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M-AREA AND METALLURGICAL LABORATORY HAZARDOUS WASTE MANAGEMENT FACILITIES GROUNDWATER MONITORING AND CORRECTIVE-ACTION REPORT (U)

FIRST AND SECOND QUARTERS 1998

VOLUMES I AND II

Publication Date: September 1998

Westinghouse Savannah River Company
Savannah River Site
Aiken, SC 29808

Prepared for the U.S. Department of Energy under Control Contract No. DE-AC09-89SR18035

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Executive Summary

This report describes the groundwater monitoring and corrective-action program at the M-Area Hazardous Waste Management Facility (HWMF) and the Metallurgical Laboratory (Met Lab) HWMF at the Savannah River Site (SRS) during first and second quarters 1998. This program is required by South Carolina Hazardous Waste Permit SC1-890-008-989 and Section 264.100(g) of the South Carolina Hazardous Waste Management Regulations. Report requirements are described in the 1995 RCRA Renewal Permit, effective October 5, 1995, Section IIIB.H.11.b for the M-Area HWMF and Section IIIG.H.11.b for the Met Lab HWMF. Program activities are summarized below.

- Sampling to determine groundwater constituents was conducted during first quarter 1998 at M-Area HWMF and Met Lab point-of-compliance (POC), background, and plume definition wells. M-Area HWMF recovery wells were sampled monthly.
- Thirty eight of the 41 POC wells at the M-Area HWMF were sampled for constituents listed in Appendix IIIB-A of the 1995 RCRA Renewal Permit. 1,1-Dichloroethylene, lead, tetrachloroethylene, and trichloroethylene exceeded the Appendix IIIB-A Groundwater Protection Standard (GWPS) in one or more of the wells. 1,1-Dichloroethylene, tetrachloroethylene, and trichloroethylene exceeded standards most frequently. 1,1-Dichloroethylene was elevated in 4 wells, tetrachloroethylene was elevated in 30 wells, and trichloroethylene was elevated in 33 wells. (See Tables D-1 and D-8, Appendix D, Volume I.)
- All 6 background wells at the M-Area HWMF were sampled during first quarter 1998. Well MSB 29D contained elevated levels of total alpha-emitting radium and gross alpha, well MSB 43B contained elevated levels of sulfate, and well MSB 43D contained an elevated level of lead. None of the other background wells contained elevated constituents. (See Table D-2, Appendix D, Volume I.)
- 1,1-Dichloroethylene, lead, tetrachloroethylene, and trichloroethylene exceeded the GWPS and chloride, sodium, and sulfate exceeded the MCS in one or more of the plume definition wells at the M-Area HWMF during first quarter 1998. Elevated concentrations of lead, tetrachloroethylene, and trichloroethylene occurred most frequently. (See Table D-3, Appendix D, Volume I.)
- Monthly sampling events were scheduled for each recovery well during the first half of 1998. Four sampling events did not occur because the pumps were off. Tetrachloroethylene and/or trichloroethylene exceeded the GWPS in most of the successfully sampled recovery wells during this period. (See Table D-4, Appendix D, Volume I.)
- All 14 of the POC wells at the Met Lab HWMF were sampled for constituents listed in Appendix IIIG-A of the 1995 RCRA Renewal Permit. Acetone, tetrachloroethylene or trichloroethylene exceeded the Appendix IIIG-A GWPS, silver exceeded the 261 Appendix VIII GWPS, and iron, sodium, sulfate, or total organic halogens exceeded the MCS in one or more of the wells. Sodium, sulfate, and trichloroethylene exceeded standards most frequently. Sodium was elevated in 8 wells, sulfate was elevated in 7 wells, and trichloroethylene was elevated in 6 wells. (See Tables D-5 and D-9, Appendix D, Volume I.)
- All 8 of the background wells at the Met Lab HWMF were sampled during first quarter 1998. The background wells contained one occurrence each of lead, sodium, total alpha-emitting radium, or gross alpha, and two occurrences of sulfate that exceeded the standards. (See Table D-6, Appendix D, Volume I.)
- All 8 of the plume definition wells at the Met Lab HWMF were sampled during first quarter 1998. Acetone, tetrachloroethylene and trichloroethylene exceeded the GWPS and chloride,

iron, sodium, sulfate, and total organic halogens exceeded the MCS in one or more of the wells. (See Table D-7, Appendix D, Volume I.)

- During the first half of 1998, the M-1 air stripper removed 5,956 lbs of solvent from the groundwater beneath the M-Area HWMF. (See the *Air Stripper Performance* subsection and Table D-10, Appendix D, Volume I.)
- During the first half of 1998, the A-2 air stripper removed 1,125 lbs of solvent from the groundwater beneath the M-Area HWMF. (See the *Air Stripper Performance* subsection and Table D-11, Appendix D, Volume I.)
- During the first half of 1998, the Soil Vacuum Extraction Unit (SVEU) Vadose Zone Unit 782-3M removed 18,346.9 lbs of solvent. (See the *Vadose Zone Unit Performance* subsection and Table D-12, Appendix D, Volume I.)
- During the first half of 1998, the SVEU Vadose Zone Unit 782-4M removed 14,324.3 lbs of solvent. (See the *Vadose Zone Unit Performance* subsection and Table D-13, Appendix D, Volume I.)
- During the first half of 1998, the SVEU Vadose Zone Unit 782-5M removed 935.1 lbs of solvent. (See the V*adose Zone Unit Performance* subsection and Table D-14, Appendix D, Volume I.)
- During the first half of 1998, the SVEU Vadose Zone Unit 782-6M removed 10,970.6 lbs of solvent. (See the *Vadose Zone Unit Performance* subsection and Table D-15, Appendix D, Volume I.)
- During the first half of 1998, the SVEU Vadose Zone Unit 782-7M removed 2,098.8 lbs of solvent. (See the *Vadose Zone Unit Performance* subsection and Table D-16, Appendix D, Volume I.)
- During the first half of 1998, the SVEU Vadose Zone Unit 782-8M removed 37.7 lbs of solvent. (See the *Vadose Zone Unit Performance* subsection and Table D-17, Appendix D, Volume I.)
- An additional soil vacuum extraction unit (782-8M) became operational in 1997.
- Upgrades to the methane injection system of the Integrated Demonstration Project were completed and operational by March 1997.
- A field demonstration of In Situ Fenton's Destruction of DNAPL took place in April 1997.

Introduction

As directed by the 1995 RCRA Renewal Permit (SCDHEC, 1995), this report includes information on groundwater monitoring and corrective action at both the M-Area Hazardous Waste Management Facility (HWMF) and the Metallurgical Laboratory Hazardous Waste Management Facility (Met Lab HWMF).

Description of Facilities

M-Area HWMF

The M-Area HWMF, located in the northwest portion of the Savannah River Site (SRS) (Figure 1, Appendix C, Volume I), consists of the M-Area Settling Basin; a seepage area, overflow ditch, and inlet process sewer line; and Lost Lake, a shallow upland depression.

The unlined settling basin operated from 1958 until 1985, receiving wastewater that contained volatile organic solvents used for metal degreasing as well as chemical constituents and depleted uranium from fuel fabrication processes in M Area. The underground process sewer line transported M-Area process wastewaters to the basin. Water periodically overflowed from the basin through the ditch to the seepage area adjacent to the ditch and to Lost Lake.

Because of the hazardous nature of the constituents released to the environment during operation of the basin, the M-Area HWMF is subject to the requirements of the Resource Conservation and Recovery Act (RCRA). Currently, the facility is operating under the 1995 RCRA Renewal Permit (South Carolina Hazardous Waste Permit SC1-890-008-989) (SCDHEC, 1995). A brief history of the M-Area HWMF compliance and post-closure programs is located in the *Monitoring and Corrective-Action Program Assessment* section of this report.

The A/M-Areas corrective-action program addresses four sectors of the contaminant plume that are based on geography, subsurface conditions, and ongoing actions.

- The **central sector** is remediated by the M-1 air stripper recovery system. The majority of the concentrated contaminant plume and the primary remediation efforts are in this sector. The area includes the solvent storage and handling areas, the M-Area process sewer line, the M-Area settling basin, and the A-014 outfall areas.
- The **northern sector** is outside the influence of the M-1 air stripper recovery system. This sector, which includes the Savannah River Laboratory Seepage Basin, the A-001 outfall, and part of the Savannah River Technology Center, is remediated by the A-2 air stripper recovery system.
- The **western sector** is west of the central sector and outside the M-1 air stripper zone of influence. Dense nonaqueous phase liquid (DNAPL) may have migrated and dispersed into this area.
- The **southern sector** encompasses the contaminant plume south of the central sector outside the M-1 air stripper zone of influence. Groundwater flows south from this sector towards Upper Three Runs Creek and is influenced by the central and western sectors. DNAPL may have migrated and dispersed into this area.

Met Lab HWMF

The Met Lab HWMF is located in the eastern portion of the central sector of A/M Areas (Figure 1, Appendix C, Volume I). The facility consists of the unlined Metallurgical Laboratory Basin, the abandoned portion of the influent process sewer line, an associated Carolina bay, and a drainage outfall to the bay.

Because of the hazardous nature of the constituents released to the environment during operation of the facility, the Met Lab HWMF is subject to the requirements of RCRA. Currently, the facility is operating under the 1995 RCRA Renewal Permit (South Carolina Hazardous Waste Permit SC1-890-008-989) (SCDHEC, 1995).

Compliance Monitoring Program

M-Area HWMF

Requirements and Standards

Point-of-compliance (POC) wells (Figure 2, Appendix C, Volume I) monitor groundwater quality at the M-Area HWMF as mandated by RCRA and associated South Carolina regulations. Appendix IIIB-C in the 1995 RCRA Renewal Permit (SCDHEC, 1995) specifies the following monitoring regimen:

- quarterly monitoring for synchronous water elevations
- quarterly monitoring of new wells for one year for Groundwater Protection Standard (GWPS) constituents, inorganic monitoring constituents, and field parameters listed in Appendix IIIB-A of the permit
- semiannual monitoring for pH, specific conductance, temperature, and GWPS constituents (except polychlorinated biphenyls [PCBs]); only POC wells MSB 1D, 2D, 4D, 57D, 58D, 59D, and 60D are monitored for PCBs
- annual monitoring for gross alpha, nonvolatile beta, total alpha-emitting radium, and the inorganic monitoring constituents listed in Section II, Appendix IIIB-A, of the permit
- monitoring during the third quarter of each year of at least 20 percent of the POC wells for Appendix IX constituents (SCDHEC, 1994)

Analytical results are compared to the GWPS as defined in Appendix IIIB-A of the permit (SCDHEC, 1995) and the Monitoring Constituents Standard (MCS), which is derived from the former GWPS as defined in WSRC (1994), standard background concentrations as defined in the 1987 Part B permit (WSRC, 1987), or drinking water standards (EPA, 1993a, 1993b) (Appendix A, Volume I). Standard background concentrations were determined during the assessment monitoring program, using groundwater samples from background wells MSB 29B, 29C, 29D, 43A, 43B, and 43D (WSRC, 1987, 1994b). Results also are compared to flagging criteria established by the SRS Environmental Protection Department/Environmental Monitoring Section (EPD/EMS) (Appendix B, Volume I).

The SRS Environmental Restoration Department (ERD) reports the monitoring results to the South Carolina Department of Health and Environmental Control (SCDHEC) as required by the 1995 RCRA Renewal Permit (SCDHEC, 1995) and Section 264.100(g) of the South Carolina Hazardous Waste Management Regulations (SCDHEC, 1994).

Point-of-Compliance Well Network

Currently, the M-Area HWMF POC well network is composed of 41 wells: MSB 1B, 1C, 1CC, 1D, 2B, 2C, 2D, 3B, 3C, 3D, 4B, 4C, 4D, 5A, 5B, 5C, 6A, 6B, 6C, 7A, 7B, 7C, 8A, 8B, 8C, 13A, 13CC, 13D, 39A, 57D, 58D, 59D, 60D, 62B, 62C, 62D, 63B, 63C, 63D, 64C, and 64D.

This network developed as follows:

- Wells MSB 1A, 2A, 3A, 4A, 5A, 6A, 7A, 8A, 13A, 13B, and 13C, installed in the early 1980s, were approved by SCDHEC as the original POC wells.
- Well MSB 22 was approved by SCDHEC for interim sampling to replace well MSB 3A.
- Sampling at wells MSB 1A, 2A, 3A, 4A, and 13C was stopped in 1990 due to declining water levels at the M-Area HWMF resulting from basin closure and the recovery system operation.

- Sampling of well MSB 22 as a POC well was stopped in 1991.
- Wells MSB 1B, 1C, 1CC, 1D, 2B, 2C, 2D, 3B, 3C, 3D, 4B, 4C, 4D, 5B, 5C, 6B, 6C, 7B, 7C, 8B, 8C, 13CC, 13D, 57D, 58D, 59D, 60D, 62B, 62C, 62D, 63B, 63C, 63D, 64B, 64C, and 64D were installed in 1990 (MSB 1D, 2D, 3D, 4D, and 13D replaced wells MSB 1A, 2A, 3A, 4A, and 13C).
- Well MSB 13B was removed from the POC well network beginning third quarter 1994.
- Well MSB 39A was designated a POC well, and well MSB 64B, formerly a POC well, was designated a plume definition well in the new permit (SCDHEC, 1995).

Met Lab HWMF

Requirements and Standards

POC wells (Figure 2, Appendix C, Volume I) monitor the groundwater quality at the Met Lab HWMF as mandated by RCRA and associated South Carolina regulations. Appendix IIIG-C of the 1995 RCRA Renewal Permit (SCDHEC, 1995) specifies the following monitoring regimen:

- quarterly monitoring for synchronous water elevations at all POC wells listed in Appendix IIIG-B of the permit
- quarterly monitoring of new POC wells for one year for GWPS constituents, inorganic monitoring constituents, and field parameters listed in Appendix IIIG-A of the permit
- semiannual monitoring for inorganic monitoring constituents, pH, specific conductance, temperature, and GWPS constituents at all POC wells listed in Appendix IIIG-B of the permit
- annual monitoring for gross alpha, nonvolatile beta, and total alpha-emitting radium at all POC wells listed in Appendix IIIG-B of the permit
- monitoring during the third quarter of each year of at least 40 percent of the POC wells for Appendix IX constituents (SCDHEC, 1994)

Analytical results are compared to the GWPS or MCS as defined in Appendix IIIG-A of the permit (SCDHEC, 1995) (Appendix A). Standard background concentrations were determined during the M-Area assessment monitoring program, using groundwater samples from background wells MSB 29B, 29C, 29D, 43A, 43B, and 43D (WSRC, 1987, 1994b). Results also are compared to flagging criteria established by the EPD/EMS (Appendix B).

ERD reports the monitoring results to SCDHEC to meet the requirements of the renewal permit (SCDHEC, 1995) and the South Carolina Hazardous Waste Management Regulations (SCDHEC, 1994).

Point-of-Compliance Well Network

Currently, the Met Lab HWMF POC well network is composed of 14 wells:

- 7 M-Area Aquifer Zone wells: AMB 4D, 5, 6, 8D, 9D, 10D, 16D
- 2 Upper Lost Lake Aquifer Zone wells: AMB 18C, 19C
- 1 Lower Lost Lake Aquifer Zone well: AMB 10B
- 4 Middle Sand Aquifer Zone of the Crouch Branch Confining Unit (CBCU) wells: AMB 4A, 10A, 17A, 18A

Corrective-Action Monitoring Program

M-Area HWMF

Requirements and Standards

Data from background, plume definition, and recovery wells (Figures 4 and 5, Appendix C, Volume I) are used to assess the effectiveness of the corrective-action program for the M-Area HWMF. Background and plume definition wells monitor the horizontal and vertical extent of groundwater contamination, groundwater flow rates and directions, and groundwater quality. Recovery wells pump contaminated groundwater to air strippers, which remove volatile organic contaminants from the water before it is returned to the ground.

The 1995 RCRA Renewal Permit (SCDHEC, 1995) specifies the following monitoring regimen for these wells to meet RCRA requirements:

Background wells

- quarterly monitoring for synchronous water elevations
- quarterly monitoring of new wells for one year for GWPS constituents, inorganic monitoring constituents, and field parameters listed in Appendix IIIB-A of the permit
- semiannual monitoring for pH, specific conductance, temperature, and GWPS constituents (except PCBs)
- annual monitoring for gross alpha, nonvolatile beta, total alpha-emitting radium, and the inorganic monitoring constituents listed in Section II, Appendix IIIB-A, of the permit

Plume definition wells

- quarterly monitoring for synchronous water elevations
- quarterly monitoring of new wells for one year for GWPS constituents, inorganic monitoring constituents, and field parameters listed in Appendix IIIB-A of the permit
- semiannual monitoring for pH, specific conductance, temperature, and GWPS constituents (except PCBs); selected plume definition wells are monitored semiannually for PCBs
- annual monitoring for gross alpha, nonvolatile beta, total alpha-emitting radium, and the inorganic monitoring constituents listed in Section II, Appendix IIIB-A, of the permit

Recovery wells

- monthly monitoring for water elevations
- monthly monitoring for pH, specific conductance, temperature, and the organic GWPS constituents (except PCBs)
- semiannual monitoring for PCBs at recovery wells RWM 1, 6, and 10

Piezometers

- quarterly monitoring for water elevations

Analytical results for background, plume definition, and recovery wells are compared to standards and reported to SCDHEC as described for the POC wells.

Corrective-Action Well Network

The network of background, plume definition, and recovery wells and piezometers currently consists of the following:

Background wells (6 total)

MSB 29B, 29C, 29D, 43A, 43B, 43D

Plume definition wells (226 total)

3 wells of the ABP series, 3 wells of the AC series, 24 wells of the AMB series, 2 wells of the AOB series, 19 wells of the ASB series, 3 wells of the MCB series, 166 wells of the MSB series, 6 wells of the SRW series

Recovery wells (17 total)

RWM 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13B, 13C, 14B, 14C, 15B

Piezometers (127 total)

9 wells of the ABP series, 1 well of the ABW series, 3 wells of the AC series, 4 wells of the ACB series, 1 well of the AMB series, 1 well of the AOB series, 4 wells of the ARP series, 2 wells of the ASB series, 6 wells of the MCB series, 63 wells of the MSB series, 33 wells of the SRW series

Met Lab HWMF

Requirements and Standards

Data from background and plume definition wells (Figure 4, Appendix C, Volume I) are used to assess the effectiveness of the corrective-action program for the Met Lab HWMF. Background and plume definition wells monitor the horizontal and vertical extent of groundwater contamination, groundwater flow rates and directions, and groundwater quality.

Appendix IIIG-C of the 1995 RCRA Renewal Permit (SCDHEC, 1995) specifies the following monitoring regimen:

- quarterly monitoring for synchronous water elevations at all background and plume definition wells listed in Appendix IIIG-B of the permit
- quarterly monitoring of new background and plume definition wells for one year for GWPS constituents, inorganic monitoring constituents, and field parameters listed in Appendix IIIG-A of the permit
- semiannual monitoring for inorganic monitoring constituents, pH, specific conductance, temperature, and GWPS constituents at all background and plume definition wells listed in Appendix IIIG-B of the permit
- annual monitoring for gross alpha, nonvolatile beta, and total alpha-emitting radium at all background and plume definition wells listed in Appendix IIIG-B of the permit

Analytical results for background and plume definition wells are compared to standards and reported to SCDHEC as described for POC wells.

Corrective-Action Well Network

The network of background and plume definition wells currently consists of the following wells:

Background wells (8 total)

- 4 M-Area Aquifer Zone wells: AMB 11D, 12D; MSB 29D, 43D
- 2 Upper Lost Lake Aquifer Zone wells: MSB 29C, 43B
- 2 Lower Lost Lake Aquifer Zone wells: MSB 29B, 43A

Plume definition wells (8 total)

- 3 M-Area Aquifer Zone wells: AMB 7, 14D, 15D
- 1 Upper Lost Lake Aquifer Zone well: AMB 11B
- 2 Lower Lost Lake Aquifer Zone wells: AMB 4B, 7B
- 2 Middle Sand Aquifer Zone of the CBCU wells: AMB 7A, 13AR

Sampling and Results

Groundwater Sampling

The sampling procedure for wells with pumps (WSRC, 1992) requires evacuation of a minimum of two well volumes and stabilization of pH, specific conductance, and turbidity prior to sample collection. Stability is established when a minimum of three successive measurements, taken at 10-minute intervals, are within 10 percent of each other.

If a well pumps dry before two well volumes are purged or before stabilization is achieved, it must be revisited within 24 hours for the data to be considered from a single sampling event. On the second visit within 24 hours, samples are taken without purging or stability measurements; thus, these samples may not be representative of the groundwater quality. Tables D-1 through D-7 (Appendix D, Volume I) show the number of well volumes purged for each well. The well volumes purged for some wells may be less than 2 because of rounding down in the calculations.

Variable-speed pumps are installed in wells that have histories of elevated metals and in some new wells. Samples from these wells are collected at a slower rate to minimize turbidity, which has been associated with elevated metals levels. Currently, variable-speed pumps are installed in wells AMB 14D, 15D, 16D, 18C, and 19C; MCB 5C, 11B, 11C, 11D, 12B, 12C, 13C, 13D, 14B, and 14C; MSB 32B, 32C, 87B, 87C, 88B, 88C, 88D, 89B, and 89C; and SRW 1, 17C, and 17D. Samples from wells MSB 3A, 11E, 15C, 16C, 17C, 37D, 40D, 42D, 44C, 45C, and 46C are collected using an open-bucket bailer. The remaining wells, except the recovery wells, have single-speed centrifugal downhole pumps. The recovery wells have pumps that run continuously. Pump types for all wells are indicated in Tables D-1 through D-7 (Appendix D, Volume I).

Samples were collected by RCS Corporation of Aiken, South Carolina, and analyzed by QST Environmental, Inc., of Gainesville, Florida, or General Engineering Laboratories of Charleston, South Carolina (South Carolina certification number 10120). Samples are treated as specified in the 1995 RCRA Renewal Permit (SCDHEC, 1995) and the Westinghouse Savannah River Company Quality Assurance Plan (WSRC, 1990).

A record of well installations, replacements, and abandonments is found in the EPD/EMS well inventory (EPD/EMS, 1997). The aquifer zones monitored by the POC well networks, and identified in this report in the *Key to Reading the Tables* section of Appendix D (Volume I), are defined in Ehrke et al. (1995).

Analytical results that exceeded the GWPS or MCS (Appendix A) or the SRS flagging criteria (Appendix B) during first quarter 1998 are presented in this report (Tables D-8 and D-9, Appendix D). Previous sampling events in third quarter 1996 and first and third quarters 1997 also are included to fulfill permit requirement IIIB.H.11.b(i) for M Area and IIIG.H.11.b(i) for Met Lab. For simplicity, results that either equaled or exceeded standards are described as *elevated, exceeding* standards, or *above* standards.

M-Area HWMF

Groundwater sampling to determine water quality was conducted during first quarter 1998 at POC, background, and plume definition wells and monthly at recovery wells.

Sampling Problems

Tables D-1 through D-4 (Appendix D, Volume I) provide sampling codes (defined in the *Key to Reading the Tables* section of Appendix D, Volume I) that describe unusual sampling events for the M-Area wells.

Well MSB 3D contains DNAPL with dissolved PCBs in sediments trapped in the well sump (memorandum SWE-ERG-93-0966, M. A. Ebra, SRS, to J. W. Cook and J. V. Odum, SRS,

December 7, 1993). This well is no longer sampled regularly for groundwater quality because of waste disposal issues.

Unusual sampling events during first quarter 1998 for the remaining wells are summarized as follows:

- Well was dry: MSB 3B, MSB 8A, MSB 9C, MSB 15C, MSB 46C, MSB 87C
- Well was broken: MSB 6C, MSB 15D, MSB 16C, MSB 36D
- Pump was inoperable: MSB 27TA, MSB 47TA
- Tracer test: MSB 74B
- Not running: RWM 10 (1/30/98 and 2/27/98), STR118I (3/19–3/25/98), STR114O (3/19–3/25/98), STR222O (2/27/98)
- Re-sampled because original sample arrived out of acceptable temperature range: AMB 4A, QA 1A, AMB 4B, AMB 4D, AMB 5, AMB 6, AMB 11B, AMB 11D, AMB 12D, AMB 13AR, AMB 16D, AMB 17A, QA 5A, AMB 18A, AMB 18C, MSB 29B, MSB 29C, MSB 29D, MSB 42C, MSB 43A, MSB 43B, MSB 43D
- High turbidity precluded metals analyses: AMB 14D, AMB 15D, MSB 39TA, MSB 48D, MSB 55HC
- Incomplete sampling because of broken container: STR118I
- Flowmeter not working: MSB 5C, MSB 9B, MSB 38C, MSB 65D, RWM 8, RWM 12
- Water-level measurements did not register: MSB 82A, RWM 1
- Location in a contamination area precluded sampling: ASB 1A, ASB 2AR, ASB 2CR, ASB 3AR, ASB 3CR, ASB 6A, ASB 10CR

Met Lab HWMF

Groundwater sampling to determine water quality was conducted during first quarter 1998 at POC, background, and plume definition wells.

Sampling Problems

Tables D-5 through D-7 provide sampling codes (defined in *Key to Reading the Tables*, Appendix D) that describe unusual sampling events for the Met Lab wells.

Unusual sampling events during first quarter 1998 are summarized as follows:

- Re-sampled because original sample arrived out of acceptable temperature range: AMB 4A, QA 1A, AMB 4B, AMB 4D, AMB 5, AMB 6, AMB 11B, AMB 11D, AMB 12D, AMB 13AR, AMB 16D, AMB 17A, QA 5A, AMB 18A, AMB 18C, MSB 29B, MSB 29C, MSB 29D, MSB 43A, MSB 43B, MSB 43D
- High turbidity precluded metals analyses: AMB 14D, AMB 15D

Field and Analytical Results

The *Key to Reading the Tables* section of Appendix D (Volume I) defines abbreviations used in the data tables and provides discussions of holding times, data rounding, and data qualification. The section includes a description of the result modifiers used in Appendix D. The modifiers help define analytical accuracy and precision. Appendix E (Volume I) provides a general assessment of the quality and usability of the data.

M-Area HWMF

Tables D-1 through D-4 (Appendix D) present the field and analytical results for samples collected from M-Area POC, background, plume definition, and recovery wells, respectively, for third quarter

1996, first and third quarters 1997, and first quarter 1998. The tables identify the constituents that exceeded the standards in Appendix IIIB-A of the 1995 RCRA Renewal Permit (SCDHEC, 1995) (Appendix A) all four quarters and the SRS flagging criteria (Appendix B) during first quarter 1998. Table D-8 summarizes the constituents that exceeded GWPS or MCS in M-Area POC wells during third quarter 1996, first and third quarters 1997, and first quarter 1998.

Constituent results in Tables D-1 through D-4 that appear to equal the standards in Appendix A but are not marked in the *ST* (exceeded standard) column are below the standards in the database. Database results, the results that are compared to the standards, have more significant digits than the results given in this report. Apparent discrepancies are from the rounding of reported results.

Tables D-1 through D-4 also show the analytical laboratories that conducted the analyses, the dilution factors used in the analyses, the analyses that received modifiers or that exceeded the EPA-approved holding times during first quarter 1998, and information concerning the wells.

Met Lab HWMF

Tables D-5 through D-7 (Appendix D) present the field and analytical results for samples collected from Met Lab POC, background, and plume definition wells, respectively, for third quarter 1996, first and third quarters 1997, and first quarter 1998. The tables identify the constituents that exceeded the standards in Appendix IIIG-A of the 1995 RCRA Renewal Permit (SCDHEC, 1995) (Appendix A) all four quarters and the SRS flagging criteria (Appendix B) during first quarter 1997. Table D-9 summarizes the constituents that exceeded GWPS or MCS in Met Lab HWMF POC wells during first quarter 1996, first and third quarters 1997, and first quarter 1998.

Constituent results in Tables D-5 through D-7 that appear to equal the standards in Appendix A but are not marked in the *ST* (exceeded standard) column are below the standards in the database. Database results, the results that are compared to the standards, have more significant digits than the results given in this report. Apparent discrepancies are from the rounding of reported results.

Tables D-5 through D-7 also show the analytical laboratories that conducted the analyses, the dilution factors used in the analyses, the analyses that received modifiers or that exceeded the EPA-approved holding times during first quarter 1998, and information concerning the wells.

Hydrogeologic Assessment

The hydrogeologic system in A/M Areas is evaluated using potentiometric maps (Maps 1 through 10, Appendix H, Volume III) to determine groundwater flow rates and directions and precipitation data and hydrographs (Appendix G, Volume II) to determine the effects of the recovery well system.

The potentiometric maps for this report were constructed for first and second quarters 1998 using synchronous water elevations. Maps were constructed for each of the aquifer zones described in Ehrke et al. (1995). Aquifer zones are identified in this report in the *Key to Reading the Tables* section of Appendix D (Volume I). Map directions are oriented to true north.

Groundwater Flow Directions and Rates

Horizontal Flow Directions

- Horizontal gradients in the M-Area Aquifer Zone (Maps 1 and 6, Appendix H, Volume III) are low and variable. The natural stratigraphy, variability in recharge, and the removal of water by wells RWM 3, 6, 9, 10, and 11 produce the mounds and depressions found on the potentiometric surface. South of the M-Area HWMF, near the Miscellaneous Chemical Basin, a water-table divide appears to divert flow naturally to the southeast, southwest, and east.
- Potentiometric contours for the Upper Lost Lake Aquifer Zone (Maps 2 and 7, Appendix H, Volume III) indicate a semi-radial flow pattern, with the highest water elevations located north of A/M Areas, and flow away from this area to the southwest and south. Near the M-Area HWMF and A-014 outfall, flow is directed to the south. A mound in the potentiometric surface at the M-Area HWMF may result from local recharge from the M-Area Aquifer Zone at this location, possibly enhanced by recovery system water-level drawdown to the north. Another mound in the potentiometric surface located north of the Metallurgical Laboratory Seepage Basin may be the result of pumping by recovery wells RWM 12 to the northeast and RWM 9 and 11 to the southwest.
- Flow beneath the Lower Lost Lake Aquifer Zone (Maps 3 and 8, Appendix H, Volume III) is toward the southeast. The most prominent feature is a north-south oriented trough beneath the M-Area HWMF. The potentiometric depression that occurs near the recovery wells surrounding the M-Area HWMF may result from the recovery well system.
- The flow direction in the Middle Sand Aquifer Zone of the Crouch Branch Confining Unit (CBCU) (Maps 4 and 9, Appendix H, Volume III) is toward the south. The effects of pumping in the overlying Upper and Lower Lost Lake Aquifer Zones cause a slight depression beneath the M-Area HWMF.
- Flow in the Crouch Branch Aquifer Zone (Maps 5 and 10, Appendix H, Volume III) is toward the south, apparently controlled by regional discharge to the Savannah River.

Horizontal Flow Rates

Horizontal groundwater flow rates are calculated using the following equation:

$$\text{Flow (ft / day)} = \frac{\text{Hydraulic Conductivity (ft / day)}}{\text{Porosity (unitless)}} \times \frac{\text{dh (ft)}}{\text{dl (ft)}}$$

Hydraulic conductivity constants estimated for the M-Area Aquifer Zone, the Upper Lost Lake Aquifer Zone, the Lower Lost Lake Aquifer Zone, the Middle Sand Aquifer Zone of the CBCU, and the Crouch Branch Aquifer Zone are 27, 45, 45, 45, and 40 ft/day, respectively; the effective porosity value for each is 0.20 (Lewis and Aadland, 1992). The value *dh* is the difference in head,

and *dl* is the length of the flow path shown on the map. The ratio *dh/dl* is the horizontal gradient. Gradient, flow rate per day, and flow rate per year were each determined to two significant digits in the calculations.

Flow-rate estimates vary depending on the vertical gradient between wells, the size of the area under consideration, the number of data points, and the length and location of the flow path. Because flow rates are based on inferred or estimated parameters, rate estimates should be considered accurate to an order of magnitude only.

The estimated groundwater flow rates for first and second quarters 1998 were as follows:

First Quarter 1998

- M-Area Aquifer Zone: 160 to 290 ft/year
- Upper Lost Lake Aquifer Zone: 190 to 550 ft/year
- Lower Lost Lake Aquifer Zone: 200 ft/year
- Middle Sand Aquifer Zone of the CBCU: 320 ft/year
- Crouch Branch Aquifer Zone: 260 ft/year

Second Quarter 1998

- M-Area Aquifer Zone: 160 to 350 ft/year
- Upper Lost Lake Aquifer Zone: 230 to 350 ft/year
- Lower Lost Lake Aquifer Zone: 220 ft/year
- Middle Sand Aquifer Zone of the CBCU: 300 ft/year
- Crouch Branch Aquifer Zone: 240 ft/year

These rates are within the same order of magnitude as the flow rates for previous quarters.

Recharge and Water Elevation Changes

Precipitation measurements for the A/M Areas during first and second quarters 1998 are provided below.

Table 1. A/M-Areas Precipitation Data for First and Second Quarters 1998

	Monthly Precipitation (in.)	Historical Average 1952–1998 (in.)
January	7.83	4.36
February	7.18	4.50
March	5.61	4.90
April	6.28	3.37
May	3.35	3.76
June	3.76	4.53
Six-month total	34.01	25.42

Hydrographs showing water-elevation changes for M-Area HWMF and Met Lab HWMF monitoring wells over time are provided in Appendix G (Volume II). Monitoring wells located near recovery wells generally reflect water-level decline caused by the recovery well system. Water

elevations in monitoring wells away from the recovery wells system show variations related to rainfall, proximity to streams and other physical features, and other factors.

Effectiveness of the Corrective-Action Program

The effectiveness of the corrective-action program is evaluated by assessing water quality changes and rate of contaminant removal. The duration of the cleanup program is assessed by tracking the time it takes to remove contaminants from the groundwater.

Water Quality Changes

Extent of Contamination

The discussion of the horizontal and vertical extent of contamination addresses the distribution of tetrachloroethylene and trichloroethylene (Maps 11 through 20, Appendix H, Volume III) . Tetrachloroethylene, although similar in distribution to trichloroethylene, is usually present in lower concentrations and to a lesser extent. The 5 µg/L contour lines on the isoconcentration maps encompass the areas where the constituent exceeded the GWPS during first quarter 1998.

Contour lines on the isoconcentration maps are solid when the horizontal extent of the constituent was confidently interpreted and dashed when concentration boundaries were uncertain.

M-Area Aquifer Zone

Maps 11 and 12 (Appendix H, Volume III) show constituent distribution in the M-Area Aquifer Zone. The plume generally is limited to areas of known or suspected solvent disposal sites, which include the M-Area HWMF, the Solvent Storage Facility, the A-014 outfall, the Metallurgical Laboratory Seepage Basin, the A-Area Metals Burning Pit and Burning/Rubble Pit, and the Miscellaneous Chemicals Basin.

Upper Lost Lake Aquifer Zone

Maps 13 and 14 (Appendix H, Volume III) show the extent of contamination in the Upper Lost Lake Aquifer Zone. The pattern of contamination in this zone in relation to known point sources is similar to, but more extensive than, the pattern in the M-Area Aquifer Zone. In general, the extent of the plume in this zone is greater in the downgradient direction than in the M-Area Aquifer Zone due to greater horizontal flow rates in both the Upper and Lower Lost Lake Aquifer Zones.

Lower Lost Lake Aquifer Zone

Constituent concentrations in the Lower Lost Lake Aquifer Zone are shown on Maps 15 and 16 (Appendix H, Volume III). The lateral extent of the plume as defined by the 5 µg/L contour is greater in the downgradient directions than in the upper units because the Lower Lost Lake Aquifer Zone has a higher potential for horizontal flow. The 1,000 µg/L contour generally is below suspected sources of contamination.

Middle Sand Aquifer Zone of the CBCU

The distribution of constituents in the Middle Sand Aquifer Zone is shown on Maps 17 and 18 (Appendix H, Volume III). Monitoring is limited in the Middle Sand Aquifer Zone. Constituent concentrations in this zone, as in the overlying zones, are highest near known sources. Contamination in the Middle Sand Aquifer Zone is less extensive beneath the western part of M Area than in overlying zones. Beneath the eastern part of M Area, contamination patterns are similar to patterns in the Lower Lost Lake Aquifer Zone, but contamination is less extensive in the lower zone.

Crouch Branch Aquifer Zone

Contaminant concentrations in the Crouch Branch Aquifer Zone are primarily limited to the area beneath SRTC and an area extending from the SRTC north to well MSB 55TA, which is generally upgradient of these facilities (Maps 19 and 20, Appendix H, Volume III). Downward vertical hydraulic gradients from the M-Area Aquifer Zone to the Crouch Branch Aquifer Zone characterize

the SRTC area. The presence of a zone of increased transmissivity in the Middle Sand Aquifer Zone, which allows downward flow into the Crouch Branch Aquifer Zone, is indicated by constituent concentrations measured in wells monitoring that portion of the Crouch Branch Aquifer Zone.

The results of a special program conducted to determine the extent of inorganic contamination near the M-Area HWMF were presented in the 1987 annual report (DuPont, 1988). The results indicate that a plume of mobile inorganic constituents is present south-southeast of the M-Area HWMF. The plume is evident in most of the hydrostratigraphic units composing the M-Area Aquifer Zone and appears to have a pattern similar to the trichloroethylene and tetrachloroethylene plumes. Plume maps for the inorganics also were shown in the revised RCRA Part B post-closure care permit application submitted May 31, 1988; they are not presented in this report. Because these constituents are within the more extensive chlorinated solvent plumes, they are addressed by the current corrective-action system or by other measures.

Concentration Changes over Time

Changes in tetrachloroethylene and trichloroethylene concentrations during the past several years in samples from POC and plume definition wells are illustrated in time series plots in Appendix F (Volume II).

Rate of Contaminant Removal

SRS determines the rate of contaminant removal using mass balance calculations that subtract the concentration of VOCs in the effluent from the concentration of VOCs in the influent. This amount is then multiplied by the number of gallons of water or square feet of air that passes through the stripper column or SVEU during a given period. The results of this technique are described in the *Corrective-Action System Operation and Performance* section.

Corrective-Action System Operation and Performance

Corrective action is accomplished in A/M Areas by pumping contaminated groundwater to two air strippers where volatile organic compounds are removed and by pumping contaminated air, using vacuum extraction, from the vadose zone to 6 catalytic-oxidation units where the volatile organic compounds are destroyed.

The M-1 air stripper in M Area, fed by 11 recovery wells (RWM 1, 2, 3, 4, 5, 6, 7, 8, 9. 10, and 11), began operating in April 1985 and has been operating full scale since September 1985. The A-1 air stripper in A Area, fed by a single recovery well, operated from March 1992 until June 1996 when it was replaced by the A-2 air stripper. The A-2 air stripper is fed by 6 recovery wells (RWM 12, 13B, 13C, 14B, 14C, and 15B) in the northern sector. The production catalytic-oxidation unit at the Integrated Demonstration Site (782-7M), fed by a single vapor extraction well, began experimental operation in 1990 and has been in full-scale operation since August 1994. Four soil vacuum-extraction units (SVEU) vadose zone units, located in A/M Areas, have been operating since May 1995. An additional SVEU (782-8M) became operational in 1997. These units are fed by soil vapor extraction wells. A description of the systems that compose the corrective-action program follows.

Air Stripper Performance

M-1 Air Stripper

A summary of first and second quarter 1998 operating and performance data for the M-1 air stripper is presented in Table D-10 (Appendix D, Volume I). From January to June 1998, the stripper removed 5,956 lbs of degreaser solvent. The average influent VOC concentration was 1,037 µg/L. The average effluent concentration was 0.0 µg/L.

The M-1 air stripper has removed a cumulative total of 330,706 lbs of VOCs. When combined with the contaminated water treated by the pilot air stripper, the prototype air stripper, and the start-up of the full-scale M-1 air stripper system (16,200, 15,900, and 2,100 lbs, respectively, for a total of 34,200 lbs), the total weight of tetrachloroethylene and trichloroethylene removed by the M-1 air stripper is 364,906 lbs.

Monthly average influent concentrations have decreased from roughly 47,100 µg/L in April 1985 to approximately 1,221 µg/L in June 1998. Stripping efficiency has always produced effluent concentrations substantially lower than the permit requirements.

A-1 Air Stripper

The A-1 air stripper has been decommissioned to allow the newer A-2 unit to handle all the existing recovery wells in the northern sector. Solvent removal at well RWM 12 is reported with the A-2 stripper.

A-2 Air Stripper

A summary of first and second quarter 1998 operating and performance data for the A-2 air stripper is presented in Table D-11 (Appendix D, Volume I). During the first half of 1998, the stripper removed 1,125 lbs of degreaser solvent from wells RWM 12, 13B, 13C, 14B, 14C, and 15B. The average influent concentration was 775 µg/L, and the average effluent concentration was 2.6 µg/L.

The A-2 air stripper has removed a cumulative total of 3,413 lbs of degreaser solvent.

Vadose Zone Unit Performance

SVEU Vadose Zone Unit 782-3M

A summary of first and second quarter 1998 operating and performance data for the 782-3M is presented in Table D-12 (Appendix D, Volume I). During the first half of 1998, the 782-3M removed a total of 18,346.9 lbs of degreaser solvent. The average VOC influent concentration was 449.2 ppmv.

SVEU Vadose Zone Unit 782-4M

A summary of first and second quarter 1998 operating and performance data for the 782-4M is presented in Table D-13 (Appendix D, Volume I). During the first half of the year, the 782-4M removed a total of 14,324 lbs of degreaser solvent. The average influent VOC concentration was 434.8 ppmv.

SVEU Vadose Zone Unit 782-5M

A summary of first and second quarter 1998 operating and performance data for the 782-5M is presented in Table D-14 (Appendix D, Volume I). During the first half of 1998, the 782-5M removed a total of 935.1 lbs of degreaser solvent. The average influent VOC concentration was 19.2 ppmv.

SVEU Vadose Zone Unit 782-6M

A summary of first and second quarter 1998 operating and performance data for the 782-6M is presented in Table D-15 (Appendix D, Volume I). During the first half of the year, the 782-6M removed a total of 10,970.6 lbs of degreaser solvent. The average influent VOC concentration was 243.5 ppmv.

SVEU Vadose Zone Unit 782-7M (formerly the Integrated Demonstration Unit)

A summary of first and second quarter 1998 operating and performance data for the 782-7M (formerly the IDU) is presented in Table D-16 (Appendix D, Volume I). This unit removed 2,098.8 pounds of VOCs during the first half of 1998. The average influent VOC concentration was 80.8 ppmv.

SVEU Vadose Zone Unit 782-8M

A summary of first and second quarter 1998 operating and performance data for the 782-8M is presented in Table D-17 (Appendix D, Volume I). During the first half of the year, the 782-8M removed a total of 37.7 lbs of degreaser solvent. The average influent VOC concentration was 3.1 ppmv.

Recovery Well System

Monthly and cumulative volumes of groundwater pumped from the recovery well system and average flow rates for recovery wells RWM 1 through 15B are presented in Table D-18 (Appendix D, Volume I). Monthly concentrations (µg/L) of tetrachloroethylene and trichloroethylene in each well are presented in Table D-19 (Appendix D, Volume I).

Vapor Extraction Well System

Soil vapor extraction wells MVE 4, MVE 9, and MVE 10 pump contaminated air to the SVEU Vadose Zone Unit 782-3M, located in the A-014 outfall. Table D-12 (Appendix D, Volume I) presents a summary of first and second quarter 1998 activity at the 782-3M.

Soil vapor extraction wells AMH 6 and AMH 7 pump contaminated air to the SVEU Vadose Zone Unit 782-4M, located in the M-Area Settling Basin. Table D-13 (Appendix D, Volume I) presents a summary of first and second quarter 1998 activity at the 782-4M.

Soil vapor extraction wells MVE 5, MVE 6, MVE 7, and MVE 8 pump contaminated air to the SVEU Vadose Zone Unit 782-5M, located in the M-Area HWMF process sewer. Table D-14 (Appendix D, Volume I) presents a summary of first and second quarter 1998 activity at the 782-5M.

Soil vapor extraction wells MVE 1, MVE 2, and MVE 3 pump contaminated air to the SVEU Vadose Zone Unit 782-6M, located in the 321-M Solvent Storage Area. Table D-15 (Appendix D, Volume I) presents a summary of first and second quarter 1998 activity at the 782-6M.

Vapor extraction well AMH 2 pumps contaminated air to the SVEU Vadose Zone Unit 782-7M (formerly the IDU). Table D-16 (Appendix D, Volume I) presents a summary of first and second quarter 1998 activity at 782-7M.

A description of the vapor extraction wells for SVEU Vadose Zone Unit 782-8M will be updated in the 1998 annual edition of this report.

Air Stripper Modifications

M-1 air stripper and A-1 air stripper modifications will be updated in the 1998 annual edition of this report.

Vadose Zone Unit Modifications

Vadose zone unit modifications will be updated in the 1998 annual edition of this report.

Monitoring and Corrective-Action Program Assessment

New Findings at Met Lab

A cone penetrometer technology (CPT) assessment of the Met Lab vadose zone contamination has been completed. The reports are currently being written; however, the initial findings indicate a relatively concentrated area of VOC contaminants in and around Building 717-A and other upgradient sources. The assessment also identified the presence of Freon-113 in the vadose zone in this area. Further characterization has identified the preferred remediation alternative as a passive in situ VOC removal technology–barometric pumping. This alternative is presented in the recently submitted CAP modification to the M-Area RCRA permit application.

Ongoing Programs

M-Area HWMF

Compliance and Post-Closure Programs

- In 1980, the U.S. Department of Energy (DOE) submitted a notification of the SRS hazardous waste activities to SCDHEC; DOE then submitted a RCRA Part A hazardous waste permit application.
- SRS notified SCDHEC of volatile organic solvent contamination when it was first detected in the groundwater beneath the settling basin in June 1981. A network of monitoring wells was initiated to define the extent, concentration, distribution, and migration rate of the contaminant plume.
- Interim status monitoring began in 1983 and continued through September 1987; assessment monitoring was initiated second quarter 1986 and completed fourth quarter 1987.
- In February 1983, SRS voluntarily began a pilot remediation system to treat contaminated groundwater.
- A groundwater protection plan was submitted to Congress in June 1984 to meet the requirements of Public Law 98-181.
- In compliance with the requirements of Public Law 98-181, a closure plan for the settling basin was submitted to SCDHEC in 1984, with revisions in 1985 and 1987.
- A full-scale corrective-action program was initiated in 1985 to remove and treat hazardous constituents from the groundwater beneath the M-Area HWMF.
- The M-Area HWMF RCRA Part B post-closure care permit application was approved by SCDHEC in 1987.
- Closure was approved by SCDHEC on July 10, 1987; a closure cap was completed during 1989 and 1990; and closure was certified by SCDHEC on April 26, 1991.
- The 1992 M-Area HWMF RCRA Part B permit renewal application was submitted to SCDHEC in April 1992 as specified in SCHWMR R.61-79.270.30(b) and 270.50(a).
- Revision 1 of the 1992 M-Area HWMF RCRA Part B permit renewal application was submitted to SCDHEC in March 1993. The revision included proposals to reduce the sampling, analysis, and reporting requirements for the groundwater monitoring program in A/M Areas.
- Modifications to the 1992 M-Area HWMF RCRA Part B permit renewal application (Revision 2) and the 1987 Part B permit application (Revision 4) were submitted to SCDHEC

December 20, 1993. The modifications included a proposal to include PCB monitoring at specified A/M-Areas groundwater monitoring wells.

- To expedite SCDHEC's approval of the program to reduce sampling, analysis, and reporting, Revision 5 of the 1987 Part B permit application was submitted in February 1994. SRS received a Notice of Deficiency (NOD) on Revision 5 in June 1994.
- Revision 6 of the 1987 Part B permit application, submitted to SCDHEC in July 1994, was approved by SCDHEC. The revision addresses the NOD on Revision 5, with modifications to the proposed reductions in sampling, analysis, and reporting.
- Also in July 1994, Revision 3 of the 1992 Part B permit renewal application was submitted to SCDHEC in response to their NOD. Revision 3 modifications included updating the hydrostratigraphic nomenclature; updating information on the purged water disposal station, closure and corrective-action activities, DNAPL investigations, and proposed demonstration programs; adding information on new investigations in the western and southern sectors of A/M Areas; and revising text on contingency plans, personnel training, and procedures to prevent hazards. The renewal document adheres to the format specified in the EPA Regulatory Completeness Checklist for Post-Closure Permit Applications (Revision 4, February 4, 1986). SCDHEC reviewed the application and held a comment and response period in March 1995.
- The final report updating the hydrostratigraphy of the A/M Areas and the Metallurgical Laboratory HWMF was submitted to SCDHEC in February 1995.
- The 1995 RCRA Renewal Permit (SCDHEC, 1995) for the M-Area HWMF and the Metallurgical Laboratory HWMF became effective October 5, 1995.

A/M-Areas Vadose Zone Remediation

Although the corrective-action system in A/M Areas has proven effective in removing and treating contaminated groundwater, it does not remove contaminants from the vadose zone, which is the unsaturated layer of soil between the ground surface and the water table. Vadose zone remediation decreases the migration of residual contaminants into the groundwater and reduces the time required for groundwater remediation.

The following four sites, which have elevated levels of tetrachloroethylene and trichloroethylene in the vadose zone, have been chosen for vadose zone remediation using vacuum extraction: the abandoned process sewer line, the M-Area Settling Basin, the A-014 outfall, and the 321-M former solvent storage area. Vacuum extraction was selected after a successful pilot demonstration removed more than 1,500 lbs of solvents during a 21-day test in 1987.

Four soil vacuum extraction units (SVEU) were installed in A/M Areas during 1994. Design of the SVEU was completed March 11, 1994; construction began March 28, 1994, and was completed in April 1995. On March 25, 1994, SRS requested temporary authorization to initiate vadose zone vacuum extraction at the four locations. SCDHEC granted temporary authorization in June 1994 (letter, J. Litton to W. Wierzbicki, June 16, 1994) and again in June 1995. These SVEU have been operating since May 1995. An additional SVEU (782-8M) became operational in 1997.

The soil vacuum extraction systems operate under air quality control permits 0080-0041-M-CA, 0080-0041-M-CB, 0080-0041-M-CC, and 0080-0041-A-CA issued by SCDHEC in January 1993.

Process modifications have been placed on the SVEU to allow remote control operation of the systems. This system allows automatic processing changes while the units are operating. This dynamic process eliminates the manual manipulations necessary to operate the units while still meeting the air quality control permit requirements.

Integrated Demonstration Project-Subsystem I

The Integrated Demonstration Project was transferred to ERD on March 30, 1994. Preliminary startup activities to conduct soil vacuum extraction in the vadose zone, including component and system testing, also were completed on March 30, 1994. Regulatory approval for full-scale opera-

tion was obtained in June 1994 (letter, J. Litton to W. Wierzbicki, June 16, 1994). Full-scale operation of the extraction equipment began on schedule August 1, 1994. Upgrades to the methane injection system were completed and operational by March 1997.

The following products related to the demonstration were issued during third quarter 1994: a numerical simulation model, a cost analysis report, a preliminary technology report, a level 2 summary report, a bioremediation demonstration video, an integrated demonstration 3D video, and an integrated discussion video.

Barometric Pumping and Solar-Enhanced Barometric Pumping Demonstrations

Subsurface pressure fluctuations are correlated to atmospheric barometric pressure fluctuations but are damped in amplitude and lagging in phase. The damping and lag occur because pressure between the vadose zone and the atmosphere can produce air flows if the two regions are connected (e.g., by a well screened in the vadose zone). Barometric pumping and solar-enhanced barometric pumping take advantage of these naturally produced forces to remove volatile organic compounds from the subsurface in the form of soil gas. SRS has evaluated these technologies through a demonstration (WSRC, 1994). Barometric pumping technology is being used within the A/M Area and is planned for use at the Met Lab HWMF.

Purge Water Management

During third quarter 1993, construction of a facility to receive, store, and transfer purged water from the M-Area monitoring wells to the M-1 air stripper was completed. This Purged Water Disposal Station, 782-2M, houses a 10,000-gal, double-wall tank. This facility has been used continuously for containment of purged water since January 1994.

Special Monitoring Wells and Piezometers Using Cone Penetrometer Technology

The generation of investigative derived waste during waste-site characterization has been greatly reduced with the successful installation of a Vadose Zone monitoring well using CPT, which does not use drilling muds or produce drill cuttings. Recently, a 2-inch-diameter PVC well with 5 ft of PVC screen (10 slot) was installed, 49 ft north of the M-Area Settling Basin, to a depth of approximately 100 ft using CPT. Gas pressure measurements were taken at the well for several weeks. The measurements showed a lagging pressure similar to that of conventionally installed wells in the area. The results suggest that the seal around the annulus of a CPT-installed well is as competent as the formation it penetrates. This method of well installation provides effective protection against contaminant migration. A report of these results has been submitted to SCDHEC under separate cover.

Western Sector Characterization

Soil head space was analyzed on eight borings in the western sector. The drilling report has recently been released and shows a refinement of the boundary of the trichloroethylene/tetrachloroethylene plume. The findings suggest that the primary source of trichloroethylene/tetrachloroethylene is from the M-Area Seepage Basin with the contamination spreading into the western sector from upgradient sources. In addition, fate and transport modeling is currently being developed to predict mobility of DNAPL contamination that is located near the M-Area Settling Basin.

Southern Sector Remediation

The southern sector plume has an estimated aerial extent of 800 acres, contains relatively dilute concentrations of volatile organic compounds, and is outside the zone of influence of the existing groundwater recovery system. SRS has investigated the southern sector to determine the boundary of solvent contamination and to define the geology and hydrology of the area, has evaluated the results of the assessments, and has installed two vertical recirculation wells to control downgradient migration of the >500 ppb trichloroethylene plume. Ten additional vertical recirculation wells have been recently installed (June-September, 1998) to control downgradient migration of the >500 ppb TCE plume. Additional information on the remediation plans will be submitted in monthly reports and in a Corrective Action Plan modification.

A-2 Air Stripper

Groundwater contamination in the northern sector extends over approximately 174 acres. Controlling contamination in the uppermost aquifer zone will prevent further migration downward into the deeper Crouch Branch Aquifer Zone. The A-2 air stripper, with a feed rate of 300 gpm, is fed by six recovery wells (including RWM 12, previously from the A-1 stripper unit) and includes a catalytic oxidation unit for offgas treatment. This unit began operating in fiscal year 1996.

Met Lab HWMF

Two recovery wells have been drilled, cased, and developed adjacent to the Met Lab basin. Regulatory approval to tie these two wells into the M-1 air stripper was received on August 21, 1998.

A proposal for background wells is currently under review for acceptance. The set of proposed background wells will allow an accurate statistical assessment of the contamination found in and around the Met Lab area.

Proposed Monitoring and Corrective-Action Program Modifications

The progress of proposed modifications is reported here after changes are approved by SCDHEC in other reports, e.g., status reports, monitoring-change proposals, and modifications.

Groundwater Monitoring Program

The number of wells in the groundwater monitoring network was reduced by approval of the 1995 RCRA Renewal Permit (SCDHEC, 1995). The reduction eliminated the monitoring of groundwater wells that were redundant in information or sampling aquifer zone, outside the known plume and not in line with plume flows, not mandated by regulation, or damaged and providing poor sample representation. Optimizing the well system is part of the fiscally responsible actions at SRS. Continuous improvement in this area is still being addressed.

Corrective-Action Program

Further work is scheduled for DNAPL characterization, assessment, and remediation technology studies near wells MSB 3D and 22D. An alcohol injection-extraction test was started in May 1996 and reported under separate cover in October 1996. The test was used to confirm the presence or absence of DNAPL in the immediate vicinity of the well screen. Data indicated no distinct patterns of detection but provided information on the design and operation of remediation systems for DNAPL.

In addition, a field demonstration of In Situ Fenton's Destruction of DNAPL (GeoCleanse) took place in April 1997. This demonstration used an injectant system to place a peroxide and iron solution in contact with DNAPL, which converts the chlorinated solvents to nontoxic end products. The initial results are promising. Significant destruction of DNAPL was noted, and the results have been published in a separate report.

A/M-Areas Vadose Zone Remediation Program

The Vadose Zone Remediation Program, as noted in earlier chapters, is progressing with additional units and strategies for remediation. This technology has dramatically increased the monthly pounds of solvent removed from the contaminant source in M Area. A remote systematic unit operations package was installed in late 1996 and is fully operational. This system optimizes the SVEU systems at all times during operation to maximize the removal efficiencies while still meeting the air quality permit requirements. Additional strategies such as soil heating and transfer of units to new locations for remediation are still being planned.

Errata and Revisions

Result values for earlier quarters presented in this report may differ from the values for those same quarters presented in previous reports because some re-analyses may have occurred after the quarterly reports were printed. Also, field data are collected once each quarter, but samples for analytical data may be collected more than once each quarter. Thus, because the results tables present the highest analytical result for the quarter, the reported analytical result may be from a sample collected on a different date from the date the field data were collected.

First and Second Quarters 1998

- No errata have been reported.

Appendix A

Standards

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Table A-1. Standards for M-Area HWMF

Constituent	Standard	Unit	Source
Groundwater Protection Standard			
261 Appendix VIII / 264 Appendix IX Hazardous Constituents			
Inorganics			
Barium	2,000	µg/L	SCDHEC (1995)[a]
Cyanide	20[b]	µg/L	SCDHEC (1995)
Lead	15	µg/L	SCDHEC (1995)
Nickel	100	µg/L	SCDHEC (1995)
Selenium	50	µg/L	SCDHEC (1995)
Organics			
Chlorobenzene	5[c]	µg/L	SCDHEC (1995)
1,1-Dichloroethane	5[c]	µg/L	SCDHEC (1995)
1,1-Dichloroethylene	7	µg/L	SCDHEC (1995)
trans-1,2-Dichloroethylene	100	µg/L	SCDHEC (1995)
PCB 1016	0.5	µg/L	SCDHEC (1995)
PCB 1221	0.5	µg/L	SCDHEC (1995)
PCB 1232	0.5	µg/L	SCDHEC (1995)
PCB 1242	0.5	µg/L	SCDHEC (1995)
PCB 1248	0.5	µg/L	SCDHEC (1995)
PCB 1254	0.5	µg/L	SCDHEC (1995)
PCB 1260	0.5	µg/L	SCDHEC (1995)
1,1,2,2-Tetrachloroethane	5[c]	µg/L	SCDHEC (1995)
Tetrachloroethylene	5	µg/L	SCDHEC (1995)
1,1,1-Trichloroethane	200	µg/L	SCDHEC (1995)
Trichloroethylene	5	µg/L	SCDHEC (1995)
Monitoring Constituents Standard			
Inorganics			
Aluminum	100	µg/L	WSRC (1987)[d]
Chloride	4,200	µg/L	WSRC (1987)
Chromium	100	µg/L	EPA (1993a)[e]
Cobalt	4	µg/L	WSRC (1994)[f]
Copper	1,300	µg/L	WSRC (1994)
Fluoride	4,000	µg/L	EPA (1993a)
Manganese	50	µg/L	EPA (1993b)[g]
Mercury	2	µg/L	EPA (1993a)
Nitrate-nitrite as nitrogen	2,400	µg/L	WSRC (1987)
Sodium	4,600	µg/L	WSRC (1987)
Sulfate	3,000	µg/L	WSRC (1987)
Total phosphates (as P)	300	µg/L	WSRC (1987)

Constituent	Standard	Unit	Source
Uranium	100	µg/L	WSRC (1987)
Zinc	5,000	µg/L	EPA (1993b)
Radionuclides			
Gross alpha	15	pCi/L	EPA (1993a)
Nonvolatile beta	50	pCi/L	EPA (1993a)
Radium, total alpha-emitting[h]	5	pCi/L	EPA (1993a)

a Concentrations with SCDHEC (1995) sources are groundwater protection standards in the 1995 RCRA Renewal Permit.
b Concentration is the practical quantitation limit (PQL) for EPA Method 335.2 and 335.3. This PQL is the contract-required PQL.
c Concentration is the PQL for EPA Method 8240 as defined in SCDHEC (1994). This PQL is the contract-required PQL.
d Concentrations with WSRC (1987) sources are background concentrations.
e Concentrations and activities with EPA (1993a) sources are primary drinking water standards.
f Concentrations with WSRC (1994) sources were groundwater protection standards under the previous permit.
g Concentrations with EPA (1993b) sources are secondary drinking water standards.
h The standard used for total alpha-emitting radium is the primary drinking water standard for total radium.

Table A-2. Standards for Met Lab HWMF

Constituent	Standard	Unit	Source
Groundwater Protection Standard			
261 Appendix VIII / 264 Appendix IX Hazardous Constituents			
Inorganics			
Arsenic	50	µg/L	SCDHEC (1995)[a]
Barium	2,000	µg/L	SCDHEC (1995)
Chromium	100	µg/L	SCDHEC (1995)
Lead	15	µg/L	SCDHEC (1995)
Mercury	2	µg/L	SCDHEC (1995)
Nickel	100	µg/L	SCDHEC (1995)
Silver	50	µg/L	SCDHEC (1995)
Organics			
Acetone	10[b]	µg/L	SCDHEC (1995)
Carbon tetrachloride	5	µg/L	SCDHEC (1995)
Chloroethene	2	µg/L	SCDHEC (1995)
Chloroform	100	µg/L	SCDHEC (1995)
1,1-Dichloroethane	0.3[b]	µg/L	SCDHEC (1995)
1,2-Dichloroethane	5	µg/L	SCDHEC (1995)
1,1-Dichloroethylene	7	µg/L	SCDHEC (1995)
cis-1,2-Dichloroethylene	70	µg/L	SCDHEC (1995)

Constituent	Standard	Unit	Source
trans-1,2-Dichloroethylene	100	µg/L	SCDHEC (1995)
2,4-Dichlorophenoxyacetic acid	10[c]	µg/L	SCDHEC (1995)
Lindane	0.2	µg/L	SCDHEC (1995)
Methyl methacrylate	2[b]	µg/L	SCDHEC (1995)
Phenol	10[d]	µg/L	SCDHEC (1995)
Tetrachloroethylene	5	µg/L	SCDHEC (1995)
1,1,1-Trichloroethane	200	µg/L	SCDHEC (1995)
Trichloroethylene	5	µg/L	SCDHEC (1995)
Monitoring Constituents Standard			
Inorganics			
Chloride	4,200	µg/L	WSRC (1987)[e]
Cyanide	20[f]	µg/L	SCDHEC (1995)
Fluoride	4,000	µg/L	EPA (1993a)[g]
Iron	300	µg/L	EPA (1993b)[h]
Manganese	50	µg/L	EPA (1993b)
Nitrate-nitrite as nitrogen	2,400	µg/L	WSRC (1987)
Selenium	50	µg/L	EPA (1993a)
Sodium	4,600	µg/L	WSRC (1987)
Sulfate	3,000	µg/L	WSRC (1987)
Total organic carbon	10,000[i]	µg/L	SCDHEC (1995)
Total organic halogens	50[j]	µg/L	SCDHEC (1995)
Total phosphates (as P)	300	µg/L	WSRC (1987)
Radionuclides			
Gross alpha	15	pCi/L	EPA (1993a)
Nonvolatile beta	50	pCi/L	EPA (1993a)
Radium, total alpha-emitting[k]	5	pCi/L	EPA (1993a)

[a] Concentrations with SCDHEC (1995) sources are groundwater protection or monitoring constituent standards in the 1995 RCRA Renewal Permit.
[b] Concentration is the practical quanititation limit (PQL) for EPA Method 8260. This PQL is the contract-required PQL.
[c] Concentration is the PQL for EPA Method 8150 as defined in SCDHEC (1994). This PQL is the contract-required PQL.
[d] Concentration is the PQL for EPA Method 8270 as listed in SCDHEC (1994). This PQL is the contract-required PQL.
[e] Concentrations with WSRC (1987) sources are background concentrations.
[f] Concentration is the PQL for EPA Method 335.2 and 335.3. This PQL is the contract-required PQL.
[g] Concentrations and activities with EPA (1993a) sources are primary drinking water standards.
[h] Concentrations with EPA (1993b) sources are secondary drinking water standards.
[i] Concentration is the PQL for EPA Method 9060. This PQL is the contract-required PQL.
[j] Concentration is the PQL for EPA Method 9020. This PQL is the contract-required PQL.
[k] The standard used for total alpha-emitting radium is the primary drinking water standard for total radium.

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Appendix B

Flagging Criteria

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Flagging Criteria

Beginning first quarter 1992, flagging criteria were established for all constituents analyzed as part of the EPD/EMS Groundwater Monitoring Program. Only the flagging criteria for environmental screening analyses are used to trigger scheduling for designated wells in the environmental screening program, while all flagging criteria in Table B-1 are used to flag constituents in the analytical results tables.

The following rules are used in determining flagging criteria and scheduling sampling:

- Flag 0: Analysis for a constituent below Flag 1 is classified as Flag 0. Constituents classified as Flag 0 in each well series will be scheduled for analyses only by custodian request or as part of the triennial environmental screening program for wells designated as environmental screening wells.
- Flag 1: The Flag 1 criterion for a constituent equals half of the EPA primary drinking water standard (PDWS), the EPA proposed PDWS, or the EPA secondary drinking water standard (SDWS) for that constituent. If a constituent does not have an EPA drinking water standard, the Flag 1 criterion equals 5 times a recently published 90th percentile detection limit obtained by one of the primary laboratories. If a constituent exceeds Flag 1 in a monitoring well series, environmental screening wells in that series are sampled and analyzed for that constituent once a year. If a constituent falls below Flag 1 for three consecutive sampling episodes, the well's flag is reduced from Flag 1 status to Flag 0 status and follows the rules for Flag 0.
- Flag 2: The Flag 2 criterion for a constituent equals the EPA PDWS, the EPA proposed PDWS, or the EPA SDWS for that constituent. If a constituent does not have a drinking water standard, the Flag 2 criterion equals 10 times a recently published 90th percentile detection limit obtained by one of the primary laboratories. If a constituent exceeds Flag 2 in a monitoring well series, environmental screening wells in that series are sampled and analyzed for that constituent once a year. If a constituent falls below Flag 2 for three consecutive sampling episodes, the well's flag is reduced from Flag 2 status to Flag 1 or Flag 0 status and follows the rules for the lower flag.

The following constituents are exceptions to the flagging rules:

- Specific conductance and pH, which are indicator parameters, have flagging criteria but do not trigger the scheduling mechanism. No flags are set for alkalinity, 5-day biochemical oxygen demand, calcium, carbonate, chemical oxygen demand, magnesium, potassium, silica, sodium, total dissolved solids, total phosphates (as P), and total phosphorous because they are indicator parameters or major cations. Analyses for these constituents are conducted as part of the triennial environmental screening program or by special request.
- Aesthetic analyses such as color, odor, corrosivity, turbidity, and surfactants are not assigned flagging criteria but are analyzed by special request.
- Common laboratory contaminants and cleaners including phthalates, dichloromethane, ketones, and toluene are not assigned flagging criteria unless they have a PDWS. These constituents are analyzed by special request.

Table B-1. Flagging Criteria

Analyte	Unit	Flag 1	Flag 2	Source
Acenaphthene	µg/L	5.1	10.2	EPA Method 8270
Acenaphthylene	µg/L	5.1	10.2	EPA Method 8270
Acetone	µg/L	500	1,000	EPA Method 8240 (Set by EPD/EMS)
Acetonitrile (Methyl cyanide)	µg/L	50	100	EPA Method 8240

Analyte	Unit	Flag 1	Flag 2	Source
Acetophenone	µg/L	85	170	EPA Method 8270
2-Acetylaminofluorene	µg/L	81	162	EPA Method 8270
Acrolein	µg/L	166.5	333	EPA Method 8240
Acrylonitrile	µg/L	250	500	EPA Method 8240
Actinium-228	µCi/mL	1.64E–06	3.27E–06	Proposed DWS (EPA, 1991a)
Alachlor	µg/L	1	2	Final DWS (CFR, 1996a)
Aldicarb	µg/L	1.5	3	Final DWS (CFR, 1996a)
Aldicarb sulfone	µg/L	1	2	Final DWS (CFR, 1996a)
Aldicarb sulfoxide	µg/L	2	4	Final DWS (CFR, 1996a)
Aldrin	µg/L	0.4	0.8	EPA Method 8080
Alkalinity (as $CaCO_3$)		No flag	No flag	Set by EPD/EMS
Allyl chloride	µg/L	416.5	833	EPA Method 8240
Aluminum	µg/L	25	50	Secondary DWS (CFR, 1996b)
Aluminum, dissolved	µg/L	25	50	Secondary DWS (CFR, 1996b)
Aluminum, total recoverable	µg/L	25	50	Secondary DWS (CFR, 1996b)
Americium-241	µCi/mL	3.17E–09	6.34E–09	Proposed DWS (EPA, 1991a)
Americium-243	µCi/mL	3.19E–09	6.37E–09	Proposed DWS (EPA, 1991a)
4-Aminobiphenyl	µg/L	81	162	EPA Method 8270
Ammonia	µg/L	250	500	APHA Method 417B
Ammonia nitrogen	µg/L	500	1,000	EPA Method 350.1
Aniline	µg/L	81	162	EPA Method 8270
Anthracene	µg/L	5.1	10.2	EPA Method 8270
Antimony	µg/L	3	6	Final DWS (CFR, 1996a)
Antimony, dissolved	µg/L	3	6	Final DWS (CFR, 1996a)
Antimony, total recoverable	µg/L	3	6	Final DWS (CFR, 1996a)
Antimony-124	µCi/mL	3E–08	6E–08	Interim Final DWS (EPA, 1977)
Antimony-125	µCi/mL	1.5E–07	3E–07	Interim Final DWS (EPA, 1977)
Aramite	µg/L	81	162	EPA Method 8270
Arsenic	µg/L	25	50	Final DWS (CFR, 1996a)
Arsenic, dissolved	µg/L	25	50	Final DWS (CFR, 1996a)
Arsenic, total recoverable	µg/L	25	50	Final DWS (CFR, 1996a)
Asbestos	Fibers/L	3,500,000	7,000,000	Final DWS (CFR, 1996a)
Atrazine	µg/L	1.5	3	Final DWS (CFR, 1996a)
Azobenzene	µg/L	50	100	EPA Method 625
Barium	µg/L	1,000	2,000	Final DWS (CFR, 1996a)
Barium, dissolved	µg/L	1,000	2,000	Final DWS (CFR, 1996a)
Barium, total recoverable	µg/L	1,000	2,000	Final DWS (CFR, 1996a)
Barium-133	µCi/mL	7.6E–07	1.52E–06	Proposed DWS (EPA, 1991a)
Barium-140[a]	µCi/mL	4.5E–08	9E–08	Interim Final DWS (EPA, 1977)
Benzene	µg/L	2.5	5	Final DWS (CFR, 1996a)
alpha-Benzene hexachloride	µg/L	0.15	0.3	EPA Method 8080
beta-Benzene hexachloride	µg/L	0.25	0.5	EPA Method 8080
delta-Benzene hexachloride	µg/L	0.25	0.5	EPA Method 8080
Benzidine	µg/L	83.5	167	EPA Method 8270
Benzo[*a*]anthracene	µg/L	0.05	0.1	Proposed DWS (EPA, 1990)
Benzo[*b*]fluoranthene	µg/L	0.1	0.2	Proposed DWS (EPA, 1990)
Benzo[*k*]fluoranthene	µg/L	0.1	0.2	Proposed DWS (EPA, 1990)
Benzoic acid	µg/L	5	10	EPA Method 8270
Benzo[*g,h,i*]perylene	µg/L	5.1	10.2	EPA Method 8270
Benzo[*a*]pyrene	µg/L	0.1	0.2	Final DWS (CFR, 1996a)
1,4-Benzoquinone	µg/L	50	100	EPA Method 8270
Benzyl alcohol	µg/L	5	10	EPA Method 8270
Beryllium	µg/L	2	4	Final DWS (CFR, 1996a)
Beryllium, dissolved	µg/L	2	4	Final DWS (CFR, 1996a)

Analyte	Unit	Flag 1	Flag 2	Source
Beryllium, total recoverable	µg/L	2	4	Final DWS (CFR, 1996a)
Beryllium-7	µCi/mL	3E–06	6E–06	Interim Final DWS (EPA, 1977)
5-day Biochemical oxygen demand		No flag	No flag	Set by EPD/EMS
Bis(2-chloroethoxy) methane	µg/L	5.1	10.2	EPA Method 8270
Bis(2-chloroethyl) ether	µg/L	5.1	10.2	EPA Method 8270
Bis(2-chloroisopropyl) ether	µg/L	100	200	EPA Method 8270
Bis(chloromethyl) ether	µg/L	50	100	EPA Method 8270
Bis(2-ethylhexyl) phthalate	µg/L	3	6	Final DWS (CFR, 1996a)
Bismuth-214	µCi/mL	9.4E–06	1.89E–05	Proposed DWS (EPA, 1991a)
Boron	µg/L	2,500	5,000	EPA Method 6010
Boron, dissolved	µg/L	2,500	5,000	EPA Method 6010
Boron, total recoverable	µg/L	2,500	5,000	EPA Method 6010
Bromide	µg/L	5,000	10,000	EPA Method 300.0
Bromobenzene	µg/L	25	50	EPA Method 8260
Bromochloromethane	µg/L	5	10	EPA Method 8260
Bromodichloromethane	µg/L	50	100	Final DWS (CFR, 1996a)
Bromoform	µg/L	50	100	Final DWS (CFR, 1996a)
Bromomethane (Methyl bromide)	µg/L	10	20	EPA Method 8240
4-Bromophenyl phenyl ether	µg/L	5.1	10.2	EPA Method 8270
n-Butylbenzene	µg/L	5	10	EPA Method 8260
sec-Butylbenzene	µg/L	5	10	EPA Method 8260
tert-Butylbenzene	µg/L	5	10	EPA Method 8260
Butylbenzyl phthalate		No flag	No flag	Set by EPD/EMS
2-sec-Butyl-4,6-dinitrophenol	µg/L	3.5	7	Final DWS (CFR, 1996a)
Cadmium	µg/L	2.5	5	Final DWS (CFR, 1996a)
Cadmium, dissolved	µg/L	2.5	5	Final DWS (CFR, 1996a)
Cadmium, total recoverable	µg/L	2.5	5	Final DWS (CFR, 1996a)
Calcium		No flag	No flag	Set by EPD/EMS
Calcium, dissolved		No flag	No flag	Set by EPD/EMS
Calcium, total recoverable		No flag	No flag	Set by EPD/EMS
Carbofuran	µg/L	20	40	Final DWS (CFR, 1996a)
Carbon disulfide	µg/L	25	50	EPA Method 8240
Carbon tetrachloride	µg/L	2.5	5	Final DWS (CFR, 1996a)
Carbon-14	µCi/mL	1E–06	2E–06	Interim Final DWS (EPA, 1977)
Carbonate		No flag	No flag	Set by EPD/EMS
Cerium-141[a]	µCi/mL	1.5E–07	3E–07	Interim Final DWS (EPA, 1977)
Cerium-144	µCi/mL	1.31E–07	2.61E–07	Proposed DWS (EPA, 1991a)
Cesium-134[b]	µCi/mL	4.07E–08	8.13E–08	Proposed DWS (EPA, 1991a)
Cesium-137	µCi/mL	1E–07	2E–07	Interim Final DWS (EPA, 1977)
Chemical oxygen demand		No flag	No flag	Set by EPD/EMS
Chlordane	µg/L	1	2	Final DWS (CFR, 1996a)
alpha-Chlordane	µg/L	0.25	0.5	EPA Method 8080
gamma-Chlordane	µg/L	0.25	0.5	EPA Method 8080
Chloride	µg/L	125,000	250,000	Secondary DWS (CFR, 1996b)
4-Chloroaniline	µg/L	5	10	EPA Method 8270
Chlorobenzene	µg/L	50	100	Final DWS (CFR, 1996a)
Chlorobenzilate	µg/L	81	162	EPA Method 8270
4-Chloro-m-cresol	µg/L	5.1	10.2	EPA Method 8270
Chloroethane	µg/L	10	20	EPA Method 8240
Chloroethene (Vinyl chloride)	µg/L	1	2	Final DWS (CFR, 1996a)
Chloroethyl vinyl ether	µg/L	5	10	EPA Method 8240
2-Chloroethyl vinyl ether	µg/L	50	100	EPA Method 8240
Chloroform	µg/L	50	100	Final DWS (CFR, 1996a)
Chloromethane (Methyl chloride)	µg/L	10	20	EPA Method 8240

Analyte	Unit	Flag 1	Flag 2	Source
2-Chloronaphthalene	µg/L	5.1	10.2	EPA Method 8240
2-Chlorophenol	µg/L	5.1	10.2	EPA Method 8270
4-Chlorophenyl phenyl ether	µg/L	5.1	10.2	EPA Method 8270
Chloroprene	µg/L	1,665	3,330	EPA Method 8240
2-Chlorotoluene	µg/L	25	50	EPA Method 8260
4-Chlorotoluene	µg/L	5	10	EPA Method 8260
Chromium	µg/L	50	100	Final DWS (CFR, 1996a)
Chromium, dissolved	µg/L	50	100	Final DWS (CFR, 1996a)
Chromium, total recoverable	µg/L	50	100	Final DWS (CFR, 1996a)
Chromium-51[a]	µCi/mL	3E–06	6E–06	Interim Final DWS (EPA, 1977)
Chrysene	µg/L	0.1	0.2	Proposed DWS (EPA, 1990)
Cobalt	µg/L	50	100	EPA Method 6010
Cobalt, dissolved	µg/L	50	100	EPA Method 6010
Cobalt, total recoverable	µg/L	50	100	EPA Method 6010
Cobalt-57	µCi/mL	5E–07	1E–06	Interim Final DWS (EPA, 1977)
Cobalt-58	µCi/mL	4.5E–06	9E–06	Interim Final DWS (EPA, 1977)
Cobalt-60	µCi/mL	5E–08	1E–07	Interim Final DWS (EPA, 1977)
Color		No flag	No flag	Set by EPD/EMS
Copper	µg/L	500	1,000	Primary DWS (SCDHEC, 1981)
Copper, dissolved	µg/L	500	1,000	Primary DWS (SCDHEC, 1981)
Copper, total recoverable	µg/L	500	1,000	Primary DWS (SCDHEC, 1981)
Corrosivity		No flag	No flag	Set by EPD/EMS
m-Cresol (3-Methylphenol)	µg/L	50	100	EPA Method 8270
o-Cresol (2-Methylphenol)	µg/L	5	10	EPA Method 8270
p-Cresol (4-Methylphenol)	µg/L	60	120	EPA Method 8270
Curium-242	µCi/mL	6.65E–08	1.33E–07	Proposed DWS (EPA, 1991a)
Curium-243	µCi/mL	4.15E–09	8.3E–09	Proposed DWS (EPA, 1991a)
Curium-243/244[c]	µCi/mL	4.15E–09	8.3E–09	Proposed DWS (EPA, 1991a)
Curium-244	µCi/mL	4.92E–09	9.84E–09	Proposed DWS (EPA, 1991a)
Curium-245/246[c]	µCi/mL	3.12E–09	6.23E–09	Proposed DWS (EPA, 1991a)
Curium-246	µCi/mL	3.14E–09	6.27E–09	Proposed DWS (EPA, 1991a)
Cyanide	µg/L	100	200	Final DWS (CFR, 1996a)
Dalapon	µg/L	100	200	Final DWS (CFR, 1996a)
p,p'-DDD	µg/L	0.55	1.1	EPA Method 8080
p,p'-DDE	µg/L	0.25	0.5	EPA Method 8080
p,p'-DDT	µg/L	0.85	1.7	EPA Method 8080
Diallate	µg/L	81	162	EPA Method 8270
Dibenz[*a,h*]anthracene	µg/L	0.15	0.3	Proposed DWS (EPA, 1990)
Dibenzofuran	µg/L	5	10	EPA Method 8270
Dibromochloromethane	µg/L	50	100	Final DWS (CFR, 1996a)
1,2-Dibromo-3-chloropropane	µg/L	0.1	0.2	Final DWS (CFR, 1996a)
1,2-Dibromoethane	µg/L	0.025	0.05	Final DWS (CFR, 1996a)
Dibromomethane (Methylene bromide)	µg/L	10	20	EPA Method 8240
Di-n-butyl phthalate		No flag	No flag	Set by EPD/EMS
1,2-Dichlorobenzene	µg/L	300	600	Final DWS (CFR, 1996a)
1,3-Dichlorobenzene	µg/L	81	162	EPA Method 8270
1,4-Dichlorobenzene	µg/L	37.5	75	Final DWS (CFR, 1996a)
3,3'-Dichlorobenzidine	µg/L	5.1	10.2	EPA Method 8270
trans-1,4-Dichloro-2-butene	µg/L	250	500	EPA Method 8240
Dichlorodifluoromethane	µg/L	10	20	EPA Method 8240
1,1-Dichloroethane	µg/L	10	20	EPA Method 8240
1,2-Dichloroethane	µg/L	2.5	5	Final DWS (CFR, 1996a)
cis-1,2-Dichloroethylene	µg/L	35	70	Final DWS (CFR, 1996a)
1,1-Dichloroethylene	µg/L	3.5	7	Final DWS (CFR, 1996a)

Analyte	Unit	Flag 1	Flag 2	Source
1,2-Dichloroethylene	µg/L	25	50	EPA Method 8240
trans-1,2-Dichloroethylene	µg/L	50	100	Final DWS (CFR, 1996a)
Dichloromethane (Methylene chloride)	µg/L	2.5	5	Final DWS (CFR, 1996a)
2,4-Dichlorophenol	µg/L	5.1	10.2	EPA Method 8270
2,6-Dichlorophenol	µg/L	83.5	167	EPA Method 8270
2,4-Dichlorophenoxyacetic acid	µg/L	35	70	Final DWS (CFR, 1996a)
1,2-Dichloropropane	µg/L	2.5	5	Final DWS (CFR, 1996a)
2,2-Dichloropropane	µg/L	5	10	EPA Method 8260
cis-1,3-Dichloropropene	µg/L	10	20	EPA Method 8240
trans-1,3-Dichloropropene	µg/L	10	20	EPA Method 8240
Dieldrin	µg/L	4.15	8.3	EPA Method 8080
Diethyl phthalate		No flag	No flag	Set by EPD/EMS
Di(2-ethylhexyl) adipate	µg/L	200	400	Final DWS (CFR, 1996a)
Dimethoate	µg/L	81	162	EPA Method 8270
2,4-Dimethyl phenol	µg/L	5.1	10.2	EPA Method 8270
Dimethyl phthalate		No flag	No flag	Set by EPD/EMS
p-Dimethylaminoazobenzene	µg/L	81	162	EPA Method 8270
p-(Dimethylamino)ethylbenzene	µg/L	50	100	EPA Method 8270
7,12-Dimethylbenz[a]anthracene	µg/L	81	162	EPA Method 8270
3,3′-Dimethylbenzidine	µg/L	81	162	EPA Method 8270
a,a-Dimethylphenethylamine	µg/L	81	162	EPA Method 8270
1,3-Dinitrobenzene	µg/L	81	162	EPA Method 8270
2,4-Dinitrophenol	µg/L	51	102	EPA Method 8270
2,4-Dinitrotoluene	µg/L	0.5	1	EPA Method 8270
2,6-Dinitrotoluene	µg/L	0.5	1	EPA Method 8270
Di-n-octyl phthalate		No flag	No flag	Set by EPD/EMS
1,4-Dioxane	µg/L	500	1,000	EPA Method 8270
Diphenylamine	µg/L	81	162	EPA Method 8270
1,2-Diphenylhydrazine	µg/L	83.5	167	EPA Method 8270
Diquat dibromide	µg/L	10	20	Final DWS (CFR, 1996a)
Dissolved organic carbon	µg/L	10,500,000	21,000,000	EPA Method 9060
Disulfoton	µg/L	81	162	EPA Method 8270
Endosulfan I	µg/L	0.25	0.5	EPA Method 8080
Endosulfan II	µg/L	0.55	1.1	EPA Method 8080
Endosulfan sulfate	µg/L	0.55	1.1	EPA Method 8080
Endothall	µg/L	50	100	Final DWS (CFR, 1996a)
Endrin	µg/L	1	2	Final DWS (CFR, 1996a)
Endrin aldehyde	µg/L	0.85	1.7	EPA Method 8080
Endrin ketone		No flag	No flag	Set by EPD/EMS
Ethyl ether	µg/L	50	100	EPA Method 8260
Ethyl methacrylate	µg/L	2.5	5	EPA Method 8270
Ethyl methanesulfonate	µg/L	81	162	EPA Method 8270
Ethylbenzene	µg/L	350	700	Final DWS (CFR, 1996a)
Europium-152	µCi/mL	3E–08	6E–08	Interim Final DWS (EPA, 1977)
Europium-154	µCi/mL	1E–07	2E–07	Interim Final DWS (EPA, 1977)
Europium-155	µCi/mL	3E–07	6E–07	Interim Final DWS (EPA, 1977)
Famphur	µg/L	81	162	EPA Method 8270
Fluoranthene	µg/L	5.1	10.2	EPA Method 8270
Fluorene	µg/L	5.1	10.2	EPA Method 8270
Fluoride	µg/L	2,000	4,000	Final DWS (CFR, 1996a)
Glyphosate	µg/L	350	700	Final DWS (CFR, 1996a)
Gross alpha	µCi/mL	7.5E–09	1.5E–08	Final DWS (CFR, 1996a)
Heptachlor	µg/L	0.2	0.4	Final DWS (CFR, 1996a)
Heptachlor epoxide	µg/L	0.1	0.2	Final DWS (CFR, 1996a)

Analyte	Unit	Flag 1	Flag 2	Source
Heptachlorodibenzo-p-dioxin isomers	µg/L	0.007	0.014	EPA Method 8280
1,2,3,4,6,7,8-HPCDD	µg/L	0.007	0.014	EPA Method 8280
Heptachlorodibenzo-p-furan isomers	µg/L	0.008	0.016	EPA Method 8280
1,2,3,4,6,7,8-HPCDF	µg/L	0.008	0.016	EPA Method 8280
Hexachlorobenzene	µg/L	0.5	1	Final DWS (CFR, 1996a)
Hexachlorobutadiene	µg/L	5	10	EPA Method 8270
Hexachlorocyclopentadiene	µg/L	25	50	Final DWS (CFR, 1996a)
Hexachlorodibenzo-p-dioxin isomers	µg/L	0.008	0.016	EPA Method 8280
1,2,3,4,7,8-HXCDD	µg/L	0.0105	0.021	EPA Method 8280
Hexachlorodibenzo-p-furan isomers	µg/L	0.006	0.012	EPA Method 8280
1,2,3,4,7,8-HXCDF	µg/L	0.0085	0.017	EPA Method 8280
Hexachloroethane	µg/L	0.5	1	EPA Method 8270
Hexachlorophene	µg/L	83.5	167	EPA Method 8270
Hexachloropropene	µg/L	81	162	EPA Method 8270
2-Hexanone	µg/L	50	100	EPA Method 8240
Indeno[1,2,3-*c,d*]pyrene	µg/L	0.5	1	EPA Method 8270
Iodine	µg/L	250	500	APHA Method 415A
Iodine-129	µCi/mL	5E–10	1E–09	Interim Final DWS (EPA, 1977)
Iodine-131[a]	µCi/mL	1.5E–09	3E–09	Interim Final DWS (EPA, 1977)
Iodomethane (Methyl iodide)	µg/L	125	250	EPA Method 8240
Iron	µg/L	150	300	Secondary DWS (CFR, 1996b)
Iron, dissolved	µg/L	150	300	Secondary DWS (CFR, 1996b)
Iron, total recoverable	µg/L	150	300	Secondary DWS (CFR, 1996b)
Iron-55[a]	µCi/mL	1E–06	2E–06	Interim Final DWS (EPA, 1977)
Iron-59[a]	µCi/mL	1E–07	2E–07	Interim Final DWS (EPA, 1977)
Isobutyl alcohol	µg/L	834.5	1,669	EPA Method 8240
Isodrin	µg/L	81	162	EPA Method 8270
Isophorone	µg/L	5.1	10.2	EPA Method 8270
Isopropylbenzene	µg/L	5	10	EPA Method 8260
p-Isopropyltoluene	µg/L	5	10	EPA Method 8260
Isosafrole	µg/L	81	162	EPA Method 8270
Kepone	µg/L	81	162	EPA Method 8270
Lanthanum-140[a]	µCi/mL	3E–08	6E–08	Interim Final DWS (EPA, 1977)
Lead	µg/L	25	50	Final DWS (SCDHEC, 1981)
Lead, dissolved	µg/L	25	50	Final DWS (SCDHEC, 1981)
Lead, total recoverable	µg/L	25	50	Final DWS (SCDHEC, 1981)
Lead-212	µCi/mL	6.2E–08	1.23E–07	Proposed DWS (EPA, 1991a)
Lindane	µg/L	0.1	0.2	Final DWS (CFR, 1996a)
Lithium	µg/L	125	250	EPA Method 6010
Lithium, dissolved	µg/L	125	250	EPA Method 6010
Lithium, total recoverable	µg/L	125	250	EPA Method 6010
Magnesium		No flag	No flag	Set by EPD/EMS
Magnesium, dissolved		No flag	No flag	Set by EPD/EMS
Magnesium, total recoverable		No flag	No flag	Set by EPD/EMS
Manganese	µg/L	25	50	Secondary DWS (CFR, 1996b)
Manganese, dissolved	µg/L	25	50	Secondary DWS (CFR, 1996b)
Manganese, total recoverable	µg/L	25	50	Secondary DWS (CFR, 1996b)
Manganese-54	µCi/mL	1.5E–07	3E–07	Interim Final DWS (EPA, 1977)
Mercury	µg/L	1	2	Final DWS (CFR, 1996a)
Mercury, dissolved	µg/L	1	2	Final DWS (CFR, 1996a)
Mercury, total recoverable	µg/L	1	2	Final DWS (CFR, 1996a)
Methacrylonitrile	µg/L	416.5	833	EPA Method 8240
Methapyrilene	µg/L	81	162	EPA Method 8270
Methoxychlor	µg/L	20	40	Final DWS (CFR, 1996a)

Analyte	Unit	Flag 1	Flag 2	Source
Methyl tert-butyl ether	µg/L	5	10	EPA Method 8260
Methyl ethyl ketone		No flag	No flag	Set by EPD/EMS
Methyl isobutyl ketone		No flag	No flag	Set by EPD/EMS
Methyl methacrylate	µg/L	50	100	EPA Method 8270
Methyl methanesulfonate	µg/L	81	162	EPA Method 8270
3-Methylcholanthrene	µg/L	81	162	EPA Method 8270
2-Methyl-4,6-dinitrophenol	µg/L	51	102	EPA Method 8270
2-Methylnaphthalene	µg/L	5	10	EPA Method 8270
Molybdenum	µg/L	250	500	EPA Method 6010
Molybdenum, dissolved	µg/L	250	500	EPA Method 6010
Molybdenum, total recoverable	µg/L	250	500	EPA Method 6010
Naphthalene	µg/L	83.5	167	EPA Method 8270
1,4-Naphthoquinone	µg/L	81	162	EPA Method 8270
1-Naphthylamine	µg/L	81	162	EPA Method 8270
2-Naphthylamine	µg/L	81	162	EPA Method 8270
Neptunium-237	µCi/mL	3.53E–09	7.06E–09	Proposed DWS (EPA, 1991a)
Neptunium-239	µCi/mL	8.4E–07	1.68E–06	Proposed DWS (EPA, 1991a)
Nickel	µg/L	50	100	Final DWS (CFR, 1996a)
Nickel, dissolved	µg/L	50	100	Final DWS (CFR, 1996a)
Nickel, total recoverable	µg/L	50	100	Final DWS (CFR, 1996a)
Nickel-59	µCi/mL	1.5E–07	3E–07	Interim Final DWS (EPA, 1977)
Nickel-63	µCi/mL	2.5E–08	5E–08	Interim Final DWS (EPA, 1977)
Niobium-95[a]	µCi/mL	1.5E–07	3E–07	Interim Final DWS (EPA, 1977)
Nitrate as nitrogen	µg/L	5,000	10,000	Final DWS (CFR, 1996a)
Nitrate-nitrite as nitrogen	µg/L	5,000	10,000	Final DWS (CFR, 1996a)
Nitrite as nitrogen	µg/L	500	1,000	Final DWS (CFR, 1996a)
m-Nitroaniline	µg/L	5	10	EPA Method 8270
o-Nitroaniline	µg/L	5	10	EPA Method 8270
p-Nitroaniline	µg/L	5	10	EPA Method 8270
Nitrobenzene	µg/L	5.1	10.2	EPA Method 8270
Nitrogen by Kjeldahl method	µg/L	500	1,000	EPA Method 351.2
2-Nitrophenol	µg/L	5.1	10.2	EPA Method 8270
4-Nitrophenol	µg/L	5.1	10.2	EPA Method 8270
4-Nitroquinoline-1-oxide	µg/L	81	162	EPA Method 8270
N-Nitrosodi-n-butylamine	µg/L	81	162	EPA Method 8270
N-Nitrosodiethylamine	µg/L	81	162	EPA Method 8270
N-Nitrosodimethylamine	µg/L	83.5	167	EPA Method 8270
N-Nitrosodiphenylamine	µg/L	5.1	10.2	EPA Method 8270
N-Nitrosodipropylamine	µg/L	5.1	10.2	EPA Method 8270
N-Nitrosomethylethylamine	µg/L	81	162	EPA Method 8270
N-Nitrosomorpholine	µg/L	81	162	EPA Method 8270
N-Nitrosopiperidine	µg/L	81	162	EPA Method 8270
N-Nitrosopyrrolidine	µg/L	81	162	EPA Method 8270
5-Nitro-o-toluidine	µg/L	81	162	EPA Method 8270
Nonvolatile beta	µCi/mL	2.5E–08	5E–08	Interim Final DWS (EPA, 1977)
Octachlorodibenzo-p-dioxin isomers	µg/L	0.0085	0.017	EPA Method 8280
Octachlorodibenzo-p-furan isomers	µg/L	0.0065	0.013	EPA Method 8280
Odor		No flag	No flag	Set by EPD/EMS
Oil and grease	µg/L	8,350	16,700	EPA Method 413.1
Oxamyl	µg/L	100	200	Final DWS (CFR, 1996a)
Parathion	µg/L	0.4	0.8	EPA Method 8080
Parathion methyl	µg/L	0.4	0.8	EPA Method 8080
PCB 1016	µg/L	0.25	0.5	Final DWS (CFR, 1996a)
PCB 1221	µg/L	0.25	0.5	Final DWS (CFR, 1996a)

Analyte	Unit	Flag 1	Flag 2	Source
PCB 1232	µg/L	0.25	0.5	Final DWS (CFR, 1996a)
PCB 1242	µg/L	0.25	0.5	Final DWS (CFR, 1996a)
PCB 1248	µg/L	0.25	0.5	Final DWS (CFR, 1996a)
PCB 1254	µg/L	0.25	0.5	Final DWS (CFR, 1996a)
PCB 1260	µg/L	0.25	0.5	Final DWS (CFR, 1996a)
PCB 1262	µg/L	0.25	0.5	Final DWS (CFR, 1996a)
Pentachlorobenzene	µg/L	81	162	EPA Method 8270
Pentachlorodibenzo-p-dioxin isomers	µg/L	0.008	0.016	EPA Method 8280
1,2,3,7,8-PCDD	µg/L	0.0075	0.015	EPA Method 8280
Pentachlorodibenzo-p-furan isomers	µg/L	0.0085	0.017	EPA Method 8280
1,2,3,7,8-PCDF	µg/L	0.0085	0.017	EPA Method 8280
Pentachloroethane	µg/L	81	162	EPA Method 8270
Pentachloronitrobenzene	µg/L	81	162	EPA Method 8270
Pentachlorophenol	µg/L	0.5	1	Final DWS (CFR, 1996a)
pH[d]	pH	8	10	Set by EPD/EMS
pH[d]	pH	4	3	Set by EPD/EMS
Phenacetin	µg/L	81	162	EPA Method 8270
Phenanthrene	µg/L	5.1	10.2	EPA Method 8270
Phenol	µg/L	83.5	167	EPA Method 8270
Phenols	µg/L	50	100	EPA Method 420.1
p-Phenylenediamine	µg/L	81	162	EPA Method 8270
Phorate	µg/L	0.85	1.7	EPA Method 8080
Picloram	µg/L	250	500	Final DWS (CFR, 1996a)
2-Picoline	µg/L	81	162	EPA Method 8270
Plutonium-238	µCi/mL	3.51E–09	7.02E–09	Proposed DWS (EPA, 1991a)
Plutonium-239	µCi/mL	3.11E–08	6.21E–08	Proposed DWS (EPA, 1991a)
Plutonium-239/240[c]	µCi/mL	3.11E–08	6.21E–08	Proposed DWS (EPA, 1991a)
Plutonium-240	µCi/mL	3.11E–08	6.22E–08	Proposed DWS (EPA, 1991a)
Plutonium-241[a]	µCi/mL	3.13E–08	6.26E–08	Proposed DWS (EPA, 1991a)
Plutonium-242[a]	µCi/mL	3.27E–08	6.54E–08	Proposed DWS (EPA, 1991a)
Potassium		No flag	No flag	Set by EPD/EMS
Potassium, dissolved		No flag	No flag	Set by EPD/EMS
Potassium, total recoverable		No flag	No flag	Set by EPD/EMS
Potassium-40	µCi/mL	1.5E–07	3E–07	Proposed DWS (EPA, 1986a)
Promethium-144	µCi/mL	5E–08	1E–07	EPA Method 901.1
Promethium-146	µCi/mL	5E–08	1E–07	EPA Method 901.1
Promethium-147	µCi/mL	2.62E–06	5.24E–06	Proposed DWS (EPA, 1991a)
Pronamid	µg/L	81	162	EPA Method 8270
Propionitrile	µg/L	1,665	3,330	EPA Method 8240
n-Propylbenzene	µg/L	5	10	EPA Method 8260
Pyrene	µg/L	5.1	10.2	EPA Method 8270
Pyridine	µg/L	81	162	EPA Method 8270
Radium, total alpha-emitting	µCi/mL	1E–08	2E–08	Proposed DWS (EPA, 1991a)
Radium-226	µCi/mL	1E–08	2E–08	Proposed DWS (EPA, 1991a)
Radium-228	µCi/mL	1E–08	2E–08	Proposed DWS (EPA, 1991a)
Radon-222	µCi/mL	1.5E–07	3E–07	Proposed DWS (EPA, 1991a)
Ruthenium-103[a]	µCi/mL	1E–07	2E–07	Interim Final DWS (EPA, 1977)
Ruthenium-106	µCi/mL	1.5E–08	3E–08	Interim Final DWS (EPA, 1977)
Safrole	µg/L	81	162	EPA Method 8270
Selenium	µg/L	25	50	Final DWS (CFR, 1996a)
Selenium, dissolved	µg/L	25	50	Final DWS (CFR, 1996a)
Selenium, total recoverable	µg/L	25	50	Final DWS (CFR, 1996a)
Silica		No flag	No flag	Set by EPD/EMS
Silica, dissolved		No flag	No flag	Set by EPD/EMS

Analyte	Unit	Flag 1	Flag 2	Source
Silica, total recoverable		No flag	No flag	Set by EPD/EMS
Silver	µg/L	50	100	Secondary DWS (CFR, 1996b)
Silver, dissolved	µg/L	50	100	Secondary DWS (CFR, 1996b)
Silver, total recoverable	µg/L	50	100	Secondary DWS (CFR, 1996b)
Simazine	µg/L	2	4	Final DWS (CFR, 1996a)
Sodium		No flag	No flag	Set by EPD/EMS
Sodium, dissolved		No flag	No flag	Set by EPD/EMS
Sodium, total recoverable		No flag	No flag	Set by EPD/EMS
Sodium-22	µCi/mL	2.33E–07	4.66E–07	Proposed DWS (EPA, 1991a)
Specific conductance[d]	µS/cm	250	500	Set by EPD/EMS
Strontium-89	µCi/mL	1E–08	2E–08	Interim Final DWS (EPA, 1977)
Strontium-89/90[c]	µCi/mL	4E–09	8E–09	Final DWS (CFR, 1996a)
Strontium-90	µCi/mL	4E–09	8E–09	Final DWS (CFR, 1996a)
Styrene	µg/L	50	100	Final DWS (CFR, 1996a)
Sulfate	µg/L	200,000	400,000	Proposed DWS (EPA, 1990)
Sulfide	µg/L	8,350	16,700	EPA Method 9030
Sulfotepp	µg/L	81	162	EPA Method 8270
Surfactants		No flag	No flag	Set by EPD/EMS
2,3,7,8-TCDD	µg/L	0.007	0.014	Final DWS (CFR, 1996a)
2,3,7,8-TCDF	µg/L	0.00425	0.0085	EPA Method 8280
Technetium-99	µCi/mL	4.5E–07	9E–07	Interim Final DWS (EPA, 1977)
1,2,4,5-Tetrachlorobenzene	µg/L	81	162	EPA Method 8270
Tetrachlorodibenzo-p-dioxin isomers	µg/L	0.007	0.014	EPA Method 8280
Tetrachlorodibenzo-p-furan isomers	µg/L	0.0055	0.011	EPA Method 8280
1,1,1,2-Tetrachloroethane	µg/L	10	20	EPA Method 8240
1,1,2,2-Tetrachloroethane	µg/L	50	100	EPA Method 8240
Tetrachloroethylene	µg/L	2.5	5	Final DWS (CFR, 1996a)
2,3,4,6-Tetrachlorophenol	µg/L	83.5	167	EPA Method 8270
Thallium	µg/L	1	2	Final DWS (CFR, 1996a)
Thallium, dissolved	µg/L	1	2	Final DWS (CFR, 1996a)
Thallium, total recoverable	µg/L	1	2	Final DWS (CFR, 1996a)
Thionazin	µg/L	81	162	EPA Method 8270
Thorium-228	µCi/mL	6.25E–08	1.25E–07	Proposed DWS (EPA, 1991a)
Thorium-230	µCi/mL	3.96E–08	7.92E–08	Proposed DWS (EPA, 1991a)
Thorium-232	µCi/mL	4.4E–08	8.8E–08	Proposed DWS (EPA, 1991a)
Thorium-234[a]	µCi/mL	2E–07	4.01E–07	Proposed DWS (EPA, 1991a)
Tin	µg/L	250	500	EPA Method 282.2
Tin, dissolved	µg/L	250	500	EPA Method 282.2
Tin, total recoverable	µg/L	250	500	EPA Method 282.2
Tin-113	µCi/mL	1.5E–07	3E–07	Interim Final DWS (EPA, 1977)
Toluene	µg/L	500	1,000	Final DWS (CFR, 1996a)
o-Toluidine	µg/L	81	162	EPA Method 8270
Total carbon	µg/L	5,000	10,000	EPA Method 9060
Total coliform	N/A	0	0	Final DWS (CFR, 1996a)
Total dissolved solids		No flag	No flag	Set by EPD/EMS
Total hydrocarbons	µg/L	5,000	10,000	EPA Method 418.1
Total inorganic carbon	µg/L	8,350	16,700	EPA Method 9060
Total organic carbon	µg/L	500,000	1,000,000	EPA Method 9060
Total organic halogens	µg/L	50	100	EPA Method 9020
Total organic nitrogen	µg/L	500	1,000	APHA Method 420
Total petroleum hydrocarbons	µg/L	8,350	16,700	EPA Method 418.1
Total phosphates (as P)		No flag	No flag	Set by EPD/EMS
Total phosphorus		No flag	No flag	Set by EPD/EMS
Toxaphene	µg/L	1.5	3	Final DWS (CFR, 1996a)

Analyte	Unit	Flag 1	Flag 2	Source
2,4,5-TP (Silvex)	µg/L	25	50	Final DWS (CFR, 1996a)
Tributyl phosphate	µg/L	86	172	EPA Method 8270
1,2,3-Trichlorobenzene	µg/L	5	10	EPA Method 8260
1,2,4-Trichlorobenzene	µg/L	35	70	Final DWS (CFR, 1996a)
1,1,1-Trichloroethane	µg/L	100	200	Final DWS (CFR, 1996a)
1,1,2-Trichloroethane	µg/L	2.5	5	Final DWS (CFR, 1996a)
Trichloroethylene	µg/L	2.5	5	Final DWS (CFR, 1996a)
Trichlorofluoromethane	µg/L	10	20	EPA Method 8240
2,4,5-Trichlorophenol	µg/L	5	10	EPA Method 8270
2,4,6-Trichlorophenol	µg/L	0.5	1	EPA Method 8270
2,4,5-Trichlorophenoxyacetic acid	µg/L	0.25	0.5	EPA Method 8150
1,2,3-Trichloropropane	µg/L	10	20	EPA Method 8240
Trichlorotrifluoroethane	µg/L	50	100	EPA Method 8260
O,O,O-Triethyl phosphorothioate	µg/L	81	162	EPA Method 8270
1,2,4-Trimethylbenzene	µg/L	5	10	EPA Method 8260
1,3,5-Trimethylbenzene	µg/L	5	10	EPA Method 8260
1,3,5-Trinitrobenzene	µg/L	81	162	EPA Method 8270
Tritium	µCi/mL	1E–05	2E–05	Final DWS (CFR, 1996a)
Turbidity[e]		No flag	No flag	Set by EPD/EMS
Uranium	µg/L	10	20	Proposed DWS (EPA, 1991a)
Uranium alpha activity	µCi/mL	1.5E–08	3E–08	Proposed DWS (EPA, 1991a)
Uranium, dissolved	µg/L	10	20	Proposed DWS (EPA, 1991a)
Uranium, total recoverable	µg/L	10	20	Proposed DWS (EPA, 1991a)
Uranium-233/234[c]	µCi/mL	6.9E–09	1.38E–08	Proposed DWS (EPA, 1991a)
Uranium-234	µCi/mL	6.95E–09	1.39E–08	Proposed DWS (EPA, 1991a)
Uranium-235	µCi/mL	7.25E–09	1.45E–08	Proposed DWS (EPA, 1991a)
Uranium-238	µCi/mL	7.3E–09	1.46E–08	Proposed DWS (EPA, 1991a)
Vanadium	µg/L	66.5	133	EPA Method 6010
Vanadium, dissolved	µg/L	66.5	133	EPA Method 6010
Vanadium, total recoverable	µg/L	66.5	133	EPA Method 6010
Vinyl acetate	µg/L	50	100	EPA Method 8240
m/p-Xylene	µg/L	81	162	EPA Method 8260
o-Xylene	µg/L	5	10	EPA Method 8260
Xylenes	µg/L	5,000	10,000	Final DWS (CFR, 1996a)
Yttrium-88	µCi/mL	5E–08	1E–07	EPA Method 901.1
Zinc	µg/L	2,500	5,000	Secondary DWS (CFR, 1996b)
Zinc, dissolved	µg/L	2,500	5,000	Secondary DWS (CFR, 1996b)
Zinc, total recoverable	µg/L	2,500	5,000	Secondary DWS (CFR, 1996b)
Zinc-65	µCi/mL	1.5E–07	3E–07	Interim Final DWS (EPA, 1977)
Zirconium-95	µCi/mL	1E–07	2E–07	Interim Final DWS (EPA, 1977)
Zirconium/Niobium-95[a]	µCi/mL	1E–07	2E–07	Interim Final DWS (EPA, 1977)

a EMS discontinued monitoring this radionuclide because it is inappropriate for the SRS groundwater monitoring program.
b EPD/EMS set this flagging criterion using the 1991 proposed DWS because the final DWS in 1977 may have been in error.
c When radionuclide analyses are combined, the lower DWS of the two isotopes is used for flagging.
d Will not trigger scheduling.
e The primary maximum contaminant level range for turbidity is 1–5 NTU, which is inappropriate for the SRS groundwater monitoring program.

Appendix C

Figures

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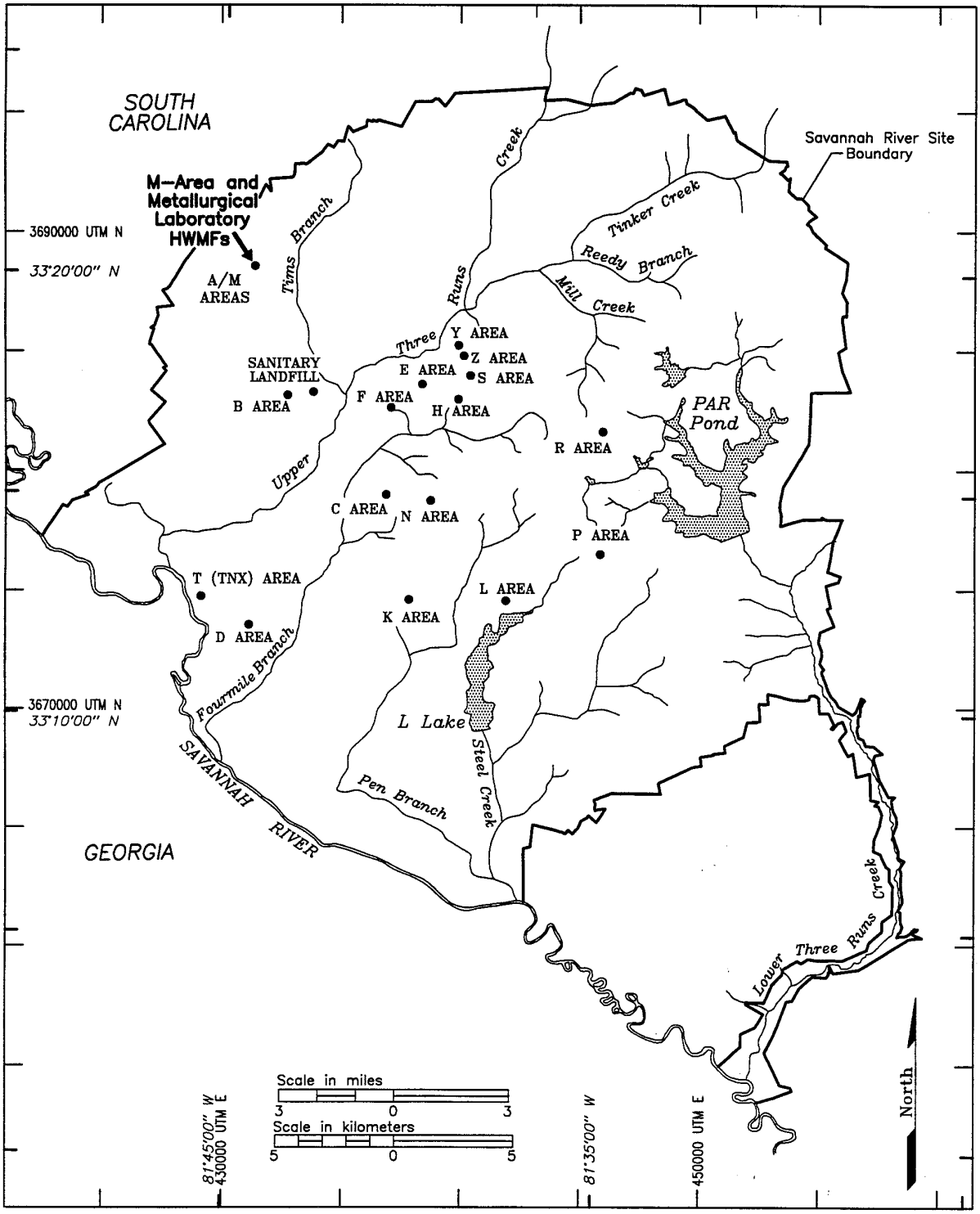

Figure 1. Location of the M-Area and Metallurgical Laboratory HWMFs at the Savannah River Site

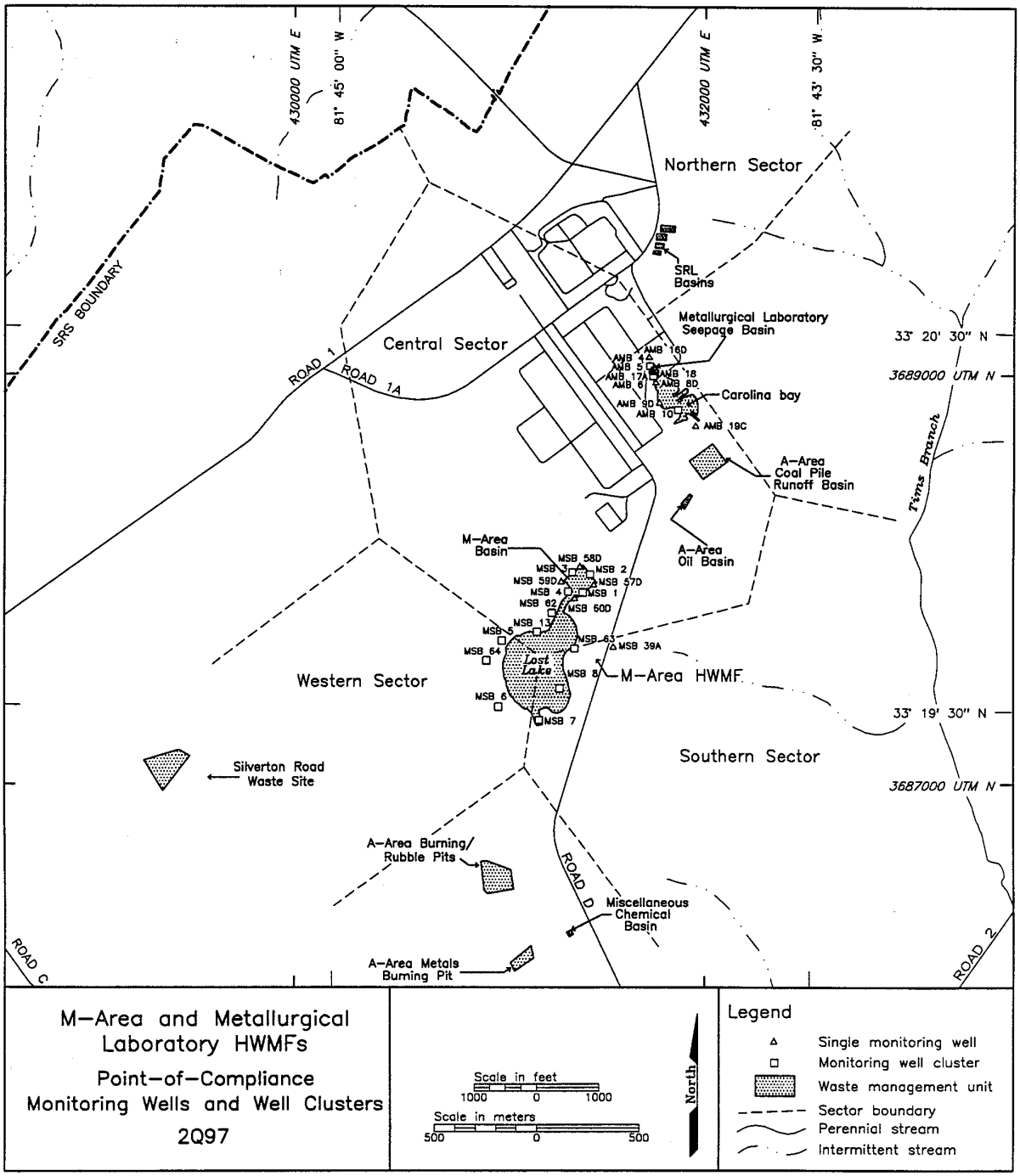

Figure 2. Location of Point-of-Compliance Wells at the M-Area and Metallurgical Laboratory HWMFs

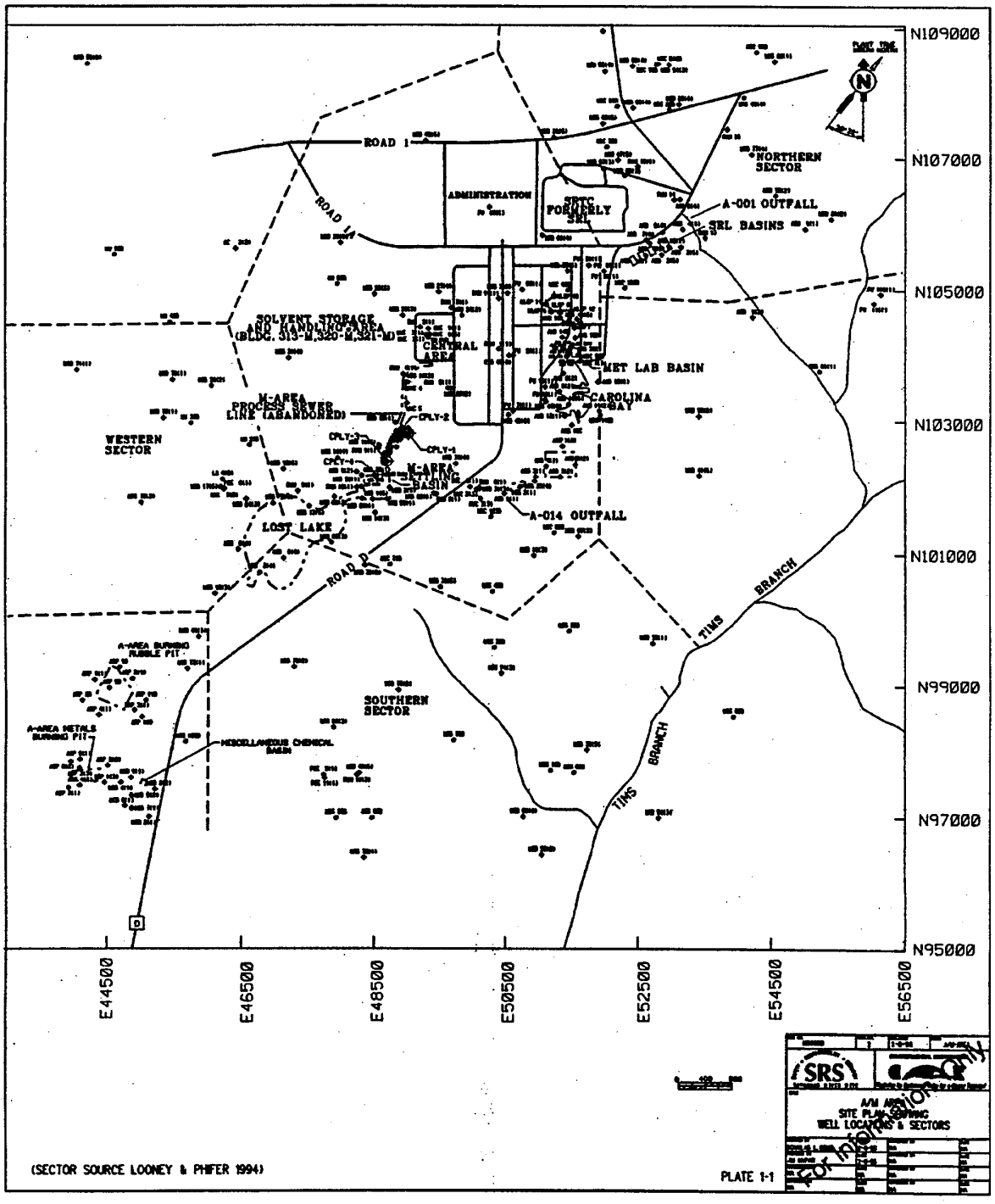

Figure 3. M-Area Sectors

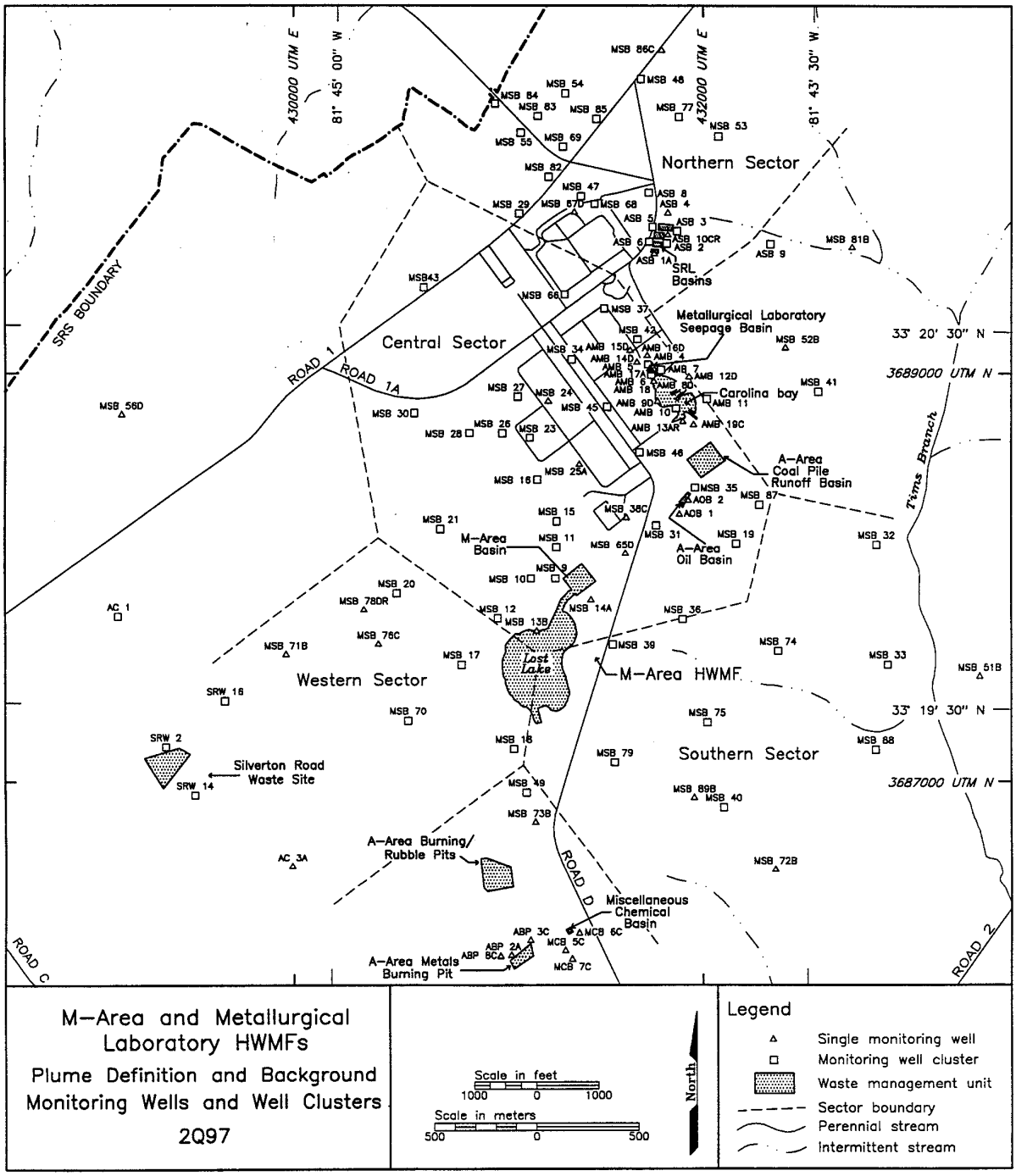

Figure 4. Location of Plume Definition and Background Wells at the M-Area and Metallurgical Laboratory HWMFs

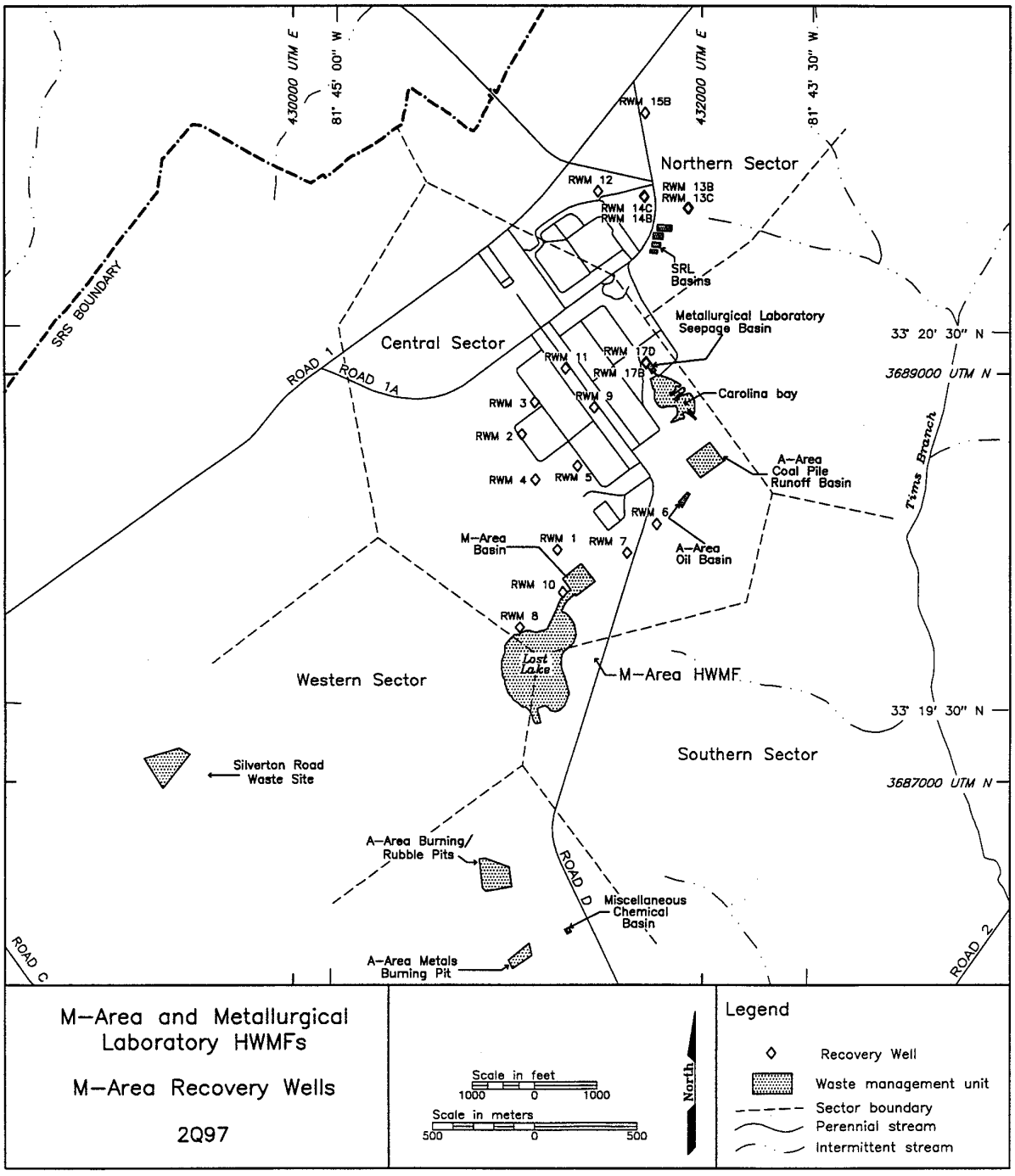

Figure 5. Location of Recovery Wells at the M-Area HWMF

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Appendix D

Groundwater Monitoring Results Tables

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Key to Reading the Tables

The following abbreviations may appear in the data tables:

Constituents

1,2,3,4,6,7,8-HPCDD	1,2,3,4,6,7,8-heptachlorodibenzo-p-dioxin
1,2,3,4,6,7,8-HPCDF	1,2,3,4,6,7,8-heptachlorodibenzo-p-furan
1,2,3,4,7,8-HXCDD	1,2,3,4,7,8-hexachlorodibenzo-p-dioxin
1,2,3,4,7,8-HXCDF	1,2,3,4,7,8-hexachlorodibenzo-p-furan
Lindane	gamma-benzene hexachloride
PCB	polychlorinated biphenyl
1,2,3,7,8-PCDD	1,2,3,7,8-pentachlorodibenzo-p-dioxin
1,2,3,7,8-PCDF	1,2,3,7,8-pentachlorodibenzo-p-furan
Sp. conductance	specific conductance
TCDD	tetrachlorodibenzo-p-dioxin
TCDF	tetrachlorodibenzo-p-furan

Laboratories

EM	Environmental Protection Department/Environmental Monitoring Section (EPD/EMS) Laboratory
ES	QST Environmental, Inc.
EX	EMAX Laboratories, Inc.
GE and GP	General Engineering Laboratories, Inc.
QR	Quanterra, Inc.
TL	Triangle Laboratories, Inc.
WA	Recra LabNet Philadelphia

Nomenclature

AZ	Aquifer Zone
CBA	Crouch Branch AZ (previously Black Creek)
LL	Lower Lost Lake AZ (previously Lower Congaree)
M	M-Area AZ (previously Water Table)
MCBC	Middle Sand AZ of the CBCU (previously Ellenton Sand)
UL	Upper Lost Lake AZ (previously Upper Congaree)

Sampling Codes

A	pump is surging excessively; aerated
B	blank sample was collected
C	well was pumping continuously
D	well was dry
E	equipment blank was collected
I	well went dry during sampling; insufficient water to collect all samples
L	well went dry before sampling began; only depth to water can be determined
N	well was not stabilized before sampling began
P	inaccessibility or mechanical failure prevented sample collection and field analysis of the water
S	no water in standpipe; for water-level events only
W	Unable to sample because of stabilization or sampling equipment failure; only water-level measurements were obtained
X	well went dry during purging; samples collected after well recovered

Sampling Methods

B	sample collected using an open-bucket bailer
O	sample collected by method other than bailer or pump
P	sample collected using a bladder pump
S	sample collected using a single-speed centrifugal downhole pump
V	sample collected using a variable-speed pump

Units

mg/L	milligrams per liter
msl	mean sea level
MSL	million structures per liter
NTU	nephelometric turbidity unit
pCi/L	picocuries per liter
pCi/mL	picocuries per milliliter
pH	pH unit
µg/L	micrograms per liter
µS/cm	microsiemens per centimeter

Other

CS	carbon steel
DF	*dilution factor* column in data tables
E	exponential notation (e.g., 1.1E–09 = 1.1 x 10^{-9} = 0.0000000011)
GWPS	groundwater protection standard
H	*holding time* column in data tables
MCS	monitoring constituents standard
Mod	*modifier* column in data tables
PDWS	primary drinking water standard
PVC	polyvinyl chloride
ST	*exceeded the GWPS or MCS* column in data tables
TOC	top of casing

Results below Detection

For radiological analyses, the analytical result field contains the result recorded on the analytical instrument and reported by the laboratory, even if it is negative. For nonradiological analyses, if the analyte is not detected, the sample-specific estimated quantitation limit (EQL) is entered into the result field and is reported with a less than [<] sign. The EQL is defined as the lowest concentration that can be achieved reliably within specified limits of precision and accuracy during routine laboratory operating conditions. The sample-specific EQL is modified for sample concentration or dilution or unusual aliquot size that affects analytical sensitivity.

Holding Times

Standard analytical methods include a limit, called holding time, on the maximum elapsed time between sample collection and extraction or analysis by the laboratory. In the data tables, a large bullet (•) in the *H* (holding time) column indicates that holding time was exceeded. Analyses performed beyond holding times may not yield valid results.

The South Carolina Department of Health and Environmental Control (SCDHEC) allows only 15 minutes to elapse between sampling and analysis for pH. Thus, only field pH measurements can meet the holding time criterion; laboratory pH analyses always will exceed it.

The laboratory procedure used for the determination of specific conductance allows one day to elapse between sampling and analysis. Thus, laboratory specific conductance measurements may exceed the holding time criterion.

Data Rounding

Constituent results in analytical results tables that appear to equal the GWPS or MCS but are not marked in the *ST* (exceeded the GWPS or MCS) column are below the GWPS or MCS in the database. Values stored in the database contain more significant digits than the reported results. Apparent discrepancies in the tables are due to the rounding of reported results.

Data Qualification

The contract laboratories submit sample- or batch-specific quality assurance/quality control information either at the same time as analytical results or in a quarterly summary. Properly defined and used data modifiers (also referred to as qualifiers) can be a key component in assessing data usability. Modifiers designed by EPD/EMS and provided to the primary laboratories are defined below. These modifiers appear in the data tables under the column *Mod.* The lettered modifiers are based on EPA's STORET codes.

Modifiers

(Blank)	Data are not qualified. Numbers should be interpreted exactly as reported.
E	Detected result is between the sample-specific estimated quantitation limit (EQL) and the method detection limit.
I	The value in the result field is the instrument reading, not the sample quantitation limit. Always used with the result qualifier *U*.
J	Value is estimated because quantitation in the sample or in associated quality control samples did not meet specifications.
L	Value is off-scale high. The actual value is not known but is known to be greater than the value shown.
M	Presence of the analyte is verified but not quantified.
Q	Sample was held beyond normal holding time.
R	Result was rejected because performance requirements in the sample analysis or associated quality control analyses were not met.
T	Analyte was not detected; if present, it was below the criteria for detection.
U	Material analyzed for but not detected. Analytical result reported is less than the sample quantitation limit.
V	Analyte was detected in an associated method blank.
Y	Result was obtained from an unpreserved or improperly preserved sample. Data may not be accurate.
1	Result may be an underestimation of the true value due to analytical bias.
2	Result may be an overestimation of the true value due to analytical bias.
3	The associated result may be of poor precision (high variability) due to analytical bias.

Note: These are only some of the qualifiers present in the database. All modifiers associated with the data are published in the result tables of EPD/EMS' quarterly groundwater monitoring reports, the official repository of the data.

Table D-1. Groundwater Monitoring Results for Point-of-Compliance Wells, M-Area HWMF

WELL MSB 1B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N101833.0 E48483.2	33.330082 °N 81.736982 °W	142.6-137.9 ft msl	354.8 ft msl	4" PVC	S	LL

SAMPLE DATE	07/17/96	01/02/97	07/28/97	02/11/98	
FIELD DATA					
Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	211.5	206.7	205.6	211.0	ft msl
pH	5.8	4.4	5.0	4.8	pH
Sp. conductance	38	30	38	46	µS/cm
Water temperature	26.0	22.0	20.0	17.0	°C
Alkalinity as $CaCO_3$	1	0	0	3	mg/L
Turbidity	0	1	0	0	NTU
Volume purged	4.0	3.2	3.6	4.2	well volume
Sampling code					
Synchronous water level	213.4 (09/18/96)	205.1 (03/18/97)	204.5 (09/17/97)	210.3 (03/19/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

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H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	10	11	11	15	1	V	µg/L	EX	0
		Cyanide	<10	<5.0	<2.5	<10	1		µg/L	EX	0
		Lead, total recoverable	<5.0	14	<5.0	<5.0	1		µg/L	EX	0
		Nickel, total recoverable	<10	<5.0	<5.0	<20	1		µg/L	EX	0
		Selenium, total recoverable	3.3	<5.0	<5.0	<10	1		µg/L	EX	0
Organics											
		Chlorobenzene	<20	<1.4	<50	<5.0	1		µg/L	EX	0
		1,1-Dichloroethane	<20	<2.5	<50	<5.0	1		µg/L	EX	0
		1,1-Dichloroethylene	<20	<3.2	<50	<5.0	1		µg/L	EX	0
		trans-1,2-Dichloroethylene	<20	<3.2	<50	<5.0	1		µg/L	EX	0
		PCB 1016	<0.13						µg/L		
		PCB 1221	<0.13						µg/L		
		PCB 1232	<0.13						µg/L		
		PCB 1242	<0.13						µg/L		
		PCB 1248	<0.13						µg/L		
		PCB 1254	<0.13						µg/L		
		PCB 1260	<0.13						µg/L		
		1,1,2,2-Tetrachloroethane	<20	<1.5	<50	<5.0	1		µg/L	EX	0
		Tetrachloroethylene	<20	3.9	<50	4.7	1	JE	µg/L	EX	1
		1,1,1-Trichloroethane	<20	<2.5	<50	<5.0	1		µg/L	EX	0
■		Trichloroethylene	***460***	***830***	***970***	***1,300***	50		µg/L	EX	2

Monitoring Constitutents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	***270***		<20				µg/L		
		Chloride	2,000		2,100				µg/L		
		Chromium, total recoverable	<4.0		<3.0				µg/L		
		Cobalt, total recoverable	0.40		<5.0				µg/L		
		Copper, total recoverable	1.3		<3.0				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	6.1		6.2				µg/L		
		Mercury, total recoverable	<0.20		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	1,900		***2,400***				µg/L		
		Sodium, total recoverable	2,500		2,600				µg/L		
		Sulfate	260		380				µg/L		
		Total phosphates (as P)	100		<50				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	4.3		12				µg/L		
Radionuclides											
		Gross alpha	9.9E-01		-3.5E-01				pCi/L		
		Nonvolatile beta	1.2E+00		*-1.0E+00*				pCi/L		
		Radium, total alpha-emitting	*5.0E-01*		*8.8E-01*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only. See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 1C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N101832.5 E48512.7	33.330130 °N 81.736904 °W	166.0-161.3 ft msl	355.1 ft msl	4" PVC	S	UL

SAMPLE DATE	08/08/96	01/03/97	07/28/97	02/11/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	216.9	215.7	214.5	215.3	ft msl
pH	10.2	11.2	7.2	9.4	pH
Sp. conductance	260	720	220	240	µS/cm
Water temperature	28.0	21.0	22.0	15.0	°C
Alkalinity as $CaCO_3$	42	14	30	38	mg/L
Turbidity	1	1	0	1	NTU
Volume purged	0.027	0.0	2.1	0.028	well volume
Sampling code	X	X		X	
Synchronous water level	217.6 (09/18/96)	214.3 (03/18/97)	213.1 (09/17/97)	214.8 (03/19/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

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H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	32	67	42	40	1		µg/L	WA	0
		Cyanide	<10	<5.0	<2.5	<15	1		µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0	<5.0	<47	1		µg/L	WA	0
		Nickel, total recoverable	<10	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	2.1	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<20	<1.4	<50	<13	2.5		µg/L	WA	0
		1,1-Dichloroethane	<20	<2.5	<50	<13	2.5		µg/L	WA	0
■		1,1-Dichloroethylene	<20	5.6	***12***	***8.0***	2.5	JE	µg/L	WA	2
		trans-1,2-Dichloroethylene	<20	<3.2	<50				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<20	<1.5	<50	<13	2.5		µg/L	WA	0
■		Tetrachloroethylene	***440***	***400***	***450***	***360***	2.5		µg/L	WA	2
		1,1,1-Trichloroethane	<20	<2.5	<50	<13	2.5		µg/L	WA	0
■		Trichloroethylene	***66***	***180***	***300***	***130***	2.5		µg/L	WA	2

Monitoring Constitutents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	***560***		74				µg/L		
		Chloride	3,900		***4,400***				µg/L		
		Chromium, total recoverable	1.3		<3.0				µg/L		
		Cobalt, total recoverable	<0.61		<5.0				µg/L		
		Copper, total recoverable	<3.9		1.6				µg/L		
		Fluoride	38		<100				µg/L		
		Manganese, total recoverable	<0.49		5.5				µg/L		
		Mercury, total recoverable	<0.20		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	***15,000***		***17,000***				µg/L		
		Sodium, total recoverable	***25,000***		***19,000***				µg/L		
		Sulfate	***3,600***		2,300				µg/L		
		Total phosphates (as P)	<50		<50				µg/L		
		Uranium, total recoverable	<9.5		<0.10				µg/L		
		Zinc, total recoverable	3.8		14				µg/L		
Radionuclides											
		Gross alpha	1.7E+00		1.2E+00				pCi/L		
		Nonvolatile beta	5.6E+00		4.1E+00				pCi/L		
		Radium, total alpha-emitting	*5.0E-01*		2.2E+00				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only. See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 1CC

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N101832.5 E48498.0	33.330106 °N 81.736942 °W	192.5-187.8 ft msl	354.9 ft msl	4" PVC	S	UL

SAMPLE DATE	07/15/96	01/03/97	07/28/97	02/11/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	218.8	217.4	216.5	216.7	ft msl
pH	6.2	5.4	5.6	6.0	pH
Sp. conductance	96	98	82	98	µS/cm
Water temperature	26.0	22.0	20.0	16.0	°C
Alkalinity as $CaCO_3$	0	13	2	17	mg/L
Turbidity	1	4	1	2	NTU
Volume purged	2.7	0.0	2.9	0.053	well volume
Sampling code		X		X	
Synchronous water level	219.3 (09/18/96)	216.4 (03/18/97)	215.0 (09/17/97)	216.5 (03/19/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

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H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	13	16	11	17	1		µg/L	WA	0
		Cyanide	3.4	<5.0	<2.5	<15	1		µg/L	WA	0
		Lead, total recoverable	<5.0	7.3	3.4	<47	1		µg/L	WA	0
		Nickel, total recoverable	1.1	<5.0	<5.0	6.8	1	JE	µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016	<0.13						µg/L		
		PCB 1221	<0.13						µg/L		
		PCB 1232	<0.13						µg/L		
		PCB 1242	<0.13						µg/L		
		PCB 1248	<0.13						µg/L		
		PCB 1254	<0.13						µg/L		
		PCB 1260	<0.13						µg/L		
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
	■	Tetrachloroethylene	***10***	***31***	***8.3***	***13***	1		µg/L	WA	2
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
	■	Trichloroethylene	***35***	***45***	***30***	***29***	1		µg/L	WA	2

Monitoring Constitutents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<20		<20				µg/L		
		Chloride	3,000		3,300				µg/L		
		Chromium, total recoverable	<4.0		<3.0				µg/L		
		Cobalt, total recoverable	<0.95		<5.0				µg/L		
		Copper, total recoverable	8.8		13				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	9.0		7.4				µg/L		
		Mercury, total recoverable	0.049		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	***6,400***		***6,400***				µg/L		
		Sodium, total recoverable	***10,000***		***9,200***				µg/L		
		Sulfate	380		420				µg/L		
		Total phosphates (as P)	<50		<50				µg/L		
		Uranium, total recoverable	<17		<0.10				µg/L		
		Zinc, total recoverable	30		52				µg/L		
Radionuclides											
		Gross alpha	1.9E+00		4.0E-01				pCi/L		
		Nonvolatile beta	*1.3E+00*		2.3E+00				pCi/L		
		Radium, total alpha-emitting	6.0E-01		2.6E+00				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only. See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 1D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N101833.4 E48452.2	33.330033 °N 81.737065 °W	229.8-210.4 ft msl	354.8 ft msl	4" PVC	S	M

SAMPLE DATE	07/16/96	01/22/97	07/29/97	02/11/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	231.3	229.9	228.6	227.7	ft msl
pH	4.8	5.0	5.2	8.4	pH
Sp. conductance	160	58	46	44	µS/cm
Water temperature	30.0	22.0	22.0	18.0	°C
Alkalinity as $CaCO_3$	1	6	5	15	mg/L
Turbidity	2	4	3	2	NTU
Volume purged	0.073	0.0	0.0	0.088	well volume
Sampling code	X	X	X	X	
Synchronous water level	231.1 (09/18/96)	229.8 (03/18/97)	228.3 (09/17/97)	228.2 (03/19/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	13	12	9.9	9.6	1		µg/L	WA	0
		Cyanide	<10	<5.0	<2.5	<15	1		µg/L	WA	0
		Lead, total recoverable	4.4	9.8	***15***	7.0	1	JE	µg/L	WA	0
		Nickel, total recoverable	<10	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<10	<7.0	<25	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<10	<13	<25	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<10	<16	<25	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<10	<16	<25				µg/L		
		PCB 1016	<0.13		<0.30	<1.2	1		µg/L	WA	0
		PCB 1221	<0.13		<0.30	<2.4	1		µg/L	WA	0
		PCB 1232	<0.13		<0.30	<1.2	1		µg/L	WA	0
		PCB 1242	<0.13		<0.30	<1.2	1		µg/L	WA	0
		PCB 1248	<0.13		<0.30	<1.2	1		µg/L	WA	0
		PCB 1254	<0.13		<0.30	<1.2	1		µg/L	WA	0
		PCB 1260	<0.13		<0.30	<1.2	1		µg/L	WA	0
		1,1,2,2-Tetrachloroethane	<10	<7.5	<25	<5.0	1		µg/L	WA	0
	■	Tetrachloroethylene	***430***	***430***	***430***	***110***	1		µg/L	WA	2
		1,1,1-Trichloroethane	<10	<13	7.0	<5.0	1		µg/L	WA	0
	■	Trichloroethylene	***150***	***130***	***160***	***26***	1		µg/L	WA	2

Monitoring Constitutents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	48		13				µg/L		
		Chloride	3,300		2,900				µg/L		
		Chromium, total recoverable	<4.0		<3.0				µg/L		
		Cobalt, total recoverable	<0.64		<5.0				µg/L		
		Copper, total recoverable	23		49				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	22		33				µg/L		
		Mercury, total recoverable	<0.20		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	***2,600***		***2,600***				µg/L		
		Sodium, total recoverable	***4,900***		4,500				µg/L		
		Sulfate	760		<5,000				µg/L		
		Total phosphates (as P)	30		<10				µg/L		
		Uranium, total recoverable	<14		<0.10				µg/L		
		Zinc, total recoverable	28		24				µg/L		
Radionuclides											
		Gross alpha	2.4E+00		*7.0E-01*				pCi/L		
		Nonvolatile beta	2.0E+00		2.3E+01				pCi/L		
		Radium, total alpha-emitting	*1.1E+00*		*9.5E-01*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only. See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 2B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N101997.9 E48748.2	33.330880 °N 81.736605 °W	150.3-145.6 ft msl	354.6 ft msl	4" PVC	S	LL

SAMPLE DATE	07/01/96	01/03/97	07/30/97	02/18/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	210.3	208.8	207.4	209.3	ft msl
pH	12.0	11.4	10.6	10.7	pH
Sp. conductance	800	600	1060	810	µS/cm
Water temperature	28.0	21.0	25.0	18.7	°C
Alkalinity as $CaCO_3$	310	13	365	0	mg/L
Turbidity	2	2	1	1	NTU
Volume purged	0.024	0.0	0.0	0.024	well volume
Sampling code	X	X	X	X	
Synchronous water level	213.4 (09/18/96)	207.5 (03/19/97)	206.7 (09/17/97)	210.8 (03/19/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	98	45	130	95	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	2.2	<5.0	3.6	<47	1		µg/L	WA	0
		Nickel, total recoverable	<10	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<500	<1.4	<5.0	<250	50		µg/L	WA	0
		1,1-Dichloroethane	<500	<2.5	<5.0	<250	50		µg/L	WA	0
		1,1-Dichloroethylene	<500	<3.2	<5.0	<250	50		µg/L	WA	0
		trans-1,2-Dichloroethylene	<500	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<500	<1.5	<5.0	<250	50		µg/L	WA	0
	■	Tetrachloroethylene	***2,400***	***4,100***	***4,300***	***5,600***	50		µg/L	WA	2
		1,1,1-Trichloroethane	<500	<2.5	<5.0	<250	50		µg/L	WA	0
	■	Trichloroethylene	***4,900***	***6,300***	***6,900***	***8,500***	50		µg/L	WA	2

Monitoring Constitutents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	***1,100***		***800***				µg/L		
		Chloride	1,000		1,300				µg/L		
		Chromium, total recoverable	2.7		2.8				µg/L		
		Cobalt, total recoverable	0.23		<5.0				µg/L		
		Copper, total recoverable	3.5		<3.0				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	<0.37		<3.0				µg/L		
		Mercury, total recoverable	0.24		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	***5,800***		***5,500***				µg/L		
		Sodium, total recoverable	***35,000***		***31,000***				µg/L		
		Sulfate	1,700		<5,000				µg/L		
		Total phosphates (as P)	<50		<10				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	6.3		15				µg/L		
Radionuclides											
		Gross alpha	6.6E+00		*6.5E-01*				pCi/L		
		Nonvolatile beta	4.6E+01		***5.9E+01***				pCi/L		
		Radium, total alpha-emitting	7.0E-01		*1.7E+00*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only. See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 2C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N101982.5 E48749.3	33.330848 °N 81.736572 °W	194.7-190.0 ft msl	354.7 ft msl	4" PVC	S	UL

SAMPLE DATE	07/01/96	01/03/97	08/25/97	02/18/98	
FIELD DATA					
Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	218.8	216.8	214.9	215.7	ft msl
pH	11.4	11.4	9.4	6.7	pH
Sp. conductance	700	780	340	190	µS/cm
Water temperature	30.0	21.0	25.0	18.5	°C
Alkalinity as $CaCO_3$	125	15	40	37	mg/L
Turbidity	15	2	3	1	NTU
Volume purged	0.053	0.0	0.0	0.77	well volume
Sampling code	X	X	X	X	
Synchronous water level	218.7 (09/18/96)	216.1 (03/19/97)	230.4 (09/16/97)	215.7 (03/19/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	78	84	63	71	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	2.2	<5.0	<5.0	<47	1		µg/L	WA	0
		Nickel, total recoverable	0.95	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<1,000	3.8		<2,500	500		µg/L	WA	0
		1,1-Dichloroethane	<1,000	<2.5		<2,500	500		µg/L	WA	0
		1,1-Dichloroethylene	<1,000	4.7		<2,500	500		µg/L	WA	0
		trans-1,2-Dichloroethylene	<1,000	<3.2					µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<1,000	<1.5		<2,500	500		µg/L	WA	0
	■	Tetrachloroethylene	***14,000***	***16,000***		***52,000***	500		µg/L	WA	2
		1,1,1-Trichloroethane	<1,000	<2.5		<2,500	500		µg/L	WA	0
	■	Trichloroethylene	***22,000***	***41,000***		***57,000***	500		µg/L	WA	2

Monitoring Constitutents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	***490***		***190***				µg/L		
		Chloride	3,000		3,100				µg/L		
		Chromium, total recoverable	3.1		1.0				µg/L		
		Cobalt, total recoverable	0.49		<5.0				µg/L		
		Copper, total recoverable	<4.0		<3.0				µg/L		
		Fluoride	20		<100				µg/L		
		Manganese, total recoverable	23		7.8				µg/L		
		Mercury, total recoverable	0.24						µg/L		
		Nitrate-nitrite as nitrogen	***11,000***		***11,000***				µg/L		
		Sodium, total recoverable	***21,000***		***13,000***				µg/L		
		Sulfate	1,300		<5,000				µg/L		
		Total phosphates (as P)	<50		<10				µg/L		
		Uranium, total recoverable	<20		0.13				µg/L		
		Zinc, total recoverable	10		16				µg/L		
Radionuclides											
		Gross alpha	5.1E+00		*9.0E-01*				pCi/L		
		Nonvolatile beta	1.3E+01		4.0E+00				pCi/L		
		Radium, total alpha-emitting	1.8E+00		4.7E+00				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only. See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 2D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N102014.0 E48755.7	33.330928 °N 81.736617 °W	230.1-210.7 ft msl	353.8 ft msl	4" PVC	S	M

SAMPLE DATE	07/01/96	01/28/97	07/30/97	02/17/98	
FIELD DATA					
Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	232.1	230.9	229.2	228.5	ft msl
pH	4.4	4.2	4.0	4.4	pH
Sp. conductance	46	46	480	60	µS/cm
Water temperature	30.0	23.0	20.0	19.0	°C
Alkalinity as $CaCO_3$	0	0	0	0	mg/L
Turbidity	4	2	5	1	NTU
Volume purged	3.4	3.7	0.0	5.1	well volume
Sampling code			X		
Synchronous water level	231.8 (09/18/96)	230.5 (03/19/97)	229.1 (09/17/97)	228.7 (03/19/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	19	19	7.4	18	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	3.4	<5.0	7.0	<47	1		µg/L	WA	0
		Nickel, total recoverable	<10	<5.0	3.4	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<40	<7.0	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<40	<13	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<40	<16	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<40	<16	<5.0				µg/L		
		PCB 1016	<0.13		<0.30	<1.0	1		µg/L	WA	0
		PCB 1221	<0.13		<0.30	<2.0	1		µg/L	WA	0
		PCB 1232	<0.13		<0.30	<1.0	1		µg/L	WA	0
		PCB 1242	<0.13		<0.30				µg/L		
		PCB 1248	<0.13		<0.30	<1.0	1		µg/L	WA	0
		PCB 1254	<0.13		<0.30	<1.0	1		µg/L	WA	0
		PCB 1260	<0.13		<0.30	<1.0	1		µg/L	WA	0
		1,1,2,2-Tetrachloroethane	<40	<7.5	<5.0	<5.0	1		µg/L	WA	0
	■	Tetrachloroethylene	***460***	***330***	***570***	***81***	1		µg/L	WA	2
		1,1,1-Trichloroethane	<40	<13	<5.0	<5.0	1		µg/L	WA	0
	■	Trichloroethylene	***370***	***250***	***830***	***190***	1		µg/L	WA	2

Monitoring Constitutents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	***290***	***270***	***220***				µg/L		
		Chloride	2,600		2,800				µg/L		
		Chromium, total recoverable	<4.0	<3.0	1.4				µg/L		
		Cobalt, total recoverable	0.45		<5.0				µg/L		
		Copper, total recoverable	4.0		9.2				µg/L		
		Fluoride	51		<100				µg/L		
		Manganese, total recoverable	14	12	12				µg/L		
		Mercury, total recoverable	0.28	<0.20	<0.20				µg/L		
		Nitrate-nitrite as nitrogen	***4,100***		***3,900***				µg/L		
		Sodium, total recoverable	2,500		2,100				µg/L		
		Sulfate	120		<5,000				µg/L		
		Total phosphates (as P)	<50		7.0				µg/L		
		Uranium, total recoverable	<20		0.16				µg/L		
		Zinc, total recoverable	8.6		100				µg/L		
Radionuclides											
		Gross alpha	1.4E+01	9.5E+00	*4.8E-01*				pCi/L		
		Nonvolatile beta	5.8E+00	*0.0E+00*	*-1.3E+00*				pCi/L		
		Radium, total alpha-emitting	***8.9E+00***		*4.0E+00*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only. See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
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WELL MSB 3B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N102191.7 E48568.0	33.331014 °N 81.737457 °W	145.8-141.1 ft msl	361 ft msl	4" PVC	S	LL

SAMPLE DATE		03/04/97	07/28/97			
FIELD DATA						
Parameter	3Q96	1Q97	3Q97	1Q98		Unit
Water elevation						ft msl
pH		6.0	6.0			pH
Sp. conductance		54	44			µS/cm
Water temperature		25.0	20.0			°C
Alkalinity as $CaCO_3$		19	20			mg/L
Turbidity		1	1			NTU
Volume purged						well volume
Sampling code		S	S			
Synchronous water level		( )	( )			ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	12	15	15				µg/L		
		Cyanide	<10	<5.0	<2.5				µg/L		
		Lead, total recoverable	13	<5.0	<5.0				µg/L		
		Nickel, total recoverable	1.1	<5.0	<5.0				µg/L		
		Selenium, total recoverable	<5.0	<5.0	<5.0				µg/L		
Organics											
		Chlorobenzene	<2.0	<28	<50				µg/L		
		1,1-Dichloroethane	<2.0	<50	<50				µg/L		
		1,1-Dichloroethylene	<2.0	<64	<50				µg/L		
		trans-1,2-Dichloroethylene	<2.0	<64	<50				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<30	<50				µg/L		
		Tetrachloroethylene	***100***	***150***	***110***				µg/L		
		1,1,1-Trichloroethane	<2.0	<50	<50				µg/L		
		Trichloroethylene	***2,200***	***920***	***920***				µg/L		

Monitoring Constitutents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<20		<20				µg/L		
		Chloride	2,400		2,200				µg/L		
		Chromium, total recoverable	1.5		<3.0				µg/L		
		Cobalt, total recoverable	1.2		<5.0				µg/L		
		Copper, total recoverable	7.3		1.1				µg/L		
		Fluoride	<29		<100				µg/L		
		Manganese, total recoverable	19		2.2				µg/L		
		Mercury, total recoverable	0.040		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	1,800		1,400				µg/L		
		Sodium, total recoverable	2,200		2,200				µg/L		
		Sulfate	440		780				µg/L		
		Total phosphates (as P)	<50		<50				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	14		13				µg/L		
Radionuclides											
		Gross alpha	1.5E+00		1.2E-01				pCi/L		
		Nonvolatile beta	*-1.8E-01*		2.5E+00				pCi/L		
		Radium, total alpha-emitting	6.7E-01		*9.3E-01*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only. See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
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WELL MSB 3C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N102189.6 E48538.5	33.330961 °N 81.737530 °W	193.7-189.0 ft msl	360.8 ft msl	4" PVC	S	UL

SAMPLE DATE: 08/08/96 | 01/03/97 | 07/29/97 | 02/19/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	219.9	218.5	217.6	217.0	ft msl
pH	11.0	12.0	11.2	11.4	pH
Sp. conductance	3000	2200	1080	3500	µS/cm
Water temperature	26.0	22.0	20.0	15.5	°C
Alkalinity as $CaCO_3$	3550	525		822	mg/L
Turbidity	1	2	14	2	NTU
Volume purged	0.049	0.0	0.0	0.055	well volume
Sampling code	X	X	X	X	
Synchronous water level	219.8 (09/19/96)	217.8 (03/19/97)	216.3 (09/17/97)	217.1 (03/19/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	580	340	360	640	1		µg/L	WA	0
		Cyanide	<10	<5.0	<2.5	5.7	1	JE	µg/L	WA	0
	■	Lead, total recoverable	***23***	<5.0	14	***17***	1	JE	µg/L	WA	0
		Nickel, total recoverable	0.89	<5.0	4.5	<26	1		µg/L	WA	0
		Selenium, total recoverable	1.6	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<500	<14	<1,300	<1,300	250		µg/L	WA	0
		1,1-Dichloroethane	<500	<25	<1,300	<1,300	250		µg/L	WA	0
		1,1-Dichloroethylene	<500	<32	<1,300	<1,300	250		µg/L	WA	0
		trans-1,2-Dichloroethylene	<500	<32	<1,300				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<500	<15	<1,300	<1,300	250		µg/L	WA	0
	■	Tetrachloroethylene	***22,000***	***48,000***	***20,000***	***25,000***	250		µg/L	WA	2
		1,1,1-Trichloroethane	<500	<25	<1,300	<1,300	250		µg/L	WA	0
	■	Trichloroethylene	***10,000***	***16,000***	***11,000***	***12,000***	250		µg/L	WA	2

Monitoring Constitutents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	***2,900***		***3,900***				µg/L		
		Chloride	570		3,000				µg/L		
		Chromium, total recoverable	9.2		13				µg/L		
		Cobalt, total recoverable	0.46		<5.0				µg/L		
		Copper, total recoverable	18		28				µg/L		
		Fluoride	830		<100				µg/L		
		Manganese, total recoverable	0.14		2.0				µg/L		
		Mercury, total recoverable	<0.20		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	2,300		***3,400***				µg/L		
		Sodium, total recoverable	***51,000***		***50,000***				µg/L		
		Sulfate	2,600		2,600				µg/L		
		Total phosphates (as P)	<50		<10				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	4.9		25				µg/L		
Radionuclides											
		Gross alpha	5.6E+00		1.3E+01				pCi/L		
		Nonvolatile beta	***5.9E+01***		***3.6E+02***				pCi/L		
		Radium, total alpha-emitting	2.6E+00		*2.8E+00*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only. See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 4B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N101978.3 E48312.8	33.330125 °N 81.737714 °W	143.1-138.4 ft msl	355.3 ft msl	4" PVC	S	LL

SAMPLE DATE	07/15/96	01/02/97	07/29/97	02/12/98
FIELD DATA				
Parameter	3Q96	1Q97	3Q97	1Q98
Water elevation	204.8	204.2	202.9	207.4
pH	6.4	4.4	4.6	5.4
Sp. conductance	40	24	28	26
Water temperature	25.0	24.0	20.0	19.0
Alkalinity as $CaCO_3$	0	1	0	5
Turbidity	0	1	0	0
Volume purged	5.1	3.0	3.2	3.0
Sampling code				
Synchronous water level	206.1 (09/19/96)	202.4 (03/18/97)	201.9 (09/17/97)	210.4 (03/19/98)

Parameter	Unit
Water elevation	ft msl
pH	pH
Sp. conductance	µS/cm
Water temperature	°C
Alkalinity as $CaCO_3$	mg/L
Turbidity	NTU
Volume purged	well volume
Sampling code	
Synchronous water level	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

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H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	6.1	8.0	5.4	6.2	1	V	µg/L	EX	0
		Cyanide	4.5	<5.0	<2.5	<10	1		µg/L	EX	0
		Lead, total recoverable	<5.0	<5.0	3.4	<5.0	1		µg/L	EX	0
		Nickel, total recoverable	<10	<5.0	<5.0	<20	1		µg/L	EX	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	6.9	1	JE	µg/L	EX	0
Organics											
		Chlorobenzene	<50	<1.4	<130	<5.0	1		µg/L	EX	0
		1,1-Dichloroethane	<50	<2.5	<130	<5.0	1		µg/L	EX	0
		1,1-Dichloroethylene	<50	<3.2	<130	<5.0	1		µg/L	EX	0
		trans-1,2-Dichloroethylene	<50	<3.2	<130	<5.0	1		µg/L	EX	0
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<50	<1.5	<130	<5.0	1		µg/L	EX	0
	■	Tetrachloroethylene	***43***	***48***	***58***	***77***	50	JE	µg/L	EX	2
		1,1,1-Trichloroethane	<50	<2.5	<130	<5.0	1		µg/L	EX	0
	■	Trichloroethylene	***830***	***1,100***	***1,200***	***1,300***	50		µg/L	EX	2

Monitoring Constitutents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<20		<20				µg/L		
		Chloride	2,100		2,300				µg/L		
		Chromium, total recoverable	<4.0		<3.0				µg/L		
		Cobalt, total recoverable	<4.0		<5.0				µg/L		
		Copper, total recoverable	0.94		1.5				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	<1.9		1.8				µg/L		
		Mercury, total recoverable	<0.20		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	1,500		740				µg/L		
		Sodium, total recoverable	1,900		2,200				µg/L		
		Sulfate	600		<5,000				µg/L		
		Total phosphates (as P)	<50		<10				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	<3.6		6.1				µg/L		
Radionuclides											
		Gross alpha	1.3E+00		*-1.5E-01*				pCi/L		
		Nonvolatile beta	1.7E+00		*-2.4E+00*				pCi/L		
		Radium, total alpha-emitting	3.0E-01		*9.2E-01*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only. See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
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WELL MSB 4C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N101963.2 E48313.6	33.330093 °N 81.737682 °W	168.1-163.3 ft msl	355.2 ft msl	4" PVC	S	UL

SAMPLE DATE	07/15/96	01/03/97	07/29/97	02/12/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	214.7	213.4	212.2	213.0	ft msl
pH	6.4	11.2	5.8	6.2	pH
Sp. conductance	180	580	200	200	µS/cm
Water temperature	26.0	22.0	20.0	20.0	°C
Alkalinity as $CaCO_3$	4	101	9	10	mg/L
Turbidity	0	2	1	1	NTU
Volume purged	2.6	0.0	2.0	3.3	well volume
Sampling code		X			
Synchronous water level	214.7 (09/19/96)	212.3 (03/18/97)	211.2 (09/17/97)	214.8 (03/19/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

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H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	68	170	64	71	1		µg/L	WA	0
		Cyanide	<10	<5.0	<2.5	<15	1		µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0	<5.0	<47	1		µg/L	WA	0
		Nickel, total recoverable	<10	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<200	<1.4	<1,300	<500	100		µg/L	WA	0
		1,1-Dichloroethane	<200	<2.5	<1,300	<500	100		µg/L	WA	0
		1,1-Dichloroethylene	<200	<3.2	<1,300	<500	100		µg/L	WA	0
		trans-1,2-Dichloroethylene	<200	<3.2	<1,300				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<200	<1.5	<1,300	<500	100		µg/L	WA	0
	■	Tetrachloroethylene	***6,700***	***3,100***	***12,000***	***7,100***	100		µg/L	WA	2
		1,1,1-Trichloroethane	<200	<2.5	<1,300	<500	100		µg/L	WA	0
	■	Trichloroethylene	***8,900***	***4,600***	***19,000***	***9,500***	100		µg/L	WA	2

Monitoring Constitutents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	18		46				µg/L		
		Chloride	4,000		***4,500***				µg/L		
		Chromium, total recoverable	<4.0		<3.0				µg/L		
		Cobalt, total recoverable	<1.5		<5.0				µg/L		
		Copper, total recoverable	<1.0		<3.0				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	14		14				µg/L		
		Mercury, total recoverable	<0.20		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	***19,000***		***30,000***				µg/L		
		Sodium, total recoverable	***13,000***		***13,000***				µg/L		
		Sulfate	91		<5,000				µg/L		
		Total phosphates (as P)	<50		<10				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	9.1		13				µg/L		
Radionuclides											
		Gross alpha	9.1E+00		*3.7E-01*				pCi/L		
		Nonvolatile beta	8.7E+00		*2.0E+00*				pCi/L		
		Radium, total alpha-emitting	3.9E+00		*3.5E+00*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only. See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 4D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N102007.5 E48311.7	33.330188 °N 81.737773 °W	228.4-209.0 ft msl	355.5 ft msl	4" PVC	S	M

SAMPLE DATE	07/15/96	01/20/97	07/29/97	02/12/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	230.3	228.9	227.7	226.7	ft msl
pH	5.8	4.8	4.2	4.6	pH
Sp. conductance	78	50	52	58	µS/cm
Water temperature	27.0	24.0	20.0	20.0	°C
Alkalinity as $CaCO_3$	0	2	0	0	mg/L
Turbidity	1	1	1	0	NTU
Volume purged	9.4	5.8	4.6	10	well volume
Sampling code					
Synchronous water level	230.0 (09/19/96)	228.9 (03/18/97)	227.4 (09/17/97)	227.4 (03/19/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	14	13	11	12	1		µg/L	WA	0
		Cyanide	<10	<5.0	<2.5	<15	1		µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0	5.2	<47	1		µg/L	WA	0
		Nickel, total recoverable	1.6	<17	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	2.2	5.2	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<20	<7.0	<10	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<20	<13	<10	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<20	<16	<10	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<20	<16	<10				µg/L		
		PCB 1016	<0.13			<1.1	1		µg/L	WA	0
		PCB 1221	<0.13			<2.1	1		µg/L	WA	0
		PCB 1232	<0.13			<1.1	1		µg/L	WA	0
		PCB 1242	<0.13			<1.1	1		µg/L	WA	0
		PCB 1248	<0.13			<1.1	1		µg/L	WA	0
		PCB 1254	<0.13			<1.1	1		µg/L	WA	0
		PCB 1260	<0.13			<1.1	1		µg/L	WA	0
		1,1,2,2-Tetrachloroethane	<20	<7.5	<10	<5.0	1		µg/L	WA	0
	■	Tetrachloroethylene	***180***	***170***	***120***	***190***	1		µg/L	WA	2
		1,1,1-Trichloroethane	<20	<13	<10	<5.0	1		µg/L	WA	0
	■	Trichloroethylene	***220***	***250***	***240***	***230***	1	E	µg/L	WA	2

Monitoring Constitutents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	***170***		***150***				µg/L		
		Chloride	2,200		2,500				µg/L		
		Chromium, total recoverable	1.1		<3.0				µg/L		
		Cobalt, total recoverable	<1.2		<5.0				µg/L		
		Copper, total recoverable	<1.4		<3.0				µg/L		
		Fluoride	26		<100				µg/L		
		Manganese, total recoverable	13		12				µg/L		
		Mercury, total recoverable	0.020		0.050				µg/L		
		Nitrate-nitrite as nitrogen	***4,300***		2,100				µg/L		
		Sodium, total recoverable	4,500		3,800				µg/L		
		Sulfate	1,400		<5,000				µg/L		
		Total phosphates (as P)	<50		<10				µg/L		
		Uranium, total recoverable	<9.7		<0.10				µg/L		
		Zinc, total recoverable	6.0		9.5				µg/L		
Radionuclides											
		Gross alpha	8.9E+00		1.4E+00				pCi/L		
		Nonvolatile beta	4.7E+00		*4.0E-02*				pCi/L		
		Radium, total alpha-emitting	***5.5E+00***		*4.7E+00*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only. See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
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WELL MSB 5A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N101971.5 E46998.7	33.327964 °N 81.741161 °W	247.2-217.2 ft msl	344.6 ft msl	4" PVC	S	M

SAMPLE DATE	07/17/96	01/28/97	07/29/97	02/02/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	228.0	227.2	225.9	224.6	ft msl
pH	6.0	4.8	5.0	5.4	pH
Sp. conductance	46	32	40	40	µS/cm
Water temperature	25.0	23.0	20.0	19.0	°C
Alkalinity as $CaCO_3$	2	0	1	3	mg/L
Turbidity	2	1	1	2	NTU
Volume purged	10	12	13	32	well volume
Sampling code					
Synchronous water level	227.9 (09/18/96)	226.8 (03/19/97)	225.4 (09/17/97)	( )	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

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H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	3.4	3.3	3.2	3.3	1	V	µg/L	WA	0
		Cyanide	<10	<5.0	<2.5	<15	1		µg/L	WA	0
	■	Lead, total recoverable	2.7	5.4	7.2	***47***	1	JE	µg/L	WA	1
		Nickel, total recoverable	<10	<5.0	<5.0	4.9	1	JE	µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	0.74	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
	■	Tetrachloroethylene	3.3	***18***	***18***	***18***	1		µg/L	WA	2
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
	■	Trichloroethylene	***6.5***	***38***	***54***	***37***	1		µg/L	WA	2

Monitoring Constitutents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<20	<21	9.0				µg/L		
		Chloride	1,400		1,800				µg/L		
		Chromium, total recoverable	0.71	<3.0	<3.0				µg/L		
		Cobalt, total recoverable	<0.30		<5.0				µg/L		
		Copper, total recoverable	19		15				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	5.3	5.2	5.3				µg/L		
		Mercury, total recoverable	<0.20	<0.20	<0.20				µg/L		
		Nitrate-nitrite as nitrogen	2,200		***2,900***				µg/L		
		Sodium, total recoverable	4,400		***4,700***				µg/L		
		Sulfate	360		<5,000				µg/L		
		Total phosphates (as P)	<50		<10				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	15		21				µg/L		
Radionuclides											
		Gross alpha	2.8E+00	1.3E+00	1.5E+00				pCi/L		
		Nonvolatile beta	1.4E+00	*3.1E+00*	*3.0E-03*				pCi/L		
		Radium, total alpha-emitting	*8.0E-01*		*1.4E+00*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only. See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 5B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N101971.1 E46983.6	33.327939 °N 81.741200 °W	136.1-131.4 ft msl	345 ft msl	4" PVC	S	LL

SAMPLE DATE	07/17/96	01/02/97	07/29/97	02/02/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	207.3	206.9	205.2	206.2	ft msl
pH	6.0	4.8	5.0	5.4	pH
Sp. conductance	30	20	20	16	µS/cm
Water temperature	25.0	24.0	20.0	17.0	°C
Alkalinity as $CaCO_3$	1	1	0	1	mg/L
Turbidity	1	1	0	2	NTU
Volume purged	3.6	2.9	3.7	2.1	well volume
Sampling code					
Synchronous water level	209.4 (09/18/96)	205.7 (03/19/97)	204.6 (09/17/97)	205.7 (03/19/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

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H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	4.0	4.5	4.6	5.2	1	V	µg/L	WA	0
		Cyanide	<7.6	<5.0	<2.5	<15	1		µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0	3.3	<47	1		µg/L	WA	0
		Nickel, total recoverable	<10	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<10	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<10	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<10	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<10				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<10	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<2.0	<1.9	<10	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<2.5	<10	<5.0	1		µg/L	WA	0
■		Trichloroethylene	***26***	***21***	***54***	***21***	1		µg/L	WA	2

Monitoring Constitutents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<20		<20				µg/L		
		Chloride	1,800		2,000				µg/L		
		Chromium, total recoverable	<4.0		<3.0				µg/L		
		Cobalt, total recoverable	<0.59		<5.0				µg/L		
		Copper, total recoverable	<3.5		<3.0				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	3.4		2.7				µg/L		
		Mercury, total recoverable	<0.20		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	580		340				µg/L		
		Sodium, total recoverable	1,500		1,600				µg/L		
		Sulfate	550		<5,000				µg/L		
		Total phosphates (as P)	<50		<10				µg/L		
		Uranium, total recoverable	17		<0.10				µg/L		
		Zinc, total recoverable	4.2		12				µg/L		
Radionuclides											
		Gross alpha	*4.7E-01*		*-3.0E-02*				pCi/L		
		Nonvolatile beta	1.1E+00		*-1.2E+00*				pCi/L		
		Radium, total alpha-emitting	*3.0E-01*		*1.7E-01*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only. See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 5C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N101970.4 E46968.6	33.327913 °N 81.741238 °W	188.1-183.4 ft msl	345.2 ft msl	4" PVC	S	UL

SAMPLE DATE	07/17/96	01/02/97	07/29/97	02/02/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	223.4	222.7	203.0	220.3	ft msl
pH	6.2	5.0	5.2	5.4	pH
Sp. conductance	200	220	220	160	µS/cm
Water temperature	25.0	24.0	20.0	18.0	°C
Alkalinity as $CaCO_3$	1	4	4	2	mg/L
Turbidity	1	1	1	1	NTU
Volume purged	3.5	2.8	6.2	2.6	well volume
Sampling code		A			
Synchronous water level	223.4 (09/18/96)	221.9 (03/19/97)	220.8 (09/17/97)	220.3 (03/19/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	40	40	37	39	1	V	µg/L	WA	0
		Cyanide	<4.3	<5.0	<2.5	<15	1		µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0	3.4	<47	1		µg/L	WA	0
		Nickel, total recoverable	1.7	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	2.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<20	<1.4	<10	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<20	2.7	<10	3.3	1	JE	µg/L	WA	0
■		1,1-Dichloroethylene	***49***	***42***	***48***	***45***	1		µg/L	WA	2
		trans-1,2-Dichloroethylene	<20	<3.2	<10				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<20	<1.5	<10	<5.0	1		µg/L	WA	0
■		Tetrachloroethylene	***190***	***220***	***130***	***150***	1		µg/L	WA	2
		1,1,1-Trichloroethane	11	9.4	7.6	8.9	1		µg/L	WA	0
■		Trichloroethylene	***19***	***22***	***20***	***25***	1		µg/L	WA	2

Monitoring Constitutents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<20		45				µg/L		
		Chloride	***4,500***		***4,800***				µg/L		
		Chromium, total recoverable	1.1		<3.0				µg/L		
		Cobalt, total recoverable	2.0		<5.0				µg/L		
		Copper, total recoverable	<2.4		<3.0				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	22		18				µg/L		
		Mercury, total recoverable	1.3		1.7				µg/L		
		Nitrate-nitrite as nitrogen	***22,000***		***24,000***				µg/L		
		Sodium, total recoverable	***28,000***		***25,000***				µg/L		
		Sulfate	570		<5,000				µg/L		
		Total phosphates (as P)	200		89				µg/L		
		Uranium, total recoverable	11		<0.10				µg/L		
		Zinc, total recoverable	11		21				µg/L		
Radionuclides											
		Gross alpha	1.3E+01		2.5E+00				pCi/L		
		Nonvolatile beta	9.2E+00		4.1E+00				pCi/L		
		Radium, total alpha-emitting	4.8E+00		*4.6E+00*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only. See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 6A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N101133.8 E46319.9	33.325004 °N 81.741318 °W	241.9-211.9 ft msl	343.8 ft msl	4" PVC	S	M

SAMPLE DATE	07/10/96	02/03/97	07/28/97	02/24/98	
FIELD DATA					
Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	227.6	226.6	225.5	223.8	ft msl
pH	5.4	5.2	5.0	5.2	pH
Sp. conductance	36	32	36	44	µS/cm
Water temperature	25.0	26.0	20.7	19.0	°C
Alkalinity as $CaCO_3$	1	2	3	6	mg/L
Turbidity	13	12	2	3	NTU
Volume purged	4.6	4.5	2.9	9.9	well volume
Sampling code					
Synchronous water level	227.3 (09/18/96)	226.6 (03/19/97)	224.8 (09/17/97)	224.0 (03/19/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	7.4	8.2	6.2	4.4	1		µg/L	WA	0
		Cyanide	<10	<5.0	<2.5	<15	1		µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0	<5.0	<47	1		µg/L	WA	0
		Nickel, total recoverable	3.0	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<2.0	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	<2.0	<3.0	<5.0	<5.0	1		µg/L	WA	0

Monitoring Constitutents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<95	***180***	<20				µg/L		
		Chloride	***4,800***		***5,500***				µg/L		
		Chromium, total recoverable	8.1	<3.0	1.8				µg/L		
		Cobalt, total recoverable	0.84		<5.0				µg/L		
		Copper, total recoverable	<2.6		3.9				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	9.4	8.6	7.0				µg/L		
		Mercury, total recoverable	<0.20	<0.20	<0.20				µg/L		
		Nitrate-nitrite as nitrogen	730		350				µg/L		
		Sodium, total recoverable	***5,100***		***5,800***				µg/L		
		Sulfate	300		400				µg/L		
		Total phosphates (as P)	<50		<50				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	<5.0		13				µg/L		
Radionuclides											
		Gross alpha	*6.4E-01*	*1.1E+00*	-5.8E-01				pCi/L		
		Nonvolatile beta	*9.1E-01*	*-7.3E-01*	*-2.8E-01*				pCi/L		
		Radium, total alpha-emitting	1.7E+00		3.3E+00				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only. See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 6B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N101148.5 E46321.6	33.325039 °N 81.741342 °W	129.8-125.1 ft msl	343.9 ft msl	4" PVC	S	LL

SAMPLE DATE	07/17/96	01/02/97	07/30/97	02/02/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	206.3	206.0	204.3	204.4	ft msl
pH	6.4	5.2	5.2	5.2	pH
Sp. conductance	70	48	50	50	µS/cm
Water temperature	27.0	24.0	20.0	18.0	°C
Alkalinity as $CaCO_3$	4	6	2	5	mg/L
Turbidity	1	1	0	1	NTU
Volume purged	3.8	3.0	3.9	3.6	well volume
Sampling code					
Synchronous water level	206.5 (09/18/96)	204.7 (03/19/97)	203.5 (09/17/97)	204.2 (03/19/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	23	23	20	20	1	V	µg/L	WA	0
		Cyanide	<1.9	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0	<5.0	<47	1		µg/L	WA	0
		Nickel, total recoverable	<10	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	2.8	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<40	<1.4	<5.0	<50	10		µg/L	WA	0
		1,1-Dichloroethane	<40	<2.5	<5.0	<50	10		µg/L	WA	0
		1,1-Dichloroethylene	<40	<3.2	<5.0	<50	10		µg/L	WA	0
		trans-1,2-Dichloroethylene	<40	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<40	<1.5	<5.0	<50	10		µg/L	WA	0
	■	Tetrachloroethylene	<40	***66***	***55***	***56***	10		µg/L	WA	2
		1,1,1-Trichloroethane	<40	<2.5	<5.0	<50	10		µg/L	WA	0
	■	Trichloroethylene	***1,200***	***1,800***	***1,700***	***1,700***	10		µg/L	WA	2

Monitoring Constitutents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	***160***		<20				µg/L		
		Chloride	1,800		2,100				µg/L		
		Chromium, total recoverable	0.73		<3.0				µg/L		
		Cobalt, total recoverable	<0.96		<5.0				µg/L		
		Copper, total recoverable	<2.6		<3.0				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	7.6		8.7				µg/L		
		Mercury, total recoverable	0.83		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	***3,300***		***4,200***				µg/L		
		Sodium, total recoverable	3,000		3,000				µg/L		
		Sulfate	160		<5,000				µg/L		
		Total phosphates (as P)	150		<10				µg/L		
		Uranium, total recoverable	20		<0.10				µg/L		
		Zinc, total recoverable	4.1		15				µg/L		
Radionuclides											
		Gross alpha	5.3E+00		*3.6E-01*				pCi/L		
		Nonvolatile beta	4.9E+00		*7.8E-01*				pCi/L		
		Radium, total alpha-emitting	*1.1E+00*		*2.7E+00*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only. See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 6C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N101169.1 E46324.1	33.325089 °N 81.741376 °W	194.0-189.3 ft msl	343.8 ft msl	4" PVC	S	UL

SAMPLE DATE	07/17/96	01/06/97	07/30/97		
FIELD DATA					
Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	224.2	223.5	222.0		ft msl
pH	6.2	10.4	5.4		pH
Sp. conductance	360	440	300		µS/cm
Water temperature	27.0	24.0	20.0		°C
Alkalinity as $CaCO_3$	12	132	4		mg/L
Turbidity	3	8	2		NTU
Volume purged	3.5	0.0	9.8		well volume
Sampling code		X			
Synchronous water level	226.1 (09/18/96)	223.0 (03/19/97)	221.4 (09/17/97)		ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	16	70	7.2				µg/L		
		Cyanide	<10	<5.0	<5.0				µg/L		
		Lead, total recoverable	<5.0	<5.0	8.7				µg/L		
		Nickel, total recoverable	<10	<5.0	<5.0				µg/L		
		Selenium, total recoverable	3.5	6.0	<5.0				µg/L		
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0				µg/L		
		1,1-Dichloroethane	<2.0	<2.5	<5.0				µg/L		
		1,1-Dichloroethylene	1.8	<3.2	<5.0				µg/L		
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0				µg/L		
		Tetrachloroethylene	***89***	***97***	***37***				µg/L		
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0				µg/L		
		Trichloroethylene	***37***	***17***	***11***				µg/L		

Monitoring Constitutents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<20						µg/L		
		Chloride	3,200						µg/L		
		Chromium, total recoverable	<4.0						µg/L		
		Cobalt, total recoverable	<0.48						µg/L		
		Copper, total recoverable	<2.8						µg/L		
		Fluoride	<100						µg/L		
		Manganese, total recoverable	8.8						µg/L		
		Mercury, total recoverable	<0.20						µg/L		
		Nitrate-nitrite as nitrogen	***41,000***						µg/L		
		Sodium, total recoverable	***78,000***						µg/L		
		Sulfate	***6,000***						µg/L		
		Total phosphates (as P)	<50						µg/L		
		Uranium, total recoverable	13						µg/L		
		Zinc, total recoverable	12						µg/L		
Radionuclides											
		Gross alpha	5.1E+00						pCi/L		
		Nonvolatile beta	1.4E+01						pCi/L		
		Radium, total alpha-emitting	*1.1E+00*						pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only. See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 7A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N100585.7 E46726.1	33.324456 °N 81.739182 °W	242.0-212.0 ft msl	344.3 ft msl	4" PVC	S	M

SAMPLE DATE	07/10/96	02/03/97	07/28/97	02/24/98	
FIELD DATA					
Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	228.5	220.2	226.4	225.0	ft msl
pH	5.2	5.2	4.8	5.2	pH
Sp. conductance	38	32	34	36	µS/cm
Water temperature	25.0	26.0	19.2	19.0	°C
Alkalinity as $CaCO_3$	1	2	0	2	mg/L
Turbidity	5	3	1	1	NTU
Volume purged	3.9	7.4	4.7	14	well volume
Sampling code					
Synchronous water level	228.3 (09/18/96)	227.5 (03/19/97)	225.9 (09/17/97)	225.2 (03/19/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	12	10	7.9	5.8	1		µg/L	WA	0
		Cyanide	<10	<5.0	<2.5	<15	1		µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0	3.4	<47	1		µg/L	WA	0
		Nickel, total recoverable	<10	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<0.050	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<0.050	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<0.050	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<0.050	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<0.050	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	0.10	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<0.050	<2.5	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	<0.050	<3.0	<5.0	<5.0	1		µg/L	WA	0

Monitoring Constitutents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<38	68	<20				µg/L		
		Chloride	3,000		3,100				µg/L		
		Chromium, total recoverable	1.0	<3.0	0.70				µg/L		
		Cobalt, total recoverable	0.26		<5.0				µg/L		
		Copper, total recoverable	<3.0		2.0				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	22	20	16				µg/L		
		Mercury, total recoverable	<0.20	<0.20	<0.20				µg/L		
		Nitrate-nitrite as nitrogen	1,900		1,700				µg/L		
		Sodium, total recoverable	***5,100***		***5,300***				µg/L		
		Sulfate	<1,000		<1,000				µg/L		
		Total phosphates (as P)	110		13				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	<5.0		8.8				µg/L		
Radionuclides											
		Gross alpha	3.6E+00	1.4E+00	1.2E+00				pCi/L		
		Nonvolatile beta	*1.4E+00*	*4.0E-01*	*-2.2E-01*				pCi/L		
		Radium, total alpha-emitting	2.1E+00		*3.1E+00*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only. See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 7B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N100597.6 E46718.1	33.324469 °N 81.739227 °W	147.5-142.7 ft msl	344.1 ft msl	4" PVC	S	LL

SAMPLE DATE 07/17/96 01/06/97 08/07/97 02/02/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	206.9	206.4	204.9	205.2	ft msl
pH	6.2	5.2	5.6	5.6	pH
Sp. conductance	98	100	100	100	µS/cm
Water temperature	26.0	24.0	19.6	18.0	°C
Alkalinity as $CaCO_3$	20	17	7	10	mg/L
Turbidity	3	3	3	2	NTU
Volume purged	4.2	2.5	2.9	2.5	well volume
Sampling code					
Synchronous water level	207.2 (09/18/96)	205.5 (03/19/97)	225.3 (09/17/97)	204.9 (03/19/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	42	44	47	50	1	V	µg/L	WA	0
		Cyanide	<1.6	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0	5.3	<47	1		µg/L	WA	0
		Nickel, total recoverable	1.5	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<10	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<10	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<10	4.3	5.1	5.5	1		µg/L	WA	1
		trans-1,2-Dichloroethylene	<10	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<10	<1.5	<5.0	<5.0	1		µg/L	WA	0
	■	Tetrachloroethylene	***100***	***88***	***85***	***73***	1		µg/L	WA	2
		1,1,1-Trichloroethane	<10	<2.5	<5.0	1.2	1	JE	µg/L	WA	0
	■	Trichloroethylene	***28***	***44***	***50***	***52***	1		µg/L	WA	2

Monitoring Constitutents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	29		42				µg/L		
		Chloride	2,800		3,200				µg/L		
		Chromium, total recoverable	<4.0		1.1				µg/L		
		Cobalt, total recoverable	<0.54		<5.0				µg/L		
		Copper, total recoverable	<2.1		<3.0				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	11		15				µg/L		
		Mercury, total recoverable	<0.20		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	***7,900***		***8,700***				µg/L		
		Sodium, total recoverable	***6,900***		***8,100***				µg/L		
		Sulfate	2,500		<5,000				µg/L		
		Total phosphates (as P)	40		110				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	12		27				µg/L		
Radionuclides											
		Gross alpha	2.3E+00		*1.0E+00*				pCi/L		
		Nonvolatile beta	2.8E+00		*1.0E+00*				pCi/L		
		Radium, total alpha-emitting	*1.4E+00*		2.1E+00				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only. See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 7C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N100609.2 E46709.1	33.324480 °N 81.739273 °W	200.1-195.4 ft msl	344.5 ft msl	4" PVC	S	UL

SAMPLE DATE	07/17/96	01/06/97	07/30/97	02/02/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	222.8	222.1	220.6	219.6	ft msl
pH	5.4	5.2	4.8	5.0	pH
Sp. conductance	240	260	240	180	µS/cm
Water temperature	25.0	24.0	20.0	18.0	°C
Alkalinity as $CaCO_3$	0	18	0	1	mg/L
Turbidity	1	4	2	1	NTU
Volume purged	3.4	0.0	4.7	3.3	well volume
Sampling code		X			
Synchronous water level	222.6 (09/18/96)	221.7 (03/19/97)	220.3 (09/17/97)	219.8 (03/19/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	34	33	29	27	1	V	µg/L	WA	0
		Cyanide	<3.4	<5.0	<5.0	12	1	JE	µg/L	WA	0
		Lead, total recoverable	1.4	<5.0	12	<47	1		µg/L	WA	0
		Nickel, total recoverable	1.7	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	4.6	<3.2	3.8	3.3	1	JE	µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
	■	Tetrachloroethylene	***37***	***44***	***31***	***49***	1		µg/L	WA	2
		1,1,1-Trichloroethane	1.4	<2.5	0.80	<5.0	1		µg/L	WA	0
	■	Trichloroethylene	***19***	***14***	***17***	***20***	1		µg/L	WA	2

Monitoring Constitutents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	83		***130***				µg/L		
		Chloride	4,200		***4,500***				µg/L		
		Chromium, total recoverable	0.65		<3.0				µg/L		
		Cobalt, total recoverable	3.3		2.5				µg/L		
		Copper, total recoverable	<4.2		13				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	34		28				µg/L		
		Mercury, total recoverable	0.075		0.070				µg/L		
		Nitrate-nitrite as nitrogen	***30,000***		***27,000***				µg/L		
		Sodium, total recoverable	***42,000***		***31,000***				µg/L		
		Sulfate	110		<5,000				µg/L		
		Total phosphates (as P)	130		<10				µg/L		
		Uranium, total recoverable	8.8		<0.10				µg/L		
		Zinc, total recoverable	6.9		20				µg/L		
Radionuclides											
		Gross alpha	1.5E+01		*7.8E+00*				pCi/L		
		Nonvolatile beta	4.5E+01		***6.7E+01***				pCi/L		
		Radium, total alpha-emitting	***5.1E+00***		*7.3E+00*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only. See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 8A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N100815.1 E47293.2	33.325889 °N 81.738135 °W	242.4-212.4 ft msl	344.2 ft msl	4" PVC	S	M

SAMPLE DATE	07/19/96	01/28/97

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	229.9	229.0			ft msl
pH	5.6	4.4			pH
Sp. conductance	56	44			µS/cm
Water temperature	26.0	23.0			°C
Alkalinity as $CaCO_3$	0	0			mg/L
Turbidity	0	2			NTU
Volume purged	7.1	6.2			well volume
Sampling code					
Synchronous water level	229.6 (09/18/96)	228.6 (03/19/97)			ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	7.5	8.2	7.6				µg/L		
		Cyanide	<10	<5.0					µg/L		
		Lead, total recoverable	<5.0	<5.0	4.8				µg/L		
		Nickel, total recoverable	<10	<5.0	<5.0				µg/L		
		Selenium, total recoverable	<5.0	<5.0	<5.0				µg/L		
Organics											
		Chlorobenzene	<10	<1.4	<5.0				µg/L		
		1,1-Dichloroethane	<10	<2.5	<5.0				µg/L		
		1,1-Dichloroethylene	<10	<3.2	<5.0				µg/L		
		trans-1,2-Dichloroethylene	<10	<3.2					µg/L		
		PCB 1016			<0.30				µg/L		
		PCB 1221			<0.30				µg/L		
		PCB 1232			<0.30				µg/L		
		PCB 1242			<0.30				µg/L		
		PCB 1248			<0.30				µg/L		
		PCB 1254			<0.30				µg/L		
		PCB 1260			<0.30				µg/L		
		1,1,2,2-Tetrachloroethane	***23***	<1.5	<5.0				µg/L		
		Tetrachloroethylene	***21***	***100***	***62***				µg/L		
		1,1,1-Trichloroethane	<10	<2.5	<5.0				µg/L		
		Trichloroethylene	***9.5***	***29***	***12***				µg/L		

Monitoring Constitutents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<20	<60	20				µg/L		
		Chloride	2,000		2,200				µg/L		
		Chromium, total recoverable	1.9	<3.0	1.7				µg/L		
		Cobalt, total recoverable	1.7		<5.0				µg/L		
		Copper, total recoverable	2.8		5.5				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	21	21	19				µg/L		
		Mercury, total recoverable	0.027	<0.20	0.060				µg/L		
		Nitrate-nitrite as nitrogen	***4,000***		***2,500***				µg/L		
		Sodium, total recoverable	3,400		3,100				µg/L		
		Sulfate	290		<5,000				µg/L		
		Total phosphates (as P)	60		15				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	<6.2		30				µg/L		
Radionuclides											
		Gross alpha	5.6E+00	3.4E+00	3.3E+00				pCi/L		
		Nonvolatile beta	3.8E+00	2.8E+00	*-1.9E+00*				pCi/L		
		Radium, total alpha-emitting	3.0E+00		2.6E+00				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only. See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 8B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N100805.8 E47281.9	33.325850 °N 81.738147 °W	150.8-146.1 ft msl	343.9 ft msl	4" PVC	S	LL

SAMPLE DATE	07/19/96	01/06/97	08/04/97	02/05/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	208.1	207.6	206.4	207.3	ft msl
pH	6.0	4.6	4.6	5.4	pH
Sp. conductance	38	24	22	32	µS/cm
Water temperature	26.0	24.0	20.1	18.0	°C
Alkalinity as $CaCO_3$	1	2	0	0	mg/L
Turbidity	1	1	2	1	NTU
Volume purged	4.1	2.6	2.2	3.6	well volume
Sampling code					
Synchronous water level	209.1 (09/18/96)	206.9 (03/19/97)	205.3 (09/17/97)	206.3 (03/18/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	9.5	8.0	8.1	11	1	V	µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0	<5.0	<47	1		µg/L	WA	0
		Nickel, total recoverable	<10	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2					µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<2.0	<1.9	<5.0	4.2	1	JE	µg/L	WA	1
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
	■	Trichloroethylene	***25***	***29***	***34***	***37***	1		µg/L	WA	2

Monitoring Constitutents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<20		<20				µg/L		
		Chloride	2,100		2,500				µg/L		
		Chromium, total recoverable	2.3		<3.0				µg/L		
		Cobalt, total recoverable	<1.0		<5.0				µg/L		
		Copper, total recoverable	2.3		<3.0				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	<3.7		2.5				µg/L		
		Mercury, total recoverable	0.028		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	1,900		1,000				µg/L		
		Sodium, total recoverable	2,100		1,900				µg/L		
		Sulfate	420		<5,000				µg/L		
		Total phosphates (as P)	<50		<10				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	<7.3		14				µg/L		
Radionuclides											
		Gross alpha	*4.5E-01*		*-2.9E-01*				pCi/L		
		Nonvolatile beta	1.8E+00		*2.1E-01*				pCi/L		
		Radium, total alpha-emitting	*-2.0E-01*		1.1E+00				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only. See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 8C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N100793.2 E47264.6	33.325794 °N 81.738168 °W	195.9-191.2 ft msl	344 ft msl	4" PVC	S	UL

SAMPLE DATE	07/19/96	01/06/97	08/04/97	02/05/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	220.6	219.6	218.3	218.0	ft msl
pH	5.6	4.2	4.4	4.6	pH
Sp. conductance	290	300	340	400	µS/cm
Water temperature	25.0	24.0	19.4	17.0	°C
Alkalinity as $CaCO_3$	0	0	0	0	mg/L
Turbidity	1	1	1	1	NTU
Volume purged	4.4	3.6	3.2	6.9	well volume
Sampling code					
Synchronous water level	220.3 (09/18/96)	219.1 (03/19/97)	217.6 (09/17/97)	217.4 (03/18/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

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H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	71	78		98	1	V	µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0		<47	1		µg/L	WA	0
		Nickel, total recoverable	1.2	<5.0		4.6	1	JE	µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0		<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4		<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5		<5.0	1		µg/L	WA	0
■		1,1-Dichloroethylene	***13***	***15***		***13***	1		µg/L	WA	2
		trans-1,2-Dichloroethylene	<2.0	<3.2					µg/L		
		PCB 1016	<0.13						µg/L		
		PCB 1221	<0.13						µg/L		
		PCB 1232	<0.13						µg/L		
		PCB 1242	0.44						µg/L		
		PCB 1248	<0.13						µg/L		
		PCB 1254	<0.13						µg/L		
		PCB 1260	<0.13						µg/L		
		1,1,2,2-Tetrachloroethane	<2.0	<1.5		<5.0	1		µg/L	WA	0
■		Tetrachloroethylene	***48***	***86***		***69***	1		µg/L	WA	2
		1,1,1-Trichloroethane	3.9	4.1		3.2	1	JE	µg/L	WA	0
■		Trichloroethylene	***38***	***53***		***48***	1		µg/L	WA	2

Monitoring Constitutents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	***110***						µg/L		
		Chloride	***4,900***		***5,700***				µg/L		
		Chromium, total recoverable	0.68						µg/L		
		Cobalt, total recoverable	2.6						µg/L		
		Copper, total recoverable	6.2						µg/L		
		Fluoride	<100		60				µg/L		
		Manganese, total recoverable	35						µg/L		
		Mercury, total recoverable	0.28		0.47				µg/L		
		Nitrate-nitrite as nitrogen	***15,000***		***40,000***				µg/L		
		Sodium, total recoverable	***24,000***						µg/L		
		Sulfate	370		<5,000				µg/L		
		Total phosphates (as P)	270		<10				µg/L		
		Uranium, total recoverable	<20						µg/L		
		Zinc, total recoverable	<15						µg/L		
Radionuclides											
		Gross alpha	6.2E+00		4.6E+00				pCi/L		
		Nonvolatile beta	3.6E+01		4.5E+01				pCi/L		
		Radium, total alpha-emitting	3.6E+00		3.7E+00				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only. See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 13A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N101725.7 E47525.4	33.328281 °N 81.739296 °W	136.4-131.4 ft msl	346.7 ft msl	4" PVC	S	LL

SAMPLE DATE	07/18/96	01/15/97	08/05/97	02/05/98
FIELD DATA				
Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	206.7	207.6	204.8	206.7	ft msl
pH	6.0	4.6	4.8	5.2	pH
Sp. conductance	46	26	28	34	µS/cm
Water temperature	26.0	23.0	20.4	18.0	°C
Alkalinity as $CaCO_3$	1	1	0	2	mg/L
Turbidity	0	2	1	1	NTU
Volume purged	3.6	2.9	2.6	2.9	well volume
Sampling code					
Synchronous water level	209.9 (09/18/96)	205.1 (03/18/97)	204.8 (09/17/97)	205.6 (03/19/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	6.8	7.1	7.0	7.2	1	V	µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0	3.6	<47	1		µg/L	WA	0
		Nickel, total recoverable	<10	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	3.6	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<10	<7.0	<50	<25	5		µg/L	WA	0
		1,1-Dichloroethane	<10	<13	<50	<25	5		µg/L	WA	0
		1,1-Dichloroethylene	<10	<16	<50	<25	5		µg/L	WA	0
		trans-1,2-Dichloroethylene	<10	<16	<50				µg/L		
		PCB 1016	<0.13						µg/L		
		PCB 1221	<0.13						µg/L		
		PCB 1232	<0.13						µg/L		
		PCB 1242	<0.13						µg/L		
		PCB 1248	<0.13						µg/L		
		PCB 1254	<0.13						µg/L		
		PCB 1260	<0.13						µg/L		
		1,1,2,2-Tetrachloroethane	<10	<7.5	<50	<25	5		µg/L	WA	0
	■	Tetrachloroethylene	<10	***21***	<50	***7.8***	5	JE	µg/L	WA	2
		1,1,1-Trichloroethane	<10	<13	<50	<25	5		µg/L	WA	0
	■	Trichloroethylene	***550***	***690***	***650***	***650***	5		µg/L	WA	2

Monitoring Constitutents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<20		<20				µg/L		
		Chloride	1,800		2,200				µg/L		
		Chromium, total recoverable	<4.0		1.3				µg/L		
		Cobalt, total recoverable	<0.79		<5.0				µg/L		
		Copper, total recoverable	<4.1		1.6				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	2.2		2.6				µg/L		
		Mercury, total recoverable	<0.20		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	2,400		1,800				µg/L		
		Sodium, total recoverable	2,200		2,100				µg/L		
		Sulfate	550		<5,000				µg/L		
		Total phosphates (as P)	220		<10				µg/L		
		Uranium, total recoverable	12		<0.10				µg/L		
		Zinc, total recoverable	16		29				µg/L		
Radionuclides											
		Gross alpha	1.5E+00		*-1.9E-01*				pCi/L		
		Nonvolatile beta	1.8E+00		*-1.4E+00*				pCi/L		
		Radium, total alpha-emitting	4.0E-01		1.3E+00				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only. See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 13CC

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N101728.8 E47525.7	33.328288 °N 81.739301 °W	196.8-192.0 ft msl	346.9 ft msl	4" PVC	S	UL

SAMPLE DATE	07/18/96	01/15/97	08/05/97	02/05/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	225.0	224.0	222.8	222.1	ft msl
pH	6.0	4.6	5.0	5.6	pH
Sp. conductance	100	80	88	96	µS/cm
Water temperature	27.0	24.0	21.0	14.0	°C
Alkalinity as $CaCO_3$	1	1	1	4	mg/L
Turbidity	1	3	2	2	NTU
Volume purged	2.4	0.048	0.0	0.0	well volume
Sampling code		X	X	X	
Synchronous water level	225.0 (09/18/96)	223.4 (03/18/97)	222.1 (09/17/97)	222.1 (03/19/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	1.2	2.9	1.4	5.1	1	V	µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
	■	Lead, total recoverable	4.0	***33***	***27***	***38***	1	JE	µg/L	WA	1
		Nickel, total recoverable	0.97	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	2.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<4.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<4.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<4.0	<3.2	2.2	1.9	1	JE2	µg/L	WA	0
		trans-1,2-Dichloroethylene	<4.0	<3.2					µg/L		
		PCB 1016			<0.30				µg/L		
		PCB 1221			<0.30				µg/L		
		PCB 1232			<0.30				µg/L		
		PCB 1242			<0.30				µg/L		
		PCB 1248			<0.30				µg/L		
		PCB 1254			<0.30				µg/L		
		PCB 1260			<0.30				µg/L		
		1,1,2,2-Tetrachloroethane	<4.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
	■	Tetrachloroethylene	***12***	***17***	***14***	***18***	1		µg/L	WA	2
		1,1,1-Trichloroethane	<4.0	<2.5	1.9	2.1	1	JE2	µg/L	WA	0
	■	Trichloroethylene	***14***	***16***	***16***	***18***	1	J2	µg/L	WA	2

Monitoring Constitutents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<20		***110***				µg/L		
		Chloride	2,300		2,700				µg/L		
		Chromium, total recoverable	<4.0		<3.0				µg/L		
		Cobalt, total recoverable	<0.42		<5.0				µg/L		
		Copper, total recoverable	13		17				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	2.6		6.6				µg/L		
		Mercury, total recoverable	<0.20		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	***8,500***		***6,900***				µg/L		
		Sodium, total recoverable	***20,000***		***16,000***				µg/L		
		Sulfate	***6,000***		***5,400***				µg/L		
		Total phosphates (as P)	80		<10				µg/L		
		Uranium, total recoverable	12		<0.10				µg/L		
		Zinc, total recoverable	12		57				µg/L		
Radionuclides											
		Gross alpha	*2.0E-01*		*-7.9E-01*				pCi/L		
		Nonvolatile beta	1.7E+00		2.7E+00				pCi/L		
		Radium, total alpha-emitting	*0.0E+00*		4.8E-01				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only. See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 13D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N101778.1 E47517.5	33.328384 °N 81.739418 °W	231.5-211.5 ft msl	347.6 ft msl	4" PVC	S	M

SAMPLE DATE	07/19/96	01/29/97	08/06/97	02/05/98	
FIELD DATA					
Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	228.8	227.9	226.5	225.4	ft msl
pH	6.4	5.6	4.8	6.4	pH
Sp. conductance	420	360	260	340	µS/cm
Water temperature	31.0	23.0	23.4	14.0	°C
Alkalinity as $CaCO_3$	33	44	41	54	mg/L
Turbidity	6	3	33	13	NTU
Volume purged	0.088	0.0	0.0	0.0	well volume
Sampling code	X	X	X	X	
Synchronous water level	228.7 (09/18/96)	227.3 (03/18/97)	226.1 (09/17/97)	225.6 (03/19/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	17	13	16	13	1	V	µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	1.3	<5.0	5.6	<47	1		µg/L	WA	0
		Nickel, total recoverable	<10	<5.0	<5.0	3.4	1	JE	µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	6.5	6.8	<5.0	6.2	1		µg/L	WA	1
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
	■	Tetrachloroethylene	***9.2***	***47***	***26***	***37***	1		µg/L	WA	2
		1,1,1-Trichloroethane	8.4	8.5	<5.0	7.1	1		µg/L	WA	0
	■	Trichloroethylene	***14***	***24***	***16***	***19***	1		µg/L	WA	2

Monitoring Constitutents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<20	<21	***760***				µg/L		
		Chloride	3,600		3,500				µg/L		
		Chromium, total recoverable	1.1	<3.0	2.2				µg/L		
		Cobalt, total recoverable	<0.38		<5.0				µg/L		
		Copper, total recoverable	8.1		2.1				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	<2.9	<3.0	6.3				µg/L		
		Mercury, total recoverable	<0.20	<0.20	<0.20				µg/L		
		Nitrate-nitrite as nitrogen	***42,000***		***31,000***				µg/L		
		Sodium, total recoverable	***92,000***		***67,000***				µg/L		
		Sulfate	***5,100***		***5,500***				µg/L		
		Total phosphates (as P)	140		34				µg/L		
		Uranium, total recoverable	<20		0.21				µg/L		
		Zinc, total recoverable	<25		43				µg/L		
Radionuclides											
		Gross alpha	*2.9E-01*	*2.4E-01*	*9.3E-01*				pCi/L		
		Nonvolatile beta	8.6E+00	1.5E+01	1.2E+01				pCi/L		
		Radium, total alpha-emitting	3.0E-01		1.1E+00				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only. See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 39A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N100837.6 E48367.3	33.327693 °N 81.735351 °W	111.7-106.1 ft msl	341.6 ft msl	4" PVC	S	MCBC

SAMPLE DATE	08/03/96	01/21/97	08/18/97	02/25/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	208.8	207.6	206.4	209.1	ft msl
pH	5.6	3.8	4.6	4.3	pH
Sp. conductance	50	30	28	27	µS/cm
Water temperature	21.0	22.0	22.0	16.2	°C
Alkalinity as $CaCO_3$	8	0	0	1	mg/L
Turbidity	3	1	1	1	NTU
Volume purged	0.015	2.8	2.1	0.015	well volume
Sampling code	X				
Synchronous water level	209.5 (09/19/96)	( )	206.0 (09/16/97)	207.0 (03/18/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	11	7.4	6.8	6.8	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	14	11	5.3	6.6	1	JE	µg/L	WA	0
		Nickel, total recoverable	5.1	<15	3.5	4.3	1	JE	µg/L	WA	0
		Selenium, total recoverable	2.3	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2					µg/L		
		PCB 1016	<0.13		<0.30				µg/L		
		PCB 1221	<0.13		<0.30				µg/L		
		PCB 1232	<0.13		<0.30				µg/L		
		PCB 1242	<0.13		<0.30				µg/L		
		PCB 1248	<0.13		<0.30				µg/L		
		PCB 1254	<0.13		<0.30				µg/L		
		PCB 1260	<0.13		<0.30				µg/L		
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<2.0	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	***6.3***	<3.0	2.8	2.4	1	JE	µg/L	WA	0

Monitoring Constitutents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	***350***		32				µg/L		
		Chloride	2,200		2,200				µg/L		
		Chromium, total recoverable	<1.2		<3.0				µg/L		
		Cobalt, total recoverable	<1.5		<5.0				µg/L		
		Copper, total recoverable	10		13				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	32		16				µg/L		
		Mercury, total recoverable	<0.20		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	***2,700***		160				µg/L		
		Sodium, total recoverable	***4,700***		1,700				µg/L		
		Sulfate	***4,000***		***4,900***				µg/L		
		Total phosphates (as P)	40		<10				µg/L		
		Uranium, total recoverable	<20		0.12				µg/L		
		Zinc, total recoverable	83		36				µg/L		
Radionuclides											
		Gross alpha	1.0E+00		*4.0E-02*				pCi/L		
		Nonvolatile beta	2.3E+00		*-2.7E-01*				pCi/L		
		Radium, total alpha-emitting	*0.0E+00*		*9.1E+00*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only. See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
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WELL MSB 57D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N101829.5 E48701.5	33.330431 °N 81.736401 °W	229.6-210.1 ft msl	356.2 ft msl	4" PVC	S	M

SAMPLE DATE	08/05/96	01/31/97	08/25/97	02/20/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	231.9	230.9	229.2	228.3	ft msl
pH	4.6	4.6	5.0	5.2	pH
Sp. conductance	52	36	42	33	µS/cm
Water temperature	30.0	23.0	25.0	11.8	°C
Alkalinity as $CaCO_3$	1	3	1	1	mg/L
Turbidity	3	3	9	13	NTU
Volume purged	0.070	3.3	0.0	0.084	well volume
Sampling code	X		X	X	
Synchronous water level	231.8 (09/19/96)	230.5 (03/18/97)	228.9 (09/17/97)	228.8 (03/19/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	7.4	13	9.9	7.7	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	3.3	***15***	3.8	5.8	1	JE	µg/L	WA	0
		Nickel, total recoverable	1.3	<5.0	3.3	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<0.25	<1.4		<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<0.25	<2.5		<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<0.25	<3.2		<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<0.25	<3.2					µg/L		
		PCB 1016	<0.13			<1.1	1		µg/L	WA	0
		PCB 1221	<0.13			<2.1	1		µg/L	WA	0
		PCB 1232	<0.13			<1.1	1		µg/L	WA	0
		PCB 1242	<0.13			<1.1	1		µg/L	WA	0
		PCB 1248	<0.13			<1.1	1		µg/L	WA	0
		PCB 1254	<0.13			<1.1	1		µg/L	WA	0
		PCB 1260	<0.13			<1.1	1		µg/L	WA	0
		1,1,2,2-Tetrachloroethane	<0.25	<1.5		<5.0	1		µg/L	WA	0
	■	Tetrachloroethylene	***86***	***62***		***22***	1		µg/L	WA	2
		1,1,1-Trichloroethane	<0.25	<2.5		<5.0	1		µg/L	WA	0
	■	Trichloroethylene	***46***	***36***		***15***	1		µg/L	WA	2

Monitoring Constitutents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	83	64	***370***				µg/L		
		Chloride	3,000						µg/L		
		Chromium, total recoverable	<4.0	<3.0	3.9				µg/L		
		Cobalt, total recoverable	0.70		<5.0				µg/L		
		Copper, total recoverable	8.0		12				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	19	27	27				µg/L		
		Mercury, total recoverable	0.042	<0.20	<0.20				µg/L		
		Nitrate-nitrite as nitrogen	2,100		2,000				µg/L		
		Sodium, total recoverable	2,800		2,400				µg/L		
		Sulfate	140						µg/L		
		Total phosphates (as P)	30		<10				µg/L		
		Uranium, total recoverable	<20		0.24				µg/L		
		Zinc, total recoverable	22		29				µg/L		
Radionuclides											
		Gross alpha	3.1E+00	*1.3E+00*	2.6E+00				pCi/L		
		Nonvolatile beta	1.6E+00	*6.9E-01*	*1.9E+00*				pCi/L		
		Radium, total alpha-emitting	2.5E+00						pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only. See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 58D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N102200.6 E48693.5	33.331239 °N 81.737144 °W	230.5-211.1 ft msl	357.9 ft msl	4" PVC	S	M

SAMPLE DATE	08/05/96	02/19/97		02/20/98		
FIELD DATA						
Parameter	3Q96	1Q97	3Q97	1Q98		Unit
Water elevation	231.7	230.5		228.0		ft msl
pH	4.8	5.2		3.7		pH
Sp. conductance	56	26		33		µS/cm
Water temperature	38.0	28.0		18.9		°C
Alkalinity as $CaCO_3$	1	3		0		mg/L
Turbidity	19	19		14		NTU
Volume purged	0.074	0.24		0.18		well volume
Sampling code	X	X		X		
Synchronous water level	231.6 (09/19/96)	230.3 (03/19/97)		228.4 (03/19/98)		ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	13	17	11	7.9	1		µg/L	WA	0
		Cyanide	<10	<5.0		<15	1		µg/L	WA	0
	■	Lead, total recoverable	***98***	***51***	11	***25***	1	JE	µg/L	WA	0
		Nickel, total recoverable	33	72	28	6.5	1	JE	µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<100	<70	<50	<25	5		µg/L	WA	0
		1,1-Dichloroethane	<100	<130	<50	<25	5		µg/L	WA	0
		1,1-Dichloroethylene	<100	<160	<50	<25	5		µg/L	WA	0
		trans-1,2-Dichloroethylene	<100	<160	<50				µg/L		
		PCB 1016	<0.13	<0.12	<0.30	<1.0	1		µg/L	WA	0
		PCB 1221	<0.13	<0.12	<0.30	<2.0	1		µg/L	WA	0
		PCB 1232	<0.13	<0.12	<0.30	<1.0	1		µg/L	WA	0
		PCB 1242	<0.13	<0.12	<0.30	<1.0	1		µg/L	WA	0
		PCB 1248	<0.13	<0.12	<0.30	<1.0	1		µg/L	WA	0
		PCB 1254	<0.13	<0.12	<0.30	<1.0	1		µg/L	WA	0
		PCB 1260	<0.13	<0.12	<0.30	<1.0	1		µg/L	WA	0
		1,1,2,2-Tetrachloroethane	<100	<75	<50	<25	5		µg/L	WA	0
	■	Tetrachloroethylene	***700***	***3,800***	***630***	***440***	5		µg/L	WA	2
		1,1,1-Trichloroethane	<100	***550***	33	<25	5		µg/L	WA	0
	■	Trichloroethylene	***1,200***	***2,200***	***760***	***550***	5		µg/L	WA	2

Monitoring Constitutents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	***770***	***740***	***340***				µg/L		
		Chloride	2,700		2,400				µg/L		
		Chromium, total recoverable	18	***110***	41				µg/L		
		Cobalt, total recoverable	1.5		<5.0				µg/L		
		Copper, total recoverable	200		23				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	22	41	24				µg/L		
		Mercury, total recoverable	0.082	<0.20	<0.20				µg/L		
		Nitrate-nitrite as nitrogen	1,500		1,500				µg/L		
		Sodium, total recoverable	2,100		2,000				µg/L		
		Sulfate	<1,000		<5,000				µg/L		
		Total phosphates (as P)	270		24				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	660		32				µg/L		
Radionuclides											
		Gross alpha	3.9E+00	1.7E+00	8.7E+00				pCi/L		
		Nonvolatile beta	3.0E+00	2.8E+00	5.9E+00				pCi/L		
		Radium, total alpha-emitting	1.5E+00		2.9E+00				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only. See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 59D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N102182.2 E48314.8	33.330579 °N 81.738105 °W	229.3-209.9 ft msl	359.3 ft msl	4" PVC	S	M

SAMPLE DATE	08/05/96	01/29/97	09/03/97	02/20/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	230.6	229.5	228.1	227.1	ft msl
pH	4.8	4.8	5.0	6.1	pH
Sp. conductance	70	56	50	30	µS/cm
Water temperature	40.0	23.0	21.0	12.0	°C
Alkalinity as $CaCO_3$	1	3	1	0	mg/L
Turbidity	1	6	10	4	NTU
Volume purged	0.074	3.8	0.0	0.0	well volume
Sampling code	X		X	X	
Synchronous water level	230.5 (09/19/96)	229.4 (03/18/97)	228.0 (09/17/97)	227.6 (03/19/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	15	22	12	9.7	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	8.8	***34***	<5.0	<47	1		µg/L	WA	0
		Nickel, total recoverable	2.7	<5.0	2.5	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2,000	<700		<500	100		µg/L	WA	0
		1,1-Dichloroethane	<2,000	<1,300		<500	100		µg/L	WA	0
		1,1-Dichloroethylene	<2,000	<1,600		<500	100		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2,000	<1,600					µg/L		
		PCB 1016	<0.13			<1.1	1		µg/L	WA	0
		PCB 1221	<0.13			<2.1	1		µg/L	WA	0
		PCB 1232	<0.13			<1.1	1		µg/L	WA	0
		PCB 1242	<0.13			<1.1	1		µg/L	WA	0
		PCB 1248	<0.13			<1.1	1		µg/L	WA	0
		PCB 1254	<0.13			<1.1	1		µg/L	WA	0
		PCB 1260	<0.13			<1.1	1		µg/L	WA	0
		1,1,2,2-Tetrachloroethane	<2,000	<750		<500	100		µg/L	WA	0
	■	Tetrachloroethylene	***22,000***	***28,000***		***12,000***	100		µg/L	WA	2
		1,1,1-Trichloroethane	<2,000	<1,300		<500	100		µg/L	WA	0
	■	Trichloroethylene	***5,300***	***7,600***		***3,700***	100		µg/L	WA	2

Monitoring Constitutents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	***240***	***190***	***270***				µg/L		
		Chloride	3,200		3,000				µg/L		
		Chromium, total recoverable	<4.0	<3.0	<3.0				µg/L		
		Cobalt, total recoverable	0.76		<5.0				µg/L		
		Copper, total recoverable	16		4.4				µg/L		
		Fluoride	34		<100				µg/L		
		Manganese, total recoverable	***56***	***85***	48				µg/L		
		Mercury, total recoverable	0.17	<0.20	<0.20				µg/L		
		Nitrate-nitrite as nitrogen	***3,000***		***2,400***				µg/L		
		Sodium, total recoverable	3,000		2,700				µg/L		
		Sulfate	150		<5,000				µg/L		
		Total phosphates (as P)	110		<10				µg/L		
		Uranium, total recoverable	<20		0.15				µg/L		
		Zinc, total recoverable	26		23				µg/L		
Radionuclides											
		Gross alpha	3.7E+00	3.3E+00	5.1E+00				pCi/L		
		Nonvolatile beta	2.4E+00	6.4E+00	2.6E+00				pCi/L		
		Radium, total alpha-emitting	1.4E+00		*2.4E+00*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only. See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 60D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N101835.5 E48326.8	33.329833 °N 81.737399 °W	228.3-208.9 ft msl	354.5 ft msl	4" PVC	S	M

SAMPLE DATE	08/05/96	01/31/97	08/26/97	02/20/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	230.8	229.9	228.2	227.5	ft msl
pH	4.4	4.8	4.2	5.3	pH
Sp. conductance	280	52	200	76	µS/cm
Water temperature	25.0	23.0	25.0	12.1	°C
Alkalinity as $CaCO_3$	1	2	0	0	mg/L
Turbidity	1	4	5	3	NTU
Volume purged	0.070	0.0	0.0	0.0	well volume
Sampling code	X	X	X	X	
Synchronous water level	230.8 (09/19/96)	229.4 (03/18/97)	228.0 (09/17/97)	228.0 (03/19/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	7.6	8.3	10	8.8	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	7.9	<5.0	7.0	<47	1		µg/L	WA	0
		Nickel, total recoverable	2.1	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<10	<14	<25	<10	2		µg/L	WA	0
		1,1-Dichloroethane	<10	<25	<25	<10	2		µg/L	WA	0
		1,1-Dichloroethylene	<10	<32	<25	<10	2		µg/L	WA	0
		trans-1,2-Dichloroethylene	<10	<32	<25				µg/L		
		PCB 1016	<0.13		<0.30	<1.1	1		µg/L	WA	0
		PCB 1221	<0.13		<0.30	<2.1	1		µg/L	WA	0
		PCB 1232	<0.13		<0.30	<1.1	1		µg/L	WA	0
		PCB 1242	<0.13		<0.30	<1.1	1		µg/L	WA	0
		PCB 1248	<0.13		<0.30	<1.1	1		µg/L	WA	0
		PCB 1254	<0.13		<0.30	<1.1	1		µg/L	WA	0
		PCB 1260	<0.13		<0.30	<1.1	1		µg/L	WA	0
		1,1,2,2-Tetrachloroethane	<10	<15	<25	<10	2		µg/L	WA	0
	■	Tetrachloroethylene	***1,300***	***1,600***	***660***	***420***	2	J2	µg/L	WA	2
		1,1,1-Trichloroethane	<10	<25	<25	<10	2		µg/L	WA	0
	■	Trichloroethylene	***360***	***460***	***220***	***110***	2	J2	µg/L	WA	2

Monitoring Constitutents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	37	52	***260***				µg/L		
		Chloride	3,300		3,700				µg/L		
		Chromium, total recoverable	<4.0	<3.0	1.5				µg/L		
		Cobalt, total recoverable	0.63		<5.0				µg/L		
		Copper, total recoverable	20		6.6				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	11	14	24				µg/L		
		Mercury, total recoverable	0.034	<0.20	<0.20				µg/L		
		Nitrate-nitrite as nitrogen	***3,800***		***6,200***				µg/L		
		Sodium, total recoverable	***5,200***		***6,800***				µg/L		
		Sulfate	340		<5,000				µg/L		
		Total phosphates (as P)	70		5.0				µg/L		
		Uranium, total recoverable	<20		0.20				µg/L		
		Zinc, total recoverable	37		24				µg/L		
Radionuclides											
		Gross alpha	8.6E+00	*3.5E+00*	5.2E+00				pCi/L		
		Nonvolatile beta	3.2E+00	*3.0E+00*	2.7E+00				pCi/L		
		Radium, total alpha-emitting	4.4E+00		*7.3E+00*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only. See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
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WELL MSB 62B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N101865.3 E47906.8	33.329213 °N 81.738563 °W	141.0-136.3 ft msl	349.1 ft msl	4" PVC	S	LL

SAMPLE DATE	08/08/96	01/07/97	08/19/97	02/18/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	209.1	206.3	205.0	207.4	ft msl
pH	5.6	5.2	5.4	5.1	pH
Sp. conductance	28	34	30	33	µS/cm
Water temperature	24.0	19.0	21.0	17.8	°C
Alkalinity as $CaCO_3$	2	2	13	10	mg/L
Turbidity	2	2	2	1	NTU
Volume purged	4.0	2.1	3.1	2.8	well volume
Sampling code					
Synchronous water level	208.5 (09/19/96)	205.5 (03/18/97)	204.4 (09/17/97)	208.0 (03/18/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	30	16	14	20	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	6.5	<5.0	<5.0	<47	1		µg/L	WA	0
		Nickel, total recoverable	<10	<5.0	4.1	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
	■	Tetrachloroethylene	***27***	***28***	***27***	***15***	1		µg/L	WA	2
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
	■	Trichloroethylene	***39***	***45***	***47***	***29***	1		µg/L	WA	2

Monitoring Constitutents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<20		45				µg/L		
		Chloride			2,100				µg/L		
		Chromium, total recoverable	<4.0		0.70				µg/L		
		Cobalt, total recoverable	<4.0		<5.0				µg/L		
		Copper, total recoverable	47		3.1				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	5.0		2.6				µg/L		
		Mercury, total recoverable	<0.20		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	1,200		850				µg/L		
		Sodium, total recoverable	3,600		2,000				µg/L		
		Sulfate	420		<5,000				µg/L		
		Total phosphates (as P)	<50		16				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	32		13				µg/L		
Radionuclides											
		Gross alpha	6.1E-01		*2.0E-01*				pCi/L		
		Nonvolatile beta	*1.0E+00*		*3.4E-01*				pCi/L		
		Radium, total alpha-emitting	*0.0E+00*		***8.7E+00***				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only. See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 62C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N101857.2 E47895.0	33.329175 °N 81.738578 °W	190.0-185.2 ft msl	349.1 ft msl	4" PVC	S	UL

SAMPLE DATE	08/07/96	01/10/97	08/19/97	02/18/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	223.7	222.6	221.1	220.8	ft msl
pH	5.2	5.0	4.6	5.2	pH
Sp. conductance	120	100	100	97	µS/cm
Water temperature	26.0	22.0	20.0	17.9	°C
Alkalinity as $CaCO_3$	1	3	11	3	mg/L
Turbidity	1	2	1	1	NTU
Volume purged	5.6	2.5	3.8	3.1	well volume
Sampling code					
Synchronous water level	223.6 (09/19/96)	222.0 (03/18/97)	220.5 (09/17/97)	220.8 (03/18/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	14	11	7.3	6.0	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0	<5.0	<47	1		µg/L	WA	0
		Nickel, total recoverable	1.0	<5.0	6.4	<26	1		µg/L	WA	0
		Selenium, total recoverable	3.5	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<10	<7.0	<10	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<10	<13	<10	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	***11***	<16	6.3	2.4	1	JE	µg/L	WA	0
		trans-1,2-Dichloroethylene	<10		<10				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<10	<7.5	<10	<5.0	1		µg/L	WA	0
	■	Tetrachloroethylene	***75***	***110***	***80***	***49***	1		µg/L	WA	2
		1,1,1-Trichloroethane	<10	<13	<10	<5.0	1		µg/L	WA	0
	■	Trichloroethylene	***93***	***82***	***66***	***44***	1		µg/L	WA	2

Monitoring Constitutents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<20		49				µg/L		
		Chloride	3,400		2,600				µg/L		
		Chromium, total recoverable	<4.0		0.60				µg/L		
		Cobalt, total recoverable	1.4		<5.0				µg/L		
		Copper, total recoverable	32		34				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	13		9.3				µg/L		
		Mercury, total recoverable	0.26		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	***13,000***		680				µg/L		
		Sodium, total recoverable	***20,000***		***15,000***				µg/L		
		Sulfate	1,300		***4,200***				µg/L		
		Total phosphates (as P)	250		<10				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	94		98				µg/L		
Radionuclides											
		Gross alpha	9.6E-01		*6.3E-01*				pCi/L		
		Nonvolatile beta	2.3E+00		2.6E+00				pCi/L		
		Radium, total alpha-emitting	4.0E-01		***5.4E+00***				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only. See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 62D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N101849.0 E47882.9	33.329137 °N 81.738594 °W	231.9-212.4 ft msl	349.5 ft msl	4" PVC	S	M

SAMPLE DATE	08/08/96	01/29/97	08/19/97	02/18/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	229.8	228.6	227.4	226.6	ft msl
pH	11.2	11.0	10.8	10.9	pH
Sp. conductance	780	940	1000	800	µS/cm
Water temperature	27.0	22.0	22.0	14.1	°C
Alkalinity as $CaCO_3$	96	182	225	151	mg/L
Turbidity	2	1	2	3	NTU
Volume purged	0.0	0.0	0.10	0.11	well volume
Sampling code	X	X	X	X	
Synchronous water level	229.7 (09/19/96)	228.4 (03/18/97)	227.0 (09/17/97)	227.0 (03/18/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	57	53	49	39	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	***340***	<5.0	<5.0	7.4	1	JE	µg/L	WA	0
		Nickel, total recoverable	<10	<5.0	5.1	<26	1		µg/L	WA	0
		Selenium, total recoverable	2.2	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<10	<1.4	<10	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<10	<2.5	<10	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	5.4	5.3	***7.4***	3.9	1	JE	µg/L	WA	1
		trans-1,2-Dichloroethylene	<10	<3.2	<10				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<10	<1.5	<10	<5.0	1		µg/L	WA	0
	■	Tetrachloroethylene	***84***	***110***	***110***	***74***	1		µg/L	WA	2
		1,1,1-Trichloroethane	8.5	6.9	8.0	3.9	1	JE	µg/L	WA	0
	■	Trichloroethylene	***30***	***37***	***37***	***26***	1		µg/L	WA	2

Monitoring Constitutents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	***1,300***	***1,400***	***1,500***				µg/L		
		Chloride	2,800		3,100				µg/L		
		Chromium, total recoverable	2.1	<3.0	3.4				µg/L		
		Cobalt, total recoverable	<4.0		<5.0				µg/L		
		Copper, total recoverable	<2.6		5.1				µg/L		
		Fluoride	340		<100				µg/L		
		Manganese, total recoverable	<2.0	<3.0	<3.0				µg/L		
		Mercury, total recoverable	0.28	<0.20	<0.20				µg/L		
		Nitrate-nitrite as nitrogen	***9,800***		***11,000***				µg/L		
		Sodium, total recoverable	***38,000***		***43,000***				µg/L		
		Sulfate	***5,400***		***5,800***				µg/L		
		Total phosphates (as P)	<50		<10				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	13		17				µg/L		
Radionuclides											
		Gross alpha	1.6E+00	*2.8E-01*	*2.8E+00*				pCi/L		
		Nonvolatile beta	3.8E+00	1.4E+01	1.0E+01				pCi/L		
		Radium, total alpha-emitting	3.0E-01		2.9E+00				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only. See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 63B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N101184.4 E47861.0	33.327633 °N 81.737359 °W	140.9-136.2 ft msl	346.9 ft msl	4" PVC	S	LL

SAMPLE DATE	08/07/96	01/07/97	08/21/97	02/12/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	209.4	207.4	208.6	207.2	ft msl
pH	4.9	4.6	4.4	5.4	pH
Sp. conductance	34	38	58	82	µS/cm
Water temperature	25.0	23.0	21.0	19.0	°C
Alkalinity as $CaCO_3$	1	1	1	2	mg/L
Turbidity	1	1	1	0	NTU
Volume purged	2.7	2.6	2.4	2.3	well volume
Sampling code					
Synchronous water level	210.1 (09/18/96)	206.6 (03/19/97)	205.4 (09/17/97)	207.0 (03/18/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	9.0	12	16	22	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0	<5.0	<47	1		µg/L	WA	0
		Nickel, total recoverable	<10	<5.0	3.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	5.1	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<1.3	<7.0	<10	<25	5		µg/L	WA	0
		1,1-Dichloroethane	<1.3	<13	<10	<25	5		µg/L	WA	0
		1,1-Dichloroethylene	<1.3	<16	<10	<25	5		µg/L	WA	0
		trans-1,2-Dichloroethylene	<1.3	<16					µg/L		
		PCB 1016			<0.30				µg/L		
		PCB 1221			<0.30				µg/L		
		PCB 1232			<0.30				µg/L		
		PCB 1242			<0.30				µg/L		
		PCB 1248			<0.30				µg/L		
		PCB 1254			<0.30				µg/L		
		PCB 1260			<0.30				µg/L		
		1,1,2,2-Tetrachloroethane	<1.3	<7.5	<10	<25	5		µg/L	WA	0
	■	Tetrachloroethylene	***21***	***72***	***97***	***170***	5		µg/L	WA	2
		1,1,1-Trichloroethane	<1.3	<13	<10	<25	5		µg/L	WA	0
	■	Trichloroethylene	***470***	***550***	***540***	***440***	5		µg/L	WA	2

Monitoring Constitutents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<20		<20				µg/L		
		Chloride	2,200		2,300				µg/L		
		Chromium, total recoverable	<4.0		9.9				µg/L		
		Cobalt, total recoverable	0.57		<5.0				µg/L		
		Copper, total recoverable	6.1		7.8				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	3.8		6.2				µg/L		
		Mercury, total recoverable	0.28		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	***2,800***		***5,200***				µg/L		
		Sodium, total recoverable	2,200		3,900				µg/L		
		Sulfate	140		<5,000				µg/L		
		Total phosphates (as P)	110		<10				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	18		35				µg/L		
Radionuclides											
		Gross alpha	*4.6E-01*		*1.2E+00*				pCi/L		
		Nonvolatile beta	*8.0E-01*		*1.3E+00*				pCi/L		
		Radium, total alpha-emitting	*2.0E-01*		*1.5E+00*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only. See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 63C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N101174.6 E47849.2	33.327592 °N 81.737371 °W	195.8-191.1 ft msl	347 ft msl	4" PVC	S	UL

SAMPLE DATE	08/07/96	01/07/97	08/21/97	02/12/98	
FIELD DATA					
Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	221.0	219.7	218.6	218.1	ft msl
pH	5.0	4.6	4.8	5.6	pH
Sp. conductance	35	32	34	40	µS/cm
Water temperature	24.0	23.0	21.0	18.0	°C
Alkalinity as $CaCO_3$	1	2	6	2	mg/L
Turbidity	1	1	1	1	NTU
Volume purged	8.4	3.7	3.8	4.6	well volume
Sampling code					
Synchronous water level	220.9 (09/18/96)	219.3 (03/19/97)	217.9 (09/17/97)	217.9 (03/18/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	8.8	5.5	6.1	5.2	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	7.2	<5.0	3.3	<47	1		µg/L	WA	0
		Nickel, total recoverable	<10	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<0.050	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<0.050	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	0.13	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<0.050	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<0.050	<1.5	<5.0	<5.0	1		µg/L	WA	0
	■	Tetrachloroethylene	***9.6***	***14***	***31***	***95***	1		µg/L	WA	2
		1,1,1-Trichloroethane	<0.050	<2.5	<5.0	<5.0	1		µg/L	WA	0
	■	Trichloroethylene	3.6	4.7	***9.0***	***16***	1		µg/L	WA	2

Monitoring Constitutents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<20		11				µg/L		
		Chloride	3,000		2,800				µg/L		
		Chromium, total recoverable	<4.0		<3.0				µg/L		
		Cobalt, total recoverable	0.74		<5.0				µg/L		
		Copper, total recoverable	13		20				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	6.3		6.5				µg/L		
		Mercury, total recoverable	0.027		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	***2,500***		***2,600***				µg/L		
		Sodium, total recoverable	2,900		3,100				µg/L		
		Sulfate	170		<5,000				µg/L		
		Total phosphates (as P)	<50		<10				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	21		47				µg/L		
Radionuclides											
		Gross alpha	1.7E+00		1.4E+00				pCi/L		
		Nonvolatile beta	1.9E+00		*-6.5E-01*				pCi/L		
		Radium, total alpha-emitting	4.0E-01		*1.9E+00*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only. See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 63D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N101165.2 E47837.4	33.327552 °N 81.737384 °W	232.8-212.8 ft msl	346.8 ft msl	4" PVC	S	M

SAMPLE DATE	08/08/96	01/30/97	08/21/97	02/12/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	230.0	229.0	227.6	226.6	ft msl
pH	8.2	9.8	8.6	8.0	pH
Sp. conductance	160	100	88	82	µS/cm
Water temperature	27.8	22.0	21.0	17.0	°C
Alkalinity as $CaCO_3$	20	40	23	18	mg/L
Turbidity	9	7	14	6	NTU
Volume purged	0.0	0.0	0.10	0.11	well volume
Sampling code	X	X	X	X	
Synchronous water level	229.9 (09/18/96)	228.7 (03/19/97)	227.3 (09/17/97)	226.9 (03/18/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	10	10	8.6	5.1	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	***45***	<5.0	6.3	<47	1		µg/L	WA	0
		Nickel, total recoverable	1.4	7.5	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	4.5	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<1.0	<7.0	<25	<10	2		µg/L	WA	0
		1,1-Dichloroethane	<1.0	<13	<25	<10	2		µg/L	WA	0
		1,1-Dichloroethylene	<1.0	<16	<25	<10	2		µg/L	WA	0
		trans-1,2-Dichloroethylene	<1.0	<16					µg/L		
		PCB 1016			<0.30				µg/L		
		PCB 1221			<0.30				µg/L		
		PCB 1232			<0.30				µg/L		
		PCB 1242			<0.30				µg/L		
		PCB 1248			<0.30				µg/L		
		PCB 1254			<0.30				µg/L		
		PCB 1260			<0.30				µg/L		
		1,1,2,2-Tetrachloroethane	<1.0	<7.5	<25	<10	2		µg/L	WA	0
	■	Tetrachloroethylene	***220***	***310***	***260***	***220***	2		µg/L	WA	2
		1,1,1-Trichloroethane	<1.0	<13	<25	<10	2		µg/L	WA	0
	■	Trichloroethylene	***35***	***42***	***34***	***33***	2		µg/L	WA	2

Monitoring Constitutents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	***1,100***	***1,200***	***1,200***				µg/L		
		Chloride	3,100		3,200				µg/L		
		Chromium, total recoverable	1.4	3.6	2.2				µg/L		
		Cobalt, total recoverable	0.25		<5.0				µg/L		
		Copper, total recoverable	49		<3.0				µg/L		
		Fluoride	57		<100				µg/L		
		Manganese, total recoverable	2.3	3.2	2.6				µg/L		
		Mercury, total recoverable	0.042	<0.20	<0.20				µg/L		
		Nitrate-nitrite as nitrogen	***3,400***		***4,100***				µg/L		
		Sodium, total recoverable	4,000		***4,700***				µg/L		
		Sulfate	770		<5,000				µg/L		
		Total phosphates (as P)	<50		63				µg/L		
		Uranium, total recoverable	<20		0.096				µg/L		
		Zinc, total recoverable	16		24				µg/L		
Radionuclides											
		Gross alpha	1.5E+00	*3.6E-01*	*1.2E-01*				pCi/L		
		Nonvolatile beta	2.5E+00	7.2E+00	*3.1E-01*				pCi/L		
		Radium, total alpha-emitting	3.0E-01		*1.4E+00*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only. See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 64C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N101842.9 E46589.2	33.327011 °N 81.741989 °W	181.2-176.5 ft msl	348.4 ft msl	4" PVC	S	UL

SAMPLE DATE	08/05/96	01/07/97	08/19/97	02/24/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	223.1	222.2	220.6	220.1	ft msl
pH	4.6	4.0	4.4	5.0	pH
Sp. conductance	160	160	160	170	µS/cm
Water temperature	24.0	22.0	21.0	19.1	°C
Alkalinity as $CaCO_3$	0	0	0	0	mg/L
Turbidity	1	1	1	1	NTU
Volume purged	5.2	3.1	4.1	2.7	well volume
Sampling code					
Synchronous water level	222.8 (09/18/96)	221.8 (03/19/97)	220.3 (09/17/97)	219.8 (03/19/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	26	29	26	28	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0	<5.0	<47	1		µg/L	WA	0
		Nickel, total recoverable	<10	<5.0	5.2	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<20	<7.0	<50	<10	2		µg/L	WA	0
		1,1-Dichloroethane	<20	<13	<50	<10	2		µg/L	WA	0
■		1,1-Dichloroethylene	***13***	<16	***26***	***19***	2		µg/L	WA	2
		trans-1,2-Dichloroethylene	<20	<16	<50				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<20	<7.5	<50	<10	2		µg/L	WA	0
■		Tetrachloroethylene	***340***	***380***	***340***	***310***	2		µg/L	WA	2
		1,1,1-Trichloroethane	<20	<13	<50	2.8	2	JE	µg/L	WA	0
■		Trichloroethylene	***51***	***47***	***46***	***37***	2		µg/L	WA	2

Monitoring Constitutents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	***170***		***210***				µg/L		
		Chloride	***4,900***		***4,800***				µg/L		
		Chromium, total recoverable	<4.0		<3.0				µg/L		
		Cobalt, total recoverable	1.8		<5.0				µg/L		
		Copper, total recoverable	1.1		11				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	10		11				µg/L		
		Mercury, total recoverable	0.53		0.70				µg/L		
		Nitrate-nitrite as nitrogen	***16,000***		***21,000***				µg/L		
		Sodium, total recoverable	***13,000***		***13,000***				µg/L		
		Sulfate	130		<5,000				µg/L		
		Total phosphates (as P)	60		<10				µg/L		
		Uranium, total recoverable	<20		0.096				µg/L		
		Zinc, total recoverable	6.0		25				µg/L		
Radionuclides											
		Gross alpha	9.3E+00		5.5E+00				pCi/L		
		Nonvolatile beta	8.5E+00		8.5E+00				pCi/L		
		Radium, total alpha-emitting	2.9E+00		***6.0E+00***				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only. See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 64D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N101854.8 E46598.5	33.327053 °N 81.741987 °W	230.1-210.1 ft msl	348.6 ft msl	4" PVC	S	M

SAMPLE DATE	08/05/96	01/29/97	08/19/97	03/03/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	227.3	226.5	225.3	223.9	ft msl
pH	5.8	5.0	5.8	5.4	pH
Sp. conductance	82	82	78	70	µS/cm
Water temperature	24.0	22.0	21.0	19.0	°C
Alkalinity as $CaCO_3$	11	20	33	13	mg/L
Turbidity	1	1	1	1	NTU
Volume purged	6.9	5.7	5.1	6.0	well volume
Sampling code					
Synchronous water level	227.3 (09/18/96)	226.3 (03/19/97)	225.0 (09/17/97)	224.1 (03/19/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	12	13	11	11	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0	<5.0	<47	1		µg/L	WA	0
		Nickel, total recoverable	0.99	<5.0	3.3	<26	1		µg/L	WA	0
		Selenium, total recoverable	1.5	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016	<0.13						µg/L		
		PCB 1221	<0.13						µg/L		
		PCB 1232	<0.13						µg/L		
		PCB 1242	<0.13						µg/L		
		PCB 1248	<0.13						µg/L		
		PCB 1254	<0.13						µg/L		
		PCB 1260	<0.13						µg/L		
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<2.0	<1.9	0.74	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	<2.0	<3.0	<5.0	<5.0	1		µg/L	WA	0

Monitoring Constitutents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<20	<36	<20				µg/L		
		Chloride	***4,500***		***4,300***				µg/L		
		Chromium, total recoverable	<4.0	<3.0	0.60				µg/L		
		Cobalt, total recoverable	0.72		<5.0				µg/L		
		Copper, total recoverable	8.6		6.7				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	6.4	7.0	7.3				µg/L		
		Mercury, total recoverable	0.13	<0.20	<0.20				µg/L		
		Nitrate-nitrite as nitrogen	***2,500***		***2,600***				µg/L		
		Sodium, total recoverable	***13,000***		***11,000***				µg/L		
		Sulfate	2,100		<5,000				µg/L		
		Total phosphates (as P)	150		<10				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	12		24				µg/L		
Radionuclides											
		Gross alpha	7.6E-01	1.5E+00	*1.1E+00*				pCi/L		
		Nonvolatile beta	*8.3E-01*	4.8E+00	5.9E+00				pCi/L		
		Radium, total alpha-emitting	*1.0E-01*		2.7E+00				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only. See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

Table D-2. Groundwater Monitoring Results for Background Wells, M-Area HWMF

WELL MSB 29B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N107319.3 E51217.5	33.346676 °N 81.740456 °W	151.7-145.1 ft msl	365 ft msl	4" PVC	S	LL

SAMPLE DATE	07/11/96	02/03/97	09/02/97	03/09/98	
FIELD DATA					
Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	224.7	223.8	222.7	221.8	ft msl
pH	4.4	4.2	4.6	4.1	pH
Sp. conductance	12	28	26	29	µS/cm
Water temperature	22.0	23.0	19.4	18.0	°C
Alkalinity as $CaCO_3$	1	0	0	0	mg/L
Turbidity	1	0	1	1	NTU
Volume purged	3.3	2.8	2.5	2.9	well volume
Sampling code					
Synchronous water level	225.4 (09/19/96)	223.3 (03/20/97)	221.6 (09/17/97)	221.6 (03/20/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	7.1	6.9	7.9	6.2	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	2.8	1	JE	µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0	4.1	<47	1		µg/L	WA	0
		Nickel, total recoverable	<10	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<0.050	<1.4	<2.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<0.050	<2.5	<2.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<0.050	<3.2	<2.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<0.050	<3.2	<2.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<0.050	<1.5	<2.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<0.050	<1.9	<2.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<0.050	<2.5	<2.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	<0.050	<3.0	<2.0	<5.0	1		µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	41		89				µg/L		
		Chloride	2,300	2,600	2,800	2,600	1		µg/L	WA	0
		Chromium, total recoverable	<4.0	<3.0	<3.0	<7.0	1		µg/L	WA	0
		Cobalt, total recoverable	0.25		<5.0				µg/L		
		Copper, total recoverable	1.2		<3.0				µg/L		
		Fluoride	<100	<100	<100	<25	1	V	µg/L	WA	0
		Manganese, total recoverable	1.4	<3.0	2.0	1.4	1	JE	µg/L	WA	0
		Mercury, total recoverable	0.023	<0.20	<0.20	<0.70	1		µg/L	WA	0
		Nitrate-nitrite as nitrogen	1,800	1,700	1,500	1,500	5		µg/L	WA	0
		Sodium, total recoverable	2,300	2,300	2,500	2,100	1	V	µg/L	WA	
		Sulfate	130	<500	<5,000	410	1		µg/L	WA	0
		Total phosphates (as P)	<50	12	<10	<67	1		µg/L	WA	0
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	<5.0		9.8				µg/L		
Radionuclides											
		Gross alpha	1.9E+00	*4.3E-01*	5.3E+00	4.2E+00	1		pCi/L	TM	0
		Nonvolatile beta	1.6E+00	*2.3E+00*	3.1E+00	2.8E+00	1		pCi/L	TM	0
		Radium, total alpha-emitting	7.0E-01	1.4E+00	***6.2E+00***	*6.6E-01*	1	UI	pCi/L	TM	0

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only. See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 29C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N107315.0 E51206.6	33.346648 °N 81.740476 °W	179.7-174.1 ft msl	365 ft msl	4" PVC	S	UL

SAMPLE DATE	07/11/96	02/03/97	08/06/97	03/09/98	
FIELD DATA					
Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	231.4	230.5	228.9	228.1	ft msl
pH	4.4	4.2	4.2	3.7	pH
Sp. conductance	14	28	28	29	µS/cm
Water temperature	23.0	23.0	21.0	18.3	°C
Alkalinity as $CaCO_3$	1	0	0	0	mg/L
Turbidity	1	0	1	0	NTU
Volume purged	3.6	3.6	2.2	2.7	well volume
Sampling code					
Synchronous water level	231.5 (09/19/96)	230.0 (03/20/97)	228.6 (09/17/97)	228.0 (03/20/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	5.9	6.1	5.5	5.2	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	3.2	<5.0	4.3	<47	1		µg/L	WA	0
		Nickel, total recoverable	1.2	<5.0	2.6	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<0.050	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<0.050	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<0.050	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<0.050	<3.2					µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<0.050	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<0.050	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<0.050	<2.5	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	<0.050	<3.0	<5.0	<5.0	1		µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	41		18				µg/L		
		Chloride	2,300	2,500	2,500	2,600	1		µg/L	WA	0
		Chromium, total recoverable	1.8	<3.0	1.0	<7.0	1		µg/L	WA	0
		Cobalt, total recoverable	0.73		<5.0				µg/L		
		Copper, total recoverable	3.7		2.1				µg/L		
		Fluoride	<100	<100	<100	<21	1	V	µg/L	WA	0
		Manganese, total recoverable	2.3	<3.0	2.2	1.9	1	JE	µg/L	WA	0
		Mercury, total recoverable	<0.20	<0.20	<0.20	<0.70	1		µg/L	WA	0
		Nitrate-nitrite as nitrogen	1,900	1,500	1,900	1,900	5		µg/L	WA	0
		Sodium, total recoverable	2,300	2,300	2,300	2,100	1	V	µg/L	WA	
		Sulfate	130	<500	<5,000	690	1		µg/L	WA	0
		Total phosphates (as P)	<50	<10	8.0	35	1	JE	µg/L	WA	
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	<8.1		25				µg/L		
Radionuclides											
		Gross alpha	2.7E+00	*4.0E-01*	*4.4E+00*	3.6E+00	1		pCi/L	TM	0
		Nonvolatile beta	2.4E+00	*1.2E+00*	5.6E+00	3.4E+00	1		pCi/L	TM	0
		Radium, total alpha-emitting	1.4E+00	1.9E+00	2.0E+00	8.5E-01	1	UIV	pCi/L	TM	0

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only. See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 29D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N107323.3 E51226.9	33.346700 °N 81.740439 °W	227.6-207.0 ft msl	364.9 ft msl	4" PVC	S	M

SAMPLE DATE	07/11/96	02/03/97	07/24/97	03/24/98	
FIELD DATA					
Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	233.3	232.4	231.3	229.5	ft msl
pH	4.8	4.4	4.8	5.0	pH
Sp. conductance	28	26	24	25	µS/cm
Water temperature	28.0	23.0	20.9	18.2	°C
Alkalinity as $CaCO_3$	0	0	1	0	mg/L
Turbidity	2	1	2	1	NTU
Volume purged	3.3	3.1	3.1	4.7	well volume
Sampling code					
Synchronous water level	233.2 (09/19/96)	233.4 (03/20/97)	230.7 (09/17/97)	230.0 (03/20/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	7.3	8.8		7.4	1		µg/L	WA	0
		Cyanide	<10	<5.0		<15	1		µg/L	WA	0
		Lead, total recoverable	2.0	<5.0		<47	1		µg/L	WA	0
		Nickel, total recoverable	<10	<5.0		<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0		<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<0.050	<1.4		<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<0.050	<2.5		<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<0.050	<3.2		<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<0.050	<3.2					µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<0.050	<1.5		<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<0.050	<1.9		<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<0.050	<2.5		<5.0	1		µg/L	WA	0
		Trichloroethylene	<0.050	<3.0		<5.0	1		µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	48						µg/L		
		Chloride	3,900	3,600		3,700	1		µg/L	WA	0
		Chromium, total recoverable	<4.0	<3.0		<7.0	1		µg/L	WA	0
		Cobalt, total recoverable	0.22						µg/L		
		Copper, total recoverable	17						µg/L		
		Fluoride	<100	<100		<19	1	V	µg/L	WA	0
		Manganese, total recoverable	4.8	3.8		5.5	1	JE	µg/L	WA	0
		Mercury, total recoverable	0.022	<0.20		<0.70	1		µg/L	WA	0
		Nitrate-nitrite as nitrogen	1,300	960		760	1		µg/L	WA	0
		Sodium, total recoverable	2,400	2,400		2,000	1	V	µg/L	WA	
		Sulfate	760	<500		820	1		µg/L	WA	0
		Total phosphates (as P)	<50	<10		<67	1		µg/L	WA	0
		Uranium, total recoverable	6.9						µg/L		
		Zinc, total recoverable	<3.1						µg/L		
Radionuclides											
	■	Gross alpha	1.0E+01	5.1E+00		***1.7E+01***	1		pCi/L	TM	2
		Nonvolatile beta	3.5E+00	*2.5E+00*		1.4E+01	1		pCi/L	TM	0
	■	Radium, total alpha-emitting	***6.6E+00***	***6.3E+00***		***6.1E+00***	1	V	pCi/L	TM	0

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only. See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 43A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N107275.3 E49293.7	33.343436 °N 81.745437 °W	140.5-134.9 ft msl	357.7 ft msl	4" PVC	S	LL

SAMPLE DATE	07/17/96	02/04/97	08/05/97	03/09/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	229.8	228.7	227.8	227.2	ft msl
pH	5.2	5.0	4.8	6.1	pH
Sp. conductance	24	26	22	25	µS/cm
Water temperature	25.0	23.0	20.4	18.7	°C
Alkalinity as $CaCO_3$	1	5	0	3	mg/L
Turbidity	3	1	0	1	NTU
Volume purged	2.8	2.7	2.5	2.2	well volume
Sampling code					
Synchronous water level	229.6 (09/19/96)	228.7 (03/20/97)	227.3 (09/17/97)	227.2 (03/20/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	11	12	6.6	7.0	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0	<5.0	<47	1		µg/L	WA	0
		Nickel, total recoverable	<10	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<0.050	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<0.050	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<0.050	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<0.050	<3.2					µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<0.050	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<0.050	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<0.050	<2.5	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	<0.050	<3.0	<5.0	<5.0	1		µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<69		<20				µg/L		
		Chloride	1,200	1,400	1,400	1,500	1		µg/L	WA	0
		Chromium, total recoverable	<4.0	<3.0	0.70	0.97	1	JE	µg/L	WA	0
		Cobalt, total recoverable	0.37		<5.0				µg/L		
		Copper, total recoverable	18		<3.0				µg/L		
		Fluoride	<100	<100	<100	<19	1	V	µg/L	WA	0
		Manganese, total recoverable	2.3	3.6	2.9	1.9	1	JE	µg/L	WA	0
		Mercury, total recoverable	<0.20	<0.20	<0.20	<0.70	1		µg/L	WA	0
		Nitrate-nitrite as nitrogen	1,600	1,500	1,700	1,500	5		µg/L	WA	0
		Sodium, total recoverable	1,800	1,800	1,700	1,600	1	V	µg/L	WA	
		Sulfate	100	<500	<5,000	410	1		µg/L	WA	0
		Total phosphates (as P)	140	13	<10	7.1	1	JE	µg/L	WA	
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	14		16				µg/L		
Radionuclides											
		Gross alpha	1.5E+00	*3.2E-01*	*-1.0E-01*	1.4E+00	1		pCi/L	TM	0
		Nonvolatile beta	1.4E+00	*1.4E+00*	*-1.9E-01*	1.7E+00	1		pCi/L	TM	0
		Radium, total alpha-emitting	*4.0E-01*	1.2E+00	*1.5E-01*	*2.2E-01*	1	UI	pCi/L	TM	0

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only. See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 43B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N107274.6 E49311.8	33.343464 °N 81.745388 °W	175.5-169.9 ft msl	357.8 ft msl	4" PVC	S	UL

SAMPLE DATE	07/15/96	02/04/97	08/06/97	03/09/98
FIELD DATA				
Parameter	3Q96	1Q97	3Q97	1Q98
Water elevation	230.3	228.8	227.7	227.3
pH	4.8	4.4	4.4	4.1
Sp. conductance	24	22	24	25
Water temperature	26.0	23.0	20.0	18.6
Alkalinity as $CaCO_3$	1	1	1	0
Turbidity	3	0	0	1
Volume purged	2.6	4.5	6.1	2.9
Sampling code				
Synchronous water level	229.8 (09/19/96)	228.7 (03/20/97)	227.4 (09/17/97)	227.3 (03/20/98)

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	3.3	2.7	2.5	2.6	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0	<5.0	<47	1		µg/L	WA	0
		Nickel, total recoverable	0.83	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<0.050	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<0.050	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<0.050	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<0.050	<3.2					µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<0.050	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<0.050	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<0.050	<2.5	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	<0.050	<3.0	<5.0	<5.0	1		µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	13		13				µg/L		
		Chloride	1,800	1,900	1,900	1,900	1		µg/L	WA	0
		Chromium, total recoverable	<4.0	<3.0	1.0	0.88	1	JE	µg/L	WA	0
		Cobalt, total recoverable	<0.69		<5.0				µg/L		
		Copper, total recoverable	6.9		<3.0				µg/L		
		Fluoride	<100	<100	<100	<18	1	V	µg/L	WA	0
		Manganese, total recoverable	1.6	<3.0	1.7	1.4	1	JE	µg/L	WA	0
		Mercury, total recoverable	<0.20	<0.20	<0.20	<0.70	1		µg/L	WA	0
		Nitrate-nitrite as nitrogen	1,700	1,600	1,900	1,600	5		µg/L	WA	0
		Sodium, total recoverable	2,300	2,400	2,300	2,100	1	V	µg/L	WA	
■		Sulfate	220	<500	<5,000	***3,900***	1		µg/L	WA	0
		Total phosphates (as P)	30	<10	<10	<67	1		µg/L	WA	0
		Uranium, total recoverable	<21		<0.10				µg/L		
		Zinc, total recoverable	8.3		17				µg/L		
Radionuclides											
		Gross alpha	2.7E+00	1.9E+00	*3.8E+00*	3.5E+00	1		pCi/L	TM	0
		Nonvolatile beta	1.7E+00	*4.5E+00*	3.3E+00	2.1E+00	1		pCi/L	TM	0
		Radium, total alpha-emitting	8.0E-01	5.9E-01	2.1E+00	1.3E+00	1	UIV	pCi/L	TM	0

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only. See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 43D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N107274.2 E49322.0	33.343480 °N 81.745360 °W	220.8-200.2 ft msl	358 ft msl	4" PVC	S	M

SAMPLE DATE	07/15/96	02/04/97	08/06/97	03/09/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	232.2	231.3	230.2	229.6	ft msl
pH	4.8	4.4	4.2	4.2	pH
Sp. conductance	20	22	22	24	µS/cm
Water temperature	28.0	23.0	21.0	17.2	°C
Alkalinity as $CaCO_3$	0	0	0	0	mg/L
Turbidity	10	1	1	4	NTU
Volume purged	3.4	3.3	6.3	0.47	well volume
Sampling code				X	
Synchronous water level	232.0 (09/19/96)	231.3 (03/20/97)	229.9 (09/17/97)	229.8 (03/20/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	3.8	3.7	3.2	2.6	1		µg/L	WA	0
		Cyanide	6.1	<5.0	<5.0	<15	1		µg/L	WA	0
	■	Lead, total recoverable	3.4	***18***	***26***	***110***	1		µg/L	WA	2
		Nickel, total recoverable	1.8	<5.0	4.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<0.050	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<0.050	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<0.050	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<0.050	<3.2					µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<0.050	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<0.050	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<0.050	<2.5	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	<0.050	<3.0	<5.0	<5.0	1		µg/L	WA	0

Monitoring Constitutents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	63		73				µg/L		
		Chloride	1,700	1,900	1,800	1,900	1		µg/L	WA	0
		Chromium, total recoverable	<4.0	<3.0	5.8	1.2	1	JE	µg/L	WA	0
		Cobalt, total recoverable	<0.92		<5.0				µg/L		
		Copper, total recoverable	16		29				µg/L		
		Fluoride	<100	<100	<100	<25	1	V	µg/L	WA	0
		Manganese, total recoverable	6.7	5.4	5.3	4.5	1	JE	µg/L	WA	0
		Mercury, total recoverable	<0.20	<0.20	<0.20	<0.70	1		µg/L	WA	0
		Nitrate-nitrite as nitrogen	1,700	1,000	1,200	920	1		µg/L	WA	0
		Sodium, total recoverable	1,400	1,600	1,400	1,300	1	V	µg/L	WA	
		Sulfate	400	630	<5,000	1,200	1		µg/L	WA	0
		Total phosphates (as P)	<50	<10	<10	25	1	JE	µg/L	WA	
		Uranium, total recoverable	<14		<0.10				µg/L		
		Zinc, total recoverable	6.2		29				µg/L		
Radionuclides											
		Gross alpha	1.5E+00	*-1.3E-01*	*3.9E+00*	1.4E+00	1		pCi/L	TM	0
		Nonvolatile beta	*1.0E+00*	*-8.0E-02*	6.4E+00	*-4.9E-01*	1	UI	pCi/L	TM	0
		Radium, total alpha-emitting	1.0E+00	1.0E+00	9.5E-01	6.8E-01	1	UIV	pCi/L	TM	0

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only. See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

Table D-3. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF

WELL ABP 2A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N97764.3 E44118.8	33.313961 °N 81.740559 °W	211.1-181.1 ft msl	371.9 ft msl	4" PVC	S	M

SAMPLE DATE	07/24/96	02/21/97	07/28/97	02/26/98	
FIELD DATA					
Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	330.8	248.2	292.9	203.4	ft msl
pH	6.2	4.6	4.4	4.2	pH
Sp. conductance	140	82	86	100	µS/cm
Water temperature	25.0	24.0	21.0	19.0	°C
Alkalinity as $CaCO_3$	0	1	2	0	mg/L
Turbidity	2	4	18	1	NTU
Volume purged	3.3	3.0	0.014	16	well volume
Sampling code			X		
Synchronous water level	263.4 (09/18/96)	223.9 (03/20/97)	220.5 (09/17/97)	219.0 (03/17/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	37	33	34	33	1		µg/L	WA	0
		Cyanide	<10	<5.0	<2.5	<15	1		µg/L	WA	0
		Lead, total recoverable	1.4	<5.0	13	<47	1		µg/L	WA	0
		Nickel, total recoverable	3.6	<5.0	5.5	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<2.0	<1.9	0.65	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	3.1	3.5	2.7	1.7	1	JE	µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	***180***		***740***				µg/L		
		Chloride	2,200		2,300				µg/L		
		Chromium, total recoverable	<4.3		6.7				µg/L		
		Cobalt, total recoverable	<2.6		<5.0				µg/L		
		Copper, total recoverable	<1.1		72				µg/L		
		Fluoride	21		<100				µg/L		
		Manganese, total recoverable	***58***		***51***				µg/L		
		Mercury, total recoverable	<0.20		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	***7,600***		***7,600***				µg/L		
		Sodium, total recoverable	2,100		2,000				µg/L		
		Sulfate	<1,000		<1,000				µg/L		
		Total phosphates (as P)	<50		60				µg/L		
		Uranium, total recoverable	<20		0.48				µg/L		
		Zinc, total recoverable	11		20				µg/L		
Radionuclides											
		Gross alpha	1.5E+01		6.2E+00				pCi/L		
		Nonvolatile beta	7.3E+00		*8.4E-01*				pCi/L		
		Radium, total alpha-emitting	***7.4E+00***		***1.2E+01***				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL ABP 3C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N97778.2 E44506.3	33.314624 °N 81.739566 °W	165.3-160.3 ft msl	354.5 ft msl	4" PVC	S	LL

SAMPLE DATE: 07/26/96 | 02/19/97 | 07/28/97 | 02/26/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	197.1	196.1	195.6	195.4	ft msl
pH	6.6	6.8	10.2	8.0	pH
Sp. conductance	100	100	180	120	µS/cm
Water temperature	26.0	24.0	21.0	18.0	°C
Alkalinity as $CaCO_3$	18	33	2	35	mg/L
Turbidity	1	1	2	1	NTU
Volume purged	4.2	3.3	2.8	3.8	well volume
Sampling code					
Synchronous water level	197.2 (09/17/96)	196.7 (03/20/97)	195.1 (09/17/97)	195.2 (03/17/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	24	30	34	29	1		µg/L	WA	0
		Cyanide	<10	<5.0	<2.5	<15	1		µg/L	WA	0
		Lead, total recoverable	6.4	<5.0	<5.0	<47	1		µg/L	WA	0
		Nickel, total recoverable	2.8	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<3.2	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	1.7	<3.2	1.7	1.2	1	JE	µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
	■	Tetrachloroethylene	***38***	***33***	***37***	***26***	1		µg/L	WA	2
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
	■	Trichloroethylene	***49***	***44***	***44***	***34***	1		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	***150***		***370***				µg/L		
		Chloride	3,300		2,700				µg/L		
		Chromium, total recoverable	0.98		0.90				µg/L		
		Cobalt, total recoverable	1.3		<5.0				µg/L		
		Copper, total recoverable	7.0		1.0				µg/L		
		Fluoride	49		<100				µg/L		
		Manganese, total recoverable	20		9.4				µg/L		
		Mercury, total recoverable	1.4		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	***4,200***		***3,700***				µg/L		
		Sodium, total recoverable	3,600		3,900				µg/L		
		Sulfate	350		350				µg/L		
		Total phosphates (as P)	36		6.0				µg/L		
		Uranium, total recoverable	16		<0.10				µg/L		
		Zinc, total recoverable	13		16				µg/L		
Radionuclides											
		Gross alpha	1.7E+00		8.3E-01				pCi/L		
		Nonvolatile beta	4.1E+00		*4.4E-01*				pCi/L		
		Radium, total alpha-emitting	1.4E+00		2.5E+00				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL ABP 8C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N97855.6 E43968.7	33.313917 °N 81.741131 °W	190.6-185.5 ft msl	372.1 ft msl	4" PVC	S	LL

SAMPLE DATE	07/25/96	2/21/97		03/10/98		
FIELD DATA						
Parameter	3Q96	1Q97	3Q97	1Q98		Unit
Water elevation	197.3	196.2		303.9		ft msl
pH	12.0			10.9		pH
Sp. conductance	3600			370		µS/cm
Water temperature	21.0			15.7		°C
Alkalinity as $CaCO_3$	838			75		mg/L
Turbidity	14			25		NTU
Volume purged	0.13			0.064		well volume
Sampling code	X	P		X		
Synchronous water level	197.2 (09/17/96)	195.8 (03/20/97)		194.7 (03/17/98)		ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable									
		Cyanide				<15	1		µg/L	WA	0
		Lead, total recoverable									
		Nickel, total recoverable									
		Selenium, total recoverable									
Organics											
		Chlorobenzene				<5.0	1		µg/L	WA	0
		1,1-Dichloroethane				<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene				<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene									
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane				<5.0	1		µg/L	WA	0
		Tetrachloroethylene				<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane				<5.0	1		µg/L	WA	0
	■	Trichloroethylene				***10***	1		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable									
		Chloride									
		Chromium, total recoverable									
		Cobalt, total recoverable									
		Copper, total recoverable									
		Fluoride									
		Manganese, total recoverable									
		Mercury, total recoverable									
		Nitrate-nitrite as nitrogen									
		Sodium, total recoverable									
		Sulfate									
		Total phosphates (as P)									
		Uranium, total recoverable									
		Zinc, total recoverable									
Radionuclides											
		Gross alpha									
		Nonvolatile beta									
		Radium, total alpha-emitting									

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL AC 1A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N105865.0 E42238.8	33.328795 °N 81.761268 °W	145.7-140.7 ft msl	262.1 ft msl	4" Steel	S	UL

SAMPLE DATE	07/25/96	02/19/97	07/24/97	02/26/98	
FIELD DATA					
Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	216.6	212.4	211.2	210.5	ft msl
pH	6.2	5.6	5.0	5.2	pH
Sp. conductance	44	22	22	22	µS/cm
Water temperature	25.0	25.0	20.0	16.0	°C
Alkalinity as $CaCO_3$	1	1	5	1	mg/L
Turbidity	2	3	3	2	NTU
Volume purged	3.9	3.8	3.7	5.3	well volume
Sampling code					
Synchronous water level	213.2 (09/18/96)	212.1 (03/19/97)	110.8 (09/17/97)	211.3 (03/18/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	5.1	5.8	4.6	4.2	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	2.3	<5.0	***17***	5.1	1	JE	µg/L	WA	0
		Nickel, total recoverable	<10	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<2.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<2.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<2.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<2.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<2.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<2.0	<1.9	<2.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<2.5	<2.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	<2.0	<3.0	<2.0	<5.0	1		µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<54		18				µg/L		
		Chloride	1,900		2,000				µg/L		
		Chromium, total recoverable	<2.7		0.77				µg/L		
		Cobalt, total recoverable	<1.4		<5.0				µg/L		
		Copper, total recoverable	<1.0		1.1				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	6.9		7.1				µg/L		
		Mercury, total recoverable	<0.20		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	1,000		790				µg/L		
		Sodium, total recoverable	1,700		1,800				µg/L		
		Sulfate	410		<5,000				µg/L		
		Total phosphates (as P)	<50		40				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	590		830				µg/L		
Radionuclides											
		Gross alpha	1.1E+00		1.8E+00				pCi/L		
		Nonvolatile beta	*1.2E+00*		6.8E+00				pCi/L		
		Radium, total alpha-emitting	1.1E+00		1.6E+00				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL AC 1B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N105862.8 E42250.5	33.328809 °N 81.761233 °W	202.1-197.1 ft msl	262 ft msl	4" Steel	S	UL

SAMPLE DATE	07/26/96	02/20/97	07/24/97	02/26/98
FIELD DATA				
Parameter	3Q96	1Q97	3Q97	1Q98
Water elevation	213.6	212.3	212.0	212.3
pH	5.6	5.6	5.4	5.4
Sp. conductance	44	24	28	26
Water temperature	23.0	24.0	20.0	16.0
Alkalinity as $CaCO_3$	1	2	2	4
Turbidity	1	1	4	2
Volume purged	14	16	4.6	6.5
Sampling code				
Synchronous water level	213.3 (09/18/96)	212.3 (03/19/97)	212.1 (09/17/97)	212.2 (03/18/98)

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	11	9.1		9.2	1		µg/L	WA	0
		Cyanide	<10	<5.0		<15	1		µg/L	WA	0
		Lead, total recoverable	2.5	<5.0		12	1	JE	µg/L	WA	0
		Nickel, total recoverable	<10	<5.0		<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0		<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<2.0	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	<2.0	<3.0	<5.0	<5.0	1		µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	19						µg/L		
		Chloride	2,900						µg/L		
		Chromium, total recoverable	<2.0						µg/L		
		Cobalt, total recoverable	<1.5						µg/L		
		Copper, total recoverable	11						µg/L		
		Fluoride	<100						µg/L		
		Manganese, total recoverable	14						µg/L		
		Mercury, total recoverable	0.37						µg/L		
		Nitrate-nitrite as nitrogen	1,300						µg/L		
		Sodium, total recoverable	2,200						µg/L		
		Sulfate	280						µg/L		
		Total phosphates (as P)	<50						µg/L		
		Uranium, total recoverable	<20						µg/L		
		Zinc, total recoverable	1,000						µg/L		
Radionuclides											
		Gross alpha	2.1E+00						pCi/L		
		Nonvolatile beta	*9.4E-01*						pCi/L		
		Radium, total alpha-emitting	1.2E+00						pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL AC 3A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N100989.1 E42119.8	33.317824 °N 81.752094 °W	153.6-148.6 ft msl	302.3 ft msl	4" PVC	S	UL

SAMPLE DATE	07/26/96	03/10/97	07/23/97	02/26/98	
FIELD DATA					
Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	210.6	209.3	208.6	207.1	ft msl
pH	5.6	5.8	6.2	5.8	pH
Sp. conductance	38	44	48	44	µS/cm
Water temperature	25.0	18.0	20.0	17.0	°C
Alkalinity as $CaCO_3$	10	28	16	16	mg/L
Turbidity	6	5	2	2	NTU
Volume purged	2.4	2.9	3.0	3.2	well volume
Sampling code					
Synchronous water level	210.2 (09/18/96)	209.2 (03/18/97)	207.5 (09/17/97)	207.1 (03/18/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	12	11	12	11	1		µg/L	WA	0
		Cyanide	<10	<5.0	<2.5	<15	1		µg/L	WA	0
		Lead, total recoverable	6.1	<5.0	<5.0	<47	1		µg/L	WA	0
		Nickel, total recoverable	1.3	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<1.5	<5.0	4.7	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<2.4	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<2.0	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	<2.0	<3.0	<5.0	<5.0	1		µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	65		14				µg/L		
		Chloride	2,700		2,200				µg/L		
		Chromium, total recoverable	<1.3		<3.0				µg/L		
		Cobalt, total recoverable	<0.67		<5.0				µg/L		
		Copper, total recoverable	6.4		1.6				µg/L		
		Fluoride	110		70				µg/L		
		Manganese, total recoverable	1.9		0.80				µg/L		
		Mercury, total recoverable	0.43		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	710		200				µg/L		
		Sodium, total recoverable	3,000		2,800				µg/L		
		Sulfate	1,300		1,100				µg/L		
		Total phosphates (as P)	11		<50				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	210		260				µg/L		
Radionuclides											
		Gross alpha	8.5E-01		4.1E-01				pCi/L		
		Nonvolatile beta	2.5E+00		8.3E-01				pCi/L		
		Radium, total alpha-emitting	3.0E-01		3.9E+00				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL AMB 4A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N104131.6 E51469.8	33.340041 °N 81.733589 °W	126.3-121.3 ft msl	380.5 ft msl	4" PVC	S	MCBC

SAMPLE DATE	08/14/96	02/24/97	08/07/97	03/23/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	219.0	218.2	216.5	216.3	ft msl
pH	6.4	6.0	5.2	5.6	pH
Sp. conductance	68	38	38	34	µS/cm
Water temperature	22.0	29.0	20.0	16.0	°C
Alkalinity as $CaCO_3$	28	13	10	4	mg/L
Turbidity	4	3	1	2	NTU
Volume purged	0.016	2.2	2.5	2.5	well volume
Sampling code	X				
Synchronous water level	220.0 (09/19/96)	217.3 (03/20/97)	215.7 (09/17/97)	216.3 (03/20/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	6.6	5.5	5.2	5.5	1		µg/L	EX	0
		Cyanide	<10	<5.0	<5.0	4.9	1	JE	µg/L	WA	0
		Lead, total recoverable	1.9	<5.0	<5.0	<5.0	1		µg/L	EX	0
		Nickel, total recoverable	4.1	<5.0	<5.0	<20	1		µg/L	EX	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<10	1		µg/L	EX	0
Organics											
		Chlorobenzene	<0.050	<7.0	<25	<5.0	1		µg/L	EX	0
		1,1-Dichloroethane	<0.050	<13	<25	<5.0	1		µg/L	EX	0
		1,1-Dichloroethylene	<0.050	<16	<25	<5.0	1		µg/L	EX	0
		trans-1,2-Dichloroethylene	0.10	<16		<5.0	1		µg/L	EX	0
		PCB 1016		<0.12					µg/L		
		PCB 1221		<0.12					µg/L		
		PCB 1232		<0.12					µg/L		
		PCB 1242		<0.12					µg/L		
		PCB 1248		<0.12					µg/L		
		PCB 1254		<0.12					µg/L		
		PCB 1260		<0.12					µg/L		
		1,1,2,2-Tetrachloroethane	<0.050	<7.5	<25	<5.0	1		µg/L	EX	0
	■	Tetrachloroethylene	***49***	***44***	***38***	***48***	2		µg/L	WA	2
		1,1,1-Trichloroethane	<0.050	<13	<25	<5.0	1		µg/L	EX	0
	■	Trichloroethylene	***430***	***370***	***280***	***340***	2		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	***150***		<20				µg/L		
		Chloride	2,100	1,600	1,700	1,800	1		µg/L	WA	0
		Chromium, total recoverable	2.8	<3.0	0.60	1.2	1	JE	µg/L	WA	0
		Cobalt, total recoverable	<4.0	<5.0	<5.0				µg/L		
		Copper, total recoverable	4.4	<3.0	<3.0				µg/L		
		Fluoride	25	<100	<100	<23	1	V	µg/L	WA	0
		Manganese, total recoverable	7.1	7.4	6.6	7.6	1	JE	µg/L	WA	0
		Mercury, total recoverable	0.054	<0.20	<0.20	<0.20	1		µg/L	EX	0
		Nitrate-nitrite as nitrogen	1,600	1,300	1,200	860	1		µg/L	WA	0
		Sodium, total recoverable	***11,000***	2,400	2,400	2,700	1	J	µg/L	EX	
		Sulfate	***3,300***	<5,000	<5,000	800	1		µg/L	WA	0
		Total phosphates (as P)	29	45	31	39	1	JE	µg/L	WA	
		Uranium, total recoverable	64		<0.10				µg/L		
		Zinc, total recoverable	17	<10	8.3				µg/L		
Radionuclides											
		Gross alpha	1.1E+00	1.4E+00	*-6.1E-01*	8.5E-01	1		pCi/L	TM	0
		Nonvolatile beta	4.5E+00	2.1E+00	*-7.5E-01*	*2.0E-02*	1	UI	pCi/L	TM	0
		Radium, total alpha-emitting	2.6E-01	3.6E-01	1.2E+00	*9.0E-02*	1	UI	pCi/L	TM	0

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL AMB 4B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N104145.6 E51482.7	33.340093 °N 81.733582 °W	157.3-152.3 ft msl	380.4 ft msl	4" PVC	S	LL

SAMPLE DATE	07/10/96	02/25/97	08/27/97	03/23/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	225.1	223.9	222.0	221.0	ft msl
pH	5.8	5.0	4.4	4.6	pH
Sp. conductance	44	30	46	28	µS/cm
Water temperature	26.0	28.0	18.0	16.0	°C
Alkalinity as $CaCO_3$	0	0	1	0	mg/L
Turbidity	0	1	2	1	NTU
Volume purged	2.9	2.3	2.5	6.2	well volume
Sampling code					
Synchronous water level	225.2 (09/19/96)	223.0 (03/20/97)	221.5 (09/17/97)	221.1 (03/20/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	5.9	8.6	7.7	6.0	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0	<5.0	<47	1		µg/L	WA	0
		Nickel, total recoverable	<10	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	1.8	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2					µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<2.0	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	3.0	4.2	2.6	3.1	1	JE	µg/L	WA	1

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<37		40				µg/L		
	■	Chloride	***4,400***	***4,400***	***5,200***	***4,700***	1		µg/L	WA	0
		Chromium, total recoverable	0.75	<3.0	0.60	<7.0	1		µg/L	WA	0
		Cobalt, total recoverable	0.18		<5.0				µg/L		
		Copper, total recoverable	<0.62		<3.0				µg/L		
		Fluoride	<100	<100	<100	<31	1	V	µg/L	WA	0
		Manganese, total recoverable	4.8	5.7	4.6	4.3	1	JE	µg/L	WA	0
		Mercury, total recoverable	<0.20	<0.20	<0.20	<0.70	1		µg/L	WA	0
		Nitrate-nitrite as nitrogen	950	530	650	450	1		µg/L	WA	0
		Sodium, total recoverable	3,000	3,100	3,000	3,200	1	V	µg/L	WA	
		Sulfate	210	<5,000	<5,000	410	1		µg/L	WA	0
		Total phosphates (as P)	***320***	<10	5.0	7.1	1	JE	µg/L	WA	
		Uranium, total recoverable	20		<0.10				µg/L		
		Zinc, total recoverable	3.0		22				µg/L		
Radionuclides											
		Gross alpha	1.6E+00	1.5E+00	*4.7E+00*	2.4E+00	1		pCi/L	TM	0
		Nonvolatile beta	*1.4E+00*	2.2E+00	*4.8E+00*	2.2E+00	1		pCi/L	TM	0
		Radium, total alpha-emitting	7.0E-01	6.9E-01	1.7E+00	6.1E-01	1	UIV	pCi/L	TM	0

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
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WELL AMB 4D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N104154.7 E51489.0	33.340124 °N 81.733584 °W	233.4-213.4 ft msl	380.3 ft msl	4" PVC	S	M

SAMPLE DATE	08/14/96	02/24/97	08/07/97	03/23/98
FIELD DATA				
Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	234.1	232.4	231.0	229.1	ft msl
pH	5.6	5.4	4.8	4.8	pH
Sp. conductance	58	40	40	38	µS/cm
Water temperature	23.0	28.0	20.0	16.0	°C
Alkalinity as $CaCO_3$	5	4	3	0	mg/L
Turbidity	1	1	4	1	NTU
Volume purged	2.9	3.8	0.0	4.4	well volume
Sampling code			X		
Synchronous water level	233.9 (09/19/96)	232.5 (03/20/97)	230.7 (09/17/97)	229.8 (03/20/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	3.5	3.9	5.9	2.0	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0	14	<47	1		µg/L	WA	0
		Nickel, total recoverable	<2.2	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<0.10	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	0.56	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<0.10	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<0.10	<3.2					µg/L		
		PCB 1016				<1.0	1		µg/L	WA	0
		PCB 1221				<2.0	1		µg/L	WA	0
		PCB 1232				<1.0	1		µg/L	WA	0
		PCB 1242				<1.0	1		µg/L	WA	0
		PCB 1248				<1.0	1		µg/L	WA	0
		PCB 1254				<1.0	1		µg/L	WA	0
		PCB 1260				<1.0	1		µg/L	WA	0
		1,1,2,2-Tetrachloroethane	<0.10	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	1.9	<1.9	3.4	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<0.10	<2.5	<5.0	<5.0	1		µg/L	WA	0
	■	Trichloroethylene	***38***	***32***	***82***	***21***	1		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	43	<20	***330***				µg/L		
		Chloride	1,700	2,100	3,000	2,200	1		µg/L	WA	0
		Chromium, total recoverable	<4.0	<3.0	1.4	<7.0	1		µg/L	WA	0
		Cobalt, total recoverable	0.29		<5.0	<4.5	1		µg/L	WA	0
		Copper, total recoverable	11		15	7.8	1	JE	µg/L	WA	0
		Fluoride	<100	<100	<100	<21	1	V	µg/L	WA	0
		Manganese, total recoverable	9.5	10	22	11	1		µg/L	WA	0
		Mercury, total recoverable	0.035	<0.20	<0.20	<0.70	1		µg/L	WA	0
		Nitrate-nitrite as nitrogen	1,400	1,300	910	1,100	2		µg/L	WA	0
	■	Sodium, total recoverable	***7,400***	***5,500***	***6,800***	***7,400***	1	V	µg/L	WA	
	■	Sulfate	***11,000***	<5,000	***3,800***	***4,500***	1		µg/L	WA	0
		Total phosphates (as P)	<50	<10	22	26	1	JE	µg/L	WA	
		Uranium, total recoverable	<20		0.11				µg/L		
		Zinc, total recoverable	<11		16	13	1	JE	µg/L	WA	0
Radionuclides											
		Gross alpha	1.1E+00	3.1E+00	6.8E+00	4.3E+00	1		pCi/L	TM	0
		Nonvolatile beta	***7.0E+01***	2.2E+00	*7.4E-01*	5.3E+00	1		pCi/L	TM	0
		Radium, total alpha-emitting	*-8.0E-01*	1.7E+00	*4.7E+00*	2.2E+00	1	V	pCi/L	TM	0

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
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WELL AMB 5

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N104083.4 E51467.2	33.339930 °N 81.733502 °W	242.1-222.1 ft msl	379.6 ft msl	4" PVC	S	M

SAMPLE DATE 07/03/96 02/20/97 08/14/97 03/23/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	235.0	233.2	231.6	229.5	ft msl
pH	5.4	5.2	5.0	5.2	pH
Sp. conductance	46	46	52	44	µS/cm
Water temperature	27.0	30.0	23.0	16.0	°C
Alkalinity as $CaCO_3$	10	12	5	4	mg/L
Turbidity	11	6	6	1	NTU
Volume purged	2.8	3.9	3.9	12	well volume
Sampling code					
Synchronous water level	234.3 (09/19/96)	232.9 (03/20/97)	231.0 (09/17/97)	230.1 (03/20/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	3.1	5.4	5.9	3.1	1		µg/L	WA	0
		Cyanide	<1.9	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0	<5.0	<47	1		µg/L	WA	0
		Nickel, total recoverable	<10	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2					µg/L		
		PCB 1016				<1.0	1		µg/L	WA	0
		PCB 1221				<2.0	1		µg/L	WA	0
		PCB 1232				<1.0	1		µg/L	WA	0
		PCB 1242				<1.0	1		µg/L	WA	0
		PCB 1248				<1.0	1		µg/L	WA	0
		PCB 1254				<1.0	1		µg/L	WA	0
		PCB 1260				<1.0	1		µg/L	WA	0
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	1.1	3.1	2.0	1.3	1	JE	µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
	■	Trichloroethylene	***16***	***51***	***45***	***43***	1		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<110	***330***	86				µg/L		
		Chloride	2,700	***5,300***	3,200	3,200	1		µg/L	WA	0
		Chromium, total recoverable	0.76	<3.0	<3.0	<7.0	1		µg/L	WA	0
		Cobalt, total recoverable	0.37		<5.0	<4.5	1		µg/L	WA	0
		Copper, total recoverable	2.6		7.6	11	1	JE	µg/L	WA	0
		Fluoride	<100	<100	<100	<19	1	V	µg/L	WA	0
		Manganese, total recoverable	6.8	7.5	7.5	6.2	1	JE	µg/L	WA	0
		Mercury, total recoverable	<0.20	<0.20	0.070	<0.70	1		µg/L	WA	0
		Nitrate-nitrite as nitrogen	650	1,200	1,600	1,500	5		µg/L	WA	0
	■	Sodium, total recoverable	***9,200***	***8,000***	***7,500***	***8,100***	1	V	µg/L	WA	
	■	Sulfate	***6,600***	***5,800***	***4,400***	***3,700***	1		µg/L	WA	0
		Total phosphates (as P)	<50	16	5.0	10	1	JE	µg/L	WA	
		Uranium, total recoverable	<20		0.13				µg/L		
		Zinc, total recoverable	15		17	8.4	1	JE	µg/L	WA	0
Radionuclides											
		Gross alpha	1.2E+00	4.5E+00	6.8E+00	6.2E+00	1		pCi/L	TM	0
		Nonvolatile beta	1.4E+00	2.0E+00	3.7E+00	3.6E+00	1		pCi/L	TM	0
		Radium, total alpha-emitting	1.2E+00	4.3E+00	***1.9E+01***	1.8E+00	1	V	pCi/L	TM	0

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL AMB 6

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N104034.1 E51466.0	33.339819 °N 81.733410 °W	242.6-222.6 ft msl	377.2 ft msl	4" PVC	S	M

SAMPLE DATE	07/03/96	02/24/97	08/14/97	03/23/98
FIELD DATA				
Parameter	3Q96	1Q97	3Q97	1Q98
Water elevation	235.2	232.9	231.7	229.6
pH	5.0	5.2	5.4	4.8
Sp. conductance	28	38	60	48
Water temperature	26.0	28.0	25.0	20.3
Alkalinity as $CaCO_3$	1	7	14	3
Turbidity	4	3	18	1
Volume purged	3.9	3.4	0.0	8.3
Sampling code			X	
Synchronous water level	234.4 (09/19/96)	228.0 (03/20/97)	231.1 (09/17/97)	230.2 (03/20/98)

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	4.0	2.3	3.6	0.97	1	JE	µg/L	WA	0
		Cyanide	<1.6	<5.0	3.4	<15	1		µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0	***23***	<47	1		µg/L	WA	0
		Nickel, total recoverable	<10	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2					µg/L		
		PCB 1016		<0.12		<1.0	1		µg/L	WA	0
		PCB 1221		<0.12		<2.0	1		µg/L	WA	0
		PCB 1232		<0.12		<1.0	1		µg/L	WA	0
		PCB 1242		<0.12		<1.0	1		µg/L	WA	0
		PCB 1248		<0.12		<1.0	1		µg/L	WA	0
		PCB 1254		<0.12		<1.0	1		µg/L	WA	0
		PCB 1260		<0.12		<1.0	1		µg/L	WA	0
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<2.0	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
■		Trichloroethylene	2.3	3.7	<5.0	***5.2***	1		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<30	38	***1,200***				µg/L		
		Chloride	2,000	2,800	2,700	2,700	1		µg/L	WA	0
		Chromium, total recoverable	1.5	<3.0	2.5	<7.0	1		µg/L	WA	0
		Cobalt, total recoverable	1.2	<5.0	<5.0	0.93	1		µg/L	WA	0
		Copper, total recoverable	3.4	<3.0	29	2.7	1	JE	µg/L	WA	0
		Fluoride	<100	<100	70	<22	1	V	µg/L	WA	0
		Manganese, total recoverable	5.9	3.6	8.5	2.4	1	JE	µg/L	WA	0
		Mercury, total recoverable	<0.20	<0.20	0.050	<0.70	1		µg/L	WA	0
		Nitrate-nitrite as nitrogen	1,100	310	340	470	1		µg/L	WA	0
■		Sodium, total recoverable	4,100	***7,200***	***8,300***	***9,300***	1	V	µg/L	WA	
■		Sulfate	1,300	<5,000	***6,200***	***6,200***	1		µg/L	WA	0
		Total phosphates (as P)	<50	<10	49	17	1	JE	µg/L	WA	
		Uranium, total recoverable	<20		0.30				µg/L		
		Zinc, total recoverable	4.2	<10	21	5.4	1	JE	µg/L	WA	0
Radionuclides											
		Gross alpha	1.2E+00	1.2E+00	4.9E+00	1.3E+00	1		pCi/L	TM	0
		Nonvolatile beta	*7.4E-01*	2.1E+00	3.1E+00	*1.7E-01*	1	UI	pCi/L	TM	0
		Radium, total alpha-emitting	1.3E+00	4.7E-01	*1.7E+00*	6.6E-01	1	UIV	pCi/L	TM	0

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
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■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL AMB 7

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N103920.0 E51624.9	33.339827 °N 81.732769 °W	242.1-222.1 ft msl	369.9 ft msl	4" PVC	S	M

SAMPLE DATE	07/09/96	02/21/97	08/14/97	03/10/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	235.3	233.6	235.7	230.21	ft msl
pH	6.6	6.2	6.4	5.9	pH
Sp. conductance	160	100	96	68	µS/cm
Water temperature	26.0	28.0	18.9	17.8	°C
Alkalinity as $CaCO_3$	49	22	15	35	mg/L
Turbidity	3	6	10	12	NTU
Volume purged	0.12	0.13	0.11	5.3	well volume
Sampling code	X	X	X		
Synchronous water level	234.7 (09/19/96)	233.3 (03/20/97)	231.3 (09/17/97)	230.4 (03/20/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	13	6.9	12	9.0	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	12	6.9	9.8	8.7	1	JE	µg/L	WA	0
		Nickel, total recoverable	8.2	<5.0	5.1	4.3	1	JE	µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<0.050	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	0.070	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<0.050	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<0.050	<3.2		<5.0	1		µg/L	WA	0
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<0.050	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	0.17	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<0.050	<2.5	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	2.5	<3.0	2.0	<5.0	1		µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	***160***	25	***330***				µg/L		
		Chloride	1,700	***4,700***	2,500	2,400	1		µg/L	WA	0
		Chromium, total recoverable	4.0	<3.0	5.1	4.7	1	JE	µg/L	WA	0
		Cobalt, total recoverable	0.68		<5.0				µg/L		
		Copper, total recoverable	42		45				µg/L		
		Fluoride	21	<100	50	<26	1	V	µg/L	WA	0
		Manganese, total recoverable	6.7	<3.0	4.6	5.2	1	JE	µg/L	WA	0
		Mercury, total recoverable	<0.13	<0.20	<0.20	<0.70	1		µg/L	WA	0
		Nitrate-nitrite as nitrogen	470	290	180	330	1		µg/L	WA	0
■		Sodium, total recoverable	***19,000***	***8,900***	***12,000***	***8,800***	1	V	µg/L	WA	
■		Sulfate	1,900	<5,000	***3,100***	***3,700***	1		µg/L	WA	0
		Total phosphates (as P)	<50	<10	45	14	1	JE	µg/L	WA	
		Uranium, total recoverable	<20		0.16				µg/L		
		Zinc, total recoverable	60		38				µg/L		
Radionuclides											
		Gross alpha	1.6E+00	*-2.0E-02*	*1.1E+00*	9.3E-01	1	J1	pCi/L	TM	0
		Nonvolatile beta	2.2E+00	3.5E+00	3.1E+00	*7.6E-01*	1	UI	pCi/L	TM	0
		Radium, total alpha-emitting	6.0E-01	*1.3E-01*	*1.4E+00*	6.5E-01	1	J1	pCi/L	TM	0

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL AMB 7A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N103987.1 E51591.0	33.339920 °N 81.732989 °W	125.6-115.6 ft msl	373.6 ft msl	4" PVC	S	MCBC

SAMPLE DATE	08/14/96	02/20/97	08/07/97	03/06/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	219.0	217.7	216.4	216.0	ft msl
pH	6.6	5.8	5.6	5.5	pH
Sp. conductance	38	26	26	26	µS/cm
Water temperature	22.0	32.0	20.0	17.8	°C
Alkalinity as $CaCO_3$	3	9	5	5	mg/L
Turbidity	3	1	2	1	NTU
Volume purged	2.4	2.1	2.0	2.6	well volume
Sampling code					
Synchronous water level	219.6 (09/19/96)	217.3 (03/20/97)	215.8 (09/17/97)	216.3 (03/20/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	4.4	4.7	4.4	5.6	1		µg/L	EX	0
		Cyanide	<10	<5.0	<5.0	<10	1		µg/L	EX	0
		Lead, total recoverable	<5.0	<5.0	4.6	<1.3	1	V	µg/L	EX	0
		Nickel, total recoverable	<1.8	<5.0	<5.0	<20	1		µg/L	EX	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<10	1		µg/L	EX	0
Organics											
		Chlorobenzene	<0.50	<1.4	<10	<5.0	1		µg/L	EX	0
		1,1-Dichloroethane	<0.50	<2.5	<10	<5.0	1		µg/L	EX	0
		1,1-Dichloroethylene	<0.50	<3.2	<10	<5.0	1		µg/L	EX	0
		trans-1,2-Dichloroethylene	<0.50	<3.2		<5.0	1		µg/L	EX	0
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<0.50	<1.5	<10	<5.0	1		µg/L	EX	0
	■	Tetrachloroethylene	***32***	***38***	***38***	***52***	2		µg/L	EX	2
		1,1,1-Trichloroethane	<0.50	<2.5	<10	<5.0	1		µg/L	EX	0
	■	Trichloroethylene	***180***	***140***	***110***	***120***	2		µg/L	EX	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	30		<20				µg/L		
		Chloride	1,900	1,600	1,600	1,600	1		µg/L	WA	0
		Chromium, total recoverable	<4.0	<3.0	0.60	1.8	1	JE	µg/L	WA	0
		Cobalt, total recoverable	0.19		<5.0				µg/L		
		Copper, total recoverable	5.6		7.5				µg/L		
		Fluoride	<100	<100	<100	<25	1	V	µg/L	WA	0
		Manganese, total recoverable	5.6	5.5	5.6	6.5	1	JE	µg/L	EX	0
		Mercury, total recoverable	0.067	<0.20	<0.20	<0.20	1		µg/L	EX	0
		Nitrate-nitrite as nitrogen	1,100	1,100	970	810	1		µg/L	WA	0
		Sodium, total recoverable	1,800	2,100	1,800	2,100	1	J	µg/L	EX	
		Sulfate	440	<5,000	<5,000	650	1		µg/L	WA	0
		Total phosphates (as P)	<50	<10	6.0	17	1	JE	µg/L	WA	
		Uranium, total recoverable	<10		<0.10				µg/L		
		Zinc, total recoverable	<6.6		23				µg/L		
Radionuclides											
		Gross alpha	*2.8E-01*	*-4.1E-01*	*4.9E-01*	1.4E+00	1		pCi/L	TM	0
		Nonvolatile beta	*1.0E+00*	*3.6E-01*	*9.0E-01*	2.5E+00	1		pCi/L	TM	0
		Radium, total alpha-emitting	*-7.0E-01*	1.2E+00	1.2E+00	6.5E-01	1		pCi/L	TM	0

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL AMB 7B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N103972.0 E51590.3	33.339885 °N 81.732961 °W	162.9-152.9 ft msl	373 ft msl	4" PVC	S	LL

SAMPLE DATE	07/09/96	02/21/97	07/28/97	03/05/98	
FIELD DATA					
Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	225.2	224.1	222.9	221.5	ft msl
pH	5.6	4.8	4.2	5.6	pH
Sp. conductance	38	24	56	20	µS/cm
Water temperature	25.0	29.0	20.0	18.0	°C
Alkalinity as $CaCO_3$	1	2	1	2	mg/L
Turbidity	1	1	1	2	NTU
Volume purged	3.5	2.6	2.8	2.3	well volume
Sampling code					
Synchronous water level	225.2 (09/19/96)	223.8 (03/20/97)	221.7 (09/17/97)	221.6 (03/20/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	2.1	4.9	<2.0	2.7	1		µg/L	WA	0
		Cyanide	<10	<5.0	<2.5	<15	1		µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0	<5.0	<47	1		µg/L	WA	0
		Nickel, total recoverable	<10	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<0.050	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<0.050	<2.0	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<0.050	<2.0	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<0.050	<2.0		<5.0	1		µg/L	WA	0
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<0.050	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	0.50	<1.9	0.87	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<0.050	<2.0	<5.0	<5.0	1		µg/L	WA	0
	■	Trichloroethylene	***6.0***	***7.0***	***6.9***	***6.4***	1		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<40		9.3				µg/L		
		Chloride	2,900	3,100	2,900	2,900	1		µg/L	WA	0
		Chromium, total recoverable	<4.0	<3.0	<3.0	<7.0	1		µg/L	WA	0
		Cobalt, total recoverable	0.23		<5.0				µg/L		
		Copper, total recoverable	3.7		1.3				µg/L		
		Fluoride	<100	<100	<100	<24	1	V	µg/L	WA	0
		Manganese, total recoverable	2.1	4.2	1.9	2.0	1	JE	µg/L	WA	0
		Mercury, total recoverable	0.79	0.24	<0.20	<0.70	1		µg/L	WA	0
		Nitrate-nitrite as nitrogen	800	500	660	560	1		µg/L	WA	0
		Sodium, total recoverable	3,800	3,900	3,600	3,300	1	V	µg/L	WA	
		Sulfate	860	880	1,000	910	1		µg/L	WA	0
		Total phosphates (as P)	190	<0.050	<50	28	1	JE	µg/L	WA	
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	5.4		17				µg/L		
Radionuclides											
		Gross alpha	*5.8E-01*	9.5E-01	-6.6E-01	2.0E+00	1		pCi/L	TM	0
		Nonvolatile beta	*1.2E+00*	2.0E+00	*-8.7E-01*	2.7E+00	1		pCi/L	TM	0
		Radium, total alpha-emitting	*0.0E+00*	1.8E+00	1.7E+00	*2.5E-01*	1	UI	pCi/L	TM	0

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL AMB 8D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N103874.7 E51400.5	33.339360 °N 81.733272 °W	240.8-220.8 ft msl	369.6 ft msl	4" PVC	S	M

SAMPLE DATE	07/09/96	02/25/97	07/24/97	03/05/98	
FIELD DATA					
Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	234.9	232.9	231.6	229.4	ft msl
pH	6.0	5.4	5.6	10.3	pH
Sp. conductance	70	50	36	33	µS/cm
Water temperature	25.0	29.0	22.0	20.8	°C
Alkalinity as $CaCO_3$	8	11	8	5	mg/L
Turbidity	0	0	1	2	NTU
Volume purged	10	5.4	8.2	2.8	well volume
Sampling code					
Synchronous water level	234.3 (09/19/96)	232.9 (03/20/97)	230.9 (09/17/97)	230.0 (03/20/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	2.1	2.8		3.8	1		µg/L	WA	0
		Cyanide	<10	<5.0		<15	1		µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0		<47	1		µg/L	WA	0
		Nickel, total recoverable	<10	<5.0		3.3	1	JE	µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0		<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<0.050	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<0.050	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<0.050	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<0.050	<3.2		<5.0	1		µg/L	WA	0
		PCB 1016				<1.0	1		µg/L	WA	0
		PCB 1221				<2.0	1		µg/L	WA	0
		PCB 1232				<1.0	1		µg/L	WA	0
		PCB 1242				<1.0	1		µg/L	WA	0
		PCB 1248				<1.0	1		µg/L	WA	0
		PCB 1254				<1.0	1		µg/L	WA	0
		PCB 1260				<1.0	1		µg/L	WA	0
		1,1,2,2-Tetrachloroethane	<0.050	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<0.050	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<0.050	<2.5	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	0.16	3.7	3.3	2.6	1	JE	µg/L	WA	1

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<28						µg/L		
		Chloride	2,500	2,800		3,300	1		µg/L	WA	0
		Chromium, total recoverable	<4.0	<3.0		<0.81	1	V	µg/L	WA	0
		Cobalt, total recoverable	<4.0	<5.0		0.88	1	JE	µg/L	WA	0
		Copper, total recoverable	0.75	<3.0		3.3	1	JE	µg/L	WA	0
		Fluoride	<100	<100		<34	1	V	µg/L	WA	0
		Manganese, total recoverable	1.5	<3.0		4.1	1	JE	µg/L	WA	0
		Mercury, total recoverable	0.34	<0.20		<0.70	1		µg/L	WA	0
		Nitrate-nitrite as nitrogen	540	440		410	1		µg/L	WA	0
	■	Sodium, total recoverable	***11,000***	***8,700***		***5,400***	1	V	µg/L	WA	
		Sulfate	***3,900***	***5,200***		2,400	1		µg/L	WA	0
		Total phosphates (as P)	40	<10		31	1	JE	µg/L	WA	
		Uranium, total recoverable	<20						µg/L		
		Zinc, total recoverable	11	<10		<53	1		µg/L	WA	0
Radionuclides											
		Gross alpha	1.2E+00	1.3E+00		6.1E+00	1		pCi/L	TM	0
		Nonvolatile beta	*3.1E-01*	2.3E+00		5.8E+00	1		pCi/L	TM	0
		Radium, total alpha-emitting	1.0E+00	1.1E+00		4.0E+00	1	V	pCi/L	TM	0

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL AMB 9D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N103585.2 E51263.0	33.338496 °N 81.733071 °W	239.7-219.7 ft msl	367.9 ft msl	4" PVC	S	M

SAMPLE DATE	07/09/96	02/27/97	07/24/97	03/05/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	235.3	233.3	231.8	229.6	ft msl
pH	5.8	5.0	5.6	7.1	pH
Sp. conductance	62	42	42	45	µS/cm
Water temperature	26.0	25.0	21.0	18.8	°C
Alkalinity as $CaCO_3$	5	11	10	7	mg/L
Turbidity	0	2	1	1	NTU
Volume purged	13	3.5	7.0	4.2	well volume
Sampling code					
Synchronous water level	234.5 (09/19/96)	233.1 (03/20/97)	231.0 (09/17/97)	230.0 (03/20/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	2.4	3.0		2.7	1		µg/L	WA	0
		Cyanide	<10	<5.0		<15	1		µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0		<47	1		µg/L	WA	0
		Nickel, total recoverable	<10	<5.0		<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	2.8		<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<0.050	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<0.050	<2.0	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<0.050	<2.0	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<0.050	<2.0		<5.0	1		µg/L	WA	0
		PCB 1016				<1.0	1		µg/L	WA	0
		PCB 1221				<2.0	1		µg/L	WA	0
		PCB 1232				<1.0	1		µg/L	WA	0
		PCB 1242				<1.0	1		µg/L	WA	0
		PCB 1248				<1.0	1		µg/L	WA	0
		PCB 1254				<1.0	1		µg/L	WA	0
		PCB 1260				<1.0	1		µg/L	WA	0
		1,1,2,2-Tetrachloroethane	<0.050	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<0.050	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<0.050	<2.0	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	<0.050	<2.0	<5.0	<5.0	1		µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<22	22					µg/L		
		Chloride	2,500	3,000		2,800	1		µg/L	WA	0
		Chromium, total recoverable	<4.0	<3.0		<0.91	1	V	µg/L	WA	0
		Cobalt, total recoverable	<4.0	<20		<4.5	1		µg/L	WA	0
		Copper, total recoverable	13	11		9.4	1	JE	µg/L	WA	0
		Fluoride	<100	<100		<25	1	V	µg/L	WA	0
		Manganese, total recoverable	1.7	3.2		2.4	1	JE	µg/L	WA	0
		Mercury, total recoverable	<0.20	<0.20		<0.70	1		µg/L	WA	0
		Nitrate-nitrite as nitrogen	410	180		170	1		µg/L	WA	0
■		Sodium, total recoverable	***8,600***	***8,400***		***7,800***	1	V	µg/L	WA	
■		Sulfate	***4,800***	***4,600***		***4,900***	1		µg/L	WA	0
		Total phosphates (as P)	<50	<0.050		20	1	JE	µg/L	WA	
		Uranium, total recoverable	<20						µg/L		
		Zinc, total recoverable	19	13		12	1	JE	µg/L	WA	0
Radionuclides											
		Gross alpha	1.0E+00	1.5E+00		3.4E+00	1		pCi/L	TM	0
		Nonvolatile beta	*3.0E-01*	2.5E+00		2.8E+00	1		pCi/L	TM	0
		Radium, total alpha-emitting	7.0E-01	1.1E+00		7.9E-01	1	UIV	pCi/L	TM	0

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL AMB 10A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N103326.4 E51410.0	33.338163 °N 81.732180 °W	111.4-106.4 ft msl	366.5 ft msl	4" PVC	S	MCBC

SAMPLE DATE	07/09/96	02/21/97	08/14/97	03/06/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	218.1	217.1	219.9	215.4	ft msl
pH	10.8	8.4	10.6	10.7	pH
Sp. conductance	140	90	600	64	µS/cm
Water temperature	30.0	30.0	19.5	16.1	°C
Alkalinity as $CaCO_3$	143	25	108	146	mg/L
Turbidity	4	11	6	3	NTU
Volume purged	0.027	2.1	0.013	0.97	well volume
Sampling code	X	X	X	X	
Synchronous water level	218.7 (09/19/96)	216.7 (03/20/97)	215.1 (09/17/97)	215.6 (03/20/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

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H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	58	12		39	1		µg/L	WA	0
		Cyanide	<10	<5.0		<15	1		µg/L	WA	0
		Lead, total recoverable	3.2	<5.0		<47	1		µg/L	WA	0
		Nickel, total recoverable	1.2	<5.0		<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0		<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<0.050	<1.4		<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<0.050	<2.5		<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<0.050	<3.2		<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<0.050	<3.2		<5.0	1		µg/L	WA	0
		PCB 1016		<0.12					µg/L		
		PCB 1221		<0.12					µg/L		
		PCB 1232		<0.12					µg/L		
		PCB 1242		<0.12					µg/L		
		PCB 1248		<0.12					µg/L		
		PCB 1254		<0.12					µg/L		
		PCB 1260		<0.12					µg/L		
		1,1,2,2-Tetrachloroethane	<0.050	<1.5		<5.0	1		µg/L	WA	0
		Tetrachloroethylene	0.070	<1.9		<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<0.050	<2.5		<5.0	1		µg/L	WA	0
		Trichloroethylene	<0.050	<3.0		<5.0	1		µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	***880***						µg/L		
		Chloride	1,600	2,000		1,900	1		µg/L	WA	0
		Chromium, total recoverable	3.3	<3.0		35	1		µg/L	WA	0
		Cobalt, total recoverable	<4.0	<5.0					µg/L		
		Copper, total recoverable	<4.0	<3.0					µg/L		
		Fluoride	97	<100		<76	1	V	µg/L	WA	0
		Manganese, total recoverable	3.5	6.7		1.9	1	JE	µg/L	WA	0
		Mercury, total recoverable	0.16	<0.20		<0.70	1		µg/L	WA	0
		Nitrate-nitrite as nitrogen	400	250		200	1		µg/L	WA	0
■		Sodium, total recoverable	***14,000***	***5,900***		***12,000***	1	V	µg/L	WA	
■		Sulfate	***5,200***	***5,700***		***4,300***	1		µg/L	WA	0
		Total phosphates (as P)	<50	23		26	1	JE	µg/L	WA	
		Uranium, total recoverable	<20						µg/L		
		Zinc, total recoverable	<5.0	<10					µg/L		
Radionuclides											
		Gross alpha	1.1E+00	*9.3E-01*		*8.3E-01*	1	UI	pCi/L	TM	0
		Nonvolatile beta	9.4E+00	3.2E+00		6.7E+00	1		pCi/L	TM	0
		Radium, total alpha-emitting	7.0E-01	*3.1E-01*		1.5E+00	1		pCi/L	TM	0

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL AMB 10B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N103337.3 E51418.3	33.338201 °N 81.732180 °W	154.3-149.3 ft msl	366.4 ft msl	4" PVC	S	LL

SAMPLE DATE	07/09/96	02/24/97	08/14/97

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	223.4	222.1	225.8		ft msl
pH	5.8	4.8	5.6		pH
Sp. conductance	54	60	36		µS/cm
Water temperature	25.0	24.0	18.9		°C
Alkalinity as $CaCO_3$	11	1	10		mg/L
Turbidity	0	1	1		NTU
Volume purged	4.5	2.4	3.1		well volume
Sampling code					
Synchronous water level	223.5 (09/19/96)	221.9 (03/20/97)	220.1 (09/17/97)		ft msl

ANALYTICAL DATA

Groundwater Protection Standard

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H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	7.3	10	5.3				µg/L		
		Cyanide	<10	<5.0	<5.0				µg/L		
		Lead, total recoverable	<5.0	<5.0	<5.0				µg/L		
		Nickel, total recoverable	<10	<5.0	<5.0				µg/L		
		Selenium, total recoverable	<5.0	<5.0	<5.0				µg/L		
Organics											
		Chlorobenzene	<0.050	<1.4	<5.0				µg/L		
		1,1-Dichloroethane	<0.050	<2.0	<5.0				µg/L		
		1,1-Dichloroethylene	<0.050	<2.0	<5.0				µg/L		
		trans-1,2-Dichloroethylene	<0.050	<2.0					µg/L		
		PCB 1016		<0.12					µg/L		
		PCB 1221		<0.12					µg/L		
		PCB 1232		<0.12					µg/L		
		PCB 1242		<0.12					µg/L		
		PCB 1248		<0.12					µg/L		
		PCB 1254		<0.12					µg/L		
		PCB 1260		<0.12					µg/L		
		1,1,2,2-Tetrachloroethane	<0.050	<1.5	<5.0				µg/L		
		Tetrachloroethylene	<0.050	<1.9	<5.0				µg/L		
		1,1,1-Trichloroethane	<0.050	<2.0	<5.0				µg/L		
		Trichloroethylene	<0.050	<2.0	<5.0				µg/L		

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<13		<20				µg/L		
		Chloride	3,100	3,300	3,200				µg/L		
		Chromium, total recoverable	<4.0	<3.0	0.60				µg/L		
		Cobalt, total recoverable	0.25	<5.0	<5.0				µg/L		
		Copper, total recoverable	1.2	<3.0	<3.0				µg/L		
		Fluoride	<100	<100	<100				µg/L		
		Manganese, total recoverable	7.2	6.3	6.1				µg/L		
		Mercury, total recoverable	0.18	1.1	0.050				µg/L		
		Nitrate-nitrite as nitrogen	410	190	190				µg/L		
		Sodium, total recoverable	3,800	4,100	4,200				µg/L		
		Sulfate	630	<5,000	<5,000				µg/L		
		Total phosphates (as P)	<50	<0.050	<10				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	13	14	6.1				µg/L		
Radionuclides											
		Gross alpha	*2.7E-01*	1.3E+00	1.5E+00				pCi/L		
		Nonvolatile beta	*3.9E-01*	2.2E+00	*7.4E-01*				pCi/L		
		Radium, total alpha-emitting	6.0E-01	6.0E-01	*1.9E+00*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL AMB 10D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N103293.4 E51456.0	33.338166 °N 81.731995 °W	239.4-219.4 ft msl	365.5 ft msl	4" PVC	S	M

SAMPLE DATE	07/09/96	02/21/97	08/14/97	03/05/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	236.6	234.6	237.0	230.3	ft msl
pH	6.0	5.0	5.6	8.5	pH
Sp. conductance	64	44	42	47	µS/cm
Water temperature	24.0	24.0	18.5	18.8	°C
Alkalinity as $CaCO_3$	10	12	6	15	mg/L
Turbidity	1	2	2	2	NTU
Volume purged	12	5.3	5.6	3.9	well volume
Sampling code					
Synchronous water level	235.7 (09/19/96)	233.9 (03/20/97)	231.7 (09/17/97)	230.9 (03/20/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

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H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	7.7	5.5	5.5	5.8	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0	<5.0	<47	1		µg/L	WA	0
		Nickel, total recoverable	<10	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<0.050	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<0.050	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<0.050	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<0.050	<3.2		<5.0	1		µg/L	WA	0
		PCB 1016				<1.0	1		µg/L	WA	0
		PCB 1221				<2.0	1		µg/L	WA	0
		PCB 1232				<1.0	1		µg/L	WA	0
		PCB 1242				<1.0	1		µg/L	WA	0
		PCB 1248				<1.0	1		µg/L	WA	0
		PCB 1254				<1.0	1		µg/L	WA	0
		PCB 1260				<1.0	1		µg/L	WA	0
		1,1,2,2-Tetrachloroethane	<0.050	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<0.050	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<0.050	<2.5	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	<0.050	<3.0	<5.0	<5.0	1		µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<43		***120***				µg/L		
		Chloride	3,000	3,200	3,200	3,200	1		µg/L	WA	0
		Chromium, total recoverable	<4.0	<3.0	<3.0	<1.4	1	V	µg/L	WA	0
		Cobalt, total recoverable	<4.0		<5.0	<4.5	1		µg/L	WA	0
		Copper, total recoverable	<4.0		<3.0	1.9	1	JE	µg/L	WA	0
		Fluoride	<100	<100	<100	<25	1	V	µg/L	WA	0
		Manganese, total recoverable	2.8	3.3	4.4	4.4	1	JE	µg/L	WA	0
		Mercury, total recoverable	<0.13	<0.20	<0.20	<0.70	1		µg/L	WA	0
		Nitrate-nitrite as nitrogen	130	73	1,700	100	1		µg/L	WA	0
■		Sodium, total recoverable	***7,500***	***6,800***	***7,300***	***7,400***	1	V	µg/L	WA	
■		Sulfate	***3,600***	<5,000	***4,000***	***3,500***	1		µg/L	WA	0
		Total phosphates (as P)	110	<10	14	25	1	JE	µg/L	WA	
		Uranium, total recoverable	<20		0.090				µg/L		
		Zinc, total recoverable	<5.0		11	<53	1		µg/L	WA	0
Radionuclides											
		Gross alpha	*1.5E-01*	*6.6E-01*	3.0E+00	2.3E+00	1		pCi/L	TM	0
		Nonvolatile beta	*2.1E-01*	*6.3E-01*	2.6E+00	3.1E+00	1		pCi/L	TM	0
		Radium, total alpha-emitting	5.0E-01	4.1E-01	*3.3E+00*	3.9E-01	1	UIV	pCi/L	TM	0

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL AMB 11B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N103154.2 E51919.5	33.338615 °N 81.730503 °W	184.5-174.5 ft msl	364.6 ft msl	4" PVC	S	UL

SAMPLE DATE	07/10/96	02/21/97	08/13/97	03/23/98	
FIELD DATA					
Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	223.4	222.2	224.5	220.5	ft msl
pH	6.4	5.2	4.4	5.6	pH
Sp. conductance	54	40	40	38	µS/cm
Water temperature	25.0	24.0	19.0	15.0	°C
Alkalinity as $CaCO_3$	8	12	2	6	mg/L
Turbidity	0	1	2	1	NTU
Volume purged	3.8	2.6	3.2	4.8	well volume
Sampling code					
Synchronous water level	223.3 (09/19/96)	221.8 (03/20/97)	220.3 (09/17/97)	220.5 (03/20/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

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H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	31	22	22	18	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	1.2	<5.0	5.4	<47	1		µg/L	WA	0
		Nickel, total recoverable	1.8	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	2.1	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2					µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<2.0	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	<2.0	<3.0	<5.0	<5.0	1		µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<45		<20				µg/L		
		Chloride	3,800	3,800	4,000	3,800	1		µg/L	WA	0
		Chromium, total recoverable	1.3	<3.0	<3.0	<7.0	1		µg/L	WA	0
		Cobalt, total recoverable	0.74		<5.0				µg/L		
		Copper, total recoverable	<0.80		<3.0				µg/L		
		Fluoride	<100	<100	<100	<27	1	V	µg/L	WA	0
		Manganese, total recoverable	11	8.2	9.4	9.0	1		µg/L	WA	0
		Mercury, total recoverable	<0.20	<0.20	<0.20	<0.70	1		µg/L	WA	0
		Nitrate-nitrite as nitrogen	470	230	240	230	1		µg/L	WA	0
		Sodium, total recoverable	2,100	1,900	2,100	2,300	1	V	µg/L	WA	
		Sulfate	430	<5,000	<5,000	630	1		µg/L	WA	0
		Total phosphates (as P)	<50	<10	<10	8.8	1	JE	µg/L	WA	
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	9.7		18				µg/L		
Radionuclides											
		Gross alpha	*5.1E-01*	*-5.3E-01*	4.6E+00	1.2E+00	1		pCi/L	TM	0
		Nonvolatile beta	*7.2E-01*	*-4.6E-01*	3.8E+00	2.0E+00	1		pCi/L	TM	0
		Radium, total alpha-emitting	3.0E-01	*1.4E-01*	*2.2E+00*	7.5E-01	1	UIV	pCi/L	TM	0

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL AMB 11D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N103132.3 E51932.6	33.338588 °N 81.730426 °W	240.5-220.5 ft msl	364 ft msl	4" PVC	S	M

SAMPLE DATE	07/10/96	02/21/97	08/29/97	03/23/98	
FIELD DATA					
Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	237.6	235.1	232.7	230.8	ft msl
pH	6.6	5.2	6.2	5.6	pH
Sp. conductance	80	42	66	46	µS/cm
Water temperature	25.0	24.0	18.7	15.0	°C
Alkalinity as $CaCO_3$	11	12	24	8	mg/L
Turbidity	1	11	0	1	NTU
Volume purged	8.2	17	4.0	23	well volume
Sampling code					
Synchronous water level	236.7 (09/19/96)	234.5 (03/20/97)	232.4 (09/17/97)	231.5 (03/20/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	10	6.1	14	9.9	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0	1.8	<47	1		µg/L	WA	0
		Nickel, total recoverable	<10	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	1.9	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<2.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<2.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<2.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<2.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<2.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<2.0	<1.9	<2.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<2.5	<2.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	<2.0	<3.0	<2.0	<5.0	1		µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<67		65				µg/L		
		Chloride	2,500	2,500	2,900	2,300	1		µg/L	WA	0
		Chromium, total recoverable	1.0	<3.0	0.84	<7.0	1		µg/L	WA	0
		Cobalt, total recoverable	0.47		<5.0				µg/L		
		Copper, total recoverable	<0.94		17				µg/L		
		Fluoride	<100	<100	<58	<26	1	V	µg/L	WA	0
		Manganese, total recoverable	1.8	4.3	2.4	2.3	1	JE	µg/L	WA	0
		Mercury, total recoverable	<0.20	<0.20	<0.20	<0.70	1		µg/L	WA	0
		Nitrate-nitrite as nitrogen	350	83	110	240	1		µg/L	WA	0
■		Sodium, total recoverable	***6,400***	***7,200***	***7,000***	***6,700***	1	V	µg/L	WA	
■		Sulfate	***4,700***	***6,200***	***6,000***	***5,500***	1		µg/L	WA	0
		Total phosphates (as P)	<50	<10	40	10	1	JE	µg/L	WA	
		Uranium, total recoverable	<20		13				µg/L		
		Zinc, total recoverable	<5.0		16				µg/L		
Radionuclides											
		Gross alpha	*9.3E-02*	1.2E+00	9.0E-01	9.0E-01	1		pCi/L	TM	0
		Nonvolatile beta	*5.0E-01*	*2.7E-01*	*2.3E-01*	*1.6E+00*	1	UI	pCi/L	TM	0
		Radium, total alpha-emitting	*0.0E+00*	1.0E+00	1.8E+00	*2.5E-01*	1	UI	pCi/L	TM	0

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL AMB 12D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N103602.4 E51901.6	33.339576 °N 81.731422 °W	239.4-219.4 ft msl	369.8 ft msl	4" PVC	S	M

SAMPLE DATE	07/10/96	03/03/97	08/13/97	03/24/98	
FIELD DATA					
Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	236.0	234.0	235.3	230.2	ft msl
pH	6.0	5.8	5.2	5.6	pH
Sp. conductance	37	26	80	24	µS/cm
Water temperature	25.0	25.0	20.0	16.0	°C
Alkalinity as $CaCO_3$	1	2	2	3	mg/L
Turbidity	1	7	2	1	NTU
Volume purged	7.0	4.1	3.3	4.4	well volume
Sampling code					
Synchronous water level	235.4 (09/19/96)	233.8 (03/20/97)	231.7 (09/17/97)	230.9 (03/20/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

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H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	4.8	5.3	48	5.7	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0	6.8	<47	1		µg/L	WA	0
		Nickel, total recoverable	<10	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2					µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<2.0	<1.9	1.1	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	<2.0	<3.0	3.4	<5.0	1		µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<36		***290***				µg/L		
		Chloride	1,200	1,100	3,900	1,400	1		µg/L	WA	0
		Chromium, total recoverable	<4.0	<3.0	0.70	<7.0	1		µg/L	WA	0
		Cobalt, total recoverable	<4.0		<5.0				µg/L		
		Copper, total recoverable	<2.0		2.2				µg/L		
		Fluoride	<100	<100	<100	<20	1	V	µg/L	WA	0
		Manganese, total recoverable	10	8.6	17	8.9	1		µg/L	WA	0
		Mercury, total recoverable	<0.20	<0.20	<0.20	<0.70	1		µg/L	WA	0
		Nitrate-nitrite as nitrogen	1,300	1,100	260	780	1		µg/L	WA	0
		Sodium, total recoverable	2,100	2,200	2,000	2,200	1	V	µg/L	WA	
		Sulfate	430	<1,300	<5,000	620	1		µg/L	WA	0
		Total phosphates (as P)	30	<10	<10	<67	1		µg/L	WA	0
		Uranium, total recoverable	14		0.076				µg/L		
		Zinc, total recoverable	9.4		30				µg/L		
Radionuclides											
		Gross alpha	7.8E-01	*5.4E-01*	1.5E+00	1.5E+00	1		pCi/L	TM	0
		Nonvolatile beta	3.1E+00	*2.1E+00*	*-1.5E-01*	*4.9E-01*	1	UI	pCi/L	TM	0
		Radium, total alpha-emitting	3.0E-01	*8.7E-01*	*1.6E+00*	5.0E-01	1	UIV	pCi/L	TM	0

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL AMB 13AR

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N103082.0 E51396.0	33.337600 °N 81.731742 °W	110.9-100.9 ft msl	365.1 ft msl	4" PVC	S	MCBC

SAMPLE DATE	07/26/96	02/21/97	08/27/97	03/09/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	218.9	217.9	216.9	216.7	ft msl
pH	9.0	6.4	6.4	6.8	pH
Sp. conductance	120	80	78	76	µS/cm
Water temperature	29.0	25.0	20.0	19.4	°C
Alkalinity as $CaCO_3$	28	46	27	33	mg/L
Turbidity	8	5	3	3	NTU
Volume purged	0.026	2.2	2.1	2.2	well volume
Sampling code	X				
Synchronous water level	219.5 (09/19/96)	217.6 (03/20/97)	216.2 (09/17/97)	216.4 (03/20/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

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H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	44	26	21	21	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0	<5.0	<47	1		µg/L	WA	0
		Nickel, total recoverable	<10	<5.0	<5.0	3.0	1	JE	µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<0.050	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	0.37	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<0.050	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<0.050	<3.2					µg/L		
		PCB 1016	<0.13						µg/L		
		PCB 1221	<0.13						µg/L		
		PCB 1232	<0.13						µg/L		
		PCB 1242	<0.13						µg/L		
		PCB 1248	<0.13						µg/L		
		PCB 1254	<0.13						µg/L		
		PCB 1260	<0.13						µg/L		
		1,1,2,2-Tetrachloroethane	<0.050	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	0.10	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<0.050	<2.5	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	0.74	<3.0	1.1	<5.0	1		µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	***360***		100				µg/L		
		Chloride	2,600	2,300	2,500	2,600	1		µg/L	WA	0
		Chromium, total recoverable	15	6.5	2.8	5.4	1	JEV	µg/L	WA	0
		Cobalt, total recoverable	<0.91		<5.0				µg/L		
		Copper, total recoverable	<1.5		<3.0				µg/L		
		Fluoride	<100	<100	<100	<25	1	V	µg/L	WA	0
		Manganese, total recoverable	5.3	3.6	4.2	2.9	1	JE	µg/L	WA	0
		Mercury, total recoverable	<0.20	<0.20	<0.20	<0.70	1		µg/L	WA	0
		Nitrate-nitrite as nitrogen	1,600	1,000	1,100	880	1		µg/L	WA	0
		Sodium, total recoverable	***5,600***	4,000	3,400	3,400	1	V	µg/L	WA	
		Sulfate	1,400	<5,000	<5,000	1,600	1		µg/L	WA	0
		Total phosphates (as P)	<30	<10	8.0	20	1	JE	µg/L	WA	
		Uranium, total recoverable	<20		0.13				µg/L		
		Zinc, total recoverable	15		22				µg/L		
Radionuclides											
		Gross alpha	1.7E+00	*-3.0E-02*	*9.2E-01*	1.5E+00	1		pCi/L	TM	0
		Nonvolatile beta	3.5E+00	*2.0E+00*	2.1E+00	1.7E+00	1		pCi/L	TM	0
		Radium, total alpha-emitting	7.0E-01	*3.4E-01*	*3.9E+00*	4.2E-01	1	UIV	pCi/L	TM	0

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL AMB 14D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N104278.7 E51360.8	33.340188 °N 81.734162 °W	235.1-215.1 ft msl	382.4 ft msl	2" PVC	V	M

SAMPLE DATE	07/03/96	02/20/97	08/13/97	03/10/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	232.8	230.9	230.1	227.8	ft msl
pH	5.6	5.8	5.6	4	pH
Sp. conductance	28	30	40	28	µS/cm
Water temperature	30.0	28.0	21.0	19	°C
Alkalinity as $CaCO_3$	8	10	8	28	mg/L
Turbidity	13	9	11	73	NTU
Volume purged	3.1	3.5	0.0	1.4	well volume
Sampling code		X	X	X	
Synchronous water level	232.0 (09/19/96)	230.9 (03/20/97)	229.0 (09/17/97)	228.2 (03/20/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

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H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	4.9	3.8	17				µg/L		
		Cyanide	<1.6	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	5.7	11	***22***				µg/L		
		Nickel, total recoverable	7.2	5.5	15				µg/L		
		Selenium, total recoverable	<5.0	<5.0	<5.0				µg/L		
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	1.6	<3.2	2.5	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2		<5.0	1		µg/L	WA	0
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
	■	Tetrachloroethylene	***26***	***40***	***29***	***11***	1		µg/L	WA	2
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
	■	Trichloroethylene	***50***	***89***	***92***	***47***	1		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	***170***		***1,100***				µg/L		
		Chloride	1,600	1,900	2,000	2,000	1		µg/L	WA	0
		Chromium, total recoverable	11	5.4	21				µg/L		
		Cobalt, total recoverable	2.3		***5.8***				µg/L		
		Copper, total recoverable	28		14				µg/L		
		Fluoride	<100	<100	<100	<22	1	V	µg/L	WA	0
		Manganese, total recoverable	28	16	31				µg/L		
		Mercury, total recoverable	<0.20	<0.20	<0.20				µg/L		
		Nitrate-nitrite as nitrogen	1,600	1,700	1,800	1,700	5		µg/L	WA	0
		Sodium, total recoverable	3,400	3,100	2,900				µg/L		
		Sulfate	270	<5,000	<5,000	300	1	JE	µg/L	WA	0
		Total phosphates (as P)	30	<10	<10	24	1	JE	µg/L	WA	
		Uranium, total recoverable	<20		0.29				µg/L		
		Zinc, total recoverable	38		51				µg/L		
Radionuclides											
		Gross alpha	1.3E+00	*-1.9E-01*	2.7E+00	3.2E+00	1		pCi/L	TM	0
		Nonvolatile beta	1.2E+00	3.2E+00	*5.2E-01*	*-3.3E-01*	1	UI	pCi/L	TM	0
		Radium, total alpha-emitting	*-1.0E-01*	6.1E-01	*1.7E+00*	1.7E+00	1		pCi/L	TM	0

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL AMB 15D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N104500.6 E51383.8	33.340716 °N 81.734534 °W	236.2-216.2 ft msl	383.4 ft msl	2" PVC	V	M

SAMPLE DATE	08/15/96	02/19/97	08/28/97	03/05/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	234.4	233.2	231.6	229.9	ft msl
pH	5.8	5.4	6.4	6.5	pH
Sp. conductance	82	26	200	43	µS/cm
Water temperature	26.0	32.0	20.0	16.9	°C
Alkalinity as $CaCO_3$	28	6	9	8	mg/L
Turbidity	42	9	13	150	NTU
Volume purged	0.33	0.0	0.0	0.45	well volume
Sampling code	X	X	X	X	
Synchronous water level	234.3 (09/19/96)	233.0 (03/20/97)	231.1 (09/17/97)	230.4 (03/20/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

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H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	9.1	3.9	20				µg/L		
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	***300***	<5.0	7.3				µg/L		
		Nickel, total recoverable	9.1	5.1	9.5				µg/L		
		Selenium, total recoverable	<5.0	<5.0	<5.0				µg/L		
Organics											
		Chlorobenzene	<0.050	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<0.050	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<0.050	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<0.050	<3.2		<5.0	1		µg/L	WA	0
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<0.050	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	1.3	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<0.050	<2.5	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	***12***	<3.0	3.0				µg/L		

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	***870***		***1,700***				µg/L		
		Chloride	2,100	1,600	2,600	2,500	1		µg/L	WA	0
		Chromium, total recoverable	9.6	<3.0	14				µg/L		
		Cobalt, total recoverable	<1.3		<5.0				µg/L		
		Copper, total recoverable	100		31				µg/L		
		Fluoride	<100	<100	<100	<29	1	V	µg/L	WA	0
		Manganese, total recoverable	36	26	33				µg/L		
		Mercury, total recoverable	<0.20	<0.20	<0.20				µg/L		
		Nitrate-nitrite as nitrogen	900	1,200	860	510	1		µg/L	WA	0
		Sodium, total recoverable	***6,100***	3,300	***5,400***				µg/L		
■		Sulfate	2,200	<5,000	***3,600***	***3,800***	1		µg/L	WA	0
		Total phosphates (as P)	***310***	<10	***390***	220	1		µg/L	WA	
		Uranium, total recoverable	19		0.62				µg/L		
		Zinc, total recoverable	53		38				µg/L		
Radionuclides											
		Gross alpha	1.4E+00	*2.0E-02*	*4.2E+00*	3.3E+00	1		pCi/L	TM	0
		Nonvolatile beta	2.0E+00	*-5.6E-01*	*2.9E+00*	*1.0E+00*	1	UI	pCi/L	TM	0
		Radium, total alpha-emitting	*0.0E+00*	8.5E-01	1.6E+00	*1.9E-01*	1	UI	pCi/L	TM	0

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL AMB 16D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N104268.8 E51557.5	33.340488 °N 81.733625 °W	233.4-213.4 ft msl	380.4 ft msl	2" PVC	V	M

SAMPLE DATE	08/15/96	02/24/97	08/07/97	03/09/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	234.1	232.5	231.1	229.8	ft msl
pH	4.6	4.8	4.6	4.7	pH
Sp. conductance	34	20	20	20	µS/cm
Water temperature	21.0	30.0	22.0	18.2	°C
Alkalinity as $CaCO_3$	30	0	0	0	mg/L
Turbidity	4	1	0	0	NTU
Volume purged	3.0	9.6	9.3	9.3	well volume
Sampling code					
Synchronous water level	233.9 (09/19/96)	232.6 (03/20/97)	230.7 (09/17/97)	229.9 (03/20/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

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H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	1.9	5.2	6.1	4.3	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	<5.0	6.2	6.5	<47	1		µg/L	WA	0
		Nickel, total recoverable	3.9	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<0.050	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<0.050	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<0.050	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<0.050	<3.2					µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<0.050	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	0.22	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<0.050	<2.5	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	4.2	<3.0	1.0	4.3	1	JE	µg/L	WA	1

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<20		<20				µg/L		
		Chloride	2,700	1,400	1,300	1,400	1		µg/L	WA	0
		Chromium, total recoverable	1.5	<3.0	<3.0	<7.0	1		µg/L	WA	0
		Cobalt, total recoverable	<0.27		<5.0				µg/L		
		Copper, total recoverable	5.6		<3.0				µg/L		
		Fluoride	<100	<100	<100	<26	1	V	µg/L	WA	0
		Manganese, total recoverable	2.8	4.4	5.5	4.0	1	JE	µg/L	WA	0
		Mercury, total recoverable	<0.20	<0.20	<0.20	<0.70	1		µg/L	WA	0
		Nitrate-nitrite as nitrogen	890	1,200	***7,100***	930	1		µg/L	WA	0
		Sodium, total recoverable	***4,700***	1,800	1,500	1,600	1	V	µg/L	WA	
		Sulfate	2,300	<5,000	<5,000	330	1	JE	µg/L	WA	0
		Total phosphates (as P)	<40	<10	<10	<67	1		µg/L	WA	0
		Uranium, total recoverable	28		<0.10				µg/L		
		Zinc, total recoverable	<5.0		7.3				µg/L		
Radionuclides											
		Gross alpha	1.2E+00	2.2E+00	4.0E+00	5.2E+00	1		pCi/L	TM	0
		Nonvolatile beta	9.3E-01	2.1E+00	*2.5E-01*	2.9E+00	1		pCi/L	TM	0
		Radium, total alpha-emitting	6.0E-01	2.4E+00	4.3E+00	2.7E+00	1	V	pCi/L	TM	0

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL AMB 17A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N104056.7 E51465.4	33.339868 °N 81.733455 °W	125.0-120.0 ft msl	379.1 ft msl	4" PVC	S	MCBC

SAMPLE DATE	08/14/96	02/19/97	08/07/97	03/23/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	219.1	217.8	216.5	216.4	ft msl
pH	5.6	4.8	4.8	5.0	pH
Sp. conductance	42	20	20	24	µS/cm
Water temperature	22.0	28.0	21.0	16.0	°C
Alkalinity as $CaCO_3$	1	1	2	3	mg/L
Turbidity	2	1	1	1	NTU
Volume purged	2.8	2.3	3.3	2.9	well volume
Sampling code					
Synchronous water level	220.0 (09/19/96)	217.6 (03/20/97)	216.0 (09/17/97)	216.3 (03/20/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	2.5	3.2	3.0	3.1	1	JE	µg/L	EX	0
		Cyanide	<10	<5.0	<5.0	<10	1		µg/L	EX	0
		Lead, total recoverable	<5.0	<5.0	6.4	<5.0	1		µg/L	EX	0
		Nickel, total recoverable	3.4	<5.0	<5.0	13	1	JE	µg/L	EX	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<10	1		µg/L	EX	0
Organics											
		Chlorobenzene	<0.50	<14	<25	<5.0	1		µg/L	EX	0
		1,1-Dichloroethane	<0.50	<25	<25	<5.0	1		µg/L	EX	0
		1,1-Dichloroethylene	<0.50	<32	<25	<5.0	1		µg/L	EX	0
		trans-1,2-Dichloroethylene	<0.50	<32		<5.0	1		µg/L	EX	0
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<0.50	<15	<25	<5.0	1		µg/L	EX	0
	■	Tetrachloroethylene	***56***	***60***	***52***	***51***	5		µg/L	WA	2
		1,1,1-Trichloroethane	<0.50	<25	<25	<5.0	1		µg/L	EX	0
	■	Trichloroethylene	***570***	***580***	***510***	***520***	5		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	60		<20				µg/L		
		Chloride	2,400	1,700	1,800	1,800	1		µg/L	WA	0
		Chromium, total recoverable	2.2	<3.0	0.60	9.1	1	JE	µg/L	EX	0
		Cobalt, total recoverable	0.78		<5.0				µg/L		
		Copper, total recoverable	9.0		2.5				µg/L		
		Fluoride	<14	<100	<100	<22	1	V	µg/L	WA	0
		Manganese, total recoverable	13	12	8.2	11	1		µg/L	WA	0
		Mercury, total recoverable	0.062	<0.20	<0.20	<0.20	1		µg/L	EX	0
		Nitrate-nitrite as nitrogen	1,300	1,200	1,100	870	1		µg/L	WA	0
		Sodium, total recoverable	1,900	2,000	2,000	2,200	1	J	µg/L	EX	
		Sulfate	480	<5,000	<5,000	480	1		µg/L	WA	0
		Total phosphates (as P)	9.2	<10	<10	22	1	JE	µg/L	WA	
		Uranium, total recoverable	<14		<0.10				µg/L		
		Zinc, total recoverable	22		11				µg/L		
Radionuclides											
		Gross alpha	*-7.0E-02*	*1.4E-01*	*-1.3E-01*	8.6E-01	1		pCi/L	TM	0
		Nonvolatile beta	*1.4E-01*	*1.4E-01*	*-1.2E+00*	*-5.0E-02*	1	UI	pCi/L	TM	0
		Radium, total alpha-emitting	***8.3E+00***	8.9E-01	*8.1E-01*	*1.2E-01*	1	UI	pCi/L	TM	0

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL AMB 18A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N103988.8 E51418.8	33.339642 °N 81.733446 °W	136.4-131.4 ft msl	377.3 ft msl	4" PVC	S	MCBC

SAMPLE DATE	08/15/96	02/24/97	08/28/97	03/23/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	219.5	218.0	216.2	215.9	ft msl
pH	6.6	5.2	5.2	5.4	pH
Sp. conductance	26	22	28	24	µS/cm
Water temperature	22.0	28.0	20.0	15.0	°C
Alkalinity as $CaCO_3$	1	2	0	1	mg/L
Turbidity	2	2	1	1	NTU
Volume purged	2.7	2.5	2.7	3.8	well volume
Sampling code					
Synchronous water level	219.8 (09/19/96)	217.4 (03/20/97)	209.9 (09/17/97)	216.2 (03/20/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	5.2	6.2	7.2	5.9	1		µg/L	WA	0
		Cyanide	<10	<5.0	***230***	<15	1		µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0	3.7	<47	1		µg/L	WA	0
		Nickel, total recoverable	2.8	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	4.2	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<0.10	<1.4	<2.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<0.10	<2.5	<2.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<0.10	<3.2	<2.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	0.12	<3.2	<2.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<0.10	<1.5	<2.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	3.5	***5.5***	4.2	4.3	1	JE	µg/L	WA	1
		1,1,1-Trichloroethane	<0.10	<2.5	<2.0	<5.0	1		µg/L	WA	0
	■	Trichloroethylene	***47***	***66***	***68***	***45***	1		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<20		22				µg/L		
		Chloride	2,300	2,000	2,500	2,200	1		µg/L	WA	0
		Chromium, total recoverable	<4.0	<3.0	1.6	<7.0	1		µg/L	WA	0
		Cobalt, total recoverable	<0.39		<5.0				µg/L		
		Copper, total recoverable	37		10				µg/L		
		Fluoride	<100	<100	<50	<22	1	V	µg/L	WA	0
		Manganese, total recoverable	5.2	5.1	6.7	4.5	1	JE	µg/L	WA	0
		Mercury, total recoverable	<0.20	<0.20	0.10	<0.70	1		µg/L	WA	0
		Nitrate-nitrite as nitrogen	1,100	1,100	1,100	760	1		µg/L	WA	0
		Sodium, total recoverable	2,100	2,100	2,300	2,000	1	V	µg/L	WA	
		Sulfate	<340	<5,000	<5,000	440	1		µg/L	WA	0
		Total phosphates (as P)	<30	<10	8.0	10	1	JE	µg/L	WA	
		Uranium, total recoverable	41		0.082				µg/L		
		Zinc, total recoverable	22		12				µg/L		
Radionuclides											
		Gross alpha	*8.9E-02*	1.3E+00	*6.0E-01*	2.3E+00	1		pCi/L	TM	0
		Nonvolatile beta	*8.8E-02*	2.4E+00	*2.1E-01*	*1.5E+00*	1	UI	pCi/L	TM	0
		Radium, total alpha-emitting	*-1.0E-01*	4.3E-01	***6.0E+00***	*1.9E-01*	1	UI	pCi/L	TM	0

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
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WELL AMB 18C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N103983.4 E51432.8	33.339653 °N 81.733398 °W	214.2-209.2 ft msl	376 ft msl	2" PVC	V	UL

SAMPLE DATE	08/16/96	03/03/97	08/18/97	03/23/98	
FIELD DATA					
Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	234.2	232.8	231.0	229.2	ft msl
pH	5.2	5.4	4.6	5.5	pH
Sp. conductance	30	26	24	19	µS/cm
Water temperature	22.0	26.0	21.0	18.4	°C
Alkalinity as $CaCO_3$	8	3	1	1	mg/L
Turbidity	10	7	15	5	NTU
Volume purged	3.2	2.8	3.6	17	well volume
Sampling code					
Synchronous water level	234.0 (09/19/96)	232.6 (03/20/97)	230.6 (09/17/97)	229.8 (03/20/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	2.0	<2.0	3.0	2.9	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	3.9	<5.0	<5.0	<47	1		µg/L	WA	0
		Nickel, total recoverable	2.7	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<0.050	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<0.050	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<0.050	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<0.050	<3.2					µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<0.050	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<0.050	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<0.050	<2.5	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	<0.050	<3.0	<5.0	<5.0	1		µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	73		***200***				µg/L		
		Chloride	2,800	2,400	1,800	1,600	1		µg/L	WA	0
		Chromium, total recoverable	3.4	<3.0	1.5	<7.0	1		µg/L	WA	0
		Cobalt, total recoverable	0.47		<5.0				µg/L		
		Copper, total recoverable	<4.2		1.2				µg/L		
		Fluoride	<100	<100	<100	<23	1	V	µg/L	WA	0
		Manganese, total recoverable	8.7	6.6	7.3	8.0	1		µg/L	WA	0
		Mercury, total recoverable	0.046	<0.20	<0.20	<0.70	1		µg/L	WA	0
		Nitrate-nitrite as nitrogen	740	540	1,000	860	1		µg/L	WA	0
		Sodium, total recoverable	***4,700***	***4,700***	3,700	2,300	1	V	µg/L	WA	
		Sulfate	<1,100	1,800	<5,000	880	1		µg/L	WA	0
		Total phosphates (as P)	<50	<10	17	15	1	JE	µg/L	WA	
		Uranium, total recoverable	<20		0.15				µg/L		
		Zinc, total recoverable	10		33				µg/L		
Radionuclides											
		Gross alpha	*7.9E-02*	*3.2E-01*	9.2E-01	1.6E+00	1		pCi/L	TM	0
		Nonvolatile beta	*8.9E-01*	*2.9E-01*	*-9.2E-01*	*9.2E-01*	1	UI	pCi/L	TM	0
		Radium, total alpha-emitting	*0.0E+00*	*8.5E-01*	*1.8E+00*	1.4E+00	1	V	pCi/L	TM	0

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
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WELL AMB 19C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N102941.1 E51503.7	33.337465 °N 81.731184 °W	196.7-191.7 ft msl	363.7 ft msl	2" PVC	V	UL

SAMPLE DATE	07/10/96	03/03/97	08/27/97	03/10/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	231.8	210.1	228.0	226.8	ft msl
pH	6.0	5.6	5.6	6.1	pH
Sp. conductance	74	48	50	54	µS/cm
Water temperature	27.0	27.0	20.0	16.5	°C
Alkalinity as $CaCO_3$	6	22	32	33	mg/L
Turbidity	1	2	7	1	NTU
Volume purged	3.3	3.3	2.5	7.6	well volume
Sampling code					
Synchronous water level	231.4 (09/19/96)	229.7 (03/20/97)	227.7 (09/17/97)	227.3 (03/20/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	0.79	<2.0	1.2	0.53	1	JE	µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	4.3	1	JE	µg/L	WA	0
		Lead, total recoverable	<5.0	7.2	<5.0	<47	1		µg/L	WA	0
		Nickel, total recoverable	1.1	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2		<5.0	1		µg/L	WA	0
		PCB 1016		<0.12					µg/L		
		PCB 1221		<0.12					µg/L		
		PCB 1232		<0.12					µg/L		
		PCB 1242		<0.12					µg/L		
		PCB 1248		<0.12					µg/L		
		PCB 1254		<0.12					µg/L		
		PCB 1260		<0.12					µg/L		
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<2.0	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	<2.0	<3.0	<5.0	<5.0	1		µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<22		75				µg/L		
		Chloride	2,000	2,000	2,000	2,100	1		µg/L	WA	0
		Chromium, total recoverable	1.0	<3.0	1.7	4.2	1	JE	µg/L	WA	0
		Cobalt, total recoverable	0.28	<5.0	<5.0				µg/L		
		Copper, total recoverable	<2.3	<3.0	<3.0				µg/L		
		Fluoride	23	<100	<100	<28	1	V	µg/L	WA	0
		Manganese, total recoverable	<0.63	<3.0	0.90	<7.8	1		µg/L	WA	0
		Mercury, total recoverable	<0.20	<0.20	<0.20	<0.70	1		µg/L	WA	0
		Nitrate-nitrite as nitrogen	420	88	120	67	1		µg/L	WA	0
■		Sodium, total recoverable	***11,000***	***11,000***	***10,000***	***9,200***	1	V	µg/L	WA	
■		Sulfate	***8,800***	***8,100***	***7,700***	***7,600***	1		µg/L	WA	0
		Total phosphates (as P)	<50	<10	16	150	1		µg/L	WA	
		Uranium, total recoverable	13		<0.10				µg/L		
		Zinc, total recoverable	<5.0	<10	20				µg/L		
Radionuclides											
		Gross alpha	*4.9E-01*	*-5.0E-01*	*-1.2E-01*	7.4E-01	1	J1	pCi/L	TM	0
		Nonvolatile beta	*2.6E-01*	*-1.9E+00*	*4.0E-02*	*4.6E-01*	1	UI	pCi/L	TM	0
		Radium, total alpha-emitting	*-1.0E-01*	*7.8E-01*	*4.9E+00*	*3.2E-01*	1	UI	pCi/L	TM	0

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL AOB 1

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N101910.7 E50485.9	33.333525 °N 81.731860 °W	248.5-218.5 ft msl	341.1 ft msl	4" PVC	S	M

SAMPLE DATE	07/10/96	02/21/97	07/24/97	03/03/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	237.0	235.2	233.3	231.1	ft msl
pH	5.6	5.0	4.6	5.2	pH
Sp. conductance	48	42	34	34	µS/cm
Water temperature	24.0	25.0	20.0	18.0	°C
Alkalinity as $CaCO_3$	1	2	0	3	mg/L
Turbidity	1	2	1	1	NTU
Volume purged	4.1	3.6	3.6	2.5	well volume
Sampling code					
Synchronous water level	236.8 (09/17/96)	234.7 (03/17/97)	232.9 (09/16/97)	232.1 (03/17/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	12	14		8.6	1		µg/L	WA	0
		Cyanide	<10	<5.0		<15	1		µg/L	WA	0
	■	Lead, total recoverable	<5.0	<5.0		***47***	1	JE	µg/L	WA	1
		Nickel, total recoverable	<10	<5.0		<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0		<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
	■	Tetrachloroethylene	***17***	***19***	***38***	***62***	1		µg/L	WA	2
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
	■	Trichloroethylene	***16***	***21***	***28***	***40***	1		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<39	56					µg/L		
		Chloride	3,400						µg/L		
		Chromium, total recoverable	0.86						µg/L		
		Cobalt, total recoverable	<4.0						µg/L		
		Copper, total recoverable	<1.6						µg/L		
		Fluoride	<100						µg/L		
		Manganese, total recoverable	14						µg/L		
		Mercury, total recoverable	<0.20						µg/L		
		Nitrate-nitrite as nitrogen	1,600						µg/L		
		Sodium, total recoverable	3,000						µg/L		
		Sulfate	250						µg/L		
		Total phosphates (as P)	<50						µg/L		
		Uranium, total recoverable	<20						µg/L		
		Zinc, total recoverable	4.7						µg/L		
Radionuclides											
		Gross alpha	1.9E+00						pCi/L		
		Nonvolatile beta	*3.0E-01*						pCi/L		
		Radium, total alpha-emitting	7.0E-01						pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL AOB 2

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N102009.8 E50724.7	33.334134 °N 81.731424 °W	250.2-220.2 ft msl	345.4 ft msl	4" PVC	S	M

SAMPLE DATE	07/10/96	02/27/97	03/03/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	227.1	234.9		228.4	ft msl
pH	6.0	4.2		5.4	pH
Sp. conductance	34	40		20	µS/cm
Water temperature	26.0	25.0		17.0	°C
Alkalinity as $CaCO_3$	1	6		3	mg/L
Turbidity	3	4		2	NTU
Volume purged	16	0.0		14	well volume
Sampling code		X			
Synchronous water level	236.6 (09/18/96)	234.9 (03/20/97)		231.8 (03/17/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	2.3	7.3	3.5	2.4	1		µg/L	WA	0
		Cyanide	<2.0	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0	4.9	<47	1		µg/L	WA	0
		Nickel, total recoverable	2.6	***100***	12	2.8	1	JE	µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<2.0	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	<2.0	<3.0	<5.0	<5.0	1		µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<40	***160***	92				µg/L		
		Chloride	1,300		1,400				µg/L		
		Chromium, total recoverable	2.8		21				µg/L		
		Cobalt, total recoverable	<4.0		<5.0				µg/L		
		Copper, total recoverable	<2.5		12				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	3.6		5.5				µg/L		
		Mercury, total recoverable	<0.20		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	1,200		1,100				µg/L		
		Sodium, total recoverable	2,700		2,900				µg/L		
		Sulfate	440		<5,000				µg/L		
		Total phosphates (as P)	30		14				µg/L		
		Uranium, total recoverable	<20		0.085				µg/L		
		Zinc, total recoverable	14		44				µg/L		
Radionuclides											
		Gross alpha	8.4E-01	1.0E+00	1.2E+00				pCi/L		
		Nonvolatile beta	*1.4E+00*		*3.0E-02*				pCi/L		
		Radium, total alpha-emitting	5.0E-01		1.1E+00				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL ASB 1A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N105535.0 E52614.0	33.345012 °N 81.733306 °W	247.2-217.2 ft msl	349.1 ft msl	4" PVC	S	M

SAMPLE DATE	08/20/96	01/24/97	08/04/97

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	237.5	236.3	238.7		ft msl
pH	5.8	5.0	5.4		pH
Sp. conductance	66	74	66		µS/cm
Water temperature	26.0	22.0	20.0		°C
Alkalinity as $CaCO_3$	22	19	25		mg/L
Turbidity	1	1	4		NTU
Volume purged	4.3	14	4.2		well volume
Sampling code					
Synchronous water level	237.4 (09/16/96)	238.4 (03/20/97)	236.0 (09/18/97)		ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	11	6.6	4.6				µg/L		
		Cyanide	<10	<5.0	<5.0				µg/L		
		Lead, total recoverable	<5.0	<5.0	3.4				µg/L		
		Nickel, total recoverable	<10	<5.0	<5.0				µg/L		
		Selenium, total recoverable	1.6	<5.0	<5.0				µg/L		
Organics											
		Chlorobenzene	<0.050	<1.4	<5.0				µg/L		
		1,1-Dichloroethane	<0.050	<2.5	<5.0				µg/L		
		1,1-Dichloroethylene	<0.050	<3.2	<5.0				µg/L		
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<0.050	<1.5	<5.0				µg/L		
		Tetrachloroethylene	3.0	2.4	3.0				µg/L		
		1,1,1-Trichloroethane	<0.050	<2.5	<5.0				µg/L		
		Trichloroethylene	1.1	<3.0	1.0				µg/L		

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<19	70	28				µg/L		
		Chloride	***5,400***		***5,600***				µg/L		
		Chromium, total recoverable	1.7	<3.0	<3.0				µg/L		
		Cobalt, total recoverable	<4.0	<5.0	<5.0				µg/L		
		Copper, total recoverable	30	30	19				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	2.9	<3.0	<3.0				µg/L		
		Mercury, total recoverable	0.079	<0.20	<0.20				µg/L		
		Nitrate-nitrite as nitrogen	680		650				µg/L		
		Sodium, total recoverable	***13,000***	***13,000***	***12,000***				µg/L		
		Sulfate	***6,000***		***7,500***				µg/L		
		Total phosphates (as P)	60		5.0				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	<5.0	<10	1.5				µg/L		
Radionuclides											
		Gross alpha	*6.8E-01*	1.9E+00	*-5.5E-01*				pCi/L		
		Nonvolatile beta	2.9E+00	*5.1E-01*	*-2.1E+00*				pCi/L		
		Radium, total alpha-emitting	*0.0E+00*	1.5E+00	1.1E+00				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL ASB 2AR

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N105550.5 E52881.7	33.345483 °N 81.732631 °W	240.1-220.2 ft msl	355.6 ft msl	4" PVC	S	M

SAMPLE DATE	08/21/96	01/25/97	08/04/97

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	238.8	238.1	236.7		ft msl
pH	5.4	5.2	5.6		pH
Sp. conductance	66	58	62		µS/cm
Water temperature	21.0	22.0	21.0		°C
Alkalinity as $CaCO_3$	19	21	26		mg/L
Turbidity	1	0	3		NTU
Volume purged	5.5	5.6	5.5		well volume
Sampling code					
Synchronous water level	238.7 (09/16/96)	237.8 (03/19/97)	236.4 (09/18/97)		ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	12	7.7	7.2				µg/L		
		Cyanide	<10	<5.0	<5.0				µg/L		
		Lead, total recoverable	1.4	<5.0	<5.0				µg/L		
		Nickel, total recoverable	0.82	<5.0	<5.0				µg/L		
		Selenium, total recoverable	<5.0	<5.0	<5.0				µg/L		
Organics											
		Chlorobenzene	<0.050	<1.4	<5.0				µg/L		
		1,1-Dichloroethane	<0.050	<2.5	<5.0				µg/L		
		1,1-Dichloroethylene	<0.050	<3.2	<5.0				µg/L		
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<0.050	<1.5	<5.0				µg/L		
		Tetrachloroethylene	<0.66	<1.9	<5.0				µg/L		
		1,1,1-Trichloroethane	<0.050	<2.5	<5.0				µg/L		
		Trichloroethylene	0.13	<3.0	<5.0				µg/L		

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	16	<20	47				µg/L		
		Chloride	***5,200***		***5,100***				µg/L		
		Chromium, total recoverable	7.6	8.6	5.7				µg/L		
		Cobalt, total recoverable	0.42	<5.0	<5.0				µg/L		
		Copper, total recoverable	3.0	<3.0	2.0				µg/L		
		Fluoride	22		<100				µg/L		
		Manganese, total recoverable	5.4	5.0	4.5				µg/L		
		Mercury, total recoverable	<0.072	<0.20	<0.20				µg/L		
		Nitrate-nitrite as nitrogen	460		250				µg/L		
		Sodium, total recoverable	***12,000***	***12,000***	***12,000***				µg/L		
		Sulfate	***4,900***		***5,000***				µg/L		
		Total phosphates (as P)	80		<10				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	3.4	<10	10				µg/L		
Radionuclides											
		Gross alpha	1.2E+00	*8.7E-01*	*-4.0E-02*				pCi/L		
		Nonvolatile beta	3.0E+00	*5.9E-01*	*-2.5E-01*				pCi/L		
		Radium, total alpha-emitting	1.1E+00	2.0E+00	1.5E+00				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
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WELL ASB 2CR

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N105540.2 E52862.7	33.345430 °N 81.732661 °W	183.1-173.1 ft msl	355.6 ft msl	4" PVC	S	LL

SAMPLE DATE	08/19/96	01/22/97				
FIELD DATA						
Parameter	3Q96	1Q97	3Q97	1Q98		Unit
Water elevation	223.0	222.5				ft msl
pH	6.0	5.8				pH
Sp. conductance	70	74				µS/cm
Water temperature	25.0	25.0				°C
Alkalinity as $CaCO_3$	1	22				mg/L
Turbidity	1	3				NTU
Volume purged	4.1	3.2				well volume
Sampling code						
Synchronous water level	223.9 (09/16/96)	221.1 (03/19/97)				ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	34	52					µg/L		
		Cyanide	<10	<5.0					µg/L		
		Lead, total recoverable	1.5	<5.0					µg/L		
		Nickel, total recoverable	<10	<5.0					µg/L		
		Selenium, total recoverable	<5.0	<5.0					µg/L		
Organics											
		Chlorobenzene	<0.25	<1.4					µg/L		
		1,1-Dichloroethane	<0.25	<2.5					µg/L		
		1,1-Dichloroethylene	<0.25	<3.2					µg/L		
		trans-1,2-Dichloroethylene		<3.2					µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<0.25	<1.5					µg/L		
		Tetrachloroethylene	***13***	***15***					µg/L		
		1,1,1-Trichloroethane	<0.25	<2.5					µg/L		
		Trichloroethylene	***110***	***130***					µg/L		

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	75	52					µg/L		
		Chloride	***8,800***						µg/L		
		Chromium, total recoverable	2.1	<3.0					µg/L		
		Cobalt, total recoverable	0.61	<5.0					µg/L		
		Copper, total recoverable	<1.6	<4.0					µg/L		
		Fluoride	<100						µg/L		
		Manganese, total recoverable	16	13					µg/L		
		Mercury, total recoverable	0.025	<0.20					µg/L		
		Nitrate-nitrite as nitrogen	1,300						µg/L		
		Sodium, total recoverable	2,500	***6,200***					µg/L		
		Sulfate	370						µg/L		
		Total phosphates (as P)	<50						µg/L		
		Uranium, total recoverable	<20						µg/L		
		Zinc, total recoverable	9.9	<10					µg/L		
Radionuclides											
		Gross alpha	1.4E+00	1.1E+00					pCi/L		
		Nonvolatile beta	*1.1E+00*	*1.6E+00*					pCi/L		
		Radium, total alpha-emitting	*3.0E-01*	1.1E+00					pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL ASB 3AR

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N105605.1 E53115.0	33.345985 °N 81.732123 °W	243.1-223.1 ft msl	341.6 ft msl	4" PVC	S	M

SAMPLE DATE	07/09/96	01/24/97	08/04/97			
FIELD DATA						
Parameter	3Q96	1Q97	3Q97	1Q98		Unit
Water elevation	239.4	238.5	237.3			ft msl
pH	5.6	5.0	5.2			pH
Sp. conductance	54	58	54			µS/cm
Water temperature	25.0	22.0	20.0			°C
Alkalinity as $CaCO_3$	7	18	2			mg/L
Turbidity	4	2	3			NTU
Volume purged	4.4	6.7	5.5			well volume
Sampling code						
Synchronous water level	239.1 (09/16/96)	238.3 (03/19/97)	236.9 (09/18/97)			ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	20	17	6.7				µg/L		
		Cyanide	<10	<5.0	<5.0				µg/L		
		Lead, total recoverable	1.7	<5.0	<5.0				µg/L		
		Nickel, total recoverable	<10	<5.0	<5.0				µg/L		
		Selenium, total recoverable	2.4	5.1	<5.0				µg/L		
Organics											
		Chlorobenzene	<0.050	<1.4					µg/L		
		1,1-Dichloroethane	<0.050	<2.5					µg/L		
		1,1-Dichloroethylene	<0.050	<3.2					µg/L		
		trans-1,2-Dichloroethylene	<2.0	<3.2					µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<0.050	<1.5					µg/L		
		Tetrachloroethylene	0.14	<1.9					µg/L		
		1,1,1-Trichloroethane	<0.050	<2.5					µg/L		
		Trichloroethylene	<0.050	<3.0					µg/L		

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<20	***100***	20				µg/L		
		Chloride	***4,600***		***4,500***				µg/L		
		Chromium, total recoverable	0.90	<3.0	<3.0				µg/L		
		Cobalt, total recoverable	0.66	<5.0	<5.0				µg/L		
		Copper, total recoverable	40	<3.0	<3.0				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	1.4	<3.0	<3.0				µg/L		
		Mercury, total recoverable	0.098	<0.20	<0.20				µg/L		
		Nitrate-nitrite as nitrogen	460		580				µg/L		
		Sodium, total recoverable	***11,000***	***12,000***	***11,000***				µg/L		
		Sulfate	***5,200***		***4,900***				µg/L		
		Total phosphates (as P)	<50		<10				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	29	<10	9.7				µg/L		
Radionuclides											
		Gross alpha	*-1.1E-01*	1.1E+00	*3.2E-01*				pCi/L		
		Nonvolatile beta	*8.9E-01*	*1.3E+00*	*-1.1E+00*				pCi/L		
		Radium, total alpha-emitting	*1.0E-01*	4.6E-01	9.0E-01				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL ASB 3CR

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N105614.5 E53130.4	33.346031 °N 81.732101 °W	184.0-174.0 ft msl	341.5 ft msl	4" PVC	S	LL

SAMPLE DATE	08/19/96	01/22/97

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	221.9	221.7			ft msl
pH	5.4	5.0			pH
Sp. conductance	44	50			µS/cm
Water temperature	25.0	23.0			°C
Alkalinity as $CaCO_3$	1	2			mg/L
Turbidity	1	1			NTU
Volume purged	5.3	5.1			well volume
Sampling code					
Synchronous water level	223.9 (09/16/96)	220.3 (03/19/97)			ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	670	630					µg/L		
		Cyanide	<10	<5.0					µg/L		
		Lead, total recoverable	<5.0	<5.0					µg/L		
		Nickel, total recoverable	<10	<5.0					µg/L		
		Selenium, total recoverable	<5.0	<5.0					µg/L		
Organics											
		Chlorobenzene	<0.25	<1.4					µg/L		
		1,1-Dichloroethane	<0.25	<2.5					µg/L		
		1,1-Dichloroethylene	<0.25	<3.2					µg/L		
		trans-1,2-Dichloroethylene		<3.2					µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<0.25	<1.5					µg/L		
		Tetrachloroethylene	***7.7***	***9.4***					µg/L		
		1,1,1-Trichloroethane	<0.25	<2.5					µg/L		
		Trichloroethylene	***130***	***120***					µg/L		

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<20	22					µg/L		
		Chloride	***7,800***						µg/L		
		Chromium, total recoverable	1.9	<3.0					µg/L		
		Cobalt, total recoverable	<4.0	<5.0					µg/L		
		Copper, total recoverable	<3.8	<4.0					µg/L		
		Fluoride	<100						µg/L		
		Manganese, total recoverable	2.2	<3.0					µg/L		
		Mercury, total recoverable	0.076	<0.20					µg/L		
		Nitrate-nitrite as nitrogen	740						µg/L		
		Sodium, total recoverable	4,200	***4,800***					µg/L		
		Sulfate	590						µg/L		
		Total phosphates (as P)	<50						µg/L		
		Uranium, total recoverable	<20						µg/L		
		Zinc, total recoverable	7.1	<10					µg/L		
Radionuclides											
		Gross alpha	9.7E-01	1.2E+00					pCi/L		
		Nonvolatile beta	*1.2E+00*	*3.0E+00*					pCi/L		
		Radium, total alpha-emitting	4.0E-01	1.5E+00					pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL ASB 4

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N105935.7 E53177.2	33.346818 °N 81.732602 °W	256.1-226.1 ft msl	335.6 ft msl	4" PVC	S	M

SAMPLE DATE	07/09/96	01/24/97	08/04/97	03/05/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	238.7	237.9	236.5	235.8	ft msl
pH	5.4	5.0	5.6	5.5	pH
Sp. conductance	46	56	62	56	µS/cm
Water temperature	26.0	22.0	21.0	18.7	°C
Alkalinity as $CaCO_3$	20	3	26	9	mg/L
Turbidity	81	11	26	5	NTU
Volume purged	3.5	8.1	0.15	4.4	well volume
Sampling code		X			
Synchronous water level	238.5 (09/16/96)	237.7 (03/19/97)	236.5 (09/18/97)	236.4 (03/20/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	15	7.3	7.1	5.1	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	10	<5.0	<5.0	<47	1		µg/L	WA	0
		Nickel, total recoverable	5.0	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<0.050	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<0.050	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<0.050	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<0.050	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<0.11	<1.9	2.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<0.050	<2.5	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	1.9	<3.0	1.0	<5.0	1		µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	***640***	***270***	57				µg/L		
		Chloride	3,000		***5,500***				µg/L		
		Chromium, total recoverable	13	<3.0	1.7				µg/L		
		Cobalt, total recoverable	0.61	<5.0	<5.0				µg/L		
		Copper, total recoverable	13	<3.0	93				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	33	3.6	***78***				µg/L		
		Mercury, total recoverable	0.24	<0.20	<0.20				µg/L		
		Nitrate-nitrite as nitrogen	990		900				µg/L		
		Sodium, total recoverable	***9,200***	***10,000***	***11,000***				µg/L		
		Sulfate	***4,600***		***5,100***				µg/L		
		Total phosphates (as P)	<50		6.0				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	68	<10	18				µg/L		
Radionuclides											
		Gross alpha	***1.9E+01***	*9.9E-01*	*4.1E-01*				pCi/L		
		Nonvolatile beta	***5.4E+02***	*1.7E+00*	*3.0E-01*				pCi/L		
		Radium, total alpha-emitting	***5.3E+00***	1.2E+00	1.1E+00				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix.A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL ASB 5AR

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N105900.5 E52854.4	33.346213 °N 81.733384 °W	243.8-223.8 ft msl	347 ft msl	4" PVC	S	M

SAMPLE DATE	08/20/96	01/23/97	08/28/97	03/03/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	246.1	236.3	235.0	234.1	ft msl
pH	5.2	4.6	5.8		pH
Sp. conductance	260	62	180		µS/cm
Water temperature	30.0	23.0	26.0		°C
Alkalinity as $CaCO_3$	7	14	5		mg/L
Turbidity	11	12	6		NTU
Volume purged	0.068	0.0	0.0	0.59	well volume
Sampling code	X	X	X		
Synchronous water level	237.2 (09/16/96)	236.2 (03/19/97)	234.7 (09/18/97)	234.8 (03/20/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	4.0	5.5	3.2	5.1	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	3.8	<5.0	<5.0	<47	1		µg/L	WA	0
		Nickel, total recoverable	4.6	7.6	<5.0	4.2	1	JE	µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	5.2	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<0.25	<7.0	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<0.25	<13	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<0.25	<16	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene		<16	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<0.25	<7.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	0.35	<9.5	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<0.25	<13	<5.0	<5.0	1		µg/L	WA	0
■		Trichloroethylene	***200***	***590***	***91***	***93***	1		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<44	***780***	38				µg/L		
		Chloride	***4,500***		***4,500***				µg/L		
		Chromium, total recoverable	1.1	4.4	0.90				µg/L		
		Cobalt, total recoverable	<4.0	<5.0	<5.0				µg/L		
		Copper, total recoverable	14	<4.0	<3.0				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	5.8	7.0	4.5				µg/L		
		Mercury, total recoverable	0.29	<0.20	<0.20				µg/L		
		Nitrate-nitrite as nitrogen	520		460				µg/L		
		Sodium, total recoverable	***11,000***	***10,000***	***11,000***				µg/L		
		Sulfate	***6,100***		***8,100***				µg/L		
		Total phosphates (as P)	<50		<10				µg/L		
		Uranium, total recoverable	20		<0.10				µg/L		
		Zinc, total recoverable	13	<10	24				µg/L		
Radionuclides											
		Gross alpha	*6.7E-01*	*1.4E+00*	*4.0E-01*				pCi/L		
		Nonvolatile beta	*5.7E-01*	*1.2E+00*	*-1.2E+00*				pCi/L		
		Radium, total alpha-emitting	*1.0E-01*	3.1E+00	1.5E+00				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL ASB 5C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N105884.8 E52837.8	33.346151 °N 81.733397 °W	175.1-165.1 ft msl	347.3 ft msl	4" PVC	S	LL

SAMPLE DATE	08/19/96	01/23/97	08/14/97	03/04/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	223.1	221.1	219.5	218.6	ft msl
pH	5.4	5.2	5.2	5.8	pH
Sp. conductance	38	42	40	50	µS/cm
Water temperature	27.0	23.0	20.8	16.0	°C
Alkalinity as $CaCO_3$	1	12	11	84	mg/L
Turbidity	1	1	1	1	NTU
Volume purged	4.9	2.8	2.5	3.1	well volume
Sampling code					
Synchronous water level	224.0 (09/16/96)	220.6 (03/19/97)	218.8 (09/18/97)	219.1 (03/20/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	7.5	8.3	8.5	13	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<10	1		µg/L	EX	0
		Lead, total recoverable	***22***	<5.0	6.1	<5.0	1		µg/L	EX	0
		Nickel, total recoverable	<10	<5.0	<5.0	<20	1		µg/L	EX	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<10	1		µg/L	EX	0
Organics											
		Chlorobenzene	<1.0	<7.0	<25	<5.0	1	J1	µg/L	EX	0
		1,1-Dichloroethane	<1.0	<13	<25	<5.0	1	J1	µg/L	EX	0
		1,1-Dichloroethylene	<1.0	<16	<25	<5.0	1	J1	µg/L	EX	0
		trans-1,2-Dichloroethylene		<16	<25	<5.0	1	J1	µg/L	EX	0
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<1.0	<7.5	<25	<5.0	1	J1	µg/L	EX	0
	■	Tetrachloroethylene	***93***	***100***	***86***	***100***	2		µg/L	WA	2
		1,1,1-Trichloroethane	<1.0	<13	<25	<5.0	1	J1	µg/L	EX	0
	■	Trichloroethylene	***400***	***400***	***310***	***290***	2		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<20	<20	7.2				µg/L		
		Chloride	***4,300***		3,300				µg/L		
		Chromium, total recoverable	<4.0	<3.0	0.70				µg/L		
		Cobalt, total recoverable	0.19	<5.0	<5.0				µg/L		
		Copper, total recoverable	<4.5	<4.0	43				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	7.1	6.7	7.5				µg/L		
		Mercury, total recoverable	0.23	<0.20	<0.20				µg/L		
		Nitrate-nitrite as nitrogen	1,200		1,500				µg/L		
		Sodium, total recoverable	2,400	2,500	2,200				µg/L		
		Sulfate	<240		<5,000				µg/L		
		Total phosphates (as P)	<50		<10				µg/L		
		Uranium, total recoverable	<20		0.031				µg/L		
		Zinc, total recoverable	8.7	<10	34				µg/L		
Radionuclides											
		Gross alpha	*4.4E-01*	1.4E+00	*-1.3E-01*				pCi/L		
		Nonvolatile beta	1.2E+00	*1.9E+00*	*1.0E+00*				pCi/L		
		Radium, total alpha-emitting	*3.0E-01*	7.5E-01	*2.9E+00*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL ASB 6A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N105716.0 E52675.9	33.345513 °N 81.733495 °W	248.2-218.2 ft msl	350.2 ft msl	4" PVC	S	M

SAMPLE DATE	08/09/96	01/24/97	08/04/97

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	248.5	236.3	238.0		ft msl
pH	7.6	5.0	5.4		pH
Sp. conductance	70	74	60		µS/cm
Water temperature	26.0	22.0	21.0		°C
Alkalinity as $CaCO_3$	28	10	27		mg/L
Turbidity	30	2	3		NTU
Volume purged	3.4	8.8	3.9		well volume
Sampling code					
Synchronous water level	236.8 (09/16/96)	238.1 (03/20/97)	236.2 (09/18/97)		ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	3.1	2.4	7.5				µg/L		
		Cyanide	<10	<5.0	<5.0				µg/L		
		Lead, total recoverable	<5.0	<5.0	<5.0				µg/L		
		Nickel, total recoverable	16	<5.0	<5.0				µg/L		
		Selenium, total recoverable	<5.0	<5.0	<5.0				µg/L		
Organics											
		Chlorobenzene	<0.050	<1.4	<5.0				µg/L		
		1,1-Dichloroethane	<0.050	<2.5	<5.0				µg/L		
		1,1-Dichloroethylene	<0.050	<3.2	<5.0				µg/L		
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<0.050	<1.5	<5.0				µg/L		
		Tetrachloroethylene	1.6	<1.9	<5.0				µg/L		
		1,1,1-Trichloroethane	<0.050	<2.5	<5.0				µg/L		
		Trichloroethylene	1.2	<3.0	<5.0				µg/L		

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	***120***	***140***	15				µg/L		
		Chloride	***5,500***		***5,100***				µg/L		
		Chromium, total recoverable	26	6.5	5.3				µg/L		
		Cobalt, total recoverable	0.65	<5.0	<5.0				µg/L		
		Copper, total recoverable	2.5	<3.0	<3.0				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	14	9.1	4.8				µg/L		
		Mercury, total recoverable	0.042	<0.20	<0.20				µg/L		
		Nitrate-nitrite as nitrogen	2,000		240				µg/L		
		Sodium, total recoverable	***15,000***	***14,000***	***12,000***				µg/L		
		Sulfate	***7,500***		***5,000***				µg/L		
		Total phosphates (as P)	<50		7.0				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	5.0	<10	<10				µg/L		
Radionuclides											
		Gross alpha	2.0E+00	3.7E+00	*3.7E-01*				pCi/L		
		Nonvolatile beta	*9.4E-01*	2.0E+01	*-1.2E+00*				pCi/L		
		Radium, total alpha-emitting	4.0E-01	1.5E+00	1.4E+00				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL ASB 6AA

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N105727.0 E52643.9	33.345485 °N 81.733601 °W	82.8-78.1 ft msl	354.2 ft msl	4" PVC	S	MCBC

SAMPLE DATE	08/20/96	01/23/97	08/14/97	03/04/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	219.1	217.0	215.0	214.6	ft msl
pH	10.4	10.2	9.6	9.4	pH
Sp. conductance	180	100	100	130	µS/cm
Water temperature	27.0	23.0	21.9	16.0	°C
Alkalinity as $CaCO_3$	122	54	42	59	mg/L
Turbidity	1	1	1	0	NTU
Volume purged	3.3	2.5	2.6	3.5	well volume
Sampling code					
Synchronous water level	219.4 (09/16/96)	216.4 (03/19/97)	214.6 (09/18/97)	215.2 (03/20/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	14	11	12	13	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<10	1		µg/L	EX	0
		Lead, total recoverable	4.8	<5.0	<5.0	<5.0	1		µg/L	EX	0
		Nickel, total recoverable	<10	<5.0	<5.0	7.3	1	JE	µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	4.3	<10	1		µg/L	EX	0
Organics											
		Chlorobenzene	<0.050	<35	<100	<25	5		µg/L	EX	0
		1,1-Dichloroethane	<0.050	<63	<100	<25	5		µg/L	EX	0
		1,1-Dichloroethylene	0.13	<80	<100	<25	5		µg/L	EX	0
		trans-1,2-Dichloroethylene		<80	<100	<25	5		µg/L	EX	0
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<0.050	<38	<100	<25	5		µg/L	EX	0
	■	Tetrachloroethylene	***19***	<48	***32***	***17***	5	JE	µg/L	EX	2
		1,1,1-Trichloroethane	<0.050	<63	<100	<25	5		µg/L	EX	0
	■	Trichloroethylene	***3,200***	***3,000***	***6,100***	***2,700***	5	L	µg/L	EX	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	***280***	***260***	***260***				µg/L		
		Chloride	2,200		2,300				µg/L		
		Chromium, total recoverable	1.2	<3.0	0.60				µg/L		
		Cobalt, total recoverable	0.29	<5.0	<5.0				µg/L		
		Copper, total recoverable	2.1	<4.0	<3.0				µg/L		
		Fluoride	100		<100				µg/L		
		Manganese, total recoverable	6.9	5.5	5.9				µg/L		
		Mercury, total recoverable	0.14	<0.20	<0.20				µg/L		
		Nitrate-nitrite as nitrogen	1,600		1,700				µg/L		
		Sodium, total recoverable	3,500	3,100	3,200				µg/L		
		Sulfate	460		<5,000				µg/L		
		Total phosphates (as P)	18		<10				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	9.0	<10	15				µg/L		
Radionuclides											
		Gross alpha	*-2.1E-01*	*2.3E-01*	*1.4E+00*				pCi/L		
		Nonvolatile beta	2.5E+00	*2.1E+00*	*1.2E+00*				pCi/L		
		Radium, total alpha-emitting	3.1E-01	9.1E-01	*1.8E+00*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL ASB 6C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N105736.8 E52655.9	33.345527 °N 81.733588 °W	178.5-173.8 ft msl	353.6 ft msl	4" PVC	S	LL

SAMPLE DATE	08/19/96	01/24/97	08/14/97	03/04/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	224.6	222.3	220.8	220.0	ft msl
pH	5.0	4.6	4.2	4.2	pH
Sp. conductance	34	36	30	32	µS/cm
Water temperature	26.0	25.0	21.0	16.0	°C
Alkalinity as $CaCO_3$	1	2	0	1	mg/L
Turbidity	1	2	1	1	NTU
Volume purged	5.6	4.5	3.0	3.5	well volume
Sampling code					
Synchronous water level	225.4 (09/16/96)	221.8 (03/19/97)	220.1 (09/18/97)	220.4 (03/20/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	10	11	10	10	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<10	1		µg/L	EX	0
		Lead, total recoverable	1.7	6.2	4.9	3.0	1	JE	µg/L	EX	0
		Nickel, total recoverable	<10	<5.0	<5.0	<20	1		µg/L	EX	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<10	1		µg/L	EX	0
Organics											
		Chlorobenzene	<0.10	<1.4	<5.0	<5.0	1	J1	µg/L	EX	0
		1,1-Dichloroethane	<0.10	<2.0	<5.0	<5.0	1	J1	µg/L	EX	0
		1,1-Dichloroethylene	<0.10	<2.0	<5.0	<5.0	1	J1	µg/L	EX	0
		trans-1,2-Dichloroethylene		<2.0	<5.0	<5.0	1	J1	µg/L	EX	0
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<0.10	<1.5	<5.0	<5.0	1	J1	µg/L	EX	0
■		Tetrachloroethylene	***36***	***43***	***35***	***43***	1		µg/L	WA	2
		1,1,1-Trichloroethane	<0.10	<2.0	<5.0	<5.0	1	J1	µg/L	EX	0
■		Trichloroethylene	***29***	***46***	***39***	***52***	1		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<20	78	23				µg/L		
		Chloride	***5,500***		***5,100***				µg/L		
		Chromium, total recoverable	0.73	<3.0	1.0				µg/L		
		Cobalt, total recoverable	0.41	<5.0	<5.0				µg/L		
		Copper, total recoverable	11	48	13				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	15	16	14				µg/L		
		Mercury, total recoverable	0.13	<0.20	0.13				µg/L		
		Nitrate-nitrite as nitrogen	700		740				µg/L		
		Sodium, total recoverable	2,500	2,900	2,400				µg/L		
		Sulfate	<210		<5,000				µg/L		
		Total phosphates (as P)	<50		<10				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	18	35	36				µg/L		
Radionuclides											
		Gross alpha	6.8E-01	2.7E+00	*8.2E-01*				pCi/L		
		Nonvolatile beta	1.4E+00	1.4E+01	*8.8E-01*				pCi/L		
		Radium, total alpha-emitting	6.0E-01	3.2E+00	*4.7E+00*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL ASB 6TA

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N105749.5 E52671.3	33.345580 °N 81.733573 °W	40.0-34.5 ft msl	352.9 ft msl	4" PVC	S	CBA

SAMPLE DATE: 08/20/96 | 01/23/97 | 08/14/97 | 03/04/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	214.7	212.6	210.4	210.6	ft msl
pH	5.0	9.0	4.8		pH
Sp. conductance	220	92	94		µS/cm
Water temperature	26.0	23.0	22.4		°C
Alkalinity as $CaCO_3$	16	28	4		mg/L
Turbidity	2	3	1		NTU
Volume purged	0.017	0.0	0.0	0.28	well volume
Sampling code	X	X	X	X	
Synchronous water level	215.3 (09/16/96)	211.9 (03/19/97)	210.1 (09/18/97)	211.3 (03/20/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	20	17	18	18	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0	4.5	<47	1		µg/L	WA	0
		Nickel, total recoverable	<10	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<14	<50	<25	5		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<25	<50	<25	5		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<32	<50	<25	5		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<32	<50				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<15	<50	<25	5		µg/L	WA	0
		Tetrachloroethylene	***6.4***	<19	<50	<25	5		µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<25	<50	<25	5		µg/L	WA	0
	■	Trichloroethylene	***670***	***910***	***770***	***660***	5		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	***130***	***210***	88				µg/L		
		Chloride	1,800		2,000				µg/L		
		Chromium, total recoverable	8.7	4.9	5.9				µg/L		
		Cobalt, total recoverable	<4.0	<5.0	<5.0				µg/L		
		Copper, total recoverable	0.85	<4.0	4.1				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	<0.88	<3.0	1.2				µg/L		
		Mercury, total recoverable	0.053	<0.20	<0.20				µg/L		
		Nitrate-nitrite as nitrogen	1,300		1,700				µg/L		
		Sodium, total recoverable	***7,600***	***5,700***	***6,500***				µg/L		
		Sulfate	***3,400***		2,600				µg/L		
		Total phosphates (as P)	<50		<10				µg/L		
		Uranium, total recoverable	<20		0.079				µg/L		
		Zinc, total recoverable	<5.0	<10	15				µg/L		
Radionuclides											
		Gross alpha	*7.8E-01*	*9.4E-01*	*-1.1E+00*				pCi/L		
		Nonvolatile beta	5.6E+00	*4.3E+00*	5.2E+00				pCi/L		
		Radium, total alpha-emitting	3.0E-01	*4.1E-01*	*3.1E+00*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL ASB 8

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N106381.6 E53136.6	33.347737 °N 81.733577 °W	226.6-206.6 ft msl	349 ft msl	4" PVC	S	UL

SAMPLE DATE	07/09/96	03/03/97	08/13/97	03/05/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	235.2	234.0	232.4	231.1	ft msl
pH	4.6	4.8	5.0	4.6	pH
Sp. conductance	40	32	46	37	µS/cm
Water temperature	25.0	24.0	22.0	17.8	°C
Alkalinity as $CaCO_3$	1	1	22	2	mg/L
Turbidity	2	11	3	4	NTU
Volume purged	3.7	11	3.0	6.0	well volume
Sampling code					
Synchronous water level	234.9 (09/16/96)	233.6 (03/19/97)	232.0 (09/15/97)	231.1 (03/17/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	1.2	<2.0	8.4	2.1	1		µg/L	WA	0
		Cyanide	<1.6	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	13	<5.0	***18***	4.8	1	JE	µg/L	WA	0
		Nickel, total recoverable	<10	5.4	<5.0	7.4	1	JE	µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<0.050	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<0.050	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<0.050	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<0.050	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	0.23	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<0.050	<2.5	<5.0	<5.0	1		µg/L	WA	0
	■	Trichloroethylene	1.4	3.1	<5.0	***7.1***	1		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<36	***100***	<20				µg/L		
		Chloride	2,800		2,000				µg/L		
		Chromium, total recoverable	<1.1	9.2	0.80				µg/L		
		Cobalt, total recoverable	<1.1	<5.0	<5.0				µg/L		
		Copper, total recoverable	100	10	11				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	0.29	<3.0	14				µg/L		
		Mercury, total recoverable	0.25	<0.20	<0.20				µg/L		
		Nitrate-nitrite as nitrogen	810		1,400				µg/L		
		Sodium, total recoverable	***6,100***	***5,800***	1,400				µg/L		
		Sulfate	***4,600***		<5,000				µg/L		
		Total phosphates (as P)	<50		<10				µg/L		
		Uranium, total recoverable	<20		0.023				µg/L		
		Zinc, total recoverable	21	<10	16				µg/L		
Radionuclides											
		Gross alpha	1.9E+00	*-6.0E-03*	1.8E+00				pCi/L		
		Nonvolatile beta	2.1E+00	*7.0E-02*	2.9E+00				pCi/L		
		Radium, total alpha-emitting	6.0E-01	*4.7E-01*	*2.1E+00*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL ASB 8B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N106362.3 E53109.6	33.347650 °N 81.733611 °W	128.4-122.8 ft msl	349.8 ft msl	4" PVC	S	MCBC

SAMPLE DATE	08/22/96	01/27/97	08/13/97	02/23/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	221.4	218.8	214.9	215.1	ft msl
pH	5.0	4.8	4.6	4.6	pH
Sp. conductance	34	30	28	32	µS/cm
Water temperature	22.0	23.0	20.0	16.0	°C
Alkalinity as $CaCO_3$	0	1	0	0	mg/L
Turbidity	1	2	0	1	NTU
Volume purged	2.7	3.3	2.3	3.2	well volume
Sampling code					
Synchronous water level	221.8 (09/16/96)	216.5 (03/19/97)	214.0 (09/15/97)	214.0 (03/17/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	6.8	5.9	5.5	5.1	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	2.7	<5.0	4.7	<47	1		µg/L	WA	0
		Nickel, total recoverable	2.1	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<5.0	<35	<100	<50	10		µg/L	WA	0
		1,1-Dichloroethane	<5.0	<63	<100	<50	10		µg/L	WA	0
		1,1-Dichloroethylene	<5.0	<80	<100	<50	10		µg/L	WA	0
		trans-1,2-Dichloroethylene		<80	<100				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<5.0	<38	<100	<50	10		µg/L	WA	0
		Tetrachloroethylene	***7.0***	<48	<100	<50	10		µg/L	WA	0
		1,1,1-Trichloroethane	<5.0	<63	<100	<50	10		µg/L	WA	0
	■	Trichloroethylene	***1,900***	***2,200***	***2,300***	***1,300***	10		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	28	<20	<20				µg/L		
		Chloride	2,400		2,100				µg/L		
		Chromium, total recoverable	<4.0	<3.0	<3.0				µg/L		
		Cobalt, total recoverable	<4.0	<5.0	<5.0				µg/L		
		Copper, total recoverable	3.2	<3.0	<3.0				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	3.5	3.2	2.7				µg/L		
		Mercury, total recoverable	0.078	<0.20	<0.20				µg/L		
		Nitrate-nitrite as nitrogen	1,100		2,200				µg/L		
		Sodium, total recoverable	2,500	2,700	2,500				µg/L		
		Sulfate	160		<5,000				µg/L		
		Total phosphates (as P)	<50		<10				µg/L		
		Uranium, total recoverable	<7.9		<0.10				µg/L		
		Zinc, total recoverable	<5.0	<10	9.8				µg/L		
Radionuclides											
		Gross alpha	1.2E+00	1.5E+00	2.3E+00				pCi/L		
		Nonvolatile beta	1.5E+00	*3.4E+00*	*1.4E+00*				pCi/L		
		Radium, total alpha-emitting	8.0E-01	2.5E+00	*2.4E+00*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL ASB 8C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N106354.4 E53101.0	33.347619 °N 81.733618 °W	188.3-182.7 ft msl	349.7 ft msl	4" PVC	S	UL

SAMPLE DATE	08/22/96	01/27/97	08/13/97	02/23/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	224.7	218.7	217.8	217.5	ft msl
pH	5.0	5.0	4.6	4.8	pH
Sp. conductance	50	38	32	38	µS/cm
Water temperature	21.0	25.0	19.2	16.0	°C
Alkalinity as $CaCO_3$	0	2	1	0	mg/L
Turbidity	2	0	1	1	NTU
Volume purged	3.3	6.8	3.3	12	well volume
Sampling code					
Synchronous water level	225.0 (09/16/96)	218.9 (03/19/97)	217.2 (09/15/97)	216.8 (03/17/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	12	11	9.3	8.5	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	2.3	<5.0	5.5	<47	1		µg/L	WA	0
		Nickel, total recoverable	3.0	<5.0	4.3	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<0.050	<140	<500	<250	50		µg/L	WA	0
		1,1-Dichloroethane	<0.050	<250	<500	<250	50		µg/L	WA	0
		1,1-Dichloroethylene	0.27	<320	<500	<250	50		µg/L	WA	0
		trans-1,2-Dichloroethylene		<320	<500				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<0.050	<150	<500	<250	50		µg/L	WA	0
		Tetrachloroethylene	<50	<190	<500	<250	50		µg/L	WA	0
		1,1,1-Trichloroethane	<0.050	<250	<500	<250	50		µg/L	WA	0
	■	Trichloroethylene	***11,000***	***13,000***	***8,100***	***8,300***	50		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	44	<20	<20				µg/L		
		Chloride	***6,800***		***4,300***				µg/L		
		Chromium, total recoverable	5.0	<3.0	8.2				µg/L		
		Cobalt, total recoverable	0.20	<5.0	<5.0				µg/L		
		Copper, total recoverable	7.6	<3.0	<3.0				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	5.7	4.2	4.6				µg/L		
		Mercury, total recoverable	***2.7***	1.4	0.98				µg/L		
		Nitrate-nitrite as nitrogen	1,000		2,100				µg/L		
		Sodium, total recoverable	4,500	4,000	3,400				µg/L		
		Sulfate	150		<5,000				µg/L		
		Total phosphates (as P)	230		<10				µg/L		
		Uranium, total recoverable	<15		0.081				µg/L		
		Zinc, total recoverable	<5.0	<10	9.0				µg/L		
Radionuclides											
		Gross alpha	2.3E+00	2.4E+00	9.7E+00				pCi/L		
		Nonvolatile beta	3.5E+00	*2.4E+00*	1.1E+01				pCi/L		
		Radium, total alpha-emitting	1.2E+00	4.5E+00	*2.7E+00*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL ASB 8TA

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N106375.8 E53124.7	33.347705 °N 81.733597 °W	24.6-19.4 ft msl	349.6 ft msl	4" CS	S	CBA

SAMPLE DATE	07/10/96	01/25/97	08/13/97	03/05/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	216.0	214.3	212.5	213.0	ft msl
pH	5.0	4.6	4.4	4.2	pH
Sp. conductance	24	20	22	17	µS/cm
Water temperature	25.0	22.0	20.0	18.0	°C
Alkalinity as $CaCO_3$	1	1	1	2	mg/L
Turbidity	3	1	7	9	NTU
Volume purged	2.5	3.0	2.5	2.5	well volume
Sampling code					
Synchronous water level	217.1 (09/16/96)	214.3 (03/19/97)	211.8 (09/15/97)	212.0 (03/17/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	9.5	9.3	8.3	7.7	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	***22***	8.0	***19***	9.9	1	JE	µg/L	WA	0
		Nickel, total recoverable	28	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	2.2	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<0.050	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<0.050	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<0.050	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<0.050	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<0.050	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<0.050	<2.5	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	<0.050	<3.0	<5.0	<5.0	1		µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	31	***430***	<20				µg/L		
		Chloride	2,500		1,900				µg/L		
		Chromium, total recoverable	27	<3.0	<3.0				µg/L		
		Cobalt, total recoverable	0.92	<5.0	<5.0				µg/L		
		Copper, total recoverable	21	7.7	17				µg/L		
		Fluoride	<16		<100				µg/L		
		Manganese, total recoverable	22	9.9	13				µg/L		
		Mercury, total recoverable	0.13	<0.20	<0.20				µg/L		
		Nitrate-nitrite as nitrogen	1,400		1,300				µg/L		
		Sodium, total recoverable	1,600	1,500	1,500				µg/L		
		Sulfate	320		<5,000				µg/L		
		Total phosphates (as P)	7.0		<10				µg/L		
		Uranium, total recoverable	12		0.027				µg/L		
		Zinc, total recoverable	8.6	<10	14				µg/L		
Radionuclides											
		Gross alpha	1.8E+00	*3.9E-01*	1.3E+00				pCi/L		
		Nonvolatile beta	1.8E+00	*9.1E-01*	*5.0E-01*				pCi/L		
		Radium, total alpha-emitting	1.3E+00	9.5E-01	*2.2E+00*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL ASB 9B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N104564.7 E54215.3	33.345482 °N 81.727201 °W	164.4-158.8 ft msl	309 ft msl	4" PVC	S	LL

SAMPLE DATE	08/20/96	01/24/97	08/14/97

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	221.3	219.7	218.2		ft msl
pH	6.6	5.8	8.8		pH
Sp. conductance	86	80	100		µS/cm
Water temperature	25.0	24.0	22.0		°C
Alkalinity as $CaCO_3$	22		57		mg/L
Turbidity	1	1	1		NTU
Volume purged	3.7	4.3	2.3		well volume
Sampling code					
Synchronous water level	( )	219.1 (03/17/97)	217.3 (09/15/97)		ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	42	46	64	46	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0	<5.0	<47	1		µg/L	WA	0
		Nickel, total recoverable	<10	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<0.050	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<0.050	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<0.050	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene		<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<0.050	<1.5	<5.0	<5.0	1		µg/L	WA	0
	■	Tetrachloroethylene	***33***	***26***	***14***	***7.5***	1		µg/L	WA	2
		1,1,1-Trichloroethane	<0.050	<2.5	<5.0	<5.0	1		µg/L	WA	0
	■	Trichloroethylene	***37***	***31***	***15***	***7.2***	1		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<25	33	36				µg/L		
		Chloride	3,800		3,800				µg/L		
		Chromium, total recoverable	<4.0	<3.0	0.90				µg/L		
		Cobalt, total recoverable	<4.0	<5.0	<5.0				µg/L		
		Copper, total recoverable	1.7	<3.0	<3.0				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	2.8	<3.0	2.1				µg/L		
		Mercury, total recoverable	0.058	<0.20	<0.20				µg/L		
		Nitrate-nitrite as nitrogen	1,200		830				µg/L		
		Sodium, total recoverable	2,500	3,300	2,500				µg/L		
		Sulfate	120		<5,000				µg/L		
		Total phosphates (as P)	<50		11				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	<5.0	<10	9.8				µg/L		
Radionuclides											
		Gross alpha	1.8E+00	1.4E+00	6.9E+00				pCi/L		
		Nonvolatile beta	*9.4E-01*	*1.6E+00*	3.9E+00				pCi/L		
		Radium, total alpha-emitting	9.0E-01	3.3E+00	***1.2E+01***				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL ASB 9C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N104568.1 E54201.1	33.345466 °N 81.727245 °W	182.9-178.2 ft msl	309.9 ft msl	4" PVC	S	UL

SAMPLE DATE	08/19/96	01/24/97	08/14/97	03/03/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	221.2	219.9	218.6	218.1	ft msl
pH	5.3	4.4	4.6	6.0	pH
Sp. conductance	34	36	32	66	µS/cm
Water temperature	27.0	24.0	19.5	16.0	°C
Alkalinity as $CaCO_3$	1	2	7	19	mg/L
Turbidity	1	1	1	1	NTU
Volume purged	3.1	5.0	2.6	3.2	well volume
Sampling code					
Synchronous water level	( )	219.4 (03/17/97)	217.6 (09/15/97)	217.7 (03/18/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	24	15	24	42	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0	<5.0	<47	1		µg/L	WA	0
		Nickel, total recoverable	<10	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene		<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane		<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene		<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene		<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane		<1.5	<5.0	<5.0	1		µg/L	WA	0
	■	Tetrachloroethylene		***17***	***9.6***	***13***	1		µg/L	WA	2
		1,1,1-Trichloroethane		<2.5	<5.0	<5.0	1		µg/L	WA	0
	■	Trichloroethylene		***18***	***12***	***12***	1		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<20	<20	14				µg/L		
		Chloride	***4,300***		4,200				µg/L		
		Chromium, total recoverable	<4.0	<3.0	<3.0				µg/L		
		Cobalt, total recoverable	<4.0	<5.0	<5.0				µg/L		
		Copper, total recoverable	<2.4	<3.0	<3.0				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	6.6	4.9	5.1				µg/L		
		Mercury, total recoverable	<0.20	<0.20	<0.20				µg/L		
		Nitrate-nitrite as nitrogen	900		1,000				µg/L		
		Sodium, total recoverable	2,800	2,900	2,700				µg/L		
		Sulfate	150		<5,000				µg/L		
		Total phosphates (as P)	<50		<10				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	8.5	<10	9.4				µg/L		
Radionuclides											
		Gross alpha	1.6E+00	*4.7E-01*	1.1E+00				pCi/L		
		Nonvolatile beta	*1.5E+00*	*-1.0E+00*	*-9.0E-02*				pCi/L		
		Radium, total alpha-emitting	7.0E-01	1.0E+00	*1.4E+00*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL ASB 10CR

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N105655.4 E52969.7	33.345859 °N 81.732604 °W	181.7-171.7 ft msl	349.2 ft msl	4" PVC	S	LL

SAMPLE DATE	08/19/96	01/22/97

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	223.3	221.9			ft msl
pH	5.2	4.6			pH
Sp. conductance	48	40			µS/cm
Water temperature	25.0	24.0			°C
Alkalinity as $CaCO_3$	1	1			mg/L
Turbidity	1	1			NTU
Volume purged	4.1	3.4			well volume
Sampling code					
Synchronous water level	224.1 (09/16/96)	220.7 (03/19/97)			ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	0.098	8.7					µg/L		
		Cyanide	<10	<5.0					µg/L		
		Lead, total recoverable	<5.0	<5.0					µg/L		
		Nickel, total recoverable	<10	<5.0					µg/L		
		Selenium, total recoverable	<5.0	<5.0					µg/L		
Organics											
		Chlorobenzene	<1.0	<1.4					µg/L		
		1,1-Dichloroethane	<1.0	<2.5					µg/L		
		1,1-Dichloroethylene	<1.0	<3.2					µg/L		
		trans-1,2-Dichloroethylene		<3.2					µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<1.0	<1.5					µg/L		
		Tetrachloroethylene	***18***	***19***					µg/L		
		1,1,1-Trichloroethane	<1.0	<2.5					µg/L		
		Trichloroethylene	***410***	***490***					µg/L		

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<20	66					µg/L		
		Chloride	***10,000***						µg/L		
		Chromium, total recoverable	<4.0	3.9					µg/L		
		Cobalt, total recoverable	<4.0	<5.0					µg/L		
		Copper, total recoverable	<0.95	<4.0					µg/L		
		Fluoride	<100						µg/L		
		Manganese, total recoverable	<1.1	3.1					µg/L		
		Mercury, total recoverable	0.58	<0.20					µg/L		
		Nitrate-nitrite as nitrogen	1,400						µg/L		
		Sodium, total recoverable	***39,000***	***5,100***					µg/L		
		Sulfate	***12,000***						µg/L		
		Total phosphates (as P)	<50						µg/L		
		Uranium, total recoverable	<20						µg/L		
		Zinc, total recoverable	<5.0	<10					µg/L		
Radionuclides											
		Gross alpha	1.0E+00	1.3E+00					pCi/L		
		Nonvolatile beta	*1.2E+00*	*3.8E+00*					pCi/L		
		Radium, total alpha-emitting	9.0E-01	1.4E+00					pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MCB 5C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N97315.1 E44862.8	33.314183 °N 81.737726 °W	161.2-156.2 ft msl	339.1 ft msl	4" PVC	V	UL

SAMPLE DATE	08/15/96	02/07/97	08/12/97	02/20/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	195.0	194.1	193.2	193.4	ft msl
pH	6.6	7.2	6.6	6.3	pH
Sp. conductance	80	100	100	90	µS/cm
Water temperature	23.0	23.0	22.0	19.5	°C
Alkalinity as $CaCO_3$	6	37	27	12	mg/L
Turbidity	4	0	3	1	NTU
Volume purged	2.4	3.0	2.4	2.4	well volume
Sampling code					
Synchronous water level	195.1 (09/17/96)	194.2 (03/20/97)	192.9 (09/17/97)	193.3 (03/17/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	31	41	32	35	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0	<5.0	<47	1		µg/L	WA	0
		Nickel, total recoverable	3.2	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<10	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<10	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<10	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<10	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<10	<1.5	<5.0	<5.0	1		µg/L	WA	0
	■	Tetrachloroethylene	***85***	***79***	***79***	***85***	1		µg/L	WA	2
		1,1,1-Trichloroethane	<10	<2.5	<5.0	<5.0	1		µg/L	WA	0
	■	Trichloroethylene	***88***	***89***	***79***	***83***	1		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	***130***		67				µg/L		
		Chloride	2,900		2,900				µg/L		
		Chromium, total recoverable	0.62		1.3				µg/L		
		Cobalt, total recoverable	<0.56		<5.0				µg/L		
		Copper, total recoverable	4.1		<3.0				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	8.5		7.3				µg/L		
		Mercury, total recoverable	0.10		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	***4,200***		***4,300***				µg/L		
		Sodium, total recoverable	***6,200***		***5,100***				µg/L		
		Sulfate	880		<5,000				µg/L		
		Total phosphates (as P)	160		76				µg/L		
		Uranium, total recoverable	<20		0.026				µg/L		
		Zinc, total recoverable	6.7		12				µg/L		
Radionuclides											
		Gross alpha	1.6E+00		3.5E+00				pCi/L		
		Nonvolatile beta	5.1E+00		4.3E+00				pCi/L		
		Radium, total alpha-emitting	*2.0E-01*		*2.2E+00*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix.A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MCB 6C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N97413.1 E45207.7	33.314963 °N 81.737009 °W	170.0-165.0 ft msl	332.1 ft msl	4" PVC	S	UL

SAMPLE DATE	08/16/96	02/04/97	07/28/97	03/04/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	195.7	194.7	194.0	194.0	ft msl
pH	6.0	5.4	9.0	7.8	pH
Sp. conductance	52	48	94	50	µS/cm
Water temperature	22.0	23.0	19.9	19.0	°C
Alkalinity as $CaCO_3$	32	18	42	16	mg/L
Turbidity	5	3	3	2	NTU
Volume purged	3.2	6.9	2.3	3.0	well volume
Sampling code					
Synchronous water level	195.7 (09/17/96)	194.9 (03/20/97)	193.5 (09/17/97)	193.9 (03/17/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	43	27	38	41	1		µg/L	WA	0
		Cyanide	<10	<5.0	<2.5	<15	1		µg/L	WA	0
		Lead, total recoverable	1.6	<5.0	<5.0	<47	1		µg/L	WA	0
		Nickel, total recoverable	3.2	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	1.0	<1.9	0.70	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	3.8	3.9	4.3	3.1	1	JE	µg/L	WA	1

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	***110***		64				µg/L		
		Chloride	2,700		2,400				µg/L		
		Chromium, total recoverable	2.0		<3.0				µg/L		
		Cobalt, total recoverable	0.68		<5.0				µg/L		
		Copper, total recoverable	4.2		<3.0				µg/L		
		Fluoride	<15		<100				µg/L		
		Manganese, total recoverable	26		6.5				µg/L		
		Mercury, total recoverable	0.061		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	1,100		960				µg/L		
		Sodium, total recoverable	***6,200***		3,100				µg/L		
		Sulfate	2,600		2,500				µg/L		
		Total phosphates (as P)	16		<50				µg/L		
		Uranium, total recoverable	<13		<0.10				µg/L		
		Zinc, total recoverable	11		20				µg/L		
Radionuclides											
		Gross alpha	2.1E+00		5.0E-02				pCi/L		
		Nonvolatile beta	3.3E+00		*2.2E-01*				pCi/L		
		Radium, total alpha-emitting	4.5E-01		*5.4E-01*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MCB 7C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N97139.9 E44870.6	33.313808 °N 81.737365 °W	160.7-155.7 ft msl	337.7 ft msl	4" PVC	S	UL

SAMPLE DATE	08/15/96	02/04/97	07/28/97	03/04/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	194.1	193.0	192.4	192.5	ft msl
pH	11.6	11.8	11.0		pH
Sp. conductance	2000	2600	960		µS/cm
Water temperature	23.0	23.0	20.3		°C
Alkalinity as $CaCO_3$	508	606	221		mg/L
Turbidity	2	8	10		NTU
Volume purged	0.040	0.0	0.0	0.95	well volume
Sampling code	X	X	X		
Synchronous water level	194.0 (09/17/96)	193.4 (03/20/97)	192.0 (09/17/97)	192.5 (03/17/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	76	68	28	120	1		µg/L	WA	0
		Cyanide	<10	<5.0	<2.5	<15	1		µg/L	WA	0
		Lead, total recoverable	1.6	<5.0	<5.0	<47	1		µg/L	WA	0
		Nickel, total recoverable	<2.1	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
	■	Tetrachloroethylene	***6.4***	***19***	***9.0***	***7.1***	1		µg/L	WA	2
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
	■	Trichloroethylene	***37***	***48***	***45***	***61***	1		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	***4,100***		***2,700***				µg/L		
		Chloride	2,100		2,400				µg/L		
		Chromium, total recoverable	2.9		1.7				µg/L		
		Cobalt, total recoverable	0.60		<5.0				µg/L		
		Copper, total recoverable	1.2		<3.0				µg/L		
		Fluoride	310		<100				µg/L		
		Manganese, total recoverable	<0.48		0.40				µg/L		
		Mercury, total recoverable	<0.20		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	180		***2,700***				µg/L		
		Sodium, total recoverable	***8,600***		***4,900***				µg/L		
		Sulfate	2,800		1,900				µg/L		
		Total phosphates (as P)	<50		<50				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	<5.0		12				µg/L		
Radionuclides											
		Gross alpha	*6.0E-01*		1.2E+00				pCi/L		
		Nonvolatile beta	7.4E+00		*3.9E-01*				pCi/L		
		Radium, total alpha-emitting	*2.0E-01*						pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
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■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 9A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N102236.7 E48242.5	33.330582 °N 81.738401 °W	144.2-139.2 ft msl	359.1 ft msl	4" PVC	S	LL

SAMPLE DATE	07/15/96	01/14/97	08/04/97	03/03/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	208.5	206.7	206.0	206.2	ft msl
pH	6.4	5.6	5.6	5.2	pH
Sp. conductance	40	42	38	29	µS/cm
Water temperature	26.0	19.0	19.8	17.6	°C
Alkalinity as $CaCO_3$	5	19	10	8	mg/L
Turbidity	7	11	3	2	NTU
Volume purged	8.3	3.0	2.4	3.2	well volume
Sampling code					
Synchronous water level	213.3 (09/18/96)	206.2 (03/18/97)	205.4 (09/17/97)	210.0 (03/19/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	4.4	6.3		4.0	1	JE	µg/L	EX	0
		Cyanide	<10	<5.0	<5.0	<10	1		µg/L	EX	0
		Lead, total recoverable	13	***26***		6.4	1		µg/L	EX	0
		Nickel, total recoverable	1.0	6.5		3.5	1	JE	µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0		<10	1		µg/L	EX	0
Organics											
		Chlorobenzene	<20	<28		<5.0	1		µg/L	EX	0
		1,1-Dichloroethane	<20	<50		<5.0	1		µg/L	EX	0
		1,1-Dichloroethylene	<20	<64		<5.0	1		µg/L	EX	0
		trans-1,2-Dichloroethylene	<20	<64		10	1	J2	µg/L	EX	0
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<20	<30		<5.0	1		µg/L	EX	0
	■	Tetrachloroethylene	***93***	***970***		***1,100***	50	J	µg/L	EX	2
		1,1,1-Trichloroethane	<20	<50		<5.0	1		µg/L	EX	0
	■	Trichloroethylene	***160***	***750***		***940***	10		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	***120***						µg/L		
		Chloride	2,000		2,400				µg/L		
		Chromium, total recoverable	2.7						µg/L		
		Cobalt, total recoverable	<0.71						µg/L		
		Copper, total recoverable	<3.6						µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	5.0						µg/L		
		Mercury, total recoverable	<0.20		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	490		350				µg/L		
		Sodium, total recoverable	1,500						µg/L		
		Sulfate	340		<5,000				µg/L		
		Total phosphates (as P)	<50		5.0				µg/L		
		Uranium, total recoverable	<6.1						µg/L		
		Zinc, total recoverable	***6,300***						µg/L		
Radionuclides											
		Gross alpha	1.6E+00		*3.1E-01*				pCi/L		
		Nonvolatile beta	*1.2E+00*		*-1.5E+00*				pCi/L		
		Radium, total alpha-emitting	6.0E-01		*4.5E-01*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 9C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N102245.6 E48273.0	33.330651 °N 81.738338 °W	241.6-221.6 ft msl	359.6 ft msl	4" PVC	S	M

SAMPLE DATE	07/15/96			03/05/98	
FIELD DATA					
Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	230.8				ft msl
pH	5.0				pH
Sp. conductance	150				µS/cm
Water temperature	26.0				°C
Alkalinity as $CaCO_3$	0				mg/L
Turbidity	1				NTU
Volume purged	6.2				well volume
Sampling code					
Synchronous water level	230.8 (09/18/96)				ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	44						µg/L		
		Cyanide	<10						µg/L		
		Lead, total recoverable	2.7						µg/L		
		Nickel, total recoverable	15						µg/L		
		Selenium, total recoverable	<5.0						µg/L		
Organics											
		Chlorobenzene	<2,000						µg/L		
		1,1-Dichloroethane	<2,000						µg/L		
		1,1-Dichloroethylene	<2,000						µg/L		
		trans-1,2-Dichloroethylene	<2,000						µg/L		
		PCB 1016	<6.3						µg/L		
		PCB 1221	<6.3						µg/L		
		PCB 1232	<6.3						µg/L		
		PCB 1242	<6.3						µg/L		
		PCB 1248	<6.3						µg/L		
		PCB 1254	<6.3						µg/L		
		PCB 1260	<6.3						µg/L		
		1,1,2,2-Tetrachloroethane	<2,000						µg/L		
		Tetrachloroethylene	***17,000***						µg/L		
		1,1,1-Trichloroethane	<2,000						µg/L		
		Trichloroethylene	***4,400***						µg/L		

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	***2,500***						µg/L		
		Chloride	2,600						µg/L		
		Chromium, total recoverable	1.4						µg/L		
		Cobalt, total recoverable	***5.8***						µg/L		
		Copper, total recoverable	16						µg/L		
		Fluoride	160						µg/L		
		Manganese, total recoverable	***150***						µg/L		
		Mercury, total recoverable	0.019						µg/L		
		Nitrate-nitrite as nitrogen	***13,000***						µg/L		
		Sodium, total recoverable	4,600						µg/L		
		Sulfate	<1,000						µg/L		
		Total phosphates (as P)	<50						µg/L		
		Uranium, total recoverable	<20						µg/L		
		Zinc, total recoverable	25						µg/L		
Radionuclides											
		Gross alpha	***1.0E+02***						pCi/L		
		Nonvolatile beta	4.5E+01						pCi/L		
		Radium, total alpha-emitting	***4.4E+01***						pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 10A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N102451.8 E47954.4	33.330587 °N 81.739578 °W	125.2-120.2 ft msl	357.2 ft msl	4" PVC	S	MCBC

SAMPLE DATE	08/13/96	01/14/97	08/06/97	02/11/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	210.9	207.9	207.1	209.1	ft msl
pH	5.2	4.6	4.0	5.6	pH
Sp. conductance	20	20	22	22	µS/cm
Water temperature	24.0	20.0	19.0	18.0	°C
Alkalinity as $CaCO_3$	1	4	1	8	mg/L
Turbidity	1	2	1	1	NTU
Volume purged	3.3	2.2	2.3	2.9	well volume
Sampling code					
Synchronous water level	212.9 (09/18/96)	207.3 (03/18/97)	206.4 (09/17/97)	209.5 (03/19/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	6.0	6.5	6.1	4.3	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0	7.1	<47	1		µg/L	WA	0
		Nickel, total recoverable	2.7	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	2.3	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
	■	Tetrachloroethylene	***8.8***	***24***	***20***	***14***	1		µg/L	WA	2
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
	■	Trichloroethylene	***62***	***87***	***61***	***65***	1		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<20		<20				µg/L		
		Chloride	2,500		2,300				µg/L		
		Chromium, total recoverable	2.2		1.2				µg/L		
		Cobalt, total recoverable	<4.0		<5.0				µg/L		
		Copper, total recoverable	2.7		1.6				µg/L		
		Fluoride	<20		<100				µg/L		
		Manganese, total recoverable	3.5		1.7				µg/L		
		Mercury, total recoverable	<0.20		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	550		360				µg/L		
		Sodium, total recoverable	2,000		1,500				µg/L		
		Sulfate	560		<5,000				µg/L		
		Total phosphates (as P)	16		<10				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	17		22				µg/L		
Radionuclides											
		Gross alpha	2.0E+00		*9.1E-01*				pCi/L		
		Nonvolatile beta	3.5E+00		*1.6E+00*				pCi/L		
		Radium, total alpha-emitting	4.0E-01		1.5E+00				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 10B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N102488.2 E47943.1	33.330649 °N 81.739679 °W	157.4-152.4 ft msl	357.6 ft msl	4" PVC	S	LL

SAMPLE DATE	07/11/96	01/02/97	08/05/97	02/24/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	212.5	211.7	209.5	215.1	ft msl
pH	4.8	4.8	5.0	5.2	pH
Sp. conductance	32	32	36	40	µS/cm
Water temperature	27.0	20.0	21.0	19.0	°C
Alkalinity as $CaCO_3$	0	1	3	1	mg/L
Turbidity	3	2	1	2	NTU
Volume purged	2.5	2.7	2.3	1.8	well volume
Sampling code					
Synchronous water level	213.9 (09/18/96)	210.6 (03/18/97)	209.4 (09/17/97)	211.9 (03/19/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	11	11	11	11	1		µg/L	WA	0
		Cyanide	7.4	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0	<5.0	<47	1		µg/L	WA	0
		Nickel, total recoverable	<10	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	1.6	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<2.0	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	3.3	3.9	3.9	4.4	1	JE	µg/L	WA	1

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	38		<20				µg/L		
		Chloride	1,900		2,100				µg/L		
		Chromium, total recoverable	2.9		3.2				µg/L		
		Cobalt, total recoverable	<1.2		<5.0				µg/L		
		Copper, total recoverable	4.9		4.7				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	5.8		6.0				µg/L		
		Mercury, total recoverable	0.025		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	160		70				µg/L		
		Sodium, total recoverable	2,300		2,500				µg/L		
		Sulfate	***7,800***		***8,200***				µg/L		
		Total phosphates (as P)	<50		<10				µg/L		
		Uranium, total recoverable	<9.7		0.032				µg/L		
		Zinc, total recoverable	17		27				µg/L		
Radionuclides											
		Gross alpha	*1.5E-02*		*-1.7E-01*				pCi/L		
		Nonvolatile beta	*8.1E-01*		*-1.5E+00*				pCi/L		
		Radium, total alpha-emitting	*0.0E+00*		9.2E-01				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
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WELL MSB 11C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N102658.6 E48579.4	33.332065 °N 81.738335 °W	182.9-177.9 ft msl	365.5 ft msl	4" PVC	S	UL

SAMPLE DATE	08/01/96	01/14/97	08/04/97

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	220.7	218.7	217.6		ft msl
pH	4.6	4.4	4.2		pH
Sp. conductance	140	140	160		µS/cm
Water temperature	24.0	21.0	20.4		°C
Alkalinity as $CaCO_3$	0	0	0		mg/L
Turbidity	1	1	1		NTU
Volume purged	6.4	3.3	3.3		well volume
Sampling code					
Synchronous water level	221.8 (09/18/96)	218.4 (03/18/97)	216.9 (09/17/97)		ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	40	41		47	1	V	µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0		<47	1		µg/L	WA	0
		Nickel, total recoverable	3.1	<5.0		<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0		<66	1		µg/L	WA	0
Organics											
●		Chlorobenzene	<5.0	<700		<1,300	250	J	µg/L	WA	0
●		1,1-Dichloroethane	<5.0	<1,300		<1,300	250	J	µg/L	WA	0
●		1,1-Dichloroethylene	***160***	<1,600		<1,300	250	J	µg/L	WA	0
		trans-1,2-Dichloroethylene	<50	<1,600					µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
●		1,1,2,2-Tetrachloroethane	<5.0	<750		<1,300	250	J	µg/L	WA	0
●		Tetrachloroethylene	***53***	<950		<1,300	250	J	µg/L	WA	0
●		1,1,1-Trichloroethane	<5.0	<1,300		<1,300	250	J	µg/L	WA	0
●	■	Trichloroethylene	***110,000***	***73,000***		***49,000***	250	J	µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	***130***						µg/L		
		Chloride	3,700		3,100				µg/L		
		Chromium, total recoverable	7.4						µg/L		
		Cobalt, total recoverable	2.9						µg/L		
		Copper, total recoverable	1.9						µg/L		
		Fluoride	<37						µg/L		
		Manganese, total recoverable	24						µg/L		
		Mercury, total recoverable	1.7		0.85				µg/L		
		Nitrate-nitrite as nitrogen	***17,000***		***17,000***				µg/L		
		Sodium, total recoverable	***8,100***						µg/L		
		Sulfate	260		<5,000				µg/L		
		Total phosphates (as P)	<50		<10				µg/L		
		Uranium, total recoverable	<12						µg/L		
		Zinc, total recoverable	22						µg/L		
Radionuclides											
		Gross alpha	6.4E+00		2.2E+00				pCi/L		
		Nonvolatile beta	1.1E+01		*1.1E+00*				pCi/L		
		Radium, total alpha-emitting	5.0E+00		*2.3E-01*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 11F

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N102629.3 E48577.0	33.331996 °N 81.738284 °W	243.1-223.1 ft msl	365.6 ft msl	4" PVC	S	M

SAMPLE DATE	08/01/96	01/14/97	08/04/97

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	231.4	230.3			ft msl
pH	5.4	3.8	4.4		pH
Sp. conductance	22	12	24		µS/cm
Water temperature	24.0	21.0	20.7		°C
Alkalinity as $CaCO_3$	1	0	0		mg/L
Turbidity	6	3	5		NTU
Volume purged	10	5.5			well volume
Sampling code			S		
Synchronous water level	231.0 (09/18/96)	( )	230.6 (09/17/97)		ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	2.5	2.9		5.9	1	V	µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
	■	Lead, total recoverable	<5.0	5.4		***18***	1	JE	µg/L	WA	0
		Nickel, total recoverable	<2.3	<5.0		<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0		<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<50	<1.4		<25	5		µg/L	WA	0
		1,1-Dichloroethane	<50	<2.5		<25	5		µg/L	WA	0
		1,1-Dichloroethylene	<50	<3.2		<25	5		µg/L	WA	0
		trans-1,2-Dichloroethylene	<50	<3.2					µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<50	<1.5		<25	5		µg/L	WA	0
	■	Tetrachloroethylene	***100***	***190***		***810***	5		µg/L	WA	2
		1,1,1-Trichloroethane	<50	<2.5		<25	5		µg/L	WA	0
	■	Trichloroethylene	***200***	***160***		***370***	5		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	57						µg/L		
		Chloride	3,200		3,100				µg/L		
		Chromium, total recoverable	2.5						µg/L		
		Cobalt, total recoverable	<0.98						µg/L		
		Copper, total recoverable	<2.3						µg/L		
		Fluoride	<100						µg/L		
		Manganese, total recoverable	12						µg/L		
		Mercury, total recoverable	<0.20						µg/L		
		Nitrate-nitrite as nitrogen	820		1,200				µg/L		
		Sodium, total recoverable	2,300						µg/L		
		Sulfate	840		<5,000				µg/L		
		Total phosphates (as P)	<50		35				µg/L		
		Uranium, total recoverable	<21						µg/L		
		Zinc, total recoverable	<9.3						µg/L		
Radionuclides											
		Gross alpha	1.5E+00		*2.6E-01*				pCi/L		
		Nonvolatile beta	2.4E+00		*-6.2E-01*				pCi/L		
		Radium, total alpha-emitting	1.1E+00		2.4E+00				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 12A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N102283.2 E47138.2	33.328881 °N 81.741400 °W	121.5-116.5 ft msl	348.9 ft msl	4" PVC	S	LL

SAMPLE DATE	07/29/96	01/15/97	08/06/97	02/05/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	207.6	138.8	205.7	207.3	ft msl
pH	5.0	4.0	4.4	4.8	pH
Sp. conductance	30	20	20	18	µS/cm
Water temperature	24.0	20.0	19.2	18.0	°C
Alkalinity as $CaCO_3$	0	1	0	0	mg/L
Turbidity	1	2	1	0	NTU
Volume purged	6.7	4.4	2.8	2.2	well volume
Sampling code					
Synchronous water level	209.8 (09/18/96)	206.2 (03/18/97)	204.4 (09/17/97)	206.1 (03/19/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	4.6	4.2		4.4	1	V	µg/L	WA	0
		Cyanide	<10	<5.0		<15	1		µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0		<47	1		µg/L	WA	0
		Nickel, total recoverable	<10	<5.0		<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0		<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<50	<14		<50	10		µg/L	WA	0
		1,1-Dichloroethane	<50	<25		<50	10		µg/L	WA	0
		1,1-Dichloroethylene	<50	<32		<50	10		µg/L	WA	0
		trans-1,2-Dichloroethylene	<50	<32					µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<50	<15		<50	10		µg/L	WA	0
		Tetrachloroethylene	<50	<19		<50	10		µg/L	WA	0
		1,1,1-Trichloroethane	<50	<25		<50	10		µg/L	WA	0
	■	Trichloroethylene	***930***	***2,100***		***1,200***	10		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	35						µg/L		
		Chloride	2,100						µg/L		
		Chromium, total recoverable	1.7						µg/L		
		Cobalt, total recoverable	1.5						µg/L		
		Copper, total recoverable	4.0						µg/L		
		Fluoride	<100						µg/L		
		Manganese, total recoverable	3.9						µg/L		
		Mercury, total recoverable	<0.20						µg/L		
		Nitrate-nitrite as nitrogen	1,100						µg/L		
		Sodium, total recoverable	1,500						µg/L		
		Sulfate	640						µg/L		
		Total phosphates (as P)	<50						µg/L		
		Uranium, total recoverable	<20						µg/L		
		Zinc, total recoverable	17						µg/L		
Radionuclides											
		Gross alpha	1.3E+00						pCi/L		
		Nonvolatile beta	*8.9E-01*						pCi/L		
		Radium, total alpha-emitting	*1.0E-01*						pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 12B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N102251.8 E47139.6	33.328814 °N 81.741335 °W	162.2-157.2 ft msl	349.5 ft msl	4" PVC	S	UL

SAMPLE DATE	07/29/96	01/15/97	08/12/97	02/05/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	218.0	216.9	215.8	215.8	ft msl
pH	4.8	4.2	4.4	4.2	pH
Sp. conductance	160	100	100	120	µS/cm
Water temperature	24.0	21.0	19.0	18.0	°C
Alkalinity as $CaCO_3$	0	1	0	0	mg/L
Turbidity	5	2	3	1	NTU
Volume purged	4.9	3.0	3.1	5.2	well volume
Sampling code					
Synchronous water level	218.1 (09/18/96)	216.5 (03/18/97)	214.9 (09/17/97)	215.1 (03/19/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	20	21	24	24	1	V	µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	2.8	<5.0	5.2	<47	1		µg/L	WA	0
		Nickel, total recoverable	<10	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<1,000	<280	<1,000	<500	100		µg/L	WA	0
		1,1-Dichloroethane	<1,000	<500	<1,000	<500	100		µg/L	WA	0
		1,1-Dichloroethylene	<1,000	<640	<1,000	<500	100		µg/L	WA	0
		trans-1,2-Dichloroethylene	<1,000	<640	<1,000				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<1,000	<300	<1,000	<500	100		µg/L	WA	0
	■	Tetrachloroethylene	***14,000***	***20,000***	***17,000***	***16,000***	100		µg/L	WA	2
		1,1,1-Trichloroethane	<1,000	<500	<1,000	<500	100		µg/L	WA	0
	■	Trichloroethylene	***17,000***	***21,000***	***19,000***	***17,000***	100		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	95		40				µg/L		
		Chloride	3,500		3,200				µg/L		
		Chromium, total recoverable	0.79		0.80				µg/L		
		Cobalt, total recoverable	1.4		<5.0				µg/L		
		Copper, total recoverable	8.6		6.8				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	7.5		9.4				µg/L		
		Mercury, total recoverable	0.41		0.11				µg/L		
		Nitrate-nitrite as nitrogen	***13,000***		***12,000***				µg/L		
		Sodium, total recoverable	***14,000***		***11,000***				µg/L		
		Sulfate	250		<5,000				µg/L		
		Total phosphates (as P)	<50		<10				µg/L		
		Uranium, total recoverable	<20		0.028				µg/L		
		Zinc, total recoverable	22		19				µg/L		
Radionuclides											
		Gross alpha	6.1E+00		5.5E+00				pCi/L		
		Nonvolatile beta	7.6E+00		9.5E+00				pCi/L		
		Radium, total alpha-emitting	3.0E+00		*4.9E+00*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
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WELL MSB 12TA

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N102266.7 E47127.3	33.328827 °N 81.741396 °W	(102.8)-(112.8) ft msl	348.9 ft msl	4" Steel	S	CBA

SAMPLE DATE	07/24/96	01/02/97	08/05/97	02/24/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	192.1	192.8	194.2	191.0	ft msl
pH	5.2	5.2	6.0	6.0	pH
Sp. conductance	32	32	34	40	µS/cm
Water temperature	26.0	21.0	22.0	18.0	°C
Alkalinity as $CaCO_3$	9	50	23	14	mg/L
Turbidity	19	1	1	1	NTU
Volume purged	2.1	2.3	2.2	2.2	well volume
Sampling code					
Synchronous water level	193.2 (09/18/96)	190.8 (03/18/97)	189.0 (09/17/97)	190.4 (03/19/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	13	11	11	13	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
	■	Lead, total recoverable	5.7	<5.0	3.9	***55***	1		µg/L	WA	2
		Nickel, total recoverable	1.3	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<2.0	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	<2.0	<3.0	<5.0	<5.0	1		µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<56		<20				µg/L		
		Chloride	2,300		1,900				µg/L		
		Chromium, total recoverable	1.5		0.60				µg/L		
		Cobalt, total recoverable	<1.2		<5.0				µg/L		
		Copper, total recoverable	17		1.9				µg/L		
		Fluoride	<14		<100				µg/L		
		Manganese, total recoverable	2.1		1.3				µg/L		
		Mercury, total recoverable	<0.20		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	370		35				µg/L		
		Sodium, total recoverable	1,300		1,200				µg/L		
		Sulfate	880		<5,000				µg/L		
		Total phosphates (as P)	10		<10				µg/L		
		Uranium, total recoverable	<20		0.053				µg/L		
		Zinc, total recoverable	19		11				µg/L		
Radionuclides											
		Gross alpha	9.0E+00		*1.7E-01*				pCi/L		
		Nonvolatile beta	4.9E+00		*5.4E-01*				pCi/L		
		Radium, total alpha-emitting	1.2E+00		9.4E-01				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
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WELL MSB 13B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N101735.7 E47523.5	33.328300 °N 81.739320 °W	177.5-172.5 ft msl	347.1 ft msl	4" PVC	S	UL

SAMPLE DATE 08/08/96

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	224.5				ft msl
pH	11.4				pH
Sp. conductance	4000				µS/cm
Water temperature	26.0				°C
Alkalinity as $CaCO_3$	785				mg/L
Turbidity	4				NTU
Volume purged	0.029				well volume
Sampling code	X				
Synchronous water level	187.8 (09/18/96)				ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable									
		Cyanide									
		Lead, total recoverable									
		Nickel, total recoverable									
		Selenium, total recoverable									
Organics											
		Chlorobenzene									
		1,1-Dichloroethane									
		1,1-Dichloroethylene									
		trans-1,2-Dichloroethylene									
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane									
		Tetrachloroethylene									
		1,1,1-Trichloroethane									
		Trichloroethylene									

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable									
		Chloride									
		Chromium, total recoverable									
		Cobalt, total recoverable									
		Copper, total recoverable									
		Fluoride									
		Manganese, total recoverable									
		Mercury, total recoverable									
		Nitrate-nitrite as nitrogen									
		Sodium, total recoverable									
		Sulfate									
		Total phosphates (as P)									
		Uranium, total recoverable									
		Zinc, total recoverable									
Radionuclides											
		Gross alpha									
		Nonvolatile beta									
		Radium, total alpha-emitting									

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 14A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N101629.5 E48521.9	33.329696 °N 81.736484 °W	164.6-144.6 ft msl	348.7 ft msl	4" PVC	S	LL

SAMPLE DATE	07/18/96	03/04/97	09/09/97

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	215.6	214.1	213.1		ft msl
pH	5.8	4.4	4.6		pH
Sp. conductance	200	180	140		µS/cm
Water temperature	25.0	25.0	20.0		°C
Alkalinity as $CaCO_3$	0	1	0		mg/L
Turbidity	1	1	1		NTU
Volume purged	4.0	2.7	2.6		well volume
Sampling code					
Synchronous water level	217.2 (09/18/96)	214.1 (03/19/97)	213.0 (09/17/97)		ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	46	47	43	43	1	V	µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	<5.0	8.2	6.0	<47	1		µg/L	WA	0
		Nickel, total recoverable	1.4	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	1.6	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<500	<70	<250	<100	20		µg/L	WA	0
		1,1-Dichloroethane	<500	<130	<250	<100	20		µg/L	WA	0
		1,1-Dichloroethylene	<500	<160	<250	<100	20		µg/L	WA	0
		trans-1,2-Dichloroethylene	<500	<160	<250				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<500	<75	<250	<100	20		µg/L	WA	0
	■	Tetrachloroethylene	***2,400***	***2,000***	***1,900***	***1,200***	20		µg/L	WA	2
		1,1,1-Trichloroethane	<500	<130	<250	<100	20		µg/L	WA	0
	■	Trichloroethylene	***3,200***	***2,700***	***2,700***	***2,200***	20		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<20		33				µg/L		
		Chloride	3,900		4,200				µg/L		
		Chromium, total recoverable	0.70		0.90				µg/L		
		Cobalt, total recoverable	<0.98		<5.0				µg/L		
		Copper, total recoverable	<3.9		<3.0				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	13		11				µg/L		
		Mercury, total recoverable	0.12		0.11				µg/L		
		Nitrate-nitrite as nitrogen	***18,000***		***19,000***				µg/L		
		Sodium, total recoverable	***17,000***		***17,000***				µg/L		
		Sulfate	120		<5,000				µg/L		
		Total phosphates (as P)	60		<10				µg/L		
		Uranium, total recoverable	14		<0.10				µg/L		
		Zinc, total recoverable	3.2		15				µg/L		
Radionuclides											
		Gross alpha	1.2E+01		3.7E+00				pCi/L		
		Nonvolatile beta	8.9E+00		3.7E+00				pCi/L		
		Radium, total alpha-emitting	2.4E+00		*5.1E+00*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 15A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N102983.5 E48827.0	33.333187 °N 81.738315 °W	167.8-162.8 ft msl	367.7 ft msl	3.75" PVC	S	UL

SAMPLE DATE	08/21/96		08/05/97	02/10/98	
FIELD DATA					
Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	220.8		217.7	217.2	ft msl
pH	6.4		6.0	6.0	pH
Sp. conductance	64		52	54	µS/cm
Water temperature	21.0		21.1	20.0	°C
Alkalinity as $CaCO_3$	15		21	17	mg/L
Turbidity	14		4	1	NTU
Volume purged	0.72		2.6	3.2	well volume
Sampling code					
Synchronous water level	221.1 (09/18/96)		217.0 (09/17/97)	217.1 (03/19/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	18		11	9.6	1		µg/L	WA	0
		Cyanide	<10		<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	9.1		12	<47	1		µg/L	WA	0
		Nickel, total recoverable	<2.4		<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0		<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<200		<500	<250	50		µg/L	WA	0
		1,1-Dichloroethane	<200		<500	<250	50		µg/L	WA	0
		1,1-Dichloroethylene	<200		<500	<250	50		µg/L	WA	0
		trans-1,2-Dichloroethylene	<200		<500				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<200		<500	<250	50		µg/L	WA	0
	■	Tetrachloroethylene	***490***		***920***	***900***	50		µg/L	WA	2
		1,1,1-Trichloroethane	<200		<500	<250	50		µg/L	WA	0
	■	Trichloroethylene	***7,100***		***8,000***	***6,700***	50		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<30		<20				µg/L		
		Chloride	2,700		2,600				µg/L		
		Chromium, total recoverable	4.6		2.6				µg/L		
		Cobalt, total recoverable	<4.0		<5.0				µg/L		
		Copper, total recoverable	4.4		<3.0				µg/L		
		Fluoride	41		<100				µg/L		
		Manganese, total recoverable	15		4.5				µg/L		
		Mercury, total recoverable	0.056		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	820		780				µg/L		
		Sodium, total recoverable	1,900		2,100				µg/L		
		Sulfate	350		<5,000				µg/L		
		Total phosphates (as P)	<50		<10				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	58		62				µg/L		
Radionuclides											
		Gross alpha	8.1E-01		*5.1E-01*				pCi/L		
		Nonvolatile beta	*1.1E+00*		*-1.1E+00*				pCi/L		
		Radium, total alpha-emitting	5.0E-01		1.2E+00				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
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WELL MSB 15AA

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N102953.2 E48818.5	33.333106 °N 81.738279 °W	147.1-142.4 ft msl	369.2 ft msl	4" PVC	S	LL

SAMPLE DATE	07/18/96	01/14/97	08/05/97	02/10/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	212.8	211.4	210.5	211.4	ft msl
pH	5.8	5.8	5.6	5.8	pH
Sp. conductance	46	34	38	54	µS/cm
Water temperature	27.0	21.0	21.1	18.0	°C
Alkalinity as $CaCO_3$	11	13	41	21	mg/L
Turbidity	1	2	1	1	NTU
Volume purged	4.8	2.8	2.3	3.0	well volume
Sampling code					
Synchronous water level	214.5 (09/18/96)	211.2 (03/18/97)	209.6 (09/17/97)	210.9 (03/19/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	13	12	15	16	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0	<5.0	<47	1		µg/L	WA	0
		Nickel, total recoverable	<10	<5.0	<5.0	6.8	1	JE	µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<40	<7.0	<25	<10	2		µg/L	WA	0
		1,1-Dichloroethane	<40	<13	<25	<10	2		µg/L	WA	0
		1,1-Dichloroethylene	<40	<16	<25	<10	2		µg/L	WA	0
		trans-1,2-Dichloroethylene	<40	<16	<25				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<40	<7.5	<25	<10	2		µg/L	WA	0
■		Tetrachloroethylene	<40	***12***	***9.6***	***12***	2		µg/L	WA	2
		1,1,1-Trichloroethane	<40	<13	<25	<10	2		µg/L	WA	0
■		Trichloroethylene	***220***	***250***	***270***	***260***	2		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<20		<20				µg/L		
		Chloride	1,800		2,000				µg/L		
		Chromium, total recoverable	1.7		1.9				µg/L		
		Cobalt, total recoverable	<1.1		<5.0				µg/L		
		Copper, total recoverable	<3.2		1.2				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	0.96		0.80				µg/L		
		Mercury, total recoverable	<0.20		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	450		120				µg/L		
		Sodium, total recoverable	1,800		1,600				µg/L		
		Sulfate	390		<5,000				µg/L		
		Total phosphates (as P)	150		<10				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	<5.0		14				µg/L		
Radionuclides											
		Gross alpha	*1.6E-01*		*2.4E+00*				pCi/L		
		Nonvolatile beta	1.0E+00		3.8E+00				pCi/L		
		Radium, total alpha-emitting	*1.0E-01*		*-2.5E-01*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 15C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N103002.1 E48834.0	33.333240 °N 81.738333 °W	260.6-240.6 ft msl	366.7 ft msl	3.75" PVC	B	M

SAMPLE DATE	08/16/96			03/10/98	
FIELD DATA					
Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	243.1	242.8		242.1	ft msl
pH	5.6				pH
Sp. conductance	44				µS/cm
Water temperature	22.0				°C
Alkalinity as $CaCO_3$	9				mg/L
Turbidity	38				NTU
Volume purged	0.0	0.0		1.2	well volume
Sampling code	I	L			
Synchronous water level	242.9 (09/18/96)	244.2 (03/15/97)		245.8 (03/19/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	4.8						µg/L		
		Cyanide	<10						µg/L		
		Lead, total recoverable	5.9						µg/L		
		Nickel, total recoverable	1.6						µg/L		
		Selenium, total recoverable	<5.0						µg/L		
Organics											
		Chlorobenzene	<2.0						µg/L		
		1,1-Dichloroethane	<2.0						µg/L		
		1,1-Dichloroethylene	<2.0						µg/L		
		trans-1,2-Dichloroethylene	<2.0						µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0						µg/L		
		Tetrachloroethylene	***34***						µg/L		
		1,1,1-Trichloroethane	<2.0						µg/L		
		Trichloroethylene	***530***						µg/L		

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	***130***						µg/L		
		Chloride	2,900						µg/L		
		Chromium, total recoverable	3.9						µg/L		
		Cobalt, total recoverable	0.33						µg/L		
		Copper, total recoverable	<4.8						µg/L		
		Fluoride	<100						µg/L		
		Manganese, total recoverable	5.1						µg/L		
		Mercury, total recoverable	0.33						µg/L		
		Nitrate-nitrite as nitrogen	***3,100***						µg/L		
		Sodium, total recoverable	4,200						µg/L		
		Sulfate	<330						µg/L		
		Total phosphates (as P)	<50						µg/L		
		Uranium, total recoverable	<20						µg/L		
		Zinc, total recoverable	15						µg/L		
Radionuclides											
		Gross alpha	3.7E+00						pCi/L		
		Nonvolatile beta	5.2E+00						pCi/L		
		Radium, total alpha-emitting	8.0E-01						pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 15D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N102971.2 E48827.5	33.333161 °N 81.738290 °W	241.4-221.9 ft msl	368.5 ft msl	4" PVC	S	M

SAMPLE DATE 08/22/96

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	233.5	235.4			ft msl
pH	6.6				pH
Sp. conductance	80				µS/cm
Water temperature	21.0				°C
Alkalinity as $CaCO_3$	23				mg/L
Turbidity	20				NTU
Volume purged	0.13	0.0			well volume
Sampling code	X	P			
Synchronous water level	233.6 (09/18/96)				ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	10						µg/L		
		Cyanide	<10						µg/L		
		Lead, total recoverable	5.2						µg/L		
		Nickel, total recoverable	1.9						µg/L		
		Selenium, total recoverable	<5.0						µg/L		
Organics											
		Chlorobenzene	<200						µg/L		
		1,1-Dichloroethane	<200						µg/L		
		1,1-Dichloroethylene	<200						µg/L		
		trans-1,2-Dichloroethylene	<200						µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<200						µg/L		
		Tetrachloroethylene	***260***						µg/L		
		1,1,1-Trichloroethane	<200						µg/L		
		Trichloroethylene	***4,000***						µg/L		

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	51						µg/L		
		Chloride	3,400						µg/L		
		Chromium, total recoverable	1.4						µg/L		
		Cobalt, total recoverable	0.67						µg/L		
		Copper, total recoverable	4.0						µg/L		
		Fluoride	<100						µg/L		
		Manganese, total recoverable	6.4						µg/L		
		Mercury, total recoverable	0.14						µg/L		
		Nitrate-nitrite as nitrogen	800						µg/L		
		Sodium, total recoverable	3,100						µg/L		
		Sulfate	380						µg/L		
		Total phosphates (as P)	<50						µg/L		
		Uranium, total recoverable	<20						µg/L		
		Zinc, total recoverable	4.3						µg/L		
Radionuclides											
		Gross alpha	3.5E+00						pCi/L		
		Nonvolatile beta	4.3E+00						pCi/L		
		Radium, total alpha-emitting	6.0E-01						pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
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WELL MSB 16A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N103693.9 E48965.1	33.334983 °N 81.739334 °W	166.8-161.8 ft msl	367.5 ft msl	3.75" PVC	S	UL

SAMPLE DATE	08/02/96	01/15/97	08/07/97	02/09/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	219.7	222.0	216.3	216.0	ft msl
pH	5.2	5.4	5.0	5.4	pH
Sp. conductance	28	26	30	42	µS/cm
Water temperature	26.0	23.0	20.4	16.0	°C
Alkalinity as $CaCO_3$	1	2	1	1	mg/L
Turbidity	2	4	4	2	NTU
Volume purged	3.7	3.0	2.7	3.9	well volume
Sampling code					
Synchronous water level	222.9 (09/18/96)	217.8 (03/18/97)	215.9 (09/17/97)	215.6 (03/19/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	4.2	4.7	6.3	5.0	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	6.2	<5.0	10	<47	1		µg/L	WA	0
		Nickel, total recoverable	<3.5	7.2	3.5	3.2	1	JE	µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<200	<140	<500	<50	10		µg/L	WA	0
		1,1-Dichloroethane	<200	<250	<500	<50	10		µg/L	WA	0
		1,1-Dichloroethylene	<200	<320	<500	<50	10		µg/L	WA	0
		trans-1,2-Dichloroethylene	<200	<320	<500				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<200	<150	<500	<50	10		µg/L	WA	0
	■	Tetrachloroethylene	***1,600***	***1,800***	***1,300***	***1,500***	10		µg/L	WA	2
		1,1,1-Trichloroethane	<200	<250	<500	<50	10		µg/L	WA	0
	■	Trichloroethylene	***13,000***	***17,000***	***13,000***	***10,000***	10	E	µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<23		<20				µg/L		
		Chloride	2,400		2,200				µg/L		
		Chromium, total recoverable	<4.0		1.0				µg/L		
		Cobalt, total recoverable	<4.0		<5.0				µg/L		
		Copper, total recoverable	46		40				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	<3.9		4.0				µg/L		
		Mercury, total recoverable	0.22		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	1,300		1,400				µg/L		
		Sodium, total recoverable	2,000		2,400				µg/L		
		Sulfate	190		<5,000				µg/L		
		Total phosphates (as P)	<50		<10				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	31		59				µg/L		
Radionuclides											
		Gross alpha	*5.9E-01*		*1.1E+00*				pCi/L		
		Nonvolatile beta	1.9E+00		*-1.4E-01*				pCi/L		
		Radium, total alpha-emitting	3.0E-01		6.0E-01				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 16C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N103714.1 E48970.5	33.335037 °N 81.739359 °W	244.8-224.8 ft msl	367.6 ft msl	3.75" PVC	B	M

SAMPLE DATE 08/09/96

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	231.6	230.6			ft msl
pH	6.4				pH
Sp. conductance	56				µS/cm
Water temperature	24.0				°C
Alkalinity as $CaCO_3$	32				mg/L
Turbidity	19				NTU
Volume purged	0.26				well volume
Sampling code	X	D			
Synchronous water level	231.2 (09/18/96)	230.1 (03/18/97)			ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	29						µg/L		
		Cyanide	<10						µg/L		
		Lead, total recoverable	***77***						µg/L		
		Nickel, total recoverable	24						µg/L		
		Selenium, total recoverable	<2.1						µg/L		
Organics											
		Chlorobenzene	<40						µg/L		
		1,1-Dichloroethane	<40						µg/L		
		1,1-Dichloroethylene	<40						µg/L		
		trans-1,2-Dichloroethylene	<40						µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<40						µg/L		
		Tetrachloroethylene	***2,400***						µg/L		
		1,1,1-Trichloroethane	<40						µg/L		
		Trichloroethylene	***4,000***						µg/L		

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	***150***						µg/L		
		Chloride	2,600						µg/L		
		Chromium, total recoverable	27						µg/L		
		Cobalt, total recoverable	1.7						µg/L		
		Copper, total recoverable	77						µg/L		
		Fluoride	<100						µg/L		
		Manganese, total recoverable	11						µg/L		
		Mercury, total recoverable	<0.20						µg/L		
		Nitrate-nitrite as nitrogen	960						µg/L		
		Sodium, total recoverable	2,500						µg/L		
		Sulfate									
		Total phosphates (as P)	90						µg/L		
		Uranium, total recoverable	<20						µg/L		
		Zinc, total recoverable	59						µg/L		
Radionuclides											
		Gross alpha	3.2E+00						pCi/L		
		Nonvolatile beta	4.1E+00						pCi/L		
		Radium, total alpha-emitting	5.0E-01						pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 17B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N101994.6 E46237.7	33.326772 °N 81.743209 °W	190.8-185.8 ft msl	359.2 ft msl	3.75" PVC	S	M

SAMPLE DATE 07/18/96 01/15/97 08/07/97

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	226.1	225.3	223.9		ft msl
pH	6.0	4.6	4.8		pH
Sp. conductance	100	100	100		µS/cm
Water temperature	25.0	21.0	19.0		°C
Alkalinity as $CaCO_3$	2	1	1		mg/L
Turbidity	1	1	1		NTU
Volume purged	6.4	3.0	3.0		well volume
Sampling code					
Synchronous water level	225.7 (09/18/96)	224.9 (03/18/97)	223.4 (09/17/97)		ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	35	30	34	42	1	V	µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	3.0	5.6	10	<47	1		µg/L	WA	0
		Nickel, total recoverable	1.7	5.5	2.8	3.8	1	JE	µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<1,000	<70	<250	<250	50		µg/L	WA	0
		1,1-Dichloroethane	<1,000	<130	<250	<250	50		µg/L	WA	0
		1,1-Dichloroethylene	<1,000	<160	<250	<250	50		µg/L	WA	0
		trans-1,2-Dichloroethylene	<1,000	<160	<250				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<1,000	<75	<250	<250	50		µg/L	WA	0
	■	Tetrachloroethylene	***750***	***1,100***	***950***	***770***	50		µg/L	WA	2
		1,1,1-Trichloroethane	<1,000	<130	<250	<250	50		µg/L	WA	0
	■	Trichloroethylene	***5,100***	***7,200***	***7,100***	***5,500***	50		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	72		72				µg/L		
		Chloride	3,200		3,300				µg/L		
		Chromium, total recoverable	<4.0		0.80				µg/L		
		Cobalt, total recoverable	<1.5		<5.0				µg/L		
		Copper, total recoverable	<6.4		5.1				µg/L		
		Fluoride	43		<100				µg/L		
		Manganese, total recoverable	9.1		8.6				µg/L		
		Mercury, total recoverable	0.22		0.19				µg/L		
		Nitrate-nitrite as nitrogen	***10,000***		***9,200***				µg/L		
		Sodium, total recoverable	***12,000***		***10,000***				µg/L		
		Sulfate	<1,000		<5,000				µg/L		
		Total phosphates (as P)	100		7.0				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	6.3		20				µg/L		
Radionuclides											
		Gross alpha	1.0E+01		4.8E+00				pCi/L		
		Nonvolatile beta	6.5E+00		*3.9E+00*				pCi/L		
		Radium, total alpha-emitting	5.0E+00		4.8E+00				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 17BB

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N102009.5 E46220.8	33.326778 °N 81.743283 °W	137.3-132.6 ft msl	359 ft msl	4" PVC	S	LL

SAMPLE DATE	08/13/96	01/15/97	08/06/97
FIELD DATA			
Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	213.1	211.3	210.3		ft msl
pH	5.2	5.0	4.8		pH
Sp. conductance	100	100	90		µS/cm
Water temperature	24.0	21.0	19.4		°C
Alkalinity as $CaCO_3$	1	3	1		mg/L
Turbidity	2	4	5		NTU
Volume purged	3.1	2.5	2.8		well volume
Sampling code					
Synchronous water level	212.3 (09/18/96)	210.9 (03/18/97)	209.6 (09/17/97)		ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	37	30	28	31	1	V	µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0	<5.0	<47	1		µg/L	WA	0
		Nickel, total recoverable	<10	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	2.1	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<28	<130	<50	10		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<50	<130	<50	10		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<64	<130	<50	10		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<64	<130				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<30	<130	<50	10		µg/L	WA	0
	■	Tetrachloroethylene	***360***	***290***	***200***	***230***	10		µg/L	WA	2
		1,1,1-Trichloroethane	<2.0	<50	<130	<50	10		µg/L	WA	0
	■	Trichloroethylene	***1,300***	***1,400***	***1,100***	***1,200***	10		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	58		38				µg/L		
		Chloride	3,700		2,900				µg/L		
		Chromium, total recoverable	0.95		1.0				µg/L		
		Cobalt, total recoverable	1.2		<5.0				µg/L		
		Copper, total recoverable	3.2		3.1				µg/L		
		Fluoride	33		<100				µg/L		
		Manganese, total recoverable	13		8.4				µg/L		
		Mercury, total recoverable	<0.20		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	***12,000***		***8,600***				µg/L		
		Sodium, total recoverable	***7,300***		***5,700***				µg/L		
		Sulfate	360		<5,000				µg/L		
		Total phosphates (as P)	30		<10				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	5.5		11				µg/L		
Radionuclides											
		Gross alpha	7.4E+00		*6.8E+00*				pCi/L		
		Nonvolatile beta	7.6E+00		6.5E+00				pCi/L		
		Radium, total alpha-emitting	1.5E+00		1.7E+00				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 18A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N100416.1 E46110.4	33.323075 °N 81.740474 °W	163.9-158.9 ft msl	341.9 ft msl	3.75" PVC	S	UL

SAMPLE DATE	07/18/96	01/15/97	08/06/97

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	212.6	211.7	210.8		ft msl
pH	6.0	4.4	4.4		pH
Sp. conductance	68	48	46		µS/cm
Water temperature	26.0	21.0	19.5		°C
Alkalinity as $CaCO_3$	1	0	0		mg/L
Turbidity	2	10	2		NTU
Volume purged	4.0	2.7	3.2		well volume
Sampling code					
Synchronous water level	212.5 (09/18/96)	211.2 (03/18/97)	210.0 (09/17/97)		ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	13	15	14	15	1	V	µg/L	WA	0
		Cyanide	<1.6	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	3.4	5.7	<5.0	<47	1		µg/L	WA	0
		Nickel, total recoverable	5.1	25	4.6	4.3	1	JE	µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	1.3	1	JE	µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
	■	Tetrachloroethylene	***7.8***	***10***	***8.0***	***11***	1		µg/L	WA	2
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
	■	Trichloroethylene	***20***	***27***	***20***	***29***	1		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<20		<20				µg/L		
		Chloride	2,200		2,500				µg/L		
		Chromium, total recoverable	1.5		1.0				µg/L		
		Cobalt, total recoverable	<1.3		<5.0				µg/L		
		Copper, total recoverable	<8.3		3.8				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	15		14				µg/L		
		Mercury, total recoverable	<0.20		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	***3,400***		***4,500***				µg/L		
		Sodium, total recoverable	2,800		3,000				µg/L		
		Sulfate	390		<5,000				µg/L		
		Total phosphates (as P)	<50		<10				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	3.5		7.6				µg/L		
Radionuclides											
		Gross alpha	9.5E-01		*3.2E+00*				pCi/L		
		Nonvolatile beta	1.9E+00		3.7E+00				pCi/L		
		Radium, total alpha-emitting	*4.0E-01*		7.3E-01				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 18B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N100424.1 E46115.7	33.323102 °N 81.740475 °W	198.5-193.5 ft msl	342.1 ft msl	3.75" PVC	S	UL

SAMPLE DATE	07/19/96	01/15/97	08/06/97
FIELD DATA			

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	222.0	221.2	219.7		ft msl
pH	6.8	5.2	6.2		pH
Sp. conductance	120	100	120		µS/cm
Water temperature	25.0	21.0	19.0		°C
Alkalinity as $CaCO_3$	12	9	53		mg/L
Turbidity	3	11	5		NTU
Volume purged	5.5	4.4	6.5		well volume
Sampling code					
Synchronous water level	221.8 (09/18/96)	220.8 (03/18/97)	219.4 (09/17/97)		ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	51	39	38	50	1	V	µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	1.6	<5.0	3.4	<47	1		µg/L	WA	0
		Nickel, total recoverable	2.2	19	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	2.9	<3.2	1.0	1.5	1	JE	µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
	■	Tetrachloroethylene	***13***	***51***	***29***	***32***	1		µg/L	WA	2
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
	■	Trichloroethylene	***13***	***18***	***11***	***12***	1		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<20		<20				µg/L		
		Chloride	3,900		4,000				µg/L		
		Chromium, total recoverable	0.99		1.0				µg/L		
		Cobalt, total recoverable	1.5		<5.0				µg/L		
		Copper, total recoverable	4.3		<3.0				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	21		12				µg/L		
		Mercury, total recoverable	<0.20		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	***8,800***		***6,900***				µg/L		
		Sodium, total recoverable	***11,000***		***8,400***				µg/L		
		Sulfate	190		<5,000				µg/L		
		Total phosphates (as P)	280		170				µg/L		
		Uranium, total recoverable	<20		0.12				µg/L		
		Zinc, total recoverable	<14		14				µg/L		
Radionuclides											
		Gross alpha	3.6E+00		*4.4E+00*				pCi/L		
		Nonvolatile beta	6.5E+00		8.4E+00				pCi/L		
		Radium, total alpha-emitting	1.4E+00		1.4E+00				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 19A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N100983.0 E50934.4	33.332206 °N 81.728874 °W	119.7-114.7 ft msl	300.3 ft msl	3.75" PVC	S	MCBC

SAMPLE DATE	07/19/96	01/15/97	08/11/97	02/17/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	214.4	213.9	212.6	213.3	ft msl
pH	6.0	4.8	5.4	5.0	pH
Sp. conductance	40	26	26	28	µS/cm
Water temperature	27.0	22.0	21.7	19.0	°C
Alkalinity as $CaCO_3$	1	3	9	0	mg/L
Turbidity	0	3	11	1	NTU
Volume purged	4.7	3.0	4.1	4.5	well volume
Sampling code					
Synchronous water level	215.1 (09/20/96)	213.1 (03/17/97)	211.9 (09/15/97)	212.4 (03/18/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	4.1	5.8	8.0	3.5	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0	13	<47	1		µg/L	WA	0
		Nickel, total recoverable	1.2	<5.0	23	3.7	1	JE	µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<4.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<4.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<4.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<4.0	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<4.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	2.7	3.2	2.3	2.2	1	JE	µg/L	WA	0
		1,1,1-Trichloroethane	<4.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
	■	Trichloroethylene	***25***	***25***	***19***	***18***	1		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<20		<20				µg/L		
		Chloride	1,700		2,000				µg/L		
		Chromium, total recoverable	<4.0		0.60				µg/L		
		Cobalt, total recoverable	<0.36		<5.0				µg/L		
		Copper, total recoverable	1.1		9.8				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	<3.8		14				µg/L		
		Mercury, total recoverable	<0.20		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	1,400		1,100				µg/L		
		Sodium, total recoverable	1,800		1,900				µg/L		
		Sulfate	630		<5,000				µg/L		
		Total phosphates (as P)	140		<10				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	<15		52				µg/L		
Radionuclides											
		Gross alpha	1.6E+00		*7.4E-01*				pCi/L		
		Nonvolatile beta	*1.6E+00*		*9.8E-01*				pCi/L		
		Radium, total alpha-emitting	7.0E-01		*2.8E+00*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 19B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N100999.3 E50934.8	33.332243 °N 81.728905 °W	147.7-142.7 ft msl	300.4 ft msl	3.75" PVC	S	LL

SAMPLE DATE	07/12/96	01/25/97	07/29/97	03/31/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	217.0	216.1	215.1	218.5	ft msl
pH	5.8	4.6	4.6	7.4	pH
Sp. conductance	32	20	18	35	µS/cm
Water temperature	24.0	22.0	19.7	21.9	°C
Alkalinity as $CaCO_3$	1	3	0	3	mg/L
Turbidity	1	1	1	1	NTU
Volume purged	5.0	3.5	4.6	1.0	well volume
Sampling code					
Synchronous water level	216.8 (09/20/96)	215.4 (03/17/97)	214.3 (09/15/97)	214.6 (03/18/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	4.0	3.9	3.6	5.9	1	V	µg/L	WA	0
		Cyanide	<10	<5.0	<2.5	<15	1		µg/L	WA	0
		Lead, total recoverable	3.4	<5.0	5.7	<47	1		µg/L	WA	0
		Nickel, total recoverable	1.7	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<2.0	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	<2.0	<3.0	<5.0	<5.0	1		µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	***100***		<20				µg/L		
		Chloride	1,700		1,800				µg/L		
		Chromium, total recoverable	<4.0		<3.0				µg/L		
		Cobalt, total recoverable	0.36		<5.0				µg/L		
		Copper, total recoverable	16		11				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	2.7		2.4				µg/L		
		Mercury, total recoverable	<0.20		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	1,300		980				µg/L		
		Sodium, total recoverable	1,600		1,500				µg/L		
		Sulfate	250		<5,000				µg/L		
		Total phosphates (as P)	<50		<10				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	<10		5.1				µg/L		
Radionuclides											
		Gross alpha	1.5E+00		*2.3E-01*				pCi/L		
		Nonvolatile beta	*1.2E+00*		*-7.9E-01*				pCi/L		
		Radium, total alpha-emitting	3.0E-01		*3.0E-03*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 19C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N100992.1 E50942.4	33.332240 °N 81.728871 °W	218.7-198.7 ft msl	300.8 ft msl	3.75" PVC	S	M

SAMPLE DATE	07/19/96	01/15/97	08/11/97	02/17/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	238.7	236.8	234.5	234.0	ft msl
pH	6.0	4.8	5.0	5.2	pH
Sp. conductance	120	100	100	160	µS/cm
Water temperature	25.0	22.0	21.3	20.0	°C
Alkalinity as $CaCO_3$	1	2	4	5	mg/L
Turbidity	1	3	10	1	NTU
Volume purged	6.2	3.1	8.8	7.4	well volume
Sampling code					
Synchronous water level	237.9 (09/20/96)	235.9 (03/17/97)	234.1 (09/15/97)	234.2 (03/18/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	10	10	12	7.7	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	4.9	7.3	***40***	11	1	JE	µg/L	WA	0
		Nickel, total recoverable	2.7	6.9	37	8.0	1	JE	µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	3.8	***5.4***	3.3	4.7	1	JE	µg/L	WA	1
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
	■	Trichloroethylene	***26***	***53***	***22***	***34***	1		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<20		<20				µg/L		
		Chloride	***5,100***		***5,100***				µg/L		
		Chromium, total recoverable	2.1		3.7				µg/L		
		Cobalt, total recoverable	1.2		<5.0				µg/L		
		Copper, total recoverable	1.7		180				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	8.4		39				µg/L		
		Mercury, total recoverable	<0.20		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	***8,900***		***9,800***				µg/L		
		Sodium, total recoverable	***15,000***		***16,000***				µg/L		
		Sulfate	***5,100***		***4,600***				µg/L		
		Total phosphates (as P)	150		<10				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	110		180				µg/L		
Radionuclides											
		Gross alpha	2.1E+00		*1.4E+00*				pCi/L		
		Nonvolatile beta	2.0E+00		*1.5E+00*				pCi/L		
		Radium, total alpha-emitting	1.1E+00		*3.5E+00*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 20A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N103545.1 E46060.5	33.329910 °N 81.746692 °W	162.6-157.6 ft msl	355.3 ft msl	3.75" PVC	S	LL

SAMPLE DATE	08/02/96	01/16/97	08/11/97	02/11/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	219.0	218.3	216.5	215.6	ft msl
pH	5.4	5.0	4.8	5.0	pH
Sp. conductance	23	24	20	24	µS/cm
Water temperature	24.0	22.0	19.2	16.0	°C
Alkalinity as $CaCO_3$	1	3	1	0	mg/L
Turbidity	3	5	5	3	NTU
Volume purged	8.0	2.9	2.9	5.4	well volume
Sampling code					
Synchronous water level	218.7 (09/18/96)	217.5 (03/18/97)	216.1 (09/16/97)	215.7 (03/18/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	6.6	7.3	6.9	5.5	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	3.0	5.3	10	<47	1		µg/L	WA	0
		Nickel, total recoverable	<2.0	7.0	7.4	4.2	1	JE	µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<50	<14	<50	<50	10		µg/L	WA	0
		1,1-Dichloroethane	<50	<25	<50	<50	10		µg/L	WA	0
		1,1-Dichloroethylene	<50	<32	<50	<50	10		µg/L	WA	0
		trans-1,2-Dichloroethylene	<50	<32	<50				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<50	<15	<50	<50	10		µg/L	WA	0
		Tetrachloroethylene	<50	<19	<50	<50	10		µg/L	WA	0
		1,1,1-Trichloroethane	<50	<25	<50	<50	10		µg/L	WA	0
	■	Trichloroethylene	***940***	***1,100***	***1,000***	***950***	10		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<23		<20				µg/L		
		Chloride	1,500		1,500				µg/L		
		Chromium, total recoverable	<4.0		<3.0				µg/L		
		Cobalt, total recoverable	<4.0		<5.0				µg/L		
		Copper, total recoverable	4.1		11				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	<4.9		9.3				µg/L		
		Mercury, total recoverable	0.034		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	1,800		1,700				µg/L		
		Sodium, total recoverable	1,400		1,600				µg/L		
		Sulfate	120		<5,000				µg/L		
		Total phosphates (as P)	<50		<10				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	<15		29				µg/L		
Radionuclides											
		Gross alpha	*2.6E-01*		*9.2E-01*				pCi/L		
		Nonvolatile beta	*1.3E+00*		*-9.7E-01*				pCi/L		
		Radium, total alpha-emitting	*0.0E+00*		*1.3E+00*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 20C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N103556.3 E46088.8	33.329981 °N 81.746640 °W	232.7-212.7 ft msl	354.7 ft msl	3.75" PVC	S	M

SAMPLE DATE	07/17/96	02/03/97	08/06/97	02/27/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	227.4	226.5	225.4	224.9	ft msl
pH	9.6	8.0	8.4	9.6	pH
Sp. conductance	180	100	100	160	µS/cm
Water temperature	25.0	25.0	18.1	17.0	°C
Alkalinity as $CaCO_3$	46	48	39	42	mg/L
Turbidity	32	15	16	11	NTU
Volume purged	0.12	0.13	0.0	0.0	well volume
Sampling code	X	X	X	X	
Synchronous water level	227.1 (09/18/96)	226.4 (03/18/97)	225.0 (09/16/97)	224.7 (03/18/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	7.1	4.7	7.5	5.3	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
	■	Lead, total recoverable	***85***	***17***	***54***	***20***	1	JE	µg/L	WA	0
		Nickel, total recoverable	32	8.1	99	56	1		µg/L	WA	1
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<2.0	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	<2.0	<3.0	<5.0	<5.0	1		µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	***570***		***600***				µg/L		
		Chloride	1,800		2,000				µg/L		
		Chromium, total recoverable	54		***170***				µg/L		
		Cobalt, total recoverable	<1.4		<5.0				µg/L		
		Copper, total recoverable	75		130				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	***52***		***60***				µg/L		
		Mercury, total recoverable	<0.20		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	2,100		2,400				µg/L		
		Sodium, total recoverable	***6,700***		4,500				µg/L		
		Sulfate	***6,300***		***7,800***				µg/L		
		Total phosphates (as P)	230		23				µg/L		
		Uranium, total recoverable	<20		0.79				µg/L		
		Zinc, total recoverable	140		220				µg/L		
Radionuclides											
		Gross alpha	*5.5E-01*		*7.7E+00*				pCi/L		
		Nonvolatile beta	1.3E+00		8.7E+00				pCi/L		
		Radium, total alpha-emitting	*-2.0E-01*		1.1E+00				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 21A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N103967.0 E47217.2	33.332732 °N 81.744468 °W	159.5-154.5 ft msl	354.8 ft msl	3.75" PVC	S	LL

SAMPLE DATE	07/29/96	01/16/97	08/11/97	02/09/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	220.2	220.5	218.6	217.8	ft msl
pH	6.3	4.8	4.8	5.2	pH
Sp. conductance	38	24	24	24	µS/cm
Water temperature	25.0	22.0	19.0	16.0	°C
Alkalinity as $CaCO_3$	2	2	4	0	mg/L
Turbidity	0	2	1	1	NTU
Volume purged	5.0	2.4	3.3	2.9	well volume
Sampling code					
Synchronous water level	220.8 (09/18/96)	219.7 (03/18/97)	218.0 (09/17/97)	218.2 (03/19/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	5.2	5.9	5.6	4.3	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	5.6	<5.0	3.7	<47	1		µg/L	WA	0
		Nickel, total recoverable	1.0	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<2.0	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
	■	Trichloroethylene	***30***	***37***	***47***	***52***	1		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	29		<20				µg/L		
		Chloride	1,900		1,900				µg/L		
		Chromium, total recoverable	<1.1		1.2				µg/L		
		Cobalt, total recoverable	<0.49		<5.0				µg/L		
		Copper, total recoverable	24		6.2				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	6.7		5.7				µg/L		
		Mercury, total recoverable	0.19		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	1,600		1,500				µg/L		
		Sodium, total recoverable	1,700		1,800				µg/L		
		Sulfate	190		<5,000				µg/L		
		Total phosphates (as P)	220		15				µg/L		
		Uranium, total recoverable	<27		<0.10				µg/L		
		Zinc, total recoverable	33		38				µg/L		
Radionuclides											
		Gross alpha	5.8E-01		*4.2E-01*				pCi/L		
		Nonvolatile beta	1.4E+00		*1.1E+00*				pCi/L		
		Radium, total alpha-emitting	*-1.0E-01*		*2.2E+00*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 21B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N104000.1 E47271.8	33.332894 °N 81.744388 °W	147.2-142.5 ft msl	355 ft msl	4" PVC	S	LL

SAMPLE DATE 01/16/97 08/11/97 02/09/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	210.4	219.9	217.8	217.1	ft msl
pH	6.3	5.0	5.0	5.4	pH
Sp. conductance	38	24	26	24	µS/cm
Water temperature	25.0	22.0	19.0	16.0	°C
Alkalinity as $CaCO_3$	2	5	5	1	mg/L
Turbidity	0	1	1	0	NTU
Volume purged	3.7	2.4	3.3	5.7	well volume
Sampling code					
Synchronous water level	220.3 (09/18/96)	218.9 (03/18/97)	217.8 (09/17/97)	217.3 (03/19/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	13	16	17	9.9	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0	<5.0	<47	1		µg/L	WA	0
		Nickel, total recoverable	<10	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<20	<7.0	<10	<10	2		µg/L	WA	0
		1,1-Dichloroethane	<20	<13	<10	<10	2		µg/L	WA	0
		1,1-Dichloroethylene	<20	<16	<10	<10	2		µg/L	WA	0
		trans-1,2-Dichloroethylene	<20	<16	<10				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<20	<7.5	<10	<10	2		µg/L	WA	0
		Tetrachloroethylene	<20	<9.5	<10	<10	2		µg/L	WA	0
		1,1,1-Trichloroethane	<20	<13	<10	<10	2		µg/L	WA	0
	■	Trichloroethylene	***210***	***240***	***220***	***220***	2		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	29		<20				µg/L		
		Chloride	2,000		2,100				µg/L		
		Chromium, total recoverable	0.77		<3.0				µg/L		
		Cobalt, total recoverable	0.65		<5.0				µg/L		
		Copper, total recoverable	<4.0		<3.0				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	3.6		4.9				µg/L		
		Mercury, total recoverable	<0.20		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	900		810				µg/L		
		Sodium, total recoverable	1,700		1,700				µg/L		
		Sulfate	290		<5,000				µg/L		
		Total phosphates (as P)	<50		<10				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	3.3		9.1				µg/L		
Radionuclides											
		Gross alpha	7.3E-01		*7.1E-01*				pCi/L		
		Nonvolatile beta	*8.2E-01*		*-1.2E+00*				pCi/L		
		Radium, total alpha-emitting	3.0E-01		*1.6E+00*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 21C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N103973.0 E47234.6	33.332774 °N 81.744433 °W	233.2-213.2 ft msl	354.8 ft msl	3.75" PVC	S	M

SAMPLE DATE	07/15/96	01/25/97	08/05/97	02/26/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	229.7	228.9	227.8	226.0	ft msl
pH	6.0	4.7	5.2	5.0	pH
Sp. conductance	36	20	24	20	µS/cm
Water temperature	25.0	24.0	20.0	17.0	°C
Alkalinity as $CaCO_3$	1	1	3	12	mg/L
Turbidity	6	4	4	12	NTU
Volume purged	17	15	12	4.9	well volume
Sampling code			W		
Synchronous water level	229.5 (09/18/96)	228.7 (03/18/97)	227.3 (09/17/97)	226.3 (03/19/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	9.2	11	7.0	22	1		µg/L	WA	0
		Cyanide	2.3	<5.0	4.5	<15	1		µg/L	WA	0
	■	Lead, total recoverable	5.3	6.7	15	***58***	1		µg/L	WA	2
		Nickel, total recoverable	2.9	<5.0	15	<23	1	V	µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<1.5	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<2.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<2.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<2.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<2.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<2.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<2.0	<1.9	<2.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<2.5	<2.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	<2.0	<3.0	<2.0	<5.0	1		µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	62		***210***				µg/L		
		Chloride	1,700		1,700				µg/L		
		Chromium, total recoverable	1.5		0.60				µg/L		
		Cobalt, total recoverable	<0.74		<5.0				µg/L		
		Copper, total recoverable	12		12				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	7.1		7.8				µg/L		
		Mercury, total recoverable	<0.20		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	1,300		1,300				µg/L		
		Sodium, total recoverable	1,500		1,600				µg/L		
		Sulfate	220		<5,000				µg/L		
		Total phosphates (as P)	<50		<10				µg/L		
		Uranium, total recoverable	<9.8		0.16				µg/L		
		Zinc, total recoverable	15		23				µg/L		
Radionuclides											
		Gross alpha	2.7E+00		2.6E+00				pCi/L		
		Nonvolatile beta	2.0E+00		1.9E+00				pCi/L		
		Radium, total alpha-emitting	1.6E+00		3.1E+00				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 23B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N104336.6 E49286.4	33.336929 °N 81.739738 °W	176.1-171.1 ft msl	371.6 ft msl	4" PVC	S	UL

SAMPLE DATE	07/29/96	01/20/97	08/07/97	02/09/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	223.7	221.9	220.3	219.4	ft msl
pH	5.6	4.4	4.4	4.4	pH
Sp. conductance	440	380	380	440	µS/cm
Water temperature	27.0	23.0	20.6	16.0	°C
Alkalinity as $CaCO_3$	0	2	0	0	mg/L
Turbidity	2	2	1	1	NTU
Volume purged	5.9	3.1	2.8	6.1	well volume
Sampling code					
Synchronous water level	223.0 (09/17/96)	222.6 (03/19/97)	219.9 (09/16/97)	219.3 (03/19/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	150	140	130	140	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	2.7	<5.0	12	<47	1		µg/L	WA	0
		Nickel, total recoverable	8.9	<13	7.6	8.9	1	JE	µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<500	<700	<1,300	<1,000	200		µg/L	WA	0
		1,1-Dichloroethane	<500	<1,300	<1,300	<1,000	200		µg/L	WA	0
		1,1-Dichloroethylene	<500	<1,600	<1,300	<1,000	200		µg/L	WA	0
		trans-1,2-Dichloroethylene	<500	<1,600	<1,300				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<500	<750	<1,300	<1,000	200		µg/L	WA	0
	■	Tetrachloroethylene	***22,000***	***36,000***	***30,000***	***31,000***	200		µg/L	WA	2
		1,1,1-Trichloroethane	<500	<1,300	<1,300	<1,000	200		µg/L	WA	0
	■	Trichloroethylene	***21,000***	***30,000***	***27,000***	***25,000***	200		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	***690***		***710***				µg/L		
		Chloride	3,200		3,000				µg/L		
		Chromium, total recoverable	0.81		0.60				µg/L		
		Cobalt, total recoverable	***17***		***15***				µg/L		
		Copper, total recoverable	<4.0		<3.0				µg/L		
		Fluoride	260		210				µg/L		
		Manganese, total recoverable	***180***		***150***				µg/L		
		Mercury, total recoverable	0.77		0.73				µg/L		
		Nitrate-nitrite as nitrogen	***48,000***		***47,000***				µg/L		
		Sodium, total recoverable	***15,000***		***13,000***				µg/L		
		Sulfate	210		<5,000				µg/L		
		Total phosphates (as P)	<50		<10				µg/L		
		Uranium, total recoverable	<20		0.22				µg/L		
		Zinc, total recoverable	58		42				µg/L		
Radionuclides											
		Gross alpha	***2.4E+01***		***3.1E+01***				pCi/L		
		Nonvolatile beta	1.9E+01		1.6E+01				pCi/L		
		Radium, total alpha-emitting	***1.4E+01***		***1.9E+01***				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 23TA

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N104298.8 E49225.8	33.336746 °N 81.739824 °W	65.4-60.4 ft msl	372.9 ft msl	4" Steel	S	CBA

SAMPLE DATE	07/10/96	01/03/97	07/29/97	03/04/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	201.4	202.1	197.6	198.0	ft msl
pH	5.8	5.0	5.0	5.1	pH
Sp. conductance	46	28	28	29	µS/cm
Water temperature	30.0	23.0	20.6	18.5	°C
Alkalinity as $CaCO_3$	1	12	1	4	mg/L
Turbidity	4	3	1	1	NTU
Volume purged	2.4	2.4	2.5	2.6	well volume
Sampling code					
Synchronous water level	202.3 (09/17/96)	197.9 (03/19/97)	195.8 (09/16/97)	197.9 (03/19/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	12	7.8	7.7	9.4	1		µg/L	WA	0
		Cyanide	<10	<5.0	<2.5	<10	1		µg/L	EX	0
		Lead, total recoverable	<5.0	<5.0	4.1	1.4	1	JE	µg/L	EX	0
		Nickel, total recoverable	1.2	<5.0	2.7	<20	1		µg/L	EX	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<10	1		µg/L	EX	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1	J1	µg/L	EX	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1	J1	µg/L	EX	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1	J1	µg/L	EX	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1	J1	µg/L	EX	0
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1	J1	µg/L	EX	0
		Tetrachloroethylene	<2.0	2.0	<5.0	<5.0	1	J1	µg/L	EX	0
		1,1,1-Trichloroethane	<2.0	<2.5	3.6	<5.0	1	J1	µg/L	EX	0
		Trichloroethylene	1.3	<3.0	<5.0	<5.0	1	J1	µg/L	EX	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<42		17				µg/L		
		Chloride	2,000		2,100				µg/L		
		Chromium, total recoverable	0.63		<3.0				µg/L		
		Cobalt, total recoverable	0.31		<5.0				µg/L		
		Copper, total recoverable	<1.0		4.7				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	23		18				µg/L		
		Mercury, total recoverable	<0.20		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	270		5.0				µg/L		
		Sodium, total recoverable	2,200		1,900				µg/L		
		Sulfate	***4,600***		***4,400***				µg/L		
		Total phosphates (as P)	<50		<10				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	4.0		32				µg/L		
Radionuclides											
		Gross alpha	1.1E+00		*-1.9E-01*				pCi/L		
		Nonvolatile beta	1.6E+00		*-7.5E-01*				pCi/L		
		Radium, total alpha-emitting	5.0E-01		*7.9E-01*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 24

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N104614.4 E49842.9	33.338451 °N 81.738813 °W	243.9-223.9 ft msl	380.2 ft msl	4" PVC	S	M

SAMPLE DATE	07/29/96	01/20/97	08/08/97	02/09/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	235.3	234.7	233.5	232.9	ft msl
pH	5.6	6.0	4.7	6.8	pH
Sp. conductance	200	100	100	200	µS/cm
Water temperature	35.0	22.0	20.6	14.0	°C
Alkalinity as $CaCO_3$	26	24	1	27	mg/L
Turbidity	1	3	7	3	NTU
Volume purged	0.0	0.14	0.0	0.17	well volume
Sampling code	X	X	X	X	
Synchronous water level	235.3 (09/17/96)	234.6 (03/19/97)	233.5 (09/16/97)	233.7 (03/19/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	9.9	4.9	6.9	13	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	<5.0	7.3	5.3	13	1	JE	µg/L	WA	0
		Nickel, total recoverable	<10	<15	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	6.2	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<200	<140	<250	<100	20		µg/L	WA	0
		1,1-Dichloroethane	<200	<250	<250	<100	20		µg/L	WA	0
		1,1-Dichloroethylene	<200	<320	<250	<100	20		µg/L	WA	0
		trans-1,2-Dichloroethylene	<200	<320	<250				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<200	<150	<250	<100	20		µg/L	WA	0
	■	Tetrachloroethylene	***3,600***	***3,800***	***2,500***	***1,800***	20		µg/L	WA	2
		1,1,1-Trichloroethane	<200	<250	<250	<100	20		µg/L	WA	0
	■	Trichloroethylene	***6,400***	***9,500***	***7,100***	***6,000***	50		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	***130***		***140***				µg/L		
		Chloride	2,200		2,300				µg/L		
		Chromium, total recoverable	3.6		3.4				µg/L		
		Cobalt, total recoverable	0.37		<5.0				µg/L		
		Copper, total recoverable	<4.0		1.7				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	5.1		1.6				µg/L		
		Mercury, total recoverable	<0.20		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	2,400		***2,600***				µg/L		
		Sodium, total recoverable	3,900		3,900				µg/L		
		Sulfate	***3,300***		***3,400***				µg/L		
		Total phosphates (as P)	<50		<10				µg/L		
		Uranium, total recoverable	<20		0.24				µg/L		
		Zinc, total recoverable	13		34				µg/L		
Radionuclides											
		Gross alpha	1.6E+00		*6.9E-01*				pCi/L		
		Nonvolatile beta	1.7E+00		*-5.8E-01*				pCi/L		
		Radium, total alpha-emitting	*2.0E-01*		*2.1E+00*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 25A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N103504.8 E49657.9	33.335697 °N 81.737141 °W	169.7-159.7 ft msl	366.4 ft msl	4" PVC	S	LL

SAMPLE DATE	08/07/96	01/16/97	08/11/97	02/09/98
FIELD DATA				
Parameter	3Q96	1Q97	3Q97	1Q98
Water elevation	216.2	242.0	213.1	212.9
pH	4.8	5.0	4.6	5.0
Sp. conductance	26	30	26	30
Water temperature	26.0	25.0	21.2	17.0
Alkalinity as $CaCO_3$	1	3	0	1
Turbidity	1	1	1	1
Volume purged	4.9	3.6	2.5	4.3
Sampling code				
Synchronous water level	216.4 (09/17/96)	214.2 (03/19/97)	212.5 (09/16/97)	212.6 (03/19/98)

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	4.2	5.2	5.6	3.9	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0	4.5	<47	1		µg/L	WA	0
		Nickel, total recoverable	<10	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<100	<28	<50	<50	10		µg/L	WA	0
		1,1-Dichloroethane	<100	<50	<50	<50	10		µg/L	WA	0
		1,1-Dichloroethylene	<100	<64	<50	<50	10		µg/L	WA	0
		trans-1,2-Dichloroethylene	<100	<64	<50				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<100	<30	<50	<50	10		µg/L	WA	0
	■	Tetrachloroethylene	***80***	***160***	***150***	***160***	10		µg/L	WA	2
		1,1,1-Trichloroethane	<100	<50	<50	<50	10		µg/L	WA	0
	■	Trichloroethylene	***1,400***	***1,400***	***1,200***	***1,100***	10		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<20		<20				µg/L		
		Chloride	2,300		2,000				µg/L		
		Chromium, total recoverable	<4.0		<3.0				µg/L		
		Cobalt, total recoverable	0.54		<5.0				µg/L		
		Copper, total recoverable	1.2		<3.0				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	<0.80		1.2				µg/L		
		Mercury, total recoverable	0.33		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	1,800		350				µg/L		
		Sodium, total recoverable	2,100		2,500				µg/L		
		Sulfate	190		<5,000				µg/L		
		Total phosphates (as P)	<50		<10				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	<5.0		7.0				µg/L		
Radionuclides											
		Gross alpha	*4.3E-01*		*5.6E-01*				pCi/L		
		Nonvolatile beta	*9.4E-01*		*2.4E-01*				pCi/L		
		Radium, total alpha-emitting	5.0E-01		*2.7E+00*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 26

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N104612.8 E48941.7	33.336976 °N 81.741183 °W	240.7-220.7 ft msl	361.7 ft msl	4" PVC	S	M

SAMPLE DATE	08/02/96	01/16/97	08/11/97	02/11/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	237.0	237.5	237.5	237.1	ft msl
pH	5.1	4.4	4.8	4.8	pH
Sp. conductance	21	22	22	24	µS/cm
Water temperature	26.0	22.0	22.0	19.0	°C
Alkalinity as $CaCO_3$	1	2	1	4	mg/L
Turbidity	2	3	1	1	NTU
Volume purged	5.3	3.9	5.4	4.7	well volume
Sampling code		A			
Synchronous water level	( )	237.0 (03/18/97)	( )	( )	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	2.6	2.7	3.1	3.1	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	<5.0	11	5.8	<47	1		µg/L	WA	0
		Nickel, total recoverable	<4.2	15	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<10	<7.0	<10	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<10	<13	<10	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<10	<16	<10	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<10	<16	<10				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<10	<7.5	<10	<5.0	1		µg/L	WA	0
	■	Tetrachloroethylene	***55***	***73***	***43***	***15***	1		µg/L	WA	2
		1,1,1-Trichloroethane	<10	<13	<10	<5.0	1		µg/L	WA	0
	■	Trichloroethylene	***220***	***300***	***180***	***64***	1		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<40		<20				µg/L		
		Chloride	2,500		2,500				µg/L		
		Chromium, total recoverable	3.5		1.5				µg/L		
		Cobalt, total recoverable	0.18		<5.0				µg/L		
		Copper, total recoverable	4.9		3.3				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	<2.9		3.2				µg/L		
		Mercury, total recoverable	0.029		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	580		340				µg/L		
		Sodium, total recoverable	2,200		2,600				µg/L		
		Sulfate	810		<5,000				µg/L		
		Total phosphates (as P)	<50		19				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	<7.6		15				µg/L		
Radionuclides											
		Gross alpha	*4.4E-01*		*5.8E-01*				pCi/L		
		Nonvolatile beta	*3.8E-01*		*1.5E-01*				pCi/L		
		Radium, total alpha-emitting	2.0E-01		*2.0E+00*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 26B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N104646.7 E48944.6	33.337056 °N 81.741241 °W	136.9-132.1 ft msl	362.8 ft msl	4" PVC	S	LL

SAMPLE DATE	08/01/96	03/04/97	08/12/97	02/11/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	218.6	217.2	215.6	215.7	ft msl
pH	5.2	5.0	4.8	5.2	pH
Sp. conductance	24	24	24	36	µS/cm
Water temperature	25.0	26.0	21.0	19.0	°C
Alkalinity as $CaCO_3$	1	7	4	9	mg/L
Turbidity	1	1	1	1	NTU
Volume purged	4.1	2.4	3.9	1.4	well volume
Sampling code					
Synchronous water level	219.8 (09/18/96)	216.6 (03/18/97)	215.5 (09/16/97)	215.3 (03/19/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	6.0	11	6.8	9.4	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0	5.1	<47	1		µg/L	WA	0
		Nickel, total recoverable	<10	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<10	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<10	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<10	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<10				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<10	<5.0	1		µg/L	WA	0
	■	Tetrachloroethylene	***6.2***	***15***	***6.7***	***17***	1		µg/L	WA	2
		1,1,1-Trichloroethane	<2.0	<2.5	<10	<5.0	1		µg/L	WA	0
	■	Trichloroethylene	***85***	***120***	***140***	***190***	1		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<20		<20				µg/L		
		Chloride	2,300		2,500				µg/L		
		Chromium, total recoverable	0.85		<3.0				µg/L		
		Cobalt, total recoverable	<0.84		<5.0				µg/L		
		Copper, total recoverable	<2.6		<3.0				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	<2.2		2.6				µg/L		
		Mercury, total recoverable	0.089		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	550		670				µg/L		
		Sodium, total recoverable	1,900		2,000				µg/L		
		Sulfate	330		<5,000				µg/L		
		Total phosphates (as P)	<50		5.0				µg/L		
		Uranium, total recoverable	<13		<0.10				µg/L		
		Zinc, total recoverable	<5.0		14				µg/L		
Radionuclides											
		Gross alpha	*-3.2E-01*		*1.1E+00*				pCi/L		
		Nonvolatile beta	*9.1E-01*		*6.3E-01*				pCi/L		
		Radium, total alpha-emitting	*-1.0E-01*		*1.8E+00*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 27

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N104972.8 E49487.7	33.338664 °N 81.740446 °W	244.0-234.0 ft msl	375.5 ft msl	4" PVC	S	M

SAMPLE DATE	07/12/96	01/02/97	07/30/97	03/03/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	237.0	236.1			ft msl
pH	4.4	4.4	4.6	4.3	pH
Sp. conductance	60	56	70	63	µS/cm
Water temperature	25.0	22.0	22.7	18.3	°C
Alkalinity as $CaCO_3$	0	1	1	0	mg/L
Turbidity	9	4	6	8	NTU
Volume purged	11	0.71			well volume
Sampling code		X	SX		
Synchronous water level	236.5 (09/17/96)	235.5 (03/19/97)	( )	( )	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	18	18	20	19	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0	***30***	<47	1		µg/L	WA	0
		Nickel, total recoverable	2.5	<5.0	9.6	3.4	1	JE	µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<2.0	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	1.2	<3.0	<5.0	<5.0	1		µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	***150***		***240***				µg/L		
		Chloride	***5,400***		***6,500***				µg/L		
		Chromium, total recoverable	2.9		10				µg/L		
		Cobalt, total recoverable	2.0		<5.0				µg/L		
		Copper, total recoverable	2.3		33				µg/L		
		Fluoride	22		<100				µg/L		
		Manganese, total recoverable	15		17				µg/L		
		Mercury, total recoverable	<0.20		0.050				µg/L		
		Nitrate-nitrite as nitrogen	***4,100***		***4,900***				µg/L		
		Sodium, total recoverable	***4,600***		***4,800***				µg/L		
		Sulfate	<1,000		<5,000				µg/L		
		Total phosphates (as P)	60		8.0				µg/L		
		Uranium, total recoverable	<20		0.22				µg/L		
		Zinc, total recoverable	<6.4		26				µg/L		
Radionuclides											
		Gross alpha	1.9E+00		*3.1E-01*				pCi/L		
		Nonvolatile beta	1.9E+00		*3.9E-01*				pCi/L		
		Radium, total alpha-emitting	5.0E-01		*2.6E+00*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 27B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N104940.3 E49486.4	33.338590 °N 81.740386 °W	169.9-164.4 ft msl	376.8 ft msl	4" PVC	S	UL

SAMPLE DATE	08/07/96	01/20/97	08/12/97	02/09/98
FIELD DATA				
Parameter	3Q96	1Q97	3Q97	1Q98
Water elevation	225.9	221.6	223.2	222.0
pH	4.8	4.4	5.0	4.8
Sp. conductance	28	40	24	26
Water temperature	25.0	21.0	21.0	16.0
Alkalinity as $CaCO_3$	1	1	3	0
Turbidity	1	2	1	0
Volume purged	5.3	2.7	3.1	6.7
Sampling code				
Synchronous water level	225.7 (09/17/96)	224.7 (03/19/97)	222.7 (09/16/97)	222.0 (03/19/98)

Parameter	Unit
Water elevation	ft msl
pH	pH
Sp. conductance	µS/cm
Water temperature	°C
Alkalinity as $CaCO_3$	mg/L
Turbidity	NTU
Volume purged	well volume
Sampling code	
Synchronous water level	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	3.3	3.2	3.3	2.0	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0	5.1	<47	1		µg/L	WA	0
		Nickel, total recoverable	1.8	<14	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<200	<35	<50	<100	20		µg/L	WA	0
		1,1-Dichloroethane	<200	<63	<50	<100	20		µg/L	WA	0
		1,1-Dichloroethylene	<200	<80	<50	<100	20		µg/L	WA	0
		trans-1,2-Dichloroethylene	<200	<80	<50				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<200	<38	<50	<100	20		µg/L	WA	0
	■	Tetrachloroethylene	***240***	***240***	***49***	***74***	20	JE	µg/L	WA	2
		1,1,1-Trichloroethane	<200	<63	<50	<100	20		µg/L	WA	0
	■	Trichloroethylene	***6,200***	***3,300***	***710***	***930***	20		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<20		<20				µg/L		
		Chloride	2,600		2,000				µg/L		
		Chromium, total recoverable	3.2		<3.0				µg/L		
		Cobalt, total recoverable	0.86		<5.0				µg/L		
		Copper, total recoverable	6.3		2.1				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	4.7		4.4				µg/L		
		Mercury, total recoverable	<0.20		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	1,500		1,800				µg/L		
		Sodium, total recoverable	2,900		3,200				µg/L		
		Sulfate	250		<5,000				µg/L		
		Total phosphates (as P)	130		29				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	6.6		15				µg/L		
Radionuclides											
		Gross alpha	6.4E-01		*2.5E-01*				pCi/L		
		Nonvolatile beta	*4.2E-01*		*-2.1E+00*				pCi/L		
		Radium, total alpha-emitting	*-2.0E-01*		*2.1E+00*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 27TA

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N104951.4 E49486.5	33.338614 °N 81.740407 °W	55.9-50.6 ft msl	376.6 ft msl	4" CS	S	CBA

SAMPLE DATE	07/12/96	01/02/97	08/18/97	03/03/98
FIELD DATA				
Parameter	3Q96	1Q97	3Q97	1Q98
Water elevation	201.3	202.0	197.0	198.1
pH	4.4	4.6	4.4	
Sp. conductance	34	22	28	
Water temperature	25.0	21.0	20.0	
Alkalinity as $CaCO_3$	1	1	0	
Turbidity	2	2	1	
Volume purged	2.2	2.4	3.5	
Sampling code				
Synchronous water level	202.2 (09/17/96)	197.9 (03/19/97)	195.2 (09/16/97)	197.8 (03/19/98)

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	5.9	5.8	6.2				µg/L		
		Cyanide	<10	<5.0	<5.0				µg/L		
		Lead, total recoverable	7.1	5.8	7.5				µg/L		
		Nickel, total recoverable	1.8	<5.0	2.4				µg/L		
		Selenium, total recoverable	<5.0	<5.0	<5.0				µg/L		
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0				µg/L		
		1,1-Dichloroethane	<2.0	<2.5	<5.0				µg/L		
		1,1-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0				µg/L		
		Tetrachloroethylene	<2.0	<1.9	<5.0				µg/L		
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0				µg/L		
		Trichloroethylene	<2.0	<3.0	<5.0				µg/L		

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	20		31				µg/L		
		Chloride	2,100		2,300				µg/L		
		Chromium, total recoverable	<4.0		<3.0				µg/L		
		Cobalt, total recoverable	1.2		<5.0				µg/L		
		Copper, total recoverable	17		11				µg/L		
		Fluoride	28		<100				µg/L		
		Manganese, total recoverable	41		35				µg/L		
		Mercury, total recoverable	0.021		0.11				µg/L		
		Nitrate-nitrite as nitrogen	360		<18				µg/L		
		Sodium, total recoverable	1,500		1,500				µg/L		
		Sulfate	***3,400***		***3,700***				µg/L		
		Total phosphates (as P)	<50		<10				µg/L		
		Uranium, total recoverable	<20		0.096				µg/L		
		Zinc, total recoverable	<5.6		8.8				µg/L		
Radionuclides											
		Gross alpha	9.2E-01		*3.2E-01*				pCi/L		
		Nonvolatile beta	*7.2E-01*		*-6.1E-01*				pCi/L		
		Radium, total alpha-emitting	5.0E-01		*2.2E+00*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 28

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N104941.8 E48517.3	33.337010 °N 81.742941 °W	230.6-210.6 ft msl	354.8 ft msl	4" PVC	S	M

SAMPLE DATE	07/10/96	01/02/97	07/28/97	02/26/98	
FIELD DATA					
Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	231.3	230.4	228.8	227.4	ft msl
pH	6.4	6.6	6.4	6.3	pH
Sp. conductance	70	60	62	62	µS/cm
Water temperature	25.0	22.0	19.2	16.0	°C
Alkalinity as $CaCO_3$	22	20	38	19	mg/L
Turbidity	3	4	3	2	NTU
Volume purged	3.6	5.3	4.0	11	well volume
Sampling code					
Synchronous water level	230.8 (09/18/96)	229.8 (03/18/97)	228.3 (09/16/97)	227.5 (03/18/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	4.8	4.8	5.1	4.1	1		µg/L	WA	0
		Cyanide	<10	<5.0	<2.5	<15	1		µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0	4.6	<47	1		µg/L	WA	0
		Nickel, total recoverable	<10	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<2.0	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	<2.0	<3.0	<5.0	<5.0	1		µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<38		32				µg/L		
		Chloride	2,200		2,600				µg/L		
		Chromium, total recoverable	1.2		0.80				µg/L		
		Cobalt, total recoverable	0.34		<5.0				µg/L		
		Copper, total recoverable	<1.5		<3.0				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	4.3		4.4				µg/L		
		Mercury, total recoverable	<0.20		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	560		190				µg/L		
		Sodium, total recoverable	1,600		1,500				µg/L		
		Sulfate	1,100		1,200				µg/L		
		Total phosphates (as P)	<50		19				µg/L		
		Uranium, total recoverable	<20		0.11				µg/L		
		Zinc, total recoverable	400		360				µg/L		
Radionuclides											
		Gross alpha	*5.8E-01*		-3.0E-01				pCi/L		
		Nonvolatile beta	*7.1E-01*		*-4.9E-01*				pCi/L		
		Radium, total alpha-emitting	*-1.0E-01*						pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 28A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N104947.7 E48521.9	33.337031 °N 81.742940 °W	157.8-152.8 ft msl	355 ft msl	4" PVC	S	UL

SAMPLE DATE	08/01/96	01/16/97	08/12/97	02/24/98	
FIELD DATA					
Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	224.4	223.5	221.5	222.6	ft msl
pH	4.8	4.8	4.8	5.5	pH
Sp. conductance	20	24	20	25	µS/cm
Water temperature	24.0	23.0	19.0	19.1	°C
Alkalinity as $CaCO_3$	1	1	0	0	mg/L
Turbidity	0	1	0	0	NTU
Volume purged	5.8	3.6	2.7	2.9	well volume
Sampling code					
Synchronous water level	223.9 (09/18/96)	222.6 (03/18/97)	220.8 (09/16/97)	220.6 (03/18/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	3.1	3.4	3.3	3.2	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0	<5.0	<47	1		µg/L	WA	0
		Nickel, total recoverable	<10	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<2.0	2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
■		Trichloroethylene	***38***	***55***	***90***	***92***	1		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<20		16				µg/L		
		Chloride	2,800		2,600				µg/L		
		Chromium, total recoverable	<4.0		<3.0				µg/L		
		Cobalt, total recoverable	<0.39		<5.0				µg/L		
		Copper, total recoverable	<2.3		<3.0				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	<2.8		3.4				µg/L		
		Mercury, total recoverable	0.026		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	620		590				µg/L		
		Sodium, total recoverable	1,800		2,000				µg/L		
		Sulfate	310		<5,000				µg/L		
		Total phosphates (as P)	30		13				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	<20		23				µg/L		
Radionuclides											
		Gross alpha	1.2E+00		1.5E+00				pCi/L		
		Nonvolatile beta	*9.7E-01*		*-1.0E-02*				pCi/L		
		Radium, total alpha-emitting	*2.0E-01*		*2.8E+00*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 29A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N107326.8 E51236.4	33.346723 °N 81.740421 °W	122.9-117.3 ft msl	365.2 ft msl	4" PVC	S	MCBC

SAMPLE DATE	07/11/96	02/03/97	07/24/97	03/05/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	219.9	219.0	218.0	217.1	ft msl
pH	5.4	5.6	5.4	4.7	pH
Sp. conductance	40	38	38	38	µS/cm
Water temperature	30.0	23.0	21.9	17.8	°C
Alkalinity as $CaCO_3$	1	8	17	4	mg/L
Turbidity	2	1	1	1	NTU
Volume purged	2.3	2.1	2.3	2.4	well volume
Sampling code					
Synchronous water level	221.1 (09/19/96)	218.6 (03/20/97)	216.9 (09/17/97)	217.0 (03/20/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	31	22		22	1		µg/L	EX	0
		Cyanide	<10	<5.0		<10	1		µg/L	EX	0
		Lead, total recoverable	4.7	<5.0		<2.1	1	V	µg/L	EX	0
		Nickel, total recoverable	5.3	<5.0		4.3	1	JE	µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0		<10	1		µg/L	EX	0
Organics											
		Chlorobenzene	<2.0	<1.4		<5.0	1		µg/L	EX	0
		1,1-Dichloroethane	<2.0	<2.5		<5.0	1		µg/L	EX	0
		1,1-Dichloroethylene	<2.0	<3.2		<5.0	1		µg/L	EX	0
		trans-1,2-Dichloroethylene	<2.0	<3.2		<5.0	1		µg/L	EX	0
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5		<5.0	1		µg/L	EX	0
		Tetrachloroethylene	<2.0	<1.9		<5.0	1		µg/L	EX	0
		1,1,1-Trichloroethane	<2.0	<2.5		<5.0	1		µg/L	EX	0
		Trichloroethylene	<2.0	<3.0		<5.0	1		µg/L	EX	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<20	34					µg/L		
		Chloride	1,300						µg/L		
		Chromium, total recoverable	3.9	<3.0					µg/L		
		Cobalt, total recoverable	1.1						µg/L		
		Copper, total recoverable	17						µg/L		
		Fluoride	30						µg/L		
		Manganese, total recoverable	28	25					µg/L		
		Mercury, total recoverable	<0.20	<0.20					µg/L		
		Nitrate-nitrite as nitrogen	920						µg/L		
		Sodium, total recoverable	1,600						µg/L		
		Sulfate	***5,700***						µg/L		
		Total phosphates (as P)	<50						µg/L		
		Uranium, total recoverable	<20						µg/L		
		Zinc, total recoverable	60						µg/L		
Radionuclides											
		Gross alpha	1.7E+00	1.7E+00					pCi/L		
		Nonvolatile beta	1.8E+00	2.5E+00					pCi/L		
		Radium, total alpha-emitting	5.0E-01						pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 29TA

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N107330.4 E51245.7	33.346746 °N 81.740403 °W	63.9-58.6 ft msl	365 ft msl	4" CS	S	CBA

SAMPLE DATE	07/11/96	02/03/97	07/24/97	03/04/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	212.4	211.1	209.9	209.6	ft msl
pH	4.4	4.8	4.8	5.9	pH
Sp. conductance	20	20	16	14	µS/cm
Water temperature	26.0	23.0	19.8	18.0	°C
Alkalinity as $CaCO_3$	0	2	1	2	mg/L
Turbidity	3	2	1	2	NTU
Volume purged	2.3	2.6	2.5	2.2	well volume
Sampling code					
Synchronous water level	213.3 (09/19/96)	210.9 (03/20/97)	208.3 (09/17/97)	209.9 (03/20/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	2.8	3.0		2.7	1		µg/L	WA	0
		Cyanide	<10	<5.0		<15	1		µg/L	WA	0
		Lead, total recoverable	4.4	6.1		6.1	1	JE	µg/L	WA	0
		Nickel, total recoverable	1.2	<5.0		<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0		<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4		<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5		<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2		<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2					µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5		<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<2.0	<1.9		<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<2.5		<5.0	1		µg/L	WA	0
		Trichloroethylene	1.2	<3.0		3.2	1	JE	µg/L	WA	1

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<20	<20					µg/L		
		Chloride	1,500						µg/L		
		Chromium, total recoverable	<4.0	<3.0					µg/L		
		Cobalt, total recoverable	0.37						µg/L		
		Copper, total recoverable	19						µg/L		
		Fluoride	<100						µg/L		
		Manganese, total recoverable	20	32					µg/L		
		Mercury, total recoverable	<0.20	<0.20					µg/L		
		Nitrate-nitrite as nitrogen	1,100						µg/L		
		Sodium, total recoverable	1,500						µg/L		
		Sulfate	790						µg/L		
		Total phosphates (as P)	80						µg/L		
		Uranium, total recoverable	<20						µg/L		
		Zinc, total recoverable	<4.4						µg/L		
Radionuclides											
		Gross alpha	*4.0E-01*	*-5.7E-01*					pCi/L		
		Nonvolatile beta	*8.9E-01*	*-1.7E+00*					pCi/L		
		Radium, total alpha-emitting	3.0E-01						pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 30AA

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N105715.7 E47970.5	33.337828 °N 81.745886 °W	96.4-90.8 ft msl	353 ft msl	4" PVC	S	MCBC

SAMPLE DATE	07/11/96	02/04/97	07/28/97

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	210.4	223.4	222.7		ft msl
pH	6.2	11.2	10.6		pH
Sp. conductance	96	460	440		µS/cm
Water temperature	23.0	23.0	20.0		°C
Alkalinity as $CaCO_3$	78	147	154		mg/L
Turbidity	3	10	4		NTU
Volume purged	0.064	0.0	0.0		well volume
Sampling code	X	X	X		
Synchronous water level	224.3 (09/18/96)	223.1 (03/18/97)	222.6 (09/16/97)		ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	23	140	120	130	1		µg/L	WA	0
		Cyanide	<10	<5.0	<2.5	<15	1		µg/L	WA	0
		Lead, total recoverable	2.9	<5.0	4.4	<47	1		µg/L	WA	0
		Nickel, total recoverable	<10	<5.0	<5.0	5.4	1	JE	µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<2.0	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	<2.0	<3.0	<5.0	1.1	1	JE	µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<20		76				µg/L		
		Chloride	1,700		1,700				µg/L		
		Chromium, total recoverable	<4.0		<3.0				µg/L		
		Cobalt, total recoverable	0.31		<5.0				µg/L		
		Copper, total recoverable	3.1		<3.0				µg/L		
		Fluoride	41		120				µg/L		
		Manganese, total recoverable	***78***		11				µg/L		
		Mercury, total recoverable	<0.20		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	430		<50				µg/L		
		Sodium, total recoverable	1,900		4,200				µg/L		
		Sulfate	***13,000***		***13,000***				µg/L		
		Total phosphates (as P)	<50		9.0				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	<6.7		18				µg/L		
Radionuclides											
		Gross alpha	*2.8E-01*		1.2E+00				pCi/L		
		Nonvolatile beta	2.3E+00		*3.2E+00*				pCi/L		
		Radium, total alpha-emitting	5.0E-01						pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
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WELL MSB 30B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N105719.9 E47981.8	33.337856 °N 81.745865 °W	128.7-123.1 ft msl	353.5 ft msl	4" PVC	S	LL

SAMPLE DATE	07/11/96	02/04/97	07/29/97	03/02/98
FIELD DATA				
Parameter	3Q96	1Q97	3Q97	1Q98
Water elevation	225.6	224.5	223.6	222.7
pH	4.0	4.0	4.2	4.0
Sp. conductance	36	30	30	36
Water temperature	26.0	23.0	19.1	16.0
Alkalinity as $CaCO_3$	0	0	0	0
Turbidity	2	1	1	1
Volume purged	2.3	2.7	2.4	3.7
Sampling code				
Synchronous water level	225.6 (09/18/96)	224.2 (03/18/97)	223.1 (09/16/97)	222.6 (03/18/98)

Parameter	Unit
Water elevation	ft msl
pH	pH
Sp. conductance	µS/cm
Water temperature	°C
Alkalinity as $CaCO_3$	mg/L
Turbidity	NTU
Volume purged	well volume
Sampling code	
Synchronous water level	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	8.2	8.2	9.3	7.7	1		µg/L	WA	0
		Cyanide	<10	<5.0	<2.5	<15	1		µg/L	WA	0
		Lead, total recoverable	***17***	9.3	4.8	<47	1		µg/L	WA	0
		Nickel, total recoverable	1.2	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	3.1	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<2.0	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	<2.0	<3.0	<5.0	<5.0	1		µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	43		75				µg/L		
		Chloride	1,800		2,000				µg/L		
		Chromium, total recoverable	1.3		<3.0				µg/L		
		Cobalt, total recoverable	1.0		<5.0				µg/L		
		Copper, total recoverable	29		1.0				µg/L		
		Fluoride	<100		50				µg/L		
		Manganese, total recoverable	10		11				µg/L		
		Mercury, total recoverable	<0.20		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	530		86				µg/L		
		Sodium, total recoverable	1,500		1,500				µg/L		
		Sulfate	***4,800***		***4,900***				µg/L		
		Total phosphates (as P)	<50		<10				µg/L		
		Uranium, total recoverable	8.4		<0.10				µg/L		
		Zinc, total recoverable	16		16				µg/L		
Radionuclides											
		Gross alpha	8.1E-01		*2.6E-01*				pCi/L		
		Nonvolatile beta	1.6E+00		*-9.0E-02*				pCi/L		
		Radium, total alpha-emitting	9.0E-01		*8.6E-01*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 30C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N105731.1 E48013.7	33.337932 °N 81.745803 °W	237.6-217.6 ft msl	354.6 ft msl	4" PVC	S	M

SAMPLE DATE	07/11/96	02/04/97	07/29/97	02/06/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	231.3	230.3	229.1		ft msl
pH	5.0	4.6	5.0		pH
Sp. conductance	7	12	14		µS/cm
Water temperature	22.0	23.0	19.9		°C
Alkalinity as $CaCO_3$	2	1	1		mg/L
Turbidity	3	1	1		NTU
Volume purged	7.8	5.2	4.4		well volume
Sampling code					
Synchronous water level	231.1 (09/18/96)	230.1 (03/18/97)	228.8 (09/16/97)		ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	2.2	<2.0	2.1	1.4	1	JE	µg/L	WA	0
		Cyanide	4.2	<5.0	<2.5	<15	1		µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0	4.9	<47	1		µg/L	WA	0
		Nickel, total recoverable	<10	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	2.8	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<2.0	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	<2.0	<3.0	<5.0	<5.0	1		µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	81		<20				µg/L		
		Chloride	1,700		1,900				µg/L		
		Chromium, total recoverable	0.75		<3.0				µg/L		
		Cobalt, total recoverable	<0.78		<5.0				µg/L		
		Copper, total recoverable	<3.7		<3.0				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	4.3		4.4				µg/L		
		Mercury, total recoverable	0.030		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	660		260				µg/L		
		Sodium, total recoverable	1,300		1,300				µg/L		
		Sulfate	360		<5,000				µg/L		
		Total phosphates (as P)	80		<10				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	16		15				µg/L		
Radionuclides											
		Gross alpha	*4.4E-01*		*-1.1E+00*				pCi/L		
		Nonvolatile beta	*8.0E-01*		*-1.8E+00*				pCi/L		
		Radium, total alpha-emitting	*1.0E-01*		*5.4E-01*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 30CC

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N105724.2 E47993.3	33.337884 °N 81.745843 °W	164.0-158.4 ft msl	354 ft msl	4" PVC	S	UL

SAMPLE DATE	07/11/96	02/06/97	07/29/97	02/06/98	
FIELD DATA					
Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	225.6	224.4	223.4		ft msl
pH	4.6	4.6	5.4		pH
Sp. conductance	8	24	26		µS/cm
Water temperature	22.0	23.0	19.4		°C
Alkalinity as $CaCO_3$	0	2	1		mg/L
Turbidity	2	1	1		NTU
Volume purged	3.1	3.4	2.8		well volume
Sampling code					
Synchronous water level	225.5 (09/18/96)	224.0 (03/18/97)	222.7 (09/16/97)		ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	6.4	6.4	20	38	1		µg/L	WA	0
		Cyanide	1.9	<5.0	<2.5	<15	1		µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0	3.5	<47	1		µg/L	WA	0
		Nickel, total recoverable	0.96	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.0	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<2.0	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<2.0	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<2.0	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<2.0	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	<2.0	<2.0	<5.0	<5.0	1		µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<20		<20				µg/L		
		Chloride	1,300		1,500				µg/L		
		Chromium, total recoverable	<4.0		0.70				µg/L		
		Cobalt, total recoverable	0.27		<5.0				µg/L		
		Copper, total recoverable	4.0		<3.0				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	13		23				µg/L		
		Mercury, total recoverable	<0.20		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	1,400		1,300				µg/L		
		Sodium, total recoverable	1,700		1,800				µg/L		
		Sulfate	940		<5,000				µg/L		
		Total phosphates (as P)	<50		<10				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	<12		9.5				µg/L		
Radionuclides											
		Gross alpha	*6.7E-01*		*-3.0E-02*				pCi/L		
		Nonvolatile beta	*4.6E-01*		*-2.4E+00*				pCi/L		
		Radium, total alpha-emitting	*0.0E+00*		*6.0E-01*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 31B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N101981.3 E50078.7	33.333016 °N 81.733069 °W	157.3-152.3 ft msl	348.3 ft msl	4" PVC	S	LL

SAMPLE DATE	07/31/96	01/16/97	08/11/97	02/10/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	218.4	212.8	210.5	211.6	ft msl
pH	4.8	4.8	4.4	4.2	pH
Sp. conductance	26	28	24	32	µS/cm
Water temperature	27.0	24.0	21.0	20.0	°C
Alkalinity as $CaCO_3$	0	0	0	0	mg/L
Turbidity	0	0	1	1	NTU
Volume purged	12	3.8	2.9	4.1	well volume
Sampling code					
Synchronous water level	213.8 (09/17/96)	211.1 (03/17/97)	210.1 (09/16/97)	209.7 (03/17/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	4.0	4.5	5.6	4.5	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0	***25***	<47	1		µg/L	WA	0
		Nickel, total recoverable	<10	<5.0	<5.0	2.7	1	JE	µg/L	WA	0
		Selenium, total recoverable	1.8	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<20	<7.0	<10	<10	2		µg/L	WA	0
		1,1-Dichloroethane	<20	<13	<10	<10	2		µg/L	WA	0
		1,1-Dichloroethylene	<20	<16	<10	<10	2		µg/L	WA	0
		trans-1,2-Dichloroethylene	<20	<16	<10				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<20	<7.5	<10	<10	2		µg/L	WA	0
	■	Tetrachloroethylene	***410***	***440***	***400***	***310***	2		µg/L	WA	2
		1,1,1-Trichloroethane	<20	<13	<10	<10	2		µg/L	WA	0
	■	Trichloroethylene	***240***	***300***	***260***	***350***	2		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<20		<20				µg/L		
		Chloride	2,500		2,200				µg/L		
		Chromium, total recoverable	<1.0		<3.0				µg/L		
		Cobalt, total recoverable	<0.92		<5.0				µg/L		
		Copper, total recoverable	<3.7		13				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	2.1		<3.0				µg/L		
		Mercury, total recoverable	0.12		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	1,100		270				µg/L		
		Sodium, total recoverable	2,200		2,000				µg/L		
		Sulfate	420		<5,000				µg/L		
		Total phosphates (as P)	<50		20				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	4.0		29				µg/L		
Radionuclides											
		Gross alpha	1.7E+00		*9.4E-01*				pCi/L		
		Nonvolatile beta	1.5E+00		*1.0E-01*				pCi/L		
		Radium, total alpha-emitting	6.0E-01		*3.2E+00*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 31C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N101979.6 E50089.9	33.333030 °N 81.733037 °W	236.1-216.1 ft msl	348.1 ft msl	4" PVC	S	M

SAMPLE DATE	07/31/96	01/16/97	08/11/97	03/05/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	235.4	234.0	231.9	230.0	ft msl
pH	5.5	5.4	5.6	8.4	pH
Sp. conductance	81	120	100	100	µS/cm
Water temperature	26.0	23.0	22.0	17.0	°C
Alkalinity as $CaCO_3$	3	3	16	11	mg/L
Turbidity	1	1	3	5	NTU
Volume purged	6.1	7.5	11	15	well volume
Sampling code					
Synchronous water level	235.0 (09/17/96)	233.2 (03/17/97)	231.7 (09/16/97)	230.8 (03/17/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

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H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	15	16	18	15	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	1.2	<5.0	4.9	<47	1		µg/L	WA	0
		Nickel, total recoverable	<10	6.9	3.0	5.9	1	JE	µg/L	WA	0
		Selenium, total recoverable	1.4	7.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2,000	<700	<1,300	<1,000	200		µg/L	WA	0
		1,1-Dichloroethane	<2,000	<1,300	<1,300	<1,000	200		µg/L	WA	0
		1,1-Dichloroethylene	<2,000	<1,600	<1,300	<1,000	200		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2,000	<1,600	<1,300				µg/L		
		PCB 1016	<0.13	<0.12	<0.30	<1.0	1		µg/L	WA	0
		PCB 1221	<0.13	<0.12	<0.30	<2.0	1		µg/L	WA	0
		PCB 1232	<0.13	<0.12	<0.30	<1.0	1		µg/L	WA	0
		PCB 1242	<0.13	<0.12	<0.30	<1.0	1		µg/L	WA	0
		PCB 1248	<0.13	<0.12	<0.30	<1.0	1		µg/L	WA	0
		PCB 1254	<0.13	<0.12	<0.30	<1.0	1		µg/L	WA	0
		PCB 1260	<0.13	<0.12	<0.30	<1.0	1		µg/L	WA	0
		1,1,2,2-Tetrachloroethane	<2,000	<750	<1,300	<1,000	200		µg/L	WA	0
	■	Tetrachloroethylene	***36,000***	***58,000***	***30,000***	***33,000***	200		µg/L	WA	2
		1,1,1-Trichloroethane	<2,000	<1,300	<1,300	<1,000	200		µg/L	WA	0
	■	Trichloroethylene	***18,000***	***36,000***	***16,000***	***11,000***	200		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	23		9.7				µg/L		
		Chloride	***4,400***		***4,900***				µg/L		
		Chromium, total recoverable	<1.2		3.2				µg/L		
		Cobalt, total recoverable	<1.1		<5.0				µg/L		
		Copper, total recoverable	<3.4		<3.0				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	7.9		10				µg/L		
		Mercury, total recoverable	<0.20		0.33				µg/L		
		Nitrate-nitrite as nitrogen	***5,700***		8.0				µg/L		
		Sodium, total recoverable	***11,000***		***9,100***				µg/L		
		Sulfate	***8,300***		***7,300***				µg/L		
		Total phosphates (as P)	<50		9.0				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	16		25				µg/L		
Radionuclides											
		Gross alpha	6.6E+00		4.1E+00				pCi/L		
		Nonvolatile beta	5.4E+00		4.3E+00				pCi/L		
		Radium, total alpha-emitting	3.5E+00		***6.5E+00***				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 31CC

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N101983.1 E50067.9	33.333002 °N 81.733101 °W	181.4-176.7 ft msl	348.6 ft msl	4" PVC	S	UL

SAMPLE DATE	07/31/96	01/16/97	08/11/97	02/10/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	217.8	212.6	210.6	211.3	ft msl
pH	5.6	5.6	5.6	5.6	pH
Sp. conductance	44	46	42	44	µS/cm
Water temperature	26.0	25.0	21.0	19.0	°C
Alkalinity as $CaCO_3$	1	2	7	3	mg/L
Turbidity	1	2	1	1	NTU
Volume purged	3.6	4.2	2.9	3.4	well volume
Sampling code					
Synchronous water level	213.8 (09/17/96)	211.3 (03/17/97)	210.3 (09/16/97)	220.7 (03/17/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	16	17	20	18	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0	7.0	<47	1		µg/L	WA	0
		Nickel, total recoverable	2.4	6.4	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	2.9	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<20	<28	<50	<50	10		µg/L	WA	0
		1,1-Dichloroethane	<20	<50	<50	<50	10		µg/L	WA	0
		1,1-Dichloroethylene	<20	<64	<50	<50	10		µg/L	WA	0
		trans-1,2-Dichloroethylene	<20	<64	<50				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<20	<30	<50	<50	10		µg/L	WA	0
	■	Tetrachloroethylene	***560***	***850***	***800***	***970***	10		µg/L	WA	2
		1,1,1-Trichloroethane	<20	<50	<50	<50	10		µg/L	WA	0
	■	Trichloroethylene	***980***	***1,500***	***1,500***	***1,600***	10		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	33		<20				µg/L		
		Chloride	2,000		2,000				µg/L		
		Chromium, total recoverable	<1.0		<3.0				µg/L		
		Cobalt, total recoverable	<0.74		<5.0				µg/L		
		Copper, total recoverable	<2.0		21				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	6.8		6.1				µg/L		
		Mercury, total recoverable	<0.20		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	1,900		260				µg/L		
		Sodium, total recoverable	2,200		2,400				µg/L		
		Sulfate	1,200		<5,000				µg/L		
		Total phosphates (as P)	<50		<10				µg/L		
		Uranium, total recoverable	9.9		<0.10				µg/L		
		Zinc, total recoverable	9.5		33				µg/L		
Radionuclides											
		Gross alpha	*4.9E-01*		*1.0E+00*				pCi/L		
		Nonvolatile beta	*8.5E-01*		*1.5E+00*				pCi/L		
		Radium, total alpha-emitting	*0.0E+00*		*2.3E+00*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 32

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N99655.6 E52733.9	33.332210 °N 81.721553 °W	218.1-198.1 ft msl	255.1 ft msl	4" PVC	S	M

SAMPLE DATE	07/12/96	02/05/97	09/02/97	02/19/98	
FIELD DATA					
Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	224.5	224.0	222.9	223.8	ft msl
pH	5.0	4.6	4.9	5.2	pH
Sp. conductance	20	22	19	20	µS/cm
Water temperature	26.0	23.0	19.4	19.0	°C
Alkalinity as $CaCO_3$	1	2	2	0	mg/L
Turbidity	2	0	1	1	NTU
Volume purged	3.2	3.5	4.4	5.1	well volume
Sampling code					
Synchronous water level	224.2 (09/20/96)	223.7 (03/17/97)	222.3 (09/15/97)	223.6 (03/18/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	1.3	<2.0	1.4	1.5	1	JE	µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0	3.4	<47	1		µg/L	WA	0
		Nickel, total recoverable	<10	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<2.0	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	<2.0	<3.0	<5.0	<5.0	1		µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	13		31				µg/L		
		Chloride	2,000		2,300				µg/L		
		Chromium, total recoverable	0.67		2.1				µg/L		
		Cobalt, total recoverable	<4.0		<5.0				µg/L		
		Copper, total recoverable	4.2		1.6				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	0.74		1.0				µg/L		
		Mercury, total recoverable	<0.20		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	1,200		900				µg/L		
		Sodium, total recoverable	3,300		2,800				µg/L		
		Sulfate	980		<5,000				µg/L		
		Total phosphates (as P)	<50		18				µg/L		
		Uranium, total recoverable	10		<0.10				µg/L		
		Zinc, total recoverable	<3.1		9.8				µg/L		
Radionuclides											
		Gross alpha	*1.1E-01*		*0.0E+00*				pCi/L		
		Nonvolatile beta	*8.2E-01*		*-1.2E+00*				pCi/L		
		Radium, total alpha-emitting	*2.0E-01*		2.4E+00				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 32B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N99676.0 E52742.5	33.332269 °N 81.721570 °W	132.5-127.5 ft msl	255.4 ft msl	2" PVC	V	LL

SAMPLE DATE	08/02/96	02/05/97	08/25/97	02/19/98	
FIELD DATA					
Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	211.4	210.6	209.9	210.3	ft msl
pH	4.8	4.6	4.4	4.4	pH
Sp. conductance	22	22	22	20	µS/cm
Water temperature	25.0	23.0	22.0	19.0	°C
Alkalinity as $CaCO_3$	1	2	0	0	mg/L
Turbidity	3	0	0	1	NTU
Volume purged	2.2	2.4	4.5	9.1	well volume
Sampling code					
Synchronous water level	211.4 (09/20/96)	210.4 (03/17/97)	208.7 (09/15/97)	210.0 (03/18/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	5.0	3.2	3.7	3.6	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	2.0	<5.0	<5.0	<47	1		µg/L	WA	0
		Nickel, total recoverable	<1.6	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<2.0	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	<2.0	<3.0	<5.0	<5.0	1		µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<26		24				µg/L		
		Chloride	1,500		1,600				µg/L		
		Chromium, total recoverable	<4.0		<3.0				µg/L		
		Cobalt, total recoverable	0.54		<5.0				µg/L		
		Copper, total recoverable	7.6		1.5				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	<6.5		1.5				µg/L		
		Mercury, total recoverable	0.066		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	1,300		1,100				µg/L		
		Sodium, total recoverable	1,400		1,500				µg/L		
		Sulfate	280		<5,000				µg/L		
		Total phosphates (as P)	190		<10				µg/L		
		Uranium, total recoverable	<20		0.056				µg/L		
		Zinc, total recoverable	<9.3		14				µg/L		
Radionuclides											
		Gross alpha	*4.4E-01*		*4.0E-02*				pCi/L		
		Nonvolatile beta	*1.3E+00*		*-5.0E-02*				pCi/L		
		Radium, total alpha-emitting	2.0E-01		*1.5E+00*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 32C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N99684.9 E52746.9	33.332296 °N 81.721576 °W	188.6-183.7 ft msl	255.7 ft msl	2" PVC	V	UL

SAMPLE DATE	07/12/96	02/05/97	08/25/97	02/19/98	
FIELD DATA					
Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	216.4	215.7	214.9	215.5	ft msl
pH	5.2	4.8	4.6	5.0	pH
Sp. conductance	22	24	22	24	µS/cm
Water temperature	26.0	23.0	22.0	18.0	°C
Alkalinity as $CaCO_3$	1	4	3	2	mg/L
Turbidity	3	0	1	0	NTU
Volume purged	2.4	3.2	12	14	well volume
Sampling code					
Synchronous water level	216.5 (09/20/96)	215.5 (03/17/97)	214.5 (09/15/97)	215.6 (03/18/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	9.9	12	11	13	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	5.8	<5.0	<5.0	<47	1		µg/L	WA	0
		Nickel, total recoverable	<10	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<2.0	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	<2.0	<3.0	<5.0	<5.0	1		µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	13		24				µg/L		
		Chloride	2,300		2,500				µg/L		
		Chromium, total recoverable	<4.0		1.2				µg/L		
		Cobalt, total recoverable	0.51		<5.0				µg/L		
		Copper, total recoverable	4.0		1.9				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	1.9		1.8				µg/L		
		Mercury, total recoverable	<0.20		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	1,100		850				µg/L		
		Sodium, total recoverable	2,000		1,900				µg/L		
		Sulfate	150		<5,000				µg/L		
		Total phosphates (as P)	30		<10				µg/L		
		Uranium, total recoverable	<20		0.16				µg/L		
		Zinc, total recoverable	<4.9		11				µg/L		
Radionuclides											
		Gross alpha	*2.8E-01*		*1.4E-01*				pCi/L		
		Nonvolatile beta	*7.7E-01*		*-1.1E+00*				pCi/L		
		Radium, total alpha-emitting	3.0E-01		*7.6E-01*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 33

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N98031.0 E51736.3	33.326990 °N 81.721020 °W	228.7-208.7 ft msl	255.9 ft msl	4" PVC	S	M

SAMPLE DATE	07/31/96	01/16/97	08/13/97	03/04/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	217.2	216.9	216.2	218.0	ft msl
pH	5.8	5.0	4.6	4.6	pH
Sp. conductance	38	120	94	100	µS/cm
Water temperature	24.0	24.0	20.4	19.0	°C
Alkalinity as $CaCO_3$	1	0	0	0	mg/L
Turbidity	1	1	1	1	NTU
Volume purged	13	8.2	4.7	4.8	well volume
Sampling code					
Synchronous water level	217.1 (09/19/96)	216.8 (03/17/97)	215.9 (09/16/97)	218.9 (03/18/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	3.6	3.3	3.6	2.8	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	1.5	<5.0	5.7	<47	1		µg/L	WA	0
		Nickel, total recoverable	<10	5.4	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	2.9	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	1.6	2.2	1.0	1.1	1	JE	µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	2.6	3.8	3.0	1.9	1	JE	µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	14		<20				µg/L		
		Chloride	***5,800***		***5,200***				µg/L		
		Chromium, total recoverable	<1.4		<3.0				µg/L		
		Cobalt, total recoverable	<0.96		<5.0				µg/L		
		Copper, total recoverable	<4.5		17				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	2.4		2.0				µg/L		
		Mercury, total recoverable	0.54		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	***6,500***		***11,000***				µg/L		
		Sodium, total recoverable	***14,000***		***16,000***				µg/L		
		Sulfate	960		<5,000				µg/L		
		Total phosphates (as P)	<50		<10				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	5.1		16				µg/L		
Radionuclides											
		Gross alpha	*6.5E-01*		*1.4E+00*				pCi/L		
		Nonvolatile beta	*1.4E+00*		*8.2E-01*				pCi/L		
		Radium, total alpha-emitting	5.0E-01		*1.5E+00*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 33A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N98006.7 E51738.0	33.326939 °N 81.720969 °W	88.4-82.8 ft msl	255.4 ft msl	4" PVC	S	MCBC

SAMPLE DATE	07/31/96	01/16/97	08/12/97	02/19/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	204.9	204.6	203.8	204.6	ft msl
pH	6.4	5.0	5.0	5.2	pH
Sp. conductance	18	26	20	27	µS/cm
Water temperature	24.0	23.0	19.8	18.8	°C
Alkalinity as $CaCO_3$	1	2	1	4	mg/L
Turbidity	0	1	0	0	NTU
Volume purged	3.5	5.1	3.1	2.3	well volume
Sampling code					
Synchronous water level	205.1 (09/19/96)	204.5 (03/17/97)	203.4 (09/16/97)	204.8 (03/18/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	3.8	4.5	3.9	5.3	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0	3.7	<47	1		µg/L	WA	0
		Nickel, total recoverable	<10	6.2	<5.0	3.6	1	JE	µg/L	WA	0
		Selenium, total recoverable	2.5	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<2.0	<1.9	<5.0	2.9	1	JE	µg/L	WA	1
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
	■	Trichloroethylene	***9.5***	***13***	***14***	***10***	1		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	13		<20				µg/L		
		Chloride	1,800		1,700				µg/L		
		Chromium, total recoverable	<1.7		<3.0				µg/L		
		Cobalt, total recoverable	<0.93		<5.0				µg/L		
		Copper, total recoverable	<2.6		6.1				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	<1.5		1.9				µg/L		
		Mercury, total recoverable	<0.20		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	1,200		1,300				µg/L		
		Sodium, total recoverable	1,600		1,800				µg/L		
		Sulfate	500		<5,000				µg/L		
		Total phosphates (as P)	<50		<10				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	5.6		16				µg/L		
Radionuclides											
		Gross alpha	*7.8E-01*		*9.3E-01*				pCi/L		
		Nonvolatile beta	*1.6E+00*		3.0E+00				pCi/L		
		Radium, total alpha-emitting	9.0E-01		*3.7E+00*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 33B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N97995.9 E51741.9	33.326921 °N 81.720937 °W	126.3-120.7 ft msl	255 ft msl	4" PVC	S	LL

SAMPLE DATE	07/31/96	01/16/97	08/12/97	02/19/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	207.6	207.4	206.5	207.3	ft msl
pH	5.9	5.2	4.8	4.9	pH
Sp. conductance	23	32	26	31	µS/cm
Water temperature	29.0	22.0	21.0	18.3	°C
Alkalinity as $CaCO_3$	2	2	4	3	mg/L
Turbidity	1	1	2	1	NTU
Volume purged	6.3	4.3	3.8	2.4	well volume
Sampling code					
Synchronous water level	207.5 (09/19/96)	207.1 (03/17/97)	205.9 (09/16/97)	207.6 (03/18/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	4.5	2.1	1.9	1.6	1	JE	µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	2.3	<5.0	<5.0	<47	1		µg/L	WA	0
		Nickel, total recoverable	<10	<6.3	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	2.1	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	5.0	***6.6***	3.7	2.7	1	JE	µg/L	WA	1
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
	■	Trichloroethylene	***8.4***	***12***	***11***	***8.6***	1		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	17		<20				µg/L		
		Chloride	2,500		2,500				µg/L		
		Chromium, total recoverable	<1.6		<3.0				µg/L		
		Cobalt, total recoverable	<1.6		<5.0				µg/L		
		Copper, total recoverable	<3.9		<3.0				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	<1.7		1.4				µg/L		
		Mercury, total recoverable	<0.20		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	900		1,200				µg/L		
		Sodium, total recoverable	4,000		4,500				µg/L		
		Sulfate	1,700		<5,000				µg/L		
		Total phosphates (as P)	<50		<10				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	9.5		10				µg/L		
Radionuclides											
		Gross alpha	*4.2E-01*		*9.5E-01*				pCi/L		
		Nonvolatile beta	*5.1E-01*		*-3.0E-02*				pCi/L		
		Radium, total alpha-emitting	*1.0E-01*		*2.4E+00*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 33C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N97984.8 E51746.7	33.326905 °N 81.720903 °W	171.0-165.4 ft msl	255.3 ft msl	4" PVC	S	UL

SAMPLE DATE	08/13/96	08/12/97	02/18/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	210.9		209.8	210.8	ft msl
pH	4.8		5.0	5.3	pH
Sp. conductance	50		48	57	µS/cm
Water temperature	25.0		21.4	18.3	°C
Alkalinity as $CaCO_3$	1		6	1	mg/L
Turbidity	1		1	0	NTU
Volume purged	7.7		3.6	2.5	well volume
Sampling code					
Synchronous water level	210.7 (09/19/96)		209.5 (09/16/97)	211.1 (03/18/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	4.4		4.6	5.2	1		µg/L	WA	0
		Cyanide	<10		<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	1.4		6.4	<47	1		µg/L	WA	0
		Nickel, total recoverable	<10		<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	1.5		<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0		<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0		<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0		<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0		<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0		<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	2.1		1.3	1.4	1	JE	µg/L	WA	0
		1,1,1-Trichloroethane	<2.0		<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	***5.6***		3.2	3.6	1	JE	µg/L	WA	1

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<20		<20				µg/L		
		Chloride	4,200		3,600				µg/L		
		Chromium, total recoverable	<4.0		0.70				µg/L		
		Cobalt, total recoverable	<4.0		<5.0				µg/L		
		Copper, total recoverable	4.3		2.9				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	2.4		3.3				µg/L		
		Mercury, total recoverable	<0.20		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	***7,500***		***4,400***				µg/L		
		Sodium, total recoverable	***8,000***		***8,400***				µg/L		
		Sulfate	430		<5,000				µg/L		
		Total phosphates (as P)	<50		<10				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	<4.6		19				µg/L		
Radionuclides											
		Gross alpha	6.6E-01		1.8E+00				pCi/L		
		Nonvolatile beta	1.4E+00		3.2E+00				pCi/L		
		Radium, total alpha-emitting	*-7.0E-01*		*2.0E+00*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 34A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N104954.9 E50534.9	33.340334 °N 81.737653 °W	118.6-113.6 ft msl	384 ft msl	4" PVC	S	MCBC

SAMPLE DATE	08/03/96	01/08/97	08/12/97	02/11/98	
FIELD DATA					
Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	218.4	216.9	215.8	215.4	ft msl
pH	4.9	4.6	4.6	4.8	pH
Sp. conductance	22	20	20	24	µS/cm
Water temperature	25.0	19.0	21.1	17.0	°C
Alkalinity as $CaCO_3$	1	1	0	0	mg/L
Turbidity	0	2	1	1	NTU
Volume purged	4.3	2.9	2.8	4.6	well volume
Sampling code					
Synchronous water level	219.6 (09/17/96)	216.9 (03/19/97)	214.9 (09/15/97)	214.6 (03/17/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	4.9	4.8	4.8	3.9	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	1.6	<5.0	14	<47	1		µg/L	WA	0
		Nickel, total recoverable	<10	<5.0	<5.0	7.0	1	JE	µg/L	WA	0
		Selenium, total recoverable	1.8	<5.0	3.9	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<200	<35	<250	<100	20		µg/L	WA	0
		1,1-Dichloroethane	<200	<63	<250	<100	20		µg/L	WA	0
		1,1-Dichloroethylene	<200	<80	<250	<100	20		µg/L	WA	0
		trans-1,2-Dichloroethylene	<200	<80	<250				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<200	<38	<250	<100	20		µg/L	WA	0
	■	Tetrachloroethylene	<200	***53***	***64***	***29***	20	JE	µg/L	WA	2
		1,1,1-Trichloroethane	<200	<63	<250	<100	20		µg/L	WA	0
	■	Trichloroethylene	***2,700***	***3,300***	***2,400***	***1,900***	20		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	16		<20				µg/L		
		Chloride	2,000		2,000				µg/L		
		Chromium, total recoverable	<1.1		<3.0				µg/L		
		Cobalt, total recoverable	<0.69		<5.0				µg/L		
		Copper, total recoverable	0.65		6.9				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	3.4		2.6				µg/L		
		Mercury, total recoverable	<0.20		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	1,300		1,500				µg/L		
		Sodium, total recoverable	2,000		2,200				µg/L		
		Sulfate	260		<5,000				µg/L		
		Total phosphates (as P)	60		5.0				µg/L		
		Uranium, total recoverable	<25		<0.10				µg/L		
		Zinc, total recoverable	39		25				µg/L		
Radionuclides											
		Gross alpha	*2.7E-01*		*1.1E+00*				pCi/L		
		Nonvolatile beta	*1.1E+00*		*8.4E-01*				pCi/L		
		Radium, total alpha-emitting	*-2.0E-01*		*1.5E+00*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 34B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N104944.7 E50534.9	33.340312 °N 81.737633 °W	187.0-182.0 ft msl	384 ft msl	4" PVC	S	UL

SAMPLE DATE	08/03/96	01/08/97	08/12/97	02/11/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	227.6	223.4	225.2	223.8	ft msl
pH	4.9	5.2	4.8	4.8	pH
Sp. conductance	26	26	26	32	µS/cm
Water temperature	26.0	20.0	21.6	17.0	°C
Alkalinity as $CaCO_3$	1	2	2	0	mg/L
Turbidity	1	2	1	0	NTU
Volume purged	5.0	3.3	3.1	9.4	well volume
Sampling code					
Synchronous water level	227.6 (09/17/96)	226.4 (03/19/97)	224.5 (09/15/97)	223.4 (03/17/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	5.6	7.9	7.1	5.3	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	3.0	<5.0	11	<47	1		µg/L	WA	0
		Nickel, total recoverable	<10	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
	■	Tetrachloroethylene	***11***	***19***	***13***	***18***	1		µg/L	WA	2
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
	■	Trichloroethylene	***11***	***17***	***15***	***23***	1		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	31		24				µg/L		
		Chloride	3,200		3,800				µg/L		
		Chromium, total recoverable	<4.0		<3.0				µg/L		
		Cobalt, total recoverable	<0.79		<5.0				µg/L		
		Copper, total recoverable	0.88		3.9				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	3.7		4.0				µg/L		
		Mercury, total recoverable	0.28		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	1,300		1,100				µg/L		
		Sodium, total recoverable	2,200		2,300				µg/L		
		Sulfate	160		<5,000				µg/L		
		Total phosphates (as P)	<50		<10				µg/L		
		Uranium, total recoverable	<20		0.062				µg/L		
		Zinc, total recoverable	13		34				µg/L		
Radionuclides											
		Gross alpha	1.4E+00		3.9E+00				pCi/L		
		Nonvolatile beta	1.7E+00		3.0E+00				pCi/L		
		Radium, total alpha-emitting	1.3E+00		***6.3E+00***				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 34C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N104934.1 E50535.5	33.340289 °N 81.737611 °W	240.9-220.9 ft msl	383.9 ft msl	4" PVC	S	M

SAMPLE DATE	08/03/96	01/08/97	08/12/97	02/11/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	230.5	228.0	228.9	228.8	ft msl
pH	4.6	4.8	4.4	4.6	pH
Sp. conductance	22	16	18	20	µS/cm
Water temperature	27.0	20.0	21.0	17.0	°C
Alkalinity as $CaCO_3$	0	1	0	0	mg/L
Turbidity	1	3	1	4	NTU
Volume purged	8.9	4.3	6.5	3.3	well volume
Sampling code					
Synchronous water level	230.4 (09/17/96)	229.3 (03/19/97)	228.8 (09/15/97)	228.8 (03/17/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	3.8	3.9	2.7	2.8	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
	■	Lead, total recoverable	7.9	***19***	12	***17***	1	JE	µg/L	WA	0
		Nickel, total recoverable	0.97	<5.0	<5.0	4.0	1	JE	µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<10	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<10	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<10	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<10	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<10	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	***13***	***13***	***8.6***	3.7	1	JE	µg/L	WA	1
		1,1,1-Trichloroethane	<10	<2.5	<5.0	<5.0	1		µg/L	WA	0
	■	Trichloroethylene	***81***	***45***	***32***	***12***	1		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	48		39				µg/L		
		Chloride	1,100		1,300				µg/L		
		Chromium, total recoverable	<4.0		1.0				µg/L		
		Cobalt, total recoverable	<0.72		<5.0				µg/L		
		Copper, total recoverable	0.80		11				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	3.2		2.4				µg/L		
		Mercury, total recoverable	0.046		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	1,800		1,300				µg/L		
		Sodium, total recoverable	1,600		1,600				µg/L		
		Sulfate	240		<5,000				µg/L		
		Total phosphates (as P)	<50		<10				µg/L		
		Uranium, total recoverable	<21		0.062				µg/L		
		Zinc, total recoverable	13		28				µg/L		
Radionuclides											
		Gross alpha	2.9E+00		3.1E+00				pCi/L		
		Nonvolatile beta	2.0E+00		2.4E+00				pCi/L		
		Radium, total alpha-emitting	9.0E-01		4.2E+00				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 34TA

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N104905.8 E50536.6	33.340229 °N 81.737553 °W	(91.9)-(101.9) ft msl	383.4 ft msl	4" Steel	S	CBA

SAMPLE DATE 07/12/96 02/04/97 08/06/97 03/03/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	202.4	183.4	190.6	198.8	ft msl
pH	6.0	4.8	5.4	5.9	pH
Sp. conductance	30	28	22	22	µS/cm
Water temperature	28.0	24.0	22.0	18.0	°C
Alkalinity as $CaCO_3$	5	1	7	6	mg/L
Turbidity	3	4	2	9	NTU
Volume purged	2.2	2.3	2.2	2.1	well volume
Sampling code					
Synchronous water level	203.4 (09/17/96)	199.2 (03/19/97)	187.4 (09/15/97)	197.2 (03/17/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	2.7	2.6	2.8	1.9	1		µg/L	WA	0
		Cyanide	3.1	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	1.6	<5.0	<5.0	<47	1		µg/L	WA	0
		Nickel, total recoverable	<10	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<2.0	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
■		Trichloroethylene	3.2	4.2	***6.7***	***9.6***	1		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<20		17				µg/L		
		Chloride	1,600		1,800				µg/L		
		Chromium, total recoverable	0.70		0.90				µg/L		
		Cobalt, total recoverable	0.38		<5.0				µg/L		
		Copper, total recoverable	2.3		<3.0				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	14		13				µg/L		
		Mercury, total recoverable	<0.20		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	990		690				µg/L		
		Sodium, total recoverable	1,700		1,800				µg/L		
		Sulfate	430		<5,000				µg/L		
		Total phosphates (as P)	<50		<10				µg/L		
		Uranium, total recoverable	12		<0.10				µg/L		
		Zinc, total recoverable	<10		39				µg/L		
Radionuclides											
		Gross alpha	*2.9E-01*		*2.7E+00*				pCi/L		
		Nonvolatile beta	*1.2E+00*		*2.2E+00*				pCi/L		
		Radium, total alpha-emitting	*1.0E-01*		9.2E-01				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 35A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N102098.0 E50945.2	33.334689 °N 81.731015 °W	128.8-123.2 ft msl	350.9 ft msl	4" PVC	S	MCBC

SAMPLE DATE

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Water elevation	217.3						ft msl		
pH	5.4						pH		
Sp. conductance	22						µS/cm		
Water temperature	24.0						°C		
Alkalinity as $CaCO_3$	3						mg/L		
Turbidity	1						NTU		
Volume purged	3.2						well volume		
Sampling code									
Synchronous water level	218.2 (03/14/96)						ft msl		

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics									
Barium, total recoverable							µg/L		
Cyanide							µg/L		
Lead, total recoverable							µg/L		
Nickel, total recoverable							µg/L		
Selenium, total recoverable							µg/L		
Organics									
Chlorobenzene							µg/L		
1,1-Dichloroethane							µg/L		
1,1-Dichloroethylene							µg/L		
trans-1,2-Dichloroethylene							µg/L		
PCB 1016									
PCB 1221									
PCB 1232									
PCB 1242									
PCB 1248									
PCB 1254									
PCB 1260									
1,1,2,2-Tetrachloroethane							µg/L		
Tetrachloroethylene							µg/L		
1,1,1-Trichloroethane							µg/L		
Trichloroethylene							µg/L		

Monitoring Constitutents

Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics									
Aluminum, total recoverable									
Chloride									
Chromium, total recoverable									
Cobalt, total recoverable									
Copper, total recoverable									
Fluoride									
Manganese, total recoverable									
Mercury, total recoverable									
Nitrate as nitrogen									
Nitrate-nitrite as nitrogen									
Sodium, total recoverable									
Sulfate									
Total phosphates (as P)									
Uranium, total recoverable									
Zinc, total recoverable									
Radionuclides									
Gross alpha									
Nonvolatile beta									
Radium, total alpha-emitting									

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 35B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N102110.8 E50947.9	33.334722 °N 81.731032 °W	169.3-163.7 ft msl	351.6 ft msl	4" PVC	S	UL

SAMPLE DATE	07/23/96	02/05/97	08/01/97	03/04/98	
FIELD DATA					
Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	220.1	218.7	214.6	217.1	ft msl
pH	5.2	4.8	5.4	5.5	pH
Sp. conductance	42	30	30	33	µS/cm
Water temperature	25.0	23.0	19.5	16.9	°C
Alkalinity as $CaCO_3$	8	8	9	25	mg/L
Turbidity	2	1	1	1	NTU
Volume purged	2.5	2.2	3.3	3.2	well volume
Sampling code					
Synchronous water level	220.1 (09/17/96)	218.2 (03/17/97)	216.8 (09/16/97)	216.7 (03/17/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	4.8	2.8	3.7	11	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	2.0	1	JE	µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0	6.7	7.2	1	JE	µg/L	WA	0
		Nickel, total recoverable	<10	<5.0	<5.0	<20	1		µg/L	EX	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<10	1		µg/L	EX	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1	J1	µg/L	EX	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1	J1	µg/L	EX	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1	J1	µg/L	EX	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1	J1	µg/L	EX	0
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1	J1	µg/L	EX	0
		Tetrachloroethylene	<2.0	<1.9	<5.0	<5.0	1	J1	µg/L	EX	0
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1	J1	µg/L	EX	0
		Trichloroethylene	<2.0	<3.0	<5.0	<5.0	1	J1	µg/L	EX	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	35		<20				µg/L		
		Chloride	2,800		3,200				µg/L		
		Chromium, total recoverable	2.1		0.80				µg/L		
		Cobalt, total recoverable	1.2		<5.0				µg/L		
		Copper, total recoverable	5.2		20				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	1.3		0.90				µg/L		
		Mercury, total recoverable	<0.20		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	320		210				µg/L		
		Sodium, total recoverable	4,200		4,500				µg/L		
		Sulfate	1,600		<5,000				µg/L		
		Total phosphates (as P)	<50		<10				µg/L		
		Uranium, total recoverable	<20		0.034				µg/L		
		Zinc, total recoverable	35		49				µg/L		
Radionuclides											
		Gross alpha	*7.5E-01*		*5.8E-01*				pCi/L		
		Nonvolatile beta	*2.5E-01*		*-1.1E+00*				pCi/L		
		Radium, total alpha-emitting	*-1.0E-01*		*2.1E+00*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 35TA

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N102101.6 E50919.6	33.334655 °N 81.731089 °W	38.2-32.9 ft msl	350.3 ft msl	4" CS	S	CBA

SAMPLE DATE	07/23/96	02/05/97	08/01/97	02/25/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	199.4	196.7	198.1	197.5	ft msl
pH	4.0	4.4	4.8	5.2	pH
Sp. conductance	20	20	16	14	µS/cm
Water temperature	25.0	23.0	19.5	18.0	°C
Alkalinity as $CaCO_3$	1	2	0	1	mg/L
Turbidity	8	4	1	2	NTU
Volume purged	2.1	2.7	2.5	2.5	well volume
Sampling code					
Synchronous water level	201.0 (09/17/96)	197.3 (03/17/97)	195.8 (09/16/97)	195.6 (03/17/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	3.1	2.8	3.5	2.9	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	3.1	11	4.9	5.9	1	JE	µg/L	WA	0
		Nickel, total recoverable	<10	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<2.0	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	<2.0	<3.0	<5.0	<5.0	1		µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	49		<20				µg/L		
		Chloride	770		1,700				µg/L		
		Chromium, total recoverable	<4.0		0.70				µg/L		
		Cobalt, total recoverable	0.36		<5.0				µg/L		
		Copper, total recoverable	5.8		6.5				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	6.2		4.8				µg/L		
		Mercury, total recoverable	<0.20		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	800		370				µg/L		
		Sodium, total recoverable	1,400		1,500				µg/L		
		Sulfate	200		<5,000				µg/L		
		Total phosphates (as P)	170		<10				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	4.3		8.6				µg/L		
Radionuclides											
		Gross alpha	*3.6E-01*		*4.6E-01*				pCi/L		
		Nonvolatile beta	*3.1E-01*		*-1.9E+00*				pCi/L		
		Radium, total alpha-emitting	*-2.0E-01*		*9.6E-01*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
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WELL MSB 36A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N100511.3 E49514.9	33.328846 °N 81.731694 °W	100.5-94.9 ft msl	340.6 ft msl	4" PVC	S	MCBC

SAMPLE DATE	08/02/96	01/08/97	08/13/97	02/18/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	209.9	208.7	207.6	208.5	ft msl
pH	8.4	3.8	4.4	4.1	pH
Sp. conductance	880	42	36	40	µS/cm
Water temperature	23.0	18.0	21.5	19.5	°C
Alkalinity as $CaCO_3$	0	0	0	0	mg/L
Turbidity	1	1	1	0	NTU
Volume purged	2.3	2.2	2.2	2.1	well volume
Sampling code					
Synchronous water level	210.3 (09/19/96)	208.3 (03/17/97)	207.2 (09/16/97)	208.0 (03/18/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	10	12	10	11	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	6.5	***26***	12	10	1	JE	µg/L	WA	0
		Nickel, total recoverable	6.1	7.4	6.0	8.1	1	JE	µg/L	WA	0
		Selenium, total recoverable	3.3	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<10	<28	<130	<50	10		µg/L	WA	0
		1,1-Dichloroethane	<10	<50	<130	<50	10		µg/L	WA	0
		1,1-Dichloroethylene	<10	<64	<130	<50	10		µg/L	WA	0
		trans-1,2-Dichloroethylene	<10	<64	<130				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<10	<30	<130	<50	10		µg/L	WA	0
	■	Tetrachloroethylene	***95***	***85***	***66***	***43***	10	JE	µg/L	WA	2
		1,1,1-Trichloroethane	<10	<50	<130	<50	10		µg/L	WA	0
	■	Trichloroethylene	***1,300***	***1,500***	***1,200***	***900***	10		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	68		47				µg/L		
		Chloride	1,900		1,800				µg/L		
		Chromium, total recoverable	<4.0		<3.0				µg/L		
		Cobalt, total recoverable	<2.0		<5.0				µg/L		
		Copper, total recoverable	8.7		22				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	40		41				µg/L		
		Mercury, total recoverable	0.15		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	740		520				µg/L		
		Sodium, total recoverable	1,800		1,800				µg/L		
		Sulfate	***6,500***		***6,700***				µg/L		
		Total phosphates (as P)	<50		<10				µg/L		
		Uranium, total recoverable	<32		0.033				µg/L		
		Zinc, total recoverable	18		26				µg/L		
Radionuclides											
		Gross alpha	1.9E+00		2.0E+00				pCi/L		
		Nonvolatile beta	2.4E+00		*1.2E+00*				pCi/L		
		Radium, total alpha-emitting	8.0E-01		*4.5E+00*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 36B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N100514.9 E49526.3	33.328872 °N 81.731671 °W	163.7-158.1 ft msl	340.8 ft msl	4" PVC	S	LL

SAMPLE DATE	08/02/96	01/08/97	08/13/97	02/18/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	214.8	213.3	212.2	212.8	ft msl
pH	5.4	4.4	4.4	4.7	pH
Sp. conductance	140	102	94	87	µS/cm
Water temperature	23.0	19.0	20.3	18.2	°C
Alkalinity as $CaCO_3$	2	1	0	1	mg/L
Turbidity	6	3	5	3	NTU
Volume purged	3.9	3.7	3.8	5.0	well volume
Sampling code					
Synchronous water level	214.4 (09/19/96)	212.9 (03/17/97)	211.8 (09/16/97)	212.4 (03/18/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	43	40	62	26	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	2.3	<5.0	***22***	<47	1		µg/L	WA	0
		Nickel, total recoverable	1.7	5.3	14	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<100	<14	<50	<50	10		µg/L	WA	0
		1,1-Dichloroethane	<100	<25	<50	<50	10		µg/L	WA	0
		1,1-Dichloroethylene	<100	<32	<50	<50	10		µg/L	WA	0
		trans-1,2-Dichloroethylene	<100	<32	<50				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<100	<15	<50	<50	10		µg/L	WA	0
		Tetrachloroethylene	<100	<19	<50	<50	10		µg/L	WA	0
		1,1,1-Trichloroethane	<100	<25	<50	<50	10		µg/L	WA	0
	■	Trichloroethylene	***830***	***1,100***	***910***	***920***	10		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	***110***		***3,600***				µg/L		
		Chloride	2,300		2,200				µg/L		
		Chromium, total recoverable	<1.1		26				µg/L		
		Cobalt, total recoverable	<2.0		2.9				µg/L		
		Copper, total recoverable	7.3		37				µg/L		
		Fluoride	20		<100				µg/L		
		Manganese, total recoverable	19		***140***				µg/L		
		Mercury, total recoverable	0.18		0.080				µg/L		
		Nitrate-nitrite as nitrogen	***15,000***		***11,000***				µg/L		
		Sodium, total recoverable	***5,300***		4,400				µg/L		
		Sulfate	410		<5,000				µg/L		
		Total phosphates (as P)	<50		99				µg/L		
		Uranium, total recoverable	<27		1.7				µg/L		
		Zinc, total recoverable	59		90				µg/L		
Radionuclides											
		Gross alpha	5.9E+00		***2.1E+01***				pCi/L		
		Nonvolatile beta	5.2E+00		8.4E+00				pCi/L		
		Radium, total alpha-emitting	2.1E+00		*5.0E+00*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 36C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N100518.3 E49537.2	33.328897 °N 81.731649 °W	194.2-188.6 ft msl	340.9 ft msl	4" PVC	S	UL

SAMPLE DATE	08/02/96	01/08/97	08/13/97	02/18/98	
FIELD DATA					
Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	214.6	213.2	212.3	212.9	ft msl
pH	5.8	4.6	4.4	4.5	pH
Sp. conductance	40	30	32	33	µS/cm
Water temperature	21.0	19.0	19.5	18.1	°C
Alkalinity as $CaCO_3$	5	1	0	1	mg/L
Turbidity	2	2	1	1	NTU
Volume purged	4.9	4.2	4.7	2.8	well volume
Sampling code					
Synchronous water level	214.6 (09/19/96)	212.9 (03/17/97)	211.9 (09/16/97)	212.4 (03/18/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	10	9.3	10	9.4	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0	8.5	<47	1		µg/L	WA	0
		Nickel, total recoverable	0.92	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<4.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<4.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<4.0		<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<4.0		<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<4.0		<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	3.2	<1.9	3.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<4.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
	■	Trichloroethylene	***38***	***6.9***	***37***	***12***	1		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	50		38				µg/L		
		Chloride	***4,300***		***4,700***				µg/L		
		Chromium, total recoverable	<4.0		<3.0				µg/L		
		Cobalt, total recoverable	<1.5		<5.0				µg/L		
		Copper, total recoverable	9.0		2.2				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	5.6		5.9				µg/L		
		Mercury, total recoverable	0.076		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	***3,000***		***3,100***				µg/L		
		Sodium, total recoverable	4,000		4,100				µg/L		
		Sulfate	180		<5,000				µg/L		
		Total phosphates (as P)	<50		<10				µg/L		
		Uranium, total recoverable	<35		0.032				µg/L		
		Zinc, total recoverable	12		19				µg/L		
Radionuclides											
		Gross alpha	2.4E+00		3.9E+00				pCi/L		
		Nonvolatile beta	1.8E+00		3.1E+00				pCi/L		
		Radium, total alpha-emitting	9.0E-01		***7.4E+00***				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
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WELL MSB 36D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N100521.7 E49548.3	33.328923 °N 81.731627 °W	249.5-228.8 ft msl	341.6 ft msl	4" PVC	S	M

SAMPLE DATE	08/02/96	01/08/97	08/14/97

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	237.9	237.9	233.0		ft msl
pH	6.0	4.8	4.0		pH
Sp. conductance	52	100	26		µS/cm
Water temperature	24.0	20.0	23.9		°C
Alkalinity as $CaCO_3$	6	1	1		mg/L
Turbidity	377	360	97		NTU
Volume purged	0.17	0.17	0.0		well volume
Sampling code	X	X	X		
Synchronous water level	237.9 (09/19/96)	234.1 (03/17/97)	232.6 (09/16/97)		ft msl

ANALYTICAL DATA

Groundwater Protection Standard

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H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable		8.9					µg/L		
		Cyanide	<10	<5.0	<5.0				µg/L		
		Lead, total recoverable		***150***					µg/L		
		Nickel, total recoverable		26					µg/L		
		Selenium, total recoverable		<5.0					µg/L		
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0				µg/L		
		1,1-Dichloroethane	<2.0	<2.5	<5.0				µg/L		
		1,1-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0				µg/L		
		Tetrachloroethylene	<2.0	<1.9	<5.0				µg/L		
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0				µg/L		
		Trichloroethylene	<2.0	<3.0	<5.0				µg/L		

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable									
		Chloride	***4,700***		1,900				µg/L		
		Chromium, total recoverable									
		Cobalt, total recoverable									
		Copper, total recoverable									
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable									
		Mercury, total recoverable									
		Nitrate-nitrite as nitrogen	930		1,100				µg/L		
		Sodium, total recoverable									
		Sulfate	240		<5,000				µg/L		
		Total phosphates (as P)	40		20				µg/L		
		Uranium, total recoverable			<0.10				µg/L		
		Zinc, total recoverable									
Radionuclides											
		Gross alpha	1.0E+00		*-9.0E-02*				pCi/L		
		Nonvolatile beta	*7.5E-01*		*-1.4E+00*				pCi/L		
		Radium, total alpha-emitting	3.0E-01		*2.3E+00*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
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WELL MSB 36TA

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N100507.7 E49503.0	33.328818 °N 81.731719 °W	53.4-48.4 ft msl	340.6 ft msl	4" CS	S	CBA

SAMPLE DATE	07/12/96	02/05/97	08/29/97	02/27/98	
FIELD DATA					
Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	195.0	192.6	192.9	193.3	ft msl
pH	6.0	5.2	5.0	4.8	pH
Sp. conductance	34	20	20	20	µS/cm
Water temperature	25.0	27.0	19.8	19.0	°C
Alkalinity as $CaCO_3$	0	2	1	1	mg/L
Turbidity	2	3	1	1	NTU
Volume purged	3.3	2.5	2.9	2.6	well volume
Sampling code					
Synchronous water level	195.6 (09/19/96)	192.8 (03/17/97)	191.1 (09/16/97)	192.3 (03/18/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	4.8	4.9	5.2	4.4	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	4.5	<5.0	10	10	1	JE	µg/L	WA	0
		Nickel, total recoverable	1.5	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<2.0	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	<2.0	<3.0	<5.0	<5.0	1		µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<20		79				µg/L		
		Chloride	1,900		2,300				µg/L		
		Chromium, total recoverable	0.75		<3.0				µg/L		
		Cobalt, total recoverable	<4.0		<5.0				µg/L		
		Copper, total recoverable	8.6		13				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	***53***		33				µg/L		
		Mercury, total recoverable	<0.20		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	330		69				µg/L		
		Sodium, total recoverable	1,500		1,500				µg/L		
		Sulfate	2,300		<5,000				µg/L		
		Total phosphates (as P)	40		<10				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	<3.8		14				µg/L		
Radionuclides											
		Gross alpha	*6.3E-01*		*7.3E-01*				pCi/L		
		Nonvolatile beta	*6.7E-01*		3.4E+00				pCi/L		
		Radium, total alpha-emitting	3.0E-01		1.3E+00				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 37B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N105289.5 E51450.0	33.342568 °N 81.735894 °W	142.3-136.7 ft msl	382.7 ft msl	4" PVC	S	MCBC

SAMPLE DATE	08/02/96	01/10/97	08/13/97	02/11/98
FIELD DATA				
Parameter	3Q96	1Q97	3Q97	1Q98
Water elevation	219.2	218.1	216.2	216.0
pH	6.0	4.8	5.6	5.2
Sp. conductance	36	26	30	24
Water temperature	21.0	19.0	23.0	17.0
Alkalinity as $CaCO_3$	5	5	5	0
Turbidity	1	1	1	1
Volume purged	2.8	3.0	2.6	5.1
Sampling code				
Synchronous water level	220.3 (09/17/96)	217.7 (03/19/97)	215.6 (09/16/97)	215.5 (03/17/98)

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	7.5	6.9	4.8	4.7	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0	4.4	<47	1		µg/L	WA	0
		Nickel, total recoverable	<10	<5.0	<5.0	3.7	1	JE	µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0		<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
	■	Tetrachloroethylene	***48***	***59***	***32***	***50***	1		µg/L	WA	2
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
	■	Trichloroethylene	***28***	***28***	***35***	***50***	1		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	12		<20				µg/L		
		Chloride	1,600		1,500				µg/L		
		Chromium, total recoverable	<4.0		<3.0				µg/L		
		Cobalt, total recoverable	<0.38		<5.0				µg/L		
		Copper, total recoverable	3.7		4.7				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	<1.7		1.8				µg/L		
		Mercury, total recoverable	0.14		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	1,100		860				µg/L		
		Sodium, total recoverable	2,200		3,000				µg/L		
		Sulfate	530		<5,000				µg/L		
		Total phosphates (as P)	<50		37				µg/L		
		Uranium, total recoverable	<30		<0.10				µg/L		
		Zinc, total recoverable	19		28				µg/L		
Radionuclides											
		Gross alpha	5.3E-01		1.4E+00				pCi/L		
		Nonvolatile beta	1.3E+00		2.5E+00				pCi/L		
		Radium, total alpha-emitting	3.0E-01		*2.3E+00*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 37C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N105283.2 E51439.8	33.342538 °N 81.735909 °W	180.8-175.2 ft msl	383 ft msl	4" PVC	S	LL

SAMPLE DATE	08/02/96	01/10/97	08/13/97	02/11/98	
FIELD DATA					
Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	229.1	228.1	226.3	225.1	ft msl
pH	5.8	4.8	5.0	5.0	pH
Sp. conductance	30	28	32	30	µS/cm
Water temperature	24.0	19.0	23.0	17.0	°C
Alkalinity as $CaCO_3$	3	4	3	1	mg/L
Turbidity	1	1	1	0	NTU
Volume purged	3.9	2.3	4.4	4.4	well volume
Sampling code					
Synchronous water level	229.3 (09/17/96)	255.5 (03/18/97)	225.8 (09/16/97)	224.8 (03/17/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	5.1	4.7	4.4	3.7	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	2.7	<5.0	4.4	<47	1		µg/L	WA	0
		Nickel, total recoverable	6.1	7.8	3.8	4.1	1	JE	µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0		<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
	■	Tetrachloroethylene	***17***	***9.6***	***7.0***	***9.7***	1		µg/L	WA	2
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	3.8	<3.0	2.0	3.2	1	JE	µg/L	WA	1

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<25		12				µg/L		
		Chloride	3,700		3,900				µg/L		
		Chromium, total recoverable	1.2		1.1				µg/L		
		Cobalt, total recoverable	0.81		<5.0				µg/L		
		Copper, total recoverable	4.8		14				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	<6.7		5.2				µg/L		
		Mercury, total recoverable	0.078		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	660		570				µg/L		
		Sodium, total recoverable	2,100		2,300				µg/L		
		Sulfate	480		<5,000				µg/L		
		Total phosphates (as P)	<50		5.0				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	<8.0		19				µg/L		
Radionuclides											
		Gross alpha	1.7E+00		*4.6E-01*				pCi/L		
		Nonvolatile beta	2.8E+00		*1.7E+00*				pCi/L		
		Radium, total alpha-emitting	3.0E-01		*2.2E+00*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 37TA

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N105301.3 E51449.8	33.342594 °N 81.735918 °W	35.1-29.8 ft msl	382.3 ft msl	4" CS	S	CBA

SAMPLE DATE	09/04/96	01/10/97	08/28/97	02/12/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	208.4	204.3	201.5	201.8	ft msl
pH	5.2	4.4	5.0	5.0	pH
Sp. conductance	24	42	28	24	µS/cm
Water temperature	28.0	19.0	20.0	16.0	°C
Alkalinity as $CaCO_3$	5	1	0	0	mg/L
Turbidity	2	4	3	2	NTU
Volume purged	3.0	2.7	2.8	3.8	well volume
Sampling code					
Synchronous water level	208.5 (09/17/96)	204.2 (03/19/97)	200.2 (09/16/97)	202.3 (03/17/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	12	11	11	10	1		µg/L	WA	0
		Cyanide	2.5	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	***18***	7.9	7.9	11	1	JE	µg/L	WA	0
		Nickel, total recoverable	1.2	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<5.0	<28	<100	<130	25		µg/L	WA	0
		1,1-Dichloroethane	<5.0	<50	<100	<130	25		µg/L	WA	0
		1,1-Dichloroethylene	<5.0	<64	<100	<130	25		µg/L	WA	0
		trans-1,2-Dichloroethylene	<100		<100				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<5.0	<30	<100	<130	25		µg/L	WA	0
	■	Tetrachloroethylene	***100***	***120***	***110***	***120***	25	JE	µg/L	WA	2
		1,1,1-Trichloroethane	<5.0	<50	<100	<130	25		µg/L	WA	0
	■	Trichloroethylene	***2,000***	***2,700***	***3,000***	***2,200***	25		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<20		7.2				µg/L		
		Chloride	2,400		2,100				µg/L		
		Chromium, total recoverable	1.6		1.9				µg/L		
		Cobalt, total recoverable	1.1		<5.0				µg/L		
		Copper, total recoverable	5.7		4.0				µg/L		
		Fluoride	<22		<100				µg/L		
		Manganese, total recoverable	18		11				µg/L		
		Mercury, total recoverable	0.023		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	1,500		1,400				µg/L		
		Sodium, total recoverable	2,200		2,000				µg/L		
		Sulfate	460		2,800				µg/L		
		Total phosphates (as P)	7.8		<10				µg/L		
		Uranium, total recoverable	53		<0.10				µg/L		
		Zinc, total recoverable	19		23				µg/L		
Radionuclides											
		Gross alpha	1.3E+00		*1.9E+00*				pCi/L		
		Nonvolatile beta	*2.0E-01*		*2.0E-01*				pCi/L		
		Radium, total alpha-emitting	4.0E-01		9.7E-01				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 38C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N102373.1 E49762.0	33.333365 °N 81.734666 °W	169.0-164.3 ft msl	358.8 ft msl	4" PVC	S	LL

SAMPLE DATE	08/06/96	01/29/97	08/21/97	02/12/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	219.3	217.1	217.4	216.1	ft msl
pH	6.0	5.6	6.0	6.2	pH
Sp. conductance	78	44	42	42	µS/cm
Water temperature	28.0	22.0	22.0	16.0	°C
Alkalinity as $CaCO_3$	15	12	17	14	mg/L
Turbidity	3	1	1	1	NTU
Volume purged	0.0	3.6	3.6	5.1	well volume
Sampling code	X				
Synchronous water level	218.8 (09/17/96)	216.6 (03/19/97)	215.3 (09/16/97)	215.2 (03/18/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	42	28	27	24	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0	<5.0	<47	1		µg/L	WA	0
		Nickel, total recoverable	1.6	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	2.2	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<100	<70	<200	<130	25		µg/L	WA	0
		1,1-Dichloroethane	<100	<130	<200	<130	25		µg/L	WA	0
		1,1-Dichloroethylene	<100	<160	<200	<130	25		µg/L	WA	0
		trans-1,2-Dichloroethylene	<100	<160	<200				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<100	<75	<200	<130	25		µg/L	WA	0
	■	Tetrachloroethylene	***2,900***	***5,300***	***3,400***	***4,000***	25		µg/L	WA	2
		1,1,1-Trichloroethane	<100	<130	<200	<130	25		µg/L	WA	0
	■	Trichloroethylene	***3,600***	***5,800***	***4,000***	***4,600***	25		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<57		44				µg/L		
		Chloride	1,900		1,800				µg/L		
		Chromium, total recoverable	0.92		<3.0				µg/L		
		Cobalt, total recoverable	0.74		<5.0				µg/L		
		Copper, total recoverable	2.7		1.5				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	6.8		6.2				µg/L		
		Mercury, total recoverable	0.10		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	1,900		2,200				µg/L		
		Sodium, total recoverable	3,200		2,000				µg/L		
		Sulfate	240		<5,000				µg/L		
		Total phosphates (as P)	<50		7.0				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	7.5		13				µg/L		
Radionuclides											
		Gross alpha	*1.3E+00*		*2.0E-02*				pCi/L		
		Nonvolatile beta	1.9E+00		*3.0E-01*				pCi/L		
		Radium, total alpha-emitting	*0.0E+00*		*8.9E-01*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 39B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N100844.6 E48376.9	33.327724 °N 81.735339 °W	149.6-144.0 ft msl	341.8 ft msl	4" PVC	S	LL

SAMPLE DATE	08/03/96	01/08/97	08/18/97	02/12/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	211.7	210.5	209.2	210.0	ft msl
pH	4.6	4.0	4.4	4.4	pH
Sp. conductance	260	220	200	220	µS/cm
Water temperature	21.0	22.0	20.0	16.0	°C
Alkalinity as $CaCO_3$	0	0	0	0	mg/L
Turbidity	1	1	1	0	NTU
Volume purged	3.6	3.2	4.3	3.1	well volume
Sampling code					
Synchronous water level	211.8 (09/19/96)	210.1 (03/18/97)	208.9 (09/16/97)	209.8 (03/18/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	42	41	38	31	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0	***21***	<47	1		µg/L	WA	0
		Nickel, total recoverable	<10	6.4	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<10	<7.0	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<10	<13	<5.0	<5.0	1		µg/L	WA	0
■		1,1-Dichloroethylene	***14***	<16	***15***	***8.4***	1		µg/L	WA	2
		trans-1,2-Dichloroethylene	<10	<16	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<10	<7.5	<5.0	<5.0	1		µg/L	WA	0
■		Tetrachloroethylene	***150***	***140***	***130***	***120***	1		µg/L	WA	2
		1,1,1-Trichloroethane	<10	<13	3.1	1.3	1	JE	µg/L	WA	0
■		Trichloroethylene	***310***	***270***	***230***	***190***	1		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	80		97				µg/L		
		Chloride	***4,700***		***4,500***				µg/L		
		Chromium, total recoverable	<4.0		0.96				µg/L		
		Cobalt, total recoverable	0.90		<5.0				µg/L		
		Copper, total recoverable	2.4		2.4				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	<12		11				µg/L		
		Mercury, total recoverable	0.33		0.41				µg/L		
		Nitrate-nitrite as nitrogen	***28,000***		***23,000***				µg/L		
		Sodium, total recoverable	***33,000***		***30,000***				µg/L		
		Sulfate	<1,000		<5,000				µg/L		
		Total phosphates (as P)	<50		100				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	<5.3		22				µg/L		
Radionuclides											
		Gross alpha	8.5E+00		3.4E+00				pCi/L		
		Nonvolatile beta	1.7E+01		1.0E+01				pCi/L		
		Radium, total alpha-emitting	2.1E+00		4.6E+00				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 39C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N100852.1 E48386.7	33.327757 °N 81.735328 °W	199.6-194.0 ft msl	341.5 ft msl	4" PVC	S	UL

SAMPLE DATE	08/03/96	01/08/97	08/18/97	02/12/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	215.7	214.3	213.2	213.5	ft msl
pH	5.0	4.6	4.2	4.2	pH
Sp. conductance	52	38	46	68	µS/cm
Water temperature	21.0	22.0	20.0	16.0	°C
Alkalinity as $CaCO_3$	0	0	0	0	mg/L
Turbidity	1	1	1	0	NTU
Volume purged	3.2	4.9	8.8	11	well volume
Sampling code					
Synchronous water level	215.6 (09/19/96)	( )	212.8 (09/16/97)	213.3 (03/18/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	8.1	8.0	7.7	6.8	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	2.5	<5.0	6.4	<47	1		µg/L	WA	0
		Nickel, total recoverable	<1.5	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	1.7	3.4	2.2	2.5	1	JE	µg/L	WA	1
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
	■	Trichloroethylene	***31***	***32***	***25***	***27***	1		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	96		81				µg/L		
		Chloride	3,800		3,800				µg/L		
		Chromium, total recoverable	0.60		<3.0				µg/L		
		Cobalt, total recoverable	0.81		<5.0				µg/L		
		Copper, total recoverable	8.2		1.7				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	<6.7		6.1				µg/L		
		Mercury, total recoverable	0.090		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	***2,900***		***3,000***				µg/L		
		Sodium, total recoverable	2,700		3,100				µg/L		
		Sulfate	280		<5,000				µg/L		
		Total phosphates (as P)	<50		<10				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	<11		14				µg/L		
Radionuclides											
		Gross alpha	9.0E-01		*2.5E-01*				pCi/L		
		Nonvolatile beta	*1.2E+00*		*-1.5E+00*				pCi/L		
		Radium, total alpha-emitting	2.0E-01		*7.7E+00*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 39D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N100858.7 E48396.0	33.327786 °N 81.735316 °W	239.7-219.0 ft msl	341.8 ft msl	4" PVC	S	M

SAMPLE DATE	07/12/96	02/03/97	08/19/97	02/26/98	
FIELD DATA					
Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	232.6	231.1	230.1	228.9	ft msl
pH	5.6	5.2	5.4	5.0	pH
Sp. conductance	40	28	30	28	µS/cm
Water temperature	25.0	25.0	20.0	19.0	°C
Alkalinity as $CaCO_3$	1	18	4	4	mg/L
Turbidity	1	8	4	13	NTU
Volume purged	7.4	4.8	0.0	0.15	well volume
Sampling code			X	X	
Synchronous water level	232.3 (09/19/96)	231.2 (03/18/97)	229.8 (09/16/97)	229.2 (03/18/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	5.2	5.1	4.1	7.9	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
	■	Lead, total recoverable	8.4	14	***16***	***50***	1		µg/L	WA	1
		Nickel, total recoverable	2.9	<5.0	6.0	<8.5	1	V	µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<2.0	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	<2.0	<3.0	<5.0	<5.0	1		µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	40	<20	53				µg/L		
		Chloride	3,600		3,700				µg/L		
		Chromium, total recoverable	6.1	3.8	5.9				µg/L		
		Cobalt, total recoverable	0.23		<5.0				µg/L		
		Copper, total recoverable	30		86				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	6.4	5.2	7.5				µg/L		
		Mercury, total recoverable	<0.20	<0.20	<0.20				µg/L		
		Nitrate-nitrite as nitrogen	1,500		850				µg/L		
		Sodium, total recoverable	2,400		2,500				µg/L		
		Sulfate	200		<5,000				µg/L		
		Total phosphates (as P)	<50		23				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	<5.7		20				µg/L		
Radionuclides											
		Gross alpha	5.5E+00	2.4E+00	1.7E+00				pCi/L		
		Nonvolatile beta	2.6E+00	*1.7E+00*	*3.2E-01*				pCi/L		
		Radium, total alpha-emitting	2.1E+00		***9.1E+00***				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 39TA

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N100830.6 E48357.7	33.327662 °N 81.735363 °W	49.7-44.4 ft msl	341.8 ft msl	4" CS	S	CBA

SAMPLE DATE	07/12/96	01/25/97	08/18/97	02/25/98	
FIELD DATA					
Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	192.7	190.6	190.6	191.3	ft msl
pH	5.4	4.6	5.0	4.8	pH
Sp. conductance	28	12	20	16	µS/cm
Water temperature	24.0	23.0	20.0	20.0	°C
Alkalinity as $CaCO_3$	0	4	1	1	mg/L
Turbidity	5	4	5	25	NTU
Volume purged	3.6	4.8	4.1	2.6	well volume
Sampling code					
Synchronous water level	193.3 (09/19/96)	191.0 (03/18/97)	189.4 (09/16/97)	190.2 (03/18/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	2.7	5.1	3.0				µg/L		
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	2.4	<5.0	<5.0				µg/L		
		Nickel, total recoverable	<10	<5.0	<5.0				µg/L		
		Selenium, total recoverable	<5.0	<5.0	<5.0				µg/L		
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<2.0	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	<2.0	<3.0	<5.0	<5.0	1		µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	34		25				µg/L		
		Chloride	2,000		2,200				µg/L		
		Chromium, total recoverable	<4.0		<3.0				µg/L		
		Cobalt, total recoverable	<4.0		<5.0				µg/L		
		Copper, total recoverable	6.7		9.7				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	14		14				µg/L		
		Mercury, total recoverable	<0.20		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	210		<10				µg/L		
		Sodium, total recoverable	1,400		1,400				µg/L		
		Sulfate	1,100		<5,000				µg/L		
		Total phosphates (as P)	30		<10				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	17		13				µg/L		
Radionuclides											
		Gross alpha	*2.3E-01*		*-6.7E-01*				pCi/L		
		Nonvolatile beta	*1.4E+00*		*-1.1E+00*				pCi/L		
		Radium, total alpha-emitting	3.0E-01		***9.9E+00***				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 40A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N97672.8 E48279.4	33.320553 °N 81.729426 °W	116.2-110.6 ft msl	321.2 ft msl	4" PVC	S	MCBC

SAMPLE DATE	07/12/96	02/27/97	08/07/97	02/26/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	202.8	202.4	201.3	201.9	ft msl
pH	5.0	4.0	4.2	4.4	pH
Sp. conductance	62	44	54	48	µS/cm
Water temperature	25.0	25.0	20.0	18.0	°C
Alkalinity as $CaCO_3$	0	0	0	0	mg/L
Turbidity	1	1	1	1	NTU
Volume purged	2.6	2.3	2.6	2.2	well volume
Sampling code					
Synchronous water level	203.1 (09/19/96)	201.8 (03/18/97)	200.8 (09/16/97)	201.7 (03/18/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	18	18	16	17	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	<5.0	6.7	14	<47	1		µg/L	WA	0
		Nickel, total recoverable	3.6	5.2	3.3	<4.8	1	V	µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<2.0	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	<2.0	<3.0	<5.0	<5.0	1		µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	76		60				µg/L		
		Chloride	2,000		2,300				µg/L		
		Chromium, total recoverable	0.60		<3.0				µg/L		
		Cobalt, total recoverable	1.8		<5.0				µg/L		
		Copper, total recoverable	2.1		4.8				µg/L		
		Fluoride	40		<100				µg/L		
		Manganese, total recoverable	40		31				µg/L		
		Mercury, total recoverable	<0.20		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	350		<10				µg/L		
		Sodium, total recoverable	2,000		2,100				µg/L		
		Sulfate	***12,000***		***12,000***				µg/L		
		Total phosphates (as P)	<50		<10				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	22		26				µg/L		
Radionuclides											
		Gross alpha	1.3E+00		1.3E+00				pCi/L		
		Nonvolatile beta	*1.0E+00*		*1.8E+00*				pCi/L		
		Radium, total alpha-emitting	9.0E-01		*4.0E+00*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 40B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N97685.0 E48281.6	33.320584 °N 81.729444 °W	154.7-149.1 ft msl	321.7 ft msl	4" PVC	S	LL

SAMPLE DATE	08/03/96	01/10/97	08/13/97	02/18/98	
FIELD DATA					
Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	204.5	203.9	202.8	203.3	ft msl
pH	5.2	4.4	4.8	4.1	pH
Sp. conductance	64	60	62	51	µS/cm
Water temperature	24.0	21.0	21.0	17.7	°C
Alkalinity as $CaCO_3$	0	0	1	0	mg/L
Turbidity	2	2	1	1	NTU
Volume purged	4.2	3.2	6.3	6.0	well volume
Sampling code					
Synchronous water level	204.3 (09/19/96)	203.4 (03/18/97)	202.3 (09/16/97)	203.3 (03/18/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	13	14	13	11	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	1.8	<5.0	4.6	<47	1		µg/L	WA	0
		Nickel, total recoverable	<0.92	5.3	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<100	<28	<130	<50	10		µg/L	WA	0
		1,1-Dichloroethane	<100	<50	<130	<50	10		µg/L	WA	0
		1,1-Dichloroethylene	<100	<64	<130	<50	10		µg/L	WA	0
		trans-1,2-Dichloroethylene	<100		<130				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<100	<30	<130	<50	10		µg/L	WA	0
		Tetrachloroethylene	<100	<38	<130	<50	10		µg/L	WA	0
		1,1,1-Trichloroethane	<100	<50	<130	<50	10		µg/L	WA	0
	■	Trichloroethylene	***1,700***	***1,800***	***1,400***	***1,300***	10		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<52		31				µg/L		
		Chloride	2,100		2,000				µg/L		
		Chromium, total recoverable	<4.0		<3.0				µg/L		
		Cobalt, total recoverable	0.89		<5.0				µg/L		
		Copper, total recoverable	9.9		10				µg/L		
		Fluoride	73		<100				µg/L		
		Manganese, total recoverable	<16		14				µg/L		
		Mercury, total recoverable	0.054		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	***4,800***		***4,000***				µg/L		
		Sodium, total recoverable	3,600		3,600				µg/L		
		Sulfate	1,300		<5,000				µg/L		
		Total phosphates (as P)	130		13				µg/L		
		Uranium, total recoverable	<20		0.020				µg/L		
		Zinc, total recoverable	<13		23				µg/L		
Radionuclides											
		Gross alpha	3.5E+00		1.7E+00				pCi/L		
		Nonvolatile beta	4.0E+00		*1.5E+00*				pCi/L		
		Radium, total alpha-emitting	9.0E-01		*4.4E+00*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 40C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N97697.8 E48283.5	33.320615 °N 81.729464 °W	192.4-186.8 ft msl	322 ft msl	4" PVC	S	UL

SAMPLE DATE	08/03/96	01/10/97	08/13/97	02/26/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	204.5	203.9	203.3	203.3	ft msl
pH	6.0	5.2	5.2	5.4	pH
Sp. conductance	80	76	74	50	µS/cm
Water temperature	23.0	21.0	21.0	20.0	°C
Alkalinity as $CaCO_3$	20	10	22	4	mg/L
Turbidity	2	3	1	1	NTU
Volume purged	0.0	0.0	2.6	2.4	well volume
Sampling code	X	X			
Synchronous water level	204.4 (09/19/96)	203.6 (03/18/97)	203.3 (09/16/97)	203.3 (03/18/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	15	16	12	11	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	6.5	***39***	5.7	5.5	1	JE	µg/L	WA	0
		Nickel, total recoverable	<2.6	7.0	<5.0	<2.8	1	V	µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0		<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<2.0	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	<2.0	<3.0	3.0	2.4	1	JE	µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	***140***		***120***				µg/L		
		Chloride	2,300		1,800				µg/L		
		Chromium, total recoverable	0.96		<3.0				µg/L		
		Cobalt, total recoverable	0.44		<5.0				µg/L		
		Copper, total recoverable	10		6.2				µg/L		
		Fluoride	1,200		920				µg/L		
		Manganese, total recoverable	33		34				µg/L		
		Mercury, total recoverable	<0.20		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	330		320				µg/L		
		Sodium, total recoverable	2,500		2,200				µg/L		
		Sulfate	***14,000***		***9,700***				µg/L		
		Total phosphates (as P)	***1,700***		***1,200***				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	<19		21				µg/L		
Radionuclides											
		Gross alpha	*1.3E-01*		*-1.7E-01*				pCi/L		
		Nonvolatile beta	*1.3E+00*		2.6E+00				pCi/L		
		Radium, total alpha-emitting	4.0E-01		*3.6E+00*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 41B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N102194.5 E53417.8	33.338940 °N 81.724690 °W	114.2-108.6 ft msl	324 ft msl	4" PVC	S	MCBC

SAMPLE DATE	08/03/96	01/16/97	08/14/97	02/23/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	217.5	217.2	215.6	216.1	ft msl
pH	6.8	5.2	6.0	5.4	pH
Sp. conductance	40	22	28	22	µS/cm
Water temperature	21.0	22.0	23.0	19.0	°C
Alkalinity as $CaCO_3$	2	3	13	8	mg/L
Turbidity	2	0	1	1	NTU
Volume purged	2.5	2.1	2.6	2.4	well volume
Sampling code					
Synchronous water level	217.9 (09/17/96)	216.2 (03/17/97)	214.5 (09/15/97)	215.3 (03/18/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	10	12	15	13	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0	5.5	<47	1		µg/L	WA	0
		Nickel, total recoverable	<10	<6.2	<5.0	4.6	1	JE	µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	4.5	***6.2***	***5.1***	4.7	1	JE	µg/L	WA	1
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	2.4	<3.0	2.2	2.1	1	JE	µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<20		<20				µg/L		
		Chloride	1,500		1,500				µg/L		
		Chromium, total recoverable	<4.0		1.0				µg/L		
		Cobalt, total recoverable	0.30		<5.0				µg/L		
		Copper, total recoverable	11		<3.0				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	2.0		2.4				µg/L		
		Mercury, total recoverable	0.018		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	1,300		720				µg/L		
		Sodium, total recoverable	1,500		1,400				µg/L		
		Sulfate	110		<5,000				µg/L		
		Total phosphates (as P)	30		<10				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	8.0		10				µg/L		
Radionuclides											
		Gross alpha	*2.7E+00*		*1.0E+00*				pCi/L		
		Nonvolatile beta	1.9E+00		*1.0E+00*				pCi/L		
		Radium, total alpha-emitting	6.0E-01		*3.0E+00*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 41TA

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N102176.5 E53429.7	33.338920 °N 81.724624 °W	26.7-21.4 ft msl	323.7 ft msl	4" CS	S	CBA

SAMPLE DATE	07/16/96	02/07/97	08/28/97	02/27/98	
FIELD DATA					
Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	207.0	205.0	204.6	204.7	ft msl
pH	5.0	5.0	4.2	7.2	pH
Sp. conductance	24	20	19	19	µS/cm
Water temperature	26.0	24.0	19.7	19.0	°C
Alkalinity as $CaCO_3$	4	2	0	0	mg/L
Turbidity	1	1	1	0	NTU
Volume purged	2.2	2.5	2.5	2.3	well volume
Sampling code					
Synchronous water level	207.4 (09/17/96)	205.0 (03/17/97)	202.7 (09/15/97)	204.0 (03/18/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	5.8	5.3	6.1	5.7	1		µg/L	WA	0
		Cyanide	<10	<5.0	***900***	<15	1		µg/L	WA	0
		Lead, total recoverable	10	12	12	8.9	1	JE	µg/L	WA	0
		Nickel, total recoverable	1.1	<5.0	2.8	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	6.1	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<2.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<2.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<2.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<2.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<2.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<2.0	<1.9	<2.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<2.5	<2.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	<2.0	<3.0	1.0	1.0	1	JE	µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<20		14				µg/L		
		Chloride	1,700		2,100				µg/L		
		Chromium, total recoverable	<4.0		2.0				µg/L		
		Cobalt, total recoverable	<0.75		<5.0				µg/L		
		Copper, total recoverable	10		13				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	34		34				µg/L		
		Mercury, total recoverable	<0.20		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	1,600		960				µg/L		
		Sodium, total recoverable	1,600		2,900				µg/L		
		Sulfate	850		1,100				µg/L		
		Total phosphates (as P)	<50		<10				µg/L		
		Uranium, total recoverable	<14		<0.10				µg/L		
		Zinc, total recoverable	4.1		12				µg/L		
Radionuclides											
		Gross alpha	8.9E-01		*2.3E-01*				pCi/L		
		Nonvolatile beta	1.8E+00		*2.2E-01*				pCi/L		
		Radium, total alpha-emitting	*2.0E-01*		1.2E+00				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 42B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N104569.8 E51582.8	33.341194 °N 81.734144 °W	166.3-160.7 ft msl	376.4 ft msl	4" PVC	S	LL

SAMPLE DATE 08/05/96 01/06/97 08/13/97 03/04/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	226.1	225.3	223.7	222.4	ft msl
pH	4.8	4.0	4.6	4.4	pH
Sp. conductance	22	20	26	36	µS/cm
Water temperature	27.0	24.0	22.0	16.0	°C
Alkalinity as $CaCO_3$	0	0	0	0	mg/L
Turbidity	0	1	1	1	NTU
Volume purged	3.9	3.0	3.0	4.0	well volume
Sampling code					
Synchronous water level	226.7 (09/17/96)	224.9 (03/19/97)	223.1 (09/16/97)	222.2 (03/17/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	3.6	3.8	3.3	3.6	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0	7.1	<47	1		µg/L	WA	0
		Nickel, total recoverable	<10	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	2.1	<1.9	1.0	1.1	1	JE	µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
	■	Trichloroethylene	***23***	***18***	***14***	***13***	1		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<20		<20				µg/L		
		Chloride	2,000		1,800				µg/L		
		Chromium, total recoverable	<4.0		<3.0				µg/L		
		Cobalt, total recoverable	0.56		<5.0				µg/L		
		Copper, total recoverable	2.2		<3.0				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	1.6		1.8				µg/L		
		Mercury, total recoverable	0.60		0.68				µg/L		
		Nitrate-nitrite as nitrogen	1,500		1,200				µg/L		
		Sodium, total recoverable	2,200		2,000				µg/L		
		Sulfate	240		<5,000				µg/L		
		Total phosphates (as P)	110		5.0				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	<5.0		11				µg/L		
Radionuclides											
		Gross alpha	*1.9E+00*		*9.7E-01*				pCi/L		
		Nonvolatile beta	8.8E+00		*1.6E-01*				pCi/L		
		Radium, total alpha-emitting	5.0E-01		*3.4E+00*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 42C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N104581.9 E51582.8	33.341221 °N 81.734168 °W	204.3-198.7 ft msl	376.4 ft msl	4" PVC	S	UL

SAMPLE DATE	08/15/96	02/06/97	08/29/97	03/23/98	
FIELD DATA					
Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	232.2	358.4	229.5	228.2	ft msl
pH	5.0	5.0	5.1	4.4	pH
Sp. conductance	24	26	24	26	µS/cm
Water temperature	22.0	26.0	20.5	19.5	°C
Alkalinity as $CaCO_3$	1	2	3	0	mg/L
Turbidity	3	0	1	1	NTU
Volume purged	3.7	0.60	3.3	5.1	well volume
Sampling code					
Synchronous water level	232.2 (09/17/96)	230.9 (03/19/97)	229.2 (09/16/97)	228.1 (03/17/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	6.3	6.4	6.0	6.1			µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0	3.3	<47			µg/L	WA	0
		Nickel, total recoverable	2.2	<5.0	<5.0	<26			µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66			µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<2.0	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	3.5	***5.4***	2.8	3.4	1	JE	µg/L	WA	1

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<20		30				µg/L		
		Chloride	2,400		2,400				µg/L		
		Chromium, total recoverable	<4.0		1.1				µg/L		
		Cobalt, total recoverable	<0.37		<5.0				µg/L		
		Copper, total recoverable	6.1		1.9				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	4.6		5.8				µg/L		
		Mercury, total recoverable	<0.20		0.29				µg/L		
		Nitrate-nitrite as nitrogen	1,300		31				µg/L		
		Sodium, total recoverable	2,400		2,400				µg/L		
		Sulfate	290		<5,000				µg/L		
		Total phosphates (as P)	<50		<10				µg/L		
		Uranium, total recoverable	30		<0.10				µg/L		
		Zinc, total recoverable	3.0		10				µg/L		
Radionuclides											
		Gross alpha	1.4E+00		*9.7E-01*				pCi/L		
		Nonvolatile beta	1.6E+00		*8.0E-01*				pCi/L		
		Radium, total alpha-emitting	*2.0E-01*		1.9E+00				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 42D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N104595.2 E51582.5	33.341250 °N 81.734194 °W	247.2-226.6 ft msl	376.4 ft msl	4" PVC	B	M

SAMPLE DATE	08/15/96	01/06/97	08/13/97	03/04/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	233.9	232.6	231.1	229.6	ft msl
pH	4.8	4.4	4.8	5.0	pH
Sp. conductance	22	20	20	22	µS/cm
Water temperature	21.0	24.0	22.0	16.0	°C
Alkalinity as $CaCO_3$	10	1	0	0	mg/L
Turbidity	10	1	2	2	NTU
Volume purged	3.1	3.0	8.9	7.8	well volume
Sampling code					
Synchronous water level	233.6 (09/17/96)	232.3 (03/19/97)	230.8 (09/16/97)	229.5 (03/17/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	8.7	6.0	5.6	6.1	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	2.5	15	4.3	<47	1		µg/L	WA	0
		Nickel, total recoverable	3.7	<5.0	<5.0	4.7	1	JE	µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	4.8	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	***8.4***	***7.7***	2.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	***51***	***60***	***17***	4.1	1	JE	µg/L	WA	1

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	***180***		<20				µg/L		
		Chloride	1,700		1,500				µg/L		
		Chromium, total recoverable	1.9		1.1				µg/L		
		Cobalt, total recoverable	<1.4		<5.0				µg/L		
		Copper, total recoverable	12		<3.0				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	18		6.3				µg/L		
		Mercury, total recoverable	<0.20		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	1,200		1,000				µg/L		
		Sodium, total recoverable	2,000		1,600				µg/L		
		Sulfate	270		<5,000				µg/L		
		Total phosphates (as P)	<30		<10				µg/L		
		Uranium, total recoverable	53		0.068				µg/L		
		Zinc, total recoverable	6.8		120				µg/L		
Radionuclides											
		Gross alpha	3.7E+00		1.1E+01				pCi/L		
		Nonvolatile beta	2.7E+00		1.5E+01				pCi/L		
		Radium, total alpha-emitting	1.3E+00		*3.5E+00*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 42TA

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N104545.6 E51581.7	33.341139 °N 81.734100 °W	45.8-40.5 ft msl	376.6 ft msl	4" CS	S	CBA

SAMPLE DATE	08/05/96	01/14/97	08/26/97	02/12/98	
FIELD DATA					
Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	205.5	166.0	201.0	201.3	ft msl
pH	5.2	4.6	5.0	5.0	pH
Sp. conductance	18	14	22	20	µS/cm
Water temperature	26.0	20.0	20.0	16.0	°C
Alkalinity as $CaCO_3$	0	1	0	0	mg/L
Turbidity	3	6	6	3	NTU
Volume purged	3.1	2.7	3.0	4.4	well volume
Sampling code					
Synchronous water level	207.2 (09/17/96)	202.1 (03/19/97)	199.2 (09/16/97)	200.4 (03/17/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	3.2	3.7	3.6	2.6	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	9.1	12	***18***	9.0	1	JE	µg/L	WA	0
		Nickel, total recoverable	<10	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
	■	Tetrachloroethylene	***21***	***23***	***22***	***25***	1		µg/L	WA	2
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
	■	Trichloroethylene	***42***	***47***	***58***	***53***	1		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<20		13				µg/L		
		Chloride	1,700		1,600				µg/L		
		Chromium, total recoverable	<4.0		0.80				µg/L		
		Cobalt, total recoverable	1.2		<5.0				µg/L		
		Copper, total recoverable	6.8		16				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	15		46				µg/L		
		Mercury, total recoverable	0.76		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	1,000		820				µg/L		
		Sodium, total recoverable	1,500		1,500				µg/L		
		Sulfate	270		<5,000				µg/L		
		Total phosphates (as P)	40		<10				µg/L		
		Uranium, total recoverable	<7.5		<0.10				µg/L		
		Zinc, total recoverable	<5.0		18				µg/L		
Radionuclides											
		Gross alpha	*1.5E+00*		*2.3E-01*				pCi/L		
		Nonvolatile beta	*1.1E+00*		*6.5E-01*				pCi/L		
		Radium, total alpha-emitting	*1.0E-01*		*7.8E+00*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 43TA

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N107275.8 E49281.8	33.343418 °N 81.745469 °W	40.3-35.0 ft msl	357.5 ft msl	4" CS	S	CBA

SAMPLE DATE	07/15/96	02/06/97	08/28/97	03/03/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	203.5	201.0	199.9	201.1	ft msl
pH	4.4	4.4	4.2	4.4	pH
Sp. conductance	20	16	16	15	µS/cm
Water temperature	26.0	22.0	20.0	19.3	°C
Alkalinity as $CaCO_3$	1	2	1	1	mg/L
Turbidity	28	4	23	12	NTU
Volume purged	2.1	2.8	2.8	2.5	well volume
Sampling code					
Synchronous water level	204.0 (09/19/96)	201.6 (03/20/97)	198.7 (09/17/97)	201.0 (03/20/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	2.2	1.8	<2.0	1.4	1	JE	µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	11	10	<5.0	<47	1		µg/L	WA	0
		Nickel, total recoverable	2.0	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.0	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<2.0	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<2.0	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<2.0	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<2.0	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	<2.0	<2.0	<5.0	<5.0	1		µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	44		14				µg/L		
		Chloride	1,800		2,100				µg/L		
		Chromium, total recoverable	<4.0		<3.0				µg/L		
		Cobalt, total recoverable	<0.48		<5.0				µg/L		
		Copper, total recoverable	33		11				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	23		34				µg/L		
		Mercury, total recoverable	<0.20		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	500		97				µg/L		
		Sodium, total recoverable	1,400		1,400				µg/L		
		Sulfate	680		<5,000				µg/L		
		Total phosphates (as P)	<50		<10				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	8.7		12				µg/L		
Radionuclides											
		Gross alpha	*2.4E-01*		*6.0E-02*				pCi/L		
		Nonvolatile beta	*7.1E-01*		*-1.4E-01*				pCi/L		
		Radium, total alpha-emitting	*1.0E-01*		*5.7E-01*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 45A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N103998.1 E50554.7	33.338252 °N 81.735739 °W	139.2-129.2 ft msl	380.8 ft msl	4" PVC	S	LL

SAMPLE DATE	08/05/96	01/14/97	08/26/97	03/04/98	
FIELD DATA					
Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	215.7	214.1	213.0	212.5	ft msl
pH	5.6	5.4	5.4	4.5	pH
Sp. conductance	46	28	36	33	µS/cm
Water temperature	24.0	24.0	20.0	18.5	°C
Alkalinity as $CaCO_3$	6	2	1	5	mg/L
Turbidity	1	1	1	0	NTU
Volume purged	1.8	3.1	3.4	3.1	well volume
Sampling code					
Synchronous water level	216.7 (09/17/96)	213.8 (03/19/97)	212.2 (09/16/97)	211.9 (03/17/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	13	13		15	1		µg/L	WA	0
		Cyanide	<10	<5.0		<15	1		µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0		<47	1		µg/L	WA	0
		Nickel, total recoverable	<10	<5.0		<26	1		µg/L	WA	0
		Selenium, total recoverable	2.3	<5.0		<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<20	<1.4		<25	5		µg/L	WA	0
		1,1-Dichloroethane	<20	<2.5		<25	5		µg/L	WA	0
		1,1-Dichloroethylene	<20	<3.2		<25	5		µg/L	WA	0
		trans-1,2-Dichloroethylene	<20	<3.2					µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<20	<1.5		<25	5		µg/L	WA	0
	■	Tetrachloroethylene	***150***	***170***		***140***	5		µg/L	WA	2
		1,1,1-Trichloroethane	<20	<2.5		<25	5		µg/L	WA	0
	■	Trichloroethylene	***620***	***840***		***740***	5		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<20						µg/L		
		Chloride	3,100						µg/L		
		Chromium, total recoverable	0.89						µg/L		
		Cobalt, total recoverable	1.1						µg/L		
		Copper, total recoverable	0.78						µg/L		
		Fluoride	<100						µg/L		
		Manganese, total recoverable	2.2						µg/L		
		Mercury, total recoverable	0.056						µg/L		
		Nitrate-nitrite as nitrogen	1,300						µg/L		
		Sodium, total recoverable	3,100						µg/L		
		Sulfate	350						µg/L		
		Total phosphates (as P)	<50						µg/L		
		Uranium, total recoverable	<20						µg/L		
		Zinc, total recoverable	<5.0						µg/L		
Radionuclides											
		Gross alpha	*1.7E+00*						pCi/L		
		Nonvolatile beta	1.7E+00						pCi/L		
		Radium, total alpha-emitting	*-1.0E-01*						pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 45B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N103987.9 E50555.3	33.338230 °N 81.735718 °W	190.0-180.0 ft msl	380.9 ft msl	4" PVC	S	UL

SAMPLE DATE	07/19/96	01/03/97	08/29/97	03/02/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	226.7	225.4	223.5	222.4	ft msl
pH	5.0	4.6	5.4	5.0	pH
Sp. conductance	44	38	36	40	µS/cm
Water temperature	26.0	25.0	20.3	16.0	°C
Alkalinity as $CaCO_3$	1	4	7	1	mg/L
Turbidity	3	3	0	1	NTU
Volume purged	2.9	2.4	3.6	6.4	well volume
Sampling code					
Synchronous water level	226.4 (09/17/96)	225.3 (03/19/97)	222.9 (09/16/97)	221.8 (03/17/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	0.59	<1.0	11	<1.8	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	<5.0	7.2	***20***	<47	1		µg/L	WA	0
		Nickel, total recoverable	<10	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<2.0	<1.9	***150***	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	<2.0	<3.0	***900***	<5.0	1		µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<20		32				µg/L		
		Chloride	2,700		3,400				µg/L		
		Chromium, total recoverable	<4.0		<3.0				µg/L		
		Cobalt, total recoverable	<4.0		<5.0				µg/L		
		Copper, total recoverable	1.2		2.0				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	<1.1		2.0				µg/L		
		Mercury, total recoverable	<0.20		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	530		1,200				µg/L		
		Sodium, total recoverable	***6,500***		***7,300***				µg/L		
		Sulfate	***5,900***		***6,500***				µg/L		
		Total phosphates (as P)	150		<10				µg/L		
		Uranium, total recoverable	<20		0.089				µg/L		
		Zinc, total recoverable	<6.3		26				µg/L		
Radionuclides											
		Gross alpha	*8.3E-02*		*3.2E-01*				pCi/L		
		Nonvolatile beta	*6.4E-01*		2.0E+00				pCi/L		
		Radium, total alpha-emitting	*1.0E-01*		1.4E+00				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 46A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N103098.6 E50548.3	33.336253 °N 81.734006 °W	130.0-120.0 ft msl	372.6 ft msl	4" PVC	S	MCBC

SAMPLE DATE	08/09/96	01/03/97	08/26/97	03/02/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	210.6	215.1	213.2	213.9	ft msl
pH	9.4	7.2	7.8	7.2	pH
Sp. conductance	160	100	140	120	µS/cm
Water temperature	30.0	24.0	21.0	19.0	°C
Alkalinity as $CaCO_3$	30	60	54	37	mg/L
Turbidity	4	3	2	1	NTU
Volume purged	0.034	0.0	0.033	0.34	well volume
Sampling code	X	X	X		
Synchronous water level	215.7 (09/17/96)	214.0 (03/19/97)	211.5 (09/16/97)	207.9 (03/17/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	16	25	25	15	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	***23***	<5.0	3.4	<47	1		µg/L	WA	0
		Nickel, total recoverable	11	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<2.2	<5.0	4.4	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<2.0	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	<2.0	<3.0	<5.0	<5.0	1		µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	***620***		38				µg/L		
		Chloride	***5,300***		1,700				µg/L		
		Chromium, total recoverable	18		3.7				µg/L		
		Cobalt, total recoverable	1.1		<5.0				µg/L		
		Copper, total recoverable	39		2.4				µg/L		
		Fluoride	<100		170				µg/L		
		Manganese, total recoverable	***57***		16				µg/L		
		Mercury, total recoverable	<0.20		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	***2,500***		25				µg/L		
		Sodium, total recoverable	***6,900***		***5,200***				µg/L		
		Sulfate	***5,000***		***11,000***				µg/L		
		Total phosphates (as P)	160		83				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	240		18				µg/L		
Radionuclides											
		Gross alpha	6.1E+00		*3.4E-01*				pCi/L		
		Nonvolatile beta	4.1E+00		4.6E+00				pCi/L		
		Radium, total alpha-emitting	1.2E+00		*3.8E+00*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 46C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N	°N ft msl	ft msl				M
E	°W					

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Cyanide					
Lead, total recoverable					
Nickel, total recoverable					
Selenium, total recoverable					
Organics					
Chlorobenzene					
1,1-Dichloroethane					
1,1-Dichloroethylene					
trans-1,2-Dichloroethylene					
PCB 1016					
PCB 1221					
PCB 1232					
PCB 1242					
PCB 1248					
PCB 1254					
PCB 1260					
1,1,2,2-Tetrachloroethane					
Tetrachloroethylene					
1,1,1-Trichloroethane					
Trichloroethylene					

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable									
		Chloride									
		Chromium, total recoverable									
		Cobalt, total recoverable									
		Copper, total recoverable									
		Fluoride									
		Manganese, total recoverable									
		Mercury, total recoverable									
		Nitrate-nitrite as nitrogen									
		Sodium, total recoverable									
		Sulfate									
		Total phosphates (as P)									
		Uranium, total recoverable									
		Zinc, total recoverable									
Radionuclides											
		Gross alpha									
		Nonvolatile beta									
		Radium, total alpha-emitting									

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 47B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N106978.5 E52207.2	33.347539 °N 81.737186 °W	171.5-165.9 ft msl	368.7 ft msl	4" PVC	S	LL

SAMPLE DATE	08/03/96	01/06/97	08/19/97	02/25/98	
FIELD DATA					
Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	227.4	227.1	222.8	221.9	ft msl
pH	5.4	5.6	5.6	6.2	pH
Sp. conductance	76	72	76	71	µS/cm
Water temperature	25.0	21.0	20.0	19.3	°C
Alkalinity as $CaCO_3$	1	2	7	8	mg/L
Turbidity	1	2	2	1	NTU
Volume purged	3.8	3.1	3.2	3.0	well volume
Sampling code					
Synchronous water level	228.4 (09/16/96)	224.0 (03/19/97)	222.4 (09/15/97)	221.5 (03/17/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

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H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	69	28	21	25	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	2.4	<5.0	<5.0	<47	1		µg/L	WA	0
		Nickel, total recoverable	<10	<5.0	3.7	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<100	<35	<250	<50	10		µg/L	WA	0
		1,1-Dichloroethane	<100	<63	<250	<50	10		µg/L	WA	0
		1,1-Dichloroethylene	<100	<80	<250	<50	10		µg/L	WA	0
		trans-1,2-Dichloroethylene	<100	<80	<250				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<100	<38	<250	<50	10		µg/L	WA	0
		Tetrachloroethylene	<100	<48	<250	<50	10		µg/L	WA	0
		1,1,1-Trichloroethane	<100	<63	<250	<50	10		µg/L	WA	0
	■	Trichloroethylene	***2,100***	***1,900***	***2,200***	***790***	10		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	63		61				µg/L		
		Chloride	***5,700***		***5,800***				µg/L		
		Chromium, total recoverable	<4.0		<3.0				µg/L		
		Cobalt, total recoverable	<1.4		<5.0				µg/L		
		Copper, total recoverable	2.2		2.1				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	17		8.4				µg/L		
		Mercury, total recoverable	0.25		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	***4,300***		***3,800***				µg/L		
		Sodium, total recoverable	***6,300***		***6,200***				µg/L		
		Sulfate	180		<5,000				µg/L		
		Total phosphates (as P)	<50		<10				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	2.7		18				µg/L		
Radionuclides											
		Gross alpha	3.6E+00		3.3E+00				pCi/L		
		Nonvolatile beta	4.1E+00		6.0E+00				pCi/L		
		Radium, total alpha-emitting	2.2E+00		***1.0E+01***				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 47C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N106969.2 E52195.5	33.347499 °N 81.737199 °W	202.6-197.0 ft msl	369 ft msl	4" PVC	S	UL

SAMPLE DATE	08/03/96	01/06/97	08/19/97	02/19/98	
FIELD DATA					
Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	233.6	232.8	230.9	229.7	ft msl
pH	5.8	6.2	6.2	6.7	pH
Sp. conductance	50	70	58	73	µS/cm
Water temperature	25.0	23.0	20.0	19.6	°C
Alkalinity as $CaCO_3$	6	30	10	21	mg/L
Turbidity	0	2	1	1	NTU
Volume purged	6.7	3.1	5.7	3.5	well volume
Sampling code					
Synchronous water level	233.6 (09/16/96)	232.5 (03/19/97)	230.7 (09/15/97)	229.3 (03/17/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

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H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	23	27	27	36	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	2.7	<5.0	<5.0	6.4	1	JE	µg/L	WA	0
		Nickel, total recoverable	<1.5	<5.0	5.2	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<400	<70	<500	<130	25		µg/L	WA	0
		1,1-Dichloroethane	<400	<130	<500	<130	25		µg/L	WA	0
		1,1-Dichloroethylene	<400	<160	<500	<130	25		µg/L	WA	0
		trans-1,2-Dichloroethylene	<400	<160	<500				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<400	<75	<500	<130	25		µg/L	WA	0
		Tetrachloroethylene	<400	<95	<500	<130	25		µg/L	WA	0
		1,1,1-Trichloroethane	<400	<130	<500	<130	25		µg/L	WA	0
	■	Trichloroethylene	***4,900***	***4,600***	***4,200***	***2,400***	25		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<39		42				µg/L		
		Chloride	***4,400***		4,100				µg/L		
		Chromium, total recoverable	<4.0		1.4				µg/L		
		Cobalt, total recoverable	<4.0		<5.0				µg/L		
		Copper, total recoverable	11		2.6				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	<16		12				µg/L		
		Mercury, total recoverable	0.085		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	2,000		2,000				µg/L		
		Sodium, total recoverable	3,800		4,000				µg/L		
		Sulfate	240		<5,000				µg/L		
		Total phosphates (as P)	<50		<10				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	<10		14				µg/L		
Radionuclides											
		Gross alpha	*6.7E-01*		*1.4E+00*				pCi/L		
		Nonvolatile beta	1.5E+00		*-6.0E-01*				pCi/L		
		Radium, total alpha-emitting	2.0E-01		***8.8E+00***				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 47D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N106960.1 E52184.0	33.347460 °N 81.737212 °W	246.1-226.5 ft msl	368.8 ft msl	4" PVC	S	M

SAMPLE DATE	07/17/96	02/06/97	08/28/97	03/03/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	234.5	233.4	232.2	230.8	ft msl
pH	5.0	4.8	5.4	4.7	pH
Sp. conductance	88	80	77	69	µS/cm
Water temperature	26.0	25.0	25.4	18.6	°C
Alkalinity as $CaCO_3$	1	1	4	1	mg/L
Turbidity	11	8	1	2	NTU
Volume purged	2.5	6.2	24	7.9	well volume
Sampling code					
Synchronous water level	234.3 (09/16/96)	233.5 (03/19/97)	231.8 (09/15/97)	230.5 (03/17/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

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H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	28	<2.0	33	31	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	<5.0	7.9	<5.0	<47	1		µg/L	WA	0
		Nickel, total recoverable	0.91	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	3.6	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<2.0	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	<2.0	<3.0	2.7	1.8	1	JE	µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<20		29				µg/L		
		Chloride	***8,700***		***8,300***				µg/L		
		Chromium, total recoverable	<4.0		0.70				µg/L		
		Cobalt, total recoverable	1.6		<5.0				µg/L		
		Copper, total recoverable	<3.0		<3.0				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	26		27				µg/L		
		Mercury, total recoverable	0.21		0.12				µg/L		
		Nitrate-nitrite as nitrogen	***5,600***		***4,300***				µg/L		
		Sodium, total recoverable	***11,000***		***9,000***				µg/L		
		Sulfate	230		<5,000				µg/L		
		Total phosphates (as P)	230		<10				µg/L		
		Uranium, total recoverable	14		<0.10				µg/L		
		Zinc, total recoverable	3.5		12				µg/L		
Radionuclides											
		Gross alpha	1.1E+01		*4.4E+00*				pCi/L		
		Nonvolatile beta	6.0E+00		*3.1E+00*				pCi/L		
		Radium, total alpha-emitting	4.0E+00		3.9E+00				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only. See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 47TA

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N106987.7 E52219.0	33.347578 °N 81.737173 °W	55.1-50.1 ft msl	368.7 ft msl	4" CS	S	CBA

SAMPLE DATE	08/03/96	01/06/97				
FIELD DATA						
Parameter	3Q96	1Q97	3Q97	1Q98		Unit
Water elevation	216.4	215.8				ft msl
pH	4.9	5.8				pH
Sp. conductance	25	26				µS/cm
Water temperature	25.0	22.0				°C
Alkalinity as $CaCO_3$	0	19				mg/L
Turbidity	13	15				NTU
Volume purged	3.0	2.2				well volume
Sampling code						
Synchronous water level	217.6 (09/16/96)	215.1 (03/19/97)				ft msl

ANALYTICAL DATA

Groundwater Protection Standard

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H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	13	22	33				µg/L		
		Cyanide	<10	<5.0					µg/L		
		Lead, total recoverable	<5.0	<5.0	4.7				µg/L		
		Nickel, total recoverable	<10	<5.0	3.8				µg/L		
		Selenium, total recoverable	<5.0	<5.0	<5.0				µg/L		
Organics											
		Chlorobenzene	<40	<7.0	<25				µg/L		
		1,1-Dichloroethane	<40	<13	<25				µg/L		
		1,1-Dichloroethylene	<40	<16	<25				µg/L		
		trans-1,2-Dichloroethylene	<40	<16	<25				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<40	<7.5	<25				µg/L		
		Tetrachloroethylene	<40	<9.5	<25				µg/L		
		1,1,1-Trichloroethane	<40	<13	<25				µg/L		
		Trichloroethylene	***670***	***680***	***870***				µg/L		

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<20		18				µg/L		
		Chloride	2,000		2,000				µg/L		
		Chromium, total recoverable	<4.0		1.6				µg/L		
		Cobalt, total recoverable	<0.44		<5.0				µg/L		
		Copper, total recoverable	1.8		<3.0				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	16		***180***				µg/L		
		Mercury, total recoverable	0.029		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	1,500		1,300				µg/L		
		Sodium, total recoverable	2,000		2,400				µg/L		
		Sulfate	150		<5,000				µg/L		
		Total phosphates (as P)	250		6.0				µg/L		
		Uranium, total recoverable	<25		<0.10				µg/L		
		Zinc, total recoverable	6.3		100				µg/L		
Radionuclides											
		Gross alpha	1.2E+00		2.5E+00				pCi/L		
		Nonvolatile beta	*1.4E+00*		*1.1E+00*				pCi/L		
		Radium, total alpha-emitting	*3.0E-01*		1.5E+00				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 48A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N107936.6 E54099.8	33.352747 °N 81.734066 °W	129.4-124.7 ft msl	361.6 ft msl	4" PVC	S	MCBC

SAMPLE DATE	07/15/96	02/04/97	08/26/97	02/18/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	222.6	221.3	220.4	219.8	ft msl
pH	5.4	5.8	5.2	5.4	pH
Sp. conductance	24	22	24	22	µS/cm
Water temperature	28.0	26.0	19.0	17.6	°C
Alkalinity as $CaCO_3$	4	18	5	20	mg/L
Turbidity	9	6	4	4	NTU
Volume purged	2.2	2.6	2.6	2.6	well volume
Sampling code					
Synchronous water level	223.7 (09/16/96)	221.5 (03/20/97)	219.7 (09/15/97)	219.1 (03/17/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

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H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	11	11	13	12	1		µg/L	WA	0
		Cyanide	2.3	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0	3.3	<47	1		µg/L	WA	0
		Nickel, total recoverable	<10	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<2.0	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	<2.0	<3.0	<5.0	<5.0	1		µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<20		29				µg/L		
		Chloride	1,200		1,300				µg/L		
		Chromium, total recoverable	<4.0		0.90				µg/L		
		Cobalt, total recoverable	<0.53		<5.0				µg/L		
		Copper, total recoverable	11		11				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	2.1		2.9				µg/L		
		Mercury, total recoverable	0.039		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	1,900		1,900				µg/L		
		Sodium, total recoverable	1,300		1,500				µg/L		
		Sulfate	<1,000		<5,000				µg/L		
		Total phosphates (as P)	<50		7.0				µg/L		
		Uranium, total recoverable	<11		<0.10				µg/L		
		Zinc, total recoverable	18		33				µg/L		
Radionuclides											
		Gross alpha	8.2E-01		9.4E-01				pCi/L		
		Nonvolatile beta	*1.3E+00*		*-1.1E+00*				pCi/L		
		Radium, total alpha-emitting	6.0E-01		*3.5E+00*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 48B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N107945.0 E54112.2	33.352786 °N 81.734049 °W	158.3-153.6 ft msl	361.4 ft msl	4" PVC	S	LL

SAMPLE DATE	08/03/96	01/06/97	08/21/97	02/25/98	
FIELD DATA					
Parameter	**3Q96**	**1Q97**	**3Q97**	**1Q98**	**Unit**
Water elevation	224.2	222.2	221.8	221.4	ft msl
pH	5.4	5.2	5.6	6.3	pH
Sp. conductance	30	28	28	37	µS/cm
Water temperature	25.0	19.0	20.0	19.0	°C
Alkalinity as $CaCO_3$	5	2		7	mg/L
Turbidity	1	1	2	2	NTU
Volume purged	3.7	2.6	5.0	2.6	well volume
Sampling code					
Synchronous water level	225.0 (09/16/96)	223.1 (03/20/97)	221.2 (09/15/97)	220.8 (03/17/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	11	11	9.0	13	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	1.9	<5.0	<5.0	<47	1		µg/L	WA	0
		Nickel, total recoverable	<10	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<10	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<10	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<10	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<10	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<10	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<10	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<10	<2.5	<5.0	<5.0	1		µg/L	WA	0
	■	Trichloroethylene	***61***	***54***	***44***	***36***	1		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	88		53				µg/L		
		Chloride	2,200		2,300				µg/L		
		Chromium, total recoverable	0.91		1.6				µg/L		
		Cobalt, total recoverable	<4.0		<5.0				µg/L		
		Copper, total recoverable	1.9		1.2				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	<4.5		1.9				µg/L		
		Mercury, total recoverable	0.10		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	1,400		1,100				µg/L		
		Sodium, total recoverable	1,800		1,700				µg/L		
		Sulfate	160		<5,000				µg/L		
		Total phosphates (as P)	<50		5.0				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	<5.0		11				µg/L		
Radionuclides											
		Gross alpha	1.4E+00		*2.8E-01*				pCi/L		
		Nonvolatile beta	*1.4E+00*		*1.7E+00*				pCi/L		
		Radium, total alpha-emitting	4.0E-01		*1.2E+00*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 48C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N107917.5 E54077.0	33.352668 °N 81.734089 °W	180.2-175.4 ft msl	362.3 ft msl	4" PVC	S	UL

SAMPLE DATE	08/03/96	01/06/97	08/21/97	02/18/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	224.7	223.8	222.4	221.8	ft msl
pH	6.2	6.0	6.2	6.0	pH
Sp. conductance	42	42	44	42	µS/cm
Water temperature	25.0	21.0	20.0	16.3	°C
Alkalinity as $CaCO_3$	8	26	6	38	mg/L
Turbidity	9	13	14	8	NTU
Volume purged	12	2.9	7.3	4.6	well volume
Sampling code					
Synchronous water level	225.5 (09/16/96)	223.6 (03/20/97)	222.0 (09/15/97)	221.2 (03/17/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	13	9.9	8.5	9.0	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	1.4	<5.0	<5.0	<47	1		µg/L	WA	0
		Nickel, total recoverable	<1.1	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	1.6	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<2.0	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	4.0	<3.0	<5.0	0.92	1	JE	µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	***110***		77				µg/L		
		Chloride	1,900		1,800				µg/L		
		Chromium, total recoverable	1.4		<3.0				µg/L		
		Cobalt, total recoverable	0.38		<5.0				µg/L		
		Copper, total recoverable	2.5		<3.0				µg/L		
		Fluoride	82		<100				µg/L		
		Manganese, total recoverable	<2.0		<3.0				µg/L		
		Mercury, total recoverable	0.11		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	1,800		1,700				µg/L		
		Sodium, total recoverable	2,900		2,500				µg/L		
		Sulfate	900		<5,000				µg/L		
		Total phosphates (as P)	***340***		***400***				µg/L		
		Uranium, total recoverable	<7.5		<0.10				µg/L		
		Zinc, total recoverable	<3.0		8.9				µg/L		
Radionuclides											
		Gross alpha	9.1E-01		*6.0E-01*				pCi/L		
		Nonvolatile beta	3.4E+00		2.6E+00				pCi/L		
		Radium, total alpha-emitting	2.0E-01		*1.1E+00*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 48D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N107914.4 E54056.3	33.352627 °N 81.734137 °W	243.5-222.0 ft msl	362.6 ft msl	4" PVC	S	M

SAMPLE DATE	08/02/96	02/05/97	03/10/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	248.7			229.9	ft msl
pH				10.8	pH
Sp. conductance				1,100	µS/cm
Water temperature				15.4	°C
Alkalinity as $CaCO_3$				497	mg/L
Turbidity					NTU
Volume purged				1.2	well volume
Sampling code	L	D		BH	
Synchronous water level	248.8 (09/16/96)			229.8 (03/17/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable									
		Cyanide				<15	1		µg/L	WA	0
		Lead, total recoverable									
		Nickel, total recoverable									
		Selenium, total recoverable									
Organics											
		Chlorobenzene				<5.0	1		µg/L	WA	0
		1,1-Dichloroethane				<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene				<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene									
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane				<5.0	1		µg/L	WA	0
		Tetrachloroethylene				<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane				<5.0	1		µg/L	WA	0
	■	Trichloroethylene				***6.7***	1		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable									
		Chloride									
		Chromium, total recoverable									
		Cobalt, total recoverable									
		Copper, total recoverable									
		Fluoride									
		Manganese, total recoverable									
		Mercury, total recoverable									
		Nitrate-nitrite as nitrogen									
		Sodium, total recoverable									
		Sulfate									
		Total phosphates (as P)									
		Uranium, total recoverable									
		Zinc, total recoverable									
Radionuclides											
		Gross alpha									
		Nonvolatile beta									
		Radium, total alpha-emitting									

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 48TA

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N107925.8 E54089.2	33.352706 °N 81.734073 °W	107.8-102.5 ft msl	361.9 ft msl	4" CS	S	CBA

SAMPLE DATE	07/17/96	02/06/97	08/06/97	03/04/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	222.5	221.4	220.3	219.5	ft msl
pH	6.0	5.4	5.4	5.8	pH
Sp. conductance	40	32	30	32	µS/cm
Water temperature	25.0	22.0	20.0	18.0	°C
Alkalinity as $CaCO_3$	7	9	8	7	mg/L
Turbidity	33	5	4	9	NTU
Volume purged	2.1	3.2	3.4	2.9	well volume
Sampling code					
Synchronous water level	223.6 (09/16/96)	221.4 (03/20/97)	219.4 (09/15/97)	219.1 (03/17/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	7.2	7.6	6.6	6.3	1		µg/L	WA	0
		Cyanide	<8.6	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0	<5.0	<47	1		µg/L	WA	0
		Nickel, total recoverable	1.7	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	6.8	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.0	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<2.0	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<2.0	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<2.0	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<2.0	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	<2.0	<2.0	<5.0	<5.0	1		µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<20		<20				µg/L		
		Chloride	1,500		1,600				µg/L		
		Chromium, total recoverable	1.8		1.2				µg/L		
		Cobalt, total recoverable	<0.59		<5.0				µg/L		
		Copper, total recoverable	<3.4		<3.0				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	44		36				µg/L		
		Mercury, total recoverable	<0.20		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	1,700		1,500				µg/L		
		Sodium, total recoverable	2,100		1,700				µg/L		
		Sulfate	320		<5,000				µg/L		
		Total phosphates (as P)	100		6.0				µg/L		
		Uranium, total recoverable	13		<0.10				µg/L		
		Zinc, total recoverable	3.4		10				µg/L		
Radionuclides											
		Gross alpha	1.4E+00		*5.2E+00*				pCi/L		
		Nonvolatile beta	*8.9E-01*		4.5E+00				pCi/L		
		Radium, total alpha-emitting	*5.0E-01*		1.6E+00				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 49A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N99759.0 E45864.6	33.321221 °N 81.739842 °W	76.7-72.0 ft msl	334.7 ft msl	4" PVC	S	MCBC

SAMPLE DATE	07/19/96	01/03/97	08/26/97	02/24/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	197.1	197.2	195.4	196.0	ft msl
pH	6.0	5.4	5.8	6.0	pH
Sp. conductance	100	66	54	64	µS/cm
Water temperature	26.0	20.0	25.6	20.0	°C
Alkalinity as $CaCO_3$	40	22	17	27	mg/L
Turbidity	2	3	2	1	NTU
Volume purged	2.3	2.6	2.4	2.3	well volume
Sampling code					
Synchronous water level	197.8 (09/18/96)	196.6 (03/19/97)	195.2 (09/17/97)	195.3 (03/18/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	37	31	34	35	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0	<5.0	<47	1		µg/L	WA	0
		Nickel, total recoverable	<10	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<2.0	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
	■	Trichloroethylene	2.7	4.7	***5.9***	***6.1***	1		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	***120***		71				µg/L		
		Chloride	1,800		2,100				µg/L		
		Chromium, total recoverable	1.3		0.60				µg/L		
		Cobalt, total recoverable	1.1		<5.0				µg/L		
		Copper, total recoverable	<4.0		<3.0				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	7.4		8.3				µg/L		
		Mercury, total recoverable	<0.20		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	840		600				µg/L		
		Sodium, total recoverable	2,000		1,700				µg/L		
		Sulfate	***3,200***		***3,600***				µg/L		
		Total phosphates (as P)	90		5.0				µg/L		
		Uranium, total recoverable	<20		0.064				µg/L		
		Zinc, total recoverable	3.4		13				µg/L		
Radionuclides											
		Gross alpha	1.2E+00		1.4E+00				pCi/L		
		Nonvolatile beta	1.9E+00		*1.1E+00*				pCi/L		
		Radium, total alpha-emitting	6.0E-01		*6.7E+00*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
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WELL MSB 49B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N99737.8 E45868.2	33.321180 °N 81.739792 °W	116.3-110.7 ft msl	334.1 ft msl	4" PVC	S	LL

SAMPLE DATE	08/13/96	01/06/97	08/26/97	02/19/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	203.4	203.3	200.7	201.0	ft msl
pH	5.8	5.2	5.0	5.4	pH
Sp. conductance	84	72	64	67	µS/cm
Water temperature	22.0	19.0	19.0	18.1	°C
Alkalinity as $CaCO_3$	6	2	1	5	mg/L
Turbidity	1	2	2	1	NTU
Volume purged	2.7	2.7	4.0	2.3	well volume
Sampling code					
Synchronous water level	202.9 (09/18/96)	201.7 (03/19/97)	200.4 (09/17/97)	200.5 (03/18/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	22	25	21	26	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0	<5.0	<47	1		µg/L	WA	0
		Nickel, total recoverable	3.5	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	2.4	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
	■	Tetrachloroethylene	***39***	***27***	***22***	***33***	1		µg/L	WA	2
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
	■	Trichloroethylene	***160***	***130***	***91***	***120***	1		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	40		23				µg/L		
		Chloride	2,400		2,200				µg/L		
		Chromium, total recoverable	2.9		0.70				µg/L		
		Cobalt, total recoverable	1.2		<5.0				µg/L		
		Copper, total recoverable	10		3.8				µg/L		
		Fluoride	<17		<100				µg/L		
		Manganese, total recoverable	7.0		7.2				µg/L		
		Mercury, total recoverable	0.11		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	***4,500***		***7,100***				µg/L		
		Sodium, total recoverable	4,600		4,000				µg/L		
		Sulfate	1,100		<5,000				µg/L		
		Total phosphates (as P)	12		<10				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	9.8		20				µg/L		
Radionuclides											
		Gross alpha	2.6E+00		*1.1E+00*				pCi/L		
		Nonvolatile beta	7.3E+00		3.5E+00				pCi/L		
		Radium, total alpha-emitting	1.2E+00		*4.6E+00*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 49D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N99724.9 E45856.4	33.321132 °N 81.739798 °W	236.4-216.7 ft msl	334.3 ft msl	4" PVC	S	M

SAMPLE DATE	07/19/96	01/03/97	08/27/97	02/24/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	229.2	228.5	226.7	226.0	ft msl
pH	5.6	4.6	5.4	4.8	pH
Sp. conductance	26	24	17	24	µS/cm
Water temperature	25.0	22.0	21.4	19.0	°C
Alkalinity as $CaCO_3$	10	2	1	6	mg/L
Turbidity	4	6	3	1	NTU
Volume purged	0.12	0.13	2.4	0.16	well volume
Sampling code	X	X	X	X	
Synchronous water level	229.1 (09/18/96)	228.1 (03/19/97)	226.5 (09/17/97)	226.3 (03/18/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	8.7	9.6	9.5	12	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	4.6	5.1	***19***	12	1	JE	µg/L	WA	0
		Nickel, total recoverable	1.8	<5.0	2.9	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<2.0	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	<2.0	<3.0	<5.0	<5.0	1		µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<20		41				µg/L		
		Chloride	1,700		2,100				µg/L		
		Chromium, total recoverable	1.8		<3.0				µg/L		
		Cobalt, total recoverable	<0.71		<5.0				µg/L		
		Copper, total recoverable	27		63				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	7.7		8.7				µg/L		
		Mercury, total recoverable	<0.20		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	1,100		860				µg/L		
		Sodium, total recoverable	1,200		1,300				µg/L		
		Sulfate	200		<5,000				µg/L		
		Total phosphates (as P)	70		<10				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	<23		33				µg/L		
Radionuclides											
		Gross alpha	3.5E+00		1.8E+00				pCi/L		
		Nonvolatile beta	*1.5E+00*		*7.8E-01*				pCi/L		
		Radium, total alpha-emitting	1.7E+00		*4.6E+00*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 51B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N96992.7 E52818.0	33.326460 °N 81.716152 °W	160.0-154.4 ft msl	263.2 ft msl	4" PVC	S	LL

SAMPLE DATE	07/22/96	02/25/97	08/18/97	03/02/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	204.6	205.4	203.7	205.0	ft msl
pH	6.0	5.4	5.8	5.4	pH
Sp. conductance	40	32	30	36	µS/cm
Water temperature	25.0	26.0	20.0	1.5	°C
Alkalinity as $CaCO_3$	12	8	4	1	mg/L
Turbidity	6	1	1	1	NTU
Volume purged	2.4	3.8	3.5	5.2	well volume
Sampling code					
Synchronous water level	204.7 (09/19/96)	204.3 (03/17/97)	203.4 (09/16/97)	205.3 (03/18/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	25	13	12	9.7	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	1.2	<5.0	9.1	<47	1		µg/L	WA	0
		Nickel, total recoverable	<10	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<2.0	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	<2.0	<3.0	<5.0	<5.0	1		µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<20		26				µg/L		
		Chloride	1,700		2,200				µg/L		
		Chromium, total recoverable	0.90		<3.0				µg/L		
		Cobalt, total recoverable	<4.0		<5.0				µg/L		
		Copper, total recoverable	<4.0		<3.0				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	<4.4		2.7				µg/L		
		Mercury, total recoverable	<0.20		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	840		350				µg/L		
		Sodium, total recoverable	1,500		1,400				µg/L		
		Sulfate	270		<5,000				µg/L		
		Total phosphates (as P)	30		<10				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	<5.5		11				µg/L		
Radionuclides											
		Gross alpha	1.3E+00		*-8.0E-02*				pCi/L		
		Nonvolatile beta	2.0E+00		*-1.0E-02*				pCi/L		
		Radium, total alpha-emitting	7.0E-01		***7.2E+00***				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 52B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N103077.7 E53418.4	33.340893 °N 81.726407 °W	171.4-165.8 ft msl	321.7 ft msl	4" PVC	S	LL

SAMPLE DATE	08/13/96	01/07/97	08/21/97	02/23/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	219.7	218.4	217.6	217.8	ft msl
pH	6.0	5.6	5.8	6.0	pH
Sp. conductance	54	38	36	44	µS/cm
Water temperature	22.0	22.0	20.0	19.0	°C
Alkalinity as $CaCO_3$	6	2	8	10	mg/L
Turbidity	2	2	2	1	NTU
Volume purged	2.8	2.6	4.0	2.1	well volume
Sampling code					
Synchronous water level	220.2 (09/17/96)	218.2 (03/17/97)	216.6 (09/15/97)	216.8 (03/18/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	8.4	8.0	8.2	10	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0	<5.0	<47	1		µg/L	WA	0
		Nickel, total recoverable	2.2	<5.0	3.9	<26	1		µg/L	WA	0
		Selenium, total recoverable	1.8	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	***5.8***	3.6	3.0	3.0	1	JE	µg/L	WA	1
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	3.6	<3.0	2.0	2.0	1	JE	µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	75		***110***				µg/L		
		Chloride	4,000		3,800				µg/L		
		Chromium, total recoverable	3.3		6.5				µg/L		
		Cobalt, total recoverable	<4.0		<5.0				µg/L		
		Copper, total recoverable	2.6		1.2				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	3.1		3.4				µg/L		
		Mercury, total recoverable	<0.20		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	1,100		900				µg/L		
		Sodium, total recoverable	2,300		2,200				µg/L		
		Sulfate	260		<5,000				µg/L		
		Total phosphates (as P)	<50		6.0				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	<3.9		26				µg/L		
Radionuclides											
		Gross alpha	1.7E+00		1.7E+00				pCi/L		
		Nonvolatile beta	*7.6E-01*		7.8E+00				pCi/L		
		Radium, total alpha-emitting	*0.0E+00*		*2.0E+00*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 53B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N106443.6 E54574.3	33.350222 °N 81.729911 °W	152.3-147.6 ft msl	344.3 ft msl	4" PVC	S	LL

SAMPLE DATE	07/19/96	02/06/97	08/22/97	02/26/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	222.2	221.1	219.9	219.4	ft msl
pH	5.0	4.8	5.1	5.4	pH
Sp. conductance	20	20	20	14	µS/cm
Water temperature	25.0	22.0	19.0	19.0	°C
Alkalinity as $CaCO_3$	1	2	1	4	mg/L
Turbidity	11	0	2	1	NTU
Volume purged	1.4	2.4	2.7	2.0	well volume
Sampling code					
Synchronous water level	223.3 (09/19/96)	220.8 (03/17/97)	219.6 (09/16/97)	219.0 (03/18/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	9.8	5.6	4.8	4.5	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	<5.0	***22***	<5.0	<47	1		µg/L	WA	0
		Nickel, total recoverable	<10	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<2.0	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	1.3	<3.0	<5.0	<5.0	1		µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<20		13				µg/L		
		Chloride	2,100		2,500				µg/L		
		Chromium, total recoverable	0.67		<3.0				µg/L		
		Cobalt, total recoverable	<0.23		<5.0				µg/L		
		Copper, total recoverable	<4.0		1.0				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	<2.4		2.0				µg/L		
		Mercury, total recoverable	<0.20		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	920		150				µg/L		
		Sodium, total recoverable	1,900		1,600				µg/L		
		Sulfate	190		<5,000				µg/L		
		Total phosphates (as P)	100		8.0				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	<11		14				µg/L		
Radionuclides											
		Gross alpha	9.9E-01		*-4.3E-01*				pCi/L		
		Nonvolatile beta	1.8E+00		4.4E+00				pCi/L		
		Radium, total alpha-emitting	4.0E-01		*1.3E+00*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 53C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N106456.2 E54540.5	33.350194 °N 81.730024 °W	192.6-187.8 ft msl	345.2 ft msl	4" PVC	S	UL

SAMPLE DATE	07/19/96	02/05/97	08/22/97	02/26/98	
FIELD DATA					
Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	223.1	222.2	221.1	220.4	ft msl
pH	5.2	5.4	5.0	6.0	pH
Sp. conductance	26	24	28	22	µS/cm
Water temperature	28.0	26.0	20.0	19.0	°C
Alkalinity as $CaCO_3$	2	3	0	3	mg/L
Turbidity	8	2	1	0	NTU
Volume purged	3.4	6.0	4.2	9.9	well volume
Sampling code					
Synchronous water level	224.2 (09/19/96)	221.8 (03/17/97)	220.8 (09/16/97)	220.0 (03/18/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	4.7	8.0	12	10	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0	3.8	<47	1		µg/L	WA	0
		Nickel, total recoverable	<10	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<2.0	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	<2.0	<3.0	<5.0	<5.0	1		µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<20		27				µg/L		
		Chloride	2,200		2,300				µg/L		
		Chromium, total recoverable	<4.0		<3.0				µg/L		
		Cobalt, total recoverable	<4.0		<5.0				µg/L		
		Copper, total recoverable	1.7		<3.0				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	<1.8		3.9				µg/L		
		Mercury, total recoverable	<0.20		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	240		1,600				µg/L		
		Sodium, total recoverable	1,500		2,400				µg/L		
		Sulfate	180		<5,000				µg/L		
		Total phosphates (as P)	80		<10				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	<7.2		17				µg/L		
Radionuclides											
		Gross alpha	*7.2E-01*		*2.6E-01*				pCi/L		
		Nonvolatile beta	*1.4E+00*		*2.8E-01*				pCi/L		
		Radium, total alpha-emitting	3.0E-01		*1.4E+00*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 54B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N108446.8 E52970.5	33.352031 °N 81.738033 °W	136.4-130.8 ft msl	373.4 ft msl	4" PVC	S	MCBC

SAMPLE DATE	07/22/96	02/05/97	08/14/97	02/25/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	222.2	221.5	220.0	219.7	ft msl
pH	6.4	6.0	5.4	6.0	pH
Sp. conductance	42	22	24	22	µS/cm
Water temperature	25.0	26.0	20.0	19.0	°C
Alkalinity as $CaCO_3$	1	2	3	11	mg/L
Turbidity	1	2	1	1	NTU
Volume purged	3.6	2.3	4.2	2.9	well volume
Sampling code					
Synchronous water level	223.3 (09/16/96)	221.4 (03/20/97)	219.4 (09/15/97)	219.0 (03/17/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	5.8	5.5	5.1	11	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0	4.9	<47	1		µg/L	WA	0
		Nickel, total recoverable	<10	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<2.0	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	<2.0	<3.0	<5.0	<5.0	1		µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	66		8.3				µg/L		
		Chloride	1,200		1,500				µg/L		
		Chromium, total recoverable	<4.0		<3.0				µg/L		
		Cobalt, total recoverable	<4.0		<5.0				µg/L		
		Copper, total recoverable	<4.0		<3.0				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	2.9		3.4				µg/L		
		Mercury, total recoverable	<0.20		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	980		1,100				µg/L		
		Sodium, total recoverable	1,600		1,600				µg/L		
		Sulfate	270		<5,000				µg/L		
		Total phosphates (as P)	<50		<10				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	<2.9		8.1				µg/L		
Radionuclides											
		Gross alpha	1.8E+00		*-9.0E-02*				pCi/L		
		Nonvolatile beta	*6.9E-01*		*2.8E-01*				pCi/L		
		Radium, total alpha-emitting	7.0E-01		*2.2E+00*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 54C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N108447.4 E52955.7	33.352008 °N 81.738073 °W	175.6-170.0 ft msl	373.4 ft msl	4" PVC	S	LL

SAMPLE DATE	07/25/96	02/05/97	08/26/97	02/25/98	
FIELD DATA					
Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	299.4	226.4	224.9	224.0	ft msl
pH	9.4	9.6	10.0	9.8	pH
Sp. conductance	100	94	94	120	µS/cm
Water temperature	26.0	27.0	21.0	20.0	°C
Alkalinity as $CaCO_3$	40	33	58	72	mg/L
Turbidity	46	6	3	1	NTU
Volume purged	2.2	4.4	4.3	4.9	well volume
Sampling code					
Synchronous water level	227.7 (09/16/96)	225.9 (03/20/97)	224.3 (09/15/97)	223.6 (03/17/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	55	44	49	48	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	1.5	<5.0	<5.0	<47	1		µg/L	WA	0
		Nickel, total recoverable	1.0	<5.0	<5.0	4.2	1	JE	µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<2.0	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	<2.0	<3.0	<5.0	<5.0	1		µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	***360***		***210***				µg/L		
		Chloride	1,400		1,700				µg/L		
		Chromium, total recoverable	<4.5		0.80				µg/L		
		Cobalt, total recoverable	<1.4		<5.0				µg/L		
		Copper, total recoverable	<4.0		<3.0				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	3.4		1.8				µg/L		
		Mercury, total recoverable	<0.20		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	1,800		1,300				µg/L		
		Sodium, total recoverable	2,600		2,100				µg/L		
		Sulfate	420		<5,000				µg/L		
		Total phosphates (as P)	270		92				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	6.6		19				µg/L		
Radionuclides											
		Gross alpha	3.7E+00		2.7E+00				pCi/L		
		Nonvolatile beta	2.4E+00		*8.5E-01*				pCi/L		
		Radium, total alpha-emitting	1.2E+00		*3.5E+00*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 54D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N108461.5 E52984.5	33.352086 °N 81.738025 °W	244.8-223.8 ft msl	373.6 ft msl	4" PVC	S	UL

SAMPLE DATE	07/22/96	02/05/97	08/14/97	02/25/98	
FIELD DATA					
Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	234.2	233.3	232.0	230.4	ft msl
pH	5.6	5.2	5.2	5.4	pH
Sp. conductance	42	20	24	14	µS/cm
Water temperature	25.0	27.0	20.0	19.0	°C
Alkalinity as $CaCO_3$	0	2	2	2	mg/L
Turbidity	0	3	1	3	NTU
Volume purged	20	14	15	29	well volume
Sampling code					
Synchronous water level	234.0 (09/16/96)	233.1 (03/20/97)	231.6 (09/15/97)	230.3 (03/17/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	3.7	4.0	3.6	4.1	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	6.7	***19***	12	12	1	JE	µg/L	WA	0
		Nickel, total recoverable	<10	<5.0	<5.0	3.9	1	JE	µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<2.0	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	<2.0	<3.0	<5.0	<5.0	1		µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	79		12				µg/L		
		Chloride	730		960				µg/L		
		Chromium, total recoverable	<4.0		1.7				µg/L		
		Cobalt, total recoverable	0.23		<5.0				µg/L		
		Copper, total recoverable	7.8		9.2				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	3.0		4.4				µg/L		
		Mercury, total recoverable	<0.20		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	1,700		1,800				µg/L		
		Sodium, total recoverable	1,400		1,700				µg/L		
		Sulfate	560		<5,000				µg/L		
		Total phosphates (as P)	<50		<10				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	<4.5		8.4				µg/L		
Radionuclides											
		Gross alpha	3.1E+00		*3.9E-01*				pCi/L		
		Nonvolatile beta	2.1E+00		*2.6E-01*				pCi/L		
		Radium, total alpha-emitting	1.4E+00		*8.0E+00*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 54TA

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N108446.3 E52985.8	33.352055 °N 81.737992 °W	80.9-75.3 ft msl	373.5 ft msl	4" CS	S	CBA

SAMPLE DATE	07/22/96	02/05/97	08/14/97	02/25/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	217.7	218.8	217.2	217.2	ft msl
pH	7.2	6.4	7.2	5.8	pH
Sp. conductance	94	34	42	20	µS/cm
Water temperature	25.0	25.0	20.0	20.0	°C
Alkalinity as $CaCO_3$	13		11	8	mg/L
Turbidity	5	5	4	2	NTU
Volume purged	2.7	2.2	2.9	2.3	well volume
Sampling code					
Synchronous water level	220.7 (09/16/96)	218.7 (03/20/97)	216.6 (09/15/97)	216.5 (03/17/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	7.9	9.7	7.8	9.1	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0	<5.0	<47	1		µg/L	WA	0
		Nickel, total recoverable	<10	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<1.7	<5.0	3.5	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.0	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<2.0	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<2.0	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<2.0	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<2.0	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	<2.0	<2.0	<5.0	<5.0	1		µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	***130***		21				µg/L		
		Chloride	1,000		1,200				µg/L		
		Chromium, total recoverable	<4.0		0.90				µg/L		
		Cobalt, total recoverable	<4.0		<5.0				µg/L		
		Copper, total recoverable	<4.0		<3.0				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	6.9		5.4				µg/L		
		Mercury, total recoverable	<0.20		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	1,200		1,000				µg/L		
		Sodium, total recoverable	1,600		1,500				µg/L		
		Sulfate	320		<5,000				µg/L		
		Total phosphates (as P)	<50		<10				µg/L		
		Uranium, total recoverable	<20		0.025				µg/L		
		Zinc, total recoverable	24		28				µg/L		
Radionuclides											
		Gross alpha	*4.6E-01*		*9.8E-01*				pCi/L		
		Nonvolatile beta	*9.5E-01*		*6.7E-01*				pCi/L		
		Radium, total alpha-emitting	7.0E-01		*6.0E+00*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 55B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N108342.4 E52006.2	33.350225 °N 81.740370 °W	152.7-148.0 ft msl	368.7 ft msl	4" PVC	S	MCBC

SAMPLE DATE	07/24/96	03/26/97	08/14/97	02/26/98
FIELD DATA				
Parameter	3Q96	1Q97	3Q97	1Q98
Water elevation	222.0	222.0	219.6	219.3
pH	4.0	3.4	4.0	4.4
Sp. conductance	66	64	68	57
Water temperature	25.0	25.0	20.0	17.8
Alkalinity as $CaCO_3$	0	0	0	0
Turbidity	11	1	2	0
Volume purged	2.4	3.0	4.2	2.5
Sampling code				
Synchronous water level	223.0 (09/16/96)	220.8 (03/20/97)	219.0 (09/15/97)	218.6 (03/17/98)

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	7.4	7.4	7.9	7.6	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	3.4	<5.0	<5.0	<47	1		µg/L	WA	0
		Nickel, total recoverable	1.6	<5.0	3.4	<4.1	1	V	µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<2.0	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	***7.7***	<1.0	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<1.0	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	<2.0	<1.0	<5.0	<5.0	1		µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	***390***		***380***				µg/L		
		Chloride	1,900		2,200				µg/L		
		Chromium, total recoverable	0.67		<3.0				µg/L		
		Cobalt, total recoverable	2.0		<5.0				µg/L		
		Copper, total recoverable	<4.0		2.4				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	9.8		9.9				µg/L		
		Mercury, total recoverable	<0.20		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	230		13				µg/L		
		Sodium, total recoverable	1,700		1,700				µg/L		
		Sulfate	***11,000***		***11,000***				µg/L		
		Total phosphates (as P)	<50		<10				µg/L		
		Uranium, total recoverable	<20		0.10				µg/L		
		Zinc, total recoverable	<9.0		15				µg/L		
Radionuclides											
		Gross alpha	4.2E+00		8.3E+00				pCi/L		
		Nonvolatile beta	5.1E+00		1.3E+01				pCi/L		
		Radium, total alpha-emitting	***6.9E+00***		*8.3E+00*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 55C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N108324.6 E52029.7	33.350224 °N 81.740273 °W	189.3-184.6 ft msl	369.4 ft msl	4" PVC	S	LL

SAMPLE DATE	08/23/96	02/05/97	08/14/97	02/26/98	
FIELD DATA					
Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	230.4	229.2	227.6	226.7	ft msl
pH	4.4	4.4	4.6	4.1	pH
Sp. conductance	24	24	28	24	µS/cm
Water temperature	22.0	23.0	20.0	18.1	°C
Alkalinity as $CaCO_3$	4	1	0	1	mg/L
Turbidity	1	2	1	1	NTU
Volume purged	5.4	3.3	3.3	3.2	well volume
Sampling code					
Synchronous water level	230.3 (09/16/96)	228.6 (03/20/97)	227.2 (09/15/97)	226.2 (03/17/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	4.5	3.8	6.2	7.4	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	2.9	<5.0	<5.0	<47	1		µg/L	WA	0
		Nickel, total recoverable	<10	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	4.2	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	0.060	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<0.050	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<0.050	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016	<0.13						µg/L		
		PCB 1221	<0.13						µg/L		
		PCB 1232	<0.13						µg/L		
		PCB 1242	<0.13						µg/L		
		PCB 1248	<0.13						µg/L		
		PCB 1254	<0.13						µg/L		
		PCB 1260	<0.13						µg/L		
		1,1,2,2-Tetrachloroethane	<0.050	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	0.10	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<0.050	<2.5	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	0.21	<3.0	<5.0	<5.0	1		µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	22		16				µg/L		
		Chloride	2,300		2,100				µg/L		
		Chromium, total recoverable	<4.0		<3.0				µg/L		
		Cobalt, total recoverable	<4.0		<5.0				µg/L		
		Copper, total recoverable	4.8		<3.0				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	3.8		4.1				µg/L		
		Mercury, total recoverable	0.16		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	1,500		1,500				µg/L		
		Sodium, total recoverable	2,600		2,500				µg/L		
		Sulfate	440		<5,000				µg/L		
		Total phosphates (as P)	<50		<10				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	<5.0		15				µg/L		
Radionuclides											
		Gross alpha	*9.5E-01*		3.3E+00				pCi/L		
		Nonvolatile beta	1.9E+00		2.3E+00				pCi/L		
		Radium, total alpha-emitting	5.0E-01		*7.6E+00*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 55D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N108391.4 E52032.5	33.350377 °N 81.740396 °W	245.9-224.7 ft msl	367.7 ft msl	4" PVC	S	UL

SAMPLE DATE	07/24/96	02/05/97	08/14/97	03/03/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	234.1	233.4	232.6	232.8	ft msl
pH	4.8	4.8	4.8	4.9	pH
Sp. conductance	24	22	26	23	µS/cm
Water temperature	25.0	23.0	20.0	17.0	°C
Alkalinity as $CaCO_3$	1	3	0	0	mg/L
Turbidity	18	4	4	2	NTU
Volume purged	3.9	8.4	21	7.9	well volume
Sampling code					
Synchronous water level	234.0 (09/16/96)	233.2 (03/20/97)	( )	232.7 (03/17/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	10	7.4	7.6	6.1	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
	■	Lead, total recoverable	13	13	13	***21***	1	JE	µg/L	WA	0
		Nickel, total recoverable	<10	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<2.0	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	<2.0	<3.0	<5.0	<5.0	1		µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<51		6.9				µg/L		
		Chloride	1,200		1,600				µg/L		
		Chromium, total recoverable	<2.3		1.7				µg/L		
		Cobalt, total recoverable	<1.4		<5.0				µg/L		
		Copper, total recoverable	8.0		13				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	12		9.7				µg/L		
		Mercury, total recoverable	0.043		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	1,800		1,900				µg/L		
		Sodium, total recoverable	1,600		1,700				µg/L		
		Sulfate	180		<5,000				µg/L		
		Total phosphates (as P)	<50		<10				µg/L		
		Uranium, total recoverable	<20		0.081				µg/L		
		Zinc, total recoverable	6.8		16				µg/L		
Radionuclides											
		Gross alpha	6.2E+00		3.5E+00				pCi/L		
		Nonvolatile beta	3.1E+00		*1.8E+00*				pCi/L		
		Radium, total alpha-emitting	3.8E+00		***9.5E+00***				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 55HC

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N108338.7 E52020.1	33.350240 °N 81.740326 °W	218.8-214.1 ft msl	368.7 ft msl	4" PVC	S	UL

SAMPLE DATE	07/25/96	02/06/97	08/27/97	03/02/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	233.7	232.9	231.4	230.2	ft msl
pH	10.0	9.2	9.0	9.4	pH
Sp. conductance	120	92	75	110	µS/cm
Water temperature	21.0	19.0	19.4	15.7	°C
Alkalinity as $CaCO_3$	22	43	21	30	mg/L
Turbidity	167	198	357	364	NTU
Volume purged	0.078	0.0	0.18	0.85	well volume
Sampling code	X	X	TX		
Synchronous water level	233.6 (09/16/96)	232.7 (03/20/97)	231.4 (09/15/97)	230.0 (03/17/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	400						µg/L		
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	5.5						µg/L		
		Nickel, total recoverable	<10						µg/L		
		Selenium, total recoverable	<3.9						µg/L		
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<2.0	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	<2.0	<3.0	<5.0	<5.0	1		µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	***560***						µg/L		
		Chloride	1,500		1,800				µg/L		
		Chromium, total recoverable	4.1						µg/L		
		Cobalt, total recoverable	0.59						µg/L		
		Copper, total recoverable	<4.0						µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	11						µg/L		
		Mercury, total recoverable	<0.20						µg/L		
		Nitrate-nitrite as nitrogen	1,900		2,100				µg/L		
		Sodium, total recoverable	***7,900***						µg/L		
		Sulfate	1,600		<5,000				µg/L		
		Total phosphates (as P)	<50		270				µg/L		
		Uranium, total recoverable	<20		2.0				µg/L		
		Zinc, total recoverable	<5.2						µg/L		
Radionuclides											
		Gross alpha	2.5E+00		1.4E+01				pCi/L		
		Nonvolatile beta	4.8E+00		8.3E+00				pCi/L		
		Radium, total alpha-emitting	1.6E+00		3.8E+00				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 55TA

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N108322.8 E52014.7	33.350196 °N 81.740309 °W	91.6-86.2 ft msl	368.7 ft msl	4" CS	S	CBA

SAMPLE DATE	07/24/96	02/05/97	08/25/97	03/02/98	
FIELD DATA					
Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	214.4	213.0	212.0	212.1	ft msl
pH	4.8	4.8	5.2	5.1	pH
Sp. conductance	26	24	22	21	µS/cm
Water temperature	24.0	25.0	20.0	17.5	°C
Alkalinity as $CaCO_3$	1	0	3	1	mg/L
Turbidity	4	2	1	1	NTU
Volume purged	2.3	3.4	2.1	2.4	well volume
Sampling code					
Synchronous water level	215.2 (09/16/96)	213.1 (03/20/97)	210.8 (09/15/97)	211.1 (03/17/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	4.8	4.1	4.4	3.3	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	2.7	<5.0	4.2	<47	1		µg/L	WA	0
		Nickel, total recoverable	0.99	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<2.0	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	<2.0	<3.0	<5.0	<5.0	1		µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<45	<20	22				µg/L		
		Chloride	1,200		1,400				µg/L		
		Chromium, total recoverable	<1.6	<3.0	<3.0				µg/L		
		Cobalt, total recoverable	<1.4		<5.0				µg/L		
		Copper, total recoverable	<0.96		1.4				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	34	33	42				µg/L		
		Mercury, total recoverable	<0.20	<0.20	<0.20				µg/L		
		Nitrate-nitrite as nitrogen	740		510				µg/L		
		Sodium, total recoverable	1,400		1,400				µg/L		
		Sulfate	1,900		<5,000				µg/L		
		Total phosphates (as P)	<50		<10				µg/L		
		Uranium, total recoverable	<20		0.058				µg/L		
		Zinc, total recoverable	7.9		17				µg/L		
Radionuclides											
		Gross alpha	8.0E-01	*-1.7E-01*	*1.7E-01*				pCi/L		
		Nonvolatile beta	*6.7E-01*	*3.0E-03*	*-6.9E-01*				pCi/L		
		Radium, total alpha-emitting	4.0E-01		*1.0E+00*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 56D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N108463.5 E44207.9	33.337755 °N 81.761141 °W	232.4-211.1 ft msl	279.5 ft msl	4" PVC	S	M

SAMPLE DATE	07/23/96	02/05/97	08/26/97	03/02/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	221.0	219.8	219.0	219.3	ft msl
pH	4.8	4.8	4.8	5.0	pH
Sp. conductance	20	18	18	22	µS/cm
Water temperature	25.0	26.0	21.2	16.0	°C
Alkalinity as $CaCO_3$	0	1	2	1	mg/L
Turbidity	19	15	6	1	NTU
Volume purged	3.2	12	7.4	10	well volume
Sampling code					
Synchronous water level	220.7 (09/16/96)	222.7 (03/20/97)	218.8 (09/15/97)	219.7 (03/17/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	3.3	4.6	10	4.7	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	7.2	***28***	***20***	8.2	1	JE	µg/L	WA	0
		Nickel, total recoverable	<10	<5.0	13	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<2.0	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	<2.0	<3.0	<5.0	<5.0	1		µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	52		***170***				µg/L		
		Chloride	2,200		3,300				µg/L		
		Chromium, total recoverable	0.86		20				µg/L		
		Cobalt, total recoverable	0.29		<5.0				µg/L		
		Copper, total recoverable	16		160				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	3.1		15				µg/L		
		Mercury, total recoverable	<0.20		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	210		610				µg/L		
		Sodium, total recoverable	1,600		1,700				µg/L		
		Sulfate	220		<5,000				µg/L		
		Total phosphates (as P)	<50		11				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	3.3		18				µg/L		
Radionuclides											
		Gross alpha	2.3E+00		3.9E+00				pCi/L		
		Nonvolatile beta	2.1E+00		3.7E+00				pCi/L		
		Radium, total alpha-emitting	1.9E+00		*7.0E+00*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 65D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N101915.5 E49413.7	33.331784 °N 81.734692 °W	243.9-224.4 ft msl	349.2 ft msl	4" PVC	S	M

SAMPLE DATE	08/08/96	01/13/97		02/24/98	
FIELD DATA					
Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	234.2	232.6		230.4	ft msl
pH	4.0	4.2		4.6	pH
Sp. conductance	180	24		25	µS/cm
Water temperature	32.0	22.0		20.6	°C
Alkalinity as $CaCO_3$	1	0		0	mg/L
Turbidity	2	1		1	NTU
Volume purged	0.31	4.1		3.8	well volume
Sampling code	X				
Synchronous water level	233.8 (09/19/96)	232.3 (03/19/97)		230.8 (03/18/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	7.9	7.4	6.9	8.2	1		µg/L	WA	0
		Cyanide	<10	<5.0		<15	1		µg/L	WA	0
		Lead, total recoverable	8.4	<5.0	5.3	9.1	1	JE	µg/L	WA	0
		Nickel, total recoverable	<10	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	1.5	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
	■	Tetrachloroethylene	***39***	***41***	***40***	***33***	1		µg/L	WA	2
		1,1,1-Trichloroethane	2.6	<2.5	<5.0	<5.0	1		µg/L	WA	0
	■	Trichloroethylene	***18***	***15***	***16***	***16***	1		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	59		41				µg/L		
		Chloride	2,000		1,900				µg/L		
		Chromium, total recoverable	<4.0		<3.0				µg/L		
		Cobalt, total recoverable	0.42		<5.0				µg/L		
		Copper, total recoverable	23		9.2				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	6.0		6.1				µg/L		
		Mercury, total recoverable	0.12		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	1,600		1,300				µg/L		
		Sodium, total recoverable	1,900		1,900				µg/L		
		Sulfate	980		<5,000				µg/L		
		Total phosphates (as P)	190		<10				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	16		23				µg/L		
Radionuclides											
		Gross alpha	1.7E+00		1.8E+00				pCi/L		
		Nonvolatile beta	2.1E+00		*1.7E+00*				pCi/L		
		Radium, total alpha-emitting	7.0E-01		1.8E+00				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 66B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N105842.0 E51064.6	33.343160 °N 81.737984 °W	143.9-139.2 ft msl	383.4 ft msl	4" PVC	S	LL

SAMPLE DATE	08/08/96	01/07/97	08/19/97	03/03/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	219.4	218.0	216.3	216.1	ft msl
pH	9.4	9.2	6.6	6.6	pH
Sp. conductance	72	80	58	54	µS/cm
Water temperature	26.0	21.0	20.0	16.0	°C
Alkalinity as $CaCO_3$	17	26	13	20	mg/L
Turbidity	0	1	1	1	NTU
Volume purged	4.9	3.0	5.5	4.9	well volume
Sampling code					
Synchronous water level	220.1 (09/16/96)	217.8 (03/20/97)	215.4 (09/15/97)	215.3 (03/17/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	19	24	16	18	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0	<5.0	<47	1		µg/L	WA	0
		Nickel, total recoverable	<10	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
	■	Tetrachloroethylene	3.7	2.9	4.9	***5.4***	1		µg/L	WA	2
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
	■	Trichloroethylene	***33***	***41***	***110***	***110***	1		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	79		61				µg/L		
		Chloride	1,600		1,600				µg/L		
		Chromium, total recoverable	<4.0		<3.0				µg/L		
		Cobalt, total recoverable	0.30		<5.0				µg/L		
		Copper, total recoverable	6.1		<3.0				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	1.3		1.7				µg/L		
		Mercury, total recoverable	0.19		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	1,700		1,900				µg/L		
		Sodium, total recoverable	2,100		2,000				µg/L		
		Sulfate	170		<5,000				µg/L		
		Total phosphates (as P)	<40		72				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	<5.0		15				µg/L		
Radionuclides											
		Gross alpha	7.5E-01		*1.8E+00*				pCi/L		
		Nonvolatile beta	1.8E+00		*1.2E+00*				pCi/L		
		Radium, total alpha-emitting	*-1.0E-01*		***5.2E+00***				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 66C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N105842.1 E51053.5	33.343142 °N 81.738014 °W	170.9-166.2 ft msl	383.4 ft msl	4" PVC	S	UL

SAMPLE DATE	08/08/96	01/07/97	03/03/98
FIELD DATA			
Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	229.3	228.1	225.3	ft msl
pH	5.2	5.8	4.4	pH
Sp. conductance	30	32	28	µS/cm
Water temperature	30.0	20.0	16.0	°C
Alkalinity as $CaCO_3$	1	2	1	mg/L
Turbidity	0	1	1	NTU
Volume purged	4.1	3.1	3.4	well volume
Sampling code				
Synchronous water level	229.4 (09/16/96)	228.1 (03/20/97)	225.1 (03/17/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	7.4	8.0		7.3	1		µg/L	WA	0
		Cyanide	<10	<5.0		<15	1		µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0		<47	1		µg/L	WA	0
		Nickel, total recoverable	<10	<5.0		<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0		<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<7.0		<10	2		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<13		<10	2		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<16		<10	2		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<16					µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<7.5		<10	2		µg/L	WA	0
	■	Tetrachloroethylene	***18***	***22***		***24***	2		µg/L	WA	2
		1,1,1-Trichloroethane	<2.0	<13		<10	2		µg/L	WA	0
	■	Trichloroethylene	***310***	***410***		***270***	2		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<20						µg/L		
		Chloride	2,100						µg/L		
		Chromium, total recoverable	<4.0						µg/L		
		Cobalt, total recoverable	0.77						µg/L		
		Copper, total recoverable	4.0						µg/L		
		Fluoride	<100						µg/L		
		Manganese, total recoverable	19						µg/L		
		Mercury, total recoverable	0.022						µg/L		
		Nitrate-nitrite as nitrogen	2,400						µg/L		
		Sodium, total recoverable	2,500						µg/L		
		Sulfate	170						µg/L		
		Total phosphates (as P)	<50						µg/L		
		Uranium, total recoverable	<20						µg/L		
		Zinc, total recoverable	12						µg/L		
Radionuclides											
		Gross alpha	1.6E+00						pCi/L		
		Nonvolatile beta	3.3E+00						pCi/L		
		Radium, total alpha-emitting	7.0E-01						pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 66D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N	°N ft msl	ft msl		M		
E	°W					

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Cyanide					
Lead, total recoverable					
Nickel, total recoverable					
Selenium, total recoverable					
Organics					
Chlorobenzene					
1,1-Dichloroethane					
1,1-Dichloroethylene					
trans-1,2-Dichloroethylene					
PCB 1016					
PCB 1221					
PCB 1232					
PCB 1242					
PCB 1248					
PCB 1254					
PCB 1260					
1,1,2,2-Tetrachloroethane					
Tetrachloroethylene					
1,1,1-Trichloroethane					
Trichloroethylene					

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable									
		Chloride									
		Chromium, total recoverable									
		Cobalt, total recoverable									
		Copper, total recoverable									
		Fluoride									
		Manganese, total recoverable									
		Mercury, total recoverable									
		Nitrate-nitrite as nitrogen									
		Sodium, total recoverable									
		Sulfate									
		Total phosphates (as P)									
		Uranium, total recoverable									
		Zinc, total recoverable									
Radionuclides											
		Gross alpha									
		Nonvolatile beta									
		Radium, total alpha-emitting									

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 66TA

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N105842.6 E51096.7	33.343214 °N 81.737901 °W	35.5-30.8 ft msl	382.7 ft msl	4" PVC	S	CBA

SAMPLE DATE	07/23/96	02/06/97	08/19/97	03/03/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	206.4	203.9	202.7	203.4	ft msl
pH	4.8	5.2	4.8	4.8	pH
Sp. conductance	20	24	24	26	µS/cm
Water temperature	26.0	26.0	20.0	16.0	°C
Alkalinity as $CaCO_3$	1	1	0	0	mg/L
Turbidity	2	0	1	1	NTU
Volume purged	2.2	2.1	2.6	2.6	well volume
Sampling code					
Synchronous water level	207.5 (09/16/96)	204.6 (03/20/97)	199.8 (09/15/97)	202.2 (03/17/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

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H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	3.4	3.5	3.2	2.7	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0	<5.0	<47	1		µg/L	WA	0
		Nickel, total recoverable	<10	<5.0	4.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
■		Tetrachloroethylene	***6.6***	***8.7***	***7.0***	***6.7***	1		µg/L	WA	2
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
■		Trichloroethylene	3.5	4.3	4.2	***6.0***	1		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	44		58				µg/L		
		Chloride	1,300		1,500				µg/L		
		Chromium, total recoverable	<4.0		<3.0				µg/L		
		Cobalt, total recoverable	0.88		<5.0				µg/L		
		Copper, total recoverable	2.1		5.8				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	12		10				µg/L		
		Mercury, total recoverable	<0.20		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	1,000		780				µg/L		
		Sodium, total recoverable	1,500		1,500				µg/L		
		Sulfate	1,500		<5,000				µg/L		
		Total phosphates (as P)	220		<10				µg/L		
		Uranium, total recoverable	<20		0.055				µg/L		
		Zinc, total recoverable	6.0		21				µg/L		
Radionuclides											
		Gross alpha	7.4E-01		*1.0E+00*				pCi/L		
		Nonvolatile beta	*4.0E-01*		*-3.8E-01*				pCi/L		
		Radium, total alpha-emitting	7.0E-01		***6.5E+00***				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 67D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N106830.7 E51971.5	33.346827 °N 81.737519 °W	241.0-221.5 ft msl	365 ft msl	4" PVC	S	M

SAMPLE DATE	08/08/96	01/07/97	08/26/97	02/26/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	233.9	233.0	231.5	230.2	ft msl
pH	5.6	5.8	5.8	5.3	pH
Sp. conductance	46	48	50	49	µS/cm
Water temperature	27.0	23.0	22.0	20.4	°C
Alkalinity as $CaCO_3$	5	2	7	8	mg/L
Turbidity	0	3	1	0	NTU
Volume purged	7.4	0.13	5.8	4.0	well volume
Sampling code		X			
Synchronous water level	233.9 (09/16/96)	232.8 (03/20/97)	231.3 (09/15/97)	230.7 (03/20/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	18	30	28	26	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	<5.0	7.8	13	9.4	1	JE	µg/L	WA	0
		Nickel, total recoverable	<10	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<100	<35	<100	<50	10		µg/L	WA	0
		1,1-Dichloroethane	<100	<63	<100	<50	10		µg/L	WA	0
		1,1-Dichloroethylene	<100	<80	<100	<50	10		µg/L	WA	0
		trans-1,2-Dichloroethylene	<100	<80	<100				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<100	<38	<100	<50	10		µg/L	WA	0
	■	Tetrachloroethylene	<100	<48	***15***	***12***	10	JE	µg/L	WA	2
		1,1,1-Trichloroethane	<100	<63	<100	<50	10		µg/L	WA	0
	■	Trichloroethylene	***1,900***	***1,800***	***1,700***	***1,500***	10		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	19		27				µg/L		
		Chloride	3,900		3,600				µg/L		
		Chromium, total recoverable	<4.0		<3.0				µg/L		
		Cobalt, total recoverable	0.54		<5.0				µg/L		
		Copper, total recoverable	<4.0		78				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	4.6		6.6				µg/L		
		Mercury, total recoverable	<0.20		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	2,200		2,000				µg/L		
		Sodium, total recoverable	2,100		3,400				µg/L		
		Sulfate	230		<5,000				µg/L		
		Total phosphates (as P)	<40		<10				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	4.2		62				µg/L		
Radionuclides											
		Gross alpha	1.3E+00		*1.1E+00*				pCi/L		
		Nonvolatile beta	1.5E+00		*-3.5E-01*				pCi/L		
		Radium, total alpha-emitting	4.0E-01		*5.9E+00*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 68B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N106744.9 E52308.5	33.347188 °N 81.736465 °W	133.0-128.3 ft msl	356.9 ft msl	4" PVC	S	MCBC

SAMPLE DATE	08/08/96	01/14/97	08/19/97	02/26/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	218.8	218.6	216.2	216.2	ft msl
pH	5.0	5.4	4.8	5.2	pH
Sp. conductance	24	20	26	27	µS/cm
Water temperature	25.0	24.0	20.0	19.5	°C
Alkalinity as $CaCO_3$	1	2	0	1	mg/L
Turbidity	0	2	1	1	NTU
Volume purged	4.7	0.30	3.5	2.5	well volume
Sampling code					
Synchronous water level	220.4 (09/16/96)	217.4 (03/20/97)	215.5 (09/15/97)	215.9 (03/20/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	4.8	6.9	5.3	5.5	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0	<5.0	<47	1		µg/L	WA	0
		Nickel, total recoverable	<10	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	2.4	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<4.0	<1.4	<10	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<4.0	<2.5	<10	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<4.0	<3.2	<10	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<4.0	<3.2	<10				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<4.0	<1.5	<10	<5.0	1		µg/L	WA	0
	■	Tetrachloroethylene	***18***	***24***	***23***	***20***	1		µg/L	WA	2
		1,1,1-Trichloroethane	<4.0	<2.5	<10	<5.0	1		µg/L	WA	0
	■	Trichloroethylene	***120***	***170***	***200***	***190***	1		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	15		32				µg/L		
		Chloride	1,900		1,900				µg/L		
		Chromium, total recoverable	<4.0		<3.0				µg/L		
		Cobalt, total recoverable	0.27		<5.0				µg/L		
		Copper, total recoverable	<1.3		<3.0				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	2.2		2.1				µg/L		
		Mercury, total recoverable	0.021		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	1,600		1,600				µg/L		
		Sodium, total recoverable	2,000		2,000				µg/L		
		Sulfate	280		<5,000				µg/L		
		Total phosphates (as P)	<50		<10				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	3.0		15				µg/L		
Radionuclides											
		Gross alpha	9.7E-01		1.3E+00				pCi/L		
		Nonvolatile beta	1.7E+00		*-2.6E-01*				pCi/L		
		Radium, total alpha-emitting	*2.0E-01*		*3.1E+00*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 68C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N106730.5 E52304.9	33.347150 °N 81.736446 °W	171.7-167.0 ft msl	356.7 ft msl	4" PVC	S	LL

SAMPLE DATE	08/08/96	01/14/97	08/19/97	02/26/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	226.8	226.7	222.0	224.5	ft msl
pH	5.0	5.8	4.6	4.6	pH
Sp. conductance	26	24	32	30	µS/cm
Water temperature	26.0	23.0	20.0	19.5	°C
Alkalinity as $CaCO_3$	1	2	0	1	mg/L
Turbidity	1	1	1	1	NTU
Volume purged	3.4	4.1	5.0	2.5	well volume
Sampling code					
Synchronous water level	227.9 (09/16/96)	223.2 (03/20/97)	221.6 (09/15/97)	221.7 (03/20/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	4.6	5.1	4.6	4.5	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0	<5.0	<47	1		µg/L	WA	0
		Nickel, total recoverable	<10	<5.0	2.6	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<20	<14	<50	<25	5		µg/L	WA	0
		1,1-Dichloroethane	<20	<25	<50	<25	5		µg/L	WA	0
		1,1-Dichloroethylene	<20	<32	<50	<25	5		µg/L	WA	0
		trans-1,2-Dichloroethylene	<20	<32	<50				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<20	<15	<50	<25	5		µg/L	WA	0
		Tetrachloroethylene	<20	<19	***6.1***	<25	5		µg/L	WA	0
		1,1,1-Trichloroethane	<20	<25	<50	<25	5		µg/L	WA	0
	■	Trichloroethylene	***480***	***890***	***790***	***640***	5		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<20		31				µg/L		
		Chloride	1,900		1,800				µg/L		
		Chromium, total recoverable	<4.0		<3.0				µg/L		
		Cobalt, total recoverable	0.30		<5.0				µg/L		
		Copper, total recoverable	3.7		1.2				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	3.1		3.1				µg/L		
		Mercury, total recoverable	<0.20		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	2,000		1,100				µg/L		
		Sodium, total recoverable	2,200		2,200				µg/L		
		Sulfate	180		<5,000				µg/L		
		Total phosphates (as P)	<50		<10				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	5.2		16				µg/L		
Radionuclides											
		Gross alpha	1.2E+00		1.5E+00				pCi/L		
		Nonvolatile beta	3.0E+00		*1.1E+00*				pCi/L		
		Radium, total alpha-emitting	*1.0E-01*		*2.8E+00*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 69B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N107776.1 E52432.9	33.349670 °N 81.738144 °W	144.5-139.8 ft msl	381.5 ft msl	4" PVC	S	MCBC

SAMPLE DATE	07/22/96	02/06/97	07/30/97	03/04/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	220.6	219.3	219.5	217.6	ft msl
pH	5.8	5.4	4.4	5.8	pH
Sp. conductance	34	26	26	26	µS/cm
Water temperature	25.0	22.0	19.0	17.0	°C
Alkalinity as $CaCO_3$	5	2	1	9	mg/L
Turbidity	2	2	1	2	NTU
Volume purged	2.3	2.9	2.7	4.9	well volume
Sampling code					
Synchronous water level	222.1 (09/16/96)	219.5 (03/20/97)	217.6 (09/15/97)	217.2 (03/17/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	11	9.0	8.1	8.0	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0	<5.0	<47	1		µg/L	WA	0
		Nickel, total recoverable	<10	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<2.0	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	<2.0	<3.0	<5.0	<5.0	1		µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<20		22				µg/L		
		Chloride	1,300		1,500				µg/L		
		Chromium, total recoverable	0.97		<3.0				µg/L		
		Cobalt, total recoverable	<0.51		<5.0				µg/L		
		Copper, total recoverable	<4.0		<3.0				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	<3.0		5.1				µg/L		
		Mercury, total recoverable	<0.20		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	820		770				µg/L		
		Sodium, total recoverable	1,700		1,500				µg/L		
		Sulfate	1,200		<5,000				µg/L		
		Total phosphates (as P)	150		<10				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	<2.9		4.0				µg/L		
Radionuclides											
		Gross alpha	1.5E+00		*2.5E-01*				pCi/L		
		Nonvolatile beta	2.3E+00		*-1.1E+00*				pCi/L		
		Radium, total alpha-emitting	5.0E-01		*3.2E+00*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 69C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N107780.1 E52447.5	33.349703 °N 81.738113 °W	175.7-171.0 ft msl	381.6 ft msl	4" PVC	S	LL

SAMPLE DATE	08/09/96	01/13/97	08/25/97	02/23/98	
FIELD DATA					
Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	228.4	228.2	225.3	224.9	ft msl
pH	5.4	5.4	5.2	5.4	pH
Sp. conductance	44	102	40	42	µS/cm
Water temperature	25.0	24.0	20.0	16.0	°C
Alkalinity as $CaCO_3$	2	2	0	3	mg/L
Turbidity	1	15	1	0	NTU
Volume purged	3.5	0.027	2.8	5.2	well volume
Sampling code		X			
Synchronous water level	229.0 (09/16/96)	226.4 (03/20/97)	225.0 (09/15/97)	224.0 (03/17/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

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H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	8.5	14	8.7	7.5	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	1.7	<5.0	<5.0	<47	1		µg/L	WA	0
		Nickel, total recoverable	<10	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4		<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5		<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2		<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2					µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5		<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<2.0	<1.9		<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<2.5		<5.0	1		µg/L	WA	0
	■	Trichloroethylene	***34***	***90***		***31***	1		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<20		22				µg/L		
		Chloride	2,800		2,900				µg/L		
		Chromium, total recoverable	<4.0		<3.0				µg/L		
		Cobalt, total recoverable	0.71		<5.0				µg/L		
		Copper, total recoverable	5.4		7.4				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	12		11				µg/L		
		Mercury, total recoverable	<0.20		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	2,300		***2,900***				µg/L		
		Sodium, total recoverable	3,800		3,200				µg/L		
		Sulfate			<5,000				µg/L		
		Total phosphates (as P)	30		<10				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	8.6		19				µg/L		
Radionuclides											
		Gross alpha	1.4E+00		*-2.3E-01*				pCi/L		
		Nonvolatile beta	1.1E+00		*-1.8E+00*				pCi/L		
		Radium, total alpha-emitting	6.0E-01		*3.3E+00*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
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WELL MSB 69D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N107784.3 E52462.0	33.349736 °N 81.738083 °W	239.8-220.3 ft msl	382 ft msl	4" PVC	S	M

SAMPLE DATE	07/22/96	02/06/97	07/30/97	03/02/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	234.4	233.2	232.0	230.8	ft msl
pH	4.6	4.4	4.0	4.8	pH
Sp. conductance	32	26	26	32	µS/cm
Water temperature	25.0	24.0	19.0	19.0	°C
Alkalinity as $CaCO_3$	0	1	1	0	mg/L
Turbidity	11	17	1	1	NTU
Volume purged	4.4	4.7	3.6	16	well volume
Sampling code					
Synchronous water level	234.1 (09/16/96)	233.3 (03/20/97)	231.7 (09/15/97)	230.4 (03/17/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

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H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	8.9	8.3	7.1	6.4	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	1.7	5.4	5.1	<47	1		µg/L	WA	0
		Nickel, total recoverable	3.1	5.7	2.6	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<2.0	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	<2.0	<3.0	<5.0	<5.0	1		µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	***150***		71				µg/L		
		Chloride	1,000		1,100				µg/L		
		Chromium, total recoverable	4.0		3.1				µg/L		
		Cobalt, total recoverable	1.3		<5.0				µg/L		
		Copper, total recoverable	8.9		4.7				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	8.6		9.2				µg/L		
		Mercury, total recoverable	<0.20		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	2,400		***2,500***				µg/L		
		Sodium, total recoverable	1,100		1,100				µg/L		
		Sulfate	<1,000		<5,000				µg/L		
		Total phosphates (as P)	<50		<10				µg/L		
		Uranium, total recoverable	<20		0.048				µg/L		
		Zinc, total recoverable	<15		12				µg/L		
Radionuclides											
		Gross alpha	1.1E+01		2.2E+00				pCi/L		
		Nonvolatile beta	4.9E+00		*-5.7E-01*				pCi/L		
		Radium, total alpha-emitting	***6.3E+00***		*3.7E-01*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 69TA

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N107772.5 E52418.4	33.349639 °N 81.738175 °W	80.3-74.6 ft msl	381.4 ft msl	4" PVC	S	CBA

SAMPLE DATE	08/15/96	02/06/97	09/02/97	03/02/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	215.9	213.9	213.2	212.8	ft msl
pH	7.8	5.0	5.2	5.8	pH
Sp. conductance	56	28	32	26	µS/cm
Water temperature	27.0	22.0	21.0	19.0	°C
Alkalinity as $CaCO_3$	7	1	2	6	mg/L
Turbidity	8	15	6	2	NTU
Volume purged	2.4	2.5	2.3	2.5	well volume
Sampling code					
Synchronous water level	216.8 (09/16/96)	213.9 (03/20/97)	212.0 (09/15/97)	211.9 (03/17/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	6.7	8.3	11	11	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	2.4	<5.0	6.5	<47	1		µg/L	WA	0
		Nickel, total recoverable	4.2	<5.0	<5.0	2.6	1	JE	µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<2.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<2.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<2.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<2.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<2.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<2.0	<1.9	<2.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<2.5	<2.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	<2.0	<3.0	<2.0	<5.0	1		µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<20		40				µg/L		
		Chloride	1,800		1,600				µg/L		
		Chromium, total recoverable	3.2		1.2				µg/L		
		Cobalt, total recoverable	<1.2		<5.0				µg/L		
		Copper, total recoverable	8.4		<3.0				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	17		20				µg/L		
		Mercury, total recoverable	<0.20		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	940		1,200				µg/L		
		Sodium, total recoverable	2,500		2,100				µg/L		
		Sulfate	450		<5,000				µg/L		
		Total phosphates (as P)	<40		80				µg/L		
		Uranium, total recoverable	24		<0.10				µg/L		
		Zinc, total recoverable	18		18				µg/L		
Radionuclides											
		Gross alpha	*6.3E-01*		*-4.1E-01*				pCi/L		
		Nonvolatile beta	1.7E+00		2.0E+00				pCi/L		
		Radium, total alpha-emitting	*2.0E-01*		3.6E+00				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 70C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N101785.2 E45012.0	33.324308 °N 81.746029 °W	178.8-174.1 ft msl	361.8 ft msl	4" PVC	S	UL

SAMPLE DATE	08/08/96	01/08/97	08/14/97	02/19/98	
FIELD DATA					
Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	218.0	217.1	215.9	214.6	ft msl
pH	5.6	5.4	5.0	5.2	pH
Sp. conductance	180	100	200	170	µS/cm
Water temperature	24.0	20.0	20.0	17.5	°C
Alkalinity as $CaCO_3$	6	6	4	8	mg/L
Turbidity	1	1	1	1	NTU
Volume purged	4.1	4.5	3.2	2.6	well volume
Sampling code					
Synchronous water level	217.6 (09/18/96)	216.7 (03/18/97)	215.3 (09/17/97)	214.7 (03/19/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	44	45	42	42	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0	<5.0	<47	1		µg/L	WA	0
		Nickel, total recoverable	<10	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<10	<28	<130	<100	20		µg/L	WA	0
		1,1-Dichloroethane	<10	<50	<130	<100	20		µg/L	WA	0
		1,1-Dichloroethylene	***61***	***67***	***40***	<100	20		µg/L	WA	0
		trans-1,2-Dichloroethylene	<10	<64	<130				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<10	<30	<130	<100	20		µg/L	WA	0
	■	Tetrachloroethylene	***410***	***680***	***660***	***690***	20		µg/L	WA	2
		1,1,1-Trichloroethane	17	<50	<130	<100	20		µg/L	WA	0
	■	Trichloroethylene	***1,300***	***2,000***	***2,200***	***2,600***	20		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	16		13				µg/L		
		Chloride	***5,300***		***4,800***				µg/L		
		Chromium, total recoverable	<4.0		<3.0				µg/L		
		Cobalt, total recoverable	0.99		<5.0				µg/L		
		Copper, total recoverable	<1.4		4.4				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	14		12				µg/L		
		Mercury, total recoverable	0.27		0.38				µg/L		
		Nitrate-nitrite as nitrogen	***19,000***		***19,000***				µg/L		
		Sodium, total recoverable	***21,000***		***21,000***				µg/L		
		Sulfate	160		<5,000				µg/L		
		Total phosphates (as P)	<50		<10				µg/L		
		Uranium, total recoverable	<20		0.053				µg/L		
		Zinc, total recoverable	5.2		18				µg/L		
Radionuclides											
		Gross alpha	3.8E+00		3.3E+00				pCi/L		
		Nonvolatile beta	4.0E+00		3.0E+00				pCi/L		
		Radium, total alpha-emitting	2.5E+00		***1.2E+01***				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 70D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N101781.8 E44997.3	33.324276 °N 81.746061 °W	228.3-208.2 ft msl	362.2 ft msl	4" PVC	S	M

SAMPLE DATE	08/08/96	01/08/97	08/14/97	02/25/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	221.6	220.8	219.7	218.0	ft msl
pH	6.4	4.4	4.6	7.3	pH
Sp. conductance	50	36	36	59	µS/cm
Water temperature	21.0	20.0	21.0	20.6	°C
Alkalinity as $CaCO_3$	4	1	2	1	mg/L
Turbidity	23	2	20	15	NTU
Volume purged	0.11	9.4	0.0	0.15	well volume
Sampling code	X		X	X	
Synchronous water level	221.3 (09/18/96)	220.4 (03/18/97)	219.2 (09/17/97)	218.4 (03/19/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	8.0	9.4	6.8	11	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	1.5	<5.0	***16***	<47	1		µg/L	WA	0
		Nickel, total recoverable	1.2	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	2.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	1.2	<3.2	<5.0	1.3	1	JE	µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
	■	Tetrachloroethylene	***6.7***	***9.7***	4.0	***7.4***	1		µg/L	WA	2
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	<2.0	<3.0	<5.0	<5.0	1		µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	***190***		***160***				µg/L		
		Chloride	2,100		2,200				µg/L		
		Chromium, total recoverable	2.6		1.6				µg/L		
		Cobalt, total recoverable	0.33		<5.0				µg/L		
		Copper, total recoverable	22		15				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	7.0		6.5				µg/L		
		Mercury, total recoverable	<0.20		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	***2,900***		***2,800***				µg/L		
		Sodium, total recoverable	3,000		2,800				µg/L		
		Sulfate	210		<5,000				µg/L		
		Total phosphates (as P)	<50		160				µg/L		
		Uranium, total recoverable	<20		0.31				µg/L		
		Zinc, total recoverable	16		52				µg/L		
Radionuclides											
		Gross alpha	7.8E+00		***7.0E+01***				pCi/L		
		Nonvolatile beta	5.6E+00		3.8E+01				pCi/L		
		Radium, total alpha-emitting	1.6E+00		***4.8E+01***				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 71B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N103801.6 E44054.7	33.327201 °N 81.752472 °W	135.9-131.1 ft msl	344.7 ft msl	4" PVC	S	LL

SAMPLE DATE	07/22/96	02/06/97	08/28/97	03/03/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	217.6	216.5	215.2	213.9	ft msl
pH	6.8	10.4	11.4	11.5	pH
Sp. conductance	86	180	1400	2300	µS/cm
Water temperature	26.0	26.0	21.0	16.2	°C
Alkalinity as $CaCO_3$	30	140	386	444	mg/L
Turbidity	240	87	31	8	NTU
Volume purged	2.6	0.018		0.94	well volume
Sampling code	X	X			
Synchronous water level	217.0 (09/18/96)	216.1 (03/18/97)	214.7 (09/16/97)	214.0 (03/18/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	28	29	190	170	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0	7.5	<47	1		µg/L	WA	0
		Nickel, total recoverable	<10	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	4.1	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<2.0	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	1.4	<3.0	<5.0	<5.0	1		µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	***130***		***860***				µg/L		
		Chloride	1,700		1,100				µg/L		
		Chromium, total recoverable	<4.0		8.5				µg/L		
		Cobalt, total recoverable	<4.0		<5.0				µg/L		
		Copper, total recoverable	<4.0		<3.0				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	3.1		2.4				µg/L		
		Mercury, total recoverable	<0.20		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	1,000		170				µg/L		
		Sodium, total recoverable	2,100		***26,000***				µg/L		
		Sulfate	200		<5,000				µg/L		
		Total phosphates (as P)	<50		12				µg/L		
		Uranium, total recoverable	<20		0.19				µg/L		
		Zinc, total recoverable	<4.3		17				µg/L		
Radionuclides											
		Gross alpha	1.2E+00		*6.0E-02*				pCi/L		
		Nonvolatile beta	1.8E+00		*3.3E+00*				pCi/L		
		Radium, total alpha-emitting	7.0E-01		3.1E+00				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 72B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N96387.6 E48350.3	33.317828 °N 81.726740 °W	156.7-152.0 ft msl	328.2 ft msl	4" PVC	S	LL

SAMPLE DATE	08/23/96	02/07/97	08/14/97	03/05/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	199.7	199.2	198.2	198.8	ft msl
pH	5.4	6.8	6.2	5.5	pH
Sp. conductance	32	44	50	47	µS/cm
Water temperature	21.0	25.0	20.0	17.1	°C
Alkalinity as $CaCO_3$	24	26	12	16	mg/L
Turbidity	1	1	1	1	NTU
Volume purged	5.8	3.6	4.9	3.3	well volume
Sampling code					
Synchronous water level	199.4 (09/19/96)	199.0 (03/17/97)	197.8 (09/16/97)	198.7 (03/18/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	16	15	16	19	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	1.6	<5.0	<5.0	<47	1		µg/L	WA	0
		Nickel, total recoverable	1.0	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<0.050	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<0.050	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<0.050	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016	<0.13						µg/L		
		PCB 1221	<0.13						µg/L		
		PCB 1232	<0.13						µg/L		
		PCB 1242	<0.13						µg/L		
		PCB 1248	<0.13						µg/L		
		PCB 1254	<0.13						µg/L		
		PCB 1260	<0.13						µg/L		
		1,1,2,2-Tetrachloroethane	<0.050	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<0.050	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<0.050	<2.5	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	<0.050	<3.0	<5.0	<5.0	1		µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	91		49				µg/L		
		Chloride	2,200		2,000				µg/L		
		Chromium, total recoverable	<4.0		2.1				µg/L		
		Cobalt, total recoverable	0.39		<5.0				µg/L		
		Copper, total recoverable	1.5		2.7				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	8.9		8.3				µg/L		
		Mercury, total recoverable	0.12		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	470		450				µg/L		
		Sodium, total recoverable	1,700		1,600				µg/L		
		Sulfate	930		<5,000				µg/L		
		Total phosphates (as P)	<50		13				µg/L		
		Uranium, total recoverable	<20		0.065				µg/L		
		Zinc, total recoverable	<3.6		14				µg/L		
Radionuclides											
		Gross alpha	1.1E+00		8.9E+00				pCi/L		
		Nonvolatile beta	*9.1E-01*		1.3E+01				pCi/L		
		Radium, total alpha-emitting	*0.0E+00*		***1.2E+01***				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 73B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N99270.3 E45694.0	33.319862 °N 81.739341 °W	135.5-130.8 ft msl	339.6 ft msl	4" PVC	S	LL

SAMPLE DATE	08/09/96	01/16/97	08/27/97	02/19/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	201.9	201.2	199.4	199.8	ft msl
pH	5.0	4.2	4.8	4.5	pH
Sp. conductance	46	36	42	39	µS/cm
Water temperature	22.0	22.0	19.0	17.0	°C
Alkalinity as $CaCO_3$	0	0	0	0	mg/L
Turbidity	2	1	1	1	NTU
Volume purged	3.0	2.4	3.3	2.6	well volume
Sampling code					
Synchronous water level	201.5 (09/18/96)	200.4 (03/19/97)	199.0 (09/17/97)	199.3 (03/18/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	11	9.6	9.7	12	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0	<5.0	<47	1		µg/L	WA	0
		Nickel, total recoverable	1.7	<8.1	3.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<2.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
	■	Tetrachloroethylene	***5.7***	***5.9***	***9.9***	***9.6***	1		µg/L	WA	2
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
	■	Trichloroethylene	***39***	***55***	***63***	***52***	1		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	54		72				µg/L		
		Chloride	2,100		2,400				µg/L		
		Chromium, total recoverable	0.97		<3.0				µg/L		
		Cobalt, total recoverable	1.7		<5.0				µg/L		
		Copper, total recoverable	1.8		1.1				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	9.5		9.9				µg/L		
		Mercury, total recoverable	<0.20		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	1,800		2,000				µg/L		
		Sodium, total recoverable	2,200		2,300				µg/L		
		Sulfate	***3,100***		***3,500***				µg/L		
		Total phosphates (as P)	<50		<10				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	6.0		16				µg/L		
Radionuclides											
		Gross alpha	*2.8E-01*		*2.6E-01*				pCi/L		
		Nonvolatile beta	1.4E+00		*1.5E+00*				pCi/L		
		Radium, total alpha-emitting	6.0E-01		1.0E+00				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 74B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N99197.4 E50443.2	33.327457 °N 81.726694 °W	147.5-142.8 ft msl	314.5 ft msl	4" PVC	S	LL

SAMPLE DATE	08/09/96	01/13/97	08/18/97

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	211.0	210.1	207.9		ft msl
pH	6.8	5.8	6.0		pH
Sp. conductance	48	36	36		µS/cm
Water temperature	21.0	22.0	22.0		°C
Alkalinity as $CaCO_3$	10	14	15		mg/L
Turbidity	3	1	1		NTU
Volume purged	2.7	2.2	2.4		well volume
Sampling code					
Synchronous water level	210.8 (09/19/96)	209.8 (03/17/97)	208.7 (09/16/97)		ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	33	36	28				µg/L		
		Cyanide	<10	<5.0	<5.0				µg/L		
		Lead, total recoverable	<5.0	<5.0	<5.0				µg/L		
		Nickel, total recoverable	<10	<5.0	<5.0				µg/L		
		Selenium, total recoverable	<5.0	<5.0	<5.0				µg/L		
Organics											
		Chlorobenzene	<40	<7.0	<10				µg/L		
		1,1-Dichloroethane	<40	<13	<10				µg/L		
		1,1-Dichloroethylene	<40	<16	<10				µg/L		
		trans-1,2-Dichloroethylene	<40	<16	<10				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<40	<7.5	<10				µg/L		
		Tetrachloroethylene	<40	<9.5	1.7				µg/L		
		1,1,1-Trichloroethane	<40	<13	<10				µg/L		
		Trichloroethylene	***570***	***560***	***260***				µg/L		

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<20		22				µg/L		
		Chloride	1,800		1,500				µg/L		
		Chromium, total recoverable	0.76		<3.0				µg/L		
		Cobalt, total recoverable	<4.0		<5.0				µg/L		
		Copper, total recoverable	2.1		21				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	6.2		10				µg/L		
		Mercury, total recoverable	<0.20		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	920		1,000				µg/L		
		Sodium, total recoverable	2,100		1,700				µg/L		
		Sulfate	1,500		<5,000				µg/L		
		Total phosphates (as P)	<50		31				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	4.0		22				µg/L		
Radionuclides											
		Gross alpha	6.9E-01		*-2.7E-01*				pCi/L		
		Nonvolatile beta	*8.9E-01*		*-1.7E+00*				pCi/L		
		Radium, total alpha-emitting	*3.0E-01*		***5.2E+00***				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 74C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N99191.1 E50457.1	33.327466 °N 81.726645 °W	177.8-173.1 ft msl	315 ft msl	4" PVC	S	UL

SAMPLE DATE	08/09/96	01/13/97	08/18/97	03/04/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	211.0	210.1	209.4	210.1	ft msl
pH	9.4	10.0	8.8	5.9	pH
Sp. conductance	120	100	120	100	µS/cm
Water temperature	25.0	22.0	22.0	16.4	°C
Alkalinity as $CaCO_3$	32	51	54	33	mg/L
Turbidity	8	1	6	3	NTU
Volume purged	0.040		0.042	0.74	well volume
Sampling code	X	X	X		
Synchronous water level	210.8 (09/19/96)	209.7 (03/17/97)	208.9 (09/16/97)	210.1 (03/18/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	78	98	61	69	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	1.5	<5.0	<5.0	<47	1		µg/L	WA	0
		Nickel, total recoverable	<10	5.2	<5.0	2.6	1	JE	µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<2.0	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
■		Trichloroethylene	***6.5***	***15***	***33***	***100***	1		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	50		56				µg/L		
		Chloride			1,600				µg/L		
		Chromium, total recoverable	<4.0		<3.0				µg/L		
		Cobalt, total recoverable	<4.0		<5.0				µg/L		
		Copper, total recoverable	7.0		3.2				µg/L		
		Fluoride			<100				µg/L		
		Manganese, total recoverable	7.4		13				µg/L		
		Mercury, total recoverable	<0.20		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	430		73				µg/L		
		Sodium, total recoverable	***4,600***		***4,600***				µg/L		
		Sulfate	***14,000***		***13,000***				µg/L		
		Total phosphates (as P)	40		62				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	9.9		18				µg/L		
Radionuclides											
		Gross alpha	7.9E-01		*8.0E-02*				pCi/L		
		Nonvolatile beta	3.2E+00		*-1.5E-01*				pCi/L		
		Radium, total alpha-emitting	*3.0E-01*		***5.2E+00***				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
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WELL MSB 74D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N99185.3 E50469.7	33.327473 °N 81.726601 °W	237.1-217.1 ft msl	315.1 ft msl	4" PVC	S	M

SAMPLE DATE: 07/24/96 | 01/25/97 | 08/28/97 | 03/04/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	232.2	231.3	230.1	229.9	ft msl
pH	5.4	4.0	5.2	5.4	pH
Sp. conductance	40	180	30	49	µS/cm
Water temperature	26.0	22.0	21.5	18.9	°C
Alkalinity as $CaCO_3$	10	0	3	7	mg/L
Turbidity	98	12	15	12	NTU
Volume purged	0.10	0.11	0.12	0.60	well volume
Sampling code	X	X	X		
Synchronous water level	232.0 (09/19/96)	231.0 (03/17/97)	229.9 (09/16/97)	230.3 (03/18/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	18	7.7	30	15	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	***31***	***16***	***32***	12	1	JE	µg/L	WA	0
		Nickel, total recoverable	3.9	<5.0	6.3	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
	■	Tetrachloroethylene	***5.5***	<1.9	4.4	***9.5***	1		µg/L	WA	2
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
	■	Trichloroethylene	***8.2***	<3.0	4.8	***13***	1		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	***560***		***1,300***				µg/L		
		Chloride	2,000		2,200				µg/L		
		Chromium, total recoverable	<9.0		12				µg/L		
		Cobalt, total recoverable	<1.1		<5.0				µg/L		
		Copper, total recoverable	200		79				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	28		32				µg/L		
		Mercury, total recoverable	<0.20		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	1,900		2,300				µg/L		
		Sodium, total recoverable	4,500		***4,800***				µg/L		
		Sulfate	460		<5,000				µg/L		
		Total phosphates (as P)	80		100				µg/L		
		Uranium, total recoverable	<20		0.36				µg/L		
		Zinc, total recoverable	61		35				µg/L		
Radionuclides											
		Gross alpha	2.3E+00		*2.0E+00*				pCi/L		
		Nonvolatile beta	2.3E+00		*1.5E+00*				pCi/L		
		Radium, total alpha-emitting	8.0E-01		*5.9E-01*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 75B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N98937.4 E48875.5	33.324322 °N 81.730317 °W	161.7-156.9 ft msl	326.7 ft msl	4" PVC	S	LL

SAMPLE DATE	08/09/96	01/10/97	08/27/97	02/19/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	209.9	208.9	207.6	208.6	ft msl
pH	6.0	4.8	5.4	6.1	pH
Sp. conductance	56	44	60	65	µS/cm
Water temperature	21.0	21.0	20.0	18.5	°C
Alkalinity as $CaCO_3$	13	1	1	17	mg/L
Turbidity	18	13	7	7	NTU
Volume purged	4.3	3.9	5.4	3.4	well volume
Sampling code					
Synchronous water level	209.7 (09/19/96)	208.5 (03/18/97)	207.4 (09/18/97)	208.3 (03/18/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	35	25	30	23	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	2.2	<5.0	<5.0	<47	1		µg/L	WA	0
		Nickel, total recoverable	2.7	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<20	<14	<50	<50	10		µg/L	WA	0
		1,1-Dichloroethane	<20	<25	<50	<50	10		µg/L	WA	0
		1,1-Dichloroethylene	<20	<32	<50	<50	10		µg/L	WA	0
		trans-1,2-Dichloroethylene	<20		<50				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<20	<15	<50	<50	10		µg/L	WA	0
		Tetrachloroethylene	<20	<19	<50	<50	10		µg/L	WA	0
		1,1,1-Trichloroethane	<20	<25	<50	<50	10		µg/L	WA	0
■		Trichloroethylene	***1,200***	***1,500***	***1,700***	***1,400***	10		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	***440***		***120***				µg/L		
		Chloride	2,000		2,200				µg/L		
		Chromium, total recoverable	2.5		<3.0				µg/L		
		Cobalt, total recoverable	3.3		<5.0				µg/L		
		Copper, total recoverable	9.0		3.9				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	***76***		47				µg/L		
		Mercury, total recoverable	<0.20		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	***3,200***		***5,500***				µg/L		
		Sodium, total recoverable	2,900		3,000				µg/L		
		Sulfate	1,500		<5,000				µg/L		
		Total phosphates (as P)	70		27				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	10		18				µg/L		
Radionuclides											
		Gross alpha	2.4E+00		1.6E+00				pCi/L		
		Nonvolatile beta	3.0E+00		*1.8E+00*				pCi/L		
		Radium, total alpha-emitting	1.3E+00		1.4E+00				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 75C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N98942.3 E48859.7	33.324307 °N 81.730368 °W	193.5-188.8 ft msl	327.5 ft msl	4" PVC	S	UL

SAMPLE DATE	07/23/96	01/25/97	08/28/97	03/04/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	209.7	208.8	207.7	208.1	ft msl
pH	5.0	4.2	5.2		pH
Sp. conductance	56	120	52		µS/cm
Water temperature	28.0	22.0	19.9		°C
Alkalinity as $CaCO_3$	3	0	10		mg/L
Turbidity	18	9	10		NTU
Volume purged	0.073	0.076	0.081	0.47	well volume
Sampling code	X	X	X		
Synchronous water level	209.5 (09/19/96)	208.4 (03/18/97)	207.4 (09/18/97)	208.2 (03/18/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	18	17	18	18	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
	■	Lead, total recoverable	***30***	***38***	***38***	***32***	1	JE	µg/L	WA	1
		Nickel, total recoverable	3.2	<5.0	5.4	6.0	1	JE	µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	4.9	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<2.0	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	<2.0	<3.0	<5.0	<5.0	1		µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	***100***		78				µg/L		
		Chloride	1,800		2,000				µg/L		
		Chromium, total recoverable	<4.0		1.4				µg/L		
		Cobalt, total recoverable	1.8		<5.0				µg/L		
		Copper, total recoverable	770		1,100				µg/L		
		Fluoride	23		<100				µg/L		
		Manganese, total recoverable	39		38				µg/L		
		Mercury, total recoverable	<0.20		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	260		320				µg/L		
		Sodium, total recoverable	***5,800***		***5,300***				µg/L		
		Sulfate	***13,000***		***13,000***				µg/L		
		Total phosphates (as P)	<50		22				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	34		45				µg/L		
Radionuclides											
		Gross alpha	1.2E+00		*1.9E+00*				pCi/L		
		Nonvolatile beta	3.2E+00		*2.8E+00*				pCi/L		
		Radium, total alpha-emitting	1.1E+00		1.2E+00				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 76C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N103061.6 E45344.0	33.327671 °N 81.747638 °W	186.0-181.3 ft msl	352.4 ft msl	4" PVC	S	UL

SAMPLE DATE	08/09/96	01/07/97	08/26/97	02/19/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	221.3	220.3	218.8	217.7	ft msl
pH	7.6	5.0	5.4	5.6	pH
Sp. conductance	180	44	46	59	µS/cm
Water temperature	25.0	23.0	19.0	18.2	°C
Alkalinity as $CaCO_3$	98	11	5	15	mg/L
Turbidity	11	2	1	3	NTU
Volume purged	0.038	3.0	3.5	3.6	well volume
Sampling code	X				
Synchronous water level	220.9 (09/18/96)	220.1 (03/18/97)	218.6 (09/16/97)	217.7 (03/18/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	24	12	12	13	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	9.2	<5.0	<5.0	<47	1		µg/L	WA	0
		Nickel, total recoverable	3.7	<5.0	3.7	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<200	<140	<250	<250	50		µg/L	WA	0
		1,1-Dichloroethane	<200	<250	<250	<250	50		µg/L	WA	0
		1,1-Dichloroethylene	<200	<320	<250	<250	50		µg/L	WA	0
		trans-1,2-Dichloroethylene	<200	<320	<250				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<200	<150	<250	<250	50		µg/L	WA	0
		Tetrachloroethylene	<200	<190	***79***	<250	50		µg/L	WA	0
		1,1,1-Trichloroethane	<200	<250	<250	<250	50		µg/L	WA	0
■		Trichloroethylene	***5,600***	***8,900***	***9,100***	***5,100***	50		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	***430***		46				µg/L		
		Chloride	1,700		2,000				µg/L		
		Chromium, total recoverable	2.3		<3.0				µg/L		
		Cobalt, total recoverable	<4.0		<5.0				µg/L		
		Copper, total recoverable	3.7		<3.0				µg/L		
		Fluoride	43		<100				µg/L		
		Manganese, total recoverable	4.7		1.9				µg/L		
		Mercury, total recoverable	<0.20		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	980		1,900				µg/L		
		Sodium, total recoverable	***27,000***		4,200				µg/L		
		Sulfate	***3,700***		<5,000				µg/L		
		Total phosphates (as P)	90		9.0				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	14		19				µg/L		
Radionuclides											
		Gross alpha	1.8E+00		*5.9E-01*				pCi/L		
		Nonvolatile beta	2.4E+00		*1.0E-02*				pCi/L		
		Radium, total alpha-emitting	4.0E-01		*3.7E+00*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 77B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N107065.8 E54217.4	33.351014 °N 81.732062 °W	145.1-140.4 ft msl	357.2 ft msl	4" PVC	S	MCBC

SAMPLE DATE	07/22/96	01/25/97	08/29/97	03/05/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	222.1	220.7	219.2	218.6	ft msl
pH	8.4	6.0	6.5	5.6	pH
Sp. conductance	60	40	43	39	µS/cm
Water temperature	26.0	22.0	19.1	17.6	°C
Alkalinity as $CaCO_3$	16	19	37	13	mg/L
Turbidity	8	0	0	0	NTU
Volume purged	2.3	2.7	0.70	2.9	well volume
Sampling code					
Synchronous water level	222.9 (09/19/96)	220.2 (03/17/97)	219.4 (09/16/97)	218.3 (03/18/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	20	23	28	27	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0	<5.0	<47	1		µg/L	WA	0
		Nickel, total recoverable	<10	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<2.0	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	<2.0	<3.0	0.89	<5.0	1		µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	***550***		***130***				µg/L		
		Chloride	1,800		1,900				µg/L		
		Chromium, total recoverable	4.0		2.3				µg/L		
		Cobalt, total recoverable	<0.60		<5.0				µg/L		
		Copper, total recoverable	3.0		<3.0				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	6.8		3.3				µg/L		
		Mercury, total recoverable	<0.20		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	400		130				µg/L		
		Sodium, total recoverable	***5,400***		1,700				µg/L		
		Sulfate	820		<5,000				µg/L		
		Total phosphates (as P)	***330***		<10				µg/L		
		Uranium, total recoverable	<20		0.084				µg/L		
		Zinc, total recoverable	<5.1		8.9				µg/L		
Radionuclides											
		Gross alpha	6.3E+00		*7.2E-01*				pCi/L		
		Nonvolatile beta	4.4E+00		*1.8E+00*				pCi/L		
		Radium, total alpha-emitting	1.1E+00		4.5E+00				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 77C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N107078.3 E54225.9	33.351056 °N 81.732064 °W	173.2-168.5 ft msl	357.2 ft msl	4" PVC	S	LL

SAMPLE DATE: 08/12/96 | 01/22/97 | 08/27/97 | 02/25/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	224.1	223.3	221.7	221.2	ft msl
pH	6.2	6.2	5.8	6.6	pH
Sp. conductance	42	38	36	47	µS/cm
Water temperature	26.0	25.0	20.0	18.6	°C
Alkalinity as $CaCO_3$	5	27	2	12	mg/L
Turbidity	4	4	6	1	NTU
Volume purged	3.7	3.0	6.9	2.7	well volume
Sampling code					
Synchronous water level	225.1 (09/19/96)	222.8 (03/17/97)	221.7 (09/16/97)	220.8 (03/18/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	13	13	9.9	13	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0	<5.0	<47	1		µg/L	WA	0
		Nickel, total recoverable	<10	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<10	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<10	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<10	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<10	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<10	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<10	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<10	<2.5	<5.0	<5.0	1		µg/L	WA	0
■		Trichloroethylene	***52***	***67***	***38***	***25***	1		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<20		86				µg/L		
		Chloride	1,800		1,800				µg/L		
		Chromium, total recoverable	<4.0		<3.0				µg/L		
		Cobalt, total recoverable	0.82		<5.0				µg/L		
		Copper, total recoverable	2.5		<3.0				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	3.4		3.5				µg/L		
		Mercury, total recoverable	<0.20		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	1,600		1,500				µg/L		
		Sodium, total recoverable	2,500		2,300				µg/L		
		Sulfate	210		<5,000				µg/L		
		Total phosphates (as P)	<50		7.0				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	<5.0		12				µg/L		
Radionuclides											
		Gross alpha	1.2E+00		*2.4E+00*				pCi/L		
		Nonvolatile beta	1.8E+00		*3.7E+00*				pCi/L		
		Radium, total alpha-emitting	5.0E-01		1.2E+00				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 78DR

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N103652.0 E45470.6	33.329183 °N 81.748454 °W	226.9-206.9 ft msl	363.7 ft msl	2" PVC		M

SAMPLE DATE	01/31/97	08/18/97	03/31/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation		223.3	222.0	220.5	ft msl
pH		4.8	5.2	5.2	pH
Sp. conductance		28	22	22	µS/cm
Water temperature		23.0	23.0	25.0	°C
Alkalinity as $CaCO_3$		25	10	4	mg/L
Turbidity		381	3	15	NTU
Volume purged		0.0	10	2.7	well volume
Sampling code		X		X	
Synchronous water level		222.8 (03/18/97)	221.5 (09/16/97)	220.5 (03/18/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable			3.4	6.5	1	V	µg/L	WA	0
●		Cyanide		<5.0	<5.0	15	1	J	µg/L	WA	0
		Lead, total recoverable			<5.0	8.1	1	JE	µg/L	WA	0
		Nickel, total recoverable			3.7	8.9	1	JE	µg/L	WA	0
		Selenium, total recoverable			<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene		<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane		<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene		<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene		<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane		<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene		***7.8***	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane		<2.5	<5.0	<5.0	1		µg/L	WA	0
	■	Trichloroethylene		***26***	***17***	***9.4***	1		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable			51				µg/L		
		Chloride		2,300	2,000				µg/L		
		Chromium, total recoverable			2.6				µg/L		
		Cobalt, total recoverable			<5.0				µg/L		
		Copper, total recoverable			7.1				µg/L		
		Fluoride		<100	<100				µg/L		
		Manganese, total recoverable			11				µg/L		
		Mercury, total recoverable			<0.20				µg/L		
		Nitrate-nitrite as nitrogen		1,600	1,400				µg/L		
		Sodium, total recoverable			2,000				µg/L		
		Sulfate		<500	<5,000				µg/L		
		Total phosphates (as P)		300	<10				µg/L		
		Uranium, total recoverable			<0.10				µg/L		
		Zinc, total recoverable			26				µg/L		
Radionuclides											
		Gross alpha		*6.1E+00*	*-7.9E-01*				pCi/L		
		Nonvolatile beta		*8.8E+00*	*-1.5E+00*				pCi/L		
		Radium, total alpha-emitting			3.2E+00				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 79B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N99296.9 E47300.2	33.322544 °N 81.735164 °W	140.8-136.1 ft msl	347.9 ft msl	4" PVC	S	LL

SAMPLE DATE	08/12/96	01/09/97	08/14/97	02/19/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	207.9	206.4	205.4	205.6	ft msl
pH	12.1	12.0	11.4	11.1	pH
Sp. conductance	3020	3000	4000	3300	µS/cm
Water temperature	31.0	22.0	23.0	18.9	°C
Alkalinity as $CaCO_3$	753	746	850	793	mg/L
Turbidity	2	4	7	8	NTU
Volume purged	0.021	0.85	0.022	0.022	well volume
Sampling code	X	X	X	X	
Synchronous water level	207.7 (09/18/96)	( )	205.0 (09/17/97)	205.4 (03/18/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	490	520	500	570	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	11	<5.0	13	8.9	1	JE	µg/L	WA	0
		Nickel, total recoverable	2.1	<5.0	3.6	5.3	1	JE	µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	***5.1***	2.4	4.0	3.7	1	JE	µg/L	WA	1
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
	■	Trichloroethylene	***20***	***9.5***	***18***	***20***	1		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	***2,100***		***2,200***				µg/L		
		Chloride	1,500		1,600				µg/L		
		Chromium, total recoverable	3.1		10				µg/L		
		Cobalt, total recoverable	1.8		2.6				µg/L		
		Copper, total recoverable	12		4.4				µg/L		
		Fluoride	1,200		<100				µg/L		
		Manganese, total recoverable	<0.40		1.9				µg/L		
		Mercury, total recoverable	<0.20		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	1,400		1,200				µg/L		
		Sodium, total recoverable	***29,000***		***26,000***				µg/L		
		Sulfate	***3,200***		***3,500***				µg/L		
		Total phosphates (as P)	<50		93				µg/L		
		Uranium, total recoverable	<20		0.039				µg/L		
		Zinc, total recoverable	<5.0		11				µg/L		
Radionuclides											
		Gross alpha	7.0E+00		*1.6E+01*				pCi/L		
		Nonvolatile beta	1.7E+01		*7.4E+00*				pCi/L		
		Radium, total alpha-emitting	2.2E+00		***1.3E+01***				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 79C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N99290.2 E47286.8	33.322508 °N 81.735186 °W	199.6-194.9 ft msl	347.8 ft msl	4" PVC	S	UL

SAMPLE DATE	08/12/96	01/08/97	08/27/97	02/19/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	210.0	208.9	207.6	207.9	ft msl
pH	6.6	5.8	5.8	6.0	pH
Sp. conductance	84	86	82	81	µS/cm
Water temperature	25.0	22.0	19.0	19.0	°C
Alkalinity as $CaCO_3$	10	15	10	16	mg/L
Turbidity	1	2	2	1	NTU
Volume purged	9.6	5.9	9.4	5.2	well volume
Sampling code					
Synchronous water level	209.8 (09/18/96)	( )	207.4 (09/17/97)	207.8 (03/18/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	16	18	17	18	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0	<5.0	<47	1		µg/L	WA	0
		Nickel, total recoverable	1.4	5.5	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	1.9	<3.2	2.7	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
	■	Tetrachloroethylene	***32***	***37***	***37***	***31***	1		µg/L	WA	2
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
	■	Trichloroethylene	***48***	***55***	***58***	***44***	1		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	***120***		***170***				µg/L		
		Chloride	2,400		2,500				µg/L		
		Chromium, total recoverable	1.3		2.1				µg/L		
		Cobalt, total recoverable	2.0		<5.0				µg/L		
		Copper, total recoverable	1.3		<3.0				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	5.6		5.5				µg/L		
		Mercury, total recoverable	<0.20		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	***4,500***		***5,400***				µg/L		
		Sodium, total recoverable	4,500		***4,700***				µg/L		
		Sulfate	800		<5,000				µg/L		
		Total phosphates (as P)	80		46				µg/L		
		Uranium, total recoverable	<20		0.15				µg/L		
		Zinc, total recoverable	3.9		17				µg/L		
Radionuclides											
		Gross alpha	2.1E+00		*4.3E+00*				pCi/L		
		Nonvolatile beta	4.2E+00		*7.7E+00*				pCi/L		
		Radium, total alpha-emitting	6.0E-01		1.3E+00				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 81B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N103762.7 E55230.4	33.345366 °N 81.722967 °W	146.1-141.4 ft msl	267 ft msl	4" PVC	S	LL

SAMPLE DATE	08/09/96	01/29/97	08/26/97	02/24/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	220.4	219.5	218.3	218.4	ft msl
pH	5.2	4.6	5.2	5.6	pH
Sp. conductance	24	26	26	30	µS/cm
Water temperature	24.0	22.0	19.0	18.5	°C
Alkalinity as $CaCO_3$	1	4	0	8	mg/L
Turbidity	1	0	1	1	NTU
Volume purged	5.9	3.0	3.9	2.6	well volume
Sampling code					
Synchronous water level	221.0 (09/19/96)	219.0 (03/17/97)	217.5 (09/15/97)	217.8 (03/18/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	18	23	27	31	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0	<5.0	<47	1		µg/L	WA	0
		Nickel, total recoverable	<10	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<2.0	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	<2.0	<3.0	<5.0	<5.0	1		µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<20		14				µg/L		
		Chloride	3,300		2,700				µg/L		
		Chromium, total recoverable	<4.0		<3.0				µg/L		
		Cobalt, total recoverable	<4.0		<5.0				µg/L		
		Copper, total recoverable	3.0		<3.0				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	15		17				µg/L		
		Mercury, total recoverable	***6.0***		1.4				µg/L		
		Nitrate-nitrite as nitrogen	580		270				µg/L		
		Sodium, total recoverable	2,000		1,800				µg/L		
		Sulfate	300		<5,000				µg/L		
		Total phosphates (as P)	<50		<10				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	4.8		15				µg/L		
Radionuclides											
		Gross alpha	6.5E-01		*9.7E-01*				pCi/L		
		Nonvolatile beta	1.6E+00		*1.3E+00*				pCi/L		
		Radium, total alpha-emitting	6.0E-01		*5.1E+00*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 82A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N107529.5 E51978.4	33.348383 °N 81.738861 °W	126.1-121.4 ft msl	374.3 ft msl	4" PVC	S	MCBC

SAMPLE DATE	08/09/96	01/15/97	08/28/97	02/25/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	228.7	226.5			ft msl
pH	11.2	11.2	10.8	10.5	pH
Sp. conductance	800	1000	1000	1000	µS/cm
Water temperature	27.0	23.0	22.0	17.1	°C
Alkalinity as $CaCO_3$	138	245		202	mg/L
Turbidity	3	2	1	1	NTU
Volume purged	0.0	0.015			well volume
Sampling code	X	X	SX	SX	
Synchronous water level	228.5 (09/16/96)	225.7 (03/20/97)	205.6 (09/15/97)	199.6 (03/17/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	150	130	150	120	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	3.7	***74***	<5.0	12	1	JE	µg/L	WA	0
		Nickel, total recoverable	<10	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	3.8	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<8.0	<7.0	<10	<10	2		µg/L	WA	0
		1,1-Dichloroethane	<8.0	<13	<10	<10	2		µg/L	WA	0
		1,1-Dichloroethylene	<8.0	<16	<10	<10	2		µg/L	WA	0
		trans-1,2-Dichloroethylene	<8.0	<16	<10				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<8.0	<7.5	<10	<10	2		µg/L	WA	0
		Tetrachloroethylene	<8.0	<9.5	<10	<10	2		µg/L	WA	0
		1,1,1-Trichloroethane	<8.0	<13	<10	<10	2		µg/L	WA	0
■		Trichloroethylene	***90***	***320***	***270***	***240***	2		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	***760***	***1,500***	***1,100***				µg/L		
		Chloride	1,600		2,500				µg/L		
		Chromium, total recoverable	0.81	8.0	0.70				µg/L		
		Cobalt, total recoverable	<4.0		<5.0				µg/L		
		Copper, total recoverable	2.1		<3.0				µg/L		
		Fluoride	260		170				µg/L		
		Manganese, total recoverable	<0.60	<3.0	<3.0				µg/L		
		Mercury, total recoverable	<0.20	<0.20	<0.20				µg/L		
		Nitrate-nitrite as nitrogen	570		1,000				µg/L		
		Sodium, total recoverable	***27,000***		***20,000***				µg/L		
		Sulfate	***25,000***		***23,000***				µg/L		
		Total phosphates (as P)	30		<10				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	<5.0		20				µg/L		
Radionuclides											
		Gross alpha	1.7E+00	1.1E+01	*5.6E+00*				pCi/L		
		Nonvolatile beta	1.2E+01	3.8E+01	*9.4E+00*				pCi/L		
		Radium, total alpha-emitting	1.2E+00		1.3E+00				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 82B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N107533.4 E51993.3	33.348416 °N 81.738829 °W	148.2-143.5 ft msl	374.2 ft msl	4" PVC	S	MCBC

SAMPLE DATE	07/25/96	02/12/97	08/18/97	03/02/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	220.0	219.3	217.2	217.2	ft msl
pH	5.2	4.0	4.4	4.0	pH
Sp. conductance	74	42	44	36	µS/cm
Water temperature	25.0	21.0	20.0	18.8	°C
Alkalinity as $CaCO_3$	0	0	0	0	mg/L
Turbidity	2	4	2	1	NTU
Volume purged	5.0	3.8	3.2	3.6	well volume
Sampling code					
Synchronous water level	221.5 (09/16/96)	218.6 (03/20/97)	216.4 (09/15/97)	216.4 (03/17/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	7.4	7.8	8.2	9.3	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	<5.0	15	7.5	<47	1		µg/L	WA	0
		Nickel, total recoverable	0.96	<5.0	3.2	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.0	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<2.0	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<2.0	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<2.0	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<2.0	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	<2.0	<2.0	<5.0	<5.0	1		µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<130		***120***				µg/L		
		Chloride	1,900		2,000				µg/L		
		Chromium, total recoverable	<2.0		1.2				µg/L		
		Cobalt, total recoverable	<1.4		<5.0				µg/L		
		Copper, total recoverable	<1.2		<3.0				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	11		11				µg/L		
		Mercury, total recoverable	<0.20		0.11				µg/L		
		Nitrate-nitrite as nitrogen	290		89				µg/L		
		Sodium, total recoverable	1,800		1,700				µg/L		
		Sulfate	***7,000***		***7,400***				µg/L		
		Total phosphates (as P)	<50		<10				µg/L		
		Uranium, total recoverable	<20		0.096				µg/L		
		Zinc, total recoverable	6.1		16				µg/L		
Radionuclides											
		Gross alpha	1.1E+01		1.3E+00				pCi/L		
		Nonvolatile beta	9.4E+00		2.8E+00				pCi/L		
		Radium, total alpha-emitting	4.7E+00		***7.4E+00***				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 82C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N107521.9 E51949.4	33.348319 °N 81.738923 °W	177.7-173.0 ft msl	373.9 ft msl	4" PVC	S	LL

SAMPLE DATE	07/25/96	02/05/97	08/28/97	03/02/98	
FIELD DATA					
Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	229.5	228.3	226.1	225.3	ft msl
pH	6.2	5.8	5.3	4.9	pH
Sp. conductance	98	26	26	29	µS/cm
Water temperature	25.0	25.0	19.4	18.6	°C
Alkalinity as $CaCO_3$	1	2	3	3	mg/L
Turbidity	0	1	1	1	NTU
Volume purged	5.0	3.1	6.2	2.4	well volume
Sampling code					
Synchronous water level	229.9 (09/16/96)	227.1 (03/20/97)	225.6 (09/15/97)	224.7 (03/17/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	20	19	18	17	1		µg/L	WA	0
		Cyanide	<10	<5.0	***20***	<15	1		µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0	3.7	<47	1		µg/L	WA	0
		Nickel, total recoverable	<10	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	5.9	5.1	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<2.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<2.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<2.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<2.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<2.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<2.0	<1.9	<2.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<2.5	<2.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	<2.0	<3.0	<2.0	<5.0	1		µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<40		<20				µg/L		
		Chloride	2,000		3,000				µg/L		
		Chromium, total recoverable	<2.7		1.8				µg/L		
		Cobalt, total recoverable	<1.5		<5.0				µg/L		
		Copper, total recoverable	<2.3		1.3				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	3.9		3.4				µg/L		
		Mercury, total recoverable	<0.20		0.16				µg/L		
		Nitrate-nitrite as nitrogen	1,900		1,600				µg/L		
		Sodium, total recoverable	2,700		2,900				µg/L		
		Sulfate	170		<5,000				µg/L		
		Total phosphates (as P)	<50		<10				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	4.3		12				µg/L		
Radionuclides											
		Gross alpha	1.2E+00		1.3E+00				pCi/L		
		Nonvolatile beta	*6.8E-01*		*9.4E-01*				pCi/L		
		Radium, total alpha-emitting	4.0E-01		3.1E+00				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 82D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N107518.1 E51934.6	33.348286 °N 81.738954 °W	236.9-216.8 ft msl	373.6 ft msl	4" PVC	S	M

SAMPLE DATE	07/25/96	02/05/97	08/28/97	03/02/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	234.0	233.2	231.8	230.6	ft msl
pH	6.2	5.6	5.4	4.3	pH
Sp. conductance	98	34	35	32	µS/cm
Water temperature	25.0	26.0	21.1	18.8	°C
Alkalinity as $CaCO_3$	1	2	3	1	mg/L
Turbidity	2	1	4	1	NTU
Volume purged	5.8	4.6	0.10	4.9	well volume
Sampling code			X		
Synchronous water level	234.0 (09/16/96)	233.0 (03/20/97)	231.5 (09/15/97)	230.2 (03/17/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	4.2	3.2	4.7	3.6	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	2.2	<5.0	***18***	<47	1		µg/L	WA	0
		Nickel, total recoverable	0.86	6.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	***7.7***	<1.0	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<1.0	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	<2.0	<1.0	<5.0	<5.0	1		µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<37		<20				µg/L		
		Chloride	2,000		2,400				µg/L		
		Chromium, total recoverable	<1.7		<3.0				µg/L		
		Cobalt, total recoverable	<0.95		2.8				µg/L		
		Copper, total recoverable	11		2.7				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	7.3		47				µg/L		
		Mercury, total recoverable	<0.20		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	1,900		81				µg/L		
		Sodium, total recoverable	3,500		***4,700***				µg/L		
		Sulfate	1,200		<5,000				µg/L		
		Total phosphates (as P)	<50		<10				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	18		17				µg/L		
Radionuclides											
		Gross alpha	3.0E+00		*5.4E+00*				pCi/L		
		Nonvolatile beta	*7.1E-01*		*5.9E+00*				pCi/L		
		Radium, total alpha-emitting	1.6E+00		1.4E+00				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 82TA

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N107525.7 E51964.2	33.348351 °N 81.738891 °W	93.8-88.4 ft msl	373.7 ft msl	4" CS	S	CBA

SAMPLE DATE	08/09/96	02/07/97	08/21/97	02/23/98	
FIELD DATA					
Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	214.4	213.1	211.8	212.2	ft msl
pH	5.2	5.2	5.4	5.2	pH
Sp. conductance	25	26	26	28	µS/cm
Water temperature	25.0	23.0	20.0	16.0	°C
Alkalinity as $CaCO_3$	2	5	4	1	mg/L
Turbidity	15	7	7	9	NTU
Volume purged	3.3	2.7	3.5	1.8	well volume
Sampling code					
Synchronous water level	215.7 (09/16/96)	213.1 (03/20/97)	210.5 (09/15/97)	210.9 (03/17/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	4.2	6.0	3.9	3.7	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0	<5.0	<47	1		µg/L	WA	0
		Nickel, total recoverable	<10	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<2.0	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
	■	Trichloroethylene	***47***	***56***	***56***	***66***	1		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	31	***320***	13				µg/L		
		Chloride	1,600		2,000				µg/L		
		Chromium, total recoverable	<4.0	<3.0	<3.0				µg/L		
		Cobalt, total recoverable	<4.0		<5.0				µg/L		
		Copper, total recoverable	3.4		<3.0				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	***57***	***63***	***58***				µg/L		
		Mercury, total recoverable	<0.20	<0.20	<0.20				µg/L		
		Nitrate-nitrite as nitrogen	820		1,600				µg/L		
		Sodium, total recoverable	1,600		1,500				µg/L		
		Sulfate	1,900		<5,000				µg/L		
		Total phosphates (as P)	40		<10				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	6.6		13				µg/L		
Radionuclides											
		Gross alpha	9.5E-01	1.1E+01	*8.2E-01*				pCi/L		
		Nonvolatile beta	1.4E+00	*3.3E+00*	*-4.2E-01*				pCi/L		
		Radium, total alpha-emitting	3.0E-01		*2.2E+00*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 83B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N108426.7 E52421.4	33.351090 °N 81.739440 °W	146.3-141.6 ft msl	371.8 ft msl	4" PVC	S	MCBC

SAMPLE DATE	07/26/96	02/12/97	07/30/97	02/26/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	222.0	221.2	220.6	219.2	ft msl
pH	5.4	5.0	5.0	4.4	pH
Sp. conductance	42	20	20	21	µS/cm
Water temperature	24.0	24.0	20.1	19.5	°C
Alkalinity as $CaCO_3$	1	7	1	1	mg/L
Turbidity	0	1	1	1	NTU
Volume purged	4.1	2.9	1.8	2.8	well volume
Sampling code					
Synchronous water level	223.1 (09/16/96)	220.7 (03/20/97)	218.8 (09/15/97)	218.6 (03/17/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	8.2	9.9	8.6	7.3	1		µg/L	WA	0
		Cyanide	2.3	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0	<5.0	<47	1		µg/L	WA	0
		Nickel, total recoverable	<10	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<1.7	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.0	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<2.0	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<2.0	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<2.0	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<2.0	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	<2.0	<2.0	<5.0	<5.0	1		µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	20		20				µg/L		
		Chloride	1,500		1,700				µg/L		
		Chromium, total recoverable	<1.9		<3.0				µg/L		
		Cobalt, total recoverable	<1.2		<5.0				µg/L		
		Copper, total recoverable	<2.6		<3.0				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	2.5		3.6				µg/L		
		Mercury, total recoverable	<0.096		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	700		580				µg/L		
		Sodium, total recoverable	1,600		1,600				µg/L		
		Sulfate	1,400		<5,000				µg/L		
		Total phosphates (as P)	<50		<10				µg/L		
		Uranium, total recoverable	<20		0.030				µg/L		
		Zinc, total recoverable	4.7		11				µg/L		
Radionuclides											
		Gross alpha	1.3E+00		*-3.5E-01*				pCi/L		
		Nonvolatile beta	2.7E+00		*4.0E-02*				pCi/L		
		Radium, total alpha-emitting	1.0E+00		*2.2E+00*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 83C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N108405.3 E52384.7	33.350983 °N 81.739495 °W	182.8-178.0 ft msl	372 ft msl	4" PVC	S	LL

SAMPLE DATE	07/25/96	02/04/97	07/30/97	02/26/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	229.0	228.0	227.3	225.6	ft msl
pH	6.8	9.2	9.2	8.4	pH
Sp. conductance	100	66	66	68	µS/cm
Water temperature	25.0	25.0	19.1	18.9	°C
Alkalinity as $CaCO_3$	10	38	37	23	mg/L
Turbidity	0	0	1	1	NTU
Volume purged	7.2	4.0	2.9	3.4	well volume
Sampling code					
Synchronous water level	229.4 (09/16/96)	227.5 (03/20/97)	226.0 (09/15/97)	225.3 (03/17/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	15	14	15	15	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	1.4	<5.0	<5.0	<47	1		µg/L	WA	0
		Nickel, total recoverable	1.5	6.3	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<2.0	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	<2.0	<3.0	<5.0	<5.0	1		µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<110		***160***				µg/L		
		Chloride	1,900		2,000				µg/L		
		Chromium, total recoverable	<2.1		1.2				µg/L		
		Cobalt, total recoverable	<1.2		<5.0				µg/L		
		Copper, total recoverable	<1.1		1.1				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	2.8		2.1				µg/L		
		Mercury, total recoverable	<0.20		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	1,900		1,900				µg/L		
		Sodium, total recoverable	2,500		2,400				µg/L		
		Sulfate	210		<5,000				µg/L		
		Total phosphates (as P)	<50		<10				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	6.5		4.1				µg/L		
Radionuclides											
		Gross alpha	1.3E+00		*0.0E+00*				pCi/L		
		Nonvolatile beta	1.5E+00		*-2.2E+00*				pCi/L		
		Radium, total alpha-emitting	*2.0E-01*		*5.1E+00*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 83D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N108418.4 E52391.2	33.351022 °N 81.739503 °W	236.1-216.7 ft msl	371.6 ft msl	4" PVC	S	M

SAMPLE DATE	07/25/96	02/05/97	07/30/97	02/26/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	234.2	233.5	232.2	230.2	ft msl
pH	6.8	5.6	6.2	5.6	pH
Sp. conductance	100	26	44	83	µS/cm
Water temperature	29.0	27.0	24.4	15.7	°C
Alkalinity as $CaCO_3$	24	21	28	28	mg/L
Turbidity	18	10	9	6	NTU
Volume purged	0.087	0.091	0.0	0.0	well volume
Sampling code	X	X	X	X	
Synchronous water level	234.1 (09/16/96)	233.2 (03/20/97)	231.8 (09/15/97)	230.4 (03/17/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	9.3	9.3	7.6	23	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	6.4	6.6	5.8	5.1	1	JE	µg/L	WA	0
		Nickel, total recoverable	2.9	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<2.0	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	<2.0	<3.0	<5.0	<5.0	1		µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	***220***		***330***				µg/L		
		Chloride	850		1,100				µg/L		
		Chromium, total recoverable	<3.4		1.2				µg/L		
		Cobalt, total recoverable	<1.2		<5.0				µg/L		
		Copper, total recoverable	6.3		<3.0				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	11		11				µg/L		
		Mercury, total recoverable	<0.20		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	1,200		1,300				µg/L		
		Sodium, total recoverable	***9,200***		4,500				µg/L		
		Sulfate	860		<5,000				µg/L		
		Total phosphates (as P)	<50		<10				µg/L		
		Uranium, total recoverable	<20		0.074				µg/L		
		Zinc, total recoverable	16		12				µg/L		
Radionuclides											
		Gross alpha	1.1E+00		*4.4E-01*				pCi/L		
		Nonvolatile beta	4.4E+00		*-1.4E-01*				pCi/L		
		Radium, total alpha-emitting	3.0E-01		*2.4E+00*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 83TA

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N108416.3 E52410.9	33.351050 °N 81.739447 °W	75.7-70.2 ft msl	371.7 ft msl	4" PVC	S	CBA

SAMPLE DATE	07/25/96	02/05/97	07/30/97	03/02/98	
FIELD DATA					
Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	215.8	214.8	214.0	213.5	ft msl
pH	6.2	5.2	4.6	4.5	pH
Sp. conductance	46	16	18	16	µS/cm
Water temperature	25.0	24.0	19.6	17.9	°C
Alkalinity as $CaCO_3$	1	2	1	1	mg/L
Turbidity	0	0	0	0	NTU
Volume purged	3.4	2.3	2.3	2.4	well volume
Sampling code					
Synchronous water level	216.7 (09/16/96)	214.6 (03/20/97)	212.4 (09/15/97)	212.6 (03/17/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	3.9	3.4	3.2	2.7	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0	4.3	<47	1		µg/L	WA	0
		Nickel, total recoverable	1.3	8.8	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<2.0	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	<2.0	<3.0	<5.0	<5.0	1		µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<29		12				µg/L		
		Chloride	1,200		1,300				µg/L		
		Chromium, total recoverable	<2.0		<3.0				µg/L		
		Cobalt, total recoverable	<1.0		<5.0				µg/L		
		Copper, total recoverable	<4.4		6.2				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	4.1		3.7				µg/L		
		Mercury, total recoverable	<0.20		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	900		760				µg/L		
		Sodium, total recoverable	1,300		1,300				µg/L		
		Sulfate	520		<5,000				µg/L		
		Total phosphates (as P)	<50		<10				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	11		12				µg/L		
Radionuclides											
		Gross alpha	*4.9E-01*		*2.9E-01*				pCi/L		
		Nonvolatile beta	*3.0E-01*		*-1.3E+00*				pCi/L		
		Radium, total alpha-emitting	*1.0E-01*		*3.4E+00*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 84A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N108982.1 E51971.2	33.351582 °N 81.741707 °W	129.4-124.5 ft msl	361.5 ft msl	4" PVC	S	MCBC

SAMPLE DATE	07/26/96	02/07/97	07/30/97	03/02/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	213.8	215.2	204.8	213.0	ft msl
pH	9.8	9.8	9.8	9	pH
Sp. conductance	400	260	34	175	µS/cm
Water temperature	25.0	24.0	22.1	300	°C
Alkalinity as $CaCO_3$	60	96	133	56	mg/L
Turbidity	36	9	5	3	NTU
Volume purged	0.017	0.017	0.0	0.50	well volume
Sampling code	X	X	X		
Synchronous water level	185.5 (09/16/96)	176.2 (03/20/97)	173.3 (09/15/97)	166.1 (03/17/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	25	15	25	25	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	3.5	15	6.5	<47	1		µg/L	WA	0
		Nickel, total recoverable	1.3	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<3.3	5.3	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<2.0	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	<2.0	<3.0	<5.0	<5.0	1		µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	***290***	***210***	***110***				µg/L		
		Chloride	3,400		3,300				µg/L		
		Chromium, total recoverable	<2.5	<3.0	<3.0				µg/L		
		Cobalt, total recoverable	<1.4		<5.0				µg/L		
		Copper, total recoverable	<3.4		<3.0				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	18	9.4	10				µg/L		
		Mercury, total recoverable	0.17	<0.20	<0.20				µg/L		
		Nitrate-nitrite as nitrogen	230		<10				µg/L		
		Sodium, total recoverable	***90,000***		***52,000***				µg/L		
		Sulfate	***45,000***		***37,000***				µg/L		
		Total phosphates (as P)	***870***		120				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	12		19				µg/L		
Radionuclides											
		Gross alpha	*-6.1E-02*	*1.9E+00*	*6.4E-01*				pCi/L		
		Nonvolatile beta	1.4E+01	3.2E+01	2.9E+01				pCi/L		
		Radium, total alpha-emitting	*2.0E-01*		2.6E+00				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 84C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N108967.9 E51973.7	33.351555 °N 81.741672 °W	194.9-190.2 ft msl	361.9 ft msl	4" PVC	S	LL

SAMPLE DATE	07/26/96	02/04/97	07/30/97	03/02/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	230.3	229.3	228.6	227.3	ft msl
pH	5.4	4.8	5.0	4.5	pH
Sp. conductance	16	30	30	29	µS/cm
Water temperature	25.0	25.0	19.6	17.5	°C
Alkalinity as $CaCO_3$	2	1	3	1	mg/L
Turbidity	4	1	0	1	NTU
Volume purged	2.3	2.7	3.5	2.9	well volume
Sampling code					
Synchronous water level	230.5 (09/16/96)	229.1 (03/20/97)	227.9 (09/15/97)	227.0 (03/17/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	5.6	5.8	5.9	4.8	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	1.5	1	JE	µg/L	WA	0
		Lead, total recoverable	1.4	<5.0	5.1	<47	1		µg/L	WA	0
		Nickel, total recoverable	<10	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<1.5	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<2.0	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	<2.0	<3.0	<5.0	<5.0	1		µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<20		42				µg/L		
		Chloride	2,000		2,200				µg/L		
		Chromium, total recoverable	<1.1		0.60				µg/L		
		Cobalt, total recoverable	<0.48		<5.0				µg/L		
		Copper, total recoverable	<7.9		4.0				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	2.1		2.2				µg/L		
		Mercury, total recoverable	<0.11		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	1,900		2,000				µg/L		
		Sodium, total recoverable	2,500		2,500				µg/L		
		Sulfate	200		<5,000				µg/L		
		Total phosphates (as P)	<50		<10				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	13		12				µg/L		
Radionuclides											
		Gross alpha	1.1E+00		*1.1E+00*				pCi/L		
		Nonvolatile beta	*1.1E+00*		*2.2E+00*				pCi/L		
		Radium, total alpha-emitting	4.0E-01		*3.3E+00*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 85B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N107827.0 E53122.7	33.350909 °N 81.736426 °W	137.3-132.6 ft msl	380.3 ft msl	4" PVC	S	CBA

SAMPLE DATE	07/25/96	02/05/97	08/25/97	03/02/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	221.6	220.4	219.1	218.7	ft msl
pH	5.4	5.4	5.0	5.2	pH
Sp. conductance	24	30	28	28	µS/cm
Water temperature	25.0	26.0	21.0	18.3	°C
Alkalinity as $CaCO_3$	4	4	4	2	mg/L
Turbidity	6	3	2	1	NTU
Volume purged	2.1	3.0	4.5	3.0	well volume
Sampling code					
Synchronous water level	222.8 (09/16/96)	220.2 (03/20/97)	218.1 (09/15/97)	218.0 (03/17/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	16	11		12	1		µg/L	WA	0
		Cyanide	<10	<5.0		<15	1		µg/L	WA	0
		Lead, total recoverable	1.3	<5.0		<47	1		µg/L	WA	0
		Nickel, total recoverable	<10	<5.0		<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0		<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4		<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5		<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2		<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2					µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5		<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<2.0	<1.9		<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<2.5		<5.0	1		µg/L	WA	0
		Trichloroethylene	1.5	<3.0		<5.0	1		µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<45						µg/L		
		Chloride	1,700						µg/L		
		Chromium, total recoverable	<2.3						µg/L		
		Cobalt, total recoverable	<1.0						µg/L		
		Copper, total recoverable	<0.95						µg/L		
		Fluoride	<100						µg/L		
		Manganese, total recoverable	<2.6						µg/L		
		Mercury, total recoverable	<0.20						µg/L		
		Nitrate-nitrite as nitrogen	1,700						µg/L		
		Sodium, total recoverable	2,500						µg/L		
		Sulfate	280						µg/L		
		Total phosphates (as P)	100						µg/L		
		Uranium, total recoverable	<20						µg/L		
		Zinc, total recoverable	8.5						µg/L		
Radionuclides											
		Gross alpha	7.0E-01						pCi/L		
		Nonvolatile beta	*1.1E+00*						pCi/L		
		Radium, total alpha-emitting	*1.0E-01*						pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 85C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N107835.2 E53151.4	33.350974 °N 81.736366 °W	173.6-168.8 ft msl	380.9 ft msl	4" PVC	S	LL

SAMPLE DATE	08/09/96	01/13/97	08/25/97	02/23/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	224.9	215.8	222.4	221.9	ft msl
pH	6.0	5.4	6.0	6.0	pH
Sp. conductance	46	38	54	46	µS/cm
Water temperature	25.0	21.0	20.0	16.0	°C
Alkalinity as $CaCO_3$	3	2	5	8	mg/L
Turbidity	1	1	2	0	NTU
Volume purged	3.0	2.8	2.0	2.8	well volume
Sampling code					
Synchronous water level	226.0 (09/16/96)	223.6 (03/20/97)	221.9 (09/15/97)	221.3 (03/17/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	20	18		17	1		µg/L	WA	0
		Cyanide	<10	<5.0		<15	1		µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0		<47	1		µg/L	WA	0
		Nickel, total recoverable	<10	<5.0		<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0		<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4		<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5		<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2		<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2					µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5		<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<2.0	<1.9		<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<2.5		<5.0	1		µg/L	WA	0
■		Trichloroethylene	***36***	***67***		***53***	1		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<20						µg/L		
		Chloride	2,500						µg/L		
		Chromium, total recoverable	<4.0						µg/L		
		Cobalt, total recoverable	<4.0						µg/L		
		Copper, total recoverable	1.1						µg/L		
		Fluoride	<100						µg/L		
		Manganese, total recoverable	2.0						µg/L		
		Mercury, total recoverable	<0.20						µg/L		
		Nitrate-nitrite as nitrogen	***2,700***						µg/L		
		Sodium, total recoverable	4,000						µg/L		
		Sulfate	190						µg/L		
		Total phosphates (as P)	<50						µg/L		
		Uranium, total recoverable	<20						µg/L		
		Zinc, total recoverable	6.5						µg/L		
Radionuclides											
		Gross alpha	*4.5E-01*						pCi/L		
		Nonvolatile beta	1.6E+00						pCi/L		
		Radium, total alpha-emitting	7.0E-01						pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 85D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N107822.8 E53108.8	33.350877 °N 81.736454 °W	236.3-216.2 ft msl	380.8 ft msl	4" PVC	S	M

SAMPLE DATE	07/25/96	02/05/97	08/25/97	03/02/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	233.8	333.0	231.5	230.4	ft msl
pH	6.0	6.0	5.0	4.2	pH
Sp. conductance	52	180	52	52	µS/cm
Water temperature	26.0	26.0	22.0	20	°C
Alkalinity as $CaCO_3$	12	25	7	3	mg/L
Turbidity	29	10	11	6	NTU
Volume purged	3.5	0.013	8.2	2.9	well volume
Sampling code		X			
Synchronous water level	233.8 (09/16/96)	232.9 (03/20/97)	245.8 (09/15/97)	230.0 (03/17/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	26	13		28	1		µg/L	WA	0
		Cyanide	<10	<5.0		<15	1		µg/L	WA	0
		Lead, total recoverable	3.7	***15***		13	1	JE	µg/L	WA	0
		Nickel, total recoverable	2.2	7.1		3.5	1	JE	µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0		<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4		<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5		<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2		<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2					µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5		<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<2.0	<1.9		<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<2.5		<5.0	1		µg/L	WA	0
		Trichloroethylene	<2.0	<3.0		<5.0	1		µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	***680***						µg/L		
		Chloride	2,400						µg/L		
		Chromium, total recoverable	<4.5						µg/L		
		Cobalt, total recoverable	<2.3						µg/L		
		Copper, total recoverable	6.6						µg/L		
		Fluoride	46						µg/L		
		Manganese, total recoverable	20						µg/L		
		Mercury, total recoverable	<0.20						µg/L		
		Nitrate-nitrite as nitrogen	***3,400***						µg/L		
		Sodium, total recoverable	***5,700***						µg/L		
		Sulfate	880						µg/L		
		Total phosphates (as P)	<150						µg/L		
		Uranium, total recoverable	<20						µg/L		
		Zinc, total recoverable	33						µg/L		
Radionuclides											
		Gross alpha	6.1E+00						pCi/L		
		Nonvolatile beta	4.7E+00						pCi/L		
		Radium, total alpha-emitting	3.3E+00						pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 85TA

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N107831.2 E53137.2	33.350942 °N 81.736396 °W	88.2-82.8 ft msl 380.4 ft msl	4" Steel	S	CBA	

SAMPLE DATE	08/09/96	01/13/97	08/26/97	03/02/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	220.9	220.7	218.5	218.3	ft msl
pH	8.0	4.8	5.4	6	pH
Sp. conductance	66	22	44	46	µS/cm
Water temperature	28.0	20.0	20.0	19.5	°C
Alkalinity as $CaCO_3$	18	1	6	17	mg/L
Turbidity	6	27	14	4	NTU
Volume purged	0.0	2.0	0.0	0.51	well volume
Sampling code	X		X		
Synchronous water level	222.2 (09/16/96)	219.8 (03/20/97)	217.8 (09/15/97)	217.6 (03/17/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	22	16	15	17	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	<5.0	10	3.8	<47	1		µg/L	WA	0
		Nickel, total recoverable	1.0	6.7	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<2.0	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	2.4	<3.0	<5.0	1.5	1	JE	µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	75		***340***				µg/L		
		Chloride	2,100		2,100				µg/L		
		Chromium, total recoverable	<4.0		0.90				µg/L		
		Cobalt, total recoverable	<4.0		<5.0				µg/L		
		Copper, total recoverable	2.0		<3.0				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	***290***		***200***				µg/L		
		Mercury, total recoverable	<0.20		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	1,000		***2,500***				µg/L		
		Sodium, total recoverable	***5,900***		3,300				µg/L		
		Sulfate	270		<5,000				µg/L		
		Total phosphates (as P)	<50		7.0				µg/L		
		Uranium, total recoverable	<20		0.12				µg/L		
		Zinc, total recoverable	7.2		18				µg/L		
Radionuclides											
		Gross alpha	*1.7E-01*		1.8E+00				pCi/L		
		Nonvolatile beta	1.3E+00		*6.0E-02*				pCi/L		
		Radium, total alpha-emitting	*0.0E+00*		*2.3E+00*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
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WELL MSB 86C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N108500.4 E54560.5	33.354746 °N 81.733949 °W	164.8-160.1 ft msl	357 ft msl	4" PVC	S	LL

SAMPLE DATE	07/25/96	02/06/97	08/28/97	03/03/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	225.5	233.7	223.6	222.7	ft msl
pH	5.8	7.2	6.0	5.3	pH
Sp. conductance	24	60	44	35	µS/cm
Water temperature	25.0	24.0	19.0	17.0	°C
Alkalinity as $CaCO_3$	9	30	3	9	mg/L
Turbidity	19	6	8	10	NTU
Volume purged	2.5	2.1	3.0	4.9	well volume
Sampling code					
Synchronous water level	325.9 (09/16/96)	224.3 (03/20/97)	222.7 (09/15/97)	222.1 (03/17/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	15	22	14	13	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	1.7	<5.0	4.2	<47	1		µg/L	WA	0
		Nickel, total recoverable	<10	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	3.4	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<2.0	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	<2.0	<3.0	<5.0	<5.0	1		µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	***150***		***170***				µg/L		
		Chloride	1,500		2,400				µg/L		
		Chromium, total recoverable	<2.0		<3.0				µg/L		
		Cobalt, total recoverable	<0.56		<5.0				µg/L		
		Copper, total recoverable	<2.6		<3.0				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	12		8.5				µg/L		
		Mercury, total recoverable	<0.20		0.26				µg/L		
		Nitrate-nitrite as nitrogen	1,600		1,200				µg/L		
		Sodium, total recoverable	2,600		2,600				µg/L		
		Sulfate	270		<5,000				µg/L		
		Total phosphates (as P)	<30		16				µg/L		
		Uranium, total recoverable	<20		0.14				µg/L		
		Zinc, total recoverable	10		12				µg/L		
Radionuclides											
		Gross alpha	6.4E-01		*-5.1E-01*				pCi/L		
		Nonvolatile beta	*8.9E-01*		*-8.0E-01*				pCi/L		
		Radium, total alpha-emitting	4.0E-01		***1.6E+01***				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 87B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N101276.0 E51607.0	33.333952 °N 81.727673 °W	174.1-169.1 ft msl	336 ft msl	2" PVC	V	LL

SAMPLE DATE	07/25/96	02/06/97	08/18/97	03/03/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	218.4	217.3	216.0	218.7	ft msl
pH	5.0	5.6	5.8	5.8	pH
Sp. conductance	28	34	36	26	µS/cm
Water temperature	25.0	23.0	20.0	18.0	°C
Alkalinity as $CaCO_3$	1	10	5	4	mg/L
Turbidity	3	1	1	1	NTU
Volume purged	2.3	3.3	2.7	9.5	well volume
Sampling code					
Synchronous water level	218.4 (09/20/96)	216.9 (03/17/97)	215.6 (09/15/97)	216.1 (03/18/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	33	29	29	26	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	4.1	<5.0	5.1	<47	1		µg/L	WA	0
		Nickel, total recoverable	1.4	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<2.0	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	<2.0	<3.0	<5.0	<5.0	1		µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<41		23				µg/L		
		Chloride	1,400		1,700				µg/L		
		Chromium, total recoverable	<3.2		<3.0				µg/L		
		Cobalt, total recoverable	<1.8		<5.0				µg/L		
		Copper, total recoverable	<4.0		2.1				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	8.4		8.4				µg/L		
		Mercury, total recoverable	<0.20		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	920		790				µg/L		
		Sodium, total recoverable	1,500		1,500				µg/L		
		Sulfate	1,800		<5,000				µg/L		
		Total phosphates (as P)	<50		19				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	6.2		12				µg/L		
Radionuclides											
		Gross alpha	*5.4E-01*		*0.0E+00*				pCi/L		
		Nonvolatile beta	*7.4E-01*		*-1.6E+00*				pCi/L		
		Radium, total alpha-emitting	*1.0E-01*		4.0E+00				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 87C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N101277.0 E51596.3	33.333937 °N 81.727703 °W	246.6-241.6 ft msl	336.6 ft msl	2" PVC	V	M

SAMPLE DATE 07/25/96

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	243.4				ft msl
pH	4.4				pH
Sp. conductance	10				µS/cm
Water temperature	25.0				°C
Alkalinity as $CaCO_3$	1				mg/L
Turbidity	9				NTU
Volume purged	17				well volume
Sampling code					
Synchronous water level	242.4 (09/20/96)				ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	5.7						µg/L		
		Cyanide	<10						µg/L		
		Lead, total recoverable	1.7						µg/L		
		Nickel, total recoverable	4.1						µg/L		
		Selenium, total recoverable	<5.0						µg/L		
Organics											
		Chlorobenzene	<2.0						µg/L		
		1,1-Dichloroethane	<2.0						µg/L		
		1,1-Dichloroethylene	<2.0						µg/L		
		trans-1,2-Dichloroethylene	<2.0						µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0						µg/L		
		Tetrachloroethylene	<2.0						µg/L		
		1,1,1-Trichloroethane	<2.0						µg/L		
		Trichloroethylene	<2.0						µg/L		

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<42						µg/L		
		Chloride	1,500						µg/L		
		Chromium, total recoverable	<3.0						µg/L		
		Cobalt, total recoverable	<3.5						µg/L		
		Copper, total recoverable	9.2						µg/L		
		Fluoride	260						µg/L		
		Manganese, total recoverable	11						µg/L		
		Mercury, total recoverable	<0.20						µg/L		
		Nitrate-nitrite as nitrogen	770						µg/L		
		Sodium, total recoverable	3,100						µg/L		
		Sulfate	460						µg/L		
		Total phosphates (as P)	<50						µg/L		
		Uranium, total recoverable	<20						µg/L		
		Zinc, total recoverable	50						µg/L		
Radionuclides											
		Gross alpha	*1.0E-01*						pCi/L		
		Nonvolatile beta	*3.6E-01*						pCi/L		
		Radium, total alpha-emitting	*-1.0E-01*						pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 88B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N97013.0 E50774.2	33.323168 °N 81.721574 °W	75.8-70.8 ft msl	238.1 ft msl	2" PVC	V	MCBC

SAMPLE DATE	08/13/96	01/13/97	08/19/97	02/18/98
FIELD DATA				
Parameter	3Q96	1Q97	3Q97	1Q98
Water elevation	201.0	79.2	200.0	200.9
pH	4.8	4.0	4.6	4.4
Sp. conductance	22	20	24	24
Water temperature	26.0	22.0	22.0	18.3
Alkalinity as $CaCO_3$	1	0	0	0
Turbidity	1	1	0	0
Volume purged	2.2	12	3.7	2.7
Sampling code				
Synchronous water level	201.1 (09/19/96)	200.5 (03/18/97)	199.9 (09/16/97)	201.2 (03/18/98)

Parameter	Unit
Water elevation	ft msl
pH	pH
Sp. conductance	µS/cm
Water temperature	°C
Alkalinity as $CaCO_3$	mg/L
Turbidity	NTU
Volume purged	well volume
Sampling code	
Synchronous water level	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	6.2	6.5	5.7	5.2	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	***130***	<5.0	<5.0	<47	1		µg/L	WA	0
		Nickel, total recoverable	2.5	5.4	4.1	2.6	1	JE	µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<2.0	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
	■	Trichloroethylene	***13***	***15***	***20***	***20***	1		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<20		80				µg/L		
		Chloride	1,800		2,000				µg/L		
		Chromium, total recoverable	1.1		0.60				µg/L		
		Cobalt, total recoverable	0.59		<5.0				µg/L		
		Copper, total recoverable	59		4.1				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	15		13				µg/L		
		Mercury, total recoverable	0.033		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	990		<100				µg/L		
		Sodium, total recoverable	1,600		1,700				µg/L		
		Sulfate	1,900		<5,000				µg/L		
		Total phosphates (as P)	<50		<10				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	26		18				µg/L		
Radionuclides											
		Gross alpha	*2.4E-01*		*7.1E-01*				pCi/L		
		Nonvolatile beta	*5.8E-01*		*-1.3E-01*				pCi/L		
		Radium, total alpha-emitting	*-5.0E-01*		*1.4E+00*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
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WELL MSB 88C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N97012.7 E50784.0	33.323184 °N 81.721548 °W	127.2-122.2 ft msl	237.2 ft msl	2" PVC	V	LL

SAMPLE DATE	08/12/96	01/13/97	08/19/97	02/18/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	203.4	203.1	202.4	203.6	ft msl
pH	5.2	5.2	4.6	4.4	pH
Sp. conductance	42	46	44	40	µS/cm
Water temperature	28.0	21.0	20.0	17.6	°C
Alkalinity as $CaCO_3$	3	4	8	2	mg/L
Turbidity	6	2	1	2	NTU
Volume purged	2.3	8.7	2.9	2.9	well volume
Sampling code					
Synchronous water level	203.2 (09/19/96)	203.1 (03/18/97)	202.2 (09/16/97)	204.5 (03/18/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	4.1	3.1	3.4	4.1	1		µg/L	WA	0
		Cyanide	<10	<5.0	2.7	<15	1		µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0	<5.0	<47	1		µg/L	WA	0
		Nickel, total recoverable	<10	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<7.0	<10	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<13	<10	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<16	<10	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<16	<10				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<7.5	<10	<5.0	1		µg/L	WA	0
	■	Tetrachloroethylene	***23***	***43***	***57***	***53***	1		µg/L	WA	2
		1,1,1-Trichloroethane	<2.0	<13	<10	<5.0	1		µg/L	WA	0
	■	Trichloroethylene	***160***	***120***	***200***	***190***	1		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<21		41				µg/L		
		Chloride	3,700		***4,400***				µg/L		
		Chromium, total recoverable	1.1		0.70				µg/L		
		Cobalt, total recoverable	0.31		<5.0				µg/L		
		Copper, total recoverable	5.2		1.6				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	8.8		6.6				µg/L		
		Mercury, total recoverable	0.025		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	***2,600***		***2,900***				µg/L		
		Sodium, total recoverable	***6,500***		***6,500***				µg/L		
		Sulfate	1,100		<5,000				µg/L		
		Total phosphates (as P)	<50		<10				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	6.4		12				µg/L		
Radionuclides											
		Gross alpha	*3.5E-01*		*3.9E-01*				pCi/L		
		Nonvolatile beta	*8.8E-01*		*1.4E+00*				pCi/L		
		Radium, total alpha-emitting	*2.0E-01*		***6.6E+00***				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
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WELL MSB 89B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N98374.1 E47889.9	33.321467 °N 81.731816 °W	162.0-157.0 ft msl	339.4 ft msl	2" PVC	V	LL

SAMPLE DATE	08/12/96	01/10/97	08/27/97	02/19/98	
FIELD DATA					
Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	207.0	190.4	204.8	205.3	ft msl
pH	5.4	5.0	5.0	4.3	pH
Sp. conductance	30	26	32	30	µS/cm
Water temperature	25.0	22.0	20.0	17.8	°C
Alkalinity as $CaCO_3$	1	2	0	1	mg/L
Turbidity	1	1	1	2	NTU
Volume purged	2.6	2.6	2.9	5.3	well volume
Sampling code					
Synchronous water level	206.7 (09/18/96)	205.7 (03/18/97)	204.7 (09/17/97)	205.3 (03/18/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	10	8.5	9.0	11	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	7.6	8.6	***16***	<47	1		µg/L	WA	0
		Nickel, total recoverable	4.5	5.3	5.1	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0		<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	1.3	3.0	3.1	2.4	1	JE	µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
	■	Trichloroethylene	***73***	***110***	***130***	***96***	1		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<20		82				µg/L		
		Chloride	1,500		1,700				µg/L		
		Chromium, total recoverable	3.8		3.2				µg/L		
		Cobalt, total recoverable	3.3		<5.0				µg/L		
		Copper, total recoverable	13		55				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	16		17				µg/L		
		Mercury, total recoverable	<0.20		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	2,100		1,300				µg/L		
		Sodium, total recoverable	2,300		2,300				µg/L		
		Sulfate	340		<5,000				µg/L		
		Total phosphates (as P)	<50		<10				µg/L		
		Uranium, total recoverable	11		<0.10				µg/L		
		Zinc, total recoverable	13		39				µg/L		
Radionuclides											
		Gross alpha	7.9E-01		*4.0E+00*				pCi/L		
		Nonvolatile beta	1.1E+00		*3.6E+00*				pCi/L		
		Radium, total alpha-emitting	*2.0E-01*		1.4E+00				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
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WELL SRW 2A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N103720.8 E41634.6	33.323069 °N 81.758687 °W	98.4-88.6 ft msl	320.6 ft msl	4" PVC	S	MCBC

SAMPLE DATE	08/15/96	02/25/97	09/02/97	02/27/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	206.8	206.7	204.3	204.7	ft msl
pH	6.0	4.6	5.1	5.0	pH
Sp. conductance	52	18	20	16	µS/cm
Water temperature	27.0	23.0	19.4	18.0	°C
Alkalinity as $CaCO_3$	1	2	3	0	mg/L
Turbidity	1	1	1	2	NTU
Volume purged	2.5	2.5	0.54	2.6	well volume
Sampling code					
Synchronous water level	206.3 (09/20/96)	205.5 (03/17/97)	204.0 (09/16/97)	205.1 (03/17/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	4.1	6.1	6.5	4.6	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	4.4	11	***130***	8.3	1	JE	µg/L	WA	0
		Nickel, total recoverable	2.8	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<2.0	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	<2.0	<3.0	<5.0	<5.0	1		µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<20		52				µg/L		
		Chloride	2,600		2,300				µg/L		
		Chromium, total recoverable	<4.0		1.0				µg/L		
		Cobalt, total recoverable	<4.0		<5.0				µg/L		
		Copper, total recoverable	57		500				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	2.7		3.2				µg/L		
		Mercury, total recoverable	0.069		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	550		99				µg/L		
		Sodium, total recoverable	1,700		1,500				µg/L		
		Sulfate	1,100		<5,000				µg/L		
		Total phosphates (as P)	<40		<10				µg/L		
		Uranium, total recoverable	47		<0.10				µg/L		
		Zinc, total recoverable	7.4		40				µg/L		
Radionuclides											
		Gross alpha	*5.9E-01*		*1.7E+00*				pCi/L		
		Nonvolatile beta	*8.3E-01*		*2.9E-01*				pCi/L		
		Radium, total alpha-emitting	*2.0E-01*		2.0E+00				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only. See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
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WELL SRW 2B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N103729.7 E41631.7	33.323084 °N 81.758712 °W	162.6-152.8 ft msl	320.6 ft msl	4" PVC	S	UL

SAMPLE DATE	08/16/96	02/25/97	09/02/97	02/27/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	207.6	206.5	205.2	205.6	ft msl
pH	4.8	4.4	5.0	5.0	pH
Sp. conductance	18	20	18	16	µS/cm
Water temperature	28.0	23.0	19.6	18.0	°C
Alkalinity as $CaCO_3$	1	2	2	5	mg/L
Turbidity	1	0	0	1	NTU
Volume purged	5.2	3.1	0.84	6.1	well volume
Sampling code					
Synchronous water level	207.5 (09/20/96)	206.3 (03/17/97)	205.1 (09/16/97)	206.1 (03/17/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	6.1	5.5	5.1	5.2	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	8.9	9.0	10	15	1	JE	µg/L	WA	0
		Nickel, total recoverable	1.4	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<2.0	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	<2.0	<3.0	<5.0	<5.0	1		µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	29		19				µg/L		
		Chloride	2,200		2,100				µg/L		
		Chromium, total recoverable	2.2		<3.0				µg/L		
		Cobalt, total recoverable	1.4		<5.0				µg/L		
		Copper, total recoverable	23		18				µg/L		
		Fluoride	<15		<100				µg/L		
		Manganese, total recoverable	7.8		7.0				µg/L		
		Mercury, total recoverable	0.064		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	830		150				µg/L		
		Sodium, total recoverable	1,400		1,400				µg/L		
		Sulfate	450		<5,000				µg/L		
		Total phosphates (as P)	7.5		<10				µg/L		
		Uranium, total recoverable	<20		<0.10				µg/L		
		Zinc, total recoverable	11		13				µg/L		
Radionuclides											
		Gross alpha	2.0E+00		*1.2E+00*				pCi/L		
		Nonvolatile beta	1.9E+00		*1.3E+00*				pCi/L		
		Radium, total alpha-emitting	1.2E+00		***9.7E+00***				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL SRW 14A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N102831.3 E41538.6	33.320946 °N 81.757209 °W	123.7-113.9 ft msl	327 ft msl	4" PVC	S	MCBC

SAMPLE DATE	08/15/96	02/25/97	07/30/97	03/02/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	203.5	202.3	201.4	201.8	ft msl
pH	5.2	4.4	4.6	4.8	pH
Sp. conductance	60	22	22	22	µS/cm
Water temperature	25.0	22.0	19.0	19.0	°C
Alkalinity as $CaCO_3$	0	2	2	2	mg/L
Turbidity	3	0	4	1	NTU
Volume purged	2.6	2.6	2.6	3.4	well volume
Sampling code					
Synchronous water level	203.1 (09/20/96)	202.4 (03/17/97)	200.8 (09/16/97)	202.1 (03/17/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	4.6	4.9	4.4	4.6	1	JE	µg/L	EX	0
		Cyanide	<10	<5.0	<5.0	<10	1		µg/L	EX	0
		Lead, total recoverable	3.5	7.8	6.6	7.7	1	JE	µg/L	WA	0
		Nickel, total recoverable	2.0	<5.0	<5.0	<20	1		µg/L	EX	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<10	1		µg/L	EX	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	EX	0
		1,1-Dichloroethane	<2.0	<2.0	<5.0	<5.0	1		µg/L	EX	0
		1,1-Dichloroethylene	<2.0	<2.0	<5.0	<5.0	1		µg/L	EX	0
		trans-1,2-Dichloroethylene	<2.0	<2.0	<5.0	<5.0	1		µg/L	EX	0
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	EX	0
		Tetrachloroethylene	<2.0	<1.9	<5.0	<5.0	1		µg/L	EX	0
		1,1,1-Trichloroethane	<2.0	<2.0	<5.0	<5.0	1		µg/L	EX	0
	■	Trichloroethylene	***31***	***35***	***41***	***49***	1		µg/L	EX	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<20		6.1				µg/L		
		Chloride	1,800		1,600				µg/L		
		Chromium, total recoverable	<4.0		<3.0				µg/L		
		Cobalt, total recoverable	<0.18		<5.0				µg/L		
		Copper, total recoverable	43		37				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	3.3		4.0				µg/L		
		Mercury, total recoverable	0.066		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	1,200		1,700				µg/L		
		Sodium, total recoverable	1,800		1,600				µg/L		
		Sulfate	360		<5,000				µg/L		
		Total phosphates (as P)	<30		<10				µg/L		
		Uranium, total recoverable	31		<0.10				µg/L		
		Zinc, total recoverable	5.7		5.7				µg/L		
Radionuclides											
		Gross alpha	*5.1E-01*		*7.1E-01*				pCi/L		
		Nonvolatile beta	*5.6E-01*		*1.0E-02*				pCi/L		
		Radium, total alpha-emitting	*-2.0E-01*		*6.8E+00*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL SRW 14B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N102836.1 E41548.1	33.320972 °N 81.757193 °W	162.9-153.1 ft msl	326.9 ft msl	4" PVC	S	UL

SAMPLE DATE

	08/15/96	02/25/97	07/30/97	03/02/98	
FIELD DATA					
Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	205.3	204.2	203.3	203.4	ft msl
pH	7.0	4.4	5.0	4.6	pH
Sp. conductance	60	20	20	20	µS/cm
Water temperature	25.0	22.0	19.0	18.0	°C
Alkalinity as $CaCO_3$	1	2	2	2	mg/L
Turbidity	4	1	2	1	NTU
Volume purged	3.8	3.3	2.8	2.2	well volume
Sampling code					
Synchronous water level	205.1 (09/20/96)	204.2 (03/17/97)	202.7 (09/16/97)	203.7 (03/17/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	5.3	5.1	5.0	4.6	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	***17***	13	***18***	14	1	JE	µg/L	WA	0
		Nickel, total recoverable	2.8	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<2.0	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
	■	Trichloroethylene	***16***	***17***	***15***	***16***	1		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<20		12				µg/L		
		Chloride	1,900		1,800				µg/L		
		Chromium, total recoverable	<4.0		<3.0				µg/L		
		Cobalt, total recoverable	<0.46		<5.0				µg/L		
		Copper, total recoverable	170		150				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	6.6		6.7				µg/L		
		Mercury, total recoverable	<0.20		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	920		1,200				µg/L		
		Sodium, total recoverable	1,700		1,400				µg/L		
		Sulfate	300		<5,000				µg/L		
		Total phosphates (as P)	<50		<10				µg/L		
		Uranium, total recoverable	26		<0.10				µg/L		
		Zinc, total recoverable	27		31				µg/L		
Radionuclides											
		Gross alpha	*4.4E-01*		*2.1E+00*				pCi/L		
		Nonvolatile beta	*8.1E-01*		*2.0E+00*				pCi/L		
		Radium, total alpha-emitting	3.0E-01		***5.4E+00***				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL SRW 16A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N103763.4 E42830.9	33.325117 °N 81.755620 °W	144.1-119.4 ft msl	346.8 ft msl	4" PVC	S	LL

SAMPLE DATE	08/15/96	02/25/97	07/30/97	03/02/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	214.2	213.0	211.7	210.9	ft msl
pH	12.0	11.2	10.8		pH
Sp. conductance	600	840	200		µS/cm
Water temperature	24.0	24.0	21.0		°C
Alkalinity as $CaCO_3$	300	232	63		mg/L
Turbidity	15	2	19		NTU
Volume purged	0.016	0.0	0.017	0.48	well volume
Sampling code	X	X	X		
Synchronous water level	214.1 (09/20/96)	212.6 (03/17/97)	211.4 (09/17/97)	210.6 (03/17/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	68	85	56	50	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Lead, total recoverable	10	<5.0	3.8	<47	1		µg/L	WA	0
		Nickel, total recoverable	14	9.3	4.4	4.1	1	JE	µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<5.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<2.0	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	<2.0	4.1	<5.0	<5.0	1		µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	***1,300***		***800***				µg/L		
		Chloride	1,800		1,800				µg/L		
		Chromium, total recoverable	3.0		0.60				µg/L		
		Cobalt, total recoverable	<1.0		<5.0				µg/L		
		Copper, total recoverable	17		9.9				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	9.8		6.8				µg/L		
		Mercury, total recoverable	<0.20		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	340		360				µg/L		
		Sodium, total recoverable	***7,200***		***5,100***				µg/L		
		Sulfate	840		<5,000				µg/L		
		Total phosphates (as P)	<70		64				µg/L		
		Uranium, total recoverable	<20		0.58				µg/L		
		Zinc, total recoverable	12		8.9				µg/L		
Radionuclides											
		Gross alpha	4.7E+00		*3.0E+00*				pCi/L		
		Nonvolatile beta	3.8E+00		*1.2E+00*				pCi/L		
		Radium, total alpha-emitting	1.6E+00		3.2E+00				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL SRW 16B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N103772.0 E42825.8	33.325128 °N 81.755650 °W	169.9-160.1 ft msl	346.8 ft msl	4" PVC	S	LL

SAMPLE DATE	08/15/96	02/25/97	09/02/97	03/02/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	214.7	213.7	212.3	211.2	ft msl
pH	4.0	4.2	4.0	5.6	pH
Sp. conductance	42	20	16	18	µS/cm
Water temperature	20.0	24.0	19.8	17.0	°C
Alkalinity as $CaCO_3$	1	3	0	4	mg/L
Turbidity	3	1	1	1	NTU
Volume purged	2.7	3.5	2.4	4.0	well volume
Sampling code					
Synchronous water level	214.5 (09/20/96)	213.4 (03/17/97)	212.1 (09/17/97)	211.4 (03/17/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable	5.6	5.8	6.3	6.3	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
	■	Lead, total recoverable	10	11	***27***	***17***	1	JE	µg/L	WA	0
		Nickel, total recoverable	2.6	<5.0	<5.0	<26	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
Organics											
		Chlorobenzene	<2.0	<1.4	<2.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<2.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<2.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<2.0				µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<2.0	<1.5	<2.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<2.0	<1.9	<2.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<2.5	<2.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	<2.0	<3.0	<2.0	<5.0	1		µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable	<20		63				µg/L		
		Chloride	1,800		2,400				µg/L		
		Chromium, total recoverable	<4.0		0.93				µg/L		
		Cobalt, total recoverable	<4.0		<5.0				µg/L		
		Copper, total recoverable	46		62				µg/L		
		Fluoride	<100		<100				µg/L		
		Manganese, total recoverable	10		11				µg/L		
		Mercury, total recoverable	0.11		<0.20				µg/L		
		Nitrate-nitrite as nitrogen	990		620				µg/L		
		Sodium, total recoverable	1,900		1,800				µg/L		
		Sulfate	250		<5,000				µg/L		
		Total phosphates (as P)	<50		***810***				µg/L		
		Uranium, total recoverable	29		<0.10				µg/L		
		Zinc, total recoverable	13		44				µg/L		
Radionuclides											
		Gross alpha	2.2E+00		*9.7E-01*				pCi/L		
		Nonvolatile beta	1.7E+00		2.2E+00				pCi/L		
		Radium, total alpha-emitting	6.0E-01		***5.7E+00***				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

Table D-4a. Groundwater Monitoring Results for Recovery Wells, November 1997 through February 1998

WELL RWM 1

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N102599.1 E48575.1	33.331926 °N 81.738231 °W	232.3-172.3 ft msl	364.7 ft msl	8" CS	S	

SAMPLE DATE	11/07/97	12/04/97	01/21/98	02/04/98
FIELD DATA				
Parameter	11M97	12M97	1M98	2M98
Water elevation				
pH	4.5	4.6	3.7	4.6
Sp. conductance	69	76	69	78
Water temperature	19.5	19.8	16.8	17.0
Alkalinity as $CaCO_3$	0	2	0	0
Turbidity	0	2	0	2
Volume purged				
Sampling code	C	CS	CS	CS

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	11M97	12M97	1M98	2M98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable									
		Cyanide									
		Lead, total recoverable									
		Nickel, total recoverable									
		Selenium, total recoverable									
Organics											
		Chlorobenzene	<1,000	<1,000	<500	<50	10		µg/L	WA	0
		1,1-Dichloroethane	<1,000	<1,000	<500	<50	10		µg/L	WA	0
		1,1-Dichloroethylene	<1,000	<1,000	<500	<50	10		µg/L	WA	0
		trans-1,2-Dichloroethylene	<1,000	<1,000					µg/L		
		PCB 1016			<1.0				µg/L		
		PCB 1221			<2.0				µg/L		
		PCB 1232			<1.0				µg/L		
		PCB 1242			<1.0				µg/L		
		PCB 1248			<1.0				µg/L		
		PCB 1254			<1.0				µg/L		
		PCB 1260			<1.0				µg/L		
		1,1,2,2-Tetrachloroethane	<1,000	<1,000	<500	<50	10		µg/L	WA	0
■		Tetrachloroethylene	***12,000***	***8,500***	***8,200***	***11,000***	200		µg/L	WA	2
		1,1,1-Trichloroethane	<1,000	<1,000	<500	<50	10		µg/L	WA	0
■		Trichloroethylene	***29,000***	***24,000***	***18,000***	***21,000***	200		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	11M97	12M97	1M98	2M98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable									
		Chloride									
		Chromium, total recoverable									
		Cobalt, total recoverable									
		Copper, total recoverable									
		Fluoride									
		Manganese, total recoverable									
		Mercury, total recoverable									
		Nitrate as nitrogen									
		Nitrate-nitrite as nitrogen									
		Sodium, total recoverable									
		Sulfate									
		Total phosphates (as P)									
		Uranium, total recoverable									
		Zinc, total recoverable									
Radionuclides											
		Gross alpha									
		Nonvolatile beta									
		Radium, total alpha-emitting									

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL RWM 2

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N104434.1 E49205.5	33.337012 °N 81.740141 °W	208.3-198.3 ft msl	371.3 ft msl		S	

SAMPLE DATE	11/06/97	12/08/97	01/21/98	02/04/98	
FIELD DATA					
Parameter	11M97	12M97	1M98	2M98	Unit
Water elevation		371.3	165.7	165.2	ft msl
pH	4.4	3.8	3.9	4.2	pH
Sp. conductance	130	400	110	100	µS/cm
Water temperature	19.0	11.0	18.1	17.0	°C
Alkalinity as $CaCO_3$	0	0	3	0	mg/L
Turbidity	2	2	1	1	NTU
Volume purged					well volume
Sampling code	CS	CS	C	C	

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	11M97	12M97	1M98	2M98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable									
		Cyanide									
		Lead, total recoverable									
		Nickel, total recoverable									
		Selenium, total recoverable									
Organics											
		Chlorobenzene	<500	<1,000	<500	<500	100		µg/L	WA	0
		1,1-Dichloroethane	<500	<1,000	<500	<500	100		µg/L	WA	0
		1,1-Dichloroethylene	<500	<1,000	<500	<500	100		µg/L	WA	0
		trans-1,2-Dichloroethylene	<500	<1,000					µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<500	<1,000	<500	<500	100		µg/L	WA	0
■		Tetrachloroethylene	***11,000***	***12,000***	***9,800***	***8,100***	100		µg/L	WA	2
		1,1,1-Trichloroethane	<500	<1,000	<500	<500	100		µg/L	WA	0
■		Trichloroethylene	***13,000***	***11,000***	***11,000***	***8,500***	100		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	11M97	12M97	1M98	2M98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable									
		Chloride									
		Chromium, total recoverable									
		Cobalt, total recoverable									
		Copper, total recoverable									
		Fluoride									
		Manganese, total recoverable									
		Mercury, total recoverable									
		Nitrate as nitrogen									
		Nitrate-nitrite as nitrogen									
		Sodium, total recoverable									
		Sulfate									
		Total phosphates (as P)									
		Uranium, total recoverable									
		Zinc, total recoverable									
Radionuclides											
		Gross alpha									
		Nonvolatile beta									
		Radium, total alpha-emitting									

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL RWM 3

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N104730.2 E49680.0	33.338441 °N 81.739467 °W	214.0-204.0 ft msl	377 ft msl	8" CS	S	

SAMPLE DATE	11/06/97	12/08/97	01/21/98	02/04/98

FIELD DATA

Parameter	11M97	12M97	1M98	2M98	Unit
Water elevation		310.6	213.2	213.9	ft msl
pH	4.5	3.2	3.7	4.4	pH
Sp. conductance	46	1000	53	52	µS/cm
Water temperature	18.4	11.0	18.1	16.0	°C
Alkalinity as $CaCO_3$	0	0	0	0	mg/L
Turbidity	2	3	0	0	NTU
Volume purged					well volume
Sampling code	CS	C	C	C	

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	11M97	12M97	1M98	2M98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable									
		Cyanide									
		Lead, total recoverable									
		Nickel, total recoverable									
		Selenium, total recoverable									
Organics											
		Chlorobenzene	<250	<250	<130	<100	20		µg/L	WA	0
		1,1-Dichloroethane	<250	<250	<130	<100	20		µg/L	WA	0
		1,1-Dichloroethylene	<250	<250	<130	<100	20		µg/L	WA	0
		trans-1,2-Dichloroethylene	<250	<250					µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<250	<250	<130	<100	20		µg/L	WA	0
	■	Tetrachloroethylene	***1,100***	***1,100***	***870***	***1,000***	20		µg/L	WA	2
		1,1,1-Trichloroethane	<250	<250	<130	<100	20		µg/L	WA	0
	■	Trichloroethylene	***3,900***	***4,600***	***3,000***	***3,400***	20		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	11M97	12M97	1M98	2M98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable									
		Chloride									
		Chromium, total recoverable									
		Cobalt, total recoverable									
		Copper, total recoverable									
		Fluoride									
		Manganese, total recoverable									
		Mercury, total recoverable									
		Nitrate as nitrogen									
		Nitrate-nitrite as nitrogen									
		Sodium, total recoverable									
		Sulfate									
		Total phosphates (as P)									
		Uranium, total recoverable									
		Zinc, total recoverable									
Radionuclides											
		Gross alpha									
		Nonvolatile beta									
		Radium, total alpha-emitting									

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL RWM 4

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N103719.3 E48948.2	33.335012 °N 81.739427 °W	211.9-201.6 ft msl	366.5 ft msl	8" CS	S	

SAMPLE DATE	11/07/97	12/04/97	01/23/98	02/04/98

FIELD DATA

Parameter	11M97	12M97	1M98	2M98	Unit
Water elevation	202.9	202.9	205.6	208.4	ft msl
pH	4.7	5.4	4.6	5.0	pH
Sp. conductance	22	28	64	20	µS/cm
Water temperature	20.0	19.5	16.0	16.0	°C
Alkalinity as $CaCO_3$	0	5	1	0	mg/L
Turbidity	0	3	4	1	NTU
Volume purged		0.0052	0.0		well volume
Sampling code	C	C	C	C	

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	11M97	12M97	1M98	2M98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable									
		Cyanide									
		Lead, total recoverable									
		Nickel, total recoverable									
		Selenium, total recoverable									
Organics											
		Chlorobenzene	<250	<250	<250	<250	50		µg/L	WA	0
		1,1-Dichloroethane	<250	<250	<250	<250	50		µg/L	WA	0
		1,1-Dichloroethylene	<250	<250	<250	<250	50		µg/L	WA	0
		trans-1,2-Dichloroethylene	<250	<250					µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<250	<250	<250	<250	50		µg/L	WA	0
	■	Tetrachloroethylene	***690***	***510***	***1,100***	***590***	50		µg/L	WA	2
		1,1,1-Trichloroethane	<250	<250	<250	<250	50		µg/L	WA	0
	■	Trichloroethylene	***6,900***	***6,400***	***5,500***	***5,300***	50		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	11M97	12M97	1M98	2M98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable									
		Chloride									
		Chromium, total recoverable									
		Cobalt, total recoverable									
		Copper, total recoverable									
		Fluoride									
		Manganese, total recoverable									
		Mercury, total recoverable									
		Nitrate as nitrogen									
		Nitrate-nitrite as nitrogen									
		Sodium, total recoverable									
		Sulfate									
		Total phosphates (as P)									
		Uranium, total recoverable									
		Zinc, total recoverable									
Radionuclides											
		Gross alpha									
		Nonvolatile beta									
		Radium, total alpha-emitting									

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL RWM 5

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N103502.2 E49628.0	33.335642 °N 81.737215 °W	216.8-206.4 ft msl	366.9 ft msl	8" CS	S	

SAMPLE DATE	11/06/97	12/08/97	01/23/98	02/04/98

FIELD DATA

Parameter	11M97	12M97	1M98	2M98	Unit
Water elevation	207.5	310.4	209.6	214.8	ft msl
pH	4.9	4.8	3.8	4.8	pH
Sp. conductance	27	84	100	24	µS/cm
Water temperature	18.9	1.3	17.0	17.0	°C
Alkalinity as $CaCO_3$	0	1	0	0	mg/L
Turbidity	0	3	3	1	NTU
Volume purged			0.0		well volume
Sampling code	C	C	C	C	

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	11M97	12M97	1M98	2M98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable									
		Cyanide									
		Lead, total recoverable									
		Nickel, total recoverable									
		Selenium, total recoverable									
Organics											
		Chlorobenzene	<50	<50	<25	<50	10		µg/L	WA	0
		1,1-Dichloroethane	<50	<50	<25	<50	10		µg/L	WA	0
		1,1-Dichloroethylene	<50	<50	<25	<50	10		µg/L	WA	0
		trans-1,2-Dichloroethylene	<50	<50					µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<50	<50	<25	<50	10		µg/L	WA	0
■		Tetrachloroethylene	***440***	***570***	***590***	***440***	10		µg/L	WA	2
		1,1,1-Trichloroethane	<50	<50	<25	<50	10		µg/L	WA	0
■		Trichloroethylene	***1,200***	***540***	***450***	***1,200***	10		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	11M97	12M97	1M98	2M98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable									
		Chloride									
		Chromium, total recoverable									
		Cobalt, total recoverable									
		Copper, total recoverable									
		Fluoride									
		Manganese, total recoverable									
		Mercury, total recoverable									
		Nitrate as nitrogen									
		Nitrate-nitrite as nitrogen									
		Sodium, total recoverable									
		Sulfate									
		Total phosphates (as P)									
		Uranium, total recoverable									
		Zinc, total recoverable									
Radionuclides											
		Gross alpha									
		Nonvolatile beta									
		Radium, total alpha-emitting									

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL RWM 6

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N102001.5 E50107.4	33.333107 °N 81.733033 °W	218.7-208.4 ft msl	349.1 ft msl	8" CS	S	

SAMPLE DATE 11/07/97 12/08/97 01/22/98 02/04/98

FIELD DATA

Parameter	11M97	12M97	1M98	2M98	Unit
Water elevation	205.5	174.5	192.4	192.2	ft msl
pH	4.7	3.6	4.9	4.8	pH
Sp. conductance	27	320	31	50	µS/cm
Water temperature	19.0	12.0	17.2	17.0	°C
Alkalinity as $CaCO_3$	0	0		9	mg/L
Turbidity	0	1	1	0	NTU
Volume purged					well volume
Sampling code	C	C	C	C	

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	11M97	12M97	1M98	2M98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable									
		Cyanide									
		Lead, total recoverable									
		Nickel, total recoverable									
		Selenium, total recoverable									
Organics											
		Chlorobenzene	<130	<1,000	<130	<130	25		µg/L	WA	0
		1,1-Dichloroethane	<130	<1,000	<130	<130	25		µg/L	WA	0
		1,1-Dichloroethylene	<130	<1,000	<130	<130	25		µg/L	WA	0
		trans-1,2-Dichloroethylene	<130	<1,000					µg/L		
		PCB 1016			<1.0				µg/L		
		PCB 1221			<2.0				µg/L		
		PCB 1232			<1.0				µg/L		
		PCB 1242			<1.0				µg/L		
		PCB 1248			<1.0				µg/L		
		PCB 1254			<1.0				µg/L		
		PCB 1260			<1.0				µg/L		
		1,1,2,2-Tetrachloroethane	<130	<1,000	<130	<130	25		µg/L	WA	0
	■	Tetrachloroethylene	***3,700***	***9,100***	***3,600***	***3,600***	25		µg/L	WA	2
		1,1,1-Trichloroethane	<130	<1,000	<130	<130	25		µg/L	WA	0
	■	Trichloroethylene	***3,400***	***6,500***	***2,800***	***2,900***	25		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	11M97	12M97	1M98	2M98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable									
		Chloride									
		Chromium, total recoverable									
		Cobalt, total recoverable									
		Copper, total recoverable									
		Fluoride									
		Manganese, total recoverable									
		Mercury, total recoverable									
		Nitrate as nitrogen									
		Nitrate-nitrite as nitrogen									
		Sodium, total recoverable									
		Sulfate									
		Total phosphates (as P)									
		Uranium, total recoverable									
		Zinc, total recoverable									
Radionuclides											
		Gross alpha									
		Nonvolatile beta									
		Radium, total alpha-emitting									

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL RWM 7

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N101904.6 E49449.5	33.331819 °N 81.734577 °W	216.3-206.0 ft msl	349 ft msl	8" CS	S	

SAMPLE DATE	11/07/97	12/08/97	01/21/98	02/04/98

FIELD DATA

Parameter	11M97	12M97	1M98	2M98	Unit
Water elevation	196.2	192.9	199.1	199.7	ft msl
pH	4.2	3.0	3.5	3.2	pH
Sp. conductance	62	400	69	900	µS/cm
Water temperature	20.5	13.0	17.9	12.7	°C
Alkalinity as $CaCO_3$	0	0	0	0	mg/L
Turbidity	0	2	1	3	NTU
Volume purged					well volume
Sampling code	C	C	C	C	

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	11M97	12M97	1M98	2M98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable									
		Cyanide									
		Lead, total recoverable									
		Nickel, total recoverable									
		Selenium, total recoverable									
Organics											
		Chlorobenzene	<250	<250	<250	<250	50		µg/L	WA	0
		1,1-Dichloroethane	<250	<250	<250	<250	50		µg/L	WA	0
		1,1-Dichloroethylene	<250	<250	<250	<250	50		µg/L	WA	0
		trans-1,2-Dichloroethylene	<250	<250					µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<250	<250	<250	<250	50		µg/L	WA	0
	■	Tetrachloroethylene	***8,400***	***5,100***	***4,800***	***6,300***	50		µg/L	WA	2
		1,1,1-Trichloroethane	<250	<250	<250	<250	50		µg/L	WA	0
	■	Trichloroethylene	***7,700***	***3,000***	***4,400***	***5,100***	50		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	11M97	12M97	1M98	2M98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable									
		Chloride									
		Chromium, total recoverable									
		Cobalt, total recoverable									
		Copper, total recoverable									
		Fluoride									
		Manganese, total recoverable									
		Mercury, total recoverable									
		Nitrate as nitrogen									
		Nitrate-nitrite as nitrogen									
		Sodium, total recoverable									
		Sulfate									
		Total phosphates (as P)									
		Uranium, total recoverable									
		Zinc, total recoverable									
Radionuclides											
		Gross alpha									
		Nonvolatile beta									
		Radium, total alpha-emitting									

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL RWM 8

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N101948.2 E47353.3	33.328492 °N 81.740182 °W	197.2-186.9 ft msl	348.3 ft msl	8" CS	S	

SAMPLE DATE 11/07/97 12/04/97 01/23/98 02/04/98

FIELD DATA

Parameter	11M97	12M97	1M98	2M98	Unit
Water elevation	200.4	200.5	202.4	203.4	ft msl
pH	4.9	4.8	4.0	3.7	pH
Sp. conductance	97	100	420	230	µS/cm
Water temperature	20.0	20.1	17.0	13.5	°C
Alkalinity as $CaCO_3$	0	2	0	0	mg/L
Turbidity	1	2	2	4	NTU
Volume purged					well volume
Sampling code	C	C	C	C	

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	11M97	12M97	1M98	2M98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable									
		Cyanide									
		Lead, total recoverable									
		Nickel, total recoverable									
		Selenium, total recoverable									
Organics											
		Chlorobenzene	<50	<50	<50	<50	10		µg/L	WA	0
		1,1-Dichloroethane	<50	<50	<50	<50	10		µg/L	WA	0
		1,1-Dichloroethylene	<50	<50	<50	<50	10		µg/L	WA	0
		trans-1,2-Dichloroethylene	<50	<50					µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<50	<50	<50	<50	10		µg/L	WA	0
	■	Tetrachloroethylene	***480***	***410***	***1,300***	***570***	10		µg/L	WA	2
		1,1,1-Trichloroethane	<50	<50	<50	<50	10		µg/L	WA	0
	■	Trichloroethylene	***980***	***980***	***1,800***	***990***	10		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	11M97	12M97	1M98	2M98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable									
		Chloride									
		Chromium, total recoverable									
		Cobalt, total recoverable									
		Copper, total recoverable									
		Fluoride									
		Manganese, total recoverable									
		Mercury, total recoverable									
		Nitrate as nitrogen									
		Nitrate-nitrite as nitrogen									
		Sodium, total recoverable									
		Sulfate									
		Total phosphates (as P)									
		Uranium, total recoverable									
		Zinc, total recoverable									
Radionuclides											
		Gross alpha									
		Nonvolatile beta									
		Radium, total alpha-emitting									

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL RWM 9

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N104099.8 E50400.0	33.338224 °N 81.736345 °W	220.6-210.2 ft msl	380.6 ft msl	8" CS	S	

SAMPLE DATE	11/06/97	12/03/97	01/21/98	02/06/98

FIELD DATA

Parameter	11M97	12M97	1M98	2M98	Unit
Water elevation	218.5	219.7	218.6		ft msl
pH	5.1	4.4	4.3		pH
Sp. conductance	49	52	49		µS/cm
Water temperature	18.2	20.0	18.1		°C
Alkalinity as $CaCO_3$	1	1	3		mg/L
Turbidity	0	3	0		NTU
Volume purged					well volume
Sampling code	C	C	C		

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	11M97	12M97	1M98	2M98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable									
		Cyanide									
		Lead, total recoverable									
		Nickel, total recoverable									
		Selenium, total recoverable									
Organics											
		Chlorobenzene	<5.0	<5.0	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<5.0	<5.0	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<5.0	<5.0	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<5.0	<5.0					µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<5.0	<5.0	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	2.7	2.3	2.8	2.9	1	JE	µg/L	WA	1
		1,1,1-Trichloroethane	<5.0	<5.0	<5.0	<5.0	1		µg/L	WA	0
■		Trichloroethylene	***140***	***160***	***110***	***140***	1		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	11M97	12M97	1M98	2M98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable									
		Chloride									
		Chromium, total recoverable									
		Cobalt, total recoverable									
		Copper, total recoverable									
		Fluoride									
		Manganese, total recoverable									
		Mercury, total recoverable									
		Nitrate as nitrogen									
		Nitrate-nitrite as nitrogen									
		Sodium, total recoverable									
		Sulfate									
		Total phosphates (as P)									
		Uranium, total recoverable									
		Zinc, total recoverable									
Radionuclides											
		Gross alpha									
		Nonvolatile beta									
		Radium, total alpha-emitting									

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL RWM 10

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N102000.9 E48244.1	33.330063 °N 81.737938 °W	215.5-205.1 ft msl	355.5 ft msl	8" CS	S	

SAMPLE DATE	11/07/97	12/04/97

FIELD DATA

Parameter	11M97	12M97	1M98	2M98	Unit
Water elevation	175.3	176.4			ft msl
pH	4.7	3.6			pH
Sp. conductance	71	180			µS/cm
Water temperature	20.0	20.2			°C
Alkalinity as $CaCO_3$	0	0			mg/L
Turbidity	0	2			NTU
Volume purged					well volume
Sampling code	C	C			

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	11M97	12M97	1M98	2M98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable									
		Cyanide									
		Lead, total recoverable									
		Nickel, total recoverable									
		Selenium, total recoverable									
Organics											
		Chlorobenzene	<250	<250					µg/L		
		1,1-Dichloroethane	<250	<250					µg/L		
		1,1-Dichloroethylene	<250	<250					µg/L		
		trans-1,2-Dichloroethylene	<250	<250					µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<250	<250					µg/L		
		Tetrachloroethylene	***7,500***	***4,800***					µg/L		
		1,1,1-Trichloroethane	<250	<250					µg/L		
		Trichloroethylene	***5,500***	***4,500***					µg/L		

Monitoring Constituents

H	ST	Parameter	11M97	12M97	1M98	2M98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable									
		Chloride									
		Chromium, total recoverable									
		Cobalt, total recoverable									
		Copper, total recoverable									
		Fluoride									
		Manganese, total recoverable									
		Mercury, total recoverable									
		Nitrate as nitrogen									
		Nitrate-nitrite as nitrogen									
		Sodium, total recoverable									
		Sulfate									
		Total phosphates (as P)									
		Uranium, total recoverable									
		Zinc, total recoverable									
Radionuclides											
		Gross alpha									
		Nonvolatile beta									
		Radium, total alpha-emitting									

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL RWM 11

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N104875.0 E50400.2	33.339938 °N 81.737852 °W	214.6-204.2 ft msl	383.3 ft msl	8" CS	S	

SAMPLE DATE	11/06/97	12/03/97	01/21/98	02/06/98

FIELD DATA

Parameter	11M97	12M97	1M98	2M98	Unit
Water elevation	209.5	210.3	211.6		ft msl
pH	4.5	4.0	4.1		pH
Sp. conductance	29	46	29		µS/cm
Water temperature	19.3	20.0	18.7		°C
Alkalinity as $CaCO_3$	0	1	0		mg/L
Turbidity	0	5	1		NTU
Volume purged					well volume
Sampling code	C	C	C		

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	11M97	12M97	1M98	2M98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable									
		Cyanide									
		Lead, total recoverable									
		Nickel, total recoverable									
		Selenium, total recoverable									
Organics											
		Chlorobenzene	<50	<50	<25	<25	5		µg/L	WA	0
		1,1-Dichloroethane	<50	<50	<25	<25	5		µg/L	WA	0
		1,1-Dichloroethylene	<50	<50	<25	<25	5		µg/L	WA	0
		trans-1,2-Dichloroethylene	<50	<50					µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<50	<50	<25	<25	5		µg/L	WA	0
■		Tetrachloroethylene	***65***	<50	***56***	***55***	5		µg/L	WA	2
		1,1,1-Trichloroethane	<50	<50	<25	<25	5		µg/L	WA	0
■		Trichloroethylene	***1,000***	***1,000***	***770***	***820***	5		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	11M97	12M97	1M98	2M98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable									
		Chloride									
		Chromium, total recoverable									
		Cobalt, total recoverable									
		Copper, total recoverable									
		Fluoride									
		Manganese, total recoverable									
		Mercury, total recoverable									
		Nitrate as nitrogen									
		Nitrate-nitrite as nitrogen									
		Sodium, total recoverable									
		Sulfate									
		Total phosphates (as P)									
		Uranium, total recoverable									
		Zinc, total recoverable									
Radionuclides											
		Gross alpha									
		Nonvolatile beta									
		Radium, total alpha-emitting									

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL RWM 12

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N106879.2 E52500.1	33.347797 °N 81.736222 °W	210.4-189.9 ft msl	359.4 ft msl	6" CS/SS	S	

SAMPLE DATE	11/06/97	12/03/97	01/23/98	02/04/98

FIELD DATA

Parameter	11M97	12M97	1M98	2M98	Unit
Water elevation	210.6	210.8	210.6	211.1	ft msl
pH	4.2	3.6	3.8	4.1	pH
Sp. conductance	53	60	100	160	µS/cm
Water temperature	18.4	20.0	17.0	16.4	°C
Alkalinity as $CaCO_3$	0	0	0	0	mg/L
Turbidity	1	5	1	1	NTU
Volume purged			0.0		well volume
Sampling code	C	C	C		

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	11M97	12M97	1M98	2M98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable									
		Cyanide									
		Lead, total recoverable									
		Nickel, total recoverable									
		Selenium, total recoverable									
Organics											
		Chlorobenzene	<1.0	<100	<50	<50	10		µg/L	WA	0
		1,1-Dichloroethane	<1.0	<100	<50	<50	10		µg/L	WA	0
		1,1-Dichloroethylene	<1.0	<100	<50	<50	10		µg/L	WA	0
		trans-1,2-Dichloroethylene	<1.0	<100					µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<1.0	<100	<50	<50	10		µg/L	WA	0
	■	Tetrachloroethylene	***15***	<100	***21***	***16***	10	JE	µg/L	WA	2
		1,1,1-Trichloroethane	<1.0	<100	<50	<50	10		µg/L	WA	0
	■	Trichloroethylene	***2,100***	***1,800***	***2,000***	***2,400***	10		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	11M97	12M97	1M98	2M98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable									
		Chloride									
		Chromium, total recoverable									
		Cobalt, total recoverable									
		Copper, total recoverable									
		Fluoride									
		Manganese, total recoverable									
		Mercury, total recoverable									
		Nitrate as nitrogen									
		Nitrate-nitrite as nitrogen									
		Sodium, total recoverable									
		Sulfate									
		Total phosphates (as P)									
		Uranium, total recoverable									
		Zinc, total recoverable									
Radionuclides											
		Gross alpha									
		Nonvolatile beta									
		Radium, total alpha-emitting									

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL RWM 13B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N105803.3 E53516.3	33.347079 °N 81.731452 °W	138.2-113.0 ft msl	336.2 ft msl	6" CS	O	

SAMPLE DATE	11/06/97	12/08/97	01/22/98	02/04/98

FIELD DATA

Parameter	11M97	12M97	1M98	2M98	Unit
Water elevation		198.8		199.2	ft msl
pH	4.8	3.6	5.5	3.9	pH
Sp. conductance	26	140	25	49	µS/cm
Water temperature	17.2	17.0	18.0	15.5	°C
Alkalinity as $CaCO_3$	1	0	0	0	mg/L
Turbidity	1	2	1	2	NTU
Volume purged		0.0			well volume
Sampling code	C	C	C	C	

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	11M97	12M97	1M98	2M98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable									
		Cyanide									
		Lead, total recoverable									
		Nickel, total recoverable									
		Selenium, total recoverable									
Organics											
		Chlorobenzene	<130	<130	<50	<50	10		µg/L	WA	0
		1,1-Dichloroethane	<130	<130	<50	<50	10		µg/L	WA	0
		1,1-Dichloroethylene	<130	<130	<50	<50	10		µg/L	WA	0
		trans-1,2-Dichloroethylene	<130	<130					µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<130	<130	<50	<50	10		µg/L	WA	0
	■	Tetrachloroethylene	<130	<130	***21***	***14***	10	JE	µg/L	WA	2
		1,1,1-Trichloroethane	<130	<130	<50	<50	10		µg/L	WA	0
	■	Trichloroethylene	***1,900***	***2,100***	***1,700***	***1,800***	10		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	11M97	12M97	1M98	2M98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable									
		Chloride									
		Chromium, total recoverable									
		Cobalt, total recoverable									
		Copper, total recoverable									
		Fluoride									
		Manganese, total recoverable									
		Mercury, total recoverable									
		Nitrate as nitrogen									
		Nitrate-nitrite as nitrogen									
		Sodium, total recoverable									
		Sulfate									
		Total phosphates (as P)									
		Uranium, total recoverable									
		Zinc, total recoverable									
Radionuclides											
		Gross alpha									
		Nonvolatile beta									
		Radium, total alpha-emitting									

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL RWM 13C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N105809.7 E53502.2	33.347070 °N 81.731501 °W	173.4-153.3 ft msl	336.4 ft msl	6" CS	O	

SAMPLE DATE	11/06/97	12/08/97	01/22/98	02/04/98

FIELD DATA

Parameter	11M97	12M97	1M98	2M98	Unit
Water elevation		205.9		206.6	ft msl
pH	4.9	3.8	4.9	3.3	pH
Sp. conductance	35	960	33	360	µS/cm
Water temperature	18.2	17.0	17.6	15.2	°C
Alkalinity as $CaCO_3$	0	0	0	0	mg/L
Turbidity	2	7	1	5	NTU
Volume purged		0.0			well volume
Sampling code	C	C	C	C	

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	11M97	12M97	1M98	2M98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable									
		Cyanide									
		Lead, total recoverable									
		Nickel, total recoverable									
		Selenium, total recoverable									
Organics											
		Chlorobenzene	<250	<250	<50	<100	20		µg/L	WA	0
		1,1-Dichloroethane	<250	<250	<50	<100	20		µg/L	WA	0
		1,1-Dichloroethylene	<250	<250	<50	<100	20		µg/L	WA	0
		trans-1,2-Dichloroethylene	<250	<250					µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<250	<250	<50	<100	20		µg/L	WA	0
	■	Tetrachloroethylene	***55***	<250	***45***	***29***	20	JE	µg/L	WA	2
		1,1,1-Trichloroethane	<250	<250	<50	<100	20		µg/L	WA	0
	■	Trichloroethylene	***2,100***	***2,500***	***2,100***	***1,900***	20		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	11M97	12M97	1M98	2M98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable									
		Chloride									
		Chromium, total recoverable									
		Cobalt, total recoverable									
		Copper, total recoverable									
		Fluoride									
		Manganese, total recoverable									
		Mercury, total recoverable									
		Nitrate as nitrogen									
		Nitrate-nitrite as nitrogen									
		Sodium, total recoverable									
		Sulfate									
		Total phosphates (as P)									
		Uranium, total recoverable									
		Zinc, total recoverable									
Radionuclides											
		Gross alpha									
		Nonvolatile beta									
		Radium, total alpha-emitting									

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL RWM 14B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N106362.1 E53044.7	33.347544 °N 81.733781 °W	148.5-123.2 ft msl	351.2 ft msl	6" CS	O	

SAMPLE DATE	11/06/97	12/08/97	01/23/98	02/04/98

FIELD DATA

Parameter	11M97	12M97	1M98	2M98	Unit
Water elevation		208.2	208.4	208.8	ft msl
pH	4.5	3.4	3.8	3.1	pH
Sp. conductance	28	180	92	900	µS/cm
Water temperature	11.4	16.0	17.0	14.6	°C
Alkalinity as $CaCO_3$	0	0	0	0	mg/L
Turbidity	1	5	4	6	NTU
Volume purged		0.0	0.0		well volume
Sampling code	C	C	C	C	

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	11M97	12M97	1M98	2M98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable									
		Cyanide									
		Lead, total recoverable									
		Nickel, total recoverable									
		Selenium, total recoverable									
Organics											
		Chlorobenzene	<130	<130	<50	<50	10		µg/L	WA	0
		1,1-Dichloroethane	<130	<130	<50	<50	10		µg/L	WA	0
		1,1-Dichloroethylene	<130	<130	<50	<50	10		µg/L	WA	0
		trans-1,2-Dichloroethylene	<130	<130					µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<130	<130	<50	<50	10		µg/L	WA	0
		Tetrachloroethylene	<130	<130	***15***	<50	10		µg/L	WA	0
		1,1,1-Trichloroethane	<130	<130	<50	<50	10		µg/L	WA	0
	■	Trichloroethylene	***1,400***	***1,500***	***1,500***	***1,400***	10		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	11M97	12M97	1M98	2M98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable									
		Chloride									
		Chromium, total recoverable									
		Cobalt, total recoverable									
		Copper, total recoverable									
		Fluoride									
		Manganese, total recoverable									
		Mercury, total recoverable									
		Nitrate as nitrogen									
		Nitrate-nitrite as nitrogen									
		Sodium, total recoverable									
		Sulfate									
		Total phosphates (as P)									
		Uranium, total recoverable									
		Zinc, total recoverable									
Radionuclides											
		Gross alpha									
		Nonvolatile beta									
		Radium, total alpha-emitting									

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL RWM 14C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N106380.8 E53051.5	33.347596 °N 81.733800 °W	193.5-173.4 ft msl	351.4 ft msl	6" CS	O	

SAMPLE DATE	11/06/97	12/08/97	01/23/98	02/04/98

FIELD DATA

Parameter	11M97	12M97	1M98	2M98	Unit
Water elevation		205.8	162.2		ft msl
pH	4.7	3.8	4.0	4.3	pH
Sp. conductance	31	70	100	42	µS/cm
Water temperature	17.2	16.0	17.0	15.7	°C
Alkalinity as $CaCO_3$	0	0	0	0	mg/L
Turbidity	3	4	23	38	NTU
Volume purged		0.0	0.0		well volume
Sampling code	C	C	C	CS	

ANALYTICAL DATA

Groundwater Protection Standard

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H	ST	Parameter	11M97	12M97	1M98	2M98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable									
		Cyanide									
		Lead, total recoverable									
		Nickel, total recoverable									
		Selenium, total recoverable									
Organics											
		Chlorobenzene	<250	<250	<200	<250	50		µg/L	WA	0
		1,1-Dichloroethane	<250	<250	<200	<250	50		µg/L	WA	0
		1,1-Dichloroethylene	<250	<250	<200	<250	50		µg/L	WA	0
		trans-1,2-Dichloroethylene	<250	<250					µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<250	<250	<200	<250	50		µg/L	WA	0
		Tetrachloroethylene	<250	<250	***73***	<250	50		µg/L	WA	0
		1,1,1-Trichloroethane	100	<250	<200	<250	50		µg/L	WA	0
■		Trichloroethylene	***5,200***	***6,300***	***4,200***	***5,000***	50		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	11M97	12M97	1M98	2M98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable									
		Chloride									
		Chromium, total recoverable									
		Cobalt, total recoverable									
		Copper, total recoverable									
		Fluoride									
		Manganese, total recoverable									
		Mercury, total recoverable									
		Nitrate as nitrogen									
		Nitrate-nitrite as nitrogen									
		Sodium, total recoverable									
		Sulfate									
		Total phosphates (as P)									
		Uranium, total recoverable									
		Zinc, total recoverable									
Radionuclides											
		Gross alpha									
		Nonvolatile beta									
		Radium, total alpha-emitting									

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL RWM 15B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N107444.7 E53849.0	33.351250 °N 81.733769 °W	150.9-125.8 ft msl	369.5 ft msl	6" CS	O	

SAMPLE DATE	11/06/97	12/08/97	01/23/98	02/06/98

FIELD DATA

Parameter	11M97	12M97	1M98	2M98	Unit
Water elevation		207.1	207.3		ft msl
pH	5.1	3.0	3.8		pH
Sp. conductance	23	240	1080		µS/cm
Water temperature	17.2	16.0	17.0		°C
Alkalinity as $CaCO_3$	0	0	0		mg/L
Turbidity	2	4	10		NTU
Volume purged		0.0	0.0		well volume
Sampling code	C	C	C		

ANALYTICAL DATA

Groundwater Protection Standard

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H	ST	Parameter	11M97	12M97	1M98	2M98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable									
		Cyanide									
		Lead, total recoverable									
		Nickel, total recoverable									
		Selenium, total recoverable									
Organics											
		Chlorobenzene	<5.0	<1.0	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<5.0	<1.0	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<5.0	<1.0	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<5.0	<1.0					µg/L		
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<5.0	<1.0	<5.0	<5.0	1		µg/L	WA	0
		Tetrachloroethylene	<5.0	<1.0	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<5.0	<1.0	<5.0	<5.0	1		µg/L	WA	0
	■	Trichloroethylene	***41***	***44***	***39***	***35***	1		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	11M97	12M97	1M98	2M98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable									
		Chloride									
		Chromium, total recoverable									
		Cobalt, total recoverable									
		Copper, total recoverable									
		Fluoride									
		Manganese, total recoverable									
		Mercury, total recoverable									
		Nitrate as nitrogen									
		Nitrate-nitrite as nitrogen									
		Sodium, total recoverable									
		Sulfate									
		Total phosphates (as P)									
		Uranium, total recoverable									
		Zinc, total recoverable									
Radionuclides											
		Gross alpha									
		Nonvolatile beta									
		Radium, total alpha-emitting									

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only . See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

Table D-4b. Groundwater Monitoring Results for Recovery Wells, March though June 1998

WELL RWM 1

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N102599.1 E48575.1	33.331926 °N 81.738231 °W	232.3-172.3 ft msl	364.7 ft msl	8" CS	S	

SAMPLE DATE	03/11/98	04/17/98	05/08/98	06/08/98	
FIELD DATA					
Parameter	3M98	4M98	5M98	6M98	Unit
Water elevation			184.6		ft msl
pH	6.2	5.1	4.2	4.8	pH
Sp. conductance	73	75	68	72	µS/cm
Water temperature	16.2	19.3	18.0	21.0	°C
Alkalinity as $CaCO_3$	0	0	0	0	mg/L
Turbidity	1	1	1	0	NTU
Volume purged			0.0		well volume
Sampling code	CS	C	C	CS	

ANALYTICAL DATA

Groundwater Protection Standard

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H	ST	Parameter	3M98	4M98	5M98	6M98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable									
		Cyanide									
		Lead, total recoverable									
		Nickel, total recoverable									
		Selenium, total recoverable									
Organics											
		Chlorobenzene	<50	<250	<130	<250	50		µg/L	EX	0
		1,1-Dichloroethane	<50	<250	<130	<250	50		µg/L	EX	0
		1,1-Dichloroethylene	<50	<250	<130	<250	50		µg/L	EX	0
		trans-1,2-Dichloroethylene		<250	<130	<250	50		µg/L	EX	0
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<50	<250	<130	<250	50		µg/L	EX	0
■		Tetrachloroethylene		***13,000***	***19,000***	***13,000***	200		µg/L	EX	2
		1,1,1-Trichloroethane	<50	<250	<130	<250	50		µg/L	EX	0
■		Trichloroethylene		***25,000***	***26,000***	***22,000***	100	L	µg/L	EX	2

Monitoring Constituents

H	ST	Parameter	3M98	4M98	5M98	6M98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable									
		Chloride									
		Chromium, total recoverable									
		Cobalt, total recoverable									
		Copper, total recoverable									
		Fluoride									
		Manganese, total recoverable									
		Mercury, total recoverable									
		Nitrate as nitrogen									
		Nitrate-nitrite as nitrogen									
		Sodium, total recoverable									
		Sulfate									
		Total phosphates (as P)									
		Uranium, total recoverable									
		Zinc, total recoverable									
Radionuclides											
		Gross alpha									
		Nonvolatile beta									
		Radium, total alpha-emitting									

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only. See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL RWM 2

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N104434.1 E49205.5	33.337012 °N 81.740141 °W	208.3-198.3 ft msl	371.3 ft msl		S	

SAMPLE DATE	03/11/98	04/17/98	05/08/98	06/08/98

FIELD DATA

Parameter	3M98	4M98	5M98	6M98	Unit
Water elevation			160.8		ft msl
pH	6.5	4.3	4.4	4.7	pH
Sp. conductance	98	80	94	96	µS/cm
Water temperature	16.4	20.1	20.0	21.7	°C
Alkalinity as $CaCO_3$	0	0	0	0	mg/L
Turbidity	1	1	2	1	NTU
Volume purged			0.0		well volume
Sampling code	C	C	C	CS	

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3M98	4M98	5M98	6M98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable									
		Cyanide									
		Lead, total recoverable									
		Nickel, total recoverable									
		Selenium, total recoverable									
Organics											
		Chlorobenzene	<500	<250	<130	<500	100		µg/L	EX	0
		1,1-Dichloroethane	<500	<250	<130	<500	100		µg/L	EX	0
		1,1-Dichloroethylene	<500	<250	<130	<500	100		µg/L	EX	0
		trans-1,2-Dichloroethylene		<250	<130	<500	100		µg/L	EX	0
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<500	<250	<130	<500	100		µg/L	EX	0
■		Tetrachloroethylene	***12,000***	***13,000***	***14,000***	***15,000***	100		µg/L	EX	2
		1,1,1-Trichloroethane	<500	<250	<130	<500	100		µg/L	EX	0
■		Trichloroethylene	***14,000***	***14,000***	***13,000***	***14,000***	100	J1	µg/L	EX	2

Monitoring Constituents

H	ST	Parameter	3M98	4M98	5M98	6M98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable									
		Chloride									
		Chromium, total recoverable									
		Cobalt, total recoverable									
		Copper, total recoverable									
		Fluoride									
		Manganese, total recoverable									
		Mercury, total recoverable									
		Nitrate as nitrogen									
		Nitrate-nitrite as nitrogen									
		Sodium, total recoverable									
		Sulfate									
		Total phosphates (as P)									
		Uranium, total recoverable									
		Zinc, total recoverable									
Radionuclides											
		Gross alpha									
		Nonvolatile beta									
		Radium, total alpha-emitting									

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only. See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL RWM 3

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N104730.2 E49680.0	33.338441 °N 81.739467 °W	214.0-204.0 ft msl	377 ft msl	8" CS	S	

SAMPLE DATE	03/11/98	04/17/98	05/08/98	06/08/98

FIELD DATA

Parameter	3M98	4M98	5M98	6M98	Unit
Water elevation	209.5		208.9		ft msl
pH	5.9	4.7	4.6	4.8	pH
Sp. conductance	48	49	46	48	µS/cm
Water temperature	15.7	19.9	20.0	21.6	°C
Alkalinity as $CaCO_3$	0	0	0	0	mg/L
Turbidity	2	2	1	1	NTU
Volume purged			0.0		well volume
Sampling code	C	C	C	CS	

ANALYTICAL DATA

Groundwater Protection Standard

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H	ST	Parameter	3M98	4M98	5M98	6M98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable									
		Cyanide									
		Lead, total recoverable									
		Nickel, total recoverable									
		Selenium, total recoverable									
Organics											
		Chlorobenzene	<50	<50	<50	<50	10		µg/L	EX	0
		1,1-Dichloroethane	<50	<50	<50	<50	10		µg/L	EX	0
		1,1-Dichloroethylene	<50	<50	<50	<50	10		µg/L	EX	0
		trans-1,2-Dichloroethylene		<50	<50	<50	10		µg/L	EX	0
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<50	<50	<50	<50	10		µg/L	EX	0
	■	Tetrachloroethylene	***1,200***	***1,300***	***1,400***	***1,200***	10		µg/L	EX	2
		1,1,1-Trichloroethane	<50	<50	<50	<50	10		µg/L	EX	0
	■	Trichloroethylene		***4,400***	***4,300***	***3,700***	50	J1	µg/L	EX	2

Monitoring Constituents

H	ST	Parameter	3M98	4M98	5M98	6M98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable									
		Chloride									
		Chromium, total recoverable									
		Cobalt, total recoverable									
		Copper, total recoverable									
		Fluoride									
		Manganese, total recoverable									
		Mercury, total recoverable									
		Nitrate as nitrogen									
		Nitrate-nitrite as nitrogen									
		Sodium, total recoverable									
		Sulfate									
		Total phosphates (as P)									
		Uranium, total recoverable									
		Zinc, total recoverable									
Radionuclides											
		Gross alpha									
		Nonvolatile beta									
		Radium, total alpha-emitting									

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only. See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL RWM 4

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N103719.3 E48948.2	33.335012 °N 81.739427 °W	211.9-201.6 ft msl	366.5 ft msl	8" CS	S	

SAMPLE DATE	03/11/98	04/17/98	05/07/98	06/08/98

FIELD DATA

Parameter	3M98	4M98	5M98	6M98	Unit
Water elevation	203.0	203.1	203.2	203.2	ft msl
pH	7.3	7.1	3.9	5.1	pH
Sp. conductance	24	34	25	26	µS/cm
Water temperature	16.8	19.5	20.7	22.2	°C
Alkalinity as $CaCO_3$	0	0	0	0	mg/L
Turbidity	1	0	0	1	NTU
Volume purged					well volume
Sampling code	C	C	C	C	

ANALYTICAL DATA

Groundwater Protection Standard

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H	ST	Parameter	3M98	4M98	5M98	6M98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable									
		Cyanide									
		Lead, total recoverable									
		Nickel, total recoverable									
		Selenium, total recoverable									
Organics											
		Chlorobenzene	<50	<250	<250	<250	50		µg/L	EX	0
		1,1-Dichloroethane	<50	<250	<250	<250	50		µg/L	EX	0
		1,1-Dichloroethylene	<50	<250	<250	<250	50		µg/L	EX	0
		trans-1,2-Dichloroethylene		<250	<250	<250	50		µg/L	EX	0
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<50	<250	<250	<250	50		µg/L	EX	0
	■	Tetrachloroethylene	***810***	***830***	***860***	***860***	50		µg/L	EX	2
		1,1,1-Trichloroethane	<50	<250	<250	<250	50		µg/L	EX	0
	■	Trichloroethylene		***7,000***	***6,600***	***5,900***	50	J1	µg/L	EX	2

Monitoring Constituents

H	ST	Parameter	3M98	4M98	5M98	6M98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable									
		Chloride									
		Chromium, total recoverable									
		Cobalt, total recoverable									
		Copper, total recoverable									
		Fluoride									
		Manganese, total recoverable									
		Mercury, total recoverable									
		Nitrate as nitrogen									
		Nitrate-nitrite as nitrogen									
		Sodium, total recoverable									
		Sulfate									
		Total phosphates (as P)									
		Uranium, total recoverable									
		Zinc, total recoverable									
Radionuclides											
		Gross alpha									
		Nonvolatile beta									
		Radium, total alpha-emitting									

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only. See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL RWM 5

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N103502.2 E49628.0	33.335642 °N 81.737215 °W	216.8-206.4 ft msl	366.9 ft msl	8" CS	S	

SAMPLE DATE	03/11/98	04/17/98	05/08/98	06/08/98	
FIELD DATA					
Parameter	3M98	4M98	5M98	6M98	Unit
Water elevation	207.5	207.9	208.7	207.6	ft msl
pH	5.1	4.8	4.8	4.8	pH
Sp. conductance	26	29	24	30	µS/cm
Water temperature	17.2	19.9	21.0	23.8	°C
Alkalinity as $CaCO_3$	0	0	0	0	mg/L
Turbidity	2	1	2	1	NTU
Volume purged			0.0		well volume
Sampling code	C	C	C	C	

ANALYTICAL DATA

Groundwater Protection Standard

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H	ST	Parameter	3M98	4M98	5M98	6M98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable									
		Cyanide									
		Lead, total recoverable									
		Nickel, total recoverable									
		Selenium, total recoverable									
Organics											
		Chlorobenzene	<50	<50	<50	<50	10		µg/L	EX	0
		1,1-Dichloroethane	<50	<50	<50	<50	10		µg/L	EX	0
		1,1-Dichloroethylene	<50	<50	<50	<50	10		µg/L	EX	0
		trans-1,2-Dichloroethylene		<50	<50	<50	10		µg/L	EX	0
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<50	<50	<50	<50	10		µg/L	EX	0
	■	Tetrachloroethylene	***390***	***490***	***520***	***460***	10		µg/L	EX	2
		1,1,1-Trichloroethane	<50	<50	<50	<50	10		µg/L	EX	0
	■	Trichloroethylene	***1,400***	***1,600***	***1,400***	***1,200***	10	J1	µg/L	EX	2

Monitoring Constituents

H	ST	Parameter	3M98	4M98	5M98	6M98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable									
		Chloride									
		Chromium, total recoverable									
		Cobalt, total recoverable									
		Copper, total recoverable									
		Fluoride									
		Manganese, total recoverable									
		Mercury, total recoverable									
		Nitrate as nitrogen									
		Nitrate-nitrite as nitrogen									
		Sodium, total recoverable									
		Sulfate									
		Total phosphates (as P)									
		Uranium, total recoverable									
		Zinc, total recoverable									
Radionuclides											
		Gross alpha									
		Nonvolatile beta									
		Radium, total alpha-emitting									

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only. See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL RWM 6

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N102001.5 E50107.4	33.333107 °N 81.733033 °W	218.7-208.4 ft msl	349.1 ft msl	8" CS	S	

SAMPLE DATE	03/11/98	04/17/98	05/07/98	06/08/98

FIELD DATA

Parameter	3M98	4M98	5M98	6M98	Unit
Water elevation	188.2	167.4	166.6	171.7	ft msl
pH	4.8	4.9	4.2	4.9	pH
Sp. conductance	29	30	31	30	µS/cm
Water temperature	16.7	20.5	21.5	24.0	°C
Alkalinity as $CaCO_3$	0	0	0	0	mg/L
Turbidity	1	1	0	1	NTU
Volume purged					well volume
Sampling code	C	C	C	C	

ANALYTICAL DATA

Groundwater Protection Standard

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H	ST	Parameter	3M98	4M98	5M98	6M98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable									
		Cyanide									
		Lead, total recoverable									
		Nickel, total recoverable									
		Selenium, total recoverable									
Organics											
		Chlorobenzene	<130	<250	<250	<250	50		µg/L	EX	0
		1,1-Dichloroethane	<130	<250	<250	<250	50		µg/L	EX	0
		1,1-Dichloroethylene	<130	<250	<250	<250	50		µg/L	EX	0
		trans-1,2-Dichloroethylene		<250	<250	<250	50		µg/L	EX	0
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<130	<250	<250	<250	50		µg/L	EX	0
■		Tetrachloroethylene	***3,600***	***4,000***	***4,300***	***3,200***	50		µg/L	EX	2
		1,1,1-Trichloroethane	<130	<250	<250	<250	50		µg/L	EX	0
■		Trichloroethylene	***2,700***	***3,000***	***3,100***	***2,300***	50	J1	µg/L	EX	2

Monitoring Constituents

H	ST	Parameter	3M98	4M98	5M98	6M98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable									
		Chloride									
		Chromium, total recoverable									
		Cobalt, total recoverable									
		Copper, total recoverable									
		Fluoride									
		Manganese, total recoverable									
		Mercury, total recoverable									
		Nitrate as nitrogen									
		Nitrate-nitrite as nitrogen									
		Sodium, total recoverable									
		Sulfate									
		Total phosphates (as P)									
		Uranium, total recoverable									
		Zinc, total recoverable									
Radionuclides											
		Gross alpha									
		Nonvolatile beta									
		Radium, total alpha-emitting									

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only. See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL RWM 7

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N101904.6 E49449.5	33.331819 °N 81.734577 °W	216.3-206.0 ft msl	349 ft msl	8" CS	S	

SAMPLE DATE	03/11/98	04/17/98	05/07/98	06/08/98

FIELD DATA

Parameter	3M98	4M98	5M98	6M98	Unit
Water elevation	194.0	193.2	198.2	195.9	ft msl
pH	4.3	4.5	5.7	4.8	pH
Sp. conductance	64	68	71	70	µS/cm
Water temperature	18.4	19.7	21.3	25.2	°C
Alkalinity as $CaCO_3$	0	0	0	0	mg/L
Turbidity	1	1	0	1	NTU
Volume purged					well volume
Sampling code	C	C	C	C	

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3M98	4M98	5M98	6M98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable									
		Cyanide									
		Lead, total recoverable									
		Nickel, total recoverable									
		Selenium, total recoverable									
Organics											
		Chlorobenzene	<250	<250	<250	<250	50		µg/L	EX	0
		1,1-Dichloroethane	<250	<250	<250	<250	50		µg/L	EX	0
		1,1-Dichloroethylene	<250	<250	<250	<250	50		µg/L	EX	0
		trans-1,2-Dichloroethylene		<250	<250	<250	50		µg/L	EX	0
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<250	<250	<250	<250	50		µg/L	EX	0
	■	Tetrachloroethylene	***7,300***	***8,400***	***8,700***	***6,000***	50		µg/L	EX	2
		1,1,1-Trichloroethane	<250	<250	<250	<250	50		µg/L	EX	0
	■	Trichloroethylene	***5,900***	***7,200***	***6,700***	***1,800***	50	J1	µg/L	EX	2

Monitoring Constituents

H	ST	Parameter	3M98	4M98	5M98	6M98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable									
		Chloride									
		Chromium, total recoverable									
		Cobalt, total recoverable									
		Copper, total recoverable									
		Fluoride									
		Manganese, total recoverable									
		Mercury, total recoverable									
		Nitrate as nitrogen									
		Nitrate-nitrite as nitrogen									
		Sodium, total recoverable									
		Sulfate									
		Total phosphates (as P)									
		Uranium, total recoverable									
		Zinc, total recoverable									
Radionuclides											
		Gross alpha									
		Nonvolatile beta									
		Radium, total alpha-emitting									

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only. See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL RWM 8

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N101948.2 E47353.3	33.328492 °N 81.740182 °W	197.2-186.9 ft msl	348.3 ft msl	8" CS	S	

SAMPLE DATE	03/11/98	04/17/98	05/07/98	06/08/98

FIELD DATA

Parameter	3M98	4M98	5M98	6M98	Unit
Water elevation	200.7	202.2	201.7	200.9	ft msl
pH	6.7	4.9	4.5	5.0	pH
Sp. conductance	80	98	97	96	µS/cm
Water temperature	18.7	19.6	19.5	20.2	°C
Alkalinity as $CaCO_3$	0	0	0	0	mg/L
Turbidity	1	1	0	1	NTU
Volume purged					well volume
Sampling code	C	C	C	C	

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3M98	4M98	5M98	6M98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable									
		Cyanide									
		Lead, total recoverable									
		Nickel, total recoverable									
		Selenium, total recoverable									
Organics											
		Chlorobenzene	<50	<50	<50	<50	10		µg/L	EX	0
		1,1-Dichloroethane	<50	<50	<50	<50	10		µg/L	EX	0
		1,1-Dichloroethylene	<50	<50	<50	<50	10		µg/L	EX	0
		trans-1,2-Dichloroethylene		<50	<50	<50	10		µg/L	EX	0
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<50	<50	<50	<50	10		µg/L	EX	0
	■	Tetrachloroethylene	***540***	***480***	***490***	***490***	10		µg/L	EX	2
		1,1,1-Trichloroethane	<50	<50	<50	<50	10		µg/L	EX	0
	■	Trichloroethylene	***940***	***890***	***850***	***850***	10	J1	µg/L	EX	2

Monitoring Constituents

H	ST	Parameter	3M98	4M98	5M98	6M98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable									
		Chloride									
		Chromium, total recoverable									
		Cobalt, total recoverable									
		Copper, total recoverable									
		Fluoride									
		Manganese, total recoverable									
		Mercury, total recoverable									
		Nitrate as nitrogen									
		Nitrate-nitrite as nitrogen									
		Sodium, total recoverable									
		Sulfate									
		Total phosphates (as P)									
		Uranium, total recoverable									
		Zinc, total recoverable									
Radionuclides											
		Gross alpha									
		Nonvolatile beta									
		Radium, total alpha-emitting									

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only. See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL RWM 9

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N104099.8 E50400.0	33.338224 °N 81.736345 °W	220.6-210.2 ft msl	380.6 ft msl	8" CS	S	

SAMPLE DATE	03/11/98	04/17/98	05/08/98	06/08/98

FIELD DATA

Parameter	3M98	4M98	5M98	6M98	Unit
Water elevation	217.2	216.8	217.1	216.5	ft msl
pH	5.2	4.9	5.0	5.1	pH
Sp. conductance	47	49	46	50	µS/cm
Water temperature	18.1	20.1	19.0	24.5	°C
Alkalinity as $CaCO_3$	1	1	3	1	mg/L
Turbidity	1	1	1	1	NTU
Volume purged			0.0		well volume
Sampling code	C	C	C	C	

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3M98	4M98	5M98	6M98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable									
		Cyanide									
		Lead, total recoverable									
		Nickel, total recoverable									
		Selenium, total recoverable									
Organics											
		Chlorobenzene	<5.0	<5.0	<5.0	<5.0	1		µg/L	EX	0
		1,1-Dichloroethane	<5.0	<5.0	<5.0	<5.0	1		µg/L	EX	0
		1,1-Dichloroethylene	<5.0	<5.0	<5.0	<5.0	1		µg/L	EX	0
		trans-1,2-Dichloroethylene		<5.0	<5.0	<5.0	1		µg/L	EX	0
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<5.0	<5.0	<5.0	<5.0	1		µg/L	EX	0
		Tetrachloroethylene	3.0	4.0	4.3	4.2	1	JE	µg/L	EX	1
		1,1,1-Trichloroethane	<5.0	<5.0	<5.0	<5.0	1		µg/L	EX	0
■		Trichloroethylene	***180***	***190***	***170***	***170***	1	J1	µg/L	EX	2

Monitoring Constituents

H	ST	Parameter	3M98	4M98	5M98	6M98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable									
		Chloride									
		Chromium, total recoverable									
		Cobalt, total recoverable									
		Copper, total recoverable									
		Fluoride									
		Manganese, total recoverable									
		Mercury, total recoverable									
		Nitrate as nitrogen									
		Nitrate-nitrite as nitrogen									
		Sodium, total recoverable									
		Sulfate									
		Total phosphates (as P)									
		Uranium, total recoverable									
		Zinc, total recoverable									
Radionuclides											
		Gross alpha									
		Nonvolatile beta									
		Radium, total alpha-emitting									

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only. See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL RWM 10

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N102000.9 E48244.1	33.330063 °N 81.737938 °W	215.5-205.1 ft msl	355.5 ft msl	8" CS	S	

SAMPLE DATE	03/11/98			06/08/98	
FIELD DATA					
Parameter	3M98	4M98	5M98	6M98	Unit
Water elevation	179.0			194.0	ft msl
pH	4.6			4.9	pH
Sp. conductance	83			120	µS/cm
Water temperature	18.9			21.6	°C
Alkalinity as $CaCO_3$	0			0	mg/L
Turbidity	0			0	NTU
Volume purged					well volume
Sampling code	C			C	

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3M98	4M98	5M98	6M98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable									
		Cyanide									
		Lead, total recoverable									
		Nickel, total recoverable									
		Selenium, total recoverable									
Organics											
		Chlorobenzene	<250			<250	50		µg/L	EX	0
		1,1-Dichloroethane	<250			<250	50		µg/L	EX	0
		1,1-Dichloroethylene	<250			<250	50		µg/L	EX	0
		trans-1,2-Dichloroethylene				<250	50		µg/L	EX	0
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<250			<250	50		µg/L	EX	0
	■	Tetrachloroethylene	***8,000***			***15,000***	100		µg/L	EX	2
		1,1,1-Trichloroethane	<250			<250	50		µg/L	EX	0
	■	Trichloroethylene	***4,900***			***5,700***	100	J1	µg/L	EX	2

Monitoring Constituents

H	ST	Parameter	3M98	4M98	5M98	6M98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable									
		Chloride									
		Chromium, total recoverable									
		Cobalt, total recoverable									
		Copper, total recoverable									
		Fluoride									
		Manganese, total recoverable									
		Mercury, total recoverable									
		Nitrate as nitrogen									
		Nitrate-nitrite as nitrogen									
		Sodium, total recoverable									
		Sulfate									
		Total phosphates (as P)									
		Uranium, total recoverable									
		Zinc, total recoverable									
Radionuclides											
		Gross alpha									
		Nonvolatile beta									
		Radium, total alpha-emitting									

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only. See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL RWM 11

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N104875.0 E50400.2	33.339938 °N 81.737852 °W	214.6-204.2 ft msl	383.3 ft msl	8" CS	S	

SAMPLE DATE	03/11/98	04/17/98	05/08/98	06/08/98

FIELD DATA

Parameter	3M98	4M98	5M98	6M98	Unit
Water elevation	209.3	208.8	205.9	209.0	ft msl
pH	4.5	4.6	4.2	4.7	pH
Sp. conductance	31	32	28	29	µS/cm
Water temperature	18.6	20.2	21.0	24.1	°C
Alkalinity as $CaCO_3$	0	0	0	0	mg/L
Turbidity	0	0	1	2	NTU
Volume purged			0.0		well volume
Sampling code	C	C	C	C	

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3M98	4M98	5M98	6M98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable									
		Cyanide									
		Lead, total recoverable									
		Nickel, total recoverable									
		Selenium, total recoverable									
Organics											
		Chlorobenzene	<50	<50	<25	<50	10		µg/L	EX	0
		1,1-Dichloroethane	<50	<50	<25	<50	10		µg/L	EX	0
		1,1-Dichloroethylene	<50	<50	<25	<50	10		µg/L	EX	0
		trans-1,2-Dichloroethylene		<50	<25	<50	10		µg/L	EX	0
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<50	<50	<25	<50	10		µg/L	EX	0
	■	Tetrachloroethylene	***63***	***72***	***74***	***67***	10		µg/L	EX	2
		1,1,1-Trichloroethane	<50	<50	<25	<50	10		µg/L	EX	0
	■	Trichloroethylene	***1,100***	***1,200***	***1,100***	***980***	10	J1	µg/L	EX	2

Monitoring Constituents

H	ST	Parameter	3M98	4M98	5M98	6M98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable									
		Chloride									
		Chromium, total recoverable									
		Cobalt, total recoverable									
		Copper, total recoverable									
		Fluoride									
		Manganese, total recoverable									
		Mercury, total recoverable									
		Nitrate as nitrogen									
		Nitrate-nitrite as nitrogen									
		Sodium, total recoverable									
		Sulfate									
		Total phosphates (as P)									
		Uranium, total recoverable									
		Zinc, total recoverable									
Radionuclides											
		Gross alpha									
		Nonvolatile beta									
		Radium, total alpha-emitting									

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only. See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL RWM 12

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N106879.2 E52500.1	33.347797 °N 81.736222 °W	210.4-189.9 ft msl	359.4 ft msl	6" CS/SS	S	

SAMPLE DATE	03/11/98	04/17/98	05/08/98	06/08/98	
FIELD DATA					
Parameter	3M98	4M98	5M98	6M98	Unit
Water elevation	211.5	210.7	211.2	210.3	ft msl
pH	4.5	4.9	4.6	4.6	pH
Sp. conductance	44	42	38	44	µS/cm
Water temperature	18.0	20.4	21.0	22.5	°C
Alkalinity as $CaCO_3$	0	0	0	0	mg/L
Turbidity	0	1	5	3	NTU
Volume purged			0.0		well volume
Sampling code	C	C	C	C	

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3M98	4M98	5M98	6M98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable									
		Cyanide									
		Lead, total recoverable									
		Nickel, total recoverable									
		Selenium, total recoverable									
Organics											
		Chlorobenzene	<50	<50	<50	<50	10	J1	µg/L	EX	0
		1,1-Dichloroethane	<50	<50	<50	<50	10	J1	µg/L	EX	0
		1,1-Dichloroethylene	<50	<50	<50	<50	10	J1	µg/L	EX	0
		trans-1,2-Dichloroethylene		<50	<50	<50	10	J1	µg/L	EX	0
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<50	<50	<50	<50	10	J1	µg/L	EX	0
		Tetrachloroethylene	***13***	***15***	***18***	<50	10	J1	µg/L	EX	0
		1,1,1-Trichloroethane	<50	<50	<50	<50	10	J1	µg/L	EX	0
	■	Trichloroethylene		***2,000***	***2,000***	***2,200***	25		µg/L	EX	2

Monitoring Constituents

H	ST	Parameter	3M98	4M98	5M98	6M98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable									
		Chloride									
		Chromium, total recoverable									
		Cobalt, total recoverable									
		Copper, total recoverable									
		Fluoride									
		Manganese, total recoverable									
		Mercury, total recoverable									
		Nitrate as nitrogen									
		Nitrate-nitrite as nitrogen									
		Sodium, total recoverable									
		Sulfate									
		Total phosphates (as P)									
		Uranium, total recoverable									
		Zinc, total recoverable									
Radionuclides											
		Gross alpha									
		Nonvolatile beta									
		Radium, total alpha-emitting									

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only. See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL RWM 13B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N105803.3 E53516.3	33.347079 °N 81.731452 °W	138.2-113.0 ft msl	336.2 ft msl	6" CS	O	

SAMPLE DATE 03/11/98 04/17/98 05/07/98 06/08/98

FIELD DATA

Parameter	3M98	4M98	5M98	6M98	Unit
Water elevation	199.1	198.8	198.3	198.1	ft msl
pH	4.8	5.1	4.2	4.9	pH
Sp. conductance	25	25	27	28	µS/cm
Water temperature	17.5	20.0	19.3	21.1	°C
Alkalinity as $CaCO_3$	0	0	0	0	mg/L
Turbidity	0	1	0	8	NTU
Volume purged					well volume
Sampling code	C	C	C	C	

ANALYTICAL DATA

Groundwater Protection Standard

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H	ST	Parameter	3M98	4M98	5M98	6M98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable									
		Cyanide									
		Lead, total recoverable									
		Nickel, total recoverable									
		Selenium, total recoverable									
Organics											
		Chlorobenzene	<50	<130	<130	<130	25		µg/L	EX	0
		1,1-Dichloroethane	<50	<130	<130	<130	25		µg/L	EX	0
		1,1-Dichloroethylene	<50	<130	<130	<130	25		µg/L	EX	0
		trans-1,2-Dichloroethylene		<130	<130	<130	25		µg/L	EX	0
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<50	<130	<130	<130	25		µg/L	EX	0
		Tetrachloroethylene	***14***	<130	***16***	<130	25		µg/L	EX	0
		1,1,1-Trichloroethane	<50	<130	<130	<130	25		µg/L	EX	0
	■	Trichloroethylene	***1,900***	***1,700***	***1,600***	***1,500***	25	J1	µg/L	EX	2

Monitoring Constituents

H	ST	Parameter	3M98	4M98	5M98	6M98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable									
		Chloride									
		Chromium, total recoverable									
		Cobalt, total recoverable									
		Copper, total recoverable									
		Fluoride									
		Manganese, total recoverable									
		Mercury, total recoverable									
		Nitrate as nitrogen									
		Nitrate-nitrite as nitrogen									
		Sodium, total recoverable									
		Sulfate									
		Total phosphates (as P)									
		Uranium, total recoverable									
		Zinc, total recoverable									
Radionuclides											
		Gross alpha									
		Nonvolatile beta									
		Radium, total alpha-emitting									

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only. See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL RWM 13C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N105809.7 E53502.2	33.347070 °N 81.731501 °W	173.4-153.3 ft msl	336.4 ft msl	6" CS	O	

SAMPLE DATE	03/11/98	04/17/98	05/07/98	06/08/98

FIELD DATA

Parameter	3M98	4M98	5M98	6M98	Unit
Water elevation	206.3	206.3	206.4	206.2	ft msl
pH	4.9	4.9	4.5	4.9	pH
Sp. conductance	33	35	33	32	µS/cm
Water temperature	18.1	19.3	19.6	21.4	°C
Alkalinity as $CaCO_3$	1	0	0	0	mg/L
Turbidity	1	1	0	4	NTU
Volume purged					well volume
Sampling code	C	C	C	C	

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3M98	4M98	5M98	6M98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable									
		Cyanide									
		Lead, total recoverable									
		Nickel, total recoverable									
		Selenium, total recoverable									
Organics											
		Chlorobenzene	<100	<130	<130	<130	25		µg/L	EX	0
		1,1-Dichloroethane	<100	<130	<130	<130	25		µg/L	EX	0
		1,1-Dichloroethylene	<100	<130	<130	<130	25		µg/L	EX	0
		trans-1,2-Dichloroethylene		<130	<130	<130	25		µg/L	EX	0
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<100	<130	<130	<130	25		µg/L	EX	0
	■	Tetrachloroethylene	***39***	***37***	***32***	***32***	25	JE	µg/L	EX	2
		1,1,1-Trichloroethane	<100	<130	<130	<130	25		µg/L	EX	0
	■	Trichloroethylene	***1,900***	***2,000***	***1,800***	***1,900***	25	J1	µg/L	EX	2

Monitoring Constituents

H	ST	Parameter	3M98	4M98	5M98	6M98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable									
		Chloride									
		Chromium, total recoverable									
		Cobalt, total recoverable									
		Copper, total recoverable									
		Fluoride									
		Manganese, total recoverable									
		Mercury, total recoverable									
		Nitrate as nitrogen									
		Nitrate-nitrite as nitrogen									
		Sodium, total recoverable									
		Sulfate									
		Total phosphates (as P)									
		Uranium, total recoverable									
		Zinc, total recoverable									
Radionuclides											
		Gross alpha									
		Nonvolatile beta									
		Radium, total alpha-emitting									

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only. See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL RWM 14B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N106362.1 E53044.7	33.347544 °N 81.733781 °W	148.5-123.2 ft msl	351.2 ft msl	6" CS	O	

SAMPLE DATE	03/11/98	04/17/98	05/08/98	06/08/98

FIELD DATA

Parameter	3M98	4M98	5M98	6M98	Unit
Water elevation	208.9	208.7	207.8	208.3	ft msl
pH	4.7	4.7	4.4	4.6	pH
Sp. conductance	28	27	24	31	µS/cm
Water temperature	16.6	20.1	20.0	22.7	°C
Alkalinity as $CaCO_3$	0	0	0	0	mg/L
Turbidity	1	1	3	7	NTU
Volume purged			0.0		well volume
Sampling code	C	C	C	C	

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3M98	4M98	5M98	6M98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable									
		Cyanide									
		Lead, total recoverable									
		Nickel, total recoverable									
		Selenium, total recoverable									
Organics											
		Chlorobenzene	<50	<50	<50	<50	10		µg/L	EX	0
		1,1-Dichloroethane	<50	<50	<50	<50	10		µg/L	EX	0
		1,1-Dichloroethylene	<50	<50	<50	<50	10		µg/L	EX	0
		trans-1,2-Dichloroethylene		<50	<50	<50	10		µg/L	EX	0
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<50	<50	<50	<50	10		µg/L	EX	0
	■	Tetrachloroethylene	<50	***10***	***9.6***	***8.7***	10	JE	µg/L	EX	2
		1,1,1-Trichloroethane	<50	<50	<50	<50	10		µg/L	EX	0
	■	Trichloroethylene	***1,300***	***1,400***	***1,200***	***1,200***	10	J1	µg/L	EX	2

Monitoring Constituents

H	ST	Parameter	3M98	4M98	5M98	6M98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable									
		Chloride									
		Chromium, total recoverable									
		Cobalt, total recoverable									
		Copper, total recoverable									
		Fluoride									
		Manganese, total recoverable									
		Mercury, total recoverable									
		Nitrate as nitrogen									
		Nitrate-nitrite as nitrogen									
		Sodium, total recoverable									
		Sulfate									
		Total phosphates (as P)									
		Uranium, total recoverable									
		Zinc, total recoverable									
Radionuclides											
		Gross alpha									
		Nonvolatile beta									
		Radium, total alpha-emitting									

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only. See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL RWM 14C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N106380.8 E53051.5	33.347596 °N 81.733800 °W	193.5-173.4 ft msl	351.4 ft msl	6" CS	O	

SAMPLE DATE	03/11/98	04/17/98	05/08/98	06/08/98	
FIELD DATA					
Parameter	3M98	4M98	5M98	6M98	Unit
Water elevation	202.5		201.8	201.5	ft msl
pH	4.7	4.7	4.8	5.0	pH
Sp. conductance	41	39	36	38	µS/cm
Water temperature	17.2	19.9	20.0	21.2	°C
Alkalinity as $CaCO_3$	0	0	0	0	mg/L
Turbidity	12	12	11	26	NTU
Volume purged			0.0		well volume
Sampling code	C	C	C	C	

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3M98	4M98	5M98	6M98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable									
		Cyanide									
		Lead, total recoverable									
		Nickel, total recoverable									
		Selenium, total recoverable									
Organics											
		Chlorobenzene	<250	<250	<250	<130	25		µg/L	WA	0
		1,1-Dichloroethane	<250	<250	<250	<130	25		µg/L	WA	0
		1,1-Dichloroethylene	<250	<250	<250	<130	25		µg/L	WA	0
		trans-1,2-Dichloroethylene		<250	<250	<130	25		µg/L	WA	0
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<250	<250	<250	<130	25		µg/L	WA	0
■		Tetrachloroethylene	***58***	***50***	***48***	***48***	50	JE	µg/L	EX	2
		1,1,1-Trichloroethane	<250	<250	<250	43	25	JE	µg/L	WA	0
■		Trichloroethylene	***5,100***	***5,400***	***5,600***	***5,100***	50	J1	µg/L	EX	2

Monitoring Constituents

H	ST	Parameter	3M98	4M98	5M98	6M98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable									
		Chloride									
		Chromium, total recoverable									
		Cobalt, total recoverable									
		Copper, total recoverable									
		Fluoride									
		Manganese, total recoverable									
		Mercury, total recoverable									
		Nitrate as nitrogen									
		Nitrate-nitrite as nitrogen									
		Sodium, total recoverable									
		Sulfate									
		Total phosphates (as P)									
		Uranium, total recoverable									
		Zinc, total recoverable									
Radionuclides											
		Gross alpha									
		Nonvolatile beta									
		Radium, total alpha-emitting									

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only. See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL RWM 15B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N107444.7 E53849.0	33.351250 °N 81.733769 °W	150.9-125.8 ft msl	369.5 ft msl	6" CS	O	

SAMPLE DATE	03/11/98	04/17/98	05/07/98	06/08/98

FIELD DATA

Parameter	3M98	4M98	5M98	6M98	Unit
Water elevation	207.2	207.3	207.2	207.0	ft msl
pH	4.8	4.9	5.1	5.0	pH
Sp. conductance	23	24	25	22	µS/cm
Water temperature	17.8	19.0	19.1	20.6	°C
Alkalinity as $CaCO_3$	1	0	0	0	mg/L
Turbidity	1	1	0	2	NTU
Volume purged					well volume
Sampling code	C	C	C	C	

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3M98	4M98	5M98	6M98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Barium, total recoverable									
		Cyanide									
		Lead, total recoverable									
		Nickel, total recoverable									
		Selenium, total recoverable									
Organics											
		Chlorobenzene	<5.0	<5.0	<5.0	<5.0	1		µg/L	EX	0
		1,1-Dichloroethane	<5.0	<5.0	<5.0	<5.0	1		µg/L	EX	0
		1,1-Dichloroethylene	<5.0	<5.0	<5.0	<5.0	1		µg/L	EX	0
		trans-1,2-Dichloroethylene		<5.0	<5.0	<5.0	1		µg/L	EX	0
		PCB 1016									
		PCB 1221									
		PCB 1232									
		PCB 1242									
		PCB 1248									
		PCB 1254									
		PCB 1260									
		1,1,2,2-Tetrachloroethane	<5.0	<5.0	<5.0	<5.0	1		µg/L	EX	0
		Tetrachloroethylene	<5.0	<5.0	<5.0	<5.0	1		µg/L	EX	0
		1,1,1-Trichloroethane	<5.0	<5.0	<5.0	<5.0	1		µg/L	EX	0
	■	Trichloroethylene	***37***	***38***	***38***	***33***	1	J1	µg/L	EX	2

Monitoring Constituents

H	ST	Parameter	3M98	4M98	5M98	6M98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Aluminum, total recoverable									
		Chloride									
		Chromium, total recoverable									
		Cobalt, total recoverable									
		Copper, total recoverable									
		Fluoride									
		Manganese, total recoverable									
		Mercury, total recoverable									
		Nitrate as nitrogen									
		Nitrate-nitrite as nitrogen									
		Sodium, total recoverable									
		Sulfate									
		Total phosphates (as P)									
		Uranium, total recoverable									
		Zinc, total recoverable									
Radionuclides											
		Gross alpha									
		Nonvolatile beta									
		Radium, total alpha-emitting									

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only. See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

Table D-5. Groundwater Monitoring Results for Point-of-Compliance Wells, Met Lab HWMF

WELL AMB 4A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N104131.6 E51469.8	33.340041 °N 81.733589 °W	126.3-121.3 ft msl	380.5 ft msl	4" PVC	S	MCBC

SAMPLE DATE	08/14/96	02/24/97	08/07/97	03/23/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	219.0	218.2	216.5	216.3	ft msl
pH	6.4	6.0	5.2	5.6	pH
Sp. conductance	68	38	38	34	µS/cm
Water temperature	22.0	29.0	20.0	16.0	°C
Alkalinity as $CaCO_3$	28	13	10	4	mg/L
Turbidity	4	3	1	2	NTU
Volume purged	0.016	2.2	2.5	2.5	well volume
Sampling code	X				
Synchronous water level	220.0 (09/19/96)	217.3 (03/20/97)	215.7 (09/17/97)	216.3 (03/20/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

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H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Arsenic, total recoverable	4.8	<8.0	<8.0	<10	1		µg/L	EX	0
		Barium, total recoverable	6.6	5.5	5.2	5.5	1		µg/L	EX	0
		Chromium, total recoverable	2.8	<3.0	0.60	1.2	1	JE	µg/L	WA	0
		Lead, total recoverable	1.9	<5.0	<5.0	<5.0	1		µg/L	EX	0
		Mercury, total recoverable	0.054	<0.20	<0.20	<0.20	1		µg/L	EX	0
		Nickel, total recoverable	4.1	<5.0	<5.0	<20	1		µg/L	EX	0
		Silver, total recoverable	0.85	<2.0	<2.0	0.55	1		µg/L	WA	0
Organics											
		Acetone	***96***	<45	<50	<10	1		µg/L	EX	0
		Carbon tetrachloride	1.3	<13	<25	<5.0	1		µg/L	EX	0
		Chloroethene (Vinyl chloride)	<0.10	<23	<50	<5.0	1		µg/L	EX	0
		Chloroform	0.43	<13	<25	<5.0	1		µg/L	EX	0
		1,1-Dichloroethane	<0.050	<13	<25	<5.0	1		µg/L	EX	0
		1,2-Dichloroethane	<0.050	<13	<25	<5.0	1		µg/L	EX	0
		1,1-Dichloroethylene	<0.050	<16	<25	<5.0	1		µg/L	EX	0
		cis-1,2-Dichloroethylene	7.0	<12	<25	3.1	1	JE	µg/L	EX	0
		trans-1,2-Dichloroethylene	0.10	<16		<5.0	1		µg/L	EX	0
		2,4-Dichlorophenoxyacetic acid	<0.049	<0.13	<0.56	<0.50	1		µg/L	EX	0
		Lindane	<0.025	<0.0060	<0.015	<0.050	1		µg/L	EX	0
		Methyl methacrylate	<10	<25	<25				µg/L		
		Phenol	<10	<2.0	<10	<10	1		µg/L	EX	0
	■	Tetrachloroethylene	***49***	***44***	***38***	***48***	2		µg/L	WA	2
		1,1,1-Trichloroethane	<0.050	<13	<25	<5.0	1		µg/L	EX	0
	■	Trichloroethylene	***430***	***370***	***280***	***340***	2		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Chloride	2,100	1,600	1,700	1,800	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	4.9	1	JE	µg/L	WA	0
		Fluoride	25	<100	<100	<23	1	V	µg/L	WA	0
		Iron, total recoverable	170	50	24	43	1	JE	µg/L	WA	0
		Manganese, total recoverable	7.1	7.4	6.6	7.6	1	JE	µg/L	WA	0
		Nitrate as nitrogen									
		Nitrate-nitrite as nitrogen	1,600	1,300	1,200	860	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<10	1		µg/L	EX	0
		Sodium, total recoverable	***11,000***	2,400	2,400	2,700	1	J	µg/L	EX	
		Sulfate	***3,300***	<5,000	<5,000	800	1		µg/L	WA	0
		Total organic carbon	1,800	<1,000	1,200	980	1	JE	µg/L	WA	0
●	■	Total organic halogens	***320***	***260***	***340***	***210***	1	J	µg/L	WA	2
		Total phosphates (as P)	29	45	31	39	1	JE	µg/L	WA	
Radionuclides											
		Gross alpha	1.1E+00	1.4E+00	*-6.1E-01*	8.5E-01	1		pCi/L	TM	0
		Nonvolatile beta	4.5E+00	2.1E+00	*-7.5E-01*	*2.0E-02*	1	UI	pCi/L	TM	0
		Radium, total alpha-emitting	2.6E-01	3.6E-01	1.2E+00	*9.0E-02*	1	UI	pCi/L	TM	0

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only. See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL AMB 4D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N104154.7 E51489.0	33.340124 °N 81.733584 °W	233.4-213.4 ft msl	380.3 ft msl	4" PVC	S	M

SAMPLE DATE	08/14/96	02/24/97	08/07/97	03/23/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	234.1	232.4	231.0	229.1	ft msl
pH	5.6	5.4	4.8	4.8	pH
Sp. conductance	58	40	40	38	µS/cm
Water temperature	23.0	28.0	20.0	16.0	°C
Alkalinity as $CaCO_3$	5	4	3	0	mg/L
Turbidity	1	1	4	1	NTU
Volume purged	2.9	3.8	0.0	4.4	well volume
Sampling code			X		
Synchronous water level	233.9 (09/19/96)	232.5 (03/20/97)	230.7 (09/17/97)	229.8 (03/20/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Arsenic, total recoverable	<3.8	<8.0	<8.0	<40	1		µg/L	WA	0
		Barium, total recoverable	3.5	3.9	5.9	2.0	1		µg/L	WA	0
		Chromium, total recoverable	<4.0	<3.0	1.4	<7.0	1		µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0	14	<47	1		µg/L	WA	0
		Mercury, total recoverable	0.035	<0.20	<0.20	<0.70	1		µg/L	WA	0
		Nickel, total recoverable	<2.2	<5.0	<5.0	<26	1		µg/L	WA	0
		Silver, total recoverable	<2.0	<2.0	<2.0	<5.0	1		µg/L	WA	0
Organics											
		Acetone	7.4	<9.0	<10	<10	1		µg/L	WA	0
		Carbon tetrachloride	0.50	<2.6	<5.0	<5.0	1		µg/L	WA	0
		Chloroethene (Vinyl chloride)	<0.20	<4.6	<10	<10	1		µg/L	WA	0
		Chloroform	0.20	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	***0.56***	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,2-Dichloroethane	<0.10	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<0.10	<3.2	<5.0	<5.0	1		µg/L	WA	0
		cis-1,2-Dichloroethylene	1.0	<2.4	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<0.10	<3.2					µg/L		
		2,4-Dichlorophenoxyacetic acid	<0.050	<0.13	<0.56	<1.0	1	J1	µg/L	WA	0
		Lindane	<0.025	<0.0060	<0.015	<0.051	1		µg/L	WA	0
		Methyl methacrylate	<20	<5.0	<5.0	<10	1		µg/L	WA	0
		Phenol	<10	<2.0	<10	<10	1		µg/L	WA	0
		Tetrachloroethylene	1.9	<1.9	3.4	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<0.10	<2.5	<5.0	<5.0	1		µg/L	WA	0
	■	Trichloroethylene	***38***	***32***	***82***	***21***	1		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Chloride	1,700	2,100	3,000	2,200	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Fluoride	<100	<100	<100	<21	1	V	µg/L	WA	0
		Iron, total recoverable	33	89	***820***	87	1	V	µg/L	WA	0
		Manganese, total recoverable	9.5	10	22	11	1		µg/L	WA	0
		Nitrate as nitrogen									
		Nitrate-nitrite as nitrogen	1,400	1,300	910	1,100	2		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
	■	Sodium, total recoverable	***7,400***	***5,500***	***6,800***	***7,400***	1	V	µg/L	WA	
	■	Sulfate	***11,000***	<5,000	***3,800***	***4,500***	1		µg/L	WA	0
		Total organic carbon	2,400	<1,000	1,600	<1,000	1		µg/L	WA	0
●		Total organic halogens	23	***100***	***130***	14	1	JE	µg/L	WA	0
		Total phosphates (as P)	<50	<10	22	26	1	JE	µg/L	WA	
Radionuclides											
		Gross alpha	1.1E+00	3.1E+00	6.8E+00	4.3E+00	1		pCi/L	TM	0
		Nonvolatile beta	***7.0E+01***	2.2E+00	*7.4E-01*	5.3E+00	1		pCi/L	TM	0
		Radium, total alpha-emitting	*-8.0E-01*	1.7E+00	*4.7E+00*	2.2E+00	1	V	pCi/L	TM	0

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only. See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL AMB 5

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N104083.4 E51467.2	33.339930 °N 81.733502 °W	242.1-222.1 ft msl	379.6 ft msl	4" PVC	S	M

SAMPLE DATE	07/03/96	02/20/97	08/14/97	03/23/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	235.0	233.2	231.6	229.5	ft msl
pH	5.4	5.2	5.0	5.2	pH
Sp. conductance	46	46	52	44	µS/cm
Water temperature	27.0	30.0	23.0	16.0	°C
Alkalinity as $CaCO_3$	10	12	5	4	mg/L
Turbidity	11	6	6	1	NTU
Volume purged	2.8	3.9	3.9	12	well volume
Sampling code					
Synchronous water level	234.3 (09/19/96)	232.9 (03/20/97)	231.0 (09/17/97)	230.1 (03/20/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Arsenic, total recoverable	<5.0	<8.0	<8.0	<40	1		µg/L	WA	0
		Barium, total recoverable	3.1	5.4	5.9	3.1	1		µg/L	WA	0
		Chromium, total recoverable	0.76	<3.0	<3.0	<7.0	1		µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0	<5.0	<47	1		µg/L	WA	0
		Mercury, total recoverable	<0.20	<0.20	0.070	<0.70	1		µg/L	WA	0
		Nickel, total recoverable	<10	<5.0	<5.0	<26	1		µg/L	WA	0
		Silver, total recoverable	<2.0	<2.0	<2.0	<5.0	1		µg/L	WA	0
Organics											
		Acetone	<10	<9.0	<10	<4.9	1	V	µg/L	WA	0
		Carbon tetrachloride	<2.0	<2.6	<5.0	<5.0	1		µg/L	WA	0
		Chloroethene (Vinyl chloride)	<2.0	<4.6	<10	<10	1		µg/L	WA	0
		Chloroform	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,2-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		cis-1,2-Dichloroethylene	<2.0	<2.4	1.1	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2					µg/L		
		2,4-Dichlorophenoxyacetic acid	<0.048	<0.13	<0.56	<1.0	1	J1	µg/L	WA	0
		Lindane	<0.025	<0.0060	<0.015	<0.051	1		µg/L	WA	0
		Methyl methacrylate	<10	<5.0	<5.0	<10	1		µg/L	WA	0
		Phenol	<10	<2.0	<10	<10	1		µg/L	WA	0
		Tetrachloroethylene	1.1	3.1	2.0	1.3	1	JE	µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
	■	Trichloroethylene	***16***	***51***	***45***	***43***	1		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Chloride	2,700	***5,300***	3,200	3,200	1		µg/L	WA	0
		Cyanide	<1.9	<5.0	<5.0	<15	1		µg/L	WA	0
		Fluoride	<100	<100	<100	<19	1	V	µg/L	WA	0
		Iron, total recoverable	***430***	***540***	160	60	1	JEV	µg/L	WA	0
		Manganese, total recoverable	6.8	7.5	7.5	6.2	1	JE	µg/L	WA	0
		Nitrate as nitrogen									
		Nitrate-nitrite as nitrogen	650	1,200	1,600	1,500	5		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
	■	Sodium, total recoverable	***9,200***	***8,000***	***7,500***	***8,100***	1	V	µg/L	WA	
	■	Sulfate	***6,600***	***5,800***	***4,400***	***3,700***	1		µg/L	WA	0
		Total organic carbon	1,000	<1,000	1,400	980	1	JE	µg/L	WA	0
●		Total organic halogens	9.6	48	***120***	32	1	JE	µg/L	WA	0
		Total phosphates (as P)	<50	16	5.0	10	1	JE	µg/L	WA	
Radionuclides											
		Gross alpha	1.2E+00	4.5E+00	6.8E+00	6.2E+00	1		pCi/L	TM	0
		Nonvolatile beta	1.4E+00	2.0E+00	3.7E+00	3.6E+00	1		pCi/L	TM	0
		Radium, total alpha-emitting	1.2E+00	4.3E+00	***1.9E+01***	1.8E+00	1	V	pCi/L	TM	0

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only. See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL AMB 6

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N104034.1 E51466.0	33.339819 °N 81.733410 °W	242.6-222.6 ft msl	377.2 ft msl	4" PVC	S	M

SAMPLE DATE	07/03/96	02/24/97	08/14/97	03/23/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	235.2	232.9	231.7	229.6	ft msl
pH	5.0	5.2	5.4	4.8	pH
Sp. conductance	28	38	60	48	µS/cm
Water temperature	26.0	28.0	25.0	20.3	°C
Alkalinity as $CaCO_3$	1	7	14	3	mg/L
Turbidity	4	3	18	1	NTU
Volume purged	3.9	3.4	0.0	8.3	well volume
Sampling code			X		
Synchronous water level	234.4 (09/19/96)	228.0 (03/20/97)	231.1 (09/17/97)	230.2 (03/20/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Arsenic, total recoverable	<5.0	<8.0	<8.0	<40	1		µg/L	WA	0
		Barium, total recoverable	4.0	2.3	3.6	0.97	1	JE	µg/L	WA	0
		Chromium, total recoverable	1.5	<3.0	2.5	<7.0	1		µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0	***23***	<47	1		µg/L	WA	0
		Mercury, total recoverable	<0.20	<0.20	0.050	<0.70	1		µg/L	WA	0
		Nickel, total recoverable	<10	<5.0	<5.0	<26	1		µg/L	WA	0
		Silver, total recoverable	<2.0	2.2	<2.0	<5.0	1		µg/L	WA	0
Organics											
		Acetone	<10	<9.0	<10	<10	1		µg/L	WA	0
		Carbon tetrachloride	<2.0	<2.6	<5.0	<5.0	1		µg/L	WA	0
		Chloroethene (Vinyl chloride)	<2.0	<4.6	<10	<10	1		µg/L	WA	0
		Chloroform	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,2-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		cis-1,2-Dichloroethylene	<2.0	<2.4	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2					µg/L		
		2,4-Dichlorophenoxyacetic acid	<0.048	<0.13	<0.56	<1.0	1	J1	µg/L	WA	0
		Lindane	<0.025	<0.0060	<0.015	<0.051	1		µg/L	WA	0
		Methyl methacrylate	<10	<5.0	<5.0	<10	1		µg/L	WA	0
		Phenol	<10	<2.0	<10	<10	1		µg/L	WA	0
		Tetrachloroethylene	<2.0	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
	■	Trichloroethylene	2.3	3.7	<5.0	***5.2***	1		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Chloride	2,000	2,800	2,700	2,700	1		µg/L	WA	0
		Cyanide	<1.6	<5.0	3.4	<15	1		µg/L	WA	0
		Fluoride	<100	<100	70	<22	1	V	µg/L	WA	0
		Iron, total recoverable	100	220	***2,000***	66	1	JEV	µg/L	WA	0
		Manganese, total recoverable	5.9	3.6	8.5	2.4	1	JE	µg/L	WA	0
		Nitrate as nitrogen									
		Nitrate-nitrite as nitrogen	1,100	310	340	470	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
	■	Sodium, total recoverable	4,100	***7,200***	***8,300***	***9,300***	1	V	µg/L	WA	
	■	Sulfate	1,300	<5,000	***6,200***	***6,200***	1		µg/L	WA	0
		Total organic carbon	1,200	<1,000	1,200	<1,000	1		µg/L	WA	0
●		Total organic halogens	<10	45	***320***	<120	1	J	µg/L	WA	0
		Total phosphates (as P)	<50	<10	49	17	1	JE	µg/L	WA	
Radionuclides											
		Gross alpha	1.2E+00	1.2E+00	4.9E+00	1.3E+00	1		pCi/L	TM	0
		Nonvolatile beta	*7.4E-01*	2.1E+00	3.1E+00	*1.7E-01*	1	UI	pCi/L	TM	0
		Radium, total alpha-emitting	1.3E+00	4.7E-01	*1.7E+00*	6.6E-01	1	UIV	pCi/L	TM	0

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only. See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL AMB 8D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N103874.7 E51400.5	33.339360 °N 81.733272 °W	240.8-220.8 ft msl	369.6 ft msl	4" PVC	S	M

SAMPLE DATE	07/09/96	02/25/97	07/24/97	03/05/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	234.9	232.9	231.6	229.4	ft msl
pH	6.0	5.4	5.6	10.3	pH
Sp. conductance	70	50	36	33	µS/cm
Water temperature	25.0	29.0	22.0	20.8	°C
Alkalinity as $CaCO_3$	8	11	8	5	mg/L
Turbidity	0	0	1	2	NTU
Volume purged	10	5.4	8.2	2.8	well volume
Sampling code					
Synchronous water level	234.3 (09/19/96)	232.9 (03/20/97)	230.9 (09/17/97)	230.0 (03/20/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Arsenic, total recoverable	<5.0	<8.0		<40	1		µg/L	WA	0
		Barium, total recoverable	2.1	2.8		3.8	1		µg/L	WA	0
		Chromium, total recoverable	<4.0	<3.0		<0.81	1	V	µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0		<47	1		µg/L	WA	0
		Mercury, total recoverable	0.34	<0.20		<0.70	1		µg/L	WA	0
		Nickel, total recoverable	<10	<5.0		3.3	1	JE	µg/L	WA	0
		Silver, total recoverable	<2.0	<2.0		0.71	1	JE	µg/L	WA	0
Organics											
		Acetone	<6.7	<9.0	<10	<10	1		µg/L	WA	0
		Carbon tetrachloride	<0.050	<2.6	<5.0	<5.0	1		µg/L	WA	0
		Chloroethene (Vinyl chloride)	<0.10	<4.6	<10	<10	1		µg/L	WA	0
		Chloroform	<0.050	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<0.050	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,2-Dichloroethane	<0.050	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<0.050	<3.2	<5.0	<5.0	1		µg/L	WA	0
		cis-1,2-Dichloroethylene	<5.0	<2.4	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<0.050	<3.2		<5.0	1		µg/L	WA	0
		2,4-Dichlorophenoxyacetic acid	<0.049	<0.13		<1.0	1	J	µg/L	WA	0
		Lindane	<0.025	<0.0060		<0.051	1		µg/L	WA	0
		Methyl methacrylate	<10	<5.0	<5.0	<11	1		µg/L	WA	0
		Phenol	<10	<2.0		<11	1		µg/L	WA	0
		Tetrachloroethylene	<0.050	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<0.050	<2.5	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	0.16	3.7	3.3	2.6	1	JE	µg/L	WA	1

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Chloride	2,500	2,800		3,300	1		µg/L	WA	0
		Cyanide	<10	<5.0		<15	1		µg/L	WA	0
		Fluoride	<100	<100		<34	1	V	µg/L	WA	0
	■	Iron, total recoverable	27	43		***340***	1	V	µg/L	WA	2
		Manganese, total recoverable	1.5	<3.0		4.1	1	JE	µg/L	WA	0
		Nitrate as nitrogen									
		Nitrate-nitrite as nitrogen	540	440		410	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0		<66	1		µg/L	WA	0
	■	Sodium, total recoverable	***11,000***	***8,700***		***5,400***	1	V	µg/L	WA	
		Sulfate	***3,900***	***5,200***		2,400	1		µg/L	WA	0
		Total organic carbon	<1,100	<1,000		860	1	JE	µg/L	WA	0
●		Total organic halogens	5.1	<10		<120	1	J	µg/L	WA	0
		Total phosphates (as P)	40	<10		31	1	JE	µg/L	WA	
Radionuclides											
		Gross alpha	1.2E+00	1.3E+00		6.1E+00	1		pCi/L	TM	0
		Nonvolatile beta	*3.1E-01*	2.3E+00		5.8E+00	1		pCi/L	TM	0
		Radium, total alpha-emitting	1.0E+00	1.1E+00		4.0E+00	1	V	pCi/L	TM	1

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only. See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL AMB 9D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N103585.2 E51263.0	33.338496 °N 81.733071 °W	239.7-219.7 ft msl	367.9 ft msl	4" PVC	S	M

SAMPLE DATE	07/09/96	02/27/97	07/24/97	03/05/98	
FIELD DATA					
Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	235.3	233.3	231.8	229.6	ft msl
pH	5.8	5.0	5.6	7.1	pH
Sp. conductance	62	42	42	45	µS/cm
Water temperature	26.0	25.0	21.0	18.8	°C
Alkalinity as $CaCO_3$	5	11	10	7	mg/L
Turbidity	0	2	1	1	NTU
Volume purged	13	3.5	7.0	4.2	well volume
Sampling code					
Synchronous water level	234.5 (09/19/96)	233.1 (03/20/97)	231.0 (09/17/97)	230.0 (03/20/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Arsenic, total recoverable	<5.0	<8.0		<40	1		µg/L	WA	0
		Barium, total recoverable	2.4	3.0		2.7	1		µg/L	WA	0
		Chromium, total recoverable	<4.0	<3.0		<0.91	1	V	µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0		<47	1		µg/L	WA	0
		Mercury, total recoverable	<0.20	<0.20		<0.70	1		µg/L	WA	0
		Nickel, total recoverable	<10	<5.0		<26	1		µg/L	WA	0
		Silver, total recoverable	<2.0	2.5		<5.0	1		µg/L	WA	0
Organics											
		Acetone	<5.8	<9.0	<10	<10	1		µg/L	WA	0
		Carbon tetrachloride	<0.050	<2.0	<5.0	<5.0	1		µg/L	WA	0
		Chloroethene (Vinyl chloride)	<0.10	<2.0	<10	<10	1		µg/L	WA	0
		Chloroform	<0.050	<2.0	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<0.050	<2.0	<5.0	<5.0	1		µg/L	WA	0
		1,2-Dichloroethane	<0.050	<2.0	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<0.050	<2.0	<5.0	<5.0	1		µg/L	WA	0
		cis-1,2-Dichloroethylene	<5.0	<2.0	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<0.050	<2.0		<5.0	1		µg/L	WA	0
		2,4-Dichlorophenoxyacetic acid	<0.049	<0.10		<1.0	1	J	µg/L	WA	0
		Lindane	<0.026	<0.0060		<0.051	1		µg/L	WA	0
●		Methyl methacrylate	<10	<5.0	<5.0	<10	1	J	µg/L	WA	0
●		Phenol	<10	50		<10	1	J	µg/L	WA	0
		Tetrachloroethylene	<0.050	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<0.050	<2.0	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	<0.050	<2.0	<5.0	<5.0	1		µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Chloride	2,500	3,000		2,800	1		µg/L	WA	0
		Cyanide	<10	<5.0		<15	1		µg/L	WA	0
		Fluoride	<100	<100		<25	1	V	µg/L	WA	0
		Iron, total recoverable	<18	53		<17	1	V	µg/L	WA	0
		Manganese, total recoverable	1.7	3.2		2.4	1	JE	µg/L	WA	0
		Nitrate as nitrogen									
		Nitrate-nitrite as nitrogen	410	180		170	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	2.8		<66	1		µg/L	WA	0
	■	Sodium, total recoverable	***8,600***	***8,400***		***7,800***	1	V	µg/L	WA	
	■	Sulfate	***4,800***	***4,600***		***4,900***	1		µg/L	WA	0
		Total organic carbon	<1,100	1,900		660	1	JE	µg/L	WA	0
●		Total organic halogens	5.8	6.6		<120	1	J	µg/L	WA	0
		Total phosphates (as P)	<50	<0.050		20	1	JE	µg/L	WA	
Radionuclides											
		Gross alpha	1.0E+00	1.5E+00		3.4E+00	1		pCi/L	TM	0
		Nonvolatile beta	*3.0E-01*	2.5E+00		2.8E+00	1		pCi/L	TM	0
		Radium, total alpha-emitting	7.0E-01	1.1E+00		7.9E-01	1	UIV	pCi/L	TM	0

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only. See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL AMB 10A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N103326.4 E51410.0	33.338163 °N 81.732180 °W	111.4-106.4 ft msl	366.5 ft msl	4" PVC	S	MCBC

SAMPLE DATE	07/09/96	02/21/97	08/14/97	03/05/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	218.1	217.1	219.9	215.4	ft msl
pH	10.8	8.4	10.6	107	pH
Sp. conductance	140	90	600	64	µS/cm
Water temperature	30.0	30.0	19.5	16.1	°C
Alkalinity as $CaCO_3$	143	25	108	146	mg/L
Turbidity	4	11	6	3	NTU
Volume purged	0.027	2.1	0.013	0.97	well volume
Sampling code	X	X	X	X	
Synchronous water level	218.7 (09/19/96)	216.7 (03/20/97)	215.1 (09/17/97)	215.6 (03/20/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Arsenic, total recoverable	<5.0	<8.0		<40	1		µg/L	WA	0
		Barium, total recoverable	58	12		39	1		µg/L	WA	0
		Chromium, total recoverable	3.3	<3.0		35	1		µg/L	WA	0
		Lead, total recoverable	3.2	<5.0		<47	1		µg/L	WA	0
		Mercury, total recoverable	0.16	<0.20		<0.70	1		µg/L	WA	0
		Nickel, total recoverable	1.2	<5.0		<26	1		µg/L	WA	0
		Silver, total recoverable	<2.0	<2.0		<5.0	1		µg/L	WA	0
Organics											
		Acetone	<9.3	<9.0		<13	1	V	µg/L	WA	0
		Carbon tetrachloride	<0.050	<2.6		<5.0	1		µg/L	WA	0
		Chloroethene (Vinyl chloride)	<0.10	<4.6		<10	1		µg/L	WA	0
		Chloroform	<0.050	<2.5		<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<0.050	<2.5		<5.0	1		µg/L	WA	0
		1,2-Dichloroethane	<0.050	<2.5		<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<0.050	<3.2		<5.0	1		µg/L	WA	0
		cis-1,2-Dichloroethylene	<5.0	<2.4		<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<0.050	<3.2		<5.0	1		µg/L	WA	0
		2,4-Dichlorophenoxyacetic acid	<0.050	<0.13		<1.0	1	J	µg/L	WA	0
		Lindane	<0.025	<0.0060		<0.051	1		µg/L	WA	0
		Methyl methacrylate	<10	<5.0					µg/L		
		Phenol	<10	<2.0		<11	1		µg/L	WA	0
		Tetrachloroethylene	0.070	<1.9		<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<0.050	<2.5		<5.0	1		µg/L	WA	0
		Trichloroethylene	<0.050	<3.0		<5.0	1		µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Chloride	1,600	2,000		1,900	1		µg/L	WA	0
		Cyanide	<10	<5.0		<15	1		µg/L	WA	0
		Fluoride	97	<100		<76	1	V	µg/L	WA	0
		Iron, total recoverable	57	230		86	1		µg/L	WA	0
		Manganese, total recoverable	3.5	6.7		1.9	1	JE	µg/L	WA	0
		Nitrate as nitrogen									
		Nitrate-nitrite as nitrogen	400	250		200	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0		<66	1		µg/L	WA	0
	■	Sodium, total recoverable	***14,000***	***5,900***		***12,000***	1	V	µg/L	WA	
	■	Sulfate	***5,200***	***5,700***		***4,300***	1		µg/L	WA	0
		Total organic carbon	2,300	<1,000		1,900	1	J2	µg/L	WA	0
●		Total organic halogens	<10	<10		<120	1	J	µg/L	WA	0
		Total phosphates (as P)	<50	23		26	1	JE	µg/L	WA	
Radionuclides											
		Gross alpha	1.1E+00	*9.3E-01*		*8.3E-01*	1	UI	pCi/L	TM	0
		Nonvolatile beta	9.4E+00	3.2E+00		6.7E+00	1		pCi/L	TM	0
		Radium, total alpha-emitting	7.0E-01	*3.1E-01*		1.5E+00	1		pCi/L	TM	0

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only. See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL AMB 10B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N103337.3 E51418.3	33.338201 °N 81.732180 °W	154.3-149.3 ft msl	366.4 ft msl	4" PVC	S	LL

SAMPLE DATE	07/09/96	02/24/97	08/14/97

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	223.4	222.1	225.8		ft msl
pH	5.8	4.8	5.6		pH
Sp. conductance	54	60	36		µS/cm
Water temperature	25.0	24.0	18.9		°C
Alkalinity as $CaCO_3$	11	1	10		mg/L
Turbidity	0	1	1		NTU
Volume purged	4.5	2.4	3.1		well volume
Sampling code					
Synchronous water level	223.5 (09/19/96)	221.9 (03/20/97)	220.1 (09/17/97)		ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Arsenic, total recoverable	<5.0	<8.0	<8.0				µg/L		
		Barium, total recoverable	7.3	10	5.3				µg/L		
		Chromium, total recoverable	<4.0	<3.0	0.60				µg/L		
		Lead, total recoverable	<5.0	<5.0	<5.0				µg/L		
		Mercury, total recoverable	0.18	1.1	0.050				µg/L		
		Nickel, total recoverable	<10	<5.0	<5.0				µg/L		
		Silver, total recoverable	<2.0	2.6	<2.0				µg/L		
Organics											
		Acetone	<6.7	<9.0	<10				µg/L		
		Carbon tetrachloride	<0.050	<2.0	<5.0				µg/L		
		Chloroethene (Vinyl chloride)	<0.10	<2.0	<10				µg/L		
		Chloroform	<0.050	<2.0	<5.0				µg/L		
		1,1-Dichloroethane	<0.050	<2.0	<5.0				µg/L		
		1,2-Dichloroethane	<0.050	<2.0	<5.0				µg/L		
		1,1-Dichloroethylene	<0.050	<2.0	<5.0				µg/L		
		cis-1,2-Dichloroethylene	<5.0	<2.0	<5.0				µg/L		
		trans-1,2-Dichloroethylene	<0.050	<2.0					µg/L		
		2,4-Dichlorophenoxyacetic acid	<0.050	<0.050	<0.56				µg/L		
		Lindane	<0.025	<0.0060	<0.015				µg/L		
		Methyl methacrylate	<10	<5.0	<5.0				µg/L		
		Phenol	<10	<2.0	<10				µg/L		
		Tetrachloroethylene	<0.050	<1.9	<5.0				µg/L		
		1,1,1-Trichloroethane	<0.050	<2.0	<5.0				µg/L		
		Trichloroethylene	<0.050	<2.0	<5.0				µg/L		

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Chloride	3,100	3,300	3,200				µg/L		
		Cyanide	<10	<5.0	<5.0				µg/L		
		Fluoride	<100	<100	<100				µg/L		
		Iron, total recoverable	<18	50	15				µg/L		
		Manganese, total recoverable	7.2	6.3	6.1				µg/L		
		Nitrate as nitrogen									
		Nitrate-nitrite as nitrogen	410	190	190				µg/L		
		Selenium, total recoverable	<5.0	<5.0	<5.0				µg/L		
		Sodium, total recoverable	3,800	4,100	4,200				µg/L		
		Sulfate	630	<5,000	<5,000				µg/L		
		Total organic carbon	<860	<1,000	500				µg/L		
		Total organic halogens	8.7	22	***120***				µg/L		
		Total phosphates (as P)	<50	<0.050	<10				µg/L		
Radionuclides											
		Gross alpha	*2.7E-01*	1.3E+00	1.5E+00				pCi/L		
		Nonvolatile beta	*3.9E-01*	2.2E+00	*7.4E-01*				pCi/L		
		Radium, total alpha-emitting	6.0E-01	6.0E-01	*1.9E+00*				pCi/L		

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only. See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL AMB 10D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N103293.4 E51456.0	33.338166 °N 81.731995 °W	239.4-219.4 ft msl	365.5 ft msl	4" PVC	S	M

SAMPLE DATE 07/09/96 02/21/97 08/14/97 03/05/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	236.6	234.6	237.0	230.3	ft msl
pH	6.0	5.0	5.6	8.5	pH
Sp. conductance	64	44	42	47	µS/cm
Water temperature	24.0	24.0	18.5	18.8	°C
Alkalinity as $CaCO_3$	10	12	6	15	mg/L
Turbidity	1	2	2	2	NTU
Volume purged	12	5.3	5.6	3.9	well volume
Sampling code					
Synchronous water level	235.7 (09/19/96)	233.9 (03/20/97)	231.7 (09/17/97)	230.9 (03/20/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Arsenic, total recoverable	<5.0	<8.0	<8.0	<40	1		µg/L	WA	0
		Barium, total recoverable	7.7	5.5	5.5	5.8	1		µg/L	WA	0
		Chromium, total recoverable	<4.0	<3.0	<3.0	<1.4	1	V	µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0	<5.0	<47	1		µg/L	WA	0
		Mercury, total recoverable	<0.13	<0.20	<0.20	<0.70	1		µg/L	WA	0
		Nickel, total recoverable	<10	<5.0	<5.0	<26	1		µg/L	WA	0
		Silver, total recoverable	<2.0	<2.0	<2.0	<0.57	1		µg/L	WA	0
Organics											
		Acetone	<5.1	<9.0	<10	<10	1		µg/L	WA	0
		Carbon tetrachloride	<0.050	<2.6	<5.0	<5.0	1		µg/L	WA	0
		Chloroethene (Vinyl chloride)	<0.10	<4.6	<10	<10	1		µg/L	WA	0
		Chloroform	<0.050	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<0.050	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,2-Dichloroethane	<0.050	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<0.050	<3.2	<5.0	<5.0	1		µg/L	WA	0
		cis-1,2-Dichloroethylene	<5.0	<2.4	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<0.050	<3.2		<5.0	1		µg/L	WA	0
		2,4-Dichlorophenoxyacetic acid	<0.049	<0.13	<0.56	<1.0	1	J	µg/L	WA	0
		Lindane	<0.025	<0.0060	<0.015	<0.051	1		µg/L	WA	0
●		Methyl methacrylate	<10	<5.0	<5.0	<10	1	J	µg/L	WA	0
●		Phenol	<10	<2.0	<10	<10	1	J	µg/L	WA	0
		Tetrachloroethylene	<0.050	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<0.050	<2.5	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	<0.050	<3.0	<5.0	<5.0	1		µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Chloride	3,000	3,200	3,200	3,200	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Fluoride	<100	<100	<100	<25	1	V	µg/L	WA	0
		Iron, total recoverable	<18	<20	***410***	170	1	V	µg/L	WA	1
		Manganese, total recoverable	2.8	3.3	4.4	4.4	1	JE	µg/L	WA	0
		Nitrate as nitrogen									
		Nitrate-nitrite as nitrogen	130	73	1,700	100	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
	■	Sodium, total recoverable	***7,500***	***6,800***	***7,300***	***7,400***	1	V	µg/L	WA	
	■	Sulfate	***3,600***	<5,000	***4,000***	***3,500***	1		µg/L	WA	0
		Total organic carbon	<1,100	<1,000	900	560	1	JE	µg/L	WA	0
●	■	Total organic halogens	8.6	13	***140***	***55***	4	JE	µg/L	WA	1
		Total phosphates (as P)	110	<10	14	25	1	JE	µg/L	WA	
Radionuclides											
		Gross alpha	*1.5E-01*	*6.6E-01*	3.0E+00	2.3E+00	1		pCi/L	TM	0
		Nonvolatile beta	*2.1E-01*	*6.3E-01*	2.6E+00	3.1E+00	1		pCi/L	TM	0
		Radium, total alpha-emitting	5.0E-01	4.1E-01	*3.3E+00*	3.9E-01	1	UIV	pCi/L	TM	0

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only. See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL AMB 16D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N104268.8 E51557.5	33.340488 °N 81.733625 °W	233.4-213.4 ft msl	380.4 ft msl	2" PVC	V	M

SAMPLE DATE	08/15/96	02/24/97	08/07/97	03/09/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	234.1	232.5	231.1	229.8	ft msl
pH	4.6	4.8	4.6	4.7	pH
Sp. conductance	34	20	20	20	µS/cm
Water temperature	21.0	30.0	22.0	18.2	°C
Alkalinity as $CaCO_3$	30	0	0	0	mg/L
Turbidity	4	1	0	0	NTU
Volume purged	3.0	9.6	9.3	9.3	well volume
Sampling code					
Synchronous water level	233.9 (09/19/96)	232.6 (03/20/97)	230.7 (09/17/97)	229.9 (03/20/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Arsenic, total recoverable	2.8	<8.0	<8.0	<40	1		µg/L	WA	0
		Barium, total recoverable	1.9	5.2	6.1	4.3	1		µg/L	WA	0
		Chromium, total recoverable	1.5	<3.0	<3.0	<7.0	1		µg/L	WA	0
		Lead, total recoverable	<5.0	6.2	6.5	<47	1		µg/L	WA	0
		Mercury, total recoverable	<0.20	<0.20	<0.20	<0.70	1		µg/L	WA	0
		Nickel, total recoverable	3.9	<5.0	<5.0	<26	1		µg/L	WA	0
		Silver, total recoverable	<2.0	<2.0	<2.0	0.92	1	JE	µg/L	WA	0
Organics											
		Acetone	<5.0	<9.0	<3.0	<10	1		µg/L	WA	0
		Carbon tetrachloride	<0.050	<2.6	<5.0	<5.0	1		µg/L	WA	0
		Chloroethene (Vinyl chloride)	<0.10	<4.6	<10	<10	1		µg/L	WA	0
		Chloroform	0.070	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<0.050	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,2-Dichloroethane	<0.050	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<0.050	<3.2	<5.0	<5.0	1		µg/L	WA	0
		cis-1,2-Dichloroethylene	0.15	<2.4	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<0.050	<3.2					µg/L		
		2,4-Dichlorophenoxyacetic acid	<0.050	<0.13	<0.56	<1.0	1	J1	µg/L	WA	0
		Lindane	<0.025	<0.0060	<0.015	<0.051	1	J1	µg/L	WA	0
		Methyl methacrylate	<10	<5.0	<5.0				µg/L		
		Phenol	<10	<2.0	<10	<10	1		µg/L	WA	0
		Tetrachloroethylene	0.22	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<0.050	<2.5	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	4.2	<3.0	1.0	4.3	1	JE	µg/L	WA	1

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Chloride	2,700	1,400	1,300	1,400	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Fluoride	<100	<100	<100	<26	1	V	µg/L	WA	0
		Iron, total recoverable	73	38	6.1	<15	1	V	µg/L	WA	0
		Manganese, total recoverable	2.8	4.4	5.5	4.0	1	JE	µg/L	WA	0
		Nitrate as nitrogen									
		Nitrate-nitrite as nitrogen	890	1,200	***7,100***	930	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
		Sodium, total recoverable	***4,700***	1,800	1,500	1,600	1	V	µg/L	WA	
		Sulfate	2,300	<5,000	<5,000	330	1	JE	µg/L	WA	0
		Total organic carbon	2,100	<1,000	1,500	1,300	1		µg/L	WA	0
●		Total organic halogens	<11	***55***	***65***	<120	1	J	µg/L	WA	0
		Total phosphates (as P)	<40	<10	<10	<67	1		µg/L	WA	0
Radionuclides											
		Gross alpha	1.2E+00	2.2E+00	4.0E+00	5.2E+00	1		pCi/L	TM	0
		Nonvolatile beta	9.3E-01	2.1E+00	*2.5E-01*	2.9E+00	1		pCi/L	TM	0
		Radium, total alpha-emitting	6.0E-01	2.4E+00	4.3E+00	2.7E+00	1	V	pCi/L	TM	1

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only. See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL AMB 17A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N104056.7 E51465.4	33.339868 °N 81.733455 °W	125.0-120.0 ft msl	379.1 ft msl	4" PVC	S	MCBC

SAMPLE DATE	08/14/96	02/19/97	08/07/97	03/23/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	219.1	217.8	216.5	216.4	ft msl
pH	5.6	4.8	4.8	5.0	pH
Sp. conductance	42	20	20	24	µS/cm
Water temperature	22.0	28.0	21.0	16.0	°C
Alkalinity as $CaCO_3$	1	1	2	3	mg/L
Turbidity	2	1	1	1	NTU
Volume purged	2.8	2.3	3.3	2.9	well volume
Sampling code					
Synchronous water level	220.0 (09/19/96)	217.6 (03/20/97)	216.0 (09/17/97)	216.3 (03/20/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Arsenic, total recoverable	<2.8	<8.0	<8.0	<10	1		µg/L	EX	0
		Barium, total recoverable	2.5	3.2	3.0	3.1	1	JE	µg/L	EX	0
		Chromium, total recoverable	2.2	<3.0	0.60	9.1	1	JE	µg/L	EX	0
		Lead, total recoverable	<5.0	<5.0	6.4	<5.0	1		µg/L	EX	0
		Mercury, total recoverable	0.062	<0.20	<0.20	<0.20	1		µg/L	EX	0
		Nickel, total recoverable	3.4	<5.0	<5.0	13	1	JE	µg/L	EX	0
	■	Silver, total recoverable	2.4	<2.0	<2.0	***280***	1		µg/L	EX	2
Organics											
	■	Acetone	***140***	<90	<50	***32***	5	JEV	µg/L	WA	0
		Carbon tetrachloride	1.5	<26	<25	<5.0	1		µg/L	EX	0
		Chloroethene (Vinyl chloride)	<1.0	<46	<50	<5.0	1		µg/L	EX	0
		Chloroform	<0.50	<25	<25	<5.0	1		µg/L	EX	0
		1,1-Dichloroethane	<0.50	<25	<25	<5.0	1		µg/L	EX	0
		1,2-Dichloroethane	<0.50	<25	<25	<5.0	1		µg/L	EX	0
		1,1-Dichloroethylene	<0.50	<32	<25	<5.0	1		µg/L	EX	0
		cis-1,2-Dichloroethylene	8.1	<24	<25	5.1	1		µg/L	EX	0
		trans-1,2-Dichloroethylene	<0.50	<32		<5.0	1		µg/L	EX	0
		2,4-Dichlorophenoxyacetic acid	<0.050	<0.13	<0.56	<0.50	1		µg/L	EX	0
		Lindane	<0.025	<0.0060	<0.015	<0.050	1		µg/L	EX	0
		Methyl methacrylate	<100	<50	<25				µg/L		
		Phenol	<10	<2.0	<10	<10	1		µg/L	EX	0
	■	Tetrachloroethylene	***56***	***60***	***52***	***51***	5		µg/L	WA	2
		1,1,1-Trichloroethane	<0.50	<25	<25	<5.0	1		µg/L	EX	0
	■	Trichloroethylene	***570***	***580***	***510***	***520***	5		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Chloride	2,400	1,700	1,800	1,800	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<10	1		µg/L	EX	0
		Fluoride	<14	<100	<100	<22	1	V	µg/L	WA	0
		Iron, total recoverable	79	55	10	88	1	V	µg/L	WA	0
		Manganese, total recoverable	13	12	8.2	11	1		µg/L	WA	0
		Nitrate as nitrogen									
		Nitrate-nitrite as nitrogen	1,300	1,200	1,100	870	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<10	1		µg/L	EX	0
		Sodium, total recoverable	1,900	2,000	2,000	2,200	1	J	µg/L	EX	
		Sulfate	480	<5,000	<5,000	480	1		µg/L	WA	0
		Total organic carbon	<920		<1,000	6,000	1		µg/L	EX	0
●	■	Total organic halogens	***400***		***630***	***570***	1	J	µg/L	WA	2
		Total phosphates (as P)	9.2	<10	<10	22	1	JE	µg/L	WA	
Radionuclides											
		Gross alpha	*-7.0E-02*	*1.4E-01*	*-1.3E-01*	8.6E-01	1		pCi/L	TM	0
		Nonvolatile beta	*1.4E-01*	*1.4E-01*	*-1.2E+00*	*-5.0E-02*	1	UI	pCi/L	TM	0
		Radium, total alpha-emitting	***8.3E+00***	8.9E-01	*8.1E-01*	*1.2E-01*	1	UI	pCi/L	TM	0

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only. See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL AMB 18A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N103988.8 E51418.8	33.339642 °N 81.733446 °W	136.4-131.4 ft msl	377.3 ft msl	4" PVC	S	MCBC

SAMPLE DATE	08/15/96	02/24/97	08/28/97	03/23/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	219.5	218.0	216.2	215.9	ft msl
pH	6.6	5.2	5.2	5.4	pH
Sp. conductance	26	22	28	24	µS/cm
Water temperature	22.0	28.0	20.0	15.0	°C
Alkalinity as $CaCO_3$	1	2	0	1	mg/L
Turbidity	2	2	1	1	NTU
Volume purged	2.7	2.5	2.7	3.8	well volume
Sampling code					
Synchronous water level	219.8 (09/19/96)	217.4 (03/20/97)	209.9 (09/17/97)	216.2 (03/20/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Arsenic, total recoverable	4.0	<8.0	<5.0	<40	1		µg/L	WA	0
		Barium, total recoverable	5.2	6.2	7.2	5.9	1		µg/L	WA	0
		Chromium, total recoverable	<4.0	<3.0	1.6	<7.0	1		µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0	3.7	<47	1		µg/L	WA	0
		Mercury, total recoverable	<0.20	<0.20	0.10	<0.70	1		µg/L	WA	0
		Nickel, total recoverable	2.8	<5.0	<5.0	<26	1		µg/L	WA	0
		Silver, total recoverable	<2.0	<2.0	<2.0	<5.0	1		µg/L	WA	0
Organics											
		Acetone	***12***	<9.0	<10	<10	1		µg/L	WA	0
		Carbon tetrachloride	<0.10	<2.6	<2.0	<5.0	1		µg/L	WA	0
		Chloroethene (Vinyl chloride)	<0.20	<4.6	<2.0	<10	1		µg/L	WA	0
		Chloroform	0.12	<2.5	<2.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<0.10	<2.5	<2.0	<5.0	1		µg/L	WA	0
		1,2-Dichloroethane	<0.10	<2.5	<2.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<0.10	<3.2	<2.0	<5.0	1		µg/L	WA	0
		cis-1,2-Dichloroethylene	3.9	3.6	5.2	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	0.12	<3.2	<2.0				µg/L		
		2,4-Dichlorophenoxyacetic acid	<0.049	<0.13	<0.10	<1.0	1	J1	µg/L	WA	0
		Lindane	<0.025	<0.0060	0.011	<0.051	1		µg/L	WA	0
		Methyl methacrylate	<20	<5.0	<5.0				µg/L		
		Phenol	<10	<2.0	<10	<10	1		µg/L	WA	0
		Tetrachloroethylene	3.5	***5.5***	4.2	4.3	1	JE	µg/L	WA	1
		1,1,1-Trichloroethane	<0.10	<2.5	<2.0	<5.0	1		µg/L	WA	0
■		Trichloroethylene	***47***	***66***	***68***	***45***	1		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Chloride	2,300	2,000	2,500	2,200	1		µg/L	WA	0
		Cyanide	<10	<5.0	***230***	<15	1		µg/L	WA	0
		Fluoride	<100	<100	<50	<22	1	V	µg/L	WA	0
		Iron, total recoverable	17	53	56	47	1	JEV	µg/L	WA	0
		Manganese, total recoverable	5.2	5.1	6.7	4.5	1	JE	µg/L	WA	0
		Nitrate as nitrogen									
		Nitrate-nitrite as nitrogen	1,100	1,100	1,100	760	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	4.2	<66	1		µg/L	WA	0
		Sodium, total recoverable	2,100	2,100	2,300	2,000	1	V	µg/L	WA	
		Sulfate	<340	<5,000	<5,000	440	1		µg/L	WA	0
		Total organic carbon	1,600	<1,000	1,200	550	1	JE	µg/L	WA	0
●		Total organic halogens	18	49	***93***	43	1	JE	µg/L	WA	0
		Total phosphates (as P)	<30	<10	8.0	10	1	JE	µg/L	WA	
Radionuclides											
		Gross alpha	*8.9E-02*	1.3E+00	*6.0E-01*	2.3E+00	1		pCi/L	TM	0
		Nonvolatile beta	*8.8E-02*	2.4E+00	*2.1E-01*	*1.5E+00*	1	UI	pCi/L	TM	0
		Radium, total alpha-emitting	*-1.0E-01*	4.3E-01	***6.0E+00***	*1.9E-01*	1	UI	pCi/L	TM	0

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only. See Appendix B for flagging criteria.
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WELL AMB 18C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N103983.4 E51432.8	33.339653 °N 81.733398 °W	214.2-209.2 ft msl	376 ft msl	2" PVC	V	UL

SAMPLE DATE	08/16/96	03/03/97	08/18/97	03/23/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	234.2	232.8	231.0	229.2	ft msl
pH	5.2	5.4	4.6	5.5	pH
Sp. conductance	30	26	24	19	µS/cm
Water temperature	22.0	26.0	21.0	18.4	°C
Alkalinity as $CaCO_3$	8	3	1	1	mg/L
Turbidity	10	7	15	5	NTU
Volume purged	3.2	2.8	3.6	17	well volume
Sampling code					
Synchronous water level	234.0 (09/19/96)	232.6 (03/20/97)	230.6 (09/17/97)	229.8 (03/20/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Arsenic, total recoverable	<5.0	<8.0	<8.0	<40	1		µg/L	WA	0
		Barium, total recoverable	2.0	<2.0	3.0	2.9	1		µg/L	WA	0
		Chromium, total recoverable	3.4	<3.0	1.5	<7.0	1		µg/L	WA	0
		Lead, total recoverable	3.9	<5.0	<5.0	<47	1		µg/L	WA	0
		Mercury, total recoverable	0.046	<0.20	<0.20	<0.70	1		µg/L	WA	0
		Nickel, total recoverable	2.7	<5.0	<5.0	<26	1		µg/L	WA	0
		Silver, total recoverable	<2.0	<2.0	<2.0	<0.58	1		µg/L	WA	0
Organics											
		Acetone	7.1	<9.0	<10	<10	1		µg/L	WA	0
		Carbon tetrachloride	<0.050	<2.6	<5.0	<5.0	1		µg/L	WA	0
		Chloroethene (Vinyl chloride)	<0.10	<4.6	<10	<10	1		µg/L	WA	0
		Chloroform	<0.050	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<0.050	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,2-Dichloroethane	<0.050	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<0.050	<3.2	<5.0	<5.0	1		µg/L	WA	0
		cis-1,2-Dichloroethylene	<5.0	<2.4	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<0.050	<3.2					µg/L		
		2,4-Dichlorophenoxyacetic acid	<10	<0.13		<1.0	1	J1	µg/L	WA	0
		Lindane	<0.025	<0.0060	<0.015	<0.051	1		µg/L	WA	0
		Methyl methacrylate	<10	<5.0	<5.0				µg/L		
		Phenol	<10	<2.0	<10	<10	1		µg/L	WA	0
		Tetrachloroethylene	<0.050	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<0.050	<2.5	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	<0.050	<3.0	<5.0	<5.0	1		µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Chloride	2,800	2,400	1,800	1,600	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Fluoride	<100	<100	<100	<23	1	V	µg/L	WA	0
		Iron, total recoverable	230	***300***	***460***	69	1	JEV	µg/L	WA	0
		Manganese, total recoverable	8.7	6.6	7.3	8.0	1		µg/L	WA	0
		Nitrate as nitrogen									
		Nitrate-nitrite as nitrogen	740	540	1,000	860	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
		Sodium, total recoverable	***4,700***	***4,700***	3,700	2,300	1	V	µg/L	WA	
		Sulfate	<1,100	1,800	<5,000	880	1		µg/L	WA	0
		Total organic carbon	<2,000	<1,000	<1,000	980	1	JE	µg/L	WA	0
●		Total organic halogens	13	<10	***130***	<120	1	J	µg/L	WA	0
		Total phosphates (as P)	<50	<10	17	15	1	JE	µg/L	WA	
Radionuclides											
		Gross alpha	*7.9E-02*	*3.2E-01*	9.2E-01	1.6E+00	1		pCi/L	TM	0
		Nonvolatile beta	*8.9E-01*	*2.9E-01*	*-9.2E-01*	*9.2E-01*	1	UI	pCi/L	TM	0
		Radium, total alpha-emitting	*0.0E+00*	*8.5E-01*	*1.8E+00*	1.4E+00	1	V	pCi/L	TM	0

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only. See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL AMB 19C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N102941.1 E51503.7	33.337465 °N 81.731184 °W	196.7-191.7 ft msl	363.7 ft msl	2" PVC	V	UL

SAMPLE DATE	07/10/96	03/03/97	08/27/97	03/10/98
FIELD DATA				
Parameter	3Q96	1Q97	3Q97	1Q98
Water elevation	231.8	210.1	228.0	226.8
pH	6.0	5.6	5.6	6.1
Sp. conductance	74	48	50	54
Water temperature	27.0	27.0	20.0	16.5
Alkalinity as $CaCO_3$	6	22	32	33
Turbidity	1	2	7	1
Volume purged	3.3	3.3	2.5	7.6
Sampling code				
Synchronous water level	231.4 (09/19/96)	229.7 (03/20/97)	227.7 (09/17/97)	227.3 (03/20/98)

Parameter	Unit
Water elevation	ft msl
pH	pH
Sp. conductance	µS/cm
Water temperature	°C
Alkalinity as $CaCO_3$	mg/L
Turbidity	NTU
Volume purged	well volume
Sampling code	
Synchronous water level	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

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H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Arsenic, total recoverable	<5.0	<8.0	<8.0	<40	1		µg/L	WA	0
		Barium, total recoverable	0.79	<2.0	1.2	0.53	1	JE	µg/L	WA	0
		Chromium, total recoverable	1.0	<3.0	1.7	4.2	1	JE	µg/L	WA	0
		Lead, total recoverable	<5.0	7.2	<5.0	<47	1		µg/L	WA	0
		Mercury, total recoverable	<0.20	<0.20	<0.20	<0.70	1		µg/L	WA	0
		Nickel, total recoverable	1.1	<5.0	<5.0	<26	1		µg/L	WA	0
		Silver, total recoverable	<2.0	<2.0	<2.0	<5.0	1		µg/L	WA	0
Organics											
		Acetone	<10	<9.0	<10	<10	1		µg/L	WA	0
		Carbon tetrachloride	<2.0	<2.6	<5.0	<5.0	1		µg/L	WA	0
		Chloroethene (Vinyl chloride)	<2.0	<4.6	<10	<10	1		µg/L	WA	0
		Chloroform	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,2-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		cis-1,2-Dichloroethylene	<2.0	<2.4	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2		<5.0	1		µg/L	WA	0
		2,4-Dichlorophenoxyacetic acid	<0.050	<0.13	<0.56	<1.0	1	J1	µg/L	WA	0
		Lindane	<0.025	<0.0060	<0.015	<0.054	1		µg/L	WA	0
		Methyl methacrylate	<10	<5.0	<5.0				µg/L		
		Phenol	<10	<2.0	<10	<10	1		µg/L	WA	0
		Tetrachloroethylene	<2.0	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	<2.0	<3.0	<5.0	<5.0	1		µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Chloride	2,000	2,000	2,000	2,100	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	4.3	1	JE	µg/L	WA	0
		Fluoride	23	<100	<100	<28	1	V	µg/L	WA	0
		Iron, total recoverable	<18	57	83	40	1	JE	µg/L	WA	0
		Manganese, total recoverable	<0.63	<3.0	0.90	<7.8	1		µg/L	WA	0
		Nitrate as nitrogen									
		Nitrate-nitrite as nitrogen	420	88	120	67	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
	■	Sodium, total recoverable	***11,000***	***11,000***	***10,000***	***9,200***	1	V	µg/L	WA	
	■	Sulfate	***8,800***	***8,100***	***7,700***	***7,600***	1		µg/L	WA	0
		Total organic carbon	<800	<1,000	2,800	120	1	JE	µg/L	WA	0
●		Total organic halogens	5.8	39	23	<120	1	J	µg/L	WA	0
		Total phosphates (as P)	<50	<10	16	150	1		µg/L	WA	
Radionuclides											
		Gross alpha	*4.9E-01*	*-5.0E-01*	*-1.2E-01*	7.4E-01	1	J1	pCi/L	TM	0
		Nonvolatile beta	*2.6E-01*	*-1.9E+00*	*4.0E-02*	*4.6E-01*	1	UI	pCi/L	TM	0
		Radium, total alpha-emitting	*-1.0E-01*	*7.8E-01*	*4.9E+00*	*3.2E-01*	1	UI	pCi/L	TM	0

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only. See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

Table D-6. Groundwater Monitoring Results for Background Wells, Met Lab HWMF
WELL AMB 11D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N103132.3 E51932.6	33.338588 °N 81.730426 °W	240.5-220.5 ft msl	364 ft msl	4" PVC	S	M

SAMPLE DATE	07/10/96	02/21/97	08/29/97	03/23/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	237.6	235.1	232.7	230.8	ft msl
pH	6.6	5.2	6.2	5.6	pH
Sp. Conductance	80	42	66	46	µS/cm
Water temperature	25.0	24.0	18.7	15.0	°C
Alkalinity as CaCO3	11	12	24	8	mg/L
Turbidity	1	11	0	1	NTU
Volume purged	8.2	17	4.0	23	Well vol
Sampling code					
Synchronous water level	236.7 (09/19/96)	234.5 (03/20/97)	232.4 (09/17/97)	231.5 (03/20/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

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H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Arsenic, total recoverable	<5.0	<8.0	<5.0	<40	1		µg/L	WA	0
		Barium, total recoverable	10	6.1	14	9.9	1		µg/L	WA	0
		Chromium, total recoverable	1.0	<3.0	0.84	<7.0	1		µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0	1.8	<47	1		µg/L	WA	0
		Mercury, total recoverable	<0.20	<0.20	<0.20	<0.70	1		µg/L	WA	0
		Nickel, total recoverable	<10	<5.0	<5.0	<26	1		µg/L	WA	0
		Silver, total recoverable	<2.0	<2.0	<2.0	<5.0	1		µg/L	WA	0
Organics											
		Acetone	<10	<9.0	4.3	<10	1		µg/L	WA	0
		Carbon tetrachloride	<2.0	<2.6	<2.0	<5.0	1		µg/L	WA	0
		Chloroethene (Vinyl chloride)	<2.0	<4.6	<2.0	<10	1		µg/L	WA	0
		Chloroform	<2.0	<2.5	<2.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<2.0	<5.0	1		µg/L	WA	0
		1,2-Dichloroethane	<2.0	<2.5	<2.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<2.0	<5.0	1		µg/L	WA	0
		cis-1,2-Dichloroethylene	<2.0	<2.4	<2.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2	<2.0				µg/L		
		2,4-Dichlorophenoxyacetic acid	<0.050	<0.13	<0.10	<1.0	1	J1	µg/L	WA	0
		Lindane	<0.025	<0.0060	<0.015	<0.051	1		µg/L	WA	0
		Methyl methacrylate	<10	<5.0	<5.0				µg/L		
		Phenol	<10	<2.0	<10	<10	1		µg/L	WA	0
		Tetrachloroethylene	<2.0	<1.9	<2.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<2.5	<2.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	<2.0	<3.0	<2.0	<5.0	1		µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Chloride	2,500	2,500	2,900	2,300	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Fluoride	<100	<100	<58	<26	1	V	µg/L	WA	0
		Iron, total recoverable	<18	210	44	<74	1		µg/L	WA	0
		Manganese, total recoverable	1.8	4.3	2.4	2.3	1	JE	µg/L	WA	0
		Nitrate as nitrogen									
		Nitrate-nitrite as nitrogen	350	83	110	240	1		µg/L	WA	0
		Selenium, total recoverable	1.9	<5.0	<5.0	<66	1		µg/L	WA	0
	■	Sodium, total recoverable	***6,400***	***7,200***	***7,000***	***6,700***	1	V	µg/L	WA	
	■	Sulfate	***4,700***	***6,200***	***6,000***	***5,500***	1		µg/L	WA	0
		Total organic carbon	<1,100	<1,000	2,000	980	1	JE	µg/L	WA	0
●		Total organic halogens	4.1	***66***	31	21	1	JE	µg/L	WA	0
		Total phosphates (as P)	<50	<10	40	10	1	JE	µg/L	WA	

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only. See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL AMB 11D, cont.

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Radionuclides											
		Gross alpha	*9.3E-02*	1.2E+00	9.0E-01	9.0E-01	1		pCi/L	TM	0
		Nonvolatile beta	*5.0E-01*	*2.7E-01*	*2.3E-01*	*1.6E+00*	1	UI	pCi/L	TM	0
		Radium, total alpha-emitting	*0.0E+00*	1.0E+00	1.8E+00	*2.5E-01*	1	UI	pCi/L	TM	0

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only. See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL AMB 12D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N103602.4 E51901.6	33.339576 °N 81.731422 °W	239.4-219.4 ft msl	369.8 ft msl	4" PVC	S	M

SAMPLE DATE	07/10/96	03/03/97	08/13/97	03/24/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	236.0	234.0	235.3	230.2	ft msl
pH	6.0	5.8	5.2	5.6	pH
Sp. Conductance	37	26	80	24	µS/cm
Water temperature	25.0	25.0	20.0	16.0	°C
Alkalinity as CaCO3	1	2	2	3	mg/L
Turbidity	1	7	2	1	NTU
Volume purged	7.0	4.1	3.3	4.4	Well vol
Sampling code					
Synchronous water level	235.4 (09/19/96)	233.8 (03/20/97)	231.7 (09/17/97)	230.9 (03/20/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

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H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Arsenic, total recoverable	<5.0	<8.0	<8.0	<40	1		µg/L	WA	0
		Barium, total recoverable	4.8	5.3	48	5.7	1		µg/L	WA	0
		Chromium, total recoverable	<4.0	<3.0	0.70	<7.0	1		µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0	6.8	<47	1		µg/L	WA	0
		Mercury, total recoverable	<0.20	<0.20	<0.20	<0.70	1		µg/L	WA	0
		Nickel, total recoverable	<10	<5.0	<5.0	<26	1		µg/L	WA	0
		Silver, total recoverable	<2.0	3.6	1.3	<5.0	1		µg/L	WA	0
Organics											
		Acetone	<10	<9.0	<10	<6.2	1	V	µg/L	WA	0
		Carbon tetrachloride	<2.0	<2.6	<5.0	<5.0	1		µg/L	WA	0
		Chloroethene (Vinyl chloride)	<2.0	<4.6	<10	<10	1		µg/L	WA	0
		Chloroform	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,2-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		cis-1,2-Dichloroethylene	<2.0	<2.4	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2					µg/L		
		2,4-Dichlorophenoxyacetic acid	<0.049	<0.13	<0.56	<1.0	1	J1	µg/L	WA	0
		Lindane	<0.025	<0.0060	<0.015	<0.051	1		µg/L	WA	0
		Methyl methacrylate	<10	<5.0	<5.0				µg/L		
		Phenol	<10	<2.0	<10	<10	1		µg/L	WA	0
		Tetrachloroethylene	<2.0	<1.9	1.1	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	<2.0	<3.0	3.4	<5.0	1		µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Chloride	1,200	1,100	3,900	1,400	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Fluoride	<100	<100	<100	<20	1	V	µg/L	WA	0
		Iron, total recoverable	<18	93	42	<13	1	V	µg/L	WA	0
		Manganese, total recoverable	10	8.6	17	8.9	1		µg/L	WA	0
		Nitrate as nitrogen									
		Nitrate-nitrite as nitrogen	1,300	1,100	260	780	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
		Sodium, total recoverable	2,100	2,200	2,000	2,200	1	V	µg/L	WA	
		Sulfate	430	<1,300	<5,000	620	1		µg/L	WA	0
		Total organic carbon	<620	<1,000	<1,000	550	1	JE	µg/L	WA	0
●		Total organic halogens	<10	<10	***180***	<120	1	J	µg/L	WA	0
		Total phosphates (as P)	30	<10	<10	<67	1		µg/L	WA	0

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only. See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL AMB 12D, cont.

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Radionuclides											
		Gross alpha	7.8E-01	*5.4E-01*	1.5E+00	1.5E+00	1		pCi/L	TM	0
		Nonvolatile beta	3.1E+00	*2.1E+00*	*-1.5E-01*	*4.9E-01*	1	UI	pCi/L	TM	0
		Radium, total alpha-emitting	3.0E-01	*8.7E-01*	*1.6E+00*	5.0E-01	1	UIV	pCi/L	TM	0

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only. See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 29B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N107319.3 E51217.5	33.346676 °N 81.740456 °W	151.7-145.1 ft msl	365 ft msl	4" PVC		S LL

SAMPLE DATE	07/11/96	02/03/97	09/02/97	03/09/98	
FIELD DATA					
Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	224.7	223.8	222.7	221.8	ft msl
pH	4.4	4.2	4.6	4.1	pH
Sp. Conductance	12	28	26	29	µS/cm
Water temperature	22.0	23.0	19.4	18.0	°C
Alkalinity as CaCO3	1	0	0	0	mg/L
Turbidity	1	0	1	1	NTU
Volume purged	3.3	2.8	2.5	2.9	Well vol
Sampling code					
Synchronous water level	225.4 (09/19/96)	223.3 (03/20/97)	221.6 (09/17/97)	221.6 (03/20/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

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H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Arsenic, total recoverable	<2.1	<8.0	<5.0	<40	1		µg/L	WA	0
		Barium, total recoverable	7.1	6.9	7.9	6.2	1		µg/L	WA	0
		Chromium, total recoverable	<4.0	<3.0	<3.0	<7.0	1		µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0	4.1	<47	1		µg/L	WA	0
		Mercury, total recoverable	0.023	<0.20	<0.20	<0.70	1		µg/L	WA	0
		Nickel, total recoverable	<10	<5.0	<5.0	<26	1		µg/L	WA	0
		Silver, total recoverable	<2.0	<2.0	<1.1	<5.0	1		µg/L	WA	0
Organics											
		Acetone	8.9	<9.0	4.1	<10	1		µg/L	WA	0
		Carbon tetrachloride	<0.050	<2.6	<2.0	<5.0	1		µg/L	WA	0
		Chloroethene (Vinyl chloride)	<0.10	<4.6	<2.0	<10	1		µg/L	WA	0
		Chloroform	<0.050	<2.5	<2.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<0.050	<2.5	<2.0	<5.0	1		µg/L	WA	0
		1,2-Dichloroethane	<0.050	<2.5	<2.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<0.050	<3.2	<2.0	<5.0	1		µg/L	WA	0
		cis-1,2-Dichloroethylene	<5.0	<2.4	<2.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<0.050	<3.2	<2.0				µg/L		
		2,4-Dichlorophenoxyacetic acid	<0.050	<0.13	<0.095	<1.0	1	J	µg/L	WA	0
		Lindane	<0.025	<0.0060	<0.015	<0.051	1		µg/L	WA	0
		Methyl methacrylate	<10	<5.0	<5.0				µg/L		
		Phenol	<10	<2.0	<10	<10	1		µg/L	WA	0
		Tetrachloroethylene	<0.050	<1.9	<2.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<0.050	<2.5	<2.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	<0.050	<3.0	<2.0	<5.0	1		µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Chloride	2,300	2,600	2,800	2,600	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	2.8	1	JE	µg/L	WA	0
		Fluoride	<100	<100	<100	<25	1	V	µg/L	WA	0
		Iron, total recoverable	<18	<20	130	8.4	1		µg/L	WA	0
		Manganese, total recoverable	1.4	<3.0	2.0	1.4	1	JE	µg/L	WA	0
		Nitrate as nitrogen									
		Nitrate-nitrite as nitrogen	1,800	1,700	1,500	1,500	5		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
		Sodium, total recoverable	2,300	2,300	2,500	2,100	1	V	µg/L	WA	
		Sulfate	130	<500	<5,000	410	1		µg/L	WA	0
		Total organic carbon	<1,000	<1,000	2,200	<1,000	1		µg/L	WA	0
●		Total organic halogens	<10	***57***	***64***	<120	1	J	µg/L	WA	0
		Total phosphates (as P)	<50	12	<10	<67	1		µg/L	WA	0

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only. See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 29B, cont.

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Radionuclides											
		Gross alpha	1.9E+00	*4.3E-01*	5.3E+00	4.2E+00	1		pCi/L	TM	0
		Nonvolatile beta	1.6E+00	*2.3E+00*	3.1E+00	2.8E+00	1		pCi/L	TM	0
		Radium, total alpha-emitting	7.0E-01	1.4E+00	***6.2E+00***	*6.6E-01*	1	UI	pCi/L	TM	0

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only. See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 29C

SRS Coord.	Lat/Longitude	Screen Zone Elevation		Top of Casing	Casing	Pump	Screen Zone
N107315.0 E51206.6	33.346648 °N 81.740476 °W	179.7-174.1 ft msl	365 ft msl		4" PVC	S	UL

SAMPLE DATE	07/11/96	02/03/97	08/06/97	03/09/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	231.4	230.5	228.9	228.1	ft msl
pH	4.4	4.2	4.2	3.7	pH
Sp. Conductance	14	28	28	29	µS/cm
Water temperature	23.0	23.0	21.0	18.3	°C
Alkalinity as CaCO3	1	0	0	0	mg/L
Turbidity	1	0	1	0	NTU
Volume purged	3.6	3.6	2.2	2.7	Well vol
Sampling code					
Synchronous water level	231.5 (09/19/96)	230.0 (03/20/97)	228.6 (09/17/97)	228.0 (03/20/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Arsenic, total recoverable	<5.0	<8.0	<8.0	<40	1		µg/L	WA	0
		Barium, total recoverable	5.9	6.1	5.5	5.2	1		µg/L	WA	0
		Chromium, total recoverable	1.8	<3.0	1.0	<7.0	1		µg/L	WA	0
		Lead, total recoverable	3.2	<5.0	4.3	<47	1		µg/L	WA	0
		Mercury, total recoverable	<0.20	<0.20	<0.20	<0.70	1		µg/L	WA	0
		Nickel, total recoverable	1.2	<5.0	2.6	<26	1		µg/L	WA	0
		Silver, total recoverable	<2.0	<2.0	<2.0	<5.0	1		µg/L	WA	0
Organics											
		Acetone	<5.0	<9.0	<10	<10	1		µg/L	WA	0
		Carbon tetrachloride	<0.050	<2.6	<5.0	<5.0	1		µg/L	WA	0
		Chloroethene (Vinyl chloride)	<0.10	<4.6	<10	<10	1		µg/L	WA	0
		Chloroform	<0.050	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<0.050	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,2-Dichloroethane	<0.050	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<0.050	<3.2	<5.0	<5.0	1		µg/L	WA	0
		cis-1,2-Dichloroethylene	<5.0	<2.4	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<0.050	<3.2					µg/L		
		2,4-Dichlorophenoxyacetic acid	<0.049	<0.13	<0.56	<1.0	1	J1	µg/L	WA	0
		Lindane	<0.025	<0.0060	<0.015	<0.051	1		µg/L	WA	0
		Methyl methacrylate	<10	<5.0	<5.0				µg/L		
		Phenol	<10	<2.0	<10	<10	1		µg/L	WA	0
		Tetrachloroethylene	<0.050	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<0.050	<2.5	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	<0.050	<3.0	<5.0	<5.0	1		µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Chloride	2,300	2,500	2,500	2,600	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Fluoride	<100	<100	<100	<21	1	V	µg/L	WA	0
		Iron, total recoverable	21	21	17	15	1		µg/L	WA	0
		Manganese, total recoverable	2.3	<3.0	2.2	1.9	1	JE	µg/L	WA	0
		Nitrate as nitrogen									
		Nitrate-nitrite as nitrogen	1,900	1,500	1,900	1,900	5		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
		Sodium, total recoverable	2,300	2,300	2,300	2,100	1	V	µg/L	WA	
		Sulfate	130	<500	<5,000	690	1		µg/L	WA	0
		Total organic carbon	<950	<1,000	700	<1,000	1		µg/L	WA	0
●		Total organic halogens	<10	27	37	<120	1	J	µg/L	WA	0
		Total phosphates (as P)	<50	<10	8.0	35	1	JE	µg/L	WA	

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only. See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 29C, cont.

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Radionuclides											
		Gross alpha	2.7E+00	*4.0E-01*	*4.4E+00*	3.6E+00	1		pCi/L	TM	0
		Nonvolatile beta	2.4E+00	*1.2E+00*	5.6E+00	3.4E+00	1		pCi/L	TM	0
		Radium, total alpha-emitting	1.4E+00	1.9E+00	2.0E+00	8.5E-01	1	UIV	pCi/L	TM	0

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only. See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 29D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N107323.3 E51226.9	33.346700 °N 81.740439 °W	227.6-207.0 ft msl	364.9 ft msl	4" PVC	S	M

SAMPLE DATE	07/11/96	02/03/97	07/24/97	03/24/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	233.3	232.4	231.3	229.5	ft msl
pH	4.8	4.4	4.8	5.0	pH
Sp. Conductance	28	26	24	25	µS/cm
Water temperature	28.0	23.0	20.9	18.2	°C
Alkalinity as CaCO3	0	0	1	0	mg/L
Turbidity	2	1	2	1	NTU
Volume purged	3.3	3.1	3.1	4.7	Well vol
Sampling code					
Synchronous water level	233.2 (09/19/96)	233.4 (03/20/97)	230.7 (09/17/97)	230.0 (03/20/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Arsenic, total recoverable	<5.0	<8.0		<40	1		µg/L	WA	0
		Barium, total recoverable	7.3	8.8		7.4	1		µg/L	WA	0
		Chromium, total recoverable	<4.0	<3.0		<7.0	1		µg/L	WA	0
		Lead, total recoverable	2.0	<5.0		<47	1		µg/L	WA	0
		Mercury, total recoverable	0.022	<0.20		<0.70	1		µg/L	WA	0
		Nickel, total recoverable	<10	<5.0		<26	1		µg/L	WA	0
		Silver, total recoverable	<2.0	<2.0		<5.0	1		µg/L	WA	0
Organics											
		Acetone	<5.0	<9.0		<10	1		µg/L	WA	0
		Carbon tetrachloride	<0.050	<2.6		<5.0	1		µg/L	WA	0
		Chloroethene (Vinyl chloride)	<0.10	<4.6		<10	1		µg/L	WA	0
		Chloroform	<0.050	<2.5		<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<0.050	<2.5		<5.0	1		µg/L	WA	0
		1,2-Dichloroethane	<0.050	<2.5		<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<0.050	<3.2		<5.0	1		µg/L	WA	0
		cis-1,2-Dichloroethylene	<5.0	<2.4		<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<0.050	<3.2					µg/L		
		2,4-Dichlorophenoxyacetic acid	<0.050	<0.13		<1.0	1	J1	µg/L	WA	0
		Lindane	<0.025	<0.0060		<0.051	1		µg/L	WA	0
		Methyl methacrylate	<10	<5.0					µg/L		
		Phenol	<10	<2.0		<10	1		µg/L	WA	0
		Tetrachloroethylene	<0.050	<1.9		<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<0.050	<2.5		<5.0	1		µg/L	WA	0
		Trichloroethylene	<0.050	<3.0		<5.0	1		µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Chloride	3,900	3,600		3,700	1		µg/L	WA	0
		Cyanide	<10	<5.0		<15	1		µg/L	WA	0
		Fluoride	<100	<100		<19	1	V	µg/L	WA	0
		Iron, total recoverable	170	180		300	1		µg/L	WA	1
		Manganese, total recoverable	4.8	3.8		5.5	1	JE	µg/L	WA	0
		Nitrate as nitrogen									
		Nitrate-nitrite as nitrogen	1,300	960		760	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0		<66	1		µg/L	WA	0
		Sodium, total recoverable	2,400	2,400		2,000	1	V	µg/L	WA	
		Sulfate	760	<500		820	1		µg/L	WA	0
		Total organic carbon	<960	<1,000		<1,000	1		µg/L	WA	0
●		Total organic halogens	3.0	19		<120	1	J	µg/L	WA	0
		Total phosphates (as P)	<50	<10		<67	1		µg/L	WA	0

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only. See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 29D, cont.

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Radionuclides											
	■	Gross alpha	1.0E+01	5.1E+00		***1.7E+01***	1		pCi/L	TM	2
		Nonvolatile beta	3.5E+00	*2.5E+00*		1.4E+01	1		pCi/L	TM	0
	■	Radium, total alpha-emitting	***6.6E+00***	***6.3E+00***		***6.1E+00***	1	V	pCi/L	TM	2

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only. See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 43A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N107275.3 E49293.7	33.343436 °N 81.745437 °W	140.5-134.9 ft msl	357.7 ft msl	4" PVC	S	LL

SAMPLE DATE	07/17/96	02/04/97	08/05/97	03/09/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	229.8	228.7	227.8	227.2	ft msl
pH	5.2	5.0	4.8	6.1	pH
Sp. Conductance	24	26	22	25	µS/cm
Water temperature	25.0	23.0	20.4	18.7	°C
Alkalinity as CaCO3	1	5	0	3	mg/L
Turbidity	3	1	0	1	NTU
Volume purged	2.8	2.7	2.5	2.2	Well vol
Sampling code					
Synchronous water level	229.6 (09/19/96)	228.7 (03/20/97)	227.3 (09/17/97)	227.2 (03/20/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Arsenic, total recoverable	<5.0	<8.0	<8.0	<40	1		µg/L	WA	0
		Barium, total recoverable	11	12	6.6	7.0	1		µg/L	WA	0
		Chromium, total recoverable	<4.0	<3.0	0.70	0.97	1	JE	µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0	<5.0	<47	1		µg/L	WA	0
		Mercury, total recoverable	<0.20	<0.20	<0.20	<0.70	1		µg/L	WA	0
		Nickel, total recoverable	<10	<5.0	<5.0	<26	1		µg/L	WA	0
		Silver, total recoverable	<2.0	<2.0	1.5	<5.0	1		µg/L	WA	0
Organics											
		Acetone	5.3	<9.0	<10	<10	1		µg/L	WA	0
		Carbon tetrachloride	<0.050	<2.6	<5.0	<5.0	1		µg/L	WA	0
		Chloroethene (Vinyl chloride)	<0.10	<4.6	<10	<10	1		µg/L	WA	0
		Chloroform	<0.050	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<0.050	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,2-Dichloroethane	<0.050	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<0.050	<3.2	<5.0	<5.0	1		µg/L	WA	0
		cis-1,2-Dichloroethylene	<5.0	<2.4	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<0.050	<3.2					µg/L		
		2,4-Dichlorophenoxyacetic acid	<0.049	<0.13	<0.56	<1.0	1	J	µg/L	WA	0
		Lindane	<0.025	<0.0060	<0.015	<0.051	1		µg/L	WA	0
		Methyl methacrylate	<10	<5.0	<5.0				µg/L		
		Phenol	<10	<2.0	<10	<10	1		µg/L	WA	0
		Tetrachloroethylene	<0.050	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<0.050	<2.5	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	<0.050	<3.0	<5.0	<5.0	1		µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Chloride	1,200	1,400	1,400	1,500	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Fluoride	<100	<100	<100	<19	1	V	µg/L	WA	0
		Iron, total recoverable	14	<20	91	12	1		µg/L	WA	0
		Manganese, total recoverable	2.3	3.6	2.9	1.9	1	JE	µg/L	WA	0
		Nitrate as nitrogen									
		Nitrate-nitrite as nitrogen	1,600	1,500	1,700	1,500	5		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
		Sodium, total recoverable	1,800	1,800	1,700	1,600	1	V	µg/L	WA	
		Sulfate	100	<500	<5,000	410	1		µg/L	WA	0
		Total organic carbon	<400	<1,000	500	<1,000	1		µg/L	WA	0
●		Total organic halogens	10	<10	***190***	<120	1	J	µg/L	WA	0
		Total phosphates (as P)	140	13	<10	7.1	1	JE	µg/L	WA	

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only. See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 43A, cont.

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Radionuclides											
		Gross alpha	1.5E+00	*3.2E-01*	*-1.0E-01*	1.4E+00	1		pCi/L	TM	0
		Nonvolatile beta	1.4E+00	*1.4E+00*	*-1.9E-01*	1.7E+00	1		pCi/L	TM	0
		Radium, total alpha-emitting	*4.0E-01*	1.2E+00	*1.5E-01*	*2.2E-01*	1	UI	pCi/L	TM	0

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only. See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 43B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N107274.6 E49311.8	33.343464 °N 81.745388 °W	175.5-169.9 ft msl	357.8 ft msl	4" PVC	S	UL

SAMPLE DATE	07/15/96	02/04/97	08/06/97	03/09/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	230.3	228.8	227.7	227.3	ft msl
pH	4.8	4.4	4.4	4.1	pH
Sp. Conductance	24	22	24	25	µS/cm
Water temperature	26.0	23.0	20.0	18.6	°C
Alkalinity as CaCO3	1	1	1	0	mg/L
Turbidity	3	0	0	1	NTU
Volume purged	2.6	4.5	6.1	2.9	Well vol
Sampling code					
Synchronous water level	229.8 (09/19/96)	228.7 (03/20/97)	227.4 (09/17/97)	227.3 (03/20/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Arsenic, total recoverable	<5.0	<8.0	<8.0	<40	1		µg/L	WA	0
		Barium, total recoverable	3.3	2.7	2.5	2.6	1		µg/L	WA	0
		Chromium, total recoverable	<4.0	<3.0	1.0	0.88	1	JE	µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0	<5.0	<47	1		µg/L	WA	0
		Mercury, total recoverable	<0.20	<0.20	<0.20	<0.70	1		µg/L	WA	0
		Nickel, total recoverable	0.83	<5.0	<5.0	<26	1		µg/L	WA	0
		Silver, total recoverable	<2.0	<2.0	<2.0	<5.0	1		µg/L	WA	0
Organics											
		Acetone	6.8	<9.0	<10	<7.3	1	V	µg/L	WA	0
		Carbon tetrachloride	<0.050	<2.6	<5.0	<5.0	1		µg/L	WA	0
		Chloroethene (Vinyl chloride)	<0.10	<4.6	<10	<10	1		µg/L	WA	0
		Chloroform	<0.050	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<0.050	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,2-Dichloroethane	<0.050	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<0.050	<3.2	<5.0	<5.0	1		µg/L	WA	0
		cis-1,2-Dichloroethylene	<5.0	<2.4	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<0.050	<3.2					µg/L		
		2,4-Dichlorophenoxyacetic acid	<0.049	<0.13	<0.56	<1.0	1	J1	µg/L	WA	0
		Lindane	<0.025	<0.0060	<0.015	<0.051	1		µg/L	WA	0
		Methyl methacrylate	<10	<5.0	<5.0				µg/L		
		Phenol	<10	<2.0	<10	<10	1		µg/L	WA	0
		Tetrachloroethylene	<0.050	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<0.050	<2.5	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	<0.050	<3.0	<5.0	<5.0	1		µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Chloride	1,800	1,900	1,900	1,900	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Fluoride	<100	<100	<100	<18	1	V	µg/L	WA	0
		Iron, total recoverable	17	<20	13	16	1		µg/L	WA	0
		Manganese, total recoverable	1.6	<3.0	1.7	1.4	1	JE	µg/L	WA	0
		Nitrate as nitrogen									
		Nitrate-nitrite as nitrogen	1,700	1,600	1,900	1,600	5		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
		Sodium, total recoverable	2,300	2,400	2,300	2,100	1	V	µg/L	WA	
	■	Sulfate	220	<500	<5,000	***3,900***	1		µg/L	WA	0
		Total organic carbon	<550	<1,000	<1,000	<1,000	1		µg/L	WA	0
●		Total organic halogens	<10	27	***300***	<120	1	J	µg/L	WA	0
		Total phosphates (as P)	30	<10	<10	<67	1		µg/L	WA	0

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only. See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 43B, cont.

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Radionuclides											
		Gross alpha	2.7E+00	1.9E+00	*3.8E+00*	3.5E+00	1		pCi/L	TM	0
		Nonvolatile beta	1.7E+00	*4.5E+00*	3.3E+00	2.1E+00	1		pCi/L	TM	0
		Radium, total alpha-emitting	8.0E-01	5.9E-01	2.1E+00	1.3E+00	1	UIV	pCi/L	TM	0

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only. See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 43D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N107274.2 E49322.0	33.343480 °N 81.745360 °W	220.8-200.2 ft msl	358 ft msl	4" PVC	S	M

SAMPLE DATE	07/15/96	02/04/97	08/06/97	03/09/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	232.2	231.3	230.2	229.6	ft msl
pH	4.8	4.4	4.2		pH
Sp. Conductance	20	22	22		µS/cm
Water temperature	28.0	23.0	21.0		°C
Alkalinity as CaCO3	0	0	0		mg/L
Turbidity	10	1	1		NTU
Volume purged	3.4	3.3	6.3	0.47	Well vol
Sampling code				X	
Synchronous water level	232.0 (09/19/96)	231.3 (03/20/97)	229.9 (09/17/97)	229.8 (03/20/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Arsenic, total recoverable	<5.0	<8.0	<8.0	<40	1		µg/L	WA	0
		Barium, total recoverable	3.8	3.7	3.2	2.6	1		µg/L	WA	0
		Chromium, total recoverable	<4.0	<3.0	5.8	1.2	1	JE	µg/L	WA	0
	■	Lead, total recoverable	3.4	***18***	***26***	***110***	1		µg/L	WA	2
		Mercury, total recoverable	<0.20	<0.20	<0.20	<0.70	1		µg/L	WA	0
		Nickel, total recoverable	1.8	<5.0	4.0	<26	1		µg/L	WA	0
		Silver, total recoverable	<2.0	<2.0	<2.0	<5.0	1		µg/L	WA	0
Organics											
		Acetone	4.8	<9.0	<10	<10	1		µg/L	WA	0
		Carbon tetrachloride	<0.050	<2.6	<5.0	<5.0	1		µg/L	WA	0
		Chloroethene (Vinyl chloride)	<0.10	<4.6	<10	<10	1		µg/L	WA	0
		Chloroform	0.21	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<0.050	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,2-Dichloroethane	<0.050	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<0.050	<3.2	<5.0	<5.0	1		µg/L	WA	0
		cis-1,2-Dichloroethylene	<5.0	<2.4	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<0.050	<3.2					µg/L		
		2,4-Dichlorophenoxyacetic acid	<0.049	<0.13	<0.56	<1.0	1	J	µg/L	WA	0
		Lindane	<0.025	<0.0060	<0.015	<0.051	1		µg/L	WA	0
		Methyl methacrylate	<10	<5.0	<5.0				µg/L		
		Phenol	<10	<2.0	<10	0.65	1	JE	µg/L	WA	0
		Tetrachloroethylene	<0.050	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<0.050	<2.5	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	<0.050	<3.0	<5.0	<5.0	1		µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Chloride	1,700	1,900	1,800	1,900	1		µg/L	WA	0
		Cyanide	6.1	<5.0	<5.0	<15	1		µg/L	WA	0
		Fluoride	<100	<100	<100	<25	1	V	µg/L	WA	0
		Iron, total recoverable	17	65	80	110	1		µg/L	WA	0
		Manganese, total recoverable	6.7	5.4	5.3	4.5	1	JE	µg/L	WA	0
		Nitrate as nitrogen									
		Nitrate-nitrite as nitrogen	1,700	1,000	1,200	920	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
		Sodium, total recoverable	1,400	1,600	1,400	1,300	1	V	µg/L	WA	
		Sulfate	400	630	<5,000	1,200	1		µg/L	WA	0
		Total organic carbon	<520	<1,000	1,200	1,100	1		µg/L	WA	0
●		Total organic halogens	<10	***190***	***140***	18	1	JE	µg/L	WA	0
		Total phosphates (as P)	<50	<10	<10	25	1	JE	µg/L	WA	

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only. See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL MSB 43D, cont.

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Radionuclides											
		Gross alpha	1.5E+00	*-1.3E-01*	*3.9E+00*	1.4E+00	1		pCi/L	TM	0
		Nonvolatile beta	*1.0E+00*	*-8.0E-02*	6.4E+00	*-4.9E-01*	1	UI	pCi/L	TM	0
		Radium, total alpha-emitting	1.0E+00	1.0E+00	9.5E-01	6.8E-01	1	UIV	pCi/L	TM	0

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only. See Appendix B for flagging criteria.
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

Table D-7. Groundwater Monitoring Results for Plume Definition Wells, Met Lab HWMF

WELL AMB 4B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N104145.6 E51482.7	33.340093 °N 81.733582 °W	157.3-152.3 ft msl	380.4 ft msl	4" PVC	S	LL

SAMPLE DATE	07/10/96	02/25/97	08/27/97	03/23/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	225.1	223.9	222.0	221.0	ft msl
pH	5.8	5.0	4.4	4.6	pH
Sp. conductance	44	30	46	28	µS/cm
Water temperature	26.0	28.0	18.0	16.0	°C
Alkalinity as $CaCO_3$	0	0	1	0	mg/L
Turbidity	0	1	2	1	NTU
Volume purged	2.9	2.3	2.5	6.2	well volume
Sampling code					
Synchronous water level	225.2 (09/19/96)	223.0 (03/20/97)	221.5 (09/17/97)	221.1 (03/20/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Arsenic, total recoverable	<5.0	<8.0	<8.0	<40	1		µg/L	WA	0
		Barium, total recoverable	5.9	8.6	7.7	6.0	1		µg/L	WA	0
		Chromium, total recoverable	0.75	<3.0	0.60	<7.0	1		µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0	<5.0	<47	1		µg/L	WA	0
		Mercury, total recoverable	<0.20	<0.20	<0.20	<0.70	1		µg/L	WA	0
		Nickel, total recoverable	<10	<5.0	<5.0	<26	1		µg/L	WA	0
		Silver, total recoverable	<2.0	<2.0	<2.0	<5.0	1		µg/L	WA	0
Organics											
		Acetone	<10	<9.0	<10	<10	1		µg/L	WA	0
		Carbon tetrachloride	<2.0	<2.6	<5.0	<5.0	1		µg/L	WA	0
		Chloroethene (Vinyl chloride)	<2.0	<4.6	<10	<10	1		µg/L	WA	0
		Chloroform	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,2-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		cis-1,2-Dichloroethylene	<2.0	<2.4	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2					µg/L		
		2,4-Dichlorophenoxyacetic acid	<0.050		<0.56	<1.0	1	J1	µg/L	WA	0
		Lindane	<0.025		<0.015	<0.051	1		µg/L	WA	0
		Methyl methacrylate	<10	<5.0	<5.0				µg/L		
		Phenol	<10	<2.0	<10	<10	1		µg/L	WA	0
		Tetrachloroethylene	<2.0	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	3.0	4.2	2.6	3.1	1	JE	µg/L	WA	1

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
	■	Chloride	***4,400***	***4,400***	***5,200***	***4,700***	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Fluoride	<100	<100	<100	<31	1	V	µg/L	WA	0
		Iron, total recoverable	<18	75	39	<25	1	V	µg/L	WA	0
		Manganese, total recoverable	4.8	5.7	4.6	4.3	1	JE	µg/L	WA	0
		Nitrate as nitrogen									
		Nitrate-nitrite as nitrogen	950	530	650	450	1		µg/L	WA	0
		Selenium, total recoverable	1.8	<5.0	<5.0	<66	1		µg/L	WA	0
		Sodium, total recoverable	3,000	3,100	3,000	3,200	1	V	µg/L	WA	
		Sulfate	210	<5,000	<5,000	410	1		µg/L	WA	0
		Total organic carbon	<1,300	1,400	2,300	<1,000	1		µg/L	WA	0
	●	Total organic halogens	5.0	<10	***150***	26	1	JE	µg/L	WA	0
		Total phosphates (as P)	***320***	<10	5.0	7.1	1	JE	µg/L	WA	
Radionuclides											
		Gross alpha	1.6E+00	1.5E+00	*4.7E+00*	2.4E+00	1		pCi/L	TM	0
		Nonvolatile beta	*1.4E+00*	2.2E+00	*4.8E+00*	2.2E+00	1		pCi/L	TM	0
		Radium, total alpha-emitting	7.0E-01	6.9E-01	1.7E+00	6.1E-01	1	UIV	pCi/L	TM	0

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only. See Appendix B for flagging criteria .

● = exceeded holding time for first quarter 1998.

■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL AMB 7

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N103920.0 E51624.9	33.339827 °N 81.732769 °W	242.1-222.1 ft msl	369.9 ft msl	4" PVC	S	M

SAMPLE DATE: 07/09/96 | 02/21/97 | 08/14/97 | 03/05/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	235.3	233.6	235.7	229.9	ft msl
pH	6.6	6.2	6.4		pH
Sp. conductance	160	100	96		µS/cm
Water temperature	26.0	28.0	18.9		°C
Alkalinity as $CaCO_3$	49	22	15		mg/L
Turbidity	3	6	10		NTU
Volume purged	0.12	0.13	0.11	5.3	well volume
Sampling code	X	X	X		
Synchronous water level	234.7 (09/19/96)	233.3 (03/20/97)	231.3 (09/17/97)	230.4 (03/20/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Arsenic, total recoverable	<5.0	<8.0	<8.0	<40	1		µg/L	WA	0
		Barium, total recoverable	13	6.9	12	9.0	1		µg/L	WA	0
		Chromium, total recoverable	4.0	<3.0	5.1	4.7	1	JE	µg/L	WA	0
		Lead, total recoverable	12	6.9	9.8	8.7	1	JE	µg/L	WA	0
		Mercury, total recoverable	<0.13	<0.20	<0.20	<0.70	1		µg/L	WA	0
		Nickel, total recoverable	8.2	<5.0	5.1	4.3	1	JE	µg/L	WA	0
		Silver, total recoverable	<2.0	<2.0	<2.0	<5.0	1		µg/L	WA	0
Organics											
		Acetone	<9.7	<9.0	<2.0	<6.1	1	V	µg/L	WA	0
		Carbon tetrachloride	<0.050	<2.6	<5.0	<5.0	1		µg/L	WA	0
		Chloroethene (Vinyl chloride)	<0.10	<4.6	<10	<10	1		µg/L	WA	0
		Chloroform	0.060	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	0.070	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,2-Dichloroethane	<0.050	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<0.050	<3.2	<5.0	<5.0	1		µg/L	WA	0
		cis-1,2-Dichloroethylene	0.070	<2.4	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<0.050	<3.2		<5.0	1		µg/L	WA	0
		2,4-Dichlorophenoxyacetic acid	<0.050	<0.13	<0.56	<1.3	1	J1	µg/L	WA	0
		Lindane	<0.025	<0.0060	<0.015	<0.054	1		µg/L	WA	0
		Methyl methacrylate	<10	<5.0	<5.0				µg/L		
		Phenol	<10	<2.0	<10	<10	1		µg/L	WA	0
		Tetrachloroethylene	0.17	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<0.050	<2.5	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	2.5	<3.0	2.0	<5.0	1		µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Chloride	1,700	***4,700***	2,500	2,400	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Fluoride	21	<100	50	<26	1	V	µg/L	WA	0
	■	Iron, total recoverable	210	61	***860***	***520***	1		µg/L	WA	2
		Manganese, total recoverable	6.7	<3.0	4.6	5.2	1	JE	µg/L	WA	0
		Nitrate as nitrogen									
		Nitrate-nitrite as nitrogen	470	290	180	330	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
	■	Sodium, total recoverable	***19,000***	***8,900***	***12,000***	***8,800***	1	V	µg/L	WA	
	■	Sulfate	1,900	<5,000	***3,100***	***3,700***	1		µg/L	WA	0
		Total organic carbon	<1,500	<1,000	1,500	770	1	JE	µg/L	WA	0
●		Total organic halogens	7.5	22	***110***	<120	1	J	µg/L	WA	0
		Total phosphates (as P)	<50	<10	45	14	1	JE	µg/L	WA	
Radionuclides											
		Gross alpha	1.6E+00	*-2.0E-02*	*1.1E+00*	9.3E-01	1	J1	pCi/L	TM	0
		Nonvolatile beta	2.2E+00	3.5E+00	3.1E+00	*7.6E-01*	1	UI	pCi/L	TM	0
		Radium, total alpha-emitting	6.0E-01	*1.3E-01*	*1.4E+00*	6.5E-01	1	J1	pCi/L	TM	0

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only. See Appendix B for flagging criteria .
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL AMB 7A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N103987.1 E51591.0	33.339920 °N 81.732989 °W	125.6-115.6 ft msl	373.6 ft msl	4" PVC	S	MCBC

SAMPLE DATE	08/14/96	02/20/97	08/07/97	03/06/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	219.0	217.7	216.4	216.0	ft msl
pH	6.6	5.8	5.6	5.5	pH
Sp. conductance	38	26	26	26	µS/cm
Water temperature	22.0	32.0	20.0	17.8	°C
Alkalinity as $CaCO_3$	3	9	5	5	mg/L
Turbidity	3	1	2	1	NTU
Volume purged	2.4	2.1	2.0	2.6	well volume
Sampling code					
Synchronous water level	219.6 (09/19/96)	217.3 (03/20/97)	215.8 (09/17/97)	216.3 (03/20/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Arsenic, total recoverable	<4.4	<8.0	<8.0	<10	1		µg/L	EX	0
		Barium, total recoverable	4.4	4.7	4.4	5.6	1		µg/L	EX	0
		Chromium, total recoverable	<4.0	<3.0	0.60	1.8	1	JE	µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0	4.6	<1.3	1	V	µg/L	EX	0
		Mercury, total recoverable	0.067	<0.20	<0.20	<0.20	1		µg/L	EX	0
		Nickel, total recoverable	<1.8	<5.0	<5.0	<20	1		µg/L	EX	0
		Silver, total recoverable	<2.0	<2.0	<2.0	<5.0	1		µg/L	WA	0
Organics											
	■	Acetone	***55***	<9.0	<20	***230***	1	L	µg/L	EX	0
		Carbon tetrachloride	0.70	<2.6	<10	<5.0	1		µg/L	EX	0
		Chloroethene (Vinyl chloride)	<1.0	<4.6	<20	<5.0	1		µg/L	EX	0
		Chloroform	<0.50	<2.5	<10	<5.0	1		µg/L	EX	0
		1,1-Dichloroethane	<0.50	<2.5	<10	<5.0	1		µg/L	EX	0
		1,2-Dichloroethane	<0.50	<2.5	<10	<5.0	1		µg/L	EX	0
		1,1-Dichloroethylene	<0.50	<3.2	<10	<5.0	1		µg/L	EX	0
		cis-1,2-Dichloroethylene	4.8	3.5	4.0	4.4	1	JE	µg/L	EX	0
		trans-1,2-Dichloroethylene	<0.50	<3.2		<5.0	1		µg/L	EX	0
		2,4-Dichlorophenoxyacetic acid	<0.049	<0.13	<0.56	<0.50	1		µg/L	EX	0
		Lindane	<0.025	<0.0060	<0.015	<0.050	1		µg/L	EX	0
		Methyl methacrylate	<100	<5.0	<10				µg/L		
		Phenol	<10	<2.0	<10	<10	1		µg/L	EX	0
	■	Tetrachloroethylene	***32***	***38***	***38***	***52***	2		µg/L	EX	2
		1,1,1-Trichloroethane	<0.50	<2.5	<10	<5.0	1		µg/L	EX	0
	■	Trichloroethylene	***180***	***140***	***110***	***120***	2		µg/L	EX	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Chloride	1,900	1,600	1,600	1,600	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<10	1		µg/L	EX	0
		Fluoride	<100	<100	<100	<25	1	V	µg/L	WA	0
		Iron, total recoverable	<18	26	3.6	27	1	JE	µg/L	WA	0
		Manganese, total recoverable	5.6	5.5	5.6	6.5	1	JE	µg/L	EX	0
		Nitrate as nitrogen									
		Nitrate-nitrite as nitrogen	1,100	1,100	970	810	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<10	1		µg/L	EX	0
		Sodium, total recoverable	1,800	2,100	1,800	2,100	1	J	µg/L	EX	
		Sulfate	440	<5,000	<5,000	650	1		µg/L	WA	0
		Total organic carbon	<1,100	<1,000	500	10,000	1		µg/L	EX	0
●	■	Total organic halogens	***89***	***150***	***140***	***140***	1	J	µg/L	WA	2
		Total phosphates (as P)	<50	<10	6.0	17	1	JE	µg/L	WA	
Radionuclides											
		Gross alpha	*2.8E-01*	*-4.1E-01*	*4.9E-01*	1.4E+00	1		pCi/L	TM	0
		Nonvolatile beta	*1.0E+00*	*3.6E-01*	*9.0E-01*	2.5E+00	1		pCi/L	TM	0
		Radium, total alpha-emitting	*-7.0E-01*	1.2E+00	1.2E+00	6.5E-01	1		pCi/L	TM	0

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only. See Appendix B for flagging criteria .
● = exceeded holding time for first quarter 1998.
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WELL AMB 7B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N103972.0 E51590.3	33.339885 °N 81.732961 °W	162.9-152.9 ft msl	373 ft msl	4" PVC	S	LL

SAMPLE DATE	07/09/96	02/21/97	07/28/97	03/05/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	225.2	224.1	222.9	221.5	ft msl
pH	5.6	4.8	4.2	5.6	pH
Sp. conductance	38	24	56	20	µS/cm
Water temperature	25.0	29.0	20.0	18.0	°C
Alkalinity as $CaCO_3$	1	2	1	2	mg/L
Turbidity	1	1	1	2	NTU
Volume purged	3.5	2.6	2.8	2.3	well volume
Sampling code					
Synchronous water level	225.2 (09/19/96)	223.8 (03/20/97)	221.7 (09/17/97)	221.6 (03/20/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Arsenic, total recoverable	<5.0	<8.0	<8.0	<40	1		µg/L	WA	0
		Barium, total recoverable	2.1	4.9	<2.0	2.7	1		µg/L	WA	0
		Chromium, total recoverable	<4.0	<3.0	<3.0	<7.0	1		µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0	<5.0	<47	1		µg/L	WA	0
		Mercury, total recoverable	0.79	0.24	<0.20	<0.70	1		µg/L	WA	0
		Nickel, total recoverable	<10	<5.0	<5.0	<26	1		µg/L	WA	0
		Silver, total recoverable	<2.0	5.8	<2.0	<5.0	1		µg/L	WA	0
Organics											
		Acetone	<4.7	<9.0	<10	<10	1		µg/L	WA	0
		Carbon tetrachloride	<0.050	<2.0	<5.0	<5.0	1		µg/L	WA	0
		Chloroethene (Vinyl chloride)	<0.10	<2.0	<10	<10	1		µg/L	WA	0
		Chloroform	<0.050	<2.0	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<0.050	<2.0	<5.0	<5.0	1		µg/L	WA	0
		1,2-Dichloroethane	<0.050	<2.0	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<0.050	<2.0	<5.0	<5.0	1		µg/L	WA	0
		cis-1,2-Dichloroethylene	0.11	<2.0	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<0.050	<2.0		<5.0	1		µg/L	WA	0
		2,4-Dichlorophenoxyacetic acid	<0.049	<0.050		<1.0	1	J	µg/L	WA	0
		Lindane	<0.025	<0.0060	<0.0050	<0.051	1		µg/L	WA	0
		Methyl methacrylate	<10	<5.0	<5.0				µg/L		
		Phenol	<10	<2.0	<10	11	1	R	µg/L	WA	0
		Tetrachloroethylene	0.50	<1.9	0.87	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<0.050	<2.0	<5.0	<5.0	1		µg/L	WA	0
	■	Trichloroethylene	***6.0***	***7.0***	***6.9***	***6.4***	1		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Chloride	2,900	3,100	2,900	2,900	1		µg/L	WA	0
		Cyanide	<10	<5.0	<2.5	<15	1		µg/L	WA	0
		Fluoride	<100	<100	<100	<24	1	V	µg/L	WA	0
		Iron, total recoverable	<18	71	6.4	<39	1	V	µg/L	WA	0
		Manganese, total recoverable	2.1	4.2	1.9	2.0	1	JE	µg/L	WA	0
		Nitrate as nitrogen									
		Nitrate-nitrite as nitrogen	800	500	660	560	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
		Sodium, total recoverable	3,800	3,900	3,600	3,300	1	V	µg/L	WA	
		Sulfate	860	880	1,000	910	1		µg/L	WA	0
		Total organic carbon	<1,100	<1,000	<1,000	660	1	JE	µg/L	WA	0
	●	Total organic halogens	15	20	15	14	1	JE	µg/L	WA	0
		Total phosphates (as P)	190	<0.050	<50	28	1	JE	µg/L	WA	
Radionuclides											
		Gross alpha	*5.8E-01*	9.5E-01	-6.6E-01	2.0E+00	1		pCi/L	TM	0
		Nonvolatile beta	*1.2E+00*	2.0E+00	*-8.7E-01*	2.7E+00	1		pCi/L	TM	0
		Radium, total alpha-emitting	*0.0E+00*	1.8E+00	1.7E+00	*2.5E-01*	1	UI	pCi/L	TM	0

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only. See Appendix B for flagging criteria .
● = exceeded holding time for first quarter 1998.
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WELL AMB 11B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N103154.2 E51919.5	33.338615 °N 81.730503 °W	184.5-174.5 ft msl	364.6 ft msl	4" PVC	S	UL

SAMPLE DATE	07/10/96	02/21/97	08/13/97	03/23/98
FIELD DATA				
Parameter	3Q96	1Q97	3Q97	1Q98
Water elevation	223.4	222.2	224.5	220.5
pH	6.4	5.2	4.4	5.6
Sp. conductance	54	40	40	38
Water temperature	25.0	24.0	19.0	15.0
Alkalinity as $CaCO_3$	8	12	2	6
Turbidity	0	1	2	1
Volume purged	3.8	2.6	3.2	4.8
Sampling code				
Synchronous water level	223.3 (09/19/96)	221.8 (03/20/97)	220.3 (09/17/97)	220.5 (03/20/98)

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Arsenic, total recoverable	<5.0	<8.0	<8.0	<40	1		µg/L	WA	0
		Barium, total recoverable	31	22	22	18	1		µg/L	WA	0
		Chromium, total recoverable	1.3	<3.0	<3.0	<7.0	1		µg/L	WA	0
		Lead, total recoverable	1.2	<5.0	5.4	<47	1		µg/L	WA	0
		Mercury, total recoverable	<0.20	<0.20	<0.20	<0.70	1		µg/L	WA	0
		Nickel, total recoverable	1.8	<5.0	<5.0	<26	1		µg/L	WA	0
		Silver, total recoverable	<2.0	<2.0	<2.0	<5.0	1		µg/L	WA	0
Organics											
		Acetone	<10	<9.0	<10	<10	1		µg/L	WA	0
		Carbon tetrachloride	<2.0	<2.6	<5.0	<5.0	1		µg/L	WA	0
		Chloroethene (Vinyl chloride)	<2.0	<4.6	<10	<10	1		µg/L	WA	0
		Chloroform	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,2-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<2.0	<3.2	<5.0	<5.0	1		µg/L	WA	0
		cis-1,2-Dichloroethylene	<2.0	<2.4	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2					µg/L		
		2,4-Dichlorophenoxyacetic acid	<0.049	<0.13	<0.56	<1.0	1	J1	µg/L	WA	0
		Lindane	<0.025	<0.0060	<0.015	<0.051	1		µg/L	WA	0
		Methyl methacrylate	<10	<5.0	<5.0				µg/L		
		Phenol	<10	<2.0	<10	<10	1		µg/L	WA	0
		Tetrachloroethylene	<2.0	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	<2.0	<3.0	<5.0	<5.0	1		µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Chloride	3,800	3,800	4,000	3,800	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Fluoride	<100	<100	<100	<27	1	V	µg/L	WA	0
		Iron, total recoverable	<18	21	18	<14	1	V	µg/L	WA	0
		Manganese, total recoverable	11	8.2	9.4	9.0	1		µg/L	WA	0
		Nitrate as nitrogen									
		Nitrate-nitrite as nitrogen	470	230	240	230	1		µg/L	WA	0
		Selenium, total recoverable	2.1	<5.0	<5.0	<66	1		µg/L	WA	0
		Sodium, total recoverable	2,100	1,900	2,100	2,300	1	V	µg/L	WA	
		Sulfate	430	<5,000	<5,000	630	1		µg/L	WA	0
		Total organic carbon	<1,000	<1,000	<1,000	<1,000	1		µg/L	WA	0
●		Total organic halogens	<10	<10	***280***	<120	1	J	µg/L	WA	0
		Total phosphates (as P)	<50	<10	<10	8.8	1	JE	µg/L	WA	
Radionuclides											
		Gross alpha	*5.1E-01*	*-5.3E-01*	4.6E+00	1.2E+00	1		pCi/L	TM	0
		Nonvolatile beta	*7.2E-01*	*-4.6E-01*	3.8E+00	2.0E+00	1		pCi/L	TM	0
		Radium, total alpha-emitting	3.0E-01	*1.4E-01*	*2.2E+00*	7.5E-01	1	UIV	pCi/L	TM	0

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only. See Appendix B for flagging criteria .
● = exceeded holding time for first quarter 1998.
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WELL AMB 13AR

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N103082.0 E51396.0	33.337600 °N 81.731742 °W	110.9-100.9 ft msl	365.1 ft msl	4" PVC	S	MCBC

SAMPLE DATE	07/26/96	02/21/97	08/27/97	03/09/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	218.9	217.9	216.9	216.7	ft msl
pH	9.0	6.4	6.4	6.8	pH
Sp. conductance	120	80	78	76	µS/cm
Water temperature	29.0	25.0	20.0	19.4	°C
Alkalinity as $CaCO_3$	28	46	27	33	mg/L
Turbidity	8	5	3	3	NTU
Volume purged	0.026	2.2	2.1	2.2	well volume
Sampling code	X				
Synchronous water level	219.5 (09/19/96)	217.6 (03/20/97)	216.2 (09/17/97)	216.4 (03/20/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Arsenic, total recoverable	<5.0	<8.0	<8.0	<40	1		µg/L	WA	0
		Barium, total recoverable	44	26	21	21	1		µg/L	WA	0
		Chromium, total recoverable	15	6.5	2.8	5.4	1	JEV	µg/L	WA	0
		Lead, total recoverable	<5.0	<5.0	<5.0	<47	1		µg/L	WA	0
		Mercury, total recoverable	<0.20	<0.20	<0.20	<0.70	1		µg/L	WA	0
		Nickel, total recoverable	<10	<5.0	<5.0	3.0	1	JE	µg/L	WA	0
		Silver, total recoverable	<2.0	<2.0	<2.0	<5.0	1		µg/L	WA	0
Organics											
		Acetone	***14***	<9.0	<10	<10	1		µg/L	WA	0
		Carbon tetrachloride	<0.050	<2.6	<5.0	<5.0	1		µg/L	WA	0
		Chloroethene (Vinyl chloride)	0.46	<4.6	<10	<10	1		µg/L	WA	0
		Chloroform	0.060	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	***0.37***	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,2-Dichloroethane	<0.050	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<0.050	<3.2	<5.0	<5.0	1		µg/L	WA	0
		cis-1,2-Dichloroethylene	<5.0	<2.4	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<0.050	<3.2					µg/L		
		2,4-Dichlorophenoxyacetic acid	<0.050	<0.13	<0.56	<1.0	1	J1	µg/L	WA	0
		Lindane	<0.025	<0.0060	<0.015	<0.051	1		µg/L	WA	0
		Methyl methacrylate	<10	<5.0	<5.0				µg/L		
		Phenol	<10	<2.0	<10	<10	1		µg/L	WA	0
		Tetrachloroethylene	0.10	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<0.050	<2.5	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	0.74	<3.0	1.1	<5.0	1		µg/L	WA	0

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Chloride	2,600	2,300	2,500	2,600	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Fluoride	<100	<100	<100	<25	1	V	µg/L	WA	0
		Iron, total recoverable	180	82	***380***	47	1	JEV	µg/L	WA	0
		Manganese, total recoverable	5.3	3.6	4.2	2.9	1	JE	µg/L	WA	0
		Nitrate as nitrogen									
		Nitrate-nitrite as nitrogen	1,600	1,000	1,100	880	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0	<66	1		µg/L	WA	0
		Sodium, total recoverable	***5,600***	4,000	3,400	3,400	1	V	µg/L	WA	
		Sulfate	1,400	<5,000	<5,000	1,600	1		µg/L	WA	0
		Total organic carbon	<1,500	<1,000	2,000	1,200	1		µg/L	WA	0
●		Total organic halogens	16	<10	***130***	<120	1	J	µg/L	WA	0
		Total phosphates (as P)	<30	<10	8.0	20	1	JE	µg/L	WA	
Radionuclides											
		Gross alpha	1.7E+00	*-3.0E-02*	*9.2E-01*	1.5E+00	1		pCi/L	TM	0
		Nonvolatile beta	3.5E+00	*2.0E+00*	2.1E+00	1.7E+00	1		pCi/L	TM	0
		Radium, total alpha-emitting	7.0E-01	*3.4E-01*	*3.9E+00*	4.2E-01	1	UIV	pCi/L	TM	0

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only. See Appendix B for flagging criteria .
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL AMB 14D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N104278.7 E51360.8	33.340188 °N 81.734162 °W	235.1-215.1 ft msl	382.4 ft msl	2" PVC	V	M

SAMPLE DATE	07/03/96	02/20/97	08/13/97	03/10/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	232.8	230.9	230.1	227.8	ft msl
pH	5.6	5.8	5.6	6.5	pH
Sp. conductance	28	30	40	43	µS/cm
Water temperature	30.0	28.0	21.0	16.9	°C
Alkalinity as $CaCO_3$	8	10	8	8	mg/L
Turbidity	13	9	11	150	NTU
Volume purged	3.1	3.5	0.0	1.4	well volume
Sampling code		X	X	X	
Synchronous water level	232.0 (09/19/96)	230.9 (03/20/97)	229.0 (09/17/97)	228.2 (03/20/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

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H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Arsenic, total recoverable	<5.0	<8.0	<8.0				µg/L		
		Barium, total recoverable	4.9	3.8	17				µg/L		
		Chromium, total recoverable	11	5.4	21				µg/L		
		Lead, total recoverable	5.7	11	***22***				µg/L		
		Mercury, total recoverable	<0.20	<0.20	<0.20				µg/L		
		Nickel, total recoverable	7.2	5.5	15				µg/L		
		Silver, total recoverable	<2.0	<2.0	<2.0				µg/L		
Organics											
		Acetone	<10	<9.0	<10	<10	1		µg/L	WA	0
		Carbon tetrachloride	<2.0	<2.6	<5.0	<5.0	1		µg/L	WA	0
		Chloroethene (Vinyl chloride)	<2.0	<4.6	<10	<10	1		µg/L	WA	0
		Chloroform	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,2-Dichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	1.6	<3.2	2.5	<5.0	1		µg/L	WA	0
		cis-1,2-Dichloroethylene	<2.0	<2.4	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<2.0	<3.2		<5.0	1		µg/L	WA	0
		2,4-Dichlorophenoxyacetic acid	<0.050	<0.13	<0.56	<1.0	1	J1	µg/L	WA	0
		Lindane	<0.025	<0.0060	<0.015	<0.067	1		µg/L	WA	0
		Methyl methacrylate	<10	<5.0	<5.0				µg/L		
		Phenol	<10	<2.0	<10	<14	1		µg/L	WA	0
	■	Tetrachloroethylene	***26***	***40***	***29***	***11***	1		µg/L	WA	2
		1,1,1-Trichloroethane	<2.0	<2.5	<5.0	<5.0	1		µg/L	WA	0
	■	Trichloroethylene	***50***	***89***	***92***	***47***	1		µg/L	WA	2

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Chloride	1,600	1,900	2,000	2,000	1		µg/L	WA	0
		Cyanide	<1.6	<5.0	<5.0	<15	1		µg/L	WA	0
		Fluoride	<100	<100	<100	<22	1	V	µg/L	WA	0
		Iron, total recoverable	***510***	84	***2,600***				µg/L		
		Manganese, total recoverable	28	16	31				µg/L		
		Nitrate as nitrogen									
		Nitrate-nitrite as nitrogen	1,600	1,700	1,800	1,700	5		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0				µg/L		
		Sodium, total recoverable	3,400	3,100	2,900				µg/L		
		Sulfate	270	<5,000	<5,000	300	1	JE	µg/L	WA	0
		Total organic carbon	520	<1,000	2,100	250	1	JE	µg/L	WA	0
●	■	Total organic halogens	***51***	***94***	***250***	***65***	1	JE	µg/L	WA	1
		Total phosphates (as P)	30	<10	<10	24	1	JE	µg/L	WA	
Radionuclides											
		Gross alpha	1.3E+00	*-1.9E-01*	2.7E+00	3.2E+00	1		pCi/L	TM	0
		Nonvolatile beta	1.2E+00	3.2E+00	*5.2E-01*	*-3.3E-01*	1	UI	pCi/L	TM	0
		Radium, total alpha-emitting	*-1.0E-01*	6.1E-01	*1.7E+00*	1.7E+00	1		pCi/L	TM	0

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only. See Appendix B for flagging criteria .
● = exceeded holding time for first quarter 1998.
■ = exceeded groundwater protection or monitoring constituent standard for first quarter 1998.

WELL AMB 15D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N104500.6 E51383.8	33.340716 °N 81.734534 °W	236.2-216.2 ft msl	383.4 ft msl	2" PVC	V	M

SAMPLE DATE	08/15/96	02/19/97	08/28/97	03/05/98

FIELD DATA

Parameter	3Q96	1Q97	3Q97	1Q98	Unit
Water elevation	234.4	233.2	231.6	229.9	ft msl
pH	5.8	5.4	6.4		pH
Sp. conductance	82	26	200		µS/cm
Water temperature	26.0	32.0	20.0		°C
Alkalinity as $CaCO_3$	28	6	9		mg/L
Turbidity	42	9	13		NTU
Volume purged	0.33	0.0	0.0	0.45	well volume
Sampling code	X	X	X		
Synchronous water level	234.3 (09/19/96)	233.0 (03/20/97)	231.1 (09/17/97)	230.4 (03/20/98)	ft msl

ANALYTICAL DATA

Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Arsenic, total recoverable	5.0	<8.0	<8.0				µg/L		
		Barium, total recoverable	9.1	3.9	20				µg/L		
		Chromium, total recoverable	9.6	<3.0	14				µg/L		
		Lead, total recoverable	***300***	<5.0	7.3				µg/L		
		Mercury, total recoverable	<0.20	<0.20	<0.20				µg/L		
		Nickel, total recoverable	9.1	5.1	9.5				µg/L		
		Silver, total recoverable	<2.0	2.8	<2.0				µg/L		
Organics											
		Acetone	<5.0	<9.0	<10	<12	1	V	µg/L	WA	0
		Carbon tetrachloride	0.090	<2.6	<5.0	<5.0	1		µg/L	WA	0
		Chloroethene (Vinyl chloride)	<0.10	<4.6	<10	<10	1		µg/L	WA	0
		Chloroform	0.080	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethane	<0.050	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,2-Dichloroethane	<0.050	<2.5	<5.0	<5.0	1		µg/L	WA	0
		1,1-Dichloroethylene	<0.050	<3.2	<5.0	<5.0	1		µg/L	WA	0
		cis-1,2-Dichloroethylene	0.29	<2.4	<5.0	<5.0	1		µg/L	WA	0
		trans-1,2-Dichloroethylene	<0.050	<3.2		<5.0	1		µg/L	WA	0
		2,4-Dichlorophenoxyacetic acid	<0.051	<0.13	<0.56	<1.3	1	J	µg/L	WA	0
		Lindane	<0.025	<0.0060	<0.015	<0.067	1		µg/L	WA	0
		Methyl methacrylate	<10	<5.0	<5.0				µg/L		
		Phenol	<10	<2.0	<10	<13	1		µg/L	WA	0
		Tetrachloroethylene	1.3	<1.9	<5.0	<5.0	1		µg/L	WA	0
		1,1,1-Trichloroethane	<0.050	<2.5	<5.0	<5.0	1		µg/L	WA	0
		Trichloroethylene	***12***	<3.0	3.0				µg/L		

Monitoring Constituents

H	ST	Parameter	3Q96	1Q97	3Q97	1Q98	DF	Mod	Unit	Lab	Flag
Inorganics											
		Chloride	2,100	1,600	2,600	2,500	1		µg/L	WA	0
		Cyanide	<10	<5.0	<5.0	<15	1		µg/L	WA	0
		Fluoride	<100	<100	<100	<29	1	V	µg/L	WA	0
		Iron, total recoverable	***4,200***	***400***	***5,600***				µg/L		
		Manganese, total recoverable	36	26	33				µg/L		
		Nitrate as nitrogen									
		Nitrate-nitrite as nitrogen	900	1,200	860	510	1		µg/L	WA	0
		Selenium, total recoverable	<5.0	<5.0	<5.0				µg/L		
		Sodium, total recoverable	***6,100***	3,300	***5,400***				µg/L		
■		Sulfate	2,200	<5,000	***3,600***	***3,800***	1		µg/L	WA	0
		Total organic carbon	<2,300	<1,000	1,700	<1,000	1		µg/L	WA	0
●		Total organic halogens	<13	***150***	33	<120	1	J	µg/L	WA	0
		Total phosphates (as P)	***310***	<10	***390***	220	1		µg/L	WA	
Radionuclides											
		Gross alpha	1.4E+00	*2.0E-02*	*4.2E+00*	3.3E+00	1		pCi/L	TM	0
		Nonvolatile beta	2.0E+00	*-5.6E-01*	*2.9E+00*	*1.0E+00*	1	UI	pCi/L	TM	0
		Radium, total alpha-emitting	*0.0E+00*	8.5E-01	1.6E+00	*1.9E-01*	1	UI	pCi/L	TM	0

Notes: Concentrations in bold italics exceed the groundwater protection or monitoring constituent standards listed in Appendix A. Radionuclide results in italics are less than sample quantitation limit. Synchronous water levels are measured over a 3-5 day period or less. Dilution factor, modifier, laboratory, and flag are for first quarter 1998 only. See Appendix B for flagging criteria .
● = exceeded holding time for first quarter 1998.
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Table D-8. Constituents Exceeding the Groundwater Protection or Monitoring Constituents Standard in Point-of-Compliance Wells, M-Area HWMF

Well	Constituent	Unit	3Q96	1Q97	3Q97	1Q98	Mod
M-Area Aquifer Zone							
MSB 1D	Lead	µg/L	–	–	15	–	
	Nitrate-nitrite as nitrogen	µg/L	2,600	NA	2,600	NA	
	Sodium	µg/L	4,900	NA	–	NA	
	Tetrachloroethylene	µg/L	430	430	430	110	
	Trichloroethylene	µg/L	150	130	160	26	
MSB 2D	Aluminum	µg/L	290	270	220	NA	
	Nitrate-nitrite as nitrogen	µg/L	4,100	NA	3,900	NA	
	Radium, total alpha-emitting	pCi/L	8.9E+00	NA	–	NA	
	Tetrachloroethylene	µg/L	460	330	570	81	
	Trichloroethylene	µg/L	370	250	830	190	
MSB 4D	Aluminum	µg/L	170	NA	150	NA	
	Nitrate-nitrite as nitrogen	µg/L	4,300	NA	–	NA	
	Radium, total alpha-emitting	pCi/L	5.5E+00	NA	–	NA	
	Tetrachloroethylene	µg/L	180	170	120	190	
	Trichloroethylene	µg/L	220	250	240	230	E
MSB 5A	Lead	µg/L	–	–	–	47	JE
	Nitrate-nitrite as nitrogen	µg/L	–	NA	2,900	NA	
	Sodium	µg/L	–	NA	4,700	NA	
	Tetrachloroethylene	µg/L	–	18	18	18	
	Trichloroethylene	µg/L	6.5	38	54	37	
MSB 6A	Aluminum	µg/L	–	180	–	NA	
	Chloride	µg/L	4,800	NA	5,500	NA	
	Sodium	µg/L	5,100	NA	5,800	NA	
MSB 7A	Sodium	µg/L	5,100	NA	5,300	NA	
MSB 8A	Nitrate-nitrite as nitrogen	µg/L	4,000	NA	2,500	NA	
	1,1,2,2-Tetrachloroethane	µg/L	23	–	–	NA	
	Tetrachloroethylene	µg/L	21	100	62	NA	
	Trichloroethylene	µg/L	9.5	29	12	NA	
MSB 13D	Aluminum	µg/L	–	–	760	NA	
	Nitrate-nitrite as nitrogen	µg/L	42,000	NA	31,000	NA	
	Sodium	µg/L	92,000	NA	67,000	NA	
	Sulfate	µg/L	5,100	NA	5,500	NA	
	Tetrachloroethylene	µg/L	9.2	47	26	37	
	Trichloroethylene	µg/L	14	24	16	19	
MSB 57D	Aluminum	µg/L	–	–	370	NA	
	Lead	µg/L	–	15	–	–	
	Tetrachloroethylene	µg/L	86	62	NA	22	
	Trichloroethylene	µg/L	46	36	NA	15	
MSB 58D	Aluminum	µg/L	770	740	340	NA	
	Chromium	µg/L	–	110	–	NA	
	Lead	µg/L	98	51	–	25	JE
	Tetrachloroethylene	µg/L	700	3,800	630	440	
	1,1,1-Trichloroethane	µg/L	–	550	–	–	

Well	Constituent	Unit	3Q96	1Q97	3Q97	1Q98	Mod
	Trichloroethylene	µg/L	1,200	2,200	760	550	
MSB 59D	Aluminum	µg/L	240	190	270	NA	
	Lead	µg/L	–	34	–	–	
	Manganese	µg/L	56	85	–	NA	
	Nitrate-nitrite as nitrogen	µg/L	3,000	NA	2,400	NA	
	Tetrachloroethylene	µg/L	22,000	28,000	NA	12,000	
	Trichloroethylene	µg/L	5,300	7,600	NA	3,700	
MSB 60D	Aluminum	µg/L	–	–	260	NA	
	Nitrate-nitrite as nitrogen	µg/L	3,800	NA	6,200	NA	
	Sodium	µg/L	5,200	NA	6,800	NA	
	Tetrachloroethylene	µg/L	1,300	1,600	660	420	J2
	Trichloroethylene	µg/L	360	460	220	110	J2
MSB 62D	Aluminum	µg/L	1,300	1,400	1,500	NA	
	1,1-Dichloroethylene	µg/L	–	–	7.4	–	
	Lead	µg/L	340	–	–	–	
	Nitrate-nitrite as nitrogen	µg/L	9,800	NA	11,000	NA	
	Sodium	µg/L	38,000	NA	43,000	NA	
	Sulfate	µg/L	5,400	NA	5,800	NA	
	Tetrachloroethylene	µg/L	84	110	110	74	
	Trichloroethylene	µg/L	30	37	37	26	
MSB 63D	Aluminum	µg/L	1,100	1,200	1,200	NA	
	Lead	µg/L	45	–	–	–	
	Nitrate-nitrite as nitrogen	µg/L	3,400	NA	4,100	NA	
	Sodium	µg/L	–	NA	4,700	NA	
	Tetrachloroethylene	µg/L	220	310	260	220	
	Trichloroethylene	µg/L	35	42	34	33	
MSB 64D	Chloride	µg/L	4,500	NA	4,300	NA	
	Nitrate-nitrite as nitrogen	µg/L	2,500	NA	2,600	NA	
	Sodium	µg/L	13,000	NA	11,000	NA	
Upper Lost Lake Aquifer Zone							
MSB 1C	Aluminum	µg/L	560	NA	–	NA	
	Chloride	µg/L	–	NA	4,400	NA	
	1,1-Dichloroethylene	µg/L	–	–	12	8.0	JE
	Nitrate-nitrite as nitrogen	µg/L	15,000	NA	17,000	NA	
	Sodium	µg/L	25,000	NA	19,000	NA	
	Sulfate	µg/L	3,600	NA	–	NA	
	Tetrachloroethylene	µg/L	440	400	450	360	
	Trichloroethylene	µg/L	66	180	300	130	
MSB 1CC	Nitrate-nitrite as nitrogen	µg/L	6,400	NA	6,400	NA	
	Sodium	µg/L	10,000	NA	9,200	NA	
	Tetrachloroethylene	µg/L	10	31	8.3	13	
	Trichloroethylene	µg/L	35	45	30	29	
MSB 2C	Aluminum	µg/L	490	NA	190	NA	
	Nitrate-nitrite as nitrogen	µg/L	11,000	NA	11,000	NA	
	Sodium	µg/L	21,000	NA	13,000	NA	
	Tetrachloroethylene	µg/L	14,000	16,000	NA	52,000	
	Trichloroethylene	µg/L	22,000	41,000	NA	57,000	
MSB 3C	Aluminum	µg/L	2,900	NA	3,900	NA	
	Lead	µg/L	23	–	–	17	JE

Well	Constituent	Unit	3Q96	1Q97	3Q97	1Q98	Mod
	Nitrate-nitrite as nitrogen	µg/L	–	NA	3,400	NA	
	Nonvolatile beta	pCi/L	5.9E+01	NA	3.6E+02	NA	
	Sodium	µg/L	51,000	NA	50,000	NA	
	Tetrachloroethylene	µg/L	22,000	48,000	20,000	25,000	
	Trichloroethylene	µg/L	10,000	16,000	11,000	12,000	
MSB 4C	Chloride	µg/L	–	NA	4,500	NA	
	Nitrate-nitrite as nitrogen	µg/L	19,000	NA	30,000	NA	
	Sodium	µg/L	13,000	NA	13,000	NA	
	Tetrachloroethylene	µg/L	6,700	3,100	12,000	7,100	
	Trichloroethylene	µg/L	8,900	4,600	19,000	9,500	
MSB 5C	Chloride	µg/L	4,500	NA	4,800	NA	
	1,1-Dichloroethylene	µg/L	49	42	48	45	
	Nitrate-nitrite as nitrogen	µg/L	22,000	NA	24,000	NA	
	Sodium	µg/L	28,000	NA	25,000	NA	
	Tetrachloroethylene	µg/L	190	220	130	150	
	Trichloroethylene	µg/L	19	22	20	25	
MSB 6C	Tetrachloroethylene	µg/L	89	97	37	NA	
	Trichloroethylene	µg/L	37	17	11	NA	
MSB 7C	Aluminum	µg/L	–	NA	130	NA	
	Chloride	µg/L	–	NA	4,500	NA	
	Nitrate-nitrite as nitrogen	µg/L	30,000	NA	27,000	NA	
	Nonvolatile beta	pCi/L	–	NA	6.7E+01	NA	
	Radium, total alpha-emitting	pCi/L	5.1E+00	NA	–	NA	
	Sodium	µg/L	42,000	NA	31,000	NA	
	Tetrachloroethylene	µg/L	37	44	31	49	
	Trichloroethylene	µg/L	19	14	17	20	
MSB 8C	Chloride	µg/L	4,900	NA	5,700	NA	
	1,1-Dichloroethylene	µg/L	13	15	NA	13	
	Nitrate-nitrite as nitrogen	µg/L	15,000	NA	40,000	NA	
	Tetrachloroethylene	µg/L	48	86	NA	69	
	Trichloroethylene	µg/L	38	53	NA	48	
MSB 13CC	Aluminum	µg/L	–	NA	110	NA	
	Lead	µg/L	–	33	27	38	JE
	Nitrate-nitrite as nitrogen	µg/L	8,500	NA	6,900	NA	
	Sodium	µg/L	20,000	NA	16,000	NA	
	Sulfate	µg/L	6,000	NA	5,400	NA	
	Tetrachloroethylene	µg/L	12	17	14	18	
	Trichloroethylene	µg/L	14	16	16	18	J2
MSB 62C	1,1-Dichloroethylene	µg/L	11	–	–	–	
	Nitrate-nitrite as nitrogen	µg/L	13,000	NA	–	NA	
	Radium, total alpha-emitting	pCi/L	–	NA	5.4E+00	NA	
	Sodium	µg/L	20,000	NA	15,000	NA	
	Sulfate	µg/L	–	NA	4,200	NA	
	Tetrachloroethylene	µg/L	75	110	80	49	
	Trichloroethylene	µg/L	93	82	66	44	
MSB 63C	Nitrate-nitrite as nitrogen	µg/L	2,500	NA	2,600	NA	
	Tetrachloroethylene	µg/L	9.6	14	31	95	
	Trichloroethylene	µg/L	–	–	9.0	16	
MSB 64C	Aluminum	µg/L	170	NA	210	NA	
	Chloride	µg/L	4,900	NA	4,800	NA	

Well	Constituent	Unit	3Q96	1Q97	3Q97	1Q98	Mod
	1,1-Dichloroethylene	µg/L	13	–	26	19	
	Nitrate-nitrite as nitrogen	µg/L	16,000	NA	21,000	NA	
	Radium, total alpha-emitting	pCi/L	–	NA	6.0E+00	NA	
	Sodium	µg/L	13,000	NA	13,000	NA	
	Tetrachloroethylene	µg/L	340	380	340	310	
	Trichloroethylene	µg/L	51	47	46	37	
Lower Lost Lake Aquifer Zone							
MSB 1B	Aluminum	µg/L	270	NA	–	NA	
	Nitrate-nitrite as nitrogen	µg/L	–	NA	2,400	NA	
	Trichloroethylene	µg/L	460	830	970	1,300	
MSB 2B	Aluminum	µg/L	1,100	NA	800	NA	
	Nitrate-nitrite as nitrogen	µg/L	5,800	NA	5,500	NA	
	Nonvolatile beta	pCi/L	–	NA	5.9E+01	NA	
	Sodium	µg/L	35,000	NA	31,000	NA	
	Tetrachloroethylene	µg/L	2,400	4,100	4,300	5,600	
	Trichloroethylene	µg/L	4,900	6,300	6,900	8,500	
MSB 3B	Tetrachloroethylene	µg/L	100	150	110	NA	
	Trichloroethylene	µg/L	2,200	920	920	NA	
MSB 4B	Tetrachloroethylene	µg/L	43	48	58	77	JE
	Trichloroethylene	µg/L	830	1,100	1,200	1,300	
MSB 5B	Trichloroethylene	µg/L	26	21	54	21	
MSB 6B	Aluminum	µg/L	160	NA	–	NA	
	Nitrate-nitrite as nitrogen	µg/L	3,300	NA	4,200	NA	
	Tetrachloroethylene	µg/L	–	66	55	56	
	Trichloroethylene	µg/L	1,200	1,800	1,700	1,700	
MSB 7B	Nitrate-nitrite as nitrogen	µg/L	7,900	NA	8,700	NA	
	Sodium	µg/L	6,900	NA	8,100	NA	
	Tetrachloroethylene	µg/L	100	88	85	73	
	Trichloroethylene	µg/L	28	44	50	52	
MSB 8B	Trichloroethylene	µg/L	25	29	34	37	
MSB 13A	Tetrachloroethylene	µg/L	–	21	–	7.8	JE
	Trichloroethylene	µg/L	550	690	650	650	
MSB 62B	Radium, total alpha-emitting	pCi/L	–	NA	8.7E+00	NA	
	Tetrachloroethylene	µg/L	27	28	27	15	
	Trichloroethylene	µg/L	39	45	47	29	
MSB 63B	Nitrate-nitrite as nitrogen	µg/L	2,800	NA	5,200	NA	
	Tetrachloroethylene	µg/L	21	72	97	170	
	Trichloroethylene	µg/L	470	550	540	440	

Well	Constituent	Unit	3Q96	1Q97	3Q97	1Q98	Mod
Middle Sand Aquifer Zone of the Crouch Branch Confining Unit							
MSB 39A	Aluminum	µg/L	350	NA	–	NA	
	Nitrate-nitrite as nitrogen	µg/L	2,700	NA	–	NA	
	Sodium	µg/L	4,700	NA	–	NA	
	Sulfate	µg/L	4,000	NA	4,900	NA	
	Trichloroethylene	µg/L	6.3	–	–	–	

NA = not analyzed.
– = analyzed but not above the GWPS.

Notes: This table presents the highest value for duplicate/replicate results. The groundwater samples are unfiltered; therefore, the results for metals are for total recoverable metals.

Table D-9. Constituents Exceeding the Groundwater Protection or Monitoring Constituents Standard in Point-of-Compliance Wells, Met Lab HWMF

Well	Constituent	Unit	3Q96	1Q97	3Q97	1Q98	Mod
M-Area Aquifer Zone							
AMB 4D	1,1-Dichloroethane	µg/L	0.56	–	–	–	
	Iron	µg/L	–	–	820	–	
	Nonvolatile beta	pCi/L	7.0E+01	–	–	–	
	Sodium	µg/L	7,400	5,500	6,800	7,400	V
	Sulfate	µg/L	11,000	–	3,800	4,500	
	Total organic halogens	µg/L	–	100	130	–	
	Trichloroethylene	µg/L	38	32	82	21	
AMB 5	Chloride	µg/L	–	5,300	–	–	
	Iron	µg/L	430	540	–	–	
	Radium, total alpha-emitting	pCi/L	–	–	1.9E+01	–	
	Sodium	µg/L	9,200	8,000	7,500	8,100	V
	Sulfate	µg/L	6,600	5,800	4,400	3,700	
	Total organic halogens	µg/L	–	–	120	–	
	Trichloroethylene	µg/L	16	51	45	43	
AMB 6	Iron	µg/L	–	–	2,000	–	
	Lead	µg/L	–	–	23	–	
	Sodium	µg/L	–	7,200	8,300	9,300	V
	Sulfate	µg/L	–	–	6,200	6,200	
	Total organic halogens	µg/L	–	–	320	–	
	Trichloroethylene	µg/L	–	–	–	5.2	
AMB 8D	Iron	µg/L	–	–	NA	340	V
	Sodium	µg/L	11,000	8,700	NA	5,400	V
	Sulfate	µg/L	3,900	5,200	NA	–	
AMB 9D	Sodium	µg/L	8,600	8,400	NA	7,800	V
	Sulfate	µg/L	4,800	4,600	NA	4,900	
AMB 10D	Iron	µg/L	–	–	410	–	
	Sodium	µg/L	7,500	6,800	7,300	7,400	V
	Sulfate	µg/L	3,600	–	4,000	3,500	
	Total organic halogens	µg/L	–	–	140	55	JE
AMB 16D	Nitrate-nitrite as nitrogen	µg/L	–	–	7,100	–	
	Sodium	µg/L	4,700	–	–	–	
	Total organic halogens	µg/L	–	55	65	–	
Middle Sand Aquifer Zone of the Crouch Branch Confining Unit							
AMB 4A	Acetone	µg/L	96	–	–	–	
	Sodium	µg/L	11,000	–	–	–	
	Sulfate	µg/L	3,300	–	–	–	
	Tetrachloroethylene	µg/L	49	44	38	48	
	Total organic halogens	µg/L	320	260	340	210	J
	Trichloroethylene	µg/L	430	370	280	340	
AMB 10A	Sodium	µg/L	14,000	5,900	NA	12,000	V
	Sulfate	µg/L	5,200	5,700	NA	4,300	
AMB 17A	Acetone	µg/L	140	–	–	32	JEV
	Radium, total alpha-emitting	pCi/L	8.3E+00	–	–	–	
	Silver	µg/L	–	–	–	280	

Well	Constituent	Unit	3Q96	1Q97	3Q97	1Q98	Mod
	Tetrachloroethylene	µg/L	56	60	52	51	
	Total organic halogens	µg/L	400	NA	630	570	J
	Trichloroethylene	µg/L	570	580	510	520	
AMB 18A	Acetone	µg/L	12	–	–	–	
	Cyanide	µg/L	–	–	230	–	
	Radium, total alpha-emitting	pCi/L	–	–	6.0E+00	–	
	Tetrachloroethylene	µg/L	–	5.5	–	–	
	Total organic halogens	µg/L	–	–	93	–	
	Trichloroethylene	µg/L	47	66	68	45	
Upper Lost Lake Aquifer Zone							
AMB 18C	Iron	µg/L	–	300	460	–	
	Sodium	µg/L	4,700	4,700	–	–	
	Total organic halogens	µg/L	–	–	130	–	
AMB 19C	Sodium	µg/L	11,000	11,000	10,000	9,200	V
	Sulfate	µg/L	8,800	8,100	7,700	7,600	
Lower Lost Lake Aquifer Zone							
AMB 10B	Total organic halogens	µg/L	–	–	120	NA	

NA = not analyzed.
– = analyzed but not above the GWPS.

Notes: This table presents the highest value for duplicate/replicate results. The groundwater samples are unfiltered; therefore, the results for metals are for total recoverable metals.

Table D-10. Summary of Operation of the M-1 Air Stripper, First and Second Quarters 1998

Operation Parameter	January	February	March	April	May	June	Total/Average
Operating Time (hours)	706.3	547.9	743.5	709.7	743.2	625.4	4,076
Downtime (hours)	37.7	124.1	0.5	10.3	0.8	94.6	268
Total Solvent Removed (lbs)	744	753	1,055	1,082	1,196	1,126	5,956
Average Concentration (µg/L)							
Stripper Influent	5144	6708	6,188	6853	7185	8063	6,690
*Stripper Effluent**	0.00	0.00	0.00	0.00	0.00	0.00	0.00

*TCE is about 0.1 ppb as measured with equipment having a detection limit of 60 ppt.

Table D-11. Summary of Operation of the A-2 Air Stripper, First and Second Quarters 1998

Operation Parameter	January	February	March	April	May	June	Total/Average
Operating Time (hours)	626.8	670.9	573.6	719.3	740.9	683.3	4,014.8
Downtime (hours)	117.2	1.1	170.4	0.7	3.1	36.7	329.2
Total Solvent Removed (lbs)	120	186	199	224	202	194	1,125
Average Concentration (µg/L)							
Stripper Influent	1,475.0	1,899.5	1,854.9	2,086.5	2,095.0	1,829.8	1,873
*Stripper Effluent**	2.60	2.80	2.60	2.80	2.80	2.10	2.62

*TCE effluent approximately 2 ppb as determined with new laboratory equipment with detection limit of 60 ppt. PCE inlet concentrations were estimated using effluent data from the same equipment and measurements of stripping efficiencies. Concentrations are estimated based on samples taken in March and November.

Table D-12. Summary of Operation of the SVEU Vadose Zone Unit 782-3M, First and Second Quarters 1998

Operation Parameter	January	February	March	April
Operating Time (hours)	505.5	357.5	625	702
Downtime (hours)	*238.5*	*314.5*	*119*	*18*
Total Solvent Removed (lbs)	3287	2479	2997	3395
Average Vapor Flow Rate (scfm)	495	440	431	516
Average Concentration (ppmv) Influent	533	629	447	377

Table D-12. Summary of Operation of the SVEU Vadose Zone Unit 782-3M, First and Second Quarters 1998 (cont.)

Operation Parameter	May	June	Total/Average
Operating Time (hours)	692.5	720	*3,602.5*
Downtime (hours)	*52*	*0*	*742.0*
Total Solvent Removed (lbs)	3238	2950	18,346.9
Average Vapor Flow Rate (scfm)	496	494	478.7
Average Concentration (ppmv) Influent	378	331	449.2

Table D-13. Summary of Operation of the SVEU Vadose Zone Unit 782-4M, First and Second Quarters 1998

Operation Parameter	January	February	March	April
Operating Time (hours)	722	610	354	569
Downtime (hours)	*22*	*62*	*390*	*151*
Total Solvent Removed (lbs)	3212	2932	1389	1791
Average Vapor Flow Rate (scfm)	428	428	390	312
Average Concentration (ppmv) Influent	424	459	408	408

Table D-13. Summary of Operation of the SVEU Vadose Zone Unit 782-4M, First and Second Quarters 1998 (cont.)

Operation Parameter	May	June	Total/Average
Operating Time (hours)	679	696.5	3,630.5
Downtime (hours)	65	23.5	713.5
Total Solvent Removed (lbs)	2718	2283	14,324.3
Average Vapor Flow Rate (scfm)	319	333	368.3
Average Concentration (ppmv) Influent	509	401	434.8

Table D-14. Summary of Operation of the SVEU Vadose Zone Unit 782-5M, First and Second Quarters 1998

Operation Parameter	January	February	March	April
Operating Time (hours)	526	595.5	385.5	154.5
Downtime (hours)	*218*	*76.5*	*358.5*	*565.5*
Total Solvent Removed (lbs)	171	208	138	56
Average Vapor Flow Rate (scfm)	607	592	800	776
Average Concentration (ppmv) Influent	24	17	20	21

Table D-14. Summary of Operation of the SVEU Vadose Zone Unit 782-5M, First and Second Quarters 1998 (cont.)

Operation Parameter	May	June	Total/Average
Operating Time (hours)	575.5	720	2,957.0
Downtime (hours)	*168.5*	*0*	1,387.0
Total Solvent Removed (lbs)	177	184	935.1
Average Vapor Flow Rate (scfm)	758	795	721.2
Average Concentration (ppmv) Influent	18	14	19.2

Table D-15. Summary of Operation of the SVEU Vadose Zone Unit 782-6M, First and Second Quarters 1998

Operation Parameter	January	February	March	April
Operating Time (hours)	657.5	446.5	676	677.5
Downtime (hours)	86.5	225.5	68	42.5
Total Solvent Removed (lbs)	2057	1308	2139	1821
Average Vapor Flow Rate (scfm)	435	486	500	581
Average Concentration (ppmv) Influent	310	263	274	200

Table D-15. Summary of Operation of the SVEU Vadose Zone Unit 782-6M, First and Second Quarters 1998 (cont.)

Operation Parameter	May	June	Total/Average
Operating Time (hours)	672.5	640.5	3,770.5
Downtime (hours)	71.5	79.5	573.5
Total Solvent Removed (lbs)	1840	1805	10,970.6
Average Vapor Flow Rate (scfm)	594	562	526.3
Average Concentration (ppmv) Influent	197	217	243.5

Table D-16. Summary of Operation of the SVEU Vadose Zone Unit 782-7M, First and Second Quarters 1998

Operation Parameter	January	February	March	April
Operating Time (hours)	724.5	267.5	744	720
Downtime (hours)	19.5	404.5	0	0
Total Solvent Removed (lbs)	467	215	481	400
Average Vapor Flow Rate (scfm)	320	319	315	310
Average Concentration (ppmv) Influent	87	108	88	77

Table D-16. Summary of Operation of the SVEU Vadose Zone Unit 782-7M, First and Second Quarters 1998 (cont.)

Operation Parameter	May	June	Total/Average
Operating Time (hours)	593.5	527	3,576.5
Downtime (hours)	150.5	193	767.5
Total Solvent Removed (lbs)	406	130	2,098.8
Average Vapor Flow Rate (scfm)	315	324	317.2
Average Concentration (ppmv) Influent	92	33	80.8

Table D-17. Summary of Operation of the SVEU Vadose Zone Unit 782-8M, First and Second Quarters 1998

Operation Parameter	January	February	March	April
Operating Time (hours)	670	640	0	0
Downtime (hours)	74	32	744	720
Total Solvent Removed (lbs)	25	13	0	0
Average Vapor Flow Rate (scfm)	165	155	0	0
Average Concentration (ppmv) Influent	10	7	0	0

Table D-17. Summary of Operation of the SVEU Vadose Zone Unit 782-8M, First and Second Quarters 1998 (cont.)

Operation Parameter	May	June	Total/Average
Operating Time (hours)	0	3.5	1,313.5
Downtime (hours)	744	716.5	3,030.5
Total Solvent Removed (lbs)	0	0.04	37.7
Average Vapor Flow Rate (scfm)	0	169	81.5
Average Concentration (ppmv) Influent	0	2	3.1

Table D-18. Summary of Volume Pumped from Recovery Wells, First and Second Quarters 1998

Well Number	January Monthly Volume (gal)	Cumulative Volume since 4/85 (gal)	Average Flow Rate (gpm)	Well Operation (hours)	February Monthly Volume (gal)	Cumulative Volume since 4/85 (gal)	Average Flow Rate (gpm)	Well Operation (hours)	March Monthly Volume (gal)	Cumulative Volume since 4/85 (gal)	Average Flow Rate (gpm)	Well Operation (hours)
RWM 1	787,321	126,769,633	19	687	634,554	127,404,187	19	562	831,611	128,235,798	19	*743*
RWM 2	1,096,737	113,634,962	26	694	870,728	114,505,690	26	562	1,181,881	115,687,571	26	749
RWM 3	1,975,926	320,787,262	47	696	1,471,962	322,259,224	44	562	2,644,712	324,903,936	59	749
RWM 4	1,765,155	209,743,932	42	694	1,391,140	211,135,072	41	*565*	2,148,140	213,283,212	*47*	768
RWM 5	1,817,963	208,151,928	43	698	1,444,051	209,595,979	43	566	*2,100,183*	211,696,162	47	744
RWM 6	2,433,514	292,191,804	58	695	*1,891,846*	294,083,650	56	567	2,942,160	297,025,810	66	744
RWM 7	1,291,740	180,639,030	31	696	1,022,988	181,662,018	30	569	*1,640,872*	183,302,890	*37*	744
RWM 8	**1,987,722**	195,142,766	**48**	695	**1,619,689**	196,762,455	**48**	566	**2,127,558**	198,890,012	**48**	744
RWM 9	1,756,730	214,601,921	42	695	1,399,493	216,001,414	41	569	2,030,897	218,032,311	46	744
RWM 10	1,315,450	239,938,695	42	517	*730,304*	240,668,999	*40*	307	**1,157,901**	241,826,900	**50**	385
RWM 11	2,635,045	350,300,714	62	706	2,036,718	352,337,432	60	568	*3,129,109*	355,466,541	*70*	744
RWM 12	1,895,226	119,770,970	**49**	645	1,968,124	121,739,094	**49**	669	1,611,770	123,350,864	**49**	548

Notes: Numbers in **bold** are estimated because of missing data or equipment malfunction. Numbers in *italics* are averages of two or more samples.

Table D-18. Summary of Volume Pumped from Recovery Wells, First and Second Quarters 1998 (cont.)

Well Number	January Monthly Volume (gal)	January Cumulative Volume since 4/85 (gal)	January Average Flow Rate (gpm)	January Well Operation (hours)	February Monthly Volume (gal)	February Cumulative Volume since 4/85 (gal)	February Average Flow Rate (gpm)	February Well Operation (hours)	March Monthly Volume (gal)	March Cumulative Volume since 4/85 (gal)	March Average Flow Rate (gpm)	March Well Operation (hours)
RWM13B	1,579,941	21,721,453	41	637	1,637,879	23,359,332	42	656	1,331,479	24,690,811	40	549
RWM13C	2,697,724	38,069,485	71	637	2,747,718	40,817,203	69	664	2,240,154	43,057,357	**69**	541
RWM14B	1,782,717	25,930,870	47	637	*1,857,992*	27,788,862	*47*	664	1,510,291	29,299,153	47	541
RWM14C	1,634,390	24,458,242	43	637	1,697,328	26,155,570	43	664	1,386,429	27,541,999	43	541
RWM15B	1,656,939	17,404,069	43	637	1,721,223	19,125,292	43	664	1,412,076	20,537,368	44	541

Notes: Numbers in **bold** are estimated because of missing data or equipment malfunction. Numbers in *italics* are averages of two or more samples.

Table D-18. Summary of Volume Pumped from Recovery Wells, First and Second Quarters 1998 (cont.)

Well Number	April Monthly Volume (gal)	April Cumulative Volume since 4/85 (gal)	April Average Flow Rate (gpm)	April Well Operation (hours)	May Monthly Volume (gal)	May Cumulative Volume since 4/85 (gal)	May Average Flow Rate (gpm)	May Well Operation (hours)	June Monthly Volume (gal)	June Cumulative Volume since 4/85 (gal)	June Average Flow Rate (gpm)	June Well Operation (hours)
RWM 1	778,780	129,014,578	18	709	801,668	129,816,246	18	743	727,249	130,543,495	19	647
RWM 2	1,100,539	116,788,110	26	697	1,183,011	117,971,121	26	747	1,030,143	119,001,264	27	644
RWM 3	2,593,083	327,497,019	62	700	2,733,857	330,230,876	**61**	747	2,170,214	332,401,090	**56**	644
RWM 4	1,958,667	215,241,879	48	685	2,120,718	217,362,597	48	745	1,762,479	219,125,076	46	644
RWM 5	2,035,570	213,731,732	48	706	*2,153,393*	215,885,125	48	747	1,791,199	217,676,324	*46*	*644*
RWM 6	*2,913,164*	299,938,974	68	709	*3,052,886*	302,991,860	68	744	2,534,227	305,526,087	65	646
RWM 7	1,593,342	184,896,232	38	706	1,616,644	186,512,876	36	744	1,181,845	187,694,721	32	609
RWM 8	*1,978,618*	200,868,630	*47*	709	2,207,687	203,076,317	49	745	1,824,816	204,901,133	47	646
RWM 9	1,961,849	219,994,160	46	706	2,068,351	222,062,511	46	747	*2,058,291*	224,120,802	*53*	643
RWM 10	**0**	241,826,900	**0**	0	176,925	242,003,825	31	94	1,178,238	243,182,063	31	645
RWM 11	3,068,180	358,534,721	72	706	3,228,306	361,763,027	72	747	2,627,009	364,390,036	**68**	643
RWM 12	2,113,712	125,464,576	**49**	719	1,058,533	126,523,109	**49**	360	*2,035,898*	128,559,007	**49**	693

Notes: Numbers in **bold** are estimated because of missing data or equipment malfunction. Numbers in *italics* are averages of two or more samples.

Table D-18. Summary of Volume Pumped from Recovery Wells, First and Second Quarters 1998 (cont.)

Well Number	April Monthly Volume (gal)	April Cumulative Volume since 4/85 (gal)	April Average Flow Rate (gpm)	April Well Operation (hours)	May Monthly Volume (gal)	May Cumulative Volume since 4/85 (gal)	May Average Flow Rate (gpm)	May Well Operation (hours)	June Monthly Volume (gal)	June Cumulative Volume since 4/85 (gal)	June Average Flow Rate (gpm)	June Well Operation (hours)
RWM13B	1,765,160	26,455,971	41	716	*1,746,530*	28,202,501	*41*	708	1,742,715	29,945,216	41	712
RWM13C	2,937,291	45,994,648	68	716	**2,970,240**	48,964,888	**70**	707	2,934,736	51,899,624	69	712
RWM14B	1,991,590	31,290,743	47	713	1,990,511	33,281,254	47	710	1,981,507	35,262,761	46	712
RWM14C	*1,833,912*	29,375,911	*43*	712	1,836,713	31,212,624	43	710	1,828,577	33,041,201	43	712
RWM15B	1,863,313	22,400,681	43	716	1,851,695	24,252,376	44	707	*1,856,285*	26,108,661	*44*	712

Notes: Numbers in **bold** are estimated because of missing data or equipment malfunction. Numbers in *italics* are averages of two or more samples.

Table D-19. Summary of Average Tetrachloroethylene and Trichloroethylene Concentrations in Recovery Wells, First and Second Quarters 1998

Well Number	January Solvent Concentrations Tetrachlor ethylene (µg/L)	Trichloro-ethylene (µg/L)	Total (µg/L)	February Solvent Concentrations Tetrachlor ethylene (µg/L)	Trichloro-ethylene (µg/L)	Total (µg/L)	March Solvent Concentrations Tetrachlor ethylene (µg/L)	Trichloro-ethylene (µg/L)	Total (µg/L)	April Solvent Concentrations Tetrachlor ethylene (µg/L)	Trichloro-ethylene (µg/L)	Total (µg/L)
RWM 1	9,500	25,000	*34,500*	10,000	24,000	*34,000*	10,000	26,000	*36,000*	7,600	*21,660*	*29,260*
RWM 2	13,000	15,000	28,000	14,000	16,000	30,000	13,000	12,675	25,675	12,000	9,350	21,350
RWM 3	18,000	5,500	23,500	2,000	5,500	7,500	1,900	5,400	7,300	1,400	5,100	6,500
RWM 4	710	6,800	*7,510*	420	4,000	*4,420*	660	6,000	*6,660*	490	6,000	*6,490*
RWM 5	690	1,200	*1,890*	730	1,300	*2,030*	560	1,100	*1,660*	420	1,100	*1,520*
RWM 6	4,400	3,700	8,100	*5,100*	*4,000*	*9,100*	3,800	3,200	7,000	2,700	2,900	5,600
RWM 7	9,500	8,100	17,600	8,900	6,900	15,800	7,800	6,900	14,700	6,100	6,800	12,900
RWM 8	640	1,200	1,840	660	1,100	1,760	540	980	1,520	400	950	1,350
RWM 9	2	100	102	2	110	112	**2**	**74**	**76**	0	38	38
RWM 10	8,500	5,600	14,100	8,700	5,500	14,200	7,000	4,900	11,900	5,500	4,800	10,300
RWM 11	94	1,300	1,394	100	1,300	1,400	79	1,100	1,179	62	1,100	1,162
RWM 12	2,300	2,100	4,400	46	7,600	7,646	NA	2,000	2,000	NA	1,900	1,900

Notes: Numbers in **bold** are estimated because of missing data or equipment malfunction. Numbers in *italics* are averages of two or more samples.

Table D-19. Summary of Average Tetrachloroethylene and Trichloroethylene Concentrations in Recovery Wells, First and Second Quarters 1998 (cont.)

Well Number	January Solvent Concentrations Tetrachloroethylene (µg/L)	January Trichloroethylene (µg/L)	January Total (µg/L)	February Solvent Concentrations Tetrachloroethylene (µg/L)	February Trichloroethylene (µg/L)	February Total (µg/L)	March Solvent Concentrations Tetrachloroethylene (µg/L)	March Trichloroethylene (µg/L)	March Total (µg/L)	April Solvent Concentrations Tetrachloroethylene (µg/L)	April Trichloroethylene (µg/L)	April Total (µg/L)
RWM13B	NA	3,300	3,300	NA	3,200	3,200	NA	**3,100**	3,100	NA	3,000	3,000
RWM13C	NA	4,200	4,200	NA	4,500	4,500	NA	*3,700*	*3,700*	NA	3,400	3,400
RWM14B	NA	**1,900**	1,900	NA	1,900	1,900	NA	1,700	1,700	NA	1,700	1,700
RWM14C	NA	7,200	7,200	NA	7,700	7,700	NA	6,800	6,800	NA	6,500	6,500
RWM15B	NA	*55*	*55*	NA	59	59	NA	*48*	*48*	NA	41	41

Notes: Numbers in **bold** are estimated because of missing data or equipment malfunction. Numbers in *italics* are averages of two or more samples.

Table D-19. Summary of Average Tetrachloroethylene and Trichloroethylene Concentrations in Recovery Wells, First and Second Quarters 1998 (cont.)

Well Number	May Solvent Concentrations Tetrachlor ethylene (µg/L)	Trichloro-ethylene (µg/L)	Total (µg/L)	June Solvent Concentrations Tetrachlor ethylene (µg/L)	Trichloro-ethylene (µg/L)	Total (µg/L)
RWM 1	*8,200*	*23,000*	*31,200*	12,000	33,000	*45,000*
RWM 2	*12,000*	*14,000*	*26,000*	13,500	17,500	*31,000*
RWM 3	*1,600*	*5,100*	*6,700*	**1,600**	**5,100**	*6,700*
RWM 4	*570*	*6,100*	*6,670*	670	7,300	*7,970*
RWM 5	*490*	*1,100*	*1,590*	430	1,300	*1,730*
RWM 6	3,800	3,800	7,600	2,000	2,100	4,100
RWM 7	6,800	7,000	13,800	5,300	5,800	11,100
RWM 8	440	990	1,430	430	980	1,410
RWM 9	0	*73*	*73*	4	93	97
RWM 10	7,400	5,600	13,000	7,600	5,800	13,400
RWM 11	64	1,000	1,064	**64**	NA	64
RWM 12	NA	1,900	1,900	NA	1,900	1,900

Notes: Numbers in **bold** are estimated because of missing data or equipment malfunction. Numbers in *italics* are averages of two or more samples.

Table D-19. Summary of Average Tetrachloroethylene and Trichloroethylene Concentrations in Recovery Wells, First and Second Quarters 1987 (cont.)

Well Number	May Solvent Concentrations Tetrachlor ethylene (µg/L)	Trichloro-ethylene (µg/L)	Total (µg/L)	June Solvent Concentrations Tetrachlor ethylene (µg/L)	Trichloro-ethylene (µg/L)	Total (µg/L)
RWM13B	NA	2,800	2,800	NA	2,900	2,900
RWM13C	NA	3,500	3,500	NA	3,300	3,300
RWM14B	NA	1,800	1,800	NA	1,900	1,900
RWM14C	NA	6,700	6,700	NA	6,900	6,900
RWM15B	NA	48	48	NA	*47*	*47*

Notes: Numbers in **bold** are estimated because of missing data or equipment malfunction. Numbers in *italics* are averages of two or more samples.