UNITED STATES DEPARTMENT OF ENERGY
SAVANNAH RIVER SITE

3Q/4Q 2001 ANNUAL M-AREA AND METALLURGICAL LABORATORY HAZARDOUS WASTE MANAGEMENT FACILITIES GROUNDWATER MONITORING AND CORRECTIVE-ACTION REPORT (U)

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Prepared By:
Westinghouse Savannah River Company
Savannah River Company
Aiken, SC 29808

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List of Acronyms and Abbreviations

µg/L	micrograms per liter
AQC	Air Quality Control
ARW	airlift recirculation well
CAR	Corrective Action Report
CBCU	Crouch Branch Confining Unit
CUSUM	Cumulative Summations
DNAPL	dense nonaqueous phase liquid
DUS	Dynamic Underground Stripping
EMS	Environmental Monitoring Section
EPD	Environmental Protection Department
ERD	Environmental Restoration Division
ft	foot
gal	gallon
gpm	gallons per minute
GWPS	Groundwater Protection Standard
HWMF	Hazardous Waste Management Facility
IDU	Integrated Demonstration Unit
IDW	Investigation Derived Waste
in.	inch
lb.	pound
MCB	Miscellaneous Chemical Basin
MCS	Monitoring Constituent Standard
Met Lab	Metallurgical Laboratory
msl	mean sea level
NDD	non decision data
NOD	Notice of Deficiency
PCB	polychlorinated biphenyl
PCE	tetrachloroethylene
POC	point of compliance
ppb	parts per billion
ppmv	parts per million by volume
RCRA	Resource Conservation and Recovery Act
SCDHEC	South Carolina Department of Health and Environmental Control
SCHWMR	South Carolina Hazardous Waste Management Regulations
SRL	Savannah River Laboratory
SRTC	Savannah River Technology Center
SRS	Savannah River Site
SVEU	Soil Vapor Extraction Unit
TCE	trichloroethylene
USDOE	United States Department of Energy
USEPA	United States Environmental Protection Agency
VOC	volatile organic compound
WSRC	Westinghouse Savannah River Company LLC

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 the third and fourth quarters of 2001. The report also provides a summary of the corrective-action program for the entire year. This program is required by South Carolina Resource Conservation and Recovery Act (RCRA) 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 was conducted to determine compliance with the Groundwater Protection Standard (GWPS) and to demonstrate the effectiveness of the corrective action program. Sample results were also compared with the Monitoring Constituent Standard (MCS) as an indication of groundwater quality. Samples were collected and analyzed during first and third quarters of 2001 at M-Area and Met Lab HWMFs point-of-compliance (POC), background, and plume definition wells. M-Area HWMF recovery wells were sampled monthly.

  Semiannual monitoring is conducted for pH, specific conductance, temperature, and GWPS constituents with the exception that polychlorinated biphenyl [PCBs] are monitored at a limited number of wells: POC wells MSB 1D, 2D, 4D, and 59D; plume definition wells MSB 9C, 10C and 31C; and RWM wells 1, 6 and 10. Although MSB 57D, 58D and 60D previously received monitoring for PCBs, they were approved for deletion from the groundwater monitoring well network (letter dated March 15, 1999; Frasier to Odum). Well MSB 3D contains DNAPL with dissolved PCBs in sediments trapped in the well sump (WSRC 1993). This well is no longer sampled regularly for groundwater quality because of waste disposal issues.

  The Monitoring Constituents are only analyzed annually, during the third quarter of the calendar year. The Appendix IX analyses are also only conducted annually on 20% of the POC wells at the M-Area HWMF and at 40% of the POC wells at the Met Lab HWMF. For the Appendix IX analyses, the Met Lab HWMF POC wells are sampled during the first quarter of the year, and the M-Area HWMF POC wells are sampled during the third quarter of the year.

- Efforts were made to sample all 37 POC wells at the M-Area HWMF for semi-annual constituents listed in Appendix IIIB-A of the 1995 RCRA Part B Permit Renewal Application (see Appendix A, Table A-1). Approval was granted by the South Carolina Department of Health and Environmental Control (SCDHEC 1999) to refine the list of inorganic Monitoring Constituents listed in Section II, Appendix IIIB-A of the 1995 Part B Permit. The Monitoring Constituents SCDHEC approved for deletion from monitoring at the POC wells were chromium, mercury, uranium, fluoride, cobalt (with the exception of the Annual Appendix IX analysis at 20% of POC wells), chloride, copper, zinc, manganese, sulfate, and total phosphates. In the summary below analyte names in **bold text** exceeded the GWPS.

  During third quarter 2001, samples from POC wells in the M-Area Aquifer Zone exceeded the Appendix IIIB-A GWPS for **tetrachloroethylene (PCE)** (MSB 4D, 5A, 13D, 59D, 62D, and 63D) and **trichloroethylene (TCE)** (MSB 4D, 5A, 59D, 62D and 63D). Samples exceeded the MCS for aluminum, total recoverable (MSB 6A, 7A, 13D, 62D, and 63D), nitrate-nitrite as nitrogen (MSB 2D, 4D, 13D, and 59D), radium, total alpha-emitting (MSB 1D, 2D, and 4D) and sodium, total recoverable (MSB 6A, 7A, 13D, 59D and 64D).

  The POC wells screened in the Upper Lost Lake Aquifer Zone had **TCE** (MSB 1C, 2C, 3C, 4C, 5C, 6C, 7C, 8C, 13CC, 62C, and 64C), **PCE** (MSB 1C, 2C, 3C, 4C, 5C, 6C, 7C, 8C, 13CC, 62C, and 64C), and **1,1-dichloroethylene** (MSB 5C, 8C and 64C) above the GWPS. Samples exceeded the MCS for aluminum, total recoverable (MSB 2C and 3C), nitrate-nitrite as nitrogen (MSB 1C, 2C, 3C, 4C, 5C, 6C, 7C, 8C 13CC, 62C, 63C and 64C), nonvolatile

beta (MSB 64C), radium, total alpha-emitting (MSB 8C) and sodium, total recoverable (MSB 1C, 2C, 3C, 4C, 5C, 6C, 7C, 8C, 62C and 64C).

Similar to the above-lying aquifer zones, the contaminants most frequently detected above the GWPS in the POC wells screened in the Lower Lost Lake Aquifer Zone were **TCE** (MSB 1B, 2B, 3B, 4B, 5B, 6B, 7B, 8B, 13A, 62B and 63B) and **PCE** (MSB 2B, 3B, 4B, 7B, 8B, 13A, 62B, and 63B). Also above the GWPS was **lead** (MSB 62B). Samples exceeded the MCS for aluminum, total recoverable (MSB 2B), nitrate-nitrite as nitrogen (MSB 1B, 2B, 6B, 7B, and 13A), and sodium, total recoverable (MSB 2B and 7B). (See the *Field and Analytical Results* subsection and Table D-2, Appendix D)

- All 6 background wells at the M-Area HWMF were sampled during third quarter 2001. (See the *Field and Analytical Results* subsection and Table D-3**,** Appendix D)

  None of the background wells had results above the GWPS for any analyte. In the M-Area Aquifer Zone, MSB 29D and 43D had total organic halogens above the MCS. In the Upper Lost Lake Aquifer Zone, MSB 29C and 43B had total organic halogens above the MCS. There were no analytes above standards in the background wells screened in the deeper aquifers.

- For the M-Area HWMF, the constituents that exceeded the GWPS or MCS in plume definition wells during the third quarter of 2001 are summarized for each aquifer. For more details, see the *Field and Analytical Results* subsection and Table D-4**,** Appendix D.

  Samples from plume definition wells exceeded the GWPS in the M-Area Aquifer Zone for **lead** (MSB 16C) **PCE** (AOB 1, MSB 9C, 15D, 16C, 17B, 18B, 24, 31C, and 34C) and **TCE** (AOB 1, ASB 5AR, -6A, 8, MSB 15D, 16C, 17B, 19C, 24, 26, 31C and 78DR). Samples exceeded the MCS for aluminum, total recoverable (MSB 9C, 16C, 20C, 31C, 48D, 54D and 78DR), iron, total recoverable (AMB 15D), nitrate-nitrite as nitrogen (MSB 17B, and 18B), radium, total alpha-emitting (MSB 17B), sodium, total recoverable (AMB 7, 9D, ASB 1A, 2AR, 3AR, 6A, 8, MSB 9C,16C, 17B, 18B, 19C, 27, 31C, and 33), sulfate (AMB 7, 9D, ASB 1A, 2AR, 3AR, 4, 5AR, 8 and MSB 48D) and total organic halogens (AMB 4D).

  In the Upper Lost Lake Aquifer Zone, the constituents that exceeded the GWPS were **lead**, **total recoverable** (ABP 8C and AMB 18C), **PCE** (ASB 6C, 9C, MCB 5C, 7C, MSB 15A, 16A, 18A, 31CC, 47C, and 79C), and **TCE** (ASB 6C, 8C, 9C, MCB 5C, 7C, MSB 15A, 16A, 18A, 28A, 31CC, 36C, 39C, 40C, 47C, 79C, and SRW 14B). Samples exceeded the MCS for aluminum, total recoverable (ABP 8C, MCB 7C, 55HC and 76C), nitrate-nitrate as nitrogen (MSB 18A), sodium, total recoverable (ABP 8C, AMB19C, MCB 7C, MSB 11C, 12B, 33C, 45B, 55HC, 76C, and 79C), and sulfate (AMB 19C).

  In the Lower Lost Lake Aquifer Zone, the constituents that exceeded the GWPS were **PCE** (ABP 3C, 5C, MSB 15AA, 17BB, 31B, 37C, 38C, 39B, 45A, 49B, 73B, 79B, 88C and 89B) and **TCE** (ABP 3C, AMB 4B, 7B, ASB 2CR, 3CR, 5C, 10CR, MSB 15AA, 17BB, 21B, 25A, 26B, 31B, 33B, 36B, 38C, 39B, 40B, 45A, 49B, 66C, 69C, 73B, 74B, 75B, 79B, 88C and 89B). Samples exceeded the MCS for aluminum, total recoverable (MSB 52B, 79B and SRW 16A), chloride (AMB 4B), nitrate-nitrite as nitrogen (MSB 17BB, 39B and 49B), sodium, total recoverable (AMB 10B, 10CR, MSB 17BB, 33B, 36B, 39B, 47B, 79B, 85C and 88C) and total organic halogens (AMB 4B and 7B).

  In the Middle Sand Aquifer Zone of the Crouch Branch Confining Unit (CBCU), the constituents that exceeded the GWPS were **PCE** (AMB 4A, 7A, 17A, MSB 10A, and 68B) and **TCE** (AMB 4A, 7A, 17A, ASB 6AA, ASB 8B, MSB 10A, 33A, 36A, 49A, 66B, 68B, 82A, 88B, and SRW 14A). Samples exceeded the MCS for aluminum, total recoverable (ASB 6AA, 49A, 55B and 82A), sodium, total recoverable (MSB 46A, 82A and 84A), sulfate (ASB 6AA, MSB 55B, 82A and 82B) and total organic halogens (AMB 4A, 17A and 18A).

In the Crouch Branch Aquifer Unit, the constituents that exceeded the GWPS were **PCE** (MSB 42TA and 66TA) and **TCE** (ASB 6TA , 34TA, 42TA, 47TA, 66TA and MSB 82TA). The ASB 6TA sample exceeded the MCS for sodium.

- Appendix IX sampling was performed during third quarter 2001 on 8 of the POC wells at the M-Area HWMF (MSB 2B, 2C, 2D, 7A, 7B, 7C, 63C and 64D). No analytes were detected that were not already included in the GWPS list.
- Concentrations of nitrate-nitrite as nitrogen, PCE, TCE, sodium, sulfate and their distributions are provided in isoconcentration maps for each aquifer zone monitored (see Appendix H). PCE and TCE are the most frequently detected constituents in the GWPS list.
- Monthly sampling events were scheduled for each recovery well during 2001. The majority of recovery wells show a continued decreasing trend in TCE and PCE concentrations. (See the *Field and Analytical Results* subsection and Tables D-7a, b, and c, Appendix D)
- Efforts were made to sample all 14 of the POC wells at the Met Lab HWMF for constituents listed in Appendix IIIG-A of the 1995 RCRA Renewal Permit during 2001 (see Appendix A, Table A-2; for results see the *Field and Analytical Results* subsection and Table D-8, Appendix D). Analyte names shown in **bold text** exceeded the GWPS.

  In the M-Area Aquifer Zone POC wells, the constituent that exceeded the GWPS was **lead, total recoverable** (AMB 6). In the M-Area Aquifer Zone POC wells, aluminum, total recoverable (AMB 6 and 8D), iron, total recoverable (AMB 6 and 8D), nitrate-nitrite as nitrogen (AMB 5), sodium (AMB 5, 6, 8D and 9D), sulfate (AMB 6, 8D and 9D), and total organic halogens (AMB 4D and 5) exceeded the MCS.

  In the Met Lab HWMF POC wells screened in the Upper Lost Lake Aquifer Zone, **lead, total recoverable** (AMB 18C) exceeded the GWPS. Sodium, total recoverable and sulfate exceeded the MCS at AMB 19C.

  In the Lower Lost Lake Aquifer Zone POC wells, sodium, total recoverable (AMB 10B) exceeded the MCS.

  The Met Lab HWMF POC wells screened in the Middle Sand Aquifer Zone of the Crouch Branch Confining Unit had total organic halogens (AMB 4A, 17A, and 18A) above the MCS. The constituents that exceeded the GWPS were **PCE** (AMB 4A and 17A) and **TCE** (AMB 4A and 17A).
- All 8 background wells at the Met Lab HWMF were sampled during third quarter 2001. In the M-Area Aquifer Zone, MSB 43D exceeded the MCS for total organic halogens, while AMB 11D had sulfate and sodium, total recoverable above the MCS. MSB 29D had total organic halogens above the MCS. In the Upper Lost Lake Aquifer Zone, MSB 29C and 43B both had total organic halogens above the MCS. (see *Field and Analytical Results* subsection and Table D-9, Appendix D).
- All 8 of the plume definition wells at the Met Lab HWMF were sampled during third quarter 2001 (see *Field and Analytical Results* subsection and Table D-10, Appendix D).

  In the M-Area Aquifer Zone plume definition wells, iron, total recoverable exceeded the MCS in AMB 15D. Sodium, total recoverable and sulfate exceeded the MCS in AMB 7. No constituents exceeded the GWPS.

  In the Upper Lost Lake Aquifer Zone plume definition wells, no constituents exceeded the GWPS or the MCS.

  In the Lower Lost Lake Aquifer Zone plume definition wells, **TCE** exceeded the GWPS in AMB 4B, and **TCE** exceeded the GWPS in AMB 7B. Total organic halogens exceeded the MCS in AMB 7B, and chloride exceeded the MCS in AMB 4B.

  In the Middle Sand Aquifer Zone of the CBCU plume definition wells, **PCE** and **TCE** (AMB 7A) exceeded the GWPS. No constituents exceeded the MCS.

- Appendix IX sampling was performed first quarter 2001 on 6 of the POC wells at the Met Lab HWMF (AMB 4A, 5, 6, 8D, 9D, 10A). No analytes were detected that were not already included in the GWPS list.
- Solvent contamination has been detected in production wells within A/M Area. Data from Production well 905-82A suggests solvents have reached the deeper McQueen Branch Aquifer at levels exceeding the GWPS. Monitoring wells have been recently installed to assess the distribution of contaminants within the Cretaceous Aquifer System. Details of the ongoing investigation will be provided in subsequent Groundwater Reports.
- Statistical analysis of trends in TCE and PCE concentrations were performed on selected monitoring wells. The evaluation included historical data up through first and third quarter 2001. Table D-15a provides the CUSUM results for POC and selected plume definition wells. "No trend" means the concentrations are remaining more or less constant. Table D-15b provides the CUSUM results for the RWM wells. "No trend" can be interpreted to mean the concentrations are remaining more or less constant, based on the review of the time series plots for the wells having "no trend" output from the statistical analysis.

  Western Sector Statistical Analysis:

  In the M-Area Aquifer Zone, concentrations are more or less constant for PCE and TCE concentrations at well MSB 18B. At MSB 17B in the M-Area Aquifer Zone, PCE concentrations are relatively constant, but there is a long-term upward trend in TCE concentrations at this well.

  In the Upper Lost Lake Aquifer Zone, MSB 18A showed a long-term upward trend in TCE concentration, and relatively constant concentrations of PCE.

  In the Lower Lost Lake Aquifer Zone, PCE concentrations were relatively constant at MSB 17BB, but TCE concentrations have a long-term upward trend.

  Central Sector Statistical Analysis:

  In the M-Area Aquifer Zone, concentrations are more or less level for PCE and TCE concentrations at well MSB 26. Long-term downward trends were determined in the high concentration areas of the PCE and TCE plumes in M-Area Aquifer Zone wells MSB 4D, MSB 24 and 34C. Downgradient of the Met Lab HWMF, MSB 19C also showed a downward trend in TCE concentrations in the M-Area Aquifer Zone.

  In the Upper Lost Lake Aquifer Zone, MSB 3C (TCE), MSB 4C (TCE, PCE), MSB 16A (PCE) and MSB 34B (TCE) have long-term upward trends in concentration. In the Upper Lost Lake Aquifer Zone, MSB 27B has a long-term downward trend in TCE and PCE concentrations, and MSB 6C has a long-term downward trend in PCE concentration. Concentrations were relatively constant in Upper Lost Lake Zone wells MSB 3C (PCE), MSB 12B (PCE, TCE), MSB 16A (TCE), MSB 34B (PCE) and MSB 31CC (PCE, TCE).

  In the Lower Lost Lake Aquifer Zone, MSB 2B (PCE, TCE), MSB 6B (PCE, TCE), MSB 13B (PCE, TCE), MSB 26B (PCE, TCE) and MSB 75B (TCE) had long-term upward trends in concentration. Wells with long-term downward trends in concentration were MSB 25A (PCE, TCE) and MSB 34A (TCE). Concentrations were relatively constant at MSB 4B (PCE), MSB 9A (PCE, TCE), MSB 31B (TCE), and MSB 37C (PCE, TCE).

  In the Middle Sand Aquifer Zone of the CBCU, MSB 10A has long-term upward trends in PCE and TCE concentrations. At MSB 37B, PCE and TCE concentrations are relatively constant.

  In the Crouch Branch Aquifer Unit, MSB 34TA (TCE) and 42TA (PCE, TCE) have long-term upward trends in concentration.

  The RWM extraction wells had long-term upward trends in concentrations at RWM 1 (PCE), RWM 5 (TCE), RWM 7 (PCE) and RWM 9 (PCE, TCE). Long-term downward trends are the case at RWM 2 (TCE), RWM 3 (PCE, TCE), RWM 8 (TCE) and RWM 11 (TCE). No

discernible long-term change in concentrations is taking place at RWM 2 (PCE), RWM 4 (PCE, TCE), RWM 5 (PCE), RWM 7 (TCE), RWM 8 (PCE) or RWM 10 (TCE).

Northern Sector Statistical Analysis:

In the Upper Lost Lake Aquifer Zone, ASB 6C showed a long-term upward trend in TCE concentration, and a long-term downward trend in PCE concentration. A long-term downward trend in TCE concentration was determined for ASB 8C and MSB 47C in the Upper Lost Lake Aquifer Zone.

In the Lower Lost Lake Aquifer Zone, ASB 5C has a long-term downward trend in PCE and TCE concentrations.

In the Middle Sand Aquifer Zone of the CBCU, ASB 6AA has a long-term downward trend in TCE concentration. MSB 41B has relatively constant concentrations of PCE and TCE.

In the Crouch Branch Aquifer Unit, ASB 6TA has relatively constant TCE concentrations.

There is a long-term downward trend in TCE concentrations in all the RWM extraction wells in the Northern Sector. The data sets for RWM 13C and RWM 14B were the only ones suitable for CUSUM analysis of PCE concentrations, and they also had long-term downward trends.

Southern Sector Statistical Analysis:

In the Upper Lost Lake Aquifer Zone, MSB 39C (TCE and PCE) and MSB 33C (TCE) showed long-term downward trends in concentration. MSB 36C is screened in the Upper Lost Lake Aquifer, in the plume pathway to the southern sector, and has relatively constant concentrations of TCE.

In the Lower Lost Lake Aquifer Zone, MSB 39B showed a short-term increase in both TCE and PCE concentrations, but the long-term trend is relatively constant. Continued monitoring will determine if this was just a temporary spike in plume concentrations, or if the concentrations are beginning to increase at this location. MSB 33B has a long-term downward trend in PCE concentration. Concentrations were relatively constant at MSB 33B (TCE), and MSB 36B (TCE).

- In the Middle Sand Aquifer Zone of the Crouch Branch Confining Unit, MSB 33A has a long-term downward trend in TCE concentration.
- Groundwater flow rates and directions are not significantly different from previous reports, despite drought-like conditions. Since 1996, precipitation was been below the historical average. In fact, the precipitation received during 2001 was 12 inches below the historical average. The flow rates calculated for each aquifer for third quarter 2001 were: 195 ft/yr (M-Area Aquifer Zone); 214 to 384 ft/yr (Upper Lost Lake Aquifer Zone); 210 to 240 ft/year (Lower Lost Lake Aquifer Zone); 154 to 307 ft/year (Middle Sand Aquifer Zone of the CBCU); and 262 ft/yr (Crouch Branch Aquifer Unit). The flow rates calculated for each aquifer for fourth quarter 2001 were: 188 ft/yr (M-Area Aquifer Zone); 192 to 318 ft/yr (Upper Lost Lake Aquifer Zone); 210 to 240 ft/year (Lower Lost Lake Aquifer Zone); 123 to 354 ft/year (Middle Sand Aquifer Zone of the CBCU); and 262 ft/yr (Crouch Branch Aquifer Unit) (see Appendix D, Table D-14).
- Drawdown was established for each of the Central Sector potentiometric surfaces based on water elevation measurements collected during the M-1 Stripper outage that occurred during the 1st Quarter of 2000 (see Figures 6-10). This representation of the influence of the RWM wells on the potentiometric surfaces replaces the outdated version contained in annual reports published through 1999. For the Upper and Lower Lost Lake Aquifer Zones, the zones of influence based on the data collected during the stripper outage generally agree with the zones of capture generated from the modeling efforts submitted in 1995. However, for the M-Area Aquifer Zone, the observed zone of influence covers less area than the zone of capture produced through modeling. Under the current hydrologic and operating conditions, the zone of capture previously modeled for the M-Area Aquifer Zone is not representative and has been removed from the maps for this report. The aquifer recovery data collected during the stripper

outage confirm that the RWM wells exert the most influence on the target zone (i.e. Lost Lake Aquifer Unit) that has the greatest mass of contamination, as shown on the isoconcentration maps (see Appendix H). Since the period that the earlier modeling was performed, SRS has implemented additional remediation of the vadose zone in the vicinity of the source areas, and deployment of additional remediation efforts is pending. Additional modeling efforts are planned to evaluate the cumulative effect that these remediation efforts are having on reducing the contamination in the water table aquifer. An updated zone of capture model will be developed for the M-Area Aquifer Zone and presented in future reports

- During the calendar year 2001, the M-1 Air Stripper removed 8156 lb. of solvent from the groundwater beneath the M-Area HWMF (see the *Air Stripper Performance* subsection and Table D-16, Appendix D). Insignificant quantities of solvent contaminated condensate from the 321-M Solvent Storage Tank Area (SSTA) Dynamic Underground Stripping (DUS) system are periodically sent to the M-1 Stripper for treatment. It should be noted that the M-1 Air Stripper water flow totalizer was found to be slightly below the acceptable calibrated ranges from March to October of calendar year 2001. This could cause the reported volume of water treated at the M-1 Air Stripper to be slightly less than the actual volume treated.
- During the calendar year of 2001, the A-2 air stripper removed 1,098 lb. of solvent from the groundwater beneath the M-Area HWMF (see the *Air Stripper Performance* subsection and Table D-17, Appendix D).
- During calendar year 2001, the Soil Vapor Extraction Unit (SVEU) Vadose Zone Unit 782-3M removed 8457 lb. of solvent (see the *Vadose Zone Unit Performance* subsection and Table D-18, Appendix D).
- During calendar year 2001, the SVEU Vadose Zone Unit 782-4M removed 13,129 lb. of solvent (see the *Vadose Zone Unit Performance* subsection and Table D-19, Appendix D).
- During 1999, the SVEU Vadose Zone Units 782-5M and 782-8M had achieved their goals and ceased operations. The 782-5M unit has been removed and is in use at another project under a new name. The 782-8M unit remains in place.
- The 782-6M SVEU was incorporated into the SSTA DUS system in calendar year 2000. Solvent removal of the 782-6M wells is accounted for in the DUS section (see the *Vadose Zone Unit Performance* subsection and Table D-20, Appendix D).
- During calendar year 2001, the SVEU Vadose Zone Unit (formerly the Integrated Demonstration Unit, or "IDU") 782-7M removed 923 lb. of solvent (see the *Vadose Zone Unit Performance* subsection and Table D-21, Appendix D).
- The DUS removed 66,217 lb. of PCE and 1625 lb. of TCE in the calendar year 2001. PCE concentrations decreased from about 1800 ppmv at the beginning of July to about 470 ppmv prior to system shutdown on September 26, 2001
- During 2001, the Southern Sector air recirculation well treatment system (SSR well series) removed a total of 838 lb. of solvent.
- The report entitled "Characterization Activities to Evaluate Chlorinated Solvent Discharges to Tim's Branch form the A/M Area of the Savannah River Site (WSRC-TR-2000-00472, November 15, 2000)" was transmitted to SCDHEC in February 2001. Based on this report, SCDHEC submitted a request for SRS to prepare a Tim's Branch Sampling Strategy. Groundwater samples were collected from the five Southern Sector seepline monitoring wells that were installed as part of the comprehensive characterization effort associated with the Tim's Branch seepline discussed in the November report. The samples were taken in August 2001 and December 2001. The results from the August 2001 sampling event were given to SCDHEC on December 13, 2001. The results from the December sampling event and the Tim's Branch Sampling Strategy will be transmitted to SCDHEC in calendar year 2002.

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 HWMF (Met Lab HWMF). Requirements specified in Module III, Section B, M-Area HWMF of the permit were approved for modification by the South Carolina Department of Health and Environmental Control (SCDHEC 1999) in response to SRS proposals for reducing monitoring at the unit (Revision 12 to Volume III of the 1992 RCRA Part B Permit Renewal Application). SCDHEC reviewed the proposals, Technical Basis Report for Efficient Groundwater Monitoring at the A/M Area Network (WSRC-TR-98-00044) and Refinement of the List of Constituents for Groundwater Monitoring at M-Area (WSRC-TR-00347) and outlined approval of specific portions of the SRS proposals in their response (SCDHEC 1999).

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), 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 wastewater to the basin. Water periodically overflowed from the basin through the ditch to the seepage area adjacent to the ditch and into Lost Lake.

Because the material released to the environment during operation of the basin was a hazardous waste, 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 (Figure 3) of the contaminant plume that are based on geography, subsurface conditions, and ongoing actions.

- The **Central Sector** includes the solvent storage and handling areas, the M-Area Process Sewer Line, the M-Area Settling Basin, and the A-014 Outfall area. Contamination came from direct release to the subsurface of large quantities of solvent with migration through the vadose zone and into the saturated zone. A separate dense nonaqueous phase liquid (DNAPL) is present in both the saturated and unsaturated zones resulting in high aqueous concentrations typically above 1000 ppb of TCE. The remediation strategy is to identify and remove DNAPL in the subsurface while continuing mass removal from the dissolved plume using the M-1 Air Stripper recovery system. The majority of the concentrated contaminant plume and the primary remediation efforts are in this sector.
- The **Western Sector** is west of the central sector and outside the M-1 Air Stripper zone of influence. DNAPL may have migrated and dispersed into this area. Although no remediation system is currently in place within the western sector, a Corrective Action Plan has been developed to accelerate remediation of DNAPL in the vicinity of the closed M-Basin, which is believed to be the source of the Western Sector Plume.
- The **Southern Sector** encompasses the contaminant plume south of the central sector outside the M-1 Air Stripper zone of influence. The contamination plume in the area is a result of advective transport processes from source zones (M-Area Settling Basin and A-014 Outfall)

in the Central Sector prior to installation of the M-1 pump and treat system. Groundwater flows south from this sector towards Upper Three Runs Creek. The plume is relatively large and has concentration values up to 16,000 ppb (TCE). Remediation in the Lost Lake Aquifer Zone is currently addressed by a system of 12 vertical airlift recirculation wells (SSR well series) at the intermediate portion of the plume. Two phytoremediation studies are currently ongoing.

- The **Northern Sector** is outside the influence of the M-1 Air Stripper recovery system. This sector, which includes the Savannah River Laboratory Seepage Basins, the A-001 outfall, and part of the Savannah River Technology Center, is remediated by the A-2 Air Stripper recovery system.

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). 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 SC 1890008989) (SCDHEC, 1995).

Compliance Monitoring Program

M-Area HWMF

Requirements and Standards

- Point-of-compliance (POC) wells (Figure 2, Appendix C) 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 required monitoring regimen. This monitoring regimen was modified by SCDHEC (letter dated March 15, 1999; Frasier to Odum) in response to proposals for reducing monitoring requirements submitted to support SRS's permit modification request (Revision 12 to Volume III of the 1992 RCRA Part B Permit Renewal Application). SCDHEC reviewed the proposals, Technical Basis Report for Efficient Groundwater Monitoring at the A/M Area Network (WSRC 1998) and Refinement of the List of Constituents for Groundwater Monitoring at M-Area (WSRC 1997c) and outlined approval of specific portions of the SRS proposals in their response (SCDHEC 1999). The monitoring regimen is as follows:
- 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 (pH, specific conductance, and temperature) listed in Appendix IIIB-A of the permit
- semiannual monitoring for field parameters (pH, specific conductance, temperature), and GWPS constituents with the exception that polychlorinated biphenyls [PCBs]) are monitored at a limited number of wells: POC wells MSB 1D, 2D, 4D, and 59D; plume definition wells MSB 9C, 10C and 31C; and RWM wells 1, 6 and 10. Although MSB 57D, 58D and 60D previously received monitoring for PCBs, they were approved for deletion from the groundwater monitoring well network (letter dated March 15, 1999; Frasier to Odum).
- 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)

- Approval was granted by SCDHEC (SCDHEC, 1999) to refine the list of inorganic Monitoring Constituents listed in Section II, Appendix IIIB-A of the permit (SCDHEC, 1995). The Monitoring Constituents SCDHEC approved for deletion from monitoring at the POC wells were chromium, mercury, uranium, fluoride, cobalt (with the exception of the Annual Appendix IX analysis at 20% of POC wells), chloride, copper, zinc, manganese, sulfate, and total phosphates.

Analytical results for the hazardous constituents listed in Section I, Appendix IIIB-A, of the permit (SCDHEC, 1995) are compared to the GWPS as defined in Appendix IIIB-A of the permit (SCDHEC, 1995). The Monitoring Constituents listed in Section II, Appendix IIIB-A are compared to the Monitoring Constituents Standard (MCS), which is derived from the former GWPS as defined in the RCRA Part B Renewal Application (WSRC, 1994), M-Area HWMF background concentrations as defined in the 1987 Part B permit application (WSRC, 1987), or drinking water standards (USEPA, 1993a, 1993b). The GWPS and the MCS used for comparison are provided in Appendix A. M-Area HWMF groundwater 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, 1994).

The SRS Environmental Restoration Department (ERD) reports the monitoring results to the 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

Appendix B, lists the wells in the groundwater monitoring network, and the units they monitor. Currently, the M-Area HWMF POC well network is composed of 37 wells: MSB 1B, 1C, 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, 59D, 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 in the early 1990's.
- 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).
- With the SCDHEC approval of the Revision 14 permit modification, MSB 64B has been deleted from the list of wells to be monitored and MSB 39A is now a plume definition well (SCDHEC 2001).

Met Lab HWMF

Requirements and Standards

POC wells (Figure 2, Appendix C) 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 first quarter of each year of at least 40 percent of the POC wells for Appendix IX constituents (SCDHEC, 1994)

Analytical results for hazardous constituents are compared to the GWPS as defined in Section I, Appendix IIIG-A of the permit (SCDHEC, 1995). Monitoring Constituents, as defined in Section II, Appendix IIIG-A of the permit (SCDHEC, 1995) are compared to a MCS which is derived from the former GWPS as defined in WSRC (1994), M-Area HWMF background concentrations as defined in the 1987 Part B permit application (WSRC, 1987), or drinking water standards (EPA, 1993a, 1993b). The GWPS and the MCS used for comparison are provided in Appendix A. M-Area HWMF groundwater 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, 1994). Data from background wells AMB 11D and 12D were not included in development of the background standard (WSRC, 1987, 1994). Therefore, the comparison is to groundwater background quality not impacted by contamination from the M-Area HWMF. 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

Appendix B, lists the wells in the groundwater monitoring network, and the units they monitor. 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) 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 monitoring regimen for these wells to meet RCRA requirements. This monitoring regimen was modified by SCDHEC (SCDHEC 1999) in response to proposals for reducing monitoring requirements submitted to support SRS's permit modification request (Revision 12 to Volume III of the 1992 RCRA Part B Permit Renewal Application). SCDHEC reviewed the proposals, Technical Basis Report for Efficient Groundwater Monitoring at the A/M Area Network (WSRC 1998) and Refinement of the List of Constituents for Groundwater Monitoring at M-Area (WSRC 1997c) and outlined approval of specific portions of the SRS proposals in their response (SCDHEC 1999).

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
- Approval was granted by SCDHEC (letter dated March 15, 1999; Fraiser to Odum) to refine the list of inorganic Monitoring Constituents listed in Section II, Appendix IIIB-A of the permit (SCDHEC, 1995). The SCDHEC approved deletion of chromium, mercury, uranium, fluoride, cobalt, chloride, copper, zinc, manganese, and total phosphates from the monitoring requirements for plume definition wells. In addition, SCDHEC (SCDHEC 1999) approved deletion of monitoring radionuclides (gross alpha, gross beta, and total radium) at most plume definition wells, continuing analyses only on samples from the wells in the MSB 17, MSB 18 and MSB 39 clusters.

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 synchronous 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

Wells were proposed for removal from the groundwater monitoring network in permit modification requests submitted to SCDHEC (Technical Basis for Proposed Modification to the Groundwater Monitoring Program, September 1996; Technical Basis Report for Efficient Groundwater Monitoring at the A/M Area Network dated June, 1998) to reduce the sampling requirements for the M-Area HWMF. In response, SCDHEC granted approval to remove some of the proposed piezometer wells (SCDHEC 1999). SCDHEC granted approval to remove some of the proposed wells from the groundwater monitoring program in response to the modification request (SCDHEC 1999). Appendix B lists the wells in the groundwater monitoring network, and the units they monitor.

Modifications to the corrective-action well network are as follows:

- Wells MSB 1CC, 57D, 58D, and 60D were proposed for removal from the groundwater monitoring network in a permit modification request submitted to SCDHEC (WSRC 1998) to reduce the sampling requirements for the M-Area HWMF. SCDHEC granted approval to remove these wells from the groundwater monitoring program in response to the modification request (SCDHEC 1999).
- Well MSB 19A was abandoned in 1999 since the well was leaning into a drainage ditch to the point that it was inaccessible for sampling.
- Well MSB 23B was abandoned June 12, 2000 as part of a construction project in the vicinity. It will be replaced after shutdown of the SSTA DUS system.

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

Background wells (6 total)

- 2 M-Area Aquifer Zone wells: 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 (215 total)

Plume definition wells are screened in the following aquifers: 1 well screened in a perched zone above the water table; 49 wells in the M-Area Aquifer Zone; 4 wells screened in the M-Area Aquifer Zone/Green Clay Confining Zone; 1 well screened in the Green Clay Confining Unit; 41 wells screened in the Upper Lost Lake Aquifer Zone; 57 wells screened in the Lower Lost Lake Aquifer Zone; 1 well screened in the Upper Clay Confining Zone-Crouch Branch Confining Unit; 32 wells screened in the Middle Sand Aquifer Zone-Crouch Branch Confining Unit; and 23 wells screened in the Crouch Branch Aquifer Unit.

Recovery wells (17 total)

The recovery wells included in the previously approved network include:

- 1 recovery well screened in the M-Area Aquifer Zone, Green Clay Confining Zone the Upper Lost Lake Aquifer Zone: RWM 1
- 2 recovery wells screened in the M-Area Aquifer Zone: RWM 9 and 10
- 2 recovery wells screened in the Upper Lost Lake Aquifer Zone: RWM 13C and 14C
- 3 recovery wells screened in the Lower Lost Lake Aquifer Zone: RWM 13B, 14B, and 15B
- 7 recovery wells screened through the M-Area Aquifer Zone, Green Clay Confining Zone, Upper Lost Lake Aquifer Zone and Lower Lost Lake Aquifer Zone: RWM 2, 3, 4, 5, 6, 7 and 11
- 1 recovery well screened through the Green Clay Confining Zone, Upper Lost Lake Aquifer Zone and Lower Lost Lake Aquifer Zone: RWM 8

- 1 recovery well screened through the Upper Lost Lake Aquifer Zone and the Lower Lost Lake Aquifer Zone: RWM 12

There are additional recovery wells that are not included in the current permit, RWM 16 cluster, 17B and 17D. The RWM 16 cluster is not operational. The data from RWM 17B and 17D has been included in this report for information purposes. RWM 17B and 17D were installed as part of the Met Lab corrective action plan (Revision 6 to Volume III of the M-Area HWMF Part B permit application) approved by SCDHEC in August 1998.

- RWM 17B is screened in the Lower Lost Lake Aquifer Zone.
- RWM 17D is screened in the M-Area Aquifer Zone.

Piezometers (57 total)

- 1 piezometer screened in the vadose zone
- 25 piezometers screened in the M-Area Aquifer
- 5 piezometers screened across the Green Clay Confining Unit such that the screen zone is in the M-Area Aquifer Zone/Green Clay Confining Zone/Upper Lost Lake Aquifer Zone
- 6 screened in the Upper Lost Lake Aquifer
- 9 screened in the Lower Lost Lake Aquifer
- 3 screened in the Middle Sand Aquifer Zone-Crouch Branch Confining Unit
- 8 screened in the Crouch Branch Aquifer Unit

Met Lab HWMF

Requirements and Standards

Data from background and plume definition wells (Figure 4, Appendix C) 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

Appendix B lists the wells in the groundwater monitoring network, and the units they monitor. 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

Monitoring and Corrective-Action Program Assessment

Ongoing Programs

M-Area HWMF

Compliance and Post-Closure Programs

- In 1980, the U.S. Department of Energy (USDOE) submitted a notification of the SRS hazardous waste activities to SCDHEC; USDOE 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 issued by SCDHEC on September 30, 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.
- A major revision (Revision 3) of the 1987 Part B permit application was submitted to SCDHEC on May 31, 1988 (WSRC 1988). SCDHEC comments on the revision were received in August 1988. Revision 3 was resubmitted on September 10, 1990 in response to SCDHEC's comments. SCDHEC issued a Notice of Deficiency (NOD) on the permit on September 17, 1991.
- Revision 4 of the 1987 RCRA Part B permit application was submitted to SCDHEC on December 20, 1993. This modification included a proposal to include PCB monitoring at specified A/M-area 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 on February 15, 1994. SRS received a NOD on Revision 5 in June 1994.
- Revision 6 of the 1987 Part B permit application, submitted to SCDHEC on July 5, 1994, was approved by SCDHEC. The revision addresses the NOD on Revision 5, with modifications to the proposed reductions in sampling, analysis, and reporting.
- Revision 7 of the 1987 Part B permit application, which proposed reductions in the A/M-Area groundwater monitoring program, was submitted to SCDHEC on August 30, 1995. This revision was approved by SCDHEC on September 25, 1995.

- 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 Area.
- The modified 1992 M-Area HWMF RCRA Part B permit renewal application (Revision 2) was submitted to SCDHEC December 20, 1993. The modifications included a proposal to include PCB monitoring at specified A/M-Area groundwater monitoring wells. SCDHEC submitted their Notice of Deficiencies (NODs) to SRS on May 27, 1994.
- On July 5, 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 Area; and revising text on contingency plans, personnel training, and procedures to prevent hazards. The renewal document adheres to the format specified in the USEPA Regulatory Completeness Checklist for Post-Closure Permit Applications (Revision 4, February 4, 1986).
- SCDHEC approved the 1992 RCRA Part B Permit application and issued the draft permit on February 24, 1995 for a 45-day public comment period. A public hearing was held on April 6, 1995. Comments on the draft permit were submitted on April 19, 1995. SCDHEC issued the permit and it became effective on October 5, 1995.
- Revision 4 of the 1992 Part B permit renewal application was submitted to SCDHEC on April 25, 1996. SCDHEC approved the revision on September 21, 1998. Revision 4 discussed A/M Area vadose zone remediation.
- Revision 5 of the 1992 Part B permit renewal application was submitted to SCDHEC on October 10, 1996. This revision concerned the rerouting of a well in the A/M Area and did not require approval by SCDHEC.
- Revision 6 of the 1992 Part B permit renewal application was submitted to SCDHEC on April 25, 1996. SCDHEC approved the revision on August 26, 1998. The Revision 6 modification concerned the remediation in the vicinity of Metallurgical Laboratory Basin. This remediation included the installation and operation of two recovery wells (RWM 17B and 17D) in this area.
- Revision 7 and 9 of the 1992 Part B permit renewal application were submitted to SCDHEC on March 6, 1997 and August 29, 1997, respectively. These revisions discussed the corrective action plan for the A/M Area Southern Sector. These efforts include the installation and operation of recirculation wells. Monitoring wells are used to monitor the effectiveness of the recirculation wells. These revisions were approved by SCDHEC on March 26, 2001.
- Revisions 8 and 11 of the 1992 Part B permit renewal application were submitted to SCDHEC on April 4, 1997 and March 30, 1998, respectively. These revisions discussed the corrective action plan (i.e., recirculation well technology) for the A/M Area Western Sector. On March 1, 2001, SRS requested that SCDHEC delay their review of these permit modifications, as the hydrologic conditions in this area are inappropriate for the deployment of the remedial technology proposed in these revisions.
- Revision 10 of the 1992 Part B permit renewal application was submitted to SCDHEC on October 31, 1997. This modification discussed corrective action plans for Phase II of the A/M Area Northern Sector. SCDHEC has not yet reviewed this revision.
- Revision 12 of the 1992 Part B permit renewal application was submitted to SCDHEC on September 20, 1998. SCDHEC issued a partial approval of this revision on March 15, 1999. This revision discussed well reductions to the A/M Area groundwater monitoring well network.

- Revision 13 of the 1992 Part B permit renewal application was submitted to SCDHEC on November 27, 2000. This revision discussed the deployment of DUS at the 321-M Solvent Storage Tank Area in A/M Area as well as responded to SCDHEC comments on the Revision 12 modification (well reduction). SCDHEC granted partial approval of the Revision 13 modification on September 10, 2001 (DUS deployment was approved with minor comments on the groundwater monitoring well program). Corrected pages to the Revision 13 modification were submitted to SCDHEC on November 1, 2001 in response to the comments on the well program. SCDHEC granted final approval of the Revision 13 modification on December 5, 2001 (SCDHEC 2001).
- Revision 14 of the 1992 Part B permit renewal application was submitted to SCDHEC on December 19, 2001. This revision addressed an aggressive source zone remediation with Dynamic Underground Stripping technology in the vicinity of the M-Area Settling Basin. This modification also addressed the additional remaining long-term remediation response required for the Western Sector after the source zone remediation is shut down. SCDHEC is currently reviewing Revision 14.
- The final report updating the hydrostratigraphy of the M-Area and the Met Lab HWMFs 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-Area Vadose Zone Remediation

Although the groundwater corrective-action system in A/M Area 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 PCE and TCE 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 former 321-M Solvent Storage Tank area. Vacuum extraction was selected after a successful pilot demonstration removed more than 1,500 lb. of solvents during a 21-day test in 1987.

Four SVEUs were installed in A/M Area during 1994. Design of the SVEUs 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 (SCDHEC 1994) and again in June 1995. The SVEUs have been operating since May 1995. During 1999, one of the SVEUs, 782-5M achieved its remediation goals and was removed from service.

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.

Two additional SVEUs, located near the M-Area Settling Basin and the process sewer line, were on line in 1997. During 1999, one of the SVEUs, 782-8M achieved its remediation goals and was removed from service.

Additional characterization of the vadose zone contamination plume was completed in 1997 and early 1998. These results were compiled for submittal and further action strategies.

The Vadose Zone Monitoring Plan was submitted under separate cover in March 1998.

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.

Investigation Derived Waste Minimization

In 1999, SRS initiated use of an alternate monitoring well design, the Westbay Multi-port Sampling System. The Westbay Multi-port Sampling System allows groundwater sampling from multiple screened intervals in the same well bore. The advantage in utilizing this technology is that only a single well bore needs to be drilled for multiple completions. Also, because the sampling device is connected directly to the aquifer via a depressible "O-ring", the only Investigation Derived Waste (IDW) that is generated is from the unused portion of the groundwater sample brought to the surface in the sampling chambers. The best application of this technology is for VOC contaminated groundwater in thick (i.e., 40-60 feet) aquifers which exhibit clean sand formations with very thin clay laminae. It is especially useful when volatile contamination is present due to the low sample volume needed for analysis. The sampler is limited to approximately one liter per run in the hole. This is the major limiting factor. As many as four canisters can be strung together to produce one liter of sample; however, a 20-foot sump below the sampling port is required to accommodate the canisters.

The first Westbay system was installed in the spring of 1999, MSB-91TB. This pilot Westbay system was completed in the Crouch Branch Aquifer Unit with two screened intervals. Installation of this Westbay system provided dual benefits by reducing IDW generation, and also reducing installation costs since conventional well installation would have required using surface casing for two wells, instead of just one. Following this successful application of the Westbay system, the technology was applied to eight effectiveness monitoring wells (SSM 10 – 17) designed to monitor the effectiveness of the recirculation well (SSR 1 – 12) VOC remediation in the Southern Sector of A/M Area. These eight Westbay completions in the Lost Lake Aquifer Zone have two screened intervals each, one interval screened in the Upper Lost Lake Aquifer Zone, and one in the Lower Lost Lake Aquifer Zone. The Southern Sector wells were installed in two phases of four wells each. The first was in October/November 1999 time frame and the last four were installed in January 2000.

Installation of the Westbay Multi-port Sampling System occurred in five effectiveness-monitoring well installations at the MCB. This remediation activity is for VOC contamination in the Lost Lake Aquifer Zone. For the MCB installation two screened intervals have the Westbay system installed. Although the MCB is not part of the M-Area or Met Lab HWMFs, monitoring activities are included in this report due to its proximity to the HWMFs, and its inclusion on area maps. Other activities included the installation of eight Westbay systems in the Crouch Branch Aquifer Unit, with up to three screened zones each. To date none of the Westbay systems have yet positioned screen zones above and below a confining unit in the same well bore.

Central Sector Remediation

The remediation strategy in the Central Sector has been to identify and remove DNAPL in the subsurface, while continuing mass removal from the dissolved plume using the M-1 Air Stripper and the RWM recovery well system. Remediation is complemented with SVEU operations in the vadose zone.

A study focusing on the status of the vadose zone remediation along 1600 ft of the process sewer line between the M-Area security fence and the M-Area Settling Basin was conducted by SRTC in late 2000. Three soil vapor extraction (SVE) units 782-5M, 782-7M, and 782-8M, connected to 4 vertical wells and 3 horizontal wells have been addressing the vadose zone volatile organic contamination (VOC) since 1995. The specific objectives of this study were to obtain soil gas and sediment samples, evaluate SVE units and vadose zone remediation, and make recommendations to address further remediation needs.

Concentration measurements were made on 60 existing vadose zone monitoring points in the area. Twenty cone penetrometer characterization borings were completed in November of 2000 for soil gas and sediment sampling. A total of 282 sediment samples and 155 soil gas samples were collected.

The following results are drawn from evaluating the concentrations and three-dimensional digital images of the sediment and soil gas data:

- A significant amount of contamination has been removed from the vadose zone.
- DNAPL does not exist in the zones sampled (<200,000 µg/kg TCE and <50,000 µg/kg PCE
- Residual contamination remains in the fine grain zones, which are not directly addressed by SVE (above and below the central sandy unit).
- Low permeability zones, perched water and cemented zones in the lower fine grain zone reduce the effectiveness of SVE from approximately 100 ft down to the water table.
- The remediation between wells MVE-7 and AMH-2 is not being addressed adequately by the current SVE systems.
- The horizontal wells associated with SVE Unit 782-8M have not fully addressed the vadose zone contamination.

Western Sector

Soil headspace 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 TCE/PCE plume. The findings suggest that the primary source of TCE/PCE is the M-Area Settling Basin with the contamination spreading into the western sector from this source. In addition, fate and transport modeling is being developed to predict mobility of the DNAPL pool that is located near the M-Area Settling Basin and Lost Lake. Characterization was initiated and completed in the Western Sector during 1998 that further defined the plume and lithology in the area.

A total of 11 airlift recirculation wells in three banks were installed in early 2001 in accordance with the Interim Record of Decision (WSRC 1999) for the Miscellaneous Chemical Basin/Metal Burning Pit (731-4A/5A). These airlift recirculation wells became operational on February 28, 2002.

Southern Sector Remediation

The Southern Sector information is included to meet the requirements of the annual effectiveness monitoring report for this area. The Southern Sector plume has an estimated areal extent of 800 acres, ranging from relatively dilute concentrations of volatile organic compounds to concentrations in the 16,000 ppb range, and is outside the zone of influence of the M-1 and A-2 Air Stripper groundwater recovery systems. SRS investigated the Southern Sector to determine the boundary of solvent contamination and to define the geology and hydrology of the area. Based on the results of the assessments, in 1996 SRS installed two vertical airlift recirculation wells (ARW), well series SSR, in the Lost Lake Aquifer Zone to control downgradient migration of the >500 ppb boundary of the VOC plume. Ten additional wells were also installed in the Lost Lake Aquifer Zone and start-up of 11 of the 12 wells in the system began in 1999. A multi-stage, in-well aerator, developed by Davis Environmental, was installed into SSR-012.

An “effectiveness monitoring plan” was submitted to SCDHEC and was approved in 1999. The plan proposed installation of 8 wells, in addition to using 4 existing wells to monitor effectiveness of the ARW treatment system. The existing SSM well clusters that currently monitor the groundwater in the area of the ARWs have wells screened in the Upper and Lower Lost Lake Aquifer Zones. Monthly status reports have continued on the progress of the remedial system.

Effectiveness Monitoring reports are scheduled for annual submittal to SCDHEC (included in this report). The Southern Sector Phase 1 Corrective Action Plan Evaluation Preport and Proposal for the Phase II Corrective Action Plan (WSRC-RP-2000-4179) was submitted to SCDHEC in December 2000. Based on the monitoring data, it is clear that some of the ARW wells are located upgradient (SSR-8, -9, -10, -11, and 12) or sidegradient (SSR-1) of the 500 ppb contour of the TCE plume. The current ARW system does not have the treatment capacity to control the approaching highly contaminated plume. Characterization work was performed in the summer of 2001 to locate the 500 µg/L TCE isoconcentration contour. Further characterization may be planned for calendar year 2002.

A pilot-scale phyto-irrigation study began in October 2001 for the Lost Lake Aquifer Unit in A/M-Area Southern Sector. The sprinkler system provides irrigation water for a wood lot that utilizes the VOC plume. The objective of this treatability study is to assess the effectiveness and capacity of phyto-irrigation as a remedial action technology for the VOC-contaminated groundwater plume in support of the Phase II Corrective Action Plan for the A/M -Area Southern Sector.

The report entitled "Characterization Activities to Evaluate Chlorinated Solvent Discharges to Time Branch form the A/M Area of the Savannah River Site (WSRC-TR-2000-00472, November 15, 2000)" was transmitted to SCDHEC in February 2001. Based on this report, SCDHEC submitted a request for SRS to prepare a Tims Branch Sampling Strategy. Groundwater samples were collected from the five Southern Sector seepline monitoring wells that were installed as part of the comprehensive characterization effort associated with the Tims Branch seepline discussed in the November report. The samples were taken in August 2001 and December 2001. The results from the August 2001 sampling event were given to SCDHEC on December 13, 2001. The results from the December sampling event and the Tims Branch Sampling Strategy will be transmitted to SCDHEC in calendar year 2002.

Northern Sector Characterization and Remediation

Characterization of the Northern Sector was initiated in 1998 by drilling three soil borings. Initial results of the borings showed a positive VOC result in the Lost Lake and Crouch Branch Aquifers. Follow-up testing has failed to confirm the VOC results in these borings. However, additional monitoring wells were installed in 1999 for continued monitoring of the Lost Lake and Crouch Branch Aquifers.

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 Unit. The A-2 Air Stripper, with a feed rate of 300 gpm, is fed by six recovery wells: RWM 13B, 13C, 14B, 14C, 15B and RWM 12 (previously from the A-1 Stripper Unit). The A-2 Air Stripper began operating in fiscal year 1996.

Although not designed for remediation purposes, production wells 905-20A and 905-53A provide remediation benefits in the Crouch Branch Aquifer in the Northern Sector. The annual operating frequency of the production wells is about 50% of the year and is estimated to remove approximately 700 lb. of solvent every year (WSRC 1997a) if operating at that frequency.

Met Lab HWMF

Vadose zone remediation was initiated in 1998 with the installation and operation of 20 BaroBalls™ within the Met Lab area. Two additional recovery wells, RWM 17B and 17D, began feeding groundwater into the M-1 Air Stripper as of July 2000.

A proposal for background wells is currently under SCDHEC 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.

Corrective-Action System Operation and Performance

Corrective action is accomplished in M-Area/Met Lab 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. In addition, remediation is being done by innovative technologies such as Baroball™ and recirculation wells for plumes and dynamic underground stripping for source term DNAPL.

The M-1 Air Stripper in M Area, Central Sector, is fed by 13 recovery wells (RWM series). Eleven of the recovery wells began operating in April 1985 and have been operating full scale since September 1985. The A-2 Air Stripper is fed by 6 recovery wells in the northern sector. 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 vapor extraction units (SVEU) in the vadose zone, located in A/M Area, have been operating since May 1995. These units are fed by 12 soil vapor extraction wells.

Within the Met Lab area, vadose zone remediation was initiated in 1998 with the installation and operation of 20 BaroBalls™. Two additional recovery wells, RWM 17B and 17D, began feeding groundwater into the M-1 Air Stripper as of July 2000.

Twelve vertical, airlift recirculation wells (ARWs), well series “SSR”, are screened in the Upper and Lower Lost Lake Aquifer Zones in the Southern Sector of A/M Area. The ARW remediation system was initiated with the installation of the first SSR well in 1996. Currently 12 wells (SSR well series) are placed approximately 255 feet apart within the vicinity of the 500 ppb isoconcentration contour of TCE (based on 1994 data) (WSRC 1999a). The SSR wells form a line diagonally across the groundwater flow path. Computer modeling predicts the SSR wells form a vertical capture zone extending across the Lost Lake Aquifer Zone (WSRC, 1999a). All twelve SSR wells of this Southern Sector remediation system are operational. The SSR wells are monitored by the SSM well series. TCE and PCE data from the SSM wells 10 – 17 are posted on the isoconcentration maps for information purposes to provide a better approximation of the southern sector plume geometry. SSM wells 10-17 were installed upgradient and downgradient of the ARW system to monitor system effectiveness.

A description of the systems that compose the corrective-action program follows.

Air Stripper Performance

M-1 Air Stripper

A summary of 2001operation and performance data for the M-1 Air Stripper is presented in Table D-16 (Appendix D). During the calendar year of 2001, the stripper removed 8156 lb. of VOCs. The average monthly influent VOC concentration was 4,308 µg/L. The average monthly effluent total was below detection.

The M-1 Air Stripper has removed a cumulative total of 376,137 lb. of VOCs since the beginning of operation in 1995. 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 lb., respectively, for a total of 34,200 lb.), the total weight of PCE and TCE removed by the M-1 Air Stripper by the end of 2001 was 410,337 lb.

The water feed rate to the M-1 Air Stripper has averaged 425 gpm since startup. Total inlet solvent concentrations have decreased from roughly 47,100 µg/L in April 1985 to less than 3815 µg/L in December 2001. Insignificant quantities of solvent contaminated condensate from the DUS system at the 321-M solvent tank storage were periodically sent to the M-1 Stripper for treatment during Calendar Year 2001. Stripping efficiency has always produced effluent concentrations substantially less than the permit limits. It should be noted that the M-1 Air Stripper water flow totalizer was found to be slightly below the acceptable calibrated ranges from March to October of

calendar year 2001. This could cause the reported volume of water treated at the M-1 Air Stripper to be slightly less than the actual volume treated.

A-2 Air Stripper

A summary of 2001 operating and performance data for the A-2 Air Stripper is presented in Table D-17 (Appendix D). During calendar year 2001, the stripper removed 1098 lb. of VOCs (PCE and TCE) from RWM 12, RWM 13B, RWM 13C, RWM 14B, RWM 14C, and RWM 15. The average annual influent VOC concentration was 901 µg/L, and the average annual effluent VOC concentration was very close to the detection limit at 1 µg/L.

Vadose Zone Unit Performance

SVEU Vadose Zone Unit 782-3M

A summary of 2001 operating and performance data for the 782-3M is presented in Table D-18 (Appendix D). During calendar year 2001, the 782-3M removed a total of 8457 lb. of VOCs. The average monthly VOC influent concentration was 89 ppmv (parts per million by volume).

SVEU Vadose Zone Unit 782-4M

A summary of 2001 operating and performance data for the 782-4M is presented in Table D-19 (Appendix D). During calendar year 2001, the 782-4M removed a total of 13,129 lb. of VOCs. The average annual influent VOC concentration was 160 ppmv.

SVEU Vadose Zone Unit 782-5M

During 1999, the 782-5M achieved its goal and was taken out of operation. It has been renamed and is currently being used at a different location for a different project.

SVEU Vadose Zone Unit 782-6M

The 782-6M wells MVE-1, 2 and 3 were incorporated into the DUS system in calendar year 2000. Solvent removal from the 782-6M wells is accounted for in the DUS section of this report. Active DUS operation ceased September 25, 2001.

SVEU Vadose Zone Unit 782-7M

Soil vapor extraction well AMH 2 pumps contaminated air to the SVEU Vadose Zone Unit 782-7M (formerly the IDU). Table D-21 (Appendix D) presents a summary of 2001 activity at the 782-7M. 782-7M removed 923 lb. of solvent in calendar year 2001.

SVEU Vadose Zone Unit 782-8M

During 1999, the 782-8M achieved its goal and was removed from service.

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 17D are presented in Table D-22 (Appendix D). Monthly concentrations (µg/L) of PCE and TCE in each RWM well are presented in Table D-23 (Appendix D).

Southern Sector Recirculation Wells

Monthly operational and performance data for the Southern Sector recirculation wells SSR-001 through SSR-012 are presented in Table D-24 (Appendix D). During 2001, the recirculation wells removed a total of 838 lb. of solvent. Table D-5 includes observation data from the SSM monitoring wells (see Appendix D).

Dynamic Underground Stripping

Dynamic Underground Stripping (DUS) is a process in which steam is injected into the subsurface zone to drive contaminants to an extraction point. The volatilized contaminants are removed by applying a vacuum to wells screened in the vadose zone.

A DUS system was operated through September 25, 2001 in the A/M-Area at the Solvent Storage Tank Area to remove TCE and PCE from the subsurface.

The DUS removed 66,217 lb. of PCE and 1625 lb. of TCE in the calendar year 2001. Contaminant removed concentrations reached a peak of 1800 ppmv PCE at the beginning of July and declined to approximately 470 ppmv PCE prior to shutdown. The DUS was shutdown on September 25, 2001 due to the decrease in the removal rates. Post DUS characterization will be performed after cool down of the soil block to verify achievement of the active SVE shutdown criteria identified in WSRC-RP-98-00146 the *A/M Area Vadose Zone Monitoring Plan.*

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 at the A-014 outfall. Table D-18 (Appendix D) presents a summary of 2001 activity at the 782-3M. 782-3M removed 8,457 lb. of solvent in calendar year 2001.

Soil vapor extraction wells AMH 6 and AMH 7 pump contaminated air to the SVEU Vadose Zone Unit 782-4M, located at the M-Area Settling Basin. Table D-19 (Appendix D) presents a summary of 2001activity at the 782-4M. 782-4M removed 13,129 lb. of solvent in calendar year 2001.

Soil vapor extraction well AMH 2 pumps contaminated air to the SVEU Vadose Zone Unit 782-7M (formerly the IDU). Table D-21 (Appendix D) presents a summary of 2001 activity at the 782-7M. 782-7M removed 923 lb. of solvent in calendar year 2001.

Air Stripper Modifications

Construction was completed on the connection from the Met Lab wells to the M1 Air Stripper in First and Second Quarter of 2000. Operation of RWM-17B commenced on June 12, 2000. However, the well was not operating on July 11, 2000 because during initial system testing and operation, which began in early June 2000, compatibility problems were encountered with the modems and the existing Bell Atlantic communication lines. In late July, after numerous attempts by SRS personnel, Bell Atlantic, and Blackbox (modem vendor) to resolve the problem, a jumper was installed to bypass the Programmable Logic Circuits.

Also, from mid-June until mid-July, RWM 17D was shut down due to water level readings indicating that the well was dry. Subsequent readings indicated that there was sufficient water to operate RWM 17D. Recovery wells RWM 17B and 17D have been operating continuously since July 26, 2000.

Vadose Zone Unit Modifications

SVEU 782-5M was physically removed and transferred to another remedial project because it had completed its designated mission.

SVEUs 782-5M and 782-8M were shut down due to low contaminant removal rates. Unit 782-7M continues to operate with a removal rate of about 25 lb./week.

The M-Area Part B permit Modification Rev. 4 stated that final shutdown of the soil vapor extraction units would be supported by an assessment of the areas under remediation. Twenty cone penetrometer characterization locations were completed in November 2000 for soil gas and sediment sampling. Concentration measurements were made on 60 existing vadose zone monitoring points in the area. A total of 282 sediment samples and 155 soil gas samples were collected. The complete details of the sampling effort can be found in Vadose Zone Remediation

Assessment: M-area Process Sewer Soil Vapor Extraction Units 782-5M, 782-7M, and 782-8M (WSRC, 2001).

Sampling and Results

Groundwater Sampling

During third and fourth quarters 2001, synchronous water elevations were measured September 2001, and November/December, 2001, respectively. Synchronous water levels for each quarter of 2001 are presented in Table D-1 (Appendix D).

The sampling procedure for wells with pumps (WSRC, 1997b) 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 well pumps run 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-2 through D-10 (Appendix D) 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 most 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; MSB 32B, 32C, 87B, 87C, 88B, 88C, and 89B. Samples from wells MSB 16C, 42D, 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-2 through D-11b (Appendix D).

Samples were collected by RCS Corporation of Aiken, South Carolina, and analyzed by Environmental Science & Engineering of 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 abandonment is found in the *Environmental Protection Department's Well Inventory* (WSRC 2000). 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, are defined in the *Hydrogeological Characterization Report for the A/M Area (U)* (WSRC 1995).

Analytical results that exceeded the GWPS (Appendix A) during third quarter 2001 are presented in this report (Tables D-2 through D-12, Appendix D). Previous sampling events in first quarter 2001, and first and third quarter 2000 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 was conducted first quarter 2001 to determine water quality at POC, background, and plume definition wells and monthly at recovery wells. Synchronous sampling for water elevations was conducted during first and second quarters 2001.

Sampling Problems

Tables D-2 through D-6 (Appendix D) provide sampling codes (defined in the *Key to Reading the Tables* section of Appendix D) that describe unusual sampling events.

Well MSB 3D contains DNAPL with dissolved PCBs in sediments trapped in the well sump (WSRC 1993). This well is no longer sampled regularly for groundwater quality because of waste disposal issues.

Maintenance or access problems during third or fourth quarter 2001 for the remaining wells are summarized as follows.

- Well was dry, no sample or field data collected:

  3Q 2001- AOB 2; MSB 42D, 55D, and 87C.

- Samples were collected but metals samples were not sent for analysis due to high turbidity:

  3Q 2001 - MSB 9C, 16C, and 47TA.

  4Q 2001 - ARP 2, 5D, 8D; SRW 17DR;

- Sample collection could not be completed because of inaccessibility or mechanical failure:

  3Q 2001 - MSB 5A, 6A, 15A, 52B, and 54D.

- Well went dry before sampling began, only depth to water can be determined:

  3Q 2001 - ABP 8C; AMB 6; MCB 7C; MSB 1C, 2B, 2C, 3C, 13D, 15D, 17BB, 20C, 24, 30AA, 33, 46A, 54D, 55HC, 62D, 63D, 70C, 70D, 74C, 82A, 84A, 85D, and 85TA .

- Well went dry during purging, samples collected after well recovered:

  3Q 2001 - ABP 8C; AMB 6; MCB 7C; MSB 1C, 2B, 2C, 3C, 13D, 15D, 20C, 24, 30AA, 33, 46A, 48D, 54D, 55HC, 62D, 63D, 74C, 79B, 82A, 84A, 85D and 85TA.

Met Lab HWMF

Groundwater sampling to determine water quality was conducted during third quarter 2001 at POC, background, and plume definition wells. Synchronous sampling for water elevations was conducted during third and fourth quarters 2001.

Sampling Problems

Tables D-7 through D-10 provide sampling codes (defined in *Key to Reading the Tables*, Appendix D) that describe unusual sampling events for the Met Lab wells.

Maintenance or access problems during third or fourth quarter 2001 are summarized as follows.

- Well went dry before sampling began, only depth to water can be determined: AMB 6

Field and Analytical Results

The *Key to Reading the Tables* section of Appendix D defines abbreviations used in the data tables and provides discussions of holding times 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 provides a general assessment of the quality and usability of the data.

M-Area HWMF

Tables D-2 through D-5 (Appendix D) present the field and analytical results for samples collected from M-Area POC, background, plume definition, and recovery wells, respectively, first and third quarters 2001. Water elevations were determined using the elevation of the top of standpipe as the measurement reference point. If no standpipe exists, the reference point used is the top of casing. The tables identify the hazardous constituents that exceeded the GWPS in Appendix IIIB-A of the 1995 RCRA Renewal Permit (SCDHEC, 1995) and the Monitoring Constituents that

exceeded the Monitoring Constituent Standard (MCS) (Appendix A). Table D-12 summarizes the constituents that exceeded the GWPS or MCS in M-Area POC wells during third quarter 2001.

Tables D-2 through D-6 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 USEPA-approved holding times during third quarter 2001, and information concerning the wells.

Met Lab HWMF

Tables D-7 through D-10 (Appendix D) present the field and analytical results for samples collected from Met Lab POC, background, and plume definition wells, respectively, for first quarter 2001. Water elevations were determined using the elevation of the top of standpipe as the measurement reference point. If no standpipe exists, the reference point used is the top of casing. The tables identify the hazardous constituents that exceeded the GWPS in Appendix IIIG-A of the 1995 RCRA Renewal Permit (SCDHEC, 1995), or the MCS (Appendix A). Table D-12b summarizes the constituents that exceeded the GWPS or MCS in Met Lab HWMF POC wells during first and third quarters 2001.

Tables D-7 through D-10 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 USEPA-approved holding times during first and third quarters 2001, and information concerning the wells.

Appendix IX Results

During each year, samples are taken at 20 percent of the POC wells at the M Area HWMF and at 40 percent of the POC wells at the Met Lab HWMF to be analyzed for Appendix IX constituents (SCDHEC, 1994). The Appendix IX analysis is done to identify any new hazardous constituents. Appendix IX sampling is done during first quarter at the Met Lab HWMF, and during third quarter at the M-Area HWMF. New constituents detected above their sample quantitation limits are re-analyzed in subsequent quarters and statistically compared to background concentrations to determine if they are true contaminants or artifacts of the analyses.

During first quarter 2001, Met Lab POC wells AMB 4A, 5, 6, 8D, 9D and 10A were analyzed for Appendix IX constituents, and the results were discussed in the semi-annual report. The first quarter 2001 annual Appendix IX sampling at the Met Lab POC wells did not identify any constituents not already included on the GWPS list that were above their sample quantitation limits and without data qualifiers.

During third quarter 2001, 8 M Area POC wells (MSB 2B, 2C, 2D, 7A, 7B, 7C, 63C and 64D) were analyzed for Appendix IX constituents to identify any Appendix IX analytes that exceeded their sample quantitation limits and that were not already listed in the GWPS (in Appendix IIIG-A of the 1995 RCRA Renewal Permit, SCDHEC, 1995). No new analytes were identified (Table D-12, Appendix D).

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Hydrogeologic Assessment

The hydrogeologic system in A/M Areas is evaluated using piezometric and potentiometric maps and cross sections (Maps 1 through 16, Appendix H) to determine groundwater flow rates and directions and precipitation data, hydrographs (Appendix G), and zone of capture maps (Appendix H, Maps 17 through 20) to determine the effects of the recovery well system.

The piezometric and potentiometric maps for this report were constructed for third and fourth quarters 2001 using synchronous water elevations. Water elevations were determined using the elevation of the top of standpipe as the water measurement reference point, or the top of casing in the cases where a standpipe was not present. Maps were constructed for each of the aquifer zones described in (WSRC 1995b). Appendix B, lists the wells in the groundwater monitoring network, and the units they monitor. Aquifer zones are identified in this report in the *Key to Reading the Tables* section of Appendix D. A significant number of monitoring well screen zones were re-evaluated in the process of preparing the isoconcentration and potentiometric surface maps to resolve data anomalies. As a result of this re-evaluation, many of the wells were re-designated to the appropriate monitoring zone corresponding to the screened interval. The Well Network for the M-Area and Met Lab HWMFs is listed in Appendix B. The aquifer zones monitored by each well, and the well designation relative to each HWMF is associated with each well of the network. Map directions are oriented to SRS site north.

Water elevations that were determined to be unrepresentative for the aquifer were not used during contouring, and were posted as “suspect value” (SV). The values that were considered unrepresentative for third and fourth quarter 2001 were:

Table 1. Unrepresentative Water Elevations

Well	Period	Water Elevation (ft msl)
ABP 2A	3Q 1996	330.89
ABP 2A	3Q 1996	263.50
ABP 2A	3Q 1997	293.00
ABP 8C	1Q 1998	304.05
AMB 4D	2Q 2001	253.41
AMB 7A	2Q 2001	277.62
AMD 10A	2Q 2001	168.49
AMB 13AR	4Q 1997	316.10
AMB 15D	3Q 1998	353.00
AMB 15D	3Q 2001	217.70
AMB 18A	2Q 1997	276.70
AMB 19C	3Q 2000	327.30
AOB 1	2Q 2001	240.6
AOB 1	3Q 2000	279.60
AOB 2	2Q 2000	345.60
ARP 2	3Q 2001	203.57
ARP 5D	2Q 2001	210.51

Table 1. Unrepresentative Water Elevations (continued)

Well	Period	Water Elevation (ft msl)
ARP 5D	4Q 2001	208.20
ASB 4	2Q 1995	278.50
ASB 1A	4Q 1999	251.30
ASB 4	4Q 1994	278.16
ASB 8B	3Q 2001	206.5
ASB 8B	4Q 2001	206.5
ASB 8TA	4Q 2001	210.10
MSB 6A	1Q 1999	327.04
MSB 7B	4Q 2001	221.60
MSB 10A	4Q 2001	195.20
MSB 10B	3Q 2001	214.41
MSB 11A	4Q 2001	214.50
MSB 11C	4Q 2001	206.50
MSB 11F	3Q 1994	354.30
MSB 19B	3Q 2001	230.84
MSB 24	4Q 1996	255.50
MSB 25A	4Q 2001	229.80
MSB 34A	1Q 2001	331.85
MSB 36TA	2Q 1997	291.60
MSB 37C	1Q 1997	255.70
MSB 39B	2Q 2001	221.19
MSB 39C	2Q 2001	306.09
MSB 39D	2Q 2001	241.9
MSB 39TA	2Q 2001	207.75
MSB 41D	2Q 2001	241.07
MSB 41D	1Q 2001	241.07
MSB 42A	2Q 2001	124.88
MSB 42B	2Q 2001	232.6
MSB 42C	1Q 1997	358.50
MSB 46C	4Q 2000	362.70
MSB 54C	3Q 1996	299.52
MSB 66D	2Q 1994	267.90
MSB 66D	3Q 1998	267.10
MSB 66D	2Q 1999	267.00
MSB 66D	1Q 2000	267.20
MSB 66D	2Q 2000	267.10
MSB 69TA	4Q 2001	231.00

Table 1. Unrepresentative Water Elevations (continued)

Well	Period	Water Elevation (ft msl)
MSB 78DR	3Q 2001	205.70
MSB 78DR	4Q 2001	205.70
MSB 84A	1Q 2001	192.99
MSB 84A	3Q 2001	155.56
MSB 84A	4Q 2001	191.90
MSB 85D	4Q 1995	264.70
MSB 85D	2Q 1997	333.20
MSB 85TA	2Q 2001	275.84
MSB 86C	3Q 1996	326.10
MSB 87B	1Q 2000	316.90
MSB 88B	1Q 1997	79.62
RWM 3	4Q 1996	306.05
RWM 13B	3Q 1998	114.57
RWM 14B	3Q 1998	271.00
RWM 14C	3Q 1998	271.00
SRW 2B	2Q 2000	320.70
SRW 3A	3Q 2000	252.20
SRW 3A	3Q 2000	252.20
SRW 9A	3Q 2000	114.40
SRW 12A	3Q 2000	122.40
SRW 12C	3Q 2000	39.50
SRW 13A	3Q 2000	94.00
SRW 14B	4Q 2001	188.8
SRW 15C	3Q 2000	133.20

Groundwater Flow Directions and Rates

Horizontal Flow Directions

- Horizontal gradients in the M-Area Aquifer Zone (Maps 1 and 6, Appendix H) are variable. The natural stratigraphy, variability in recharge, and the removal of water by wells RWM 3, 6, 9, 10, and 11 produce mounds and depressions found on the piezometric surface. South of the M-Area HWMF, near the Miscellaneous Chemical Basin (MCB), a water-table divide appears to divert flow naturally, with flow heading to the southwest and also to the southeast.
- Potentiometric contours for the Upper Lost Lake Aquifer Zone (Maps 2 and 7, Appendix H) indicate a flow pattern, with the highest water elevations located north of A/M Area, and flow away from this area to the southwest and also to the southeast. 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) is toward the south, southeast. The most prominent feature is a generally 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 CBCU (Maps 4 and 9, Appendix H) is toward the south, southeast. 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 Unit (Maps 5 and 10, Appendix H) is to the west-southwest, especially in the northern vicinity of A/M Area, 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 Unit are 27, 45, 45, 45, and 40 ft/day, respectively; the effective porosity value for each is 0.20 (WSRC 1995a). 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 third and fourth quarters 2001 (Table D-14, Appendix D) were as follows:

Table 2. Groundwater Flow Rates

Aquifer	Third Quarter 2001 Flow Rate (ft/year)	Fourth Quarter 2001 Flow Rate (ft/year)
M-Area Aquifer Zone	195	188
Upper Lost Lake Aquifer Zone	214 to 384	192 to 318
Lower Lost Lake Aquifer Zone	210 to 240	210 to 240
Middle Sand Aquifer Zone of the CBCU	154 to 307	123 to 354
Crouch Branch Aquifer Unit	262	262

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

Water-Elevation Changes

Recharge and Water-Elevation Changes

Precipitation measurements for the A/M Areas during the 2001 are provided in Table 3 below. For comparison, the historical averages are also provided.

Table 3. A/M-Area Precipitation Data for 2001

	2001 Monthly Precipitation (in)	Historical Monthly Average 1952 – 2001 (in.)
January	2.8	4.40
February	2.52	4.36
March	7.27	4.88
April	0.96	3.25
May	4.79	3.69
June	4.87	4.56
July	5.42	5.15
August	1.6	4.87
September	3.34	4.08
October	0.12	2.91
November	1.16	2.61
December	1.2	3.47
Annual Total	36.05	Average Totals 48.22

As in 1998, 1999 and 2000, precipitation in 2001 was below the historical average. Concurrently, recharge rates would also be expected to be below the historical average. Although precipitation in March was well above the historical average for the first time in several years, subsequent rainfall events were near or below historical rainfall events. By the end of 2001, the total rainfall was below the average by 12 inches, reflecting continued drought-like conditions in the southeastern United States. A reduction in recharge rates may be reflected in a decreasing trend in water elevations measured in shallow aquifers, while an increase in recharge rates may be reflected by an increase in water elevations.

Hydrographs showing water-elevation changes for M-Area HWMF and Met Lab HWMF monitoring wells from 1992 to present are provided in Appendix G. Hydrographs in Appendix G continue to show a declining trend. Water elevations portrayed by the hydrographs were determined using the elevation of the top of standpipe as the water measurement reference point except for wells without standpipes, where top of casing was used as the reference point. The vertical scale of the hydrographs has been adjusted to include the normal range for all water elevations in the network. Water elevations were noted that extended outside the range of the chart. The anomalous elevations are believed to be the result of measurement or transcription error and were noted in Table 1.

Monitoring wells generally reflect a water-level decline since 1996 caused by the decrease in precipitation over the last several years. Water elevations in monitoring wells away from the recovery wells system show variations related to rainfall, proximity to streams and other physical features.

Corrective Action and Water-Elevation Changes

Following is a description of a past study that was done to collect water elevations as they would appear if no groundwater extraction was underway. The M-Area RWM series of recovery wells were shut down for a week starting March 11, 2000 for maintenance to be performed on the M-1 Air Stripper system. The outage was viewed as an opportunity to conduct a “pumping test” to evaluate current conditions. This provided data to prepare drawdown maps in the Central Sector for the M-Area Aquifer Zone, Upper/Lower Lost Lake Aquifer Zones and Crouch Branch Aquifer. Water elevations were measured before the pumps were stopped, and at the end of the recovery period while the pumps were off. Maps were generated for each aquifer to illustrate the influence of the pumping wells (see Appendix C, Figures 6 - 10). Similar maps had been used in earlier groundwater reports, but they had become significantly outdated as many of the wells used for their preparation had been abandoned, and many new wells had been installed that could add many more data points to create a better interpretation.

Most of the RWM wells are screened across multiple aquifer units and confining zones (see Appendix B, Well Network). Pressure transducers and data loggers were installed in "observation wells" near RWM-10 (MSB-4D, -C and -B and MSB-59D) and near RWM-8 (MSB-13D, -CC and -A). Hand measurements were collected at selected observation wells distributed around the Central Sector. Additionally, hand measurements were taken more frequently at a set of five well clusters distributed around the RWM pumping centers, and also at the RWM wells. Data is provided in Table 4.

Schedule of Field Activities

03/07/00*:* Instrument wells with pressure transducers and hermits.

03/09/00: Start data collection in all hermits (“background” data).

03/10/00: First round of manual water level readings taken on all selected observation wells. This is our baseline (“background”) round of manual water level measurements.

03/11/00: Second round of manual water level readings taken on a subset of wells just prior to outage commencing.

03/11/00, about 12:00 hrs: M-1 Air Stripper outage begins; system/pumps powered down. Stop background data collection in hermits and begin second of three phases (i.e., monitor recovery phase).

03/13/00: Third round of manual water level readings taken on a subset of wells. Recovery phase continues.

03/14/00*:* Fourth round of manual water level readings taken on a subset of wells. Recovery phase continues.

03/15/00*:* Fifth round of manual water level readings taken at all selected observation wells. End of outage; begin monitoring of drawdown phase with M-1 system startup via hermits (the third and final hermit phase). No further manual water level measurements are collected.

03/29/00: Stop data collection with hermits; remove transducer and hermit equipment.

Contour Maps

A series of contour maps was created to show the effects of RWM production well pumping on each of the aquifers in the study area (see Appendix C, Figures 6 - 10). The maps show groundwater recovery by difference between values of the 03/15/00 (baseline conditions represented by the end of outage measurements) and 03/10/00 (prior to outage) manual water level measurements. The zone of influence from the RWM wells is indicated by the contours of the head difference measured at the end of the aquifer recovery phase.

Table 4. Water Elevation Data Before and During M-1 Stripper Outage

Well*	Aquifer	Water Elevation (ft) 3/10/00 pumps on	Water Elevation (ft) 3/11/00 pumps off	Water Elevation (ft) 3/13/00 pumps off	Water Elevation (ft) 3/14/00 pumps off	Water Elevation (ft) 3/15/00 pumps off	Head Change (ft) (pumps off - pumps on)
MCB11B	LLLAZ	191.18				190.92	-
MCB11C	ULLAZ	191.32				191.05	-
MCB11D	ULLAZ	215.8				215.98	0.1
MSB13A	LLLAZ	206.08	207.56	210.93	211.10	211.22	5.1
MSB13B	ULLAZ				229.55	229.55	NA
MSB13C	MAAZ				226.94	226.94	NA
MSB13C	ULLAZ	223.02	223.11	223.67	223.84	223.90	0.8
MSB13D	MAAZ	226.75	226.77	226.69	226.76	226.80	0.0
MSB15A	ULLAZ	218	218.33	221.30	221.76	222.08	4.0
MSB15A	LLLAZ	211.62	212.19	216.24	216.48	216.61	4.9
MSB15D	MAAZ	237.41	237.41	237.41	237.41	237.41	NA
MSB18A	ULLAZ	211.26				211.78	0.5
MSB18B	MAAZ	220.62				220.66	0.0
MSB18C	MAAZ	226.19				226.18	-
MSB21B	LLLAZ	218.53				220.36	1.8
MSB21C	MAAZ	227.9				227.89	-
MSB21T	CBAU	193.03				193.25	0.2
MSB26	MAAZ	229.39	229.54	229.46	229.58	229.65	0.2
MSB26A	ULLAZ	222.2	225.02	224.66	224.84	224.98	2.7
MSB26B	LLLAZ	216.67	217.17	220.13	220.27	220.41	3.7
MSB31A	CBAU	196.84	196.83	196.99	197.03	196.91	0.0
MSB31B	LLLAZ	210.8	217.06	219.38	219.73	219.86	9.0
MSB31C	MAAZ	231.08	231.07	231.03	231.18	231.10	0.0
MSB31C	ULLAZ	210.93	216.98	219.43	219.73	219.91	8.9
MSB33	MAAZ						NA
MSB33A	MSAZ_CBCU	204.19				204.18	-
MSB33B	LLLAZ	206.83				206.89	0.0
MSB33C	ULLAZ	209.94				209.99	0.0
MSB33T	CBAU	194.76				194.74	-
MSB34A	LLLAZ	217.32	217.48	218.36	218.47	218.48	1.1
MSB34B	ULLAZ	226.52	226.75	226.85	227.05	227.08	0.5
MSB34C	MAAZ				Dry		NA
MSB34T	CBAU	201.02	199.97	201.22	201.22	201.08	0.0
MSB34T	MSAZ_CBCU	201.31	201.22	201.45	201.47	201.37	0.0
MSB35A	MSAZ_CBCU	215.09				216.26	1.1
MSB35B	ULLAZ	217.54				219.75	2.2
MSB35D	MAAZ	238.45				238.32	-

Table 4. Water Elevation Data Before and During M-1 Stripper Outage (continued)

Well*	Aquifer	Water Elevation (ft) 3/10/00 pumps on	Water Elevation (ft) 3/11/00 pumps off	Water Elevation (ft) 3/13/00 pumps off	Water Elevation (ft) 3/14/00 pumps off	Water Elevation (ft) 3/15/00 pumps off	Head Change (ft) (pumps off – pumps on)
MSB35T	CBAU	198.68				198.70	0.0
MSB36A	MSAZ_CBCU	208.69				210.68	1.9
MSB36B	LLLAZ	212.68				214.25	1.5
MSB36C	ULLAZ	212.72				214.30	1.5
MSB36D	MAAZ	232.81				232.75	-
MSB36T	CBAU	194.05				194.16	0.1
MSB39A	MSAZ_CBCU	207.6				209.85	2.2
MSB39B	LLLAZ	210.39				212.62	2.2
MSB39C	ULLAZ	213.86				215.37	1.5
MSB39D	MAAZ	230.27				230.20	-
MSB39T	CBAU	191.9				192.02	0.1
MSB40A	MSAZ_CBCU	202.05				202.17	0.1
MSB40B	LLLAZ	203.53				203.58	0.0
MSB40C	ULLAZ	203.59				203.64	0.0
MSB40D	MAAZ	226.53				226.31	-
MSB40T	CBAU	189.05				189.16	0.1
MSB41A	MSAZ_CBCU	216.21				216.41	0.20
MSB41B	MSAZ_CBCU	216.28				216.47	0.19
MSB41C	LLLAZ	216.75				217.00	0.25
MSB41D	MAAZ	241.11				241.10	-0.01
MSB41T	CBAU	205.81				205.73	-0.08
MSB42A	MSAZ_CBCU	217.5					NA
MSB42B	LLLAZ	223.99					NA
MSB42C	ULLAZ	228.86					NA
MSB42D	MAAZ	229.95					NA
MSB42T	CBAU	204.15					NA
MSB43A	LLLAZ	227.62				227.76	0.14
MSB43B	ULLAZ	227.75				227.90	0.15
MSB43D	MAAZ_GCCZ	229.82				229.33	-0.49
MSB43D	MAAZ	229.82				229.79	-0.03
MSB43T	CBAU	201.97				202.04	0.07
MSB4A	MAAZ						NA
MSB4B	LLLAZ	206.73	210.16	214.62	214.85	215.00	8.27
MSB4C	ULLAZ	213.14	214.35	217.73	218.19	218.51	5.37
MSB4D	MAAZ	227.77	227.96	227.99	228.08	228.07	0.30
MSB59D	MAAZ	227.73	228.22	228.15	228.25	228.25	0.52
MSB62B	LLLAZ				212.95	213.14	NA
MSB62C	ULLAZ				222.97	223.10	NA
MSB62D	MAAZ				227.56	227.56	NA
MSB64B	LLLAZ	206.43				209.16	2.73
MSB64C	ULLAZ	221.37				221.85	0.48
MSB64D	MAAZ	225.78				225.80	0.02
MSB70C	ULLAZ	216.63				216.69	0.06
MSB70D	MAAZ	220.14				220.15	0.01
MSB74B	LLLAZ	208.88				209.39	0.51

Table 4. Water Elevation Data Before and During M-1 Stripper Outage (continued)

Well*	Aquifer	Water Elevation (ft) 3/10/00 pumps on	Water Elevation (ft) 3/11/00 pumps off	Water Elevation (ft) 3/13/00 pumps off	Water Elevation (ft) 3/14/00 pumps off	Water Elevation (ft) 3/15/00 pumps off	Head Change (ft) (pumps off – pumps on)
MSB74C	ULLAZ	209.71				208.71	-1.00
MSB74D	MAAZ					230.06	NA
RWM1	MAAZ/GCCZ	185.59	221.49	223.38	223.82	224.06	38.47
RWM10	MAAZ/GCCZ/ULLAZ/ LLLAZ/ MSAZ_CBCU	192.75	215.42	218.86	219.12	219.31	26.56
RWM11	MAAZ/GCCZ/ULLAZ/ LLLAZ	225.35	225.60	225.97	226.15	226.23	0.88
RWM2	GCCZ/ULLAZ/ LLLAZ	161.72	226.38	226.88	227.11	227.18	65.46
RWM3	MAAZ/GCCZ/ULLAZ/ LLLAZ	211.24	224.33	225.34	225.15	225.64	14.40
RWM4	GCCZ/ULLAZ/ LLLAZ/UCCZ_CBCU	205.36	219.38	222.12	222.36	222.51	17.15
RWM5	ULLAZ/ LLLAZ	209.79	219.19	221.71	221.97	222.11	12.32
RWM6	GCCZ/ULLAZ/ LLLAZ/ UCCZ_CBCU	214.45	222.18	224.00	224.26	222.34	7.89
RWM7	GCCZ/ULLAZ/ LLLAZ/ UCCZ_CBCU	195.22	220.52	222.73	223.15	223.39	28.17
RWM8	GCCZ/ULLAZ/ LLLAZ/ UCCZ_CBCU	202.57	210.42	213.56	213.74	213.86	11.29
RWM9	GCCZ/ULLAZ/ LLLAZ	228.28	228.37	228.46	228.65	228.72	0.44
SRW15A	MSAZ_CBCU	207.48				207.44	-0.04
SRW15B	ULLAZ	207.65				207.65	0.00
SRW15C	MAAZ	210.89				211.03	0.14

Notes: MAAZ: M-Area Aquifer Zone
GCCZ: Green Clay Confining Zone
ULLAZ: Upper Lost Lake Aquifer Zone
LLLAZ: Lower Lost Lake Aquifer Zone
MSAZ_CBCU: Middle Sand Aquifer Zone of the Crouch Branch Confining Unit
NA: Not applicable
*Shaded areas identify subset of wells measured more frequently during the M-1 Stripper Outage.

RWM Pumping Well Flow Rates

Table 5 shows the totalizer and flow rate values from the 11 RWM series recovery wells in the study. This includes values for RWM 8 and RWM 10 just prior to outage start on 03/11/00 and for all wells after system startup (readings taken on 03/15/00, 03/17/00, and 03/23/00).

Table 5. RWM Pumping Well Flow Rates

Well	Flow Rate	Flow Rate	Flow Rate	Flow Rate	Flow Rate
RWM1	-	-	20.5	***19.87***	-
RWM2	-	-	26.0	***25.30***	-
RWM3	-	-	60.2	***58.90***	-
RWM4	-	-	47.0	***46.65***	-
RWM5	-	-	48.1	***47.61***	-
RWM6	-	-	68.1	***67.39***	-
RWM7	-	-	38.1	***37.12***	-
RWM8	45.8	56[a]	46.5 ***(44.25)***[c]	***45.00***	46.17 ***(45.54)***
	45.0	-	-		-
RWM9	-	-	46.3	***45.53***	-
RWM10	36.4	46.0[b]	32.4 ***(31.27)***	***31.97***	31.98 ***(31.96)***
	43.0	-	-		-
RWM11	-	-	71.5	***70.74***	-

Notes:

a- Bad readings from this meter - totalizer already running and reading 18.7 gpm prior to pump being turned on.

b- Initial flow rate was 56-58 gpm, which was rapidly throttled back to 46.0 gpm.

c- Bold italics indicate calculated flow rates from totalizers

Summary of Observations

The observations drawn from the data collected during the M-1 stripper outage are discussed in relationship to the aquifers beginning with the uppermost zone and continuing to the deepest zone monitored. The discussion only refers to RWM wells in the Central Sector associated with the M-1 stripper. Estimates of the extent of the zone of influence for each aquifer are based on the recovery measured at the selected monitoring wells, and are therefore biased by the location and distribution of the available wells that were screened at the appropriate intervals.

Although the screen zones of RWM 1, 3, 10 and 11 begin in the M-Area Aquifer Zone, their influence on the flow field in this aquifer appears minimal. The maximum recovery measured in a monitoring well was only 0.52 ft (MSB 59D), near RWM 10. The screened interval for RWM 10 extends from the M-Area Aquifer Zone down to the Middle Sand Aquifer Zone of the Crouch Branch Confining Unit. None of the other RWM wells appear to extract much groundwater through the screened portions that begin in the M-Area Aquifer Zone.

Most of the RWM wells have the greatest screen length within the Lost Lake Aquifer Unit since this is the primary target zone for the groundwater remediation in the Central Sector. As would be expected, the Upper and Lower Lost Lake Aquifer Zones show the greatest response to the RWM pumping wells. Of the monitoring wells, a maximum recovery of 8.27 ft (MSB 31CC) was observed in the Upper Lost Lake Aquifer Zone and a maximum recovery of 9.06 ft (MSB 31B) was observed in the Lower Lost Lake Aquifer Zone.

In the Upper Lost Lake Aquifer Zone, the center of the zone of influence during pumping is in the vicinity of RWM 6, and affects an area approximately 3 miles in diameter. In the Lower Lost Lake Aquifer Zone, the center of the zone of influence is more elongated around RWM 6, 7 and 10, and encompasses an area approximately 4 miles in diameter.

Only RWM 10 penetrates into the Middle Sand Aquifer Zone of the Crouch Branch Confining Unit. As would be expected, the extraction influence in this aquifer is greatest in the vicinity of RWM 10, as

demonstrated by the maximum recovery measured at the nearby wells, 2.25 ft (MSB 39A) and 1.99 ft (MSB 36A). The zone of influence has a diameter of roughly 3 miles.

None of the RWM wells reach the Crouch Branch Aquifer Zone and only RWM 10 penetrates to the Middle Sand Aquifer Zone of the Crouch Branch Confining Unit. The negligible effect the RWM pumping wells have on the Crouch Branch Aquifer Zone is evidence of the competency of the Lower Clay Confining Zone of the Crouch Branch Confining Unit in the vicinity of RWM 8 and 10.

Generally, the extraction influence of the RWM recovery wells seems to be greatest in the vicinity of RWM 6, 7, 8 and 10. Less aquifer response was measurable around the RWM wells located further north in the Central Sector. For the most part, the zone of influence in the Lost Lake Aquifer Unit correlates well with high concentration regions of the TCE and PCE plumes that are the target of the remediation activities in the Central Sector.

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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 estimated by tracking the time it takes to remove contaminants from the groundwater and projecting the time it will take to reach the remediation goals.

Water Quality Changes

Extent of Contamination

The discussion of the horizontal and vertical extent of contamination addresses the distribution of PCE and TCE contamination (Maps and cross-sections, Appendix H). There is an isoconcentration contour map for each contaminant, showing the distribution of contamination in as it occurs in each aquifer zone or unit. PCE, although geometrically similar in distribution to TCE, is usually present in lower concentrations, and the plume is less extensive. The 5 µg/L contour lines on the isoconcentration maps encompass the areas where the constituent exceeded the GWPS during third quarter 2001.

Isoconcentration maps of nitrate-nitrite as nitrogen, sodium, and sulfate are provided only in the annual reports as indicators of contamination emanating from discrete sources in the A/M Area, even though these constituents are not part of the list of hazardous constituents. Nitric acid and sodium hydroxide were used to clean aluminum parts in the A/M Area during the manufacture of fuel targets for reactors. Isoconcentration maps of sodium and nitrate may be useful in identifying the zone of contamination that could be attributed to the M-Area Basin. A separate zone of elevated sodium concentrations in the Northern Sector may be indicative of another release from the SRL Seepage Basins. A distinct plume of sulfate contamination was observed within the northern sector at the SRL Seepage Basins when isoconcentration maps were plotted using first quarter 1995 and third quarter 1996 data for the M-Area and Upper Lost Lake Aquifers. Therefore, isoconcentration maps of sulfate may be indicative as general tracers of the contamination zone attributed to the SRL Seepage Basins. The SRL Seepage Basins were closed in 2001 under the SRS RCRA/CERCLA FFA Program.

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 TCE and PCE plumes. Plume maps for the inorganics also were shown in the revised RCRA Part B post-closure care permit application submitted May 31, 1988 (WSRC 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.

Vertical distribution of PCE and TCE along 6 transects is shown only in annual reports by isoconcentration cross-sections. Vertical distribution of PCE along is shown by cross-sections 42 through 47 (Appendix H). Vertical distribution of TCE is shown by cross-sections 48 through 53 (Appendix H).

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. Isoconcentration maps, showing the extent of contamination, are interpreted and plotted for the recorded specific concentration value of a monitoring well within a specific aquifer for that specific time frame. The plume geometry and apparent extent of contamination may differ between sampling periods. Differences may in part be attributed to the distribution of data points available

for each sampling period being contoured. If a particular well at a controlling location could not be sampled due to access or mechanical problems, historical data from the well was reviewed to determine what the expected value would have been from the well, and efforts were made to honor the historical data while contouring. A similar review process was used in the case of data returned from the lab with the qualifiers “J” or “L” that were posted on the maps as “non decision data” (NDD) based on guidance received from SCDHEC (SCDHEC 1998). Thus the extent of the plume may not be representative of past extents of the depicted analyte.

M-Area Aquifer Zone

The distribution of constituents in the M-Area Aquifer Zone is shown on Maps 17 through 21 (Appendix H). The plume generally is limited to areas of known or suspected solvent disposal sites, which include the M-Area and Met Lab HWMFs, the Solvent Storage Facility, the A-014 outfall and other smaller disposal areas. The A-Area Miscellaneous Rubble Pile is not believed to have impacted the groundwater.

Upper Lost Lake Aquifer Zone

The distribution of constituents in the Upper Lost Lake Aquifer Zone is shown on Maps 22 through 26 (Appendix H). 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 plumes in this zone is greater in the downgradient direction than in the M-Area Aquifer Zone due to greater horizontal flow rates in the Upper Lost Lake Aquifer Zone. The addition of TCE and PCE data from the SSM wells has enhanced the description of the plumes in the Southern Sector.

Lower Lost Lake Aquifer Zone

Constituent concentrations in the Lower Lost Lake Aquifer Zone are shown on Maps 27 though 31 (Appendix H). The lateral extent of the plume as defined by the 5 µg/L contour is greater in the downgradient directions than in the upper aquifer zones because the Lower Lost Lake Aquifer Zone has a higher potential for horizontal flow. The addition of TCE and PCE data from the SSM wells has allowed a more detailed projection of the plumes in the Southern Sector.

Middle Sand Aquifer Zone of the Crouch Branch Confining Unit

The distribution of constituents in the Middle Sand Aquifer Zone of the Crouch Branch Confining Unit is shown on Maps 32 through 36 (Appendix H). Monitoring is limited in the Middle Sand Aquifer Zone of the Crouch Branch Confining Unit. Constituent concentrations in this zone, as in the overlying zones, are highest near known sources. Contamination in the Middle Sand Aquifer Zone of the Crouch Branch Confining Unit 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 Unit

The distribution of constituents in the Crouch Branch Aquifer Unit is shown on Maps 37 through 41 (Appendix H). Contaminant concentrations in the Crouch Branch Aquifer Unit are primarily limited to the area beneath the Savannah River Technology Center (SRTC) and an area extending from the SRTC north to well MSB 55TA, which is generally upgradient of these facilities. Downward vertical hydraulic gradients from the M-Area Aquifer Zone to the Crouch Branch Aquifer Unit 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 Unit, is indicated by constituent concentrations measured in wells monitoring that portion of the Crouch Branch Aquifer Unit.

Concentration Changes over Time

Changes in PCE and TCE concentrations during the past several years in samples from POC and plume definition wells are illustrated in time series plots in Appendix F. The plots use a fixed, logarithmic scale providing a consistent frame of reference for evaluating changes in

concentration over time. Since the vertical scale begins at 1 µg/L, occasionally a few values that were less than 1 µg/L drop below the x axis.

The RCRA Part B Permit requires annual reports on the effectiveness of the corrective action program that are to include a statistical evaluation of water quality data for significant changes. The statistical analysis is performed after all the analyses for the year 2001 are completed, and the results are included in the annual report. The purpose of the statistical evaluation is to identify remediation system impacts to the groundwater quality in various wells. Identifying impacts requires a statistical evaluation since normal concentration fluctuations and trends make a non-statistical approach ineffective.

Statistical evaluations using the Cumulative Summations (CUSUM) test were previously performed as described in the 1987 *Annual Monitoring and Corrective-Action Report* (DuPont, 1988) and as modified in third quarter 1998. The CUSUM statistical evaluation program was rewritten in 1999 to be consistent with new EPA guidance for using CUSUM (*ASTM, 1996*, *Provisional Standard Guide for Developing Appropriate Statistical Approaches for Ground-Water Detection Monitoring Programs*, PS 64-96; *WSRC 2000, F&HASB Remediation Project, SGS Recommendation for CAR Statistics, PECD-SGS-99-013 Rev. 1*)

Typically, combined Shewhart-CUSUM control charts is the method suggested by the EPA for intrawell comparisons (EPA, 1989). However, M-Area/Met Lab data show existing contamination and wells often were installed after initiation of the remediation system. Therefore, the “textbook” combined Shewhart-CUSUM control chart method was slightly modified from the EPA procedure and the ASTM Provisional Standard Guide (ASTM PS 64-96) for use at M-Area/Met Lab HWMFs to statistically monitor both increasing and decreasing changes to our recent groundwater quality data.

The recent historical sampling data (1/1/95 to 12/31/00) was analyzed for trends, with a comparison of the 2001 sampling data (1Q01 and 3Q01) then made to determine if any significant changes have occurred. The "historical" trend determination was made per EPA guidance, and included evaluation and removal of outliers, and normality determination and transformation. The determination of significant changes for 2001 data was made using the standardized value from the combined Shewhart-CUSUM control chart analysis (WSRC, 2000), with any standardized value exceeding the control limits indicating a deviation from the recent historical trend. If the data set failed the normality test and could not be transformed, the data set had to be excluded from the CUSUM analysis as these data set properties render the CUSUM analysis useless in such conditions.

Statistical evaluations of trends in concentrations of TCE and PCE using the updated, EPA based version of the CUSUM test are provided in Tables D-15a and D-15b (Appendix D). The CUSUM test was applied to monitoring (both POC and plume definition) wells and RWM wells. Wells were selected in each aquifer at locations that were expected to be significant with respect to plume remediation. Wells in the M-Area Aquifer Zone, Lost Lake Aquifer Zones and Middle Sand Aquifer Zone of the Crouch Branch Confining Unit were selected in areas of high concentrations near the sources and also near the RWM wells. Wells in the Crouch Branch Aquifer Unit were selected near the area of highest concentrations. Although remediation wells have not been installed in the Crouch Branch Aquifer Unit, production wells screened in this aquifer may be serving to extract some of the contamination.

Wells with a historically low concentration do not lend themselves to analysis using the CUSUM statistical method as too many numbers near the detection limit skew the data set in such a way that the chart control method is not appropriate. Results of the CUSUM test are provided in the tables for wells having a sufficient quantity of decision quality data to perform the analysis. Errors are shown for wells that had data sets that were not appropriate for CUSUM analysis, and therefore caused the program to abort.

Table D-15a provides the CUSUM results for POC and selected plume definition wells. “No trend” means the concentrations are remaining more or less constant. Table D-15b provides the CUSUM results for the RWM wells. “No trend” can be interpreted to mean the concentrations are

remaining more or less constant, based on the review of the time series plots for the wells having "no trend" output from the statistical analysis.

- Western Sector:

  In the M-Area Aquifer Zone, concentrations are more or less constant for PCE and TCE concentrations at well MSB 18B. At MSB 17B in the M-Area Aquifer Zone, PCE concentrations are relatively constant, but there is a long-term upward trend in TCE concentrations at this well.

  In the Upper Lost Lake Aquifer Zone, MSB 18A showed a long-term upward trend in TCE concentration, and relatively constant concentrations of PCE.

  In the Lower Lost Lake Aquifer Zone, PCE concentrations were relatively constant at MSB 17BB, but TCE concentrations have a long-term upward trend.

- Central Sector:

  In the M-Area Aquifer Zone, concentrations are more or less level for PCE and TCE concentrations at well MSB 26. Long-term downward trends were determined in the high concentration areas of the PCE and TCE plumes in M-Area Aquifer Zone wells MSB 4D, MSB 24 and 34C. Downgradient of the Met Lab HWMF, MSB 19C also showed a downward trend in TCE concentrations in the M-Area Aquifer Zone.

  In the Upper Lost Lake Aquifer Zone, MSB 3C (TCE), MSB 4C (TCE, PCE), MSB 16A (PCE) and MSB 34B (TCE) have long-term upward trends in concentration. In the Upper Lost Lake Aquifer Zone, MSB 27B has a long-term downward trend in TCE and PCE concentrations, and MSB 6C has a long-term downward trend in PCE concentration. Concentrations were relatively constant in Upper Lost Lake Zone wells MSB 3C (PCE), MSB 12B (PCE, TCE), MSB 16A (TCE), MSB 34B (PCE) and MSB 31CC (PCE, TCE).

  In the Lower Lost Lake Aquifer Zone, MSB 2B (PCE, TCE), MSB 6B (PCE, TCE), MSB 13B (PCE, TCE), MSB 26B (PCE, TCE) and MSB 75B (TCE) had long-term upward trends in concentration. Wells with long-term downward trends in concentration were MSB 25A (PCE, TCE) and MSB 34A (TCE). Concentrations were relatively constant at MSB 4B (PCE), MSB 9A (PCE, TCE), MSB 31B (TCE), and MSB 37C (PCE, TCE).

  In the Middle Sand Aquifer Zone of the Crouch Branch Confining Unit, MSB 10A has long-term upward trends in PCE and TCE concentrations. At MSB 37B, PCE and TCE concentrations are relatively constant.

  In the Crouch Branch Aquifer Unit, MSB 34TA (TCE) and 42TA (PCE, TCE) have long-term upward trends in concentration.

  The RWM extraction wells had long-term upward trends in concentrations at RWM 1 (PCE), RWM 5 (TCE), RWM 7 (PCE) and RWM 9 (PCE, TCE). Long-term downward trends are the case at RWM 2 (TCE), RWM 3 (PCE, TCE), RWM 8 (TCE) and RWM 11 (TCE). No discernible long-term change in concentrations is taking place at RWM 2 (PCE), RWM 4 (PCE, TCE), RWM 5 (PCE), RWM 7 (TCE), RWM 8 (PCE) or RWM 10 (TCE).

- Northern Sector:

  In the Upper Lost Lake Aquifer Zone, ASB 6C showed a long-term upward trend in TCE concentration, and a long-term downward trend in PCE concentration. A long-term downward trend in TCE concentration was determined for ASB 8C and MSB 47C in the Upper Lost Lake Aquifer Zone.

  In the Lower Lost Lake Aquifer Zone, ASB 5C has a long-term downward trend in PCE and TCE concentrations.

  In the Middle Sand Aquifer Zone of the Crouch Branch Confining Unit, ASB 6AA has a long-term downward trend in TCE concentration. MSB 41B has relatively constant concentrations of PCE and TCE.

In the Crouch Branch Aquifer Unit, ASB 6TA has relatively constant TCE concentrations.

There is a long-term downward trend in TCE concentrations in all the RWM extraction wells in the Northern Sector. The data sets for RWM 13C and RWM 14B were the only ones suitable for CUSUM analysis of PCE concentrations, and they also had long-term downward trends.

- Southern Sector:

  In the Upper Lost Lake Aquifer Zone, MSB 39C (TCE and PCE) and MSB 33C (TCE) showed long-term downward trends in concentration. MSB 36C is screened in the Upper Lost Lake Aquifer, in the plume pathway to the southern sector, and has relatively constant concentrations of TCE.

  In the Lower Lost Lake Aquifer Zone, MSB 39B showed a short-term increase in both TCE and PCE concentrations, but the long-term trend is relatively constant. Continued monitoring will determine if this was just a temporary spike in plume concentrations, or if the concentrations are beginning to increase at this location. MSB 33B has a long-term downward trend in PCE concentration. Concentrations were relatively constant at MSB 33B (TCE), and MSB 36B (TCE).

  In the Middle Sand Aquifer Zone of the Crouch Branch Confining Unit, MSB 33A has a long-term downward trend in TCE concentration.

In the previous annual report, statistical analysis of data was, at times, somewhat limited due to the occurrence of numerous data points that received data qualifiers and were therefore not used as decision data. For the 2001 analysis, “J” qualified data was reviewed with respect to the time vs. concentrations plots. Since the “J” qualified values appeared to be well within the normal fluctuation of the concentrations, these values were included in the statistical analysis. The addition of “J” qualified or estimated data has allowed computation of additional trends from last year and does not appear to have had an area-wide negative effect on this statistical analysis.

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 cubic 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.

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

A modification to the current sampling program was submitted in 1998 to reduce the sampling requirements (analytes and wells) for the M-Area HWMF. This modification received partial approval in March 1999 (SCDHEC 1999). Revision 13 of the 1992 Part B permit renewal application was submitted to SCDHEC on November 27, 2000. This revision discussed the deployment of DUS at the 321-M Solvent Storage Tank Area as well as responded to SCDHEC comments on the Revision 12 modification. SCDHEC granted final approval of the Revision 13 modification on December 5, 2001 (SCDHEC 2001).

A/M-Areas Vadose Zone Remediation Program

SVEU 782-5M was physically removed and transferred to another remedial project because it had completed its designated mission.

Nine two-inch diameter wells were installed in the A-014 Outfall and were piped into the 782-3M SVEU in the second half of 2000. Work is ongoing to optimize the performance of these wells.

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.

First and Second Quarters 2001

No errata have been reported.

References

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Appendix A

Standards

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Table A-1. Standards for M-Area HWMF

Groundwater Protection Standard

261 Appendix VIII / 264 Appendix IX Hazardous Constituents

Constituent	Standard	Unit	Source
Inorganics			
Barium	2,000	µg/L	SCDHEC (1995)[a]
Cyanide	40[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

Constituent	Standard	Unit	Source
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)

Table A-1. Standards for M-Area HWMF (continued)

Monitoring Constituents Standard (continued)

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 as defined in SCHWMR R.61-79.264 Appendix IX.
[c] Concentration is the PQL for EPA Method 8240 as defined in SCDHEC (1994). This PQL is the contract-required PQL for GE and WA.
[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

Groundwater Protection Standard

261 Appendix VIII / 264 Appendix IX Hazardous Constituents

Constituent	Standard	Unit	Source
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	5[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)
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

Constituent	Standard	Unit	Source
Inorganics			
Chloride	4,200	µg/L	WSRC (1987)[e]
Cyanide	40[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)

Table A-2. Standards for Met Lab HWMF (continued)

Monitoring Constituents Standard

Constituent	Standard	Unit	Source
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 standards in the 1995 RCRA Renewal Permit.
[b] Concentration is the practical quanitation limit (PQL) as defined in R.61-79.264 Appendix IX.
[c] Concentration is the PQL for EPA Method 8150 as defined in SCDHEC (1994). This PQL is the contract-required PQL for GE and WA.
[d] Concentration is the PQL for EPA Method 8270 as listed in SCDHEC (1994). This PQL is the contract-required PQL for GE and WA.
[e] Concentrations with WSRC (1987) sources are background concentrations.
[f] Concentration is the PQL as defined in R.61-79.264 Appendix IX.
[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 for GE and WA.
[j] Concentration is the PQL for EPA Method 9020. This PQL is the contract-required PQL for GE and WA.
[k] The standard used for total alpha-emitting radium is the primary drinking water standard for total radium.

Appendix B
Well Network

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Met Lab Well Network

Well	Aquifer Abbreviation	Met Lab HWMF RCRA Well Use
AMB 11D	MAAZ	Background Well
AMB 12D	MAAZ	Background Well
MSB 29B	LLLAZ	Background Well
MSB 29C	ULLAZ	Background Well
MSB 29D	MAAZ	Background Well
MSB 43A	LLLAZ	Background Well
MSB 43B	ULLAZ	Background Well
MSB 43D	MAAZ_GCCZ	Background Well
AMB 4B	LLLAZ	Plume Definition Well
AMB 7	MAAZ	Plume Definition Well
AMB 7A	MSAZ_CBCU	Plume Definition Well
AMB 7B	LLLAZ	Plume Definition Well
AMB 11B	ULLAZ	Plume Definition Well
AMB 13AR	MSAZ_CBCU	Plume Definition Well
AMB 14D	MAAZ	Plume Definition Well
AMB 15D	MAAZ	Plume Definition Well
AMB 4A	MSAZ_CBCU	Point of Compliance Well
AMB 4D	MAAZ	Point of Compliance Well
AMB 5	MAAZ	Point of Compliance Well
AMB 6	MAAZ	Point of Compliance Well
AMB 8D	MAAZ	Point of Compliance Well
AMB 9D	MAAZ	Point of Compliance Well
AMB 10A	MSAZ_CBCU	Point of Compliance Well
AMB 10B	LLLAZ	Point of Compliance Well
AMB 10D	MAAZ	Point of Compliance Well
AMB 16D	MAAZ	Point of Compliance Well
AMB 17A	MSAZ_CBCU	Point of Compliance Well
AMB 18A	MSAZ_CBCU	Point of Compliance Well
AMB 18C	ULLAZ	Point of Compliance Well
AMB 19C	ULLAZ	Point of Compliance Well

M-Area HWMF Well Network

Well	Aquifer Abbreviation	M-Area HWMF RCRA Well Use
ARP 16D	GCCZ	Auxiliary Well
ARP 8D	MAAZ_GCCZ	Auxiliary Well
ARP 9D	MAAZ_GCCZ	Auxiliary Well
ARP 10D	MAAZ	Auxiliary Well
ARP 11D	MAAZ_GCCZ	Auxiliary Well
ARP 12B1	MSAZ_CBCU	Auxiliary Well
ARP 12B2	MSAZ_CBCU	Auxiliary Well
ARP 12C1	LLLAZ	Auxiliary Well
ARP 12C2	LLLAZ	Auxiliary Well
ARP 12C3	LLLAZ	Auxiliary Well

M-Area HWMF Well Network (CONTINUED)

Well	Aquifer Abbreviation	M-Area HWMF RCRA Well Use
ARP 12C4	LLLAZ	Auxiliary Well
ARP 13B1	UCCZ_CBCU	Auxiliary Well
ARP 13B2	UCCZ_CBCU	Auxiliary Well
ARP 13C1	ULLAZ	Auxiliary Well
ARP 13C2	ULLAZ	Auxiliary Well
ARP 13C3	ULLAZ	Auxiliary Well
ARP 13C4	ULLAZ	Auxiliary Well
ARP 14B1	MSAZ_CBCU	Auxiliary Well
ARP 14B2	MSAZ_CBCU	Auxiliary Well
ARP 14C1	ULLAZ	Auxiliary Well
ARP 14C2	ULLAZ	Auxiliary Well
ARP 14C3	LLLAZ	Auxiliary Well
ARP 14C4	LLLAZ	Auxiliary Well
ARP 15B1	MSAZ_CBCU	Auxiliary Well
ARP 15B2	MSAZ_CBCU	Auxiliary Well
ARP 15C1	ULLAZ	Auxiliary Well
ARP 15C2	ULLAZ	Auxiliary Well
ARP 15C3	LLLAZ	Auxiliary Well
ARP 15C4	LLLAZ	Auxiliary Well
MSB 90C	ULLAZ	Auxiliary Well
MSB 90TB	CBAU	Auxiliary Well
MSB 91C	ULLAZ	Auxiliary Well
MSB 91TB2	CBAU	Auxiliary Well
MSB 91TB5	CBAU	Auxiliary Well
MSB 92C	ULLAZ	Auxiliary Well
MSB 93TA1	CBAU	Auxiliary Well
MSB 93TA2	CBAU	Auxiliary Well
MSB 93TB1	CBAU	Auxiliary Well
MSB 93TB2	CBAU	Auxiliary Well
MSB 93TB3	CBAU	Auxiliary Well
MSB 93TB4	CBAU	Auxiliary Well
MSB 94TB1	CBAU	Auxiliary Well
MSB 94TB2	CBAU	Auxiliary Well
MSB 94TB3	CBAU	Auxiliary Well
MSB 94TB4	CBAU	Auxiliary Well
MSB 95TB1	CBAU	Auxiliary Well
MSB 95TB2	CBAU	Auxiliary Well
MSB 95TB3	CBAU	Auxiliary Well
MSB 95TB4	CBAU	Auxiliary Well
RWM 17B	MSAZ_CBCU	Auxiliary Recovery Well
RWM 17D	MAAZ_GCCZ	Auxiliary Recovery Well
SRW 17DR	MAAZ	Auxiliary Well
SRW 18	MAAZ	Auxiliary Well
SRW 19	PUA_MAAZ	Auxiliary Well
SSM 1B	LLLAZ	Auxiliary Well

M-Area HWMF Well Network (CONTINUED)

Well	Aquifer Abbreviation	M-Area HWMF RCRA Well Use
SSM 1C	ULLAZ	Auxiliary Well
SSM 2B	LLLAZ	Auxiliary Well
SSM 2C	ULLAZ	Auxiliary Well
SSM 3B	LLLAZ	Auxiliary Well
SSM 3C	ULLAZ	Auxiliary Well
SSM 4B	LLLAZ	Auxiliary Well
SSM 4C	ULLAZ	Auxiliary Well
SSM 5B	LLLAZ	Auxiliary Well
SSM 5C	ULLAZ	Auxiliary Well
SSM 6B	LLLAZ	Auxiliary Well
SSM 6C	ULLAZ	Auxiliary Well
SSM 7B	LLLAZ	Auxiliary Well
SSM 7C	ULLAZ	Auxiliary Well
SSM 8B	LLLAZ	Auxiliary Well
SSM 8C	ULLAZ	Auxiliary Well
SSM 9B	LLLAZ	Auxiliary Well
SSM 9C	ULLAZ	Auxiliary Well
SSM 10B	LLLAZ	Auxiliary Well
SSM 10B2	LLLAZ	Auxiliary Well
SSM 10C	ULLAZ	Auxiliary Well
SSM 10C2	ULLAZ	Auxiliary Well
SSM 11B	LLLAZ	Auxiliary Well
SSM 11B2	LLLAZ	Auxiliary Well
SSM 11C	ULLAZ	Auxiliary Well
SSM 11C2	ULLAZ	Auxiliary Well
SSM 12B	LLLAZ	Auxiliary Well
SSM 12B2	LLLAZ	Auxiliary Well
SSM 12C	ULLAZ	Auxiliary Well
SSM 12C2	ULLAZ	Auxiliary Well
SSM 13B	LLLAZ	Auxiliary Well
SSM 13B2	LLLAZ	Auxiliary Well
SSM 13C	ULLAZ	Auxiliary Well
SSM 13C2	ULLAZ	Auxiliary Well
SSM 14B	LLLAZ	Auxiliary Well
SSM 14B2	LLLAZ	Auxiliary Well
SSM 14C	ULLAZ	Auxiliary Well
SSM 14C2	ULLAZ	Auxiliary Well
SSM 15B	LLLAZ	Auxiliary Well
SSM 15B2	LLLAZ	Auxiliary Well
SSM 15C	ULLAZ	Auxiliary Well
SSM 15C2	ULLAZ	Auxiliary Well
SSM 16B	LLLAZ	Auxiliary Well
SSM 16B2	LLLAZ	Auxiliary Well
SSM 16C	ULLAZ	Auxiliary Well
SSM 16C2	ULLAZ	Auxiliary Well

M-Area HWMF Well Network (CONTINUED)

Well	Aquifer Abbreviation	M-Area HWMF RCRA Well Use
SSM 17B	LLLAZ	Auxiliary Well
SSM 17B2	LLLAZ	Auxiliary Well
SSM 17C	ULLAZ	Auxiliary Well
SSM 17C2	ULLAZ	Auxiliary Well
MSB 29B	LLLAZ	Background Well
MSB 29C	ULLAZ	Background Well
MSB 29D	MAAZ	Background Well
MSB 43A	LLLAZ	Background Well
MSB 43B	ULLAZ	Background Well
MSB 43D	MAAZ_GCCZ	Background Well
AC 1A	ULLAZ	Piezometer Well
AC 2A	LLLAZ	Piezometer Well
AC 2B	MAAZ	Piezometer Well
ACB 2A	MAAZ	Piezometer Well
ARP 1A	MAAZ_GCCZ	Piezometer Well
ARP 2	MAAZ_GCCZ	Piezometer Well
ARP 3	MAAZ_GCCZ	Piezometer Well
ARP 4	MAAZ_GCCZ	Piezometer Well
ARP 5D	MAAZ_GCCZ	Piezometer Well
ASB 9	MAAZ	Piezometer Well
MCB 2	MAAZ	Piezometer Well
MCB 9D	MAAZ	Piezometer Well
MSB 11A	LLLAZ	Piezometer Well
MSB 12A	LLLAZ	Piezometer Well
MSB 21TA	CBAU	Piezometer Well
MSB 24A	ULLAZ	Piezometer Well
MSB 25	MAAZ	Piezometer Well
MSB 30A	CBAU	Piezometer Well
MSB 31A	CBAU	Piezometer Well
MSB 33TA	CBAU	Piezometer Well
MSB 35D	MAAZ	Piezometer Well
MSB 37D	MAAZ	Piezometer Well
MSB 37TA	CBAU	Piezometer Well
MSB 38TA	CBAU	Piezometer Well
MSB 40D	MAAZ	Piezometer Well
MSB 40TA	CBAU	Piezometer Well
MSB 41C	LLLAZ	Piezometer Well
MSB 41D	MAAZ	Piezometer Well
MSB 44A	MSAZ_CBCU	Piezometer Well
MSB 45C	MAAZ	Piezometer Well
MSB 46B	ULLAZ	Piezometer Well
MSB 50B	LLLAZ	Piezometer Well
MSB 50D	ULLAZ	Piezometer Well
MSB 51D	MAAZ	Piezometer Well
MSB 52D	MAAZ	Piezometer Well

M-Area HWMF Well Network (CONTINUED)

Well	Aquifer Abbreviation	M-Area HWMF RCRA Well Use
MSB 53D	MAAZ	Piezometer Well
MSB 56D	MAAZ	Piezometer Well
MSB 77D	MAAZ	Piezometer Well
MSB 89C	MAAZ	Piezometer Well
SRW 3A	MAAZ	Piezometer Well
SRW 3BB	LLLAZ	Piezometer Well
SRW 6	MAAZ	Piezometer Well
SRW 9	MAAZ	Piezometer Well
SRW 9A	LLLAZ	Piezometer Well
SRW 11BB	LLLAZ	Piezometer Well
SRW 12A	CBCU	Piezometer Well
SRW 12C	MAAZ	Piezometer Well
SRW 13A	LLLAZ	Piezometer Well
SRW 13B	ULLAZ	Piezometer Well
SRW 13C	MAAZ	Piezometer Well
SRW 15A	MSAZ_CBCU	Piezometer Well
SRW 15B	ULLAZ	Piezometer Well
SRW 15C	MAAZ	Piezometer Well
SRW 16C	MAAZ	Piezometer Well
ABP 2A	MAAZ	Plume Definition Well
ABP 3C	LLLAZ	Plume Definition Well
ABP 8C	ULLAZ	Plume Definition Well
AC 3A	ULLAZ	Plume Definition Well
AC 3B	MAAZ	Plume Definition Well
AMB 4A	MSAZ_CBCU	Plume Definition Well
AMB 4B	LLLAZ	Plume Definition Well
AMB 4D	MAAZ	Plume Definition Well
AMB 7	MAAZ	Plume Definition Well
AMB 7A	MSAZ_CBCU	Plume Definition Well
AMB 7B	LLLAZ	Plume Definition Well
AMB 9D	MAAZ	Plume Definition Well
AMB 10A	MSAZ_CBCU	Plume Definition Well
AMB 10B	LLLAZ	Plume Definition Well
AMB 12D	MAAZ	Plume Definition Well
AMB 13AR	MSAZ_CBCU	Plume Definition Well
AMB 15D	MAAZ	Plume Definition Well
AMB 16D	MAAZ	Plume Definition Well
AMB 17A	MSAZ_CBCU	Plume Definition Well
AMB 18A	MSAZ_CBCU	Plume Definition Well
AMB 18C	ULLAZ	Plume Definition Well
AMB 19C	ULLAZ	Plume Definition Well
AOB 1	MAAZ	Plume Definition Well
AOB 2	MAAZ	Plume Definition Well
ASB 1A	MAAZ_GCCZ	Plume Definition Well
ASB 2AR	MAAZ	Plume Definition Well

M-Area HWMF Well Network (CONTINUED)

Well	Aquifer Abbreviation	M-Area HWMF RCRA Well Use
ASB 2CR	LLLAZ	Plume Definition Well
ASB 3AR	MAAZ	Plume Definition Well
ASB 3CR	LLLAZ	Plume Definition Well
ASB 4	MAAZ	Plume Definition Well
ASB 5AR	MAAZ	Plume Definition Well
ASB 5C	LLLAZ	Plume Definition Well
ASB 6A	MAAZ	Plume Definition Well
ASB 6AA	MSAZ_CBCU	Plume Definition Well
ASB 6C	ULLAZ	Plume Definition Well
ASB 6TA	CBAU	Plume Definition Well
ASB 8	MAAZ	Plume Definition Well
ASB 8B	MSAZ_CBCU	Plume Definition Well
ASB 8C	ULLAZ	Plume Definition Well
ASB 8TA	CBAU	Plume Definition Well
ASB 9B	LLLAZ	Plume Definition Well
ASB 9C	ULLAZ	Plume Definition Well
ASB 10CR	LLLAZ	Plume Definition Well
MCB 5C	ULLAZ	Plume Definition Well
MCB 6C	ULLAZ	Plume Definition Well
MCB 7C	ULLAZ	Plume Definition Well
MSB 9A	LLLAZ	Plume Definition Well
MSB 9C	MAAZ	Plume Definition Well
MSB 10A	MSAZ_CBCU	Plume Definition Well
MSB 10B	LLLAZ	Plume Definition Well
MSB 11C	ULLAZ	Plume Definition Well
MSB 11F	MAAZ	Plume Definition Well
MSB 12B	ULLAZ	Plume Definition Well
MSB 12TA	CBAU	Plume Definition Well
MSB 15A	ULLAZ	Plume Definition Well
MSB 15AA	LLLAZ	Plume Definition Well
MSB 15D	MAAZ	Plume Definition Well
MSB 16A	ULLAZ	Plume Definition Well
MSB 16C	MAAZ	Plume Definition Well
MSB 17B	MAAZ	Plume Definition Well
MSB 17BB	LLLAZ	Plume Definition Well
MSB 18A	ULLAZ	Plume Definition Well
MSB 18B	MAAZ	Plume Definition Well
MSB 19B	LLLAZ	Plume Definition Well
MSB 19C	MAAZ	Plume Definition Well
MSB 20A	ULLAZ	Plume Definition Well
MSB 20C	MAAZ	Plume Definition Well
MSB 21B	LLLAZ	Plume Definition Well
MSB 21C	MAAZ	Plume Definition Well
MSB 23TA	CBAU	Plume Definition Well
MSB 24	MAAZ	Plume Definition Well

M-Area HWMF Well Network (CONTINUED)

Well	Aquifer Abbreviation	M-Area HWMF RCRA Well Use
MSB 25A	LLLAZ	Plume Definition Well
MSB 26	MAAZ	Plume Definition Well
MSB 26B	LLLAZ	Plume Definition Well
MSB 27	MAAZ	Plume Definition Well
MSB 27B	ULLAZ	Plume Definition Well
MSB 27TA	CBAU	Plume Definition Well
MSB 28	MAAZ	Plume Definition Well
MSB 28A	ULLAZ	Plume Definition Well
MSB 29A	MSAZ_CBCU	Plume Definition Well
MSB 29TA	CBAU	Plume Definition Well
MSB 30AA	MSAZ_CBCU	Plume Definition Well
MSB 30B	LLLAZ	Plume Definition Well
MSB 30CC	ULLAZ	Plume Definition Well
MSB 31B	LLLAZ	Plume Definition Well
MSB 31C	MAAZ	Plume Definition Well
MSB 31CC	ULLAZ	Plume Definition Well
MSB 32	MAAZ	Plume Definition Well
MSB 32B	LLLAZ	Plume Definition Well
MSB 32C	ULLAZ	Plume Definition Well
MSB 33	MAAZ	Plume Definition Well
MSB 33A	MSAZ_CBCU	Plume Definition Well
MSB 33B	LLLAZ	Plume Definition Well
MSB 33C	ULLAZ	Plume Definition Well
MSB 34A	LLLAZ	Plume Definition Well
MSB 34B	ULLAZ	Plume Definition Well
MSB 34C	MAAZ	Plume Definition Well
MSB 34TA	CBAU	Plume Definition Well
MSB 35A	MSAZ_CBCU	Plume Definition Well
MSB 35B	ULLAZ	Plume Definition Well
MSB 35TA	CBAU	Plume Definition Well
MSB 36A	MSAZ_CBCU	Plume Definition Well
MSB 36B	LLLAZ	Plume Definition Well
MSB 36C	ULLAZ	Plume Definition Well
MSB 36D	MAAZ	Plume Definition Well
MSB 36TA	CBAU	Plume Definition Well
MSB 37A	CBAU	Plume Definition Well
MSB 37B	MSAZ_CBCU	Plume Definition Well
MSB 37C	LLLAZ	Plume Definition Well
MSB 38C	LLLAZ	Plume Definition Well
MSB 39B	LLLAZ	Plume Definition Well
MSB 39C	ULLAZ	Plume Definition Well
MSB 39D	MAAZ	Plume Definition Well
MSB 39TA	CBAU	Plume Definition Well
MSB 40A	MSAZ_CBCU	Plume Definition Well
MSB 40B	LLLAZ	Plume Definition Well

M-Area HWMF Well Network (CONTINUED)

Well	Aquifer Abbreviation	M-Area HWMF RCRA Well Use
MSB 40C	ULLAZ	Plume Definition Well
MSB 41B	MSAZ_CBCU	Plume Definition Well
MSB 41TA	CBAU	Plume Definition Well
MSB 42A	MSAZ_CBCU	Plume Definition Well
MSB 42B	LLLAZ	Plume Definition Well
MSB 42C	ULLAZ	Plume Definition Well
MSB 42D	MAAZ	Plume Definition Well
MSB 42TA	CBAU	Plume Definition Well
MSB 43TA	CBAU	Plume Definition Well
MSB 45A	LLLAZ	Plume Definition Well
MSB 45B	ULLAZ	Plume Definition Well
MSB 46A	MSAZ_CBCU	Plume Definition Well
MSB 46C	MAAZ	Plume Definition Well
MSB 47B	LLLAZ	Plume Definition Well
MSB 47C	ULLAZ	Plume Definition Well
MSB 47D	MAAZ	Plume Definition Well
MSB 47TA	CBAU	Plume Definition Well
MSB 48A	MSAZ_CBCU	Plume Definition Well
MSB 48B	LLLAZ	Plume Definition Well
MSB 48C	ULLAZ	Plume Definition Well
MSB 48D	MAAZ	Plume Definition Well
MSB 48TA	CBAU	Plume Definition Well
MSB 49A	MSAZ_CBCU	Plume Definition Well
MSB 49B	LLLAZ	Plume Definition Well
MSB 49D	MAAZ	Plume Definition Well
MSB 51B	LLLAZ	Plume Definition Well
MSB 52B	LLLAZ	Plume Definition Well
MSB 53B	LLLAZ	Plume Definition Well
MSB 53C	ULLAZ	Plume Definition Well
MSB 54B	MSAZ_CBCU	Plume Definition Well
MSB 54C	LLLAZ	Plume Definition Well
MSB 54D	MAAZ_GCCZ	Plume Definition Well
MSB 54TA	CBAU	Plume Definition Well
MSB 55B	MSAZ_CBCU	Plume Definition Well
MSB 55C	LLLAZ	Plume Definition Well
MSB 55D	MAAZ_GCCZ	Plume Definition Well
MSB 55HC	ULLAZ	Plume Definition Well
MSB 55TA	CBAU	Plume Definition Well
MSB 64B	LLLAZ	Plume Definition Well
MSB 65D	MAAZ	Plume Definition Well
MSB 66B	MSAZ_CBCU	Plume Definition Well
MSB 66C	LLLAZ	Plume Definition Well
MSB 66D	MAAZ	Plume Definition Well
MSB 66TA	CBAU	Plume Definition Well
MSB 67D	MAAZ	Plume Definition Well

M-Area HWMF Well Network (CONTINUED)

Well	Aquifer Abbreviation	M-Area HWMF RCRA Well Use
MSB 68B	MSAZ_CBCU	Plume Definition Well
MSB 68C	LLLAZ	Plume Definition Well
MSB 69B	MSAZ_CBCU	Plume Definition Well
MSB 69C	LLLAZ	Plume Definition Well
MSB 69D	MAAZ	Plume Definition Well
MSB 69TA	CBAU	Plume Definition Well
MSB 70C	ULLAZ	Plume Definition Well
MSB 70D	MAAZ	Plume Definition Well
MSB 71B	LLLAZ	Plume Definition Well
MSB 72B	LLLAZ	Plume Definition Well
MSB 73B	LLLAZ	Plume Definition Well
MSB 74B	LLLAZ	Plume Definition Well
MSB 74C	ULLAZ	Plume Definition Well
MSB 74D	MAAZ	Plume Definition Well
MSB 75B	LLLAZ	Plume Definition Well
MSB 75C	ULLAZ	Plume Definition Well
MSB 76C	ULLAZ	Plume Definition Well
MSB 77B	LLLAZ	Plume Definition Well
MSB 77C	ULLAZ	Plume Definition Well
MSB 78DR	MAAZ_GCCZ	Plume Definition Well
MSB 79B	LLLAZ	Plume Definition Well
MSB 79C	ULLAZ	Plume Definition Well
MSB 81B	LLLAZ	Plume Definition Well
MSB 82A	MSAZ_CBCU	Plume Definition Well
MSB 82B	MSAZ_CBCU	Plume Definition Well
MSB 82C	LLLAZ	Plume Definition Well
MSB 82D	MAAZ	Plume Definition Well
MSB 82TA	CBAU	Plume Definition Well
MSB 83B	MSAZ_CBCU	Plume Definition Well
MSB 83C	LLLAZ	Plume Definition Well
MSB 83TA	CBAU	Plume Definition Well
MSB 84A	MSAZ_CBCU	Plume Definition Well
MSB 84C	LLLAZ	Plume Definition Well
MSB 85B	CBAU	Plume Definition Well
MSB 85C	LLLAZ	Plume Definition Well
MSB 85D	MAAZ	Plume Definition Well
MSB 85TA	CBAU	Plume Definition Well
MSB 86C	LLLAZ	Plume Definition Well
MSB 87B	ULLAZ	Plume Definition Well
MSB 87C	MAAZ	Plume Definition Well
MSB 88B	MSAZ_CBCU	Plume Definition Well
MSB 88C	LLLAZ	Plume Definition Well
MSB 89B	LLLAZ	Plume Definition Well
SRW 2A	MSAZ_CBCU	Plume Definition Well
SRW 2B	ULLAZ	Plume Definition Well

M-Area HWMF Well Network (CONTINUED)

Well	Aquifer Abbreviation	M-Area HWMF RCRA Well Use
SRW 14A	MSAZ_CBCU	Plume Definition Well
SRW 14B	ULLAZ	Plume Definition Well
SRW 16A	LLLAZ	Plume Definition Well
SRW 16B	ULLAZ	Plume Definition Well
MSB 1B	LLLAZ	Point of Compliance Well
MSB 1C	ULLAZ	Point of Compliance Well
MSB 1D	MAAZ	Point of Compliance Well
MSB 2B	LLLAZ	Point of Compliance Well
MSB 2C	ULLAZ	Point of Compliance Well
MSB 2D	MAAZ	Point of Compliance Well
MSB 3B	LLLAZ	Point of Compliance Well
MSB 3C	ULLAZ	Point of Compliance Well
MSB 3D	MAAZ	Point of Compliance Well
MSB 4B	LLLAZ	Point of Compliance Well
MSB 4C	ULLAZ	Point of Compliance Well
MSB 4D	MAAZ	Point of Compliance Well
MSB 5A	MAAZ	Point of Compliance Well
MSB 5B	LLLAZ	Point of Compliance Well
MSB 5C	ULLAZ	Point of Compliance Well
MSB 6A	MAAZ	Point of Compliance Well
MSB 6B	LLLAZ	Point of Compliance Well
MSB 6C	ULLAZ	Point of Compliance Well
MSB 7A	MAAZ	Point of Compliance Well
MSB 7B	LLLAZ	Point of Compliance Well
MSB 7C	ULLAZ	Point of Compliance Well
MSB 8A	MAAZ	Point of Compliance Well
MSB 8B	LLLAZ	Point of Compliance Well
MSB 8C	ULLAZ	Point of Compliance Well
MSB 13A	LLLAZ	Point of Compliance Well
MSB 13CC	ULLAZ	Point of Compliance Well
MSB 13D	MAAZ	Point of Compliance Well
MSB 39A	MSAZ_CBCU	Point of Compliance Well
MSB 59D	MAAZ	Point of Compliance Well
MSB 62B	LLLAZ	Point of Compliance Well
MSB 62C	ULLAZ	Point of Compliance Well
MSB 62D	MAAZ	Point of Compliance Well
MSB 63B	LLLAZ	Point of Compliance Well
MSB 63C	ULLAZ	Point of Compliance Well
MSB 63D	MAAZ	Point of Compliance Well
MSB 64C	ULLAZ	Point of Compliance Well
MSB 64D	MAAZ	Point of Compliance Well
SSR 1	LLLAZ	Recirculation Well
SSR 1	ULLAZ	Recirculation Well
SSR 2	LLLAZ	Recirculation Well
SSR 2	ULLAZ	Recirculation Well

M-Area HWMF Well Network (CONTINUED)

Well	Aquifer Abbreviation	M-Area HWMF RCRA Well Use
SSR 3		Recirculation Well
SSR 4	LLLAZ	Recirculation Well
SSR 4	ULLAZ	Recirculation Well
SSR 5	LLLAZ	Recirculation Well
SSR 5	ULLAZ	Recirculation Well
SSR 6	LLLAZ	Recirculation Well
SSR 6	ULLAZ	Recirculation Well
SSR 7	ULLAZ	Recirculation Well
SSR 7	LLLAZ	Recirculation Well
SSR 8	LLLAZ	Recirculation Well
SSR 8	ULLAZ	Recirculation Well
SSR 9	LLLAZ	Recirculation Well
SSR 9	ULLAZ	Recirculation Well
SSR 10	ULLAZ	Recirculation Well
SSR 10	LLLAZ	Recirculation Well
SSR 11	ULLAZ	Recirculation Well
SSR 11	LLLAZ	Recirculation Well
SSR 12	LLLAZ	Recirculation Well
SSR 12	ULLAZ	Recirculation Well
RWM 1	MAAZ_GCCZ	Recovery Well
RWM 2	GCCZ_ULLAZ_LLLAZ	Recovery Well
RWM 3	MAAZ_GCCZ_ULLAZ_LLLAZ	Recovery Well
RWM 4	GCCZ_ULLAZ_LLLAZ_UCCZ_CBCU	Recovery Well
RWM 5	ULLAZ_LLLAZ	Recovery Well
RWM 6	GCCZ_ULLAZ_LLLAZ_UCCZ_CBCU	Recovery Well
RWM 7	GCCZ_ULLAZ_LLLAZ_UCCZ_CBCU	Recovery Well
RWM 8	GCCZ_ULLAZ_LLLAZ_UCCZ_CBCU	Recovery Well
RWM 9	GCCZ_ULLAZ_LLLAZ	Recovery Well
RWM 10	MAAZ_GCCZ_ULLAZ_LLLAZ_MSAZ _CBCU	Recovery Well
RWM 11	MAAZ_GCCZ_ULLAZ_LLLAZ	Recovery Well
RWM 12	ULLAZ_LLLAZ	Recovery Well
RWM 13B	MSAZ_CBCU	Recovery Well
RWM 13C	LLLAZ	Recovery Well
RWM 14B	LLLAZ	Recovery Well
RWM 14C	ULLAZ	Recovery Well
RWM 15B	LLLAZ_CBAU	Recovery Well

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Appendix C
Figures

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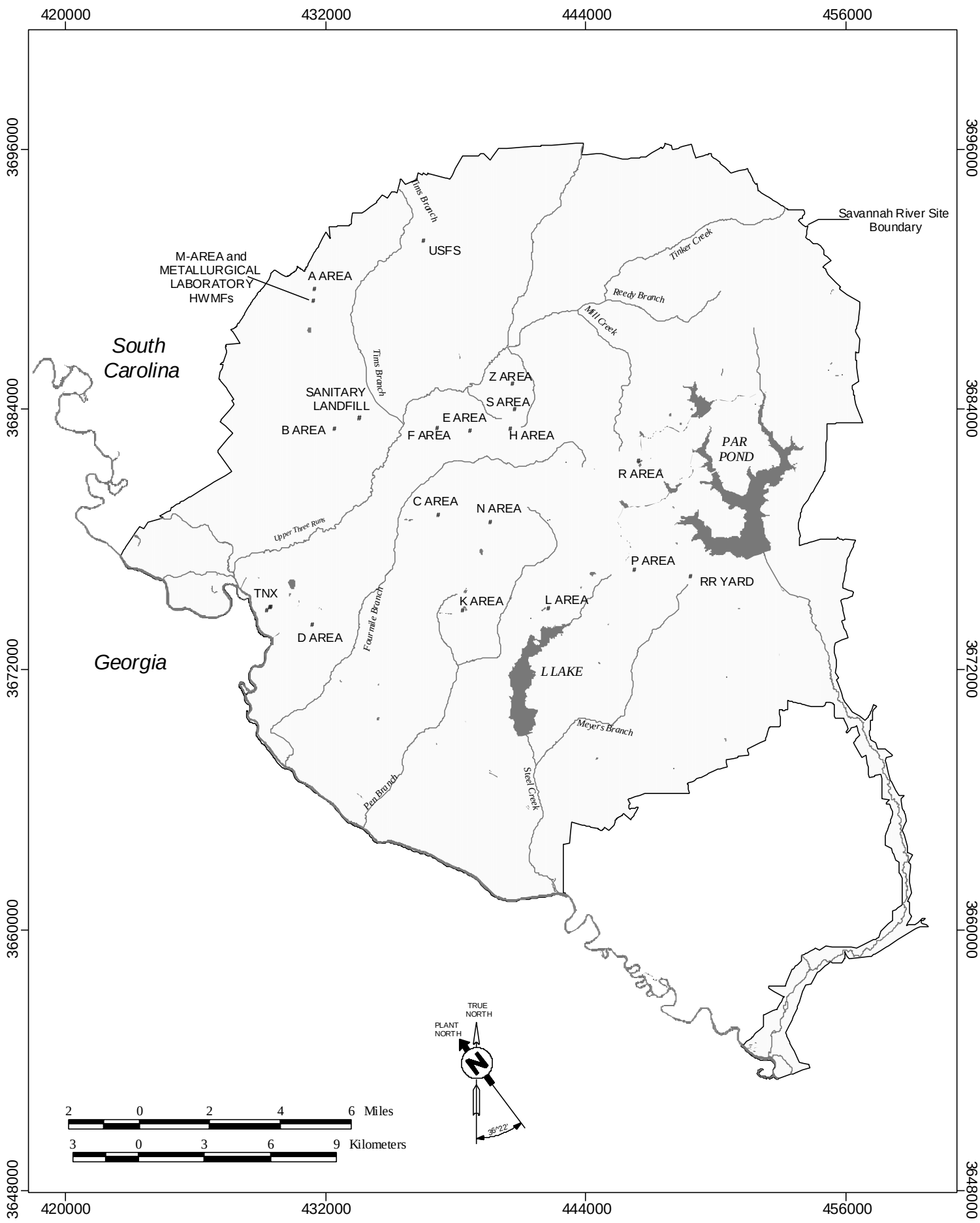

Figure 1. Location of the M-Area and Metallurgical Laboratory HWMFs at the Savannah River Site

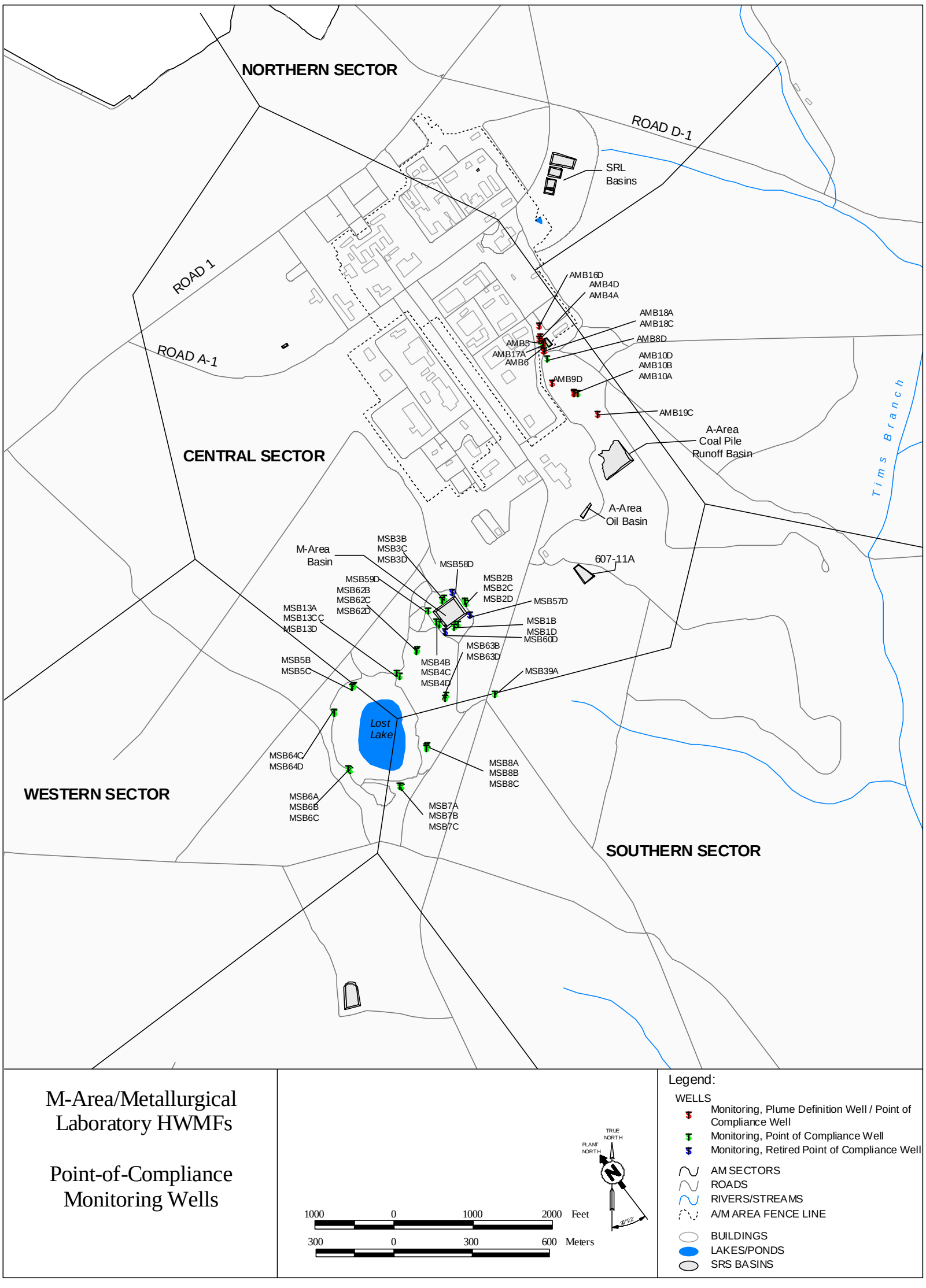

Figure 2 Location of Point-of-Compliance Wells at the M-Area and Metallurgical Laboratory HWMFs

Figure 3. M-Area Sectors

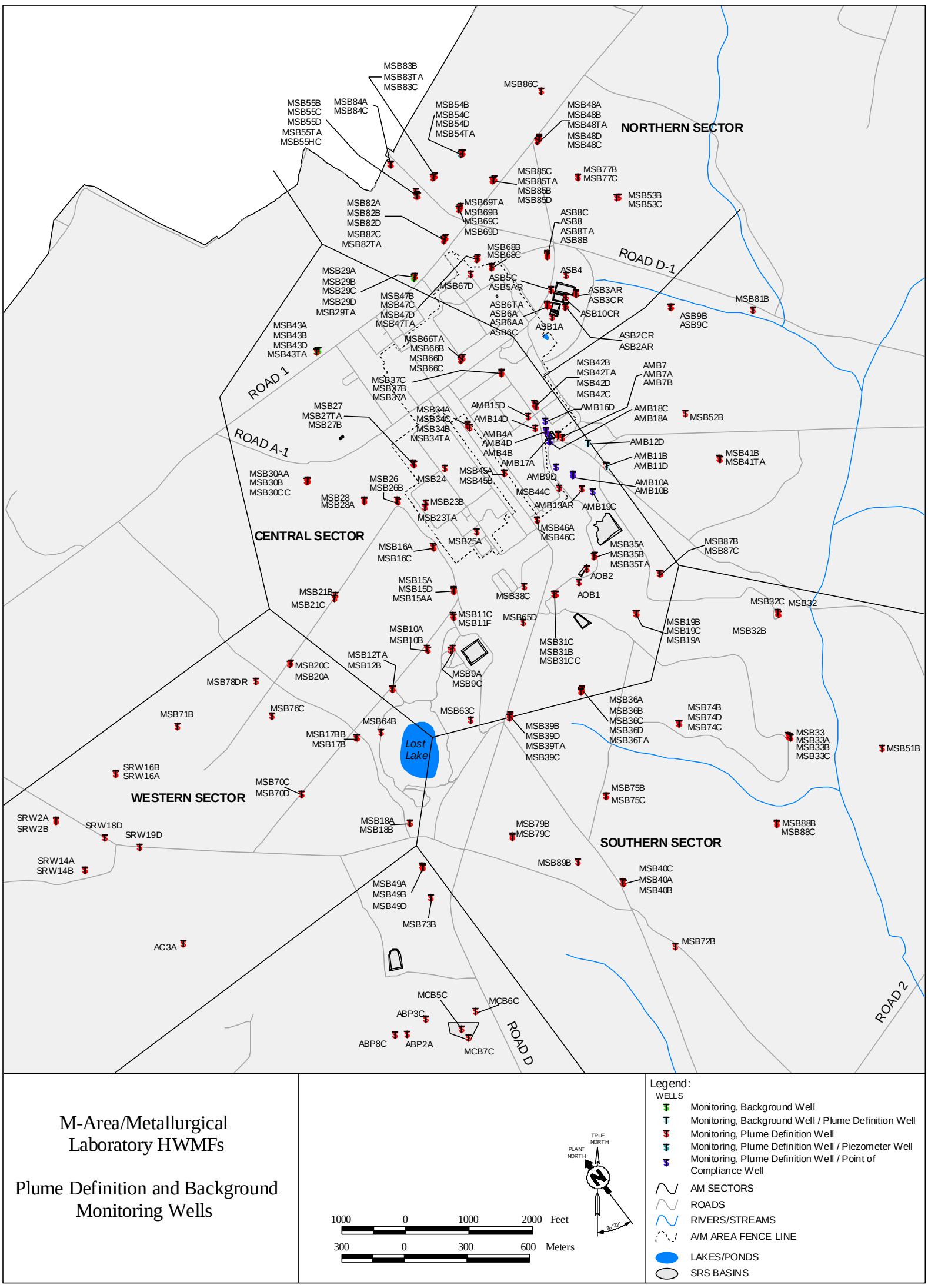

Figure 4. Location of Plume Definition and Background Wells at the M-Area and Metallurgical Laboratory HWMFs

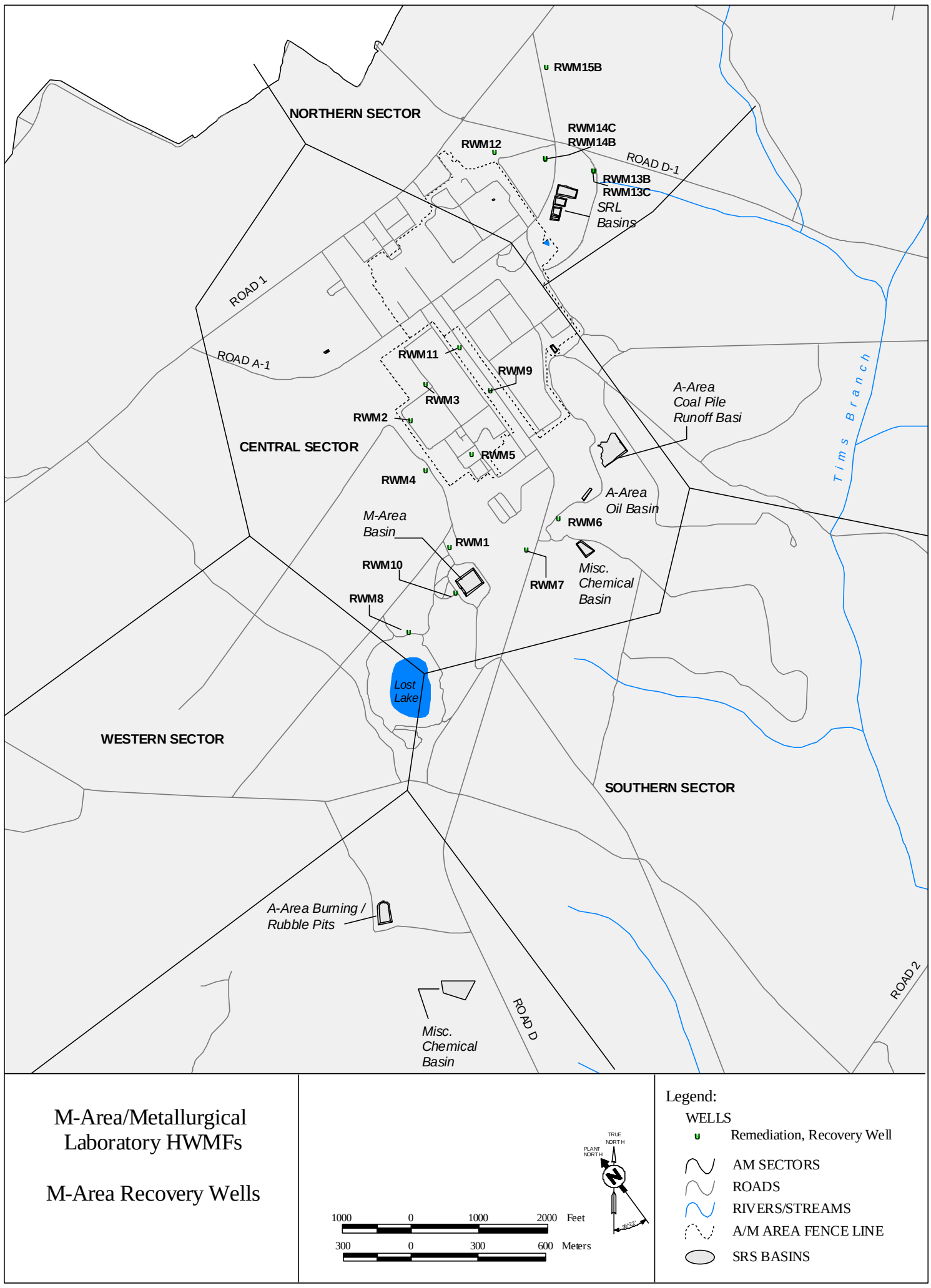

Figure 5. Location of Recovery Wells (RWM) at the M-Area HWMFs

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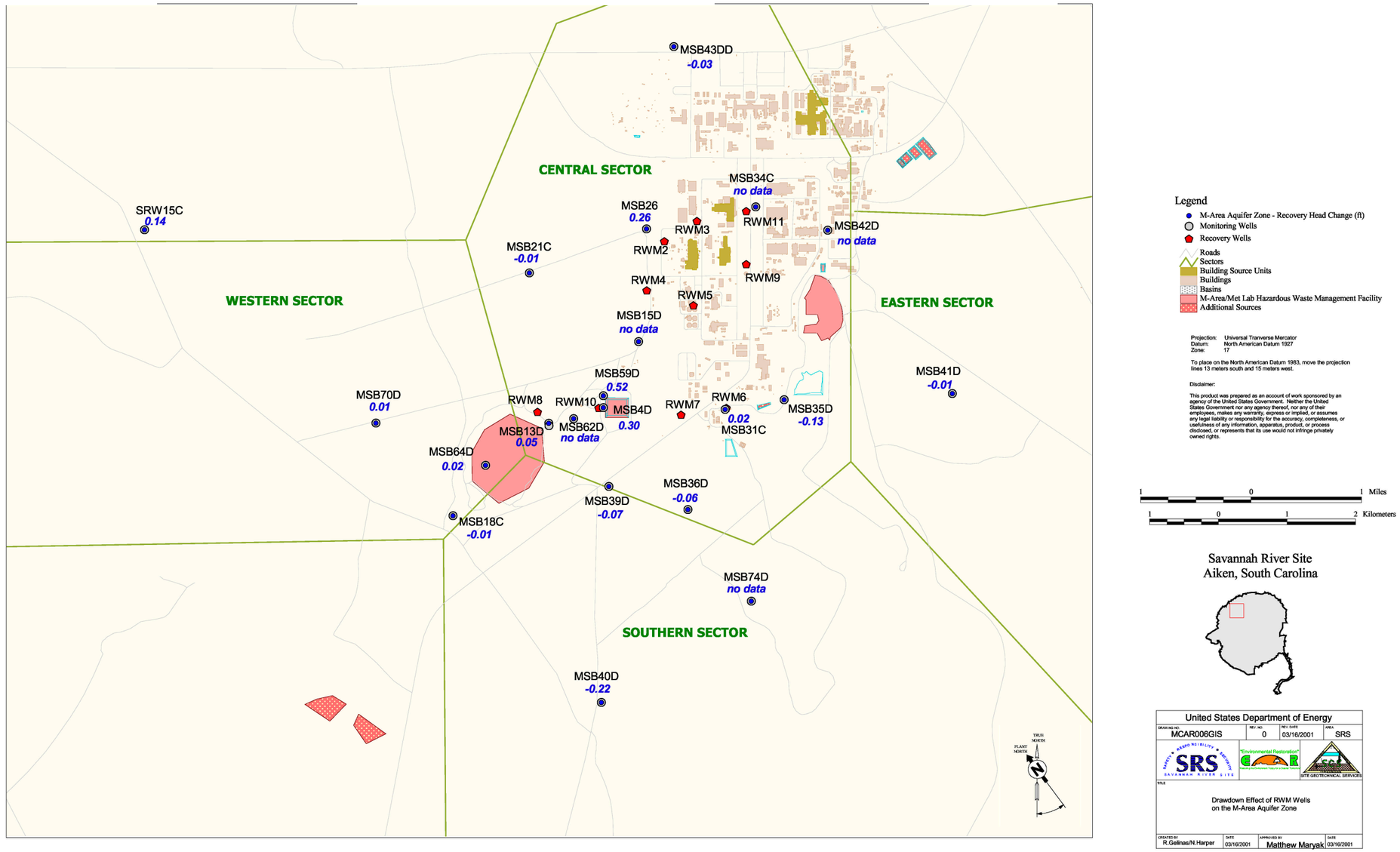

Figure 6: Drawdown Effect of RWM Wells on the M-Area Aquifer Zone

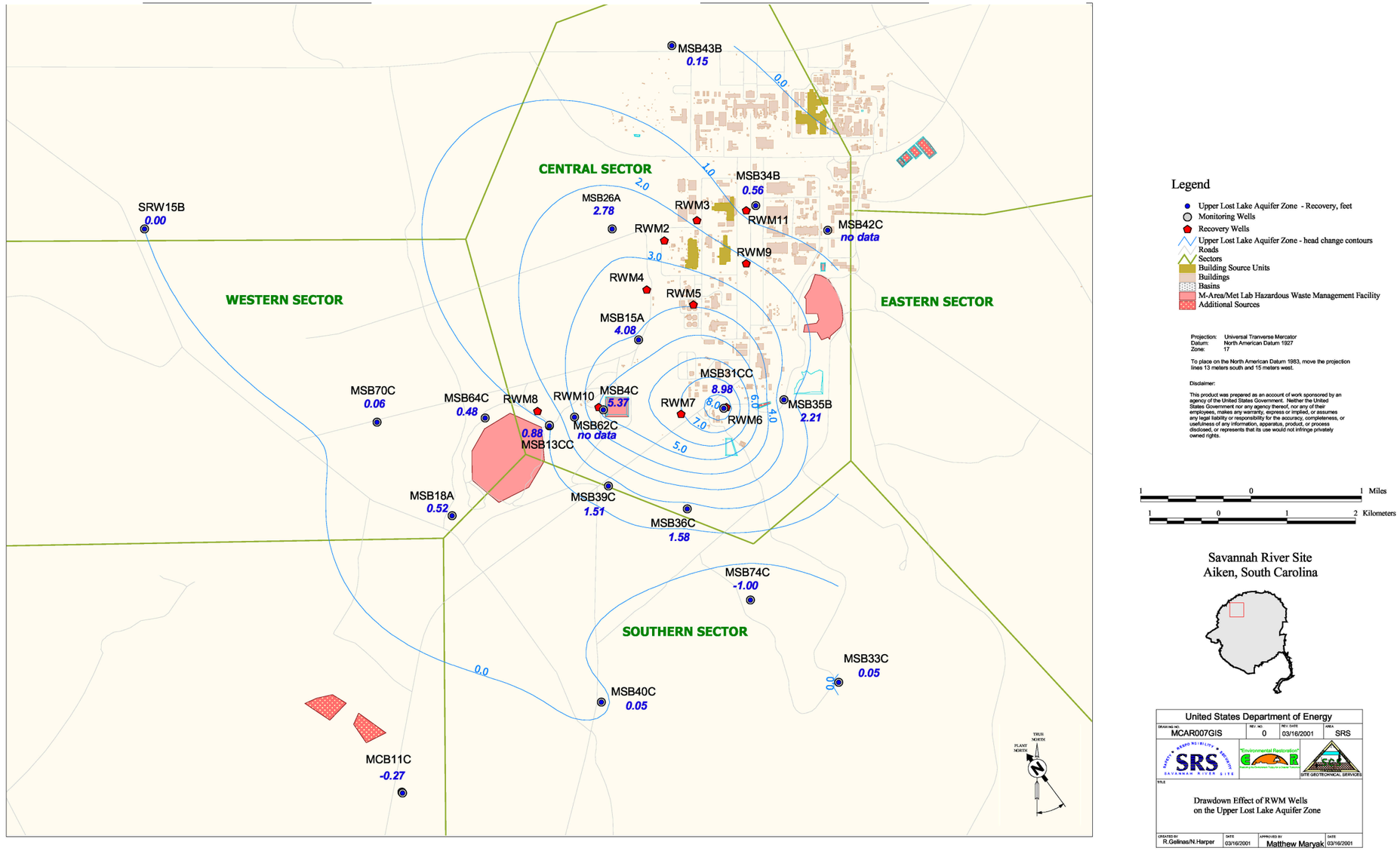

Figure 7. Drawdown Effect of RWM Wells on the Upper Lost Lake Aquifer Zone

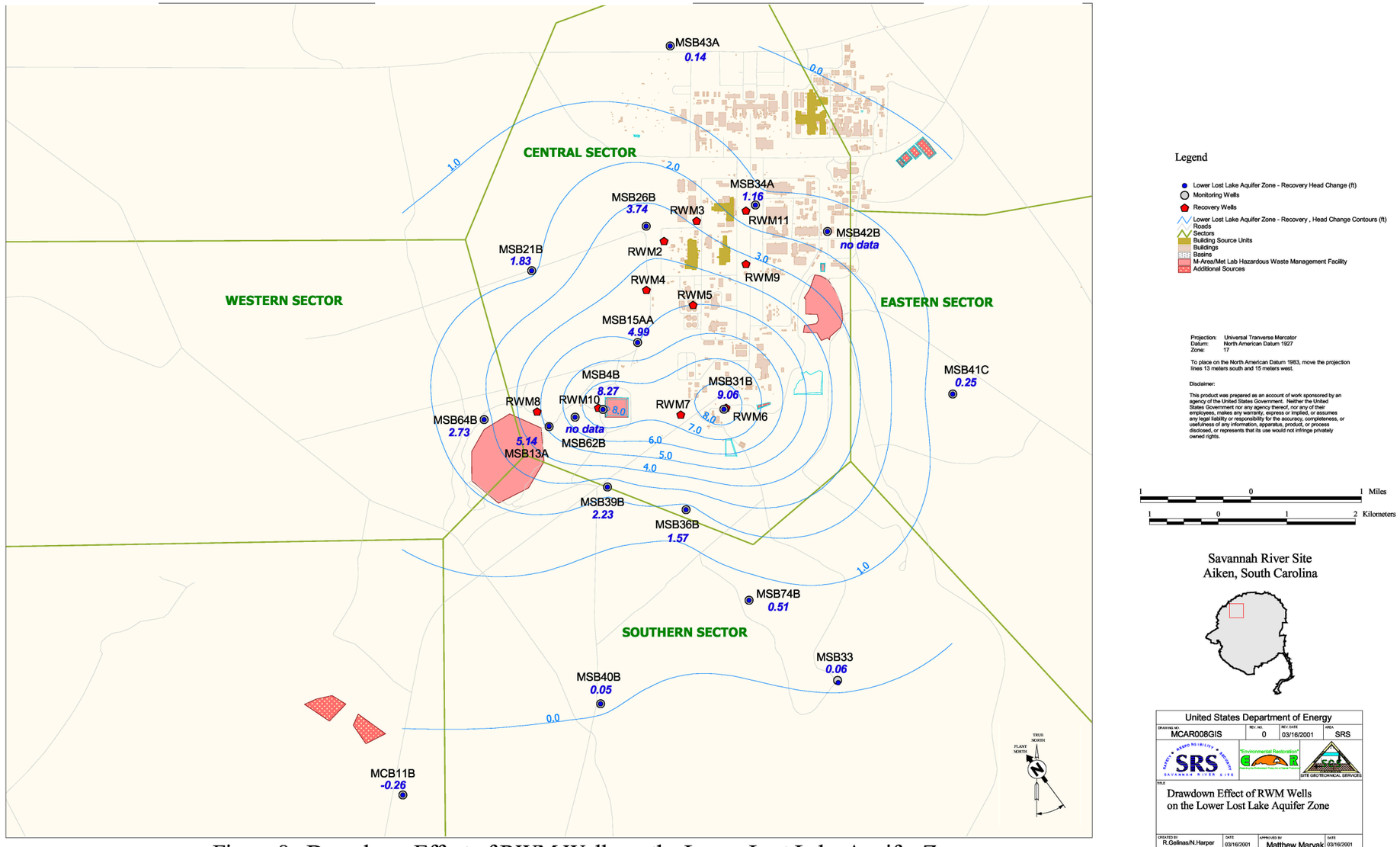

Figure 8: Drawdown Effect of RWM Wells on the Lower Lost Lake Aquifer Zone

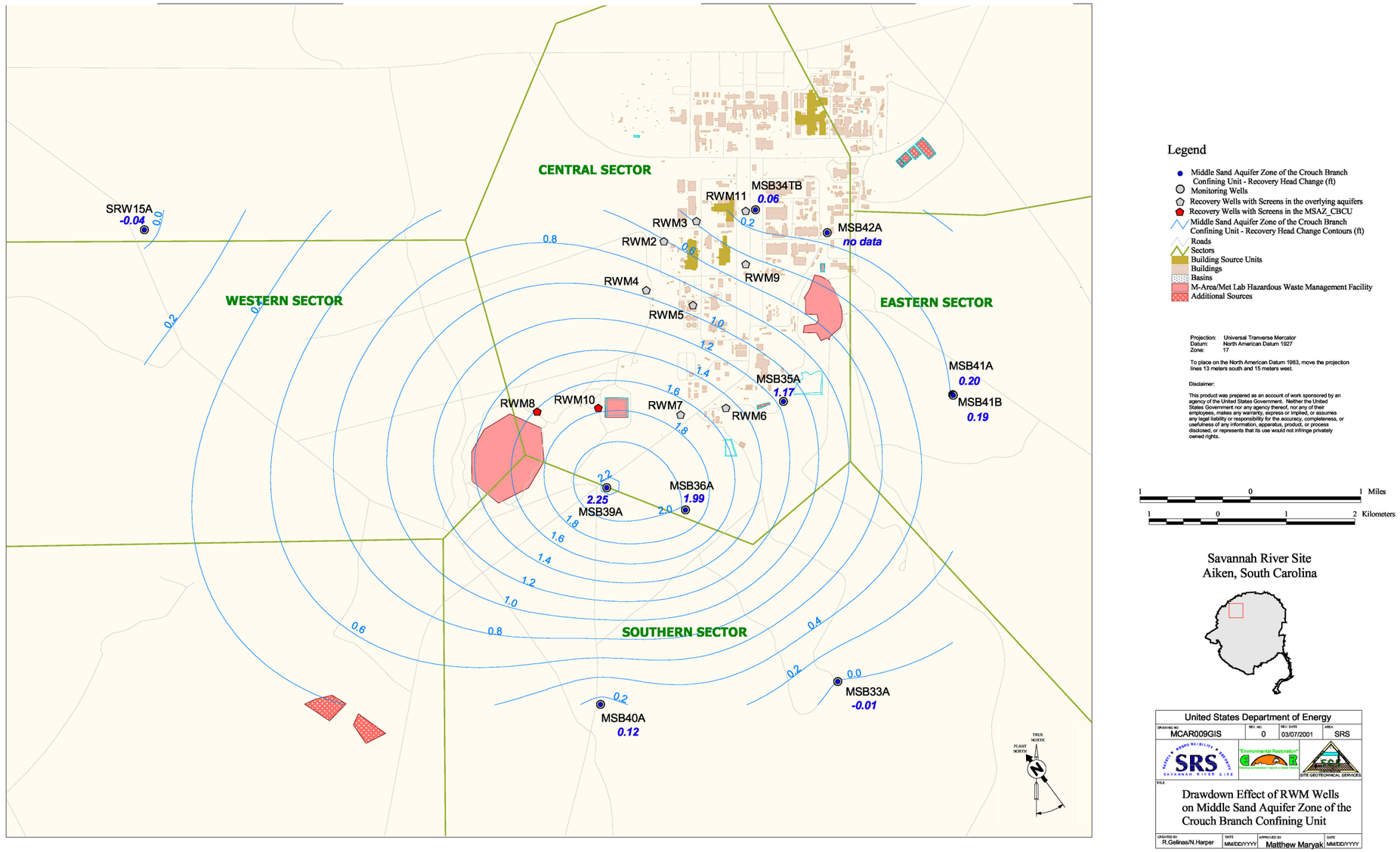

Figure 9: Drawdown Effect of RWM Wells on Middle Sand Aquifer Zone of the Crouch Branch Confining Unit

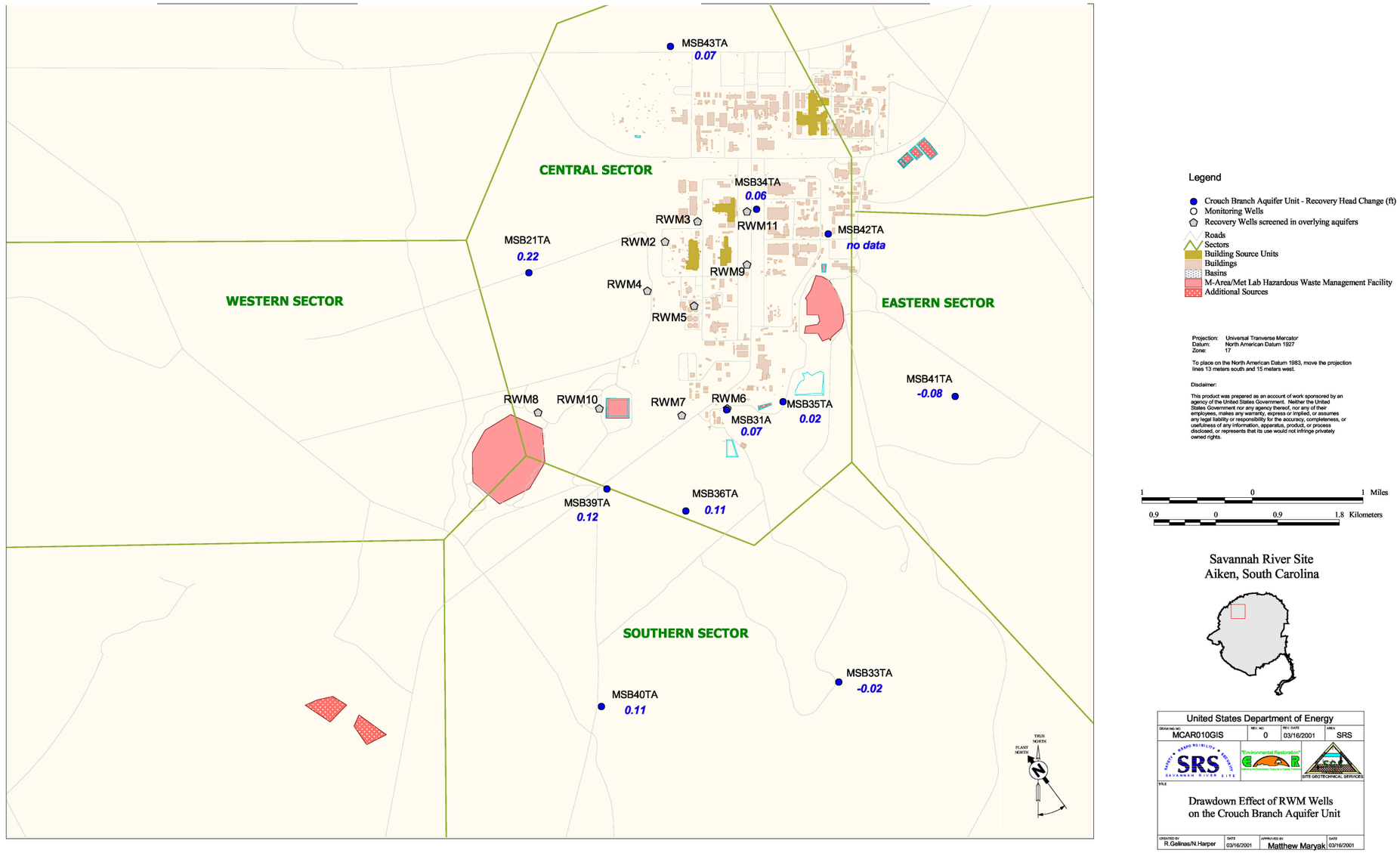

Figure 10. Drawdown Effect of RWM Wells on the Crouch Branch Aquifer Unit

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Appendix D

Groundwater Monitoring Results Tables

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

CN	Clemson Technical Center, Inc.
EM	Environmental Protection Department/Environmental Monitoring Section (EPD/EMS) Laboratory
GE and GP	General Engineering Laboratories, Inc.
SC	Savannah River Technology Center
SP	Spencer Testing Services, Inc.
TM	Thermo NUtech
WA and WS	Recra LabNet Philadelphia.

Nomenclature

AZ	-	Aquifer Zone
CBAU	CBA	Crouch Branch Aquifer Unit (previously Black Creek)
CBCU	CBC	Crouch Branch Confining Unit
GAU	GAU	Gordon Aquifer Unit
GCCZ	GC	Green Clay Confining Zone
LAZ_UTRA	LAZ	Lower Aquifer Zone-Upper Three Runs Aquifer Unit
LLAZ	LLAZ	Lost Lake Aquifer Zone
LLLAZ	LL	Lower Lost Lake Aquifer Zone (previously Lower Congaree)
MAAZ	M	M-Area Aquifer Zone (previously Water Table)
MSAZ_CBCU	MCBC	Middle Sand Aquifer Zone-CBCU (previously Ellenton Sand)
PZ	PZ	Perched Zone
UAZ_UTRA	UAZ	Upper Aquifer Zone-Upper Three Runs Aquifer Unit
ULLAZ	UL	Upper Lost Lake Aquifer Zone (previously Upper Congaree)
UNKNOWN	UNK	Unknown
SP		Steed Pond Aquifer

Sampling Codes

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
T	samples were collected, but some samples were not sent to the laboratory due to high turbidity
W	unable to sample well because of stabilization or sampling equipment failure; 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

deg. C	degrees Celsius
Deg N	Degrees North
Deg W	Degrees West
E	East
ft	feet
mg/L	milligrams per liter
mV	millivolts
msl	mean sea level
N	North
nM	nanomoles
NTU	nepholometric 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 Codes

CLP	EPA Functional Guideline Codes
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)
STORET	EPA STORET result qualifiers
Filt.	Data results after application of the Data Usability filter
GWPS	groundwater protection standard
MCS	monitoring constituents standard
Mod	*modifier* column in data tables
NDD	*"not decision data"*
PDWS	primary drinking water standard
PVC	polyvinyl chloride
ST	*exceeded the GWPS or MCS* column in data tables
TOC	top of casing
<EQL	less than the sample-specific estimated quantitation limit

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.

Uncertainty and Data Usability

In April 1998, SCDHEC accepted guidance proposed by SRS to apply a method for minimizing uncertainty in compliance decisions potentially affecting long-term monitoring or remediation (letter, Taylor to Cook; April 21, 1998). The method is applied by processing or "filtering" the data, using the EPA Functional Guideline Codes applied by the laboratories to qualify the analytical results. By removing all data with a result qualifier of "L", "R", "U", and "J" from consideration, groundwater data users can ensure that only quantified numerical results are applied to the decision process. The output of the filtering process populates the "Filt" column as follows:

1) "Null" or "blank" – Data not remarked. The analytical result is acceptable for use as reported, and the result is not greater than an associated concentration limit for the analyte. If a concentration limit exists for the analyte, and the result is greater than the concentration limit, then the "Filt." Column will contain the applicable limit, and the "greater than" symbol. For example, in the case of trichloroethylene, ">5" would indicate the result exceeded a concentration limit of 5 μg/L.

Rationale: The best result would be one without qualifiers, so the preferred choice would be the maximum result that did not have any qualifiers.

2) "J", “L”, “N”, “NJ”, or “JL” – “J” identifies that the analyte was positively identified; the associated numerical value is an estimated concentration of the analyte in the sample. "L" Indicates the sample result is off scale high. "JL" Indicates an estimated quantity of a sample that is off scale high. “N” is used for all TIC (tentatively identified compounds) and indicates the presence of an analyte for which there is presumptive evidence to make a tentative identification. “NJ” means the presence of an analyte that has been tentatively identified and the associated numerical value represents its approximate concentration.

Rationale: an estimate can still provide useful information. Although there may be a range of uncertainty around the actual value, the value itself may still grossly exceed a regulatory standard. However, a estimated value is less certain than an unqualified result. Therefore, this would be labeled as "NDD" (not decision data).

3) "U" - material analyzed for, but not detected. The analyte concentration is less than the sample specific Estimated Quantitation Limit and labeled “<EQL”.

Rationale: a result above the detection limit would be chosen before a result below detection so that the process is not biased toward false negatives.

4) "UJ" - result is not above the reported sample quantitation limit, but the reported quantitation limit itself is approximate, and may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

Rationale: the additional qualifiers make this result less reliable for use than the "U" without qualifiers. These results would be labeled “<EQL”.

5) “Rejected” – The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Rationale: the only value in providing this result in the report is to indicate that the lab attempted to analyze the sample. If there are any other results available, the result with the “R” qualifier should not be reported. If it is reported, it is definitely “NDD” (not decision data).

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, the result qualifier Q in the “EPA” 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 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

qualifiers can be a key component in assessing data usability. The EPA Functional Guideline Codes used by the analytical laboratories are shown in the CLP result qualifier column are defined below. These modifiers appear in the data tables under the column *CLP*. EPA STORET codes appear in the data tables under the column labeled *EPA*.

"CLP" Qualifiers - EPA Functional Guideline Codes

(Blank)	Data not remarked. The analytical result is acceptable for use as reported.
J	The analyte was positively identified; the associated numerical value is an estimated concentration of the analyte in the sample.
N	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a tentative identification. Used for all TIC results.
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence of absence of the analyte cannot be verified. Assignment of *R* requires approval by the appropriate WSRC data validation coordinator.
U	Material analyzed for but not detected. Analytical result reported is less than the sample quantitation limit.
NJ	The analysis indicates the presence of an analyte that has been tentatively identified and the associated numerical value represents its approximate concentration.

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.

"EPA" Qualifiers – EPA STORET Codes

(Blank)	Data not remarked
C	The result is calculated.
I	The result is less than the ssEQL, but equal to or greater than the MDL. Always reported with an associated EPA functional Guideline Code qualifier of *U*.
K	The actual concentration is known to be less than the reported result.
L	The actual concentration is known to be less than the reported result.
O	Sample received by laboratory, but the analysis was lost or not performed.
Q	Sample was held beyond normal holding time prior to analysis.

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 D1

Synchronous Water Elevations

Synchronous Measurement Events

1Q01	**March 2001**
2Q01	**June 2001**
3Q01	**September 2001**
4Q01	**November/December 2001**

Exceptions to the synchronous measurement period were:

MSB 17 measured on 2/14/01
MSB 36 measured on 2/20/01

Table D1. Synchronous Water Elevation Measurements

Well Name	1Q 2001 Elevation (ft msl)	2Q 2001 Elevation (ft msl)	3Q 2001 Elevation (ft msl)	4Q 2001 Elevation (ft msl)	Aquifer Abbreviation
ASB 6TA	208.92	209.11	208.1	208.33	CBAU
ASB 8TA	211.09	211.07	210.14	210.09	CBAU
MSB 12TA	189.43	189.21	188.1	188.09	CBAU
MSB 21TA	190.62	190.71	189.79	189.51	CBAU
MSB 23TA	not measured	not measured	not measured	not measured	CBAU
MSB 27TA	195.64	196.71	195.59	195.85	CBAU
MSB 29TA	207.39	207.75	206.83	206.88	CBAU
MSB 30A	194.13	194.77	193.1	193.62	CBAU
MSB 31A	194.59	194.1	194.3	193.24	CBAU
MSB 33TA	193.03	192.34	191.34	191.42	CBAU
MSB 34TA	190.19	197.33	192.53	196.94	CBAU
MSB 35TA	196.40	195.72	195.4	195.02	CBAU
MSB 36TA	148.40	191.53	191.14	190.62	CBAU
MSB 37A	not measured	not measured	not measured	not measured	CBAU
MSB 37TA	200.29	202.43	200.54	201.57	CBAU
MSB 38TA	194.35	193.95	193.54	193.05	CBAU
MSB 39TA	190.01	207.75	189	188.53	CBAU
MSB 40TA	187.46	not measured	not measured	185.89	CBAU
MSB 41TA	203.35	202.72	201.9	201.88	CBAU
MSB 42TA	199.44	206.8	199.8	199.98	CBAU
MSB 43TA	198.53	199.07	198.09	198.25	CBAU
MSB 47TA	211.58	211.3	210.64	210.5	CBAU
MSB 48TA	217.99	217.41	216.82	216.4	CBAU
MSB 54TA	215.34	214.95	214.31	213.87	CBAU
MSB 55TA	210.03	209.87	209.08	208.97	CBAU
MSB 66TA	200.51	202.17	200.39	201.29	CBAU
MSB 69TA	211.01	210.75	210.07	209.85	CBAU
MSB 82TA	209.69	210.09	208.99	208.96	CBAU
MSB 83TA	211.49	211.22	210.52	210.23	CBAU
MSB 85B	216.82	216.33	215.66	215.35	CBAU
MSB 85TA	216.36	275.84	215.23	214.89	CBAU
MSB 90TB	203.60	203.576	202.76	202.68	CBAU
MSB 91TB2	not measured	not measured	not measured	not measured	CBAU
MSB 91TB5	not measured	not measured	not measured	not measured	CBAU
MSB 93TA1	not measured	not measured	not measured	not measured	CBAU
MSB 93TA2	not measured	not measured	not measured	not measured	CBAU
MSB 93TB1	not measured	not measured	not measured	not measured	CBAU
MSB 93TB2	not measured	not measured	not measured	not measured	CBAU
MSB 93TB3	not measured	not measured	not measured	not measured	CBAU
MSB 93TB4	not measured	not measured	not measured	not measured	CBAU
MSB 94TB1	not measured	not measured	not measured	not measured	CBAU
MSB 94TB2	not measured	not measured	not measured	not measured	CBAU
MSB 94TB3	not measured	not measured	not measured	not measured	CBAU
MSB 94TB4	not measured	not measured	not measured	not measured	CBAU

Table D1. Synchronous Water Elevation Measurements (continued)

Well Name	1Q 2001 Elevation (ft msl)	2Q 2001 Elevation (ft msl)	3Q 2001 Elevation (ft msl)	4Q 2001 Elevation (ft msl)	Aquifer Abbreviation
MSB 95TB1	not measured	not measured	not measured	not measured	CBAU
MSB 95TB2	not measured	not measured	not measured	not measured	CBAU
MSB 95TB3	not measured	not measured	not measured	not measured	CBAU
MSB 95TB4	not measured	not measured	not measured	not measured	CBAU
SRW 12A	189.30	189.69	188.4	187.39	CBCU
ARP 16D	not measured	not measured	not measured	not measured	GCCZ
ABP 3C	193.72	192.68	192.8	191.69	LLLAZ
AC 2A	216.25	215.45	214.9	214.56	LLLAZ
AMB 4B	218.84	218.42	217.74	217.5	LLLAZ
AMB 7B	219.10	219.59	218.05	217.6	LLLAZ
AMB 10B	217.73	217.29	216.81	216.22	LLLAZ
ARP 12C1	not measured	not measured	not measured	not measured	LLLAZ
ARP 12C2	not measured	not measured	not measured	not measured	LLLAZ
ARP 12C3	not measured	not measured	not measured	not measured	LLLAZ
ARP 12C4	not measured	not measured	not measured	not measured	LLLAZ
ARP 14C3	not measured	not measured	not measured	not measured	LLLAZ
ARP 14C4	not measured	not measured	not measured	not measured	LLLAZ
ARP 15C3	not measured	not measured	not measured	not measured	LLLAZ
ARP 15C4	not measured	not measured	not measured	not measured	LLLAZ
ASB 2CR	219.38	216.67	216.16	215.74	LLLAZ
ASB 3CR	216.73	216.09	219.3	215.2	LLLAZ
ASB 5C	216.91	216.33	215.58	215.38	LLLAZ
ASB 9B	216.39	214.34	215.2	214.5	LLLAZ
ASB 10CR	217.18	216.42	215.84	215.45	LLLAZ
MSB 1B	206.73	206.12	206	204.85	LLLAZ
MSB 2B	207.93	207.21	206.8	206.1	LLLAZ
MSB 3B	not measured	not measured	not measured	not measured	LLLAZ
MSB 4B	205.93	205.35	207.5	204.05	LLLAZ
MSB 5B	204.08	203.36	202.92	202.18	LLLAZ
MSB 6B	202.59	201.89	201.6	200.85	LLLAZ
MSB 7B	203.39	202.65	202.27	221.59	LLLAZ
MSB 8B	204.79	204.08	203.77	203.1	LLLAZ
MSB 9A	206.83	206.3	206.4	205.26	LLLAZ
MSB 10B	209.66	208.94	214.41	207.8	LLLAZ
MSB 11A	208.09	207.52	206.7	214.49	LLLAZ
MSB 12A	204.40	203.93	203.1	202.7	LLLAZ
MSB 13A	205.32	203.19	203	202.04	LLLAZ
MSB 15AA	208.59	208.36	207.4	207.29	LLLAZ
MSB 17BB	208.32	207.67	207.25	206.75	LLLAZ
MSB 19B	213.20	212.44	212.06	211.8	LLLAZ
MSB 21B	215.68	215.25	215.2	not measured	LLLAZ
MSB 25A	210.40	209.79	209.6	208.68	LLLAZ
MSB 26B	213.50	213.14	212.45	212.02	LLLAZ
MSB 29B	219.35	218.9	218.38	218.02	LLLAZ

Table D1. Synchronous Water Elevation Measurements (continued)

Well Name	1Q 2001 Elevation (ft msl)	2Q 2001 Elevation (ft msl)	3Q 2001 Elevation (ft msl)	4Q 2001 Elevation (ft msl)	Aquifer Abbreviation
MSB 30B	220.79	220.35	219.74	219.02	LLLAZ
MSB 31B	208.89	207.81	207.72	206.92	LLLAZ
MSB 32B	209.05	208.35	207.69	207.46	LLLAZ
MSB 33B	205.90	205.38	204.75	204.65	LLLAZ
MSB 34A	331.85	212.61	212.2	211.64	LLLAZ
MSB 36B	210.75	210.09	209.88	209.21	LLLAZ
MSB 37C	222.88	222.3	221.79	221.17	LLLAZ
MSB 38C	216.48	212.81	212	211.97	LLLAZ
MSB 39B	208.47	221.19	207.31	206.68	LLLAZ
MSB 40B	201.60	not measured	not measured	199.87	LLLAZ
MSB 41C	214.50	213.6	213.18	212.73	LLLAZ
MSB 42B	220.57	232.6	219.55	218.5	LLLAZ
MSB 43A	224.87	224.21	223.85	223.24	LLLAZ
MSB 45A	210.45	209.96	210.04	209.2	LLLAZ
MSB 47B	220.23	219.39	218.9	218.4	LLLAZ
MSB 48B	219.59	218.92	218.34	217.9	LLLAZ
MSB 49B	199.64	198.99	198.8	197.9	LLLAZ
MSB 50B	201.54	201.23	200.9	200.34	LLLAZ
MSB 51B	203.44	202.97	202.3	199.3	LLLAZ
MSB 52B	216.05	215.43	214.09	213.75	LLLAZ
MSB 53B	218.05	217.02	216.6	216	LLLAZ
MSB 54C	223.21	221.57	221.01	220.43	LLLAZ
MSB 55C	224.92	224.23	223.77	223.24	LLLAZ
MSB 62B	205.55	204.99	204.3	203.92	LLLAZ
MSB 63B	205.42	204.8	204.2	203.7	LLLAZ
MSB 64B	not measured	not measured	not measured	202.11	LLLAZ
MSB 66C	223.67	222.92	222.41	221.81	LLLAZ
MSB 68C	219.90	219.18	218.69	218	LLLAZ
MSB 69C	222.83	222.21	221.71	221.19	LLLAZ
MSB 71B	212.33	211.58	211.12	210.36	LLLAZ
MSB 72B	197.51	196.8	not measured	195.74	LLLAZ
MSB 73B	197.76	197.11	196.8	196.05	LLLAZ
MSB 74B	208.10	207.63	207.8	207.03	LLLAZ
MSB 75B	206.94	206.47	not measured	205.4	LLLAZ
MSB 77B	217.40	216.63	216.5	215.55	LLLAZ
MSB 79B	203.79	203.14	not measured	202.2	LLLAZ
MSB 81B	216.45	215.73	215.2	214.64	LLLAZ
MSB 82C	223.33	222.62	222.2	221.59	LLLAZ
MSB 83C	223.90	223.27	222.79	222.12	LLLAZ
MSB 84C	136.12	225.03	224.53	223.97	LLLAZ
MSB 85C	220.03	219.43	218.81	218.37	LLLAZ
MSB 86C	220.82	220.33	219.74	219.25	LLLAZ
MSB 88C	202.45	not measured	201.49	201.16	LLLAZ
MSB 89B	203.07	not measured	not measured	202.26	LLLAZ

Table D1. Synchronous Water Elevation Measurements (continued)

Well Name	1Q 2001 Elevation (ft msl)	2Q 2001 Elevation (ft msl)	3Q 2001 Elevation (ft msl)	4Q 2001 Elevation (ft msl)	Aquifer Abbreviation
SRW 3BB	203.96	203.39	202.06	201.91	LLLAZ
SRW 9A	194.35	194.15	191.98	not measured	LLLAZ
SRW 11BB	201.09	200.65	199.7	198.99	LLLAZ
SRW 13A	196.99	196.75	195.9	195.85	LLLAZ
SRW 16A	209.04	208.33	207.9	206.99	LLLAZ
SSM 1B	not measured	not measured	not measured	not measured	LLLAZ
SSM 2B	not measured	not measured	not measured	not measured	LLLAZ
SSM 3B	not measured	not measured	not measured	not measured	LLLAZ
SSM 4B	not measured	not measured	not measured	not measured	LLLAZ
SSM 5B	not measured	not measured	not measured	not measured	LLLAZ
SSM 6B	not measured	not measured	not measured	not measured	LLLAZ
SSM 7B	not measured	not measured	not measured	not measured	LLLAZ
SSM 8B	not measured	not measured	not measured	not measured	LLLAZ
SSM 9B	not measured	not measured	not measured	not measured	LLLAZ
SSM 10B	not measured	not measured	not measured	not measured	LLLAZ
SSM 10B2	not measured	not measured	not measured	not measured	LLLAZ
SSM 11B	not measured	not measured	not measured	not measured	LLLAZ
SSM 11B2	not measured	not measured	not measured	not measured	LLLAZ
SSM 12B	not measured	not measured	not measured	not measured	LLLAZ
SSM 12B2	not measured	not measured	not measured	not measured	LLLAZ
SSM 13B	not measured	not measured	not measured	not measured	LLLAZ
SSM 13B2	not measured	not measured	not measured	not measured	LLLAZ
SSM 14B	not measured	not measured	not measured	not measured	LLLAZ
SSM 14B2	not measured	not measured	not measured	not measured	LLLAZ
SSM 15B	not measured	not measured	not measured	not measured	LLLAZ
SSM 15B2	not measured	not measured	not measured	not measured	LLLAZ
SSM 16B	not measured	not measured	not measured	not measured	LLLAZ
SSM 16B2	not measured	not measured	not measured	not measured	LLLAZ
SSM 17B	not measured	not measured	not measured	not measured	LLLAZ
SSM 17B2	not measured	not measured	not measured	not measured	LLLAZ
ABP 2A	218.62	not measured	214	not measured	MAAZ
AC 2B	225.21	225.18	226.05	224.95	MAAZ
AC 3B	207.79	207.35	not measured	206.05	MAAZ
ACB 2A	227.43	229.96	not measured	not measured	MAAZ
AMB 4D	226.40	253.41	not measured	224.51	MAAZ
AMB 7	227.43	224.67	226.1	225.89	MAAZ
AMB 8D	227.20	225.59	225.9	225.64	MAAZ
AMB 9D	227.17	225.61	226.1	225.69	MAAZ
AMB 12D	227.88	227.17	227.1	226.3	MAAZ
AMB 15D	227.59	226.81	217.7	225.99	MAAZ
AMB 16D	226.95	226.17	225.7	225.34	MAAZ
AOB 1	230.06	240.6	222.04	228.62	MAAZ
AOB 2	not measured	not measured	not measured	not measured	MAAZ
ARP 10D	not measured	not measured	not measured	not measured	MAAZ

Table D1. Synchronous Water Elevation Measurements (continued)

Well Name	1Q 2001 Elevation (ft msl)	2Q 2001 Elevation (ft msl)	3Q 2001 Elevation (ft msl)	4Q 2001 Elevation (ft msl)	Aquifer Abbreviation
ASB 2AR	233.69	233	232.7	232.1	MAAZ
ASB 3AR	231.86	233.18	232.7	232.19	MAAZ
ASB 4	233.32	232.45	231.9	231.74	MAAZ
ASB 5AR	227.96	227.05	227.12	226.49	MAAZ
ASB 6A	228.76	228.76	228.71	228.64	MAAZ
ASB 8	229.19	228.32	227.81	227.13	MAAZ
ASB 9	237.67	236.42	236	235.34	MAAZ
MCB 2	220.90	219	218.6	218.31	MAAZ
MCB 9D	218.73	222.82	216.9	216.65	MAAZ
MSB 1D	226.23	225.2	225.03	224.36	MAAZ
MSB 2D	226.91	225.79	225.44	224.87	MAAZ
MSB 3D	not measured	not measured	not measured	not measured	MAAZ
MSB 4D	225.34	224.46	224.1	223.53	MAAZ
MSB 5A	223.41	not measured	221.8	not measured	MAAZ
MSB 6A	not measured	not measured	not measured	not measured	MAAZ
MSB 7A	224.40	223.24	222.6	not measured	MAAZ
MSB 8A	not measured	not measured	not measured	not measured	MAAZ
MSB 9C	226.00	225.29	224.7	224.18	MAAZ
MSB 11F	226.11	not measured	not measured	not measured	MAAZ
MSB 13D	223.98	223.05	222.7	222.1	MAAZ
MSB 15D	227.11	237.48	237.49	233.35	MAAZ
MSB 16C	225.69	225.33	224.6	224.35	MAAZ
MSB 17B	137.69	220.74	220.5	219.81	MAAZ
MSB 18B	215.07	216.58	216.3	not measured	MAAZ
MSB 19C	232.01	231.48	not measured	231.24	MAAZ
MSB 20C	not measured	not measured	not measured	not measured	MAAZ
MSB 21C	225.29	225.39	225.36	225.35	MAAZ
MSB 24	233.05	232.92	233.5	233.34	MAAZ
MSB 25	not measured	not measured	not measured	not measured	MAAZ
MSB 26	226.38	225.79	226	225.17	MAAZ
MSB 27	not measured	not measured	not measured	not measured	MAAZ
MSB 28	226.00	225.5	225	224.25	MAAZ
MSB 29D	228.06	227.39	226.91	226.3	MAAZ
MSB 31C	229.30	229.33	228.26	227.86	MAAZ
MSB 32	223.23	222	221.13	220.99	MAAZ
MSB 33	not measured	not measured	not measured	not measured	MAAZ
MSB 34C	229.10	228.97	228.92	228.82	MAAZ
MSB 35D	not measured	not measured	238.69	not measured	MAAZ
MSB 36D	111.15	229.82	229.7	229.09	MAAZ
MSB 37D	not measured	not measured	not measured	not measured	MAAZ
MSB 39D	227.90	241.9	225.9	225.83	MAAZ
MSB 40D	223.30	not measured	not measured	222.5	MAAZ
MSB 41D	241.07	241.07	241.1	241.08	MAAZ
MSB 42D	226.99	226.28	not measured	not measured	MAAZ

Table D1. Synchronous Water Elevation Measurements (continued)

Well Name	1Q 2001 Elevation (ft msl)	2Q 2001 Elevation (ft msl)	3Q 2001 Elevation (ft msl)	4Q 2001 Elevation (ft msl)	Aquifer Abbreviation
MSB 45C	not measured	not measured	not measured	not measured	MAAZ
MSB 46C	not measured	not measured	not measured	not measured	MAAZ
MSB 47D	229.24	229.02	229.65	229.6	MAAZ
MSB 48D	228.37	227.63	not measured	not measured	MAAZ
MSB 49D	224.48	223.64	223.41	223.07	MAAZ
MSB 51D	208.16	207.98	207.84	207.64	MAAZ
MSB 52D	233.70	233.07	232.8	232.55	MAAZ
MSB 53D	229.40	228.2	227.82	not measured	MAAZ
MSB 56D	217.29	226.81	215.99	not measured	MAAZ
MSB 59D	225.88	224.63	224.5	223.76	MAAZ
MSB 62D	225.02	224.12	223.7	223.09	MAAZ
MSB 63D	224.20	224.2	224.04	223.51	MAAZ
MSB 64D	222.82	221.98	221.64	not measured	MAAZ
MSB 65D	228.12	not measured	not measured	not measured	MAAZ
MSB 66D	not measured	not measured	not measured	not measured	MAAZ
MSB 67D	not measured	not measured	not measured	not measured	MAAZ
MSB 69D	228.90	228.14	227.68	227.06	MAAZ
MSB 70D	216.85	216.24	214.86	215.08	MAAZ
MSB 74D	228.28	228.01	not measured	227.71	MAAZ
MSB 77D	229.70	228.41	228.24	227.53	MAAZ
MSB 82D	228.89	227.93	227.8	226.8	MAAZ
MSB 85D	228.51	227.77	227.26	226.58	MAAZ
MSB 87C	236.74	236.77	237.11	237.29	MAAZ
MSB 89C	225.93	225.59	not measured	225.01	MAAZ
SRW 3A	208.79	208.22	207.2	not measured	MAAZ
SRW 6	not measured	not measured	not measured	not measured	MAAZ
SRW 9	193.48	183.62	193.6	not measured	MAAZ
SRW 12C	189.40	189.77	not measured	not measured	MAAZ
SRW 13C	204.80	204.51	203.88	not measured	MAAZ
SRW 15C	207.55	207.2	206.61	not measured	MAAZ
SRW 16C	210.27	209.55	208.65	not measured	MAAZ
SRW 17DR	not measured	not measured	not measured	not measured	MAAZ
SRW 18	not measured	not measured	not measured	not measured	MAAZ
ARP 1A	214.99	215.19	not measured	214.6	MAAZ_GCCZ
ARP 2	214.05	213.16	203.57	218.97	MAAZ_GCCZ
ARP 3	not measured	not measured	not measured	221.21	MAAZ_GCCZ
ARP 4	214.35	not measured	not measured	not measured	MAAZ_GCCZ
ARP 5D	213.88	210.51	210.31	208.16	MAAZ_GCCZ
ARP 8D	not measured	not measured	not measured	not measured	MAAZ_GCCZ
ARP 9D	not measured	not measured	not measured	not measured	MAAZ_GCCZ
ARP 11D	not measured	not measured	not measured	not measured	MAAZ_GCCZ
ASB 1A	232.01	231.28	231.3	235.32	MAAZ_GCCZ
MSB 43D	227.30	226.64	226.23	225.66	MAAZ_GCCZ
MSB 54D	228.91	not measured	227.57	226.85	MAAZ_GCCZ

Table D1. Synchronous Water Elevation Measurements (continued)

Well Name	1Q 2001 Elevation (ft msl)	2Q 2001 Elevation (ft msl)	3Q 2001 Elevation (ft msl)	4Q 2001 Elevation (ft msl)	Aquifer Abbreviation
MSB 55D	228.88	not measured	not measured	not measured	MAAZ_GCCZ
MSB 78DR	219.34	219.16	205.7	not measured	MAAZ_GCCZ
AMB 4A	212.08	211.78	211.7	212.72	MSAZ_CBCU
AMB 7A	212.71	277.62	211.15	212.73	MSAZ_CBCU
AMB 10A	214.22	168.49	212.6	212.04	MSAZ_CBCU
AMB 13AR	214.07	212.54	209.2	212.8	MSAZ_CBCU
AMB 17A	212.12	211.75	202.41	212.51	MSAZ_CBCU
AMB 18A	211.92	210.74	211.06	212.31	MSAZ_CBCU
ARP 12B1	not measured	not measured	not measured	not measured	MSAZ_CBCU
ARP 12B2	not measured	not measured	not measured	not measured	MSAZ_CBCU
ARP 14B1	not measured	not measured	not measured	not measured	MSAZ_CBCU
ARP 14B2	not measured	not measured	not measured	not measured	MSAZ_CBCU
ARP 15B1	not measured	not measured	not measured	not measured	MSAZ_CBCU
ARP 15B2	not measured	not measured	not measured	not measured	MSAZ_CBCU
ASB 6AA	213.05	212.76	211.86	211.8	MSAZ_CBCU
ASB 8B	207.82	207.45	206.8	206.49	MSAZ_CBCU
MSB 10A	207.19	206.4	205.4	195.17	MSAZ_CBCU
MSB 29A	217.06	217.13	217.16	217.15	MSAZ_CBCU
MSB 30AA	219.09	219.29	218.8	217.2	MSAZ_CBCU
MSB 33A	203.15	202.56	201.94	201.71	MSAZ_CBCU
MSB 35A	212.90	211.89	212.1	211.31	MSAZ_CBCU
MSB 36A	133.97	205.94	205.8	205.04	MSAZ_CBCU
MSB 37B	213.60	not measured	212.75	212.4	MSAZ_CBCU
MSB 39A	205.59	204.85	204.38	203.88	MSAZ_CBCU
MSB 40A	200.38	199.6	not measured	198.56	MSAZ_CBCU
MSB 41B	213.92	213.05	212.72	212.29	MSAZ_CBCU
MSB 42A	213.47	124.88	212.7	211.85	MSAZ_CBCU
MSB 44A	212.63	212.1	211.89	211.3	MSAZ_CBCU
MSB 46A	210.51	210.44	209.48	209.47	MSAZ_CBCU
MSB 48A	218.08	217.51	216.9	216.49	MSAZ_CBCU
MSB 49A	194.09	193.43	192.93	192.41	MSAZ_CBCU
MSB 54B	217.84	217.39	216.68	216.2	MSAZ_CBCU
MSB 55B	217.45	216.93	216.23	215.94	MSAZ_CBCU
MSB 66B	213.97	213.56	213.68	212.59	MSAZ_CBCU
MSB 68B	214.11	213.61	213.05	212.61	MSAZ_CBCU
MSB 69B	216.08	215.55	214.98	214.59	MSAZ_CBCU
MSB 82A	209.78	216.57	208.91	215.43	MSAZ_CBCU
MSB 82B	219.69	214.74	214.13	213.84	MSAZ_CBCU
MSB 83B	217.44	217.06	216.14	215.94	MSAZ_CBCU
MSB 84A	160.20	192.99	155.56	191.91	MSAZ_CBCU
MSB 88B	199.90	199.2	189.5	198.3	MSAZ_CBCU
SRW 2A	201.87	201.46	199.7	not measured	MSAZ_CBCU
SRW 14A	198.87	198.15	197.1	195.88	MSAZ_CBCU
SRW 15A	200.41	204.05	203.3	202.49	MSAZ_CBCU

Table D1. Synchronous Water Elevation Measurements (continued)

Well Name	1Q 2001 Elevation (ft msl)	2Q 2001 Elevation (ft msl)	3Q 2001 Elevation (ft msl)	4Q 2001 Elevation (ft msl)	Aquifer Abbreviation
SRW 19	not measured	not measured	not measured	not measured	PUA_MAAZ
ARP 13B1	not measured	not measured	not measured	not measured	UCCZ_CBCU
ARP 13B2	not measured	not measured	not measured	not measured	UCCZ_CBCU
ABP 8C	193.10	191.99	191.3	190.88	ULLAZ
AC 1A	not measured	not measured	not measured	not measured	ULLAZ
AC 3A	205.76	205.35	not measured	203.99	ULLAZ
AMB 18C	226.95	226.31	225.8	225.4	ULLAZ
AMB 19C	224.53	223.88	223	223.1	ULLAZ
ARP 13C1	not measured	not measured	not measured	not measured	ULLAZ
ARP 13C2	not measured	not measured	not measured	not measured	ULLAZ
ARP 13C3	not measured	not measured	not measured	not measured	ULLAZ
ARP 13C4	not measured	not measured	not measured	not measured	ULLAZ
ARP 14C1	not measured	not measured	not measured	not measured	ULLAZ
ARP 14C2	not measured	not measured	not measured	not measured	ULLAZ
ARP 15C1	not measured	not measured	not measured	not measured	ULLAZ
ARP 15C2	not measured	not measured	not measured	not measured	ULLAZ
ASB 6C	218.14	217.48	216.88	216.5	ULLAZ
ASB 8C	215.18	214.88	214.33	213.9	ULLAZ
ASB 9C	216.30	215.77	215.09	214.84	ULLAZ
MCB 5C	191.44	190.64	190.3	189.56	ULLAZ
MCB 6C	192.22	191.31	191.3	190.26	ULLAZ
MCB 7C	190.53	189.78	189.9	188.85	ULLAZ
MSB 1C	212.78	212.09	211.75	not measured	ULLAZ
MSB 2C	214.23	213.04	212.72	211.98	ULLAZ
MSB 3C	215.83	214.44	214.15	213.42	ULLAZ
MSB 4C	211.97	210.99	211.51	210.04	ULLAZ
MSB 5C	219.18	217.84	217.59	216.99	ULLAZ
MSB 6C	218.91	218.03	217.75	217.11	ULLAZ
MSB 7C	218.69	217.52	217.1	216.55	ULLAZ
MSB 8C	216.51	215.45	214.95	214.4	ULLAZ
MSB 11C	217.72	215.59	215.55	206.45	ULLAZ
MSB 12B	213.81	213.17	212.75	213.99	ULLAZ
MSB 13CC	220.44	219.32	219.08	218.53	ULLAZ
MSB 15A	216.28	215	214.47	213.62	ULLAZ
MSB 16A	213.84	213.4	212.7	212.4	ULLAZ
MSB 18A	208.45	207.6	207.14	206.6	ULLAZ
MSB 20A	214.28	213.76	213.5	212.48	ULLAZ
MSB 24A	218.93	219.01	not measured	217.81	ULLAZ
MSB 27B	220.24	219.53	219.1	218.69	ULLAZ
MSB 28A	219.10	218.69	218.15	217.29	ULLAZ
MSB 29C	225.74	225.1	224.63	224.05	ULLAZ
MSB 30CC	220.67	220.25	not measured	219	ULLAZ
MSB 31CC	209.00	not measured	207.9	206.81	ULLAZ
MSB 32C	215.01	213.49	213.12	212.9	ULLAZ

Table D1. Synchronous Water Elevation Measurements (continued)

Well Name	1Q 2001 Elevation (ft msl)	2Q 2001 Elevation (ft msl)	3Q 2001 Elevation (ft msl)	4Q 2001 Elevation (ft msl)	Aquifer Abbreviation
MSB 33C	209.60	209.16	208.91	208.78	ULLAZ
MSB 34B	221.54	220.88	221.44	219.72	ULLAZ
MSB 35B	215.24	214.28	214.16	213.63	ULLAZ
MSB 36C	210.90	210.13	209.9	209.34	ULLAZ
MSB 39C	211.96	306.09	210.7	210.08	ULLAZ
MSB 40C	203.45	not measured	not measured	203.51	ULLAZ
MSB 42C	225.85	223.87	224.46	223.88	ULLAZ
MSB 43B	225.02	224.66	224	223.36	ULLAZ
MSB 45B	219.59	218.79	219.5	217.8	ULLAZ
MSB 46B	225.91	225.97	226.02	226.03	ULLAZ
MSB 47C	227.97	227.07	226.56	225.9	ULLAZ
MSB 48C	220.06	219.43	218.87	218.4	ULLAZ
MSB 50D	not measured	not measured	not measured	not measured	ULLAZ
MSB 53C	218.71	217.68	217.28	216.66	ULLAZ
MSB 55HC	228.58	227.78	227.33	226.71	ULLAZ
MSB 62C	219.30	218.24	217.92	217.29	ULLAZ
MSB 63C	216.93	215.64	215.56	214.98	ULLAZ
MSB 64C	218.32	217.49	217.6	216.59	ULLAZ
MSB 70C	213.14	212.59	212.1	not measured	ULLAZ
MSB 74C	208.52	207.95	207.34	207.22	ULLAZ
MSB 75C	206.87	206.5	not measured	205.7	ULLAZ
MSB 76C	216.53	215.92	215.6	214.57	ULLAZ
MSB 77C	219.63	218.41	218.12	217.48	ULLAZ
MSB 79C	206.39	205.65	not measured	204.66	ULLAZ
MSB 87B	214.89	213.96	213.5	213.35	ULLAZ
MSB 90C	227.86	226.969	226.46	225.91	ULLAZ
MSB 91C	226.20	not measured	224.94	224.38	ULLAZ
MSB 92C	225.34	224.78	224.37	223.76	ULLAZ
SRW 2B	202.74	202.49	201.49	not measured	ULLAZ
SRW 13B	198.66	198.35	197.29	196.7	ULLAZ
SRW 14B	200.69	200.18	199.25	188.77	ULLAZ
SRW 15B	204.57	204.16	203.39	not measured	ULLAZ
SRW 16B	209.61	209.01	208.18	not measured	ULLAZ
SSM 1C	not measured	not measured	not measured	not measured	ULLAZ
SSM 2C	not measured	not measured	not measured	not measured	ULLAZ
SSM 3C	not measured	not measured	not measured	not measured	ULLAZ
SSM 4C	not measured	not measured	not measured	not measured	ULLAZ
SSM 5C	not measured	not measured	not measured	not measured	ULLAZ
SSM 6C	not measured	not measured	not measured	not measured	ULLAZ
SSM 7C	not measured	not measured	not measured	not measured	ULLAZ
SSM 8C	not measured	not measured	not measured	not measured	ULLAZ
SSM 9C	not measured	not measured	not measured	not measured	ULLAZ
SSM 10C	not measured	not measured	not measured	not measured	ULLAZ
SSM 10C2	not measured	not measured	not measured	not measured	ULLAZ

Table D1. Synchronous Water Elevation Measurements (continued)

Well Name	1Q 2001 Elevation (ft msl)	2Q 2001 Elevation (ft msl)	3Q 2001 Elevation (ft msl)	4Q 2001 Elevation (ft msl)	Aquifer Abbreviation
SSM 11C	not measured	not measured	not measured	not measured	ULLAZ
SSM 11C2	not measured	not measured	not measured	not measured	ULLAZ
SSM 12C	not measured	not measured	not measured	not measured	ULLAZ
SSM 12C2	not measured	not measured	not measured	not measured	ULLAZ
SSM 13C	not measured	not measured	not measured	not measured	ULLAZ
SSM 13C2	not measured	not measured	not measured	not measured	ULLAZ
SSM 14C	not measured	not measured	not measured	not measured	ULLAZ
SSM 14C2	not measured	not measured	not measured	not measured	ULLAZ
SSM 15C	not measured	not measured	not measured	not measured	ULLAZ
SSM 15C2	not measured	not measured	not measured	not measured	ULLAZ
SSM 16C	not measured	not measured	not measured	not measured	ULLAZ
SSM 16C2	not measured	not measured	not measured	not measured	ULLAZ
SSM 17C	not measured	not measured	not measured	not measured	ULLAZ
SSM 17C2	not measured	not measured	not measured	not measured	ULLAZ

Notes:
Values in Italics were considered anomalous due to measurement error and were not used for contouring potentiometric surfaces.

PUA_MAAZ – Well screened in a perched unit above the M-Area Aquifer Zone
MAAZ – Well screened in the M-Area Aquifer Zone
MAAZ_GCCZ – Well screened in the M-Area Aquifer Zone and partially in the Green Clay Confining Zone
ULLAZ – Well screened in the Upper Lost Lake Aquifer Zone of the Lost Lake Aquifer Unit
LLLAZ – Well screened in the Lower Lost Lake Aquifer Zone of the Lost Lake Aquifer Unit
MSAZ_CBCU – Well screened in the Middle Sand Aquifer Zone of the Crouch Branch Confining Unit
UCCZ_CBCU – Well screened in the Upper Clay Confining Zone of the Crouch Branch Confining Unit
CBCU – Well screened in the Crouch Branch Confining Unit
CBAU – Well screened in the Crouch Branch Aquifer Unit

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Table D-2. 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
N 101833 E 48483.2	33.33008 Deg N -81.7370 Deg W	142.6 - 137.9 ft msl	354.8 ft msl	4 " PVC	S	LL

SAMPLE DATE	02/28/00	08/08/00	02/12/01	08/30/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	208.2	207.07	207.25	205.98	ft msl
pH	5.7	5	4.8	5.2	pH
Sp. Conductance	45	40	44	40	uS/cm
Water temperature	18.7	20.3	18.4	21.6	deg. C
Alkalinity as CaCO3	4	5	0	0	mg/L
Turbidity	.4	.7	.7	.5	NTU
Volumes purged	2.50	3.05	3.59	2.92	well volume
Sampling code					
Synchronous water level	208.1 (03/21/00)	208.3 (09/23/00)	206.7 (03/29/01)	206 (09/24/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

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ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
	Inorganics																
	barium, total recoverable	46			14.2	J	I	<16.2	U	V	16.1			1	GE	2000	ug/L
	cyanide																
	lead, total recoverable	10.5	J	I	<20	U		<47	U		<24	U		1	WA	15	ug/L
	nickel, total recoverable	<60	U		<60	U										100	ug/L
	selenium, total recoverable	<40	U		<40	U										50	ug/L
	Organics																
	chlorobenzene	<10	U		<5	U		<5	U		<50	U		10	WA	5	ug/L
	1,1-dichloroethane	<10	U		<5	U		<5	U		<50	U		10	WA	5	ug/L
	1,1-dichloroethylene	<10	U		<5	U		<5	U		<50	U		10	WA	7	ug/L
	trans-1,2-dichloroethylene				<5	U		<5	U		<50	U		10	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<10	U		<5	U		<5	U		<50	U		10	WA	5	ug/L
+	tetrachloroethylene	10.3	J	K	***9.3***			***8.64***			7.74	J	Q	1	GE	5	ug/L
	1,1,1-trichloroethane	<10	U		<5	U		<5	U		<50	U		10	WA	200	ug/L
+	trichloroethylene	1690	J	K	***1630***			***1370***			***1350***			10	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
	Inorganics																
	aluminum, total recoverable	<200	U		<200	U		<40	U		<322	U		1	WA	100	ug/L
+	nitrate-nitrite as nitrogen	2240			***3120***			***3290***			***3000***			2	GE	2400	ug/L
	sodium, total recoverable	2640			2890			3030			2820			1	GE	4600	ug/L
	sulfate	315	J	I	243											3000	ug/L
	Radionuclides																
	gross alpha	2.02			1.36	J	I	1.83	J	I	.744	U		1	GE	15	pCi/L
	nonvolatile beta	1.91			1.26	U		2.9	J	I	1.25	J	I	1	GE	50	pCi/L
	radium, total alpha-emitting	.41			.2	U		1.6	J	IL	1.37	J	I	1	SC	5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-2. Groundwater Monitoring Results for Point-of-Compliance Wells, M-Area HWMF (Cont.)

WELL MSB 1C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 101832.4 E 48512.7	33.33013 Deg N -81.7369 Deg W	166 - 161.3 ft msl	355.1 ft msl	4 " PVC	S	UL

SAMPLE DATE	02/28/00	08/08/00	02/12/01	08/30/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	214.52	213.34	213.05	211.81	ft msl
pH	10	6.9	6.6	10.1	pH
Sp. Conductance	207	162	171	244	uS/cm
Water temperature	17.5	22.6	18.5	25.7	deg. C
Alkalinity as CaCO3	32	25	24	15	mg/L
Turbidity	.6	.3	.7	2.2	NTU
Volumes purged	0	2.15	2.25	1.06	well volume
Sampling code	NX			X	
Synchronous water level	214.4 (03/21/00)	214.1 (09/23/00)	212.8 (03/29/01)	211.8 (09/24/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
	Inorganics																
	barium, total recoverable	5.13	J	I	35.8			38.5			29.2			1	WA	2000	ug/L
	cyanide																
	lead, total recoverable	<20	U		<20	U		<47	U		<24	U		1	WA	15	ug/L
	nickel, total recoverable	<60	U		<60	U										100	ug/L
	selenium, total recoverable	<40	U		<40	U										50	ug/L
	Organics																
	chlorobenzene	<2	U		<5	U		<5	U		<50	U		10	WA	5	ug/L
	1,1-dichloroethane	<2	U		<5	U		<5	U		<50	U		10	WA	5	ug/L
	1,1-dichloroethylene	3.76	J	K	3.1	J	I	3.23	J	IK	<50	U		10	WA	7	ug/L
	trans-1,2-dichloroethylene				<5	U		<5	U		<50	U		10	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<2	U		<5	U		<5	U		<50	U		10	WA	5	ug/L
+	tetrachloroethylene	304	J	K	***657***			1670	J	K	***929***			10	WA	5	ug/L
	1,1,1-trichloroethane	<2	U		<5	U		<5	U		<50	U		10	WA	200	ug/L
+	trichloroethylene	152	J	K	***434***			1470	J	K	***938***			10	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
	Inorganics																
+	aluminum, total recoverable	***1770***			***1820***			8.17	J	I	194	J	I	1	WA	100	ug/L
+	nitrate-nitrite as nitrogen	***11700***			***9410***			***11600***			***9480***			20	WA	2400	ug/L
+	sodium, total recoverable	***22600***			***18700***			***16100***			***13500***			1	WA	4600	ug/L
	sulfate	2750			2870											3000	ug/L
	Radionuclides																
	gross alpha	2.91			.939	U		1.84	J	I	.447	U		1	SC	15	pCi/L
	nonvolatile beta	10.9			5.97	J	K	3.69			1.83	U		1	SC	50	pCi/L
	radium, total alpha-emitting	.72			.3	U		.647	J	IL	.866	U		1	SC	5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-2. Groundwater Monitoring Results for Point-of-Compliance Wells, M-Area HWMF (Cont.)

WELL MSB 1D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 101833.4 E 48452.2	33.33003 Deg N -81.7371 Deg W	229.8 - 210.4 ft msl	354.8 ft msl	4 " PVC	S	M

SAMPLE DATE	03/27/00	09/01/00	02/12/01	08/30/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	228.67	227.4	226.28	224.99	ft msl
pH	5.4	5	5.1	4.8	pH
Sp. Conductance	39	41	35	35	uS/cm
Water temperature	21.5	22.3	18.8	21.8	deg. C
Alkalinity as CaCO3	2	0	0	0	mg/L
Turbidity	5.1	1.6	.6	.7	NTU
Volumes purged	4.89	4.08	3.50	2.97	well volume
Sampling code	NX				
Synchronous water level	228.5 (03/21/00)	227.2 (09/23/00)	226.2 (03/29/01)	225 (09/24/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
	Inorganics																
	barium, total recoverable	13.8	J	I	13.5	J	I	<11.3	U	V	10.2			1	WA	2000	ug/L
	cyanide	<5.2	U	V	<20	U		<15.2	U		<33	U		1	WA	40	ug/L
	lead, total recoverable	<5.83	JU	V	<13.4	U	V	<47	U		4.4	J	I	1	WA	15	ug/L
	nickel, total recoverable	<60	U		23.9	J	I	<26	U		<.95	UJ		1	WA	100	ug/L
	selenium, total recoverable	<40	U		<40	U		<66	U		<31	U		1	WA	50	ug/L
	Organics																
	chlorobenzene	<5	U		<1	JU	L	<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethane	<5	U		<1	JU	L	<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<5	U		<1	JU	L	<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene	<5	U		<1	JU	L	<5	U		<5	U		1	WA	100	ug/L
	pcb 1016	<.971	JU	Q	<.943	U		<1	U		<2.33	UJ	Q	1	WA	.5	ug/L
	pcb 1221	<.971	JU	Q	<.943	U		<2	U		<4.65	UJ	Q	1	WA	.5	ug/L
	pcb 1232	<.971	JU	Q	<.943	U		<1	U		<2.33	UJ	Q	1	WA	.5	ug/L
	pcb 1242	<.971	JU	Q	<.943	U		<1	U		<2.33	UJ	Q	1	WA	.5	ug/L
	pcb 1248	<.971	JU	Q	<.943	U		<1	U		<2.33	UJ	Q	1	WA	.5	ug/L
	pcb 1254	<.971	JU	Q	<.943	U		<1	U		<2.33	UJ	Q	1	WA	.5	ug/L
	pcb 1260	<.971	JU	Q	<.943	U		<1	U		<2.33	UJ	Q	1	WA	.5	ug/L
	1,1,2,2-tetrachloroethane	<5	U		<1	JU	L	<5	U		<5	U		1	WA	5	ug/L
+	tetrachloroethylene	***17.8***			<1	JU	L	1.52	J	I	1.44	J	I	1	WA	5	ug/L
	1,1,1-trichloroethane	<5	U		<1	JU	L	<5	U		<5	U		1	WA	200	ug/L
+	trichloroethylene	***17.3***			<1	JU	L	2.23	J	I	<5	U		1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
	Inorganics																
+	aluminum, total recoverable	<200	U		<200	U		***12000***			91.7	J	I	1	WA	100	ug/L
+	nitrate-nitrite as nitrogen	2290			***2490***			2270	J	K	1890			2	WA	2400	ug/L
+	sodium, total recoverable	***5320***			4100			3760			3280			1	WA	4600	ug/L
	sulfate	192	J	I	278											3000	ug/L
	Radionuclides																
	gross alpha	11			5.84			8.43			3.79	J	I	1	SC	15	pCi/L
	nonvolatile beta	7.29			2.63			4.16			-1.2	U	V	1	SC	50	pCi/L
+	radium, total alpha-emitting	2.41			1.4			4.27			***5.39***			1	SC	5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-2. Groundwater Monitoring Results for Point-of-Compliance Wells, M-Area HWMF (Cont.)

WELL MSB 2B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 101997.9 E 48748.2	33.33088 Deg N -81.7366 Deg W	150.3 - 145.6 ft msl	354.6 ft msl	4 " PVC	S	LL

SAMPLE DATE	02/28/00	08/08/00	02/12/01	08/30/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	209.45	208.32	208.25	210.82	ft msl
pH	9.9	10.3	11.5	11.6	pH
Sp. Conductance	3740	2675	1392	3214	uS/cm
Water temperature	18.1	22.2	13.6	24.6	deg. C
Alkalinity as CaCO3	771	548	268	0	mg/L
Turbidity	.6	.4	1.5	.3	NTU
Volumes purged	0	.024	0	.867	well volume
Sampling code	NX	NX	NX	X	
Synchronous water level	209.3 (03/21/00)	209.4 (09/23/00)	207.9 (03/29/01)	206.8 (09/24/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable	115			628			166			338			1	WA	2000	ug/L
	cyanide				<10	U										40	ug/L
+	lead, total recoverable	<4.24	JU		<1.17	JU		***80***			3.6	J	I	1	WA	15	ug/L
	nickel, total recoverable	<60	U		<50	U										100	ug/L
	selenium, total recoverable	<40	U		<7.58	U	V									50	ug/L
Organics																	
	chlorobenzene	<50	U		<50	U		<5	U		<100	U		20	WA	5	ug/L
	1,1-dichloroethane	<50	U		<50	U		<5	U		<100	U		20	WA	5	ug/L
	1,1-dichloroethylene	<50	U		<50	U		1.1	J	IK	<100	U		20	WA	7	ug/L
	trans-1,2-dichloroethylene				<50	U		3.49	J	IK	<100	U		20	WA	100	ug/L
	pcb 1016				<.98	U										.5	ug/L
	pcb 1221				<.98	U										.5	ug/L
	pcb 1232				<.98	U										.5	ug/L
	pcb 1242				<2	U										.5	ug/L
	pcb 1248				<.98	U										.5	ug/L
	pcb 1254				<.98	U										.5	ug/L
	pcb 1260				<.98	U										.5	ug/L
	1,1,2,2-tetrachloroethane	<50	U		<50	U		<5	U		<100	U		20	WA	5	ug/L
+	tetrachloroethylene	13500	J	K	***13000***			7170	J	K	***10900***			100	WA	5	ug/L
	1,1,1-trichloroethane	<50	U		<50	U		1.38	J	IK	<100	U		20	WA	200	ug/L
+	trichloroethylene	16800	J	K	***13000***			6470	J	K	***8990***			100	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
+	aluminum, total recoverable	***1030***			***1100***			***1270***			***1200***			1	WA	100	ug/L
+	nitrate-nitrite as nitrogen	***4340***			***5250***			***4430***			***3880***			10	WA	2400	ug/L
+	sodium, total recoverable	***53700***			***61000***			***56400***			***28900***			1	WA	4600	ug/L
	sulfate	1660			1780											3000	ug/L
Radionuclides																	
	gross alpha	9.79			7.09			8.32	U		2.02	U		1	SC	15	pCi/L
+	nonvolatile beta	***59.46***			36.6			47.3			17.8			1	SC	50	pCi/L
	radium, total alpha-emitting	3.35			3.1			4.14	J	L	3.47			1	SC	5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-2. Groundwater Monitoring Results for Point-of-Compliance Wells, M-Area HWMF (Cont.)

WELL MSB 2C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 101982.5 E 48749.3	33.33085 Deg N -81.7366 Deg W	194.7 - 190 ft msl	354.7 ft msl	4 " PVC	S	UL

SAMPLE DATE	02/28/00	08/08/00	02/12/01	08/30/01	
FIELD DATA					
Parameter	**1Q00**	**3Q00**	**1Q01**	**3Q01**	**Unit**
Water Elevation	215.68	214.44	214.16	212.76	ft msl
pH	10.4	7	5.9	10.4	pH
Sp. Conductance	940	154	145	247	uS/cm
Water temperature	17.5	23.1	19.5	25.8	deg. C
Alkalinity as CaCO3	168	22	7	0	mg/L
Turbidity	1.7	.7	.8	.9	NTU
Volumes purged	0	2.20	2.42	.676	well volume
Sampling code	NX			X	
Synchronous water level	215.5 (03/21/00)	215.3 (09/23/00)	214.2 (03/29/01)	212.7 (09/24/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable	20.8			62.8			53.3			53.2			1	WA	2000	ug/L
	cyanide				<10	U										40	ug/L
	lead, total recoverable	<20	U		<10	U		<47	U		<24	U		1	WA	15	ug/L
	nickel, total recoverable	<60	U		<50	U										100	ug/L
	selenium, total recoverable	<40	U		<10	U										50	ug/L
Organics																	
	chlorobenzene	<100	U		<250	JU	L	2.91	J	I	<125	U		25	WA	5	ug/L
	1,1-dichloroethane	<100	U		<250	JU	L	<5	U		<125	U		25	WA	5	ug/L
	1,1-dichloroethylene	<100	U		<250	JU	L	<5	U		<125	U		25	WA	7	ug/L
	trans-1,2-dichloroethylene				<250	JU	L	<5	U		<125	U		25	WA	100	ug/L
	pcb 1016				<.97	U										.5	ug/L
	pcb 1221				<.97	U										.5	ug/L
	pcb 1232				<.97	U										.5	ug/L
	pcb 1242				<1.9	U										.5	ug/L
	pcb 1248				<.97	U										.5	ug/L
	pcb 1254				<.97	U										.5	ug/L
	pcb 1260				<.97	U										.5	ug/L
+	1,1,2,2-tetrachloroethane	<100	U		<250	JU	L	***5.13***			<125	U		25	WA	5	ug/L
+	tetrachloroethylene	22200	J	K	***39000***			***40500***			***11800***			100	WA	5	ug/L
	1,1,1-trichloroethane	<100	U		<250	JU	L	<5	U		<125	U		25	WA	200	ug/L
+	trichloroethylene	14200	J	K	***25000***			***25900***			***7250***			100	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
+	aluminum, total recoverable	***727***			<200	U		86.4	J	I	***402***			1	WA	100	ug/L
+	nitrate-nitrite as nitrogen	***7830***			***15300***			***13200***			***7570***			10	WA	2400	ug/L
+	sodium, total recoverable	***20300***			***13000***			***12500***			***10300***			1	WA	4600	ug/L
	sulfate	811			337											3000	ug/L
Radionuclides																	
	gross alpha	6.05			3.31			4.42			-.111	U	V	1	SC	15	pCi/L
	nonvolatile beta	11.74			4.37			3.74			2.09	U		1	SC	50	pCi/L
	radium, total alpha-emitting	1.65			3.7			2.77	J	L	2.32	J	I	1	SC	5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-2. Groundwater Monitoring Results for Point-of-Compliance Wells, M-Area HWMF (Cont.)

WELL MSB 2D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 102014 E 48755.7	33.33093 Deg N -81.7366 Deg W	230.1 - 210.7 ft msl	353.8 ft msl	4 " PVC	S	M

SAMPLE DATE	02/28/00	09/27/00	02/12/01	08/30/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	229.04	227.55	226.8	225.55	ft msl
pH	5.5	4.7	4.8	4.6	pH
Sp. Conductance	36	38	37	42	uS/cm
Water temperature	18.6	19.3	18.2	22.8	deg. C
Alkalinity as CaCO3	2	0	0	0	mg/L
Turbidity	1.3	.8	.8	.9	NTU
Volumes purged	2.27	4.21	4.22	2.81	well volume
Sampling code					
Synchronous water level	229 (03/21/00)	227.7 (09/23/00)	226.9 (03/29/01)	225.4 (09/24/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
	Inorganics																
	barium, total recoverable	12	J	I	12.4			<13.2	U	V	13			1	WA	2000	ug/L
+	cyanide	<20	U		<10	U		***46.8***			<33	U		1	WA	40	ug/L
	lead, total recoverable	<20	U		<10	U		44.9	J	I	2.7	J	I	1	WA	15	ug/L
	nickel, total recoverable	<60	U		<50	U		4.5	J	I	<1.4	UJ		1	WA	100	ug/L
	selenium, total recoverable	<40	U		<4.54	JU		<66	U		<31	U		1	WA	50	ug/L
	Organics																
	chlorobenzene	<2	U		<5	JU	L	<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethane	<2	U		<5	JU	L	<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	1.34	J	IK	<5	JU	L	<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene				<5	JU	L	<5	U		<5	U		1	WA	100	ug/L
	pcb 1016	<1	JU		<.96	U		<1.03	U		<1.02	UJ	Q	1	WA	.5	ug/L
	pcb 1221	<1	JU		<.96	U		<2.06	U		<2.04	UJ	Q	1	WA	.5	ug/L
	pcb 1232	<1	JU		<.96	U		<1.03	U		<1.02	UJ	Q	1	WA	.5	ug/L
	pcb 1242	<1	JU		<1.9	U		<1.03	U		<1.02	UJ	Q	1	WA	.5	ug/L
	pcb 1248	<1	JU		<.96	U		<1.03	U		<1.02	UJ	Q	1	WA	.5	ug/L
	pcb 1254	<1	JU		<.96	U		<1.03	U		<1.02	UJ	Q	1	WA	.5	ug/L
	pcb 1260	<1	JU		<.96	U		<1.03	U		<1.02	UJ	Q	1	WA	.5	ug/L
	1,1,2,2-tetrachloroethane	<2	U		<5	JU	L	<5	U		<5	U		1	WA	5	ug/L
+	tetrachloroethylene	599	J	K	12	J	L	***12.5***			9.1	J	K	1	WA	5	ug/L
	1,1,1-trichloroethane	20.6	J	K	<5	JU	L	<5	U		<5	U		1	WA	200	ug/L
+	trichloroethylene	84.8	J	K	36	J	L	***37.4***			38.1	J	K	1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
	Inorganics																
+	aluminum, total recoverable	***710***			115	J	I	<125	U	V	118	J	I	1	WA	100	ug/L
+	nitrate-nitrite as nitrogen	1800			***2450***			2250			***2720***			5	WA	2400	ug/L
	sodium, total recoverable	2480		V	2100			1950			2000			1	WA	4600	ug/L
	sulfate	246	J	I	<400	U										3000	ug/L
	Radionuclides																
+	gross alpha	***18.14***			7.49			8.75			3.94	J	I	1	SC	15	pCi/L
	nonvolatile beta	15.36			2.83	J	I	2.88	J	I	.704	U		1	SC	50	pCi/L
+	radium, total alpha-emitting	3.14		V	4.9			***6.37***			***8.6***			1	SC	5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-2. Groundwater Monitoring Results for Point-of-Compliance Wells, M-Area HWMF (Cont.)

WELL MSB 3B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 102191.7 E 48568	33.33101 Deg N -81.7375 Deg W	145.8 - 141.1 ft msl	361 ft msl	4 " PVC	S	LL

SAMPLE DATE	02/28/00	08/08/00	02/13/01	08/31/01	
FIELD DATA					
Parameter	**1Q00**	**3Q00**	**1Q01**	**3Q01**	**Unit**
Water Elevation	*Not Applicable*	241.2	240.95	*Not Applicable*	ft msl
pH	7.2	6.3	9.9	6.8	pH
Sp. Conductance	65	41	143	55	uS/cm
Water temperature	18.8	21.4	13.7	20.7	deg. C
Alkalinity as CaCO3	8	6	90	4	mg/L
Turbidity	.9	.2	1.8	.3	NTU
Volumes purged		3.57	2.11		well volume
Sampling code					
Synchronous water level	( )	( )	( )	( )	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable	<15	U		14	J	I	30.1			15.6			1	WA	2000	ug/L
	cyanide																
	lead, total recoverable	<5.8	JU		<20	U		<47	U		<24	U		1	WA	15	ug/L
	nickel, total recoverable	<60	U		<60	U										100	ug/L
	selenium, total recoverable	<40	U		<40	U										50	ug/L
Organics																	
	chlorobenzene	<5	U		<10	U		<5	U		<50	U		10	WA	5	ug/L
	1,1-dichloroethane	<5	U		<10	U		<5	U		<50	U		10	WA	5	ug/L
	1,1-dichloroethylene	<5	U		<10	U		<5	U		<50	U		10	WA	7	ug/L
	trans-1,2-dichloroethylene				<10	U		<5	U		<50	U		10	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<5	U		<10	U		<5	U		<50	U		10	WA	5	ug/L
+	tetrachloroethylene	551	J	K	***356***			***2310***			***911***			10	WA	5	ug/L
	1,1,1-trichloroethane	<5	U		<10	U		<5	U		<50	U		10	WA	200	ug/L
+	trichloroethylene	1730	J	K	***1310***			***3110***			***2920***		L	10	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable	<200	U		<200	U		<40	U		<322	U		1	WA	100	ug/L
	nitrate-nitrite as nitrogen	1340			1130			1170			1520			2	WA	2400	ug/L
	sodium, total recoverable	2760			2600			2490			2450			1	WA	4600	ug/L
	sulfate	706			443											3000	ug/L
Radionuclides																	
	gross alpha	1.21			.6	J	I	.861	J	I	-1.62	U	V	1	SC	15	pCi/L
	nonvolatile beta	2.36			1.39	J	I	1.3	U		-.537	U	V	1	SC	50	pCi/L
	radium, total alpha-emitting	.25	U	W	.4	U		.631	J	IL	1.53	J	I	1	SC	5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-2. Groundwater Monitoring Results for Point-of-Compliance Wells, M-Area HWMF (Cont.)

WELL MSB 3C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 102189.6 E 48538.5	33.33096 Deg N -81.7375 Deg W	193.7 - 189.0 ft msl	360.8 ft msl	4 " PVC	S	UL

SAMPLE DATE	02/28/00	08/09/00	02/13/01	08/31/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	217.3	216.1	215.75	213.84	ft msl
pH	9	11.7	11.6	10.9	pH
Sp. Conductance	1852	1790	1770	2062	uS/cm
Water temperature	19.1	22.7	14.8	23.7	deg. C
Alkalinity as CaCO3	380	286	346	314	mg/L
Turbidity	1	.8	.9	1	NTU
Volumes purged	0	0	2.06	.432	well volume
Sampling code	NX	NX		X	
Synchronous water level	217.2 (03/21/00)	216.8 (09/23/00)	215.8 (03/29/01)	214.2 (09/24/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
	Inorganics																
	barium, total recoverable	149			333			356			491			1	WA	2000	ug/L
	cyanide																
	lead, total recoverable	<20	U		<20	U		8.1	J	I	6.7	J	I	1	WA	15	ug/L
	nickel, total recoverable	<60	U		<60	U										100	ug/L
	selenium, total recoverable	<40	U		<40	U										50	ug/L
	Organics																
	chlorobenzene	<200	U		<200	JU	L	4.12	J	I	<125	U		25	WA	5	ug/L
	1,1-dichloroethane	<200	U		<200	JU	L	<5	U		<125	U		25	WA	5	ug/L
	1,1-dichloroethylene	<200	U		<200	JU	L	5.86			<125	U		25	WA	7	ug/L
	trans-1,2-dichloroethylene				<200	JU	L	30.3			44.2	J	I	25	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<200	U		<200	JU	L	<5	U		<125	U		25	WA	5	ug/L
+	tetrachloroethylene	45800	J	K	60200	J	L	***47700***			***43200***			250	WA	5	ug/L
	1,1,1-trichloroethane	<200	U		<200	JU	L	2.3	J	I	<125	U		25	WA	200	ug/L
+	trichloroethylene	17200	J	K	17300	J	L	***17800***			***18800***			250	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
	Inorganics																
+	aluminum, total recoverable	***3550***			***3400***			***3140***			***2840***			1	WA	100	ug/L
+	nitrate-nitrite as nitrogen	2300			2210			***4740***			***8520***			20	WA	2400	ug/L
+	sodium, total recoverable	***40400***			***20000***			***18700***			***16900***			1	WA	4600	ug/L
	sulfate	1250			1140											3000	ug/L
	Radionuclides																
	gross alpha	9.18			2.9			6.31	U		-.725	U	V	1	SC	15	pCi/L
+	nonvolatile beta	***64.48***			24.9			19.4	J	I	12.6			1	SC	50	pCi/L
	radium, total alpha-emitting	1.89			2.2			1.56	J	IL	3.37			1	SC	5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-2. Groundwater Monitoring Results for Point-of-Compliance Wells, M-Area HWMF (Cont.)

WELL MSB 4B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 101978.3 E 48312.8	33.33013 Deg N -81.7377 Deg W	143.1 - 138.4 ft msl	355.3 ft msl	4 " PVC	S	LL

SAMPLE DATE	02/28/00	08/10/00	02/13/01	09/04/01	
FIELD DATA					
Parameter	**1Q00**	**3Q00**	**1Q01**	**3Q01**	**Unit**
Water Elevation	206.7	206.12	206.55	204.39	ft msl
pH	6.1	5	7.6	5.3	pH
Sp. Conductance	26	26	27	27	uS/cm
Water temperature	19.1	21.3	17.8	20.4	deg. C
Alkalinity as CaCO3	6	0	7	0	mg/L
Turbidity	.4	.7	1.2	.2	NTU
Volumes purged	2.42	3.00	2.13	2.15	well volume
Sampling code					
Synchronous water level	206.6 (03/21/00)	207.5 (09/23/00)	205.9 (03/29/01)	207.5 (09/24/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable	<15	U		12.2	J	I	10.4			9.9			1	WA	2000	ug/L
	cyanide										<33	U		1	WA	40	ug/L
	lead, total recoverable	<4.96	JU		<20	U		<47	U		3.1	J	I	1	WA	15	ug/L
	nickel, total recoverable	<60	U		<60	U					<1.3	UJ		1	WA	100	ug/L
	selenium, total recoverable	<40	U		9.62	J	I				<31	U		1	WA	50	ug/L
Organics																	
	chlorobenzene	<10	U		<5	U		<50	U		<50	U		10	WA	5	ug/L
	1,1-dichloroethane	<10	U		<5	U		<50	U		<50	U		10	WA	5	ug/L
	1,1-dichloroethylene	<10	U		<5	U		<50	U		<50	U		10	WA	7	ug/L
	trans-1,2-dichloroethylene				<5	U		<50	U		<50	U		10	WA	100	ug/L
	pcb 1016										<1.04	UJ	Q	1	WA	.5	ug/L
	pcb 1221										<2.08	UJ	Q	1	WA	.5	ug/L
	pcb 1232										<1.04	UJ	Q	1	WA	.5	ug/L
	pcb 1242										<1.04	UJ	Q	1	WA	.5	ug/L
	pcb 1248										<1.04	UJ	Q	1	WA	.5	ug/L
	pcb 1254										<1.04	UJ	Q	1	WA	.5	ug/L
	pcb 1260										<1.04	UJ	Q	1	WA	.5	ug/L
	1,1,2,2-tetrachloroethane	<10	U		<5	U		<50	U		<50	U		10	WA	5	ug/L
+	tetrachloroethylene	62.7	J	K	***73***			***85.5***			***68.2***			10	WA	5	ug/L
	1,1,1-trichloroethane	<10	U		<5	U		<50	U		<50	U		10	WA	200	ug/L
+	trichloroethylene	1120	J	K	***1200***			***1000***			***868***			10	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable	<200	U		<200	U		<40	U		42.5	J	I	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	1110			1200			1500			1320			2	WA	2400	ug/L
	sodium, total recoverable	2190			2000			2210			2260			1	WA	4600	ug/L
	sulfate	569			548											3000	ug/L
Radionuclides																	
	gross alpha	1.61			.0354	U		1.51	J	I	.2	U		1	SC	15	pCi/L
	nonvolatile beta	3.06			2.06	J	I	1.07	U		1.31	U		1	SC	50	pCi/L
	radium, total alpha-emitting	.33			.6	J	I	.196	JU	L	.019	U		1	SC	5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-2. Groundwater Monitoring Results for Point-of-Compliance Wells, M-Area HWMF (Cont.)

WELL MSB 4C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 101963.2 E 48313.6	33.33009 Deg N -81.7377 Deg W	168.1 - 163.3 ft msl	355.2 ft msl	4 " PVC	S	UL

SAMPLE DATE	02/28/00	08/10/00	02/13/01	09/04/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	213.12	212.37	211.95	210.27	ft msl
pH	8.9	5.8	10.2	5.9	pH
Sp. Conductance	415	191	267	196	uS/cm
Water temperature	19.2	21.5	16.6	22.2	deg. C
Alkalinity as CaCO3	32	2	65	13	mg/L
Turbidity	.7	.7	.9	.4	NTU
Volumes purged	0	2.65	2.11	2.09	well volume
Sampling code	NX				
Synchronous water level	213 (03/21/00)	213 (09/23/00)	212 (03/29/01)	211.5 (09/24/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP EPA	3Q00	CLP EPA	1Q01	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
	Inorganics												
	barium, total recoverable	142		68.1		104		66.8		1	WA	2000	ug/L
	cyanide							<33	U	1	WA	40	ug/L
	lead, total recoverable	<20	U	<20	U	<47	U	<24	U	1	WA	15	ug/L
	nickel, total recoverable	<60	U	<60	U			<1.4	UJ	1	WA	100	ug/L
	selenium, total recoverable	<40	U	<40	U			<31	U	1	WA	50	ug/L
	Organics												
	chlorobenzene	<50	U	<50	JU L	1.04	J I	<500	U	100	WA	5	ug/L
	1,1-dichloroethane	<50	U	<50	JU L	<5	U	<500	U	100	WA	5	ug/L
+	1,1-dichloroethylene	<50	U	<50	JU L	***28.2***		<500	U	100	WA	7	ug/L
	trans-1,2-dichloroethylene			<50	JU L	<5	U	<500	U	100	WA	100	ug/L
	pcb 1016							<1.09	UJ Q	1	WA	.5	ug/L
	pcb 1221							<2.17	UJ Q	1	WA	.5	ug/L
	pcb 1232							<1.09	UJ Q	1	WA	.5	ug/L
	pcb 1242							<1.09	UJ Q	1	WA	.5	ug/L
	pcb 1248							<1.09	UJ Q	1	WA	.5	ug/L
	pcb 1254							<1.09	UJ Q	1	WA	.5	ug/L
	pcb 1260							<1.09	UJ Q	1	WA	.5	ug/L
	1,1,2,2-tetrachloroethane	<50	U	<50	JU L	<5	U	<500	U	100	WA	5	ug/L
+	tetrachloroethylene	7050	J K	19400	J L	***10000***		***12900***		100	WA	5	ug/L
	1,1,1-trichloroethane	<50	U	<50	JU L	<5	U	<500	U	100	WA	200	ug/L
+	trichloroethylene	10300	J K	16900	J L	***10700***		***10600***		100	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP EPA	3Q99	CLP EPA	3Q00	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
	Inorganics												
	aluminum, total recoverable	<200	U	<200	U	<40	U	65.1	J I	1	WA	100	ug/L
+	nitrate-nitrite as nitrogen	***17700***		***18800***		***18200***		***17800***		50	WA	2400	ug/L
+	sodium, total recoverable	***16800***		***15000***		***16300***		***15300***		1	WA	4600	ug/L
	sulfate	292	J I	239								3000	ug/L
	Radionuclides												
	gross alpha	10.78		2.93		3.47	J I	1.72	U	1	SC	15	pCi/L
	nonvolatile beta	25.95		7.03		6.98		5.87	J I	1	SC	50	pCi/L
	radium, total alpha-emitting	2.1		2		2.22	J L	3.33	J I	1	SC	5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-2. Groundwater Monitoring Results for Point-of-Compliance Wells, M-Area HWMF (Cont.)

WELL MSB 4D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 102007.4 E 48311.7	33.33019 Deg N -81.7378 Deg W	228.4 - 209 ft msl	355.5 ft msl	4 " PVC	S	M

SAMPLE DATE	02/28/00	08/10/00	02/13/01	09/04/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	227.85	226.85	225.45	223.95	ft msl
pH	5.4	4.7	6.8	4.9	pH
Sp. Conductance	53	53	83	55	uS/cm
Water temperature	19.3	21.5	16	21.8	deg. C
Alkalinity as CaCO3	2	0	5	0	mg/L
Turbidity	.9	.4	1.7	.1	NTU
Volumes purged	3.45	5.56	2.08	2.50	well volume
Sampling code					
Synchronous water level	227.7 (03/21/00)	226.4 (09/23/00)	225.3 (03/29/01)	224.1 (09/24/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable	5.55	J	I	13.1	J	I	14.8			15.8			1	WA	2000	ug/L
	cyanide	8.2	J	IL	<20	U		<15.2	U		<33	U		1	WA	40	ug/L
	lead, total recoverable	<20	U		<20	U		9.5	J	I	3.9	J	I	1	WA	15	ug/L
	nickel, total recoverable	<60	U		<60	U		<26	U		2.5	J	I	1	WA	100	ug/L
	selenium, total recoverable	<40	U		<40	U		<66	U		<31	U		1	WA	50	ug/L
Organics																	
	chlorobenzene	<1	U		<1	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethane	<1	U		<1	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<1	U		<1	U		<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene				<1	U		<5	U		<5	U		1	WA	100	ug/L
	pcb 1016	<1	JU		<.976	JU	Q	<1.01	JU	Q	<1.02	UJ	Q	1	WA	.5	ug/L
	pcb 1221	<1	JU		<.976	JU	Q	<2.02	JU	Q	<2.04	UJ	Q	1	WA	.5	ug/L
	pcb 1232	<1	JU		<.976	JU	Q	<1.01	JU	Q	<1.02	UJ	Q	1	WA	.5	ug/L
	pcb 1242	<1	JU		<.976	JU	Q	<1.01	JU	Q	<1.02	UJ	Q	1	WA	.5	ug/L
	pcb 1248	<1	JU		<.976	JU	Q	<1.01	JU	Q	<1.02	UJ	Q	1	WA	.5	ug/L
	pcb 1254	<1	JU		<.976	JU	Q	<1.01	JU	Q	<1.02	UJ	Q	1	WA	.5	ug/L
	pcb 1260	<1	JU		<.976	JU	Q	<1.01	JU	Q	<1.02	UJ	Q	1	WA	.5	ug/L
	1,1,2,2-tetrachloroethane	<1	U		<1	U		<5	U		<5	U		1	WA	5	ug/L
+	tetrachloroethylene	53.5	J	K	***34.5***			***43.6***			***25.9***			1	WA	5	ug/L
	1,1,1-trichloroethane	<1	U		<1	U		<5	U		<5	U		1	WA	200	ug/L
+	trichloroethylene	85.6	J	K	***70.4***			***61***			***56.8***			1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
+	aluminum, total recoverable	111	J	I	130	J	I	***149***			223	J	I	1	WA	100	ug/L
+	nitrate-nitrite as nitrogen	***2570***			***4520***			***3530***			***4220***			10	WA	2400	ug/L
	sodium, total recoverable	3730		V	4400			4140			3920			1	WA	4600	ug/L
	sulfate	1480	J	K	1540											3000	ug/L
Radionuclides																	
+	gross alpha	***15.41***			4.79			6.21			6.71	J	I	1	SC	15	pCi/L
	nonvolatile beta	17.84	J		4.46			3.97	J	I	3.07	J	I	1	SC	50	pCi/L
+	radium, total alpha-emitting	1.41		V	4.4			3.37	J	L	***6.94***			1	SC	5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-2. Groundwater Monitoring Results for Point-of-Compliance Wells, M-Area HWMF (Cont.)

WELL MSB 5A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 101971.5 E 46998.7	33.32796 Deg N -81.7412 Deg W	247.2 - 217.2 ft msl	344.6 ft msl	4 " PVC	S	M

SAMPLE DATE	02/24/00	08/09/00	02/23/01	09/10/01	
FIELD DATA					
Parameter	**1Q00**	**3Q00**	**1Q01**	**3Q01**	**Unit**
Water Elevation	226.3	225.11	232.8	222.09	ft msl
pH	4.5	5.3	5.6	6	pH
Sp. Conductance	27	27	34	42	uS/cm
Water temperature	18.7	23.6	14.1	21.7	deg. C
Alkalinity as CaCO3	0	1	88	13	mg/L
Turbidity	.6	.7	2.3	1.5	NTU
Volumes purged	4.80	5.34	2.08	2.60	well volume
Sampling code					
Synchronous water level	226.2 (03/21/00)	224.6 (09/23/00)	223.4 (03/29/01)	221.8 (09/24/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable	<15	U		<15	U		3.7			3.3	J	I	1	WA	2000	ug/L
	cyanide	<20	U		<20	U		<15.2	U		<33	U		1	WA	40	ug/L
	lead, total recoverable	<9.84	JU	IV	<20	U		9	J	I	6.9	J	I	1	WA	15	ug/L
	nickel, total recoverable	<60	U		<60	U		<26	U		4.7			1	WA	100	ug/L
	selenium, total recoverable	<40	U		<40	U		<66	U		<31	U		1	WA	50	ug/L
Organics																	
	chlorobenzene	<1	U		<1	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethane	<1	U		<1	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<1	U		<1	U		<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	U		<1	U		<5	U		<5	U		1	WA	100	ug/L
	pcb 1016										<1.04	UJ	Q	1	WA	.5	ug/L
	pcb 1221										<2.08	UJ	Q	1	WA	.5	ug/L
	pcb 1232										<1.04	UJ	Q	1	WA	.5	ug/L
	pcb 1242										<1.04	UJ	Q	1	WA	.5	ug/L
	pcb 1248										<1.04	UJ	Q	1	WA	.5	ug/L
	pcb 1254										<1.04	UJ	Q	1	WA	.5	ug/L
	pcb 1260										<1.04	UJ	Q	1	WA	.5	ug/L
	1,1,2,2-tetrachloroethane	<1	U		<1	U		<5	U		<5	U		1	WA	5	ug/L
+	tetrachloroethylene	<1	U		<1	U		<5	U		***6.9***			1	WA	5	ug/L
	1,1,1-trichloroethane	<1	U		<1	U		<5	U		<5	U		1	WA	200	ug/L
+	trichloroethylene	<1	U		<1	U		1	J	I	***9.52***			1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable	99.9	J	I	<200	U		<15.1	U	V	<322	U		1	WA	100	ug/L
	nitrate-nitrite as nitrogen	1530			1290			1530			1860			5	WA	2400	ug/L
+	sodium, total recoverable	***5550***			3700			3550			***6050***			1	WA	4600	ug/L
	sulfate	822			701											3000	ug/L
Radionuclides																	
	gross alpha	2.42			1.29	U	V	1.8	J	I	.289	U		1	SC	15	pCi/L
	nonvolatile beta	1.26	U	W	1.08	U		.646	U		.007	U		1	SC	50	pCi/L
	radium, total alpha-emitting	1.26			.2	U		.773	J	IL	1.46	U		1	SC	5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-2. Groundwater Monitoring Results for Point-of-Compliance Wells, M-Area HWMF (Cont.)

WELL MSB 5B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 101971.1 E 46983.6	33.32794 Deg N -81.7412 Deg W	136.1 - 131.4 ft msl	345 ft msl	4 " PVC	S	LL

SAMPLE DATE	02/24/00	08/09/00	02/13/01	09/04/01	
FIELD DATA					
Parameter	**1Q00**	**3Q00**	**1Q01**	**3Q01**	**Unit**
Water Elevation	206.48	205	204.21	202.21	ft msl
pH	4.5	5.2	5.3	5.4	pH
Sp. Conductance	18	18	18	20	uS/cm
Water temperature	18.4	22.6	18.5	20.3	deg. C
Alkalinity as CaCO3	0	0	0	1	mg/L
Turbidity	.3	.8	.7	1.2	NTU
Volumes purged	2.50	3.63	2.46	2.12	well volume
Sampling code					
Synchronous water level	206.4 (03/21/00)	206.6 (12/27/00)	204.1 (03/29/01)	202.9 (09/24/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
	Inorganics																
	barium, total recoverable	4.79	J	I	5.07	J	I	5.6			5.4	J	I	1	WA	2000	ug/L
	cyanide										<33	U		1	WA	40	ug/L
	lead, total recoverable	<5.36	JU	IV	<20	U		<47	U		<24	U		1	WA	15	ug/L
	nickel, total recoverable	<60	U		<60	U					<4.1	U		1	WA	100	ug/L
	selenium, total recoverable	<40	U		<40	U					<31	U		1	WA	50	ug/L
	Organics																
	chlorobenzene	<1	U		<1	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethane	<1	U		<1	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<1	U		<1	U		<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	U		<1	U		<5	U		<5	U		1	WA	100	ug/L
	pcb 1016										<1.04	UJ	Q	1	WA	.5	ug/L
	pcb 1221										<2.08	UJ	Q	1	WA	.5	ug/L
	pcb 1232										<1.04	UJ	Q	1	WA	.5	ug/L
	pcb 1242										<1.04	UJ	Q	1	WA	.5	ug/L
	pcb 1248										<1.04	UJ	Q	1	WA	.5	ug/L
	pcb 1254										<1.04	UJ	Q	1	WA	.5	ug/L
	pcb 1260										<1.04	UJ	Q	1	WA	.5	ug/L
	1,1,2,2-tetrachloroethane	<1	U		<1	U		<5	U		<5	U		1	WA	5	ug/L
	tetrachloroethylene	<1	U		<1	U		<5	U		<5	U		1	WA	5	ug/L
	1,1,1-trichloroethane	<1	U		<1	U		<5	U		<5	U		1	WA	200	ug/L
+	trichloroethylene	10.9	J	K	***21.5***			***11.1***			***18.2***			1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
	Inorganics																
	aluminum, total recoverable	<200	U		<200	U		<10.3	U	V	48.6	J	I	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	253	J	I	246	J	I	405	J	I	287			1	WA	2400	ug/L
	sodium, total recoverable	1600		V	1700			1580			1580			1	WA	4600	ug/L
	sulfate	568			701											3000	ug/L
	Radionuclides																
	gross alpha	17.57	J		.254	JU	L	1.21	J	I	-.369	U	V	1	SC	15	pCi/L
	nonvolatile beta	41.7	J		1.37	U		.149	U		.394	U		1	SC	50	pCi/L
	radium, total alpha-emitting	.75			.1	U		.239	JU	L	-.181	U	V	1	SC	5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-2. Groundwater Monitoring Results for Point-of-Compliance Wells, M-Area HWMF (Cont.)

WELL MSB 5C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 101970.4 E 46968.6	33.32791 Deg N -81.7412 Deg W	188.1 - 183.4 ft msl	345.2 ft msl	4 " PVC	S	UL

SAMPLE DATE	02/24/00	08/09/00	02/13/01	09/04/01	
FIELD DATA					
Parameter	**1Q00**	**3Q00**	**1Q01**	**3Q01**	**Unit**
Water Elevation	221.65	220.35	219.11	217.31	ft msl
pH	5	5.3	5.2	5.3	pH
Sp. Conductance	224	222	220	218	uS/cm
Water temperature	18.6	22.2	18.3	20.6	deg. C
Alkalinity as CaCO3	2	2	0	0	mg/L
Turbidity	.5	.5	1.1	.4	NTU
Volumes purged	3.08	3.98	3.26	2.44	well volume
Sampling code					
Synchronous water level	221.6 (03/21/00)	220.2 (09/23/00)	219.2 (03/29/01)	217.6 (09/24/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

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ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable	39			34.3			34.6			37.2			1	WA	2000	ug/L
	cyanide										<33	U		1	WA	40	ug/L
	lead, total recoverable	<11.1	JU	IV	<20	U		<47	U		3.3	J	I	1	WA	15	ug/L
	nickel, total recoverable	<60	U		<60	U					1.8	J	I	1	WA	100	ug/L
	selenium, total recoverable	<40	U		<40	U					<31	U		1	WA	50	ug/L
Organics																	
	chlorobenzene	<1	U		<1	JU	L	<10	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethane	2.4			2.21	J	L	1.84	J	I	1.96	J	I	1	WA	5	ug/L
+	1,1-dichloroethylene	***36.6***			30.3	J	L	***28.5***			***29***			1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	U		<1	JU	L	<10	U		<5	U		1	WA	100	ug/L
	pcb 1016										<1.05	UJ	Q	1	WA	.5	ug/L
	pcb 1221										<2.11	UJ	Q	1	WA	.5	ug/L
	pcb 1232										<1.05	UJ	Q	1	WA	.5	ug/L
	pcb 1242										<1.05	UJ	Q	1	WA	.5	ug/L
	pcb 1248										<1.05	UJ	Q	1	WA	.5	ug/L
	pcb 1254										<1.05	UJ	Q	1	WA	.5	ug/L
	pcb 1260										<1.05	UJ	Q	1	WA	.5	ug/L
	1,1,2,2-tetrachloroethane	<1	U		<1	JU	L	<10	U		<5	U		1	WA	5	ug/L
+	tetrachloroethylene	***151***			139	J	L	***108***			***106***			1	WA	5	ug/L
	1,1,1-trichloroethane	5.16			3.09	J	L	2.65	J	I	2.35	J	I	1	WA	200	ug/L
+	trichloroethylene	***28.5***			20.9	J	L	***22.1***			***24***			1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable	105	J	I	<200	U		<20.7	U	V	90.1	J	I	1	WA	100	ug/L
+	nitrate-nitrite as nitrogen	***4410***			***23300***			***23700***			***22600***			50	WA	2400	ug/L
+	sodium, total recoverable	***25800***		V	***31000***			***29000***			***26800***			1	WA	4600	ug/L
	sulfate	512			428											3000	ug/L
Radionuclides																	
	gross alpha	7.44	J		3.49	J	IL	6.75			7.86	J	I	1	SC	15	pCi/L
	nonvolatile beta	13.8	J		12.1			14.4			12			1	SC	50	pCi/L
	radium, total alpha-emitting	2.85			2.1			2.92	J	L	3.86	J	I	1	SC	5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-2. Groundwater Monitoring Results for Point-of-Compliance Wells, M-Area HWMF (Cont.)

WELL MSB 6A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 101133.8 E 46319.9	33.32500 Deg N -81.7413 Deg W	241.9 - 211.9 ft msl	343.8 ft msl	4 " PVC	S	M

SAMPLE DATE	02/03/00	09/02/00	03/19/01	09/14/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	226.42	224.6	*Not Applicable*	*Not Applicable*	ft msl
pH	4.5	6	5.4	4.3	pH
Sp. Conductance	38	36	35	39	uS/cm
Water temperature	18.3	19.5	19.9		deg. C
Alkalinity as CaCO3	0	5	1	5	mg/L
Turbidity	.6	5.1	.4	1.5	NTU
Volumes purged	5.22	8.78			well volume
Sampling code					
Synchronous water level	226.3 (03/21/00)	224.1 (09/23/00)	( )	( )	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
	Inorganics																
	barium, total recoverable	6.24	J	I	4.91	J	I	3.6			6.3	J	I	1	WA	2000	ug/L
	cyanide	<15.1	U	V	<20	U		<15.2	U		<33	U		1	WA	40	ug/L
	lead, total recoverable	<20	U		<12.3	U	V	<47	U		13	J	I	1	WA	15	ug/L
	nickel, total recoverable	<60	U		<60	U		<26	U		<3.1	U	V	1	WA	100	ug/L
	selenium, total recoverable	<40	U		<40	U		<66	U		<31	U		1	WA	50	ug/L
	Organics																
	chlorobenzene	<1	U		<1	JU	L	<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethane	<1	U		<1	JU	L	<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<1	U		<1	JU	L	<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	U		<1	JU	L	<5	U		<5	U		1	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<1	U		<1	JU	L	<5	U		<5	U		1	WA	5	ug/L
	tetrachloroethylene	<1	U		1.79	J	L	<5	U		<5	U		1	WA	5	ug/L
	1,1,1-trichloroethane	<1	U		<1	JU	L	<5	U		<5	U		1	WA	200	ug/L
	trichloroethylene	<1	U		4.48	J	L	<5	U		<5	U		1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
	Inorganics																
+	aluminum, total recoverable	<200	U		<200	U		26.5	J	I	***347***			1	WA	100	ug/L
	nitrate-nitrite as nitrogen	390	J	I	384	J	I	329	J	K	342			1	WA	2400	ug/L
+	sodium, total recoverable	***5250***			***6300***			***6100***			***7630***			1	WA	4600	ug/L
	sulfate	711			350	J	I									3000	ug/L
	Radionuclides																
	gross alpha	3.35			1.6			1.68	J	I	.12			1	SC	15	pCi/L
	nonvolatile beta	1.99			1.02	J	I	1.61	J	I	1.19			1	SC	50	pCi/L
	radium, total alpha-emitting	1.1			.8	J	I	.884	J	I	-.352	U		1	SC	5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-2. Groundwater Monitoring Results for Point-of-Compliance Wells, M-Area HWMF (Cont.)

WELL MSB 6B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 101148.4 E 46321.6	33.32504 Deg N -81.7413 Deg W	129.8 - 125.1 ft msl	343.9 ft msl	4 " PVC	S	LL

SAMPLE DATE	02/24/00	08/10/00	02/13/01	09/04/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	205.23	203.95	202.94	200.93	ft msl
pH	5.3	5.7	5.5	5.5	pH
Sp. Conductance	54	54	52	53	uS/cm
Water temperature	18.9	22	18.8	20.8	deg. C
Alkalinity as CaCO3	2	1	0	1	mg/L
Turbidity	.4	.5	.7	.2	NTU
Volumes purged	2.48	2.46	2.30	2.08	well volume
Sampling code					
Synchronous water level	205.1 (03/21/00)	204 (12/27/00)	202.6 (03/26/01)	201.6 (09/24/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
	Inorganics																
	barium, total recoverable	18.5			38			20.4			24			1	WA	2000	ug/L
	cyanide																
+	lead, total recoverable	<5.41	JU	IV	***244***			7.1	J	I	<24	U		1	WA	15	ug/L
	nickel, total recoverable	<60	U		<60	U										100	ug/L
	selenium, total recoverable	<40	U		<40	U										50	ug/L
	Organics																
	chlorobenzene	<10	U		<10	JU	L	<250	U		<100	U		20	WA	5	ug/L
	1,1-dichloroethane	<10	U		<10	JU	L	<250	U		<100	U		20	WA	5	ug/L
	1,1-dichloroethylene	<10	U		<10	JU	L	<250	U		<100	U		20	WA	7	ug/L
	trans-1,2-dichloroethylene	<10	U		<10	JU	L	<250	U		<100	U		20	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<10	U		<10	JU	L	<250	U		<100	U		20	WA	5	ug/L
+	tetrachloroethylene	***91.1***			96	J	L	79.9	J	I	83	J	I	20	WA	5	ug/L
	1,1,1-trichloroethane	<10	U		<10	JU	L	<250	U		<100	U		20	WA	200	ug/L
+	trichloroethylene	***2880***			3230	J	L	***2530***			***2210***			20	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
	Inorganics																
	aluminum, total recoverable	<200	U		<200	U		<40	U		<322	U		1	WA	100	ug/L
+	nitrate-nitrite as nitrogen	***2990***			***3740***			804			***4090***			10	WA	2400	ug/L
	sodium, total recoverable	2980			3400			3640			3480			1	WA	4600	ug/L
	sulfate	436			219	J	I									3000	ug/L
	Radionuclides																
	gross alpha	2.51			1.74	J	I	3.53			2.81	J	I	1	SC	15	pCi/L
	nonvolatile beta	4.13		V	3.95			4.52			1.05	U		1	SC	50	pCi/L
	radium, total alpha-emitting	.93			.9	J	I	1.23	J	IL	3.91	J	I	1	SC	5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-2. Groundwater Monitoring Results for Point-of-Compliance Wells, M-Area HWMF (Cont.)

WELL MSB 6C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 101169.1 E 46324.1	33.32509 Deg N -81.7414 Deg W	194 - 189.3 ft msl	343.8 ft msl	4 " PVC	S	UL

SAMPLE DATE	02/24/00	08/10/00	02/13/01	09/04/01	
FIELD DATA					
Parameter	**1Q00**	**3Q00**	**1Q01**	**3Q01**	**Unit**
Water Elevation	222.35	221	219.25	217.32	ft msl
pH	5.4	5.6	5.8	5.6	pH
Sp. Conductance	203	192	190	180	uS/cm
Water temperature	19.3	22.4	16.8	20.3	deg. C
Alkalinity as CaCO3	11	1	19	10	mg/L
Turbidity	.6	1.5	.6	1.1	NTU
Volumes purged	2.32	3.58		2.85	well volume
Sampling code			NX		
Synchronous water level	222.2 (03/21/00)	220.4 (09/23/00)	218.9 (03/26/01)	217.8 (09/24/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable	4.59	J	I	4.21	J	I	7			2.9	J	I	1	WA	2000	ug/L
	cyanide																
	lead, total recoverable	<6.13	JU	IV	<20	U		<47	U		<24	U		1	WA	15	ug/L
	nickel, total recoverable	<60	U		<60	U										100	ug/L
	selenium, total recoverable	<40	U		8.9	J	I									50	ug/L
Organics																	
	chlorobenzene	<1	U		<1	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethane	<1	U		<1	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<1	U		<1	U		<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	U		<1	U		<5	U		<5	U		1	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<1	U		<1	U		<5	U		<5	U		1	WA	5	ug/L
+	tetrachloroethylene	***61.5***			***61.2***			***50.1***			***52.2***			1	WA	5	ug/L
	1,1,1-trichloroethane	<1	U		<1	U		<5	U		<5	U		1	WA	200	ug/L
+	trichloroethylene	***11.3***			***11.9***			***8.29***			***10***			1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable				<200	U		<40	U		<322	U		1	WA	100	ug/L
+	nitrate-nitrite as nitrogen				***14900***			***11700***			***11600***			20	WA	2400	ug/L
+	sodium, total recoverable				***40000***			***36900***			***31800***			1	WA	4600	ug/L
+	sulfate				***16300***											3000	ug/L
Radionuclides																	
	gross alpha				.668	U		.795	U		-.547	U	V	1	SC	15	pCi/L
	nonvolatile beta				6.66			4.37			2.63	J	I	1	SC	50	pCi/L
	radium, total alpha-emitting				.5	J	I	.053	JU	L	.694	U		1	SC	5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-2. Groundwater Monitoring Results for Point-of-Compliance Wells, M-Area HWMF (Cont.)

WELL MSB 7A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 100585.7 E 46726.1	33.32446 Deg N -81.7392 Deg W	242 - 212 ft msl	344.3 ft msl	4 " PVC	S	M

SAMPLE DATE	02/03/00	09/02/00	03/16/01	08/23/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	227.42	225.62	224.22	222.95	ft msl
pH	4.6	6	5.3	4.8	pH
Sp. Conductance	40	37	39	36	uS/cm
Water temperature	18.2	19.7	20.7	20.6	deg. C
Alkalinity as CaCO3	0	5	0	0	mg/L
Turbidity	.7	2	1.4	.2	NTU
Volumes purged	3.23	2.52	2.43	2.15	well volume
Sampling code					
Synchronous water level	227.3 (03/21/00)	225.5 (09/23/00)	224.4 (03/29/01)	222.6 (09/24/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
	Inorganics																
	barium, total recoverable	8.54	J	I	7.62	J	I	7.5			9.3	J	I	1	WA	2000	ug/L
	cyanide	<14.7	U	V	<10	U		<15.2	U		<33	U		1	WA	40	ug/L
	lead, total recoverable	<20	U		<10	U		<47	U		12.6	J	I	1	WA	15	ug/L
	nickel, total recoverable	<60	U		<50	U		<26	U		5.8			1	WA	100	ug/L
	selenium, total recoverable	<40	U		<10	U		<66	U		<31	U		1	WA	50	ug/L
	Organics																
	chlorobenzene	<1	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethane	<1	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<1	U		<5	U		<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	U		<5	U		<5	U		<5	U		1	WA	100	ug/L
	pcb 1016				<.94	U										.5	ug/L
	pcb 1221				<.94	U										.5	ug/L
	pcb 1232				<.94	U										.5	ug/L
	pcb 1242				<1.9	U										.5	ug/L
	pcb 1248				<.94	U										.5	ug/L
	pcb 1254				<.94	U										.5	ug/L
	pcb 1260				<.94	U										.5	ug/L
	1,1,2,2-tetrachloroethane	<1	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	tetrachloroethylene	<1	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1,1-trichloroethane	<1	U		<5	U		<5	U		<5	U		1	WA	200	ug/L
	trichloroethylene	<1	U		<5	U		<5	U		<5	U		1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
	Inorganics																
+	aluminum, total recoverable	<200	U		<200	U		<200	U		***326***			1	WA	100	ug/L
	nitrate-nitrite as nitrogen	1610			1550			1860	J	K	520			1	WA	2400	ug/L
+	sodium, total recoverable	***6010***			***5900***			***6880***			***5670***			1	WA	4600	ug/L
	sulfate	405			237	J	I									3000	ug/L
	Radionuclides																
	gross alpha	4.78			1.83	J	I	2.63			1.87	U		1	SC	15	pCi/L
	nonvolatile beta	3.13			.489	U		1.5	J	I	-1.55	U		1	SC	50	pCi/L
	radium, total alpha-emitting	1.27			1.7			.722	J	I	1.55	J	I	1	SC	5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-2. Groundwater Monitoring Results for Point-of-Compliance Wells, M-Area HWMF (Cont.)

WELL MSB 7B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 100597.6 E 46718.1	33.32447 Deg N -81.7392 Deg W	147.5 - 142.7 ft msl	344.1 ft msl	4 " PVC	S	LL

SAMPLE DATE	02/24/00	08/10/00	02/12/01	09/04/01	
FIELD DATA					
Parameter	**1Q00**	**3Q00**	**1Q01**	**3Q01**	**Unit**
Water Elevation	205.84	204.52	203.61	201.69	ft msl
pH	5.8	5.6	5.8	6.7	pH
Sp. Conductance	93	99	115	120	uS/cm
Water temperature	19	23.5	18.3	19.6	deg. C
Alkalinity as CaCO3	11	1	1	19	mg/L
Turbidity	1.1	1.2	.3	1.2	NTU
Volumes purged	2.40	3.09	2.26	2.31	well volume
Sampling code					
Synchronous water level	205.7 (03/21/00)	204.5 (09/23/00)	203.4 (03/29/01)	202.3 (09/24/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

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ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable	104			66.3			47.7			90.5			1	GE	2000	ug/L
	cyanide				<10	U										40	ug/L
	lead, total recoverable	<5.39	JU	IV	<10	U		<47	U		<24	U		1	WA	15	ug/L
	nickel, total recoverable	<60	U		<50	U										100	ug/L
	selenium, total recoverable	<40	U		<10	U										50	ug/L
Organics																	
	chlorobenzene	<1	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethane	<1	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
+	1,1-dichloroethylene	6.48			***8.3***			5.65			***8.47***			1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	U		<5	U		<5	U		<5	U		1	WA	100	ug/L
	pcb 1016				<1	U										.5	ug/L
	pcb 1221				<1	U										.5	ug/L
	pcb 1232				<1	U										.5	ug/L
	pcb 1242				<2	U										.5	ug/L
	pcb 1248				<1	U										.5	ug/L
	pcb 1254				<1	U										.5	ug/L
	pcb 1260				<1	U										.5	ug/L
	1,1,2,2-tetrachloroethane	<1	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
+	tetrachloroethylene	***66.1***			***65***			***69.9***			***52.9***			1	WA	5	ug/L
	1,1,1-trichloroethane	1.02			.98	J	I	<5	U		.592	J	I	1	GE	200	ug/L
+	trichloroethylene	***50.4***			49	J	K	***50.3***			***35.8***			1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable	<200	U		<200	U		49.2	J	I	54.5			1	GE	100	ug/L
+	nitrate-nitrite as nitrogen	***5460***			***7740***			***8730***			***10100***			20	WA	2400	ug/L
+	sodium, total recoverable	***7750***		V	***9200***			***9890***			***10600***			1	WA	4600	ug/L
+	sulfate	***3290***			***3140***											3000	ug/L
Radionuclides																	
	gross alpha	1.71	J		.89	JU	L	2.31	J	I	1.93	J	I	1	GE	15	pCi/L
	nonvolatile beta	1.88	J		2.46	J	I	3.83			4.24			1	GE	50	pCi/L
	radium, total alpha-emitting	1.63			.6	J	I	1.05	J	IL	1.77			1	GE	5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-2. Groundwater Monitoring Results for Point-of-Compliance Wells, M-Area HWMF (Cont.)

WELL MSB 7C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 100609.2 E 46709.1	33.32448 Deg N -81.7393 Deg W	200.1 - 195.4 ft msl	344.5 ft msl	4 " PVC	S	UL

SAMPLE DATE	02/18/00	08/10/00	02/12/01	09/04/01	
FIELD DATA					
Parameter	**1Q00**	**3Q00**	**1Q01**	**3Q01**	**Unit**
Water Elevation	221.4	220.1	218.34	217	ft msl
pH	5.3	5.2	5.3	5.5	pH
Sp. Conductance	179	168	160	153	uS/cm
Water temperature	19.7	22.3	18.7	19.6	deg. C
Alkalinity as CaCO3	2	1	0	0	mg/L
Turbidity	1.9	.6	1	.5	NTU
Volumes purged	2.90	3.67	2.82	2.49	well volume
Sampling code					
Synchronous water level	221.3 (03/21/00)	219.7 (09/23/00)	218.7 (03/29/01)	217.1 (09/24/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

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ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable	28.1			27			<24.7	U	V	22.7			1	WA	2000	ug/L
	cyanide				<10	U										40	ug/L
	lead, total recoverable	<4.44	JU		<1.14	JU		<47	U		<24	U		1	WA	15	ug/L
	nickel, total recoverable	<60	U		<50	U										100	ug/L
	selenium, total recoverable	<40	U		<10	U										50	ug/L
Organics																	
	chlorobenzene	<1	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethane	<1	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	1.88			1.8	J	I	1.07	J	I	1.52	J	I	1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	U		<5	U		<5	U		<5	U		1	WA	100	ug/L
	pcb 1016				<.98	U										.5	ug/L
	pcb 1221				<.98	U										.5	ug/L
	pcb 1232				<.98	U										.5	ug/L
	pcb 1242				<2	U										.5	ug/L
	pcb 1248				<.98	U										.5	ug/L
	pcb 1254				<.98	U										.5	ug/L
	pcb 1260				<.98	U										.5	ug/L
	1,1,2,2-tetrachloroethane	<1	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
+	tetrachloroethylene	***62.1***			***60***			***58.9***			***53.4***			1	WA	5	ug/L
	1,1,1-trichloroethane	<1	U		<5	U		<5	U		<5	U		1	WA	200	ug/L
+	trichloroethylene	***20.9***			19	J	K	***20.6***			***19.3***			1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable	167	J	I	<200	U		135	J	I	<322	U		1	WA	100	ug/L
+	nitrate-nitrite as nitrogen	***13600***			***20200***			***17000***			***15300***			50	WA	2400	ug/L
+	sodium, total recoverable	***27500***		V	***29000***			***24900***			***19400***			1	WA	4600	ug/L
	sulfate	364	J	I	<200	U										3000	ug/L
Radionuclides																	
	gross alpha	7.8	J		3.07	J	L	4.46			.045	U		1	SC	15	pCi/L
	nonvolatile beta	53.21	J		30.6			32.2			30			1	SC	50	pCi/L
	radium, total alpha-emitting	3.42			1.8			2.21	J	L	5.47	J	I	1	SC	5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-2. Groundwater Monitoring Results for Point-of-Compliance Wells, M-Area HWMF (Cont.)

WELL MSB 8A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 100815.1 E 47293.2	33.32589 Deg N -81.7381 Deg W	242.4 - 212.4 ft msl	344.2 ft msl	4 " PVC	S	M

SAMPLE DATE 02/18/00

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	168.17	*Not Applicable*	*Not Applicable*	*Not Applicable*	ft msl
pH	5				pH
Sp. Conductance	33				uS/cm
Water temperature	18.5				deg. C
Alkalinity as CaCO3	0				mg/L
Turbidity	.8				NTU
Volumes purged	-1.0				well volume
Sampling code					
Synchronous water level	168 (03/21/00)	( )	( )	( )	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

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ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable	6.18	J	I												2000	ug/L
	cyanide	<20	U													40	ug/L
	lead, total recoverable	<4.64	JU													15	ug/L
	nickel, total recoverable	<60	U													100	ug/L
	selenium, total recoverable	<40	U													50	ug/L
Organics																	
	chlorobenzene	<1	U													5	ug/L
	1,1-dichloroethane	<1	U													5	ug/L
	1,1-dichloroethylene	<1	U													7	ug/L
	trans-1,2-dichloroethylene	<1	U													100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<1	U													5	ug/L
+	tetrachloroethylene	***36.7***														5	ug/L
	1,1,1-trichloroethane	<1	U													200	ug/L
+	trichloroethylene	***5.96***														5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
+	aluminum, total recoverable	***544***			<200	U										100	ug/L
+	nitrate-nitrite as nitrogen	1290			***2790***											2400	ug/L
	sodium, total recoverable	2780			3500											4600	ug/L
	sulfate	621			569											3000	ug/L
Radionuclides																	
	gross alpha	10.1			3.17											15	pCi/L
	nonvolatile beta	9.71			2.11	J	I									50	pCi/L
	radium, total alpha-emitting	2.95			2.4	U	V									5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-2. Groundwater Monitoring Results for Point-of-Compliance Wells, M-Area HWMF (Cont.)

WELL MSB 8B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 100805.7 E 47281.9	33.32585 Deg N -81.7381 Deg W	150.8 - 146.1 ft msl	343.9 ft msl	4 " PVC	S	LL

SAMPLE DATE	02/18/00	08/09/00	02/12/01	08/31/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	207.21	205.85	205.01	203.21	ft msl
pH	5.6	5.3	4.8	5.3	pH
Sp. Conductance	29	27	28	30	uS/cm
Water temperature	18.5	21.8	17.7	21.6	deg. C
Alkalinity as CaCO3	3	1	0	1	mg/L
Turbidity	1.2	.7	1	1.6	NTU
Volumes purged	2.53	2.89	2.41	2.12	well volume
Sampling code					
Synchronous water level	209.1 (06/29/00)	206.5 (12/28/00)	204.8 (03/29/01)	203.8 (09/24/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

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ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
	Inorganics																
	barium, total recoverable	26.4			16.2			<12.4	U	V	11.3			1	WA	2000	ug/L
	cyanide																
	lead, total recoverable	<20	U		<20	U		<47	U		<24	U		1	WA	15	ug/L
	nickel, total recoverable	<60	U		<60	U										100	ug/L
	selenium, total recoverable	<40	U		<40	U										50	ug/L
	Organics																
	chlorobenzene	<1	U		<1	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethane	<1	U		<1	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<1	U		<1	U		<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	U		<1	U		<5	U		<5	U		1	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<1	U		<1	U		<5	U		<5	U		1	WA	5	ug/L
+	tetrachloroethylene	***5.38***			***6.83***			***8.51***			***10***			1	WA	5	ug/L
	1,1,1-trichloroethane	<1	U		<1	U		<5	U		<5	U		1	WA	200	ug/L
+	trichloroethylene	***47.5***			***45.1***			***57.9***			***57.9***			1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
	Inorganics																
	aluminum, total recoverable	<200	U		<200	U		<7.76	U	V	<322	U		1	WA	100	ug/L
	nitrate-nitrite as nitrogen	1070			1140			1650			1500			2	WA	2400	ug/L
	sodium, total recoverable	2310		V	2600			2420			2220			1	WA	4600	ug/L
	sulfate	654	J	K	426											3000	ug/L
	Radionuclides																
	gross alpha	1.41			.521	JU	L	.79	U		-1.14	U	V	1	SC	15	pCi/L
	nonvolatile beta	3.17	J		1.01	U		1.23	U		-.852	U	V	1	SC	50	pCi/L
	radium, total alpha-emitting	.35	U	V	0	U		.111	JU	L	1.41	J	I	1	SC	5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-2. Groundwater Monitoring Results for Point-of-Compliance Wells, M-Area HWMF (Cont.)

WELL MSB 8C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 100793.2 E 47264.6	33.32579 Deg N -81.7382 Deg W	195.9 - 191.2 ft msl	344 ft msl	4 " PVC	S	UL

SAMPLE DATE	02/24/00	08/09/00	02/12/01	08/31/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	218.74	217.55	216.01	215.02	ft msl
pH	5.1	4.5	4.3	4.6	pH
Sp. Conductance	568	591	572	596	uS/cm
Water temperature	18.8	21.8	18.4	21.2	deg. C
Alkalinity as CaCO3	0	0	0	0	mg/L
Turbidity	.9	.5	.3	.1	NTU
Volumes purged	3.18	2.74	3.28	2.13	well volume
Sampling code					
Synchronous water level	218.7 (03/21/00)	219.4 (09/23/00)	216.5 (03/29/01)	215 (09/24/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

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ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
	Inorganics																
	barium, total recoverable	137			136			130			132			1	WA	2000	ug/L
	cyanide																
	lead, total recoverable	<5.91	JU	IV	<20	U		<47	U		2.9	J	I	1	WA	15	ug/L
	nickel, total recoverable	<60	U		<60	U										100	ug/L
	selenium, total recoverable	<40	U		<40	U										50	ug/L
	Organics																
	chlorobenzene	<1	U		<1	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethane	.49	J	I	<1	U		<5	U		<5	U		1	WA	5	ug/L
+	1,1-dichloroethylene	***7.96***			5.77			7			***7.41***			1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	U		<1	U		<5	U		<5	U		1	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<1	U		<1	U		<5	U		<5	U		1	WA	5	ug/L
+	tetrachloroethylene	***68.1***			***64.5***			***62.1***			***61***			1	WA	5	ug/L
	1,1,1-trichloroethane	1.62			1.22			1.02	J	I	<5	U		1	WA	200	ug/L
+	trichloroethylene	***43.4***			***34.6***			***38***			***39.4***			1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
	Inorganics																
+	aluminum, total recoverable	180	J	I	***260***			***229***			278	J	I	1	WA	100	ug/L
+	nitrate-nitrite as nitrogen	***45000***			***59000***			***63300***			***64800***			100	WA	2400	ug/L
+	sodium, total recoverable	***34600***		V	***51000***			***75700***			***53500***			1	WA	4600	ug/L
	sulfate	404	J	K	343	J	I									3000	ug/L
	Radionuclides																
+	gross alpha	***20.82***			6.61	J	L	14			8.59	J	I	1	SC	15	pCi/L
+	nonvolatile beta	120.46	J		***84***			***75.4***			***70.2***			1	SC	50	pCi/L
+	radium, total alpha-emitting	2.07		V	4.2			7.19	J	L	***12.1***			1	SC	5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-2. Groundwater Monitoring Results for Point-of-Compliance Wells, M-Area HWMF (Cont.)

WELL MSB 13A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 101725.7 E 47525.4	33.32828 Deg N -81.7393 Deg W	136.4 - 131.4 ft msl	346.7 ft msl	4 " PVC	S	LL

SAMPLE DATE	03/15/00	08/18/00	02/20/01	09/12/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	211.17	205.5	203.95	204.19	ft msl
pH	5.2	5.2	5	5.1	pH
Sp. Conductance	30	35	35	46	uS/cm
Water temperature	20	24.1	18.8	20.6	deg. C
Alkalinity as CaCO3	2	0	0	0	mg/L
Turbidity	.9	.5	.9	.3	NTU
Volumes purged	3.01	2.95	2.91	2.33	well volume
Sampling code					
Synchronous water level	211 (03/21/00)	207 (12/27/00)	205.3 (03/29/01)	203 (09/26/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable	7.37	J	I	7.92	J	I	9.8			10.3			1	GE	2000	ug/L
	cyanide																
	lead, total recoverable	<20	U		<20	U		<47	U		2.5	J	I	1	WA	15	ug/L
	nickel, total recoverable	<60	U		<60	U										100	ug/L
	selenium, total recoverable	<40	U		<40	U										50	ug/L
Organics																	
+	chlorobenzene	***11.3***			<5	U		<50	U		<50	U		10	WA	5	ug/L
	1,1-dichloroethane	<5	U		<5	U		<50	U		<50	U		10	WA	5	ug/L
	1,1-dichloroethylene	<5	U		<5	U		<50	U		<50	U		10	WA	7	ug/L
	trans-1,2-dichloroethylene	<5	U		<5	U		<50	U		<50	U		10	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<5	U		<5	U		<50	U		<50	U		10	WA	5	ug/L
+	tetrachloroethylene	***15.8***			45.1	J	K	28.5	J	I	***45.3***			25	GE	5	ug/L
	1,1,1-trichloroethane	<5	U		<5	U		<50	U		<50	U		10	WA	200	ug/L
+	trichloroethylene	***1210***			1180	J	K	***1260***			***1560***			25	GE	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable	<200	U		<200	U		33.1	J	I	37	J	I	1	GE	100	ug/L
+	nitrate-nitrite as nitrogen	1900			1830			***2410***			***2960***			5	WA	2400	ug/L
	sodium, total recoverable	2510			2300			2270			3110			1	GE	4600	ug/L
	sulfate	713			551											3000	ug/L
Radionuclides																	
	gross alpha	2.09			.386	U		.725	U		1.19	J	I	1	GE	15	pCi/L
	nonvolatile beta	2.92			1.2	U		1.79	J	I	1.97	J	I	1	GE	50	pCi/L
	radium, total alpha-emitting	.09	U	W	.4	U		.538	J	I	1.13	J	I	1	GE	5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-2. Groundwater Monitoring Results for Point-of-Compliance Wells, M-Area HWMF (Cont.)

WELL MSB 13CC

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 101728.8 E 47525.7	33.32829 Deg N -81.7393 Deg W	196.8 - 192 ft msl	346.9 ft msl	4 " PVC	S	UL

SAMPLE DATE	03/17/00	08/18/00	03/07/01	09/12/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	223.56	221.99	220.66	219.53	ft msl
pH	6.7	5.2	5.3	5.3	pH
Sp. Conductance	125	190	138	125	uS/cm
Water temperature	16.5	24.6	21	23.4	deg. C
Alkalinity as CaCO3	3	0	0	0	mg/L
Turbidity	1	.4	.2	.4	NTU
Volumes purged	.097	2.30	.429	2.01	well volume
Sampling code	NX				
Synchronous water level	223.4 (03/21/00)	221.7 (09/23/00)	220.4 (03/29/01)	219.1 (09/26/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
	Inorganics																
	barium, total recoverable	<15	U		3.92	J	I	3.3			<8.3	U		1	WA	2000	ug/L
	cyanide																
	lead, total recoverable	18.1	J	I	<7.75	JU		<47	U		<24	U		1	WA	15	ug/L
	nickel, total recoverable	<60	U		<60	U										100	ug/L
	selenium, total recoverable	<40	U		<40	U										50	ug/L
	Organics																
	chlorobenzene	<1	U		<1	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethane	<1	U		<1	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	2.86			2.11			1.86	J	I	1.75	J	I	1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	U		<1	U		<5	U		<5	U		1	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<1	U		<1	U		<5	U		<5	U		1	WA	5	ug/L
+	tetrachloroethylene	***14.9***			***14.7***			***10.4***			***7.79***			1	WA	5	ug/L
	1,1,1-trichloroethane	2.31			2.12			1.87	J	I	1.5	J	I	1	WA	200	ug/L
+	trichloroethylene	***9.88***			***13.5***			***5.72***			***5.51***			1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
	Inorganics																
	aluminum, total recoverable	181	J	I	98	J	I	67.8			<322	U		1	WA	100	ug/L
+	nitrate-nitrite as nitrogen	***4960***			***6100***			***19200***			***12000***			20	WA	2400	ug/L
+	sodium, total recoverable	***15600***			***19000***			***34000***			<81.2	U	V	1	WA	4600	ug/L
+	sulfate	***4450***			***4130***											3000	ug/L
	Radionuclides																
	gross alpha	1.56			2.35			1.51	J	I	-1.19	U		1	SC	15	pCi/L
	nonvolatile beta	5			2.07	J	I	6.53			2.25	U		1	SC	50	pCi/L
	radium, total alpha-emitting	.48	U	W	0	U		.573	J	I	.652	U		1	SC	5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-2. Groundwater Monitoring Results for Point-of-Compliance Wells, M-Area HWMF (Cont.)

WELL MSB 13D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 101778.1 E 47517.5	33.32838 Deg N -81.7394 Deg W	231.5 - 211.5 ft msl	347.6 ft msl	4 " PVC	S	M

SAMPLE DATE	02/29/00	09/27/00	02/21/01	09/11/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	226.73	225.1	224.13	222.75	ft msl
pH	6.7	6.2	6.1	5.9	pH
Sp. Conductance	346	294	266	259	uS/cm
Water temperature	19.4	24.2	24.9	23.8	deg. C
Alkalinity as CaCO3	14	18	29	348	mg/L
Turbidity	5.7	10.2	13.6	11.3	NTU
Volumes purged	0		0	1.24	well volume
Sampling code	NX		NX	L	
Synchronous water level	226.6 (03/21/00)	225.2 (09/23/00)	224 (03/29/01)	222.7 (09/26/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable	18			28.6			10.7			10.6			1	WA	2000	ug/L
	cyanide	<20	U		5.3	J	I	<15.2	U		<33	U		1	WA	40	ug/L
	lead, total recoverable	8.77	J	I	<20	U		<47	U		5.9	J	I	1	WA	15	ug/L
	nickel, total recoverable	<60	U		<60	U		9.8	J	I	8.2			1	WA	100	ug/L
	selenium, total recoverable	<40	U		<40	U		<66	U		<31	U		1	WA	50	ug/L
Organics																	
	chlorobenzene	<1	U		<1	JU	L	<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethane	<1	U		<1	JU	L	<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	3.12	J	K	2.18	J	L	1.5	J	I	<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene				<1	JU	L	<5	U		<5	U		1	WA	100	ug/L
	pcb 1016										<1.04	UJ	Q	1	WA	.5	ug/L
	pcb 1221										<2.08	UJ	Q	1	WA	.5	ug/L
	pcb 1232										<1.04	UJ	Q	1	WA	.5	ug/L
	pcb 1242										<1.04	UJ	Q	1	WA	.5	ug/L
	pcb 1248										<1.04	UJ	Q	1	WA	.5	ug/L
	pcb 1254										<1.04	UJ	LQ	1	WA	.5	ug/L
	pcb 1260										<1.04	UJ	Q	1	WA	.5	ug/L
	1,1,2,2-tetrachloroethane	<1	U		<1	JU	L	<5	U		<5	U		1	WA	5	ug/L
+	tetrachloroethylene	22	J	K	17.6	J	L	***11.1***			***12***			1	WA	5	ug/L
	1,1,1-trichloroethane	3.57			2.4	J	L	1.61	J	I	<5	U		1	WA	200	ug/L
+	trichloroethylene	8.61	J	K	6.7	J	L	***5.05***			<5	U		1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
+	aluminum, total recoverable	77.9	J	I	***165***			<40	U		***452***			1	WA	100	ug/L
+	nitrate-nitrite as nitrogen	***21400***			***23700***			***23400***			***18200***			50	WA	2400	ug/L
+	sodium, total recoverable	***69400***			***61000***			***8750***			***41500***			1	WA	4600	ug/L
+	sulfate	***4280***			***4960***											3000	ug/L
Radionuclides																	
	gross alpha	4.5			1.02	U		.898	U		.278	U		1	SC	15	pCi/L
	nonvolatile beta	13.04			3.48			8.54			5.51	J	I	1	SC	50	pCi/L
	radium, total alpha-emitting	.42	U	W	.2	U		.507	U		4.23	J	IK	1	SC	5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-2. Groundwater Monitoring Results for Point-of-Compliance Wells, M-Area HWMF (Cont.)

WELL MSB 39A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 100837.6 E 48367.3	33.32769 Deg N -81.7354 Deg W	111.7 - 106.1 ft msl	341.6 ft msl	4 " PVC	S	MCBC

SAMPLE DATE	01/31/00	08/24/00	03/02/01	08/22/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	207.84	206.95	207.1	205.14	ft msl
pH		4.9	4.8	4.5	pH
Sp. Conductance		27	26	28	uS/cm
Water temperature		21.3	19.1	21.6	deg. C
Alkalinity as CaCO3	103	0	0	0	mg/L
Turbidity		.3	.3	.3	NTU
Volumes purged		2.22	2.25	1.76	well volume
Sampling code	LN				
Synchronous water level	207.8 (03/22/00)	206.6 (09/23/00)	205.6 (03/29/01)	204.4 (09/24/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<1	JU	L	<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethane	<1	JU	L	<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<1	JU	L	<5	U		<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene				<5	U		<5	U		<5	U		1	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<1	JU	L	<5	U		<5	U		<5	U		1	WA	5	ug/L
	tetrachloroethylene	<1	JU	L	<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1,1-trichloroethane	<1	JU	L	<5	U		<5	U		<5	U		1	WA	200	ug/L
	trichloroethylene	3.63	J	L	1.8	J	I	3.41	J	I	3.34	J	I	1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
+	aluminum, total recoverable	***695***			<200	U		52.8	J	I	<114	U	V	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	735			74.8	J	I				74			1	WA	2400	ug/L
	sodium, total recoverable	4070			1600			1700			1660			1	WA	4600	ug/L
+	sulfate	***3930***			***4350***											3000	ug/L
Radionuclides																	
	gross alpha	2.93			1.81	J	I	.833	J	I	.278	U		1	SC	15	pCi/L
	nonvolatile beta	6.04			3.28			1.67	J	I	.33	U		1	SC	50	pCi/L
	radium, total alpha-emitting	1.04			2.8			.826	J	I	1.07	J	I	1	SC	5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-2. Groundwater Monitoring Results for Point-of-Compliance Wells, M-Area HWMF (Cont.)

WELL MSB 59D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 102182.2 E 48314.8	33.33058 Deg N -81.7381 Deg W	229.3 - 209.9 ft msl	359.3 ft msl	4 " PVC	S	M

SAMPLE DATE	03/23/00	09/14/00	02/21/01	09/12/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	227.97	226.9	225.8	*Not Applicable*	ft msl
pH		5.3	5.4	4.8	pH
Sp. Conductance		39	57	72	uS/cm
Water temperature		22.1	21		deg. C
Alkalinity as CaCO3	34	0	1	1	mg/L
Turbidity		2.8	1.2	5.1	NTU
Volumes purged		4.54	4.85		well volume
Sampling code	LN				
Synchronous water level	228.1 (03/21/00)	226.7 (09/23/00)	225.9 (03/29/01)	224.5 (09/26/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
	Inorganics																
	barium, total recoverable	13.2	J	I	10.7	J	I	12.9			11.9			1	WA	2000	ug/L
	cyanide	<35.1	JU	LV	<20	U		<15.2	U		<33	U		1	WA	40	ug/L
+	lead, total recoverable	10.4	J	I	<20	U		***58.7***			6.5	J	I	1	WA	15	ug/L
	nickel, total recoverable	<60	U		<60	U		4.5	J	I	<4.9	U	V	1	WA	100	ug/L
	selenium, total recoverable	<40	U		<40	U		<66	U		<31	U		1	WA	50	ug/L
	Organics																
	chlorobenzene	<200	U		<400	JU	L	<5000	U		<500	U		100	WA	5	ug/L
	1,1-dichloroethane	<200	U		<400	JU	L	<5000	U		<500	U		100	WA	5	ug/L
	1,1-dichloroethylene	<200	U		<400	JU	L	<5000	U		<500	U		100	WA	7	ug/L
	trans-1,2-dichloroethylene	<200	U		<400	JU	L	<5000	U		<500	U		100	WA	100	ug/L
	pcb 1016	<.99	U		<.948	JU	L	<1.02	U		<1.02	UJ	Q	1	WA	.5	ug/L
	pcb 1221	<.99	U		<.948	JU	L	<2.04	U		<2.04	UJ	Q	1	WA	.5	ug/L
	pcb 1232	<.99	U		<.948	JU	L	<1.02	U		<1.02	UJ	Q	1	WA	.5	ug/L
	pcb 1242	<.99	U		<.948	JU	L	<1.02	U		<1.02	UJ	Q	1	WA	.5	ug/L
	pcb 1248	<.99	U		<.948	JU	L	<1.02	U		<1.02	UJ	Q	1	WA	.5	ug/L
	pcb 1254	<.99	U		<.948	JU	L	<1.02	U		<1.02	UJ	LQ	1	WA	.5	ug/L
	pcb 1260	<.99	U		<.948	JU	L	<1.02	U		<1.02	UJ	Q	1	WA	.5	ug/L
	1,1,2,2-tetrachloroethane	<200	U		<400	JU	L	<5000	U		<500	U		100	WA	5	ug/L
+	tetrachloroethylene	127000	J	K	170000	J	L	***127000***			***212000***		L	100	WA	5	ug/L
	1,1,1-trichloroethane	<200	U		<400	JU	L	<5000	U		<500	U		100	WA	200	ug/L
+	trichloroethylene	18000	J	K	14000	J	L	***11000***			***7200***			100	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
	Inorganics																
	aluminum, total recoverable	162	J	I	130	J	IK	97.3			75.7	J	I	1	WA	100	ug/L
+	nitrate-nitrite as nitrogen	2030			***4360***			2320			***5850***			10	WA	2400	ug/L
+	sodium, total recoverable	2980			4010			4370			***10300***			1	WA	4600	ug/L
	sulfate	215	J	I	629											3000	ug/L
	Radionuclides																
	gross alpha	5.98			6.59			2.71			1.76	U		1	SC	15	pCi/L
	nonvolatile beta	5.62			2.98			.944	U		4.06	J	I	1	SC	50	pCi/L
	radium, total alpha-emitting	1.67			1	J	I	2.78			2.32	U	V	1	SC	5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-2. Groundwater Monitoring Results for Point-of-Compliance Wells, M-Area HWMF (Cont.)

WELL MSB 62B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 101865.3 E 47906.8	33.32921 Deg N -81.7386 Deg W	141 - 136.3 ft msl	349.1 ft msl	4 " PVC	S	LL

SAMPLE DATE	03/14/00	08/23/00	02/20/01	09/12/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	212.89	206.85	206.15	*Not Applicable*	ft msl
pH	6	5.8	5.9	5.1	pH
Sp. Conductance	32	29	30	30	uS/cm
Water temperature	19.5	21.4	20.1		deg. C
Alkalinity as CaCO3	16	6	2	6	mg/L
Turbidity	.8	.9	1.2	.8	NTU
Volumes purged	2.61	2.71	2.19		well volume
Sampling code					
Synchronous water level	212.8 (03/21/00)	207.9 (12/27/00)	205.6 (03/29/01)	204.3 (09/26/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable	16			16.7			16.1			14.3			1	WA	2000	ug/L
	cyanide																
+	lead, total recoverable	<20	U		<5.34	JU		<47	U		***30***			1	WA	15	ug/L
	nickel, total recoverable	<60	U		<60	U										100	ug/L
	selenium, total recoverable	<40	U		<13.6	U	V									50	ug/L
Organics																	
	chlorobenzene	<1	U		<1	JU	L	<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethane	<1	U		<1	JU	L	<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<1	U		<1	JU	L	<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	U		<1	JU	L	<5	U		<5	U		1	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<1	U		<1	JU	L	<5	U		<5	U		1	WA	5	ug/L
+	tetrachloroethylene	14.6	J	K	21.8	J	L	***26.7***			***43.8***			1	WA	5	ug/L
	1,1,1-trichloroethane	<1	U		<1	JU	L	<5	U		<5	U		1	WA	200	ug/L
+	trichloroethylene	38.2	J	K	39.1	J	L	***89.8***			***168***			1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable	<200	U		<200	U		<91.6	JU	L	<322	U		1	WA	100	ug/L
	nitrate-nitrite as nitrogen	1550			570			789			850			2	WA	2400	ug/L
	sodium, total recoverable	2470			2400			2450	J	I	2540			1	WA	4600	ug/L
	sulfate	507			560											3000	ug/L
Radionuclides																	
+	gross alpha	.9			***27***			.622	U		-.104	U		1	SC	15	pCi/L
	nonvolatile beta	1.97	J		6.33	J	K	1.48	U		.455	U		1	SC	50	pCi/L
	radium, total alpha-emitting	.65			.2	U		.164	U		-.083	U		1	SC	5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-2. Groundwater Monitoring Results for Point-of-Compliance Wells, M-Area HWMF (Cont.)

WELL MSB 62C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 101857.2 E 47895	33.32918 Deg N -81.7386 Deg W	190 - 185.2 ft msl	349.1 ft msl	4 " PVC	S	UL

SAMPLE DATE	03/14/00	08/23/00	02/20/01	09/12/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	222.94	221.1	219.55	*Not Applicable*	ft msl
pH	5.5	5.6	5.5	5	pH
Sp. Conductance	62	62	59	63	uS/cm
Water temperature	19.4	21.1	18.8		deg. C
Alkalinity as CaCO3	5	3	1	5	mg/L
Turbidity	.3	.8	1.1	.8	NTU
Volumes purged	3.09	3.42	3.04		well volume
Sampling code					
Synchronous water level	222.8 (03/21/00)	220.5 (09/23/00)	219.3 (03/29/01)	217.9 (09/26/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable	3.74	J	I	3.73	J	I	3.6			3	J	I	1	WA	2000	ug/L
	cyanide																
	lead, total recoverable	<20	U		<6.26	JU		<47	U		<24	U		1	WA	15	ug/L
	nickel, total recoverable	<60	U		<60	U										100	ug/L
	selenium, total recoverable	<40	U		<9.01	U	V									50	ug/L
Organics																	
	chlorobenzene	<1	U		<1	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethane	<1	U		<1	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	.81	J	I	<1	U		<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	U		<1	U		<5	U		<5	U		1	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<1	U		<1	U		<5	U		<5	U		1	WA	5	ug/L
+	tetrachloroethylene	***17.6***			20.5	J	K	***15.4***			***13.4***			1	WA	5	ug/L
	1,1,1-trichloroethane	<1	U		<1	U		<5	U		<5	U		1	WA	200	ug/L
+	trichloroethylene	***20.8***			21.2	J	K	***15.3***			***13.8***			1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable	<200	U		<200	U		<40	JU	L	<322	U		1	WA	100	ug/L
+	nitrate-nitrite as nitrogen	496	J	I	***4400***			***4000***			***3360***			5	WA	2400	ug/L
+	sodium, total recoverable	***14200***			***11700***			***10200***			***9870***			1	WA	4600	ug/L
+	sulfate	***5910***			***5000***											3000	ug/L
Radionuclides																	
+	gross alpha	.8			***17.9***			.461	U		.687	U		1	SC	15	pCi/L
	nonvolatile beta	.33	UJ	W	4.33	J	K	.634	U		.69	U		1	SC	50	pCi/L
	radium, total alpha-emitting	.44	U	W	-.3	U		.203	U		2.54	U		1	SC	5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-2. Groundwater Monitoring Results for Point-of-Compliance Wells, M-Area HWMF (Cont.)

WELL MSB 62D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 101849 E 47882.9	33.32914 Deg N -81.7386 Deg W	231.9 - 212.4 ft msl	349.5 ft msl	4 " PVC	S	M

SAMPLE DATE	03/17/00	08/23/00	02/20/01	09/13/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	227.6	226.35	224.99	223.65	ft msl
pH	10.7	9.9	10.8	10.8	pH
Sp. Conductance	766	599	569	1134	uS/cm
Water temperature	15.9	22.5	19.3	2.5	deg. C
Alkalinity as CaCO3	143	102	87	9	mg/L
Turbidity	2.7	5.8	2.4	7	NTU
Volumes purged	.102	.222	0	.138	well volume
Sampling code	NX	NX	NX	X	
Synchronous water level	227.5 (03/21/00)	226 (09/23/00)	225 (03/29/01)	223.7 (09/26/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
	Inorganics																
	barium, total recoverable	37.5			42.8			32			50			1	GE	2000	ug/L
	cyanide	<8.6	JU	LV	<20	U		<15.2	U		<33	U		1	WA	40	ug/L
	lead, total recoverable	<20	U		<5	JU		5.3	J	I	3.9	J	I	1	WA	15	ug/L
	nickel, total recoverable	<60	U		<60	U		<26	U		<5	U		1	GE	100	ug/L
	selenium, total recoverable	<40	U		<14.5	U	V	<66	U		<31	U		1	WA	50	ug/L
	Organics																
	chlorobenzene	<1	U		<1	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethane	<1	U		<1	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	1.51			1.31	J	K	<5	U		1.38			1	GE	7	ug/L
	trans-1,2-dichloroethylene	<1	U		<1	U		<5	U		<5	U		1	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<1	U		<1	U		<5	U		<5	U		1	WA	5	ug/L
+	tetrachloroethylene	***32.7***			34.2	J	K	***17.9***			***26.4***			1	GE	5	ug/L
	1,1,1-trichloroethane	1.35			1.3	J	K	<5	U		1.09	J	I	1	WA	200	ug/L
+	trichloroethylene	***8.51***			14.9	J	K	4.63	J	I	***7.67***			1	GE	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
	Inorganics																
+	aluminum, total recoverable	***1510***			***1280***			2220	J	L	***1980***			1	GE	100	ug/L
+	nitrate-nitrite as nitrogen	***12600***			***13000***			***14300***			<16000	U		25	GE	2400	ug/L
+	sodium, total recoverable	***53400***			***45400***			***32200***			<28700	U		1	GE	4600	ug/L
+	sulfate	***5190***			***4600***											3000	ug/L
	Radionuclides																
	gross alpha	1.6			.646	U		.371	U		1.43	J	I	1	GE	15	pCi/L
	nonvolatile beta	17.27	J		15.5	J	K	.634	U		11.4			1	GE	50	pCi/L
	radium, total alpha-emitting	-.12	U	W	.1	U		.158	U		1.34	J	I	1	GE	5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-2. Groundwater Monitoring Results for Point-of-Compliance Wells, M-Area HWMF (Cont.)

WELL MSB 63B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 101184.3 E 47861	33.32763 Deg N -81.7374 Deg W	140.9 - 136.2 ft msl	346.9 ft msl	4 " PVC	S	LL

SAMPLE DATE	03/10/00	09/26/00	02/20/01	09/11/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	207.55	206.92	205.79	204.17	ft msl
pH	6.1	7	5.3	4.2	pH
Sp. Conductance	79	68	59	62	uS/cm
Water temperature	19.1	20.1	19.1		deg. C
Alkalinity as CaCO3	3	1	1	1	mg/L
Turbidity	.2	1.7	.9	.5	NTU
Volumes purged	3.39	1.99	2.42	3.06	well volume
Sampling code					
Synchronous water level	207.4 (03/21/00)	207.5 (12/28/00)	205.4 (03/29/01)	204.2 (09/26/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
	Inorganics																
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
	Organics																
+	chlorobenzene	***6.5***			<5	U		<5	U		<25	U		5	WA	5	ug/L
	1,1-dichloroethane	<5	U		<5	U		<5	U		<25	U		5	WA	5	ug/L
	1,1-dichloroethylene	<5	U		1.5	J	I	1.17	J	I	<25	U		5	WA	7	ug/L
	trans-1,2-dichloroethylene				<5	U		<5	U		<25	U		5	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<5	U		<5	U		<5	U		<25	U		5	WA	5	ug/L
+	tetrachloroethylene	***125***			***100***			***81.7***			***69***			5	WA	5	ug/L
	1,1,1-trichloroethane	<5	U		<5	U		<5	U		<25	U		5	WA	200	ug/L
+	trichloroethylene	***684***			***540***		L	***811***			***720***			5	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
	Inorganics																
	aluminum, total recoverable	<200	U		<200	U		31.5	J	I	<120	U	V	1	WA	100	ug/L
+	nitrate-nitrite as nitrogen	***6990***			***7800***											2400	ug/L
+	sodium, total recoverable	***5950***			***6660***			***4920***			4350			1	WA	4600	ug/L
	sulfate	359	J	I	120	J	I									3000	ug/L
	Radionuclides																
	gross alpha	3.36			1.84											15	pCi/L
	nonvolatile beta	7.29	J		3.91	J	K									50	pCi/L
	radium, total alpha-emitting	.93			.9	J	I									5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-2. Groundwater Monitoring Results for Point-of-Compliance Wells, M-Area HWMF (Cont.)

WELL MSB 63C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 101174.5 E 47849.2	33.32759 Deg N -81.7374 Deg W	195.8 - 191.1 ft msl	347 ft msl	4 " PVC	S	UL

SAMPLE DATE	03/10/00	09/26/00	02/20/01	09/11/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	219.04	217.92	217	215.35	ft msl
pH	5.8	5.2	5.5	4.2	pH
Sp. Conductance	36	37	36	40	uS/cm
Water temperature	18.5	20.3	19.3		deg. C
Alkalinity as CaCO3	2	6	1	0	mg/L
Turbidity	.4	1.5	1	.3	NTU
Volumes purged	3.49	2.65	3.35	3.32	well volume
Sampling code					
Synchronous water level	219 (03/21/00)	217.9 (09/23/00)	216.9 (03/29/01)	215.6 (09/26/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable	6.18	J	I	6.6	J	I	7.1			7.9	J	I	1	WA	2000	ug/L
	cyanide				<10	JU	Q									40	ug/L
	lead, total recoverable	<20	U		3.34	J	I	<47	U		2.7	J	I	1	WA	15	ug/L
	nickel, total recoverable	<60	U		<50	U										100	ug/L
	selenium, total recoverable	<40	U		<10	U										50	ug/L
Organics																	
	chlorobenzene	<1	U		<5	U		<10	U		<10	UJ	Q	2	WA	5	ug/L
	1,1-dichloroethane	<1	U		<5	U		<10	U		<10	UJ	Q	2	WA	5	ug/L
	1,1-dichloroethylene	.6	J	IK	<5	U		<10	U		<10	UJ	Q	2	WA	7	ug/L
	trans-1,2-dichloroethylene				<5	U		<10	U		<10	UJ	Q	2	WA	100	ug/L
	pcb 1016				<.95	U										.5	ug/L
	pcb 1221				<.95	U										.5	ug/L
	pcb 1232				<.95	U										.5	ug/L
	pcb 1242				<1.9	U										.5	ug/L
	pcb 1248				<.95	U										.5	ug/L
	pcb 1254				<.95	U										.5	ug/L
	pcb 1260				<.95	U										.5	ug/L
	1,1,2,2-tetrachloroethane	<1	U		<5	U		<10	U		<10	UJ	Q	2	WA	5	ug/L
+	tetrachloroethylene	155	J	K	***160***			***218***			225	J	Q	2	WA	5	ug/L
	1,1,1-trichloroethane	<1	U		<5	U		<10	U		<10	UJ	Q	2	WA	200	ug/L
+	trichloroethylene	22.6	J	K	24	J	K	***26***			20.3	J	Q	2	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable	<200	U		<200	U		<200	U		<322	U		1	WA	100	ug/L
+	nitrate-nitrite as nitrogen	1900			2400			2280			***2600***			5	WA	2400	ug/L
	sodium, total recoverable	3230			2950			3180			3360			1	WA	4600	ug/L
	sulfate	427			250											3000	ug/L
Radionuclides																	
	gross alpha	2.87			1.05	J	I	2.35	J	I	-.222	U		1	SC	15	pCi/L
	nonvolatile beta	2.57	J		1.78	J	IK	2.77	U		.541	U		1	SC	50	pCi/L
	radium, total alpha-emitting	.5	U	W	.5	U		1.16	J	I	2.36	U		1	SC	5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-2. Groundwater Monitoring Results for Point-of-Compliance Wells, M-Area HWMF (Cont.)

WELL MSB 63D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 101165.2 E 47837.4	33.32755 Deg N -81.7374 Deg W	232.8 - 212.8 ft msl	346.8 ft msl	4 " PVC	S	M

SAMPLE DATE	03/10/00	09/26/00	02/21/01	09/12/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	227.95	226.38	225.45	223.98	ft msl
pH	9.1	9.6	8.8	7.4	pH
Sp. Conductance	97	103	79	86	uS/cm
Water temperature	23.3	24.2	20.8	22.6	deg. C
Alkalinity as CaCO3	47	22	26	28	mg/L
Turbidity	14.9	12.8	14	11.2	NTU
Volumes purged	1.33	2.16	0		well volume
Sampling code	NX		NX	X	
Synchronous water level	227.8 (03/21/00)	226.5 (09/23/00)	224.2 (03/29/01)	224 (09/26/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
	Inorganics																
	barium, total recoverable	12	J	I	6.92	J	I	10			10.4			1	WA	2000	ug/L
	cyanide	<8.6	JU	ILV	<10	U		<15.2	U		<33	U		1	WA	40	ug/L
	lead, total recoverable	<7.48	JU	IV	<10	U		<47	U		<24	U		1	WA	15	ug/L
	nickel, total recoverable	<60	U		<7.09	JU		<26	U		<2.2	U	V	1	WA	100	ug/L
	selenium, total recoverable	<40	U		<10	U		<66	U		<31	U		1	WA	50	ug/L
	Organics																
	chlorobenzene	<1	U		<12	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethane	<1	U		<12	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<1	U		<12	U		<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene				<12	U		<5	U		<5	U		1	WA	100	ug/L
	pcb 1016				<1	U										.5	ug/L
	pcb 1221				<1	U										.5	ug/L
	pcb 1232				<1	U										.5	ug/L
	pcb 1242				<2	U										.5	ug/L
	pcb 1248				<1	U										.5	ug/L
	pcb 1254				<1	U										.5	ug/L
	pcb 1260				<1	U										.5	ug/L
	1,1,2,2-tetrachloroethane	<1	U		<12	U		<5	U		<5	U		1	WA	5	ug/L
+	tetrachloroethylene	***220***			130	J	K	***88.8***			***85.5***			1	WA	5	ug/L
	1,1,1-trichloroethane	<1	U		<12	U		<5	U		<5	U		1	WA	200	ug/L
+	trichloroethylene	***20.2***			11	J	IK	***7.81***			***7.24***			1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
	Inorganics																
+	aluminum, total recoverable	***1020***			***688***			***410***			***386***			1	WA	100	ug/L
+	nitrate-nitrite as nitrogen	***2770***			***2500***			1850			1990			5	WA	2400	ug/L
	sodium, total recoverable	4070			2950			2540			2370			1	WA	4600	ug/L
	sulfate	1440			730											3000	ug/L
	Radionuclides																
	gross alpha	2.72			.634	U		1.02	U		-.427	U		1	SC	15	pCi/L
	nonvolatile beta	12.99	J		1.4	J	IK	1.06	U		.331	U		1	SC	50	pCi/L
	radium, total alpha-emitting	.53			.2	U		.99	J	I	5.1	J	IK	1	SC	5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-2. Groundwater Monitoring Results for Point-of-Compliance Wells, M-Area HWMF (Cont.)

WELL MSB 64C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 101842.9 E 46589.2	33.32701 Deg N -81.7420 Deg W	181.2 - 176.5 ft msl	348.4 ft msl	4 " PVC	S	UL

SAMPLE DATE	03/15/00	08/22/00	02/21/01	09/11/01	
FIELD DATA					
Parameter	**1Q00**	**3Q00**	**1Q01**	**3Q01**	**Unit**
Water Elevation	221.78	219.8	218.75	217.18	ft msl
pH	4.7	4.7	4.8	4.2	pH
Sp. Conductance	187	199	188	206	uS/cm
Water temperature	19.3	20.2	20.1		deg. C
Alkalinity as CaCO3	0	0	0	0	mg/L
Turbidity	.3	.7	1	.6	NTU
Volumes purged	2.71	2.94	2.61		well volume
Sampling code					
Synchronous water level	220.4 (06/25/00)	219.8 (09/23/00)	218.3 (03/26/01)	217.6 (09/26/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable	29.6			31.7			36.4			31.2			1	WA	2000	ug/L
	cyanide																
	lead, total recoverable	<8.29	JU	IV	<5.55	JU		<47	U		<24	U		1	WA	15	ug/L
	nickel, total recoverable	<60	U		<60	U										100	ug/L
	selenium, total recoverable	<40	U		<8.41	U	V									50	ug/L
Organics																	
	chlorobenzene	<1	JU		<1	U		<10	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethane	.93	J	I	.96	J	IK	<10	U		1.08	J	I	1	WA	5	ug/L
+	1,1-dichloroethylene	26	J		22	J	K	***21.4***			***27***			1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	JU		<1	U		<10	U		<5	U		1	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<1	JU		<1	U		<10	U		<5	U		1	WA	5	ug/L
+	tetrachloroethylene	217	J		218	J	K	***151***			***149***			1	WA	5	ug/L
	1,1,1-trichloroethane	2.8	J		2.42	J	K	2.03	J	I	1.76	J	I	1	WA	200	ug/L
+	trichloroethylene	27.1	J		25.7	J	K	***21.9***			***22***			1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
+	aluminum, total recoverable	***230***						604	J	L	135	J	I	1	WA	100	ug/L
+	nitrate-nitrite as nitrogen	***16800***						***20000***			***21600***			50	WA	2400	ug/L
+	sodium, total recoverable	***14400***						***14500***			***16300***			1	WA	4600	ug/L
	sulfate	<400	U													3000	ug/L
Radionuclides																	
	gross alpha	11.05						4.5			5.39	J	I	1	SC	15	pCi/L
	nonvolatile beta	15.86						11.6			21.2			1	SC	50	pCi/L
	radium, total alpha-emitting	1.96						2.79			6.22	J	IK	1	SC	5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-2. Groundwater Monitoring Results for Point-of-Compliance Wells, M-Area HWMF (Cont.)

WELL MSB 64D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 101854.8 E 46598.5	33.32705 Deg N -81.7420 Deg W	230.1 - 210.1 ft msl	348.6 ft msl	4 " PVC	S	M

SAMPLE DATE	02/15/00	09/20/00	03/12/01	09/06/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	225.78	224.1	223	221.67	ft msl
pH	5.8	5.8	6.5	5.1	pH
Sp. Conductance	94	80	92	60	uS/cm
Water temperature	19.2	21.3	17.7	22.4	deg. C
Alkalinity as CaCO3	15	13	68	15	mg/L
Turbidity	.9	1.9	1.1	.4	NTU
Volumes purged	3.64	1.22	2.16		well volume
Sampling code					
Synchronous water level	225.3 (03/21/00)	224.6 (12/27/00)	222.8 (03/26/01)	221.6 (09/26/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable	11.6	J	I	10.5	J	I	22.9			12.1			1	WA	2000	ug/L
	cyanide	<20	U		<20	U		15.2	R	LQ	<33	U		1	WA	40	ug/L
	lead, total recoverable	<20	U		<20	U		8.8	J	I	2.5	J	I	1	WA	15	ug/L
	nickel, total recoverable	<60	U		<60	U		<26	U		1.6	J	I	1	WA	100	ug/L
	selenium, total recoverable	<40	U		<40	U		<66	U		<31	U		1	WA	50	ug/L
Organics																	
	chlorobenzene	<1	U		<1	JU	L	<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethane	<1	U		<1	JU	L	<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<1	U		<1	JU	L	<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	U		<1	JU	L	<5	U		<5	U		1	WA	100	ug/L
	pcb 1016										<1.01	UJ	Q	1	WA	.5	ug/L
	pcb 1221										<2.02	UJ	Q	1	WA	.5	ug/L
	pcb 1232										<1.01	UJ	Q	1	WA	.5	ug/L
	pcb 1242										<1.01	UJ	Q	1	WA	.5	ug/L
	pcb 1248										<1.01	UJ	Q	1	WA	.5	ug/L
	pcb 1254										<1.01	UJ	Q	1	WA	.5	ug/L
	pcb 1260										<1.01	UJ	Q	1	WA	.5	ug/L
	1,1,2,2-tetrachloroethane	<1	U		<1	JU	L	<5	U		<5	U		1	WA	5	ug/L
	tetrachloroethylene	<1	U		<1	JU	L	<5	U		<5	U		1	WA	5	ug/L
	1,1,1-trichloroethane	<1	U		<1	JU	L	<5	U		<5	U		1	WA	200	ug/L
	trichloroethylene	<1	U		<1	JU	L	<5	U		<5	UJ	L	1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable	<200	U		17.2	J	I	<40	U		<322	U		1	WA	100	ug/L
	nitrate-nitrite as nitrogen	1650			1890			1600			1720			5	WA	2400	ug/L
+	sodium, total recoverable	***15300***			***21000***			***12900***			***9250***			1	WA	4600	ug/L
+	sulfate	***3380***			***7700***											3000	ug/L
Radionuclides																	
	gross alpha	.34	U	W	.416	U		1.51	J	I	-.617	U	V	1	SC	15	pCi/L
	nonvolatile beta	2.7	U	V	2	J	I	3.28	J	I	2.36	U		1	SC	50	pCi/L
	radium, total alpha-emitting	.5			.4	J	I	.352	J	I	1.57			1	SC	5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-3. 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
N 107319.2 E 51217.5	33.34668 Deg N -81.7405 Deg W	151.7 - 145.1 ft msl	365 ft msl	4 " PVC	S	LL

SAMPLE DATE	02/15/00	08/25/00	03/06/01	08/24/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	222.56	221.09	219.69	218.56	ft msl
pH	5.6	5	5.5	5.3	pH
Sp. Conductance	28	28	30	29	uS/cm
Water temperature	16.9	21	19.2	22.7	deg. C
Alkalinity as CaCO3	1	0	1	0	mg/L
Turbidity	1.1	.9	.3	.2	NTU
Volumes purged	.020	2.47	2.33	2.12	well volume
Sampling code	NX				
Synchronous water level	222.4 (03/23/00)	223.1 (12/31/00)	219.4 (03/20/01)	218.4 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable	7.35	J	I	7.98	J	I	9.3			<8.9	U	V	1	WA	2000	ug/L
	cyanide	<10	U		<10	U		<15.2	U		<33	U		1	WA	40	ug/L
	lead, total recoverable	<10	U		<10	U		<47	U		<24	U		1	WA	15	ug/L
	nickel, total recoverable	<50	U		<50	U		<26	U		<4.1	U		1	WA	100	ug/L
	selenium, total recoverable	<10	U		<10	U		<66	U		<31	U		1	WA	50	ug/L
Organics																	
	chlorobenzene	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene	<5	U		<5	U					<5	U		1	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	tetrachloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1,1-trichloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	200	ug/L
	trichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable	<200	U		<200	U		59.5	J	I	62.4	J	I	1	WA	100	ug/L
	chloride	2770			2540			2720			2830			1	WA	4200	ug/L
	chromium, total recoverable	<10	U		<10	U		<10	U		2.4	J	I	1	WA	100	ug/L
	cobalt, total recoverable	<20	U		<20	U										4	ug/L
	copper, total recoverable	<20	U		<20	U										1300	ug/L
	fluoride	<200	U		<200	U		<100	U		<11.5	U	V	1	WA	4000	ug/L
	manganese, total recoverable	1.77	J	I	<1.4	U	V	1.66	J	I	1.3	J	I	1	WA	50	ug/L
	mercury, total recoverable	<.5	U		<.5	U		<.5	U		<.3	U		1	WA	2	ug/L
	nitrate-nitrite as nitrogen	1360			1460			1420			1450			2	WA	2400	ug/L
	sodium, total recoverable	2440			2600			2660			2350			1	WA	4600	ug/L
	sulfate	469			<400	U		1160			483			1	WA	3000	ug/L
	total phosphates (as p)	<2500	U		<2500	U		<2500	U		<101	UJ	Q	1	WA	300	ug/L
	uranium-238																
	zinc, total recoverable	<20	U		<20	U										5000	ug/L
Radionuclides																	
	gross alpha	2.02			.898	U										15	pCi/L
	nonvolatile beta	.33	U	W	1.28	U										50	pCi/L
	radium, total alpha-emitting	.72			1.5	J	I									5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-3. Groundwater Monitoring Results for Background Wells, M-Area HWMF (Cont.)
WELL MSB 29C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 107315 E 51206.6	33.34665 Deg N -81.7405 Deg W	179.7 - 174.1 ft msl	365 ft msl	4 " PVC	S	UL

SAMPLE DATE	02/15/00	08/25/00	03/06/01	08/24/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	228.47	227.41	225.95	225	ft msl
pH	5.5	4.9	5	4.9	pH
Sp. Conductance	28	29	28	28	uS/cm
Water temperature	18.9	20.7	19.2	21.9	deg. C
Alkalinity as CaCO3	2	0	0	0	mg/L
Turbidity	1.1	.9	.4	.1	NTU
Volumes purged	5.39	2.78	2.39	2.52	well volume
Sampling code					
Synchronous water level	228.4 (03/23/00)	230.1 (12/31/00)	225.7 (03/20/01)	224.6 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable	6	J	I	5.96	J	I	5.2			<5.3	U	V	1	WA	2000	ug/L
	cyanide	<10	U		<10	U		<15.2	U		<33	U		1	WA	40	ug/L
	lead, total recoverable	<10	U		<10	U		<47	U		<24	U		1	WA	15	ug/L
	nickel, total recoverable	<50	U		<50	U		<26	U		<.42	UJ		1	WA	100	ug/L
	selenium, total recoverable	<10	U		<10	U		<66	U		<31	U		1	WA	50	ug/L
Organics																	
	chlorobenzene	<5	U		<5	U		<5	U		<5	UJ	L	1	WA	5	ug/L
	1,1-dichloroethane	<5	U		<5	U		<5	U		<5	UJ	L	1	WA	5	ug/L
	1,1-dichloroethylene	<5	U		<5	U		<5	U		<5	UJ	L	1	WA	7	ug/L
	trans-1,2-dichloroethylene	<5	U		<5	U					<5	UJ	L	1	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<5	U		<5	U		<5	U		<5	UJ	L	1	WA	5	ug/L
	tetrachloroethylene	<5	U		<5	U		<5	U		<5	UJ	L	1	WA	5	ug/L
	1,1,1-trichloroethane	<5	U		<5	U		<5	U		<5	UJ	L	1	WA	200	ug/L
	trichloroethylene	<5	U		<5	U		<5	U		<5	UJ	L	1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable	<200	U		77	J	I	53.7	J	I	<322	U		1	WA	100	ug/L
	chloride	2810			2600			2820			3000			1	WA	4200	ug/L
	chromium, total recoverable	<10	U		<10	U		<10	U		1.8	J	I	1	WA	100	ug/L
	cobalt, total recoverable	<20	U		<20	U										4	ug/L
	copper, total recoverable	13.9	J	I	<20	U										1300	ug/L
	fluoride	<200	U		<200	U		<100	U		<7.5	U	V	1	WA	4000	ug/L
	manganese, total recoverable	1.77	J	I	1.9	J	I	2.26	J	I	1.6			1	WA	50	ug/L
	mercury, total recoverable	<.5	U		<.5	U		<.5	U		<.3	U		1	WA	2	ug/L
	nitrate-nitrite as nitrogen	1350			1440			1270			1320			2	WA	2400	ug/L
	sodium, total recoverable	2470			2500			2650			2300			1	WA	4600	ug/L
	sulfate	366	J	I	535			1290			479			1	WA	3000	ug/L
	total phosphates (as p)	<2500	U		<2500	U		<2500	U		<101	UJ	Q	1	WA	300	ug/L
	uranium-238																
	zinc, total recoverable	<20	U		8.8	J	I									5000	ug/L
Radionuclides																	
	gross alpha	3.73			1.28	J	IK									15	pCi/L
	nonvolatile beta	3.85			2.58	J	I									50	pCi/L
	radium, total alpha-emitting	.34	U	W	.5	J	I									5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-3. Groundwater Monitoring Results for Background Wells, M-Area HWMF (Cont.)
WELL MSB 29D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 107323.3 E 51226.9	33.34670 Deg N -81.7404 Deg W	227.6 - 207 ft msl	364.9 ft msl	4 " PVC	S	M

SAMPLE DATE	02/16/00	09/28/00	03/06/01	08/24/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	230.59	229.24	228.16	217.3	ft msl
pH	5.6	5.5	6.4	4.8	pH
Sp. Conductance	30	33	36	32	uS/cm
Water temperature	18.3	19.8	20.3	21.9	deg. C
Alkalinity as CaCO3	1	0	13	0	mg/L
Turbidity	1.2	1.8	1.2	.2	NTU
Volumes purged	3.32	8.51	2.84	2.87	well volume
Sampling code					
Synchronous water level	230.4 (03/23/00)	232.4 (12/31/00)	228.1 (03/20/01)	226.9 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

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ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable	<8.64	U	V	11.5			14.4			<10.8	U	V	1	WA	2000	ug/L
	cyanide	<10	U		<10	U		<15.2	U		<33	U		1	WA	40	ug/L
	lead, total recoverable	11.2			3.11	J	I	<47	U		<24	U		1	WA	15	ug/L
	nickel, total recoverable	<10.9	JU	V	<5.27	JU		3.1	J	I	<1.3	UJ		1	WA	100	ug/L
	selenium, total recoverable	<10	U		<10	U		<66	U		<31	U		1	WA	50	ug/L
Organics																	
	chlorobenzene	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene	<5	U		<5	U					<5	U		1	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	tetrachloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1,1-trichloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	200	ug/L
	trichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable	<200	U		<200	U		<50.1	U	V	43	J	I	1	WA	100	ug/L
	chloride	3450	J	K	3340			3010			3120			1	WA	4200	ug/L
	chromium, total recoverable	6.18	J	I	<10	U		<3.08	JU		2.1	J	I	1	WA	100	ug/L
	cobalt, total recoverable	<20	U		<20	U										4	ug/L
	copper, total recoverable	17.4	J	I	19	J	I									1300	ug/L
	fluoride	188	J	I	<200	U		<100	U		<7.43	U	V	1	WA	4000	ug/L
	manganese, total recoverable	9.17	J	I	14			1.38	J	I	1	J	I	1	WA	50	ug/L
	mercury, total recoverable	<.5	U		<.5	U		<.5	U		<.3	U		1	WA	2	ug/L
+	nitrate-nitrite as nitrogen	867			1400			***3340***			1800			2	WA	2400	ug/L
	sodium, total recoverable	2700		V	3400			3830			3230			1	WA	4600	ug/L
	sulfate	356	J	IK	647			862			560			1	WA	3000	ug/L
	total phosphates (as p)	2500	J	K	<2500	U		<2500	U		<101	UJ	Q	1	WA	300	ug/L
	uranium-238																
	zinc, total recoverable	10.1	J	I	7.5	J	I									5000	ug/L
Radionuclides																	
+	gross alpha	***28.5***			12.4	J	K									15	pCi/L
	nonvolatile beta	19.3	J		4.93											50	pCi/L
	radium, total alpha-emitting	3.33		V	3.7											5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-3. Groundwater Monitoring Results for Background Wells, M-Area HWMF (Cont.)
WELL MSB 43A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 107275.3 E 49293.7	33.34344 Deg N -81.7454 Deg W	140.5 - 134.9 ft msl	357.7 ft msl	4 " PVC	S	LL

SAMPLE DATE	02/11/00	09/10/00	03/06/01	09/14/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	227.87	226.23	224.9	223.99	ft msl
pH	5.1	5.7	7	4.1	pH
Sp. Conductance	25	30	43	27	uS/cm
Water temperature	19.3	22.5	14.9		deg. C
Alkalinity as CaCO3	0	8	5	10	mg/L
Turbidity	.5	.4	2.7	.5	NTU
Volumes purged	2.60	2.46	2.10		well volume
Sampling code					
Synchronous water level	227.6 (03/23/00)	229 (12/31/00)	224.9 (03/20/01)	223.9 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

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ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable	9.54	J	I	13.8			29.7			8.5			1	WA	2000	ug/L
	cyanide	<10	U		<10	U		<15.2	U		<33	U		1	WA	40	ug/L
	lead, total recoverable	<1.93	JU		2.21	J	I	17.8	J	I	4.2	J	I	1	WA	15	ug/L
	nickel, total recoverable	<50	U		<10.4	U	V	<26	U		<1	U	V	1	WA	100	ug/L
	selenium, total recoverable	<10	U		8.21	J	I	<66	U		<31	U		1	WA	50	ug/L
Organics																	
	chlorobenzene	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene	<5	U		<5	U					<5	U		1	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	tetrachloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1,1-trichloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	200	ug/L
	trichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable	<200	U		<200	U		<200	U		<322	U		1	WA	100	ug/L
	chloride	1530			1620			1550			1720			1	WA	4200	ug/L
	chromium, total recoverable	<10	U		<10	U		<10	U		<11	U		1	WA	100	ug/L
	cobalt, total recoverable	<20	U		<20	U										4	ug/L
	copper, total recoverable	<20	U		<20	U										1300	ug/L
	fluoride	391			153	J	I	<100	U		<62	U		1	WA	4000	ug/L
	manganese, total recoverable	2.51	J	I	2.3	J	I	2.03	J	I	2.5			1	WA	50	ug/L
	mercury, total recoverable	<.5	U		<.5	U		<.5	U		<.3	U		1	WA	2	ug/L
	nitrate-nitrite as nitrogen	1470			1620			1750			1830			2	WA	2400	ug/L
	sodium, total recoverable	1700		V	2000			2100			2020			1	WA	4600	ug/L
	sulfate	284	J	I	252	J	I	709			312	J	I	1	WA	3000	ug/L
	total phosphates (as p)	<2500	U		<2500	U		<2500	U		14.1	J	I	1	WA	300	ug/L
	uranium-238																
	zinc, total recoverable	4.38	J	I	6.3	J	I									5000	ug/L
Radionuclides																	
	gross alpha	.76	U	W	.531	U										15	pCi/L
	nonvolatile beta	2.16			4.32											50	pCi/L
	radium, total alpha-emitting	.72	U	V	.1	U										5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-3. Groundwater Monitoring Results for Background Wells, M-Area HWMF (Cont.)

WELL MSB 43B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 107274.6 E 49311.8	33.34346 Deg N -81.7454 Deg W	175.5 - 169.9 ft msl	357.8 ft msl	4 " PVC	S	UL

SAMPLE DATE	02/11/00	09/10/00	03/06/01	08/29/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	228	226.4	225.1	223.91	ft msl
pH	4.7	5.1	5.2	4.9	pH
Sp. Conductance	24	24	23	23	uS/cm
Water temperature	19.3	20.8	18.2	21.9	deg. C
Alkalinity as CaCO3	0	0	3	0	mg/L
Turbidity	.5	.6	1.9	.6	NTU
Volumes purged	2.50	2.49	2.13	2.24	well volume
Sampling code					
Synchronous water level	227.8 (03/23/00)	229 (12/31/00)	225 (03/20/01)	224 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

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ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable	<3.22	U	V	2.89	J	I	3.1			3.1	J	I	1	WA	2000	ug/L
	cyanide	<10	U		<10	U		<15.2	U		<33	U		1	WA	40	ug/L
	lead, total recoverable	<10	U		<10	U		7.5	J	I	5.4	J	I	1	WA	15	ug/L
	nickel, total recoverable	<50	U		<50	U		<26	U		2.5	J	I	1	WA	100	ug/L
	selenium, total recoverable	<10	U		<10	U		<66	U		<31	U		1	WA	50	ug/L
Organics																	
	chlorobenzene	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene	<5	U		<5	U					<5	U		1	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	tetrachloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1,1-trichloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	200	ug/L
	trichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable	<200	U		<200	U		<200	U		<53.9	U	V	1	WA	100	ug/L
	chloride	1950			1900			1820			1760			1	WA	4200	ug/L
	chromium, total recoverable	<10	U		<10	U		<10	U		6.9	J	I	1	WA	100	ug/L
	cobalt, total recoverable	<20	U		<20	U										4	ug/L
	copper, total recoverable	<20	U		<4.6	JU	I									1300	ug/L
	fluoride	373			159	J	I	<100	U		<7.42	U	V	1	WA	4000	ug/L
	manganese, total recoverable	1.61	J	I	2.5	J	I	.67	J	I	2			1	WA	50	ug/L
	mercury, total recoverable	<.5	U		<.5	U		<.5	U		<.3	U		1	WA	2	ug/L
	nitrate-nitrite as nitrogen	1440			1480			1540			1540			2	WA	2400	ug/L
	sodium, total recoverable	2330		V	2400			2220			2110			1	WA	4600	ug/L
	sulfate	359	J	I	374	J	I	1030			449			1	WA	3000	ug/L
	total phosphates (as p)	<2500	U		<2500	U		<2500	U		<101	U		1	WA	300	ug/L
	uranium-238																
	zinc, total recoverable	10.3	J	I	12	J	I									5000	ug/L
Radionuclides																	
	gross alpha	3.76			1.44	J	I									15	pCi/L
	nonvolatile beta	4.24			1.48	U										50	pCi/L
	radium, total alpha-emitting	.99	U	V	.5	U	V									5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-3. Groundwater Monitoring Results for Background Wells, M-Area HWMF (Cont.)

WELL MSB 43D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 107274.2 E 49322	33.34348 Deg N -81.7454 Deg W	220.8 - 200.2 ft msl	358 ft msl	4 " PVC	S	M/GC

SAMPLE DATE	02/11/00	09/10/00	03/06/01	08/29/01	
FIELD DATA					
Parameter	**1Q00**	**3Q00**	**1Q01**	**3Q01**	**Unit**
Water Elevation	230.1	228.63	226.9	226.31	ft msl
pH	3.3	4.8	5	4.5	pH
Sp. Conductance	23	23	20	23	uS/cm
Water temperature	19.7	21.5	15.6	22	deg. C
Alkalinity as CaCO3	0	0	0	0	mg/L
Turbidity	.6	.3	2	.3	NTU
Volumes purged	2.66	3.01	2.06	2.23	well volume
Sampling code					
Synchronous water level	229.9 (03/23/00)	231.4 (12/31/00)	227.3 (03/20/01)	226.2 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

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ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable	<3.61	U	V	2.98	J	I	3.8			3.6	J	I	1	WA	2000	ug/L
	cyanide	<10	U		<10	U		<15.2	U		<33	U		1	WA	40	ug/L
+	lead, total recoverable	***25.8***			10.6			***81***			17.4	J	I	1	WA	15	ug/L
	nickel, total recoverable	<50	U		<50	U		<26	U		<1.3	UJ		1	WA	100	ug/L
	selenium, total recoverable	<10	U		<10	U		<66	U		<31	U		1	WA	50	ug/L
Organics																	
	chlorobenzene	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene	<5	U		<5	U					<5	U		1	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	tetrachloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1,1-trichloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	200	ug/L
	trichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable	84.9	J	I	<200	U		77.7	J	I	<148	U	V	1	WA	100	ug/L
	chloride	1920			1710			1980			1870			1	WA	4200	ug/L
	chromium, total recoverable	4.2	J	I	<10	U		<10	U		1.4	J	I	1	WA	100	ug/L
	cobalt, total recoverable	4.66	J	I	<20	U										4	ug/L
	copper, total recoverable	119			37											1300	ug/L
	fluoride	309			<200	U		<100	U		<8.36	U	V	1	WA	4000	ug/L
	manganese, total recoverable	4.83	J	I	4.8	J	I	3.39	J	I	4			1	WA	50	ug/L
	mercury, total recoverable	<.5	U		<.5	U		<.5	U		<.3	U		1	WA	2	ug/L
	nitrate-nitrite as nitrogen	953			1050			1060			1070			2	WA	2400	ug/L
	sodium, total recoverable	1510		V	1500			1490			1420			1	WA	4600	ug/L
	sulfate	508			308	J	I	1250			573			1	WA	3000	ug/L
	total phosphates (as p)	<2500	U		<2500	U		<2500	U		<101	U		1	WA	300	ug/L
	uranium-238																
	zinc, total recoverable	18.4	J	I	13	J	I									5000	ug/L
Radionuclides																	
	gross alpha	1.31			.495	U										15	pCi/L
	nonvolatile beta	1.39	U	W	2.12	J	I									50	pCi/L
	radium, total alpha-emitting	.45	U	V	.3	U										5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. 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
N 97764.3 E 44118.8	33.31396 Deg N -81.7406 Deg W	211.1 - 181.1 ft msl	371.9 ft msl	4 " PVC	S	M

SAMPLE DATE	02/01/00	09/25/00	03/12/01	09/05/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	222.16	216	*Not Applicable*	215.5	ft msl
pH	4.4	4.5	4.6	5	pH
Sp. Conductance	64	81	54	38	uS/cm
Water temperature	19.1	21.4	19	20.9	deg. C
Alkalinity as CaCO3	0	0	0	0	mg/L
Turbidity	.8	.6	1	2.9	NTU
Volumes purged	2.46	4.07		2.36	well volume
Sampling code					
Synchronous water level	222.2 (03/20/00)	219 (12/30/00)	218.6 (03/30/01)	214 (09/26/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

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ST	Parameter	1Q00	CLP EPA	3Q00	CLP EPA	1Q01	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	barium, total recoverable												
	cyanide												
	lead, total recoverable												
	nickel, total recoverable												
	selenium, total recoverable												
Organics													
	chlorobenzene	<1	JU	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethane	<1	JU	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethylene	<1	JU	<5	U	<5	U	<5	U	1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	JU	<5	U	<5	U	<5	U	1	WA	100	ug/L
	pcb 1016												
	pcb 1221												
	pcb 1232												
	pcb 1242												
	pcb 1248												
	pcb 1254												
	pcb 1260												
	1,1,2,2-tetrachloroethane	<1	JU	<5	U	<5	U	<5	U	1	WA	5	ug/L
	tetrachloroethylene	<1	JU	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1,1-trichloroethane	<1	JU	<5	U	<5	U	<5	U	1	WA	200	ug/L
	trichloroethylene	.99	J I	1.2	J I	<5	U	2.46	J I	1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP EPA	3Q99	CLP EPA	3Q00	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	aluminum, total recoverable	114	J I	120	J I	104	J I	<127	U V	1	WA	100	ug/L
+	nitrate-nitrite as nitrogen	***5640***		***6220***								2400	ug/L
	sodium, total recoverable	1820	V	2200		1960		1240		1	WA	4600	ug/L
	sulfate	190	J I	276								3000	ug/L
Radionuclides													
	gross alpha	13.96	J	6.22								15	pCi/L
	nonvolatile beta	5.04	UJ W	3.55								50	pCi/L
	radium, total alpha-emitting	3.24		3.5								5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL ABP 3C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 97778.2 E 44506.3	33.31462 Deg N -81.7396 Deg W	165.3 - 160.3 ft msl	354.5 ft msl	4 " PVC	S	LL

SAMPLE DATE	02/01/00	09/07/00	03/20/01	09/05/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	196.39	194.22	193.77	192.19	ft msl
pH	9.9	9.6	9.6	8.9	pH
Sp. Conductance	153	112	107	105	uS/cm
Water temperature	19.1	20.3	18.9	20.5	deg. C
Alkalinity as CaCO3	40	57	0	25	mg/L
Turbidity	.5	.4	.1	.3	NTU
Volumes purged	2.47	2.72			well volume
Sampling code					
Synchronous water level	196.5 (03/20/00)	194.3 (09/23/00)	193.7 (03/30/01)	192.8 (09/26/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

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ST	Parameter	1Q00	CLP EPA	3Q00	CLP EPA	1Q01	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	barium, total recoverable												
	cyanide												
	lead, total recoverable												
	nickel, total recoverable												
	selenium, total recoverable												
Organics													
	chlorobenzene	<1	JU	<5	JU L	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethane	<1	JU	<5	JU L	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethylene	1.3	J	<5	JU L	<5	U	<5	U	1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	JU	<5	JU L	<5	U	<5	U	1	WA	100	ug/L
	pcb 1016												
	pcb 1221												
	pcb 1232												
	pcb 1242												
	pcb 1248												
	pcb 1254												
	pcb 1260												
	1,1,2,2-tetrachloroethane	<1	JU	<5	JU L	<5	U	<5	U	1	WA	5	ug/L
+	tetrachloroethylene	29.9	J	19	J L	***15.7***		***15.4***		1	WA	5	ug/L
	1,1,1-trichloroethane	<1	JU	<5	JU L	<5	U	<5	U	1	WA	200	ug/L
+	trichloroethylene	32.9	J	13	J L	***19.8***		***17.9***		1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP EPA	3Q99	CLP EPA	3Q00	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
+	aluminum, total recoverable	***359***		***290***		***263***		<230	U V	1	WA	100	ug/L
+	nitrate-nitrite as nitrogen	***3790***		***3600***								2400	ug/L
	sodium, total recoverable	4160	V	4200		3980		3330		1	WA	4600	ug/L
	sulfate	509		222								3000	ug/L
Radionuclides													
	gross alpha	4.54	J	.996	U							15	pCi/L
	nonvolatile beta	3.32	UJ W	1.25	U							50	pCi/L
	radium, total alpha-emitting	1.35		.3	U							5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL ABP 8C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 97855.6 E 43968.7	33.31392 Deg N -81.7411 Deg W	190.6 - 185.5 ft msl	372.1 ft msl	4 " PVC	S	UL

SAMPLE DATE	03/02/00	08/17/00	03/01/01	08/17/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	195.9	193.75	192.97	191.95	ft msl
pH	11	11.3	11.6	11.4	pH
Sp. Conductance	3412	3639	3187	3234	uS/cm
Water temperature	18.6	20.6	19	22.6	deg. C
Alkalinity as CaCO3	761	642	703	491	mg/L
Turbidity	11	5.5	5.9	7.3	NTU
Volumes purged	0	0	.839	.244	well volume
Sampling code	NX	NX	NX	X	
Synchronous water level	195.9 (03/20/00)	193.5 (09/27/00)	193.1 (03/30/01)	191.3 (09/26/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

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ST	Parameter	1Q00	CLP EPA	3Q00	CLP EPA	1Q01	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	barium, total recoverable												
	cyanide												
+	lead, total recoverable			***172***		10.8	J I	***41.1***		1	WA	15	ug/L
	nickel, total recoverable												
	selenium, total recoverable												
Organics													
	chlorobenzene	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethane	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethylene	<1	U	<5	U	<5	U	<5	U	1	WA	7	ug/L
	trans-1,2-dichloroethylene			<5	U	<5	U	<5	U	1	WA	100	ug/L
	pcb 1016												
	pcb 1221												
	pcb 1232												
	pcb 1242												
	pcb 1248												
	pcb 1254												
	pcb 1260												
	1,1,2,2-tetrachloroethane	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
	tetrachloroethylene	<1	U	<5	U	<5	U	1.32	J I	1	WA	5	ug/L
	1,1,1-trichloroethane	<1	U	<5	U	<5	U	<5	U	1	WA	200	ug/L
+	trichloroethylene	***5.02***		6.3	J K	4.92	J I	4.11	J I	1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP EPA	3Q99	CLP EPA	3Q00	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
+	aluminum, total recoverable	***3760***		***3090***		***3490***		***3690***		1	WA	100	ug/L
	nitrate-nitrite as nitrogen	159		458	J I							2400	ug/L
+	sodium, total recoverable	***29000***	V	***18700***		***25600***		***26700***		1	WA	4600	ug/L
	sulfate	4430	J Q	2960								3000	ug/L
Radionuclides													
	gross alpha	13.72		3.09								15	pCi/L
	nonvolatile beta	38.09		13.6								50	pCi/L
	radium, total alpha-emitting	3.5		1.4	J I							5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL AC 3A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 100989.1 E 42119.8	33.31782 Deg N -81.7521 Deg W	153.6 - 148.6 ft msl	302.3 ft msl	4 " PVC	S	UL

SAMPLE DATE	02/01/00	09/07/00	03/19/01	08/25/01	
FIELD DATA					
Parameter	**1Q00**	**3Q00**	**1Q01**	**3Q01**	**Unit**
Water Elevation	209.57	207.46	205.59	204.61	ft msl
pH	5.8	5.8	6.5		pH
Sp. Conductance	46	44	45		uS/cm
Water temperature	18.8	19.3	19		deg. C
Alkalinity as CaCO3	3	15	7	15	mg/L
Turbidity	1	.9	.8		NTU
Volumes purged	2.33	3.12	2.60	3.03	well volume
Sampling code					
Synchronous water level	209.5 (03/21/00)	207.5 (09/24/00)	205.8 (03/26/01)	( )	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

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ST	Parameter	1Q00	CLP EPA	3Q00	CLP EPA	1Q01	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	barium, total recoverable												
	cyanide												
	lead, total recoverable												
	nickel, total recoverable												
	selenium, total recoverable												
Organics													
	chlorobenzene	<1	JU	<5	U	<5	U	<5	UJ L	1	WA	5	ug/L
	1,1-dichloroethane	<1	JU	<5	U	<5	U	<5	UJ L	1	WA	5	ug/L
	1,1-dichloroethylene	<1	JU	<5	U	<5	U	<5	UJ L	1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	JU	<5	U	<5	U	<5	UJ L	1	WA	100	ug/L
	pcb 1016												
	pcb 1221												
	pcb 1232												
	pcb 1242												
	pcb 1248												
	pcb 1254												
	pcb 1260												
	1,1,2,2-tetrachloroethane	<1	JU	<5	U	<5	U	<5	UJ L	1	WA	5	ug/L
	tetrachloroethylene	<1	JU	<5	U	<5	U	<5	UJ L	1	WA	5	ug/L
	1,1,1-trichloroethane	<1	JU	<5	U	<5	U	<5	UJ L	1	WA	200	ug/L
	trichloroethylene	<1	JU	<5	U	<5	U	<5	UJ L	1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP EPA	3Q99	CLP EPA	3Q00	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	aluminum, total recoverable	108	J I	29	J I	<200	U	<322	U V	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	215		213		299	J I	2140		5	WA	2400	ug/L
	sodium, total recoverable	2810	V	2490		2860		2450		1	WA	4600	ug/L
	sulfate	889		970								3000	ug/L
Radionuclides													
	gross alpha	.76		.419	U							15	pCi/L
	nonvolatile beta	2.36		1.89	J I							50	pCi/L
	radium, total alpha-emitting	.31	U W	0	U							5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL AMB 4A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 104131.6 E 51469.8	33.34004 Deg N -81.7336 Deg W	126.3 - 121.3 ft msl	380.5 ft msl	4 " PVC	S	MCBC

SAMPLE DATE	02/23/00	07/25/00	02/27/01	08/16/01	
FIELD DATA					
Parameter	**1Q00**	**3Q00**	**1Q01**	**3Q01**	**Unit**
Water Elevation	217.3	215.78	213.19	211.57	ft msl
pH	5.9	5.9	5.8	5.5	pH
Sp. Conductance	34	31	27	26	uS/cm
Water temperature	18.8	21.5	20	20.6	deg. C
Alkalinity as CaCO3	4	6	10	1	mg/L
Turbidity	1.6	1.1	1.2	4.2	NTU
Volumes purged	2.45	2.57	2.41	2.34	well volume
Sampling code					
Synchronous water level	217.2 (03/23/00)	214.7 (09/27/00)	212.1 (03/20/01)	211.7 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

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ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable	<6.16	U	V	4.87	J	I	4.9			5.1	J	I	1	WA	2000	ug/L
	cyanide	<10	U		<10	U		<15.2	U		<33	U		1	WA	40	ug/L
	lead, total recoverable	<10	U		<10	U		<47	U		<24	U		1	WA	15	ug/L
	nickel, total recoverable	<6.24	JU	V	<50	U		<26	U		<.77	UJ		1	WA	100	ug/L
	selenium, total recoverable	<10	U		<10	U		<66	U		<31	U		1	WA	50	ug/L
Organics																	
	chlorobenzene	<25	U		<25	JU	L	<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethane	<25	U		<25	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<25	U		<25	U		<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene	<25	U		<25	U		<5	U		<5	U		1	WA	100	ug/L
	pcb 1016							<1.02	U							.5	ug/L
	pcb 1221							<2.04	U							.5	ug/L
	pcb 1232							<1.02	U							.5	ug/L
	pcb 1242							<1.02	U							.5	ug/L
	pcb 1248							<1.02	U							.5	ug/L
	pcb 1254							<1.02	U							.5	ug/L
	pcb 1260							<1.02	U							.5	ug/L
	1,1,2,2-tetrachloroethane	<25	U		<25	U		<5	U		<5	U		1	WA	5	ug/L
+	tetrachloroethylene	***62***			67	J	K	25.2	J	K	***29.6***			1	WA	5	ug/L
	1,1,1-trichloroethane	<25	U		<25	U		<5	U		<5	U		1	WA	200	ug/L
+	trichloroethylene	***380***			590	J	K	58.1	J	K	***24.3***			1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable	55.7	J	I	17.8	J	I	<200	U		57.4	J	I	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	953			899			921	J	K	891			1	WA	2400	ug/L
	sodium, total recoverable	2360		V	2030			2240			1850			1	WA	4600	ug/L
	sulfate	784	J	Q	616			1370			841			1	WA	3000	ug/L
Radionuclides																	
	gross alpha	1.05			.0121	U										15	pCi/L
	nonvolatile beta	6.6	J		.357	U										50	pCi/L
	radium, total alpha-emitting	.13	U	W	0	U										5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL AMB 4B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 104145.6 E 51482.7	33.34009 Deg N -81.7336 Deg W	157.3 - 152.3 ft msl	380.4 ft msl	4 " PVC	S	LL

SAMPLE DATE	02/14/00	09/26/00	03/15/01	08/25/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	222.8	220.61	219.78	217.98	ft msl
pH	4.3	4.9	5.1	4.8	pH
Sp. Conductance	26	27	26	26	uS/cm
Water temperature	19.4	19.7	21	20.2	deg. C
Alkalinity as CaCO3	0	0	0	0	mg/L
Turbidity	.4	.4	.7	.9	NTU
Volumes purged	2.73	2.78	2.92	2.49	well volume
Sampling code					
Synchronous water level	222.6 (03/23/00)	220.9 (09/27/00)	218.8 (03/20/01)	217.7 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

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ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
	Inorganics																
	barium, total recoverable	5.16	J	I	11.6			4.7			5.8	J	I	1	WA	2000	ug/L
	cyanide	<10	U		<10	U		<15.2	U		<33	U		1	WA	40	ug/L
	lead, total recoverable	<10	U		<10	U		<47	U		<24	U		1	WA	15	ug/L
	nickel, total recoverable	<50	U		<9.26	JU		<26	U		<4.1	U		1	WA	100	ug/L
	selenium, total recoverable	<10	U		<10	U		<66	U		<31	U		1	WA	50	ug/L
	Organics																
	chlorobenzene	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	tetrachloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1,1-trichloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	200	ug/L
+	trichloroethylene	4.5	J	I	4.6	J	IK	***8.96***			***5.83***			1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
	Inorganics																
+	aluminum, total recoverable	***292***			29	J	I	<54.3	U	V	<81.9	U	V	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	440			444			528			1000			2	WA	2400	ug/L
	sodium, total recoverable	3210			2970			3180			2800			1	WA	4600	ug/L
	sulfate	1180			402			890			499			1	WA	3000	ug/L
	Radionuclides																
	gross alpha	1.85			.636	U										15	pCi/L
	nonvolatile beta	8.38	J		.463	U										50	pCi/L
	radium, total alpha-emitting	.74			.3	U										5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL AMB 4D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 104154.7 E 51489	33.34012 Deg N -81.7336 Deg W	233.4 - 213.4 ft msl	380.3 ft msl	4 " PVC	S	M

SAMPLE DATE	02/23/00	08/29/00	02/27/01	08/25/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	229.72	227.9	226.44	229.05	ft msl
pH	5.3	5.1	5.3	5.2	pH
Sp. Conductance	29	23	25	21	uS/cm
Water temperature	19.4	20.5	20.7	24.2	deg. C
Alkalinity as CaCO3	3	4	0	2	mg/L
Turbidity	.8	3.7	1.1	1	NTU
Volumes purged	2.71	3.36	3.16	2.14	well volume
Sampling code					
Synchronous water level	229.6 (03/23/00)	227.6 (09/27/00)	253.4 (06/27/01)	( )	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

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ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable	<4.42	U	V	3.43	J	I	2.7			3.7	J	I	1	WA	2000	ug/L
	cyanide	<10	U		<10	U		<15.2	U		<33	U		1	WA	40	ug/L
	lead, total recoverable	<10	U		<10	U		<47	U		<24	U		1	WA	15	ug/L
	nickel, total recoverable	<50	U		<50	U		<26	U		<1.3	UJ		1	WA	100	ug/L
	selenium, total recoverable	<10	U		<10	U		<66	U		<31	U		1	WA	50	ug/L
Organics																	
	chlorobenzene	<5	JU	L	<5	U		<5	U		<5	UJ	L	1	WA	5	ug/L
	1,1-dichloroethane	<5	JU	L	<5	U		<5	U		<5	UJ	L	1	WA	5	ug/L
	1,1-dichloroethylene	<5	JU	L	<5	U		<5	U		<5	UJ	L	1	WA	7	ug/L
	trans-1,2-dichloroethylene	<5	JU	L	<5	U		<5	U		<5	UJ	L	1	WA	100	ug/L
	pcb 1016	<.97	U													.5	ug/L
	pcb 1221	<.97	U													.5	ug/L
	pcb 1232	<.97	U													.5	ug/L
	pcb 1242	<1.9	U													.5	ug/L
	pcb 1248	<.97	U													.5	ug/L
	pcb 1254	<.97	U													.5	ug/L
	pcb 1260	<.97	U													.5	ug/L
	1,1,2,2-tetrachloroethane	<5	JU	L	<5	U		<5	U		<5	UJ	L	1	WA	5	ug/L
	tetrachloroethylene	<5	JU	L	<5	U		<5	U		<5	UJ	L	1	WA	5	ug/L
	1,1,1-trichloroethane	<5	JU	L	<5	U		<5	U		<5	UJ	L	1	WA	200	ug/L
	trichloroethylene	7.6	J	L	<5	U		<5	U		1.01	J	IL	1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable	84.4	J	I	38.2	J	I	<200	U		<54.8	U	V	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	2380			1390			951	J	I	220			1	WA	2400	ug/L
+	sodium, total recoverable	***5620***		V	4090			3140			2770			1	WA	4600	ug/L
	sulfate	1170			2560			1680			887			1	WA	3000	ug/L
Radionuclides																	
+	gross alpha	***17.2***			1.99	J	I									15	pCi/L
	nonvolatile beta	12.17	J		1.16	U										50	pCi/L
	radium, total alpha-emitting	4.04			2.2											5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL AMB 7

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 103919.9 E 51624.9	33.33983 Deg N -81.7328 Deg W	242.1 - 222.1 ft msl	369.9 ft msl	4 " PVC	S	M

SAMPLE DATE	02/15/00	09/14/00	02/28/01	09/07/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	230.78	228.95	227.9	226.5	ft msl
pH	6.5	5.8	6.7	6	pH
Sp. Conductance	64	43	81	44	uS/cm
Water temperature	17.5	24.6	20.7	25.8	deg. C
Alkalinity as CaCO3	22	6	60	12	mg/L
Turbidity	11	5.9	8	1.9	NTU
Volumes purged	.539	5.96	1.91	5.08	well volume
Sampling code	NX				
Synchronous water level	230.7 (03/23/00)	229.7 (12/31/00)	227.4 (03/20/01)	226.1 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

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ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable	10.1			3.2	J	I	6.8			4	J	I	1	WA	2000	ug/L
	cyanide	<10	U		<10	U		<15.2	U		<33	U		1	WA	40	ug/L
	lead, total recoverable	7.2	J	I	2.34	J	I	<47	U		<24	U		1	WA	15	ug/L
	nickel, total recoverable	<11.3	U	V	<50	U		2.9	J	I	<3.4	U	V	1	WA	100	ug/L
	selenium, total recoverable	<10	U		<10	U		<66	U		<31	U		1	WA	50	ug/L
Organics																	
	chlorobenzene	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	tetrachloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1,1-trichloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	200	ug/L
	trichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
+	aluminum, total recoverable	***334***			***342***			62.7	J	I	34.6	J	I	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	285			575			508			591			1	WA	2400	ug/L
+	sodium, total recoverable	***10800***		V	***8140***			***8440***			***7280***			1	WA	4600	ug/L
+	sulfate	***3970***			***4010***			***5240***			***3640***			1	WA	3000	ug/L
Radionuclides																	
	gross alpha	1.75	J		.55	J	IK									15	pCi/L
	nonvolatile beta	1.82	UJ	W	.93	U										50	pCi/L
	radium, total alpha-emitting	.43			.5	J	I									5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL AMB 7A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 103987.1 E 51591	33.33992 Deg N -81.7330 Deg W	125.6 - 115.6 ft msl	373.6 ft msl	4 " PVC	S	MCBC

SAMPLE DATE	02/23/00	07/28/00	02/28/01	08/16/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	217.22	214.38	213.61	214.8	ft msl
pH	6	6.1	5.9	5.4	pH
Sp. Conductance	24	24	23	26	uS/cm
Water temperature	18.9	20	20.3	20.1	deg. C
Alkalinity as CaCO3	5	4	2	1	mg/L
Turbidity	.2	.7	.9	.7	NTU
Volumes purged	2.89	3.49	2.38	1.85	well volume
Sampling code					
Synchronous water level	217.1 (03/23/00)	214.9 (09/27/00)	277.6 (06/27/01)	211.2 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

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ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable	<5.23	U	V	4.39	J	I	4.1			3.8	J	I	1	WA	2000	ug/L
	cyanide	<10	U		<10	U		<15.2	U		<33	U		1	WA	40	ug/L
	lead, total recoverable	<10	U		<1.88	JU		<47	U		<5	U		1	GE	15	ug/L
	nickel, total recoverable	<12.3	JU	V	<50	U		<26	U		<4.1	U		1	WA	100	ug/L
	selenium, total recoverable	<10	U		<10	U		<66	U		<31	U		1	WA	50	ug/L
Organics																	
	chlorobenzene	<5	U		<5	U		<5	U		<1	U		1	GE	5	ug/L
	1,1-dichloroethane	<5	U		<5	U		<5	U		<1	U		1	GE	5	ug/L
	1,1-dichloroethylene	<5	U		<5	U		<5	U		<1	U		1	GE	7	ug/L
	trans-1,2-dichloroethylene	<5	U		<5	U		<5	U		<1	U		1	GE	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<5	U		<5	U		<5	U		<1	U		1	GE	5	ug/L
+	tetrachloroethylene	***41***			34	J	K	18.1	J	K	***6.96***			1	GE	5	ug/L
	1,1,1-trichloroethane	<5	U		<5	U		<5	U		<1	U		1	GE	200	ug/L
+	trichloroethylene	***73***			76	J	K	41.7	J	K	***14.9***			1	GE	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable	43.7	J	I	<146	U		<200	U		<322	U		1	WA	100	ug/L
	nitrate-nitrite as nitrogen	837			935			827			753			1	WA	2400	ug/L
	sodium, total recoverable	2290		V	1620			1980			1530			1	GE	4600	ug/L
	sulfate	789			498			<1320	U		<905	U		1	GE	3000	ug/L
Radionuclides																	
	gross alpha	.893			.689	J	I									15	pCi/L
	nonvolatile beta	1.41			.8	U										50	pCi/L
	radium, total alpha-emitting	.36	U	W	.2	U										5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL AMB 7B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 103972 E 51590.3	33.33989 Deg N -81.7330 Deg W	162.9 - 152.9 ft msl	373 ft msl	4 " PVC	S	LL

SAMPLE DATE	02/23/00	07/28/00	02/28/01	08/16/01	
FIELD DATA					
Parameter	**1Q00**	**3Q00**	**1Q01**	**3Q01**	**Unit**
Water Elevation	222.56	220.86	219.75	219.02	ft msl
pH	5.3	5.8	5.4	5.1	pH
Sp. Conductance	24	24	24	23	uS/cm
Water temperature	19	20	19.6	20.3	deg. C
Alkalinity as CaCO3	2	0	11	0	mg/L
Turbidity	.9	.8	.5	.3	NTU
Volumes purged	2.39	2.79	2.28	2.47	well volume
Sampling code					
Synchronous water level	222.4 (03/23/00)	221 (09/27/00)	219.6 (06/27/01)	218.1 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

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ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable	<2.88	U	V	1.96	J	I	2.9			2.6	J	I	1	WA	2000	ug/L
	cyanide	<10	U		<10	U		<15.2	U		<33	U		1	WA	40	ug/L
	lead, total recoverable	<10	U		<10	U		<47	U		3.1	J	I	1	WA	15	ug/L
	nickel, total recoverable	<5.95	JU	V	<50	U		<26	U		<4.1	U		1	WA	100	ug/L
	selenium, total recoverable	<10	U		<10	U		<66	U		<31	U		1	WA	50	ug/L
Organics																	
	chlorobenzene	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	tetrachloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1,1-trichloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	200	ug/L
+	trichloroethylene	***5.9***			7.1	J	K	5.36	J	K	***5.5***			1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable	23.3	J	I	<146	U		<200	U		37.4	J	I	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	593			636			640			756			1	WA	2400	ug/L
	sodium, total recoverable	3300		V	3130			3950			3190			1	WA	4600	ug/L
	sulfate	836			821			<1480	U		<934	U		1	WA	3000	ug/L
Radionuclides																	
	gross alpha	.7	U	W	.611	U										15	pCi/L
	nonvolatile beta	.4	UJ	W	.778	U										50	pCi/L
	radium, total alpha-emitting	.09	U	W	.2	U										5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL AMB 9D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 103585.2 E 51263	33.33850 Deg N -81.7331 Deg W	239.7 - 219.7 ft msl	367.9 ft msl	4 " PVC	S	M

SAMPLE DATE	02/14/00	09/14/00	03/13/01	09/06/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	230.43	228.65	227.57	226.15	ft msl
pH	5.3	5.6	5.8	4.2	pH
Sp. Conductance	43	45	45	46	uS/cm
Water temperature	18.7	22.4	20.1	20.9	deg. C
Alkalinity as CaCO3	8	5	12	10	mg/L
Turbidity	.9	1	.8	.8	NTU
Volumes purged	3.76	5.57	3.78		well volume
Sampling code					
Synchronous water level	229.9 (03/23/00)	228.3 (09/27/00)	227.2 (03/20/01)	226.1 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

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ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable	<2.77	U	V	2.58	J	I	2.5			2.5	J	I	1	WA	2000	ug/L
	cyanide	<10	U		<10	U		<15.2	U		<33	U		1	WA	40	ug/L
	lead, total recoverable	<10	U		<10	U		<47	U		3.5	J	I	1	WA	15	ug/L
	nickel, total recoverable	<50	U		<50	U		<26	U		<1.8	U	V	1	WA	100	ug/L
	selenium, total recoverable	<10	U		<10	U		<66	U		<31	U		1	WA	50	ug/L
Organics																	
	chlorobenzene	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	100	ug/L
	pcb 1016							<1.02	U							.5	ug/L
	pcb 1221							<2.04	U							.5	ug/L
	pcb 1232							<1.02	U							.5	ug/L
	pcb 1242							<1.02	U							.5	ug/L
	pcb 1248							<1.02	U							.5	ug/L
	pcb 1254							<1.02	U							.5	ug/L
	pcb 1260							<1.02	U							.5	ug/L
	1,1,2,2-tetrachloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	tetrachloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1,1-trichloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	200	ug/L
	trichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
+	aluminum, total recoverable	***953***			<146	U		61.7	J	I	210	J	I	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	173			117			217	J	I	140			1	WA	2400	ug/L
+	sodium, total recoverable	***8830***		V	***7710***			***8920***			***7810***			1	WA	4600	ug/L
+	sulfate	***4900***			***5380***			***5330***			***4360***			1	WA	3000	ug/L
Radionuclides																	
	gross alpha	2.35	J		1.1	U	V									15	pCi/L
	nonvolatile beta	1.59	UJ	W	.573	U										50	pCi/L
	radium, total alpha-emitting	1			.9	J	I									5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL AMB 10A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 103326.4 E 51410	33.33816 Deg N -81.7322 Deg W	111.4 - 106.4 ft msl	366.5 ft msl	4 " PVC	S	MCBC

SAMPLE DATE	02/14/00	09/12/00	03/13/01	09/06/01	
FIELD DATA					
Parameter	**1Q00**	**3Q00**	**1Q01**	**3Q01**	**Unit**
Water Elevation	216.82	215.15	213.89	212.07	ft msl
pH	8.2	7	10.8	6.8	pH
Sp. Conductance	80	76	300	72	uS/cm
Water temperature	19	21.5	16.7	22	deg. C
Alkalinity as CaCO3	24	17	57	27	mg/L
Turbidity	2.6	.8	.9	.5	NTU
Volumes purged	.014	2.27	.014	2.11	well volume
Sampling code	NX		NX		
Synchronous water level	216.7 (03/23/00)	214.5 (12/31/00)	214.2 (03/20/01)	212.6 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

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ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable	12.1			10.2			21			10.6			1	WA	2000	ug/L
	cyanide	<10	U		<10	U		<15.2	U		<33	U		1	WA	40	ug/L
	lead, total recoverable	<10	U		<10	U		<47	U		<24	U		1	WA	15	ug/L
	nickel, total recoverable	<50	U		<9.81	U	V	<26	U		<4.1	U		1	WA	100	ug/L
	selenium, total recoverable	<10	U		<10	U		<66	U		<31	U		1	WA	50	ug/L
Organics																	
	chlorobenzene	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	100	ug/L
	pcb 1016							<1.02	U							.5	ug/L
	pcb 1221							<2.04	U							.5	ug/L
	pcb 1232							<1.02	U							.5	ug/L
	pcb 1242							<1.02	U							.5	ug/L
	pcb 1248							<1.02	U							.5	ug/L
	pcb 1254							<1.02	U							.5	ug/L
	pcb 1260							<1.02	U							.5	ug/L
	1,1,2,2-tetrachloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	tetrachloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1,1-trichloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	200	ug/L
	trichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
+	aluminum, total recoverable	***156***			66	J	I	<200	U		<322	U		1	WA	100	ug/L
	nitrate-nitrite as nitrogen	263			270			294	J	I	275			1	WA	2400	ug/L
+	sodium, total recoverable	***5540***		V	***4910***			***4840***			4010			1	WA	4600	ug/L
+	sulfate	***3610***			***3700***			***3640***			2980			1	WA	3000	ug/L
Radionuclides																	
	gross alpha	.09	UJ	W	.0302	U										15	pCi/L
	nonvolatile beta	1.81	UJ	W	1.08	U										50	pCi/L
	radium, total alpha-emitting	-.11	U	W	.2	U										5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL AMB 10B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 103337.3 E 51418.3	33.33820 Deg N -81.7322 Deg W	154.3 - 149.3 ft msl	366.4 ft msl	4 " PVC	S	LL

SAMPLE DATE	02/14/00	09/12/00	03/13/01	09/06/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	221.43	219.75	218.29	216.65	ft msl
pH	5.5	6	5.9	5.7	pH
Sp. Conductance	34	38	41	39	uS/cm
Water temperature	18.5	21	19.1	19.7	deg. C
Alkalinity as CaCO3	3	10	13	10	mg/L
Turbidity	.3	.8	.5	.4	NTU
Volumes purged	2.61	3.45	2.24	2.47	well volume
Sampling code					
Synchronous water level	221.3 (03/23/00)	219.8 (09/27/00)	217.7 (03/20/01)	216.8 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

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ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable	8.51	J	I	13.4			14.4			12.5			1	GE	2000	ug/L
	cyanide	<10	U		<10	U		<15.2	U		10.9			1	GE	40	ug/L
	lead, total recoverable	<10	U		<10	U		<47	U		<24	U		1	WA	15	ug/L
	nickel, total recoverable	<5.71	U	V	<50	U		<26	U		<5	U		1	GE	100	ug/L
	selenium, total recoverable	<10	U		<10	U		<66	U		<31	U		1	WA	50	ug/L
Organics																	
	chlorobenzene	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	100	ug/L
	pcb 1016	<.96	U													.5	ug/L
	pcb 1221	<.96	U													.5	ug/L
	pcb 1232	<.96	U													.5	ug/L
	pcb 1242	<1.9	U													.5	ug/L
	pcb 1248	<.96	U													.5	ug/L
	pcb 1254	<.96	U													.5	ug/L
	pcb 1260	<.96	U													.5	ug/L
	1,1,2,2-tetrachloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	tetrachloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1,1-trichloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	200	ug/L
	trichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable	<146	U		<146	U		<200	U		<322	U		1	WA	100	ug/L
	nitrate-nitrite as nitrogen	206			239			310	J	I	340			1	GE	2400	ug/L
+	sodium, total recoverable	4260		V	4400			***5340***			***5140***			1	GE	4600	ug/L
	sulfate	865			1060			1600			<1350	U		1	GE	3000	ug/L
Radionuclides																	
	gross alpha	.36	UJ	W	.013	U										15	pCi/L
	nonvolatile beta	6.68	J	V	.542	U										50	pCi/L
	radium, total alpha-emitting	.18	U	W	.1	U										5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL AMB 12D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 103602.4 E 51901.6	33.33958 Deg N -81.7314 Deg W	239.4 - 219.4 ft msl	369.8 ft msl	4 " PVC	S	M

SAMPLE DATE	02/14/00	09/14/00	03/13/01	09/06/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	231.17	229.45	228.28	226.79	ft msl
pH	5.8	6	6.5	6.8	pH
Sp. Conductance	21	24	30	32	uS/cm
Water temperature	19.5	21.8	19.8	21.6	deg. C
Alkalinity as CaCO3	3	4	15	10	mg/L
Turbidity	.8	1.1	1.4	.8	NTU
Volumes purged	3.06	3.28	2.49	3.01	well volume
Sampling code					
Synchronous water level	230.7 (03/23/00)	230.2 (12/31/00)	227.9 (03/20/01)	227.1 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

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ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable	7.61	J	I	6.23	J	I	8.2			7.9	J	I	1	WA	2000	ug/L
	cyanide	<10	U		<10	U		<15.2	U		<33	U		1	WA	40	ug/L
	lead, total recoverable	<10	U		<10	U		<47	U		<24	U		1	WA	15	ug/L
	nickel, total recoverable	<50	U		<50	U		<26	U		<1.6	U	V	1	WA	100	ug/L
	selenium, total recoverable	<10	U		<10	U		<66	U		<31	U		1	WA	50	ug/L
Organics																	
	chlorobenzene	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	tetrachloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1,1-trichloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	200	ug/L
	trichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable	<146	U		<146	U		<200	U		<322	U		1	WA	100	ug/L
	nitrate-nitrite as nitrogen	841		V	814			816			864			1	WA	2400	ug/L
	sodium, total recoverable	1530		V	1660			1160			1820			1	WA	4600	ug/L
	sulfate				601			1040			463			1	WA	3000	ug/L
Radionuclides																	
	gross alpha	2.51			1.08	J	I									15	pCi/L
	nonvolatile beta	8.37	J		1.42	J	I									50	pCi/L
	radium, total alpha-emitting	.35	U	W	.1	U										5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL AMB 13AR

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 103082 E 51396	33.33760 Deg N -81.7317 Deg W	110.9 - 100.9 ft msl	365.1 ft msl	4 " PVC	S	MCBC

SAMPLE DATE 02/15/00 09/13/00 03/15/01 09/06/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	217.22	215.75	214.75	212.75	ft msl
pH	6.7	6.8	6.9	7.1	pH
Sp. Conductance	75	66	67	101	uS/cm
Water temperature	19.6	22.7	20.3	22.2	deg. C
Alkalinity as CaCO3	19	17	47	48	mg/L
Turbidity	1.4	.7	2.6	2.5	NTU
Volumes purged	2.26	2.36	2.13	2.09	well volume
Sampling code					
Synchronous water level	225.1 (06/28/00)	215.8 (09/27/00)	214.1 (03/20/01)	209.2 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

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ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
	Inorganics																
	barium, total recoverable	22.2			21.4			22.7			32			1	WA	2000	ug/L
	cyanide	<10	U		<10	JU	Q	<15.2	U		<33	U		1	WA	40	ug/L
	lead, total recoverable	<10	U		<10	U		<47	U		<24	U		1	WA	15	ug/L
	nickel, total recoverable	<5.09	U	V	<50	U		<26	U		<1.8	U	V	1	WA	100	ug/L
	selenium, total recoverable	<10	U		<5.45	JU		<66	U		<31	U		1	WA	50	ug/L
	Organics																
	chlorobenzene	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	tetrachloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1,1-trichloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	200	ug/L
	trichloroethylene	<5	U		<5	U		<5	U		<5	UJ	L	1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
	Inorganics																
+	aluminum, total recoverable				***226***			49.6	J	I	62.8	J	I	1	WA	100	ug/L
	nitrate-nitrite as nitrogen				978			964			966			2	WA	2400	ug/L
	sodium, total recoverable				3380			2650			3620			1	WA	4600	ug/L
	sulfate				1510			1720			1730			1	WA	3000	ug/L
	Radionuclides																
	gross alpha				.384	U										15	pCi/L
	nonvolatile beta				2	J	I									50	pCi/L
	radium, total alpha-emitting				.5	J	I									5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL AMB 15D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 104500.6 E 51383.8	33.34072 Deg N -81.7345 Deg W	236.2 - 216.2 ft msl	383.4 ft msl	2 " PVC	V	M

SAMPLE DATE	02/16/00	09/27/00	03/16/01	09/07/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	230.62	229	216.7	225.9	ft msl
pH	5.3	5.7	4.6	5	pH
Sp. Conductance	26	26	24	214	uS/cm
Water temperature	21	18.4	20.2	24.3	deg. C
Alkalinity as CaCO3	1	7	2	2	mg/L
Turbidity	2.3	67.2	3.1	9.6	NTU
Volumes purged	10.8	.488	457.	7.78	well volume
Sampling code		NX			
Synchronous water level	238.7 (06/28/00)	230.5 (12/31/00)	227.6 (03/20/01)	217.7 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

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ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
	Inorganics																
	barium, total recoverable	<4.35	U	V	27.4			4.9			5.6	J	I	1	WA	2000	ug/L
	cyanide	<10	U		<10	U		<15.2	U		<33	U		1	WA	40	ug/L
	lead, total recoverable	<10	U		2.96	J	I	<47	U		4.6	J	I	1	WA	15	ug/L
	nickel, total recoverable	<8.41	JU	V	14.2	J	I	3.5	J	I	5.6			1	WA	100	ug/L
	selenium, total recoverable	<10	U		<10	U		<66	U		<31	U		1	WA	50	ug/L
	Organics																
	chlorobenzene	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	tetrachloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1,1-trichloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	200	ug/L
	trichloroethylene	<5	U		1.7	J	IK	2.64	J	I	<5	UJ	L	1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
	Inorganics																
+	aluminum, total recoverable	***890***			***637***			***5220***			90.8	J	I	1	WA	100	ug/L
+	nitrate-nitrite as nitrogen	717			1160			***2800***			1130			2	WA	2400	ug/L
	sodium, total recoverable	4000		V	2800			3110			2410			1	WA	4600	ug/L
	sulfate	371	J	Q	1620			2050			655			1	WA	3000	ug/L
	Radionuclides																
	gross alpha	11.07			1.03	J	I									15	pCi/L
	nonvolatile beta	6.66			.8	U										50	pCi/L
	radium, total alpha-emitting	1.09			.9	J	I									5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL AMB 16D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 104268.8 E 51557.5	33.34049 Deg N -81.7336 Deg W	233.4 - 213.4 ft msl	380.4 ft msl	2 " PVC	V	M

SAMPLE DATE	02/16/00	09/25/00	03/16/01	09/06/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	230.12	228.6	227.15	225.78	ft msl
pH	5.1	4.7	5	4	pH
Sp. Conductance	24	30	22	23	uS/cm
Water temperature	19.5	23	20.8	22.3	deg. C
Alkalinity as CaCO3	0	0	0	1	mg/L
Turbidity	.7	.4	.9	.4	NTU
Volumes purged	10.0	10.6	2.72		well volume
Sampling code					
Synchronous water level	230 (03/23/00)	228.7 (12/31/00)	227 (03/20/01)	225.7 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

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ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable	<4.35	U	V	3.64	J	I	5.3			5.1	J	I	1	WA	2000	ug/L
	cyanide	<10	U		<10	JU	Q	<15.2	U		<33	U		1	WA	40	ug/L
	lead, total recoverable	<10	U		<10	U		<47	U		<24	U		1	WA	15	ug/L
	nickel, total recoverable	<7.83	JU	V	<11.2	JU		<26	U		<.56	U	V	1	WA	100	ug/L
	selenium, total recoverable	<10	U		<10	U		<66	U		<31	U		1	WA	50	ug/L
Organics																	
	chlorobenzene	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	100	ug/L
	pcb 1016	<.94	U													.5	ug/L
	pcb 1221	<.94	U													.5	ug/L
	pcb 1232	<.94	U													.5	ug/L
	pcb 1242	<1.9	U													.5	ug/L
	pcb 1248	<.94	U													.5	ug/L
	pcb 1254	<.94	U													.5	ug/L
	pcb 1260	<.94	U													.5	ug/L
	1,1,2,2-tetrachloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	tetrachloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1,1-trichloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	200	ug/L
	trichloroethylene	3.1	J	I	1.6	J	IK	<5	U		<5	UJ	L	1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable	<146	U		59.8	J	I	<32.5	U	V	<322	U		1	WA	100	ug/L
	nitrate-nitrite as nitrogen	1040			1400			1280			845			1	WA	2400	ug/L
	sodium, total recoverable	1960		V	2920			2580			1800			1	WA	4600	ug/L
	sulfate	352			414			981			567			1	WA	3000	ug/L
Radionuclides																	
	gross alpha	7.09			4.02											15	pCi/L
	nonvolatile beta	3.96		V	2.41											50	pCi/L
	radium, total alpha-emitting	1.26			1.8	J	I									5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL AMB 17A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 104056.7 E 51465.4	33.33987 Deg N -81.7335 Deg W	125 - 120 ft msl	379.1 ft msl	4 " PVC	S	MCBC

SAMPLE DATE	02/23/00	09/28/00	02/28/01	08/20/01	
FIELD DATA					
Parameter	**1Q00**	**3Q00**	**1Q01**	**3Q01**	**Unit**
Water Elevation	217.03	214.05	213.29	211.35	ft msl
pH	4.8	5.3	5.3	5.3	pH
Sp. Conductance	20	20	19	18	uS/cm
Water temperature	18.8	19.6	20.3	26.4	deg. C
Alkalinity as CaCO3	1	7	0	0	mg/L
Turbidity	.4	1.4	2.8	1.5	NTU
Volumes purged	2.34	2.90	2.63	2.25	well volume
Sampling code					
Synchronous water level	216.8 (03/23/00)	214.5 (09/27/00)	212.1 (03/20/01)	202.4 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

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ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable	<3.28	U	V	3.47	J	I	3.4			2.9	J	I	1	WA	2000	ug/L
	cyanide	<10	U		<10	U		<15.2	U		<33	U		1	WA	40	ug/L
	lead, total recoverable	<10	U		<10	U		<47	U		<24	U		1	WA	15	ug/L
	nickel, total recoverable	<50	U		<50	U		<26	U		<.86	UJ		1	WA	100	ug/L
	selenium, total recoverable	<10	U		8.65	J	I	<66	U		<31	U		1	WA	50	ug/L
Organics																	
	chlorobenzene	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	100	ug/L
	pcb 1016	<.98	U													.5	ug/L
	pcb 1221	<.98	U													.5	ug/L
	pcb 1232	<.98	U													.5	ug/L
	pcb 1242	<2	U													.5	ug/L
	pcb 1248	<.98	U													.5	ug/L
	pcb 1254	<.98	U													.5	ug/L
	pcb 1260	<.98	U													.5	ug/L
	1,1,2,2-tetrachloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
+	tetrachloroethylene	***25***			29	J	K	22.2	J	K	***13.6***			1	WA	5	ug/L
	1,1,1-trichloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	200	ug/L
+	trichloroethylene	***170***			51	J	K	34.5	J	K	***25.7***			1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable	<200	U		<146	U		<200	U		<322	U		1	WA	100	ug/L
+	nitrate-nitrite as nitrogen	868			926			***2570***			856			1	WA	2400	ug/L
	sodium, total recoverable	2040		V	1680			1740			1560			1	WA	4600	ug/L
	sulfate	514			452			991			571			1	WA	3000	ug/L
Radionuclides																	
	gross alpha	1.21			.122	U										15	pCi/L
	nonvolatile beta	10.04			.497	U										50	pCi/L
	radium, total alpha-emitting	.32	U	W	-.1	U										5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL AMB 18A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 103988.7 E 51418.8	33.33964 Deg N -81.7334 Deg W	136.4 - 131.4 ft msl	377.3 ft msl	4 " PVC	S	MCBC

SAMPLE DATE	02/23/00	09/28/00	02/28/01	08/16/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	216.96	213.9	213.1	211.26	ft msl
pH	4.5	5.5	5.4	5.3	pH
Sp. Conductance	23	24	24	23	uS/cm
Water temperature	18.7	20	20	20.1	deg. C
Alkalinity as CaCO3	1	7	1	0	mg/L
Turbidity	.2	1	.4	.4	NTU
Volumes purged	2.64	2.83	2.20	3.32	well volume
Sampling code					
Synchronous water level	216.8 (03/23/00)	214.5 (09/27/00)	211.9 (03/20/01)	211.1 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

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ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
	Inorganics																
	barium, total recoverable	44.7			6.42	J	I	6.9			7	J	I	1	WA	2000	ug/L
	cyanide	<10	U		<10	U		<15.2	U		<33	U		1	WA	40	ug/L
	lead, total recoverable	<10	U		<10	U		<47	U		<24	U		1	WA	15	ug/L
	nickel, total recoverable	<6.24	JU	V	<50	U		<26	U		<.74	UJ		1	WA	100	ug/L
	selenium, total recoverable	<10	U		<10	U		<66	U		<31	U		1	WA	50	ug/L
	Organics																
	chlorobenzene	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	100	ug/L
	pcb 1016	<.96	U													.5	ug/L
	pcb 1221	<.96	U													.5	ug/L
	pcb 1232	<.96	U													.5	ug/L
	pcb 1242	<1.9	U													.5	ug/L
	pcb 1248	<.96	U													.5	ug/L
	pcb 1254	<.96	U													.5	ug/L
	pcb 1260	<.96	U													.5	ug/L
	1,1,2,2-tetrachloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	tetrachloroethylene	4.6	J	I	3.9	J	IK	2.79	J	IK	2.44	J	IK	1	WA	5	ug/L
	1,1,1-trichloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	200	ug/L
+	trichloroethylene	***24***			21	J	K	21.8	J	K	19.2	J	K	1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
	Inorganics																
	aluminum, total recoverable	<55.5	U	V	<146	U		<200	U		<322	U		1	WA	100	ug/L
	nitrate-nitrite as nitrogen	813			795			<2360	U		673			1	WA	2400	ug/L
	sodium, total recoverable	2190		V	1900			2130			1980			1	WA	4600	ug/L
	sulfate	471	J	Q	432			<968	U		573			1	WA	3000	ug/L
	Radionuclides																
	gross alpha	.28	UJ	W	.106	U										15	pCi/L
	nonvolatile beta	2.27			.482	U										50	pCi/L
	radium, total alpha-emitting	.35	U	W	0	U										5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL AMB 18C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 103983.4 E 51432.8	33.33965 Deg N -81.7334 Deg W	214.2 - 209.2 ft msl	376 ft msl	2 " PVC	V	UL

SAMPLE DATE	02/15/00	09/21/00	03/16/01	09/04/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	229.9	228.39	227.15	318.9	ft msl
pH	4.1	5.4	5.4	5.4	pH
Sp. Conductance	20	20	19	20	uS/cm
Water temperature	19.3	20.8	18.9	20.9	deg. C
Alkalinity as CaCO3	0	1	3	1	mg/L
Turbidity	4.3	2.5	2.9	.9	NTU
Volumes purged	7.77	10.3	2.07	2.62	well volume
Sampling code					
Synchronous water level	229.7 (03/23/00)	229 (12/31/00)	227 (03/20/01)	225.8 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable	4.25	J	I	4.98	J	I	3.7			4.2	J	I	1	WA	2000	ug/L
	cyanide	<10	U		<10	U		<15.2	U		<33	U		1	WA	40	ug/L
+	lead, total recoverable	***15.7***			***31.4***			10.1	J	I	***25.5***			1	WA	15	ug/L
	nickel, total recoverable	<6.96	U	V	<50	U		<26	U		<1.2	UJ		1	WA	100	ug/L
	selenium, total recoverable	<10	U		<10	U		<66	U		<31	U		1	WA	50	ug/L
Organics																	
	chlorobenzene	<5	U		<5	U		<5	U		<5	UJ	L	1	WA	5	ug/L
	1,1-dichloroethane	<5	U		<5	U		<5	U		<5	UJ	L	1	WA	5	ug/L
	1,1-dichloroethylene	<5	U		<5	U		<5	U		<5	UJ	L	1	WA	7	ug/L
	trans-1,2-dichloroethylene	<5	U		<5	U		<5	U		<5	UJ	L	1	WA	100	ug/L
	pcb 1016	<.97	U													.5	ug/L
	pcb 1221	<.97	U													.5	ug/L
	pcb 1232	<.97	U													.5	ug/L
	pcb 1242	<1.9	U													.5	ug/L
	pcb 1248	<.97	U													.5	ug/L
	pcb 1254	<.97	U													.5	ug/L
	pcb 1260	<.97	U													.5	ug/L
	1,1,2,2-tetrachloroethane	<5	U		<5	U		<5	U		<5	UJ	L	1	WA	5	ug/L
	tetrachloroethylene	<5	U		<5	U		<5	U		<5	UJ	L	1	WA	5	ug/L
	1,1,1-trichloroethane	<5	U		<5	U		<5	U		<5	UJ	L	1	WA	200	ug/L
	trichloroethylene	<5	U		<5	U		<5	U		<5	UJ	L	1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable	87.1	J	I	63.8	J	I	<136	U	V	64.3	J	I	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	884			763			<777	U		1130			2	WA	2400	ug/L
	sodium, total recoverable	1960		V	1960			2540			1870			1	WA	4600	ug/L
	sulfate	708			629			<1260	U		1010			1	WA	3000	ug/L
Radionuclides																	
	gross alpha	1.07			1.39	J	IK									15	pCi/L
	nonvolatile beta	.91	U	W	.676	U										50	pCi/L
	radium, total alpha-emitting	1.07			.3	J	I									5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL AMB 19C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 102941.1 E 51503.7	33.33746 Deg N -81.7312 Deg W	196.7 - 191.7 ft msl	363.7 ft msl	2 " PVC	V	UL

SAMPLE DATE	02/15/00	09/25/00	03/16/01	09/04/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	227.34	226	224.93	290.35	ft msl
pH	5	5.6	5.9	5.8	pH
Sp. Conductance	46	45	41	43	uS/cm
Water temperature	18.3	19.7	19.8	21	deg. C
Alkalinity as CaCO3	2	7	11	10	mg/L
Turbidity	.5	.8	2.1	1.1	NTU
Volumes purged	5.00	3.05	2.22	.558	well volume
Sampling code					
Synchronous water level	327.3 (03/23/00)	225.9 (09/27/00)	224.5 (03/20/01)	223 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable	<1.8	U	V	.71	J	I	<1.2	U		1.4	J	I	1	WA	2000	ug/L
	cyanide	<10	U		<10	JU	Q	<15.2	U		<33	U		1	WA	40	ug/L
+	lead, total recoverable	***98.8***			***28.6***			7.3	J	I	4.4	J	I	1	WA	15	ug/L
	nickel, total recoverable	<50	U		<10.8	JU		<26	U		3.6	J	I	1	WA	100	ug/L
	selenium, total recoverable	<10	U		<10	U		<66	U		<31	U		1	WA	50	ug/L
Organics																	
	chlorobenzene	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	tetrachloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1,1-trichloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	200	ug/L
	trichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable	<146	U		<146	U		<200	U		55.4	J	I	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	68			71			194	J	I	65			1	WA	2400	ug/L
+	sodium, total recoverable	***9440***		V	***9160***			***9100***			***8360***			1	WA	4600	ug/L
+	sulfate	***6540***			***6160***			***4790***			***4600***			1	WA	3000	ug/L
Radionuclides																	
	gross alpha	1.43			.425	U										15	pCi/L
	nonvolatile beta	1.07	U	W	.756	U										50	pCi/L
	radium, total alpha-emitting	.14	U	W	-.1	U										5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL AOB 1

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 101910.7 E 50485.9	33.33352 Deg N -81.7319 Deg W	248.5 - 218.5 ft msl	341.1 ft msl	4 " PVC	S	M

SAMPLE DATE	02/01/00	09/19/00	03/16/01	09/04/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	232.12	*Not Applicable*	229.63	228.88	ft msl
pH	5.1	5.3	5.6	5.3	pH
Sp. Conductance	36	33	30	28	uS/cm
Water temperature	19.1	23.9	21.7	20.1	deg. C
Alkalinity as CaCO3	1	3	1	1	mg/L
Turbidity	1	5.5	2	1.1	NTU
Volumes purged	2.48		3.46	3.26	well volume
Sampling code		S			
Synchronous water level	( )	279.6 (09/23/00)	240.6 (06/27/01)	222 (09/24/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP EPA	3Q00	CLP EPA	1Q01	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	barium, total recoverable												
	cyanide												
	lead, total recoverable												
	nickel, total recoverable												
	selenium, total recoverable												
Organics													
	chlorobenzene	.29	J I	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethane	<1	JU	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethylene	<1	JU	<5	U	<5	U	<5	U	1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	JU	<5	U	<5	U	<5	U	1	WA	100	ug/L
	pcb 1016												
	pcb 1221												
	pcb 1232												
	pcb 1242												
	pcb 1248												
	pcb 1254												
	pcb 1260												
	1,1,2,2-tetrachloroethane	<1	JU	<5	U	<5	U	<5	U	1	WA	5	ug/L
+	tetrachloroethylene	49.4	J	18	J K	***7.86***		***9.29***		1	WA	5	ug/L
	1,1,1-trichloroethane	<1	JU	<5	U	<5	U	<5	U	1	WA	200	ug/L
+	trichloroethylene	45.4	J	14	J K	***6.63***		***9.43***		1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP EPA	3Q99	CLP EPA	3Q00	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	aluminum, total recoverable	<146	U	<146	U	<70.4	U V	<322	U	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	1240		1380								2400	ug/L
	sodium, total recoverable	3930	V	4210		4520		3760		1	WA	4600	ug/L
	sulfate	582		1640								3000	ug/L
Radionuclides													
	gross alpha	2.73	J	.392	U							15	pCi/L
	nonvolatile beta	.89	UJ W	.345	U							50	pCi/L
	radium, total alpha-emitting	.77		.4	U							5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL AOB 2

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 102009.8 E 50724.7	33.33413 Deg N -81.7314 Deg W	250.2 - 220.2 ft msl	345.4 ft msl	4 " PVC	S	M

SAMPLE DATE	02/01/00	09/19/00	03/19/01	09/18/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	230.6	*Not Applicable*	229.51	*Not Applicable*	ft msl
pH	5.3	5.5	5.1	6	pH
Sp. Conductance	20	19	18	18	uS/cm
Water temperature	18.7	19.6	18.4		deg. C
Alkalinity as CaCO3	1	2	1	10	mg/L
Turbidity	.7	.9	.2	.2	NTU
Volumes purged	2.99		3.51		well volume
Sampling code		S		S	
Synchronous water level	(06/24/00)	230.1 (12/29/00)	( )	( )	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP EPA	3Q00	CLP EPA	1Q01	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	barium, total recoverable												
	cyanide												
	lead, total recoverable												
	nickel, total recoverable												
	selenium, total recoverable												
Organics													
	chlorobenzene	<1	JU	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethane	<1	JU	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethylene	<1	JU	<5	U	<5	U	<5	U	1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	JU	<5	U	<5	U	<5	U	1	WA	100	ug/L
	pcb 1016												
	pcb 1221												
	pcb 1232												
	pcb 1242												
	pcb 1248												
	pcb 1254												
	pcb 1260												
	1,1,2,2-tetrachloroethane	<1	JU	<5	U	<5	U	<5	U	1	WA	5	ug/L
	tetrachloroethylene	<1	JU	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1,1-trichloroethane	<1	JU	<5	U	<5	U	<5	U	1	WA	200	ug/L
	trichloroethylene	<1	JU	<5	U	<5	U	<5	U	1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP EPA	3Q99	CLP EPA	3Q00	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	aluminum, total recoverable	<146	U	18.5	J I	<200	U	<123	U V	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	1220		922								2400	ug/L
	sodium, total recoverable	1840	V	2410		2830		2320		1	WA	4600	ug/L
	sulfate	348		515								3000	ug/L
Radionuclides													
	gross alpha	2.21	J	.554	U							15	pCi/L
	nonvolatile beta	1.87	J	.315	U							50	pCi/L
	radium, total alpha-emitting	.71		.3	U							5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL ASB 1A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 105535 E 52614	33.34501 Deg N -81.7333 Deg W	247.2 - 217.2 ft msl	349.1 ft msl	4 " PVC	S	M/GC

SAMPLE DATE	03/06/00	09/27/00	03/13/01	09/05/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	236.02	235.92	232.18	235.97	ft msl
pH	5.9	5.8	6.1	5.8	pH
Sp. Conductance	65	70	72	75	uS/cm
Water temperature	19.1	20.2	20.4	22.8	deg. C
Alkalinity as CaCO3	14	13	18	12	mg/L
Turbidity	.9	6.5	4.8	3.1	NTU
Volumes purged	3.11	5.27	2.37	2.38	well volume
Sampling code					
Synchronous water level	235.9 (03/23/00)	235.9 (09/27/00)	232 (03/29/01)	231.3 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<1	JU		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethane	<1	JU		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<1	JU		<5	U		<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	JU		<5	U		<5	U		<5	U		1	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<1	JU		<5	U		<5	U		<5	U		1	WA	5	ug/L
	tetrachloroethylene	1.15	J		1.2	J	I	1.39	J	I	1.68	J	I	1	WA	5	ug/L
	1,1,1-trichloroethane	<1	JU		<5	U		<5	U		<5	U		1	WA	200	ug/L
	trichloroethylene	1.43	J		1.2	J	I	<5	U		<5	U		1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable	<146	U		<146	U		41.4	J	I	<67.6	U	V	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	962			1390											2400	ug/L
+	sodium, total recoverable	***12000***		V	***12000***			***13800***			***13500***			1	WA	4600	ug/L
+	sulfate	***4960***			***6800***			***6170***			***4470***			1	WA	3000	ug/L
Radionuclides																	
	gross alpha	2.09			.643	U										15	pCi/L
	nonvolatile beta	4.3			1.15	J	I									50	pCi/L
	radium, total alpha-emitting	1.03			.5	J	I									5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL ASB 2AR

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 105550.5 E 52881.7	33.34548 Deg N -81.7326 Deg W	240.1 - 220.2 ft msl	355.6 ft msl	4 " PVC	S	M

SAMPLE DATE	03/06/00	09/26/00	03/12/01	09/05/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	235.83	234.44	233.69	232.85	ft msl
pH	5.8	5.9	6.4	6	pH
Sp. Conductance	53	56	67	90	uS/cm
Water temperature	18.7	20	21.8	20.7	deg. C
Alkalinity as CaCO3	5	10	0	22	mg/L
Turbidity	.7	1.2	1.3	.6	NTU
Volumes purged	5.04	6.19	3.33	2.82	well volume
Sampling code					
Synchronous water level	235.7 (03/23/00)	234.4 (09/27/00)	233.7 (03/29/01)	232.7 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<1	JU		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethane	<1	JU		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<1	JU		<5	U		<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	JU		<5	U		<5	U		<5	U		1	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<1	JU		<5	U		<5	U		<5	U		1	WA	5	ug/L
	tetrachloroethylene	<1	JU		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1,1-trichloroethane	<1	JU		<5	U		<5	U		<5	U		1	WA	200	ug/L
	trichloroethylene	<1	JU		<5	U		<5	U		<5	U		1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable	<146	U		<146	U		<200	U		<52.4	U	V	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	400		V	489											2400	ug/L
+	sodium, total recoverable	***11300***		V	***10100***			***11500***			***16900***			1	WA	4600	ug/L
+	sulfate	***3840***			***3280***			***3540***			***4280***			1	WA	3000	ug/L
Radionuclides																	
	gross alpha	4.46			2.59	J	I									15	pCi/L
	nonvolatile beta	127.85	J		1.36	J	I									50	pCi/L
	radium, total alpha-emitting	.91			.7	J	I									5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL ASB 2CR

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 105540.2 E 52862.7	33.34543 Deg N -81.7327 Deg W	183.1 - 173.1 ft msl	355.6 ft msl	4 " PVC	S	LL

SAMPLE DATE	03/06/00	07/26/00	03/01/01	08/21/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	221.68	219.05	217.73	218.15	ft msl
pH	5.7	5.6	5.8	5.7	pH
Sp. Conductance	50	49	46	51	uS/cm
Water temperature	19.8	20.1	18.6	19.6	deg. C
Alkalinity as CaCO3	9	6	5	8	mg/L
Turbidity	.2	1.5	.3	.2	NTU
Volumes purged	3.18	2.93	2.81	2.18	well volume
Sampling code					
Synchronous water level	221.5 (03/23/00)	219.2 (09/27/00)	219.4 (03/29/01)	216.2 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<1	JU		<10	JU	LQ	<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethane	<1	JU		<10	JU	LQ	<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<1	JU		<10	JU	LQ	<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	JU		<10	JU	LQ	<5	U		<5	U		1	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<1	JU		<10	JU	LQ	<5	U		<5	U		1	WA	5	ug/L
	tetrachloroethylene	4.98	J		5.7	J	ILQ	4.19	J	I	4.67	J	I	1	WA	5	ug/L
	1,1,1-trichloroethane	<1	JU		<10	JU	LQ	<5	U		<5	U		1	WA	200	ug/L
+	trichloroethylene	30.8	J		26	J	KQ	***32.4***			***36.4***			1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable	32.7	J	I	30.4	J	I	46.3	J	I	35.9	J	I	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	1160			1120											2400	ug/L
+	sodium, total recoverable	***5010***		V	***4850***			***5260***			4540			1	WA	4600	ug/L
	sulfate	458			364			<638	U		550			1	WA	3000	ug/L
Radionuclides																	
	gross alpha	1.88			.894	U	V									15	pCi/L
	nonvolatile beta	4.04	J		1.46	J	I									50	pCi/L
	radium, total alpha-emitting	.49			.3	U										5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL ASB 3AR

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 105605.1 E 53115	33.34599 Deg N -81.7321 Deg W	243.1 - 223.1 ft msl	341.6 ft msl	4 " PVC	S	M

SAMPLE DATE	03/06/00	09/27/00	03/12/01	09/05/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	236.29	234.86	234.06	233	ft msl
pH	5.5	5.9	6	5.7	pH
Sp. Conductance	54	57	57	76	uS/cm
Water temperature	19.3	20.9	19.4	21.2	deg. C
Alkalinity as CaCO3	6	11	0	19	mg/L
Turbidity	1.2	.2	1	.4	NTU
Volumes purged	3.14	4.18	2.81	12.3	well volume
Sampling code					
Synchronous water level	236.1 (03/23/00)	234.9 (09/27/00)	233.2 (06/27/01)	232.7 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<1	JU		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethane	<1	JU		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<1	JU		<5	U		<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	JU		<5	U		<5	U		<5	U		1	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<1	JU		<5	U		<5	U		<5	U		1	WA	5	ug/L
	tetrachloroethylene	<1	JU		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1,1-trichloroethane	<1	JU		<5	U		<5	U		<5	U		1	WA	200	ug/L
	trichloroethylene	<1	JU		<5	U		<5	U		<5	U		1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
+	aluminum, total recoverable	35.7	J	I	106	J	I	***1770***			<79.2	U	V	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	569		V	894											2400	ug/L
+	sodium, total recoverable	***11400***		V	***10700***			***10600***			***14600***			1	WA	4600	ug/L
+	sulfate	***4900***			***4290***			***4050***			***4600***			1	WA	3000	ug/L
Radionuclides																	
	gross alpha	1.45			1.24	U	V									15	pCi/L
	nonvolatile beta	3.78	J		1.82	J	I									50	pCi/L
	radium, total alpha-emitting	1.03			.5	J	I									5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL ASB 3CR

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 105614.5 E 53130.4	33.34603 Deg N -81.7321 Deg W	184 - 174 ft msl	341.5 ft msl	4 " PVC	S	LL

SAMPLE DATE	03/06/00	07/26/00	03/01/01	08/21/01	
FIELD DATA					
Parameter	**1Q00**	**3Q00**	**1Q01**	**3Q01**	**Unit**
Water Elevation	221.42	218.41	217.15	217.81	ft msl
pH	5.3	5.3	5.4	5.3	pH
Sp. Conductance	43	41	39	41	uS/cm
Water temperature	19.8	20.7	18.1	21.1	deg. C
Alkalinity as CaCO3	3	0	0	1	mg/L
Turbidity	.2	1	.1	.3	NTU
Volumes purged	2.87	3.45	2.91	2.73	well volume
Sampling code					
Synchronous water level	221.3 (03/23/00)	218.5 (09/27/00)	216.7 (03/29/01)	219.3 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<1	JU		<10	JU	LQ	<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethane	<1	JU		<10	JU	LQ	<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<1	JU		<10	JU	LQ	<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	JU		<10	JU	LQ	<5	U		<5	U		1	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<1	JU		<10	JU	LQ	<5	U		<5	U		1	WA	5	ug/L
	tetrachloroethylene	3.79	J		<10	JU	LQ	2.75	J	I	3.02	J	I	1	WA	5	ug/L
	1,1,1-trichloroethane	<1	JU		<10	JU	LQ	<5	U		<5	U		1	WA	200	ug/L
+	trichloroethylene	15.5	J		9.9	J	IKQ	***12.1***			***14.9***			1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable	55.6	J	I	<146	U		54	J	I	<322	U		1	WA	100	ug/L
	nitrate-nitrite as nitrogen	1060			1220											2400	ug/L
+	sodium, total recoverable	4110		V	4500			***5110***			4540			1	WA	4600	ug/L
	sulfate	670			600			788			664			1	WA	3000	ug/L
Radionuclides																	
	gross alpha	1.9			.95	J	I									15	pCi/L
	nonvolatile beta	3.41	J		1.79	J	I									50	pCi/L
	radium, total alpha-emitting	.86			.4	J	I									5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL ASB 4

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 105935.7 E 53177.2	33.34682 Deg N -81.7326 Deg W	256.1 - 226.1 ft msl	335.6 ft msl	4 " PVC	S	M

SAMPLE DATE	02/01/00	09/26/00	03/12/01	09/05/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	236.27	234.4	233.29	232.58	ft msl
pH	5.6	5.7	5.7	5.6	pH
Sp. Conductance	48	50	51	48	uS/cm
Water temperature	19.2	21.4	22.1	25	deg. C
Alkalinity as CaCO3	4	7	5	11	mg/L
Turbidity	14.8	2.1	6.5	7.3	NTU
Volumes purged	2.63	4.95	3.98	2.47	well volume
Sampling code					
Synchronous water level	236.1 (03/23/00)	234.4 (09/27/00)	233.3 (03/30/01)	231.9 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP EPA	3Q00	CLP EPA	1Q01	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	barium, total recoverable												
	cyanide												
	lead, total recoverable												
	nickel, total recoverable												
	selenium, total recoverable												
Organics													
	chlorobenzene	<1	JU	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethane	<1	JU	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethylene	<1	JU	<5	U	<5	U	<5	U	1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	JU	<5	U	<5	U	<5	U	1	WA	100	ug/L
	pcb 1016												
	pcb 1221												
	pcb 1232												
	pcb 1242												
	pcb 1248												
	pcb 1254												
	pcb 1260												
	1,1,2,2-tetrachloroethane	<1	JU	<5	U	<5	U	<5	U	1	WA	5	ug/L
	tetrachloroethylene	<1	JU	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1,1-trichloroethane	<1	JU	<5	U	<5	U	<5	U	1	WA	200	ug/L
	trichloroethylene	.73	J I	<5	U	<5	U	<5	U	1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP EPA	3Q99	CLP EPA	3Q00	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
+	aluminum, total recoverable			***150***		32.7	J I	<100	U V	1	WA	100	ug/L
	nitrate-nitrite as nitrogen			898								2400	ug/L
+	sodium, total recoverable			***6950***		***10400***		***8650***		1	WA	4600	ug/L
+	sulfate			***3230***		***3410***		***3240***		1	WA	3000	ug/L
Radionuclides													
	gross alpha			1.06	U V							15	pCi/L
	nonvolatile beta			.657	U							50	pCi/L
	radium, total alpha-emitting			.7	J I							5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL ASB 5AR

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 105900.5 E 52854.4	33.34621 Deg N -81.7334 Deg W	243.8 - 223.8 ft msl	347 ft msl	4 " PVC	S	M

SAMPLE DATE	03/23/00	07/27/00	03/14/01	08/22/01	
FIELD DATA					
Parameter	**1Q00**	**3Q00**	**1Q01**	**3Q01**	**Unit**
Water Elevation	233.51	230.15	228.09	227.11	ft msl
pH	6	6.6	5.7	5.7	pH
Sp. Conductance	64	61	57	58	uS/cm
Water temperature	18.6	24.5	20.3	23.2	deg. C
Alkalinity as CaCO3	11	2	14	1	mg/L
Turbidity	6.7	5	2.6	2.8	NTU
Volumes purged	.159	3.17	2.18	2.85	well volume
Sampling code	NX				
Synchronous water level	233.5 (03/23/00)	232.3 (12/31/00)	228 (03/29/01)	227.1 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable				<10	U										15	ug/L
	nickel, total recoverable																
	selenium, total recoverable				<10	U										50	ug/L
Organics																	
	chlorobenzene	<1	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethane	<1	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<1	U		<5	U		<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	U		<5	U		<5	U		<5	U		1	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<1	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	tetrachloroethylene	1.89	J	K	<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1,1-trichloroethane	<1	U		<5	U		<5	U		<5	U		1	WA	200	ug/L
+	trichloroethylene	17.8	J	K	38	J	K	***10.6***			***20***			1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable	126	J	I	41.6	J	I	<200	U		<69.8	U	V	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	530			626											2400	ug/L
+	sodium, total recoverable	***10900***		V	***10400***			***13100***			***10900***			1	WA	4600	ug/L
+	sulfate	***5900***			***7300***			***5870***			***6490***			1	WA	3000	ug/L
Radionuclides																	
	gross alpha	.85	U	W	4.01											15	pCi/L
	nonvolatile beta	.7	UJ	W	3.14	J	I									50	pCi/L
	radium, total alpha-emitting	.25	U	W	.6	J	I									5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL ASB 5C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 105884.8 E 52837.8	33.34615 Deg N -81.7334 Deg W	175.1 - 165.1 ft msl	347.3 ft msl	4 " PVC	S	LL

SAMPLE DATE	03/23/00	07/27/00	03/01/01	08/22/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	220.28	218.57	217.45	218.44	ft msl
pH	6.1	6.6	6	6.3	pH
Sp. Conductance	45	44	44	60	uS/cm
Water temperature	18.9	21	18.6	20.5	deg. C
Alkalinity as CaCO3	11	9	8	49	mg/L
Turbidity	1	.9	.8	1.9	NTU
Volumes purged	2.77	3.41	2.40	2.12	well volume
Sampling code					
Synchronous water level	220.3 (03/23/00)	219 (09/27/00)	216.9 (03/29/01)	215.6 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<1	U		<5	JU		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethane	<1	U		<5	JU		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<1	U		<5	JU		<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	U		<5	JU		<5	U		<5	U		1	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<1	U		<5	JU		<5	U		<5	U		1	WA	5	ug/L
+	tetrachloroethylene	54.7	J	K	57	J		***42.7***			***55.8***			1	WA	5	ug/L
	1,1,1-trichloroethane	<1	U		<5	JU		<5	U		<5	U		1	WA	200	ug/L
+	trichloroethylene	186	J	K	170	J	K	***91.3***			***105***			1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable	<146	U		41.3	J	I	41.3	J	I	286	J	I	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	1090			1060											2400	ug/L
	sodium, total recoverable	1920		V	2280			2780			2750			1	WA	4600	ug/L
	sulfate	392			339	J	I	535			468			1	WA	3000	ug/L
Radionuclides																	
	gross alpha	.33	U	W	.664	U										15	pCi/L
	nonvolatile beta	.24	UJ	W	.703	U										50	pCi/L
	radium, total alpha-emitting	.34			0	U										5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL ASB 6A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 105716 E 52675.9	33.34551 Deg N -81.7335 Deg W	248.2 - 218.2 ft msl	350.2 ft msl	4 " PVC	S	M

SAMPLE DATE	03/06/00	09/26/00	02/28/01	08/21/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	228.98	228.89	228.98	230.49	ft msl
pH	5.6	5.4	6.8	5.5	pH
Sp. Conductance	67	91	79	86	uS/cm
Water temperature	19.3	22.6	19.9	21.3	deg. C
Alkalinity as CaCO3	6	3	0	4	mg/L
Turbidity	1.6	1.2	.6	1.4	NTU
Volumes purged	2.88	2.62	3.75	3.91	well volume
Sampling code					
Synchronous water level	228.8 (03/23/00)	236.1 (12/31/00)	228.8 (03/29/01)	228.7 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP EPA	3Q00	CLP EPA	1Q01	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	barium, total recoverable												
	cyanide												
	lead, total recoverable												
	nickel, total recoverable												
	selenium, total recoverable												
Organics													
	chlorobenzene	<1	JU	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethane	<1	JU	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethylene	<1	JU	<5	U	<5	U	<5	U	1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	JU	<5	U	<5	U	<5	U	1	WA	100	ug/L
	pcb 1016												
	pcb 1221												
	pcb 1232												
	pcb 1242												
	pcb 1248												
	pcb 1254												
	pcb 1260												
	1,1,2,2-tetrachloroethane	<1	JU	<5	U	<5	U	<5	U	1	WA	5	ug/L
	tetrachloroethylene	.68	J I	<5	U	<5	U	.91	J I	1	WA	5	ug/L
	1,1,1-trichloroethane	<1	JU	<5	U	<5	U	<5	U	1	WA	200	ug/L
+	trichloroethylene	5.59	J	***8***		5.56	J K	***7.29***		1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP EPA	3Q99	CLP EPA	3Q00	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	aluminum, total recoverable	<146	U	17.1	J I	<200	U	<322	U	1	WA	100	ug/L
+	nitrate-nitrite as nitrogen	***6020***		***4170***								2400	ug/L
+	sodium, total recoverable	***18400***	V	***12400***		***18300***		***13800***		1	WA	4600	ug/L
+	sulfate	***5640***		***5120***		***6950***		<224	U	1	WA	3000	ug/L
Radionuclides													
+	gross alpha	6.84		***25.6***								15	pCi/L
	nonvolatile beta	2.04	U W	6								50	pCi/L
	radium, total alpha-emitting	2.53		.8	J I							5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL ASB 6AA

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 105727 E 52643.9	33.34549 Deg N -81.7336 Deg W	82.8 - 78.1 ft msl	354.2 ft msl	4 " PVC	S	MCBC

SAMPLE DATE	03/06/00	07/27/00	02/28/01	08/21/01	
FIELD DATA					
Parameter	**1Q00**	**3Q00**	**1Q01**	**3Q01**	**Unit**
Water Elevation	216.8	214.43	213.77	213.37	ft msl
pH	10.1	9.9	10.2	9.8	pH
Sp. Conductance	110	92	111	115	uS/cm
Water temperature	19.5	20.1	19.1	21.3	deg. C
Alkalinity as CaCO3	47	19	31	52	mg/L
Turbidity	.6	1.5	.3	.4	NTU
Volumes purged	2.74	2.39	2.44	2.13	well volume
Sampling code					
Synchronous water level	216.7 (03/23/00)	214.6 (09/27/00)	213.1 (03/29/01)	211.9 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<10	JU	L	<250	JU	Q	<50	U		<50	U		10	WA	5	ug/L
	1,1-dichloroethane	<10	JU	L	<250	JU	Q	<50	U		<50	U		10	WA	5	ug/L
	1,1-dichloroethylene	<10	JU	L	<250	JU	Q	<50	U		<50	U		10	WA	7	ug/L
	trans-1,2-dichloroethylene	<10	JU	L	<250	JU	Q	<50	U		<50	U		10	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<10	JU	L	<250	JU	Q	<50	U		<50	U		10	WA	5	ug/L
	tetrachloroethylene	11.5	J	L	<250	JU	Q	<50	U		11.4	J	I	10	WA	5	ug/L
	1,1,1-trichloroethane	<10	JU	L	<250	JU	Q	<50	U		<50	U		10	WA	200	ug/L
+	trichloroethylene	2190	J	L	1400	J	KQ	1360	J	K	***1050***			10	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
+	aluminum, total recoverable	***239***			***194***			***225***			***193***			1	GE	100	ug/L
	nitrate-nitrite as nitrogen	1390			1420											2400	ug/L
	sodium, total recoverable	3200			3240			3210			2740			1	GE	4600	ug/L
+	sulfate	541	J	Q	580			652			***5080***			1	WA	3000	ug/L
Radionuclides																	
	gross alpha	1.52			.611	U										15	pCi/L
	nonvolatile beta	3.1			.423	U										50	pCi/L
	radium, total alpha-emitting	.38			.2	U										5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL ASB 6C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 105736.8 E 52655.9	33.34553 Deg N -81.7336 Deg W	178.5 - 173.8 ft msl	353.6 ft msl	4 " PVC	S	UL

SAMPLE DATE	03/06/00	07/27/00	02/28/01	08/21/01	
FIELD DATA					
Parameter	**1Q00**	**3Q00**	**1Q01**	**3Q01**	**Unit**
Water Elevation	221.85	219.78	218.64	218.91	ft msl
pH	5.4	5.8	5.4	5.2	pH
Sp. Conductance	31	32	31	33	uS/cm
Water temperature	19.9	21	19.5	20.2	deg. C
Alkalinity as CaCO3	1	0	0	0	mg/L
Turbidity	.7	.6	.1	1.3	NTU
Volumes purged	3.43	2.76	2.62	2.44	well volume
Sampling code					
Synchronous water level	221.7 (03/23/00)	220 (09/27/00)	218.1 (03/29/01)	216.9 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<1	JU		<5	JU	Q	<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethane	<1	JU		<5	JU	Q	<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<1	JU		<5	JU	Q	<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	JU		<5	JU	Q	<5	U		<5	U		1	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<1	JU		<5	JU	Q	<5	U		<5	U		1	WA	5	ug/L
+	tetrachloroethylene	30.9	J		29	J	Q	23.1	J	K	***25.4***			1	WA	5	ug/L
	1,1,1-trichloroethane	<1	JU		<5	JU	Q	<5	U		<5	U		1	WA	200	ug/L
+	trichloroethylene	115	J		93	J	KQ	138	J	K	***121***			1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable	<146	U		<25.1	U		66.2	J	I	<322	U		1	WA	100	ug/L
	nitrate-nitrite as nitrogen	708			757											2400	ug/L
	sodium, total recoverable	2070		V	2070			2780			2340			1	WA	4600	ug/L
	sulfate	333	J	I	282	J	I	531			<621	U		1	WA	3000	ug/L
Radionuclides																	
	gross alpha	2.36			.66	U										15	pCi/L
	nonvolatile beta	3.7	J		1.12	U										50	pCi/L
	radium, total alpha-emitting	.87			.6	J	I									5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL ASB 6TA

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 105749.5 E 52671.3	33.34558 Deg N -81.7336 Deg W	40 - 34.5 ft msl	352.9 ft msl	4 " PVC	S	CBA

SAMPLE DATE	03/06/00	07/27/00	03/01/01	08/21/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	212.63	210.36	210.12	208.7	ft msl
pH	9.1	9.4	8.2	8.9	pH
Sp. Conductance	104	98	90	103	uS/cm
Water temperature	20.2	23.7	19.1	21.8	deg. C
Alkalinity as CaCO3	42	52	30	25	mg/L
Turbidity	.6	1.2	1.5	1.3	NTU
Volumes purged	.009	.009	.009	2.09	well volume
Sampling code	NX	NX	NX		
Synchronous water level	212.5 (03/23/00)	210.6 (09/27/00)	209.1 (06/27/01)	208.1 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<5	U		<120	JU	Q	<5	U		<25	U		5	WA	5	ug/L
	1,1-dichloroethane	<5	U		<120	JU	Q	<5	U		<25	U		5	WA	5	ug/L
	1,1-dichloroethylene	<5	U		<120	JU	Q	<5	U		<25	U		5	WA	7	ug/L
	trans-1,2-dichloroethylene	<5	U		<120	JU	Q	<5	U		<25	U		5	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<5	U		<120	JU	Q	<5	U		<25	U		5	WA	5	ug/L
+	tetrachloroethylene	***15.2***			<120	JU	Q	4.94	J	I	8.14	J	I	5	WA	5	ug/L
	1,1,1-trichloroethane	<5	U		<120	JU	Q	<5	U		<25	U		5	WA	200	ug/L
+	trichloroethylene	***937***			570	J	KQ	***659***		L	***654***			5	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable	78.3	J	I	68.2	J	I	68	J	I	82.5	J	I	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	1250			1340											2400	ug/L
+	sodium, total recoverable	***7250***		V	3110			***6480***			***5680***			1	WA	4600	ug/L
	sulfate	2340			1480			2790			<372	U		1	WA	3000	ug/L
Radionuclides																	
	gross alpha	1.63			.628	U										15	pCi/L
	nonvolatile beta	10.04	J		1.59	J	I									50	pCi/L
	radium, total alpha-emitting	.29			.2	U										5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL ASB 8

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 106381.6 E 53136.6	33.34774 Deg N -81.7336 Deg W	226.6 - 206.6 ft msl	349 ft msl	4 " PVC	S	M

SAMPLE DATE	02/01/00	09/26/00	03/12/01	09/04/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	232.13	*Not Applicable*	229.22	222.05	ft msl
pH	4.2	5.2	5.1	4.8	pH
Sp. Conductance	42	41	40	44	uS/cm
Water temperature	18.6	19.6	18.7	23.7	deg. C
Alkalinity as CaCO3	0	0	0	1	mg/L
Turbidity	1.1	1.8	2.9	3.6	NTU
Volumes purged	3.24		4.20	2.68	well volume
Sampling code		S			
Synchronous water level	232 (03/20/00)	230.3 (09/27/00)	229.2 (03/29/01)	227.8 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP EPA	3Q00	CLP EPA	1Q01	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	barium, total recoverable												
	cyanide												
	lead, total recoverable												
	nickel, total recoverable												
	selenium, total recoverable												
Organics													
	chlorobenzene	<1	JU	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethane	<1	JU	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethylene	<1	JU	<5	U	<5	U	<5	U	1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	JU	<5	U	<5	U	<5	U	1	WA	100	ug/L
	pcb 1016												
	pcb 1221												
	pcb 1232												
	pcb 1242												
	pcb 1248												
	pcb 1254												
	pcb 1260												
	1,1,2,2-tetrachloroethane	<1	JU	<5	U	<5	U	<5	U	1	WA	5	ug/L
	tetrachloroethylene	<1	JU	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1,1-trichloroethane	<1	JU	<5	U	<5	U	<5	U	1	WA	200	ug/L
+	trichloroethylene	1.82	J	2	J I	3.23	J I	***5.8***		1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP EPA	3Q99	CLP EPA	3Q00	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	aluminum, total recoverable	27.8	J I	<146	U	<200	U	47.6	J I	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	627	V	842								2400	ug/L
+	sodium, total recoverable	***7240***	V	***6990***		***7690***		***6940***		1	WA	4600	ug/L
+	sulfate	***6730***		***5440***		***6060***		***6860***		1	WA	3000	ug/L
Radionuclides													
	gross alpha	.57	U W	.539	U							15	pCi/L
	nonvolatile beta	4.7	J	1.37	U							50	pCi/L
	radium, total alpha-emitting	1.2		.1	U							5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL ASB 8B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 106362.3 E 53109.6	33.34765 Deg N -81.7336 Deg W	128.4 - 122.8 ft msl	349.8 ft msl	4 " PVC	S	MCBC

SAMPLE DATE	02/29/00	07/26/00	02/28/01	08/22/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	210.98	209.61	208.45	210.75	ft msl
pH	5	4.9	5	4.9	pH
Sp. Conductance	20	19	18	19	uS/cm
Water temperature	18.3	19.5	18.7	19.4	deg. C
Alkalinity as CaCO3	0	0	0	0	mg/L
Turbidity	.6	.9	.4	.7	NTU
Volumes purged	2.25	3.03	2.60	2.58	well volume
Sampling code					
Synchronous water level	211 (03/20/00)	209.3 (09/27/00)	207.8 (03/29/01)	206.8 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
	Inorganics																
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
	Organics																
	chlorobenzene	<1	U		<100	JU	LQ	<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethane	<1	U		<100	JU	LQ	<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<1	U		<100	JU	LQ	<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene				<100	JU	LQ	<5	U		<5	U		1	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<1	U		<100	JU	LQ	<5	U		<5	U		1	WA	5	ug/L
	tetrachloroethylene	1.76	J	K	<100	JU	LQ	<5	U		<5	U		1	WA	5	ug/L
	1,1,1-trichloroethane	<1	U		<100	JU	LQ	<5	U		<5	U		1	WA	200	ug/L
+	trichloroethylene	107	J	K	92	J	IKQ	80.7	J	K	***63.6***			1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
	Inorganics																
	aluminum, total recoverable	22.6	J	I	<146	U		47.1	J	I	<51.5	U	V	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	1280			775											2400	ug/L
	sodium, total recoverable	2110		V	1680			1840			1580			1	WA	4600	ug/L
	sulfate	287	J	I	384			659			532			1	WA	3000	ug/L
	Radionuclides																
	gross alpha	3.79	J		.586	U										15	pCi/L
	nonvolatile beta	8.25	J		1.51	J	I									50	pCi/L
	radium, total alpha-emitting	.47			.1	U										5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL ASB 8C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 106354.4 E 53101	33.34762 Deg N -81.7336 Deg W	188.3 - 182.7 ft msl	349.7 ft msl	4 " PVC	S	UL

SAMPLE DATE	02/29/00	07/26/00	02/28/01	08/22/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	218.33	217.08	215.85	218.96	ft msl
pH	4.9	4.9	5.1	5.6	pH
Sp. Conductance	29	26	23	24	uS/cm
Water temperature	18.2	19.3	18.6	18.8	deg. C
Alkalinity as CaCO3	0	0	0	0	mg/L
Turbidity	.4	.6	.3	1.2	NTU
Volumes purged	3.44	0	3.42	10.1	well volume
Sampling code					
Synchronous water level	218.5 (03/20/00)	219.3 (09/27/00)	215.2 (03/29/01)	214.3 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
	Inorganics																
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
	Organics																
	chlorobenzene	<20	U		<250	JU	Q	<50	U		<50	U		10	WA	5	ug/L
	1,1-dichloroethane	<20	U		<250	JU	Q	<50	U		<50	U		10	WA	5	ug/L
	1,1-dichloroethylene	<20	U		<250	JU	Q	<50	U		<50	U		10	WA	7	ug/L
	trans-1,2-dichloroethylene				<250	JU	Q	<50	U		<50	U		10	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<20	U		<250	JU	Q	<50	U		<50	U		10	WA	5	ug/L
	tetrachloroethylene	<20	U		<250	JU	Q	<50	U		<50	U		10	WA	5	ug/L
	1,1,1-trichloroethane	<20	U		<250	JU	Q	<50	U		<50	U		10	WA	200	ug/L
+	trichloroethylene	2080	J	K	1300	J	KQ	788	J	K	***567***			10	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
	Inorganics																
	aluminum, total recoverable	19.3	J	I	19.5	J	I	<200	U		<64.8	U	V	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	1700			1740											2400	ug/L
	sodium, total recoverable	3110		V	2600			2380			2000			1	WA	4600	ug/L
	sulfate	286	J	I	275	J	I	534			403			1	WA	3000	ug/L
	Radionuclides																
	gross alpha	2.29	J		1.15	J	IK									15	pCi/L
	nonvolatile beta	5.93	J		3.78											50	pCi/L
	radium, total alpha-emitting	.59			.7	J	I									5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL ASB 8TA

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 106375.8 E 53124.7	33.34770 Deg N -81.7336 Deg W	24.6 - 19.4 ft msl	349.6 ft msl	4 " CS	S	CBA

SAMPLE DATE	02/01/00	09/26/00	03/12/01	09/04/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	214.58	194.71	211.85	209.85	ft msl
pH	4.9	4.9	5.2	5.1	pH
Sp. Conductance	21	20	20	19	uS/cm
Water temperature	18.5	19.2	18.7	21.3	deg. C
Alkalinity as CaCO3	0	0	0	1	mg/L
Turbidity	1.1	6.2	7.1	4.4	NTU
Volumes purged	2.26	3.22	2.45	2.92	well volume
Sampling code					
Synchronous water level	214.3 (03/20/00)	209.4 (12/31/00)	211.1 (03/29/01)	210.1 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

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ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<1	JU		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethane	<1	JU		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<1	JU		<5	U		<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	JU		<5	U		<5	U		<5	U		1	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<1	JU		<5	U		<5	U		<5	U		1	WA	5	ug/L
	tetrachloroethylene	<1	JU		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1,1-trichloroethane	<1	JU		<5	U		<5	U		<5	U		1	WA	200	ug/L
	trichloroethylene	<1	JU		<5	U		<5	U		<5	U		1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable	<146	U		<146	U		<200	U		79.7	J	I	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	1060		V	1100											2400	ug/L
	sodium, total recoverable	1390		V	1380			1440			1360			1	WA	4600	ug/L
	sulfate	288	J	I	231	J	I	752			312	J	I	1	WA	3000	ug/L
Radionuclides																	
	gross alpha	1.37			.336	U										15	pCi/L
	nonvolatile beta	2	J		1.57	J	I									50	pCi/L
	radium, total alpha-emitting	.27	U	W	.3	U										5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL ASB 9B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 104564.7 E 54215.3	33.34548 Deg N -81.7272 Deg W	164.4 - 158.8 ft msl	309 ft msl	4 " PVC	S	LL

SAMPLE DATE	03/06/00	07/26/00	03/01/01	08/22/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	219.39	217.55	216.4	214.67	ft msl
pH	6.4	6.9	8.9	7.1	pH
Sp. Conductance	69	88	93	79	uS/cm
Water temperature	19	20.4	18.1	26.4	deg. C
Alkalinity as CaCO3	32	33	33	0	mg/L
Turbidity	.2	1.2	.5	6.3	NTU
Volumes purged	2.78	2.63	2.20	2.22	well volume
Sampling code					
Synchronous water level	219.4 (03/22/00)	217.4 (09/27/00)	216.4 (03/29/01)	215.2 (09/24/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

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ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<1	JU		<5	JU	Q	<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethane	<1	JU		<5	JU	Q	<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<1	JU		<5	JU	Q	<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	JU		<5	JU	Q	<5	U		<5	U		1	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<1	JU		<5	JU	Q	<5	U		<5	U		1	WA	5	ug/L
	tetrachloroethylene	9.67	J		8.9	J	Q	4.06	J	I	8.07	J	K	1	WA	5	ug/L
	1,1,1-trichloroethane	<1	JU		<5	JU	Q	<5	U		<5	U		1	WA	200	ug/L
	trichloroethylene	10.6	J		9.6	J	KQ	4.78	J	I	8.64	J	K	1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable	<146	U		18.5	J	I	<53.6	U		<60.3	U	V	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	467			628											2400	ug/L
	sodium, total recoverable	2130		V	2370			2960			2540			1	WA	4600	ug/L
	sulfate	311	J	I	264	J	I	<546	U		606			1	WA	3000	ug/L
Radionuclides																	
	gross alpha	2.68			2.08	J	I									15	pCi/L
	nonvolatile beta	1.14	U	W	.48	U										50	pCi/L
	radium, total alpha-emitting	.83			1.8	J	I									5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL ASB 9C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 104568.1 E 54201.1	33.34547 Deg N -81.7272 Deg W	182.9 - 178.2 ft msl	309.9 ft msl	4 " PVC	S	UL

SAMPLE DATE	03/06/00	07/26/00	03/01/01	08/22/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	219.8	218	217.87	216.01	ft msl
pH	5.4	5.4	5.9	5.7	pH
Sp. Conductance	32	31	44	41	uS/cm
Water temperature	19.2	20.2	19.4	19.7	deg. C
Alkalinity as CaCO3	4	2	10	40	mg/L
Turbidity	.7	1	1.3	.6	NTU
Volumes purged	2.99	2.51	2.36	2.89	well volume
Sampling code					
Synchronous water level	219.8 (03/22/00)	217.8 (09/23/00)	216.3 (03/29/01)	215.1 (09/24/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

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ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<1	JU		<5	JU	Q	<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethane	<1	JU		<5	JU	Q	<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<1	JU		<5	JU	Q	<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	JU		<5	JU	Q	<5	U		<5	U		1	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<1	JU		<5	JU	Q	<5	U		<5	U		1	WA	5	ug/L
+	tetrachloroethylene	11.6	J		5.8	J	Q	***10.6***			***12.6***			1	WA	5	ug/L
	1,1,1-trichloroethane	<1	JU		<5	JU	Q	<5	U		<5	U		1	WA	200	ug/L
+	trichloroethylene	11.4	J		6.4	J	KQ	***9.47***			***9.37***			1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable	<146	U		22.7	J	I	<35	U		<69	U	V	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	729			773											2400	ug/L
	sodium, total recoverable	2610		V	2570			2810			2760			1	WA	4600	ug/L
	sulfate	323	J	I	272	J	I	<494	U		351			1	WA	3000	ug/L
Radionuclides																	
	gross alpha	2.57			.799	J	I									15	pCi/L
	nonvolatile beta	1.25	U	W	.964	U										50	pCi/L
	radium, total alpha-emitting	.44	U	W	4.7											5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL ASB 10CR

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 105655.4 E 52969.7	33.34586 Deg N -81.7326 Deg W	181.7 - 171.7 ft msl	349.2 ft msl	4 " PVC	S	LL

SAMPLE DATE	03/06/00	07/27/00	03/01/01	08/21/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	221.52	218.59	217.44	218.08	ft msl
pH	5.3	5.8	5.2	5.6	pH
Sp. Conductance	41	41	37	38	uS/cm
Water temperature	19.5	20.7	18.8	20.2	deg. C
Alkalinity as CaCO3	1	0	0	0	mg/L
Turbidity	.3	.9	.2	.4	NTU
Volumes purged	3.50	3.04	3.58	2.38	well volume
Sampling code					
Synchronous water level	221.4 (03/23/00)	218.9 (09/27/00)	217.2 (03/29/01)	215.8 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

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ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<1	JU		<5	JU	LQ	<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethane	<1	JU		<5	JU	LQ	<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<1	JU		<5	JU	LQ	<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	JU		<5	JU	LQ	<5	U		<5	U		1	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<1	JU		<5	JU	LQ	<5	U		<5	U		1	WA	5	ug/L
	tetrachloroethylene	3.35	J		2.9	J	ILQ	3.4	J	I	3.38	J	I	1	WA	5	ug/L
	1,1,1-trichloroethane	<1	JU		<5	JU	LQ	<5	U		<5	U		1	WA	200	ug/L
+	trichloroethylene	179	J		120	J	KQ	***149***			***155***			1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable	16.8	J	I	<146	U		55.2	J	I	<322	U		1	WA	100	ug/L
	nitrate-nitrite as nitrogen	1260			1260											2400	ug/L
+	sodium, total recoverable	***5080***		V	***4910***			***5960***			***4650***			1	WA	4600	ug/L
	sulfate	400			399			630			2850			1	WA	3000	ug/L
Radionuclides																	
	gross alpha	2.21			.827	J	I									15	pCi/L
	nonvolatile beta	13.23	J		2.5											50	pCi/L
	radium, total alpha-emitting	.41			.3	U										5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MCB 5C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 97315.1 E 44862.8	33.31418 Deg N -81.7377 Deg W	161.2 - 156.2 ft msl	339.1 ft msl	4 " PVC	V	UL

SAMPLE DATE	03/02/00	08/15/00	02/28/01	09/13/01	
FIELD DATA					
Parameter	**1Q00**	**3Q00**	**1Q01**	**3Q01**	**Unit**
Water Elevation	194.18	192	191.62	190.05	ft msl
pH	8.5	8.8	6.6	6.8	pH
Sp. Conductance	126	124	85	90	uS/cm
Water temperature	19.5	22.8	22.3	20.1	deg. C
Alkalinity as CaCO3	46	29	11	18	mg/L
Turbidity	.6	.5	1	.3	NTU
Volumes purged	2.18	.685	2.29	2.17	well volume
Sampling code					
Synchronous water level	194.3 (03/20/00)	192 (09/23/00)	191.4 (03/20/01)	190.3 (09/26/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

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ST	Parameter	1Q00	CLP EPA	3Q00	CLP EPA	1Q01	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	barium, total recoverable												
	cyanide												
+	lead, total recoverable			***211***		<47	U	<24	U	1	WA	15	ug/L
	nickel, total recoverable												
	selenium, total recoverable												
Organics													
	chlorobenzene	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethane	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethylene	.97	J I	<5	U	1.04	J IK	<5	U	1	WA	7	ug/L
	trans-1,2-dichloroethylene			<5	U	<5	U	<5	U	1	WA	100	ug/L
	pcb 1016												
	pcb 1221												
	pcb 1232												
	pcb 1242												
	pcb 1248												
	pcb 1254												
	pcb 1260												
	1,1,2,2-tetrachloroethane	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
+	tetrachloroethylene	***74.8***		68	J K	49.8	J K	***51***		1	WA	5	ug/L
	1,1,1-trichloroethane	<1	U	<5	U	<5	U	<5	U	1	WA	200	ug/L
+	trichloroethylene	***59***		46	J K	43.1	J K	***40***		1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP EPA	3Q99	CLP EPA	3Q00	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	aluminum, total recoverable			173	J I	<87.2	U V	<188	U V	1	WA	100	ug/L
+	nitrate-nitrite as nitrogen			***3790***								2400	ug/L
+	sodium, total recoverable			***5610***		4400		4010		1	WA	4600	ug/L
	sulfate			1000								3000	ug/L
Radionuclides													
	gross alpha	3.04		1.64	J I							15	pCi/L
	nonvolatile beta	5.68	J	5.07								50	pCi/L
	radium, total alpha-emitting	.5	U W	1.2	J I							5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MCB 6C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 97413.1 E 45207.7	33.31496 Deg N -81.7370 Deg W	170 - 165 ft msl	332.1 ft msl	4 " PVC	S	UL

SAMPLE DATE	02/15/00	09/07/00	03/09/01	08/24/01	
FIELD DATA					
Parameter	**1Q00**	**3Q00**	**1Q01**	**3Q01**	**Unit**
Water Elevation	194.74	192.69	192.17	190.82	ft msl
pH	6.3	7.3	9.3	6.6	pH
Sp. Conductance	54	77	101	75	uS/cm
Water temperature	18.7	19.3	18.6	20.3	deg. C
Alkalinity as CaCO3	14	29	43	10	mg/L
Turbidity	2	.7	.8	.9	NTU
Volumes purged	4.03	3.27	2.15	3.99	well volume
Sampling code					
Synchronous water level	194.9 (03/20/00)	192.7 (09/23/00)	192.2 (03/29/01)	191.3 (09/26/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

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ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<1	U		<5	U		<5	U		<5	UJ	L	1	WA	5	ug/L
	1,1-dichloroethane	<1	U		<5	U		<5	U		<5	UJ	L	1	WA	5	ug/L
	1,1-dichloroethylene	<1	U		<5	U		<5	U		<5	UJ	L	1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	U		<5	U		<5	U		<5	UJ	L	1	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<1	U		<5	U		<5	U		<5	UJ	L	1	WA	5	ug/L
	tetrachloroethylene	1.38			<5	U		<5	U		1.36	J	IL	1	WA	5	ug/L
	1,1,1-trichloroethane	<1	U		<5	U		<5	U		<5	UJ	L	1	WA	200	ug/L
+	trichloroethylene	***10.8***			***6.8***			***6.65***			8.94	J	L	1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable	34.7	J	I	<200	U		56.2	J	I	<86.6	U	V	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	770			915											2400	ug/L
	sodium, total recoverable	2350		V	2800			2700			3200			1	WA	4600	ug/L
	sulfate	2210			2260											3000	ug/L
Radionuclides																	
	gross alpha	.91			.0701	U										15	pCi/L
	nonvolatile beta	2.1			2.46	J	I									50	pCi/L
	radium, total alpha-emitting	.06	U	W	-.1	U										5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MCB 7C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 97139.9 E 44870.6	33.31381 Deg N -81.7374 Deg W	160.7 - 155.7 ft msl	337.7 ft msl	4 " PVC	S	UL

SAMPLE DATE	03/02/00	08/16/00	03/16/01	09/13/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	193.37	191.13	190.75	189.39	ft msl
pH	10.9	10.3	11.6	11	pH
Sp. Conductance	1435	607	2268	2089	uS/cm
Water temperature	18.6	22.9	19.3	20.2	deg. C
Alkalinity as CaCO3	432	117	378	255	mg/L
Turbidity	2.9	.4	2	1	NTU
Volumes purged	0	2.34	2.14	.046	well volume
Sampling code	NX		NX	X	
Synchronous water level	193.4 (03/20/00)	191.1 (09/23/00)	190.5 (03/29/01)	189.9 (09/26/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
+	lead, total recoverable				***50.2***			<47	U		2.7	J	I	1	WA	15	ug/L
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<1	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethane	<1	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<1	U		<5	U		<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene				<5	U		<5	U		<5	U		1	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<1	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
+	tetrachloroethylene	***8.07***			15	J	K	***13.8***			***15***			1	WA	5	ug/L
	1,1,1-trichloroethane	<1	U		<5	U		<5	U		<5	U		1	WA	200	ug/L
+	trichloroethylene	***63.4***			41	J	K	***52.6***			***47***			1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
+	aluminum, total recoverable	***4200***			***2470***			***2630***			***3250***			1	WA	100	ug/L
	nitrate-nitrite as nitrogen	561			2190											2400	ug/L
+	sodium, total recoverable	***10900***		V	4310			4500			***5760***			1	WA	4600	ug/L
	sulfate	2280			1770											3000	ug/L
Radionuclides																	
	gross alpha	2.68	J		.00721	U										15	pCi/L
	nonvolatile beta	9.26	J		3.43											50	pCi/L
	radium, total alpha-emitting	.71			.1	U										5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 9A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 102236.7 E 48242.5	33.33058 Deg N -81.7384 Deg W	144.2 - 139.2 ft msl	359.1 ft msl	4 " PVC	S	LL

SAMPLE DATE	02/18/00	08/18/00	02/12/01	08/30/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	208.79	210	207.4	205.9	ft msl
pH	5.8	6.2	6.2	6.1	pH
Sp. Conductance	30	38	31	36	uS/cm
Water temperature	18.4	20.8	17.3	20.2	deg. C
Alkalinity as CaCO3	8	10	1	10.1	mg/L
Turbidity	1.1	1.2	.7	1.1	NTU
Volumes purged	2.60	2.34	2.72	2.32	well volume
Sampling code					
Synchronous water level	208.7 (03/21/00)	208.6 (12/27/00)	206.8 (03/29/01)	206.4 (09/24/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

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ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<5	U		<50	U		<50	U		<5	UJ	L	1	WA	5	ug/L
	1,1-dichloroethane	<5	U		<50	U		<50	U		<5	UJ	L	1	WA	5	ug/L
	1,1-dichloroethylene	<5	U		<50	U		<50	U		<5	UJ	L	1	WA	7	ug/L
	trans-1,2-dichloroethylene	8.6			<50	U		<50	U		3.51	J	IL	1	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<5	U		<50	U		<50	U		<5	UJ	L	1	WA	5	ug/L
+	tetrachloroethylene	***1320***			1400	J	K	***1060***			1300	J	LQ	10	WA	5	ug/L
	1,1,1-trichloroethane	<5	U		<50	U		<50	U		<5	UJ	L	1	WA	200	ug/L
+	trichloroethylene	***908***			1100	J	K	***757***			783	J	LQ	10	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable	<200	U		<200	U		<60.7	U	V	<322	U		1	WA	100	ug/L
	nitrate-nitrite as nitrogen	231	J	I	383	J	I									2400	ug/L
	sodium, total recoverable	1600		V	1800			1900			1670			1	WA	4600	ug/L
	sulfate	<400	U		506											3000	ug/L
Radionuclides																	
	gross alpha	.61	J		.543	U										15	pCi/L
	nonvolatile beta	.9	J		.802	U										50	pCi/L
	radium, total alpha-emitting	.37	U	W	.6	J	I									5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 9C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 102245.6 E 48273	33.33065 Deg N -81.7383 Deg W	241.6 - 221.6 ft msl	359.6 ft msl	4 " PVC	S	M

SAMPLE DATE			03/22/01	09/12/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	*Not Applicable*	*Not Applicable*	225.99	224.79	ft msl
pH			4.5	4	pH
Sp. Conductance			156	162	uS/cm
Water temperature			16.4	23	deg. C
Alkalinity as CaCO3			0	0	mg/L
Turbidity			443	364	NTU
Volumes purged			2.61	1.58	well volume
Sampling code				T	
Synchronous water level	( )	226.5 (12/27/00)	226 (03/29/01)	224.7 (09/24/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

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ST	Parameter	1Q00	CLP EPA	3Q00	CLP EPA	1Q01	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
	Inorganics												
	barium, total recoverable												
	cyanide												
	lead, total recoverable												
	nickel, total recoverable												
	selenium, total recoverable												
	Organics												
	chlorobenzene					5.01	J L	<100	U	20	WA	5	ug/L
	1,1-dichloroethane					<2500	U	<100	U	20	WA	5	ug/L
	1,1-dichloroethylene					<2500	U	<100	U	20	WA	7	ug/L
	trans-1,2-dichloroethylene					<2500	U	<100	U	20	WA	100	ug/L
	pcb 1016					<2.33	JU Q	<2.04	UJ Q	1	WA	.5	ug/L
	pcb 1221					<4.65	JU Q	<4.1	UJ Q	1	WA	.5	ug/L
	pcb 1232					<2.33	JU Q	<2.04	UJ Q	1	WA	.5	ug/L
	pcb 1242					<2.33	JU Q	<2.04	UJ Q	1	WA	.5	ug/L
	pcb 1248					<2.33	JU Q	<2.04	UJ Q	1	WA	.5	ug/L
	pcb 1254					3.12	J Q	1.8	J ILQ	1	WA	.5	ug/L
	pcb 1260					<2.33	JU Q	<2.04	UJ Q	1	WA	.5	ug/L
	1,1,2,2-tetrachloroethane					9.48	J L	<100	U	20	WA	5	ug/L
+	tetrachloroethylene					***32300***		***25000***		200	WA	5	ug/L
	1,1,1-trichloroethane					1.33	J I	<100	U	20	WA	200	ug/L
+	trichloroethylene					***6970***		3600	J K	20	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP EPA	3Q99	CLP EPA	3Q00	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
	Inorganics												
+	aluminum, total recoverable							***9330***		1	WA	100	ug/L
	nitrate-nitrite as nitrogen												
+	sodium, total recoverable							***8250***		1	WA	4600	ug/L
	sulfate												
	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. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 10A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 102451.7 E 47954.4	33.33059 Deg N -81.7396 Deg W	125.2 - 120.2 ft msl	357.2 ft msl	4 " PVC	S	MCBC

SAMPLE DATE	02/24/00	08/18/00	02/13/01	08/31/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	209.15	209.6	207.75	205.39	ft msl
pH	5.2	5.3	7.7	5.5	pH
Sp. Conductance	20	20	35	23	uS/cm
Water temperature	18.9	22	15.5	20.1	deg. C
Alkalinity as CaCO3	1	2	13	25	mg/L
Turbidity	.2	.3	1.9	.8	NTU
Volumes purged	2.32	3.13	2.15	2.17	well volume
Sampling code					
Synchronous water level	209 (03/21/00)	208.5 (12/27/00)	207.2 (03/29/01)	205.4 (09/26/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

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ST	Parameter	1Q00	CLP EPA	3Q00	CLP EPA	1Q01	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
	Inorganics												
	barium, total recoverable												
	cyanide												
	lead, total recoverable												
	nickel, total recoverable												
	selenium, total recoverable												
	Organics												
	chlorobenzene	<1	U	<5	U	<25	U	<10	U	2	WA	5	ug/L
	1,1-dichloroethane	<1	U	<5	U	<25	U	<10	U	2	WA	5	ug/L
	1,1-dichloroethylene	<1	U	<5	U	<25	U	<10	U	2	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	U	<5	U	<25	U	<10	U	2	WA	100	ug/L
	pcb 1016												
	pcb 1221												
	pcb 1232												
	pcb 1242												
	pcb 1248												
	pcb 1254												
	pcb 1260												
	1,1,2,2-tetrachloroethane	<1	U	<5	U	<25	U	<10	U	2	WA	5	ug/L
+	tetrachloroethylene	***22.6***		32	J K	***334***		***25.2***		2	WA	5	ug/L
	1,1,1-trichloroethane	<1	U	<5	U	<25	U	<10	U	2	WA	200	ug/L
+	trichloroethylene	***90.7***		***250***		***340***		***273***		2	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP EPA	3Q99	CLP EPA	3Q00	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
	Inorganics												
	aluminum, total recoverable	<200	U	<200	U	<200	U	<322	U	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	275	J I	322	J I							2400	ug/L
	sodium, total recoverable	1540		1700		1680		1590		1	WA	4600	ug/L
	sulfate	576		472								3000	ug/L
	Radionuclides												
	gross alpha	1.35		.441	U							15	pCi/L
	nonvolatile beta	1.11	U W	.479	U							50	pCi/L
	radium, total alpha-emitting	.28	U W	.4	J I							5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 10B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 102488.2 E 47943.1	33.33065 Deg N -81.7397 Deg W	157.4 - 152.4 ft msl	357.6 ft msl	4 " PVC	S	LL

SAMPLE DATE	02/29/00	08/24/00	02/13/01	08/31/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	211.05	*Not Applicable*	210	208.17	ft msl
pH	5.2	5.1	8.5	7.2	pH
Sp. Conductance	37	35	38	37	uS/cm
Water temperature	18.6	20.1	17.6	20.8	deg. C
Alkalinity as CaCO3	0	0	7	1	mg/L
Turbidity	.8	1.9	1.6	.9	NTU
Volumes purged	2.30		2.15	2.11	well volume
Sampling code		S			
Synchronous water level	210.7 (06/25/00)	211.1 (09/23/00)	209.7 (03/29/01)	214.4 (09/26/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<1	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethane	<1	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<1	U		<5	U		<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene				<5	U		<5	U		<5	U		1	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<1	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
+	tetrachloroethylene	15.6	J	K	***5.6***			***106***			12.8	J	K	1	WA	5	ug/L
	1,1,1-trichloroethane	<1	U		<5	U		<5	U		<5	U		1	WA	200	ug/L
+	trichloroethylene	19.4	J	K	***6.3***			***74.9***			13.1	J	K	1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable	<200	U		<200	U		<200	U		<322	U		1	WA	100	ug/L
	nitrate-nitrite as nitrogen	96	J	I	80.1	J	I									2400	ug/L
	sodium, total recoverable	2290			2800			2720			2430			1	WA	4600	ug/L
+	sulfate	***8090***			***7980***											3000	ug/L
Radionuclides																	
	gross alpha	1	U	W	-.0344	U										15	pCi/L
	nonvolatile beta	1.57	U	W	.687	U										50	pCi/L
	radium, total alpha-emitting	.37			0	U										5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 11C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 102658.6 E 48579.4	33.33206 Deg N -81.7383 Deg W	182.9 - 177.9 ft msl	365.5 ft msl	4 " PVC	S	UL

SAMPLE DATE	03/08/00	08/09/00	02/13/01	09/07/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	217.85	216.74	217.3	215.1	ft msl
pH	4.7	5.4	6.9	5	pH
Sp. Conductance	153	150	184	196	uS/cm
Water temperature	19.4	21	16.6	20.3	deg. C
Alkalinity as CaCO3	0	0	6	0	mg/L
Turbidity	.4	.6	2.1	.5	NTU
Volumes purged	3.76	3.23	2.10	2.64	well volume
Sampling code					
Synchronous water level	217.7 (03/21/00)	218.4 (09/23/00)	217.7 (03/29/01)	215.6 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
	Inorganics																
	barium, total recoverable	48.7			47.6			64.1			63.4			1	WA	2000	ug/L
	cyanide																
	lead, total recoverable	<20	U		<5.52	U	V	6.9	J	I	4.3	J	I	1	WA	15	ug/L
	nickel, total recoverable	<60	U		<60	U										100	ug/L
	selenium, total recoverable	<40	U		<40	U										50	ug/L
	Organics																
	chlorobenzene	112	J	IK	<200	JU	L	<2500	U		<5	UJ		1	WA	5	ug/L
	1,1-dichloroethane	<200	U		<200	JU	L	<2500	U		<5	UJ		1	WA	5	ug/L
	1,1-dichloroethylene	<200	U		<200	JU	L	<2500	U		<5	UJ		1	WA	7	ug/L
	trans-1,2-dichloroethylene	<200	U		<200	JU	L	<2500	U		<5	UJ		1	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<200	U		<200	JU	L	<2500	U		<5	UJ		1	WA	5	ug/L
	tetrachloroethylene	<200	JU	K	<200	JU	L	<2500	U		500	J	L	1	WA	5	ug/L
	1,1,1-trichloroethane	<200	U		<200	JU	L	<2500	U		<5	UJ		1	WA	200	ug/L
+	trichloroethylene	40300	J	K	33500	J	L	***46400***			47800	J		500	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
	Inorganics																
+	aluminum, total recoverable	122	J	I	160	J	I	***119***			221	J	I	1	WA	100	ug/L
+	nitrate-nitrite as nitrogen	***15500***			***16900***											2400	ug/L
+	sodium, total recoverable	***5870***			***5700***			4580			***5890***			1	WA	4600	ug/L
	sulfate	252	J	I	165	J	I									3000	ug/L
	Radionuclides																
	gross alpha	9.66			5.1											15	pCi/L
	nonvolatile beta	9.48		V	4.23											50	pCi/L
	radium, total alpha-emitting	3.19			2.9											5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 11F

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 102629.3 E 48577	33.33200 Deg N -81.7383 Deg W	243.1 - 223.1 ft msl	365.6 ft msl	4 " PVC	S	M

SAMPLE DATE	03/14/00	08/09/00	03/13/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	228.4	227.4	226.2	*Not Applicable*	ft msl
pH	5.1	4.8	4.6		pH
Sp. Conductance	31	35	33		uS/cm
Water temperature	18.7	22.3	22.1		deg. C
Alkalinity as CaCO3	0	0	0		mg/L
Turbidity	4.1	2.1	2.1		NTU
Volumes purged	7.77	2.60	5.78		well volume
Sampling code					
Synchronous water level	228.3 (03/21/00)	226.8 (09/23/00)	226.1 (03/29/01)	( )	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable	4.5	J	I	4.73	J	I	6.3								2000	ug/L
	cyanide																
	lead, total recoverable	<6.72	JU	IV	<6.72	U	V	17.4	J	I						15	ug/L
	nickel, total recoverable	<60	U		<60	U		3.2	J	I						100	ug/L
	selenium, total recoverable	<40	U		<40	U										50	ug/L
Organics																	
	chlorobenzene	1.4	J	IK	<10	JU	L	<50	U							5	ug/L
	1,1-dichloroethane	<5	U		<10	JU	L	<50	U							5	ug/L
	1,1-dichloroethylene	<5	U		<10	JU	L	<50	U							7	ug/L
	trans-1,2-dichloroethylene	<5	U		<10	JU	L	<50	U							100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<5	U		<10	JU	L	<50	U							5	ug/L
+	tetrachloroethylene	1600	J	K	1490	J	L	***318***								5	ug/L
	1,1,1-trichloroethane	4.55	J	IK	<10	JU	L	<50	U							200	ug/L
+	trichloroethylene	843	J	K	478	J	L	***176***								5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable	191	J	I	160	J	I	99.6								100	ug/L
	nitrate-nitrite as nitrogen	755			824											2400	ug/L
	sodium, total recoverable	2890			3800			3840								4600	ug/L
	sulfate	886			961											3000	ug/L
Radionuclides																	
	gross alpha	6.27			1.77											15	pCi/L
	nonvolatile beta	1.8	U	V	1.13	U										50	pCi/L
	radium, total alpha-emitting	1.66			.8	J	I									5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 12B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 102272.7 E 47142.1	33.32886 Deg N -81.7414 Deg W	162.4 - 157.4 ft msl	349.7 ft msl	4 " PVC	S	UL

SAMPLE DATE	02/29/00	08/23/00	02/20/01	09/06/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	216.68	215.45	214.09	212.66	ft msl
pH	5.1	4.9	4.8	4.1	pH
Sp. Conductance	88	91	90	37	uS/cm
Water temperature	18.4	20.4	18.7	19.6	deg. C
Alkalinity as CaCO3	0	0	0	0	mg/L
Turbidity	2.2	.9	1.4	.3	NTU
Volumes purged	2.52	3.05	2.91	2.35	well volume
Sampling code					
Synchronous water level	216.5 (03/21/00)	215.3 (09/23/00)	213.8 (03/29/01)	212.8 (09/26/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<50	U		<500	U		<500	U		1.6	J	IK	1	WA	5	ug/L
	1,1-dichloroethane	<50	U		<500	U		<500	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<50	U		<500	U		<500	U		7.94	J	K	1	WA	7	ug/L
	trans-1,2-dichloroethylene				<500	U		<500	U		<5	U		1	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<50	U		<500	U		<500	U		3.44	J	IK	1	WA	5	ug/L
+	tetrachloroethylene	18200	J	K	***15000***			***15900***			19500	J	Q	250	GE	5	ug/L
	1,1,1-trichloroethane	<50	U		<500	U		<500	U		1.66	J	IK	1	WA	200	ug/L
+	trichloroethylene	20000	J	K	***13000***			***13600***			15100	J	Q	250	GE	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable	<200	U		160	J	I	<161	U	V	59.5			1	GE	100	ug/L
+	nitrate-nitrite as nitrogen	***9950***			***9870***											2400	ug/L
+	sodium, total recoverable	***9450***			***12000***			***8680***			***8510***			1	GE	4600	ug/L
	sulfate	325	J	I	306											3000	ug/L
Radionuclides																	
	gross alpha	8.89			4.39											15	pCi/L
	nonvolatile beta	10.89		V	6											50	pCi/L
	radium, total alpha-emitting	2.61			1.4	J	I									5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 12TA

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 102287.8 E 47130.3	33.32888 Deg N -81.7414 Deg W	-102.6 - -113. ft msl	349.1 ft msl	4 " STEEL	S	CBA

SAMPLE DATE	02/03/00	08/23/00	03/06/01	08/23/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	191.55	189.97	189.7	187.89	ft msl
pH	5.7	7.1	11.4	6.5	pH
Sp. Conductance	33	33	520	40	uS/cm
Water temperature	18.9	22.4	13.5	21	deg. C
Alkalinity as CaCO3	6	16	143	11	mg/L
Turbidity	.9	.8	5.4	1.1	NTU
Volumes purged	8.63	9.18	8.38	8.10	well volume
Sampling code					
Synchronous water level	191.8 (03/21/00)	213.6 (09/23/00)	189.4 (03/29/01)	188.1 (09/26/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP EPA	3Q00	CLP EPA	1Q01	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	barium, total recoverable												
	cyanide												
	lead, total recoverable												
	nickel, total recoverable												
	selenium, total recoverable												
Organics													
	chlorobenzene	<1	U	<5	U	<5	U	<5	UJ L	1	WA	5	ug/L
	1,1-dichloroethane	<1	U	<5	U	<5	U	<5	UJ L	1	WA	5	ug/L
	1,1-dichloroethylene	<1	U	<5	U	<5	U	<5	UJ L	1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	U	<5	U	<5	U	<5	UJ L	1	WA	100	ug/L
	pcb 1016												
	pcb 1221												
	pcb 1232												
	pcb 1242												
	pcb 1248												
	pcb 1254												
	pcb 1260												
	1,1,2,2-tetrachloroethane	<1	U	<5	U	<5	U	<5	UJ L	1	WA	5	ug/L
	tetrachloroethylene	<1	U	<5	U	<5	U	<5	UJ L	1	WA	5	ug/L
	1,1,1-trichloroethane	<1	U	<5	U	<5	U	<5	UJ L	1	WA	200	ug/L
	trichloroethylene	<1	U	<5	U	<5	U	<5	UJ L	1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP EPA	3Q99	CLP EPA	3Q00	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	aluminum, total recoverable	74.4	J I	<200	U	<200	U	<79.9	U V	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	<500	U	<500	U							2400	ug/L
	sodium, total recoverable	1280		1400		1250		1300		1	WA	4600	ug/L
	sulfate	827		579								3000	ug/L
Radionuclides													
	gross alpha	2.29		1.16	J I							15	pCi/L
	nonvolatile beta	1.05	U W	1.11	U							50	pCi/L
	radium, total alpha-emitting	.62		.4	J I							5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 15A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 102983.5 E 48827	33.33319 Deg N -81.7383 Deg W	167.8 - 162.8 ft msl	367.7 ft msl	3.8 " PVC	S	UL

SAMPLE DATE	02/29/00	08/21/00	02/14/01	09/14/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	217.94	218.05	216.33	223.16	ft msl
pH	6.7	6.7	6.6	6.5	pH
Sp. Conductance	51	55	52	44	uS/cm
Water temperature	19.8	20.5	20.4		deg. C
Alkalinity as CaCO3	8	16	23	25	mg/L
Turbidity	1.4	1.2	1.7	2.7	NTU
Volumes purged	2.47	2.40	2.77		well volume
Sampling code				P	
Synchronous water level	217.8 (03/21/00)	217.4 (09/23/00)	216.3 (03/29/01)	214.5 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
	Inorganics																
	barium, total recoverable							<10.3	U	V	7.6	J	I	1	WA	2000	ug/L
	cyanide																
	lead, total recoverable							5.6	J	I	2.9	J	I	1	WA	15	ug/L
	nickel, total recoverable																
	selenium, total recoverable																
	Organics																
	chlorobenzene	<50	U		<250	U		<50	U		<250	U		50	WA	5	ug/L
	1,1-dichloroethane	<50	U		<250	U		<50	U		<250	U		50	WA	5	ug/L
	1,1-dichloroethylene	<50	U		<250	U		<50	U		<250	U		50	WA	7	ug/L
	trans-1,2-dichloroethylene				<250	U		<50	U		<250	U		50	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<50	U		<250	U		<50	U		<250	U		50	WA	5	ug/L
+	tetrachloroethylene	2020	J	K	***1600***			***1320***			***1120***			50	WA	5	ug/L
	1,1,1-trichloroethane	<50	U		<250	U		<50	U		<250	U		50	WA	200	ug/L
+	trichloroethylene	12100	J	K	***7800***			***6240***			***5500***			50	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
	Inorganics																
	aluminum, total recoverable	<200	U		<200	U		<200	U		<322	U		1	WA	100	ug/L
	nitrate-nitrite as nitrogen	550			590											2400	ug/L
	sodium, total recoverable	2210			2000			2410			2000			1	WA	4600	ug/L
	sulfate	361	J	I	307											3000	ug/L
	Radionuclides																
	gross alpha	1.56			.491	U										15	pCi/L
	nonvolatile beta	2.48			1.3	U										50	pCi/L
	radium, total alpha-emitting	.36	U	W	.2	U										5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 15AA

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 102953.1 E 48818.5	33.33311 Deg N -81.7383 Deg W	147.1 - 142.4 ft msl	369.2 ft msl	4 " PVC	S	LL

SAMPLE DATE	02/29/00	08/21/00	02/14/01	09/06/01	
FIELD DATA					
Parameter	**1Q00**	**3Q00**	**1Q01**	**3Q01**	**Unit**
Water Elevation	211.61	211	209.53	207.61	ft msl
pH	6.2	6.2	6.2	6	pH
Sp. Conductance	44	34	32	76	uS/cm
Water temperature	18.8	19.6	18.8	22.2	deg. C
Alkalinity as CaCO3	10	10	9	16	mg/L
Turbidity	.5	.9	.7	.6	NTU
Volumes purged	2.39	3.10	2.41	2.27	well volume
Sampling code					
Synchronous water level	211.5 (03/21/00)	210.4 (09/23/00)	208.6 (03/29/01)	207.4 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable	16.9			15.1			<13.9	U	V	14.8			1	WA	2000	ug/L
	cyanide																
	lead, total recoverable	<20	U		<20	U		<47	U		2.4	J	I	1	WA	15	ug/L
	nickel, total recoverable	<60	U		<60	U										100	ug/L
	selenium, total recoverable	<40	U		<40	U										50	ug/L
Organics																	
	chlorobenzene	<1	U		<1	U		<10	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethane	<1	U		<1	U		<10	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<1	U		<1	U		<10	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene				<1	U		<10	U		<5	U		1	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<1	U		<1	U		<10	U		<5	U		1	WA	5	ug/L
+	tetrachloroethylene	13.6	J	K	13.4	J	K	6.49	J	I	***11.3***			1	WA	5	ug/L
	1,1,1-trichloroethane	<1	U		<1	U		<10	U		<5	U		1	WA	200	ug/L
+	trichloroethylene	263	J	K	230	J	K	***252***			***272***			2	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable	<200	U		<200	U		<40	U		<50.8	U	V	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	<500	U		153	J	I									2400	ug/L
	sodium, total recoverable	1530			1700			1800			1920			1	WA	4600	ug/L
	sulfate	<200	U		381											3000	ug/L
Radionuclides																	
	gross alpha	.6	U	W	-.0638	U										15	pCi/L
	nonvolatile beta	-.56	U	W	.473	U										50	pCi/L
	radium, total alpha-emitting	.12	U	V	.1	U										5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 15D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 102971.2 E 48827.5	33.33316 Deg N -81.7383 Deg W	241.4 - 221.9 ft msl	368.5 ft msl	4 " PVC	S	M

SAMPLE DATE	02/29/00	08/21/00	02/14/01	09/07/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	*Not Applicable*	237.5	226.86	237.45	ft msl
pH		5.6	6.1	4.1	pH
Sp. Conductance		25	25	27	uS/cm
Water temperature		19.3	18.5	20.6	deg. C
Alkalinity as CaCO3	5	2	1	15	mg/L
Turbidity		7.8	14.8	7.2	NTU
Volumes purged		.299	1.31	.100	well volume
Sampling code	LN	NX	NX	X	
Synchronous water level	237.5 (06/24/00)	227.6 (09/23/00)	237.5 (06/24/01)	237.5 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP EPA	3Q00	CLP EPA	1Q01	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	barium, total recoverable												
	cyanide												
	lead, total recoverable												
	nickel, total recoverable												
	selenium, total recoverable												
Organics													
	chlorobenzene	<2	U	<120	U	<50	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethane	<2	U	<120	U	<50	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethylene	<2	U	<120	U	<50	U	<5	U	1	WA	7	ug/L
	trans-1,2-dichloroethylene			<120	U	<50	U	<5	U	1	WA	100	ug/L
	pcb 1016												
	pcb 1221												
	pcb 1232												
	pcb 1242												
	pcb 1248												
	pcb 1254												
	pcb 1260												
	1,1,2,2-tetrachloroethane	<2	U	<120	U	<50	U	<5	U	1	WA	5	ug/L
+	tetrachloroethylene	95.4	J K	73	J I	***93.2***		***40.4***		1	WA	5	ug/L
	1,1,1-trichloroethane	<2	U	<120	U	<50	U	<5	U	1	WA	200	ug/L
+	trichloroethylene	595	J K	***540***		***834***		***489***		5	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP EPA	3Q99	CLP EPA	3Q00	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	aluminum, total recoverable			<200	U	30.6	J I	<72.1	U V	1	WA	100	ug/L
	nitrate-nitrite as nitrogen			1280								2400	ug/L
	sodium, total recoverable			3500		3530		3580		1	WA	4600	ug/L
	sulfate			345								3000	ug/L
Radionuclides													
	gross alpha			.88	J I							15	pCi/L
	nonvolatile beta			.858	U							50	pCi/L
	radium, total alpha-emitting			.1	U							5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 16A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 103693.9 E 48965.1	33.33498 Deg N -81.7393 Deg W	166.8 - 161.8 ft msl	367.5 ft msl	3.8 " PVC	V	UL

SAMPLE DATE	03/14/00	09/22/00	02/14/01	09/06/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	222.82	215.95	214.89	212.81	ft msl
pH	5.7	5.1	5.6	5.7	pH
Sp. Conductance		32	32	33	uS/cm
Water temperature	20.2	19.8	21.1	22.5	deg. C
Alkalinity as CaCO3	34	0	1	0	mg/L
Turbidity	1.3	2.9	.7	.6	NTU
Volumes purged	0	6.91	2.66	2.42	well volume
Sampling code					
Synchronous water level	217 (03/21/00)	215.7 (09/23/00)	213.8 (03/20/01)	212.7 (09/26/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
	Inorganics																
	barium, total recoverable	10.7	J	I	3.56	J	I	<4.5	U	V	4	J	I	1	WA	2000	ug/L
	cyanide																
	lead, total recoverable	14.8	J	IV	<20	U		<47	U		13.8	J	I	1	WA	15	ug/L
	nickel, total recoverable	<60	U		<60	U										100	ug/L
	selenium, total recoverable	<40	U		<40	U										50	ug/L
	Organics																
	chlorobenzene	23	J	I	<50	JU	L	<250	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethane	<50	U		<50	JU	L	<250	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<50	U		<50	JU	L	<250	U		4.7	J	I	1	WA	7	ug/L
	trans-1,2-dichloroethylene	<50	U		<50	JU	L	<250	U		<5	U		1	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<50	U		<50	JU	L	<250	U		<5	U		1	WA	5	ug/L
+	tetrachloroethylene	***1480***			1720	J	L	***1460***			***1270***		L	1	WA	5	ug/L
	1,1,1-trichloroethane	<50	U		<50	JU	L	<250	U		<5	U		1	WA	200	ug/L
+	trichloroethylene	***12700***			8190	J	L	***7440***			***6050***			50	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
	Inorganics																
	aluminum, total recoverable	<200	U		<200	U		<40	U		<66.2	U	V	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	1490			1800											2400	ug/L
	sodium, total recoverable	2340			2800			2500			2640			1	WA	4600	ug/L
	sulfate	<200	U		111	J	I									3000	ug/L
	Radionuclides																
	gross alpha	1.32			.754	J	I									15	pCi/L
	nonvolatile beta	.76	U	W	1.82	J	I									50	pCi/L
	radium, total alpha-emitting	.93		V	2.2	U	V									5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 16C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 103714.1 E 48970.5	33.33504 Deg N -81.7394 Deg W	244.8 - 224.8 ft msl	367.6 ft msl	3.8 " PVC	B	M

SAMPLE DATE	03/26/01	09/12/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	*Not Applicable*	*Not Applicable*	225.69	224.99	ft msl
pH			9	7.5	pH
Sp. Conductance			100	117	uS/cm
Water temperature			17	20.6	deg. C
Alkalinity as CaCO3			54	0	mg/L
Turbidity			541	100	NTU
Volumes purged			1.95	228.	well volume
Sampling code				T	
Synchronous water level	228.5 (03/21/00)	226.8 (12/28/00)	225.7 (03/20/01)	224.6 (09/26/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP EPA	3Q00	CLP EPA	1Q01	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	barium, total recoverable					454		241		1	WA	2000	ug/L
	cyanide												
+	lead, total recoverable					***217***		***83.8***		1	WA	15	ug/L
+	nickel, total recoverable					***289***		91.8		1	WA	100	ug/L
	selenium, total recoverable												
Organics													
	chlorobenzene					<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethane					<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethylene					<5	U	<5	U	1	WA	7	ug/L
	trans-1,2-dichloroethylene					<5	U	<5	U	1	WA	100	ug/L
	pcb 1016												
	pcb 1221												
	pcb 1232												
	pcb 1242												
	pcb 1248												
	pcb 1254												
	pcb 1260												
	1,1,2,2-tetrachloroethane					<5	U	<5	U	1	WA	5	ug/L
+	tetrachloroethylene					***49.1***		***58.2***		1	WA	5	ug/L
	1,1,1-trichloroethane					<5	U	<5	U	1	WA	200	ug/L
+	trichloroethylene					***46.1***		***54.7***		1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP EPA	3Q99	CLP EPA	3Q00	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
+	aluminum, total recoverable							***5850***		1	WA	100	ug/L
	nitrate-nitrite as nitrogen												
+	sodium, total recoverable							***5380***		1	WA	4600	ug/L
	sulfate												
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. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 17B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 101994.6 E 46237.7	33.32677 Deg N -81.7432 Deg W	190.8 - 185.8 ft msl	359.2 ft msl	3.8 " PVC	S	M

SAMPLE DATE	03/02/00	08/24/00	02/14/01	09/10/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	224.69	223.15	221.81	220.43	ft msl
pH	5.2	4.6	5.4	5.2	pH
Sp. Conductance	89	92	95	91	uS/cm
Water temperature	18.3	20	19.3	20.6	deg. C
Alkalinity as CaCO3	0	3	6	13	mg/L
Turbidity	.4	.8	.8	.4	NTU
Volumes purged	2.88	2.90	2.67	2.83	well volume
Sampling code					
Synchronous water level	224.4 (03/21/00)	222.9 (09/23/00)	220.7 (06/24/01)	220.5 (09/26/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable				42											2000	ug/L
	cyanide																
	lead, total recoverable				<9.25	JU										15	ug/L
	nickel, total recoverable				<60	U										100	ug/L
	selenium, total recoverable				<12	U	V									50	ug/L
Organics																	
	chlorobenzene	<50	JU	L	<50	JU	L	<250	U		<500	U		100	WA	5	ug/L
	1,1-dichloroethane	<50	JU	L	<50	JU	L	<250	U		<500	U		100	WA	5	ug/L
	1,1-dichloroethylene	<50	JU	L	<50	JU	L	<250	U		<500	U		100	WA	7	ug/L
	trans-1,2-dichloroethylene				<50	JU	L	<250	U		<500	U		100	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<50	JU	L	<50	JU	L	<250	U		<500	U		100	WA	5	ug/L
+	tetrachloroethylene	1980	J	L	1330	J	L	***1100***			***1010***			100	WA	5	ug/L
	1,1,1-trichloroethane	<50	JU	L	<50	JU	L	<250	U		<500	U		100	WA	200	ug/L
+	trichloroethylene	11300	J	L	7740	J	L	***7070***			***8540***			100	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable	91.6	J	I	97	J	I	201	J	IL	<169	U	V	1	WA	100	ug/L
+	nitrate-nitrite as nitrogen	***8340***			***8840***			***8750***			***9040***			20	WA	2400	ug/L
+	sodium, total recoverable	***11200***			***10000***			***10100***			***9610***			1	WA	4600	ug/L
	sulfate	<400	U		<400	U										3000	ug/L
Radionuclides																	
	gross alpha	14.74			6.9	J	K	9.64			4.15	J	I	1	SC	15	pCi/L
	nonvolatile beta	12.54			5.51			7.42			2.97	J	I	1	SC	50	pCi/L
+	radium, total alpha-emitting	4.1	J	L	3.7			4.81			***5.29***			1	SC	5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 17BB

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 102009.5 E 46220.8	33.32678 Deg N -81.7433 Deg W	137.3 - 132.6 ft msl	359 ft msl	4 " PVC	S	LL

SAMPLE DATE	03/02/00	08/21/00	02/14/01	09/10/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	211.3	210.05	208.69	207.05	ft msl
pH	5.3	5.5	5.5	5.4	pH
Sp. Conductance	106	105	115	116	uS/cm
Water temperature	18.4	20.7	19	19.5	deg. C
Alkalinity as CaCO3	0	3	1	29	mg/L
Turbidity	1	4.1	2.8	2.8	NTU
Volumes purged	2.41	2.05	2.17	2.26	well volume
Sampling code				L	
Synchronous water level	211 (03/21/00)	209.7 (09/23/00)	208.3 (03/26/01)	207.3 (09/26/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable				33.1											2000	ug/L
	cyanide																
	lead, total recoverable				<5.04	JU										15	ug/L
	nickel, total recoverable				<60	U										100	ug/L
	selenium, total recoverable				<40	U										50	ug/L
Organics																	
	chlorobenzene	<10	JU	L	<10	U		<125	U		<100	U		20	WA	5	ug/L
	1,1-dichloroethane	<10	JU	L	<10	U		<125	U		<100	U		20	WA	5	ug/L
	1,1-dichloroethylene	<10	JU	L	<10	U		<125	U		<100	U		20	WA	7	ug/L
	trans-1,2-dichloroethylene				<10	U		<125	U		<100	U		20	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<10	JU	L	<10	U		<125	U		<100	U		20	WA	5	ug/L
+	tetrachloroethylene	619	J	L	420	J	K	***555***			***741***			20	WA	5	ug/L
	1,1,1-trichloroethane	<10	JU	L	<10	U		<125	U		<100	U		20	WA	200	ug/L
+	trichloroethylene	2430	J	L	1710	J	K	***2550***			***3510***			20	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable	73.1	J	I	86	J	I	55.2	J	L	<146	U	V	1	WA	100	ug/L
+	nitrate-nitrite as nitrogen	***10500***			***10700***			***10200***			***11400***			20	WA	2400	ug/L
+	sodium, total recoverable	***6780***			***7600***			***6570***			***7520***			1	WA	4600	ug/L
	sulfate	<200	U		405											3000	ug/L
Radionuclides																	
	gross alpha	3.29			1.22	J	IK	1.88	U		.078	U		1	SC	15	pCi/L
	nonvolatile beta	12.45	UJ	V	3.64			7.45	J	I	3.16	J	I	1	SC	50	pCi/L
	radium, total alpha-emitting	.82			.3	U		.723	J	I	1.31	U		1	SC	5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 18A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 100416.1 E 46110.4	33.32308 Deg N -81.7405 Deg W	163.9 - 158.9 ft msl	341.9 ft msl	3.8 " PVC	S	UL

SAMPLE DATE 03/02/00 08/23/00 02/13/01 08/17/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	211.39	209.95	208.58	207.33	ft msl
pH	4.6	5.2	4.8	4.8	pH
Sp. Conductance	52	53	56	57	uS/cm
Water temperature	18.2	21.5	16.4	20.3	deg. C
Alkalinity as CaCO3	0	0	0	0	mg/L
Turbidity	1.2	20.2	3.8	13.6	NTU
Volumes purged	2.79	4.06	3.44	3.52	well volume
Sampling code					
Synchronous water level	211.1 (03/21/00)	209.8 (09/23/00)	208.5 (03/26/01)	207.1 (09/26/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP EPA	3Q00	CLP EPA	1Q01	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	barium, total recoverable			18.7								2000	ug/L
	cyanide												
	lead, total recoverable			<5.23	JU							15	ug/L
	nickel, total recoverable			<60	U							100	ug/L
	selenium, total recoverable			<40	U							50	ug/L
Organics													
	chlorobenzene	<1	U	<1	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethane	<1	U	<1	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethylene	1.06		1.03	J K	1.04	J I	.987	J I	1	GE	7	ug/L
	trans-1,2-dichloroethylene			<1	U	<5	U	<5	U	1	WA	100	ug/L
	pcb 1016												
	pcb 1221												
	pcb 1232												
	pcb 1242												
	pcb 1248												
	pcb 1254												
	pcb 1260												
	1,1,2,2-tetrachloroethane	<1	U	<1	U	<5	U	<5	U	1	WA	5	ug/L
+	tetrachloroethylene	***13.3***		13.6	J K	***10.5***		***10.9***		1	WA	5	ug/L
	1,1,1-trichloroethane	<1	U	<1	U	<5	U	<5	U	1	WA	200	ug/L
+	trichloroethylene	***35.2***		31.2	J K	***31.1***		***29.6***		1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP EPA	3Q99	CLP EPA	3Q00	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	aluminum, total recoverable	<200	U	<200	U	56.6	J L	<60.3	U	1	WA	100	ug/L
+	nitrate-nitrite as nitrogen	***3540***		***3840***		***4470***		***4890***		3	WA	2400	ug/L
	sodium, total recoverable	3360		3500		3430		3520		1	GE	4600	ug/L
	sulfate	491		307								3000	ug/L
Radionuclides													
	gross alpha	.39	U W	.359	U	.843	U	.597	U	1	GE	15	pCi/L
	nonvolatile beta	4.21		2.69		3.38	J I	4.79	J I	1	SC	50	pCi/L
	radium, total alpha-emitting	.64	U W	.2	U	.113	U	.488	J I	1	GE	5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 18B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 100424.1 E 46115.7	33.32310 Deg N -81.7405 Deg W	198.5 - 193.5 ft msl	342.1 ft msl	3.8 " PVC	S	M

SAMPLE DATE	03/02/00	09/22/00	03/13/01	09/15/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	220.77	218.65	217.6	216.25	ft msl
pH	5.5	5.3	5.8	5.5	pH
Sp. Conductance	115	97	82	79	uS/cm
Water temperature	18	18.8	19.1	19.5	deg. C
Alkalinity as CaCO3	2	0	8	9	mg/L
Turbidity	1.3	3.5	1.1	.4	NTU
Volumes purged	3.33	8.27	2.39	2.54	well volume
Sampling code					
Synchronous water level	220.5 (03/21/00)	218.9 (09/23/00)	216.6 (06/24/01)	216.3 (09/26/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable				29.3											2000	ug/L
	cyanide																
	lead, total recoverable				<5.37	JU										15	ug/L
	nickel, total recoverable				<60	U										100	ug/L
	selenium, total recoverable				<40	U										50	ug/L
Organics																	
	chlorobenzene	<1	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethane	<1	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	2.85			1.6	J	I	<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene				<5	U		<5	U		<5	U		1	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<1	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
+	tetrachloroethylene	***46.3***			***28***			***21.9***			***12.7***			1	WA	5	ug/L
	1,1,1-trichloroethane	.47	J	I	<5	U		<5	U		<5	U		1	WA	200	ug/L
+	trichloroethylene	***15.7***			***9.2***			***8.36***			3.41	J	I	1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
+	aluminum, total recoverable	***423***			<200	U		<40	U		35.8	J	I	1	WA	100	ug/L
+	nitrate-nitrite as nitrogen	***8450***			***8290***			***6910***			***4490***			10	WA	2400	ug/L
+	sodium, total recoverable	***9410***		V	***8500***			***8800***			***6110***			1	WA	4600	ug/L
	sulfate	935			195	J	I									3000	ug/L
Radionuclides																	
	gross alpha	4.98			3.83			3.15			.279	U		1	SC	15	pCi/L
	nonvolatile beta	81.71	J		10.5			7.05			1.74	U		1	SC	50	pCi/L
	radium, total alpha-emitting	1.49			1.7	U	V	1.52			1.34	J	I	1	SC	5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 19B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 100999.3 E 50934.8	33.33224 Deg N -81.7289 Deg W	147.7 - 142.7 ft msl	300.4 ft msl	3.8 " PVC	S	LL

SAMPLE DATE	02/03/00	08/25/00	03/14/01	08/24/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	215.27	214.6	213.4	212.24	ft msl
pH	4.2	5.1	5.6	5	pH
Sp. Conductance	20	20	20	20	uS/cm
Water temperature	18.6	20	20.1	20.8	deg. C
Alkalinity as CaCO3	0	0	2	0	mg/L
Turbidity	.4	1	1	.4	NTU
Volumes purged	2.54	2.95	.172	2.40	well volume
Sampling code					
Synchronous water level	215.1 (03/23/00)	214.4 (09/23/00)	213.2 (03/29/01)	230.8 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<1	U		<5	U		<5	U		<5	UJ	L	1	WA	5	ug/L
	1,1-dichloroethane	<1	U		<5	U		<5	U		<5	UJ	L	1	WA	5	ug/L
	1,1-dichloroethylene	<1	U		<5	U		<5	U		<5	UJ	L	1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	U		<5	U		<5	U		<5	UJ	L	1	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<1	U		<5	U		<5	U		<5	UJ	L	1	WA	5	ug/L
	tetrachloroethylene	<1	U		<5	U		<5	U		<5	UJ	L	1	WA	5	ug/L
	1,1,1-trichloroethane	<1	U		<5	U		<5	U		<5	UJ	L	1	WA	200	ug/L
	trichloroethylene	<1	U		<5	U		<5	U		<5	UJ	L	1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable	<200	U		<200	U		<200	U		<78	U	V	1	WA	100	ug/L
+	nitrate-nitrite as nitrogen	501			***2760***											2400	ug/L
	sodium, total recoverable	1600		V	1550			1790			1600			1	WA	4600	ug/L
	sulfate	2260	J	K	285											3000	ug/L
Radionuclides																	
	gross alpha	3.25			.844	J	I									15	pCi/L
	nonvolatile beta	4.12	J		.58	U										50	pCi/L
	radium, total alpha-emitting	.28	U	V	.5	U										5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 19C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 100992.1 E 50942.4	33.33224 Deg N -81.7289 Deg W	218.7 - 198.7 ft msl	300.8 ft msl	3.8 " PVC	S	M

SAMPLE DATE	03/02/00	08/24/00	02/21/01	09/19/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	233.5	232.2	231.74	*Not Applicable*	ft msl
pH	5.3	8.7	5.7	5.7	pH
Sp. Conductance	87	97	100	91	uS/cm
Water temperature	19.3	20.8	19.6		deg. C
Alkalinity as CaCO3	0	4	2	22	mg/L
Turbidity	1	1.9	.8	12.1	NTU
Volumes purged	2.81	5.68	3.27		well volume
Sampling code					
Synchronous water level	233.3 (03/23/00)	232.2 (09/23/00)	232 (03/29/01)	( )	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<1	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethane	<1	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<1	U		<5	U		<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene				<5	U		<5	U		<5	U		1	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<1	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	tetrachloroethylene	3.77			3.5	J	IK	2.48	J	I	4.24	J	I	1	WA	5	ug/L
	1,1,1-trichloroethane	<1	U		<5	U		<5	U		<5	U		1	WA	200	ug/L
+	trichloroethylene	***20.3***			21	J	K	***13.2***			***29.4***			1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable				<200	U		<73	U	V	<159	U	V	1	WA	100	ug/L
+	nitrate-nitrite as nitrogen				***4400***											2400	ug/L
+	sodium, total recoverable				***16000***			***19900***			***13600***			1	WA	4600	ug/L
+	sulfate				***13400***											3000	ug/L
Radionuclides																	
	gross alpha				.767	U										15	pCi/L
	nonvolatile beta				1.34	J	I									50	pCi/L
	radium, total alpha-emitting				.4	U										5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 20A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 103545.1 E 46060.5	33.32991 Deg N -81.7467 Deg W	162.6 - 157.6 ft msl	355.3 ft msl	3.8 " PVC	S	UL

SAMPLE DATE	03/27/00	09/07/00	02/14/01	09/12/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	217.07	215.65	214.64	213.65	ft msl
pH	5.7	5.6	5.7	5.4	pH
Sp. Conductance	21	21	20	21	uS/cm
Water temperature	19.3	19.9	19.6	19.8	deg. C
Alkalinity as CaCO3	2	4	1	17	mg/L
Turbidity	4.1	5.4	12.5	3.5	NTU
Volumes purged	2.96	2.43	4.82	3.01	well volume
Sampling code					
Synchronous water level	216.2 (06/25/00)	215.8 (09/23/00)	214.3 (03/26/01)	213.5 (09/26/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
	Inorganics																
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
	Organics																
	chlorobenzene	<5	U		<50	U		<50	U		<50	U		10	WA	5	ug/L
	1,1-dichloroethane	<5	U		<50	U		<50	U		<50	U		10	WA	5	ug/L
	1,1-dichloroethylene	<5	U		<50	U		<50	U		<50	U		10	WA	7	ug/L
	trans-1,2-dichloroethylene	<5	U		<50	U		<50	U		<50	U		10	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<5	U		<50	U		<50	U		<50	U		10	WA	5	ug/L
	tetrachloroethylene	<5	U		<50	U		<50	U		<50	U		10	WA	5	ug/L
	1,1,1-trichloroethane	<5	U		<50	U		<50	U		<50	U		10	WA	200	ug/L
+	trichloroethylene	***986***			***950***			***1050***			763	J	K	10	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
	Inorganics																
	aluminum, total recoverable	<200	U		<200	U		52.3	J	I	<158	U	V	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	1030			1080			1070			1080			2	WA	2400	ug/L
	sodium, total recoverable	1270			1700			1710			1520			1	WA	4600	ug/L
	sulfate	<400	U		186	J	I									3000	ug/L
	Radionuclides																
	gross alpha	1.48			.166	U										15	pCi/L
	nonvolatile beta	.54	U	W	.738	U										50	pCi/L
	radium, total alpha-emitting	1.32			.5	J	I									5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 20C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 103556.3 E 46088.8	33.32998 Deg N -81.7466 Deg W	232.7 - 212.7 ft msl	354.7 ft msl	3.8 " PVC	S	M

SAMPLE DATE	03/31/00	09/20/00	03/20/01	08/28/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	225.56	222.2	*Not Applicable*	*Not Applicable*	ft msl
pH	9.6		10.4	10.5	pH
Sp. Conductance	159		236	267	uS/cm
Water temperature	19.4		17	25.1	deg. C
Alkalinity as CaCO3	47	0	56	86	mg/L
Turbidity	25.3		92	26.7	NTU
Volumes purged	.548				well volume
Sampling code	NX	LN	LN	X	
Synchronous water level	225.6 (03/21/00)	( )	( )	( )	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP EPA	3Q00	CLP EPA	1Q01	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	barium, total recoverable												
	cyanide												
	lead, total recoverable												
	nickel, total recoverable												
	selenium, total recoverable												
Organics													
	chlorobenzene	<1	U	<5	U	<5	U	<5	UJ L	1	WA	5	ug/L
	1,1-dichloroethane	<1	U	<5	U	<5	U	<5	UJ L	1	WA	5	ug/L
	1,1-dichloroethylene	<1	U	<5	U	<5	U	<5	UJ L	1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	U	<5	U	<5	U	<5	UJ L	1	WA	100	ug/L
	pcb 1016												
	pcb 1221												
	pcb 1232												
	pcb 1242												
	pcb 1248												
	pcb 1254												
	pcb 1260												
	1,1,2,2-tetrachloroethane	<1	U	<5	U	<5	U	<5	UJ L	1	WA	5	ug/L
	tetrachloroethylene	<1	U	<5	U	<5	U	<5	UJ L	1	WA	5	ug/L
	1,1,1-trichloroethane	<1	U	<5	U	<5	U	<5	UJ L	1	WA	200	ug/L
	trichloroethylene	<1	U	<5	U	<5	U	<5	UJ L	1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP EPA	3Q99	CLP EPA	3Q00	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
+	aluminum, total recoverable	***502***		***390***		***2320***		***1100***		1	WA	100	ug/L
	nitrate-nitrite as nitrogen	1720		2190		2090		1900		5	WA	2400	ug/L
+	sodium, total recoverable	3240		***7900***		***4640***		2840		1	WA	4600	ug/L
+	sulfate	***12200***		***9970***								3000	ug/L
Radionuclides													
	gross alpha	5.92		1.97	J I							15	pCi/L
	nonvolatile beta	9.83	UJ V	1.78	J I							50	pCi/L
	radium, total alpha-emitting	4.61		-.2	U							5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 21B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 104000.1 E 47271.8	33.33289 Deg N -81.7444 Deg W	147.2 - 142.5 ft msl	355 ft msl	4 " PVC	S	LL

SAMPLE DATE	03/03/00	09/07/00	02/14/01	09/13/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	218.54	216.95	216.15	214.94	ft msl
pH	5.9	5.9	5.8	6	pH
Sp. Conductance	23	29	25	31	uS/cm
Water temperature	19.1	19.3	18.7	20.1	deg. C
Alkalinity as CaCO3	5	4	1	8	mg/L
Turbidity	.3	1.3	1.1	.2	NTU
Volumes purged	2.85	2.67	2.78	2.26	well volume
Sampling code					
Synchronous water level	218.5 (03/21/00)	217.2 (09/23/00)	215.7 (03/26/01)	215.2 (09/26/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP EPA	3Q00	CLP EPA	1Q01	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	barium, total recoverable												
	cyanide												
	lead, total recoverable												
	nickel, total recoverable												
	selenium, total recoverable												
Organics													
	chlorobenzene	<1	U	<50	U	<10	U	<10	U	2	WA	5	ug/L
	1,1-dichloroethane	<1	U	<50	U	<10	U	<10	U	2	WA	5	ug/L
	1,1-dichloroethylene	<1	U	<50	U	<10	U	<10	U	2	WA	7	ug/L
	trans-1,2-dichloroethylene			<50	U	<10	U	<10	U	2	WA	100	ug/L
	pcb 1016												
	pcb 1221												
	pcb 1232												
	pcb 1242												
	pcb 1248												
	pcb 1254												
	pcb 1260												
	1,1,2,2-tetrachloroethane	<1	U	<50	U	<10	U	<10	U	2	WA	5	ug/L
	tetrachloroethylene	<1	U	<50	U	<10	U	<10	U	2	WA	5	ug/L
	1,1,1-trichloroethane	<1	U	<50	U	<10	U	<10	U	2	WA	200	ug/L
+	trichloroethylene	***293***		***280***		***314***		***319***		10	GE	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP EPA	3Q99	CLP EPA	3Q00	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	aluminum, total recoverable	<200	U	<200	U	58.8	J I	<122	U V	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	613		688								2400	ug/L
	sodium, total recoverable	1760		2000		1830		1930		1	GE	4600	ug/L
	sulfate	<400	U	293								3000	ug/L
Radionuclides													
	gross alpha	1.7		.442	U							15	pCi/L
	nonvolatile beta	3.17		.917	U							50	pCi/L
	radium, total alpha-emitting	.51		.1	U							5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 21C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 103973 E 47234.6	33.33277 Deg N -81.7444 Deg W	233.2 - 213.2 ft msl	354.8 ft msl	3.8 " PVC	S	M

SAMPLE DATE	02/04/00	09/11/00	02/15/01	08/23/01	
FIELD DATA					
Parameter	**1Q00**	**3Q00**	**1Q01**	**3Q01**	**Unit**
Water Elevation	228.2	226.5	225.59	225.32	ft msl
pH	5.3	5.2	5.1	5.4	pH
Sp. Conductance	21	22	20	22	uS/cm
Water temperature	17.6	21.2	18.7	25.3	deg. C
Alkalinity as CaCO3	1	0	1	1	mg/L
Turbidity	2.6	2.3	2.4	13.9	NTU
Volumes purged	9.20	9.61	4.16	4.11	well volume
Sampling code					
Synchronous water level	228.1 (03/21/00)	226.5 (09/23/00)	225.4 (06/23/01)	225.4 (09/26/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<1	JU		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethane	<1	JU		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<1	JU		<5	U		<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	JU		<5	U		<5	U		<5	U		1	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<1	JU		<5	U		<5	U		<5	U		1	WA	5	ug/L
	tetrachloroethylene	<1	JU		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1,1-trichloroethane	<1	JU		<5	U		<5	U		<5	U		1	WA	200	ug/L
	trichloroethylene	<1	JU		<5	U		<5	U		<5	U		1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable	<200	U		<200	U		<200	U		<71.4	U	V	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	824			996			986			1080			2	WA	2400	ug/L
	sodium, total recoverable	1940		V	2200			2140			1550			1	WA	4600	ug/L
	sulfate	2170	J	K	472											3000	ug/L
Radionuclides																	
	gross alpha	8.12			2.98	J	K									15	pCi/L
	nonvolatile beta	7.26	J		2.35											50	pCi/L
	radium, total alpha-emitting	3.13		V	1.2											5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 23TA

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 104298.8 E 49225.8	33.33675 Deg N -81.7398 Deg W	65.4 - 60.4 ft msl	372.9 ft msl	4 " STEEL	S	CBA

SAMPLE DATE 02/10/00

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	199.93	*Not Applicable*	*Not Applicable*	*Not Applicable*	ft msl
pH	5.2				pH
Sp. Conductance	28				uS/cm
Water temperature	19.5				deg. C
Alkalinity as CaCO3	4				mg/L
Turbidity	1.5				NTU
Volumes purged	2.90				well volume
Sampling code					
Synchronous water level	199.9 (03/21/00)	( )	( )	( )	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP EPA	3Q00	CLP EPA	1Q01	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	barium, total recoverable												
	cyanide												
	lead, total recoverable												
	nickel, total recoverable												
	selenium, total recoverable												
Organics													
	chlorobenzene	<1	U									5	ug/L
	1,1-dichloroethane	<1	U									5	ug/L
	1,1-dichloroethylene	<1	U									7	ug/L
	trans-1,2-dichloroethylene												
	pcb 1016												
	pcb 1221												
	pcb 1232												
	pcb 1242												
	pcb 1248												
	pcb 1254												
	pcb 1260												
	1,1,2,2-tetrachloroethane	<1	U									5	ug/L
	tetrachloroethylene	<1	U									5	ug/L
	1,1,1-trichloroethane	<1	U									200	ug/L
	trichloroethylene	<1	U									5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP EPA	3Q99	CLP EPA	3Q00	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	aluminum, total recoverable	<200	U	<200	U							100	ug/L
	nitrate-nitrite as nitrogen	<100	U	<500	U							2400	ug/L
	sodium, total recoverable	2250		2300								4600	ug/L
+	sulfate	***4400***		***4300***								3000	ug/L
Radionuclides													
	gross alpha	2.65	J	.564	U							15	pCi/L
	nonvolatile beta			1.94	J I							50	pCi/L
	radium, total alpha-emitting	.53		.5	J I							5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 24

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 104614.3 E 49842.9	33.33845 Deg N -81.7388 Deg W	243.9 - 223.9 ft msl	380.2 ft msl	4 " PVC	S	M

SAMPLE DATE	03/10/00	08/25/00	02/15/01	09/14/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	233.97	233.29	233.6	233.39	ft msl
pH	6.7	7.1	5.6	7.6	pH
Sp. Conductance	88	98	78	98	uS/cm
Water temperature	23.8	31.6	18.4		deg. C
Alkalinity as CaCO3	37	24	22	33	mg/L
Turbidity	3.4	3.3	2	2.2	NTU
Volumes purged	.156	.168	0	.166	well volume
Sampling code	NX	NX	NX	X	
Synchronous water level	233.9 (03/21/00)	233.4 (12/29/00)	233.1 (03/20/01)	233.5 (09/26/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP EPA	3Q00	CLP EPA	1Q01	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	barium, total recoverable												
	cyanide												
	lead, total recoverable												
	nickel, total recoverable												
	selenium, total recoverable												
Organics													
	chlorobenzene	<10	JU	<100	U	<100	U	<50	U	10	WA	5	ug/L
	1,1-dichloroethane	<10	JU	<100	U	<100	U	<50	U	10	WA	5	ug/L
	1,1-dichloroethylene	<10	JU	<100	U	<100	U	<50	U	10	WA	7	ug/L
	trans-1,2-dichloroethylene			<100	U	<100	U	<50	U	10	WA	100	ug/L
	pcb 1016												
	pcb 1221												
	pcb 1232												
	pcb 1242												
	pcb 1248												
	pcb 1254												
	pcb 1260												
	1,1,2,2-tetrachloroethane	<10	JU	<100	U	<100	U	<50	U	10	WA	5	ug/L
+	tetrachloroethylene	618	J	***630***		***450***		***330***		10	WA	5	ug/L
	1,1,1-trichloroethane	<10	JU	<100	U	<100	U	<50	U	10	WA	200	ug/L
+	trichloroethylene	2240	J	***1400***		***1340***		***1200***		10	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP EPA	3Q99	CLP EPA	3Q00	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
+	aluminum, total recoverable	***207***		160	J I	***289***		<423	U V	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	2000		2150								2400	ug/L
	sodium, total recoverable	4320		4000		4280		4230		1	WA	4600	ug/L
	sulfate	2320		1960								3000	ug/L
Radionuclides													
	gross alpha	2.29		1.45	U V							15	pCi/L
	nonvolatile beta	16.13		.971	U							50	pCi/L
	radium, total alpha-emitting	.38	U W	.3	U							5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 25A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 103504.8 E 49657.9	33.33570 Deg N -81.7371 Deg W	169.7 - 159.7 ft msl	366.4 ft msl	4 " PVC	S	LL

SAMPLE DATE	03/03/00	08/25/00	02/15/01	09/13/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	213.86	212.45	211.45	209.68	ft msl
pH	5.7	5.2	5.4	5.5	pH
Sp. Conductance	28	29	27	32	uS/cm
Water temperature	20.6	21.5	20.7	21.5	deg. C
Alkalinity as CaCO3	2	3	2	.5	mg/L
Turbidity	.3	1	.9	.3	NTU
Volumes purged	2.71	2.96	2.63	2.94	well volume
Sampling code					
Synchronous water level	213.8 (03/21/00)	212.2 (09/23/00)	210.4 (03/20/01)	209.6 (09/26/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP EPA	3Q00	CLP EPA	1Q01	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	barium, total recoverable												
	cyanide												
	lead, total recoverable												
	nickel, total recoverable												
	selenium, total recoverable												
Organics													
	chlorobenzene	<10	U	<100	U	<50	JU	<50	U	10	WA	5	ug/L
	1,1-dichloroethane	<10	U	<100	U	<50	JU	<50	U	10	WA	5	ug/L
	1,1-dichloroethylene	<10	U	<100	U	<50	JU	<50	U	10	WA	7	ug/L
	trans-1,2-dichloroethylene			<100	U	<50	JU	<50	U	10	WA	100	ug/L
	pcb 1016												
	pcb 1221												
	pcb 1232												
	pcb 1242												
	pcb 1248												
	pcb 1254												
	pcb 1260												
	1,1,2,2-tetrachloroethane	<10	U	<100	U	<50	JU	<50	U	10	WA	5	ug/L
+	tetrachloroethylene	***276***		***160***		319	J	***240***		10	WA	5	ug/L
	1,1,1-trichloroethane	<10	U	<100	U	<50	JU	<50	U	10	WA	200	ug/L
+	trichloroethylene	***1290***		***740***		1430	J	***1300***		10	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP EPA	3Q99	CLP EPA	3Q00	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	aluminum, total recoverable	<200	U	<200	U	<200	U	<159	U V	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	1430		1590								2400	ug/L
	sodium, total recoverable	2390		2800		2780		3100		1	WA	4600	ug/L
	sulfate	<400	U	623								3000	ug/L
Radionuclides													
	gross alpha	.79	U W	.9	U							15	pCi/L
	nonvolatile beta	.26	U W	1.59	J I							50	pCi/L
	radium, total alpha-emitting	.34		.4	J I							5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 26

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 104612.8 E 48941.7	33.33698 Deg N -81.7412 Deg W	240.7 - 220.7 ft msl	361.7 ft msl	4 " PVC	S	M

SAMPLE DATE	03/11/00	08/25/00	03/14/01	09/17/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	229.54	218.95	226.67	225.64	ft msl
pH	6	5.5	4.9	5.3	pH
Sp. Conductance	35	23	23	23	uS/cm
Water temperature	21.2	20.9	20		deg. C
Alkalinity as CaCO3	21	3	0	0	mg/L
Turbidity	65.2	12.8	10.3	.4	NTU
Volumes purged	1.43	-8.2	3.76	6.90	well volume
Sampling code	NX				
Synchronous water level	229.4 (03/21/00)	228.1 (09/23/00)	226.4 (03/26/01)	226 (09/26/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP EPA	3Q00	CLP EPA	1Q01	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
	Inorganics												
	barium, total recoverable												
	cyanide												
	lead, total recoverable												
	nickel, total recoverable												
	selenium, total recoverable												
	Organics												
	chlorobenzene	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethane	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethylene	<1	U	<5	U	<5	U	<5	U	1	WA	7	ug/L
	trans-1,2-dichloroethylene			<5	U	<5	U	<5	U	1	WA	100	ug/L
	pcb 1016												
	pcb 1221												
	pcb 1232												
	pcb 1242												
	pcb 1248												
	pcb 1254												
	pcb 1260												
	1,1,2,2-tetrachloroethane	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
+	tetrachloroethylene	45.4	J K	***14***		1.8	J I	2.66	J I	1	WA	5	ug/L
	1,1,1-trichloroethane	<1	U	<5	U	<5	U	<5	U	1	WA	200	ug/L
+	trichloroethylene	186	J K	***39***		***5.6***		***10.8***		1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP EPA	3Q99	CLP EPA	3Q00	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
	Inorganics												
	aluminum, total recoverable	<200	U	<200	U	<200	U	<322	U	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	235	J I	262	J I							2400	ug/L
	sodium, total recoverable	2440		2800		3050		2930		1	WA	4600	ug/L
	sulfate	1660		923								3000	ug/L
	Radionuclides												
	gross alpha	8.39		.558	U							15	pCi/L
	nonvolatile beta	13.14	J	.861	U							50	pCi/L
	radium, total alpha-emitting	.23	U W	.3	U							5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 26B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 104646.7 E 48944.6	33.33706 Deg N -81.7412 Deg W	136.9 - 132.1 ft msl	362.8 ft msl	4 " PVC	S	LL

SAMPLE DATE	03/03/00	08/25/00	02/15/01	09/13/01	
FIELD DATA					
Parameter	**1Q00**	**3Q00**	**1Q01**	**3Q01**	**Unit**
Water Elevation	216.94	215.5	214.4	212.99	ft msl
pH	5.8	5.4	5.7	5.6	pH
Sp. Conductance	25	24	27	26	uS/cm
Water temperature	19.1	20.2	19.3	20.3	deg. C
Alkalinity as CaCO3	5	4	1	29	mg/L
Turbidity	.4	1	1.1	.5	NTU
Volumes purged	2.68	3.13	2.87	2.48	well volume
Sampling code					
Synchronous water level	216.8 (03/21/00)	215.1 (09/23/00)	213.5 (03/26/01)	212.5 (09/26/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<10	JU	L	<100	U		<50	U		<100	U		20	WA	5	ug/L
	1,1-dichloroethane	<10	JU	L	<100	U		<50	U		<100	U		20	WA	5	ug/L
	1,1-dichloroethylene	<10	JU	L	<100	U		<50	U		<100	U		20	WA	7	ug/L
	trans-1,2-dichloroethylene				<100	U		<50	U		<100	U		20	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<10	JU	L	<100	U		<50	U		<100	U		20	WA	5	ug/L
	tetrachloroethylene	55.4	J	L	<100	U		60	J	K	34	J	I	20	WA	5	ug/L
	1,1,1-trichloroethane	<10	JU	L	<100	U		<50	U		<100	U		20	WA	200	ug/L
+	trichloroethylene	2180	J	L	***1500***			3020	J	K	***2400***			20	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable	<200	U		<200	U		<200	U		<138	U	V	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	598			631											2400	ug/L
	sodium, total recoverable	1870			2200			2140			2140			1	WA	4600	ug/L
	sulfate	309			426											3000	ug/L
Radionuclides																	
	gross alpha	.34	U	W	.462	U										15	pCi/L
	nonvolatile beta	.45	UJ	W	.663	U										50	pCi/L
	radium, total alpha-emitting	.28	U	W	-.1	U										5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 27

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 104972.8 E 49487.7	33.33866 Deg N -81.7404 Deg W	244 - 234 ft msl	375.5 ft msl	4 " PVC	S	M

SAMPLE DATE	02/02/00	08/24/00	03/05/01	08/24/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	*Not Applicable*	*Not Applicable*	231.4	*Not Applicable*	ft msl
pH	4.6	4.7	4.8	5	pH
Sp. Conductance	60	59	55	62	uS/cm
Water temperature	19.7	21.7	17.9	21.8	deg. C
Alkalinity as CaCO3	0	0	1	0	mg/L
Turbidity	2	1.5	3.1	.5	NTU
Volumes purged			-.54		well volume
Sampling code					
Synchronous water level	226.5 (06/24/00)	( )	( )	( )	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable	16.6			15.4			21.8			15.3			1	WA	2000	ug/L
	cyanide																
	lead, total recoverable	<20	U		<5.78	JU		<47	U		<24	U		1	WA	15	ug/L
	nickel, total recoverable	<60	U		<60	U		6.6	J	I	<1.1	UJ		1	WA	100	ug/L
	selenium, total recoverable	<40	U		<13.1	U	V									50	ug/L
Organics																	
	chlorobenzene	<1	JU	L	<1	JU		<5	U		<5	UJ	L	1	WA	5	ug/L
	1,1-dichloroethane	<1	JU	L	<1	JU		<5	U		<5	UJ	L	1	WA	5	ug/L
	1,1-dichloroethylene	<1	JU	L	<1	JU		<5	U		<5	UJ	L	1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	JU	L	<1	JU		<5	U		<5	UJ	L	1	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<1	JU	L	<1	JU		<5	U		<5	UJ	L	1	WA	5	ug/L
	tetrachloroethylene	.57	J	IL	<1	JU		<5	U		<5	UJ	L	1	WA	5	ug/L
	1,1,1-trichloroethane	<1	JU	L	<1	JU		<5	U		<5	UJ	L	1	WA	200	ug/L
	trichloroethylene	<1	JU	L	8.21	J		<5	U		<5	UJ	L	1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable	142	J	I	120	J	I	119	J	L	<98.5	U	V	1	WA	100	ug/L
+	nitrate-nitrite as nitrogen	***3760***			***3270***											2400	ug/L
+	sodium, total recoverable	***5920***		V	***4900***			***5050***			***5090***			1	WA	4600	ug/L
	sulfate	<400	U		291											3000	ug/L
Radionuclides																	
	gross alpha	4.21			2.06	J	K									15	pCi/L
	nonvolatile beta	3.4			1.19	J	I									50	pCi/L
	radium, total alpha-emitting	.78			.7	J	I									5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 27B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 104940.3 E 49486.4	33.33859 Deg N -81.7404 Deg W	169.9 - 164.4 ft msl	376.8 ft msl	4 " PVC	S	UL

SAMPLE DATE	03/11/00	09/07/00	02/15/01	09/13/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	224.81	221.55	221.1	220.32	ft msl
pH	5.3	5.4	5.3	5.2	pH
Sp. Conductance	26	25	24	24	uS/cm
Water temperature	19.2	19.7	19.4	22.1	deg. C
Alkalinity as CaCO3	1	3	0	0	mg/L
Turbidity	.3	1.8	.9	.2	NTU
Volumes purged	3.29	2.65	2.97	2.52	well volume
Sampling code					
Synchronous water level	224.7 (03/21/00)	221.7 (09/23/00)	220.2 (03/20/01)	219.1 (09/26/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable	<15	U		3.05	J	I	3			3.6	J	I	1	WA	2000	ug/L
	cyanide																
	lead, total recoverable	<20	U		<20	U		<47	U		<24	U		1	WA	15	ug/L
	nickel, total recoverable	<60	U		<60	U										100	ug/L
	selenium, total recoverable	<40	U		<40	U										50	ug/L
Organics																	
	chlorobenzene	4.4	J	I	<5	JU	L	<25	U		<25	U		5	WA	5	ug/L
	1,1-dichloroethane	<5	U		<5	JU	L	<25	U		<25	U		5	WA	5	ug/L
	1,1-dichloroethylene	<5	U		<5	JU	L	<25	U		<25	U		5	WA	7	ug/L
	trans-1,2-dichloroethylene				<5	JU	L	<25	U		<25	U		5	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<5	U		<5	JU	L	<25	U		<25	U		5	WA	5	ug/L
+	tetrachloroethylene	***45.5***			41.6	J	L	***57.3***			44.7	J	K	5	WA	5	ug/L
	1,1,1-trichloroethane	<5	U		<5	JU	L	<25	U		<25	U		5	WA	200	ug/L
+	trichloroethylene	***644***			462	J	L	***619***			581	J	K	5	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable	<200	U		<200	U		<40	U		<322	U		1	WA	100	ug/L
	nitrate-nitrite as nitrogen	1330			1490											2400	ug/L
	sodium, total recoverable	2990			3500			2980			2750			1	WA	4600	ug/L
	sulfate	<400	U		586											3000	ug/L
Radionuclides																	
	gross alpha	.62	U	W	.172	U										15	pCi/L
	nonvolatile beta	-.26	U	W	.136	U										50	pCi/L
	radium, total alpha-emitting	.15	U	W	0	U										5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 27TA

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 104951.4 E 49486.5	33.33861 Deg N -81.7404 Deg W	55.9 - 50.6 ft msl	376.6 ft msl	4 " CS	S	CBA

SAMPLE DATE	02/02/00	08/24/00	03/05/01	08/24/01	
FIELD DATA					
Parameter	**1Q00**	**3Q00**	**1Q01**	**3Q01**	**Unit**
Water Elevation	199.68	198.02	193.8	194.88	ft msl
pH	4.9	5.1	6.2	5.3	pH
Sp. Conductance	24	24	50	25	uS/cm
Water temperature	18.7	20.6	18.6	20.2	deg. C
Alkalinity as CaCO3	0	0	48	0	mg/L
Turbidity	.6	.8	3.6	.7	NTU
Volumes purged	2.26	2.43	2.13	2.08	well volume
Sampling code					
Synchronous water level	199.5 (03/21/00)	197.7 (12/29/00)	196.7 (06/27/01)	195.6 (09/26/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<1	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethane	<1	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<1	U		<5	U		<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	U		<5	U		<5	U		<5	U		1	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<1	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	tetrachloroethylene	<1	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1,1-trichloroethane	<1	U		<5	U		<5	U		<5	U		1	WA	200	ug/L
	trichloroethylene	<1	U		<5	U		<5	U		<5	U		1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable	<200	U		<200	U		<61.7	U	V	<90.5	U	V	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	<200	U		<500	U										2400	ug/L
	sodium, total recoverable	<1660	U	V	1600			1790			1620			1	WA	4600	ug/L
+	sulfate	***3170***			***3520***											3000	ug/L
Radionuclides																	
	gross alpha	.79			.826	J	IK									15	pCi/L
	nonvolatile beta	.57	U	W	.99	U										50	pCi/L
	radium, total alpha-emitting	.37	U	W	0	U										5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 28

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 104941.7 E 48517.3	33.33701 Deg N -81.7429 Deg W	230.6 - 210.6 ft msl	354.8 ft msl	4 " PVC	S	M

SAMPLE DATE	02/14/00	08/24/00	02/23/01	08/25/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	229	227.55	226.35	224.97	ft msl
pH	6.9	7	6.8	6.9	pH
Sp. Conductance	77	70	64	65	uS/cm
Water temperature	18.5	20.8	18.2	19.6	deg. C
Alkalinity as CaCO3	25	25	78	24	mg/L
Turbidity	1.4	1.8	6.5	1.3	NTU
Volumes purged	3.69	3.91	2.16	6.24	well volume
Sampling code					
Synchronous water level	228.4 (03/21/00)	226.8 (12/27/00)	226 (03/26/01)	225 (09/26/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<1	U		<5	U		<5	U		<5	UJ	L	1	WA	5	ug/L
	1,1-dichloroethane	<1	U		<5	U		<5	U		<5	UJ	L	1	WA	5	ug/L
	1,1-dichloroethylene	<1	U		<5	U		<5	U		<5	UJ	L	1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	U		<5	U		<5	U		<5	UJ	L	1	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<1	U		<5	U		<5	U		<5	UJ	L	1	WA	5	ug/L
	tetrachloroethylene	<1	U		<5	U		<5	U		<5	UJ	L	1	WA	5	ug/L
	1,1,1-trichloroethane	<1	U		<5	U		<5	U		<5	UJ	L	1	WA	200	ug/L
	trichloroethylene	<1	U		<5	U		<5	U		<5	UJ	L	1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable	<200	U		<200	U		<96.6	U	V	<72.3	U	V	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	204			198	J	I									2400	ug/L
	sodium, total recoverable	<1630	U	V	1700			1590			1550			1	WA	4600	ug/L
	sulfate	838			2340											3000	ug/L
Radionuclides																	
	gross alpha	1.43			.732	U										15	pCi/L
	nonvolatile beta	.63	U	W	.393	U										50	pCi/L
	radium, total alpha-emitting	.03	U	W	0	U										5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 28A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 104947.7 E 48521.9	33.33703 Deg N -81.7429 Deg W	157.8 - 152.8 ft msl	355 ft msl	4 " PVC	S	UL

SAMPLE DATE	03/11/00	09/07/00	02/15/01	09/13/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	222.22	220.45	219.85	218.25	ft msl
pH	5.2	5.1	5.2	5	pH
Sp. Conductance	20	21	20	22	uS/cm
Water temperature	19	18.9	18.7	21.2	deg. C
Alkalinity as CaCO3	1	0	0	0	mg/L
Turbidity	.3	1.8	.9	.4	NTU
Volumes purged	2.62	2.58	2.46	3.04	well volume
Sampling code					
Synchronous water level	222.1 (03/21/00)	199.7 (12/27/00)	219.1 (03/26/01)	218.2 (09/26/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
	Inorganics																
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
	Organics																
	chlorobenzene	<5	JU		<100	U		<50	U		<50	U		10	WA	5	ug/L
	1,1-dichloroethane	<5	JU		<100	U		<50	U		<50	U		10	WA	5	ug/L
	1,1-dichloroethylene	<5	JU		<100	U		<50	U		<50	U		10	WA	7	ug/L
	trans-1,2-dichloroethylene				<100	U		<50	U		<50	U		10	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<5	JU		<100	U		<50	U		<50	U		10	WA	5	ug/L
	tetrachloroethylene	<5	JU		<100	U		<50	U		<50	U		10	WA	5	ug/L
	1,1,1-trichloroethane	<5	JU		<100	U		<50	U		<50	U		10	WA	200	ug/L
+	trichloroethylene	2060	J		3000	J	K	***1680***			***983***			10	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
	Inorganics																
	aluminum, total recoverable	<200	U		<200	U		59.3	J	I	<116	U	V	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	437	J	I	467	J	I									2400	ug/L
	sodium, total recoverable	2370			2240			2280			2410			1	WA	4600	ug/L
	sulfate	443			313	J	I									3000	ug/L
	Radionuclides																
	gross alpha	1.12			.92	J	I									15	pCi/L
	nonvolatile beta	1.82			.406	U										50	pCi/L
	radium, total alpha-emitting	.38	U	W	.5	U										5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 29A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 107326.8 E 51236.4	33.34672 Deg N -81.7404 Deg W	122.9 - 117.3 ft msl	365.2 ft msl	4 " PVC	S	MCBC

SAMPLE DATE	02/02/00	09/02/00	03/06/01	08/24/01	
FIELD DATA					
Parameter	**1Q00**	**3Q00**	**1Q01**	**3Q01**	**Unit**
Water Elevation	218.12	217.05	217.03	217.25	ft msl
pH	5.5	6.4	6.4	5.9	pH
Sp. Conductance	36	38	41	37	uS/cm
Water temperature	19.1	20.7	19	22.9	deg. C
Alkalinity as CaCO3	3	4	13	4	mg/L
Turbidity	.5	2.9	.4	.3	NTU
Volumes purged	2.19	2.11	2.19	2.14	well volume
Sampling code					
Synchronous water level	218 (03/23/00)	217.7 (12/31/00)	217.1 (06/27/01)	217.2 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP EPA	3Q00	CLP EPA	1Q01	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	barium, total recoverable												
	cyanide												
	lead, total recoverable												
	nickel, total recoverable												
	selenium, total recoverable												
Organics													
	chlorobenzene	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethane	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethylene	<1	U	<5	U	<5	U	<5	U	1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	U	<5	U	<5	U	<5	U	1	WA	100	ug/L
	pcb 1016												
	pcb 1221												
	pcb 1232												
	pcb 1242												
	pcb 1248												
	pcb 1254												
	pcb 1260												
	1,1,2,2-tetrachloroethane	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
	tetrachloroethylene	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1,1-trichloroethane	<1	U	<5	U	<5	U	<5	U	1	WA	200	ug/L
	trichloroethylene	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP EPA	3Q99	CLP EPA	3Q00	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	aluminum, total recoverable	<200	U	<200	U	49.8	J I	<86	U V	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	832		694								2400	ug/L
	sodium, total recoverable	1980		1900		1800		1670		1	WA	4600	ug/L
+	sulfate	***4800***		***5080***								3000	ug/L
Radionuclides													
	gross alpha	2.98	J	1.69	J I							15	pCi/L
	nonvolatile beta	2.65		2.09	J I							50	pCi/L
	radium, total alpha-emitting	.94		.9	J I							5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 29TA

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 107330.4 E 51245.7	33.34675 Deg N -81.7404 Deg W	63.9 - 58.6 ft msl	365 ft msl	4 " CS	S	CBA

SAMPLE DATE	02/02/00	09/09/00	02/26/01	08/23/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	211.03	209.02	208.63	176.73	ft msl
pH	4.6	5.4	4.9	5.1	pH
Sp. Conductance	20	20	18	18	uS/cm
Water temperature	18.5	20	20	26.6	deg. C
Alkalinity as CaCO3	0	0	0	0	mg/L
Turbidity	.7	1.2	1.3	1.7	NTU
Volumes purged	2.27	2.64	2.52	2.66	well volume
Sampling code					
Synchronous water level	210.9 (03/23/00)	209.3 (12/31/00)	207.8 (06/27/01)	206.8 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

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ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<1	U		<5	JU	L	<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethane	<1	U		<5	JU	L	<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<1	U		<5	JU	L	<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	U		<5	JU	L	<5	U		<5	U		1	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<1	U		<5	JU	L	<5	U		<5	U		1	WA	5	ug/L
	tetrachloroethylene	<1	U		<5	JU	L	<5	U		<5	U		1	WA	5	ug/L
	1,1,1-trichloroethane	<1	U		<5	JU	L	<5	U		<5	U		1	WA	200	ug/L
	trichloroethylene	9.06	J	K	5.6	J	L	6.06	J	K	4.16	J	I	1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable	<200	U		<200	U		37.1	J	I	<92	U	V	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	618			680											2400	ug/L
	sodium, total recoverable	1930			1500			1830			1700			1	WA	4600	ug/L
	sulfate	931			785											3000	ug/L
Radionuclides																	
	gross alpha	.01	UJ	W	.428	U										15	pCi/L
	nonvolatile beta	-.36	U	W	.273	U										50	pCi/L
	radium, total alpha-emitting	.44			.1	U										5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 30AA

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 105715.7 E 47970.5	33.33783 Deg N -81.7459 Deg W	96.4 - 90.8 ft msl	353 ft msl	4 " PVC	S	MCBC

SAMPLE DATE	02/02/00	08/25/00	03/02/01	08/30/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	222.67	221.11	220.1	224.31	ft msl
pH	11.2	8.8	10.9	10	pH
Sp. Conductance	796	125	619	648	uS/cm
Water temperature	17.5	22.1	20.3	19.5	deg. C
Alkalinity as CaCO3	181	64	149	147	mg/L
Turbidity	3.4	13.1	9.7	14.8	NTU
Volumes purged	0	0	.012	.011	well volume
Sampling code	NX	NX	NX	X	
Synchronous water level	222.5 (03/21/00)	221.3 (09/23/00)	219.3 (06/23/01)	218.8 (09/26/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP EPA	3Q00	CLP EPA	1Q01	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	barium, total recoverable												
	cyanide												
	lead, total recoverable												
	nickel, total recoverable												
	selenium, total recoverable												
Organics													
	chlorobenzene	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethane	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethylene	<1	U	<5	U	<5	U	<5	U	1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	U	<5	U	<5	U	<5	U	1	WA	100	ug/L
	pcb 1016												
	pcb 1221												
	pcb 1232												
	pcb 1242												
	pcb 1248												
	pcb 1254												
	pcb 1260												
	1,1,2,2-tetrachloroethane	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
	tetrachloroethylene	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1,1-trichloroethane	<1	U	<5	U	<5	U	<5	U	1	WA	200	ug/L
	trichloroethylene	.75	J IK	<5	U	<5	U	<5	U	1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP EPA	3Q99	CLP EPA	3Q00	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	aluminum, total recoverable	<200	U	84	J I	39.8	J I	<322	U	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	<500	U	<500	U							2400	ug/L
+	sodium, total recoverable	4440	V	***5300***		2190		3580		1	WA	4600	ug/L
+	sulfate	14500	J K	***12700***								3000	ug/L
Radionuclides													
	gross alpha	4.27		5.51	J K							15	pCi/L
	nonvolatile beta	7.38	J	4.42								50	pCi/L
	radium, total alpha-emitting	1	V	1.6								5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 30B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 105719.9 E 47981.8	33.33786 Deg N -81.7459 Deg W	128.7 - 123.1 ft msl	353.5 ft msl	4 " PVC	S	LL

SAMPLE DATE	02/02/00	08/24/00	03/02/01	08/28/01	
FIELD DATA					
Parameter	**1Q00**	**3Q00**	**1Q01**	**3Q01**	**Unit**
Water Elevation	223.61	222.35	221.25	219.99	ft msl
pH	4.6	4.6	4.6	5.1	pH
Sp. Conductance	32	31	29	26	uS/cm
Water temperature	18.3	20	19.1	21.9	deg. C
Alkalinity as CaCO3	0	0	0	0	mg/L
Turbidity	.5	.6	.4	.1	NTU
Volumes purged	2.98	3.46	2.88	2.35	well volume
Sampling code					
Synchronous water level	223.4 (03/21/00)	222.2 (09/23/00)	220.8 (03/26/01)	219.7 (09/26/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP EPA	3Q00	CLP EPA	1Q01	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	barium, total recoverable												
	cyanide												
	lead, total recoverable												
	nickel, total recoverable												
	selenium, total recoverable												
Organics													
	chlorobenzene	<1	U	<5	U	<5	U	<1	U	1	GE	5	ug/L
	1,1-dichloroethane	<1	U	<5	U	<5	U	<1	U	1	GE	5	ug/L
	1,1-dichloroethylene	<1	U	<5	U	<5	U	<1	U	1	GE	7	ug/L
	trans-1,2-dichloroethylene	<1	U	<5	U	<5	U	<1	U	1	GE	100	ug/L
	pcb 1016												
	pcb 1221												
	pcb 1232												
	pcb 1242												
	pcb 1248												
	pcb 1254												
	pcb 1260												
	1,1,2,2-tetrachloroethane	<1	U	<5	U	<5	U	<1	U	1	GE	5	ug/L
	tetrachloroethylene	<1	U	<5	U	<5	U	<1	U	1	GE	5	ug/L
	1,1,1-trichloroethane	<1	U	<5	U	<5	U	<1	U	1	GE	200	ug/L
	trichloroethylene	<1	U	<5	U	<5	U	<1	U	1	GE	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP EPA	3Q99	CLP EPA	3Q00	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	aluminum, total recoverable	<200	U	<200	U	<105	U V	38.7	J I	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	<100	U	<500	U							2400	ug/L
	sodium, total recoverable	1770		1600		1820		1570		1	GE	4600	ug/L
+	sulfate	***5280***		***5710***								3000	ug/L
Radionuclides													
	gross alpha	.38	UJ W	.198	U							15	pCi/L
	nonvolatile beta			.609	U							50	pCi/L
	radium, total alpha-emitting	.46		1.1	J I							5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 30CC

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 105724.2 E 47993.3	33.33788 Deg N -81.7458 Deg W	164 - 158.4 ft msl	354 ft msl	4 " PVC	S	UL

SAMPLE DATE	02/02/00	08/24/00	03/02/01	08/28/01	
FIELD DATA					
Parameter	**1Q00**	**3Q00**	**1Q01**	**3Q01**	**Unit**
Water Elevation	223.55	222.34	221.15	219.92	ft msl
pH	5.3	5.4	5.5	5.5	pH
Sp. Conductance	27	23	23	24	uS/cm
Water temperature	18.2	20	19	22.5	deg. C
Alkalinity as CaCO3	3	0	0	5	mg/L
Turbidity	.9	.8	1.2	.6	NTU
Volumes purged	2.75	3.35	2.92	2.56	well volume
Sampling code					
Synchronous water level	223.4 (03/21/00)	222.1 (09/23/00)	220.7 (03/26/01)	( )	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP EPA	3Q00	CLP EPA	1Q01	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	barium, total recoverable												
	cyanide												
	lead, total recoverable												
	nickel, total recoverable												
	selenium, total recoverable												
Organics													
	chlorobenzene	<1	JU L	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethane	<1	JU L	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethylene	<1	JU L	<5	U	<5	U	<5	U	1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	JU L	<5	U	<5	U	<5	U	1	WA	100	ug/L
	pcb 1016												
	pcb 1221												
	pcb 1232												
	pcb 1242												
	pcb 1248												
	pcb 1254												
	pcb 1260												
	1,1,2,2-tetrachloroethane	<1	JU L	<5	U	<5	U	<5	U	1	WA	5	ug/L
	tetrachloroethylene	<1	JU L	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1,1-trichloroethane	<1	JU L	<5	U	<5	U	<5	U	1	WA	200	ug/L
	trichloroethylene	<1	JU L	<5	U	<5	U	<5	U	1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP EPA	3Q99	CLP EPA	3Q00	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	aluminum, total recoverable	<200	U	<200	U	<200	U	<322	U	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	1050		1030								2400	ug/L
	sodium, total recoverable	1910		1900		1790		2000		1	WA	4600	ug/L
	sulfate	<200	U	949								3000	ug/L
Radionuclides													
	gross alpha	.93	UJ W	.763	U							15	pCi/L
	nonvolatile beta			.186	U							50	pCi/L
	radium, total alpha-emitting	.27	U W	.2	U							5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 31B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 101981.3 E 50078.7	33.33302 Deg N -81.7331 Deg W	157.3 - 152.3 ft msl	348.3 ft msl	4 " PVC	S	LL

SAMPLE DATE	03/16/00	09/12/00	02/26/01	08/29/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	212.49	213.35	209.46	207.46	ft msl
pH	3.9	5	5.4	9.8	pH
Sp. Conductance	30	29	26	36	uS/cm
Water temperature	19.4	21.2	19.5	22.3	deg. C
Alkalinity as CaCO3	0	0	1	0	mg/L
Turbidity	.4	1.1	1.2	.2	NTU
Volumes purged	2.95	3.09	2.36	3.31	well volume
Sampling code					
Synchronous water level	212.4 (03/23/00)	213.8 (09/23/00)	208.9 (03/29/01)	207.7 (09/24/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	.74	J	I	<10	U		<10	U		<25	U		5	WA	5	ug/L
	1,1-dichloroethane	<2	U		<10	U		<10	U		<25	U		5	WA	5	ug/L
	1,1-dichloroethylene	<2	U		<10	U		<10	U		<25	U		5	WA	7	ug/L
	trans-1,2-dichloroethylene	<2	U		<10	U		<10	U		<25	U		5	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<2	U		<10	U		<10	U		<25	U		5	WA	5	ug/L
+	tetrachloroethylene	***340***			***320***			***309***			***415***			5	WA	5	ug/L
	1,1,1-trichloroethane	<2	U		<10	U		<10	U		<25	U		5	WA	200	ug/L
+	trichloroethylene	***625***			***580***			***464***		L	***647***			5	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable	<200	U		<200	U		<200	U		85.2	J	I	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	1540			2160											2400	ug/L
	sodium, total recoverable	2260		V	2800			2410			2400			1	WA	4600	ug/L
	sulfate	307	J	I	184	J	I									3000	ug/L
Radionuclides																	
	gross alpha	3.64	U	W	1.22	J	I									15	pCi/L
	nonvolatile beta	42.55	J		3.09											50	pCi/L
	radium, total alpha-emitting	.67			1.1	J	I									5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 31C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 101979.6 E 50089.9	33.33303 Deg N -81.7330 Deg W	236.1 - 216.1 ft msl	348.1 ft msl	4 " PVC	S	M

SAMPLE DATE	03/16/00	09/12/00	02/26/01	08/29/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	231.17	230.05	229.26	224	ft msl
pH	5.1	5.7	7	6.4	pH
Sp. Conductance	93	95	115	95	uS/cm
Water temperature	18.9	21.1	20.6	21.2	deg. C
Alkalinity as CaCO3	7	4	20	80	mg/L
Turbidity	3.5	2.4	3.6	2.9	NTU
Volumes purged	5.54	9.98	6.23	6.53	well volume
Sampling code					
Synchronous water level	231.1 (03/23/00)	229.9 (09/23/00)	229.3 (06/27/01)	228.3 (09/24/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP EPA	3Q00	CLP EPA	1Q01	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	barium, total recoverable												
	cyanide												
	lead, total recoverable												
	nickel, total recoverable												
	selenium, total recoverable												
Organics													
	chlorobenzene	<200	U	<250	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethane	<200	U	<250	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethylene	<200	U	<250	U	<5	U	<5	U	1	WA	7	ug/L
	trans-1,2-dichloroethylene	<200	U	<250	U	<5	U	<5	U	1	WA	100	ug/L
	pcb 1016	<1	U	<1	U	<1.02	U	<1.04	UJ Q	1	WA	.5	ug/L
	pcb 1221	<1	U	<1	U	<2.04	U	<2.08	UJ Q	1	WA	.5	ug/L
	pcb 1232	<1	U	<1	U	<1.02	U	<1.04	UJ Q	1	WA	.5	ug/L
	pcb 1242	<1	U	<1	U	<1.02	U	<1.04	UJ Q	1	WA	.5	ug/L
	pcb 1248	<1	U	<1	U	<1.02	U	<1.04	UJ Q	1	WA	.5	ug/L
	pcb 1254	<1	U	<1	U	<1.02	U	<1.04	UJ Q	1	WA	.5	ug/L
	pcb 1260	<1	U	<1	U	<1.02	U	<1.04	UJ Q	1	WA	.5	ug/L
	1,1,2,2-tetrachloroethane	<200	U	<250	U	<5	U	<5	U	1	WA	5	ug/L
+	tetrachloroethylene	***22500***		***2900***		***197***		***150***		1	WA	5	ug/L
	1,1,1-trichloroethane	<200	U	<250	U	<5	U	<5	U	1	WA	200	ug/L
+	trichloroethylene	***1210***		140	J I	***26***		***13.7***		1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP EPA	3Q99	CLP EPA	3Q00	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
+	aluminum, total recoverable	<200	U			<200	U	***359***		1	WA	100	ug/L
+	nitrate-nitrite as nitrogen	***5500***										2400	ug/L
+	sodium, total recoverable	***12600***				***11900***		***8200***		1	WA	4600	ug/L
+	sulfate	***9270***										3000	ug/L
Radionuclides													
	gross alpha	7.36		3.79								15	pCi/L
	nonvolatile beta	9.5		3.54								50	pCi/L
	radium, total alpha-emitting	3.11	J L	2.1								5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 31CC

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 101983.1 E 50067.9	33.33300 Deg N -81.7331 Deg W	181.4 - 176.7 ft msl	348.6 ft msl	4 " PVC	S	UL

SAMPLE DATE	03/16/00	09/12/00	03/27/01	09/19/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	212.55	214.2	208.52	207.24	ft msl
pH	4.9	5.8	8.4	6.1	pH
Sp. Conductance	37	34	96	39	uS/cm
Water temperature	19.6	21.6	19.3		deg. C
Alkalinity as CaCO3	6	3	42	0	mg/L
Turbidity	1.8	2.1	117	.5	NTU
Volumes purged	2.79	4.34		2.72	well volume
Sampling code					
Synchronous water level	212.4 (03/23/00)	213.7 (09/23/00)	209 (03/29/01)	207.9 (09/24/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

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ST	Parameter	1Q00	CLP EPA	3Q00	CLP EPA	1Q01	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	barium, total recoverable												
	cyanide												
	lead, total recoverable												
	nickel, total recoverable												
	selenium, total recoverable												
Organics													
	chlorobenzene	<20	U	<5	U	<5	U	<50	U	10	WA	5	ug/L
	1,1-dichloroethane	<20	U	<5	U	<5	U	<50	U	10	WA	5	ug/L
	1,1-dichloroethylene	<20	U	<5	U	<5	U	<50	U	10	WA	7	ug/L
	trans-1,2-dichloroethylene	<20	U	<5	U	<5	U	<50	U	10	WA	100	ug/L
	pcb 1016												
	pcb 1221												
	pcb 1232												
	pcb 1242												
	pcb 1248												
	pcb 1254												
	pcb 1260												
	1,1,2,2-tetrachloroethane	<20	U	<5	U	<5	U	<50	U	10	WA	5	ug/L
+	tetrachloroethylene	***3730***		***2600***		***1650***		***2100***	L	10	WA	5	ug/L
	1,1,1-trichloroethane	<20	U	<5	U	<5	U	<50	U	10	WA	200	ug/L
+	trichloroethylene	***5570***		***3400***		***2220***		***3010***	L	10	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP EPA	3Q99	CLP EPA	3Q00	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	aluminum, total recoverable	<200	U	<200	U	<200	U	<177	U V	1	WA	100	ug/L
+	nitrate-nitrite as nitrogen	***2450***		1990								2400	ug/L
	sodium, total recoverable	1870		2100		2220		2420		1	WA	4600	ug/L
	sulfate	1080		1090								3000	ug/L
Radionuclides													
	gross alpha	.9		.727	J I							15	pCi/L
	nonvolatile beta	.74	UJ W	.753	U							50	pCi/L
	radium, total alpha-emitting	-.09	U W	-.1	U							5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 32

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 99655.6 E 52733.9	33.33221 Deg N -81.7216 Deg W	218.1 - 198.1 ft msl	255.1 ft msl	4 " PVC	S	M

SAMPLE DATE	02/02/00	08/27/00	03/02/01	08/23/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	223.11	221.5	222.27	221.52	ft msl
pH	5	5.2	5.4	5.1	pH
Sp. Conductance	22	23	22	23	uS/cm
Water temperature	18.2	19.9	19.7	21.2	deg. C
Alkalinity as CaCO3	3	0	0	0	mg/L
Turbidity	3.1	2.5	3.7	2.3	NTU
Volumes purged	3.38	2.43	4.45	4.33	well volume
Sampling code					
Synchronous water level	223 (03/23/00)	221.9 (12/29/00)	223.2 (03/29/01)	221.1 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<1	JU	L	<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethane	<1	JU	L	<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<1	JU	L	<5	U		<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	JU	L	<5	U		<5	U		<5	U		1	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<1	JU	L	<5	U		<5	U		<5	U		1	WA	5	ug/L
	tetrachloroethylene	<1	JU	L	<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1,1-trichloroethane	<1	JU	L	<5	U		<5	U		<5	U		1	WA	200	ug/L
	trichloroethylene	<1	JU	L	<5	U		<5	U		<5	U		1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable	<200	U		<200	U		61.5	J	I	<79.4	U	V	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	776			856											2400	ug/L
	sodium, total recoverable	2760		V	3700			4070			1460			1	WA	4600	ug/L
	sulfate	696			1180											3000	ug/L
Radionuclides																	
	gross alpha	.9			.739	U										15	pCi/L
	nonvolatile beta	.71	U	W	1.15	U										50	pCi/L
	radium, total alpha-emitting	.06	U	W	0	U										5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 32B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 99676 E 52742.5	33.33227 Deg N -81.7216 Deg W	132.5 - 127.5 ft msl	255.4 ft msl	2 " PVC	V	LL

SAMPLE DATE	02/02/00	08/27/00	03/02/01	08/23/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	210.79	209.85	209.1	207.78	ft msl
pH	5.1	4.9	5.3	4.8	pH
Sp. Conductance	20	19	19	20	uS/cm
Water temperature	18.2	19.4	18.9	19.5	deg. C
Alkalinity as CaCO3	3	0	0	0	mg/L
Turbidity	.3	.3	.2	.7	NTU
Volumes purged	3.17	2.46	2.18	2.06	well volume
Sampling code					
Synchronous water level	210.7 (03/23/00)	209.6 (09/23/00)	209.1 (03/29/01)	207.7 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<1	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethane	<1	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<1	U		<5	U		<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	U		<5	U		<5	U		<5	U		1	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<1	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	tetrachloroethylene	<1	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1,1-trichloroethane	<1	U		<5	U		<5	U		<5	U		1	WA	200	ug/L
	trichloroethylene	<1	U		<5	U		<5	U		<5	U		1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable	<200	U		<200	U		<200	U		<133	U	V	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	<500	U		896											2400	ug/L
	sodium, total recoverable	1360			1600			1480			3820			1	WA	4600	ug/L
	sulfate	424			308											3000	ug/L
Radionuclides																	
	gross alpha	.78	U	W	-.049	JU	L									15	pCi/L
	nonvolatile beta	1.48	U	W	1.48	J	I									50	pCi/L
	radium, total alpha-emitting	.31	U	W	0	U										5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 32C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 99684.8 E 52746.9	33.33230 Deg N -81.7216 Deg W	188.6 - 183.7 ft msl	255.7 ft msl	2 " PVC	V	UL

SAMPLE DATE	02/02/00	08/27/00	03/02/01	08/23/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	215.7	214.52	214.19	213.25	ft msl
pH	5.5	5.3	5.5	5.5	pH
Sp. Conductance	22	23	23	29	uS/cm
Water temperature	17.5	19.5	18.4	19	deg. C
Alkalinity as CaCO3	3	3	1	12	mg/L
Turbidity	.4	.4	.2	.2	NTU
Volumes purged	3.09	2.81	2.63	2.09	well volume
Sampling code					
Synchronous water level	215.5 (03/23/00)	214.7 (09/23/00)	215 (03/29/01)	213.1 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

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ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<1	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethane	<1	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<1	U		<5	U		<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	U		<5	U		<5	U		<5	U		1	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<1	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	tetrachloroethylene	<1	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1,1-trichloroethane	<1	U		<5	U		<5	U		<5	U		1	WA	200	ug/L
	trichloroethylene	<1	U		<5	U		<5	U		<5	U		1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable	<200	U		<200	U		<200	U		<91.1	U	V	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	911			863											2400	ug/L
	sodium, total recoverable	2270			2200			2500			2830			1	WA	4600	ug/L
	sulfate	355	J	I	200	J	I									3000	ug/L
Radionuclides																	
	gross alpha	.27	U	W	.0626	JU	L									15	pCi/L
	nonvolatile beta	.64	U	W	.546	U										50	pCi/L
	radium, total alpha-emitting	.39	U	W	1.1	J	I									5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 33

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 98031 E 51736.3	33.32699 Deg N -81.7210 Deg W	228.7 - 208.7 ft msl	255.9 ft msl	4 " PVC	S	M

SAMPLE DATE	02/02/00	08/24/00	02/23/01	08/25/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	216.22	215.85	214.85	215.77	ft msl
pH	5.1	5.3	5.9		pH
Sp. Conductance	81	81	67		uS/cm
Water temperature	18.4	20.9	16.6		deg. C
Alkalinity as CaCO3	1	1	3	2	mg/L
Turbidity	.6	1.1	2.1		NTU
Volumes purged	3.33	4.39	2.05	.111	well volume
Sampling code				L	
Synchronous water level	216.1 (03/22/00)	216.1 (09/23/00)	( )	( )	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

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ST	Parameter	1Q00	CLP EPA	3Q00	CLP EPA	1Q01	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	barium, total recoverable												
	cyanide												
	lead, total recoverable												
	nickel, total recoverable												
	selenium, total recoverable												
Organics													
	chlorobenzene	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethane	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethylene	<1	U	<5	U	<5	U	<5	U	1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	U	<5	U	<5	U	<5	U	1	WA	100	ug/L
	pcb 1016												
	pcb 1221												
	pcb 1232												
	pcb 1242												
	pcb 1248												
	pcb 1254												
	pcb 1260												
	1,1,2,2-tetrachloroethane	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
	tetrachloroethylene	1.93	J K	<5	U	1	J I	<5	U	1	WA	5	ug/L
	1,1,1-trichloroethane	<1	U	<5	U	<5	U	<5	U	1	WA	200	ug/L
	trichloroethylene	5.76	J K	2.5	J IK	2	J I	1.72	J I	1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP EPA	3Q99	CLP EPA	3Q00	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
+	aluminum, total recoverable	***6200***		<200	U	<200	U	<75.6	U V	1	WA	100	ug/L
+	nitrate-nitrite as nitrogen	***6970***		***5210***								2400	ug/L
+	sodium, total recoverable	***16500***		***14000***		***15700***		***9840***		1	WA	4600	ug/L
+	sulfate	1750		***5070***								3000	ug/L
Radionuclides													
	gross alpha	2.54		.986	J IL							15	pCi/L
	nonvolatile beta	2.05		2.94								50	pCi/L
	radium, total alpha-emitting	.96		.2	U							5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 33A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 98006.7 E 51738	33.32694 Deg N -81.7210 Deg W	88.4 - 82.8 ft msl	255.4 ft msl	4 " PVC	S	LL

SAMPLE DATE	03/20/00	08/28/00	02/20/01	09/07/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	204.28	203.4	202.71	201.82	ft msl
pH	5.3	4.9	5.7	5.6	pH
Sp. Conductance	21	20	26	24	uS/cm
Water temperature	19.1	19.1	19.5	26.5	deg. C
Alkalinity as CaCO3	1	0	9	23	mg/L
Turbidity	1.2	1.7	.3	.3	NTU
Volumes purged	2.49	.936	2.51	2.42	well volume
Sampling code					
Synchronous water level	204.1 (03/22/00)	203.4 (09/23/00)	203.2 (03/29/01)	201.9 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP EPA	3Q00	CLP EPA	1Q01	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	barium, total recoverable												
	cyanide												
	lead, total recoverable												
	nickel, total recoverable												
	selenium, total recoverable												
Organics													
	chlorobenzene	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethane	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethylene	<1	U	<5	U	<5	U	<5	U	1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	U	<5	U	<5	U	<5	U	1	WA	100	ug/L
	pcb 1016												
	pcb 1221												
	pcb 1232												
	pcb 1242												
	pcb 1248												
	pcb 1254												
	pcb 1260												
	1,1,2,2-tetrachloroethane	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
	tetrachloroethylene	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1,1-trichloroethane	<1	U	<5	U	<5	U	<5	U	1	WA	200	ug/L
+	trichloroethylene	***7.47***		6.3	J K	***5.34***		***5.06***		1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP EPA	3Q99	CLP EPA	3Q00	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	aluminum, total recoverable	<200	U	<200	U	<200	U	<61.4	U V	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	1270	J L	912								2400	ug/L
	sodium, total recoverable	1750		2100		1850		2050		1	WA	4600	ug/L
	sulfate	327	J I	1040								3000	ug/L
Radionuclides													
	gross alpha	1.49		.855	J I							15	pCi/L
	nonvolatile beta	1.22	U W	2.62	J I							50	pCi/L
	radium, total alpha-emitting	.38		1	J I							5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 33B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 97995.9 E 51741.9	33.32692 Deg N -81.7209 Deg W	126.3 - 120.7 ft msl	255 ft msl	4 " PVC	S	UL

SAMPLE DATE	03/20/00	08/28/00		09/07/01	
FIELD DATA					
Parameter	**1Q00**	**3Q00**	**1Q01**	**3Q01**	**Unit**
Water Elevation	206.96	206.1	*Not Applicable*	204.92	ft msl
pH	5.3	5.5		5.5	pH
Sp. Conductance	31	30		34	uS/cm
Water temperature	18.6	19.4		20.5	deg. C
Alkalinity as CaCO3	2	4		17	mg/L
Turbidity	1	1.1		.2	NTU
Volumes purged	3.45	.358		2.23	well volume
Sampling code					
Synchronous water level	206.9 (03/22/00)	206.3 (09/23/00)	205.9 (03/29/01)	204.8 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

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ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<1	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethane	<1	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<1	U		<5	U		<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	U		<5	U		<5	U		<5	U		1	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<1	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	tetrachloroethylene	3.03			2.6	J	I	1.68	J	I	1.64	J	I	1	WA	5	ug/L
	1,1,1-trichloroethane	<1	U		<5	U		<5	U		<5	U		1	WA	200	ug/L
+	trichloroethylene	***10.4***			***8.5***			***6.14***			***6.74***			1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable	<200	U		<200	U		<200	U		<57.4	U	V	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	1370		V	1360											2400	ug/L
+	sodium, total recoverable	***5000***			***5800***			***5640***			***5370***			1	WA	4600	ug/L
	sulfate	2040			1550											3000	ug/L
Radionuclides																	
	gross alpha	.89			.0764	U										15	pCi/L
	nonvolatile beta	5.57	J		.645	U										50	pCi/L
	radium, total alpha-emitting	.24	U	W	.1	U										5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 33C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 97984.8 E 51746.7	33.32690 Deg N -81.7209 Deg W	171 - 165.4 ft msl	255.3 ft msl	4 " PVC	S	UL

SAMPLE DATE	02/02/00	08/24/00	02/23/01	08/27/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	210.36	209.4	209.25	208.87	ft msl
pH	5.1	5.3	5.8	5.1	pH
Sp. Conductance	67	66	69	64	uS/cm
Water temperature	18.2	20.1	17.4	19.6	deg. C
Alkalinity as CaCO3	0	1	5	0	mg/L
Turbidity	.5	.6	1.8	.4	NTU
Volumes purged	2.35	6.33	2.10	2.29	well volume
Sampling code					
Synchronous water level	210.2 (03/22/00)	210 (09/23/00)	209.6 (03/29/01)	208.9 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

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ST	Parameter	1Q00	CLP EPA	3Q00	CLP EPA	1Q01	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
	Inorganics												
	barium, total recoverable												
	cyanide												
	lead, total recoverable												
	nickel, total recoverable												
	selenium, total recoverable												
	Organics												
	chlorobenzene	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethane	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethylene	<1	U	<5	U	<5	U	<5	U	1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	U	<5	U	<5	U	<5	U	1	WA	100	ug/L
	pcb 1016												
	pcb 1221												
	pcb 1232												
	pcb 1242												
	pcb 1248												
	pcb 1254												
	pcb 1260												
	1,1,2,2-tetrachloroethane	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
	tetrachloroethylene	1.03	J K	<5	U	2	J I	1.04	J I	1	WA	5	ug/L
	1,1,1-trichloroethane	<1	U	<5	U	<5	U	<5	U	1	WA	200	ug/L
	trichloroethylene	2.8	J K	<5	U	3	J I	2.32	J I	1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP EPA	3Q99	CLP EPA	3Q00	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
	Inorganics												
	aluminum, total recoverable	<200	U	<200	U	<200	U	<322	U V	1	WA	100	ug/L
+	nitrate-nitrite as nitrogen	***4490***		***4780***								2400	ug/L
+	sodium, total recoverable	***10200***		***11000***		***12400***		***11000***		1	WA	4600	ug/L
	sulfate	629		475								3000	ug/L
	Radionuclides												
	gross alpha	1.54		.251	U							15	pCi/L
	nonvolatile beta	1.13	UJ W	1.29	J I							50	pCi/L
	radium, total alpha-emitting	.6		.2	U							5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 34A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 104954.9 E 50534.9	33.34033 Deg N -81.7377 Deg W	118.6 - 113.6 ft msl	384 ft msl	4 " PVC	S	LL

SAMPLE DATE	03/11/00	08/31/00	02/26/01	08/27/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	217.28	214.45	213.89	212.21	ft msl
pH	5.4	5.1	5.2	5.2	pH
Sp. Conductance	21	23	23	22	uS/cm
Water temperature	19.9	20.8	20.8	20.9	deg. C
Alkalinity as CaCO3	2	0	1	0	mg/L
Turbidity	.2	1	.7	.2	NTU
Volumes purged	2.78	2.24	2.38	2.14	well volume
Sampling code					
Synchronous water level	217.1 (03/23/00)	214.6 (09/23/00)	331.9 (03/20/01)	212.2 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

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ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<10	JU	L	<100	U		<50	U		<50	U		10	WA	5	ug/L
	1,1-dichloroethane	<10	JU	L	<100	U		<50	U		<50	U		10	WA	5	ug/L
	1,1-dichloroethylene	<10	JU	L	<100	U		<50	U		<50	U		10	WA	7	ug/L
	trans-1,2-dichloroethylene				<100	U		<50	U		<50	U		10	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<10	JU	L	<100	U		<50	U		<50	U		10	WA	5	ug/L
	tetrachloroethylene	29.6	J	L	<100	U		15.6	J	IK	23.1	J	IK	10	WA	5	ug/L
	1,1,1-trichloroethane	<10	JU	L	<100	U		<50	U		<50	U		10	WA	200	ug/L
	trichloroethylene	1120	J	L	1500	J	K	1770	J	K	1180	J	K	10	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable	<200	U		<200	U		43.2	J	I	<34.4	U	V	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	984			1030											2400	ug/L
	sodium, total recoverable	2210			2100			2090			2040			1	WA	4600	ug/L
	sulfate	<400	U		270	J	I									3000	ug/L
Radionuclides																	
	gross alpha	1.39			.169	U										15	pCi/L
	nonvolatile beta	2.32			.874	U										50	pCi/L
	radium, total alpha-emitting	.26	U	W	.3	U										5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 34B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 104944.7 E 50534.9	33.34031 Deg N -81.7376 Deg W	187 - 182 ft msl	384 ft msl	4 " PVC	S	UL

SAMPLE DATE	03/13/00	08/31/00	03/13/01	08/27/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	226.62	226.45	224.09	221.96	ft msl
pH	5.6	5	5.2	5.1	pH
Sp. Conductance	30	30	32	32	uS/cm
Water temperature	19.3	21	21.3	21.5	deg. C
Alkalinity as CaCO3	2	3	4	1	mg/L
Turbidity	.3	1.1	.9	1.8	NTU
Volumes purged	3.27	1.00	2.44	2.42	well volume
Sampling code					
Synchronous water level	226.5 (03/23/00)	223.6 (12/28/00)	221.5 (03/20/01)	221.4 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

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ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	3.28	J	L	<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethane	<1	JU	L	<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<1	JU	L	<5	U		<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	JU	L	<5	U		<5	U		<5	U		1	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<1	JU	L	<5	U		<5	U		<5	U		1	WA	5	ug/L
+	tetrachloroethylene	19.6	J	L	28	J	K	***23.2***			24.6	J	K	1	WA	5	ug/L
	1,1,1-trichloroethane	<1	JU	L	<5	U		<5	U		<5	U		1	WA	200	ug/L
+	trichloroethylene	50.7	J	L	80	J	K	***130***			193	J	K	1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable	<200	U		<200	U		46	J	I	<78.1	U	V	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	1130			881											2400	ug/L
	sodium, total recoverable	2700			3000			3390			2820			1	WA	4600	ug/L
	sulfate	<400	U		577											3000	ug/L
Radionuclides																	
	gross alpha	3.88			1.8											15	pCi/L
	nonvolatile beta	4.79			1.93	J	I									50	pCi/L
	radium, total alpha-emitting	1.08			1.3	J	I									5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 34C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 104934.1 E 50535.5	33.34029 Deg N -81.7376 Deg W	240.9 - 220.9 ft msl	383.9 ft msl	4 " PVC	S	M

SAMPLE DATE	03/13/00	08/31/00	03/13/01	08/29/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	228.58	226.25	229.16	228.92	ft msl
pH	5.7	5.1	5.2	4.9	pH
Sp. Conductance	20	20	21	22	uS/cm
Water temperature	20.5	21.3	21.3	23.3	deg. C
Alkalinity as CaCO3	2	3	0	0	mg/L
Turbidity	.3	1.4	.3	.3	NTU
Volumes purged	7.13	8.29	9.27	2.73	well volume
Sampling code					
Synchronous water level	228.4 (03/23/00)	224.7 (12/28/00)	229.1 (03/20/01)	228.9 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

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ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	4.66	J	L	<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethane	<1	JU	L	<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<1	JU	L	<5	U		<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	JU	L	<5	U		<5	U		<5	U		1	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<1	JU	L	<5	U		<5	U		<5	U		1	WA	5	ug/L
+	tetrachloroethylene	6.5	J	L	6.8	J	K	***7.44***			***6.64***			1	WA	5	ug/L
	1,1,1-trichloroethane	<1	JU	L	<5	U		<5	U		<5	U		1	WA	200	ug/L
	trichloroethylene	11.3	J	L	4.5	J	IK	3.8	J	I	2.11	J	I	1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable	72.6	J	I	<200	U		<200	U		103	J	I	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	1350			1250											2400	ug/L
	sodium, total recoverable	2120			2100			1870			2320			1	WA	4600	ug/L
	sulfate	<400	U		755											3000	ug/L
Radionuclides																	
	gross alpha	4.77			2.32											15	pCi/L
	nonvolatile beta	5.33			3											50	pCi/L
	radium, total alpha-emitting	1.72			1.4	J	I									5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 34TA

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 104905.8 E 50536.6	33.34023 Deg N -81.7376 Deg W	-91.9 - -102. ft msl	383.4 ft msl	4 " STEEL	S	CBA

SAMPLE DATE	03/13/00	08/31/00	02/27/01	08/27/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	201.02	197.5	198.49	191.55	ft msl
pH	6	5.4	6.4	5.6	pH
Sp. Conductance	26	25	24	24	uS/cm
Water temperature	19	19.8	21.5	20.9	deg. C
Alkalinity as CaCO3	14	4	1	30	mg/L
Turbidity	2.4	5.5	5.6	5.8	NTU
Volumes purged	7.21	6.84	6.77	6.82	well volume
Sampling code					
Synchronous water level	200.9 (03/23/00)	198.9 (12/28/00)	197.3 (06/27/01)	192.5 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

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ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
	Inorganics																
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
	Organics																
	chlorobenzene	1.75	J	L	<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethane	<1	JU	L	<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<1	JU	L	<5	U		<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	JU	L	<5	U		<5	U		<5	U		1	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<1	JU	L	<5	U		<5	U		<5	U		1	WA	5	ug/L
	tetrachloroethylene	<1	JU	L	<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1,1-trichloroethane	<1	JU	L	<5	U		<5	U		<5	U		1	WA	200	ug/L
+	trichloroethylene	12.1	J	L	6.6	J		5.1	J	K	***11.5***			1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
	Inorganics																
	aluminum, total recoverable	<200	U		<200	U		<200	U		<51.7	U	V	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	718			699											2400	ug/L
	sodium, total recoverable	<1670	U	V	1900			1850			1670			1	WA	4600	ug/L
	sulfate	971			714											3000	ug/L
	Radionuclides																
	gross alpha	.87			.603	U										15	pCi/L
	nonvolatile beta	1.34	U	W	1.4	J	I									50	pCi/L
	radium, total alpha-emitting	.62			.3	U										5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 35A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 102098 E 50945.2	33.33469 Deg N -81.7310 Deg W	128.8 - 123.2 ft msl	350.9 ft msl	4 " PVC	S	MCBC

SAMPLE DATE			02/23/01	08/25/01	
FIELD DATA					
Parameter	**1Q00**	**3Q00**	**1Q01**	**3Q01**	**Unit**
Water Elevation	*Not Applicable*	*Not Applicable*	213.15	211.69	ft msl
pH			5.8	5.1	pH
Sp. Conductance			28	27	uS/cm
Water temperature			19.3	20.9	deg. C
Alkalinity as CaCO3			48	0	mg/L
Turbidity			1.3	.5	NTU
Volumes purged			2.14	2.26	well volume
Sampling code					
Synchronous water level	215 (03/23/00)	214.1 (09/23/00)	212.9 (03/29/01)	212.1 (09/24/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP EPA	3Q00	CLP EPA	1Q01	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	barium, total recoverable												
	cyanide												
	lead, total recoverable												
	nickel, total recoverable												
	selenium, total recoverable												
Organics													
	chlorobenzene					<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethane					<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethylene					<5	U	<5	U	1	WA	7	ug/L
	trans-1,2-dichloroethylene					<5	U	<5	U	1	WA	100	ug/L
	pcb 1016												
	pcb 1221												
	pcb 1232												
	pcb 1242												
	pcb 1248												
	pcb 1254												
	pcb 1260												
	1,1,2,2-tetrachloroethane					<5	U	<5	U	1	WA	5	ug/L
	tetrachloroethylene					<5	U	<5	U	1	WA	5	ug/L
	1,1,1-trichloroethane					<5	U	<5	U	1	WA	200	ug/L
	trichloroethylene					<5	U	<5	U	1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP EPA	3Q99	CLP EPA	3Q00	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	aluminum, total recoverable												
	nitrate-nitrite as nitrogen												
	sodium, total recoverable												
	sulfate												
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. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 35B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 102110.8 E 50947.9	33.33472 Deg N -81.7310 Deg W	169.3 - 163.7 ft msl	351.6 ft msl	4 " PVC	S	UL

SAMPLE DATE	01/31/00	08/27/00	02/23/01	08/25/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	217.78	217.25	215.6	214.21	ft msl
pH	4.7	5.5	6.3	5.7	pH
Sp. Conductance	32	32	42	36	uS/cm
Water temperature	17.9	21	20.4	21.6	deg. C
Alkalinity as CaCO3	8	5	3	13	mg/L
Turbidity	.9	1	1.1	.7	NTU
Volumes purged	2.43	3.28	2.09	2.30	well volume
Sampling code					
Synchronous water level	217.6 (03/23/00)	216.8 (09/23/00)	215.2 (03/29/01)	214.2 (09/24/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<1	JU	L	<5	U		<5	U		<5	UJ	L	1	WA	5	ug/L
	1,1-dichloroethane	<1	JU	L	<5	U		<5	U		<5	UJ	L	1	WA	5	ug/L
	1,1-dichloroethylene	<1	JU	L	<5	U		<5	U		<5	UJ	L	1	WA	7	ug/L
	trans-1,2-dichloroethylene				<5	U		<5	U		<5	UJ	L	1	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<1	JU	L	<5	U		<5	U		<5	UJ	L	1	WA	5	ug/L
	tetrachloroethylene	<1	JU	L	<5	U		<5	U		<5	UJ	L	1	WA	5	ug/L
	1,1,1-trichloroethane	<1	JU	L	<5	U		<5	U		<5	UJ	L	1	WA	200	ug/L
	trichloroethylene	<1	JU	L	<5	U		<5	U		<5	UJ	L	1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable	<200	U		<200	U		<200	U		<114	U	V	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	216	J	I	215	J	I									2400	ug/L
+	sodium, total recoverable	***4650***			4400			4470			4140			1	WA	4600	ug/L
	sulfate	1410			1370											3000	ug/L
Radionuclides																	
	gross alpha	.83	UJ	W	.0953	U										15	pCi/L
	nonvolatile beta	-.1	U	W	1.21	U										50	pCi/L
	radium, total alpha-emitting	.02	U	W	-.1	U										5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 35TA

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 102101.6 E 50919.6	33.33466 Deg N -81.7311 Deg W	38.2 - 32.9 ft msl	350.3 ft msl	4 " CS	S	CBA

SAMPLE DATE	01/31/00	08/27/00	02/23/01	08/25/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	198.85	204.3	189.1	170.07	ft msl
pH	4.9	5	5.7	5	pH
Sp. Conductance	16	16	18	17	uS/cm
Water temperature	18.2	20.1	19	22	deg. C
Alkalinity as CaCO3	1	0	3	6	mg/L
Turbidity	8.1	3	12	11.2	NTU
Volumes purged	3.06	5.46	2.13	2.94	well volume
Sampling code					
Synchronous water level	198.7 (03/23/00)	197.4 (09/23/00)	196.4 (03/29/01)	195.4 (09/24/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

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ST	Parameter	1Q00	CLP EPA	3Q00	CLP EPA	1Q01	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
	Inorganics												
	barium, total recoverable												
	cyanide												
	lead, total recoverable												
	nickel, total recoverable												
	selenium, total recoverable												
	Organics												
	chlorobenzene	<1	JU L	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethane	<1	JU L	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethylene	<1	JU L	<5	U	<5	U	<5	U	1	WA	7	ug/L
	trans-1,2-dichloroethylene			<5	U	<5	U	<5	U	1	WA	100	ug/L
	pcb 1016												
	pcb 1221												
	pcb 1232												
	pcb 1242												
	pcb 1248												
	pcb 1254												
	pcb 1260												
	1,1,2,2-tetrachloroethane	<1	JU L	<5	U	<5	U	<5	U	1	WA	5	ug/L
	tetrachloroethylene	<1	JU L	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1,1-trichloroethane	<1	JU L	<5	U	<5	U	<5	U	1	WA	200	ug/L
	trichloroethylene	<1	JU L	<5	U	<5	U	<5	U	1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP EPA	3Q99	CLP EPA	3Q00	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
	Inorganics												
	aluminum, total recoverable	<200	U	<200	U	<200	U	<50	U	1	GE	100	ug/L
+	nitrate-nitrite as nitrogen	***9630***		349	J I							2400	ug/L
	sodium, total recoverable	1510		1500		1650		1470		1	GE	4600	ug/L
	sulfate	673		693								3000	ug/L
	Radionuclides												
	gross alpha	.661		.306	U							15	pCi/L
	nonvolatile beta	.533	U W	.729	U							50	pCi/L
	radium, total alpha-emitting	.67		-.1	U							5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 36A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 100511.3 E 49514.9	33.32885 Deg N -81.7317 Deg W	100.5 - 94.9 ft msl	340.6 ft msl	4 " PVC	S	MCBC

SAMPLE DATE	03/17/00	08/30/00	02/20/01	08/30/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	209.48	207.75	206.83	205.49	ft msl
pH	4.5	4.3	4.4	4.5	pH
Sp. Conductance	39	42	43	43	uS/cm
Water temperature	20	21	19.3	26.5	deg. C
Alkalinity as CaCO3	0	0	0	0	mg/L
Turbidity	.4	.8	.3	.8	NTU
Volumes purged	2.20	1.66	2.21	2.11	well volume
Sampling code					
Synchronous water level	209.4 (03/22/00)	208 (12/28/00)	229.5 (03/29/01)	205.8 (09/24/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

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ST	Parameter	1Q00	CLP EPA	3Q00	CLP EPA	1Q01	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
	Inorganics												
	barium, total recoverable												
	cyanide												
	lead, total recoverable												
	nickel, total recoverable												
	selenium, total recoverable												
	Organics												
	chlorobenzene	<2	JU	<100	U	<10	U	<50	U	10	WA	5	ug/L
	1,1-dichloroethane	<2	JU	<100	U	<10	U	<50	U	10	WA	5	ug/L
	1,1-dichloroethylene	<2	JU	<100	U	<10	U	<50	U	10	WA	7	ug/L
	trans-1,2-dichloroethylene	<2	JU	<100	U	<10	U	<50	U	10	WA	100	ug/L
	pcb 1016												
	pcb 1221												
	pcb 1232												
	pcb 1242												
	pcb 1248												
	pcb 1254												
	pcb 1260												
	1,1,2,2-tetrachloroethane	<2	JU	<100	U	<10	U	<50	U	10	WA	5	ug/L
	tetrachloroethylene	15.4	J	<100	U	8.38	J I	<50	U	10	WA	5	ug/L
	1,1,1-trichloroethane	<2	JU	<100	U	<10	U	<50	U	10	WA	200	ug/L
+	trichloroethylene	542	J	220	J K	***270***		***292***		10	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP EPA	3Q99	CLP EPA	3Q00	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
	Inorganics												
	aluminum, total recoverable			73	J I	71.9	J I	70.1	J I	1	WA	100	ug/L
	nitrate-nitrite as nitrogen			392	J I							2400	ug/L
	sodium, total recoverable			1900		1970		1810		1	WA	4600	ug/L
+	sulfate			***6610***								3000	ug/L
	Radionuclides												
	gross alpha			1.64	U V							15	pCi/L
	nonvolatile beta			2.08	J I							50	pCi/L
	radium, total alpha-emitting			.4	J I							5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 36B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 100514.9 E 49526.3	33.32887 Deg N -81.7317 Deg W	163.7 - 158.1 ft msl	340.8 ft msl	4 " PVC	S	LL

SAMPLE DATE	03/17/00	08/30/00	03/13/01	08/30/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	213.4	211.95	211.12	209.7	ft msl
pH	5.5	5.8	5.1	5.2	pH
Sp. Conductance	71	70	70	67	uS/cm
Water temperature	19.1	19.5	18.6	19.9	deg. C
Alkalinity as CaCO3	3	2	0	0	mg/L
Turbidity	.8	1.6	.7	.2	NTU
Volumes purged	2.79	2.78	2.33	2.34	well volume
Sampling code					
Synchronous water level	213.2 (03/22/00)	211.9 (09/23/00)	210.8 (03/29/01)	209.9 (09/24/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

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ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<5	U		<100	U		<50	U		<50	U		10	WA	5	ug/L
	1,1-dichloroethane	<5	U		<100	U		<50	U		<50	U		10	WA	5	ug/L
	1,1-dichloroethylene	<5	U		<100	U		<50	U		<50	U		10	WA	7	ug/L
	trans-1,2-dichloroethylene	<5	U		<100	U		<50	U		<50	U		10	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<5	U		<100	U		<50	U		<50	U		10	WA	5	ug/L
	tetrachloroethylene	2.3	J	I	<100	U		<50	U		<50	U		10	WA	5	ug/L
	1,1,1-trichloroethane	<5	U		<100	U		<50	U		<50	U		10	WA	200	ug/L
+	trichloroethylene	***1180***			710	J	K	***958***			***1170***			10	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
+	aluminum, total recoverable	***235***			190	J	I	<200	U		<322	U		1	WA	100	ug/L
+	nitrate-nitrite as nitrogen	***7520***		V	***6690***											2400	ug/L
+	sodium, total recoverable	***4620***			4400			***4900***			***4870***			1	WA	4600	ug/L
	sulfate	460			397	J	I									3000	ug/L
Radionuclides																	
	gross alpha	6.57			2.55	U	V									15	pCi/L
	nonvolatile beta	5.04			2.02	J	I									50	pCi/L
	radium, total alpha-emitting	3.95			.8	J	I									5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 36C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 100518.3 E 49537.2	33.32890 Deg N -81.7316 Deg W	194.2 - 188.6 ft msl	340.9 ft msl	4 " PVC	S	UL

SAMPLE DATE	03/17/00	08/30/00	03/13/01	08/30/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	213.48	212.09	211.15	209.84	ft msl
pH	5.3	6.6	4.8	4.9	pH
Sp. Conductance	38	41	42	43	uS/cm
Water temperature	18.8	19.3	19	19.6	deg. C
Alkalinity as CaCO3	1	0	0	0	mg/L
Turbidity	.3	1.7	.9	.8	NTU
Volumes purged	3.20	4.17	2.31	2.38	well volume
Sampling code					
Synchronous water level	213.3 (03/22/00)	212 (09/23/00)	210.9 (03/29/01)	209.9 (09/24/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

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ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
	Inorganics																
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
	Organics																
	chlorobenzene	<1	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethane	<1	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<1	U		<5	U		<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	U		<5	U		<5	U		<5	U		1	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<1	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	tetrachloroethylene	.77	J	I	<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1,1-trichloroethane	<1	U		<5	U		<5	U		<5	U		1	WA	200	ug/L
+	trichloroethylene	***8.48***			6.3	J	K	***5.38***			***5.83***			1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
	Inorganics																
	aluminum, total recoverable	131	J	I	<200	U		57.3	J	I	52.6	J	I	1	WA	100	ug/L
+	nitrate-nitrite as nitrogen	<500	U		***2430***											2400	ug/L
+	sodium, total recoverable	***5310***			3500			4310			3740			1	WA	4600	ug/L
	sulfate	<400	U		<400	U										3000	ug/L
	Radionuclides																
	gross alpha	5.73			1.67	U	V									15	pCi/L
	nonvolatile beta	3.16	J		.9	U										50	pCi/L
	radium, total alpha-emitting	1.22			.4	J	I									5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 36D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 100521.7 E 49548.3	33.32892 Deg N -81.7316 Deg W	249.5 - 228.8 ft msl	341.6 ft msl	4 " PVC	S	M

SAMPLE DATE 03/17/00

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	232.59	*Not Applicable*	*Not Applicable*	*Not Applicable*	ft msl
pH					pH
Sp. Conductance					uS/cm
Water temperature					deg. C
Alkalinity as CaCO3	2				mg/L
Turbidity					NTU
Volumes purged					well volume
Sampling code	LN				
Synchronous water level	232.5 (03/22/00)	231.3 (09/23/00)	229.8 (06/27/01)	229.7 (09/24/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP EPA	3Q00	CLP EPA	1Q01	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	barium, total recoverable												
	cyanide												
	lead, total recoverable												
	nickel, total recoverable												
	selenium, total recoverable												
Organics													
	chlorobenzene	<1	U									5	ug/L
	1,1-dichloroethane	<1	U									5	ug/L
	1,1-dichloroethylene	<1	U									7	ug/L
	trans-1,2-dichloroethylene	<1	U									100	ug/L
	pcb 1016												
	pcb 1221												
	pcb 1232												
	pcb 1242												
	pcb 1248												
	pcb 1254												
	pcb 1260												
	1,1,2,2-tetrachloroethane	<1	U									5	ug/L
	tetrachloroethylene	<1	U									5	ug/L
	1,1,1-trichloroethane	<1	U									200	ug/L
	trichloroethylene	<1	U									5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP EPA	3Q99	CLP EPA	3Q00	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	aluminum, total recoverable	<200	U	<200	U							100	ug/L
+	nitrate-nitrite as nitrogen	***2690***		736								2400	ug/L
	sodium, total recoverable	3170		2500								4600	ug/L
	sulfate	606		<400	U							3000	ug/L
Radionuclides													
	gross alpha	.99	U W	.992	U V							15	pCi/L
	nonvolatile beta	-.41	UJ W	1.39	J I							50	pCi/L
	radium, total alpha-emitting	.39	U W	.1	U							5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 36TA

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 100507.7 E 49503	33.32882 Deg N -81.7317 Deg W	53.4 - 48.4 ft msl	340.6 ft msl	4 " CS	S	CBA

SAMPLE DATE	02/02/00	08/27/00	03/12/01	08/30/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	194.1	192.51	192.4	189.8	ft msl
pH	5.3	5.2	6.1	5.3	pH
Sp. Conductance	23	21	48	22	uS/cm
Water temperature	18.9	20.7	18.6	19.6	deg. C
Alkalinity as CaCO3	2	0	65	0	mg/L
Turbidity	.9	.7	7.9	.3	NTU
Volumes purged	2.26	2.33	2.13	2.20	well volume
Sampling code					
Synchronous water level	193.9 (03/22/00)	192.8 (09/23/00)	191.5 (06/27/01)	191.1 (09/24/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP EPA	3Q00	CLP EPA	1Q01	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	barium, total recoverable												
	cyanide												
	lead, total recoverable												
	nickel, total recoverable												
	selenium, total recoverable												
Organics													
	chlorobenzene	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethane	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethylene	<1	U	<5	U	<5	U	<5	U	1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	U	<5	U	<5	U	<5	U	1	WA	100	ug/L
	pcb 1016												
	pcb 1221												
	pcb 1232												
	pcb 1242												
	pcb 1248												
	pcb 1254												
	pcb 1260												
	1,1,2,2-tetrachloroethane	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
	tetrachloroethylene	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1,1-trichloroethane	<1	U	<5	U	<5	U	<5	U	1	WA	200	ug/L
	trichloroethylene	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP EPA	3Q99	CLP EPA	3Q00	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	aluminum, total recoverable	<200	U	<200	U	<200	U	<322	U	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	721		<500	U							2400	ug/L
	sodium, total recoverable	1490		1700		1690		1540		1	WA	4600	ug/L
	sulfate	2050		2350								3000	ug/L
Radionuclides													
	gross alpha	1.42	J	.306	U							15	pCi/L
	nonvolatile beta	3.37	J	.121	U							50	pCi/L
	radium, total alpha-emitting	.14	U W	-.1	U							5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 37B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 105289.5 E 51450	33.34257 Deg N -81.7359 Deg W	142.3 - 136.7 ft msl	382.7 ft msl	4 " PVC	S	MCBC

SAMPLE DATE	03/13/00	08/29/00	02/26/01	08/27/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	218.01	215.35	214.48	212.88	ft msl
pH	5.7	5.7	6.1	5.7	pH
Sp. Conductance	24	24	25	24	uS/cm
Water temperature	19.3	20.7	21.2	22	deg. C
Alkalinity as CaCO3	4	3	2	33	mg/L
Turbidity	.8	1	.3	.3	NTU
Volumes purged	2.59	3.32	2.39	2.24	well volume
Sampling code					
Synchronous water level	217.9 (03/23/00)	215.2 (09/23/00)	213.6 (03/20/01)	212.8 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	1.44			<5	U		<5	U		<5	UJ	L	1	WA	5	ug/L
	1,1-dichloroethane	<1	U		<5	U		<5	U		<5	UJ	L	1	WA	5	ug/L
	1,1-dichloroethylene	<1	U		<5	U		<5	U		<5	UJ	L	1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	U		<5	U		<5	U		<5	UJ	L	1	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<1	U		<5	U		<5	U		<5	UJ	L	1	WA	5	ug/L
+	tetrachloroethylene	***54.1***			8.8	J	K	30.2	J	K	44.9	J	L	1	WA	5	ug/L
	1,1,1-trichloroethane	<1	U		<5	U		<5	U		<5	UJ	L	1	WA	200	ug/L
+	trichloroethylene	***73.1***			1.8	J	IK	47.5	J	K	15.9	J	L	1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable	<200	U		<200	U		<200	U		<64.3	U	V	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	814			850											2400	ug/L
	sodium, total recoverable	1890			1800			<1980	U		2350			1	WA	4600	ug/L
	sulfate	<400	U		444			816			546			1	WA	3000	ug/L
Radionuclides																	
	gross alpha	.74	U	W	.636	U										15	pCi/L
	nonvolatile beta	14.53			.662	U										50	pCi/L
	radium, total alpha-emitting	.22	U	W	-.1	U										5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 37C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 105283.2 E 51439.8	33.34254 Deg N -81.7359 Deg W	180.8 - 175.2 ft msl	383 ft msl	4 " PVC	S	LL

SAMPLE DATE	03/13/00	08/29/00	02/26/01	08/27/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	226.3	224.45	223.35	222.05	ft msl
pH	5.3	5	5.2	5.2	pH
Sp. Conductance	31	34	35	34	uS/cm
Water temperature	19.6	20.5	21	21.5	deg. C
Alkalinity as CaCO3	2	0	0	0	mg/L
Turbidity	.3	.7	.4	.2	NTU
Volumes purged	2.85	3.57	2.38	2.25	well volume
Sampling code					
Synchronous water level	226.2 (03/23/00)	224.4 (09/23/00)	222.9 (03/20/01)	221.8 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP EPA	3Q00	CLP EPA	1Q01	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
	Inorganics												
	barium, total recoverable												
	cyanide												
	lead, total recoverable												
	nickel, total recoverable												
	selenium, total recoverable												
	Organics												
	chlorobenzene	1.23		<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethane	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethylene	<1	U	<5	U	<5	U	<5	U	1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	U	<5	U	<5	U	<5	U	1	WA	100	ug/L
	pcb 1016												
	pcb 1221												
	pcb 1232												
	pcb 1242												
	pcb 1248												
	pcb 1254												
	pcb 1260												
	1,1,2,2-tetrachloroethane	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
+	tetrachloroethylene	***6.6***		8.9	J K	***5.41***		***8.11***		1	WA	5	ug/L
	1,1,1-trichloroethane	<1	U	<5	U	<5	U	<5	U	1	WA	200	ug/L
	trichloroethylene	2.34		<5	U	1.78	J I	1.77	J I	1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP EPA	3Q99	CLP EPA	3Q00	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
	Inorganics												
	aluminum, total recoverable	<200	U	<200	U	<200	U	<72.5	U V	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	543		475	J I							2400	ug/L
	sodium, total recoverable	2710		2700		4030		3640		1	WA	4600	ug/L
	sulfate	<400	U	416		931		666		1	WA	3000	ug/L
	Radionuclides												
	gross alpha	2.22		.417	U							15	pCi/L
	nonvolatile beta	5.84		2.8	J I							50	pCi/L
	radium, total alpha-emitting	.53		.2	U							5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 38C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 102373.1 E 49762	33.33337 Deg N -81.7347 Deg W	169 - 164.3 ft msl	358.8 ft msl	4 " PVC	S	LL

SAMPLE DATE	03/14/00	09/07/00	02/15/01	09/14/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	220.17	216.02	215.55	212.8	ft msl
pH	7	6.5	6.3	6.4	pH
Sp. Conductance	38	52	36	43	uS/cm
Water temperature	19.6	20.7	20.7		deg. C
Alkalinity as CaCO3	8	3	7	13	mg/L
Turbidity	1	1.8	.8	.3	NTU
Volumes purged	3.64	2.13	2.84	13.2	well volume
Sampling code					
Synchronous water level	220 (03/21/00)	215.8 (09/23/00)	216.5 (03/20/01)	212 (09/26/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<50	U		<250	U		<250	U		<125	U		25	WA	5	ug/L
	1,1-dichloroethane	<50	U		<250	U		<250	U		<125	U		25	WA	5	ug/L
	1,1-dichloroethylene	<50	U		<250	U		<250	U		<125	U		25	WA	7	ug/L
	trans-1,2-dichloroethylene	<50	U		<250	U		<250	U		<125	U		25	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<50	U		<250	U		<250	U		<125	U		25	WA	5	ug/L
+	tetrachloroethylene	7100	J	K	8600	J	K	***4540***			***4300***			25	WA	5	ug/L
	1,1,1-trichloroethane	<50	U		<250	U		<250	U		<125	U		25	WA	200	ug/L
+	trichloroethylene	8760	J	K	6500	J	K	***4680***			***4600***			25	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable	<200	U		<200	U		60.4	J	I	<122	U	V	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	1460			1440											2400	ug/L
	sodium, total recoverable	2190			2270			2910			2230			1	WA	4600	ug/L
	sulfate	<400	U		178	J	I									3000	ug/L
Radionuclides																	
	gross alpha	1.23			1.2	J	I									15	pCi/L
	nonvolatile beta	2.38			.472	U										50	pCi/L
	radium, total alpha-emitting	.22	U	W	.6	J	I									5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 39B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 100844.6 E 48376.9	33.32772 Deg N -81.7353 Deg W	149.6 - 144 ft msl	341.8 ft msl	4 " PVC	S	LL

SAMPLE DATE	03/15/00	08/21/00	02/14/01	08/29/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	212.52	209.85	208.53	207.39	ft msl
pH	5	4.9	4.8	4.8	pH
Sp. Conductance	126	118	109	100	uS/cm
Water temperature	18.1	19.4	20	20.4	deg. C
Alkalinity as CaCO3	0	0	0	0	mg/L
Turbidity	.3	.7	.3	.3	NTU
Volumes purged	3.19	2.48	2.18	2.17	well volume
Sampling code					
Synchronous water level	212.4 (03/22/00)	209.5 (09/23/00)	221.2 (06/27/01)	207.3 (09/24/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
	Inorganics																
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
	Organics																
	chlorobenzene	<1	JU		<5	U		<10	U		<25	U		5	WA	5	ug/L
	1,1-dichloroethane	<1	JU		<5	U		<10	U		<25	U		5	WA	5	ug/L
	1,1-dichloroethylene	4.91	J		3.7	J	I	4.66	J	I	<25	U		5	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	JU		<5	U		<10	U		<25	U		5	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<1	JU		<5	U		<10	U		<25	U		5	WA	5	ug/L
+	tetrachloroethylene	177	J		***260***		L	***519***			***508***			5	WA	5	ug/L
	1,1,1-trichloroethane	.66	J	I	<5	U		<10	U		<25	U		5	WA	200	ug/L
+	trichloroethylene	401	J		***430***		L	***725***			***697***			5	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
	Inorganics																
	aluminum, total recoverable	90.8	J	I	<200	U		<200	U		94.1	J	I	1	WA	100	ug/L
+	nitrate-nitrite as nitrogen	***17100***			***14600***						***9580***			20	WA	2400	ug/L
+	sodium, total recoverable	***23100***			***21000***			***18300***			***12400***			1	WA	4600	ug/L
	sulfate	437			266											3000	ug/L
	Radionuclides																
	gross alpha	4.72			1.37	J	IK	3.64			.78	U		1	SC	15	pCi/L
	nonvolatile beta	19.51			6.52			4.66			3.07	J	I	1	SC	50	pCi/L
	radium, total alpha-emitting	2.64			.8	J	I	.84	J	I	1.85	J	I	1	SC	5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 39C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 100852 E 48386.7	33.32776 Deg N -81.7353 Deg W	199.6 - 194 ft msl	341.5 ft msl	4 " PVC	S	UL

SAMPLE DATE	03/10/00	08/21/00	02/14/01	08/29/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	213.78	213.25	212.1	211.69	ft msl
pH	4.9	4.8	4.6	4.7	pH
Sp. Conductance	38	39	38	35	uS/cm
Water temperature	19.2	20.9	19.5	19.8	deg. C
Alkalinity as CaCO3	0	0	0	0	mg/L
Turbidity	.2	.7	.3	.4	NTU
Volumes purged	3.97	4.64	3.83	2.88	well volume
Sampling code					
Synchronous water level	213.6 (03/22/00)	215.9 (09/23/00)	306.1 (06/27/01)	210.7 (09/24/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

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ST	Parameter	1Q00	CLP EPA	3Q00	CLP EPA	1Q01	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
	Inorganics												
	barium, total recoverable												
	cyanide												
	lead, total recoverable												
	nickel, total recoverable												
	selenium, total recoverable												
	Organics												
	chlorobenzene	<1	JU	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethane	<1	JU	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethylene	<1	JU	<5	U	<5	U	<5	U	1	WA	7	ug/L
	trans-1,2-dichloroethylene			<5	U	<5	U	<5	U	1	WA	100	ug/L
	pcb 1016												
	pcb 1221												
	pcb 1232												
	pcb 1242												
	pcb 1248												
	pcb 1254												
	pcb 1260												
	1,1,2,2-tetrachloroethane	<1	JU	<5	U	<5	U	<5	U	1	WA	5	ug/L
	tetrachloroethylene	2.19	J	1.6	J I	2.15	J I	1.42	J I	1	WA	5	ug/L
	1,1,1-trichloroethane	<1	JU	<5	U	<5	U	<5	U	1	WA	200	ug/L
+	trichloroethylene	24.5	J	***18***		***20***		***15.4***		1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP EPA	3Q99	CLP EPA	3Q00	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
	Inorganics												
	aluminum, total recoverable	79.9	J I	<200	U	63.9	J I	106	J I	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	2040		2080				1880		5	WA	2400	ug/L
	sodium, total recoverable	3230		3300		3530		2660		1	WA	4600	ug/L
	sulfate	453		417								3000	ug/L
	Radionuclides												
	gross alpha	.56	U W	1.12	J IK	2.08	J I	.675	U	1	SC	15	pCi/L
	nonvolatile beta	4.91		1.5	J I	2.24	J I	.73	U	1	SC	50	pCi/L
	radium, total alpha-emitting	.98		.5	J I	.25	U	1.62	J I	1	SC	5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 39D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 100858.7 E 48396	33.32779 Deg N -81.7353 Deg W	239.7 - 219 ft msl	341.8 ft msl	4 " PVC	V	M

SAMPLE DATE	01/31/00	09/19/00	03/14/01	08/24/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	230.49	228.78	225.25	226.51	ft msl
pH	5.3	5.5	6.1	5.7	pH
Sp. Conductance	25	28	29	39	uS/cm
Water temperature	18.5	22.2	19.3	21.6	deg. C
Alkalinity as CaCO3	1	3	2	1	mg/L
Turbidity	.8	3.5	1.8	3.8	NTU
Volumes purged	12.6	2.05	1.98	3.29	well volume
Sampling code					
Synchronous water level	230.3 (03/22/00)	228.8 (09/23/00)	241.9 (06/27/01)	225.9 (09/26/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<1	JU	L	<5	U		<5	U		<5	UJ	L	1	WA	5	ug/L
	1,1-dichloroethane	<1	JU	L	<5	U		<5	U		<5	UJ	L	1	WA	5	ug/L
	1,1-dichloroethylene	<1	JU	L	<5	U		<5	U		<5	UJ	L	1	WA	7	ug/L
	trans-1,2-dichloroethylene				<5	U		<5	U		<5	UJ	L	1	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<1	JU	L	<5	U		<5	U		<5	UJ	L	1	WA	5	ug/L
	tetrachloroethylene	<1	JU	L	<5	U		<5	U		2.35	J	IL	1	WA	5	ug/L
	1,1,1-trichloroethane	<1	JU	L	<5	U		<5	U		<5	UJ	L	1	WA	200	ug/L
	trichloroethylene	<1	JU	L	<5	U		3.95	J	I	14.9	J	L	1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable	<200	U		<200	U		<86	U	V	<65.1	U	V	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	99	J	I	860						2140			5	WA	2400	ug/L
	sodium, total recoverable	2900		V	1980			2230			2870			1	WA	4600	ug/L
	sulfate	405			490											3000	ug/L
Radionuclides																	
	gross alpha	4			2.15			3.45			.395	U		1	SC	15	pCi/L
	nonvolatile beta	2.74	U		1.35	J	IK	2.35	J	I	.537	U		1	SC	50	pCi/L
	radium, total alpha-emitting	1.4		V	1.2	J	I	2.63			2.21	J	I	1	SC	5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 39TA

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 100830.6 E 48357.7	33.32766 Deg N -81.7354 Deg W	49.7 - 44.4 ft msl	341.8 ft msl	4 " CS	S	CBA

SAMPLE DATE	01/31/00	08/27/00	03/02/01	08/22/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	192	190.45	190.12	188.21	ft msl
pH	5.3	5.2	5.2	5.2	pH
Sp. Conductance	17	17	16	20	uS/cm
Water temperature	18.2	21	19.2	24.4	deg. C
Alkalinity as CaCO3	2	0	0	12	mg/L
Turbidity	5.3	4.1	4	13.4	NTU
Volumes purged	2.98	5.69	3.83	2.27	well volume
Sampling code					
Synchronous water level	191.9 (03/22/00)	190.6 (09/23/00)	207.8 (06/27/01)	189 (09/24/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<1	JU	L	<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethane	<1	JU	L	<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<1	JU	L	<5	U		<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene				<5	U		<5	U		<5	U		1	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<1	JU	L	<5	U		<5	U		<5	U		1	WA	5	ug/L
	tetrachloroethylene	<1	JU	L	<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1,1-trichloroethane	<1	JU	L	<5	U		<5	U		<5	U		1	WA	200	ug/L
	trichloroethylene	<1	JU	L	<5	U		<5	U		<5	U		1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable	<200	U		<200	U		<200	U							100	ug/L
	nitrate-nitrite as nitrogen	4	J	I	<500	U										2400	ug/L
	sodium, total recoverable	1510		V	1400			1340								4600	ug/L
+	sulfate	******			1430											3000	ug/L
Radionuclides																	
	gross alpha	.509			1.13	J	I	.442	U		-.687	U	V	1	SC	15	pCi/L
	nonvolatile beta	3.15	U		3.47			.676	U		1.07	U		1	SC	50	pCi/L
	radium, total alpha-emitting	.5			1.3	J	I	.317	U		.152	U		1	SC	5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 40A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 97672.8 E 48279.4	33.32055 Deg N -81.7294 Deg W	116.2 - 110.6 ft msl	321.2 ft msl	4 " PVC	S	MCBC

SAMPLE DATE	02/03/00	08/27/00	03/02/01	08/23/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	202.2	201.01	200.3	198.7	ft msl
pH	4.7	4.5	4.6	4.3	pH
Sp. Conductance	50	50	48	49	uS/cm
Water temperature	18.2	21.4	18.5	21	deg. C
Alkalinity as CaCO3	0	0	0	0	mg/L
Turbidity	.7	.5	.2	.3	NTU
Volumes purged	2.52	2.42	3.27	2.43	well volume
Sampling code					
Synchronous water level	202.1 (03/22/00)	200.8 (09/23/00)	200.4 (03/29/01)	( )	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<1	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethane	<1	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<1	U		<5	U		<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	U		<5	U		<5	U		<5	U		1	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<1	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	tetrachloroethylene	<1	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1,1-trichloroethane	<1	U		<5	U		<5	U		<5	U		1	WA	200	ug/L
	trichloroethylene	<1	U		<5	U		<5	U		<5	U		1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
+	aluminum, total recoverable	96.1	J	I	<200	U		***894***			67.5	J	K	1	GE	100	ug/L
	nitrate-nitrite as nitrogen	403	J	I	<500	U										2400	ug/L
	sodium, total recoverable	2080		V	2500			2110			<2090	U		1	WA	4600	ug/L
+	sulfate	***11800***			***13300***											3000	ug/L
Radionuclides																	
	gross alpha	1.71	J		.608	JU	L									15	pCi/L
	nonvolatile beta	4.64	J		1.96	J	I									50	pCi/L
	radium, total alpha-emitting	.4	U	W	0	U										5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 41B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 102194.4 E 53417.8	33.33894 Deg N -81.7247 Deg W	114.2 - 108.6 ft msl	324 ft msl	4 " PVC	S	MCBC

SAMPLE DATE	03/10/00	09/01/00	02/21/01	09/07/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	216.28	214.9	214.1	212.15	ft msl
pH	5.9	5.7	6.6	5.9	pH
Sp. Conductance	23	22	32	25	uS/cm
Water temperature	19.5	22.3	20	20.4	deg. C
Alkalinity as CaCO3	3	3	12	35	mg/L
Turbidity	.7	1.9	.3	.1	NTU
Volumes purged	2.58	2.16	2.33	2.20	well volume
Sampling code					
Synchronous water level	216.1 (03/23/00)	214.9 (09/23/00)	213.9 (03/29/01)	212.7 (09/24/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
	Inorganics																
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
	Organics																
	chlorobenzene	<1	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethane	<1	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<1	U		<5	U		<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene				<5	U		<5	U		<5	U		1	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<1	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
+	tetrachloroethylene	6.17	J	K	***5.1***			3.32	J	I	4.07	J	I	1	WA	5	ug/L
	1,1,1-trichloroethane	<1	U		<5	U		<5	U		<5	U		1	WA	200	ug/L
	trichloroethylene	2.94	J	K	<5	U		1.81	J	I	2.58	J	I	1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
	Inorganics																
	aluminum, total recoverable	<200	U		<200	U		41.6	J	I	<40.4	U	V	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	1070			1050											2400	ug/L
	sodium, total recoverable	1430			1400			1440			1540			1	WA	4600	ug/L
	sulfate	423			193	J	I									3000	ug/L
	Radionuclides																
	gross alpha	3.16			1.93	U	V									15	pCi/L
	nonvolatile beta	2.75	J		2.61	J	I									50	pCi/L
	radium, total alpha-emitting	.64			.8	J	I									5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 41TA

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 102176.5 E 53429.7	33.33892 Deg N -81.7246 Deg W	26.7 - 21.4 ft msl	323.7 ft msl	4 " CS	S	CBA

SAMPLE DATE	02/04/00	08/27/00	03/05/01	08/30/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	206.11	204.27	203.81	200.64	ft msl
pH	4.8	4.9	5	5	pH
Sp. Conductance	22	22	21	23	uS/cm
Water temperature	18.7	20	18.7	19.9	deg. C
Alkalinity as CaCO3	2	0	0	0	mg/L
Turbidity	.7	.7	.5	.8	NTU
Volumes purged	2.37	2.29	2.29	2.17	well volume
Sampling code					
Synchronous water level	206 (03/23/00)	204.3 (09/23/00)	203.4 (03/29/01)	201.9 (09/24/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP EPA	3Q00	CLP EPA	1Q01	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	barium, total recoverable												
	cyanide												
	lead, total recoverable												
	nickel, total recoverable												
	selenium, total recoverable												
Organics													
	chlorobenzene	<1	JU	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethane	<1	JU	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethylene	<1	JU	<5	U	<5	U	<5	U	1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	JU	<5	U	<5	U	<5	U	1	WA	100	ug/L
	pcb 1016												
	pcb 1221												
	pcb 1232												
	pcb 1242												
	pcb 1248												
	pcb 1254												
	pcb 1260												
	1,1,2,2-tetrachloroethane	<1	JU	<5	U	<5	U	<5	U	1	WA	5	ug/L
	tetrachloroethylene	<1	JU	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1,1-trichloroethane	<1	JU	<5	U	<5	U	<5	U	1	WA	200	ug/L
	trichloroethylene	<1	JU	<5	U	1.13	J I	1.5	J I	1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP EPA	3Q99	CLP EPA	3Q00	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	aluminum, total recoverable	<200	U	<200	U	<200	U	<322	U	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	769		862								2400	ug/L
	sodium, total recoverable	2100		2000		1810		1780		1	WA	4600	ug/L
	sulfate	1290		873								3000	ug/L
Radionuclides													
	gross alpha	.97	UJ W	.749	J I							15	pCi/L
	nonvolatile beta	.52	U W	.264	U							50	pCi/L
	radium, total alpha-emitting	.15	U W	0	U							5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 42B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 104569.8 E 51582.8	33.34119 Deg N -81.7341 Deg W	166.3 - 160.7 ft msl	376.4 ft msl	4 " PVC	S	LL

SAMPLE DATE	03/22/00	08/29/00	02/27/01	09/06/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	223.26	221.92	220.69	219.04	ft msl
pH	4.9		4.9	5	pH
Sp. Conductance	23		24	23	uS/cm
Water temperature	19.9		21.7	21	deg. C
Alkalinity as CaCO3	0	0	0	0	mg/L
Turbidity	.3		.4	.3	NTU
Volumes purged	2.69	4.20	2.35	2.07	well volume
Sampling code					
Synchronous water level	224 (06/29/00)	221.9 (09/26/00)	232.6 (06/27/01)	219.6 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

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ST	Parameter	1Q00	CLP EPA	3Q00	CLP EPA	1Q01	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	barium, total recoverable												
	cyanide												
	lead, total recoverable												
	nickel, total recoverable												
	selenium, total recoverable												
Organics													
	chlorobenzene	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethane	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethylene	<1	U	<5	U	<5	U	<5	U	1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	U	<5	U	<5	U	<5	U	1	WA	100	ug/L
	pcb 1016												
	pcb 1221												
	pcb 1232												
	pcb 1242												
	pcb 1248												
	pcb 1254												
	pcb 1260												
	1,1,2,2-tetrachloroethane	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
	tetrachloroethylene	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1,1-trichloroethane	<1	U	<5	U	<5	U	<5	U	1	WA	200	ug/L
	trichloroethylene	5.8	J K	3.8	J IK	4.11	J IK	3.71	J I	1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP EPA	3Q99	CLP EPA	3Q00	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	aluminum, total recoverable	<200	U	<200	U	30.5	J I	<62.8	U V	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	1100		950								2400	ug/L
	sodium, total recoverable	2290	V	2160		2640		2370		1	WA	4600	ug/L
	sulfate	<200	U	480								3000	ug/L
Radionuclides													
	gross alpha	1.97		.728	J I							15	pCi/L
	nonvolatile beta	3.88		1.01	J IK							50	pCi/L
	radium, total alpha-emitting	.42	U V	.3	U							5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 42C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 104581.9 E 51582.8	33.34122 Deg N -81.7342 Deg W	204.3 - 198.7 ft msl	376.4 ft msl	4 " PVC	S	UL

SAMPLE DATE	03/22/00	08/29/00	02/27/01	09/05/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	228.54	228.2	226.05	224.6	ft msl
pH	5.1	5.2	5.3	4.8	pH
Sp. Conductance	24	23	23	24	uS/cm
Water temperature	20	21.2	21.6	23.3	deg. C
Alkalinity as CaCO3	1	0	17	0	mg/L
Turbidity	.3	.7	.5	.3	NTU
Volumes purged	4.00	.674	2.41	2.54	well volume
Sampling code					
Synchronous water level	229.5 (06/29/00)	(12/31/00)	225.9 (03/29/01)	224.5 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP EPA	3Q00	CLP EPA	1Q01	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	barium, total recoverable												
	cyanide												
	lead, total recoverable												
	nickel, total recoverable												
	selenium, total recoverable												
Organics													
	chlorobenzene	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethane	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethylene	<1	U	<5	U	<5	U	<5	U	1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	U	<5	U	<5	U	<5	U	1	WA	100	ug/L
	pcb 1016												
	pcb 1221												
	pcb 1232												
	pcb 1242												
	pcb 1248												
	pcb 1254												
	pcb 1260												
	1,1,2,2-tetrachloroethane	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
	tetrachloroethylene	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1,1-trichloroethane	<1	U	<5	U	<5	U	<5	U	1	WA	200	ug/L
	trichloroethylene	3.78	J K	3.1	J IK	2.01	J I	<5	U	1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP EPA	3Q99	CLP EPA	3Q00	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	aluminum, total recoverable	<200	U	109	J I	29.8	J I	<77.4	U V	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	1040		960								2400	ug/L
	sodium, total recoverable	2750		2660		2780		2610		1	WA	4600	ug/L
	sulfate	401		500								3000	ug/L
Radionuclides													
+	gross alpha	1.25	J	***21.8***								15	pCi/L
	nonvolatile beta	2.76		5.82	J K							50	pCi/L
	radium, total alpha-emitting	.52		1.3	J I							5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 42D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 104595.2 E 51582.5	33.34125 Deg N -81.7342 Deg W	247.2 - 226.6 ft msl	376.4 ft msl	4 " PVC	B	M

SAMPLE DATE

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	*Not Applicable*	*Not Applicable*	*Not Applicable*	*Not Applicable*	ft msl
pH					pH
Sp. Conductance					uS/cm
Water temperature					deg. C
Alkalinity as CaCO3					mg/L
Turbidity					NTU
Volumes purged					well volume
Sampling code					
Synchronous water level	230.5 (06/29/00)	228.1 (09/26/00)	227 (03/29/01)	( )	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<1	U													5	ug/L
	1,1-dichloroethane	<1	U													5	ug/L
	1,1-dichloroethylene	<1	U													7	ug/L
	trans-1,2-dichloroethylene	<1	U													100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<1	U													5	ug/L
	tetrachloroethylene	<1	U													5	ug/L
	1,1,1-trichloroethane	<1	U													200	ug/L
	trichloroethylene	4.2														5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable	<200	U		<200	U										100	ug/L
	nitrate-nitrite as nitrogen	780			660											2400	ug/L
	sodium, total recoverable	<1760	U	V	1640											4600	ug/L
	sulfate	<400	U		770											3000	ug/L
Radionuclides																	
	gross alpha	8.19			2.19											15	pCi/L
	nonvolatile beta	18.68			1.53	J	K									50	pCi/L
	radium, total alpha-emitting	2.02		V	1.5	J	I									5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 42TA

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 104545.6 E 51581.7	33.34114 Deg N -81.7341 Deg W	45.8 - 40.5 ft msl	376.6 ft msl	4 " CS	S	CBA

SAMPLE DATE	03/21/00	08/29/00	02/27/01	09/06/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	203.71	202	201.64	198.86	ft msl
pH	5.5	5.4	5.7	5.4	pH
Sp. Conductance	18	18	18	18	uS/cm
Water temperature	19.9	22.4	22.2	21.5	deg. C
Alkalinity as CaCO3	2	4	1	11	mg/L
Turbidity	4.5	5	6.9	1.4	NTU
Volumes purged	2.26	1.63	2.52	2.22	well volume
Sampling code					
Synchronous water level	205 (06/29/00)	201.6 (09/26/00)	206.8 (06/27/01)	199.8 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP EPA	3Q00	CLP EPA	1Q01	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
	Inorganics												
	barium, total recoverable												
	cyanide												
	lead, total recoverable												
	nickel, total recoverable												
	selenium, total recoverable												
	Organics												
	chlorobenzene	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethane	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethylene	<1	U	<5	U	<5	U	<5	U	1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	U	<5	U	<5	U	<5	U	1	WA	100	ug/L
	pcb 1016												
	pcb 1221												
	pcb 1232												
	pcb 1242												
	pcb 1248												
	pcb 1254												
	pcb 1260												
	1,1,2,2-tetrachloroethane	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
+	tetrachloroethylene	***34.7***		35	J K	25.8	J K	***33***		1	WA	5	ug/L
	1,1,1-trichloroethane	<1	U	<5	U	<5	U	<5	U	1	WA	200	ug/L
+	trichloroethylene	***73.5***		49	J K	60.2	J K	***66.2***		1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP EPA	3Q99	CLP EPA	3Q00	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
	Inorganics												
	aluminum, total recoverable	<200	U	<200	U	<200	U	<62.1	U V	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	640		620								2400	ug/L
	sodium, total recoverable	<1720	U V	1590		1700		1570		1	WA	4600	ug/L
	sulfate	<400	U	360								3000	ug/L
	Radionuclides												
+	gross alpha	1.39		***19.6***								15	pCi/L
	nonvolatile beta	7.24		4.39	J K							50	pCi/L
+	radium, total alpha-emitting	.37	U V	***6.7***								5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 43TA

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 107275.7 E 49281.8	33.34342 Deg N -81.7455 Deg W	40.3 - 35 ft msl	357.5 ft msl	4 " CS	S	CBA

SAMPLE DATE	02/04/00	09/10/00	03/06/01	08/29/01	
FIELD DATA					
Parameter	**1Q00**	**3Q00**	**1Q01**	**3Q01**	**Unit**
Water Elevation	202.21	200.09	199.75	197.14	ft msl
pH	4.9	5.1	5.4	4.9	pH
Sp. Conductance	16	16	17	16	uS/cm
Water temperature	19.2	21.7	17.8	21.7	deg. C
Alkalinity as CaCO3	3	0	3	0	mg/L
Turbidity	5.7	1.8	13.1	3.4	NTU
Volumes purged	3.17	2.69	2.14	2.33	well volume
Sampling code					
Synchronous water level	201.5 (03/23/00)	199.8 (09/27/00)	199.1 (06/27/01)	198.1 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<1	JU		<5	JU	L	<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethane	<1	JU		<5	JU	L	<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<1	JU		<5	JU	L	<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	JU		<5	JU	L	<5	U		<5	U		1	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<1	JU		<5	JU	L	<5	U		<5	U		1	WA	5	ug/L
	tetrachloroethylene	<1	JU		<5	JU	L	<5	U		<5	U		1	WA	5	ug/L
	1,1,1-trichloroethane	<1	JU		<5	JU	L	<5	U		<5	U		1	WA	200	ug/L
	trichloroethylene	<1	JU		<5	JU	L	<5	U		<5	U		1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable	<200	U		<200	U		74.2	J	I	52.6	J	I	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	106	J	I	103	J	I									2400	ug/L
	sodium, total recoverable	1610			1500			1590			1430			1	WA	4600	ug/L
	sulfate	758			839											3000	ug/L
Radionuclides																	
	gross alpha	.24	UJ	W	.366	U										15	pCi/L
	nonvolatile beta	-.32	U	W	.671	U										50	pCi/L
	radium, total alpha-emitting	.02	U	W	-.2	U										5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 45A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 103998.1 E 50554.7	33.33825 Deg N -81.7357 Deg W	139.2 - 129.2 ft msl	380.8 ft msl	4 " PVC	S	LL

SAMPLE DATE	03/13/00	08/31/00	02/21/01	08/29/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	216.33	211.89	211.58	209.43	ft msl
pH	7.4	5.7	9.7	6.2	pH
Sp. Conductance	47	32	85	49	uS/cm
Water temperature	18.2	20	20.7	21.2	deg. C
Alkalinity as CaCO3	13	3	34	32	mg/L
Turbidity	1.1	1.2	.5	.3	NTU
Volumes purged	2.30	2.11	.111	2.35	well volume
Sampling code					
Synchronous water level	216.2 (03/23/00)	212.2 (09/23/00)	210.5 (03/20/01)	210 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<5	JU		<5	U		<5	U		<25	U		5	WA	5	ug/L
	1,1-dichloroethane	<5	JU		<5	U		<5	U		<25	U		5	WA	5	ug/L
	1,1-dichloroethylene	<5	JU		<5	U		<5	U		<25	U		5	WA	7	ug/L
	trans-1,2-dichloroethylene	<5	JU		<5	U		<5	U		<25	U		5	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<5	JU		<5	U		<5	U		<25	U		5	WA	5	ug/L
+	tetrachloroethylene	100	J		100	J	K	***63.2***			***116***			5	WA	5	ug/L
	1,1,1-trichloroethane	<5	JU		<5	U		<5	U		<25	U		5	WA	200	ug/L
+	trichloroethylene	776	J		540	J	K	***732***			***641***			5	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable	<200	U		<200	U		46.4	J	I	80.3	J	I	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	993			962											2400	ug/L
	sodium, total recoverable	2580			2600			2710			2710			1	WA	4600	ug/L
	sulfate	582			372	J	I									3000	ug/L
Radionuclides																	
	gross alpha	2.58			.96	U	V									15	pCi/L
	nonvolatile beta	3.86	J		1.47	J	I									50	pCi/L
	radium, total alpha-emitting	.55			.1	U										5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 45B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 103987.9 E 50555.3	33.33823 Deg N -81.7357 Deg W	190 - 180 ft msl	380.9 ft msl	4 " PVC	S	UL

SAMPLE DATE	02/04/00	09/07/00	03/08/01	08/29/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	224.48	221.39	219.99	218.42	ft msl
pH	5.5	5.6	5.4	5.2	pH
Sp. Conductance	40	40	40	40	uS/cm
Water temperature	18.2	21.2	19.7	21.3	deg. C
Alkalinity as CaCO3	4	3	1	6	mg/L
Turbidity	.6	.5	.5	.9	NTU
Volumes purged	2.82	2.48	2.15	3.07	well volume
Sampling code					
Synchronous water level	223 (03/23/00)	221.4 (09/23/00)	219.6 (03/20/01)	219.5 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP EPA	3Q00	CLP EPA	1Q01	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	barium, total recoverable												
	cyanide												
	lead, total recoverable												
	nickel, total recoverable												
	selenium, total recoverable												
Organics													
	chlorobenzene	<1	JU L	<5	JU	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethane	<1	JU L	<5	JU	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethylene	<1	JU L	<5	JU	<5	U	<5	U	1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	JU L	<5	JU	<5	U	<5	U	1	WA	100	ug/L
	pcb 1016												
	pcb 1221												
	pcb 1232												
	pcb 1242												
	pcb 1248												
	pcb 1254												
	pcb 1260												
	1,1,2,2-tetrachloroethane	<1	JU L	<5	JU	<5	U	<5	U	1	WA	5	ug/L
	tetrachloroethylene	<1	JU L	<5	JU	<5	U	<5	U	1	WA	5	ug/L
	1,1,1-trichloroethane	<1	JU L	<5	JU	<5	U	<5	U	1	WA	200	ug/L
	trichloroethylene	<1	JU L	<5	JU	<5	U	<5	U	1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP EPA	3Q99	CLP EPA	3Q00	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	aluminum, total recoverable	<200	U	<200	U	54.1	J I	34.8	J I	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	595		255	J I							2400	ug/L
+	sodium, total recoverable	***7480***		***8100***		***8980***		***7430***		1	WA	4600	ug/L
+	sulfate	***4720***		***5640***								3000	ug/L
Radionuclides													
	gross alpha	.43	UJ W	.635	U							15	pCi/L
	nonvolatile beta	.21	UJ W	.774	U							50	pCi/L
	radium, total alpha-emitting	.22	U W	.2	U							5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 46A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 103098.6 E 50548.3	33.33625 Deg N -81.7340 Deg W	130 - 120 ft msl	372.6 ft msl	4 " PVC	S	MCBC

SAMPLE DATE	02/04/00	08/28/00	03/06/01	08/22/01	
FIELD DATA					
Parameter	**1Q00**	**3Q00**	**1Q01**	**3Q01**	**Unit**
Water Elevation	214.15	212.39	211.3	194.68	ft msl
pH	8.1	8.2	6.1	7.6	pH
Sp. Conductance	150	165	160	177	uS/cm
Water temperature	11.2	24.9	10.3	30.6	deg. C
Alkalinity as CaCO3	53	66	97	66	mg/L
Turbidity	1.1	1.2	.8	5.3	NTU
Volumes purged	.016	.017	2.13	.020	well volume
Sampling code	NX	NX		X	
Synchronous water level	214.2 (03/23/00)	212.1 (09/23/00)	210.5 (03/20/01)	209.5 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP EPA	3Q00	CLP EPA	1Q01	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	barium, total recoverable												
	cyanide												
	lead, total recoverable												
	nickel, total recoverable												
	selenium, total recoverable												
Organics													
	chlorobenzene	<1	JU	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethane	<1	JU	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethylene	<1	JU	<5	U	<5	U	<5	U	1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	JU	<5	U	<5	U	<5	U	1	WA	100	ug/L
	pcb 1016												
	pcb 1221												
	pcb 1232												
	pcb 1242												
	pcb 1248												
	pcb 1254												
	pcb 1260												
	1,1,2,2-tetrachloroethane	<1	JU	<5	U	<5	U	<5	U	1	WA	5	ug/L
	tetrachloroethylene	<1	JU	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1,1-trichloroethane	<1	JU	<5	U	<5	U	<5	U	1	WA	200	ug/L
	trichloroethylene	<1	JU	<5	U	<5	U	<5	U	1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP EPA	3Q99	CLP EPA	3Q00	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	aluminum, total recoverable	<200	U	<200	U	<200	U	<49.9	U V	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	365	J I	<100	U							2400	ug/L
+	sodium, total recoverable	***5030***		***5000***		4590		***5220***		1	WA	4600	ug/L
+	sulfate	***8040***		***10900***								3000	ug/L
Radionuclides													
	gross alpha	-.36	UJ W	.555	U							15	pCi/L
	nonvolatile beta	4.24	J	5.56								50	pCi/L
	radium, total alpha-emitting	.14	U W	0	U							5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 46C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 103098.5 E 50548.7	33.33625 Deg N -81.7340 Deg W	247 - 237 ft msl	372.6 ft msl	2 " PVC	B	M

SAMPLE DATE

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	*Not Applicable*	*Not Applicable*	*Not Applicable*	*Not Applicable*	ft msl
pH					pH
Sp. Conductance					uS/cm
Water temperature					deg. C
Alkalinity as CaCO3					mg/L
Turbidity					NTU
Volumes purged					well volume
Sampling code					
Synchronous water level	( )	362.7 (12/29/00)	( )	( )	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP EPA	3Q00	CLP EPA	1Q01	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
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												

II. Monitoring Constituents

ST	Parameter	3Q98	CLP EPA	3Q99	CLP EPA	3Q00	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
+	aluminum, total recoverable	***936***										100	ug/L
+	nitrate-nitrite as nitrogen	***2790***										2400	ug/L
	sodium, total recoverable	2140										4600	ug/L
	sulfate	576										3000	ug/L
Radionuclides													
	gross alpha	12.1										15	pCi/L
	nonvolatile beta	20.57										50	pCi/L
	radium, total alpha-emitting	1.82										5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 47B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 106978.5 E 52207.2	33.34754 Deg N -81.7372 Deg W	171.5 - 165.9 ft msl	368.7 ft msl	4 " PVC	S	LL

SAMPLE DATE	02/25/00	09/18/00	02/27/01	08/23/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	223.1	221.52	220.3	219.14	ft msl
pH	6.2	5.5	5.3	5.9	pH
Sp. Conductance	64	65	60	62	uS/cm
Water temperature	19	19.1	18.3	21	deg. C
Alkalinity as CaCO3	4	4	1	7	mg/L
Turbidity	.1	.6	1	6.5	NTU
Volumes purged	2.51	2.56	3.26	2.33	well volume
Sampling code					
Synchronous water level	223.1 (03/20/00)	221.4 (09/24/00)	220.2 (03/30/01)	218.9 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<5	U		<50	U		<50	U		<5	UJ	L	1	WA	5	ug/L
	1,1-dichloroethane	<5	U		<50	U		<50	U		<5	UJ	L	1	WA	5	ug/L
	1,1-dichloroethylene	<5	U		<50	U		<50	U		<5	UJ	L	1	WA	7	ug/L
	trans-1,2-dichloroethylene	<5	U		<50	U		<50	U		<5	UJ	L	1	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<5	U		<50	U		<50	U		<5	UJ	L	1	WA	5	ug/L
	tetrachloroethylene	<5	U		<50	U		<50	U		1.03	J	IL	1	WA	5	ug/L
	1,1,1-trichloroethane	<5	U		<50	U		<50	U		<5	UJ	L	1	WA	200	ug/L
+	trichloroethylene	***1180***			820	J	K	865	J	K	739	J	L	1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable	<200	U		<200	U		<80.7	U	V	<100	U	V	1	WA	100	ug/L
+	nitrate-nitrite as nitrogen	***3580***			***3510***											2400	ug/L
+	sodium, total recoverable	***6370***		V	***6800***			***6820***			***5460***			1	WA	4600	ug/L
	sulfate	356	J	I	183	J	I	796			337			1	WA	3000	ug/L
Radionuclides																	
	gross alpha	7.98			4.07											15	pCi/L
	nonvolatile beta	10.24			5.62											50	pCi/L
	radium, total alpha-emitting	1.57		V	2.2											5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 47C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 106969.2 E 52195.5	33.34750 Deg N -81.7372 Deg W	202.6 - 197 ft msl	369 ft msl	4 " PVC	S	UL

SAMPLE DATE	02/25/00	09/18/00	02/27/01	08/28/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	230.66	229.12	227.95	226.72	ft msl
pH	6.9	6.7	6.5	6.5	pH
Sp. Conductance	75	69	64	71	uS/cm
Water temperature	18.7	19.4	18.4	19.4	deg. C
Alkalinity as CaCO3	7	35	16	205	mg/L
Turbidity	.7	.6	.8	.6	NTU
Volumes purged	2.77	2.19	4.30	2.47	well volume
Sampling code					
Synchronous water level	230.7 (03/20/00)	229.2 (09/24/00)	228 (03/30/01)	226.6 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
	Inorganics																
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
	Organics																
	chlorobenzene	<10	U		<100	U		<125	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethane	<10	U		<100	U		<125	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<10	U		<100	U		<125	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene	<10	U		<100	U		<125	U		<5	U		1	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<10	U		<100	U		<125	U		<5	U		1	WA	5	ug/L
+	tetrachloroethylene	***15***			<100	U		<125	U		***6.89***			1	WA	5	ug/L
	1,1,1-trichloroethane	<10	U		<100	U		<125	U		<5	U		1	WA	200	ug/L
+	trichloroethylene	***2730***			2300	J	K	2450	J	K	***1600***		L	1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
	Inorganics																
+	aluminum, total recoverable	<200	U		98	J	I	***540***			<322	U		1	WA	100	ug/L
	nitrate-nitrite as nitrogen	1500			1440											2400	ug/L
+	sodium, total recoverable	4430		V	***5100***			***9930***			4360			1	WA	4600	ug/L
	sulfate	510			323	J	I	1260			573			1	WA	3000	ug/L
	Radionuclides																
	gross alpha	1.3			1.13	J	I									15	pCi/L
	nonvolatile beta	1.67			.739	U										50	pCi/L
	radium, total alpha-emitting	.6	U	V	.2	U										5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 47D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 106960.1 E 52184	33.34746 Deg N -81.7372 Deg W	246.1 - 226.5 ft msl	368.8 ft msl	4 " PVC	S	M

SAMPLE DATE	03/08/00	09/10/00	03/08/01	08/29/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	231.78	230.34	*Not Applicable*	229.61	ft msl
pH	6	5.2	6	5.6	pH
Sp. Conductance	84	55	57	52	uS/cm
Water temperature	20.5	20.8	19.7	22.7	deg. C
Alkalinity as CaCO3	12	0	11	14	mg/L
Turbidity	8.5	1.6	1.5	10	NTU
Volumes purged	12.6	14.7		3.14	well volume
Sampling code					
Synchronous water level	231.9 (03/20/00)	230.3 (09/24/00)	229.2 (03/30/01)	229.7 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<.61	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethane	<1	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<1	U		<5	U		<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	U		<5	U		<5	U		<5	U		1	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<1	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	tetrachloroethylene	<1	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1,1-trichloroethane	<1	U		<5	U		<5	U		<5	U		1	WA	200	ug/L
+	trichloroethylene	.85	J	IK	3.3	J	I	***5.25***			1.97	J	I	1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
+	aluminum, total recoverable	<200	U					***464***			71.7	J	I	1	WA	100	ug/L
+	nitrate-nitrite as nitrogen	***3070***														2400	ug/L
+	sodium, total recoverable	***5830***		V				***6530***			4220			1	WA	4600	ug/L
	sulfate	346	J	I				849			460			1	WA	3000	ug/L
Radionuclides																	
+	gross alpha	***18.46***														15	pCi/L
	nonvolatile beta	12.25														50	pCi/L
+	radium, total alpha-emitting	***8.38***														5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 47TA

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 106987.7 E 52219	33.34758 Deg N -81.7372 Deg W	55.1 - 50.1 ft msl	368.7 ft msl	4 " CS	S	CBA

SAMPLE DATE	02/25/00	09/18/00	02/27/01	08/28/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	214.98	212.92	212.25	210.78	ft msl
pH	6.2	5.8	6	5.9	pH
Sp. Conductance	28	27	23	26	uS/cm
Water temperature	20.1	19.7	19.6	21.4	deg. C
Alkalinity as CaCO3	6	8	7	49	mg/L
Turbidity	240	236	43	65.1	NTU
Volumes purged	2.67	4.34	6.21	3.56	well volume
Sampling code		T		T	
Synchronous water level	214.7 (03/20/00)	212.9 (09/24/00)	211.6 (03/30/01)	210.6 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

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ST	Parameter	1Q00	CLP EPA	3Q00	CLP EPA	1Q01	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
	Inorganics												
	barium, total recoverable												
	cyanide												
	lead, total recoverable												
	nickel, total recoverable												
	selenium, total recoverable												
	Organics												
	chlorobenzene	<2	U	<25	U	<25	U	<25	U	5	WA	5	ug/L
	1,1-dichloroethane	<2	U	<25	U	<25	U	<25	U	5	WA	5	ug/L
	1,1-dichloroethylene	<2	U	<25	U	<25	U	<25	U	5	WA	7	ug/L
	trans-1,2-dichloroethylene	<2	U	<25	U	<25	U	<25	U	5	WA	100	ug/L
	pcb 1016												
	pcb 1221												
	pcb 1232												
	pcb 1242												
	pcb 1248												
	pcb 1254												
	pcb 1260												
	1,1,2,2-tetrachloroethane	<2	U	<25	U	<25	U	<25	U	5	WA	5	ug/L
	tetrachloroethylene	1.42	J I	<25	U	<25	U	<25	U	5	WA	5	ug/L
	1,1,1-trichloroethane	<2	U	<25	U	<25	U	<25	U	5	WA	200	ug/L
+	trichloroethylene	***589***		520	J K	605	J K	***462***		5	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP EPA	3Q99	CLP EPA	3Q00	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
	Inorganics												
	aluminum, total recoverable			<200	U	<35.8	U V	<322	U	1	WA	100	ug/L
	nitrate-nitrite as nitrogen			1170								2400	ug/L
	sodium, total recoverable			2100		2380		1960		1	WA	4600	ug/L
	sulfate			1050		801		316	J I	1	WA	3000	ug/L
	Radionuclides												
	gross alpha			1.89	J IK							15	pCi/L
	nonvolatile beta			1.5	U							50	pCi/L
	radium, total alpha-emitting			.7	J I							5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 48A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 107936.6 E 54099.8	33.35275 Deg N -81.7341 Deg W	129.4 - 124.7 ft msl	361.6 ft msl	4 " PVC	S	MCBC

SAMPLE DATE	01/31/00	09/11/00	03/06/01	08/24/01	
FIELD DATA					
Parameter	**1Q00**	**3Q00**	**1Q01**	**3Q01**	**Unit**
Water Elevation	221.19	219.4	218.41	216.93	ft msl
pH	5.4	5.7	5.7	5.5	pH
Sp. Conductance	22	24	23	23	uS/cm
Water temperature	18	19.1	18.7	19.6	deg. C
Alkalinity as CaCO3	2	4	7	11	mg/L
Turbidity	3.7	1.9	1	2	NTU
Volumes purged	2.63	2.40	2.28	3.11	well volume
Sampling code					
Synchronous water level	221.1 (03/20/00)	(12/29/00)	218.1 (03/20/01)	216.9 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP EPA	3Q00	CLP EPA	1Q01	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	barium, total recoverable												
	cyanide												
	lead, total recoverable												
	nickel, total recoverable												
	selenium, total recoverable												
Organics													
	chlorobenzene	<1	JU L	<5	JU	<5	U	<5	UJ L	1	WA	5	ug/L
	1,1-dichloroethane	<1	JU L	<5	JU	<5	U	<5	UJ L	1	WA	5	ug/L
	1,1-dichloroethylene	<1	JU L	<5	JU	<5	U	<5	UJ L	1	WA	7	ug/L
	trans-1,2-dichloroethylene			<5	JU	<5	U	<5	UJ L	1	WA	100	ug/L
	pcb 1016												
	pcb 1221												
	pcb 1232												
	pcb 1242												
	pcb 1248												
	pcb 1254												
	pcb 1260												
	1,1,2,2-tetrachloroethane	<1	JU L	<5	JU	<5	U	<5	UJ L	1	WA	5	ug/L
	tetrachloroethylene	<1	JU L	<5	JU	<5	U	<5	UJ L	1	WA	5	ug/L
	1,1,1-trichloroethane	<1	JU L	<5	JU	<5	U	<5	UJ L	1	WA	200	ug/L
	trichloroethylene	<1	JU L	<5	JU	<5	U	<5	UJ L	1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP EPA	3Q99	CLP EPA	3Q00	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
+	aluminum, total recoverable	***243***		<200	U	33.7	J I	<53.9	U V	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	1480		1470								2400	ug/L
	sodium, total recoverable	1690		1600		1990		1510		1	WA	4600	ug/L
+	sulfate	<200	U	***8110***		742		237	J I	1	WA	3000	ug/L
Radionuclides													
	gross alpha	1.4	J	.352	U							15	pCi/L
	nonvolatile beta			1.57	J I							50	pCi/L
	radium, total alpha-emitting	.54		3.2								5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 48B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 107945 E 54112.2	33.35279 Deg N -81.7340 Deg W	158.3 - 153.6 ft msl	361.4 ft msl	4 " PVC	S	LL

SAMPLE DATE	02/17/00	09/18/00	02/28/01	08/22/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	222.48	220.8	219.95	219.29	ft msl
pH	5.6	5.3	5.8	5.7	pH
Sp. Conductance	33	36	32	31	uS/cm
Water temperature	18.3	18.8	18.4	19.9	deg. C
Alkalinity as CaCO3	1	6	1	8	mg/L
Turbidity	.6	.5	.4	.7	NTU
Volumes purged	2.57	3.41	3.62	2.21	well volume
Sampling code					
Synchronous water level	222.5 (03/20/00)	220.9 (09/24/00)	219.6 (03/20/01)	218.3 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

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ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<1	JU	L	<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethane	<1	JU	L	<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<1	JU	L	<5	U		<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	JU	L	<5	U		<5	U		<5	U		1	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<1	JU	L	<5	U		<5	U		<5	U		1	WA	5	ug/L
	tetrachloroethylene	<1	JU	L	<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1,1-trichloroethane	<1	JU	L	<5	U		<5	U		<5	U		1	WA	200	ug/L
	trichloroethylene	10.8	J		5.5	J	K	4.72	J	IK	4.32	J	I	1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable	<200	U		<200	U		<35.8	U	V	<55.7	U	V	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	339	J	I	2180											2400	ug/L
	sodium, total recoverable	2040			2000			2130			1770			1	WA	4600	ug/L
	sulfate	331	J	I	<400	U		748			363			1	WA	3000	ug/L
Radionuclides																	
	gross alpha	2.57			1.67	J	I									15	pCi/L
	nonvolatile beta	4.11	J		2.08	J	I									50	pCi/L
	radium, total alpha-emitting	.7			.3	U										5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 48C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 107917.5 E 54077	33.35267 Deg N -81.7341 Deg W	180.2 - 175.4 ft msl	362.3 ft msl	4 " PVC	S	UL

SAMPLE DATE	01/31/00	09/11/00	03/06/01	08/25/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	223.2	221.45	220.29	218.84	ft msl
pH	5.4	6	6.1	5.9	pH
Sp. Conductance	31	32	32	31	uS/cm
Water temperature	18.1	19.6	19.1	20.1	deg. C
Alkalinity as CaCO3	5	5	9	2	mg/L
Turbidity	.5	1.7	.3	.9	NTU
Volumes purged	2.88	2.73	2.25	2.40	well volume
Sampling code					
Synchronous water level	223 (03/20/00)	221.4 (09/24/00)	220.1 (03/20/01)	218.9 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

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ST	Parameter	1Q00	CLP EPA	3Q00	CLP EPA	1Q01	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	barium, total recoverable												
	cyanide												
	lead, total recoverable												
	nickel, total recoverable												
	selenium, total recoverable												
Organics													
	chlorobenzene	<1	JU L	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethane	<1	JU L	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethylene	<1	JU L	<5	U	<5	U	<5	U	1	WA	7	ug/L
	trans-1,2-dichloroethylene			<5	U	<5	U	<5	U	1	WA	100	ug/L
	pcb 1016												
	pcb 1221												
	pcb 1232												
	pcb 1242												
	pcb 1248												
	pcb 1254												
	pcb 1260												
	1,1,2,2-tetrachloroethane	<1	JU L	<5	U	<5	U	<5	U	1	WA	5	ug/L
	tetrachloroethylene	<1	JU L	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1,1-trichloroethane	<1	JU L	<5	U	<5	U	<5	U	1	WA	200	ug/L
	trichloroethylene	<1	JU L	<5	U	<5	U	<5	U	1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP EPA	3Q99	CLP EPA	3Q00	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	aluminum, total recoverable	74	J I	<200	U	<200	U	<322	U V	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	1370		1510								2400	ug/L
	sodium, total recoverable	2310		2200		2400		1940		1	WA	4600	ug/L
	sulfate	<200	U	423		912		501		1	WA	3000	ug/L
Radionuclides													
	gross alpha	1.35	UJ W	.576	U							15	pCi/L
	nonvolatile beta			2.35	J I							50	pCi/L
	radium, total alpha-emitting	.58		.6	J I							5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 48D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 107914.4 E 54056.3	33.35263 Deg N -81.7341 Deg W	243.5 - 222 ft msl	362.6 ft msl	4 " PVC	S	M

SAMPLE DATE	02/17/00		03/31/01	09/08/01	
FIELD DATA					
Parameter	**1Q00**	**3Q00**	**1Q01**	**3Q01**	**Unit**
Water Elevation	231.3	*Not Applicable*	*Not Applicable*	227.38	ft msl
pH	10.3		10	10.8	pH
Sp. Conductance	336		171	417	uS/cm
Water temperature	17.4		17.5	21.6	deg. C
Alkalinity as CaCO3	188		23	147	mg/L
Turbidity	609		137	170	NTU
Volumes purged	2.01				well volume
Sampling code				X	
Synchronous water level	231.4 (03/20/00)	229.8 (09/24/00)	228.4 (03/20/01)	( )	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

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ST	Parameter	1Q00	CLP EPA	3Q00	CLP EPA	1Q01	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	barium, total recoverable												
	cyanide												
	lead, total recoverable												
	nickel, total recoverable												
	selenium, total recoverable												
Organics													
	chlorobenzene	<1	JU L	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethane	<1	JU L	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethylene	<1	JU L	<5	U	<5	U	<5	U	1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	JU L	<5	U	<5	U	<5	U	1	WA	100	ug/L
	pcb 1016												
	pcb 1221												
	pcb 1232												
	pcb 1242												
	pcb 1248												
	pcb 1254												
	pcb 1260												
	1,1,2,2-tetrachloroethane	<1	JU L	<5	U	<5	U	<5	U	1	WA	5	ug/L
	tetrachloroethylene	<1	JU L	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1,1-trichloroethane	<1	JU L	<5	U	<5	U	<5	U	1	WA	200	ug/L
	trichloroethylene	<1	JU L	<5	U	<5	U	<5	U	1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP EPA	3Q99	CLP EPA	3Q00	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
+	aluminum, total recoverable					***3640***		***9690***		1	WA	100	ug/L
	nitrate-nitrite as nitrogen												
	sodium, total recoverable					3010		4460		1	WA	4600	ug/L
+	sulfate					***5110***		***3510***		1	WA	3000	ug/L
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. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 48TA

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 107925.8 E 54089.2	33.35271 Deg N -81.7341 Deg W	107.8 - 102.5 ft msl	361.9 ft msl	4 " CS	S	CBA

SAMPLE DATE	01/31/00	09/13/00	03/06/01	08/24/01	
FIELD DATA					
Parameter	**1Q00**	**3Q00**	**1Q01**	**3Q01**	**Unit**
Water Elevation	221.21	219.37	218.13	216.85	ft msl
pH	6	6	6	5.7	pH
Sp. Conductance	27	28	28	28	uS/cm
Water temperature	18.2	19.7	19.8	19.5	deg. C
Alkalinity as CaCO3	6	1	7	12	mg/L
Turbidity	2.9	9.1	9.8	3.1	NTU
Volumes purged	2.44	3.06	2.30	2.24	well volume
Sampling code					
Synchronous water level	221 (03/20/00)	219.3 (09/24/00)	218 (03/20/01)	216.8 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

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ST	Parameter	1Q00	CLP EPA	3Q00	CLP EPA	1Q01	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	barium, total recoverable												
	cyanide												
	lead, total recoverable												
	nickel, total recoverable												
	selenium, total recoverable												
Organics													
	chlorobenzene	<1	JU L	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethane	<1	JU L	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethylene	<1	JU L	<5	U	<5	U	<5	U	1	WA	7	ug/L
	trans-1,2-dichloroethylene			<5	U	<5	U	<5	U	1	WA	100	ug/L
	pcb 1016												
	pcb 1221												
	pcb 1232												
	pcb 1242												
	pcb 1248												
	pcb 1254												
	pcb 1260												
	1,1,2,2-tetrachloroethane	<1	JU L	<5	U	<5	U	<5	U	1	WA	5	ug/L
	tetrachloroethylene	<1	JU L	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1,1-trichloroethane	<1	JU L	<5	U	<5	U	<5	U	1	WA	200	ug/L
	trichloroethylene	<1	JU L	<5	U	<5	U	<5	U	1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP EPA	3Q99	CLP EPA	3Q00	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	aluminum, total recoverable	130	J I	<200	U	<200	U	<69.5	U V	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	1160		1230								2400	ug/L
	sodium, total recoverable	1700		1700		1570		1550		1	WA	4600	ug/L
	sulfate	<200	U	331		863		445		1	WA	3000	ug/L
Radionuclides													
	gross alpha	.87	UJ W	.427	U							15	pCi/L
	nonvolatile beta			1.37	U							50	pCi/L
	radium, total alpha-emitting	.78		.2	U							5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 49A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 99759 E 45864.6	33.32122 Deg N -81.7398 Deg W	76.7 - 72 ft msl	334.7 ft msl	4 " PVC	S	MCBC

SAMPLE DATE	03/18/00	08/23/00	02/14/01	08/17/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	196.33	194.85	194.2	192.98	ft msl
pH	7.2	6.1	6.2	6	pH
Sp. Conductance	79	43	40	44	uS/cm
Water temperature	17.6	20.8	18.4	21.5	deg. C
Alkalinity as CaCO3	26	9	5	1	mg/L
Turbidity	1.2	2.5	1.1	.9	NTU
Volumes purged	2.38	2.39	2.51	2.35	well volume
Sampling code					
Synchronous water level	196.5 (03/21/00)	194.9 (09/23/00)	194.1 (03/29/01)	192.9 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<1	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethane	<1	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<1	U		<5	U		<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	U		<5	U		<5	U		<5	U		1	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<1	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	tetrachloroethylene	<1	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1,1-trichloroethane	<1	U		<5	U		<5	U		<5	U		1	WA	200	ug/L
+	trichloroethylene	***10.8***			***12***			***14.3***			***12.9***			1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
+	aluminum, total recoverable	40.3	J	I	<200	U		<45.1	U	V	***891***			1	WA	100	ug/L
	nitrate-nitrite as nitrogen	882			544											2400	ug/L
	sodium, total recoverable	1880		V	1800			1900			1680			1	WA	4600	ug/L
+	sulfate	***3310***			***3040***											3000	ug/L
Radionuclides																	
	gross alpha	2.55			1.74	U	V									15	pCi/L
+	nonvolatile beta	***107***			1.41	J	I									50	pCi/L
	radium, total alpha-emitting	.9			.8	J	I									5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 49B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 99737.8 E 45868.2	33.32118 Deg N -81.7398 Deg W	116.3 - 110.7 ft msl	334.1 ft msl	4 " PVC	S	LL

SAMPLE DATE	03/18/00	08/23/00	03/13/01	09/14/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	202.32	200.8	199.93	198.55	ft msl
pH	6.4	7	6.7	6	pH
Sp. Conductance	72	86	83	76	uS/cm
Water temperature	17.6	21.3	20	20.8	deg. C
Alkalinity as CaCO3	9	13	50	10	mg/L
Turbidity	.3	2	1.7	.8	NTU
Volumes purged	3.08	4.28	2.14	2.01	well volume
Sampling code					
Synchronous water level	202.5 (03/21/00)	200.8 (09/23/00)	199.6 (03/29/01)	198.8 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP EPA	3Q00	CLP EPA	1Q01	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	barium, total recoverable												
	cyanide												
	lead, total recoverable												
	nickel, total recoverable												
	selenium, total recoverable												
Organics													
	chlorobenzene	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethane	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethylene	<1	U	<5	U	<5	U	<5	U	1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	U	<5	U	<5	U	<5	U	1	WA	100	ug/L
	pcb 1016												
	pcb 1221												
	pcb 1232												
	pcb 1242												
	pcb 1248												
	pcb 1254												
	pcb 1260												
	1,1,2,2-tetrachloroethane	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
+	tetrachloroethylene	***70***		***38***		***39.4***		***64.1***		1	WA	5	ug/L
	1,1,1-trichloroethane	<1	U	<5	U	<5	U	<5	U	1	WA	200	ug/L
+	trichloroethylene	***146***		***100***		***98.1***		***115***		1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP EPA	3Q99	CLP EPA	3Q00	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	aluminum, total recoverable	<200	U	<200	U	<200	U	42.9	J I	1	WA	100	ug/L
+	nitrate-nitrite as nitrogen	***4480***		***4460***		***5370***		***6130***		10	WA	2400	ug/L
+	sodium, total recoverable	***4690***		***4800***		***5070***		***5060***		1	WA	4600	ug/L
	sulfate	554		571								3000	ug/L
Radionuclides													
	gross alpha	3.98		2.79								15	pCi/L
	nonvolatile beta	5.85		4.1								50	pCi/L
	radium, total alpha-emitting	1.34		.8	J I							5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 49D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 99724.9 E 45856.4	33.32113 Deg N -81.7398 Deg W	236.4 - 216.7 ft msl	334.3 ft msl	4 " PVC	S	M

SAMPLE DATE	02/14/00	09/11/00	03/12/01	08/29/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	227.94	225.78	224.35	218.5	ft msl
pH	4.8	5.3	7.9	5.9	pH
Sp. Conductance	21	20	33	29	uS/cm
Water temperature	19.1	22.9	17.8	21.9	deg. C
Alkalinity as CaCO3	0	3	4	14	mg/L
Turbidity	1.2	1.5	3.9	2.7	NTU
Volumes purged	.137	.170	1.82	4.48	well volume
Sampling code	NX	NX			
Synchronous water level	228.1 (03/21/00)	225.7 (09/23/00)	224.5 (03/29/01)	223.4 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<1	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethane	<1	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<1	U		<5	U		<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	U		<5	U		<5	U		<5	U		1	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<1	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	tetrachloroethylene	<1	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1,1-trichloroethane	<1	U		<5	U		<5	U		<5	U		1	WA	200	ug/L
	trichloroethylene	<1	U		<5	U		<5	U		<5	U		1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable	<200	U		<200	U		44.9	J	I	117	J	I	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	716			838			764			345			1	WA	2400	ug/L
	sodium, total recoverable	2340		V	1700			<1600	U	V	1440			1	WA	4600	ug/L
	sulfate	354	J	I	192	J	I									3000	ug/L
Radionuclides																	
	gross alpha	8.06			3.55											15	pCi/L
	nonvolatile beta	5.88			2.54											50	pCi/L
	radium, total alpha-emitting	1.18			1.6											5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 51B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 96992.7 E 52818	33.32646 Deg N -81.7162 Deg W	160 - 154.4 ft msl	263.2 ft msl	4 " PVC	S	LL

SAMPLE DATE	02/14/00	09/21/00	03/12/01	08/30/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	204.55	203.53	203.3	202.34	ft msl
pH	5.7	6.3	10.6	6.2	pH
Sp. Conductance	25	37	138	30	uS/cm
Water temperature	18	19.3	17.3	19	deg. C
Alkalinity as CaCO3	5	14	63	13	mg/L
Turbidity	.4	.7	2.7	.6	NTU
Volumes purged	2.89	2.36	2.09	2.49	well volume
Sampling code					
Synchronous water level	204.4 (03/23/00)	203.6 (09/23/00)	203.4 (03/30/01)	202.3 (09/24/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP EPA	3Q00	CLP EPA	1Q01	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	barium, total recoverable												
	cyanide												
	lead, total recoverable												
	nickel, total recoverable												
	selenium, total recoverable												
Organics													
	chlorobenzene	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethane	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethylene	<1	U	<5	U	<5	U	<5	U	1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	U	<5	U	<5	U	<5	U	1	WA	100	ug/L
	pcb 1016												
	pcb 1221												
	pcb 1232												
	pcb 1242												
	pcb 1248												
	pcb 1254												
	pcb 1260												
	1,1,2,2-tetrachloroethane	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
	tetrachloroethylene	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1,1-trichloroethane	<1	U	<5	U	<5	U	<5	U	1	WA	200	ug/L
	trichloroethylene	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP EPA	3Q99	CLP EPA	3Q00	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	aluminum, total recoverable	<200	U	<200	U	<200	U	56.9	J I	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	<200	U	270	J I							2400	ug/L
	sodium, total recoverable	1100		1500		1730		1560		1	WA	4600	ug/L
	sulfate	<400	U	334								3000	ug/L
Radionuclides													
	gross alpha	2.93		.742	U							15	pCi/L
	nonvolatile beta	6.94	J	2.71								50	pCi/L
	radium, total alpha-emitting	.51		.2	U							5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 52B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 103077.7 E 53418.4	33.34089 Deg N -81.7264 Deg W	171.4 - 165.8 ft msl	321.7 ft msl	4 " PVC	S	LL

SAMPLE DATE	02/14/00	09/11/00	03/14/01	09/10/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	218.4	216.75	218.1	213.71	ft msl
pH	5.6	5.7	6.8	6	pH
Sp. Conductance	34	34	90	32	uS/cm
Water temperature	18.7	20.3	22.1	20.8	deg. C
Alkalinity as CaCO3	4	4	43	21	mg/L
Turbidity	.8	.9	1000	221	NTU
Volumes purged	2.68	3.75	2.11	16.7	well volume
Sampling code			T		
Synchronous water level	218.4 (03/22/00)	219.7 (12/30/00)	216.1 (03/29/01)	214.1 (09/24/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP EPA	3Q00	CLP EPA	1Q01	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	barium, total recoverable												
	cyanide												
	lead, total recoverable												
	nickel, total recoverable												
	selenium, total recoverable												
Organics													
	chlorobenzene	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethane	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethylene	<1	U	<5	U	<5	U	<5	U	1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	U	<5	U	<5	U	<5	U	1	WA	100	ug/L
	pcb 1016												
	pcb 1221												
	pcb 1232												
	pcb 1242												
	pcb 1248												
	pcb 1254												
	pcb 1260												
	1,1,2,2-tetrachloroethane	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
	tetrachloroethylene	2.57	J K	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1,1-trichloroethane	<1	U	<5	U	<5	U	<5	U	1	WA	200	ug/L
	trichloroethylene	1.77	J K	<5	U	<5	U	<5	U	1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP EPA	3Q99	CLP EPA	3Q00	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
+	aluminum, total recoverable	<200	U	<200	U	96.8	J I	***2920***		1	WA	100	ug/L
	nitrate-nitrite as nitrogen	610		574								2400	ug/L
	sodium, total recoverable	2240		2500		2890		3730		1	WA	4600	ug/L
	sulfate	<400	U	217								3000	ug/L
Radionuclides													
	gross alpha	1.48		.716	J I							15	pCi/L
	nonvolatile beta	2.16	UJ	3.68								50	pCi/L
	radium, total alpha-emitting	.7		.4	U							5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 53B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 106443.6 E 54574.3	33.35022 Deg N -81.7299 Deg W	152.3 - 147.6 ft msl	344.3 ft msl	4 " PVC	S	LL

SAMPLE DATE	02/15/00	09/12/00	03/05/01	09/05/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	220.61	209.39	217.91	218.25	ft msl
pH	5.3	5.5	5.6	4.5	pH
Sp. Conductance	16	16	15	17	uS/cm
Water temperature	17.2	19.2	18.7	20.2	deg. C
Alkalinity as CaCO3	1	15	1	0	mg/L
Turbidity	.7	1.3	.3	.3	NTU
Volumes purged	2.79	3.32	2.24		well volume
Sampling code					
Synchronous water level	220.6 (03/22/00)	219 (09/23/00)	218.1 (03/29/01)	216.6 (09/24/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP EPA	3Q00	CLP EPA	1Q01	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	barium, total recoverable												
	cyanide												
	lead, total recoverable												
	nickel, total recoverable												
	selenium, total recoverable												
Organics													
	chlorobenzene	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethane	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethylene	<1	U	<5	U	<5	U	<5	U	1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	U	<5	U	<5	U	<5	U	1	WA	100	ug/L
	pcb 1016												
	pcb 1221												
	pcb 1232												
	pcb 1242												
	pcb 1248												
	pcb 1254												
	pcb 1260												
	1,1,2,2-tetrachloroethane	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
	tetrachloroethylene	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1,1-trichloroethane	<1	U	<5	U	<5	U	<5	U	1	WA	200	ug/L
	trichloroethylene	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP EPA	3Q99	CLP EPA	3Q00	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
+	aluminum, total recoverable	<200	U	<200	U	***2760***		<50	U V	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	<200	U	202	J I							2400	ug/L
	sodium, total recoverable	1100		1700		1490		1610		1	WA	4600	ug/L
	sulfate	<400	U	1350								3000	ug/L
Radionuclides													
	gross alpha	1.47		.883	J I							15	pCi/L
	nonvolatile beta	1.31	UJ W	.737	U							50	pCi/L
	radium, total alpha-emitting	.51		.3	U							5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 53C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 106456.2 E 54540.5	33.35019 Deg N -81.7300 Deg W	192.6 - 187.8 ft msl	345.2 ft msl	4 " PVC	S	UL

SAMPLE DATE	02/15/00	09/12/00	03/05/01	09/05/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	221.27	219.96	219.04	217	ft msl
pH	5.3	5.4	5.6	4.4	pH
Sp. Conductance	24	23	23	24	uS/cm
Water temperature	17.7	19.7	18.1	19.6	deg. C
Alkalinity as CaCO3	3	1	1	1	mg/L
Turbidity	.7	1.2	.4	.3	NTU
Volumes purged	3.24	3.28	2.15		well volume
Sampling code					
Synchronous water level	231.4 (06/29/00)	219.7 (09/23/00)	218.7 (03/29/01)	217.3 (09/24/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP EPA	3Q00	CLP EPA	1Q01	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	barium, total recoverable												
	cyanide												
	lead, total recoverable												
	nickel, total recoverable												
	selenium, total recoverable												
Organics													
	chlorobenzene	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethane	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethylene	<1	U	<5	U	<5	U	<5	U	1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	U	<5	U	<5	U	<5	U	1	WA	100	ug/L
	pcb 1016												
	pcb 1221												
	pcb 1232												
	pcb 1242												
	pcb 1248												
	pcb 1254												
	pcb 1260												
	1,1,2,2-tetrachloroethane	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
	tetrachloroethylene	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1,1-trichloroethane	<1	U	<5	U	<5	U	<5	U	1	WA	200	ug/L
	trichloroethylene	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP EPA	3Q99	CLP EPA	3Q00	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	aluminum, total recoverable	<200	U	<200	U	<200	U	<57.4	U V	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	1120		1170								2400	ug/L
	sodium, total recoverable	2310		2700		2370		2440		1	WA	4600	ug/L
	sulfate	<400	U	224								3000	ug/L
Radionuclides													
	gross alpha	2.87		1.35	J I							15	pCi/L
	nonvolatile beta	2.88	J	1.39	U							50	pCi/L
	radium, total alpha-emitting	.49		.5	J I							5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 54B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 108446.8 E 52970.5	33.35203 Deg N -81.7380 Deg W	136.4 - 130.8 ft msl	373.4 ft msl	4 " PVC	S	MCBC

SAMPLE DATE	01/31/00	08/27/00	03/07/01	08/24/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	220.97	219.39	218.01	216.71	ft msl
pH	4.8	5.8	6.3	5.3	pH
Sp. Conductance	20	20	21	19	uS/cm
Water temperature	18.4	22.8	20.2	20.2	deg. C
Alkalinity as CaCO3	0	1	2	42	mg/L
Turbidity	.8	1.5	.4	.6	NTU
Volumes purged	2.13	2.52	2.27	2.27	well volume
Sampling code					
Synchronous water level	220.9 (03/20/00)	219.1 (09/24/00)	217.8 (03/20/01)	216.7 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<1	JU	L	<5	U		<5	U		<5	UJ	L	1	WA	5	ug/L
	1,1-dichloroethane	<1	JU	L	<5	U		<5	U		<5	UJ	L	1	WA	5	ug/L
	1,1-dichloroethylene	<1	JU	L	<5	U		<5	U		<5	UJ	L	1	WA	7	ug/L
	trans-1,2-dichloroethylene				<5	U		<5	U		<5	UJ	L	1	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<1	JU	L	<5	U		<5	U		<5	UJ	L	1	WA	5	ug/L
	tetrachloroethylene	<1	JU	L	<5	U		<5	U		<5	UJ	L	1	WA	5	ug/L
	1,1,1-trichloroethane	<1	JU	L	<5	U		<5	U		<5	UJ	L	1	WA	200	ug/L
	trichloroethylene	<1	JU	L	<5	U		<5	U		<5	UJ	L	1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable	<200	U		<200	U		<200	U		<88.3	U	V	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	904			906											2400	ug/L
	sodium, total recoverable	<1670	U	V	1800			1620			1690			1	WA	4600	ug/L
	sulfate	276	J	I	340			1130			473			1	WA	3000	ug/L
Radionuclides																	
	gross alpha	2.46			.62	J	IK									15	pCi/L
	nonvolatile beta	2.38			1.99	J	I									50	pCi/L
	radium, total alpha-emitting	.21	U	W	.4	J	I									5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 54C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 108447.4 E 52955.7	33.35201 Deg N -81.7381 Deg W	175.6 - 170 ft msl	373.4 ft msl	4 " PVC	S	LL

SAMPLE DATE	01/31/00	08/27/00	03/07/01	08/24/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	225.3	223.74	222.32	221.02	ft msl
pH	9.7	9.8	10.3	10.3	pH
Sp. Conductance	117	94	174	156	uS/cm
Water temperature	18.5	23	20.6	20.7	deg. C
Alkalinity as CaCO3	38	21	65	81	mg/L
Turbidity	1	1	.9	.6	NTU
Volumes purged	2.49	3.61	2.74	2.63	well volume
Sampling code					
Synchronous water level	225.2 (03/20/00)	223.5 (09/24/00)	223.2 (03/20/01)	221 (09/29/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP EPA	3Q00	CLP EPA	1Q01	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	barium, total recoverable												
	cyanide												
	lead, total recoverable												
	nickel, total recoverable												
	selenium, total recoverable												
Organics													
	chlorobenzene	<1	JU L	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethane	<1	JU L	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethylene	<1	JU L	<5	U	<5	U	<5	U	1	WA	7	ug/L
	trans-1,2-dichloroethylene			<5	U	<5	U	<5	U	1	WA	100	ug/L
	pcb 1016												
	pcb 1221												
	pcb 1232												
	pcb 1242												
	pcb 1248												
	pcb 1254												
	pcb 1260												
	1,1,2,2-tetrachloroethane	<1	JU L	<5	U	<5	U	<5	U	1	WA	5	ug/L
	tetrachloroethylene	<1	JU L	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1,1-trichloroethane	<1	JU L	<5	U	<5	U	<5	U	1	WA	200	ug/L
	trichloroethylene	<1	JU L	<5	U	<5	U	<5	U	1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP EPA	3Q99	CLP EPA	3Q00	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
+	aluminum, total recoverable	***206***		140	J I	112	J I	<182	U V	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	1110		1210								2400	ug/L
	sodium, total recoverable	2130		2000		2060		2110		1	WA	4600	ug/L
	sulfate	425		319		859		473		1	WA	3000	ug/L
Radionuclides													
	gross alpha	2.55	J	.857	J IK							15	pCi/L
	nonvolatile beta	2.93		1.64	J I							50	pCi/L
	radium, total alpha-emitting	.83		.9	J I							5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 54D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 108461.5 E 52984.5	33.35209 Deg N -81.7380 Deg W	244.8 - 223.8 ft msl	373.6 ft msl	4 " PVC	S	M/GC

SAMPLE DATE	01/31/00	09/09/00	03/07/01	09/19/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	231.98	229.27	229.02	227.63	ft msl
pH	7.7	5.4	6.1	5.1	pH
Sp. Conductance	21	20	22	20	uS/cm
Water temperature	18.4	21.1	17		deg. C
Alkalinity as CaCO3	4	1	17	0	mg/L
Turbidity	.8	3.9	21.2	78.1	NTU
Volumes purged	6.88	16.8	3.34	7.56	well volume
Sampling code				L	
Synchronous water level	231.8 (03/20/00)	230.2 (09/24/00)	228.9 (03/20/01)	227.6 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP EPA	3Q00	CLP EPA	1Q01	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	barium, total recoverable												
	cyanide												
	lead, total recoverable												
	nickel, total recoverable												
	selenium, total recoverable												
Organics													
	chlorobenzene	<1	JU L	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethane	<1	JU L	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethylene	<1	JU L	<5	U	<5	U	<5	U	1	WA	7	ug/L
	trans-1,2-dichloroethylene			<5	U	<5	U	<5	U	1	WA	100	ug/L
	pcb 1016												
	pcb 1221												
	pcb 1232												
	pcb 1242												
	pcb 1248												
	pcb 1254												
	pcb 1260												
	1,1,2,2-tetrachloroethane	<1	JU L	<5	U	<5	U	<5	U	1	WA	5	ug/L
	tetrachloroethylene	<1	JU L	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1,1-trichloroethane	<1	JU L	<5	U	<5	U	<5	U	1	WA	200	ug/L
	trichloroethylene	<1	JU L	<5	U	<5	U	<5	U	1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP EPA	3Q99	CLP EPA	3Q00	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
+	aluminum, total recoverable	<200	U	<200	U	105	J I	***1010***		1	WA	100	ug/L
	nitrate-nitrite as nitrogen	1250		1470								2400	ug/L
	sodium, total recoverable	2190	V	1900		1790		1780		1	WA	4600	ug/L
	sulfate	<200	U	594		1050		428		1	WA	3000	ug/L
Radionuclides													
	gross alpha	6.97		1.35	J IK							15	pCi/L
	nonvolatile beta	10	J	1.37	J I							50	pCi/L
	radium, total alpha-emitting	1.87		.7	J I							5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 54TA

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 108446.3 E 52985.8	33.35205 Deg N -81.7380 Deg W	80.9 - 75.3 ft msl	373.5 ft msl	4 " CS	S	CBA

SAMPLE DATE	01/31/00	08/27/00	03/07/01	08/25/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	218.5	216.96	215.6	214.22	ft msl
pH	8.4	6.4	8.2	6	pH
Sp. Conductance	28	26	26	26	uS/cm
Water temperature	18.8	22.3	19.9	19.3	deg. C
Alkalinity as CaCO3	12	10	20	21	mg/L
Turbidity	.8	1.1	.2	.5	NTU
Volumes purged	2.41	2.41	2.25	2.19	well volume
Sampling code					
Synchronous water level	218.4 (03/20/00)	216.6 (09/24/00)	215.3 (03/20/01)	214.3 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<1	JU	L	<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethane	<1	JU	L	<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<1	JU	L	<5	U		<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene				<5	U		<5	U		<5	U		1	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<1	JU	L	<5	U		<5	U		<5	U		1	WA	5	ug/L
	tetrachloroethylene	<1	JU	L	<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1,1-trichloroethane	<1	JU	L	<5	U		<5	U		<5	U		1	WA	200	ug/L
	trichloroethylene	<1	JU	L	<5	U		<5	U		<5	U		1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable	<200	U		120	J	I	<200	U		<67.6	U	V	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	885			894											2400	ug/L
	sodium, total recoverable	<1320	U	V	1600			1340			1430			1	WA	4600	ug/L
	sulfate	237	J	I	234			815			399			1	WA	3000	ug/L
Radionuclides																	
	gross alpha	1.67			1.01	J	IK									15	pCi/L
	nonvolatile beta	.71	U	W	1.11	J	I									50	pCi/L
	radium, total alpha-emitting	.27	U	W	.6	J	I									5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 55B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 108342.4 E 52006.2	33.35023 Deg N -81.7404 Deg W	152.7 - 148 ft msl	368.7 ft msl	4 " PVC	S	MCBC

SAMPLE DATE	02/04/00	09/01/00	03/06/01	08/28/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	220.75	218.95	217.75	215.99	ft msl
pH	4.3	4	4.2	4.2	pH
Sp. Conductance	65	63	61	65	uS/cm
Water temperature	18.1	20.9	18.2	20.6	deg. C
Alkalinity as CaCO3	0	0	0	0	mg/L
Turbidity	1.2	2	.2	.3	NTU
Volumes purged	3.61	2.89	2.63	2.05	well volume
Sampling code					
Synchronous water level	220.5 (03/20/00)	218.8 (09/24/00)	217.5 (03/20/01)	216.2 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP EPA	3Q00	CLP EPA	1Q01	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	barium, total recoverable												
	cyanide												
	lead, total recoverable												
	nickel, total recoverable												
	selenium, total recoverable												
Organics													
	chlorobenzene	<1	JU	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethane	<1	JU	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethylene	<1	JU	<5	U	<5	U	<5	U	1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	JU	<5	U	<5	U	<5	U	1	WA	100	ug/L
	pcb 1016												
	pcb 1221												
	pcb 1232												
	pcb 1242												
	pcb 1248												
	pcb 1254												
	pcb 1260												
	1,1,2,2-tetrachloroethane	<1	JU	<5	U	<5	U	<5	U	1	WA	5	ug/L
	tetrachloroethylene	<1	JU	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1,1-trichloroethane	<1	JU	<5	U	<5	U	<5	U	1	WA	200	ug/L
	trichloroethylene	<1	JU	<5	U	<5	U	<5	U	1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP EPA	3Q99	CLP EPA	3Q00	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
+	aluminum, total recoverable	***443***		***510***		***448***		***386***		1	WA	100	ug/L
	nitrate-nitrite as nitrogen	<500	U	<500	U							2400	ug/L
	sodium, total recoverable	<2030	U V	2100		1940		1820		1	WA	4600	ug/L
+	sulfate	***13100***		***10800***		***13700***		***11800***		5	WA	3000	ug/L
Radionuclides													
	gross alpha	3.65		1.75	J I							15	pCi/L
	nonvolatile beta	4.12	J	3.62								50	pCi/L
	radium, total alpha-emitting	1.05		.6	U							5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 55C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 108324.6 E 52029.7	33.35022 Deg N -81.7403 Deg W	189.3 - 184.6 ft msl	369.4 ft msl	4 " PVC	S	LL

SAMPLE DATE	02/04/00	09/01/00	03/06/01	08/28/01	
FIELD DATA					
Parameter	**1Q00**	**3Q00**	**1Q01**	**3Q01**	**Unit**
Water Elevation	228.15	226.33	224.99	223.49	ft msl
pH	5.6	5.5	5.2	5.2	pH
Sp. Conductance	24	25	23	25	uS/cm
Water temperature	17	21	18.2	19.7	deg. C
Alkalinity as CaCO3	3	1	0	0	mg/L
Turbidity	1.2	1	.2	.3	NTU
Volumes purged	4.22	2.57	3.76	3.35	well volume
Sampling code					
Synchronous water level	227.9 (03/20/00)	226.3 (09/24/00)	224.9 (03/20/01)	223.8 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP EPA	3Q00	CLP EPA	1Q01	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	barium, total recoverable												
	cyanide												
	lead, total recoverable												
	nickel, total recoverable												
	selenium, total recoverable												
Organics													
	chlorobenzene	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethane	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethylene	<1	U	<5	U	<5	U	<5	U	1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	U	<5	U	<5	U	<5	U	1	WA	100	ug/L
	pcb 1016												
	pcb 1221												
	pcb 1232												
	pcb 1242												
	pcb 1248												
	pcb 1254												
	pcb 1260												
	1,1,2,2-tetrachloroethane	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
	tetrachloroethylene	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1,1-trichloroethane	<1	U	<5	U	<5	U	<5	U	1	WA	200	ug/L
	trichloroethylene	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP EPA	3Q99	CLP EPA	3Q00	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	aluminum, total recoverable	<200	U	<200	U	31.7	J I	<322	U	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	1110		1290								2400	ug/L
	sodium, total recoverable	2640	V	2700		2870		2520		1	WA	4600	ug/L
	sulfate	<200	U	462		1100		575		1	WA	3000	ug/L
Radionuclides													
	gross alpha	1.73		.869	JU L							15	pCi/L
	nonvolatile beta	1.35	UJ W	1.01	U							50	pCi/L
	radium, total alpha-emitting	.47		.4	J I							5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 55D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 108391.4 E 52032.5	33.35038 Deg N -81.7404 Deg W	245.9 - 224.7 ft msl	367.7 ft msl	4 " PVC	S	M/GC

SAMPLE DATE 02/04/00 09/21/00

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	232.99	232.87	*Not Applicable*	*Not Applicable*	ft msl
pH	5.2	5			pH
Sp. Conductance	24	23			uS/cm
Water temperature	17.9	21.1			deg. C
Alkalinity as CaCO3	3	0			mg/L
Turbidity	2.1	3.3			NTU
Volumes purged	9.80	3.25			well volume
Sampling code					
Synchronous water level	233 (03/20/00)	233 (09/24/00)	228.9 (03/20/01)	( )	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP EPA	3Q00	CLP EPA	1Q01	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	barium, total recoverable												
	cyanide												
	lead, total recoverable												
	nickel, total recoverable												
	selenium, total recoverable												
Organics													
	chlorobenzene	<1	JU	<5	U							5	ug/L
	1,1-dichloroethane	<1	JU	<5	U							5	ug/L
	1,1-dichloroethylene	<1	JU	<5	U							7	ug/L
	trans-1,2-dichloroethylene	<1	JU	<5	U							100	ug/L
	pcb 1016												
	pcb 1221												
	pcb 1232												
	pcb 1242												
	pcb 1248												
	pcb 1254												
	pcb 1260												
	1,1,2,2-tetrachloroethane	<1	JU	<5	U							5	ug/L
	tetrachloroethylene	<1	JU	<5	U							5	ug/L
	1,1,1-trichloroethane	<1	JU	<5	U							200	ug/L
	trichloroethylene	<1	JU	<5	U							5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP EPA	3Q99	CLP EPA	3Q00	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	aluminum, total recoverable	<200	U	<200	U	<200	U					100	ug/L
	nitrate-nitrite as nitrogen	1640		1840								2400	ug/L
	sodium, total recoverable	2800	V	1900		1810						4600	ug/L
	sulfate	<200	U	192	J I	856						3000	ug/L
Radionuclides													
	gross alpha	7.87		3.34	J L							15	pCi/L
	nonvolatile beta	2.77	J	1.79	J I							50	pCi/L
	radium, total alpha-emitting	2.57		2.5								5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 55HC

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 108338.7 E 52020.1	33.35024 Deg N -81.7403 Deg W	218.8 - 214.1 ft msl	368.7 ft msl	4 " PVC	S	UL

SAMPLE DATE	02/16/00	09/01/00	03/07/01	08/29/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	235.74	229.92	228.52	227.42	ft msl
pH	8.6	9.5	10.1	8.6	pH
Sp. Conductance	71	76	121	74	uS/cm
Water temperature	22.2	26.4	15.4	23.9	deg. C
Alkalinity as CaCO3	30	27	35	45	mg/L
Turbidity	44	24.9	88.8	17.8	NTU
Volumes purged		1.07	.536	5.58	well volume
Sampling code	NX		NX	X	
Synchronous water level	231.5 (03/20/00)	229.9 (09/24/00)	228.6 (03/20/01)	227.3 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP EPA	3Q00	CLP EPA	1Q01	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	barium, total recoverable												
	cyanide												
	lead, total recoverable												
	nickel, total recoverable												
	selenium, total recoverable												
Organics													
	chlorobenzene	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethane	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethylene	<1	U	<5	U	<5	U	<5	U	1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	U	<5	U	<5	U	<5	U	1	WA	100	ug/L
	pcb 1016												
	pcb 1221												
	pcb 1232												
	pcb 1242												
	pcb 1248												
	pcb 1254												
	pcb 1260												
	1,1,2,2-tetrachloroethane	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
	tetrachloroethylene	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1,1-trichloroethane	<1	U	<5	U	<5	U	<5	U	1	WA	200	ug/L
	trichloroethylene	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP EPA	3Q99	CLP EPA	3Q00	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
+	aluminum, total recoverable			***660***		***490***		***428***		1	WA	100	ug/L
	nitrate-nitrite as nitrogen	1690		1500								2400	ug/L
+	sodium, total recoverable			***5400***		***5410***		***4780***		1	WA	4600	ug/L
	sulfate	887		461		971		587		1	WA	3000	ug/L
Radionuclides													
+	gross alpha	***15.13***		2.43	J K							15	pCi/L
	nonvolatile beta	7.83		1.65	U							50	pCi/L
	radium, total alpha-emitting	1.67	V	.8	J I							5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 55TA

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 108322.8 E 52014.7	33.35020 Deg N -81.7403 Deg W	91.6 - 86.2 ft msl	368.7 ft msl	4 " CS	S	CBA

SAMPLE DATE	02/04/00	09/13/00	03/06/01	08/28/01	
FIELD DATA					
Parameter	**1Q00**	**3Q00**	**1Q01**	**3Q01**	**Unit**
Water Elevation	213.35	211.27	210.65	208.83	ft msl
pH	5.5	5.7	5.7	5.3	pH
Sp. Conductance	21	21	20	20	uS/cm
Water temperature	18.6	20.6	18.1	20.3	deg. C
Alkalinity as CaCO3	5	2	0	1	mg/L
Turbidity	1.7	2.4	.5	.7	NTU
Volumes purged	2.19	1.95	2.66	2.08	well volume
Sampling code					
Synchronous water level	213 (03/20/00)	211.3 (09/24/00)	210 (03/20/01)	209.1 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP EPA	3Q00	CLP EPA	1Q01	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	barium, total recoverable												
	cyanide												
	lead, total recoverable												
	nickel, total recoverable												
	selenium, total recoverable												
Organics													
	chlorobenzene	<1	JU L	<5	U	<5	U	<5	UJ L	1	WA	5	ug/L
	1,1-dichloroethane	<1	JU L	<5	U	<5	U	<5	UJ L	1	WA	5	ug/L
	1,1-dichloroethylene	<1	JU L	<5	U	<5	U	<5	UJ L	1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	JU L	<5	U	<5	U	<5	UJ L	1	WA	100	ug/L
	pcb 1016												
	pcb 1221												
	pcb 1232												
	pcb 1242												
	pcb 1248												
	pcb 1254												
	pcb 1260												
	1,1,2,2-tetrachloroethane	<1	JU L	<5	U	<5	U	<5	UJ L	1	WA	5	ug/L
	tetrachloroethylene	<1	JU L	<5	U	<5	U	<5	UJ L	1	WA	5	ug/L
	1,1,1-trichloroethane	<1	JU L	<5	U	<5	U	<5	UJ L	1	WA	200	ug/L
	trichloroethylene	<1	JU L	<5	U	<5	U	<5	UJ L	1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP EPA	3Q99	CLP EPA	3Q00	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	aluminum, total recoverable	<200	U	<200	U	<200	U	<322	U	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	410	J I	459	J I							2400	ug/L
	sodium, total recoverable	<1560	U V	1500		1490		1490		1	WA	4600	ug/L
	sulfate	1790		1580		2290		1930		1	WA	3000	ug/L
Radionuclides													
	gross alpha	.92		.582	U							15	pCi/L
	nonvolatile beta	.03	UJ W	.807	U							50	pCi/L
	radium, total alpha-emitting	.31		.3	U							5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 64B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 101830.9 E 46579.7	33.32697 Deg N -81.7420 Deg W	124.3 - 119.6 ft msl	348.3 ft msl	4 " PVC	S	LL

SAMPLE DATE

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	*Not Applicable*	*Not Applicable*	*Not Applicable*	*Not Applicable*	ft msl
pH					pH
Sp. Conductance					uS/cm
Water temperature					deg. C
Alkalinity as CaCO3					mg/L
Turbidity					NTU
Volumes purged					well volume
Sampling code					
Synchronous water level	206.7 (03/21/00)	205.2 (09/23/00)	( )	( )	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP EPA	3Q00	CLP EPA	1Q01	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
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												

II. Monitoring Constituents

ST	Parameter	3Q98	CLP EPA	3Q99	CLP EPA	3Q00	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	aluminum, total recoverable	<200	U									100	ug/L
	nitrate-nitrite as nitrogen												
	sodium, total recoverable	4070										4600	ug/L
	sulfate												
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. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 65D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 101915.5 E 49413.7	33.33178 Deg N -81.7347 Deg W	243.9 - 224.4 ft msl	349.2 ft msl	4 " PVC	S	M

SAMPLE DATE	03/10/00	08/30/00	03/13/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	230.29	227.8	*Not Applicable*	*Not Applicable*	ft msl
pH	5.2	4.6	4.8		pH
Sp. Conductance	23	24	24		uS/cm
Water temperature	19.9	30.7	20.3		deg. C
Alkalinity as CaCO3	0	0	0		mg/L
Turbidity	.4	1	.7		NTU
Volumes purged	6.54	13.8			well volume
Sampling code					
Synchronous water level	230.1 (03/21/00)	229.1 (09/23/00)	228.1 (03/30/01)	( )	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP EPA	3Q00	CLP EPA	1Q01	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	barium, total recoverable												
	cyanide												
	lead, total recoverable												
	nickel, total recoverable												
	selenium, total recoverable												
Organics													
	chlorobenzene	<1	U	<5	U	<5	U					5	ug/L
	1,1-dichloroethane	<1	U	<5	U	<5	U					5	ug/L
	1,1-dichloroethylene	<1	U	<5	U	<5	U					7	ug/L
	trans-1,2-dichloroethylene			<5	U	<5	U					100	ug/L
	pcb 1016												
	pcb 1221												
	pcb 1232												
	pcb 1242												
	pcb 1248												
	pcb 1254												
	pcb 1260												
	1,1,2,2-tetrachloroethane	<1	U	<5	U	<5	U					5	ug/L
+	tetrachloroethylene	16.9	J K	***23***		***17.8***						5	ug/L
	1,1,1-trichloroethane	<1	U	<5	U	<5	U					200	ug/L
+	trichloroethylene	9.32	J K	***7***		***7.43***						5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP EPA	3Q99	CLP EPA	3Q00	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	aluminum, total recoverable	108	J I			42.5	J I					100	ug/L
	nitrate-nitrite as nitrogen	1090										2400	ug/L
	sodium, total recoverable	1860	V			1940						4600	ug/L
	sulfate	726										3000	ug/L
Radionuclides													
	gross alpha	4.64										15	pCi/L
	nonvolatile beta	2.18	J									50	pCi/L
	radium, total alpha-emitting	1.17										5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 66B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 105842 E 51064.6	33.34316 Deg N -81.7380 Deg W	143.9 - 139.2 ft msl	383.4 ft msl	4 " PVC	S	MCBC

SAMPLE DATE	03/01/00	09/19/00	03/05/01	09/14/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	217.68	215.4	214.55	204.78	ft msl
pH	7.2	8.9	8.8	8.9	pH
Sp. Conductance	58	78	65	74	uS/cm
Water temperature	20.2	21.3	19.4		deg. C
Alkalinity as CaCO3	19	18	17	25	mg/L
Turbidity	1.7	1.7	.1	.7	NTU
Volumes purged	2.44	2.65	2.70	2.34	well volume
Sampling code					
Synchronous water level	217.3 (03/20/00)	215.4 (09/24/00)	214 (03/20/01)	213.7 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<2	U		<25	U		<25	U		<25	U		5	WA	5	ug/L
	1,1-dichloroethane	<2	U		<25	U		<25	U		<25	U		5	WA	5	ug/L
	1,1-dichloroethylene	<2	U		<25	U		<25	U		<25	U		5	WA	7	ug/L
	trans-1,2-dichloroethylene				<25	U		<25	U		<25	U		5	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<2	U		<25	U		<25	U		<25	U		5	WA	5	ug/L
+	tetrachloroethylene	***11.8***			8.5	J	IK	17.6	J	I	<25	U		5	WA	5	ug/L
	1,1,1-trichloroethane	<2	U		<25	U		<25	U		<25	U		5	WA	200	ug/L
+	trichloroethylene	***559***			***590***			***431***			***540***			5	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable	<200	U		<200	U		<90	U	V	<116	U	V	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	1440			1570											2400	ug/L
	sodium, total recoverable	2130		V	2630			2770			2360			1	WA	4600	ug/L
	sulfate	225	J	I	<400	U		807			457			1	WA	3000	ug/L
Radionuclides																	
	gross alpha	1.88	J		.35	U										15	pCi/L
	nonvolatile beta	5.69			1.17	U										50	pCi/L
	radium, total alpha-emitting	.89			.4	U										5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 66C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 105842.1 E 51053.5	33.34314 Deg N -81.7380 Deg W	170.9 - 166.2 ft msl	383.4 ft msl	4 " PVC	S	LL

SAMPLE DATE	03/01/00	09/19/00	03/05/01	09/14/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	226.89	224.8	223.68	222.11	ft msl
pH	5.5	6.5	4.8	6	pH
Sp. Conductance	0	35	34	38	uS/cm
Water temperature	20.4	21.4	19.7		deg. C
Alkalinity as CaCO3	1	0	0	0	mg/L
Turbidity	.8	1.4	.2	.5	NTU
Volumes purged	2.40	2.30	2.67	2.11	well volume
Sampling code					
Synchronous water level	226.8 (03/20/00)	225.1 (09/24/00)	223.7 (03/20/01)	222.4 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<1	U		<12	U		<50	U		<50	U		10	WA	5	ug/L
	1,1-dichloroethane	<1	U		<12	U		<50	U		<50	U		10	WA	5	ug/L
	1,1-dichloroethylene	<1	U		<12	U		<50	U		<50	U		10	WA	7	ug/L
	trans-1,2-dichloroethylene				<12	U		<50	U		<50	U		10	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<1	U		<12	U		<50	U		<50	U		10	WA	5	ug/L
+	tetrachloroethylene	***15.5***			14	J	K	<50	U		<50	U		10	WA	5	ug/L
	1,1,1-trichloroethane	<1	U		<12	U		<50	U		<50	U		10	WA	200	ug/L
+	trichloroethylene	***325***			280	J	K	***731***			***670***			10	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable	<200	U		<200	U		<200	U		<85.1	U	V	1	WA	100	ug/L
+	nitrate-nitrite as nitrogen	2220			***2470***											2400	ug/L
	sodium, total recoverable	2810		V	3240			3460			3250			1	WA	4600	ug/L
	sulfate	251	J	I	259	J	I	900			417			1	WA	3000	ug/L
Radionuclides																	
	gross alpha	6.78	J		2.18	J	I									15	pCi/L
	nonvolatile beta	7.81			2.93	J	I									50	pCi/L
	radium, total alpha-emitting	.41			1.8	U	V									5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 66D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 105841.8 E 51044	33.34313 Deg N -81.7380 Deg W	239.5 - 220 ft msl	383.2 ft msl	4 " PVC		M

SAMPLE DATE 09/28/00

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	*Not Applicable*	228.27	*Not Applicable*	*Not Applicable*	ft msl
pH		6.3			pH
Sp. Conductance					uS/cm
Water temperature		21.2			deg. C
Alkalinity as CaCO3		53			mg/L
Turbidity					NTU
Volumes purged					well volume
Sampling code					
Synchronous water level	267.2 (03/20/00)	228.4 (09/24/00)	( )	( )	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP EPA	3Q00	CLP EPA	1Q01	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	barium, total recoverable												
	cyanide												
	lead, total recoverable												
	nickel, total recoverable												
	selenium, total recoverable												
Organics													
	chlorobenzene			<5	U							5	ug/L
	1,1-dichloroethane			<5	U							5	ug/L
	1,1-dichloroethylene			<5	U							7	ug/L
	trans-1,2-dichloroethylene			<5	U							100	ug/L
	pcb 1016												
	pcb 1221												
	pcb 1232												
	pcb 1242												
	pcb 1248												
	pcb 1254												
	pcb 1260												
	1,1,2,2-tetrachloroethane			<5	U							5	ug/L
	tetrachloroethylene			3.7	J I							5	ug/L
	1,1,1-trichloroethane			<5	U							200	ug/L
+	trichloroethylene			***110***								5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP EPA	3Q99	CLP EPA	3Q00	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
+	aluminum, total recoverable					***26300***						100	ug/L
	nitrate-nitrite as nitrogen												
+	sodium, total recoverable					***6330***						4600	ug/L
+	sulfate					***3610***						3000	ug/L
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. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 66TA

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 105842.6 E 51096.7	33.34321 Deg N -81.7379 Deg W	35.5 - 30.8 ft msl	382.7 ft msl	4 " PVC	S	CBA

SAMPLE DATE	03/01/00	09/19/00	03/05/01	09/14/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	205.29	202.05	202.9	199.8	ft msl
pH	5.6	6.9	5.2	5	pH
Sp. Conductance	21	20	19	21	uS/cm
Water temperature	19.7	20.9	19.9		deg. C
Alkalinity as CaCO3	2	0	0	0	mg/L
Turbidity	.3	1.1	.2	.8	NTU
Volumes purged	2.28	2.11	0	2.08	well volume
Sampling code					
Synchronous water level	204.2 (03/20/00)	202.4 (09/24/00)	202.2 (06/27/01)	200.4 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
	Inorganics																
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
	Organics																
	chlorobenzene	<1	U		<5	U		<5	U		<10	U		2	WA	5	ug/L
	1,1-dichloroethane	<1	U		<5	U		<5	U		<10	U		2	WA	5	ug/L
	1,1-dichloroethylene	<1	U		<5	U		<5	U		<10	U		2	WA	7	ug/L
	trans-1,2-dichloroethylene				<5	U		<5	U		<10	U		2	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<1	U		<5	U		<5	U		<10	U		2	WA	5	ug/L
+	tetrachloroethylene	6.74	J	K	6	J	K	6.62	J	K	***15***			2	WA	5	ug/L
	1,1,1-trichloroethane	<1	U		<5	U		<5	U		<10	U		2	WA	200	ug/L
+	trichloroethylene	5.56	J	K	4.7	J	IK	5.98	J	K	***13***			2	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
	Inorganics																
	aluminum, total recoverable	<200	U		<200	U		<35.2	U	V	<187	U	V	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	682			695											2400	ug/L
	sodium, total recoverable	1510		V	1560			1580			1500			1	WA	4600	ug/L
	sulfate	1300			1380			2110			1520			1	WA	3000	ug/L
	Radionuclides																
	gross alpha	1.15	J		.189	U										15	pCi/L
	nonvolatile beta	.67	U	W	.576	U										50	pCi/L
	radium, total alpha-emitting	1.08			.3	U										5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 68B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 106744.9 E 52308.5	33.34719 Deg N -81.7365 Deg W	133 - 128.3 ft msl	356.9 ft msl	4 " PVC	S	MCBC

SAMPLE DATE	03/29/00	09/05/00	02/26/01	09/14/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	216.82	215.78	214.71	213.02	ft msl
pH	5.7	5.6	5.7	5.8	pH
Sp. Conductance	25	28	28	29	uS/cm
Water temperature	18.6	20.5	20.6		deg. C
Alkalinity as CaCO3	2	2	1	4	mg/L
Turbidity	1.1	.7	.4	.2	NTU
Volumes purged	3.51	2.68	2.58	2.53	well volume
Sampling code					
Synchronous water level	217.2 (03/20/00)	215.9 (12/31/00)	214.1 (03/20/01)	213.1 (09/26/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<1	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethane	<1	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<1	U		<5	U		<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	U		<5	U		<5	U		<5	U		1	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<1	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
+	tetrachloroethylene	***13.3***			4.5	J	I	***7.86***			***7.18***			1	WA	5	ug/L
	1,1,1-trichloroethane	<1	U		<5	U		<5	U		<5	U		1	WA	200	ug/L
+	trichloroethylene	***211***			***100***			***172***			***140***			1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable	<200	U					<200	U		<111	U	V	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	1310														2400	ug/L
	sodium, total recoverable	2040		V				1890			2040			1	WA	4600	ug/L
	sulfate	334	J	I				842			502			1	WA	3000	ug/L
Radionuclides																	
	gross alpha	2.14	J													15	pCi/L
	nonvolatile beta	4.23														50	pCi/L
	radium, total alpha-emitting	.21	U	W												5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 68C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 106730.5 E 52304.9	33.34715 Deg N -81.7364 Deg W	171.7 - 167 ft msl	356.7 ft msl	4 " PVC	S	LL

SAMPLE DATE	02/22/00	09/05/00	02/26/01	09/14/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	222.68	221.5	220.27	218.81	ft msl
pH	4.4	5	4.9	5	pH
Sp. Conductance	29	28	28	30	uS/cm
Water temperature	18.9	21.1	20.7		deg. C
Alkalinity as CaCO3	0	0	0	0	mg/L
Turbidity	.2	.4	.4	.2	NTU
Volumes purged	3.15	4.23	2.37	2.67	well volume
Sampling code					
Synchronous water level	222.9 (03/20/00)	221.4 (12/31/00)	219.9 (03/20/01)	218.7 (09/26/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP EPA	3Q00	CLP EPA	1Q01	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	barium, total recoverable												
	cyanide												
	lead, total recoverable												
	nickel, total recoverable												
	selenium, total recoverable												
Organics													
	chlorobenzene	<5	U	<50	U	<50	U	<50	U	10	WA	5	ug/L
	1,1-dichloroethane	<5	U	<50	U	<50	U	<50	U	10	WA	5	ug/L
	1,1-dichloroethylene	<5	U	<50	U	<50	U	<50	U	10	WA	7	ug/L
	trans-1,2-dichloroethylene	<5	U	<50	U	<50	U	<50	U	10	WA	100	ug/L
	pcb 1016												
	pcb 1221												
	pcb 1232												
	pcb 1242												
	pcb 1248												
	pcb 1254												
	pcb 1260												
	1,1,2,2-tetrachloroethane	<5	U	<50	U	<50	U	<50	U	10	WA	5	ug/L
+	tetrachloroethylene	***8.6***		<50	U	<50	U	<50	U	10	WA	5	ug/L
	1,1,1-trichloroethane	<5	U	<50	U	<50	U	<50	U	10	WA	200	ug/L
+	trichloroethylene	***1070***		630	J K	***596***		810	J K	10	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP EPA	3Q99	CLP EPA	3Q00	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	aluminum, total recoverable	<200	U	<200	U	35.8	J I	<95.6	U V	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	1780		1660								2400	ug/L
	sodium, total recoverable	2390	V	2820		2710		2630		1	WA	4600	ug/L
	sulfate	2480		263	J I	966		382		1	WA	3000	ug/L
Radionuclides													
	gross alpha	4.71	J	1.49	J I							15	pCi/L
	nonvolatile beta	15.4		3.22								50	pCi/L
	radium, total alpha-emitting	1.07		.8	U V							5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 69B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 107776.1 E 52432.9	33.34967 Deg N -81.7381 Deg W	144.5 - 139.8 ft msl	381.5 ft msl	4 " PVC	S	MCBC

SAMPLE DATE	01/31/00	09/05/00	02/27/01	08/24/01	
FIELD DATA					
Parameter	**1Q00**	**3Q00**	**1Q01**	**3Q01**	**Unit**
Water Elevation	219.34	217.75	216.6	215	ft msl
pH	5.4	7	6	5.6	pH
Sp. Conductance	36	61	29	29	uS/cm
Water temperature	18.2	21.6	18	20.8	deg. C
Alkalinity as CaCO3	7	12	6	6	mg/L
Turbidity	.5	1.7	1	1	NTU
Volumes purged	2.57	6.33	3.00		well volume
Sampling code					
Synchronous water level	219.2 (03/20/00)	217.4 (12/28/00)	216.1 (03/20/01)	215 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<1	JU	L	<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethane	<1	JU	L	<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<1	JU	L	<5	U		<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene				<5	U		<5	U		<5	U		1	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<1	JU	L	<5	U		<5	U		<5	U		1	WA	5	ug/L
	tetrachloroethylene	<1	JU	L	<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1,1-trichloroethane	<1	JU	L	<5	U		<5	U		<5	U		1	WA	200	ug/L
	trichloroethylene	<1	JU	L	<5	U		<5	U		<5	U		1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable	39.5	J	I	<200	U		<200	U		<115	U	V	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	563			550											2400	ug/L
	sodium, total recoverable	1980		V	2000			2260			1900			1	WA	4600	ug/L
	sulfate	1500			1290			1910			1460			1	WA	3000	ug/L
Radionuclides																	
	gross alpha	1.44			1.14	J	I									15	pCi/L
	nonvolatile beta	1.71			2.07	J	I									50	pCi/L
	radium, total alpha-emitting	.7			.4	U	V									5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 69C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 107780.1 E 52447.5	33.34970 Deg N -81.7381 Deg W	175.7 - 171 ft msl	381.6 ft msl	4 " PVC	S	LL

SAMPLE DATE	03/03/00	09/01/00	02/27/01	08/23/01	
FIELD DATA					
Parameter	**1Q00**	**3Q00**	**1Q01**	**3Q01**	**Unit**
Water Elevation	225.78	224.25	223.2	221.92	ft msl
pH	5.4	5	5.4	5.3	pH
Sp. Conductance	35	35	35	36	uS/cm
Water temperature	18.8	20	18.4	20.6	deg. C
Alkalinity as CaCO3	2	6	0	0	mg/L
Turbidity	.3	1.8	.7	.3	NTU
Volumes purged	2.71	3.45	2.85	2.47	well volume
Sampling code					
Synchronous water level	225.9 (03/20/00)	224.2 (09/24/00)	222.8 (03/20/01)	221.7 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<1	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethane	<1	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<1	U		<5	U		<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene				<5	U		<5	U		<5	U		1	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<1	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	tetrachloroethylene	<1	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1,1-trichloroethane	<1	U		<5	U		<5	U		<5	U		1	WA	200	ug/L
+	trichloroethylene	***39***			20	J		29.4	J	K	***23.7***			1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable	<200	U		<200	U		44.2	J	I	<117	U	V	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	2050			2380											2400	ug/L
	sodium, total recoverable	3640		V	4000			4200			3720			1	WA	4600	ug/L
	sulfate	309	J	I	<400	U		779			319	J	I	1	WA	3000	ug/L
Radionuclides																	
	gross alpha	3.54			.228	U										15	pCi/L
	nonvolatile beta	4.2			1.45	J	I									50	pCi/L
	radium, total alpha-emitting	1.01	U	V	.8	J	I									5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 69D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 107784.3 E 52462	33.34974 Deg N -81.7381 Deg W	239.8 - 220.3 ft msl	382 ft msl	4 " PVC	S	M

SAMPLE DATE	01/31/00	09/05/00	02/27/01	08/24/01	
FIELD DATA					
Parameter	**1Q00**	**3Q00**	**1Q01**	**3Q01**	**Unit**
Water Elevation	231.98	230.3	229.05	227.91	ft msl
pH	4.5	4.8	4.7	4.7	pH
Sp. Conductance	26	26	26	25	uS/cm
Water temperature	18.2	21.9	18.8	22.1	deg. C
Alkalinity as CaCO3	0	0	0	0	mg/L
Turbidity	2.1	3.3	3.6	1.4	NTU
Volumes purged	2.39	5.76	4.10		well volume
Sampling code					
Synchronous water level	231.8 (03/20/00)	230.2 (09/24/00)	228.9 (03/20/01)	227.7 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP EPA	3Q00	CLP EPA	1Q01	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	barium, total recoverable												
	cyanide												
	lead, total recoverable												
	nickel, total recoverable												
	selenium, total recoverable												
Organics													
	chlorobenzene	<1	JU L	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethane	<1	JU L	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethylene	<1	JU L	<5	U	<5	U	<5	U	1	WA	7	ug/L
	trans-1,2-dichloroethylene			<5	U	<5	U	<5	U	1	WA	100	ug/L
	pcb 1016												
	pcb 1221												
	pcb 1232												
	pcb 1242												
	pcb 1248												
	pcb 1254												
	pcb 1260												
	1,1,2,2-tetrachloroethane	<1	JU L	<5	U	<5	U	<5	U	1	WA	5	ug/L
	tetrachloroethylene	<1	JU L	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1,1-trichloroethane	<1	JU L	<5	U	<5	U	<5	U	1	WA	200	ug/L
	trichloroethylene	<1	JU L	<5	U	<5	U	<5	U	1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP EPA	3Q99	CLP EPA	3Q00	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	aluminum, total recoverable	<200	U	<200	U	113	J I	<236	U V	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	1990		1820								2400	ug/L
	sodium, total recoverable	<1320	U V	1200		1070		1240		1	WA	4600	ug/L
	sulfate	<400	U	273		1270		414		1	WA	3000	ug/L
Radionuclides													
+	gross alpha	***23.25***		8.2								15	pCi/L
	nonvolatile beta	14.24		4								50	pCi/L
	radium, total alpha-emitting	4.44		4.8	U V							5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 69TA

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 107772.5 E 52418.4	33.34964 Deg N -81.7382 Deg W	80.3 - 74.6 ft msl	381.4 ft msl	4 " PVC	S	CBA

SAMPLE DATE	01/31/00	09/05/00	02/27/01	08/24/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	214.3	212.75	211.5	209.79	ft msl
pH	5.8	5.9	6.1	2.9	pH
Sp. Conductance	28	26	26	26	uS/cm
Water temperature	18.1	20.4	18.5	21.2	deg. C
Alkalinity as CaCO3	9	3	3	5	mg/L
Turbidity	2.6	1.1	3.6	3.5	NTU
Volumes purged	2.20	4.59	2.30		well volume
Sampling code					
Synchronous water level	214 (03/20/00)	212.4 (12/28/00)	211 (03/20/01)	210.1 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<1	JU	L	<5	U		<5	U		<5	UJ	L	1	WA	5	ug/L
	1,1-dichloroethane	<1	JU	L	<5	U		<5	U		<5	UJ	L	1	WA	5	ug/L
	1,1-dichloroethylene	<1	JU	L	<5	U		<5	U		<5	UJ	L	1	WA	7	ug/L
	trans-1,2-dichloroethylene				<5	U		<5	U		<5	UJ	L	1	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<1	JU	L	<5	U		<5	U		<5	UJ	L	1	WA	5	ug/L
	tetrachloroethylene	<1	JU	L	<5	U		<5	U		<5	UJ	L	1	WA	5	ug/L
	1,1,1-trichloroethane	<1	JU	L	<5	U		<5	U		<5	UJ	L	1	WA	200	ug/L
	trichloroethylene	<1	JU	L	<5	U		<5	U		<5	UJ	L	1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable	<200	U		<200	U		<200	U		<119	U	V	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	975			1040											2400	ug/L
	sodium, total recoverable	1970		V	2200			1890			2040			1	WA	4600	ug/L
	sulfate	416			375			935			523			1	WA	3000	ug/L
Radionuclides																	
	gross alpha	1.04			.0449	U										15	pCi/L
	nonvolatile beta	.93	U	W	-.043	U										50	pCi/L
	radium, total alpha-emitting	.3	U	W	.1	U										5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 70C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 101785.2 E 45012	33.32431 Deg N -81.7460 Deg W	178.8 - 174.1 ft msl	361.8 ft msl	4 " PVC	S	UL

SAMPLE DATE	03/15/00	08/22/00	02/15/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	216.69	215.1	213.85	*Not Applicable*	ft msl
pH	5.8	7	5.8		pH
Sp. Conductance	148	150	136		uS/cm
Water temperature	19.3	19.4	18.6		deg. C
Alkalinity as CaCO3	7	4	2		mg/L
Turbidity	.5	.8	.9		NTU
Volumes purged	3.75	3.15	2.90		well volume
Sampling code					
Synchronous water level	218.8 (06/25/00)	214.8 (09/23/00)	213.1 (03/26/01)	212.1 (09/26/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	20.5	J	IK	<250	U		<50	U							5	ug/L
	1,1-dichloroethane	<50	U		<250	U		<50	U							5	ug/L
	1,1-dichloroethylene	35	J	IK	<250	U		31.9	J	I						7	ug/L
	trans-1,2-dichloroethylene	<50	U		<250	U		<50	U							100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<50	U		<250	U		<50	U							5	ug/L
+	tetrachloroethylene	1140	J	K	***1100***			***1250***								5	ug/L
	1,1,1-trichloroethane	<50	U		<250	U		<50	U							200	ug/L
+	trichloroethylene	6490	J	K	***5300***			***5300***								5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable	<200	U		<200	U		<200	U							100	ug/L
+	nitrate-nitrite as nitrogen	***16400***			***14400***			***14400***								2400	ug/L
+	sodium, total recoverable	***22600***		V	***21800***			***21600***								4600	ug/L
	sulfate	<200	U		263	J	I									3000	ug/L
Radionuclides																	
	gross alpha	4.8			2.99											15	pCi/L
	nonvolatile beta	5.28			3.47	U	V									50	pCi/L
+	radium, total alpha-emitting	***5.21***		V	2.2	J	I									5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 70D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 101781.8 E 44997.3	33.32428 Deg N -81.7461 Deg W	228.3 - 208.2 ft msl	362.2 ft msl	4 " PVC	S	M

SAMPLE DATE	03/15/00	08/22/00	02/15/01	08/27/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	220.15	218.7	217.45	215.94	ft msl
pH	5.5	5.2	5.3	4.6	pH
Sp. Conductance	31	32	30	33	uS/cm
Water temperature	19.8	20.8	19.4	22.1	deg. C
Alkalinity as CaCO3	1	2	1	0	mg/L
Turbidity	2.3	2.2	1.9	3.1	NTU
Volumes purged	8.82	7.84	7.58	5.05	well volume
Sampling code					
Synchronous water level	220.2 (03/21/00)	218.5 (09/23/00)	216.9 (03/26/01)	214.9 (09/26/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<1	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethane	<1	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	.84	J	I	<5	U		1.2	J	I	4.55	J	I	1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	U		<5	U		<5	U		<5	U		1	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<1	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	tetrachloroethylene	4.43			4.4	J	I	4.78	J	I	5	J	I	1	WA	5	ug/L
	1,1,1-trichloroethane	<1	U		<5	U		<5	U		<5	U		1	WA	200	ug/L
	trichloroethylene	<1	U		<5	U		<5	U		<5	U		1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable	181	J	I				<200	U		<96.2	U	V	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	1770						1830			1710			2	WA	2400	ug/L
	sodium, total recoverable	3220		V				3140			2990			1	WA	4600	ug/L
	sulfate	<400	U													3000	ug/L
Radionuclides																	
+	gross alpha	***20.87***						3.27								15	pCi/L
	nonvolatile beta	13.47														50	pCi/L
	radium, total alpha-emitting	2.98		V												5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 71B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 103801.6 E 44054.7	33.32720 Deg N -81.7525 Deg W	135.9 - 131.1 ft msl	344.7 ft msl	4 " PVC	S	LL

SAMPLE DATE		09/20/00	03/12/01	08/31/01	
FIELD DATA					
Parameter	**1Q00**	**3Q00**	**1Q01**	**3Q01**	**Unit**
Water Elevation	*Not Applicable*	213.75	212.55	211.15	ft msl
pH		7.8	11.9	7.5	pH
Sp. Conductance		87	1800	83	uS/cm
Water temperature		19.8	19.6	21.1	deg. C
Alkalinity as CaCO3		28	310	43	mg/L
Turbidity		14.4	6	8	NTU
Volumes purged		2.27	2.06	2.04	well volume
Sampling code					
Synchronous water level	215.8 (03/21/00)	214.1 (09/24/00)	212.3 (03/26/01)	211.1 (09/26/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP EPA	3Q00	CLP EPA	1Q01	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	barium, total recoverable												
	cyanide												
	lead, total recoverable												
	nickel, total recoverable												
	selenium, total recoverable												
Organics													
	chlorobenzene	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethane	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethylene	<1	U	<5	U	<5	U	<5	U	1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	U	<5	U	<5	U	<5	U	1	WA	100	ug/L
	pcb 1016												
	pcb 1221												
	pcb 1232												
	pcb 1242												
	pcb 1248												
	pcb 1254												
	pcb 1260												
	1,1,2,2-tetrachloroethane	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
	tetrachloroethylene	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1,1-trichloroethane	<1	U	<5	U	<5	U	<5	U	1	WA	200	ug/L
	trichloroethylene	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP EPA	3Q99	CLP EPA	3Q00	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
+	aluminum, total recoverable	***2000***		140	J I	***675***		99.6	J I	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	158	J I	87.7	J I							2400	ug/L
+	sodium, total recoverable	***7490***		4000		***5050***		4160		1	WA	4600	ug/L
	sulfate	1110		791								3000	ug/L
Radionuclides													
	gross alpha	2.28		.922	U							15	pCi/L
	nonvolatile beta	3.43		2.24	J I							50	pCi/L
	radium, total alpha-emitting	.51		-.1	U							5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 72B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 96387.6 E 48350.3	33.31783 Deg N -81.7267 Deg W	156.7 - 152 ft msl	328.2 ft msl	4 " PVC	S	LL

SAMPLE DATE		09/19/00	03/12/01	08/30/01	
FIELD DATA					
Parameter	**1Q00**	**3Q00**	**1Q01**	**3Q01**	**Unit**
Water Elevation	*Not Applicable*	198.03	197.3	196.1	ft msl
pH		6.4	11.6	7.2	pH
Sp. Conductance		39	958	58	uS/cm
Water temperature		19.4	17.2	21.4	deg. C
Alkalinity as CaCO3		5	206	37	mg/L
Turbidity		.9	1.9	1.2	NTU
Volumes purged		3.50	2.13	2.30	well volume
Sampling code					
Synchronous water level	199.1 (03/22/00)	197.9 (09/23/00)	197.5 (03/29/01)	( )	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<1	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethane	<1	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<1	U		<5	U		<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	U		<5	U		<5	U		<5	U		1	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<1	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	tetrachloroethylene	<1	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1,1-trichloroethane	<1	U		<5	U		<5	U		<5	U		1	WA	200	ug/L
	trichloroethylene	<1	U		<5	U		<5	U		<5	U		1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable	75.3	J	I	<200	U		<35.2	U	V	64.1	J	I	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	385			442	J	I									2400	ug/L
	sodium, total recoverable	2340		V	1700			1790			1720			1	WA	4600	ug/L
	sulfate	836			652											3000	ug/L
Radionuclides																	
	gross alpha	1.75			.264	U										15	pCi/L
	nonvolatile beta	.53	U	W	.983	U										50	pCi/L
	radium, total alpha-emitting	.28	U	W	.4	U	V									5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 73B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 99270.3 E 45694	33.31986 Deg N -81.7393 Deg W	135.5 - 130.8 ft msl	339.6 ft msl	4 " PVC	S	LL

SAMPLE DATE	03/17/00	08/24/00	03/13/01	09/13/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	200.91	198.89	198.2	196.86	ft msl
pH	4.8	7.5	5.3	5.7	pH
Sp. Conductance	42	42	42	42	uS/cm
Water temperature	19	20.8	19.9	26.6	deg. C
Alkalinity as CaCO3	0	0	26	4	mg/L
Turbidity	.6	.5	2	.3	NTU
Volumes purged	2.62	2.13	1.93	2.13	well volume
Sampling code					
Synchronous water level	200.5 (03/21/00)	199 (09/23/00)	197.8 (03/29/01)	196.8 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP EPA	3Q00	CLP EPA	1Q01	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
	Inorganics												
	barium, total recoverable												
	cyanide												
	lead, total recoverable												
	nickel, total recoverable												
	selenium, total recoverable												
	Organics												
	chlorobenzene	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethane	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethylene	<1	U	<5	U	<5	U	<5	U	1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	U	<5	U	<5	U	<5	U	1	WA	100	ug/L
	pcb 1016												
	pcb 1221												
	pcb 1232												
	pcb 1242												
	pcb 1248												
	pcb 1254												
	pcb 1260												
	1,1,2,2-tetrachloroethane	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
+	tetrachloroethylene	***19.4***		***22***		***23.9***		***23.2***		1	WA	5	ug/L
	1,1,1-trichloroethane	<1	U	<5	U	<5	U	<5	U	1	WA	200	ug/L
+	trichloroethylene	***61***		***48***		***56.5***		***48.9***		1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP EPA	3Q99	CLP EPA	3Q00	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
	Inorganics												
	aluminum, total recoverable	<200	U	<200	U	<80	U V	112	J I	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	1650		1830								2400	ug/L
	sodium, total recoverable	2570		2760		2900		2850		1	WA	4600	ug/L
+	sulfate	***3190***		***3130***								3000	ug/L
	Radionuclides												
	gross alpha	1.45		.324	U							15	pCi/L
	nonvolatile beta	2.54		1.99	J I							50	pCi/L
	radium, total alpha-emitting	.41	U W	.3	U							5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 74D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 99185.3 E 50469.7	33.32747 Deg N -81.7266 Deg W	237.1 - 217.1 ft msl	315.1 ft msl	4 " PVC	S	M

SAMPLE DATE	03/16/00	08/28/00	03/13/01	09/15/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	230.14	229.07	228.39	227.77	ft msl
pH	5.3	5.2	4.9	4.1	pH
Sp. Conductance	32	28	30	29	uS/cm
Water temperature	19.1	22.1	18.9	19.8	deg. C
Alkalinity as CaCO3	2	0	0	0	mg/L
Turbidity	1.1	2.6	1.4	1	NTU
Volumes purged	4.27	2.33	4.67		well volume
Sampling code					
Synchronous water level	230 (03/22/00)	229 (09/23/00)	228.3 (03/29/01)	( )	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP EPA	3Q00	CLP EPA	1Q01	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	barium, total recoverable												
	cyanide												
	lead, total recoverable												
	nickel, total recoverable												
	selenium, total recoverable												
Organics													
	chlorobenzene	.35	J I	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethane	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethylene	<1	U	<5	U	<5	U	<5	U	1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	U	<5	U	<5	U	<5	U	1	WA	100	ug/L
	pcb 1016												
	pcb 1221												
	pcb 1232												
	pcb 1242												
	pcb 1248												
	pcb 1254												
	pcb 1260												
	1,1,2,2-tetrachloroethane	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
+	tetrachloroethylene	***7.23***		***6.9***		***5.44***		4	J I	1	WA	5	ug/L
	1,1,1-trichloroethane	<1	U	<5	U	<5	U	<5	U	1	WA	200	ug/L
+	trichloroethylene	***9.32***		***8***		***5.84***		5		1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP EPA	3Q99	CLP EPA	3Q00	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	aluminum, total recoverable	117	J I	<200	U	45.5	J I	<126	U V	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	2280		1750								2400	ug/L
+	sodium, total recoverable	***4680***		4180		3680		3620		1	WA	4600	ug/L
	sulfate	276		331								3000	ug/L
Radionuclides													
	gross alpha	1.9		.894	U							15	pCi/L
	nonvolatile beta	4.03		1.12	U							50	pCi/L
	radium, total alpha-emitting	.14	UJ W	.2	U							5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 76C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 103061.5 E 45344	33.32767 Deg N -81.7476 Deg W	186 - 181.3 ft msl	352.4 ft msl	4 " PVC	S	UL

SAMPLE DATE	03/18/00	09/14/00	02/15/01	09/14/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	219.21	217.93	217.15	215.45	ft msl
pH	7.3	7	8.5	9.4	pH
Sp. Conductance	63	64	74	92	uS/cm
Water temperature	18	20.5	18.8		deg. C
Alkalinity as CaCO3	28	25	22	33	mg/L
Turbidity	.9	1.6	1.4	.5	NTU
Volumes purged	2.75	3.10	2.52	3.19	well volume
Sampling code					
Synchronous water level	219.2 (03/21/00)	218 (09/23/00)	216.5 (03/26/01)	215.6 (09/26/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP EPA	3Q00	CLP EPA	1Q01	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
	Inorganics												
	barium, total recoverable												
	cyanide												
	lead, total recoverable												
	nickel, total recoverable												
	selenium, total recoverable												
	Organics												
	chlorobenzene	<20	U	<5	U	<50	U	<100	U	20	WA	5	ug/L
	1,1-dichloroethane	<20	U	<5	U	<50	U	<100	U	20	WA	5	ug/L
	1,1-dichloroethylene	<20	U	<5	U	<50	U	<100	U	20	WA	7	ug/L
	trans-1,2-dichloroethylene	<20	U	<5	U	<50	U	<100	U	20	WA	100	ug/L
	pcb 1016												
	pcb 1221												
	pcb 1232												
	pcb 1242												
	pcb 1248												
	pcb 1254												
	pcb 1260												
	1,1,2,2-tetrachloroethane	<20	U	<5	U	<50	U	<100	U	20	WA	5	ug/L
+	tetrachloroethylene	***43***		***30***		42.3	J IK	<100	U	20	WA	5	ug/L
	1,1,1-trichloroethane	<20	U	<5	U	<50	U	<100	U	20	WA	200	ug/L
+	trichloroethylene	***4620***		***3800***		3710	J K	2630	J K	20	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP EPA	3Q99	CLP EPA	3Q00	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
	Inorganics												
+	aluminum, total recoverable	<200	U	<200	U	***204***		***1110***		1	WA	100	ug/L
	nitrate-nitrite as nitrogen	1490		1430		1680		1650		5	WA	2400	ug/L
+	sodium, total recoverable	4580		***5700***		***5230***		***5790***		1	WA	4600	ug/L
	sulfate	516		982								3000	ug/L
	Radionuclides												
	gross alpha	1.02		.726	U							15	pCi/L
	nonvolatile beta	1.14	U W	.794	U							50	pCi/L
	radium, total alpha-emitting	2.55	UJ V	0	U							5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 77B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 107065.8 E 54217.4	33.35101 Deg N -81.7321 Deg W	145.1 - 140.4 ft msl	357.2 ft msl	4 " PVC	S	LL

SAMPLE DATE	02/15/00	09/12/00	03/01/01	08/31/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	220.04	218.75	217.54	215.18	ft msl
pH	5.6	6.7	7.8	6.8	pH
Sp. Conductance	44	42	43	44	uS/cm
Water temperature	17.7	19.4	18.2	19.9	deg. C
Alkalinity as CaCO3	12	118	15	37	mg/L
Turbidity	.8	1.1	3.4	2	NTU
Volumes purged	2.48	2.83	2.18	2.07	well volume
Sampling code					
Synchronous water level	220 (03/22/00)	218.4 (09/23/00)	217.4 (03/29/01)	216.5 (09/24/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP EPA	3Q00	CLP EPA	1Q01	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	barium, total recoverable												
	cyanide												
	lead, total recoverable												
	nickel, total recoverable												
	selenium, total recoverable												
Organics													
	chlorobenzene	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethane	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethylene	<1	U	<5	U	<5	U	<5	U	1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	U	<5	U	<5	U	<5	U	1	WA	100	ug/L
	pcb 1016												
	pcb 1221												
	pcb 1232												
	pcb 1242												
	pcb 1248												
	pcb 1254												
	pcb 1260												
	1,1,2,2-tetrachloroethane	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
	tetrachloroethylene	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1,1-trichloroethane	<1	U	<5	U	<5	U	<5	U	1	WA	200	ug/L
	trichloroethylene	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP EPA	3Q99	CLP EPA	3Q00	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	aluminum, total recoverable	104	J I	<200	U	47.5	J I	96.5	J I	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	848		873								2400	ug/L
	sodium, total recoverable	1910		2000		1720		1530		1	WA	4600	ug/L
	sulfate	<200	U	<400	U	761		359		1	WA	3000	ug/L
Radionuclides													
	gross alpha	2.35	J	1.58	J I							15	pCi/L
	nonvolatile beta	7.08	J	1.19	U							50	pCi/L
	radium, total alpha-emitting	.35	U W	.3	J I							5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 77C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 107078.3 E 54225.9	33.35106 Deg N -81.7321 Deg W	173.2 - 168.5 ft msl	357.2 ft msl	4 " PVC	S	UL

SAMPLE DATE	03/11/00	09/14/00	02/21/01	08/27/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	222.26	220.6	220.12	218.19	ft msl
pH	6.2	6.1	6	5.8	pH
Sp. Conductance	27	27	28	26	uS/cm
Water temperature	18.9	19.8	19.6	20.4	deg. C
Alkalinity as CaCO3	13	6	11	54	mg/L
Turbidity	.8	1.3	1	.9	NTU
Volumes purged	2.95	2.32	2.40	2.37	well volume
Sampling code					
Synchronous water level	222 (03/22/00)	220.6 (09/23/00)	219.6 (03/29/01)	218.1 (09/24/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
	Inorganics																
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
	Organics																
	chlorobenzene	<1	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethane	<1	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<1	U		<5	U		<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene				<5	U		<5	U		<5	U		1	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<1	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	tetrachloroethylene	<1	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1,1-trichloroethane	<1	U		<5	U		<5	U		<5	U		1	WA	200	ug/L
+	trichloroethylene	16.2	J	K	***13***			***10.2***			5.91	J	K	1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
	Inorganics																
	aluminum, total recoverable	145	J	I	<200	U		<200	U		<40.4	U	V	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	790			654											2400	ug/L
	sodium, total recoverable	2350		V	2190			1910			2010			1	WA	4600	ug/L
	sulfate	<400	U		242	J	I									3000	ug/L
	Radionuclides																
	gross alpha	2.42			.58	U										15	pCi/L
	nonvolatile beta	3.84			2.34	J	I									50	pCi/L
	radium, total alpha-emitting	.85		V	.5	J	I									5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 78DR

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 103652 E 45470.6	33.32918 Deg N -81.7485 Deg W	226.9 - 206.8 ft msl	363.7 ft msl	2 " PVC		M/GC

SAMPLE DATE	03/18/00	09/27/00	02/15/01	09/12/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	221.64	220.23	219.97	*Not Applicable*	ft msl
pH	9.6		6.8	4.7	pH
Sp. Conductance	36		24	24	uS/cm
Water temperature	15.2		21.8		deg. C
Alkalinity as CaCO3	12	1	1	1	mg/L
Turbidity	12.8		5.3	9.8	NTU
Volumes purged	.411		2.32		well volume
Sampling code	NX	LN			
Synchronous water level	221.6 (03/21/00)	220.6 (09/23/00)	219.3 (03/26/01)	205.7 (09/26/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
	Inorganics																
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
	Organics																
	chlorobenzene	<1	U		<5	U		<5	JU	L	<5	U		1	WA	5	ug/L
	1,1-dichloroethane	<1	U		<5	U		<5	JU	L	<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<1	U		<5	U		<5	JU	L	<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	U		<5	U		<5	JU	L	<5	U		1	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<1	U		<5	U		<5	JU	L	<5	U		1	WA	5	ug/L
	tetrachloroethylene	4.7			1.3	J	I	3.18	J	IL	<5	U		1	WA	5	ug/L
	1,1,1-trichloroethane	<1	U		<5	U		<5	JU	L	<5	U		1	WA	200	ug/L
+	trichloroethylene	***25.3***			***11***			16.3	J	L	***12***			1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
	Inorganics																
+	aluminum, total recoverable	167	J	I	<200	U		86.7	J	I	***1380***			1	WA	100	ug/L
	nitrate-nitrite as nitrogen	1020			1120			1150			906			1	WA	2400	ug/L
	sodium, total recoverable	2160		V	1970			1720			2150			1	WA	4600	ug/L
	sulfate	322	J	I	191	J	I									3000	ug/L
	Radionuclides																
	gross alpha	7.62			1.36	J	I									15	pCi/L
	nonvolatile beta	6.23	J		.201	U										50	pCi/L
	radium, total alpha-emitting	1.5			.9	J	I									5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 79B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 99296.9 E 47300.2	33.32254 Deg N -81.7352 Deg W	140.8 - 136.1 ft msl	347.9 ft msl	4 " PVC	S	LL

SAMPLE DATE	03/18/00	09/27/00	02/21/01	09/07/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	206.43	204.7	204.12	202.65	ft msl
pH	11.5	10.5	11.6	6.4	pH
Sp. Conductance	3060	469	1630	885	uS/cm
Water temperature	14.5	22.3	18.3	18.5	deg. C
Alkalinity as CaCO3	671	48	374	1441	mg/L
Turbidity	3.9	12.4	5.3	7.4	NTU
Volumes purged	.022	10.2		.023	well volume
Sampling code	NX		NX		
Synchronous water level	206.3 (03/23/00)	204.9 (09/23/00)	203.8 (03/29/01)	( )	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP EPA	3Q00	CLP EPA	1Q01	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	barium, total recoverable												
	cyanide												
	lead, total recoverable												
	nickel, total recoverable												
	selenium, total recoverable												
Organics													
	chlorobenzene	<1	JU L	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethane	<1	JU L	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethylene	<1	JU L	<5	U	<5	U	<5	U	1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	JU L	<5	U	<5	U	<5	U	1	WA	100	ug/L
	pcb 1016												
	pcb 1221												
	pcb 1232												
	pcb 1242												
	pcb 1248												
	pcb 1254												
	pcb 1260												
	1,1,2,2-tetrachloroethane	<1	JU L	<5	U	<5	U	<5	U	1	WA	5	ug/L
+	tetrachloroethylene	5.92	J L	***8.5***		***5.26***		***7.12***		1	WA	5	ug/L
	1,1,1-trichloroethane	<1	JU L	<5	U	<5	U	<5	U	1	WA	200	ug/L
+	trichloroethylene	28.5	J L	***60***		***37.3***		***53.8***		1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP EPA	3Q99	CLP EPA	3Q00	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
+	aluminum, total recoverable	***2190***		***1720***		***1490***		***1840***		1	WA	100	ug/L
	nitrate-nitrite as nitrogen	880		783								2400	ug/L
+	sodium, total recoverable	***25100***		***19300***		***8630***		***11600***		1	WA	4600	ug/L
+	sulfate	***3640***		***3690***								3000	ug/L
Radionuclides													
+	gross alpha	***22.05***		6.51								15	pCi/L
	nonvolatile beta	16.4		17.6	J K							50	pCi/L
	radium, total alpha-emitting	4.47		2.9								5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 79C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 99290.2 E 47286.8	33.32251 Deg N -81.7352 Deg W	199.6 - 194.9 ft msl	347.8 ft msl	4 " PVC	S	UL

SAMPLE DATE	03/18/00	09/27/00	02/21/01	09/06/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	208.67	207.05	206.66	205.19	ft msl
pH	6.5	6.3	6.6	6.4	pH
Sp. Conductance	74	73	85	78	uS/cm
Water temperature	17.2	19.1	22	21.1	deg. C
Alkalinity as CaCO3	11	3	20	132	mg/L
Turbidity	.8	1.1	2.6	.3	NTU
Volumes purged	5.62	9.31	4.62	3.47	well volume
Sampling code					
Synchronous water level	208.5 (03/23/00)	207.3 (09/23/00)	206.4 (03/29/01)	( )	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP EPA	3Q00	CLP EPA	1Q01	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	barium, total recoverable												
	cyanide												
	lead, total recoverable												
	nickel, total recoverable												
	selenium, total recoverable												
Organics													
	chlorobenzene	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethane	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethylene	1.52		1.3	J I	1.01	J I	1.09	J I	1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	U	<5	U	<5	U	<5	U	1	WA	100	ug/L
	pcb 1016												
	pcb 1221												
	pcb 1232												
	pcb 1242												
	pcb 1248												
	pcb 1254												
	pcb 1260												
	1,1,2,2-tetrachloroethane	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
+	tetrachloroethylene	***38.7***		***35***		***24.5***		***28.6***		1	WA	5	ug/L
	1,1,1-trichloroethane	<1	U	<5	U	<5	U	<5	U	1	WA	200	ug/L
+	trichloroethylene	***46.4***		***42***		***35.3***		***39.2***		1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP EPA	3Q99	CLP EPA	3Q00	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
+	aluminum, total recoverable	126	J I	***217***		127	J I	<140	U V	1	WA	100	ug/L
+	nitrate-nitrite as nitrogen	***4340***		***4760***								2400	ug/L
+	sodium, total recoverable	***6450***		***5920***		***5030***		***5360***		1	WA	4600	ug/L
	sulfate	1330		1000								3000	ug/L
Radionuclides													
+	gross alpha	3.25		***45***								15	pCi/L
	nonvolatile beta	8.72		15.1	J K							50	pCi/L
	radium, total alpha-emitting	1.69		1	J I							5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 81B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 103762.7 E 55230.4	33.34537 Deg N -81.7230 Deg W	146.1 - 141.4 ft msl	267 ft msl	4 " PVC	S	LL

SAMPLE DATE	02/15/00	09/20/00	03/05/01	08/31/01	
FIELD DATA					
Parameter	**1Q00**	**3Q00**	**1Q01**	**3Q01**	**Unit**
Water Elevation	219.12	217.5	216.61	214.61	ft msl
pH	5.1	6.7	5.5	5.5	pH
Sp. Conductance	24	26	24	27	uS/cm
Water temperature	18.5	19.7	19.7	20.6	deg. C
Alkalinity as CaCO3	2	7	1	9	mg/L
Turbidity	.5	2.8	.5	.7	NTU
Volumes purged	2.73	1.77	2.34	2.13	well volume
Sampling code					
Synchronous water level	219.1 (03/22/00)	217.7 (09/23/00)	216.5 (03/29/01)	215.2 (09/24/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<1	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethane	<1	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<1	U		<5	U		<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	U		<5	U		<5	U		<5	U		1	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<1	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	tetrachloroethylene	<1	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1,1-trichloroethane	<1	U		<5	U		<5	U		<5	U		1	WA	200	ug/L
	trichloroethylene	<1	U		<5	U		<5	U		<5	U		1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable	79.5	J	I	98.2	J	I	<34.1	U	V	72.6	J	I	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	207			330	J	I									2400	ug/L
	sodium, total recoverable	2000			2100			2590			2090			1	WA	4600	ug/L
	sulfate	357			<400	U										3000	ug/L
Radionuclides																	
	gross alpha	2.06	U		.964	J	I									15	pCi/L
	nonvolatile beta	1.1	U	W	1.15	J	I									50	pCi/L
	radium, total alpha-emitting	1.81			.4	U										5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 82A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 107529.5 E 51978.4	33.34838 Deg N -81.7389 Deg W	126.1 - 121.4 ft msl	374.3 ft msl	4 " PVC	S	MCBC

SAMPLE DATE	02/17/00	09/19/00	02/26/01	08/23/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	219.72	220.15	217.93	186.22	ft msl
pH	10.9	10.9	10.9	10.9	pH
Sp. Conductance	922	945	59	6.84	uS/cm
Water temperature	18.2	20.6	21.9	27.6	deg. C
Alkalinity as CaCO3	190	190	136	144	mg/L
Turbidity	.6	1.7	1	.7	NTU
Volumes purged	0	2.12	0	.024	well volume
Sampling code	NX		NX	X	
Synchronous water level	218.4 (06/28/00)	218.6 (12/28/00)	216.6 (06/27/01)	208.9 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP EPA	3Q00	CLP EPA	1Q01	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	barium, total recoverable												
	cyanide												
	lead, total recoverable												
	nickel, total recoverable												
	selenium, total recoverable												
Organics													
	chlorobenzene	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethane	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethylene	<1	U	<5	U	<5	U	<5	U	1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	U	<5	U	<5	U	<5	U	1	WA	100	ug/L
	pcb 1016												
	pcb 1221												
	pcb 1232												
	pcb 1242												
	pcb 1248												
	pcb 1254												
	pcb 1260												
	1,1,2,2-tetrachloroethane	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
	tetrachloroethylene	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1,1-trichloroethane	<1	U	<5	U	<5	U	<5	U	1	WA	200	ug/L
+	trichloroethylene	***65.8***		45	J K	***27.5***		***27.7***		1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP EPA	3Q99	CLP EPA	3Q00	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
+	aluminum, total recoverable	***793***		***850***		***915***		***769***		1	WA	100	ug/L
	nitrate-nitrite as nitrogen	104	J I	87.5	J I							2400	ug/L
+	sodium, total recoverable	***23500***		***20000***		***16900***		***14400***		1	WA	4600	ug/L
+	sulfate	***24000***		***22400***		***20900***		***23200***		5	WA	3000	ug/L
Radionuclides													
	gross alpha	3.7		.89	U							15	pCi/L
	nonvolatile beta	8.27		6.49								50	pCi/L
	radium, total alpha-emitting	.25	U W	.7	J I							5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 82B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 107533.4 E 51993.3	33.34842 Deg N -81.7388 Deg W	148.2 - 143.5 ft msl	374.2 ft msl	4 " PVC	S	MCBC

SAMPLE DATE	01/31/00	09/01/00	03/15/01	08/24/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	218.5	216.85	215.81	214.15	ft msl
pH	4.4	4.4	4.6	4.7	pH
Sp. Conductance	39	40	41	34	uS/cm
Water temperature	18.5	20.8	19.8	21.7	deg. C
Alkalinity as CaCO3	0	0	0	0	mg/L
Turbidity	.5	1	.3	1	NTU
Volumes purged	2.55	2.69	2.37		well volume
Sampling code					
Synchronous water level	218.4 (03/20/00)	216.5 (09/24/00)	219.7 (03/29/01)	214.1 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<1	JU	L	<5	U		<5	U		<5	UJ	L	1	WA	5	ug/L
	1,1-dichloroethane	<1	JU	L	<5	U		<5	U		<5	UJ	L	1	WA	5	ug/L
	1,1-dichloroethylene	<1	JU	L	<5	U		<5	U		<5	UJ	L	1	WA	7	ug/L
	trans-1,2-dichloroethylene				<5	U		<5	U		<5	UJ	L	1	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<1	JU	L	<5	U		<5	U		<5	UJ	L	1	WA	5	ug/L
	tetrachloroethylene	<1	JU	L	<5	U		<5	U		<5	UJ	L	1	WA	5	ug/L
	1,1,1-trichloroethane	<1	JU	L	<5	U		<5	U		<5	UJ	L	1	WA	200	ug/L
	trichloroethylene	<1	JU	L	<5	U		<5	U		<5	UJ	L	1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable	101	J	I	76	J	I	155	J	I	<192	U	V	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	<100	U		101	J	I									2400	ug/L
	sodium, total recoverable	1820			2000			1850			1760			1	WA	4600	ug/L
+	sulfate	***7910***			***7590***			***8800***			***7740***			2	WA	3000	ug/L
Radionuclides																	
	gross alpha	2.67	J		1.95	J	I									15	pCi/L
	nonvolatile beta	6.45	J		4.79											50	pCi/L
	radium, total alpha-emitting	1.32			.8	U										5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 82C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 107521.9 E 51949.4	33.34832 Deg N -81.7389 Deg W	177.7 - 173 ft msl	373.9 ft msl	4 " PVC	S	LL

SAMPLE DATE	01/31/00	09/01/00	03/15/01	08/24/01	
FIELD DATA					
Parameter	**1Q00**	**3Q00**	**1Q01**	**3Q01**	**Unit**
Water Elevation	226.5	224.81	223.8	222.49	ft msl
pH	5.6	6	5.7	5.8	pH
Sp. Conductance	30	33	29	30	uS/cm
Water temperature	18.3	20.7	19.8	20.1	deg. C
Alkalinity as CaCO3	4	1	1	2	mg/L
Turbidity	.5	1.5	.4	.2	NTU
Volumes purged	2.40	3.01	2.83		well volume
Sampling code					
Synchronous water level	226.3 (03/20/00)	224.7 (09/24/00)	223.3 (03/29/01)	222.2 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<1	JU	L	<5	U		<5	U		<5	UJ	L	1	WA	5	ug/L
	1,1-dichloroethane	<1	JU	L	<5	U		<5	U		<5	UJ	L	1	WA	5	ug/L
	1,1-dichloroethylene	<1	JU	L	<5	U		<5	U		<5	UJ	L	1	WA	7	ug/L
	trans-1,2-dichloroethylene				<5	U		<5	U		<5	UJ	L	1	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<1	JU	L	<5	U		<5	U		<5	UJ	L	1	WA	5	ug/L
	tetrachloroethylene	<1	JU	L	<5	U		<5	U		<5	UJ	L	1	WA	5	ug/L
	1,1,1-trichloroethane	<1	JU	L	<5	U		<5	U		<5	UJ	L	1	WA	200	ug/L
	trichloroethylene	<1	JU	L	<5	U		<5	U		<5	UJ	L	1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable	78.2	J	I	<200	U		32.9	J	I	<100	U	V	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	1520			1640											2400	ug/L
	sodium, total recoverable	3000			3300			2920			2780			1	WA	4600	ug/L
	sulfate	<200	U		182	J	I	756			299	J	I	1	WA	3000	ug/L
Radionuclides																	
	gross alpha	2.31	J		1.09	J	I									15	pCi/L
	nonvolatile beta	1.61	UJ	W	2.26	J	I									50	pCi/L
	radium, total alpha-emitting	.46			.4	U										5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 82D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 107518.1 E 51934.6	33.34829 Deg N -81.7390 Deg W	236.9 - 216.8 ft msl	373.6 ft msl	4 " PVC	S	M

SAMPLE DATE	01/31/00	09/01/00	03/15/01	08/24/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	231.76	230.02	229.11	227.75	ft msl
pH	5.3	5.2	5.3	5.4	pH
Sp. Conductance	30	26	28	25	uS/cm
Water temperature	18.8	20.7	22.3	22.2	deg. C
Alkalinity as CaCO3	4	1	0	1	mg/L
Turbidity	.7	1.3	.8	2.9	NTU
Volumes purged	2.58	6.56	3.02		well volume
Sampling code					
Synchronous water level	231.6 (03/20/00)	230 (09/24/00)	228.9 (03/29/01)	227.8 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP EPA	3Q00	CLP EPA	1Q01	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	barium, total recoverable												
	cyanide												
	lead, total recoverable												
	nickel, total recoverable												
	selenium, total recoverable												
Organics													
	chlorobenzene	<1	JU L	<5	U	<5	U	<5	UJ L	1	WA	5	ug/L
	1,1-dichloroethane	<1	JU L	<5	U	<5	U	<5	UJ L	1	WA	5	ug/L
	1,1-dichloroethylene	<1	JU L	<5	U	<5	U	<5	UJ L	1	WA	7	ug/L
	trans-1,2-dichloroethylene			<5	U	<5	U	<5	UJ L	1	WA	100	ug/L
	pcb 1016												
	pcb 1221												
	pcb 1232												
	pcb 1242												
	pcb 1248												
	pcb 1254												
	pcb 1260												
	1,1,2,2-tetrachloroethane	<1	JU L	<5	U	<5	U	<5	UJ L	1	WA	5	ug/L
	tetrachloroethylene	<1	JU L	<5	U	<5	U	<5	UJ L	1	WA	5	ug/L
	1,1,1-trichloroethane	<1	JU L	<5	U	<5	U	<5	UJ L	1	WA	200	ug/L
	trichloroethylene	<1	JU L	<5	JU L	<5	U	<5	UJ L	1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP EPA	3Q99	CLP EPA	3Q00	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	aluminum, total recoverable	<200	U	<200	U	<200	U	<120	U V	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	2320		1870								2400	ug/L
+	sodium, total recoverable	***5090***		4000		3430		3110		1	WA	4600	ug/L
	sulfate	1200		753		1230		768		1	WA	3000	ug/L
Radionuclides													
	gross alpha	6.6	J	2.48								15	pCi/L
	nonvolatile beta	3.78	J	1.65	J I							50	pCi/L
	radium, total alpha-emitting	.84		1.4	U							5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 82TA

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 107525.7 E 51964.2	33.34835 Deg N -81.7389 Deg W	93.8 - 88.4 ft msl	373.7 ft msl	4 " CS	S	CBA

SAMPLE DATE	02/17/00	09/19/00	02/26/01	08/23/01	
FIELD DATA					
Parameter	**1Q00**	**3Q00**	**1Q01**	**3Q01**	**Unit**
Water Elevation	213.26	211.15	210.74	209.11	ft msl
pH	5.4	8.2	5.9	5.3	pH
Sp. Conductance	24	24	21	22	uS/cm
Water temperature	19.8	19.2	20.9	21.4	deg. C
Alkalinity as CaCO3	1	5	2	1	mg/L
Turbidity	8.2	8.9	9.7	8.2	NTU
Volumes purged	2.52	2.60	3.53	2.49	well volume
Sampling code					
Synchronous water level	213 (03/20/00)	211.1 (09/24/00)	210.1 (06/27/01)	209 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<1	JU	L	<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethane	<1	JU	L	<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<1	JU	L	<5	U		<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	JU	L	<5	U		<5	U		<5	U		1	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<1	JU	L	<5	U		<5	U		<5	U		1	WA	5	ug/L
	tetrachloroethylene	<1	JU	L	<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1,1-trichloroethane	<1	JU	L	<5	U		<5	U		<5	U		1	WA	200	ug/L
+	trichloroethylene	123	J	L	110	J	K	***138***			***123***			1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable	<200	U		<200	U		<200	U		<110	U	V	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	543			531											2400	ug/L
	sodium, total recoverable	1700		V	2000			1920			1780			1	WA	4600	ug/L
	sulfate	2060			1970			2460			2280			1	WA	3000	ug/L
Radionuclides																	
	gross alpha	1.6			.0863	U										15	pCi/L
	nonvolatile beta	13.64			1.39	J	I									50	pCi/L
	radium, total alpha-emitting	1.32		V	.3	J	I									5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 83B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 108426.7 E 52421.4	33.35109 Deg N -81.7394 Deg W	146.3 - 141.6 ft msl	371.8 ft msl	4 " PVC	S	MCBC

SAMPLE DATE	02/10/00	09/09/00	03/09/01	08/24/01	
FIELD DATA					
Parameter	**1Q00**	**3Q00**	**1Q01**	**3Q01**	**Unit**
Water Elevation	220.78	218.85	218.02	216.31	ft msl
pH	5.3	5.6	5.7	5.5	pH
Sp. Conductance	20	23	21	22	uS/cm
Water temperature	18.6	19.7	19.1	20.2	deg. C
Alkalinity as CaCO3	2	2	1	36	mg/L
Turbidity	.7	1	.7	.1	NTU
Volumes purged	2.53	2.51	2.36	2.37	well volume
Sampling code					
Synchronous water level	220.5 (03/20/00)	218.9 (09/24/00)	217.4 (03/20/01)	216.1 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP EPA	3Q00	CLP EPA	1Q01	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	barium, total recoverable												
	cyanide												
	lead, total recoverable												
	nickel, total recoverable												
	selenium, total recoverable												
Organics													
	chlorobenzene	<1	U	<5	U	<5	U	<5	UJ L	1	WA	5	ug/L
	1,1-dichloroethane	<1	U	<5	U	<5	U	<5	UJ L	1	WA	5	ug/L
	1,1-dichloroethylene	<1	U	<5	U	<5	U	<5	UJ L	1	WA	7	ug/L
	trans-1,2-dichloroethylene			<5	U	<5	U	<5	UJ L	1	WA	100	ug/L
	pcb 1016												
	pcb 1221												
	pcb 1232												
	pcb 1242												
	pcb 1248												
	pcb 1254												
	pcb 1260												
	1,1,2,2-tetrachloroethane	<1	U	<5	U	<5	U	<5	UJ L	1	WA	5	ug/L
	tetrachloroethylene	<1	U	<5	U	<5	U	<5	UJ L	1	WA	5	ug/L
	1,1,1-trichloroethane	<1	U	<5	U	<5	U	<5	UJ L	1	WA	200	ug/L
	trichloroethylene	<1	U	<5	U	<5	U	<5	UJ L	1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP EPA	3Q99	CLP EPA	3Q00	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
+	aluminum, total recoverable	<200	U	<200	U	***253***		<112	U V	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	427		497	J I							2400	ug/L
	sodium, total recoverable	1860		1800		1910		1600		1	WA	4600	ug/L
	sulfate	1370		1360		1880		1570		1	WA	3000	ug/L
Radionuclides													
	gross alpha	2.39	J	1.71	J I							15	pCi/L
	nonvolatile beta	3.44	J	3.18								50	pCi/L
	radium, total alpha-emitting	1.33		.4	J I							5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 83C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 108405.3 E 52384.7	33.35098 Deg N -81.7395 Deg W	182.8 - 178 ft msl	372 ft msl	4 " PVC	S	LL

SAMPLE DATE	02/10/00	09/09/00	03/09/01	08/24/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	227.01	225.38	223.93	222.88	ft msl
pH	8.4	8.3	8.8	7	pH
Sp. Conductance	65	60	65	55	uS/cm
Water temperature	18.3	21.1	18.2	19.9	deg. C
Alkalinity as CaCO3	17	18	30	36	mg/L
Turbidity	.4	.9	.6	.1	NTU
Volumes purged	2.81	3.10	2.23	2.12	well volume
Sampling code					
Synchronous water level	226.9 (03/20/00)	225 (12/28/00)	223.9 (03/29/01)	222.8 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP EPA	3Q00	CLP EPA	1Q01	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	barium, total recoverable												
	cyanide												
	lead, total recoverable												
	nickel, total recoverable												
	selenium, total recoverable												
Organics													
	chlorobenzene	<1	U	<5	U	<5	U	<5	UJ L	1	WA	5	ug/L
	1,1-dichloroethane	<1	U	<5	U	<5	U	<5	UJ L	1	WA	5	ug/L
	1,1-dichloroethylene	<1	U	<5	U	<5	U	<5	UJ L	1	WA	7	ug/L
	trans-1,2-dichloroethylene			<5	U	<5	U	<5	UJ L	1	WA	100	ug/L
	pcb 1016												
	pcb 1221												
	pcb 1232												
	pcb 1242												
	pcb 1248												
	pcb 1254												
	pcb 1260												
	1,1,2,2-tetrachloroethane	<1	U	<5	U	<5	U	<5	UJ L	1	WA	5	ug/L
	tetrachloroethylene	<1	U	<5	U	<5	U	<5	UJ L	1	WA	5	ug/L
	1,1,1-trichloroethane	<1	U	<5	U	<5	U	<5	UJ L	1	WA	200	ug/L
	trichloroethylene	<1	U	<5	U	<5	U	<5	UJ L	1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP EPA	3Q99	CLP EPA	3Q00	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	aluminum, total recoverable	197	J I	<200	U	<134	U	<159	U V	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	1360		1410								2400	ug/L
	sodium, total recoverable	2430		2300		2920		2660		1	WA	4600	ug/L
	sulfate	<200	U	174	J I	791		362		1	WA	3000	ug/L
Radionuclides													
	gross alpha	1.06	UJ W	.479	U							15	pCi/L
	nonvolatile beta	1.5	UJ W	1.36	J I							50	pCi/L
	radium, total alpha-emitting	.43		.3	J I							5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 83TA

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 108416.2 E 52410.9	33.35105 Deg N -81.7394 Deg W	75.7 - 70.2 ft msl	371.7 ft msl	4 " PVC	S	CBA

SAMPLE DATE	02/10/00	09/09/00	03/09/01	08/24/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	214.78	212.84	211.99	209.1	ft msl
pH	5	5.2	5.3	5.1	pH
Sp. Conductance	16	18	18	18	uS/cm
Water temperature	18.7	19.5	18.9	20.3	deg. C
Alkalinity as CaCO3	1	0	0	31	mg/L
Turbidity	.5	1.1	.2	.2	NTU
Volumes purged	2.32	4.38	2.21	2.13	well volume
Sampling code					
Synchronous water level	214.5 (03/20/00)	212.8 (12/28/00)	211.5 (03/29/01)	210.5 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP EPA	3Q00	CLP EPA	1Q01	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	barium, total recoverable												
	cyanide												
	lead, total recoverable												
	nickel, total recoverable												
	selenium, total recoverable												
Organics													
	chlorobenzene	<1	U	<5	U	<5	U	<5	UJ L	1	WA	5	ug/L
	1,1-dichloroethane	<1	U	<5	U	<5	U	<5	UJ L	1	WA	5	ug/L
	1,1-dichloroethylene	<1	U	<5	U	<5	U	<5	UJ L	1	WA	7	ug/L
	trans-1,2-dichloroethylene			<5	U	<5	U	<5	UJ L	1	WA	100	ug/L
	pcb 1016												
	pcb 1221												
	pcb 1232												
	pcb 1242												
	pcb 1248												
	pcb 1254												
	pcb 1260												
	1,1,2,2-tetrachloroethane	<1	U	<5	U	<5	U	<5	UJ L	1	WA	5	ug/L
	tetrachloroethylene	<1	U	<5	U	<5	U	<5	UJ L	1	WA	5	ug/L
	1,1,1-trichloroethane	<1	U	<5	U	<5	U	<5	UJ L	1	WA	200	ug/L
	trichloroethylene	<1	U	<5	U	<5	U	<5	UJ L	1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP EPA	3Q99	CLP EPA	3Q00	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	aluminum, total recoverable	<200	U	<200	U	<62.1	U	<116	U V	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	730		757								2400	ug/L
	sodium, total recoverable	1270		1600		1660		1400		1	WA	4600	ug/L
	sulfate	<200	U	546		1100		701		1	WA	3000	ug/L
Radionuclides													
	gross alpha	1.03	J	.665	U							15	pCi/L
	nonvolatile beta	-.51	UJ W	.829	U							50	pCi/L
	radium, total alpha-emitting	.61		.3	U							5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 84A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 108982.1 E 51971.2	33.35158 Deg N -81.7417 Deg W	129.4 - 124.5 ft msl	361.5 ft msl	4 " PVC	S	MCBC

SAMPLE DATE	01/31/00	09/10/00	03/20/01	08/30/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	208.92	217.55	*Not Applicable*	193.5	ft msl
pH	8.9	7	8.5	6.3	pH
Sp. Conductance	231	195	245	245	uS/cm
Water temperature	17.1	27	11.6	22.2	deg. C
Alkalinity as CaCO3	16	14	85	10	mg/L
Turbidity	1.4	2.1	2.8	.9	NTU
Volumes purged	0	0		.841	well volume
Sampling code	NX	NX	LN	X	
Synchronous water level	217.9 (06/29/00)	184.6 (12/28/00)	193 (06/27/01)	155.6 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

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ST	Parameter	1Q00	CLP EPA	3Q00	CLP EPA	1Q01	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	barium, total recoverable												
	cyanide												
	lead, total recoverable												
	nickel, total recoverable												
	selenium, total recoverable												
Organics													
	chlorobenzene	<1	JU L	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethane	<1	JU L	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethylene	<1	JU L	<5	U	<5	U	<5	U	1	WA	7	ug/L
	trans-1,2-dichloroethylene			<5	U	<5	U	<5	U	1	WA	100	ug/L
	pcb 1016												
	pcb 1221												
	pcb 1232												
	pcb 1242												
	pcb 1248												
	pcb 1254												
	pcb 1260												
	1,1,2,2-tetrachloroethane	<1	JU L	<5	U	<5	U	<5	U	1	WA	5	ug/L
	tetrachloroethylene	<1	JU L	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1,1-trichloroethane	<1	JU L	<5	U	<5	U	<5	U	1	WA	200	ug/L
	trichloroethylene	<1	JU L	<5	U	<5	U	<5	U	1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP EPA	3Q99	CLP EPA	3Q00	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	aluminum, total recoverable	115	J I	<200	U	<200	U	52.5	J I	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	<500	U	<500	U							2400	ug/L
+	sodium, total recoverable	***40700***	V	***30000***		***28800***		***22200***		1	WA	4600	ug/L
+	sulfate	***12800***		***25800***								3000	ug/L
Radionuclides													
	gross alpha	3.04		.538	U							15	pCi/L
	nonvolatile beta	25.88	J	13.4								50	pCi/L
	radium, total alpha-emitting	.39		.4	J I							5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 84C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 108967.9 E 51973.7	33.35156 Deg N -81.7417 Deg W	194.9 - 190.2 ft msl	361.9 ft msl	4 " PVC	S	LL

SAMPLE DATE	01/31/00	09/10/00	03/15/01	08/30/01	
FIELD DATA					
Parameter	**1Q00**	**3Q00**	**1Q01**	**3Q01**	**Unit**
Water Elevation	228.76	227.05	226.18	224.72	ft msl
pH	5.4	6	5.7	4.6	pH
Sp. Conductance	27	27	27	27	uS/cm
Water temperature	18.4	20.2	20.6	20.1	deg. C
Alkalinity as CaCO3	5	2	33	1	mg/L
Turbidity	.4	.8	.2	.4	NTU
Volumes purged	2.80	3.55	2.48		well volume
Sampling code					
Synchronous water level	228.6 (03/20/00)	227 (09/24/00)	225 (06/27/01)	224.5 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<1	JU	L	<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethane	<1	JU	L	<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<1	JU	L	<5	U		<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene				<5	U		<5	U		<5	U		1	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<1	JU	L	<5	U		<5	U		<5	U		1	WA	5	ug/L
	tetrachloroethylene	<1	JU	L	<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1,1-trichloroethane	<1	JU	L	<5	U		<5	U		<5	U		1	WA	200	ug/L
	trichloroethylene	<1	JU	L	<5	U		<5	U		<5	U		1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable	<200	U		<200	U		47.7	J	I	<322	U		1	WA	100	ug/L
	nitrate-nitrite as nitrogen	1250			1330											2400	ug/L
	sodium, total recoverable	2350		V	2300			2320			2200			1	WA	4600	ug/L
	sulfate	<200	U		234											3000	ug/L
Radionuclides																	
	gross alpha	2.92			.553	U										15	pCi/L
	nonvolatile beta	1.41	UJ	W	.799	U										50	pCi/L
	radium, total alpha-emitting	.53			.1	U										5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 85B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 107827 E 53122.7	33.35091 Deg N -81.7364 Deg W	137.3 - 132.6 ft msl	380.3 ft msl	4 " PVC	S	CBA

SAMPLE DATE	02/10/00	09/09/00	03/12/01	08/25/01	
FIELD DATA					
Parameter	**1Q00**	**3Q00**	**1Q01**	**3Q01**	**Unit**
Water Elevation	220.19	218.28	217.15	215.66	ft msl
pH	4.9	5.5	5.6	5.3	pH
Sp. Conductance	24	26	25	26	uS/cm
Water temperature	18.8	19.8	18.7	19.6	deg. C
Alkalinity as CaCO3	1	1	1	11	mg/L
Turbidity	.8	.8	.2	.3	NTU
Volumes purged	2.56	3.69	2.62		well volume
Sampling code					
Synchronous water level	219.9 (03/20/00)	218.2 (09/24/00)	216.8 (03/20/01)	215.7 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

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ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<1	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethane	<1	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<1	U		<5	U		<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene				<5	U		<5	U		<5	U		1	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<1	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	tetrachloroethylene	<1	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1,1-trichloroethane	<1	U		<5	U		<5	U		<5	U		1	WA	200	ug/L
	trichloroethylene	<1	U		<5	U		<5	U		<5	U		1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable	<200	U		<200	U		55.8	J	I	<108	U	V	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	1340			1460											2400	ug/L
	sodium, total recoverable	2780			2300			2500			4320			1	WA	4600	ug/L
	sulfate	261	J	I	198	J	I	755			329			1	WA	3000	ug/L
Radionuclides																	
	gross alpha	.94	UJ	W	.527	U										15	pCi/L
	nonvolatile beta	.18	U	W	1.4	U										50	pCi/L
	radium, total alpha-emitting	.1	U	W	.2	U										5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 85C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 107835.2 E 53151.4	33.35097 Deg N -81.7364 Deg W	173.6 - 168.8 ft msl	380.9 ft msl	4 " PVC	S	LL

SAMPLE DATE	02/17/00	09/01/00	02/26/01	08/22/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	222.95	221.45	220.4	220.09	ft msl
pH	5.6	5.9	5.9	5.9	pH
Sp. Conductance	42	48	38	45	uS/cm
Water temperature	18.9	21.2	19.9	26.1	deg. C
Alkalinity as CaCO3	1	5	5	2	mg/L
Turbidity	.6	1.7	.6	1.5	NTU
Volumes purged	2.46	2.15	4.12	2.09	well volume
Sampling code					
Synchronous water level	223 (03/20/00)	228.4 (09/24/00)	220 (03/20/01)	218.8 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<1	JU	L	<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethane	<1	JU	L	<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<1	JU	L	<5	U		<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	JU	L	<5	U		<5	U		<5	U		1	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<1	JU	L	<5	U		<5	U		<5	U		1	WA	5	ug/L
	tetrachloroethylene	<1	JU	L	<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1,1-trichloroethane	<1	JU	L	<5	U		<5	U		<5	U		1	WA	200	ug/L
+	trichloroethylene	53.1	J	L	***43***			28.4	J	K	50.6	J	K	1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable	<200	U		<200	U		85.4	J	I	185	J	I	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	2170			2290											2400	ug/L
+	sodium, total recoverable	3970		V	4600			4590			***4630***			1	WA	4600	ug/L
	sulfate	447			178	J	I	787			415			1	WA	3000	ug/L
Radionuclides																	
	gross alpha	1.47			1.15	J	I									15	pCi/L
	nonvolatile beta	8.74			1.18	U										50	pCi/L
	radium, total alpha-emitting	.43	U	V	.7	J	I									5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 85D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 107822.8 E 53108.8	33.35088 Deg N -81.7365 Deg W	236.3 - 216.2 ft msl	380.8 ft msl	4 " PVC	S	M

SAMPLE DATE	02/02/00	09/09/00	03/12/01	08/25/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	231.44	229.95	228.55	227.67	ft msl
pH	4.4	5.1	5.5	5.9	pH
Sp. Conductance	42	45	43		uS/cm
Water temperature	18.7	21.1	19.3	26.2	deg. C
Alkalinity as CaCO3	0	0	2	18	mg/L
Turbidity	11.1	1.3	1.8	13.2	NTU
Volumes purged	4.36	5.63	4.01	.135	well volume
Sampling code				X	
Synchronous water level	231.5 (03/20/00)	229.9 (09/24/00)	228.5 (03/20/01)	227.3 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<1	U		<5	U		<5	U		<5	UJ	L	1	WA	5	ug/L
	1,1-dichloroethane	<1	U		<5	U		<5	U		<5	UJ	L	1	WA	5	ug/L
	1,1-dichloroethylene	<1	U		<5	U		<5	U		<5	UJ	L	1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	U		<5	U		<5	U		<5	UJ	L	1	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<1	U		<5	U		<5	U		<5	UJ	L	1	WA	5	ug/L
	tetrachloroethylene	<1	U		<5	U		<5	U		<5	UJ	L	1	WA	5	ug/L
	1,1,1-trichloroethane	<1	U		<5	U		<5	U		<5	UJ	L	1	WA	200	ug/L
	trichloroethylene	.83	J	IK	<5	U		<5	U		<5	UJ	L	1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable	96.9	J	I	<200	U		90.8	J	I	<44.8	U	V	1	WA	100	ug/L
+	nitrate-nitrite as nitrogen	***3260***			***2830***											2400	ug/L
+	sodium, total recoverable	4000			***4700***			2070			2180			1	WA	4600	ug/L
	sulfate	313	J	I	308			719			431			1	WA	3000	ug/L
Radionuclides																	
	gross alpha	16.55	J		3.85											15	pCi/L
	nonvolatile beta	11.65			3.95											50	pCi/L
	radium, total alpha-emitting	3.15			2.4											5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 85TA

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 107831.2 E 53137.2	33.35094 Deg N -81.7364 Deg W	88.2 - 82.8 ft msl	380.4 ft msl	4 " STEEL	S	CBA

SAMPLE DATE	02/02/00	09/10/00	03/12/01	08/27/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	219.44	*Not Applicable*	216.68	214.7	ft msl
pH	5.9	7.5	5.8	6.4	pH
Sp. Conductance	47	45	22	44	uS/cm
Water temperature	18.4	21.4	20.7	23.7	deg. C
Alkalinity as CaCO3	15	15	1	42	mg/L
Turbidity	12	7.5	1.9	6.9	NTU
Volumes purged	.089		2.19	.006	well volume
Sampling code	NX	NSX		X	
Synchronous water level	219.4 (03/20/00)	217.7 (09/24/00)	275.8 (06/27/01)	215.2 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

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ST	Parameter	1Q00	CLP EPA	3Q00	CLP EPA	1Q01	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	barium, total recoverable												
	cyanide												
	lead, total recoverable												
	nickel, total recoverable												
	selenium, total recoverable												
Organics													
	chlorobenzene	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethane	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethylene	<1	U	<5	U	<5	U	<5	U	1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	U	<5	U	<5	U	<5	U	1	WA	100	ug/L
	pcb 1016												
	pcb 1221												
	pcb 1232												
	pcb 1242												
	pcb 1248												
	pcb 1254												
	pcb 1260												
	1,1,2,2-tetrachloroethane	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
	tetrachloroethylene	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1,1-trichloroethane	<1	U	<5	U	<5	U	<5	U	1	WA	200	ug/L
	trichloroethylene	1.56		1.5	J I	<5	U	.943	J I	1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP EPA	3Q99	CLP EPA	3Q00	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	aluminum, total recoverable	<200	U	<200	U	167	J I	<53.9	U V	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	<500	U	82.1	J I							2400	ug/L
+	sodium, total recoverable	***5190***		4400		3700		2580		1	WA	4600	ug/L
	sulfate	217	J I	<200	U	684		231	J	1	WA	3000	ug/L
Radionuclides													
	gross alpha	.13	UJ W	-.0774	U							15	pCi/L
	nonvolatile beta	2.23		.998	U							50	pCi/L
	radium, total alpha-emitting	.31	U W	0	U							5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 86C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 108500.4 E 54560.5	33.35475 Deg N -81.7339 Deg W	164.8 - 160.1 ft msl	357 ft msl	4 " PVC	S	LL

SAMPLE DATE	02/28/00	09/10/00	03/12/01	08/31/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	223.85	222.5	221.25	219.75	ft msl
pH	7.9	6.6	6.4	6.7	pH
Sp. Conductance	38	38	35	37	uS/cm
Water temperature	18.2	21.1	18.5	19.6	deg. C
Alkalinity as CaCO3	31	9	7	16	mg/L
Turbidity	6	2.2	2.5	4.1	NTU
Volumes purged	2.57	2.97	2.45	2.38	well volume
Sampling code					
Synchronous water level	223.9 (03/20/00)	222.3 (09/25/00)	220.8 (03/20/01)	219.7 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

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ST	Parameter	1Q00	CLP EPA	3Q00	CLP EPA	1Q01	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	barium, total recoverable												
	cyanide												
	lead, total recoverable												
	nickel, total recoverable												
	selenium, total recoverable												
Organics													
	chlorobenzene	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethane	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethylene	<1	U	<5	U	<5	U	<5	U	1	WA	7	ug/L
	trans-1,2-dichloroethylene			<5	U	<5	U	<5	U	1	WA	100	ug/L
	pcb 1016												
	pcb 1221												
	pcb 1232												
	pcb 1242												
	pcb 1248												
	pcb 1254												
	pcb 1260												
	1,1,2,2-tetrachloroethane	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
	tetrachloroethylene	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1,1-trichloroethane	<1	U	<5	U	<5	U	<5	U	1	WA	200	ug/L
	trichloroethylene	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP EPA	3Q99	CLP EPA	3Q00	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
+	aluminum, total recoverable	***361***		<200	U	194	J I	131	J I	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	1100		1140								2400	ug/L
	sodium, total recoverable	3120		2300		2280		2600		1	WA	4600	ug/L
	sulfate	<200	U	213								3000	ug/L
Radionuclides													
	gross alpha	3.13	J	.889	J I							15	pCi/L
	nonvolatile beta	6.07	J	1.2	U							50	pCi/L
	radium, total alpha-emitting	.19	U W	.1	U							5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 87B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 101276 E 51607	33.33395 Deg N -81.7277 Deg W	174.1 - 169.1 ft msl	336 ft msl	2 " PVC	V	UL

SAMPLE DATE	02/02/00	09/11/00	03/09/01	08/31/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	216.92	216.05	214.9	213.2	ft msl
pH	5.7	5.9	6.4	6.4	pH
Sp. Conductance	27	24	30	29	uS/cm
Water temperature	18.2	18.6	21.4	19.8	deg. C
Alkalinity as CaCO3	8	4	1	8	mg/L
Turbidity	.6	1.2	1.4	.8	NTU
Volumes purged	3.87	8.40	2.56	2.10	well volume
Sampling code					
Synchronous water level	316.9 (03/23/00)	215.9 (09/23/00)	214.9 (03/30/01)	213.5 (09/24/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

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ST	Parameter	1Q00	CLP EPA	3Q00	CLP EPA	1Q01	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	barium, total recoverable												
	cyanide												
	lead, total recoverable												
	nickel, total recoverable												
	selenium, total recoverable												
Organics													
	chlorobenzene	<1	U	<5	JU	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethane	<1	U	<5	JU	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethylene	<1	U	<5	JU	<5	U	<5	U	1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	U	<5	JU	<5	U	<5	U	1	WA	100	ug/L
	pcb 1016												
	pcb 1221												
	pcb 1232												
	pcb 1242												
	pcb 1248												
	pcb 1254												
	pcb 1260												
	1,1,2,2-tetrachloroethane	<1	U	<5	JU	<5	U	<5	U	1	WA	5	ug/L
	tetrachloroethylene	<1	U	<5	JU	<5	U	<5	U	1	WA	5	ug/L
	1,1,1-trichloroethane	<1	U	<5	JU	<5	U	<5	U	1	WA	200	ug/L
	trichloroethylene	<1	U	<5	JU	<5	U	<5	U	1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP EPA	3Q99	CLP EPA	3Q00	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	aluminum, total recoverable	<200	U	<200	U	<200	U	72.4	J I	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	569		598								2400	ug/L
	sodium, total recoverable	1570		1700		<1600	U V	1620		1	WA	4600	ug/L
	sulfate	1270		1280								3000	ug/L
Radionuclides													
	gross alpha	.01	UJ W	.498	U							15	pCi/L
	nonvolatile beta	1.16	UJ W	.505	U							50	pCi/L
	radium, total alpha-emitting	.05	U W	-.1	U							5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 88B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 97013 E 50774.2	33.32317 Deg N -81.7216 Deg W	75.8 - 70.8 ft msl	238.1 ft msl	2 " PVC	V	MCBC

SAMPLE DATE	03/18/00	09/06/00	02/15/01	09/06/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	200.54	199.75	199.37	198.64	ft msl
pH	5.3	5	4.9	5	pH
Sp. Conductance	24	23	24	24	uS/cm
Water temperature	17.9	18.9	19.9	19.5	deg. C
Alkalinity as CaCO3	1	0	0	0	mg/L
Turbidity	.7	1.6	.2	.2	NTU
Volumes purged	2.69	2.28	2.47	2.25	well volume
Sampling code					
Synchronous water level	200.4 (03/22/00)	199.9 (09/23/00)	199.9 (03/29/01)	189.5 (09/24/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP EPA	3Q00	CLP EPA	1Q01	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	barium, total recoverable												
	cyanide												
	lead, total recoverable												
	nickel, total recoverable												
	selenium, total recoverable												
Organics													
	chlorobenzene	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethane	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethylene	<1	U	<5	U	<5	U	<5	U	1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	U	<5	U	<5	U	<5	U	1	WA	100	ug/L
	pcb 1016												
	pcb 1221												
	pcb 1232												
	pcb 1242												
	pcb 1248												
	pcb 1254												
	pcb 1260												
	1,1,2,2-tetrachloroethane	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
	tetrachloroethylene	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1,1-trichloroethane	<1	U	<5	U	<5	U	<5	U	1	WA	200	ug/L
+	trichloroethylene	***27.3***		22	J K	***31.9***		***30.5***		1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP EPA	3Q99	CLP EPA	3Q00	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	aluminum, total recoverable	<200	U	<200	U	<200	U	<58.7	U V	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	710		800								2400	ug/L
	sodium, total recoverable	1740	V	1750		1670		1760		1	WA	4600	ug/L
	sulfate	1740		1940								3000	ug/L
Radionuclides													
	gross alpha	1.88		.148	U							15	pCi/L
	nonvolatile beta	1.57	U W	1.49	U							50	pCi/L
	radium, total alpha-emitting	.17	UJ LW	0	U							5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 88C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 97012.7 E 50784	33.32318 Deg N -81.7215 Deg W	127.2 - 122.2 ft msl	237.2 ft msl	2 " PVC	V	LL

SAMPLE DATE	03/15/00	09/06/00	02/15/01	09/06/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	203.03	202.4	201.92	201.52	ft msl
pH	5.3	4.7	5.5	5.3	pH
Sp. Conductance	41	39	45	43	uS/cm
Water temperature	18.1	18.3	19.7	19.4	deg. C
Alkalinity as CaCO3	1	1	1	0	mg/L
Turbidity	.4	1.7	.3	.6	NTU
Volumes purged	2.96	1.99	2.46	2.01	well volume
Sampling code					
Synchronous water level	202.9 (03/22/00)	202.4 (09/23/00)	202.5 (03/29/01)	201.5 (09/24/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

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ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
	Inorganics																
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
	Organics																
	chlorobenzene	<1	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethane	<1	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<1	U		<5	U		<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	U		<5	U		<5	U		<5	U		1	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<1	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
+	tetrachloroethylene	39.1	J	K	32	J		***31.4***			***27.6***			1	WA	5	ug/L
	1,1,1-trichloroethane	<1	U		<5	U		<5	U		<5	U		1	WA	200	ug/L
+	trichloroethylene	150	J	K	93	J		***83.1***			***81.1***			1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
	Inorganics																
	aluminum, total recoverable	<200	U					36.4	J	I	<52.8	U	V	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	2250														2400	ug/L
+	sodium, total recoverable	***6980***		V				***6720***			***5900***			1	WA	4600	ug/L
	sulfate	844														3000	ug/L
	Radionuclides																
	gross alpha	.53	U	W												15	pCi/L
	nonvolatile beta	5.76														50	pCi/L
	radium, total alpha-emitting	.17	U	W				.207	U							5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL MSB 89B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 98374.1 E 47889.9	33.32147 Deg N -81.7318 Deg W	162 - 157 ft msl	339.4 ft msl	2 " PVC	V	LL

SAMPLE DATE	03/20/00	09/13/00	02/15/01	09/17/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	206.34	144.6	203.95	*Not Applicable*	ft msl
pH	5.4	5.5	4.7	5.3	pH
Sp. Conductance	31	32	34	35	uS/cm
Water temperature	19	20.3	20.5		deg. C
Alkalinity as CaCO3	1	2	1	0	mg/L
Turbidity	.8	.6	.8	.5	NTU
Volumes purged	4.61	-15.	2.62		well volume
Sampling code					
Synchronous water level	206.2 (03/23/00)	204.5 (09/23/00)	203.1 (03/30/01)	( )	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

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ST	Parameter	1Q00	CLP EPA	3Q00	CLP EPA	1Q01	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	barium, total recoverable												
	cyanide												
	lead, total recoverable												
	nickel, total recoverable												
	selenium, total recoverable												
Organics													
	chlorobenzene	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethane	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethylene	<1	U	<5	U	<5	U	<5	U	1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	U	<5	U	<5	U	<5	U	1	WA	100	ug/L
	pcb 1016												
	pcb 1221												
	pcb 1232												
	pcb 1242												
	pcb 1248												
	pcb 1254												
	pcb 1260												
	1,1,2,2-tetrachloroethane	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
+	tetrachloroethylene	***5.08***		***6.1***		***9.33***		***7.62***		1	WA	5	ug/L
	1,1,1-trichloroethane	<1	U	<5	U	<5	U	<5	U	1	WA	200	ug/L
+	trichloroethylene	***122***		***90***		***102***		***99.2***		1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP EPA	3Q99	CLP EPA	3Q00	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	aluminum, total recoverable	<200	U	<200	U	<200	U	<322	U	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	1960		2180								2400	ug/L
	sodium, total recoverable	2880		2390		2550		2790		1	WA	4600	ug/L
	sulfate	345	J I	301								3000	ug/L
Radionuclides													
	gross alpha	1.77		1.05	J I							15	pCi/L
	nonvolatile beta	1.26	U W	1.93	J I							50	pCi/L
	radium, total alpha-emitting	.69	U W	.7	J I							5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL SRW 2A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 103720.8 E 41634.6	33.32307 Deg N -81.7587 Deg W	98.4 - 88.6 ft msl	320.6 ft msl	4 " PVC	S	MCBC

SAMPLE DATE		09/25/00	03/05/01	08/29/01	
FIELD DATA					
Parameter	**1Q00**	**3Q00**	**1Q01**	**3Q01**	**Unit**
Water Elevation	*Not Applicable*	203	201.83	200.88	ft msl
pH		5	5.3	4.8	pH
Sp. Conductance		19	18	19	uS/cm
Water temperature		20.6	18.4	20.9	deg. C
Alkalinity as CaCO3		0	0	0	mg/L
Turbidity		.3	.8	.1	NTU
Volumes purged		2.61	2.26	2.43	well volume
Sampling code					
Synchronous water level	204.6 (03/21/00)	203 (09/23/00)	201.9 (03/30/01)	199.7 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

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ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<1	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethane	<1	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<1	U		<5	U		<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	U		<5	U		<5	U		<5	U		1	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<1	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	tetrachloroethylene	<1	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1,1-trichloroethane	<1	U		<5	U		<5	U		<5	U		1	WA	200	ug/L
	trichloroethylene	<1	U		<5	U		<5	U		<5	U		1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable	34.4	J	I	20.6	J	I	<200	U		46.4	J	I	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	416			411											2400	ug/L
	sodium, total recoverable	1440		V	1490			1600			1520			1	WA	4600	ug/L
	sulfate	1400			1200											3000	ug/L
Radionuclides																	
	gross alpha	1.74			.556	J	IK									15	pCi/L
	nonvolatile beta	2.65			.429	U										50	pCi/L
	radium, total alpha-emitting	.37	U	W	-.1	U										5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL SRW 2B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 103729.7 E 41631.7	33.32308 Deg N -81.7587 Deg W	162.6 - 152.8 ft msl	320.6 ft msl	4 " PVC	S	UL

SAMPLE DATE	02/01/00	09/25/00	03/05/01	08/29/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	205.99	203.96	202.76	202.3	ft msl
pH	4.9	5.1	5.4	5.1	pH
Sp. Conductance	17	18	17	18	uS/cm
Water temperature	18.9	20	18.1	21.4	deg. C
Alkalinity as CaCO3	1	0	1	1	mg/L
Turbidity	.5	.9	.4	.3	NTU
Volumes purged	2.87	3.08	2.45	2.35	well volume
Sampling code					
Synchronous water level	(06/26/00)	204.1 (09/23/00)	202.7 (03/30/01)	201.5 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

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ST	Parameter	1Q00	CLP EPA	3Q00	CLP EPA	1Q01	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	barium, total recoverable												
	cyanide												
	lead, total recoverable												
	nickel, total recoverable												
	selenium, total recoverable												
Organics													
	chlorobenzene	<1	JU	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethane	<1	JU	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethylene	<1	JU	<5	U	<5	U	<5	U	1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	JU	<5	U	<5	U	<5	U	1	WA	100	ug/L
	pcb 1016												
	pcb 1221												
	pcb 1232												
	pcb 1242												
	pcb 1248												
	pcb 1254												
	pcb 1260												
	1,1,2,2-tetrachloroethane	<1	JU	<5	U	<5	U	<5	U	1	WA	5	ug/L
	tetrachloroethylene	<1	JU	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1,1-trichloroethane	<1	JU	<5	U	<5	U	<5	U	1	WA	200	ug/L
	trichloroethylene	<1	JU	<5	U	<5	U	<5	U	1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP EPA	3Q99	CLP EPA	3Q00	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
+	aluminum, total recoverable	28.2	J I	***1420***		40.6	J I	78.4	J I	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	650		674								2400	ug/L
	sodium, total recoverable	1440	V	1460		1540		1480		1	WA	4600	ug/L
	sulfate	411		429								3000	ug/L
Radionuclides													
	gross alpha	3.52		1.42	J IK							15	pCi/L
	nonvolatile beta	12.55		.709	U							50	pCi/L
	radium, total alpha-emitting	.77		1.1	U V							5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL SRW 14A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 102831.3 E 41538.6	33.32095 Deg N -81.7572 Deg W	123.7 - 113.9 ft msl	327 ft msl	4 " PVC	S	MCBC

SAMPLE DATE	02/01/00	09/25/00	03/05/01	08/29/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	201.8	199.84	199.09	122.95	ft msl
pH	4.2		5.3	4.9	pH
Sp. Conductance	22		22	24	uS/cm
Water temperature	18.6		19.5	22	deg. C
Alkalinity as CaCO3	0	0	0	0	mg/L
Turbidity	.8		.7	.7	NTU
Volumes purged	2.99	2.63	2.45	5.62	well volume
Sampling code					
Synchronous water level	201.6 (03/21/00)	198.9 (12/30/00)	198.9 (03/30/01)	197.1 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP EPA	3Q00	CLP EPA	1Q01	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	barium, total recoverable												
	cyanide												
	lead, total recoverable												
	nickel, total recoverable												
	selenium, total recoverable												
Organics													
	chlorobenzene	<1	JU	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethane	<1	JU	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethylene	<1	JU	<5	U	<5	U	<5	U	1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	JU	<5	U	<5	U	<5	U	1	WA	100	ug/L
	pcb 1016												
	pcb 1221												
	pcb 1232												
	pcb 1242												
	pcb 1248												
	pcb 1254												
	pcb 1260												
	1,1,2,2-tetrachloroethane	<1	JU	<5	U	<5	U	<5	U	1	WA	5	ug/L
	tetrachloroethylene	<1	JU	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1,1-trichloroethane	<1	JU	<5	U	<5	U	<5	U	1	WA	200	ug/L
+	trichloroethylene	38.9	J	***35***		***48***		***31.7***		1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP EPA	3Q99	CLP EPA	3Q00	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
+	aluminum, total recoverable	30.1	J I	***463***		<200	U	59.3	J I	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	1420		1490								2400	ug/L
	sodium, total recoverable	1600	V	1700		1750		1700		1	WA	4600	ug/L
	sulfate	488		493								3000	ug/L
Radionuclides													
	gross alpha	1.15		.407	U							15	pCi/L
	nonvolatile beta	6.88		1.6	J I							50	pCi/L
	radium, total alpha-emitting	.2	U W	.1	U							5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL SRW 14B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 102836.1 E 41548.1	33.32097 Deg N -81.7572 Deg W	162.9 - 153.1 ft msl	326.9 ft msl	4 " PVC	S	UL

SAMPLE DATE	02/01/00	09/25/00	03/05/01	08/29/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	203.69	201.7	200.58	188.73	ft msl
pH	5.1	5.1	5.3	5.2	pH
Sp. Conductance	21	21	20	22	uS/cm
Water temperature	18.5	20.1	18.2	21.4	deg. C
Alkalinity as CaCO3	3	1	17	2	mg/L
Turbidity	.4	.2	.6	.2	NTU
Volumes purged	2.66	5.44	2.38	2.40	well volume
Sampling code					
Synchronous water level	203.6 (03/21/00)	201.8 (09/23/00)	200.7 (03/30/01)	199.3 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<1	JU		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethane	<1	JU		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<1	JU		<5	U		<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	JU		<5	U		<5	U		<5	U		1	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<1	JU		<5	U		<5	U		<5	U		1	WA	5	ug/L
	tetrachloroethylene	<1	JU		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1,1-trichloroethane	<1	JU		<5	U		<5	U		<5	U		1	WA	200	ug/L
+	trichloroethylene	15.5	J		***11***			***14.5***			***20.4***			1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable	<146	U		<146	U		44.5	J	I	<322	U		1	WA	100	ug/L
	nitrate-nitrite as nitrogen	988			1040											2400	ug/L
	sodium, total recoverable	1450		V	1470			1650			1500			1	WA	4600	ug/L
	sulfate	408			415											3000	ug/L
Radionuclides																	
	gross alpha	1.25			.935	J	IK									15	pCi/L
	nonvolatile beta	.92	U	W	.604	U										50	pCi/L
	radium, total alpha-emitting	.16	U	W	.7	U	V									5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL SRW 16A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 103763.4 E 42830.9	33.32512 Deg N -81.7556 Deg W	144.1 - 119.4 ft msl	346.8 ft msl	4 " PVC	S	LL

SAMPLE DATE	02/02/00	09/28/00	03/05/01	08/29/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	212.57	210.4	208.99	207.85	ft msl
pH	5.1	5.7	6.9	6	pH
Sp. Conductance	35	26	53	28	uS/cm
Water temperature	18.7	19.3	19.5	22.4	deg. C
Alkalinity as CaCO3	4	10	13	7	mg/L
Turbidity	57.6	31.2	5.9	7	NTU
Volumes purged	.246	5.22	.017	3.93	well volume
Sampling code	NX		NX		
Synchronous water level	212.5 (03/21/00)	209.6 (12/30/00)	209 (03/30/01)	207.9 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP EPA	3Q00	CLP EPA	1Q01	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	barium, total recoverable												
	cyanide												
	lead, total recoverable												
	nickel, total recoverable												
	selenium, total recoverable												
Organics													
	chlorobenzene	<1	U	<5	U	<5	JU	<5	U	1	WA	5	ug/L
	1,1-dichloroethane	<1	U	<5	U	<5	JU	<5	U	1	WA	5	ug/L
	1,1-dichloroethylene	<1	U	<5	U	<5	JU	<5	U	1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	U	<5	U	<5	JU	<5	U	1	WA	100	ug/L
	pcb 1016												
	pcb 1221												
	pcb 1232												
	pcb 1242												
	pcb 1248												
	pcb 1254												
	pcb 1260												
	1,1,2,2-tetrachloroethane	<1	U	<5	U	<5	JU	<5	U	1	WA	5	ug/L
	tetrachloroethylene	<1	U	<5	U	<5	JU	<5	U	1	WA	5	ug/L
	1,1,1-trichloroethane	<1	U	<5	U	<5	JU	<5	U	1	WA	200	ug/L
	trichloroethylene	1.22		1.4	J I	<5	JU	1.38	J I	1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP EPA	3Q99	CLP EPA	3Q00	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
+	aluminum, total recoverable	***1050***		***608***		***1090***		***392***		1	WA	100	ug/L
	nitrate-nitrite as nitrogen	220		473								2400	ug/L
+	sodium, total recoverable	***6080***	V	3540		2240		2460		1	WA	4600	ug/L
	sulfate	867	J Q	633								3000	ug/L
Radionuclides													
	gross alpha	9.03	J	2.37	J IK							15	pCi/L
	nonvolatile beta	9.33	J	2.9								50	pCi/L
	radium, total alpha-emitting	1.3		1	U V							5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-4. Groundwater Monitoring Results for Plume Definition Wells, M-Area HWMF (Cont.)

WELL SRW 16B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 103772 E 42825.8	33.32513 Deg N -81.7556 Deg W	169.9 - 160.1 ft msl	346.8 ft msl	4 " PVC	S	UL

SAMPLE DATE	02/01/00	09/28/00	03/05/01	08/29/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	213.2	211.07	209.69	209.64	ft msl
pH	4.3	5.2	5.2	5	pH
Sp. Conductance	17	18	17	18	uS/cm
Water temperature	18.1	19.1	19.5	19.7	deg. C
Alkalinity as CaCO3	0	0	0	1	mg/L
Turbidity	.3	.5	.9	.6	NTU
Volumes purged	3.97	3.15	2.40	2.40	well volume
Sampling code					
Synchronous water level	213.1 (03/21/00)	210.2 (12/30/00)	209.6 (03/30/01)	208.2 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<1	JU		<5	U		<5	JU	L	<5	U		1	WA	5	ug/L
	1,1-dichloroethane	<1	JU		<5	U		<5	JU	L	<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<1	JU		<5	U		<5	JU	L	<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	JU		<5	U		<5	JU	L	<5	U		1	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<1	JU		<5	U		<5	JU	L	<5	U		1	WA	5	ug/L
	tetrachloroethylene	<1	JU		<5	U		<5	JU	L	<5	U		1	WA	5	ug/L
	1,1,1-trichloroethane	<1	JU		<5	U		<5	JU	L	<5	U		1	WA	200	ug/L
	trichloroethylene	<1	JU		<5	U		<5	JU	L	<5	U		1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable	<146	U		<146	U		<200	U		103	J	I	1	WA	100	ug/L
	nitrate-nitrite as nitrogen	731			730											2400	ug/L
	sodium, total recoverable	1330		V	1340			1210			1420			1	WA	4600	ug/L
	sulfate	414			409											3000	ug/L
Radionuclides																	
	gross alpha	7.35			1.72	J	I									15	pCi/L
	nonvolatile beta	7.18			1.54	U										50	pCi/L
	radium, total alpha-emitting	.98			.5	U	V									5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-5. Groundwater Monitoring Results for Southern Sector Monitoring Wells, M-Area HWMF

WELL MSB 40B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 97684.9 E 48281.6	33.32058 Deg N -81.7294 Deg W	154.7 - 149.1 ft msl	321.7 ft msl	4 " PVC	S	LL

SAMPLE DATE	03/13/01	06/18/01	09/05/01	11/05/01

FIELD DATA

Parameter	1Q01	2Q01	3Q01	4Q01	Unit
Water Elevation	201.7	200.99	200.48	199.45	ft msl
pH	4.9	4.7	4.9	4.1	pH
Sp. Conductance	84	83	89	95	uS/cm
Water temperature	20.6	22.3	20	19.3	deg. C
Alkalinity as CaCO3	0	0	0	0	mg/L
Turbidity	1	.6	.1	.2	NTU
Volumes purged	2.09	2.62	2.88	2.09	well volume
Sampling code					
Synchronous water level	201.6 (03/29/01)	( )	( )	199.9 (12/11/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q01	CLP EPA	2Q01	CLP EPA	3Q01	CLP EPA	4Q01	CLP EPA	DF	Lab	Limit	Unit
Organics													
	chlorobenzene	<50	U			<50	U	<50	U	10	LV	5	ug/L
	1,1-dichloroethane	<50	U			<50	U	<50	U	10	LV	5	ug/L
	1,1-dichloroethylene	<50	U			<50	U	<50	U	10	LV	7	ug/L
	trans-1,2-dichloroethylene	<50	U			<50	U	<50	U	10	LV	100	ug/L
	1,1,2,2-tetrachloroethane	<50	U			<50	U	<50	U	10	LV	5	ug/L
	tetrachloroethylene	<50	U	<5	U	<50	U	<50	U	10	LV	5	ug/L
	1,1,1-trichloroethane	<50	U			<50	U	<50	U	10	LV	200	ug/L
+	trichloroethylene	***1050***		***1380***		***1170***		***1840***		10	LV	5	ug/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-5. Groundwater Monitoring Results for Southern Sector Monitoring Wells, M-Area HWMF (Cont.)

WELL MSB 40C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 97697.8 E 48283.5	33.32062 Deg N -81.7295 Deg W	192.4 - 186.8 ft msl	322 ft msl	4 " PVC	S	UL

SAMPLE DATE	03/13/01	06/18/01	09/05/01	11/05/01

FIELD DATA

Parameter	1Q01	2Q01	3Q01	4Q01	Unit
Water Elevation	203.4	203.55	203.51	203.45	ft msl
pH	5.9	5.2	5.4	5.2	pH
Sp. Conductance	54	46	53	57	uS/cm
Water temperature	21.2	22.3	21.7	19.4	deg. C
Alkalinity as CaCO3	1	2	17	8	mg/L
Turbidity	2.1	.5	.9	12.4	NTU
Volumes purged	2.14	2.86	2.03	.093	well volume
Sampling code				L	
Synchronous water level	203.5 (03/29/01)	( )	( )	203.5 (12/11/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q01	CLP EPA	2Q01	CLP EPA	3Q01	CLP EPA	4Q01	CLP EPA	DF	Lab	Limit	Unit
Organics													
	chlorobenzene	<5	U			<5	U	<5	U	1	LV	5	ug/L
	1,1-dichloroethane	<5	U			<5	U	<5	U	1	LV	5	ug/L
	1,1-dichloroethylene	<5	U			<5	U	<5	U	1	LV	7	ug/L
	trans-1,2-dichloroethylene	<5	U			<5	U	<5	U	1	LV	100	ug/L
	1,1,2,2-tetrachloroethane	<5	U			<5	U	<5	U	1	LV	5	ug/L
	tetrachloroethylene	<5	U	<5	U	<5	U	<5	U	1	LV	5	ug/L
	1,1,1-trichloroethane	<5	U			<5	U	<5	U	1	LV	200	ug/L
+	trichloroethylene	***24.6***		***50.1***		***54.5***		***26.7***		1	LV	5	ug/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-5. Groundwater Monitoring Results for Southern Sector Monitoring Wells, M-Area HWMF (Cont.)

WELL MSB 74B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 99197.4 E 50443.2	33.32746 Deg N -81.7267 Deg W	147.5 - 142.8 ft msl	314.5 ft msl	4 " PVC	S	LL

SAMPLE DATE	02/15/01		09/11/01	11/05/01	
FIELD DATA					
Parameter	**1Q01**	**2Q01**	**3Q01**	**4Q01**	**Unit**
Water Elevation	208.52	*Not Applicable*	207.45	206.95	ft msl
pH	5.9		6.5	5.8	pH
Sp. Conductance	26		35	33	uS/cm
Water temperature	19.3		19.7	20.3	deg. C
Alkalinity as CaCO3	4		84	6	mg/L
Turbidity	.8		.3	2	NTU
Volumes purged	2.94		2.46	2.08	well volume
Sampling code					
Synchronous water level	208.1 (03/29/01)	207.6 (06/27/01)	207.8 (09/24/01)	207 (12/11/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q01	CLP EPA	2Q01	CLP EPA	3Q01	CLP EPA	4Q01	CLP EPA	DF	Lab	Limit	Unit
Organics													
	chlorobenzene	<5	U			<5	U	<5	U	1	LV	5	ug/L
	1,1-dichloroethane	<5	U			<5	U	<5	U	1	LV	5	ug/L
	1,1-dichloroethylene	<5	U			<5	U	<5	U	1	LV	7	ug/L
	trans-1,2-dichloroethylene	<5	U			<5	U	<5	U	1	LV	100	ug/L
	1,1,2,2-tetrachloroethane	<5	U			<5	U	<5	U	1	LV	5	ug/L
	tetrachloroethylene	1.01	J I			<5	U	<5	U	1	LV	5	ug/L
	1,1,1-trichloroethane	<5	U			<5	U	<5	U	1	LV	200	ug/L
+	trichloroethylene	***61.7***				***49***		***40.1***		1	LV	5	ug/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-5. Groundwater Monitoring Results for Southern Sector Monitoring Wells, M-Area HWMF (Cont.)

WELL MSB 74C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 99191.1 E 50457.1	33.32747 Deg N -81.7266 Deg W	177.8 - 173.1 ft msl	315 ft msl	4 " PVC	S	UL

SAMPLE DATE	02/15/01		09/12/01	11/05/01	
FIELD DATA					
Parameter	**1Q01**	**2Q01**	**3Q01**	**4Q01**	**Unit**
Water Elevation	208.64	*Not Applicable*	207.35	207.22	ft msl
pH	6.9		7.1	6.3	pH
Sp. Conductance	119		113	113	uS/cm
Water temperature	18.9		19.6	20	deg. C
Alkalinity as CaCO3	41		370	30	mg/L
Turbidity	3.3		4.3	10.1	NTU
Volumes purged	.345		.045	2.07	well volume
Sampling code	NX		X		
Synchronous water level	208.5 (03/29/01)	208 (06/27/01)	207.3 (09/24/01)	207.2 (12/11/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q01	CLP EPA	2Q01	CLP EPA	3Q01	CLP EPA	4Q01	CLP EPA	DF	Lab	Limit	Unit
Organics													
	chlorobenzene	<5	U			<5	U	<5	U	1	LV	5	ug/L
	1,1-dichloroethane	<5	U			<5	U	<5	U	1	LV	5	ug/L
	1,1-dichloroethylene	<5	U			<5	U	<5	U	1	LV	7	ug/L
	trans-1,2-dichloroethylene	<5	U			<5	U	<5	U	1	LV	100	ug/L
	1,1,2,2-tetrachloroethane	<5	U			<5	U	<5	U	1	LV	5	ug/L
	tetrachloroethylene	<5	U			<5	U	<5	U	1	LV	5	ug/L
	1,1,1-trichloroethane	<5	U			<5	U	<5	U	1	LV	200	ug/L
+	trichloroethylene	***60.2***				30	J K	***27.9***		1	LV	5	ug/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-5. Groundwater Monitoring Results for Southern Sector Monitoring Wells, M-Area HWMF (Cont.)

WELL MSB 75B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 98937.4 E 48875.5	33.32432 Deg N -81.7303 Deg W	161.7 - 156.9 ft msl	326.7 ft msl	4 " PVC	S	LL

SAMPLE DATE	03/13/01	06/18/01	09/12/01	11/05/01

FIELD DATA

Parameter	1Q01	2Q01	3Q01	4Q01	Unit
Water Elevation	207.1	206.45	205.76	204.47	ft msl
pH	11.5	6.4	6.5	5.5	pH
Sp. Conductance	1172	115	107	102	uS/cm
Water temperature	19.7	23.2	22.1	19.9	deg. C
Alkalinity as CaCO3	247	21	166	15	mg/L
Turbidity	12.4	11	7.5	5.4	NTU
Volumes purged	2.13	2.50	2.76	3.54	well volume
Sampling code					
Synchronous water level	206.9 (03/20/01)	206.5 (06/27/01)	( )	205.4 (12/11/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q01	CLP EPA	2Q01	CLP EPA	3Q01	CLP EPA	4Q01	CLP EPA	DF	Lab	Limit	Unit
Organics													
	chlorobenzene	<50	U			<50	U	<50	U	10	LV	5	ug/L
	1,1-dichloroethane	<50	U			<50	U	<50	U	10	LV	5	ug/L
	1,1-dichloroethylene	<50	U			<50	U	<50	U	10	LV	7	ug/L
	trans-1,2-dichloroethylene	<50	U			<50	U	<50	U	10	LV	100	ug/L
	1,1,2,2-tetrachloroethane	<50	U			<50	U	<50	U	10	LV	5	ug/L
	tetrachloroethylene	<50	U	<5	U	<50	U	<50	U	10	LV	5	ug/L
	1,1,1-trichloroethane	<50	U			<50	U	<50	U	10	LV	200	ug/L
+	trichloroethylene	***2380***		***1510***		***1910***		***1740***		10	LV	5	ug/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-5. Groundwater Monitoring Results for Southern Sector Monitoring Wells, M-Area HWMF (Cont.)

WELL MSB 75C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 98942.3 E 48859.7	33.32431 Deg N -81.7304 Deg W	193.5 - 188.8 ft msl	327.5 ft msl	4 " PVC	S	UL

SAMPLE DATE	03/27/01	06/19/01	09/12/01	11/05/01

FIELD DATA

Parameter	1Q01	2Q01	3Q01	4Q01	Unit
Water Elevation	206.87	206.73	206.07	205.85	ft msl
pH	6.9	5.9	6	5.3	pH
Sp. Conductance	96	67	71	70	uS/cm
Water temperature	19.5	25.4	25	20.7	deg. C
Alkalinity as CaCO3	26	10	112	9	mg/L
Turbidity	22.1	8	9.2	14.2	NTU
Volumes purged		3.04	1.99	.458	well volume
Sampling code	NX			L	
Synchronous water level	206.9 (03/20/01)	206.5 (06/27/01)	( )	205.7 (12/11/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q01	CLP	EPA	2Q01	CLP	EPA	3Q01	CLP	EPA	4Q01	CLP	EPA	DF	Lab	Limit	Unit
Organics																	
	chlorobenzene	<5	U					<5	U		<5	U		1	LV	5	ug/L
	1,1-dichloroethane	<5	U					<5	U		<5	U		1	LV	5	ug/L
	1,1-dichloroethylene	<5	U					<5	U		<5	U		1	LV	7	ug/L
	trans-1,2-dichloroethylene	<5	U					<5	U		<5	U		1	LV	100	ug/L
	1,1,2,2-tetrachloroethane	<5	U					<5	U		<5	U		1	LV	5	ug/L
	tetrachloroethylene	<5	U		<5	U		<5	U		<5	U		1	LV	5	ug/L
	1,1,1-trichloroethane	<5	U					<5	U		<5	U		1	LV	200	ug/L
+	trichloroethylene	2.3	J	I	***6.54***			<5	U		<2.08	U		1	LV	5	ug/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-5. Groundwater Monitoring Results for Southern Sector Monitoring Wells, M-Area HWMF (Cont.)

WELL SSM 10B2

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 98959.9 E 49558.4	33.32549 Deg N -81.7286 Deg W	- ft msl	ft msl	4 " PVC		LL

SAMPLE DATE	03/23/01	06/19/01		11/01/01	
FIELD DATA					
Parameter	**1Q01**	**2Q01**	**3Q01**	**4Q01**	**Unit**
Water Elevation	*Not Applicable*	*Not Applicable*	*Not Applicable*	*Not Applicable*	ft msl
pH	5.4	4.1		7.8	pH
Sp. Conductance	37	42		45	uS/cm
Water temperature	21.8	22.7		18.4	deg. C
Alkalinity as CaCO3	0	0		0	mg/L
Turbidity	1.5	.2		1.4	NTU
Volumes purged	0	0		0	well volume
Sampling code					
Synchronous water level	( )	( )	( )	( )	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q01	CLP	EPA	2Q01	CLP	EPA	3Q01	CLP	EPA	4Q01	CLP	EPA	DF	Lab	Limit	Unit
Organics																	
	chlorobenzene										<25	U		5	LV	5	ug/L
	1,1-dichloroethane										<25	U		5	LV	5	ug/L
	1,1-dichloroethylene										<25	U		5	LV	7	ug/L
	trans-1,2-dichloroethylene										<25	U		5	LV	100	ug/L
	1,1,2,2-tetrachloroethane										<25	U		5	LV	5	ug/L
	tetrachloroethylene	<5	U		<5	U					<25	U		5	LV	5	ug/L
	1,1,1-trichloroethane										<25	U		5	LV	200	ug/L
+	trichloroethylene	545	J	K	***453***						479	J	L	5	LV	5	ug/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-5. Groundwater Monitoring Results for Southern Sector Monitoring Wells, M-Area HWMF (Cont.)

WELL SSM 10C2

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 98959.9 E 49558.4	33.32549 Deg N -81.7286 Deg W	- ft msl	ft msl	4 " PVC		UL

SAMPLE DATE	03/23/01	06/19/01		11/01/01	
FIELD DATA					
Parameter	**1Q01**	**2Q01**	**3Q01**	**4Q01**	**Unit**
Water Elevation	*Not Applicable*	*Not Applicable*	*Not Applicable*	*Not Applicable*	ft msl
pH	4.6	4.1		5	pH
Sp. Conductance	48	46		46	uS/cm
Water temperature	18.8	22.7		18.8	deg. C
Alkalinity as CaCO3	0	0		0	mg/L
Turbidity	1.3	.2		1.6	NTU
Volumes purged	0	0		0	well volume
Sampling code					
Synchronous water level	( )	( )	( )	( )	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q01	CLP	EPA	2Q01	CLP	EPA	3Q01	CLP	EPA	4Q01	CLP	EPA	DF	Lab	Limit	Unit
Organics																	
	chlorobenzene										<25	U		5	LV	5	ug/L
	1,1-dichloroethane										<25	U		5	LV	5	ug/L
	1,1-dichloroethylene										<25	U		5	LV	7	ug/L
	trans-1,2-dichloroethylene										<25	U		5	LV	100	ug/L
	1,1,2,2-tetrachloroethane										<25	U		5	LV	5	ug/L
+	tetrachloroethylene	18.5	J	K	***21.2***						***34.7***			5	LV	5	ug/L
	1,1,1-trichloroethane										<25	U		5	LV	200	ug/L
+	trichloroethylene	659	J	K	***654***						***1070***			10	LV	5	ug/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-5. Groundwater Monitoring Results for Southern Sector Monitoring Wells, M-Area HWMF (Cont.)

WELL SSM 11B2

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 99453.7 E 50216.2	33.32765 Deg N -81.7278 Deg W	- ft msl	ft msl	4 " PVC		LL

SAMPLE DATE	03/23/01	06/15/01		10/31/01

FIELD DATA

Parameter	1Q01	2Q01	3Q01	4Q01	Unit
Water Elevation	*Not Applicable*	*Not Applicable*	*Not Applicable*	*Not Applicable*	ft msl
pH	4.9	5.3		8.7	pH
Sp. Conductance	30	29		42	uS/cm
Water temperature	20.4	25.9		22.6	deg. C
Alkalinity as CaCO3	0	0		9	mg/L
Turbidity	1.4	.5		1.7	NTU
Volumes purged	0	0		0	well volume
Sampling code				N	
Synchronous water level	( )	( )	( )	( )	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q01	CLP	EPA	2Q01	CLP	EPA	3Q01	CLP	EPA	4Q01	CLP	EPA	DF	Lab	Limit	Unit
Organics																	
	chlorobenzene										<250	UJ	Y	50	LV	5	ug/L
	1,1-dichloroethane										<250	UJ	Y	50	LV	5	ug/L
	1,1-dichloroethylene										<250	UJ	Y	50	LV	7	ug/L
	trans-1,2-dichloroethylene										<250	UJ	Y	50	LV	100	ug/L
	1,1,2,2-tetrachloroethane										<250	UJ	Y	50	LV	5	ug/L
+	tetrachloroethylene	127	J	K	***131***		Y				56.7	J	IY	50	LV	5	ug/L
	1,1,1-trichloroethane										<250	UJ	Y	50	LV	200	ug/L
+	trichloroethylene	13400	J	K	***10800***						7810	J	Y	50	LV	5	ug/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-5. Groundwater Monitoring Results for Southern Sector Monitoring Wells, M-Area HWMF (Cont.)

WELL SSM 11C2

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 99453.7 E 50216.2	33.32765 Deg N -81.7278 Deg W	- ft msl	ft msl	4 " PVC		UL

SAMPLE DATE	03/23/01	06/15/01			
FIELD DATA					
Parameter	**1Q01**	**2Q01**	**3Q01**	**4Q01**	**Unit**
Water Elevation	*Not Applicable*	*Not Applicable*	*Not Applicable*	*Not Applicable*	ft msl
pH	6.6	6.4			pH
Sp. Conductance	67	68			uS/cm
Water temperature	22.8	25.7			deg. C
Alkalinity as CaCO3	2	0			mg/L
Turbidity	1.4	.7			NTU
Volumes purged	0	0			well volume
Sampling code					
Synchronous water level	( )	( )	( )	( )	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q01	CLP	EPA	2Q01	CLP	EPA	3Q01	CLP	EPA	4Q01	CLP	EPA	DF	Lab	Limit	Unit
Organics																	
	chlorobenzene										<25	UJ	Y	5	LV	5	ug/L
	1,1-dichloroethane										<25	UJ	Y	5	LV	5	ug/L
	1,1-dichloroethylene										<25	UJ	Y	5	LV	7	ug/L
	trans-1,2-dichloroethylene										<25	UJ	Y	5	LV	100	ug/L
	1,1,2,2-tetrachloroethane										<25	UJ	Y	5	LV	5	ug/L
	tetrachloroethylene	3.29	J	IK	3.79	J	I				<25	UJ	Y	5	LV	5	ug/L
	1,1,1-trichloroethane										<25	UJ	Y	5	LV	200	ug/L
+	trichloroethylene	450	J	K	***324***		LY				337	J	Y	5	LV	5	ug/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-5. Groundwater Monitoring Results for Southern Sector Monitoring Wells, M-Area HWMF (Cont.)

WELL SSM 12B2

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 98824.3 E 50794.4	33.32721 Deg N -81.7250 Deg W	- ft msl	ft msl	4 " PVC		LL

SAMPLE DATE	03/26/01	06/15/01		10/31/01

FIELD DATA

Parameter	1Q01	2Q01	3Q01	4Q01	Unit
Water Elevation	*Not Applicable*	*Not Applicable*	*Not Applicable*	*Not Applicable*	ft msl
pH	5.4	5.8		4.6	pH
Sp. Conductance	27	19		26	uS/cm
Water temperature	14.3	26.9		20.4	deg. C
Alkalinity as CaCO3	1	0		7	mg/L
Turbidity	2.8	.7		2.9	NTU
Volumes purged	0	0		0	well volume
Sampling code					
Synchronous water level	( )	( )	( )	( )	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q01	CLP	EPA	2Q01	CLP	EPA	3Q01	CLP	EPA	4Q01	CLP	EPA	DF	Lab	Limit	Unit
Organics																	
	chlorobenzene										<5	UJ	Y	1	LV	5	ug/L
	1,1-dichloroethane										<5	UJ	Y	1	LV	5	ug/L
	1,1-dichloroethylene										<5	UJ	Y	1	LV	7	ug/L
	trans-1,2-dichloroethylene										<5	UJ	Y	1	LV	100	ug/L
	1,1,2,2-tetrachloroethane										<5	UJ	Y	1	LV	5	ug/L
	tetrachloroethylene	<5	JU		<5	U					<5	UJ	Y	1	LV	5	ug/L
	1,1,1-trichloroethane										<5	UJ	Y	1	LV	200	ug/L
	trichloroethylene	3.31	J	I	2.88	J	I				1.36	J	IY	1	LV	5	ug/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-5. Groundwater Monitoring Results for Southern Sector Monitoring Wells, M-Area HWMF (Cont.)

WELL SSM 12C2

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 98824.3 E 50794.4	33.32721 Deg N -81.7250 Deg W	- ft msl	ft msl	4 " PVC		UL

SAMPLE DATE	03/26/01	06/15/01		10/31/01	
FIELD DATA					
Parameter	**1Q01**	**2Q01**	**3Q01**	**4Q01**	**Unit**
Water Elevation	*Not Applicable*	*Not Applicable*	*Not Applicable*	*Not Applicable*	ft msl
pH	10.5	10.5		9.2	pH
Sp. Conductance	236	243		172	uS/cm
Water temperature	15.7	27.7		20.5	deg. C
Alkalinity as CaCO3	71	47		36	mg/L
Turbidity	1.5	.6		1.7	NTU
Volumes purged	0	0		0	well volume
Sampling code					
Synchronous water level	( )	( )	( )	( )	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q01	CLP	EPA	2Q01	CLP	EPA	3Q01	CLP	EPA	4Q01	CLP	EPA	DF	Lab	Limit	Unit
Organics																	
	chlorobenzene										<5	UJ	Y	1	LV	5	ug/L
	1,1-dichloroethane										<5	UJ	Y	1	LV	5	ug/L
	1,1-dichloroethylene										<5	UJ	Y	1	LV	7	ug/L
	trans-1,2-dichloroethylene										<5	UJ	Y	1	LV	100	ug/L
	1,1,2,2-tetrachloroethane										<5	UJ	Y	1	LV	5	ug/L
	tetrachloroethylene	<5	U		1.11	J	I				<5	UJ	Y	1	LV	5	ug/L
	1,1,1-trichloroethane										<5	UJ	Y	1	LV	200	ug/L
	trichloroethylene	4.06	J	IK	4.31	J	I				3.68	J	IY	1	LV	5	ug/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-5. Groundwater Monitoring Results for Southern Sector Monitoring Wells, M-Area HWMF (Cont.)

WELL SSM 13B2

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 97441.4 E 47979.9	33.31955 Deg N -81.7298 Deg W	- ft msl	ft msl	4 " PVC		LL

SAMPLE DATE	03/19/01	06/20/01		11/06/01	
FIELD DATA					
Parameter	**1Q01**	**2Q01**	**3Q01**	**4Q01**	**Unit**
Water Elevation	*Not Applicable*	*Not Applicable*	*Not Applicable*	*Not Applicable*	ft msl
pH	4.1	4		4.8	pH
Sp. Conductance	117	126		127	uS/cm
Water temperature	20.9	21		21.7	deg. C
Alkalinity as CaCO3	0	0		0	mg/L
Turbidity	1.3	.3		1.4	NTU
Volumes purged		0		0	well volume
Sampling code				N	
Synchronous water level	( )	( )	( )	( )	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q01	CLP EPA	2Q01	CLP EPA	3Q01	CLP EPA	4Q01	CLP EPA	DF	Lab	Limit	Unit
Organics													
	chlorobenzene							<25	U	5	LV	5	ug/L
	1,1-dichloroethane							<25	U	5	LV	5	ug/L
	1,1-dichloroethylene							<25	U	5	LV	7	ug/L
	trans-1,2-dichloroethylene							<25	U	5	LV	100	ug/L
	1,1,2,2-tetrachloroethane							<25	U	5	LV	5	ug/L
	tetrachloroethylene	<5	U	<5	U			<25	U	5	LV	5	ug/L
	1,1,1-trichloroethane							<25	U	5	LV	200	ug/L
+	trichloroethylene	***842***		***912***	Y			***995***		5	LV	5	ug/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-5. Groundwater Monitoring Results for Southern Sector Monitoring Wells, M-Area HWMF (Cont.)

WELL SSM 13C2

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 97441.4 E 47979.9	33.31955 Deg N -81.7298 Deg W	- ft msl	ft msl	4 " PVC		UL

SAMPLE DATE	03/19/01	06/20/01		11/06/01	
FIELD DATA					
Parameter	**1Q01**	**2Q01**	**3Q01**	**4Q01**	**Unit**
Water Elevation	*Not Applicable*	*Not Applicable*	*Not Applicable*	*Not Applicable*	ft msl
pH	4.4	4.1		4.7	pH
Sp. Conductance	58	55		53	uS/cm
Water temperature	18.9	25.1		19	deg. C
Alkalinity as CaCO3	0	0		0	mg/L
Turbidity	1	.6		1.2	NTU
Volumes purged		0		0	well volume
Sampling code				N	
Synchronous water level	( )	( )	( )	( )	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q01	CLP	EPA	2Q01	CLP	EPA	3Q01	CLP	EPA	4Q01	CLP	EPA	DF	Lab	Limit	Unit
Organics																	
	chlorobenzene										<5	U		1	LV	5	ug/L
	1,1-dichloroethane										<5	U		1	LV	5	ug/L
	1,1-dichloroethylene										<5	U		1	LV	7	ug/L
	trans-1,2-dichloroethylene										<5	U		1	LV	100	ug/L
	1,1,2,2-tetrachloroethane										<5	U		1	LV	5	ug/L
	tetrachloroethylene	<5	U		<5	U					<5	U		1	LV	5	ug/L
	1,1,1-trichloroethane										<5	U		1	LV	200	ug/L
+	trichloroethylene	***218***			***149***		Y				***103***			1	LV	5	ug/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-5. Groundwater Monitoring Results for Southern Sector Monitoring Wells, M-Area HWMF (Cont.)

WELL SSM 14B2

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 96940 E 48285.1	33.31894 Deg N -81.7280 Deg W	- ft msl	ft msl	4 " PVC		LL

SAMPLE DATE	03/19/01	06/20/01		11/01/01	
FIELD DATA					
Parameter	**1Q01**	**2Q01**	**3Q01**	**4Q01**	**Unit**
Water Elevation	*Not Applicable*	*Not Applicable*	*Not Applicable*	*Not Applicable*	ft msl
pH	4.8	4.4		4.5	pH
Sp. Conductance	28	28		37	uS/cm
Water temperature	17.7	23.7		1	deg. C
Alkalinity as CaCO3	0	0		0	mg/L
Turbidity	2.8	.4		1.6	NTU
Volumes purged		0		0	well volume
Sampling code					
Synchronous water level	( )	( )	( )	( )	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q01	CLP EPA	2Q01	CLP EPA	3Q01	CLP EPA	4Q01	CLP EPA	DF	Lab	Limit	Unit
Organics													
	chlorobenzene							<5	U	1	LV	5	ug/L
	1,1-dichloroethane							<5	U	1	LV	5	ug/L
	1,1-dichloroethylene							<5	U	1	LV	7	ug/L
	trans-1,2-dichloroethylene							<5	U	1	LV	100	ug/L
	1,1,2,2-tetrachloroethane							<5	U	1	LV	5	ug/L
	tetrachloroethylene	<5	U	<5	U			<5	U	1	LV	5	ug/L
	1,1,1-trichloroethane							<5	U	1	LV	200	ug/L
+	trichloroethylene	***222***		***229***	Y			***160***		1	LV	5	ug/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-5. Groundwater Monitoring Results for Southern Sector Monitoring Wells, M-Area HWMF (Cont.)

WELL SSM 14C2

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 96940 E 48285.1	33.31894 Deg N -81.7280 Deg W	- ft msl	ft msl	4 " PVC		UL

SAMPLE DATE	03/19/01	06/20/01		11/01/01	
FIELD DATA					
Parameter	**1Q01**	**2Q01**	**3Q01**	**4Q01**	**Unit**
Water Elevation	*Not Applicable*	*Not Applicable*	*Not Applicable*	*Not Applicable*	ft msl
pH	4.8	10.2		8.9	pH
Sp. Conductance	28	142		123	uS/cm
Water temperature	17.7	23.9		16.7	deg. C
Alkalinity as CaCO3	0	23		40	mg/L
Turbidity	1	.4		2	NTU
Volumes purged		0		0	well volume
Sampling code					
Synchronous water level	( )	( )	( )	( )	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q01	CLP EPA	2Q01	CLP EPA	3Q01	CLP EPA	4Q01	CLP EPA	DF	Lab	Limit	Unit
Organics													
	chlorobenzene							<5	U	1	LV	5	ug/L
	1,1-dichloroethane							<5	U	1	LV	5	ug/L
	1,1-dichloroethylene							<5	U	1	LV	7	ug/L
	trans-1,2-dichloroethylene							<5	U	1	LV	100	ug/L
	1,1,2,2-tetrachloroethane							<5	U	1	LV	5	ug/L
	tetrachloroethylene	<5	U	<5	U			<5	U	1	LV	5	ug/L
	1,1,1-trichloroethane							<5	U	1	LV	200	ug/L
+	trichloroethylene	***98.4***		***115***	Y			87.2	J L	1	LV	5	ug/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-5. Groundwater Monitoring Results for Southern Sector Monitoring Wells, M-Area HWMF (Cont.)

WELL SSM 15B2

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 97626.7 E 49132.6	33.32184 Deg N -81.7271 Deg W	- ft msl	ft msl	4 " PVC		LL

SAMPLE DATE	03/21/01	06/19/01		10/31/01	
FIELD DATA					
Parameter	**1Q01**	**2Q01**	**3Q01**	**4Q01**	**Unit**
Water Elevation	*Not Applicable*	*Not Applicable*	*Not Applicable*	*Not Applicable*	ft msl
pH	4.5	4.2		5	pH
Sp. Conductance	58	31		28	uS/cm
Water temperature	13.2	27.3		21.7	deg. C
Alkalinity as CaCO3	0	0		0	mg/L
Turbidity	3.7	3.8		5.7	NTU
Volumes purged		0		0	well volume
Sampling code					
Synchronous water level	( )	( )	( )	( )	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q01	CLP	EPA	2Q01	CLP	EPA	3Q01	CLP	EPA	4Q01	CLP	EPA	DF	Lab	Limit	Unit
Organics																	
	chlorobenzene										<5	UJ	Y	1	LV	5	ug/L
	1,1-dichloroethane										<5	UJ	Y	1	LV	5	ug/L
	1,1-dichloroethylene										<5	UJ	Y	1	LV	7	ug/L
	trans-1,2-dichloroethylene										<5	UJ	Y	1	LV	100	ug/L
	1,1,2,2-tetrachloroethane										<5	UJ	Y	1	LV	5	ug/L
	tetrachloroethylene	<5	U		<5	U					<5	UJ	Y	1	LV	5	ug/L
	1,1,1-trichloroethane										<5	UJ	Y	1	LV	200	ug/L
	trichloroethylene	<5	U		<5	U					2.43	J	IY	1	LV	5	ug/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-5. Groundwater Monitoring Results for Southern Sector Monitoring Wells, M-Area HWMF (Cont.)

WELL SSM 15C2

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 97626.7 E 49132.6	33.32184 Deg N -81.7271 Deg W	- ft msl	ft msl	4 " PVC		UL

SAMPLE DATE	03/21/01	06/19/01		10/31/01	
FIELD DATA					
Parameter	**1Q01**	**2Q01**	**3Q01**	**4Q01**	**Unit**
Water Elevation	*Not Applicable*	*Not Applicable*	*Not Applicable*	*Not Applicable*	ft msl
pH	4.4	4.2		4.7	pH
Sp. Conductance	49	51		43	uS/cm
Water temperature	15.5	24		20.7	deg. C
Alkalinity as CaCO3	14	0		4	mg/L
Turbidity	2.4	.9		4.4	NTU
Volumes purged		0		0	well volume
Sampling code					
Synchronous water level	( )	( )	( )	( )	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q01	CLP	EPA	2Q01	CLP	EPA	3Q01	CLP	EPA	4Q01	CLP	EPA	DF	Lab	Limit	Unit
Organics																	
	chlorobenzene										<5	UJ	Y	1	LV	5	ug/L
	1,1-dichloroethane										<5	UJ	Y	1	LV	5	ug/L
	1,1-dichloroethylene										<5	UJ	Y	1	LV	7	ug/L
	trans-1,2-dichloroethylene										<5	UJ	Y	1	LV	100	ug/L
	1,1,2,2-tetrachloroethane										<5	UJ	Y	1	LV	5	ug/L
	tetrachloroethylene	<5	U		<5	U					<5	UJ	Y	1	LV	5	ug/L
	1,1,1-trichloroethane										<5	UJ	Y	1	LV	200	ug/L
+	trichloroethylene	***220***	L		***240***	L					216	J	Y	1	LV	5	ug/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-5. Groundwater Monitoring Results for Southern Sector Monitoring Wells, M-Area HWMF (Cont.)

WELL SSM 16B2

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 98067.9 E 49715.6	33.32377 Deg N -81.7264 Deg W	- ft msl	ft msl	4 " PVC		LL

SAMPLE DATE		06/20/01		11/06/01	

FIELD DATA

Parameter	1Q01	2Q01	3Q01	4Q01	Unit
Water Elevation	*Not Applicable*	*Not Applicable*	*Not Applicable*	*Not Applicable*	ft msl
pH		3.9		4.3	pH
Sp. Conductance		42		36	uS/cm
Water temperature		24.5		16.9	deg. C
Alkalinity as CaCO3		0		0	mg/L
Turbidity		1.3		1.9	NTU
Volumes purged		0		0	well volume
Sampling code					
Synchronous water level	( )	( )	( )	( )	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q01	CLP	EPA	2Q01	CLP	EPA	3Q01	CLP	EPA	4Q01	CLP	EPA	DF	Lab	Limit	Unit
Organics																	
	chlorobenzene										<50	U		10	LV	5	ug/L
	1,1-dichloroethane										<50	U		10	LV	5	ug/L
	1,1-dichloroethylene										<50	U		10	LV	7	ug/L
	trans-1,2-dichloroethylene										<50	U		10	LV	100	ug/L
	1,1,2,2-tetrachloroethane										<50	U		10	LV	5	ug/L
+	tetrachloroethylene	19.1	J	K	***29.3***		Y				<50	U		10	LV	5	ug/L
	1,1,1-trichloroethane										<50	U		10	LV	200	ug/L
+	trichloroethylene	2370	J	K	***2240***		Y				***1090***			10	LV	5	ug/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-5. Groundwater Monitoring Results for Southern Sector Monitoring Wells, M-Area HWMF (Cont.)

WELL SSM 16C2

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 98067.9 E 49715.6	33.32377 Deg N -81.7264 Deg W	- ft msl	ft msl	4 " PVC		UL

SAMPLE DATE	03/22/01	06/20/01		11/06/01	
FIELD DATA					
Parameter	**1Q01**	**2Q01**	**3Q01**	**4Q01**	**Unit**
Water Elevation	*Not Applicable*	*Not Applicable*	*Not Applicable*	*Not Applicable*	ft msl
pH	4.7	4.2		5	pH
Sp. Conductance	41	41		47	uS/cm
Water temperature	22.7	24.9		16.8	deg. C
Alkalinity as CaCO3	0	0		0	mg/L
Turbidity	.2	.2		1.7	NTU
Volumes purged		0		0	well volume
Sampling code				N	
Synchronous water level	( )	( )	( )	( )	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q01	CLP	EPA	2Q01	CLP	EPA	3Q01	CLP	EPA	4Q01	CLP	EPA	DF	Lab	Limit	Unit
Organics																	
	chlorobenzene										<5	U		1	LV	5	ug/L
	1,1-dichloroethane										<5	U		1	LV	5	ug/L
	1,1-dichloroethylene										<5	U		1	LV	7	ug/L
	trans-1,2-dichloroethylene										<5	U		1	LV	100	ug/L
	1,1,2,2-tetrachloroethane										<5	U		1	LV	5	ug/L
+	tetrachloroethylene	3.11	J	IK	***6.98***		Y				***17***			1	LV	5	ug/L
	1,1,1-trichloroethane										<5	U		1	LV	200	ug/L
+	trichloroethylene	749	J	K	***943***		Y				1770	J		10	LV	5	ug/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-5. Groundwater Monitoring Results for Southern Sector Monitoring Wells, M-Area HWMF (Cont.)

WELL SSM 17B2

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 98433.5 E 50164.8	33.32531 Deg N -81.7259 Deg W	- ft msl	ft msl	4 " PVC		LL

SAMPLE DATE	03/26/01	06/21/01		11/06/01	
FIELD DATA					
Parameter	**1Q01**	**2Q01**	**3Q01**	**4Q01**	**Unit**
Water Elevation	*Not Applicable*	*Not Applicable*	*Not Applicable*	*Not Applicable*	ft msl
pH	5.9	4.3		4.6	pH
Sp. Conductance	29	18		169	uS/cm
Water temperature	19.2	23		18.2	deg. C
Alkalinity as CaCO3	5	0		0	mg/L
Turbidity	1.2	.6		2.1	NTU
Volumes purged	0	0		0	well volume
Sampling code					
Synchronous water level	( )	( )	( )	( )	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q01	CLP	EPA	2Q01	CLP	EPA	3Q01	CLP	EPA	4Q01	CLP	EPA	DF	Lab	Limit	Unit
Organics																	
	chlorobenzene										<5	U		1	LV	5	ug/L
	1,1-dichloroethane										<5	U		1	LV	5	ug/L
	1,1-dichloroethylene										<5	U		1	LV	7	ug/L
	trans-1,2-dichloroethylene										<5	U		1	LV	100	ug/L
	1,1,2,2-tetrachloroethane										<5	U		1	LV	5	ug/L
	tetrachloroethylene	2.37	J	IK	3.2	J	I				2.61	J	I	1	LV	5	ug/L
	1,1,1-trichloroethane										<5	U		1	LV	200	ug/L
+	trichloroethylene	42.7	J	K	***46.4***						***36.7***			1	LV	5	ug/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-5. Groundwater Monitoring Results for Southern Sector Monitoring Wells, M-Area HWMF (Cont.)

WELL SSM 17C2

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 98433.5 E 50164.8	33.32531 Deg N -81.7259 Deg W	- ft msl	ft msl	4 " PVC		UL

SAMPLE DATE	03/26/01	06/21/01		11/06/01	
FIELD DATA					
Parameter	**1Q01**	**2Q01**	**3Q01**	**4Q01**	**Unit**
Water Elevation	*Not Applicable*	*Not Applicable*	*Not Applicable*	*Not Applicable*	ft msl
pH	5.3	4		4.7	pH
Sp. Conductance	52	54		57	uS/cm
Water temperature	19.2	26.6		17.5	deg. C
Alkalinity as CaCO3	4	0		0	mg/L
Turbidity	.9	.6		1.4	NTU
Volumes purged	0	0		0	well volume
Sampling code					
Synchronous water level	( )	( )	( )	( )	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q01	CLP	EPA	2Q01	CLP	EPA	3Q01	CLP	EPA	4Q01	CLP	EPA	DF	Lab	Limit	Unit
Organics																	
	chlorobenzene										<10	UJ	Y	2	LV	5	ug/L
	1,1-dichloroethane										<10	UJ	Y	2	LV	5	ug/L
	1,1-dichloroethylene										<10	UJ	Y	2	LV	7	ug/L
	trans-1,2-dichloroethylene										<10	UJ	Y	2	LV	100	ug/L
	1,1,2,2-tetrachloroethane										<10	UJ	Y	2	LV	5	ug/L
+	tetrachloroethylene	14.3	J	K	***15.1***						14.1	J	Y	2	LV	5	ug/L
	1,1,1-trichloroethane										<10	UJ	Y	2	LV	200	ug/L
+	trichloroethylene	247	J	KL	***194***						201	J	Y	2	LV	5	ug/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-6. Groundwater Monitoring Results for Auxiliary Wells, M-Area HWMF

WELL ARP 8D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 98986.6 E 44132.6	33.31669 Deg N -81.7429 Deg W	224.79 - 204.8 ft msl	355.76 ft msl	2 " PVC		M/GC

SAMPLE DATE 07/24/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	*Not Applicable*	*Not Applicable*	*Not Applicable*	211.81	ft msl
pH				5.8	pH
Sp. Conductance				60	uS/cm
Water temperature				21.8	deg. C
Alkalinity as CaCO3				2	mg/L
Turbidity				1000	NTU
Volumes purged				0	well volume
Sampling code					
Synchronous water level	( )	( )	( )	( )	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP EPA	3Q00	CLP EPA	1Q01	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
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							<5	U	1	WA	5	ug/L
	1,1,1-trichloroethane												
	trichloroethylene							1.52	J IK	1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP EPA	3Q99	CLP EPA	3Q00	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	aluminum, total recoverable												
	nitrate-nitrite as nitrogen												
	sodium, total recoverable												
	sulfate												
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. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-6. Groundwater Monitoring Results for Auxiliary Wells, M-Area HWMF (Cont.)

WELL ARP 9D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 99295.5 E 44686.6	33.31827 Deg N -81.7420 Deg W	224.85 - 204.9 ft msl	347.48 ft msl	2 " PVC		M/GC

SAMPLE DATE 07/24/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	*Not Applicable*	*Not Applicable*	*Not Applicable*	211.32	ft msl
pH				5.7	pH
Sp. Conductance				20	uS/cm
Water temperature				22.4	deg. C
Alkalinity as CaCO3				0	mg/L
Turbidity				275	NTU
Volumes purged				0	well volume
Sampling code					
Synchronous water level	( )	( )	( )	( )	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP EPA	3Q00	CLP EPA	1Q01	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
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							<5	U	1	WA	5	ug/L
	1,1,1-trichloroethane												
	trichloroethylene							<5	U	1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP EPA	3Q99	CLP EPA	3Q00	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	aluminum, total recoverable												
	nitrate-nitrite as nitrogen												
	sodium, total recoverable												
	sulfate												
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. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-6. Groundwater Monitoring Results for Auxiliary Wells, M-Area HWMF (Cont.)

WELL ARP 10D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 98536.5 E 45016.4	33.31713 Deg N -81.7397 Deg W	228.79 - 208.8 ft msl	336.27 ft msl	2 " PVC		M

SAMPLE DATE 07/26/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	*Not Applicable*	*Not Applicable*	*Not Applicable*	216.72	ft msl
pH				5.4	pH
Sp. Conductance				27	uS/cm
Water temperature				19.2	deg. C
Alkalinity as CaCO3				2	mg/L
Turbidity				143	NTU
Volumes purged				3.84	well volume
Sampling code					
Synchronous water level	( )	( )	( )	( )	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP EPA	3Q00	CLP EPA	1Q01	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
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							<5	U	1	WA	5	ug/L
	1,1,1-trichloroethane												
	trichloroethylene							<5	U	1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP EPA	3Q99	CLP EPA	3Q00	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	aluminum, total recoverable												
	nitrate-nitrite as nitrogen												
	sodium, total recoverable												
	sulfate												
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. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-6. Groundwater Monitoring Results for Auxiliary Wells, M-Area HWMF (Cont.)

WELL ARP 11D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 98788.4 E 45081.1	33.31780 Deg N -81.7400 Deg W	223.81 - 204.3 ft msl	336.63 ft msl	2 " PVC		M/GC

SAMPLE DATE 07/25/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	*Not Applicable*	*Not Applicable*	*Not Applicable*	214.25	ft msl
pH				5.6	pH
Sp. Conductance				29	uS/cm
Water temperature				21.9	deg. C
Alkalinity as CaCO3				0	mg/L
Turbidity				96.3	NTU
Volumes purged				4.30	well volume
Sampling code					
Synchronous water level	( )	( )	( )	( )	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP EPA	3Q00	CLP EPA	1Q01	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
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							<5	U	1	WA	5	ug/L
	1,1,1-trichloroethane												
	trichloroethylene							<5	U	1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP EPA	3Q99	CLP EPA	3Q00	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	aluminum, total recoverable												
	nitrate-nitrite as nitrogen												
	sodium, total recoverable												
	sulfate												
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. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-6. Groundwater Monitoring Results for Auxiliary Wells, M-Area HWMF (Cont.)

WELL MSB 90C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 108016.2 E 50581.1	33.34718 Deg N -81.7435 Deg W	183.45 - 178.4 ft msl	345.95 ft msl	4 " PVC		UL

SAMPLE DATE	03/24/00	07/21/00	03/14/01	08/30/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	230.14	229.3	227.74	226.5	ft msl
pH	4.5	4.9	5.5	4.8	pH
Sp. Conductance	29	29	30	30	uS/cm
Water temperature	18.5	20.6	18.6	19.6	deg. C
Alkalinity as CaCO3	0	4	24	1	mg/L
Turbidity	2.9	.8	.3	.4	NTU
Volumes purged	2.36		5.13	2.25	well volume
Sampling code					
Synchronous water level	230.4 (03/20/00)	228.9 (09/24/00)	227.9 (03/29/01)	226.5 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP EPA	3Q00	CLP EPA	1Q01	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
	Inorganics												
	barium, total recoverable												
	cyanide												
	lead, total recoverable												
	nickel, total recoverable												
	selenium, total recoverable												
	Organics												
	chlorobenzene	<1	JU	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethane	<1	JU	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethylene	<1	JU	<5	U	<5	U	<5	U	1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	JU	<5	U	<5	U	<5	U	1	WA	100	ug/L
	pcb 1016												
	pcb 1221												
	pcb 1232												
	pcb 1242												
	pcb 1248												
	pcb 1254												
	pcb 1260												
	1,1,2,2-tetrachloroethane	<1	JU	<5	U	<5	U	<5	U	1	WA	5	ug/L
	tetrachloroethylene	<1	JU	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1,1-trichloroethane	<1	JU	<5	U	<5	U	<5	U	1	WA	200	ug/L
	trichloroethylene	<1	JU	<5	U	<5	U	<5	U	1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP EPA	3Q99	CLP EPA	3Q00	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
	Inorganics												
	aluminum, total recoverable					54.3	J I	36.4	J I	1	WA	100	ug/L
	nitrate-nitrite as nitrogen												
+	sodium, total recoverable					***7490***		***5520***		1	WA	4600	ug/L
	sulfate					2760		2620		1	WA	3000	ug/L
	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. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-6. Groundwater Monitoring Results for Auxiliary Wells, M-Area HWMF (Cont.)

WELL MSB 90TB

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 108007.4 E 50583.7	33.34716 Deg N -81.7435 Deg W	-20.54 - -25.5 ft msl	-20.24 ft msl	4 " SS		CBA

SAMPLE DATE	03/29/00	07/25/00	03/16/01	08/27/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	206.18	204.94	204.04	202.11	ft msl
pH	6.1	6.6	6.3	5.8	pH
Sp. Conductance	26	18	23	20	uS/cm
Water temperature	20.9	21.6	18.9	21.9	deg. C
Alkalinity as CaCO3	14	3	1	1	mg/L
Turbidity	39.4	8.9	22.2	10.8	NTU
Volumes purged	1.66	3.73	1.94	2.07	well volume
Sampling code					
Synchronous water level	206.4 (03/20/00)	204.9 (12/28/00)	203.6 (03/29/01)	202.8 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<1	U		<5	JU	L	<5	U		<5	UJ	L	1	WA	5	ug/L
	1,1-dichloroethane	<1	U		<5	U		<5	U		<5	UJ	L	1	WA	5	ug/L
	1,1-dichloroethylene	<1	U		<5	U		<5	U		<5	UJ	L	1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	U		<5	U		<5	U		<5	UJ	L	1	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<1	U		<5	U		<5	U		<5	UJ	L	1	WA	5	ug/L
	tetrachloroethylene	<1	U		<5	U		<5	U		<5	UJ	L	1	WA	5	ug/L
	1,1,1-trichloroethane	<1	U		<5	U		<5	U		<5	UJ	L	1	WA	200	ug/L
	trichloroethylene	<1	U		<5	U		<5	U		<5	UJ	L	1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable							57.4	J	I	<71	U	V	1	WA	100	ug/L
	nitrate-nitrite as nitrogen																
	sodium, total recoverable							2700			2330			1	WA	4600	ug/L
	sulfate							712	J	I	881			1	WA	3000	ug/L
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. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-6. Groundwater Monitoring Results for Auxiliary Wells, M-Area HWMF (Cont.)

WELL MSB 91C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 109581.9 E 50406.7	33.35035 Deg N -81.7470 Deg W	155.26 - 150.3 ft msl	334.76 ft msl	4 " PVC		UL

SAMPLE DATE	03/24/00	07/20/00	03/14/01	09/12/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	228.58	227.66	226.12	225.05	ft msl
pH	5.3	5.5	6.1	6.3	pH
Sp. Conductance	35	32	37	28	uS/cm
Water temperature	18	19.3	19.3	20	deg. C
Alkalinity as CaCO3	6	10	15	12	mg/L
Turbidity	13.7	2.5	2.6	.5	NTU
Volumes purged	3.52	2.05	2.19	2.00	well volume
Sampling code					
Synchronous water level	228.6 (03/20/00)	227.4 (09/25/00)	226.2 (03/20/01)	224.9 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP EPA	3Q00	CLP EPA	1Q01	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	barium, total recoverable												
	cyanide												
	lead, total recoverable												
	nickel, total recoverable												
	selenium, total recoverable												
Organics													
	chlorobenzene	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethane	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1-dichloroethylene	<1	U	<5	U	<5	U	<5	U	1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	U	<5	U	<5	U	<5	U	1	WA	100	ug/L
	pcb 1016												
	pcb 1221												
	pcb 1232												
	pcb 1242												
	pcb 1248												
	pcb 1254												
	pcb 1260												
	1,1,2,2-tetrachloroethane	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
	tetrachloroethylene	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L
	1,1,1-trichloroethane	<1	U	<5	U	<5	U	<5	U	1	WA	200	ug/L
	trichloroethylene	<1	U	<5	U	<5	U	<5	U	1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP EPA	3Q99	CLP EPA	3Q00	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	aluminum, total recoverable					66.8	J I	<142	U V	1	WA	100	ug/L
	nitrate-nitrite as nitrogen												
	sodium, total recoverable					3870		2290		1	WA	4600	ug/L
	sulfate					892		463		1	WA	3000	ug/L
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. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-6. Groundwater Monitoring Results for Auxiliary Wells, M-Area HWMF (Cont.)

WELL MSB 91TB2

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 109579.8 E 50395.5	33.35033 Deg N -81.7470 Deg W	6.03 - .73 ft msl	333.53 ft msl	4 " CS/SS		CBA

SAMPLE DATE		08/30/00	03/30/01	

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	*Not Applicable*	207.31	208.22	*Not Applicable*	ft msl
pH		9.3	9.2		pH
Sp. Conductance		72	80		uS/cm
Water temperature		22.6	18.8		deg. C
Alkalinity as CaCO3		38	0		mg/L
Turbidity		57.5	13.2		NTU
Volumes purged					well volume
Sampling code		B			
Synchronous water level	( )	( )	( )	( )	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

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ST	Parameter	1Q00	CLP EPA	3Q00	CLP EPA	1Q01	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	barium, total recoverable												
	cyanide												
	lead, total recoverable												
	nickel, total recoverable												
	selenium, total recoverable												
Organics													
	chlorobenzene			<5	U	<5	U					5	ug/L
	1,1-dichloroethane			<5	U	<5	U					5	ug/L
	1,1-dichloroethylene			<5	U	<5	U					7	ug/L
	trans-1,2-dichloroethylene			<5	U	<5	U					100	ug/L
	pcb 1016												
	pcb 1221												
	pcb 1232												
	pcb 1242												
	pcb 1248												
	pcb 1254												
	pcb 1260												
	1,1,2,2-tetrachloroethane			<5	U	<5	U					5	ug/L
	tetrachloroethylene			<5	U	<5	U					5	ug/L
	1,1,1-trichloroethane			<5	U	<5	U					200	ug/L
	trichloroethylene			<5	U	<5	U					5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP EPA	3Q99	CLP EPA	3Q00	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	aluminum, total recoverable												
	nitrate-nitrite as nitrogen												
	sodium, total recoverable												
	sulfate												
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. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-6. Groundwater Monitoring Results for Auxiliary Wells, M-Area HWMF (Cont.)

WELL MSB 91TB5

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 109579.8 E 50395.5	33.35033 Deg N -81.7470 Deg W	-11.57 - -16.9 ft msl	333.53 ft msl	4 " STEEL		CBA

SAMPLE DATE		08/30/00	03/30/01		
FIELD DATA					
Parameter	**1Q00**	**3Q00**	**1Q01**	**3Q01**	**Unit**
Water Elevation	*Not Applicable*	207.33	208.25	*Not Applicable*	ft msl
pH		7.1	5.9		pH
Sp. Conductance		37	30		uS/cm
Water temperature		21.8	19.4		deg. C
Alkalinity as CaCO3		14	0		mg/L
Turbidity		91.8	18		NTU
Volumes purged					well volume
Sampling code		B			
Synchronous water level	( )	( )	( )	( )	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP EPA	3Q00	CLP EPA	1Q01	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	barium, total recoverable												
	cyanide												
	lead, total recoverable												
	nickel, total recoverable												
	selenium, total recoverable												
Organics													
	chlorobenzene			<5	U	<5	U					5	ug/L
	1,1-dichloroethane			<5	U	<5	U					5	ug/L
	1,1-dichloroethylene			<5	U	<5	U					7	ug/L
	trans-1,2-dichloroethylene			<5	U	<5	U					100	ug/L
	pcb 1016												
	pcb 1221												
	pcb 1232												
	pcb 1242												
	pcb 1248												
	pcb 1254												
	pcb 1260												
	1,1,2,2-tetrachloroethane			<5	U	<5	U					5	ug/L
	tetrachloroethylene			<5	U	<5	U					5	ug/L
	1,1,1-trichloroethane			<5	U	<5	U					200	ug/L
	trichloroethylene			<5	U	<5	U					5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP EPA	3Q99	CLP EPA	3Q00	CLP EPA	3Q01	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	aluminum, total recoverable												
	nitrate-nitrite as nitrogen												
	sodium, total recoverable												
	sulfate												
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. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-6. Groundwater Monitoring Results for Auxiliary Wells, M-Area HWMF (Cont.)

WELL MSB 92C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 108615 E 48921.9	33.34579 Deg N -81.7490 Deg W	141.02 - 136.2 ft msl	339.82 ft msl	4 " PVC		UL

SAMPLE DATE	03/24/00	07/20/00	03/14/01	09/07/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	227.88	227.11	225.46	224.51	ft msl
pH	5.5	5	5.3	4.4	pH
Sp. Conductance	26	22	22	22	uS/cm
Water temperature	18.7	20.9	19.1	19.9	deg. C
Alkalinity as CaCO3	8	0	1	14	mg/L
Turbidity	3.9	1.4	2.2	1	NTU
Volumes purged	2.43	2.45	2.19		well volume
Sampling code					
Synchronous water level	228.3 (03/20/00)	226.7 (09/24/00)	225.3 (03/20/01)	224.4 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

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ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<1	U		<5	U		<5	JU	L	<5	U		1	WA	5	ug/L
	1,1-dichloroethane	<1	U		<5	U		<5	JU	L	<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<1	U		<5	U		<5	JU	L	<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene	<1	U		<5	U		<5	JU	L	<5	U		1	WA	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<1	U		<5	U		<5	JU	L	<5	U		1	WA	5	ug/L
	tetrachloroethylene	<1	U		<5	U		<5	JU	L	<5	U		1	WA	5	ug/L
	1,1,1-trichloroethane	<1	U		<5	U		<5	JU	L	<5	U		1	WA	200	ug/L
	trichloroethylene	<1	U		<5	U		<5	JU	L	<5	U		1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable							30.8	J	I	<61.3	U	V	1	WA	100	ug/L
	nitrate-nitrite as nitrogen																
	sodium, total recoverable							3360			2390			1	WA	4600	ug/L
	sulfate							1400			825			1	WA	3000	ug/L
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. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-6. Groundwater Monitoring Results for Auxiliary Wells, M-Area HWMF (Cont.)

WELL RWM 17B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 104179.7 E 51490	33.34018 Deg N -81.7336 Deg W	133.2 - 118.2 ft msl	381.28 ft msl	6.6 " SS		MCBC

SAMPLE DATE		09/14/00	03/06/01	07/10/01	
FIELD DATA					
Parameter	**1Q00**	**3Q00**	**1Q01**	**3Q01**	**Unit**
Water Elevation	*Not Applicable*	210.57	209.68	207.98	ft msl
pH		5.3	5.2	5.2	pH
Sp. Conductance		20	20	20	uS/cm
Water temperature		25.1	16.9	22.1	deg. C
Alkalinity as CaCO3		0	0	0	mg/L
Turbidity		1.9	2.3	.4	NTU
Volumes purged			0	0	well volume
Sampling code		C	C	C	
Synchronous water level	( )	( )	( )	( )	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

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ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene				<1	JU	L	<25	U		<10	U		10	ML	5	ug/L
	1,1-dichloroethane				<1	JU	L	<25	U		<10	U		10	ML	5	ug/L
	1,1-dichloroethylene				<1	JU	L	<25	U		<10	U		10	ML	7	ug/L
	trans-1,2-dichloroethylene				<1	JU	L	<25	U		<10	U		10	ML	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane				<1	JU	L	<25	U		<10	U		10	ML	5	ug/L
+	tetrachloroethylene				76.2	J	L	***93.4***			***95.9***			5	ML	5	ug/L
	1,1,1-trichloroethane				<1	JU	L	<25	U		<10	U		10	ML	200	ug/L
+	trichloroethylene				311	J	L	***474***			***477***			10	ML	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable																
	nitrate-nitrite as nitrogen																
	sodium, total recoverable																
	sulfate																
Radionuclides																	
	gross alpha							.811	J	I						15	pCi/L
	nonvolatile beta							1.2	U							50	pCi/L
	radium, total alpha-emitting							.813	J	I						5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-6. Groundwater Monitoring Results for Auxiliary Wells, M-Area HWMF (Cont.)

WELL RWM 17D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 104196.8 E 51502	33.34024 Deg N -81.7336 Deg W	232.4 - 217.4 ft msl	380.88 ft msl	6.6 " CS		M/GC

SAMPLE DATE		09/14/00	03/06/01	07/10/01	
FIELD DATA					
Parameter	**1Q00**	**3Q00**	**1Q01**	**3Q01**	**Unit**
Water Elevation	*Not Applicable*	223.13	220.58	220.74	ft msl
pH		5.2	5.3	5.1	pH
Sp. Conductance		23	23	23	uS/cm
Water temperature		25.1	17	23.5	deg. C
Alkalinity as CaCO3		0	0	0	mg/L
Turbidity		.7	2.3	1.4	NTU
Volumes purged			0	0	well volume
Sampling code		C	C	C	
Synchronous water level	( )	( )	( )	( )	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene				<1	JU	L	<5	U		<1	U		1	ML	5	ug/L
	1,1-dichloroethane				<1	JU	L	<5	U		<1	U		1	ML	5	ug/L
	1,1-dichloroethylene				<1	JU	L	<5	U		<1	U		1	ML	7	ug/L
	trans-1,2-dichloroethylene				<1	JU	L	<5	U		<1	U		1	ML	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane				<1	JU	L	<5	U		<1	U		1	ML	5	ug/L
	tetrachloroethylene				<1	JU	L	<5	U		<1	U		1	ML	5	ug/L
	1,1,1-trichloroethane				<1	JU	L	<5	U		<1	U		1	ML	200	ug/L
	trichloroethylene				8.35	J	L	<5	U		.461	J	IK	1	ML	5	ug/L

II. Monitoring Constituents

ST	Parameter	3Q98	CLP	EPA	3Q99	CLP	EPA	3Q00	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable																
	nitrate-nitrite as nitrogen																
	sodium, total recoverable																
	sulfate																
Radionuclides																	
	gross alpha							1.3	J	I						15	pCi/L
	nonvolatile beta							2.06	J	I						50	pCi/L
	radium, total alpha-emitting							1.46	J	I						5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-7a. Groundwater Monitoring Results for Recovery Wells, January - April 2001

WELL RWM 1

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 102599.1 E 48575.1	33.33193 Deg N -81.7382 Deg W	232.3 - 172.3 ft msl	364.7 ft msl	8 " CS	S	M/GC

SAMPLE DATE	01/09/01	02/05/01	03/05/01	04/30/01

FIELD DATA

Parameter	JAN	FEB	MAR	APR	Unit
Water Elevation	*Not Applicable*	*Not Applicable*	*Not Applicable*	185.88	ft msl
pH	4.9	5	5	4.8	pH
Sp. Conductance	43	44	40	42	uS/cm
Water temperature	14.8	18.1	18.4	17.9	deg. C
Alkalinity as CaCO3	0	0	0	0	mg/L
Turbidity	1.1	.7	.1	1.5	NTU
Sampling code	C	C	C	C	

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	JAN	CLP	EPA	FEB	CLP	EPA	MAR	CLP	EPA	APR	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<50	U		<50	U		<50	U		.85	J	IL	1	GE	5	ug/L
	1,1-dichloroethane	<50	U		<50	U		<50	U		.898	J	IL	1	GE	5	ug/L
	1,1-dichloroethylene	<50	U		<50	U		<50	U		8.56	J	L	1	GE	7	ug/L
	trans-1,2-dichloroethylene	<50	U		<50	U		<50	U		<1	JU	L	1	GE	100	ug/L
	pcb 1016	<.971	U													.5	ug/L
	pcb 1221	<.971	U													.5	ug/L
	pcb 1232	<.971	U													.5	ug/L
	pcb 1242	<.971	U													.5	ug/L
	pcb 1248	<.971	U													.5	ug/L
	pcb 1254	<.971	U													.5	ug/L
	pcb 1260	<.971	U													.5	ug/L
	1,1,2,2-tetrachloroethane	<50	U		<50	U		<50	U		.187	J	IL	1	GE	5	ug/L
+	tetrachloroethylene	***12000***			***8800***		L	***14200***			4380	J	L	100	GE	5	ug/L
	1,1,1-trichloroethane	<50	U		19	J	I	29.5	J	I	26.2	J	L	1	GE	200	ug/L
+	trichloroethylene	***9900***			***7400***		L	***12200***			5700	J	L	100	GE	5	ug/L

II. Monitoring Constituents

ST	Parameter	JAN	CLP	EPA	FEB	CLP	EPA	MAR	CLP	EPA	APR	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable																
	nitrate-nitrite as nitrogen																
	sodium, total recoverable																
	sulfate																
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. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for April 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all months which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A ((all Months)

Table D-7a. Groundwater Monitoring Results for Recovery Wells, January - April 2001 (Cont.)
WELL RWM 3

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 104730.2 E 49680	33.33844 Deg N -81.7395 Deg W	154 - 144 ft msl	164 ft msl	8 " CS	S	M/GC/UL/LL

SAMPLE DATE	01/09/01	02/06/01	03/06/01	04/10/01

FIELD DATA

Parameter	JAN	FEB	MAR	APR	Unit
Water Elevation	207.75	*Not Applicable*	*Not Applicable*	207.9	ft msl
pH	5	4.6	4.9	4.8	pH
Sp. Conductance	47	48	44	48	uS/cm
Water temperature	15	19.1	15.5	20.1	deg. C
Alkalinity as CaCO3	0	0	0	0	mg/L
Turbidity	.3	.7	.2	.7	NTU
Sampling code	C	C	C	C	

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	JAN	CLP EPA	FEB	CLP EPA	MAR	CLP EPA	APR	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	barium, total recoverable												
	cyanide												
	lead, total recoverable												
	nickel, total recoverable												
	selenium, total recoverable												
Organics													
	chlorobenzene	<100	U	<250	U	<20	U	<50	U	50	GE	5	ug/L
	1,1-dichloroethane	<100	U	<250	U	<20	U	<50	U	50	GE	5	ug/L
	1,1-dichloroethylene	<100	U	<250	U	<20	U	<50	U	50	GE	7	ug/L
	trans-1,2-dichloroethylene	<100	U	<250	U	<20	U	<50	U	50	GE	100	ug/L
	pcb 1016												
	pcb 1221												
	pcb 1232												
	pcb 1242												
	pcb 1248												
	pcb 1254												
	pcb 1260												
	1,1,2,2-tetrachloroethane	<100	U	<250	U	<20	U	<50	U	50	GE	5	ug/L
+	tetrachloroethylene	***890***		***900***		***970***		***1100***		50	GE	5	ug/L
	1,1,1-trichloroethane	<100	U	<250	U	<20	U	<50	U	50	GE	200	ug/L
+	trichloroethylene	***3300***		***2900***		***3610***		***3690***		50	GE	5	ug/L

II. Monitoring Constituents

ST	Parameter	JAN	CLP EPA	FEB	CLP EPA	MAR	CLP EPA	APR	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	aluminum, total recoverable												
	nitrate-nitrite as nitrogen												
	sodium, total recoverable												
	sulfate												
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. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for April 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all months which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A ((all Months)

Table D-7a. Groundwater Monitoring Results for Recovery Wells, January - April 2001 (Cont.)

WELL RWM 4

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 103719.3 E 48948.2	33.33501 Deg N -81.7394 Deg W	139.9 - 129.5 ft msl	160.4 ft msl	8 " CS	S	GC/UL/LL/UC/C

SAMPLE DATE	01/09/01	02/06/01	03/05/01	04/10/01

FIELD DATA

Parameter	JAN	FEB	MAR	APR	Unit
Water Elevation	203.11	203.04	202.11	202.59	ft msl
pH	5.2	4.3	5.2	5	pH
Sp. Conductance	23	24	22	24	uS/cm
Water temperature	14.3	19.2	18.5	19.1	deg. C
Alkalinity as CaCO3	0	0	0	0	mg/L
Turbidity	1.6	.6	.2	.2	NTU
Sampling code	C	C	C	C	

ANALYTICAL DATA

I. Groundwater Protection Standard

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ST	Parameter	JAN	CLP	EPA	FEB	CLP	EPA	MAR	CLP	EPA	APR	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<50	U		<50	U		<20	U		<100	JU	L	100	GE	5	ug/L
	1,1-dichloroethane	<50	U		<50	U		<20	U		<100	JU	L	100	GE	5	ug/L
	1,1-dichloroethylene	<50	U		<50	U		<20	U		<100	JU	L	100	GE	7	ug/L
	trans-1,2-dichloroethylene	<50	U		<50	U		<20	U		<100	JU	L	100	GE	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<50	U		<50	U		<20	U		<100	JU	L	100	GE	5	ug/L
+	tetrachloroethylene	***1100***			***1100***			***1240***			1310	J	L	100	GE	5	ug/L
	1,1,1-trichloroethane	<50	U		<50	U		<20	U		<100	JU	L	100	GE	200	ug/L
+	trichloroethylene	***6100***			***5600***			***6660***			7040	J	L	100	GE	5	ug/L

II. Monitoring Constituents

ST	Parameter	JAN	CLP	EPA	FEB	CLP	EPA	MAR	CLP	EPA	APR	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable																
	nitrate-nitrite as nitrogen																
	sodium, total recoverable																
	sulfate																
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. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for April 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all months which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A ((all Months)

Table D-7a. Groundwater Monitoring Results for Recovery Wells, January - April 2001 (Cont.)
WELL RWM 5

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 103502.2 E 49628	33.33564 Deg N -81.7372 Deg W	144.3 - 133.9 ft msl	154.7 ft msl	8 " CS	S	UL/LL

SAMPLE DATE	01/09/01	02/06/01	03/06/01	04/10/01

FIELD DATA

Parameter	JAN	FEB	MAR	APR	Unit
Water Elevation	207.87	206.71	206.85	206.15	ft msl
pH	5	4.9	5.2	5.8	pH
Sp. Conductance	28	28	26	89	uS/cm
Water temperature	16.6	19.8	15.9	20.9	deg. C
Alkalinity as CaCO3	0	0	0	0	mg/L
Turbidity	.3	.5	.3	.2	NTU
Sampling code	C	C	C	C	

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	JAN	CLP	EPA	FEB	CLP	EPA	MAR	CLP	EPA	APR	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<50	U		<50	U		<10	U		<25	JU	L	25	GE	5	ug/L
	1,1-dichloroethane	<50	U		<50	U		<10	U		<25	JU	L	25	GE	5	ug/L
	1,1-dichloroethylene	<50	U		<50	U		<10	U		<25	JU	L	25	GE	7	ug/L
	trans-1,2-dichloroethylene	<50	U		<50	U		<10	U		<25	JU	L	25	GE	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<50	U		<50	U		<10	U		<25	JU	L	25	GE	5	ug/L
+	tetrachloroethylene	***550***			***510***			***534***			601	J	L	25	GE	5	ug/L
	1,1,1-trichloroethane	<50	U		<50	U		<10	U		<25	JU	L	25	GE	200	ug/L
+	trichloroethylene	1600	J	K	***1500***			***1680***			1760	J	L	25	GE	5	ug/L

II. Monitoring Constituents

ST	Parameter	JAN	CLP	EPA	FEB	CLP	EPA	MAR	CLP	EPA	APR	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable																
	nitrate-nitrite as nitrogen																
	sodium, total recoverable																
	sulfate																
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. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for April 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all months which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A ((all Months)

Table D-7a. Groundwater Monitoring Results for Recovery Wells, January - April 2001 (Cont.)
WELL RWM 6

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 102001.5 E 50107.4	33.33311 Deg N -81.7330 Deg W	151.5 - 141.1 ft msl	156.8 ft msl	8 " CS	S	GC/UL/LL/UC/C

SAMPLE DATE	01/08/01	02/05/01	03/06/01	04/09/01

FIELD DATA

Parameter	JAN	FEB	MAR	APR	Unit
Water Elevation	173.03	155.59	156.09	172.47	ft msl
pH	5.2	4.9	5.3	5.1	pH
Sp. Conductance	28	28	25	34	uS/cm
Water temperature	17.1	18.8	16	22.6	deg. C
Alkalinity as CaCO3	0	0	0	0	mg/L
Turbidity	8.1	.7	.6	.3	NTU
Sampling code	C	C	C	C	

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	JAN	CLP	EPA	FEB	CLP	EPA	MAR	CLP	EPA	APR	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<250	U		<120	U		<10	U		<25	U		25	GE	5	ug/L
	1,1-dichloroethane	<250	U		<120	U		<10	U		<25	U		25	GE	5	ug/L
	1,1-dichloroethylene	<250	U		<120	U		<10	U		<25	U		25	GE	7	ug/L
	trans-1,2-dichloroethylene	<250	U		<120	U		<10	U		<25	U		25	GE	100	ug/L
	pcb 1016	<.952	U													.5	ug/L
	pcb 1221	<.952	U													.5	ug/L
	pcb 1232	<.952	U													.5	ug/L
	pcb 1242	<.952	U													.5	ug/L
	pcb 1248	<.952	U													.5	ug/L
	pcb 1254	<.952	U													.5	ug/L
	pcb 1260	<.952	U													.5	ug/L
	1,1,2,2-tetrachloroethane	<250	U		<120	U		<10	U		<25	U		25	GE	5	ug/L
+	tetrachloroethylene	***1900***			1900	J	K	***1650***			***1580***			25	GE	5	ug/L
	1,1,1-trichloroethane	<250	U		<120	U		<10	U		<25	U		25	GE	200	ug/L
+	trichloroethylene	1600	J	K	1800	J	KL	***1790***			***1830***			25	GE	5	ug/L

II. Monitoring Constituents

ST	Parameter	JAN	CLP	EPA	FEB	CLP	EPA	MAR	CLP	EPA	APR	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable																
	nitrate-nitrite as nitrogen																
	sodium, total recoverable																
	sulfate																
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. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for April 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all months which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A ((all Months)

Table D-7a. Groundwater Monitoring Results for Recovery Wells, January - April 2001 (Cont.)

WELL RWM 7

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 101904.6 E 49449.5	33.33182 Deg N -81.7346 Deg W	154.2 - 144 ft msl	164.7 ft msl	8 " CS	S	GC/UL/LL/UC/C

SAMPLE DATE	01/08/01	02/05/01	03/05/01	04/09/01

FIELD DATA

Parameter	JAN	FEB	MAR	APR	Unit
Water Elevation	191.65	193.52	194.08	194.15	ft msl
pH	4.8	4.6	4.9	5	pH
Sp. Conductance	65	64	60	65	uS/cm
Water temperature	17.5	19.8	19.5	22.4	deg. C
Alkalinity as CaCO3	0	0	0	0	mg/L
Turbidity	1.9	.8	.4	.1	NTU
Sampling code	C	C	C	C	

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	JAN	CLP	EPA	FEB	CLP	EPA	MAR	CLP	EPA	APR	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<500	U		<500	U		<50	U		<100	U		100	GE	5	ug/L
	1,1-dichloroethane	<500	U		<500	U		<50	U		<100	U		100	GE	5	ug/L
	1,1-dichloroethylene	<500	U		<500	U		<50	U		<100	U		100	GE	7	ug/L
	trans-1,2-dichloroethylene	<500	U		<500	U		<50	U		<100	U		100	GE	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<500	U		<500	U		<50	U		<100	U		100	GE	5	ug/L
+	tetrachloroethylene	***11000***			***7200***		L	***9520***			***7930***			100	GE	5	ug/L
	1,1,1-trichloroethane	<500	U		<500	U		<50	U		<100	U		100	GE	200	ug/L
+	trichloroethylene	***8200***			***5800***		L	***8110***			***6690***			100	GE	5	ug/L

II. Monitoring Constituents

ST	Parameter	JAN	CLP	EPA	FEB	CLP	EPA	MAR	CLP	EPA	APR	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable																
	nitrate-nitrite as nitrogen																
	sodium, total recoverable																
	sulfate																
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. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for April 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all months which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A ((all Months)

Table D-7a. Groundwater Monitoring Results for Recovery Wells, January - April 2001 (Cont.)
WELL RWM 8

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 101948.2 E 47353.3	33.32849 Deg N -81.7402 Deg W	119.7 - 109.3 ft msl	130 ft msl	8 " CS	S	GC/UL/LL/UC/C

SAMPLE DATE	01/08/01	02/05/01	03/05/01	04/09/01

FIELD DATA

Parameter	JAN	FEB	MAR	APR	Unit
Water Elevation	201.03	200.99	201.19	200.49	ft msl
pH	5.2	5	5.2	5.2	pH
Sp. Conductance	147	90	81	111	uS/cm
Water temperature	17.8	17.1	20.2	22	deg. C
Alkalinity as CaCO3	0	0	0	0	mg/L
Turbidity	1.9	2.9	.2	1.3	NTU
Sampling code	C	C	C	C	

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	JAN	CLP	EPA	FEB	CLP	EPA	MAR	CLP	EPA	APR	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<50	U		<25	U		<5	U		<10	U		10	GE	5	ug/L
	1,1-dichloroethane	<50	U		<25	U		<5	U		<10	U		10	GE	5	ug/L
	1,1-dichloroethylene	<50	U		<25	U		<5	U		<10	U		10	GE	7	ug/L
	trans-1,2-dichloroethylene	<50	U		<25	U		<5	U		<10	U		10	GE	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<50	U		<25	U		<5	U		<10	U		10	GE	5	ug/L
+	tetrachloroethylene	***680***			390	J	K	***402***			***410***			10	GE	5	ug/L
	1,1,1-trichloroethane	<50	U		<25	U		<5	U		<10	U		10	GE	200	ug/L
+	trichloroethylene	***890***			690	J	KL	***793***			***807***			10	GE	5	ug/L

II. Monitoring Constituents

ST	Parameter	JAN	CLP	EPA	FEB	CLP	EPA	MAR	CLP	EPA	APR	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable																
	nitrate-nitrite as nitrogen																
	sodium, total recoverable																
	sulfate																
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. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for April 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all months which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A ((all Months)

Table D-7a. Groundwater Monitoring Results for Recovery Wells, January - April 2001 (Cont.)
WELL RWM 9

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 104099.8 E 50400	33.33822 Deg N -81.7363 Deg W	143 - 132.6 ft msl	158.6 ft msl	8 " CS	S	GC/UL/LL

SAMPLE DATE	01/08/01	02/05/01	03/05/01	04/09/01

FIELD DATA

Parameter	JAN	FEB	MAR	APR	Unit
Water Elevation	213.97	213.96	213.02	211.91	ft msl
pH	5.3	5.2	5.3	5.7	pH
Sp. Conductance	45	45	45	62	uS/cm
Water temperature	17.2	19.4	18.8	21.2	deg. C
Alkalinity as CaCO3	0	0	1	0	mg/L
Turbidity	2.2	.6	.2	.3	NTU
Sampling code	C	C	C	C	

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	JAN	CLP EPA	FEB	CLP EPA	MAR	CLP EPA	APR	CLP EPA	DF	Lab	Limit	Unit
	Inorganics												
	barium, total recoverable												
	cyanide												
	lead, total recoverable												
	nickel, total recoverable												
	selenium, total recoverable												
	Organics												
	chlorobenzene	<25	U	<25	U	<2	U	<10	U	10	GE	5	ug/L
	1,1-dichloroethane	<25	U	<25	U	<2	U	<10	U	10	GE	5	ug/L
	1,1-dichloroethylene	<25	U	<25	U	<2	U	<10	U	10	GE	7	ug/L
	trans-1,2-dichloroethylene	<25	U	<25	U	<2	U	<10	U	10	GE	100	ug/L
	pcb 1016												
	pcb 1221												
	pcb 1232												
	pcb 1242												
	pcb 1248												
	pcb 1254												
	pcb 1260												
	1,1,2,2-tetrachloroethane	<25	U	<25	U	<2	U	<10	U	10	GE	5	ug/L
+	tetrachloroethylene	***30***		36	J K	***25.8***		***48***		10	GE	5	ug/L
	1,1,1-trichloroethane	<25	U	<25	U	<2	U	<10	U	10	GE	200	ug/L
+	trichloroethylene	***410***		550	J K	***401***		***587***		10	GE	5	ug/L

II. Monitoring Constituents

ST	Parameter	JAN	CLP EPA	FEB	CLP EPA	MAR	CLP EPA	APR	CLP EPA	DF	Lab	Limit	Unit
	Inorganics												
	aluminum, total recoverable												
	nitrate-nitrite as nitrogen												
	sodium, total recoverable												
	sulfate												
	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. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for April 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all months which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A ((all Months)

Table D-7a. Groundwater Monitoring Results for Recovery Wells, January - April 2001 (Cont.)
WELL RWM 10

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 102000.9 E 48244.1	33.33006 Deg N -81.7379 Deg W	137.9 - 127.5 ft msl	148.2 ft msl	8 " CS	S	M/GC/UL/LL/MC

SAMPLE DATE	01/08/01	02/05/01	03/08/01	04/09/01

FIELD DATA

Parameter	JAN	FEB	MAR	APR	Unit
Water Elevation	213.33	193.89	196.3	196.03	ft msl
pH	5.1	7.5	4.2	5.1	pH
Sp. Conductance	106	103	133	109	uS/cm
Water temperature	18	19.1	15.1	22.3	deg. C
Alkalinity as CaCO3	0	0	1	0	mg/L
Turbidity	2.5	1.2	4.1	.4	NTU
Sampling code	C	C	C	C	

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	JAN	CLP	EPA	FEB	CLP	EPA	MAR	CLP	EPA	APR	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<500	U		<500	U		<50	U		<200	U		200	GE	5	ug/L
	1,1-dichloroethane	<500	U		<500	U		<50	U		<200	U		200	GE	5	ug/L
	1,1-dichloroethylene	<500	U		<500	U		<50	U		<200	U		200	GE	7	ug/L
	trans-1,2-dichloroethylene	<500	U		<500	U		<50	U		<200	U		200	GE	100	ug/L
	pcb 1016	<.976	U													.5	ug/L
	pcb 1221	<.976	U													.5	ug/L
	pcb 1232	<.976	U													.5	ug/L
	pcb 1242	<.976	U													.5	ug/L
	pcb 1248	<.976	U													.5	ug/L
	pcb 1254	<.976	U													.5	ug/L
	pcb 1260	<.976	U													.5	ug/L
	1,1,2,2-tetrachloroethane	<500	U		<500	U		<50	U		<200	U		200	GE	5	ug/L
+	tetrachloroethylene	***4400***			10000	J	K	***13300***			***10800***			200	GE	5	ug/L
	1,1,1-trichloroethane	<500	U		<500	U		<50	U		<200	U		200	GE	200	ug/L
+	trichloroethylene	2600	J	K	5600	J	KL	***3480***			***5380***			200	GE	5	ug/L

II. Monitoring Constituents

ST	Parameter	JAN	CLP	EPA	FEB	CLP	EPA	MAR	CLP	EPA	APR	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable																
	nitrate-nitrite as nitrogen																
	sodium, total recoverable																
	sulfate																
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. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for April 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all months which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A ((all Months)

Table D-7a. Groundwater Monitoring Results for Recovery Wells, January - April 2001 (Cont.)

WELL RWM 11

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 104875 E 50400.2	33.33994 Deg N -81.7379 Deg W	152.2 - 141.9 ft msl	172.9 ft msl	8 " CS	S	M/GC/UL/LL

SAMPLE DATE	01/08/01	02/05/01	03/05/01	04/09/01

FIELD DATA

Parameter	JAN	FEB	MAR	APR	Unit
Water Elevation	207.59	208.49	208.4	207.77	ft msl
pH	4.8	4.5	4.9	4.6	pH
Sp. Conductance	29	28	26	34	uS/cm
Water temperature	17.6	19.8	19.6	21.9	deg. C
Alkalinity as CaCO3	0	0	0	0	mg/L
Turbidity	2.1	.6	.2	.1	NTU
Sampling code	C	C	C	C	

ANALYTICAL DATA

I. Groundwater Protection Standard

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ST	Parameter	JAN	CLP	EPA	FEB	CLP	EPA	MAR	CLP	EPA	APR	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<50	U		<25	U		<5	U		<10	U		10	GE	5	ug/L
	1,1-dichloroethane	<50	U		<25	U		<5	U		<10	U		10	GE	5	ug/L
	1,1-dichloroethylene	<50	U		<25	U		<5	U		<10	U		10	GE	7	ug/L
	trans-1,2-dichloroethylene	<50	U		<25	U		<5	U		<10	U		10	GE	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<50	U		<25	U		<5	U		<10	U		10	GE	5	ug/L
+	tetrachloroethylene	49	J	I	45	J	K	***42.1***			***36.6***			10	GE	5	ug/L
	1,1,1-trichloroethane	<50	U		<25	U		<5	U		<10	U		10	GE	200	ug/L
+	trichloroethylene	***640***			700	J	K	***747***			***648***			10	GE	5	ug/L

II. Monitoring Constituents

ST	Parameter	JAN	CLP	EPA	FEB	CLP	EPA	MAR	CLP	EPA	APR	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable																
	nitrate-nitrite as nitrogen																
	sodium, total recoverable																
	sulfate																
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. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for April 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all months which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A ((all Months)

Table D-7a. Groundwater Monitoring Results for Recovery Wells, January - April 2001 (Cont.)

WELL RWM 12

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 106879.2 E 52500.1	33.34780 Deg N -81.7362 Deg W	179.7 - 159.2 ft msl	ft msl	6 " CS/SS	S	UL/LL

SAMPLE DATE	01/08/01	02/05/01	03/05/01	04/09/01

FIELD DATA

Parameter	JAN	FEB	MAR	APR	Unit
Water Elevation	*Not Applicable*	208.89	208.65	208.11	ft msl
pH	4.7	4.5	4.9	4.9	pH
Sp. Conductance	42	42	39	42	uS/cm
Water temperature	16.7	19	20.3	21.6	deg. C
Alkalinity as CaCO3	0	0	0	0	mg/L
Turbidity	2.6	.8	.2	.2	NTU
Sampling code	C	C	C	C	

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	JAN	CLP	EPA	FEB	CLP	EPA	MAR	CLP	EPA	APR	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<250	U		<500	U		<10	U		<20	U		20	GE	5	ug/L
	1,1-dichloroethane	<250	U		<500	U		<10	U		<20	U		20	GE	5	ug/L
	1,1-dichloroethylene	<250	U		<500	U		<10	U		<20	U		20	GE	7	ug/L
	trans-1,2-dichloroethylene	<250	U		<500	U		<10	U		<20	U		20	GE	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<250	U		<500	U		<10	U		<20	U		20	GE	5	ug/L
+	tetrachloroethylene	56	J	I	<500	U		***10.7***			<20	U		20	GE	5	ug/L
	1,1,1-trichloroethane	<250	U		<500	U		<10	U		<20	U		20	GE	200	ug/L
+	trichloroethylene	***1600***			1900	J	K	***1900***			***1730***			20	GE	5	ug/L

II. Monitoring Constituents

ST	Parameter	JAN	CLP	EPA	FEB	CLP	EPA	MAR	CLP	EPA	APR	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable																
	nitrate-nitrite as nitrogen																
	sodium, total recoverable																
	sulfate																
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. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for April 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all months which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A ((all Months)

Table D-7a. Groundwater Monitoring Results for Recovery Wells, January - April 2001 (Cont.)

WELL RWM 13B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 105803.2 E 53516.3	33.34708 Deg N -81.7315 Deg W	138.2 - 113 ft msl	ft msl	6 " CS		MCBC

SAMPLE DATE	01/08/01	02/05/01	03/06/01	04/09/01

FIELD DATA

Parameter	JAN	FEB	MAR	APR	Unit
Water Elevation	199.6	198.89	198.43	203.53	ft msl
pH	5.1	4.9	5.3	5.1	pH
Sp. Conductance	20	20	18	20	uS/cm
Water temperature	17.3	19.9	16.7	20.6	deg. C
Alkalinity as CaCO3	0	0	0	0	mg/L
Turbidity	2.4	.7	2.3	.2	NTU
Sampling code	C	C	C	C	

ANALYTICAL DATA

I. Groundwater Protection Standard

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ST	Parameter	JAN	CLP	EPA	FEB	CLP	EPA	MAR	CLP	EPA	APR	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<25	U		<25	U		<2	U		<5	U		5	GE	5	ug/L
	1,1-dichloroethane	<25	U		<25	U		<2	U		<5	U		5	GE	5	ug/L
	1,1-dichloroethylene	<25	U		<25	U		<2	U		<5	U		5	GE	7	ug/L
	trans-1,2-dichloroethylene	<25	U		<25	U		<2	U		<5	U		5	GE	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<25	U		<25	U		<2	U		<5	U		5	GE	5	ug/L
+	tetrachloroethylene	8.5	J	I	6.5	J	IK	***11.6***			4.01	J	I	5	GE	5	ug/L
	1,1,1-trichloroethane	<25	U		<25	U		<2	U		<5	U		5	GE	200	ug/L
+	trichloroethylene	***400***			400	J	K	***744***			***342***			5	GE	5	ug/L

II. Monitoring Constituents

ST	Parameter	JAN	CLP	EPA	FEB	CLP	EPA	MAR	CLP	EPA	APR	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable																
	nitrate-nitrite as nitrogen																
	sodium, total recoverable																
	sulfate																
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. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for April 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all months which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A ((all Months)

Table D-7a. Groundwater Monitoring Results for Recovery Wells, January - April 2001 (Cont.)

WELL RWM 13C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 105809.6 E 53502.2	33.34707 Deg N -81.7315 Deg W	173.4 - 153.3 ft msl	ft msl	6 " CS		LL

SAMPLE DATE	01/08/01	02/05/01	03/06/01	04/09/01

FIELD DATA

Parameter	JAN	FEB	MAR	APR	Unit
Water Elevation	204.65	204.57	204.2	203.73	ft msl
pH	5	4.9	5.2	4.9	pH
Sp. Conductance	30	28	27		uS/cm
Water temperature	17.7	19.5	17.3	20.8	deg. C
Alkalinity as CaCO3	0	0	0	38	mg/L
Turbidity	1.9	.7	.3	.3	NTU
Sampling code	C	C	C	C	

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	JAN	CLP	EPA	FEB	CLP	EPA	MAR	CLP	EPA	APR	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<25	U		<25	U		<2	U		<10	U		10	GE	5	ug/L
	1,1-dichloroethane	<25	U		<25	U		<2	U		<10	U		10	GE	5	ug/L
	1,1-dichloroethylene	<25	U		<25	U		<2	U		<10	U		10	GE	7	ug/L
	trans-1,2-dichloroethylene	<25	U		<25	U		<2	U		<10	U		10	GE	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<25	U		<25	U		<2	U		<10	U		10	GE	5	ug/L
+	tetrachloroethylene	13	J	I	12	J	IK	***19.5***			8.37	J	I	10	GE	5	ug/L
	1,1,1-trichloroethane	<25	U		<25	U		<2	U		<10	U		10	GE	200	ug/L
+	trichloroethylene	***550***			550	J	K	***885***			***527***			10	GE	5	ug/L

II. Monitoring Constituents

ST	Parameter	JAN	CLP	EPA	FEB	CLP	EPA	MAR	CLP	EPA	APR	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable																
	nitrate-nitrite as nitrogen																
	sodium, total recoverable																
	sulfate																
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. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for April 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all months which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A ((all Months)

Table D-7a. Groundwater Monitoring Results for Recovery Wells, January - April 2001 (Cont.)

WELL RWM 14B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 106362.1 E 53044.7	33.34754 Deg N -81.7338 Deg W	148.5 - 123.2 ft msl	ft msl	6 " CS		LL

SAMPLE DATE	01/08/01	02/05/01	03/05/01	04/09/01

FIELD DATA

Parameter	JAN	FEB	MAR	APR	Unit
Water Elevation	207.32	207.16	195	206.21	ft msl
pH	5	4.6	5.1	4.9	pH
Sp. Conductance	24	23	22	23	uS/cm
Water temperature	17	17.6	17.4	19.4	deg. C
Alkalinity as CaCO3	0	0	0	0	mg/L
Turbidity	4.6	.9	.2	.5	NTU
Sampling code	C	C	C	C	

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	JAN	CLP	EPA	FEB	CLP	EPA	MAR	CLP	EPA	APR	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<25	U		<25	U		<2	U		<10	U		10	GE	5	ug/L
	1,1-dichloroethane	<25	U		<25	U		<2	U		<10	U		10	GE	5	ug/L
	1,1-dichloroethylene	<25	U		<25	U		<2	U		<10	U		10	GE	7	ug/L
	trans-1,2-dichloroethylene	<25	U		<25	U		<2	U		<10	U		10	GE	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<25	U		<25	U		<2	U		<10	U		10	GE	5	ug/L
+	tetrachloroethylene	9.9	J	I	7.4	J	I	***6.22***			4.95	J	I	10	GE	5	ug/L
	1,1,1-trichloroethane	<25	U		<25	U		<2	U		<10	U		10	GE	200	ug/L
+	trichloroethylene	***550***			***540***			***432***			***523***			10	GE	5	ug/L

II. Monitoring Constituents

ST	Parameter	JAN	CLP	EPA	FEB	CLP	EPA	MAR	CLP	EPA	APR	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable																
	nitrate-nitrite as nitrogen																
	sodium, total recoverable																
	sulfate																
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. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for April 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all months which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A ((all Months)

Table D-7a. Groundwater Monitoring Results for Recovery Wells, January - April 2001 (Cont.)

WELL RWM 14C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 106380.8 E 53051.5	33.34760 Deg N -81.7338 Deg W	193.5 - 173.4 ft msl	ft msl	6 " CS		UL

SAMPLE DATE	01/08/01	02/05/01	03/05/01	04/09/01

FIELD DATA

Parameter	JAN	FEB	MAR	APR	Unit
Water Elevation	*Not Applicable*	200.05	199.85	199.29	ft msl
pH	5	5.1	5.1	4.5	pH
Sp. Conductance	35	35	34	36	uS/cm
Water temperature	17	18.3	18.1	19.3	deg. C
Alkalinity as CaCO3	0	0	0	0	mg/L
Turbidity	4.6	.8	.4	3.4	NTU
Sampling code	C	C	C	C	

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	JAN	CLP EPA	FEB	CLP EPA	MAR	CLP EPA	APR	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	barium, total recoverable												
	cyanide												
	lead, total recoverable												
	nickel, total recoverable												
	selenium, total recoverable												
Organics													
	chlorobenzene	<250	U	<250	U	<10	U	<50	U	50	GE	5	ug/L
	1,1-dichloroethane	<250	U	<250	U	<10	U	<50	U	50	GE	5	ug/L
	1,1-dichloroethylene	<250	U	<250	U	<10	U	<50	U	50	GE	7	ug/L
	trans-1,2-dichloroethylene	<250	U	<250	U	<10	U	<50	U	50	GE	100	ug/L
	pcb 1016												
	pcb 1221												
	pcb 1232												
	pcb 1242												
	pcb 1248												
	pcb 1254												
	pcb 1260												
	1,1,2,2-tetrachloroethane	<250	U	<250	U	<10	U	<50	U	50	GE	5	ug/L
+	tetrachloroethylene	<250	U	<250	U	***23.5***		<50	U	50	GE	5	ug/L
	1,1,1-trichloroethane	<250	U	<250	U	<10	U	<50	U	50	GE	200	ug/L
+	trichloroethylene	***2300***		2700	J K	***3340***		***2870***		50	GE	5	ug/L

II. Monitoring Constituents

ST	Parameter	JAN	CLP EPA	FEB	CLP EPA	MAR	CLP EPA	APR	CLP EPA	DF	Lab	Limit	Unit
Inorganics													
	aluminum, total recoverable												
	nitrate-nitrite as nitrogen												
	sodium, total recoverable												
	sulfate												
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. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for April 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all months which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A ((all Months)

Table D-7a. Groundwater Monitoring Results for Recovery Wells, January - April 2001 (Cont.)

WELL RWM 15B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 107444.7 E 53849	33.35125 Deg N -81.7338 Deg W	150.9 - 125.8 ft msl	ft msl	6 " CS		LL/CBA

SAMPLE DATE	01/08/01	02/05/01	03/06/01	04/09/01

FIELD DATA

Parameter	JAN	FEB	MAR	APR	Unit
Water Elevation	205.73	205.53	234.1	204.59	ft msl
pH	5.1	4.9	5.2	5.3	pH
Sp. Conductance	21	21	19	32	uS/cm
Water temperature	17	20.1	17.4	20.6	deg. C
Alkalinity as CaCO3	0	0	0	0	mg/L
Turbidity	2.1	.5	.2	.3	NTU
Sampling code	C	C	C	C	

ANALYTICAL DATA

I. Groundwater Protection Standard

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ST	Parameter	JAN	CLP EPA	FEB	CLP EPA	MAR	CLP EPA	APR	CLP EPA	DF	Lab	Limit	Unit
	Inorganics												
	barium, total recoverable												
	cyanide												
	lead, total recoverable												
	nickel, total recoverable												
	selenium, total recoverable												
	Organics												
	chlorobenzene	<5	U	<5	U	<1	U	<1	U	1	GE	5	ug/L
	1,1-dichloroethane	<5	U	<5	U	<1	U	<1	U	1	GE	5	ug/L
	1,1-dichloroethylene	<5	U	<5	U	<1	U	<1	U	1	GE	7	ug/L
	trans-1,2-dichloroethylene	<5	U	<5	U	<1	U	<1	U	1	GE	100	ug/L
	pcb 1016												
	pcb 1221												
	pcb 1232												
	pcb 1242												
	pcb 1248												
	pcb 1254												
	pcb 1260												
	1,1,2,2-tetrachloroethane	<5	U	<5	U	<1	U	<1	U	1	GE	5	ug/L
	tetrachloroethylene	<5	U	<5	U	<1	U	<1	U	1	GE	5	ug/L
	1,1,1-trichloroethane	<5	U	<5	U	<1	U	<1	U	1	GE	200	ug/L
+	trichloroethylene	***16***		17	J K	***16.3***		***16.4***		1	GE	5	ug/L

II. Monitoring Constituents

ST	Parameter	JAN	CLP EPA	FEB	CLP EPA	MAR	CLP EPA	APR	CLP EPA	DF	Lab	Limit	Unit
	Inorganics												
	aluminum, total recoverable												
	nitrate-nitrite as nitrogen												
	sodium, total recoverable												
	sulfate												
	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. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for April 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all months which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A ((all Months)

Table D-7b. Groundwater Monitoring Results for Recovery Wells, May - August 2001

WELL RWM 1

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 102599.1 E 48575.1	33.33193 Deg N -81.7382 Deg W	232.3 - 172.3 ft msl	364.7 ft msl	8 " CS	S	M/GC

SAMPLE DATE	05/09/01	06/04/01	07/09/01	08/07/01

FIELD DATA

Parameter	MAY	JUN	JUL	AUG	Unit
Water Elevation	190.26	187.81	*Not Applicable*	*Not Applicable*	ft msl
pH	5	4.5	4.7	5.2	pH
Sp. Conductance	43	46	45	48	uS/cm
Water temperature	22.1	21.7	24	19.8	deg. C
Alkalinity as CaCO3	0	0	0	0	mg/L
Turbidity	2.1	.7	.6	.2	NTU
Sampling code	C	C		L	

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	MAY	CLP	EPA	JUN	CLP	EPA	JUL	CLP	EPA	AUG	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<200	JU	L	1.04	J	L	1.07			<200	UJ	LQ	200	GE	5	ug/L
	1,1-dichloroethane	<200	JU	L	.59	J	IL	.674	J	I	<200	UJ	LQ	200	GE	5	ug/L
	1,1-dichloroethylene	<200	JU	L	5.99	J	L	6.33			<200	UJ	LQ	200	GE	7	ug/L
	trans-1,2-dichloroethylene	<200	JU	L	<1	JU	L	<1	U		<200	UJ	LQ	200	GE	100	ug/L
	pcb 1016							<.1	U							.5	ug/L
	pcb 1221							<.1	U							.5	ug/L
	pcb 1232							<.1	U							.5	ug/L
	pcb 1242							<.1	U							.5	ug/L
	pcb 1248							<.1	U							.5	ug/L
	pcb 1254							<.1	U							.5	ug/L
	pcb 1260							<.1	U							.5	ug/L
	1,1,2,2-tetrachloroethane	<200	JU	L	.584	J	IL	.98	J	I	<200	UJ	LQ	200	GE	5	ug/L
+	tetrachloroethylene	3790	J	L	8590	J	L	***9560***			11900	J	LQ	200	GE	5	ug/L
	1,1,1-trichloroethane	<200	JU	L	15	J	L	15.2			<200	UJ	LQ	200	GE	200	ug/L
+	trichloroethylene	7650	J	L	9760	J	L	***11100***			11900	J	LQ	200	GE	5	ug/L

II. Monitoring Constituents

ST	Parameter	MAY	CLP	EPA	JUN	CLP	EPA	JUL	CLP	EPA	AUG	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable																
	nitrate-nitrite as nitrogen																
	sodium, total recoverable																
	sulfate																
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. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for August 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all months which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A ((all Months)

Table D-7b. Groundwater Monitoring Results for Recovery Wells, May - August 2001 (Cont.)

WELL RWM 3

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 104730.2 E 49680	33.33844 Deg N -81.7395 Deg W	154 - 144 ft msl	164 ft msl	8 " CS	S	M/GC/UL/LL

SAMPLE DATE	05/09/01	06/04/01	07/10/01	08/07/01

FIELD DATA

Parameter	MAY	JUN	JUL	AUG	Unit
Water Elevation	*Not Applicable*	*Not Applicable*	*Not Applicable*	205.91	ft msl
pH	4.9	4.8	4.8	4.7	pH
Sp. Conductance	48	49	48	53	uS/cm
Water temperature	24.1	25.8	23.9	24.3	deg. C
Alkalinity as CaCO3	0	0	0	0	mg/L
Turbidity	.3	.7	.3	.1	NTU
Sampling code	C	C	C	C	

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	MAY	CLP	EPA	JUN	CLP	EPA	JUL	CLP	EPA	AUG	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<50	JU	L	<1	JU	L	<50	U		<50	UJ	LQ	50	GE	5	ug/L
	1,1-dichloroethane	<50	JU	L	<1	JU	L	<50	U		<50	UJ	LQ	50	GE	5	ug/L
	1,1-dichloroethylene	<50	JU	L	1.72	J	L	<50	U		<50	UJ	LQ	50	GE	7	ug/L
	trans-1,2-dichloroethylene	<50	JU	L	<1	JU	L	<50	U		<50	UJ	LQ	50	GE	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<50	JU	L	<1	JU	L	<50	U		<50	UJ	LQ	50	GE	5	ug/L
	tetrachloroethylene	646	J	L	1100	J	L	1160	J	K	1040	J	LQ	50	GE	5	ug/L
	1,1,1-trichloroethane	<50	JU	L	<1	JU	L	<50	U		<50	UJ	LQ	50	GE	200	ug/L
	trichloroethylene	2410	J	L	3420	J	L	3750	J	K	3250	J	LQ	50	GE	5	ug/L

II. Monitoring Constituents

ST	Parameter	MAY	CLP	EPA	JUN	CLP	EPA	JUL	CLP	EPA	AUG	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable																
	nitrate-nitrite as nitrogen																
	sodium, total recoverable																
	sulfate																
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. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for August 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all months which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A ((all Months)

Table D-7b. Groundwater Monitoring Results for Recovery Wells, May - August 2001 (Cont.)

WELL RWM 4

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 103719.3 E 48948.2	33.33501 Deg N -81.7394 Deg W	139.9 - 129.5 ft msl	160.4 ft msl	8 " CS	S	GC/UL/LL/UC/C

SAMPLE DATE	05/09/01	06/04/01	07/09/01	08/07/01

FIELD DATA

Parameter	MAY	JUN	JUL	AUG	Unit
Water Elevation	202.74	202.14	202.3	201.46	ft msl
pH	5.1	4.9	4.9	4.9	pH
Sp. Conductance	23	24	23	28	uS/cm
Water temperature	22.1	23.6	24.1	20.2	deg. C
Alkalinity as CaCO3	0	0	0	0	mg/L
Turbidity	.3	.6	.3	.2	NTU
Sampling code	C	C		C	

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	MAY	CLP	EPA	JUN	CLP	EPA	JUL	CLP	EPA	AUG	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<100	JU	L	<1	JU	L	<1	U		<100	UJ	LQ	100	GE	5	ug/L
	1,1-dichloroethane	<100	JU	L	<1	JU	L	<1	U		<100	UJ	LQ	100	GE	5	ug/L
	1,1-dichloroethylene	<100	JU	L	1.64	J	L	2.31			<100	UJ	LQ	100	GE	7	ug/L
	trans-1,2-dichloroethylene	<100	JU	L	<1	JU	L	<1	U		<100	UJ	LQ	100	GE	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<100	JU	L	<1	JU	L	<1	U		<100	UJ	LQ	100	GE	5	ug/L
+	tetrachloroethylene	885	J	L	1330	J	L	***1420***			1280	J	LQ	100	GE	5	ug/L
	1,1,1-trichloroethane	<100	JU	L	<1	JU	L	<1	U		<100	UJ	LQ	100	GE	200	ug/L
+	trichloroethylene	5000	J	L	6510	J	L	***6860***			6170	J	LQ	100	GE	5	ug/L

II. Monitoring Constituents

ST	Parameter	MAY	CLP	EPA	JUN	CLP	EPA	JUL	CLP	EPA	AUG	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable																
	nitrate-nitrite as nitrogen																
	sodium, total recoverable																
	sulfate																
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. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for August 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all months which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A ((all Months)

Table D-7b. Groundwater Monitoring Results for Recovery Wells, May - August 2001 (Cont.)
WELL RWM 5

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 103502.2 E 49628	33.33564 Deg N -81.7372 Deg W	144.3 - 133.9 ft msl	154.7 ft msl	8 " CS	S	UL/LL

SAMPLE DATE	05/09/01	06/04/01	07/10/01	08/06/01

FIELD DATA

Parameter	MAY	JUN	JUL	AUG	Unit
Water Elevation	206.36	205.81	205.8	230.12	ft msl
pH	5.1	5	4.9	5.2	pH
Sp. Conductance	28	30	28	30	uS/cm
Water temperature	22.4	22.9	24.6	24.5	deg. C
Alkalinity as CaCO3	0	0	0	0	mg/L
Turbidity	.2	.3	.6	2.5	NTU
Sampling code	C	C	C	C	

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	MAY	CLP	EPA	JUN	CLP	EPA	JUL	CLP	EPA	AUG	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<20	JU	L	<1	JU	L	<20	U		<20	U		20	GE	5	ug/L
	1,1-dichloroethane	<20	JU	L	<1	JU	L	<20	U		<20	U		20	GE	5	ug/L
	1,1-dichloroethylene	<20	JU	L	.628	J	IL	<20	U		<20	U		20	GE	7	ug/L
	trans-1,2-dichloroethylene	<20	JU	L	<1	JU	L	<20	U		<20	U		20	GE	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<20	JU	L	<1	JU	L	<20	U		<20	U		20	GE	5	ug/L
+	tetrachloroethylene	358	J	L	452	J	L	565	J	K	***483***			20	GE	5	ug/L
	1,1,1-trichloroethane	<20	JU	L	<1	JU	L	<20	U		<20	U		20	GE	200	ug/L
+	trichloroethylene	1270	J	L	1490	J	L	1770	J	K	***1740***			20	GE	5	ug/L

II. Monitoring Constituents

ST	Parameter	MAY	CLP	EPA	JUN	CLP	EPA	JUL	CLP	EPA	AUG	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable																
	nitrate-nitrite as nitrogen																
	sodium, total recoverable																
	sulfate																
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. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for August 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all months which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A ((all Months)

Table D-7b. Groundwater Monitoring Results for Recovery Wells, May - August 2001 (Cont.)
WELL RWM 6

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 102001.5 E 50107.4	33.33311 Deg N -81.7330 Deg W	151.5 - 141.1 ft msl	156.8 ft msl	8 " CS	S	GC/UL/LL/UC/C

SAMPLE DATE	05/09/01	06/04/01	07/10/01	08/06/01

FIELD DATA

Parameter	MAY	JUN	JUL	AUG	Unit
Water Elevation	*Not Applicable*	158.89	168.69	160.82	ft msl
pH	5.2	5.1	5.1	4.8	pH
Sp. Conductance	27	30	27	40	uS/cm
Water temperature	23.8	22.8	29.2	29.3	deg. C
Alkalinity as CaCO3	0	0	0	0	mg/L
Turbidity	.6	.5	.6	.5	NTU
Sampling code	C	C	C	C	

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	MAY	CLP	EPA	JUN	CLP	EPA	JUL	CLP	EPA	AUG	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<25	JU	L	<1	JU	L	<25	U		<20	U		20	GE	5	ug/L
	1,1-dichloroethane	<25	JU	L	<1	JU	L	<25	U		<20	U		20	GE	5	ug/L
	1,1-dichloroethylene	<25	JU	L	<1	JU	L	<25	U		<20	U		20	GE	7	ug/L
	trans-1,2-dichloroethylene	<25	JU	L	<1	JU	L	<25	U		<20	U		20	GE	100	ug/L
	pcb 1016							<.0971	U							.5	ug/L
	pcb 1221							<.0971	U							.5	ug/L
	pcb 1232							<.0971	U							.5	ug/L
	pcb 1242							<.0971	U							.5	ug/L
	pcb 1248							<.0971	U							.5	ug/L
	pcb 1254							<.0971	U							.5	ug/L
	pcb 1260							<.0971	U							.5	ug/L
	1,1,2,2-tetrachloroethane	<25	JU	L	<1	JU	L	<25	U		<20	U		20	GE	5	ug/L
+	tetrachloroethylene	1000	J	L	1510	J	L	***1670***			***1680***			20	GE	5	ug/L
	1,1,1-trichloroethane	<25	JU	L	<1	JU	L	<25	U		<20	U		20	GE	200	ug/L
+	trichloroethylene	1330	J	L	1630	J	L	***1830***			***1880***			20	GE	5	ug/L

II. Monitoring Constituents

ST	Parameter	MAY	CLP	EPA	JUN	CLP	EPA	JUL	CLP	EPA	AUG	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable																
	nitrate-nitrite as nitrogen																
	sodium, total recoverable																
	sulfate																
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. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for August 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all months which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A ((all Months)

Table D-7b. Groundwater Monitoring Results for Recovery Wells, May - August 2001 (Cont.)

WELL RWM 7

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 101904.6 E 49449.5	33.33182 Deg N -81.7346 Deg W	154.2 - 144 ft msl	164.7 ft msl	8 " CS	S	GC/UL/LL/UC/C

SAMPLE DATE	05/09/01	06/04/01	07/09/01	08/06/01

FIELD DATA

Parameter	MAY	JUN	JUL	AUG	Unit
Water Elevation	194.31	194	*Not Applicable*	193.45	ft msl
pH	4.9	4.6	4.4	4.7	pH
Sp. Conductance	64	67	65	72	uS/cm
Water temperature	24.2	20.8	22.1	22.4	deg. C
Alkalinity as CaCO3	0	0	65	0	mg/L
Turbidity	.3	1.9	.3	.2	NTU
Sampling code	C	C		C	

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	MAY	CLP	EPA	JUN	CLP	EPA	JUL	CLP	EPA	AUG	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<200	JU	L	<1	JU	L	<1	U		<100	U		100	GE	5	ug/L
	1,1-dichloroethane	<200	JU	L	<1	JU	L	<1	U		<100	U		100	GE	5	ug/L
	1,1-dichloroethylene	<200	JU	L	3.33	J	L	4.18			<100	U		100	GE	7	ug/L
	trans-1,2-dichloroethylene	<200	JU	L	<1	JU	L	<1	U		<100	U		100	GE	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<200	JU	L	<1	JU	L	<1	U		<100	U		100	GE	5	ug/L
+	tetrachloroethylene	5230	J	L	7700	J	L	***8300***			***8440***			100	GE	5	ug/L
	1,1,1-trichloroethane	<200	JU	L	.515	J	IL	.647	J	I	<100	U		100	GE	200	ug/L
+	trichloroethylene	5200	J	L	6140	J	L	***7010***			***7120***			100	GE	5	ug/L

II. Monitoring Constituents

ST	Parameter	MAY	CLP	EPA	JUN	CLP	EPA	JUL	CLP	EPA	AUG	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable																
	nitrate-nitrite as nitrogen																
	sodium, total recoverable																
	sulfate																
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. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for August 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all months which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A ((all Months)

Table D-7b. Groundwater Monitoring Results for Recovery Wells, May - August 2001 (Cont.)
WELL RWM 8

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 101948.2 E 47353.3	33.32849 Deg N -81.7402 Deg W	119.7 - 109.3 ft msl	130 ft msl	8 " CS	S	GC/UL/LL/UC/C

SAMPLE DATE	05/09/01	06/04/01	07/09/01	08/06/01

FIELD DATA

Parameter	MAY	JUN	JUL	AUG	Unit
Water Elevation	199.62	201.35	*Not Applicable*	199.63	ft msl
pH	5.1	5	4.9	5.2	pH
Sp. Conductance	86	87	87	85	uS/cm
Water temperature	22.7	21.7	23	27.2	deg. C
Alkalinity as CaCO3	0	0	0	0	mg/L
Turbidity	.2	.9	.6	.3	NTU
Sampling code	C	C		C	

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	MAY	CLP	EPA	JUN	CLP	EPA	JUL	CLP	EPA	AUG	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<20	JU	L	<1	JU	L	<1	U		<10	U		10	GE	5	ug/L
	1,1-dichloroethane	<20	JU	L	<1	JU	L	<1	U		<10	U		10	GE	5	ug/L
	1,1-dichloroethylene	<20	JU	L	1.4	J	L	2.03			<10	U		10	GE	7	ug/L
	trans-1,2-dichloroethylene	<20	JU	L	<1	JU	L	<1	U		<10	U		10	GE	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<20	JU	L	<1	JU	L	<1	U		<10	U		10	GE	5	ug/L
+	tetrachloroethylene	289	J	L	394	J	L	***393***			***402***			10	GE	5	ug/L
	1,1,1-trichloroethane	<20	JU	L	<1	JU	L	.454	J	I	<10	U		10	GE	200	ug/L
+	trichloroethylene	596	J	L	688	J	L	***736***			***768***			10	GE	5	ug/L

II. Monitoring Constituents

ST	Parameter	MAY	CLP	EPA	JUN	CLP	EPA	JUL	CLP	EPA	AUG	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable																
	nitrate-nitrite as nitrogen																
	sodium, total recoverable																
	sulfate																
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. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for August 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all months which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A ((all Months)

Table D-7b. Groundwater Monitoring Results for Recovery Wells, May - August 2001 (Cont.)

WELL RWM 9

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 104099.8 E 50400	33.33822 Deg N -81.7363 Deg W	143 - 132.6 ft msl	158.6 ft msl	8 " CS	S	GC/UL/LL

SAMPLE DATE	05/10/01	06/04/01	07/09/01	08/06/01

FIELD DATA

Parameter	MAY	JUN	JUL	AUG	Unit
Water Elevation	*Not Applicable*	209.99	*Not Applicable*	208.6	ft msl
pH	5.3	5	4.8	4.8	pH
Sp. Conductance	43	44	42	45	uS/cm
Water temperature	19.6	21.7	21.9	25.3	deg. C
Alkalinity as CaCO3	0	0	0	0	mg/L
Turbidity	.3	.6	.2	.6	NTU
Sampling code	C	C		C	

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	MAY	CLP	EPA	JUN	CLP	EPA	JUL	CLP	EPA	AUG	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<10	JU	L	<1	JU	L	<1	U		<10	U		10	GE	5	ug/L
	1,1-dichloroethane	<10	JU	L	<1	JU	L	<1	U		<10	U		10	GE	5	ug/L
	1,1-dichloroethylene	<10	JU	L	<1	JU	L	<1	U		<10	U		10	GE	7	ug/L
	trans-1,2-dichloroethylene	<10	JU	L	<1	JU	L	<1	U		<10	U		10	GE	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<10	JU	L	<1	JU	L	<1	U		<10	U		10	GE	5	ug/L
+	tetrachloroethylene	45.8	J	L	61.2	J	L	***74.6***			***104***			5	ML	5	ug/L
	1,1,1-trichloroethane	<10	JU	L	<1	JU	L	<1	U		<10	U		10	GE	200	ug/L
+	trichloroethylene	513	J	L	541	J	L	***609***			***924***			5	ML	5	ug/L

II. Monitoring Constituents

ST	Parameter	MAY	CLP	EPA	JUN	CLP	EPA	JUL	CLP	EPA	AUG	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable																
	nitrate-nitrite as nitrogen																
	sodium, total recoverable																
	sulfate																
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. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for August 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all months which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A ((all Months)

Table D-7b. Groundwater Monitoring Results for Recovery Wells, May - August 2001 (Cont.)

WELL RWM 10

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 102000.9 E 48244.1	33.33006 Deg N -81.7379 Deg W	137.9 - 127.5 ft msl	148.2 ft msl	8 " CS	S	M/GC/UL/LL/MC

SAMPLE DATE	05/09/01	06/04/01		08/06/01	
FIELD DATA					
Parameter	**MAY**	**JUN**	**JUL**	**AUG**	**Unit**
Water Elevation	199.24	198.87	*Not Applicable*	199.31	ft msl
pH	5.1	4.6		5	pH
Sp. Conductance	104	102		101	uS/cm
Water temperature	23.6	21.6		24.1	deg. C
Alkalinity as CaCO3	0	0		0	mg/L
Turbidity	.5	.8		.1	NTU
Sampling code	C	C		C	

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	MAY	CLP	EPA	JUN	CLP	EPA	JUL	CLP	EPA	AUG	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<100	JU	L	1.24	J	L	1.44			<200	U		200	GE	5	ug/L
	1,1-dichloroethane	<100	JU	L	.659	J	IL	.85	J	I	<200	U		200	GE	5	ug/L
	1,1-dichloroethylene	<100	JU	L	3.36	J	L	4.57			<200	U		200	GE	7	ug/L
	trans-1,2-dichloroethylene	<100	JU	L	<1	JU	L	<1	U		<200	U		200	GE	100	ug/L
	pcb 1016							<.0971	U							.5	ug/L
	pcb 1221							<.0971	U							.5	ug/L
	pcb 1232							<.0971	U							.5	ug/L
	pcb 1242							<.0971	U							.5	ug/L
	pcb 1248							<.0971	U							.5	ug/L
	pcb 1254							<.0971	U							.5	ug/L
	pcb 1260							<.0971	U							.5	ug/L
	1,1,2,2-tetrachloroethane	<100	JU	L	.774	J	IL	1.02			<200	U		200	GE	5	ug/L
+	tetrachloroethylene	8020	J	L	10600	J	L	***9710***			***9950***			200	GE	5	ug/L
	1,1,1-trichloroethane	<100	JU	L	.354	J	IL	.486	J	I	<200	U		200	GE	200	ug/L
+	trichloroethylene	4340	J	L	4980	J	L	***4770***			***5080***			200	GE	5	ug/L

II. Monitoring Constituents

ST	Parameter	MAY	CLP	EPA	JUN	CLP	EPA	JUL	CLP	EPA	AUG	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable																
	nitrate-nitrite as nitrogen																
	sodium, total recoverable																
	sulfate																
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. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for August 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all months which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A ((all Months)

Table D-7b. Groundwater Monitoring Results for Recovery Wells, May - August 2001 (Cont.)

WELL RWM 11

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 104875 E 50400.2	33.33994 Deg N -81.7379 Deg W	152.2 - 141.9 ft msl	172.9 ft msl	8 " CS	S	M/GC/UL/LL

SAMPLE DATE	05/10/01	06/04/01	07/09/01	08/06/01

FIELD DATA

Parameter	MAY	JUN	JUL	AUG	Unit
Water Elevation	208.2	207.52	*Not Applicable*	207.12	ft msl
pH	4.9	4.7	4.3	4.4	pH
Sp. Conductance	29	30	29	30	uS/cm
Water temperature	20.3	22.7	22.2	22.9	deg. C
Alkalinity as CaCO3	0	0	0	0	mg/L
Turbidity	.2	.4	.4	.5	NTU
Sampling code	C	C		C	

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	MAY	CLP	EPA	JUN	CLP	EPA	JUL	CLP	EPA	AUG	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<10	JU	L	<1	JU	L	<1	U		<10	U		10	GE	5	ug/L
	1,1-dichloroethane	<10	JU	L	<1	JU	L	<1	U		<10	U		10	GE	5	ug/L
	1,1-dichloroethylene	<10	JU	L	<1	JU	L	<1	U		<10	U		10	GE	7	ug/L
	trans-1,2-dichloroethylene	<10	JU	L	<1	JU	L	<1	U		<10	U		10	GE	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<10	JU	L	<1	JU	L	<1	U		<10	U		10	GE	5	ug/L
+	tetrachloroethylene	26.8	J	L	34.2	J	L	***37***			***35.4***			10	GE	5	ug/L
	1,1,1-trichloroethane	<10	JU	L	<1	JU	L	<1	U		<10	U		10	GE	200	ug/L
+	trichloroethylene	515	J	L	563	J	L	***584***			***633***			10	GE	5	ug/L

II. Monitoring Constituents

ST	Parameter	MAY	CLP	EPA	JUN	CLP	EPA	JUL	CLP	EPA	AUG	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable																
	nitrate-nitrite as nitrogen																
	sodium, total recoverable																
	sulfate																
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. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for August 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all months which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A ((all Months)

Table D-7b. Groundwater Monitoring Results for Recovery Wells, May - August 2001 (Cont.)

WELL RWM 12

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 106879.2 E 52500.1	33.34780 Deg N -81.7362 Deg W	179.7 - 159.2 ft msl	ft msl	6 " CS/SS	S	UL/LL

SAMPLE DATE	05/09/01	06/04/01		08/06/01	
FIELD DATA					
Parameter	**MAY**	**JUN**	**JUL**	**AUG**	**Unit**
Water Elevation	208.35	207.92	*Not Applicable*	207.49	ft msl
pH	4.9	4.9		4.8	pH
Sp. Conductance	41	42		42	uS/cm
Water temperature	20.7	21.1		20.5	deg. C
Alkalinity as CaCO3	0	0		0	mg/L
Turbidity	.2	1.1		1	NTU
Sampling code	C	C		C	

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	MAY	CLP	EPA	JUN	CLP	EPA	JUL	CLP	EPA	AUG	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<25	JU	L	<1	JU	L	<1	U		<20	U		20	GE	5	ug/L
	1,1-dichloroethane	<25	JU	L	<1	JU	L	<1	U		<20	U		20	GE	5	ug/L
	1,1-dichloroethylene	<25	JU	L	<1	JU	L	<1	U		<20	U		20	GE	7	ug/L
	trans-1,2-dichloroethylene	<25	JU	L	<1	JU	L	<1	U		<20	U		20	GE	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<25	JU	L	<1	JU	L	<1	U		<20	U		20	GE	5	ug/L
+	tetrachloroethylene	7.48	J	IL	13	J	L	***10.2***			5.23	J	I	20	GE	5	ug/L
	1,1,1-trichloroethane	<25	JU	L	<1	JU	L	<1	U		<20	U		20	GE	200	ug/L
+	trichloroethylene	1360	J	L	1540	J	L	***1590***			***1540***			20	GE	5	ug/L

II. Monitoring Constituents

ST	Parameter	MAY	CLP	EPA	JUN	CLP	EPA	JUL	CLP	EPA	AUG	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable																
	nitrate-nitrite as nitrogen																
	sodium, total recoverable																
	sulfate																
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. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for August 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all months which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A ((all Months)

Table D-7b. Groundwater Monitoring Results for Recovery Wells, May - August 2001 (Cont.)

WELL RWM 13B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 105803.2 E 53516.3	33.34708 Deg N -81.7315 Deg W	138.2 - 113 ft msl	ft msl	6 " CS		MCBC

SAMPLE DATE	05/09/01	06/04/01	07/10/01	08/06/01

FIELD DATA

Parameter	MAY	JUN	JUL	AUG	Unit
Water Elevation	197.63	197.5	197.6	196.89	ft msl
pH	5.2	5	5	4.8	pH
Sp. Conductance	19	21	19	20	uS/cm
Water temperature	21.5	20.8	22.7	22.7	deg. C
Alkalinity as CaCO3	0	0	0	0	mg/L
Turbidity	.6	1.2	2.9	.7	NTU
Sampling code	C	C	C	C	

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	MAY	CLP	EPA	JUN	CLP	EPA	JUL	CLP	EPA	AUG	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<5	JU	L	<1	JU	L	<5	U		<5	U		5	GE	5	ug/L
	1,1-dichloroethane	<5	JU	L	<1	JU	L	<5	U		<5	U		5	GE	5	ug/L
	1,1-dichloroethylene	<5	JU	L	<1	JU	L	<5	U		<5	U		5	GE	7	ug/L
	trans-1,2-dichloroethylene	<5	JU	L	<1	JU	L	<5	U		<5	U		5	GE	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<5	JU	L	<1	JU	L	<5	U		<5	U		5	GE	5	ug/L
	tetrachloroethylene	3.85	J	L	8.5	J	L	6.22	J	K	4.64	J	I	5	GE	5	ug/L
	1,1,1-trichloroethane	<5	JU	L	<1	JU	L	<5	U		<5	U		5	GE	200	ug/L
+	trichloroethylene	279	J	L	346	J	L	347	J	K	***329***			5	GE	5	ug/L

II. Monitoring Constituents

ST	Parameter	MAY	CLP	EPA	JUN	CLP	EPA	JUL	CLP	EPA	AUG	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable																
	nitrate-nitrite as nitrogen																
	sodium, total recoverable																
	sulfate																
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. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for August 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all months which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A ((all Months)

Table D-7b. Groundwater Monitoring Results for Recovery Wells, May - August 2001 (Cont.)

WELL RWM 13C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 105809.6 E 53502.2	33.34707 Deg N -81.7315 Deg W	173.4 - 153.3 ft msl	ft msl	6 " CS		LL

SAMPLE DATE	05/09/01	06/04/01	07/10/01	08/06/01

FIELD DATA

Parameter	MAY	JUN	JUL	AUG	Unit
Water Elevation	203.89	203.58	216.72	203.04	ft msl
pH	5.2	5	5.1	4.9	pH
Sp. Conductance	29	30	29	29	uS/cm
Water temperature	22.3	21.4	23.6	22.4	deg. C
Alkalinity as CaCO3	0	0	0	0	mg/L
Turbidity	2.5	.4	2	.5	NTU
Sampling code	C	C	C	C	

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	MAY	CLP	EPA	JUN	CLP	EPA	JUL	CLP	EPA	AUG	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<5	JU	L	<1	JU	L	<5	U		<10	U		10	GE	5	ug/L
	1,1-dichloroethane	<5	JU	L	<1	JU	L	<5	U		<10	U		10	GE	5	ug/L
	1,1-dichloroethylene	<5	JU	L	<1	JU	L	<5	U		<10	U		10	GE	7	ug/L
	trans-1,2-dichloroethylene	<5	JU	L	<1	JU	L	<5	U		<10	U		10	GE	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<5	JU	L	<1	JU	L	<5	U		<10	U		10	GE	5	ug/L
	tetrachloroethylene	7.34	J	L	12	J	L	11.1	J	K	8.34	J	I	10	GE	5	ug/L
	1,1,1-trichloroethane	<5	JU	L	<1	JU	L	<5	U		<10	U		10	GE	200	ug/L
+	trichloroethylene	374	J	L	452	J	L	485	J	K	***486***			10	GE	5	ug/L

II. Monitoring Constituents

ST	Parameter	MAY	CLP	EPA	JUN	CLP	EPA	JUL	CLP	EPA	AUG	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable																
	nitrate-nitrite as nitrogen																
	sodium, total recoverable																
	sulfate																
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. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for August 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all months which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A ((all Months)

Table D-7b. Groundwater Monitoring Results for Recovery Wells, May - August 2001 (Cont.)

WELL RWM 14B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 106362.1 E 53044.7	33.34754 Deg N -81.7338 Deg W	148.5 - 123.2 ft msl	ft msl	6 " CS		LL

SAMPLE DATE	05/09/01	06/04/01	07/09/01	08/06/01

FIELD DATA

Parameter	MAY	JUN	JUL	AUG	Unit
Water Elevation	206.62	206.26	*Not Applicable*	205.73	ft msl
pH	5.1	5	5.1	4.8	pH
Sp. Conductance	24	24	23	30	uS/cm
Water temperature	17.8	22.1	20.2	19.9	deg. C
Alkalinity as CaCO3	0	0	0	0	mg/L
Turbidity	.6	.7	.3	.2	NTU
Sampling code	C	C		C	

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	MAY	CLP	EPA	JUN	CLP	EPA	JUL	CLP	EPA	AUG	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<5	JU	L	<5	U		<1	U		<10	U		10	GE	5	ug/L
	1,1-dichloroethane	<5	JU	L	<5	U		<1	U		<10	U		10	GE	5	ug/L
	1,1-dichloroethylene	<5	JU	L	<5	U		<1	U		<10	U		10	GE	7	ug/L
	trans-1,2-dichloroethylene	<5	JU	L	<5	U		<1	U		<10	U		10	GE	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<5	JU	L	<5	U		<1	U		<10	U		10	GE	5	ug/L
+	tetrachloroethylene	5.76	J	L	***14.7***			***9.78***			6.77	J	I	10	GE	5	ug/L
	1,1,1-trichloroethane	<5	JU	L	<5	U		<1	U		<10	U		10	GE	200	ug/L
+	trichloroethylene	391	J	L	***589***			***653***			***558***			10	GE	5	ug/L

II. Monitoring Constituents

ST	Parameter	MAY	CLP	EPA	JUN	CLP	EPA	JUL	CLP	EPA	AUG	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable																
	nitrate-nitrite as nitrogen																
	sodium, total recoverable																
	sulfate																
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. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for August 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all months which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A ((all Months)

Table D-7b. Groundwater Monitoring Results for Recovery Wells, May - August 2001 (Cont.)

WELL RWM 14C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 106380.8 E 53051.5	33.34760 Deg N -81.7338 Deg W	193.5 - 173.4 ft msl	ft msl	6 " CS		UL

SAMPLE DATE	05/09/01	06/04/01	07/09/01	08/06/01

FIELD DATA

Parameter	MAY	JUN	JUL	AUG	Unit
Water Elevation	202.24	202.06	*Not Applicable*	209.12	ft msl
pH	5	5	4.6	5	pH
Sp. Conductance	35	36	36	36	uS/cm
Water temperature	18.5	21.6	22.5	20.3	deg. C
Alkalinity as CaCO3	0	0	0	0	mg/L
Turbidity	1	.3	.4	.8	NTU
Sampling code	C	C		C	

ANALYTICAL DATA

I. Groundwater Protection Standard

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ST	Parameter	MAY	CLP	EPA	JUN	CLP	EPA	JUL	CLP	EPA	AUG	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<50	JU	L	<1	JU	L	<1	U		<50	U		50	GE	5	ug/L
	1,1-dichloroethane	<50	JU	L	<1	JU	L	<1	U		<50	U		50	GE	5	ug/L
	1,1-dichloroethylene	<50	JU	L	<1	JU	L	<1	U		<50	U		50	GE	7	ug/L
	trans-1,2-dichloroethylene	<50	JU	L	<1	JU	L	<1	U		<50	U		50	GE	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<50	JU	L	<1	JU	L	<1	U		<50	U		50	GE	5	ug/L
+	tetrachloroethylene	13	J	IL	18.1	J	L	***19.3***			<50	U		50	GE	5	ug/L
	1,1,1-trichloroethane	11.9	J	IL	2.62	J	L	.549	J	I	64.6			50	GE	200	ug/L
+	trichloroethylene	2290	J	L	3030	J	L	***3360***			***2910***			50	GE	5	ug/L

II. Monitoring Constituents

ST	Parameter	MAY	CLP	EPA	JUN	CLP	EPA	JUL	CLP	EPA	AUG	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable																
	nitrate-nitrite as nitrogen																
	sodium, total recoverable																
	sulfate																
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. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for August 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all months which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A ((all Months)

Table D-7b. Groundwater Monitoring Results for Recovery Wells, May - August 2001 (Cont.)

WELL RWM 15B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 107444.7 E 53849	33.35125 Deg N -81.7338 Deg W	150.9 - 125.8 ft msl	ft msl	6 " CS		LL/CBA

SAMPLE DATE	05/09/01	06/04/01	07/10/01	08/06/01

FIELD DATA

Parameter	MAY	JUN	JUL	AUG	Unit
Water Elevation	205.5	205.02	204.85	204.35	ft msl
pH	5.3	5.1	5.3	4.8	pH
Sp. Conductance	20	22	22	25	uS/cm
Water temperature	21.1	21.5	23.5	21.3	deg. C
Alkalinity as CaCO3	0	0	0	0	mg/L
Turbidity	1.2	1	1.1	.5	NTU
Sampling code	C	C	C	C	

ANALYTICAL DATA

I. Groundwater Protection Standard

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ST	Parameter	MAY	CLP	EPA	JUN	CLP	EPA	JUL	CLP	EPA	AUG	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<1	JU	L	<1	JU	L	<1	U		<1	U		1	GE	5	ug/L
	1,1-dichloroethane	<1	JU	L	<1	JU	L	<1	U		<1	U		1	GE	5	ug/L
	1,1-dichloroethylene	<1	JU	L	<1	JU	L	<1	U		<1	U		1	GE	7	ug/L
	trans-1,2-dichloroethylene	<1	JU	L	<1	JU	L	<1	U		<1	U		1	GE	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<1	JU	L	<1	JU	L	<1	U		<1	U		1	GE	5	ug/L
	tetrachloroethylene	<1	JU	L	<1	JU	L	<1	U		<1	U		1	GE	5	ug/L
	1,1,1-trichloroethane	<1	JU	L	<1	JU	L	<1	U		<1	U		1	GE	200	ug/L
+	trichloroethylene	11.1	J	L	13.3	J	L	***12.7***			***10.8***			1	GE	5	ug/L

II. Monitoring Constituents

ST	Parameter	MAY	CLP	EPA	JUN	CLP	EPA	JUL	CLP	EPA	AUG	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable																
	nitrate-nitrite as nitrogen																
	sodium, total recoverable																
	sulfate																
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. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for August 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all months which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A ((all Months)

Table D-7c. Groundwater Monitoring Results for Recovery Wells, September - December 2001

WELL RWM 1

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 102599.1 E 48575.1	33.33193 Deg N -81.7382 Deg W	232.3 - 172.3 ft msl	364.7 ft msl	8 " CS	S	M/GC

SAMPLE DATE	09/05/01	10/09/01	11/12/01	12/04/01

FIELD DATA

Parameter	SEP	OCT	NOV	DEC	Unit
Water Elevation	196.51	195.55	365.8	365.8	ft msl
pH	5.3	4.6	4.8	4.6	pH
Sp. Conductance	54	48	51	49	uS/cm
Water temperature	21.1	16.4	18.8	19.4	deg. C
Alkalinity as CaCO3	0	0	0	0	mg/L
Turbidity	1.5	.3	.4	4.1	NTU
Sampling code		C	C	C	

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	SEP	CLP	EPA	OCT	CLP	EPA	NOV	CLP	EPA	DEC	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<200	UJ	L	<200	U		<200	U		<200	U		200	GE	5	ug/L
	1,1-dichloroethane	<200	UJ	L	<200	U		<200	U		<200	U		200	GE	5	ug/L
	1,1-dichloroethylene	<200	UJ	L	<200	U		<200	U		<200	U		200	GE	7	ug/L
	trans-1,2-dichloroethylene	<200	UJ	L	<200	U		<200	U		<200	U		200	GE	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<200	UJ	L	<200	U		<200	U		<200	U		200	GE	5	ug/L
+	tetrachloroethylene	12100	J	L	11900	J	K	***12600***			***12800***			200	GE	5	ug/L
	1,1,1-trichloroethane	<200	UJ	L	<200	U		<200	U		<200	U		200	GE	200	ug/L
+	trichloroethylene	11000	J	L	12700	J	K	***12300***			***11300***			200	GE	5	ug/L

II. Monitoring Constituents

ST	Parameter	SEP	CLP	EPA	OCT	CLP	EPA	NOV	CLP	EPA	DEC	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable																
	nitrate-nitrite as nitrogen																
	sodium, total recoverable																
	sulfate																
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. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for December 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all months which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A ((all Months)

Table D-7c. Groundwater Monitoring Results for Recovery Wells, September - December 2001 (Cont.)

WELL RWM 3

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 104730.2 E 49680	33.33844 Deg N -81.7395 Deg W	154 - 144 ft msl	164 ft msl	8 " CS	S	M/GC/UL/LL

SAMPLE DATE	09/05/01	10/09/01	11/13/01	12/05/01

FIELD DATA

Parameter	SEP	OCT	NOV	DEC	Unit
Water Elevation	205.76	378.1	378.1	378.1	ft msl
pH	5.3	4.9	4.3	4.4	pH
Sp. Conductance	74	50	51	51	uS/cm
Water temperature	22.4	20.8	17.1	19.1	deg. C
Alkalinity as CaCO3	0	0	2	0	mg/L
Turbidity	.2	.2	.6	.2	NTU
Sampling code		C	C	C	

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	SEP	CLP	EPA	OCT	CLP	EPA	NOV	CLP	EPA	DEC	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<50	UJ	L	<20	U		<50	U		<50	U		50	GE	5	ug/L
	1,1-dichloroethane	<50	UJ	L	<20	U		<50	U		<50	U		50	GE	5	ug/L
	1,1-dichloroethylene	<50	UJ	L	<20	U		<50	U		<50	U		50	GE	7	ug/L
	trans-1,2-dichloroethylene	<50	UJ	L	<20	U		<50	U		<50	U		50	GE	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<50	UJ	L	<20	U		<50	U		<50	U		50	GE	5	ug/L
+	tetrachloroethylene	1110	J	L	***995***			***1060***			***1180***			50	GE	5	ug/L
	1,1,1-trichloroethane	<50	UJ	L	<20	U		<50	U		<50	U		50	GE	200	ug/L
+	trichloroethylene	3490	J	L	3650	J	Q	***3220***			***3240***			50	GE	5	ug/L

II. Monitoring Constituents

ST	Parameter	SEP	CLP	EPA	OCT	CLP	EPA	NOV	CLP	EPA	DEC	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable																
	nitrate-nitrite as nitrogen																
	sodium, total recoverable																
	sulfate																
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. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for December 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all months which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A ((all Months)

Table D-7c. Groundwater Monitoring Results for Recovery Wells, September - December 2001 (Cont.)

WELL RWM 4

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 103719.3 E 48948.2	33.33501 Deg N -81.7394 Deg W	139.9 - 129.5 ft msl	160.4 ft msl	8 " CS	S	GC/UL/LL/UC/C

SAMPLE DATE	09/05/01	10/10/01	11/12/01	12/04/01

FIELD DATA

Parameter	SEP	OCT	NOV	DEC	Unit
Water Elevation	200.88	201.13	200.85	201.45	ft msl
pH	5.5	5.4	4.4	4.7	pH
Sp. Conductance	33	27	25	25	uS/cm
Water temperature	21.3	19.1	18.5	19.1	deg. C
Alkalinity as CaCO3	0	0	0	0	mg/L
Turbidity	.3	.6	.4	1.1	NTU
Sampling code		C	C	C	

ANALYTICAL DATA

I. Groundwater Protection Standard

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ST	Parameter	SEP	CLP	EPA	OCT	CLP	EPA	NOV	CLP	EPA	DEC	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<100	UJ	L	<100	UJ	L	<100	U		<100	U		100	GE	5	ug/L
	1,1-dichloroethane	<100	UJ	L	<100	UJ	L	<100	U		<100	U		100	GE	5	ug/L
	1,1-dichloroethylene	<100	UJ	L	<100	UJ	L	<100	U		<100	U		100	GE	7	ug/L
	trans-1,2-dichloroethylene	<100	UJ	L	<100	UJ	L	<100	U		<100	U		100	GE	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<100	UJ	L	<100	UJ	L	<100	U		<100	U		100	GE	5	ug/L
+	tetrachloroethylene	1300	J	L	1130	J	L	***1330***			***1420***			100	GE	5	ug/L
	1,1,1-trichloroethane	<100	UJ	L	<100	UJ	L	<100	U		<100	U		100	GE	200	ug/L
+	trichloroethylene	6210	J	L	6100	J	L	***6120***			***5880***			100	GE	5	ug/L

II. Monitoring Constituents

ST	Parameter	SEP	CLP	EPA	OCT	CLP	EPA	NOV	CLP	EPA	DEC	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable																
	nitrate-nitrite as nitrogen																
	sodium, total recoverable																
	sulfate																
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. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for December 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all months which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A ((all Months)

Table D-7c. Groundwater Monitoring Results for Recovery Wells, September - December 2001 (Cont.)
WELL RWM 5

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 103502.2 E 49628	33.33564 Deg N -81.7372 Deg W	144.3 - 133.9 ft msl	154.7 ft msl	8 " CS	S	UL/LL

SAMPLE DATE	09/05/01	10/09/01	11/13/01	12/05/01

FIELD DATA

Parameter	SEP	OCT	NOV	DEC	Unit
Water Elevation	204.5	204.49	204.4	204.95	ft msl
pH	5.5	5.1	4.8	4.6	pH
Sp. Conductance	39	29	29	31	uS/cm
Water temperature	21.7	21.4	17.9	20.8	deg. C
Alkalinity as CaCO3	0	0	0	0	mg/L
Turbidity	.2	.2	.2	.2	NTU
Sampling code		C	C	C	

ANALYTICAL DATA

I. Groundwater Protection Standard

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ST	Parameter	SEP	CLP	EPA	OCT	CLP	EPA	NOV	CLP	EPA	DEC	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<20	UJ	L	<25	U		<25	U		<25	U		25	GE	5	ug/L
	1,1-dichloroethane	<20	UJ	L	<25	U		<25	U		<25	U		25	GE	5	ug/L
	1,1-dichloroethylene	<20	UJ	L	<25	U		<25	U		<25	U		25	GE	7	ug/L
	trans-1,2-dichloroethylene	<20	UJ	L	<25	U		<25	U		<25	U		25	GE	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<20	UJ	L	<25	U		<25	U		<25	U		25	GE	5	ug/L
+	tetrachloroethylene	515	J	L	452	J	K	***507***			***580***			25	GE	5	ug/L
	1,1,1-trichloroethane	<20	UJ	L	<25	U		<25	U		<25	U		25	GE	200	ug/L
+	trichloroethylene	1650	J	L	1800	J	K	***1940***			***1560***			25	GE	5	ug/L

II. Monitoring Constituents

ST	Parameter	SEP	CLP	EPA	OCT	CLP	EPA	NOV	CLP	EPA	DEC	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable																
	nitrate-nitrite as nitrogen																
	sodium, total recoverable																
	sulfate																
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. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for December 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all months which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A ((all Months)

Table D-7c. Groundwater Monitoring Results for Recovery Wells, September - December 2001 (Cont.)

WELL RWM 6

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 102001.5 E 50107.4	33.33311 Deg N -81.7330 Deg W	151.5 - 141.1 ft msl	156.8 ft msl	8 " CS	S	GC/UL/LL/UC/C

SAMPLE DATE	09/05/01	10/09/01	11/12/01	12/05/01

FIELD DATA

Parameter	SEP	OCT	NOV	DEC	Unit
Water Elevation	168.19	199.3	350.2	350.2	ft msl
pH	5.5	4.9	4.8	4.8	pH
Sp. Conductance	70	27	28	28	uS/cm
Water temperature	23.6	20.9	20	21	deg. C
Alkalinity as CaCO3	0	0	0	0	mg/L
Turbidity	.9	.2	.2	.4	NTU
Sampling code		C	C	C	

ANALYTICAL DATA

I. Groundwater Protection Standard

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ST	Parameter	SEP	CLP	EPA	OCT	CLP	EPA	NOV	CLP	EPA	DEC	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<25	UJ	L	<25	U		<25	U		<25	U		25	GE	5	ug/L
	1,1-dichloroethane	<25	UJ	L	<25	U		<25	U		<25	U		25	GE	5	ug/L
	1,1-dichloroethylene	<25	UJ	L	<25	U		<25	U		<25	U		25	GE	7	ug/L
	trans-1,2-dichloroethylene	<25	UJ	L	<25	U		<25	U		<25	U		25	GE	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<25	UJ	L	<25	U		<25	U		<25	U		25	GE	5	ug/L
+	tetrachloroethylene	1670	J	L	1440	J	K	***1820***			***1780***			25	GE	5	ug/L
	1,1,1-trichloroethane	<25	UJ	L	<25	U		<25	U		<25	U		25	GE	200	ug/L
+	trichloroethylene	1870	J	L	1870	J	K	***1780***			***1640***			25	GE	5	ug/L

II. Monitoring Constituents

ST	Parameter	SEP	CLP	EPA	OCT	CLP	EPA	NOV	CLP	EPA	DEC	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable																
	nitrate-nitrite as nitrogen																
	sodium, total recoverable																
	sulfate																
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. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for December 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all months which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A ((all Months)

Table D-7c. Groundwater Monitoring Results for Recovery Wells, September - December 2001 (Cont.)

WELL RWM 7

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 101904.6 E 49449.5	33.33182 Deg N -81.7346 Deg W	154.2 - 144 ft msl	164.7 ft msl	8 " CS	S	GC/UL/LL/UC/C

SAMPLE DATE	09/05/01	10/09/01	11/12/01	12/04/01

FIELD DATA

Parameter	SEP	OCT	NOV	DEC	Unit
Water Elevation	196.1	193.06	193.45	194.15	ft msl
pH	5.7	4.7	4.6	4.3	pH
Sp. Conductance	104	65	67	69	uS/cm
Water temperature	22.8	19.6	19.3	19.3	deg. C
Alkalinity as CaCO3	0	0	0	0	mg/L
Turbidity	.3	.2	.3	.9	NTU
Sampling code		C	C	C	

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	SEP	CLP	EPA	OCT	CLP	EPA	NOV	CLP	EPA	DEC	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<200	UJ	L	<200	UJ	L	<200	U		<100	U		100	GE	5	ug/L
	1,1-dichloroethane	<200	UJ	L	<200	UJ	L	<200	U		<100	U		100	GE	5	ug/L
	1,1-dichloroethylene	<200	UJ	L	<200	UJ	L	<200	U		<100	U		100	GE	7	ug/L
	trans-1,2-dichloroethylene	<200	UJ	L	<200	UJ	L	<200	U		<100	U		100	GE	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<200	UJ	L	<200	UJ	L	<200	U		<100	U		100	GE	5	ug/L
+	tetrachloroethylene	7330	J	L	7410	J	L	***8640***			***8020***			100	GE	5	ug/L
	1,1,1-trichloroethane	<200	UJ	L	<200	UJ	L	<200	U		<100	U		100	GE	200	ug/L
+	trichloroethylene	6090	J	L	7020	J	L	***6510***			***5910***			100	GE	5	ug/L

II. Monitoring Constituents

ST	Parameter	SEP	CLP	EPA	OCT	CLP	EPA	NOV	CLP	EPA	DEC	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable																
	nitrate-nitrite as nitrogen																
	sodium, total recoverable																
	sulfate																
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. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for December 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all months which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A ((all Months)

Table D-7c. Groundwater Monitoring Results for Recovery Wells, September - December 2001 (Cont.)
WELL RWM 8

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 101948.2 E 47353.3	33.32849 Deg N -81.7402 Deg W	119.7 - 109.3 ft msl	130 ft msl	8 " CS	S	GC/UL/LL/UC/C

SAMPLE DATE 09/05/01 10/09/01 11/12/01 12/04/01

FIELD DATA

Parameter	SEP	OCT	NOV	DEC	Unit
Water Elevation	200.29	199.28	198.8	199.82	ft msl
pH	5.5	4.9	4.9	4.7	pH
Sp. Conductance	.98	85	85	86	uS/cm
Water temperature	21.7	19	19.3	20.4	deg. C
Alkalinity as CaCO3	0	0	0	0	mg/L
Turbidity	7	.5	.3	1.7	NTU
Sampling code		C	C	C	

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	SEP	CLP	EPA	OCT	CLP	EPA	NOV	CLP	EPA	DEC	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<20	UJ	L	<20	U		<20	U		<10	U		10	GE	5	ug/L
	1,1-dichloroethane	<20	UJ	L	<20	U		<20	U		<10	U		10	GE	5	ug/L
	1,1-dichloroethylene	<20	UJ	L	<20	U		<20	U		<10	U		10	GE	7	ug/L
	trans-1,2-dichloroethylene	<20	UJ	L	<20	U		<20	U		<10	U		10	GE	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<20	UJ	L	<20	U		<20	U		<10	U		10	GE	5	ug/L
+	tetrachloroethylene	524	J	L	338	J	K	***411***			***391***			10	GE	5	ug/L
	1,1,1-trichloroethane	<20	UJ	L	<20	U		<20	U		<10	U		10	GE	200	ug/L
+	trichloroethylene	785	J	L	743	J	K	***707***			***638***			10	GE	5	ug/L

II. Monitoring Constituents

ST	Parameter	SEP	CLP	EPA	OCT	CLP	EPA	NOV	CLP	EPA	DEC	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable																
	nitrate-nitrite as nitrogen																
	sodium, total recoverable																
	sulfate																
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. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for December 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all months which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A ((all Months)

Table D-7c. Groundwater Monitoring Results for Recovery Wells, September - December 2001 (Cont.)

WELL RWM 9

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 104099.8 E 50400	33.33822 Deg N -81.7363 Deg W	143 - 132.6 ft msl	158.6 ft msl	8 " CS	S	GC/UL/LL

SAMPLE DATE	09/05/01	10/09/01	11/12/01	12/05/01

FIELD DATA

Parameter	SEP	OCT	NOV	DEC	Unit
Water Elevation	208.69	207.59	207.05	207.65	ft msl
pH	5.3	5.2	4.8	4.9	pH
Sp. Conductance	95	41	41	40	uS/cm
Water temperature	21.8	20	19	20.7	deg. C
Alkalinity as CaCO3	0	0	0	0	mg/L
Turbidity	.2	.2	.3	.3	NTU
Sampling code		C	C	C	

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	SEP	CLP EPA	OCT	CLP EPA	NOV	CLP EPA	DEC	CLP EPA	DF	Lab	Limit	Unit
	Inorganics												
	barium, total recoverable												
	cyanide												
	lead, total recoverable												
	nickel, total recoverable												
	selenium, total recoverable												
	Organics												
	chlorobenzene	<10	UJ L	<10	U	<10	U	<10	U	10	GE	5	ug/L
	1,1-dichloroethane	<10	UJ L	<10	U	<10	U	<10	U	10	GE	5	ug/L
	1,1-dichloroethylene	<10	UJ L	<10	U	<10	U	<10	U	10	GE	7	ug/L
	trans-1,2-dichloroethylene	<10	UJ L	<10	U	<10	U	<10	U	10	GE	100	ug/L
	pcb 1016												
	pcb 1221												
	pcb 1232												
	pcb 1242												
	pcb 1248												
	pcb 1254												
	pcb 1260												
	1,1,2,2-tetrachloroethane	<10	UJ L	<10	U	<10	U	<10	U	10	GE	5	ug/L
+	tetrachloroethylene	74.3	J L	61.3	J K	***90***		***89.2***		10	GE	5	ug/L
	1,1,1-trichloroethane	<10	UJ L	<10	U	<10	U	<10	U	10	GE	200	ug/L
+	trichloroethylene	578	J L	597	J K	***607***		***499***		10	GE	5	ug/L

II. Monitoring Constituents

ST	Parameter	SEP	CLP EPA	OCT	CLP EPA	NOV	CLP EPA	DEC	CLP EPA	DF	Lab	Limit	Unit
	Inorganics												
	aluminum, total recoverable												
	nitrate-nitrite as nitrogen												
	sodium, total recoverable												
	sulfate												
	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. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for December 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all months which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A ((all Months)

Table D-7c. Groundwater Monitoring Results for Recovery Wells, September - December 2001 (Cont.)

WELL RWM 10

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 102000.9 E 48244.1	33.33006 Deg N -81.7379 Deg W	137.9 - 127.5 ft msl	148.2 ft msl	8 " CS	S	M/GC/UL/LL/MC

SAMPLE DATE	09/05/01	10/09/01	11/12/01	12/04/01

FIELD DATA

Parameter	SEP	OCT	NOV	DEC	Unit
Water Elevation	212.64	199.19	198.56	198.99	ft msl
pH	5.3	5	4.8	4.4	pH
Sp. Conductance	108	100	101	99	uS/cm
Water temperature	24.1	18.1	19.5	19.8	deg. C
Alkalinity as CaCO3	0	0	0	0	mg/L
Turbidity	.3	.2	.3	.7	NTU
Sampling code		C	C	C	

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	SEP	CLP	EPA	OCT	CLP	EPA	NOV	CLP	EPA	DEC	CLP	EPA	DF	Lab	Limit	Unit
	Inorganics																
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
	Organics																
	chlorobenzene	<100	UJ	L	<200	U		<200	U		<125	U		125	GE	5	ug/L
	1,1-dichloroethane	<100	UJ	L	<200	U		<200	U		<125	U		125	GE	5	ug/L
	1,1-dichloroethylene	<100	UJ	L	<200	U		<200	U		<125	U		125	GE	7	ug/L
	trans-1,2-dichloroethylene	<100	UJ	L	<200	U		<200	U		<125	U		125	GE	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<100	UJ	L	<200	U		<200	U		<125	U		125	GE	5	ug/L
+	tetrachloroethylene	9150	J	L	9500	J	K	***10600***			***10200***			125	GE	5	ug/L
	1,1,1-trichloroethane	<100	UJ	L	<200	U		<200	U		<125	U		125	GE	200	ug/L
+	trichloroethylene	4820	J	L	5210	J	K	***5250***			***4980***			125	GE	5	ug/L

II. Monitoring Constituents

ST	Parameter	SEP	CLP	EPA	OCT	CLP	EPA	NOV	CLP	EPA	DEC	CLP	EPA	DF	Lab	Limit	Unit
	Inorganics																
	aluminum, total recoverable																
	nitrate-nitrite as nitrogen																
	sodium, total recoverable																
	sulfate																
	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. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for December 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all months which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A ((all Months)

Table D-7c. Groundwater Monitoring Results for Recovery Wells, September - December 2001 (Cont.)

WELL RWM 11

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 104875 E 50400.2	33.33994 Deg N -81.7379 Deg W	152.2 - 141.9 ft msl	172.9 ft msl	8 " CS	S	M/GC/UL/LL

SAMPLE DATE	09/05/01	10/09/01	11/12/01	12/05/01

FIELD DATA

Parameter	SEP	OCT	NOV	DEC	Unit
Water Elevation	206.51	206.65	206.23	207.06	ft msl
pH	5.7	4.8	4.3	4.5	pH
Sp. Conductance	70	29	31	30	uS/cm
Water temperature	21.3	20.7	19.8	22.2	deg. C
Alkalinity as CaCO3	0	0	0	0	mg/L
Turbidity		.1	.2	.3	NTU
Sampling code		C	C	C	

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	SEP	CLP	EPA	OCT	CLP	EPA	NOV	CLP	EPA	DEC	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<10	UJ	L	<10	UJ	LQ	<10	U		<2	U		2	GE	5	ug/L
	1,1-dichloroethane	<10	UJ	L	<10	UJ	LQ	<10	U		<2	U		2	GE	5	ug/L
	1,1-dichloroethylene	<10	UJ	L	<10	UJ	LQ	<10	U		<2	U		2	GE	7	ug/L
	trans-1,2-dichloroethylene	<10	UJ	L	<10	UJ	LQ	<10	U		<2	U		2	GE	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<10	UJ	L	<10	UJ	LQ	<10	U		<2	U		2	GE	5	ug/L
+	tetrachloroethylene	35.3	J	L	33.8	J	LQ	***26.6***			***21.3***			2	GE	5	ug/L
	1,1,1-trichloroethane	<10	UJ	L	<10	UJ	LQ	<10	U		<2	U		2	GE	200	ug/L
+	trichloroethylene	539	J	L	665	J	LQ	***161***			***111***			2	GE	5	ug/L

II. Monitoring Constituents

ST	Parameter	SEP	CLP	EPA	OCT	CLP	EPA	NOV	CLP	EPA	DEC	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable																
	nitrate-nitrite as nitrogen																
	sodium, total recoverable																
	sulfate																
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. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for December 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all months which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A ((all Months)

Table D-7c. Groundwater Monitoring Results for Recovery Wells, September - December 2001 (Cont.)

WELL RWM 12

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 106879.2 E 52500.1	33.34780 Deg N -81.7362 Deg W	179.7 - 159.2 ft msl	ft msl	6 " CS/SS	S	UL/LL

SAMPLE DATE	09/06/01	10/10/01	11/12/01	12/05/01

FIELD DATA

Parameter	SEP	OCT	NOV	DEC	Unit
Water Elevation	206.97	207.18	207.22	207.52	ft msl
pH	4.9	4.9	4.2	4.4	pH
Sp. Conductance	42	43	39	43	uS/cm
Water temperature	19.4	18.5	17.7	19.8	deg. C
Alkalinity as CaCO3	0	0	0	0	mg/L
Turbidity	.4	.2	.4	.3	NTU
Sampling code	C	C	C	C	

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	SEP	CLP	EPA	OCT	CLP	EPA	NOV	CLP	EPA	DEC	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<20	UJ	Q	<20	UJ	L	<20	U		<20	U		20	GE	5	ug/L
	1,1-dichloroethane	<20	UJ	Q	<20	UJ	L	<20	U		<20	U		20	GE	5	ug/L
	1,1-dichloroethylene	<20	UJ	Q	<20	UJ	L	<20	U		<20	U		20	GE	7	ug/L
	trans-1,2-dichloroethylene	<20	UJ	Q	<20	UJ	L	<20	U		<20	U		20	GE	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<20	UJ	Q	<20	UJ	L	<20	U		<20	U		20	GE	5	ug/L
	tetrachloroethylene	8.71	J	IQ	<20	UJ	L	9.49	J	I	10.6	J		20	GE	5	ug/L
	1,1,1-trichloroethane	<20	UJ	Q	<20	UJ	L	<20	U		<20	U		20	GE	200	ug/L
+	trichloroethylene	1420	J	LQ	1570	J	L	***1620***			***1380***			20	GE	5	ug/L

II. Monitoring Constituents

ST	Parameter	SEP	CLP	EPA	OCT	CLP	EPA	NOV	CLP	EPA	DEC	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable																
	nitrate-nitrite as nitrogen																
	sodium, total recoverable																
	sulfate																
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. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for December 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all months which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A ((all Months)

Table D-7c. Groundwater Monitoring Results for Recovery Wells, September - December 2001 (Cont.)

WELL RWM 13B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 105803.2 E 53516.3	33.34708 Deg N -81.7315 Deg W	138.2 - 113 ft msl	ft msl	6 " CS		MCBC

SAMPLE DATE	09/06/01	10/09/01	11/12/01	12/05/01

FIELD DATA

Parameter	SEP	OCT	NOV	DEC	Unit
Water Elevation	195.85	159.99	336.2	336.2	ft msl
pH	5	5.2	4.5	4.6	pH
Sp. Conductance	19	19	20	20	uS/cm
Water temperature	19.7	19.7	18.6	19.2	deg. C
Alkalinity as CaCO3	0	0	0	0	mg/L
Turbidity	1.1	.2	.4	.4	NTU
Sampling code	C	C	C	C	

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	SEP	CLP	EPA	OCT	CLP	EPA	NOV	CLP	EPA	DEC	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<1	U		<5	UJ	L	<5	U		<5	U		5	GE	5	ug/L
	1,1-dichloroethane	<1	U		<5	UJ	L	<5	U		<5	U		5	GE	5	ug/L
	1,1-dichloroethylene	<1	U		<5	UJ	L	<5	U		<5	U		5	GE	7	ug/L
	trans-1,2-dichloroethylene	<1	U		<5	UJ	L	<5	U		<5	U		5	GE	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<1	U		<5	UJ	L	<5	U		<5	U		5	GE	5	ug/L
+	tetrachloroethylene	***5.15***			4.42	J	IL	***5.91***			***5.39***			5	GE	5	ug/L
	1,1,1-trichloroethane	<1	U		<5	UJ	L	<5	U		<5	U		5	GE	200	ug/L
+	trichloroethylene	***322***			298	J	L	***331***			***273***			5	GE	5	ug/L

II. Monitoring Constituents

ST	Parameter	SEP	CLP	EPA	OCT	CLP	EPA	NOV	CLP	EPA	DEC	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable																
	nitrate-nitrite as nitrogen																
	sodium, total recoverable																
	sulfate																
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. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for December 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all months which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A ((all Months)

Table D-7c. Groundwater Monitoring Results for Recovery Wells, September - December 2001 (Cont.)

WELL RWM 13C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 105809.6 E 53502.2	33.34707 Deg N -81.7315 Deg W	173.4 - 153.3 ft msl	ft msl	6 " CS		LL

SAMPLE DATE	09/06/01	10/09/01	11/12/01	12/05/01

FIELD DATA

Parameter	SEP	OCT	NOV	DEC	Unit
Water Elevation	202.54	185.74	336.4	336.4	ft msl
pH	4.8	5.1	4.7	4.6	pH
Sp. Conductance	33	29	30	31	uS/cm
Water temperature	20.3	19	18.5	18.9	deg. C
Alkalinity as CaCO3	0	0	0	0	mg/L
Turbidity	.2	.2	.2	.9	NTU
Sampling code	C	C	C	C	

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	SEP	CLP	EPA	OCT	CLP	EPA	NOV	CLP	EPA	DEC	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<10	UJ	Q	<5	UJ	L	<5	U		<5	U		5	GE	5	ug/L
	1,1-dichloroethane	<10	UJ	Q	<5	UJ	L	<5	U		<5	U		5	GE	5	ug/L
	1,1-dichloroethylene	<10	UJ	Q	<5	UJ	L	<5	U		<5	U		5	GE	7	ug/L
	trans-1,2-dichloroethylene	<10	UJ	Q	<5	UJ	L	<5	U		<5	U		5	GE	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<10	UJ	Q	<5	UJ	L	<5	U		<5	U		5	GE	5	ug/L
+	tetrachloroethylene	8.44	J	lQ	8.23	J	L	***9.18***			***9.23***			5	GE	5	ug/L
	1,1,1-trichloroethane	<10	UJ	Q	<5	UJ	L	<5	U		<5	U		5	GE	200	ug/L
+	trichloroethylene	441	J	LQ	408	J	L	***441***			***359***			5	GE	5	ug/L

II. Monitoring Constituents

ST	Parameter	SEP	CLP	EPA	OCT	CLP	EPA	NOV	CLP	EPA	DEC	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable																
	nitrate-nitrite as nitrogen																
	sodium, total recoverable																
	sulfate																
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. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for December 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all months which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A ((all Months)

Table D-7c. Groundwater Monitoring Results for Recovery Wells, September - December 2001 (Cont.)

WELL RWM 14B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 106362.1 E 53044.7	33.34754 Deg N -81.7338 Deg W	148.5 - 123.2 ft msl	ft msl	6 " CS		LL

SAMPLE DATE	09/06/01	10/10/01	11/12/01	12/05/01

FIELD DATA

Parameter	SEP	OCT	NOV	DEC	Unit
Water Elevation	214.24	205.28	205.66	205.87	ft msl
pH	4.8	4.4	4.2	4.6	pH
Sp. Conductance	23	24	26	24	uS/cm
Water temperature	19.4	17.8	17.7	19.1	deg. C
Alkalinity as CaCO3	0	0	0	0	mg/L
Turbidity	.1	.4	.4	.4	NTU
Sampling code	C	C	C	C	

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	SEP	CLP	EPA	OCT	CLP	EPA	NOV	CLP	EPA	DEC	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
Organics																	
	chlorobenzene	<10	UJ	Q	<10	UJ	L	<10	U		<5	U		5	GE	5	ug/L
	1,1-dichloroethane	<10	UJ	Q	<10	UJ	L	<10	U		<5	U		5	GE	5	ug/L
	1,1-dichloroethylene	<10	UJ	Q	<10	UJ	L	<10	U		<5	U		5	GE	7	ug/L
	trans-1,2-dichloroethylene	<10	UJ	Q	<10	UJ	L	<10	U		<5	U		5	GE	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<10	UJ	Q	<10	UJ	L	<10	U		<5	U		5	GE	5	ug/L
+	tetrachloroethylene	8.02	J	IQ	7.67	J	IL	8.34	J	I	***8.83***			5	GE	5	ug/L
	1,1,1-trichloroethane	<10	UJ	Q	<10	UJ	L	<10	U		<5	U		5	GE	200	ug/L
+	trichloroethylene	480	J	LQ	494	J	L	***473***			***425***			5	GE	5	ug/L

II. Monitoring Constituents

ST	Parameter	SEP	CLP	EPA	OCT	CLP	EPA	NOV	CLP	EPA	DEC	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	aluminum, total recoverable																
	nitrate-nitrite as nitrogen																
	sodium, total recoverable																
	sulfate																
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. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for December 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all months which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A ((all Months)

Table D-7c. Groundwater Monitoring Results for Recovery Wells, September - December 2001 (Cont.)

WELL RWM 14C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 106380.8 E 53051.5	33.34760 Deg N -81.7338 Deg W	193.5 - 173.4 ft msl	ft msl	6 " CS		UL

SAMPLE DATE	09/06/01	10/10/01	11/12/01	12/05/01

FIELD DATA

Parameter	SEP	OCT	NOV	DEC	Unit
Water Elevation	201.53	201.82	202.4	202.57	ft msl
pH	4.5	4.8	4	4.7	pH
Sp. Conductance	40	36	37	36	uS/cm
Water temperature	20.2	17.8	18	19.2	deg. C
Alkalinity as CaCO3	0	0	0	0	mg/L
Turbidity	.5	.4	.3	.3	NTU
Sampling code	C	C	C	C	

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	SEP	CLP	EPA	OCT	CLP	EPA	NOV	CLP	EPA	DEC	CLP	EPA	DF	Lab	Limit	Unit
	Inorganics																
	barium, total recoverable																
	cyanide																
	lead, total recoverable																
	nickel, total recoverable																
	selenium, total recoverable																
	Organics																
	chlorobenzene	<50	UJ	Q	<50	UJ	L	<50	U		<50	U		50	GE	5	ug/L
	1,1-dichloroethane	<50	UJ	Q	<50	UJ	L	<50	U		<50	U		50	GE	5	ug/L
	1,1-dichloroethylene	<50	UJ	Q	<50	UJ	L	<50	U		<50	U		50	GE	7	ug/L
	trans-1,2-dichloroethylene	<50	UJ	Q	<50	UJ	L	<50	U		<50	U		50	GE	100	ug/L
	pcb 1016																
	pcb 1221																
	pcb 1232																
	pcb 1242																
	pcb 1248																
	pcb 1254																
	pcb 1260																
	1,1,2,2-tetrachloroethane	<50	UJ	Q	<50	UJ	L	<50	U		<50	U		50	GE	5	ug/L
	tetrachloroethylene	13.9	J	IQ	<50	UJ	L	14.1	J	I	<50	U		50	GE	5	ug/L
	1,1,1-trichloroethane	14.6	J	IQ	<50	UJ	L	<50	U		<50	U		50	GE	200	ug/L
+	trichloroethylene	2650	J	LQ	2620	J	L	***2690***			***2410***			50	GE	5	ug/L

II. Monitoring Constituents

ST	Parameter	SEP	CLP	EPA	OCT	CLP	EPA	NOV	CLP	EPA	DEC	CLP	EPA	DF	Lab	Limit	Unit
	Inorganics																
	aluminum, total recoverable																
	nitrate-nitrite as nitrogen																
	sodium, total recoverable																
	sulfate																
	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. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for December 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all months which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A ((all Months)

Table D-7c. Groundwater Monitoring Results for Recovery Wells, September - December 2001 (Cont.)

WELL RWM 15B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 107444.7 E 53849	33.35125 Deg N -81.7338 Deg W	150.9 - 125.8 ft msl	ft msl	6 " CS		LL/CBA

SAMPLE DATE	09/06/01	10/09/01	11/12/01	12/05/01

FIELD DATA

Parameter	SEP	OCT	NOV	DEC	Unit
Water Elevation	203.63	203.75	203.94	204.41	ft msl
pH	4.6	5	4.6	4.8	pH
Sp. Conductance	21	20	22	22	uS/cm
Water temperature	21	20.1	18.6	19.9	deg. C
Alkalinity as CaCO3	0	0	0	0	mg/L
Turbidity	.5	1.3	.6	.3	NTU
Sampling code	C	C	C	C	

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	SEP	CLP EPA	OCT	CLP EPA	NOV	CLP EPA	DEC	CLP EPA	DF	Lab	Limit	Unit
	Inorganics												
	barium, total recoverable												
	cyanide												
	lead, total recoverable												
	nickel, total recoverable												
	selenium, total recoverable												
	Organics												
	chlorobenzene	<1	UJ Q	<1	U	<1	U	<1	U	1	GE	5	ug/L
	1,1-dichloroethane	<1	UJ Q	<1	U	<1	U	<1	U	1	GE	5	ug/L
	1,1-dichloroethylene	<1	UJ Q	<1	U	<1	U	<1	U	1	GE	7	ug/L
	trans-1,2-dichloroethylene	<1	UJ Q	<1	U	<1	U	<1	U	1	GE	100	ug/L
	pcb 1016												
	pcb 1221												
	pcb 1232												
	pcb 1242												
	pcb 1248												
	pcb 1254												
	pcb 1260												
	1,1,2,2-tetrachloroethane	<1	UJ Q	<1	U	<1	U	<1	U	1	GE	5	ug/L
	tetrachloroethylene	<1	UJ Q	<1	U	<1	U	<1	U	1	GE	5	ug/L
	1,1,1-trichloroethane	<1	UJ Q	<1	U	<1	U	<1	U	1	GE	200	ug/L
+	trichloroethylene	11.2	J LQ	***11.2***		***12.5***		***11.3***		1	GE	5	ug/L

II. Monitoring Constituents

ST	Parameter	SEP	CLP EPA	OCT	CLP EPA	NOV	CLP EPA	DEC	CLP EPA	DF	Lab	Limit	Unit
	Inorganics												
	aluminum, total recoverable												
	nitrate-nitrite as nitrogen												
	sodium, total recoverable												
	sulfate												
	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. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for December 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all months which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A ((all Months)

Table D-8. 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
N 104131.6 E 51469.8	33.34004 Deg N -81.7336 Deg W	126.3 - 121.3 ft msl	380.5 ft msl	4 " PVC	S	MCBC

SAMPLE DATE	02/23/00	07/25/00	02/27/01	08/16/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	217.3	215.78	213.19	211.57	ft msl
pH	5.9	5.9	5.8	5.5	pH
Sp. Conductance	34	31	27	26	uS/cm
Water temperature	18.8	21.5	20	20.6	deg. C
Alkalinity as CaCO3	4	6	10	1	mg/L
Turbidity	1.6	1.1	1.2	4.2	NTU
Volumes purged	2.45	2.57	2.41	2.34	well volume
Sampling code					
Synchronous water level	217.2 (03/23/00)	214.7 (09/27/00)	212.1 (03/20/01)	211.7 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	arsenic, total recoverable	<10	U		<10	U		<40	U		<42	U		1	WA	50	ug/L
	barium, total recoverable	<6.16	U	V	4.87	J	I	4.9			5.1	J	I	1	WA	2000	ug/L
	chromium, total recoverable	<4.45	JU	V	<10	U		1.9	J	I	<11	U		1	WA	100	ug/L
	lead, total recoverable	<10	U		<10	U		<47	U		<24	U		1	WA	15	ug/L
	mercury, total recoverable	<.5	U		<.5	U		<.7	U		<.3	U		1	WA	2	ug/L
	nickel, total recoverable	<6.24	JU	V	<50	U		<26	U		<.77	UJ		1	WA	100	ug/L
	silver, total recoverable	<6.47	JU	V	<20	U		<5	U		<6.8	U		1	WA	50	ug/L
Organics																	
	acetone	<100	U		<100	U		<10	U		<10	U		1	WA	10	ug/L
	carbon tetrachloride	<25	U		<25	U		2.33	J	K	<5	U		1	WA	5	ug/L
	chloroethene (vinyl chloride)	<25	U		<25	U		<10	U		<10	U		1	WA	2	ug/L
	chloroform	<25	U		<25	U		1.72	J	IK	<1.11	U		1	WA	100	ug/L
	1,1-dichloroethane	<25	U		<25	U		<5	U		<5	U		1	WA	5	ug/L
	1,2-dichloroethane	<25	U		<25	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<25	U		<25	U		<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene	<25	U		<25	U		<5	U		<5	U		1	WA	100	ug/L
	cis-1,2-dichloroethylene	4.3	J	I	6.1	J	IK	1.95	J	K	2.27	J	I	1	WA	70	ug/L
	2,4-dichlorophenoxyacetic acid	<.2	U		<.2	JU	L	<2.17	JU	L	<1	UJ	Q	1	WA	10	ug/L
	lindane	<.098	U		<.096	U		<.051	JU	L	<.0505	UJ	L	1	WA	.2	ug/L
	methyl methacrylate	<100	U		<100	U		<21.6	JU	L	<10	U		1	WA	2	ug/L
	phenol	<9.6	JU	LQ	<9.3	U		<21.6	U		<10	U		1	WA	10	ug/L
+	tetrachloroethylene	***62***			67	J	K	25.2	J	K	***29.6***			1	WA	5	ug/L
	1,1,1-trichloroethane	<25	U		<25	U		<5	U		<5	U		1	WA	200	ug/L
+	trichloroethylene	***380***			590	J	K	58.1	J	K	***24.3***			1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	chloride	1540			1720			1460			1720			1	WA	4200	ug/L
	cyanide	<10	U		<10	U		<15.2	U		<33	U		1	WA	40	ug/L
	fluoride	<200	U		108	J	I	<15.2	U	V	<12.1	U	V	1	WA	4000	ug/L
	iron, total recoverable	<57	U	V	16.5	J	I	30.6	J	I	61.3	J	I	1	WA	300	ug/L
	manganese, total recoverable	7.01	J	I	5.68	J	I	6	J	I	5.8			1	WA	50	ug/L
	nitrate-nitrite as nitrogen	895			921	J	K	913			891			1	WA	2400	ug/L
	selenium, total recoverable	<10	U		<10	U		<66	U		<31	U		1	WA	50	ug/L
	sodium, total recoverable	2290			2240			1730			1850			1	WA	4600	ug/L
	sulfate	838			1370			<536	U		841			1	WA	3000	ug/L
	total organic carbon	<5000	JU	Q	<5000	U		<179	U		<1400	U		1	WA	10000	ug/L
+	total organic halogens	***326***			307	J	L	26.3	J		***25000***			1	WA	50	ug/L
	total phosphates (as p)	<2500	U		1510	J	IL	<67	U		19.7	J	I	1	WA	300	ug/L
Radionuclides																	
	gross alpha	.451	J	I				5.72	JU	L						15	pCi/L
	nonvolatile beta	.759	J	I				.143	U							50	pCi/L
	radium, total alpha-emitting	.053	U					.4	JU	L						5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-8. Groundwater Monitoring Results for Point-of-Compliance Wells, Met Lab HWMF (Cont.)

WELL AMB 4D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 104154.7 E 51489	33.34012 Deg N -81.7336 Deg W	233.4 - 213.4 ft msl	380.3 ft msl	4 " PVC	S	M

SAMPLE DATE	02/23/00	08/29/00	02/27/01	08/25/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	229.72	227.9	226.44	229.05	ft msl
pH	5.3	5.1	5.3	5.2	pH
Sp. Conductance	29	23	25	21	uS/cm
Water temperature	19.4	20.5	20.7	24.2	deg. C
Alkalinity as CaCO3	3	4	0	2	mg/L
Turbidity	.8	3.7	1.1	1	NTU
Volumes purged	2.71	3.36	3.16	2.14	well volume
Sampling code					
Synchronous water level	229.6 (03/23/00)	227.6 (09/27/00)	253.4 (06/27/01)	( )	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	arsenic, total recoverable	<10	U		<3.48	JU		<40	U		<42	U		1	WA	50	ug/L
	barium, total recoverable	<4.42	U	V	3.43	J	I	2.7			3.7	J	I	1	WA	2000	ug/L
	chromium, total recoverable	<3.75	JU	V	<10	U		<.97	JU		3	J	I	1	WA	100	ug/L
	lead, total recoverable	<10	U		<10	U		<47	U		<24	U		1	WA	15	ug/L
	mercury, total recoverable	<.5	U		<.5	U		<.7	U		<.3	U		1	WA	2	ug/L
	nickel, total recoverable	<50	U		<50	U		<26	U		<1.3	UJ		1	WA	100	ug/L
	silver, total recoverable	<4.35	JU	V	<20	U		<5	U		<.75	UJ		1	WA	50	ug/L
Organics																	
	acetone	<20	JU	L	<20	U		6.44	J	IK	<10	UJ	L	1	WA	10	ug/L
	carbon tetrachloride	<5	JU	L	<5	U		<5	U		<5	UJ	L	1	WA	5	ug/L
	chloroethene (vinyl chloride)	<5	JU	L	<5	U		<10	U		<10	UJ	L	1	WA	2	ug/L
	chloroform	<5	JU	L	<5	U		<5	U		<5	UJ	L	1	WA	100	ug/L
	1,1-dichloroethane	<5	JU	L	<5	U		<5	U		<5	UJ	L	1	WA	5	ug/L
	1,2-dichloroethane	<5	JU	L	<5	U		<5	U		<5	UJ	L	1	WA	5	ug/L
	1,1-dichloroethylene	<5	JU	L	<5	U		<5	U		<5	UJ	L	1	WA	7	ug/L
	trans-1,2-dichloroethylene	<5	JU	L	<5	U		<5	U		<5	UJ	L	1	WA	100	ug/L
	cis-1,2-dichloroethylene	<5	JU	L	<5	U		<5	U		<5	UJ	L	1	WA	70	ug/L
	2,4-dichlorophenoxyacetic acid	<.2	U		<.2	JU	L	<2.17	JU	L	<1	UJ	L	1	WA	10	ug/L
	lindane	<.097	U		<.094	U		<.109	JU	L	<.0505	U		1	WA	.2	ug/L
	methyl methacrylate	<20	JU	L	<20	U					<10	UJ	L	1	WA	2	ug/L
	phenol	<9.7	JU	Q	<9.3	JU	Q	<10.2	U		<10	UJ	Q	1	WA	10	ug/L
	tetrachloroethylene	<5	JU	L	<5	U		<5	U		<5	UJ	L	1	WA	5	ug/L
	1,1,1-trichloroethane	<5	JU	L	<5	U		<5	U		<5	UJ	L	1	WA	200	ug/L
	trichloroethylene	7.6	J	L	<5	U		<5	U		1.01	J	IL	1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	chloride	1440			1570			1620	J	Q	1740			1	WA	4200	ug/L
	cyanide	<10	U		<10	U		<15.2	U		<33	U		1	WA	40	ug/L
	fluoride	<200	U		<100	U		<6.54	U	V	<62	U		1	WA	4000	ug/L
	iron, total recoverable	<33.5	U	V	<22.1	U	V	25.4	J	I	35.9	J	I	1	WA	300	ug/L
	manganese, total recoverable	12.3			11.4			7.4	J	I	10.6			1	WA	50	ug/L
	nitrate-nitrite as nitrogen	1100			951	J	I	862			220			1	WA	2400	ug/L
	selenium, total recoverable	<10	U		<10	U		<66	U		<31	U		1	WA	50	ug/L
	sodium, total recoverable	4460			3140			3690			2770			1	WA	4600	ug/L
	sulfate	1750			1680			1580	J	Q	887			1	WA	3000	ug/L
	total organic carbon	<5000	JU	Q	<5000	U		<1000	U		439	J	I	1	WA	10000	ug/L
+	total organic halogens	16.8	J	I	19.2	J	I	<120	U		***4080***			1	WA	50	ug/L
	total phosphates (as p)	<2500	U		<5000	U		<26.4	JU	Q	<101	U		1	WA	300	ug/L
Radionuclides																	
	gross alpha	3.14						5.79	JU	L						15	pCi/L
	nonvolatile beta	1.69	J	I				.144	U							50	pCi/L
	radium, total alpha-emitting	1.81						2.45	J	L						5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-8. Groundwater Monitoring Results for Point-of-Compliance Wells, Met Lab HWMF (Cont.)

WELL AMB 5

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 104083.4 E 51467.2	33.33993 Deg N -81.7335 Deg W	242.1 - 222.1 ft msl	379.6 ft msl	4 " PVC	S	M

SAMPLE DATE	02/23/00	09/28/00	02/28/01	08/20/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	230.21	228.1	227.36	212.05	ft msl
pH	5.2	5.4	5.3	5.4	pH
Sp. Conductance	31	38	38	38	uS/cm
Water temperature	19.5	19.8	23.2	23.4	deg. C
Alkalinity as CaCO3	2	8	0	0	mg/L
Turbidity	1.4	.3	1.6	4.3	NTU
Volumes purged	5.20	13.1	3.92	-20.	well volume
Sampling code					
Synchronous water level	230.1 (03/23/00)	228.2 (09/27/00)	226.7 (03/20/01)	( )	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

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ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	arsenic, total recoverable	<10	U		<10	U		<40	U		<42	U		1	WA	50	ug/L
	barium, total recoverable	<4.62	U	V	6.6	J	I	9.6			8.4			1	WA	2000	ug/L
	chromium, total recoverable	<10	U		<10	U		5.2	J	I	3	J	I	1	WA	100	ug/L
	lead, total recoverable	<10	U		<10	U		<47	U		5.5	J	I	1	WA	15	ug/L
	mercury, total recoverable	<.5	U		<.5	U		<.7	U		<.3	U		1	WA	2	ug/L
	nickel, total recoverable	<9.29	JU	V	<50	U		4.6	J	I	3.1	J	I	1	WA	100	ug/L
	silver, total recoverable	<20	U		<3.53	JU		<5	U		<6.8	U		1	WA	50	ug/L
Organics																	
	acetone	<20	U		<20	U		7.45	J	IK	<10	U		1	WA	10	ug/L
	carbon tetrachloride	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	chloroethene (vinyl chloride)	<5	U		<5	U		<10	U		<10	U		1	WA	2	ug/L
	chloroform	<5	U		<5	U		<5	U		<5	U		1	WA	100	ug/L
	1,1-dichloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,2-dichloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	100	ug/L
	cis-1,2-dichloroethylene	<5	U		1.3	J	IK	<5	U		<5	U		1	WA	70	ug/L
	2,4-dichlorophenoxyacetic acid	<.2	U		<.2	U		<1.01	JU	LQ	<1	U		1	WA	10	ug/L
	lindane	<.1	U		<.096	U		<.0516	JU	LQ	<.0505	UJ	L	1	WA	.2	ug/L
	methyl methacrylate	<20	U		<20	U		<10.2	U		<10	U		1	WA	2	ug/L
	phenol	<9.8	JU	LQ	<9.5	U		<10.2	U		<10	UJ	L	1	WA	10	ug/L
	tetrachloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1,1-trichloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	200	ug/L
+	trichloroethylene	***5.7***			12	J	K	8.35	J	IK	1.64	J	IK	1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	chloride	1750			2560			2760			3650			1	WA	4200	ug/L
	cyanide	<10	U		<10	U		<15.2	U		<33	U		1	WA	40	ug/L
	fluoride	<200	U		<100	U		<5.06	U		<62	U		1	WA	4000	ug/L
	iron, total recoverable	<23.4	U	V	<54	U	V	92.5			55.6	J	I	1	WA	300	ug/L
	manganese, total recoverable	5.95	J	I	8.44	J	I	11.8			12.7			1	WA	50	ug/L
+	nitrate-nitrite as nitrogen	1360			***4010***			***2940***			***2820***			5	WA	2400	ug/L
	selenium, total recoverable	<10	U		6.58	J	I	<66	U		<31	U		1	WA	50	ug/L
+	sodium, total recoverable	***5040***			***5370***			4590			***4680***			1	WA	4600	ug/L
	sulfate	2190			1510			694			584			1	WA	3000	ug/L
	total organic carbon	<5000	JU	Q	5700			153	J		282	J	I	1	WA	10000	ug/L
+	total organic halogens	21.7	J	I	36.8	J	I	<120	U		***3300***			1	WA	50	ug/L
+	total phosphates (as p)	<2500	U		<2500	U		***341***			<101	U		1	WA	300	ug/L
Radionuclides																	
	gross alpha	3.46						22.1	J	IL						15	pCi/L
	nonvolatile beta	2.52						2.04	U							50	pCi/L
	radium, total alpha-emitting	1.75						6.1	J	L						5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-8. Groundwater Monitoring Results for Point-of-Compliance Wells, Met Lab HWMF (Cont.)

WELL AMB 6

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 104034.1 E 51466	33.33982 Deg N -81.7334 Deg W	242.6 - 222.6 ft msl	377.2 ft msl	4 " PVC	S	M

SAMPLE DATE	02/23/00		02/28/01	09/10/01	
FIELD DATA					
Parameter	**1Q00**	**3Q00**	**1Q01**	**3Q01**	**Unit**
Water Elevation	230.32	*Not Applicable*	227.7	*Not Applicable*	ft msl
pH	5.8		5.6	6.5	pH
Sp. Conductance	35		40	69	uS/cm
Water temperature	20.2		20	24.4	deg. C
Alkalinity as CaCO3	8		5	8	mg/L
Turbidity	1.7		8.3	18.3	NTU
Volumes purged	3.04		2.18		well volume
Sampling code				X	
Synchronous water level	230.1 (03/23/00)	228.5 (09/27/00)	227.1 (03/20/01)	( )	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

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ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	arsenic, total recoverable	<10	U					<40	U		<42	U		1	WA	50	ug/L
	barium, total recoverable	<2.14	U	V				4.1			8.6			1	WA	2000	ug/L
	chromium, total recoverable	<10	U					1.4	J	I	9.5	J	I	1	WA	100	ug/L
+	lead, total recoverable	***15.1***						12.3	J	I	***33.6***			1	WA	15	ug/L
	mercury, total recoverable	<.5	U					<.7	U		<.3	U		1	WA	2	ug/L
	nickel, total recoverable	<9.72	JU	V				<26	U		6.9			1	WA	100	ug/L
	silver, total recoverable	<20	U					<5	U		<6.8	U		1	WA	50	ug/L
Organics																	
	acetone	<20	U					<10	U		<10	U		1	WA	10	ug/L
	carbon tetrachloride	<5	U					<5	U		<5	U		1	WA	5	ug/L
	chloroethene (vinyl chloride)	<5	U					<10	U		<10	U		1	WA	2	ug/L
	chloroform	<5	U					<5	U		<5	U		1	WA	100	ug/L
	1,1-dichloroethane	<5	U					<5	U		<5	U		1	WA	5	ug/L
	1,2-dichloroethane	<5	U					<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<5	U					<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene	<5	U					<5	U		<5	U		1	WA	100	ug/L
	cis-1,2-dichloroethylene	<5	U					<5	U		<5	U		1	WA	70	ug/L
	2,4-dichlorophenoxyacetic acid	<.2	U					<1.01	JU	LQ	<1	UJ	Q	1	WA	10	ug/L
	lindane	<.095	U					<.0521	JU	LQ	<.0505	UJ	Q	1	WA	.2	ug/L
	methyl methacrylate	<20	U					<10.2	U		<10	U		1	WA	2	ug/L
	phenol	<9.4	JU	LQ				<10.2	U		<10	UJ	Q	1	WA	10	ug/L
	tetrachloroethylene	<5	U					<5	U		<5	U		1	WA	5	ug/L
	1,1,1-trichloroethane	<5	U					<5	U		<5	U		1	WA	200	ug/L
	trichloroethylene	<5	U					<5	U		<1.1	U	V	1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	chloride	1470						2550			2890			1	WA	4200	ug/L
	cyanide	<10	U					<15.2	U		<33	U		1	WA	40	ug/L
	fluoride	<200	U					<7.79	U		<62	U		1	WA	4000	ug/L
+	iron, total recoverable	208						136			***1760***			1	WA	300	ug/L
	manganese, total recoverable	2.48	J	I				5.1	J	I	12.5			1	WA	50	ug/L
	nitrate-nitrite as nitrogen	820						1100			1180			2	WA	2400	ug/L
	selenium, total recoverable	<10	U					<66	U		<31	U		1	WA	50	ug/L
+	sodium, total recoverable	***7030***						6500	J		***8250***			1	WA	4600	ug/L
+	sulfate	***4010***						2840			***3900***			1	WA	3000	ug/L
	total organic carbon	<5000	JU	Q				517	J		356	J	I	1	WA	10000	ug/L
	total organic halogens	13.5	J	I				<120	U		<52	U		1	WA	50	ug/L
	total phosphates (as p)	<2500	U					90			33.6	J	I	1	WA	300	ug/L
Radionuclides																	
	gross alpha	.687	J	I				-.367	JU	L						15	pCi/L
	nonvolatile beta	1.2	J	I				-1.06	U							50	pCi/L
	radium, total alpha-emitting	-.038	U					1.6	J	IL						5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-8. Groundwater Monitoring Results for Point-of-Compliance Wells, Met Lab HWMF (Cont.)

WELL AMB 8D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 103874.6 E 51400.5	33.33936 Deg N -81.7333 Deg W	240.8 - 220.8 ft msl	369.6 ft msl	4 " PVC	S	M

SAMPLE DATE	02/14/00	09/14/00	03/12/01	09/06/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	230.51	228.7	227.38	226.14	ft msl
pH	5.3	5.7	5.8	4.3	pH
Sp. Conductance	37	34	35	40	uS/cm
Water temperature	20.6	23.6	22.5	23.1	deg. C
Alkalinity as CaCO3	7	4	7	8	mg/L
Turbidity	1	2.5	1.5	3.7	NTU
Volumes purged	2.75	5.42	4.13		well volume
Sampling code					
Synchronous water level	230.1 (03/23/00)	228.4 (09/27/00)	227.2 (03/20/01)	225.9 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

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ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	arsenic, total recoverable	<10	U		<10	U		<40	U		<42	U		1	WA	50	ug/L
	barium, total recoverable	<3.22	U	V	3.03	J	I	4			4.4	J	I	1	WA	2000	ug/L
	chromium, total recoverable	<3.45	U	V	<10	U		1.6	J	I	4	J	I	1	WA	100	ug/L
	lead, total recoverable	<10	U		<10	U		<47	U		6.9	J	I	1	WA	15	ug/L
	mercury, total recoverable	<.5	U		<.5	U		<.7	U		<.3	U		1	WA	2	ug/L
	nickel, total recoverable	<50	U		<50	U		2.9	J	I	<3.7	U	V	1	WA	100	ug/L
	silver, total recoverable	<20	U		<20	U		<5	U		<6.8	U		1	WA	50	ug/L
Organics																	
	acetone	<20	U		<20	U		<10	U		<10	U		1	WA	10	ug/L
	carbon tetrachloride	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	chloroethene (vinyl chloride)	<5	U		<5	U		<10	U		<10	U		1	WA	2	ug/L
	chloroform	<5	U		<5	U		<5	U		<5	U		1	WA	100	ug/L
	1,1-dichloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,2-dichloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	100	ug/L
	cis-1,2-dichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	70	ug/L
	2,4-dichlorophenoxyacetic acid	<.2	JU	L	<.2	U		<1.02	JU	LQ	<1	UJ	Q	1	WA	10	ug/L
	lindane	<.099	U		<.1	JU	L	<.051	JU	Q	<.0505	UJ	Q	1	WA	.2	ug/L
	methyl methacrylate	<20	U		<20	U		<10.2	JU	Q	<10	U		1	WA	2	ug/L
	phenol	<9.6	U		<11	U		<10.2	JU	Q	<10	U		1	WA	10	ug/L
	tetrachloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1,1-trichloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	200	ug/L
	trichloroethylene	1.1	J	I	<5	U		<5	U		<5	U		1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	chloride	2370			2440			2340	J	Q	2800			1	WA	4200	ug/L
	cyanide	<10	U		<10	U		<15.2	U		<33	U		1	WA	40	ug/L
	fluoride	<200	U		<100	U		<12.8	U	V	<6.78	U	V	1	WA	4000	ug/L
+	iron, total recoverable	<339	U	V	227			175			***538***			1	WA	300	ug/L
	manganese, total recoverable	<3.49	U	V	1.35	J	I	2	J	I	5.8			1	WA	50	ug/L
	nitrate-nitrite as nitrogen	508			632			546			436			1	WA	2400	ug/L
	selenium, total recoverable	<10	U		<10	U		<66	U		<31	U		1	WA	50	ug/L
+	sodium, total recoverable	***6810***			***6340***			***5820***			***6880***			1	WA	4600	ug/L
+	sulfate	2730			2840			2850	J	Q	***3720***			1	WA	3000	ug/L
	total organic carbon	<5000	U		<5000	U		1400			2010			1	WA	10000	ug/L
	total organic halogens	15.5	J	IQ	33.3	J	I	<120	U		<52	U		1	WA	50	ug/L
	total phosphates (as p)	<2500	U		<2500	U		<67	JU	Q	14.1	J	I	1	WA	300	ug/L
Radionuclides																	
	gross alpha	4.36						12	U							15	pCi/L
	nonvolatile beta	2.15	J	I				8.92	U							50	pCi/L
	radium, total alpha-emitting	.656	J	I				1.03	J	IY						5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-8. Groundwater Monitoring Results for Point-of-Compliance Wells, Met Lab HWMF (Cont.)

WELL AMB 9D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 103585.2 E 51263	33.33850 Deg N -81.7331 Deg W	239.7 - 219.7 ft msl	367.9 ft msl	4 " PVC	S	M

SAMPLE DATE	02/14/00	09/14/00	03/13/01	09/06/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	230.43	228.65	227.57	226.15	ft msl
pH	5.3	5.6	5.8	4.2	pH
Sp. Conductance	43	45	45	46	uS/cm
Water temperature	18.7	22.4	20.1	20.9	deg. C
Alkalinity as CaCO3	8	5	12	10	mg/L
Turbidity	.9	1	.8	.8	NTU
Volumes purged	3.76	5.57	3.78		well volume
Sampling code					
Synchronous water level	229.9 (03/23/00)	228.3 (09/27/00)	227.2 (03/20/01)	226.1 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	arsenic, total recoverable	<10	U		<10	U		<40	U		<42	U		1	WA	50	ug/L
	barium, total recoverable	<2.77	U	V	2.58	J	I	2.5			2.5	J	I	1	WA	2000	ug/L
	chromium, total recoverable	<10	U		<10	U		1.8	J	I	1.6	J	I	1	WA	100	ug/L
	lead, total recoverable	<10	U		<10	U		<47	U		3.5	J	I	1	WA	15	ug/L
	mercury, total recoverable	<.5	U		<.5	U		<.7	U		<.3	U		1	WA	2	ug/L
	nickel, total recoverable	<50	U		<50	U		<26	U		<1.8	U	V	1	WA	100	ug/L
	silver, total recoverable	<6.34	JU		<20	U		<5	U		<6.8	U		1	WA	50	ug/L
Organics																	
	acetone	<20	U		<20	U		<6.63	U	V	<10	U		1	WA	10	ug/L
	carbon tetrachloride	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	chloroethene (vinyl chloride)	<5	U		<5	U		<10	U		<10	U		1	WA	2	ug/L
	chloroform	<5	U		<5	U		<5	U		<5	U		1	WA	100	ug/L
	1,1-dichloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,2-dichloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	100	ug/L
	cis-1,2-dichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	70	ug/L
	2,4-dichlorophenoxyacetic acid	<.2	JU	L	<.2	U		<1.02	JU	L	<1	UJ	Q	1	WA	10	ug/L
	lindane	<.098	U		<.095	JU	L	<.051	U		<.0505	UJ	Q	1	WA	.2	ug/L
	methyl methacrylate	<20	U		<20	U		<10.2	U		<10	U		1	WA	2	ug/L
	phenol	<10	U		<9.5	U		<10.2	U		<10	U		1	WA	10	ug/L
	tetrachloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1,1-trichloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	200	ug/L
	trichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	chloride	2510			2850			2710			2810			1	WA	4200	ug/L
	cyanide	<10	U		<10	U		<15.2	U		<33	U		1	WA	40	ug/L
	fluoride	<200	U		<100	U		<11.8	U	V	<62	U		1	WA	4000	ug/L
	iron, total recoverable	<115	U	V	61.7	J	I	152			82.1	J	I	1	WA	300	ug/L
	manganese, total recoverable	<2.75	U	V	1.07	J	I	1.3	J	I	3.8			1	WA	50	ug/L
	nitrate-nitrite as nitrogen	<500	U		217	J	I	120			140			1	WA	2400	ug/L
	selenium, total recoverable	<10	U		<10	U		<66	U		<31	U		1	WA	50	ug/L
+	sodium, total recoverable	***9760***			***8920***			***8120***			***7810***			1	WA	4600	ug/L
+	sulfate	***4800***			***5330***			***4960***			***4360***			1	WA	3000	ug/L
	total organic carbon	<5000	U		<5000	U		130	J	I	572	J	I	1	WA	10000	ug/L
	total organic halogens	20.1	J	I	33.3	J	I	<120	U		<52	U		1	WA	50	ug/L
	total phosphates (as p)	<2500	U		<2500	U		<67	U		<101	U		1	WA	300	ug/L
Radionuclides																	
	gross alpha	.681	U					7.16	U							15	pCi/L
	nonvolatile beta	.924	U					-2.43	U							50	pCi/L
	radium, total alpha-emitting	.693	J	I				1.58	J	I						5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-8. Groundwater Monitoring Results for Point-of-Compliance Wells, Met Lab HWMF (Cont.)

WELL AMB 10A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 103326.4 E 51410	33.33816 Deg N -81.7322 Deg W	111.4 - 106.4 ft msl	366.5 ft msl	4 " PVC	S	MCBC

SAMPLE DATE	02/14/00	09/12/00	03/13/01	09/06/01	
FIELD DATA					
Parameter	**1Q00**	**3Q00**	**1Q01**	**3Q01**	**Unit**
Water Elevation	216.82	215.15	213.89	212.07	ft msl
pH	8.2	7	10.8	6.8	pH
Sp. Conductance	80	76	300	72	uS/cm
Water temperature	19	21.5	16.7	22	deg. C
Alkalinity as CaCO3	24	17	57	27	mg/L
Turbidity	2.6	.8	.9	.5	NTU
Volumes purged	.014	2.27	.014	2.11	well volume
Sampling code	NX		NX		
Synchronous water level	216.7 (03/23/00)	214.5 (12/31/00)	214.2 (03/20/01)	212.6 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	arsenic, total recoverable	<10	U		<10	U		<40	U		<42	U		1	WA	50	ug/L
	barium, total recoverable	12.1			10.2			21			10.6			1	WA	2000	ug/L
	chromium, total recoverable	<4.99	U	V	<10	U		1.6	J	I	<1.3	UJ		1	WA	100	ug/L
	lead, total recoverable	<10	U		<10	U		<47	U		<24	U		1	WA	15	ug/L
	mercury, total recoverable	<.5	U		<.5	U		<.7	U		<.3	U		1	WA	2	ug/L
	nickel, total recoverable	<50	U		<9.81	U	V	<26	U		<4.1	U		1	WA	100	ug/L
	silver, total recoverable	<20	U		<20	U		<5	U		<6.8	U		1	WA	50	ug/L
Organics																	
	acetone	<20	U		<20	U		<6.57	U	V	<10	U		1	WA	10	ug/L
	carbon tetrachloride	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	chloroethene (vinyl chloride)	<5	U		<5	U		<10	U		<10	U		1	WA	2	ug/L
	chloroform	<5	U		<5	U		<5	U		<5	U		1	WA	100	ug/L
	1,1-dichloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,2-dichloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	100	ug/L
	cis-1,2-dichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	70	ug/L
	2,4-dichlorophenoxyacetic acid	<.2	JU	L	<.2	U		<1.01	JU	L	<1	UJ	Q	1	WA	10	ug/L
	lindane	<.096	U		<.094	U		<.051	U		<.0505	UJ	Q	1	WA	.2	ug/L
	methyl methacrylate	<20	U		<20	U		<10.2	U		<10	U		1	WA	2	ug/L
	phenol	<9.7	U		<9.6	U		<10.2	U		<10	U		1	WA	10	ug/L
	tetrachloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1,1-trichloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	200	ug/L
	trichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	chloride	1830			2260			2010			2180			1	WA	4200	ug/L
	cyanide	<10	U		<10	U		<15.2	U		<33	U		1	WA	40	ug/L
	fluoride	<200	U		<100	U		<29.7	U	V	<62	U		1	WA	4000	ug/L
	iron, total recoverable	<62	U	V	<13.7	U	V	27.4	J	I	23.9	J	I	1	WA	300	ug/L
	manganese, total recoverable	<4.46	U	V	6.64	J	I	.95	J	I	2.6			1	WA	50	ug/L
	nitrate-nitrite as nitrogen	<500	U		294	J	I	308			275			1	WA	2400	ug/L
	selenium, total recoverable	<10	U		<10	U		<66	U		<31	U		1	WA	50	ug/L
+	sodium, total recoverable	***7170***			***4840***			***7190***			4010			1	WA	4600	ug/L
+	sulfate	***5510***			***3640***			***4120***			2980			1	WA	3000	ug/L
	total organic carbon	<5000	U		<5000	U		1220			<273	U		1	WA	10000	ug/L
	total organic halogens	16.3	J	I	20.7	J	I	<120	U		<52	U		1	WA	50	ug/L
	total phosphates (as p)	<2500	U		<2500	U		<67	U		20.6	J	I	1	WA	300	ug/L
Radionuclides																	
	gross alpha	.457	U					8.75	U							15	pCi/L
	nonvolatile beta	2.18	J	I				-1.7	U							50	pCi/L
	radium, total alpha-emitting	.039	U					.355	U							5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-8. Groundwater Monitoring Results for Point-of-Compliance Wells, Met Lab HWMF (Cont.)

WELL AMB 10B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 103337.3 E 51418.3	33.33820 Deg N -81.7322 Deg W	154.3 - 149.3 ft msl	366.4 ft msl	4 " PVC	S	LL

SAMPLE DATE	02/14/00	09/12/00	03/13/01	09/06/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	221.43	219.75	218.29	216.65	ft msl
pH	5.5	6	5.9	5.7	pH
Sp. Conductance	34	38	41	39	uS/cm
Water temperature	18.5	21	19.1	19.7	deg. C
Alkalinity as CaCO3	3	10	13	10	mg/L
Turbidity	.3	.8	.5	.4	NTU
Volumes purged	2.61	3.45	2.24	2.47	well volume
Sampling code					
Synchronous water level	221.3 (03/23/00)	219.8 (09/27/00)	217.7 (03/20/01)	216.8 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	arsenic, total recoverable	<10	U		<10	U		<40	U		<42	U		1	WA	50	ug/L
	barium, total recoverable	8.51	J	I	13.4			14.4			12.5			1	GE	2000	ug/L
	chromium, total recoverable	<3.1	U	V	<10	U		<7	U		<11	U		1	WA	100	ug/L
	lead, total recoverable	<10	U		<10	U		<47	U		<24	U		1	WA	15	ug/L
	mercury, total recoverable	<.5	U		<.5	U		<.7	U		<.3	U		1	WA	2	ug/L
	nickel, total recoverable	<5.71	U	V	<50	U		<26	U		<5	U		1	GE	100	ug/L
	silver, total recoverable	<6.3	JU		<20	U		<5	U		<6.8	U		1	WA	50	ug/L
Organics																	
	acetone	<20	U		<20	U		<7.25	U	V	<10	U		1	WA	10	ug/L
	carbon tetrachloride	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	chloroethene (vinyl chloride)	<5	U		<5	U		<10	U		<10	U		1	WA	2	ug/L
	chloroform	<5	U		<5	U		<5	U		<5	U		1	WA	100	ug/L
	1,1-dichloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,2-dichloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	100	ug/L
	cis-1,2-dichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	70	ug/L
	2,4-dichlorophenoxyacetic acid	<.2	JU	L	<.2	U		<2.02	JU	LQ	<.5	U		20	GE	10	ug/L
	lindane	<.096	U		<.094	U		<.051	JU	Q	<.0194	U		1	GE	.2	ug/L
	methyl methacrylate	<20	U		<20	U					<10	U		1	WA	2	ug/L
	phenol	<9.8	U		<11	U		<10.2	JU	Q	<10	U		1	WA	10	ug/L
	tetrachloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1,1-trichloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	200	ug/L
	trichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	chloride	2900			3570			2960			3150			1	WA	4200	ug/L
	cyanide	<10	U		<10	U		<15.2	U		10.9			1	GE	40	ug/L
	fluoride	<200	U		<100	U		<12.8	U	V	<62	U		1	WA	4000	ug/L
	iron, total recoverable	<6.29	U	V	<16.5	U	V	<25.2	U	V	<192	U		1	WA	300	ug/L
	manganese, total recoverable	<4.91	U	V	4.47	J	I	3.4	J	I	2.7			1	WA	50	ug/L
	nitrate-nitrite as nitrogen	<500	U		310	J	I	306			340			1	GE	2400	ug/L
	selenium, total recoverable	<10	U		<10	U		<66	U		<31	U		1	WA	50	ug/L
+	sodium, total recoverable	***4950***			***5340***			***4630***			***5140***			1	GE	4600	ug/L
	sulfate	1370			1600			1300			<1350	U		1	GE	3000	ug/L
	total organic carbon	<5000	U		<5000	U		310	J	I	<509	U		1	WA	10000	ug/L
	total organic halogens	23.8	J	I	38.2	J	I	<120	U		<52	U		1	WA	50	ug/L
+	total phosphates (as p)	<2500	U		<2500	U		***495***			<101	U		1	WA	300	ug/L
Radionuclides																	
	gross alpha	.285	U					3.36	U							15	pCi/L
	nonvolatile beta	.575	U					3.67	U							50	pCi/L
	radium, total alpha-emitting	.072	U					.686	U							5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-8. Groundwater Monitoring Results for Point-of-Compliance Wells, Met Lab HWMF (Cont.)

WELL AMB 10D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 103293.4 E 51456	33.33817 Deg N -81.7320 Deg W	239.4 - 219.4 ft msl	365.5 ft msl	4 " PVC	S	M

SAMPLE DATE	02/14/00	09/12/00

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	231.12	229.35	*Not Applicable*	*Not Applicable*	ft msl
pH	5.4	5.7			pH
Sp. Conductance	42	45			uS/cm
Water temperature	18.4	19.7			deg. C
Alkalinity as CaCO3	3	7			mg/L
Turbidity	1.9	1.5			NTU
Volumes purged	5.87	7.90			well volume
Sampling code					
Synchronous water level	230.9 (03/23/00)	189.1 (09/27/00)	( )	( )	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	arsenic, total recoverable	<10	U		<10	U										50	ug/L
	barium, total recoverable	14.4			3.33	J	I									2000	ug/L
	chromium, total recoverable	<3.79	U	V	<10	U										100	ug/L
	lead, total recoverable	<10	U		<1.75	JU										15	ug/L
	mercury, total recoverable	<.5	U		<.5	U										2	ug/L
	nickel, total recoverable	<50	U		<5.49	U	V									100	ug/L
	silver, total recoverable	<6.34	JU		<20	U										50	ug/L
Organics																	
	acetone	<20	U		<20	U										10	ug/L
	carbon tetrachloride	<5	U		<5	U										5	ug/L
	chloroethene (vinyl chloride)	<5	U		<5	U										2	ug/L
	chloroform	<5	U		<5	U										100	ug/L
	1,1-dichloroethane	<5	U		<5	U										5	ug/L
	1,2-dichloroethane	<5	U		<5	U										5	ug/L
	1,1-dichloroethylene	<5	U		<5	U										7	ug/L
	trans-1,2-dichloroethylene	<5	U		<5	U										100	ug/L
	cis-1,2-dichloroethylene	<5	U		<5	U										70	ug/L
	2,4-dichlorophenoxyacetic acid	<.2	JU	L	<.2	U										10	ug/L
	lindane	<.099	U		<.092	U										.2	ug/L
	methyl methacrylate	<20	U		<20	U										2	ug/L
	phenol	<9.8	U		<9.4	U										10	ug/L
	tetrachloroethylene	<5	U		<5	U										5	ug/L
	1,1,1-trichloroethane	<5	U		<5	U										200	ug/L
	trichloroethylene	<5	U		<5	U										5	ug/L

II. Monitoring Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	chloride	2650			3030											4200	ug/L
	cyanide	<10	U		<10	U										40	ug/L
	fluoride	<200	U		53	J	I									4000	ug/L
	iron, total recoverable	<101	U	V	88.6	J	I									300	ug/L
	manganese, total recoverable	<3.41	U	V	1.77	J	I									50	ug/L
	nitrate-nitrite as nitrogen	<500	U		119	J	I									2400	ug/L
	selenium, total recoverable	<10	U		<10	U										50	ug/L
+	sodium, total recoverable	***8980***			***8940***											4600	ug/L
+	sulfate	***4270***			***5230***											3000	ug/L
	total organic carbon	<5000	U		<5000	U										10000	ug/L
	total organic halogens	25.5	J	I	48.3	J	I									50	ug/L
	total phosphates (as p)	<2500	U		<2500	U										300	ug/L
Radionuclides																	
	gross alpha	.978	J	I												15	pCi/L
	nonvolatile beta	.857	U													50	pCi/L
	radium, total alpha-emitting	.25	U													5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-8. Groundwater Monitoring Results for Point-of-Compliance Wells, Met Lab HWMF (Cont.)

WELL AMB 16D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 104268.8 E 51557.5	33.34049 Deg N -81.7336 Deg W	233.4 - 213.4 ft msl	380.4 ft msl	2 " PVC	V	M

SAMPLE DATE	02/16/00	09/25/00	03/16/01	09/06/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	230.12	228.6	227.15	225.78	ft msl
pH	5.1	4.7	5	4	pH
Sp. Conductance	24	30	22	23	uS/cm
Water temperature	19.5	23	20.8	22.3	deg. C
Alkalinity as CaCO3	0	0	0	1	mg/L
Turbidity	.7	.4	.9	.4	NTU
Volumes purged	10.0	10.6	2.72		well volume
Sampling code					
Synchronous water level	230 (03/23/00)	228.7 (12/31/00)	227 (03/20/01)	225.7 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	arsenic, total recoverable	<10	U		<10	U		<40	U		<42	U		1	WA	50	ug/L
	barium, total recoverable	<4.35	U	V	3.64	J	I	5.3			5.1	J	I	1	WA	2000	ug/L
	chromium, total recoverable	<10	U		<10	U		2.2	J	I	<11	U		1	WA	100	ug/L
	lead, total recoverable	<10	U		<10	U		<47	U		<24	U		1	WA	15	ug/L
	mercury, total recoverable	<.5	U		<.5	U		<.7	U		<.3	U		1	WA	2	ug/L
	nickel, total recoverable	<7.83	JU	V	<11.2	JU		<26	U		<.56	U	V	1	WA	100	ug/L
	silver, total recoverable	<4.21	U	V	<20	U		<5	U		<6.8	U		1	WA	50	ug/L
Organics																	
	acetone	<20	U		<20	U		6.54	J	I	<10	U		1	WA	10	ug/L
	carbon tetrachloride	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	chloroethene (vinyl chloride)	<5	U		<5	U		<10	U		<10	U		1	WA	2	ug/L
	chloroform	<5	U		<5	U		<5	U		<5	U		1	WA	100	ug/L
	1,1-dichloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,2-dichloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	100	ug/L
	cis-1,2-dichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	70	ug/L
	2,4-dichlorophenoxyacetic acid	<.2	JU	Q	<.2	U		<1.01	U		<1	UJ	Q	1	WA	10	ug/L
	lindane	<.094	U		<.094	U		<.0532	U		<.0505	UJ	Q	1	WA	.2	ug/L
	methyl methacrylate	<20	U		<20	U					<10	U		1	WA	2	ug/L
	phenol	<9.9	JU	Q	<9.6	U		<10.2	U		<10	U		1	WA	10	ug/L
	tetrachloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1,1-trichloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	200	ug/L
	trichloroethylene	3.1	J	I	1.6	J	IK	<5	U		<5	UJ	L	1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	chloride	1490			1620			1960			2210			1	WA	4200	ug/L
	cyanide	<10	U		<10	JU	Q	<15.2	U		<33	U		1	WA	40	ug/L
	fluoride	<200	U		<100	U		<9	U	V	<62	U		1	WA	4000	ug/L
	iron, total recoverable	<5.25	U	V	46.3	J	I	25.5	J	I	20.7	J	I	1	WA	300	ug/L
	manganese, total recoverable	4.46	J	I	4.67	J	I	6.5	J	I	6.4			1	WA	50	ug/L
	nitrate-nitrite as nitrogen	1320			1280			1090			845			1	WA	2400	ug/L
	selenium, total recoverable	<10	U		<10	U		<66	U		<31	U		1	WA	50	ug/L
	sodium, total recoverable	3380			2580			2100			1800			1	WA	4600	ug/L
	sulfate	768	J	I	981			593			567			1	WA	3000	ug/L
	total organic carbon	<5000	U		<5000	U		188	J	I	534	J	I	1	WA	10000	ug/L
	total organic halogens	16.3	J	I	26.9	J	I	<120	U		<52	U		1	WA	50	ug/L
	total phosphates (as p)	<2500	U		<2500	U		<67	U		<101	U		1	WA	300	ug/L
Radionuclides																	
	gross alpha	4.07						13.5	J	I						15	pCi/L
	nonvolatile beta	2.79						-2.73	U							50	pCi/L
	radium, total alpha-emitting	1.6						1.97	J	I						5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-8. Groundwater Monitoring Results for Point-of-Compliance Wells, Met Lab HWMF (Cont.)

WELL AMB 17A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 104056.7 E 51465.4	33.33987 Deg N -81.7335 Deg W	125 - 120 ft msl	379.1 ft msl	4 " PVC	S	MCBC

SAMPLE DATE	02/23/00	09/28/00	02/28/01	08/20/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	217.03	214.05	213.29	211.35	ft msl
pH	4.8	5.3	5.3	5.3	pH
Sp. Conductance	20	20	19	18	uS/cm
Water temperature	18.8	19.6	20.3	26.4	deg. C
Alkalinity as CaCO3	1	7	0	0	mg/L
Turbidity	.4	1.4	2.8	1.5	NTU
Volumes purged	2.34	2.90	2.63	2.25	well volume
Sampling code					
Synchronous water level	216.8 (03/23/00)	214.5 (09/27/00)	212.1 (03/20/01)	202.4 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

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ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	arsenic, total recoverable	<10	U		<10	U		<40	U		<42	U		1	WA	50	ug/L
	barium, total recoverable	<3.28	U	V	3.47	J	I	3.4			2.9	J	I	1	WA	2000	ug/L
	chromium, total recoverable	<10	U		<10	U		2.8	J	I	<11	U		1	WA	100	ug/L
	lead, total recoverable	<10	U		<10	U		<47	U		<24	U		1	WA	15	ug/L
	mercury, total recoverable	<.5	U		<.5	U		.16	J	I	<.3	U		1	WA	2	ug/L
	nickel, total recoverable	<50	U		<50	U		<26	U		<.86	UJ		1	WA	100	ug/L
	silver, total recoverable	<20	U		<20	U		<5	U		<6.8	U		1	WA	50	ug/L
Organics																	
	acetone	<20	U		<20	U		7.76	J	IK	<10	U		1	WA	10	ug/L
	carbon tetrachloride	<5	U		3.5	J	IK	2.07	J	IK	1.07	J	I	1	WA	5	ug/L
	chloroethene (vinyl chloride)	<5	U		<5	U		<10	U		<10	U		1	WA	2	ug/L
	chloroform	<5	U		2.6	J	IK	1.26	J	IK	<5	U		1	WA	100	ug/L
	1,1-dichloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,2-dichloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	100	ug/L
	cis-1,2-dichloroethylene	3.8	J	I	2.3	J	IK	1.74	J	IK	1.69	J	I	1	WA	70	ug/L
	2,4-dichlorophenoxyacetic acid	<.2	U		<.2	U		<1.01	JU	LQ	<1	UJ	L	1	WA	10	ug/L
	lindane	<.098	U		<.096	U		<.0544	JU	LQ	<.1	UJ	L	1	WA	.2	ug/L
	methyl methacrylate	<20	U		<20	U					<10	UJ		1	WA	2	ug/L
	phenol	<9.7	JU	Q	<9.5	U		<10.3	JU	Q	<10	UJ	L	1	WA	10	ug/L
+	tetrachloroethylene	***25***			29	J	K	22.2	J	K	***13.6***			1	WA	5	ug/L
	1,1,1-trichloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	200	ug/L
+	trichloroethylene	***170***			51	J	K	34.5	J	K	***25.7***			1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	chloride	1560			1580			1640			1650			1	WA	4200	ug/L
	cyanide	<10	U		<10	U		<15.2	U		<33	U		1	WA	40	ug/L
	fluoride	<200	U		<100	U		<8.9	U	V	<62	U		1	WA	4000	ug/L
	iron, total recoverable	<54.1	U	V	33.2	J	I	155			19.6	J	I	1	WA	300	ug/L
	manganese, total recoverable	7.01	J	I	4.62	J	I	7.7	J	I	3.9			1	WA	50	ug/L
+	nitrate-nitrite as nitrogen	838			***2570***			888			856			1	WA	2400	ug/L
	selenium, total recoverable	<10	U		8.65	J	I	<66	U		<31	U		1	WA	50	ug/L
	sodium, total recoverable	1870			1740			1590			1560			1	WA	4600	ug/L
	sulfate	<636	U		991			485			571			1	WA	3000	ug/L
	total organic carbon	<5000	JU	Q	5200			151	J	I	347	J	I	1	WA	10000	ug/L
+	total organic halogens	***148***			86.6	J	I	30.6	J	I	***25300***			1	WA	50	ug/L
	total phosphates (as p)	<2500	U		<2500	U		41.5	J	I	15.9	J	I	1	WA	300	ug/L
Radionuclides																	
	gross alpha	.0614	U					7.42	JU	L						15	pCi/L
	nonvolatile beta	.217	U					4.61	U							50	pCi/L
	radium, total alpha-emitting	.055	U					.305	JU	L						5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-8. Groundwater Monitoring Results for Point-of-Compliance Wells, Met Lab HWMF (Cont.)

WELL AMB 18A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 103988.7 E 51418.8	33.33964 Deg N -81.7334 Deg W	136.4 - 131.4 ft msl	377.3 ft msl	4 " PVC	S	MCBC

SAMPLE DATE	02/23/00	09/28/00	02/28/01	08/16/01	
FIELD DATA					
Parameter	**1Q00**	**3Q00**	**1Q01**	**3Q01**	**Unit**
Water Elevation	216.96	213.9	213.1	211.26	ft msl
pH	4.5	5.5	5.4	5.3	pH
Sp. Conductance	23	24	24	23	uS/cm
Water temperature	18.7	20	20	20.1	deg. C
Alkalinity as CaCO3	1	7	1	0	mg/L
Turbidity	.2	1	.4	.4	NTU
Volumes purged	2.64	2.83	2.20	3.32	well volume
Sampling code					
Synchronous water level	216.8 (03/23/00)	214.5 (09/27/00)	211.9 (03/20/01)	211.1 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	arsenic, total recoverable	<10	U		<10	U		<40	U		<42	U		1	WA	50	ug/L
	barium, total recoverable	44.7			6.42	J	I	6.9			7	J	I	1	WA	2000	ug/L
	chromium, total recoverable	<10	U		<10	U		<.92	JU		<11	U		1	WA	100	ug/L
	lead, total recoverable	<10	U		<10	U		<47	U		<24	U		1	WA	15	ug/L
	mercury, total recoverable	<.5	U		<.5	U		<.7	U		<.3	U		1	WA	2	ug/L
	nickel, total recoverable	<6.24	JU	V	<50	U		<26	U		<.74	UJ		1	WA	100	ug/L
	silver, total recoverable	<20	U		<20	U		<5	U		<.79	UJ		1	WA	50	ug/L
Organics																	
	acetone	<20	U		<20	U		18.6	J	K	<10	U		1	WA	10	ug/L
	carbon tetrachloride	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	chloroethene (vinyl chloride)	<5	U		<5	U		<10	U		<10	U		1	WA	2	ug/L
	chloroform	<5	U		<5	U		<5	U		<5	U		1	WA	100	ug/L
	1,1-dichloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,2-dichloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	100	ug/L
	cis-1,2-dichloroethylene	2.2	J	I	2	J	IK	1.75	J	IK	1.72	J	IK	1	WA	70	ug/L
	2,4-dichlorophenoxyacetic acid	<.2	U		<.2	U		<1.01	JU	LQ	<1	UJ	Q	1	WA	10	ug/L
	lindane	<.096	U		<.096	U		<.0556	JU	LQ	<.0505	UJ	L	1	WA	.2	ug/L
	methyl methacrylate	<20	U		<20	U					<10	U		1	WA	2	ug/L
	phenol	<9.6	JU	Q	<9.5	U		<10.3	JU	Q	<10	U		1	WA	10	ug/L
	tetrachloroethylene	4.6	J	I	3.9	J	IK	2.79	J	IK	2.44	J	IK	1	WA	5	ug/L
	1,1,1-trichloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	200	ug/L
+	trichloroethylene	***24***			21	J	K	21.8	J	K	19.2	J	K	1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	chloride	2220			2350			2240			2640			1	WA	4200	ug/L
	cyanide	<10	U		<10	U		<15.2	U		<33	U		1	WA	40	ug/L
	fluoride	<200	U		<100	U		<8.98	U	V	<62	U		1	WA	4000	ug/L
	iron, total recoverable	<11.7	U	V	<200	U		18	J	I	<192	U		1	WA	300	ug/L
	manganese, total recoverable	4.88	J	I	3.26	J	I	3.9	J	I	3.9			1	WA	50	ug/L
	nitrate-nitrite as nitrogen	<734	U		<2360	U		717			673			1	WA	2400	ug/L
	selenium, total recoverable	<10	U		<10	U		<66	U		<31	U		1	WA	50	ug/L
	sodium, total recoverable	2310			2130			1980			1980			1	WA	4600	ug/L
	sulfate	<555	U		<968	U		506			573			1	WA	3000	ug/L
	total organic carbon	<5000	JU	Q	7000			146	J	I	<1400	U		1	WA	10000	ug/L
+	total organic halogens	29.8	J	I				13.6	J	I	***12000***			1	WA	50	ug/L
	total phosphates (as p)	<2500	U		<2500	U		31.4	J	I	10.3	J	I	1	WA	300	ug/L
Radionuclides																	
	gross alpha	.838	J	I				-.371	JU	L						15	pCi/L
	nonvolatile beta	.827	U					1.83	U							50	pCi/L
	radium, total alpha-emitting	-.081	U					.468	JU	L						5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-8. Groundwater Monitoring Results for Point-of-Compliance Wells, Met Lab HWMF (Cont.)

WELL AMB 18C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 103983.4 E 51432.8	33.33965 Deg N -81.7334 Deg W	214.2 - 209.2 ft msl	376 ft msl	2 " PVC	V	UL

SAMPLE DATE	02/15/00	09/21/00	03/16/01	09/04/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	229.9	228.39	227.15	318.9	ft msl
pH	4.1	5.4	5.4	5.4	pH
Sp. Conductance	20	20	19	20	uS/cm
Water temperature	19.3	20.8	18.9	20.9	deg. C
Alkalinity as CaCO3	0	1	3	1	mg/L
Turbidity	4.3	2.5	2.9	.9	NTU
Volumes purged	7.77	10.3	2.07	2.62	well volume
Sampling code					
Synchronous water level	229.7 (03/23/00)	229 (12/31/00)	227 (03/20/01)	225.8 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	arsenic, total recoverable	<10	U		<10	U		<40	U		<42	U		1	WA	50	ug/L
	barium, total recoverable	4.25	J	I	4.98	J	I	3.7			4.2	J	I	1	WA	2000	ug/L
	chromium, total recoverable	<10	U		<10	U		1.3	J	I	<11	U		1	WA	100	ug/L
+	lead, total recoverable	***15.7***			***31.4***			10.1	J	I	***25.5***			1	WA	15	ug/L
	mercury, total recoverable	<.5	U		<.5	JU	L	<.7	U		<.05	U	V	1	WA	2	ug/L
	nickel, total recoverable	<6.96	U	V	<50	U		<26	U		<1.2	UJ		1	WA	100	ug/L
	silver, total recoverable	<20	U		<20	U		<5	U		<6.8	U		1	WA	50	ug/L
Organics																	
	acetone	<20	U		<20	U		7.21	J	I	<10	UJ	L	1	WA	10	ug/L
	carbon tetrachloride	<5	U		<5	U		<5	U		<5	UJ	L	1	WA	5	ug/L
	chloroethene (vinyl chloride)	<5	U		<5	U		<10	U		<10	UJ	L	1	WA	2	ug/L
	chloroform	<5	U		<5	U		<5	U		<5	UJ	L	1	WA	100	ug/L
	1,1-dichloroethane	<5	U		<5	U		<5	U		<5	UJ	L	1	WA	5	ug/L
	1,2-dichloroethane	<5	U		<5	U		<5	U		<5	UJ	L	1	WA	5	ug/L
	1,1-dichloroethylene	<5	U		<5	U		<5	U		<5	UJ	L	1	WA	7	ug/L
	trans-1,2-dichloroethylene	<5	U		<5	U		<5	U		<5	UJ	L	1	WA	100	ug/L
	cis-1,2-dichloroethylene	<5	U		<5	U		<5	U		<5	UJ	L	1	WA	70	ug/L
	2,4-dichlorophenoxyacetic acid	<.2	JU	L	<.2	U		<1.01	U		<1	UJ	LQ	1	WA	10	ug/L
	lindane	<.097	U		<.1	U		<.0505	U		<.0532	UJ	Q	1	WA	.2	ug/L
	methyl methacrylate	<20	U		<20	U					<10	UJ	L	1	WA	2	ug/L
	phenol	<9.6	JU	Q	<10	JU	Q	<10.2	U		<10	U		1	WA	10	ug/L
	tetrachloroethylene	<5	U		<5	U		<5	U		<5	UJ	L	1	WA	5	ug/L
	1,1,1-trichloroethane	<5	U		<5	U		<5	U		<5	UJ	L	1	WA	200	ug/L
	trichloroethylene	<5	U		<5	U		<5	U		<5	UJ	L	1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	chloride	1600			1740			1540			1720			1	WA	4200	ug/L
	cyanide	<10	U		<10	U		<15.2	U		<33	U		1	WA	40	ug/L
	fluoride	<200	U		<100	U		<9	U	V	<6.59	U	V	1	WA	4000	ug/L
	iron, total recoverable	<185	U	V	105	J	I	42.6	J	I	41.3	J	I	1	WA	300	ug/L
	manganese, total recoverable	8.65	J	I	9.5	J	I	7	J	I	7			1	WA	50	ug/L
	nitrate-nitrite as nitrogen	<702	U		<777	U		720			1130			2	WA	2400	ug/L
	selenium, total recoverable	<10	U		<10	U		<66	U		<31	U		1	WA	50	ug/L
	sodium, total recoverable	2370			2540			1900			1870			1	WA	4600	ug/L
	sulfate	<969	U		<1260	U		876			1010			1	WA	3000	ug/L
	total organic carbon	<5000	U		<5000	U		159	J	I	247	J	I	1	WA	10000	ug/L
	total organic halogens	16.7	J	I	26.1	J	I	<120	U		<52	U		1	WA	50	ug/L
	total phosphates (as p)	<2500	U		<2500	JU	L	<67	U		<101	U		1	WA	300	ug/L
Radionuclides																	
	gross alpha	2.32	J	I				18.6	J	I						15	pCi/L
	nonvolatile beta	.709	U					-1.56	U							50	pCi/L
	radium, total alpha-emitting	.402	J	I				.52	U							5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-8. Groundwater Monitoring Results for Point-of-Compliance Wells, Met Lab HWMF (Cont.)

WELL AMB 19C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 102941.1 E 51503.7	33.33746 Deg N -81.7312 Deg W	196.7 - 191.7 ft msl	363.7 ft msl	2 " PVC	V	UL

SAMPLE DATE	02/15/00	09/25/00	03/16/01	09/04/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	227.34	226	224.93	290.35	ft msl
pH	5	5.6	5.9	5.8	pH
Sp. Conductance	46	45	41	43	uS/cm
Water temperature	18.3	19.7	19.8	21	deg. C
Alkalinity as CaCO3	2	7	11	10	mg/L
Turbidity	.5	.8	2.1	1.1	NTU
Volumes purged	5.00	3.05	2.22	.558	well volume
Sampling code					
Synchronous water level	327.3 (03/23/00)	225.9 (09/27/00)	224.5 (03/20/01)	223 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

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ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	arsenic, total recoverable	<10	U		<10	U		<40	U		<42	U		1	WA	50	ug/L
	barium, total recoverable	<1.8	U	V	.71	J	I	<1.2	U		1.4	J	I	1	WA	2000	ug/L
	chromium, total recoverable	<7.24	U	V	<5.62	JU		2.8	J	I	3.4	J	I	1	WA	100	ug/L
+	lead, total recoverable	***98.8***			***28.6***			7.3	J	I	4.4	J	I	1	WA	15	ug/L
	mercury, total recoverable	<.5	U		<.5	U		<.7	U		<.05	U	V	1	WA	2	ug/L
	nickel, total recoverable	<50	U		<10.8	JU		<26	U		3.6	J	I	1	WA	100	ug/L
	silver, total recoverable	<5.33	JU		<20	U		<5	U		<6.8	U		1	WA	50	ug/L
Organics																	
	acetone	<20	U		<20	U		<6.09	U	V	<10	U		1	WA	10	ug/L
	carbon tetrachloride	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	chloroethene (vinyl chloride)	<5	U		<5	U		<10	U		<10	U		1	WA	2	ug/L
	chloroform	<5	U		<5	U		<5	U		<5	U		1	WA	100	ug/L
	1,1-dichloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,2-dichloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	100	ug/L
	cis-1,2-dichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	70	ug/L
	2,4-dichlorophenoxyacetic acid	<.2	JU	L	<.2	U		<1.01	U		<1	UJ	LQ	1	WA	10	ug/L
	lindane	<.095	JU	Q	<.092	U		<.051	U		<.116	UJ	Q	1	WA	.2	ug/L
	methyl methacrylate	<20	U		<20	U					<10	U		1	WA	2	ug/L
	phenol	<9.8	JU	Q	<9.6	U		<10.1	U		<10	U		1	WA	10	ug/L
	tetrachloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1,1-trichloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	200	ug/L
	trichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	chloride	2060			2310			2140			2440			1	WA	4200	ug/L
	cyanide	<10	U		<10	JU	Q	<15.2	U		<33	U		1	WA	40	ug/L
	fluoride	<200	U		<100	U		<16	U	V	<6.98	U	V	1	WA	4000	ug/L
	iron, total recoverable	<35.8	U	V	53.7	J	I	48.2	J	I	67.5	J	I	1	WA	300	ug/L
	manganese, total recoverable	<1.22	U	V	<10	U		<7.8	U		1.1	J	I	1	WA	50	ug/L
	nitrate-nitrite as nitrogen	<500	U		194	J	I	70			65			1	WA	2400	ug/L
	selenium, total recoverable	<10	U		<10	U		<66	U		<31	U		1	WA	50	ug/L
+	sodium, total recoverable	***10300***			***9100***			***8120***			***8360***			1	WA	4600	ug/L
+	sulfate	***5160***			***4790***			***4680***			***4600***			1	WA	3000	ug/L
	total organic carbon	<5000	U		<5000	U		205	J	I	508	J	I	1	WA	10000	ug/L
	total organic halogens	26.1	J	I	39	J	I	<120	U		<52	U		1	WA	50	ug/L
	total phosphates (as p)	<2500	U		<2500	U		263			27.7	J	I	1	WA	300	ug/L
Radionuclides																	
	gross alpha	.176	U					.274	U							15	pCi/L
	nonvolatile beta	.636	U					-.156	U							50	pCi/L
	radium, total alpha-emitting	-.036	U					.331	U							5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-9. 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
N 103132.3 E 51932.6	33.33859 Deg N -81.7304 Deg W	240.5 - 220.5 ft msl	364 ft msl	4 " PVC	S	M

SAMPLE DATE	02/16/00	09/12/00	03/13/01	09/06/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	231.37	230	228.89	227.6	ft msl
pH	5.9	6	6.5	6.2	pH
Sp. Conductance	44	43	58	51	uS/cm
Water temperature	18.4	20	20.3	20.4	deg. C
Alkalinity as CaCO3	8	6	15	10	mg/L
Turbidity	1.1	1.2	.5	.5	NTU
Volumes purged	10.8	27.5	2.83	4.71	well volume
Sampling code					
Synchronous water level	231.2 (03/23/00)	229.8 (09/27/00)	228.5 (03/20/01)	227.5 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

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ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	arsenic, total recoverable	<10	U		<10	U		<40	U		<42	U		1	WA	50	ug/L
	barium, total recoverable	<5.76	U	V	3.15	J	I	8.4			11.4			1	WA	2000	ug/L
	chromium, total recoverable	<10	U		<10	U		1.6	J	I	2.2	J	I	1	WA	100	ug/L
	lead, total recoverable	<10	U		<10	U		<47	U		<24	U		1	WA	15	ug/L
	mercury, total recoverable	<.5	U		<.5	U		<.7	U		<.3	U		1	WA	2	ug/L
	nickel, total recoverable	<9.87	JU	V	<6.47	U	V	<26	U		<2	U	V	1	WA	100	ug/L
	silver, total recoverable	<20	U		<20	U		<5	U		<6.8	U		1	WA	50	ug/L
Organics																	
	acetone	<20	U		<20	U		<6.21	U	V	<10	U		1	WA	10	ug/L
	carbon tetrachloride	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	chloroethene (vinyl chloride)	<5	U		<5	U		<10	U		<10	U		1	WA	2	ug/L
	chloroform	<5	U		<5	U		<5	U		<5	U		1	WA	100	ug/L
	1,1-dichloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,2-dichloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	100	ug/L
	cis-1,2-dichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	70	ug/L
	2,4-dichlorophenoxyacetic acid	<.2	U		<.2	U		<1.01	JU	LQ	<1	UJ	Q	1	WA	10	ug/L
	lindane	<.099	U		<.093	U		<.051	JU	Q	<.0505	UJ	Q	1	WA	.2	ug/L
	methyl methacrylate	<20	U		<20	U					<10	U		1	WA	2	ug/L
	phenol	<9.9	JU	Q	<9.4	U		<10.2	JU	Q	<10	U		1	WA	10	ug/L
	tetrachloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1,1-trichloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	200	ug/L
	trichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	chloride	2240			2470			1900			1870			1	WA	4200	ug/L
	cyanide	<10	U		<10	U		<15.2	U		<33	U		1	WA	40	ug/L
	fluoride	<200	U		<100	U		<8.49	U	V	<62	U		1	WA	4000	ug/L
	iron, total recoverable	<16.2	U	V	<8.38	U	V	<17.6	U		<192	U		1	WA	300	ug/L
	manganese, total recoverable	1.28	J	I	<10	U		1.4	J	I	.92	J	I	1	WA	50	ug/L
	nitrate-nitrite as nitrogen	<500	U		448	J	I	428			517			1	WA	2400	ug/L
	selenium, total recoverable	<10	U		<10	U		<66	U		<31	U		1	WA	50	ug/L
+	sodium, total recoverable	***8170***			***6350***			***5780***			***5700***			1	WA	4600	ug/L
+	sulfate	***5650***			***6280***			***5270***			***5060***			1	WA	3000	ug/L
	total organic carbon	<5000	U		5000			130	J	I	293	J	I	1	WA	10000	ug/L
	total organic halogens	15.7	J	I	26.7	J	I	<120	U		<52	U		1	WA	50	ug/L
	total phosphates (as p)	<2500	U		<2500	U		<67	U		<101	U		1	WA	300	ug/L
Radionuclides																	
	gross alpha	.326	U					-.494	U							15	pCi/L
	nonvolatile beta	.621	U					.381	U							50	pCi/L
	radium, total alpha-emitting	.371	J	I				-.508	JU							5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-9. Groundwater Monitoring Results for Background Wells, Met Lab HWMF (Cont.)

WELL AMB 12D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 103602.4 E 51901.6	33.33958 Deg N -81.7314 Deg W	239.4 - 219.4 ft msl	369.8 ft msl	4 " PVC	S	M

SAMPLE DATE	02/14/00	09/14/00	03/13/01	09/06/01	
FIELD DATA					
Parameter	**1Q00**	**3Q00**	**1Q01**	**3Q01**	**Unit**
Water Elevation	231.17	229.45	228.28	226.79	ft msl
pH	5.8	6	6.5	6.8	pH
Sp. Conductance	21	24	30	32	uS/cm
Water temperature	19.5	21.8	19.8	21.6	deg. C
Alkalinity as CaCO3	3	4	15	10	mg/L
Turbidity	.8	1.1	1.4	.8	NTU
Volumes purged	3.06	3.28	2.49	3.01	well volume
Sampling code					
Synchronous water level	230.7 (03/23/00)	230.2 (12/31/00)	227.9 (03/20/01)	227.1 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

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ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	arsenic, total recoverable	<10	U		<10	U		<40	U		<42	U		1	WA	50	ug/L
	barium, total recoverable	7.61	J	I	6.23	J	I	8.2			7.9	J	I	1	WA	2000	ug/L
	chromium, total recoverable	<3.27	U	V	<10	U		2.4	J	I	1.9	J	I	1	WA	100	ug/L
	lead, total recoverable	<10	U		<10	U		<47	U		<24	U		1	WA	15	ug/L
	mercury, total recoverable	<.5	U		<.5	U		<.7	U		<.3	U		1	WA	2	ug/L
	nickel, total recoverable	<50	U		<50	U		<26	U		<1.6	U	V	1	WA	100	ug/L
	silver, total recoverable	<5.19	JU		<20	U		<5	U		<6.8	U		1	WA	50	ug/L
Organics																	
	acetone	<20	U		<20	U		<10	U		<10	U		1	WA	10	ug/L
	carbon tetrachloride	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	chloroethene (vinyl chloride)	<5	U		<5	U		<10	U		<10	U		1	WA	2	ug/L
	chloroform	<5	U		<5	U		<5	U		<5	U		1	WA	100	ug/L
	1,1-dichloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,2-dichloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	100	ug/L
	cis-1,2-dichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	70	ug/L
	2,4-dichlorophenoxyacetic acid	<.2	JU	L	<.2	U		<1.01	JU	LQ	<1	UJ	Q	1	WA	10	ug/L
	lindane	<.095	U		<.1	JU	L	<.051	JU	Q	<.0505	UJ	Q	1	WA	.2	ug/L
	methyl methacrylate	<20	U		<20	U					<10	U		1	WA	2	ug/L
	phenol	<9.9	U		<11	U		<10.2	JU	Q	<10	U		1	WA	10	ug/L
	tetrachloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1,1-trichloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	200	ug/L
	trichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	chloride	1450			1390			1080			1060			1	WA	4200	ug/L
	cyanide	<10	U		<10	U		<15.2	U		<33	U		1	WA	40	ug/L
	fluoride	<200	U		<100	U		<6.71	U	V	<62	U		1	WA	4000	ug/L
	iron, total recoverable	<14.3	U	V	12.3	J	I	74.9			33.6	J	I	1	WA	300	ug/L
	manganese, total recoverable	15.4			7.71	J	I	4.9	J	I	7.3			1	WA	50	ug/L
	nitrate-nitrite as nitrogen	650			816			752			864			1	WA	2400	ug/L
	selenium, total recoverable	<10	U		<10	U		<66	U		<31	U		1	WA	50	ug/L
	sodium, total recoverable	1280			1160			2230			1820			1	WA	4600	ug/L
	sulfate	904	J	I	1040			664			463			1	WA	3000	ug/L
	total organic carbon	<5000	U		<5000	U		1860			1920			1	WA	10000	ug/L
	total organic halogens	<120	U		15.7	J	I	<120	U		<52	U		1	WA	50	ug/L
	total phosphates (as p)	<2500	U		<2500	U		<67	U		14.1	J	I	1	WA	300	ug/L
Radionuclides																	
	gross alpha	.494	U					13.8	U							15	pCi/L
	nonvolatile beta	1.5	J	I				1.58	U							50	pCi/L
	radium, total alpha-emitting	.148	U					.844	U							5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-9. Groundwater Monitoring Results for Background Wells, Met Lab HWMF (Cont.)

WELL MSB 29B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 107319.2 E 51217.5	33.34668 Deg N -81.7405 Deg W	151.7 - 145.1 ft msl	365 ft msl	4 " PVC	S	LL

SAMPLE DATE	02/15/00	08/25/00	03/06/01	08/24/01	
FIELD DATA					
Parameter	**1Q00**	**3Q00**	**1Q01**	**3Q01**	**Unit**
Water Elevation	222.56	221.09	219.69	218.56	ft msl
pH	5.6	5	5.5	5.3	pH
Sp. Conductance	28	28	30	29	uS/cm
Water temperature	16.9	21	19.2	22.7	deg. C
Alkalinity as CaCO3	1	0	1	0	mg/L
Turbidity	1.1	.9	.3	.2	NTU
Volumes purged	.020	2.47	2.33	2.12	well volume
Sampling code	NX				
Synchronous water level	222.4 (03/23/00)	223.1 (12/31/00)	219.4 (03/20/01)	218.4 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	arsenic, total recoverable	<10	U		4.77	J	I	<40	U		<42	U		1	WA	50	ug/L
	barium, total recoverable	7.35	J	I	7.98	J	I	9.3			<8.9	U	V	1	WA	2000	ug/L
	chromium, total recoverable	<4.65	U	V	<10	U		1.4	J	I	2.4	J	I	1	WA	100	ug/L
	lead, total recoverable	<10	U		<10	U		<47	U		<24	U		1	WA	15	ug/L
	mercury, total recoverable	<.5	U		<.5	U		<.7	U		<.3	U		1	WA	2	ug/L
	nickel, total recoverable	<50	U		<50	U		<26	U		<4.1	U		1	WA	100	ug/L
	silver, total recoverable	<4.08	JU		<20	U		<5	U		<6.8	U		1	WA	50	ug/L
Organics																	
	acetone	<20	U		<20	U		8.81	J	I	<10	U		1	WA	10	ug/L
	carbon tetrachloride	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	chloroethene (vinyl chloride)	<5	U		<5	U		<10	U		<10	U		1	WA	2	ug/L
	chloroform	<5	U		<5	U		<5	U		<5	U		1	WA	100	ug/L
	1,1-dichloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,2-dichloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene	<5	U		<5	U					<5	U		1	WA	100	ug/L
	cis-1,2-dichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	70	ug/L
	2,4-dichlorophenoxyacetic acid	<.2	JU	L	<.2	U		<1.01	JU	Q	<1	UJ	LQ	1	WA	10	ug/L
	lindane	<.094	JU	Q	<.094	U		<.051	U		<.0521	UJ	Q	1	WA	.2	ug/L
	methyl methacrylate	<20	U		<20	U					<10	U		1	WA	2	ug/L
	phenol	<9.7	JU	Q	<9.3	JU	Q	<10.3	U		<10	U		1	WA	10	ug/L
	tetrachloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1,1-trichloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	200	ug/L
	trichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	chloride	2510			2720			2630	J	Q	2830			1	WA	4200	ug/L
	cyanide	<10	U		<10	U		<15.2	U		<33	U		1	WA	40	ug/L
	fluoride	<200	U		<100	U		<11.6	U	V	<11.5	U	V	1	WA	4000	ug/L
	iron, total recoverable	<16.2	U	V	35.7	J	I	20.2	J	I	20.6	J	I	1	WA	300	ug/L
	manganese, total recoverable	<2.42	U	V	1.66	J	I	1.1	J	I	1.3	J	I	1	WA	50	ug/L
	nitrate-nitrite as nitrogen	1420			1420			1400			1450			2	WA	2400	ug/L
	selenium, total recoverable	<10	U		<10	U		<66	U		<31	U		1	WA	50	ug/L
	sodium, total recoverable	2720			2660			2290			2350			1	WA	4600	ug/L
	sulfate	413	J	I	1160			<435	JU	Q	483			1	WA	3000	ug/L
	total organic carbon	<5000	U		<5000	U		102	J	IQ	371	J	I	1	WA	10000	ug/L
	total organic halogens	23.3	J	I	24.4	J	I	<133	U		<52	U		1	WA	50	ug/L
	total phosphates (as p)	<2500	U		<2500	U		8.73	J	I	<101	UJ	Q	1	WA	300	ug/L
Radionuclides																	
	gross alpha	1.19	J	I				24.9	J	I						15	pCi/L
	nonvolatile beta	1.5	J	I				10.7	U							50	pCi/L
	radium, total alpha-emitting	.417	J	I				1.33	J	I						5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-9. Groundwater Monitoring Results for Background Wells, Met Lab HWMF (Cont.)

WELL MSB 29C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 107315 E 51206.6	33.34665 Deg N -81.7405 Deg W	179.7 - 174.1 ft msl	365 ft msl	4 " PVC	S	UL

SAMPLE DATE	02/15/00	08/25/00	03/06/01	08/24/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	228.47	227.41	225.95	225	ft msl
pH	5.5	4.9	5	4.9	pH
Sp. Conductance	28	29	28	28	uS/cm
Water temperature	18.9	20.7	19.2	21.9	deg. C
Alkalinity as CaCO3	2	0	0	0	mg/L
Turbidity	1.1	.9	.4	.1	NTU
Volumes purged	5.39	2.78	2.39	2.52	well volume
Sampling code					
Synchronous water level	228.4 (03/23/00)	230.1 (12/31/00)	225.7 (03/20/01)	224.6 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	arsenic, total recoverable	<10	U		<3.99	JU		<40	U		<42	U		1	WA	50	ug/L
	barium, total recoverable	6	J	I	5.96	J	I	5.2			<5.3	U	V	1	WA	2000	ug/L
	chromium, total recoverable	<6.03	U	V	<10	U		<7	U		1.8	J	I	1	WA	100	ug/L
	lead, total recoverable	<10	U		<10	U		<47	U		<24	U		1	WA	15	ug/L
	mercury, total recoverable	<.5	U		<.5	U		<.7	U		<.3	U		1	WA	2	ug/L
	nickel, total recoverable	<50	U		<50	U		<26	U		<.42	UJ		1	WA	100	ug/L
	silver, total recoverable	<20	U		<20	U		<5	U		<6.8	U		1	WA	50	ug/L
Organics																	
	acetone	<20	U		<20	U		7.58	J	I	<10	UJ	L	1	WA	10	ug/L
	carbon tetrachloride	<5	U		<5	U		<5	U		<5	UJ	L	1	WA	5	ug/L
	chloroethene (vinyl chloride)	<5	U		<5	U		<10	U		<10	UJ	L	1	WA	2	ug/L
	chloroform	<5	U		<5	U		<5	U		<5	UJ	L	1	WA	100	ug/L
	1,1-dichloroethane	<5	U		<5	U		<5	U		<5	UJ	L	1	WA	5	ug/L
	1,2-dichloroethane	<5	U		<5	U		<5	U		<5	UJ	L	1	WA	5	ug/L
	1,1-dichloroethylene	<5	U		<5	U		<5	U		<5	UJ	L	1	WA	7	ug/L
	trans-1,2-dichloroethylene	<5	U		<5	U					<5	UJ	L	1	WA	100	ug/L
	cis-1,2-dichloroethylene	<5	U		<5	U		<5	U		<5	UJ	L	1	WA	70	ug/L
	2,4-dichlorophenoxyacetic acid	<.2	JU	L	<.2	U		<1.02	JU	Q	<1	UJ	LQ	1	WA	10	ug/L
	lindane	<.093	JU	Q	<.093	U		<.051	U		<.051	UJ	Q	1	WA	.2	ug/L
	methyl methacrylate	<20	U		<20	U					<10	UJ	L	1	WA	2	ug/L
	phenol	<9.7	JU	Q	<9.4	JU	Q	<10.2	U		<10	U		1	WA	10	ug/L
	tetrachloroethylene	<5	U		<5	U		<5	U		<5	UJ	L	1	WA	5	ug/L
	1,1,1-trichloroethane	<5	U		<5	U		<5	U		<5	UJ	L	1	WA	200	ug/L
	trichloroethylene	<5	U		<5	U		<5	U		<5	UJ	L	1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	chloride	2510			2820			2480	J	Q	3000			1	WA	4200	ug/L
	cyanide	<10	U		<10	U		<15.2	U		<33	U		1	WA	40	ug/L
	fluoride	<200	U		<100	U		<9.8	U	V	<7.5	U	V	1	WA	4000	ug/L
	iron, total recoverable	<5.47	U	V	<7.5	U	V	18.7	J	I	89.8	J	I	1	WA	300	ug/L
	manganese, total recoverable	<1.86	U	V	2.26	J	I	1.6	J	I	1.6			1	WA	50	ug/L
	nitrate-nitrite as nitrogen	1320			1270			1260			1320			2	WA	2400	ug/L
	selenium, total recoverable	<10	U		<10	U		<66	U		<31	U		1	WA	50	ug/L
	sodium, total recoverable	2390			2650			2160			2300			1	WA	4600	ug/L
	sulfate	591	J	I	1290			<457	JU	Q	479			1	WA	3000	ug/L
	total organic carbon	<5000	U		<5000	U		546	J	IQ	504	J	I	1	WA	10000	ug/L
+	total organic halogens	25.7	J	I	24.2	J	I	<120	U		***1210***			1	WA	50	ug/L
	total phosphates (as p)	<2500	U		<2500	U		<67	U		<101	UJ	Q	1	WA	300	ug/L
Radionuclides																	
	gross alpha	2.45						-.929	U							15	pCi/L
	nonvolatile beta	2.56	J	I				-.382	U							50	pCi/L
	radium, total alpha-emitting	.603	J	IL				3.64	J	IY						5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-9. Groundwater Monitoring Results for Background Wells, Met Lab HWMF (Cont.)

WELL MSB 29D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 107323.3 E 51226.9	33.34670 Deg N -81.7404 Deg W	227.6 - 207 ft msl	364.9 ft msl	4 " PVC	S	M

SAMPLE DATE	02/16/00	09/28/00	03/06/01	08/24/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	230.59	229.24	228.16	217.3	ft msl
pH	5.6	5.5	6.4	4.8	pH
Sp. Conductance	30	33	36	32	uS/cm
Water temperature	18.3	19.8	20.3	21.9	deg. C
Alkalinity as CaCO3	1	0	13	0	mg/L
Turbidity	1.2	1.8	1.2	.2	NTU
Volumes purged	3.32	8.51	2.84	2.87	well volume
Sampling code					
Synchronous water level	230.4 (03/23/00)	232.4 (12/31/00)	228.1 (03/20/01)	226.9 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	arsenic, total recoverable	<10	U		<10	U		<40	U		<42	U		1	WA	50	ug/L
	barium, total recoverable	<8.64	U	V	11.5			14.4			<10.8	U	V	1	WA	2000	ug/L
	chromium, total recoverable	<10	U		<3.08	JU		3.3	J	I	2.1	J	I	1	WA	100	ug/L
	lead, total recoverable	11.2			3.11	J	I	<47	U		<24	U		1	WA	15	ug/L
	mercury, total recoverable	<.5	U		<.5	U		<.7	U		<.3	U		1	WA	2	ug/L
	nickel, total recoverable	<10.9	JU	V	<5.27	JU		3.1	J	I	<1.3	UJ		1	WA	100	ug/L
	silver, total recoverable	<5.32	JU	V	<20	U		<5	U		<6.8	U		1	WA	50	ug/L
Organics																	
	acetone	<20	U		<20	U		<10	U		<10	U		1	WA	10	ug/L
	carbon tetrachloride	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	chloroethene (vinyl chloride)	<5	U		<5	U		<10	U		<10	U		1	WA	2	ug/L
	chloroform	<5	U		<5	U		<5	U		<5	U		1	WA	100	ug/L
	1,1-dichloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,2-dichloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene	<5	U		<5	U					<5	U		1	WA	100	ug/L
	cis-1,2-dichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	70	ug/L
	2,4-dichlorophenoxyacetic acid	<.2	U		<.2	U		<1.02	JU	Q	<1	UJ	LQ	1	WA	10	ug/L
	lindane	<.096	U		<.099	U		<.051	U		<.0521	UJ	LQ	1	WA	.2	ug/L
	methyl methacrylate	<20	U		<20	U					<10	U		1	WA	2	ug/L
	phenol	<9.6	JU	Q	<10	JU	Q	<10.3	U		10	R	L	1	WA	10	ug/L
	tetrachloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1,1-trichloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	200	ug/L
	trichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	chloride	2790			3010			2850	J	Q	3120			1	WA	4200	ug/L
	cyanide	<10	U		<10	U		<15.2	U		<33	U		1	WA	40	ug/L
	fluoride	<200	U		<100	U		<10.4	U	V	<7.43	U	V	1	WA	4000	ug/L
+	iron, total recoverable	***845***			169	J	I	239			<192	U		1	WA	300	ug/L
	manganese, total recoverable	14.5			1.38	J	I	1.4	J	I	1	J	I	1	WA	50	ug/L
+	nitrate-nitrite as nitrogen	1600			***3340***			1760			1800			2	WA	2400	ug/L
	selenium, total recoverable	<10	U		<10	U		<66	U		<31	U		1	WA	50	ug/L
	sodium, total recoverable	4120			3830			3320			3230			1	WA	4600	ug/L
	sulfate	784	J	I	862			<482	JU	Q	560			1	WA	3000	ug/L
	total organic carbon	<5000	U		<5000	U		301	J	IQ	442	J	I	1	WA	10000	ug/L
+	total organic halogens	21.5	J	I	34.8	J	I	<120	U		***1760***			1	WA	50	ug/L
	total phosphates (as p)	<2500	U		<2500	U		<67	U		<101	UJ	Q	1	WA	300	ug/L
Radionuclides																	
+	gross alpha	***18.1***						11.5	U							15	pCi/L
	nonvolatile beta	6.81						4.94	U							50	pCi/L
+	radium, total alpha-emitting	***6.27***						***8.83***		Y						5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-9. Groundwater Monitoring Results for Background Wells, Met Lab HWMF (Cont.)

WELL MSB 43A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 107275.3 E 49293.7	33.34344 Deg N -81.7454 Deg W	140.5 - 134.9 ft msl	357.7 ft msl	4 " PVC	S	LL

SAMPLE DATE	02/11/00	09/10/00	03/06/01	09/14/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	227.87	226.23	224.9	223.99	ft msl
pH	5.1	5.7	7	4.1	pH
Sp. Conductance	25	30	43	27	uS/cm
Water temperature	19.3	22.5	14.9		deg. C
Alkalinity as CaCO3	0	8	5	10	mg/L
Turbidity	.5	.4	2.7	.5	NTU
Volumes purged	2.60	2.46	2.10		well volume
Sampling code					
Synchronous water level	227.6 (03/23/00)	229 (12/31/00)	224.9 (03/20/01)	223.9 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	arsenic, total recoverable	<10	U		<10	U		<40	U		<42	U		1	WA	50	ug/L
	barium, total recoverable	9.54	J	I	13.8			29.7			8.5			1	WA	2000	ug/L
	chromium, total recoverable	<5.34	U	V	<10	U		2.1	J	I	<11	U		1	WA	100	ug/L
	lead, total recoverable	<1.93	JU		2.21	J	I	17.8	J	I	4.2	J	I	1	WA	15	ug/L
	mercury, total recoverable	<.5	U		<.5	U		<.7	U		<.3	U		1	WA	2	ug/L
	nickel, total recoverable	<50	U		<10.4	U	V	<26	U		<1	U	V	1	WA	100	ug/L
	silver, total recoverable	<5.07	JU		<20	U		<5	U		<6.8	U		1	WA	50	ug/L
Organics																	
	acetone	<20	U		<20	U		6.14	J	I	<10	U		1	WA	10	ug/L
	carbon tetrachloride	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	chloroethene (vinyl chloride)	<5	U		<5	U		<10	U		<10	U		1	WA	2	ug/L
	chloroform	<5	U		<5	U		<5	U		<5	U		1	WA	100	ug/L
	1,1-dichloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,2-dichloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene	<5	U		<5	U					<5	U		1	WA	100	ug/L
	cis-1,2-dichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	70	ug/L
	2,4-dichlorophenoxyacetic acid	<.2	JU	LQ	<.2	U		<1.01	JU	Q	<1	UJ	Q	1	WA	10	ug/L
	lindane	<.1	JU	Q	<.099	U		<.051	U		<.111	U		1	WA	.2	ug/L
	methyl methacrylate	<20	U		<20	U					<10	U		1	WA	2	ug/L
	phenol	<10	JU	Q	<10	U		<10.4	U		<10	UJ	Q	1	WA	10	ug/L
	tetrachloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1,1-trichloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	200	ug/L
	trichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	chloride	1290			1550			1300	J	Q	1720			1	WA	4200	ug/L
	cyanide	<10	U		<10	U		<15.2	U		<33	U		1	WA	40	ug/L
	fluoride	<200	U		<100	U		<8.64	U	V	<62	U		1	WA	4000	ug/L
	iron, total recoverable	<6.23	U	V	<5.47	U	V	80.5			<192	U		1	WA	300	ug/L
	manganese, total recoverable	<2.58	U	V	2.03	J	I	9.4			2.5			1	WA	50	ug/L
	nitrate-nitrite as nitrogen	1570			1750			1650			1830			2	WA	2400	ug/L
	selenium, total recoverable	<10	U		8.21	J	I	<66	U		<31	U		1	WA	50	ug/L
	sodium, total recoverable	2070			2100			2040			2020			1	WA	4600	ug/L
	sulfate	<1000	U		709			366	J	Q	312	J	I	1	WA	3000	ug/L
	total organic carbon	5700			<5000	U		348	J	IQ	437	J	I	1	WA	10000	ug/L
	total organic halogens	<120	U					<120	U		<52	U		1	WA	50	ug/L
	total phosphates (as p)	<2500	U		<2500	U		7.04	J	I	14.1	J	I	1	WA	300	ug/L
Radionuclides																	
	gross alpha	.471	U					.908	U							15	pCi/L
	nonvolatile beta	1.2	U					8.78	U							50	pCi/L
	radium, total alpha-emitting	.254	U					1.24	J	IY						5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-9. Groundwater Monitoring Results for Background Wells, Met Lab HWMF (Cont.)

WELL MSB 43B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 107274.6 E 49311.8	33.34346 Deg N -81.7454 Deg W	175.5 - 169.9 ft msl	357.8 ft msl	4 " PVC	S	UL

SAMPLE DATE	02/11/00	09/10/00	03/06/01	08/29/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	228	226.4	225.1	223.91	ft msl
pH	4.7	5.1	5.2	4.9	pH
Sp. Conductance	24	24	23	23	uS/cm
Water temperature	19.3	20.8	18.2	21.9	deg. C
Alkalinity as CaCO3	0	0	3	0	mg/L
Turbidity	.5	.6	1.9	.6	NTU
Volumes purged	2.50	2.49	2.13	2.24	well volume
Sampling code					
Synchronous water level	227.8 (03/23/00)	229 (12/31/00)	225 (03/20/01)	224 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

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ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	arsenic, total recoverable	<10	U		<10	U		<40	U		<42	U		1	WA	50	ug/L
	barium, total recoverable	<3.22	U	V	2.89	J	I	3.1			3.1	J	I	1	WA	2000	ug/L
	chromium, total recoverable	<10	U		<10	U		1.7	J	I	6.9	J	I	1	WA	100	ug/L
	lead, total recoverable	<10	U		<10	U		7.5	J	I	5.4	J	I	1	WA	15	ug/L
	mercury, total recoverable	<.5	U		<.5	U		<.7	U		<.3	U		1	WA	2	ug/L
	nickel, total recoverable	<50	U		<50	U		<26	U		2.5	J	I	1	WA	100	ug/L
	silver, total recoverable	<20	U		<20	U		<5	U		<6.8	U		1	WA	50	ug/L
Organics																	
	acetone	<20	U		<20	U		7.56	J	I	<10	U		1	WA	10	ug/L
	carbon tetrachloride	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	chloroethene (vinyl chloride)	<5	U		<5	U		<10	U		<10	U		1	WA	2	ug/L
	chloroform	<5	U		<5	U		<5	U		<5	U		1	WA	100	ug/L
	1,1-dichloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,2-dichloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene	<5	U		<5	U					<5	U		1	WA	100	ug/L
	cis-1,2-dichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	70	ug/L
	2,4-dichlorophenoxyacetic acid	<.2	JU	LQ	<.2	U		<1.01	U		<1	UJ	Q	1	WA	10	ug/L
	lindane	<.11	JU	Q	<.097	U		<.051	U		<.116	UJ	Q	1	WA	.2	ug/L
	methyl methacrylate	<20	U		<20	U					<10	U		1	WA	2	ug/L
	phenol	<11	JU	Q	<10	U		<10.2	U		<10	UJ	Q	1	WA	10	ug/L
	tetrachloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1,1-trichloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	200	ug/L
	trichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	chloride	1490			1820			1480	J	Q	1760			1	WA	4200	ug/L
	cyanide	<10	U		<10	U		<15.2	U		<33	U		1	WA	40	ug/L
	fluoride	<200	U		<100	U		<7.75	U	V	<7.42	U	V	1	WA	4000	ug/L
	iron, total recoverable	<15.3	U	V	<9.65	U	V	68	J	I	45.6	J	I	1	WA	300	ug/L
	manganese, total recoverable	<2.02	U	V	.67	J	I	2.1	J	I	2			1	WA	50	ug/L
	nitrate-nitrite as nitrogen	1430			1540			1510			1540			2	WA	2400	ug/L
	selenium, total recoverable	<10	U		<10	U		<66	U		<31	U		1	WA	50	ug/L
	sodium, total recoverable	2390			2220			1980			2110			1	WA	4600	ug/L
	sulfate	<1000	U		1030			425	J	Q	449			1	WA	3000	ug/L
	total organic carbon	<5000	U		<5000	U		456	J	IQ	486	J	I	1	WA	10000	ug/L
+	total organic halogens	<120	U		21.1	J	I	<120	U		***1810***			1	WA	50	ug/L
	total phosphates (as p)	<2500	U		<2500	U		<67	U		<101	U		1	WA	300	ug/L
Radionuclides																	
	gross alpha	2.57						2.85	U							15	pCi/L
	nonvolatile beta	1.98	J	I				4.75	U							50	pCi/L
	radium, total alpha-emitting	.895	J	I				1.88	J	IY						5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-9. Groundwater Monitoring Results for Background Wells, Met Lab HWMF (Cont.)

WELL MSB 43D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 107274.2 E 49322	33.34348 Deg N -81.7454 Deg W	220.8 - 200.2 ft msl	358 ft msl	4 " PVC	S	M/GC

SAMPLE DATE	02/11/00	09/10/00	03/06/01	08/29/01	
FIELD DATA					
Parameter	**1Q00**	**3Q00**	**1Q01**	**3Q01**	**Unit**
Water Elevation	230.1	228.63	226.9	226.31	ft msl
pH	3.3	4.8	5	4.5	pH
Sp. Conductance	23	23	20	23	uS/cm
Water temperature	19.7	21.5	15.6	22	deg. C
Alkalinity as CaCO3	0	0	0	0	mg/L
Turbidity	.6	.3	2	.3	NTU
Volumes purged	2.66	3.01	2.06	2.23	well volume
Sampling code					
Synchronous water level	229.9 (03/23/00)	231.4 (12/31/00)	227.3 (03/20/01)	226.2 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

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ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	arsenic, total recoverable	<10	U		<10	U		<40	U		<42	U		1	WA	50	ug/L
	barium, total recoverable	<3.61	U	V	2.98	J	I	3.8			3.6	J	I	1	WA	2000	ug/L
	chromium, total recoverable	<5.34	U	V	<10	U		2.3	J	I	1.4	J	I	1	WA	100	ug/L
+	lead, total recoverable	***25.8***			10.6			***81***			17.4	J	I	1	WA	15	ug/L
	mercury, total recoverable	<.5	U		<.5	U		<.7	U		<.3	U		1	WA	2	ug/L
	nickel, total recoverable	<50	U		<50	U		<26	U		<1.3	UJ		1	WA	100	ug/L
	silver, total recoverable	<20	U		<20	U		<5	U		<6.8	U		1	WA	50	ug/L
Organics																	
	acetone	<20	U		<20	U		<10	U		<10	U		1	WA	10	ug/L
	carbon tetrachloride	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	chloroethene (vinyl chloride)	<5	U		<5	U		<10	U		<10	U		1	WA	2	ug/L
	chloroform	<5	U		<5	U		<5	U		<5	U		1	WA	100	ug/L
	1,1-dichloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,2-dichloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene	<5	U		<5	U					<5	U		1	WA	100	ug/L
	cis-1,2-dichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	70	ug/L
	2,4-dichlorophenoxyacetic acid	<.2	JU	LQ	<.2	U		<1.01	JU	Q	<1	UJ	Q	1	WA	10	ug/L
	lindane	<.11	JU	Q	<.092	U		<.051	U		<.0526	UJ	Q	1	WA	.2	ug/L
	methyl methacrylate	<20	U		<20	U					<10	U		1	WA	2	ug/L
	phenol	<10	JU	Q	<9.4	U		6.56	J	I	<10	UJ	Q	1	WA	10	ug/L
	tetrachloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1,1-trichloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	200	ug/L
	trichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	chloride	1550			1980			1840	J	Q	1870			1	WA	4200	ug/L
	cyanide	<10	U		<10	U		<15.2	U		<33	U		1	WA	40	ug/L
	fluoride	<200	U		<100	U		<12.2	U	V	<8.36	U	V	1	WA	4000	ug/L
	iron, total recoverable	<170	U	V	<10.2	U	V	98.5			<192	U		1	WA	300	ug/L
	manganese, total recoverable	<5.02	U	V	3.39	J	I	4.9	J	I	4			1	WA	50	ug/L
	nitrate-nitrite as nitrogen	973			1060			1020			1070			2	WA	2400	ug/L
	selenium, total recoverable	<10	U		<10	U		<66	U		<31	U		1	WA	50	ug/L
	sodium, total recoverable	1580			1490			1370			1420			1	WA	4600	ug/L
	sulfate	<1000	U		1250			510	J	Q	573			1	WA	3000	ug/L
	total organic carbon	<5000	U		<5000	U		246	J	IQ	526	J	I	1	WA	10000	ug/L
+	total organic halogens	<120	U		21.6	J	I	<120	U		***970***			1	WA	50	ug/L
	total phosphates (as p)	<2500	U		<2500	U		<67	U		<101	U		1	WA	300	ug/L
Radionuclides																	
	gross alpha	1.15	J	I				10.8	U							15	pCi/L
	nonvolatile beta	.716	U					-6.56	U							50	pCi/L
	radium, total alpha-emitting	.346	J	I				1.19	J	IY						5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-10. 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
N 104145.6 E 51482.7	33.34009 Deg N -81.7336 Deg W	157.3 - 152.3 ft msl	380.4 ft msl	4 " PVC	S	LL

SAMPLE DATE	02/14/00	09/26/00	03/15/01	08/25/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	222.8	220.61	219.78	217.98	ft msl
pH	4.3	4.9	5.1	4.8	pH
Sp. Conductance	26	27	26	26	uS/cm
Water temperature	19.4	19.7	21	20.2	deg. C
Alkalinity as CaCO3	0	0	0	0	mg/L
Turbidity	.4	.4	.7	.9	NTU
Volumes purged	2.73	2.78	2.92	2.49	well volume
Sampling code					
Synchronous water level	222.6 (03/23/00)	220.9 (09/27/00)	218.8 (03/20/01)	217.7 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

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ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	arsenic, total recoverable	<10	U		<10	U		<40	U		<42	U		1	WA	50	ug/L
	barium, total recoverable	5.16	J	I	11.6			4.7			5.8	J	I	1	WA	2000	ug/L
	chromium, total recoverable	<4.65	U	V	<10	U		<7	U		<11	U		1	WA	100	ug/L
	lead, total recoverable	<10	U		<10	U		<47	U		<24	U		1	WA	15	ug/L
	mercury, total recoverable	<.5	U		<.5	U		<.7	U		<.3	U		1	WA	2	ug/L
	nickel, total recoverable	<50	U		<9.26	JU		<26	U		<4.1	U		1	WA	100	ug/L
	silver, total recoverable	<20	U		<20	U		<5	U		<6.8	U		1	WA	50	ug/L
Organics																	
+	acetone	<20	U		<20	U		***10.8***			<10	U		1	WA	10	ug/L
	carbon tetrachloride	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	chloroethene (vinyl chloride)	<5	U		<5	U		<10	U		<10	U		1	WA	2	ug/L
	chloroform	<5	U		<5	U		<5	U		<5	U		1	WA	100	ug/L
	1,1-dichloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,2-dichloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	100	ug/L
	cis-1,2-dichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	70	ug/L
	2,4-dichlorophenoxyacetic acid	<.2	JU	L	<.2	U		<1.01	JU	Q	<1	UJ	L	1	WA	10	ug/L
	lindane	<.096	U		<.095	U		<.111	JU	Q	<.0505	U		1	WA	.2	ug/L
	methyl methacrylate	<20	U		<20	U					<10	U		1	WA	2	ug/L
	phenol	<9.6	U		<10	U		<10.2	JU	Q	<10	UJ	Q	1	WA	10	ug/L
	tetrachloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1,1-trichloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	200	ug/L
+	trichloroethylene	4.5	J	I	4.6	J	IK	***8.96***			***5.83***			1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
+	chloride	4060			***4570***			4010			***4410***			1	WA	4200	ug/L
	cyanide	<10	U		<10	U		<15.2	U		<33	U		1	WA	40	ug/L
	fluoride	<200	U		<100	U		<23	U	V	<8.01	U	V	1	WA	4000	ug/L
	iron, total recoverable	<6.12	U	V	66.1	J	I	8.7	J	I	<192	U		1	WA	300	ug/L
	manganese, total recoverable	<3.95	U	V	4.4	J	I	3.2	J	I	3.3			1	WA	50	ug/L
	nitrate-nitrite as nitrogen	<500	U		528			686			1000			2	WA	2400	ug/L
	selenium, total recoverable	<10	U		<10	U		<66	U		<31	U		1	WA	50	ug/L
	sodium, total recoverable	2950			3180			2700			2800			1	WA	4600	ug/L
	sulfate	797	J	I	890			<494	U		499			1	WA	3000	ug/L
	total organic carbon	7800			<5000	U		<134	U		498	J	I	1	WA	10000	ug/L
+	total organic halogens	31.6	J	I	43.8	J	I	<120	U		***3120***			1	WA	50	ug/L
	total phosphates (as p)	<2500	U		<2500	U		<2990	U		<101	U		1	WA	300	ug/L
Radionuclides																	
	gross alpha	1.75	J	I				12.5	U							15	pCi/L
	nonvolatile beta	1.66	J	I				5.53	U							50	pCi/L
	radium, total alpha-emitting	.355	J	I				2.08	J	I						5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-10. Groundwater Monitoring Results for Plume Definition Wells, Met Lab HWMF (Cont.)

WELL AMB 7

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 103919.9 E 51624.9	33.33983 Deg N -81.7328 Deg W	242.1 - 222.1 ft msl	369.9 ft msl	4 " PVC	S	M

SAMPLE DATE	02/15/00	09/14/00	02/28/01	09/07/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	230.78	228.95	227.9	226.5	ft msl
pH	6.5	5.8	6.7	6	pH
Sp. Conductance	64	43	81	44	uS/cm
Water temperature	17.5	24.6	20.7	25.8	deg. C
Alkalinity as CaCO3	22	6	60	12	mg/L
Turbidity	11	5.9	8	1.9	NTU
Volumes purged	.539	5.96	1.91	5.08	well volume
Sampling code	NX				
Synchronous water level	230.7 (03/23/00)	229.7 (12/31/00)	227.4 (03/20/01)	226.1 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	arsenic, total recoverable	<10	U		<10	U		<40	U		<42	U		1	WA	50	ug/L
	barium, total recoverable	10.1			3.2	J	I	6.8			4	J	I	1	WA	2000	ug/L
	chromium, total recoverable	<12.1	U	V	<10	U		2.9	J	I	1.7	J	I	1	WA	100	ug/L
	lead, total recoverable	7.2	J	I	2.34	J	I	<47	U		<24	U		1	WA	15	ug/L
	mercury, total recoverable	<.5	U		<.5	U		<.7	U		<.3	U		1	WA	2	ug/L
	nickel, total recoverable	<11.3	U	V	<50	U		2.9	J	I	<3.4	U	V	1	WA	100	ug/L
	silver, total recoverable	<20	U		<20	U		<5	U		<6.8	U		1	WA	50	ug/L
Organics																	
	acetone	<20	U		<20	U		<10	U		<10	U		1	WA	10	ug/L
	carbon tetrachloride	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	chloroethene (vinyl chloride)	<5	U		<5	U		<10	U		<10	U		1	WA	2	ug/L
	chloroform	<5	U		<5	U		<5	U		<5	U		1	WA	100	ug/L
	1,1-dichloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,2-dichloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	100	ug/L
	cis-1,2-dichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	70	ug/L
	2,4-dichlorophenoxyacetic acid	<.2	JU	L	<.2	U		<1.01	JU	LQ	<1	UJ	Q	1	WA	10	ug/L
	lindane	<.095	JU	Q	<.1	JU	L	<.0505	JU	LQ	<.0505	UJ	L	1	WA	.2	ug/L
	methyl methacrylate	<20	U		<20	U					<10	U		1	WA	2	ug/L
	phenol	<9.8	JU	Q	<11	U		<10.1	JU	Q	<10	U		1	WA	10	ug/L
	tetrachloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1,1-trichloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	200	ug/L
	trichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	chloride	1880			2310			1840			2150			1	WA	4200	ug/L
	cyanide	<10	U		<10	U		<15.2	U		<33	U		1	WA	40	ug/L
	fluoride	<200	U		<100	U		<62.6	U	V	<62	U		1	WA	4000	ug/L
+	iron, total recoverable	***604***			63.2	J	I	269			91.2	J	I	1	WA	300	ug/L
	manganese, total recoverable	<5.41	U	V	1.07	J	I	3.4	J	I	1.2	J	I	1	WA	50	ug/L
	nitrate-nitrite as nitrogen	390	J	I	508			340			591			1	WA	2400	ug/L
	selenium, total recoverable	<10	U		<10	U		<66	U		<31	U		1	WA	50	ug/L
+	sodium, total recoverable	***12400***			***8440***			***10200***			***7280***			1	WA	4600	ug/L
+	sulfate	***19700***			***5240***			***4630***			***3640***			1	WA	3000	ug/L
	total organic carbon	6600			<5000	U		437	J	I	343	J	I	1	WA	10000	ug/L
	total organic halogens	15.2	J	I	31.2	J	I	<120	U		<52	U		1	WA	50	ug/L
	total phosphates (as p)	<2500	U		<2500	U		<21.4	U		14.1	J	I	1	WA	300	ug/L
Radionuclides																	
	gross alpha	1.25	J	I				-.393	JU	L						15	pCi/L
	nonvolatile beta	1.16	U					3.81	U							50	pCi/L
	radium, total alpha-emitting	.11	U					.405	JU	L						5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-10. Groundwater Monitoring Results for Plume Definition Wells, Met Lab HWMF (Cont.)

WELL AMB 7A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 103987.1 E 51591	33.33992 Deg N -81.7330 Deg W	125.6 - 115.6 ft msl	373.6 ft msl	4 " PVC	S	MCBC

SAMPLE DATE	02/23/00	07/28/00	02/28/01	08/16/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	217.22	214.38	213.61	214.8	ft msl
pH	6	6.1	5.9	5.4	pH
Sp. Conductance	24	24	23	26	uS/cm
Water temperature	18.9	20	20.3	20.1	deg. C
Alkalinity as CaCO3	5	4	2	1	mg/L
Turbidity	.2	.7	.9	.7	NTU
Volumes purged	2.89	3.49	2.38	1.85	well volume
Sampling code					
Synchronous water level	217.1 (03/23/00)	214.9 (09/27/00)	277.6 (06/27/01)	211.2 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	arsenic, total recoverable	<10	U		<10	U		<40	U		<42	U		1	WA	50	ug/L
	barium, total recoverable	<5.23	U	V	4.39	J	I	4.1			3.8	J	I	1	WA	2000	ug/L
	chromium, total recoverable	<10	U		<10	U		<7	U		<11	U		1	WA	100	ug/L
	lead, total recoverable	<10	U		<1.88	JU		<47	U		<5	U		1	GE	15	ug/L
	mercury, total recoverable	<.5	U		<.5	U		<.7	U		<.3	U		1	WA	2	ug/L
	nickel, total recoverable	<12.3	JU	V	<50	U		<26	U		<4.1	U		1	WA	100	ug/L
	silver, total recoverable	<6.31	JU	V	<5.9	U	V	<5	U		<6.8	U		1	WA	50	ug/L
Organics																	
	acetone	<20	U		<20	U		8.99	J	IK	<5.25	U	V	1	GE	10	ug/L
	carbon tetrachloride	1	J	I	1.5	J	IK	<5	U		.334	J	I	1	GE	5	ug/L
	chloroethene (vinyl chloride)	<5	U		<5	U		<10	U		<1	U		1	GE	2	ug/L
	chloroform	.74	J	I	1.1	J	IK	<5	U		.31	J	I	1	GE	100	ug/L
	1,1-dichloroethane	<5	U		<5	U		<5	U		<1	U		1	GE	5	ug/L
	1,2-dichloroethane	<5	U		<5	U		<5	U		<1	U		1	GE	5	ug/L
	1,1-dichloroethylene	<5	U		<5	U		<5	U		<1	U		1	GE	7	ug/L
	trans-1,2-dichloroethylene	<5	U		<5	U		<5	U		<1	U		1	GE	100	ug/L
	cis-1,2-dichloroethylene	3	J	I	2.8	J	IK	1.63	J	IK	.99	J	I	1	GE	70	ug/L
	2,4-dichlorophenoxyacetic acid	<.2	U		<.2	U		<1.01	JU	LQ	<.481	U		20	GE	10	ug/L
	lindane	<.097	U		<.099	U		<.0521	JU	LQ	<.0505	UJ	L	1	WA	.2	ug/L
	methyl methacrylate	<20	U		<20	U					<5	U		1	GE	2	ug/L
	phenol	<9.7	JU	LQ	<9.9	U		<10.2	JU	Q	<10	U		1	WA	10	ug/L
+	tetrachloroethylene	***41***			34	J	K	18.1	J	K	***6.96***			1	GE	5	ug/L
	1,1,1-trichloroethane	<5	U		<5	U		<5	U		<1	U		1	GE	200	ug/L
+	trichloroethylene	***73***			76	J	K	41.7	J	K	***14.9***			1	GE	5	ug/L

II. Monitoring Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	chloride	1560			1600			1460			1730			1	WA	4200	ug/L
	cyanide	<10	U		<10	U		<15.2	U		<33	U		1	WA	40	ug/L
	fluoride	<200	U		<200	U		<10.3	U		<62	U		1	WA	4000	ug/L
	iron, total recoverable	<6.62	U	V	<200	U		<11.9	U		<192	U		1	WA	300	ug/L
	manganese, total recoverable	4.89	J	I	4.95	J	I	6.1	J	I	4.9			1	WA	50	ug/L
	nitrate-nitrite as nitrogen	821			827			866			753			1	WA	2400	ug/L
	selenium, total recoverable	<10	U		<10	U		<66	U		<31	U		1	WA	50	ug/L
	sodium, total recoverable	1850			1980			1560			1530			1	GE	4600	ug/L
	sulfate	<627	U		<1320	U		563			<905	U		1	GE	3000	ug/L
	total organic carbon	<5000	JU	Q	<5000	U		242	J	I	<244	U		1	GE	10000	ug/L
	total organic halogens	93	J	I	103	J	IL	35.3	J	I	<13000	U		1	WA	50	ug/L
	total phosphates (as p)	<2500	U		<2500	U		<67	U		<101	U		1	WA	300	ug/L
Radionuclides																	
	gross alpha	1.01	J	I				-2.4	JU	L						15	pCi/L
	nonvolatile beta	.475	U					9.69	U							50	pCi/L
	radium, total alpha-emitting	.052	U					.526	JU	L						5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-10. Groundwater Monitoring Results for Plume Definition Wells, Met Lab HWMF (Cont.)

WELL AMB 7B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 103972 E 51590.3	33.33989 Deg N -81.7330 Deg W	162.9 - 152.9 ft msl	373 ft msl	4 " PVC	S	LL

SAMPLE DATE	02/23/00	07/28/00	02/28/01	08/16/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	222.56	220.86	219.75	219.02	ft msl
pH	5.3	5.8	5.4	5.1	pH
Sp. Conductance	24	24	24	23	uS/cm
Water temperature	19	20	19.6	20.3	deg. C
Alkalinity as CaCO3	2	0	11	0	mg/L
Turbidity	.9	.8	.5	.3	NTU
Volumes purged	2.39	2.79	2.28	2.47	well volume
Sampling code					
Synchronous water level	222.4 (03/23/00)	221 (09/27/00)	219.6 (06/27/01)	218.1 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	arsenic, total recoverable	<10	U		<10	U		<40	U		<42	U		1	WA	50	ug/L
	barium, total recoverable	<2.88	U	V	1.96	J	I	2.9			2.6	J	I	1	WA	2000	ug/L
	chromium, total recoverable	<10	U		<10	U		<.97	JU		<11	U		1	WA	100	ug/L
	lead, total recoverable	<10	U		<10	U		<47	U		3.1	J	I	1	WA	15	ug/L
	mercury, total recoverable	<.5	U		<.5	U		<.7	U		<.3	U		1	WA	2	ug/L
	nickel, total recoverable	<5.95	JU	V	<50	U		<26	U		<4.1	U		1	WA	100	ug/L
	silver, total recoverable	<20	U		<20	U		<5	U		<6.8	U		1	WA	50	ug/L
Organics																	
	acetone	<20	U		<20	U		12.4	J	K	<10	U		1	WA	10	ug/L
	carbon tetrachloride	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	chloroethene (vinyl chloride)	<5	U		<5	U		<10	U		<10	U		1	WA	2	ug/L
	chloroform	<5	U		<5	U		<5	U		<5	U		1	WA	100	ug/L
	1,1-dichloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,2-dichloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	100	ug/L
	cis-1,2-dichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	70	ug/L
	2,4-dichlorophenoxyacetic acid	<.2	U		<.2	U		<1.03	JU	LQ	<1	UJ	Q	1	WA	10	ug/L
	lindane	<.097	U		<.096	U		<.0556	JU	LQ	<.05	UJ	L	1	WA	.2	ug/L
	methyl methacrylate	<20	U		<20	U					<10	U		1	WA	2	ug/L
	phenol	<9.6	JU	LQ	<9.8	U		<10.4	JU	Q	<10	U		1	WA	10	ug/L
	tetrachloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1,1-trichloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	200	ug/L
+	trichloroethylene	***5.9***			7.1	J	K	5.36	J	K	***5.5***			1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	chloride	2580			2640			2530			2880			1	WA	4200	ug/L
	cyanide	<10	U		<10	U		<15.2	U		<33	U		1	WA	40	ug/L
	fluoride	<200	U		<200	U		<9.74	U	V	<6.4	U	V	1	WA	4000	ug/L
	iron, total recoverable	<10.7	U	V	<200	U		<32.3	U		<192	U		1	WA	300	ug/L
	manganese, total recoverable	1.91	J	I	1.82	J	I	2	J	I	2			1	WA	50	ug/L
	nitrate-nitrite as nitrogen	647			640			727			756			1	WA	2400	ug/L
	selenium, total recoverable	<10	U		<10	U		<66	U		<31	U		1	WA	50	ug/L
	sodium, total recoverable	3750			3950			3130			3190			1	WA	4600	ug/L
	sulfate	<1000	U		<1480	U		811			<934	U		1	WA	3000	ug/L
	total organic carbon	<5000	JU	Q	<5000	U		105	J	I	<194	U		1	WA	10000	ug/L
+	total organic halogens	21.1	J	I				<120	U		***4410***			1	WA	50	ug/L
	total phosphates (as p)	<2500	U		<2500	U		<67	U		23.5	J	I	1	WA	300	ug/L
Radionuclides																	
	gross alpha	.761	J	I				-2.37	JU	L						15	pCi/L
	nonvolatile beta	.515	U					1.11	U							50	pCi/L
	radium, total alpha-emitting	.263	U					.318	JU	L						5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-10. Groundwater Monitoring Results for Plume Definition Wells, Met Lab HWMF (Cont.)

WELL AMB 11B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 103154.2 E 51919.5	33.33862 Deg N -81.7305 Deg W	184.5 - 174.5 ft msl	364.6 ft msl	4 " PVC	S	UL

SAMPLE DATE	02/16/00	09/12/00	03/13/01	09/06/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	220.88	219.6	218.99	216.72	ft msl
pH	5.8	6	5.9	5.8	pH
Sp. Conductance	35	36	36	38	uS/cm
Water temperature	18.8	20	19.4	21.3	deg. C
Alkalinity as CaCO3	8	7	4	7	mg/L
Turbidity	.9	1	.8	.3	NTU
Volumes purged	2.54	3.01	2.47	2.39	well volume
Sampling code					
Synchronous water level	220.8 (06/28/00)	219.6 (09/27/00)	218 (03/20/01)	216.7 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

261 Appendix VIII/264 Appendix IX Hazardous Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	arsenic, total recoverable	<10	U		<10	U		<40	U		<42	U		1	WA	50	ug/L
	barium, total recoverable	43.2			18.7			17.6			14.9			1	WA	2000	ug/L
	chromium, total recoverable	<10	U		<10	U		1.5	J	I	<11	U		1	WA	100	ug/L
	lead, total recoverable	<10	U		<1.35	JU		<47	U		<24	U		1	WA	15	ug/L
	mercury, total recoverable	<.5	U		<.5	U		<.7	U		<.3	U		1	WA	2	ug/L
	nickel, total recoverable	<9.87	JU	V	<8.63	U	V	<26	U		<1.8	U	V	1	WA	100	ug/L
	silver, total recoverable	<20	U		<20	U		<5	U		<6.8	U		1	WA	50	ug/L
Organics																	
	acetone	<20	U		<20	U		<6.02	U	V	<10	U		1	WA	10	ug/L
	carbon tetrachloride	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	chloroethene (vinyl chloride)	<5	U		<5	U		<10	U		<10	U		1	WA	2	ug/L
	chloroform	<5	U		<5	U		<5	U		<5	U		1	WA	100	ug/L
	1,1-dichloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,2-dichloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	100	ug/L
	cis-1,2-dichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	70	ug/L
	2,4-dichlorophenoxyacetic acid	<.2	U		<.2	U		<1.01	JU	LQ	<1	UJ	Q	1	WA	10	ug/L
	lindane	<.092	U		<.095	U		<.051	JU	Q	<.0505	UJ	Q	1	WA	.2	ug/L
	methyl methacrylate	<20	U		<20	U					<10	U		1	WA	2	ug/L
	phenol	<10	JU	Q	<9.7	U		<10.2	JU	Q	<10	U		1	WA	10	ug/L
	tetrachloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1,1-trichloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	200	ug/L
	trichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
+	chloride	3680			***4650***			3760			3960			1	WA	4200	ug/L
	cyanide	<10	U		<10	U		<15.2	U		<33	U		1	WA	40	ug/L
	fluoride	<200	U		<100	U		<9.22	U	V	<62	U		1	WA	4000	ug/L
	iron, total recoverable	<41.3	U	V	<13.9	U	V	<52.9	U		31.4	J	I	1	WA	300	ug/L
	manganese, total recoverable	14			9.89	J	I	8.3			8.6			1	WA	50	ug/L
	nitrate-nitrite as nitrogen	<500	U		227	J	I	205			223			1	WA	2400	ug/L
	selenium, total recoverable	<10	U		<10	U		<66	U		<31	U		1	WA	50	ug/L
	sodium, total recoverable	2570			2100			1940		V	2010			1	WA	4600	ug/L
	sulfate	833	J	I	870			539			519			1	WA	3000	ug/L
	total organic carbon	<5000	U		<5000	U		576	J	I	2710			1	WA	10000	ug/L
	total organic halogens	29.9	J	I	56.8	J	I	<120	U		<52	U		1	WA	50	ug/L
	total phosphates (as p)	<2500	U		<2500	U		72.9			<101	U		1	WA	300	ug/L
Radionuclides																	
	gross alpha	.489	U					6.63	U							15	pCi/L
	nonvolatile beta	.835	U					4.85	U							50	pCi/L
	radium, total alpha-emitting	.584	J	I				.333	U							5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-10. Groundwater Monitoring Results for Plume Definition Wells, Met Lab HWMF (Cont.)

WELL AMB 13AR

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 103082 E 51396	33.33760 Deg N -81.7317 Deg W	110.9 - 100.9 ft msl	365.1 ft msl	4 " PVC	S	MCBC

SAMPLE DATE	02/15/00	09/13/00	03/15/01	09/06/01	
FIELD DATA					
Parameter	**1Q00**	**3Q00**	**1Q01**	**3Q01**	**Unit**
Water Elevation	217.22	215.75	214.75	212.75	ft msl
pH	6.7	6.8	6.9	7.1	pH
Sp. Conductance	75	66	67	101	uS/cm
Water temperature	19.6	22.7	20.3	22.2	deg. C
Alkalinity as CaCO3	19	17	47	48	mg/L
Turbidity	1.4	.7	2.6	2.5	NTU
Volumes purged	2.26	2.36	2.13	2.09	well volume
Sampling code					
Synchronous water level	225.1 (06/28/00)	215.8 (09/27/00)	214.1 (03/20/01)	209.2 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

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ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	arsenic, total recoverable	<10	U		<10	U		<40	U		<42	U		1	WA	50	ug/L
	barium, total recoverable	22.2			21.4			22.7			32			1	WA	2000	ug/L
	chromium, total recoverable	<8.45	U	V	<10	U		4.5	J	I	2.3	J	I	1	WA	100	ug/L
	lead, total recoverable	<10	U		<10	U		<47	U		<24	U		1	WA	15	ug/L
	mercury, total recoverable	<.5	U		<.5	U		<.7	U		<.3	U		1	WA	2	ug/L
	nickel, total recoverable	<5.09	U	V	<50	U		<26	U		<1.8	U	V	1	WA	100	ug/L
	silver, total recoverable	<4.34	JU		<20	U		<5	U		<6.8	U		1	WA	50	ug/L
Organics																	
	acetone	<20	U		<20	U		7.94	J	I	<10	U		1	WA	10	ug/L
	carbon tetrachloride	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	chloroethene (vinyl chloride)	<5	U		<5	U		<10	U		<10	U		1	WA	2	ug/L
	chloroform	<5	U		<5	U		<5	U		<5	U		1	WA	100	ug/L
	1,1-dichloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,2-dichloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	100	ug/L
	cis-1,2-dichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	70	ug/L
	2,4-dichlorophenoxyacetic acid	<.2	JU	L	<.2	U		<2.15	JU	Q	<1	UJ	Q	1	WA	10	ug/L
	lindane	<.096	JU	Q	<.1	JU	L	<.051	JU	Q	<.0505	UJ	Q	1	WA	.2	ug/L
	methyl methacrylate	<20	U		<20	U					<10	U		1	WA	2	ug/L
	phenol	<9.8	JU	Q	<11	U		<10.2	JU	Q	<10	U		1	WA	10	ug/L
	tetrachloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1,1-trichloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	200	ug/L
	trichloroethylene	<5	U		<5	U		<5	U		<5	UJ	L	1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	chloride	2380			2640			2830			2680			1	WA	4200	ug/L
	cyanide	<10	U		<10	JU	Q	<15.2	U		<33	U		1	WA	40	ug/L
	fluoride	<200	U		<100	U		<23	U	V	<62	U		1	WA	4000	ug/L
	iron, total recoverable	<40.1	U	V	9.18	J	I	27.7	J	I	27.2	J	I	1	WA	300	ug/L
	manganese, total recoverable	<4.13	U	V	2.93	J	I	2.2	J	I	2.4			1	WA	50	ug/L
	nitrate-nitrite as nitrogen	846			964			1000			966			2	WA	2400	ug/L
	selenium, total recoverable	<10	U		<5.45	JU		<66	U		<31	U		1	WA	50	ug/L
	sodium, total recoverable	3280			2650			3250			3620			1	WA	4600	ug/L
	sulfate	1680			1720			1650			1730			1	WA	3000	ug/L
	total organic carbon	<5000	U		<5000	U		182	J	I	603	J	I	1	WA	10000	ug/L
	total organic halogens	20	J	I	28.6	J	I	<120	U		<52	U		1	WA	50	ug/L
+	total phosphates (as p)	<2500	U		<2500	U		***3200***			<101	U		1	WA	300	ug/L
Radionuclides																	
	gross alpha	.295	U					7.15	U							15	pCi/L
	nonvolatile beta	1.72	J	I				3.37	U							50	pCi/L
	radium, total alpha-emitting	.069	U					.58	U							5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-10. Groundwater Monitoring Results for Plume Definition Wells, Met Lab HWMF (Cont.)

WELL AMB 15D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 104500.6 E 51383.8	33.34072 Deg N -81.7345 Deg W	236.2 - 216.2 ft msl	383.4 ft msl	2 " PVC	V	M

SAMPLE DATE 02/16/00 09/27/00 03/16/01 09/07/01

FIELD DATA

Parameter	1Q00	3Q00	1Q01	3Q01	Unit
Water Elevation	230.62	229	216.7	225.9	ft msl
pH	5.3	5.7	4.6	5	pH
Sp. Conductance	26	26	24	214	uS/cm
Water temperature	21	18.4	20.2	24.3	deg. C
Alkalinity as CaCO3	1	7	2	2	mg/L
Turbidity	2.3	67.2	3.1	9.6	NTU
Volumes purged	10.8	.488	457.	7.78	well volume
Sampling code		NX			
Synchronous water level	238.7 (06/28/00)	230.5 (12/31/00)	227.6 (03/20/01)	217.7 (09/25/01)	ft msl

ANALYTICAL DATA

I. Groundwater Protection Standard

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ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	arsenic, total recoverable	<10	U		<10	U		<40	U		<42	U		1	WA	50	ug/L
	barium, total recoverable	<4.35	U	V	27.4			4.9			5.6	J	I	1	WA	2000	ug/L
	chromium, total recoverable	<4.92	JU	V	27.4			2.9	J	I	4.9	J	I	1	WA	100	ug/L
	lead, total recoverable	<10	U		2.96	J	I	<47	U		4.6	J	I	1	WA	15	ug/L
	mercury, total recoverable	<.5	U		<.5	U		<.7	U		.05	J	I	1	WA	2	ug/L
	nickel, total recoverable	<8.41	JU	V	14.2	J	I	3.5	J	I	5.6			1	WA	100	ug/L
	silver, total recoverable	<4.5	JU	V	<3.57	JU		<5	U		<6.8	U		1	WA	50	ug/L
Organics																	
	acetone	<20	U		<20	U		7.93	J	I	<10	U		1	WA	10	ug/L
	carbon tetrachloride	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	chloroethene (vinyl chloride)	<5	U		<5	U		<10	U		<10	U		1	WA	2	ug/L
	chloroform	<5	U		<5	U		<5	U		<5	U		1	WA	100	ug/L
	1,1-dichloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,2-dichloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1-dichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	7	ug/L
	trans-1,2-dichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	100	ug/L
	cis-1,2-dichloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	70	ug/L
	2,4-dichlorophenoxyacetic acid	<.2	U		<.2	U		<1.01	U		<1	UJ	Q	1	WA	10	ug/L
	lindane	<.094	U		<.11	U		<.0521	U		<.0505	U		1	WA	.2	ug/L
	methyl methacrylate	<20	U		<20	U					<10	U		1	WA	2	ug/L
	phenol	<9.7	JU	Q				<10.2	U		<10	U		1	WA	10	ug/L
	tetrachloroethylene	<5	U		<5	U		<5	U		<5	U		1	WA	5	ug/L
	1,1,1-trichloroethane	<5	U		<5	U		<5	U		<5	U		1	WA	200	ug/L
	trichloroethylene	<5	U		1.7	J	IK	2.64	J	I	<5	UJ	L	1	WA	5	ug/L

II. Monitoring Constituents

ST	Parameter	1Q00	CLP	EPA	3Q00	CLP	EPA	1Q01	CLP	EPA	3Q01	CLP	EPA	DF	Lab	Limit	Unit
Inorganics																	
	chloride	2140			2140			1810			2180			1	WA	4200	ug/L
	cyanide	<10	U		<10	U		<15.2	U		<33	U		1	WA	40	ug/L
	fluoride	<200	U		<100	U		<10	U	V	<62	U		1	WA	4000	ug/L
+	iron, total recoverable	<62.6	U	V	***9010***			***410***			***353***			1	WA	300	ug/L
	manganese, total recoverable	20.8			37.8			17.2			19.8			1	WA	50	ug/L
+	nitrate-nitrite as nitrogen	1080			***2800***			1190			1130			2	WA	2400	ug/L
	selenium, total recoverable	<10	U		<10	U		<66	U		<31	U		1	WA	50	ug/L
	sodium, total recoverable	3280			3110			2940			2410			1	WA	4600	ug/L
	sulfate	<1060	U		2050			1260			655			1	WA	3000	ug/L
	total organic carbon	<5000	U		<5000	U		129	J	I	473	J	I	1	WA	10000	ug/L
	total organic halogens	14.4	J	I	22.5	J	I	<120	U		<52	U		1	WA	50	ug/L
	total phosphates (as p)	<2500	U		<2500	U		19.7	J	I	11.9	J	I	1	WA	300	ug/L
Radionuclides																	
	gross alpha	.772	U					7.3	U							15	pCi/L
	nonvolatile beta	.92	U					-5.52	U							50	pCi/L
	radium, total alpha-emitting	.055	U					.171	U							5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Third Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-11A. Groundwater Monitoring Results for QA Wells, M-Area and Met Lab HWMF

WELL ARP 5D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 98967.7 E 44530	33.31729 Deg N -81.7418 Deg W	225 - 205 ft msl	347.5 ft msl	2 " PVC	V	M/GC

SAMPLE DATE 10/16/01

FIELD DATA

Parameter	3Q01	4Q01	Unit
Water Elevation	*Not Applicable*	210.89	ft msl
pH		0	pH
Sp. Conductance		130	uS/cm
Water temperature		23	deg. C
Alkalinity as CaCO3		0	mg/L
Turbidity		1.3	NTU
Volumes purged		0	well volume
Sampling code		P	

ANALYTICAL DATA

ST	Parameter	3Q01	CLP	EPA	4Q01	CLP	EPA	DF	Lab	Limit	Unit
	chloroethene (vinyl chloride)				<20	UJ	LY	2	LV	2	ug/L
	cis-1,2-dichloroethylene				76	J	LY	2	LV	70	ug/L
	tetrachloroethylene				10.2	J	LY	2	LV	5	ug/L
	trans-1,2-dichloroethylene				<10	UJ	LY	2	LV	100	ug/L
	trichloroethylene				254	J	LY	2	LV	5	ug/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-11A. Groundwater Monitoring Results for QA Wells, M-Area and Met Lab HWMF (Cont.)

WELL MCB 7C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 97139.9 E 44870.6	33.31381 Deg N -81.7374 Deg W	160.7 - 155.7 ft msl	337.7 ft msl	4 " PVC	S	UL

SAMPLE DATE 12/14/01

FIELD DATA

Parameter	3Q01	4Q01	Unit
Water Elevation	*Not Applicable*	188.9	ft msl
pH		11.1	pH
Sp. Conductance		1697	uS/cm
Water temperature		19.3	deg. C
Alkalinity as CaCO3		359	mg/L
Turbidity		.7	NTU
Volumes purged		0	well volume
Sampling code		L	

ANALYTICAL DATA

ST	Parameter	3Q01	CLP	EPA	4Q01	CLP	EPA	DF	Lab	Limit	Unit
	lead, total recoverable				2.5			1	LV	15	ug/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-11A. Groundwater Monitoring Results for QA Wells, M-Area and Met Lab HWMF (Cont.)

WELL MSB 40B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 97684.9 E 48281.6	33.32058 Deg N -81.7294 Deg W	154.7 - 149.1 ft msl	321.7 ft msl	4 " PVC	S	LL

SAMPLE DATE 11/05/01

FIELD DATA

Parameter	3Q01	4Q01	Unit
Water Elevation	*Not Applicable*	199.45	ft msl
pH		4.1	pH
Sp. Conductance		95	uS/cm
Water temperature		19.3	deg. C
Alkalinity as CaCO3		0	mg/L
Turbidity		.2	NTU
Volumes purged		2.09	well volume
Sampling code			

ANALYTICAL DATA

ST	Parameter	3Q01	CLP	EPA	4Q01	CLP	EPA	DF	Lab	Limit	Unit
	1,1,1-trichloroethane				<50	U		10	LV	200	ug/L
	1,1,2,2-tetrachloroethane				<50	U		10	LV	5	ug/L
	1,1-dichloroethane				<50	U		10	LV	5	ug/L
	1,1-dichloroethylene				<50	U		10	LV	7	ug/L
	1,2-dichloroethane				<50	U		10	LV	5	ug/L
	carbon tetrachloride				<50	U		10	LV	5	ug/L
	chlorobenzene				<50	U		10	LV	5	ug/L
	chloroethene (vinyl chloride)				<100	U		10	LV	2	ug/L
	chloroform				<50	U		10	LV	100	ug/L
	cis-1,2-dichloroethylene				44.2	J	I	10	LV	70	ug/L
	tetrachloroethylene				<50	U		10	LV	5	ug/L
	trans-1,2-dichloroethylene				<50	U		10	LV	100	ug/L
+	trichloroethylene				***1160***			10	LV	5	ug/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-11A. Groundwater Monitoring Results for QA Wells, M-Area and Met Lab HWMF (Cont.)

WELL RWM 6

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 102001.5 E 50107.4	33.33311 Deg N -81.7330 Deg W	151.5 - 141.1 ft msl	156.8 ft msl	8 " CS	S	GC/UL/LL/UC/C

SAMPLE DATE 10/09/01

FIELD DATA

Parameter	3Q01	4Q01	Unit
Water Elevation	*Not Applicable*	199.3	ft msl
pH		4.9	pH
Sp. Conductance		27	uS/cm
Water temperature		20.9	deg. C
Alkalinity as CaCO3		0	mg/L
Turbidity		.2	NTU
Volumes purged		0	well volume
Sampling code		C	

ANALYTICAL DATA

ST	Parameter	3Q01	CLP	EPA	4Q01	CLP	EPA	DF	Lab	Limit	Unit
	1,1,1-trichloroethane				<25	U		25	GE	200	ug/L
	1,1,2,2-tetrachloroethane				<25	U		25	GE	5	ug/L
	1,1-dichloroethane				<25	U		25	GE	5	ug/L
	1,1-dichloroethylene				<25	U		25	GE	7	ug/L
	1,2-dichloroethane				<25	U		25	GE	5	ug/L
	carbon tetrachloride				<25	U		25	GE	5	ug/L
	chlorobenzene				<25	U		25	GE	5	ug/L
	chloroethene (vinyl chloride)				<25	U		25	GE	2	ug/L
	chloroform				<25	U		25	GE	100	ug/L
	cis-1,2-dichloroethylene				<25	U		25	GE	70	ug/L
+	tetrachloroethylene				***1490***			25	GE	5	ug/L
	trans-1,2-dichloroethylene				<25	U		25	GE	100	ug/L
+	trichloroethylene				***1870***			25	GE	5	ug/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-11A. Groundwater Monitoring Results for QA Wells, M-Area and Met Lab HWMF (Cont.)

WELL RWM 12

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 106879.2 E 52500.1	33.34780 Deg N -81.7362 Deg W	179.7 - 159.2 ft msl	359.4 ft msl	6 " CS/SS	S	UL/LL

SAMPLE DATE 11/12/01

FIELD DATA

Parameter	3Q01	4Q01	Unit
Water Elevation	*Not Applicable*	207.18	ft msl
pH		4.9	pH
Sp. Conductance		43	uS/cm
Water temperature		18.5	deg. C
Alkalinity as CaCO3		0	mg/L
Turbidity		.2	NTU
Volumes purged		0	well volume
Sampling code		C	

ANALYTICAL DATA

ST	Parameter	3Q01	CLP	EPA	4Q01	CLP	EPA	DF	Lab	Limit	Unit
	1,1,1-trichloroethane				<20	U		20	GE	200	ug/L
	1,1,2,2-tetrachloroethane				<20	U		20	GE	5	ug/L
	1,1-dichloroethane				<20	U		20	GE	5	ug/L
	1,1-dichloroethylene				<20	U		20	GE	7	ug/L
	1,2-dichloroethane				<20	U		20	GE	5	ug/L
	carbon tetrachloride				<20	U		20	GE	5	ug/L
	chlorobenzene				<20	U		20	GE	5	ug/L
	chloroethene (vinyl chloride)				<20	U		20	GE	2	ug/L
	chloroform				<20	U		20	GE	100	ug/L
	cis-1,2-dichloroethylene				15.3	J	I	20	GE	70	ug/L
	tetrachloroethylene				10.9	J	I	20	GE	5	ug/L
	trans-1,2-dichloroethylene				<20	U		20	GE	100	ug/L
+	trichloroethylene				***1650***			20	GE	5	ug/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-11A. Groundwater Monitoring Results for QA Wells, M-Area and Met Lab HWMF (Cont.)

WELL RWM 17D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 104196.8 E 51502	33.34024 Deg N -81.7336 Deg W	232.4 - 217.4 ft msl	380.88 ft msl	6.6 " CS		M/GC

SAMPLE DATE 12/05/01

FIELD DATA

Parameter	3Q01	4Q01	Unit
Water Elevation	*Not Applicable*	218.88	ft msl
pH		4.8	pH
Sp. Conductance		23	uS/cm
Water temperature		21	deg. C
Alkalinity as CaCO3		0	mg/L
Turbidity		.2	NTU
Volumes purged		0	well volume
Sampling code		C	

ANALYTICAL DATA

ST	Parameter	3Q01	CLP	EPA	4Q01	CLP	EPA	DF	Lab	Limit	Unit
	1,1,1-trichloroethane				<1	U		1	GE	200	ug/L
	1,1,2,2-tetrachloroethane				<1	U		1	GE	5	ug/L
	1,1-dichloroethane				<1	U		1	GE	5	ug/L
	1,1-dichloroethylene				<1	U		1	GE	7	ug/L
	1,2-dichloroethane				<1	U		1	GE	5	ug/L
	carbon tetrachloride				<1	U		1	GE	5	ug/L
	chlorobenzene				<1	U		1	GE	5	ug/L
	chloroethene (vinyl chloride)				<1	U		1	GE	2	ug/L
	chloroform				<1	U		1	GE	100	ug/L
	cis-1,2-dichloroethylene				<1	U		1	GE	70	ug/L
	tetrachloroethylene				<1	U		1	GE	5	ug/L
	trans-1,2-dichloroethylene				<1	U		1	GE	100	ug/L
	trichloroethylene				<1	U		1	GE	5	ug/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-11A. Groundwater Monitoring Results for QA Wells, M-Area and Met Lab HWMF (Cont.)

WELL SRW 12C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 103712.5 E 39023.1	33.31878 Deg N -81.7655 Deg W	198.9 - 179.1 ft msl	236.3 ft msl	4 " PVC	S	M

SAMPLE DATE 11/14/01

FIELD DATA

Parameter	3Q01	4Q01	Unit
Water Elevation	*Not Applicable*	188.69	ft msl
pH		5.4	pH
Sp. Conductance		14	uS/cm
Water temperature		19.5	deg. C
Alkalinity as CaCO3		6	mg/L
Turbidity		.8	NTU
Volumes purged		4.87	well volume
Sampling code			

ANALYTICAL DATA

ST	Parameter	3Q01	CLP	EPA	4Q01	CLP	EPA	DF	Lab	Limit	Unit
	1,2-dichloroethane				<5	UJ	LY	1	LV	5	ug/L
	carbon tetrachloride				<5	UJ	LY	1	LV	5	ug/L
	cis-1,2-dichloroethylene				<5	UJ	LY	1	LV	70	ug/L
	tetrachloroethylene				<5	UJ	LY	1	LV	5	ug/L
	trans-1,2-dichloroethylene				<5	UJ	LY	1	LV	100	ug/L
	trichloroethylene				<5	UJ	LY	1	LV	5	ug/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-11A. Groundwater Monitoring Results for QA Wells, M-Area and Met Lab HWMF (Cont.)

WELL SSM 17C2

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N 98433.5 E 50164.8	33.32531 Deg N -81.7259 Deg W	- ft msl	ft msl	4 " PVC		UL

SAMPLE DATE 11/06/01

FIELD DATA

Parameter	3Q01	4Q01	Unit
Water Elevation	*Not Applicable*	*Not Applicable*	ft msl
pH		4.7	pH
Sp. Conductance		57	uS/cm
Water temperature		17.5	deg. C
Alkalinity as CaCO3		0	mg/L
Turbidity		1.4	NTU
Volumes purged		0	well volume
Sampling code			

ANALYTICAL DATA

ST	Parameter	3Q01	CLP	EPA	4Q01	CLP	EPA	DF	Lab	Limit	Unit
	1,1,1-trichloroethane				<10	UJ	Y	2	LV	200	ug/L
	1,1,2,2-tetrachloroethane				<10	UJ	Y	2	LV	5	ug/L
	1,1-dichloroethane				<10	UJ	Y	2	LV	5	ug/L
	1,1-dichloroethylene				<10	UJ	Y	2	LV	7	ug/L
	1,2-dichloroethane				<10	UJ	Y	2	LV	5	ug/L
	carbon tetrachloride				<10	UJ	Y	2	LV	5	ug/L
	chlorobenzene				<10	UJ	Y	2	LV	5	ug/L
	chloroethene (vinyl chloride)				<20	UJ	Y	2	LV	2	ug/L
	chloroform				<10	UJ	Y	2	LV	100	ug/L
	cis-1,2-dichloroethylene				8.21	J	IY	2	LV	70	ug/L
	tetrachloroethylene				14.4	J	Y	2	LV	5	ug/L
	trans-1,2-dichloroethylene				<10	UJ	Y	2	LV	100	ug/L
	trichloroethylene				203	J	Y	2	LV	5	ug/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-11B. Groundwater Monitoring Results for All Wells (Lab Duplicates), M-Area and Met Lab HWMF

WELL ABP 2A

SAMPLE DATE 09/05/01

ANALYTICAL DATA

ST	Parameter	3Q01	CLP	EPA	4Q01	CLP	EPA	DF	Lab	Limit	Unit
	aluminum, total recoverable	<125	U	V						100	ug/L
	sodium, total recoverable	1240								4600	ug/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-11B. Groundwater Monitoring Results for All Wells (Lab Duplicates), M-Area and Met Lab HWMF (Cont.

WELL ABP 3C

SAMPLE DATE 09/05/01

ANALYTICAL DATA

ST	Parameter	3Q01	CLP	EPA	4Q01	CLP	EPA	DF	Lab	Limit	Unit
	1,1,1-trichloroethane	<5	U							200	ug/L
	1,1,2,2-tetrachloroethane	<5	U							5	ug/L
	1,1-dichloroethane	<5	U							5	ug/L
	1,1-dichloroethylene	<5	U							7	ug/L
	1,2-dichloroethane	<5	U							5	ug/L
	carbon tetrachloride	<5	U							5	ug/L
	chlorobenzene	<5	U							5	ug/L
	chloroethene (vinyl chloride)	<10	U							2	ug/L
	chloroform	<5	U							100	ug/L
	cis-1,2-dichloroethylene	<5	U							70	ug/L
+	tetrachloroethylene	***15.2***								5	ug/L
	trans-1,2-dichloroethylene	<5	U							100	ug/L
+	trichloroethylene	***17.9***								5	ug/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-11B. Groundwater Monitoring Results for All Wells (Lab Duplicates), M-Area and Met Lab HWMF (Cont.)

WELL ABP 8C

SAMPLE DATE 08/17/01

ANALYTICAL DATA

ST	Parameter	3Q01	CLP	EPA	4Q01	CLP	EPA	DF	Lab	Limit	Unit
	1,1,1-trichloroethane	<5	U							200	ug/L
	1,1,2,2-tetrachloroethane	<5	U							5	ug/L
	1,1-dichloroethane	<5	U							5	ug/L
	1,1-dichloroethylene	<5	U							7	ug/L
	1,2-dichloroethane	<5	U							5	ug/L
+	aluminum, total recoverable	***3690***								100	ug/L
	carbon tetrachloride	<5	U							5	ug/L
	chlorobenzene	<5	U							5	ug/L
	chloroethene (vinyl chloride)	<10	U							2	ug/L
	chloroform	<5	U							100	ug/L
	cis-1,2-dichloroethylene	<5	U							70	ug/L
+	sodium, total recoverable	***26700***								4600	ug/L
	tetrachloroethylene	1.23	J	I						5	ug/L
	trans-1,2-dichloroethylene	<5	U							100	ug/L
	trichloroethylene	4.11	J	I						5	ug/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-11B. Groundwater Monitoring Results for All Wells (Lab Duplicates), M-Area and Met Lab HWMF (Cont.

WELL AC 3A

SAMPLE DATE 08/25/01

ANALYTICAL DATA

ST	Parameter	3Q01	CLP	EPA	4Q01	CLP	EPA	DF	Lab	Limit	Unit
	1,1,1-trichloroethane	<5	UJ	L						200	ug/L
	1,1,2,2-tetrachloroethane	<5	UJ	L						5	ug/L
	1,1-dichloroethane	<5	UJ	L						5	ug/L
	1,1-dichloroethylene	<5	UJ	L						7	ug/L
	1,2-dichloroethane	<5	UJ	L						5	ug/L
	aluminum, total recoverable	<322	U	V						100	ug/L
	carbon tetrachloride	<5	UJ	L						5	ug/L
	chlorobenzene	<5	UJ	L						5	ug/L
	chloroethene (vinyl chloride)	<10	UJ	L						2	ug/L
	chloroform	<5	UJ	L						100	ug/L
	cis-1,2-dichloroethylene	<5	UJ	L						70	ug/L
	sodium, total recoverable	2350								4600	ug/L
	tetrachloroethylene	<5	UJ	L						5	ug/L
	trans-1,2-dichloroethylene	<5	UJ	L						100	ug/L
	trichloroethylene	<5	UJ	L						5	ug/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-11B. Groundwater Monitoring Results for All Wells (Lab Duplicates), M-Area and Met Lab HWMF (Cont.

WELL AMB 4A

SAMPLE DATE 08/16/01

ANALYTICAL DATA

ST	Parameter	3Q01	CLP	EPA	4Q01	CLP	EPA	DF	Lab	Limit	Unit
	2,4-dichlorophenoxyacetic acid	<1	U							10	ug/L
	aluminum, total recoverable	37.4	J	I						100	ug/L
	arsenic, total recoverable	<42	U							50	ug/L
	barium, total recoverable	4.8	J	I						2000	ug/L
	chloride	1680								4200	ug/L
	chromium, total recoverable	<11	U							100	ug/L
	fluoride	<11.5	U	V						4000	ug/L
	iron, total recoverable	58.1	J	I						300	ug/L
	lead, total recoverable	2.5	J	I						15	ug/L
	manganese, total recoverable	5.8								50	ug/L
	mercury, total recoverable	<.3	U							2	ug/L
	nickel, total recoverable	<4.1	U							100	ug/L
	selenium, total recoverable	<31	U							50	ug/L
	silver, total recoverable	<6.8	U							50	ug/L
	sodium, total recoverable	1850								4600	ug/L
	sulfate	678								3000	ug/L
	total organic carbon	<1400	U							10000	ug/L
	total phosphates (as p)	17.8	J	I						300	ug/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-11B. Groundwater Monitoring Results for All Wells (Lab Duplicates), M-Area and Met Lab HWMF (Cont.

WELL AMB 4B

SAMPLE DATE 08/25/01

ANALYTICAL DATA

ST	Parameter	3Q01	CLP	EPA	4Q01	CLP	EPA	DF	Lab	Limit	Unit
	phenol	<10	UJ	Q						10	ug/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-11B. Groundwater Monitoring Results for All Wells (Lab Duplicates), M-Area and Met Lab HWMF (Cont.

WELL AMB 4D

SAMPLE DATE		08/25/01										
ANALYTICAL DATA												
ST	Parameter	3Q01	CLP	EPA	4Q01	CLP	EPA	DF	Lab	Limit	Unit
	nitrate-nitrite as nitrogen	220								2400	ug/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-11B. Groundwater Monitoring Results for All Wells (Lab Duplicates), M-Area and Met Lab HWMF (Cont.

WELL AMB 5

SAMPLE DATE 08/20/01

ANALYTICAL DATA

ST	Parameter	3Q01	CLP	EPA	4Q01	CLP	EPA	DF	Lab	Limit	Unit
	methyl methacrylate	<10	U							2	ug/L
	phenol	<10	UJ	L						10	ug/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-11B. Groundwater Monitoring Results for All Wells (Lab Duplicates), M-Area and Met Lab HWMF (Cont.

WELL AMB 6

SAMPLE DATE 09/10/01

ANALYTICAL DATA

ST	Parameter	3Q01	CLP	EPA	4Q01	CLP	EPA	DF	Lab	Limit	Unit
	1,1,1-trichloroethane	<5	U							200	ug/L
	1,1,2,2-tetrachloroethane	<5	U							5	ug/L
	1,1-dichloroethane	<5	U							5	ug/L
	1,1-dichloroethylene	<5	U							7	ug/L
	1,2-dichloroethane	<5	U							5	ug/L
	acetone	<10	U							10	ug/L
	carbon tetrachloride	<5	U							5	ug/L
	chloride	2850								4200	ug/L
	chlorobenzene	<5	U							5	ug/L
	chloroethene (vinyl chloride)	<10	U							2	ug/L
	chloroform	<5	U							100	ug/L
	cis-1,2-dichloroethylene	<5	U							70	ug/L
	fluoride	<62	U							4000	ug/L
	lindane	<.102	U							.2	ug/L
	methyl methacrylate	<10	U							2	ug/L
	phenol	<10	UJ	Q						10	ug/L
+	sulfate	***3890***								3000	ug/L
	tetrachloroethylene	<5	U							5	ug/L
	total organic carbon	330	J	I						10000	ug/L
	trans-1,2-dichloroethylene	<5	U							100	ug/L
	trichloroethylene	<.971	U	V						5	ug/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-11B. Groundwater Monitoring Results for All Wells (Lab Duplicates), M-Area and Met Lab HWMF (Cont.

WELL AMB 7

SAMPLE DATE 09/07/01

ANALYTICAL DATA

ST	Parameter	3Q01	CLP	EPA	4Q01	CLP	EPA	DF	Lab	Limit	Unit
	aluminum, total recoverable	<322	U							100	ug/L
	arsenic, total recoverable	<42	U							50	ug/L
	barium, total recoverable	4	J	I						2000	ug/L
	chloride	2080								4200	ug/L
	chromium, total recoverable	1.7	J	I						100	ug/L
	iron, total recoverable	91.2	J	I						300	ug/L
	lead, total recoverable	<24	U							15	ug/L
	lindane	<.0505	UJ	L						.2	ug/L
	manganese, total recoverable	1.2	J	I						50	ug/L
	mercury, total recoverable	<.3	U							2	ug/L
	nickel, total recoverable	<3.4	U	V						100	ug/L
	phenol	<10	U							10	ug/L
	selenium, total recoverable	<31	U							50	ug/L
	silver, total recoverable	<6.8	U							50	ug/L
+	sodium, total recoverable	***7280***								4600	ug/L
+	sulfate	***3640***								3000	ug/L
	total phosphates (as p)	14.1	J	I						300	ug/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-11B. Groundwater Monitoring Results for All Wells (Lab Duplicates), M-Area and Met Lab HWMF (Cont.

WELL AMB 7A

SAMPLE DATE 08/16/01

ANALYTICAL DATA

ST	Parameter	3Q01	CLP	EPA	4Q01	CLP	EPA	DF	Lab	Limit	Unit
	chloride	1250								4200	ug/L
	fluoride	<35.1	U	V						4000	ug/L
	sulfate	<905	U							3000	ug/L
	total organic carbon	<244	U							10000	ug/L
	total organic halogens	<10.8	U	V						50	ug/L
	total phosphates (as p)	<50	U							300	ug/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-11B. Groundwater Monitoring Results for All Wells (Lab Duplicates), M-Area and Met Lab HWMF (Cont.

WELL AMB 8D

SAMPLE DATE 09/06/01

ANALYTICAL DATA

ST	Parameter	3Q01	CLP	EPA	4Q01	CLP	EPA	DF	Lab	Limit	Unit
	2,4-dichlorophenoxyacetic acid	<1	U							10	ug/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-11B. Groundwater Monitoring Results for All Wells (Lab Duplicates), M-Area and Met Lab HWMF (Cont.

WELL AMB 9D

SAMPLE DATE	09/06/01									
ANALYTICAL DATA										
ST	**Parameter**	**3Q01**	**CLP**	**EPA**	**4Q01**	**CLP**	**EPA**	**DF**	**Lab**	**Limit**	**Unit**
	total organic halogens	<52	U							50	ug/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-11B. Groundwater Monitoring Results for All Wells (Lab Duplicates), M-Area and Met Lab HWMF (Cont.

WELL AMB 10B

SAMPLE DATE 09/06/01

ANALYTICAL DATA

ST	Parameter	3Q01	CLP	EPA	4Q01	CLP	EPA	DF	Lab	Limit	Unit
	cyanide	9.15								40	ug/L
	fluoride	<18.9	UJ	QV						4000	ug/L
	nitrate-nitrite as nitrogen	340								2400	ug/L
	total organic carbon	<316	U	V						10000	ug/L
	total organic halogens	<10	U							50	ug/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-11B. Groundwater Monitoring Results for All Wells (Lab Duplicates), M-Area and Met Lab HWMF (Cont.

WELL AMB 13AR

SAMPLE DATE 09/06/01

ANALYTICAL DATA

ST	Parameter	3Q01	CLP	EPA	4Q01	CLP	EPA	DF	Lab	Limit	Unit
	1,1,1-trichloroethane	<5	U							200	ug/L
	1,1,2,2-tetrachloroethane	<5	U							5	ug/L
	1,1-dichloroethane	<5	U							5	ug/L
	1,1-dichloroethylene	<5	U							7	ug/L
	1,2-dichloroethane	<5	U							5	ug/L
	acetone	<10	U							10	ug/L
	carbon tetrachloride	<5	U							5	ug/L
	chlorobenzene	<5	U							5	ug/L
	chloroethene (vinyl chloride)	<10	U							2	ug/L
	chloroform	<5	U							100	ug/L
	cis-1,2-dichloroethylene	<5	U							70	ug/L
	methyl methacrylate	<10	U							2	ug/L
	tetrachloroethylene	<5	U							5	ug/L
	trans-1,2-dichloroethylene	<5	U							100	ug/L
	trichloroethylene	<5	UJ	L						5	ug/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-11B. Groundwater Monitoring Results for All Wells (Lab Duplicates), M-Area and Met Lab HWMF (Cont.

WELL AMB 17A

SAMPLE DATE 08/20/01

ANALYTICAL DATA

ST	Parameter	3Q01	CLP	EPA	4Q01	CLP	EPA	DF	Lab	Limit	Unit
	2,4-dichlorophenoxyacetic acid	<1	UJ	L						10	ug/L
	lindane	<.1	UJ	L						.2	ug/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-11B. Groundwater Monitoring Results for All Wells (Lab Duplicates), M-Area and Met Lab HWMF (Cont.

WELL AMB 18C

SAMPLE DATE 09/04/01

ANALYTICAL DATA

ST	Parameter	3Q01	CLP	EPA	4Q01	CLP	EPA	DF	Lab	Limit	Unit
	2,4-dichlorophenoxyacetic acid	<1	UJ	L						10	ug/L
	phenol	<10	U							10	ug/L
	total organic carbon	247	J	I						10000	ug/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-11B. Groundwater Monitoring Results for All Wells (Lab Duplicates), M-Area and Met Lab HWMF (Cont.

WELL AMB 19C

SAMPLE DATE 09/04/01

ANALYTICAL DATA

ST	Parameter	3Q01	CLP	EPA	4Q01	CLP	EPA	DF	Lab	Limit	Unit
	aluminum, total recoverable	55.4	J	I						100	ug/L
	arsenic, total recoverable	<42	U							50	ug/L
	barium, total recoverable	1.4	J	I						2000	ug/L
	chromium, total recoverable	3.1	J	I						100	ug/L
	iron, total recoverable	67.5	J	I						300	ug/L
	lead, total recoverable	4.4	J	I						15	ug/L
	lindane	<.116	UJ	Q						.2	ug/L
	manganese, total recoverable	1.1	J	I						50	ug/L
	nickel, total recoverable	3	J	I						100	ug/L
	selenium, total recoverable	<31	U							50	ug/L
	silver, total recoverable	<6.8	U							50	ug/L
+	sodium, total recoverable	***8250***								4600	ug/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-11B. Groundwater Monitoring Results for All Wells (Lab Duplicates), M-Area and Met Lab HWMF (Cont.

WELL AOB 1

SAMPLE DATE 09/04/01

ANALYTICAL DATA

ST	Parameter	3Q01	CLP	EPA	4Q01	CLP	EPA	DF	Lab	Limit	Unit
	1,1,1-trichloroethane	<5	U							200	ug/L
	1,1,2,2-tetrachloroethane	<5	U							5	ug/L
	1,1-dichloroethane	<5	U							5	ug/L
	1,1-dichloroethylene	<5	U							7	ug/L
	1,2-dichloroethane	<5	U							5	ug/L
	carbon tetrachloride	<5	U							5	ug/L
	chlorobenzene	<5	U							5	ug/L
	chloroethene (vinyl chloride)	<10	U							2	ug/L
	chloroform	<5	U							100	ug/L
	cis-1,2-dichloroethylene	<5	U							70	ug/L
+	tetrachloroethylene	***9.29***								5	ug/L
	trans-1,2-dichloroethylene	<5	U							100	ug/L
+	trichloroethylene	***9.43***								5	ug/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-11B. Groundwater Monitoring Results for All Wells (Lab Duplicates), M-Area and Met Lab HWMF (Cont.

WELL AOB 2

SAMPLE DATE 09/18/01

ANALYTICAL DATA

ST	Parameter	3Q01	CLP	EPA	4Q01	CLP	EPA	DF	Lab	Limit	Unit
	1,1,1-trichloroethane	<5	U							200	ug/L
	1,1,2,2-tetrachloroethane	<5	U							5	ug/L
	1,1-dichloroethane	<5	U							5	ug/L
	1,1-dichloroethylene	<5	U							7	ug/L
	1,2-dichloroethane	<5	U							5	ug/L
	carbon tetrachloride	<5	U							5	ug/L
	chlorobenzene	<5	U							5	ug/L
	chloroethene (vinyl chloride)	<10	U							2	ug/L
	chloroform	<5	U							100	ug/L
	cis-1,2-dichloroethylene	<5	U							70	ug/L
	tetrachloroethylene	<5	U							5	ug/L
	trans-1,2-dichloroethylene	<5	U							100	ug/L
	trichloroethylene	<5	U							5	ug/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-11B. Groundwater Monitoring Results for All Wells (Lab Duplicates), M-Area and Met Lab HWMF (Cont.)

WELL ARP 2

SAMPLE DATE 07/20/01

ANALYTICAL DATA

ST	Parameter	3Q01	CLP	EPA	4Q01	CLP	EPA	DF	Lab	Limit	Unit
	chloroethene (vinyl chloride)	<10	U							2	ug/L
	cis-1,2-dichloroethylene	<5	U							70	ug/L
	tetrachloroethylene	<5	U							5	ug/L
	trichloroethylene	<5	U							5	ug/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-11B. Groundwater Monitoring Results for All Wells (Lab Duplicates), M-Area and Met Lab HWMF (Cont.

WELL ASB 5AR

SAMPLE DATE 08/22/01

ANALYTICAL DATA

ST	Parameter	3Q01	CLP	EPA	4Q01	CLP	EPA	DF	Lab	Limit	Unit
+	sulfate	***6370***								3000	ug/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-11B. Groundwater Monitoring Results for All Wells (Lab Duplicates), M-Area and Met Lab HWMF (Cont.

WELL ASB 6AA

SAMPLE DATE 08/21/01

ANALYTICAL DATA

ST	Parameter	3Q01	CLP	EPA	4Q01	CLP	EPA	DF	Lab	Limit	Unit
	sulfate	<495	U							3000	ug/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-11B. Groundwater Monitoring Results for All Wells (Lab Duplicates), M-Area and Met Lab HWMF (Cont.)

WELL MCB 5C

SAMPLE DATE 09/13/01

ANALYTICAL DATA

ST	Parameter	3Q01	CLP	EPA	4Q01	CLP	EPA	DF	Lab	Limit	Unit
	1,1,1-trichloroethane	<5	U							200	ug/L
	1,1,2,2-tetrachloroethane	<5	U							5	ug/L
	1,1-dichloroethane	<5	U							5	ug/L
	1,1-dichloroethylene	<5	U							7	ug/L
	1,2-dichloroethane	<5	U							5	ug/L
	aluminum, total recoverable	<185	U	V						100	ug/L
	carbon tetrachloride	<5	U							5	ug/L
	chlorobenzene	<5	U							5	ug/L
	chloroethene (vinyl chloride)	<10	U							2	ug/L
	chloroform	<5	U							100	ug/L
	cis-1,2-dichloroethylene	<5	U							70	ug/L
	sodium, total recoverable	4010								4600	ug/L
+	tetrachloroethylene	***48***								5	ug/L
	trans-1,2-dichloroethylene	<5	U							100	ug/L
+	trichloroethylene	***40***								5	ug/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-11B. Groundwater Monitoring Results for All Wells (Lab Duplicates), M-Area and Met Lab HWMF (Cont.

WELL MCB 6C

SAMPLE DATE 08/24/01

ANALYTICAL DATA

ST	Parameter	3Q01	CLP	EPA	4Q01	CLP	EPA	DF	Lab	Limit	Unit
	aluminum, total recoverable	<86.6	U	V						100	ug/L
	sodium, total recoverable	3200								4600	ug/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-11B. Groundwater Monitoring Results for All Wells (Lab Duplicates), M-Area and Met Lab HWMF (Cont.

WELL MSB 1D

SAMPLE DATE 08/30/01

ANALYTICAL DATA

ST	Parameter	3Q01	CLP	EPA	4Q01	CLP	EPA	DF	Lab	Limit	Unit
	aluminum, total recoverable	91.7	J	I						100	ug/L
	barium, total recoverable	10.2								2000	ug/L
	lead, total recoverable	4	J	I						15	ug/L
	nickel, total recoverable	<.95	UJ							100	ug/L
	pcb 1016	<2.33	UJ	Q						.5	ug/L
	pcb 1221	<4.65	UJ	Q						.5	ug/L
	pcb 1232	<2.33	UJ	Q						.5	ug/L
	pcb 1242	<2.33	UJ	Q						.5	ug/L
	pcb 1248	<2.33	UJ	Q						.5	ug/L
	pcb 1254	<2.33	UJ	Q						.5	ug/L
	pcb 1260	<2.33	UJ	Q						.5	ug/L
	selenium, total recoverable	<31	U							50	ug/L
	sodium, total recoverable	3280								4600	ug/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-11B. Groundwater Monitoring Results for All Wells (Lab Duplicates), M-Area and Met Lab HWMF (Cont.

WELL MSB 2B

SAMPLE DATE 08/30/01

ANALYTICAL DATA

ST	Parameter	3Q01	CLP	EPA	4Q01	CLP	EPA	DF	Lab	Limit	Unit
+	tetrachloroethylene	***10900***								5	ug/L
+	trichloroethylene	***8990***								5	ug/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-11B. Groundwater Monitoring Results for All Wells (Lab Duplicates), M-Area and Met Lab HWMF (Cont.

WELL MSB 2C

SAMPLE DATE 08/30/01

ANALYTICAL DATA

ST	Parameter	3Q01	CLP	EPA	4Q01	CLP	EPA	DF	Lab	Limit	Unit
+	tetrachloroethylene	***11800***								5	ug/L
+	trichloroethylene	***7250***								5	ug/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-11B. Groundwater Monitoring Results for All Wells (Lab Duplicates), M-Area and Met Lab HWMF (Cont.

WELL MSB 2D

SAMPLE DATE 08/30/01

ANALYTICAL DATA

ST	Parameter	3Q01	CLP	EPA	4Q01	CLP	EPA	DF	Lab	Limit	Unit
	1,1,1-trichloroethane	<5	U							200	ug/L
	1,1,2,2-tetrachloroethane	<5	U							5	ug/L
	1,1-dichloroethane	<5	U							5	ug/L
	1,1-dichloroethylene	<5	U							7	ug/L
	1,2-dichloroethane	<5	U							5	ug/L
	carbon tetrachloride	<5	U							5	ug/L
	chlorobenzene	<5	U							5	ug/L
	chloroethene (vinyl chloride)	<10	U							2	ug/L
	chloroform	<5	U							100	ug/L
	cis-1,2-dichloroethylene	4.34	J	IK						70	ug/L
	tetrachloroethylene	8.34	J	K						5	ug/L
	trans-1,2-dichloroethylene	<5	U							100	ug/L
	trichloroethylene	36.1	J	K						5	ug/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-11B. Groundwater Monitoring Results for All Wells (Lab Duplicates), M-Area and Met Lab HWMF (Cont.

WELL MSB 3B

SAMPLE DATE		08/31/01									
ANALYTICAL DATA											
ST	**Parameter**	**3Q01**	**CLP**	**EPA**	**4Q01**	**CLP**	**EPA**	**DF**	**Lab**	**Limit**	**Unit**
+	trichloroethylene	***1060***								5	ug/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-11B. Groundwater Monitoring Results for All Wells (Lab Duplicates), M-Area and Met Lab HWMF (Cont.

WELL MSB 3C

SAMPLE DATE 08/31/01

ANALYTICAL DATA

ST	Parameter	3Q01	CLP	EPA	4Q01	CLP	EPA	DF	Lab	Limit	Unit
+	tetrachloroethylene	***43200***								5	ug/L
+	trichloroethylene	***18800***								5	ug/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-11B. Groundwater Monitoring Results for All Wells (Lab Duplicates), M-Area and Met Lab HWMF (Cont.

WELL MSB 4B

SAMPLE DATE 09/04/01

ANALYTICAL DATA

ST	Parameter	3Q01	CLP	EPA	4Q01	CLP	EPA	DF	Lab	Limit	Unit
	aluminum, total recoverable	42.5	J	I						100	ug/L
	arsenic, total recoverable	<42	U							50	ug/L
	barium, total recoverable	9.6								2000	ug/L
	chromium, total recoverable	<11	U							100	ug/L
	cobalt, total recoverable	<11	U							4	ug/L
	copper, total recoverable	<2.2	U	V						1300	ug/L
	lead, total recoverable	<24	U							15	ug/L
	lindane	<.0505	U							.2	ug/L
	methyl methacrylate	<10	U							2	ug/L
	nickel, total recoverable	<4.1	U							100	ug/L
	pcb 1016	<1.04	UJ	Q						.5	ug/L
	pcb 1221	<2.08	UJ	Q						.5	ug/L
	pcb 1232	<1.04	UJ	Q						.5	ug/L
	pcb 1242	<1.04	UJ	Q						.5	ug/L
	pcb 1248	<1.04	UJ	Q						.5	ug/L
	pcb 1254	<1.04	UJ	Q						.5	ug/L
	pcb 1260	<1.04	UJ	Q						.5	ug/L
	phenol	<10	U							10	ug/L
	selenium, total recoverable	<31	U							50	ug/L
	silver, total recoverable	<6.8	U							50	ug/L
	sodium, total recoverable	2260								4600	ug/L
	zinc, total recoverable	9.5	J	I						5000	ug/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-11B. Groundwater Monitoring Results for All Wells (Lab Duplicates), M-Area and Met Lab HWMF (Cont.

WELL MSB 5A

SAMPLE DATE 09/10/01

ANALYTICAL DATA

ST	Parameter	3Q01	CLP	EPA	4Q01	CLP	EPA	DF	Lab	Limit	Unit
	2,4-dichlorophenoxyacetic acid	<1	U							10	ug/L
	lindane	<.0521	U							.2	ug/L
	methyl methacrylate	<10	UJ	Q						2	ug/L
	pcb 1016	<1.04	UJ	Q						.5	ug/L
	pcb 1221	<2.08	UJ	Q						.5	ug/L
	pcb 1232	<1.04	UJ	Q						.5	ug/L
	pcb 1242	<1.04	UJ	Q						.5	ug/L
	pcb 1248	<1.04	UJ	Q						.5	ug/L
	pcb 1254	<1.04	UJ	Q						.5	ug/L
	pcb 1260	<1.04	UJ	Q						.5	ug/L
	phenol	<10	UJ	Q						10	ug/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-11B. Groundwater Monitoring Results for All Wells (Lab Duplicates), M-Area and Met Lab HWMF (Cont.

WELL MSB 5B

SAMPLE DATE		09/04/01										
ANALYTICAL DATA												
ST	Parameter	3Q01	CLP	EPA	4Q01	CLP	EPA	DF	Lab	Limit	Unit
	nitrate-nitrite as nitrogen	287								2400	ug/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-11B. Groundwater Monitoring Results for All Wells (Lab Duplicates), M-Area and Met Lab HWMF (Cont.

WELL MSB 6A

SAMPLE DATE 09/14/01

ANALYTICAL DATA

ST	Parameter	3Q01	CLP	EPA	4Q01	CLP	EPA	DF	Lab	Limit	Unit
	gross alpha	-.419								15	pCi/L
	nonvolatile beta	1.19								50	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-11B. Groundwater Monitoring Results for All Wells (Lab Duplicates), M-Area and Met Lab HWMF (Cont.

WELL MSB 6B

SAMPLE DATE 09/04/01

ANALYTICAL DATA

ST	Parameter	3Q01	CLP	EPA	4Q01	CLP	EPA	DF	Lab	Limit	Unit
	aluminum, total recoverable	<322	U							100	ug/L
	barium, total recoverable	23.2								2000	ug/L
	lead, total recoverable	<24	U							15	ug/L
	sodium, total recoverable	3380								4600	ug/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-11B. Groundwater Monitoring Results for All Wells (Lab Duplicates), M-Area and Met Lab HWMF (Cont.

WELL MSB 7A

SAMPLE DATE 08/23/01

ANALYTICAL DATA

ST	Parameter	3Q01	CLP	EPA	4Q01	CLP	EPA	DF	Lab	Limit	Unit
	1,1,1-trichloroethane	<5	U							200	ug/L
	1,1,2,2-tetrachloroethane	<5	U							5	ug/L
	1,1-dichloroethane	<5	U							5	ug/L
	1,1-dichloroethylene	<5	U							7	ug/L
	1,2-dichloroethane	<5	U							5	ug/L
	carbon tetrachloride	<5	U							5	ug/L
	chlorobenzene	<5	U							5	ug/L
	chloroethene (vinyl chloride)	<10	U							2	ug/L
	chloroform	<5	U							100	ug/L
	cis-1,2-dichloroethylene	<5	U							70	ug/L
	radium, total alpha-emitting	1.55	J	I						5	pCi/L
	tetrachloroethylene	<5	U							5	ug/L
	trans-1,2-dichloroethylene	<5	U							100	ug/L
	trichloroethylene	<5	U							5	ug/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-11B. Groundwater Monitoring Results for All Wells (Lab Duplicates), M-Area and Met Lab HWMF (Cont.

WELL MSB 7B

SAMPLE DATE 09/04/01

ANALYTICAL DATA

ST	Parameter	3Q01	CLP	EPA	4Q01	CLP	EPA	DF	Lab	Limit	Unit
+	nitrate-nitrite as nitrogen	***8200***								2400	ug/L
	radium, total alpha-emitting	1.66								5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-11B. Groundwater Monitoring Results for All Wells (Lab Duplicates), M-Area and Met Lab HWMF (Cont.

WELL MSB 9A

SAMPLE DATE 08/30/01

ANALYTICAL DATA

ST	Parameter	3Q01	CLP	EPA	4Q01	CLP	EPA	DF	Lab	Limit	Unit
	tetrachloroethylene	1300	J	LQ						5	ug/L
	trichloroethylene	783	J	LQ						5	ug/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-11B. Groundwater Monitoring Results for All Wells (Lab Duplicates), M-Area and Met Lab HWMF (Cont.

WELL MSB 9C

SAMPLE DATE 09/12/01

ANALYTICAL DATA

ST	Parameter	3Q01	CLP	EPA	4Q01	CLP	EPA	DF	Lab	Limit	Unit
	pcb 1016	<2.04	UJ	Q						.5	ug/L
	pcb 1221	<4.1	UJ	Q						.5	ug/L
	pcb 1232	<2.04	UJ	Q						.5	ug/L
	pcb 1242	<2.04	UJ	Q						.5	ug/L
	pcb 1248	<2.04	UJ	Q						.5	ug/L
	pcb 1254	1.8	J	ILQ						.5	ug/L
	pcb 1260	<2.04	UJ	Q						.5	ug/L
+	tetrachloroethylene	***25000***								5	ug/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-11B. Groundwater Monitoring Results for All Wells (Lab Duplicates), M-Area and Met Lab HWMF (Cont.

WELL MSB 11C

SAMPLE DATE 09/07/01

ANALYTICAL DATA

ST	Parameter	3Q01	CLP	EPA	4Q01	CLP	EPA	DF	Lab	Limit	Unit
	1,1,1-trichloroethane	<5	UJ							200	ug/L
	1,1,2,2-tetrachloroethane	<5	UJ							5	ug/L
	1,1-dichloroethane	<5	UJ							5	ug/L
	1,1-dichloroethylene	<5	UJ							7	ug/L
	1,2-dichloroethane	<5	UJ							5	ug/L
	aluminum, total recoverable	215	J	I						100	ug/L
	barium, total recoverable	63.4								2000	ug/L
	carbon tetrachloride	2.08	J	I						5	ug/L
	chlorobenzene	<5	UJ							5	ug/L
	chloroethene (vinyl chloride)	<10	UJ							2	ug/L
	chloroform	1.24	J	I						100	ug/L
	cis-1,2-dichloroethylene	116	J							70	ug/L
	lead, total recoverable	4.3	J	I						15	ug/L
+	sodium, total recoverable	***5890***								4600	ug/L
	tetrachloroethylene	500	J	L						5	ug/L
	trans-1,2-dichloroethylene	<5	UJ							100	ug/L
	trichloroethylene	47800	J							5	ug/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-11B. Groundwater Monitoring Results for All Wells (Lab Duplicates), M-Area and Met Lab HWMF (Cont.

WELL MSB 12B

SAMPLE DATE 09/06/01

ANALYTICAL DATA

ST	Parameter	3Q01	CLP	EPA	4Q01	CLP	EPA	DF	Lab	Limit	Unit
	tetrachloroethylene	14700	J	K						5	ug/L
	trichloroethylene	13000	J	K						5	ug/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-11B. Groundwater Monitoring Results for All Wells (Lab Duplicates), M-Area and Met Lab HWMF (Cont.

WELL MSB 12TA

SAMPLE DATE 08/23/01

ANALYTICAL DATA

ST	Parameter	3Q01	CLP	EPA	4Q01	CLP	EPA	DF	Lab	Limit	Unit
	1,1,1-trichloroethane	<5	UJ	L						200	ug/L
	1,1,2,2-tetrachloroethane	<5	UJ	L						5	ug/L
	1,1-dichloroethane	<5	UJ	L						5	ug/L
	1,1-dichloroethylene	<5	UJ	L						7	ug/L
	1,2-dichloroethane	<5	UJ	L						5	ug/L
	carbon tetrachloride	<5	UJ	L						5	ug/L
	chlorobenzene	<5	UJ	L						5	ug/L
	chloroethene (vinyl chloride)	<10	UJ	L						2	ug/L
	chloroform	<5	UJ	L						100	ug/L
	cis-1,2-dichloroethylene	<5	UJ	L						70	ug/L
	tetrachloroethylene	<5	UJ	L						5	ug/L
	trans-1,2-dichloroethylene	<5	UJ	L						100	ug/L
	trichloroethylene	<5	UJ	L						5	ug/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-11B. Groundwater Monitoring Results for All Wells (Lab Duplicates), M-Area and Met Lab HWMF (Cont.

WELL MSB 13D

SAMPLE DATE 09/11/01

ANALYTICAL DATA

ST	Parameter	3Q01	CLP	EPA	4Q01	CLP	EPA	DF	Lab	Limit	Unit
	2,4-dichlorophenoxyacetic acid	<1	U							10	ug/L
	lindane	<.0521	U							.2	ug/L
	methyl methacrylate	<10	UJ	Q						2	ug/L
	pcb 1016	<1.04	UJ	Q						.5	ug/L
	pcb 1221	<2.08	UJ	Q						.5	ug/L
	pcb 1232	<1.04	UJ	Q						.5	ug/L
	pcb 1242	<1.04	UJ	Q						.5	ug/L
	pcb 1248	<1.04	UJ	Q						.5	ug/L
	pcb 1254	<1.04	UJ	LQ						.5	ug/L
	pcb 1260	<1.04	UJ	Q						.5	ug/L
	phenol	<10	UJ	Q						10	ug/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-11B. Groundwater Monitoring Results for All Wells (Lab Duplicates), M-Area and Met Lab HWMF (Cont.

WELL MSB 15AA

SAMPLE DATE		09/06/01									
ANALYTICAL DATA											
ST	Parameter	3Q01	CLP	EPA	4Q01	CLP	EPA	DF	Lab	Limit	Unit
+	trichloroethylene	***272***								5	ug/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-11B. Groundwater Monitoring Results for All Wells (Lab Duplicates), M-Area and Met Lab HWMF (Cont.

WELL MSB 15D

SAMPLE DATE		09/07/01									
ANALYTICAL DATA											
ST	Parameter	3Q01	CLP	EPA	4Q01	CLP	EPA	DF	Lab	Limit	Unit
+	trichloroethylene	***489***								5	ug/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-11B. Groundwater Monitoring Results for All Wells (Lab Duplicates), M-Area and Met Lab HWMF (Cont.

WELL MSB 16A

SAMPLE DATE 09/06/01

ANALYTICAL DATA

ST	Parameter	3Q01	CLP	EPA	4Q01	CLP	EPA	DF	Lab	Limit	Unit
+	tetrachloroethylene	***1060***								5	ug/L
+	trichloroethylene	***6050***								5	ug/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-11B. Groundwater Monitoring Results for All Wells (Lab Duplicates), M-Area and Met Lab HWMF (Cont.

WELL MSB 18A

SAMPLE DATE 08/17/01

ANALYTICAL DATA

ST	Parameter	3Q01	CLP	EPA	4Q01	CLP	EPA	DF	Lab	Limit	Unit
	radium, total alpha-emitting	.046	U							5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-11B. Groundwater Monitoring Results for All Wells (Lab Duplicates), M-Area and Met Lab HWMF (Cont.)

WELL MSB 18B

SAMPLE DATE 08/20/01

ANALYTICAL DATA

ST	Parameter	3Q01	CLP	EPA	4Q01	CLP	EPA	DF	Lab	Limit	Unit
	nonvolatile beta	1.74	U							50	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-11B. Groundwater Monitoring Results for All Wells (Lab Duplicates), M-Area and Met Lab HWMF (Cont.

WELL MSB 29B

SAMPLE DATE 08/24/01

ANALYTICAL DATA

ST	Parameter	3Q01	CLP	EPA	4Q01	CLP	EPA	DF	Lab	Limit	Unit
	chloride	2830								4200	ug/L
	fluoride	<11.3	U	V						4000	ug/L
	lindane	<.1	U							.2	ug/L
	phenol	<10	U							10	ug/L
	sulfate	483								3000	ug/L
	total phosphates (as p)	<101	UJ	Q						300	ug/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-11B. Groundwater Monitoring Results for All Wells (Lab Duplicates), M-Area and Met Lab HWMF (Cont.

WELL MSB 29C

SAMPLE DATE 08/24/01

ANALYTICAL DATA

ST	Parameter	3Q01	CLP	EPA	4Q01	CLP	EPA	DF	Lab	Limit	Unit
	aluminum, total recoverable	<322	U							100	ug/L
	arsenic, total recoverable	<42	U							50	ug/L
	barium, total recoverable	<5.3	U	V						2000	ug/L
	chromium, total recoverable	<11	U							100	ug/L
	iron, total recoverable	26.4	J	I						300	ug/L
	lead, total recoverable	<24	U							15	ug/L
	manganese, total recoverable	1.6								50	ug/L
	nickel, total recoverable	<4.1	U							100	ug/L
	selenium, total recoverable	<31	U							50	ug/L
	silver, total recoverable	<6.8	U							50	ug/L
	sodium, total recoverable	2300								4600	ug/L
+	total organic halogens	***1210***								50	ug/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-11B. Groundwater Monitoring Results for All Wells (Lab Duplicates), M-Area and Met Lab HWMF (Cont.

WELL MSB 29D

SAMPLE DATE 08/24/01

ANALYTICAL DATA

ST	Parameter	3Q01	CLP	EPA	4Q01	CLP	EPA	DF	Lab	Limit	Unit
	2,4-dichlorophenoxyacetic acid	<1	UJ	LQ						10	ug/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-11B. Groundwater Monitoring Results for All Wells (Lab Duplicates), M-Area and Met Lab HWMF (Cont.

WELL MSB 37B

SAMPLE DATE 08/27/01

ANALYTICAL DATA

ST	Parameter	3Q01	CLP	EPA	4Q01	CLP	EPA	DF	Lab	Limit	Unit
	sulfate	527								3000	ug/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-11B. Groundwater Monitoring Results for All Wells (Lab Duplicates), M-Area and Met Lab HWMF (Cont.

WELL MSB 37TA

SAMPLE DATE 08/27/01

ANALYTICAL DATA

ST	Parameter	3Q01	CLP	EPA	4Q01	CLP	EPA	DF	Lab	Limit	Unit
	trichloroethylene	2060	J	K						5	ug/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-11B. Groundwater Monitoring Results for All Wells (Lab Duplicates), M-Area and Met Lab HWMF (Cont.

WELL MSB 43A

SAMPLE DATE 09/14/01

ANALYTICAL DATA

ST	Parameter	3Q01	CLP	EPA	4Q01	CLP	EPA	DF	Lab	Limit	Unit
	2,4-dichlorophenoxyacetic acid	<1	U							10	ug/L
	chloride	1720								4200	ug/L
	cyanide	<33	U							40	ug/L
	lindane	<.111	U							.2	ug/L
	phenol	<10	UJ	Q						10	ug/L
	sulfate	312	J	I						3000	ug/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-11B. Groundwater Monitoring Results for All Wells (Lab Duplicates), M-Area and Met Lab HWMF (Cont.

WELL MSB 43B

SAMPLE DATE 08/29/01

ANALYTICAL DATA

ST	Parameter	3Q01	CLP	EPA	4Q01	CLP	EPA	DF	Lab	Limit	Unit
	2,4-dichlorophenoxyacetic acid	<1	U							10	ug/L
	aluminum, total recoverable	<49.7	U	V						100	ug/L
	arsenic, total recoverable	<42	U							50	ug/L
	barium, total recoverable	3	J	I						2000	ug/L
	chloride	1760								4200	ug/L
	chromium, total recoverable	6.9	J	I						100	ug/L
	iron, total recoverable	45.6	J	I						300	ug/L
	lead, total recoverable	4	J	I						15	ug/L
	lindane	<.116	UJ	Q						.2	ug/L
	manganese, total recoverable	2								50	ug/L
	nickel, total recoverable	2.5	J	I						100	ug/L
	phenol	<10	UJ	Q						10	ug/L
	selenium, total recoverable	<31	U							50	ug/L
	silver, total recoverable	<6.8	U							50	ug/L
	sodium, total recoverable	2090								4600	ug/L
	sulfate	449								3000	ug/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-11B. Groundwater Monitoring Results for All Wells (Lab Duplicates), M-Area and Met Lab HWMF (Cont.

WELL MSB 43D

SAMPLE DATE 08/29/01

ANALYTICAL DATA

ST	Parameter	3Q01	CLP	EPA	4Q01	CLP	EPA	DF	Lab	Limit	Unit
	fluoride	<8.2	U	V						4000	ug/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-11B. Groundwater Monitoring Results for All Wells (Lab Duplicates), M-Area and Met Lab HWMF (Cont.

WELL MSB 47B

SAMPLE DATE 08/23/01

ANALYTICAL DATA

ST	Parameter	3Q01	CLP	EPA	4Q01	CLP	EPA	DF	Lab	Limit	Unit
	trichloroethylene	730	J	L						5	ug/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-11B. Groundwater Monitoring Results for All Wells (Lab Duplicates), M-Area and Met Lab HWMF (Cont.

WELL MSB 47C

SAMPLE DATE		08/28/01									
ANALYTICAL DATA											
ST	Parameter	3Q01	CLP	EPA	4Q01	CLP	EPA	DF	Lab	Limit	Unit
+	trichloroethylene	***1500***								5	ug/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-11B. Groundwater Monitoring Results for All Wells (Lab Duplicates), M-Area and Met Lab HWMF (Cont.

WELL MSB 49D

SAMPLE DATE 08/29/01

ANALYTICAL DATA

ST	Parameter	3Q01	CLP	EPA	4Q01	CLP	EPA	DF	Lab	Limit	Unit
	nitrate-nitrite as nitrogen	342								2400	ug/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-11B. Groundwater Monitoring Results for All Wells (Lab Duplicates), M-Area and Met Lab HWMF (Cont.

WELL MSB 54B

SAMPLE DATE 08/24/01

ANALYTICAL DATA

ST	Parameter	3Q01	CLP	EPA	4Q01	CLP	EPA	DF	Lab	Limit	Unit
	aluminum, total recoverable	<82.4	U	V						100	ug/L
	sodium, total recoverable	1690								4600	ug/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-11B. Groundwater Monitoring Results for All Wells (Lab Duplicates), M-Area and Met Lab HWMF (Cont.

WELL MSB 55B

SAMPLE DATE 08/28/01

ANALYTICAL DATA

ST	Parameter	3Q01	CLP	EPA	4Q01	CLP	EPA	DF	Lab	Limit	Unit
	1,1,1-trichloroethane	<5	U							200	ug/L
	1,1,2,2-tetrachloroethane	<5	U							5	ug/L
	1,1-dichloroethane	<5	U							5	ug/L
	1,1-dichloroethylene	<5	U							7	ug/L
	1,2-dichloroethane	<5	U							5	ug/L
	carbon tetrachloride	<5	U							5	ug/L
	chlorobenzene	<5	U							5	ug/L
	chloroethene (vinyl chloride)	<10	U							2	ug/L
	chloroform	<5	U							100	ug/L
	cis-1,2-dichloroethylene	<5	U							70	ug/L
	tetrachloroethylene	<5	U							5	ug/L
	trans-1,2-dichloroethylene	<5	U							100	ug/L
	trichloroethylene	<5	U							5	ug/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-11B. Groundwater Monitoring Results for All Wells (Lab Duplicates), M-Area and Met Lab HWMF (Cont.

WELL MSB 55HC

SAMPLE DATE 08/29/01

ANALYTICAL DATA

ST	Parameter	3Q01	CLP	EPA	4Q01	CLP	EPA	DF	Lab	Limit	Unit
	1,1,1-trichloroethane	<5	U							200	ug/L
	1,1,2,2-tetrachloroethane	<5	U							5	ug/L
	1,1-dichloroethane	<5	U							5	ug/L
	1,1-dichloroethylene	<5	U							7	ug/L
	1,2-dichloroethane	<5	U							5	ug/L
	carbon tetrachloride	<5	U							5	ug/L
	chlorobenzene	<5	U							5	ug/L
	chloroethene (vinyl chloride)	<10	U							2	ug/L
	chloroform	<5	U							100	ug/L
	cis-1,2-dichloroethylene	<5	U							70	ug/L
	tetrachloroethylene	<5	U							5	ug/L
	trans-1,2-dichloroethylene	<5	U							100	ug/L
	trichloroethylene	<5	U							5	ug/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-11B. Groundwater Monitoring Results for All Wells (Lab Duplicates), M-Area and Met Lab HWMF (Cont.

WELL MSB 59D

SAMPLE DATE 09/12/01

ANALYTICAL DATA

ST	Parameter	3Q01	CLP	EPA	4Q01	CLP	EPA	DF	Lab	Limit	Unit
	tetrachloroethylene	87400	J	Q						5	ug/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-11B. Groundwater Monitoring Results for All Wells (Lab Duplicates), M-Area and Met Lab HWMF (Cont.

WELL MSB 62B

SAMPLE DATE 09/12/01

ANALYTICAL DATA

ST	Parameter	3Q01	CLP	EPA	4Q01	CLP	EPA	DF	Lab	Limit	Unit
	nitrate-nitrite as nitrogen	850								2400	ug/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-11B. Groundwater Monitoring Results for All Wells (Lab Duplicates), M-Area and Met Lab HWMF (Cont.

WELL MSB 62D

SAMPLE DATE 09/13/01

ANALYTICAL DATA

ST	Parameter	3Q01	CLP	EPA	4Q01	CLP	EPA	DF	Lab	Limit	Unit
+	aluminum, total recoverable	***1870***								100	ug/L
	barium, total recoverable	47								2000	ug/L
	lead, total recoverable	3.1	J	I						15	ug/L
	nickel, total recoverable	<1.6	U	V						100	ug/L
	selenium, total recoverable	<31	U							50	ug/L
	sodium, total recoverable	<26300	U							4600	ug/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-11B. Groundwater Monitoring Results for All Wells (Lab Duplicates), M-Area and Met Lab HWMF (Cont.

WELL MSB 64C

SAMPLE DATE 09/11/01

ANALYTICAL DATA

ST	Parameter	3Q01	CLP	EPA	4Q01	CLP	EPA	DF	Lab	Limit	Unit
	radium, total alpha-emitting	6.22	J	IK						5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-11B. Groundwater Monitoring Results for All Wells (Lab Duplicates), M-Area and Met Lab HWMF (Cont.

WELL MSB 64D

SAMPLE DATE 09/06/01

ANALYTICAL DATA

ST	Parameter	3Q01	CLP	EPA	4Q01	CLP	EPA	DF	Lab	Limit	Unit
	2,4-dichlorophenoxyacetic acid	<1	UJ	L						10	ug/L
	cyanide	<33	U							40	ug/L
	lindane	<.0505	U							.2	ug/L
	methyl methacrylate	<10	UJ	Q						2	ug/L
	pcb 1016	<1.01	UJ	Q						.5	ug/L
	pcb 1221	<2.02	UJ	Q						.5	ug/L
	pcb 1232	<1.01	UJ	Q						.5	ug/L
	pcb 1242	<1.01	UJ	Q						.5	ug/L
	pcb 1248	<1.01	UJ	Q						.5	ug/L
	pcb 1254	<1.01	UJ	Q						.5	ug/L
	pcb 1260	<1.01	UJ	Q						.5	ug/L
	phenol	<10	UJ	Q						10	ug/L
	radium, total alpha-emitting	1.57								5	pCi/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-11B. Groundwater Monitoring Results for All Wells (Lab Duplicates), M-Area and Met Lab HWMF (Cont.

WELL MSB 66B

SAMPLE DATE 09/14/01

ANALYTICAL DATA

ST	Parameter	3Q01	CLP	EPA	4Q01	CLP	EPA	DF	Lab	Limit	Unit
	aluminum, total recoverable	<116	U	V						100	ug/L
	sodium, total recoverable	2330								4600	ug/L
	sulfate	420								3000	ug/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-11B. Groundwater Monitoring Results for All Wells (Lab Duplicates), M-Area and Met Lab HWMF (Cont.)

WELL MSB 74C

SAMPLE DATE 09/12/01

ANALYTICAL DATA

ST	Parameter	3Q01	CLP	EPA	4Q01	CLP	EPA	DF	Lab	Limit	Unit
	1,1,1-trichloroethane	<5	U							200	ug/L
	1,1,2,2-tetrachloroethane	<5	U							5	ug/L
	1,1-dichloroethane	<5	U							5	ug/L
	1,1-dichloroethylene	<5	U							7	ug/L
	1,2-dichloroethane	<5	U							5	ug/L
	carbon tetrachloride	<5	U							5	ug/L
	chlorobenzene	<5	U							5	ug/L
	chloroethene (vinyl chloride)	<10	U							2	ug/L
	chloroform	<5	U							100	ug/L
	cis-1,2-dichloroethylene	<5	U							70	ug/L
	tetrachloroethylene	<5	U							5	ug/L
	trans-1,2-dichloroethylene	<5	U							100	ug/L
	trichloroethylene	30	J	K						5	ug/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-11B. Groundwater Monitoring Results for All Wells (Lab Duplicates), M-Area and Met Lab HWMF (Cont.)

WELL MSB 75B

SAMPLE DATE		09/12/01									
ANALYTICAL DATA											
ST	Parameter	3Q01	CLP	EPA	4Q01	CLP	EPA	DF	Lab	Limit	Unit
+	trichloroethylene	***1300***								5	ug/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-11B. Groundwater Monitoring Results for All Wells (Lab Duplicates), M-Area and Met Lab HWMF (Cont.

WELL MSB 90C

SAMPLE DATE 08/30/01

ANALYTICAL DATA

ST	Parameter	3Q01	CLP	EPA	4Q01	CLP	EPA	DF	Lab	Limit	Unit
	1,1,1-trichloroethane	<5	U							200	ug/L
	1,1,2,2-tetrachloroethane	<5	U							5	ug/L
	1,1-dichloroethane	<5	U							5	ug/L
	1,1-dichloroethylene	<5	U							7	ug/L
	1,2-dichloroethane	<5	U							5	ug/L
	carbon tetrachloride	<5	U							5	ug/L
	chlorobenzene	<5	U							5	ug/L
	chloroethene (vinyl chloride)	<10	U							2	ug/L
	chloroform	<5	U							100	ug/L
	cis-1,2-dichloroethylene	<5	U							70	ug/L
	tetrachloroethylene	<5	U							5	ug/L
	trans-1,2-dichloroethylene	<5	U							100	ug/L
	trichloroethylene	<5	U							5	ug/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-11B. Groundwater Monitoring Results for All Wells (Lab Duplicates), M-Area and Met Lab HWMF (Cont.

WELL SSM 10B2

SAMPLE DATE 11/01/01

ANALYTICAL DATA

ST	Parameter	3Q01	CLP	EPA	4Q01	CLP	EPA	DF	Lab	Limit	Unit
	1,1,1-trichloroethane				<25	U		5	LV	200	ug/L
	1,1,2,2-tetrachloroethane				<25	U		5	LV	5	ug/L
	1,1-dichloroethane				<25	U		5	LV	5	ug/L
	1,1-dichloroethylene				<25	U		5	LV	7	ug/L
	1,2-dichloroethane				<25	U		5	LV	5	ug/L
	carbon tetrachloride				<25	U		5	LV	5	ug/L
	chlorobenzene				<25	U		5	LV	5	ug/L
	chloroethene (vinyl chloride)				<50	U		5	LV	2	ug/L
	chloroform				<25	U		5	LV	100	ug/L
	cis-1,2-dichloroethylene				10.2	J	I	5	LV	70	ug/L
	tetrachloroethylene				<25	U		5	LV	5	ug/L
	trans-1,2-dichloroethylene				<25	U		5	LV	100	ug/L
	trichloroethylene				358	J	L	5	LV	5	ug/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-11B. Groundwater Monitoring Results for All Wells (Lab Duplicates), M-Area and Met Lab HWMF (Cont.

WELL SSM 10C2

SAMPLE DATE 11/01/01

ANALYTICAL DATA

ST	Parameter	3Q01	CLP	EPA	4Q01	CLP	EPA	DF	Lab	Limit	Unit
+	trichloroethylene				***1070***			10	LV	5	ug/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-11B. Groundwater Monitoring Results for All Wells (Lab Duplicates), M-Area and Met Lab HWMF (Cont.

WELL SSM 15B2

SAMPLE DATE 10/31/01

ANALYTICAL DATA

ST	Parameter	3Q01	CLP	EPA	4Q01	CLP	EPA	DF	Lab	Limit	Unit
	1,1,1-trichloroethane				<5	UJ	Y	1	LV	200	ug/L
	1,1,2,2-tetrachloroethane				<5	UJ	Y	1	LV	5	ug/L
	1,1-dichloroethane				<5	UJ	Y	1	LV	5	ug/L
	1,1-dichloroethylene				<5	UJ	Y	1	LV	7	ug/L
	1,2-dichloroethane				<5	UJ	Y	1	LV	5	ug/L
	carbon tetrachloride				<5	UJ	Y	1	LV	5	ug/L
	chlorobenzene				<5	UJ	Y	1	LV	5	ug/L
	chloroethene (vinyl chloride)				<10	UJ	Y	1	LV	2	ug/L
	chloroform				<5	UJ	Y	1	LV	100	ug/L
	cis-1,2-dichloroethylene				<5	UJ	Y	1	LV	70	ug/L
	tetrachloroethylene				<5	UJ	Y	1	LV	5	ug/L
	trans-1,2-dichloroethylene				<5	UJ	Y	1	LV	100	ug/L
	trichloroethylene				2.32	J	IY	1	LV	5	ug/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-11B. Groundwater Monitoring Results for All Wells (Lab Duplicates), M-Area and Met Lab HWMF (Cont.

WELL SSM 15C2

SAMPLE DATE 10/31/01

ANALYTICAL DATA

ST	Parameter	3Q01	CLP	EPA	4Q01	CLP	EPA	DF	Lab	Limit	Unit
	trichloroethylene				179	J	LY	2	LV	5	ug/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-11B. Groundwater Monitoring Results for All Wells (Lab Duplicates), M-Area and Met Lab HWMF (Cont.

WELL SSM 16C2

SAMPLE DATE 11/06/01

ANALYTICAL DATA

ST	Parameter	3Q01	CLP	EPA	4Q01	CLP	EPA	DF	Lab	Limit	Unit
	trichloroethylene				1770	J		10	LV	5	ug/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-11B. Groundwater Monitoring Results for All Wells (Lab Duplicates), M-Area and Met Lab HWMF (Cont.

WELL SSM 17C2

SAMPLE DATE 11/06/01

ANALYTICAL DATA

ST	Parameter	3Q01	CLP	EPA	4Q01	CLP	EPA	DF	Lab	Limit	Unit
	1,1,1-trichloroethane				<5	UJ	Y	1	LV	200	ug/L
	1,1,2,2-tetrachloroethane				<5	UJ	Y	1	LV	5	ug/L
	1,1-dichloroethane				<5	UJ	Y	1	LV	5	ug/L
	1,1-dichloroethylene				<5	UJ	Y	1	LV	7	ug/L
	1,2-dichloroethane				<5	UJ	Y	1	LV	5	ug/L
	carbon tetrachloride				<5	UJ	Y	1	LV	5	ug/L
	chlorobenzene				<5	UJ	Y	1	LV	5	ug/L
	chloroethene (vinyl chloride)				<10	UJ	Y	1	LV	2	ug/L
	chloroform				<5	UJ	Y	1	LV	100	ug/L
	cis-1,2-dichloroethylene				7.92	J	Y	1	LV	70	ug/L
	tetrachloroethylene				13.2	J	Y	1	LV	5	ug/L
	trans-1,2-dichloroethylene				<5	UJ	Y	1	LV	100	ug/L
	trichloroethylene				182	J	Y	1	LV	5	ug/L

Notes: Concentrations in bold italics exceed the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A. Synchronous water levels are measured over a 3-10 day period or less. Dilution factors (DF) and Laboratory (Lab) columns are shown for Groundwater Protection Standard Constituents and Monitoring Constituents for Fourth Quarter 2001 data only. Analytical High Limit (Limit) and Unit columns are shown for all Quarters which have analytical results.
+ Indicates a result(s) exceeded the Groundwater Protection or Monitoring Constituent Standards listed in Appendix A (all Quarters).

Table D-12a. Constituents Exceeding the Groundwater Protection or Monitoring Constituents Standard in Point of Compliance Wells, M-Area HWMF

M-Area Aquifer Zone

POC Well Name	Constituent	3Q01	Units	GWPS[a]	MCS[b]
MSB 6A	aluminum, total recoverable	347	µg/L		100
MSB 7A	aluminum, total recoverable	326	µg/L		100
MSB 13D	aluminum, total recoverable	452	µg/L		100
MSB 62D	aluminum, total recoverable	1980	µg/L		100
MSB 63D	aluminum, total recoverable	386	µg/L		100
MSB 2D	nitrate-nitrite as nitrogen	2720	µg/L		2400
MSB 4D	nitrate-nitrite as nitrogen	4220	µg/L		2400
MSB 13D	nitrate-nitrite as nitrogen	18200	µg/L		2400
MSB 59D	nitrate-nitrite as nitrogen	5850	µg/L		2400
MSB 1D	radium, total alpha-emitting	5.39	pCi/L		5
MSB 2D	radium, total alpha-emitting	8.6	pCi/L		5
MSB 4D	radium, total alpha-emitting	6.94	pCi/L		5
MSB 5A	sodium, total recoverable	6050	µg/L		4600
MSB 6A	sodium, total recoverable	7630	µg/L		4600
MSB 7A	sodium, total recoverable	5670	µg/L		4600
MSB 13D	sodium, total recoverable	41500	µg/L		4600
MSB 59D	sodium, total recoverable	10300	µg/L		4600
MSB 64D	sodium, total recoverable	9250	µg/L		4600
MSB 4D	tetrachloroethylene	25.9	µg/L	5	5
MSB 5A	tetrachloroethylene	6.9	µg/L	5	5
MSB 13D	tetrachloroethylene	12	µg/L	5	5
MSB 59D	tetrachloroethylene	212000	µg/L	5	5
MSB 62D	tetrachloroethylene	26.4	µg/L	5	5
MSB 63D	tetrachloroethylene	85.5	µg/L	5	5
MSB 4D	trichloroethylene	56.8	µg/L	5	5
MSB 5A	trichloroethylene	9.52	µg/L	5	5
MSB 59D	trichloroethylene	7200	µg/L	5	5
MSB 62D	trichloroethylene	7.67	µg/L	5	5
MSB 63D	trichloroethylene	7.24	µg/L	5	5

Upper Lost Lake Aquifer Zone

POC Well Name	Constituent	3Q01	Units	GWPS[a]	MCS[b]
MSB 5C	1,1-dichloroethylene	29	µg/L	7	
MSB 8C	1,1-dichloroethylene	7.41	µg/L	7	
MSB 64C	1,1-dichloroethylene	27	µg/L	7	
MSB 2C	aluminum, total recoverable	402	µg/L		100
MSB 3C	aluminum, total recoverable	2840	µg/L		100
MSB 1C	nitrate-nitrite as nitrogen	9480	µg/L		2400
MSB 2C	nitrate-nitrite as nitrogen	7570	µg/L		2400
MSB 3C	nitrate-nitrite as nitrogen	8520	µg/L		2400
MSB 4C	nitrate-nitrite as nitrogen	17800	µg/L		2400

Table D-12a. Constituents Exceeding the Groundwater Protection or Monitoring Constituents Standard in Point of Compliance Wells, M-Area HWMF (continued)

Upper Lost Lake Aquifer Zone (continued)

POC Well Name	Constituent	3Q01	Units	GWPS[a]	MCS[b]
MSB 5C	nitrate-nitrite as nitrogen	22600	µg/L		2400
MSB 6C	nitrate-nitrite as nitrogen	11600	µg/L		2400
MSB 7C	nitrate-nitrite as nitrogen	15300	µg/L		2400
MSB 8C	nitrate-nitrite as nitrogen	64800	µg/L		2400
MSB 13CC	nitrate-nitrite as nitrogen	12000	µg/L		2400
MSB 62C	nitrate-nitrite as nitrogen	3360	µg/L		2400
MSB 63C	nitrate-nitrite as nitrogen	2600	µg/L		2400
MSB 64C	nitrate-nitrite as nitrogen	21600	µg/L		2400
MSB 8C	nonvolatile beta	70.2	pCi/L		50
MSB 8C	radium, total alpha-emitting	12.1	pCi/L		5
MSB 1C	sodium, total recoverable	13500	µg/L		4600
MSB 2C	sodium, total recoverable	10300	µg/L		4600
MSB 3C	sodium, total recoverable	16900	µg/L		4600
MSB 4C	sodium, total recoverable	15300	µg/L		4600
MSB 5C	sodium, total recoverable	26800	µg/L		4600
MSB 6C	sodium, total recoverable	31800	µg/L		4600
MSB 7C	sodium, total recoverable	19400	µg/L		4600
MSB 8C	sodium, total recoverable	53500	µg/L		4600
MSB 62C	sodium, total recoverable	9870	µg/L		4600
MSB 64C	sodium, total recoverable	16300	µg/L		4600
MSB 1C	tetrachloroethylene	929	µg/L	5	
MSB 2C	tetrachloroethylene	11800	µg/L	5	
MSB 3C	tetrachloroethylene	43200	µg/L	5	
MSB 4C	tetrachloroethylene	12900	µg/L	5	
MSB 5C	tetrachloroethylene	106	µg/L	5	
MSB 6C	tetrachloroethylene	52.2	µg/L	5	
MSB 7C	tetrachloroethylene	53.4	µg/L	5	
MSB 8C	tetrachloroethylene	61	µg/L	5	
MSB 13CC	tetrachloroethylene	7.79	µg/L	5	
MSB 62C	tetrachloroethylene	13.4	µg/L	5	
MSB 64C	tetrachloroethylene	149	µg/L	5	
MSB 1C	trichloroethylene	938	µg/L	5	
MSB 2C	trichloroethylene	7250	µg/L	5	
MSB 3C	trichloroethylene	18800	µg/L	5	
MSB 4C	trichloroethylene	10600	µg/L	5	
MSB 5C	trichloroethylene	24	µg/L	5	
MSB 6C	trichloroethylene	10	µg/L	5	
MSB 7C	trichloroethylene	19.3	µg/L	5	
MSB 8C	trichloroethylene	39.4	µg/L	5	
MSB 13CC	trichloroethylene	5.51	µg/L	5	
MSB 62C	trichloroethylene	13.8	µg/L	5	
MSB 64C	trichloroethylene	22	µg/L	5	

Table D-12a. Constituents Exceeding the Groundwater Protection or Monitoring Constituents Standard in Point of Compliance Wells, M-Area HWMF (Continued)

Lower Lost Lake Aquifer Zone

POC Well Name	Constituent	3Q01	Units	GWPS[a]	MCS[b]
MSB 7B	1,1-dichloroethylene	8.47	µg/L	7	
MSB 2B	aluminum, total recoverable	1200	µg/L		100
MSB 62B	lead, total recoverable	30	µg/L	15	
MSB 1B	nitrate-nitrite as nitrogen	3000	µg/L		2400
MSB 2B	nitrate-nitrite as nitrogen	3880	µg/L		2400
MSB 6B	nitrate-nitrite as nitrogen	4090	µg/L		2400
MSB 7B	nitrate-nitrite as nitrogen	10100	µg/L		2400
MSB 13A	nitrate-nitrite as nitrogen	2960	µg/L		2400
MSB 2B	sodium, total recoverable	28900	µg/L		4600
MSB 7B	sodium, total recoverable	10600	µg/L		4600
MSB 2B	tetrachloroethylene	10900	µg/L	5	
MSB 3B	tetrachloroethylene	911	µg/L	5	
MSB 4B	tetrachloroethylene	68.2	µg/L	5	
MSB 7B	tetrachloroethylene	52.9	µg/L	5	
MSB 8B	tetrachloroethylene	10	µg/L	5	
MSB 13A	tetrachloroethylene	45.3	µg/L	5	
MSB 62B	tetrachloroethylene	43.8	µg/L	5	
MSB 63B	tetrachloroethylene	69	µg/L	5	
MSB 1B	trichloroethylene	1350	µg/L	5	
MSB 2B	trichloroethylene	8990	µg/L	5	
MSB 3B	trichloroethylene	2920	µg/L	5	
MSB 4B	trichloroethylene	868	µg/L	5	
MSB 5B	trichloroethylene	18.2	µg/L	5	
MSB 6B	trichloroethylene	2210	µg/L	5	
MSB 7B	trichloroethylene	35.8	µg/L	5	
MSB 8B	trichloroethylene	57.9	µg/L	5	
MSB 13A	trichloroethylene	1560	µg/L	5	
MSB 62B	trichloroethylene	168	µg/L	5	
MSB 63B	trichloroethylene	720	µg/L	5	

a- GWPS column shows the maximum concentration limits from the Groundwater Protection Standard of the M-Area HWMF Part B permit application.

b- MCS column shows the maximum concentration limits from the Monitoring Constituent Standard list of the M-Area HWMF Part B permit application.

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Table D-12b. Constituents Exceeding the Groundwater Protection or Monitoring Constituents Standard in Point of Compliance Wells, Met Lab HWMF

M-Area Aquifer Zone

POC Well Name	Constituent	3Q01	Units	GWPS[a]	MCS[b]
AMB 6	aluminum, total recoverable	861	µg/L		100
AMB 8D	aluminum, total recoverable	952	µg/L		100
AMB 6	iron, total recoverable	1760	µg/L		300
AMB 8D	iron, total recoverable	538	µg/L		300
AMB 6	lead, total recoverable	33.6	µg/L	15	
AMB 5	nitrate-nitrite as nitrogen	2820	µg/L		2400
AMB 5	sodium, total recoverable	4680	µg/L		4600
AMB 6	sodium, total recoverable	8250	µg/L		4600
AMB 8D	sodium, total recoverable	6880	µg/L		4600
AMB 9D	sodium, total recoverable	7810	µg/L		4600
AMB 6	sulfate	3900	µg/L		3000
AMB 8D	sulfate	3720	µg/L		3000
AMB 9D	sulfate	4360	µg/L		3000
AMB 4D	total organic halogens	4080	µg/L		50
AMB 5	total organic halogens	3300	µg/L		50

Upper Lost Lake Aquifer Zone

POC Well Name	Constituent	3Q01	Units	GWPS[a]	MCS[b]
AMB 18C	lead, total recoverable	25.5	µg/L	15	15
AMB 19C	sodium, total recoverable	8360	µg/L		4600
AMB 19C	sulfate	4600	µg/L		3000

Lower Lost Lake Aquifer Zone

POC Well Name	Constituent	3Q01	Units	GWPS[a]	MCS[b]
AMB 10B	sodium, total recoverable	5140	µg/L		4600

Middle Sand Aquifer Zone of the Crouch Branch Aquifer Unit

POC Well Name	Constituent	3Q01	Units	GWPS[a]	MCS[b]
AMB 4A	tetrachloroethylene	29.6	µg/L	5	
AMB 17A	tetrachloroethylene	13.6	µg/L	5	
AMB 4A	total organic halogens	25000	µg/L		50
AMB 17A	total organic halogens	25300	µg/L		50
AMB 18A	total organic halogens	12000	µg/L		50
AMB 4A	trichloroethylene	24.3	µg/L	5	
AMB 17A	trichloroethylene	25.7	µg/L	5	

a- GWPS column shows the maximum concentration limits from the Groundwater Protection Standard of the Metallurgical Laboratory Part B permit application.

b- MCS column shows the maximum concentration limits from the Monitoring Constituent Standard list of the Metallurgical Laboratory HWMF Part B permit application.

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Table D-13. Summary of Sampling for Appendix IX Analytes to Identify New Constituents Not Currently Included in the Groundwater Protection Standard

M Area HWMF

3Q01 Wells	New Appendix IX Constituent	Maximum Result
MSB 2B	NA[a]	
MSB 2C	NA	
MSB 2D	NA	
MSB 7A	NA	
MSB 7B	NA	
MSB 7C	NA	
MSB 63C	NA	
MSB 64D	NA	

Met Lab HWMF

1Q01 Wells	New Appendix IX Constituent	Maximum Result
AMB 4D	NA	
AMB 10B	NA	
AMB 16D	NA	
AMB 17A	NA	
AMB 18A	NA	
AMB 18C	NA	

[a] NA = not applicable. No Appendix IX Constituents not already included in the GWPS currently used to determine compliance were detected from this well at levels above sample quantitation limits, or were without the qualifiers "L", "R", "U", or "J".

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Table D-14. Horizontal Gradients and Flow Rates in the Five Aquifer Zones

Third Quarter 2001

Aquifer Zone	Transect	Horizontal Gradient	Flow Rate (ft/day)	Flow Rate (ft/year)
M-Area	A-A'[a]	0.0040	0.54	195
Upper Lost Lake	A-A'	0.0026	0.59	214
	B-B'	0.0047	1.06	384
Lower Lost Lake	A-A'	0.0029	0.66	240
	B-B'	0.0026	0.58	210
Middle Sand of the CBCU	A-A'	0.0038	0.85	307
	B-B'	0.0019	0.42	154
Crouch Branch	A-A'	0.0036	0.72	262

Fourth Quarter 2001

Aquifer Zone	Transect	Horizontal Gradient	Flow Rate (ft/day)	Flow Rate (ft/year)
M-Area	A-A'[a]	0.0038	0.52	188
Upper Lost Lake	A-A'	0.0024	0.53	192
	B-B'	0.0039	0.88	318
Lower Lost Lake	A-A'	0.0029	0.66	240
	B-B'	0.0026	0.58	210
Middle Sand of the CBCU	A-A'	0.0043	0.98	354
	B-B'	0.0015	0.34	123
Crouch Branch	A-A'	0.0036	0.72	262

[a] Gradients were determined along transects oriented to represent the minimum and maximum gradient evident on the piezometric and potentiometric maps in Appendix H of this report.

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Table D-15a. CUSUM Analysis of Trichloroethylene and Tetrachloroethelyene Concentrations in Selected Monitoring Wells

Well Name	Aquifer Zone	Analyte Name	1Q01 Short-term Trend	3Q01 Short-term Trend	Long Term Trend	Process Error Code
ASB 6TA	CBAU	PCE	Could not be analyzed.	Could not be analyzed.	Could not be analyzed.	1
MSB 34TA	CBAU	PCE	Could not be analyzed.	Could not be analyzed.	Could not be analyzed.	1
MSB 42TA	CBAU	PCE	No Trend	No Trend	Upward Trend	
ASB 5C	LLLAZ	PCE	No Trend	No Trend	Downward Trend	
MSB 2B	LLLAZ	PCE	No Trend	No Trend	Upward Trend	
MSB 4B	LLLAZ	PCE	No Trend	No Trend	No Trend	
MSB 6B	LLLAZ	PCE	No Trend	No Trend	Upward Trend	
MSB 9A	LLLAZ	PCE	No Trend	No Trend	No Trend	
MSB 13A	LLLAZ	PCE	No Trend	Downward Trend	Upward Trend	
MSB 17BB	LLLAZ	PCE	No Trend	No Trend	No Trend	
MSB 19B	LLLAZ	PCE	Could not be analyzed.	Could not be analyzed.	Could not be analyzed.	1
MSB 25A	LLLAZ	PCE	No Trend	No Trend	No Trend	
MSB 26B	LLLAZ	PCE	No Trend	No Trend	Upward Trend	
MSB 31B	LLLAZ	PCE	Could not be analyzed.	Could not be analyzed.	Could not be analyzed.	2
MSB 33B	LLLAZ	PCE	No Trend	No Trend	Downward Trend	
MSB 34A	LLLAZ	PCE	Could not be analyzed.	Could not be analyzed.	Could not be analyzed.	3
MSB 36B	LLLAZ	PCE	Could not be analyzed.	Could not be analyzed.	Could not be analyzed.	1
MSB 37C	LLLAZ	PCE	No Trend	No Trend	Downward Trend	
MSB 39B	LLLAZ	PCE	Upward Trend	Upward Trend	No Trend	
MSB 75B	LLLAZ	PCE	Could not be analyzed.	Could not be analyzed.	Could not be analyzed.	1
MSB 4D	MAAZ	PCE	No Trend	No Trend	Downward Trend	
MSB 16C	MAAZ	PCE	Could not be analyzed.	Could not be analyzed.	Could not be analyzed.	4
MSB 17B	MAAZ	PCE	No Trend	No Trend	No Trend	
MSB 18B	MAAZ	PCE	No Trend	No Trend	No Trend	
MSB 19C	MAAZ	PCE	Could not be analyzed.	Could not be analyzed.	Could not be analyzed.	2
MSB 20C	MAAZ	PCE	Could not be analyzed.	Could not be analyzed.	Could not be analyzed.	1
MSB 24	MAAZ	PCE	No Trend	No Trend	Downward Trend	
MSB 26	MAAZ	PCE	No Trend	No Trend	No Trend	
MSB 34C	MAAZ	PCE	No Trend	No Trend	Downward Trend	
MSB 39D	MAAZ	PCE	Could not be analyzed.	Could not be analyzed.	Could not be analyzed.	1
ASB 6AA	MSAZ_CBCU	PCE	Could not be analyzed.	Could not be analyzed.	Could not be analyzed.	1
ASB 8B	MSAZ_CBCU	PCE	Could not be analyzed.	Could not be analyzed.	Could not be analyzed.	1
MSB 10A	MSAZ_CBCU	PCE	No Trend	No Trend	Upward Trend	
MSB 33A	MSAZ_CBCU	PCE	Could not be analyzed.	Could not be analyzed.	Could not be analyzed.	1
MSB 37B	MSAZ_CBCU	PCE	No Trend	No Trend	No Trend	
MSB 41B	MSAZ_CBCU	PCE	No Trend	No Trend	No Trend	
ASB 6C	ULLAZ	PCE	No Trend	No Trend	Downward Trend	
ASB 8C	ULLAZ	PCE	Could not be analyzed.	Could not be analyzed.	Could not be analyzed.	1
MSB 3C	ULLAZ	PCE	No Trend	No Trend	No Trend	
MSB 4C	ULLAZ	PCE	No Trend	No Trend	Upward Trend	
MSB 6C	ULLAZ	PCE	No Trend	No Trend	Downward Trend	
MSB 12B	ULLAZ	PCE	No Trend	No Trend	No Trend	
MSB 16A	ULLAZ	PCE	No Trend	No Trend	Upward Trend	

Table D-15a. CUSUM Analysis of Trichloroethylene and Tetrachloroethelyene Concentrations in Selected Monitoring Wells (continued)

Well Name	Aquifer Zone	Analyte Name	1Q01 Short-term Trend	3Q01 Short-term Trend	Long Term Trend	Process Error Code
MSB 18A	ULLAZ	PCE	No Trend	No Trend	No Trend	
MSB 20A	ULLAZ	PCE	Could not be analyzed.	Could not be analyzed.	Could not be analyzed.	1
MSB 27B	ULLAZ	PCE	No Trend	No Trend	Downward Trend	
MSB 31CC	ULLAZ	PCE	No Trend	No Trend	No Trend	
MSB 33C	ULLAZ	PCE	Could not be analyzed.	Could not be analyzed.	Could not be analyzed.	3
MSB 34B	ULLAZ	PCE	No Trend	No Trend	No Trend	
MSB 36C	ULLAZ	PCE	Could not be analyzed.	Could not be analyzed.	Could not be analyzed.	3
MSB 39C	ULLAZ	PCE	No Trend	No Trend	Downward Trend	
MSB 47C	ULLAZ	PCE	Could not be analyzed.	Could not be analyzed.	Could not be analyzed.	1
ASB 6TA	CBAU	TCE	No Trend	No Trend	No Trend	
MSB 34TA	CBAU	TCE	No Trend	No Trend	Upward Trend	
MSB 42TA	CBAU	TCE	No Trend	No Trend	Upward Trend	
ASB 5C	LLLAZ	TCE	No Trend	No Trend	Downward Trend	
MSB 2B	LLLAZ	TCE	No Trend	No Trend	Upward Trend	
MSB 4B	LLLAZ	TCE	Could not be analyzed.	Could not be analyzed.	Could not be analyzed.	2
MSB 6B	LLLAZ	TCE	No Trend	No Trend	Upward Trend	
MSB 9A	LLLAZ	TCE	No Trend	No Trend	No Trend	
MSB 13A	LLLAZ	TCE	No Trend	No Trend	Upward Trend	
MSB 17BB	LLLAZ	TCE	No Trend	No Trend	Upward Trend	
MSB 19B	LLLAZ	TCE	Could not be analyzed.	Could not be analyzed.	Could not be analyzed.	1
MSB 25A	LLLAZ	TCE	No Trend	No Trend	Downward Trend	
MSB 26B	LLLAZ	TCE	No Trend	No Trend	Upward Trend	
MSB 31B	LLLAZ	TCE	No Trend	No Trend	No Trend	
MSB 33B	LLLAZ	TCE	No Trend	No Trend	No Trend	
MSB 34A	LLLAZ	TCE	No Trend	No Trend	Downward Trend	
MSB 36B	LLLAZ	TCE	No Trend	No Trend	No Trend	
MSB 37C	LLLAZ	TCE	No Trend	No Trend	No Trend	
MSB 39B	LLLAZ	TCE	Upward Trend	No Trend	No Trend	
MSB 75B	LLLAZ	TCE	No Trend	No Trend	Upward Trend	
MSB 4D	MAAZ	TCE	No Trend	No Trend	Downward Trend	
MSB 16C	MAAZ	TCE	Could not be analyzed.	Could not be analyzed.	Could not be analyzed.	4
MSB 17B	MAAZ	TCE	No Trend	No Trend	Upward Trend	
MSB 18B	MAAZ	TCE	No Trend	No Trend	No Trend	
MSB 19C	MAAZ	TCE	No Trend	No Trend	Downward Trend	
MSB 20C	MAAZ	TCE	Could not be analyzed.	Could not be analyzed.	Could not be analyzed.	1
MSB 24	MAAZ	TCE	No Trend	No Trend	Downward Trend	
MSB 26	MAAZ	TCE	No Trend	No Trend	No Trend	
MSB 34C	MAAZ	TCE	No Trend	No Trend	Downward Trend	
MSB 39D	MAAZ	TCE	Could not be analyzed.	Could not be analyzed.	Could not be analyzed.	1
ASB 6AA	MSAZ_CBCU	TCE	No Trend	No Trend	Downward Trend	
ASB 8B	MSAZ_CBCU	TCE	Could not be analyzed.	Could not be analyzed.	Could not be analyzed.	2
MSB 10A	MSAZ_CBCU	TCE	No Trend	No Trend	Upward Trend	
MSB 33A	MSAZ_CBCU	TCE	No Trend	No Trend	Downward Trend	

Table D-15a. CUSUM Analysis of Trichloroethylene and Tetrachloroethelyene Concentrations in Selected Monitoring Wells (continued)

Well Name	Aquifer Zone	Analyte Name	1Q01 Short-term Trend	3Q01 Short-term Trend	Long Term Trend	Process Error Code
MSB 37B	MSAZ_CBCU	TCE	No Trend	No Trend	No Trend	
MSB 41B	MSAZ_CBCU	TCE	No Trend	No Trend	No Trend	
ASB 6C	ULLAZ	TCE	No Trend	No Trend	Upward Trend	
ASB 8C	ULLAZ	TCE	No Trend	No Trend	Downward Trend	
MSB 3C	ULLAZ	TCE	No Trend	No Trend	Upward Trend	
MSB 4C	ULLAZ	TCE	No Trend	No Trend	Upward Trend	
MSB 6C	ULLAZ	TCE	Could not be analyzed.	Could not be analyzed.	Could not be analyzed.	2
MSB 12B	ULLAZ	TCE	No Trend	No Trend	No Trend	
MSB 16A	ULLAZ	TCE	No Trend	No Trend	No Trend	
MSB 18A	ULLAZ	TCE	No Trend	No Trend	Upward Trend	
MSB 20A	ULLAZ	TCE	Could not be analyzed.	Could not be analyzed.	Could not be analyzed.	2
MSB 27B	ULLAZ	TCE	No Trend	No Trend	Downward Trend	
MSB 31CC	ULLAZ	TCE	No Trend	No Trend	No Trend	
MSB 33C	ULLAZ	TCE	No Trend	No Trend	Downward Trend	
MSB 34B	ULLAZ	TCE	No Trend	No Trend	Upward Trend	
MSB 36C	ULLAZ	TCE	No Trend	No Trend	No Trend	
MSB 39C	ULLAZ	TCE	No Trend	No Trend	Downward Trend	
MSB 47C	ULLAZ	TCE	No Trend	No Trend	Downward Trend	

Process Error Code: The statistical program generates process errors associated with the input data set

1) Not enough values above detection limits to allow statistical analysis.
2) Data is not normally distributed so CUSUM statistics cannot be applied.
3) Data distribution inappropriate for CUSUM statistical analysis
4) Number of values less than the minimum needed allow CUSUM statistical analysis.

PCE Tetrachloroethylene
TCE Trichloroethylene

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Table D-15b. CUSUM Analysis of Trichloroethylene and Tetrachloroethelyene Concentrations in Recovery Wells

Well Name	Aquifer Zone	Analyte Name	1Q01 Short-term Trend	3Q01 Short-term Trend	Long-term Trend	Process Error Code
RWM 1	multiple	PCE	No Trend	No Trend	Upward Trend	
RWM 2	multiple	PCE	No Trend	No Trend	No Trend	
RWM 3	multiple	PCE	No Trend	Upward Trend	Downward Trend	
RWM 4	multiple	PCE	No Trend	No Trend	No Trend	
RWM 5	multiple	PCE	No Trend	No Trend	No Trend	
RWM 6	multiple	PCE	Could not be analyzed.	Could not be analyzed.	Could not be analyzed.	
RWM 7	multiple	PCE	No Trend	No Trend	Upward Trend	
RWM 8	multiple	PCE	No Trend	No Trend	No Trend	
RWM 9	multiple	PCE	No Trend	Upward Trend	Upward Trend	
RWM 10	multiple	PCE	Could not be analyzed.	Could not be analyzed.	Could not be analyzed.	2
RWM 11	multiple	PCE	Could not be analyzed.	Could not be analyzed.	Could not be analyzed.	2
RWM 12	multiple	PCE	Could not be analyzed.	Could not be analyzed.	Could not be analyzed.	2
RWM 13B	multiple	PCE	Could not be analyzed.	Could not be analyzed.	Could not be analyzed.	2
RWM 13C	multiple	PCE	No Trend	No Trend	Downward Trend	
RWM 14B	multiple	PCE	No Trend	No Trend	Downward Trend	
RWM 14C	multiple	PCE	Could not be analyzed.	Could not be analyzed.	Could not be analyzed.	3
RWM 15B	multiple	PCE	Could not be analyzed.	Could not be analyzed.	Could not be analyzed.	1
RWM 1	multiple	TCE	Could not be analyzed.	Could not be analyzed.	Could not be analyzed.	2
RWM 2	multiple	TCE	No Trend	No Trend	Downward Trend	
RWM 3	multiple	TCE	No Trend	No Trend	Downward Trend	
RWM 4	multiple	TCE	No Trend	No Trend	No Trend	
RWM 5	multiple	TCE	No Trend	No Trend	Upward Trend	
RWM 6	multiple	TCE	Could not be analyzed.	Could not be analyzed.	Could not be analyzed.	2
RWM 7	multiple	TCE	No Trend	No Trend	No Trend	
RWM 8	multiple	TCE	No Trend	No Trend	Downward Trend	
RWM 9	multiple	TCE	Upward Trend	Upward Trend	Upward Trend	
RWM 10	multiple	TCE	No Trend	No Trend	No Trend	
RWM 11	multiple	TCE	No Trend	No Trend	Downward Trend	
RWM 12	multiple	TCE	No Trend	No Trend	Downward Trend	
RWM 13B	multiple	TCE	Upward Trend	No Trend	Downward Trend	
RWM 13C	multiple	TCE	No Trend	No Trend	Downward Trend	
RWM 14B	multiple	TCE	No Trend	No Trend	Downward Trend	
RWM 14C	multiple	TCE	No Trend	No Trend	Downward Trend	
RWM 15B	multiple	TCE	No Trend	No Trend	Downward Trend	

Process Error Code: The statistical program generates process errors associated with the input data set

1) Not enough values above detection limits to allow statistical analysis.
2) Data is not normally distributed so CUSUM statistics cannot be applied.
3) Data distribution inappropriate for CUSUM statistical analysis
4) Number of values less than the minimum needed allow CUSUM statistical analysis.

PCE Tetrachloroethylene
TCE Trichloroethylene

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Table D-16. Operating and Performance Summary of the M1 Air Stripper 2001

Operation Parameter	Jan	Feb	Mar	Apr	May	Jun
Average Operating Time (Hrs.)	602.9	669.9	732	720	743.8	713
Downtime (hrs)	141.1	2.1	12	0	0.2	7
Throughput (gal)	15,537,370	17,251,110	20,385,090	19,458,690	20,656,579	19,755,804
TCE Solvent Removed (lbs)	349.8	374.0	457.2	274.2	337.6	375.6
PCE Solvent Removed (lbs)	246.1	273.3	277.1	185.0	234.2	242.1
Total Solvent Removed (lbs)	595.9	647.3	734.3	459.2	571.8	617.7
Average Concentration (mg/L)						
Stripper Influent						
(PCE)	1900	1900	1630	1140	1360	1470
(TCE)	2700	2600	2690	1690	1960	2280
Total	4600	4500	4320	2830	3320	3750
Stripper Effluent						
(PCE)	0	0	0	0	0	0
(TCE)	0	0	0	0	0	0
Total	0	0	0	0	0	0

Table D-16. Operating and Performance Summary of the M1 Air Stripper 2001 (Cont.)

Operation Parameter	Jul	Aug	Sep	Oct	Nov	Dec	Annual Totals	Monthly Average
Average Operating Time (Hrs.)	744	692	659	706	716	723	**8,422**	**702**
Downtime (hrs)	0	53	61	38	4	21	**339**	**28**
Throughput (gal)	20,606,766	18,743,780	18,121,650	19,136,330	18,349,570	19,694,000	**227,696,739**	**18,974,728**
TCE Solvent Removed (lbs)	478	447	376	386	392	488	**4,735**	**395**
PCE Solvent Removed (lbs)	357	347	267	265	308	419	**3,421**	**285**
Total Solvent Removed (lbs)	835	794	644	651	699	906	**8,156**	**680**
Average Concentration (mg/L)								
Stripper Influent								
(PCE)	2,080	2,220	1,770	1,660	2,010	2,550	**21,690**	**1808**
(TCE)	2,780	2,860	2,490	2,420	2,560	2,970	**30,000**	**2500**
Total	4,860	5,080	4,260	4,080	4,570	5,520	**51,690**	**4308**
Stripper Effluent								
(PCE)	0	0	0	0	0	0	**0**	**0**
(TCE)	0	0	0	0	0	0	**0**	**0**
Total	0	0	0	0	0	0	**0**	**0**

Table D-17. Operating and Performance Summary of the A2 Air Stripper 2001

Operation Parameter	Jan	Feb	Mar	Apr	May	Jun
Average Operating Time (hrs)	720	658.8	739	717	732	717.5
Downtime (hrs)	24	13.2	5	3	12	2.5
Throughput (gal)	12,807,810	11,724,004	13,054,622	11,918,418	12,892,932	12,656,700
TCE Solvent Removed (lbs)	106.8	107.5	123.0	63.1	86.3	83.6
PCE Solvent Removed (lbs)	2.4	1.6	1.1	0.7	0.7	0.6
Total Solvent Removed (lbs)	109.2	109.1	124.1	63.8	87.0	84.2
Average Concentration (mg/L)						
Stripper Influent						
PCE	22.4	16	10.5	6.85	6.21	5.83
TCE	1000	1100	1130	635	803	792
Total	1022	1116	1141	642	809	798
Stripper Effluent						
PCE	0	0	0	0	0	0
TCE	1.3	1.3	1.15	0.8	0.8	0.7
Total	1.30	1.30	1.15	0.80	0.80	0.70

Table D-17. Operating and Performance Summary of the A2 Air Stripper 2001 (Cont.)

Operation Parameter	Jul	Aug	Sep	Oct	Nov	Dec	Annual Total	Monthly Average
Average Operating Time (hrs)	533.8	694.3	660.8	741	652	744	**8,310**	**692.52**
Downtime (hrs)	210.2	49.7	59.2	3	68	0	**450**	**37.48**
Throughput (gal)	9,022,857	11,945,220	11,481,420	12,922,790	11,122,909	12,951,927	**144,501,609**	**12,041,800.75**
TCE Solvent Removed (lbs)	71.0	95.2	79.0	97.4	84.1	87.9	**1,085**	**90.41**
PCE Solvent Removed (lbs)	0.7	0.4	1.1	2.2	1.0	0.9	**13**	**1.12**
Total Solvent Removed (lbs)	71.7	95.6	80.1	99.6	85.2	88.8	**1,098**	**91.53**
Average Concentration (mg/L)								
Stripper Influent								
PCE	8.96	4.28	11.4	20	11.16	8.51	**132**	**11**
TCE	944	956	825	904	907.25	814	**10,810**	**901**
Total	953	960	836	924	918	823	**10,942**	**912**
Stripper Effluent								
PCE	0	0	0	0	0	0	**0**	**0**
TCE	0.9	0.9	0	0.9	0.8	0.9	**10**	**1**
Total	0.90	0.90	0.00	0.90	0.80	0.90	**10**	**1**

Table D-18. Summary of Operation of the SVEU Vadose Unit 782-3M for 2001

Operation Parameter	Jan	Feb	Mar	Apr	May	Jun
Operating Time (hours)	744	605	445	720	743	519
Downtime (hours)	0	67	299	0	1	201
Total Solvent Removed (lbs.)	648.72	608.72	605.55	662.16	659.85	557.30
Average Vapor Flow Rate (scfm)	539.52	563.07	543.19	531.67	527.20	527.07
Average Concentration Influent (ppmv)	64.73	71.71	99.85	69.16	67.24	77.97

Operation Parameter	Jul	Aug	Sep	Oct	Nov	Dec	Yearly Total	Monthly Average
Operating Time (hours)	419	383.1	702	574.8	714.9	744	**7,314**	**609**
Downtime (hours)	325	360.9	18	169.2	5.1	0	**1,446**	**121**
Total Solvent Removed (lbs)	510.97	571.58	973.32	621.86	987.40	1049.76	**8,457**	**705**
Average Vapor Flow Rate (scfm)	515.73	516.45	514.33	514.81	525.49	517.48	**6,336**	**528**
Average Concentration Influent (ppmv)	94.63	115.13	107.69	83.68	104.75	107.85	**1,064**	**89**

Table D-19. Summary of Operation of the SVEU Vadose Unit 782-4M for 2001

Operation Parameter	Jan	Feb	Mar	Apr	May	Jun
Operating Time (hours)	741	672	742	720	744	717
Downtime (hours)	3	0	2	0	0	3
Total Solvent Removed (lbs.)	1021.77	1096.80	1095.48	954.00	958.08	1027.62
Average Vapor Flow Rate (scfm)	410.01	493.79	384.62	371.03	378.87	364.33
Average Concentration Influent (ppmv)	135.93	131.91	155.08	144.55	137.93	159.11

Operation Parameter	Jul	Aug	Sep	Oct	Nov	Dec	Yearly Total	Monthly Average
Operating Time (hours)	731	741	700.7	744	718	729.5	**8,700**	**725**
Downtime (hours)	13	3	19.3	0	2	14.5	**60**	**5**
Total Solvent Removed (lbs)	1116.42	1152.93	1123.06	1165.20	1227.72	1189.47	**13,129**	**1,094**
Average Vapor Flow Rate (scfm)	368.54	366.19	364.62	363.32	368.36	378.43	**4,612**	**384**
Average Concentration Influent (ppmv)	167.00	171.52	178.96	173.15	186.47	174.03	**1,916**	**160**

Table D-20. Summary of Operation of the SVEU Vadose Unit 782-6M for 2001

Operation Parameter	Jan	Feb	Mar	Apr	May	Jun
Operating Time (hours)	462	634	490	710	416	680
Downtime (hours)	281	38	254	10	328	40
Total Solvent Removed (lbs.)	2963.94	12193.94	9663.78	13068.08	3424.56	12550.16
Average Vapor Flow Rate (scfm)	558.06	545.44	504.96	307.52	292.77	254.58
Average Concentration Influent (ppmv)	463.88	1430.79	1654.69	2371.13	1114.96	2886.65

Operation Parameter	July	Aug	Sep	Oct	Nov	Dece	Yearly Totals	Monthly Average
Operating Time (hours)	744	384	465	66.2	128	0	**5,179**	**432**
Downtime (hours)	0	360	255	677.8	592	744	**3,580**	**298**
Total Solvent Removed (lbs)	8138.40	3301.29	2568.53	5.02	33.14	0.00	**67,911**	**5,659**
Average Vapor Flow Rate (scfm)	289.68	299.34	296.80	309.94	303.24	0.00	**3,962**	**330**
Average Concentration Influent (ppmv)	1501.04	1138.09	738.55	9.44	33.95	0.00	**13,343**	**1,112**

Table D-21. Summary of Operation of the SVEU Vadose Unit 782-7M for 2001

Operation Parameter	Jan	Feb	Mar	Apr	May	Jun
Operating Time (hours)	744	664	744	720	744	720
Downtime (hours)	0	8	0	0	0	0
Total Solvent Removed (lbs.)	106.80	73.28	92.64	79.68	80.70	72.30
Average Vapor Flow Rate (scfm)	325.00	325.00	324.33	307.67	320.65	325.00
Average Concentration Influent (ppmv)	19.53	14.60	16.82	15.95	15.01	13.38

Operation Parameter	Jul	Aug	Sep	Oct	Nov	Dec	Yearly Total	Monthly Average
Operating Time (hours)	740	741	720	743	716	744	**8,740**	**728**
Downtime (hours)	4	3	0	1	4	0	**20**	**2**
Total Solvent Removed (lbs)	74.42	77.87	73.50	67.12	60.64	64.32	**923**	**77**
Average Vapor Flow Rate (scfm)	326.14	328.40	320.83	320.00	312.65	311.77	**3,847**	**321**
Average Concentration Influent (ppmv)	13.45	13.65	13.42	12.31	11.17	11.80	**171**	**14**

Table D22. Summary of Volume Pumped from Recovery Wells, 2001

	Jan-01				Feb-01				Mar-01			
	Monthly Volume (gal)	Cumulative Volume Since 4/85 (gal)	Average Flow Rate (gpm)	Well Operations (hours)	Monthly Volume (gal)	Cumulative Volume Since 4/85 (gal)	Average Flow Rate (gpm)	Well Operations (hours)	Monthly Volume (gal)	Cumulative Volume Since 4/85 (gal)	Average Flow Rate (gpm)	Well Operations (hours)
RWM01	501,184	154,011,106	13	625	599,600	154,610,706	15	645	88,386	154,699,092	12	119
RWM02	215,842	146,771,952	5	744	14,670	146,786,622	0	664	75,981	146,862,603	2	598
RWM03	2,215,420	413,998,571	61	606	2,439,000	416,437,571	61	671	2,650,263	419,087,834	61	730
RWM04	1,720,904	281,900,002	47	605	1,896,529	283,796,531	47	671	2,113,092	285,909,623	47	743
RWM05	1,735,584	280,547,967	48	599	1,945,644	282,493,611	48	671	2,140,128	284,633,739	48	743
RWM06	1,171,488	387,869,668	33	599	1,149,613	389,019,281	39	486	2,371,975	391,391,256	53	743
RWM07	1,374,842	232,705,236	38	599	1,234,949	233,940,185	31	672	1,588,896	235,529,081	36	734
RWM08	1,389,194	249,031,030	44	524	1,768,254	250,799,284	44	672	1,930,617	252,729,901	44	740
RWM09	1,744,825	270,374,947	48	608	1,909,912	272,284,859	48	667	2,097,166	274,382,025	47	737
RWM10	878,627	288,352,805	24	601	983,808	289,336,613	25	652	823,524	290,160,137	27	511
RWM11	2,609,668	450,173,800	71	614	2,858,492	453,032,292	71	667	3,149,236	456,181,528	71	740
RWM12	2,224,491	190,381,494	52	719	2,057,643	192,439,137	51	669	2,280,797	194,719,934	51	744
RWM13B	1,763,334	85,291,851	41	718	1,620,130	86,911,981	41	660	1,835,282	88,747,263	42	732
RWM13C	2,975,421	146,090,268	69	718	2,428,804	148,519,072	60	670	3,088,022	151,607,094	69	742
RWM14B	1,987,491	97,801,746	46	720	1,794,203	99,595,949	45	658	2,029,755	101,625,704	46	744
RWM14C	1,839,295	91,015,993	43	720	1,724,203	92,740,196	44	657	1,994,203	94,734,399	46	730
RWM15B	1,881,275	85,447,567	44	718	1,832,164	87,279,731	45	680	1,997,147	89,276,878	45	742
RWM17B	964,208	6,211,390	27	605	1,033,384	7,244,774	25	681	1,269,008	8,513,782	28	744
RWM17D	585,363	3,111,184	16	605	461,649	3,572,833	11	670	571,597	4,144,430	13	743

Table D22. Summary of Volume Pumped from Recovery Wells, 2001 (cont.)

	Apr-01				May-01				Jun-01			
	Monthly Volume (gal)	Cumulative Volume Since 4/85 (gal)	Average Flow Rate (gpm)	Well Operations (hours)	Monthly Volume (gal)	Cumulative Volume Since 4/85 (gal)	Average Flow Rate (gpm)	Well Operations (hours)	Monthly Volume (gal)	Cumulative Volume Since 4/85 (gal)	Average Flow Rate (gpm)	Well Operations (hours)
RWM01	110,636	154,809,728	18	101	829,239	155,638,967	19	741	516,672	156,155,639	12	710
RWM02	139,789	147,002,392	6	422	327,934	147,330,326	7	742	156,198	147,486,524	4	717
RWM03	2,588,727	421,676,561	60	718	2,653,283	424,329,844	60	743	2,538,725	426,868,569	59	712
RWM04	1,995,905	287,905,528	47	705	2,092,862	289,998,390	47	744	2,000,403	291,998,793	47	711
RWM05	2,049,408	286,683,147	48	712	2,109,180	288,792,327	48	737	2,022,943	290,815,270	47	713
RWM06	2,253,945	393,645,201	54	700	2,388,905	396,034,106	54	740	2,304,868	398,338,974	54	709
RWM07	1,460,441	236,989,522	35	695	1,510,718	238,500,240	34	738	1,467,776	239,968,016	34	712
RWM08	1,865,245	254,595,146	43	716	1,911,546	256,506,692	43	736	1,789,758	258,296,450	44	675
RWM09	1,987,590	276,369,615	48	697	2,074,674	278,444,289	47	736	2,061,452	280,505,741	48	713
RWM10	1,133,838	291,293,975	27	697	1,082,965	292,376,940	24	742	1,040,197	293,417,137	25	708
RWM11	3,047,704	459,229,232	71	719	3,026,494	462,255,726	69	735	2,988,442	465,244,168	70	712
RWM12	2,155,003	196,874,937	52	695	2,249,940	199,124,877	51	737	2,188,295	201,313,172	51	718
RWM13B	1,708,725	90,455,988	40	718	1,782,736	92,238,724	40	737	1,726,575	93,965,299	40	715
RWM13C	2,994,838	154,601,932	71	698	3,063,238	157,665,170	70	737	2,961,885	160,627,055	69	715
RWM14B	2,012,021	103,637,725	47	709	2,021,565	105,659,290	47	722	1,975,924	107,635,214	45	728
RWM14C	1,098,860	95,833,259	45	407	1,845,936	97,679,195	45	687	1,913,967	99,593,162	45	714
RWM15B	1,780,279	91,057,157	44	670	1,938,074	92,995,231	44	737	1,876,115	94,871,346	44	715
RWM17B	1,367,577	9,881,359	33	697	1,441,856	11,323,215	32	741	1,363,209	12,686,424	33	695
RWM17D	481,495	4,625,925	11	709	496,977	5,122,902	11	740	508,771	5,631,673	12	695

Table D22. Summary of Volume Pumped from Recovery Wells, 2001 (cont.)

	Jul-01				Aug-01				Sep-01			
	Monthly Volume (gal)	Cumulative Volume Since 4/85 (gal)	Average Flow Rate (gpm)	Well Operations (hours)	Monthly Volume (gal)	Cumulative Volume Since 4/85 (gal)	Average Flow Rate (gpm)	Well Operations (hours)	Monthly Volume (gal)	Cumulative Volume Since 4/85 (gal)	Average Flow Rate (gpm)	Well Operations (hours)
RWM01	691,920	156,847,559	16	744	767,193	157,614,752	17	744	632524	158,247,276	20.75	508.1
RWM02	116,321	147,602,845	3	744	67,961	147,670,806	3	384	61944	147,732,750	2.22	465
RWM03	2,756,520	429,625,089	62	745	2,465,622	432,090,711	60	690	2334680	434,425,391	59.22	657.1
RWM04	2,093,995	294,092,788	47	745	1,946,702	296,039,490	47	690	1845760	297,885,250	46.72	658.5
RWM05	2,144,707	292,959,977	48	744	1,977,743	294,937,720	48	689	1861894	296,799,614	47.22	657.2
RWM06	2,415,652	400,754,626	55	735	2,261,268	403,015,894	55	688	2173354	405,189,248	54.69	662.3
RWM07	1,510,203	241,478,219	34	733	1,414,867	242,893,086	34	689	1323975	244,217,061	33.38	661.1
RWM08	2,029,616	260,326,066	46	735	-908,757	259,417,309	-22	691	1677821	261,095,130	42.52	657.6
RWM09	2,081,939	282,587,680	47	742	1,937,696	284,525,376	47	690	1833528	286,358,904	46.45	657.9
RWM10	1,053,639	294,470,776	24	732	1,012,915	295,483,691	24	690	925026	296,408,717	23.43	658
RWM11	3,109,261	468,353,429	70	742	2,711,901	471,065,330	70	647	2744047	473,809,377	69.46	658.4
RWM12	1,554,459	202,867,631	49	526	1,966,323	204,833,954	51	646	2011746	206,845,700	50.82	659.8
RWM13B	1,305,398	95,270,697	40	539	1,669,061	96,939,758	40	687	1596529	98,536,287	40.22	661.5
RWM13C	2,241,684	162,868,739	70	533	2,868,702	165,737,441	69	693	2733980	168,471,421	68.88	661.5
RWM14B	1,474,124	109,109,338	46	532	1,910,233	111,019,571	46	694	1810908	112,830,479	45.74	659.8
RWM14C	1,430,478	101,023,640	45	532	1,829,534	102,853,174	44	694	1735102	104,588,276	43.83	659.8
RWM15B	1,009,776	95,881,122	44	386	1,820,473	97,701,595	44	694	1738557	99,440,152	43.70	663
RWM17B	1,467,988	14,154,412	33	744	1,348,664	15,503,076	33	690	1317789	16,820,865	33.28	659.9
RWM17D	508,111	6,139,784	11	744	434,414	6,574,198	11	690	415800	6,989,998	10.50	660

Table D22. Summary of Volume Pumped from Recovery Wells, 2001 (cont.)

	Oct-01				Nov-01				Dec-01			
	Monthly Volume (gal)	Cumulative Volume Since 4/85 (gal)	Average Flow Rate (gpm)	Well Operations (hours)	Monthly Volume (gal)	Cumulative Volume Since 4/85 (gal)	Average Flow Rate (gpm)	Well Operations (hours)	Monthly Volume (gal)	Cumulative Volume Since 4/85 (gal)	Average Flow Rate (gpm)	Well Operations (hours)
RWM01	690,509	158,937,785	18	640	831,462	159,769,247	19	714	822,395	160,591,642	18	742
RWM02	1,918	147,734,668	1	61	0	147,734,668	0	0	50,202	147,784,870	0	0
RWM03	2,510,125	436,935,516	60	703	2,550,390	439,485,906	60	711	2,597,772	442,083,678	60	722
RWM04	1,992,939	299,878,189	47	708	2,003,948	301,882,137	47	711	2,048,996	303,931,133	47	724
RWM05	2,019,317	298,818,931	48	706	2,039,053	300,857,984	48	710	2,077,416	302,935,400	48	723
RWM06	2,311,107	407,500,355	55	705	2,335,989	409,836,344	55	713	2,401,662	412,238,006	55	724
RWM07	1,416,244	245,633,305	33	708	1,420,041	247,053,346	33	710	1,468,180	248,521,526	34	724
RWM08	1,812,987	262,908,117	43	710	1,815,650	264,723,767	43	711	1,793,146	266,516,913	42	705
RWM09	1,983,769	288,342,673	47	710	1,985,277	290,327,950	44	759	2,027,704	292,355,654	47	722
RWM10	1,022,407	297,431,124	24	709	1,038,065	298,469,189	24	710	1,073,954	299,543,143	25	723
RWM11	2,960,394	476,769,771	69	711	2,688,347	479,458,118	70	642	2,637,192	482,095,310	70	627
RWM12	2,255,044	209,100,744	51	742	1,779,748	210,880,492	51	585	2,266,674	213,147,166	51	746
RWM13B	1,796,892	100,333,179	40	743	1,563,168	101,896,347	40	645	1,811,687	103,708,034	40	750
RWM13C	3,070,111	171,541,532	69	743	2,666,169	174,207,701	69	645	3,097,903	177,305,604	69	750
RWM14B	2,033,635	114,864,114	46	741	1,782,798	116,646,912	46	648	2,051,958	118,698,870	46	746
RWM14C	1,948,419	106,536,695	44	741	1,707,830	108,244,525	44	648	5,534,036	113,778,561	224	412
RWM15B	1,931,603	101,371,755	43	741	1,673,330	103,045,085	43	645	1,943,576	104,988,661	43	747
RWM17B	1,413,427	18,234,292	33	710	1,417,292	19,651,584	33	711	1,245,223	20,896,807	33	625
RWM17D	391,920	7,381,918	9	710	377,046	7,758,964	9	711	267,178	8,026,142	11	390

Table D23. Summary of Average Tetrachloroethylene and Trichloroethylene Concentrations in Recovery Wells

Well Number	January PCE (mg/L)	TCE (mg/L)	Total (mg/L)	February PCE (mg/L)	TCE (mg/L)	Total (mg/L)	March PCE (mg/L)	TCE (mg/L)	Total (mg/L)
RWM 1	11,400	17,300	28,700	14,000	19,600	33,600	15,800	22,500	38,300
RWM 2	9,720	9,590	19,310	9,120	8,980	18,100	13,000	12,300	25,300
RWM 3	903	3,230	4,133	717	2,720	3,437	915	3,320	4,235
RWM 4	1,430	9,150	10,580	628	5,210	5,838	1,260	9,500	10,760
RWM 5	442	1,020	1,462	422	1,140	1,562	619	1,290	1,909
RWM 6	2,570	2,060	4,630	2,570	1,920	4,490	3,740	2,530	6,270
RWM 7	*5,433*	*5,260*	10,693	6,580	5,310	11,890	9,220	7,030	16,250
RWM 8	341	635	976	401	683	1,084	440	817	1,257
RWM 9	8	191	199	**6**	**154**	160	**6**	**152**	158
RWM 10	6,410	4,170	10,580	7,100	4,320	11,420	9,020	5,580	14,600
RWM 11	59	772	831	**48**	**483**	531	**51**	**590**	641
RWM 12	**16**	1,550	1,566	**17**	1,470	1,487	**17**	1,560	1,577
RWM 13B	50	743	793	50	646	696	**24**	831	855
RWM 13C	**23**	1,050	1,073	**23**	917	940	**23**	1,590	1,613
RWM 14B	**12**	784	796	**12**	727	739	**12**	886	898
RWM 14C	**35**	3,440	3,475	**35**	3,240	3,275	**35**	3,950	3,985
RWM 15B	**1**	27	28	**1**	25	26	***1***	*26*	27

NOTE: Numbers in **bold** are estimated because of missing data or equipment malfunction. Numbers in *italics* are averages of two or more samples.

Table D23. Summary of Average Tetrachloroethylene and Trichloroethylene Concentrations in Recovery Wells (Cont.)

Well Number	April PCE (mg/L)	April TCE (mg/L)	April Total (mg/L)	May PCE (mg/L)	May TCE (mg/L)	May Total (mg/L)	June PCE (mg/L)	June TCE (mg/L)	June Total (mg/L)
RWM 1	15,000	22,000	37,000	9,500	14,000	23,500	16,000	21,000	37,000
RWM 2	13,000	13,000	26,000	11,000	11,000	22,000	14,000	12,000	26,000
RWM 3	*1,104*	*3,925*	5,029	900	3,000	3,900	1,500	4,700	6,200
RWM 4	1,100	7,000	8,100	850	6,100	6,950	1,300	7,600	8,900
RWM 5	720	550	1,270	540	1,400	1,940	590	1,500	2,090
RWM 6	3,500	2,500	6,000	3,000	2,100	5,100	4,000	2,800	6,800
RWM 7	8,300	7,000	15,300	7,500	6,100	13,600	9,600	7,200	16,800
RWM 8	470	860	1,330	**437**	**787**	1,224	980	1,400	2,380
RWM 9	6	150	156	**6**	160	166	**6**	**146**	152
RWM 10	9,100	5,700	14,800	7,200	4,600	11,800	9,700	5,800	15,500
RWM 11	44	270	314	48	590	638	*61*	*910*	971
RWM 12	*13*	2,100	2,113	**20**	1,800	1,820	18	1,500	1,518
RWM 13B	34	875	909	**11**	720	731	14	910	924
RWM 13C	**23**	1,300	1,323	**23**	1,000	1,023	28	1,200	1,228
RWM 14B	**12**	970	982	**12**	820	832	12	1,000	1,012
RWM 14C	**35**	4,300	4,335	**35**	3,600	3,635	97	5,600	5,697
RWM 15B	**1**	31	32	**1**	22	23	**1**	32	33

NOTE: Numbers in **bold** are estimated because of missing data or equipment malfunction. Numbers in *italics* are averages of two or more samples.

Table D23. Summary of Average Tetrachloroethylene and Trichloroethylene Concentrations in Recovery Wells (Cont.)

Well Number	July PCE (mg/L)	July TCE (mg/L)	July Total (mg/L)	August PCE (mg/L)	August TCE (mg/L)	August Total (mg/L)	September PCE (mg/L)	September TCE (mg/L)	September Total (mg/L)
RWM 1	13,600	20,000	33,600	*11,500*	*16,050*	27,550	*12,800*	*18,950*	31,750
RWM 2	**12,667**	**12,000**	24,667	9,870	9,500	19,370	9,690	10,600	20,290
RWM 3	1,200	3,050	4,250	850	3,020	3,870	697	2,890	3,587
RWM 4	884	5,300	6,184	724	5,190	5,914	570	5,670	6,240
RWM 5	498	1,260	1,758	482	1,240	1,722	497	1,380	1,877
RWM 6	2,470	1,830	4,300	2,420	1,740	4,160	2,450	1,990	4,440
RWM 7	7,450	5,530	12,980	6,930	5,570	12,500	6,630	5,720	12,350
RWM 8	**629**	**1,016**	1,645	*693*	*992*	1,684	906	1,320	2,226
RWM 9	**7**	**163**	169	5	130	135	5	145	150
RWM 10	7,180	4,560	11,740	7,610	4,600	12,210	7,140	4,150	11,290
RWM 11	112	749	861	50	785	835	44	736	780
RWM 12	**23**	**1,800**	1,823	**19**	1,540	1,559	**19**	1,420	1,439
RWM 13B	9	625	634	8	586	594	**8**	626	634
RWM 13C	24	934	958	18	912	930	14	887	901
RWM 14B	**12**	748	760	6	704	710	**12**	712	724
RWM 14C	**35**	3,020	3,055	26	2,730	2,756	**35**	3,690	3,725
RWM 15B	**1**	25	26	**1**	22	23	**1**	24	25

NOTE: Numbers in **bold** are estimated because of missing data or equipment malfunction. Numbers in *italics* are averages of two or more samples.

Table D23. Summary of Average Tetrachloroethylene and Trichloroethylene Concentrations in Recovery Wells (Cont.)

Well Number	October PCE (mg/L)	October TCE (mg/L)	October Total (mg/L)	November PCE (mg/L)	November TCE (mg/L)	November Total (mg/L)	December PCE (mg/L)	December TCE (mg/L)	December Total (mg/L)
RWM 1	*14,575*	*20,725*	35,300	10,900	16,600	27,500	20,500	25,200	45,700
RWM 2	12,500	13,500	26,000	8,950	10,700	19,650	12,000	11,400	23,400
RWM 3	979	3,730	4,709	791	3,300	4,091	1,040	3,570	4,610
RWM 4	1,030	7,380	8,410	817	5,370	6,187	1,080	6,570	7,650
RWM 5	595	1,630	2,225	438	1,340	1,778	598	1,470	2,068
RWM 6	2,670	2,200	4,870	2,090	1,840	3,930	2,780	2,130	4,910
RWM 7	8,070	7,230	15,300	*7,173*	*6,580*	13,753	**7,291**	**6,510**	13,801
RWM 8	**743**	**1,109**	1,852	**780**	**1,140**	1,921	**N/A**	**N/A**	**N/A**
RWM 9	9	212	221	**7**	**162**	169	**7**	**173**	180
RWM 10	8,950	5,140	14,090	6,760	4,730	11,490	8,687	5,310	13,997
RWM 11	52	820	872	40	801	841	55	835	890
RWM 12	30	3,400	3,430	10	1,530	1,540	16	1,880	1,896
RWM 13B	9	638	647	6	575	581	10	598	608
RWM 13C	19	929	948	**18**	847	865	21	882	903
RWM 14B	22	717	739	7	587	594	9	703	712
RWM 14C	39	3,610	3,649	**35**	2,500	2,535	41	3,610	3,651
RWM 15B	1	23	24	1	21	22	1	24	25

NOTE: Numbers in **bold** are estimated because of missing data or equipment malfunction. Numbers in *italics* are averages of two or more samples.

Table D-24. Summary of Operation of the Airlift Recirculation Wells for 2001

Well SSR-1

Operation Parameter	January	February	March	April	May	June
Operating Time (hours)	19.7	58.2	567.9	720	741.7	716.8
Downtime (hours)	724.3	613.8	176.1	0	2.3	3.2
Total Solvent Removed (lbs.)	0.003	0.008	0.189	0.222	0.088	0.075
Average Vapor Flow Rate (scfm)	21.90	21.90	26.70	31.10	32.90	40.10
Average Concentration Influent (ppmv)	0.30	0.30	0.62	0.47	0.18	0.13

Operation Parameter	July	August	September	October	November	December	Yearly Total	Monthly Average
Operating Time (hours)	744	736.7	639.9	692.1	693.5	744	**7,074.50**	**589.54**
Downtime (hours)	0	7.3	80.1	51.9	26.5	0	**1,685.50**	**140.46**
Total Solvent Removed (lbs.)	0.480	0.000	0.000	0.059	0.031	0.028	**1.18**	**0.10**
Average Vapor Flow Rate (scfm)	40.20	38.90	38.50	32.60	34.70	38.40	**397.90**	**33.16**
Average Concentration Influent (ppmv)	0.08	0.00	0.00	0.13	0.06	0.05	**2.32**	**0.19**

Table D-24. Summary of Operation of the Airlift Recirculation Wells for 2001 (Cont.)

Well SSR-2

Operation Parameter	January	February	March	April	May	June
Operating Time (hours)	692	58	567.8	720	741.7	716.9
Downtime (hours)	52	614	176.2	0	2.3	3.1
Total Solvent Removed (lbs.)	0.045	0.003	0.000	0.000	0.735	0.000
Average Vapor Flow Rate (scfm)	36.20	27.90	11.10	37.10	39.30	29.80
Average Concentration Influent (ppmv)	0.09	0.10	0.00	0.00	1.06	0.00

Operation Parameter	July	August	September	October	November	December	Yearly Total	Monthly Average
Operating Time (hours)	744	736.8	704.9	740.9	716.8	744	**7,883.80**	**656.98**
Downtime (hours)	0	7.2	15.1	3.1	3.2	0	**876.20**	**73.02**
Total Solvent Removed (lbs.)	0.000	0.000	0.000	0.000	0.000	0.025	**0.81**	**0.07**
Average Vapor Flow Rate (scfm)	30.10	31.90	33.10	30.90	32.90	34.00	**374.30**	**31.19**
Average Concentration Influent (ppmv)	0.00	0.00	0.00	0.00	0.00	0.05	**1.30**	**0.11**

Table D-24. Summary of Operation of the Airlift Recirculation Wells for 2001 (Cont.)

Well SSR-3

Operation Parameter	January	February	March	April	May	June
Operating Time (hours)	646.4	666.5	261.4	720	741.7	716.9
Downtime (hours)	97.6	5.5	482.6	0	2.3	3.1
Total Solvent Removed (lbs.)	0.0999	0.0904	0.0385	0.0913	0.241	0.073
Average Vapor Flow Rate (scfm)	33.5	33.8	31.9	31.6	31.7	26.6
Average Concentration Influent (ppmv)	0.23	0.20	0.23	0.20	0.51	0.19

Operation Parameter	July	August	September	October	November	December	Yearly Total	Monthly Average
Operating Time (hours)	744	736.8	701.2	740.9	716.7	744	**8136.5**	**678.04**
Downtime (hours)	0	7.2	18.8	3.1	3.3	0	**623.5**	**51.96**
Total Solvent Removed (lbs.)	0.0694	0.0908	0.0694	0.0927	0.0874	0.0734	**1.1172**	**0.09**
Average Vapor Flow Rate (scfm)	33.2	34.1	35.2	32.8	35.1	35.3	**394.8**	**32.90**
Average Concentration Influent (ppmv)	0.14	0.18	0.14	0.19	0.17	0.14	**2.52**	**0.21**

Table D-24. Summary of Operation of the Airlift Recirculation Wells for 2001 (Cont.)

Well SSR-4

Operation Parameter	January	February	March	April	May	June
Operating Time (hours)	739.7	667.8	333.1	720	741.7	716.9
Downtime (hours)	4.3	4.2	410.9	0	2.3	3.1
Total Solvent Removed (lbs.)	0.142	0.128	0.063	0.1375	0.1325	0.1229
Average Vapor Flow Rate (scfm)	35.40	28.90	313.00	307.00	35.60	29.40
Average Concentration Influent (ppmv)	0.27	0.33	0.30	0.31	0.25	0.29

Operation Parameter	July	August	September	October	November	December	Yearly Total	Monthly Average
Operating Time (hours)	744	736.8	700.8	741	716.4	744	**8302.2**	**691.85**
Downtime (hours)	0	7.2	19.2	3	3.6	0	**457.8**	**38.15**
Total Solvent Removed (lbs.)	0.1371	0.1506	0.1217	0.1438	0.1500	0.1533	**1.5824**	**0.13**
Average Vapor Flow Rate (scfm)	32.80	35.10	33.30	31.20	36.00	34.60	**952.3**	**79.36**
Average Concentration Influent (ppmv)	0.28	0.29	0.26	0.31	0.29	0.31	**3.49**	**0.29**

Table D-24. Summary of Operation of the Airlift Recirculation Wells for 2001 (Cont.)

Well SSR-5

Operation Parameter	January	February	March	April	May	June
Operating Time (hours)	0	332.3	743.5	720	741.7	716.8
Downtime (hours)	744	339.7	0.5	0	2.3	3.2
Total Solvent Removed (lbs.)	0.00	0.00	0.00	0.00	0.00	0.00
Average Vapor Flow Rate (scfm)	0.00	31.50	28.60	33.40	31.30	30.30
Average Concentration Influent (ppmv)	0.00	0.00	0.00	0.00	0.00	0.00

Operation Parameter	July	August	September	October	November	December	Yearly Total	Monthly Average
Operating Time (hours)	744	310.1	7	24	0	0	**4339.4**	**361.62**
Downtime (hours)	0	433.9	713	720	720	744	**4420.6**	**368.38**
Total Solvent Removed (lbs.)	0.00	0.00	0.00	0.00	0.00	0.00	**0**	**0.00**
Average Vapor Flow Rate (scfm)	31.50	33.60	0.00	0.00	0.00	0.00	**220.2**	**18.35**
Average Concentration Influent (ppmv)	0.00	0.00	0.00	0.00	0.00	0.00	**0**	**0.00**

Table D-24. Summary of Operation of the Airlift Recirculation Wells for 2001 (Cont.)

Well SSR-6

Operation Parameter	January	February	March	April	May	June
Operating Time (hours)	743.2	663.5	598.1	421.6	741.7	716.9
Downtime (hours)	0.8	8.5	145.9	298.4	2.3	3.1
Total Solvent Removed (lbs.)	0.0553	0.040	0.048	0.0216	0.0391	0.0356
Average Vapor Flow Rate (scfm)	30.9	29.9	23.6	31.8	32.8	30.9
Average Concentration Influent (ppmv)	0.12	0.10	0.17	0.08	0.08	0.08

Operation Parameter	July	August	September	October	November	December	Yearly Total	Monthly Average
Operating Time (hours)	744	736.9	706.3	733.2	716.2	744	**8265.6**	**688.80**
Downtime (hours)	0	7.1	13.7	10.8	3.8	0	**494.4**	**41.20**
Total Solvent Removed (lbs.)	0.0444	0.0802	0.0514	0.0457	0.048	0.064	**0.5733**	**0.05**
Average Vapor Flow Rate (scfm)	33.1	36.2	33	31.1	33.6	35.8	**382.7**	**31.89**
Average Concentration Influent (ppmv)	0.09	0.15	0.11	0.10	0.10	0.12	**1.3**	**0.11**

Table D-24. Summary of Operation of the Airlift Recirculation Wells for 2001 (Cont.)

Well SSR-7

Operation Parameter	January	February	March	April	May	June
Operating Time (hours)	573	669.6	598.1	467.4	741.7	716.9
Downtime (hours)	171	2.4	145.9	252.6	2.3	3.1
Total Solvent Removed (lbs.)	0.173	0.181	0.168	0.093	0.148	0.113
Average Vapor Flow Rate (scfm)	35.00	31.20	33.30	20.30	311.00	29.20
Average Concentration Influent (ppmv)	0.43	0.43	0.42	0.49	0.32	0.27

Operation Parameter	July	August	September	October	November	December	Yearly Total	Monthly Average
Operating Time (hours)	744	736.9	706.3	733.2	716.8	744	**8147.9**	**678.99**
Downtime (hours)	0	7.1	13.7	10.8	3.2	0	**612.1**	**51.01**
Total Solvent Removed (lbs.)	0.1217	0.1463	0.5116	0.1180	0.1291	0.1246	**2.0273**	**0.17**
Average Vapor Flow Rate (scfm)	28.10	35.30	34.70	30.80	32.10	37.60	**658.6**	**54.88**
Average Concentration Influent (ppmv)	0.29	0.28	1.04	0.26	0.28	0.24	**4.75**	**0.40**

Table D-24. Summary of Operation of the Airlift Recirculation Wells for 2001 (Cont.)

Well SSR-8

Operation Parameter	January	February	March	April	May	June
Operating Time (hours)	739.6	672	672.5	424	693.1	589.6
Downtime (hours)	4.4	0	71.5	296	50.9	130.4
Total Solvent Removed (lbs.)	0.592	0.1459	0.2523	0.1681	0.1659	0.2393
Average Vapor Flow Rate (scfm)	32	14.8	23.4	40.3	33.1	32.6
Average Concentration Influent (ppmv)	1.24	0.73	0.8	0.49	0.36	0.52

Operation Parameter	July	August	September	October	November	December	Yearly Total	Monthly Average
Operating Time (hours)	744	736.9	720	211.3	716.7	744	**7663.7**	**638.64**
Downtime (hours)	0	7.1	0	532.7	3.3	0	**1096.3**	**91.36**
Total Solvent Removed (lbs.)	0.2691	0.2685	0.5116	0.0999	0.3371	0.3523	**3.402**	**0.28**
Average Vapor Flow Rate (scfm)	32.8	33.6	38.4	32.7	33.5	36.5	**383.7**	**31.98**
Average Concentration Influent (ppmv)	0.55	0.54	0.85	0.72	0.70	0.65	**8.15**	**0.68**

Table D-24. Summary of Operation of the Airlift Recirculation Wells for 2001 (Cont.)

Well SSR-9

Operation Parameter	January	February	March	April	May	June
Operating Time (hours)	728.7	667.5	700.2	428	741.2	716.9
Downtime (hours)	15.3	4.5	43.8	292	2.8	3.1
Total Solvent Removed (lbs.)	18.7225	13.0298	16.0175	8.3927	15.6292	15.9766
Average Vapor Flow Rate (scfm)	22.40	24.40	22.00	40.30	33.10	32.40
Average Concentration Influent (ppmv)	50.13	39.08	53.72	33.06	31.18	33.87

Operation Parameter	July	August	September	October	November	December	Yearly Total	Monthly Average
Operating Time (hours)	744	736.9	148.3	67.8	716.7	744	**7140.2**	**595.02**
Downtime (hours)	0	7.1	571.7	676.2	3.3	0	**1619.8**	**134.98**
Total Solvent Removed (lbs.)	15.11	17.13	3.45	0.21	3.45	26.35	**153.4683**	**12.79**
Average Vapor Flow Rate (scfm)	32.60	33.80	33.80	45.60	47.50	71.30	**439.2**	**36.60**
Average Concentration Influent (ppmv)	30.54	33.62	33.62	3.30	5.04	24.49	**371.65**	**30.97**

Table D-24. Summary of Operation of the Airlift Recirculation Wells for 2001 (Cont.)

Well SSR-10

Operation Parameter	January	February	March	April	May	June
Operating Time (hours)	739.1	475.4	742.7	489	741.7	716.9
Downtime (hours)	4.9	196.6	1.3	231	2.3	3.1
Total Solvent Removed (lbs.)	16.6797	20.7914	30.5755	27.8460	42.2273	34.0798
Average Vapor Flow Rate (scfm)	27.9	34.4	31	33.4	32.5	30.9
Average Concentration Influent (ppmv)	39.89	62.77	65.75	84.34	86.59	76.27

Operation Parameter	July	August	September	October	November	December	Yearly Total	Monthly Average
Operating Time (hours)	744	736.9	279.4	44.4	716	744	**7169.5**	**597.46**
Downtime (hours)	0	7.1	440.6	699.6	4	0	**1590.5**	**132.54**
Total Solvent Removed (lbs.)	33.4516	39.1273	6.9051	0.1651	4.6213	4.8515	**261.3216**	**21.78**
Average Vapor Flow Rate (scfm)	32.5	37.1	31.3	46.6	48.4	70.7	**456.7**	**38.06**
Average Concentration Influent (ppmv)	68.35	70.69	39.22	3.99	6.897	4.61	**609.367**	**50.78**

Table D-24. Summary of Operation of the Airlift Recirculation Wells for 2001 (Cont.)

Well SSR-11

Operation Parameter	January	February	March	April	May	June
Operating Time (hours)	602.4	667.6	742.7	393	741.7	716.9
Downtime (hours)	141.6	4.4	1.3	327	2.3	3.1
Total Solvent Removed (lbs.)	21.8636	24.6794	24.4952	15.2399	21.7534	23.8731
Average Vapor Flow Rate (scfm)	33.90	30.80	32.30	39.90	32.70	35.80
Average Concentration Influent (ppmv)	53.02	59.25	50.58	48.18	44.51	43.24

Operation Parameter	July	August	September	October	November	December	Yearly Total	Monthly Average
Operating Time (hours)	744	733.5	289.7	332.1	593.9	744	**7301.5**	**608.46**
Downtime (hours)	0	10.5	430.3	411.9	126.1	0	**1458.5**	**121.54**
Total Solvent Removed (lbs.)	22.62	21.59	17.16	11.39	18.36	33.95	**256.9746**	**21.41**
Average Vapor Flow Rate (scfm)	33.90	33.70	38.90	45.70	41.20	68.20	**467**	**38.92**
Average Concentration Influent (ppmv)	44.48	43.28	81.95	37.25	37.27	33.39	**576.4**	**48.03**

Table D-24. Summary of Operation of the Airlift Recirculation Wells for 2001 (Cont.)

Well SSR-12

Operation Parameter	January	February	March	April	May	June
Operating Time (hours)	734.2	672	740.7	720	744	717.8
Downtime (hours)	9.8	0	3.3	0	0	2.2
Total Solvent Removed (lbs.)	18.0090	16.1527	13.9116	12.5853	13.2278	17.6091
Average Vapor Flow Rate (scfm)	49.9	45.8	36.7	36.2	36.6	36.3
Average Concentration Influent (ppmv)	24.44	26.11	25.41	24.04	24.13	33.63

Operation Parameter	July	August	September	October	November	December	Yearly Total	Monthly Average
Operating Time (hours)	744	232	0	215.2	716.6	744	**6980.5**	**581.71**
Downtime (hours)	0	512	720	528.8	3.4	0	**1779.5**	**148.29**
Total Solvent Removed (lbs.)	13.2979	7.0832	0.00	4.7707	17.5076	21.616	**155.7709**	**12.98**
Average Vapor Flow Rate (scfm)	38.4	38.4	0.00	42.7	48.1	65.8	**474.9**	**39.58**
Average Concentration Influent (ppmv)	23.12	39.55	0.00	25.85	25.225	22.076	**293.581**	**24.47**

Appendix E

Data Quality/Usability Assessment

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Data Quality/Usability Assessment

Quality assurance/quality control (QA/QC) procedures relating to accuracy and precision of analyses performed on groundwater samples are followed in the field and laboratory, and QC data are reviewed prior to publication of results. The review by the Environmental Protection Department/ Environmental Monitoring Section (EPD/EMS) of the volume of analytical data acquired each quarter and presented in various reports is an ongoing process; EPD/EMS' review of the QC data cannot be completed in time to meet the deadlines for the groundwater monitoring reports required by the Resource Conservation and Recovery Act and associated regulations. Beginning first quarter 1996, the *Quality Control Samples* section of EMS' quarterly groundwater monitoring report contains detailed evaluation of the following indicators of data quality: precision, accuracy, representativeness, comparability, and completeness. Site and regulatory personnel can obtain further information on the data quality and usability in a variety of ways, including those described below.

Data Qualification

The contract laboratories continually assess their own accuracy and precision according to U.S. Environmental Protection Agency (EPA) guidelines. They submit sample- or batch-specific QC information either at the same time as analytical results or in quarterly summaries. Properly defined and used modifiers (also referred to as qualifiers) can be a key component in assessing data usability. Modifiers designed by EPA or EPD/EMS and used by the primary laboratories or EMS' data validators are presented in Appendix D.

Assessment of Accuracy of the Data

Accuracy, or the nearness of the reported result to the true concentration of a constituent in a sample, can be assessed in several ways.

A laboratory's general accuracy can be judged by evaluation of results obtained from known samples. The contract laboratories analyze commercial reference samples periodically at EPD/EMS' request. The results of these analyses from the non-radionuclide laboratories are presented in the EPD/EMS groundwater monitoring quarterly reports; the results from the radionuclide laboratories should be available on request from the laboratory subcontract representatives. The primary laboratories also seek or maintain state certification by participating periodically in performance studies. Reference samples and evaluation of results are provided by EPA. Results of these studies also are published in the EPD/EMS quarterly reports.

Analysis of blanks provides a tool for assessing the accuracy of both sampling and laboratory analysis. Results for all field blanks for the quarter can be found in the EPD/EMS quarterly reports. Any field or laboratory blanks that exceed established minimums are identified in the same reports, in tables associating them with groundwater samples analyzed in the same batches. In these regulatory reports, the modifier *V* is assigned to every detected result that is run in the same batch as a laboratory blank with positive results for that analyte. A *U* qualifier (reported as *less than* [<]) also is added if the analyte concentration is less than five times the concentration in the blank (or, for common laboratory contaminants, less than ten times).

Surrogates, organic compounds similar in chemical behavior to the compounds of interest but not normally found in environmental samples, are used to monitor the effect of the matrix on the accuracy of analyses for organic parameters. For example, for analyses of volatile organics by EPA Method 8240, three surrogate compounds are added to all samples and blanks in each analytical batch. In analyses of semivolatile organics by EPA Method 8270, three surrogates are required and an additional compound is advised for each fraction (acids and base/neutrals). Two surrogates are used in organochlorine pesticides analyses. Percent recoveries for surrogate analyses are calculated by laboratory personnel, reported to EPD/EMS, reviewed, and entered into the database. Beginning first quarter 1996, statistical summaries are published in the *Quality Control Samples*

section of the EPD/EMS quarterly groundwater monitoring report. If recoveries are not within specified limits, the laboratory is expected to reanalyze the samples or attach qualifiers to the data identifying the anomalous results.

Sample-specific accuracy for both organic and inorganic parameters can be assessed by examination of matrix spike/matrix spike duplicate results. A portion of the sample is analyzed unspiked to determine a baseline set of values. A second portion of the sample is spiked with known concentrations of compounds appropriate to the analyses being performed, typically five volatile organic compounds for volatile organics analyses, eleven semivolatile compounds for semivolatiles, six pesticide compounds for pesticides, all metals for metals analyses by SW-846 methods (EPA, 1986), and a known quantity of cyanide for cyanide analysis. The percentage of the spike compound that is recovered (i.e., measured in excess of the value obtained for the unspiked sample) is a direct measure of analytical accuracy. EPA requires matrix spike/matrix spike duplicates to be run at least once per 20 samples of similar matrix.

Matrix spike/matrix spike duplicate results are reported to EPD/EMS. Beginning first quarter 1996, spike results and a statistical summary are published in the *Quality Control Samples* section of the EPD/EMS quarterly groundwater monitoring report. For organic compounds, according to EPA guidelines, no action is taken on the basis of matrix spike/matrix spike duplicate data alone (i.e., no result modifiers are assigned solely on the basis of matrix spike results); however, the results can indicate if a laboratory is having a systemic problem in the analysis of one or more analytes.

In the case of inorganic compounds, such as metals, the matrix spike sample analysis provides information about the effect of each sample matrix on the digestion and measurement methodology. Data qualifiers assigned by the laboratories on the basis of the percentage of spike recovery are reported in the EPD/EMS results tables.

Assessment of Precision

Precision of the analyses, or agreement of a set of replicate results among themselves, is assessed through the use of duplicates initiated by the laboratory and blind replicates provided by EPD/EMS. The results of duplicate and replicate analyses are presented in results tables that report only one quarter of data. Results tables that include more than one quarter of data present only the highest result for each analyte for each quarter of the year.

The laboratories assess precision by calculating the relative percent difference (RPD) for each pair of laboratory-initiated duplicate results. The EMS data validators apply a data qualifier to the results of entire preparation batches of metals analyses when the RPD for laboratory duplicates is greater than 20 percent and either the difference between the two samples is greater than the contract-required detection limit (CRDL) or both sample results are greater than 5 times the CRDL. This qualifier is published in the EPD/EMS quarterly reports.

Additional statistical comparisons of laboratory duplicate and blind replicate results, both intra- and interlaboratory, are presented in the EPD/EMS quarterly reports. The calculation used for these reports is the mean relative difference (MRD), which is similar to EPA's RPD except that the MRD is the average of all the RPD values from one laboratory for each compound (intralaboratory MRD) or all the RPD values from all laboratories for each compound (interlaboratory MRD) during one quarter. Because detection limits may vary among samples, the MRD requires calculation of a reference detection limit, which is the detection limit at the 90th percentile of the array of limits in the population of all duplicate and replicate analyses for a given analyte during a particular quarter. The MRD is not method-specific.

Method-Specific Accuracy and Precision

The contract laboratories' EPA-approved laboratory procedures include QA/QC requirements as an integral part of the methods. Thus, knowledge of the method used in obtaining data is an important component of determining data usability. EPA has conducted extensive research and development on the methods approved for the analysis of water and wastewater. Information on the accuracy and precision of a method is available from EPA publications, as is full information on required QA/QC

procedures. A listing of the methods used by the primary laboratories during fourth quarter 1995 is given below, along with the source for the method description. Many, if not all, of these sources include presentations of representative accuracy and precision results. The EPD/EMS quarterly reports provide the methods used by the laboratories each quarter.

Table E-1. Methods Used by the Contract Laboratories

Method	Used to Analyze	Source
EICHROMTC1MOD[a]	Technetium isotopes	EiChrom Industries, Inc.; NA[b]
EMLAM01MOD	Americium, curium isotopes	DOE, 1992
EMLPU02MOD	Neptunium, plutonium isotopes	DOE, 1992
EMLSR02MOD	Strontium isotopes	DOE, 1992
EMLTH01MOD	Thorium isotopes	DOE, 1992
EMLU02MOD	Uranium isotopes	DOE, 1992
ENICMOD	Carbon-14	NA
EPA120.1	Specific conductance	EPA EMSL, 1983
EPA150.1	pH	EPA EMSL, 1983
EPA160.1	Total dissolved solids	EPA EMSL, 1983
EPA160.2	Total dissolved solids, total suspended solids	EPA EMSL, 1983
EPA180.1	Turbidity	EPA EMSL, 1983
EPA200.7	Metals	EPA EMSL, 1983
EPA245.1	Mercury	EPA EMSL, 1983
EPA300.0	Chloride, nitrite, sulfate, fluoride	EPA EMSL, 1983
EPA310.1	Alkalinity (as $CaCO_3$)	EPA EMSL, 1983
EPA335.2	Cyanide	EPA EMSL, 1983
EPA335.3	Cyanide	EPA EMSL, 1983
EPA340.2	Fluoride	EPA EMSL, 1983
EPA350.1	Ammonia nitrogen	EPA EMSL, 1983
EPA350.3	Ammonia	EPA EMSL, 1983
EPA353.1	Nitrogen, nitrate-nitrite	EPA EMSL, 1983
EPA353.2	Nitrogen, nitrate, nitrite, or combined	EPA EMSL, 1983
EPA365.2	Phosphorus, all forms (reported as total phosphates)	EPA EMSL, 1983
EPA365.3	Phosphorus, all forms (reported as total phosphates)	EPA EMSL, 1983
EPA365.4	Phosphorus, all forms (reported as total phosphates)	EPA EMSL, 1983
EPA405.1	Five-day biochemical oxygen demand	EPA EMSL, 1983
EPA405.1/SM	Five-day biochemical oxygen demand	EPA EMSL, 1983
EPA410.4	Chemical oxygen demand	EPA EMSL, 1983
EPA415.1	Dissolved organic carbon, total inorganic carbon, total organic carbon	EPA EMSL, 1983
EPA418.1	Total petroleum hydrocarbons	EPA EMSL, 1983

Method	Used to Analyze	Source
EPA420.2	Phenols	EPA EMSL, 1983
EPA450.1	Total organic halogens	NA
EPA900.0MOD	Gross alpha, nonvolatile beta	EPA EMSL, 1980
EPA901.1MOD	Gamma PHA, iodine isotopes	EPA EMSL, 1980
EPA903.0MOD	Total alpha-emitting radium, radium isotopes	EPA EMSL, 1980
EPA904.0MOD	Radium isotopes	EPA EMSL, 1980
EPA906.0MOD	Tritium	EPA EMSL, 1980
EPA6010	Metals	EPA, 1986
EPA6010A	Metals	EPA, 1992
EPA7470	Mercury	EPA, 1986
EPA8080	Organochlorine pesticides and PCBs	EPA, 1986
EPA8150	Chlorinated herbicides	EPA, 1986
EPA8240	GCMS volatiles	EPA, 1986
EPA8260	GCMS volatiles	EPA, 1986
EPA8270	GCMS semivolatiles	EPA, 1986
EPA8280	Dioxins and furans	EPA, 1986
EPA9020A	Total organic halogens	EPA, 1986
EPA9020B	Total organic halogens	EPA, 1994b
EPA9060	Total inorganic carbon	EPA, 1986
EPIA-001[c]	Gross alpha, nonvolatile beta	EP, 1996
EPIA-002[c]	Tritium	EP, 1996
EPIA-003[c]	Carbon-14	EP, 1996
EPIA-004[c]	Strontium-90	EP, 1996
EPIA-005[c]	Technetium-99	EP, 1996
EPIA-006[c]	Iodine-129	EP, 1996
EPIA-008[c]	Radium-226	EP, 1996
EPIA-009[c]	Radium-228	EP, 1996
EPIA-010[c]	Radium, total alpha-emitting	EP, 1996
EPIA-011[c]	Americium, curium, uranium isotopes	EP, 1996
EPIA-012[c]	Neptunium, plutonium, thorium isotopes	EP, 1996
EPIA-013[c]	Gamma PHA	EP, 1996
EPIA-022[c]	Nickel isotopes	EP, 1996
MMES16009MOD	Technetium-99	NA
3Q1-6-1420	Total activity, tritium	NA

[a] MOD indicates modifications of applicable EPA, DOE, or other procedures.

[b] NA = not available. Sources for some proprietary methods are not available.

[c] The methods and detection limits used by GP are in-house methods based on applicable EPA, DOE, or other procedures. Complete method descriptions are available from GP.

Note: One of the labs reports the method for some metals determinations as CLP or CLP-MOD. This is presumed equivalent to Method 6010 or 6010A.

An example of method-specific QC information is that for EPA Method 8270 (EPA, 1986), which is used by both GE and Weston for analyses of semivolatile organics. The following table gives method-specific accuracy and precision as functions of concentration. Contract laboratories are expected to achieve or at least approach these limits.

Table E-2. Method Accuracy and Precision as Functions of Concentration for EPA Method 8270

Parameter	Accuracy, as recovery, x´ (µg/L)	Single analyst precision, s_r´ (µg/L)	Overall precision, S´ (µg/L)
Acenaphthene	0.96C+0.19	0.15*X*–0.12	0.21*X*–0.67
Acenaphthylene	0.89C+0.74	0.24*X*–1.06	0.26*X*–0.54
Aldrin	0.78C+1.66	0.27*X*–1.28	0.43*X*+1.13
Anthracene	0.80C+0.68	0.21*X*–0.32	0.27*X*–0.64
Benzo[*a*]anthracene	0.88C–0.60	0.15*X*+0.93	0.26*X*–0.21
Benzo[*b*]fluoranthene	0.93C–1.80	0.22*X*+0.43	0.29*X*+0.96
Benzo[*k*]fluoranthene	0.87C–1.56	0.19*X*+1.03	0.35*X*+0.40
Benzo[*g,h,i*]perylene	0.98C–0.86	0.29*X*+2.40	0.51*X*–0.44
Benzo[*a*]pyrene	0.90C–0.13	0.22*X*+0.48	0.32*X*+1.35
β-BHC	0.87C–0.94	0.20*X*–0.58	0.30*X*+1.94
δ-BHC	0.29C–1.09	0.34*X*+0.86	0.93*X*+0.17
Bis(2-chloroethoxy) methane	1.12C–5.04	0.16*X*+1.34	0.26*X*+2.01
Bis(2-chloroethyl) ether	0.86C–1.54	0.35*X*–0.99	0.35*X*+0.10
Bis(2-chloroisopropyl) ether	1.03C–2.31	0.24*X*+0.28	0.25*X*+1.04
Bis(2-ethylhexyl) phthalate	0.84C–1.18	0.26*X*+0.73	0.36*X*+0.67
4-Bromophenyl phenyl ether	0.91C–1.34	0.13*X*+0.66	0.16*X*+0.66
Butylbenzyl phthalate	0.66C–1.68	0.18*X*+0.94	0.53*X*+0.92
4-Chloro-m-cresol	0.84C+0.35	0.23*X*+0.75	0.29*X*+1.31
Chloroethane	0.99C–1.53	0.14*X*–0.13	0.17*X*–0.28
2-Chloronaphthalene	0.89C+0.01	0.07*X*+0.52	0.13*X*+0.34
2-Chlorophenol	0.78C+0.29	0.18*X*+1.46	0.28*X*+0.97
4-Chlorophenyl phenyl ether	0.91C+0.53	0.20*X*–0.94	0.30*X*–0.46
Chrysene	0.93C–1.00	0.28*X*+0.13	0.33*X*–0.09
p,p′-DDD	0.56C–0.40	0.29*X*–0.32	0.66*X*–0.96
p,p′-DDE	0.70C–0.54	0.26*X*–1.17	0.39*X*–1.04
p,p′-DDT	0.79C–3.28	0.42*X*+0.19	0.65*X*–0.58
Dibenz[*a,h*]anthracene	0.88C+4.72	0.30*X*+8.51	0.59*X*+0.25
Di-n-butyl phthalate	0.59C+0.71	0.13*X*+1.16	0.39*X*+0.60
1,2-Dichlorobenzene	0.80C+0.28	0.20*X*+0.47	0.24*X*+0.39
1,3-Dichlorobenzene	0.86C–0.70	0.25*X*+0.68	0.41*X*+0.11

Parameter	Accuracy, as recovery, x´ (µg/L)	Single analyst precision, s_r´ (µg/L)	Overall precision, S´ (µg/L)
1,4-Dichlorobenzene	0.73C–1.47	0.24*X*+0.23	0.29*X*+0.36
3,3′-Dichlorobenzidine	1.23C–12.65	0.28*X*+7.33	0.47*X*+3.45
2,4-Dichlorophenol	0.87C–0.13	0.15*X*+1.25	0.21*X*+1.28
Dieldrin	0.82C–0.16	0.20*X*–0.16	0.26*X*–0.07
Diethyl phthalate	0.43C+1.00	0.28*X*+1.44	0.52*X*+0.22
2,4-Dimethyl phenol	0.71C+4.41	0.16*X*+1.21	0.22*X*+1.31
Dimethyl phthalate	0.20C+1.03	0.54*X*+0.19	1.05*X*–0.92
2,4-Dinitrophenol	0.81C–18.04	0.38*X*+2.36	0.42*X*+26.29
2,4-Dinitrotoluene	0.92C–4.81	0.12*X*+1.06	0.21*X*+1.50
2,6-Dinitrotoluene	1.06C–3.60	0.14*X*+1.26	0.19*X*+0.35
Di-n-octyl phthalate	0.76C–0.79	0.21*X*+1.19	0.37*X*+1.19
Endosulfan sulfate	0.39C+0.41	0.12*X*+2.47	0.63*X*–1.03
Endrin aldehyde	0.76C–3.86	0.18*X*+3.91	0.73*X*–0.62
Fluoranthene	0.81C+1.10	0.22*X*–0.73	0.28*X*–0.60
Fluorene	0.90C–0.00	0.12*X*+0.26	0.13*X*+0.61
Heptachlor	0.87C–2.97	0.24*X*–0.56	0.50*X*–0.23
Heptachlor epoxide	0.92C–1.87	0.33*X*–0.46	0.28*X*+0.64
Hexachlorobenzene	0.74C+0.66	0.18*X*–0.10	0.43*X*–0.52
Hexachlorobutadiene	0.71C–1.01	0.19*X*+0.92	0.26*X*+0.49
Hexachloroethane	0.73C–0.83	0.17*X*+0.67	0.17*X*+0.80
Indeno[1,2,3-*c,d*]pyrene	0.78C–3.10	0.29*X*+1.46	0.50*X*–0.44
Isophorone	1.12C+1.41	0.27*X*+0.77	0.33*X*+0.26
2-Methyl-4,6-dinitrophenol	1.04C–28.04	0.10*X*+42.29	0.26*X*+23.10
Naphthalene	0.76C+1.58	0.21*X*–0.41	0.30*X*–0.68
Nitrobenzene	1.09C–3.05	0.19*X*+0.92	0.27*X*+0.21
2-Nitrophenol	0.07C–1.15	0.16*X*+1.94	0.27*X*+2.60
4-Nitrophenol	0.61C–1.22	0.38*X*+2.57	0.44*X*+3.24
N-Nitrosodi-n-propylamine	1.12C–6.22	0.27*X*+0.68	0.44*X*+0.47
PCB 1260	0.81C–10.86	0.35*X*+3.61	0.43*X*+1.82
Pentachlorophenol	0.93C+1.99	0.24*X*+3.03	0.30*X*+4.33
Phenanthrene	0.87C+0.06	0.12*X*+0.57	0.15*X*+0.25
Phenol	0.43C+1.26	0.26*X*+0.73	0.35*X*+0.58
Pyrene	0.84C–0.16	0.16*X*+0.06	0.15*X*+0.31
1,2,4-Trichlorobenzene	0.94C–0.79	0.15*X*+0.85	0.21*X*+0.39
2,4,6-Trichlorophenol	0.91C–0.18	0.16*X*+2.22	0.22*X*+1.81

x´ = Expected recovery for one or more measurements of a sample containing a concentration of C, in µg/L.

s_r' = Expected single analyst standard deviation of measurements at an average concentration of *X*, in µg/L.

S' = Expected interlaboratory standard deviation of measurements at an average concentration of *X*, in µg/L.

C = True value for the concentration, in µg/L.

X = Average recovery found for measurements of samples containing a concentration of C, in µg/L.

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Appendix F

Time Series Plots

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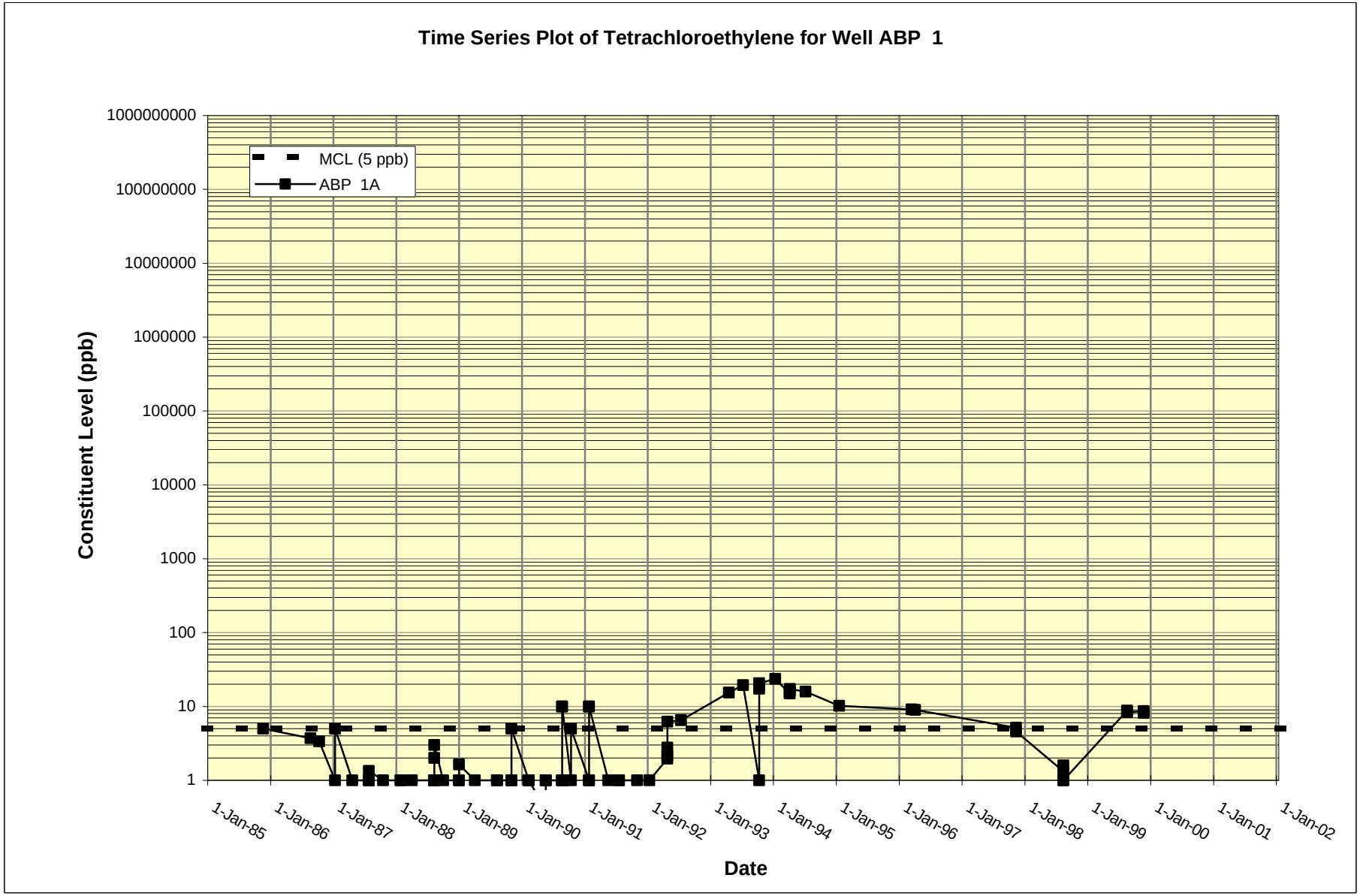
Time Series Plot of Tetrachloroethylene for Well ABP 1
MCL (5 ppb)
ABP 1A
Constituent Level (ppb)
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100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
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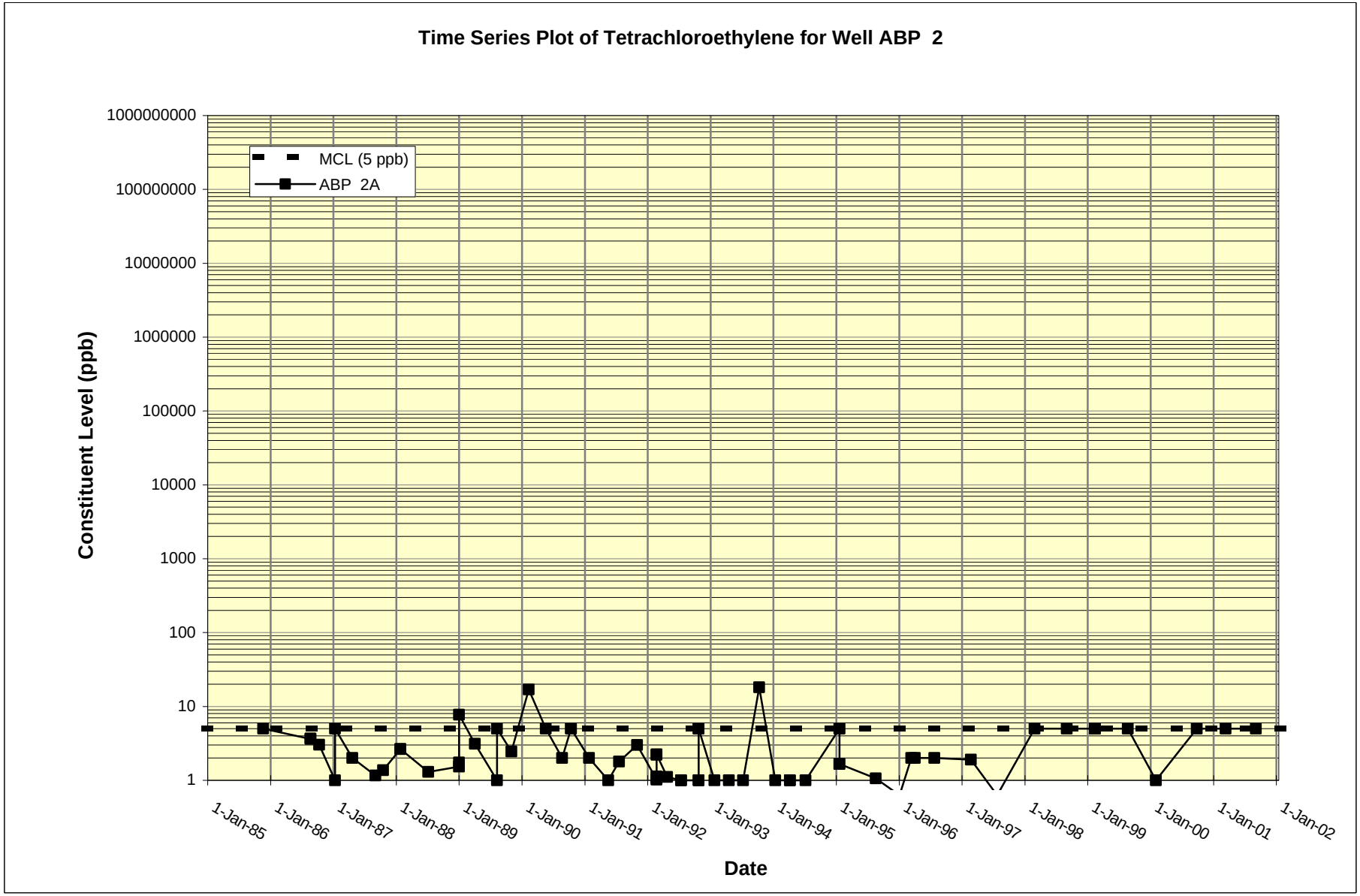
1-Jan-00
1-Jan-01
1-Jan-02
Date


Time Series Plot of Tetrachloroethylene for Well ABP 2
MCL (5 ppb)
ABP 2A
Constituent Level (ppb)
1000000000
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
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1-Jan-95
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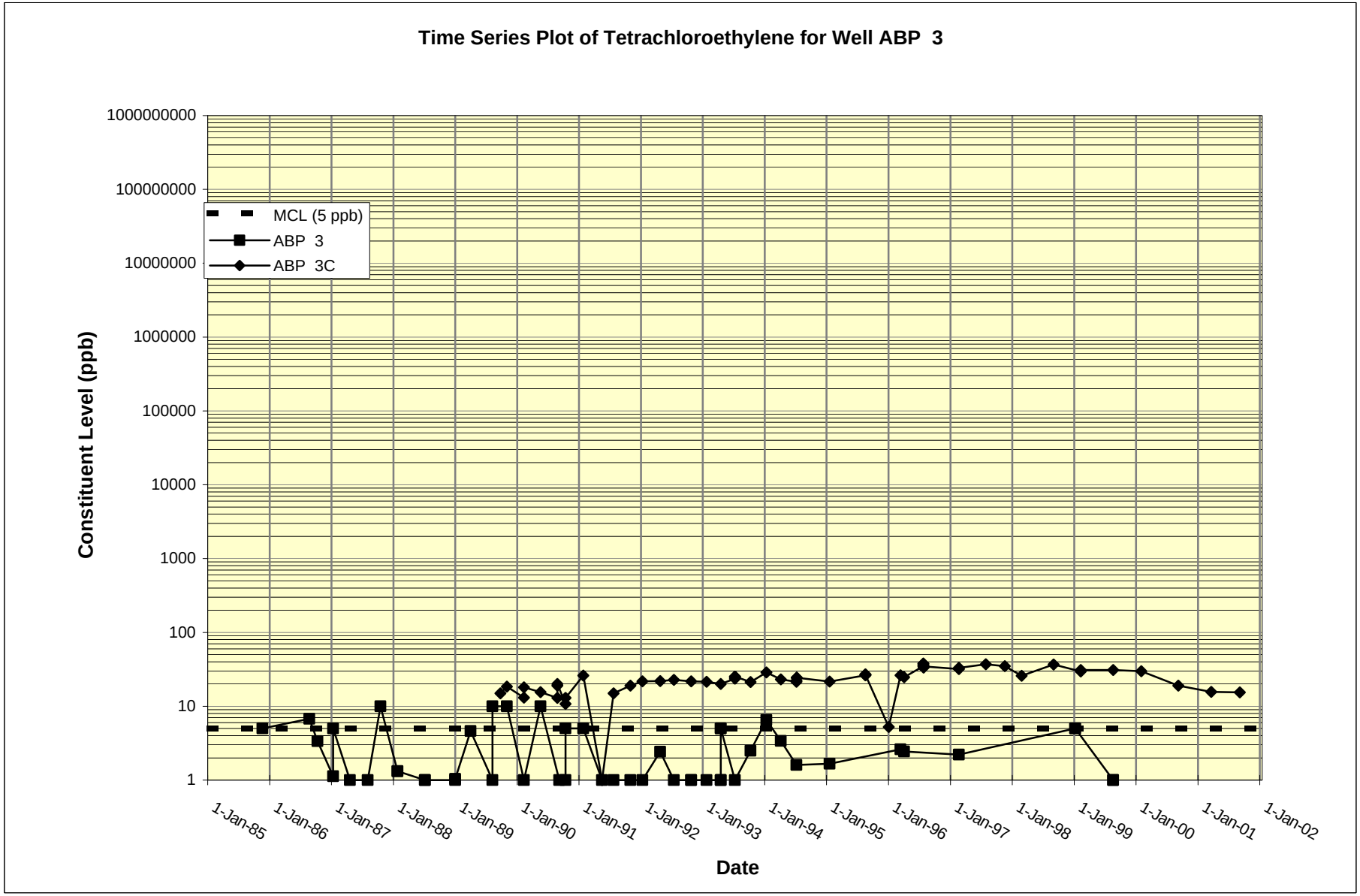
1-Jan-97
1-Jan-98
1-Jan-99
1-Jan-00
1-Jan-01
1-Jan-02
Date


Time Series Plot of Tetrachloroethylene for Well ABP 3
MCL (5 ppb)
ABP 3
ABP 3C
Constituent Level (ppb)
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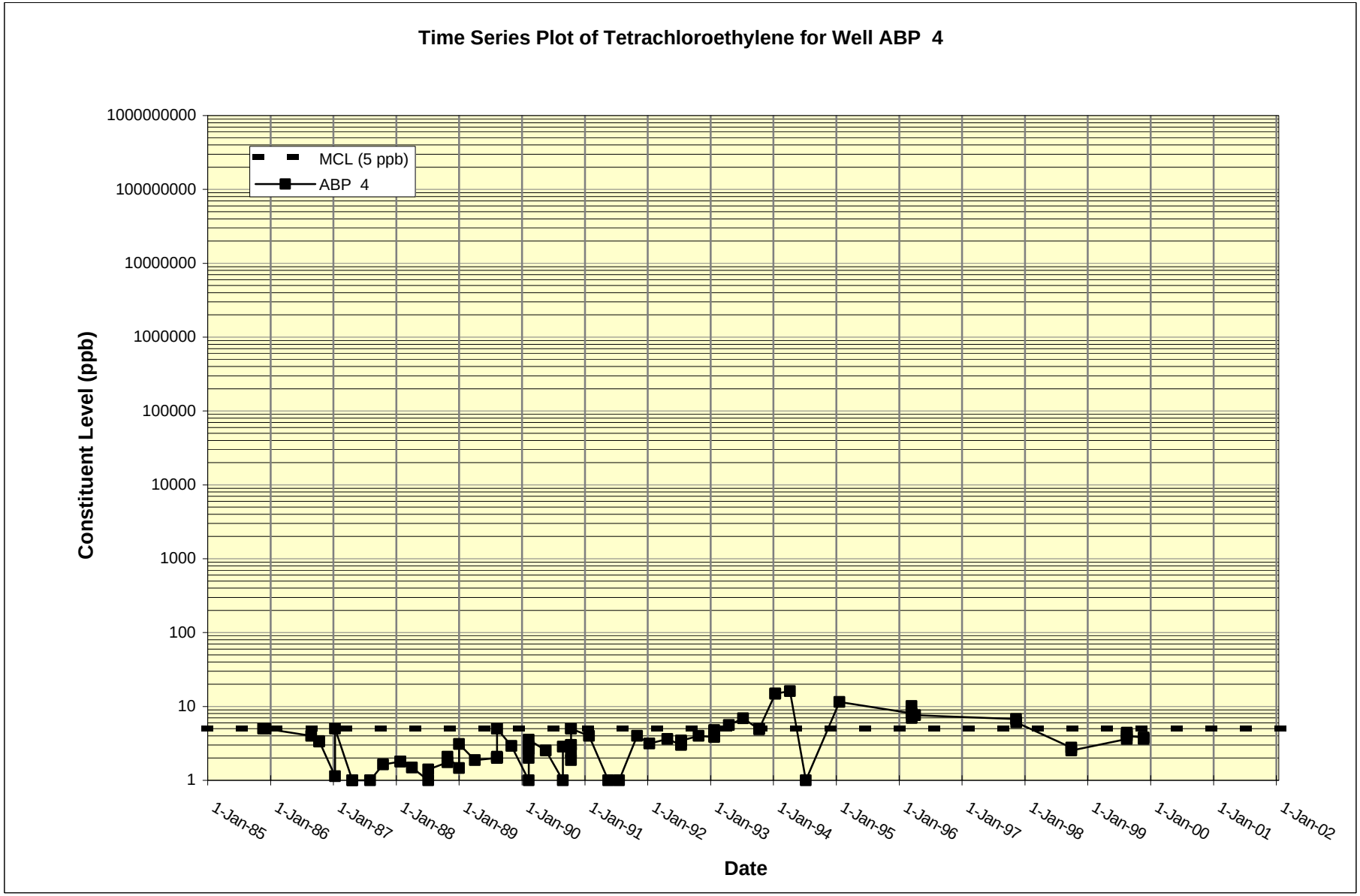
Date


Time Series Plot of Tetrachloroethylene for Well ABP 4
MCL (5 ppb)
ABP 4
Constituent Level (ppb)
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10000000
1000000
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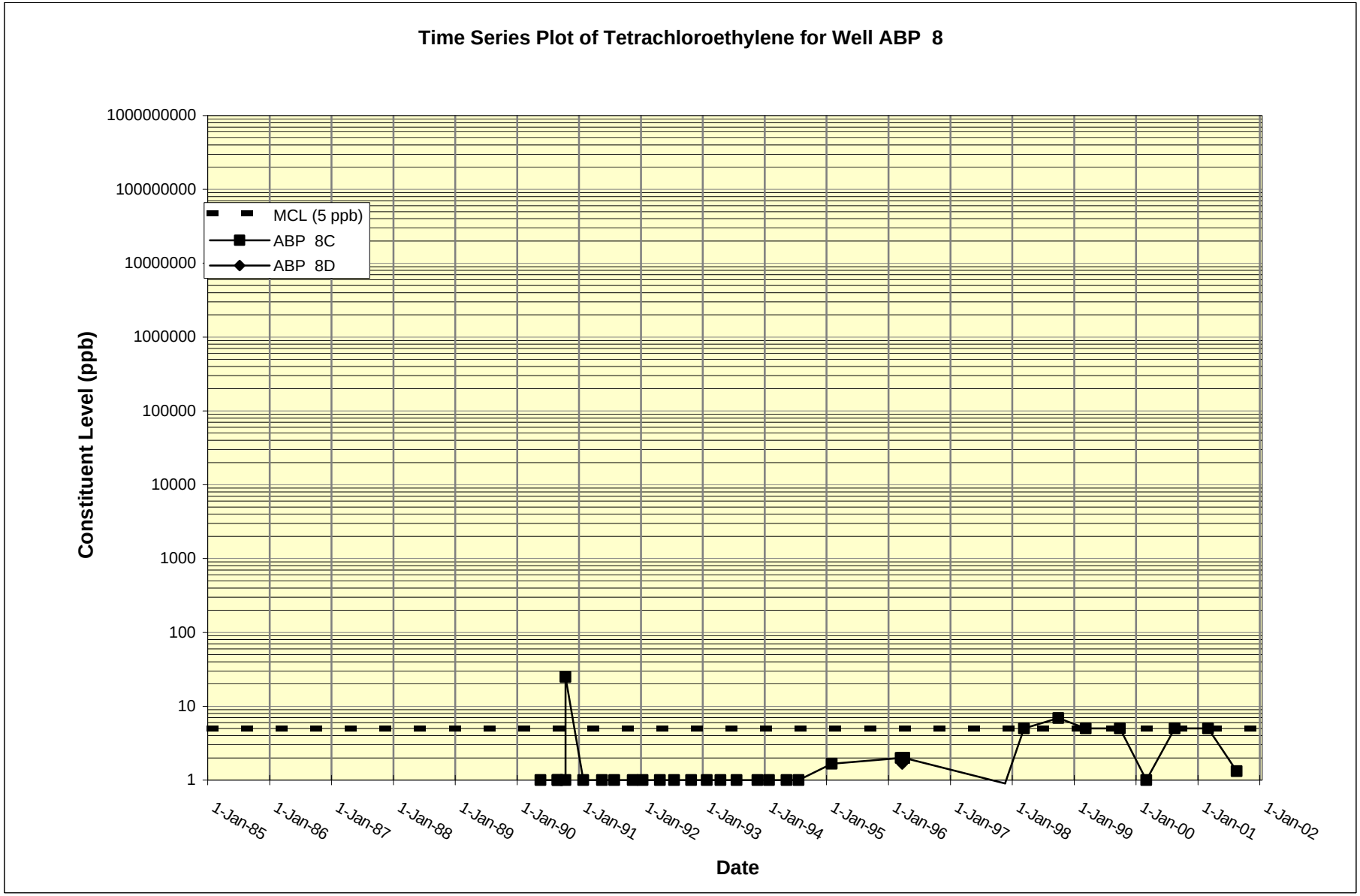
Time Series Plot of Tetrachloroethylene for Well ABP 8
MCL (5 ppb)
ABP 8C
ABP 8D
Constituent Level (ppb)
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1000000
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1000
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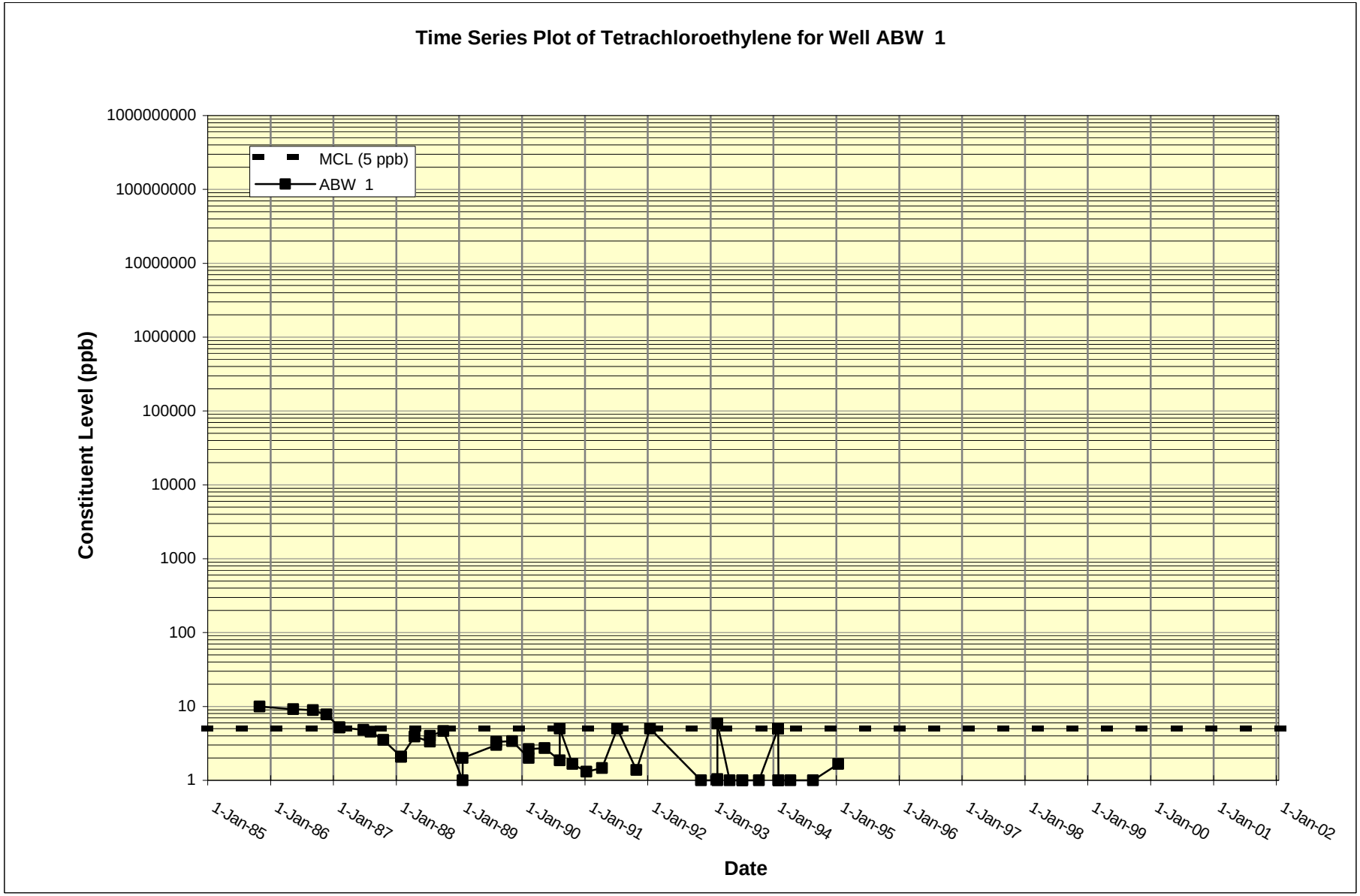
Time Series Plot of Tetrachloroethylene for Well ABW 1
MCL (5 ppb)
ABW 1
Constituent Level (ppb)
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10000000
1000000
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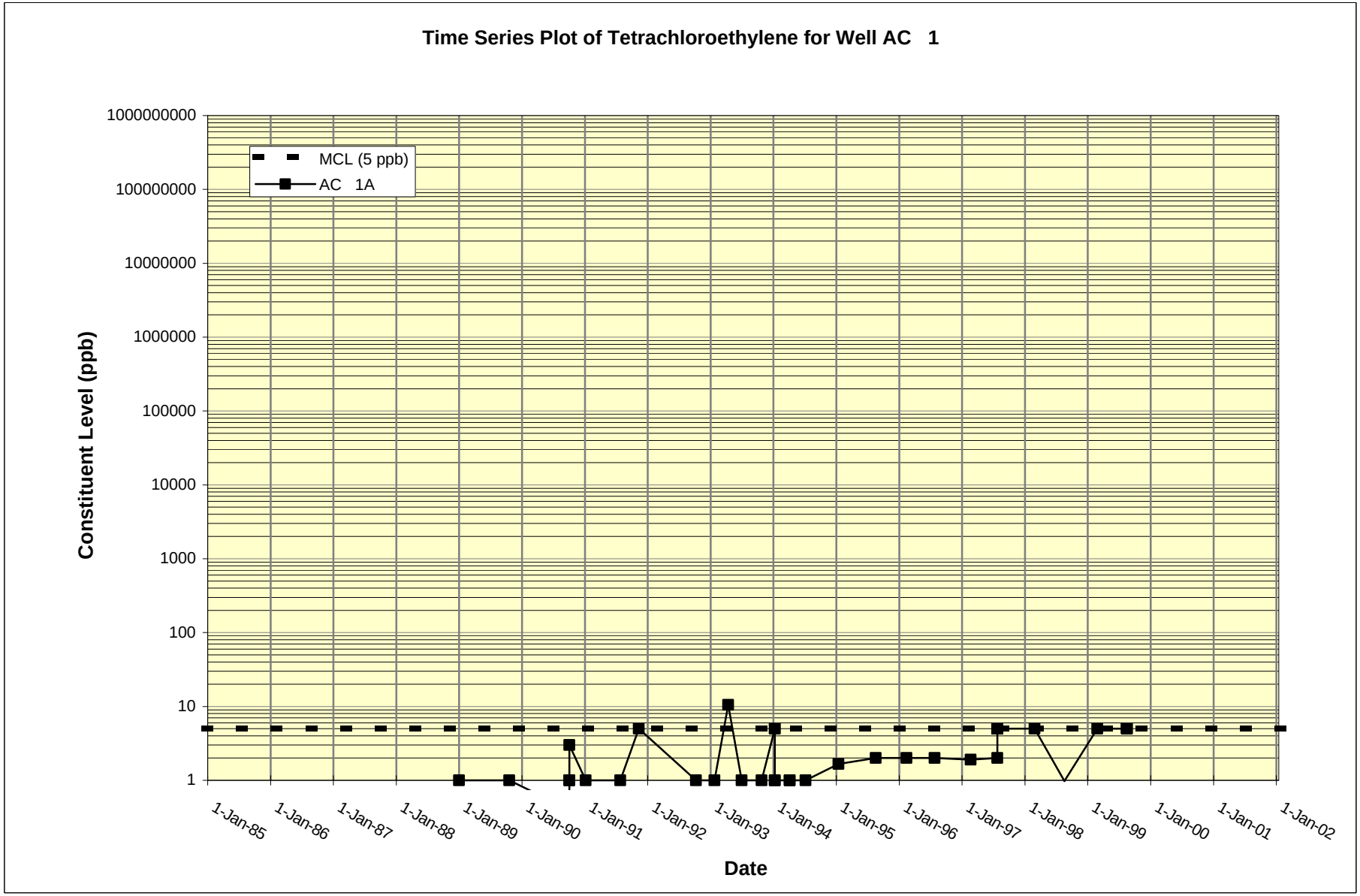
Time Series Plot of Tetrachloroethylene for Well AC 1
MCL (5 ppb)
AC 1A
Constituent Level (ppb)
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1000
100
10
1
1-Jan-85
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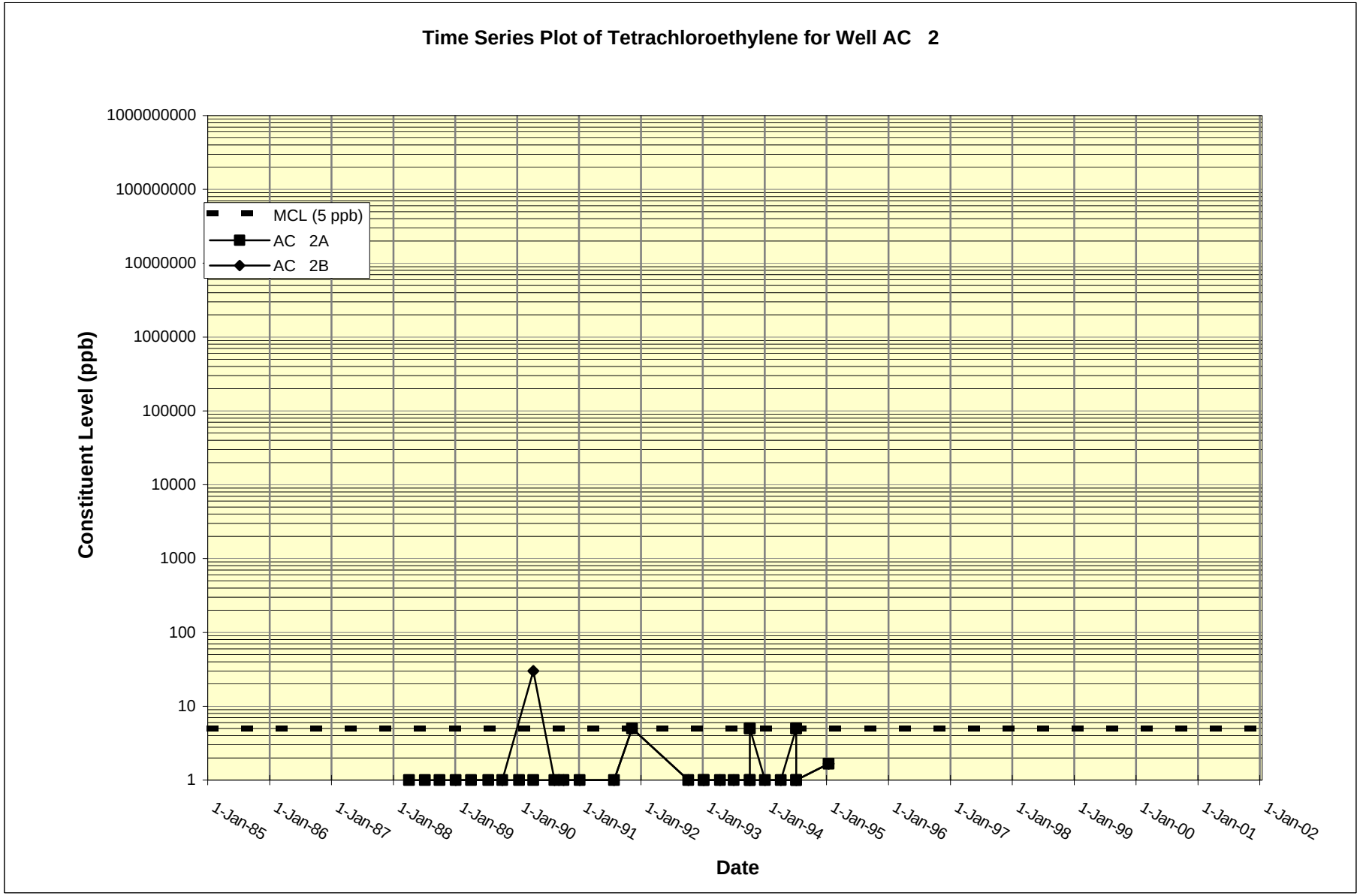
Time Series Plot of Tetrachloroethylene for Well AC 2
MCL (5 ppb)
AC 2A
AC 2B
Constituent Level (ppb)
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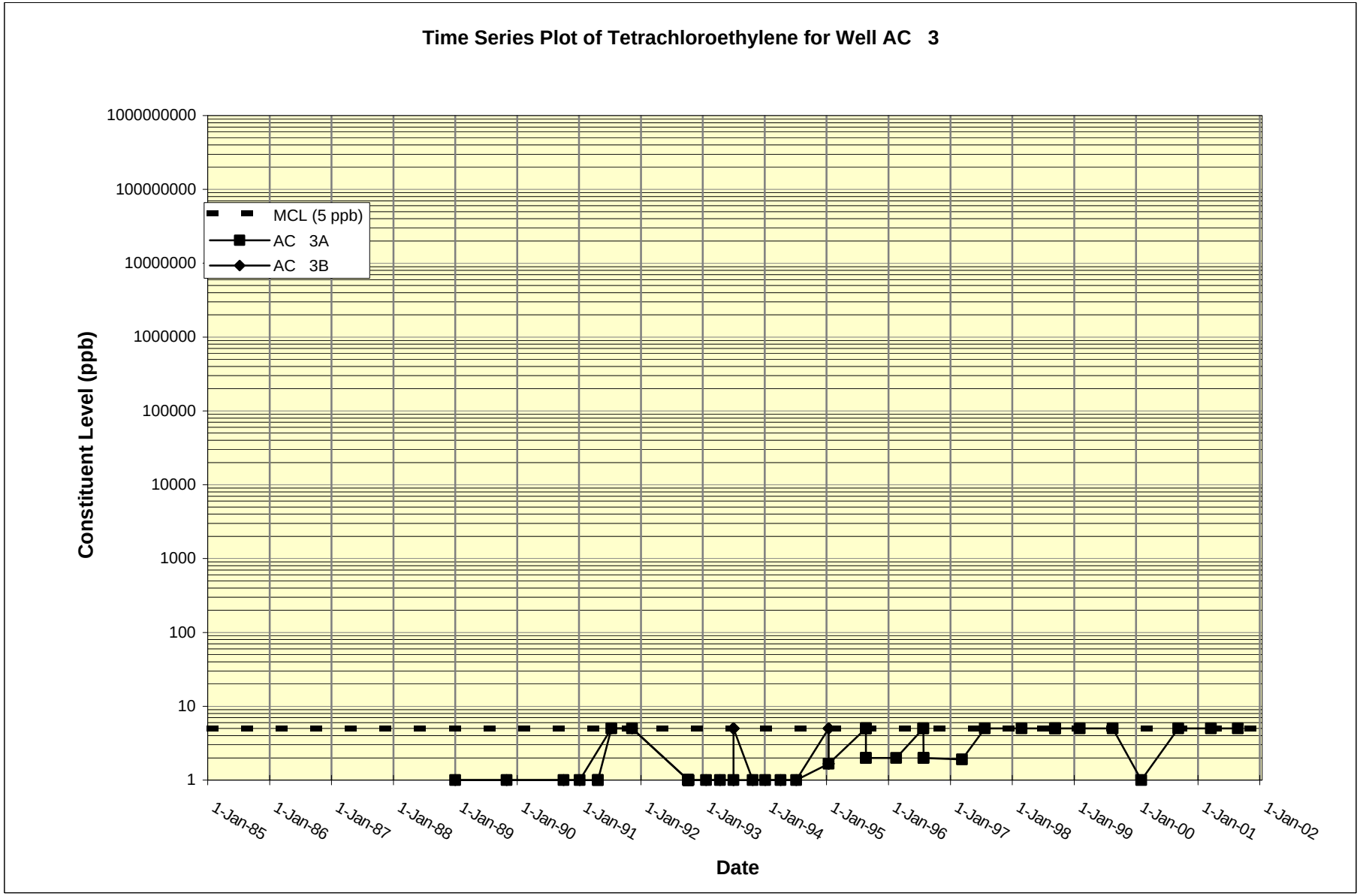
Date


Time Series Plot of Tetrachloroethylene for Well AC 3
MCL (5 ppb)
AC 3A
AC 3B
Constituent Level (ppb)
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10000000
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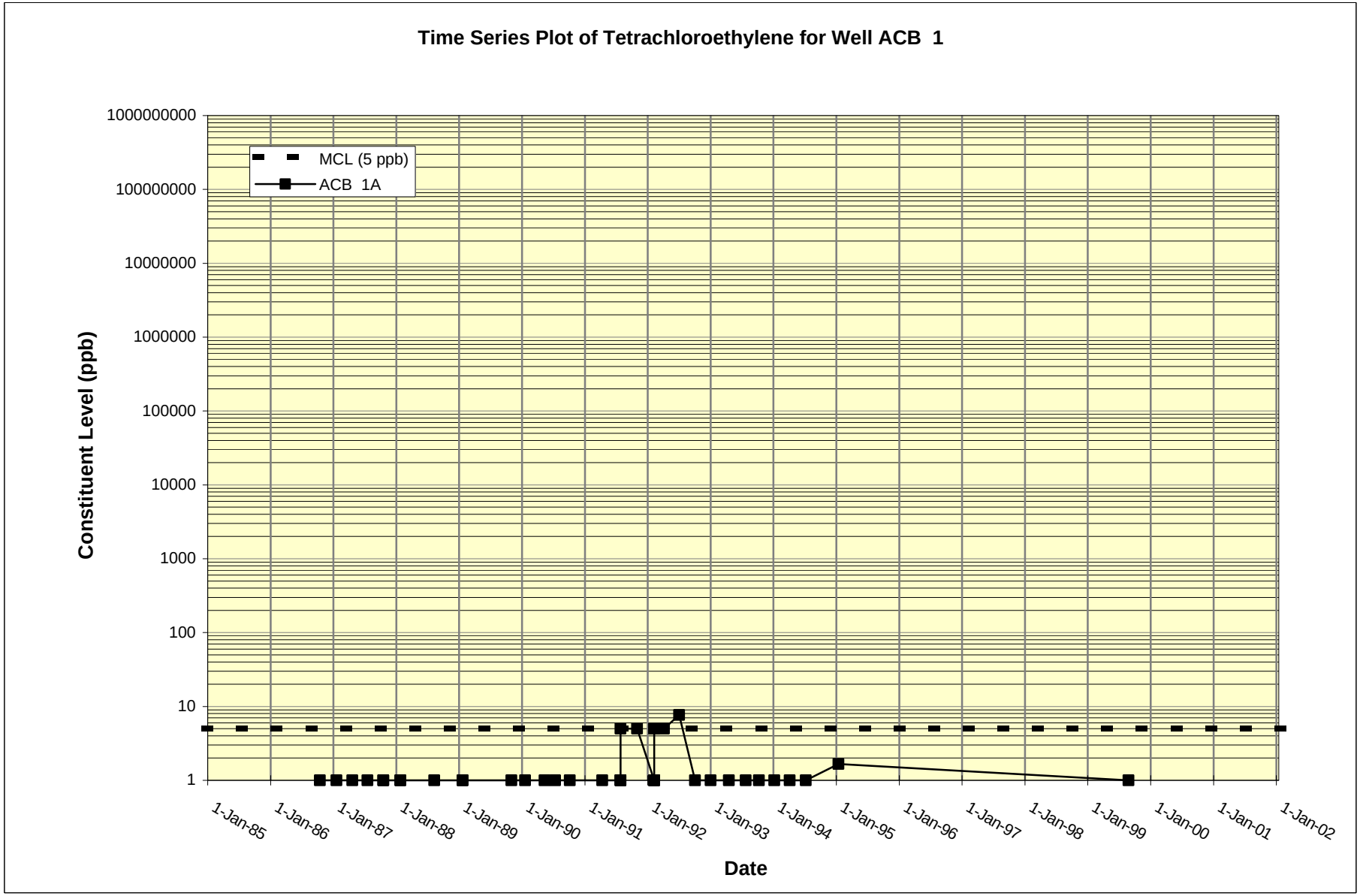
Date


Time Series Plot of Tetrachloroethylene for Well ACB 1
MCL (5 ppb)
ACB 1A
Constituent Level (ppb)
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100000000
10000000
1000000
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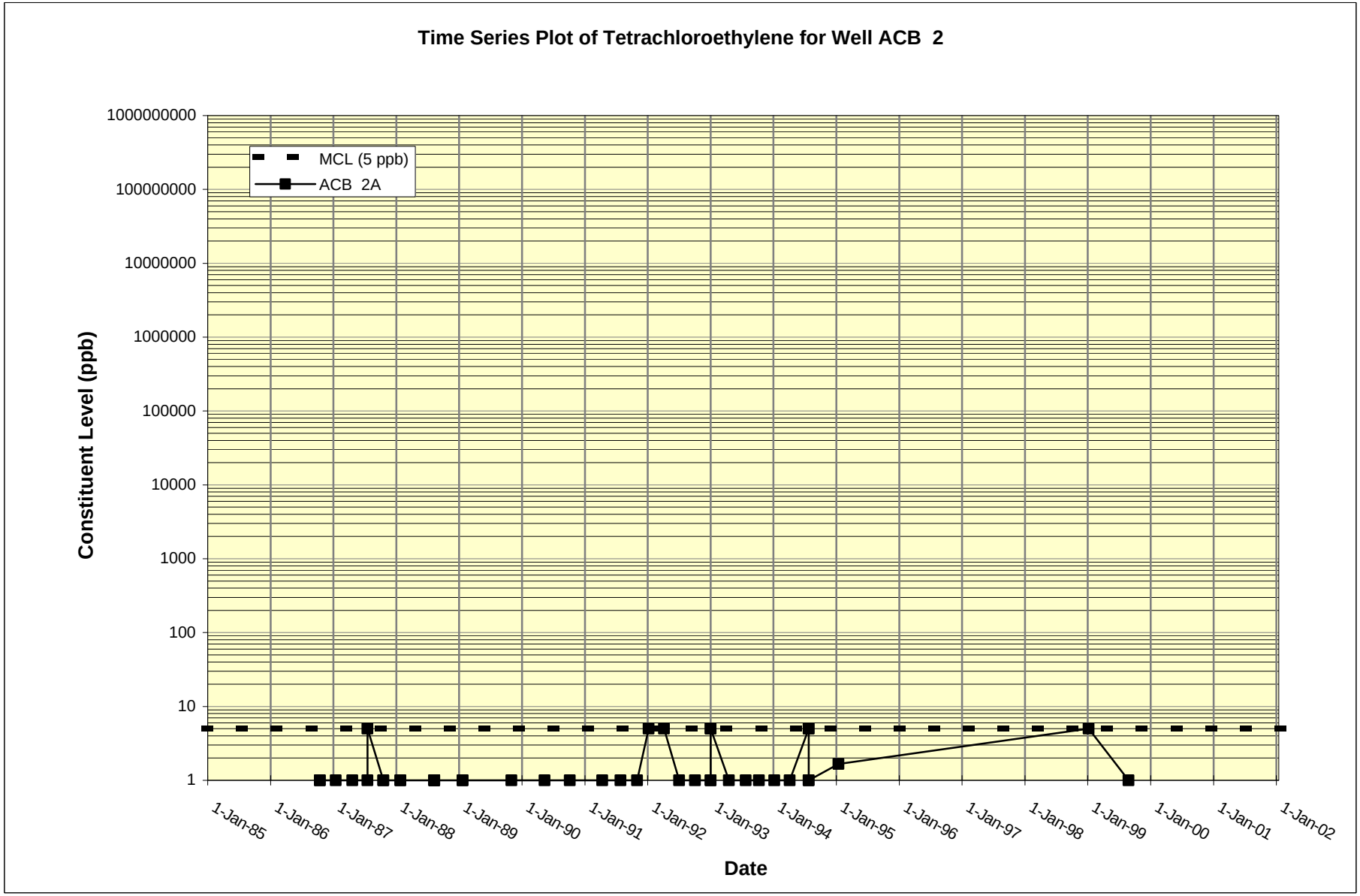
Time Series Plot of Tetrachloroethylene for Well ACB 2
MCL (5 ppb)
ACB 2A
Constituent Level (ppb)
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100000000
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10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
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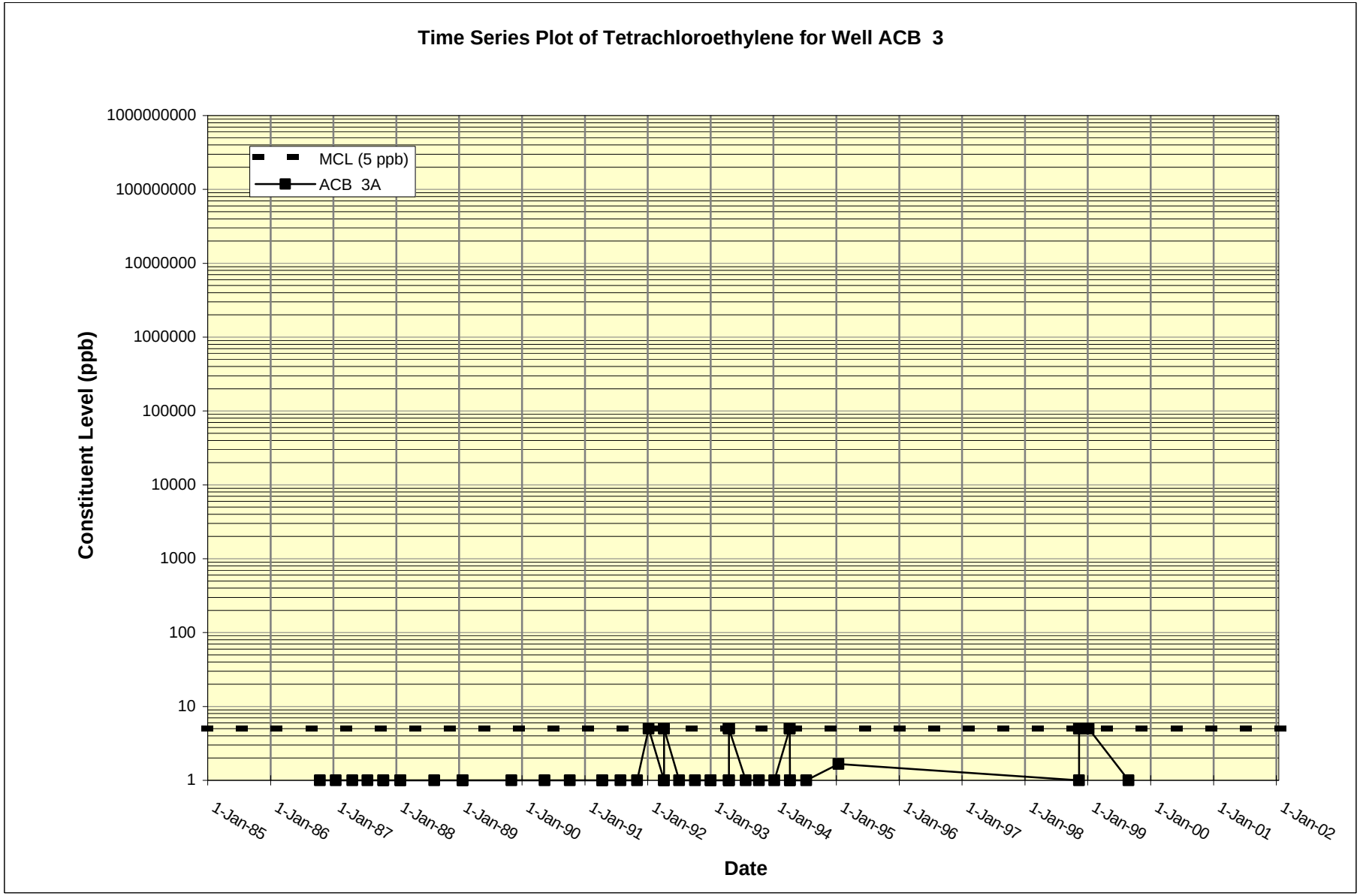
Time Series Plot of Tetrachloroethylene for Well ACB 3
MCL (5 ppb)
ACB 3A
Constituent Level (ppb)
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1000
100
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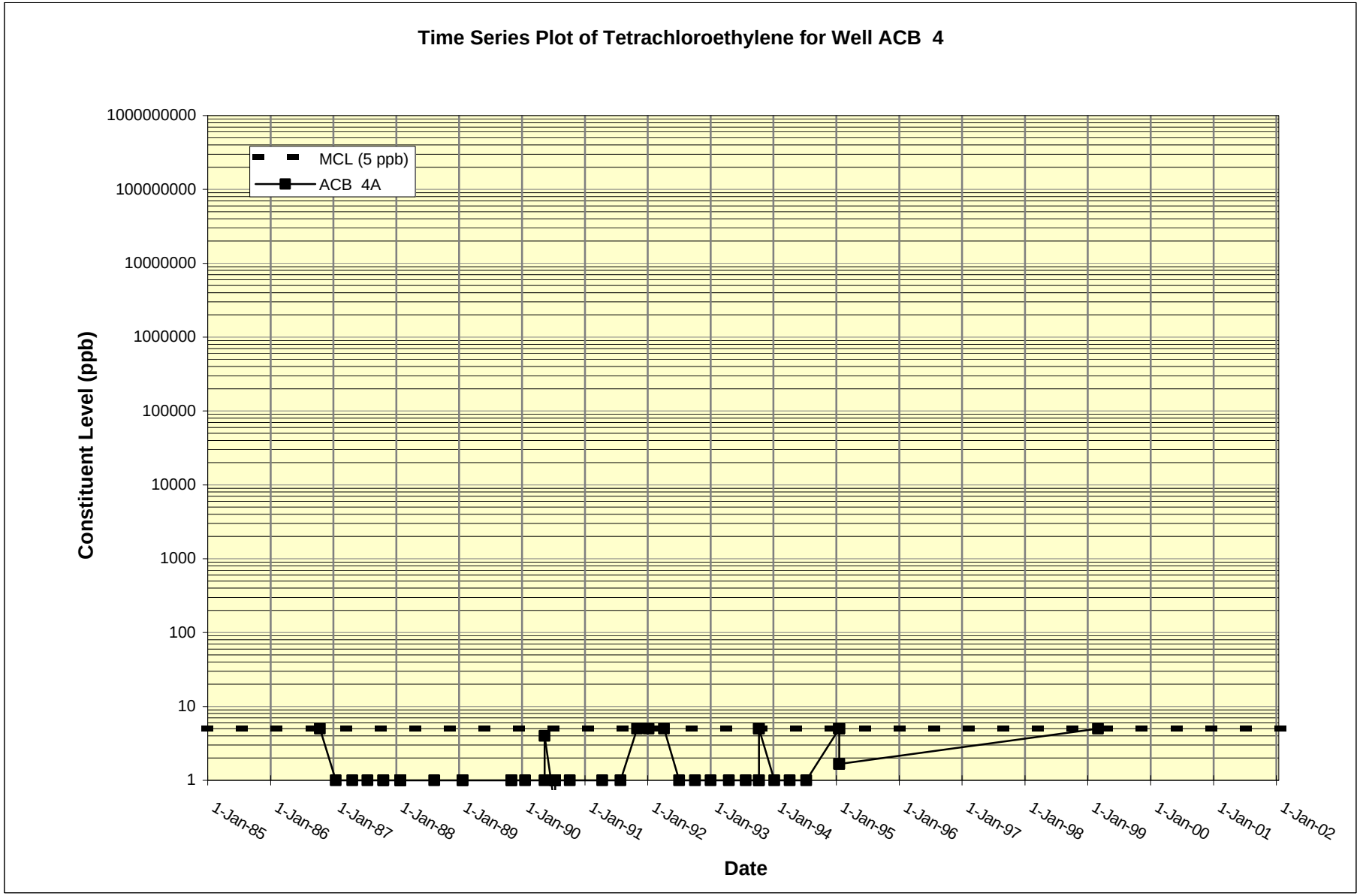
Time Series Plot of Tetrachloroethylene for Well ACB 4
MCL (5 ppb)
ACB 4A
Constituent Level (ppb)
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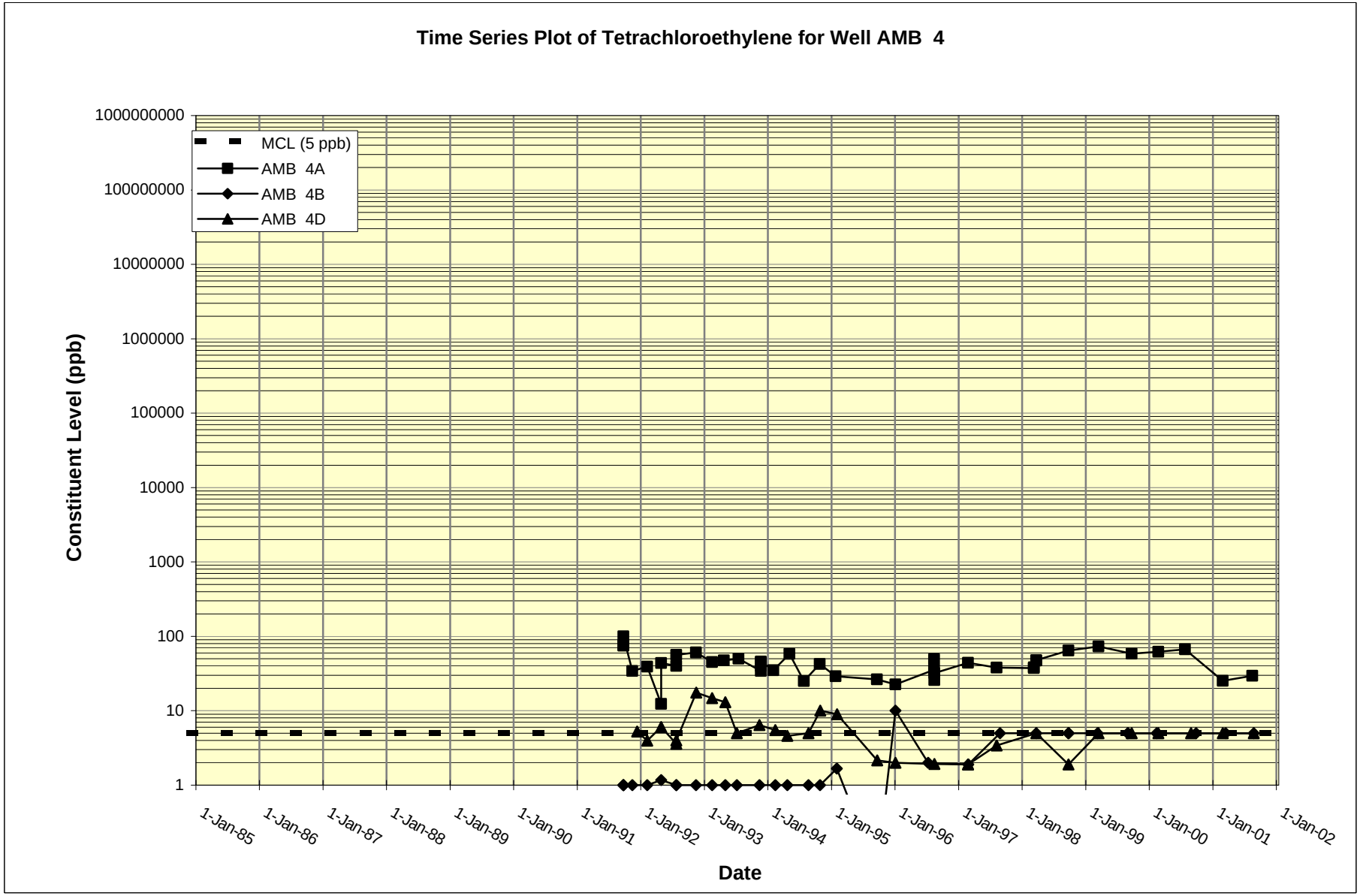
Time Series Plot of Tetrachloroethylene for Well AMB 4
MCL (5 ppb)
AMB 4A
AMB 4B
AMB 4D
Constituent Level (ppb)
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10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
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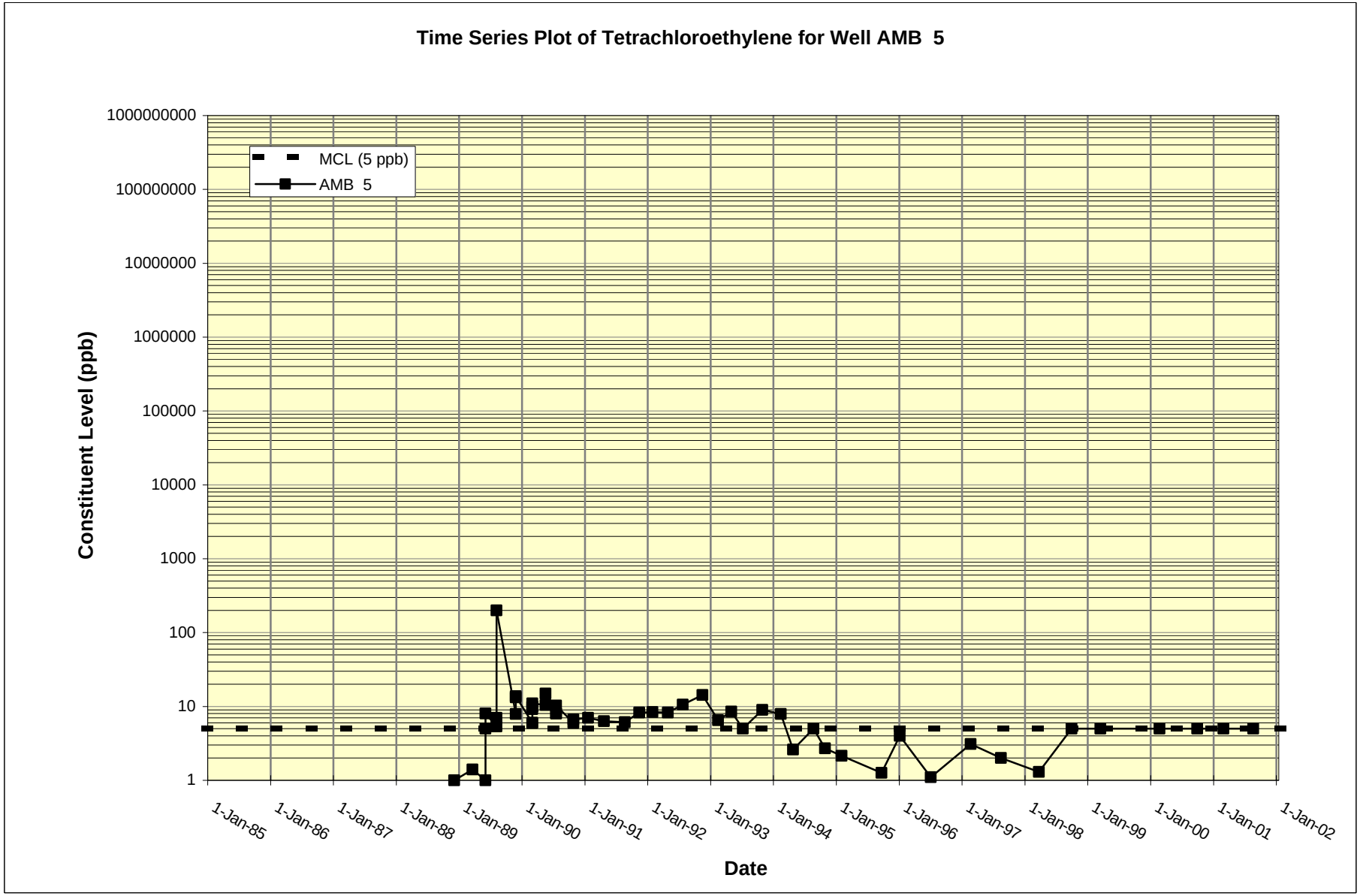
Time Series Plot of Tetrachloroethylene for Well AMB 5
MCL (5 ppb)
AMB 5
Constituent Level (ppb)
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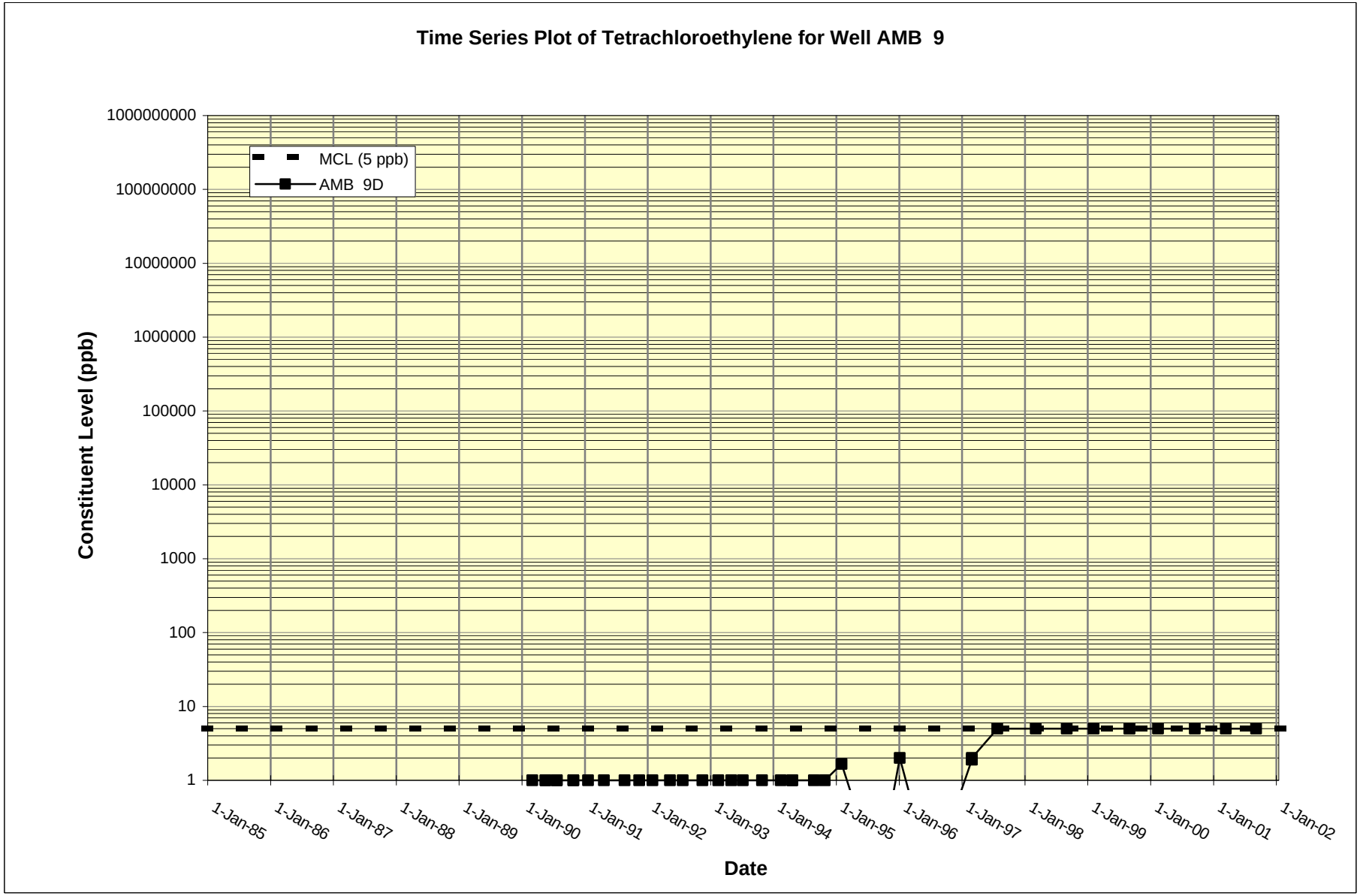
Date


Time Series Plot of Tetrachloroethylene for Well AMB 9
MCL (5 ppb)
AMB 9D
Constituent Level (ppb)
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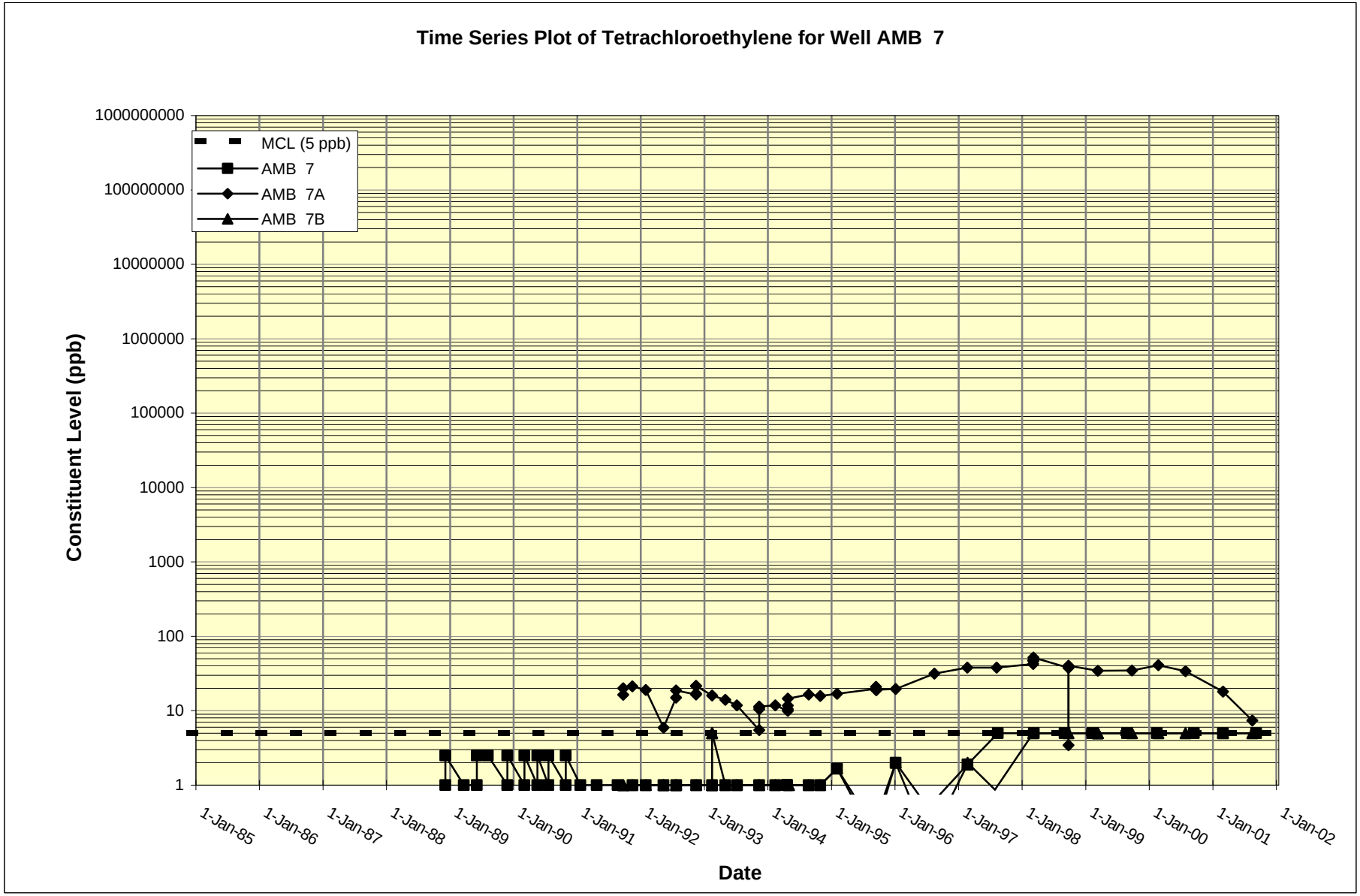
Date


Time Series Plot of Tetrachloroethylene for Well AMB 7
MCL (5 ppb)
AMB 7
AMB 7A
AMB 7B
Constituent Level (ppb)
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10
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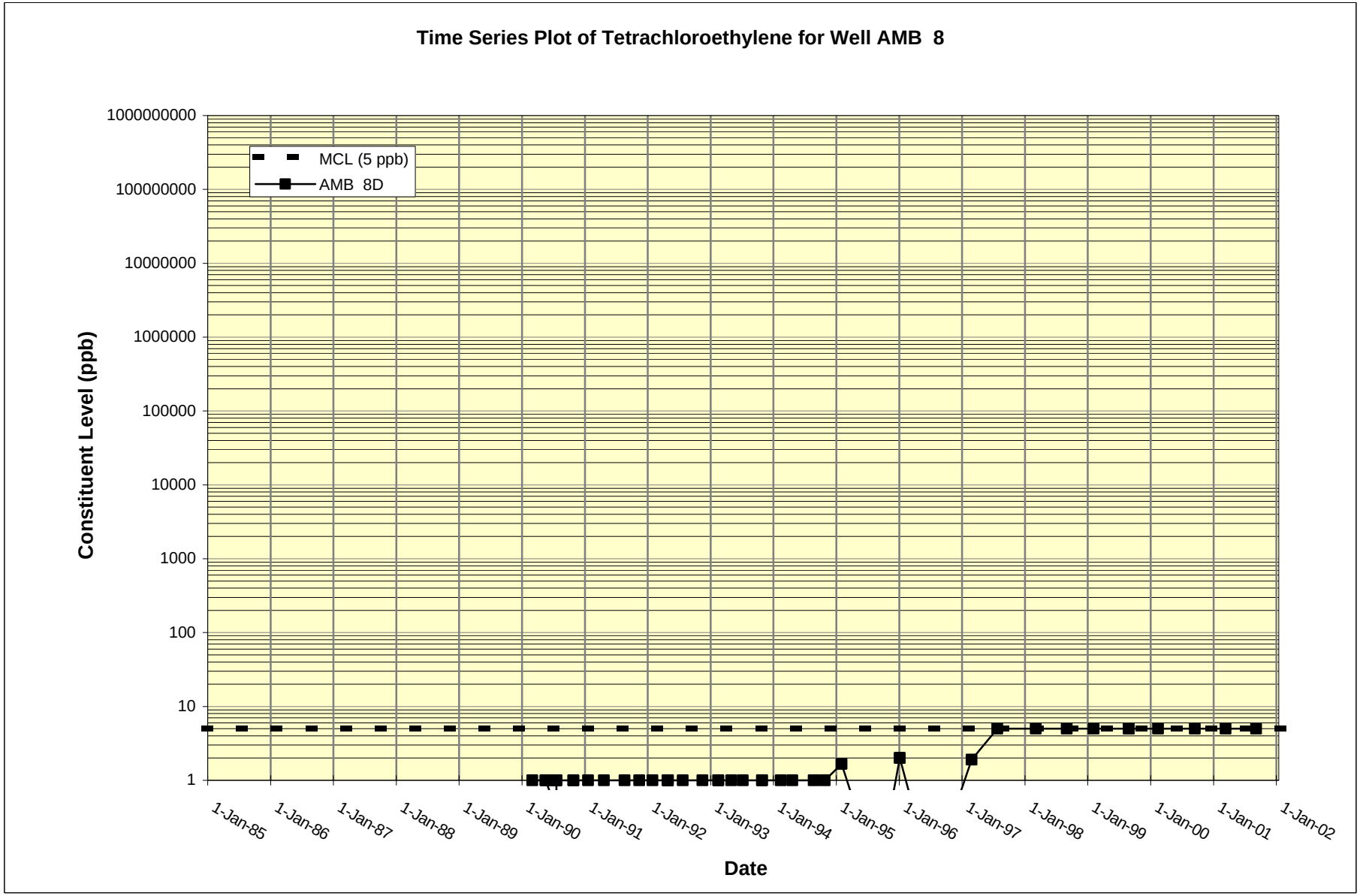
Time Series Plot of Tetrachloroethylene for Well AMB 8
MCL (5 ppb)
AMB 8D
Constituent Level (ppb)
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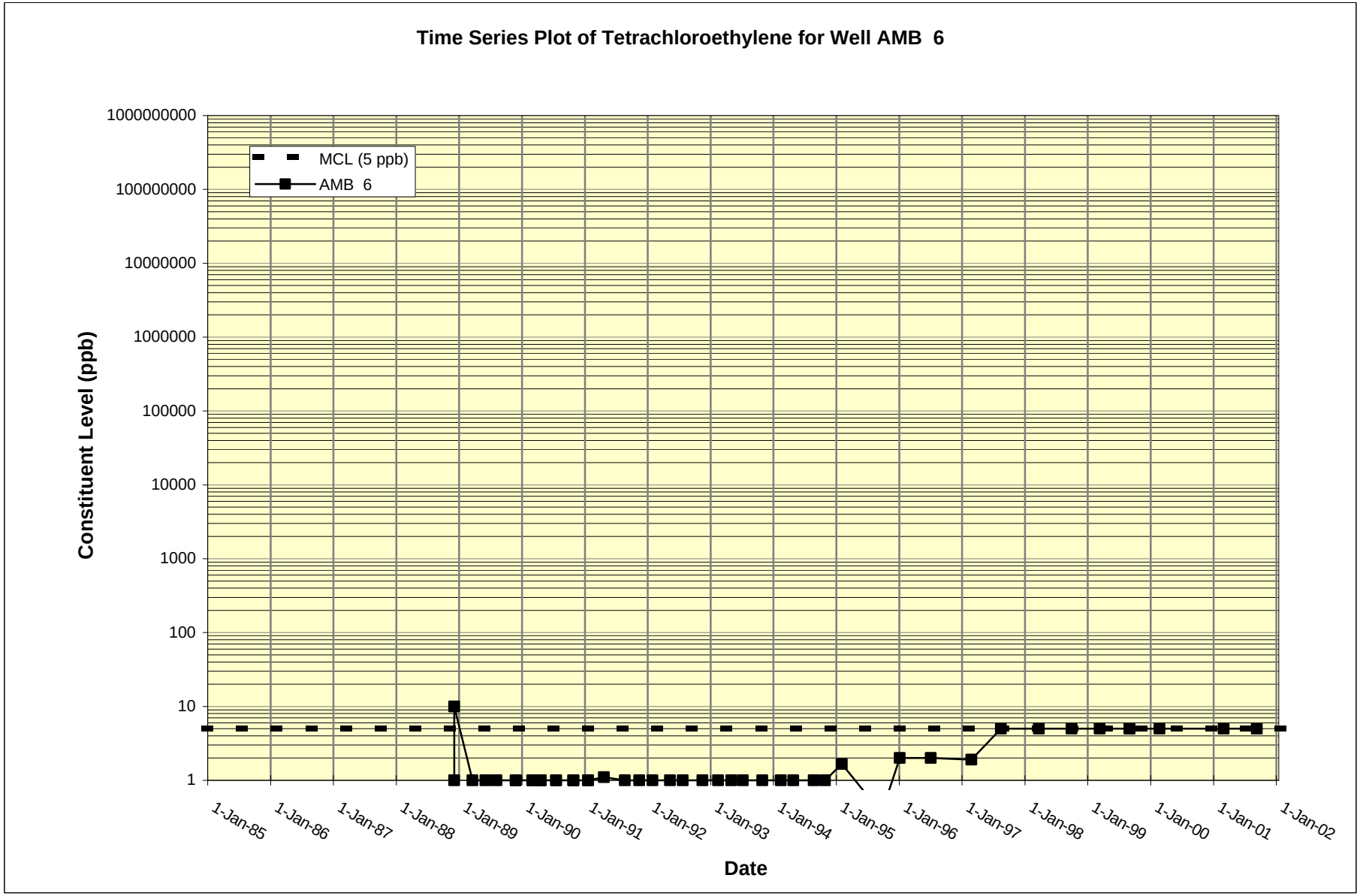
Time Series Plot of Tetrachloroethylene for Well AMB 6
MCL (5 ppb)
AMB 6
Constituent Level (ppb)
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1000000
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100
10
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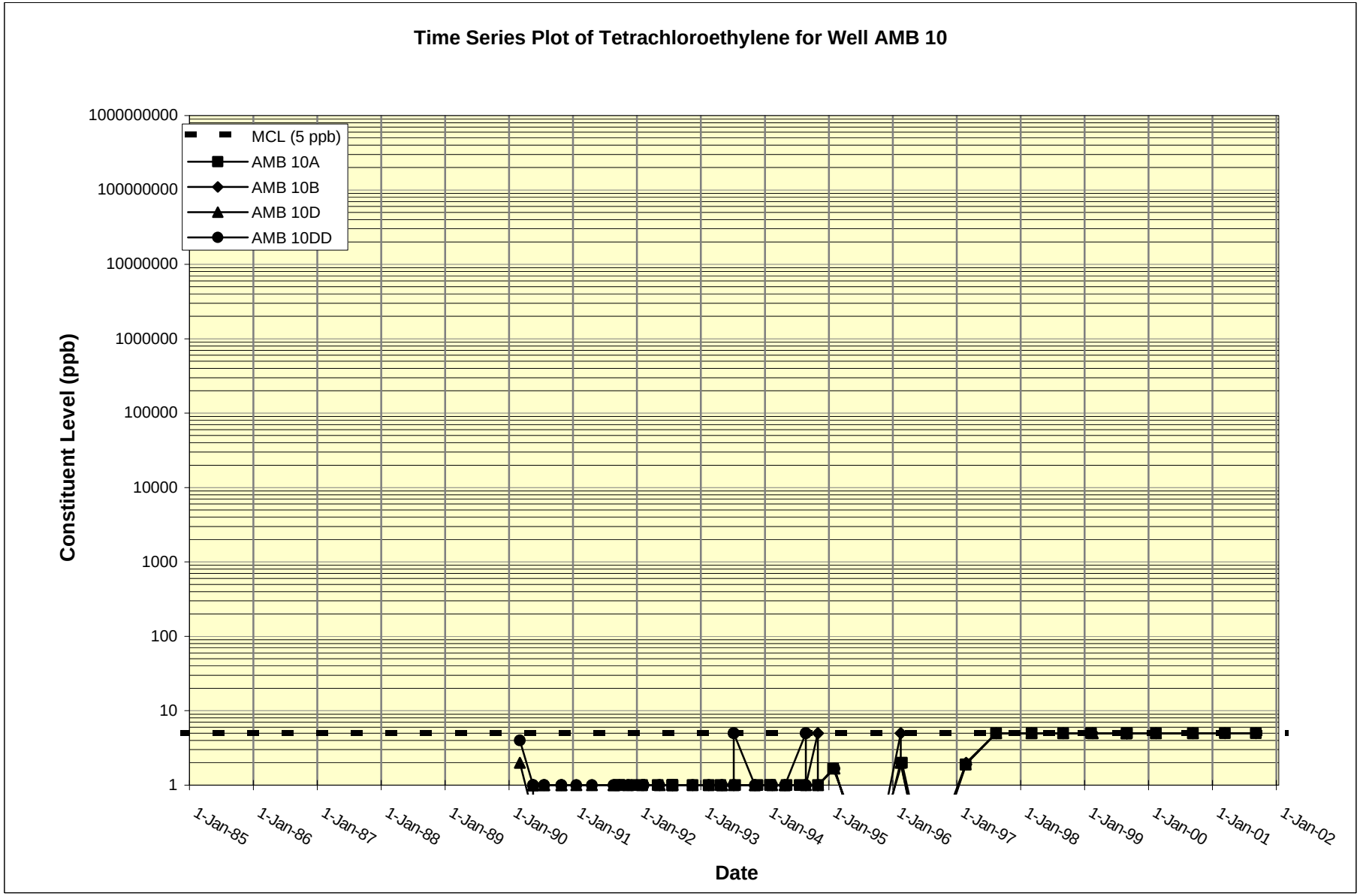
Time Series Plot of Tetrachloroethylene for Well AMB 10
MCL (5 ppb)
AMB 10A
AMB 10B
AMB 10D
AMB 10DD
Constituent Level (ppb)
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100000000
10000000
1000000
100000
10000
1000
100
10
1
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1-Jan-86
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1-Jan-89
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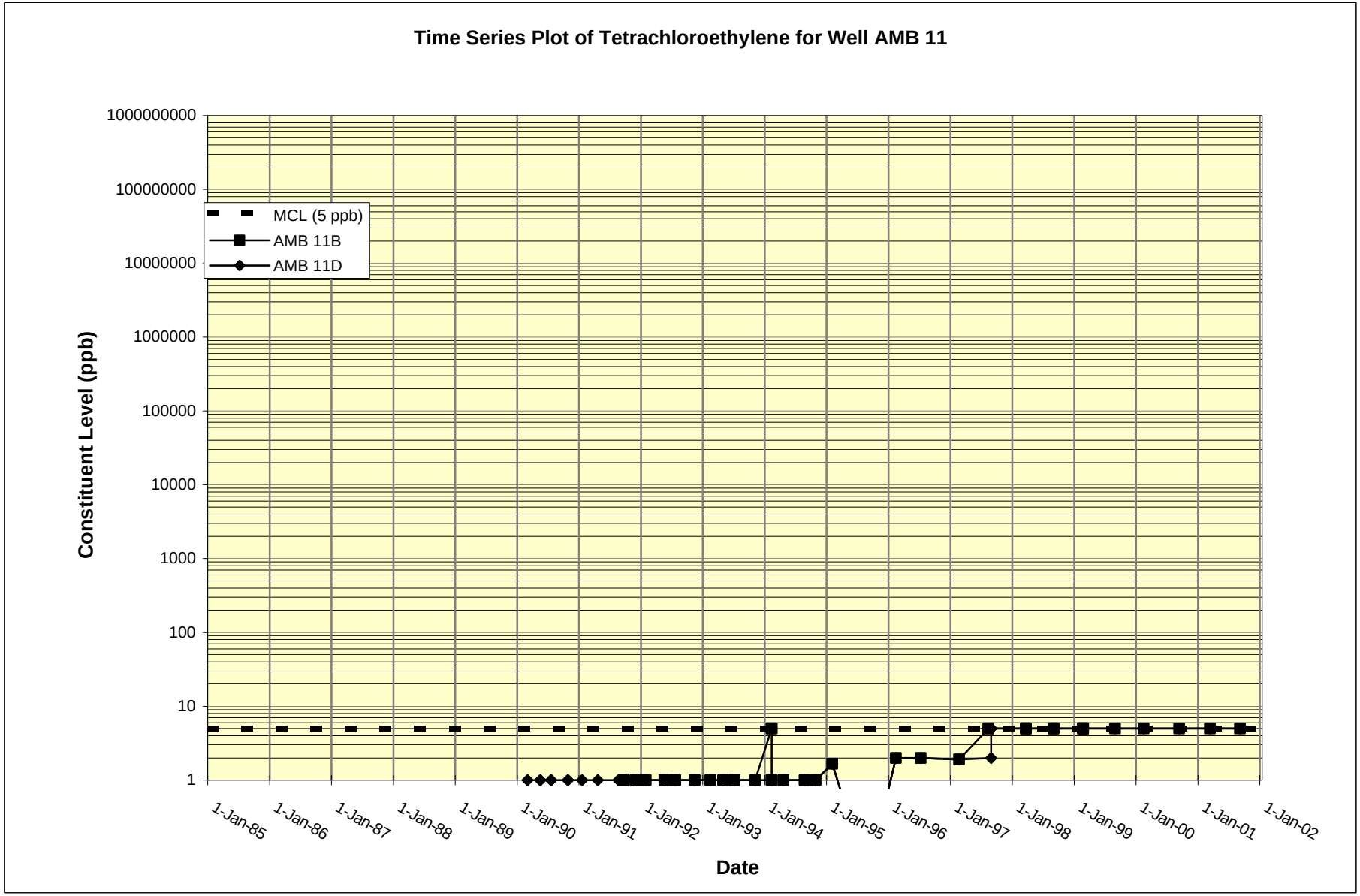
Time Series Plot of Tetrachloroethylene for Well AMB 11
MCL (5 ppb)
AMB 11B
AMB 11D
Constituent Level (ppb)
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1000000
100000
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1000
100
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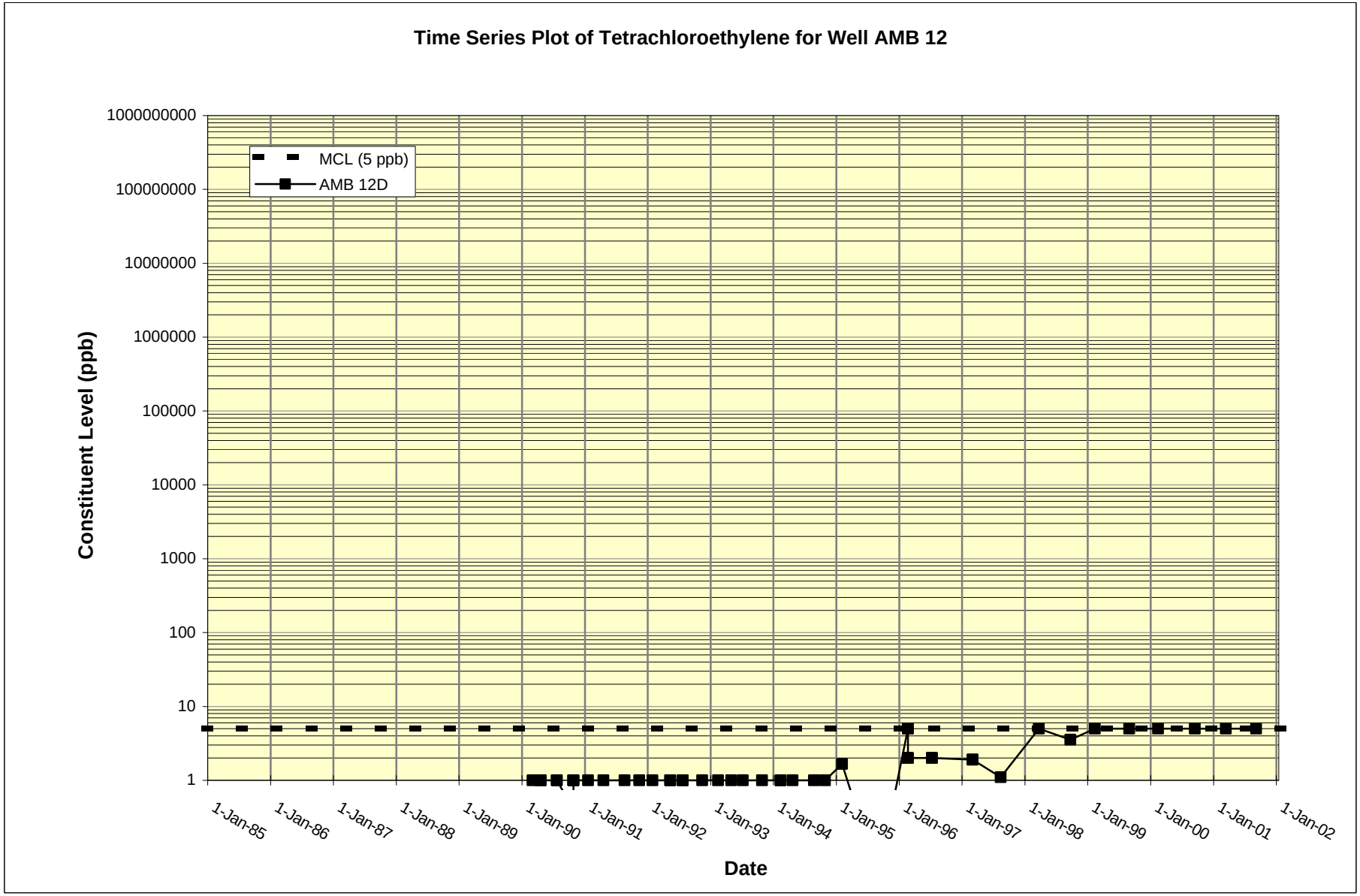
Time Series Plot of Tetrachloroethylene for Well AMB 12
MCL (5 ppb)
AMB 12D
Constituent Level (ppb)
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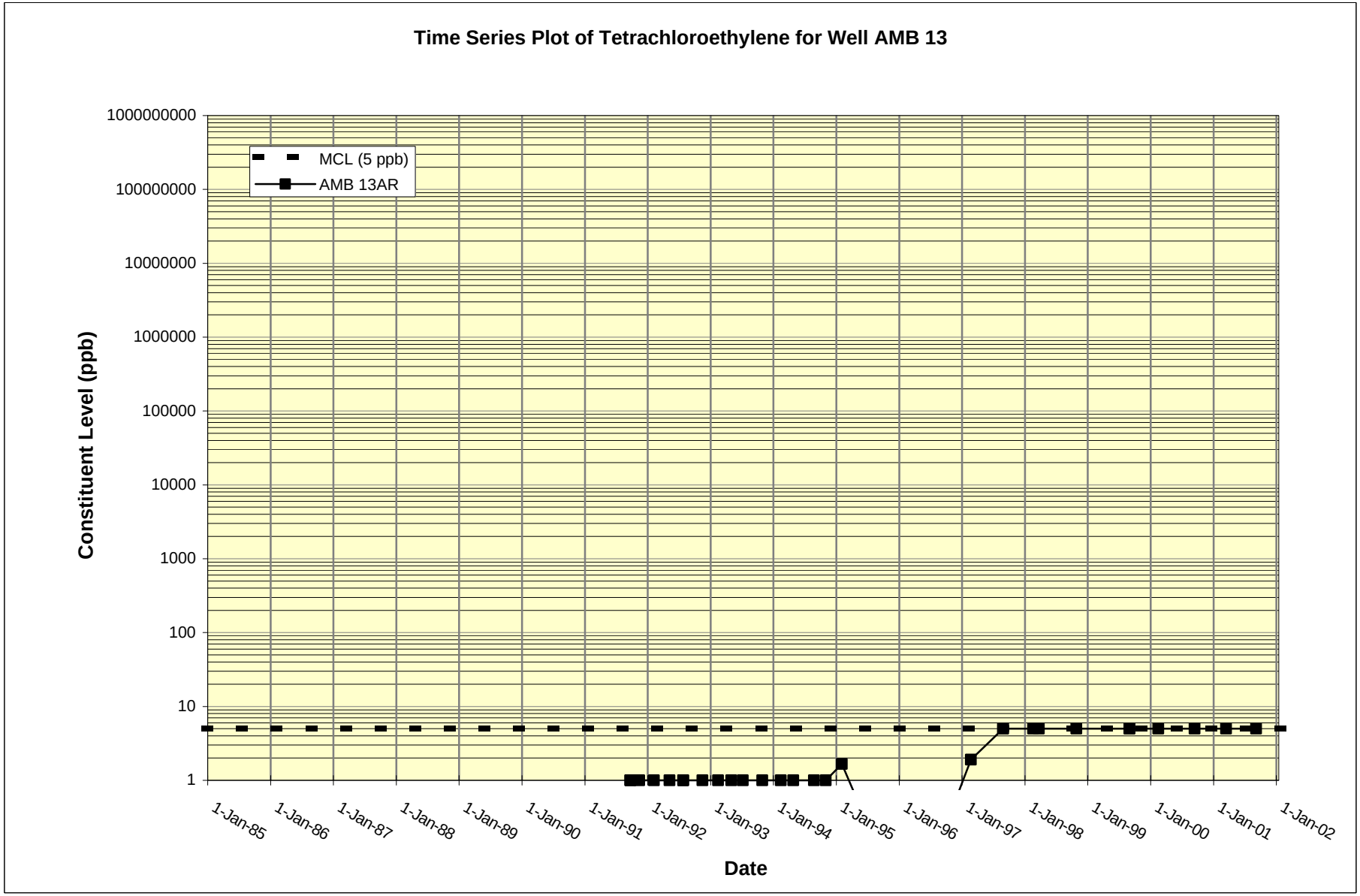
Date


Time Series Plot of Tetrachloroethylene for Well AMB 13
MCL (5 ppb)
AMB 13AR
Constituent Level (ppb)
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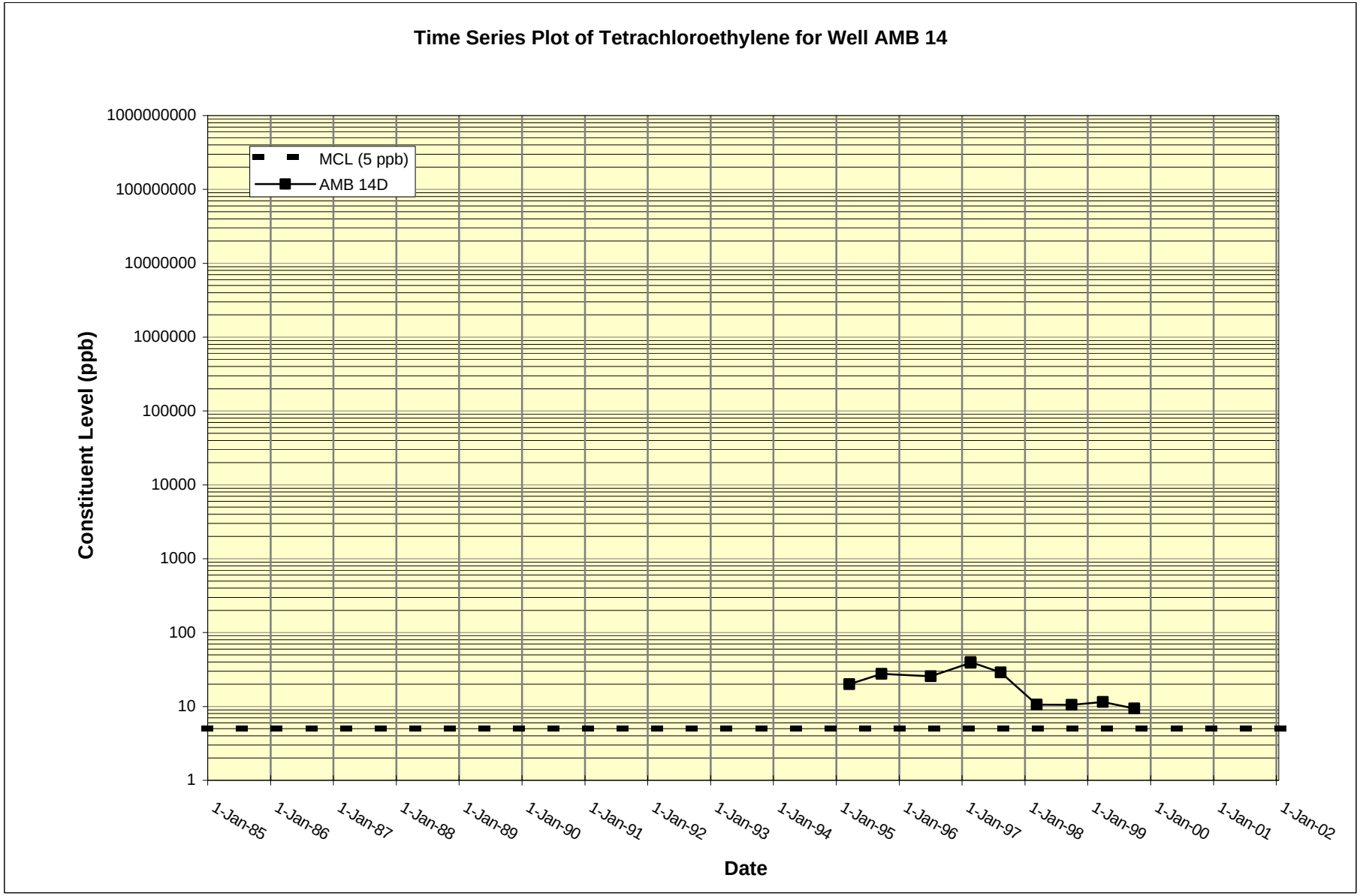
Date


Time Series Plot of Tetrachloroethylene for Well AMB 14
MCL (5 ppb)
AMB 14D
Constituent Level (ppb)
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10
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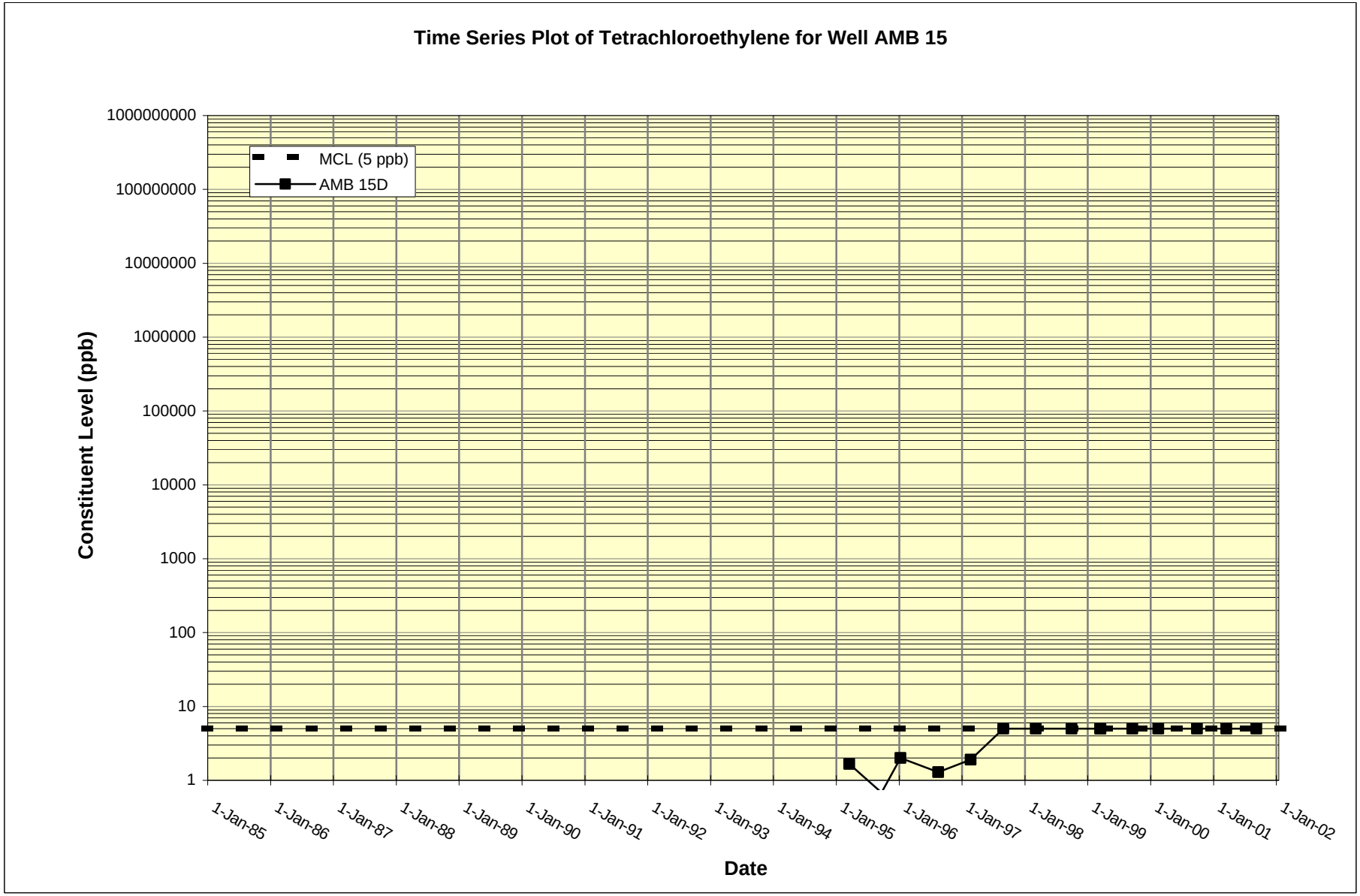
1-Jan-02
Date


Time Series Plot of Tetrachloroethylene for Well AMB 15
MCL (5 ppb)
AMB 15D
Constituent Level (ppb)
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1-Jan-85
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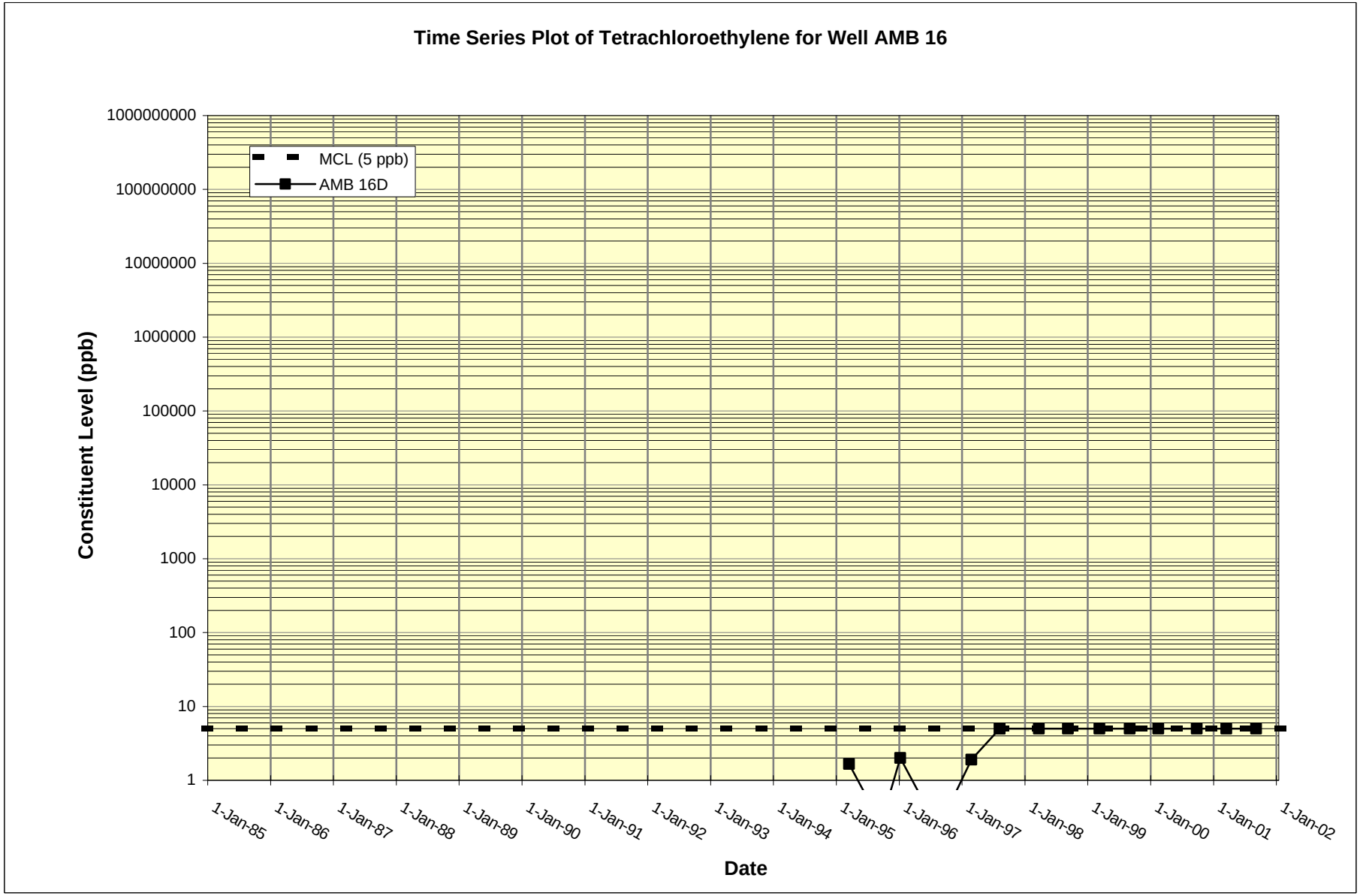
1-Jan-02
Date


Time Series Plot of Tetrachloroethylene for Well AMB 16
MCL (5 ppb)
AMB 16D
Constituent Level (ppb)
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10000000
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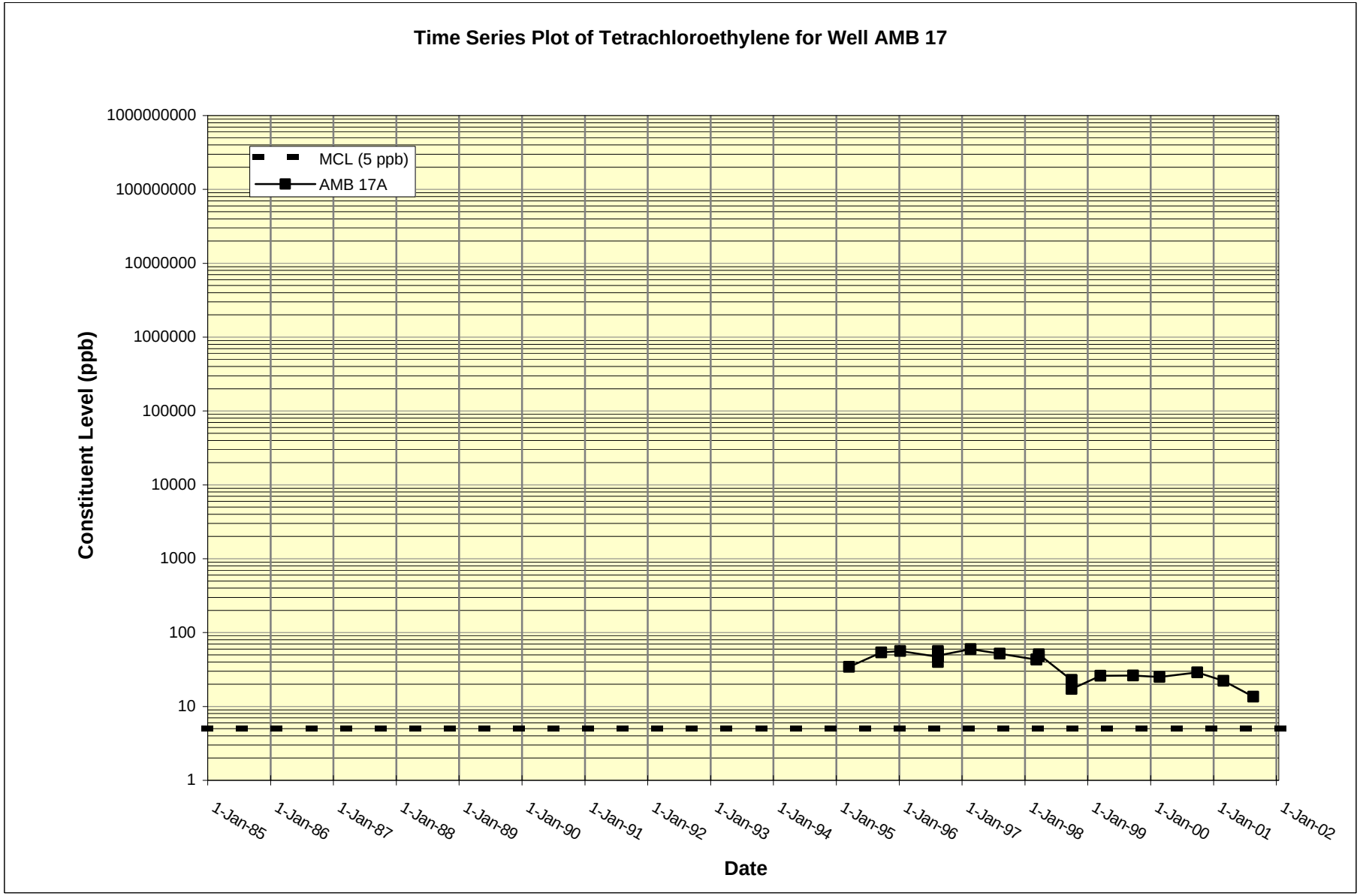
1-Jan-02
Date


Time Series Plot of Tetrachloroethylene for Well AMB 17
MCL (5 ppb)
AMB 17A
Constituent Level (ppb)
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100000000
10000000
1000000
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1-Jan-85
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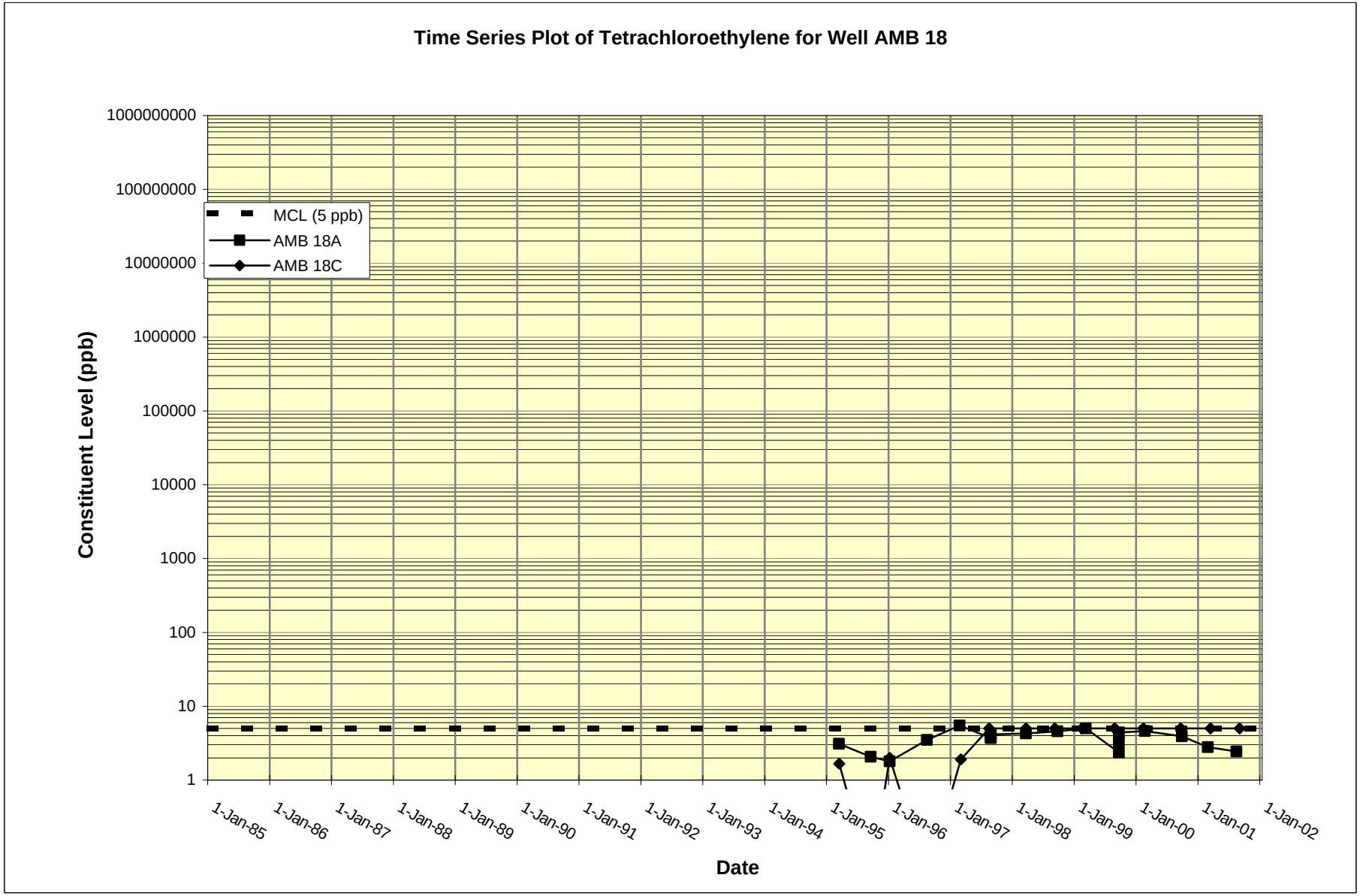
Date


Time Series Plot of Tetrachloroethylene for Well AMB 18
MCL (5 ppb)
AMB 18A
AMB 18C
Constituent Level (ppb)
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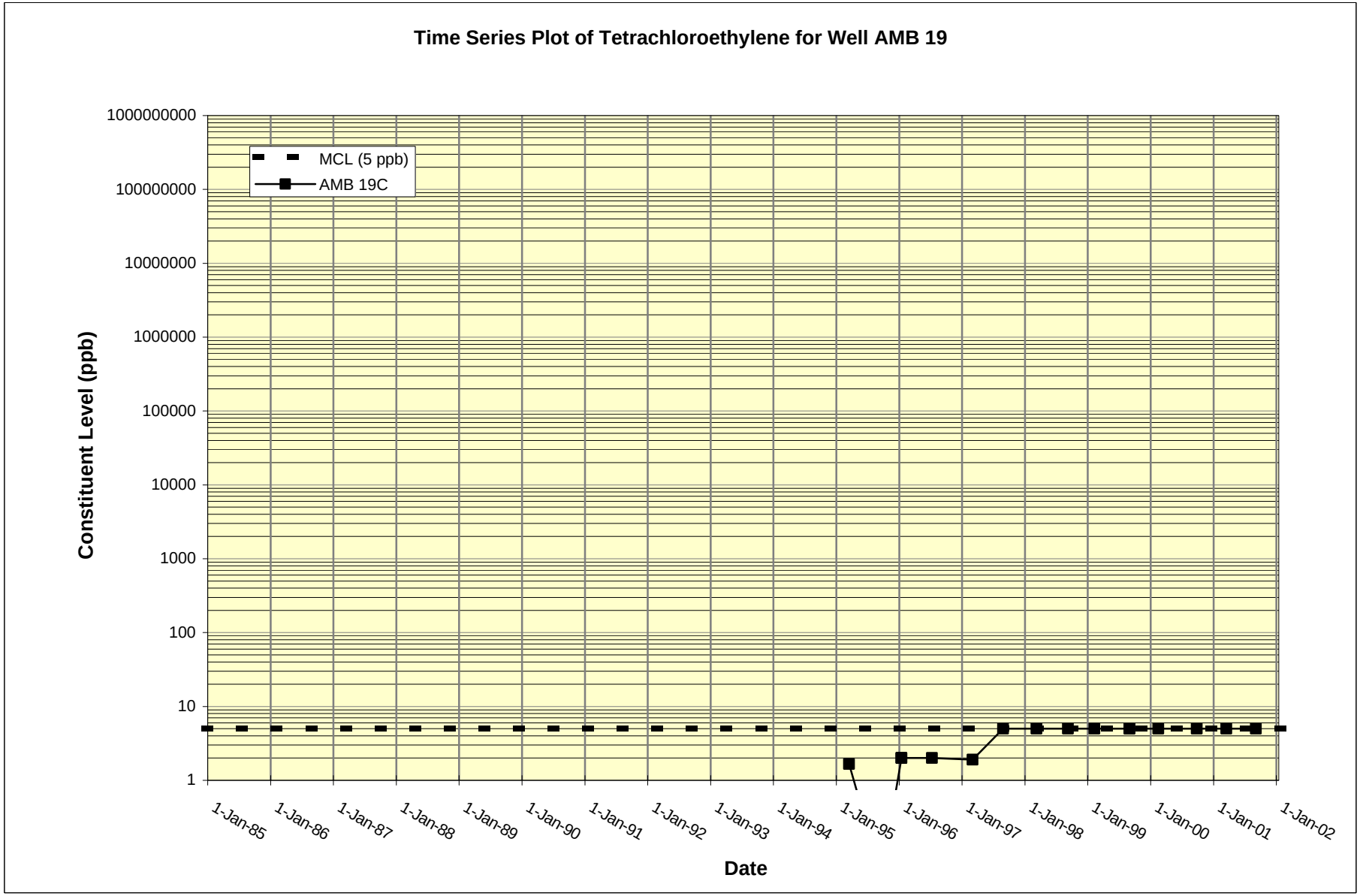
Date


Time Series Plot of Tetrachloroethylene for Well AMB 19
MCL (5 ppb)
AMB 19C
Constituent Level (ppb)
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100000000
10000000
1000000
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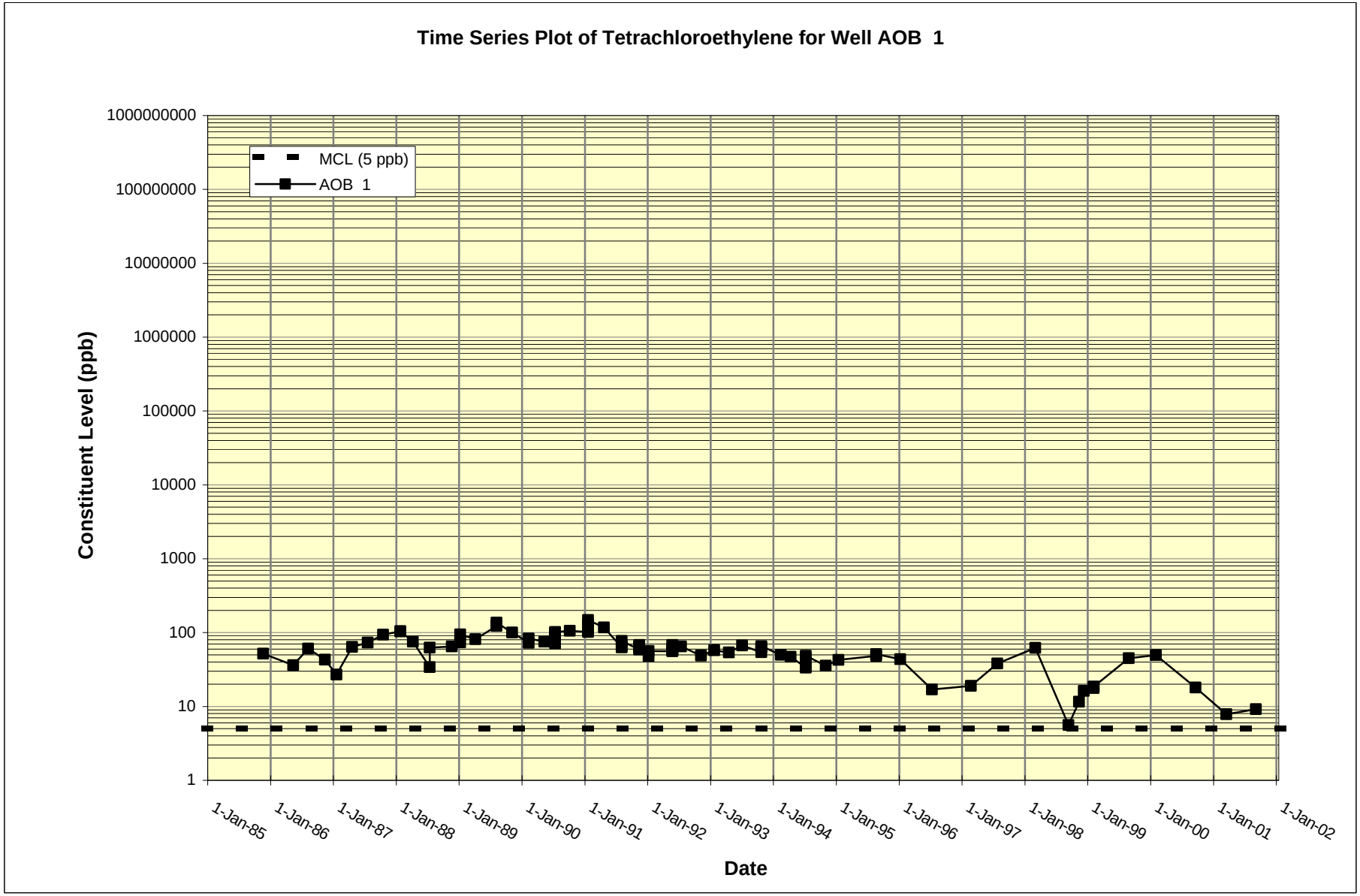
Date


Time Series Plot of Tetrachloroethylene for Well AOB 1
MCL (5 ppb)
AOB 1
Constituent Level (ppb)
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100000000
10000000
1000000
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100
10
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1-Jan-85
1-Jan-86
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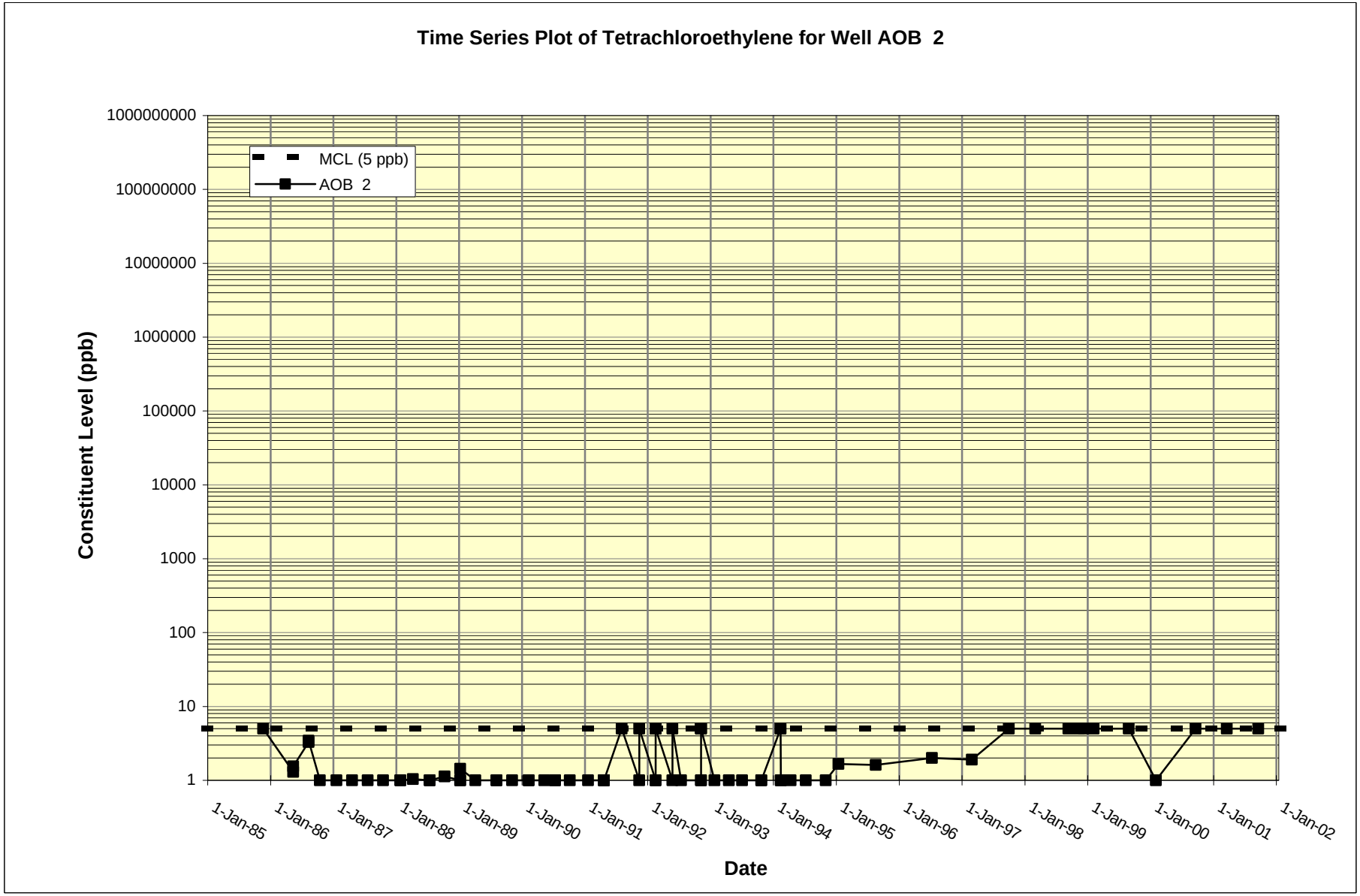
Time Series Plot of Tetrachloroethylene for Well AOB 2
MCL (5 ppb)
AOB 2
Constituent Level (ppb)
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100000000
10000000
1000000
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1-Jan-85
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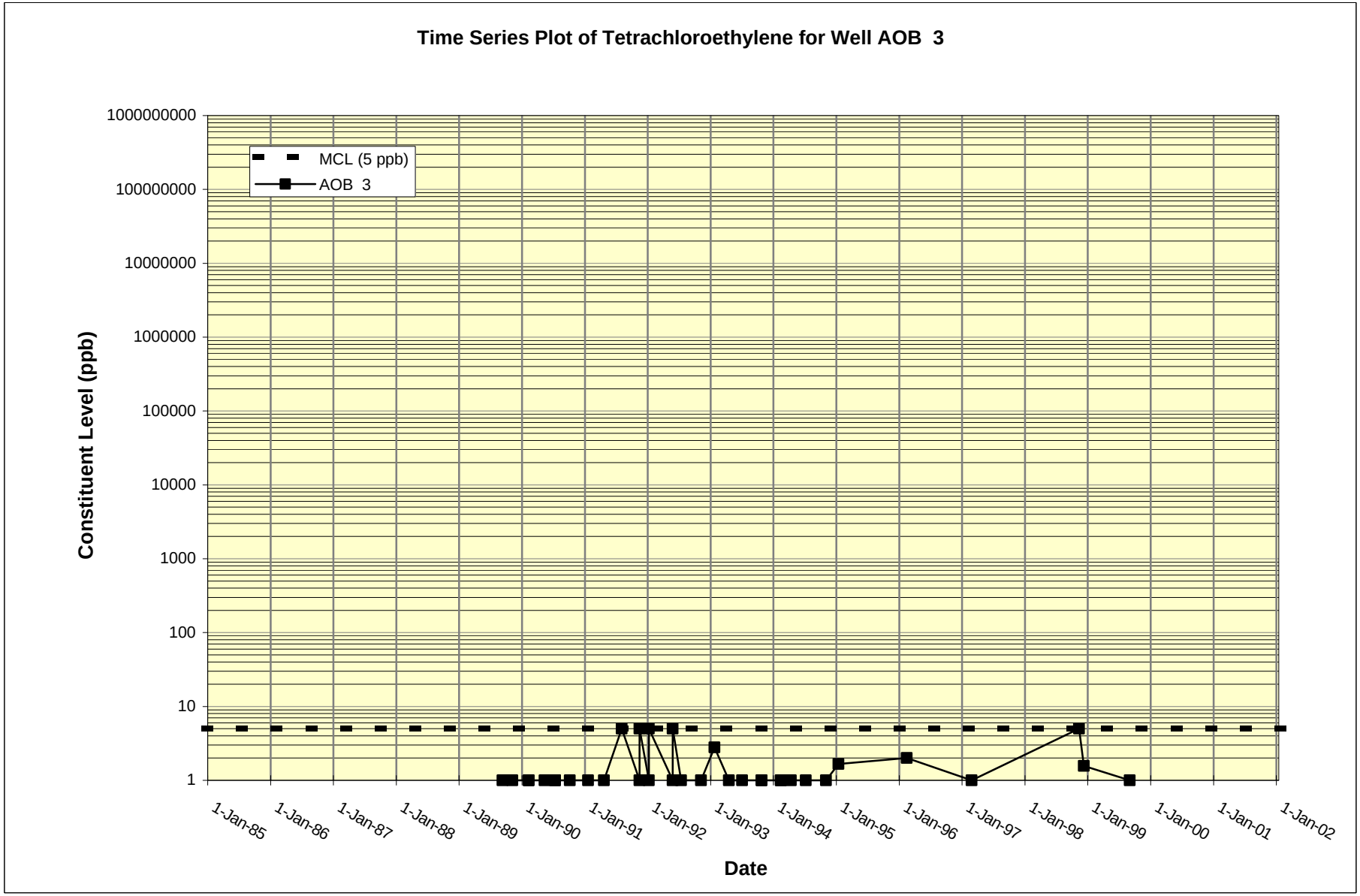
Time Series Plot of Tetrachloroethylene for Well AOB 3
MCL (5 ppb)
AOB 3
Constituent Level (ppb)
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100000000
10000000
1000000
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1-Jan-85
1-Jan-86
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1-Jan-94
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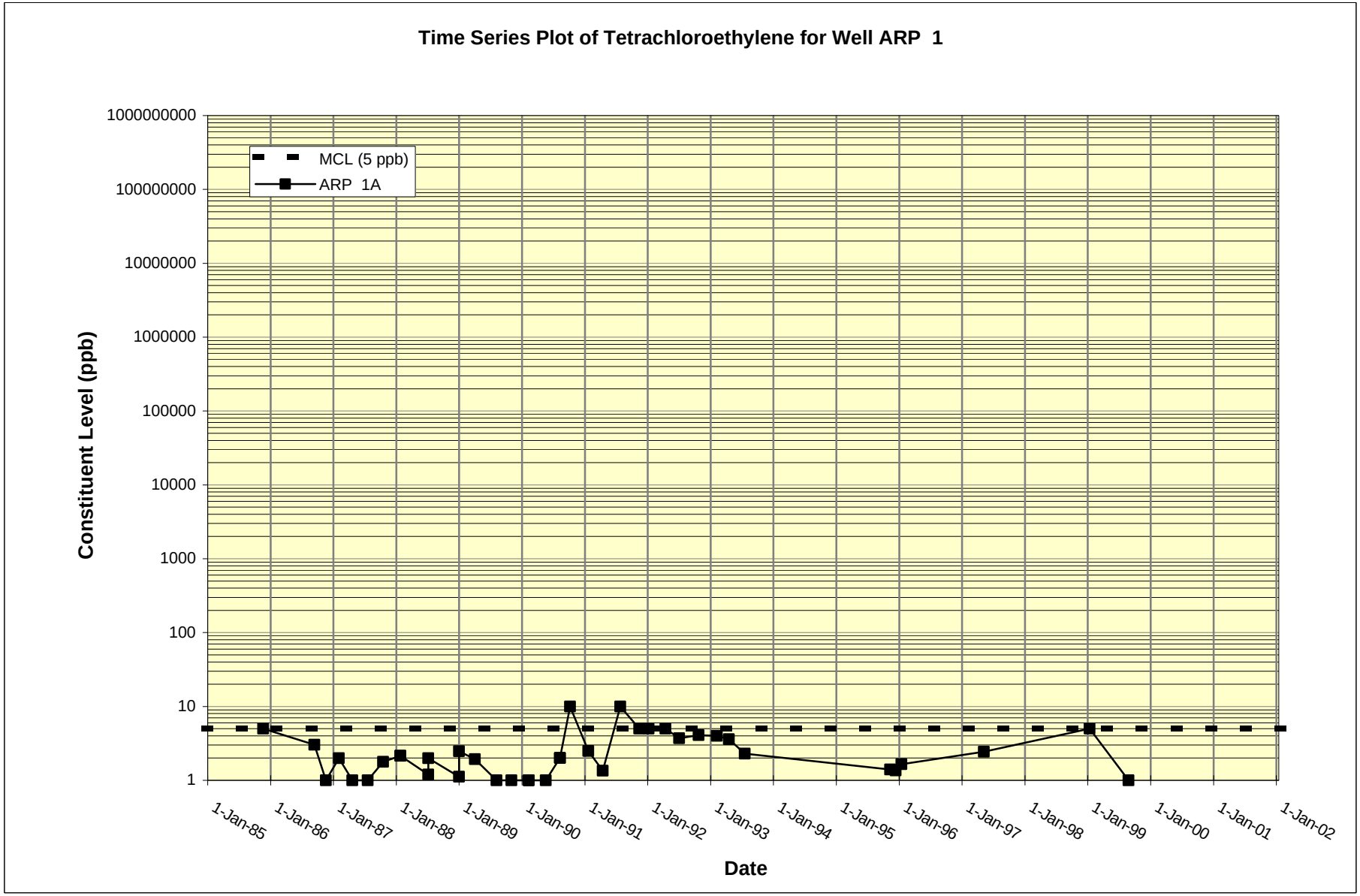
Date


Time Series Plot of Tetrachloroethylene for Well ARP 1
MCL (5 ppb)
ARP 1A
Constituent Level (ppb)
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100000000
10000000
1000000
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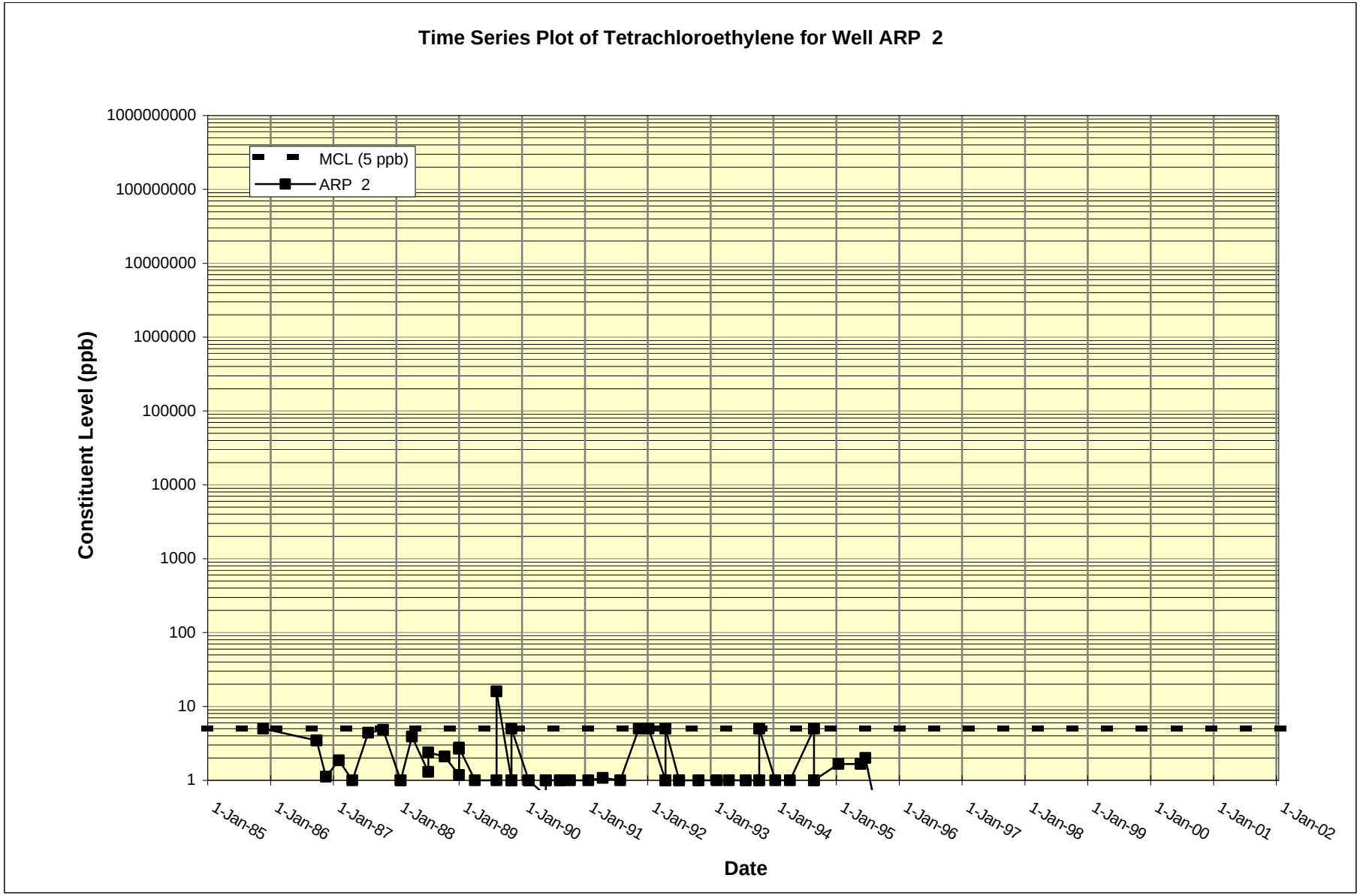
Date


Time Series Plot of Tetrachloroethylene for Well ARP 2
MCL (5 ppb)
ARP 2
Constituent Level (ppb)
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10000000
1000000
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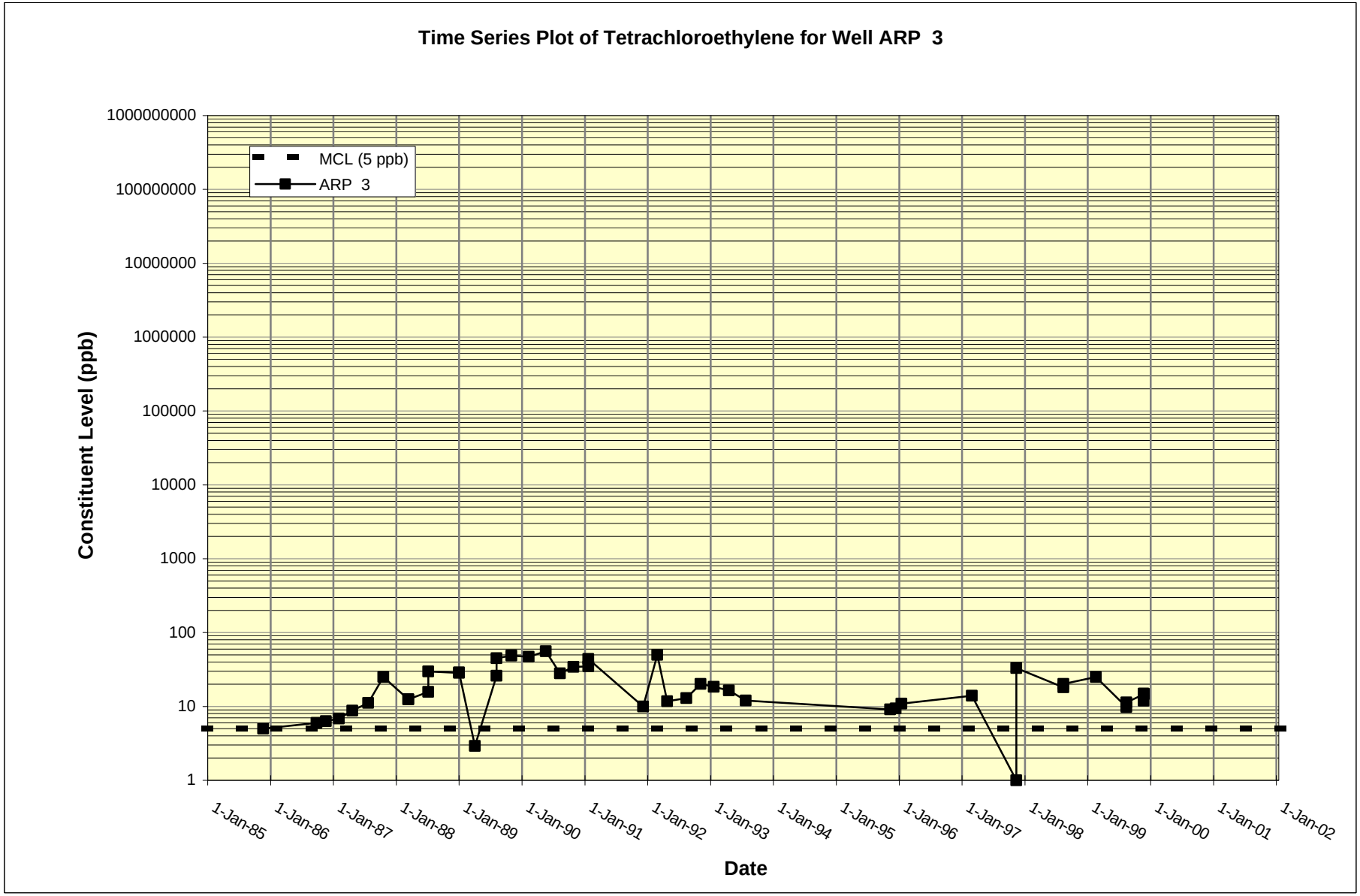
Time Series Plot of Tetrachloroethylene for Well ARP 3
MCL (5 ppb)
ARP 3
Constituent Level (ppb)
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10000000
1000000
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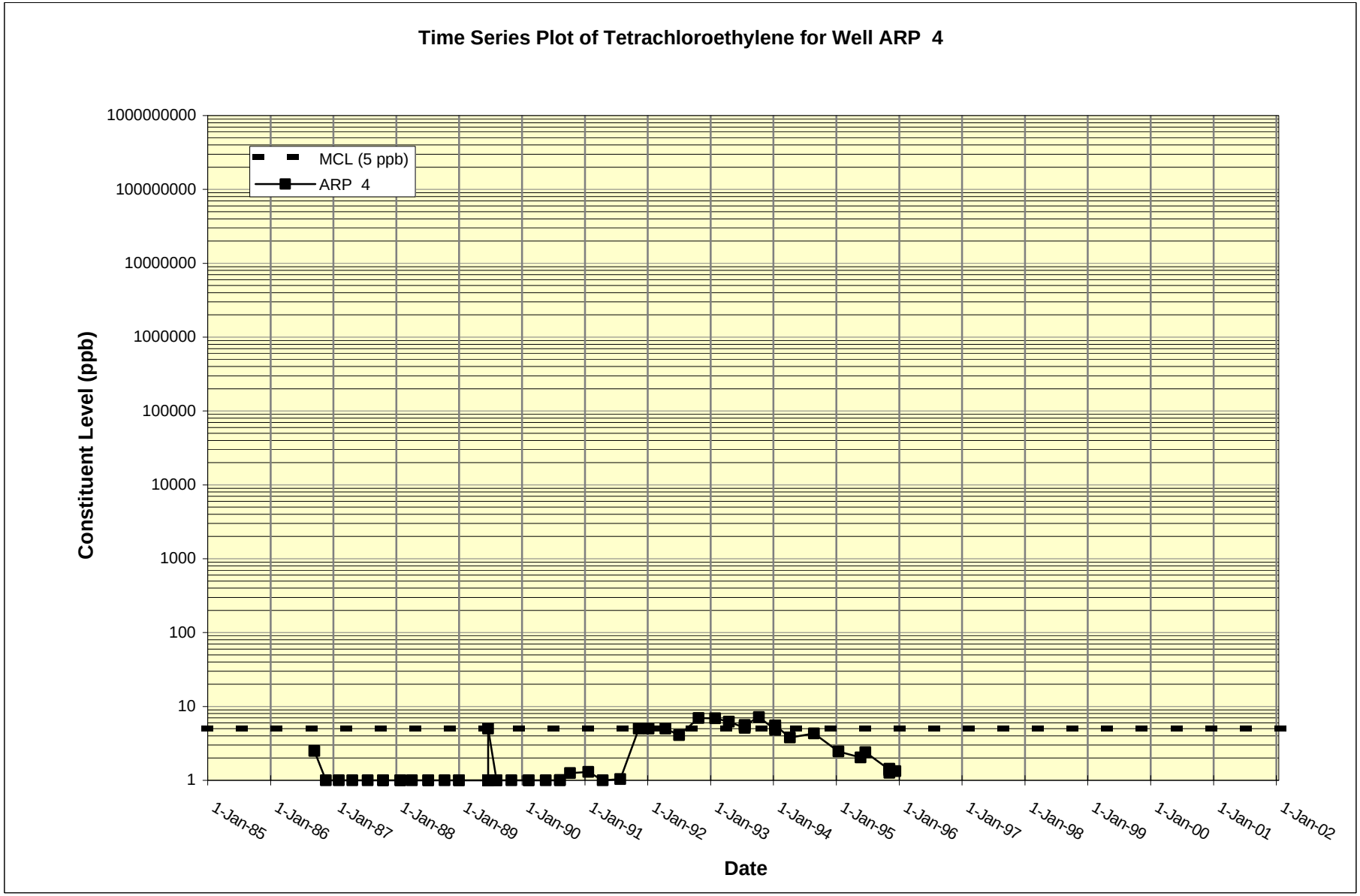
Date


Time Series Plot of Tetrachloroethylene for Well ARP 4
MCL (5 ppb)
ARP 4
Constituent Level (ppb)
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100000000
10000000
1000000
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1000
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10
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1-Jan-87
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1-Jan-94
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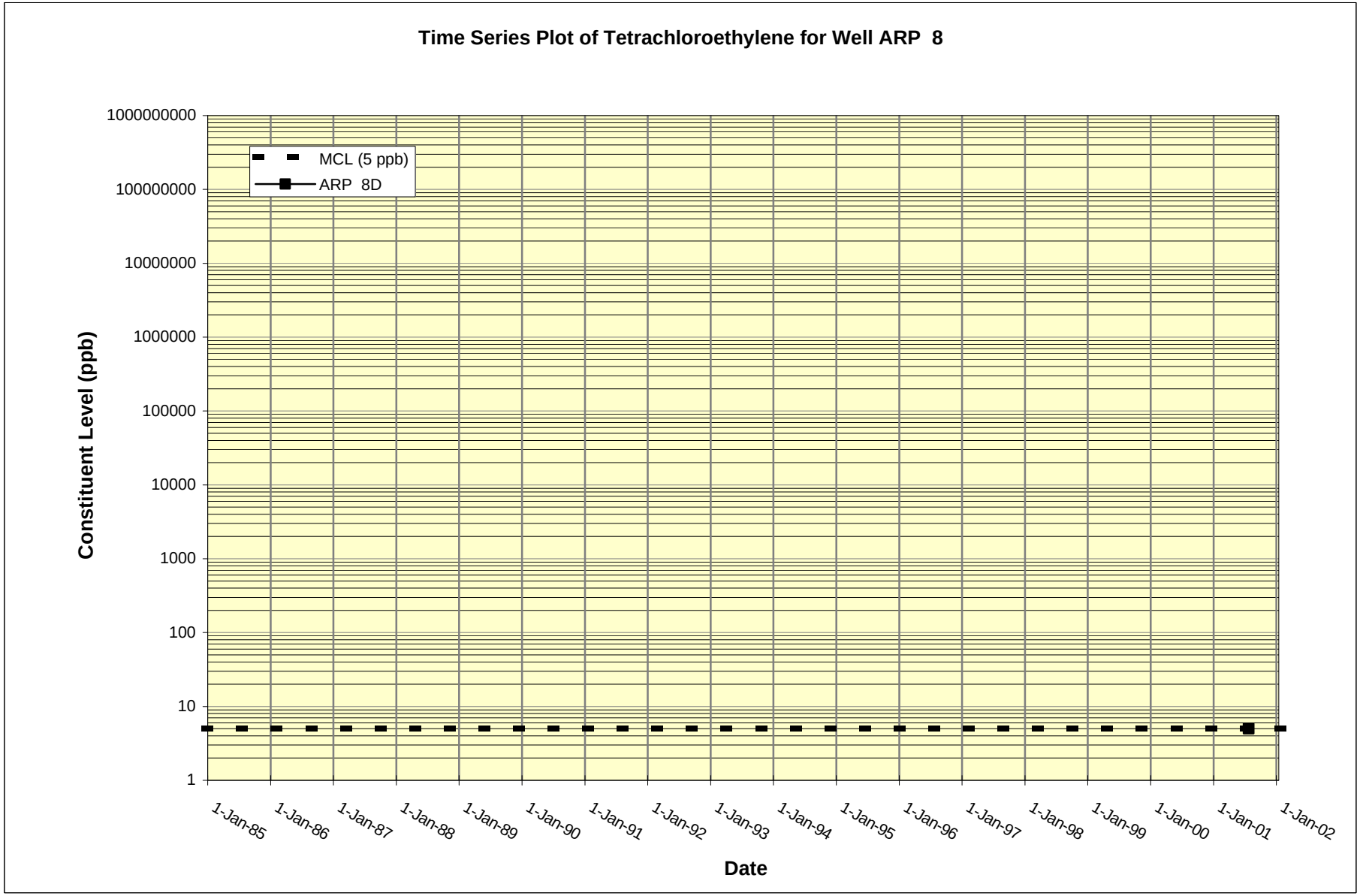
1-Jan-02
Date


Time Series Plot of Tetrachloroethylene for Well ARP 8
MCL (5 ppb)
ARP 8D
Constituent Level (ppb)
1000000000
100000000
10000000
1000000
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100
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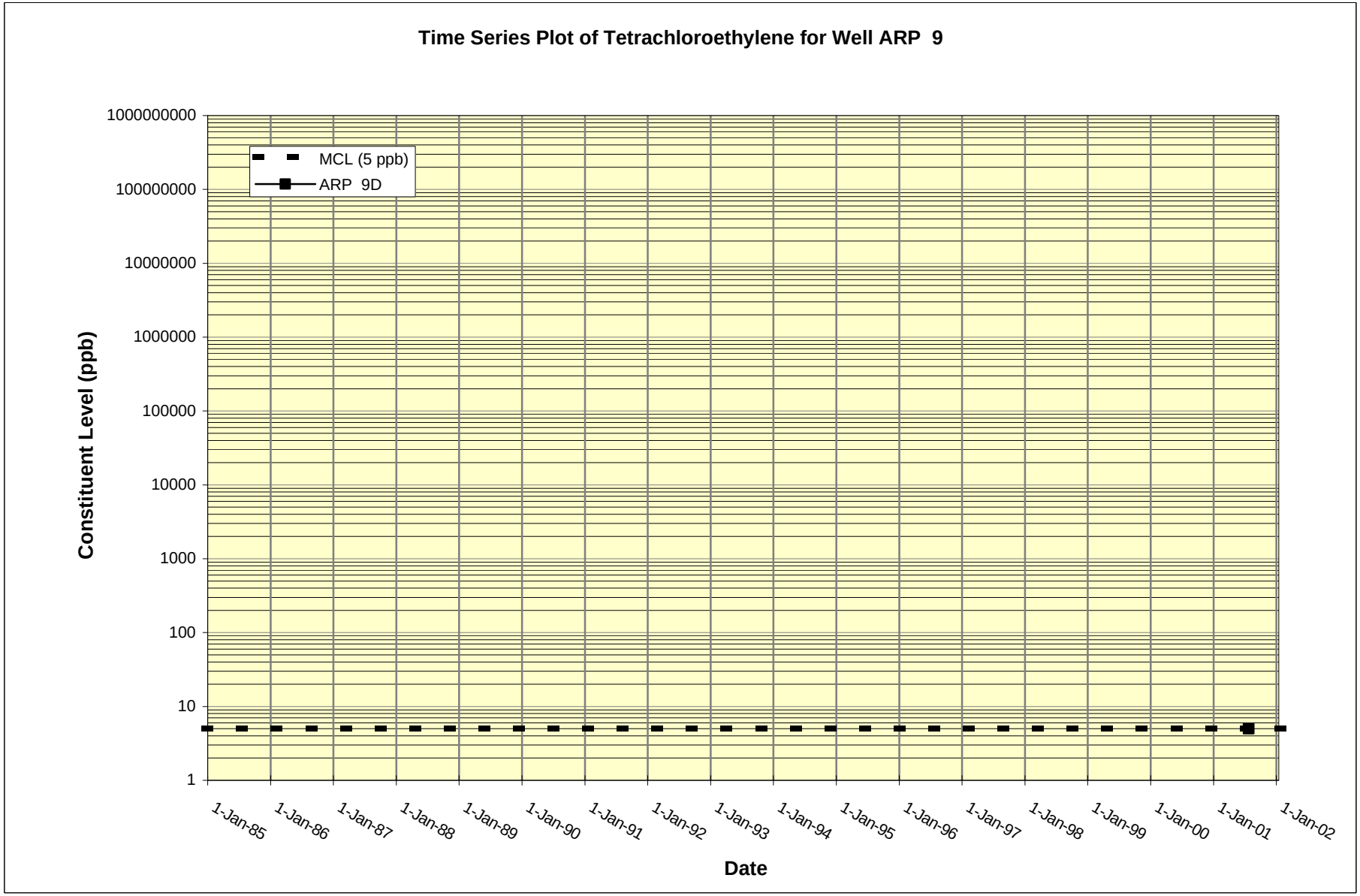
Date


Time Series Plot of Tetrachloroethylene for Well ARP 9
MCL (5 ppb)
ARP 9D
Constituent Level (ppb)
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1000000
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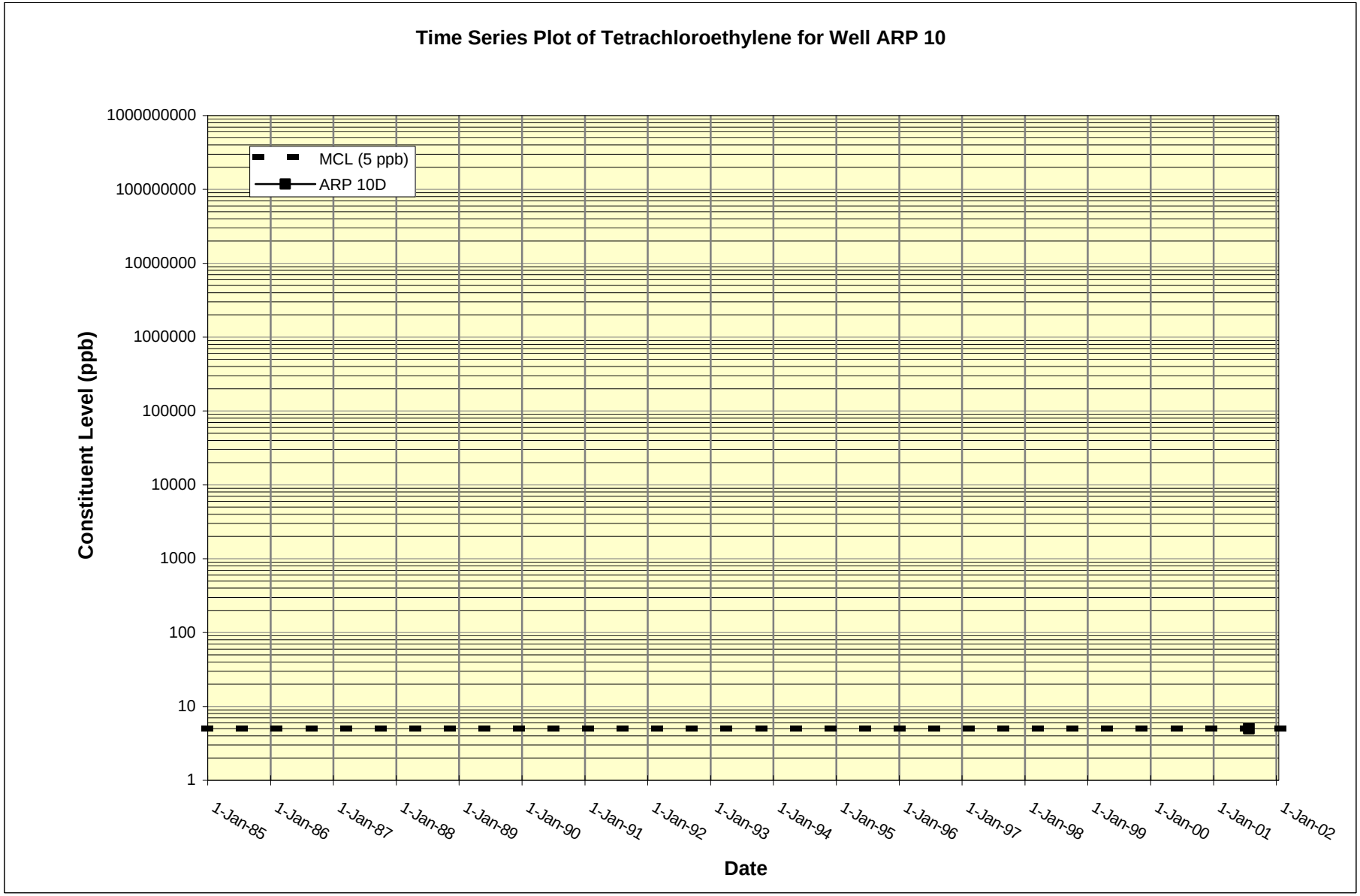
Date


Time Series Plot of Tetrachloroethylene for Well ARP 10
MCL (5 ppb)
ARP 10D
Constituent Level (ppb)
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10000000
1000000
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10000
1000
100
10
1
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1-Jan-86
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1-Jan-89
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1-Jan-92
1-Jan-93
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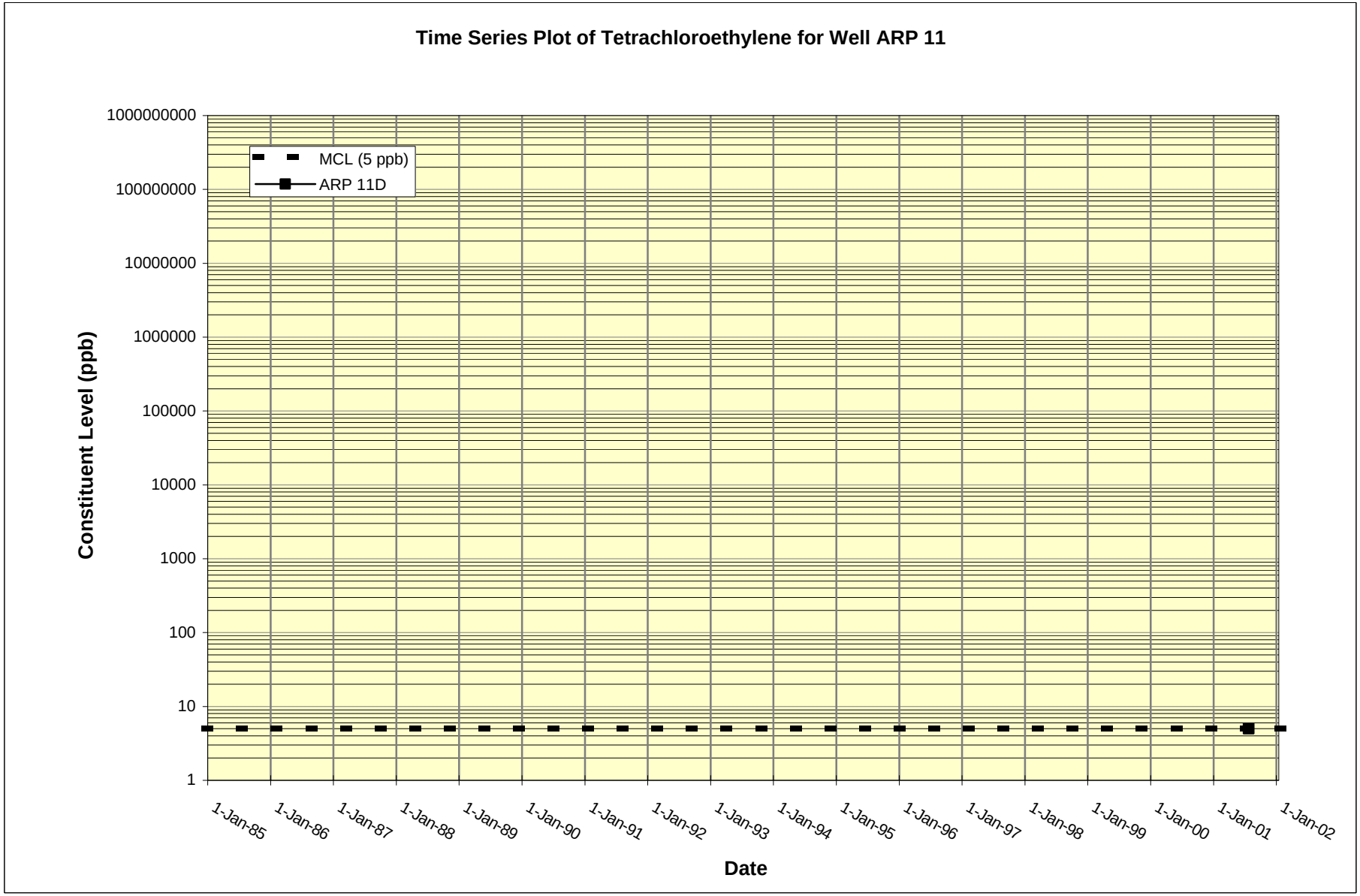
Date


Time Series Plot of Tetrachloroethylene for Well ARP 11
MCL (5 ppb)
ARP 11D
Constituent Level (ppb)
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100000000
10000000
1000000
100000
10000
1000
100
10
1
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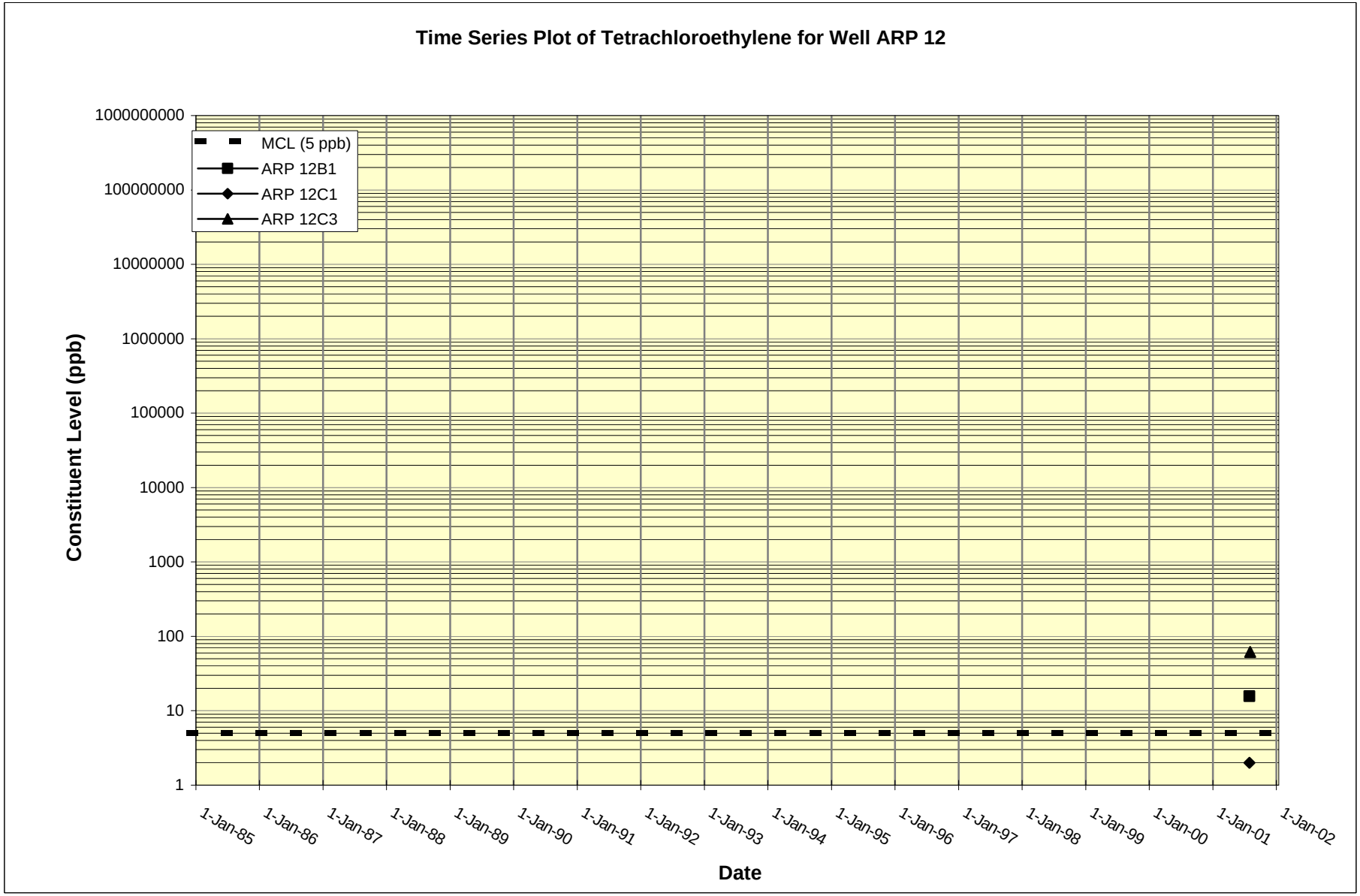
Time Series Plot of Tetrachloroethylene for Well ARP 12
MCL (5 ppb)
ARP 12B1
ARP 12C1
ARP 12C3
Constituent Level (ppb)
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100000000
10000000
1000000
100000
10000
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100
10
1
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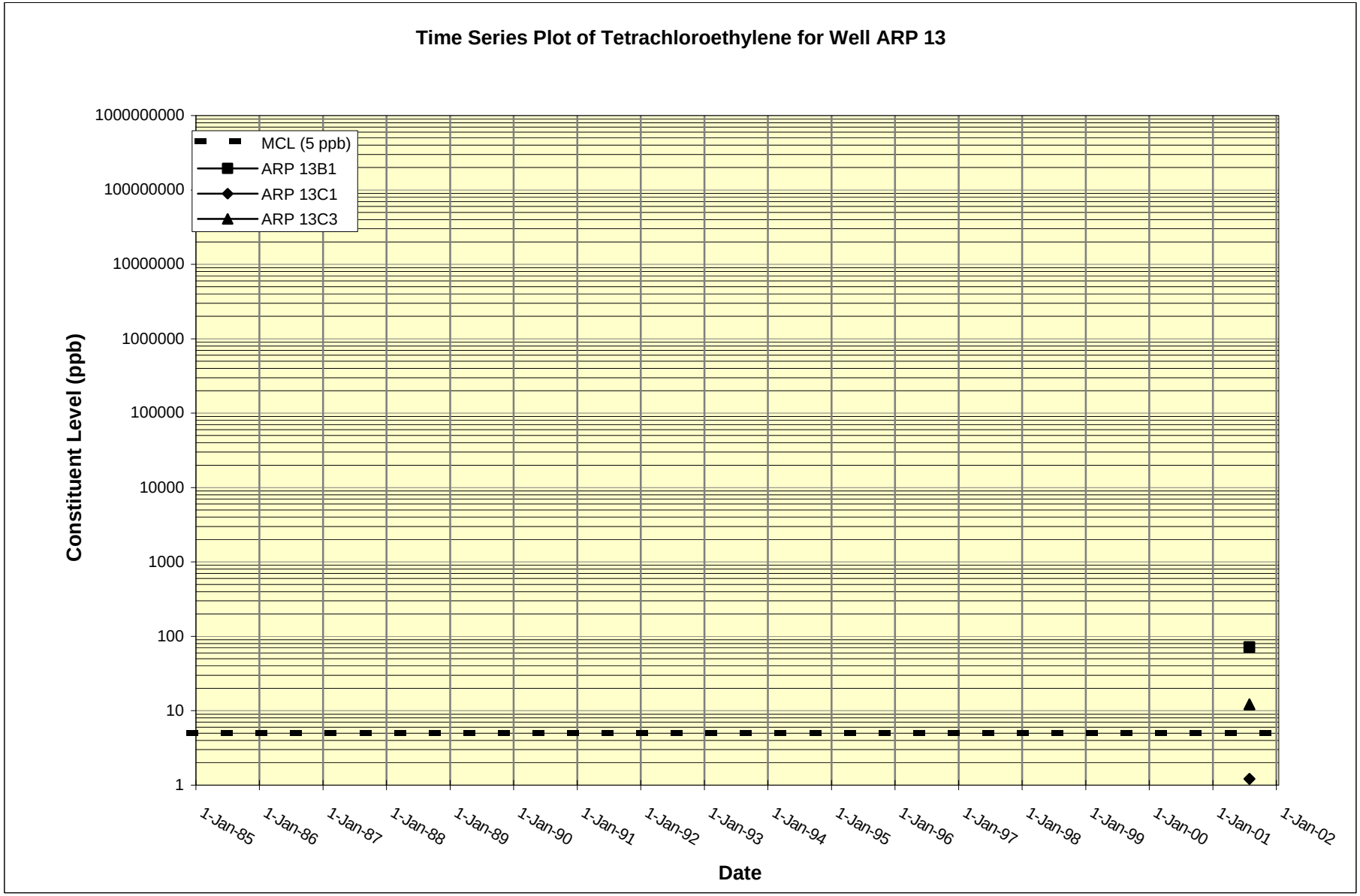
Date


Time Series Plot of Tetrachloroethylene for Well ARP 13
MCL (5 ppb)
ARP 13B1
ARP 13C1
ARP 13C3
Constituent Level (ppb)
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100000000
10000000
1000000
100000
10000
1000
100
10
1
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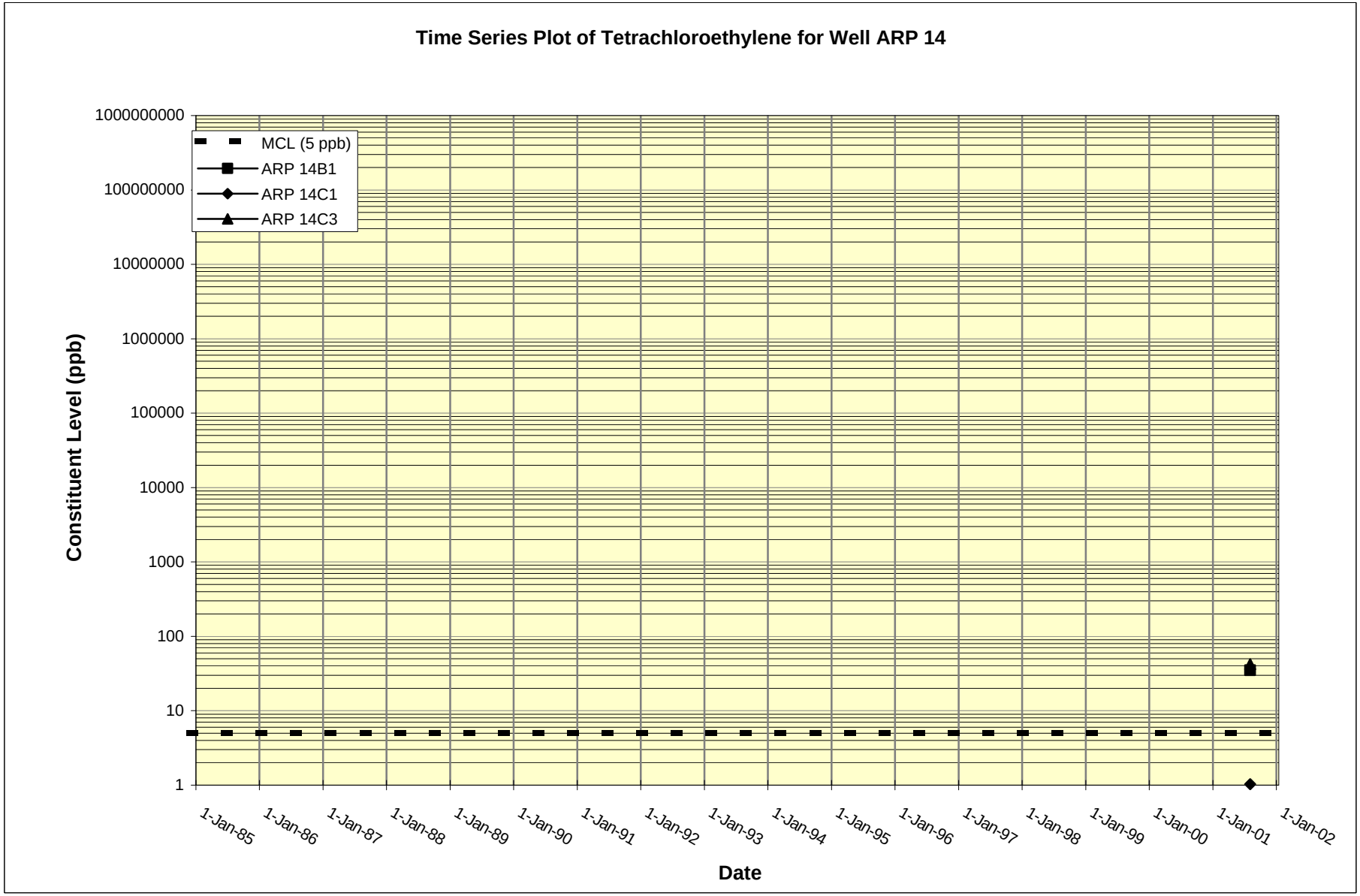
Date


Time Series Plot of Tetrachloroethylene for Well ARP 14
MCL (5 ppb)
ARP 14B1
ARP 14C1
ARP 14C3
Constituent Level (ppb)
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100000000
10000000
1000000
100000
10000
1000
100
10
1
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1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
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1-Jan-94
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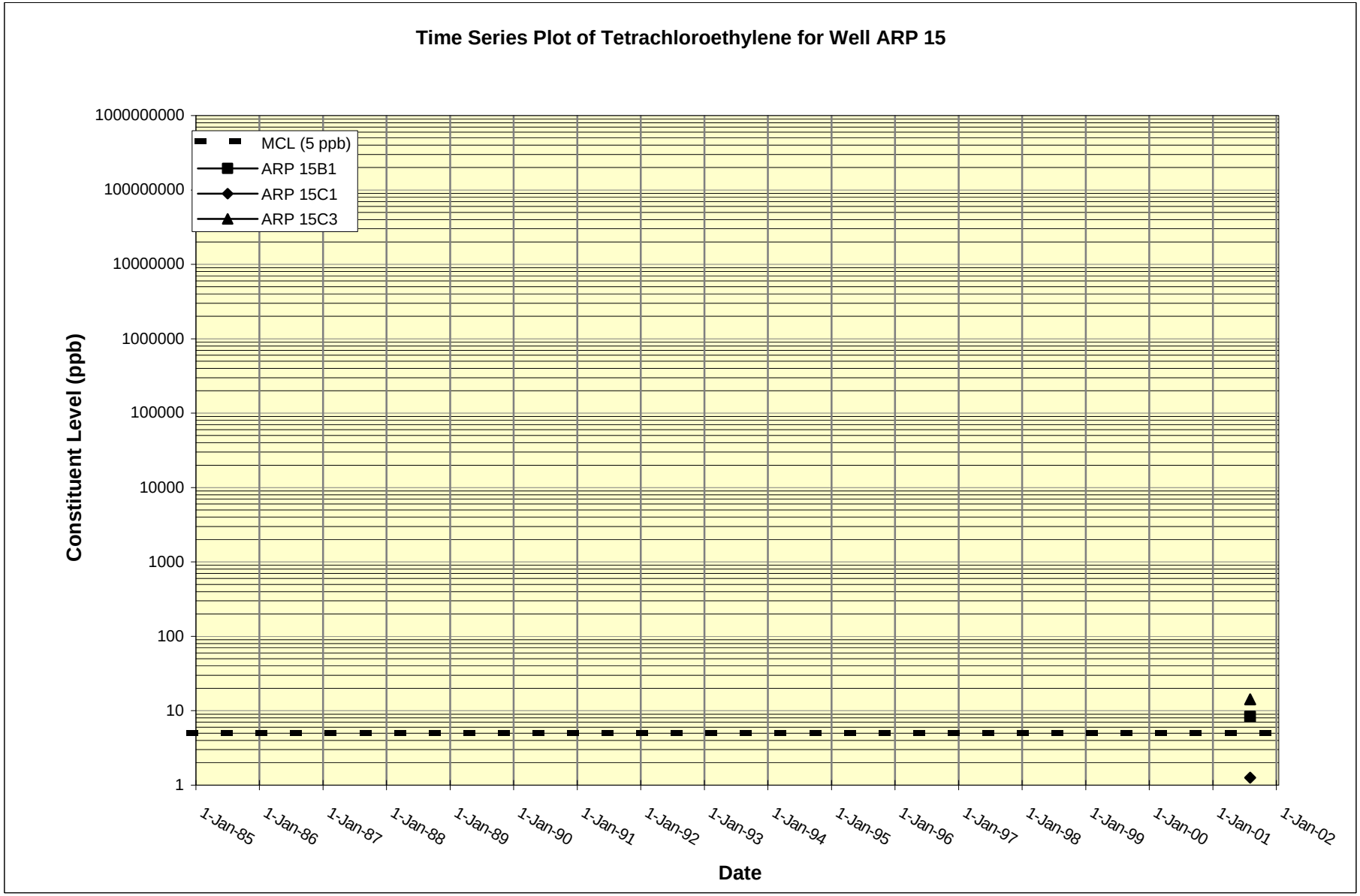
Date


Time Series Plot of Tetrachloroethylene for Well ARP 15
MCL (5 ppb)
ARP 15B1
ARP 15C1
ARP 15C3
Constituent Level (ppb)
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100000000
10000000
1000000
100000
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1000
100
10
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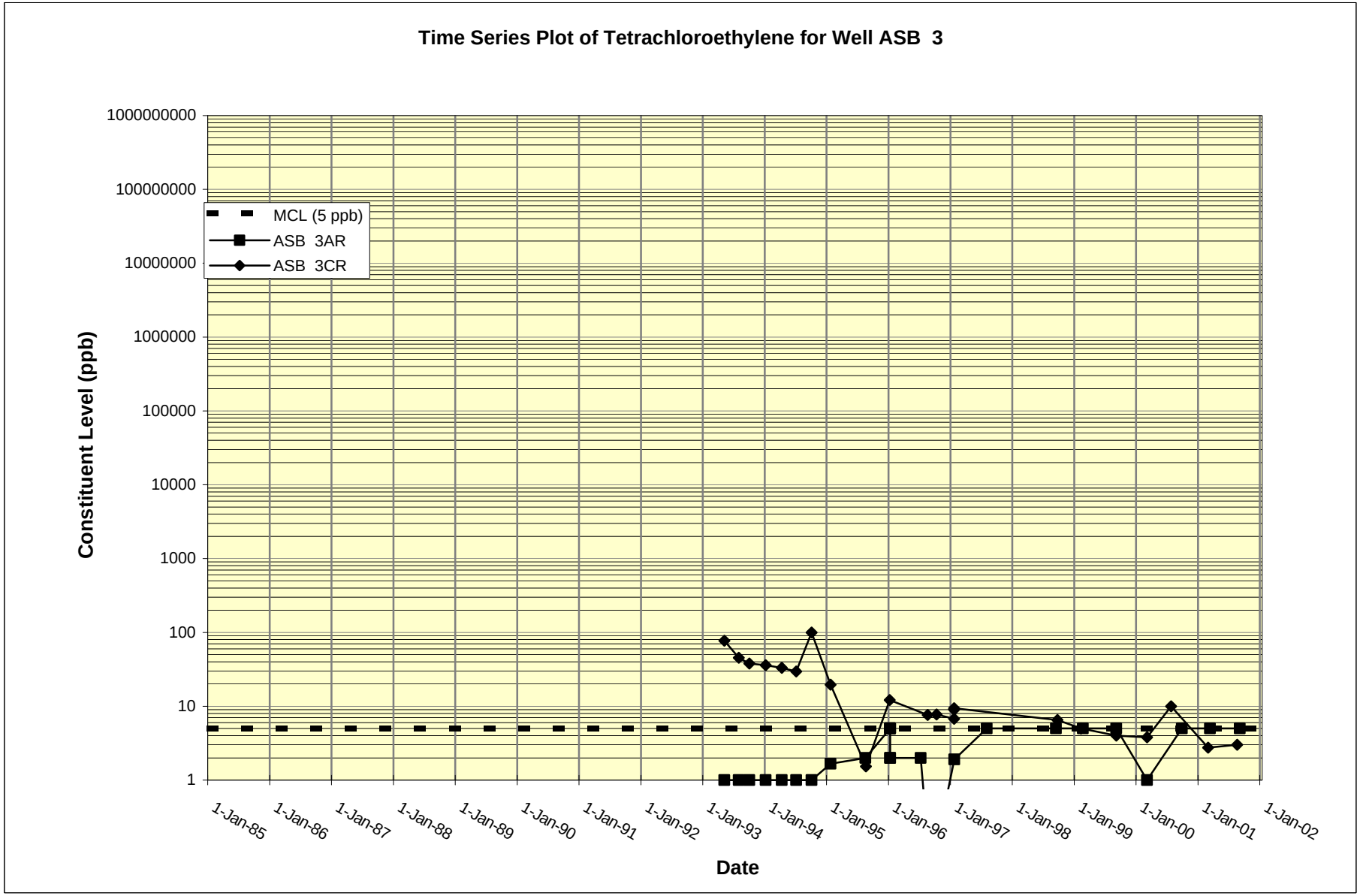
1-Jan-02
Date


Time Series Plot of Tetrachloroethylene for Well ASB 3
MCL (5 ppb)
ASB 3AR
ASB 3CR
Constituent Level (ppb)
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1000000
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10000
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100
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1-Jan-85
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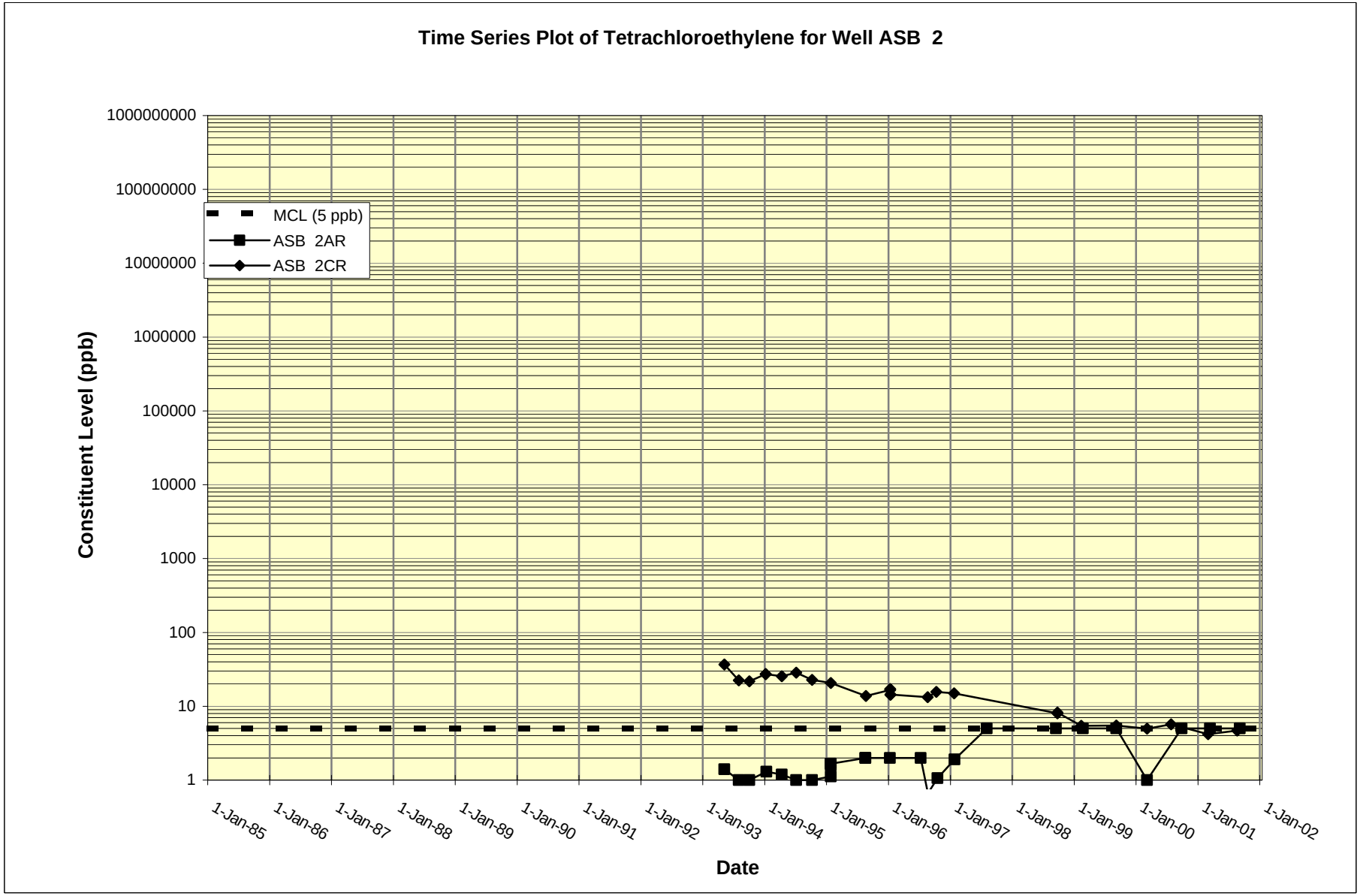
1-Jan-02
Date


Time Series Plot of Tetrachloroethylene for Well ASB 2
MCL (5 ppb)
ASB 2AR
ASB 2CR
Constituent Level (ppb)
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10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
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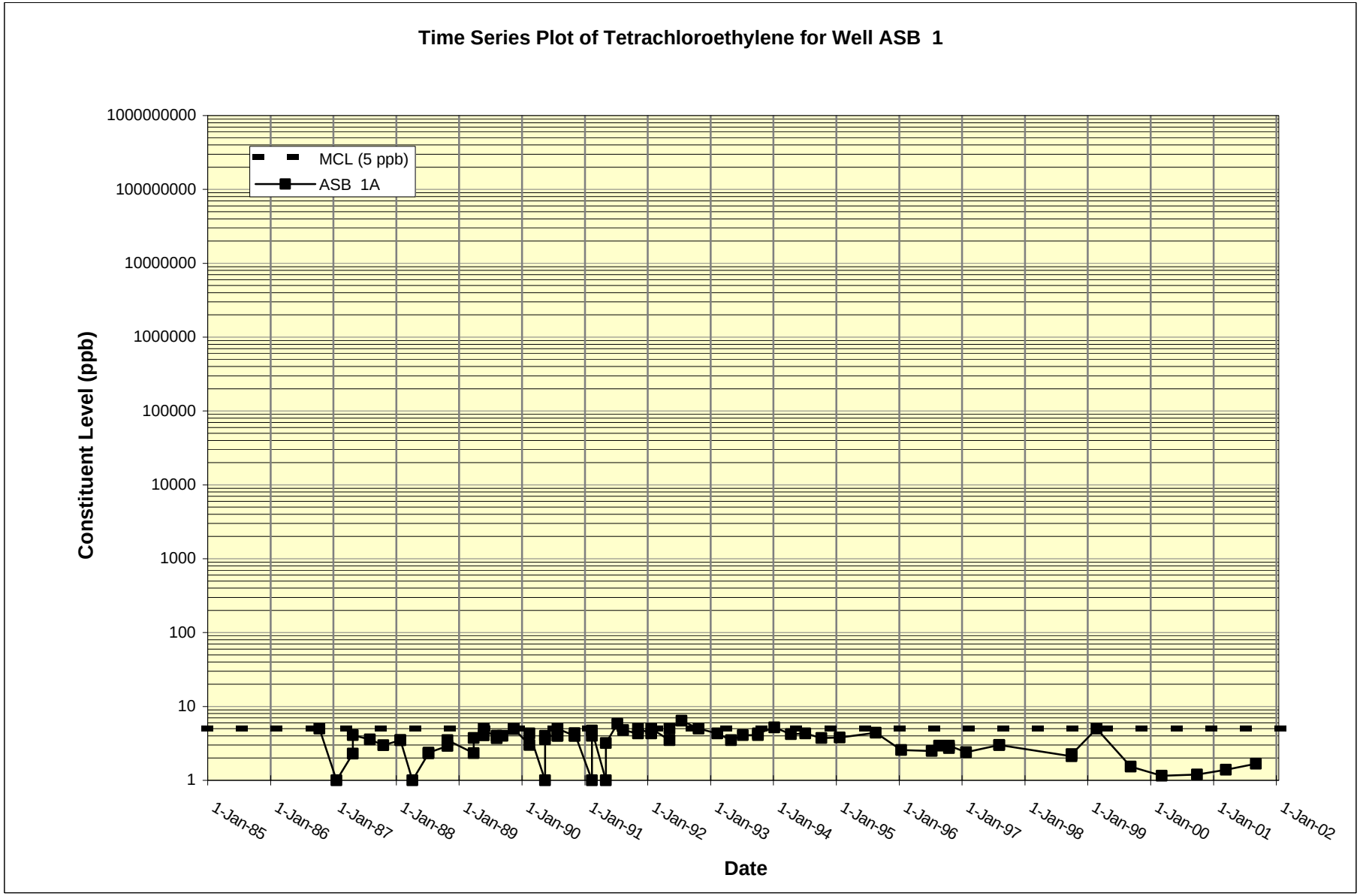
Date


Time Series Plot of Tetrachloroethylene for Well ASB 1
MCL (5 ppb)
ASB 1A
Constituent Level (ppb)
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10000000
1000000
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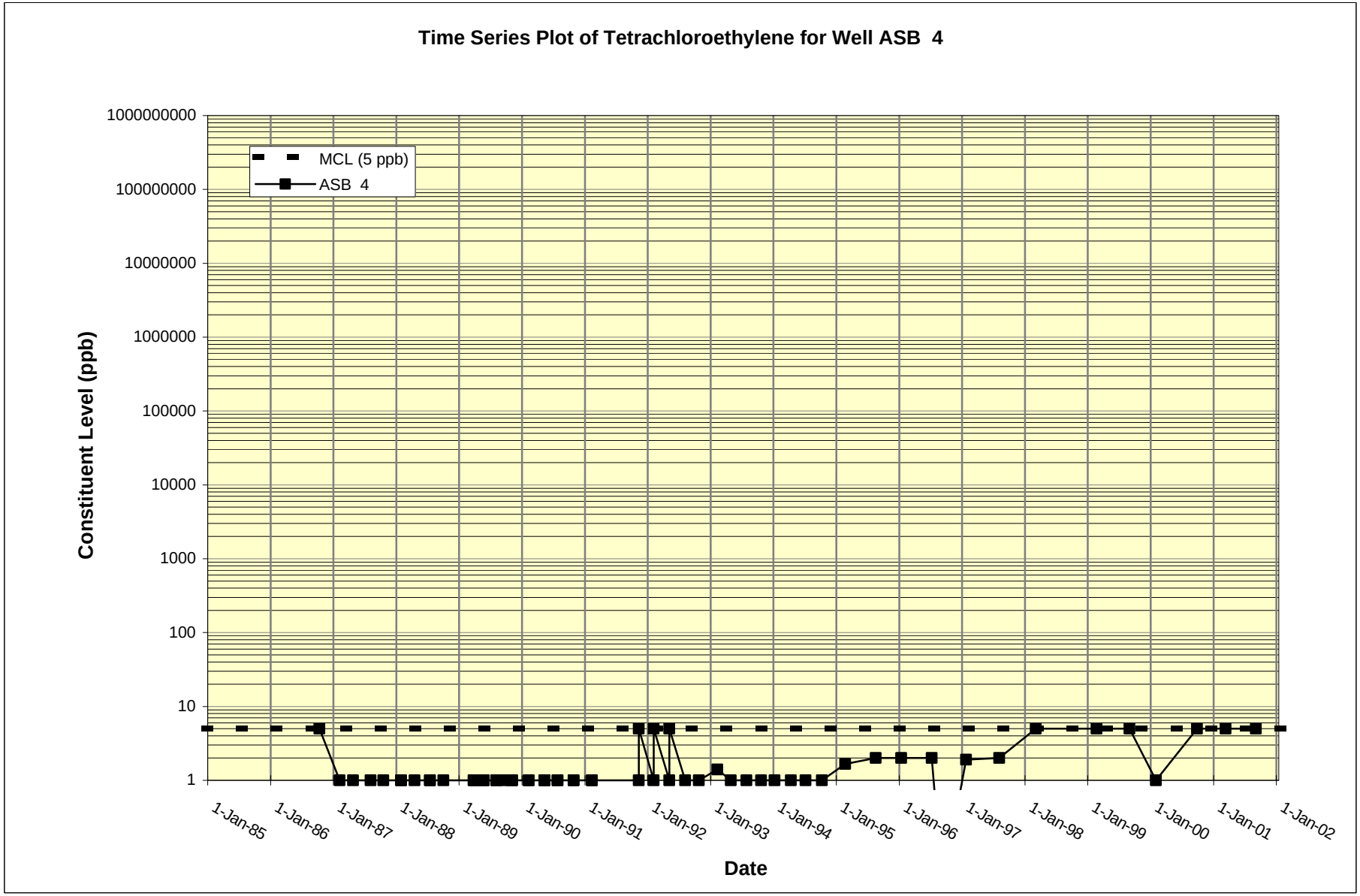
1-Jan-02
Date


Time Series Plot of Tetrachloroethylene for Well ASB 4
MCL (5 ppb)
ASB 4
Constituent Level (ppb)
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10000000
1000000
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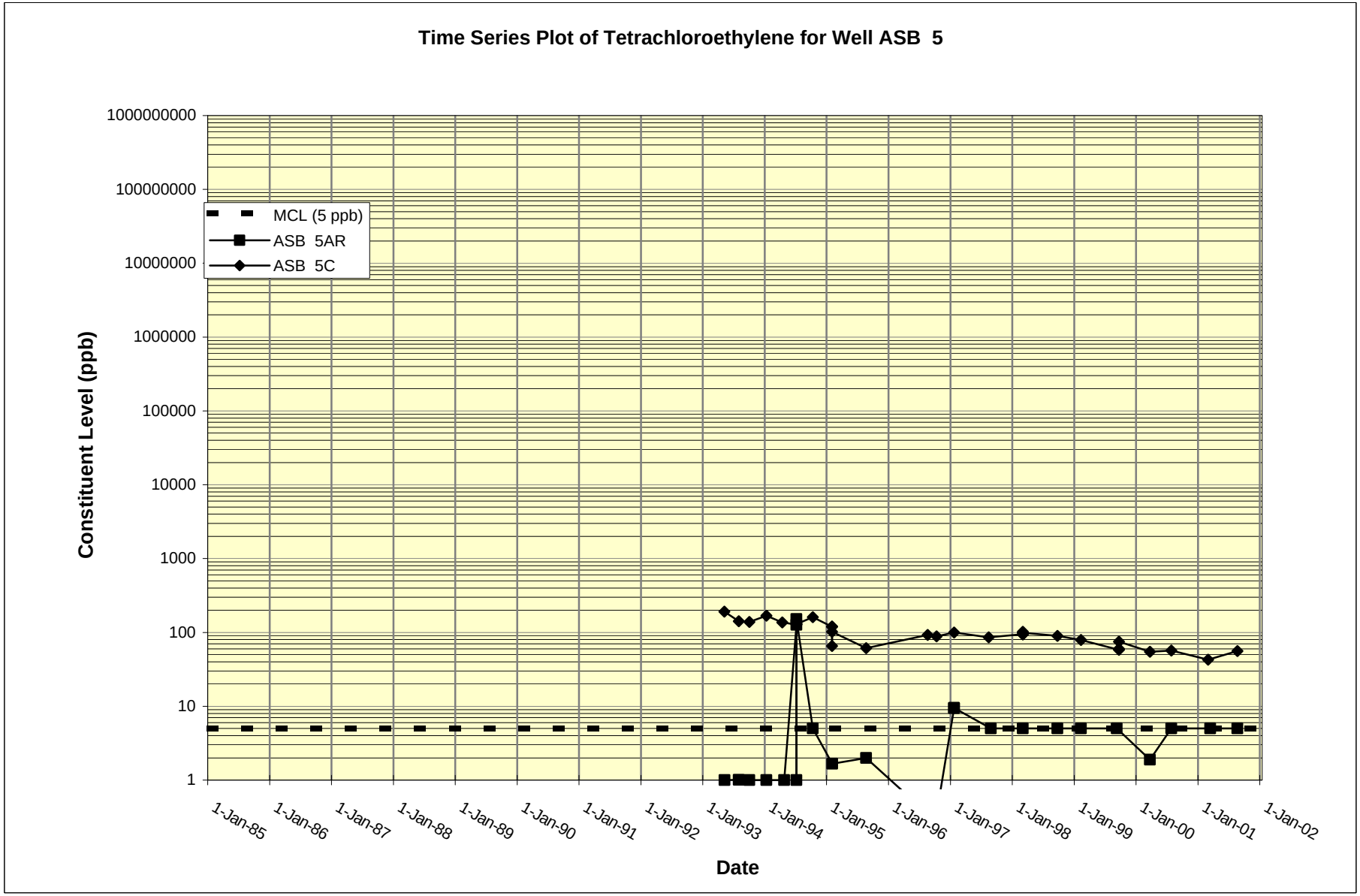
Date


Time Series Plot of Tetrachloroethylene for Well ASB 5
MCL (5 ppb)
ASB 5AR
ASB 5C
Constituent Level (ppb)
1000000000
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
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1-Jan-94
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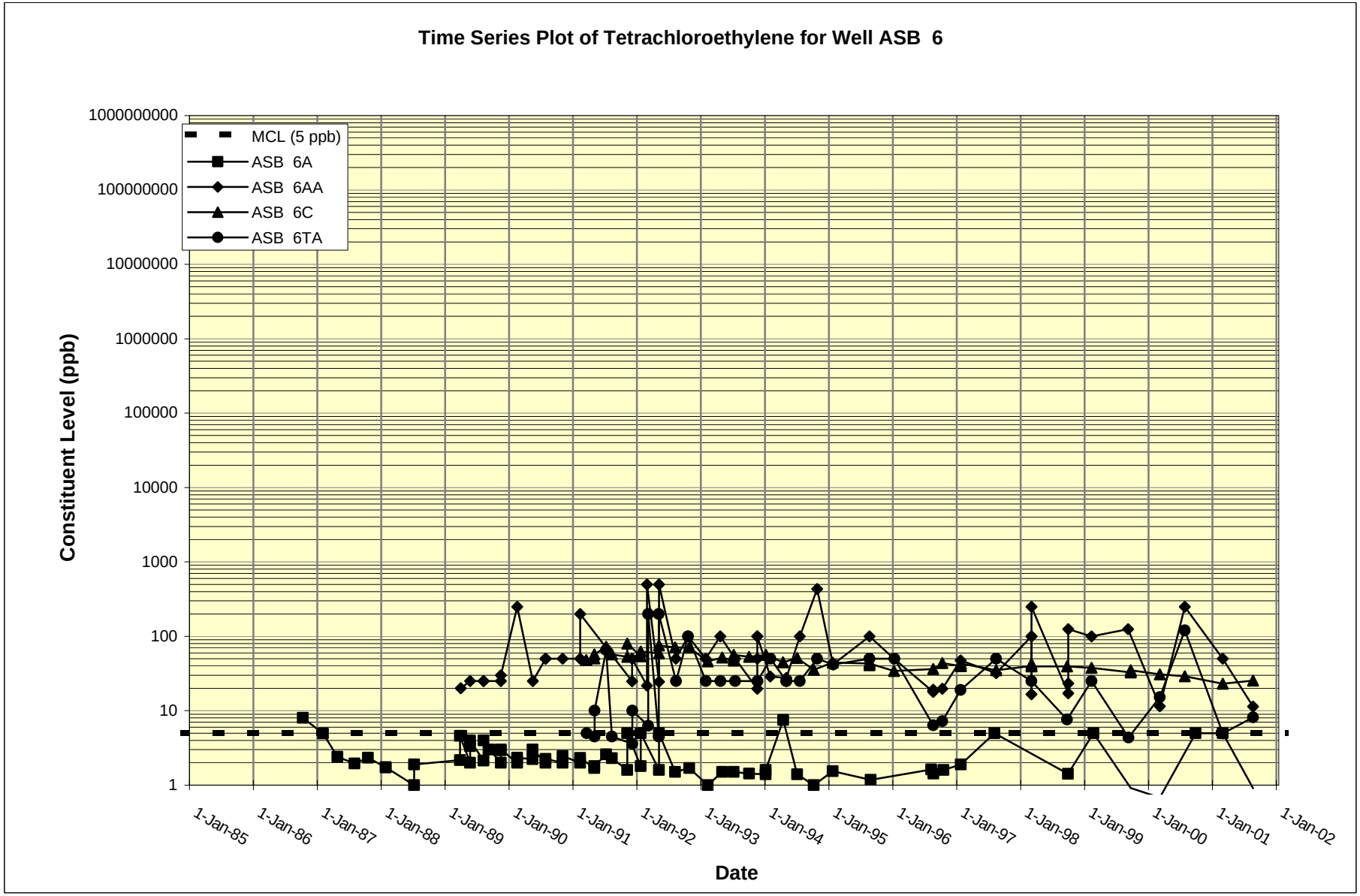
1-Jan-00
1-Jan-01
1-Jan-02
Date


Time Series Plot of Tetrachloroethylene for Well ASB 6
MCL (5 ppb)
ASB 6A
ASB 6AA
ASB 6C
ASB 6TA
Constituent Level (ppb)
1000000000
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
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1-Jan-94
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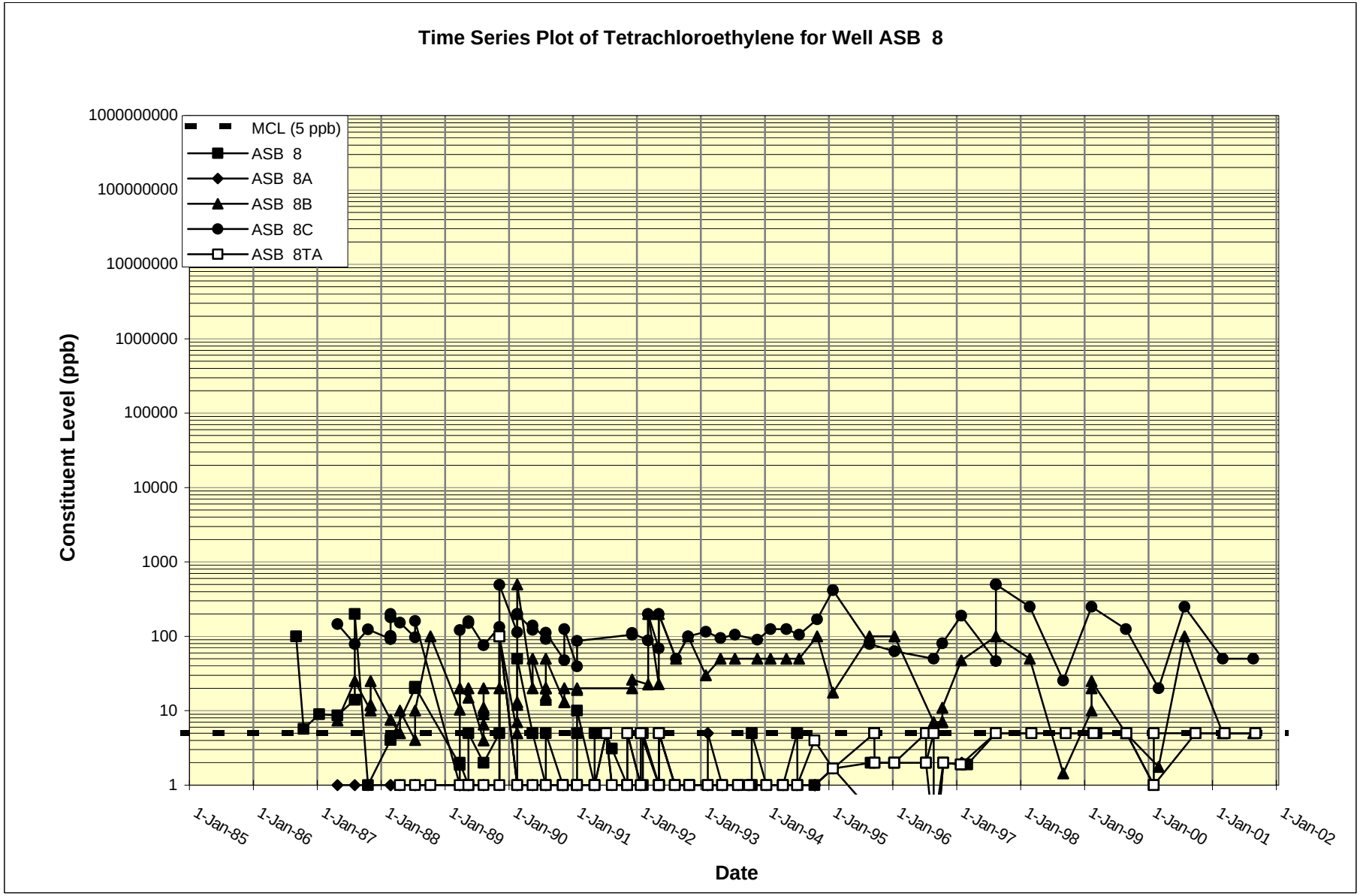
1-Jan-01
1-Jan-02
Date


Time Series Plot of Tetrachloroethylene for Well ASB 8
MCL (5 ppb)
ASB 8
ASB 8A
ASB 8B
ASB 8C
ASB 8TA
Constituent Level (ppb)
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100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
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1-Jan-88
1-Jan-89
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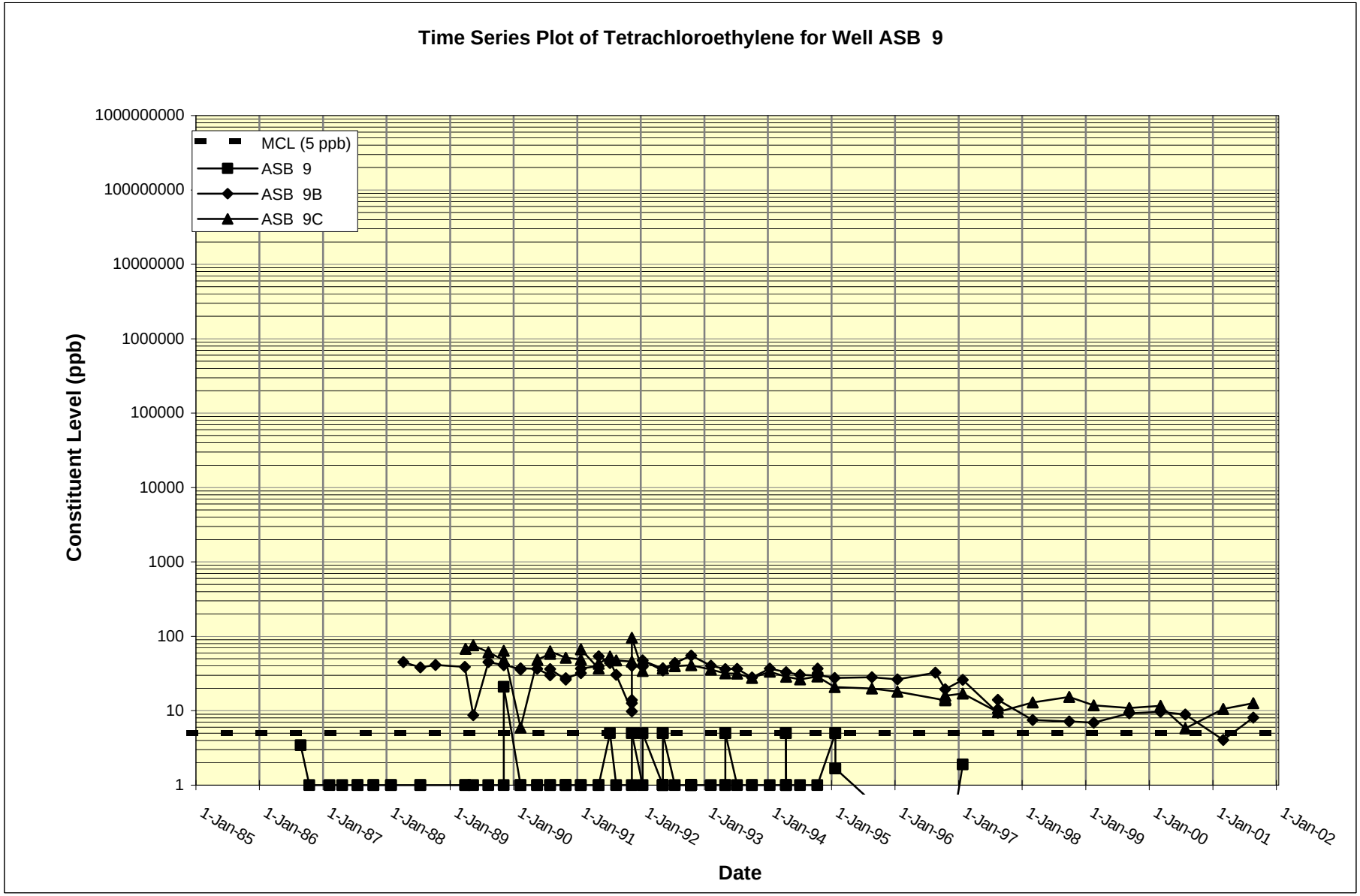
1-Jan-01
1-Jan-02
Date


Time Series Plot of Tetrachloroethylene for Well ASB 9
MCL (5 ppb)
ASB 9
ASB 9B
ASB 9C
Constituent Level (ppb)
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100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
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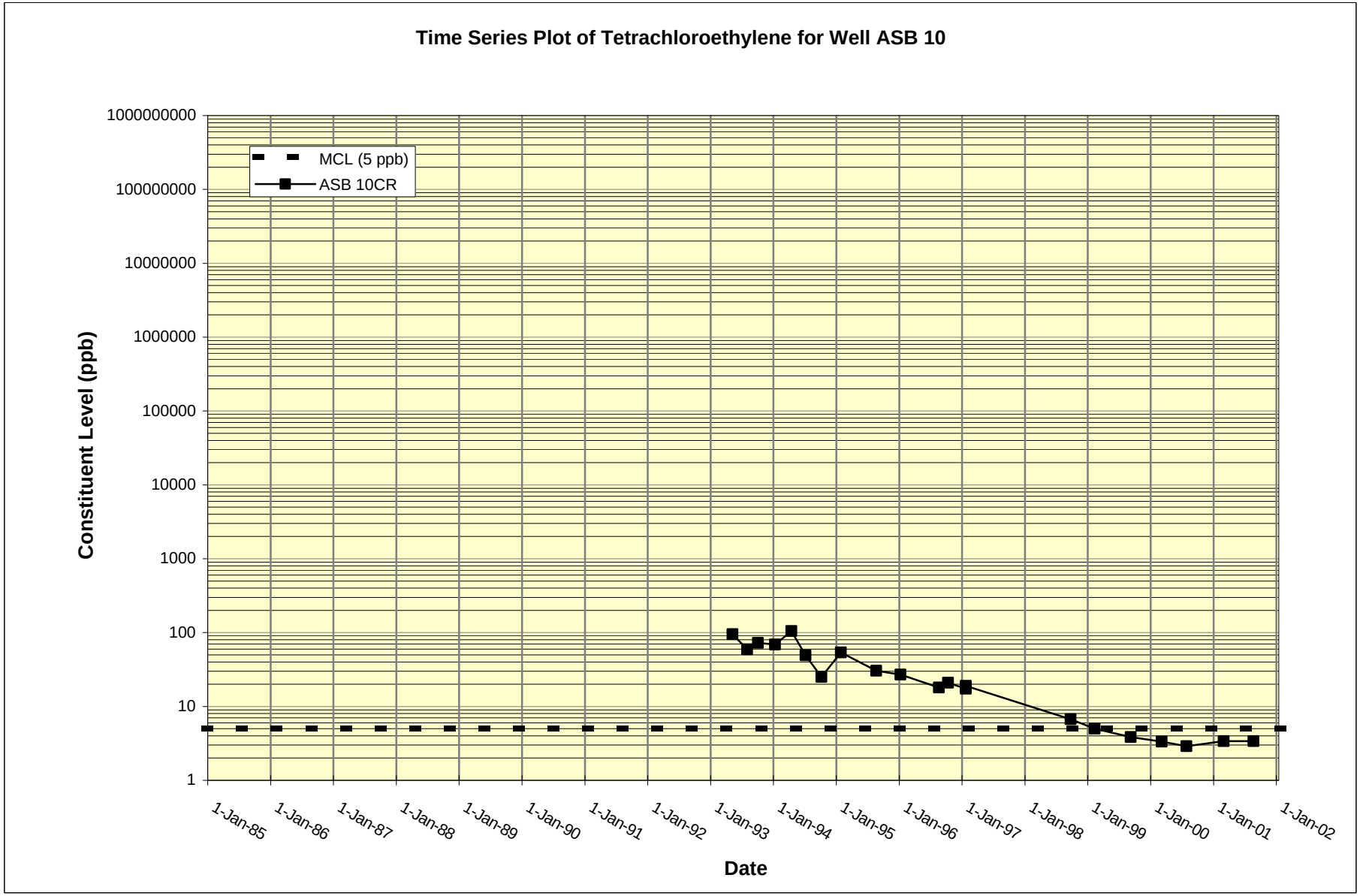
Date


Time Series Plot of Tetrachloroethylene for Well ASB 10
MCL (5 ppb)
ASB 10CR
Constituent Level (ppb)
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1000000
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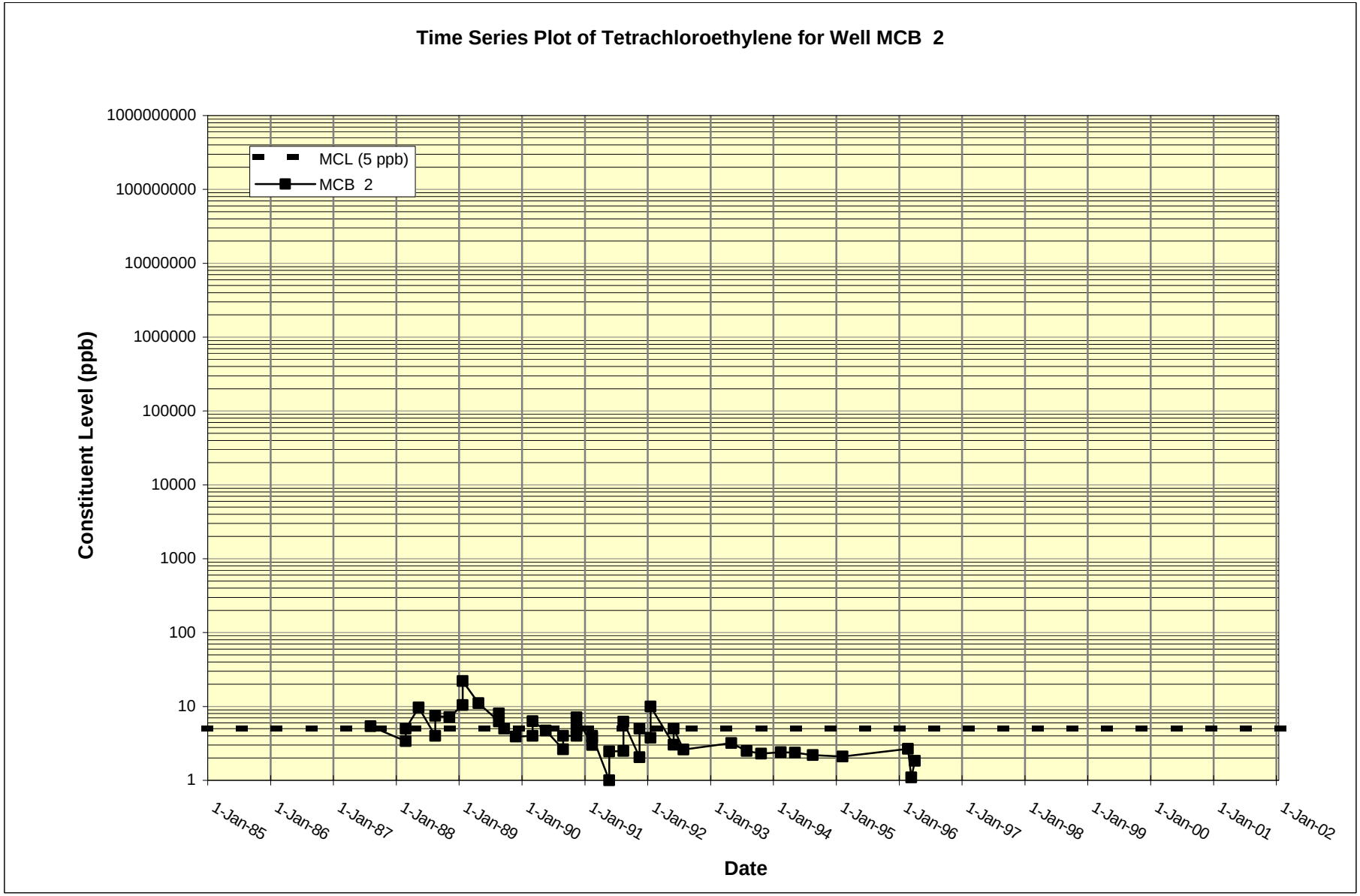
1-Jan-02
Date


Time Series Plot of Tetrachloroethylene for Well MCB 2
MCL (5 ppb)
MCB 2
Constituent Level (ppb)
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100000000
10000000
1000000
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1-Jan-94
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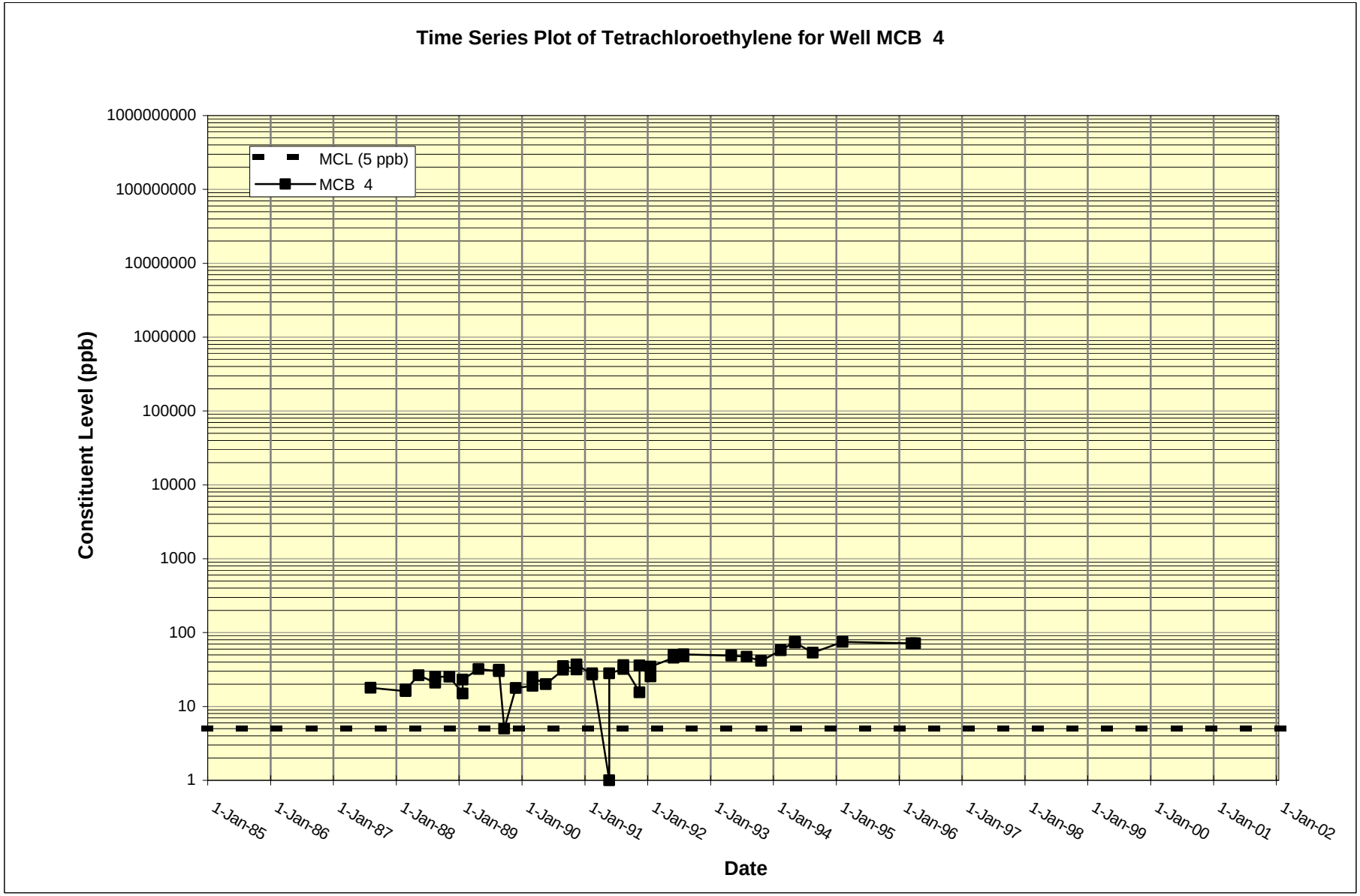
1-Jan-01
1-Jan-02
Date


Time Series Plot of Tetrachloroethylene for Well MCB 4
MCL (5 ppb)
MCB 4
Constituent Level (ppb)
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100000000
10000000
1000000
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10000
1000
100
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1-Jan-85
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1-Jan-94
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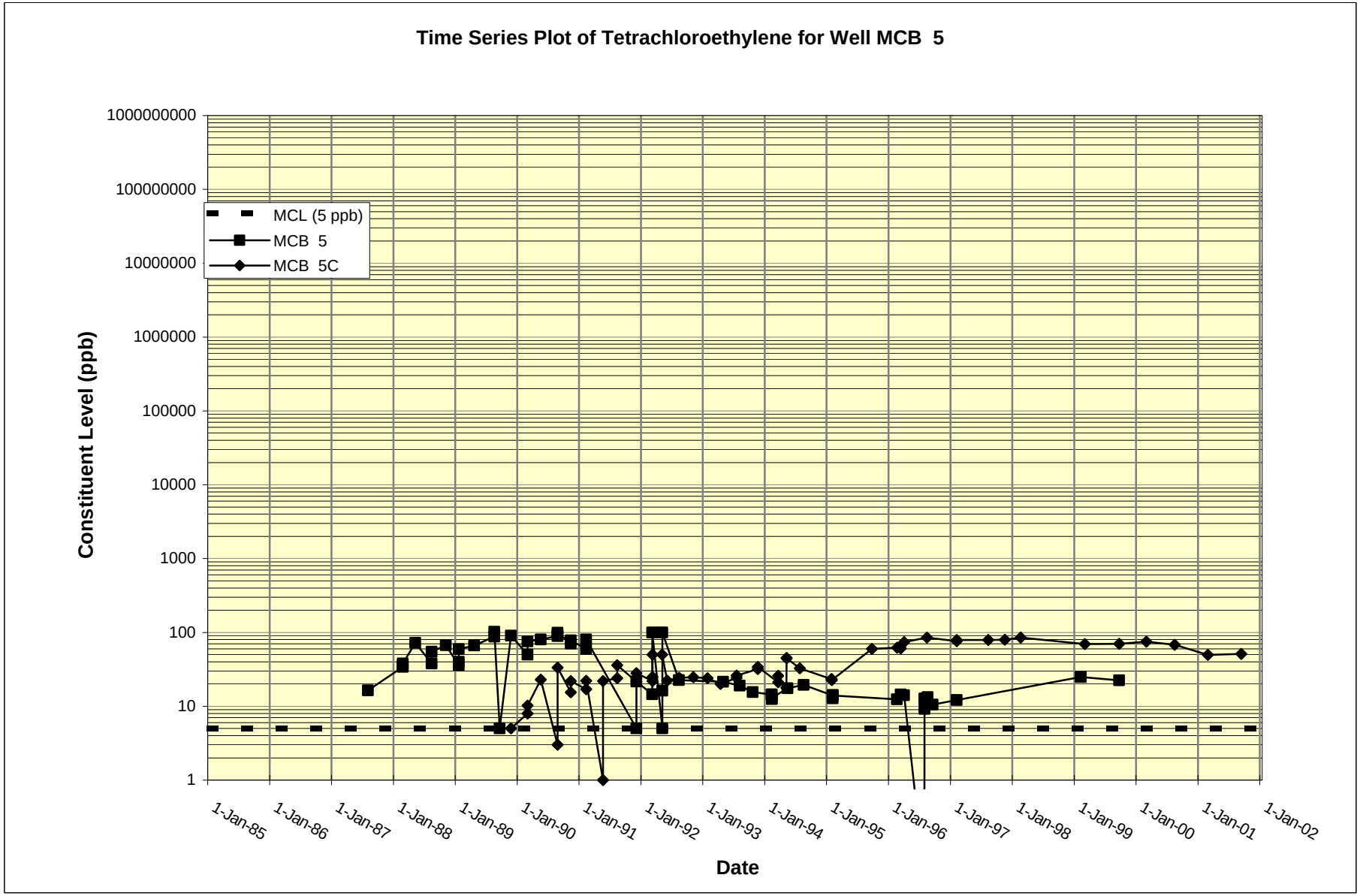
1-Jan-02
Date


Time Series Plot of Tetrachloroethylene for Well MCB 5
MCL (5 ppb)
MCB 5
MCB 5C
Constituent Level (ppb)
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100000000
10000000
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100
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1-Jan-94
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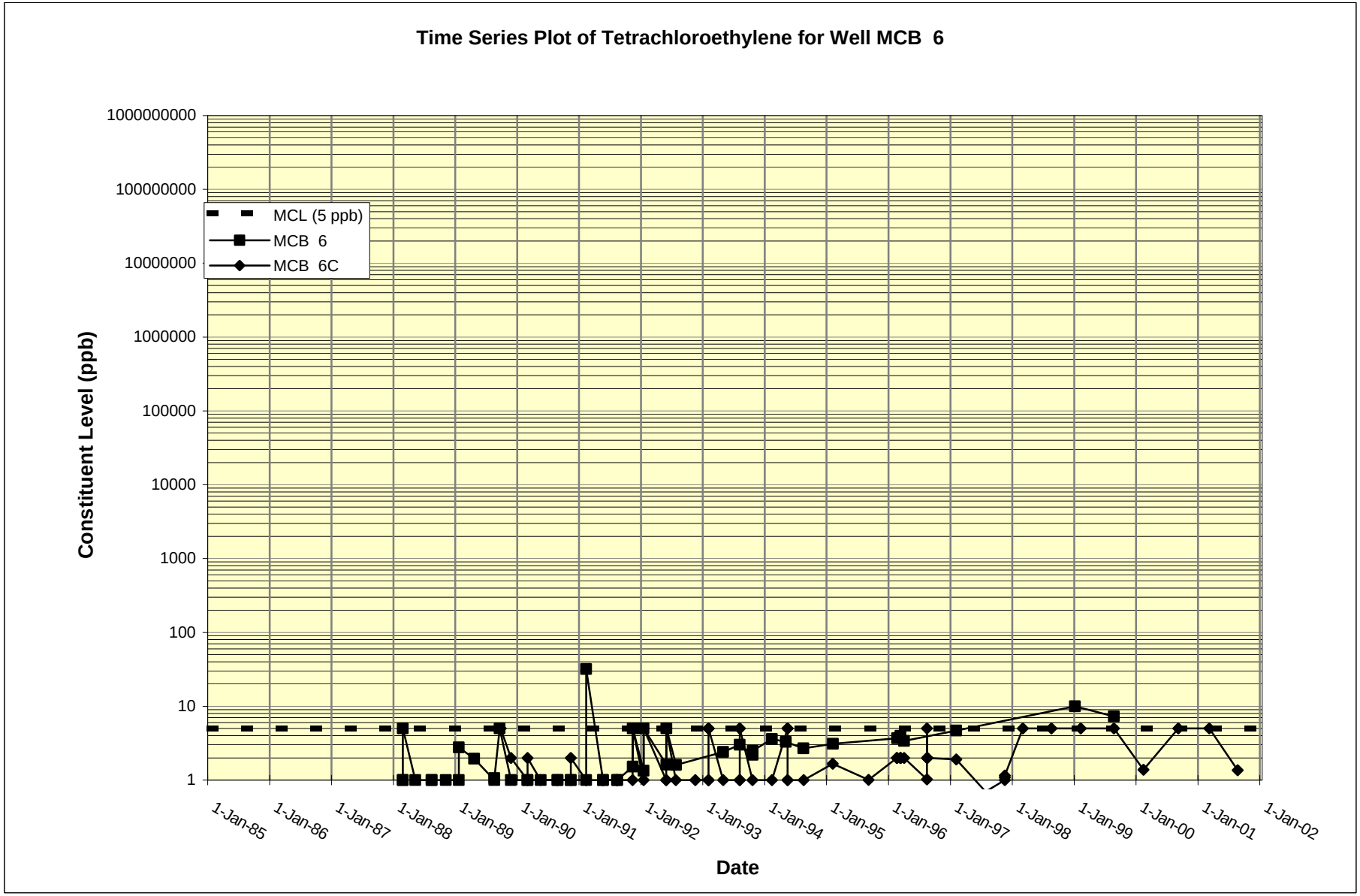
1-Jan-02
Date


Time Series Plot of Tetrachloroethylene for Well MCB 6
Constituent Level (ppb)
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100000000
10000000
1000000
100000
10000
1000
100
10
1
MCL (5 ppb)
MCB 6
MCB 6C
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
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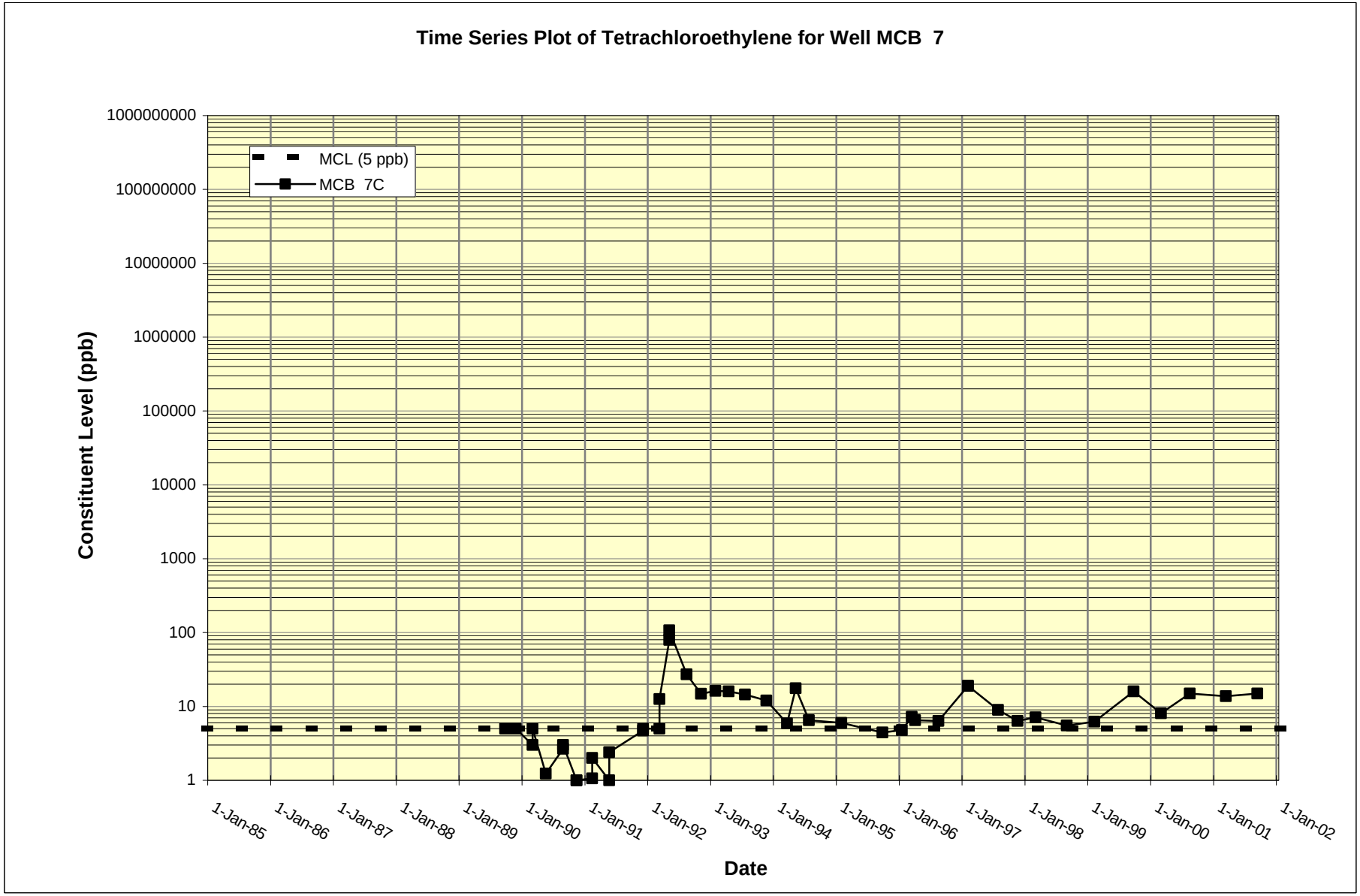
1-Jan-02
Date


Time Series Plot of Tetrachloroethylene for Well MCB 7
MCL (5 ppb)
MCB 7C
Constituent Level (ppb)
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100000000
10000000
1000000
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100
10
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1-Jan-85
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1-Jan-94
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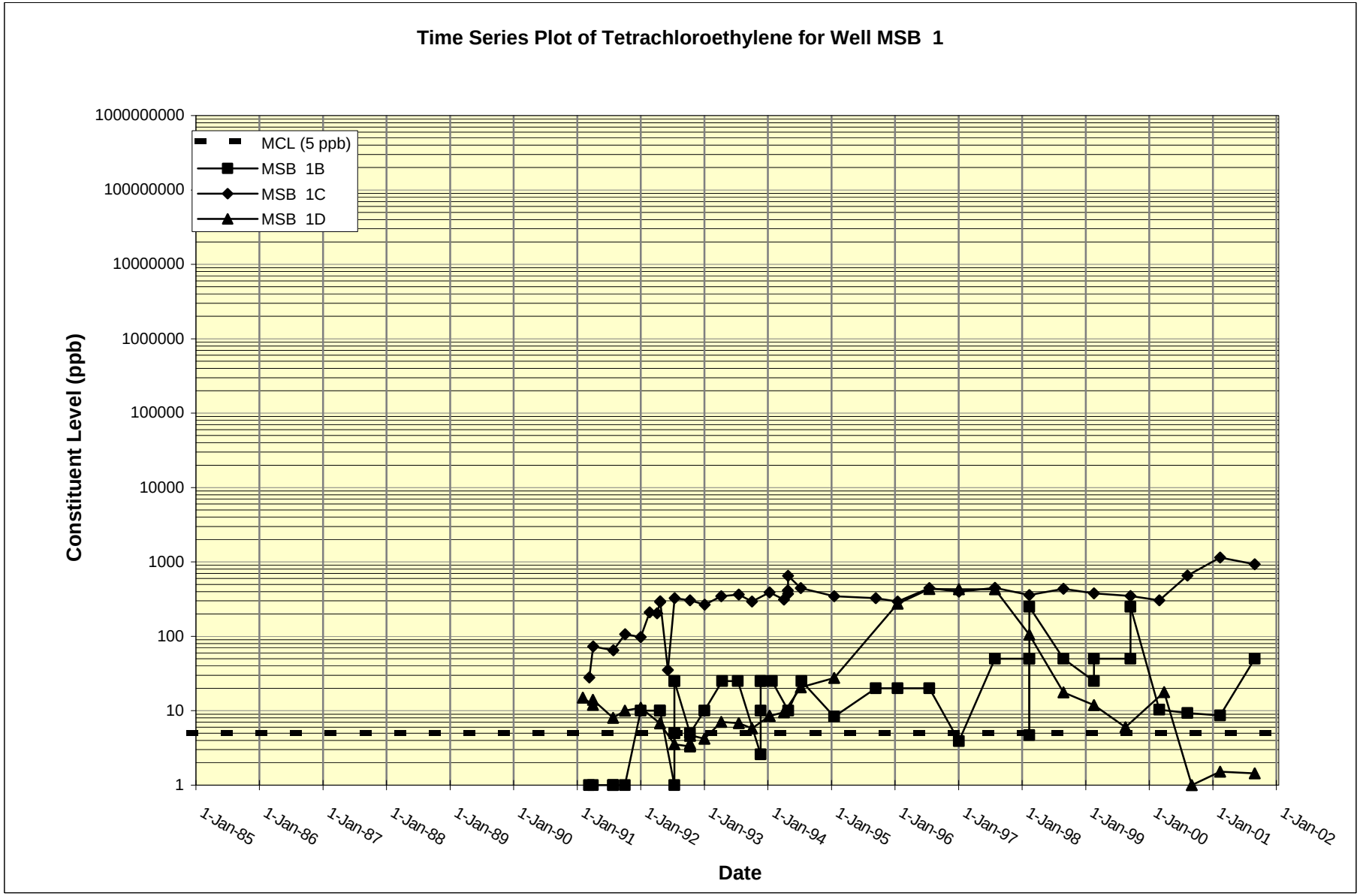
Time Series Plot of Tetrachloroethylene for Well MSB 1
MCL (5 ppb)
MSB 1B
MSB 1C
MSB 1D
Constituent Level (ppb)
1000000000
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
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1-Jan-92
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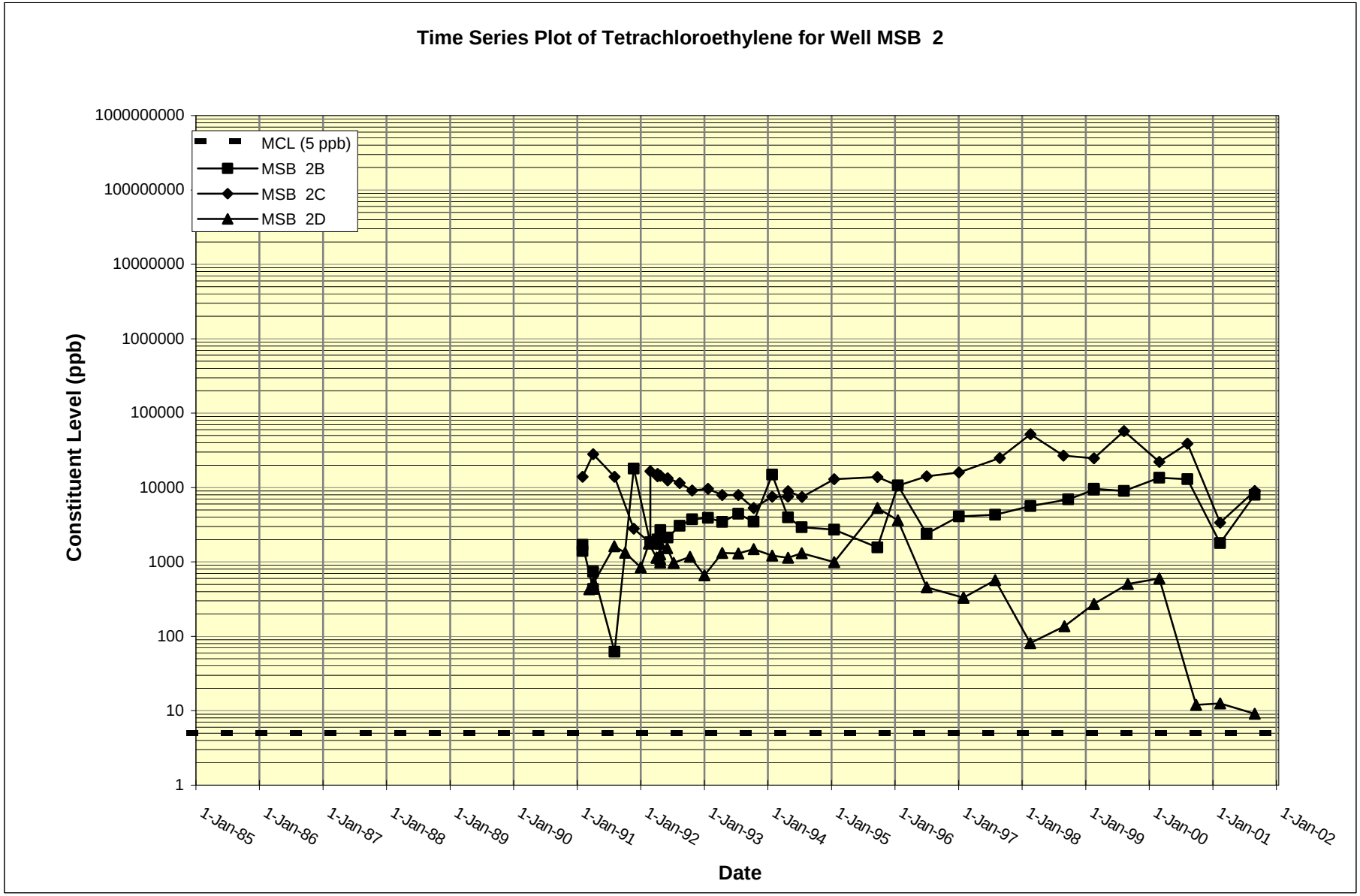
Date


Time Series Plot of Tetrachloroethylene for Well MSB 2
MCL (5 ppb)
MSB 2B
MSB 2C
MSB 2D
Constituent Level (ppb)
1000000000
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
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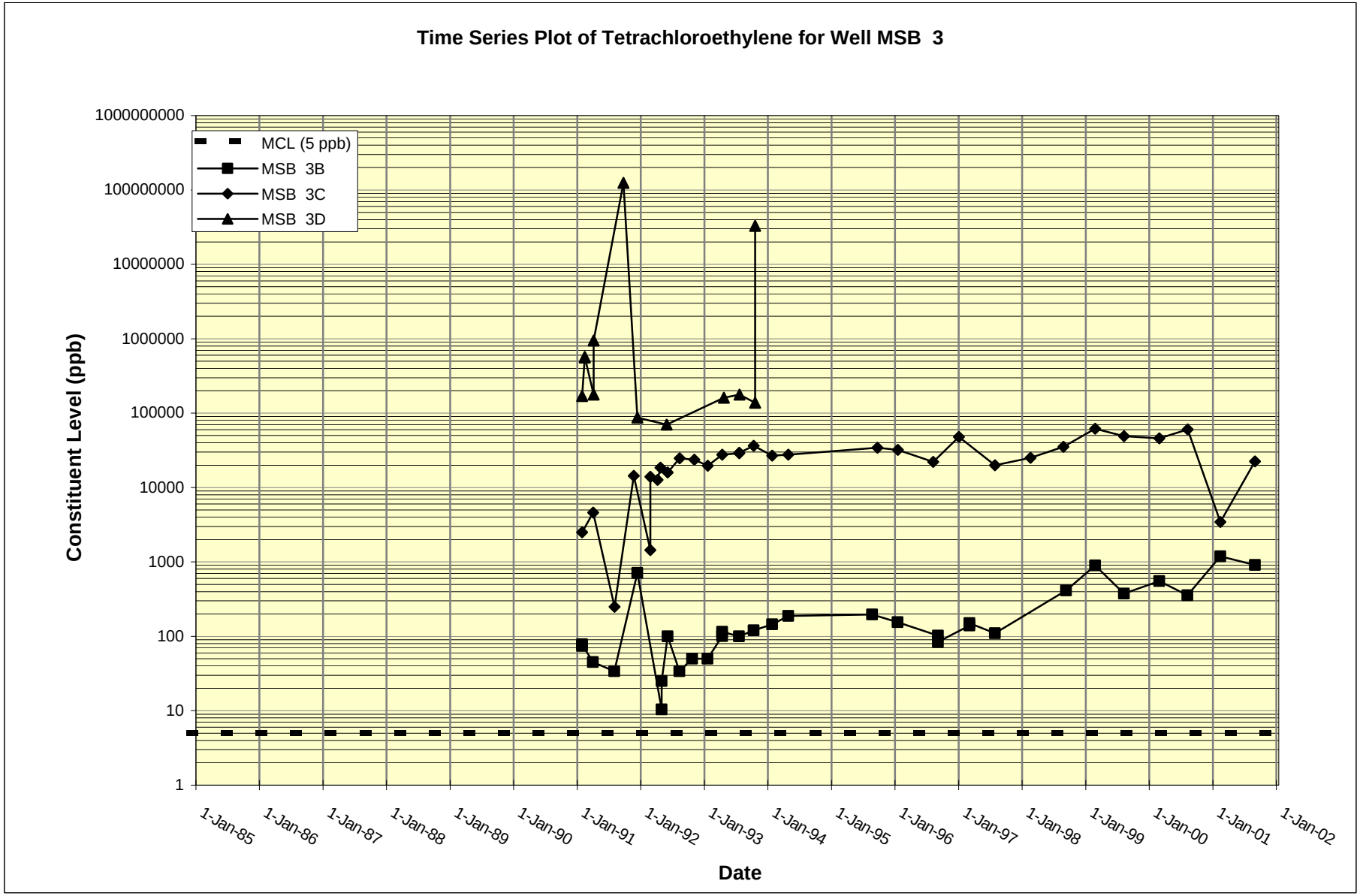
Time Series Plot of Tetrachloroethylene for Well MSB 3
MCL (5 ppb)
MSB 3B
MSB 3C
MSB 3D
Constituent Level (ppb)
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100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
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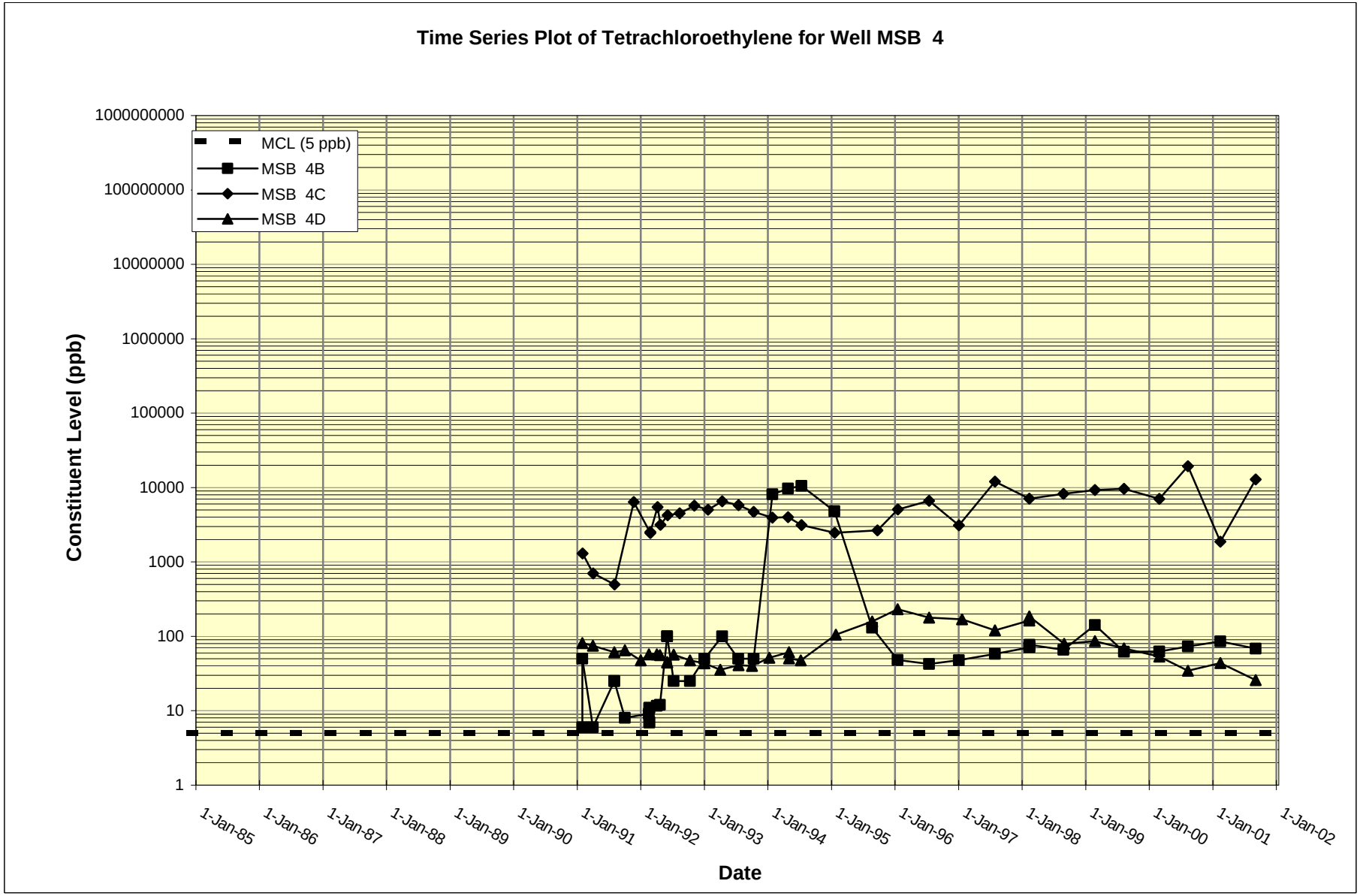
Date


Time Series Plot of Tetrachloroethylene for Well MSB 4
MCL (5 ppb)
MSB 4B
MSB 4C
MSB 4D
Constituent Level (ppb)
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100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
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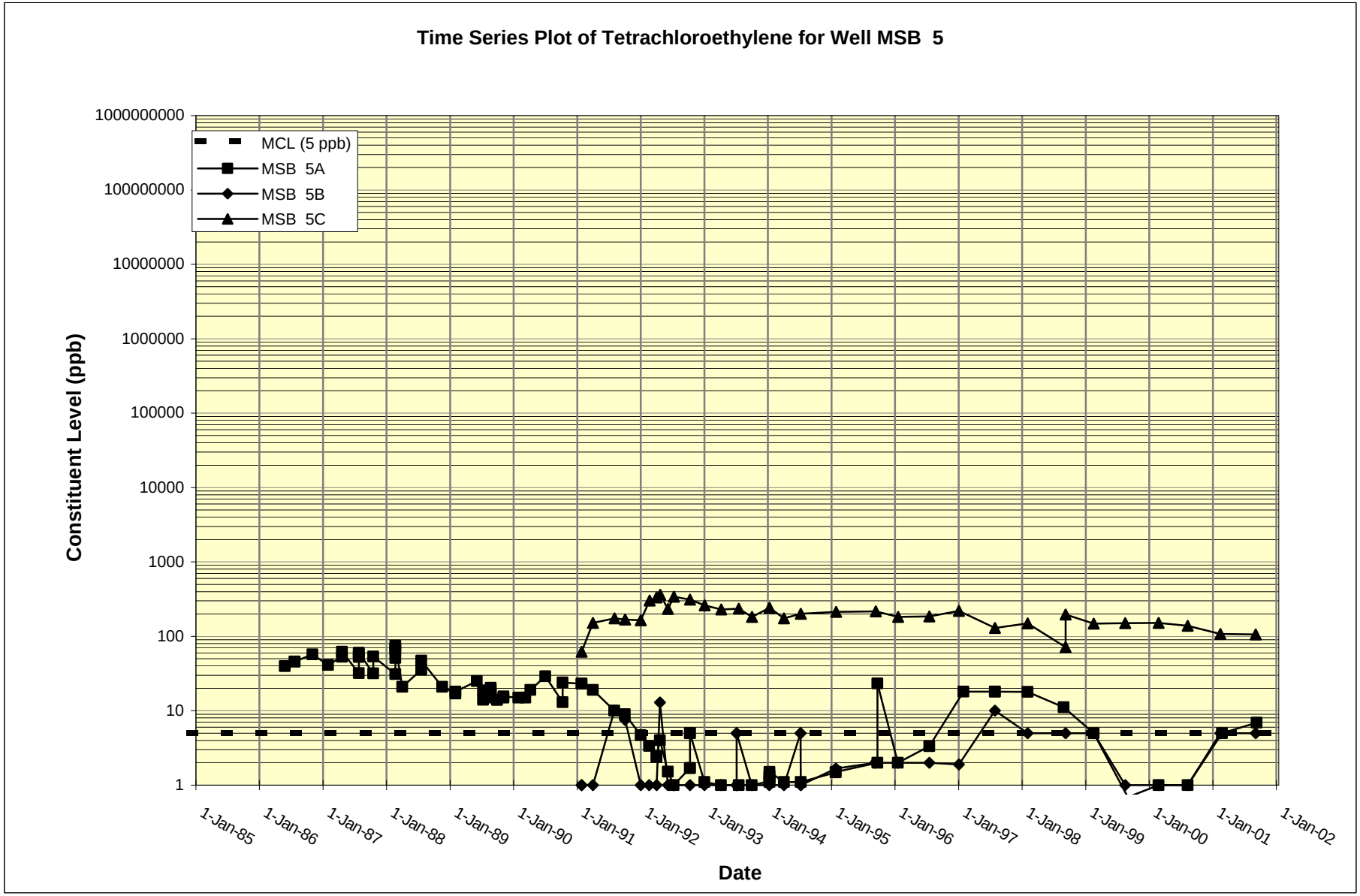
Time Series Plot of Tetrachloroethylene for Well MSB 5
MCL (5 ppb)
MSB 5A
MSB 5B
MSB 5C
Constituent Level (ppb)
1000000000
100000000
10000000
1000000
100000
10000
1000
100
10
1
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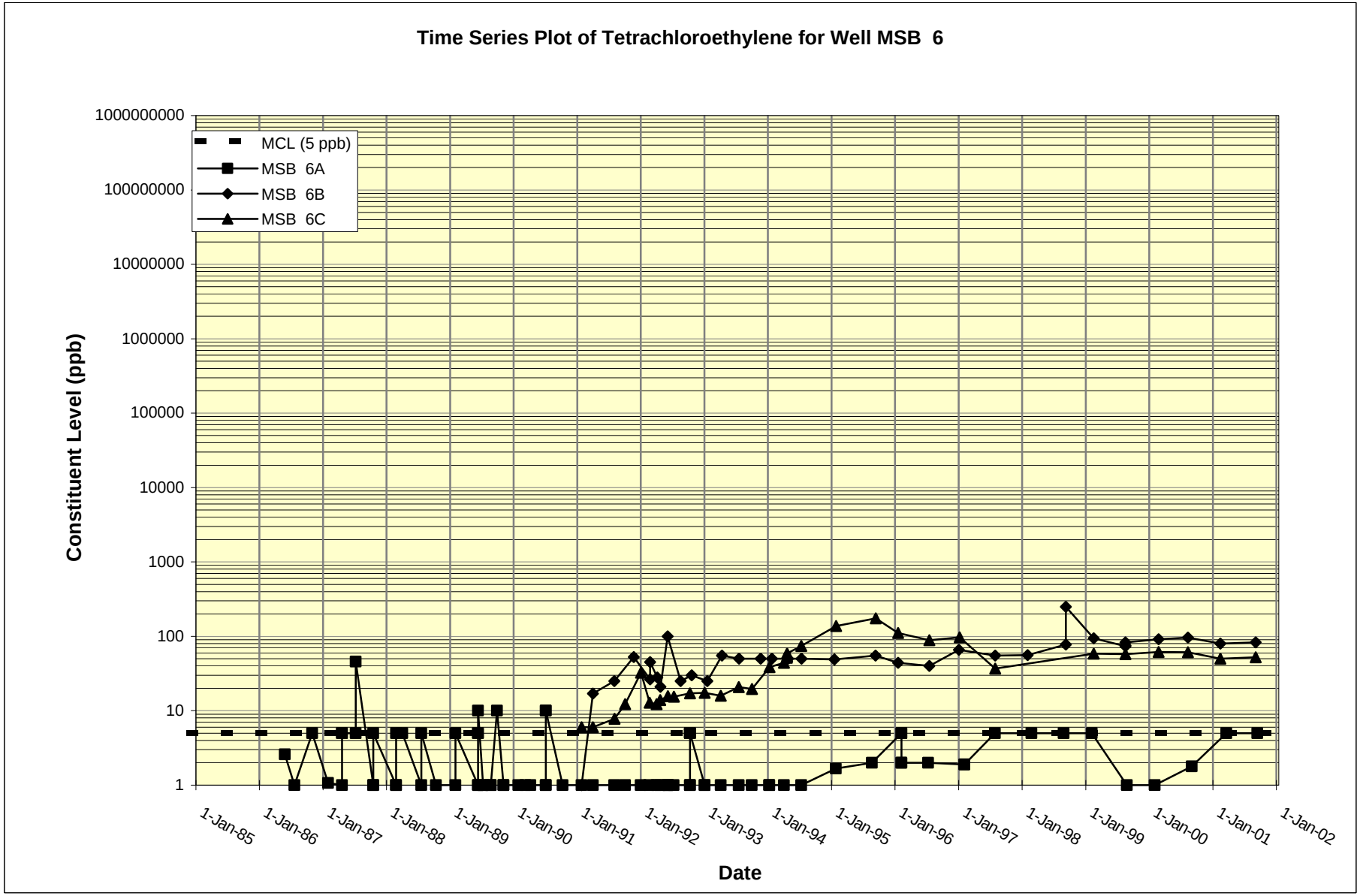
Date


Time Series Plot of Tetrachloroethylene for Well MSB 6
MCL (5 ppb)
MSB 6A
MSB 6B
MSB 6C
Constituent Level (ppb)
1000000000
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
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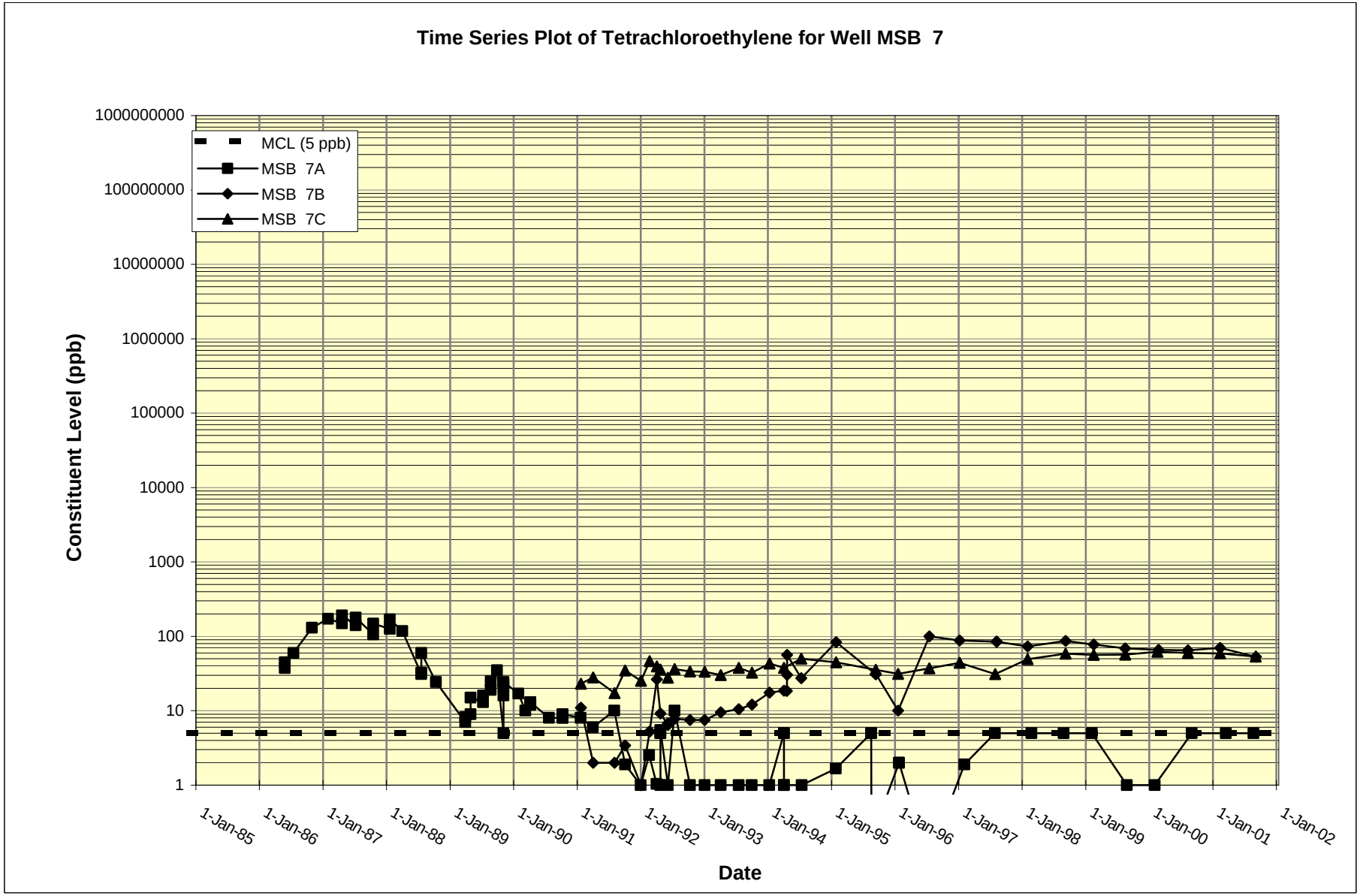
Time Series Plot of Tetrachloroethylene for Well MSB 7
MCL (5 ppb)
MSB 7A
MSB 7B
MSB 7C
Constituent Level (ppb)
1000000000
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
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1-Jan-87
1-Jan-88
1-Jan-89
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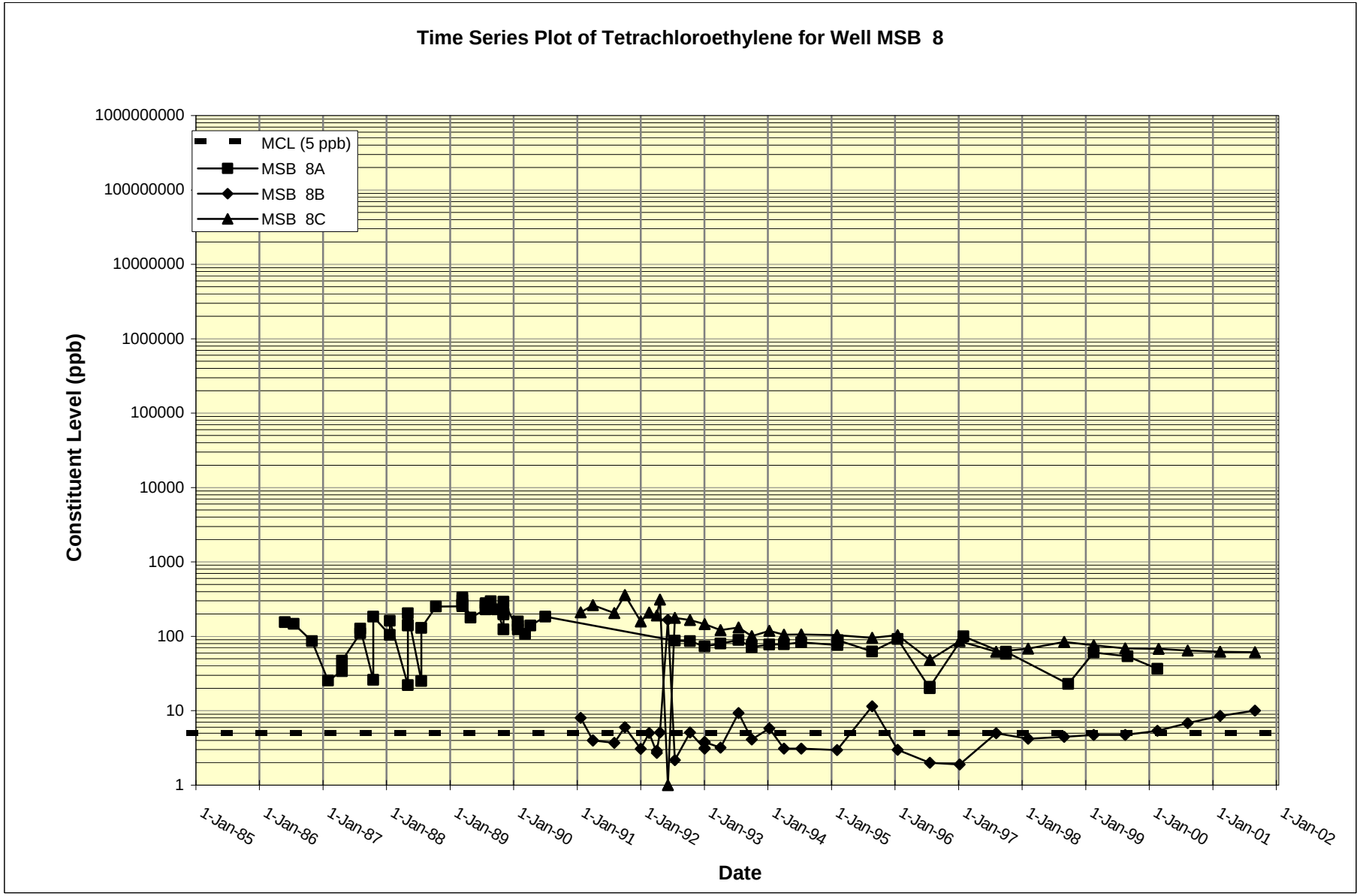
Time Series Plot of Tetrachloroethylene for Well MSB 8
MCL (5 ppb)
MSB 8A
MSB 8B
MSB 8C
Constituent Level (ppb)
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100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
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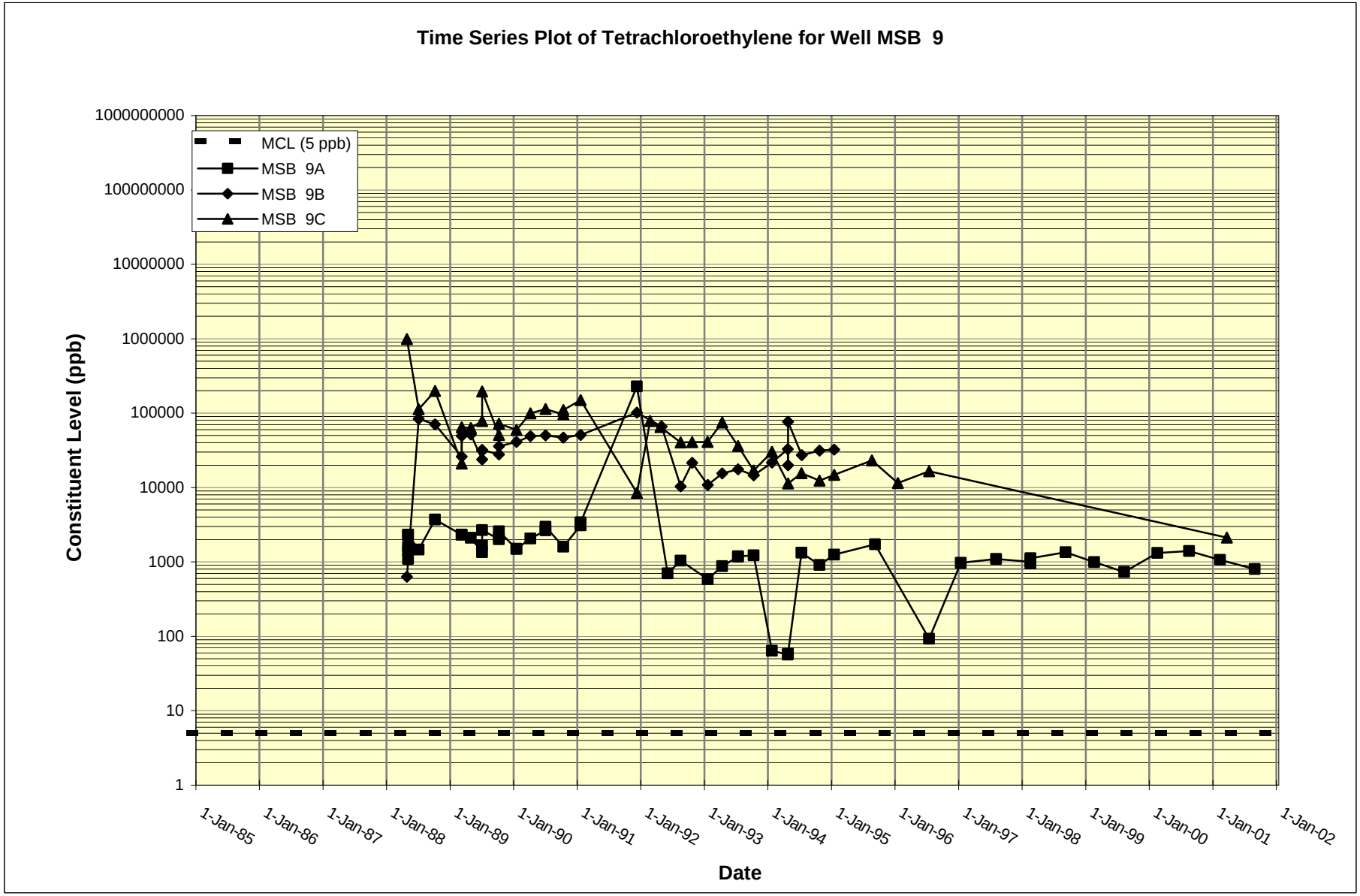
Date


Time Series Plot of Tetrachloroethylene for Well MSB 9
MCL (5 ppb)
MSB 9A
MSB 9B
MSB 9C
Constituent Level (ppb)
1000000000
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
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1-Jan-88
1-Jan-89
1-Jan-90
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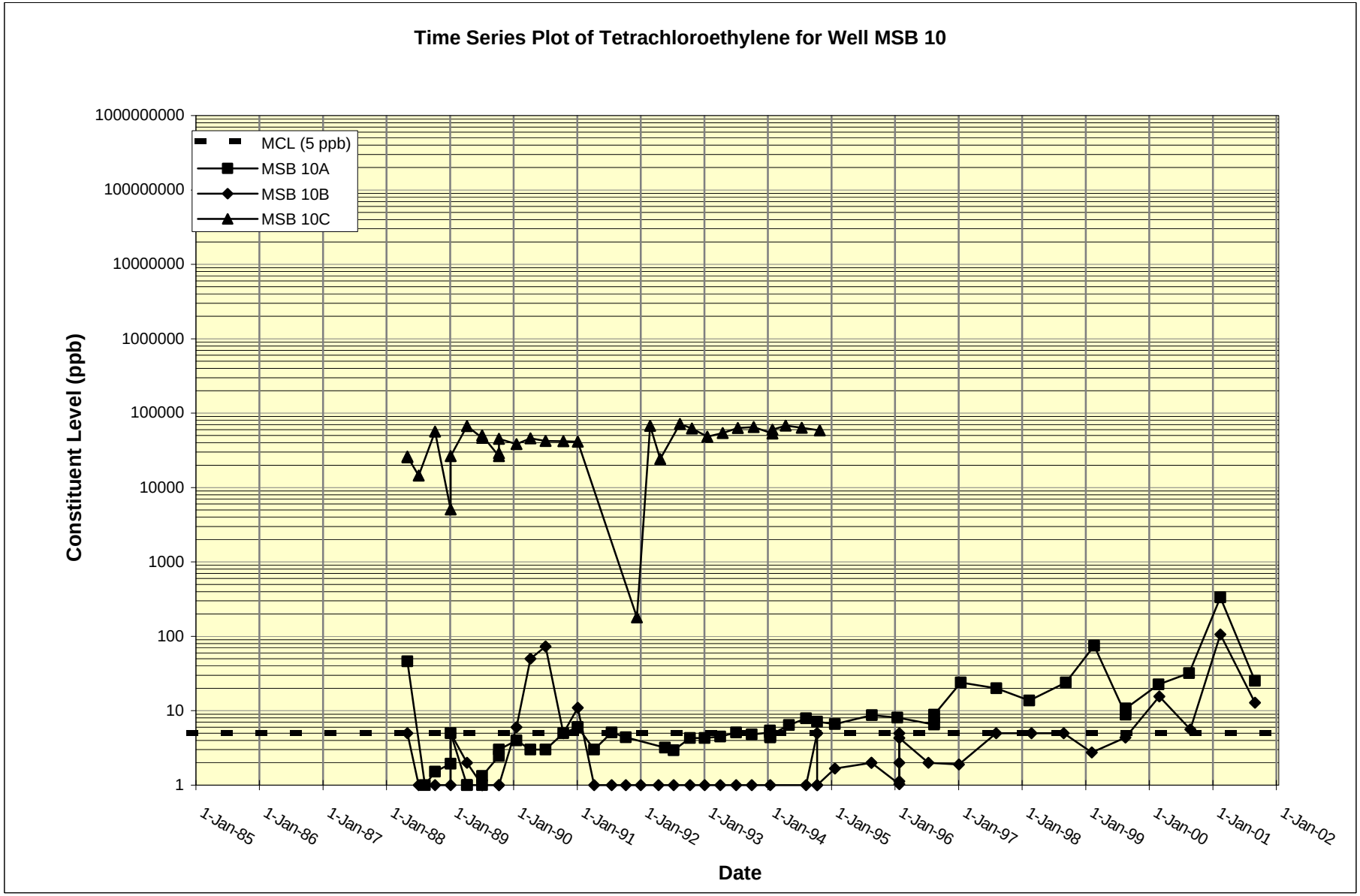
Time Series Plot of Tetrachloroethylene for Well MSB 10
MCL (5 ppb)
MSB 10A
MSB 10B
MSB 10C
Constituent Level (ppb)
1000000000
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
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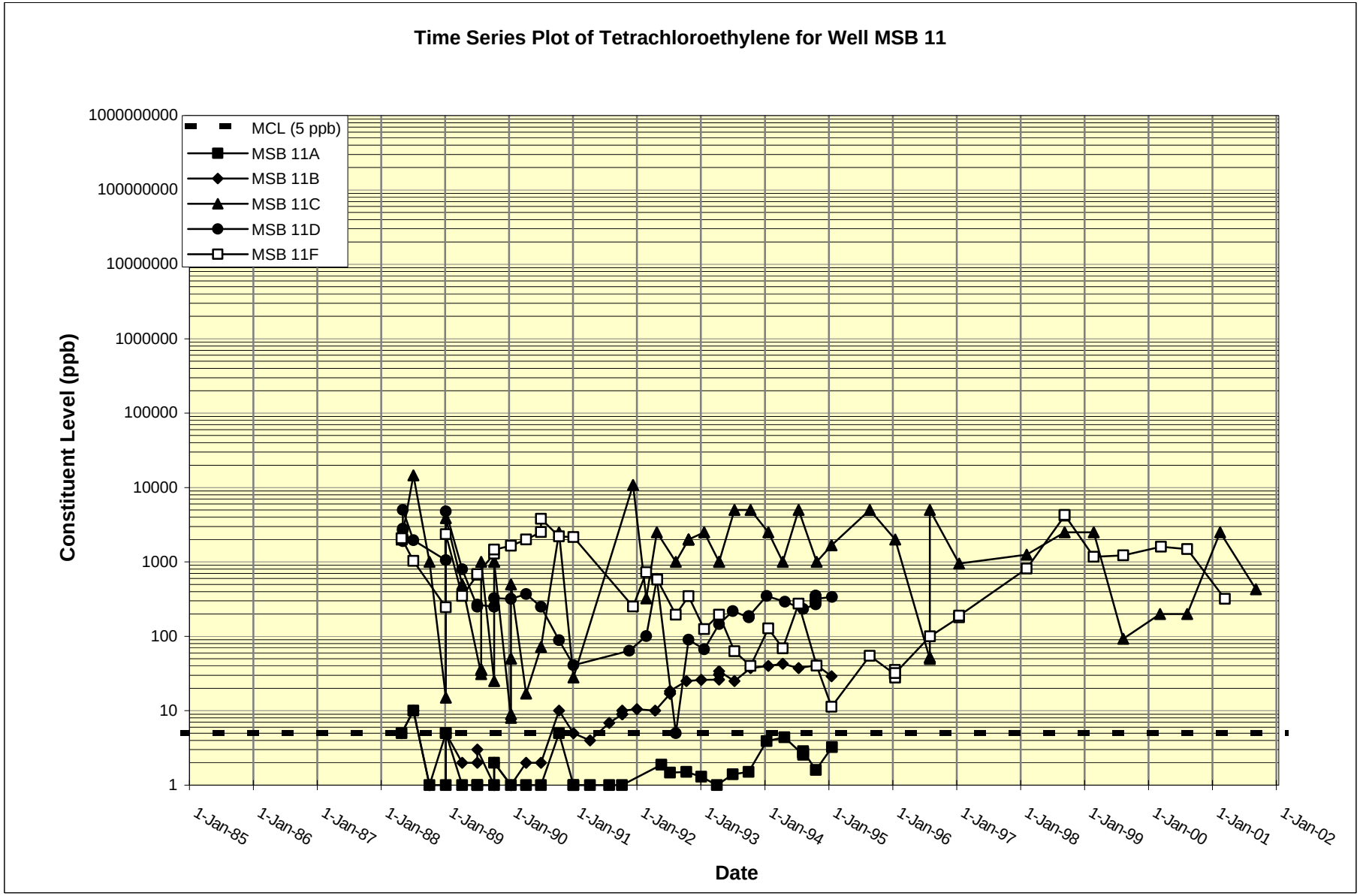
Date


Time Series Plot of Tetrachloroethylene for Well MSB 11
MCL (5 ppb)
MSB 11A
MSB 11B
MSB 11C
MSB 11D
MSB 11F
Constituent Level (ppb)
1000000000
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
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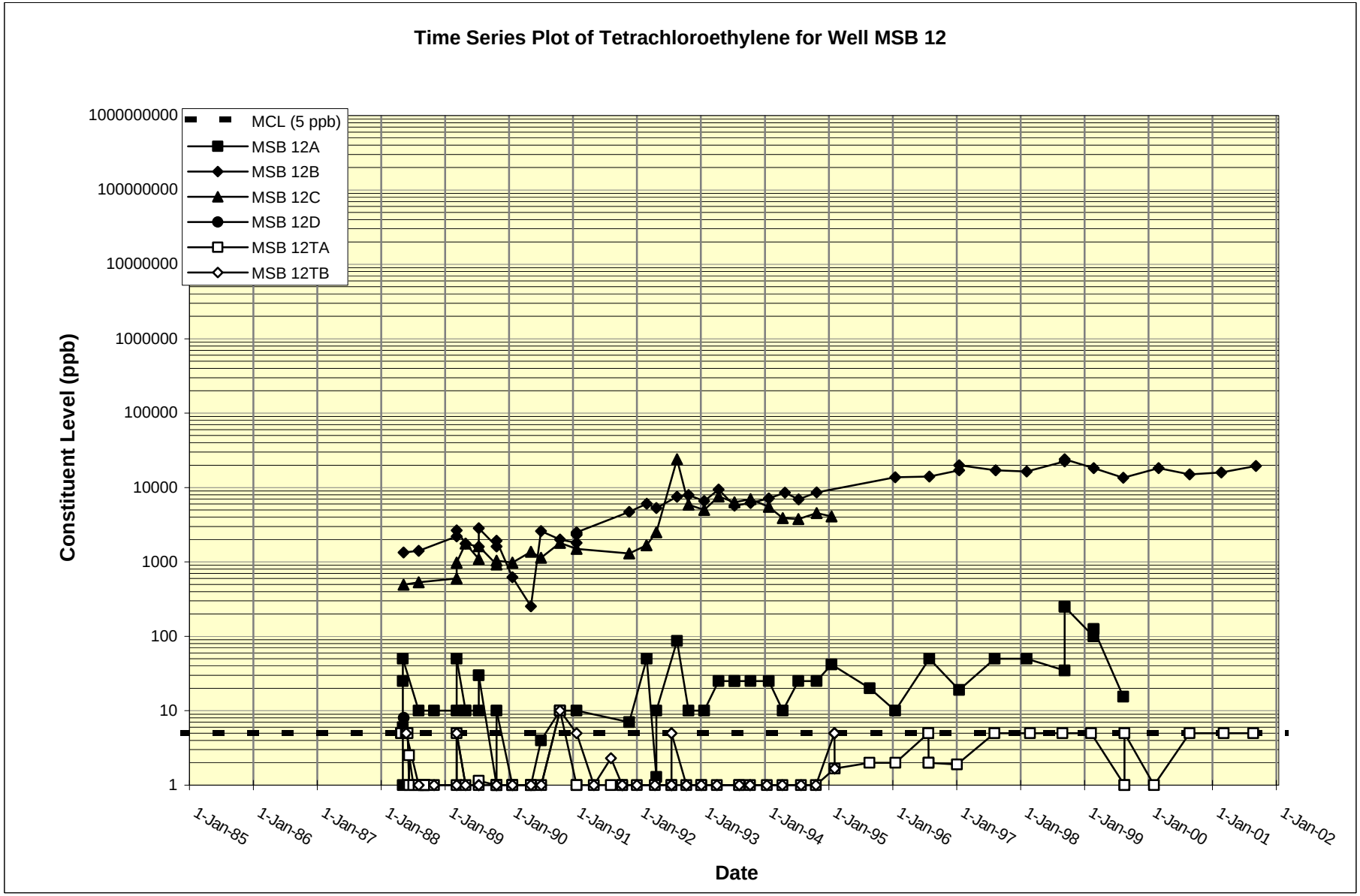
Date


Time Series Plot of Tetrachloroethylene for Well MSB 12
MCL (5 ppb)
MSB 12A
MSB 12B
MSB 12C
MSB 12D
MSB 12TA
MSB 12TB
Constituent Level (ppb)
1000000000
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
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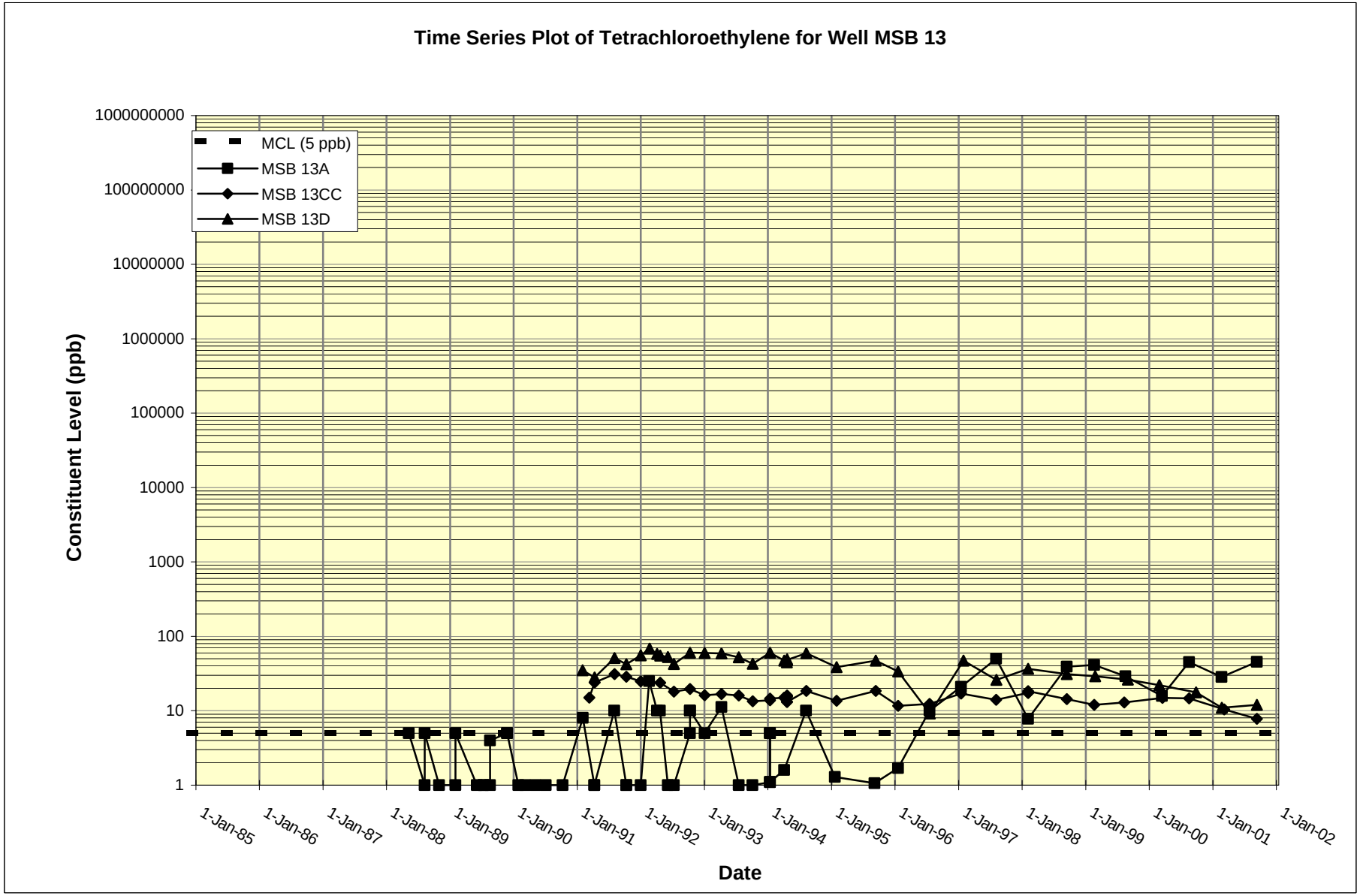
Date


Time Series Plot of Tetrachloroethylene for Well MSB 13
MCL (5 ppb)
MSB 13A
MSB 13CC
MSB 13D
Constituent Level (ppb)
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10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
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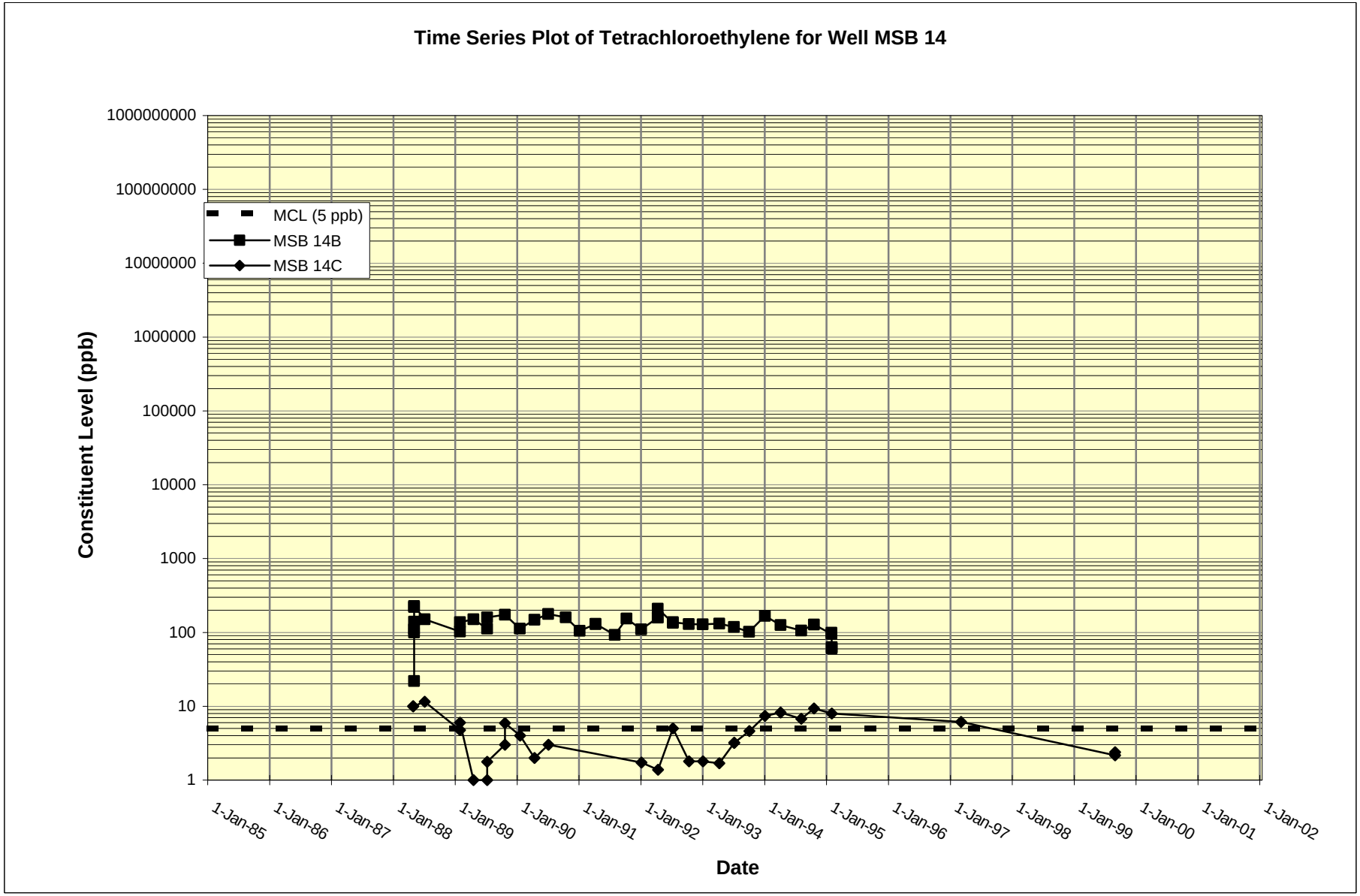
1-Jan-00
1-Jan-01
1-Jan-02
Date


Time Series Plot of Tetrachloroethylene for Well MSB 14
MCL (5 ppb)
MSB 14B
MSB 14C
Constituent Level (ppb)
1000000000
100000000
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1000000
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100
10
1
1-Jan-85
1-Jan-86
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1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
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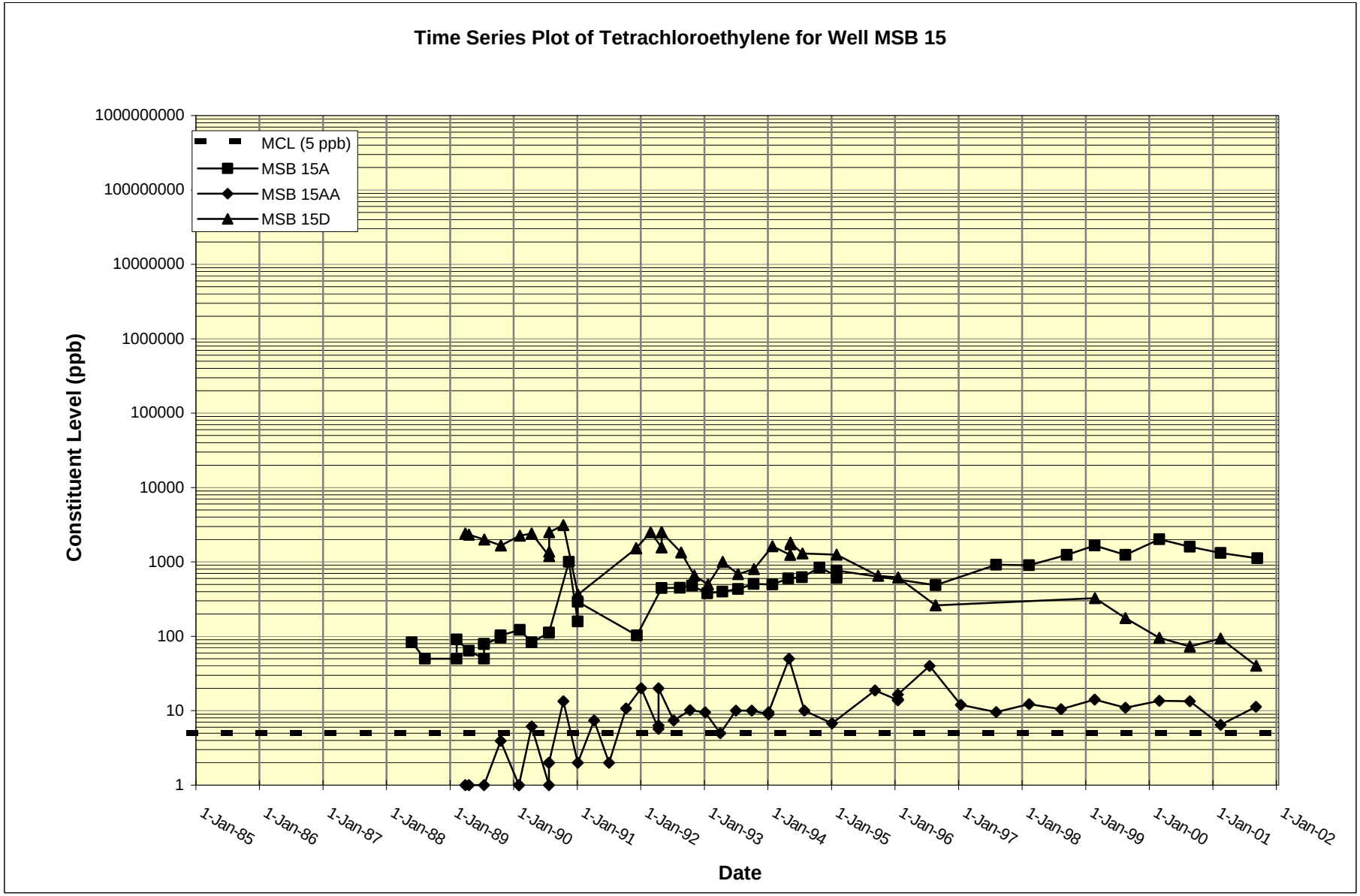
1-Jan-99
1-Jan-00
1-Jan-01
1-Jan-02
Date


Time Series Plot of Tetrachloroethylene for Well MSB 15
MCL (5 ppb)
MSB 15A
MSB 15AA
MSB 15D
Constituent Level (ppb)
1000000000
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
1-Jan-95
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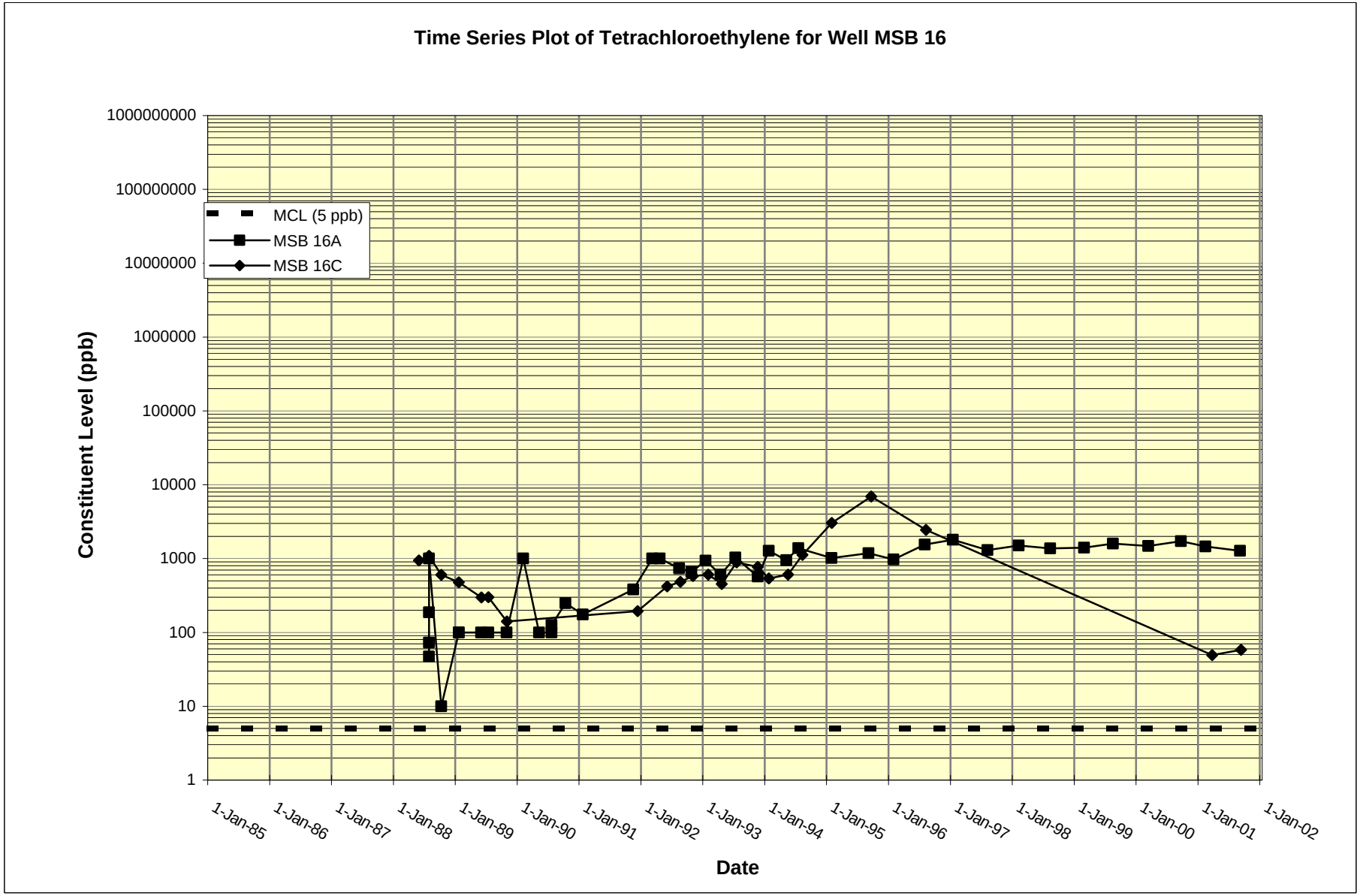
1-Jan-97
1-Jan-98
1-Jan-99
1-Jan-00
1-Jan-01
1-Jan-02
Date


Time Series Plot of Tetrachloroethylene for Well MSB 16
MCL (5 ppb)
MSB 16A
MSB 16C
Constituent Level (ppb)
1000000000
100000000
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1000000
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100
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1
1-Jan-85
1-Jan-86
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1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
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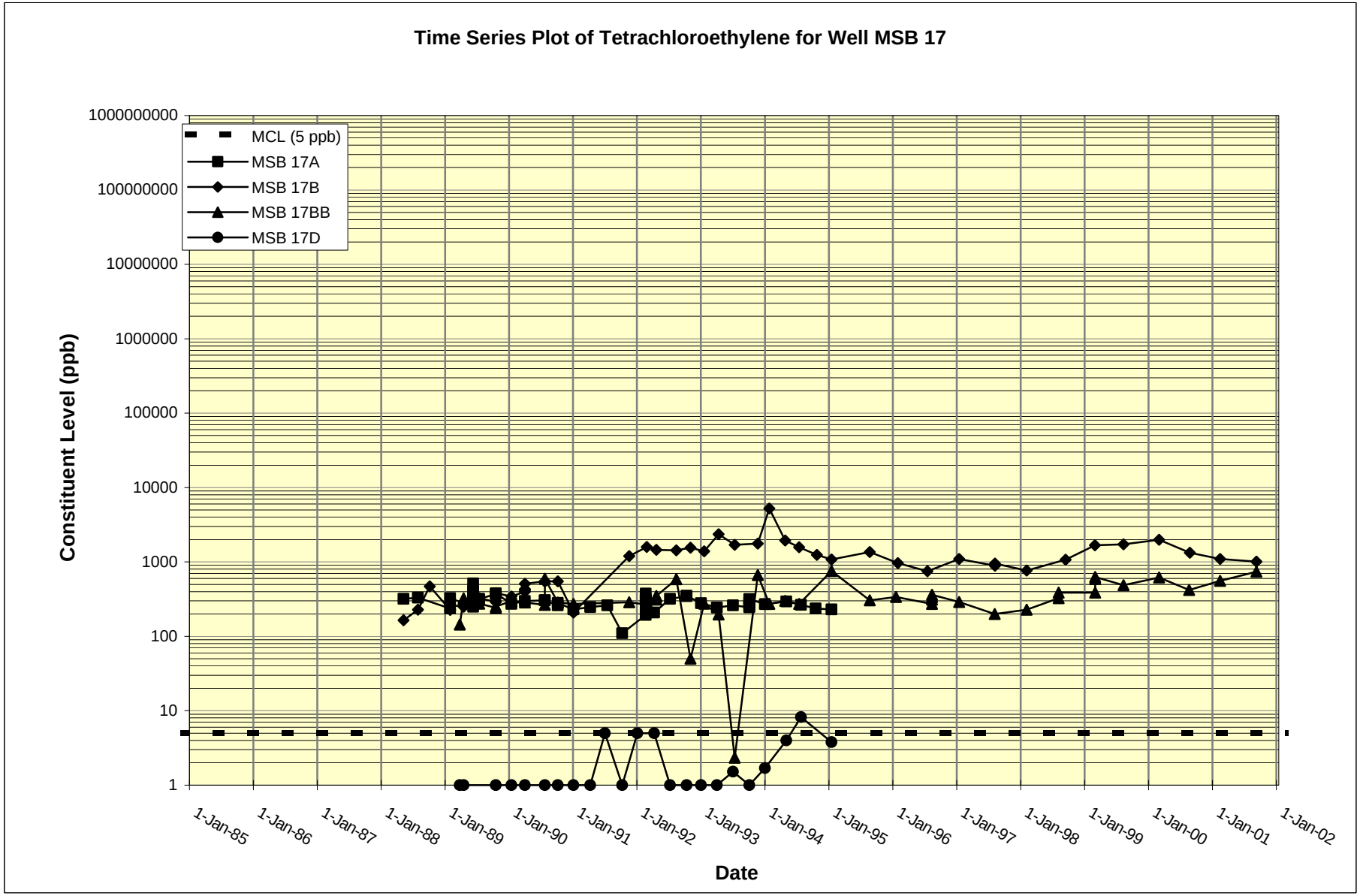
1-Jan-97
1-Jan-98
1-Jan-99
1-Jan-00
1-Jan-01
1-Jan-02
Date


Time Series Plot of Tetrachloroethylene for Well MSB 17
MCL (5 ppb)
MSB 17A
MSB 17B
MSB 17BB
MSB 17D
Constituent Level (ppb)
1000000000
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
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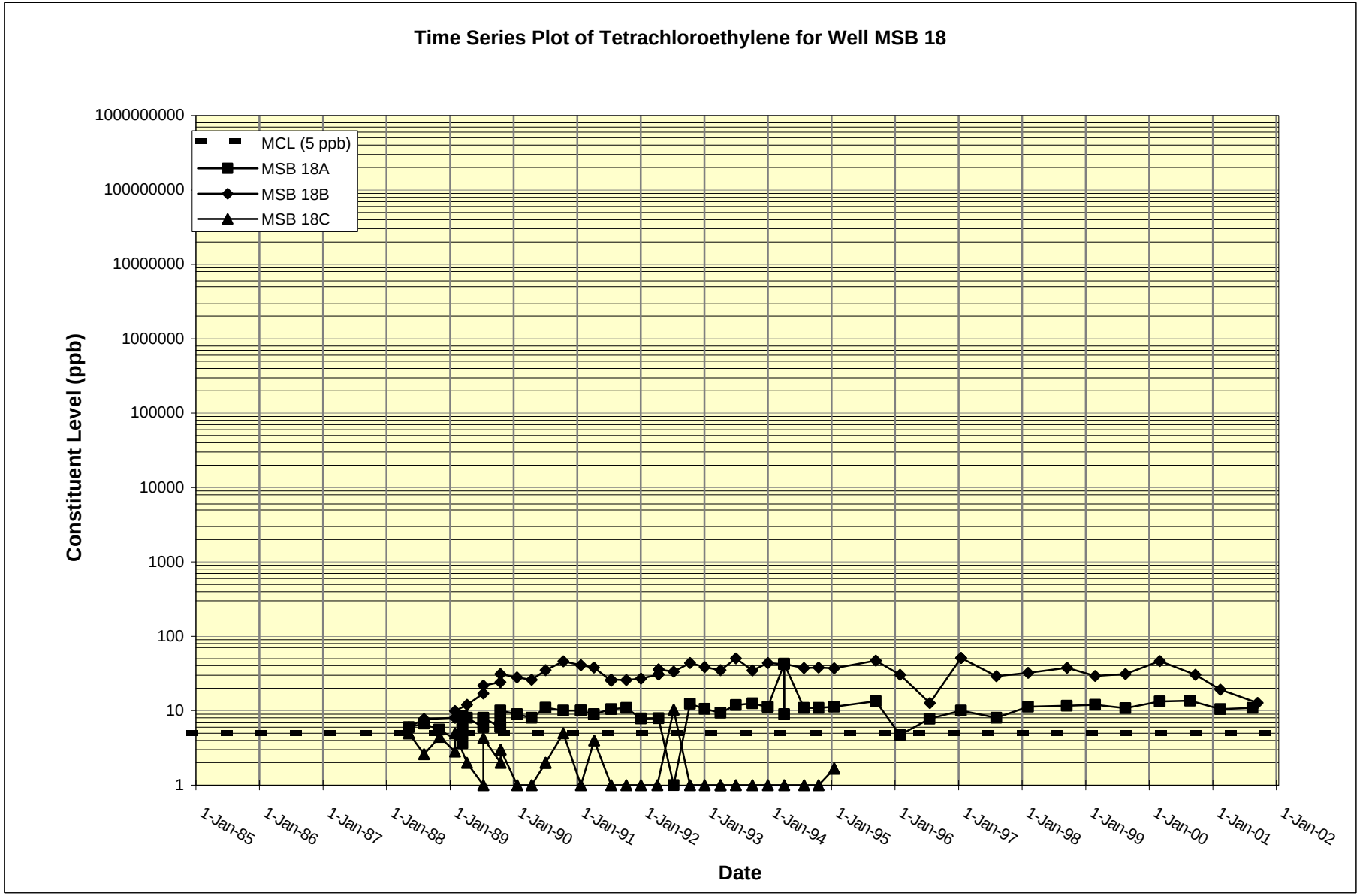
1-Jan-99
1-Jan-00
1-Jan-01
1-Jan-02
Date


Time Series Plot of Tetrachloroethylene for Well MSB 18
MCL (5 ppb)
MSB 18A
MSB 18B
MSB 18C
Constituent Level (ppb)
1000000000
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
1-Jan-95
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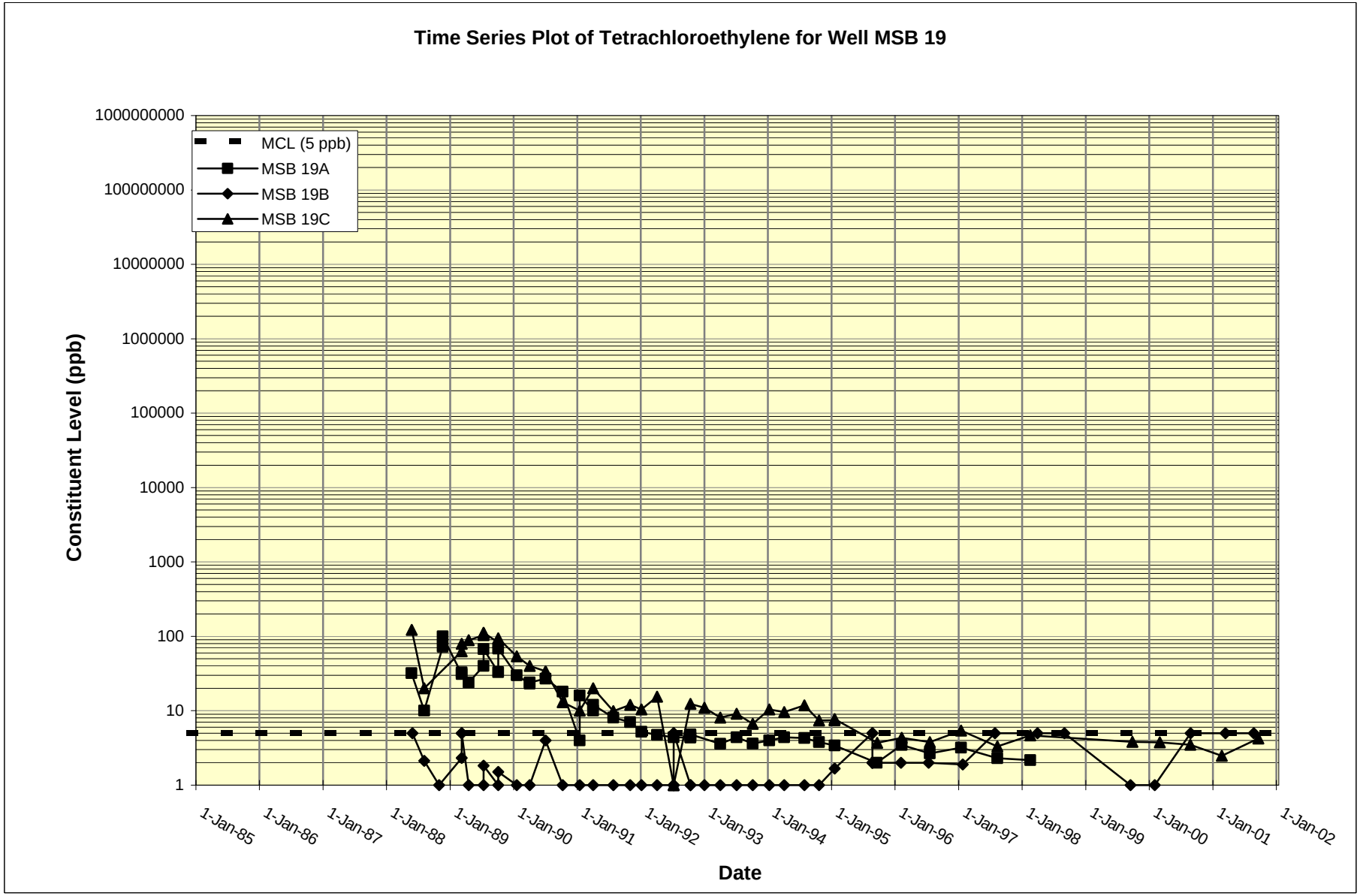
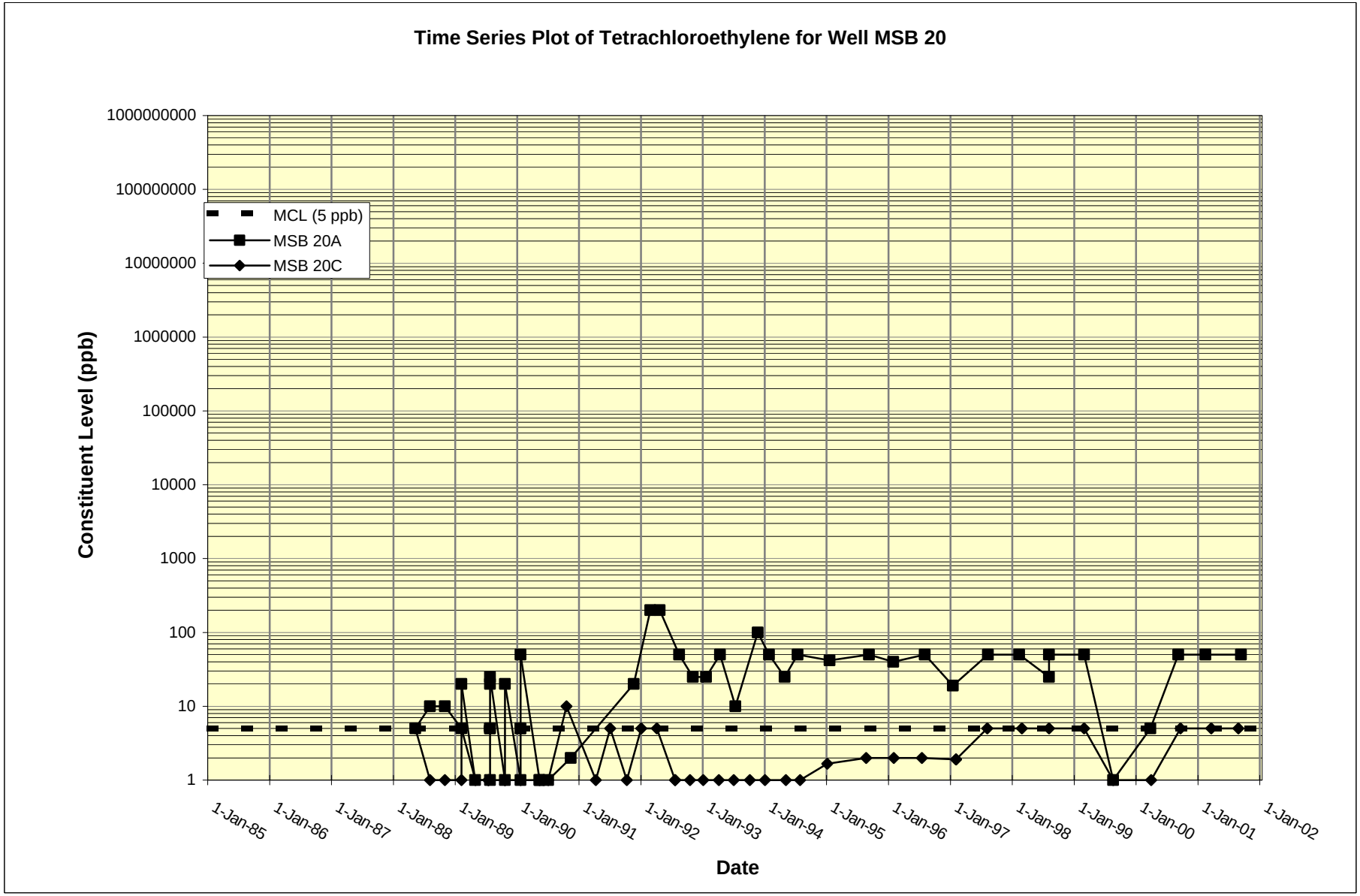
1-Jan-99
1-Jan-00
1-Jan-01
1-Jan-02
Date


Time Series Plot of Tetrachloroethylene for Well MSB 19
MCL (5 ppb)
MSB 19A
MSB 19B
MSB 19C
Constituent Level (ppb)
1000000000
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
1-Jan-95
1-Jan-96
1-Jan-97
1-Jan-98
1-Jan-99
1-Jan-00
1-Jan-01
1-Jan-02
Date


Time Series Plot of Tetrachloroethylene for Well MSB 20
MCL (5 ppb)
MSB 20A
MSB 20C
Constituent Level (ppb)
1000000000
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
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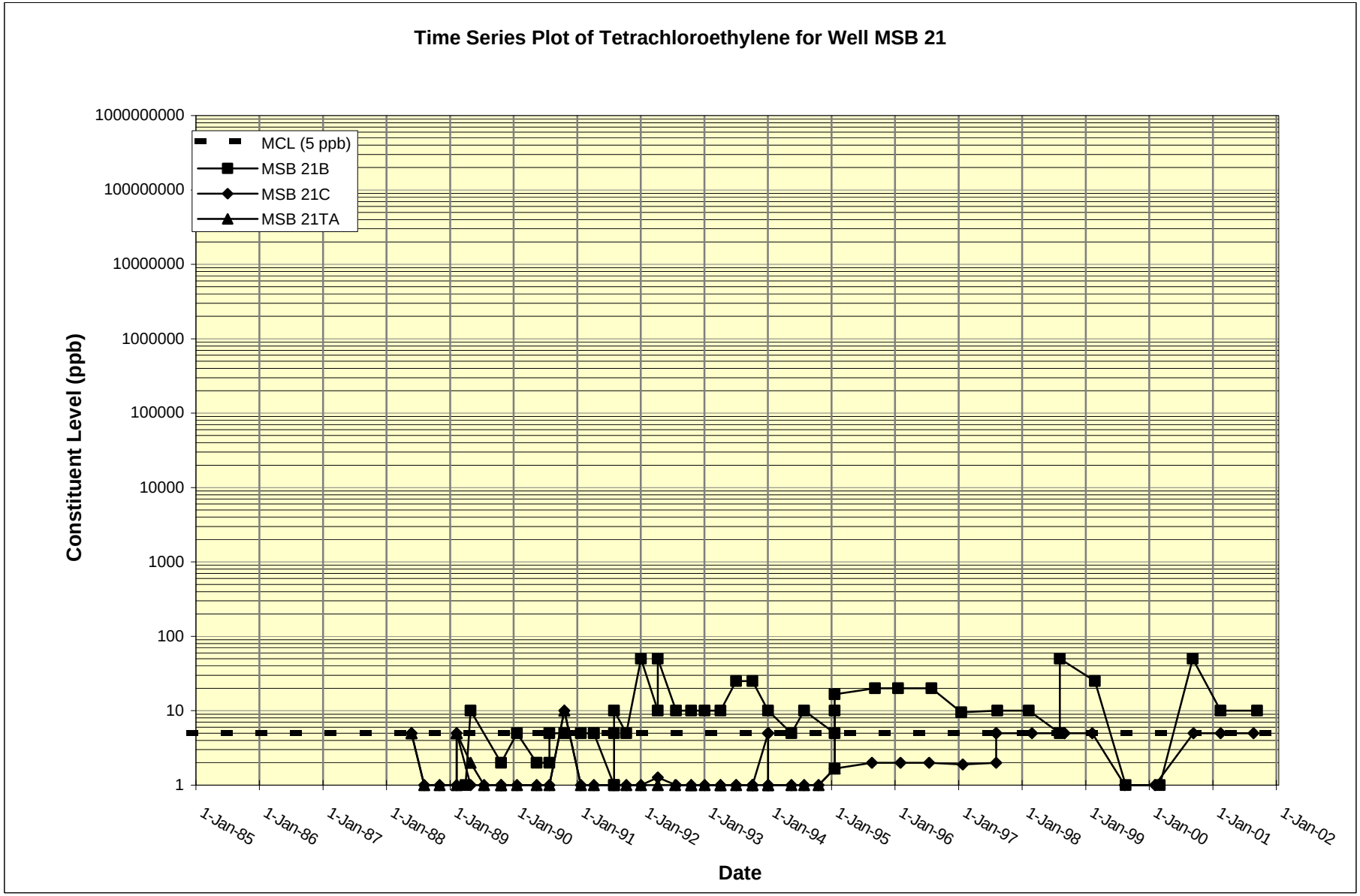
1-Jan-97
1-Jan-98
1-Jan-99
1-Jan-00
1-Jan-01
1-Jan-02
Date


Time Series Plot of Tetrachloroethylene for Well MSB 21
MCL (5 ppb)
MSB 21B
MSB 21C
MSB 21TA
Constituent Level (ppb)
1000000000
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
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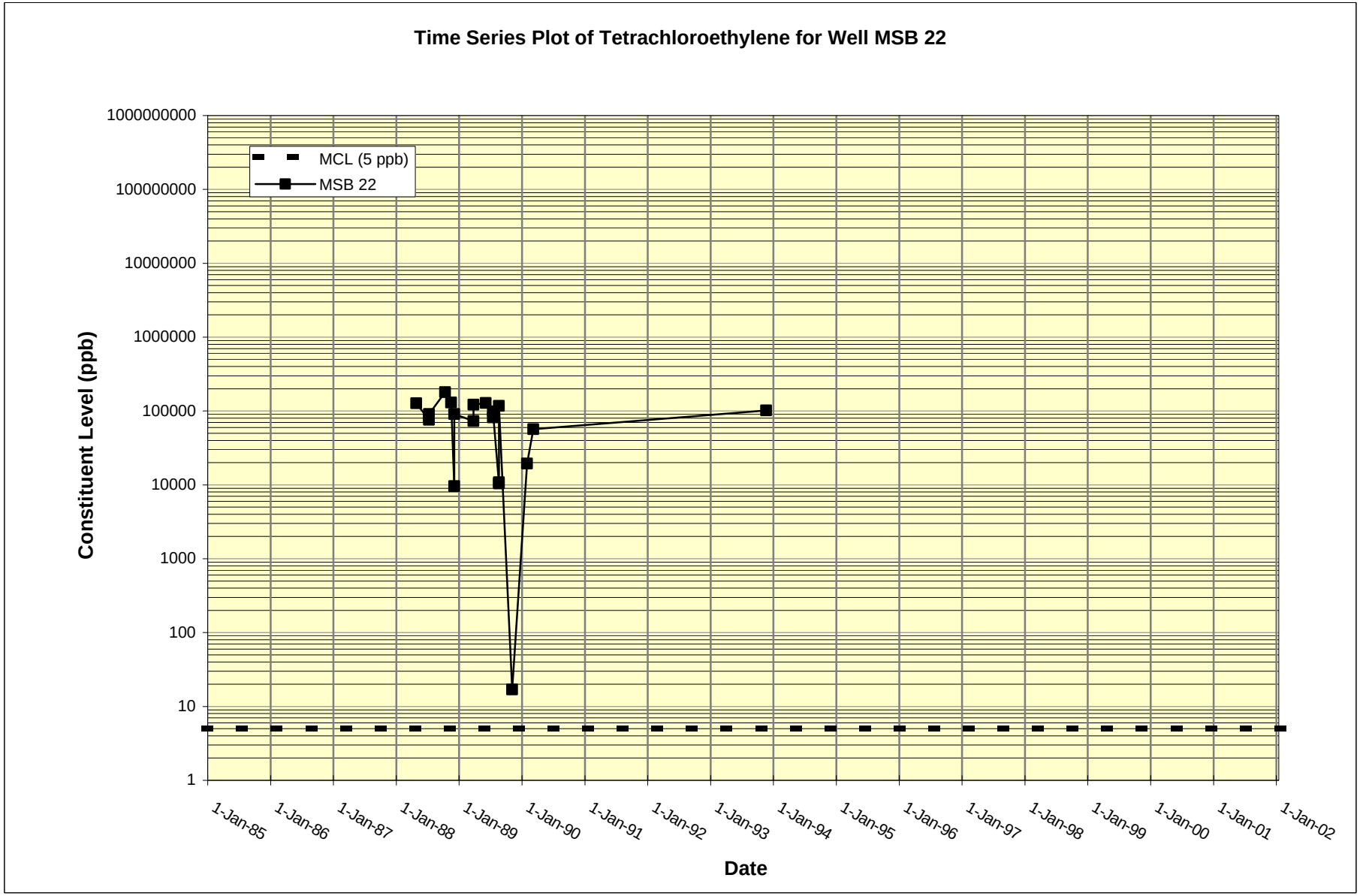
1-Jan-01
1-Jan-02
Date


Time Series Plot of Tetrachloroethylene for Well MSB 22
MCL (5 ppb)
MSB 22
Constituent Level (ppb)
1000000000
100000000
10000000
1000000
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10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
1-Jan-95
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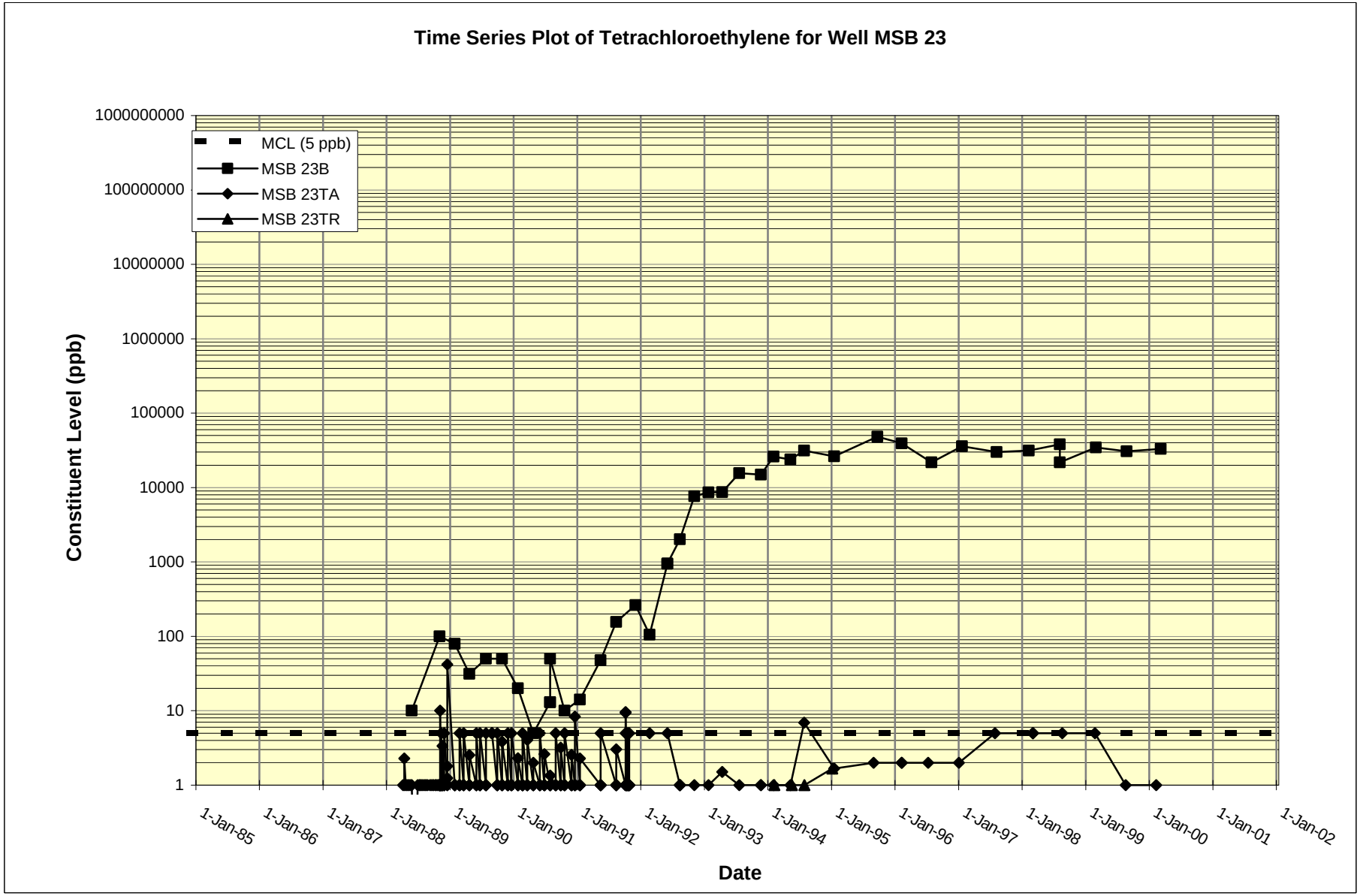
1-Jan-99
1-Jan-00
1-Jan-01
1-Jan-02
Date


Time Series Plot of Tetrachloroethylene for Well MSB 23
MCL (5 ppb)
MSB 23B
MSB 23TA
MSB 23TR
Constituent Level (ppb)
1000000000
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
1-Jan-95
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1-Jan-97
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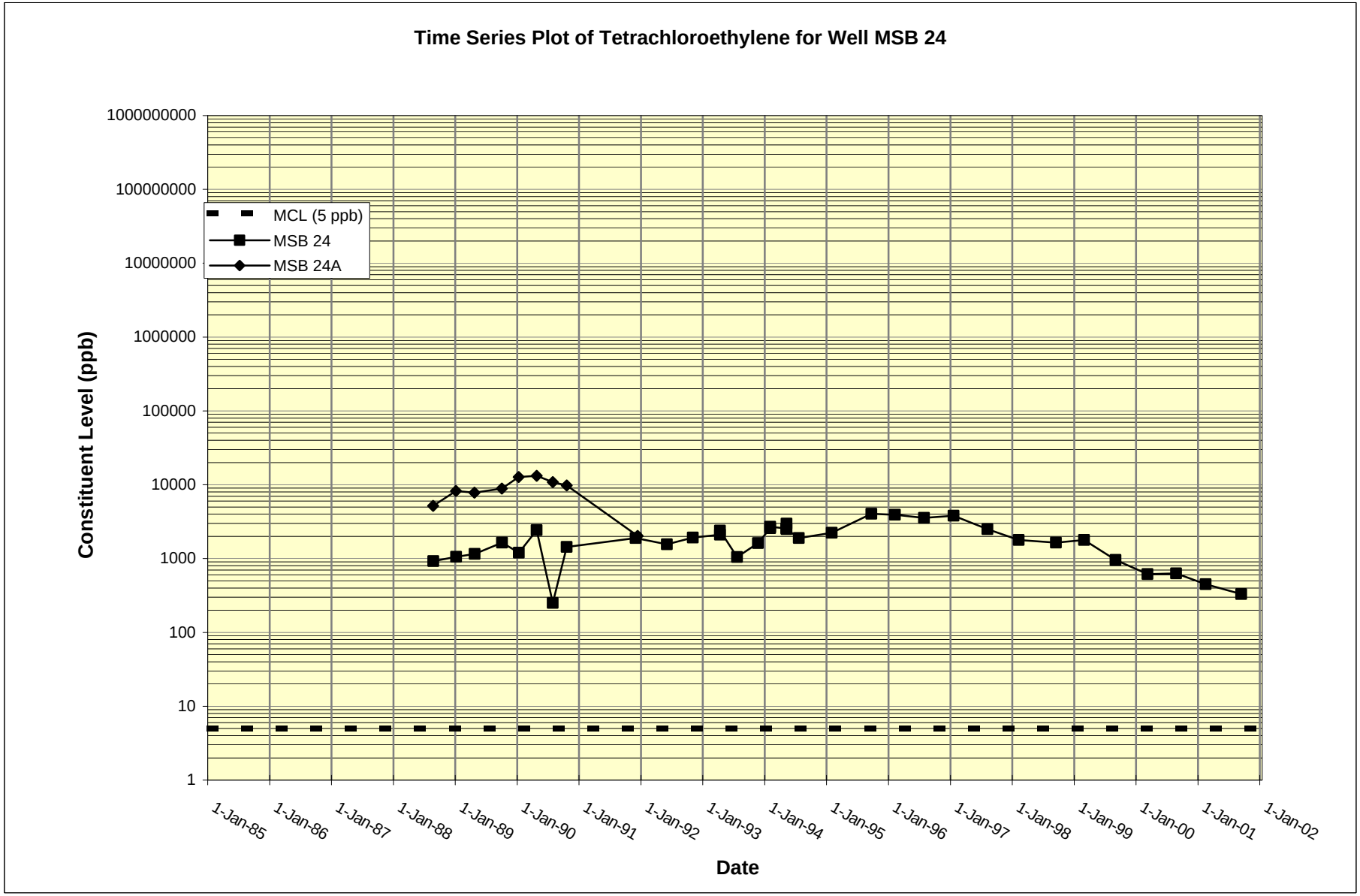
1-Jan-99
1-Jan-00
1-Jan-01
1-Jan-02
Date


Time Series Plot of Tetrachloroethylene for Well MSB 24
MCL (5 ppb)
MSB 24
MSB 24A
Constituent Level (ppb)
1000000000
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
1-Jan-95
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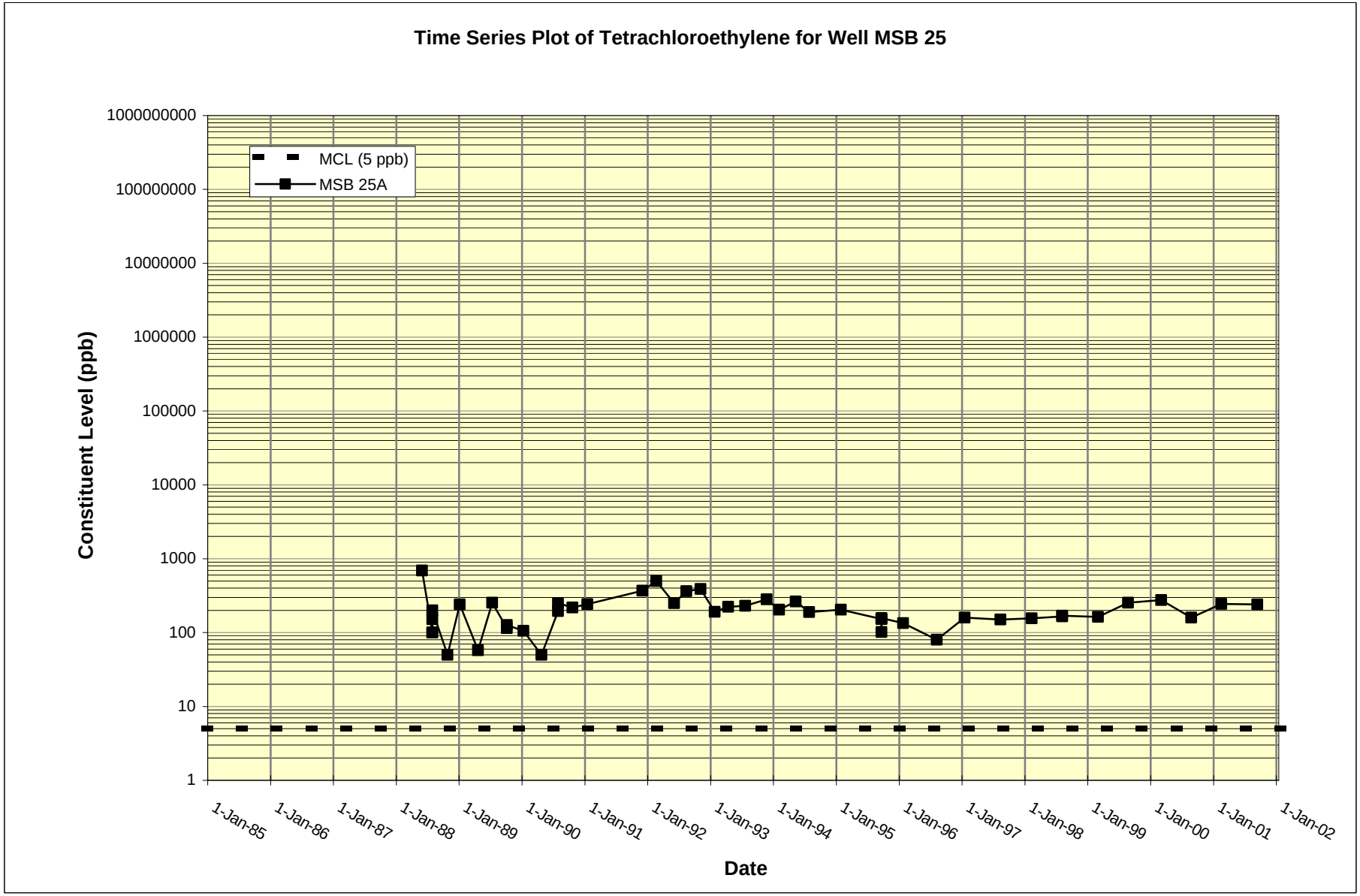
1-Jan-97
1-Jan-98
1-Jan-99
1-Jan-00
1-Jan-01
1-Jan-02
Date


Time Series Plot of Tetrachloroethylene for Well MSB 25
MCL (5 ppb)
MSB 25A
Constituent Level (ppb)
1000000000
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
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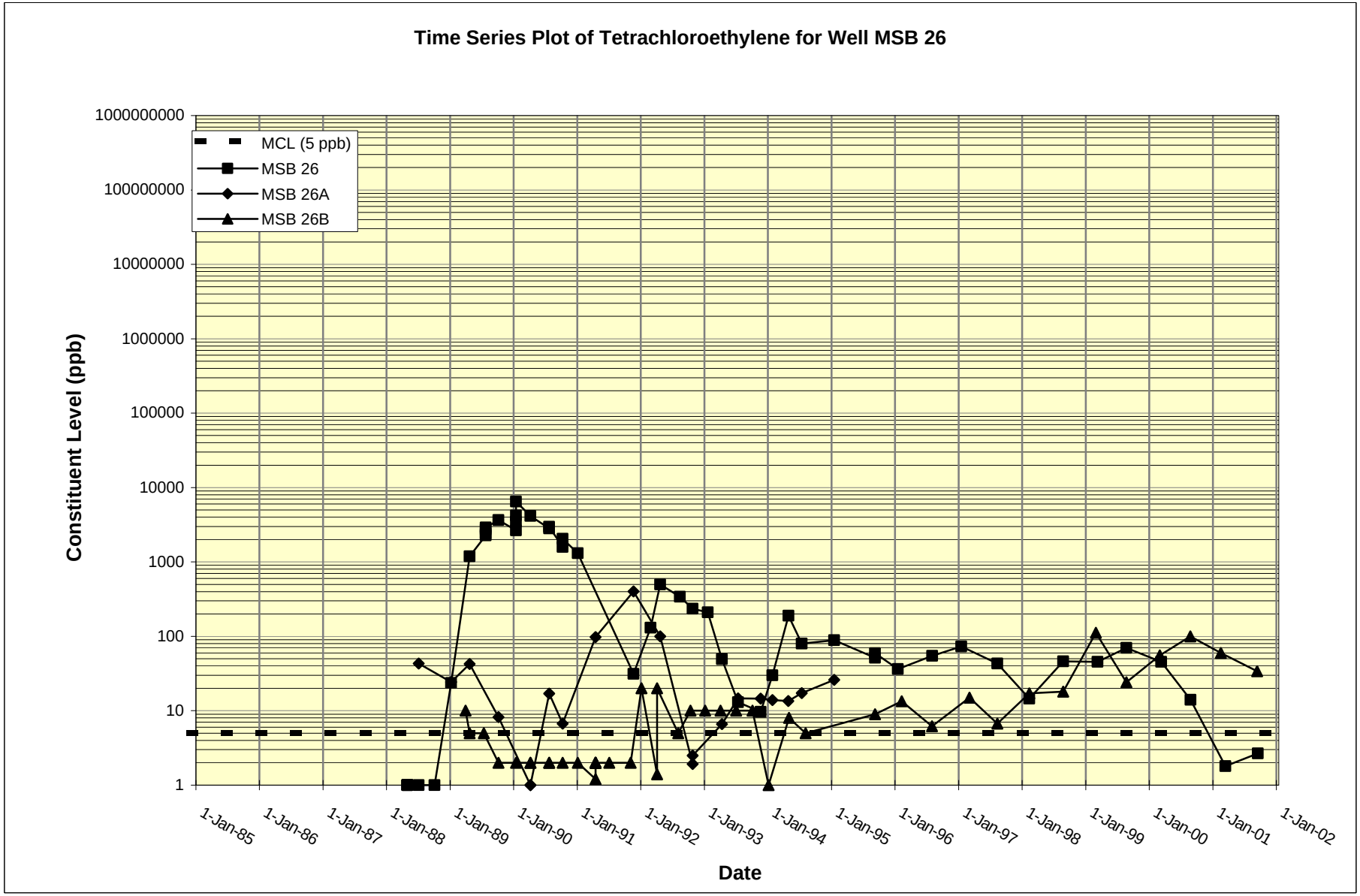
1-Jan-99
1-Jan-00
1-Jan-01
1-Jan-02
Date


Time Series Plot of Tetrachloroethylene for Well MSB 26
MCL (5 ppb)
MSB 26
MSB 26A
MSB 26B
Constituent Level (ppb)
1000000000
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
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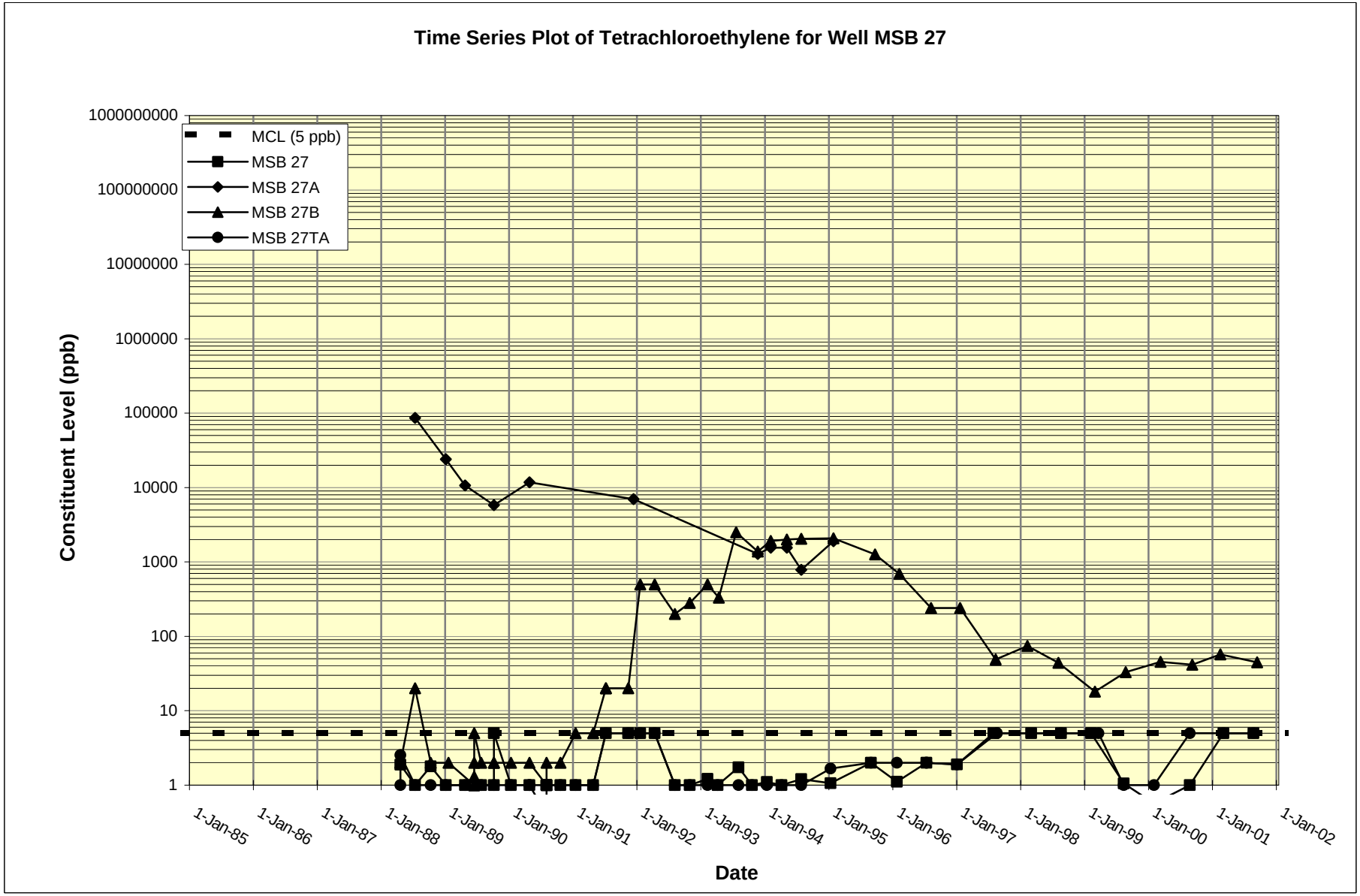
1-Jan-01
1-Jan-02
Date


Time Series Plot of Tetrachloroethylene for Well MSB 27
MCL (5 ppb)
MSB 27
MSB 27A
MSB 27B
MSB 27TA
Constituent Level (ppb)
1000000000
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
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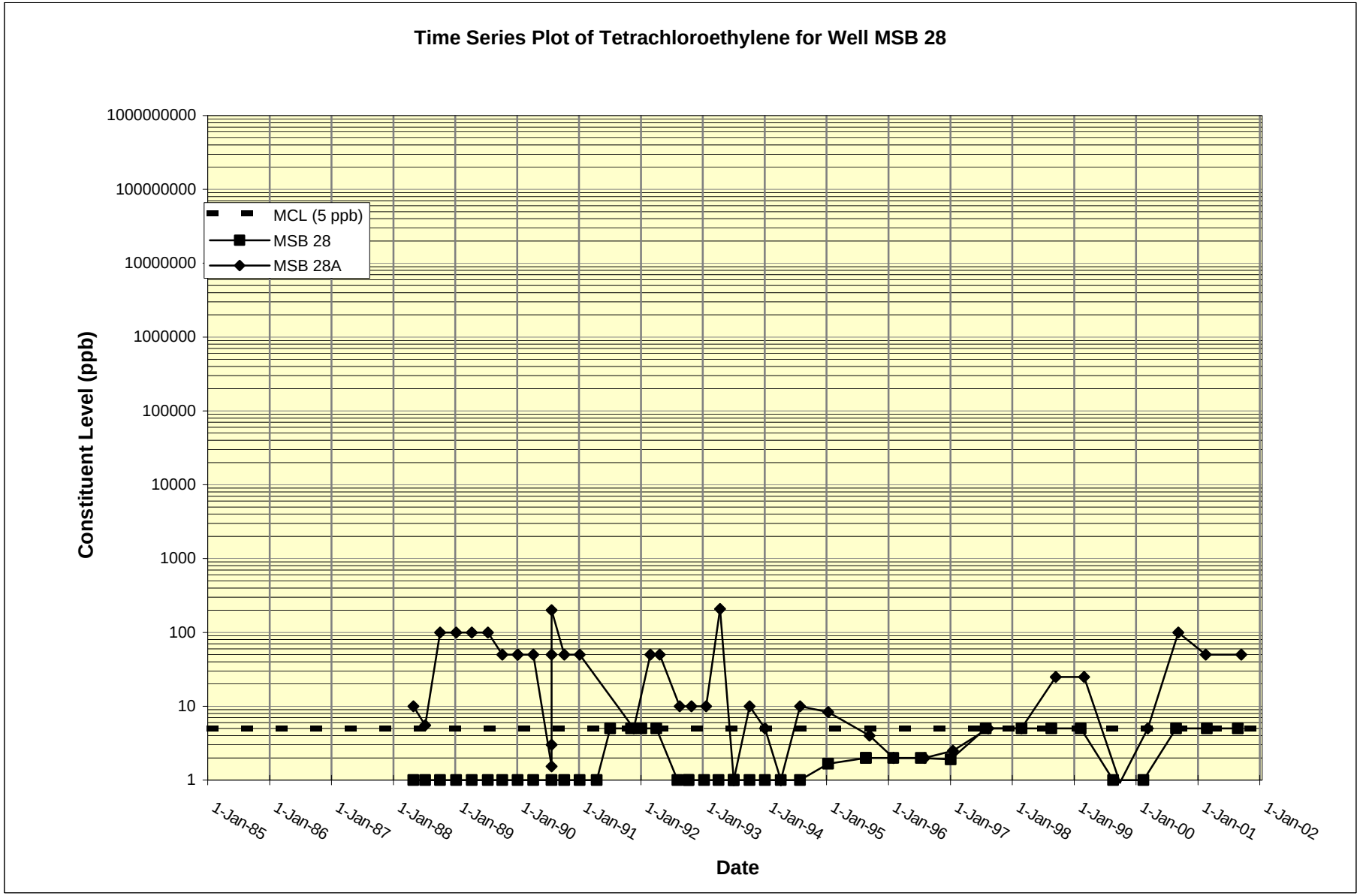
1-Jan-00
1-Jan-01
1-Jan-02
Date


Time Series Plot of Tetrachloroethylene for Well MSB 28
MCL (5 ppb)
MSB 28
MSB 28A
Constituent Level (ppb)
1000000000
100000000
10000000
1000000
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1-Jan-88
1-Jan-89
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1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
1-Jan-95
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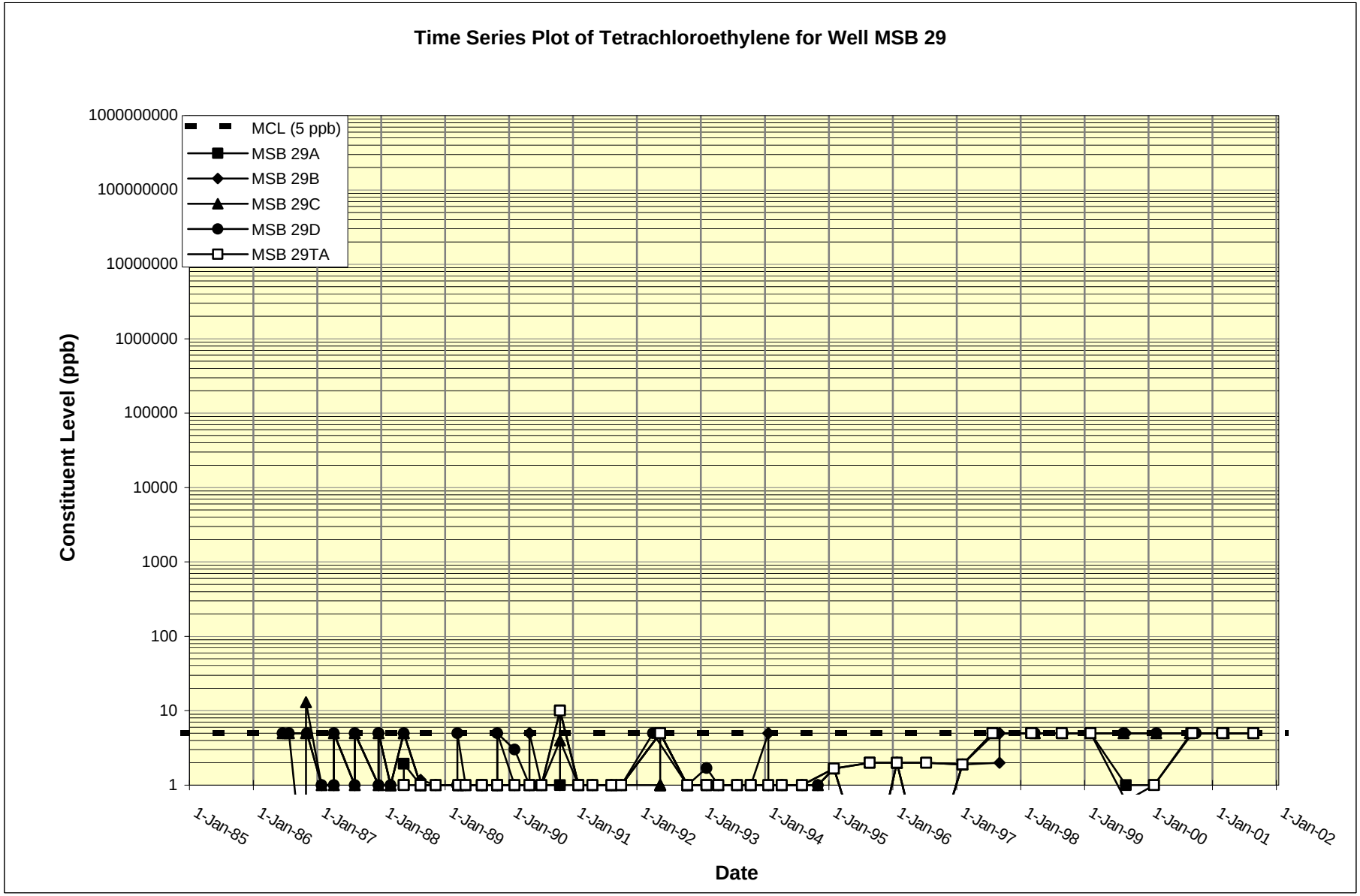
1-Jan-00
1-Jan-01
1-Jan-02
Date


Time Series Plot of Tetrachloroethylene for Well MSB 29
MCL (5 ppb)
MSB 29A
MSB 29B
MSB 29C
MSB 29D
MSB 29TA
Constituent Level (ppb)
1000000000
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
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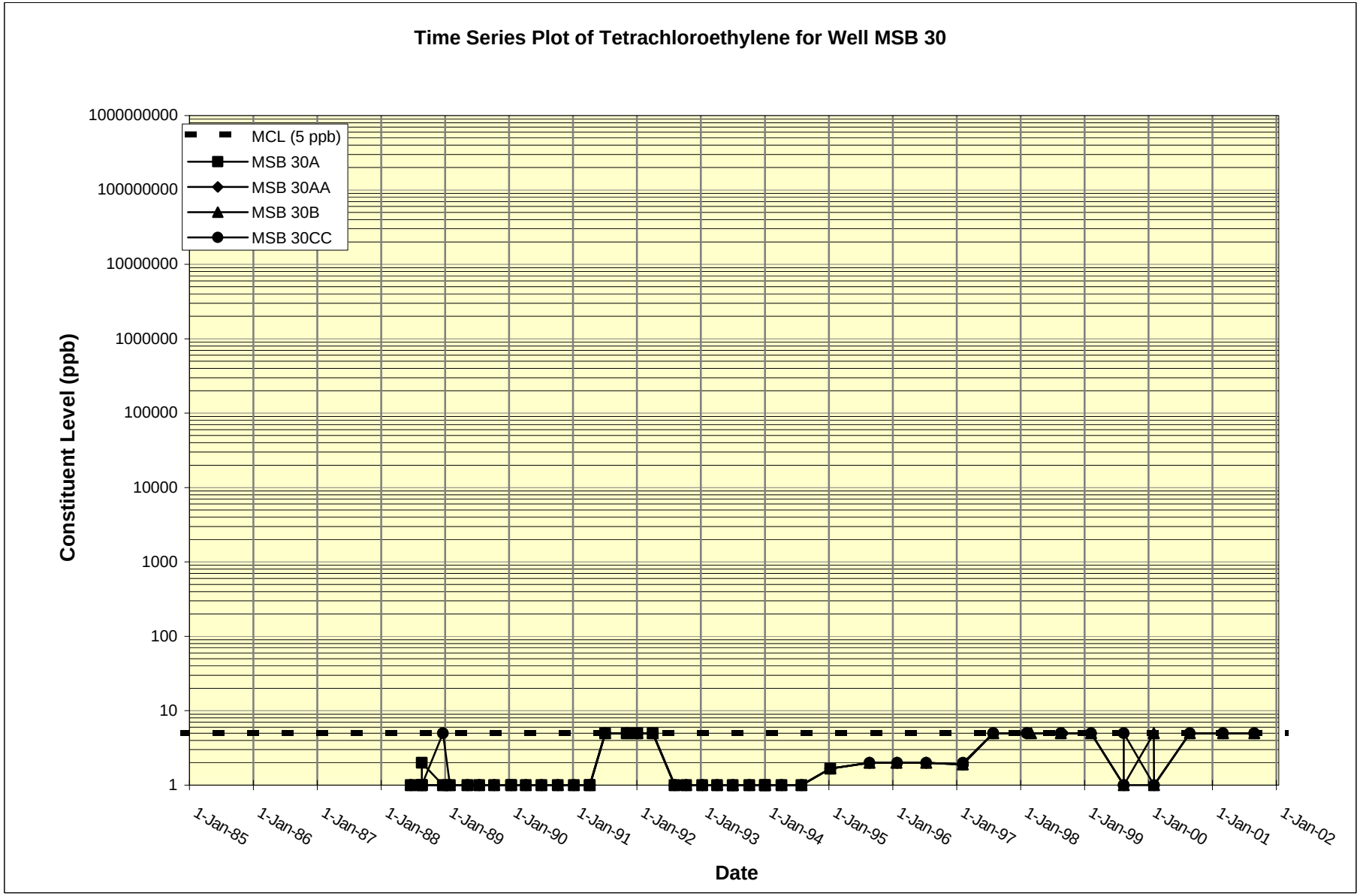
1-Jan-00
1-Jan-01
1-Jan-02
Date


Time Series Plot of Tetrachloroethylene for Well MSB 30
MCL (5 ppb)
MSB 30A
MSB 30AA
MSB 30B
MSB 30CC
Constituent Level (ppb)
1000000000
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
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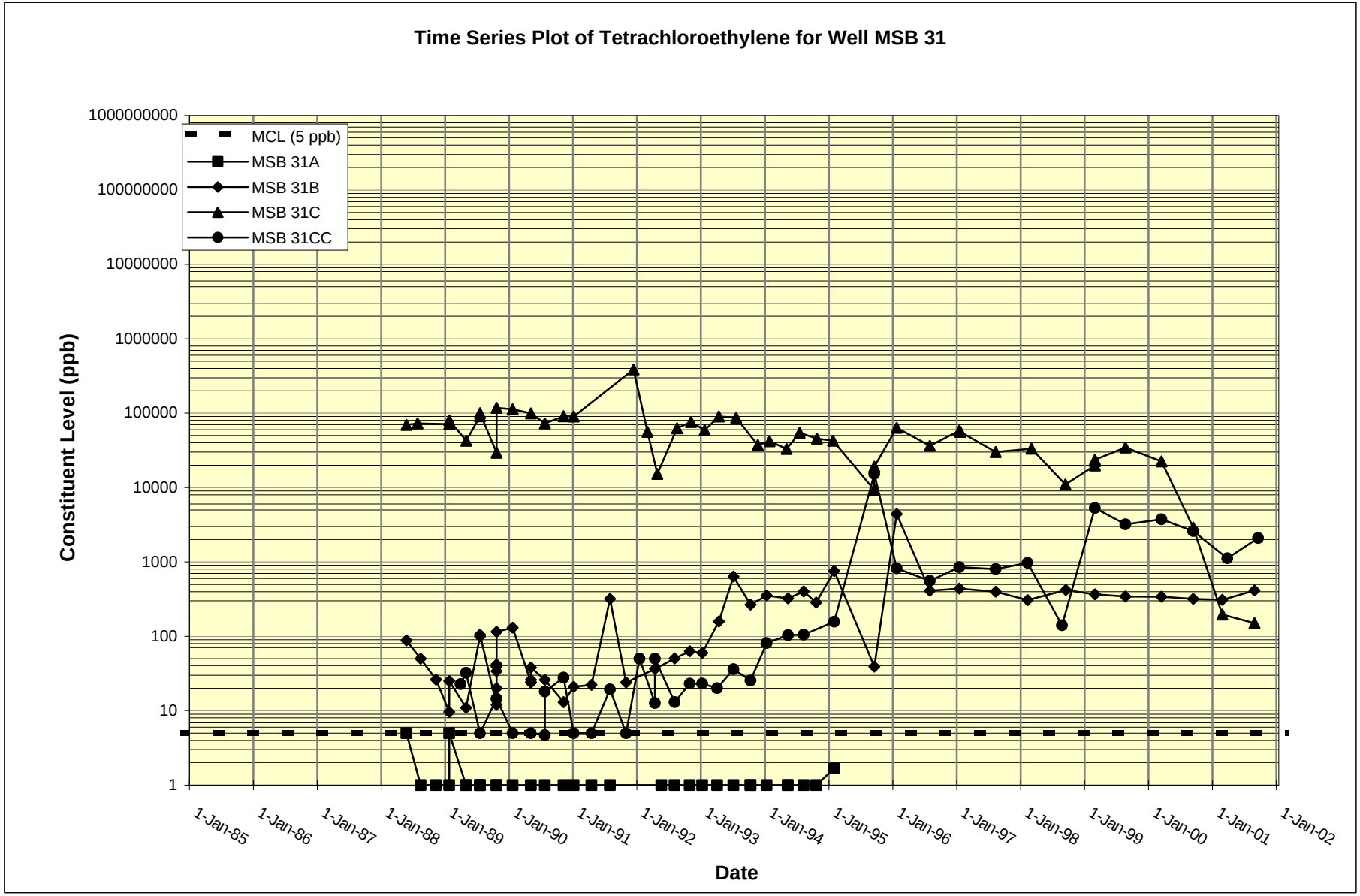
1-Jan-00
1-Jan-01
1-Jan-02
Date


Time Series Plot of Tetrachloroethylene for Well MSB 31
MCL (5 ppb)
MSB 31A
MSB 31B
MSB 31C
MSB 31CC
Constituent Level (ppb)
1000000000
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
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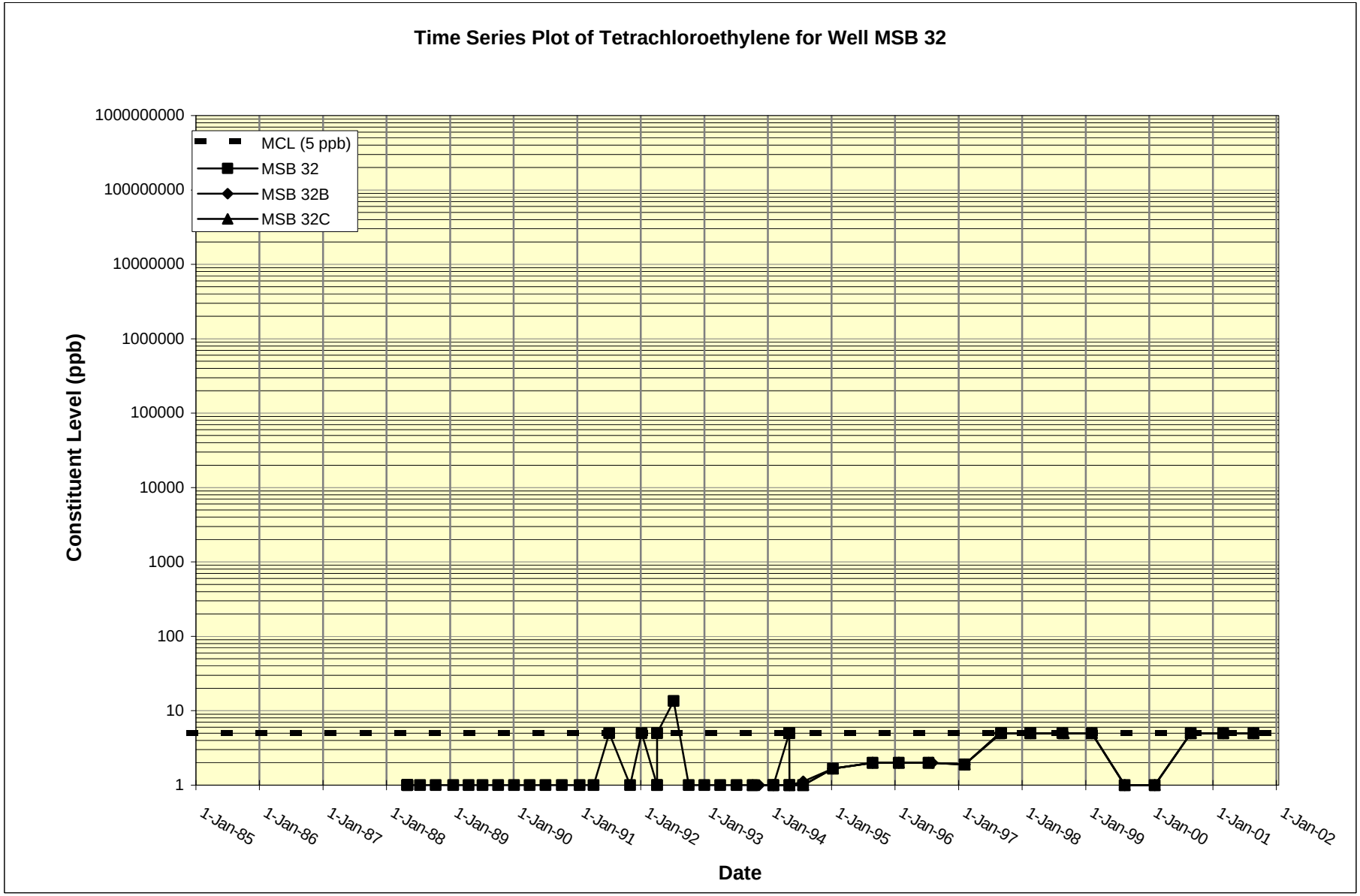
1-Jan-01
1-Jan-02
Date


Time Series Plot of Tetrachloroethylene for Well MSB 32
MCL (5 ppb)
MSB 32
MSB 32B
MSB 32C
Constituent Level (ppb)
1000000000
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
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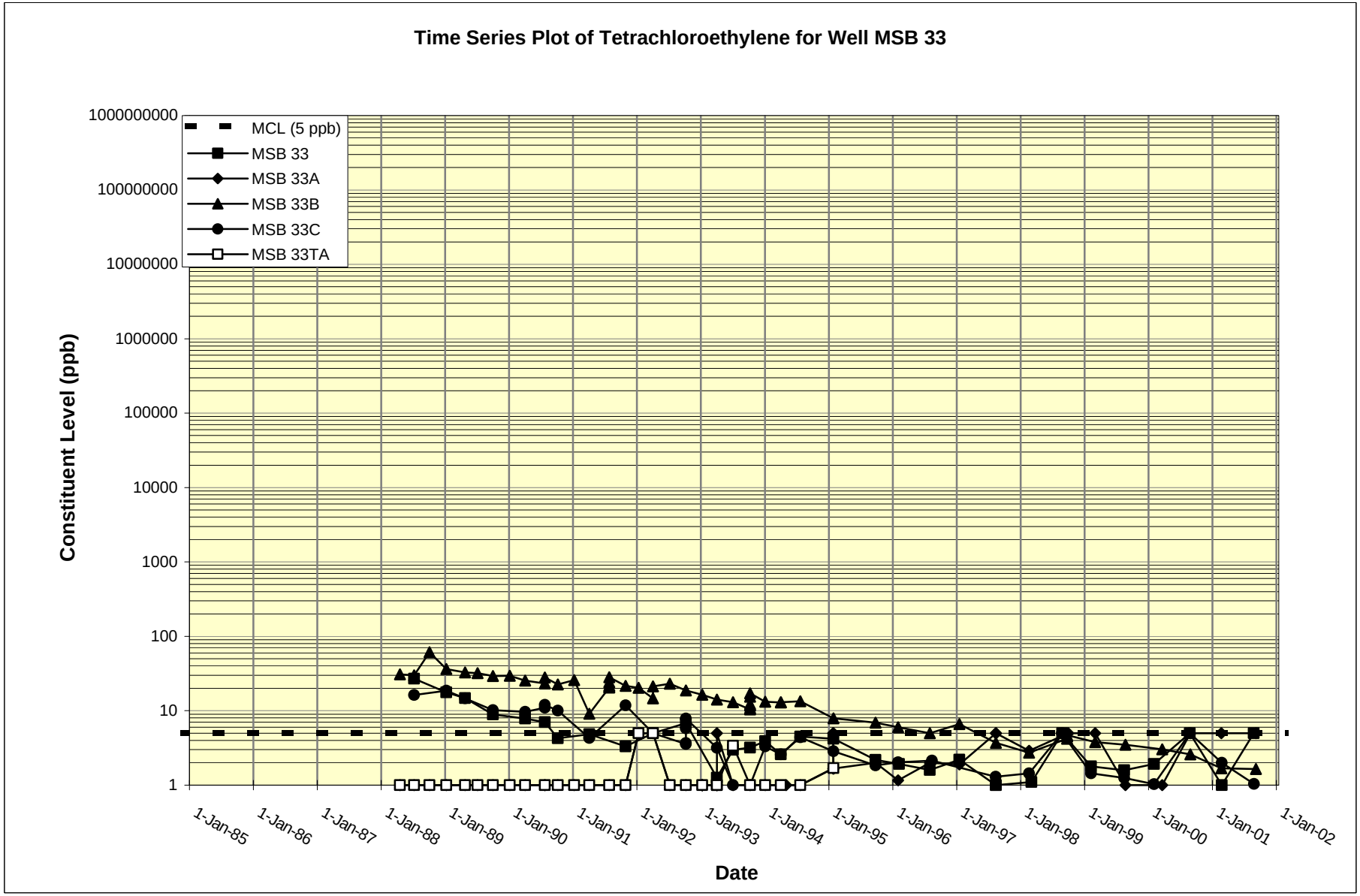
1-Jan-01
1-Jan-02
Date


Time Series Plot of Tetrachloroethylene for Well MSB 33
MCL (5 ppb)
MSB 33
MSB 33A
MSB 33B
MSB 33C
MSB 33TA
Constituent Level (ppb)
1000000000
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
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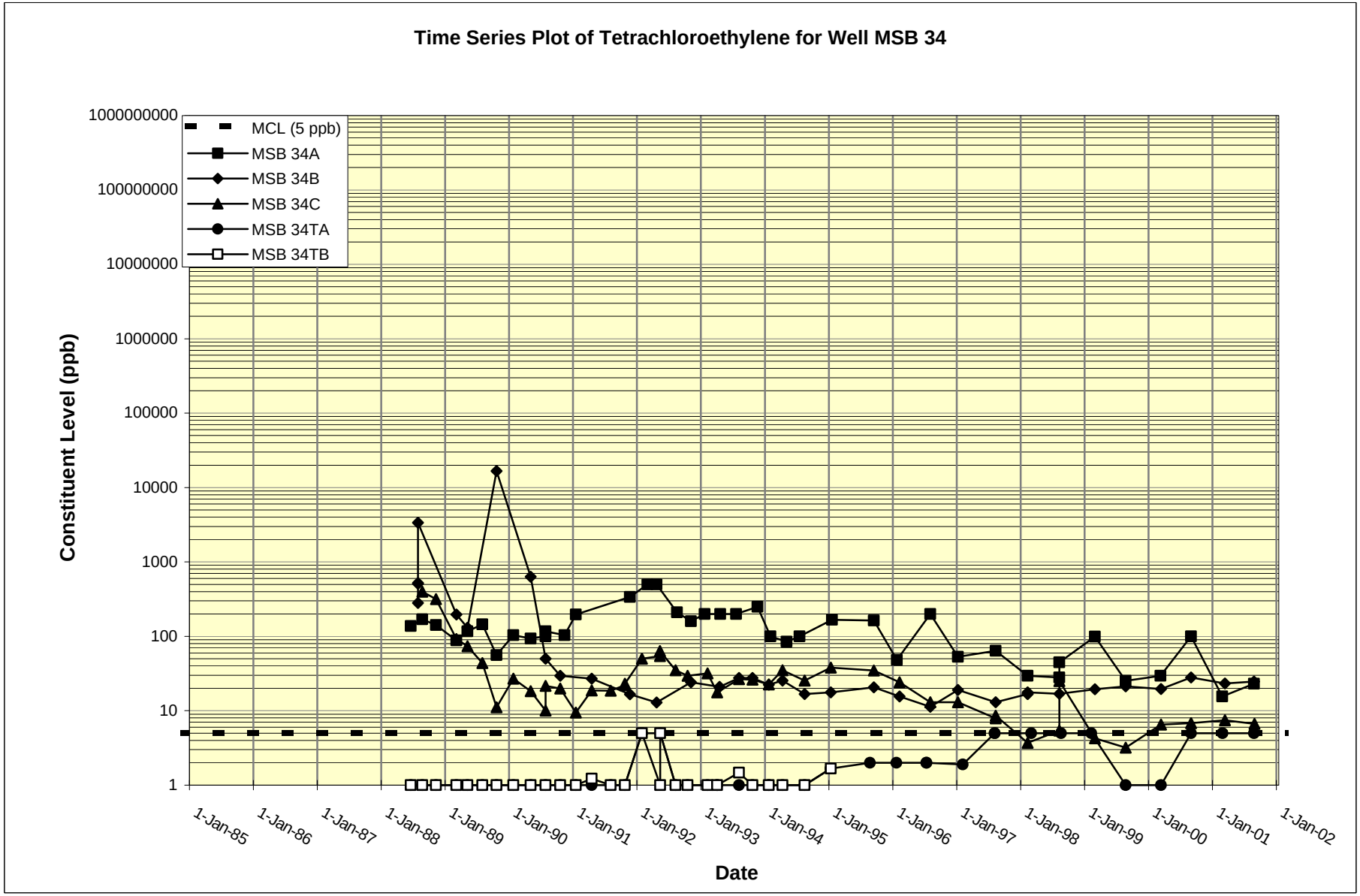
1-Jan-01
1-Jan-02
Date


Time Series Plot of Tetrachloroethylene for Well MSB 34
MCL (5 ppb)
MSB 34A
MSB 34B
MSB 34C
MSB 34TA
MSB 34TB
Constituent Level (ppb)
1000000000
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
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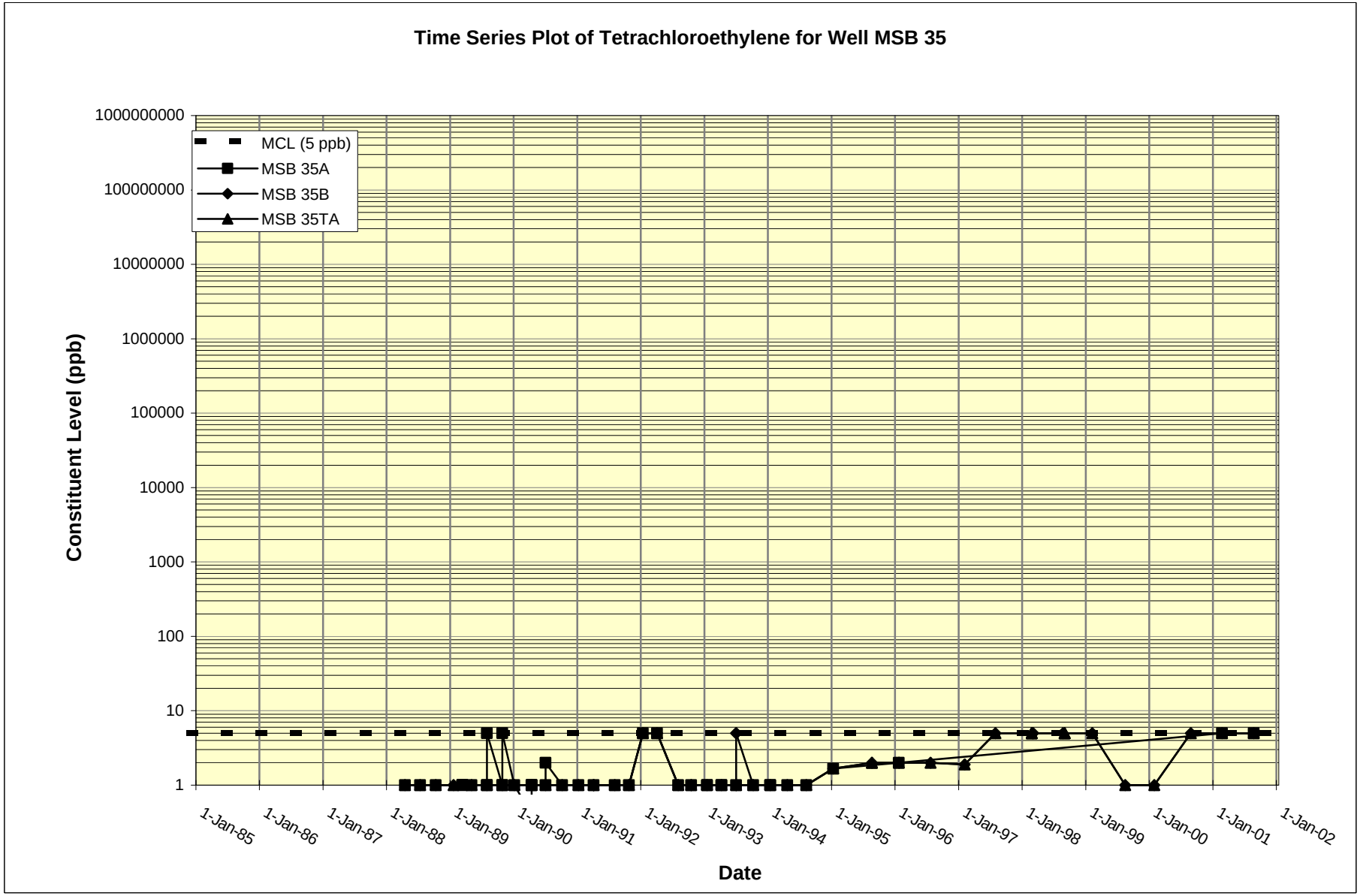
1-Jan-01
1-Jan-02
Date


Time Series Plot of Tetrachloroethylene for Well MSB 35
MCL (5 ppb)
MSB 35A
MSB 35B
MSB 35TA
Constituent Level (ppb)
1000000000
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
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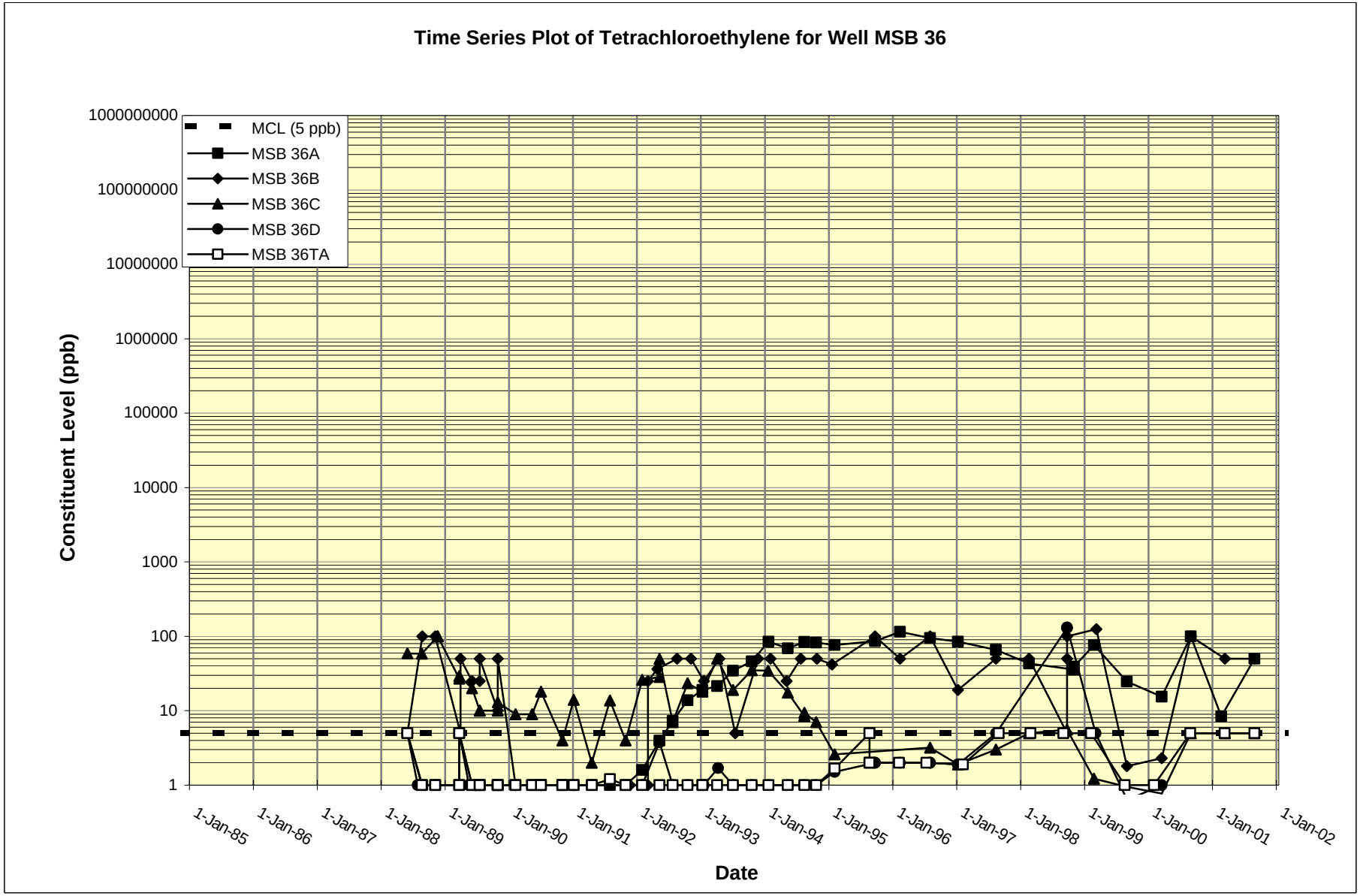
Date


Time Series Plot of Tetrachloroethylene for Well MSB 36
MCL (5 ppb)
MSB 36A
MSB 36B
MSB 36C
MSB 36D
MSB 36TA
Constituent Level (ppb)
1000000000
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
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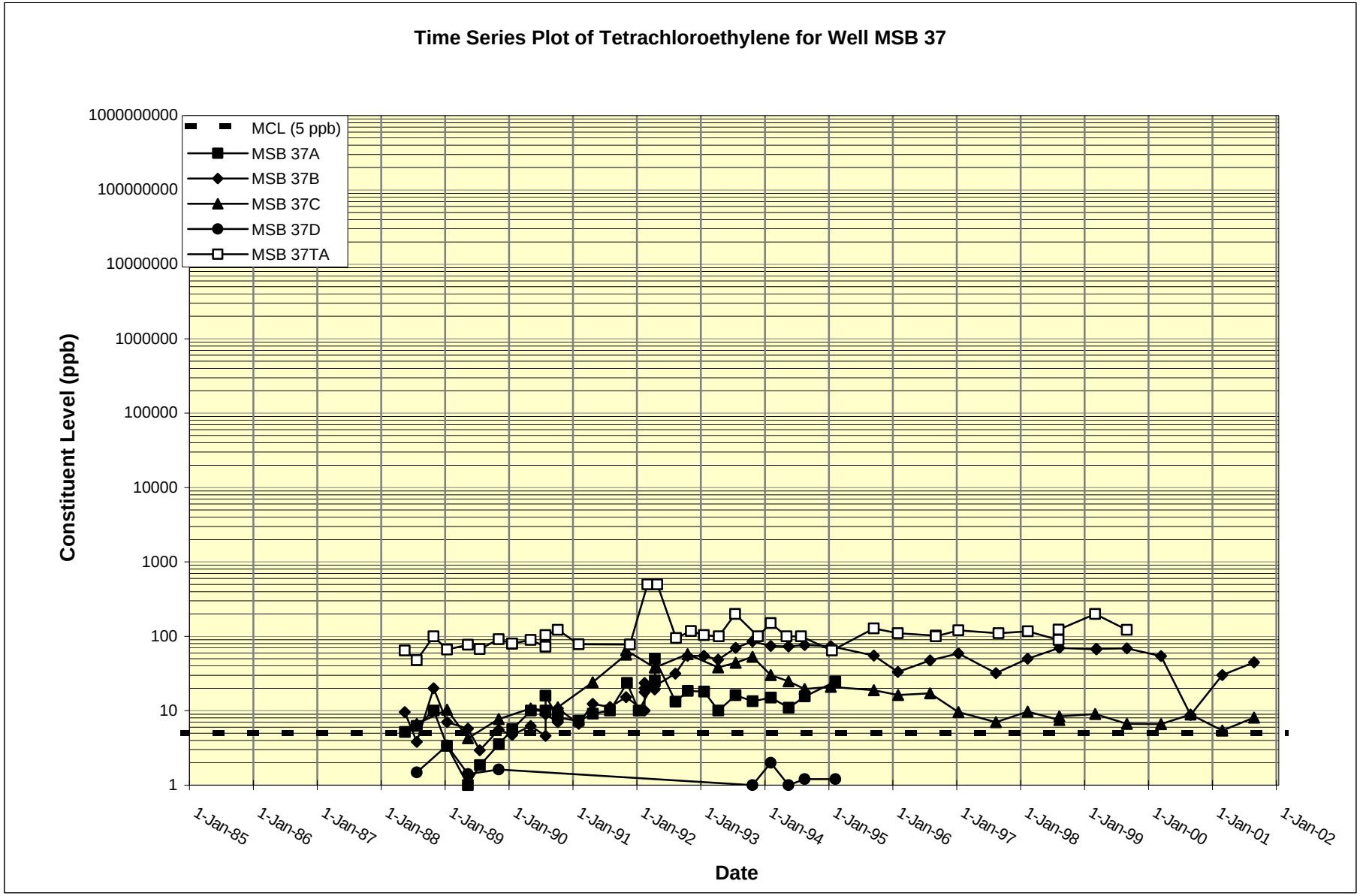
1-Jan-01
1-Jan-02
Date


Time Series Plot of Tetrachloroethylene for Well MSB 37
MCL (5 ppb)
MSB 37A
MSB 37B
MSB 37C
MSB 37D
MSB 37TA
Constituent Level (ppb)
1000000000
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
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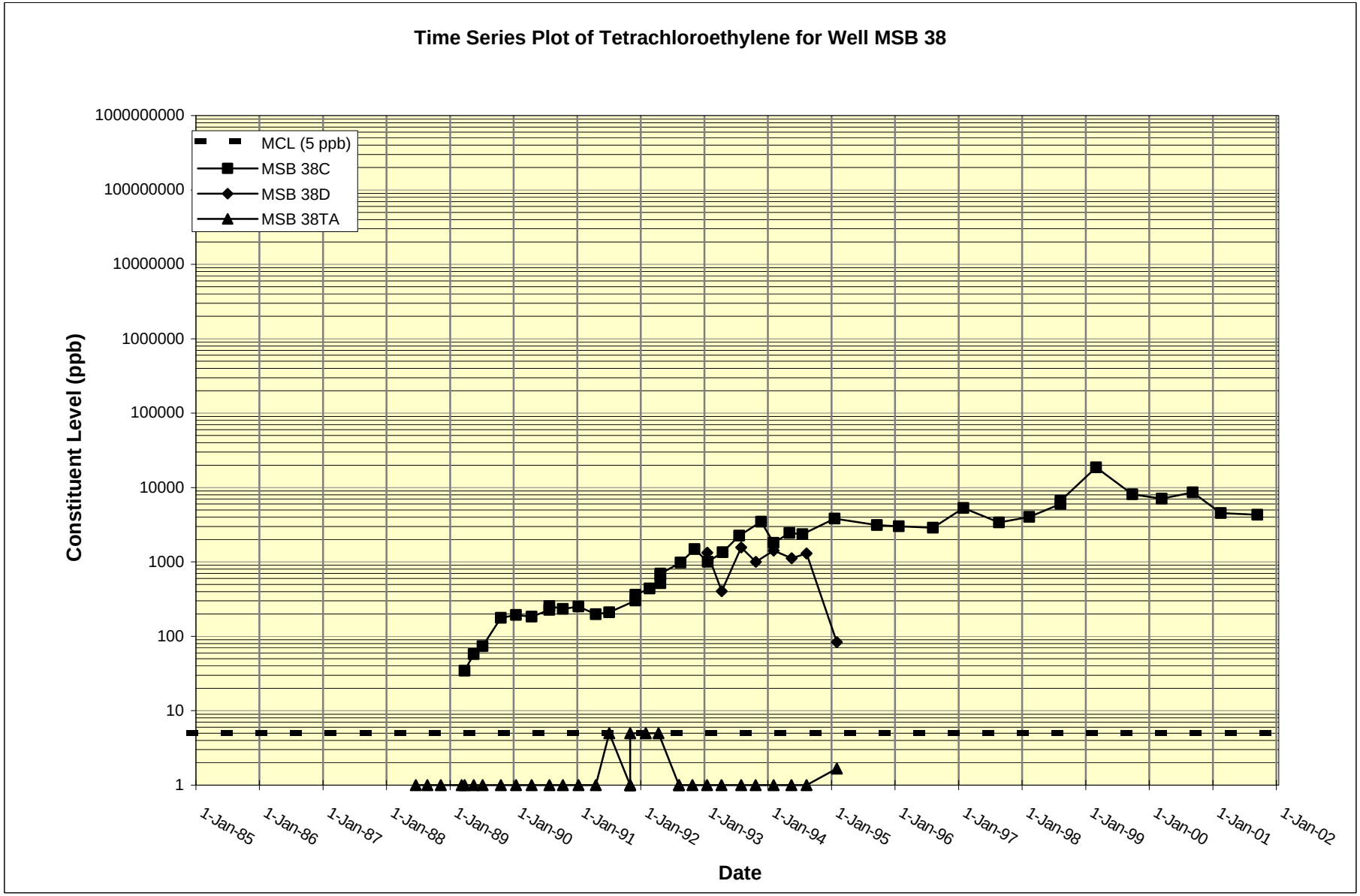
1-Jan-97
1-Jan-98
1-Jan-99
1-Jan-00
1-Jan-01
1-Jan-02
Date


Time Series Plot of Tetrachloroethylene for Well MSB 38
MCL (5 ppb)
MSB 38C
MSB 38D
MSB 38TA
Constituent Level (ppb)
1000000000
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
1-Jan-95
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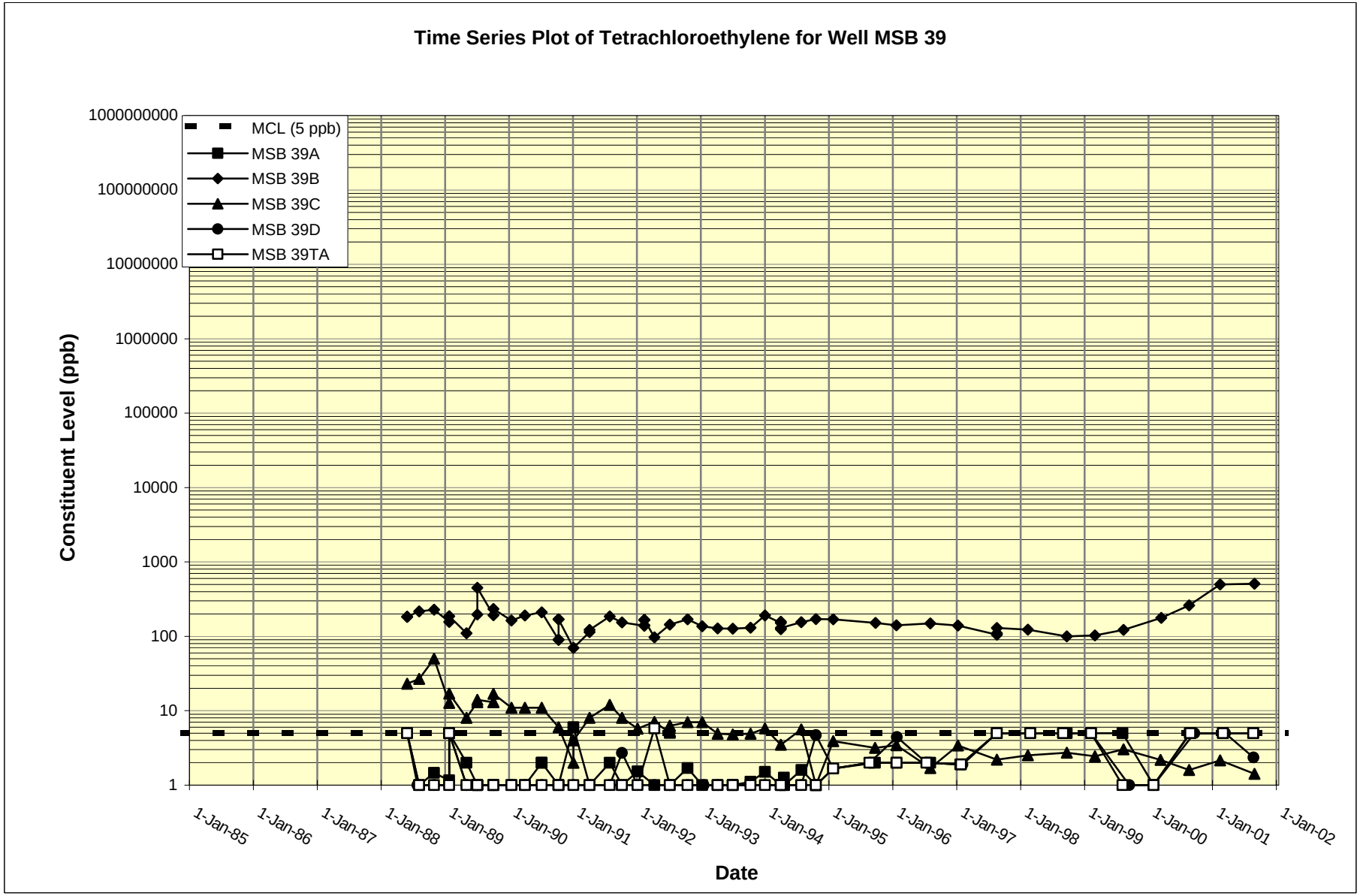
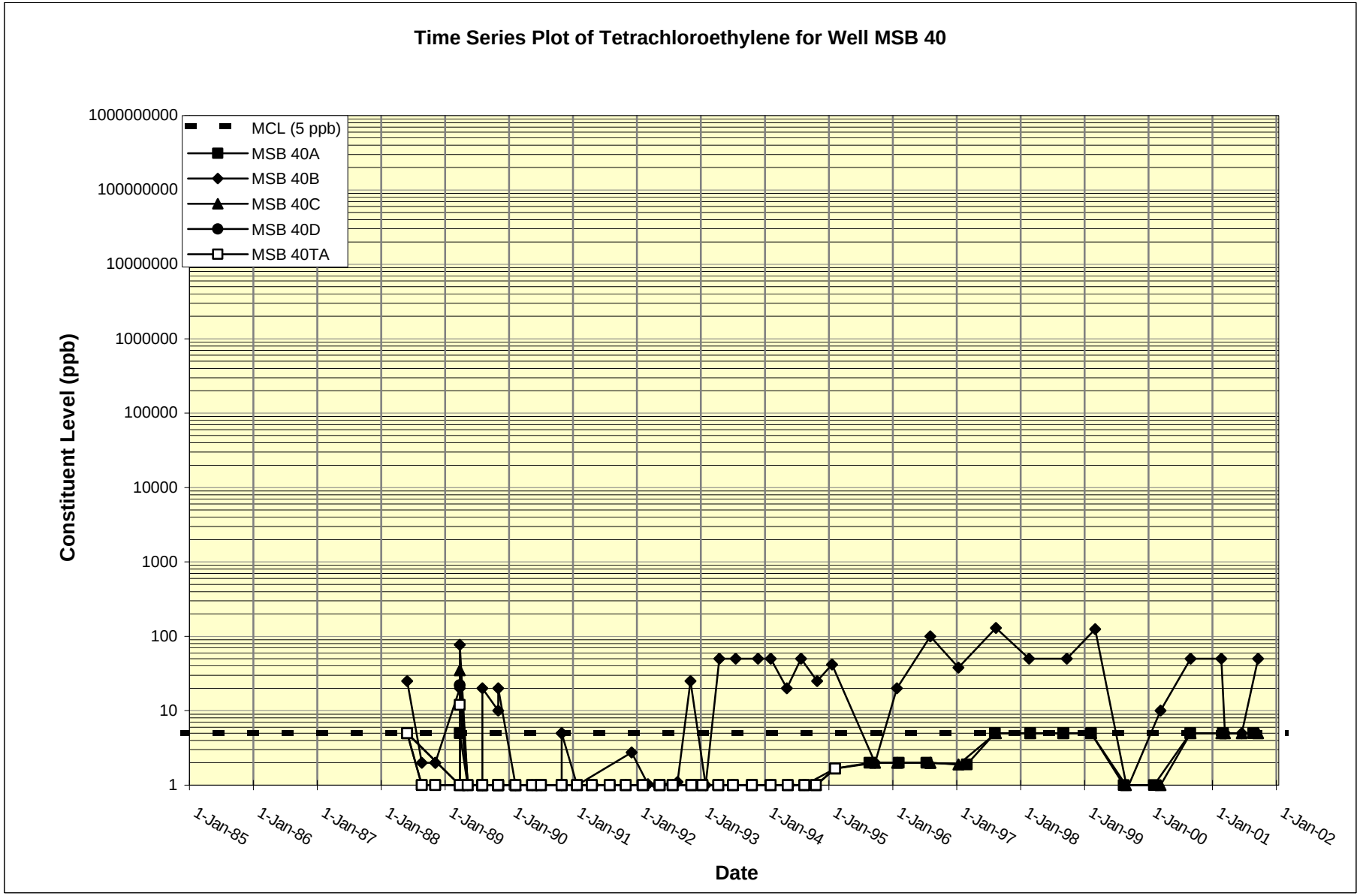
1-Jan-97
1-Jan-98
1-Jan-99
1-Jan-00
1-Jan-01
1-Jan-02
Date


Time Series Plot of Tetrachloroethylene for Well MSB 39
MCL (5 ppb)
MSB 39A
MSB 39B
MSB 39C
MSB 39D
MSB 39TA
Constituent Level (ppb)
1000000000
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
1-Jan-95
1-Jan-96
1-Jan-97
1-Jan-98
1-Jan-99
1-Jan-00
1-Jan-01
1-Jan-02
Date


Time Series Plot of Tetrachloroethylene for Well MSB 40
MCL (5 ppb)
MSB 40A
MSB 40B
MSB 40C
MSB 40D
MSB 40TA
Constituent Level (ppb)
1000000000
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
1-Jan-95
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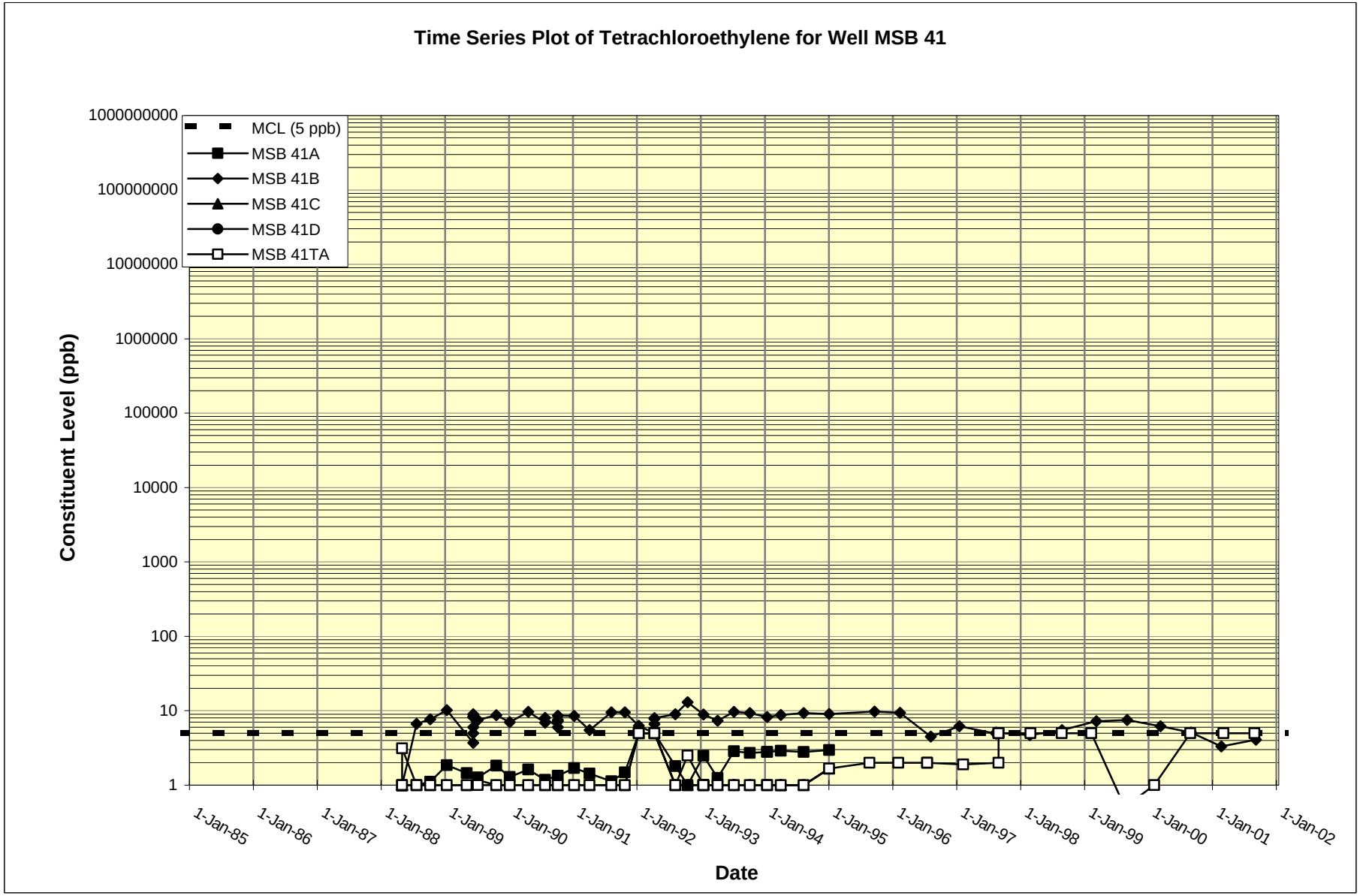
1-Jan-97
1-Jan-98
1-Jan-99
1-Jan-00
1-Jan-01
1-Jan-02
Date


Time Series Plot of Tetrachloroethylene for Well MSB 41
MCL (5 ppb)
MSB 41A
MSB 41B
MSB 41C
MSB 41D
MSB 41TA
Constituent Level (ppb)
1000000000
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
1-Jan-95
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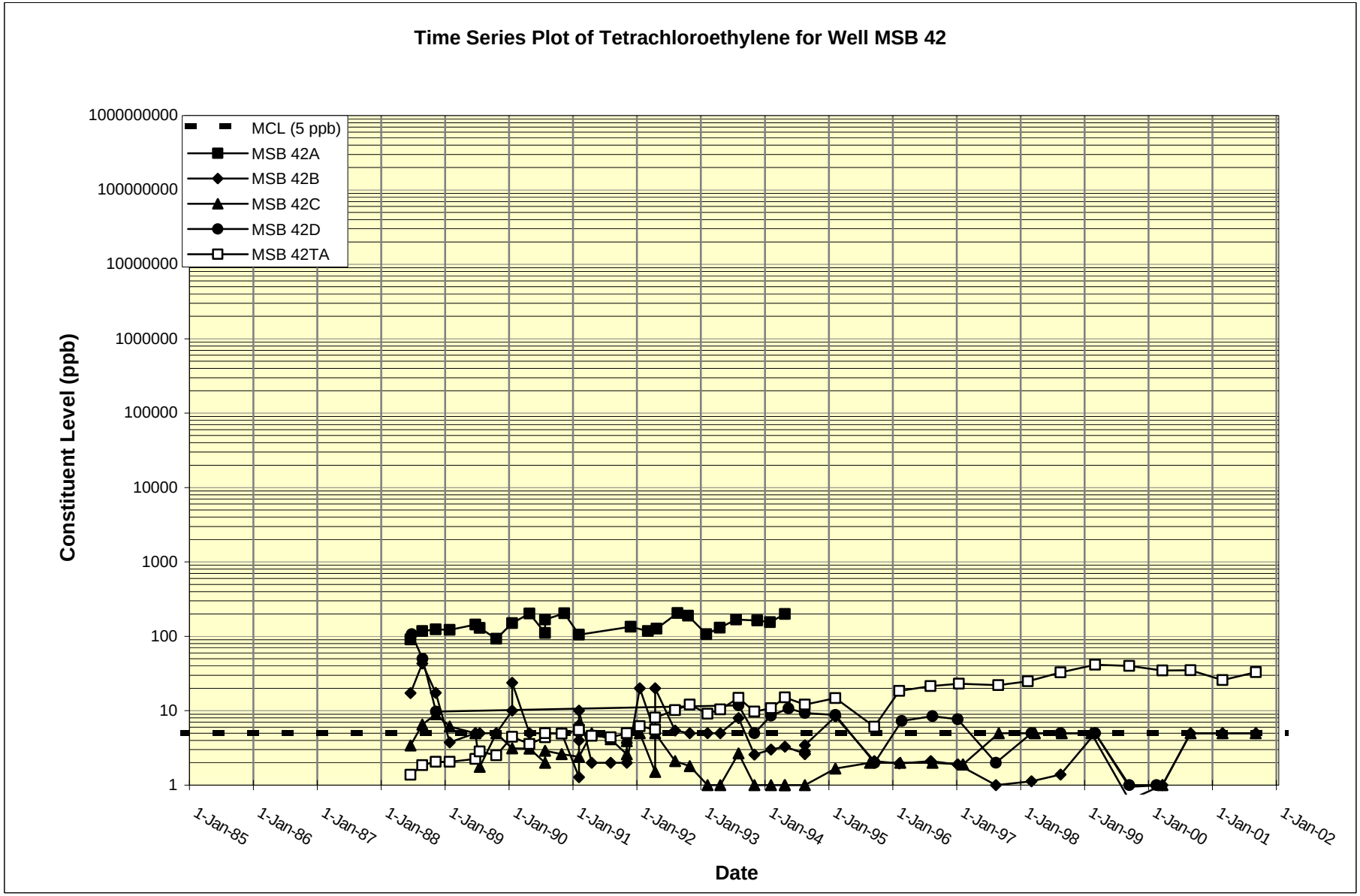
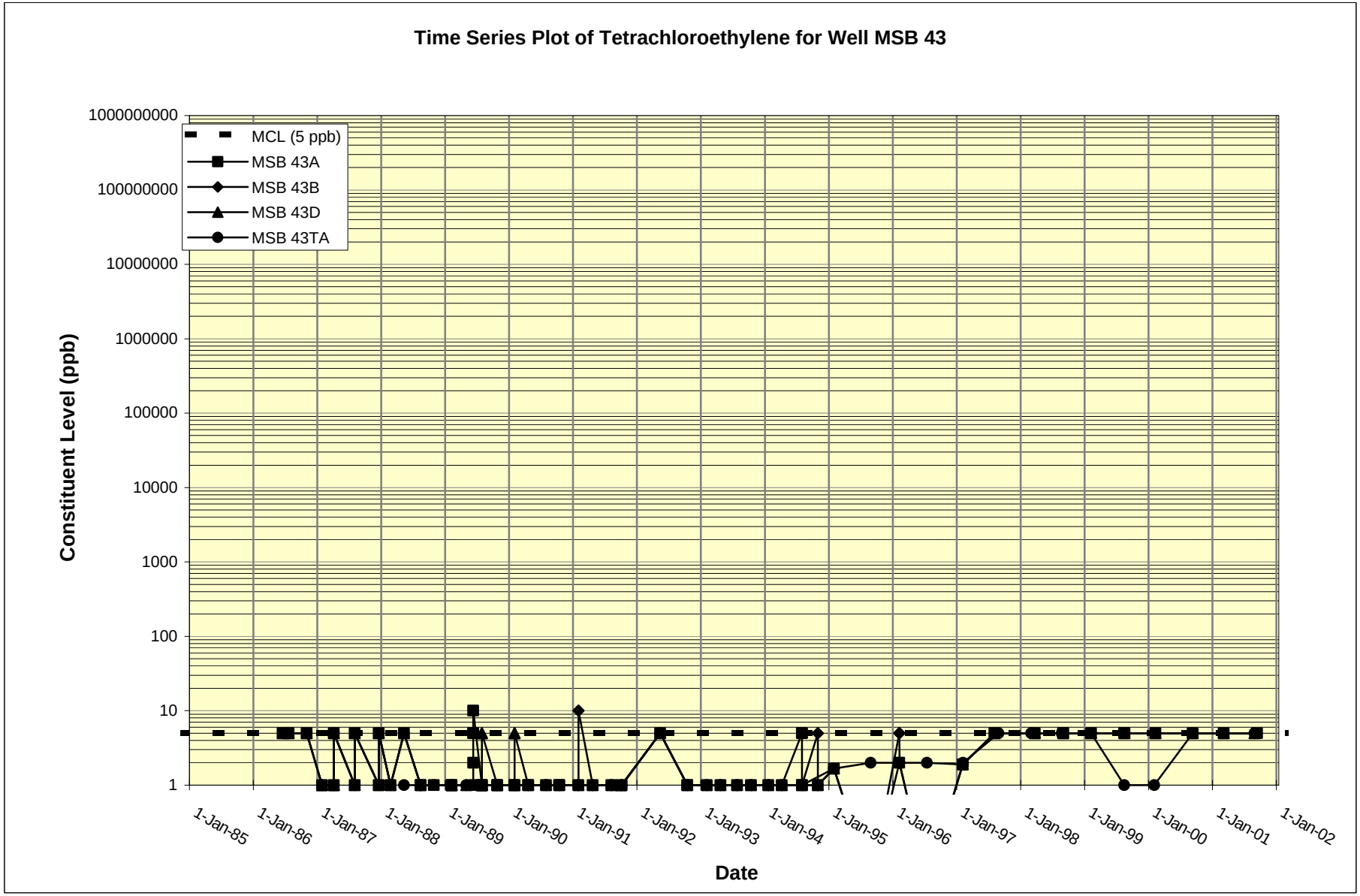
1-Jan-97
1-Jan-98
1-Jan-99
1-Jan-00
1-Jan-01
1-Jan-02
Date


Time Series Plot of Tetrachloroethylene for Well MSB 42
MCL (5 ppb)
MSB 42A
MSB 42B
MSB 42C
MSB 42D
MSB 42TA
Constituent Level (ppb)
1000000000
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
1-Jan-95
1-Jan-96
1-Jan-97
1-Jan-98
1-Jan-99
1-Jan-00
1-Jan-01
1-Jan-02
Date


Time Series Plot of Tetrachloroethylene for Well MSB 43
MCL (5 ppb)
MSB 43A
MSB 43B
MSB 43D
MSB 43TA
Constituent Level (ppb)
1000000000
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
1-Jan-95
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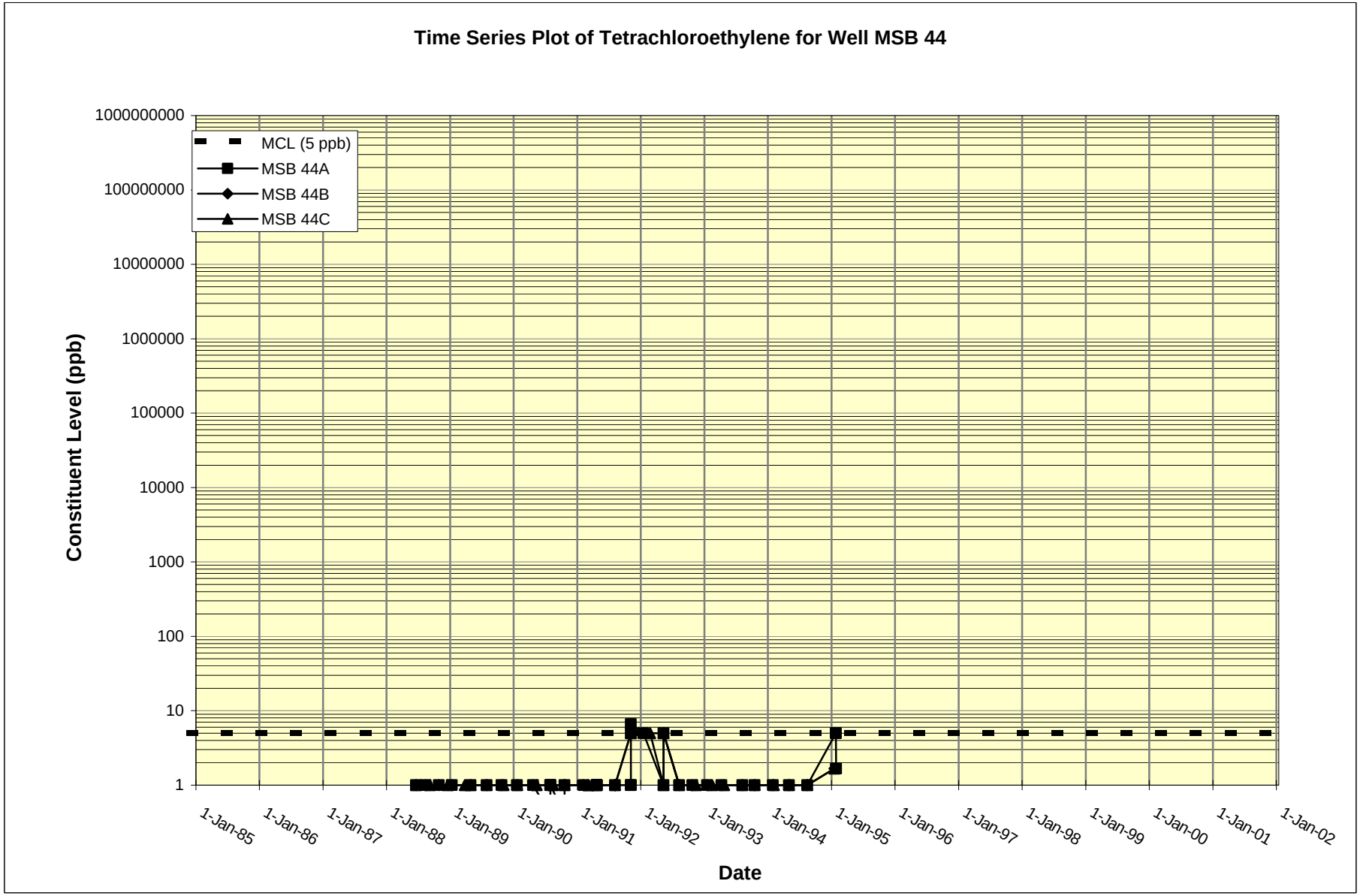
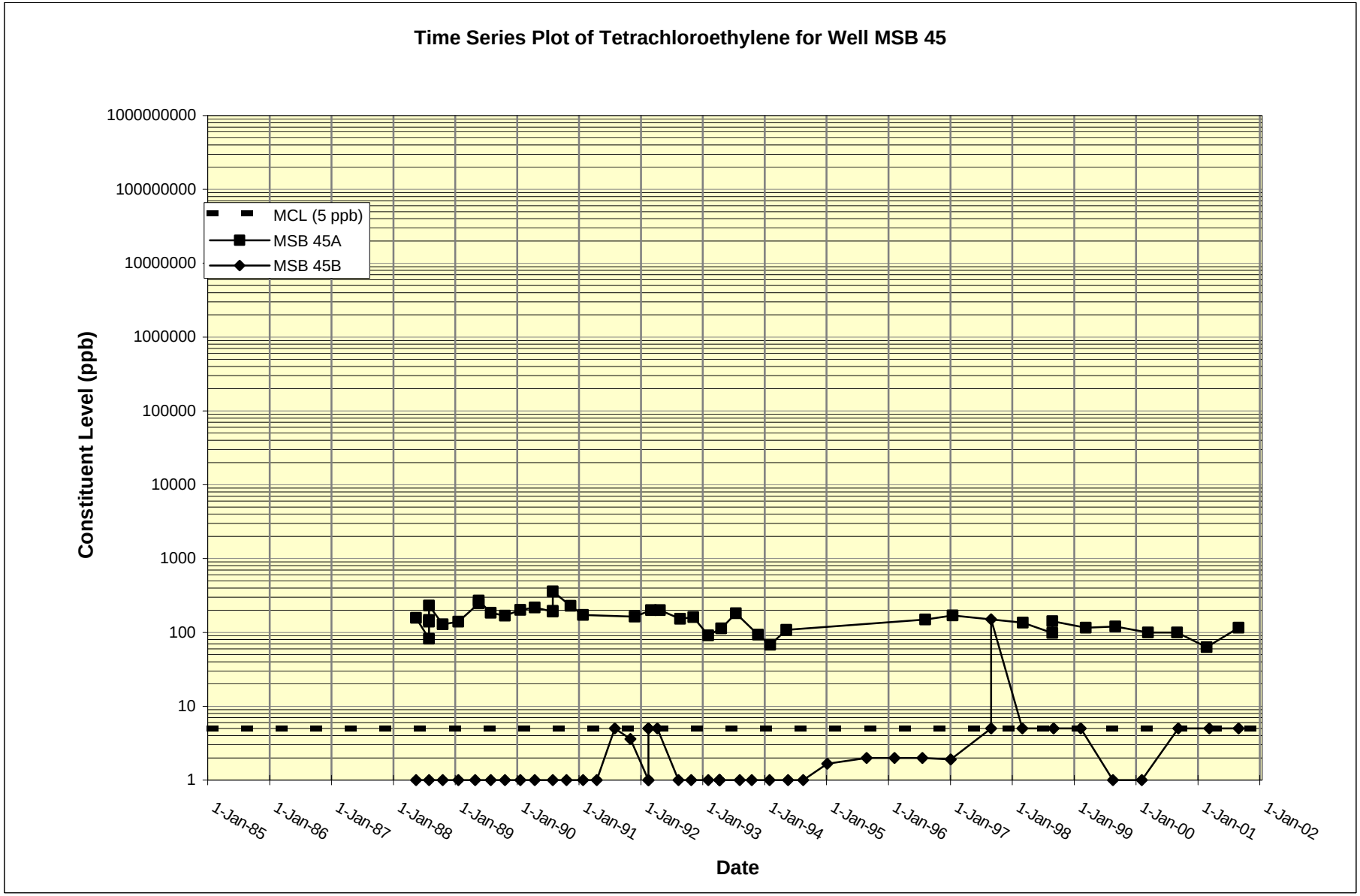
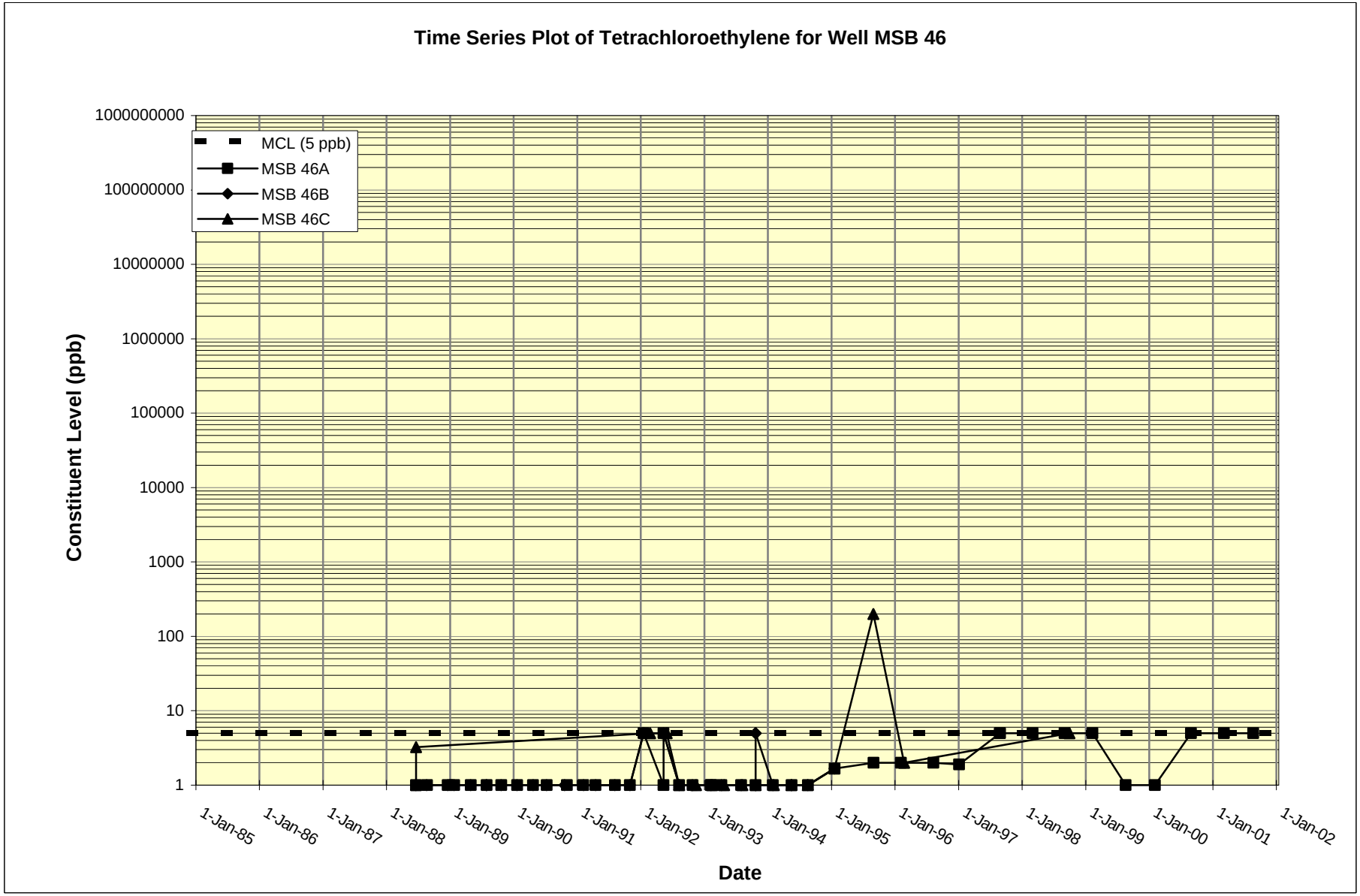
1-Jan-97
1-Jan-98
1-Jan-99
1-Jan-00
1-Jan-01
1-Jan-02
Date


Time Series Plot of Tetrachloroethylene for Well MSB 44
MCL (5 ppb)
MSB 44A
MSB 44B
MSB 44C
Constituent Level (ppb)
1000000000
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
1-Jan-95
1-Jan-96
1-Jan-97
1-Jan-98
1-Jan-99
1-Jan-00
1-Jan-01
1-Jan-02
Date


Time Series Plot of Tetrachloroethylene for Well MSB 45
Constituent Level (ppb)
1000000000
100000000
10000000
1000000
100000
10000
1000
100
10
1
MCL (5 ppb)
MSB 45A
MSB 45B
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
1-Jan-95
1-Jan-96
1-Jan-97
1-Jan-98
1-Jan-99
1-Jan-00
1-Jan-01
1-Jan-02
Date


Time Series Plot of Tetrachloroethylene for Well MSB 46
MCL (5 ppb)
MSB 46A
MSB 46B
MSB 46C
Constituent Level (ppb)
1000000000
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
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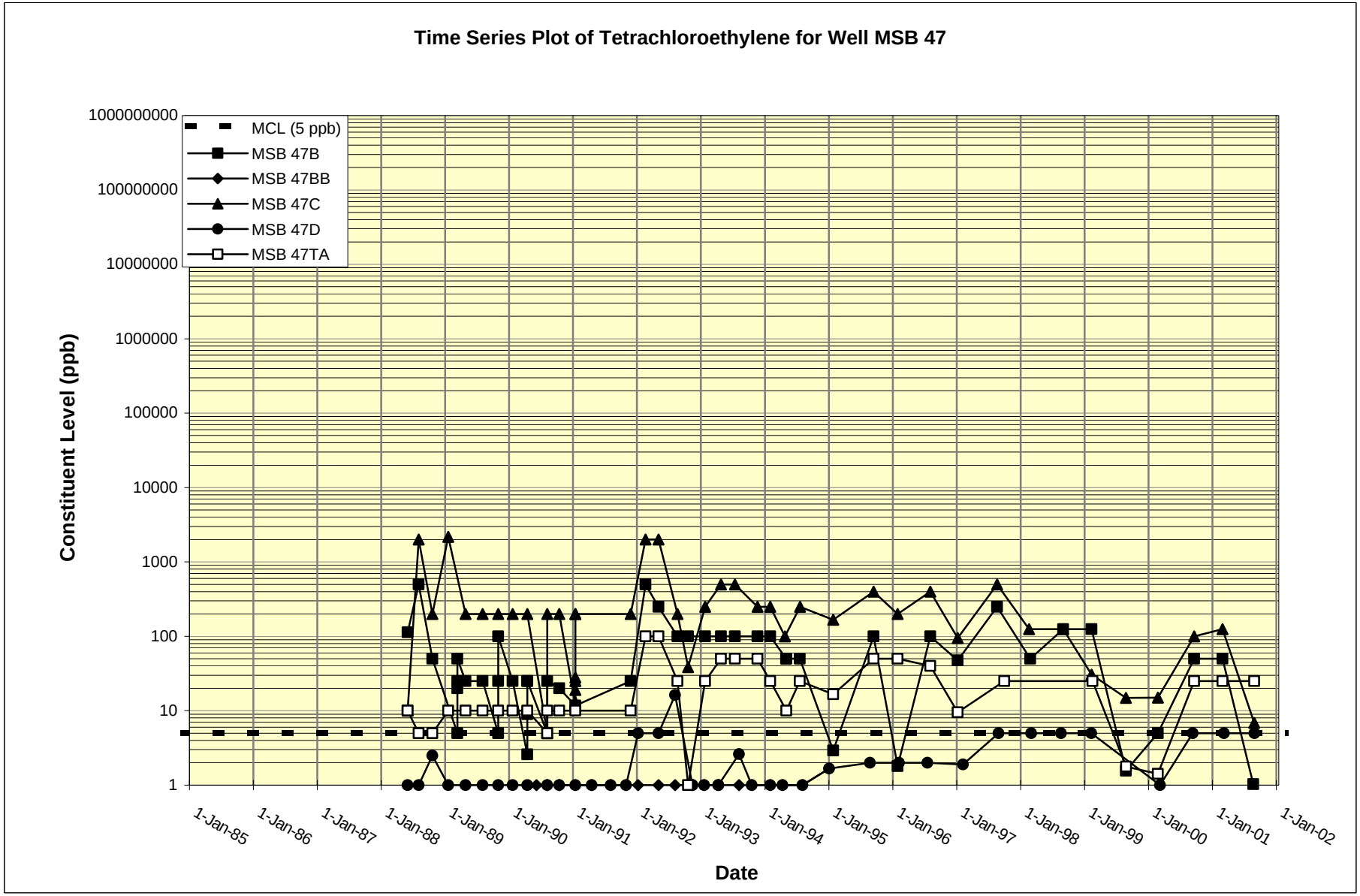
1-Jan-97
1-Jan-98
1-Jan-99
1-Jan-00
1-Jan-01
1-Jan-02
Date


Time Series Plot of Tetrachloroethylene for Well MSB 47
MCL (5 ppb)
MSB 47B
MSB 47BB
MSB 47C
MSB 47D
MSB 47TA
Constituent Level (ppb)
1000000000
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
1-Jan-95
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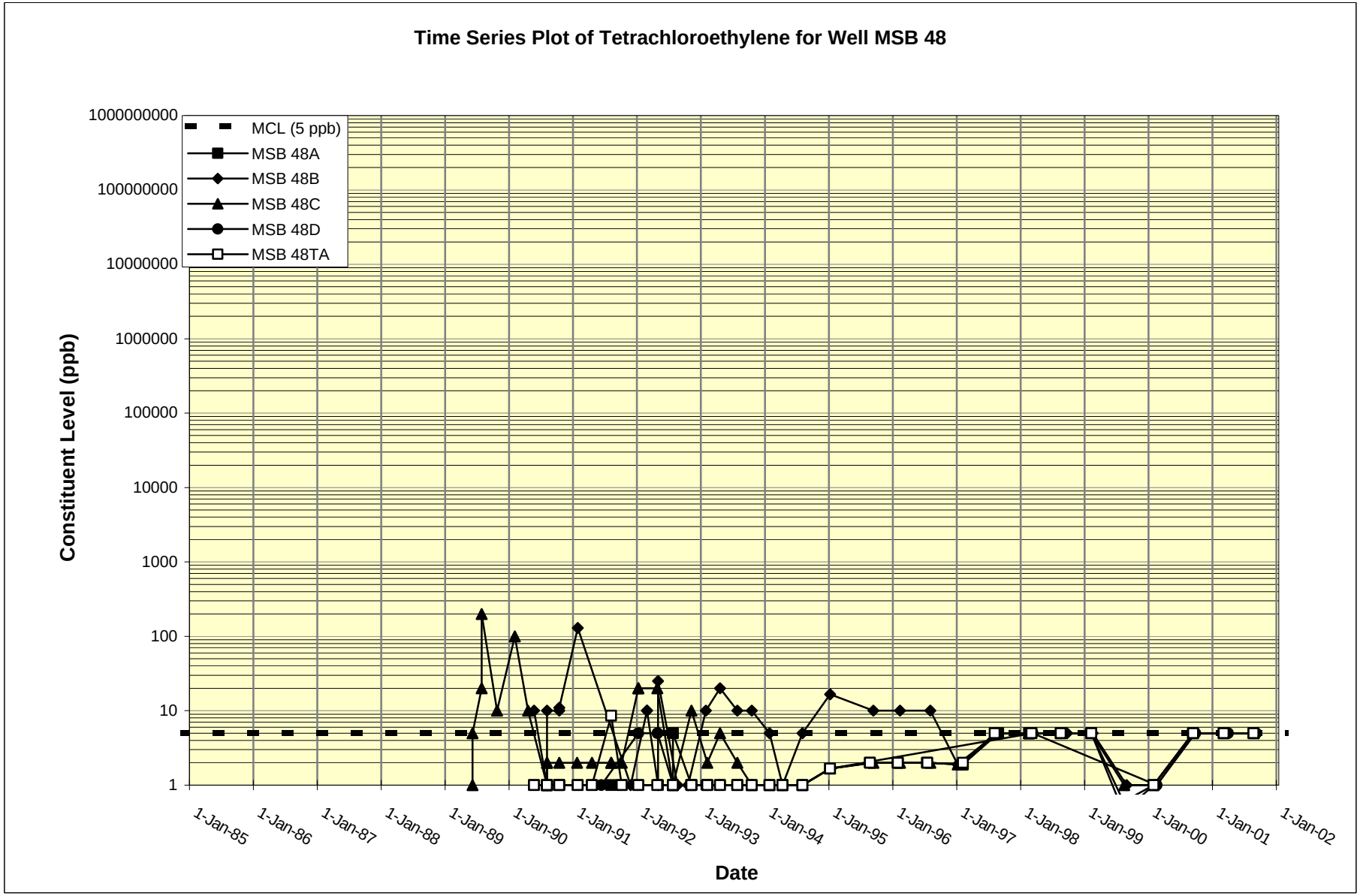
1-Jan-98
1-Jan-99
1-Jan-00
1-Jan-01
1-Jan-02
Date


Time Series Plot of Tetrachloroethylene for Well MSB 48
MCL (5 ppb)
MSB 48A
MSB 48B
MSB 48C
MSB 48D
MSB 48TA
Constituent Level (ppb)
1000000000
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
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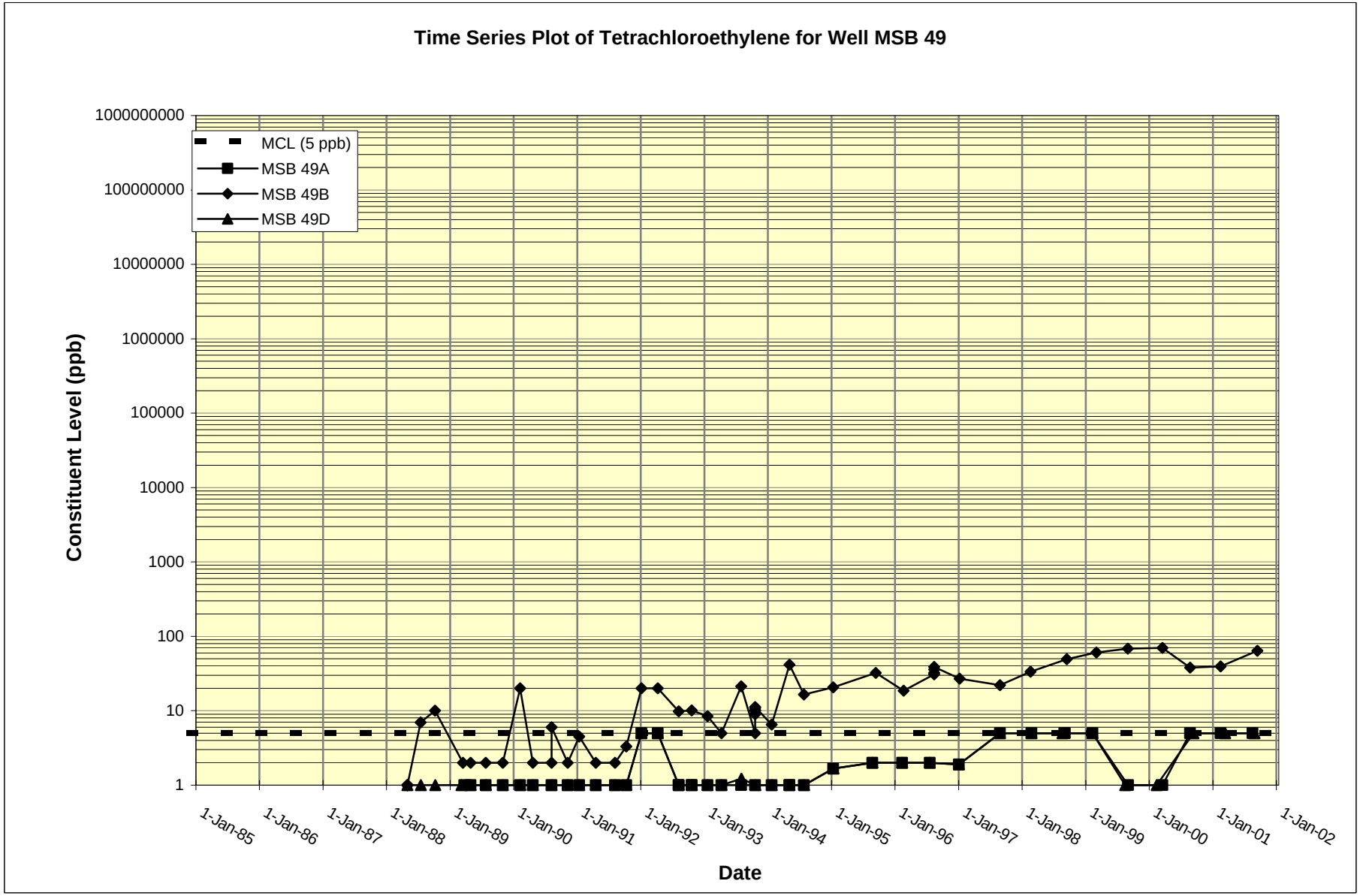
1-Jan-99
1-Jan-00
1-Jan-01
1-Jan-02
Date


Time Series Plot of Tetrachloroethylene for Well MSB 49
MCL (5 ppb)
MSB 49A
MSB 49B
MSB 49D
Constituent Level (ppb)
1000000000
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
1-Jan-95
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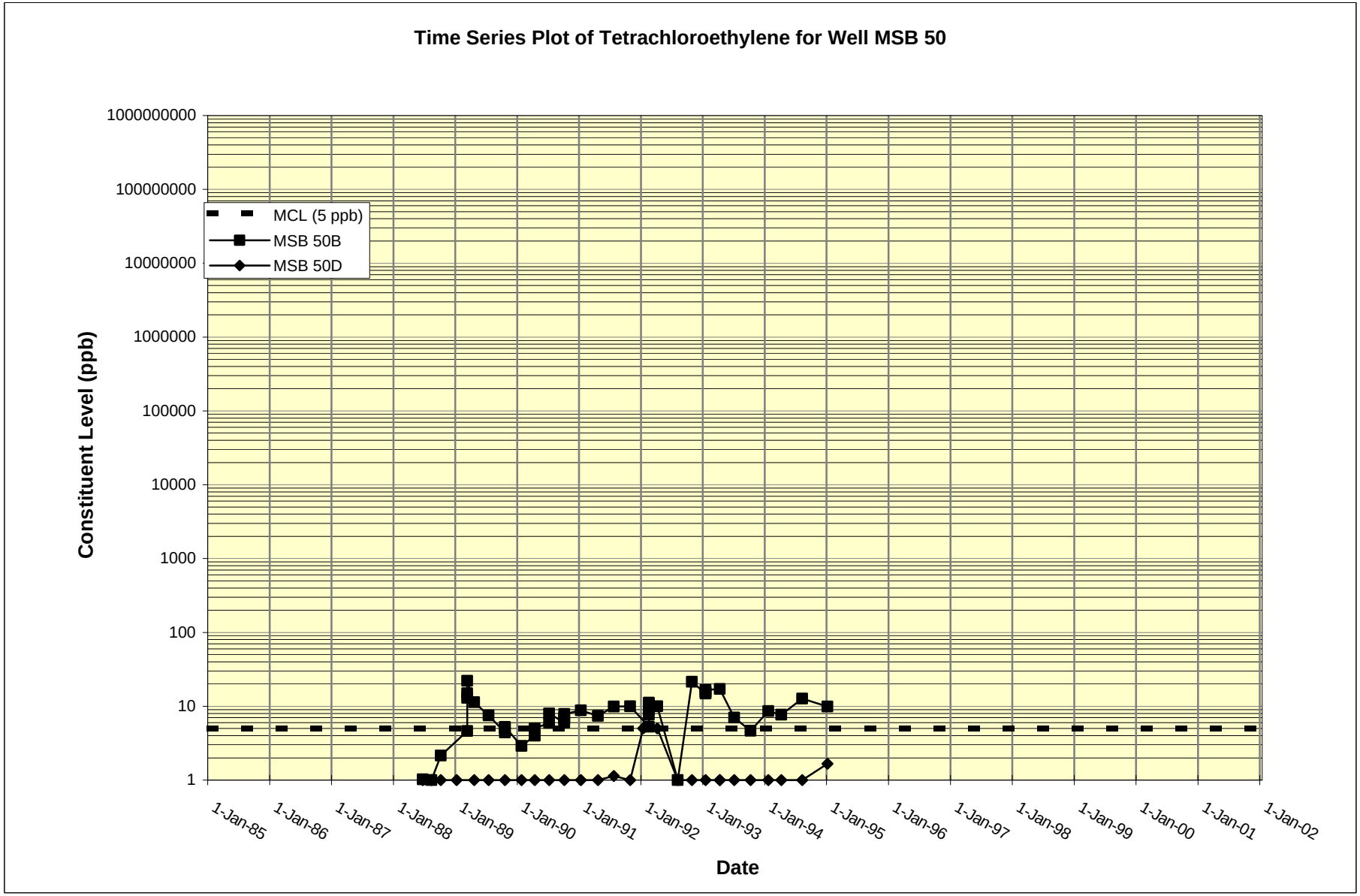
1-Jan-97
1-Jan-98
1-Jan-99
1-Jan-00
1-Jan-01
1-Jan-02
Date


Time Series Plot of Tetrachloroethylene for Well MSB 50
Constituent Level (ppb)
1000000000
100000000
10000000
1000000
100000
10000
1000
100
10
1
MCL (5 ppb)
MSB 50B
MSB 50D
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
1-Jan-95
1-Jan-96
1-Jan-97
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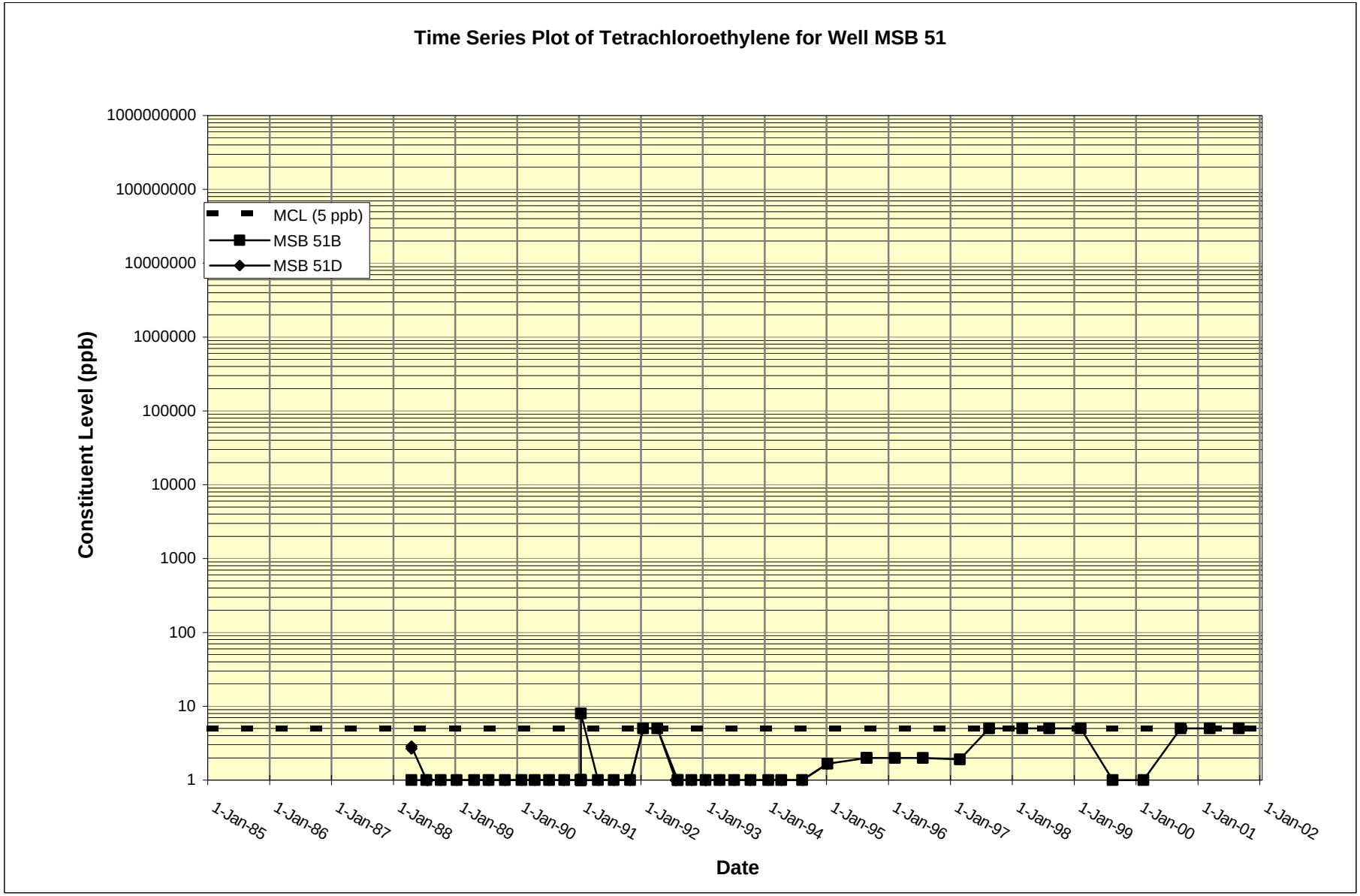
1-Jan-99
1-Jan-00
1-Jan-01
1-Jan-02
Date


Time Series Plot of Tetrachloroethylene for Well MSB 51
MCL (5 ppb)
MSB 51B
MSB 51D
Constituent Level (ppb)
1000000000
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
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1-Jan-97
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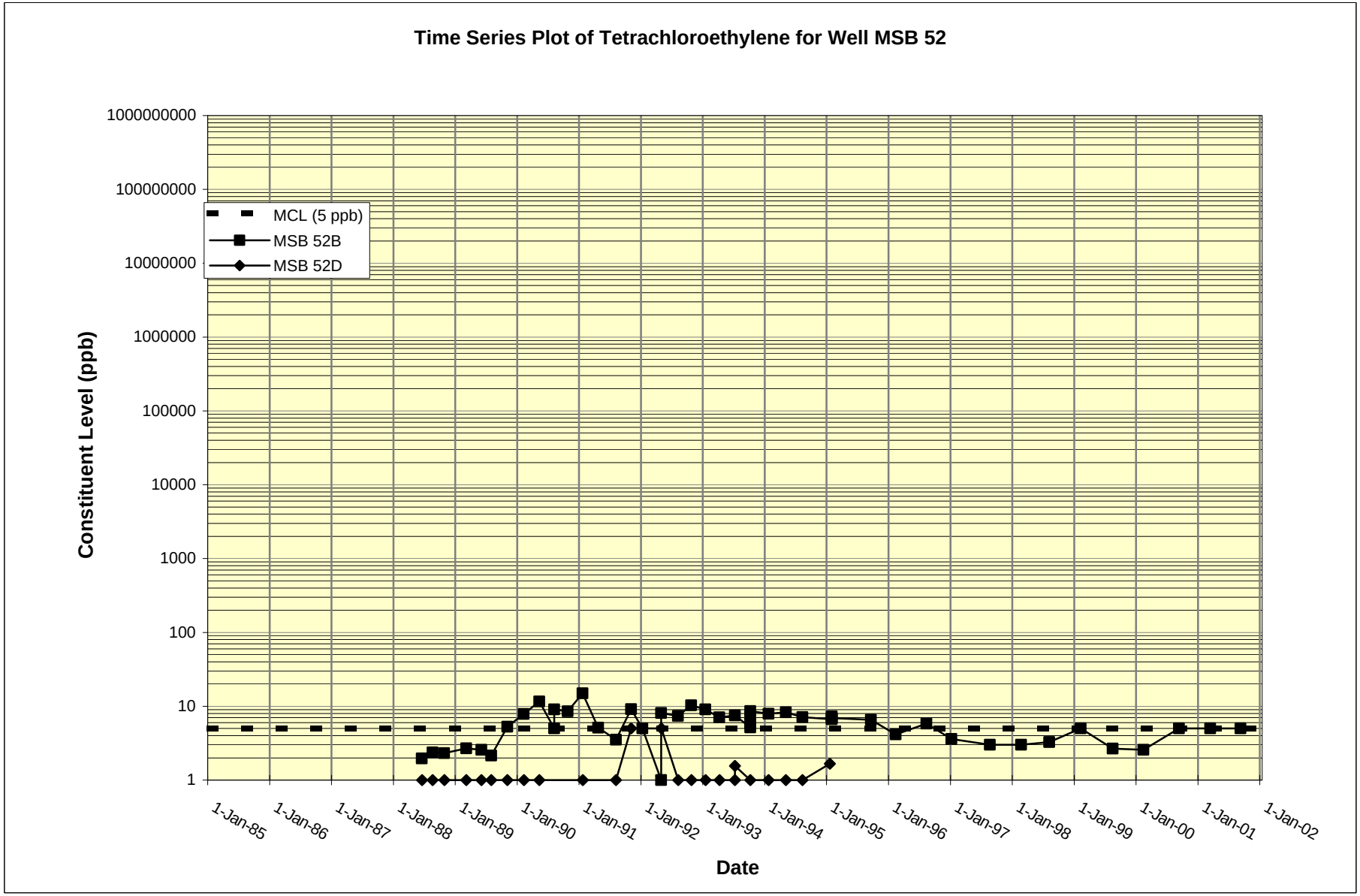
1-Jan-99
1-Jan-00
1-Jan-01
1-Jan-02
Date


Time Series Plot of Tetrachloroethylene for Well MSB 52
MCL (5 ppb)
MSB 52B
MSB 52D
Constituent Level (ppb)
1000000000
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
1-Jan-95
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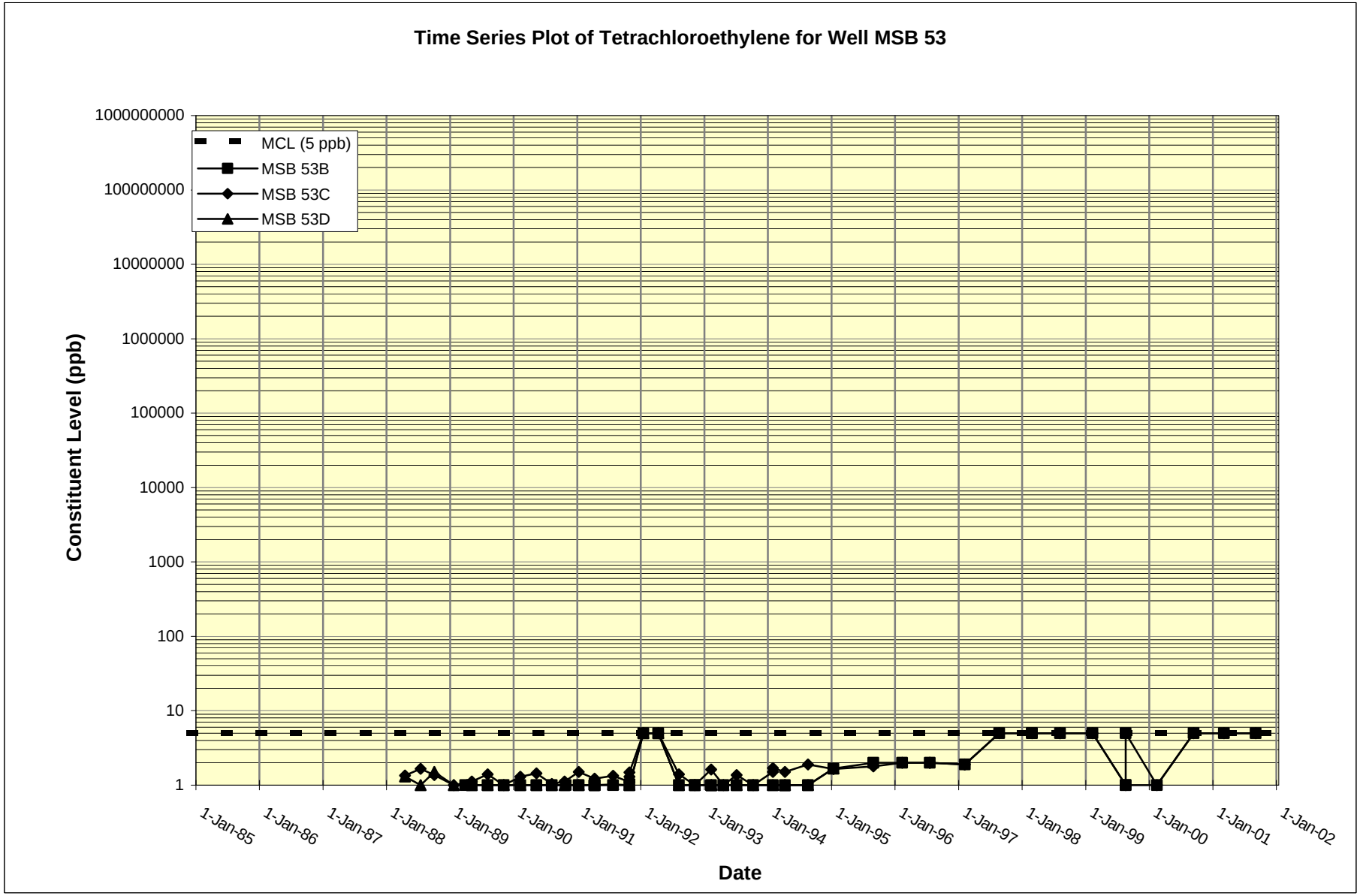
1-Jan-97
1-Jan-98
1-Jan-99
1-Jan-00
1-Jan-01
1-Jan-02
Date


Time Series Plot of Tetrachloroethylene for Well MSB 53
MCL (5 ppb)
MSB 53B
MSB 53C
MSB 53D
Constituent Level (ppb)
1000000000
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
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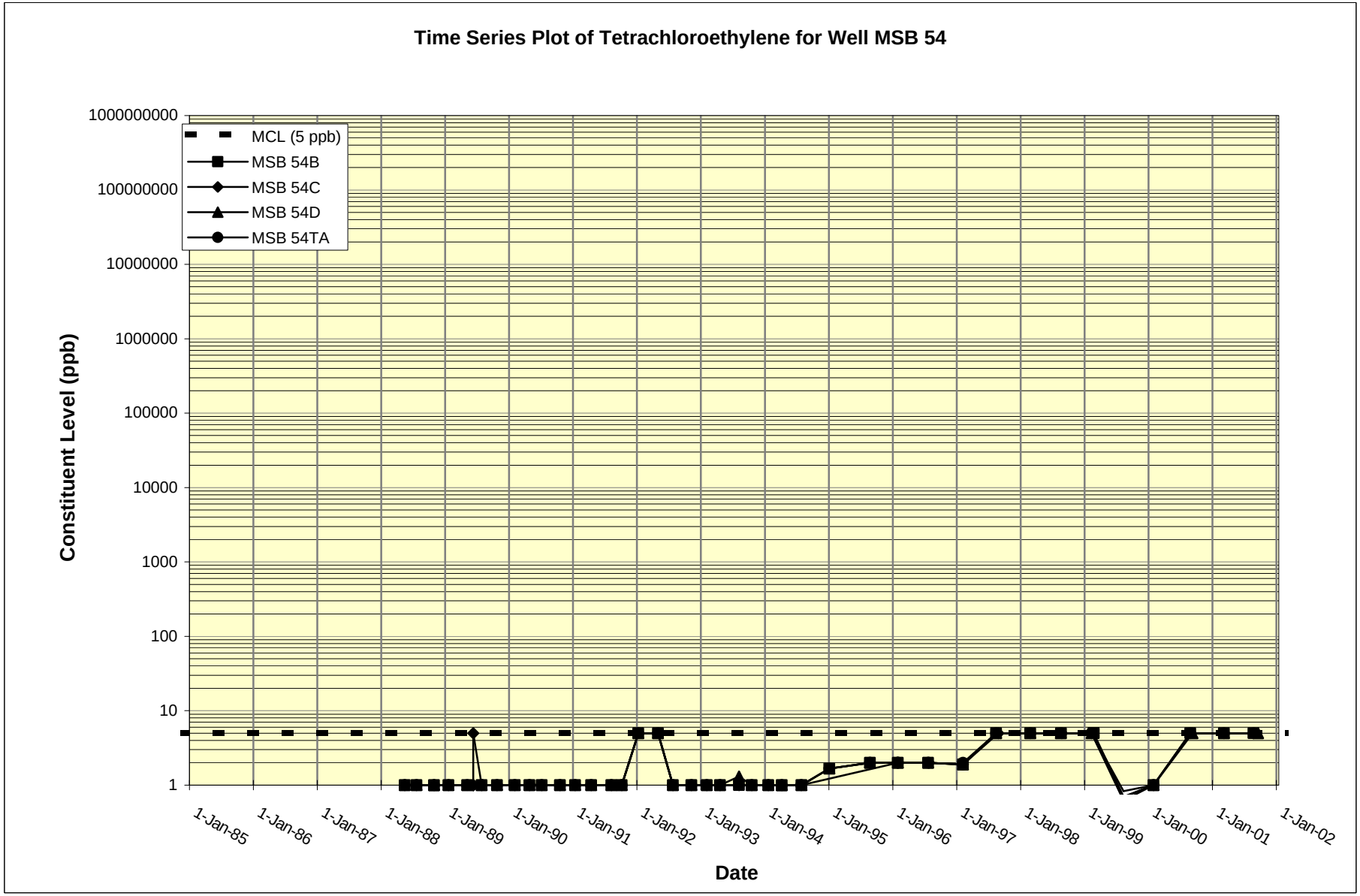
1-Jan-99
1-Jan-00
1-Jan-01
1-Jan-02
Date


Time Series Plot of Tetrachloroethylene for Well MSB 54
MCL (5 ppb)
MSB 54B
MSB 54C
MSB 54D
MSB 54TA
Constituent Level (ppb)
1000000000
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
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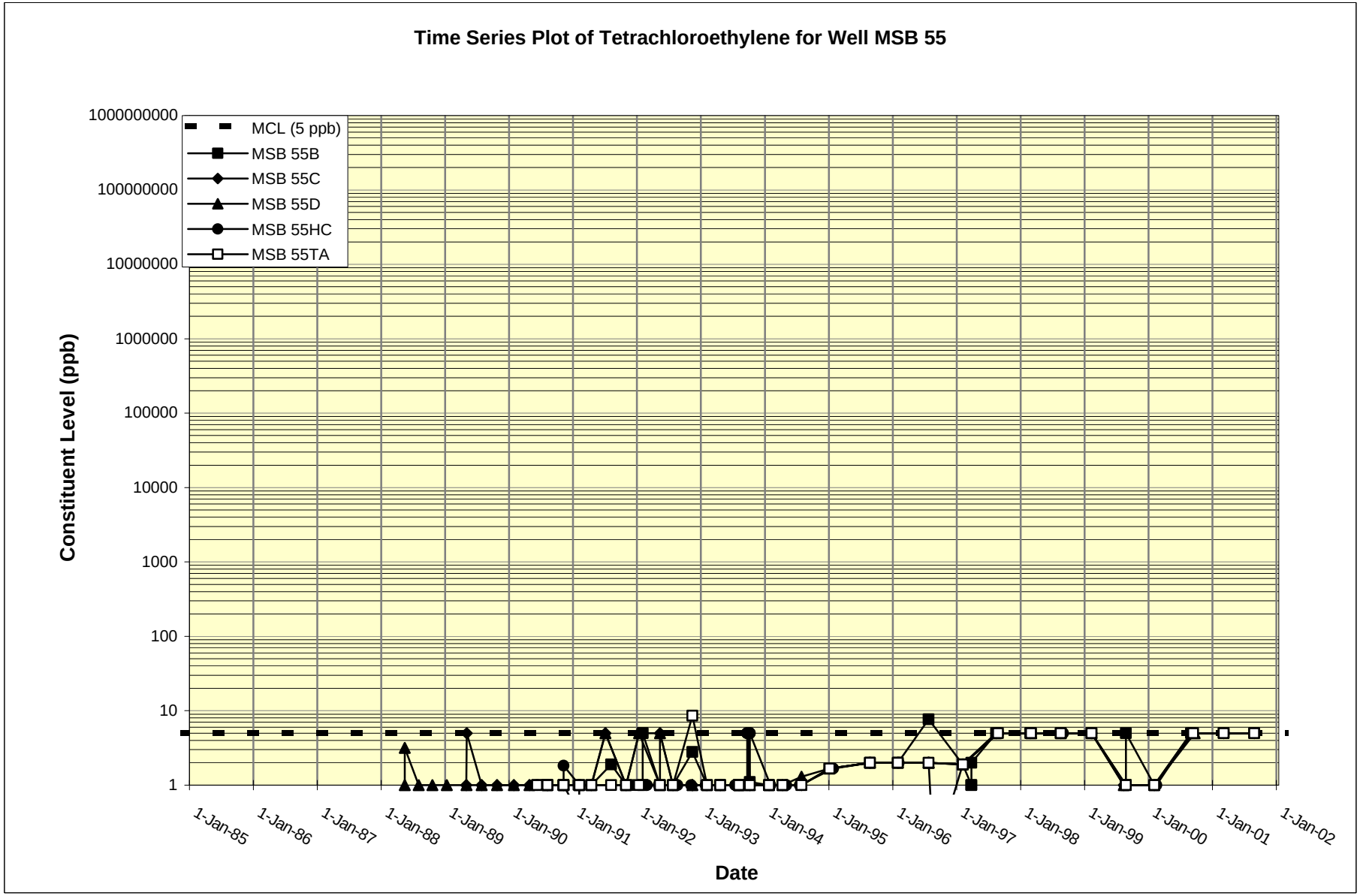
1-Jan-00
1-Jan-01
1-Jan-02
Date


Time Series Plot of Tetrachloroethylene for Well MSB 55
MCL (5 ppb)
MSB 55B
MSB 55C
MSB 55D
MSB 55HC
MSB 55TA
Constituent Level (ppb)
1000000000
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
1-Jan-95
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1-Jan-97
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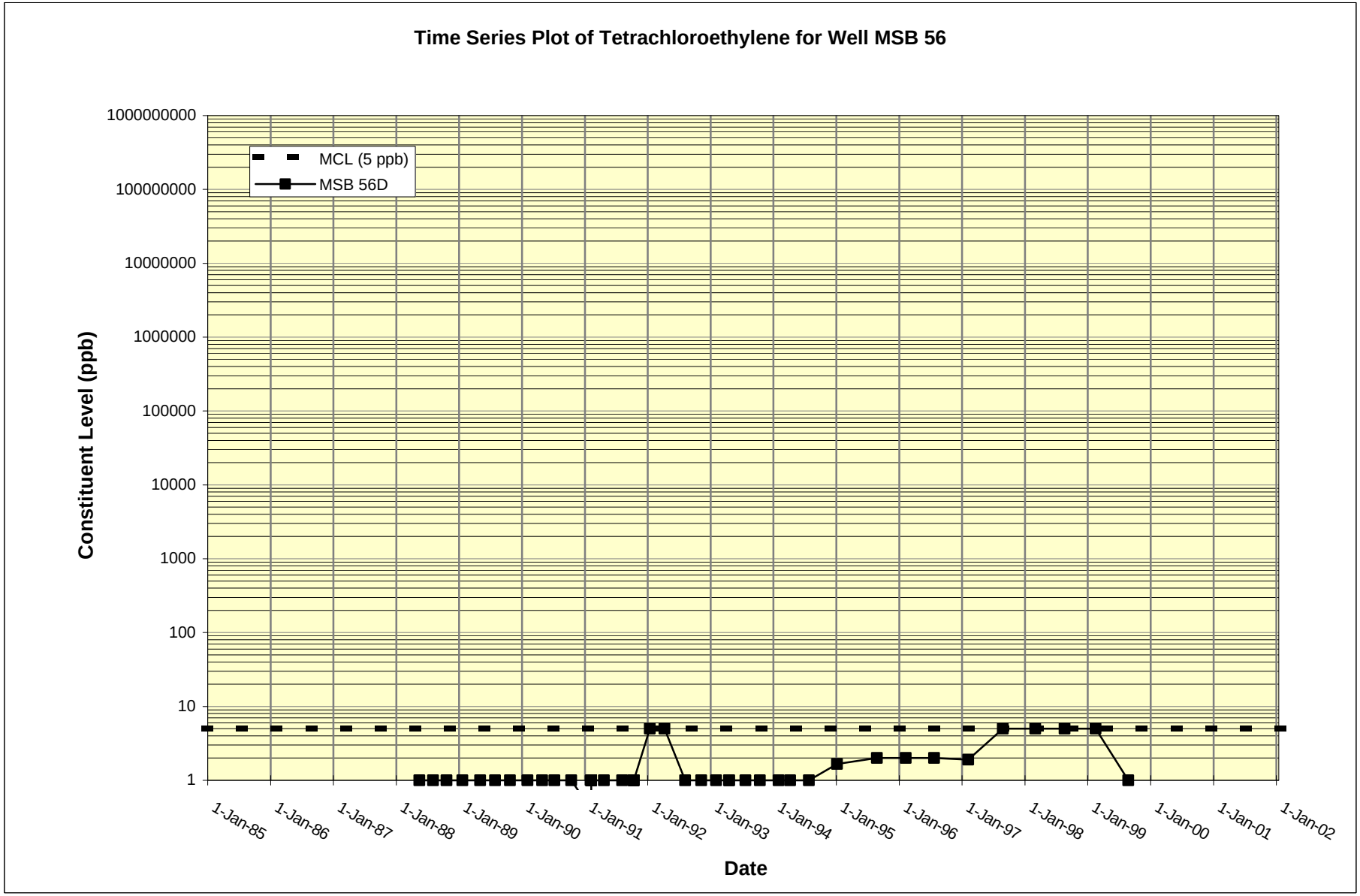
1-Jan-00
1-Jan-01
1-Jan-02
Date


Time Series Plot of Tetrachloroethylene for Well MSB 56
MCL (5 ppb)
MSB 56D
Constituent Level (ppb)
1000000000
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
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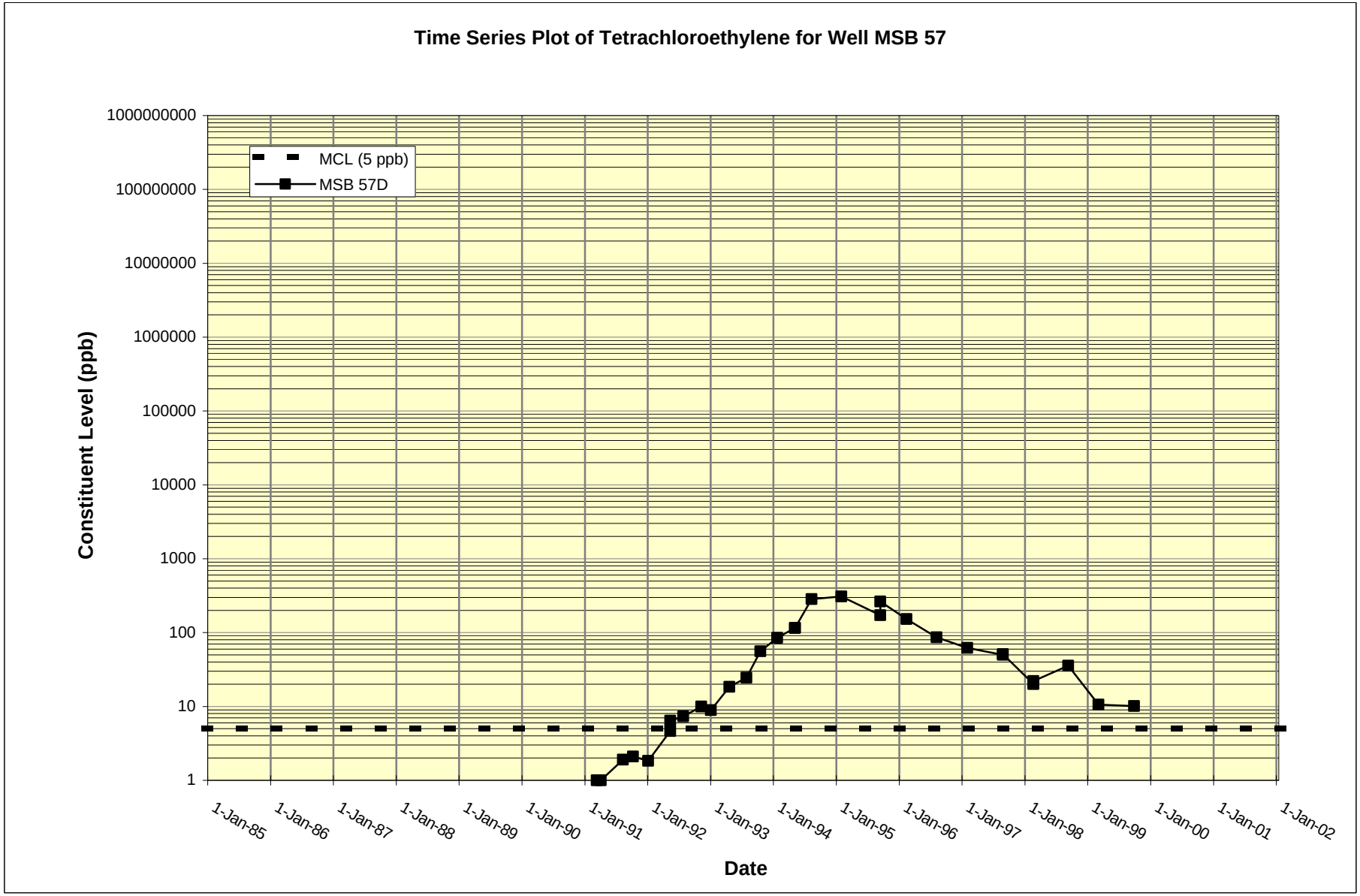
1-Jan-01
1-Jan-02
Date


Time Series Plot of Tetrachloroethylene for Well MSB 57
MCL (5 ppb)
MSB 57D
Constituent Level (ppb)
1000000000
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
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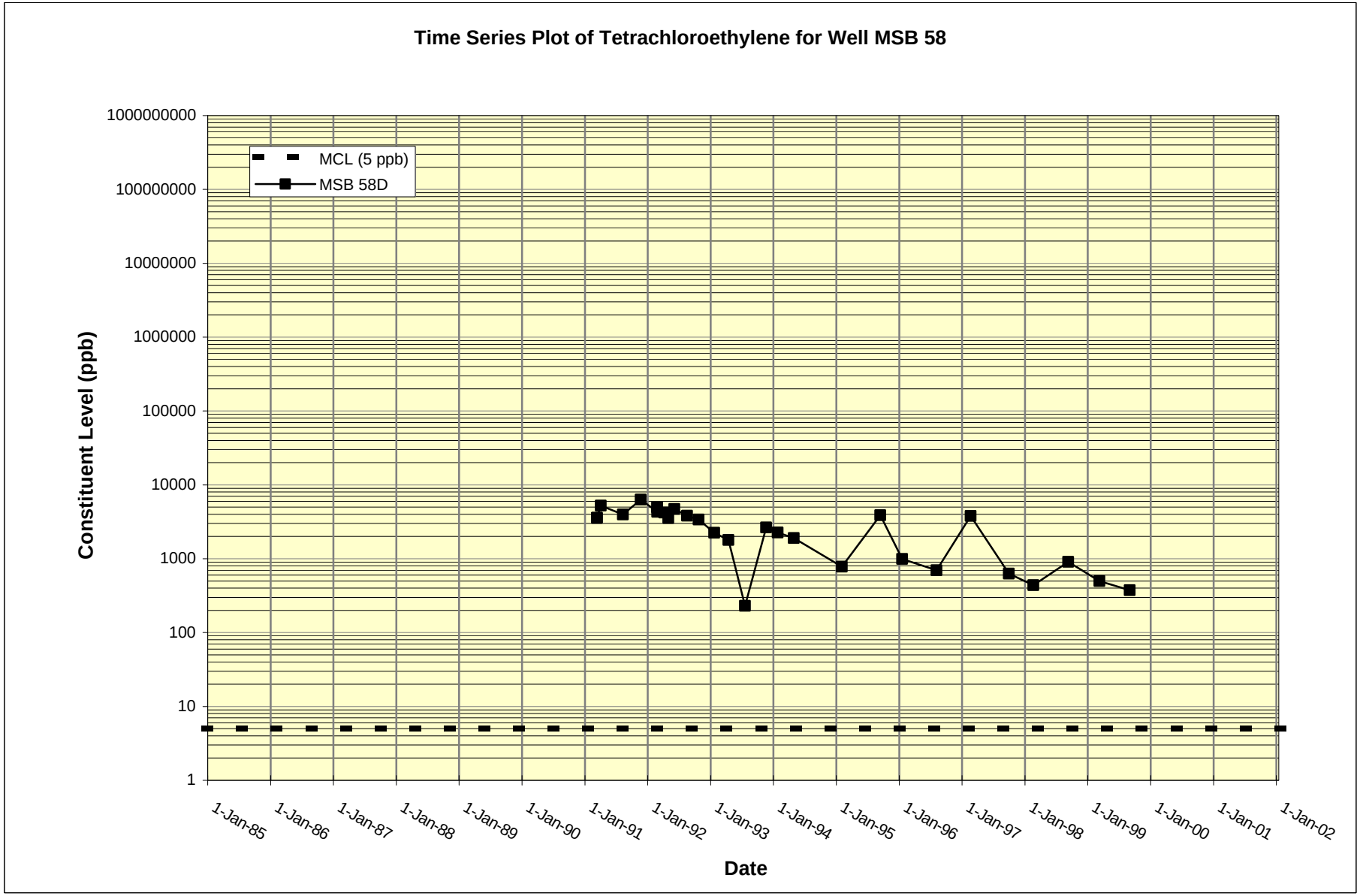
1-Jan-00
1-Jan-01
1-Jan-02
Date


Time Series Plot of Tetrachloroethylene for Well MSB 58
MCL (5 ppb)
MSB 58D
Constituent Level (ppb)
1000000000
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
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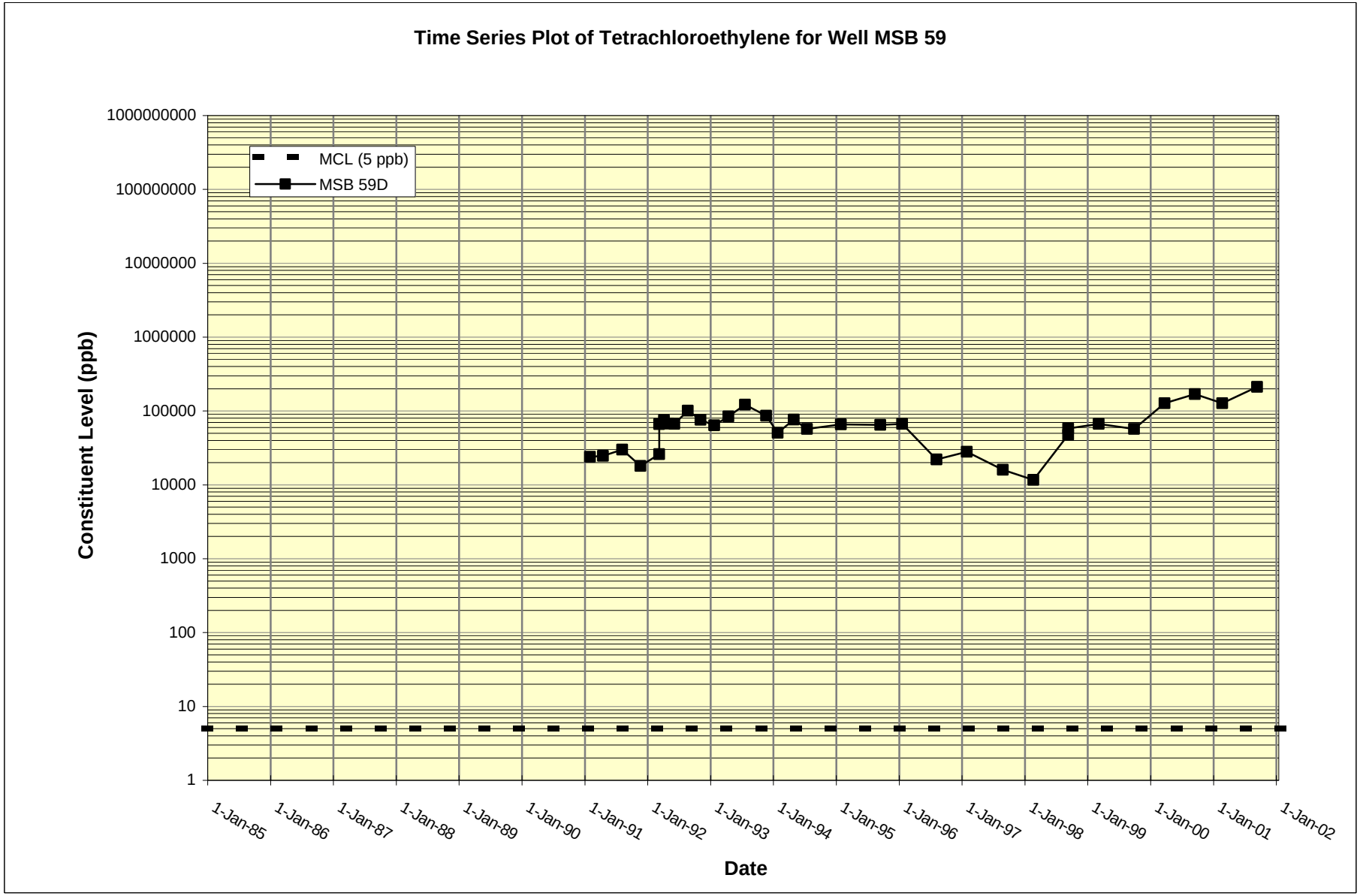
1-Jan-94
1-Jan-95
1-Jan-96
1-Jan-97
1-Jan-98
1-Jan-99
1-Jan-00
1-Jan-01
1-Jan-02
Date


Time Series Plot of Tetrachloroethylene for Well MSB 59
MCL (5 ppb)
MSB 59D
Constituent Level (ppb)
1000000000
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
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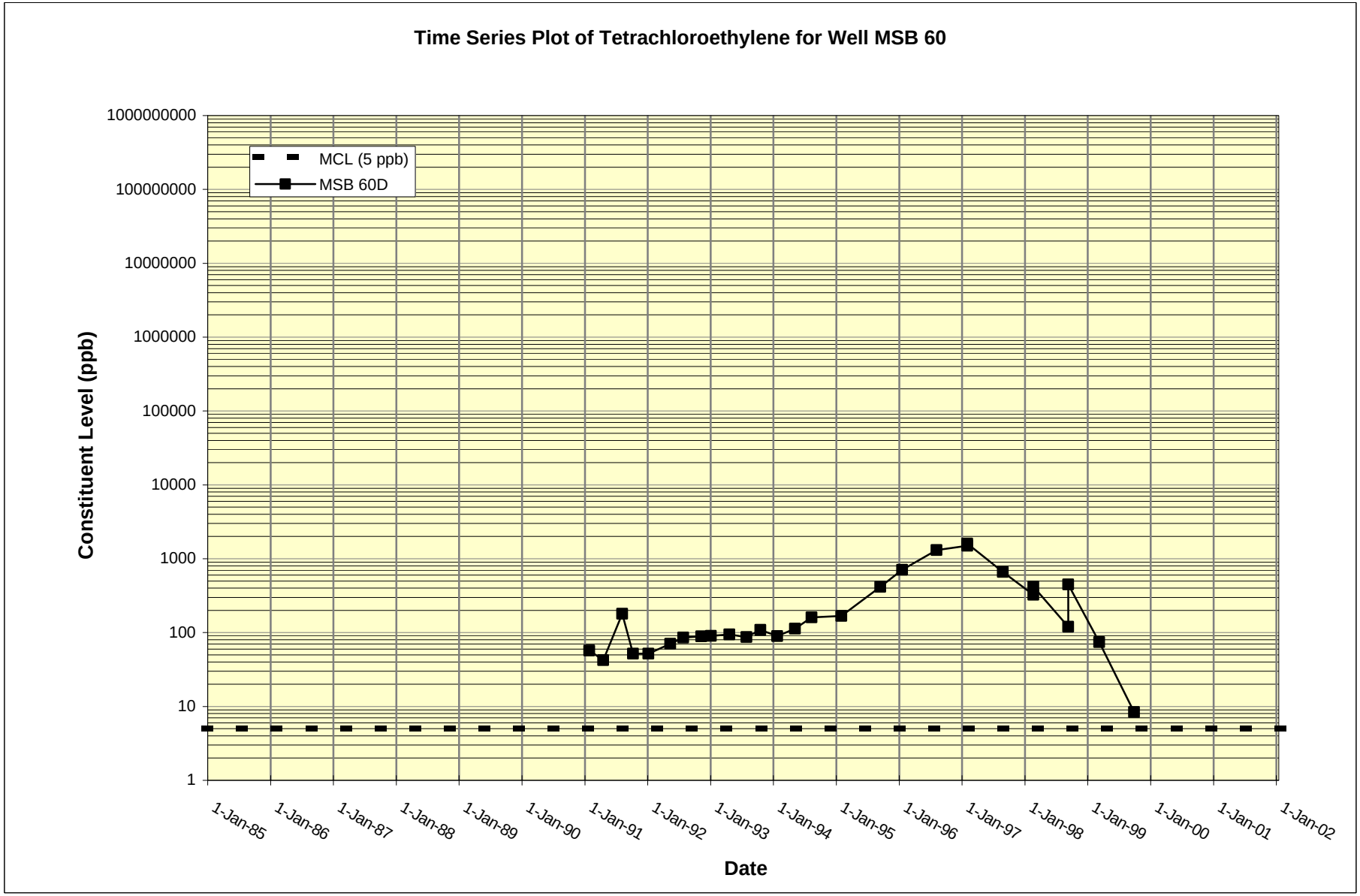
1-Jan-00
1-Jan-01
1-Jan-02
Date


Time Series Plot of Tetrachloroethylene for Well MSB 60
MCL (5 ppb)
MSB 60D
Constituent Level (ppb)
1000000000
100000000
10000000
1000000
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1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
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1-Jan-97
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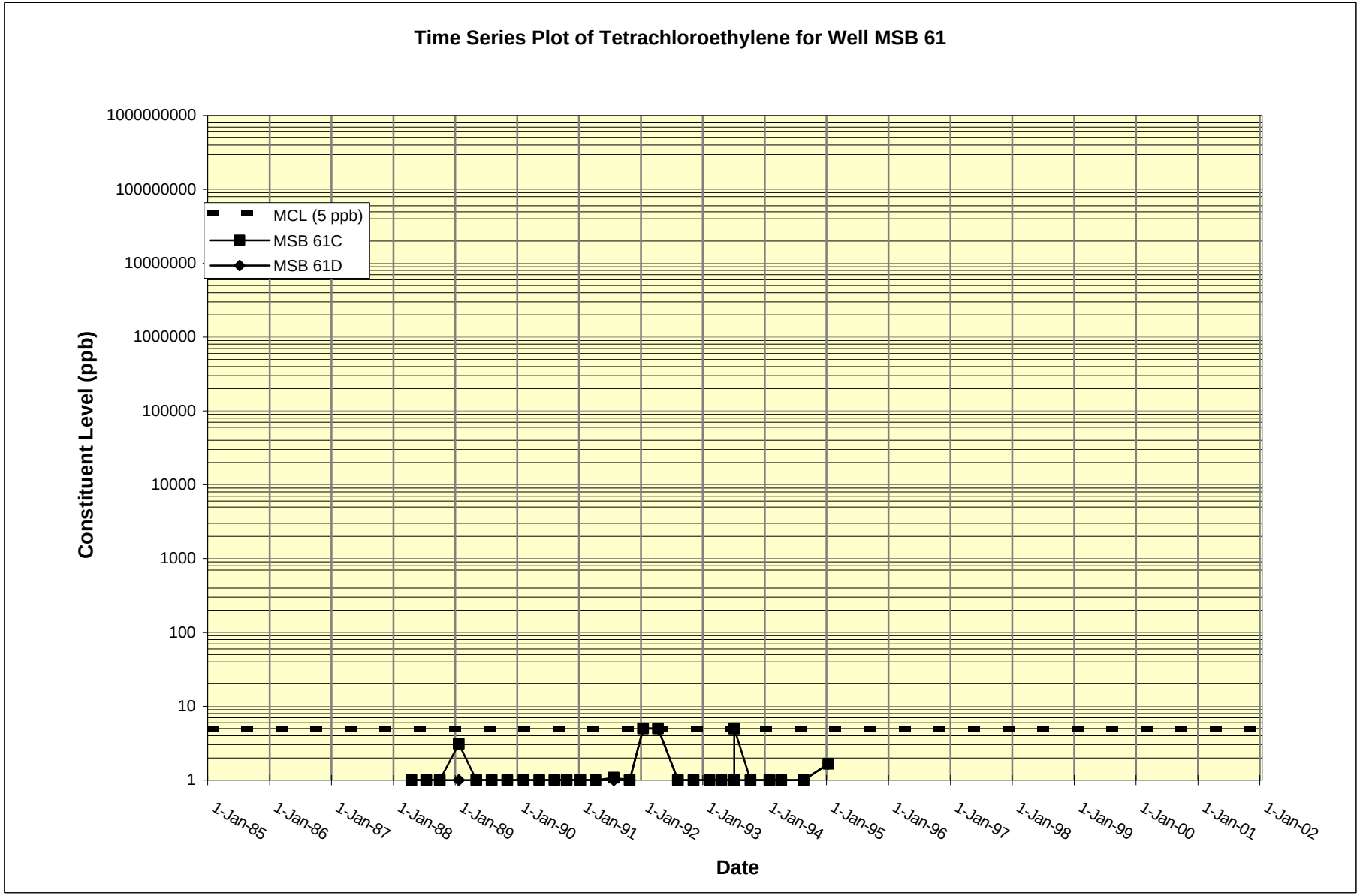
1-Jan-99
1-Jan-00
1-Jan-01
1-Jan-02
Date


Time Series Plot of Tetrachloroethylene for Well MSB 61
MCL (5 ppb)
MSB 61C
MSB 61D
Constituent Level (ppb)
1000000000
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
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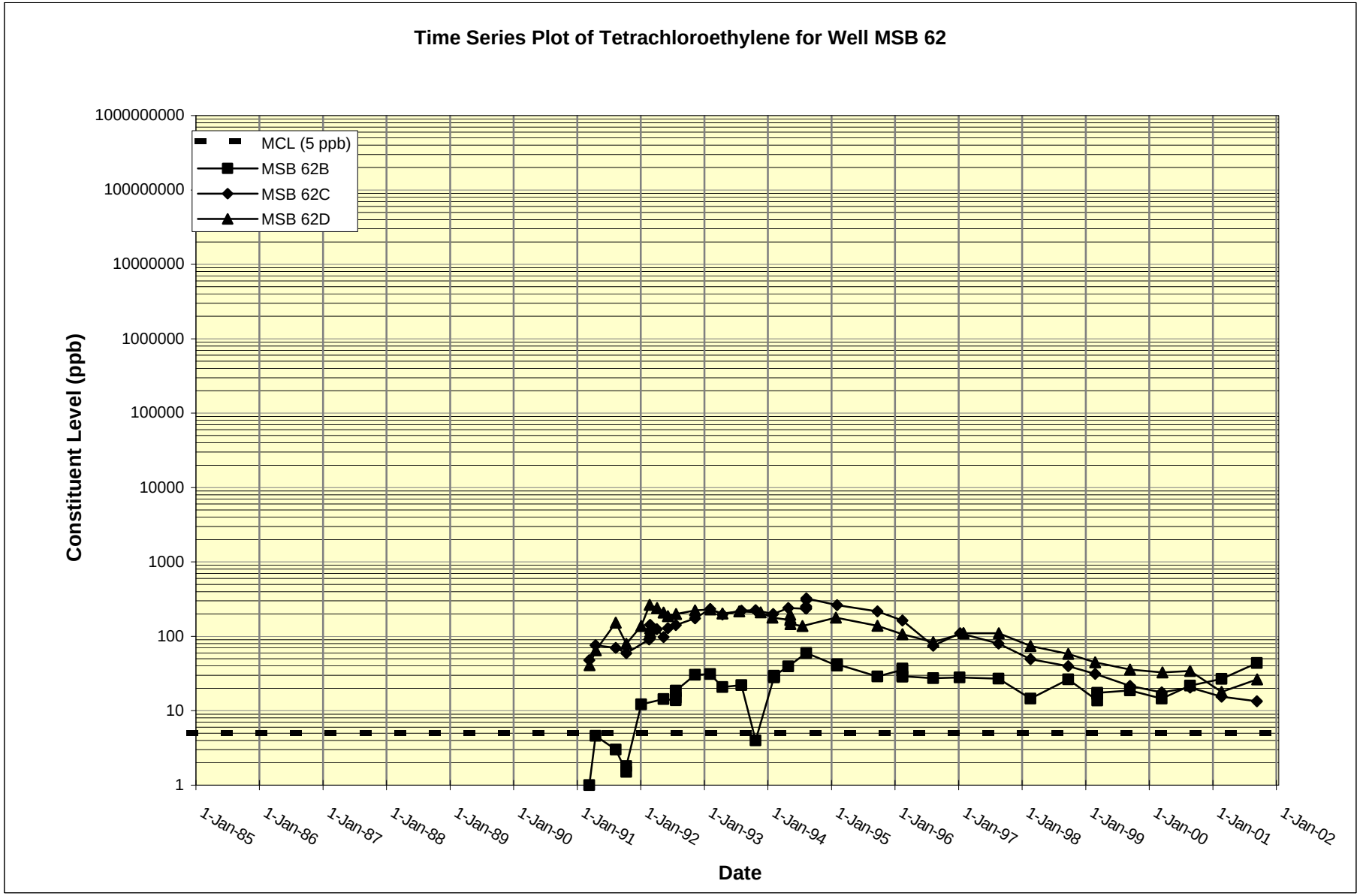
1-Jan-97
1-Jan-98
1-Jan-99
1-Jan-00
1-Jan-01
1-Jan-02
Date


Time Series Plot of Tetrachloroethylene for Well MSB 62
MCL (5 ppb)
MSB 62B
MSB 62C
MSB 62D
Constituent Level (ppb)
1000000000
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
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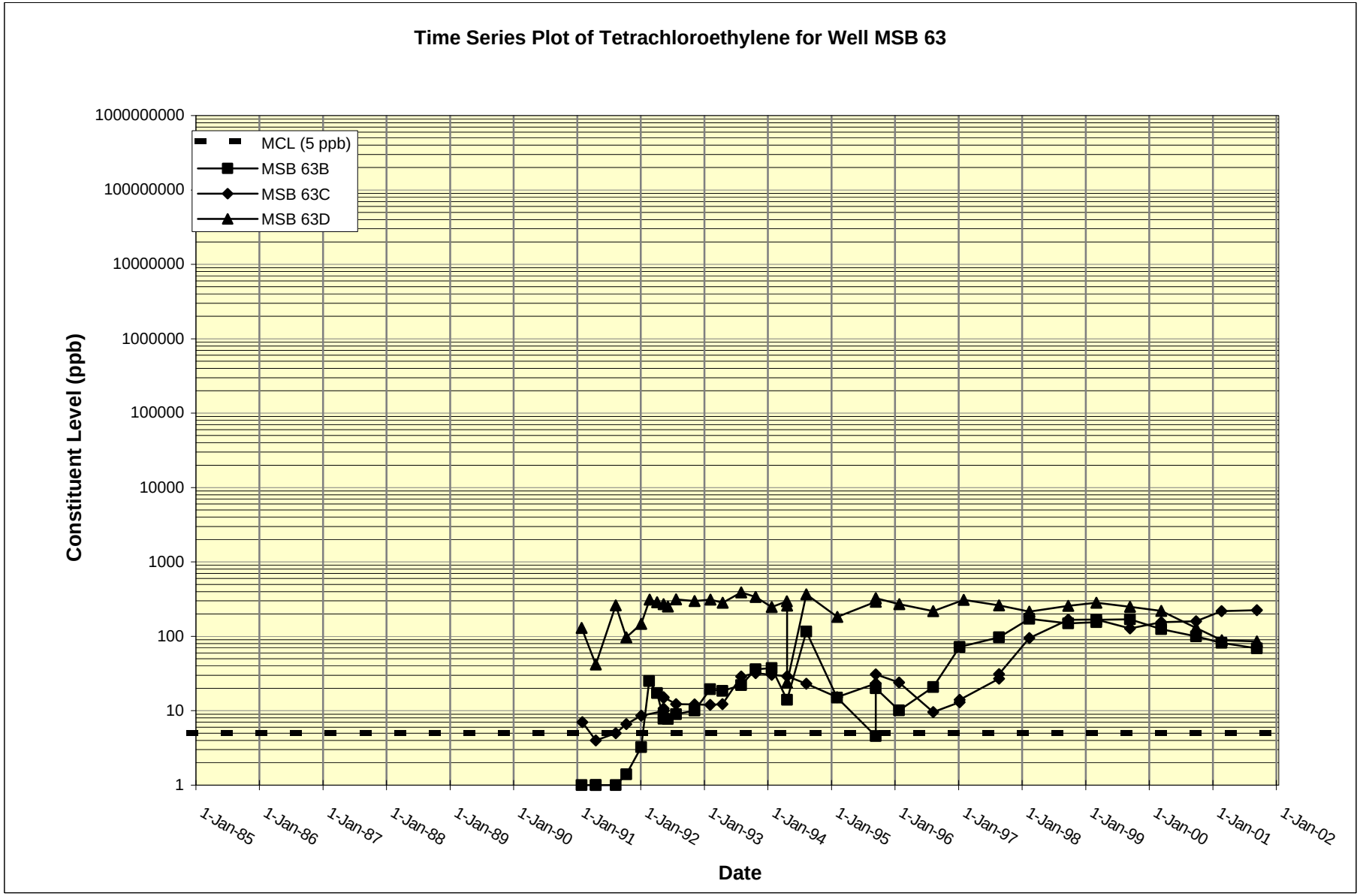
1-Jan-01
1-Jan-02
Date


Time Series Plot of Tetrachloroethylene for Well MSB 63
MCL (5 ppb)
MSB 63B
MSB 63C
MSB 63D
Constituent Level (ppb)
1000000000
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
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1-Jan-92
1-Jan-93
1-Jan-94
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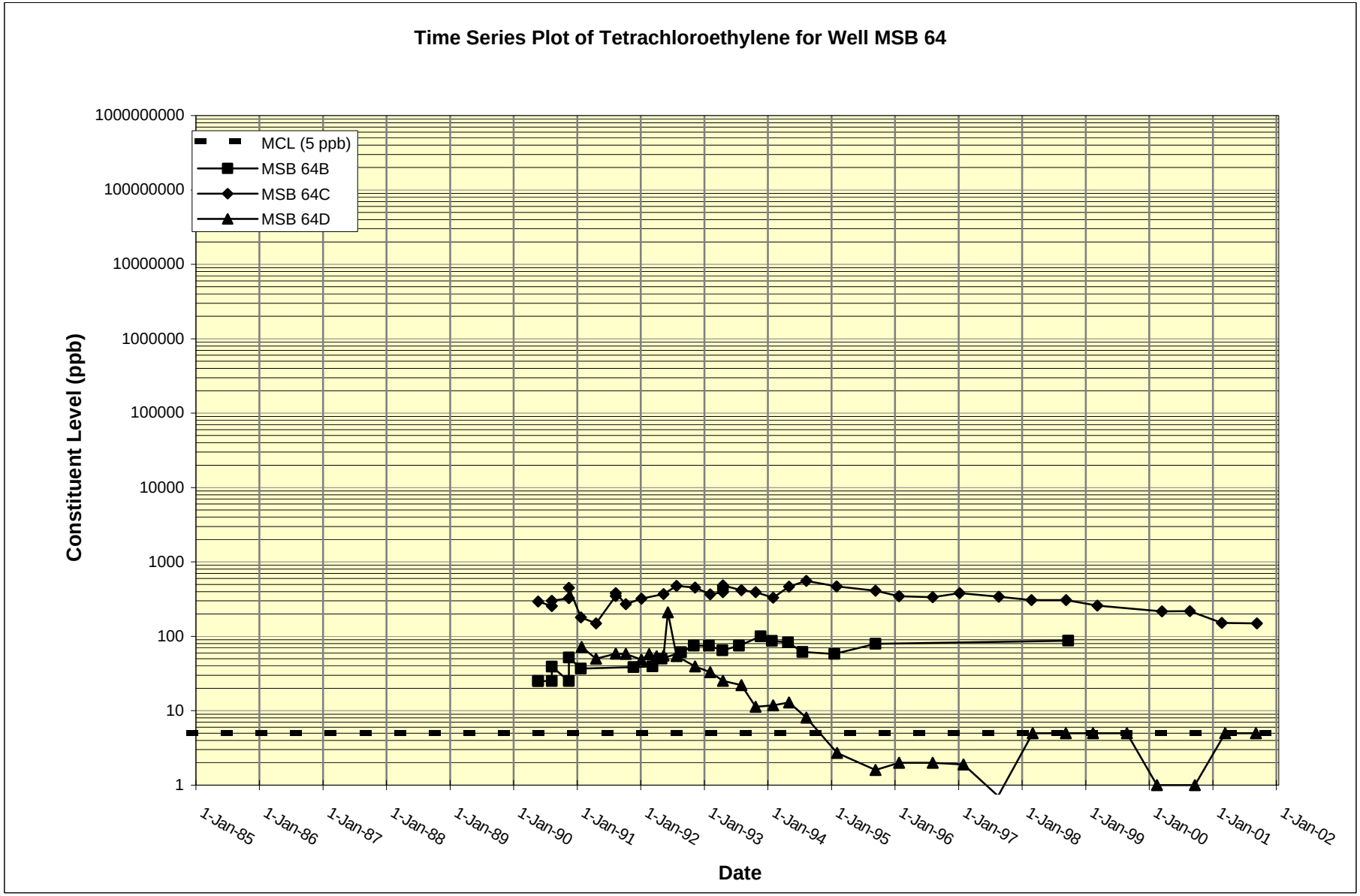
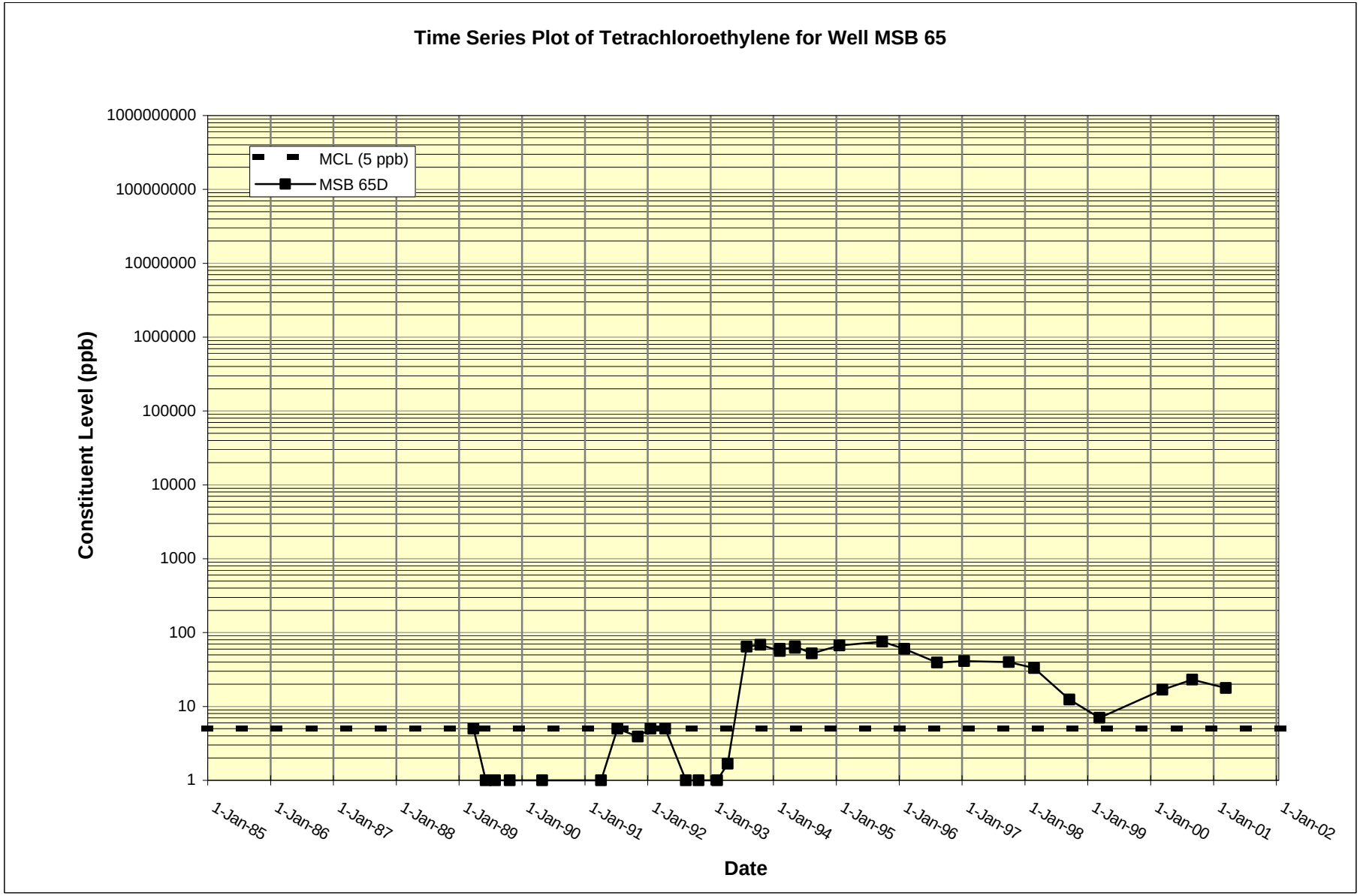
1-Jan-00
1-Jan-01
1-Jan-02
Date


Time Series Plot of Tetrachloroethylene for Well MSB 64
MCL (5 ppb)
MSB 64B
MSB 64C
MSB 64D
Constituent Level (ppb)
1000000000
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
1-Jan-95
1-Jan-96
1-Jan-97
1-Jan-98
1-Jan-99
1-Jan-00
1-Jan-01
1-Jan-02
Date


Time Series Plot of Tetrachloroethylene for Well MSB 65
MCL (5 ppb)
MSB 65D
Constituent Level (ppb)
1000000000
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
1-Jan-95
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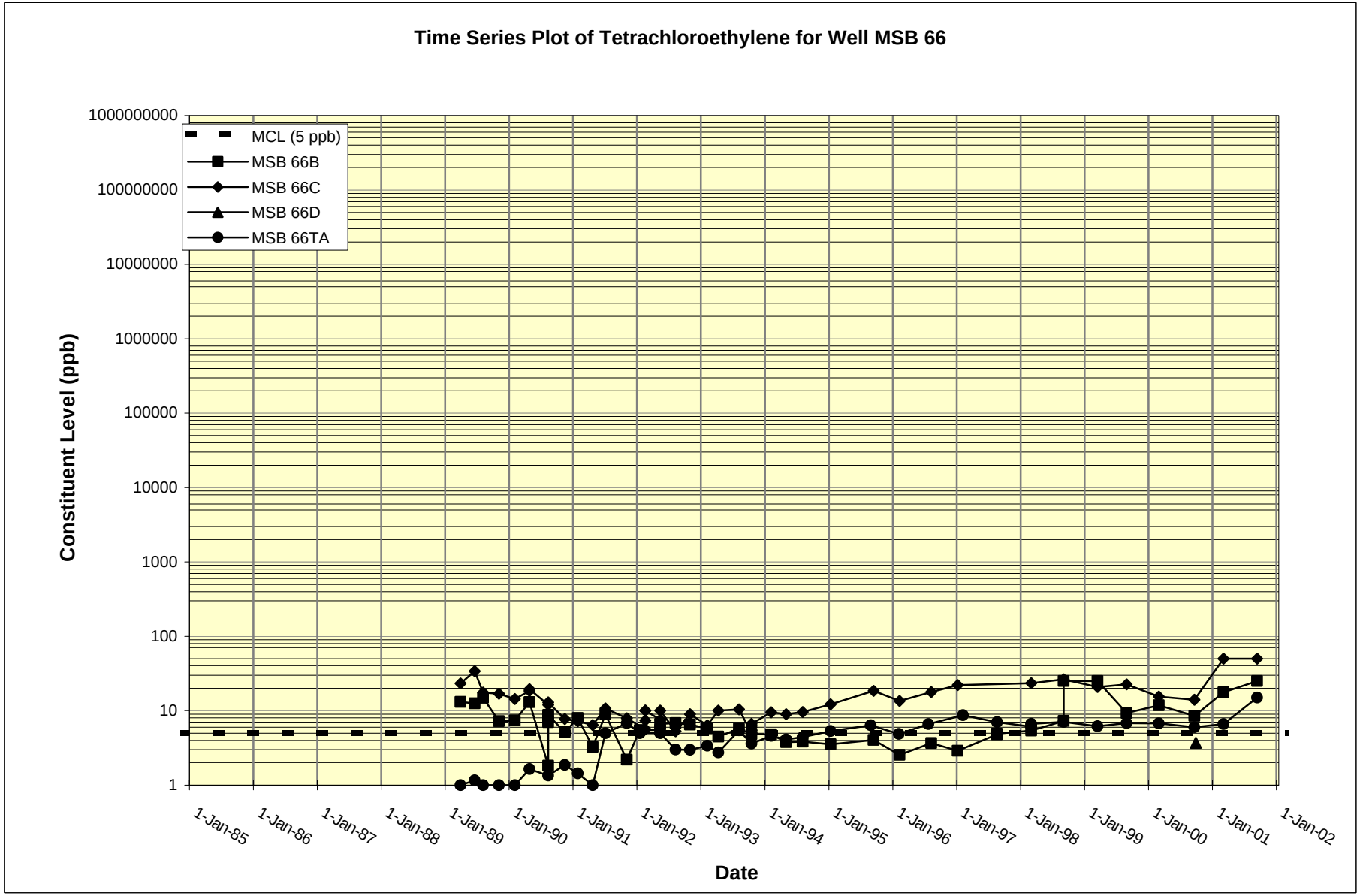
1-Jan-97
1-Jan-98
1-Jan-99
1-Jan-00
1-Jan-01
1-Jan-02
Date


Time Series Plot of Tetrachloroethylene for Well MSB 66
MCL (5 ppb)
MSB 66B
MSB 66C
MSB 66D
MSB 66TA
Constituent Level (ppb)
1000000000
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
1-Jan-95
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1-Jan-97
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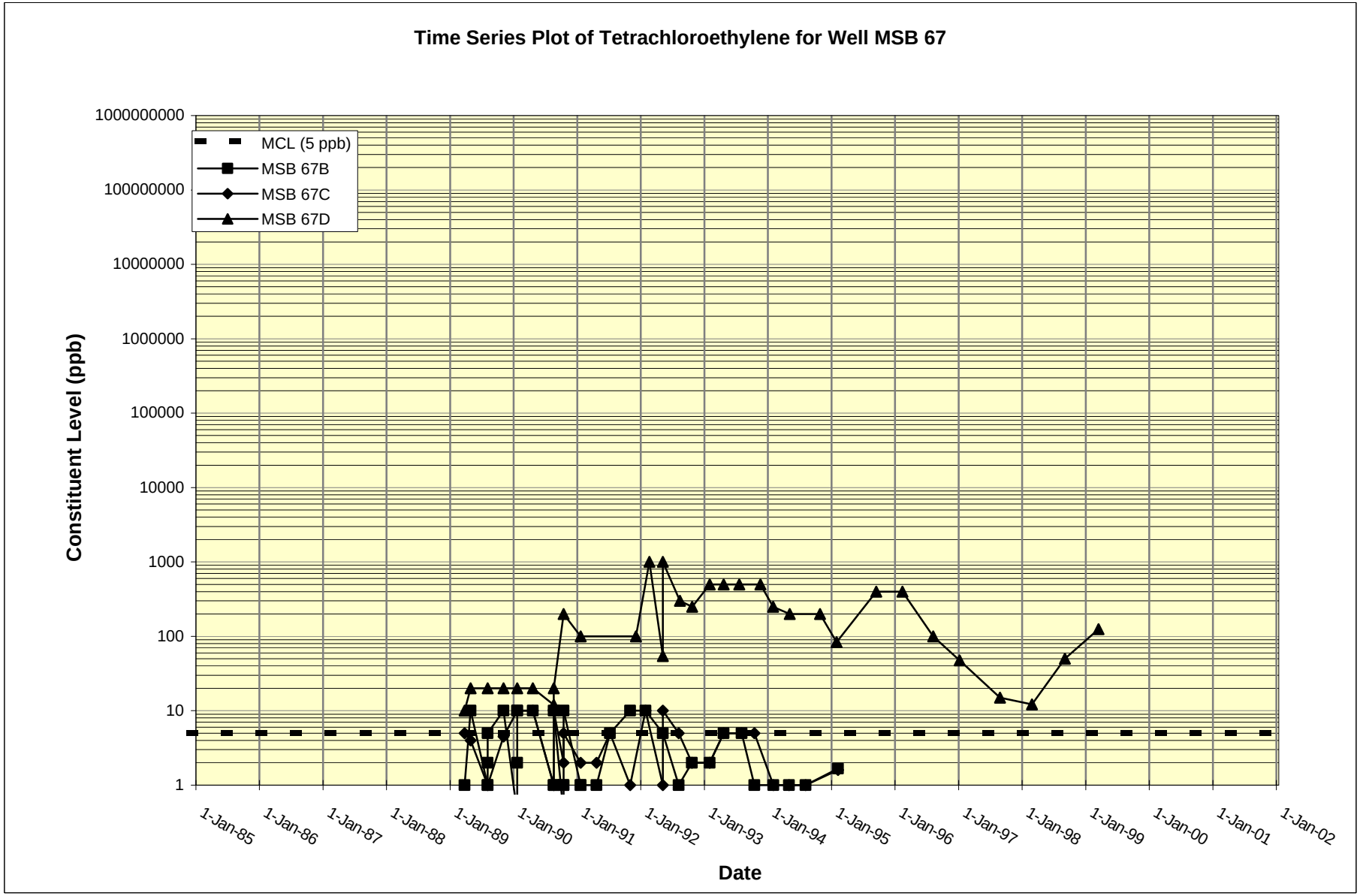
1-Jan-02
Date


Time Series Plot of Tetrachloroethylene for Well MSB 67
MCL (5 ppb)
MSB 67B
MSB 67C
MSB 67D
Constituent Level (ppb)
1000000000
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
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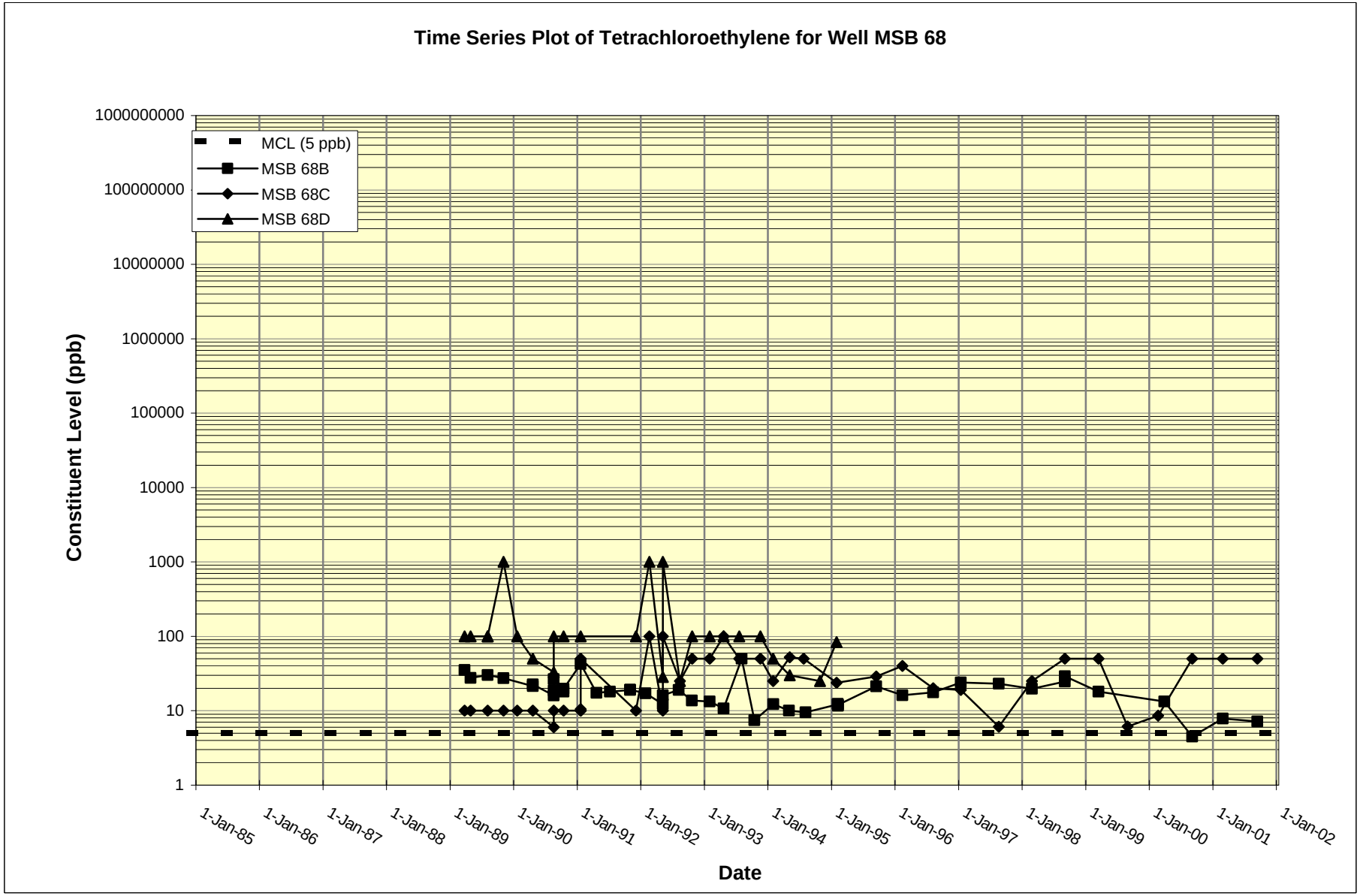
1-Jan-99
1-Jan-00
1-Jan-01
1-Jan-02
Date


Time Series Plot of Tetrachloroethylene for Well MSB 68
MCL (5 ppb)
MSB 68B
MSB 68C
MSB 68D
Constituent Level (ppb)
1000000000
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
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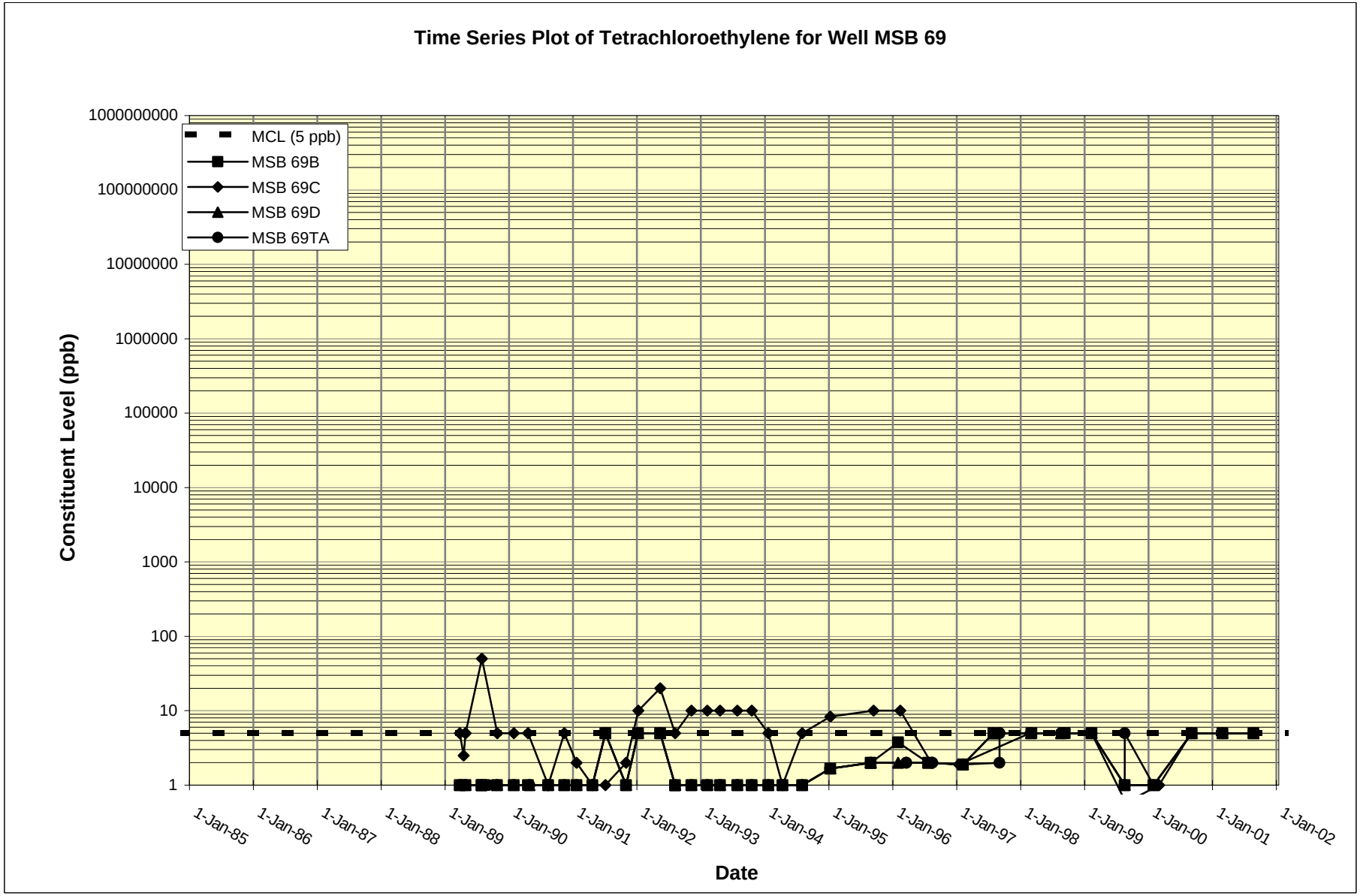
1-Jan-01
1-Jan-02
Date


Time Series Plot of Tetrachloroethylene for Well MSB 69
MCL (5 ppb)
MSB 69B
MSB 69C
MSB 69D
MSB 69TA
Constituent Level (ppb)
1000000000
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
1-Jan-95
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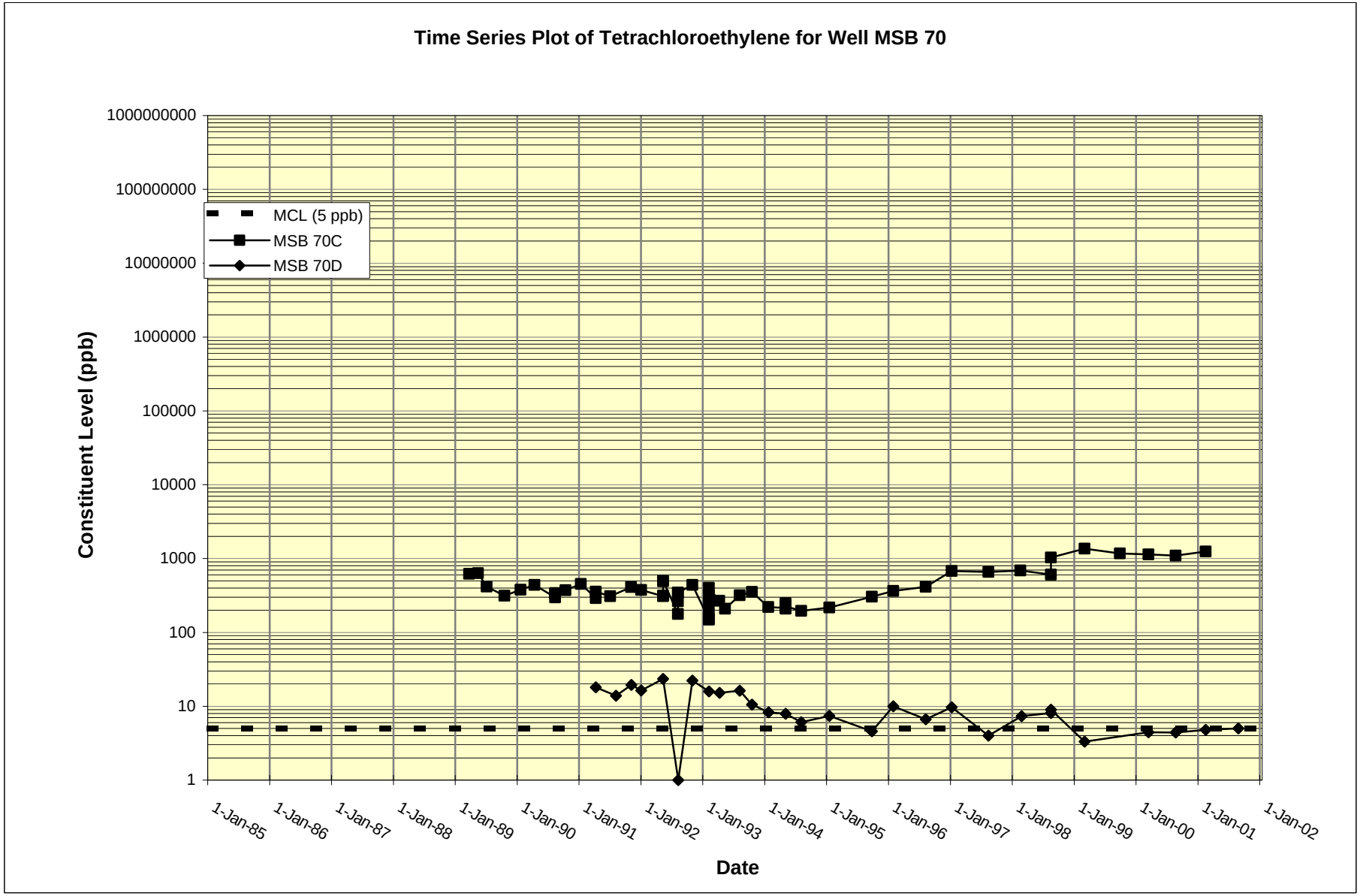
1-Jan-97
1-Jan-98
1-Jan-99
1-Jan-00
1-Jan-01
1-Jan-02
Date


Time Series Plot of Tetrachloroethylene for Well MSB 70
MCL (5 ppb)
MSB 70C
MSB 70D
Constituent Level (ppb)
1000000000
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
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1-Jan-97
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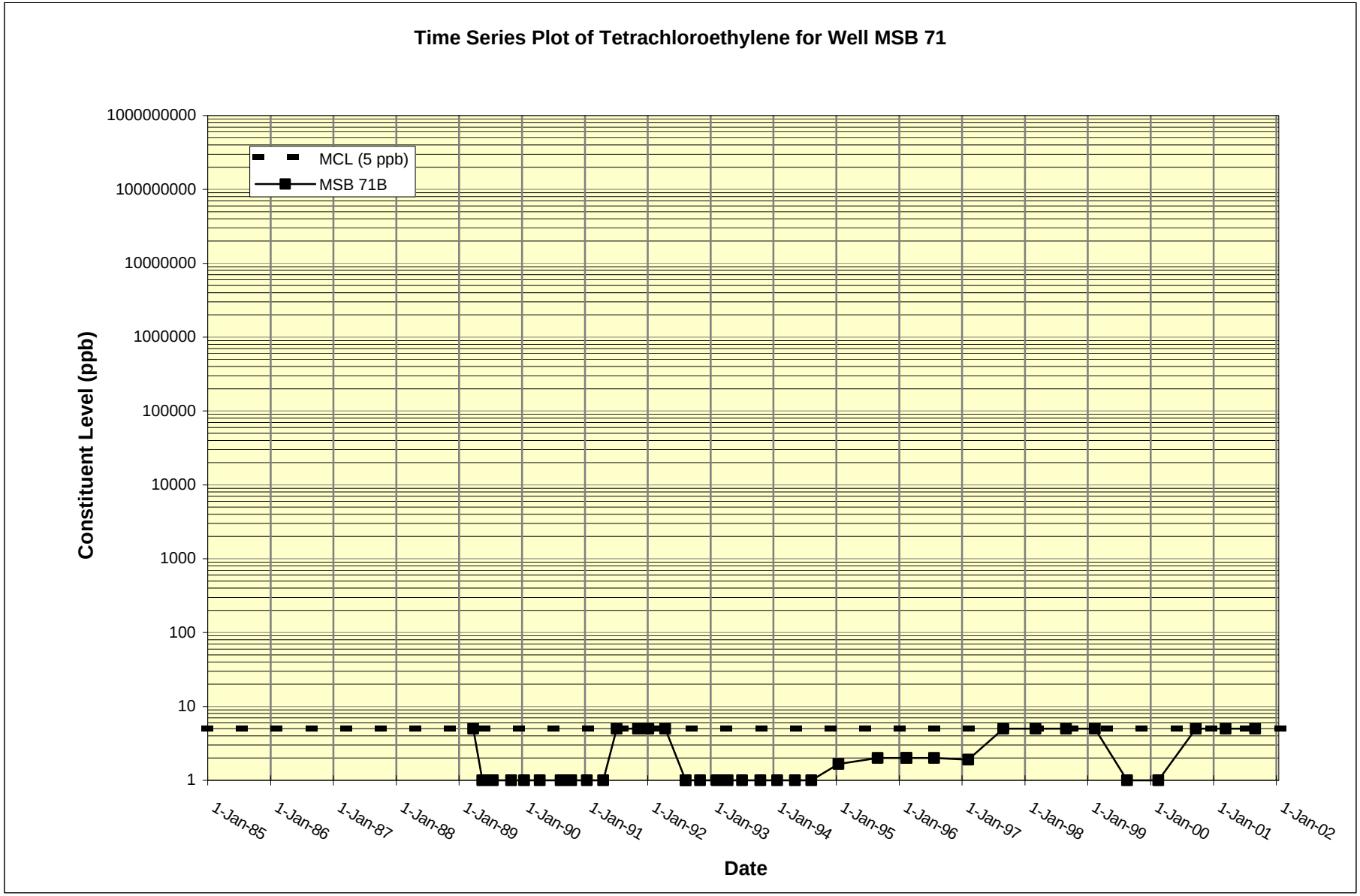
1-Jan-99
1-Jan-00
1-Jan-01
1-Jan-02
Date


Time Series Plot of Tetrachloroethylene for Well MSB 71
MCL (5 ppb)
MSB 71B
Constituent Level (ppb)
1000000000
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
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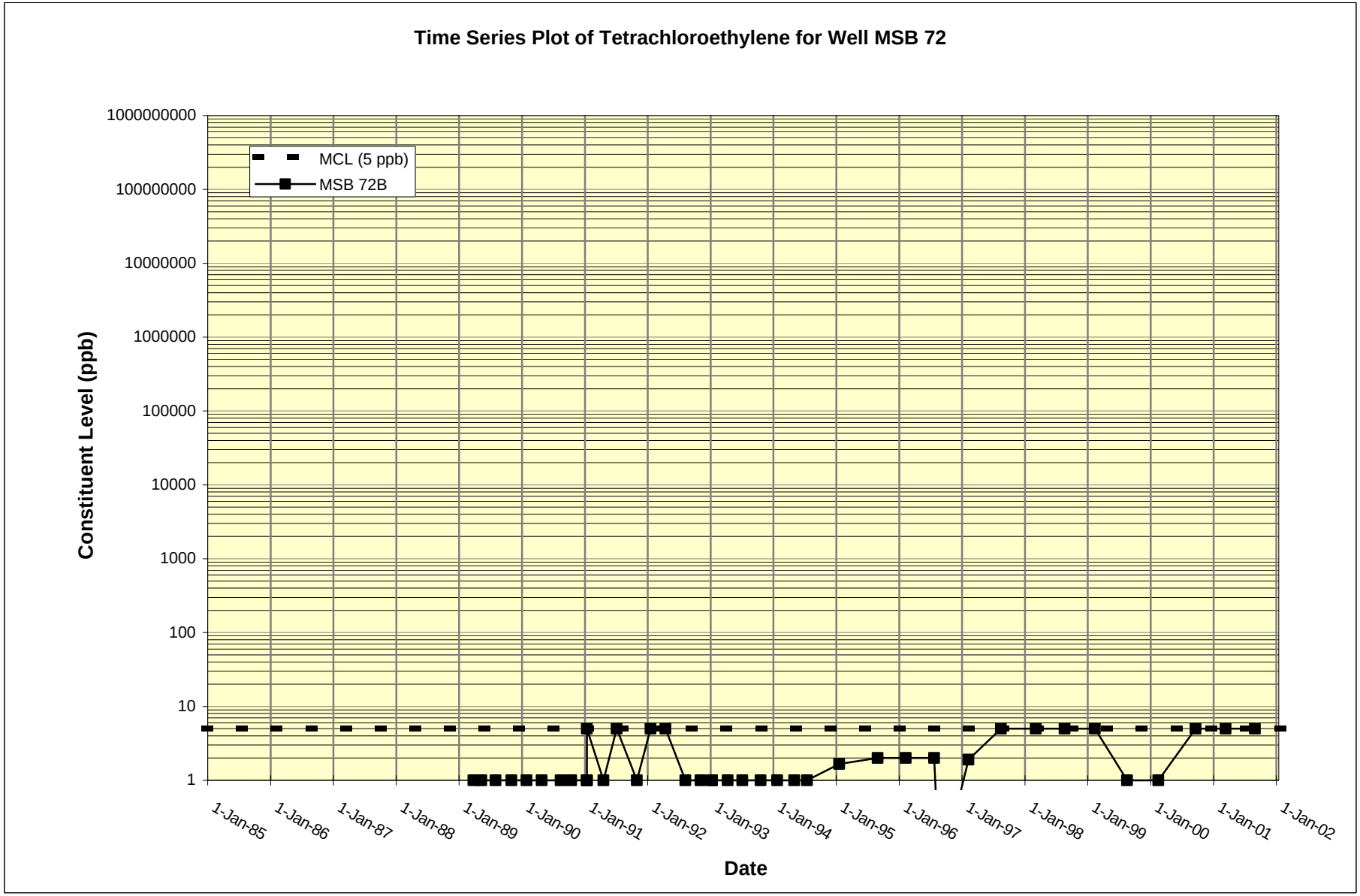
1-Jan-99
1-Jan-00
1-Jan-01
1-Jan-02
Date


Time Series Plot of Tetrachloroethylene for Well MSB 72
MCL (5 ppb)
MSB 72B
Constituent Level (ppb)
1000000000
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
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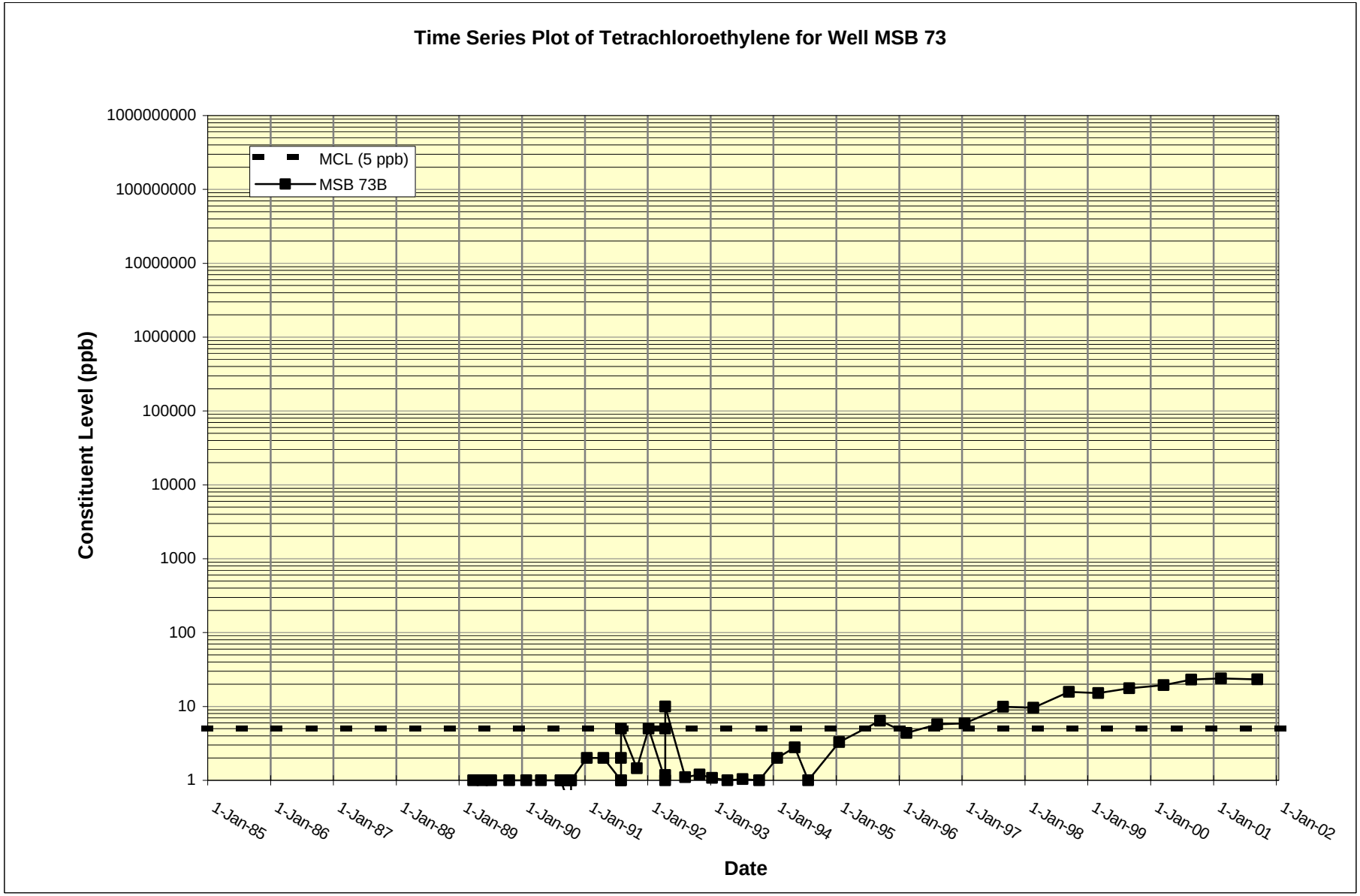
1-Jan-01
1-Jan-02
Date


Time Series Plot of Tetrachloroethylene for Well MSB 73
MCL (5 ppb)
MSB 73B
Constituent Level (ppb)
1000000000
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
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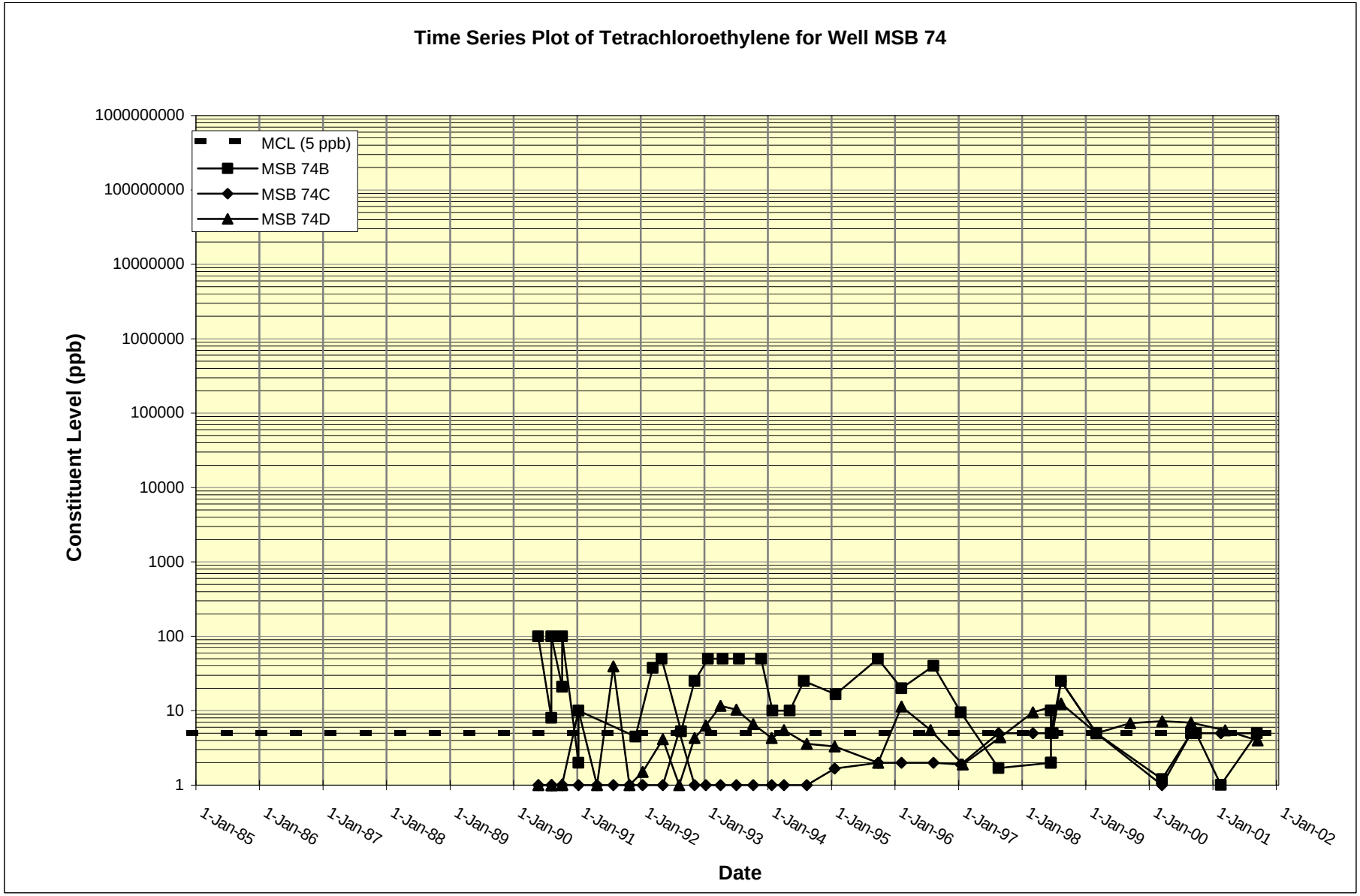
Date


Time Series Plot of Tetrachloroethylene for Well MSB 74
MCL (5 ppb)
MSB 74B
MSB 74C
MSB 74D
Constituent Level (ppb)
1000000000
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
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1-Jan-00
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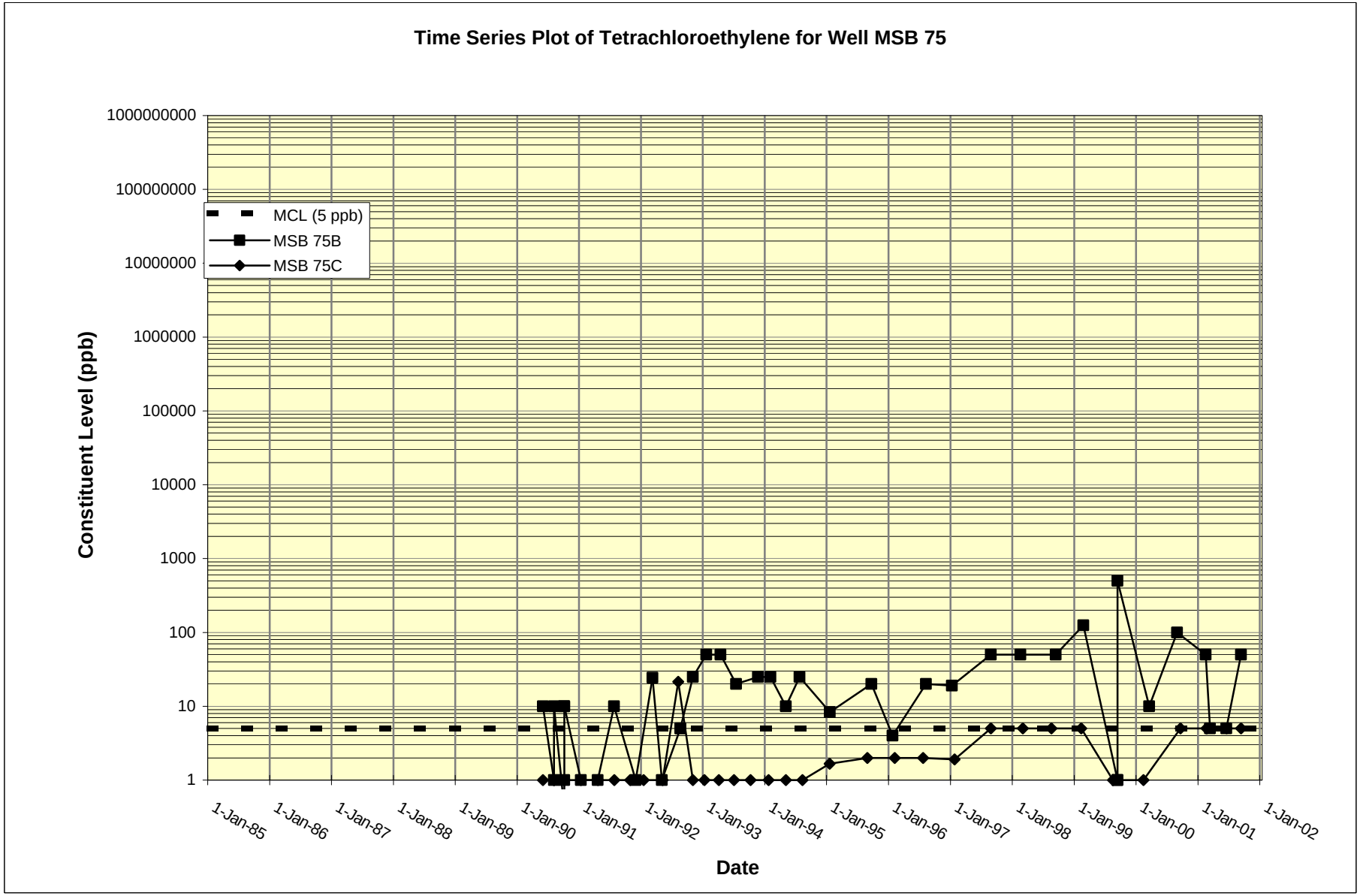
1-Jan-02
Date


Time Series Plot of Tetrachloroethylene for Well MSB 75
MCL (5 ppb)
MSB 75B
MSB 75C
Constituent Level (ppb)
1000000000
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
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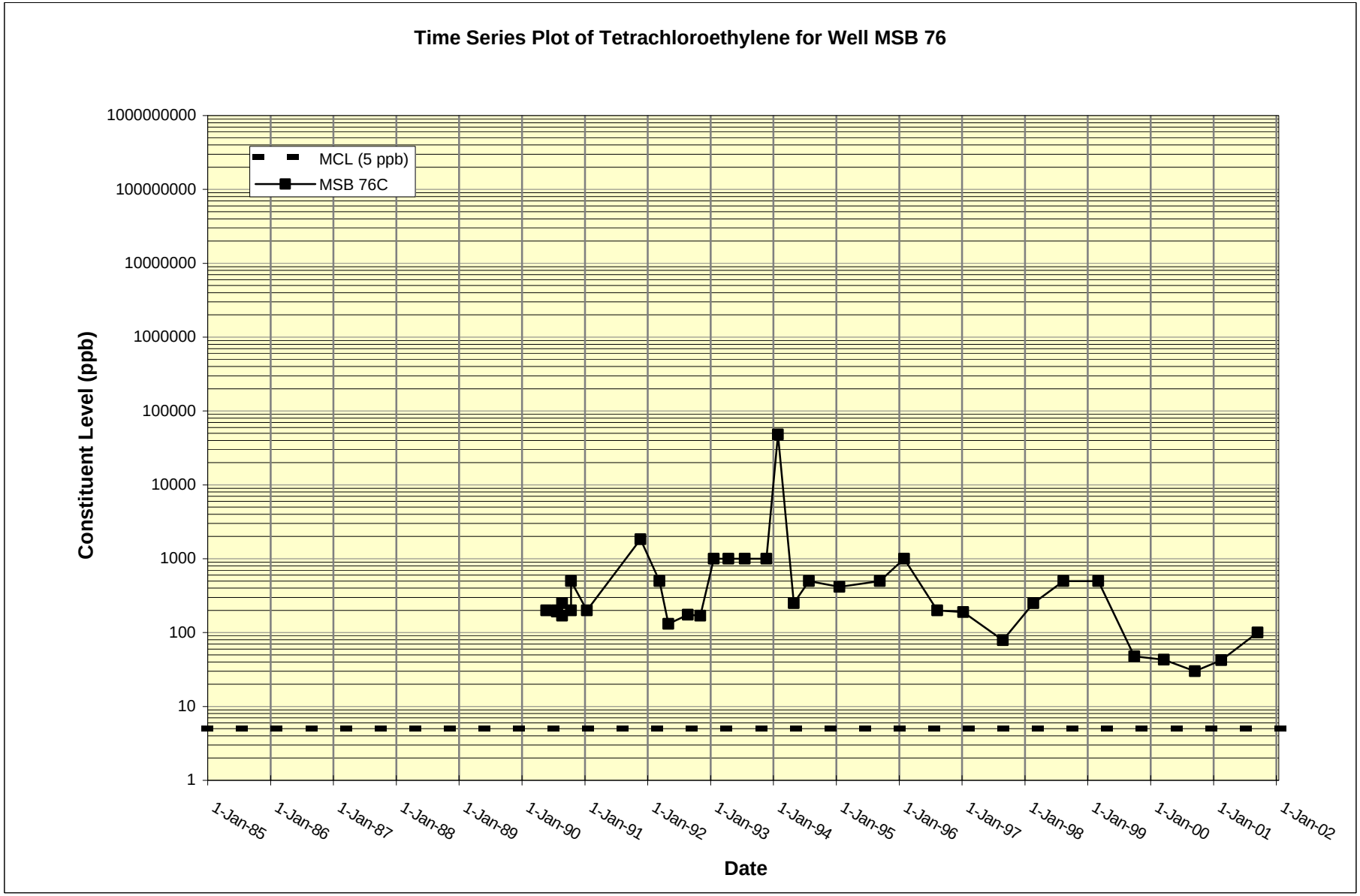
1-Jan-01
1-Jan-02
Date


Time Series Plot of Tetrachloroethylene for Well MSB 76
MCL (5 ppb)
MSB 76C
Constituent Level (ppb)
1000000000
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
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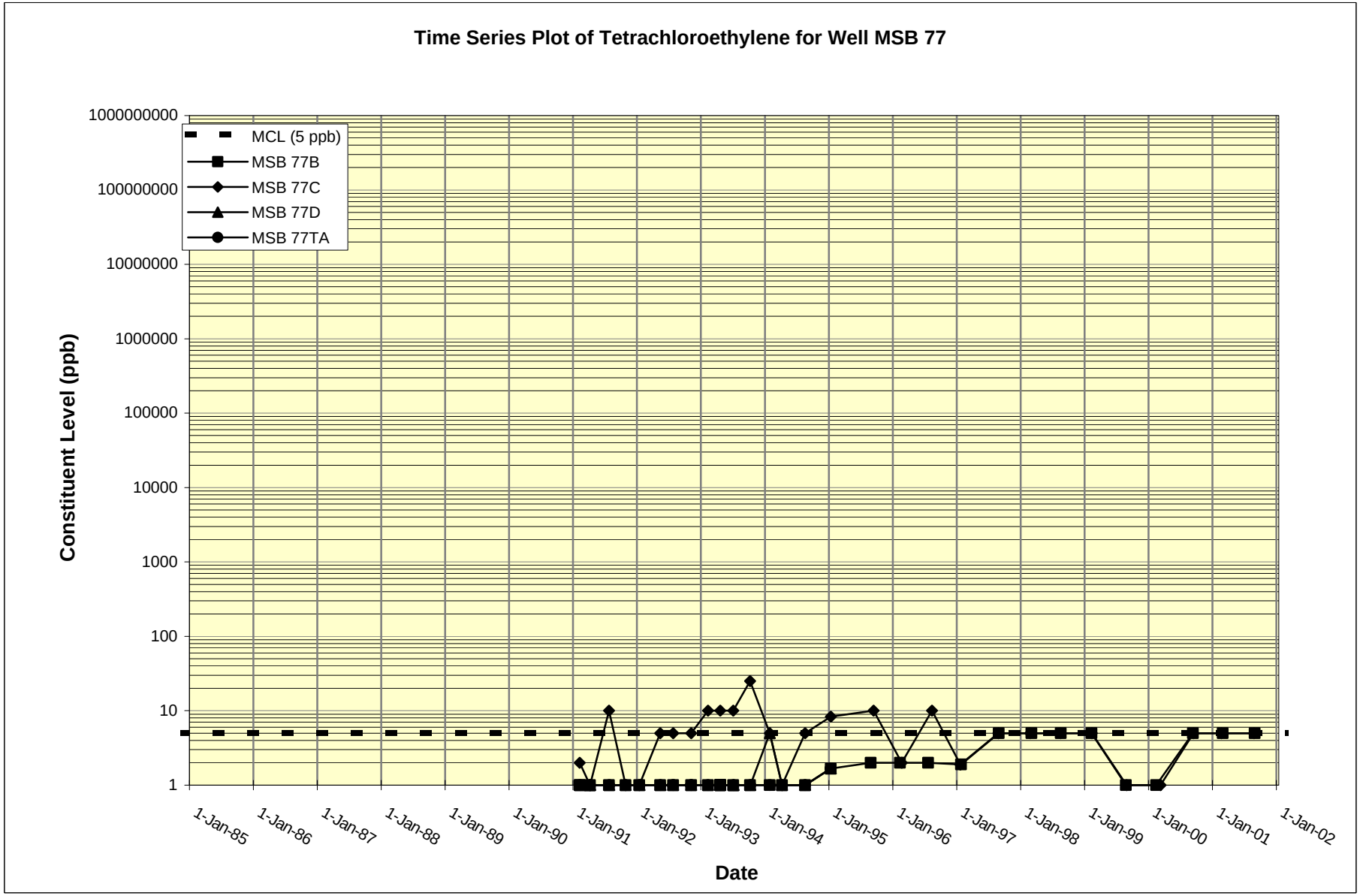
1-Jan-00
1-Jan-01
1-Jan-02
Date


Time Series Plot of Tetrachloroethylene for Well MSB 77
MCL (5 ppb)
MSB 77B
MSB 77C
MSB 77D
MSB 77TA
Constituent Level (ppb)
1000000000
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
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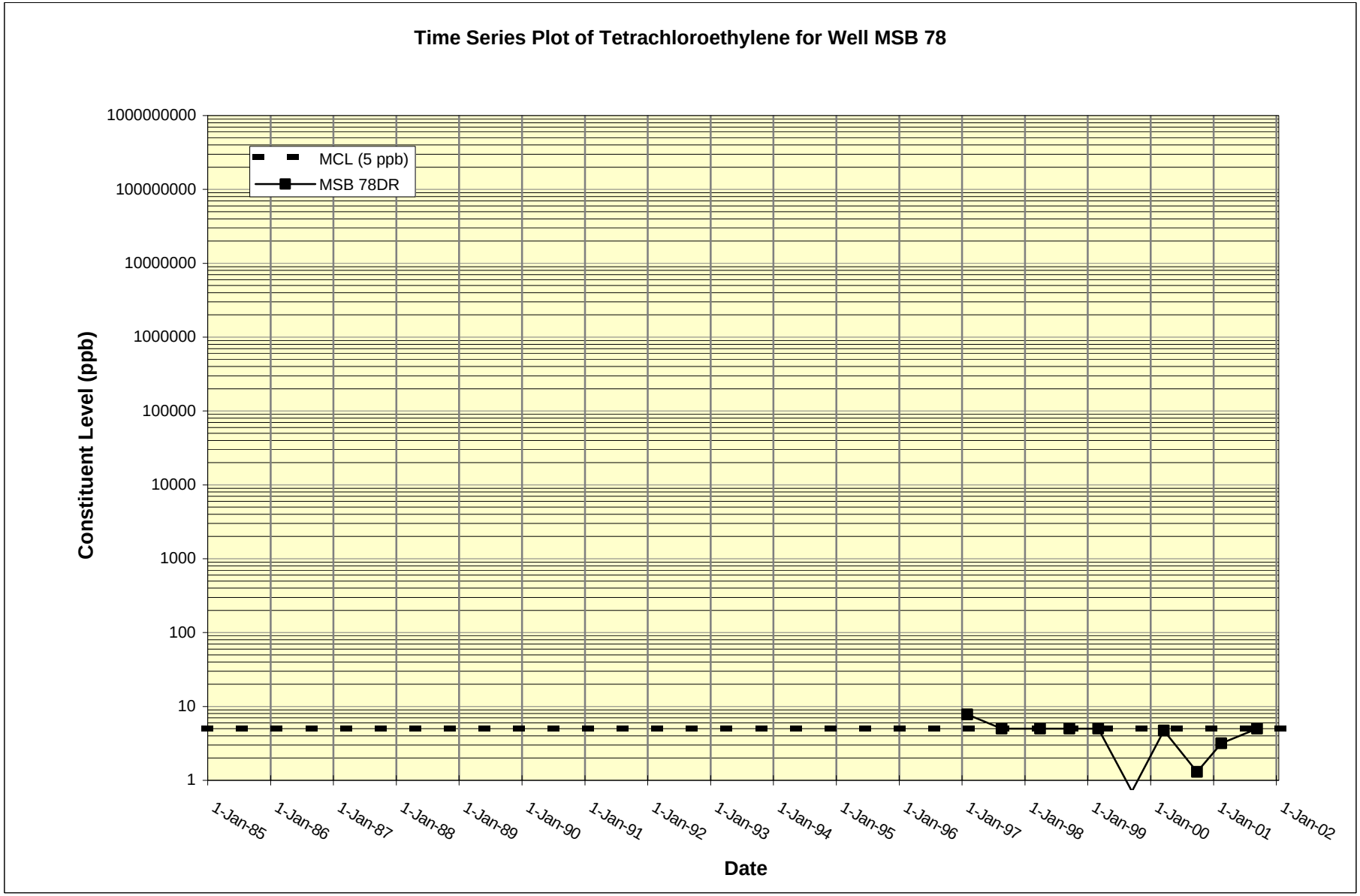
1-Jan-01
1-Jan-02
Date


Time Series Plot of Tetrachloroethylene for Well MSB 78
MCL (5 ppb)
MSB 78DR
Constituent Level (ppb)
1000000000
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
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1-Jan-94
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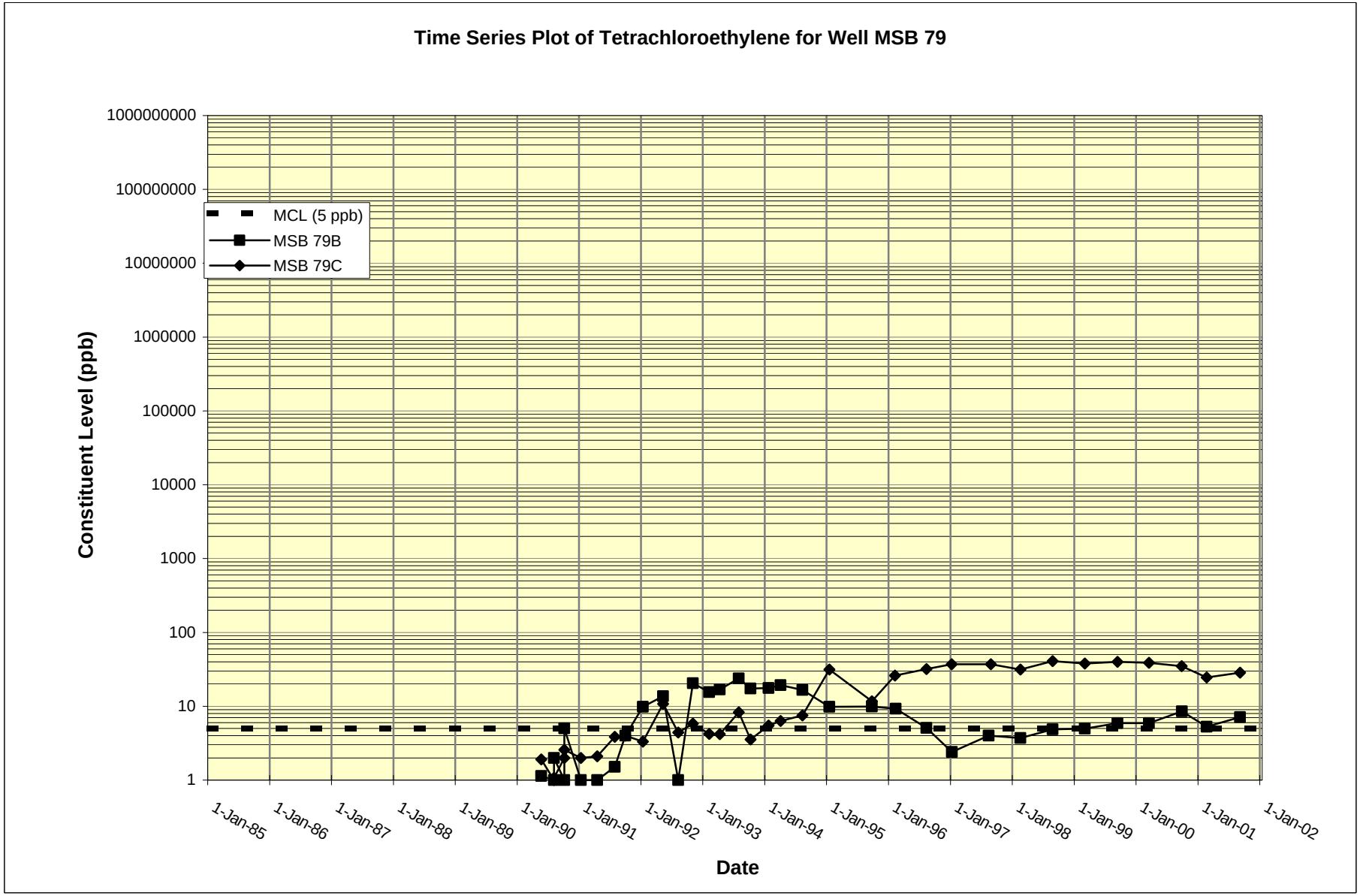
1-Jan-01
1-Jan-02
Date


Time Series Plot of Tetrachloroethylene for Well MSB 79
MCL (5 ppb)
MSB 79B
MSB 79C
Constituent Level (ppb)
1000000000
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
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1-Jan-94
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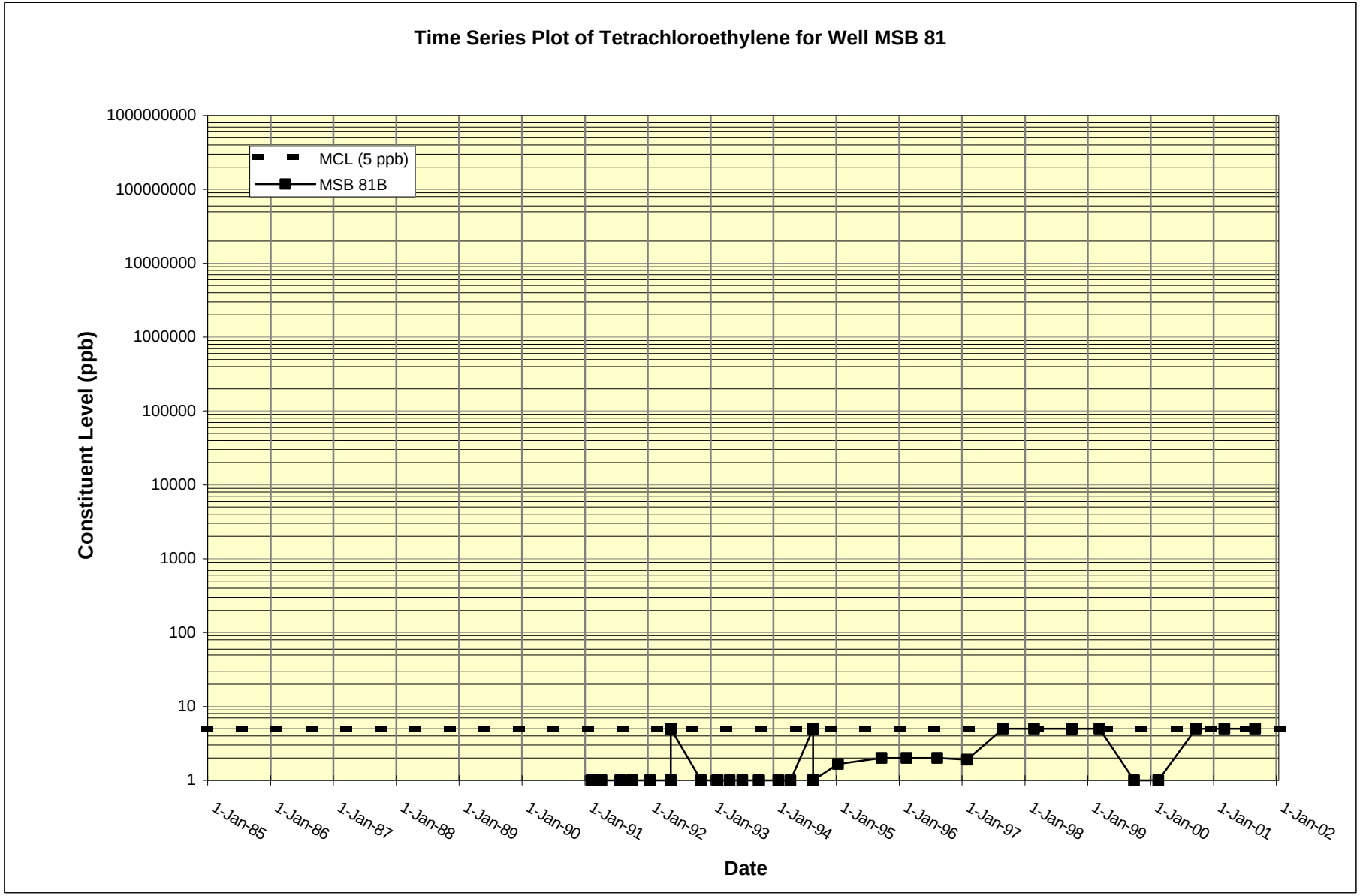
1-Jan-01
1-Jan-02
Date


Time Series Plot of Tetrachloroethylene for Well MSB 81
MCL (5 ppb)
MSB 81B
Constituent Level (ppb)
1000000000
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
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1-Jan-94
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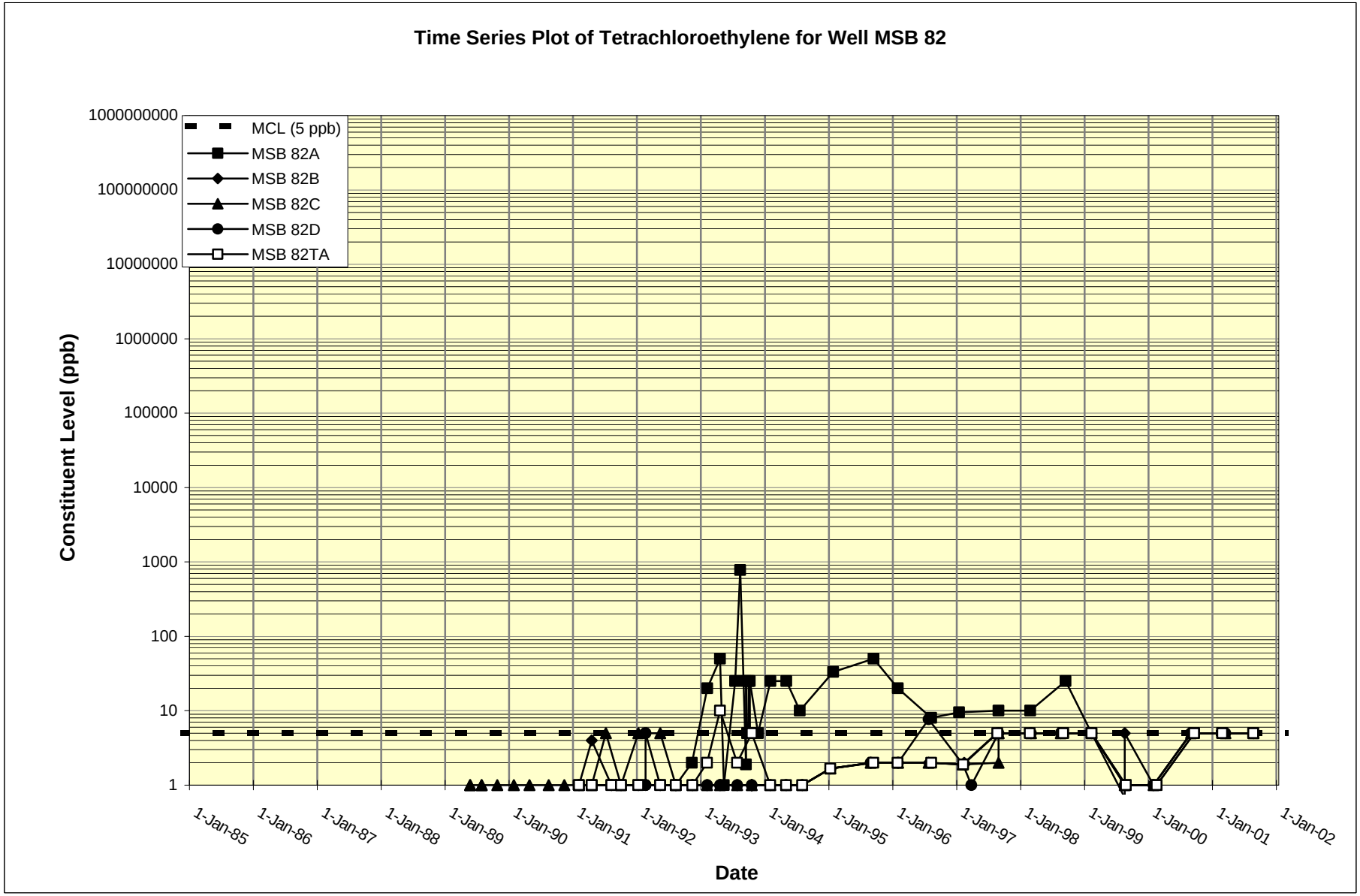
1-Jan-01
1-Jan-02
Date


Time Series Plot of Tetrachloroethylene for Well MSB 82
MCL (5 ppb)
MSB 82A
MSB 82B
MSB 82C
MSB 82D
MSB 82TA
Constituent Level (ppb)
1000000000
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
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1-Jan-94
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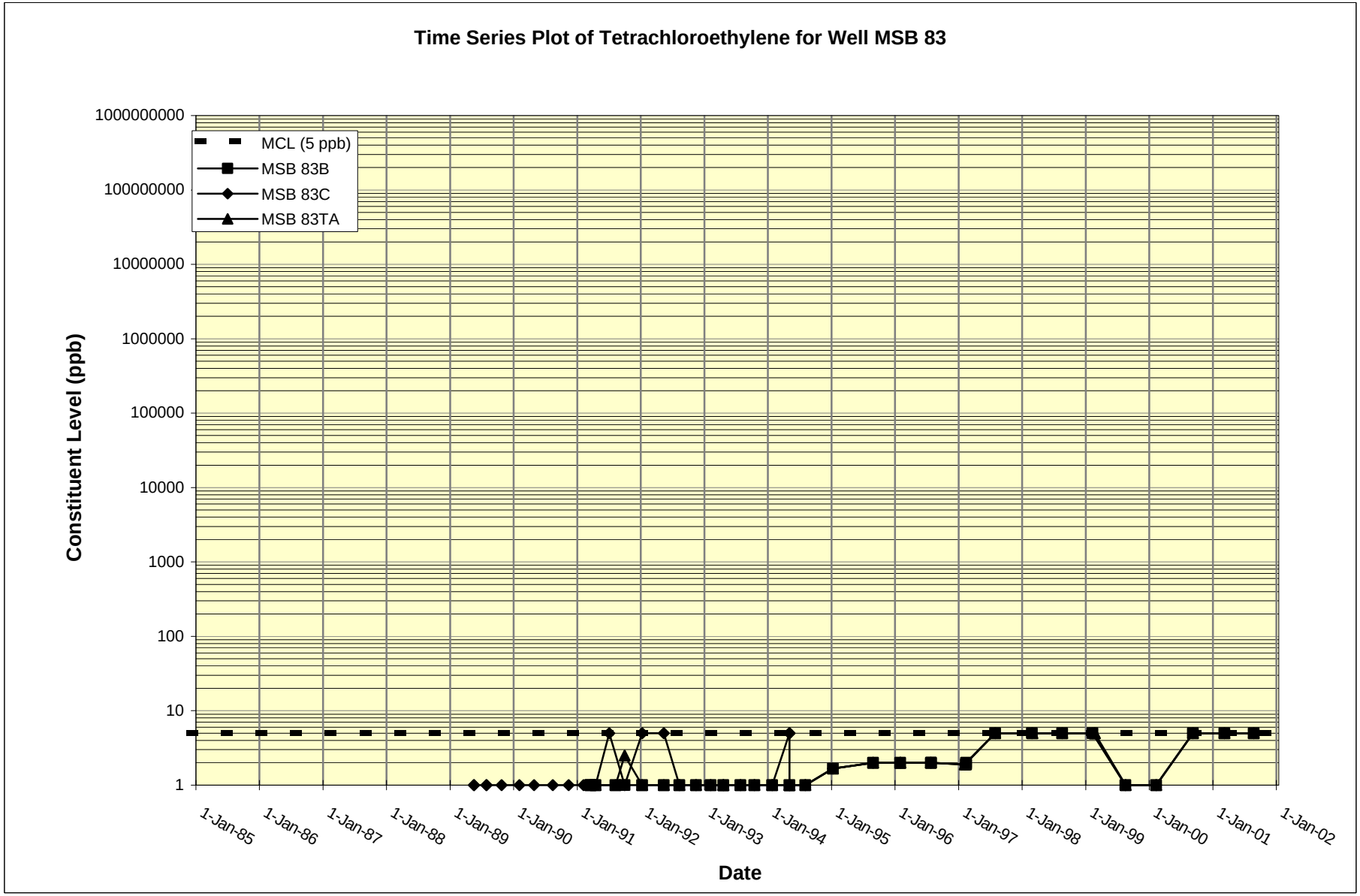
1-Jan-00
1-Jan-01
1-Jan-02
Date


Time Series Plot of Tetrachloroethylene for Well MSB 83
MCL (5 ppb)
MSB 83B
MSB 83C
MSB 83TA
Constituent Level (ppb)
1000000000
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
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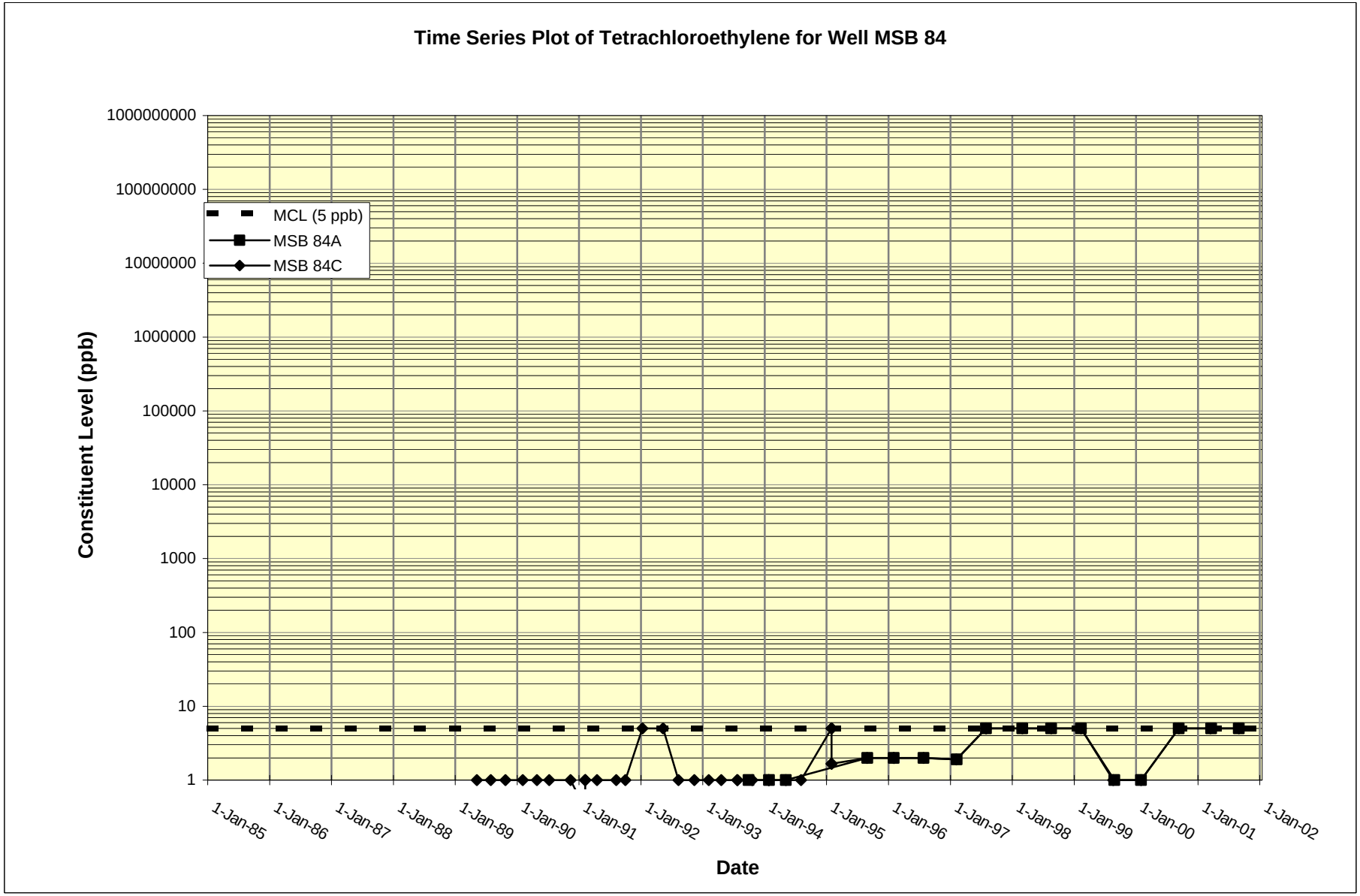
1-Jan-00
1-Jan-01
1-Jan-02
Date


Time Series Plot of Tetrachloroethylene for Well MSB 84
Constituent Level (ppb)
1000000000
100000000
10000000
1000000
100000
10000
1000
100
10
1
MCL (5 ppb)
MSB 84A
MSB 84C
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
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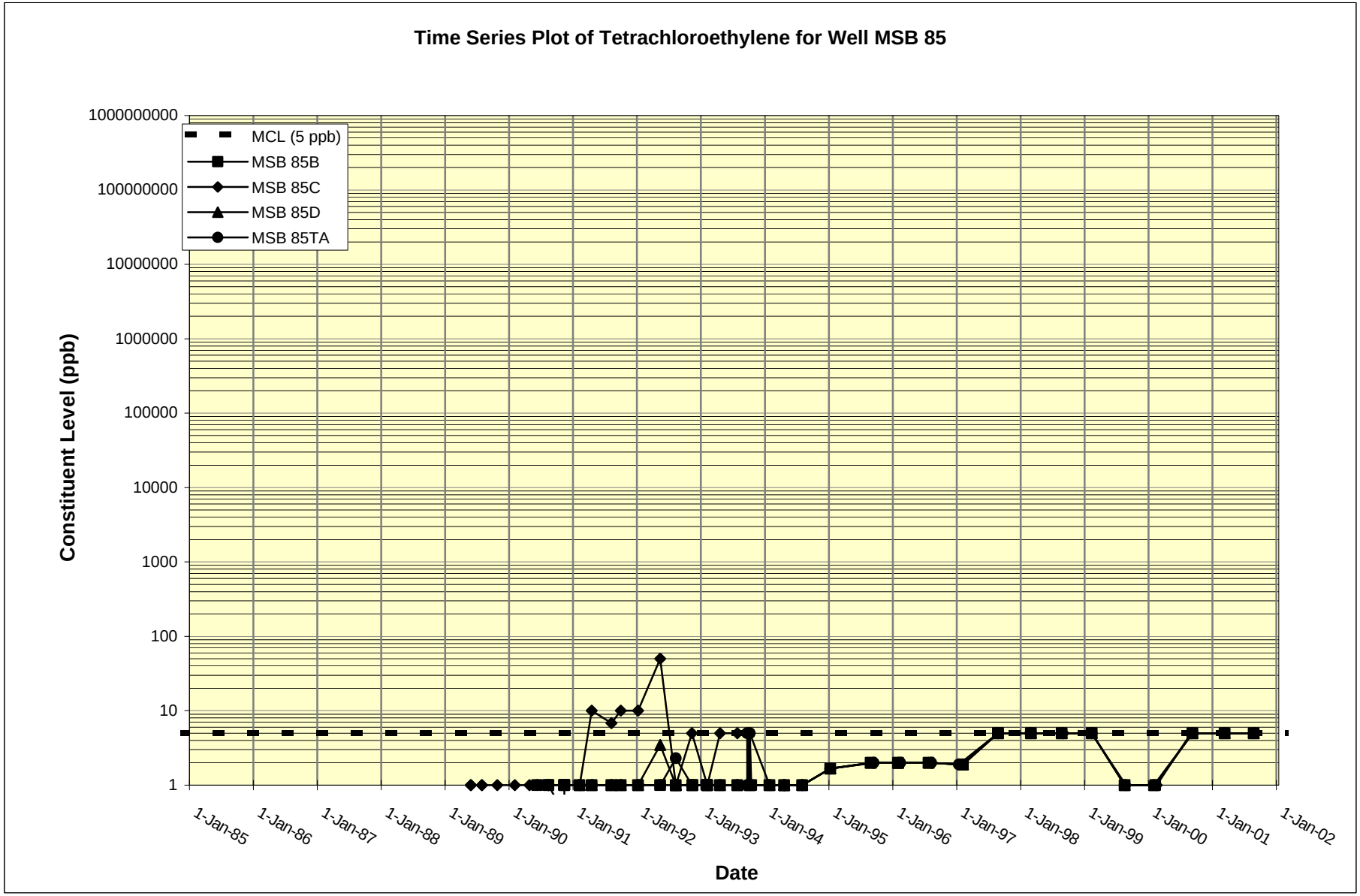
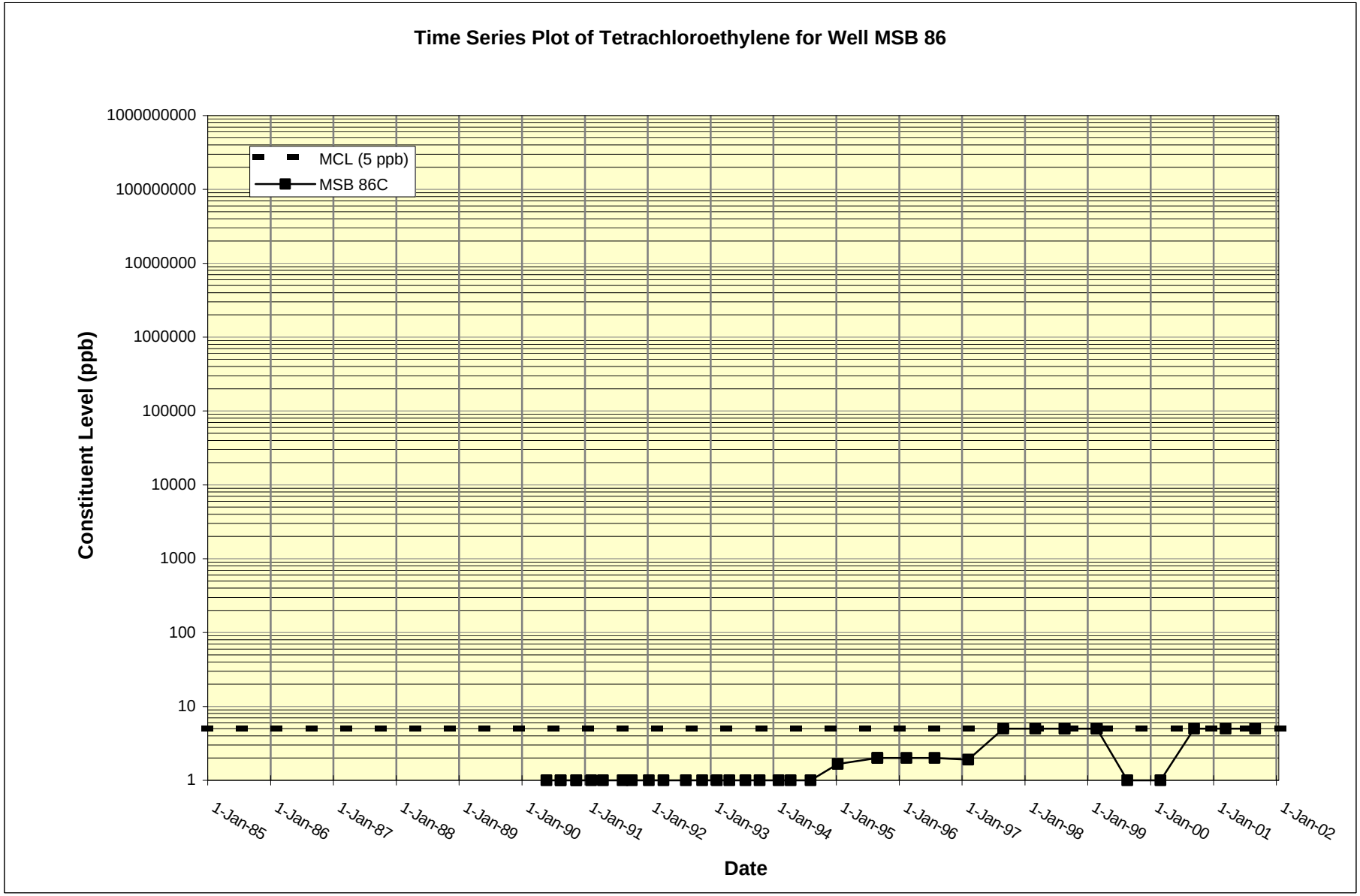
1-Jan-01
1-Jan-02
Date


Time Series Plot of Tetrachloroethylene for Well MSB 85
MCL (5 ppb)
MSB 85B
MSB 85C
MSB 85D
MSB 85TA
Constituent Level (ppb)
1000000000
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
1-Jan-95
1-Jan-96
1-Jan-97
1-Jan-98
1-Jan-99
1-Jan-00
1-Jan-01
1-Jan-02
Date


Time Series Plot of Tetrachloroethylene for Well MSB 86
MCL (5 ppb)
MSB 86C
Constituent Level (ppb)
1000000000
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
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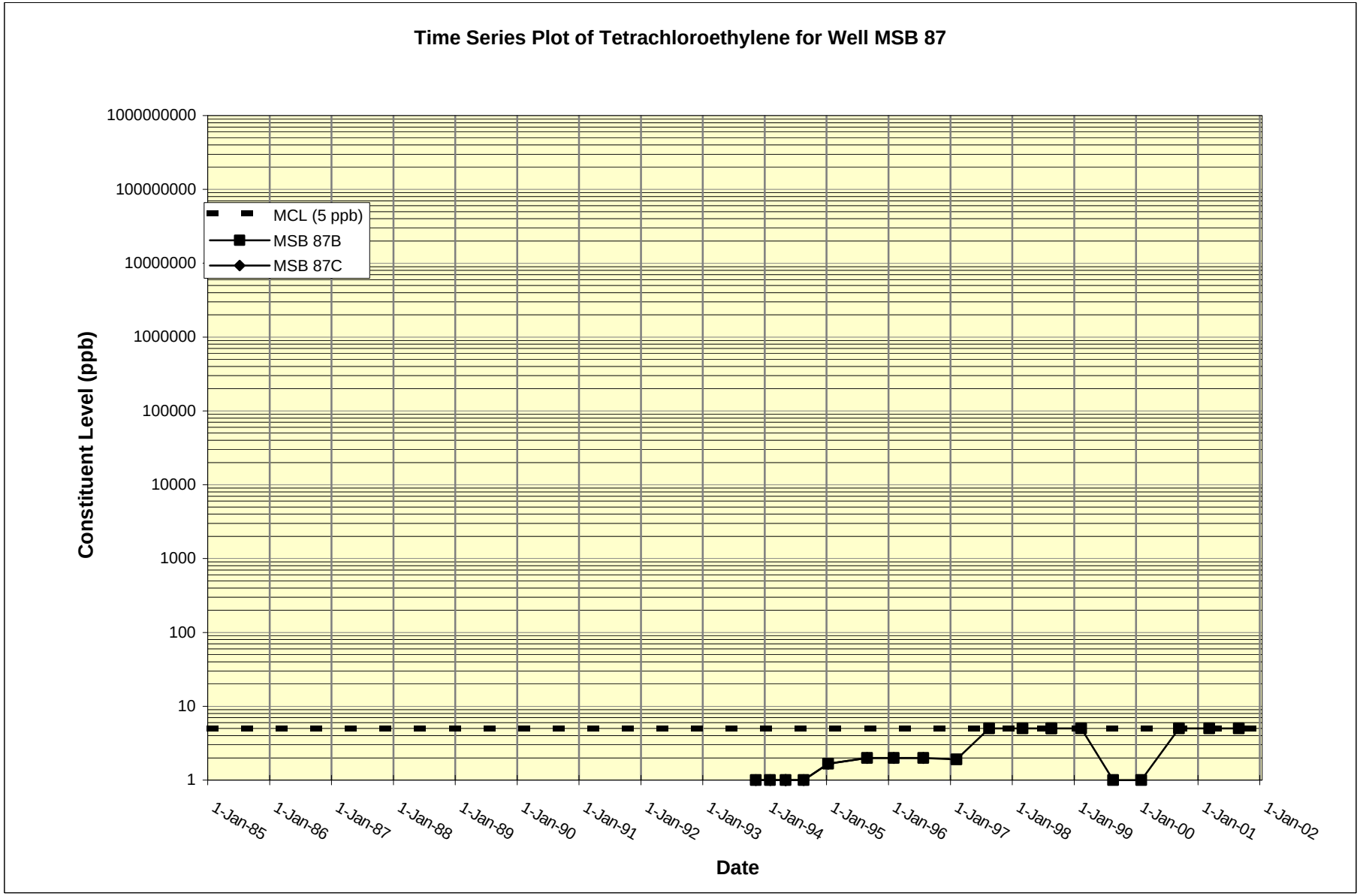
1-Jan-02
Date


Time Series Plot of Tetrachloroethylene for Well MSB 87
Constituent Level (ppb)
1000000000
100000000
10000000
1000000
100000
10000
1000
100
10
1
MCL (5 ppb)
MSB 87B
MSB 87C
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
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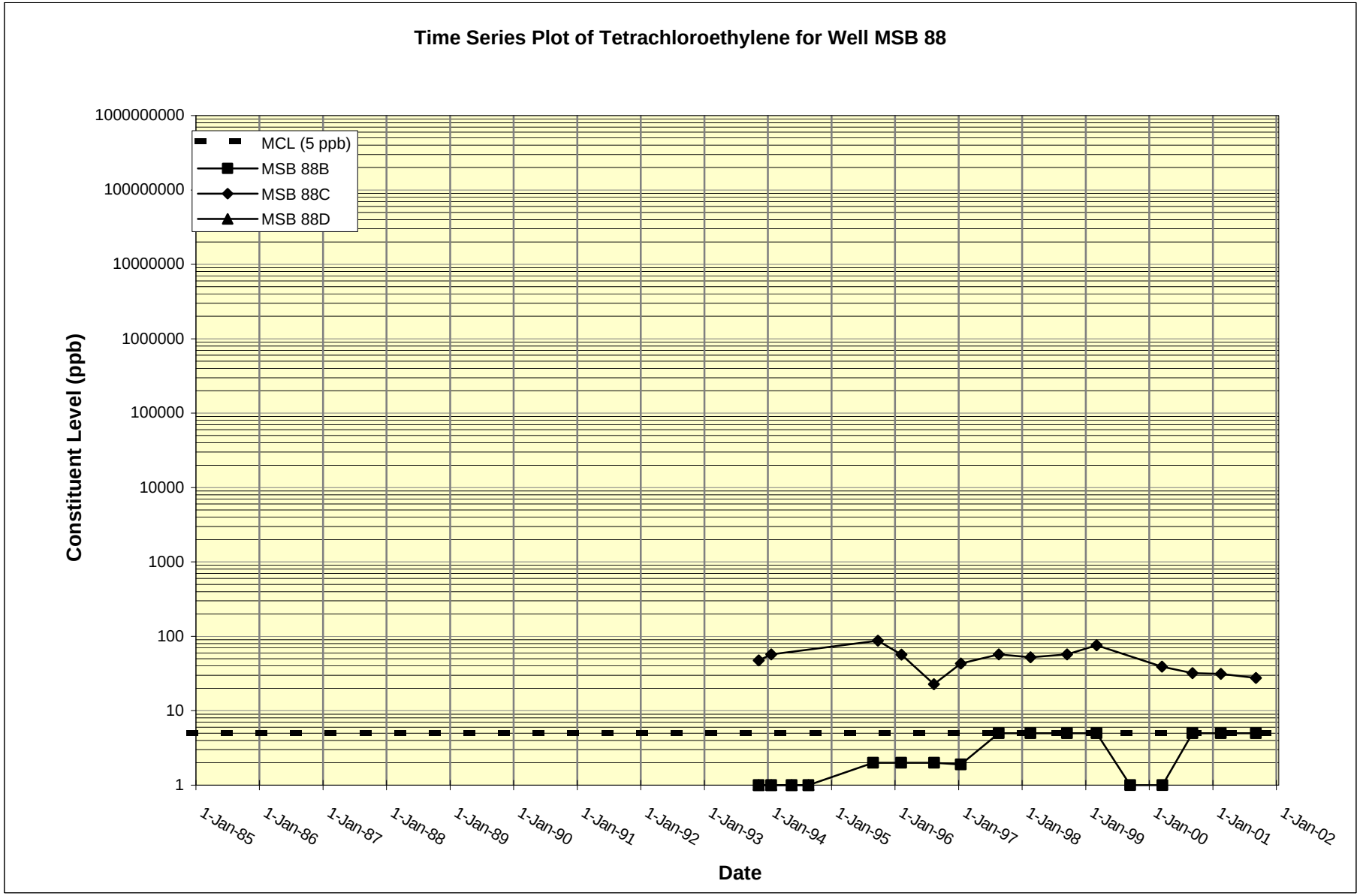
1-Jan-00
1-Jan-01
1-Jan-02
Date


Time Series Plot of Tetrachloroethylene for Well MSB 88
MCL (5 ppb)
MSB 88B
MSB 88C
MSB 88D
Constituent Level (ppb)
1000000000
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
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1-Jan-92
1-Jan-93
1-Jan-94
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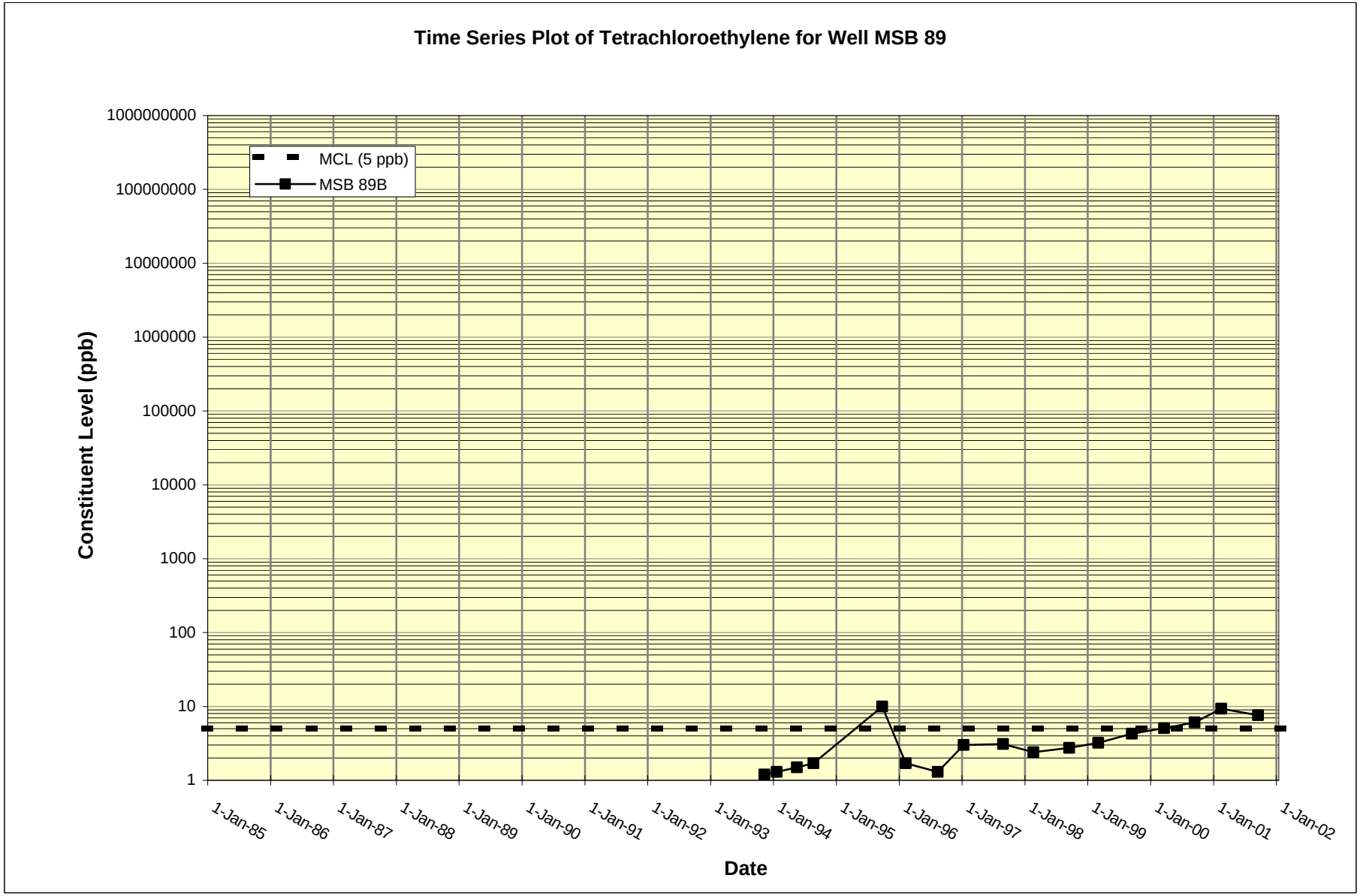
1-Jan-01
1-Jan-02
Date


Time Series Plot of Tetrachloroethylene for Well MSB 89
MCL (5 ppb)
MSB 89B
Constituent Level (ppb)
1000000000
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
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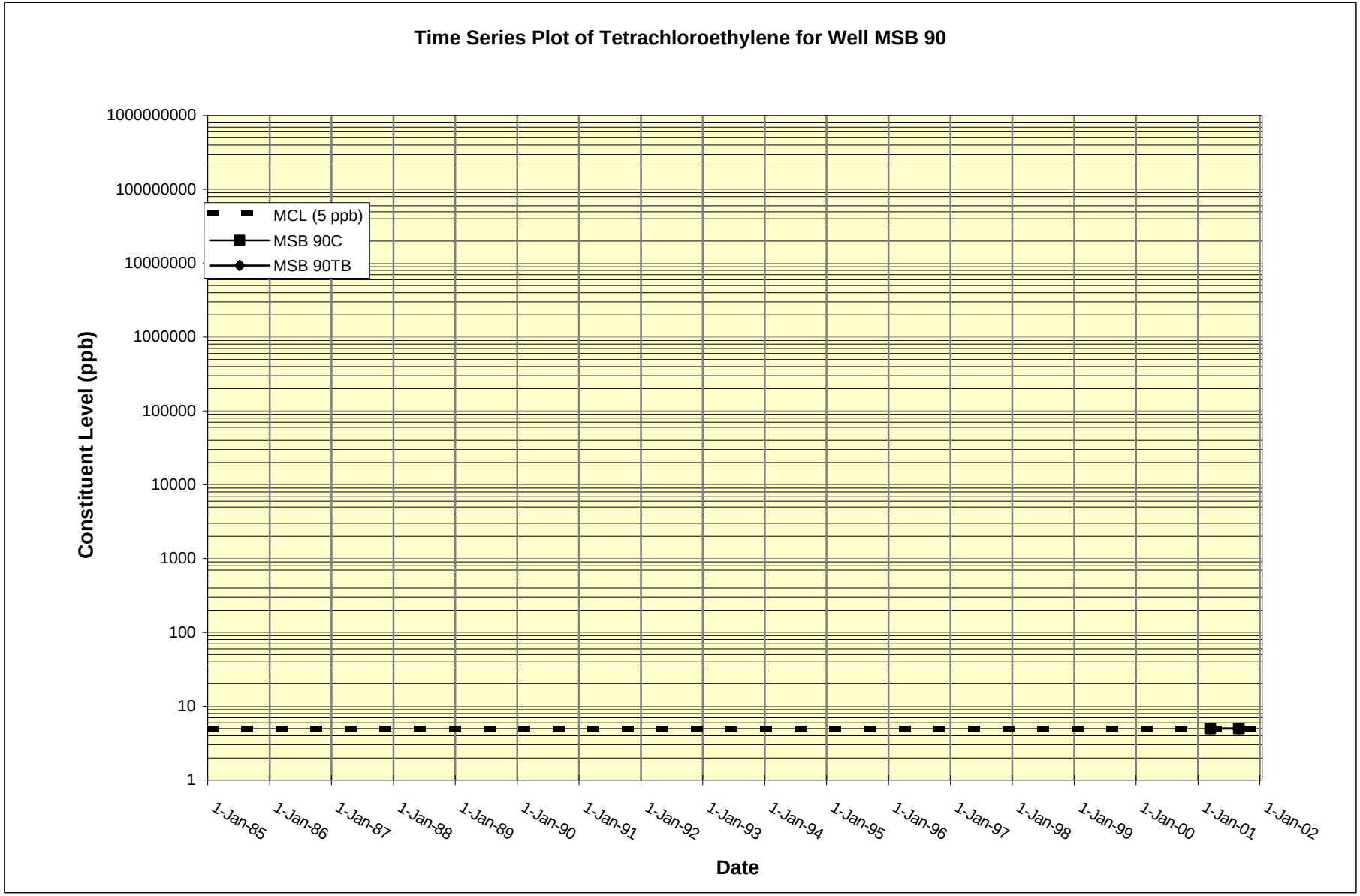
Date


Time Series Plot of Tetrachloroethylene for Well MSB 90
MCL (5 ppb)
MSB 90C
MSB 90TB
Constituent Level (ppb)
1000000000
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
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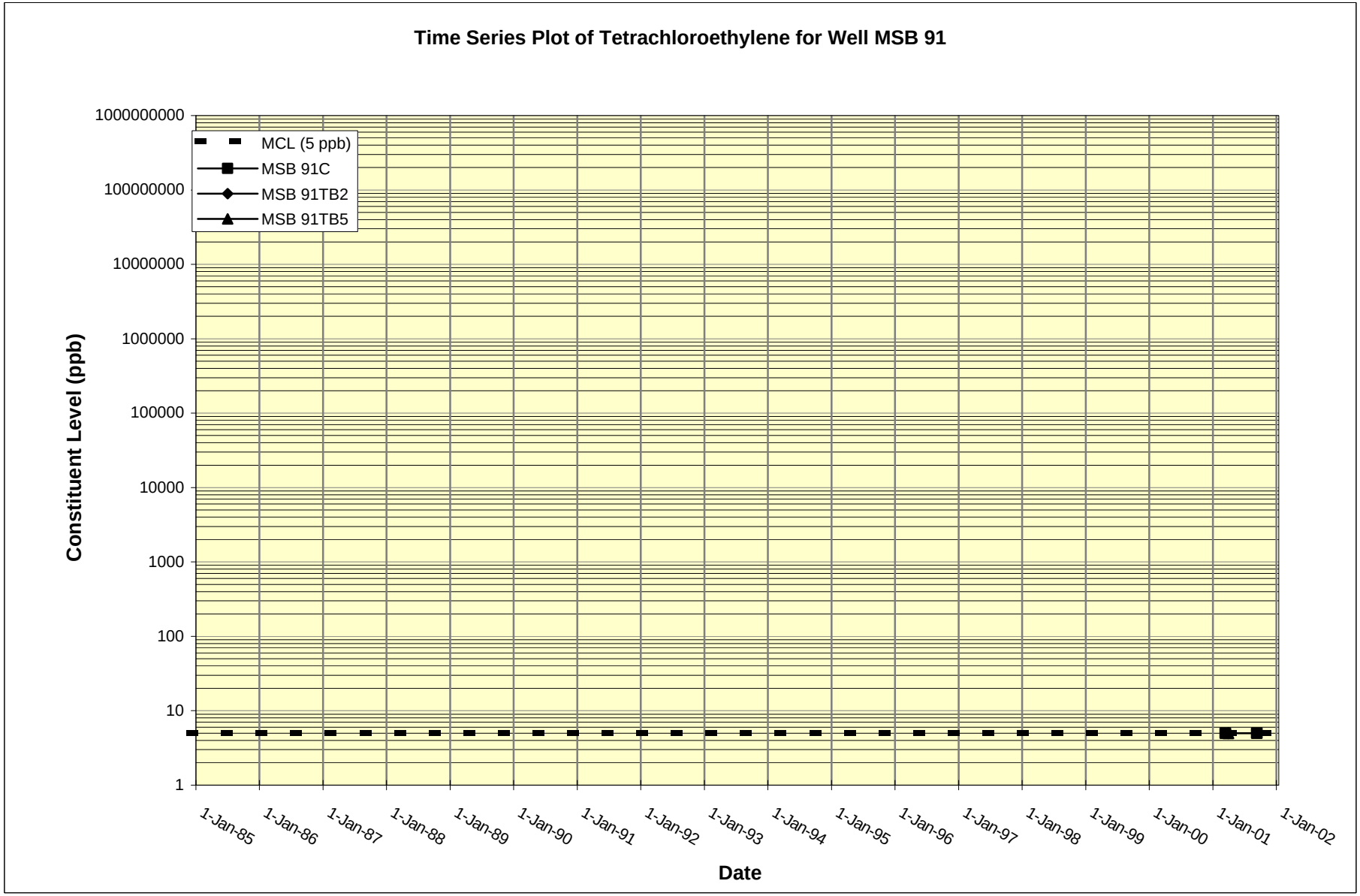
Date


Time Series Plot of Tetrachloroethylene for Well MSB 91
MCL (5 ppb)
MSB 91C
MSB 91TB2
MSB 91TB5
Constituent Level (ppb)
1000000000
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
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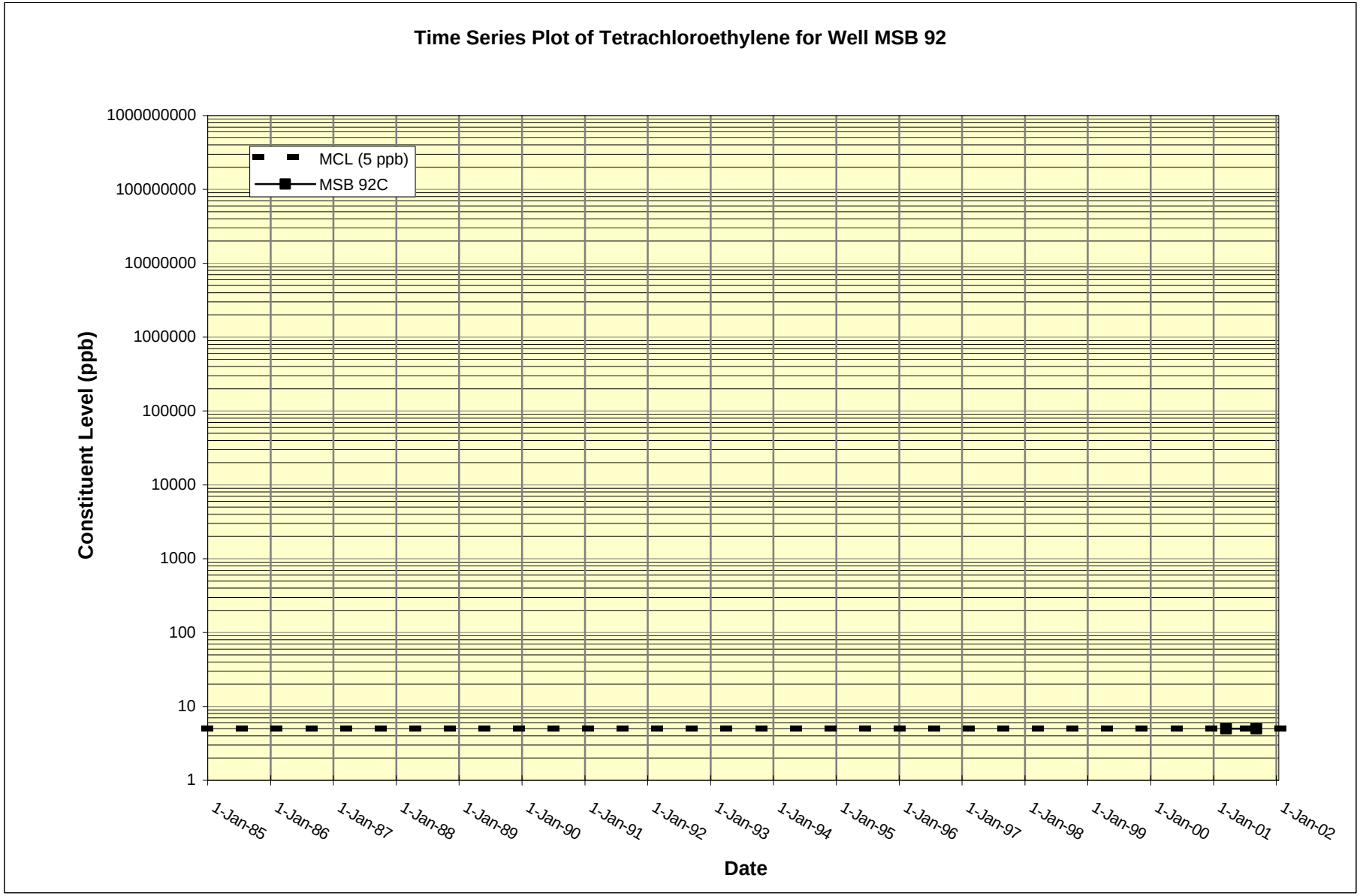
1-Jan-02
Date


Time Series Plot of Tetrachloroethylene for Well MSB 92
MCL (5 ppb)
MSB 92C
Constituent Level (ppb)
1000000000
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
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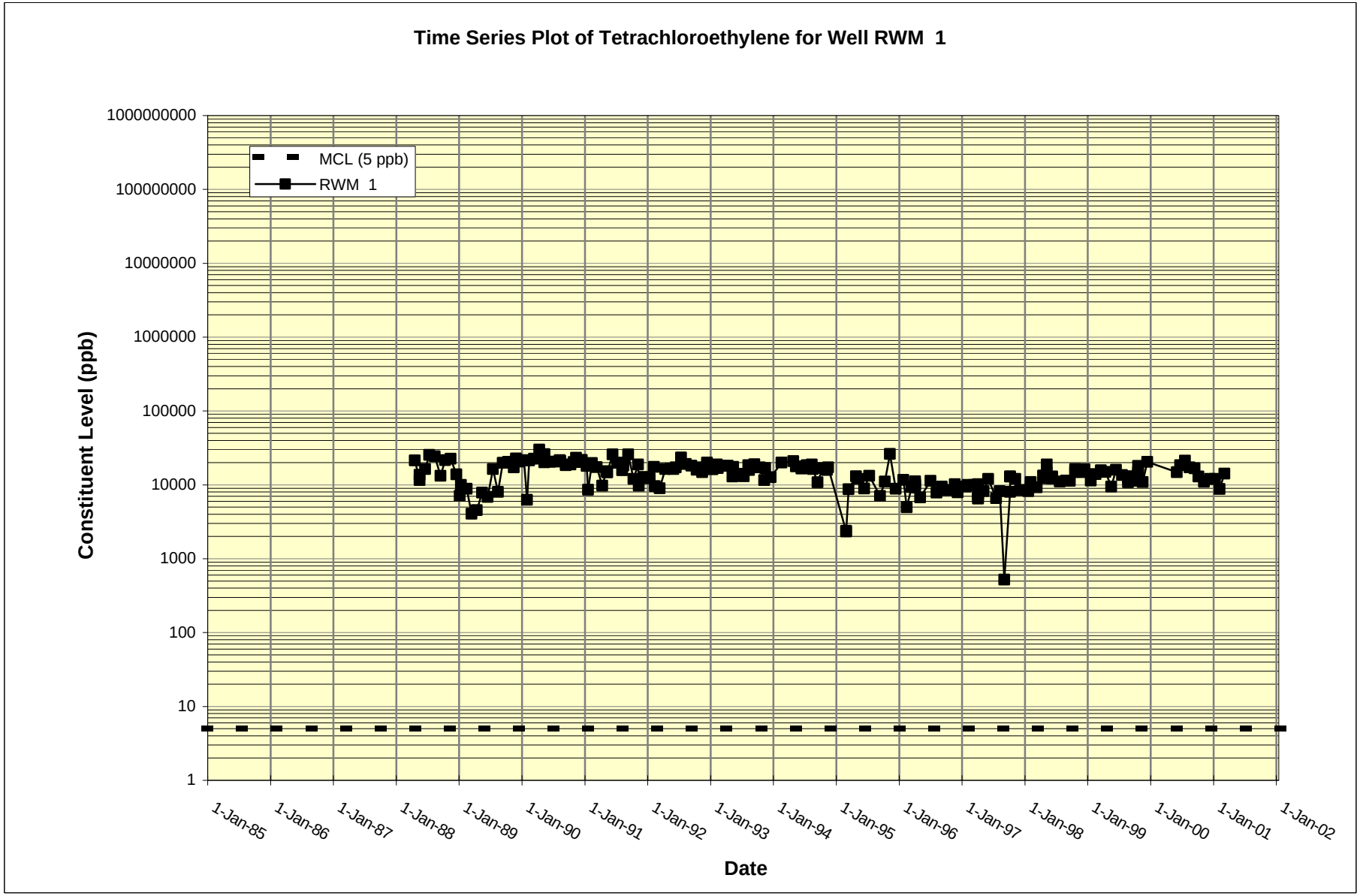
1-Jan-02
Date


Time Series Plot of Tetrachloroethylene for Well RWM 1
MCL (5 ppb)
RWM 1
Constituent Level (ppb)
1000000000
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
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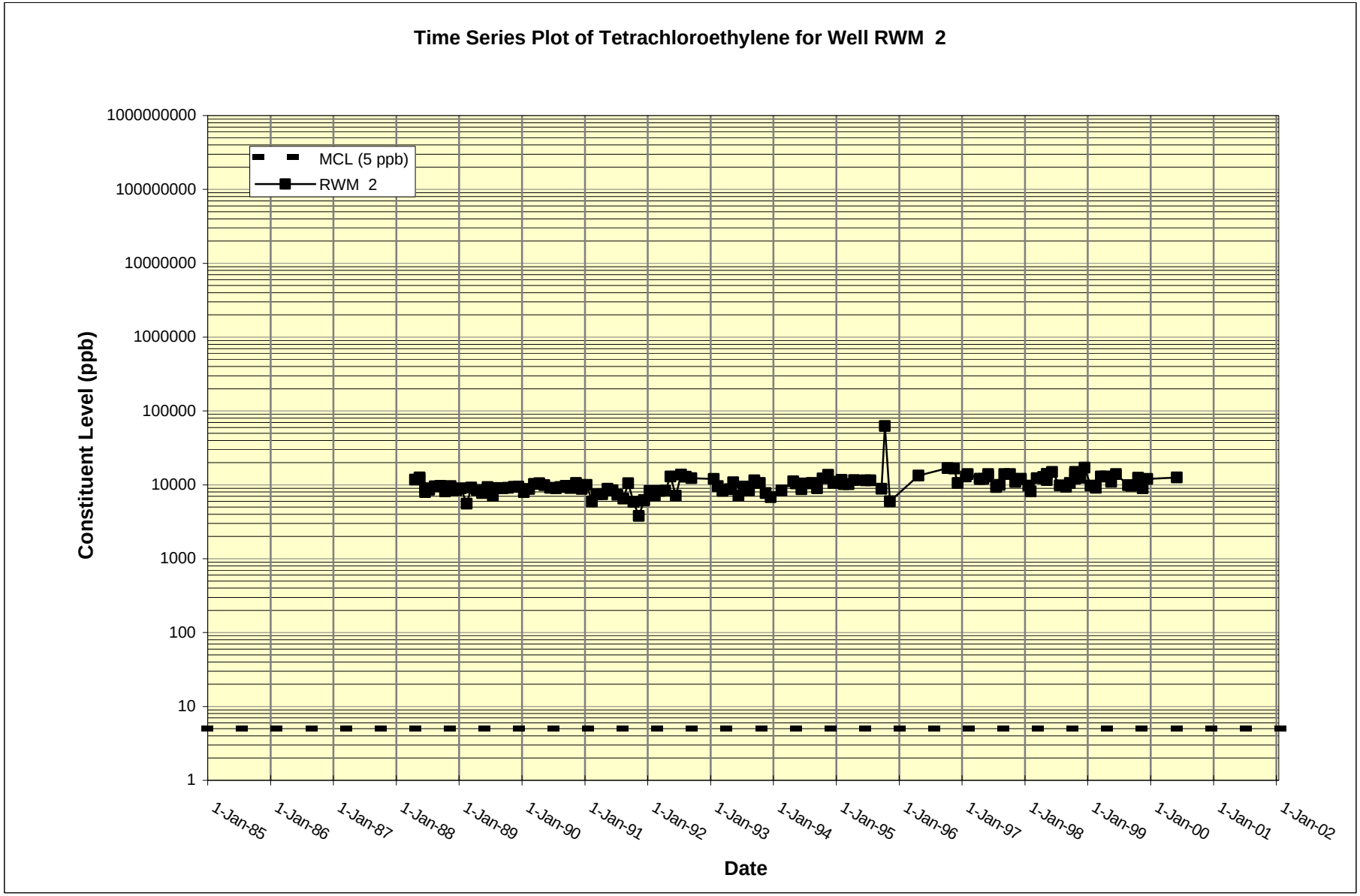
1-Jan-02
Date


Time Series Plot of Tetrachloroethylene for Well RWM 2
MCL (5 ppb)
RWM 2
Constituent Level (ppb)
1000000000
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
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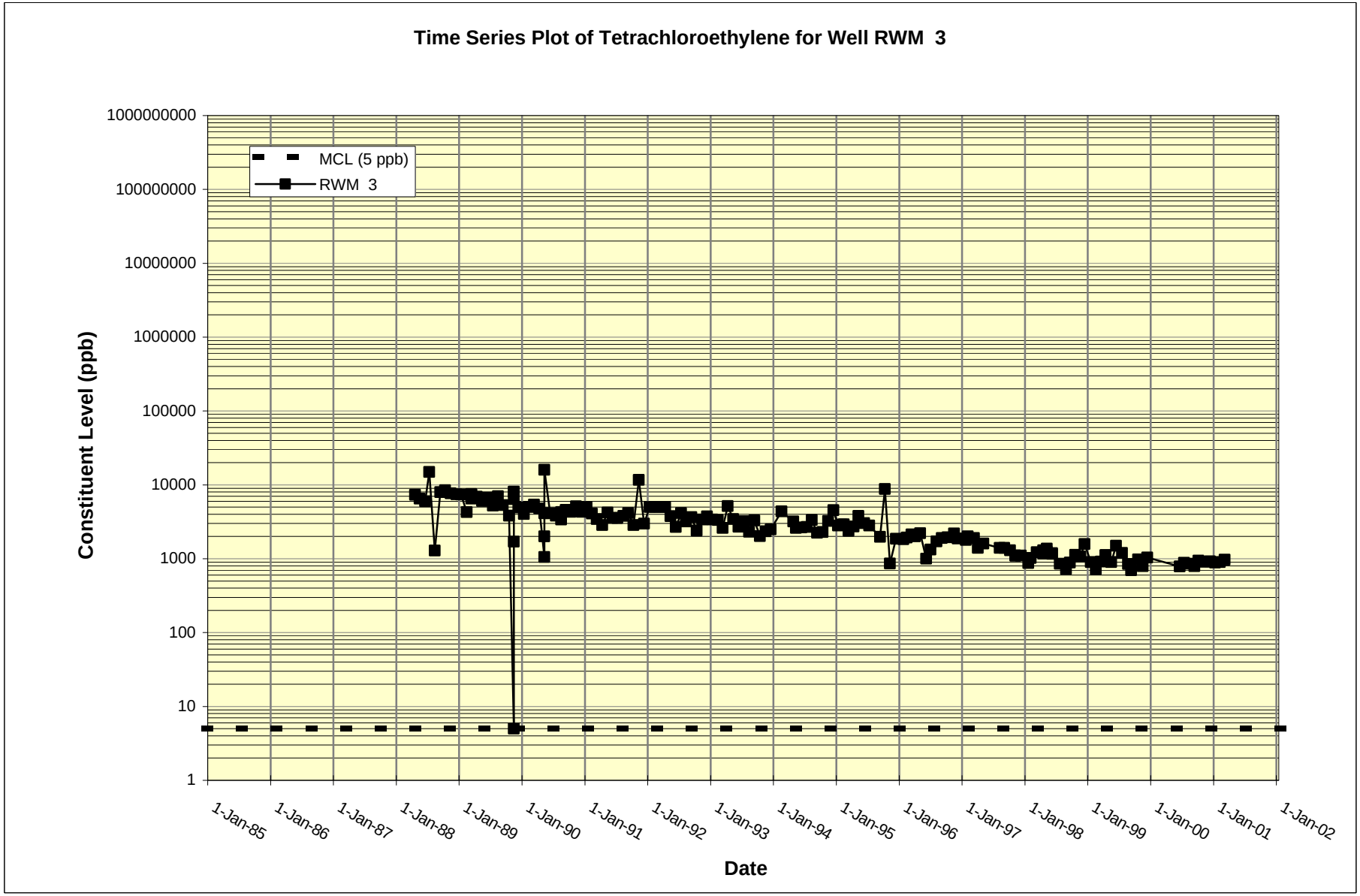
1-Jan-02
Date


Time Series Plot of Tetrachloroethylene for Well RWM 3
MCL (5 ppb)
RWM 3
Constituent Level (ppb)
1000000000
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
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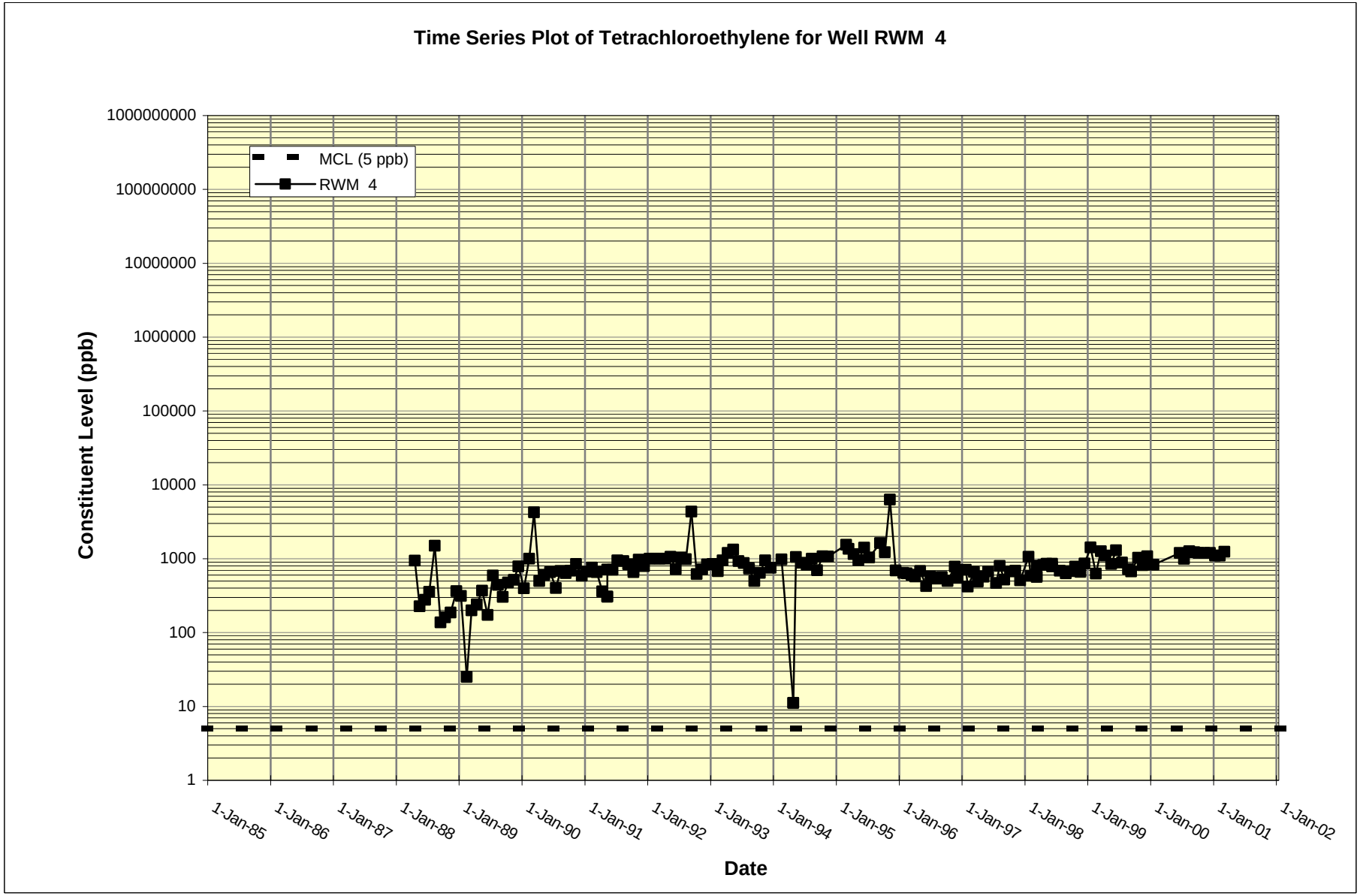
1-Jan-02
Date


Time Series Plot of Tetrachloroethylene for Well RWM 4
MCL (5 ppb)
RWM 4
Constituent Level (ppb)
1000000000
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
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1-Jan-94
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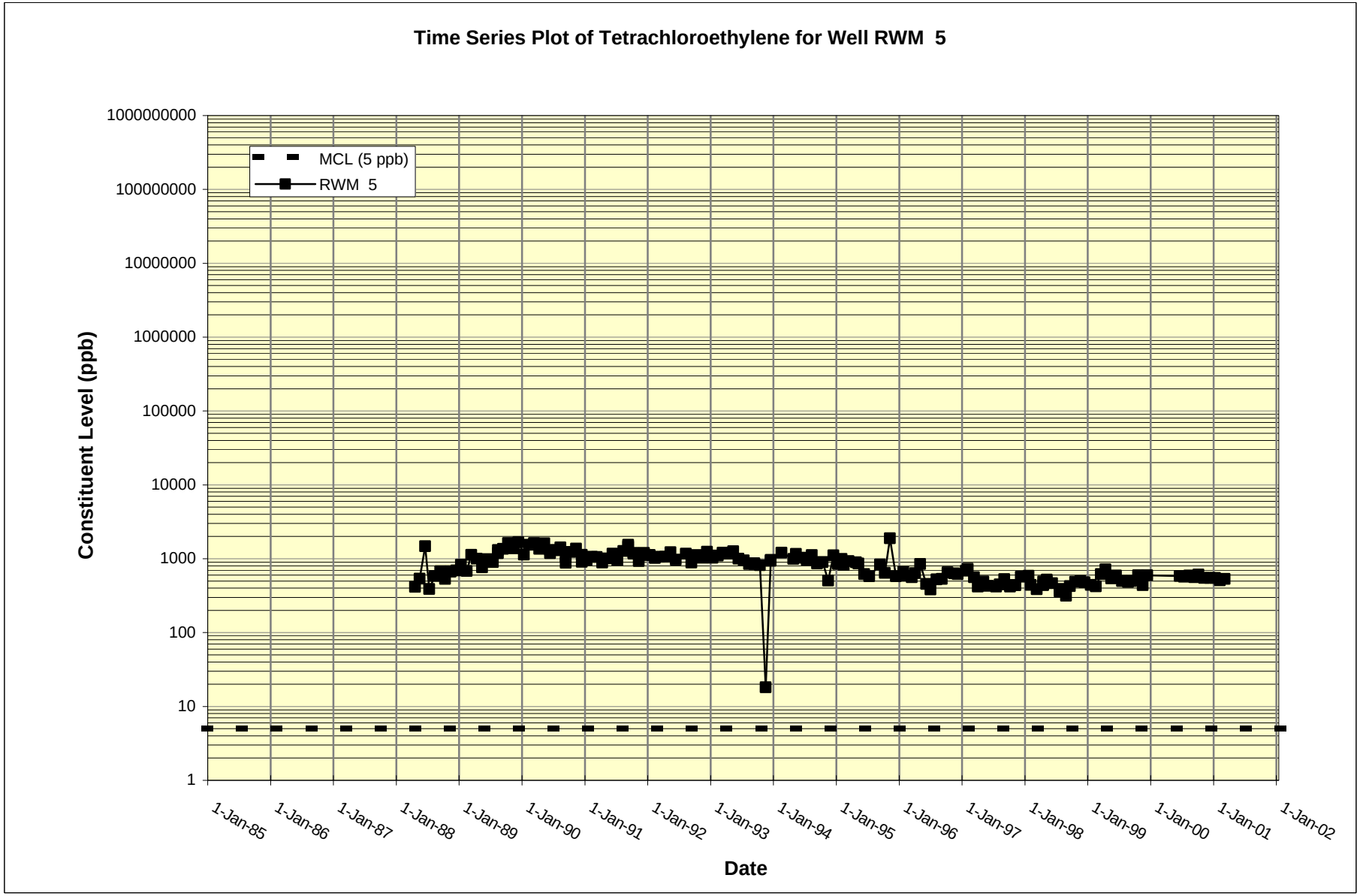
1-Jan-02
Date


Time Series Plot of Tetrachloroethylene for Well RWM 5
MCL (5 ppb)
RWM 5
Constituent Level (ppb)
1000000000
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
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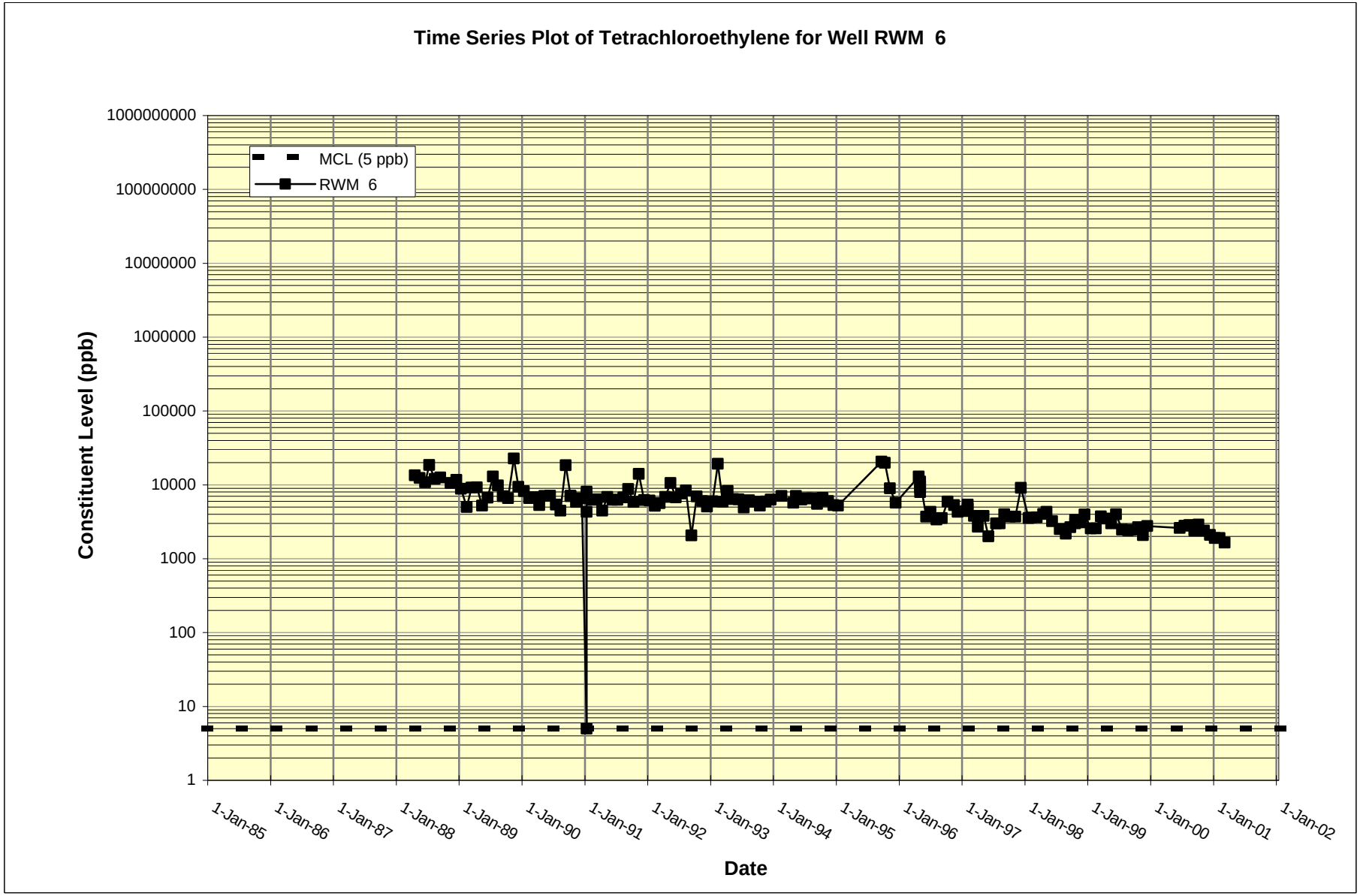
Date


Time Series Plot of Tetrachloroethylene for Well RWM 6
MCL (5 ppb)
RWM 6
Constituent Level (ppb)
1000000000
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
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1-Jan-94
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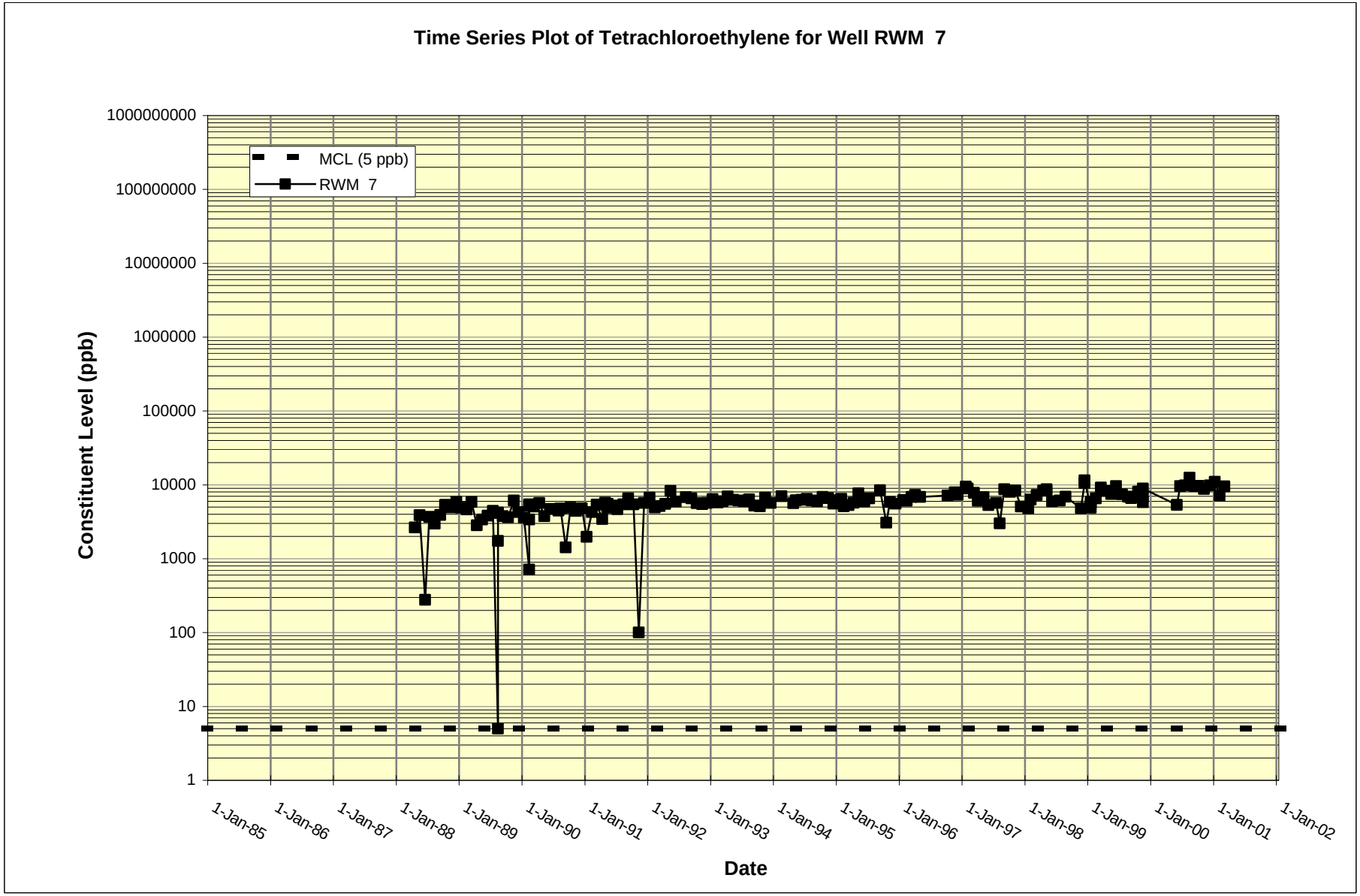
1-Jan-02
Date


Time Series Plot of Tetrachloroethylene for Well RWM 7
MCL (5 ppb)
RWM 7
Constituent Level (ppb)
1000000000
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
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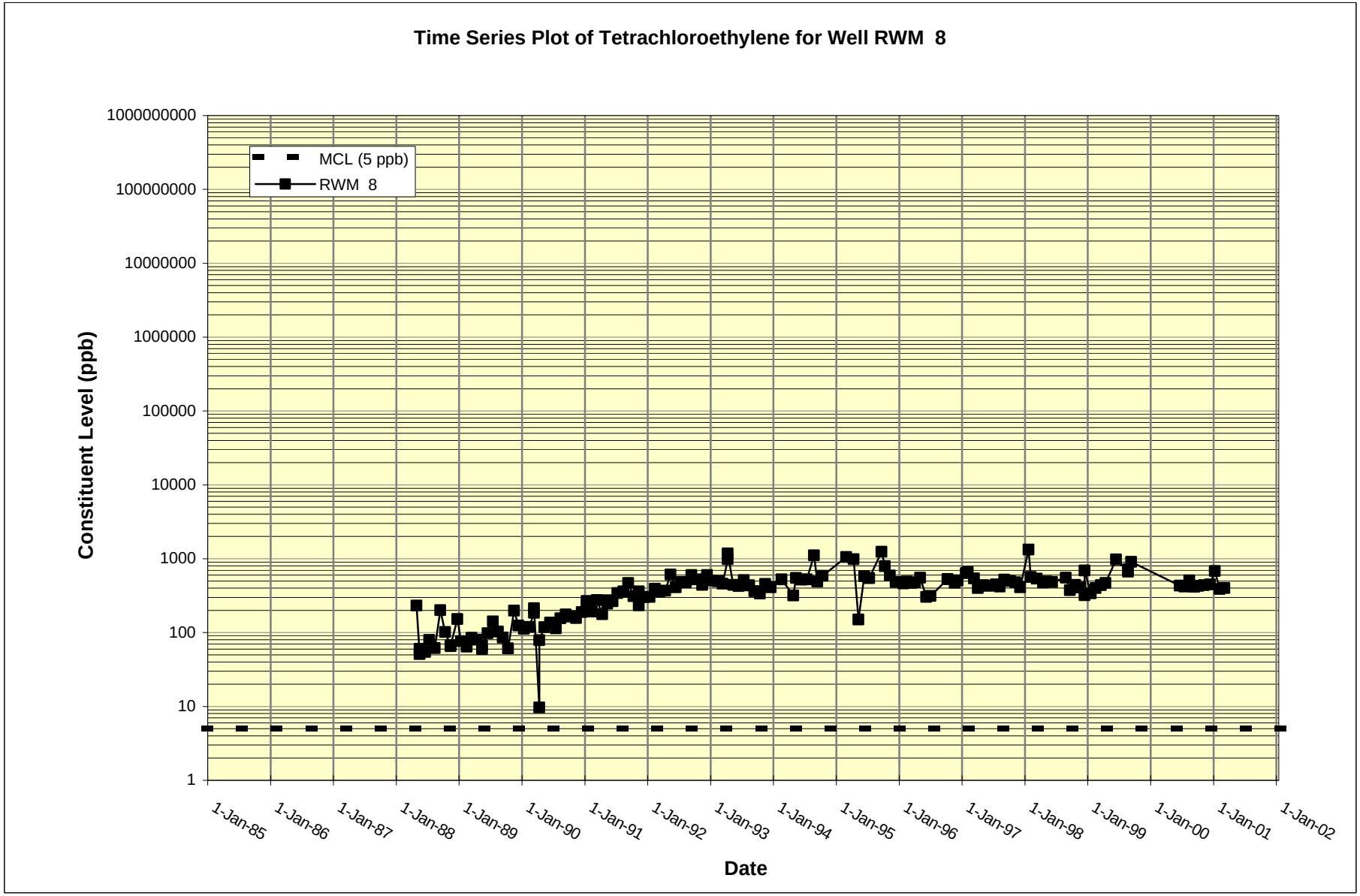
1-Jan-02
Date


Time Series Plot of Tetrachloroethylene for Well RWM 8
MCL (5 ppb)
RWM 8
Constituent Level (ppb)
1000000000
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
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1-Jan-88
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1-Jan-94
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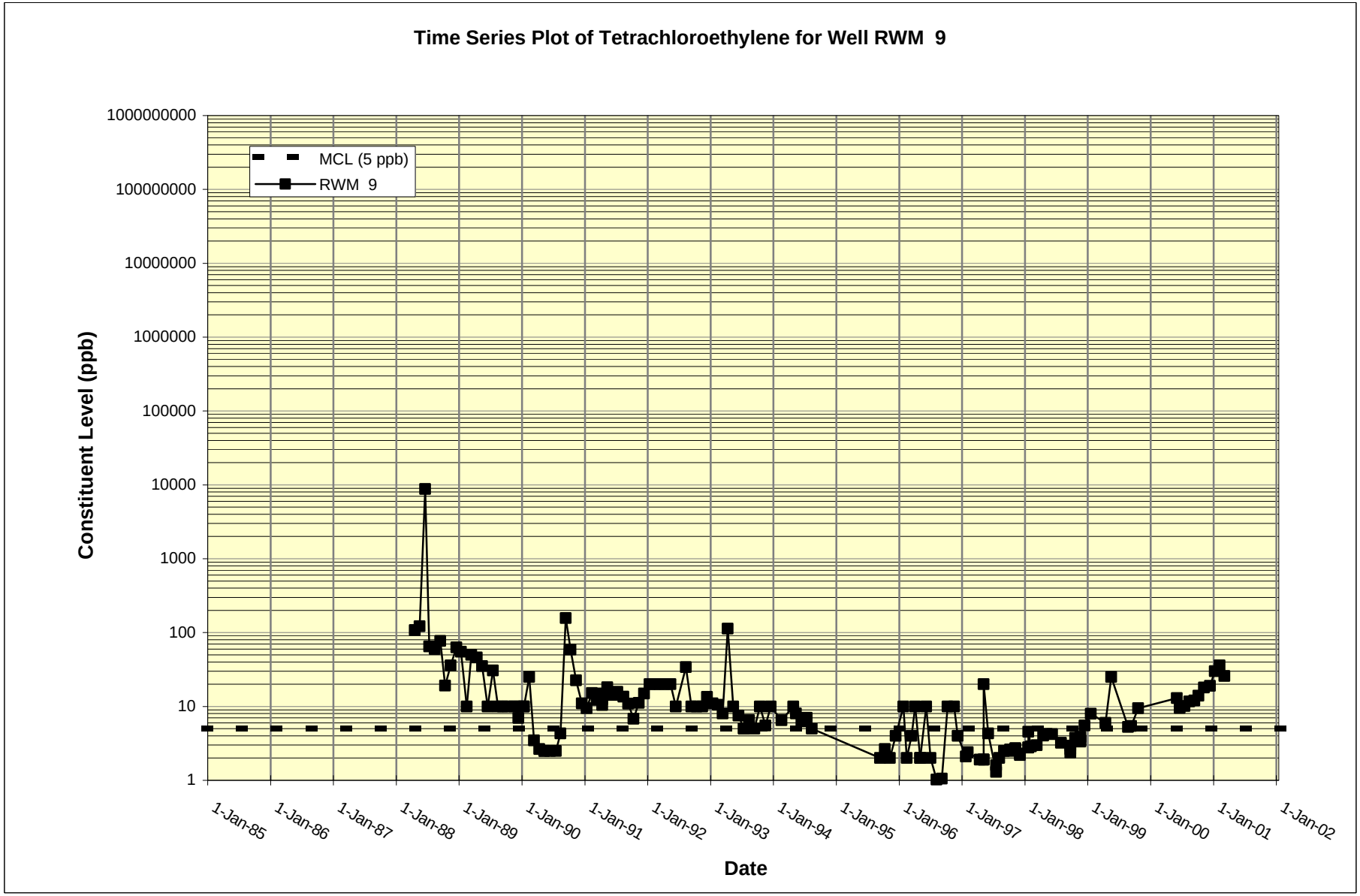
1-Jan-02
Date


Time Series Plot of Tetrachloroethylene for Well RWM 9
MCL (5 ppb)
RWM 9
Constituent Level (ppb)
1000000000
100000000
10000000
1000000
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10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
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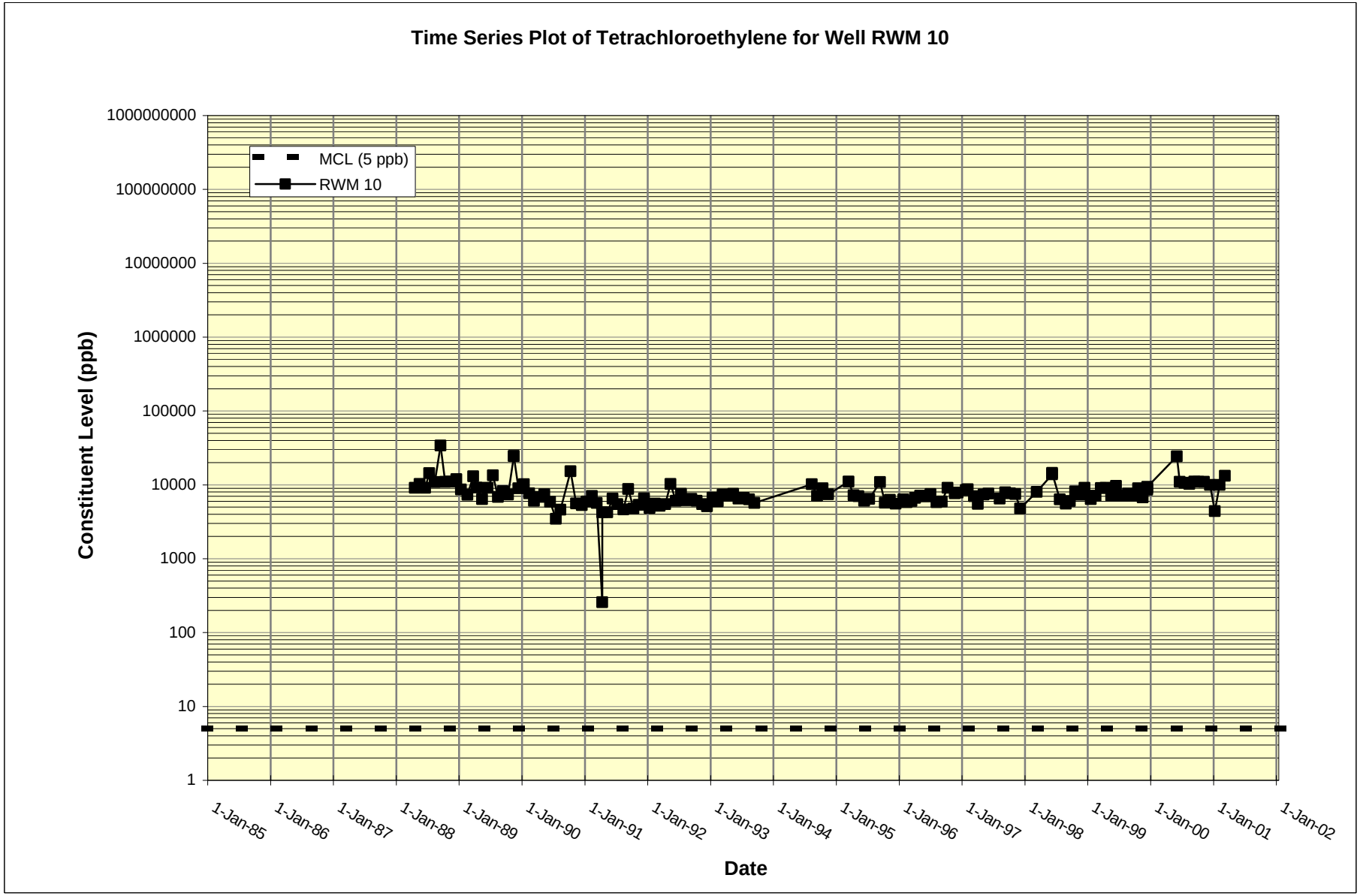
1-Jan-02
Date


Time Series Plot of Tetrachloroethylene for Well RWM 10
MCL (5 ppb)
RWM 10
Constituent Level (ppb)
1000000000
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
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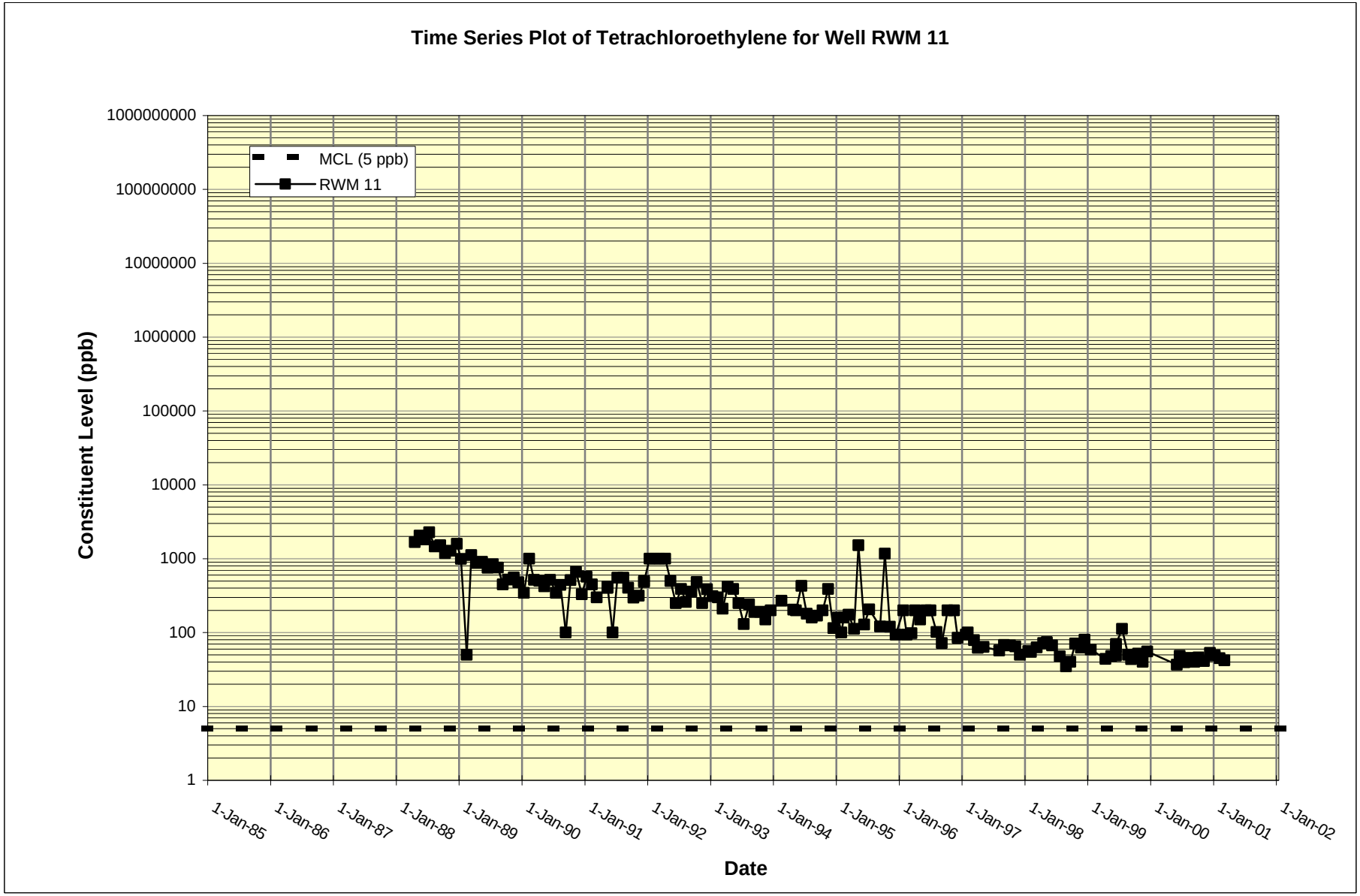
1-Jan-02
Date


Time Series Plot of Tetrachloroethylene for Well RWM 11
MCL (5 ppb)
RWM 11
Constituent Level (ppb)
1000000000
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
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1-Jan-94
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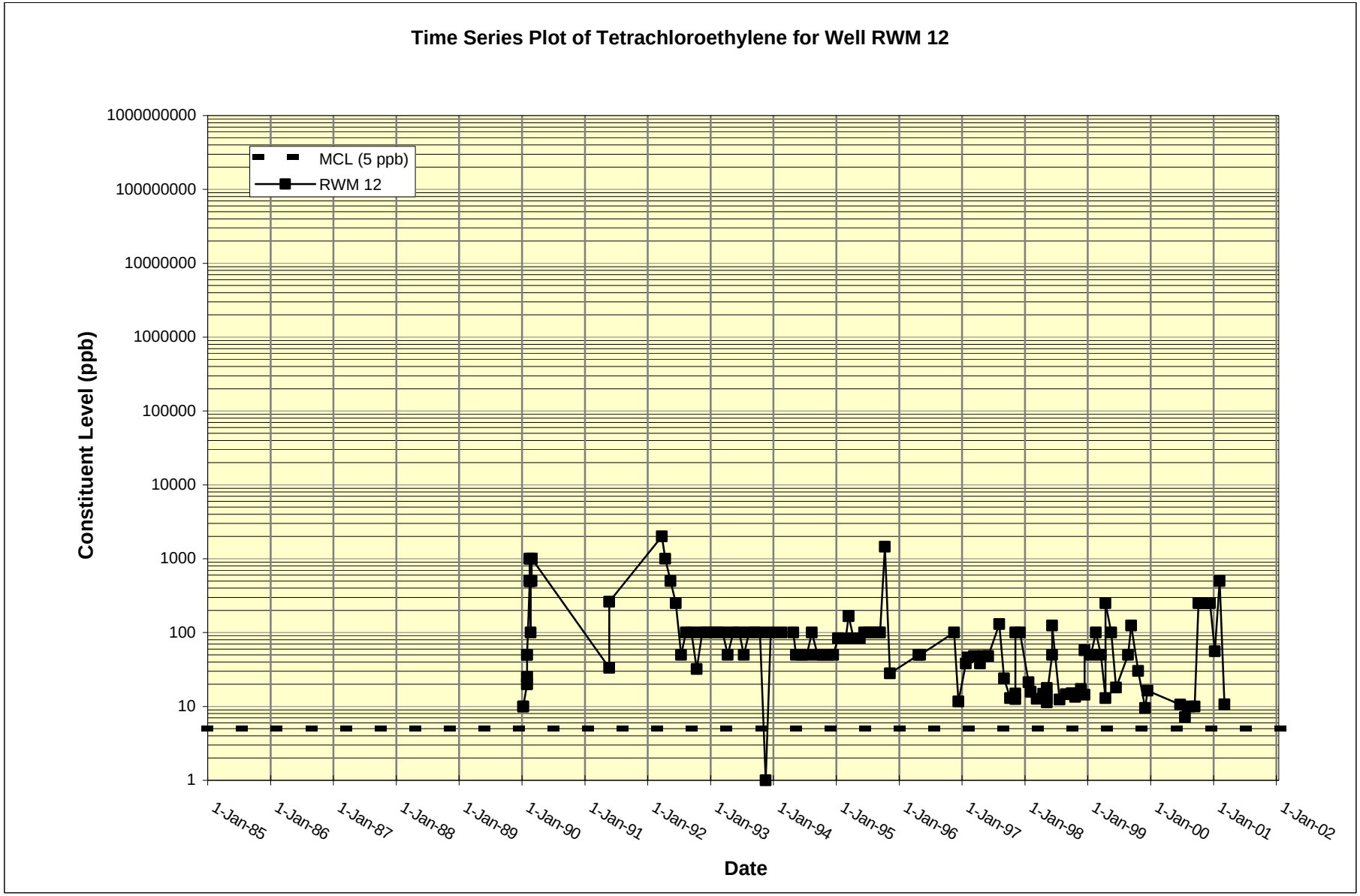
1-Jan-02
Date


Time Series Plot of Tetrachloroethylene for Well RWM 12
MCL (5 ppb)
RWM 12
Constituent Level (ppb)
1000000000
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
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1-Jan-93
1-Jan-94
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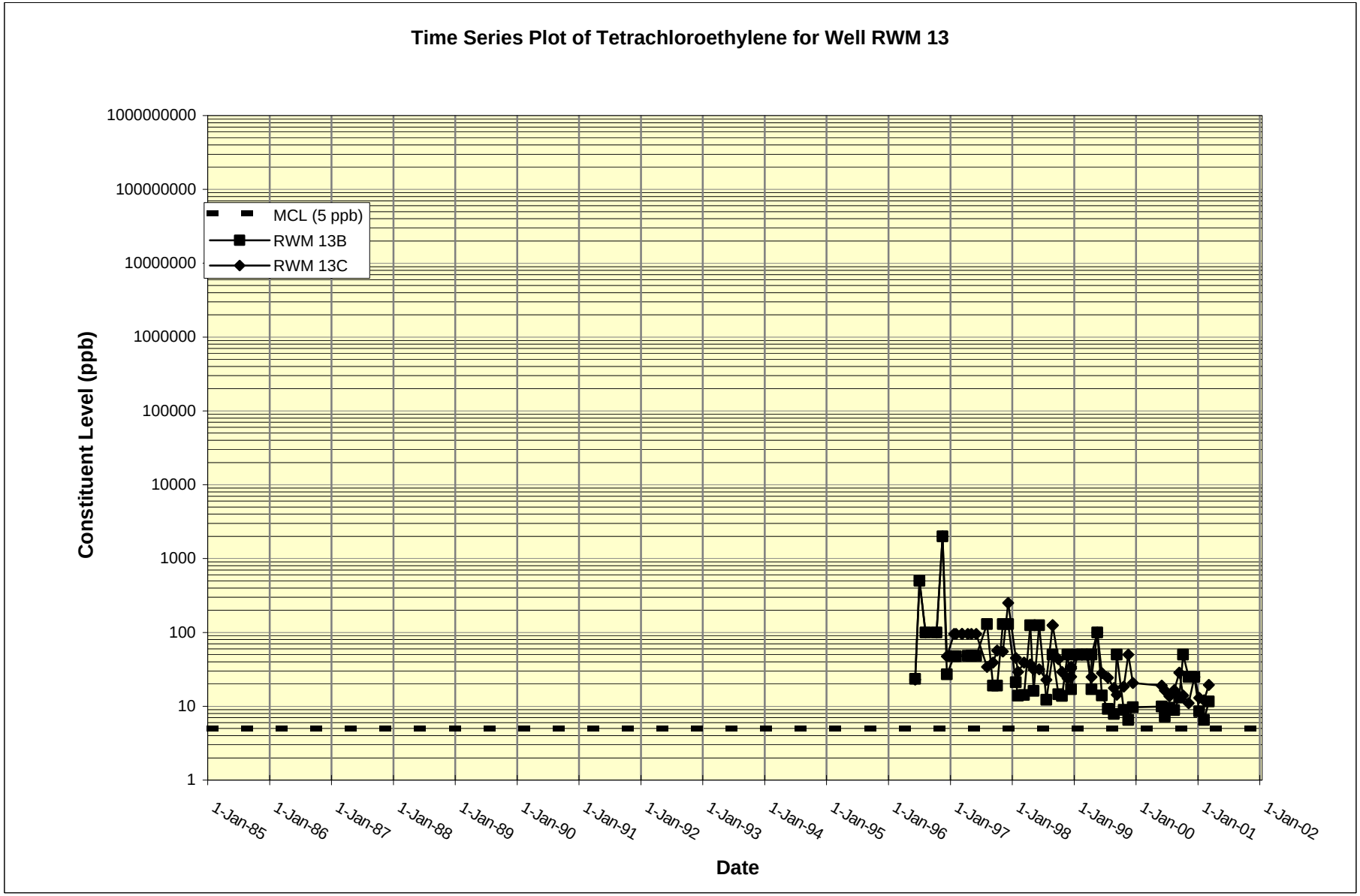
1-Jan-00
1-Jan-01
1-Jan-02
Date


Time Series Plot of Tetrachloroethylene for Well RWM 13
MCL (5 ppb)
RWM 13B
RWM 13C
Constituent Level (ppb)
1000000000
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
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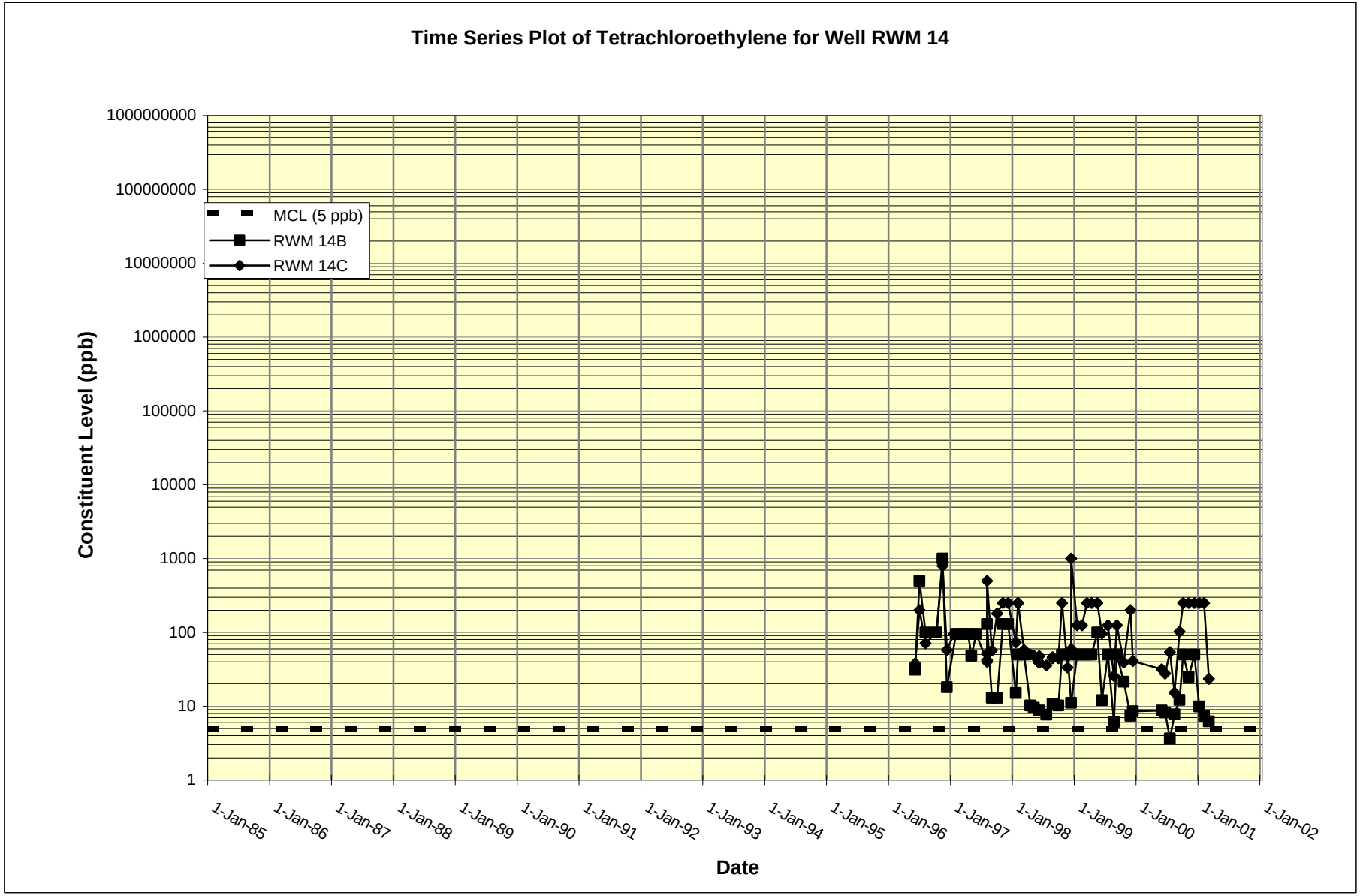
1-Jan-01
1-Jan-02
Date


Time Series Plot of Tetrachloroethylene for Well RWM 14
MCL (5 ppb)
RWM 14B
RWM 14C
Constituent Level (ppb)
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1000000
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10000
1000
100
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1
1-Jan-85
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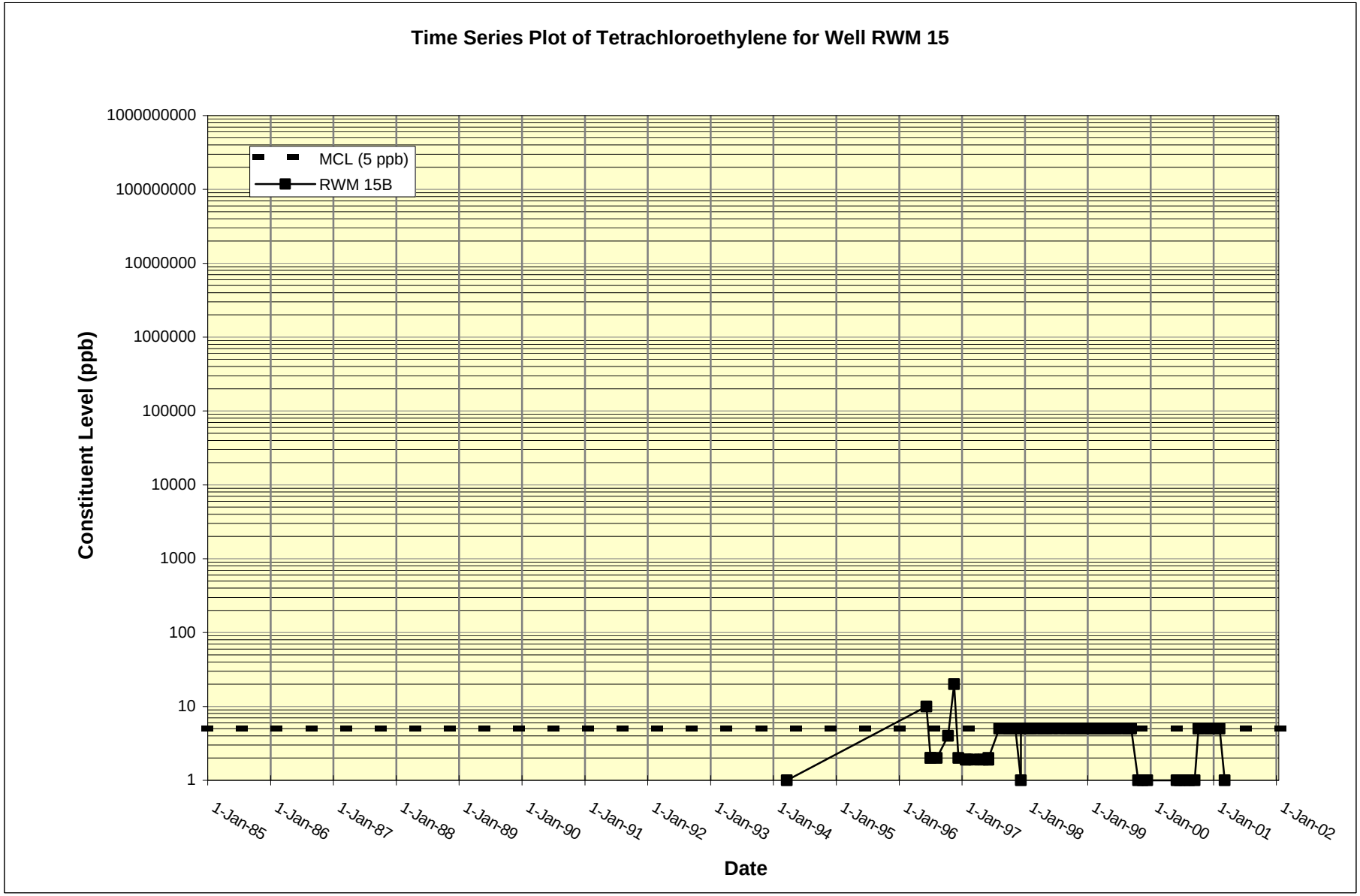
Date


Time Series Plot of Tetrachloroethylene for Well RWM 15
MCL (5 ppb)
RWM 15B
Constituent Level (ppb)
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100000000
10000000
1000000
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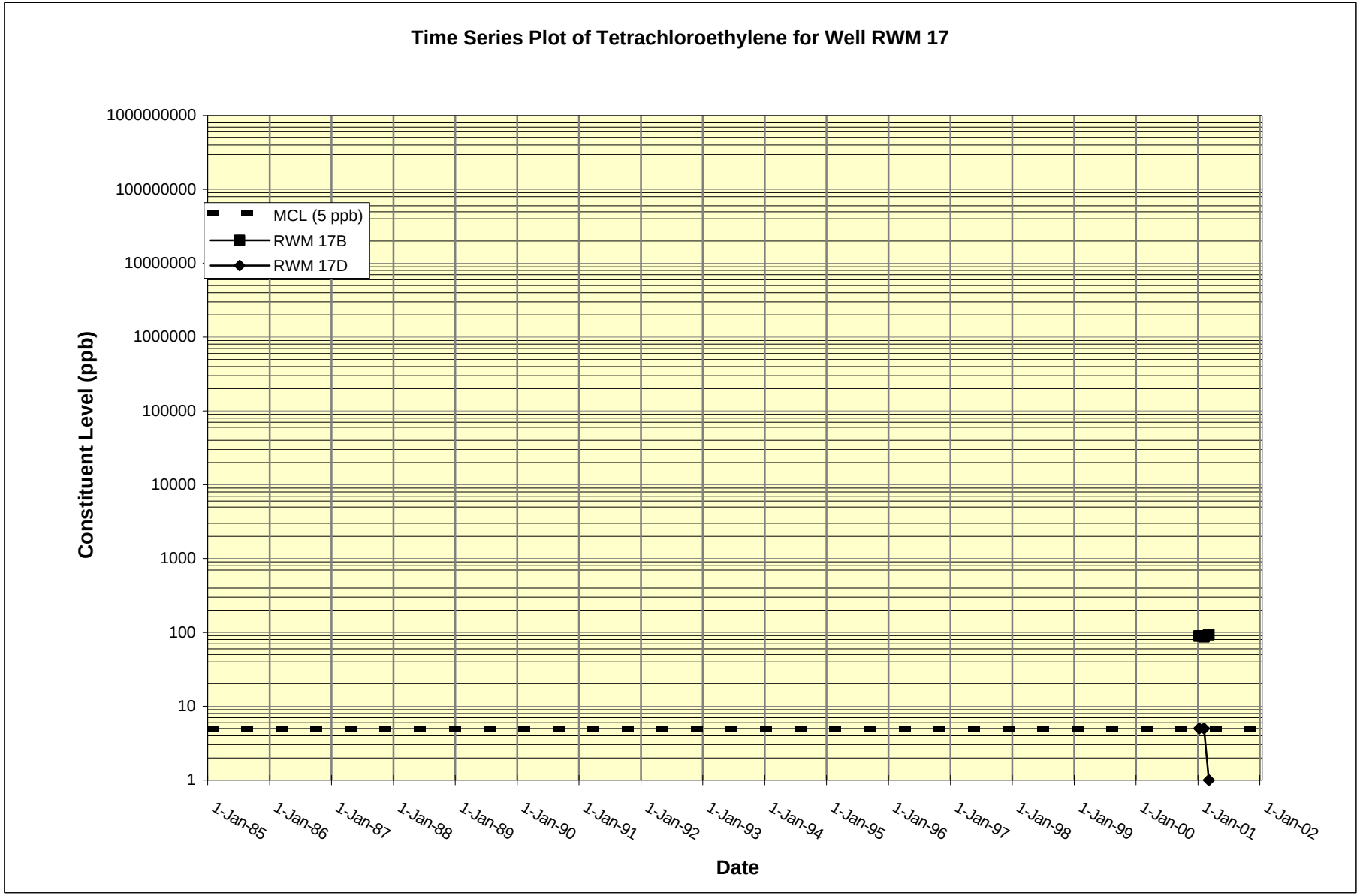
Date


Time Series Plot of Tetrachloroethylene for Well RWM 17
MCL (5 ppb)
RWM 17B
RWM 17D
Constituent Level (ppb)
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10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
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1-Jan-90
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1-Jan-94
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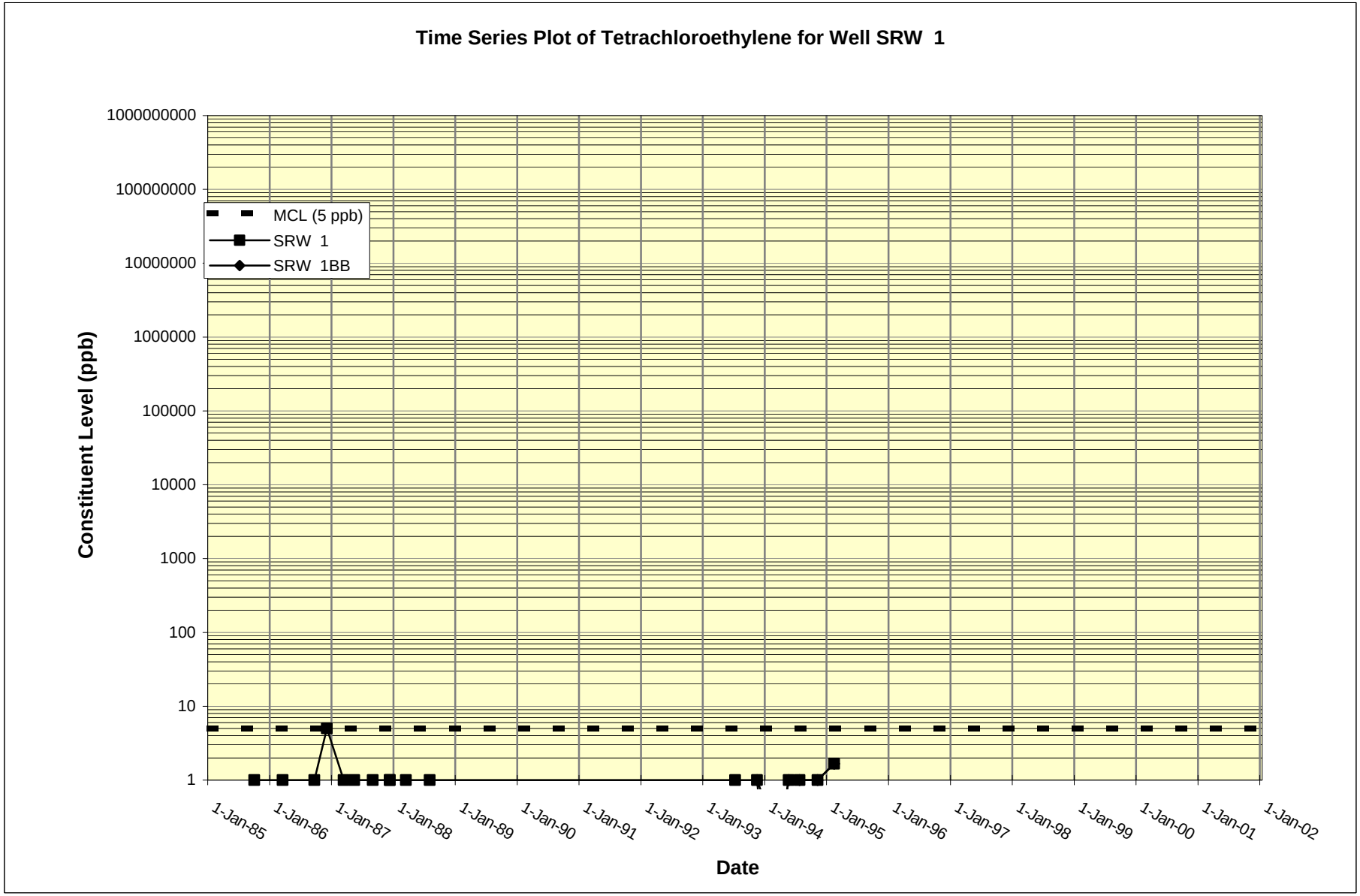
1-Jan-02
Date


Time Series Plot of Tetrachloroethylene for Well SRW 1
MCL (5 ppb)
SRW 1
SRW 1BB
Constituent Level (ppb)
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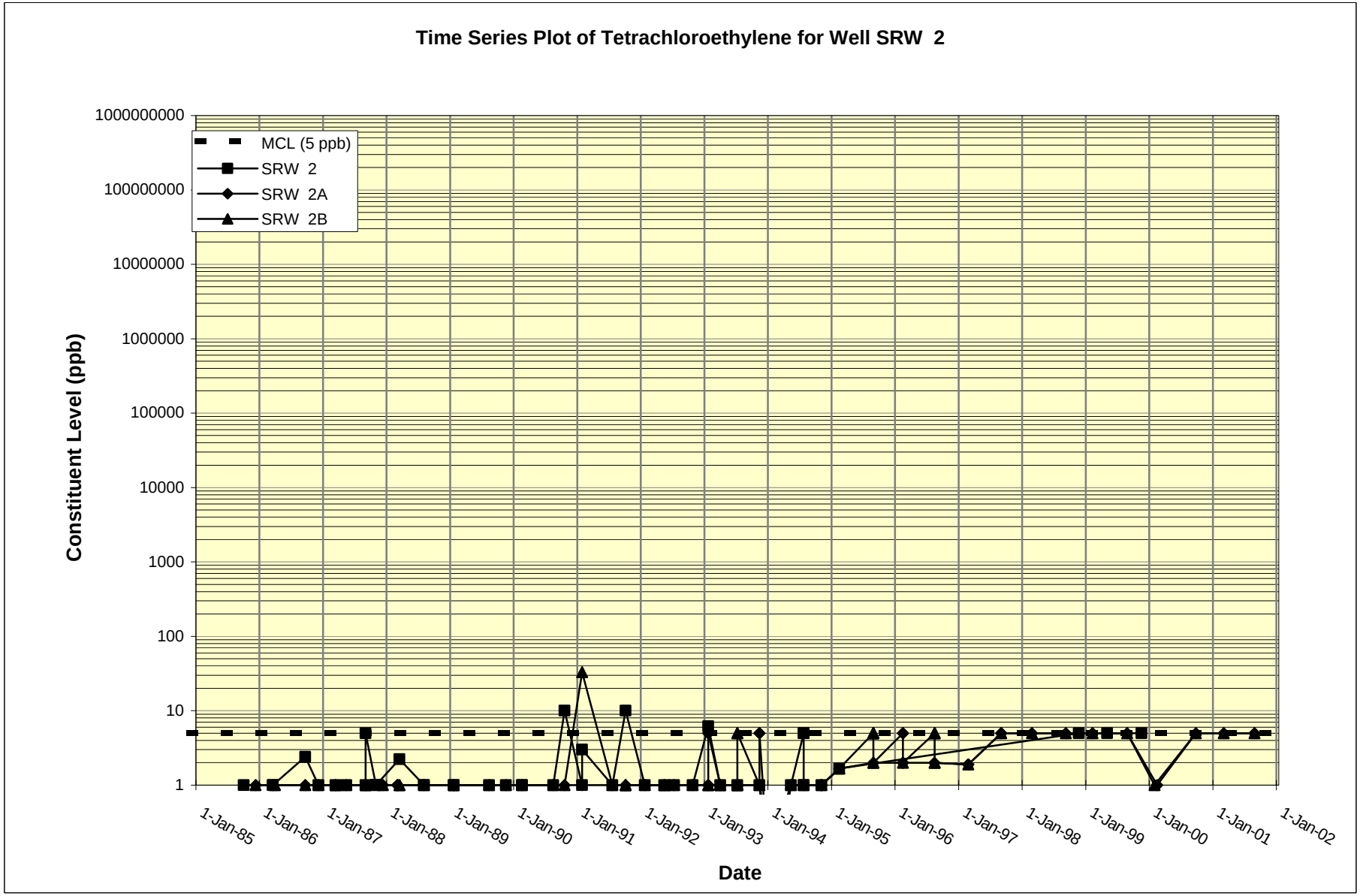
Time Series Plot of Tetrachloroethylene for Well SRW 2
MCL (5 ppb)
SRW 2
SRW 2A
SRW 2B
Constituent Level (ppb)
1000000000
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
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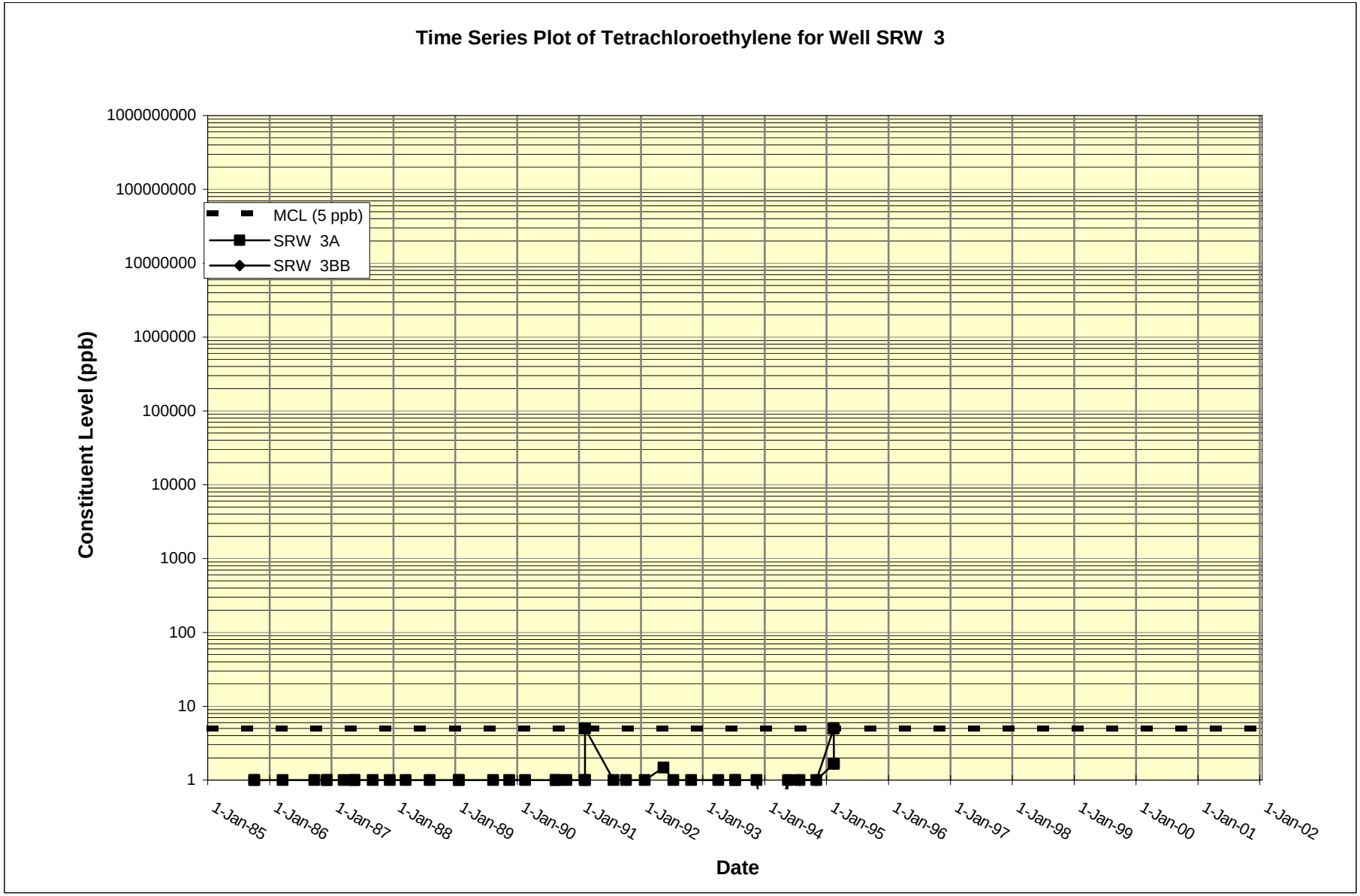
Date


Time Series Plot of Tetrachloroethylene for Well SRW 3
MCL (5 ppb)
SRW 3A
SRW 3BB
Constituent Level (ppb)
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10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
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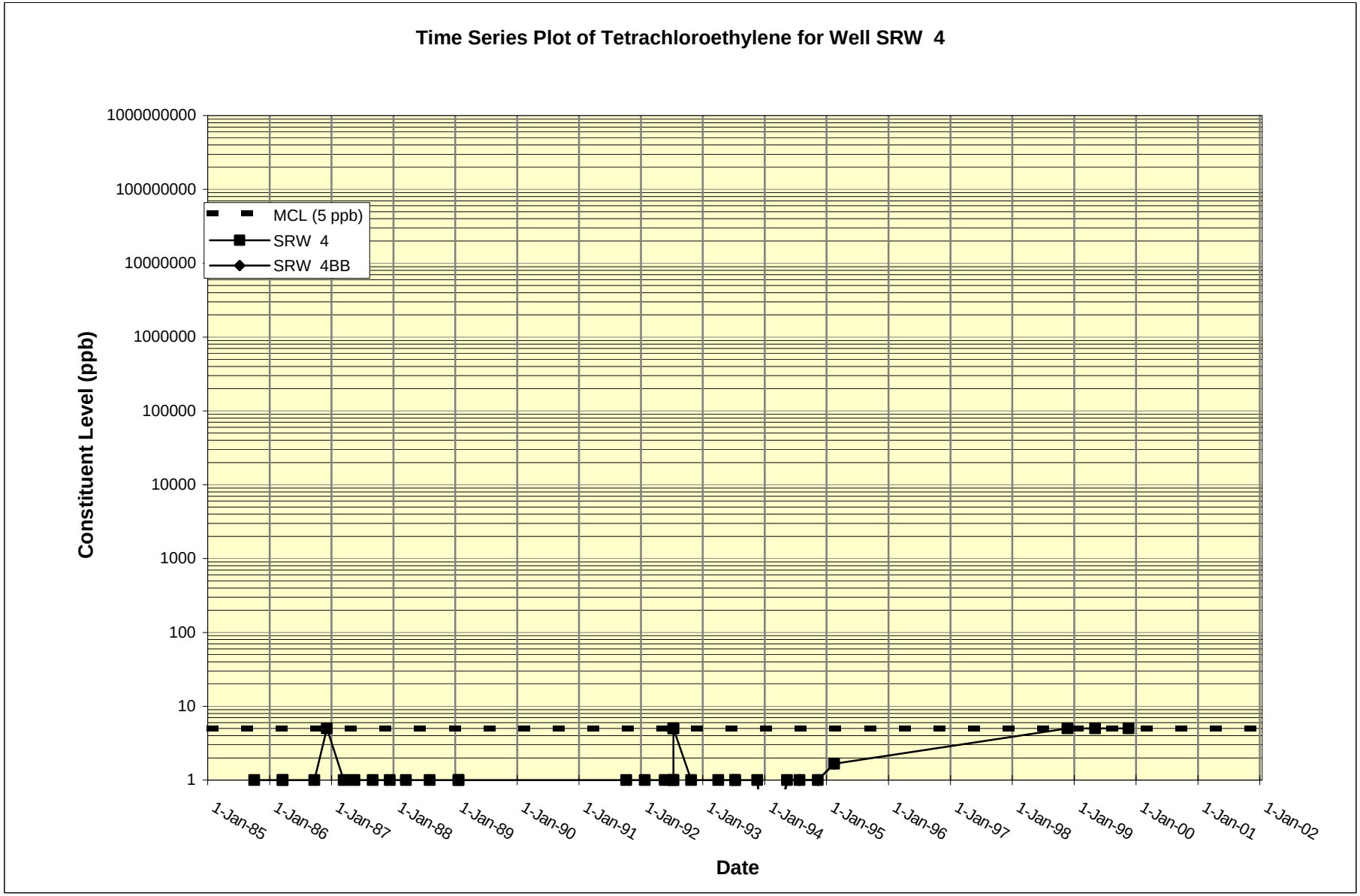
Date


Time Series Plot of Tetrachloroethylene for Well SRW 4
MCL (5 ppb)
SRW 4
SRW 4BB
Constituent Level (ppb)
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100000000
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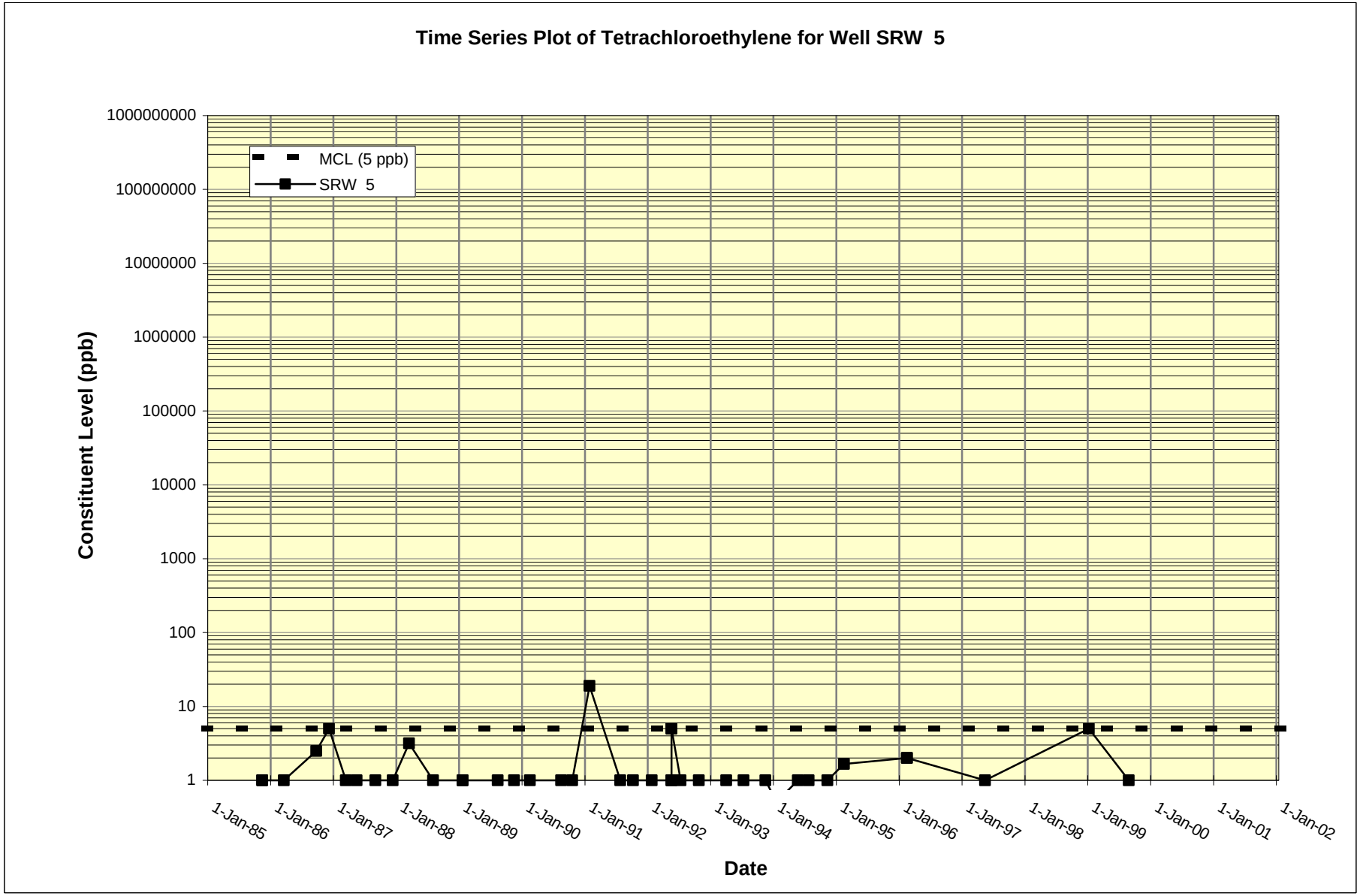
Date


Time Series Plot of Tetrachloroethylene for Well SRW 5
MCL (5 ppb)
SRW 5
Constituent Level (ppb)
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100000000
10000000
1000000
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10000
1000
100
10
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1-Jan-85
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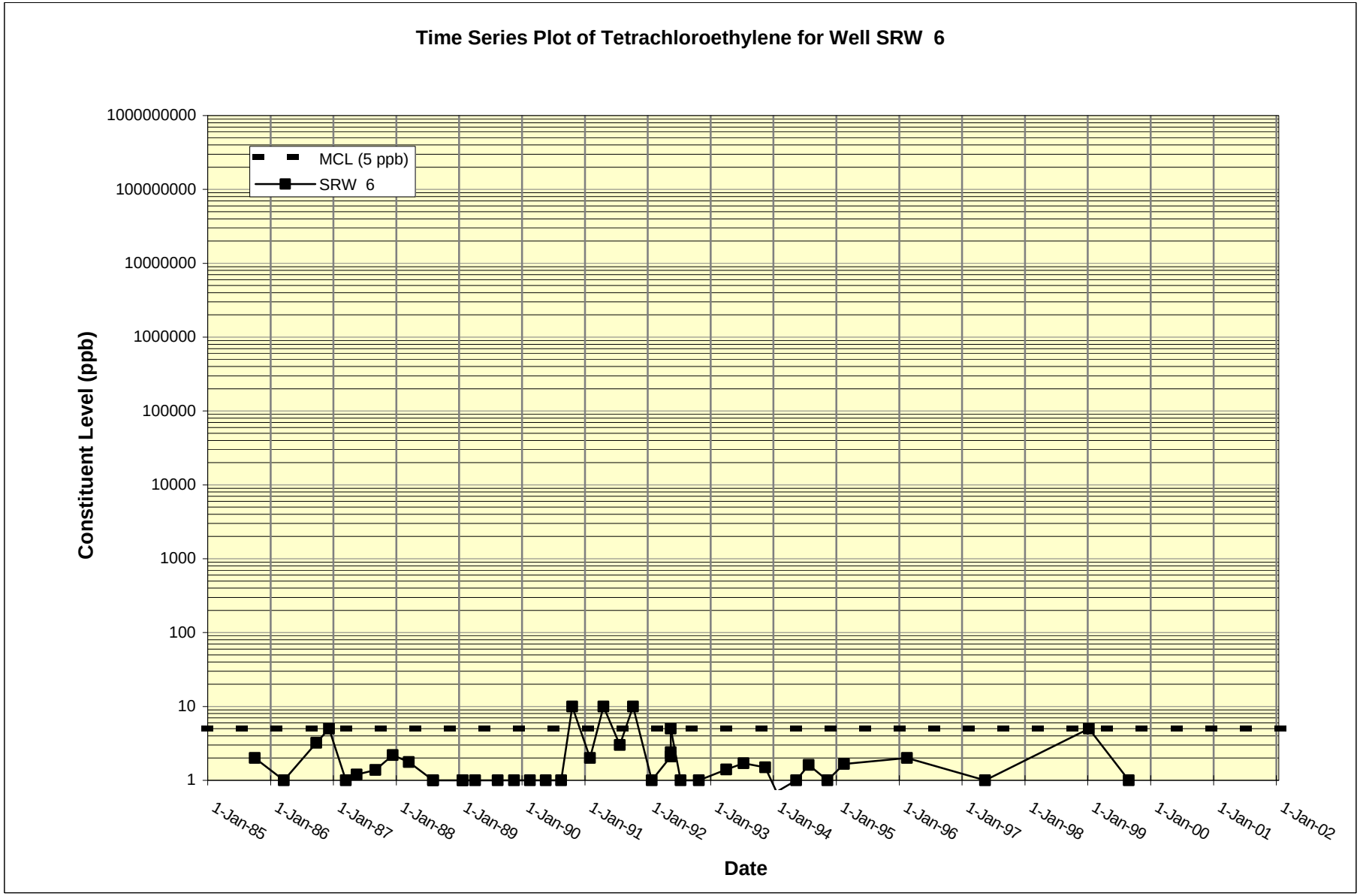
Date


Time Series Plot of Tetrachloroethylene for Well SRW 6
MCL (5 ppb)
SRW 6
Constituent Level (ppb)
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10000000
1000000
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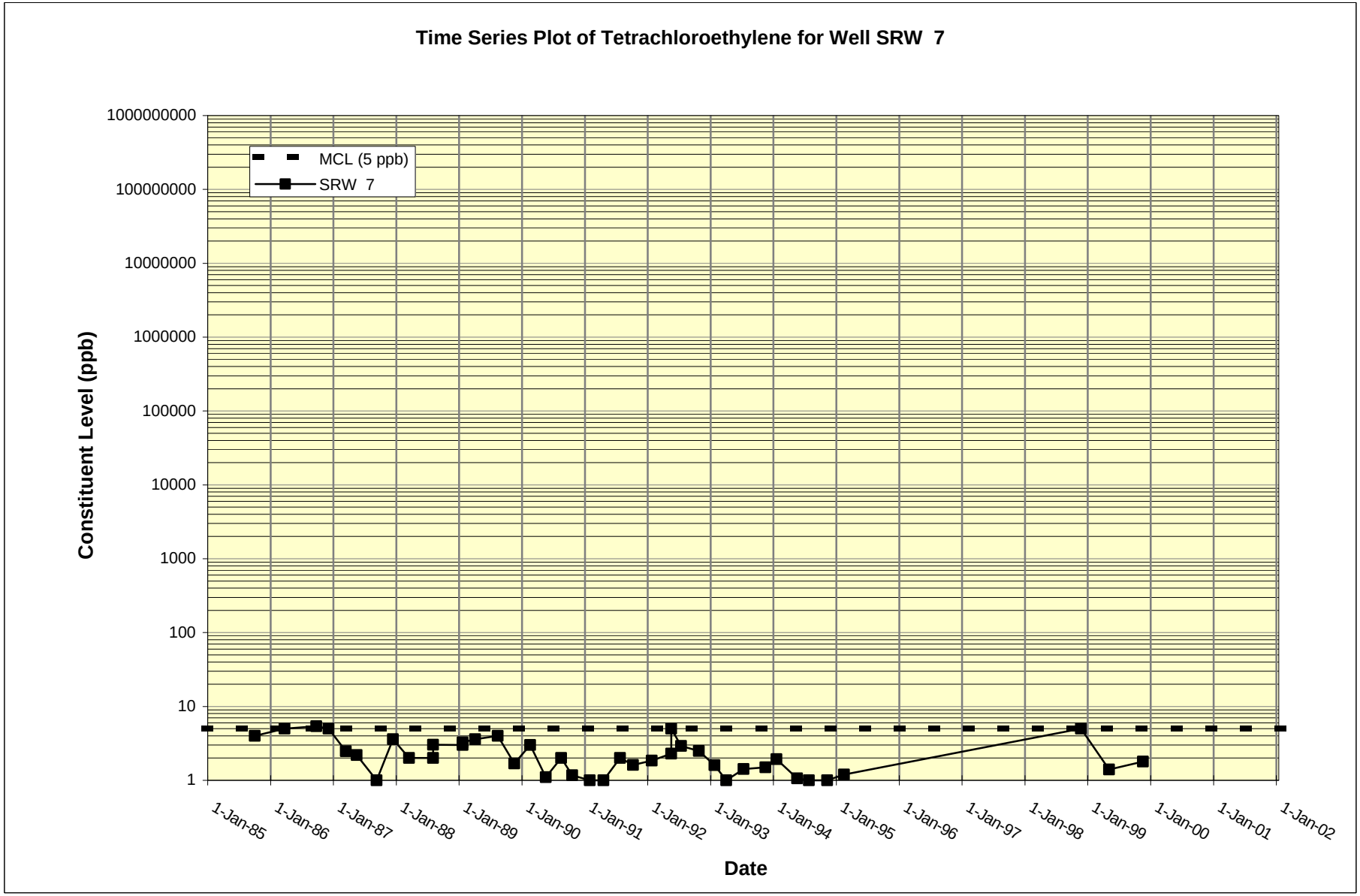
Date


Time Series Plot of Tetrachloroethylene for Well SRW 7
MCL (5 ppb)
SRW 7
Constituent Level (ppb)
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1000000
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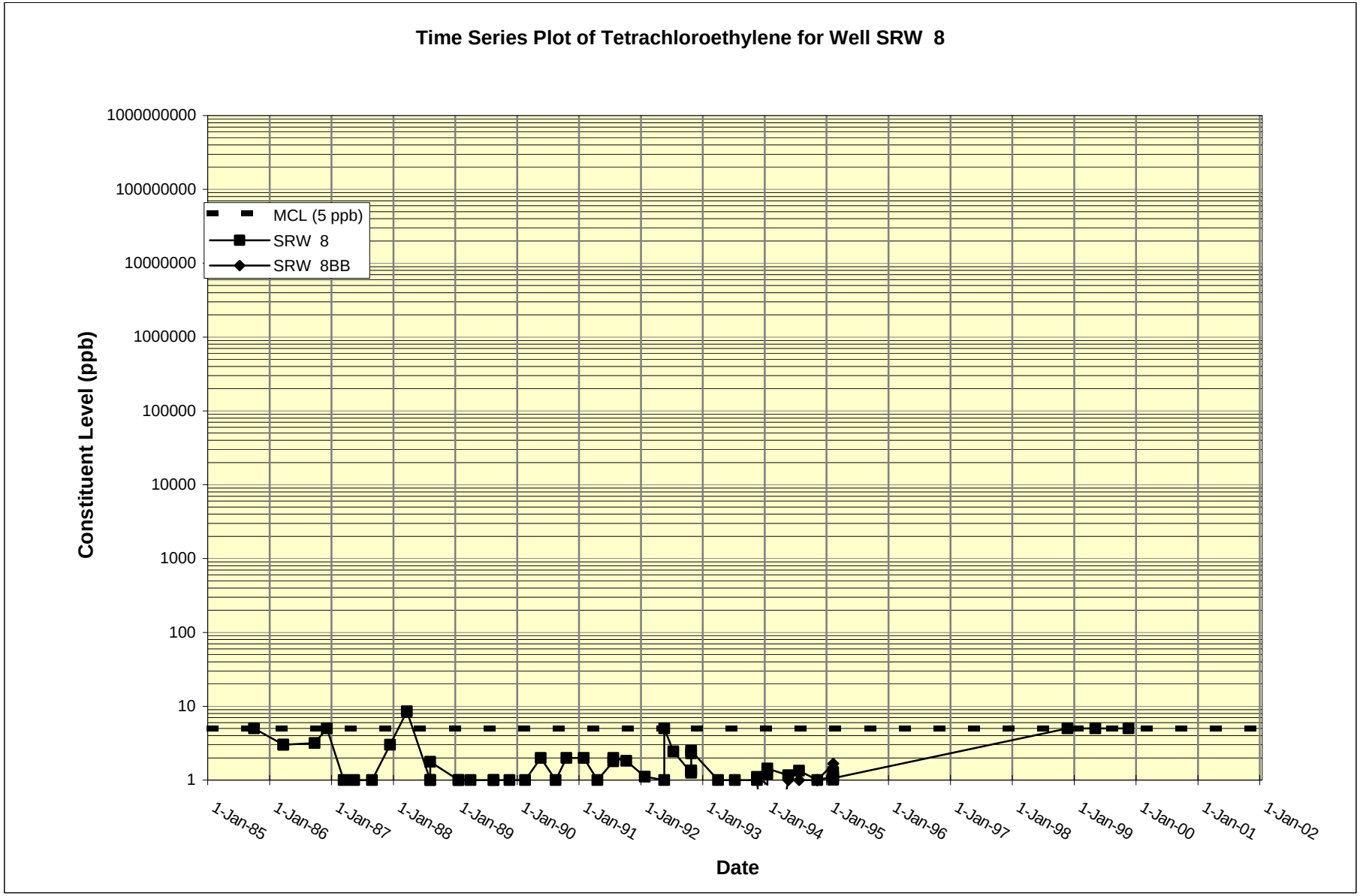
Date


Time Series Plot of Tetrachloroethylene for Well SRW 8
MCL (5 ppb)
SRW 8
SRW 8BB
Constituent Level (ppb)
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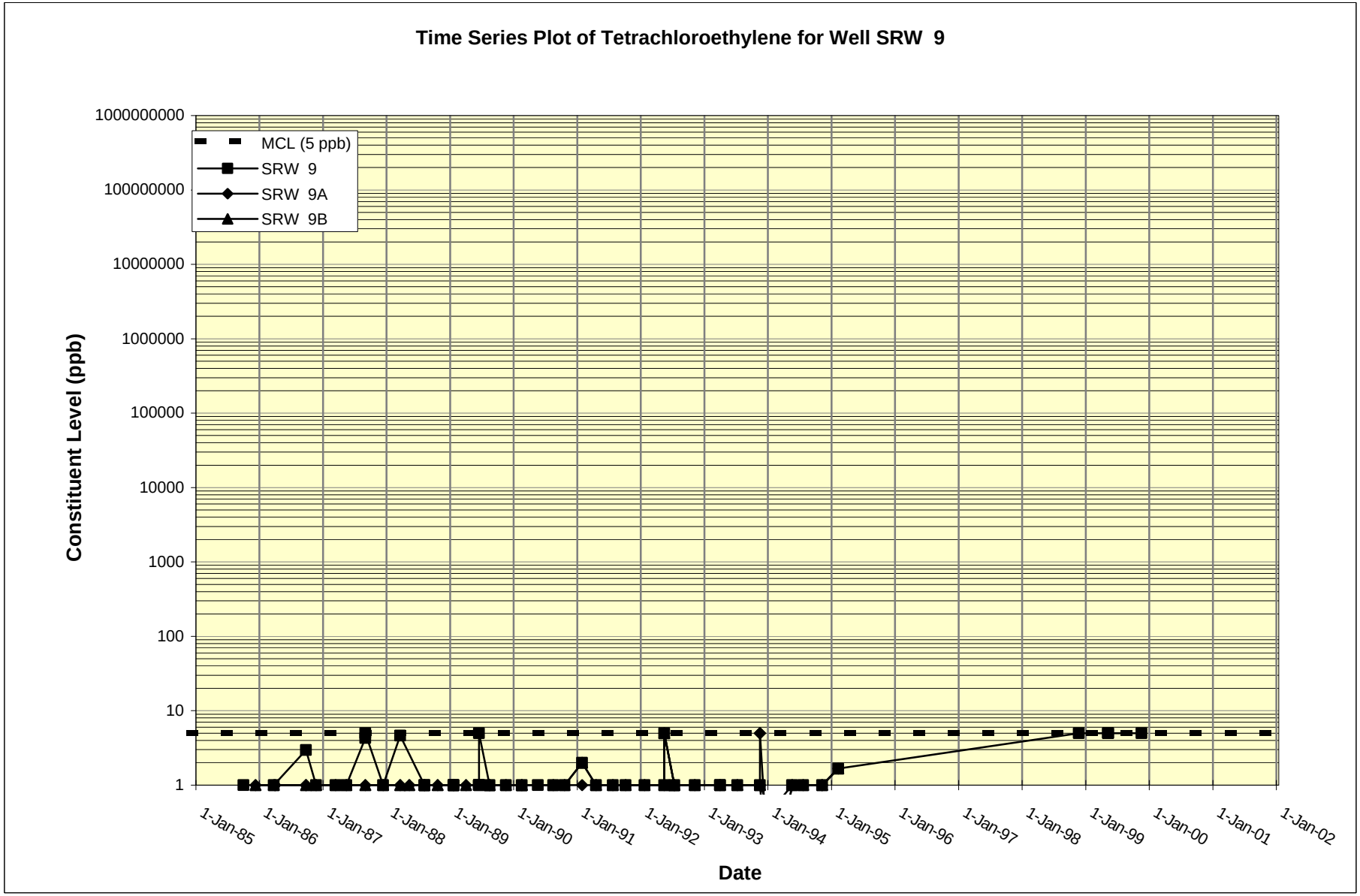
Date


Time Series Plot of Tetrachloroethylene for Well SRW 9
MCL (5 ppb)
SRW 9
SRW 9A
SRW 9B
Constituent Level (ppb)
1000000000
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
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1-Jan-88
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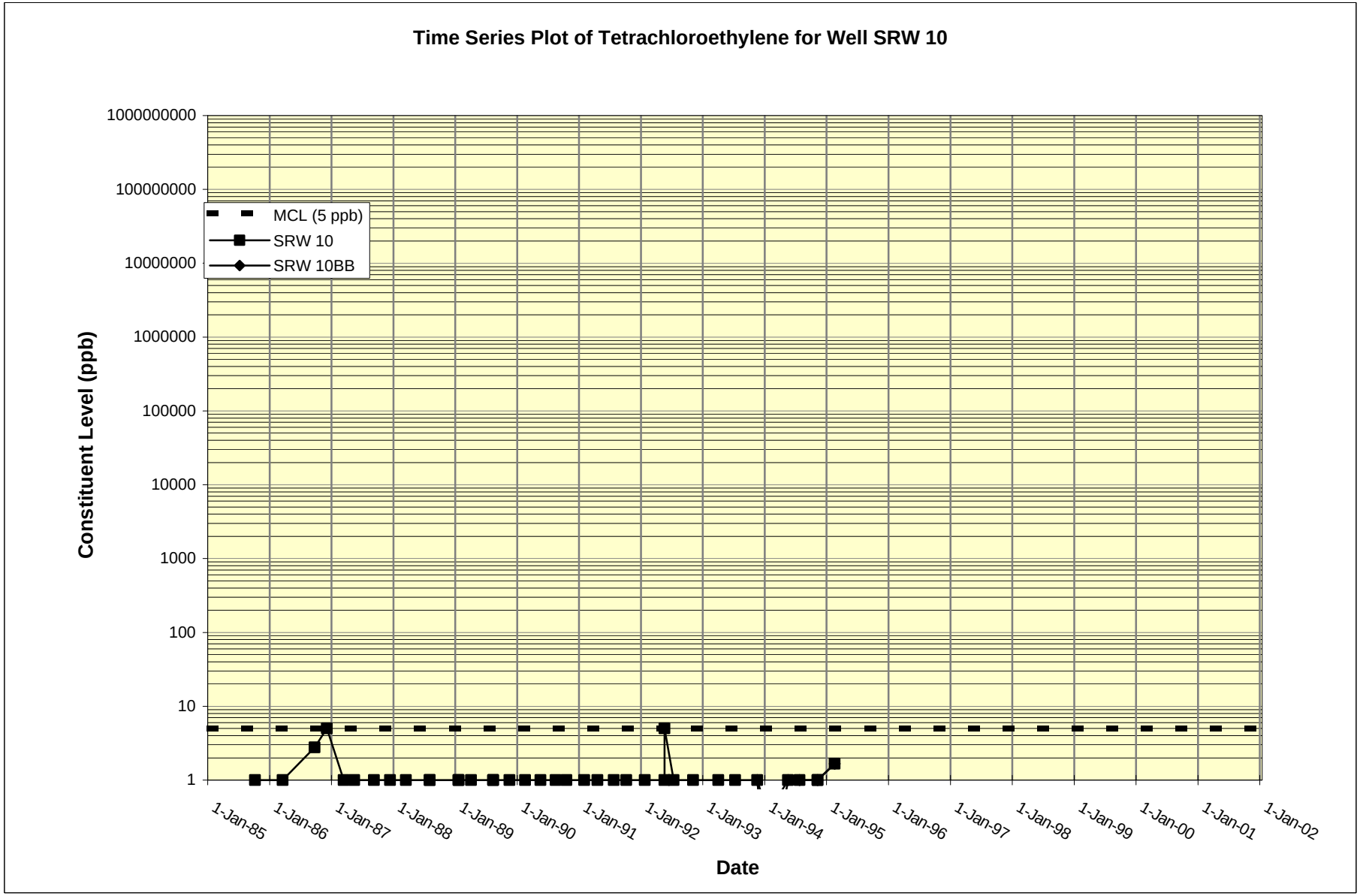
Date


Time Series Plot of Tetrachloroethylene for Well SRW 10
MCL (5 ppb)
SRW 10
SRW 10BB
Constituent Level (ppb)
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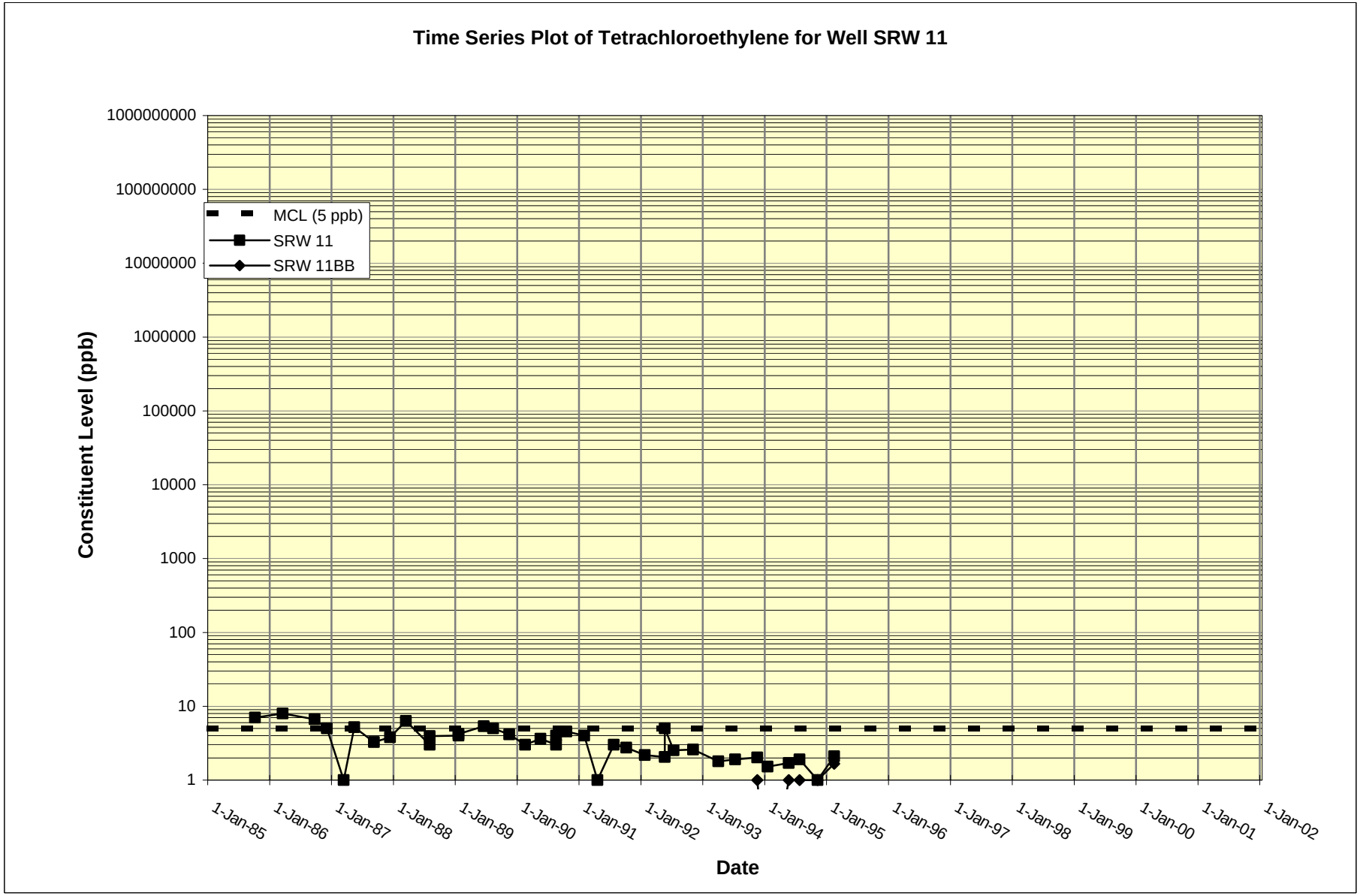
Date


Time Series Plot of Tetrachloroethylene for Well SRW 11
MCL (5 ppb)
SRW 11
SRW 11BB
Constituent Level (ppb)
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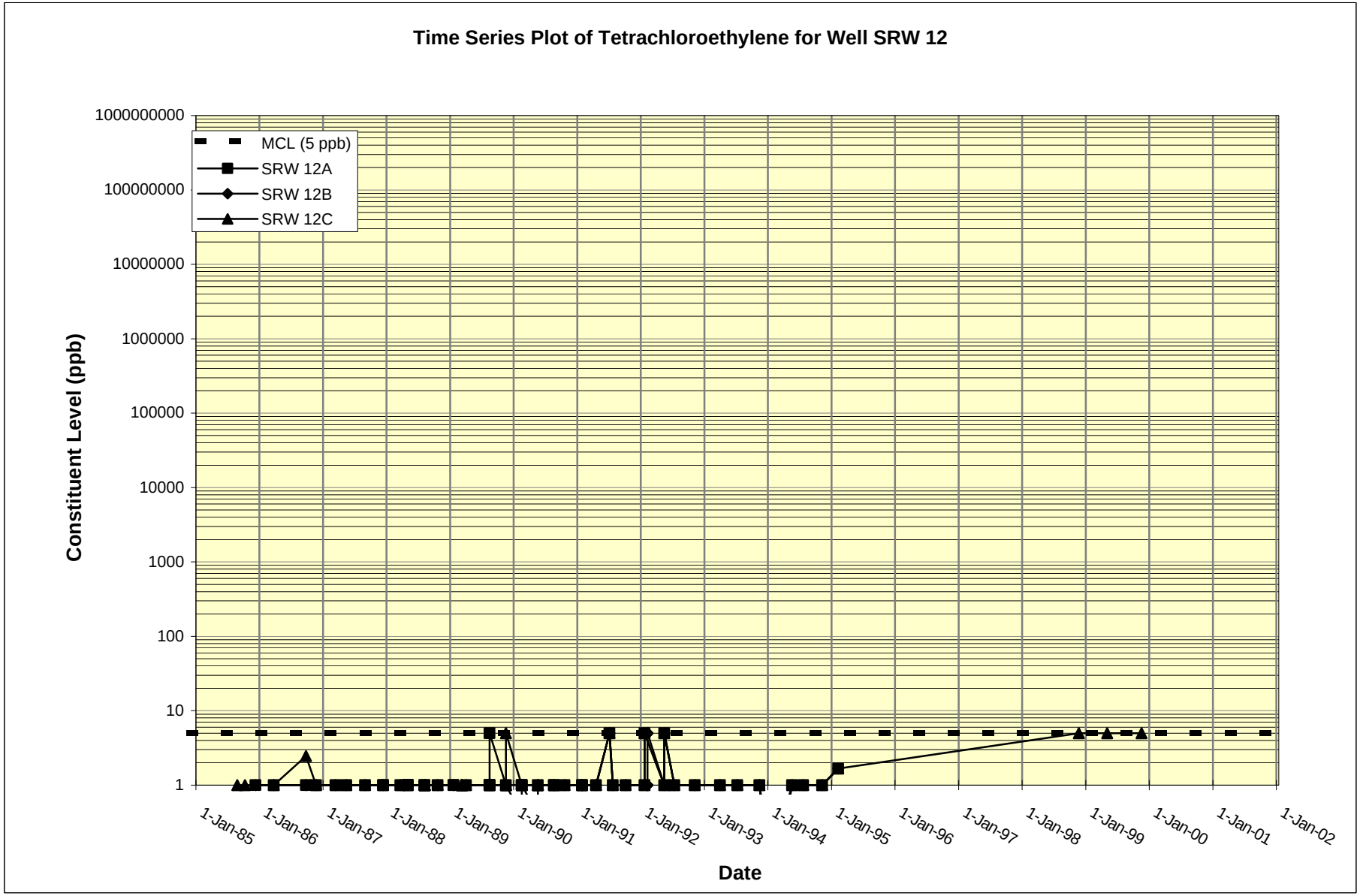
Date


Time Series Plot of Tetrachloroethylene for Well SRW 12
MCL (5 ppb)
SRW 12A
SRW 12B
SRW 12C
Constituent Level (ppb)
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100000000
10000000
1000000
100000
10000
1000
100
10
1
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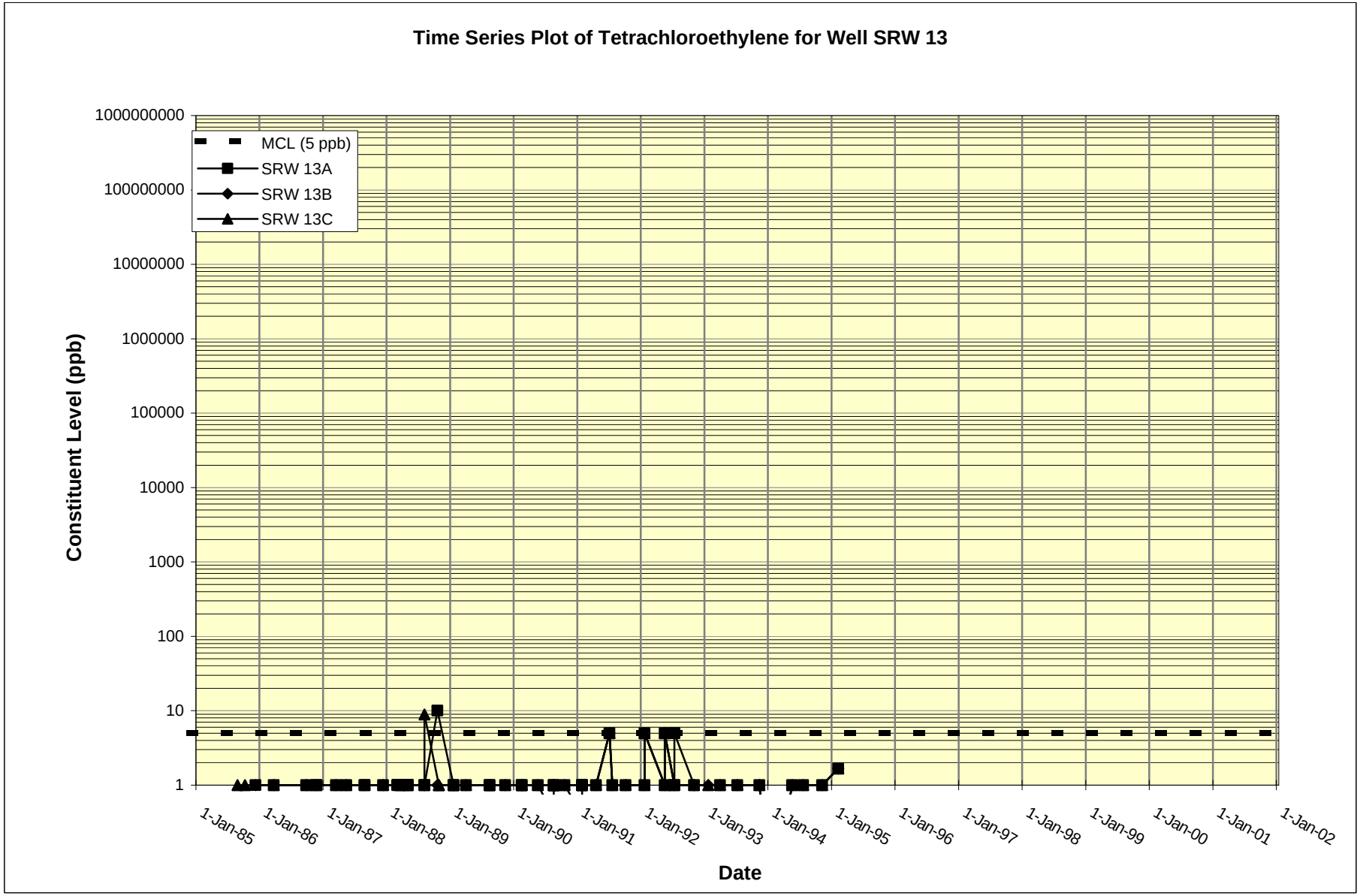
Time Series Plot of Tetrachloroethylene for Well SRW 13
MCL (5 ppb)
SRW 13A
SRW 13B
SRW 13C
Constituent Level (ppb)
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10000000
1000000
100000
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1000
100
10
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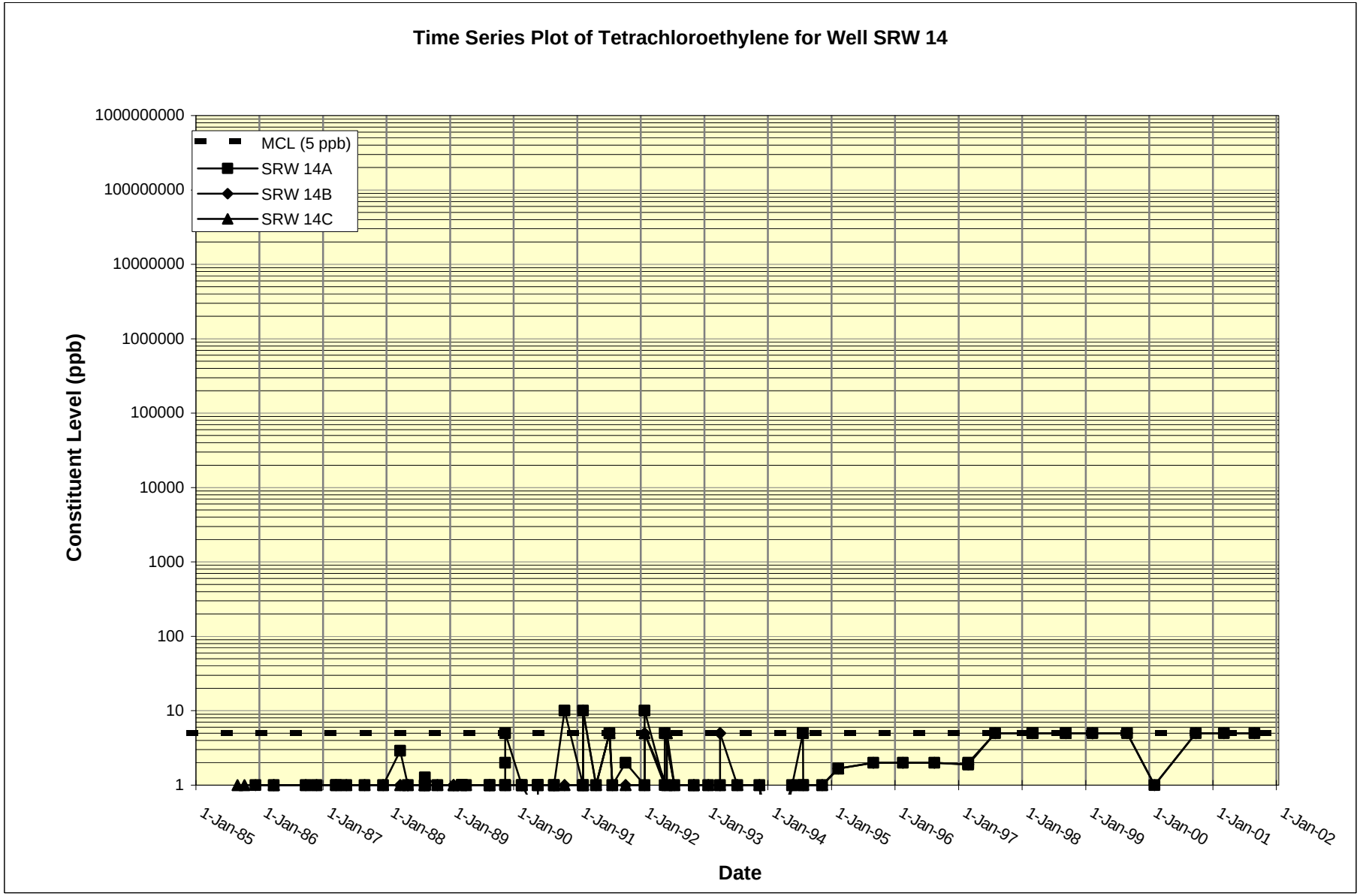
Time Series Plot of Tetrachloroethylene for Well SRW 14
MCL (5 ppb)
SRW 14A
SRW 14B
SRW 14C
Constituent Level (ppb)
1000000000
100000000
10000000
1000000
100000
10000
1000
100
10
1
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1-Jan-87
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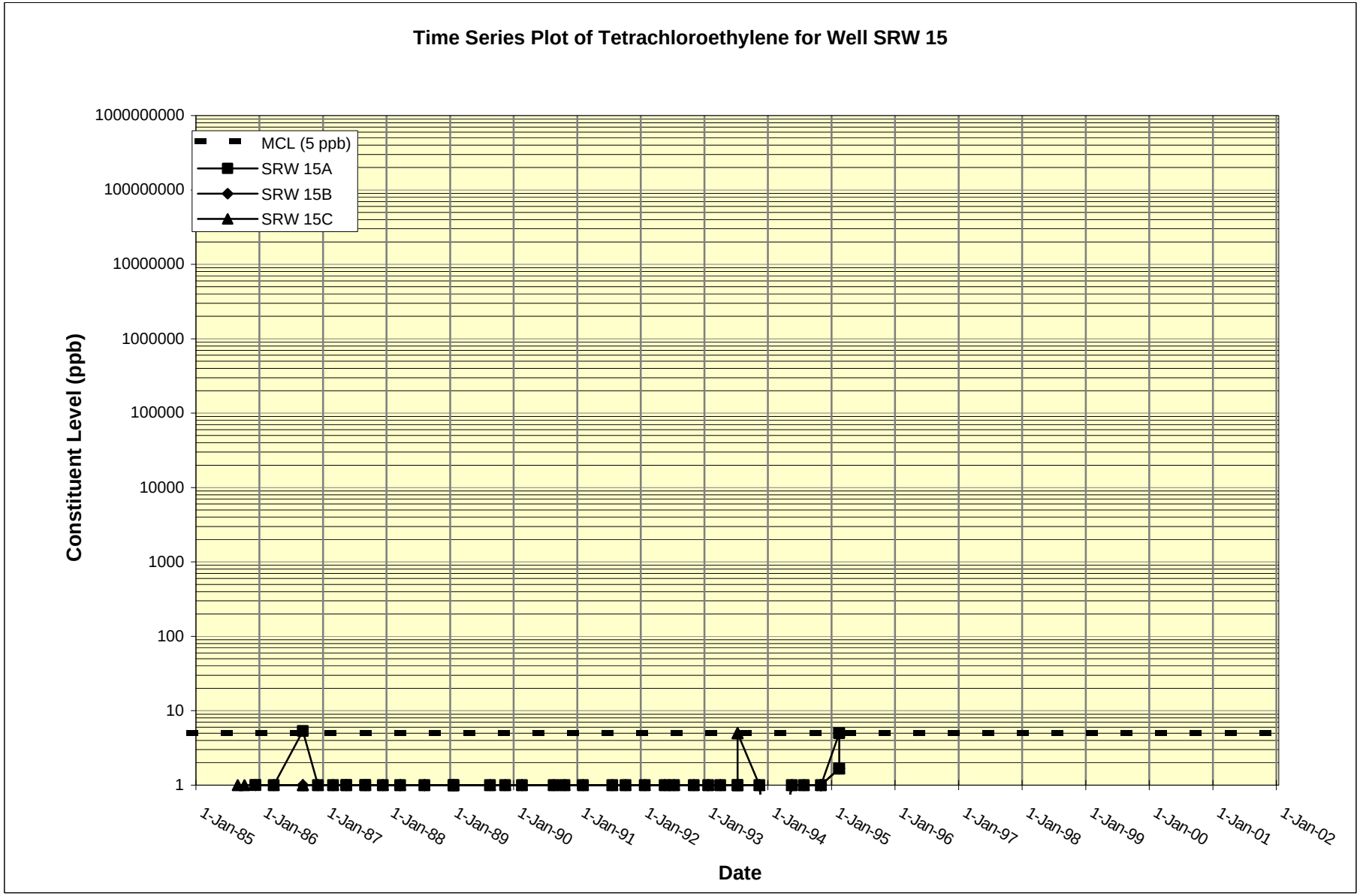
Time Series Plot of Tetrachloroethylene for Well SRW 15
MCL (5 ppb)
SRW 15A
SRW 15B
SRW 15C
Constituent Level (ppb)
1000000000
100000000
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1000000
100000
10000
1000
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10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
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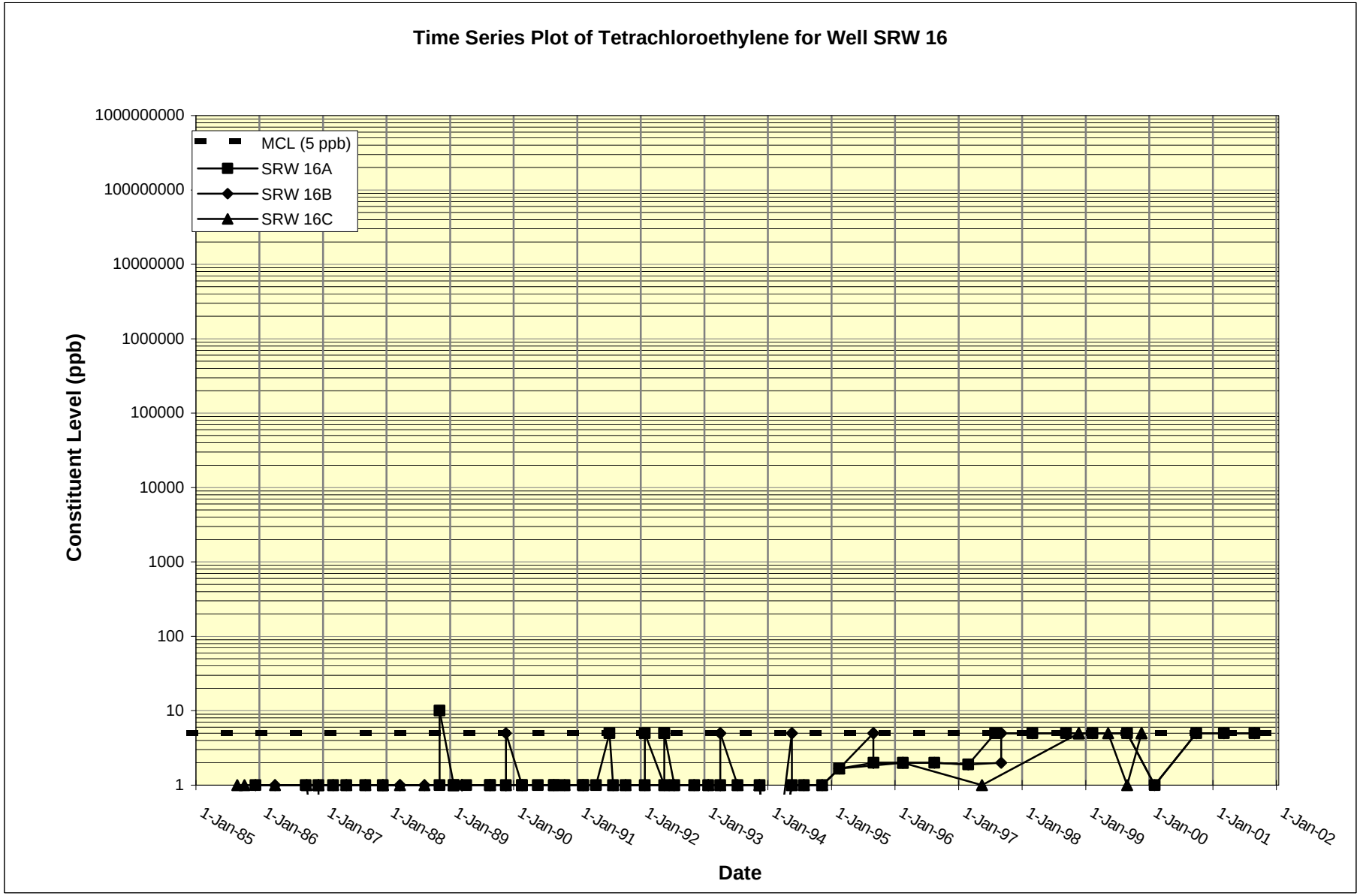
Time Series Plot of Tetrachloroethylene for Well SRW 16
MCL (5 ppb)
SRW 16A
SRW 16B
SRW 16C
Constituent Level (ppb)
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100000000
10000000
1000000
100000
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1000
100
10
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1-Jan-85
1-Jan-86
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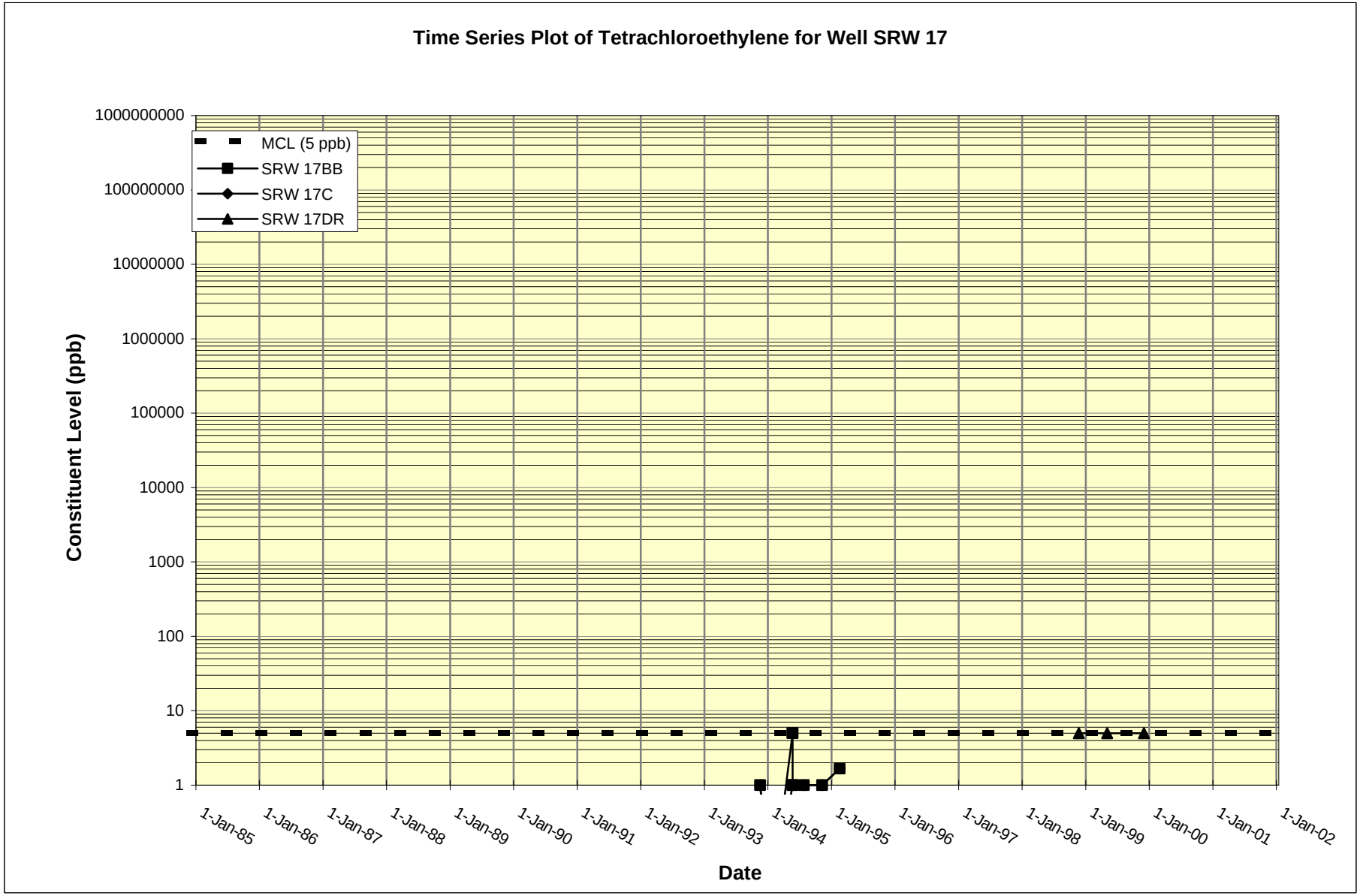
Date


Time Series Plot of Tetrachloroethylene for Well SRW 17
MCL (5 ppb)
SRW 17BB
SRW 17C
SRW 17DR
Constituent Level (ppb)
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10000000
1000000
100000
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10
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1-Jan-85
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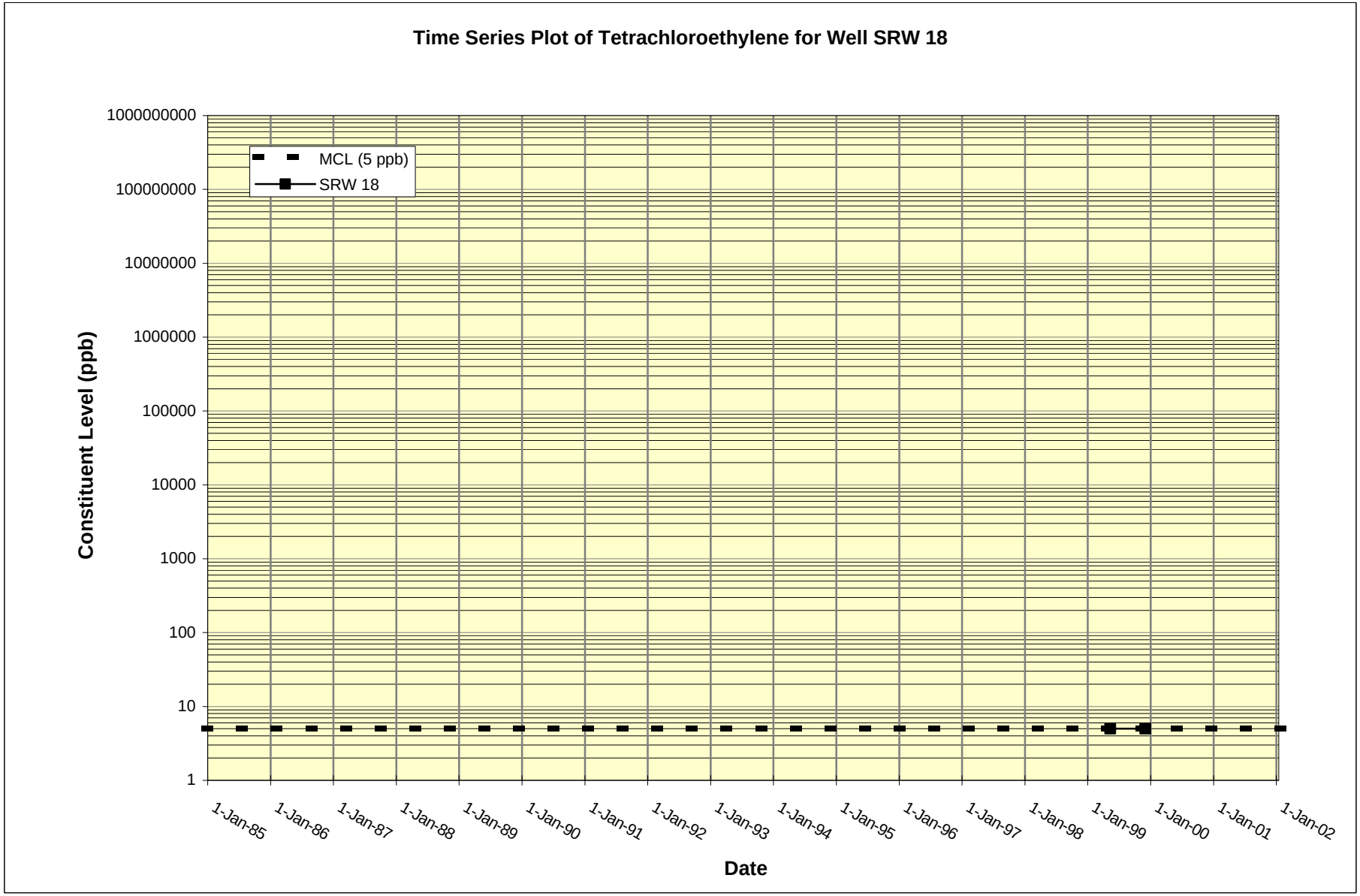
Time Series Plot of Tetrachloroethylene for Well SRW 18
MCL (5 ppb)
SRW 18
Constituent Level (ppb)
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1000000
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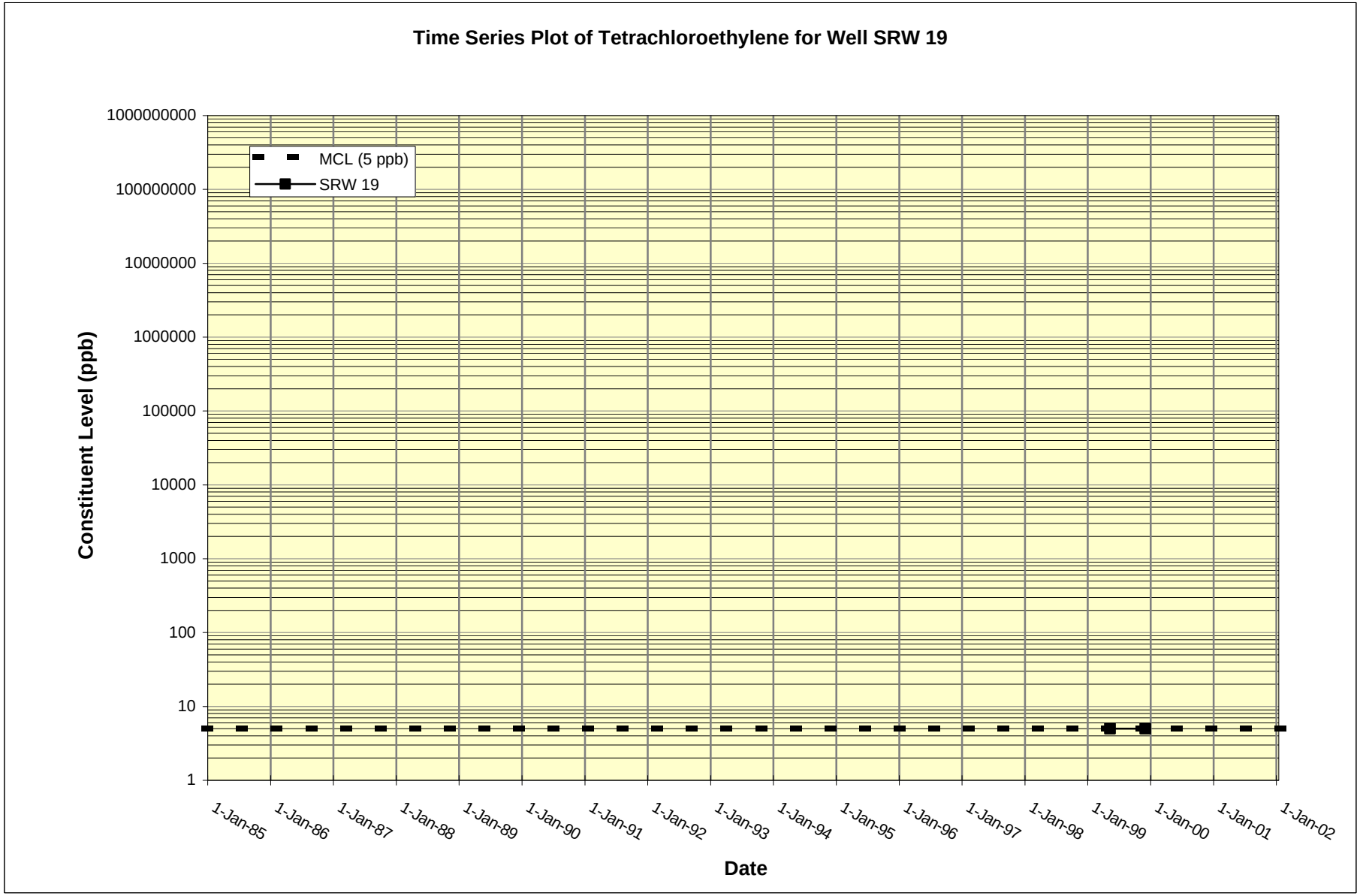
Time Series Plot of Tetrachloroethylene for Well SRW 19
MCL (5 ppb)
SRW 19
Constituent Level (ppb)
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100000000
10000000
1000000
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1-Jan-85
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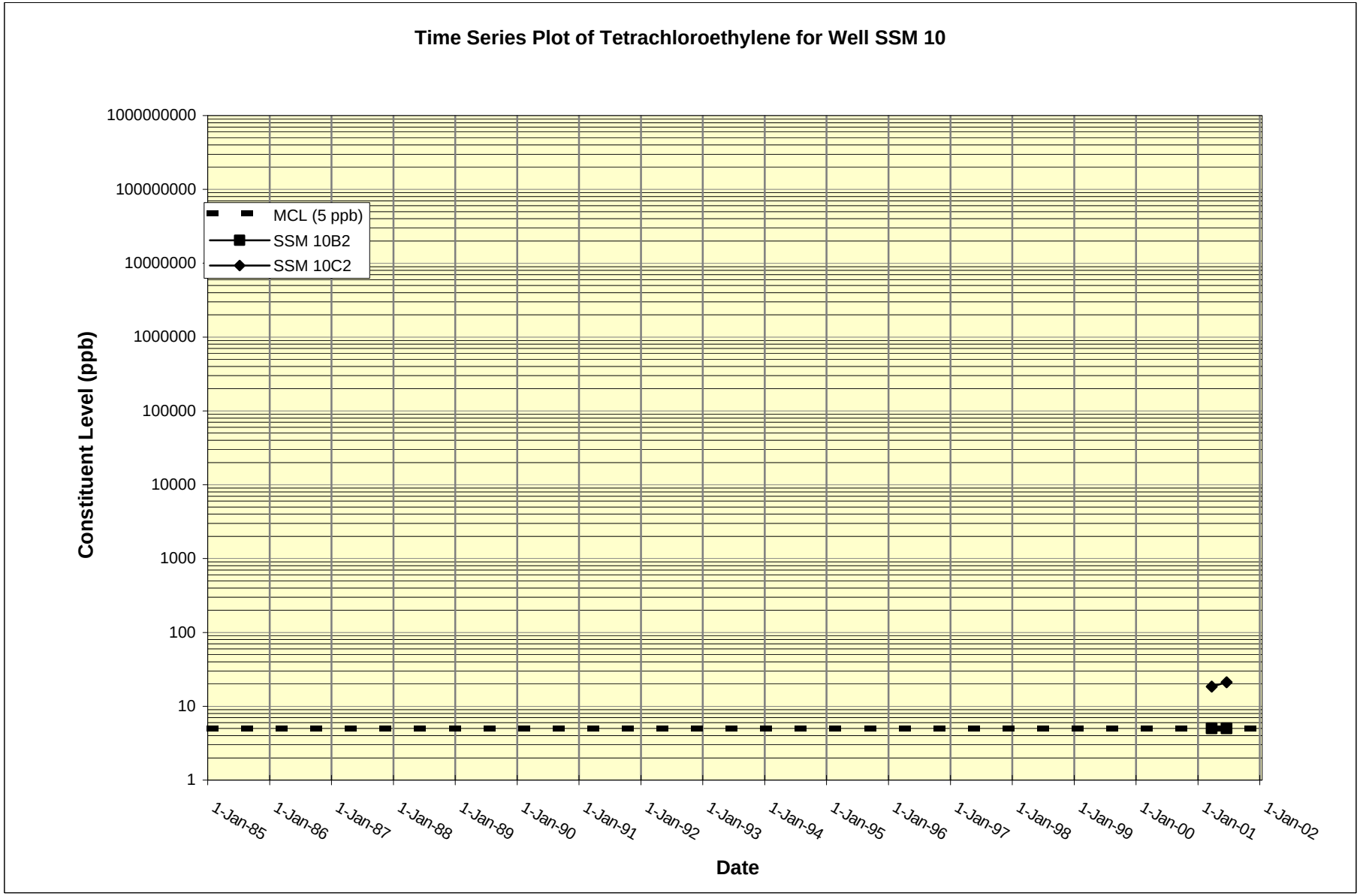
Time Series Plot of Tetrachloroethylene for Well SSM 10
MCL (5 ppb)
SSM 10B2
SSM 10C2
Constituent Level (ppb)
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100000000
10000000
1000000
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10000
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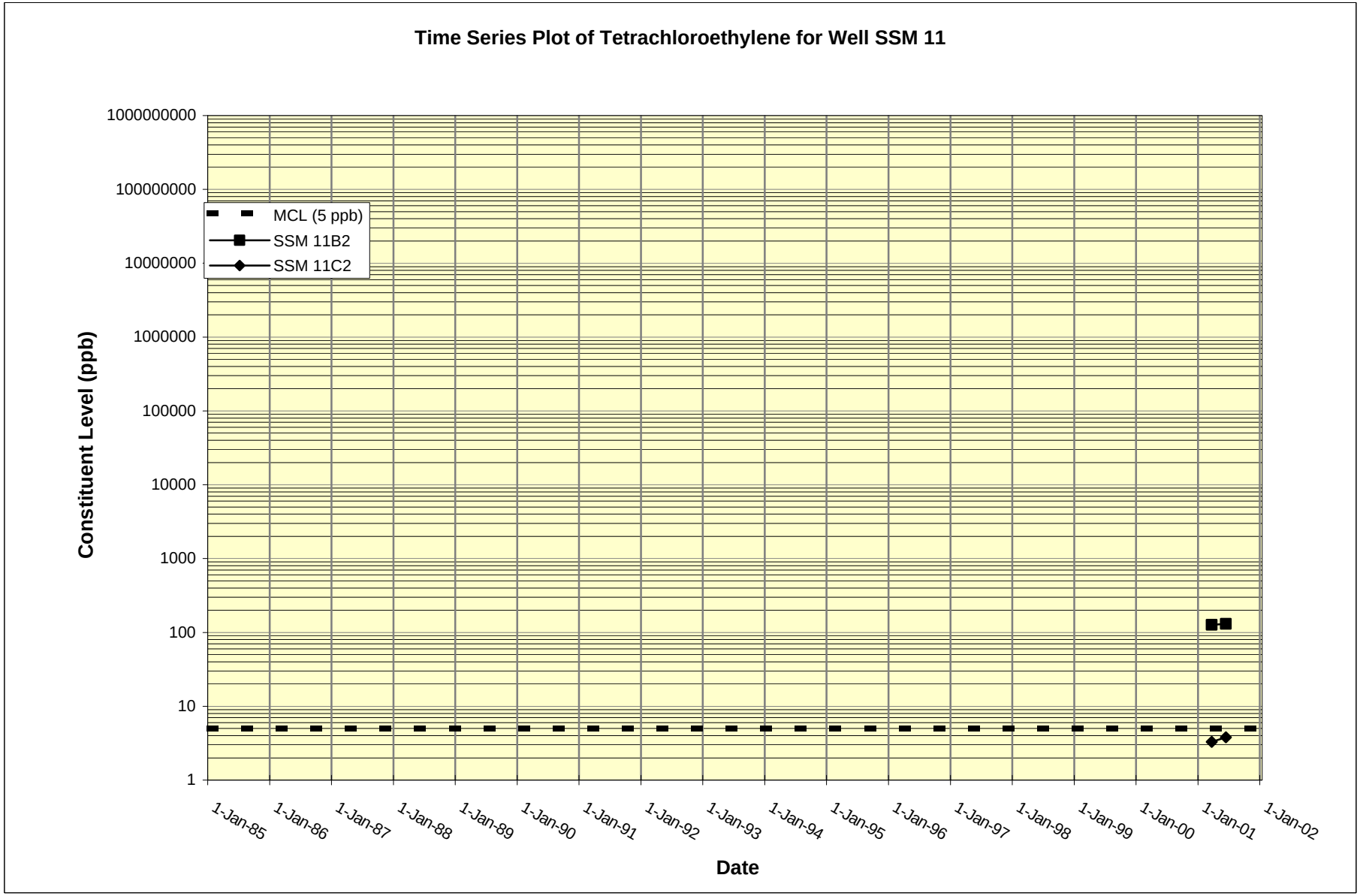
Date


Time Series Plot of Tetrachloroethylene for Well SSM 11
MCL (5 ppb)
SSM 11B2
SSM 11C2
Constituent Level (ppb)
1000000000
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
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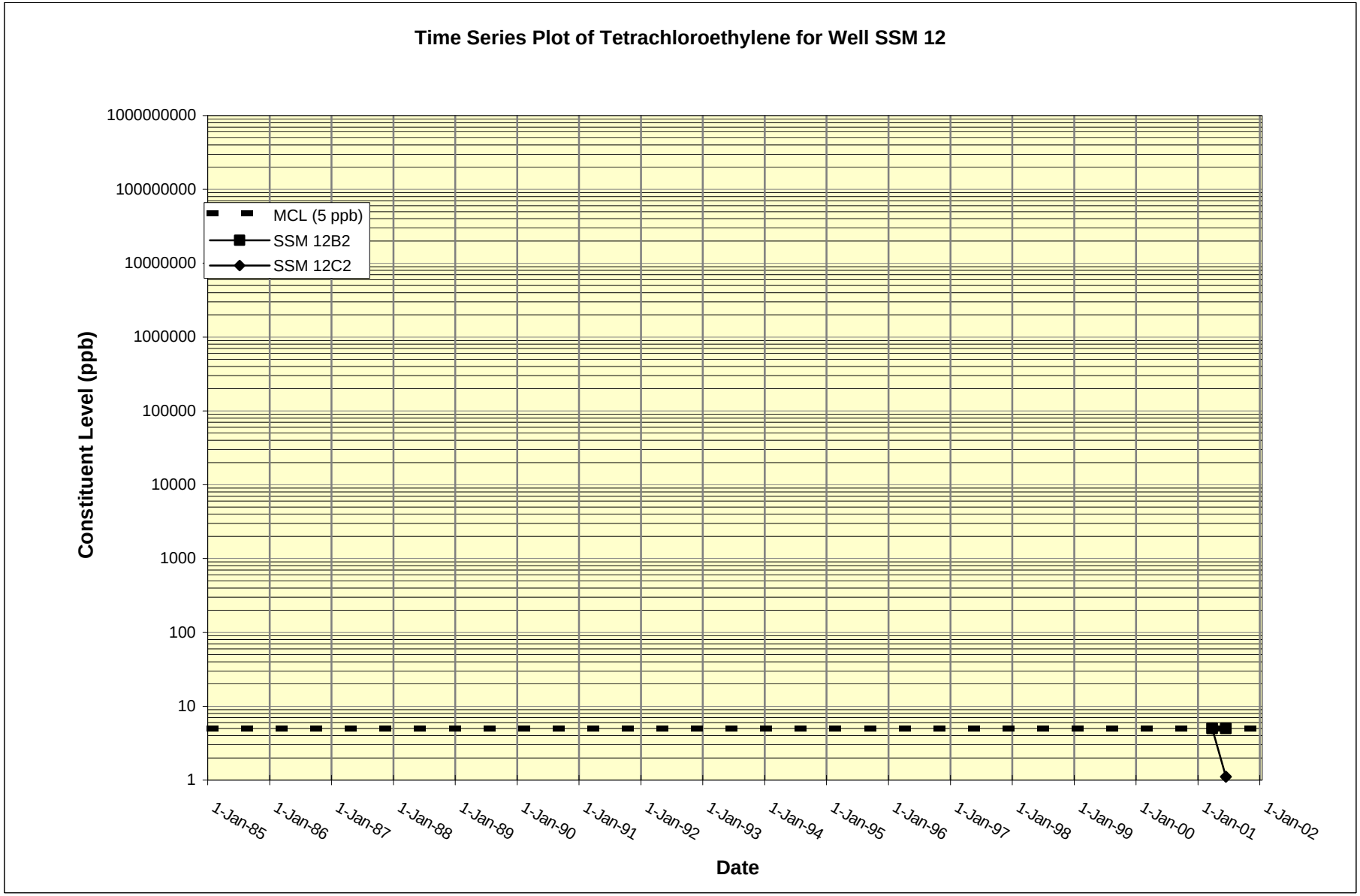
Date


Time Series Plot of Tetrachloroethylene for Well SSM 12
MCL (5 ppb)
SSM 12B2
SSM 12C2
Constituent Level (ppb)
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100000000
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1-Jan-85
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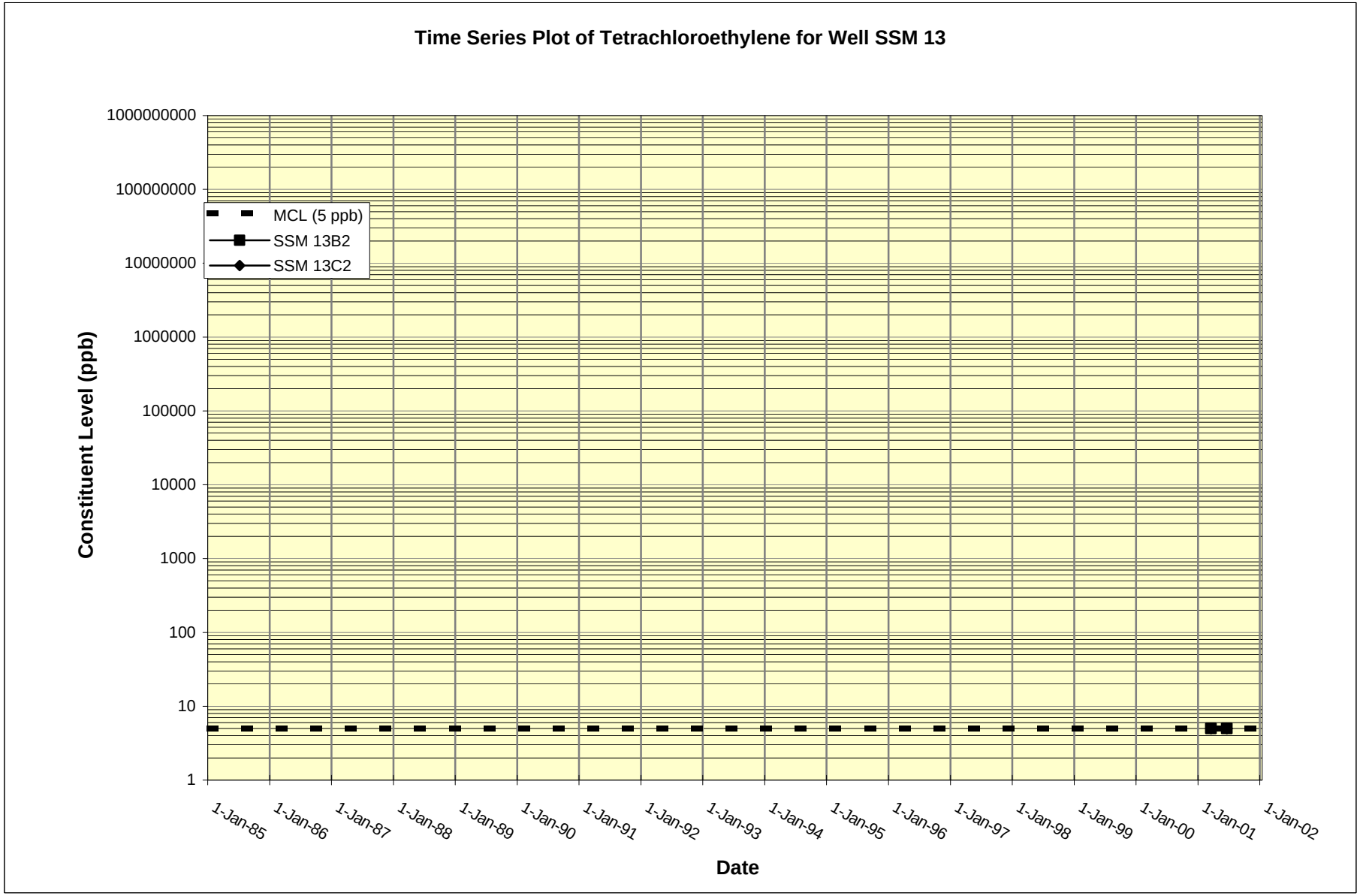
Date


Time Series Plot of Tetrachloroethylene for Well SSM 13
MCL (5 ppb)
SSM 13B2
SSM 13C2
Constituent Level (ppb)
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100000000
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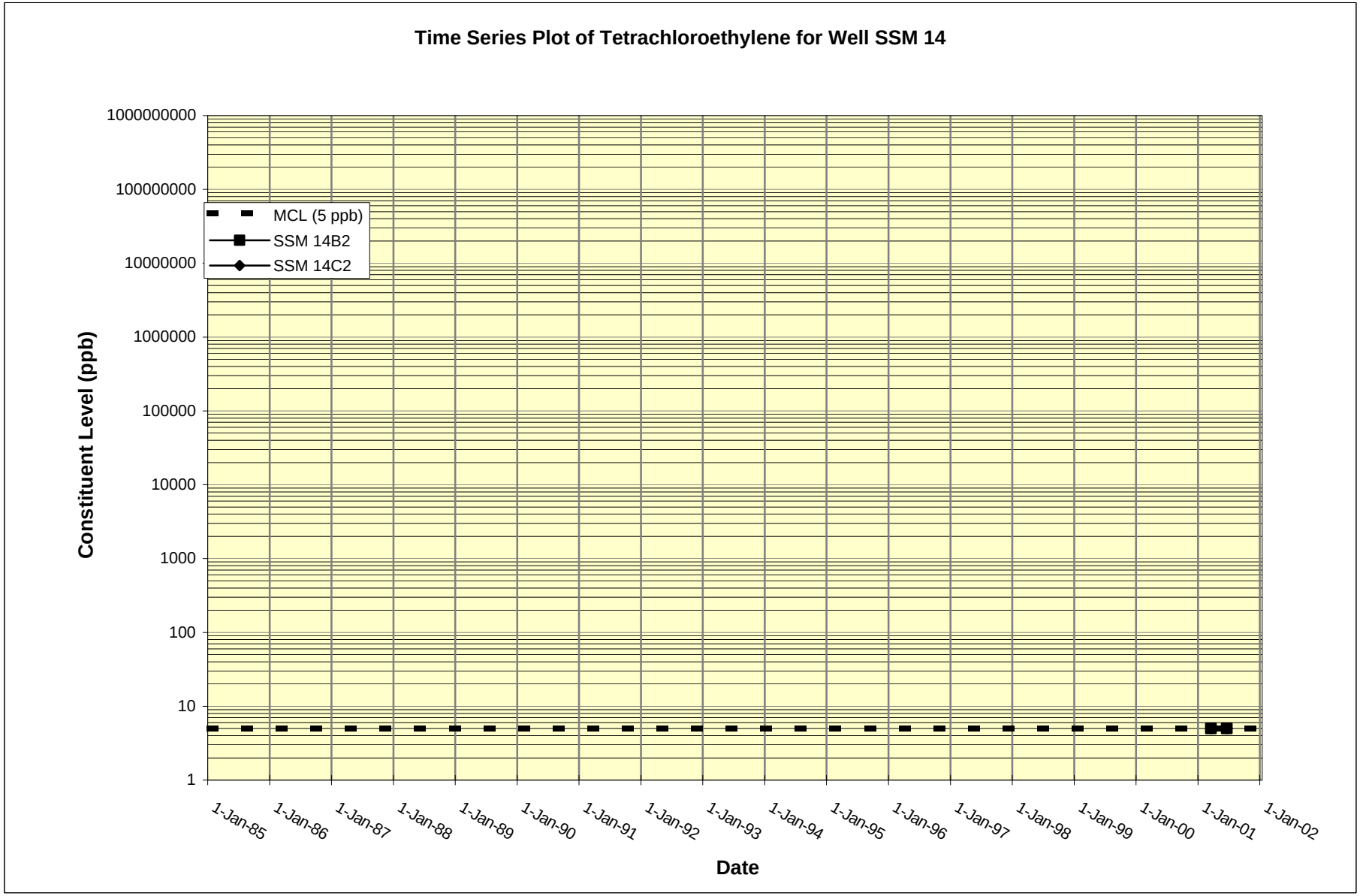
Date


Time Series Plot of Tetrachloroethylene for Well SSM 14
MCL (5 ppb)
SSM 14B2
SSM 14C2
Constituent Level (ppb)
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100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
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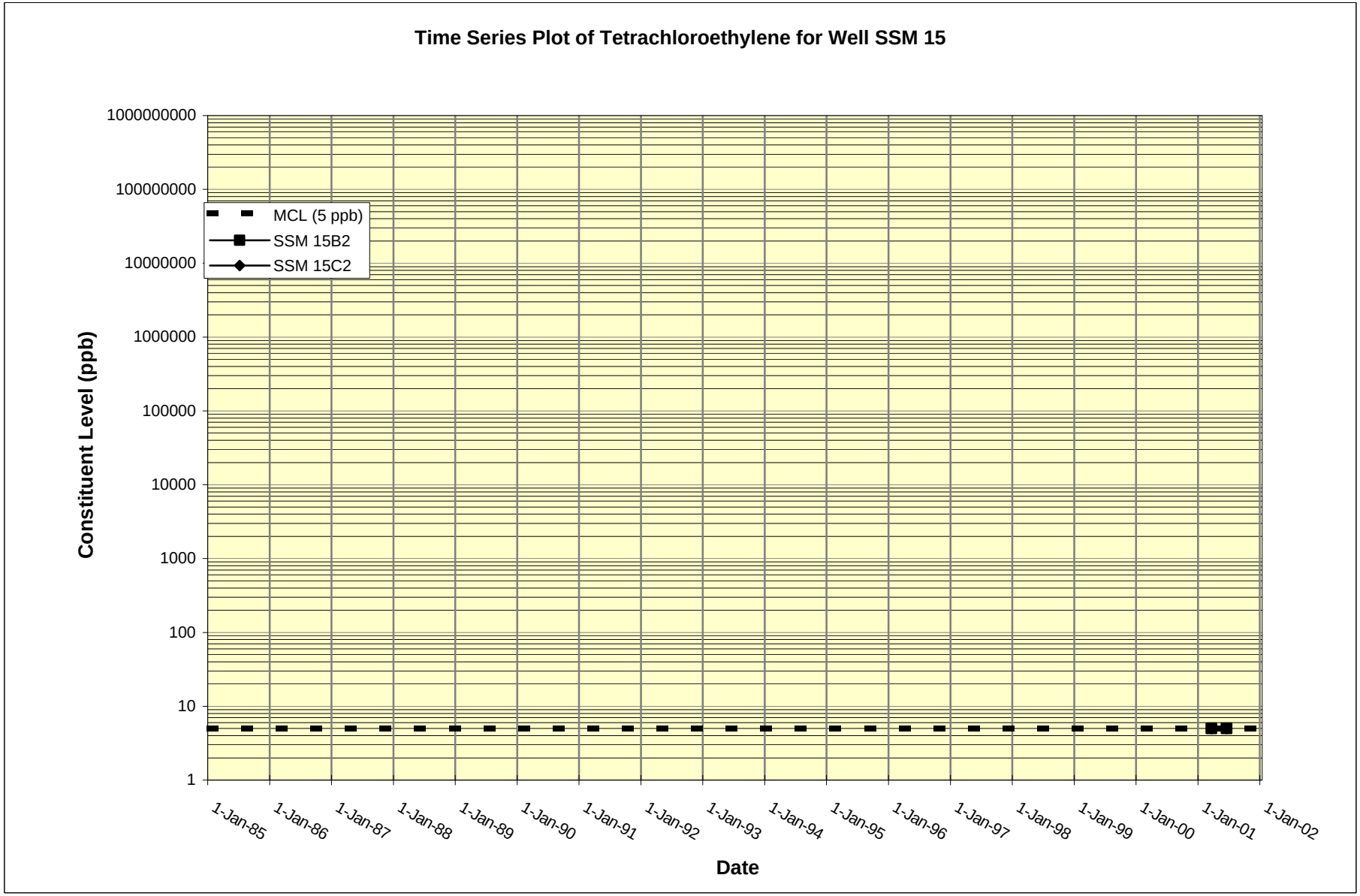
Time Series Plot of Tetrachloroethylene for Well SSM 15
MCL (5 ppb)
SSM 15B2
SSM 15C2
Constituent Level (ppb)
1000000000
100000000
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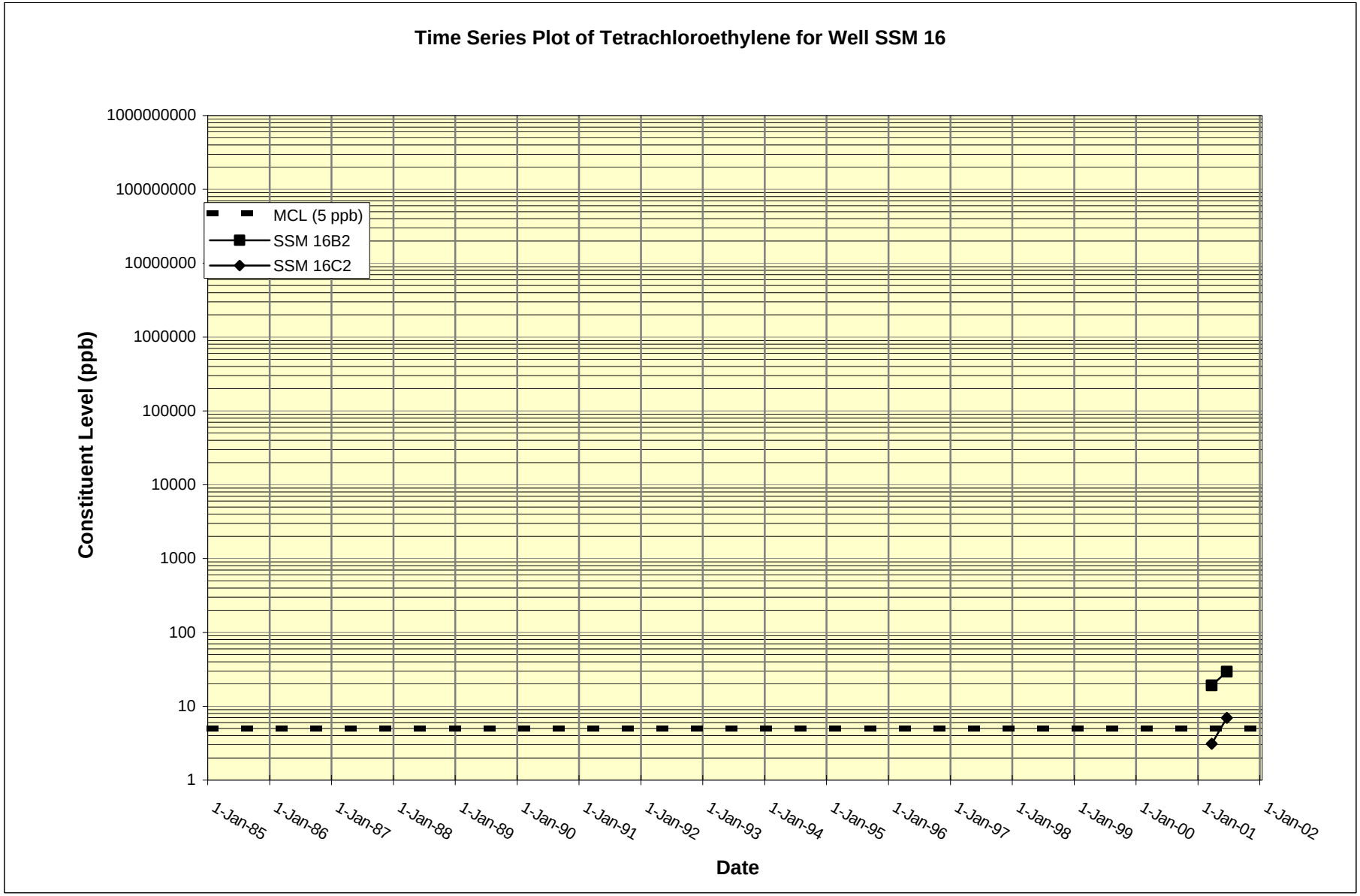
Time Series Plot of Tetrachloroethylene for Well SSM 16
MCL (5 ppb)
SSM 16B2
SSM 16C2
Constituent Level (ppb)
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100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
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1-Jan-89
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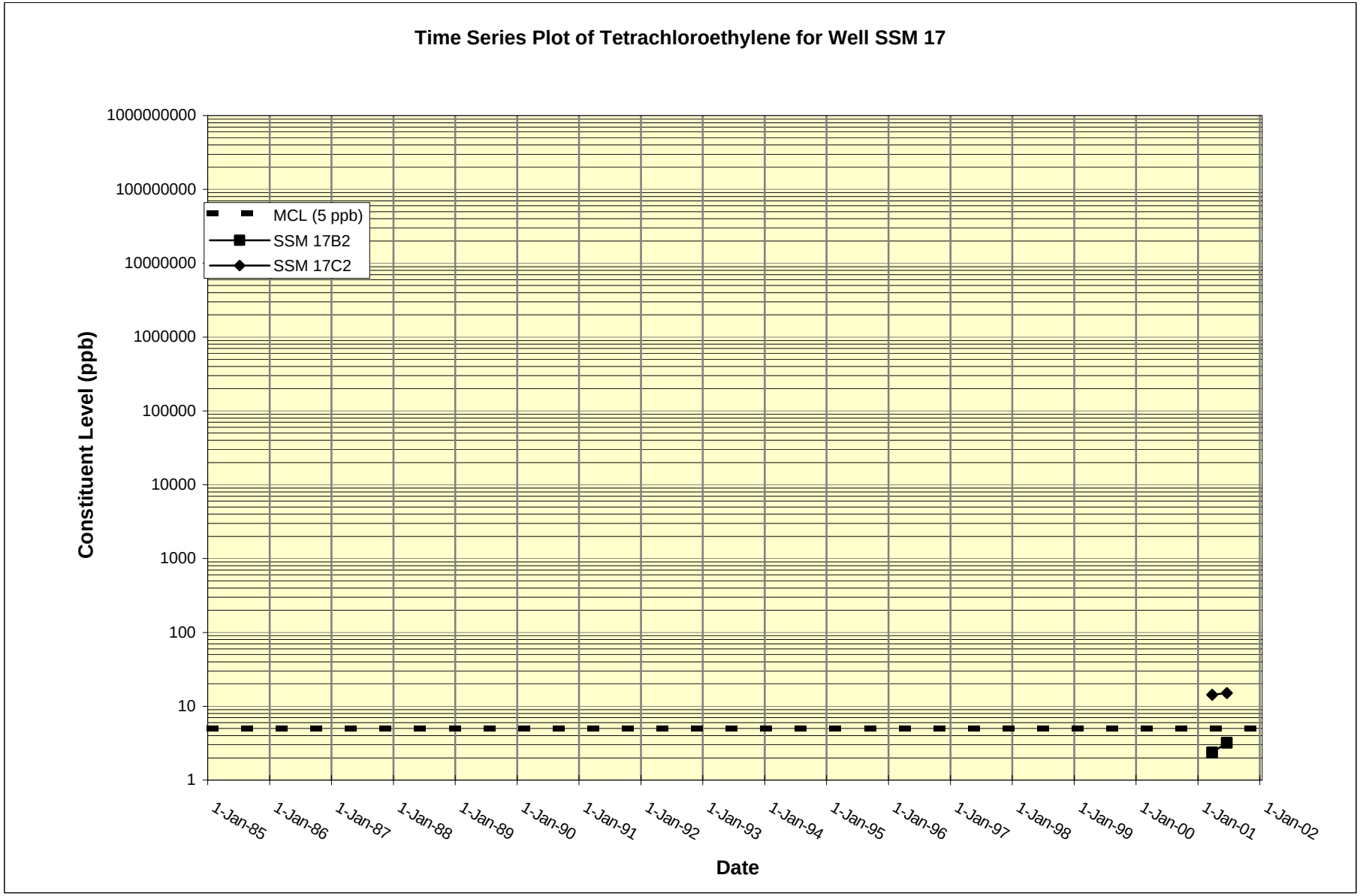
Time Series Plot of Tetrachloroethylene for Well SSM 17
MCL (5 ppb)
SSM 17B2
SSM 17C2
Constituent Level (ppb)
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100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
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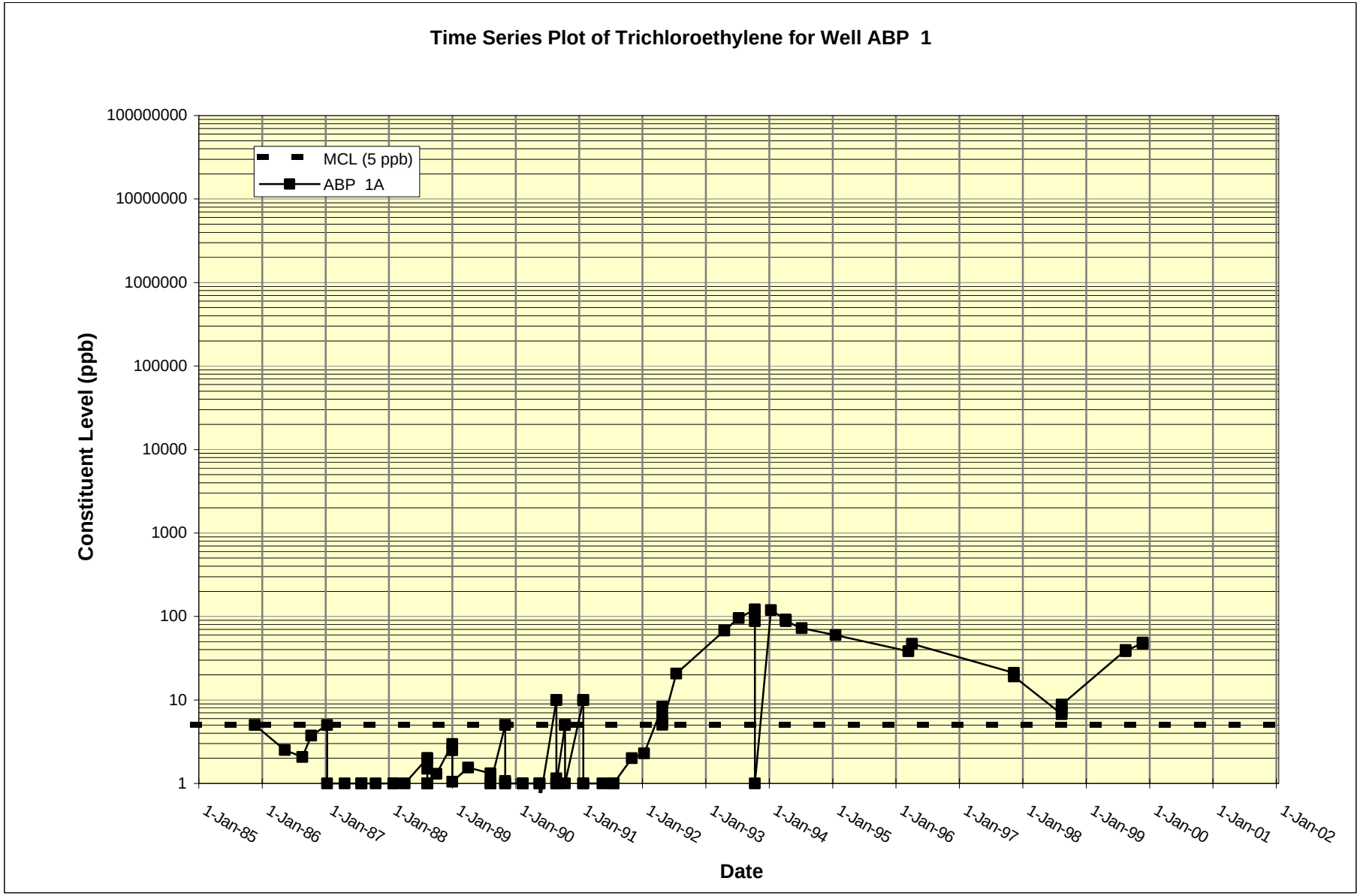
Time Series Plot of Trichloroethylene for Well ABP 1
MCL (5 ppb)
ABP 1A
Constituent Level (ppb)
100000000
10000000
1000000
100000
10000
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100
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1-Jan-85
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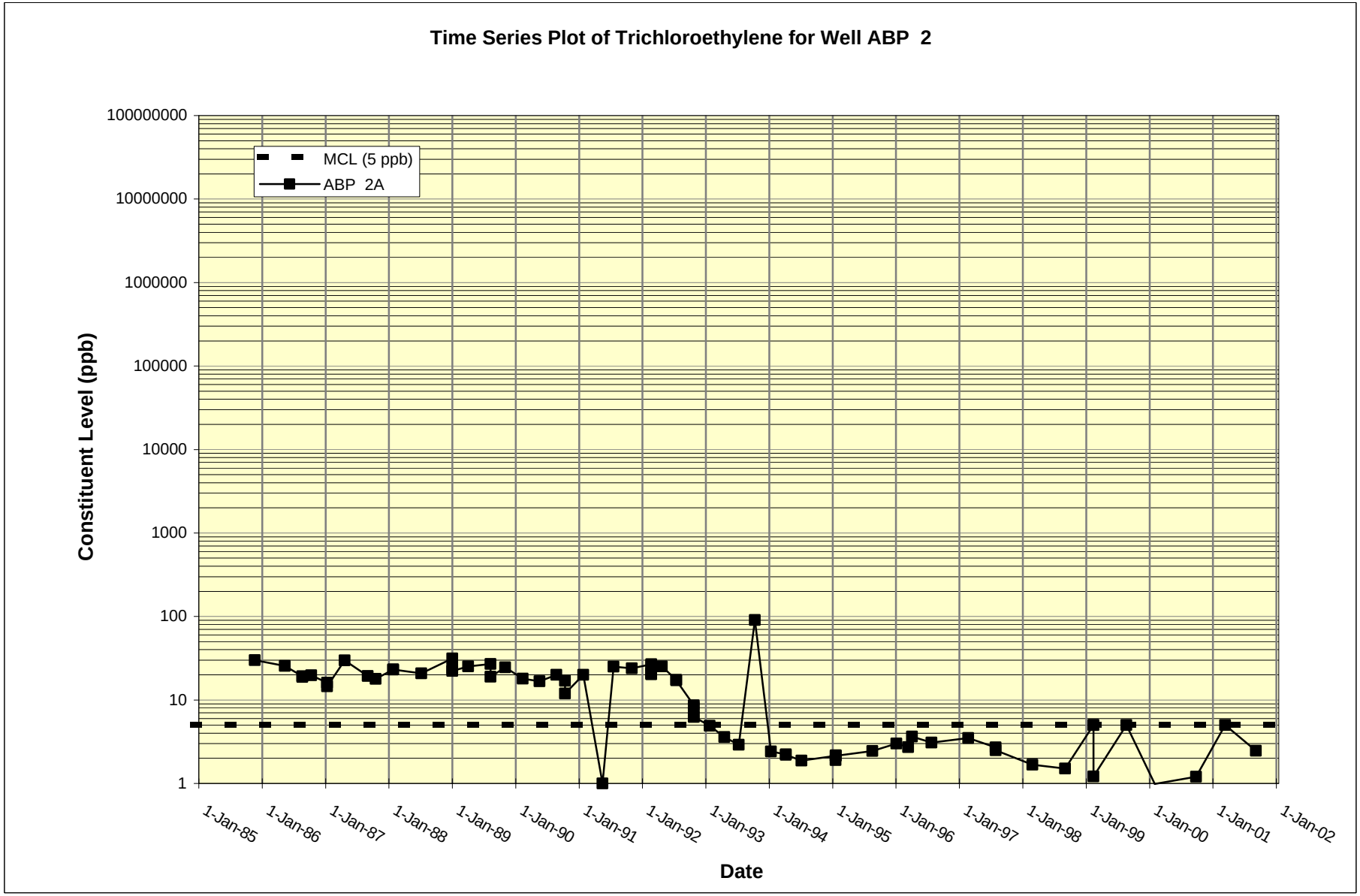
Date


Time Series Plot of Trichloroethylene for Well ABP 2
MCL (5 ppb)
ABP 2A
Constituent Level (ppb)
100000000
10000000
1000000
100000
10000
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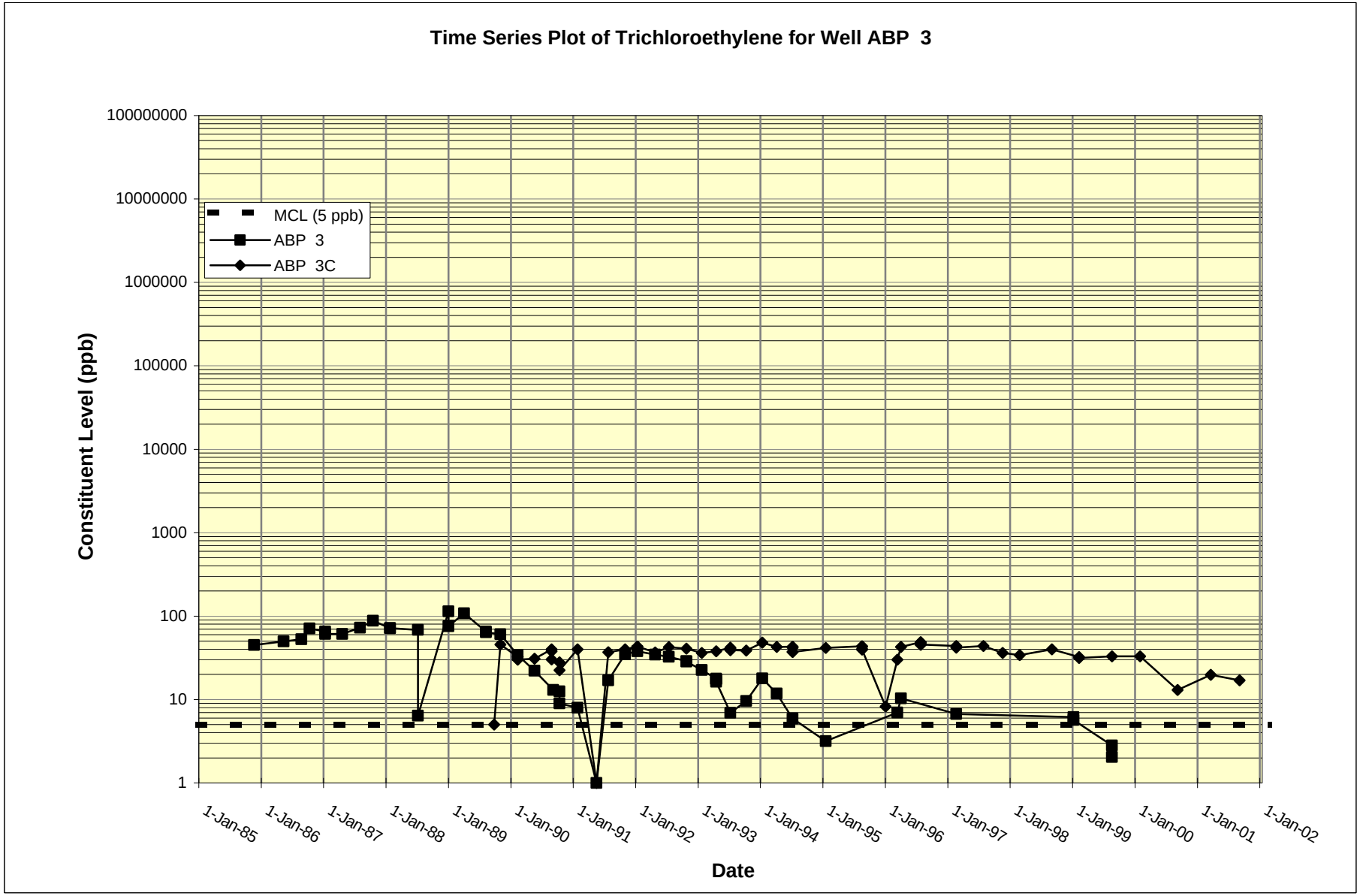
Time Series Plot of Trichloroethylene for Well ABP 3
MCL (5 ppb)
ABP 3
ABP 3C
Constituent Level (ppb)
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10000000
1000000
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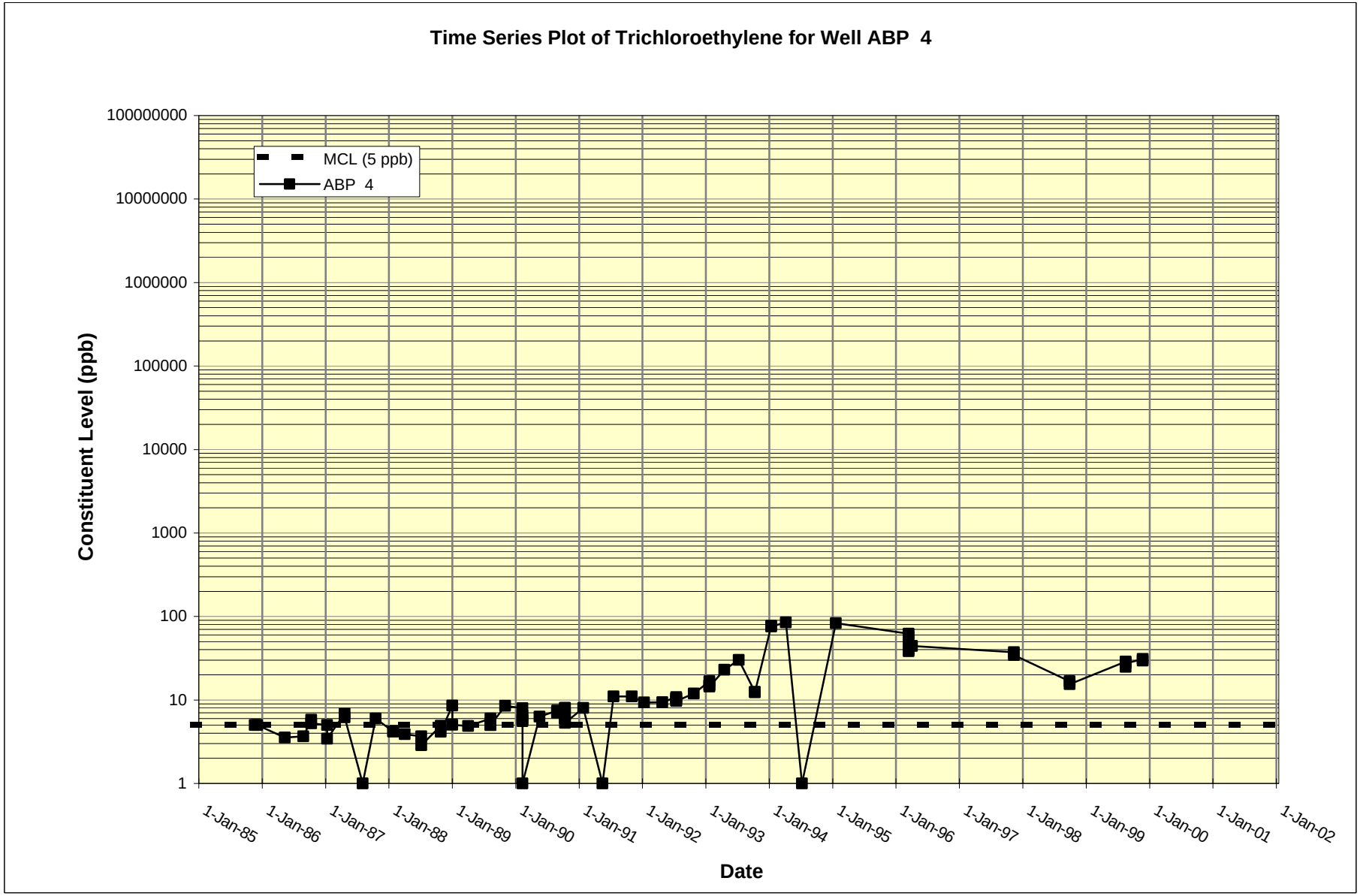
Date


Time Series Plot of Trichloroethylene for Well ABP 4
MCL (5 ppb)
ABP 4
Constituent Level (ppb)
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10000000
1000000
100000
10000
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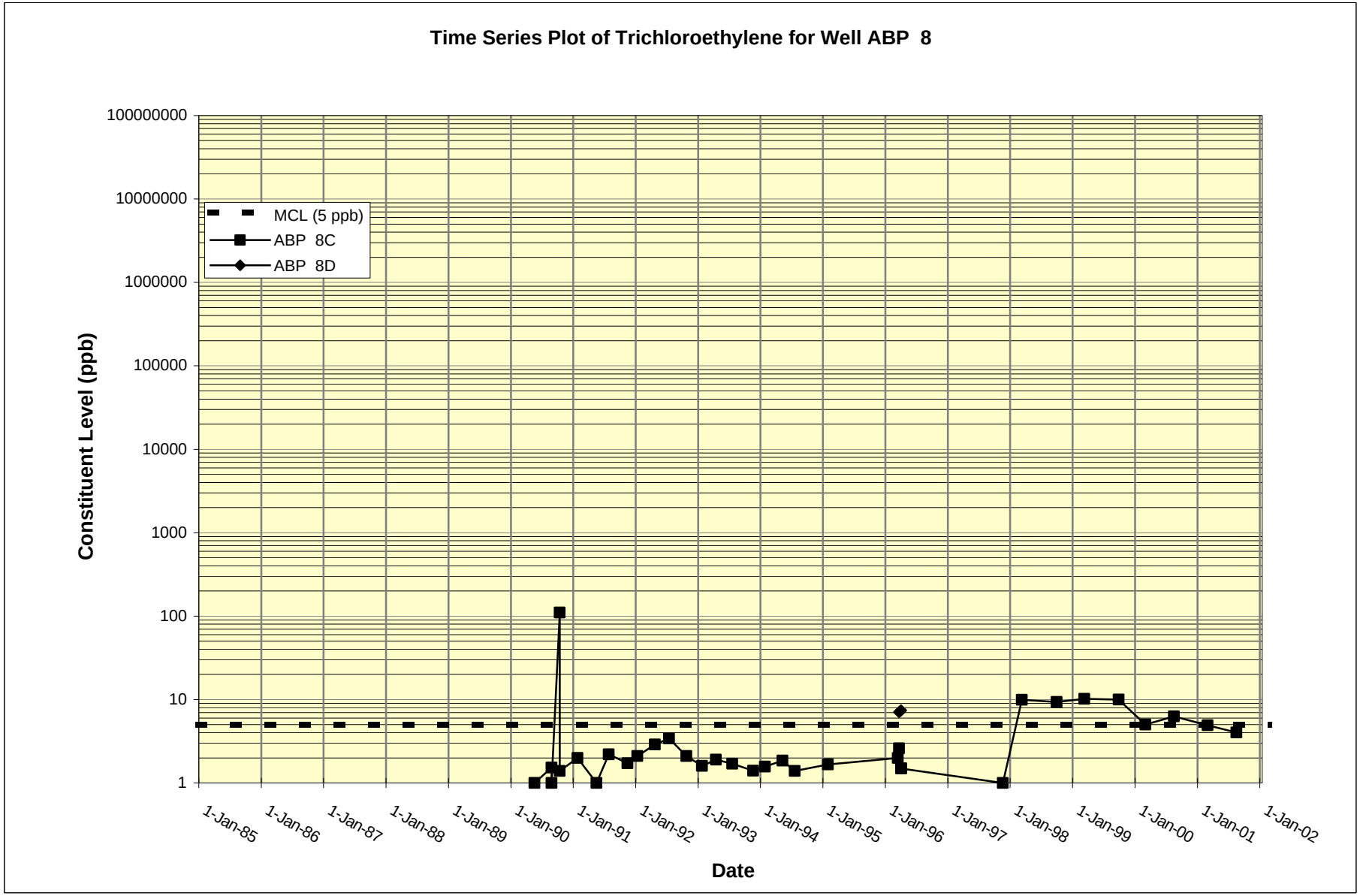
Time Series Plot of Trichloroethylene for Well ABP 8
MCL (5 ppb)
ABP 8C
ABP 8D
Constituent Level (ppb)
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10000000
1000000
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100
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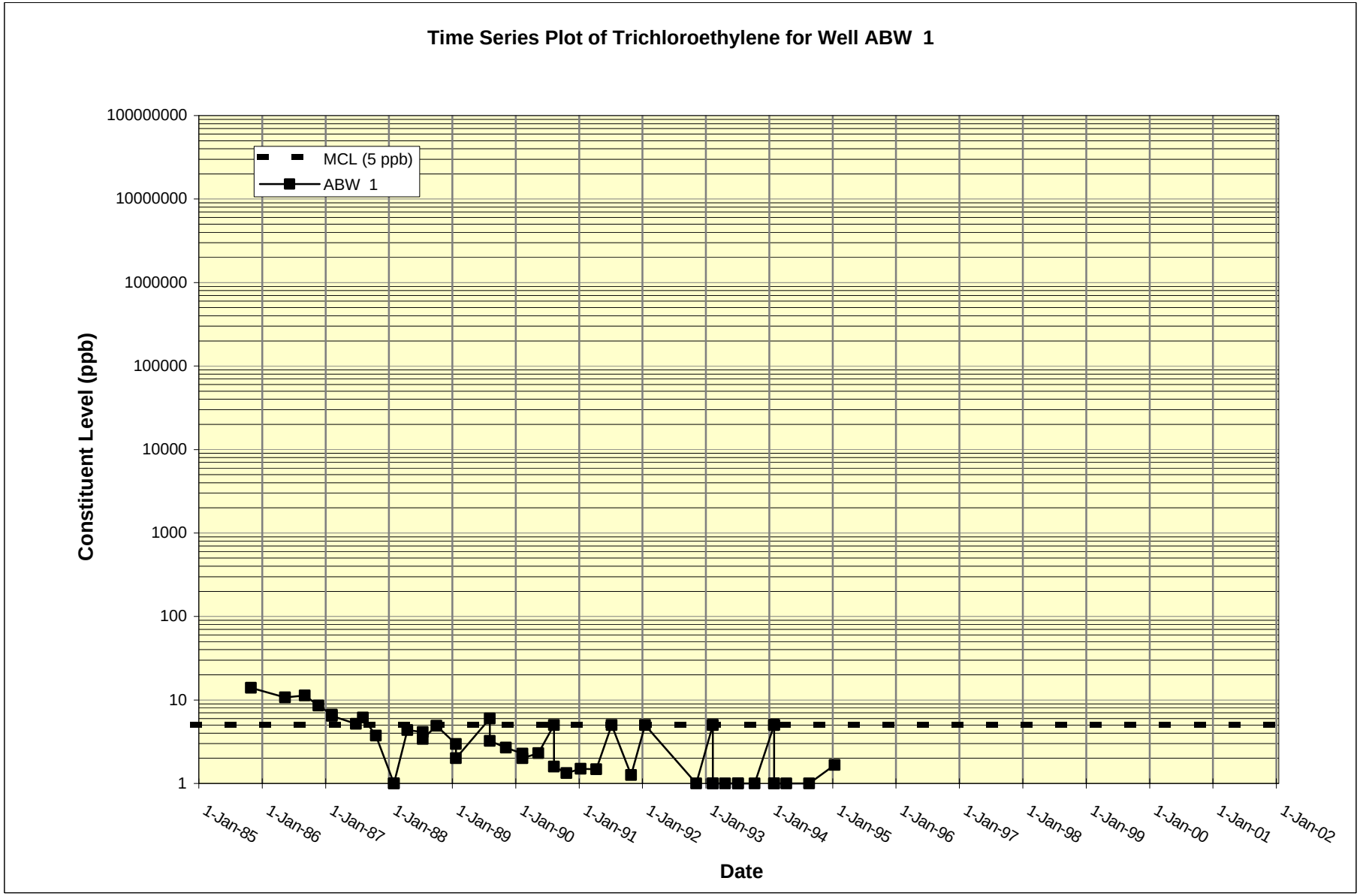
Time Series Plot of Trichloroethylene for Well ABW 1
MCL (5 ppb)
ABW 1
Constituent Level (ppb)
100000000
10000000
1000000
100000
10000
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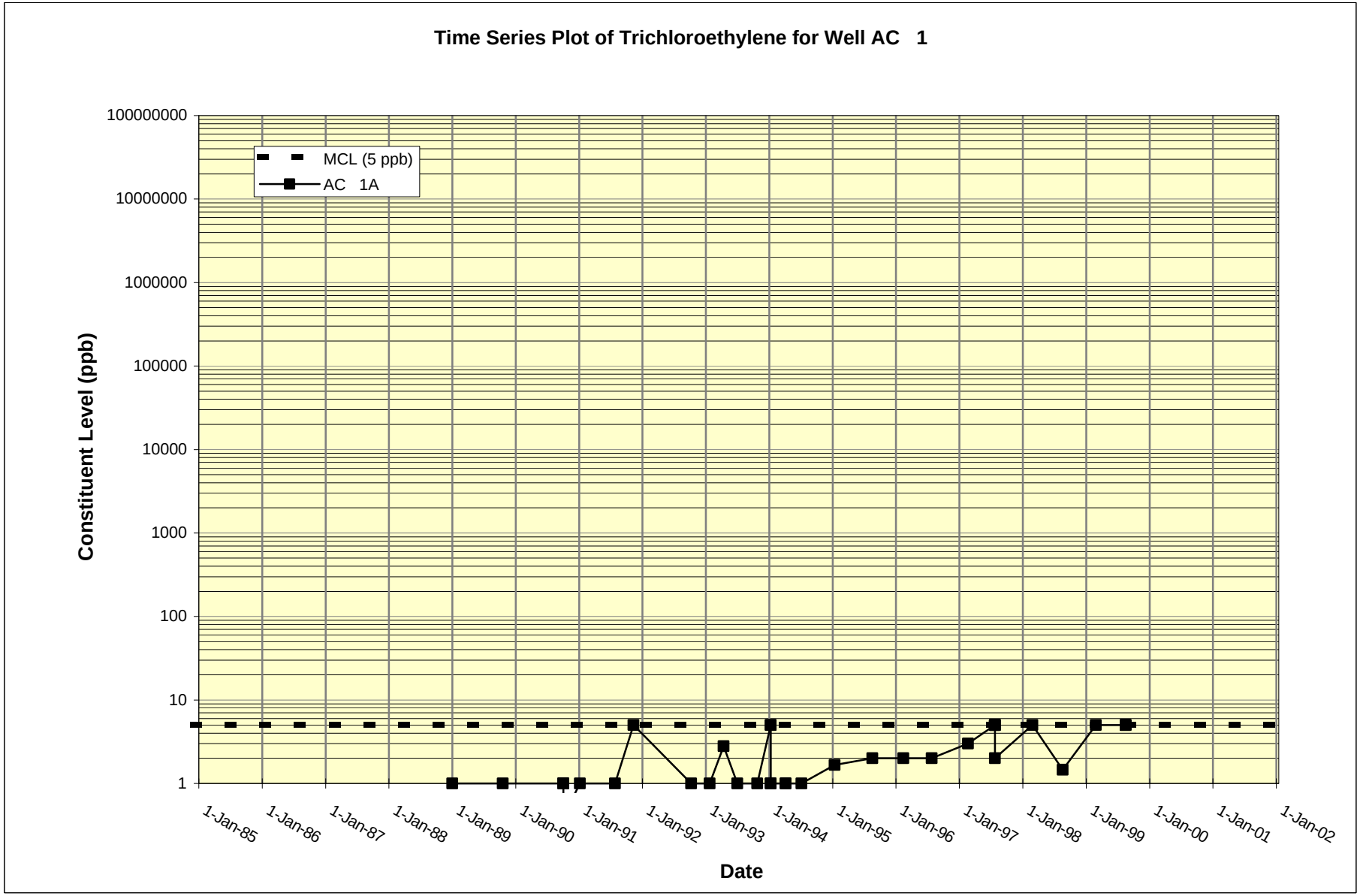
Time Series Plot of Trichloroethylene for Well AC 1
MCL (5 ppb)
AC 1A
Constituent Level (ppb)
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10000000
1000000
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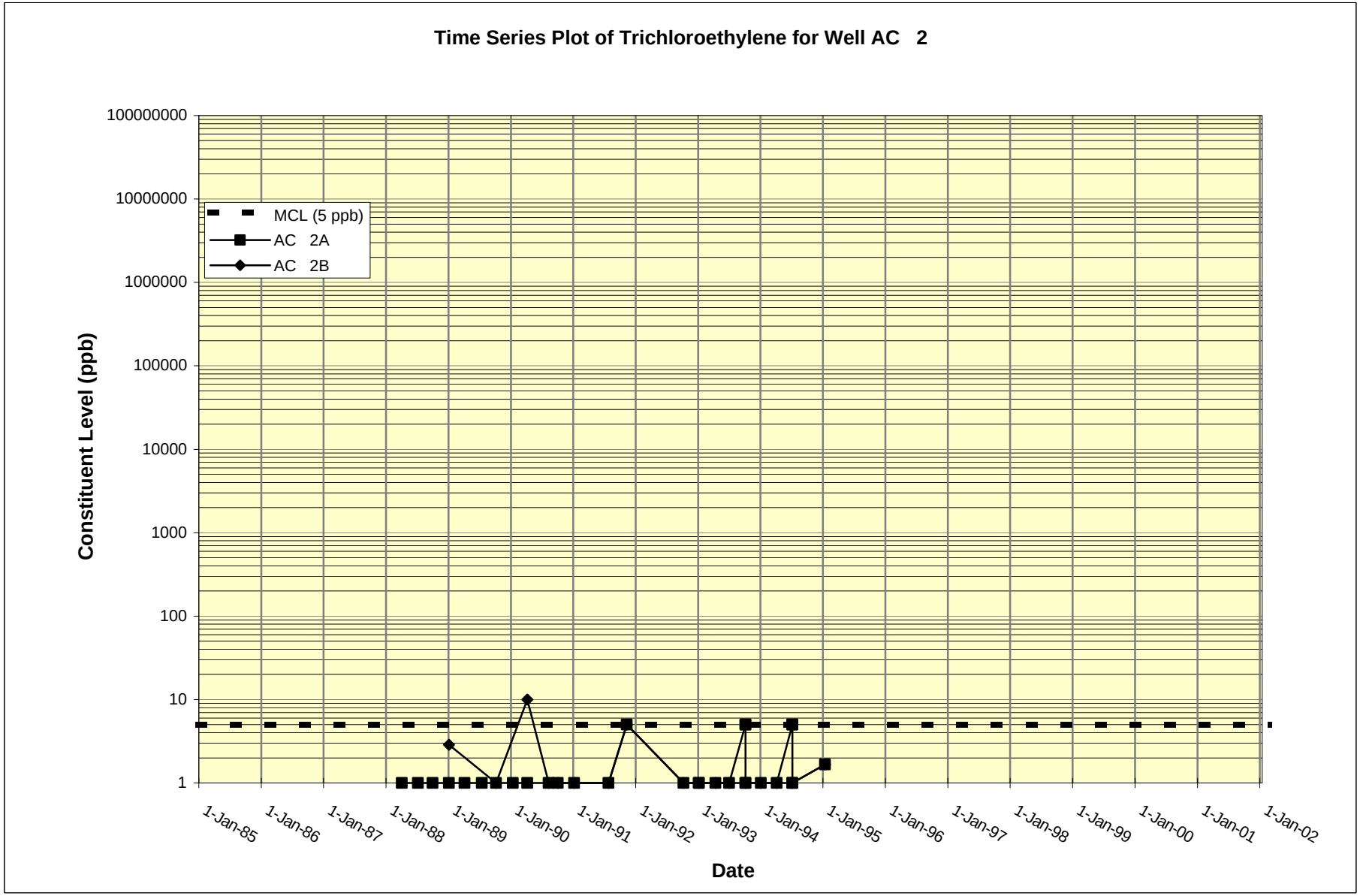
Time Series Plot of Trichloroethylene for Well AC 2
MCL (5 ppb)
AC 2A
AC 2B
Constituent Level (ppb)
100000000
10000000
1000000
100000
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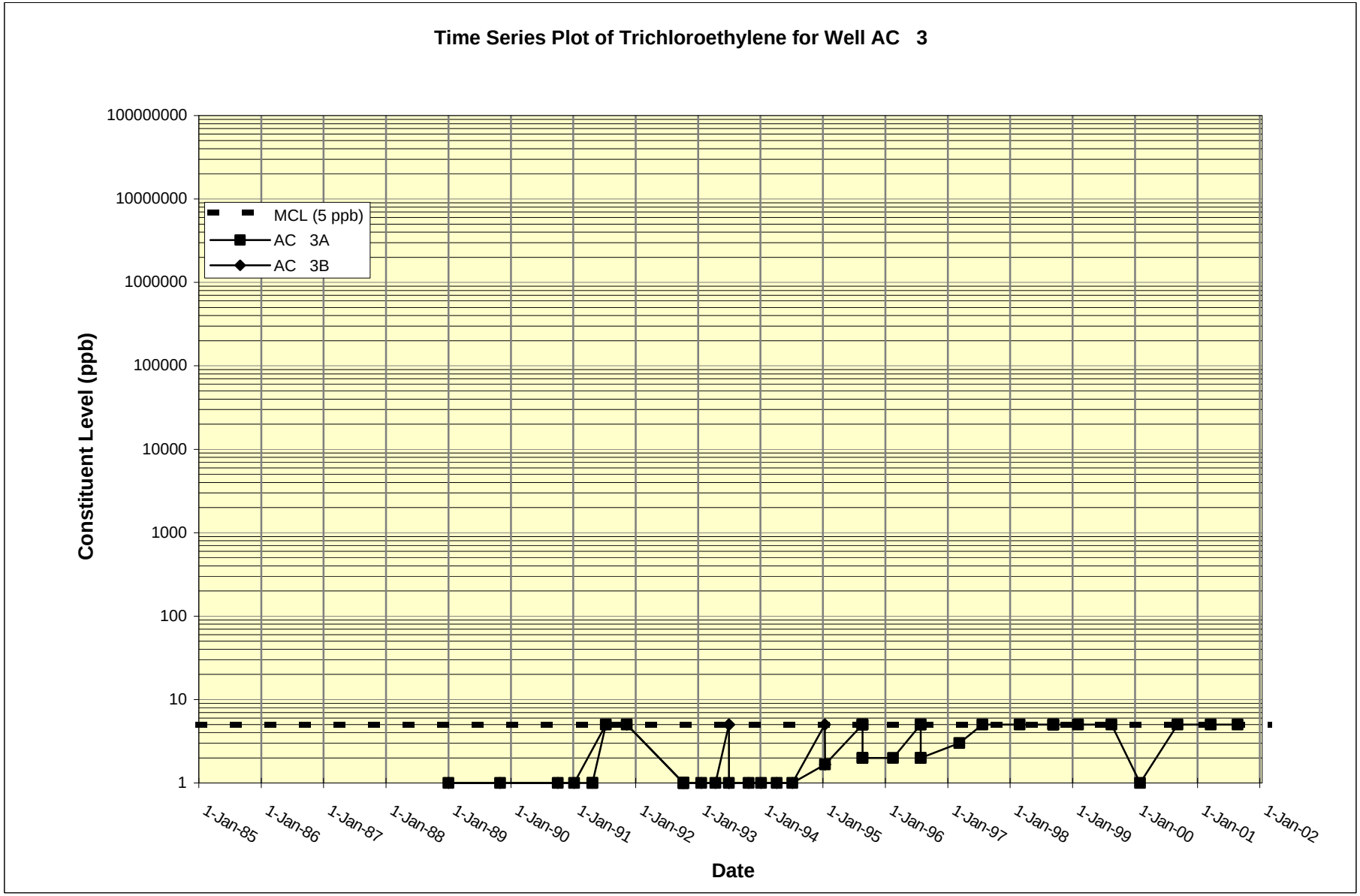
Time Series Plot of Trichloroethylene for Well AC 3
MCL (5 ppb)
AC 3A
AC 3B
Constituent Level (ppb)
100000000
10000000
1000000
100000
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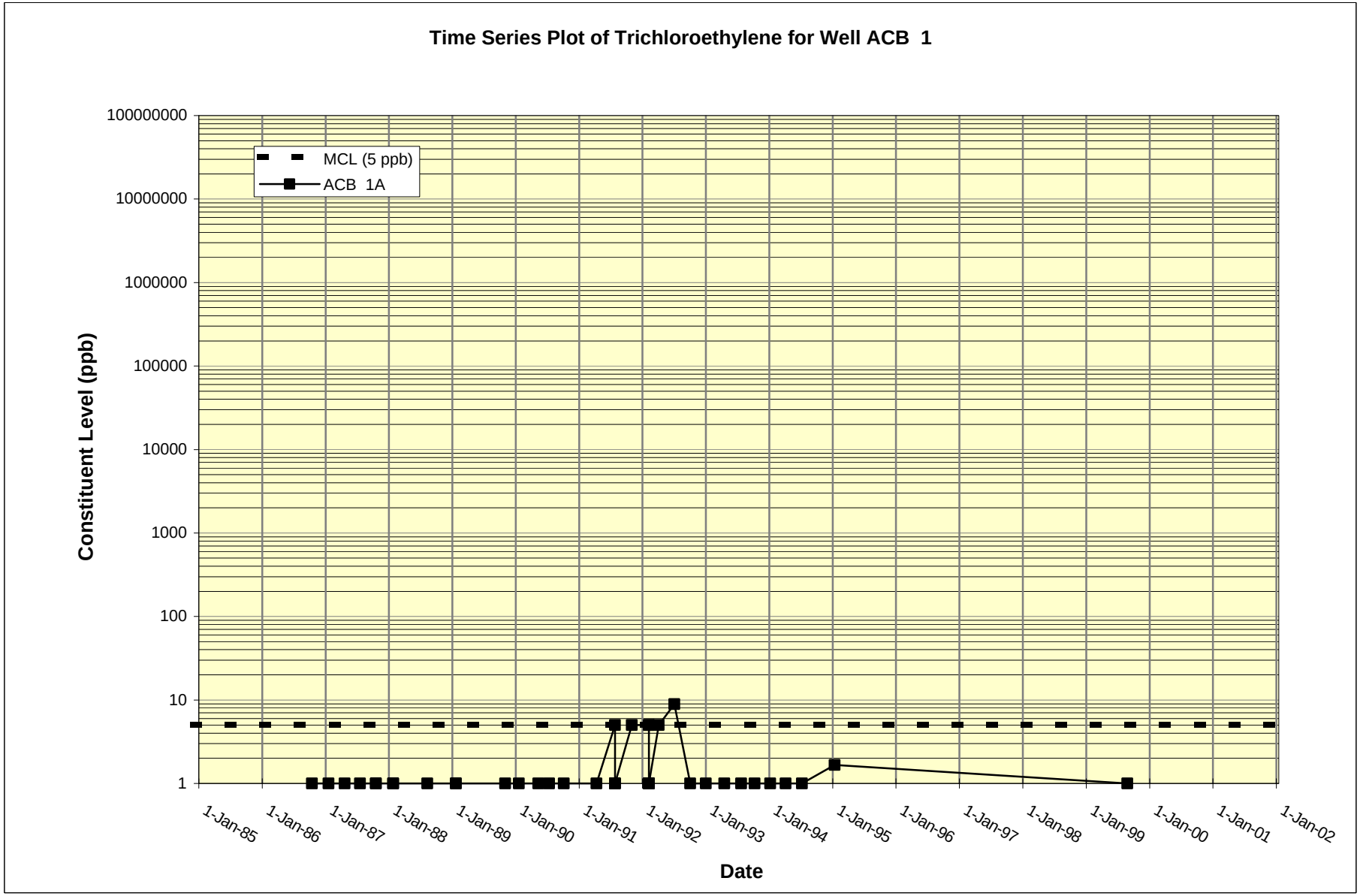
Time Series Plot of Trichloroethylene for Well ACB 1
MCL (5 ppb)
ACB 1A
Constituent Level (ppb)
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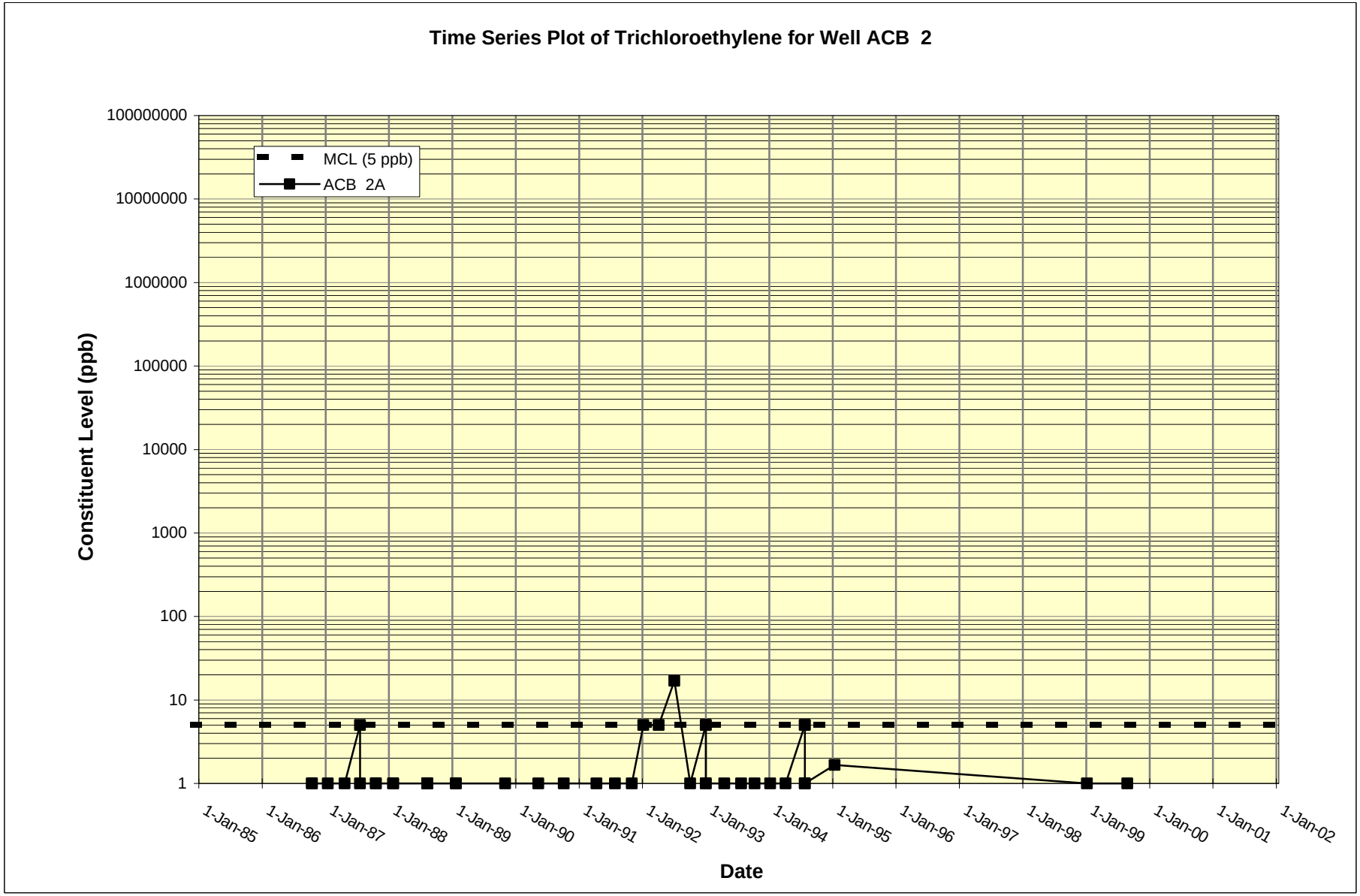
Time Series Plot of Trichloroethylene for Well ACB 2
MCL (5 ppb)
ACB 2A
Constituent Level (ppb)
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100000
10000
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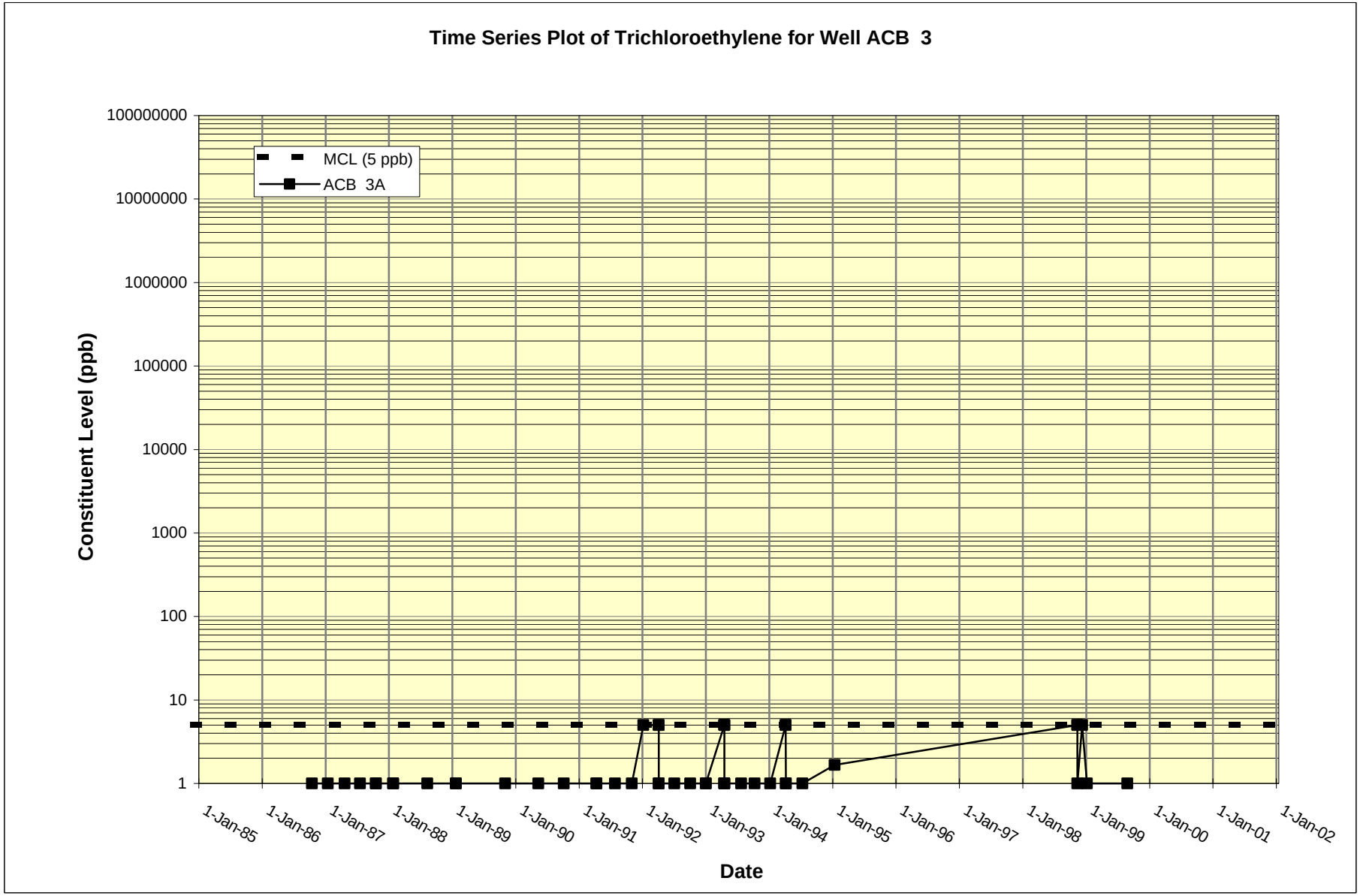
Time Series Plot of Trichloroethylene for Well ACB 3
MCL (5 ppb)
ACB 3A
Constituent Level (ppb)
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10000000
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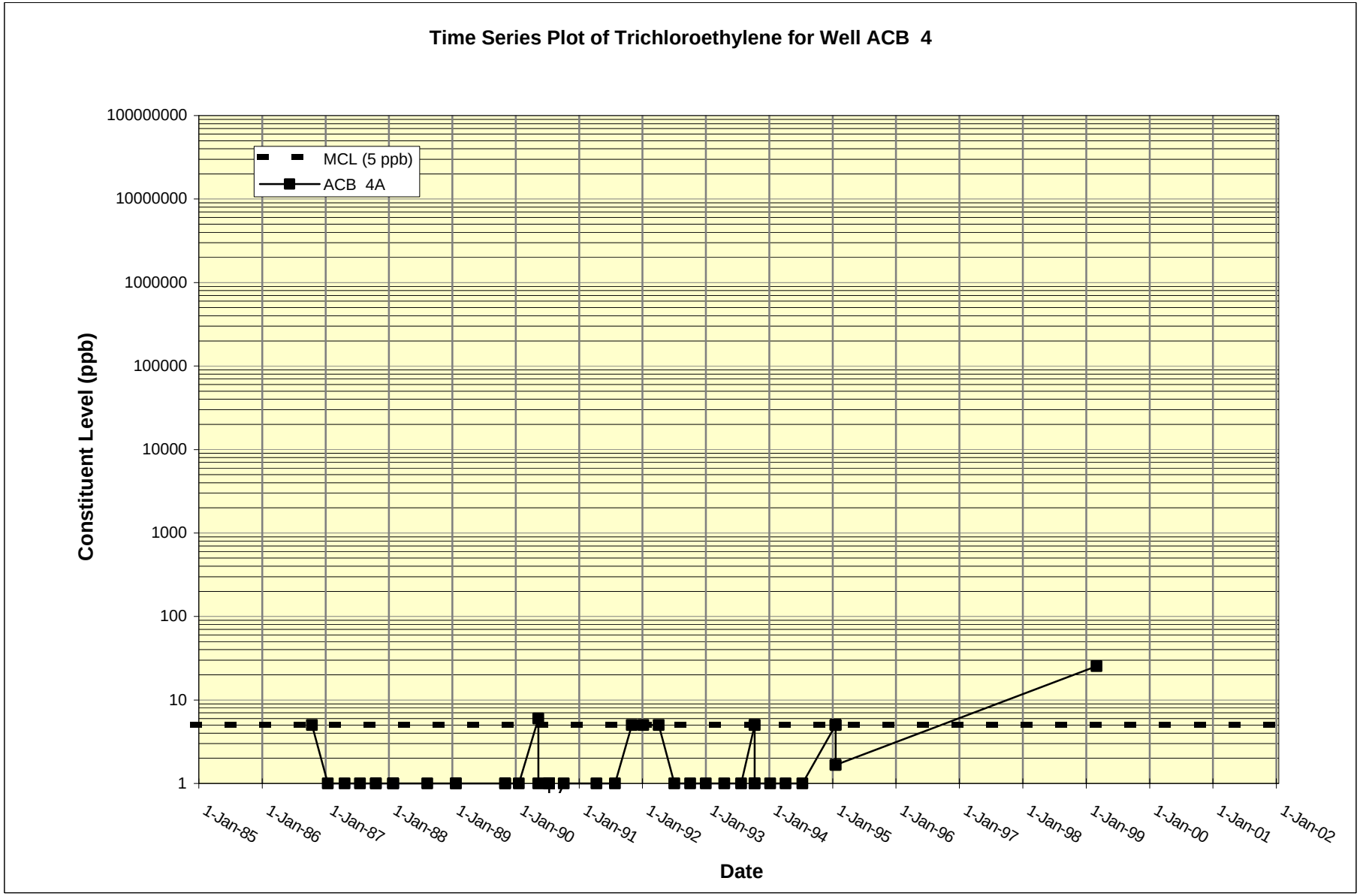
Time Series Plot of Trichloroethylene for Well ACB 4
MCL (5 ppb)
ACB 4A
Constituent Level (ppb)
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10000000
1000000
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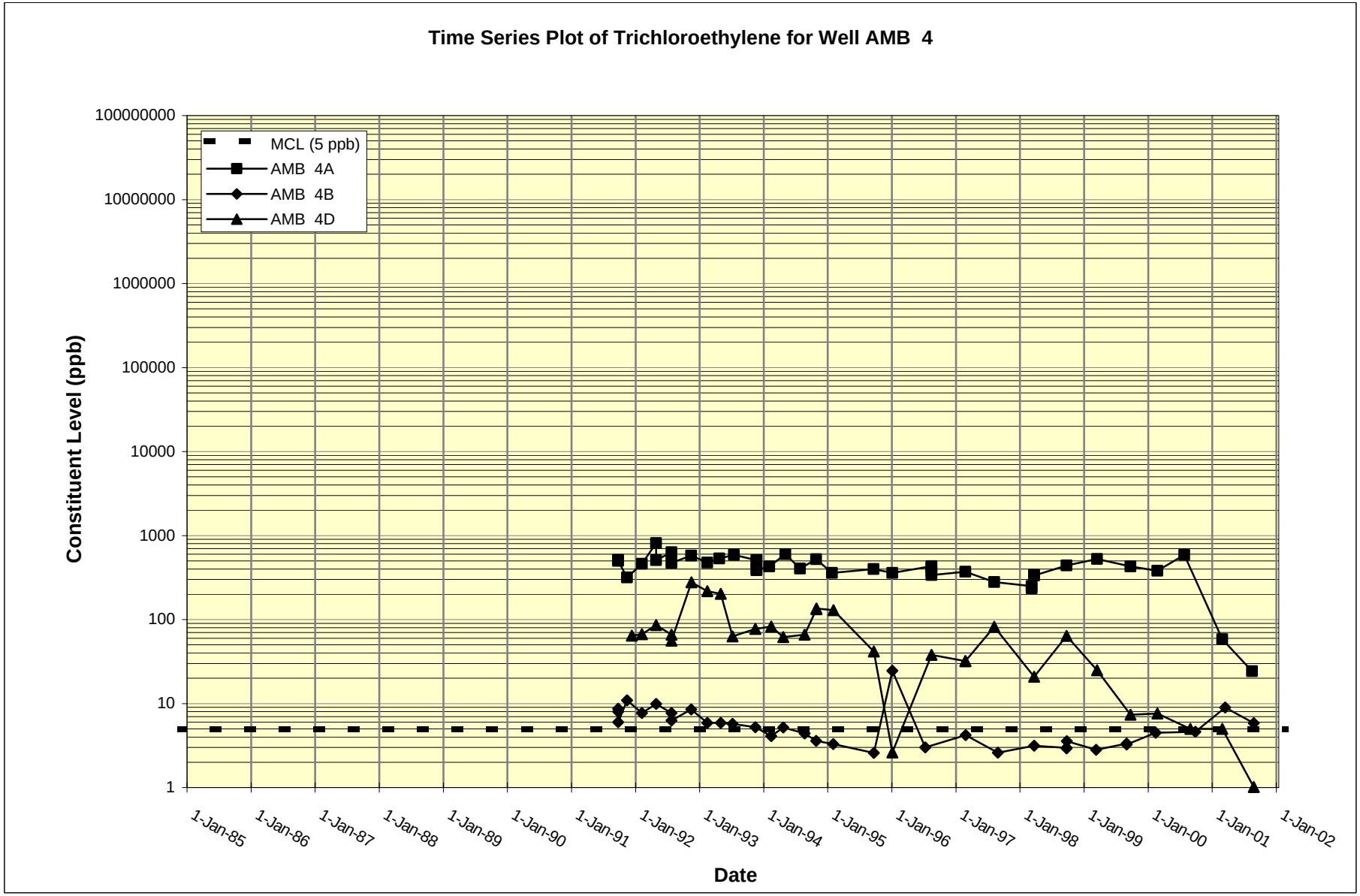
Time Series Plot of Trichloroethylene for Well AMB 4
MCL (5 ppb)
AMB 4A
AMB 4B
AMB 4D
Constituent Level (ppb)
100000000
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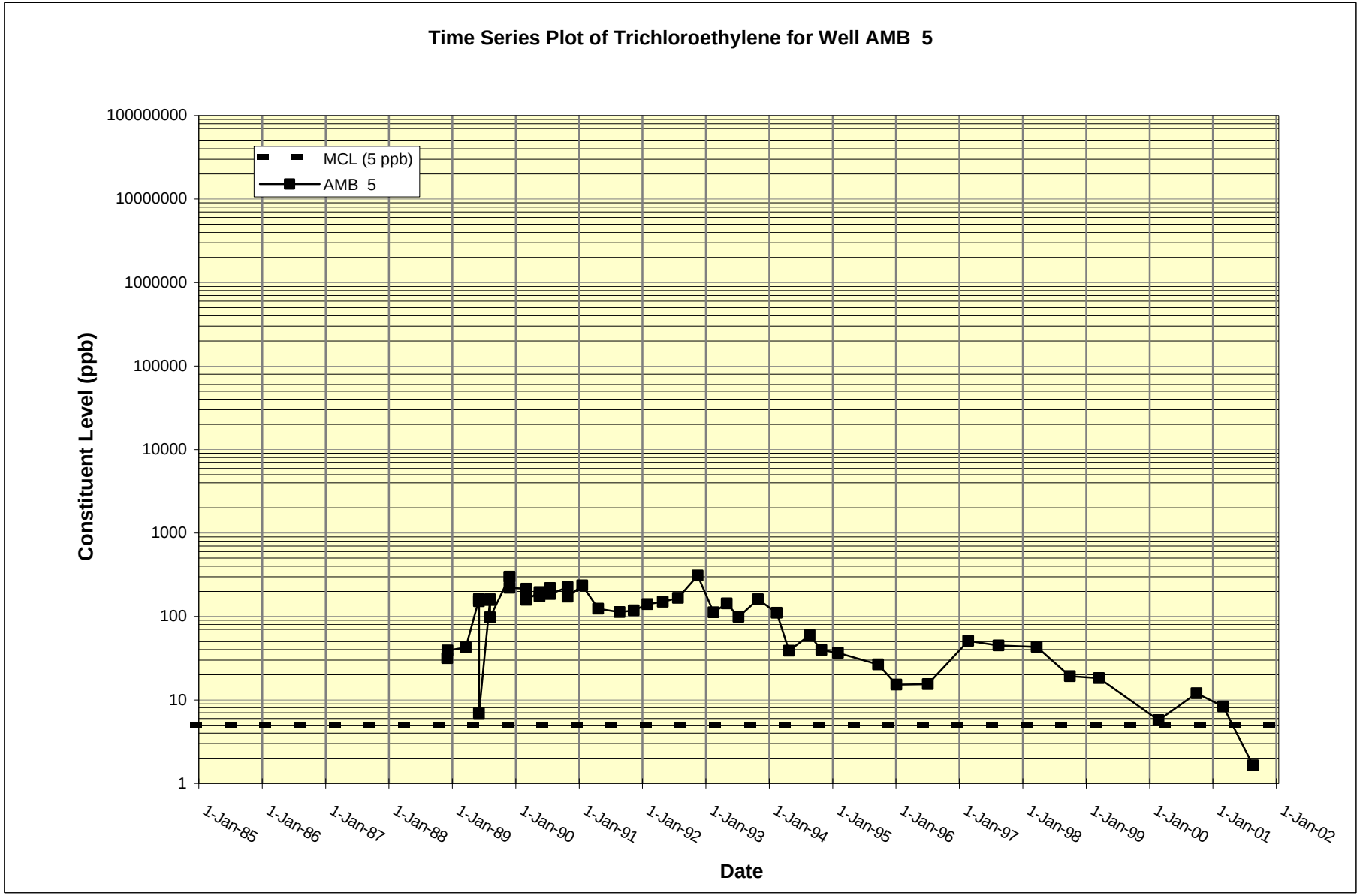
Time Series Plot of Trichloroethylene for Well AMB 5
MCL (5 ppb)
AMB 5
Constituent Level (ppb)
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10000000
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100
10
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1-Jan-85
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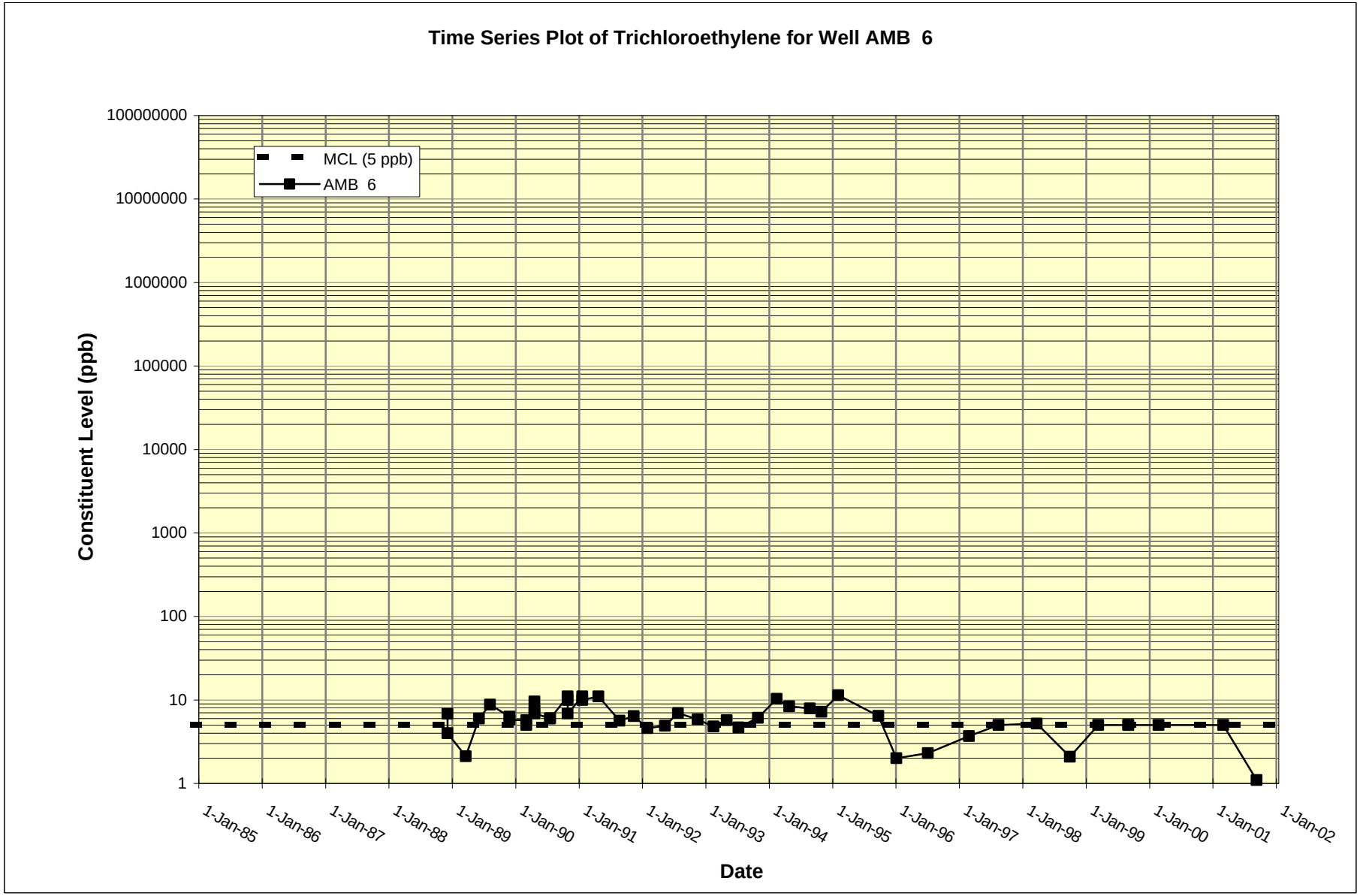
Time Series Plot of Trichloroethylene for Well AMB 6
MCL (5 ppb)
AMB 6
Constituent Level (ppb)
100000000
10000000
1000000
100000
10000
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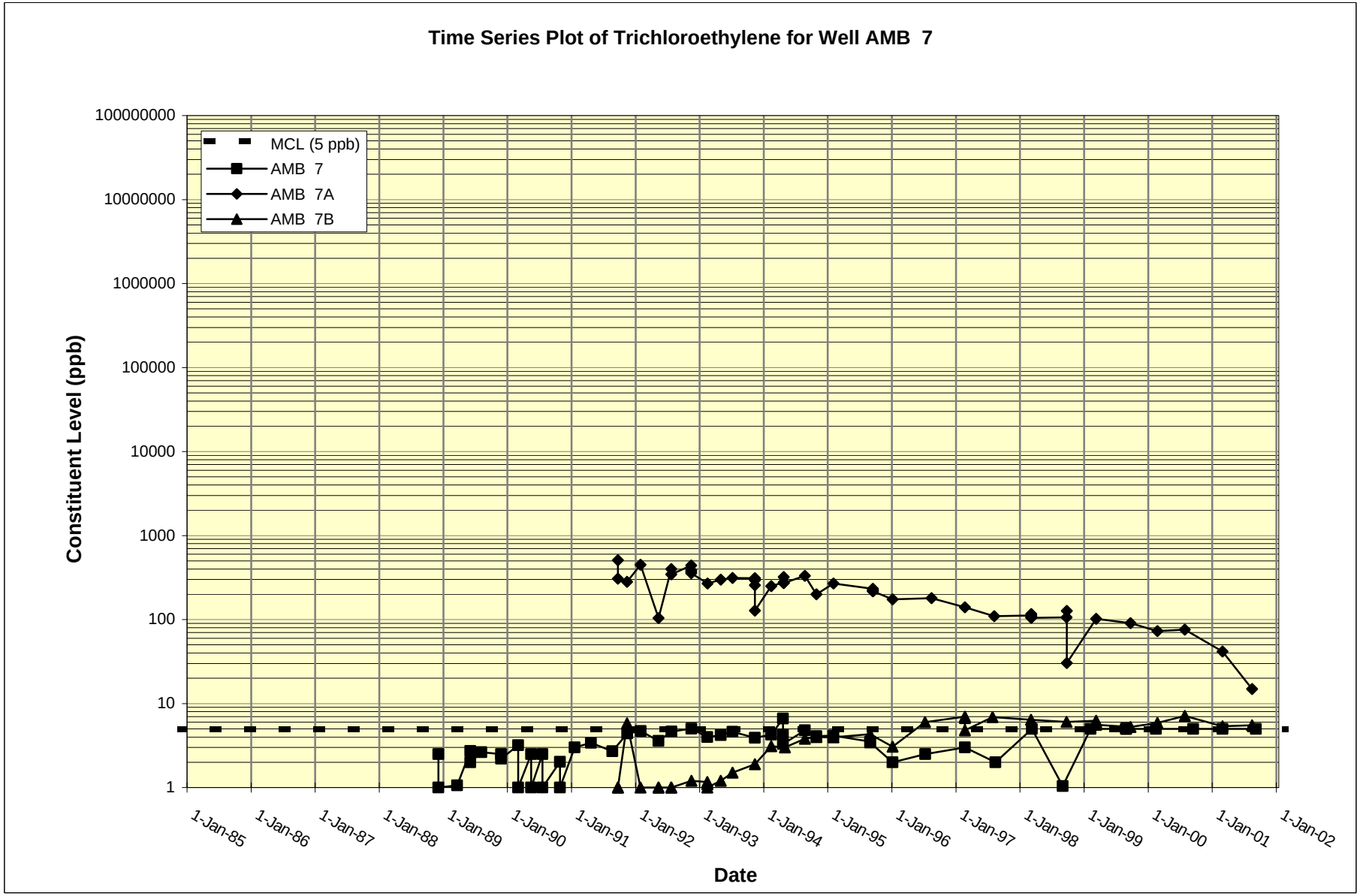
Time Series Plot of Trichloroethylene for Well AMB 7
MCL (5 ppb)
AMB 7
AMB 7A
AMB 7B
Constituent Level (ppb)
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100000
10000
1000
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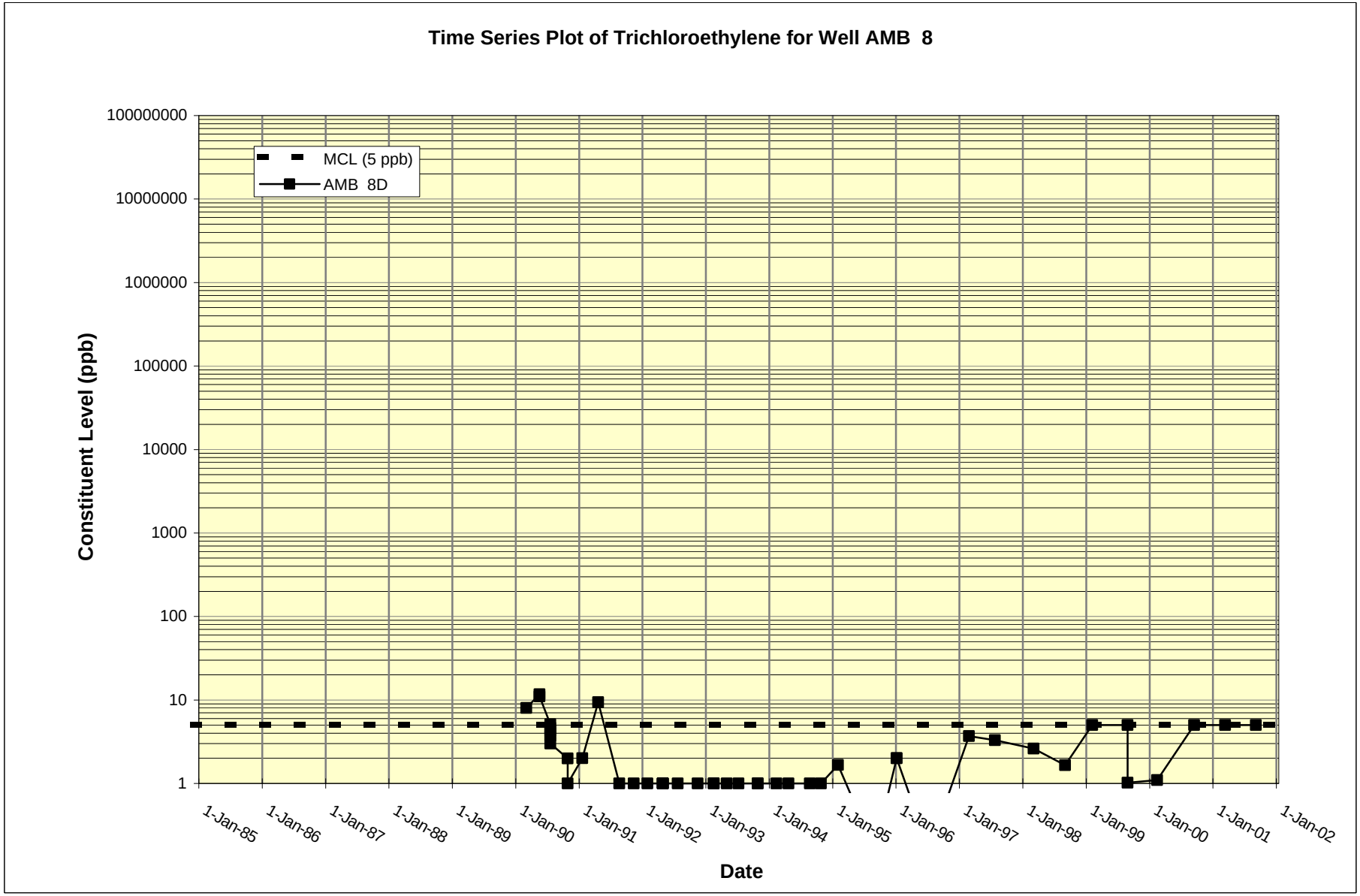
Time Series Plot of Trichloroethylene for Well AMB 8
MCL (5 ppb)
AMB 8D
Constituent Level (ppb)
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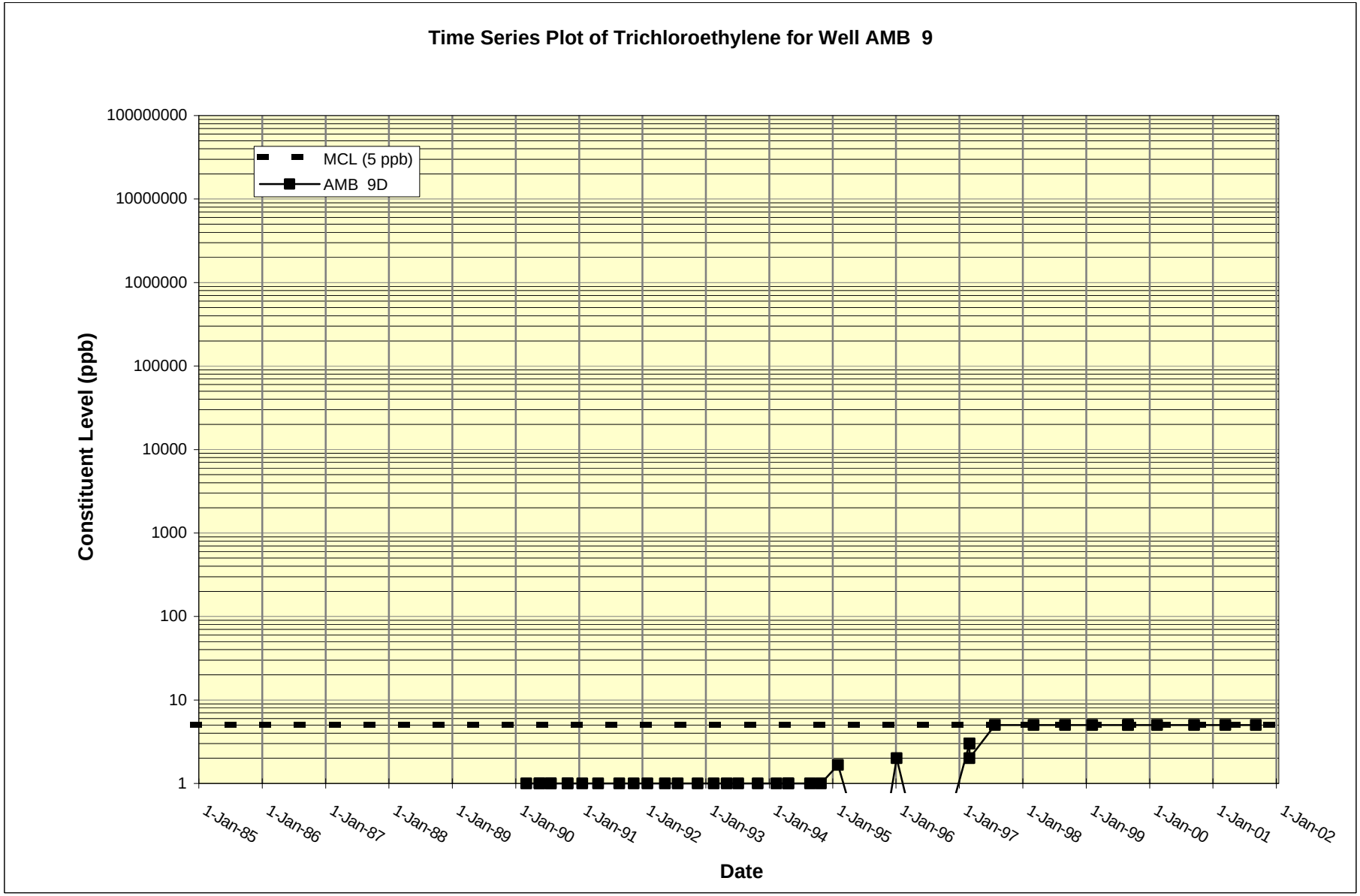
Date


Time Series Plot of Trichloroethylene for Well AMB 9
MCL (5 ppb)
AMB 9D
Constituent Level (ppb)
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10000
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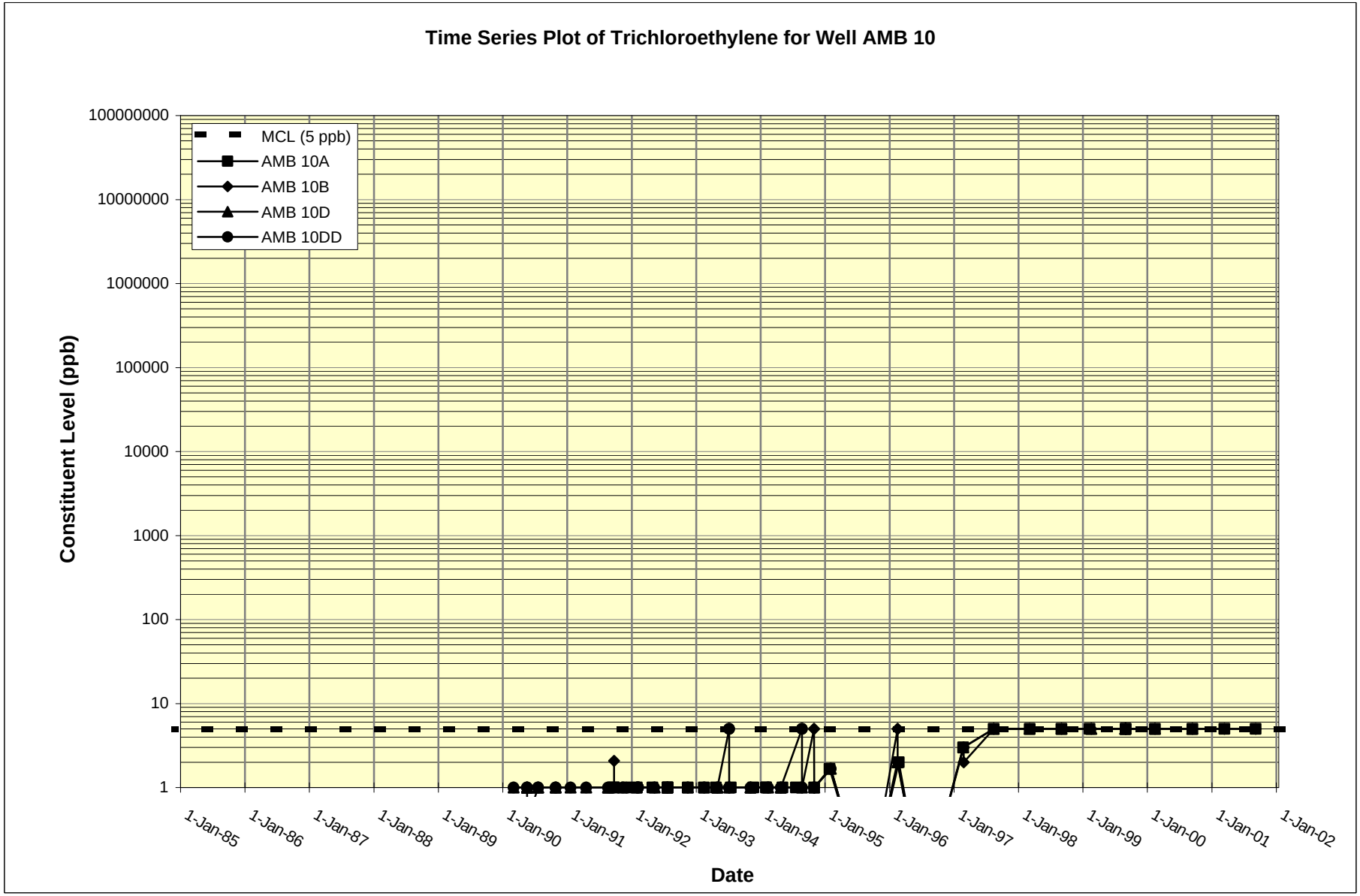
Date


Time Series Plot of Trichloroethylene for Well AMB 10
MCL (5 ppb)
AMB 10A
AMB 10B
AMB 10D
AMB 10DD
Constituent Level (ppb)
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1000
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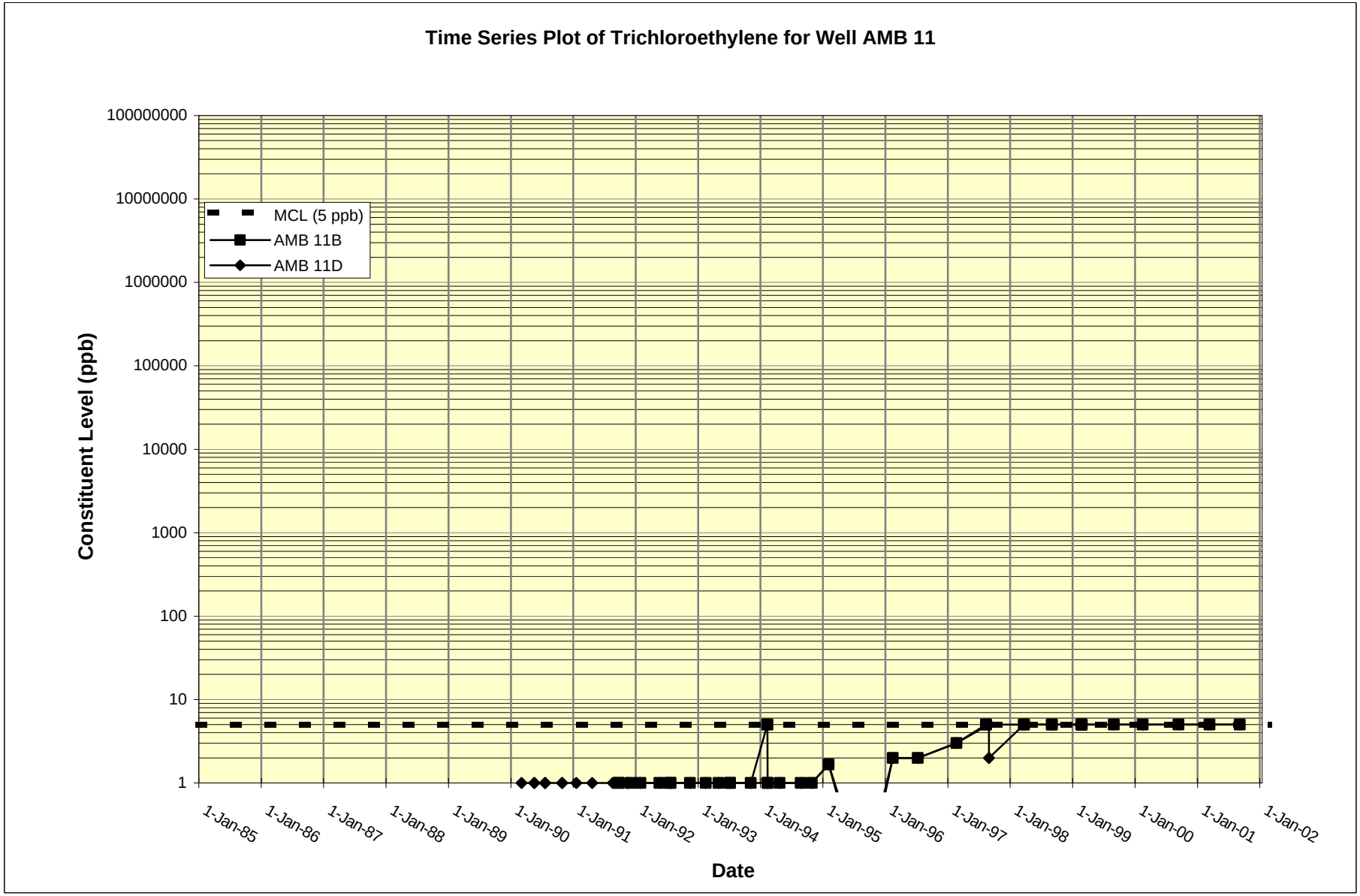
Date


Time Series Plot of Trichloroethylene for Well AMB 11
MCL (5 ppb)
AMB 11B
AMB 11D
Constituent Level (ppb)
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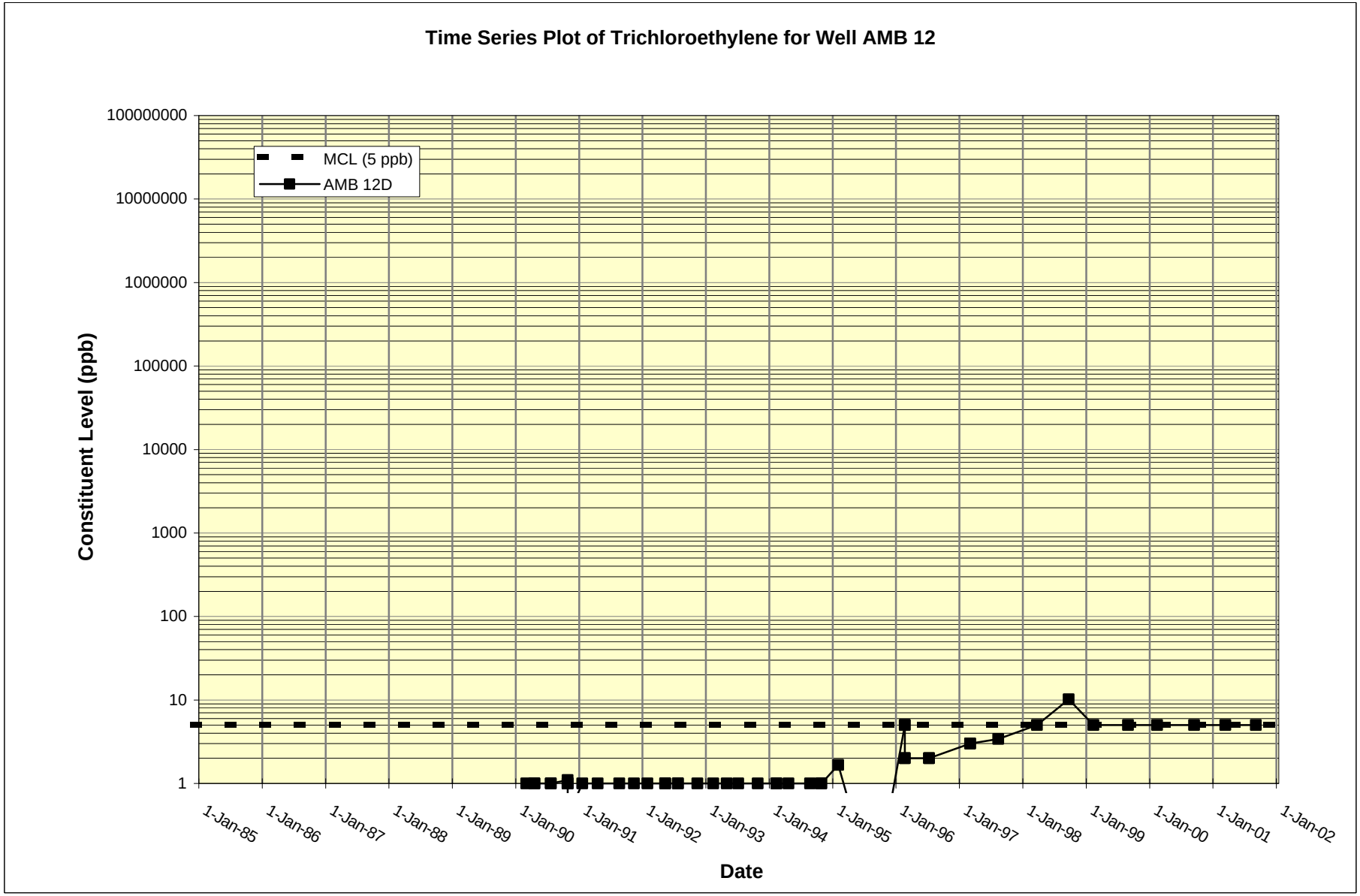
Date


Time Series Plot of Trichloroethylene for Well AMB 12
MCL (5 ppb)
AMB 12D
Constituent Level (ppb)
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10000
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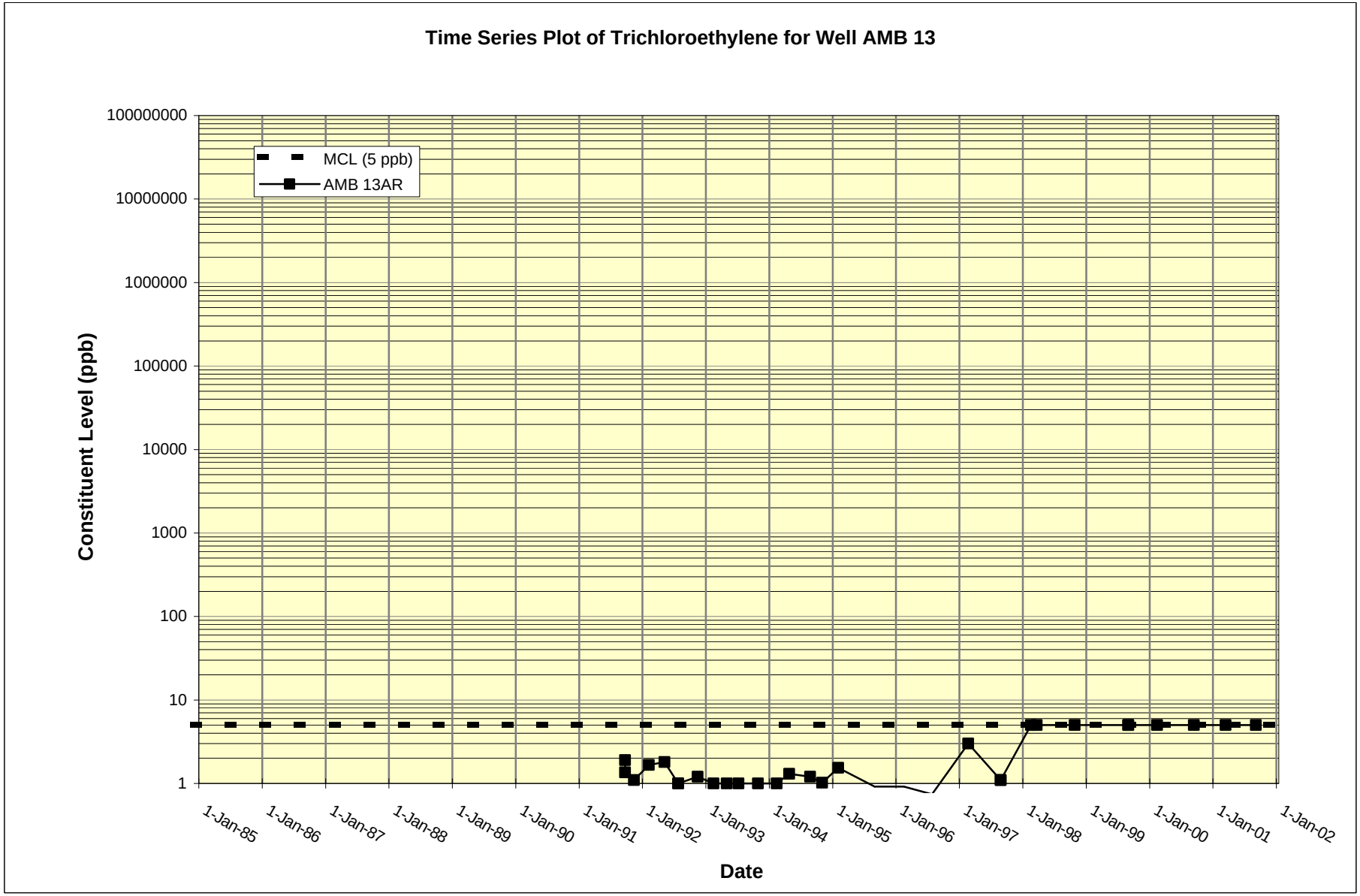
Date


Time Series Plot of Trichloroethylene for Well AMB 13
MCL (5 ppb)
AMB 13AR
Constituent Level (ppb)
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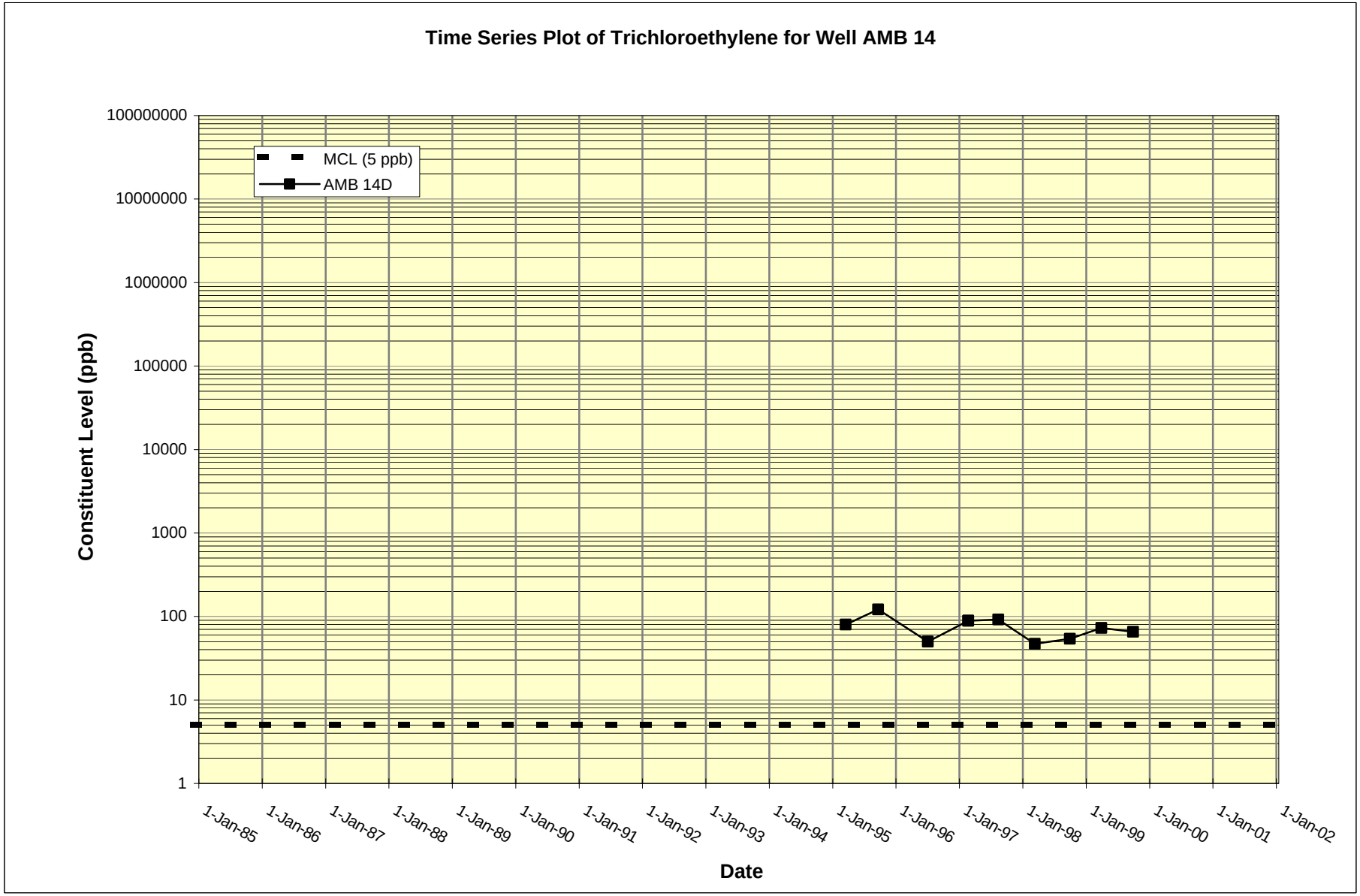
Date


Time Series Plot of Trichloroethylene for Well AMB 14
MCL (5 ppb)
AMB 14D
Constituent Level (ppb)
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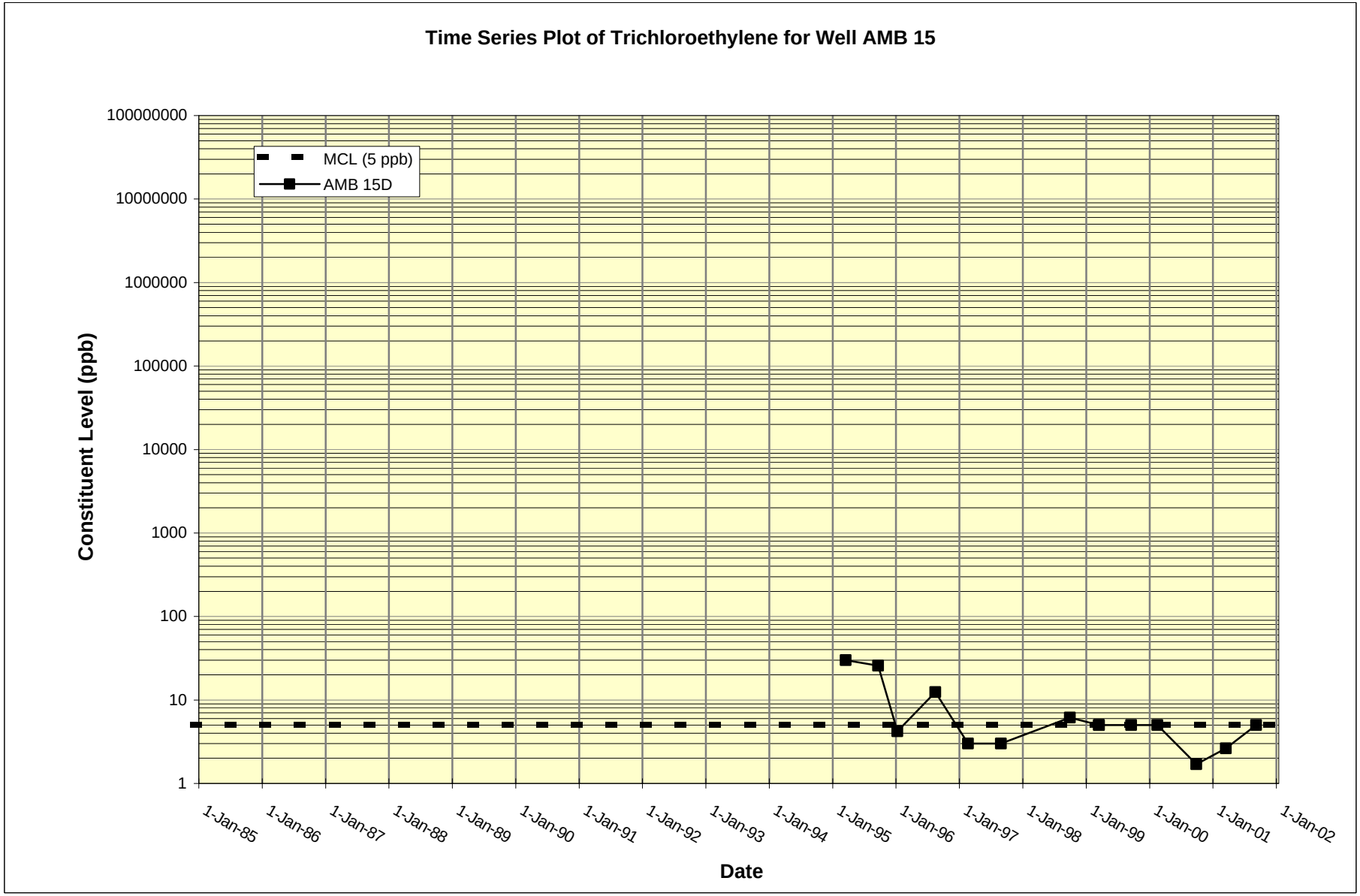
Date


Time Series Plot of Trichloroethylene for Well AMB 15
MCL (5 ppb)
AMB 15D
Constituent Level (ppb)
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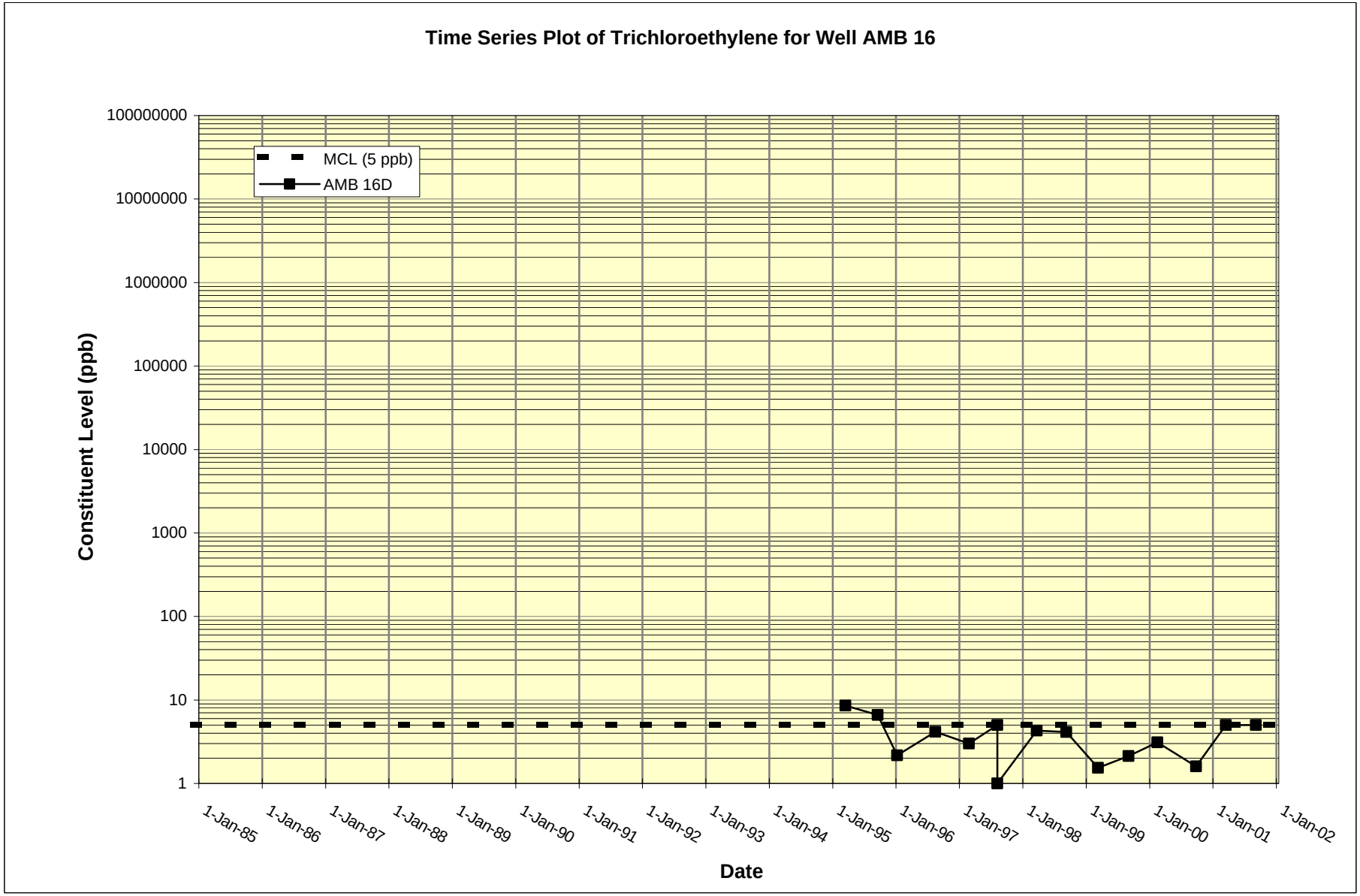
Time Series Plot of Trichloroethylene for Well AMB 16
MCL (5 ppb)
AMB 16D
Constituent Level (ppb)
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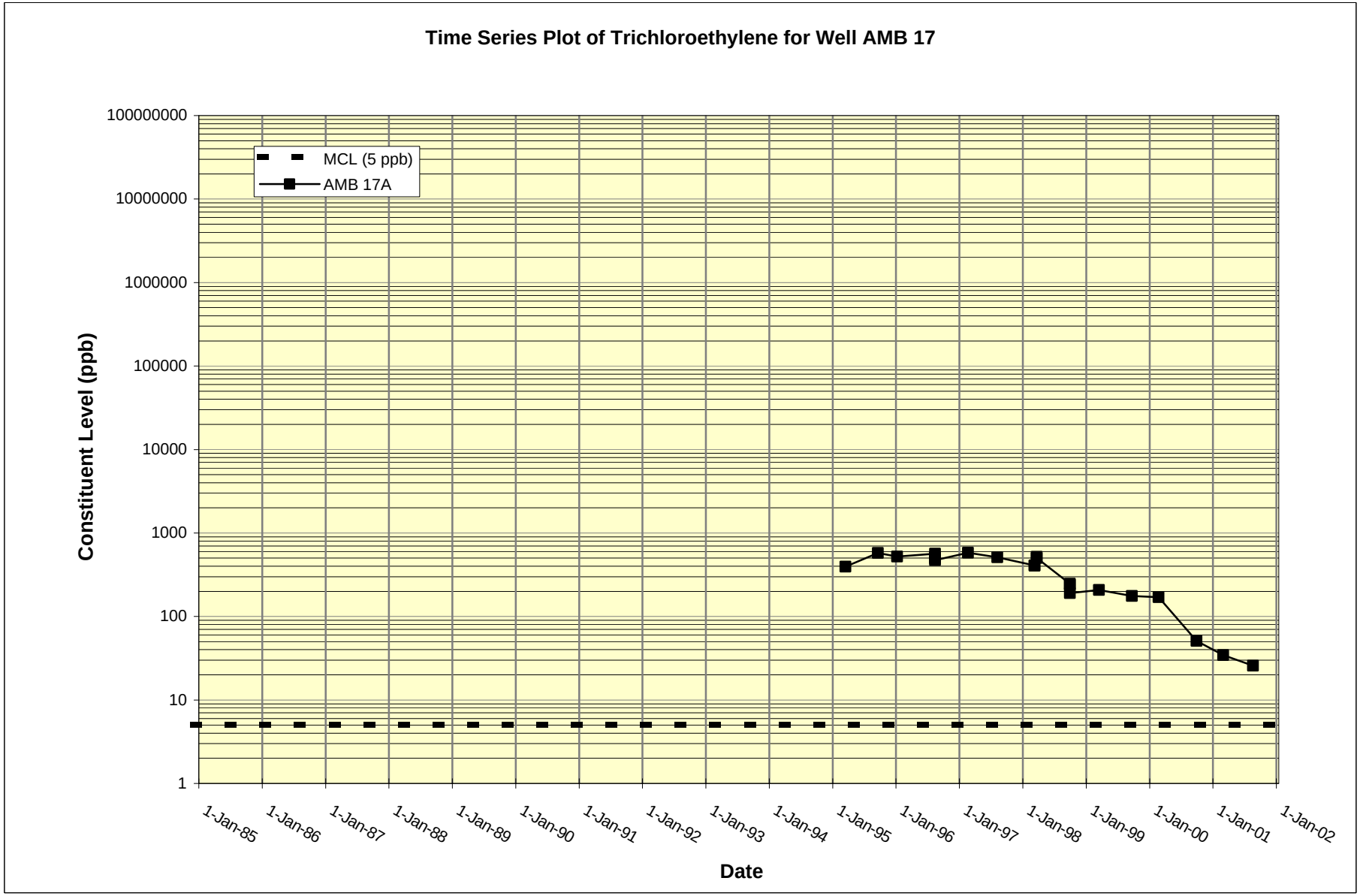
Time Series Plot of Trichloroethylene for Well AMB 17
MCL (5 ppb)
AMB 17A
Constituent Level (ppb)
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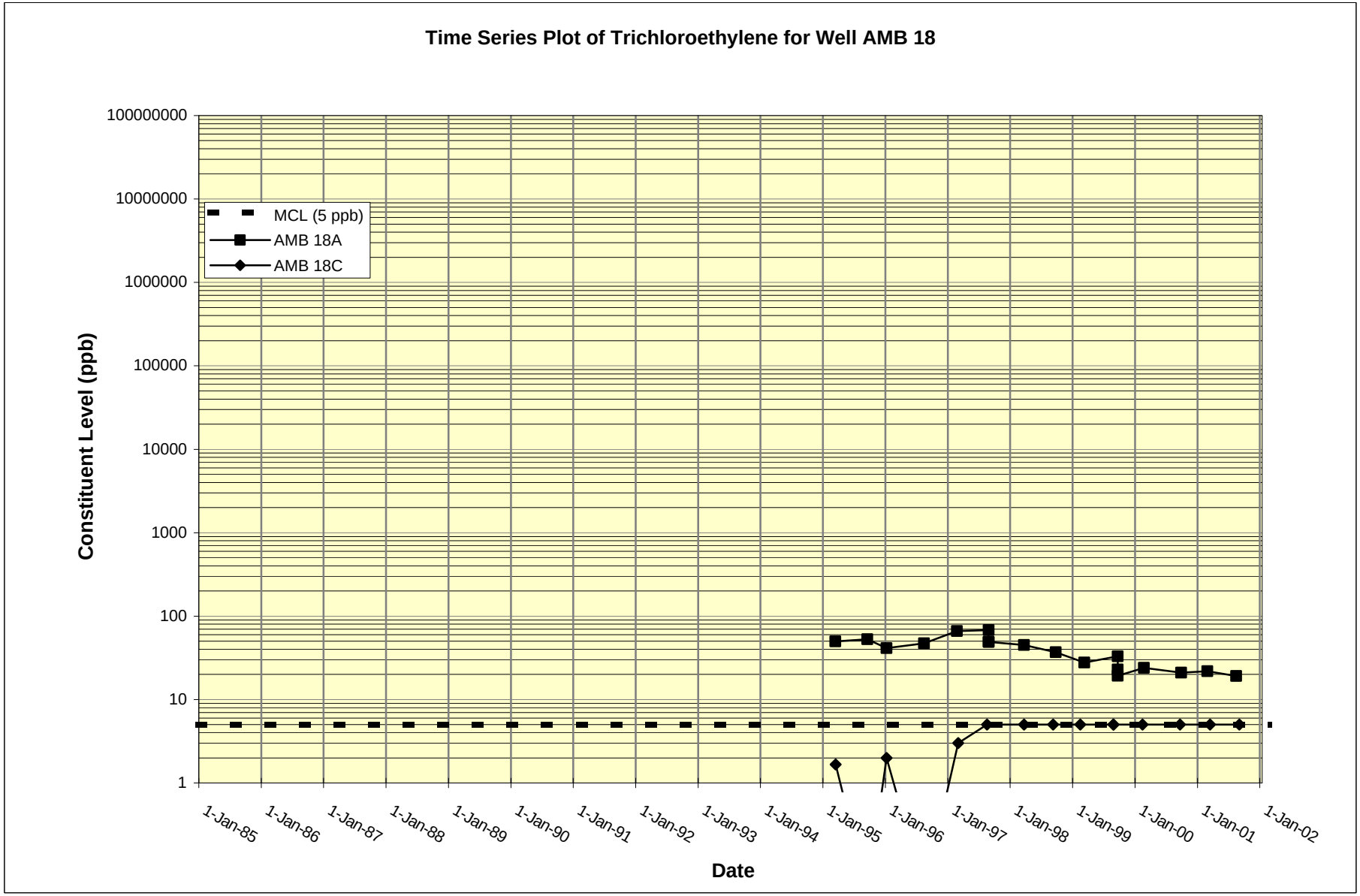
Time Series Plot of Trichloroethylene for Well AMB 18
MCL (5 ppb)
AMB 18A
AMB 18C
Constituent Level (ppb)
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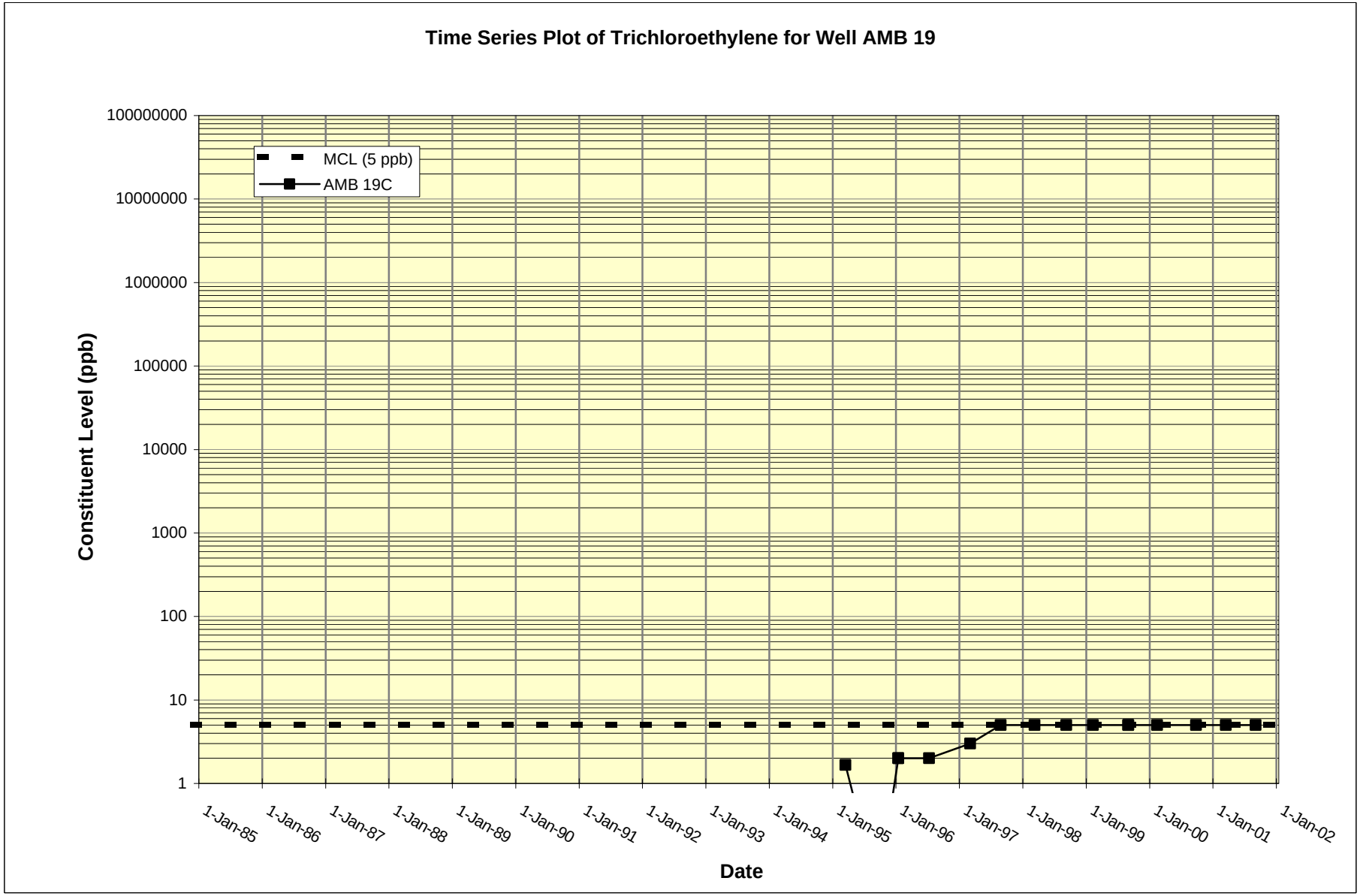
Time Series Plot of Trichloroethylene for Well AMB 19
MCL (5 ppb)
AMB 19C
Constituent Level (ppb)
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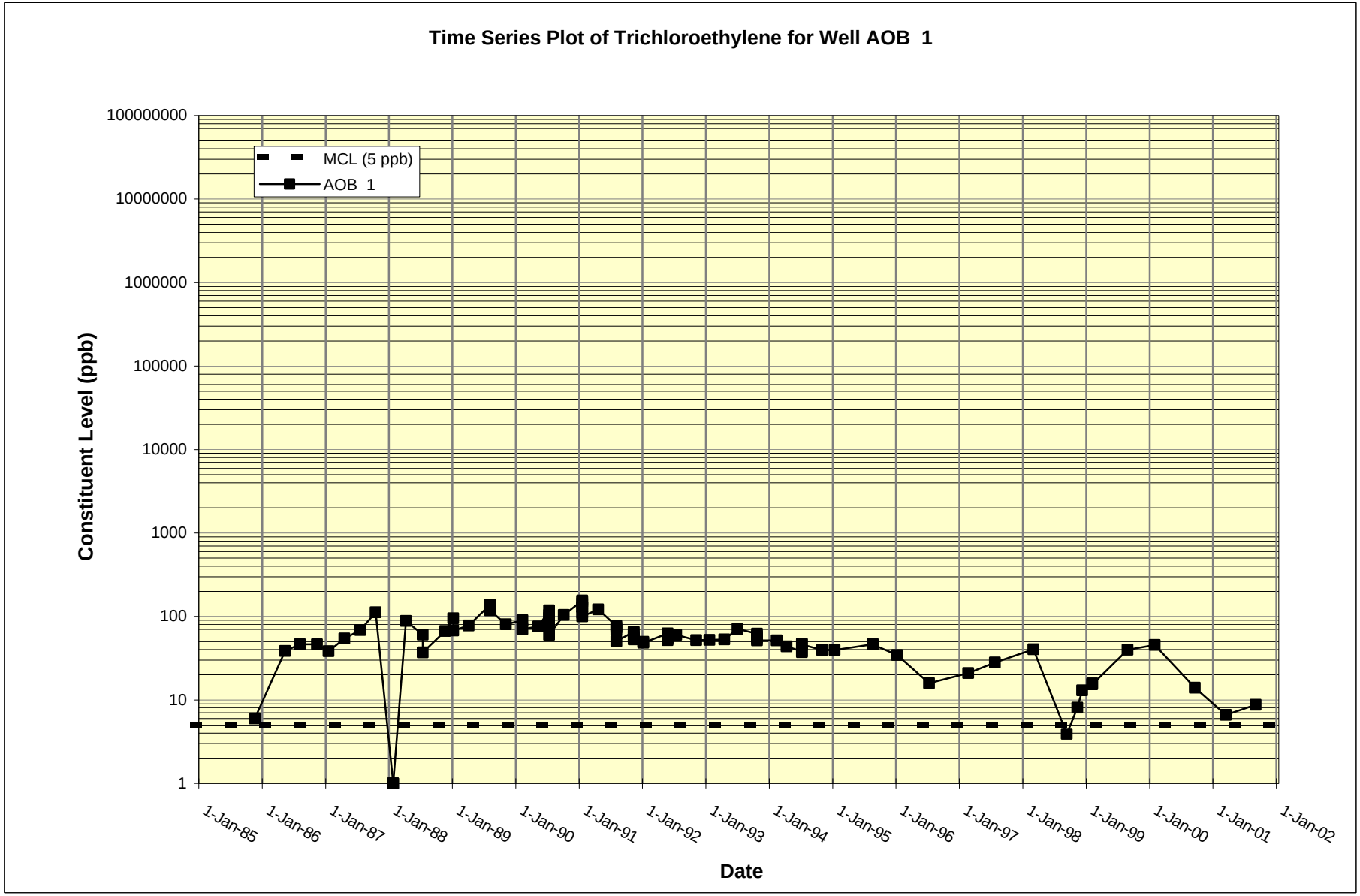
Time Series Plot of Trichloroethylene for Well AOB 1
MCL (5 ppb)
AOB 1
Constituent Level (ppb)
100000000
10000000
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10000
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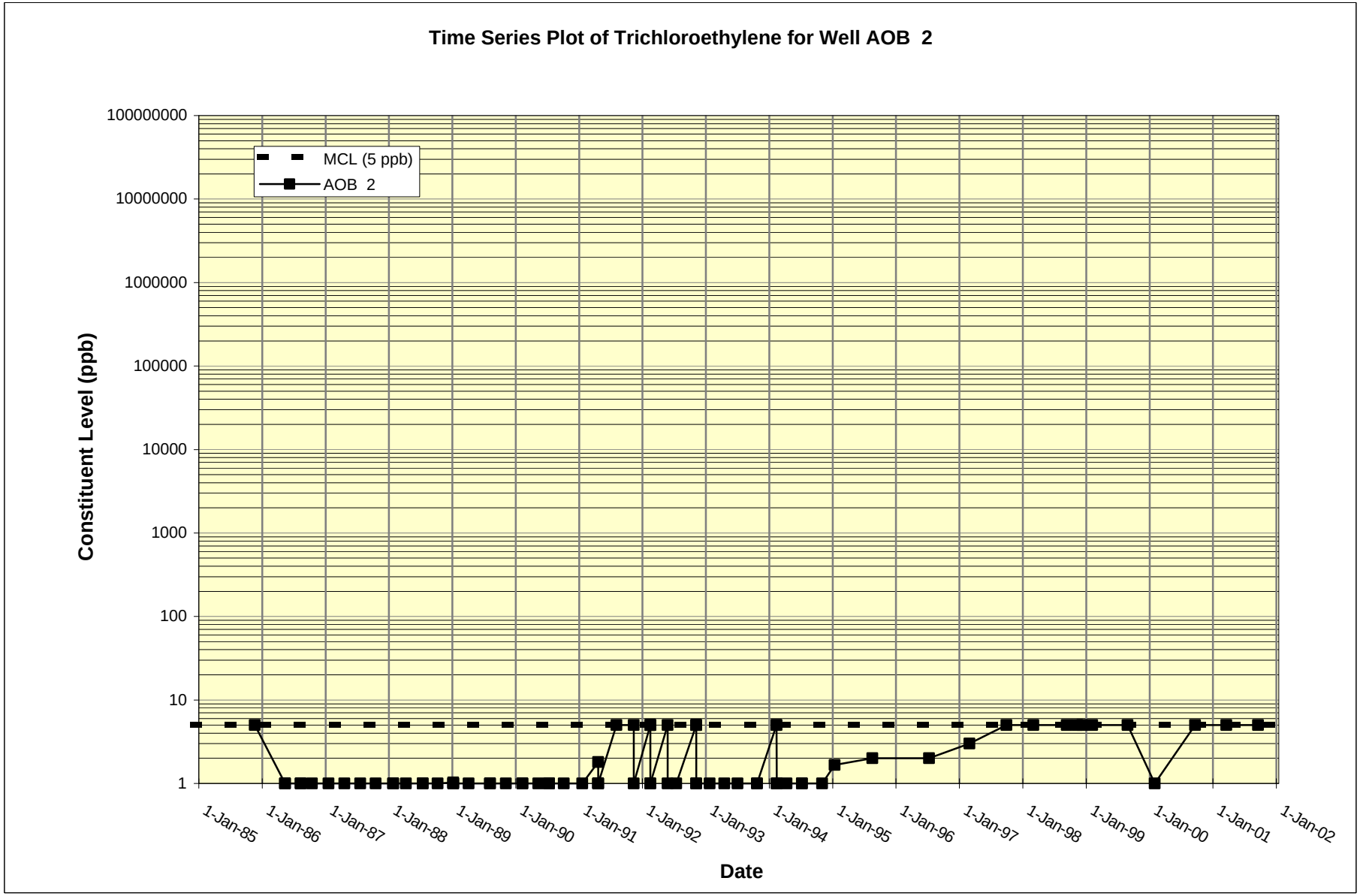
Time Series Plot of Trichloroethylene for Well AOB 2
MCL (5 ppb)
AOB 2
Constituent Level (ppb)
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100000
10000
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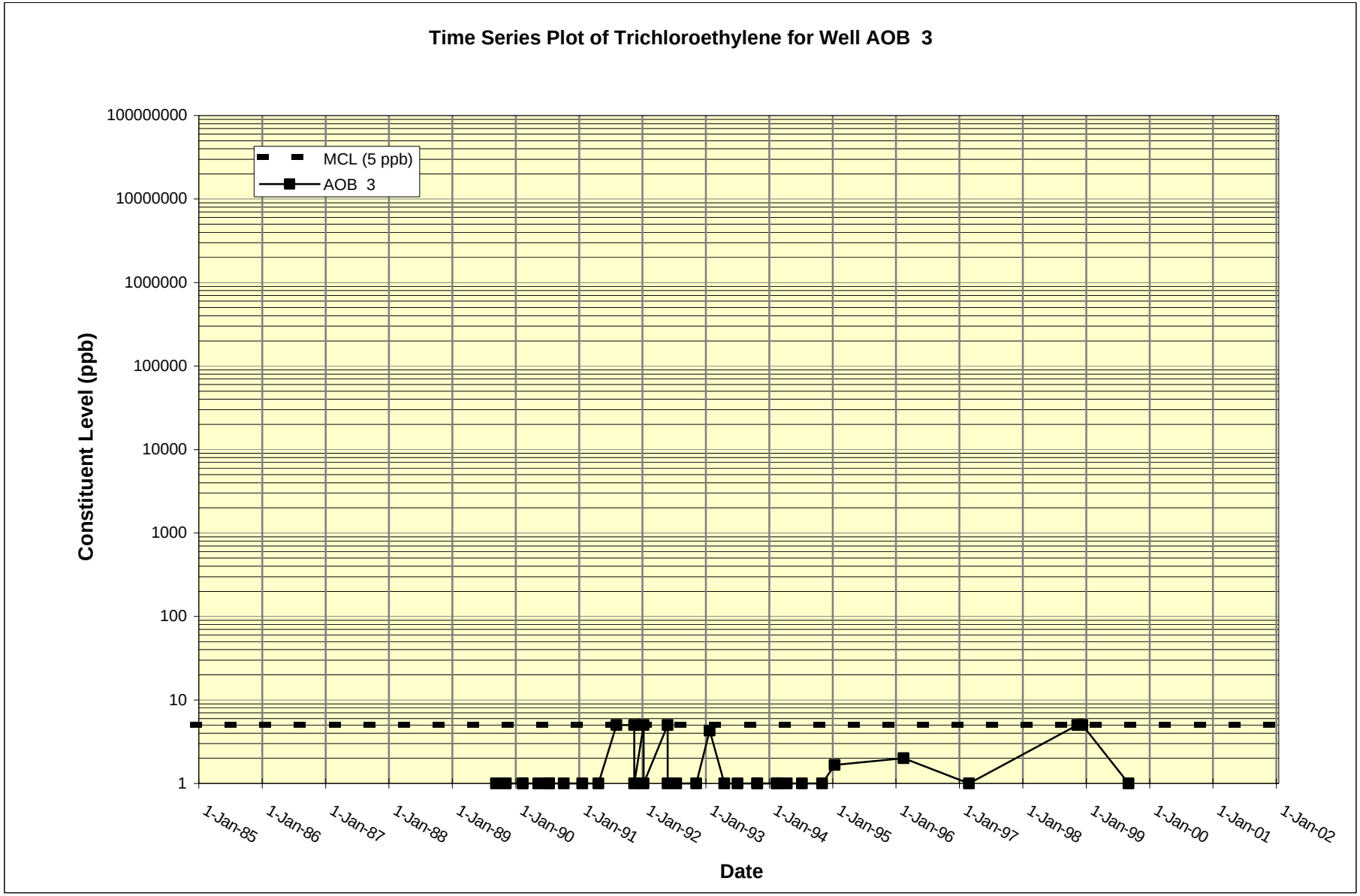
Time Series Plot of Trichloroethylene for Well AOB 3
MCL (5 ppb)
AOB 3
Constituent Level (ppb)
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10000000
1000000
100000
10000
1000
100
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1
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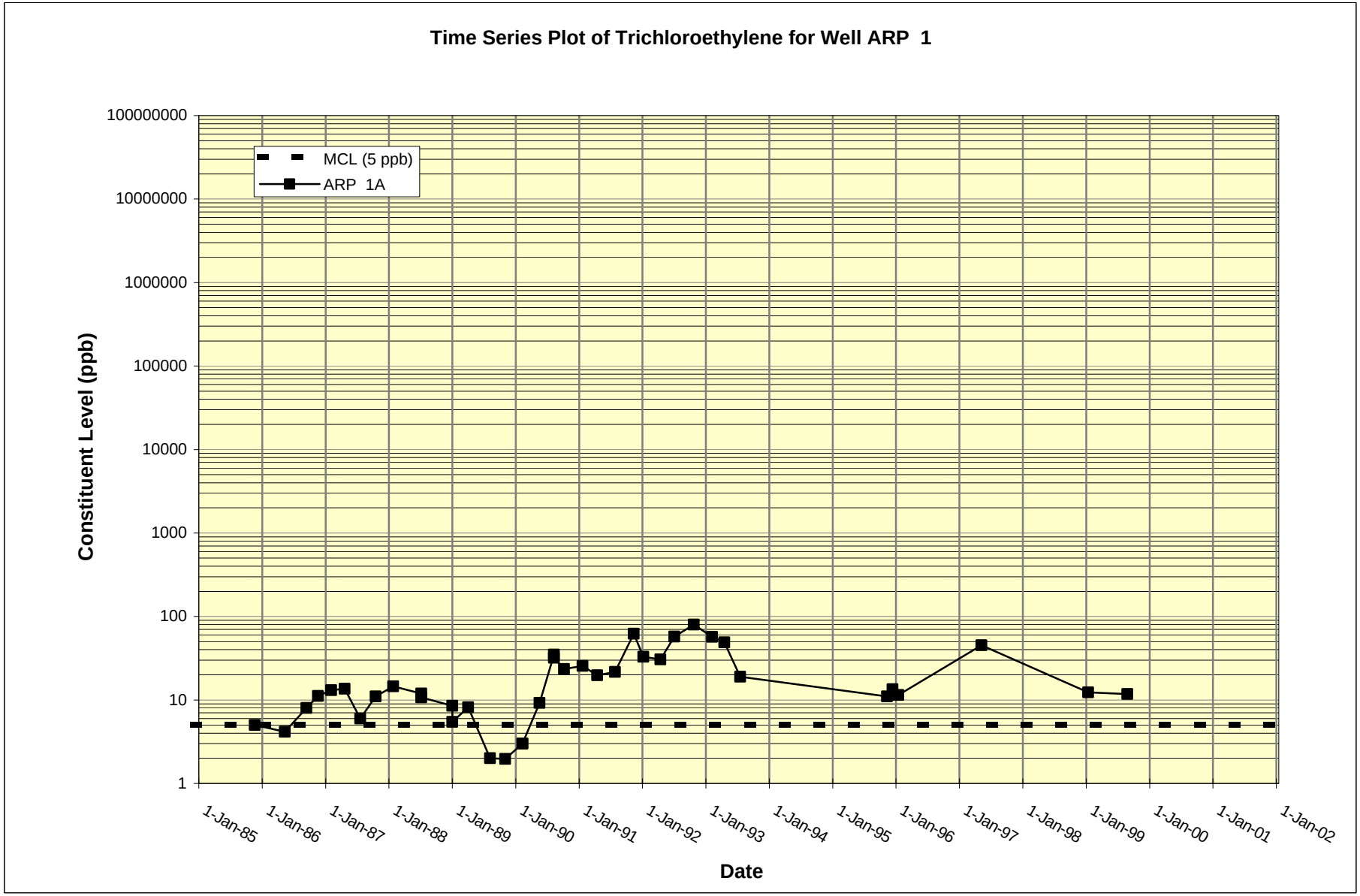
Time Series Plot of Trichloroethylene for Well ARP 1
MCL (5 ppb)
ARP 1A
Constituent Level (ppb)
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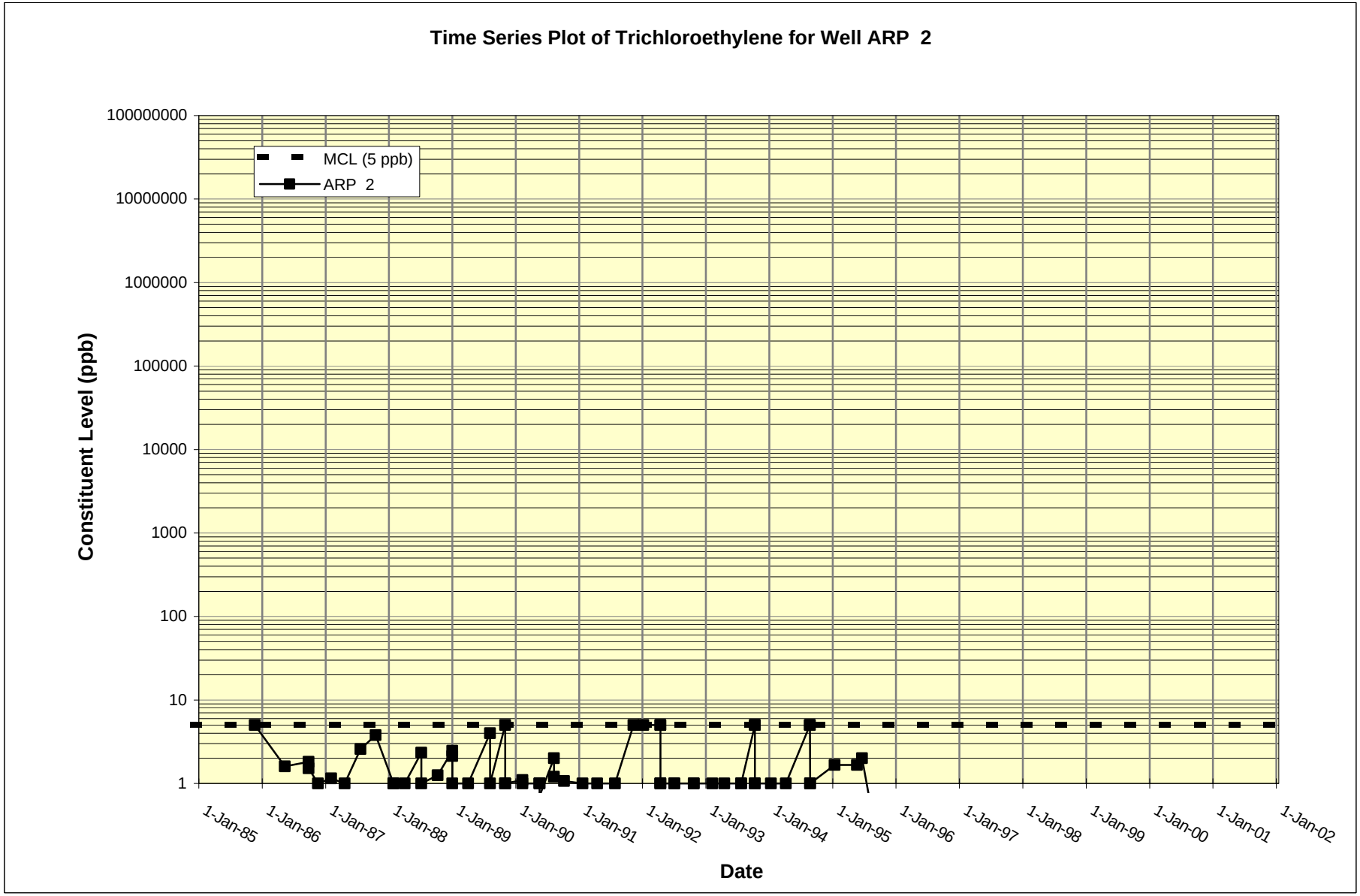
Time Series Plot of Trichloroethylene for Well ARP 2
MCL (5 ppb)
ARP 2
Constituent Level (ppb)
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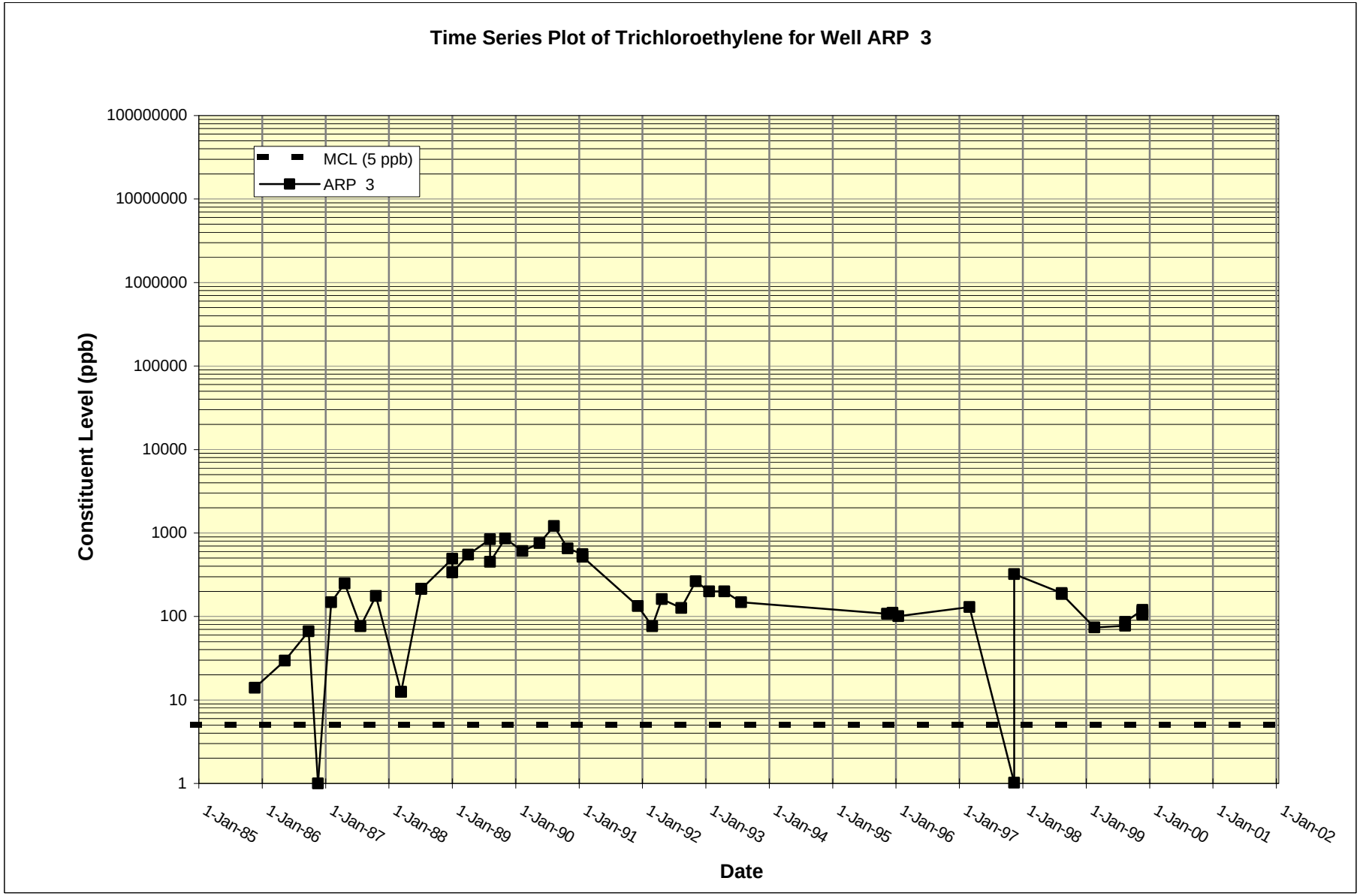
Time Series Plot of Trichloroethylene for Well ARP 3
MCL (5 ppb)
ARP 3
Constituent Level (ppb)
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1000000
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10000
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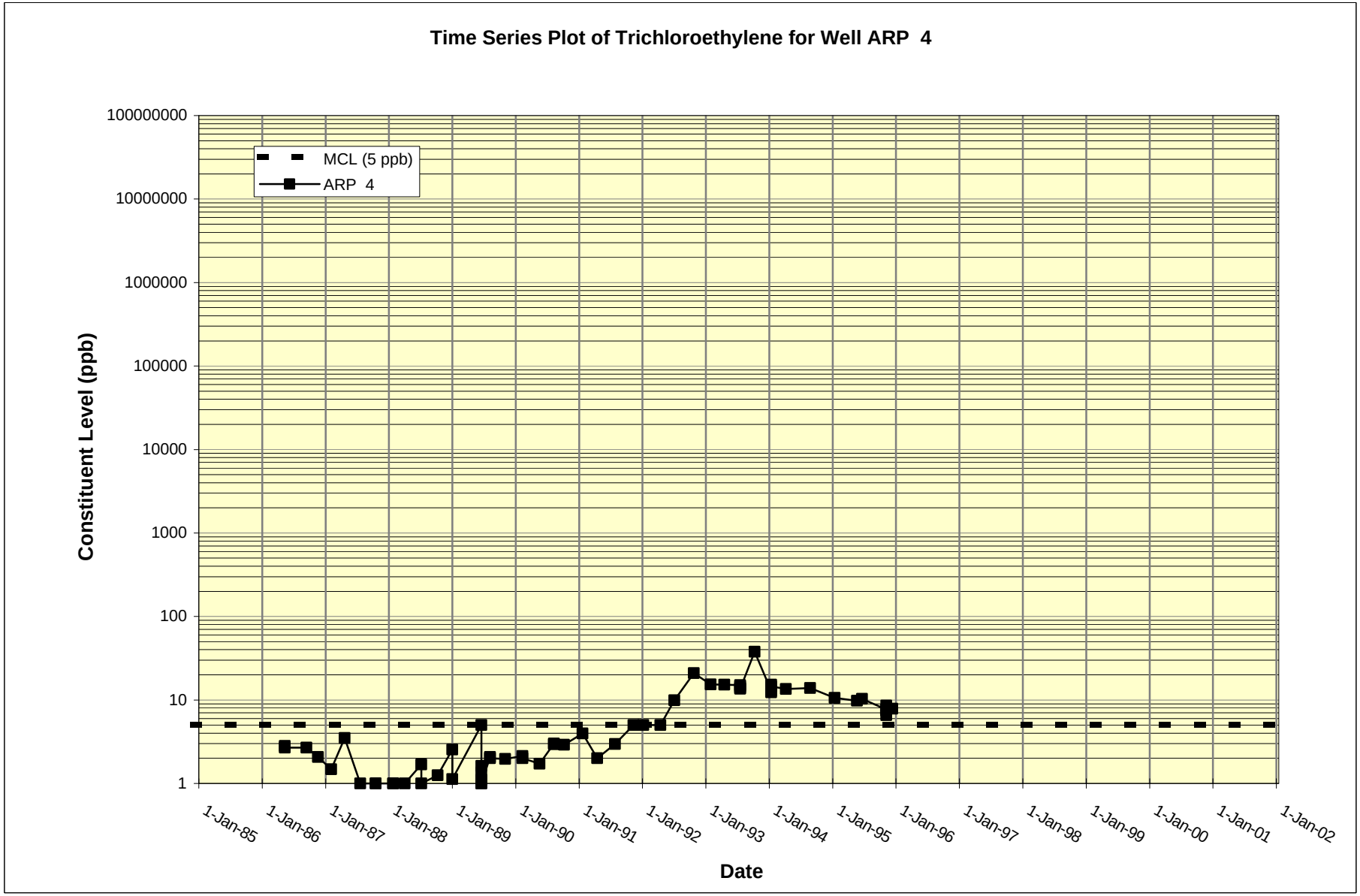
Date


Time Series Plot of Trichloroethylene for Well ARP 4
MCL (5 ppb)
ARP 4
Constituent Level (ppb)
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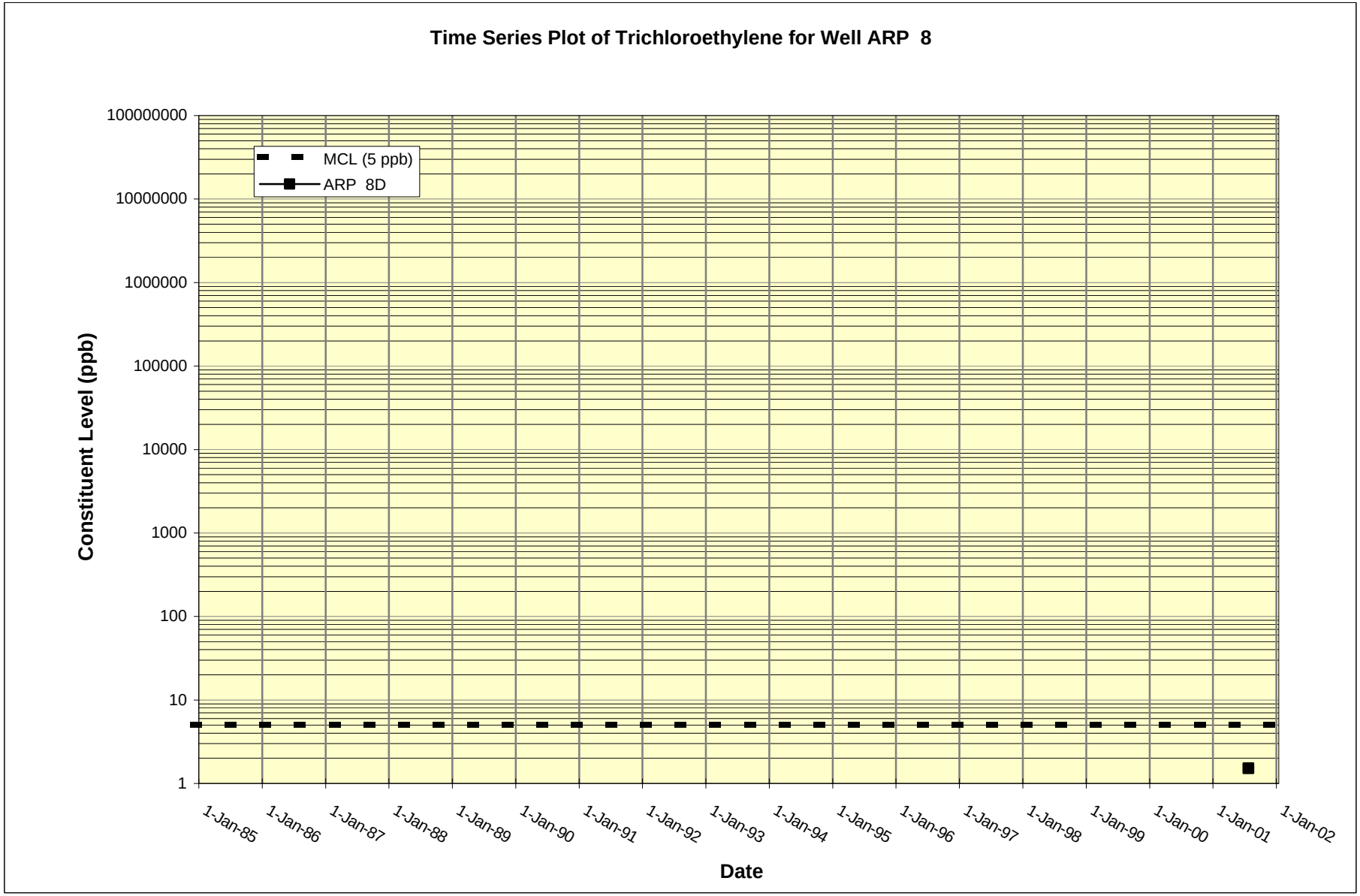
Time Series Plot of Trichloroethylene for Well ARP 8
MCL (5 ppb)
ARP 8D
Constituent Level (ppb)
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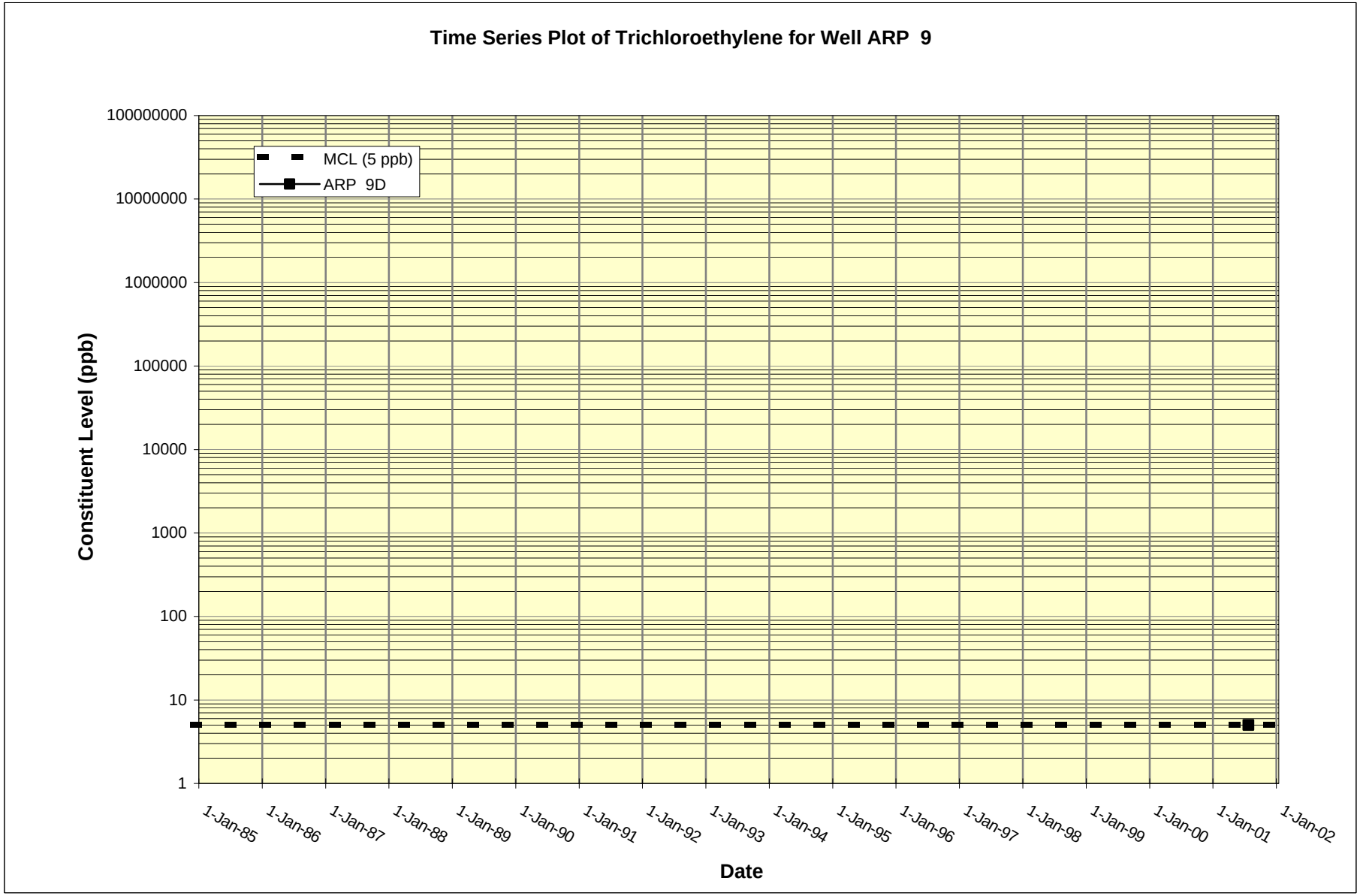
Time Series Plot of Trichloroethylene for Well ARP 9
MCL (5 ppb)
ARP 9D
Constituent Level (ppb)
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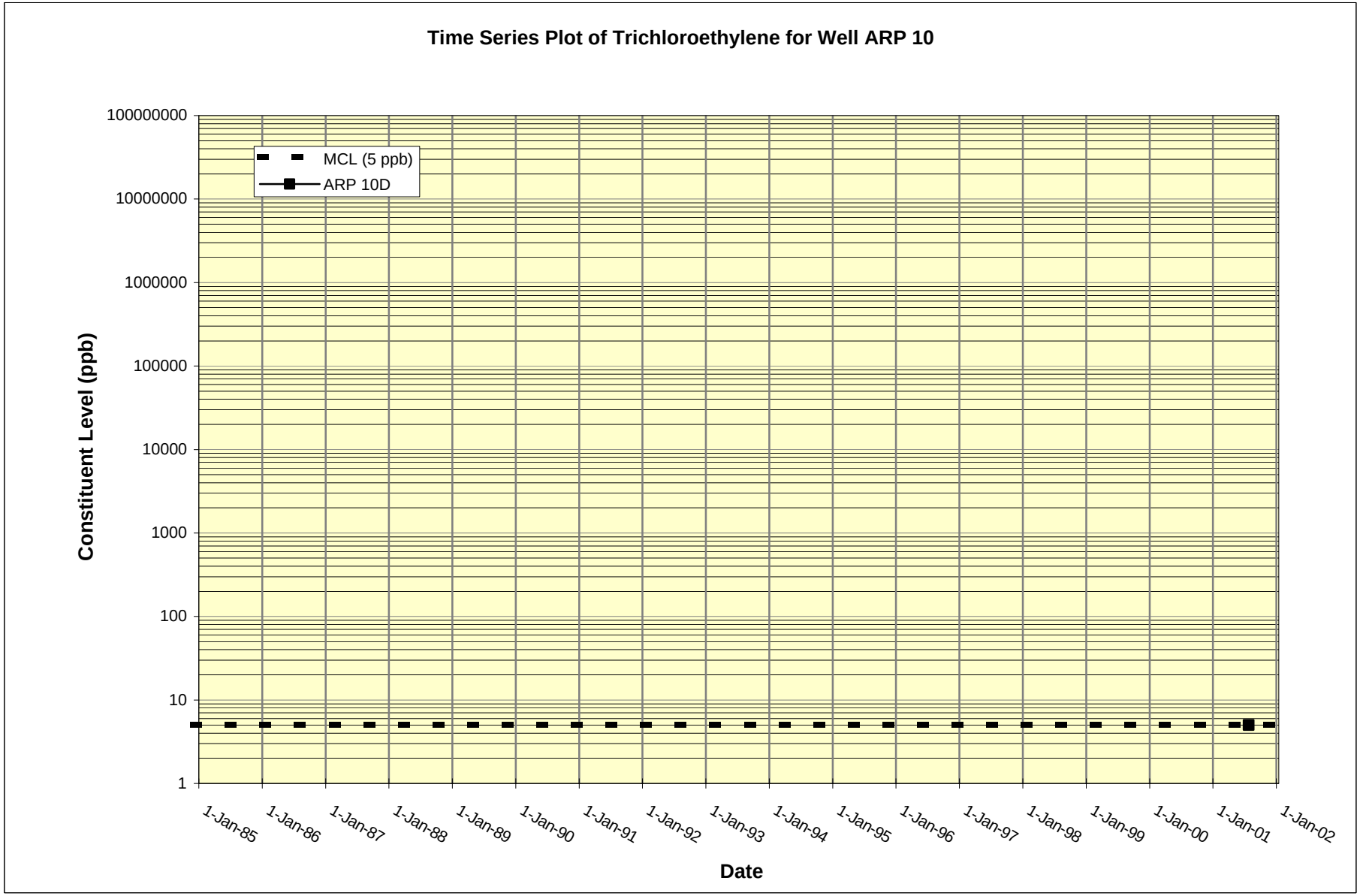
Time Series Plot of Trichloroethylene for Well ARP 10
MCL (5 ppb)
ARP 10D
Constituent Level (ppb)
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10000000
1000000
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10000
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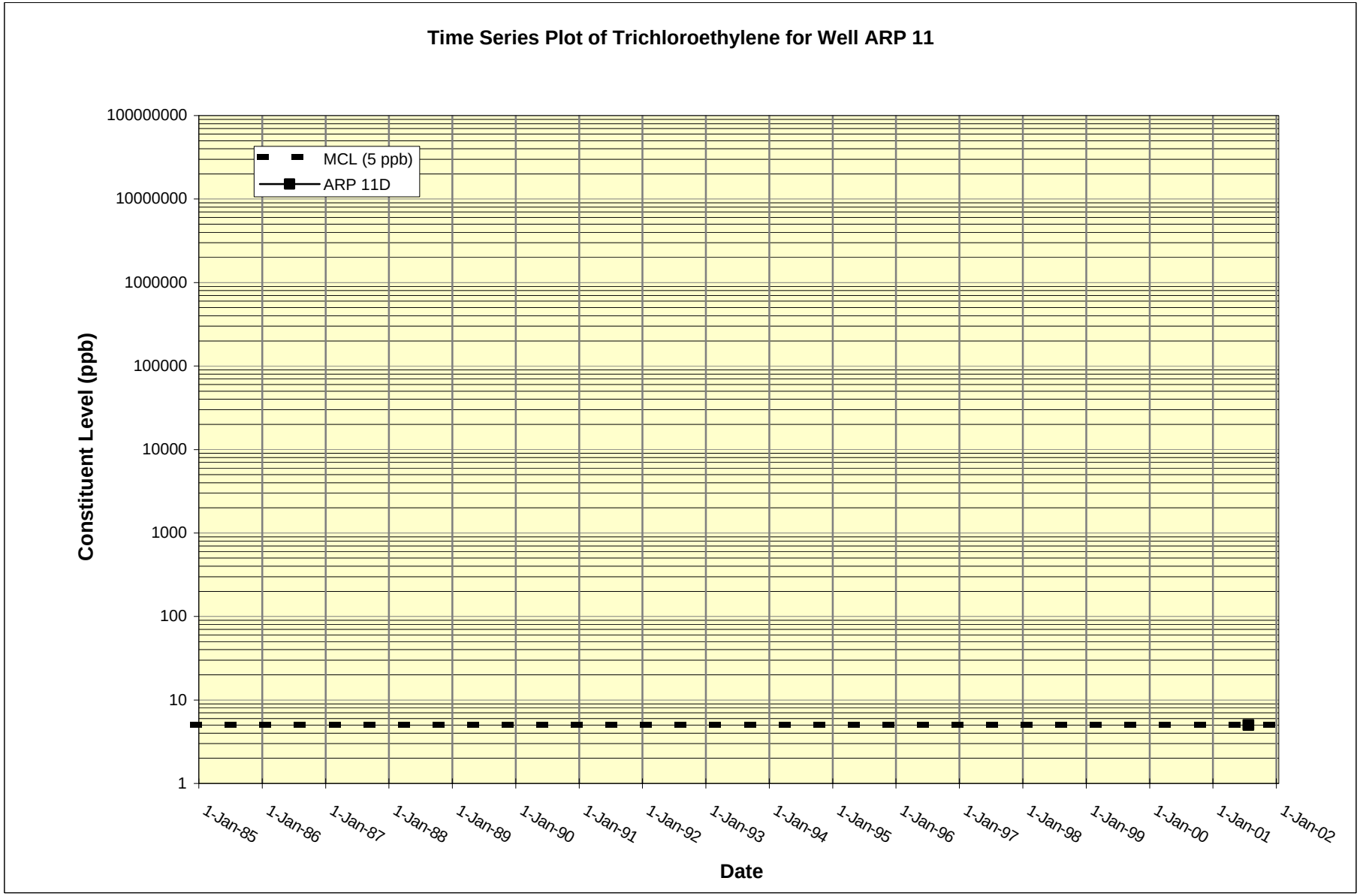
Time Series Plot of Trichloroethylene for Well ARP 11
MCL (5 ppb)
ARP 11D
Constituent Level (ppb)
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10000000
1000000
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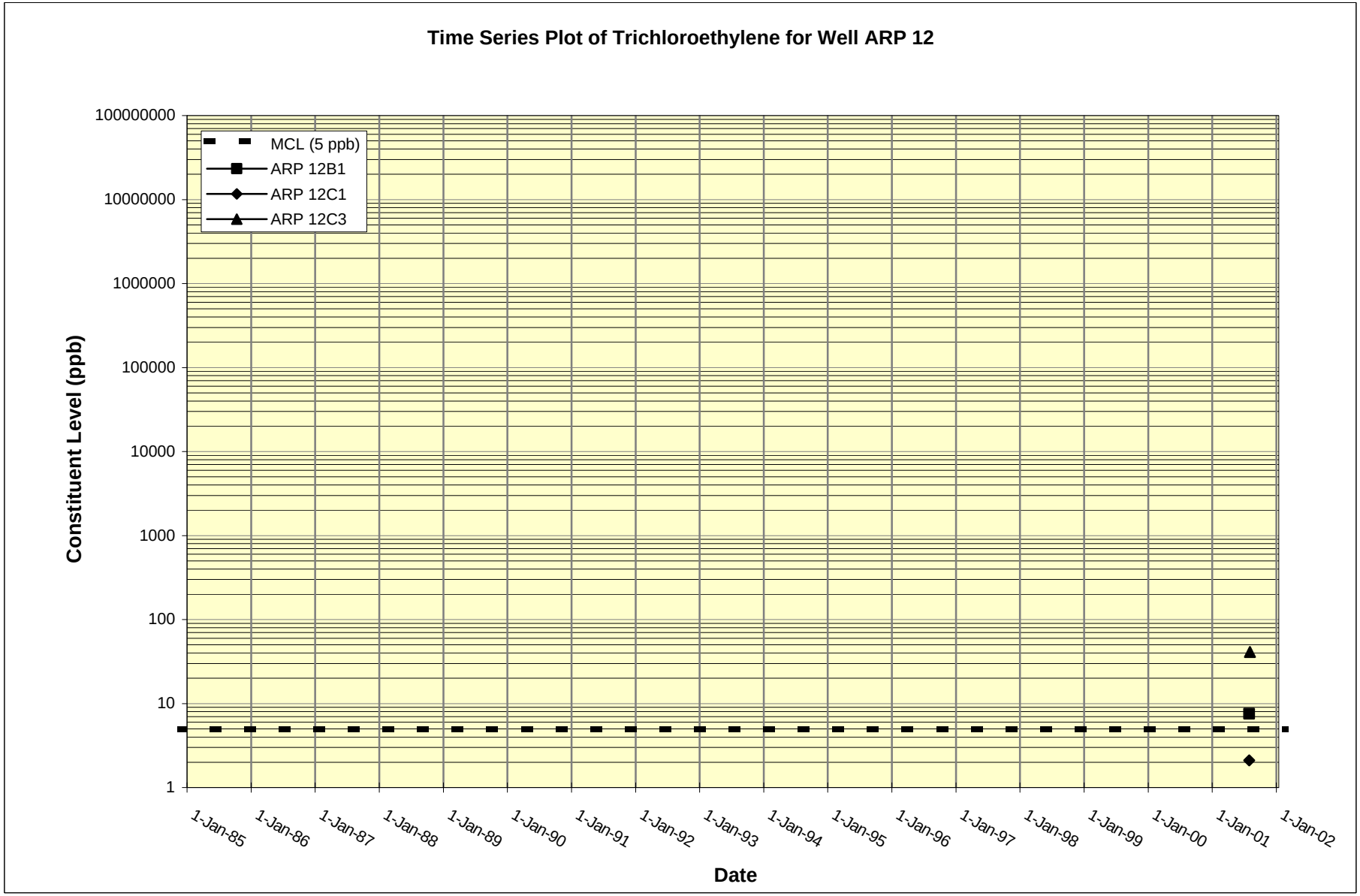
Time Series Plot of Trichloroethylene for Well ARP 12
MCL (5 ppb)
ARP 12B1
ARP 12C1
ARP 12C3
Constituent Level (ppb)
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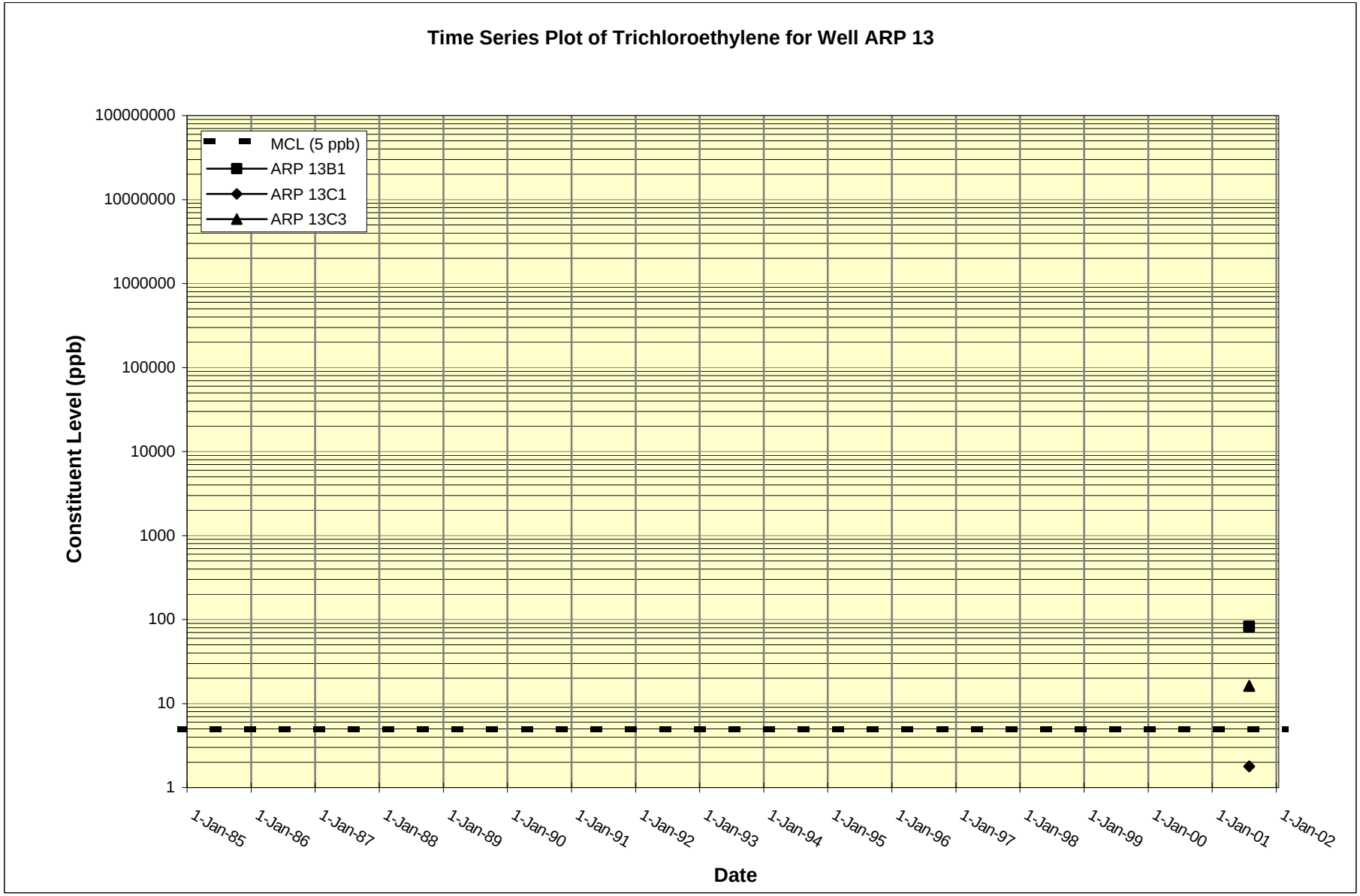
Time Series Plot of Trichloroethylene for Well ARP 13
MCL (5 ppb)
ARP 13B1
ARP 13C1
ARP 13C3
Constituent Level (ppb)
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10000000
1000000
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10000
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100
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1
1-Jan-85
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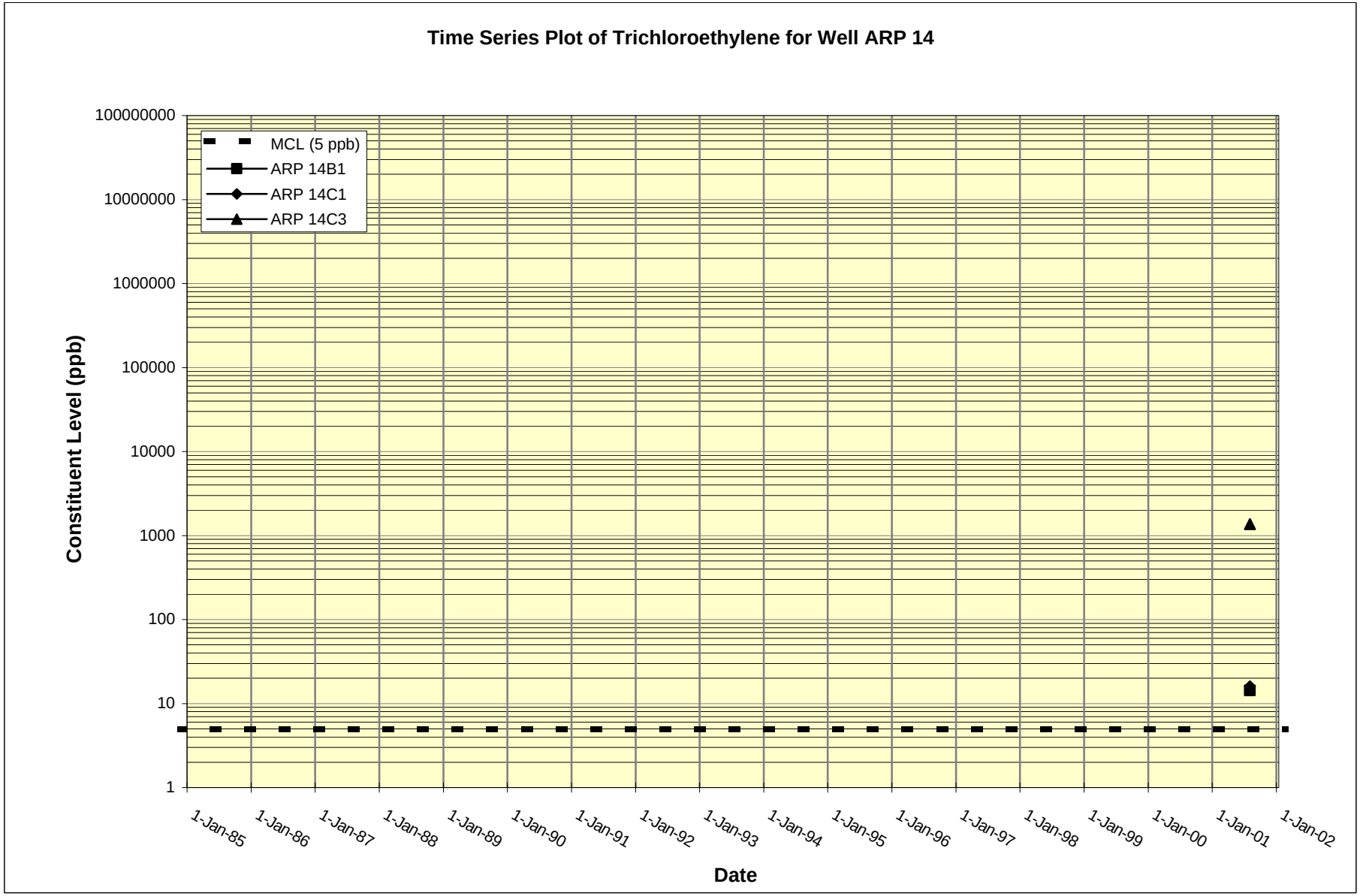
1-Jan-02
Date


Time Series Plot of Trichloroethylene for Well ARP 14
MCL (5 ppb)
ARP 14B1
ARP 14C1
ARP 14C3
Constituent Level (ppb)
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10000000
1000000
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10000
1000
100
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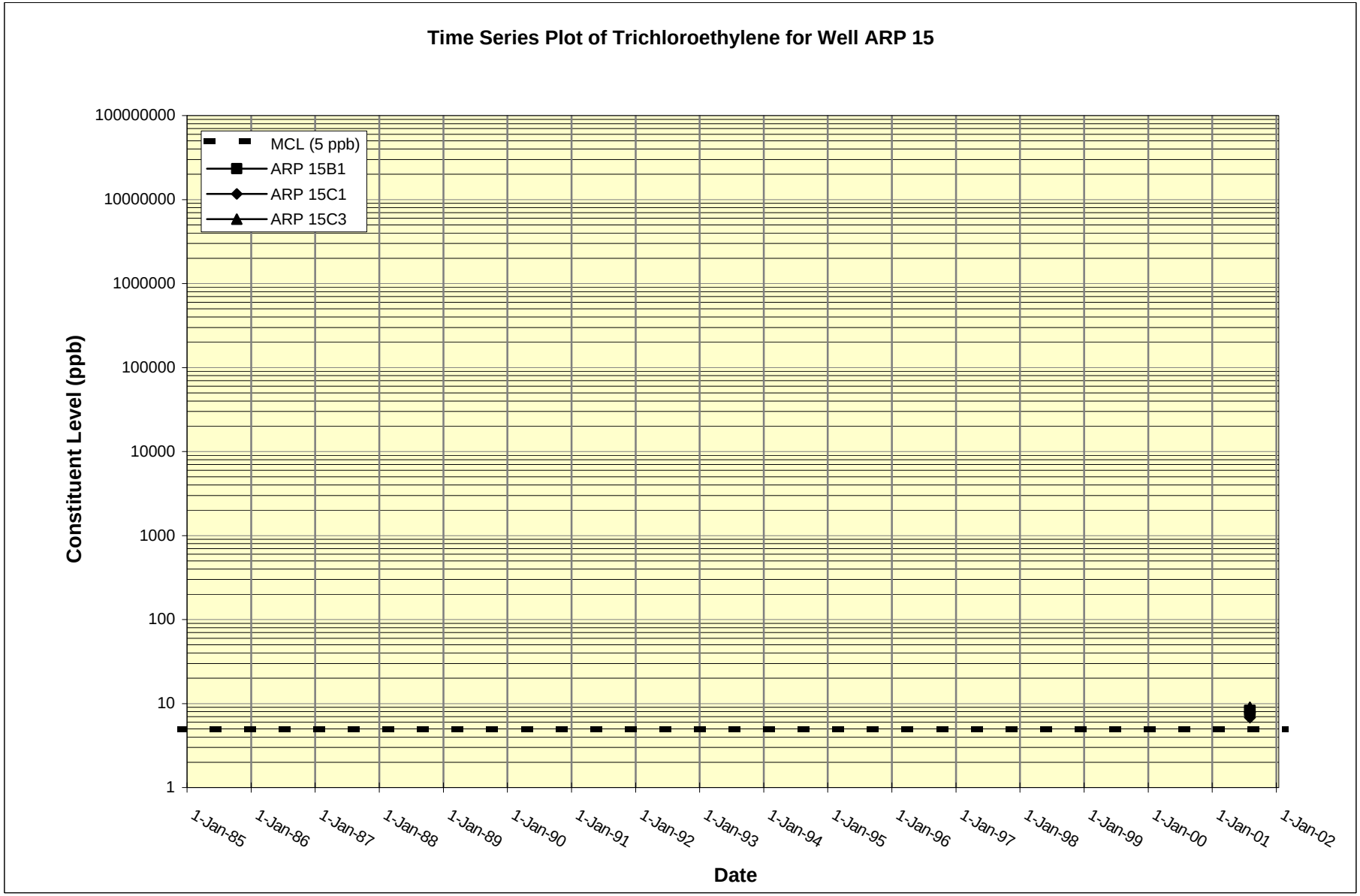
Date


Time Series Plot of Trichloroethylene for Well ARP 15
MCL (5 ppb)
ARP 15B1
ARP 15C1
ARP 15C3
Constituent Level (ppb)
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10000000
1000000
100000
10000
1000
100
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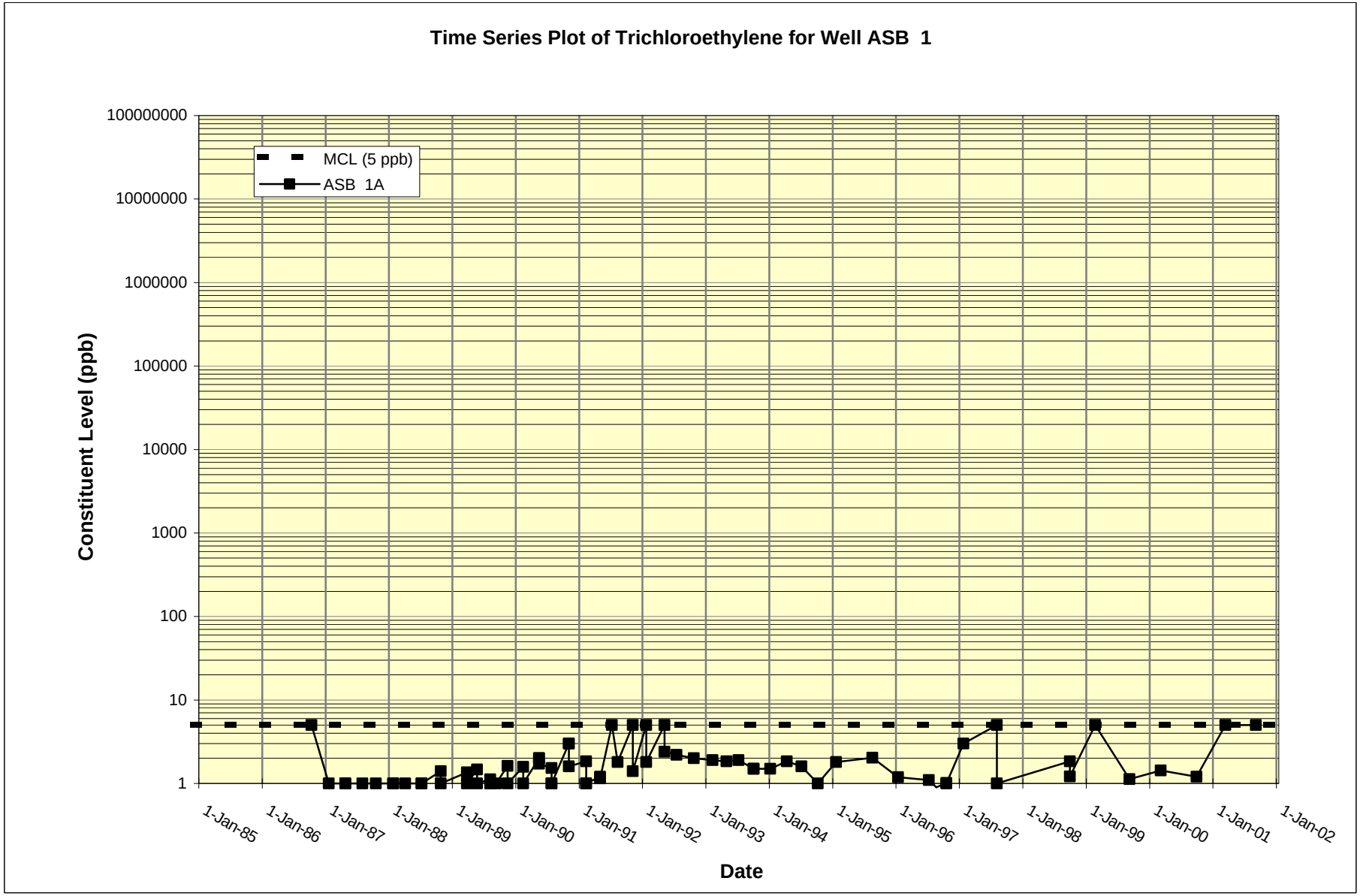
Date


Time Series Plot of Trichloroethylene for Well ASB 1
MCL (5 ppb)
ASB 1A
Constituent Level (ppb)
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10000000
1000000
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10000
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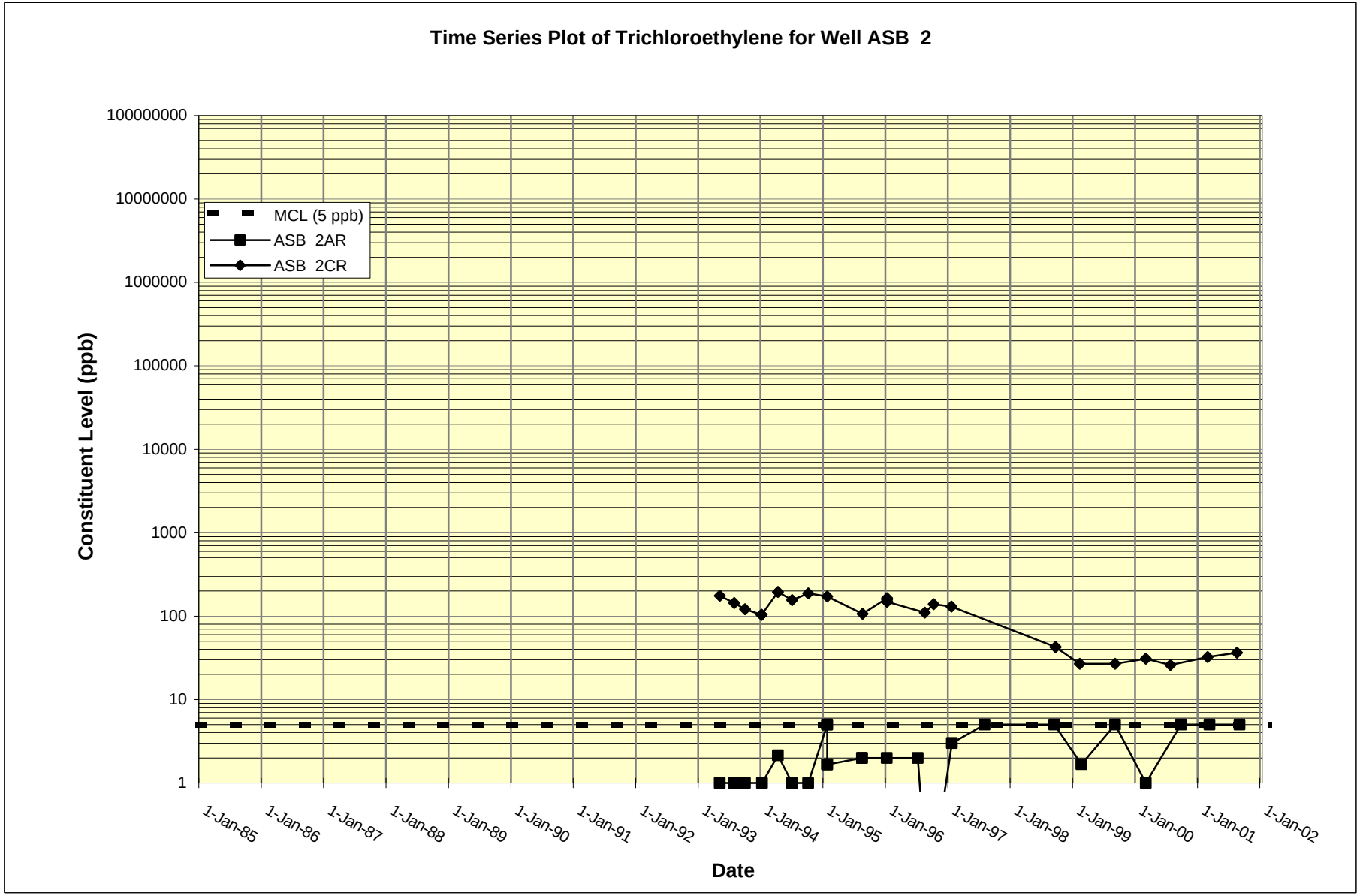
Date


Time Series Plot of Trichloroethylene for Well ASB 2
MCL (5 ppb)
ASB 2AR
ASB 2CR
Constituent Level (ppb)
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10000000
1000000
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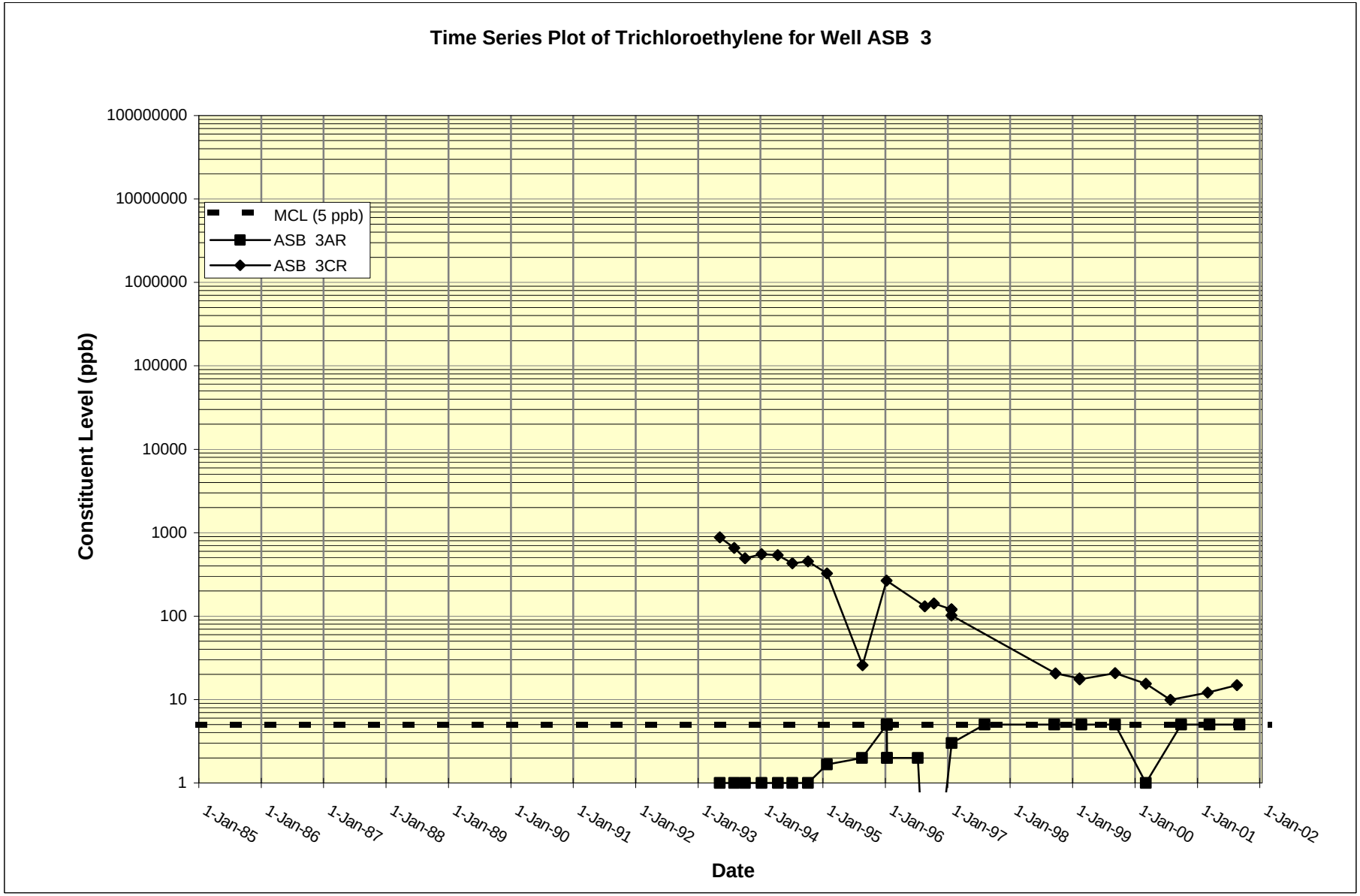
Time Series Plot of Trichloroethylene for Well ASB 3
MCL (5 ppb)
ASB 3AR
ASB 3CR
Constituent Level (ppb)
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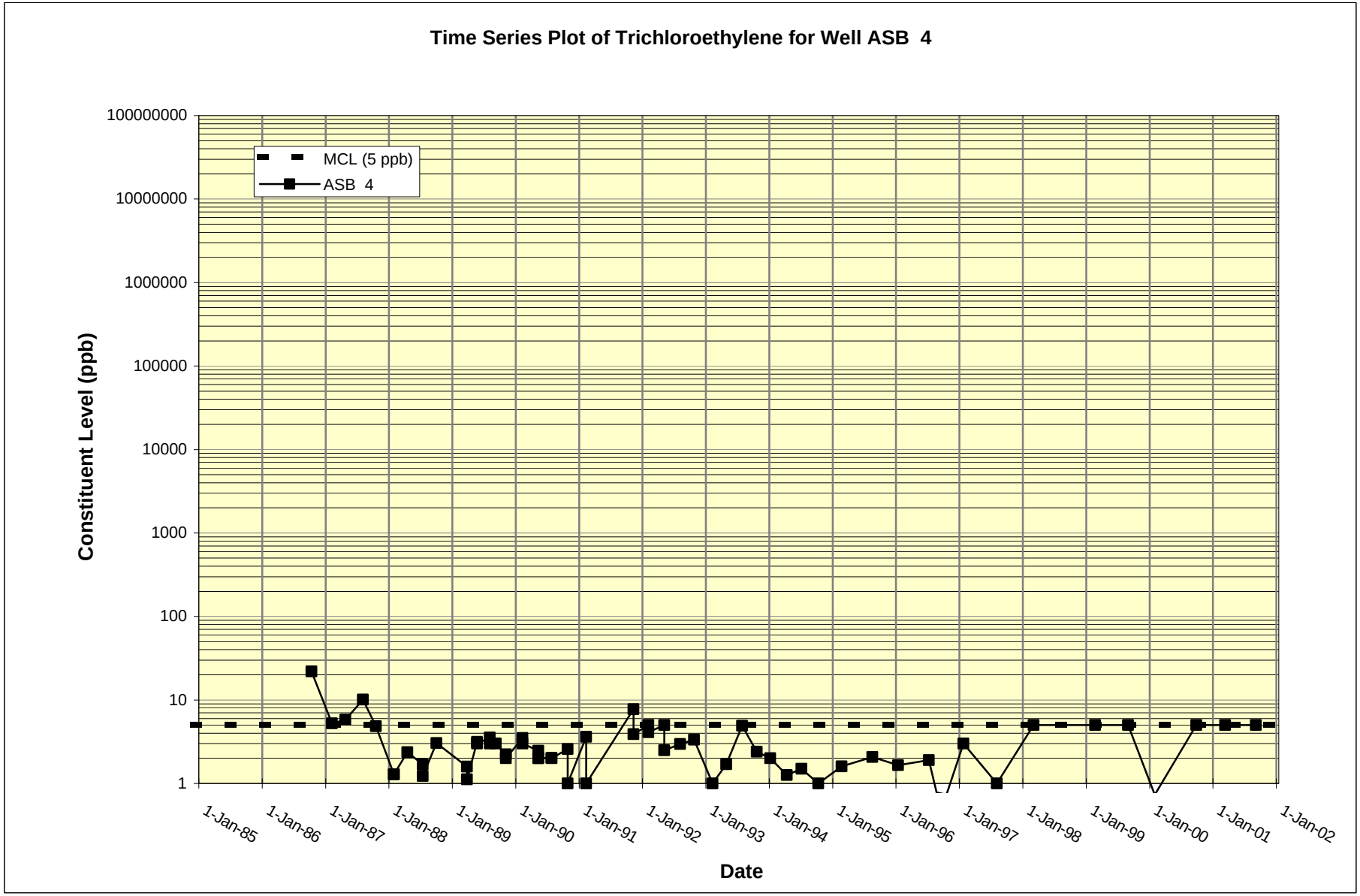
Time Series Plot of Trichloroethylene for Well ASB 4
MCL (5 ppb)
ASB 4
Constituent Level (ppb)
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10000000
1000000
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10000
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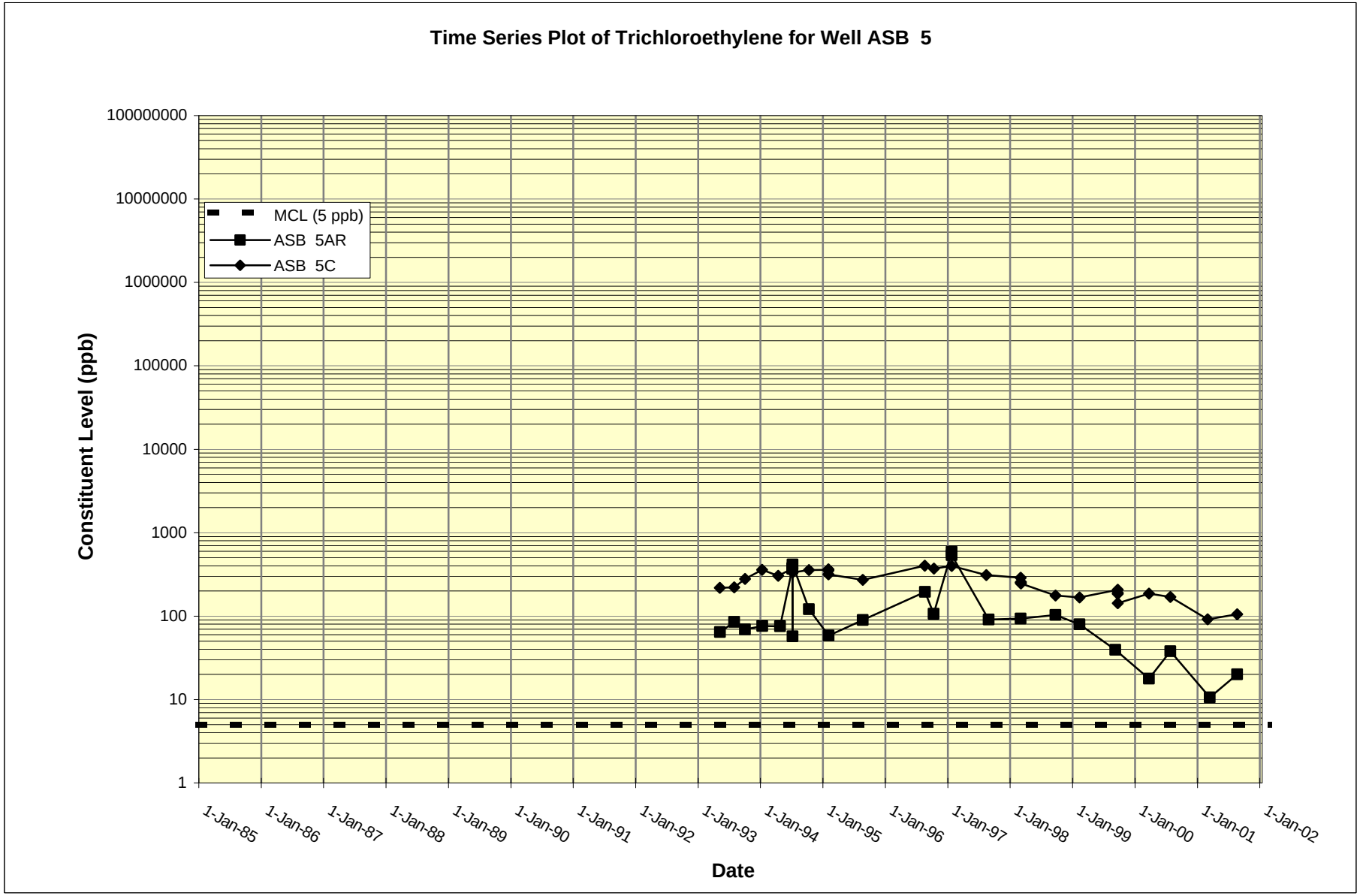
Time Series Plot of Trichloroethylene for Well ASB 5
MCL (5 ppb)
ASB 5AR
ASB 5C
Constituent Level (ppb)
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10000000
1000000
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100
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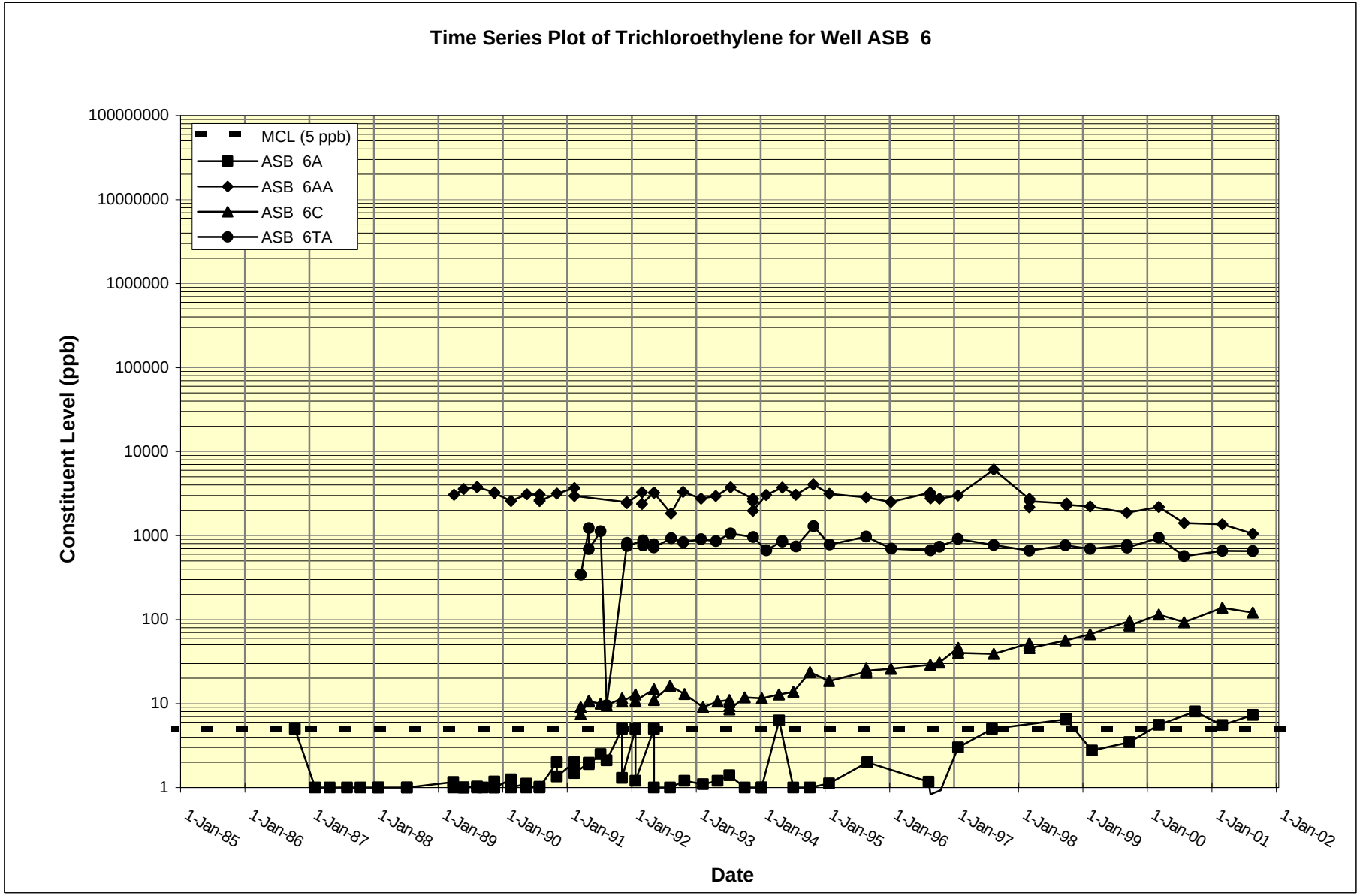
Time Series Plot of Trichloroethylene for Well ASB 6
MCL (5 ppb)
ASB 6A
ASB 6AA
ASB 6C
ASB 6TA
Constituent Level (ppb)
100000000
10000000
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10000
1000
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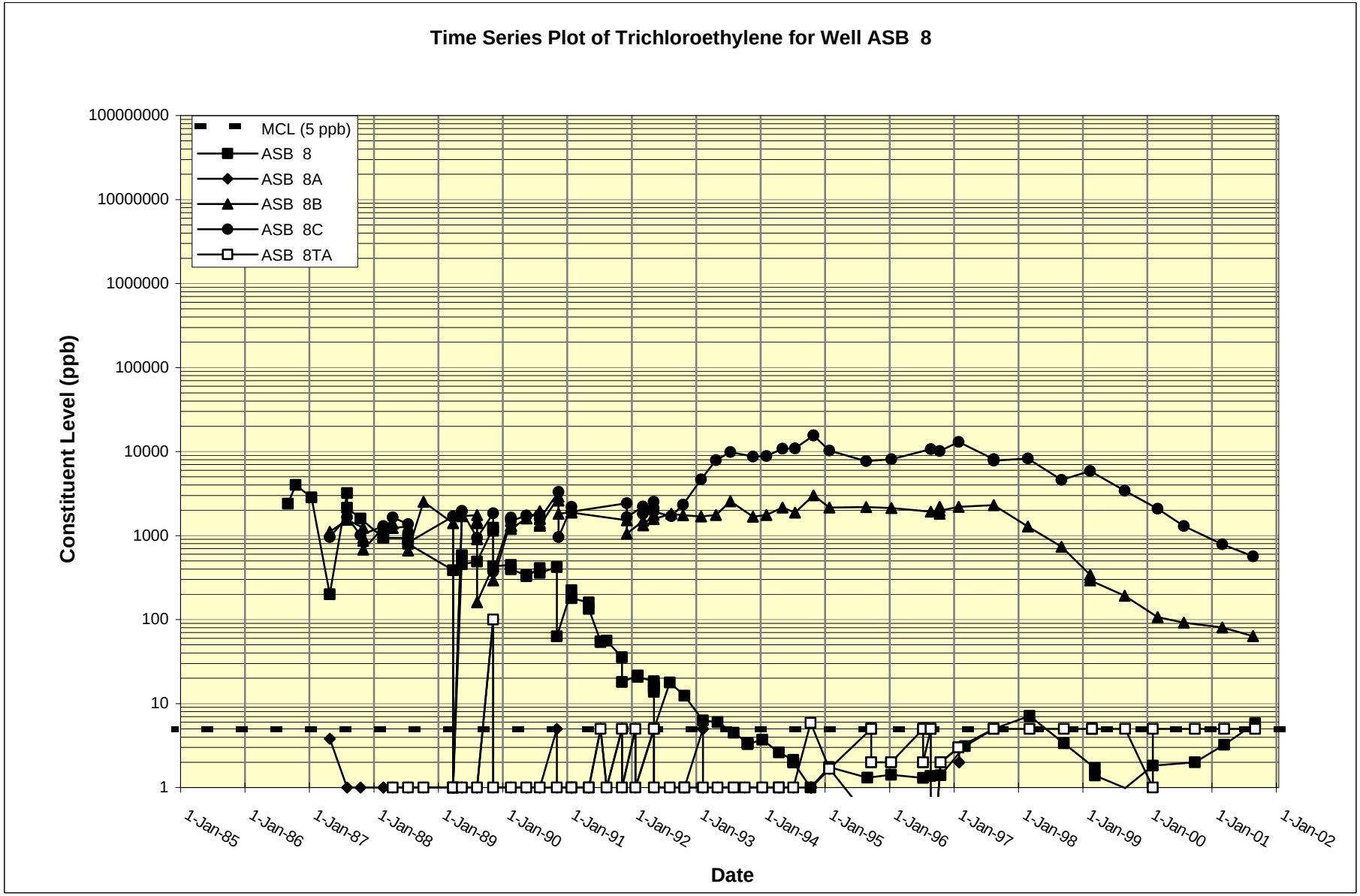
Date


Time Series Plot of Trichloroethylene for Well ASB 8
MCL (5 ppb)
ASB 8
ASB 8A
ASB 8B
ASB 8C
ASB 8TA
Constituent Level (ppb)
100000000
10000000
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100000
10000
1000
100
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1
1-Jan-85
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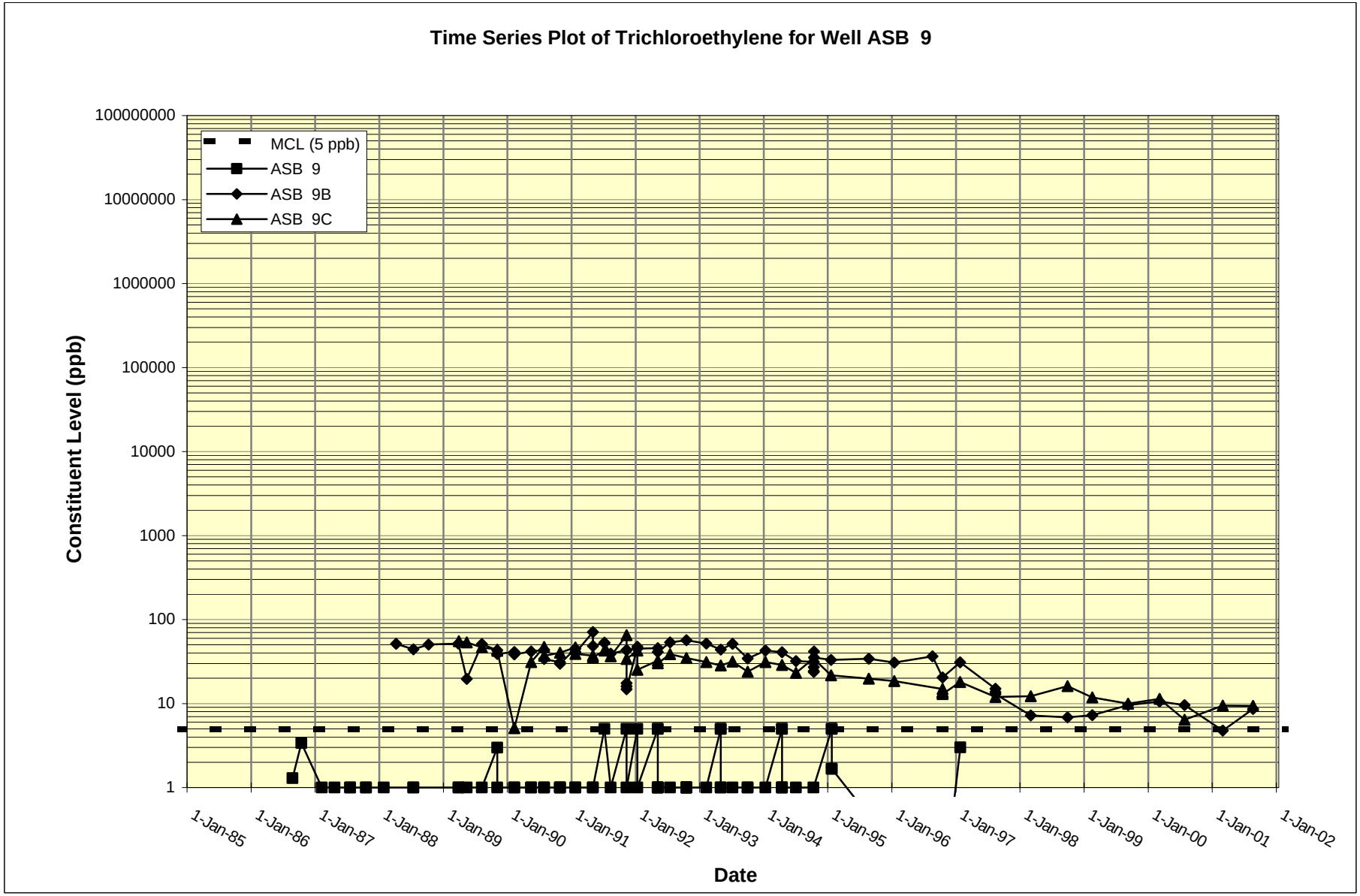
Date


Time Series Plot of Trichloroethylene for Well ASB 9
MCL (5 ppb)
ASB 9
ASB 9B
ASB 9C
Constituent Level (ppb)
100000000
10000000
1000000
100000
10000
1000
100
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1
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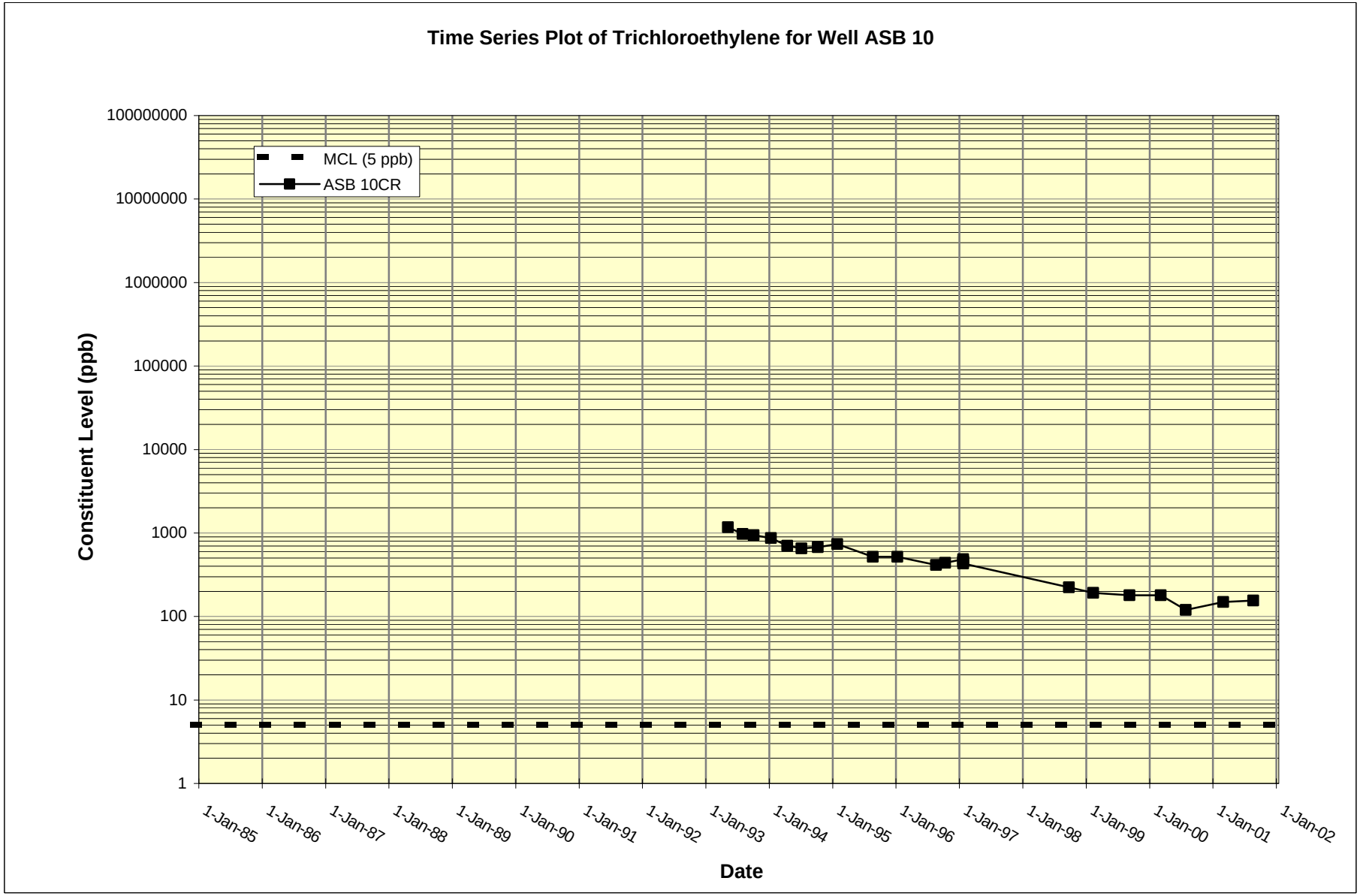
Time Series Plot of Trichloroethylene for Well ASB 10
MCL (5 ppb)
ASB 10CR
Constituent Level (ppb)
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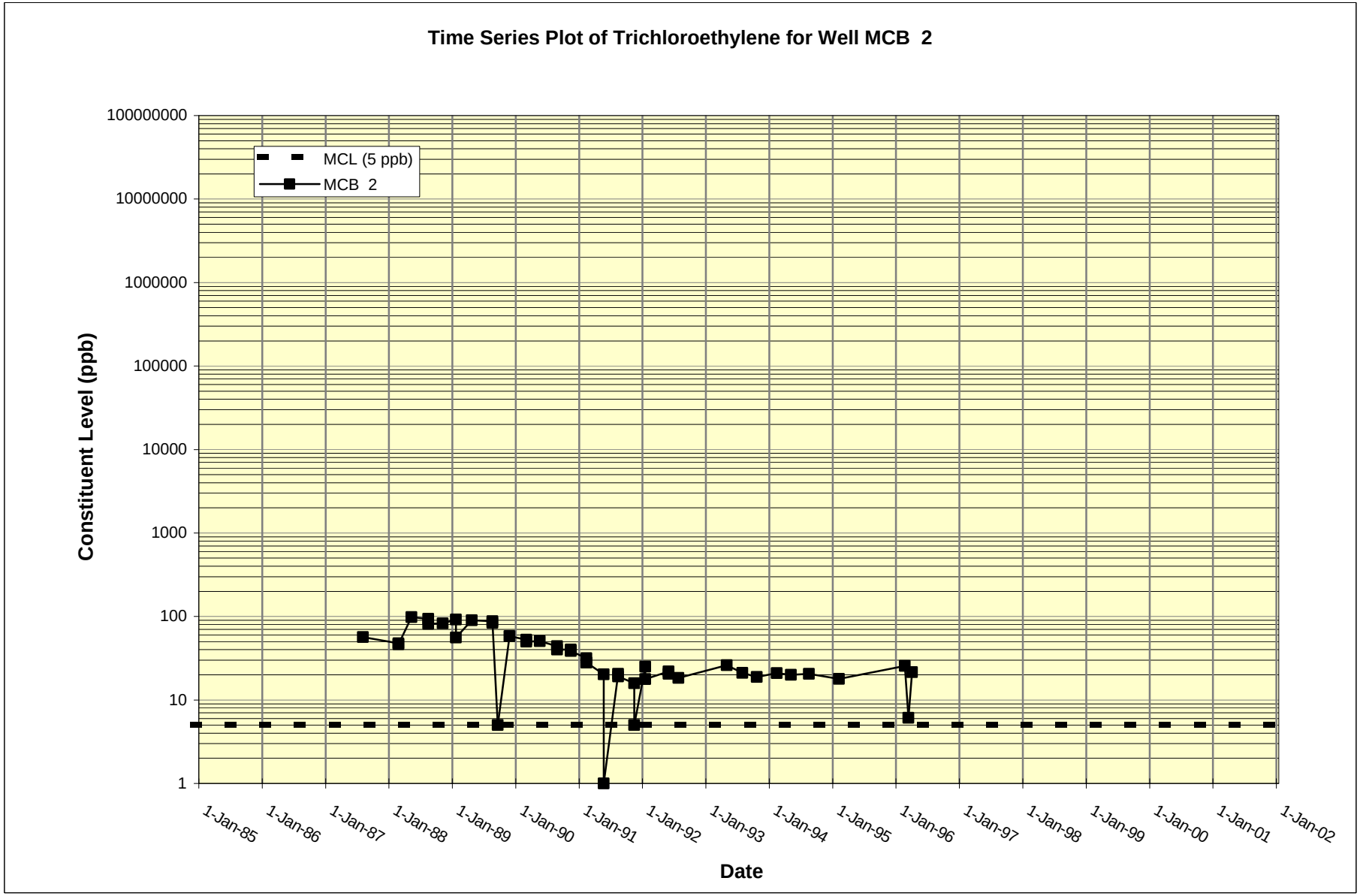
Time Series Plot of Trichloroethylene for Well MCB 2
MCL (5 ppb)
MCB 2
Constituent Level (ppb)
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10000
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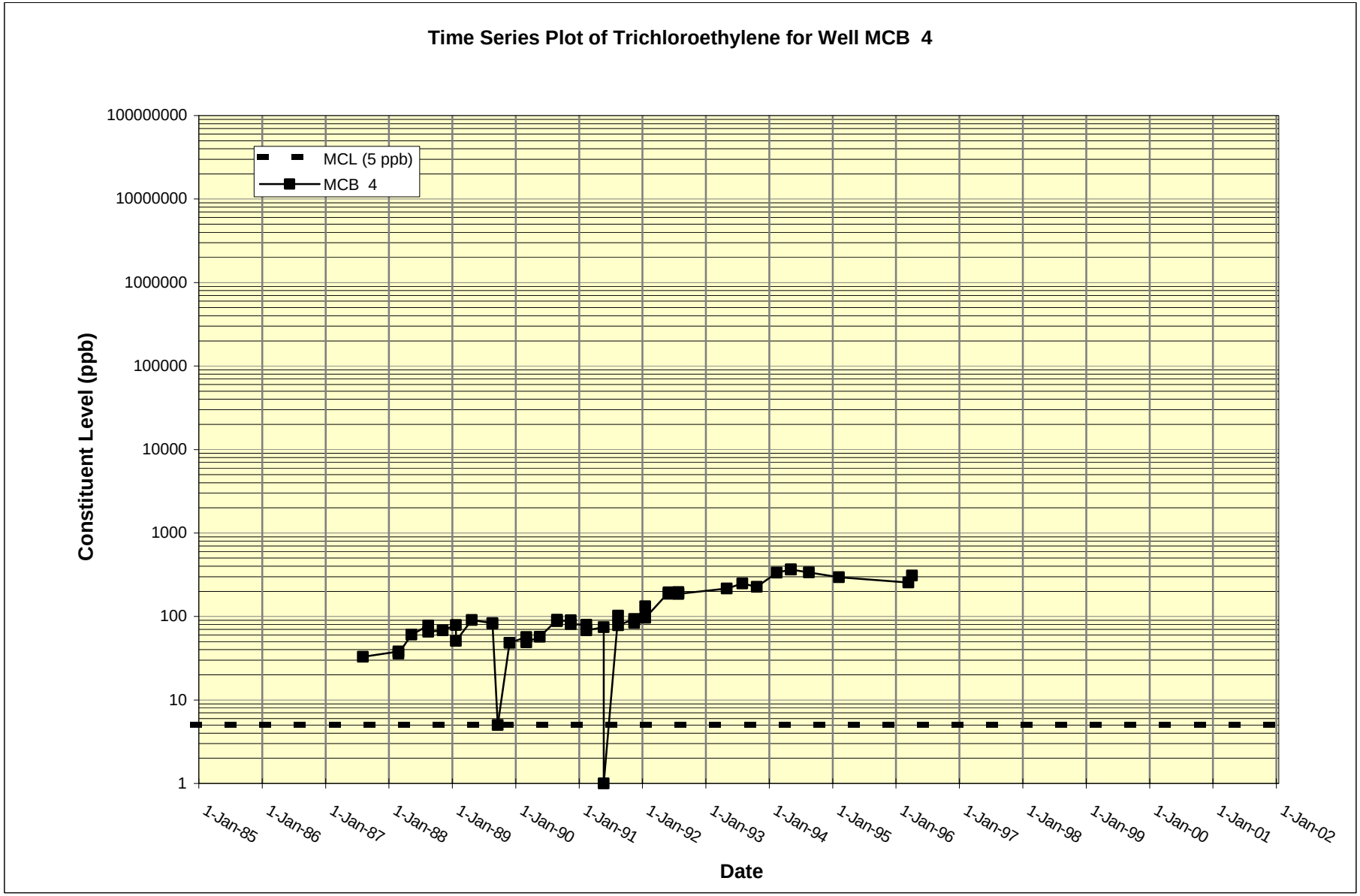
Time Series Plot of Trichloroethylene for Well MCB 4
MCL (5 ppb)
MCB 4
Constituent Level (ppb)
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1
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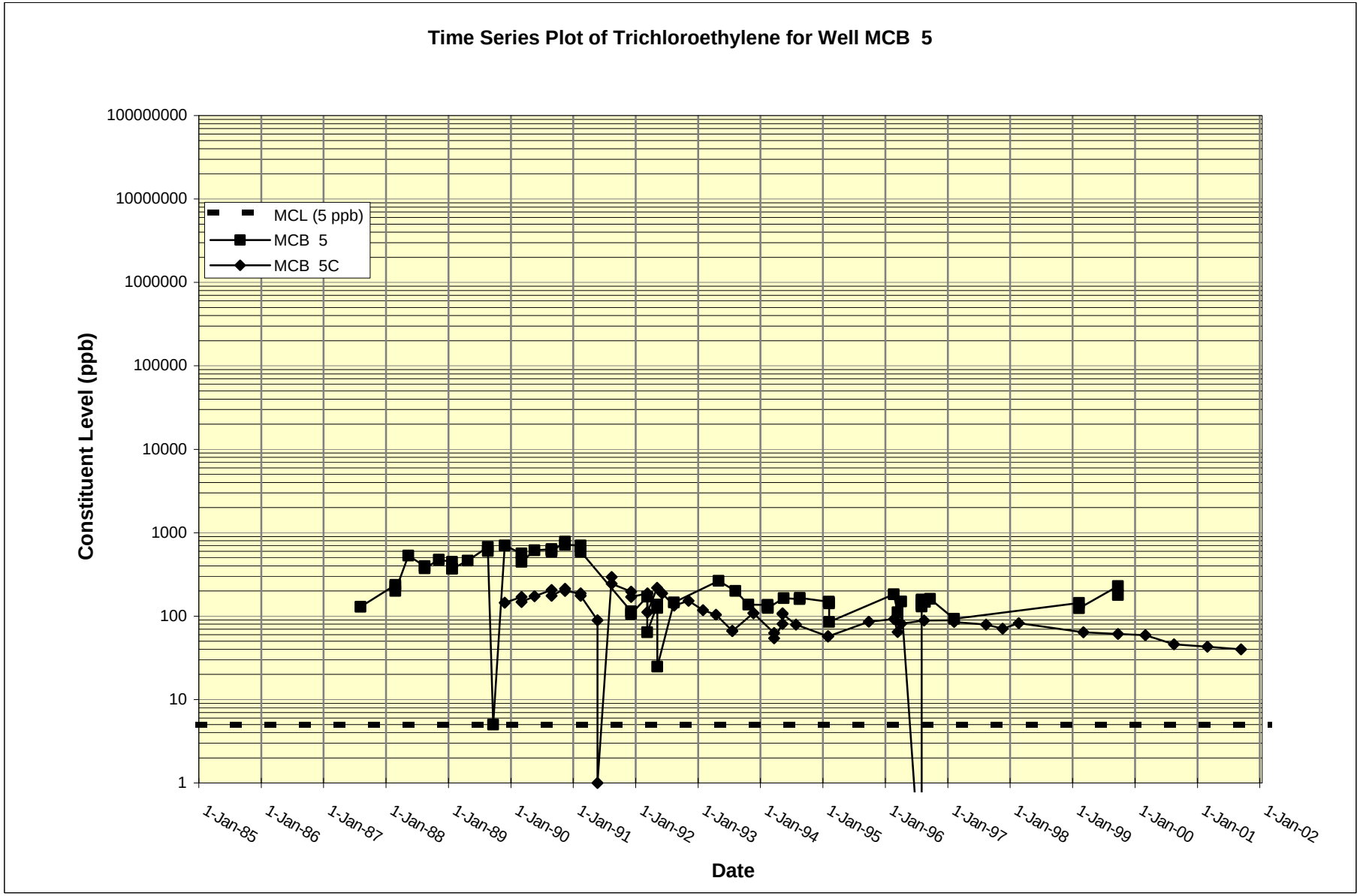
Time Series Plot of Trichloroethylene for Well MCB 5
MCL (5 ppb)
MCB 5
MCB 5C
Constituent Level (ppb)
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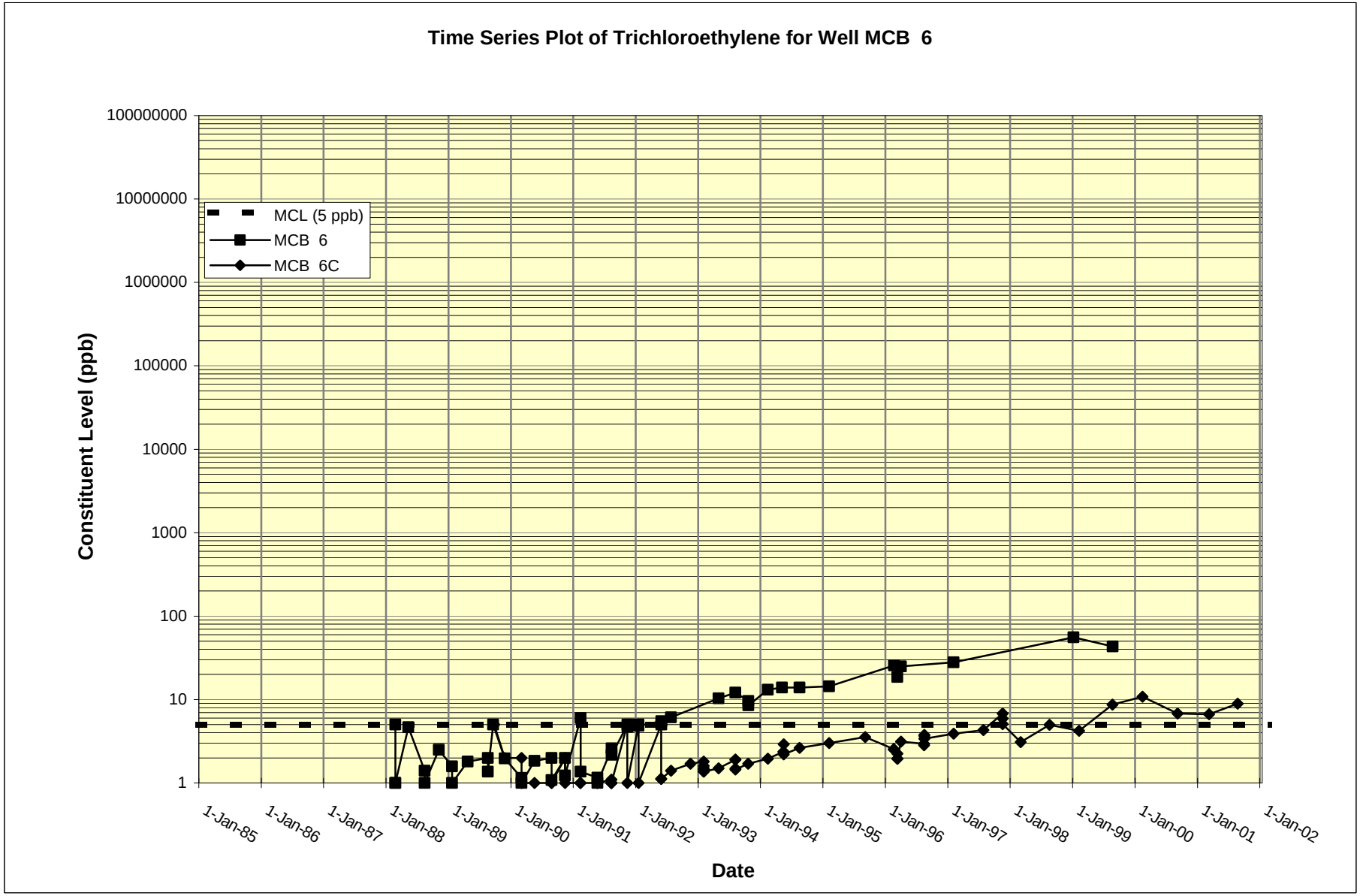
Time Series Plot of Trichloroethylene for Well MCB 6
MCL (5 ppb)
MCB 6
MCB 6C
Constituent Level (ppb)
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10000000
1000000
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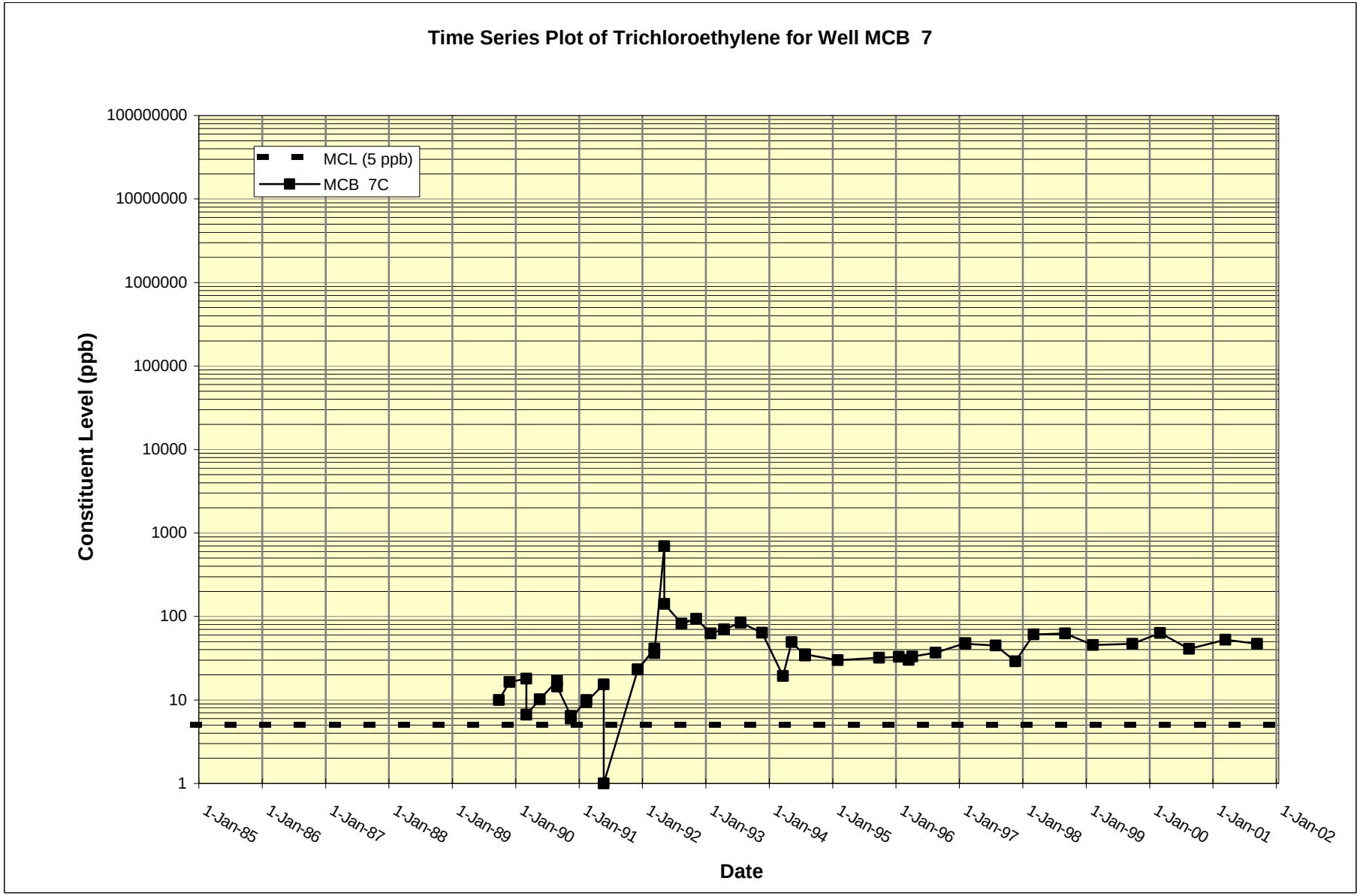
Time Series Plot of Trichloroethylene for Well MCB 7
MCL (5 ppb)
MCB 7C
Constituent Level (ppb)
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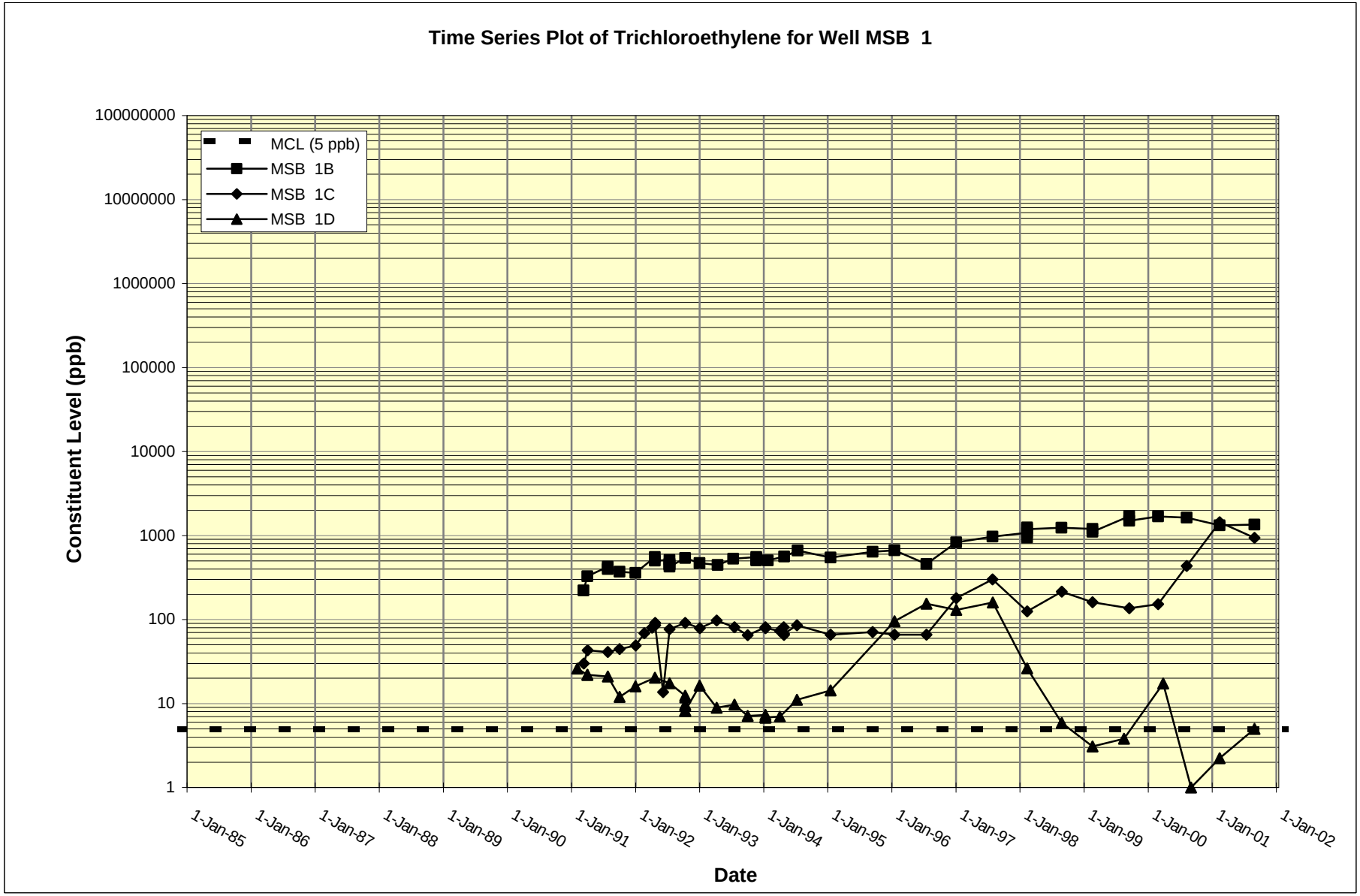
Time Series Plot of Trichloroethylene for Well MSB 1
MCL (5 ppb)
MSB 1B
MSB 1C
MSB 1D
Constituent Level (ppb)
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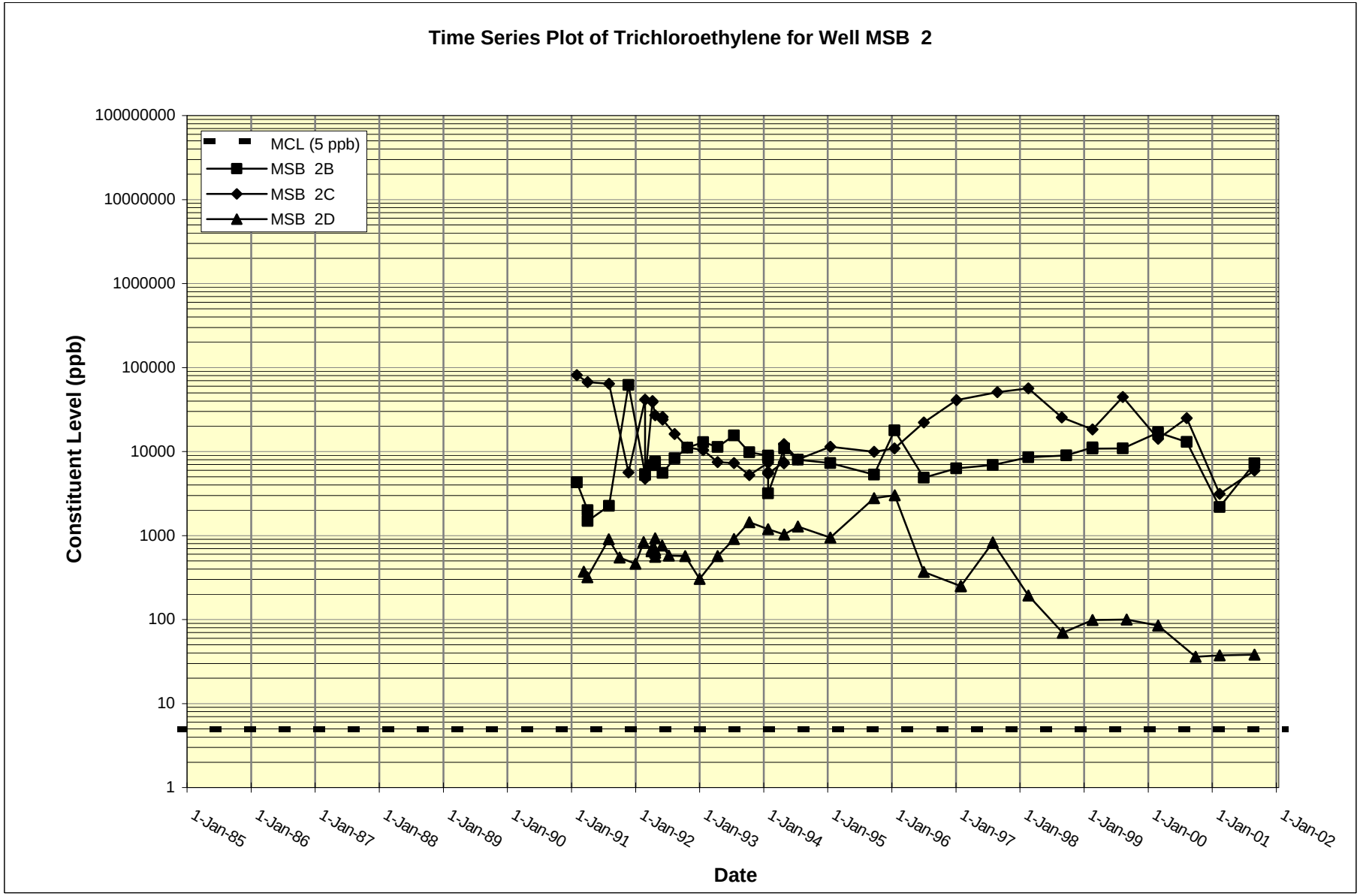
Time Series Plot of Trichloroethylene for Well MSB 2
MCL (5 ppb)
MSB 2B
MSB 2C
MSB 2D
Constituent Level (ppb)
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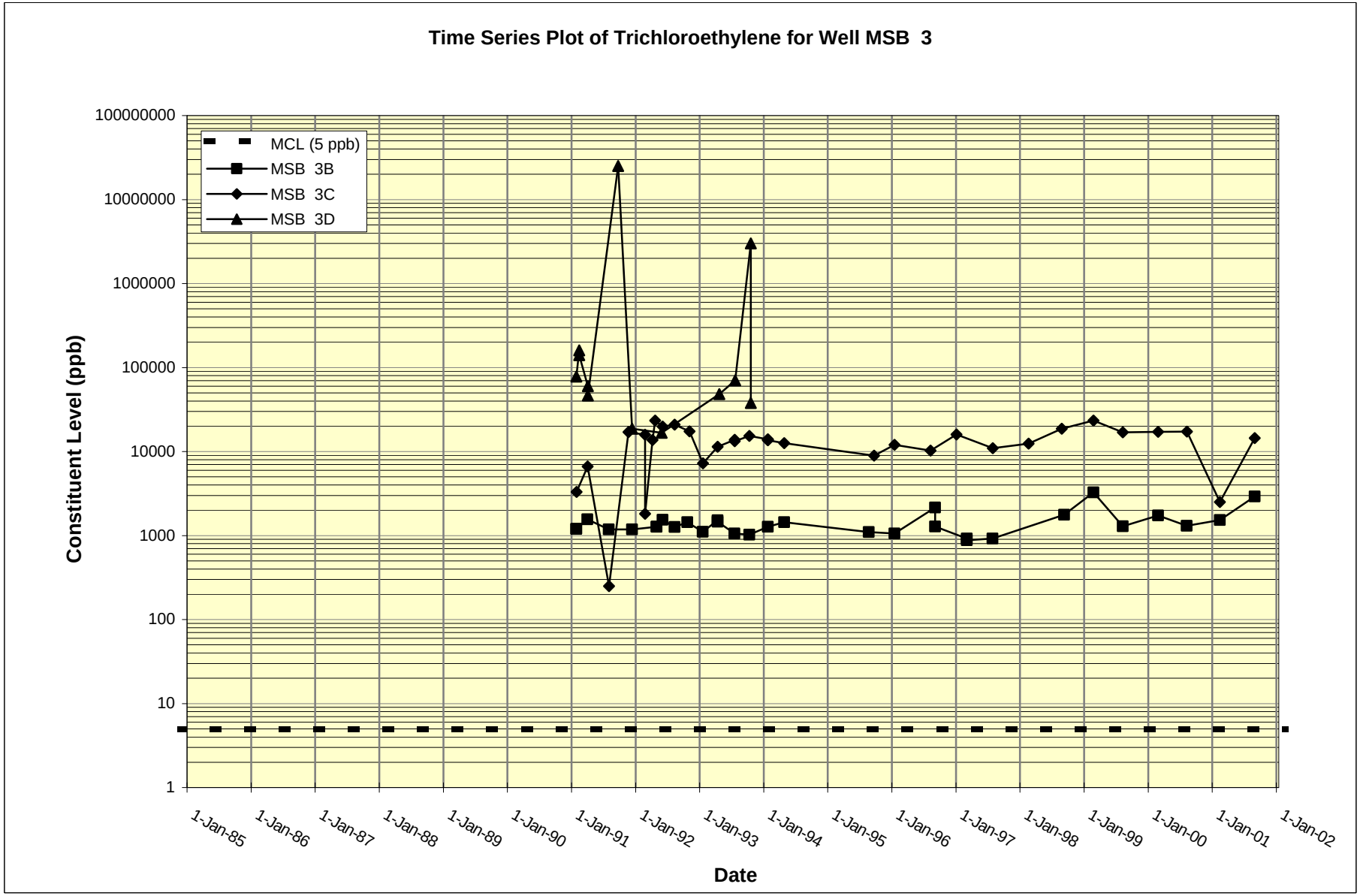
Time Series Plot of Trichloroethylene for Well MSB 3
MCL (5 ppb)
MSB 3B
MSB 3C
MSB 3D
Constituent Level (ppb)
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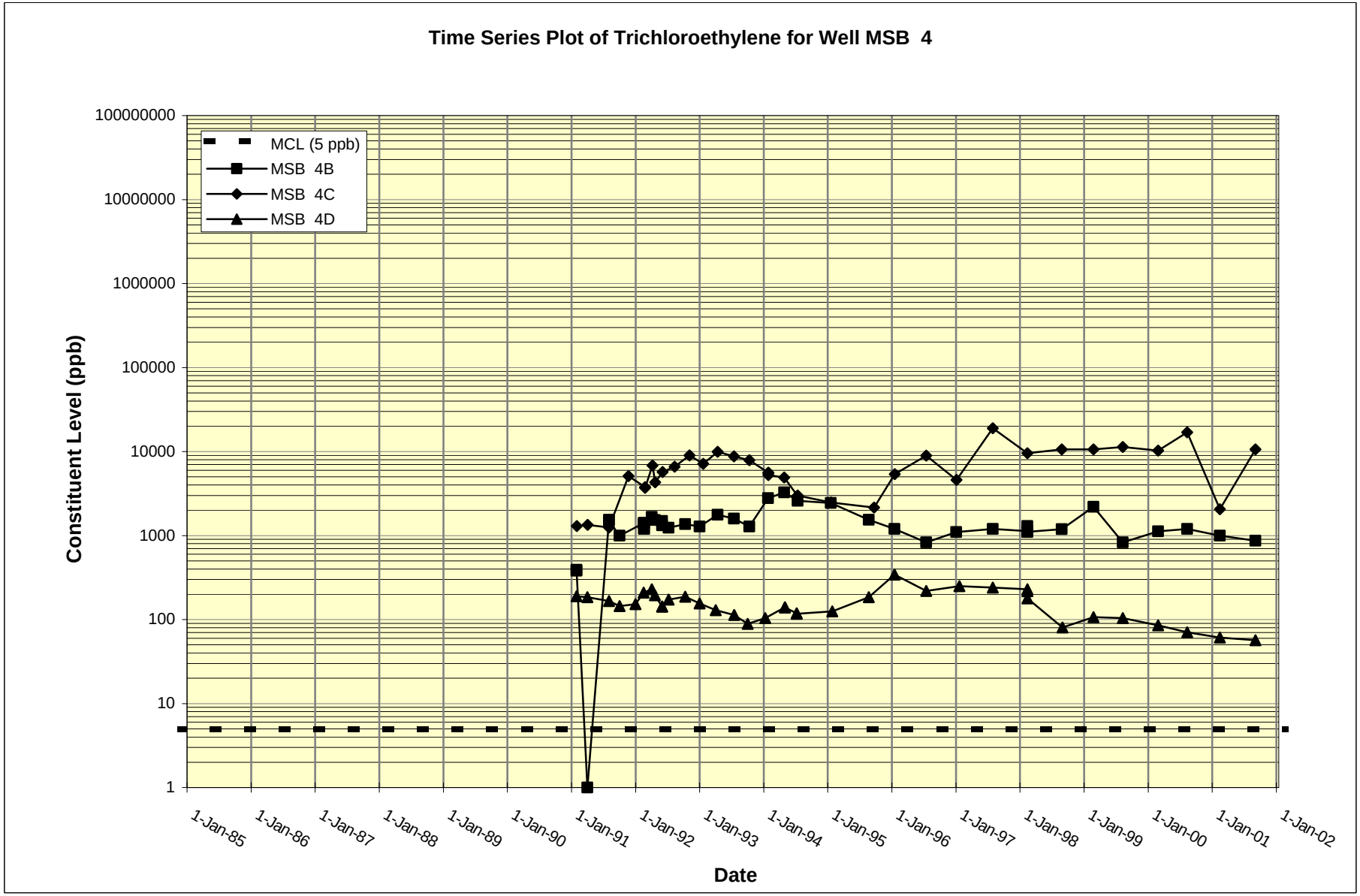
Time Series Plot of Trichloroethylene for Well MSB 4
MCL (5 ppb)
MSB 4B
MSB 4C
MSB 4D
Constituent Level (ppb)
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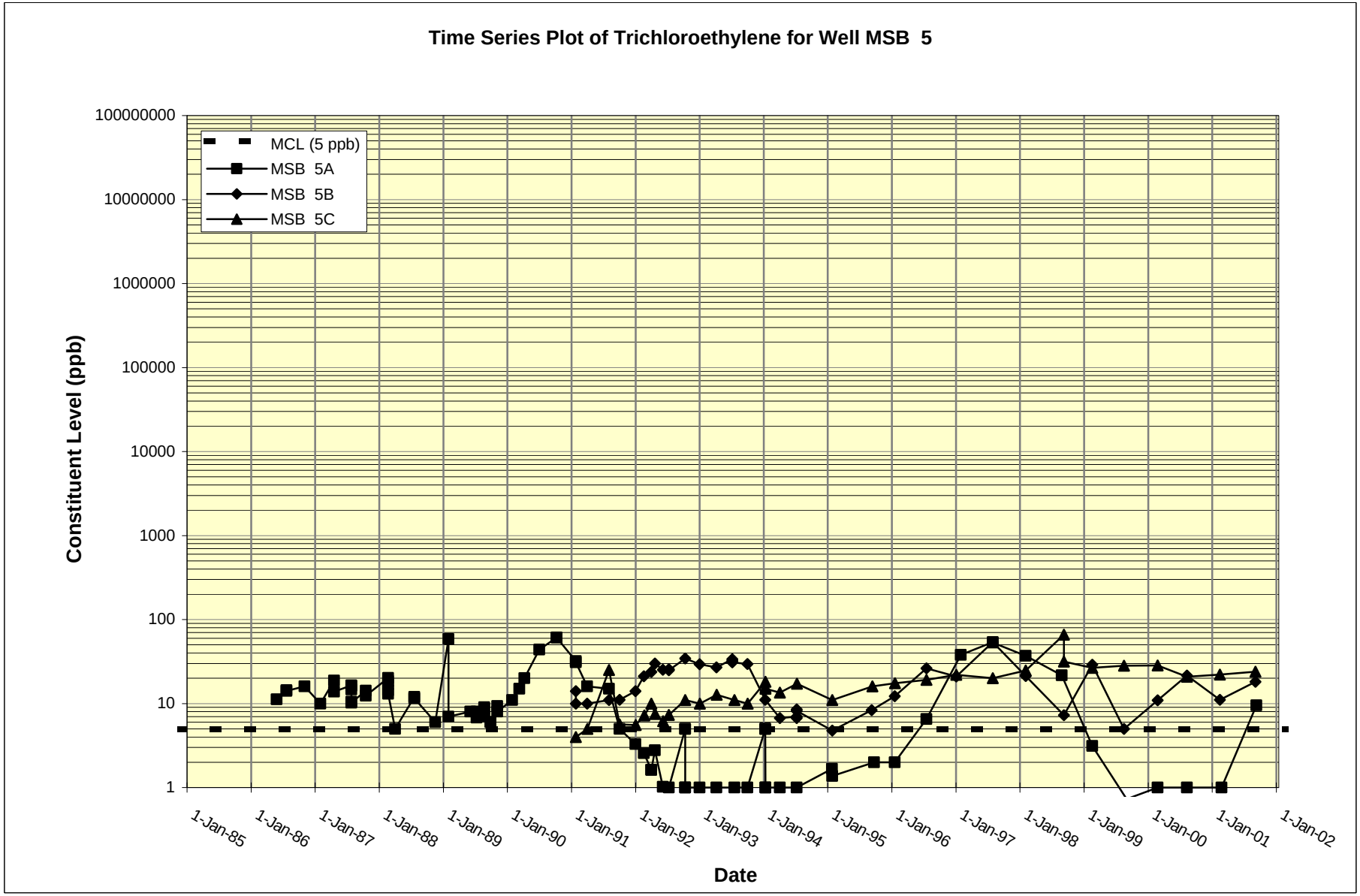
Time Series Plot of Trichloroethylene for Well MSB 5
MCL (5 ppb)
MSB 5A
MSB 5B
MSB 5C
Constituent Level (ppb)
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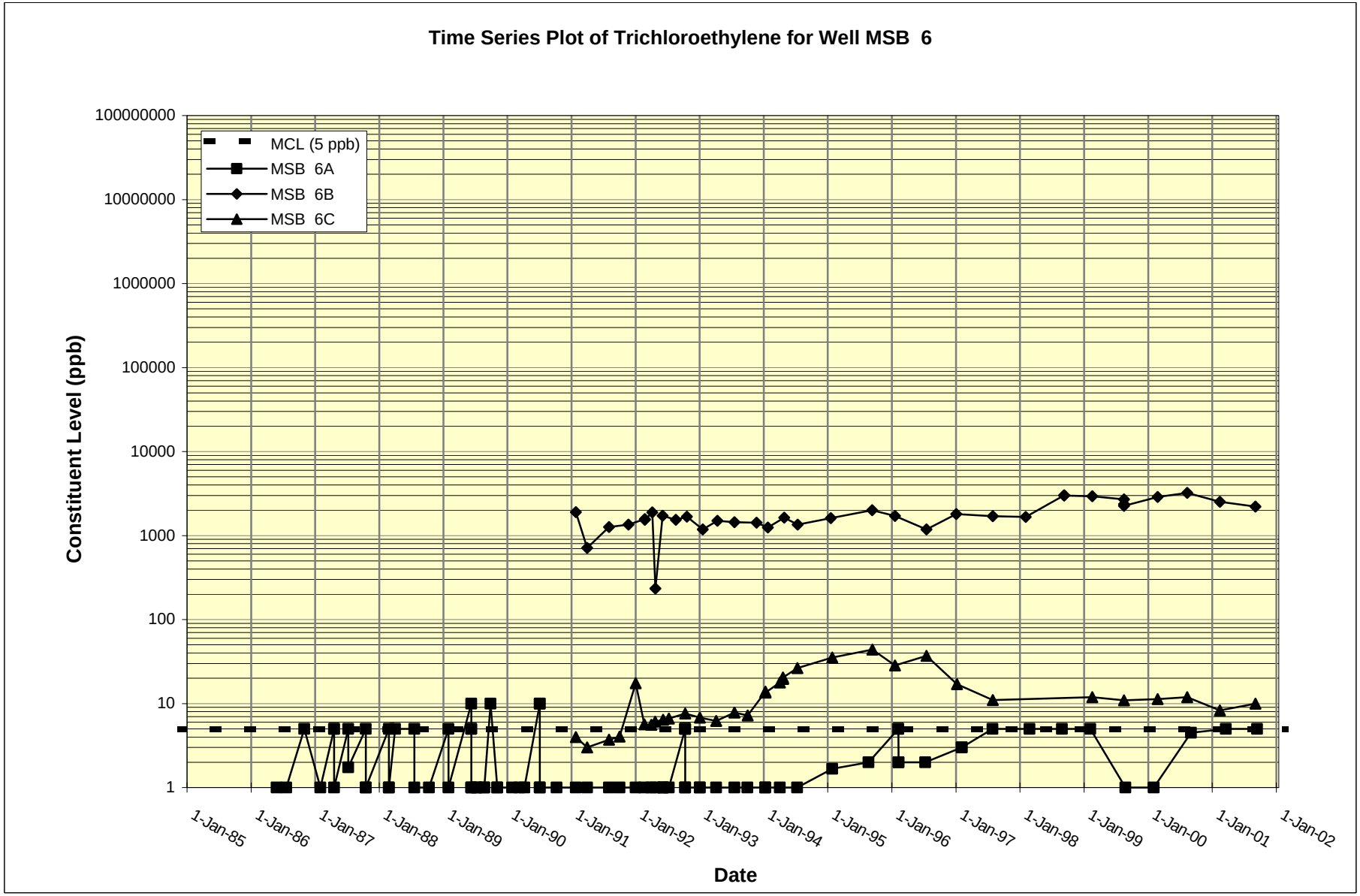
Time Series Plot of Trichloroethylene for Well MSB 6
MCL (5 ppb)
MSB 6A
MSB 6B
MSB 6C
Constituent Level (ppb)
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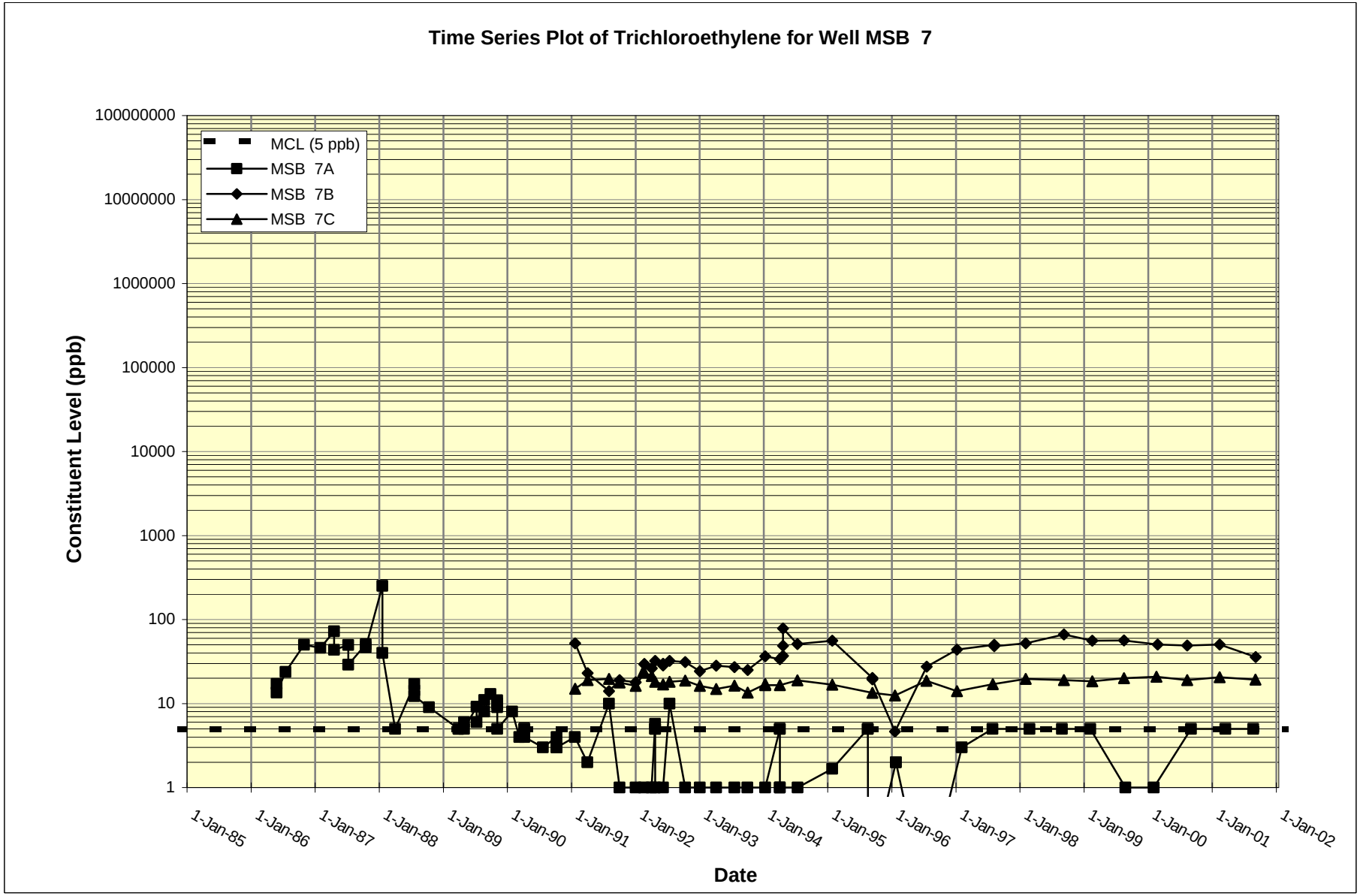
Date


Time Series Plot of Trichloroethylene for Well MSB 7
MCL (5 ppb)
MSB 7A
MSB 7B
MSB 7C
Constituent Level (ppb)
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10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
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1-Jan-91
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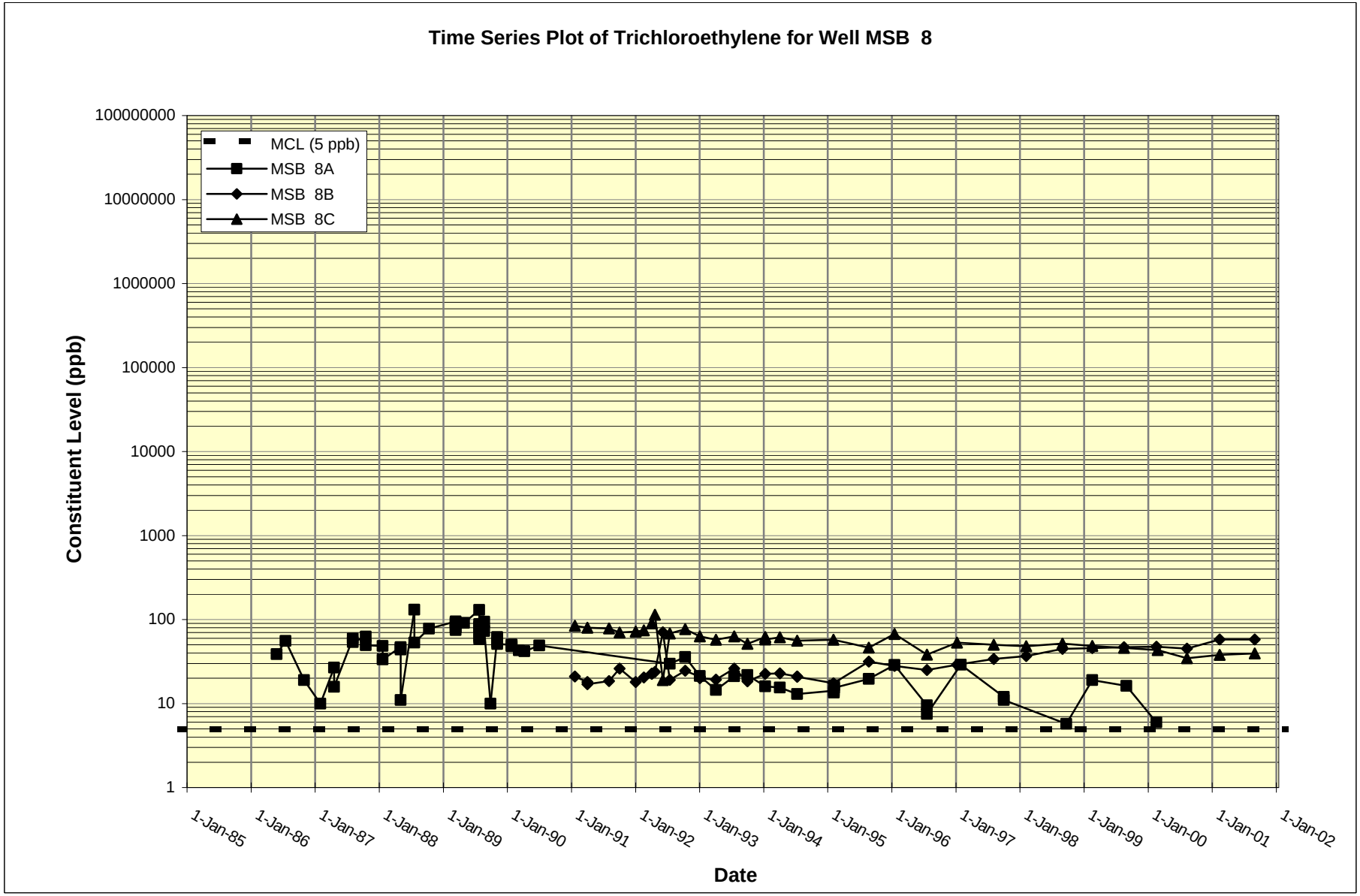
1-Jan-01
1-Jan-02
Date


Time Series Plot of Trichloroethylene for Well MSB 8
MCL (5 ppb)
MSB 8A
MSB 8B
MSB 8C
Constituent Level (ppb)
100000000
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1-Jan-85
1-Jan-86
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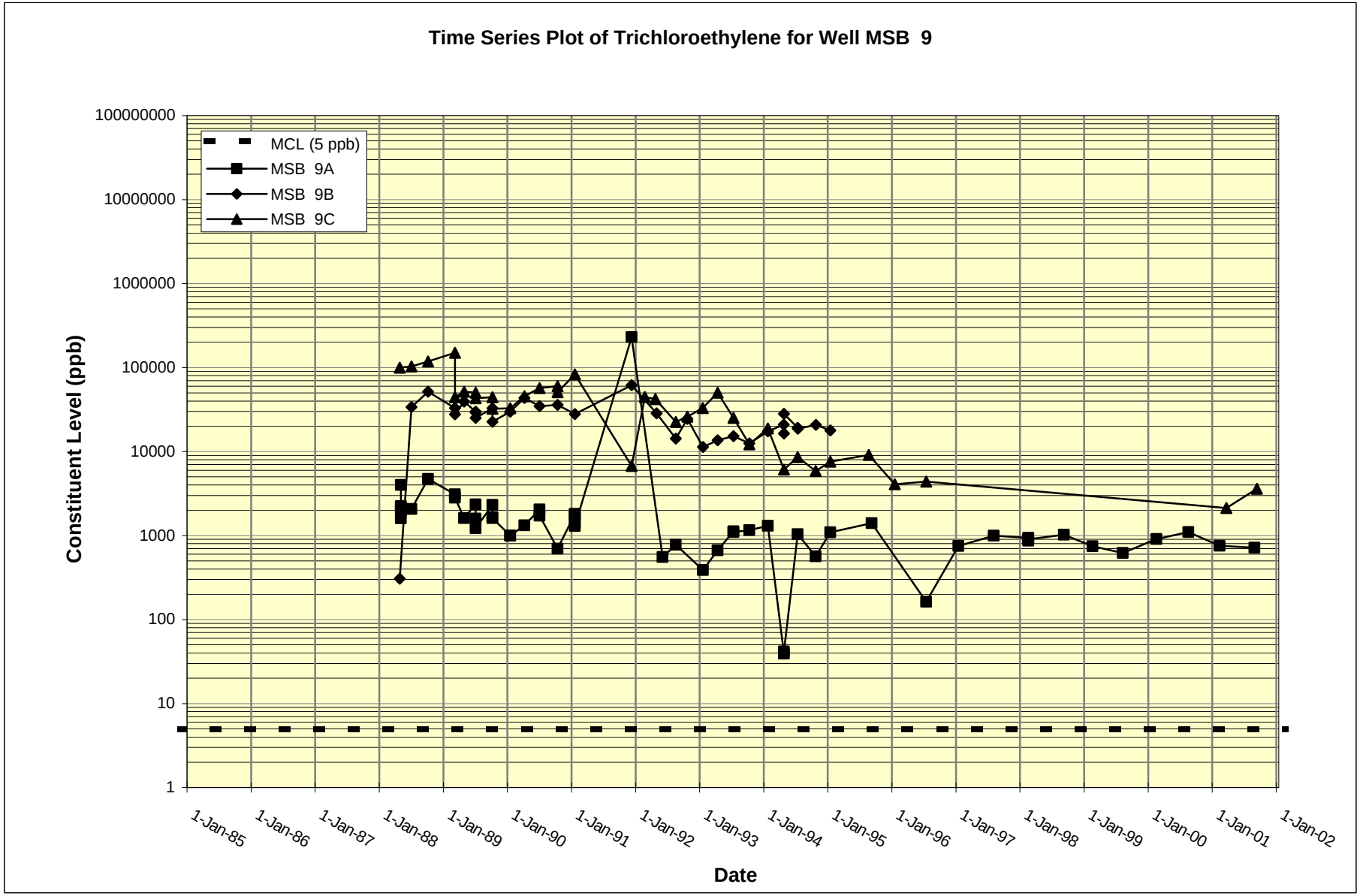
1-Jan-02
Date


Time Series Plot of Trichloroethylene for Well MSB 9
MCL (5 ppb)
MSB 9A
MSB 9B
MSB 9C
Constituent Level (ppb)
100000000
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1-Jan-85
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1-Jan-92
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1-Jan-94
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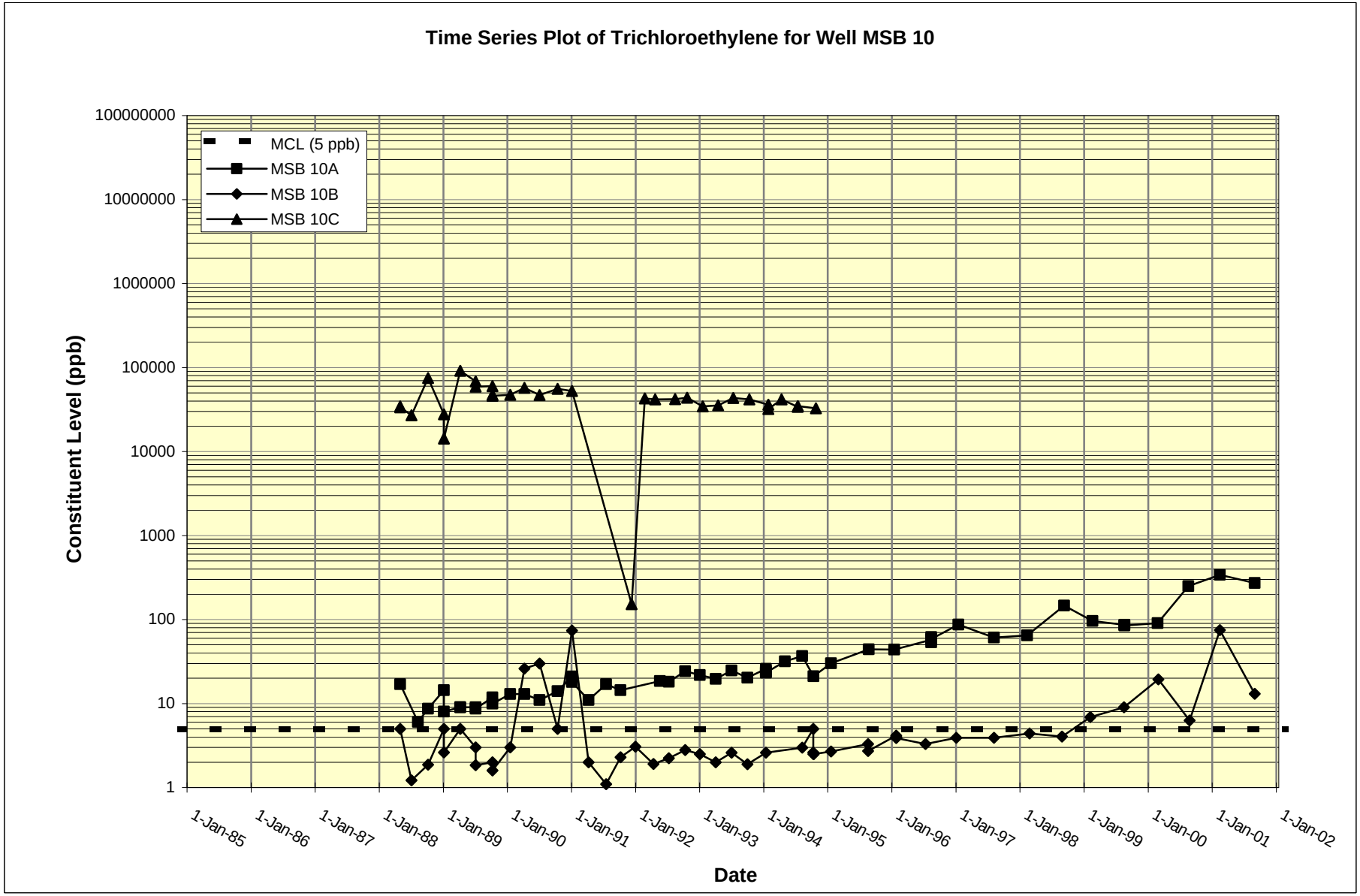
1-Jan-01
1-Jan-02
Date


Time Series Plot of Trichloroethylene for Well MSB 10
MCL (5 ppb)
MSB 10A
MSB 10B
MSB 10C
Constituent Level (ppb)
100000000
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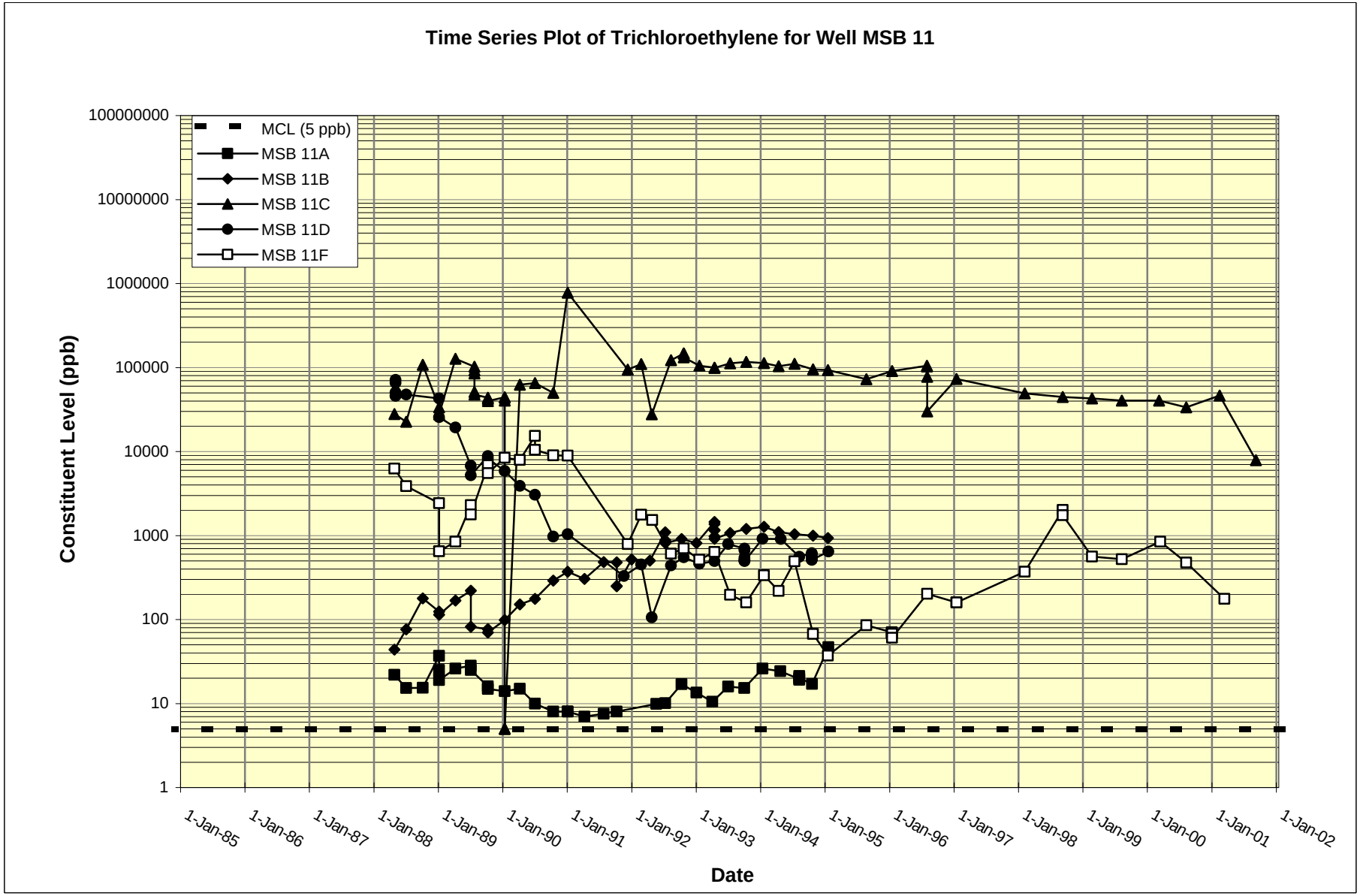
Date


Time Series Plot of Trichloroethylene for Well MSB 11
MCL (5 ppb)
MSB 11A
MSB 11B
MSB 11C
MSB 11D
MSB 11F
Constituent Level (ppb)
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
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1-Jan-94
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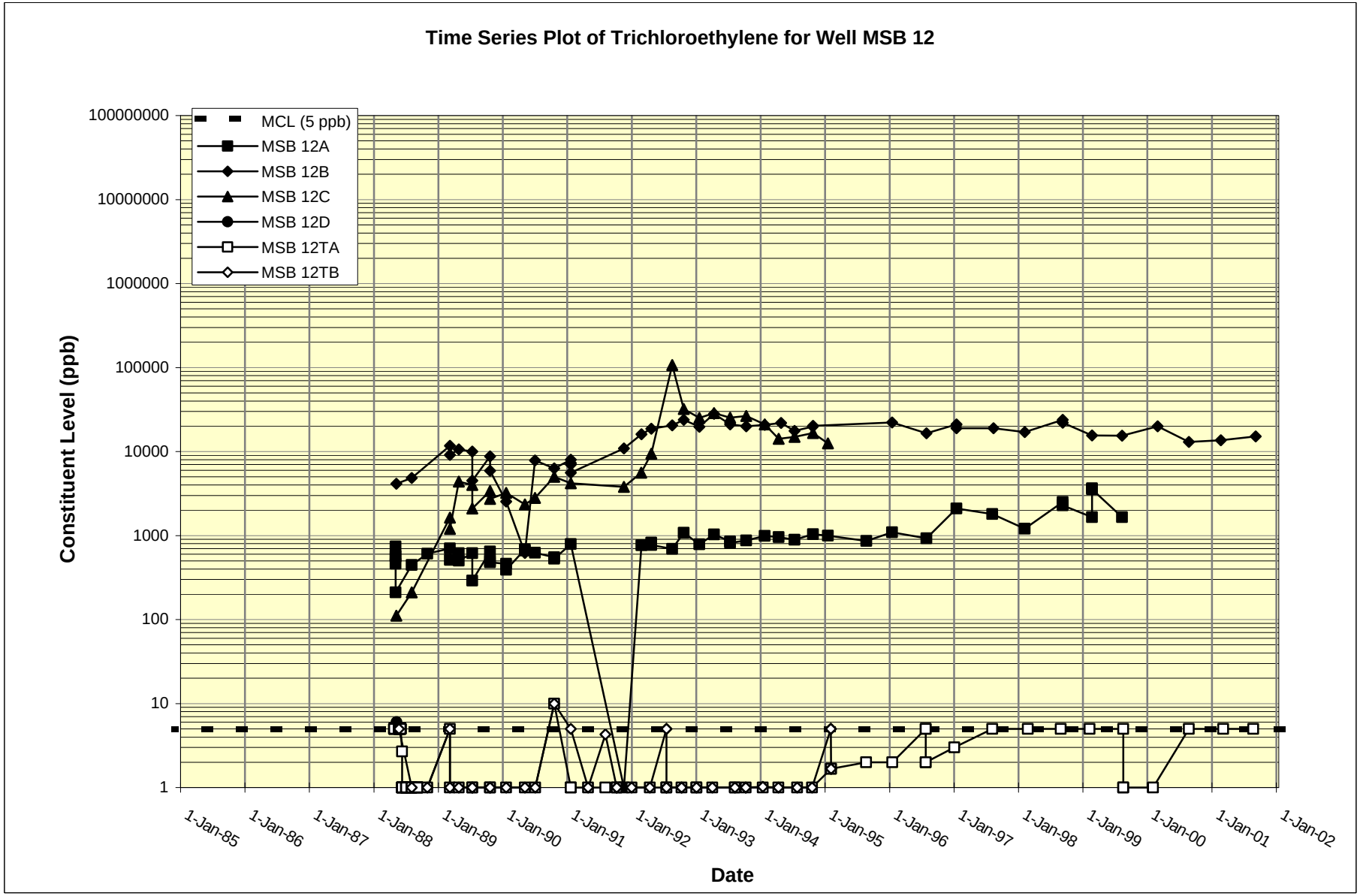
Date


Time Series Plot of Trichloroethylene for Well MSB 12
MCL (5 ppb)
MSB 12A
MSB 12B
MSB 12C
MSB 12D
MSB 12TA
MSB 12TB
Constituent Level (ppb)
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
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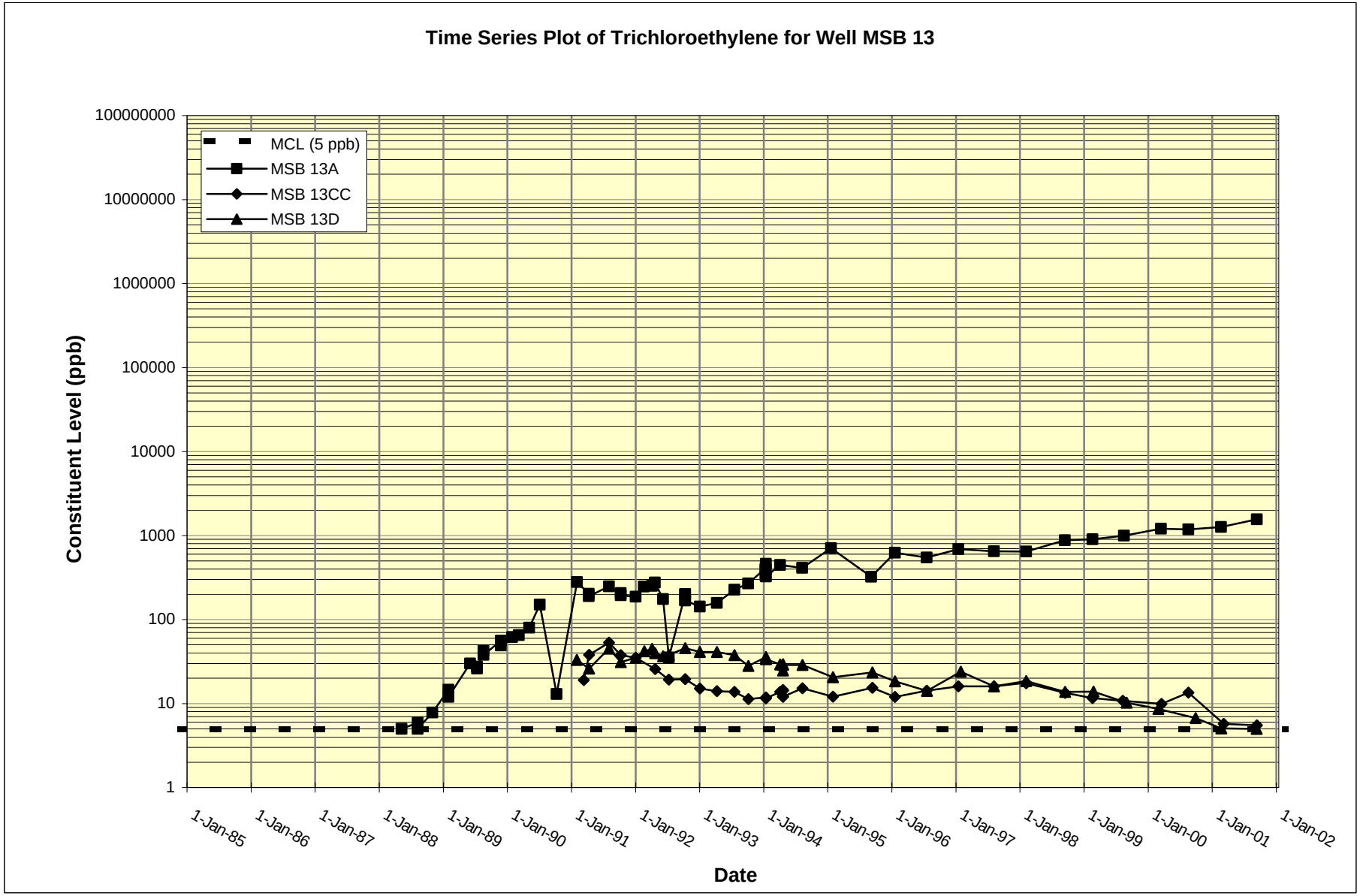
1-Jan-01
1-Jan-02
Date


Time Series Plot of Trichloroethylene for Well MSB 13
MCL (5 ppb)
MSB 13A
MSB 13CC
MSB 13D
Constituent Level (ppb)
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
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1-Jan-94
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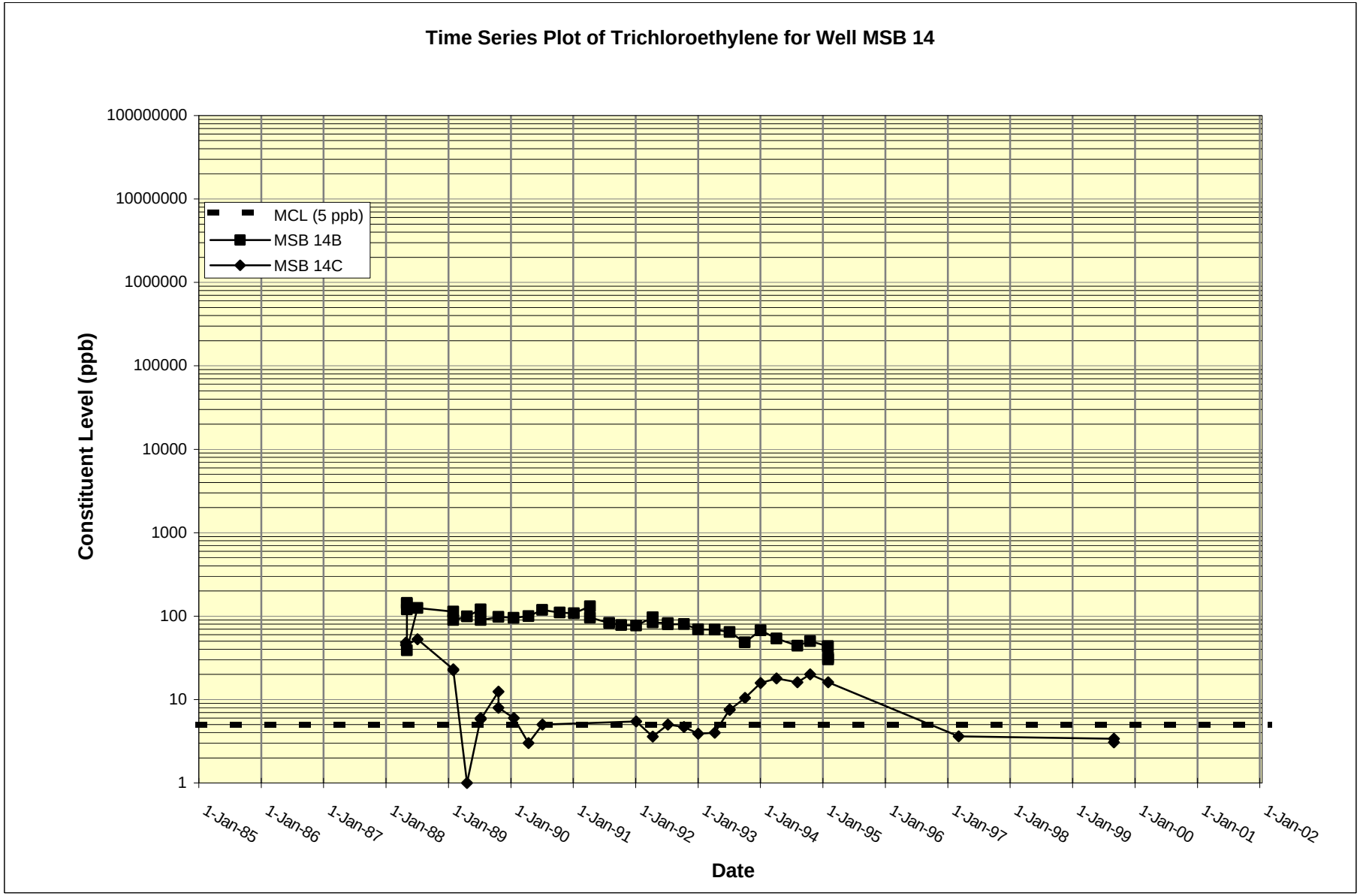
Date


Time Series Plot of Trichloroethylene for Well MSB 14
MCL (5 ppb)
MSB 14B
MSB 14C
Constituent Level (ppb)
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
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1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
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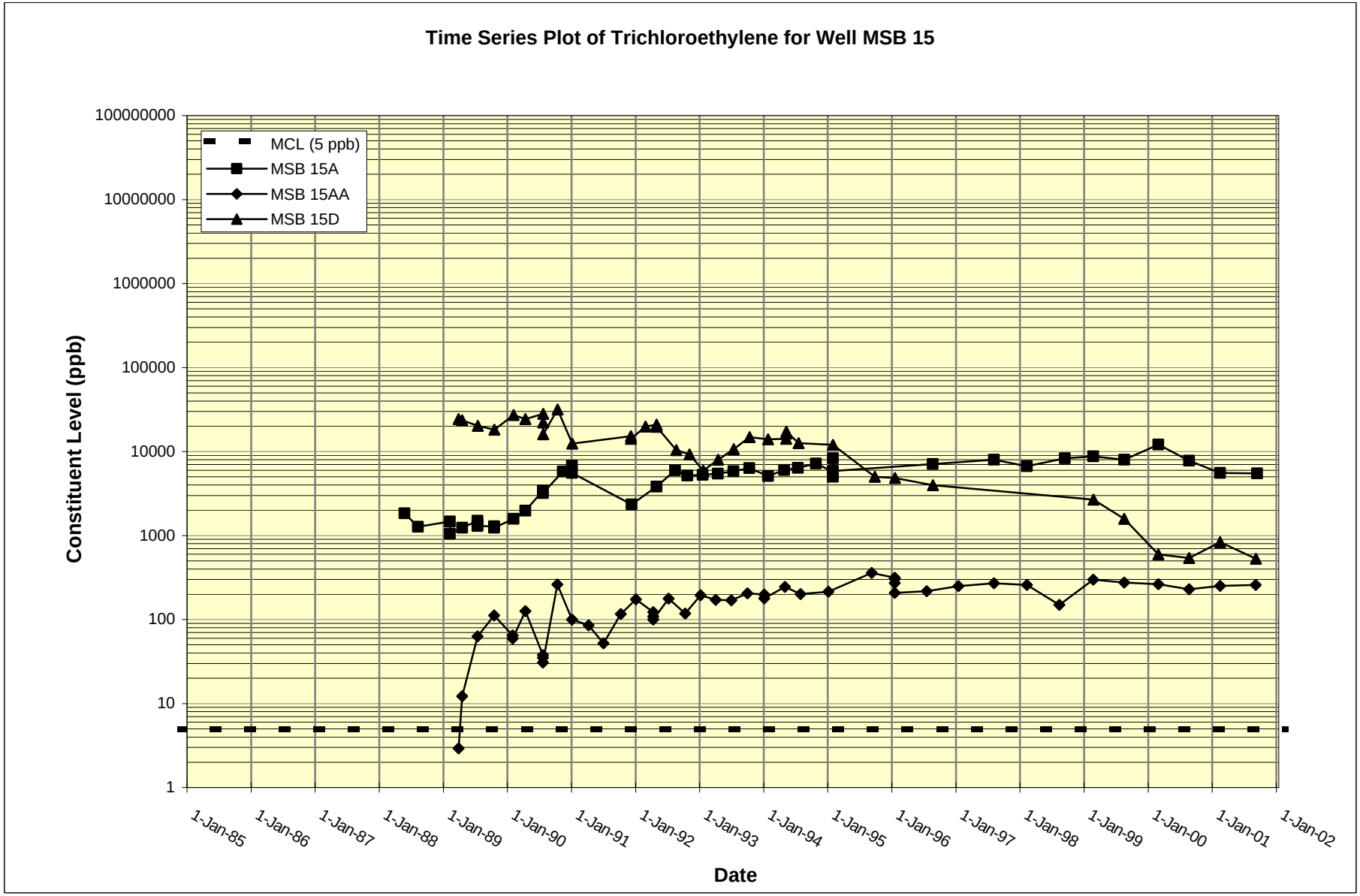
Time Series Plot of Trichloroethylene for Well MSB 15
MCL (5 ppb)
MSB 15A
MSB 15AA
MSB 15D
Constituent Level (ppb)
100000000
10000000
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1-Jan-91
1-Jan-92
1-Jan-93
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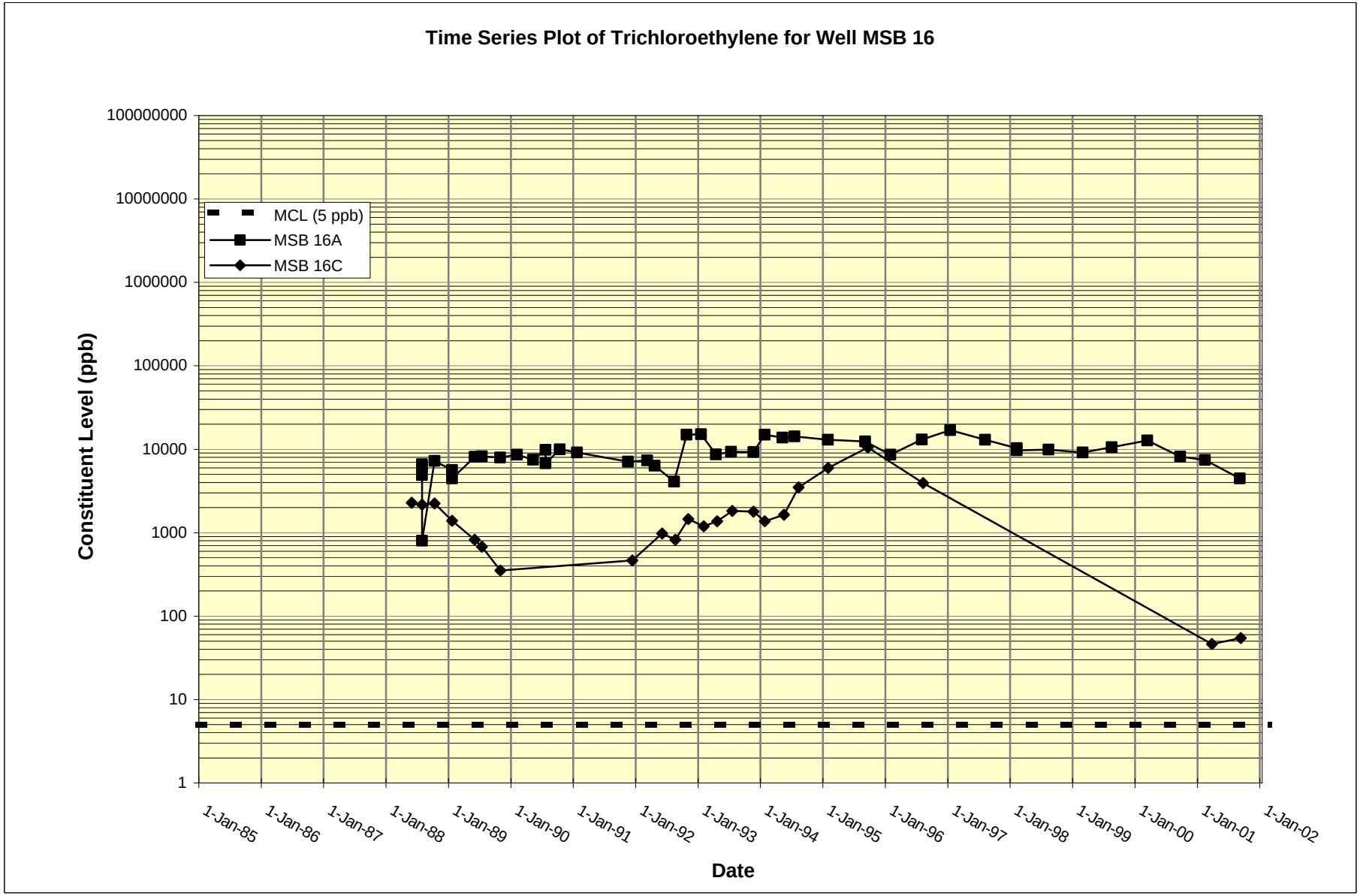
1-Jan-02
Date


Time Series Plot of Trichloroethylene for Well MSB 16
MCL (5 ppb)
MSB 16A
MSB 16C
Constituent Level (ppb)
100000000
10000000
1000000
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10000
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1-Jan-85
1-Jan-86
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1-Jan-94
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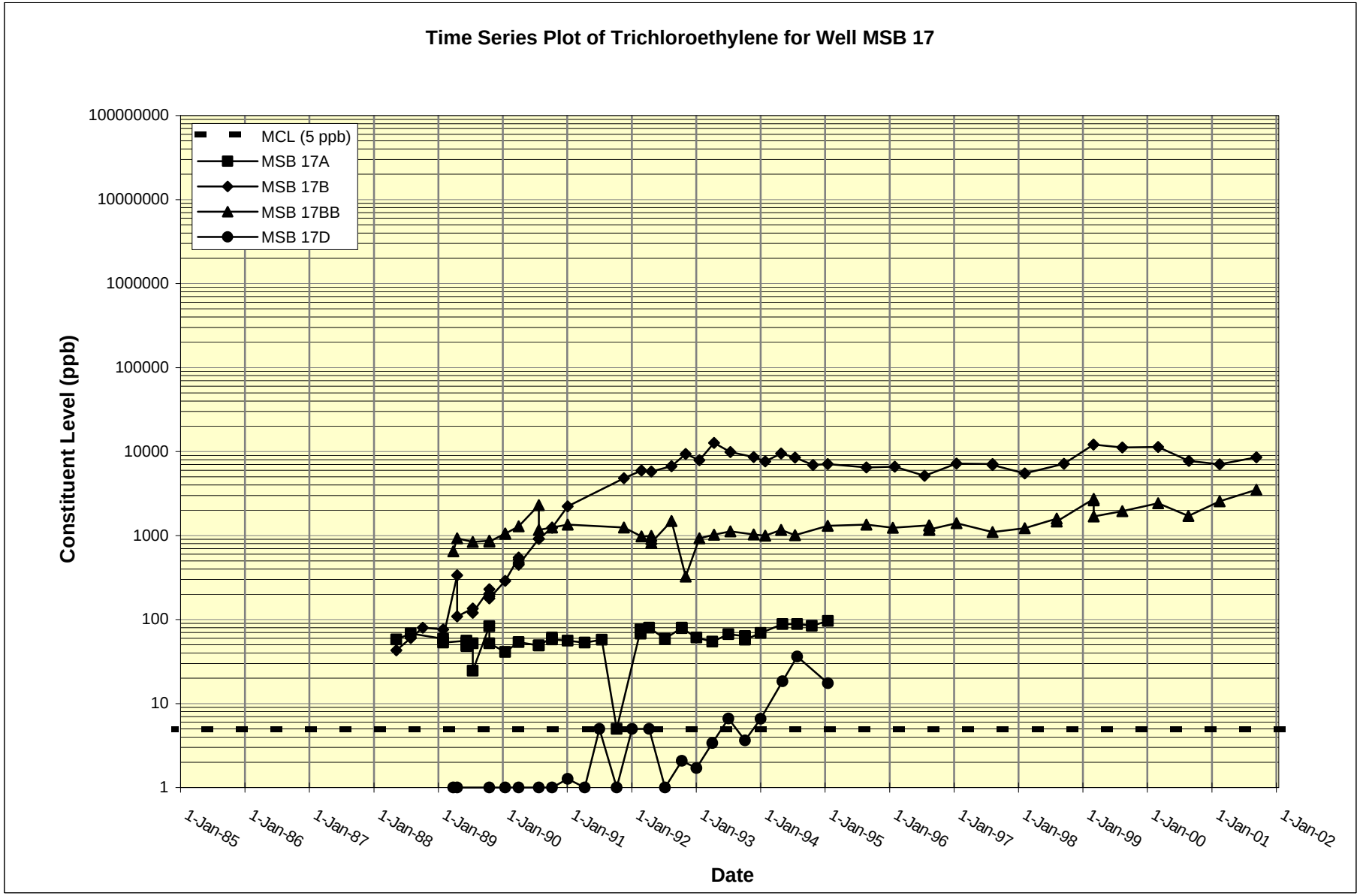
Time Series Plot of Trichloroethylene for Well MSB 17
MCL (5 ppb)
MSB 17A
MSB 17B
MSB 17BB
MSB 17D
Constituent Level (ppb)
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
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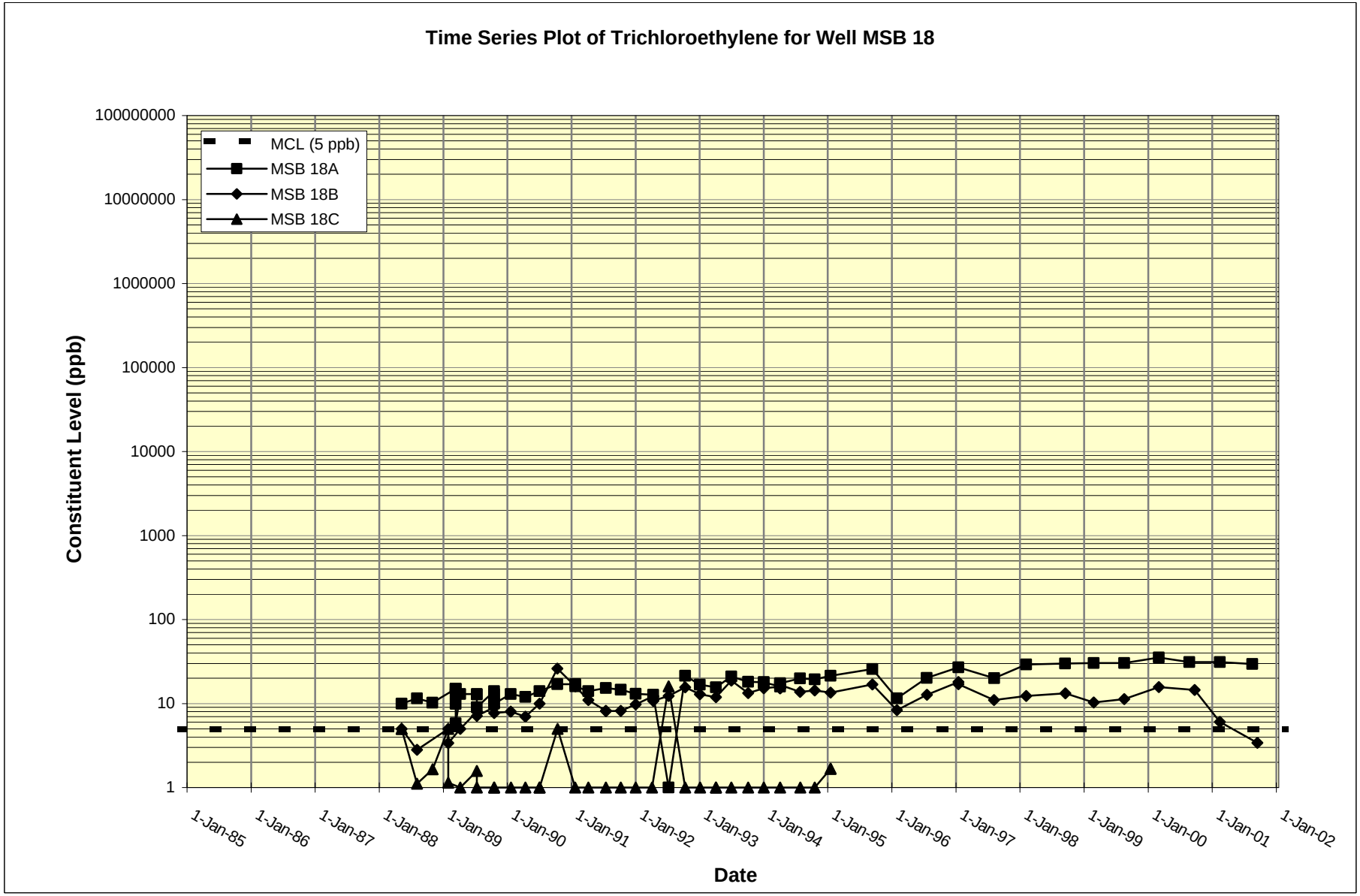
Date


Time Series Plot of Trichloroethylene for Well MSB 18
MCL (5 ppb)
MSB 18A
MSB 18B
MSB 18C
Constituent Level (ppb)
100000000
10000000
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100000
10000
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100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
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1-Jan-92
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1-Jan-94
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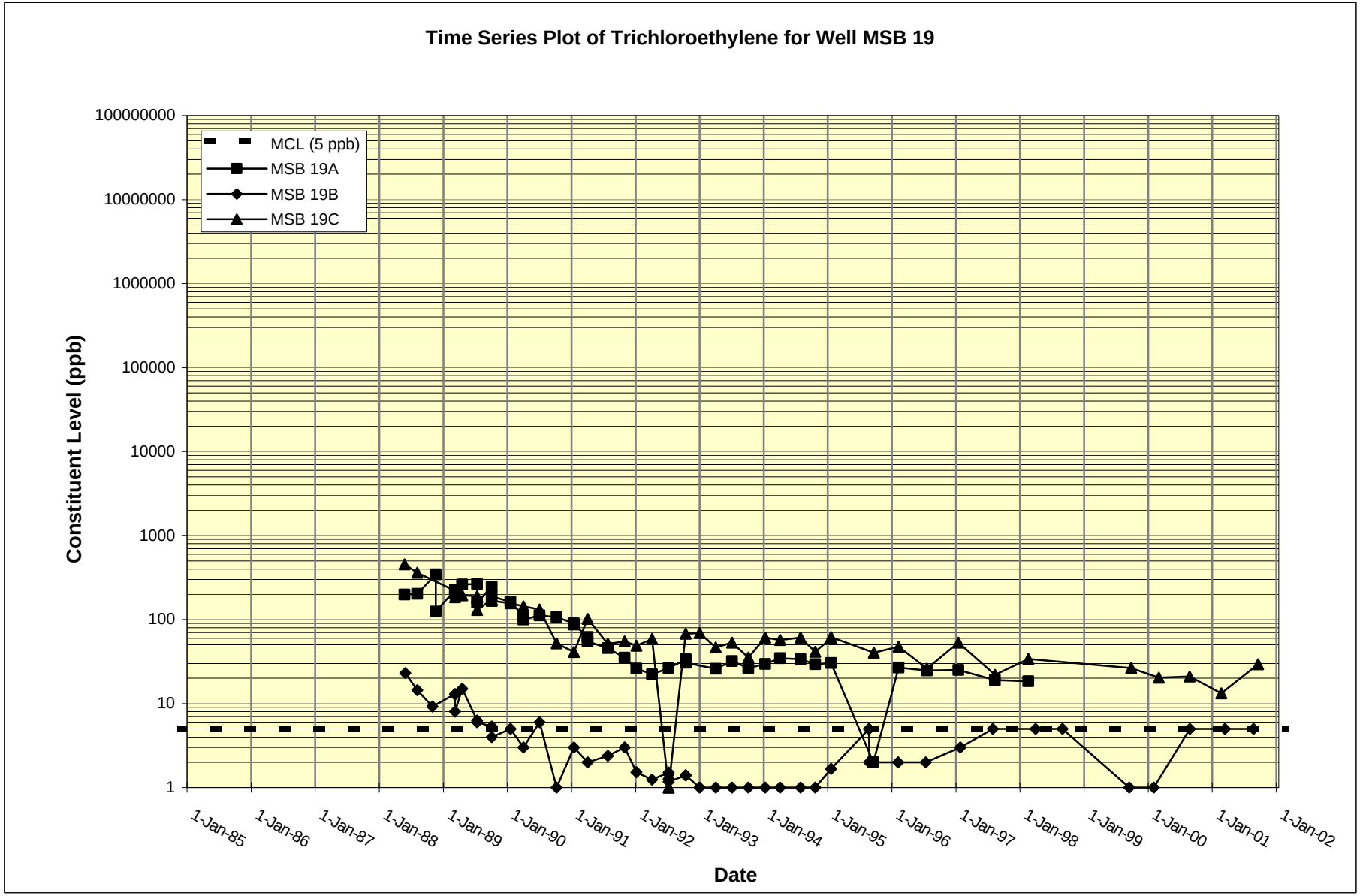
1-Jan-02
Date


Time Series Plot of Trichloroethylene for Well MSB 19
MCL (5 ppb)
MSB 19A
MSB 19B
MSB 19C
Constituent Level (ppb)
100000000
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10
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1-Jan-85
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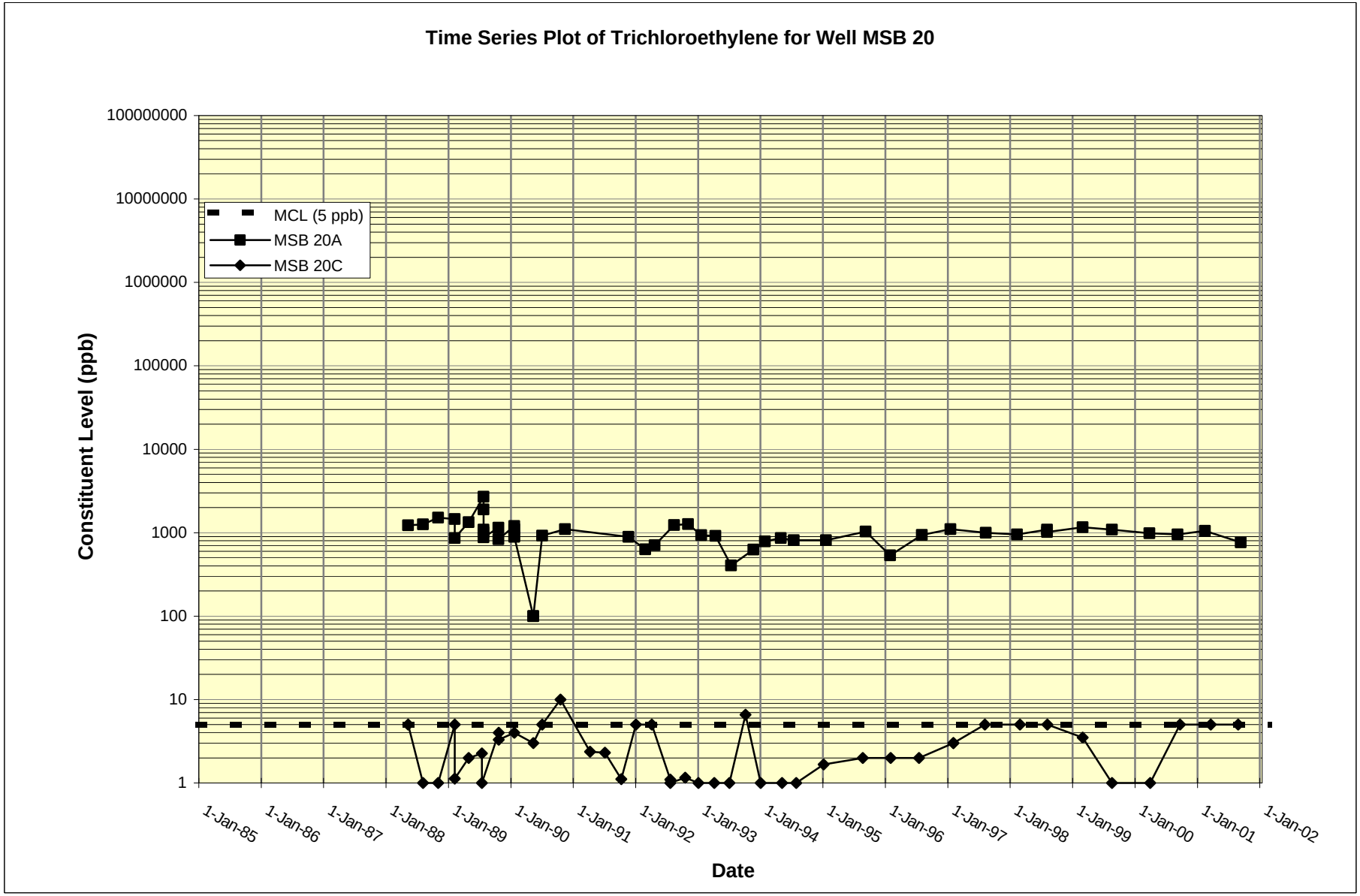
Time Series Plot of Trichloroethylene for Well MSB 20
MCL (5 ppb)
MSB 20A
MSB 20C
Constituent Level (ppb)
100000000
10000000
1000000
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10000
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100
10
1
1-Jan-85
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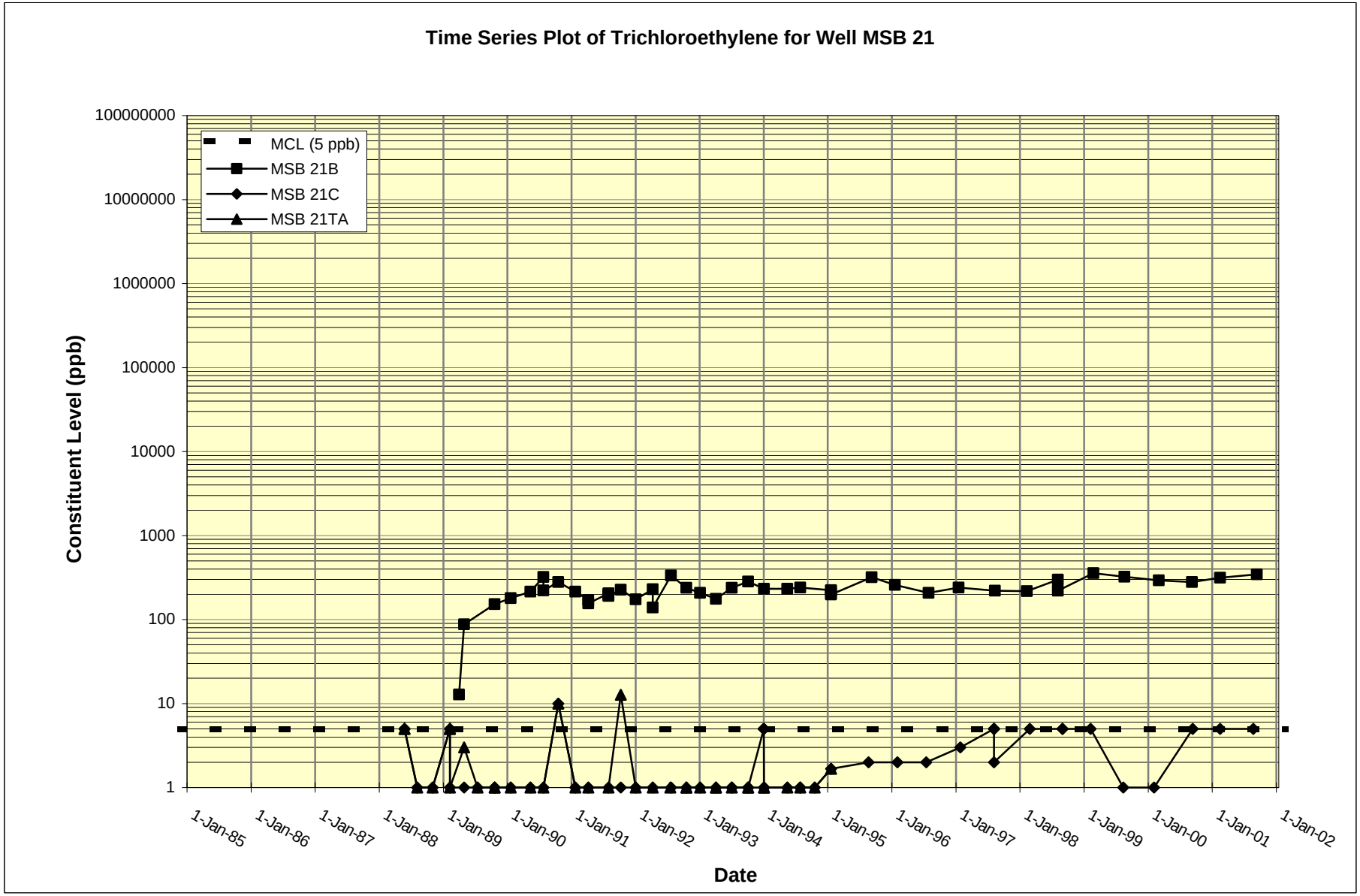
Time Series Plot of Trichloroethylene for Well MSB 21
MCL (5 ppb)
MSB 21B
MSB 21C
MSB 21TA
Constituent Level (ppb)
100000000
10000000
1000000
100000
10000
1000
100
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1
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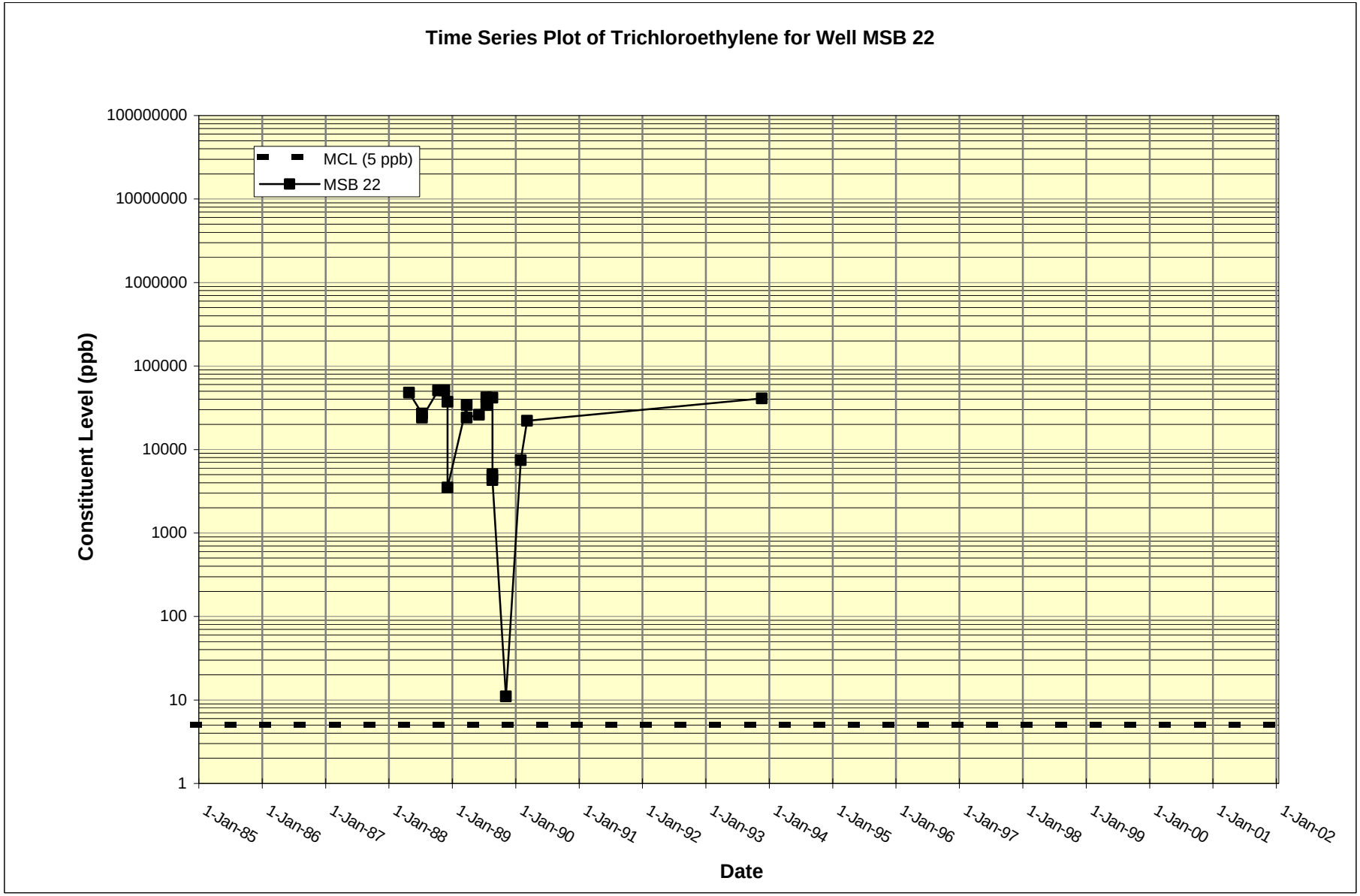
Time Series Plot of Trichloroethylene for Well MSB 22
MCL (5 ppb)
MSB 22
Constituent Level (ppb)
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10000000
1000000
100000
10000
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1-Jan-85
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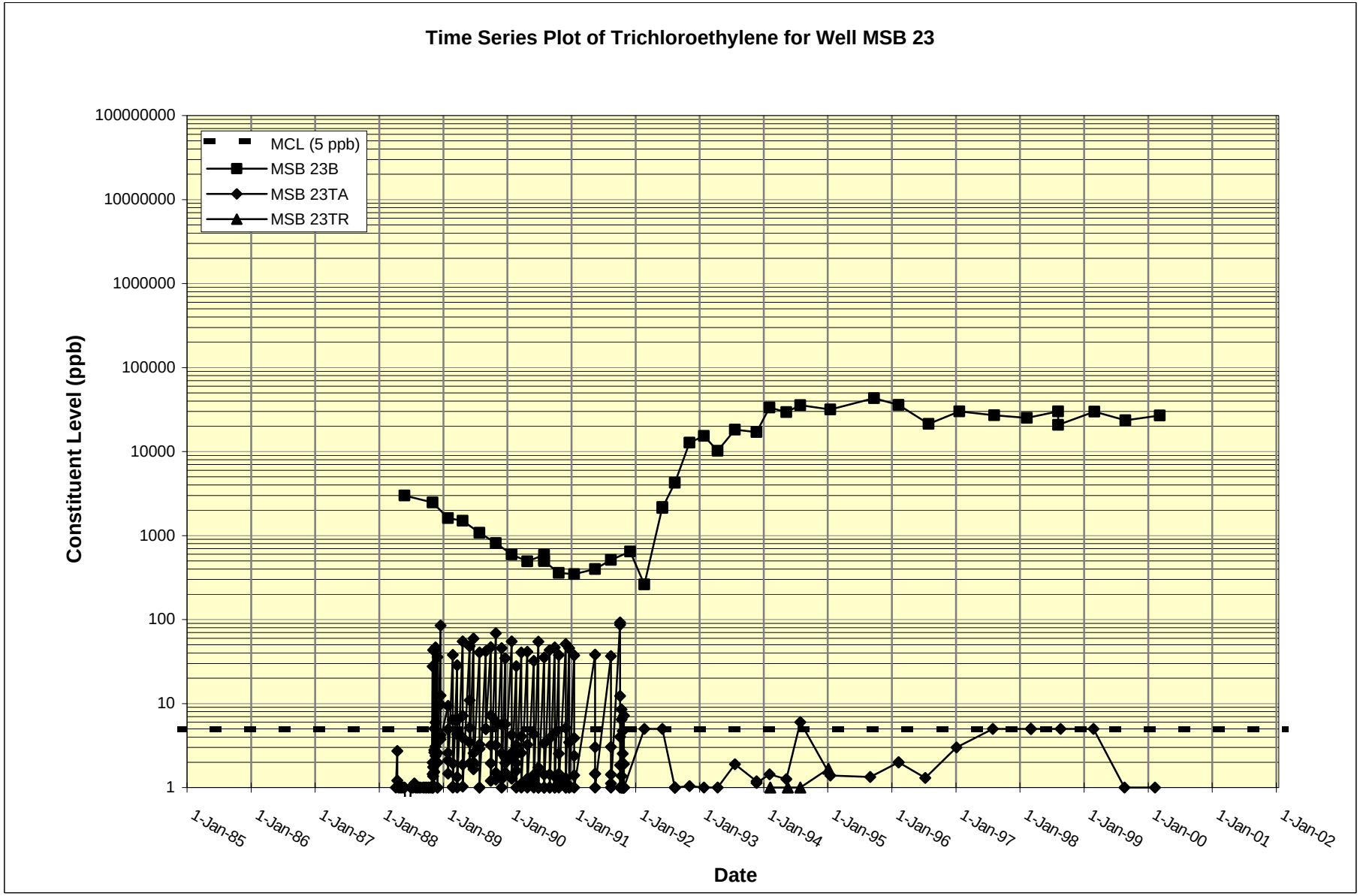
Time Series Plot of Trichloroethylene for Well MSB 23
MCL (5 ppb)
MSB 23B
MSB 23TA
MSB 23TR
Constituent Level (ppb)
100000000
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1
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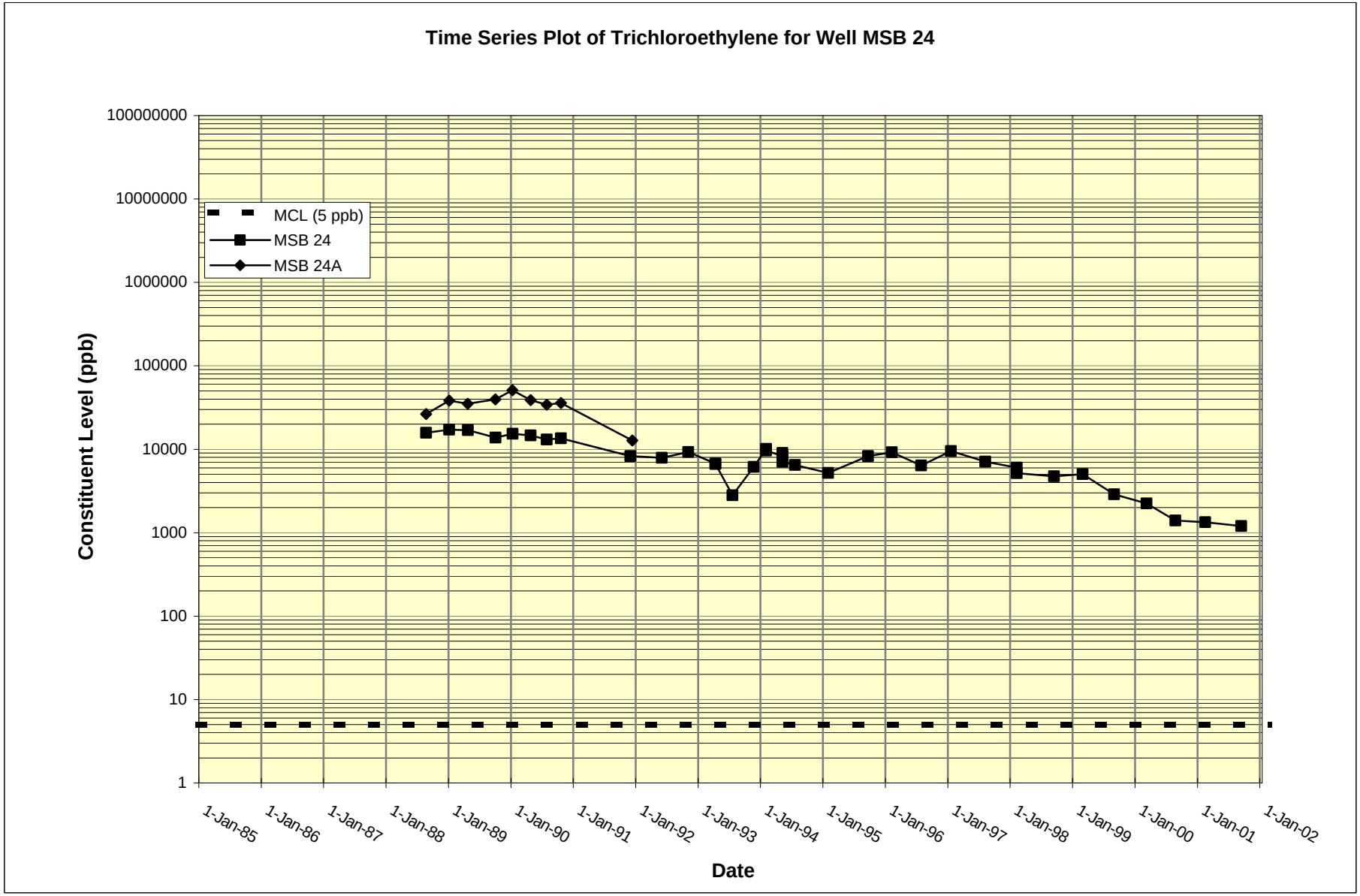
Time Series Plot of Trichloroethylene for Well MSB 24
Constituent Level (ppb)
100000000
10000000
1000000
100000
10000
1000
100
10
1
MCL (5 ppb)
MSB 24
MSB 24A
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
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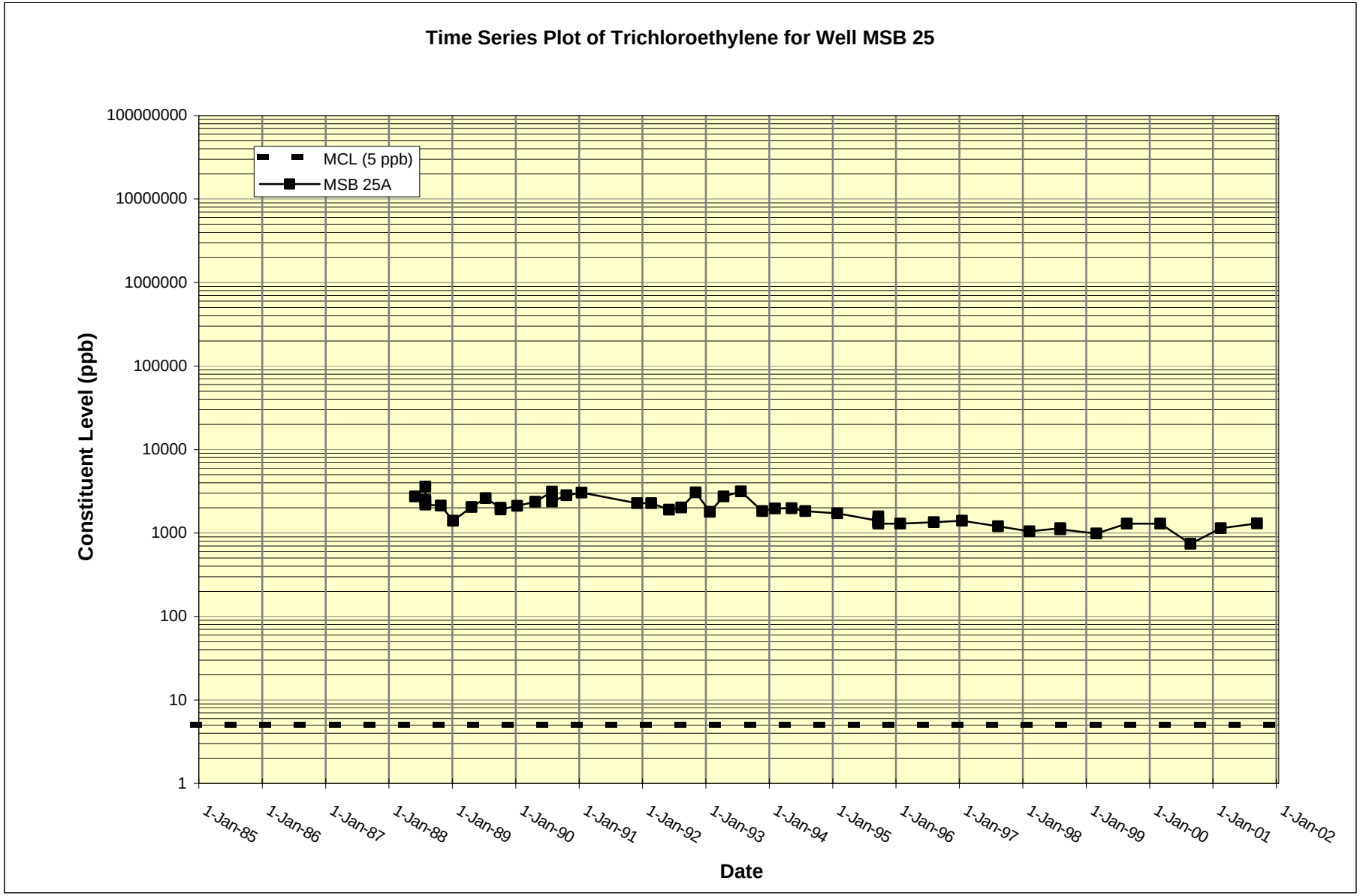
Time Series Plot of Trichloroethylene for Well MSB 25
MCL (5 ppb)
MSB 25A
Constituent Level (ppb)
100000000
10000000
1000000
100000
10000
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1-Jan-85
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1-Jan-92
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1-Jan-94
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1-Jan-02
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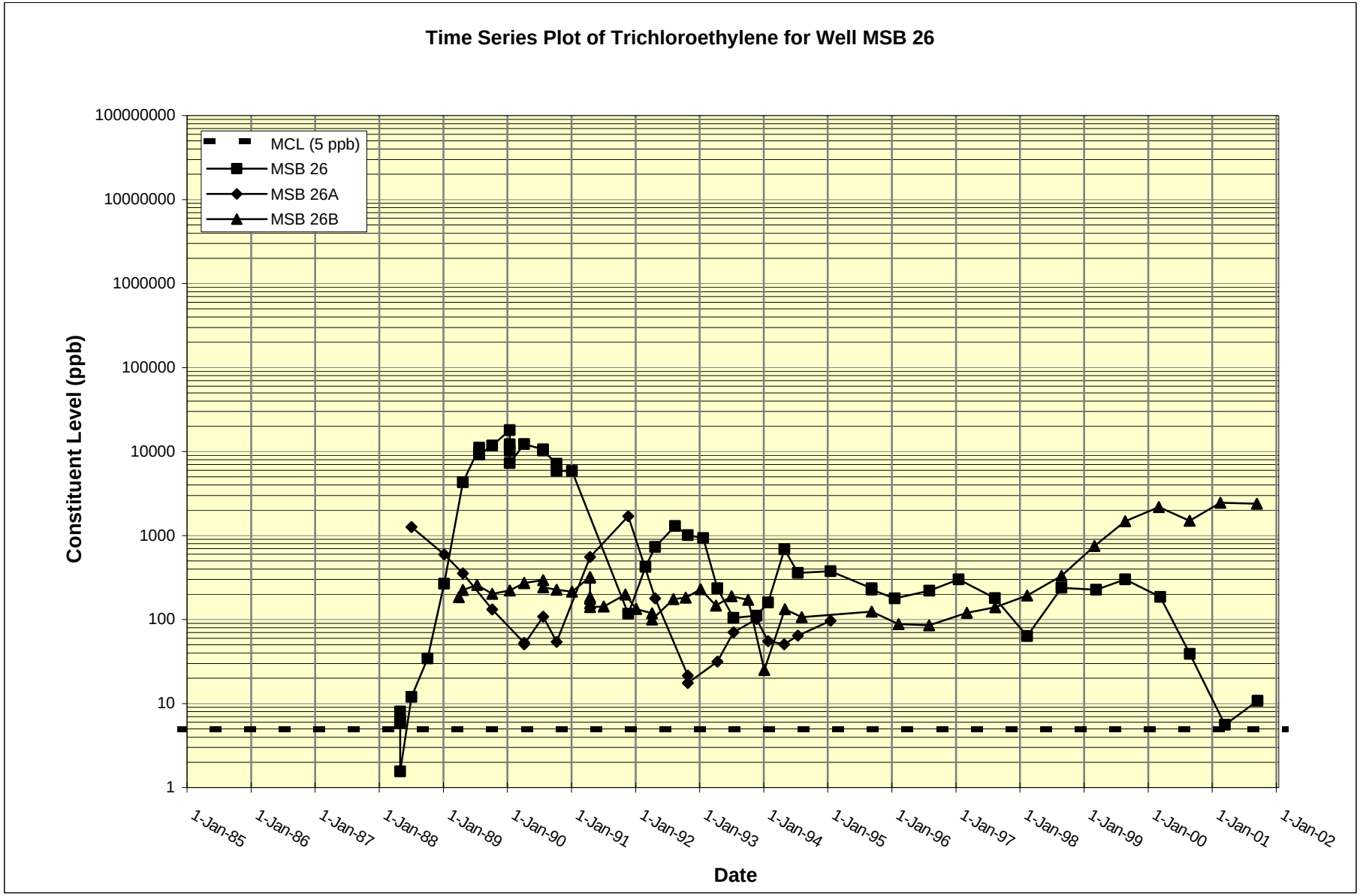
Time Series Plot of Trichloroethylene for Well MSB 26
MCL (5 ppb)
MSB 26
MSB 26A
MSB 26B
Constituent Level (ppb)
100000000
10000000
1000000
100000
10000
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10
1
1-Jan-85
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1-Jan-87
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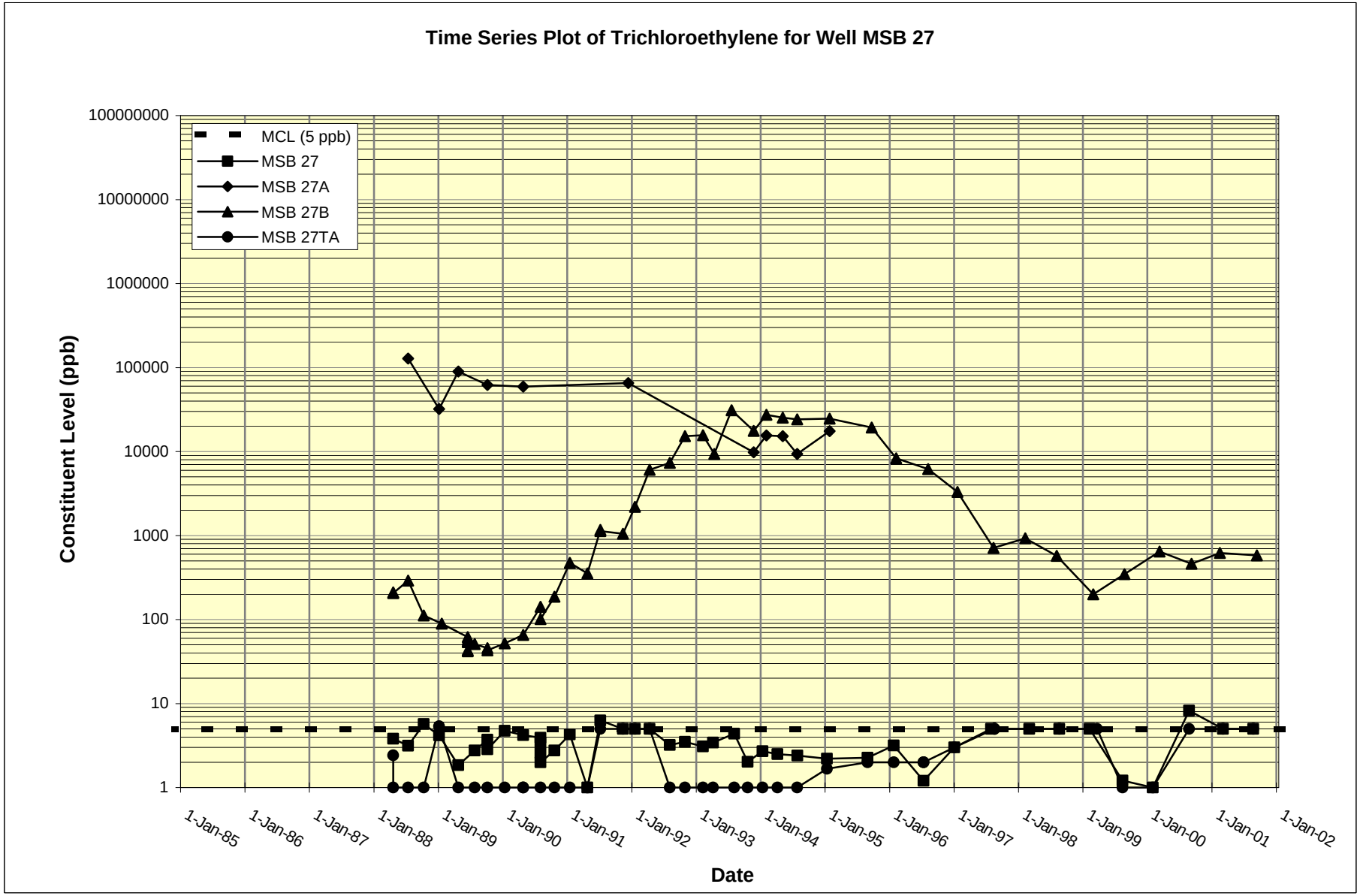
Time Series Plot of Trichloroethylene for Well MSB 27
MCL (5 ppb)
MSB 27
MSB 27A
MSB 27B
MSB 27TA
Constituent Level (ppb)
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
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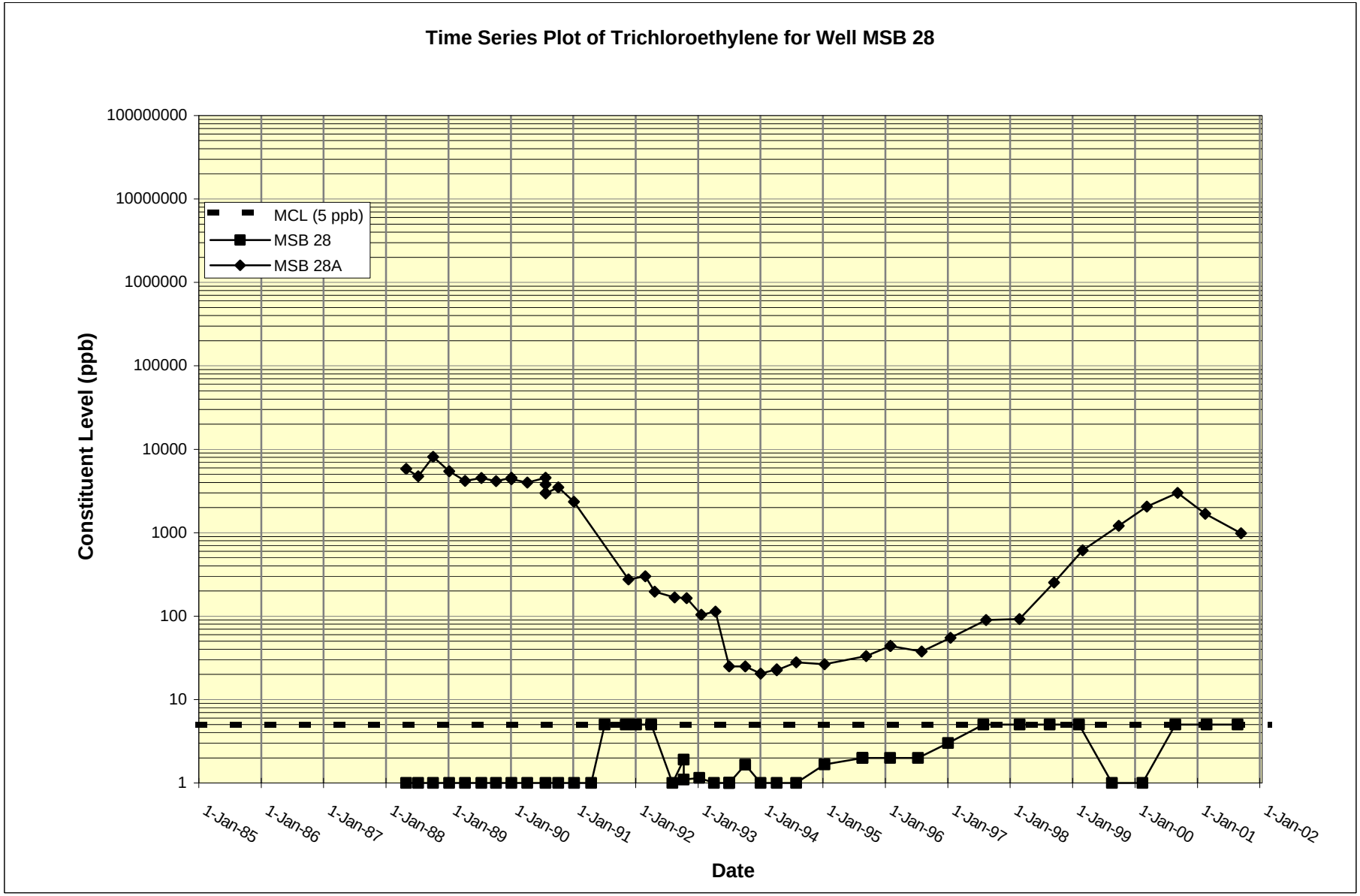
Time Series Plot of Trichloroethylene for Well MSB 28
MCL (5 ppb)
MSB 28
MSB 28A
Constituent Level (ppb)
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
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1-Jan-89
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1-Jan-94
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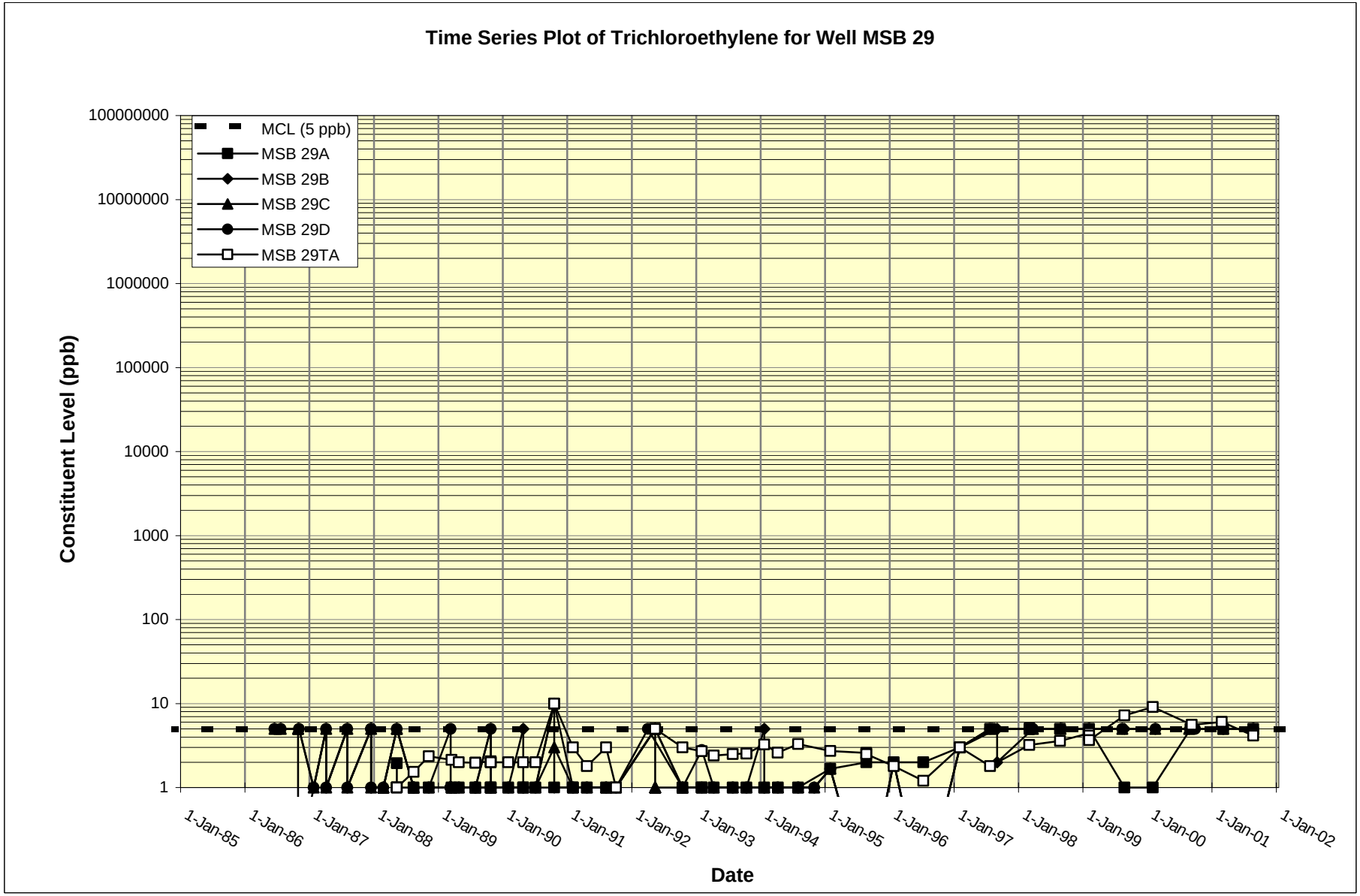
1-Jan-02
Date


Time Series Plot of Trichloroethylene for Well MSB 29
MCL (5 ppb)
MSB 29A
MSB 29B
MSB 29C
MSB 29D
MSB 29TA
Constituent Level (ppb)
100000000
10000000
1000000
100000
10000
1000
100
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1-Jan-85
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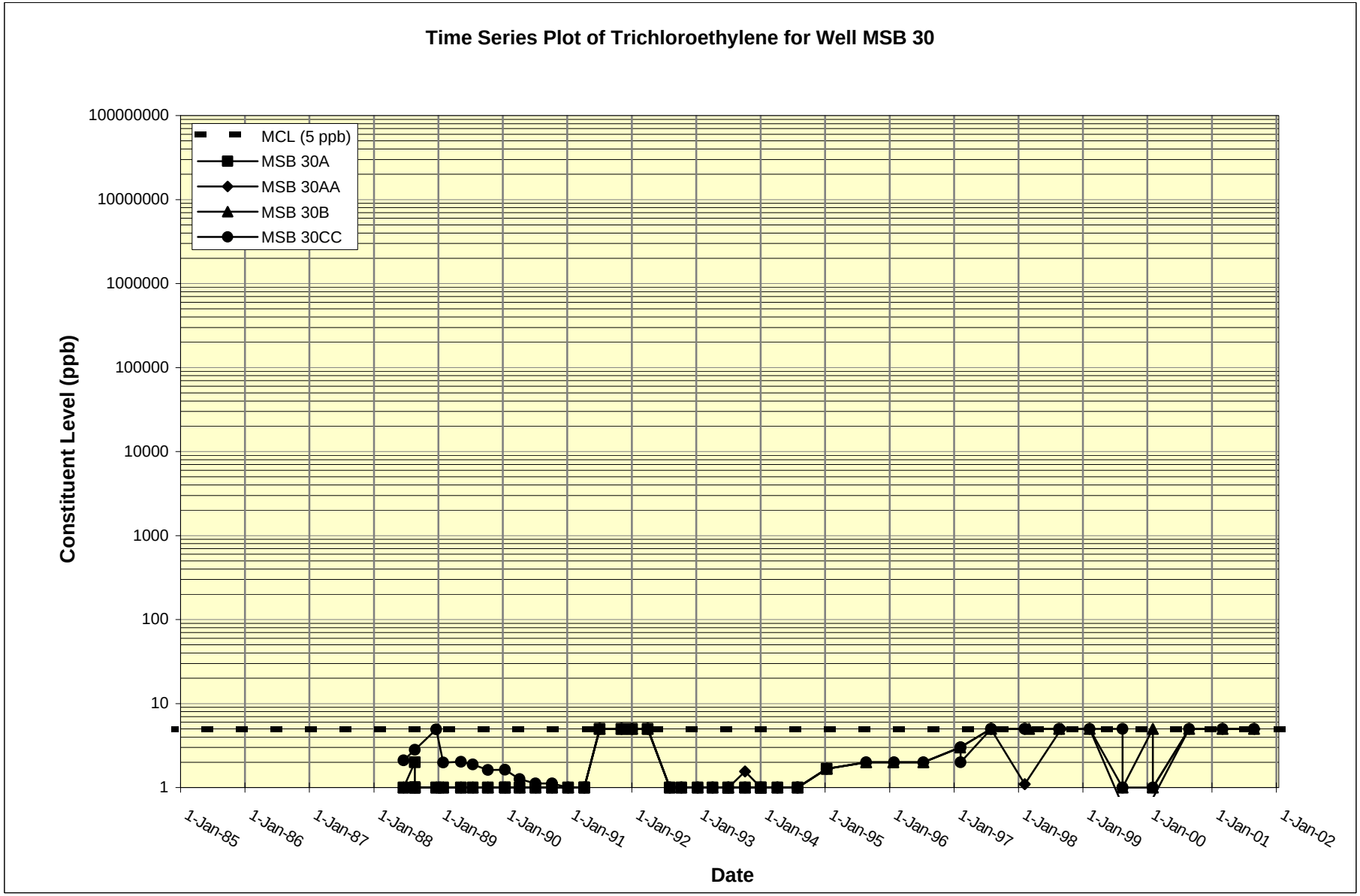
1-Jan-02
Date


Time Series Plot of Trichloroethylene for Well MSB 30
MCL (5 ppb)
MSB 30A
MSB 30AA
MSB 30B
MSB 30CC
Constituent Level (ppb)
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
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1-Jan-94
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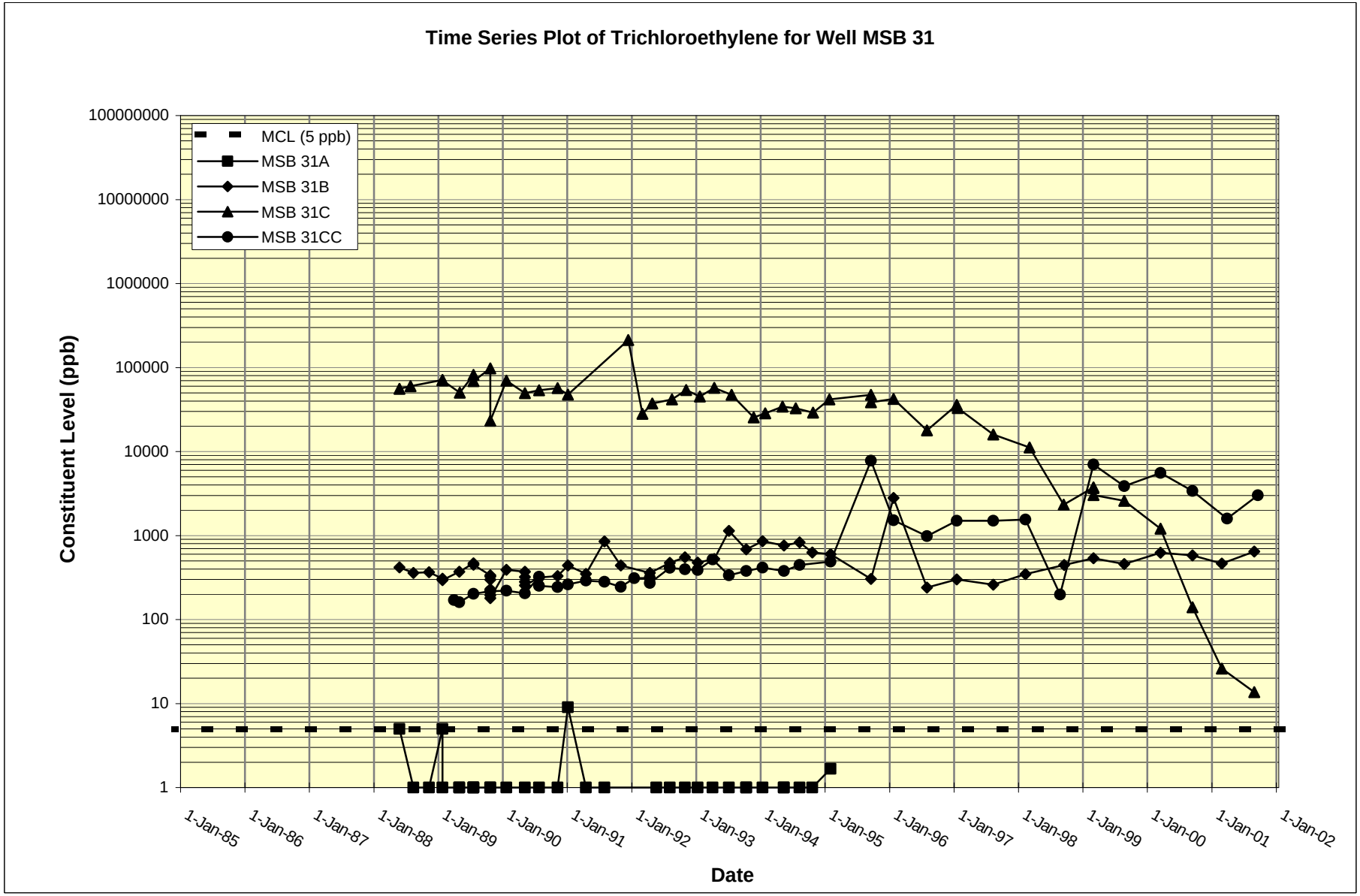
1-Jan-00
1-Jan-01
1-Jan-02
Date


Time Series Plot of Trichloroethylene for Well MSB 31
MCL (5 ppb)
MSB 31A
MSB 31B
MSB 31C
MSB 31CC
Constituent Level (ppb)
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
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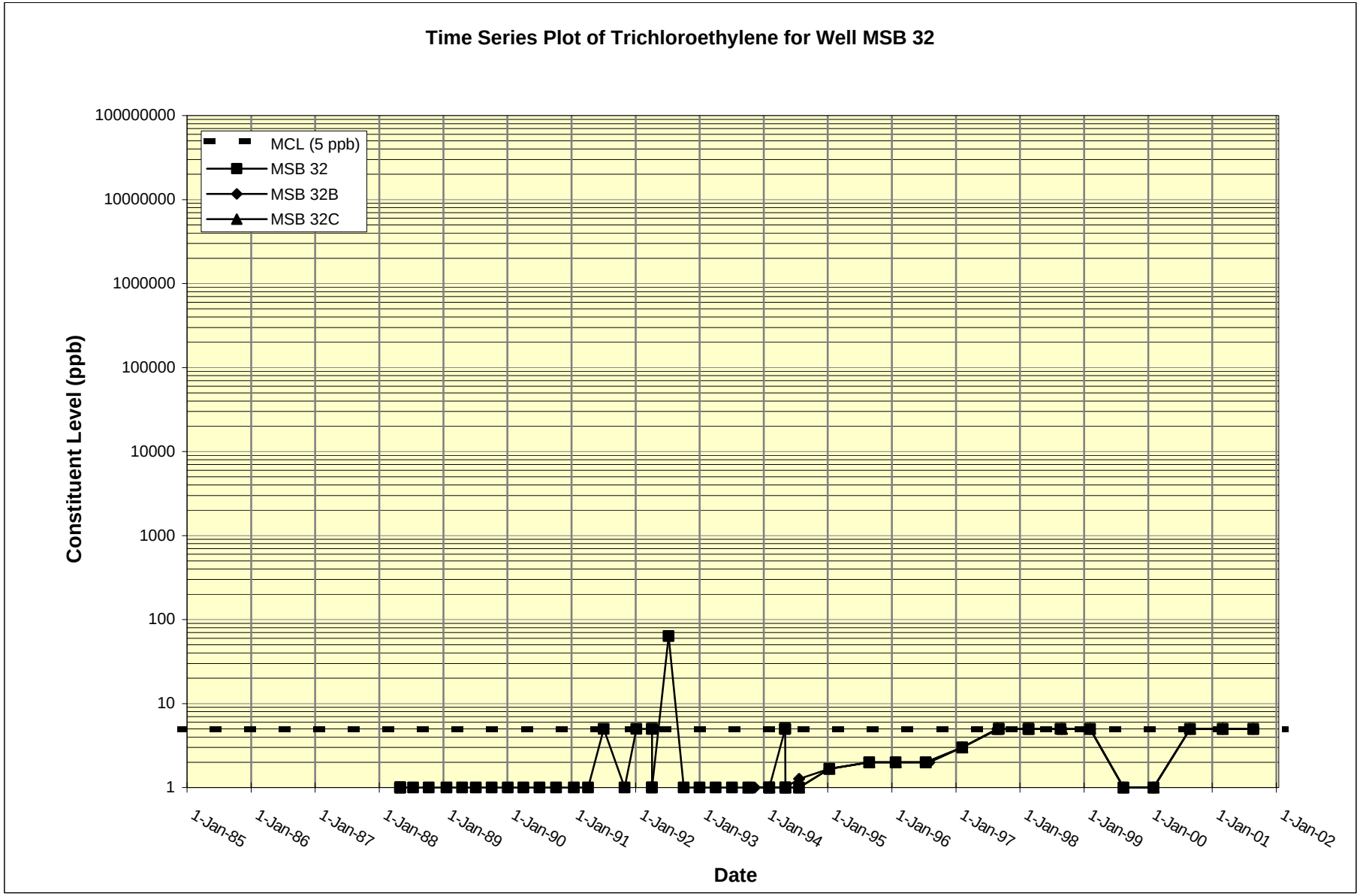
1-Jan-01
1-Jan-02
Date


Time Series Plot of Trichloroethylene for Well MSB 32
MCL (5 ppb)
MSB 32
MSB 32B
MSB 32C
Constituent Level (ppb)
100000000
10000000
1000000
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10000
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100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
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1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
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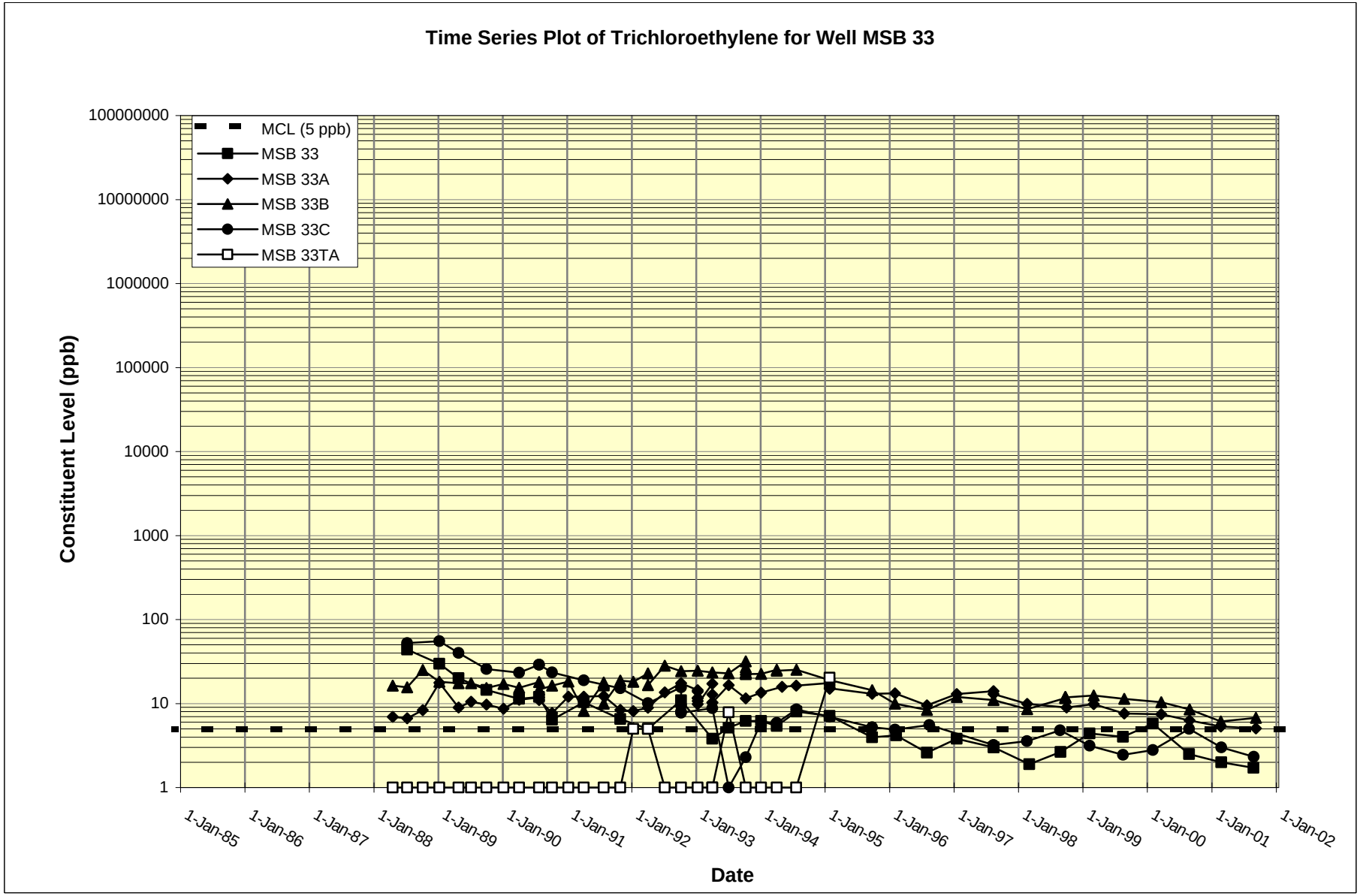
1-Jan-98
1-Jan-99
1-Jan-00
1-Jan-01
1-Jan-02
Date


Time Series Plot of Trichloroethylene for Well MSB 33
MCL (5 ppb)
MSB 33
MSB 33A
MSB 33B
MSB 33C
MSB 33TA
Constituent Level (ppb)
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
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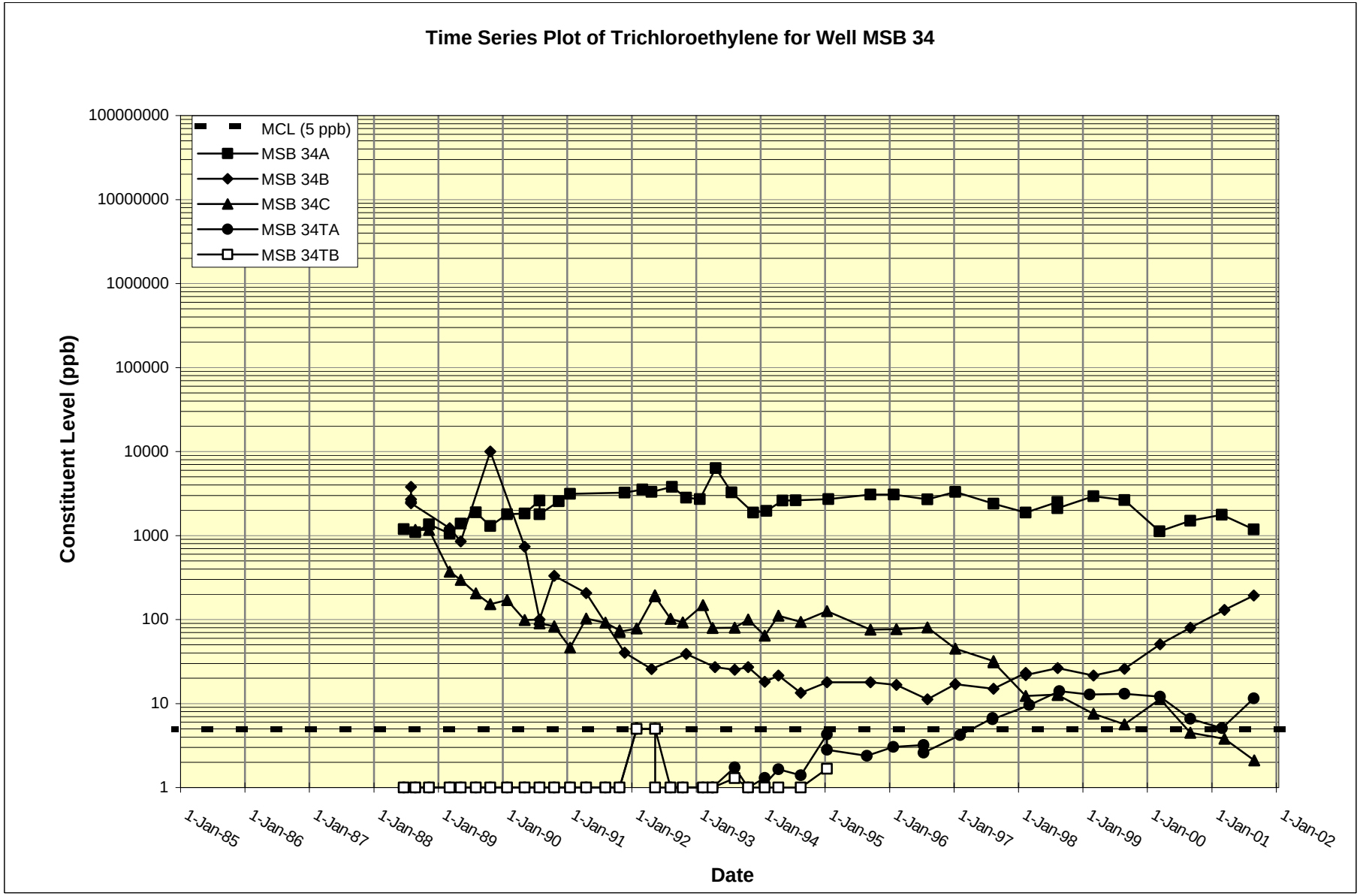
1-Jan-01
1-Jan-02
Date


Time Series Plot of Trichloroethylene for Well MSB 34
MCL (5 ppb)
MSB 34A
MSB 34B
MSB 34C
MSB 34TA
MSB 34TB
Constituent Level (ppb)
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
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1-Jan-94
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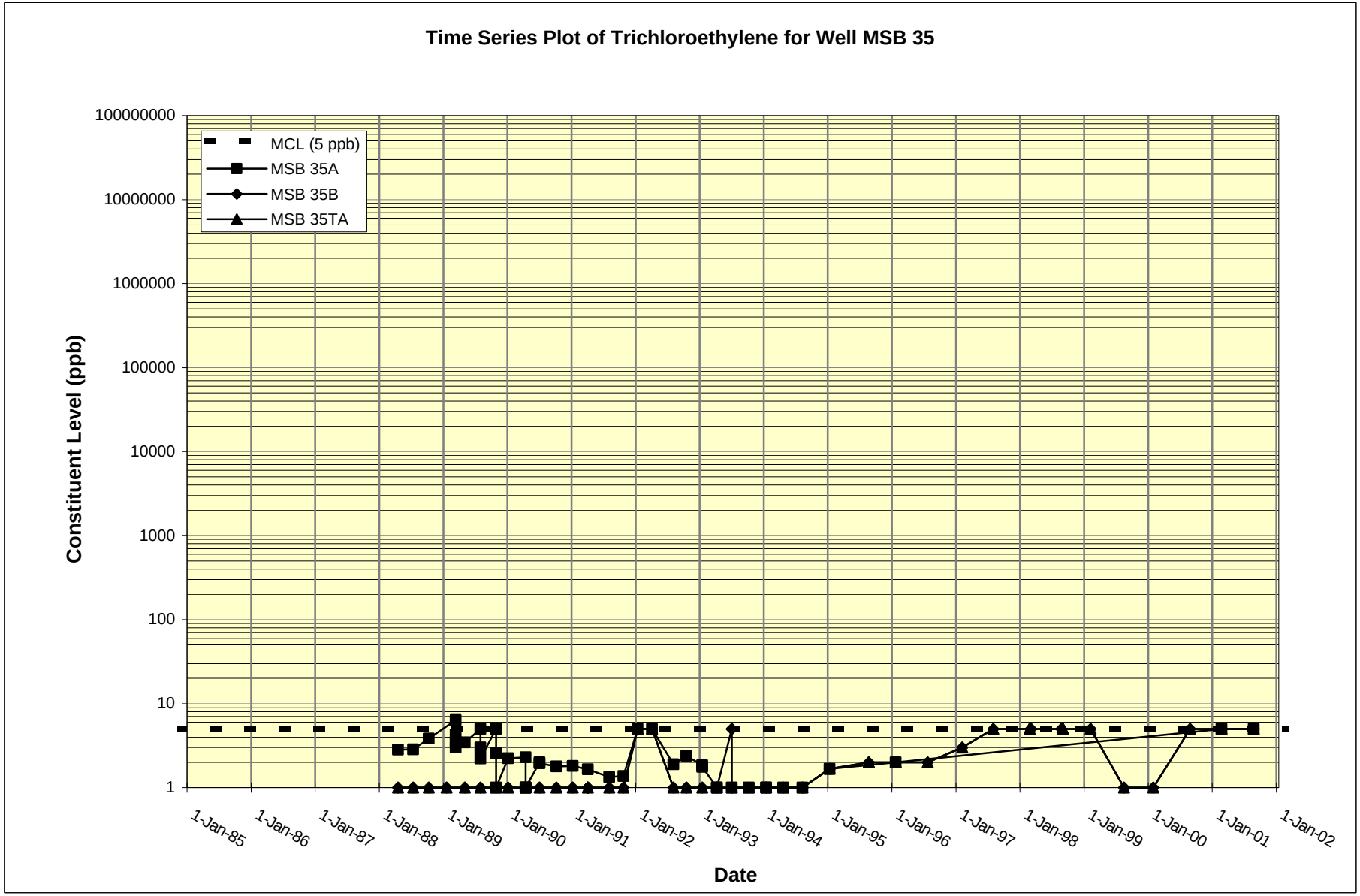
1-Jan-02
Date


Time Series Plot of Trichloroethylene for Well MSB 35
MCL (5 ppb)
MSB 35A
MSB 35B
MSB 35TA
Constituent Level (ppb)
100000000
10000000
1000000
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10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
1-Jan-95
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1-Jan-97
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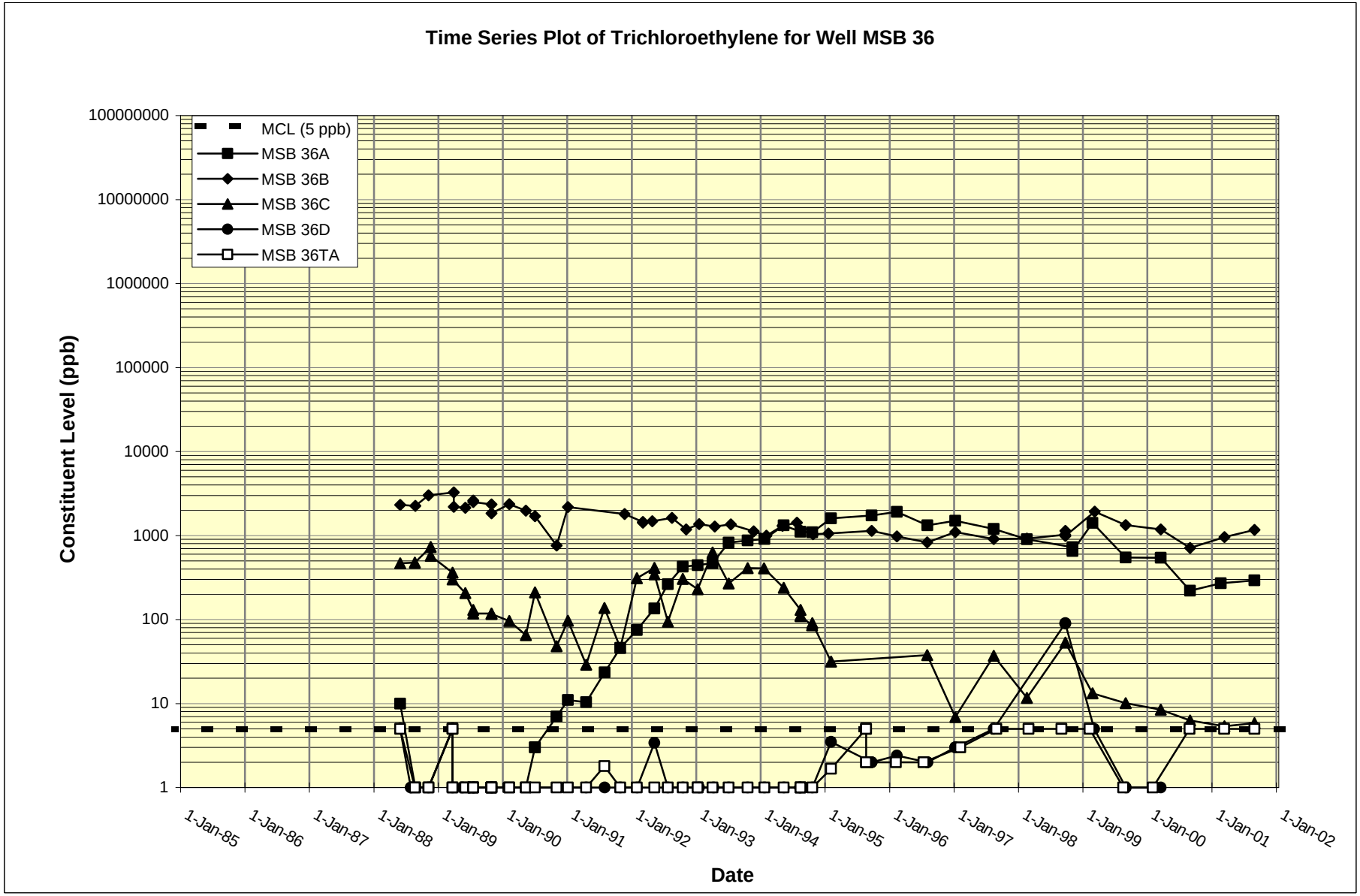
1-Jan-00
1-Jan-01
1-Jan-02
Date


Time Series Plot of Trichloroethylene for Well MSB 36
MCL (5 ppb)
MSB 36A
MSB 36B
MSB 36C
MSB 36D
MSB 36TA
Constituent Level (ppb)
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
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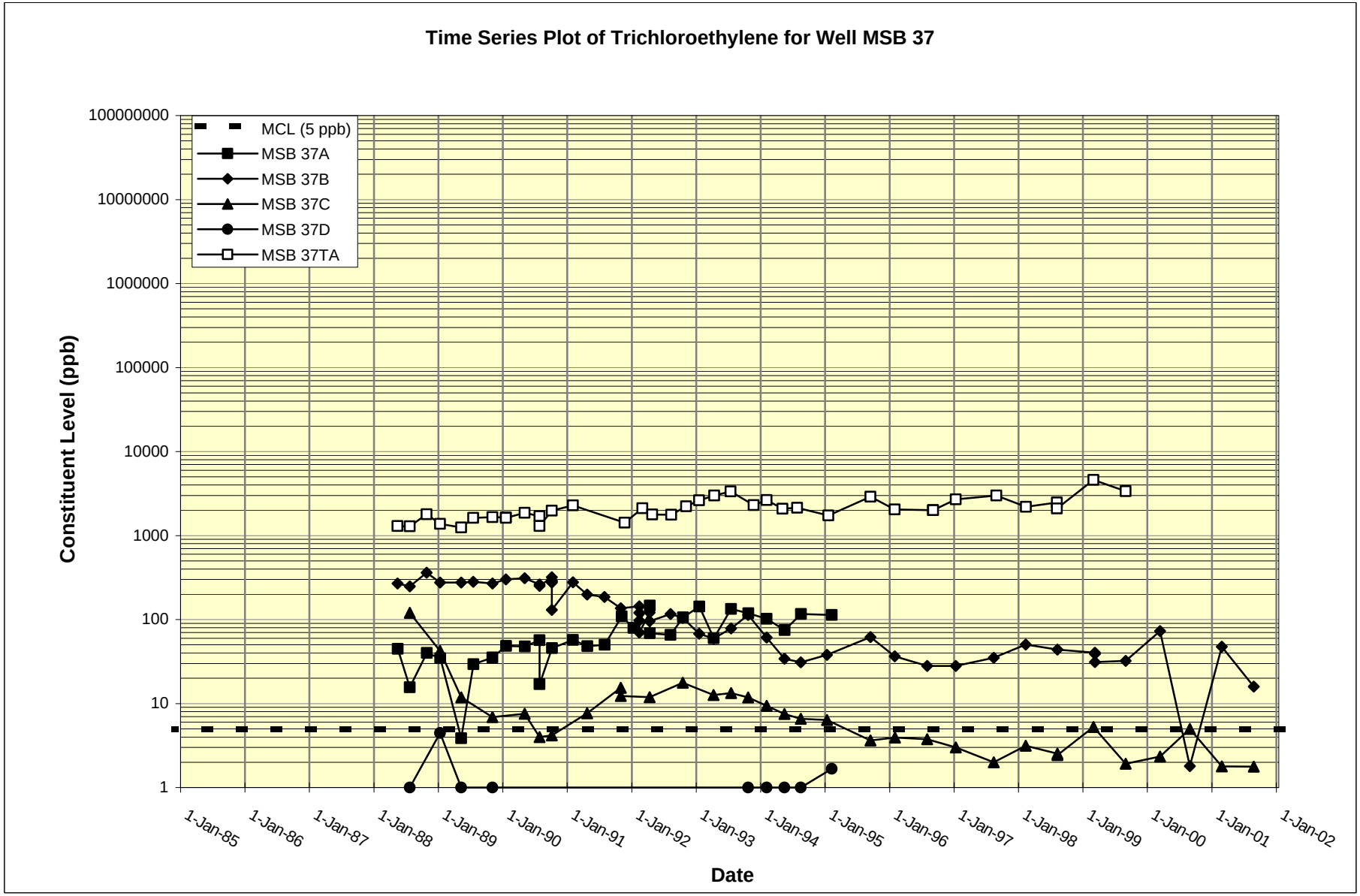
1-Jan-01
1-Jan-02
Date


Time Series Plot of Trichloroethylene for Well MSB 37
MCL (5 ppb)
MSB 37A
MSB 37B
MSB 37C
MSB 37D
MSB 37TA
Constituent Level (ppb)
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
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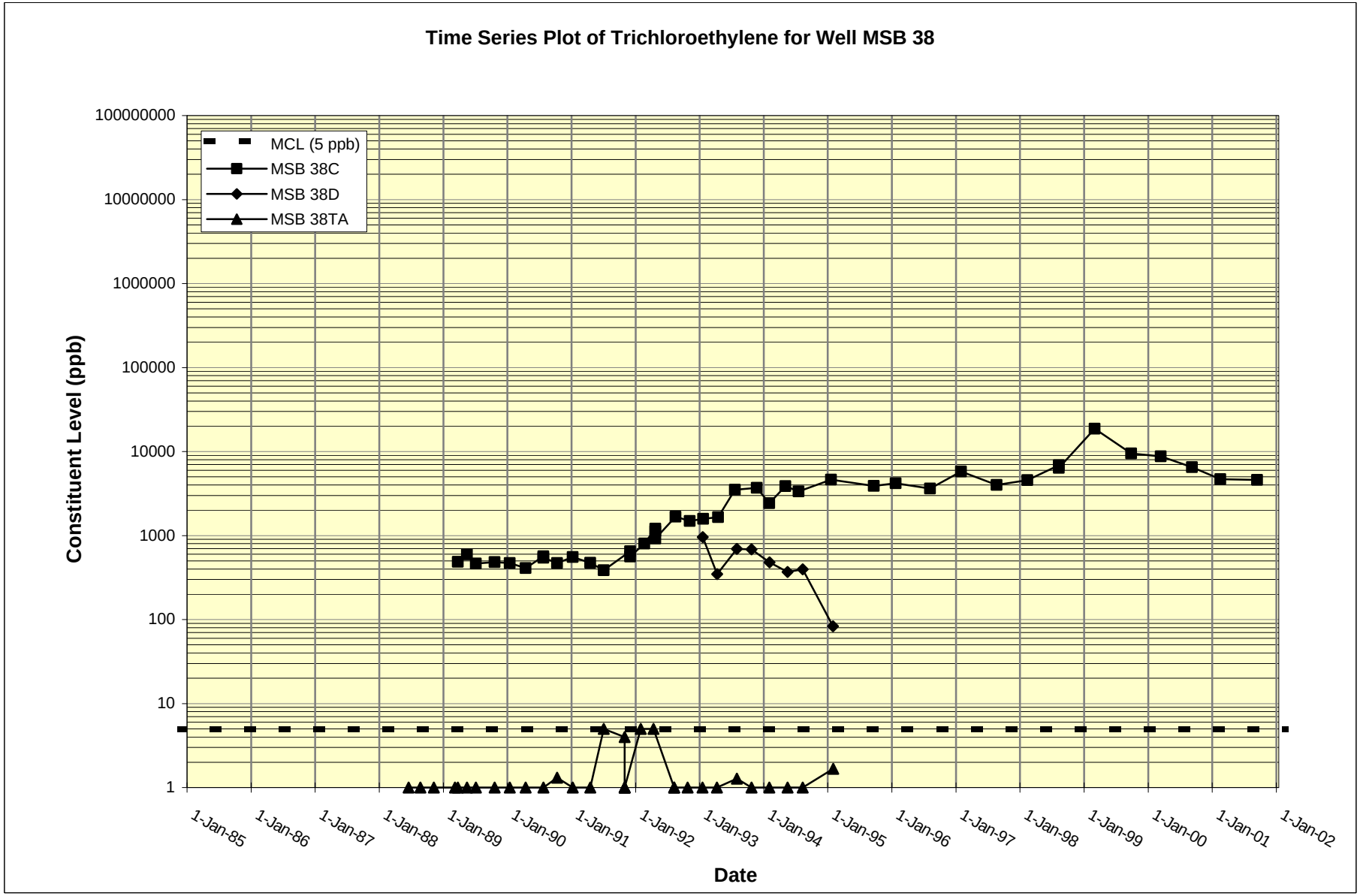
1-Jan-01
1-Jan-02
Date


Time Series Plot of Trichloroethylene for Well MSB 38
MCL (5 ppb)
MSB 38C
MSB 38D
MSB 38TA
Constituent Level (ppb)
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
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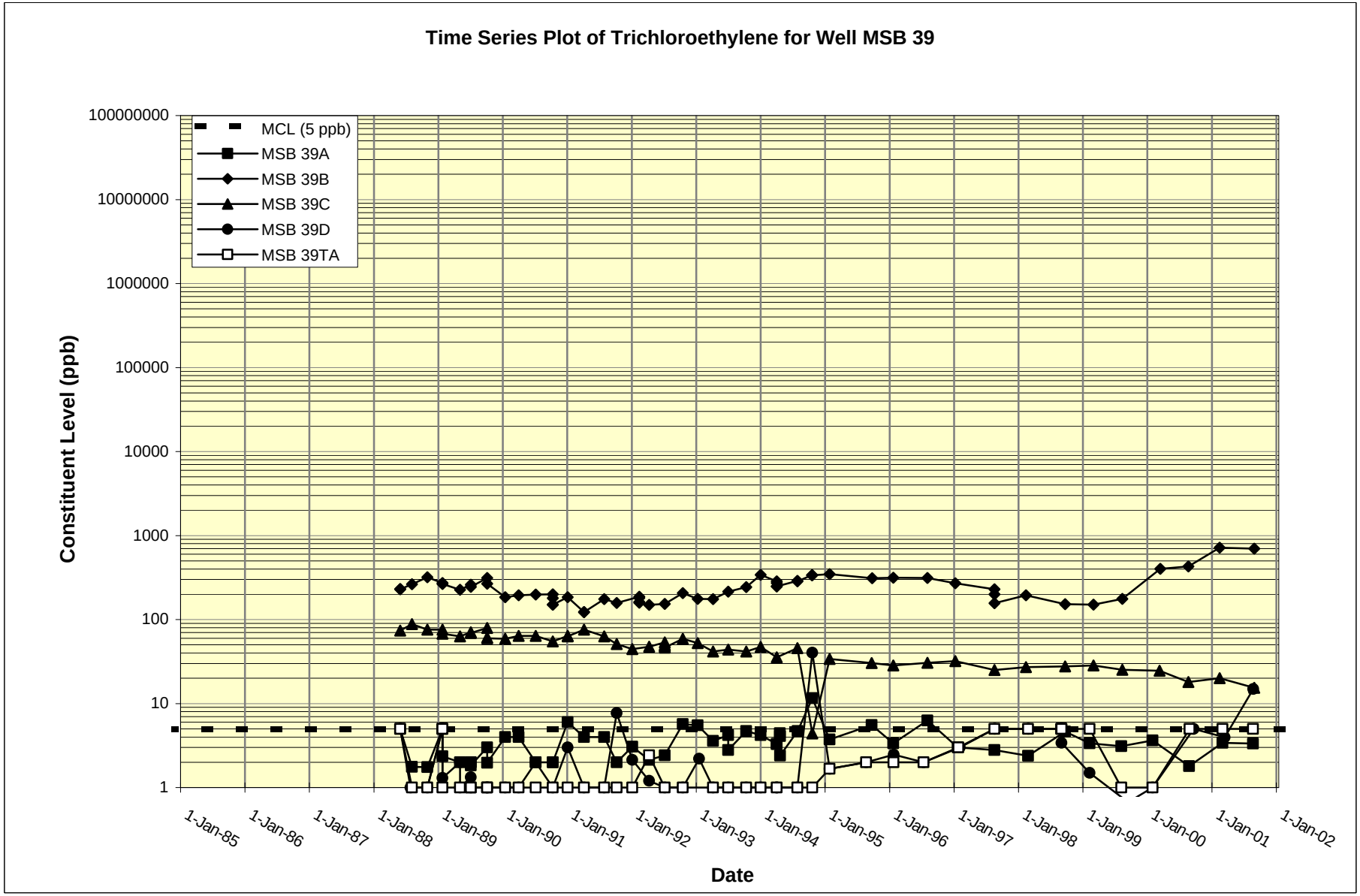
1-Jan-00
1-Jan-01
1-Jan-02
Date


Time Series Plot of Trichloroethylene for Well MSB 39
MCL (5 ppb)
MSB 39A
MSB 39B
MSB 39C
MSB 39D
MSB 39TA
Constituent Level (ppb)
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
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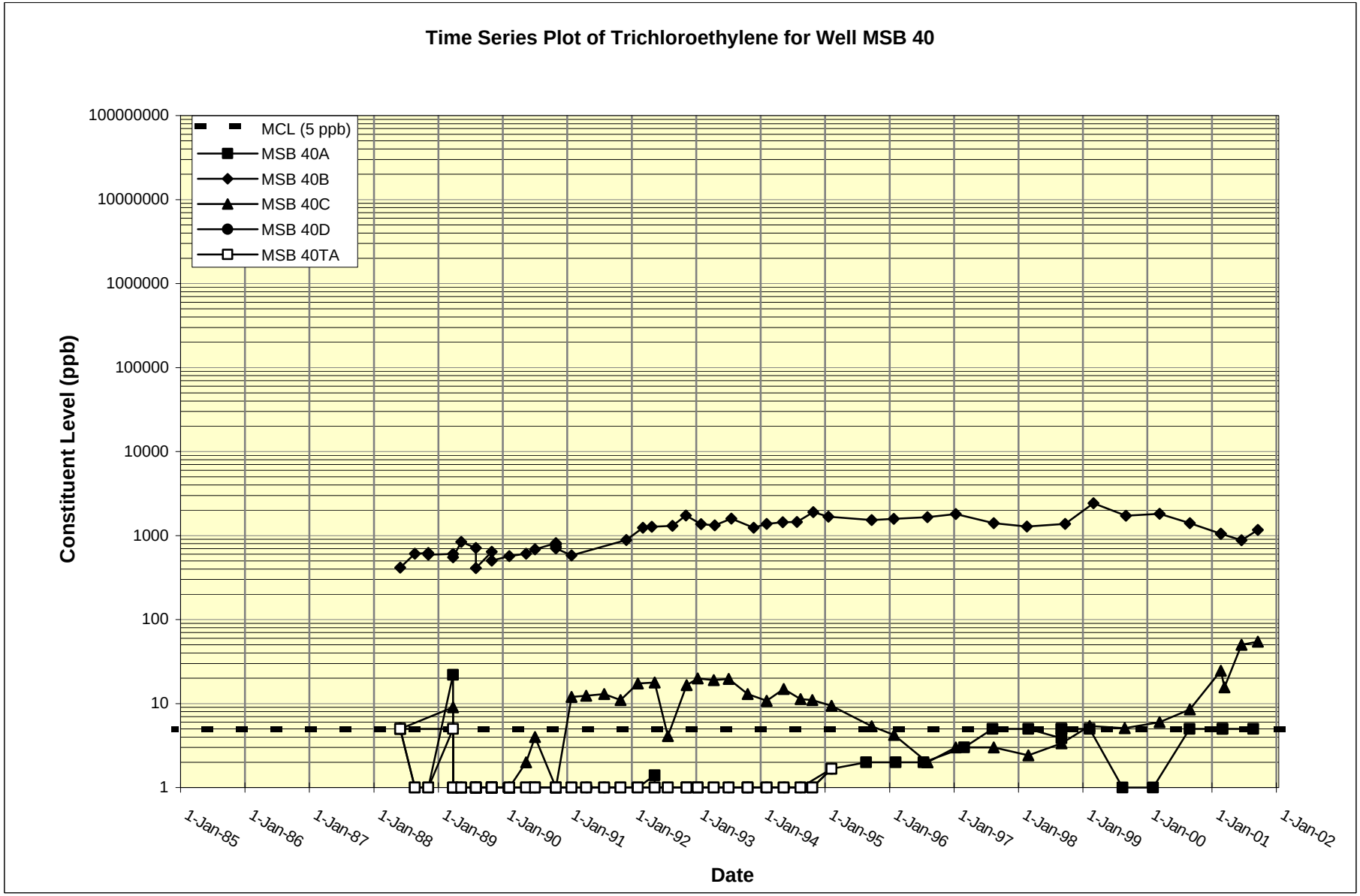
1-Jan-01
1-Jan-02
Date


Time Series Plot of Trichloroethylene for Well MSB 40
MCL (5 ppb)
MSB 40A
MSB 40B
MSB 40C
MSB 40D
MSB 40TA
Constituent Level (ppb)
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
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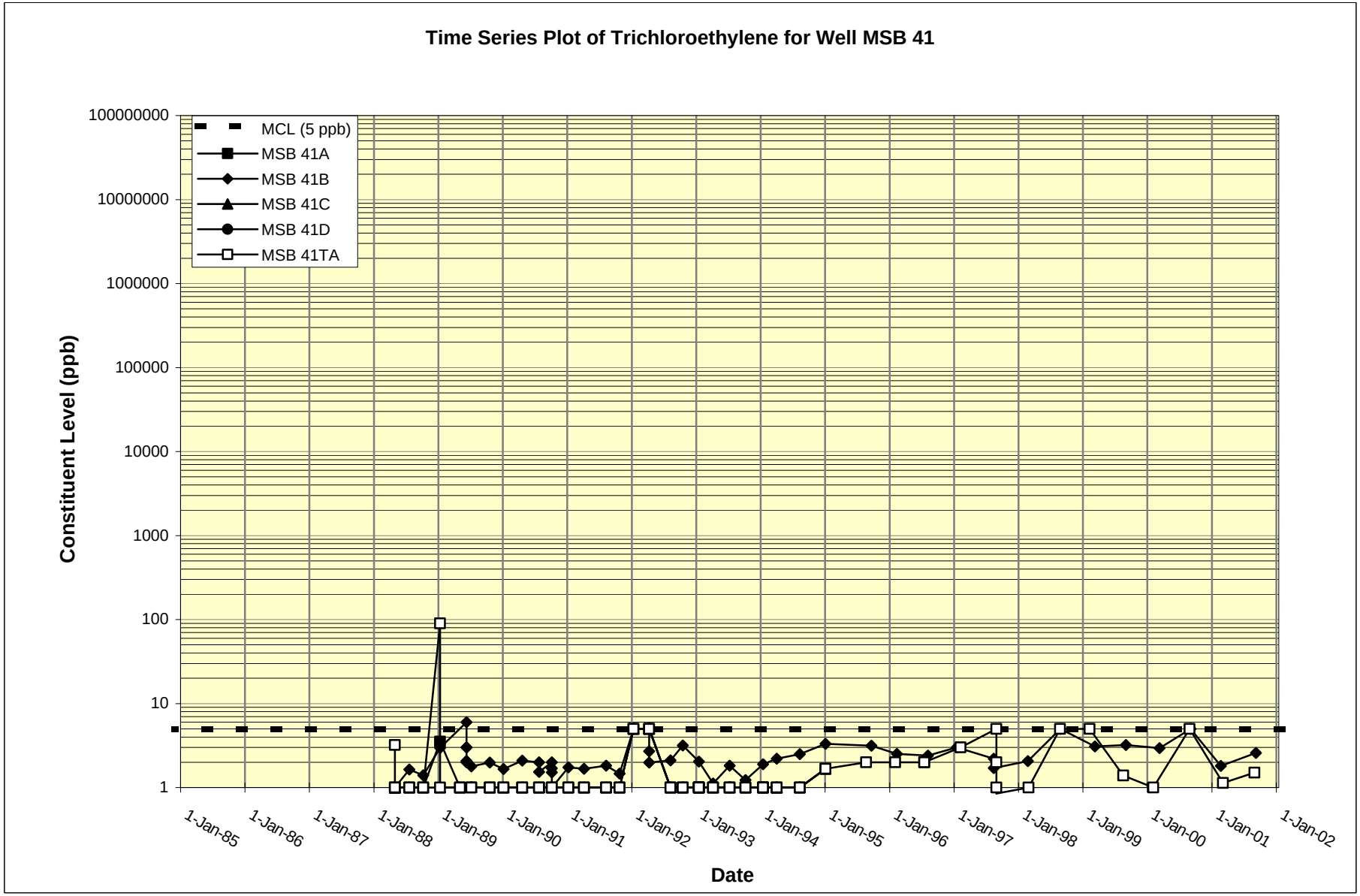
1-Jan-01
1-Jan-02
Date


Time Series Plot of Trichloroethylene for Well MSB 41
MCL (5 ppb)
MSB 41A
MSB 41B
MSB 41C
MSB 41D
MSB 41TA
Constituent Level (ppb)
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
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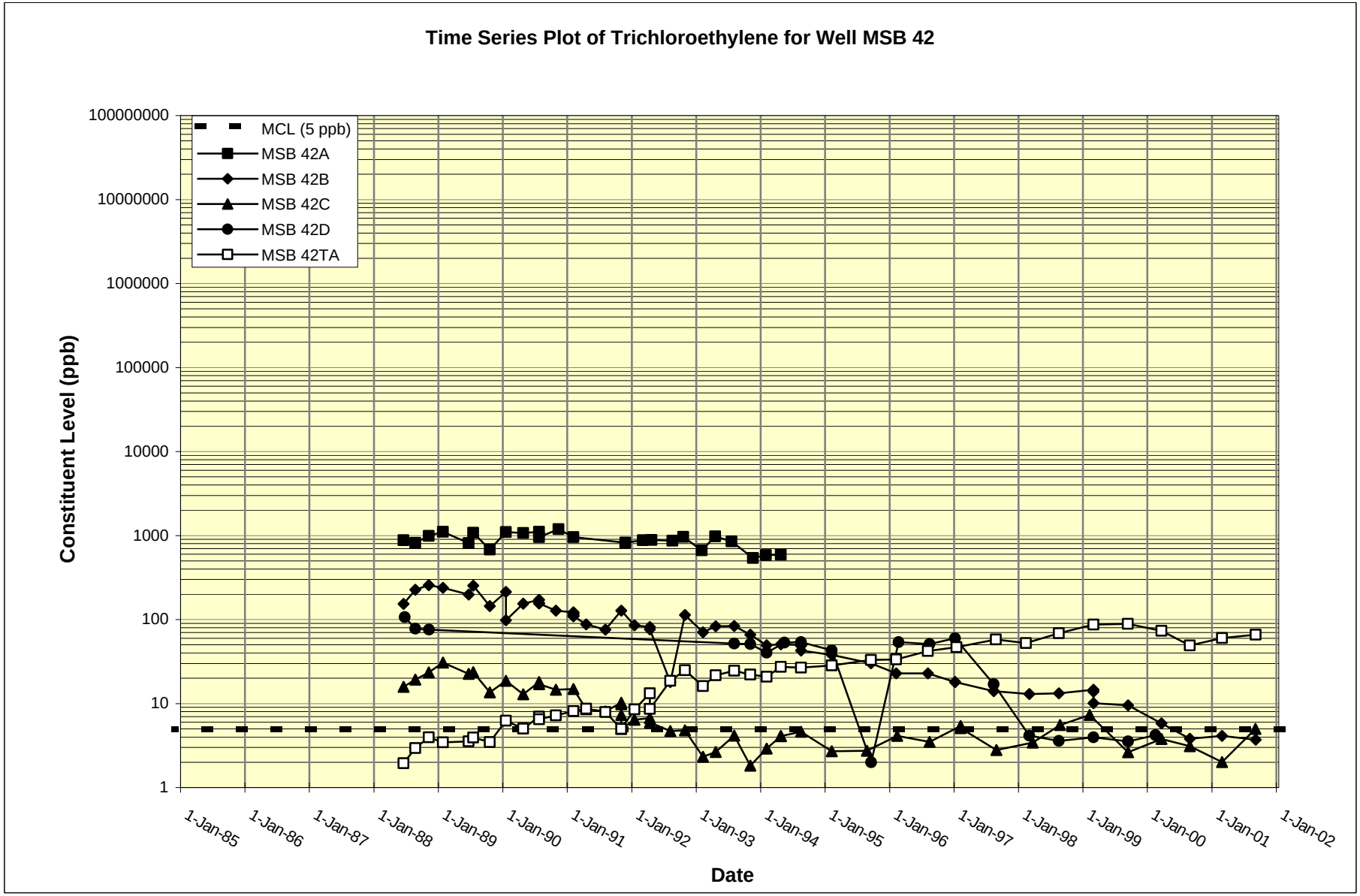
1-Jan-00
1-Jan-01
1-Jan-02
Date


Time Series Plot of Trichloroethylene for Well MSB 42
MCL (5 ppb)
MSB 42A
MSB 42B
MSB 42C
MSB 42D
MSB 42TA
Constituent Level (ppb)
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
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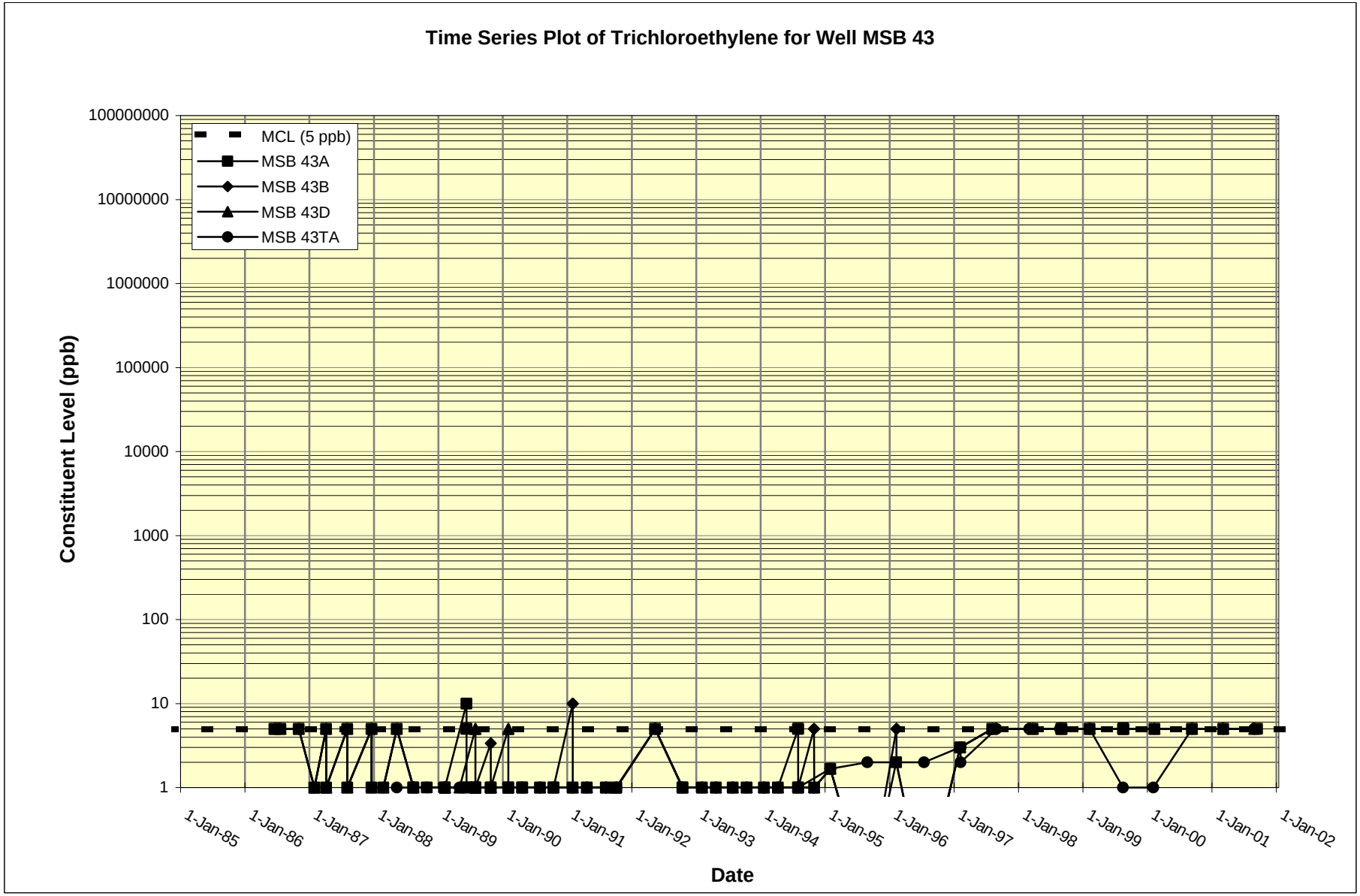
1-Jan-02
Date


Time Series Plot of Trichloroethylene for Well MSB 43
MCL (5 ppb)
MSB 43A
MSB 43B
MSB 43D
MSB 43TA
Constituent Level (ppb)
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
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1-Jan-94
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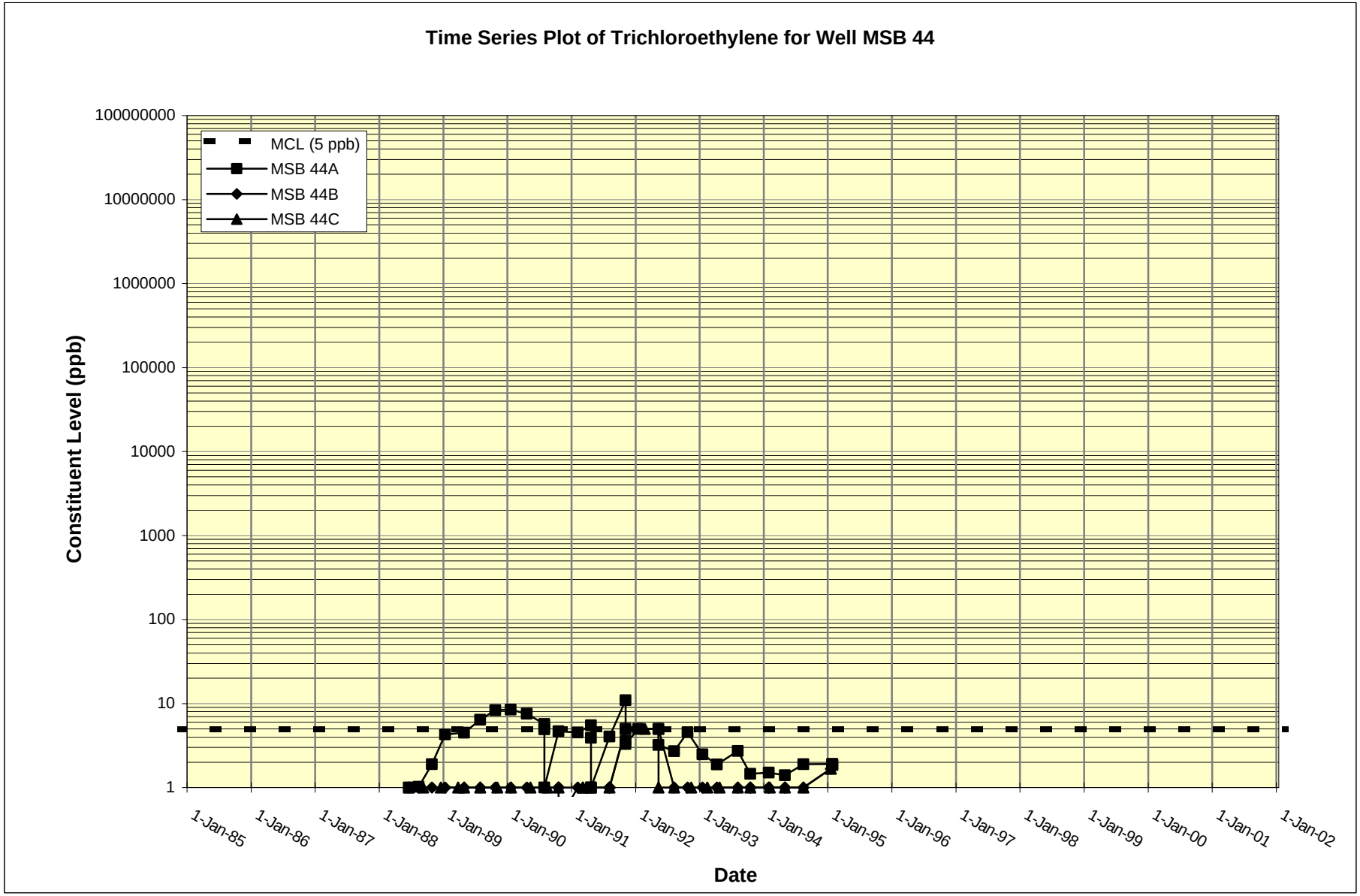
1-Jan-02
Date


Time Series Plot of Trichloroethylene for Well MSB 44
MCL (5 ppb)
MSB 44A
MSB 44B
MSB 44C
Constituent Level (ppb)
100000000
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1000000
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10000
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100
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1-Jan-86
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1-Jan-89
1-Jan-90
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1-Jan-94
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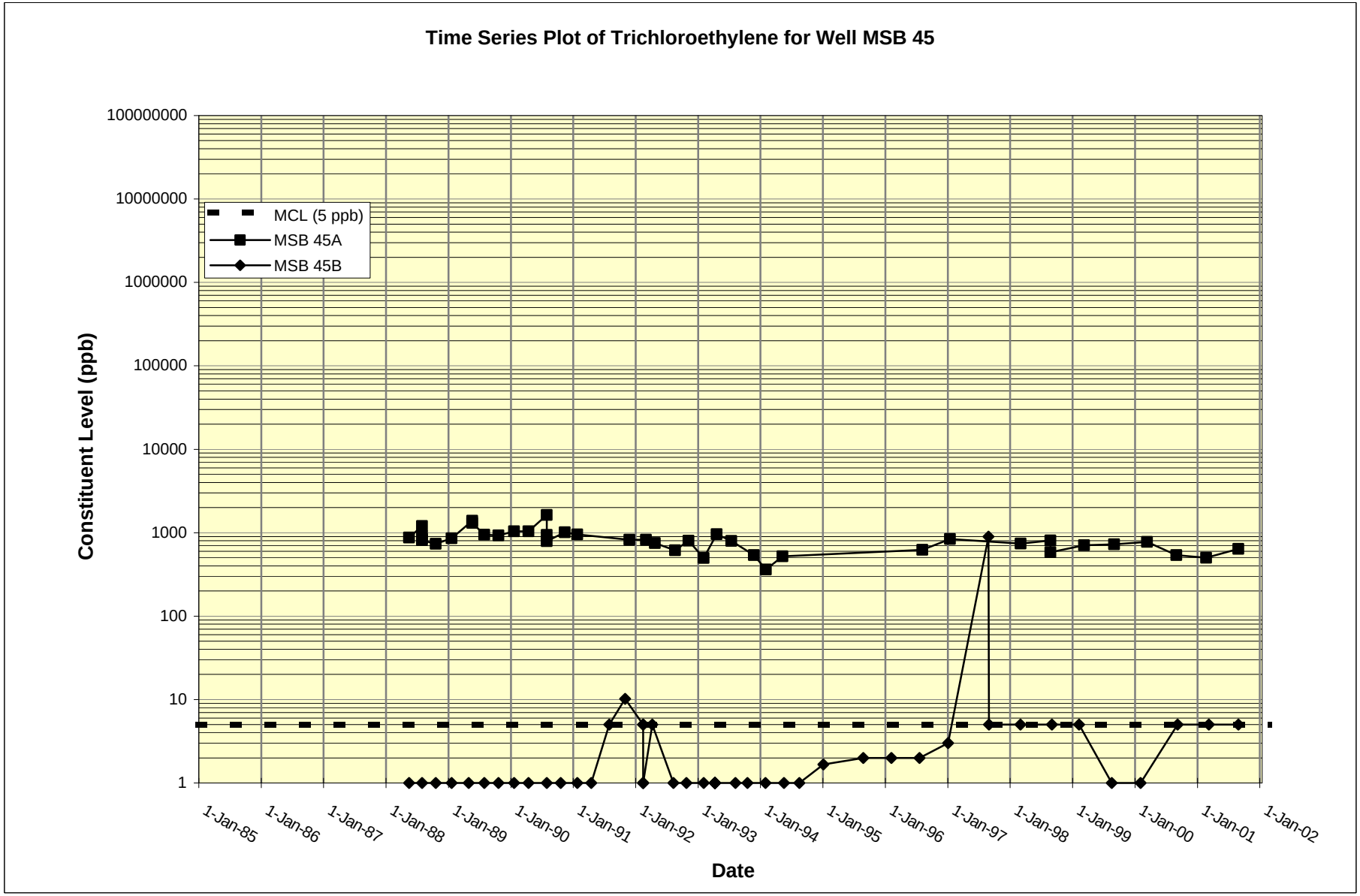
1-Jan-02
Date


Time Series Plot of Trichloroethylene for Well MSB 45
MCL (5 ppb)
MSB 45A
MSB 45B
Constituent Level (ppb)
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
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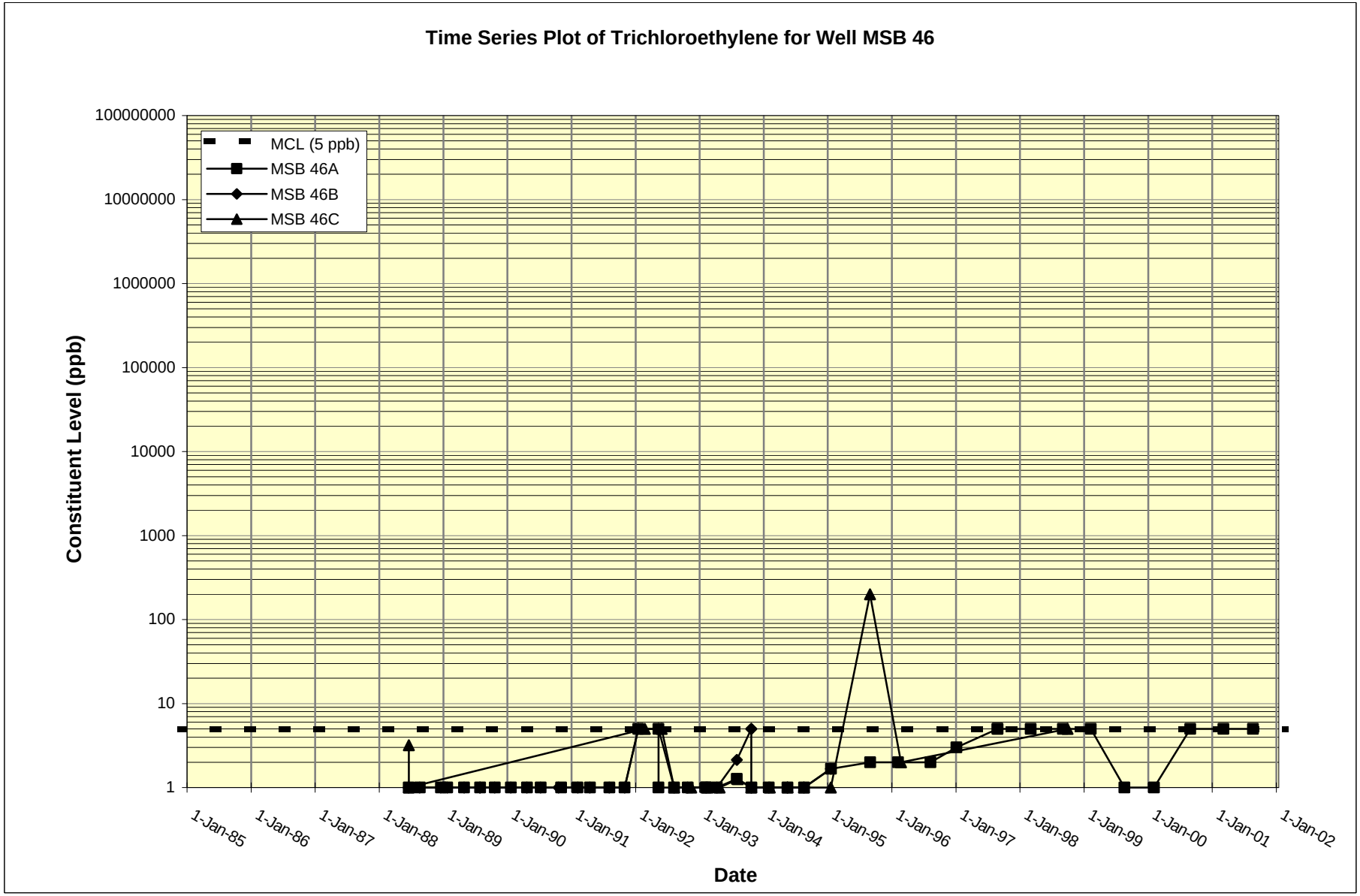
Date


Time Series Plot of Trichloroethylene for Well MSB 46
MCL (5 ppb)
MSB 46A
MSB 46B
MSB 46C
Constituent Level (ppb)
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
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1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
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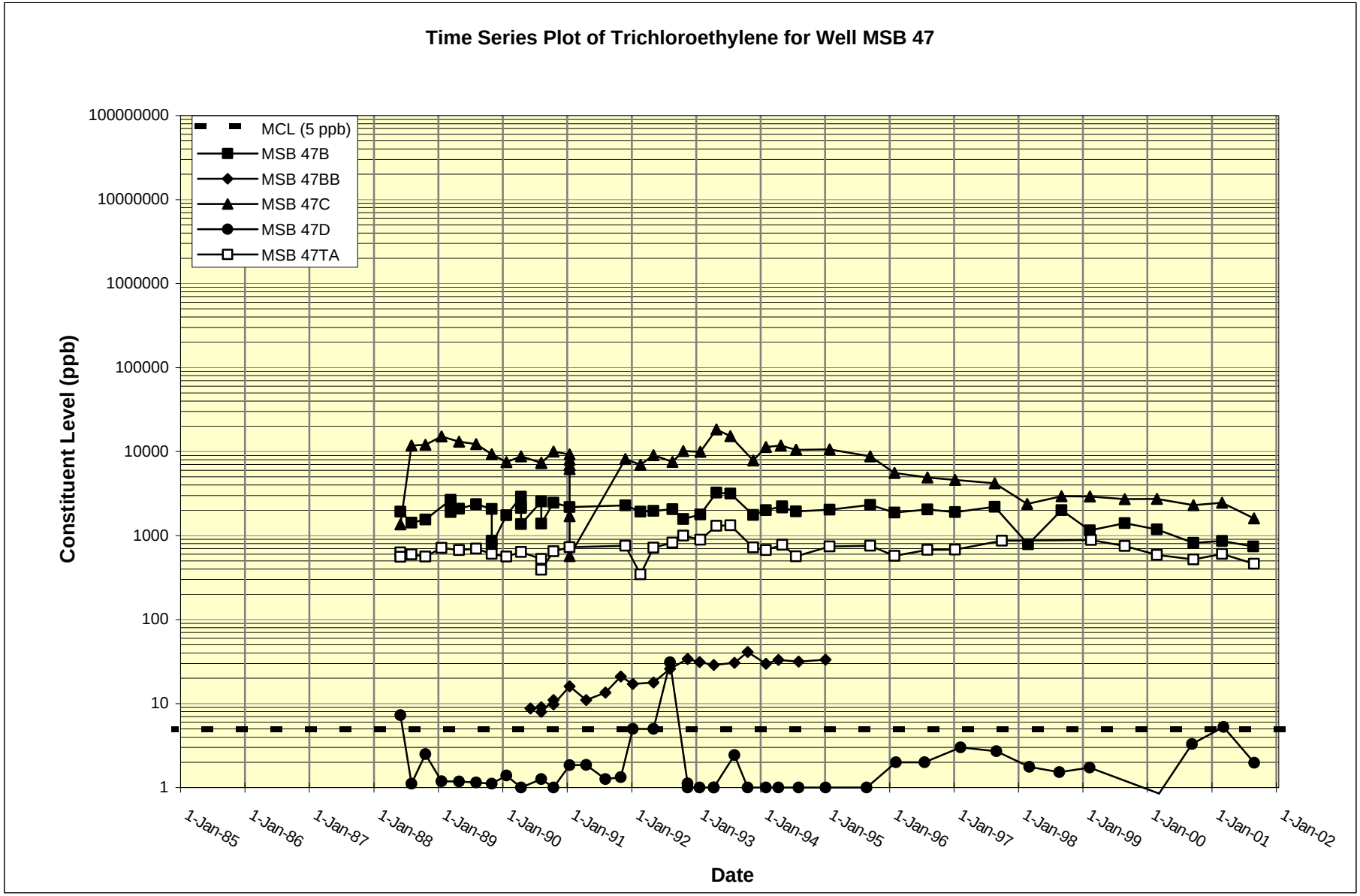
1-Jan-00
1-Jan-01
1-Jan-02
Date


Time Series Plot of Trichloroethylene for Well MSB 47
MCL (5 ppb)
MSB 47B
MSB 47BB
MSB 47C
MSB 47D
MSB 47TA
Constituent Level (ppb)
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
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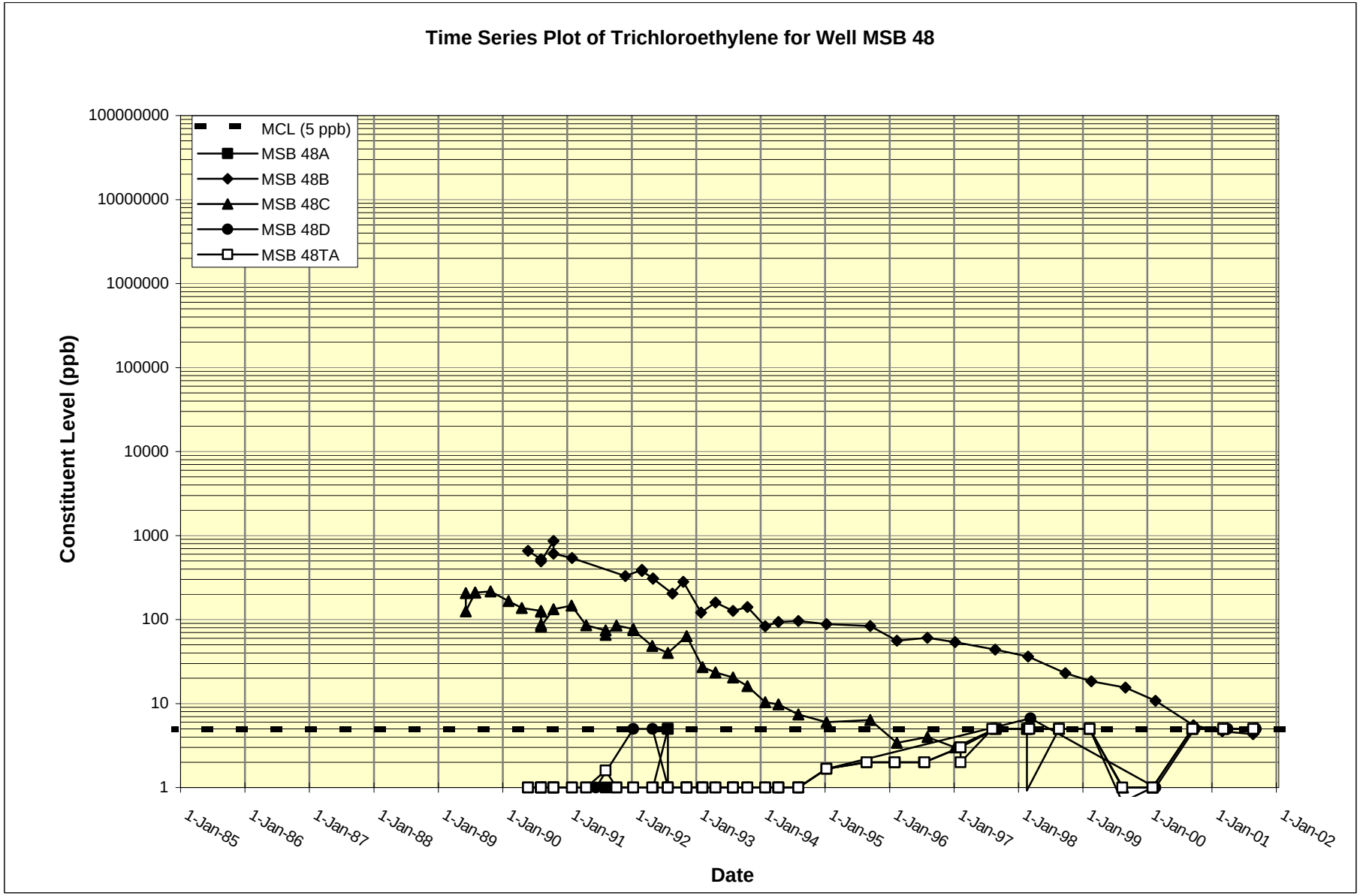
1-Jan-02
Date


Time Series Plot of Trichloroethylene for Well MSB 48
MCL (5 ppb)
MSB 48A
MSB 48B
MSB 48C
MSB 48D
MSB 48TA
Constituent Level (ppb)
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
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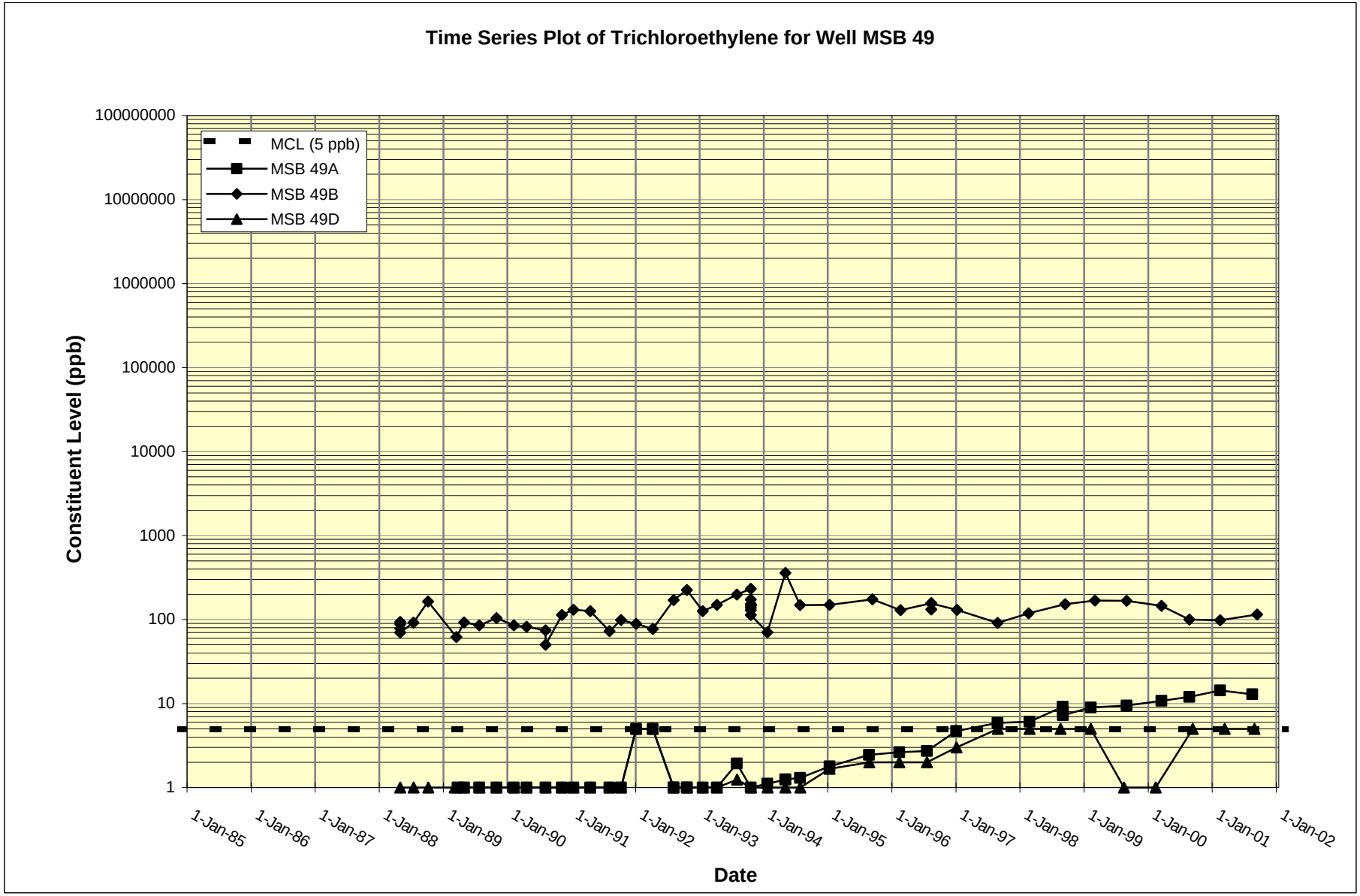
Date


Time Series Plot of Trichloroethylene for Well MSB 49
MCL (5 ppb)
MSB 49A
MSB 49B
MSB 49D
Constituent Level (ppb)
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
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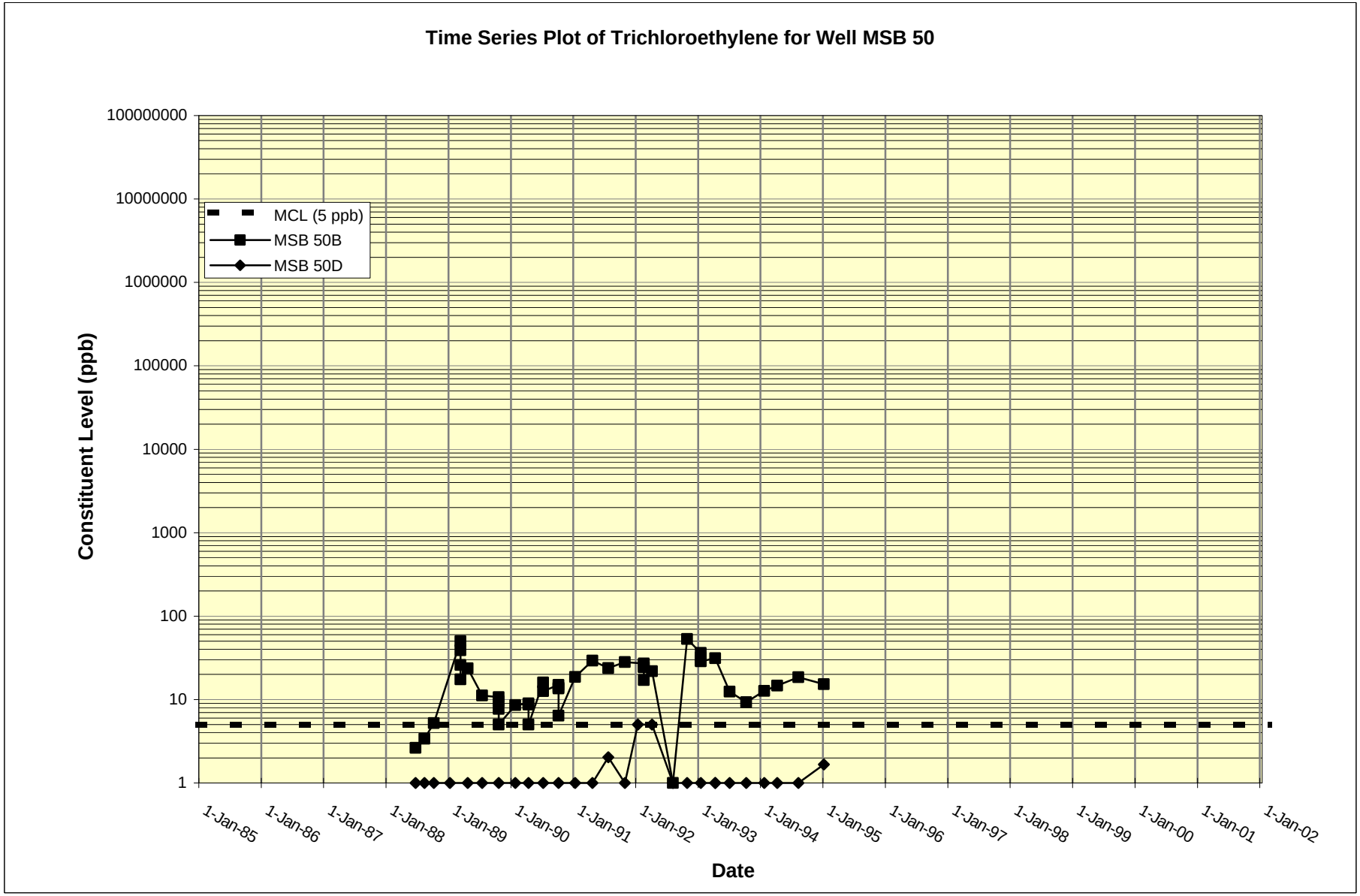
1-Jan-02
Date


Time Series Plot of Trichloroethylene for Well MSB 50
MCL (5 ppb)
MSB 50B
MSB 50D
Constituent Level (ppb)
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
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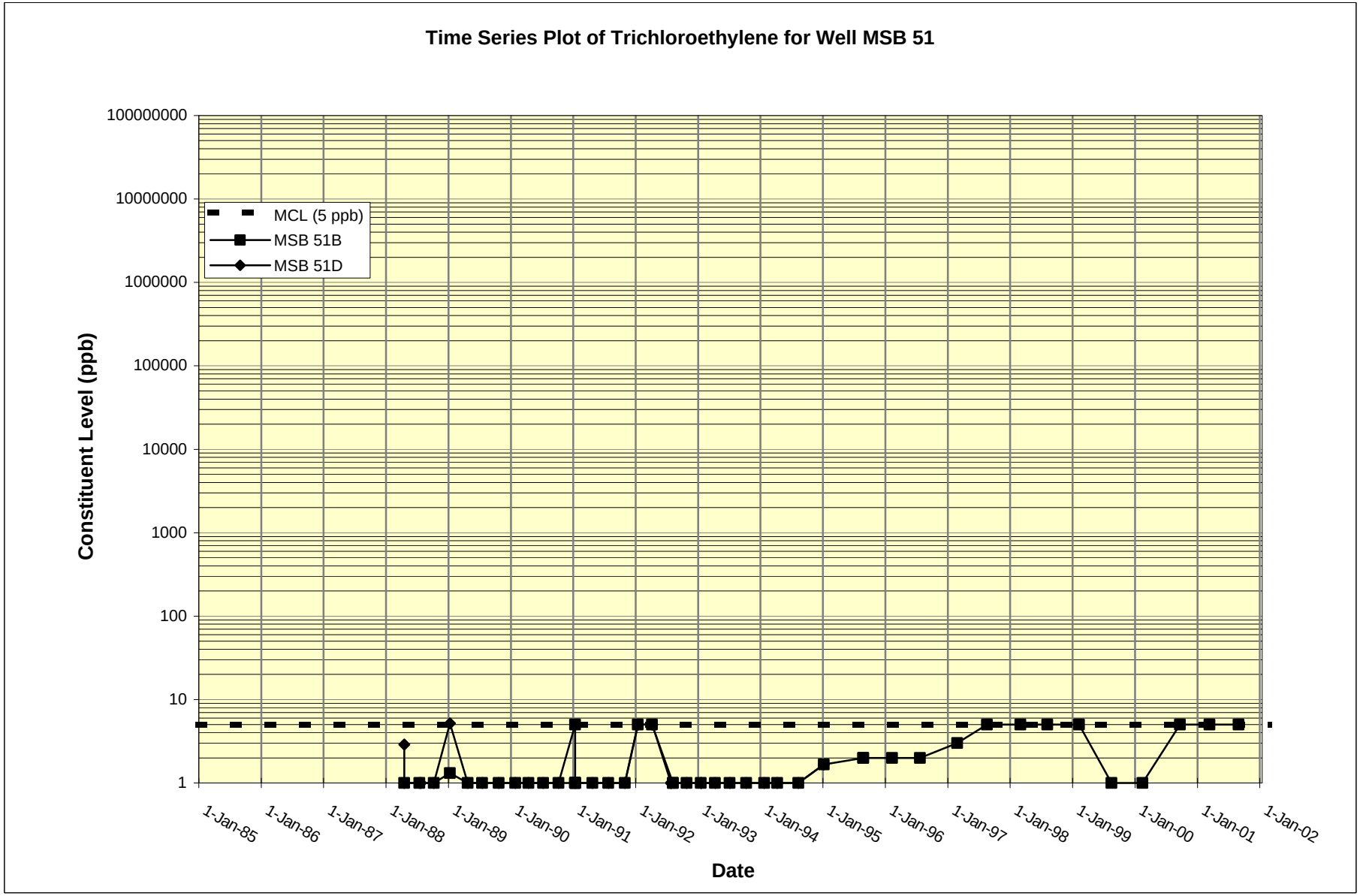
1-Jan-02
Date


Time Series Plot of Trichloroethylene for Well MSB 51
MCL (5 ppb)
MSB 51B
MSB 51D
Constituent Level (ppb)
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
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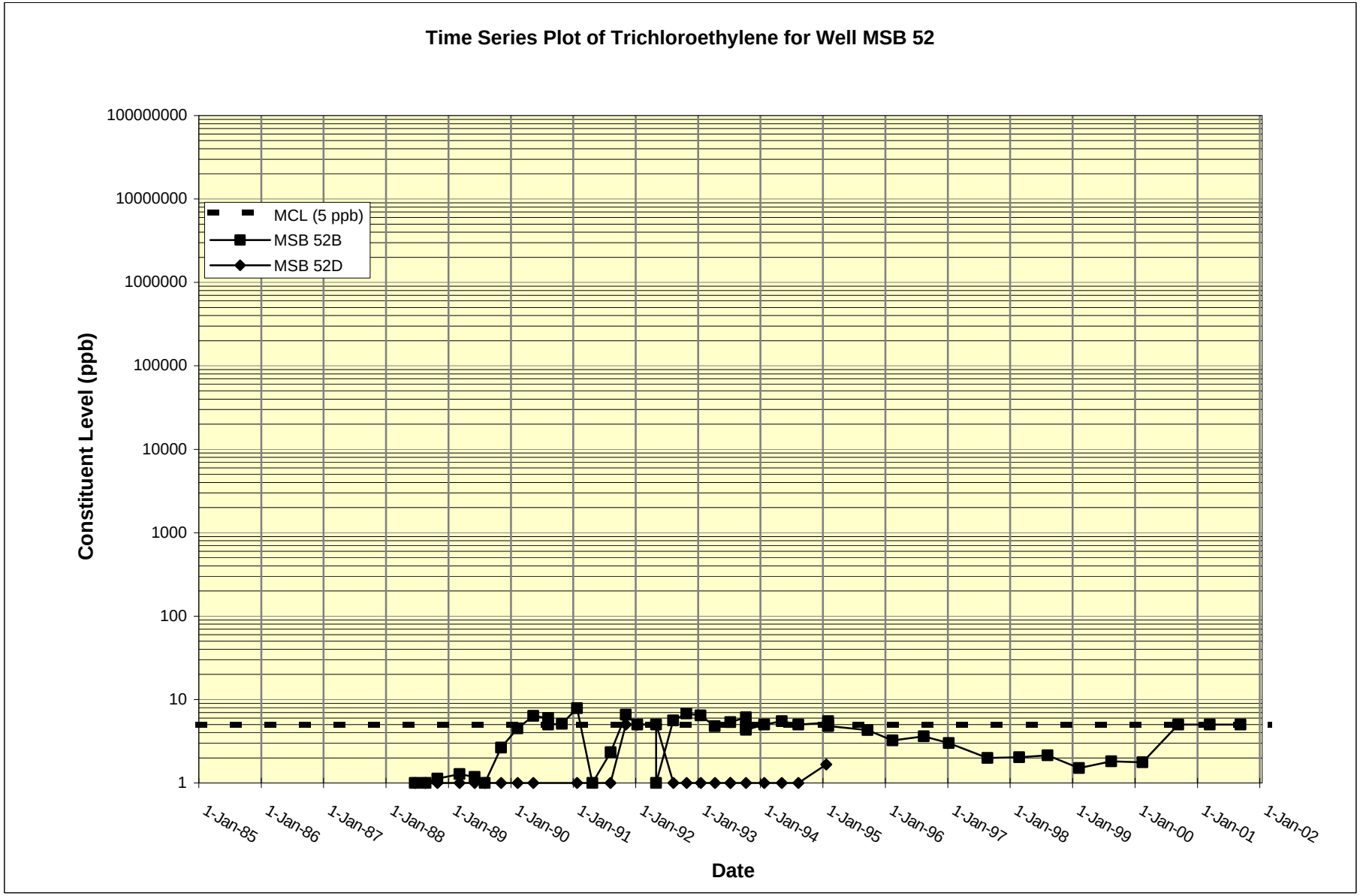
1-Jan-01
1-Jan-02
Date


Time Series Plot of Trichloroethylene for Well MSB 52
MCL (5 ppb)
MSB 52B
MSB 52D
Constituent Level (ppb)
100000000
10000000
1000000
100000
10000
1000
100
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1
1-Jan-85
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1-Jan-90
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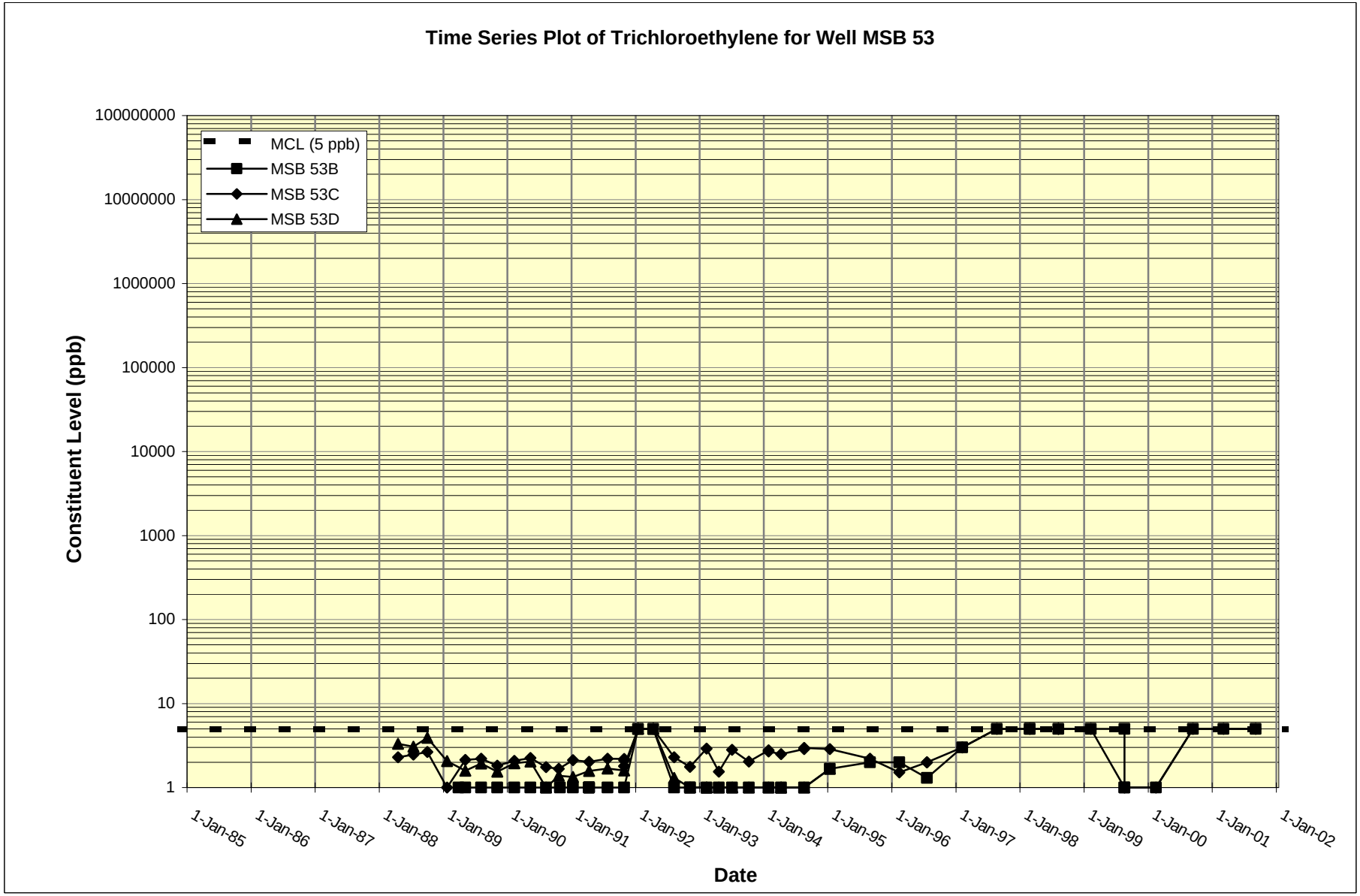
1-Jan-01
1-Jan-02
Date


Time Series Plot of Trichloroethylene for Well MSB 53
MCL (5 ppb)
MSB 53B
MSB 53C
MSB 53D
Constituent Level (ppb)
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
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1-Jan-93
1-Jan-94
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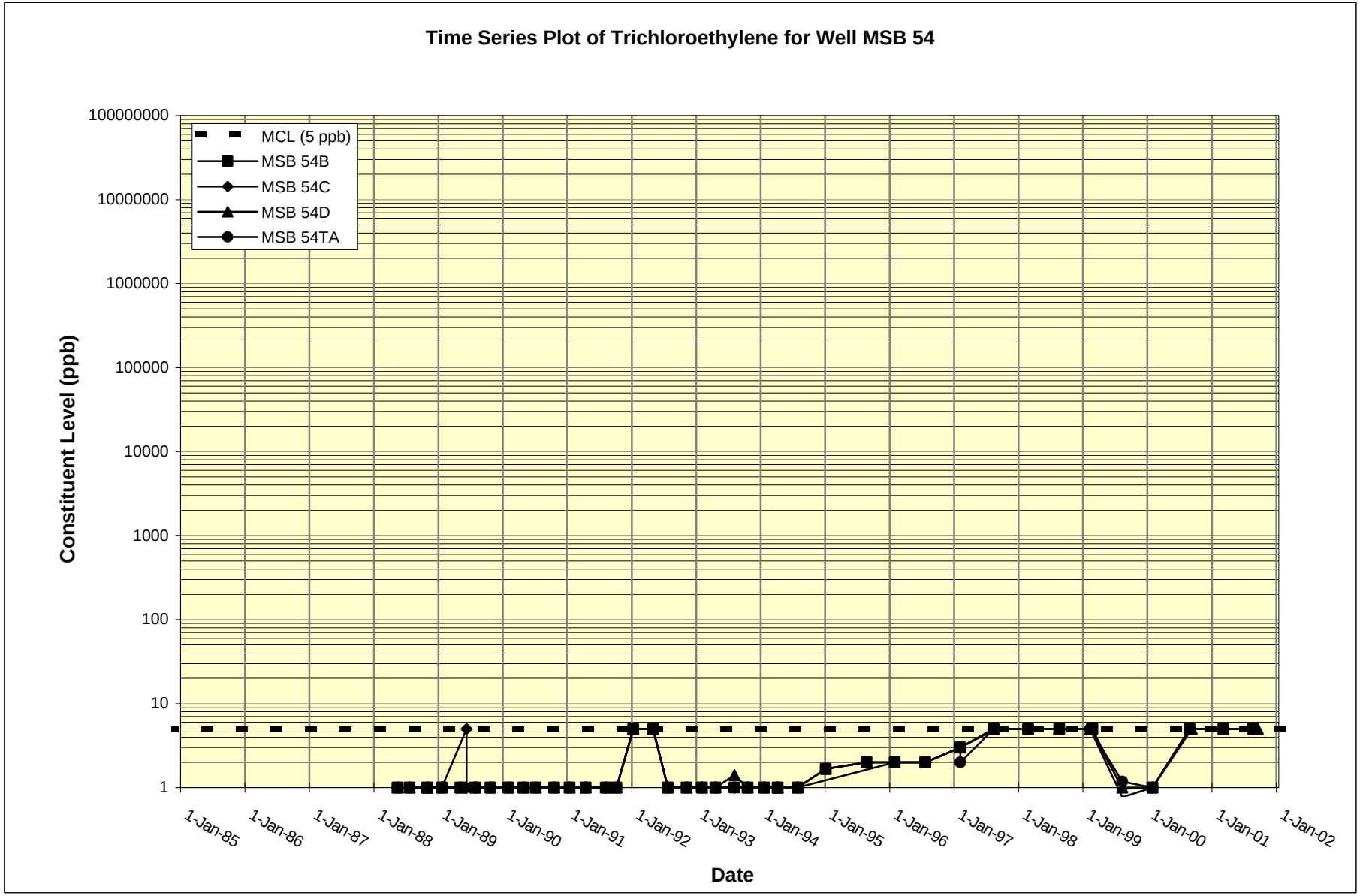
1-Jan-99
1-Jan-00
1-Jan-01
1-Jan-02
Date


Time Series Plot of Trichloroethylene for Well MSB 54
MCL (5 ppb)
MSB 54B
MSB 54C
MSB 54D
MSB 54TA
Constituent Level (ppb)
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
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1-Jan-99
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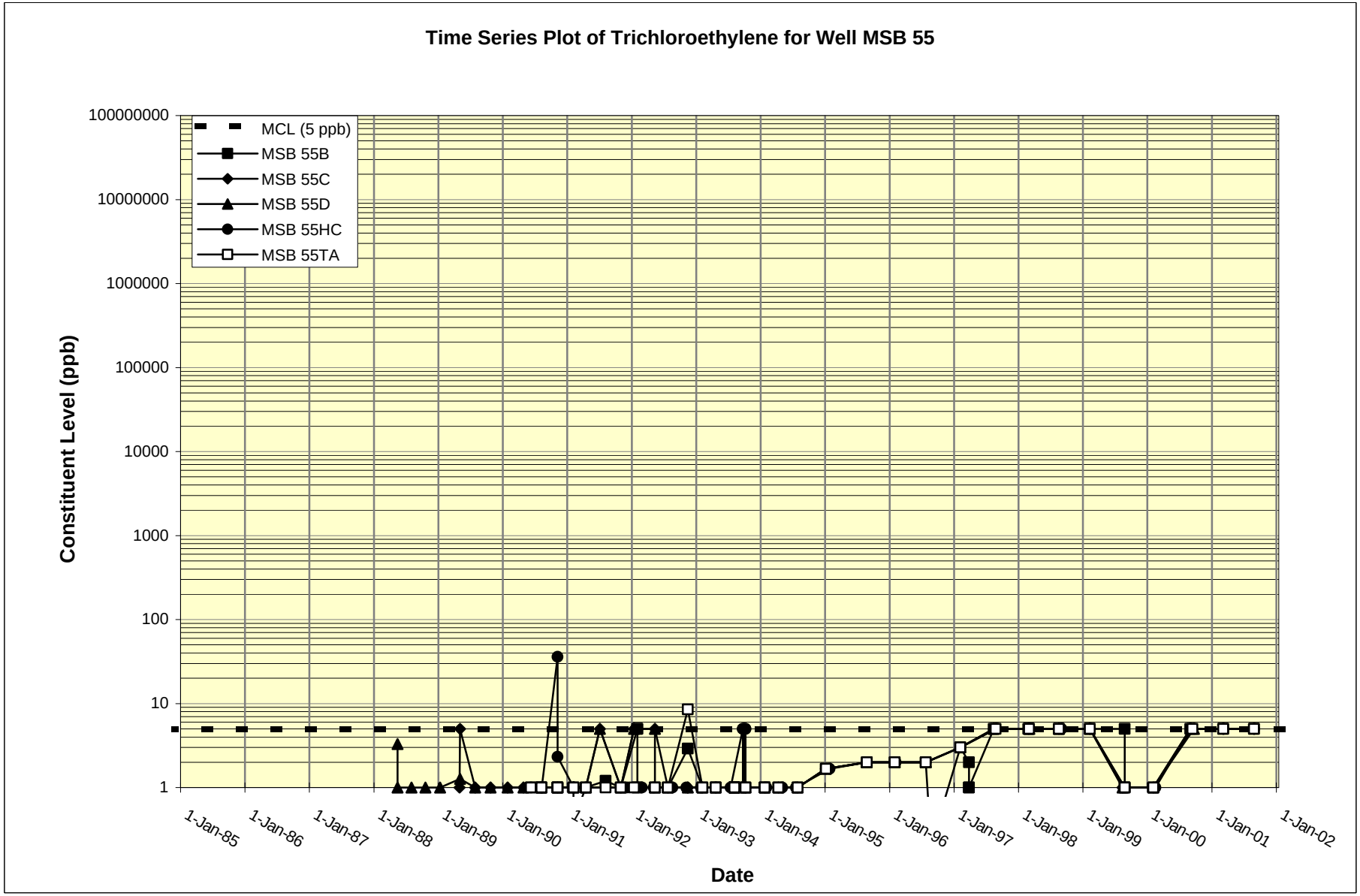
1-Jan-01
1-Jan-02
Date


Time Series Plot of Trichloroethylene for Well MSB 55
MCL (5 ppb)
MSB 55B
MSB 55C
MSB 55D
MSB 55HC
MSB 55TA
Constituent Level (ppb)
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
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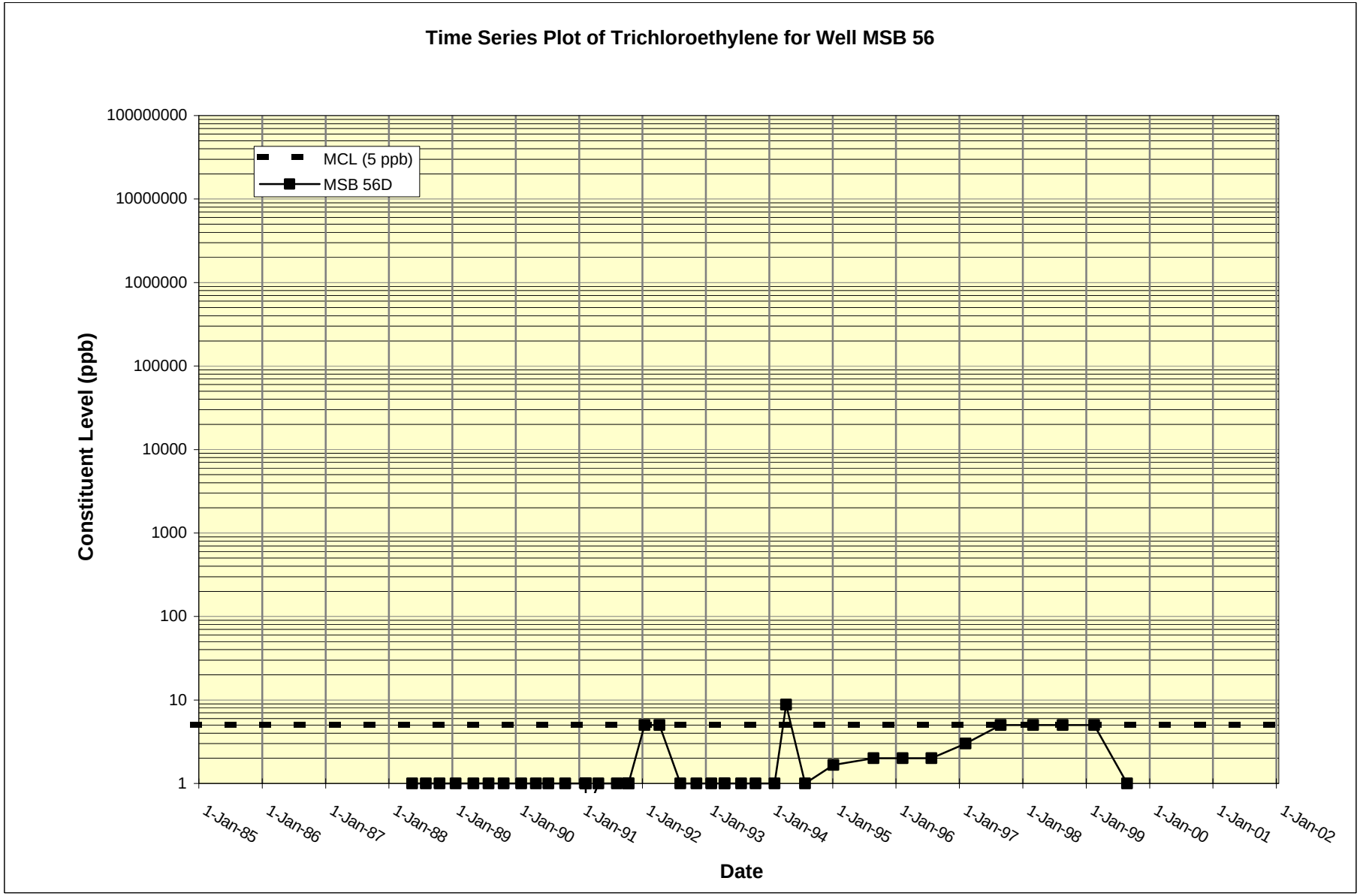
1-Jan-01
1-Jan-02
Date


Time Series Plot of Trichloroethylene for Well MSB 56
MCL (5 ppb)
MSB 56D
Constituent Level (ppb)
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
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1-Jan-92
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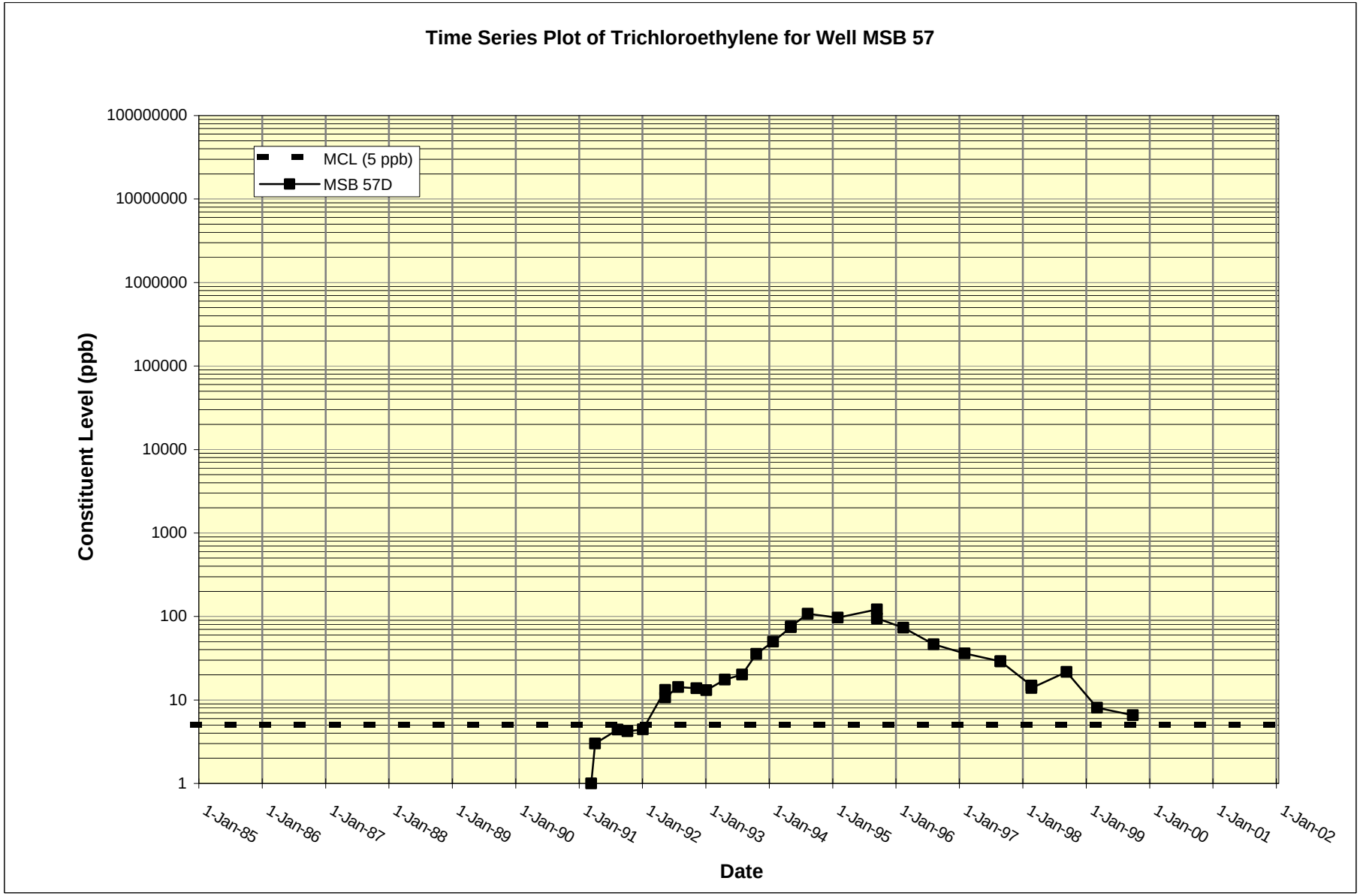
1-Jan-02
Date


Time Series Plot of Trichloroethylene for Well MSB 57
MCL (5 ppb)
MSB 57D
Constituent Level (ppb)
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
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1-Jan-90
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1-Jan-92
1-Jan-93
1-Jan-94
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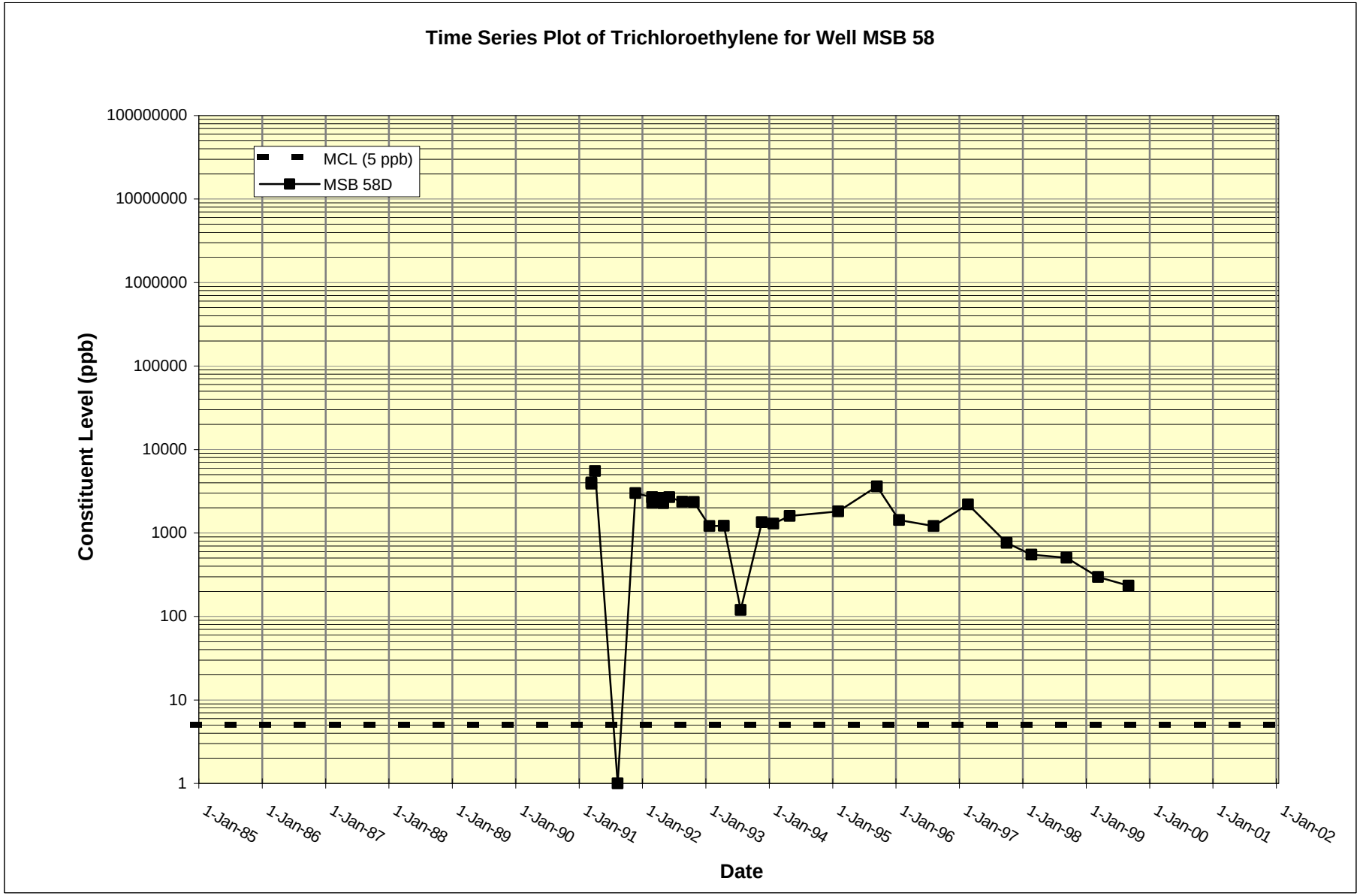
1-Jan-02
Date


Time Series Plot of Trichloroethylene for Well MSB 58
MCL (5 ppb)
MSB 58D
Constituent Level (ppb)
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
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1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
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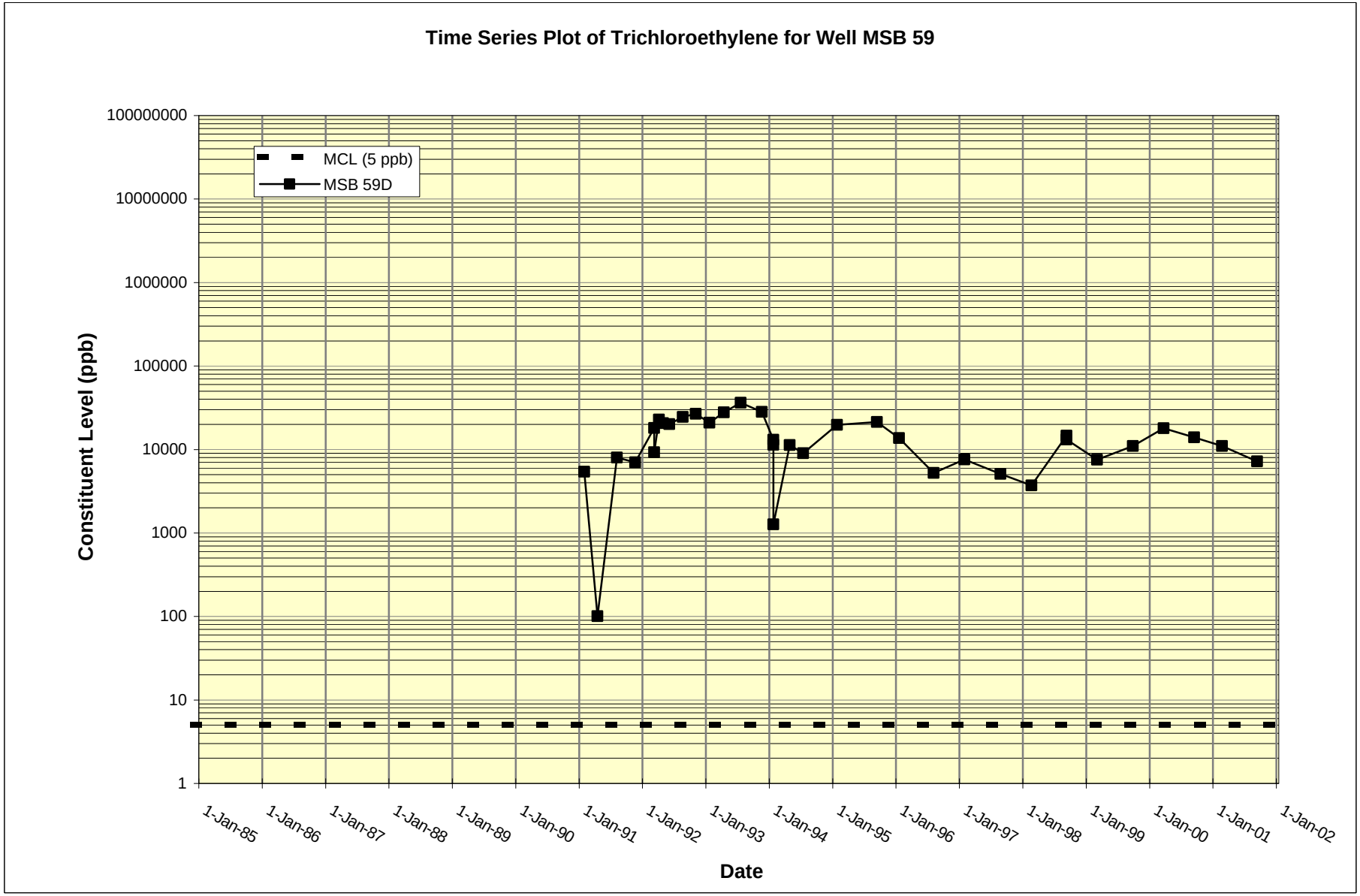
1-Jan-01
1-Jan-02
Date


Time Series Plot of Trichloroethylene for Well MSB 59
MCL (5 ppb)
MSB 59D
Constituent Level (ppb)
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
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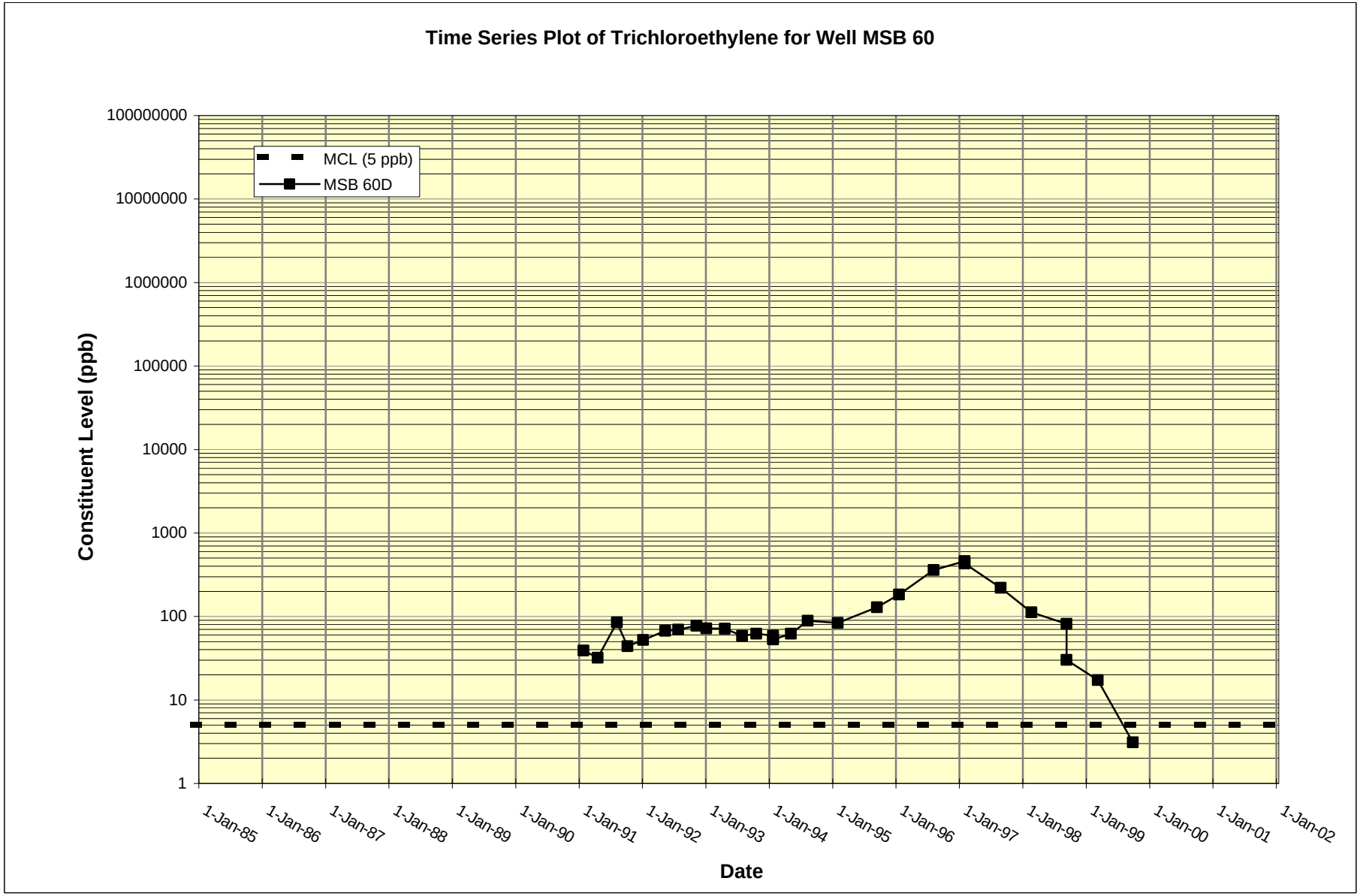
1-Jan-02
Date


Time Series Plot of Trichloroethylene for Well MSB 60
MCL (5 ppb)
MSB 60D
Constituent Level (ppb)
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
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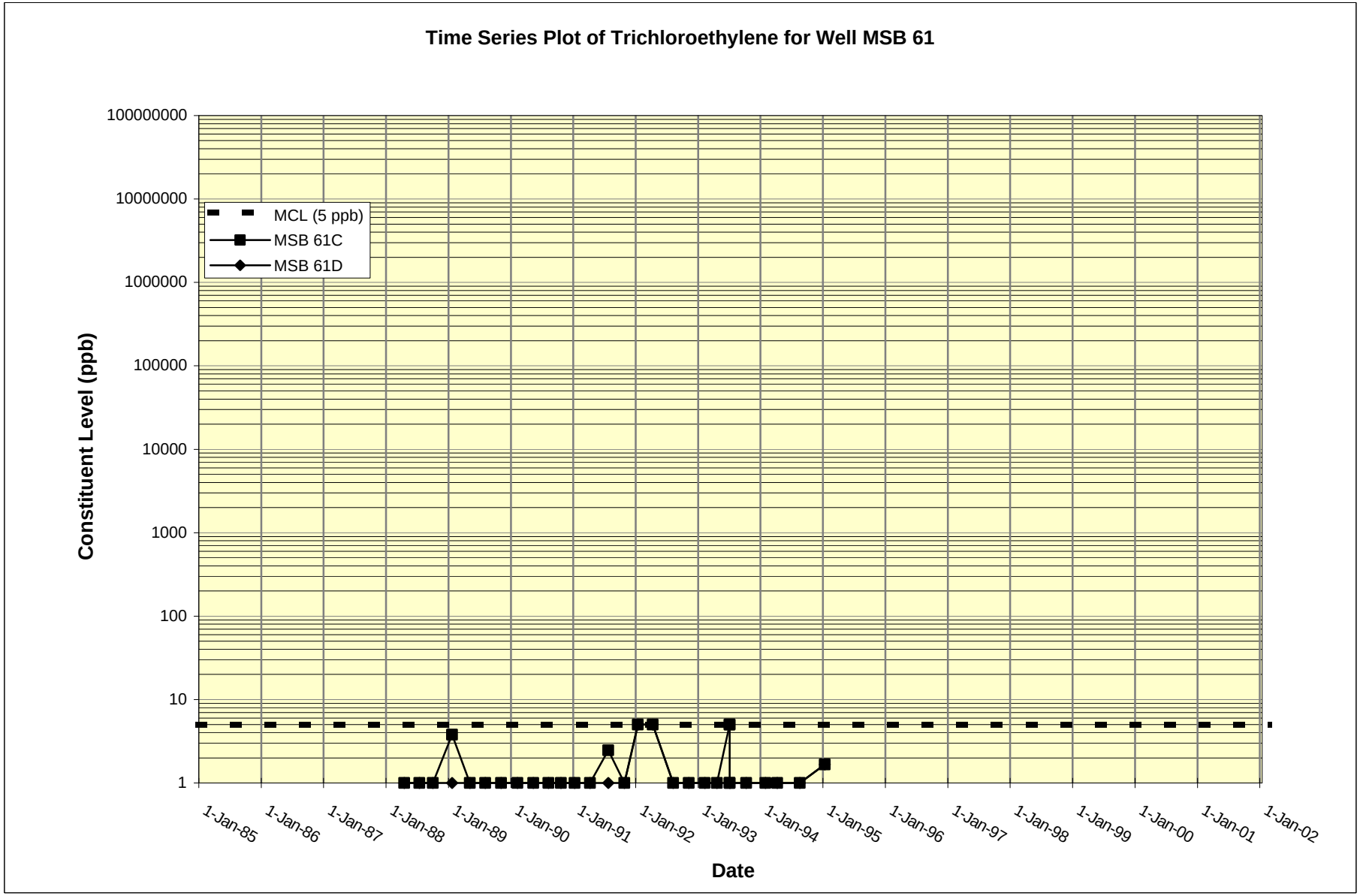
1-Jan-02
Date


Time Series Plot of Trichloroethylene for Well MSB 61
MCL (5 ppb)
MSB 61C
MSB 61D
Constituent Level (ppb)
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
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1-Jan-92
1-Jan-93
1-Jan-94
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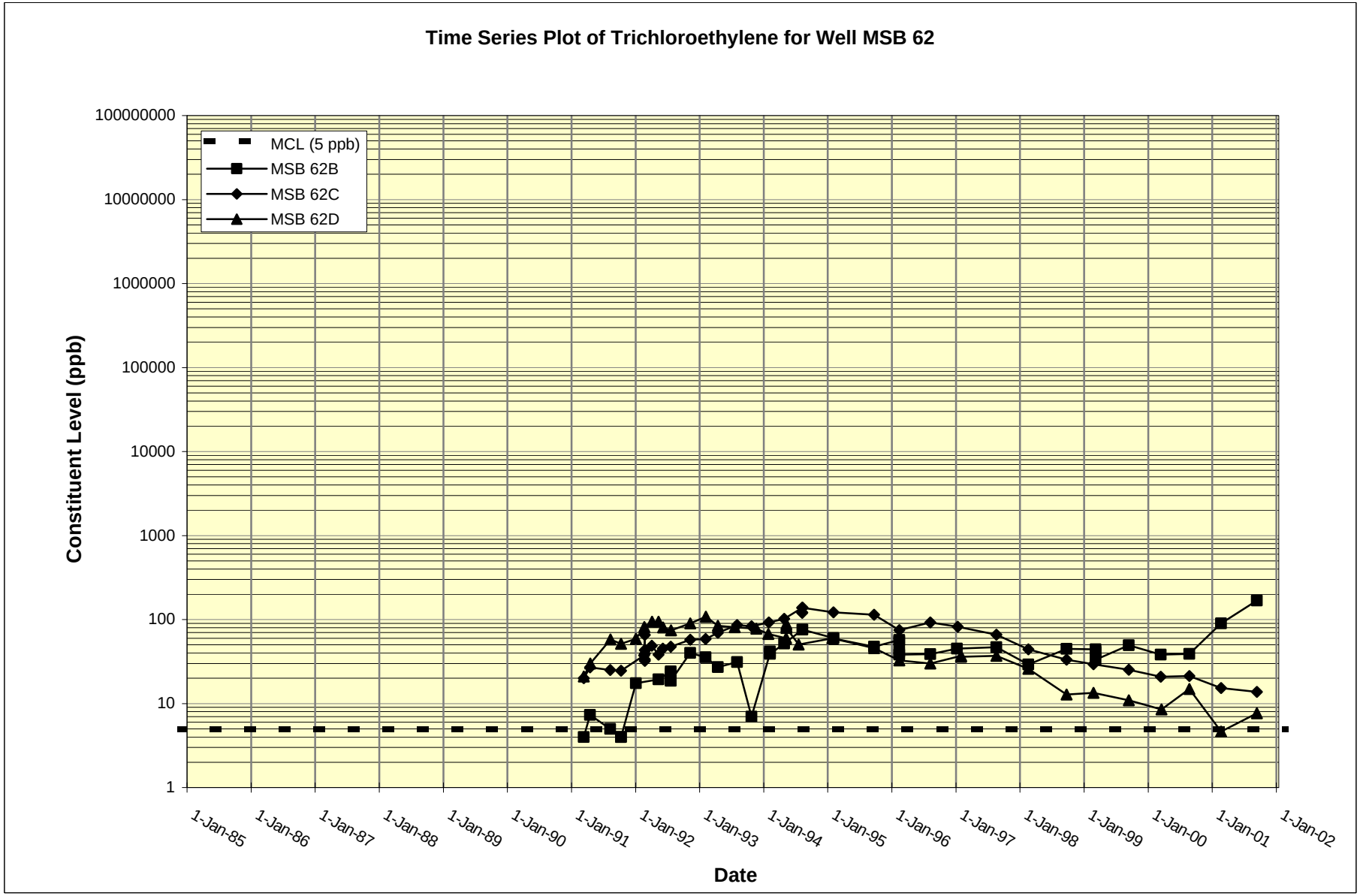
1-Jan-01
1-Jan-02
Date


Time Series Plot of Trichloroethylene for Well MSB 62
MCL (5 ppb)
MSB 62B
MSB 62C
MSB 62D
Constituent Level (ppb)
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
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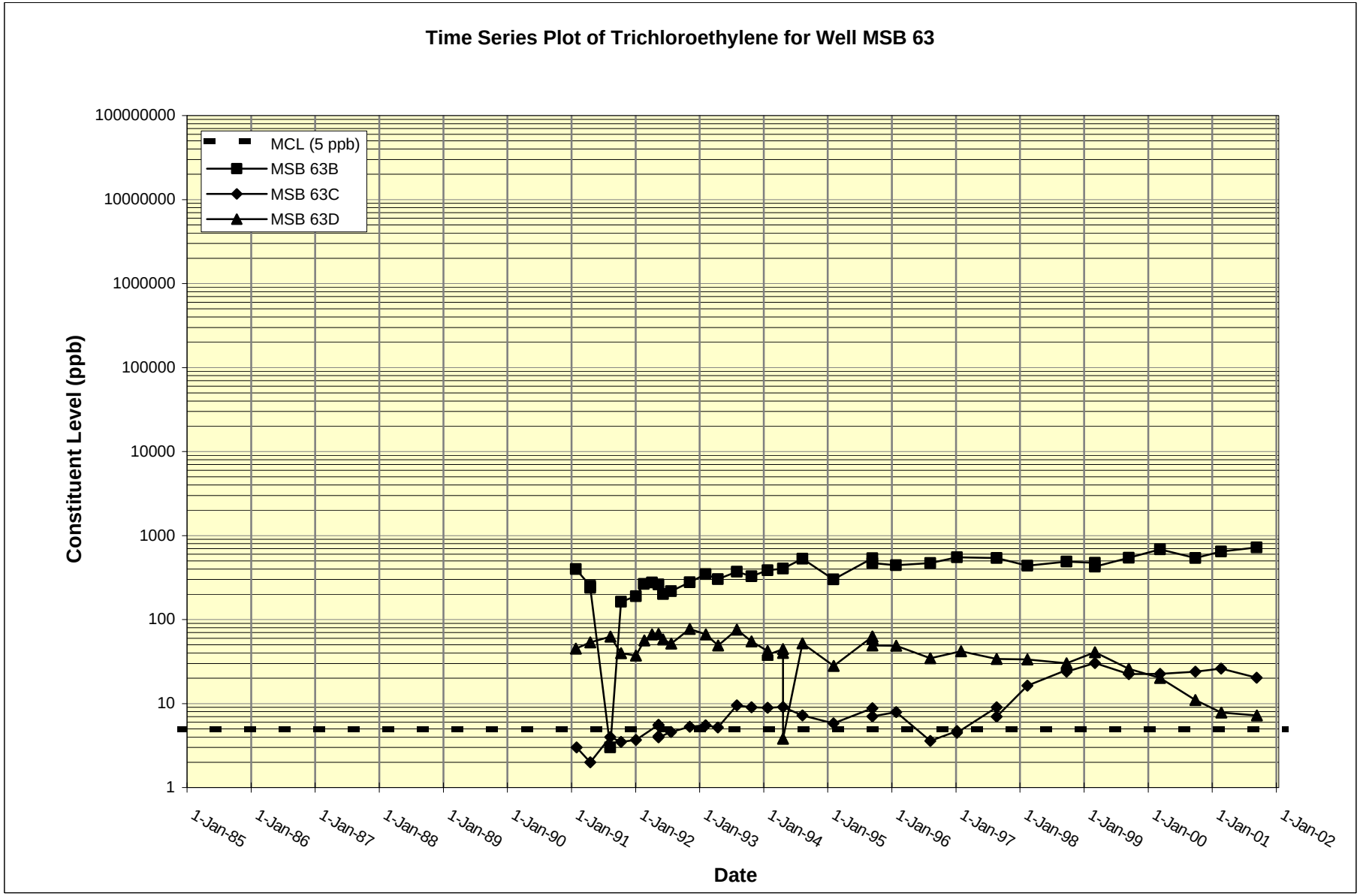
1-Jan-01
1-Jan-02
Date


Time Series Plot of Trichloroethylene for Well MSB 63
MCL (5 ppb)
MSB 63B
MSB 63C
MSB 63D
Constituent Level (ppb)
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
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1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
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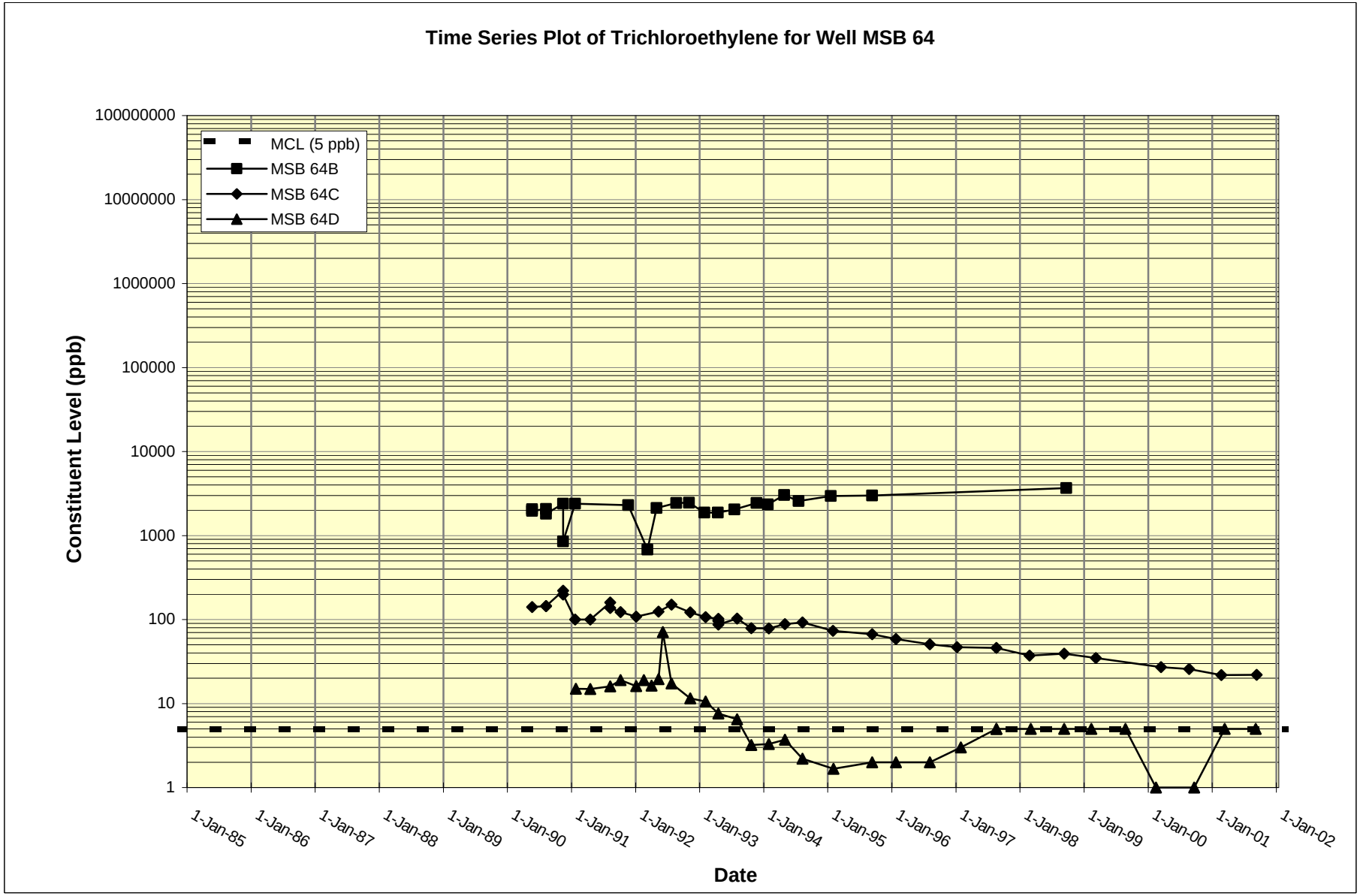
1-Jan-00
1-Jan-01
1-Jan-02
Date


Time Series Plot of Trichloroethylene for Well MSB 64
MCL (5 ppb)
MSB 64B
MSB 64C
MSB 64D
Constituent Level (ppb)
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
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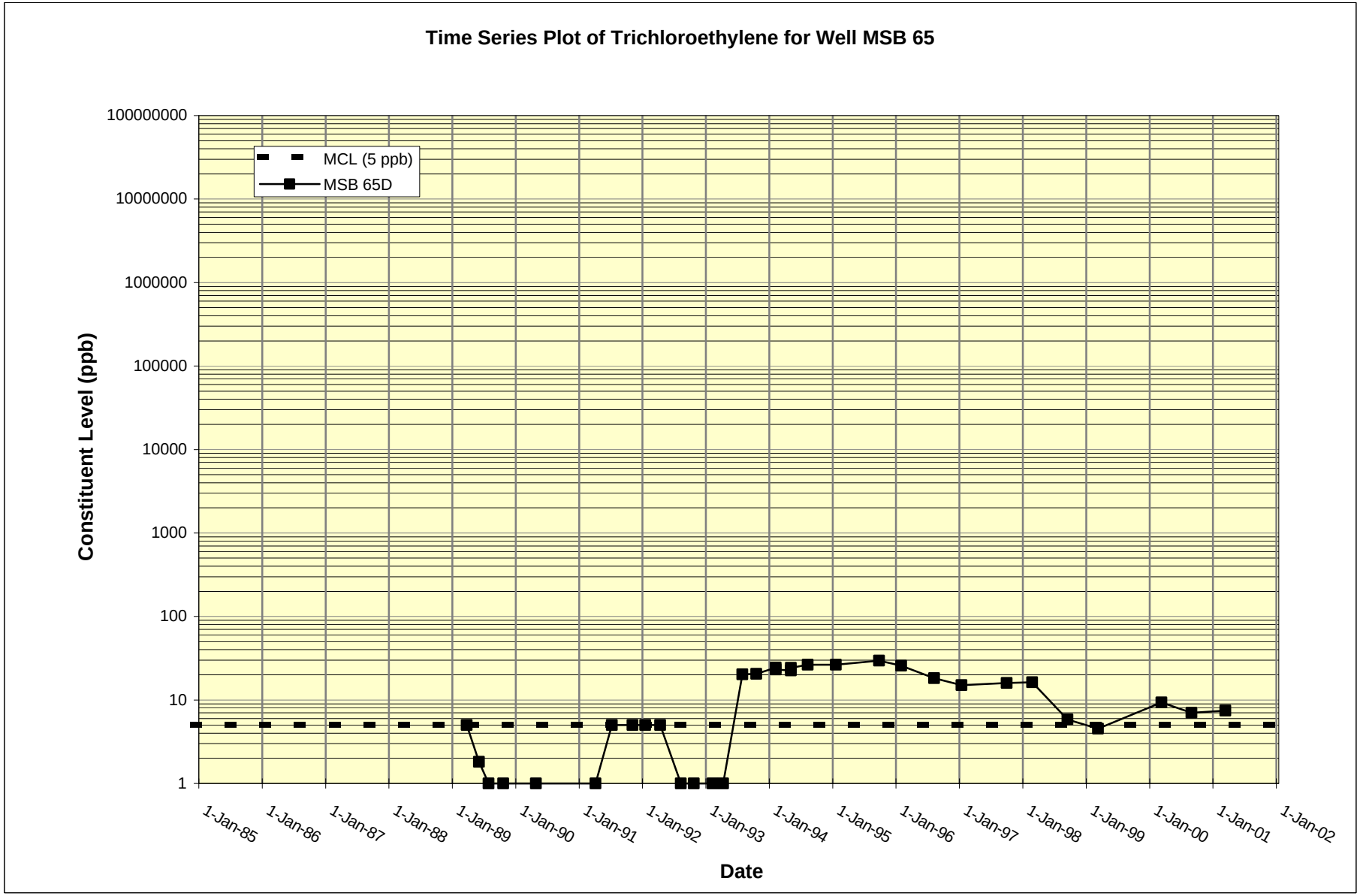
1-Jan-02
Date


Time Series Plot of Trichloroethylene for Well MSB 65
MCL (5 ppb)
MSB 65D
Constituent Level (ppb)
100000000
10000000
1000000
100000
10000
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100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
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1-Jan-94
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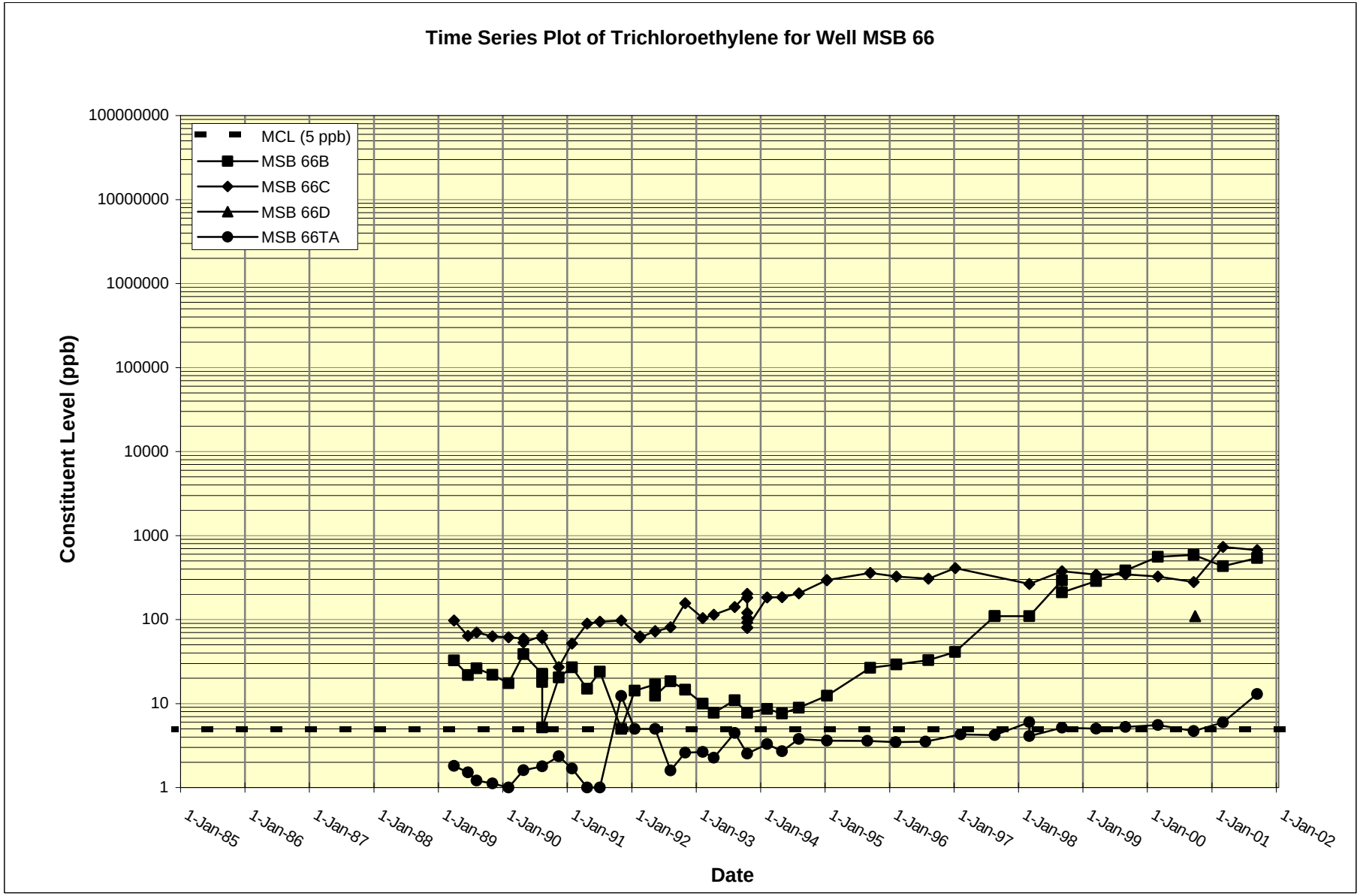
1-Jan-02
Date


Time Series Plot of Trichloroethylene for Well MSB 66
MCL (5 ppb)
MSB 66B
MSB 66C
MSB 66D
MSB 66TA
Constituent Level (ppb)
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
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1-Jan-92
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1-Jan-94
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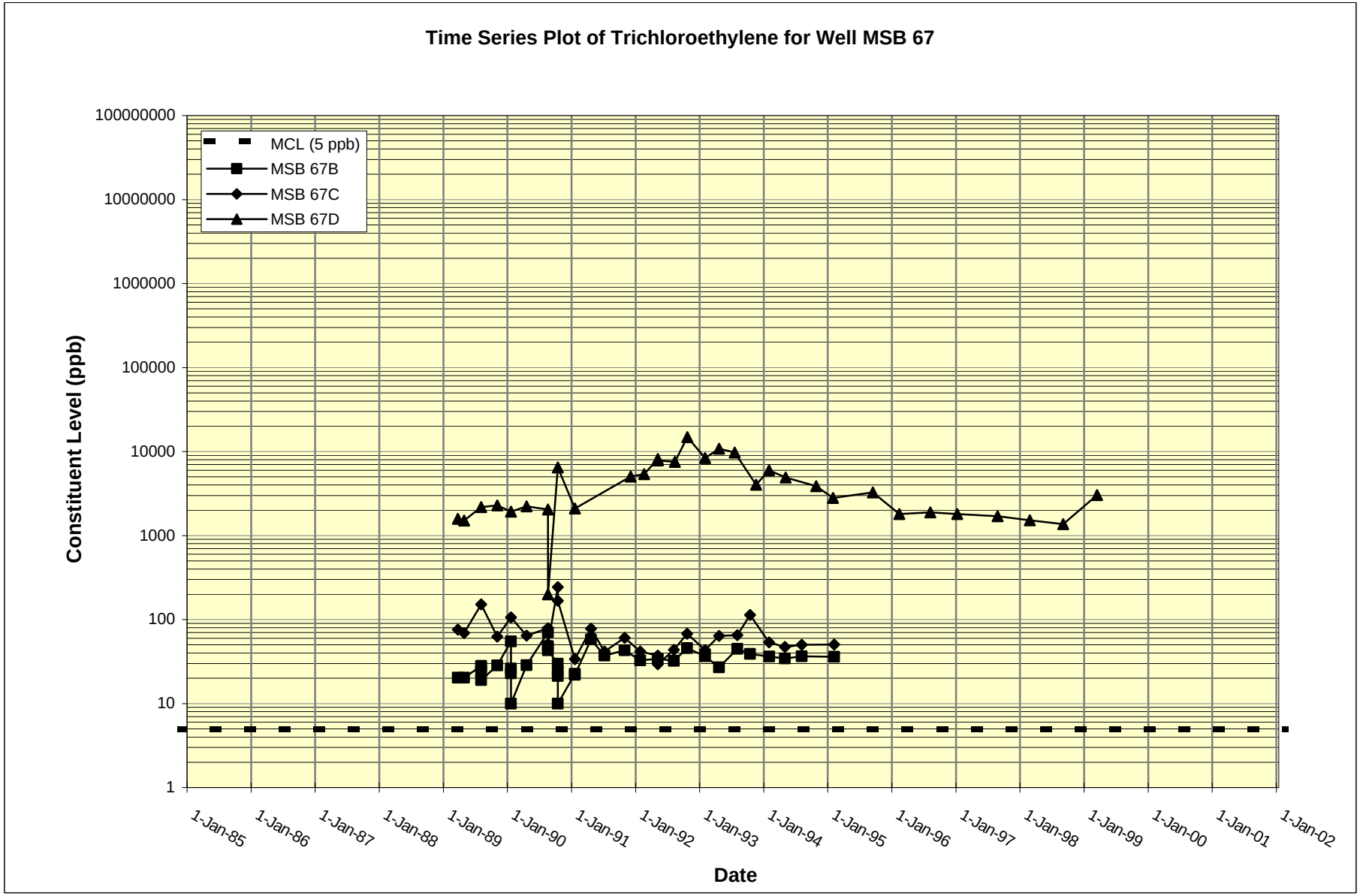
1-Jan-02
Date


Time Series Plot of Trichloroethylene for Well MSB 67
MCL (5 ppb)
MSB 67B
MSB 67C
MSB 67D
Constituent Level (ppb)
100000000
10000000
1000000
100000
10000
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100
10
1
1-Jan-85
1-Jan-86
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1-Jan-94
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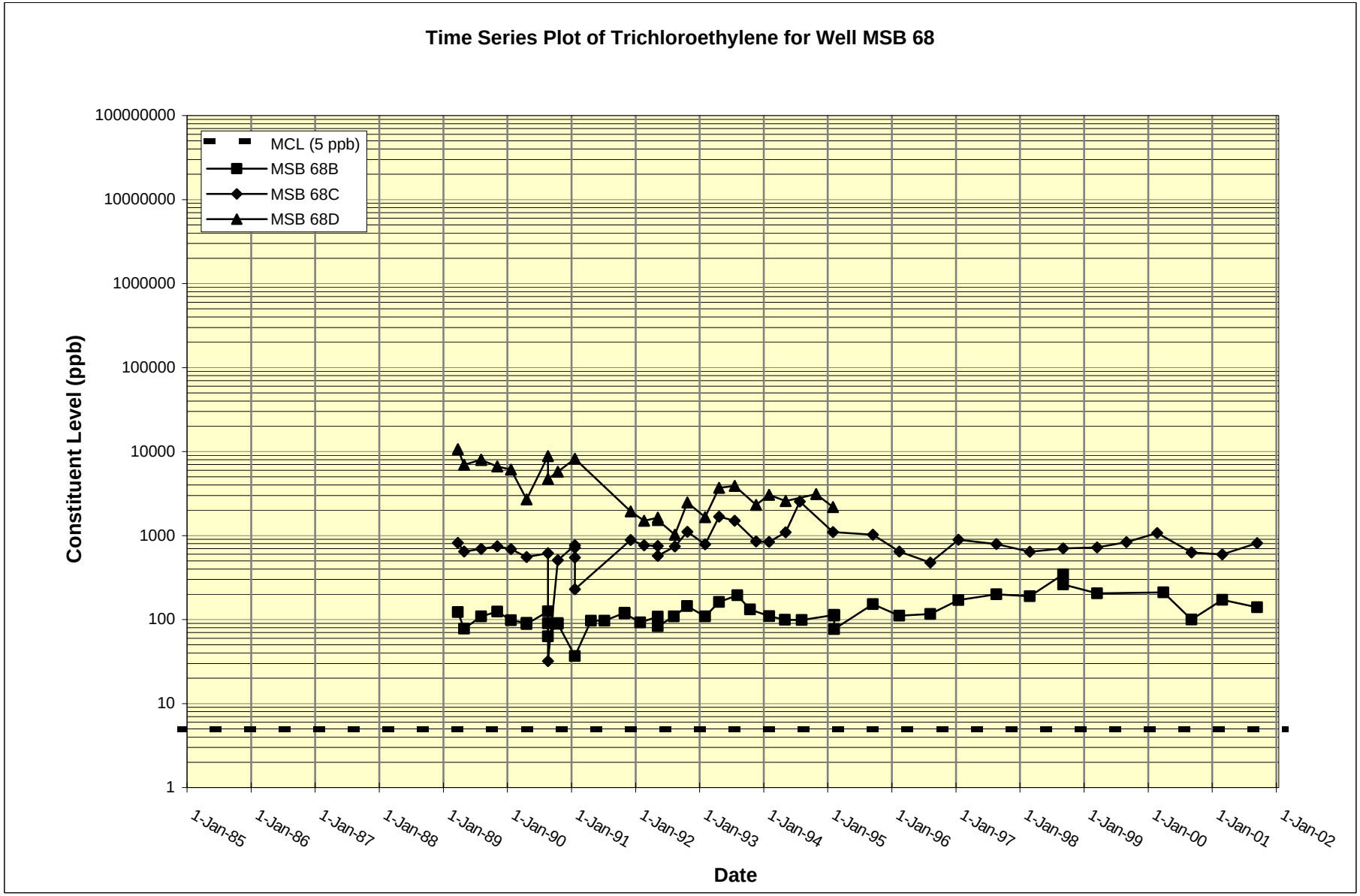
1-Jan-02
Date


Time Series Plot of Trichloroethylene for Well MSB 68
MCL (5 ppb)
MSB 68B
MSB 68C
MSB 68D
Constituent Level (ppb)
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
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1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
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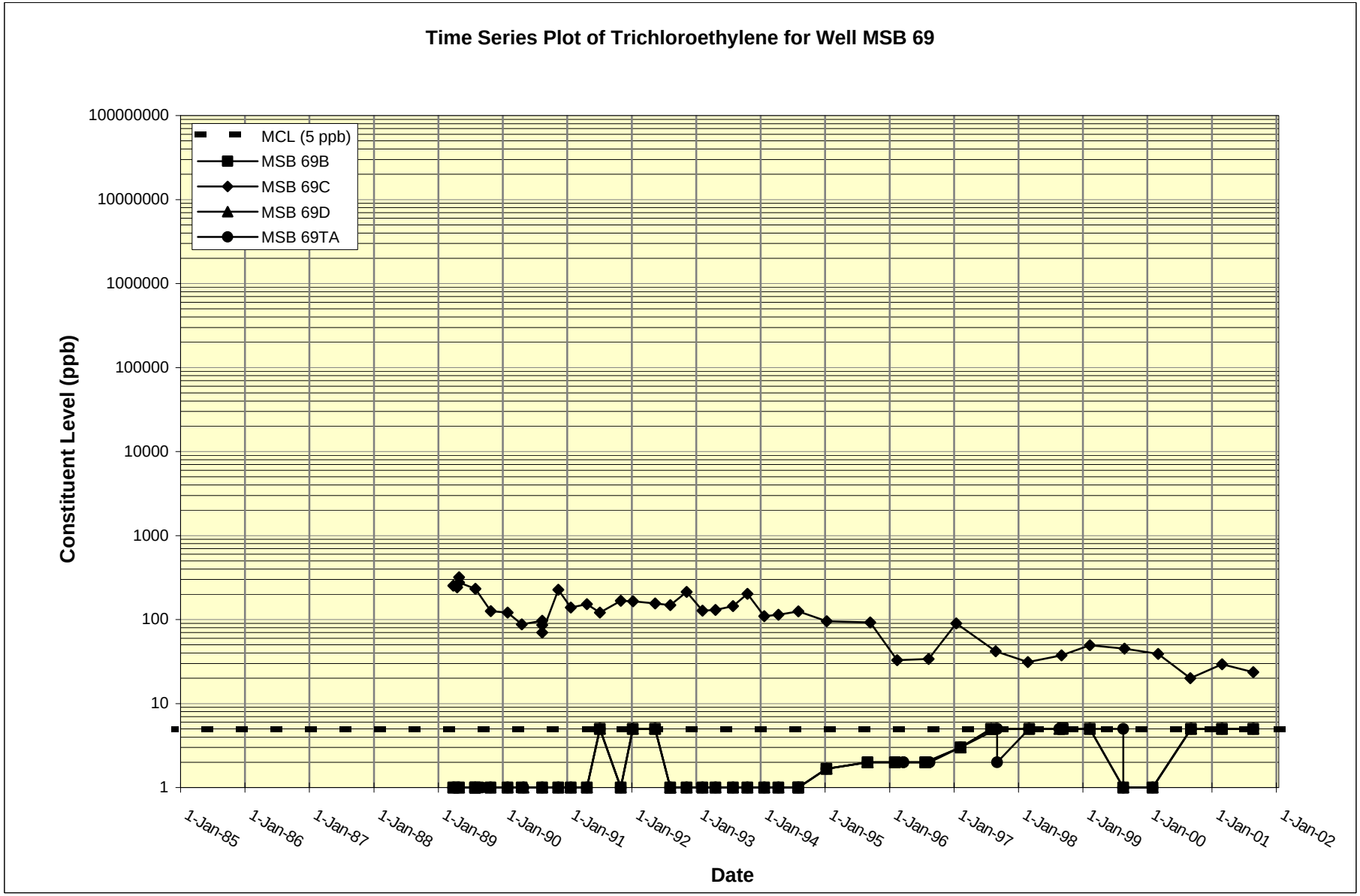
1-Jan-01
1-Jan-02
Date


Time Series Plot of Trichloroethylene for Well MSB 69
MCL (5 ppb)
MSB 69B
MSB 69C
MSB 69D
MSB 69TA
Constituent Level (ppb)
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
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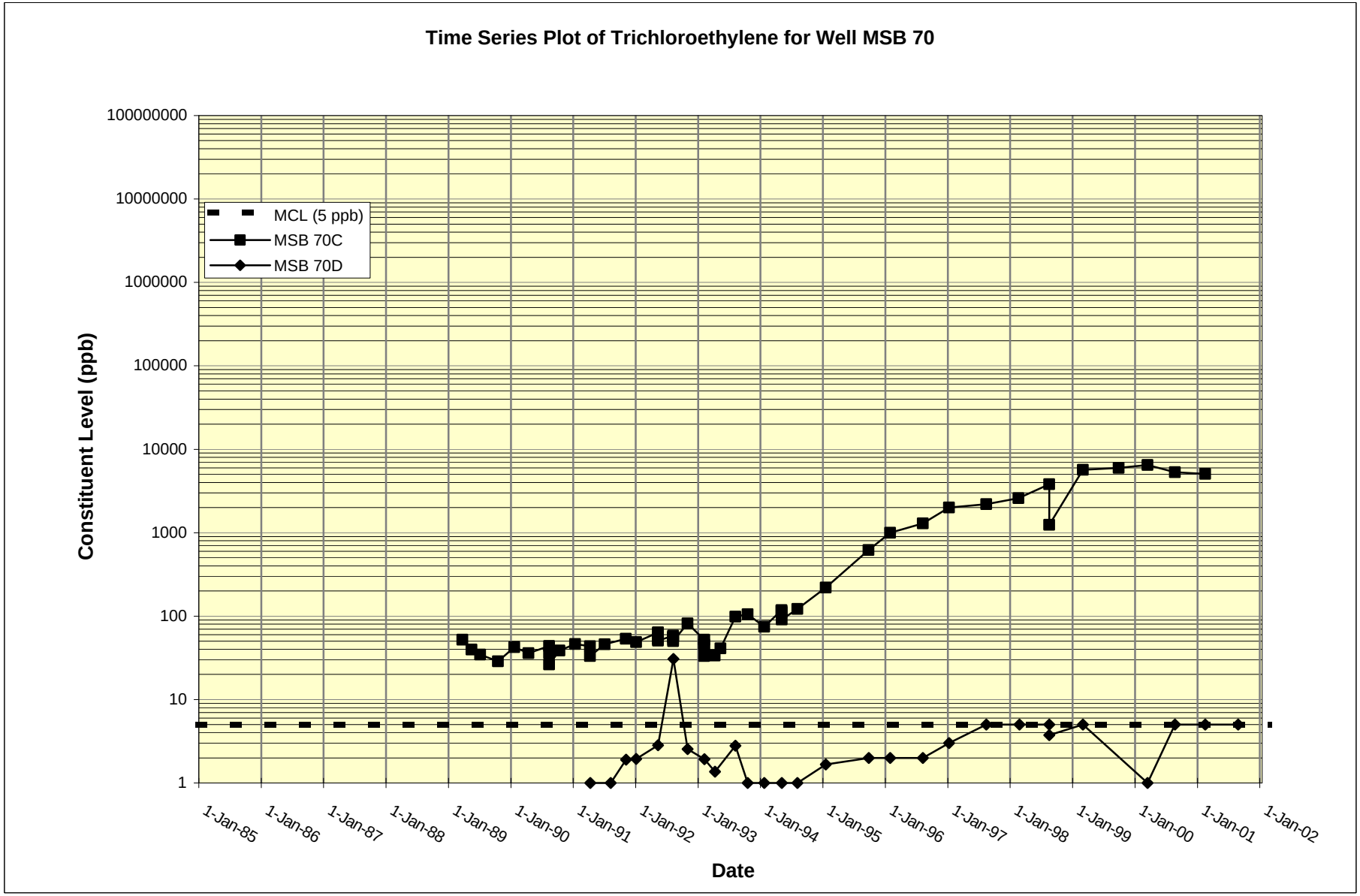
1-Jan-01
1-Jan-02
Date


Time Series Plot of Trichloroethylene for Well MSB 70
MCL (5 ppb)
MSB 70C
MSB 70D
Constituent Level (ppb)
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
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1-Jan-94
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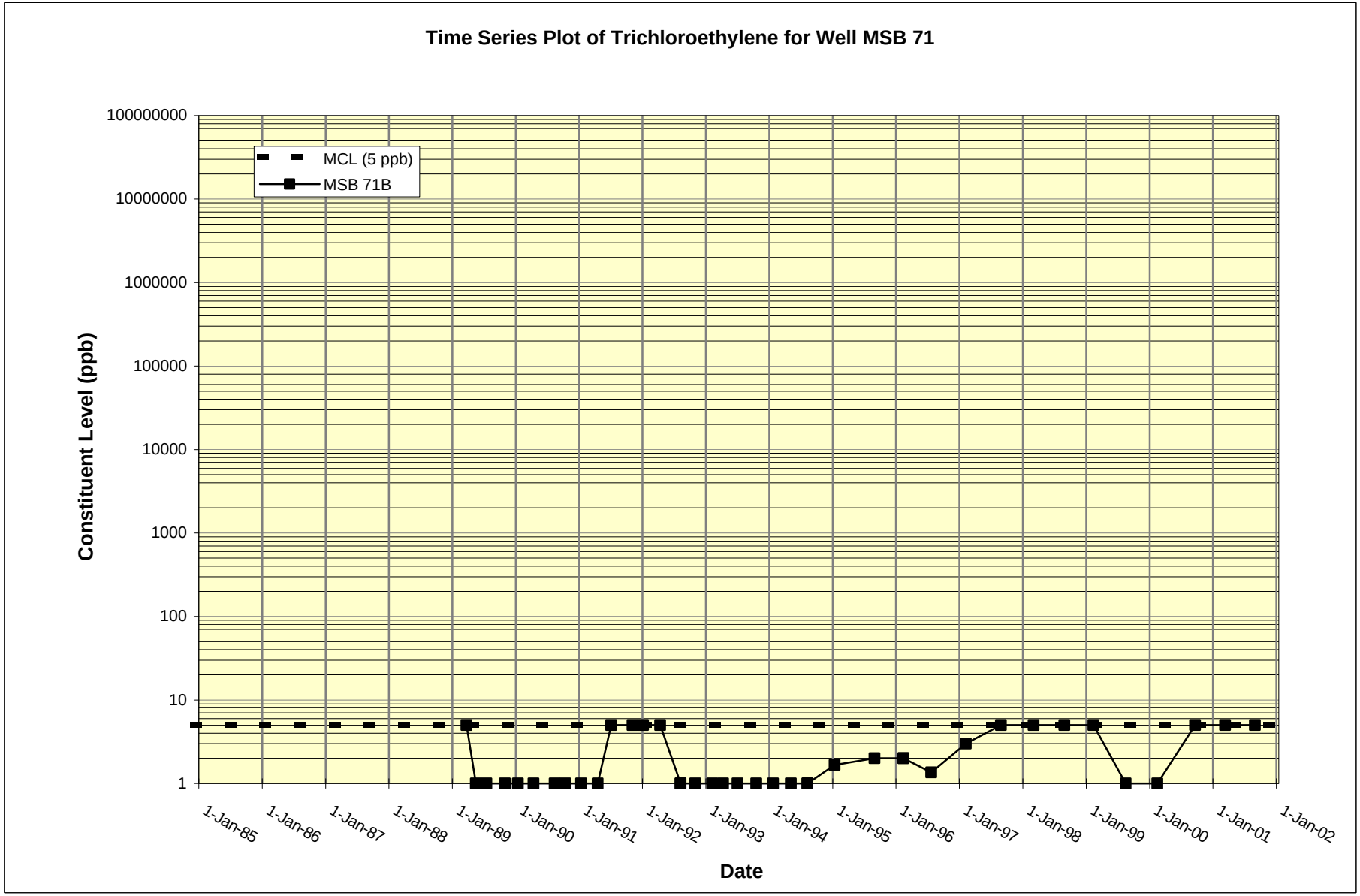
1-Jan-02
Date


Time Series Plot of Trichloroethylene for Well MSB 71
MCL (5 ppb)
MSB 71B
Constituent Level (ppb)
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
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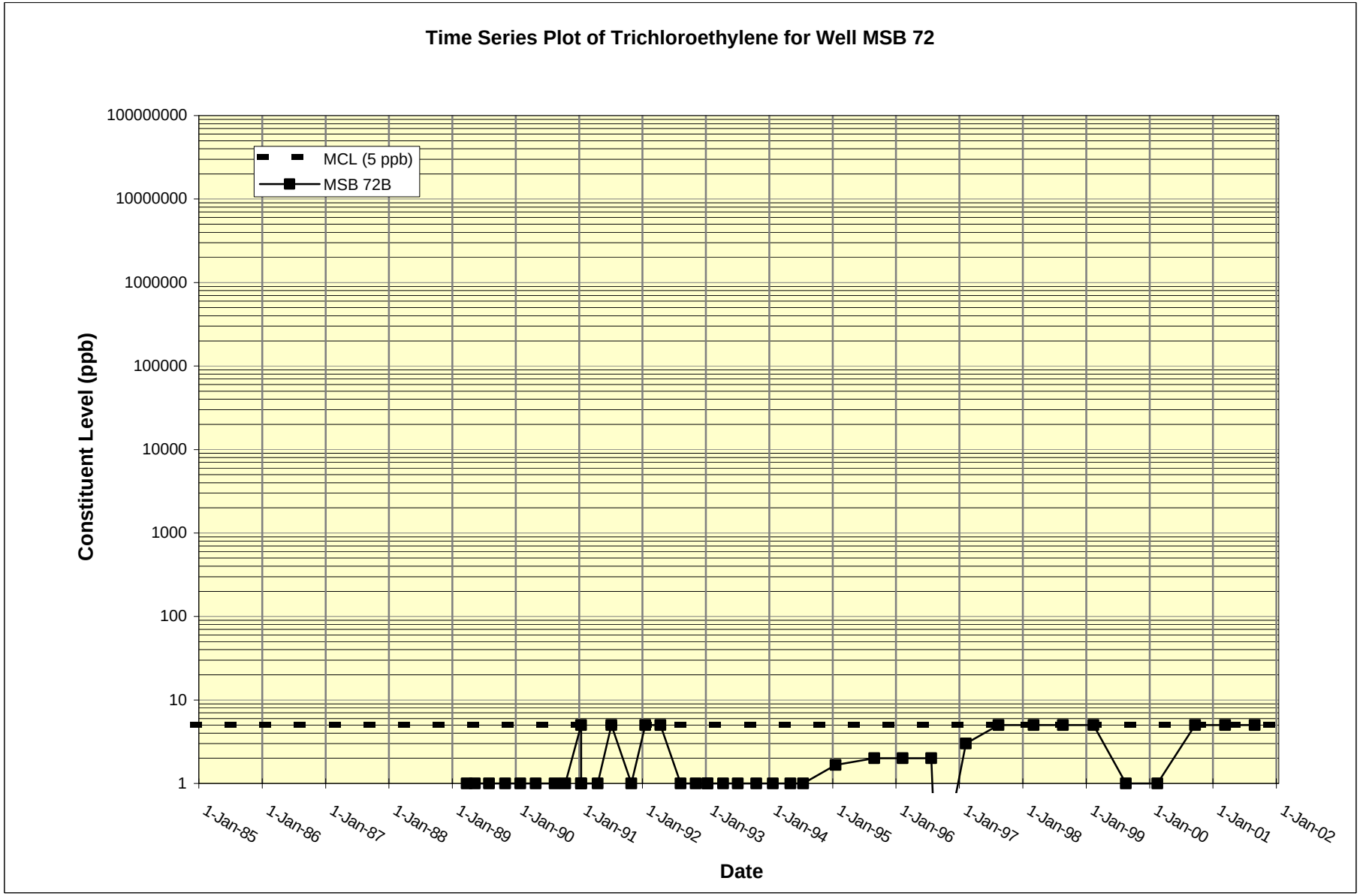
1-Jan-00
1-Jan-01
1-Jan-02
Date


Time Series Plot of Trichloroethylene for Well MSB 72
MCL (5 ppb)
MSB 72B
Constituent Level (ppb)
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
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1-Jan-94
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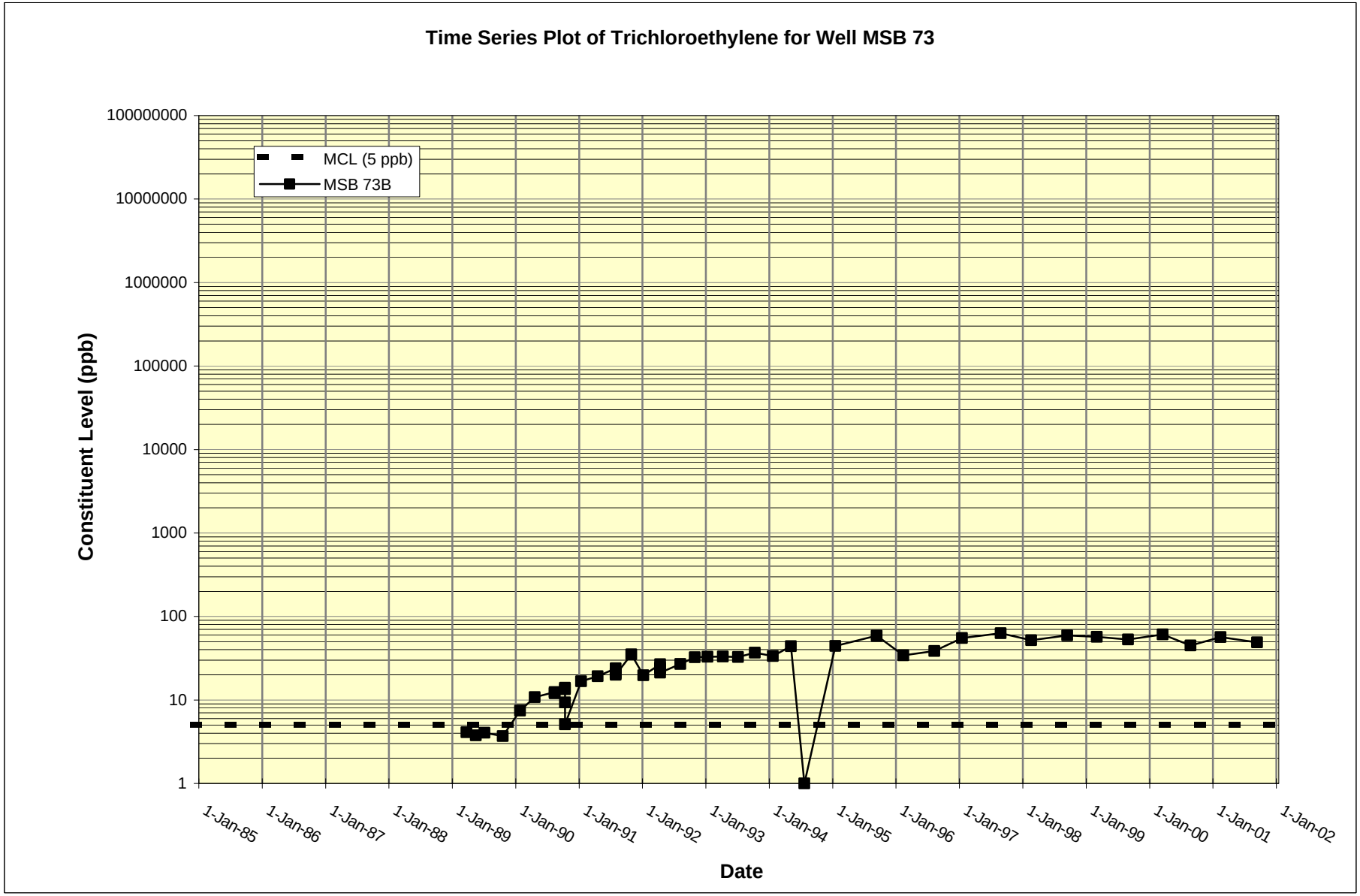
1-Jan-02
Date


Time Series Plot of Trichloroethylene for Well MSB 73
MCL (5 ppb)
MSB 73B
Constituent Level (ppb)
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
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1-Jan-89
1-Jan-90
1-Jan-91
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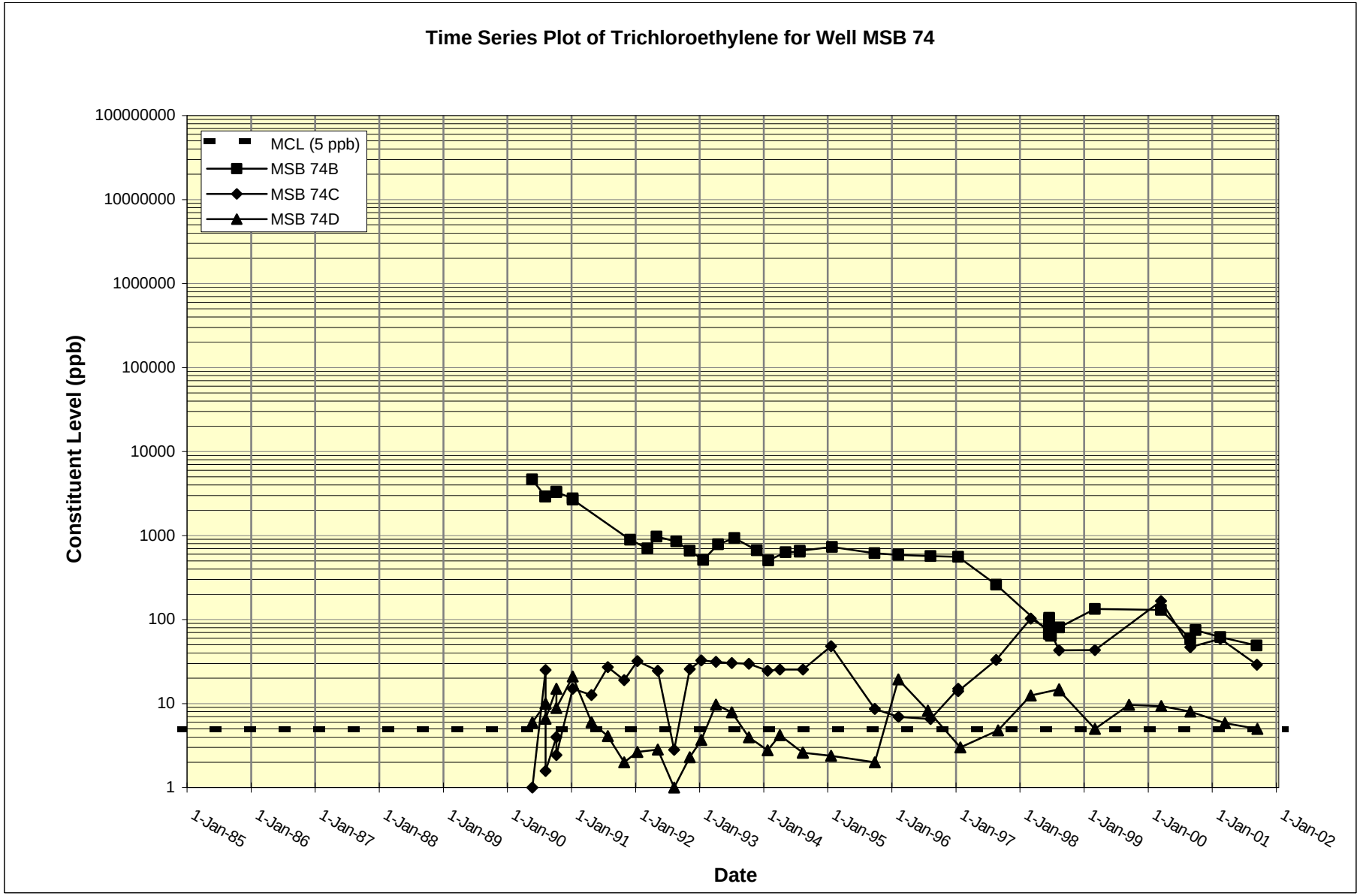
1-Jan-02
Date


Time Series Plot of Trichloroethylene for Well MSB 74
MCL (5 ppb)
MSB 74B
MSB 74C
MSB 74D
Constituent Level (ppb)
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
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1-Jan-94
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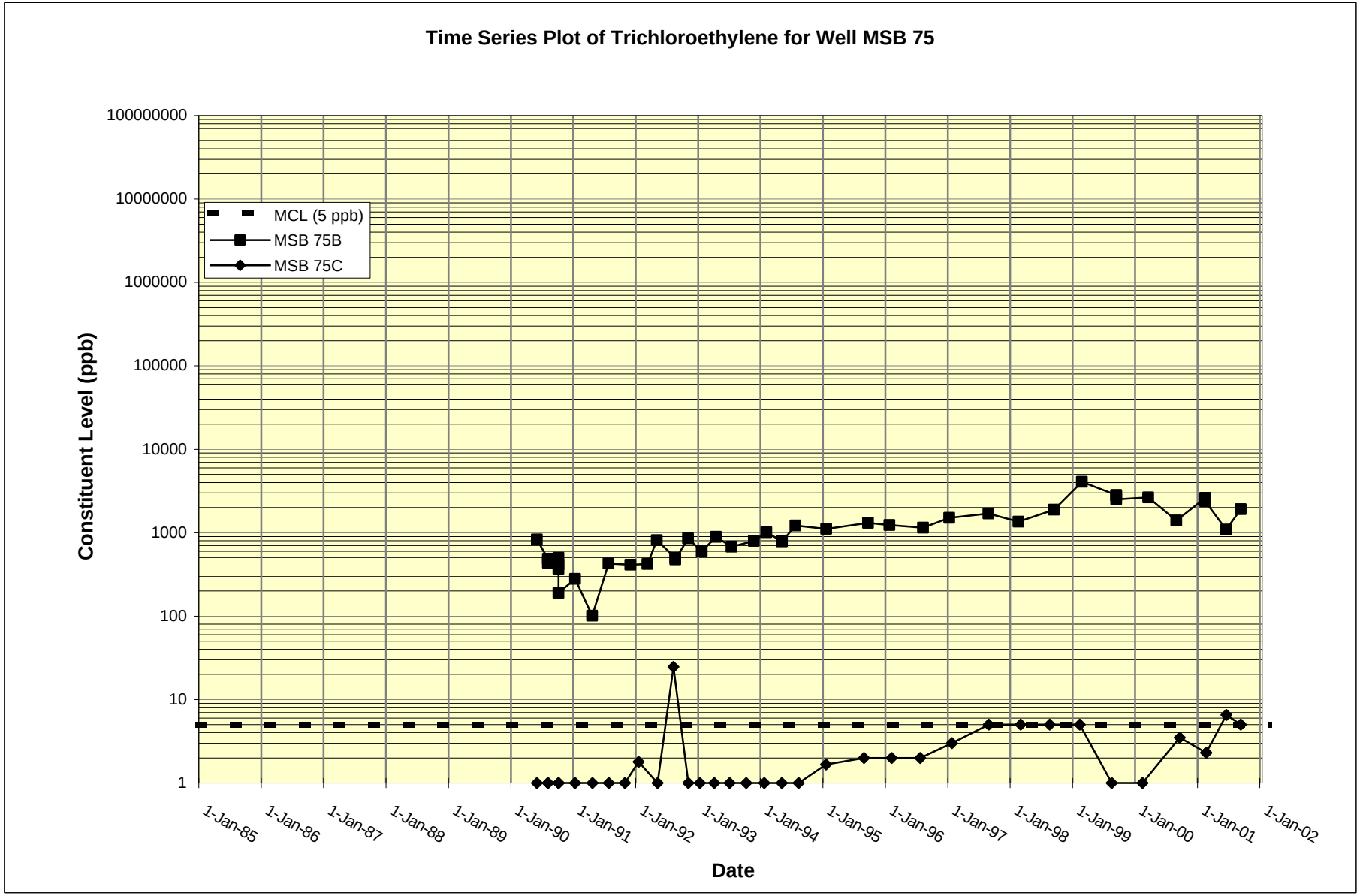
1-Jan-00
1-Jan-01
1-Jan-02
Date


Time Series Plot of Trichloroethylene for Well MSB 75
Constituent Level (ppb)
100000000
10000000
1000000
100000
10000
1000
100
10
1
MCL (5 ppb)
MSB 75B
MSB 75C
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
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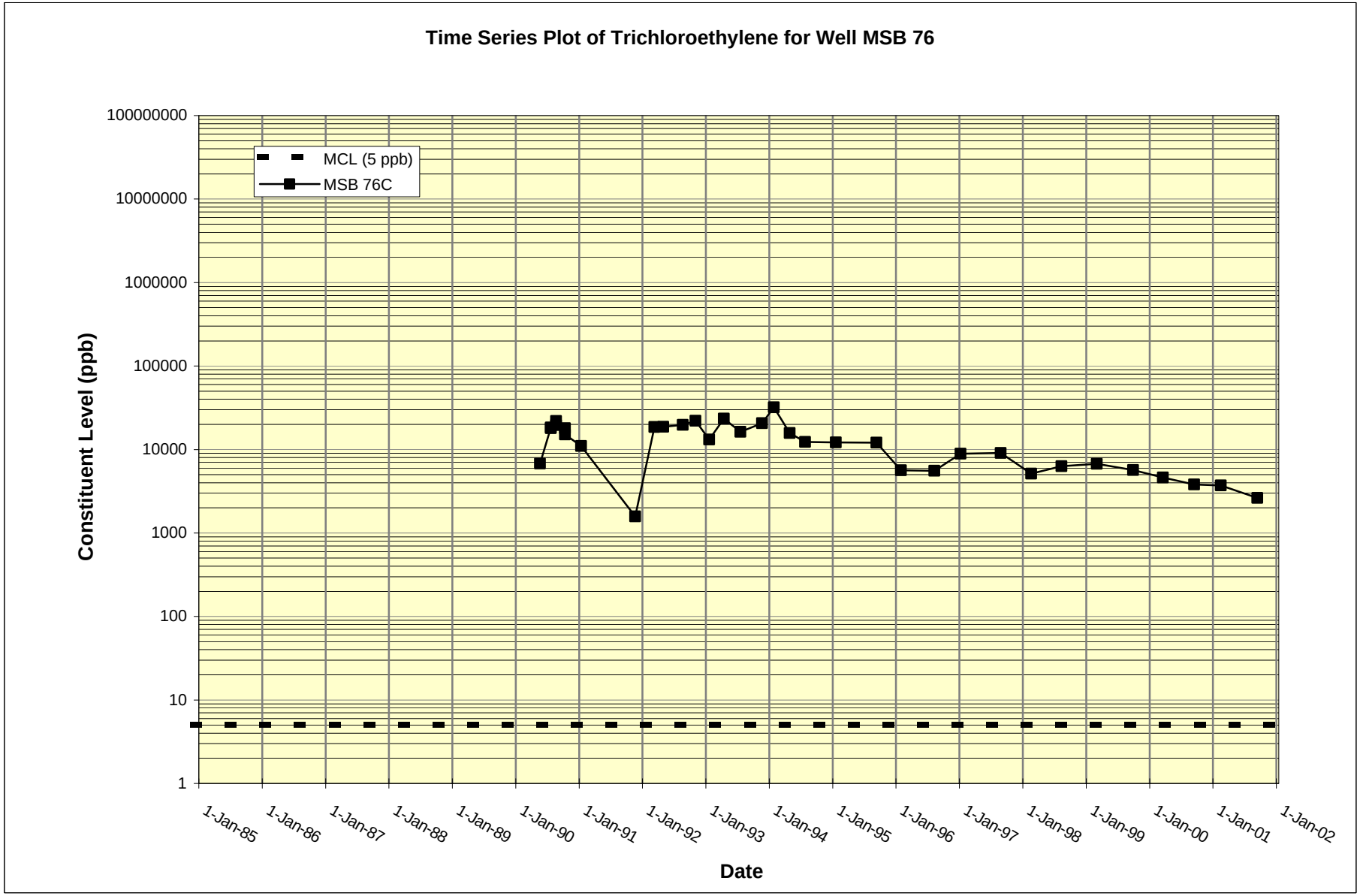
1-Jan-02
Date


Time Series Plot of Trichloroethylene for Well MSB 76
MCL (5 ppb)
MSB 76C
Constituent Level (ppb)
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10000000
1000000
100000
10000
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100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
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1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
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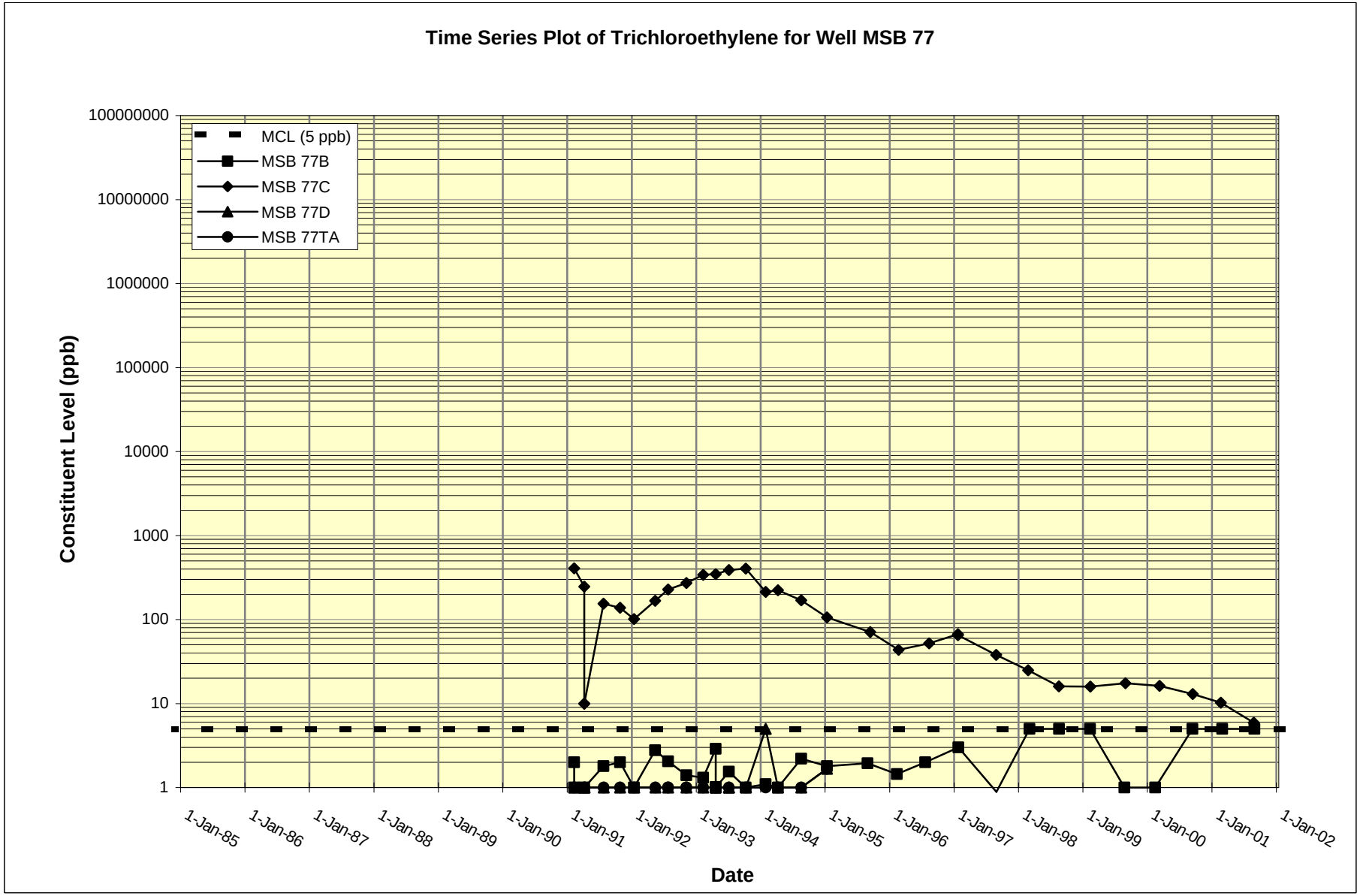
1-Jan-02
Date


Time Series Plot of Trichloroethylene for Well MSB 77
MCL (5 ppb)
MSB 77B
MSB 77C
MSB 77D
MSB 77TA
Constituent Level (ppb)
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
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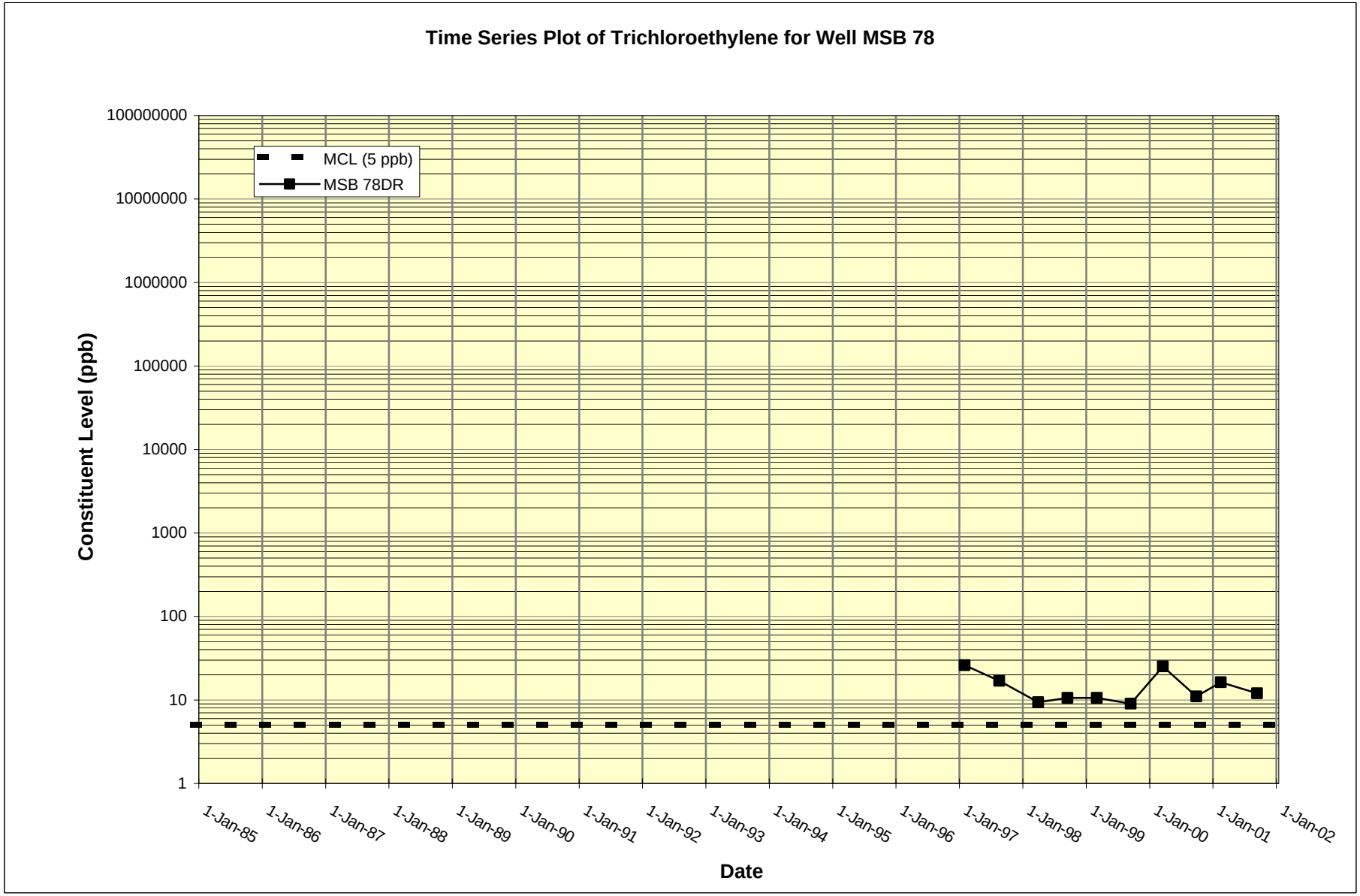
1-Jan-02
Date


Time Series Plot of Trichloroethylene for Well MSB 78
MCL (5 ppb)
MSB 78DR
Constituent Level (ppb)
100000000
10000000
1000000
100000
10000
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1
1-Jan-85
1-Jan-86
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1-Jan-92
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1-Jan-94
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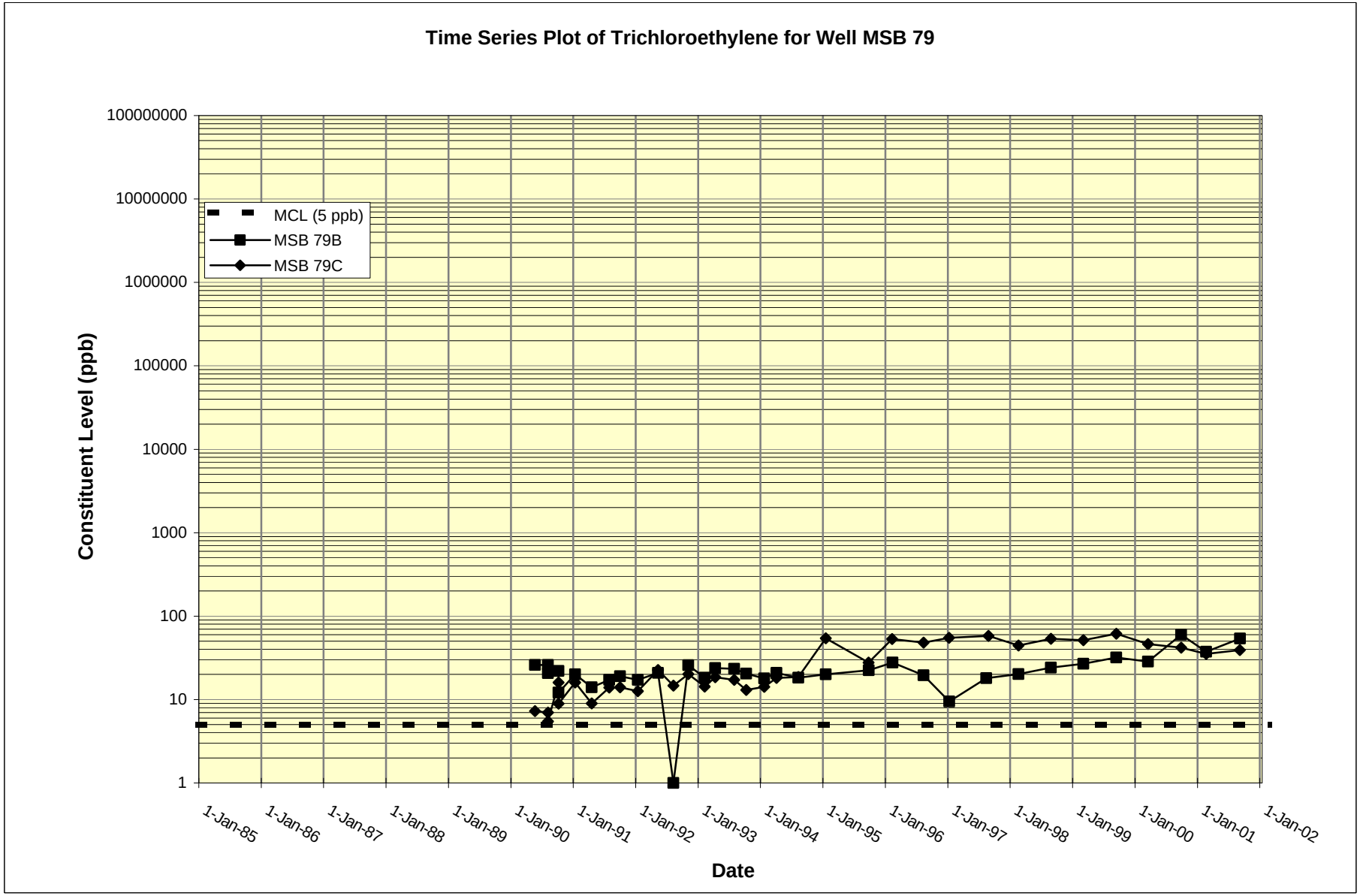
1-Jan-02
Date


Time Series Plot of Trichloroethylene for Well MSB 79
MCL (5 ppb)
MSB 79B
MSB 79C
Constituent Level (ppb)
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10000000
1000000
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1-Jan-85
1-Jan-86
1-Jan-87
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1-Jan-90
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1-Jan-92
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1-Jan-94
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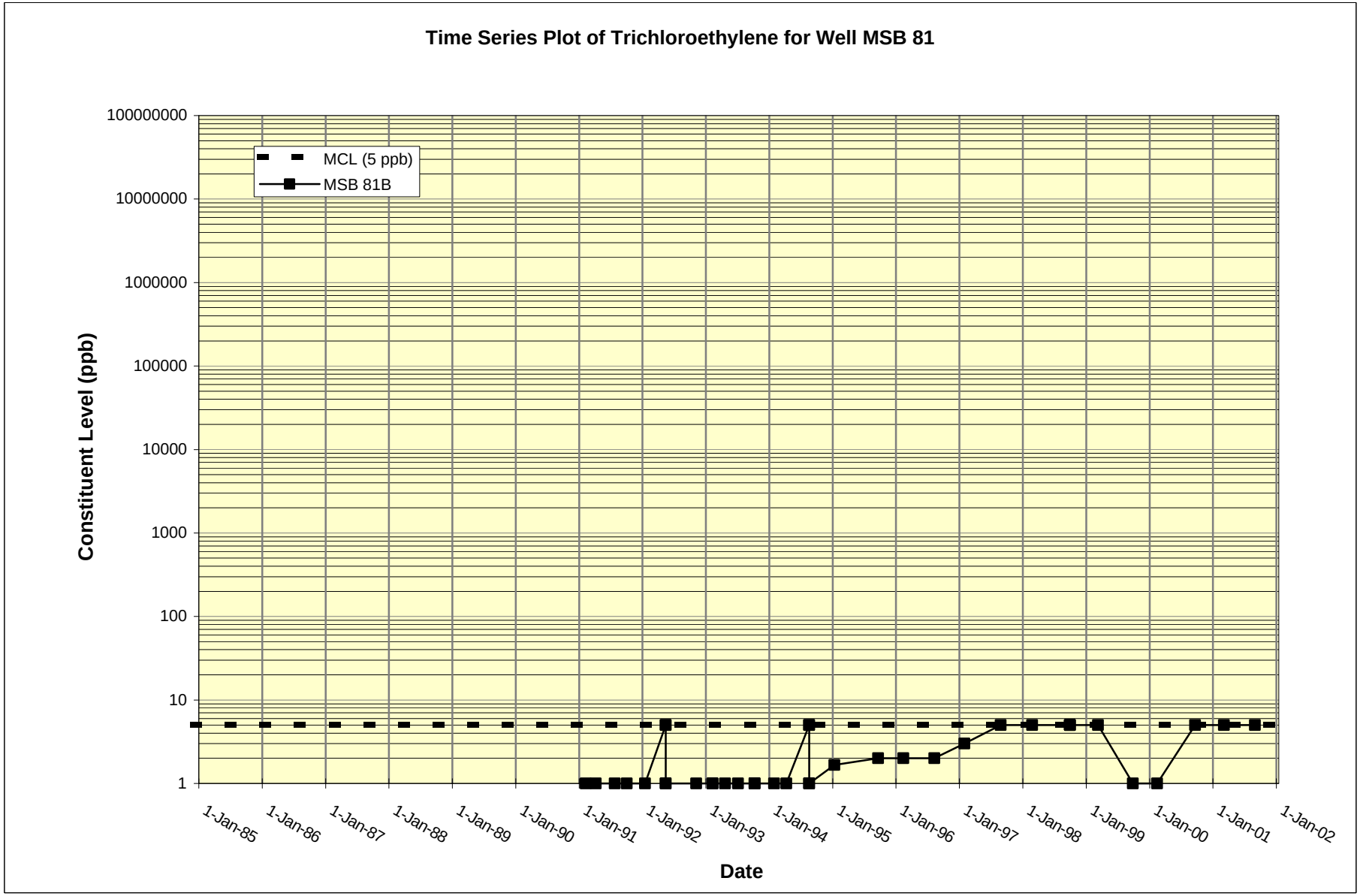
Date


Time Series Plot of Trichloroethylene for Well MSB 81
MCL (5 ppb)
MSB 81B
Constituent Level (ppb)
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
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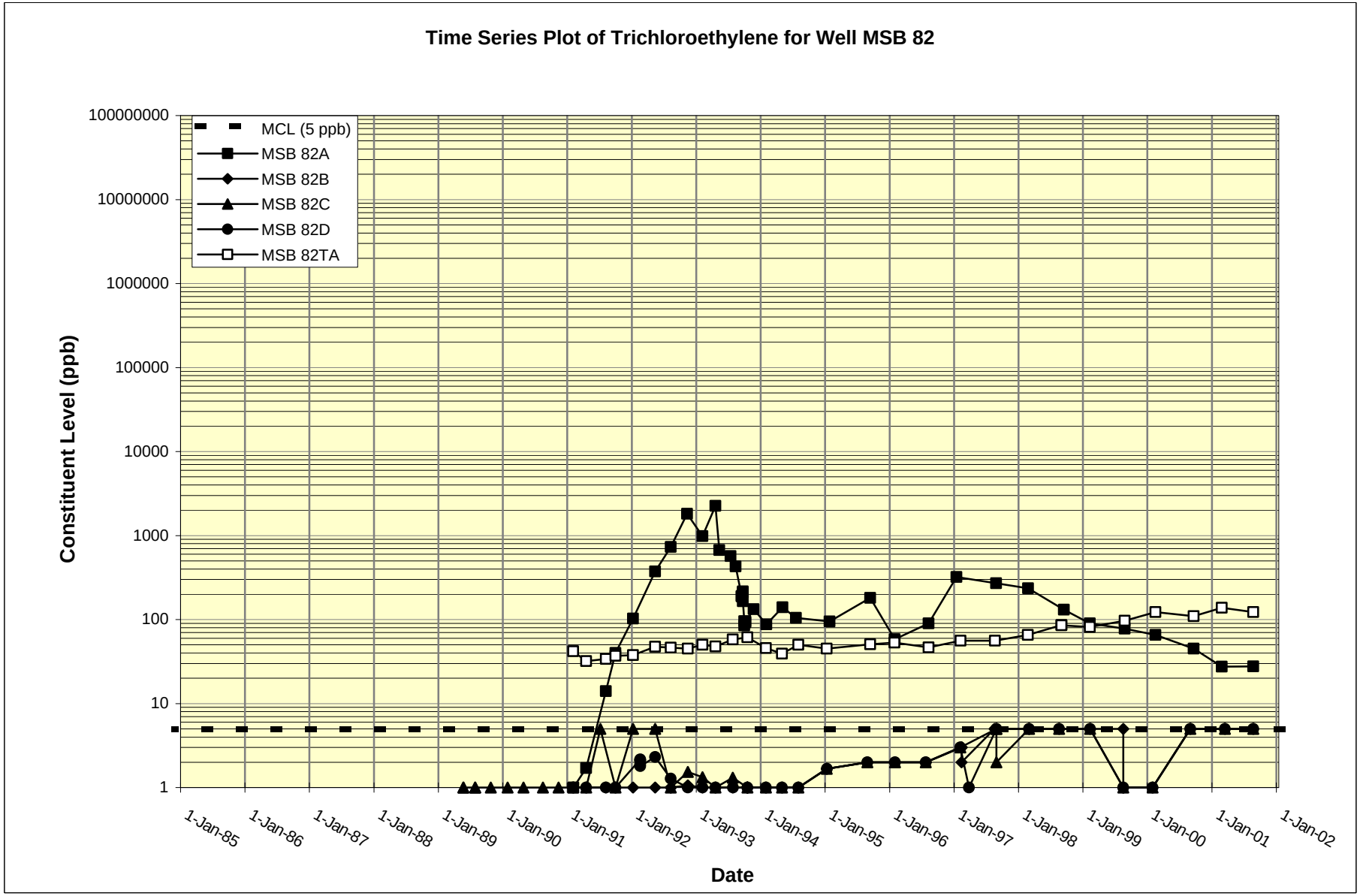
Date


Time Series Plot of Trichloroethylene for Well MSB 82
MCL (5 ppb)
MSB 82A
MSB 82B
MSB 82C
MSB 82D
MSB 82TA
Constituent Level (ppb)
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
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1-Jan-92
1-Jan-93
1-Jan-94
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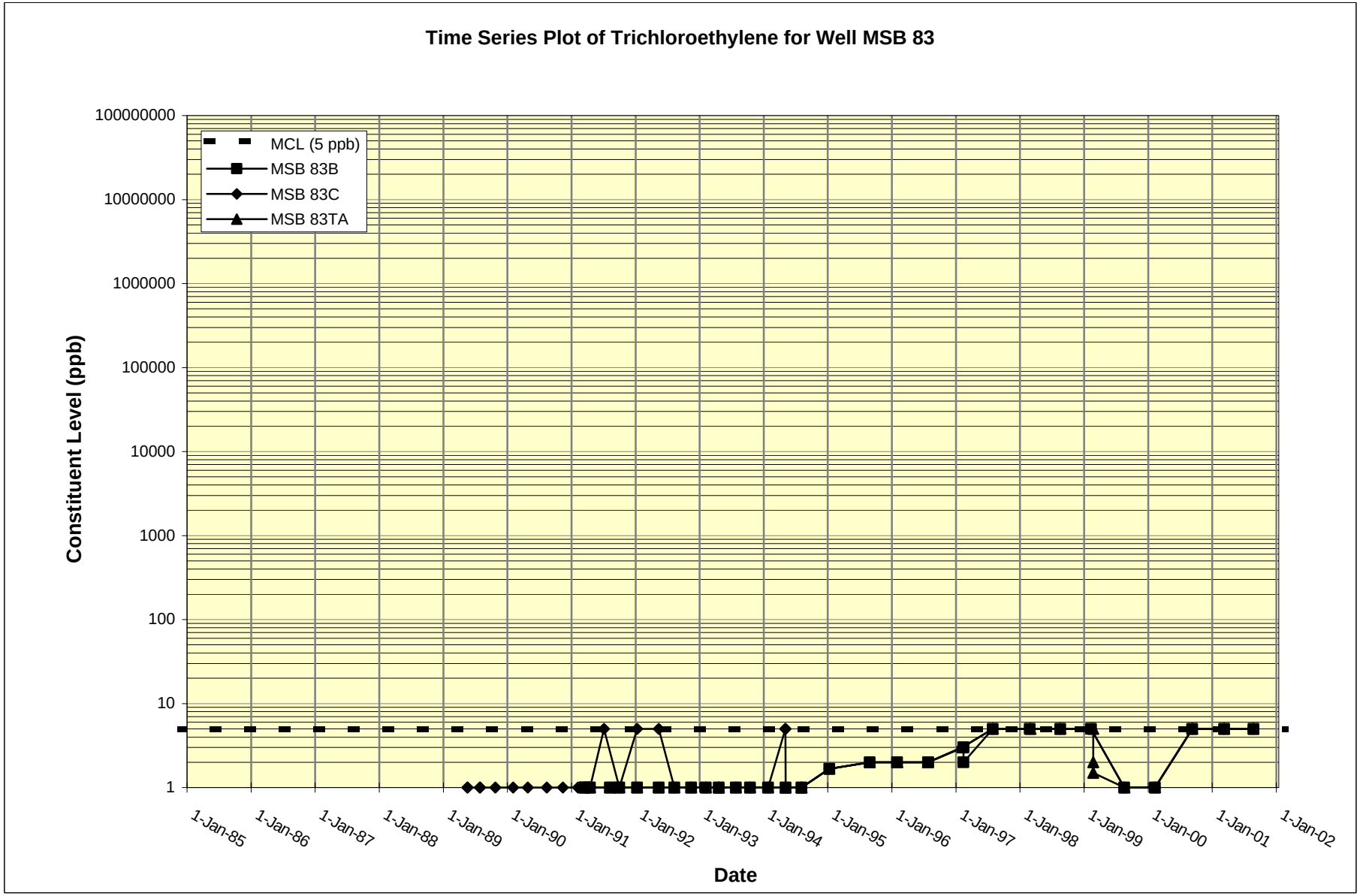
1-Jan-02
Date


Time Series Plot of Trichloroethylene for Well MSB 83
MCL (5 ppb)
MSB 83B
MSB 83C
MSB 83TA
Constituent Level (ppb)
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
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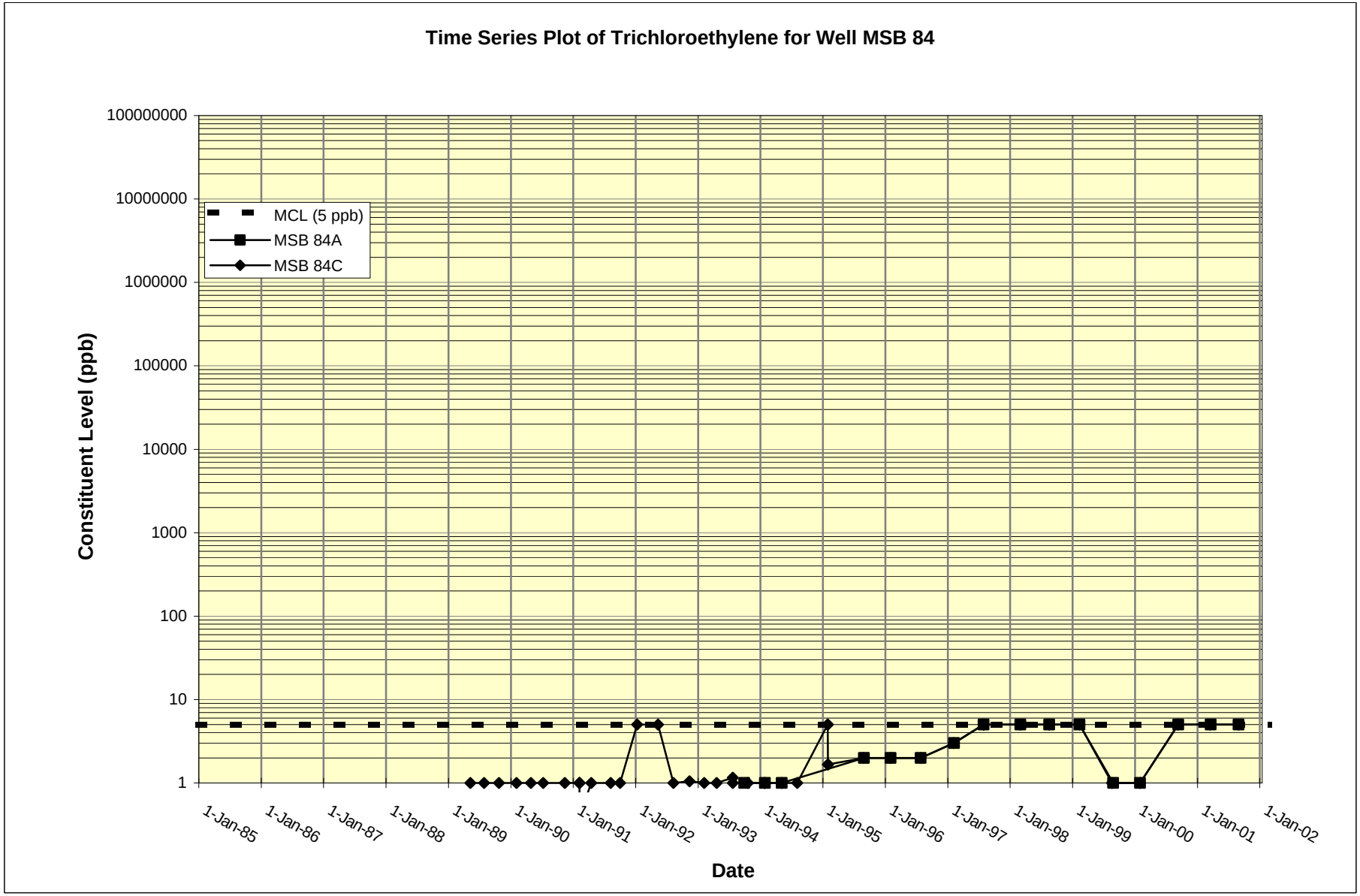
1-Jan-02
Date


Time Series Plot of Trichloroethylene for Well MSB 84
Constituent Level (ppb)
100000000
10000000
1000000
100000
10000
1000
100
10
1
MCL (5 ppb)
MSB 84A
MSB 84C
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
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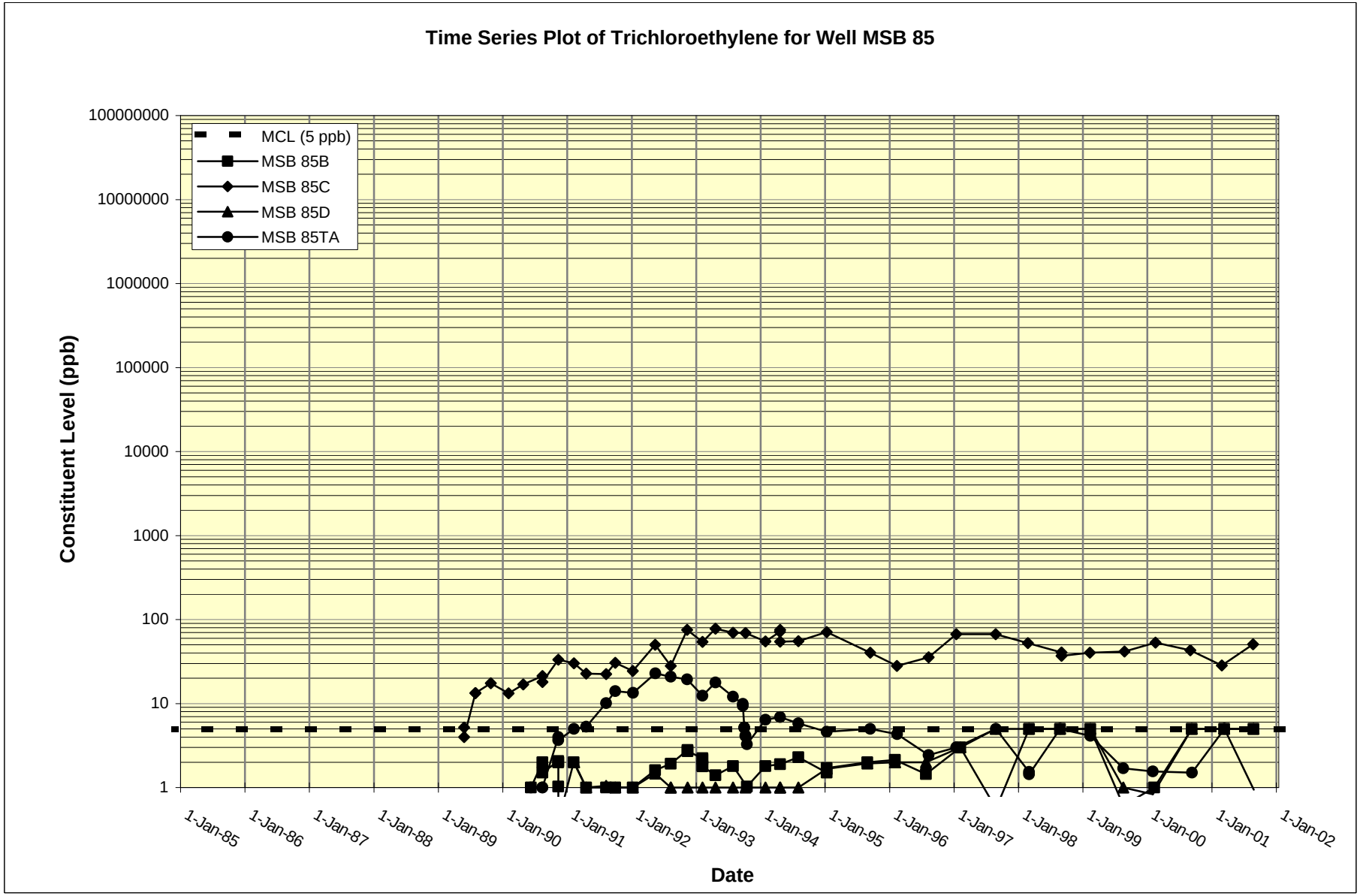
1-Jan-02
Date


Time Series Plot of Trichloroethylene for Well MSB 85
MCL (5 ppb)
MSB 85B
MSB 85C
MSB 85D
MSB 85TA
Constituent Level (ppb)
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
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1-Jan-92
1-Jan-93
1-Jan-94
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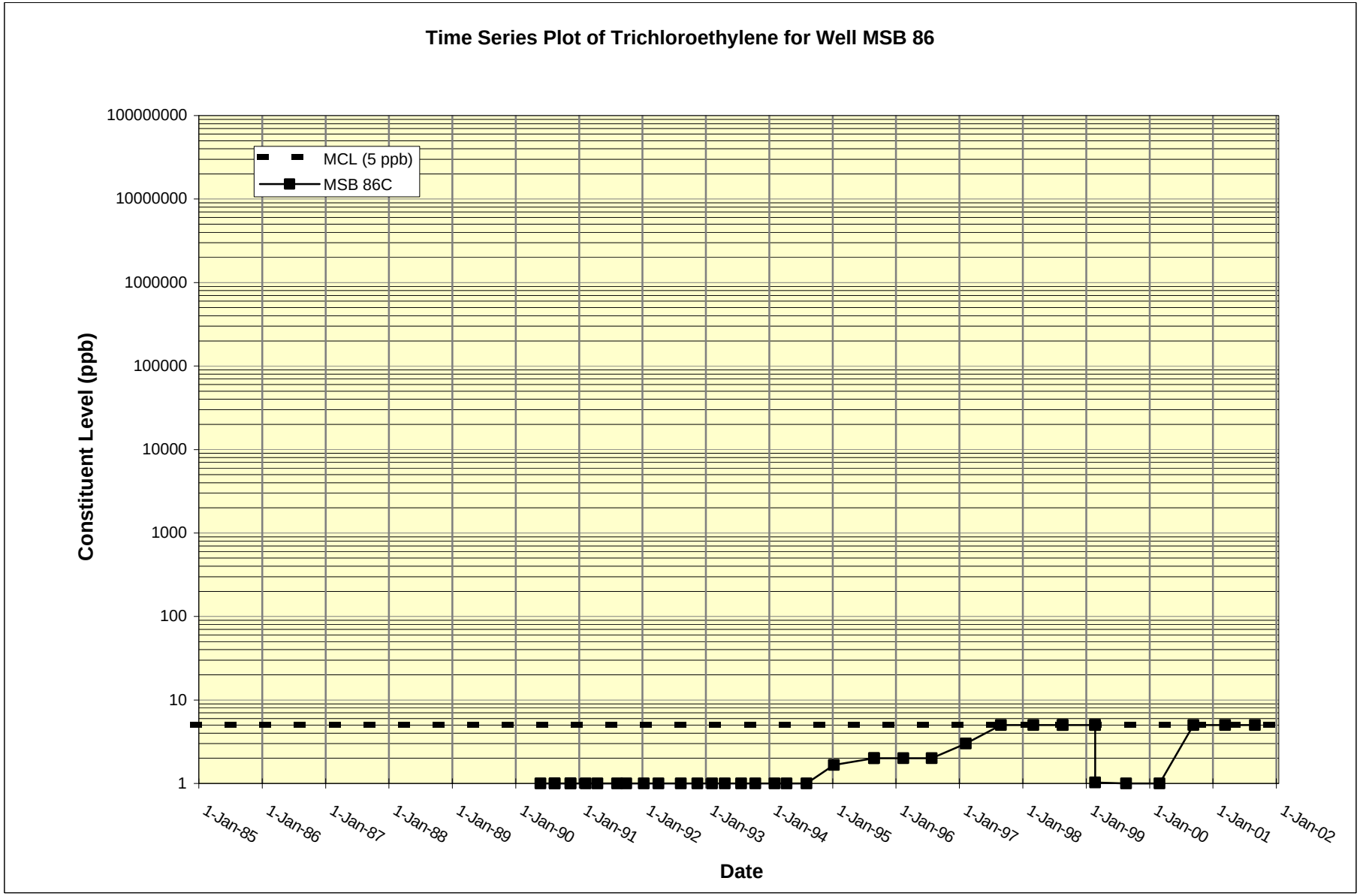
1-Jan-02
Date


Time Series Plot of Trichloroethylene for Well MSB 86
MCL (5 ppb)
MSB 86C
Constituent Level (ppb)
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
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1-Jan-92
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1-Jan-94
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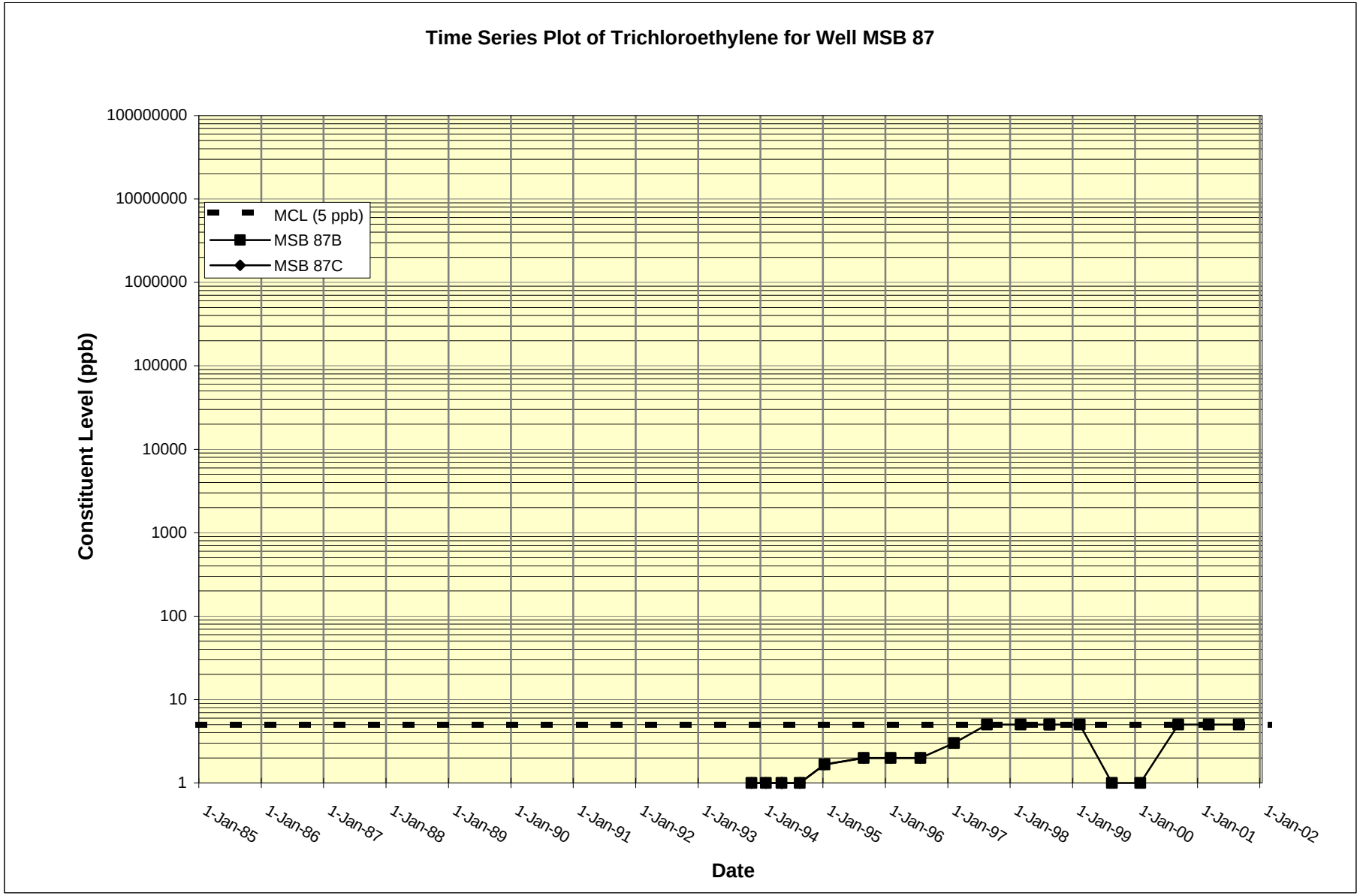
Date


Time Series Plot of Trichloroethylene for Well MSB 87
MCL (5 ppb)
MSB 87B
MSB 87C
Constituent Level (ppb)
100000000
10000000
1000000
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100
10
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1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
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1-Jan-90
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1-Jan-92
1-Jan-93
1-Jan-94
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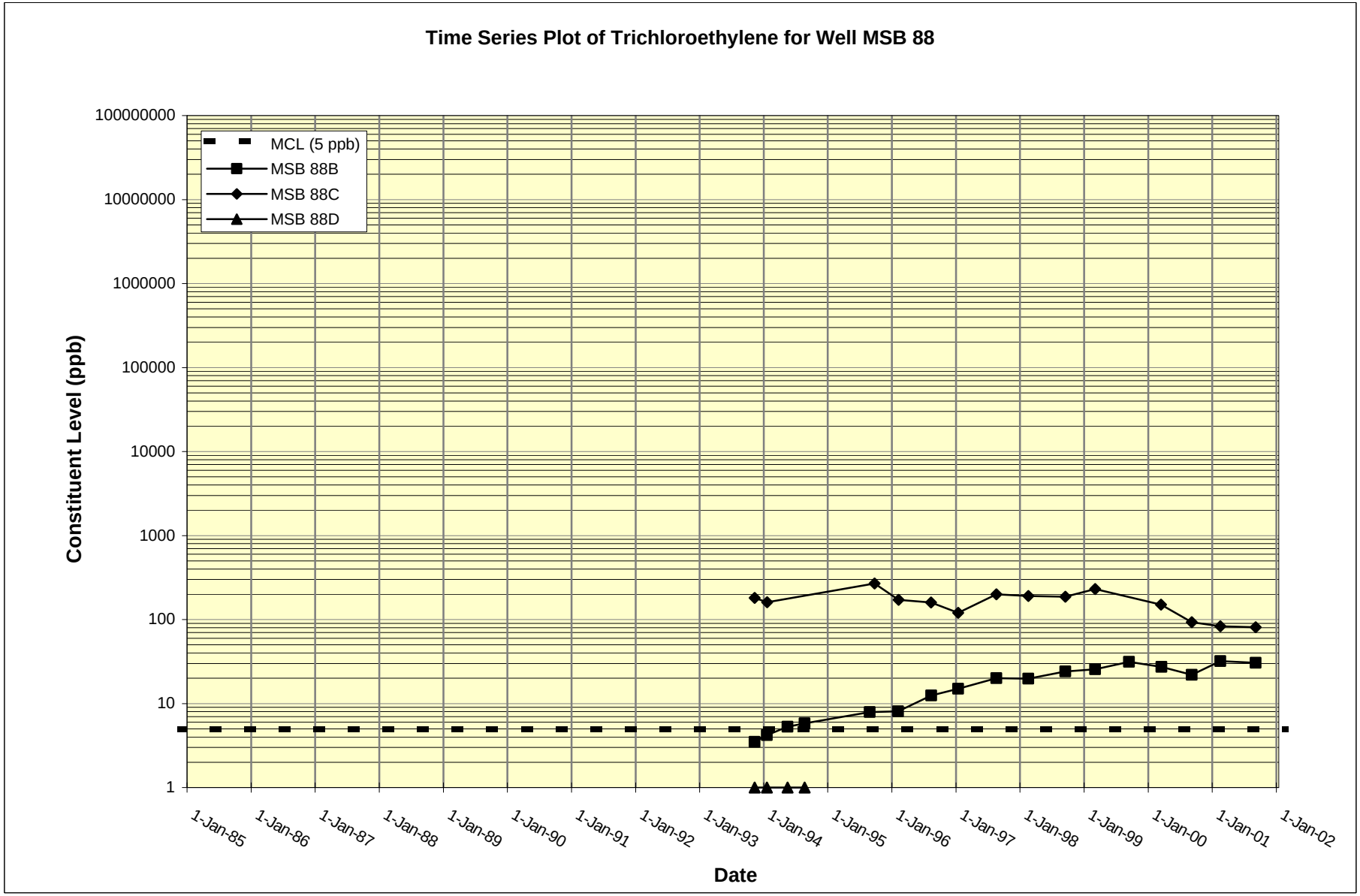
Time Series Plot of Trichloroethylene for Well MSB 88
MCL (5 ppb)
MSB 88B
MSB 88C
MSB 88D
Constituent Level (ppb)
100000000
10000000
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100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
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1-Jan-90
1-Jan-91
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1-Jan-94
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1-Jan-02
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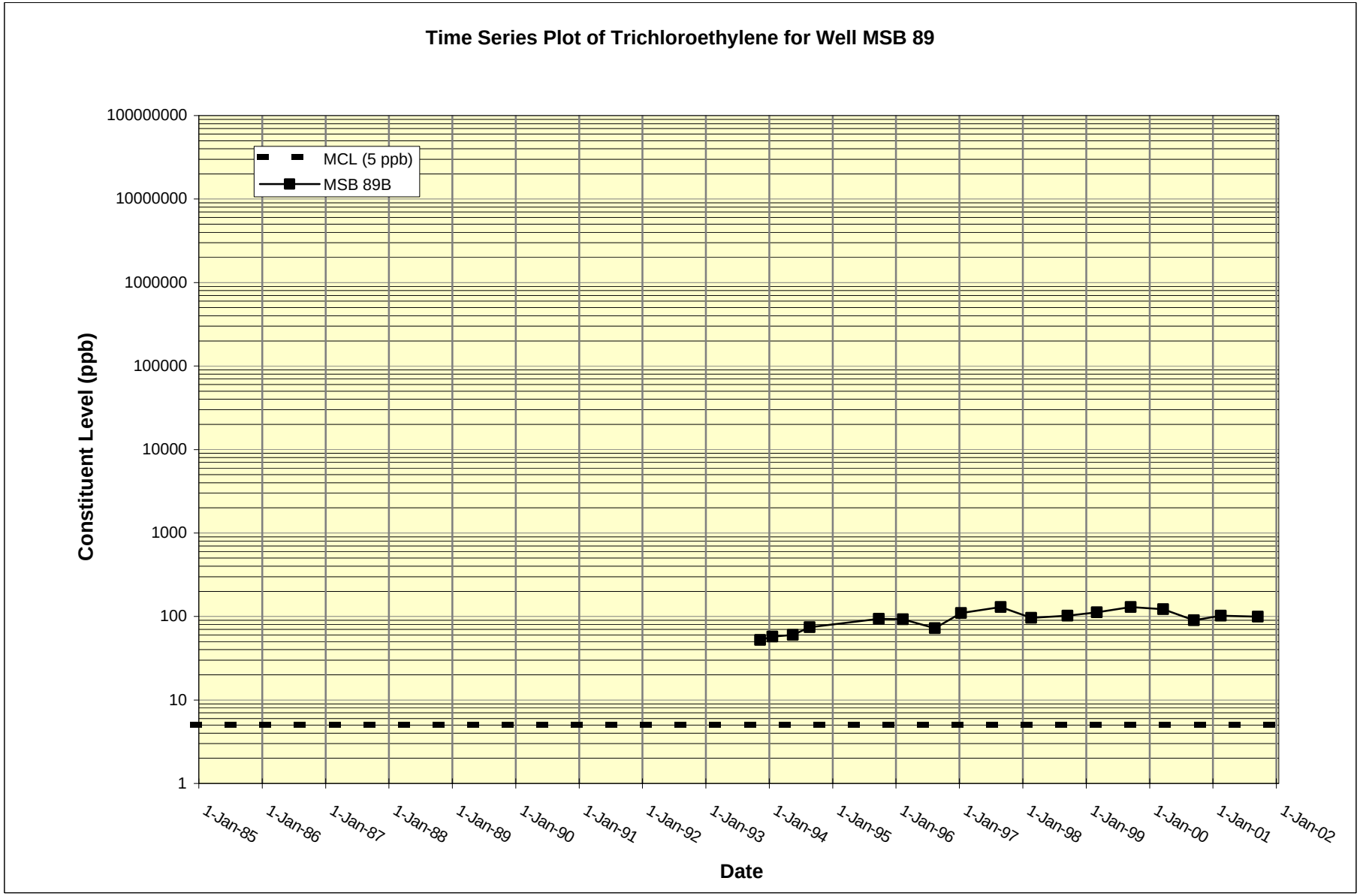
Time Series Plot of Trichloroethylene for Well MSB 89
MCL (5 ppb)
MSB 89B
Constituent Level (ppb)
100000000
10000000
1000000
100000
10000
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100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
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1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
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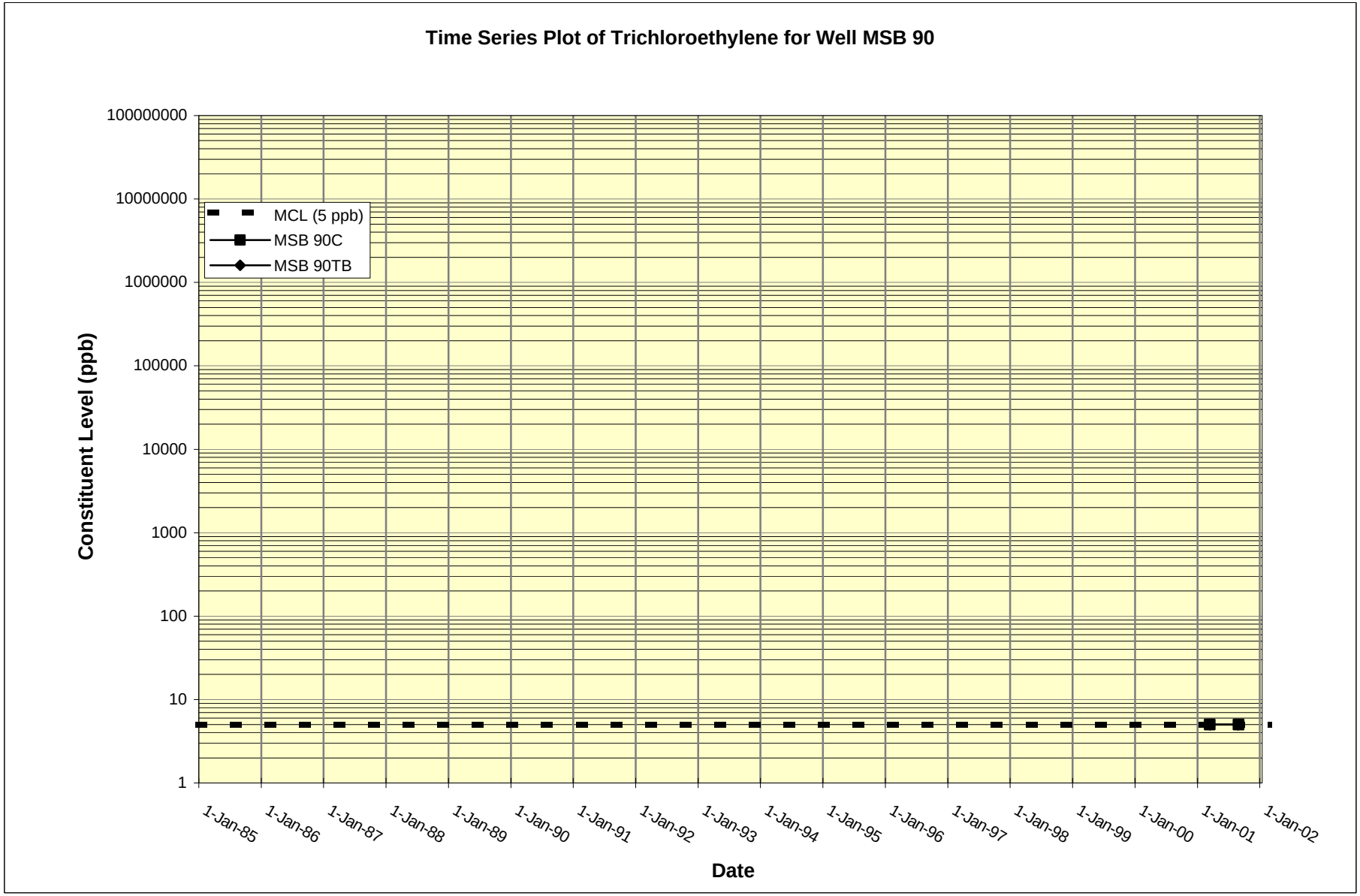
1-Jan-01
1-Jan-02
Date


Time Series Plot of Trichloroethylene for Well MSB 90
MCL (5 ppb)
MSB 90C
MSB 90TB
Constituent Level (ppb)
100000000
10000000
1000000
100000
10000
1000
100
10
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1-Jan-87
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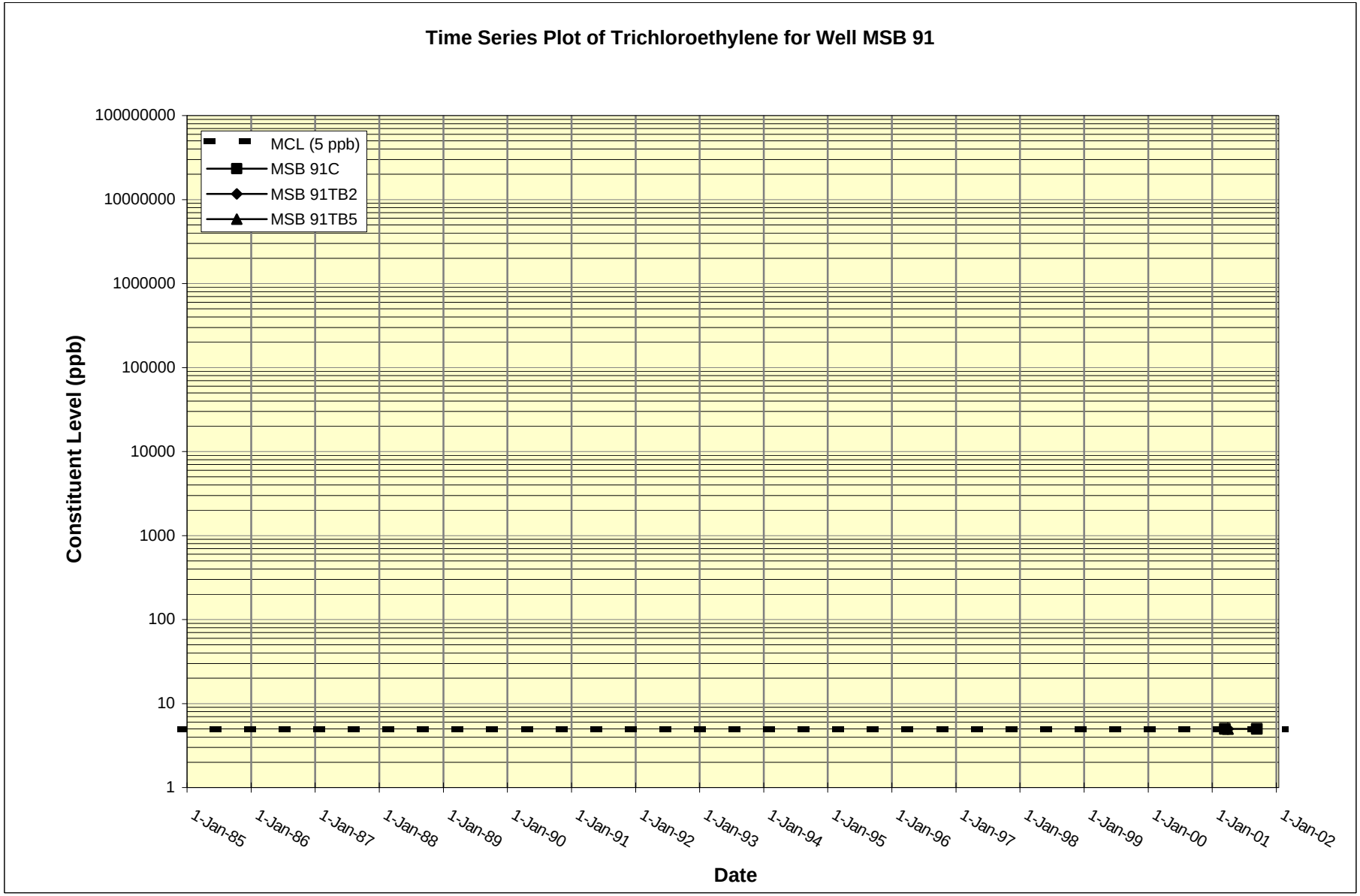
Date


Time Series Plot of Trichloroethylene for Well MSB 91
MCL (5 ppb)
MSB 91C
MSB 91TB2
MSB 91TB5
Constituent Level (ppb)
100000000
10000000
1000000
100000
10000
1000
100
10
1
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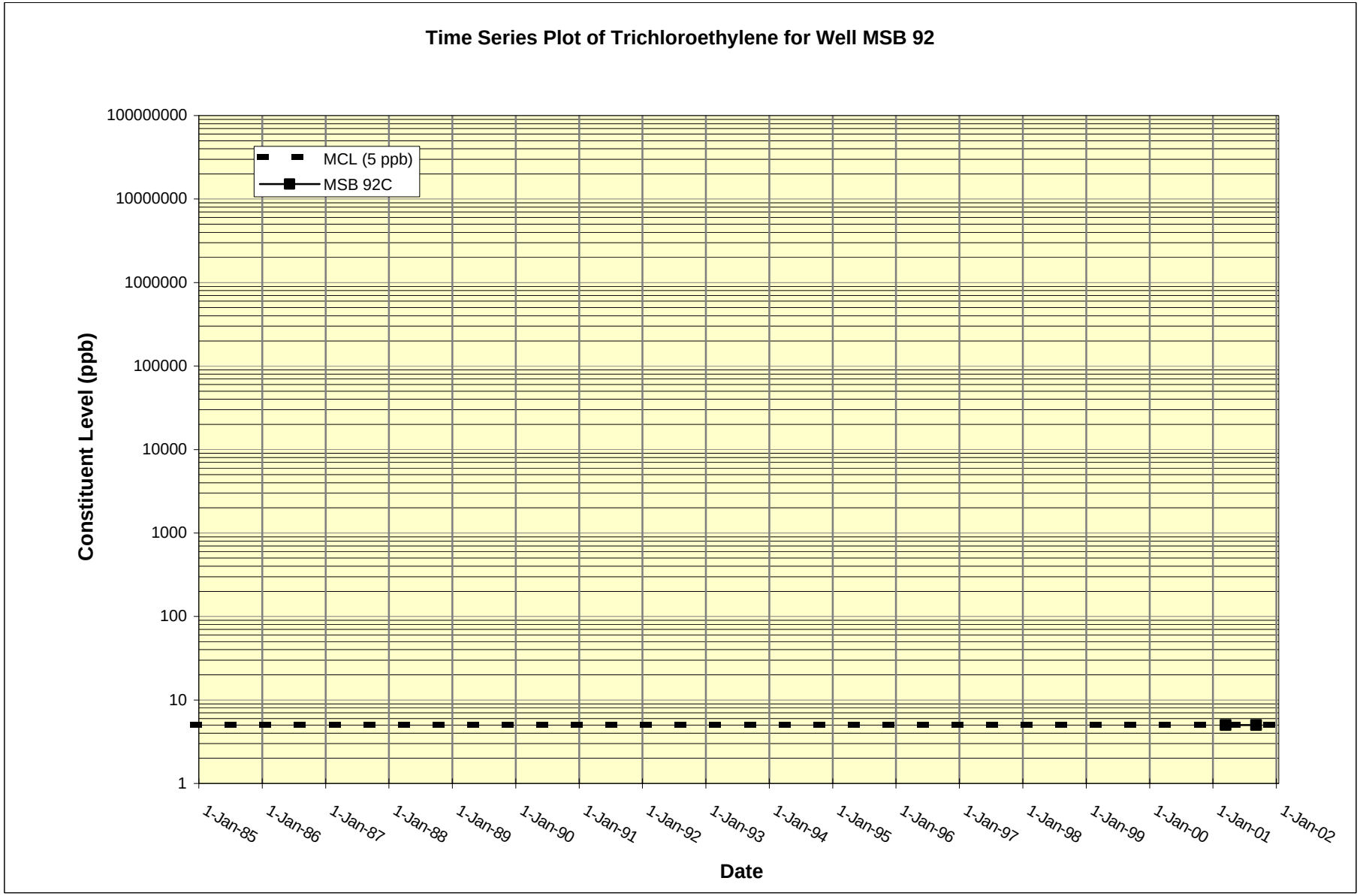
Time Series Plot of Trichloroethylene for Well MSB 92
MCL (5 ppb)
MSB 92C
Constituent Level (ppb)
100000000
10000000
1000000
100000
10000
1000
100
10
1
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1-Jan-86
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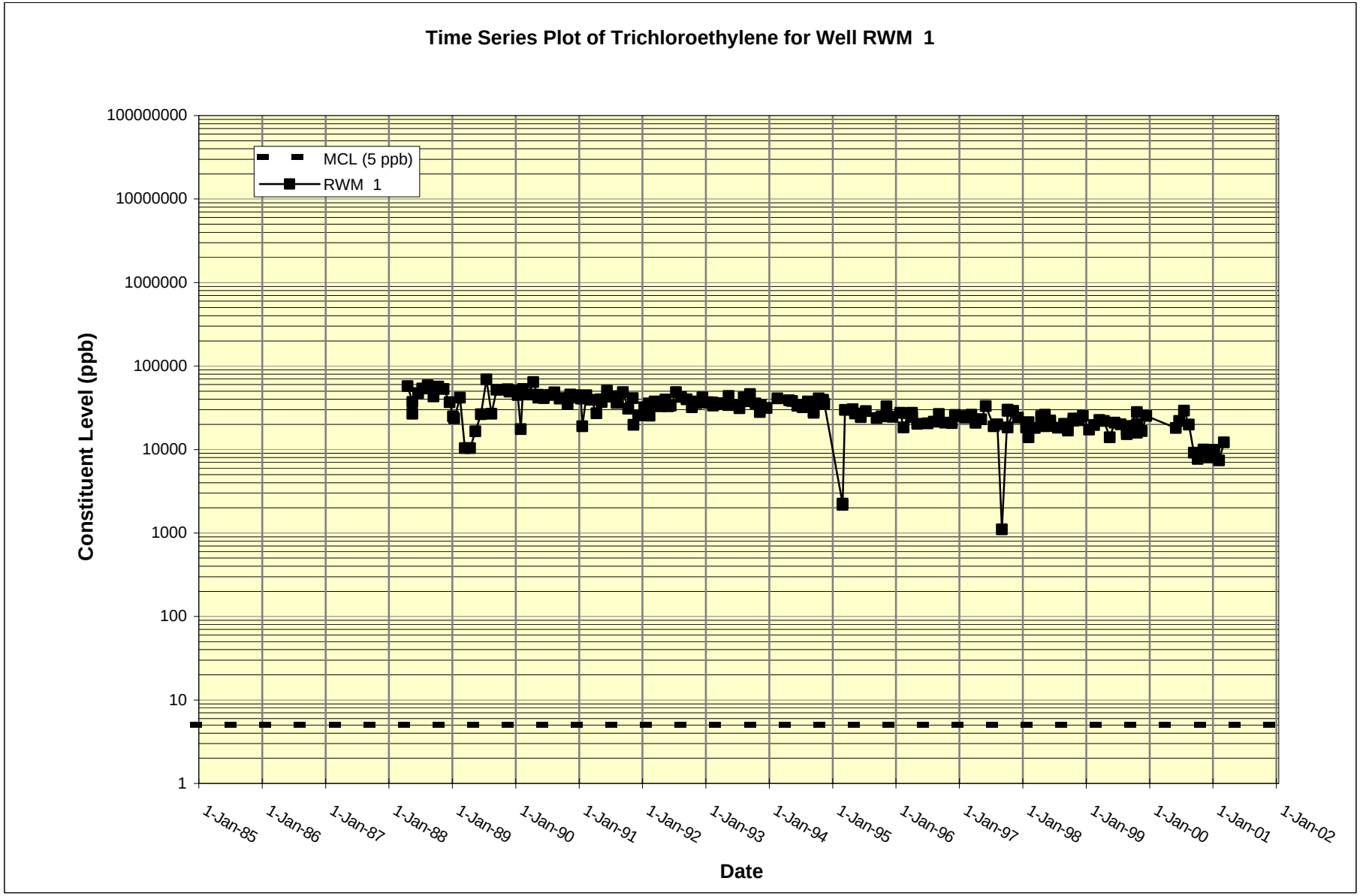
Time Series Plot of Trichloroethylene for Well RWM 1
MCL (5 ppb)
RWM 1
Constituent Level (ppb)
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
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1-Jan-89
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1-Jan-92
1-Jan-93
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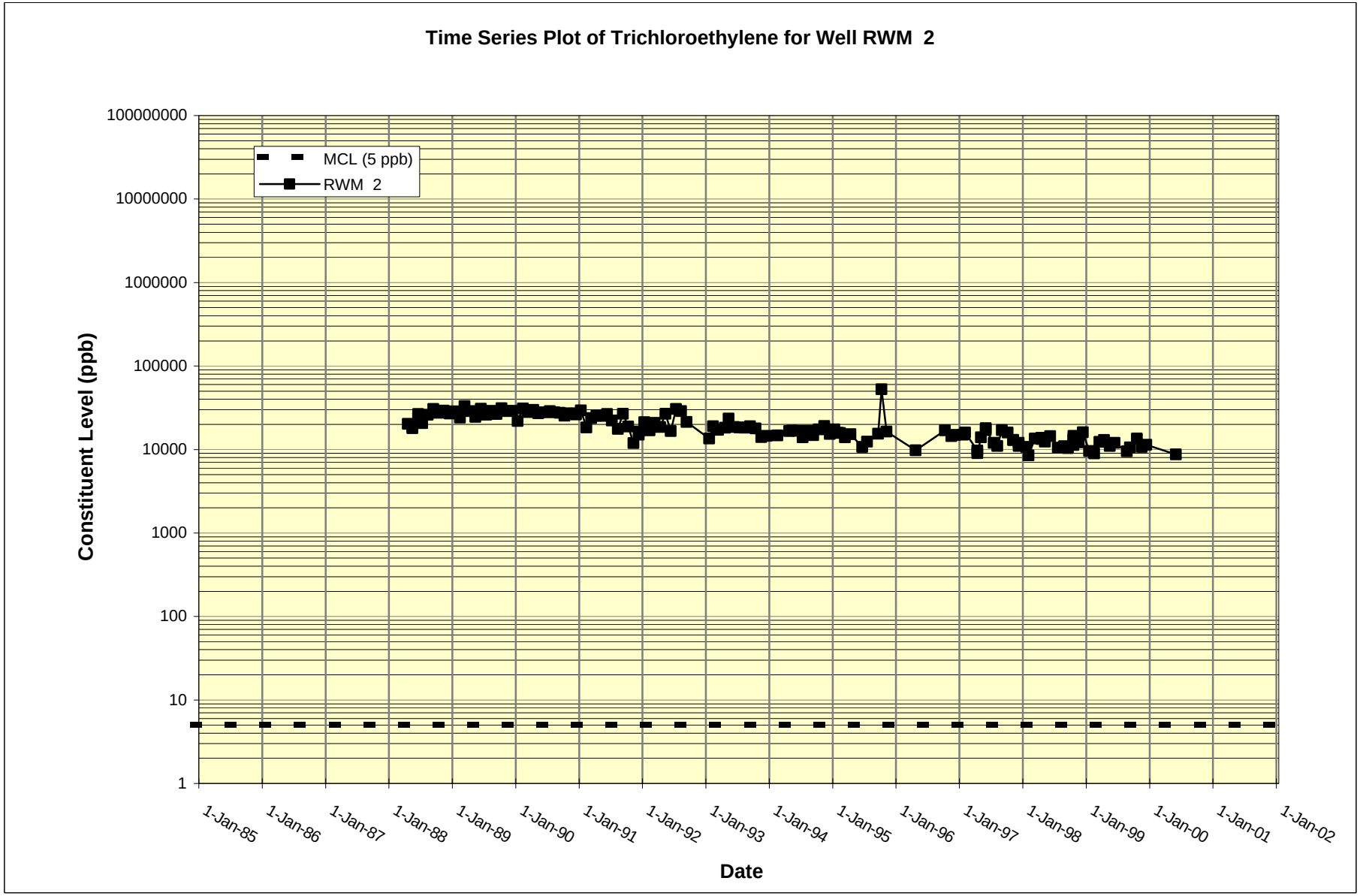
Time Series Plot of Trichloroethylene for Well RWM 2
MCL (5 ppb)
RWM 2
Constituent Level (ppb)
100000000
10000000
1000000
100000
10000
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100
10
1
1-Jan-85
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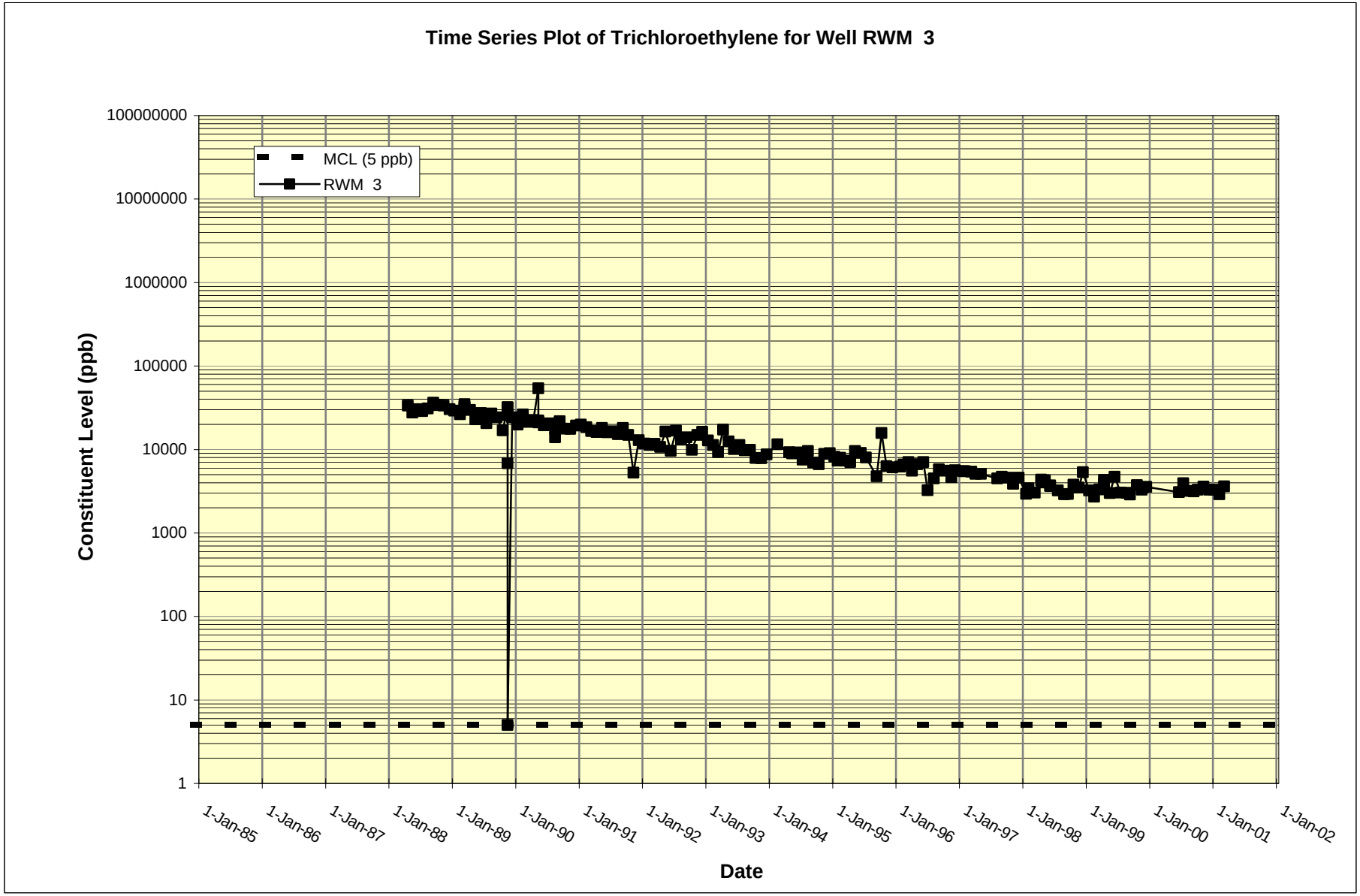
Time Series Plot of Trichloroethylene for Well RWM 3
MCL (5 ppb)
RWM 3
Constituent Level (ppb)
100000000
10000000
1000000
100000
10000
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100
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1
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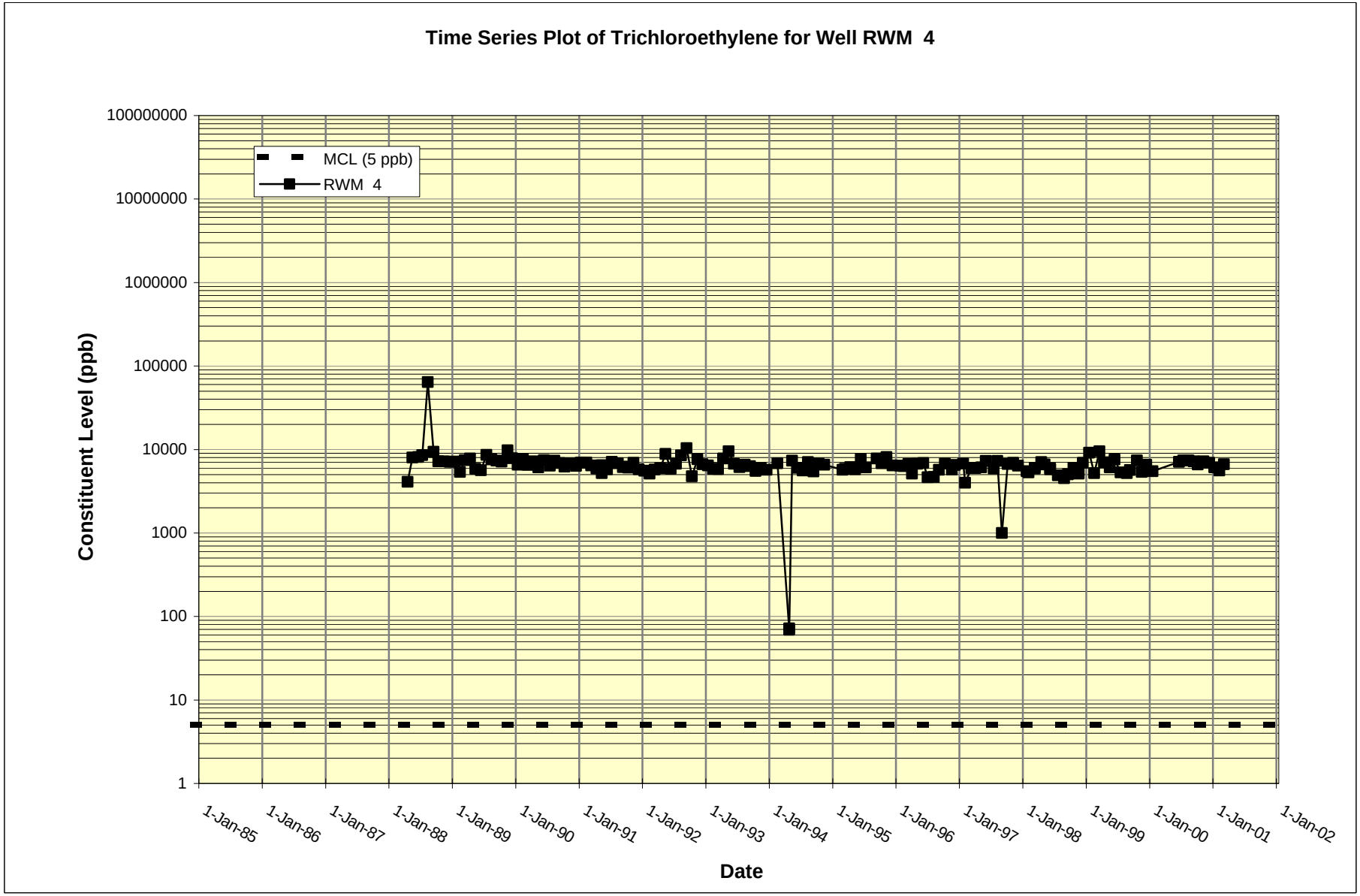
Time Series Plot of Trichloroethylene for Well RWM 4
MCL (5 ppb)
RWM 4
Constituent Level (ppb)
100000000
10000000
1000000
100000
10000
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100
10
1
1-Jan-85
1-Jan-86
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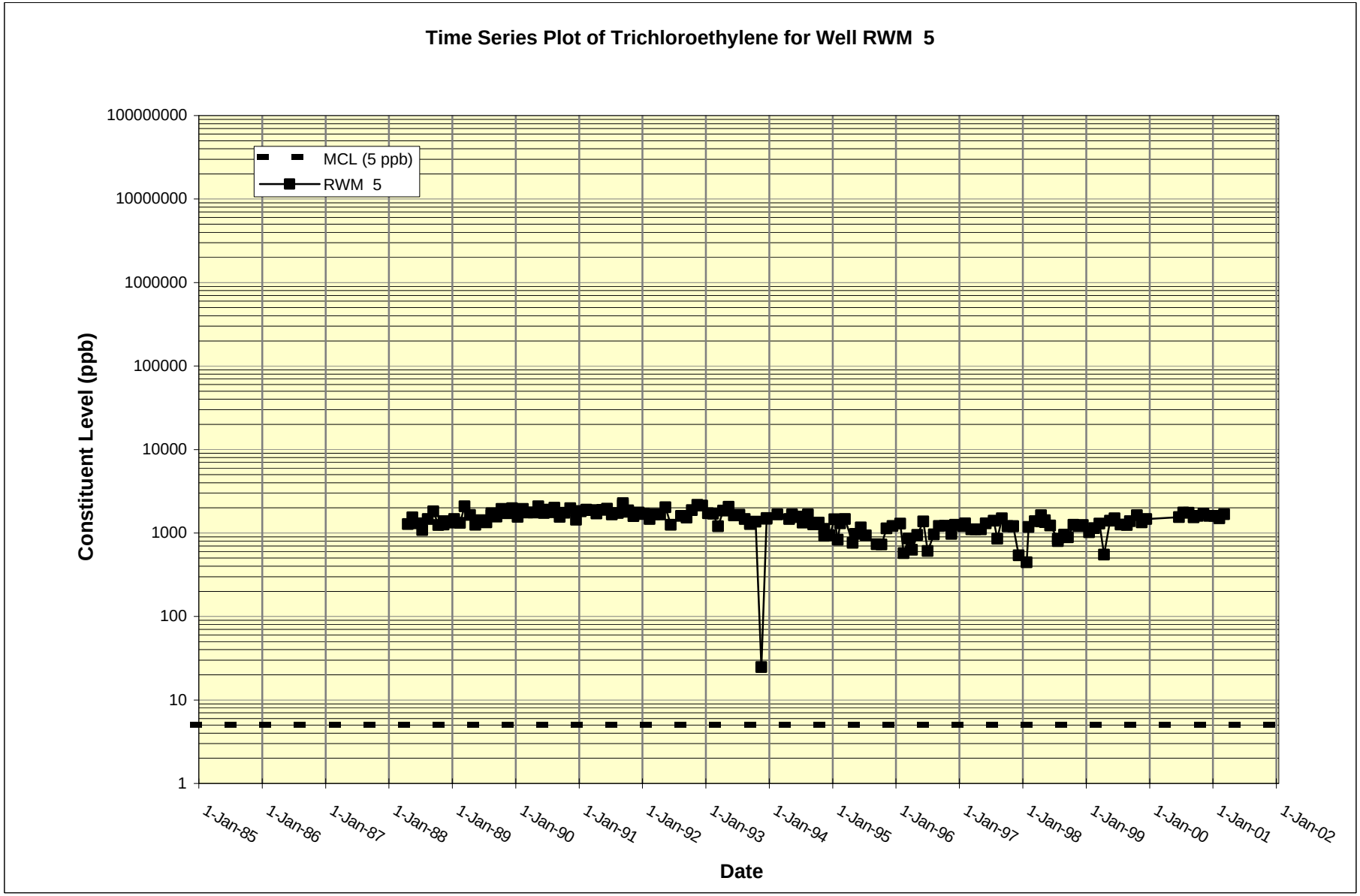
Time Series Plot of Trichloroethylene for Well RWM 5
MCL (5 ppb)
RWM 5
Constituent Level (ppb)
100000000
10000000
1000000
100000
10000
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100
10
1
1-Jan-85
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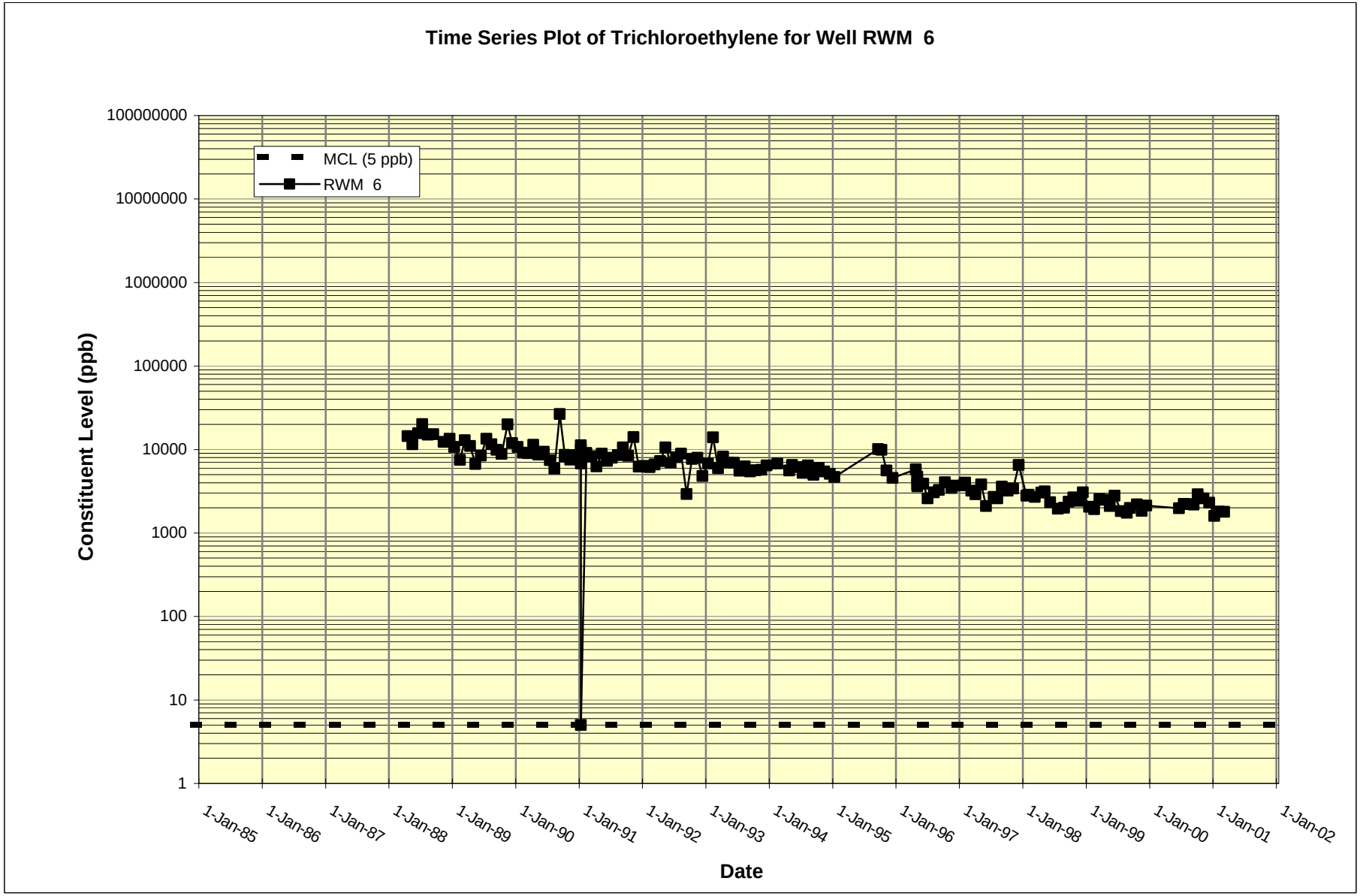
Time Series Plot of Trichloroethylene for Well RWM 6
MCL (5 ppb)
RWM 6
Constituent Level (ppb)
100000000
10000000
1000000
100000
10000
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100
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1-Jan-85
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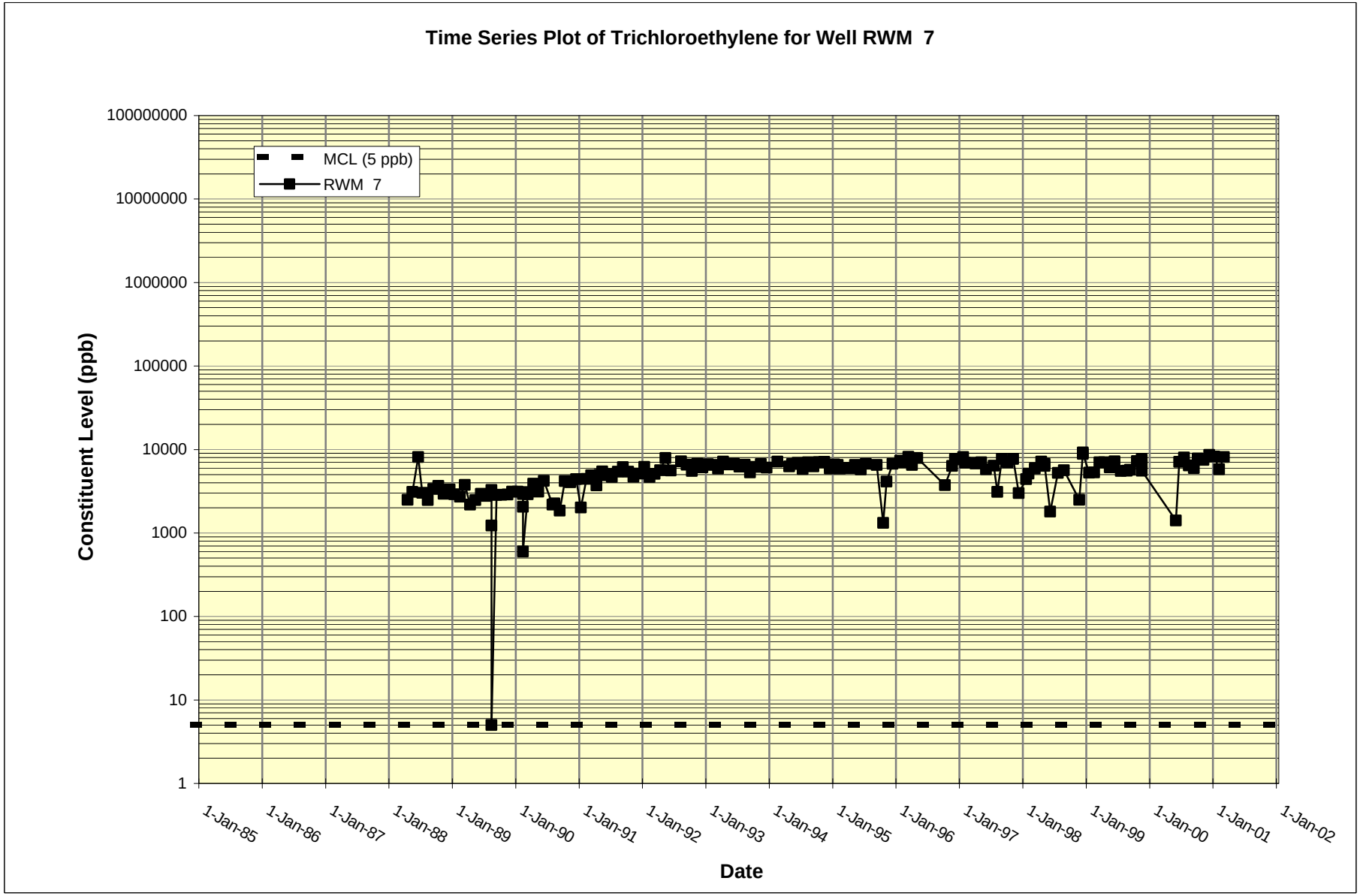
Time Series Plot of Trichloroethylene for Well RWM 7
MCL (5 ppb)
RWM 7
Constituent Level (ppb)
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
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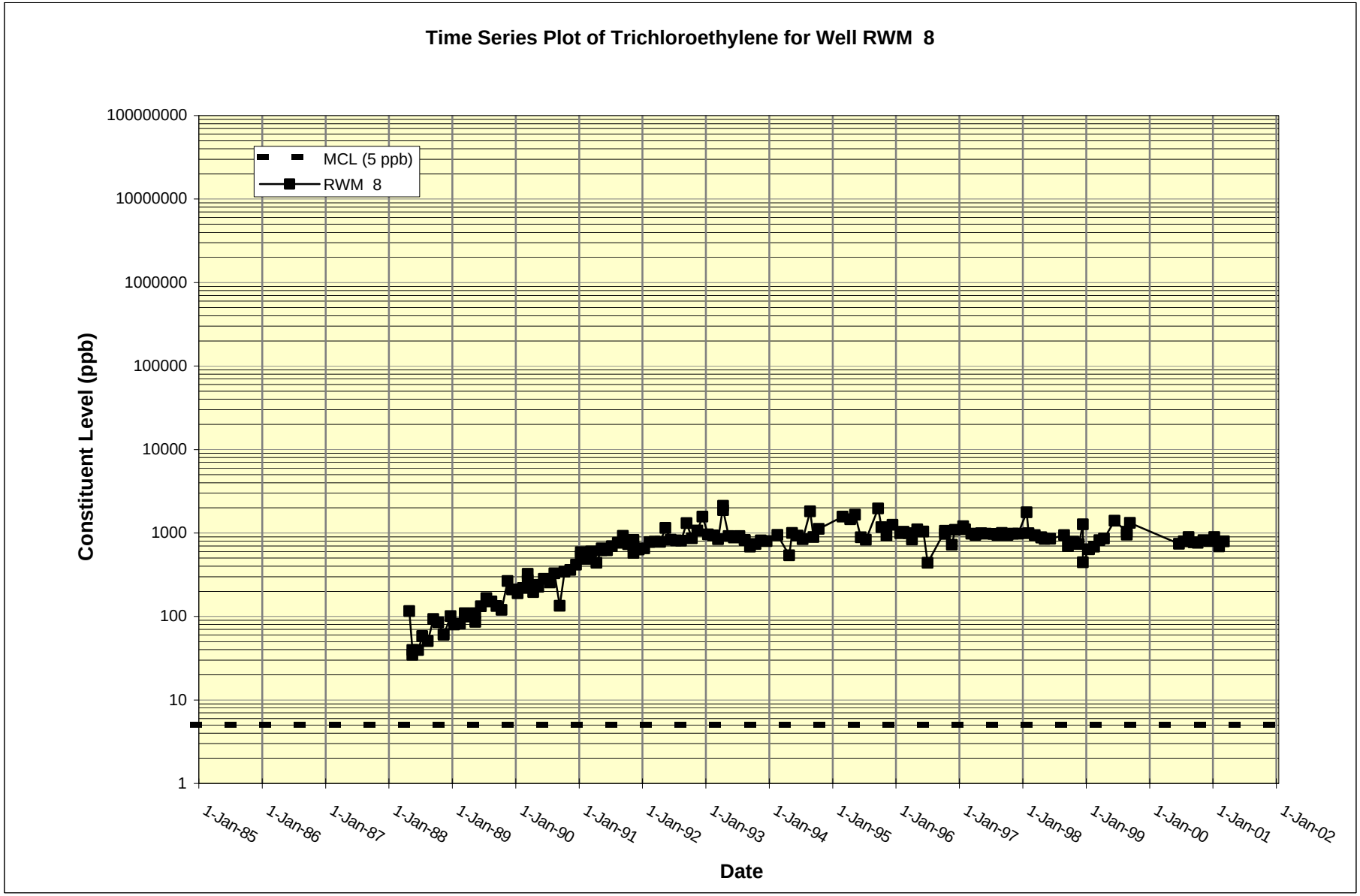
Date


Time Series Plot of Trichloroethylene for Well RWM 8
MCL (5 ppb)
RWM 8
Constituent Level (ppb)
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
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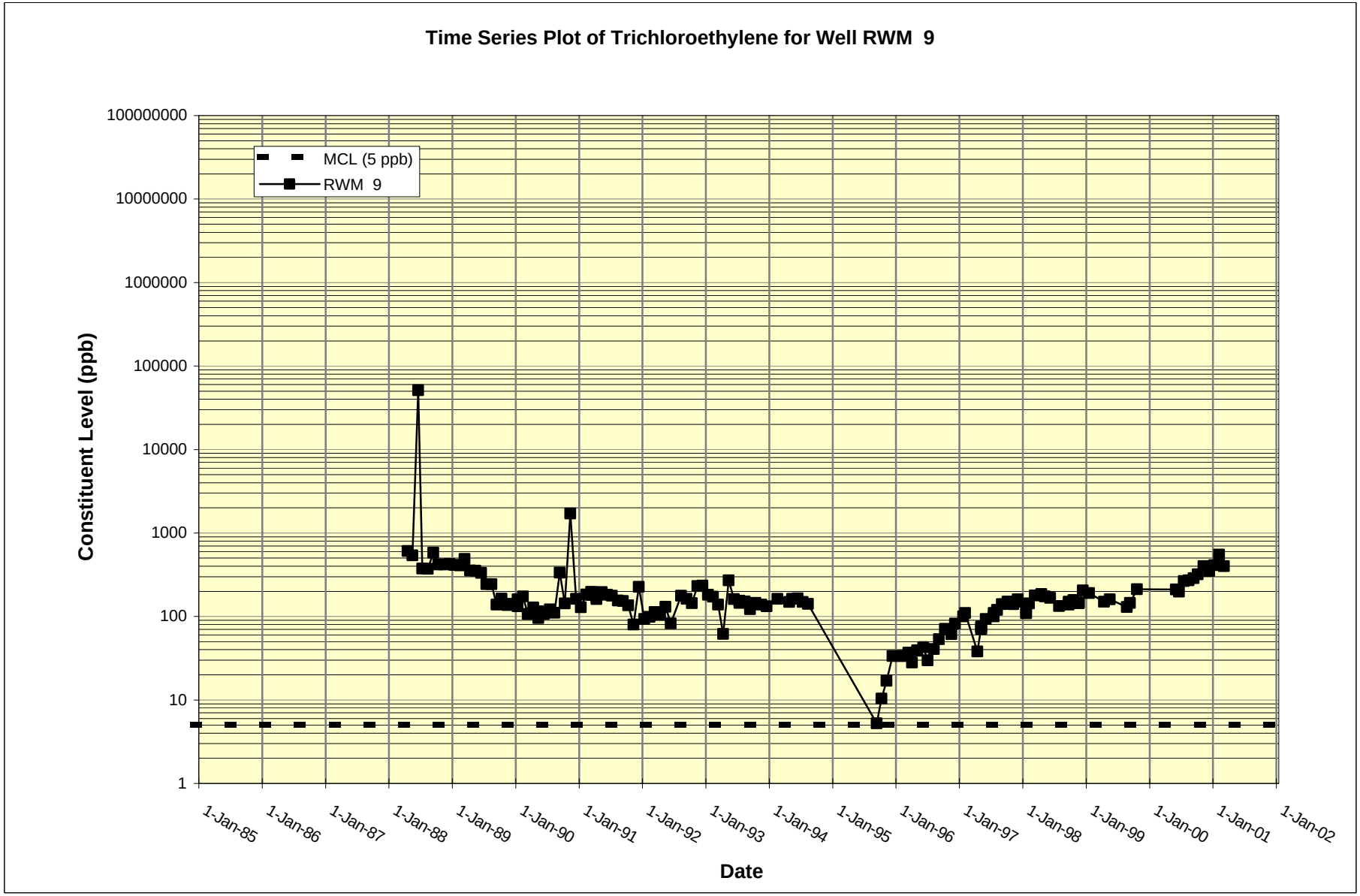
Date


Time Series Plot of Trichloroethylene for Well RWM 9
MCL (5 ppb)
RWM 9
Constituent Level (ppb)
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10000000
1000000
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10000
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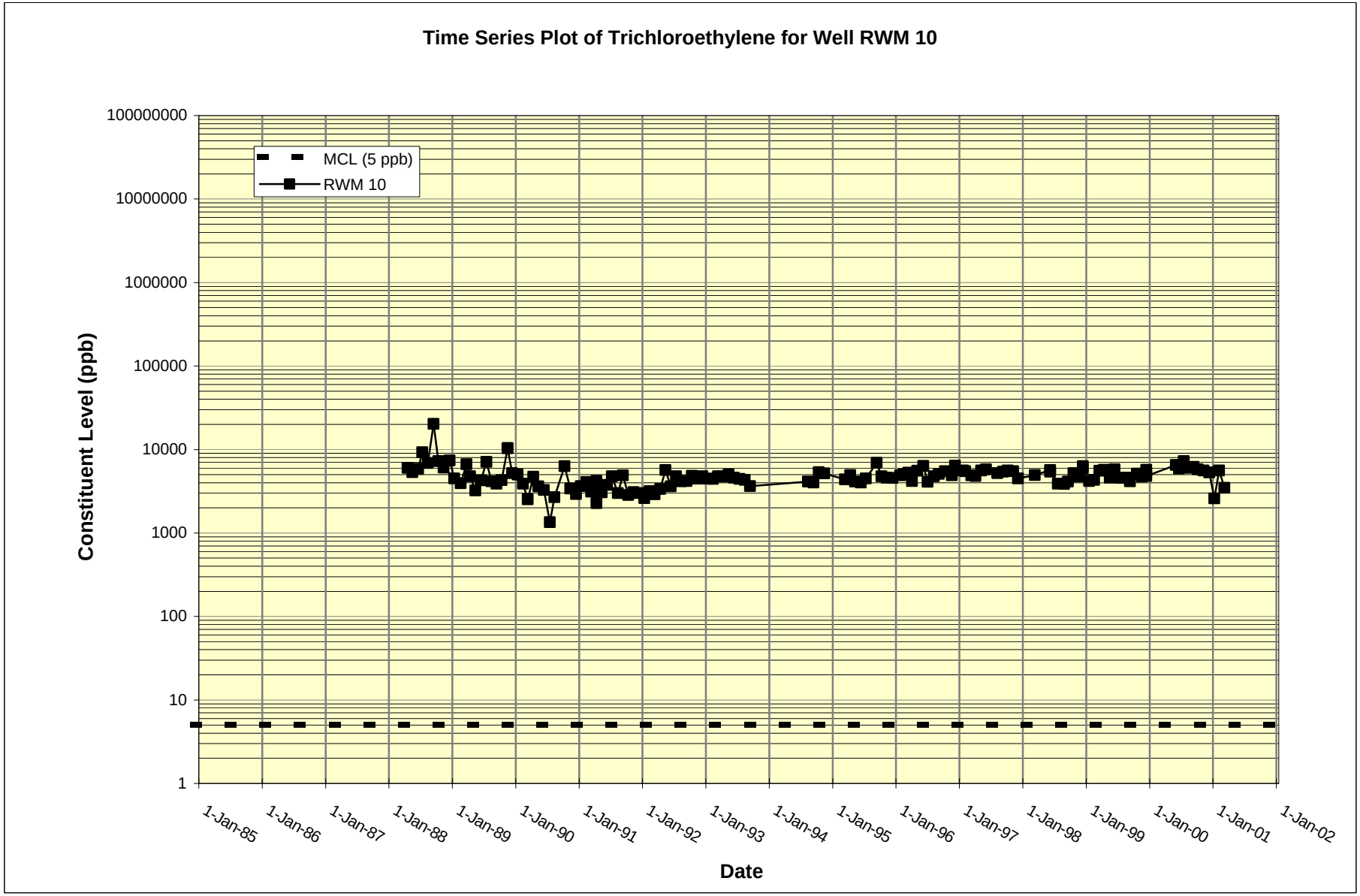
Time Series Plot of Trichloroethylene for Well RWM 10
MCL (5 ppb)
RWM 10
Constituent Level (ppb)
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10000000
1000000
100000
10000
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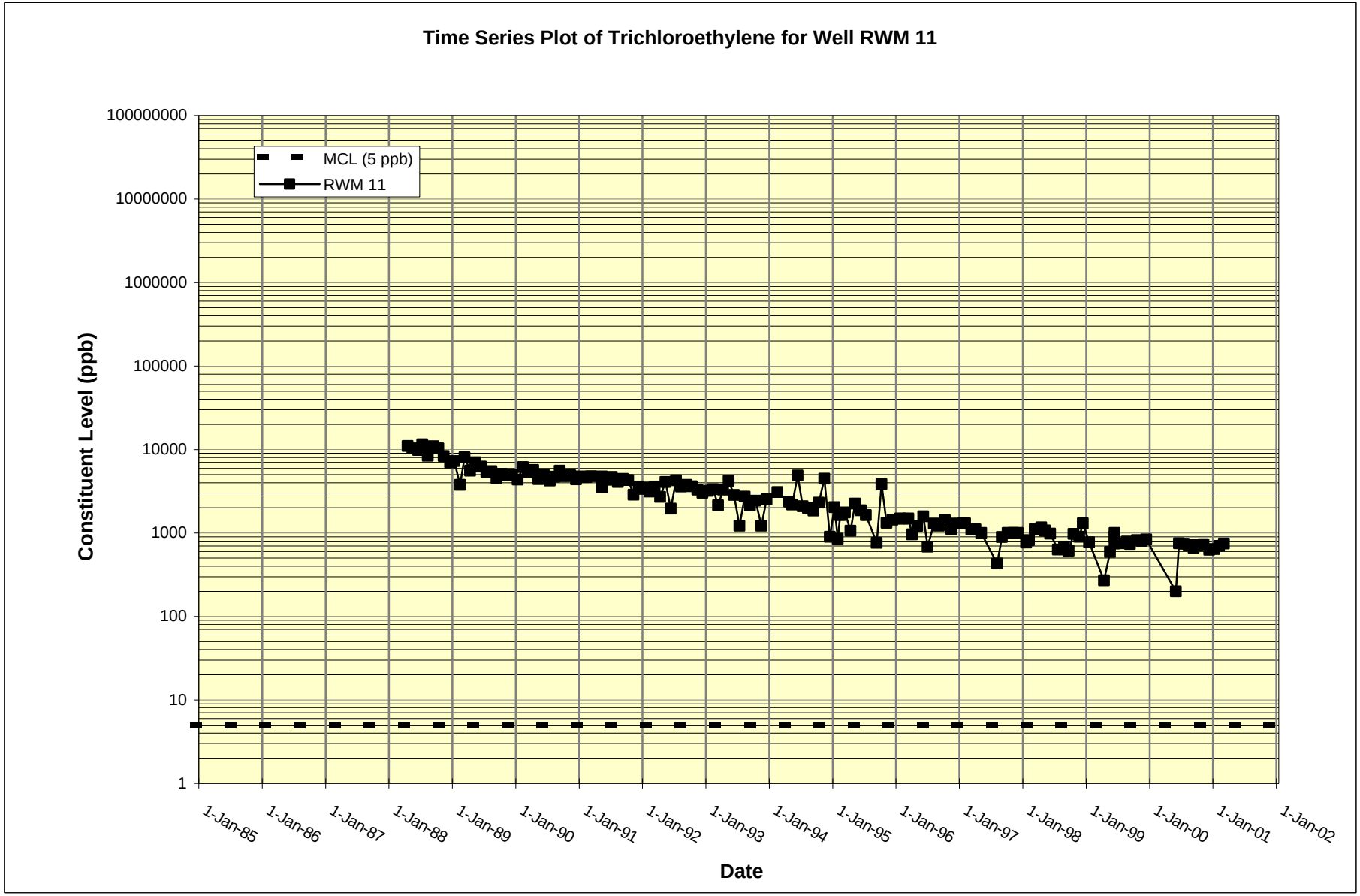
Time Series Plot of Trichloroethylene for Well RWM 11
MCL (5 ppb)
RWM 11
Constituent Level (ppb)
100000000
10000000
1000000
100000
10000
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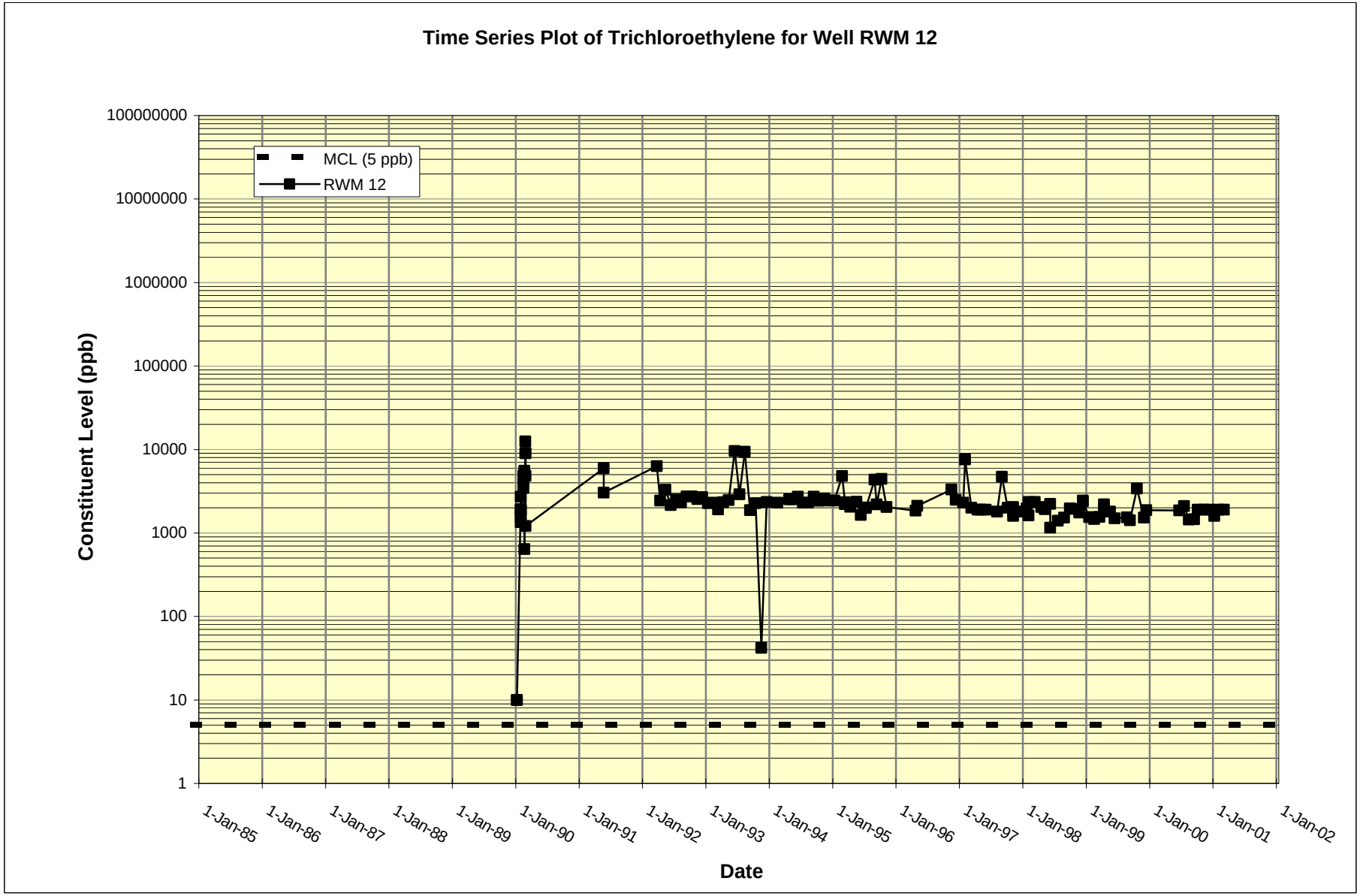
Time Series Plot of Trichloroethylene for Well RWM 12
MCL (5 ppb)
RWM 12
Constituent Level (ppb)
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10000000
1000000
100000
10000
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100
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1
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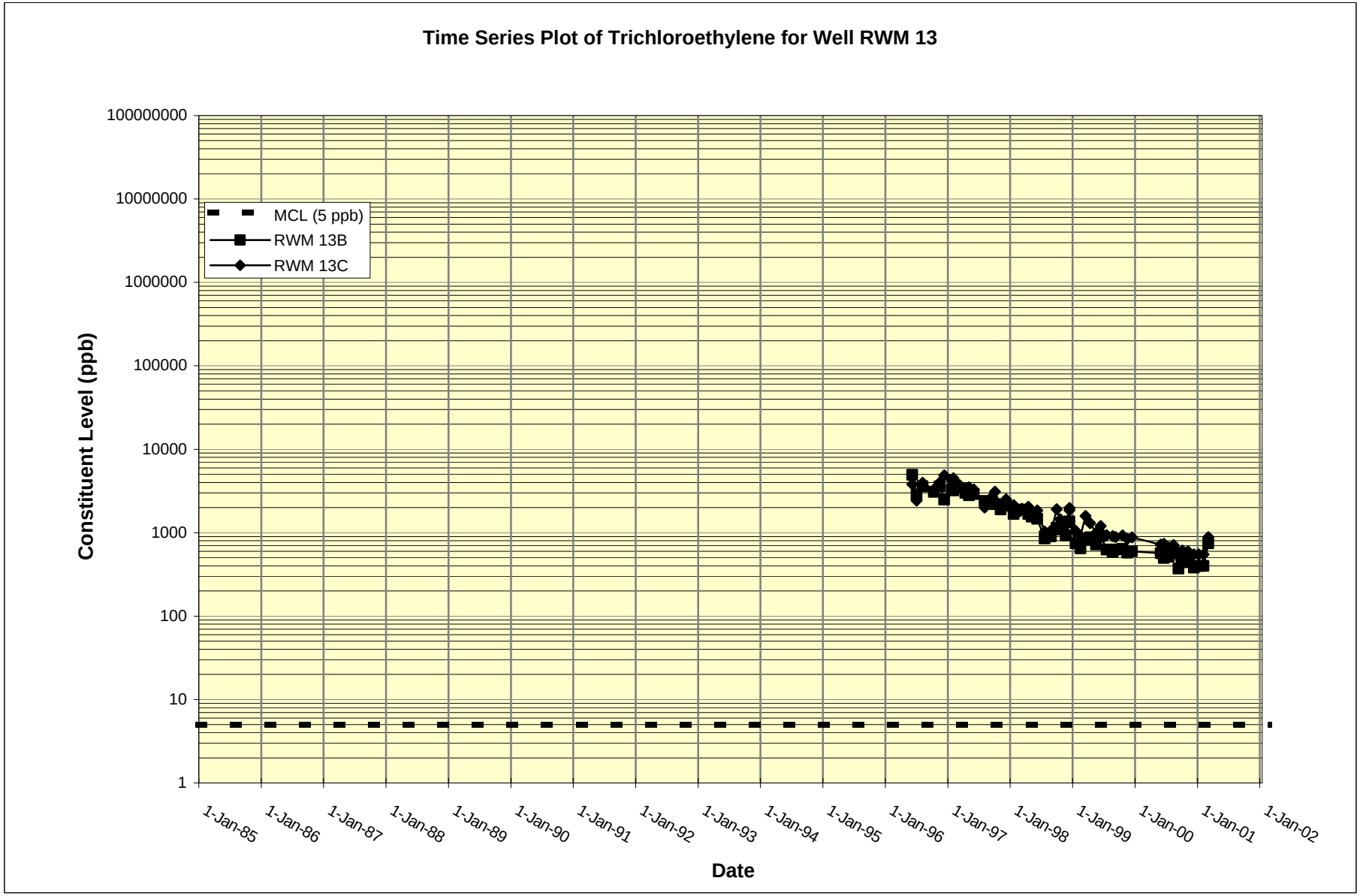
Time Series Plot of Trichloroethylene for Well RWM 13
MCL (5 ppb)
RWM 13B
RWM 13C
Constituent Level (ppb)
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
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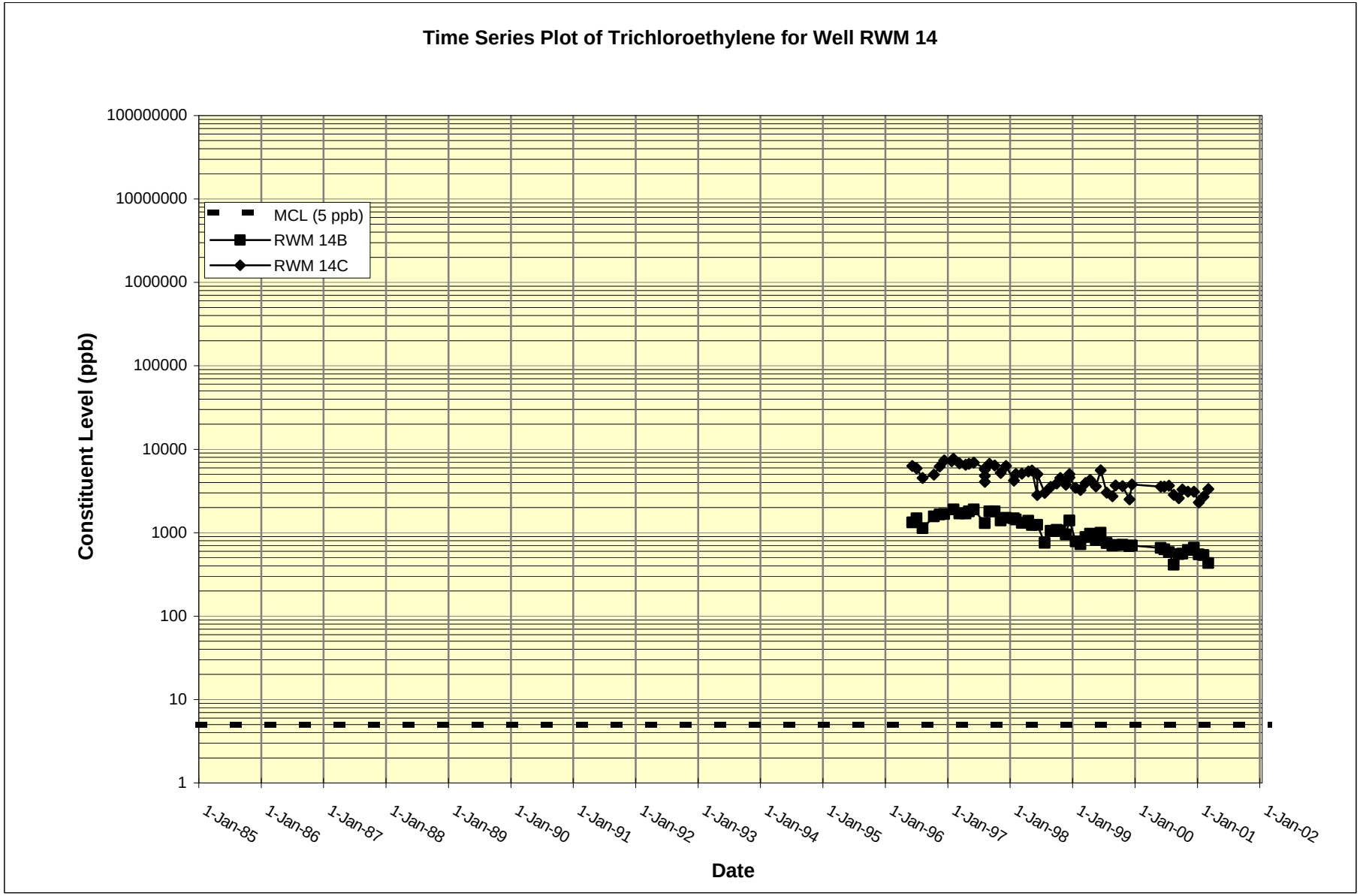
Date


Time Series Plot of Trichloroethylene for Well RWM 14
MCL (5 ppb)
RWM 14B
RWM 14C
Constituent Level (ppb)
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10000000
1000000
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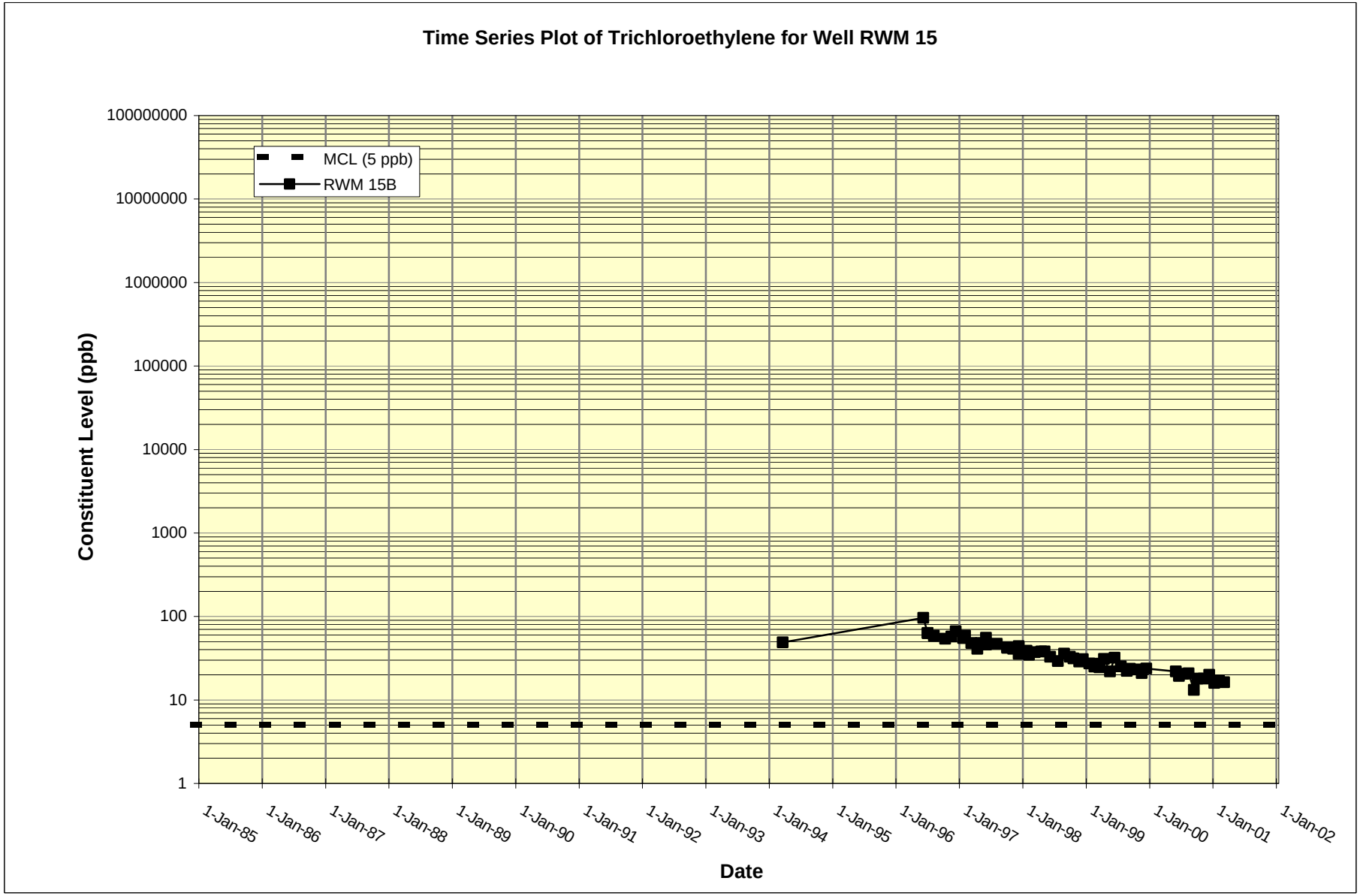
Time Series Plot of Trichloroethylene for Well RWM 15
MCL (5 ppb)
RWM 15B
Constituent Level (ppb)
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10000000
1000000
100000
10000
1000
100
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1
1-Jan-85
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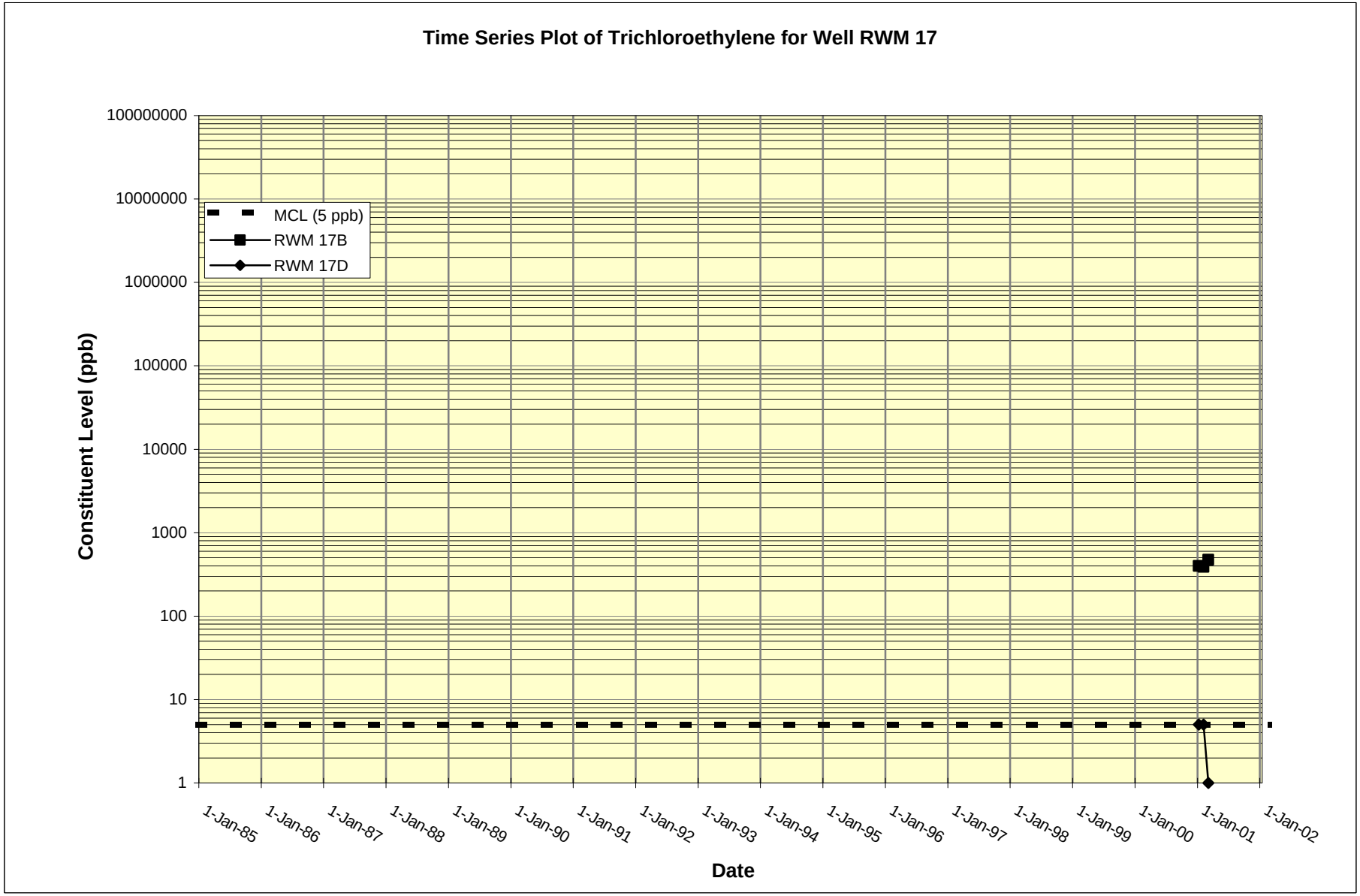
Date


Time Series Plot of Trichloroethylene for Well RWM 17
Constituent Level (ppb)
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10000000
1000000
100000
10000
1000
100
10
1
MCL (5 ppb)
RWM 17B
RWM 17D
1-Jan-85
1-Jan-86
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1-Jan-88
1-Jan-89
1-Jan-90
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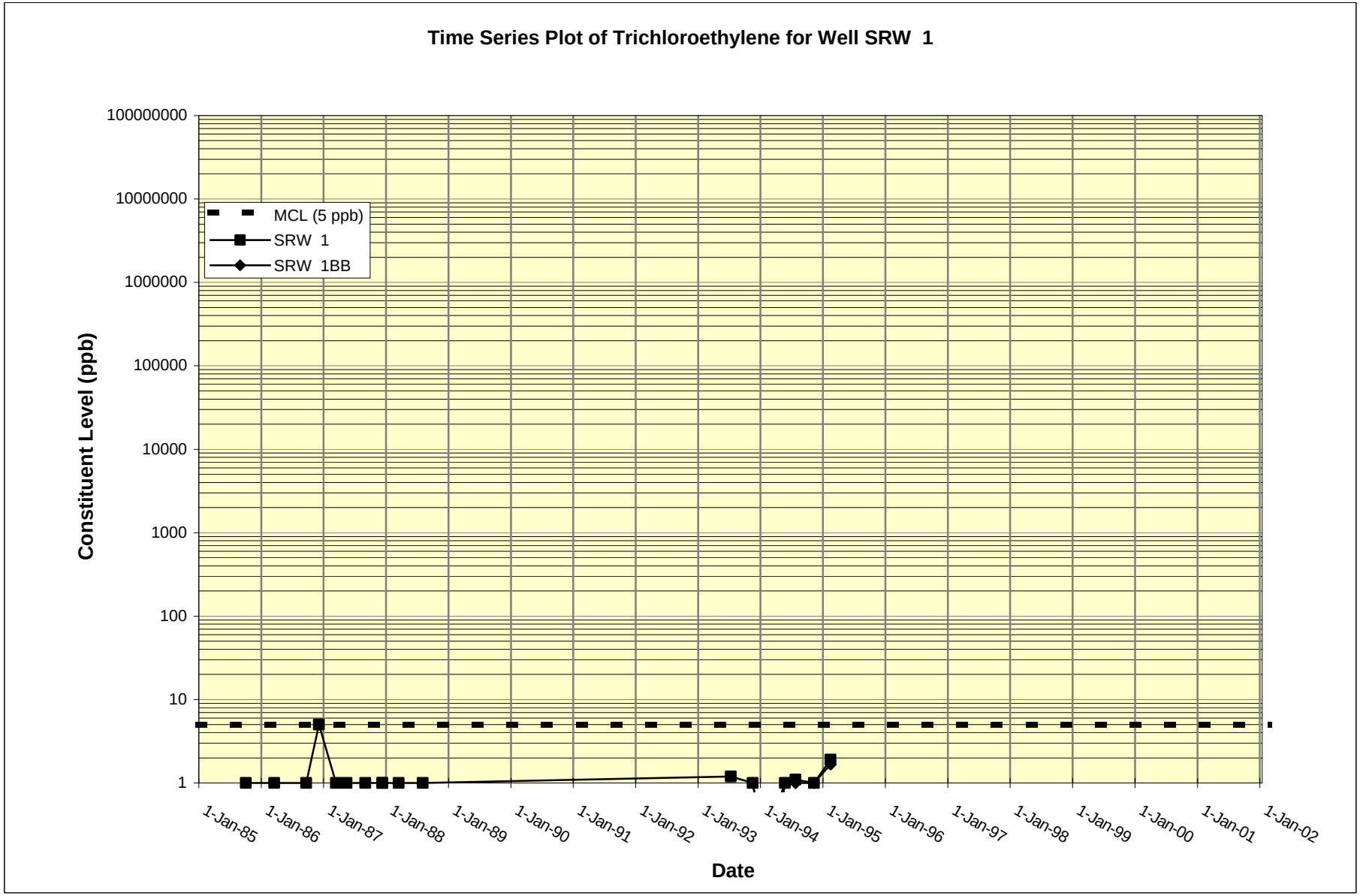
Time Series Plot of Trichloroethylene for Well SRW 1
MCL (5 ppb)
SRW 1
SRW 1BB
Constituent Level (ppb)
100000000
10000000
1000000
100000
10000
1000
100
10
1
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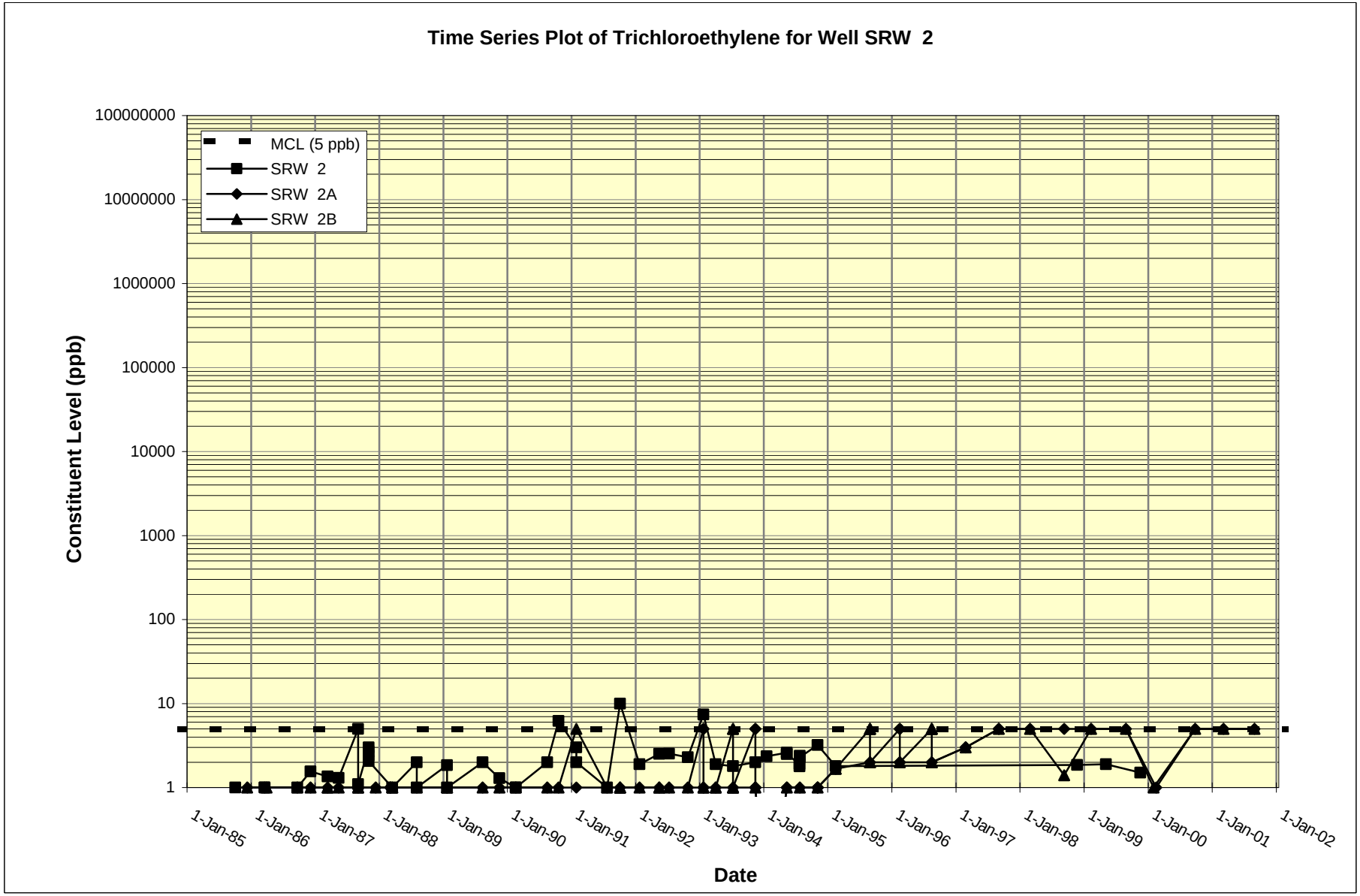
Time Series Plot of Trichloroethylene for Well SRW 2
MCL (5 ppb)
SRW 2
SRW 2A
SRW 2B
Constituent Level (ppb)
100000000
10000000
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100
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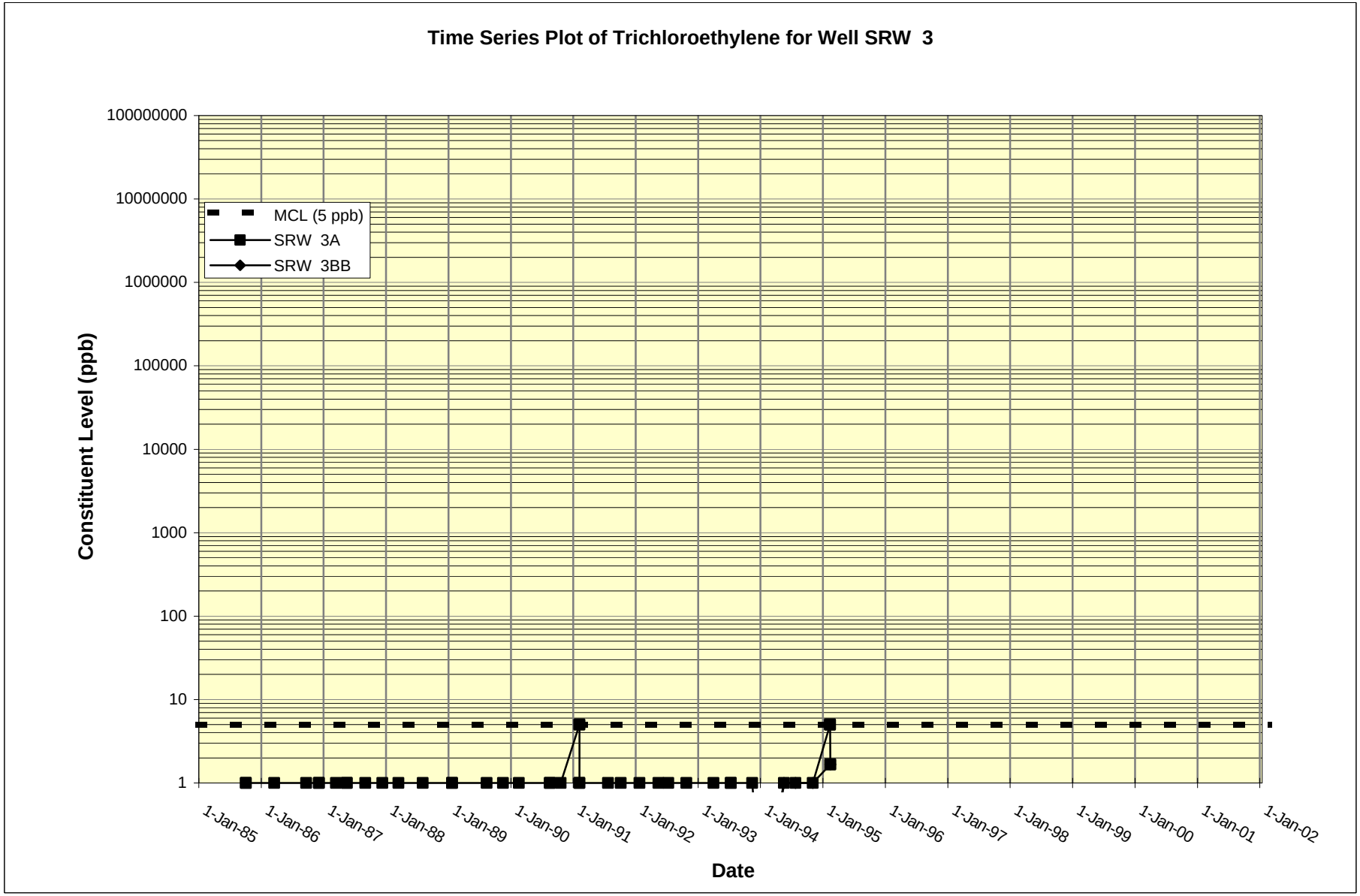
Time Series Plot of Trichloroethylene for Well SRW 3
MCL (5 ppb)
SRW 3A
SRW 3BB
Constituent Level (ppb)
100000000
10000000
1000000
100000
10000
1000
100
10
1
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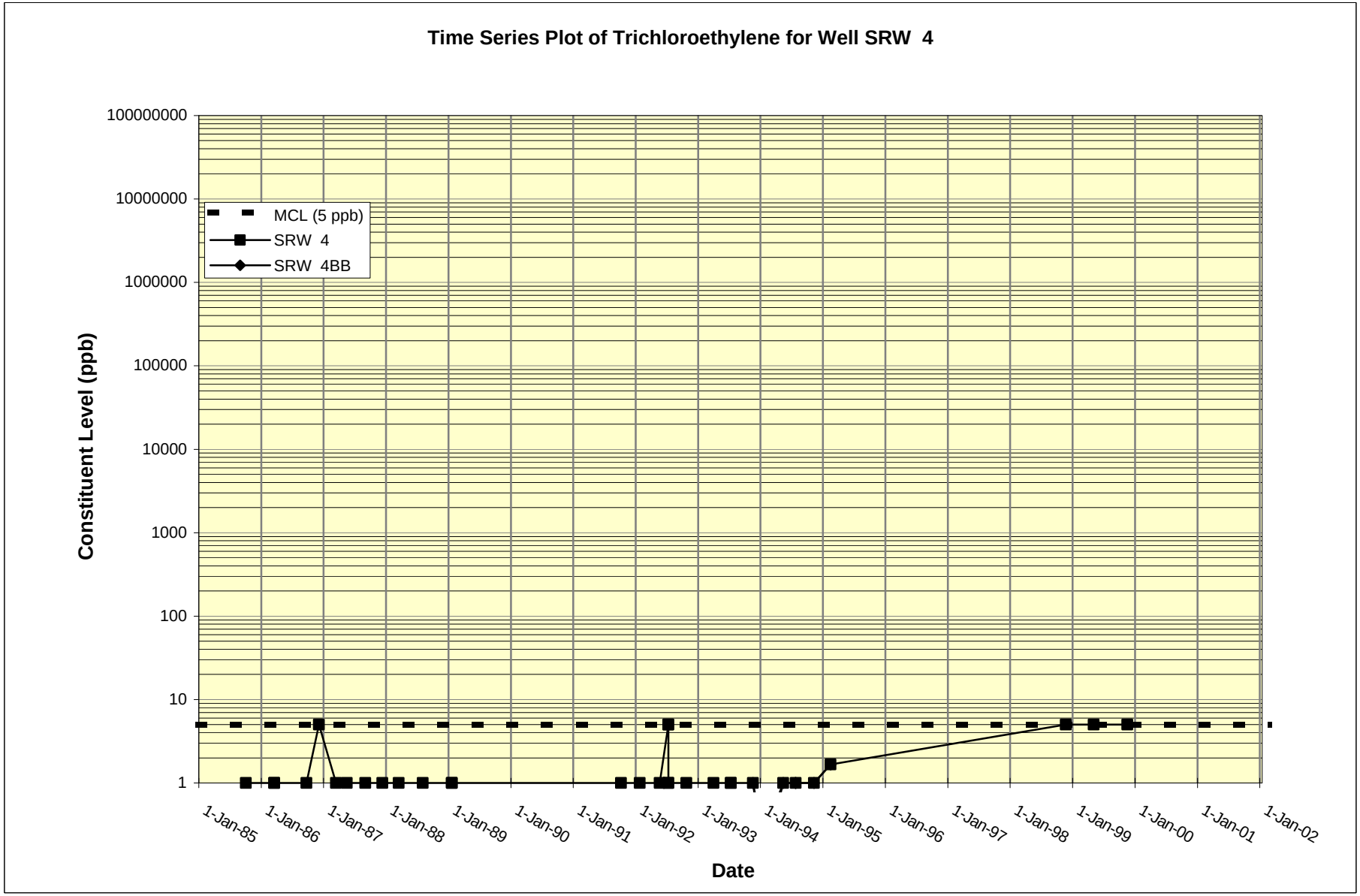
Time Series Plot of Trichloroethylene for Well SRW 4
MCL (5 ppb)
SRW 4
SRW 4BB
Constituent Level (ppb)
100000000
10000000
1000000
100000
10000
1000
100
10
1
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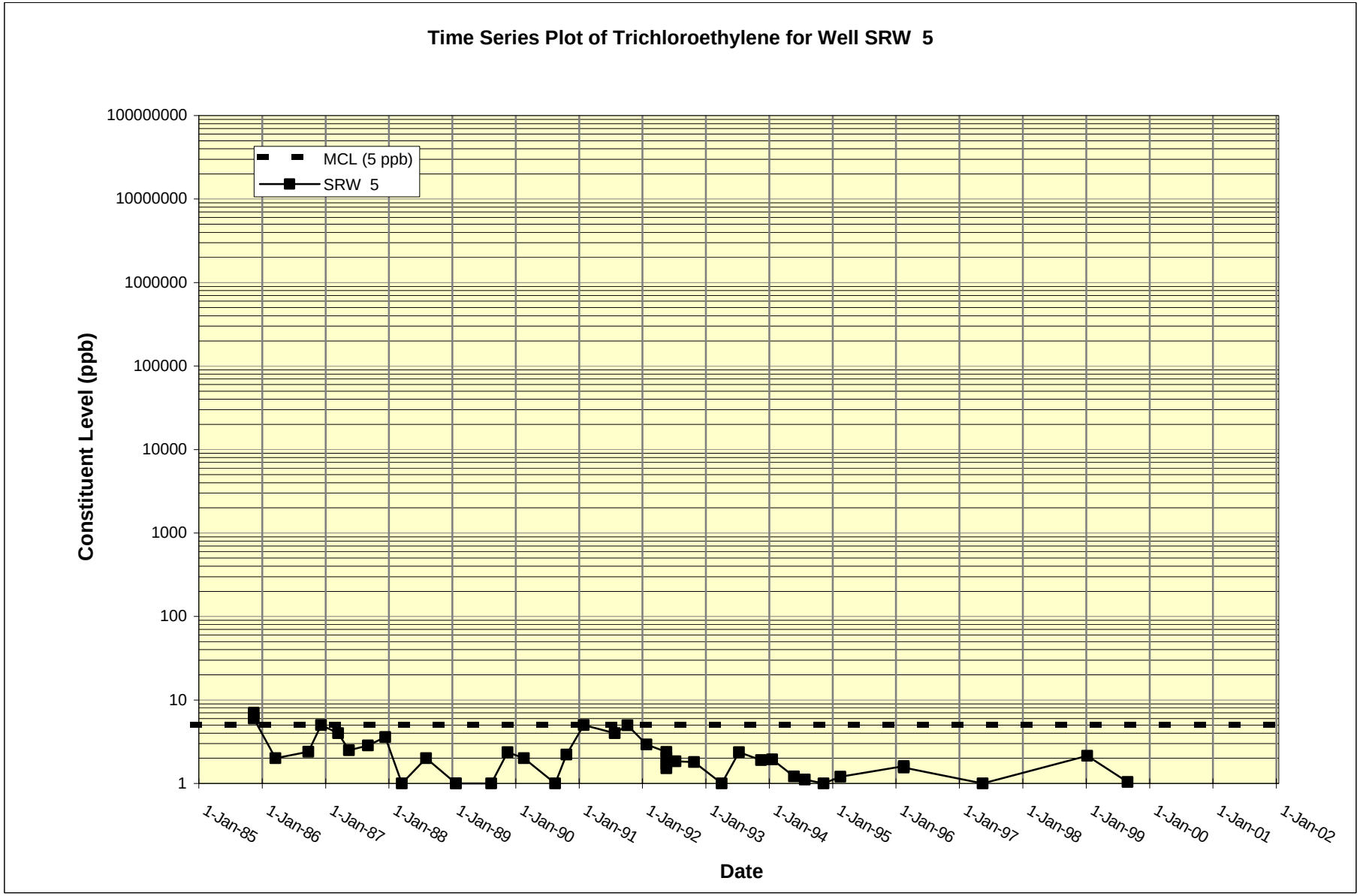
Time Series Plot of Trichloroethylene for Well SRW 5
MCL (5 ppb)
SRW 5
Constituent Level (ppb)
100000000
10000000
1000000
100000
10000
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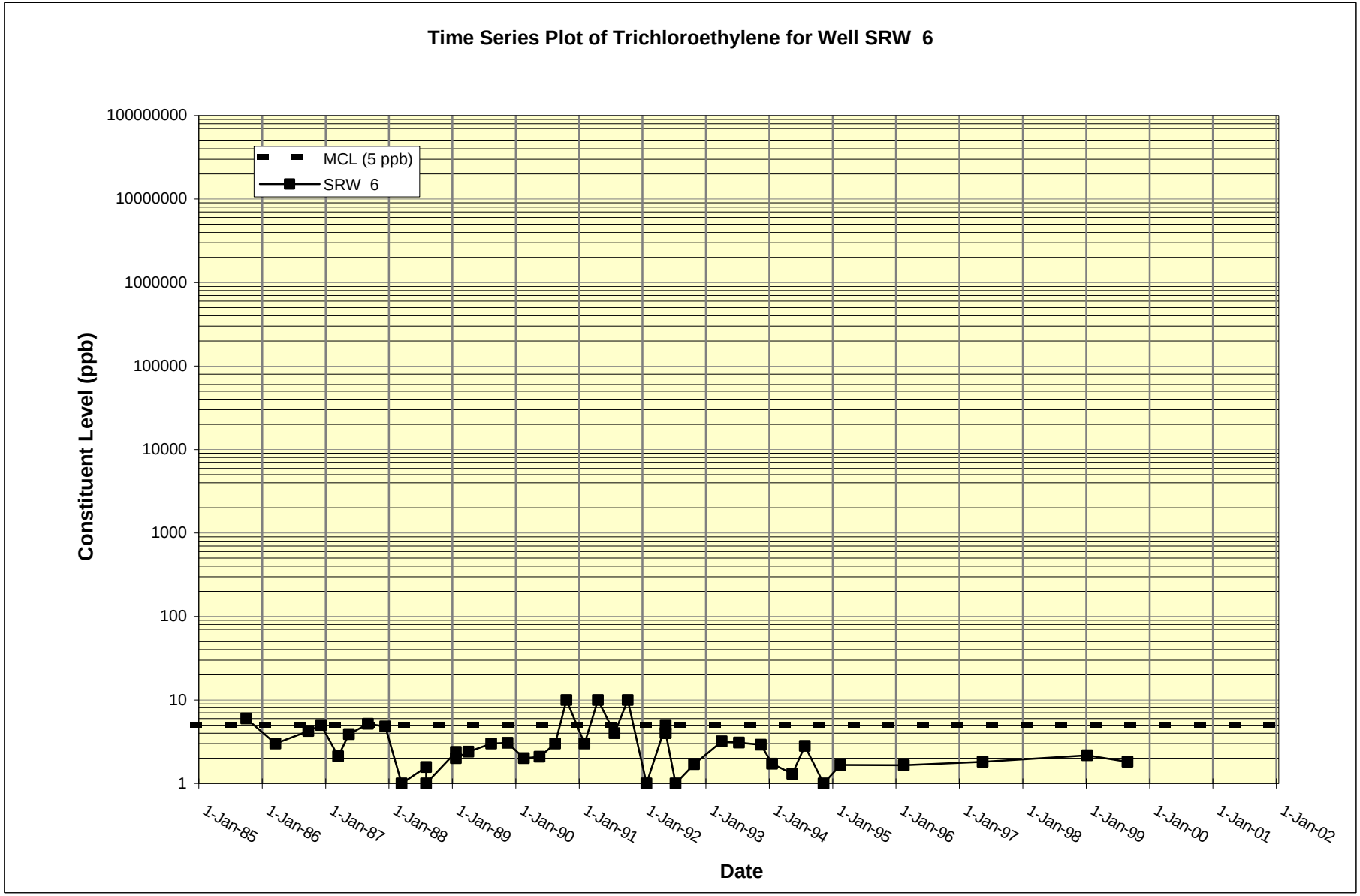
Time Series Plot of Trichloroethylene for Well SRW 6
MCL (5 ppb)
SRW 6
Constituent Level (ppb)
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10000000
1000000
100000
10000
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100
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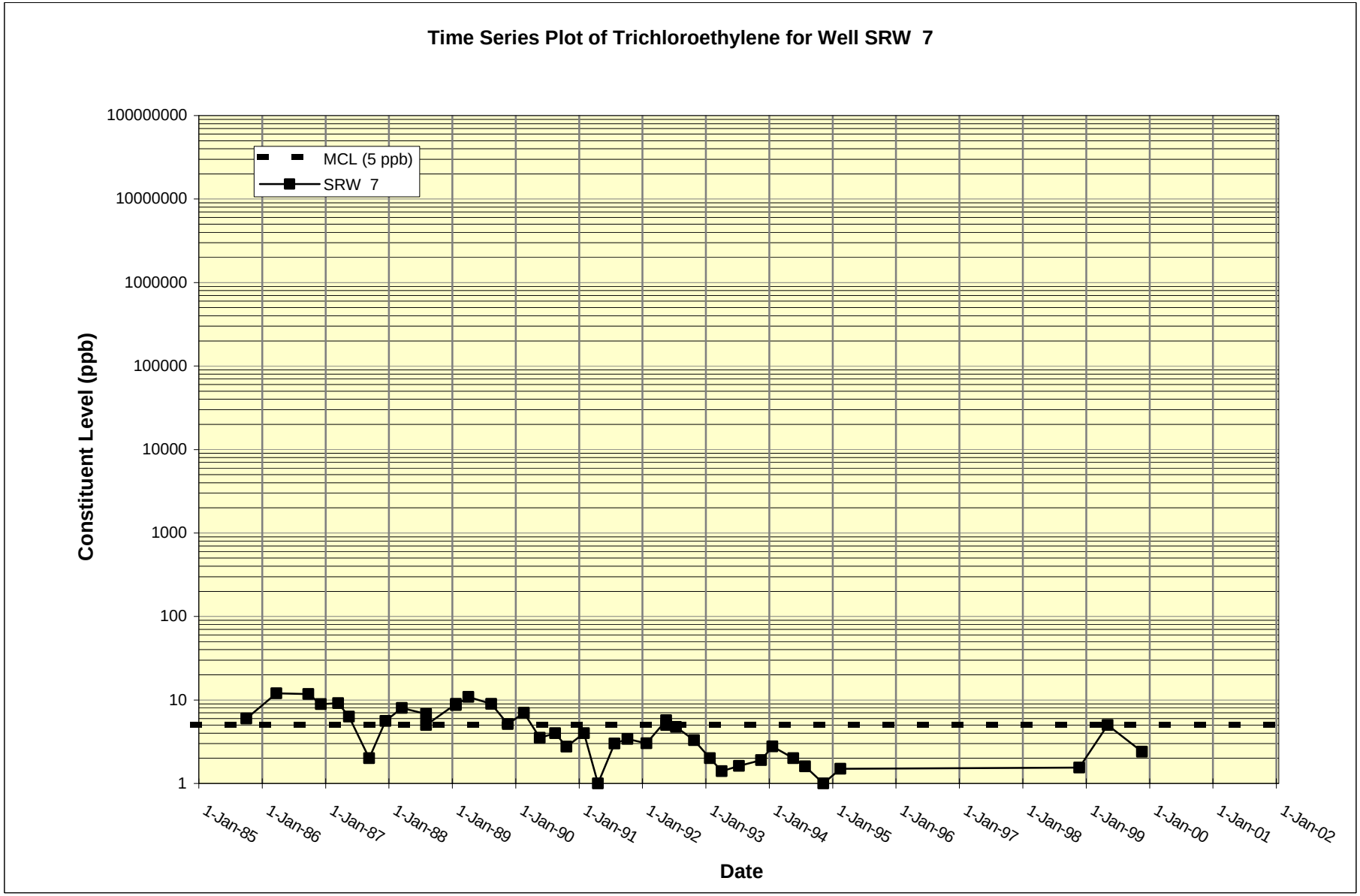
Time Series Plot of Trichloroethylene for Well SRW 7
MCL (5 ppb)
SRW 7
Constituent Level (ppb)
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1000000
100000
10000
1000
100
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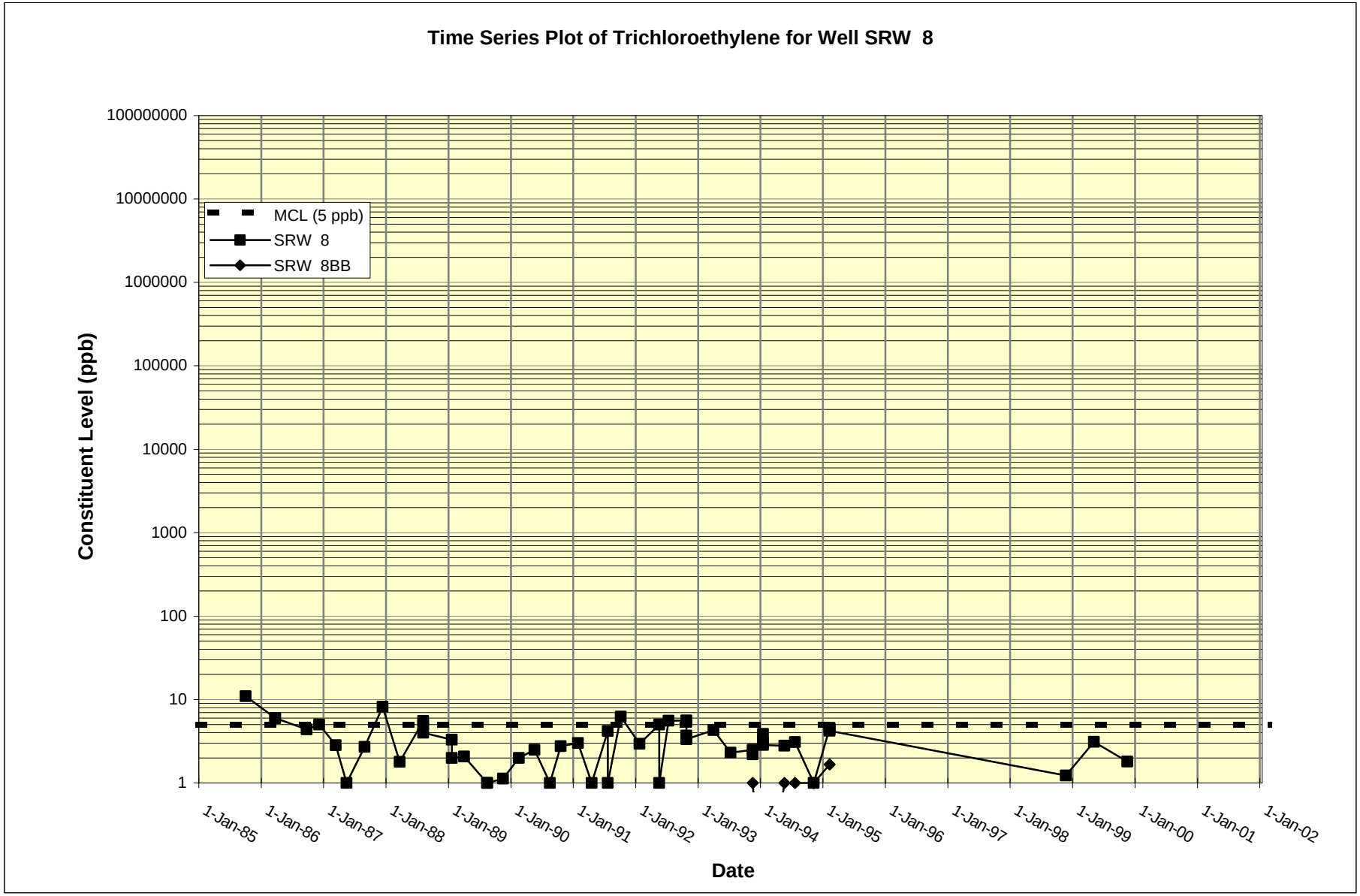
Time Series Plot of Trichloroethylene for Well SRW 8
MCL (5 ppb)
SRW 8
SRW 8BB
Constituent Level (ppb)
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1000000
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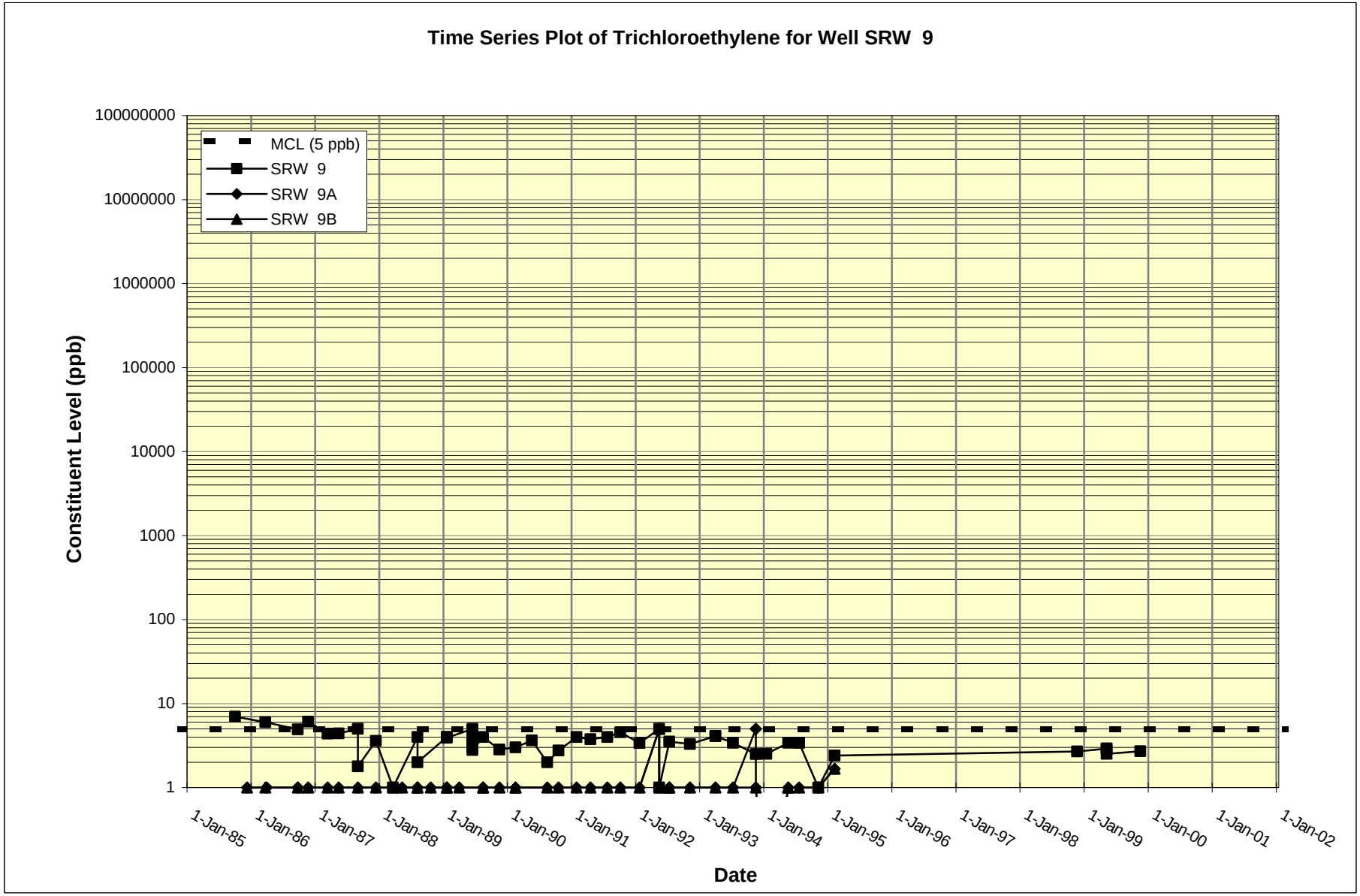
Time Series Plot of Trichloroethylene for Well SRW 9
MCL (5 ppb)
SRW 9
SRW 9A
SRW 9B
Constituent Level (ppb)
100000000
10000000
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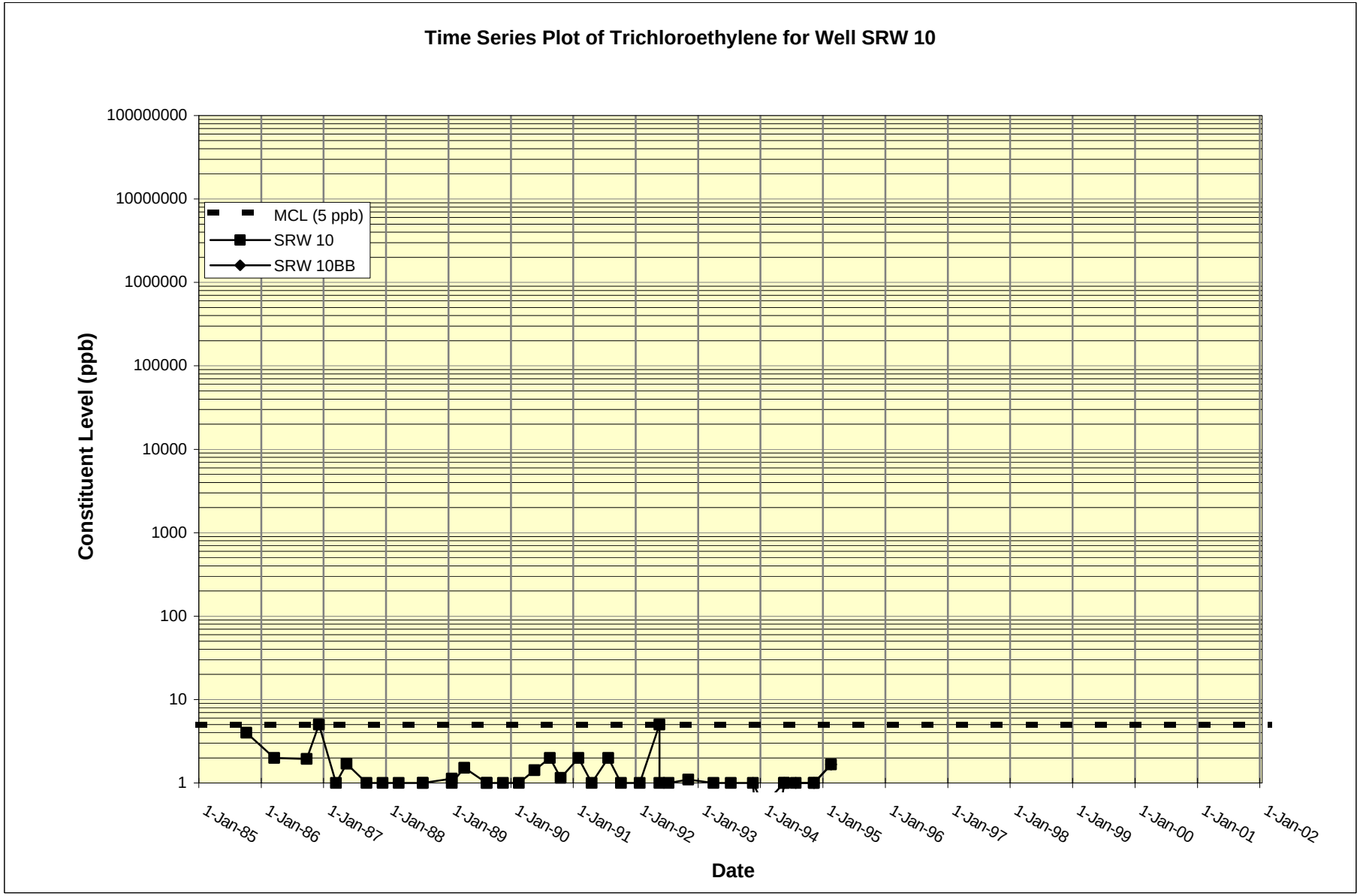
Time Series Plot of Trichloroethylene for Well SRW 10
MCL (5 ppb)
SRW 10
SRW 10BB
Constituent Level (ppb)
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10000000
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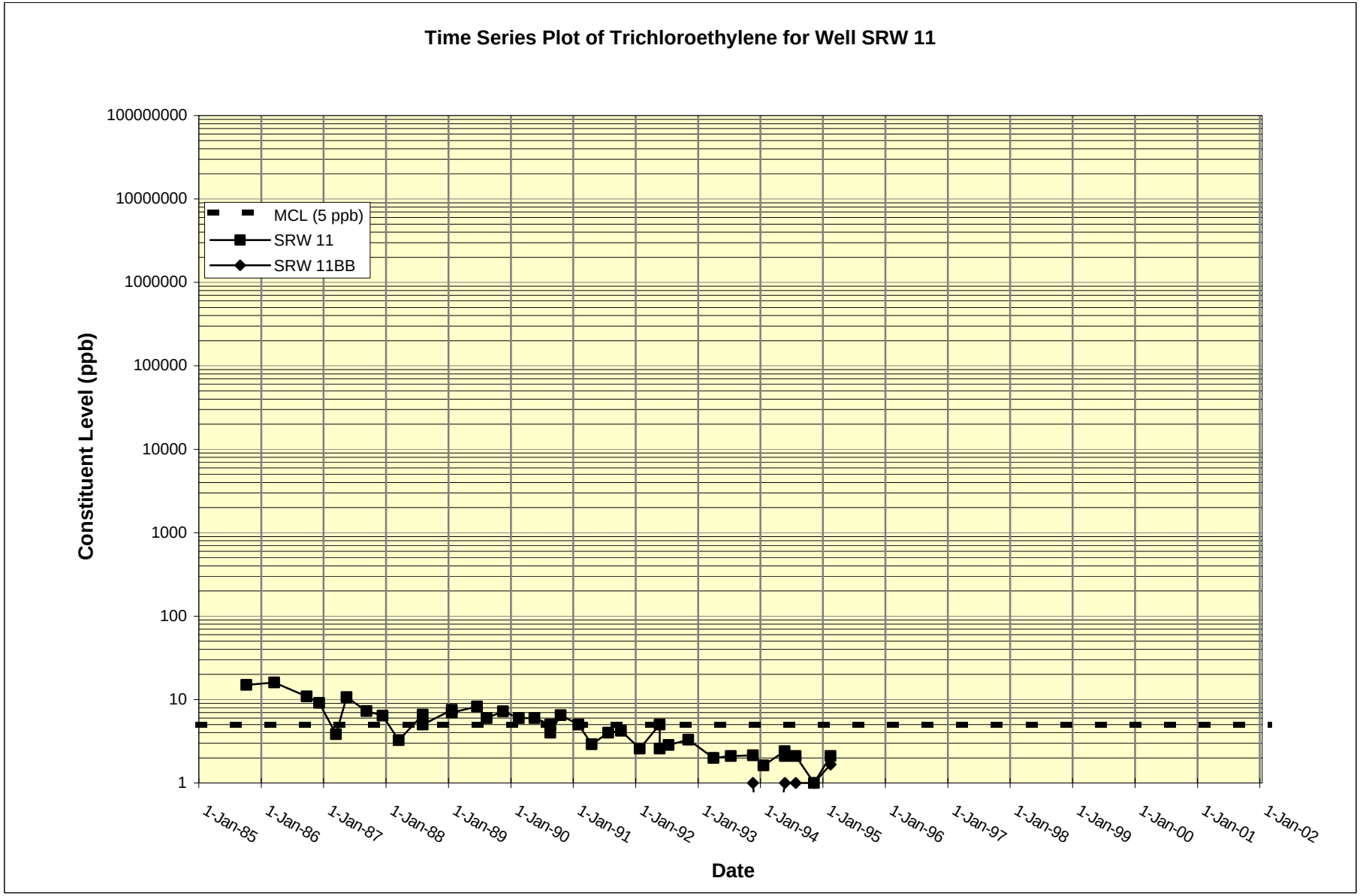
Time Series Plot of Trichloroethylene for Well SRW 11
MCL (5 ppb)
SRW 11
SRW 11BB
Constituent Level (ppb)
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100000
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1000
100
10
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1-Jan-85
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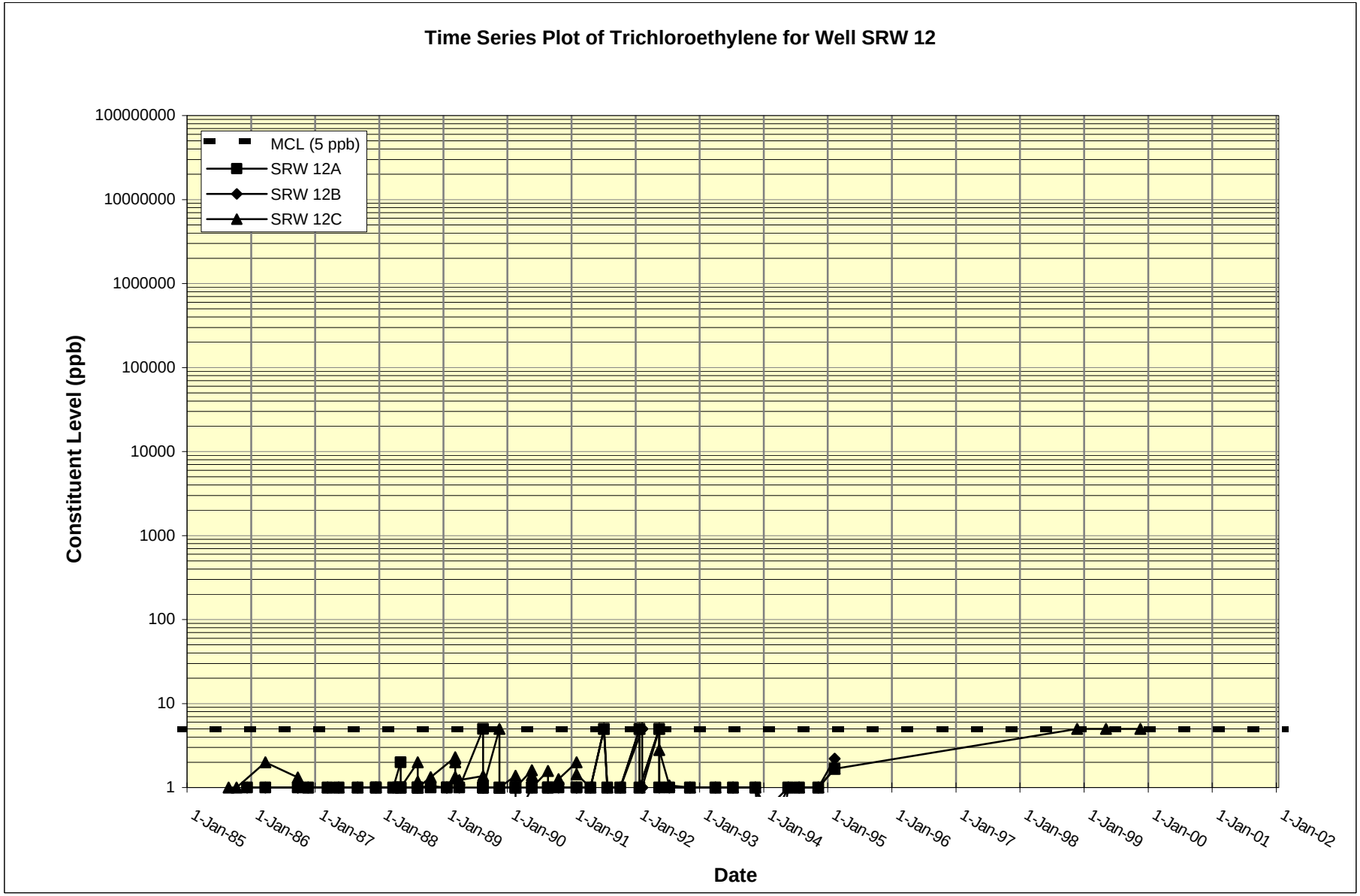
Time Series Plot of Trichloroethylene for Well SRW 12
MCL (5 ppb)
SRW 12A
SRW 12B
SRW 12C
Constituent Level (ppb)
100000000
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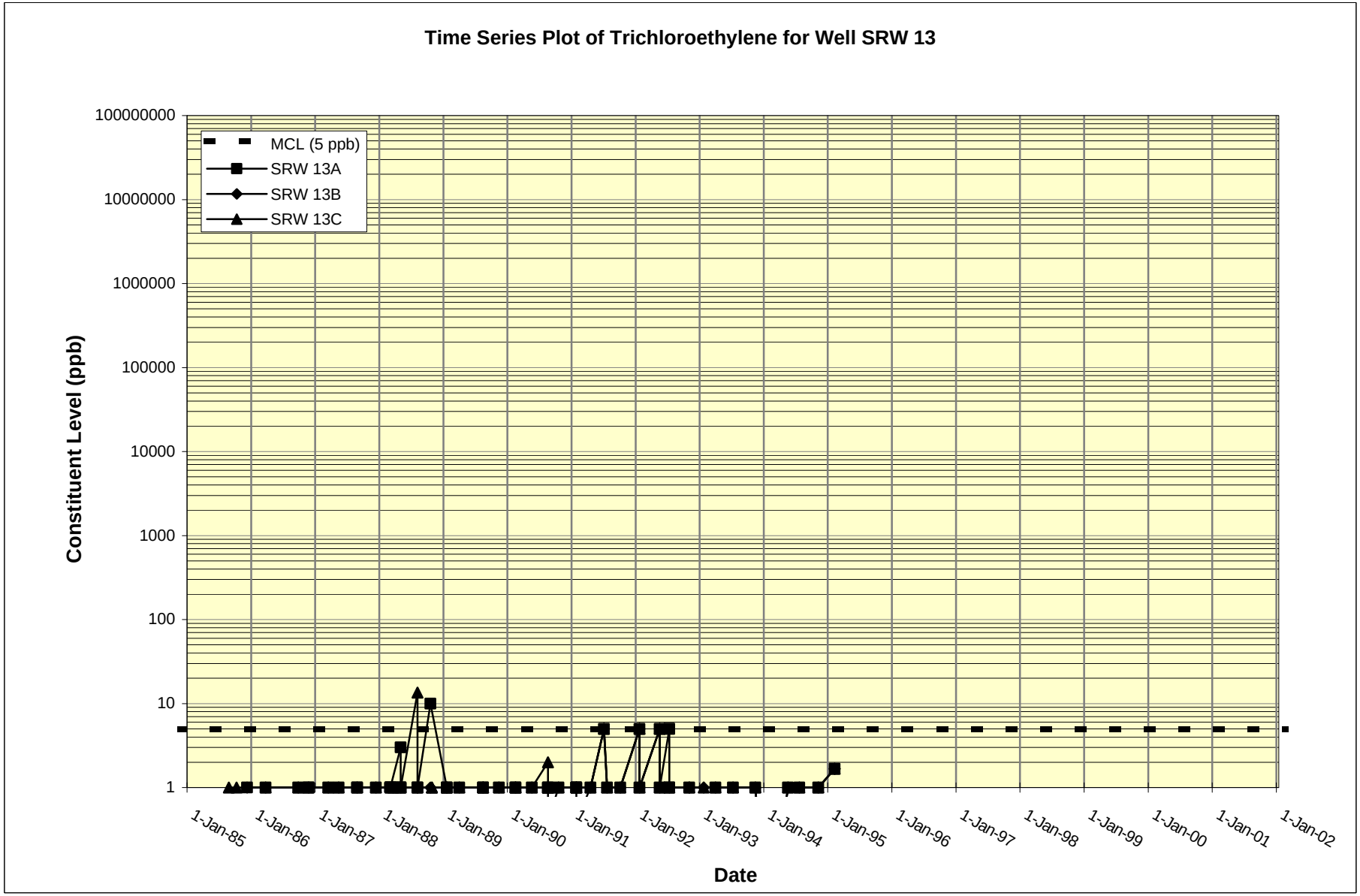
Time Series Plot of Trichloroethylene for Well SRW 13
MCL (5 ppb)
SRW 13A
SRW 13B
SRW 13C
Constituent Level (ppb)
100000000
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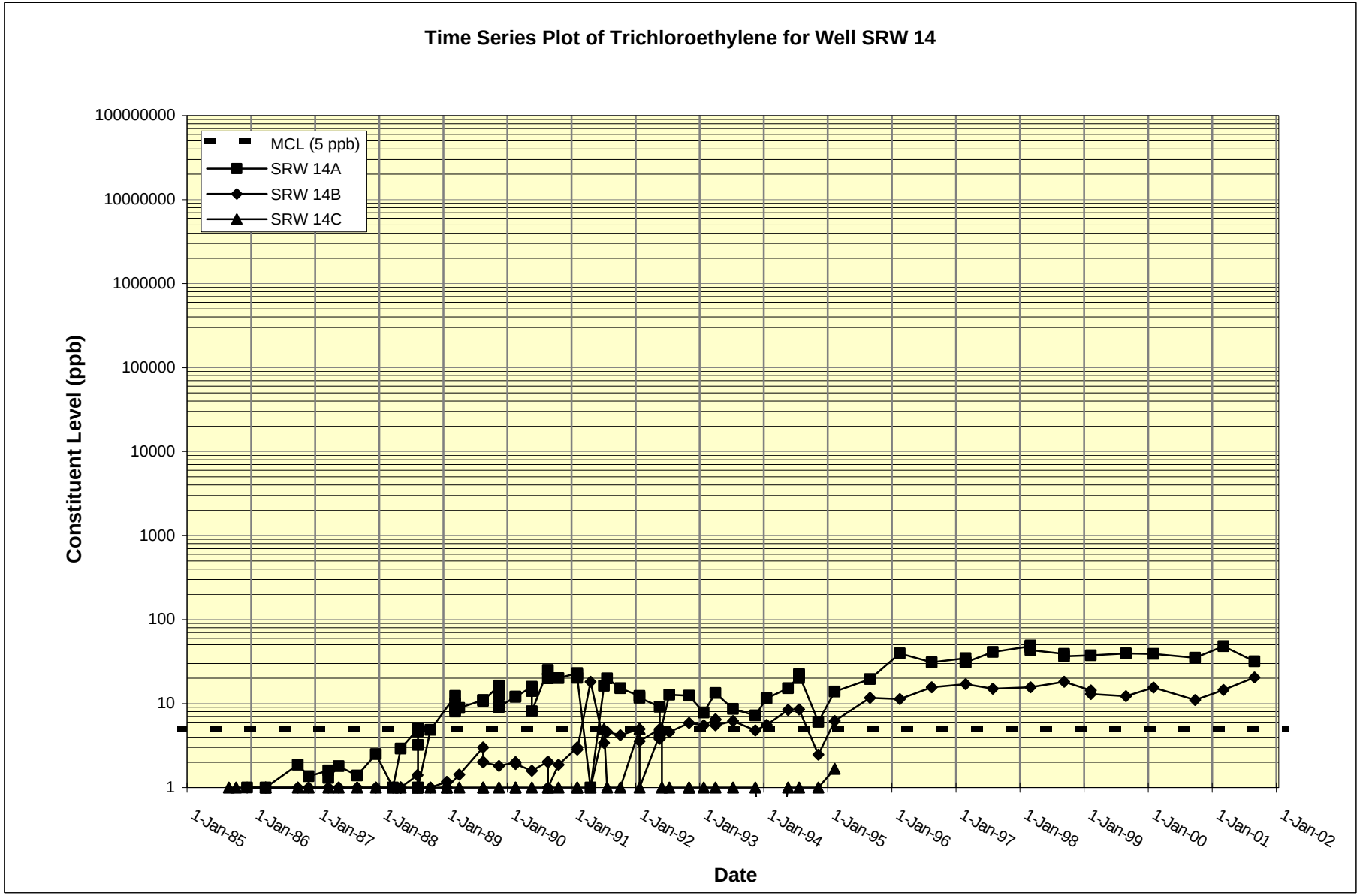
Time Series Plot of Trichloroethylene for Well SRW 14
MCL (5 ppb)
SRW 14A
SRW 14B
SRW 14C
Constituent Level (ppb)
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10000000
1000000
100000
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1
1-Jan-85
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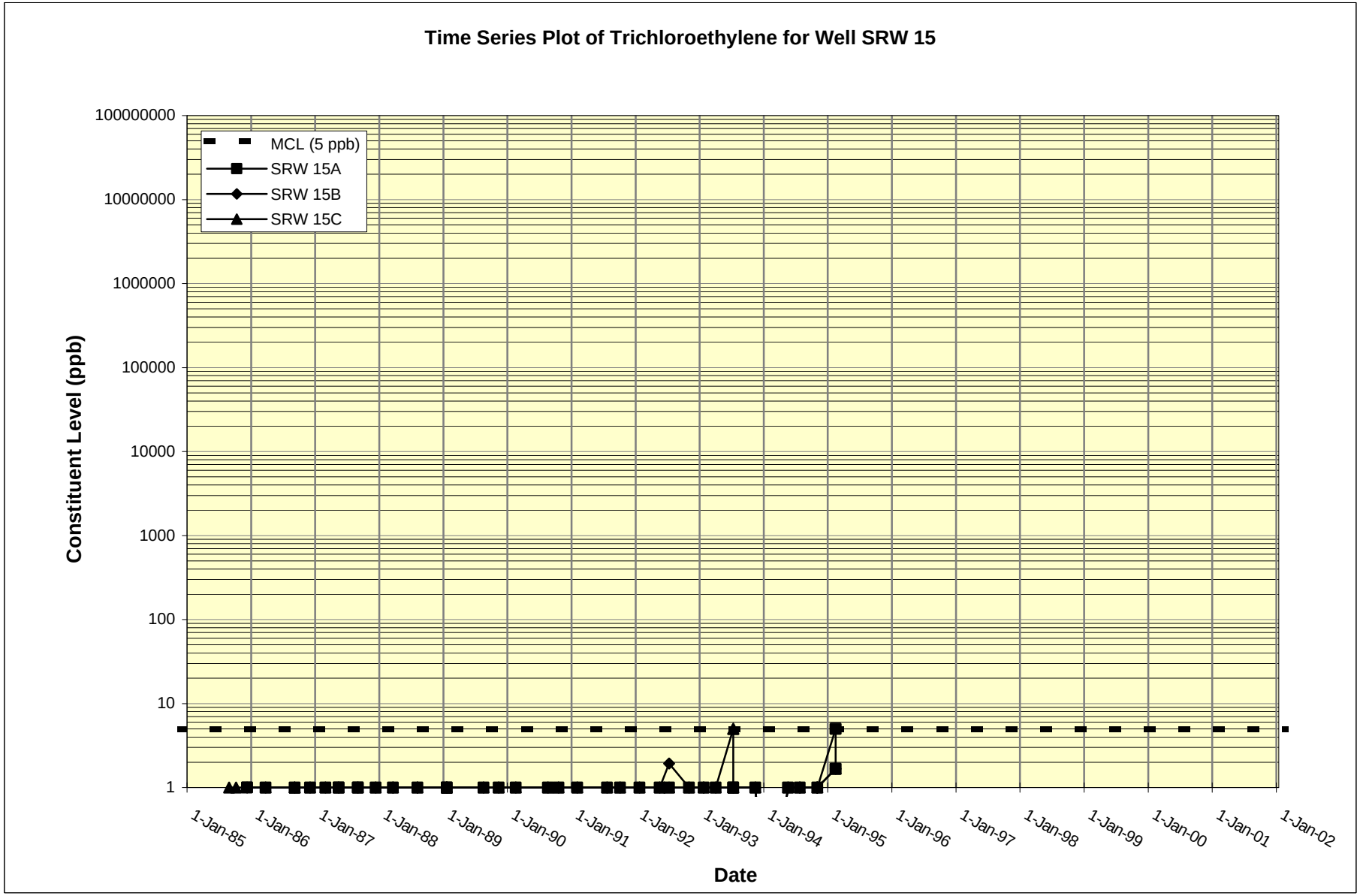
Time Series Plot of Trichloroethylene for Well SRW 15
MCL (5 ppb)
SRW 15A
SRW 15B
SRW 15C
Constituent Level (ppb)
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10000000
1000000
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1-Jan-85
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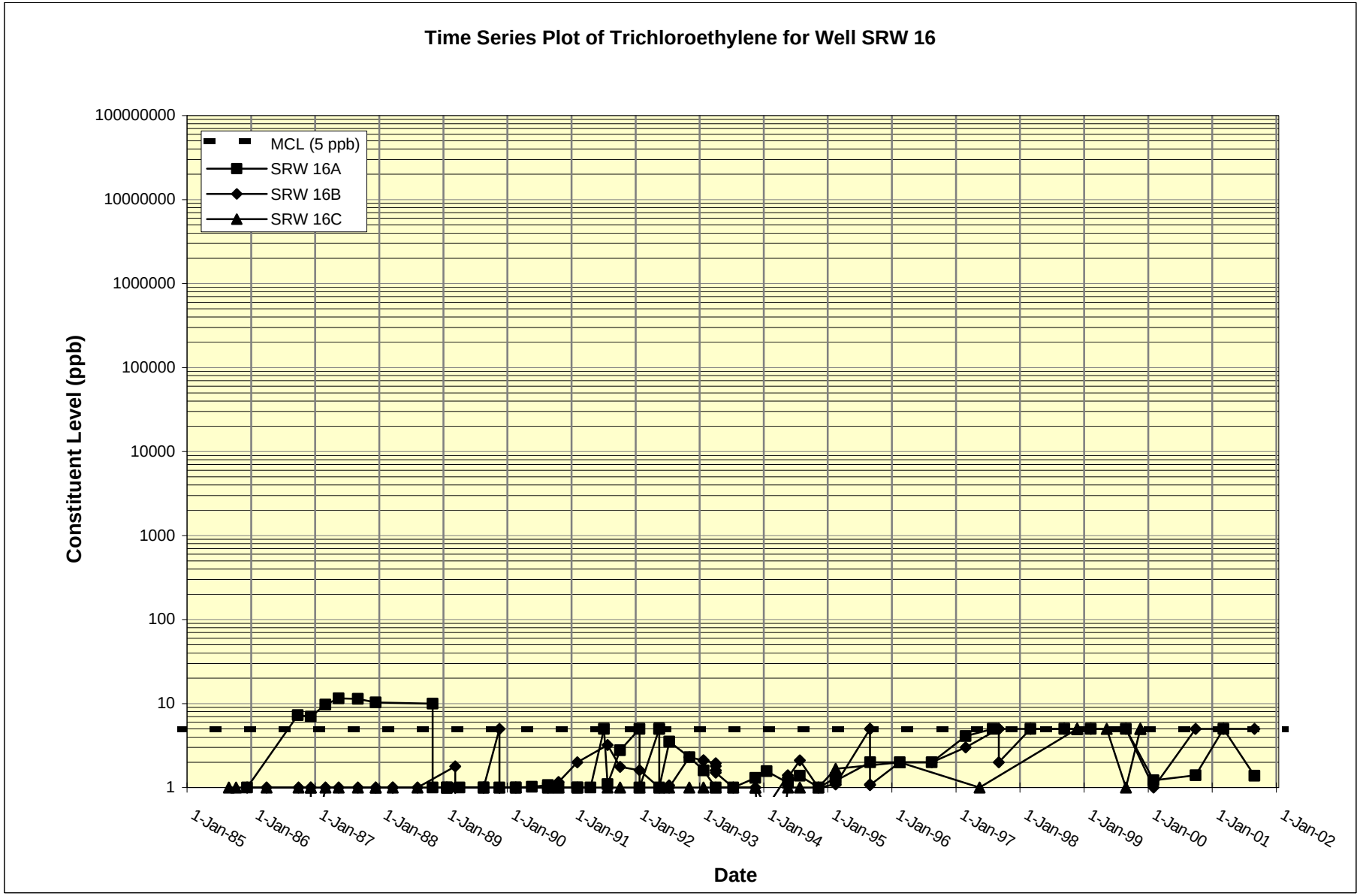
Time Series Plot of Trichloroethylene for Well SRW 16
MCL (5 ppb)
SRW 16A
SRW 16B
SRW 16C
Constituent Level (ppb)
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
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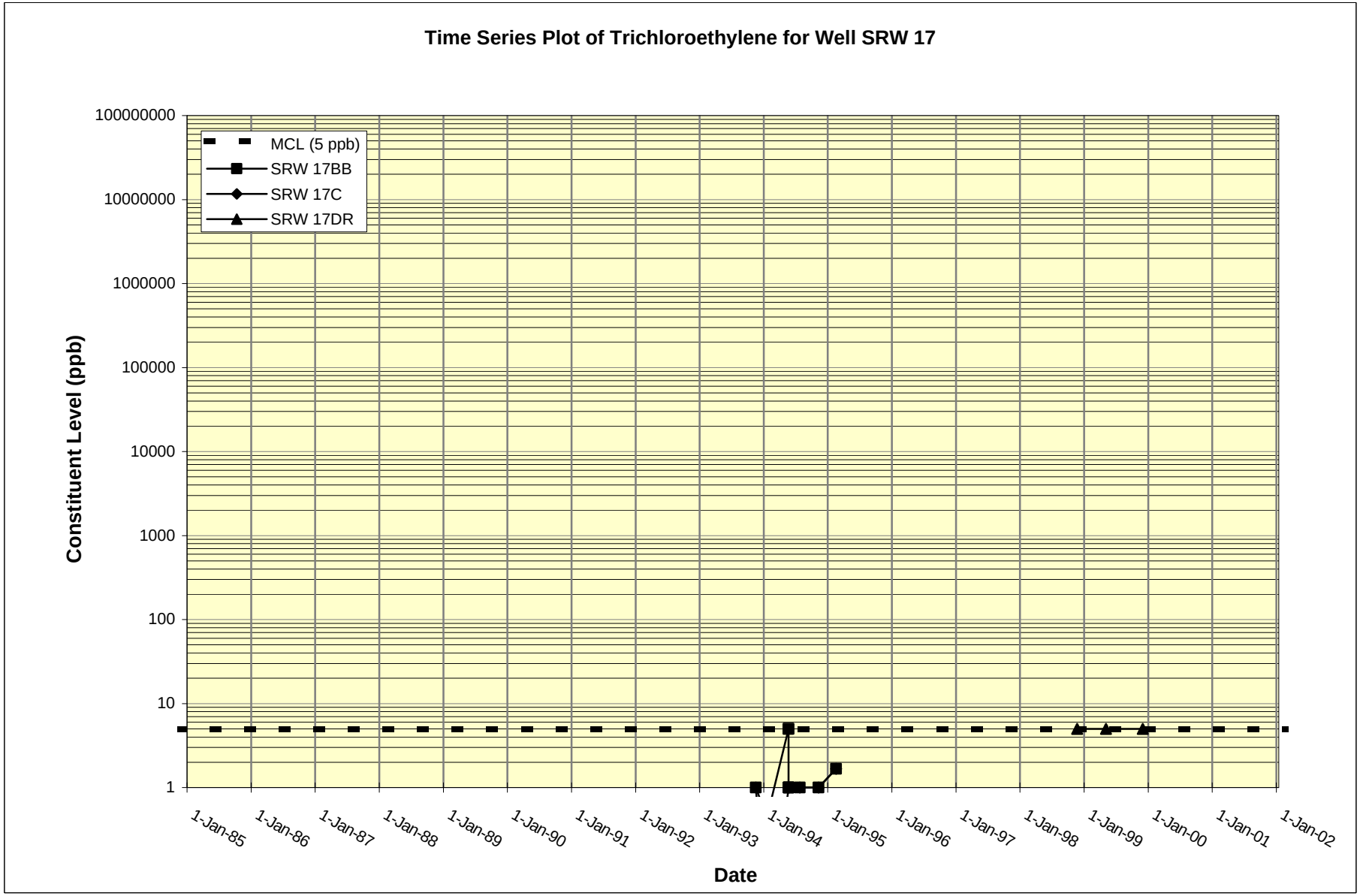
Date


Time Series Plot of Trichloroethylene for Well SRW 17
MCL (5 ppb)
SRW 17BB
SRW 17C
SRW 17DR
Constituent Level (ppb)
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
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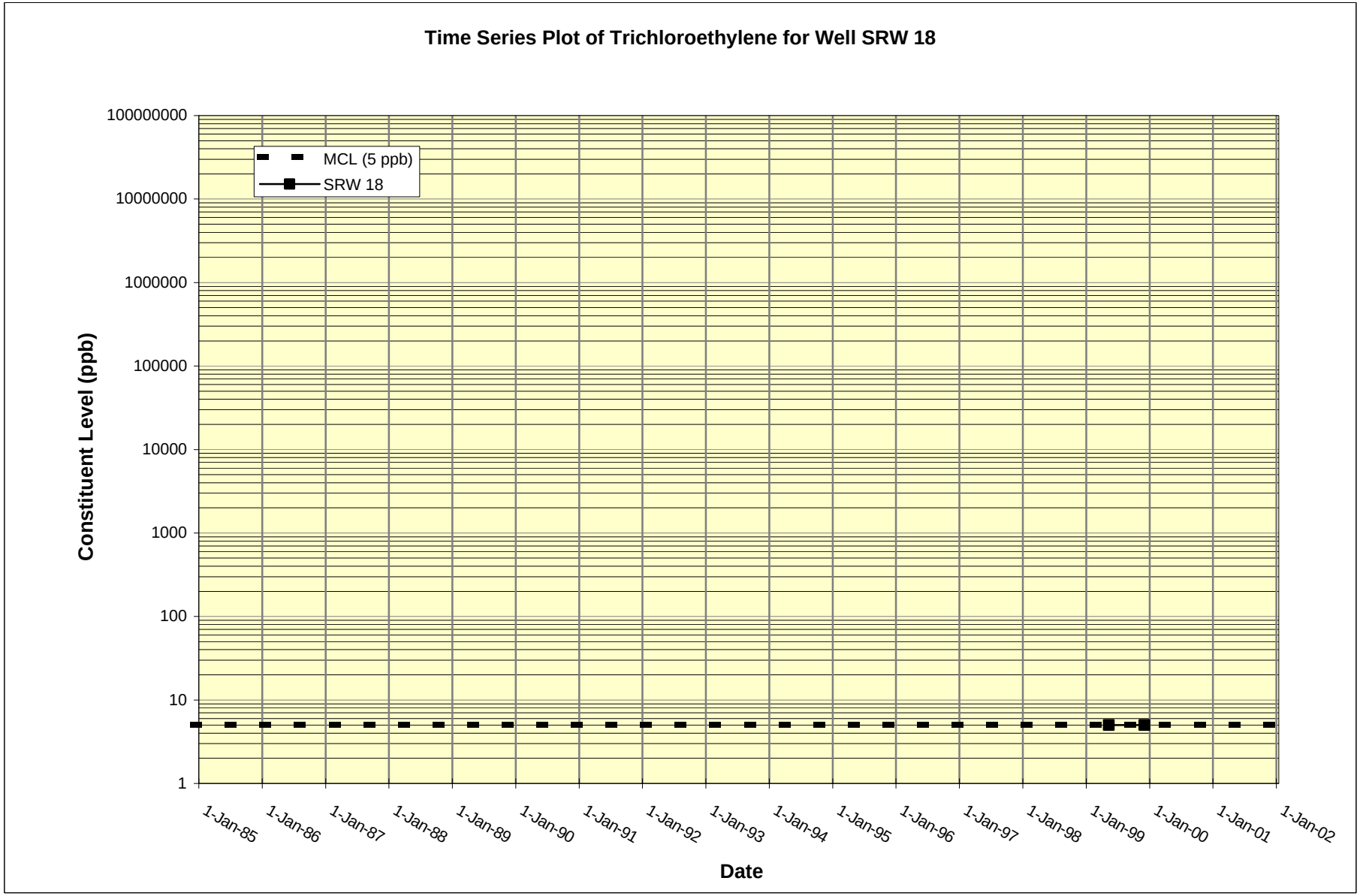
1-Jan-02
Date


Time Series Plot of Trichloroethylene for Well SRW 18
MCL (5 ppb)
SRW 18
Constituent Level (ppb)
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10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
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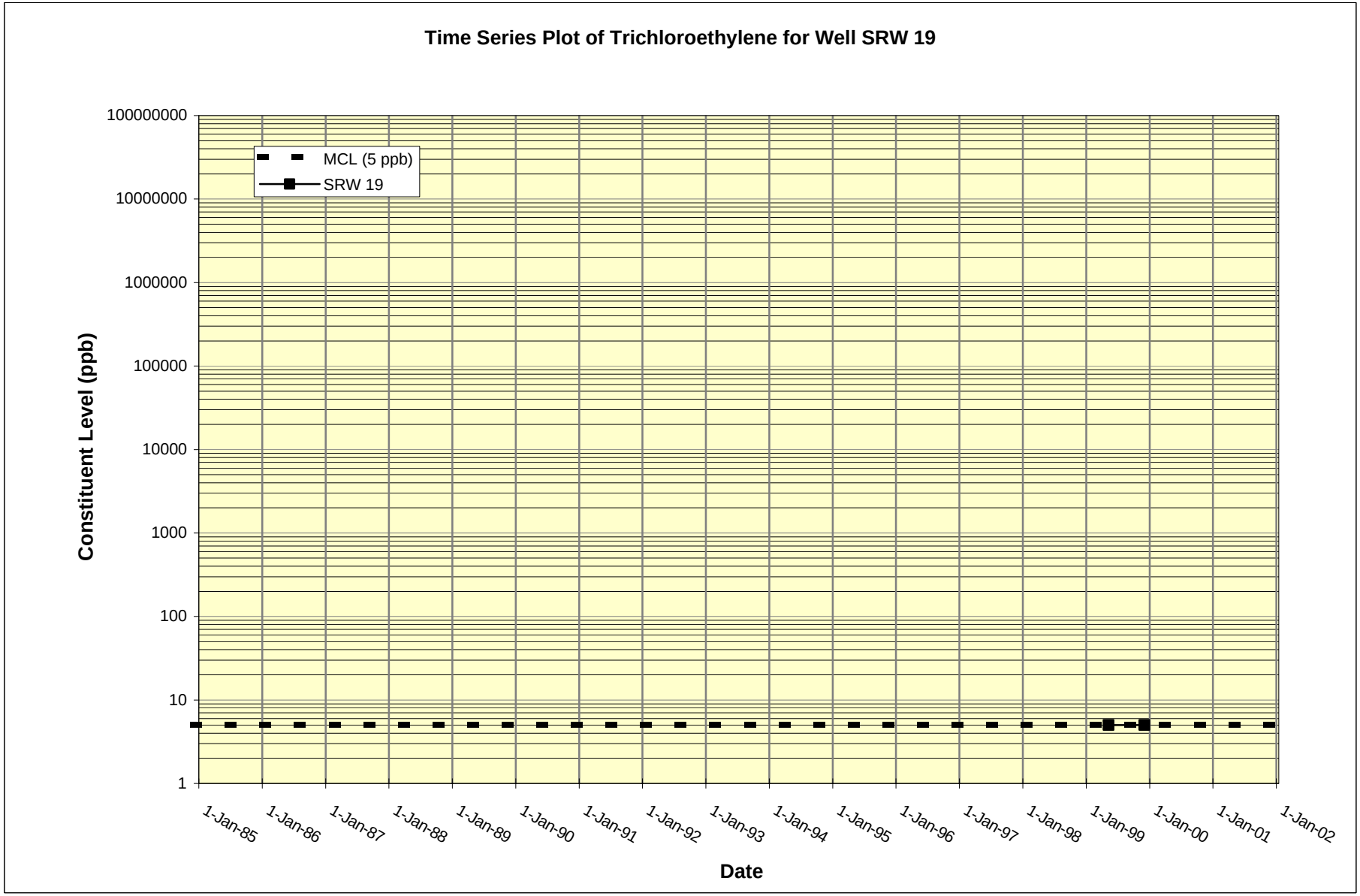
1-Jan-02
Date


Time Series Plot of Trichloroethylene for Well SRW 19
MCL (5 ppb)
SRW 19
Constituent Level (ppb)
100000000
10000000
1000000
100000
10000
1000
100
10
1
1-Jan-85
1-Jan-86
1-Jan-87
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1-Jan-94
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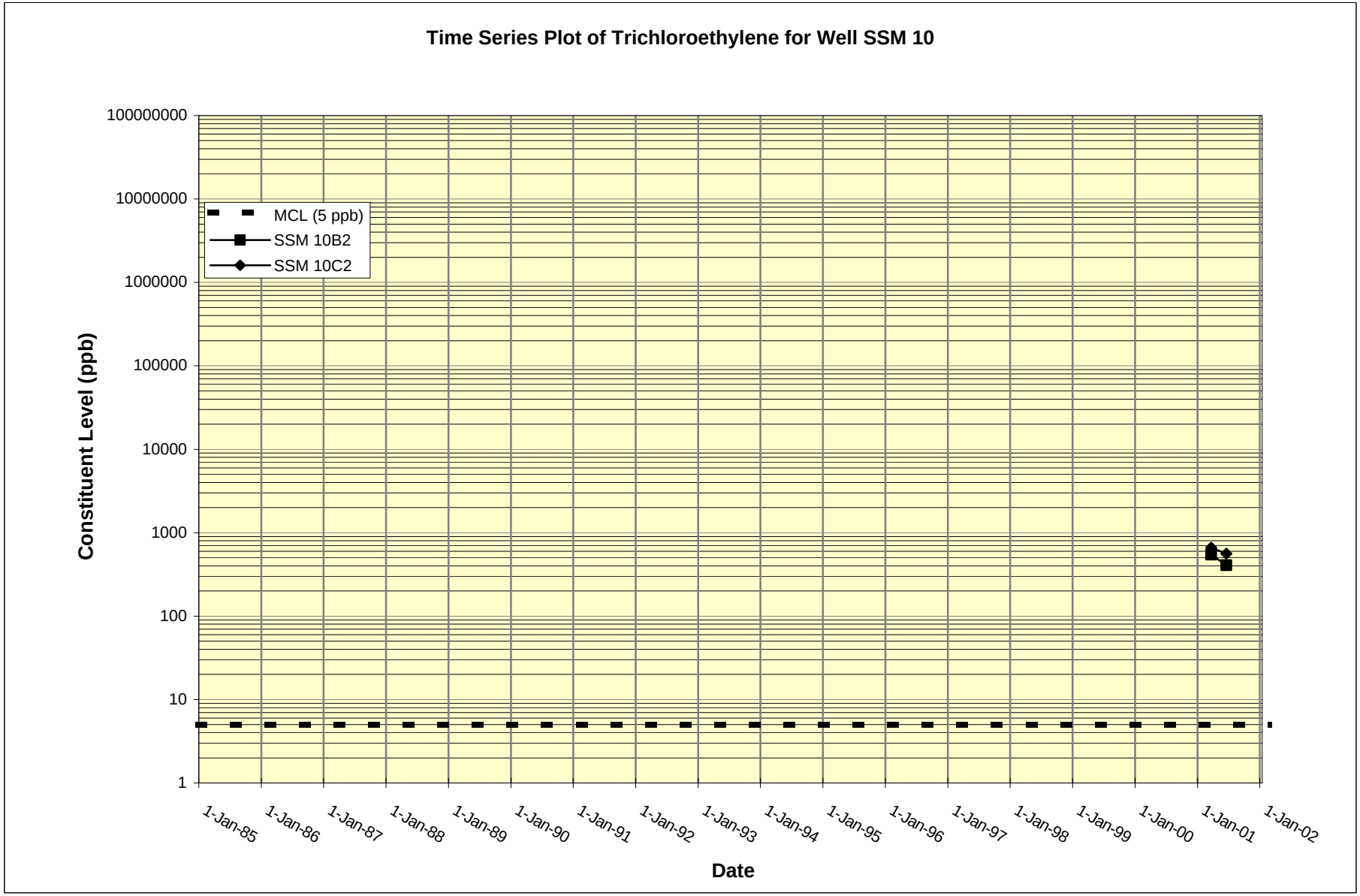
Time Series Plot of Trichloroethylene for Well SSM 10
Constituent Level (ppb)
100000000
10000000
1000000
100000
10000
1000
100
10
1
MCL (5 ppb)
SSM 10B2
SSM 10C2
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
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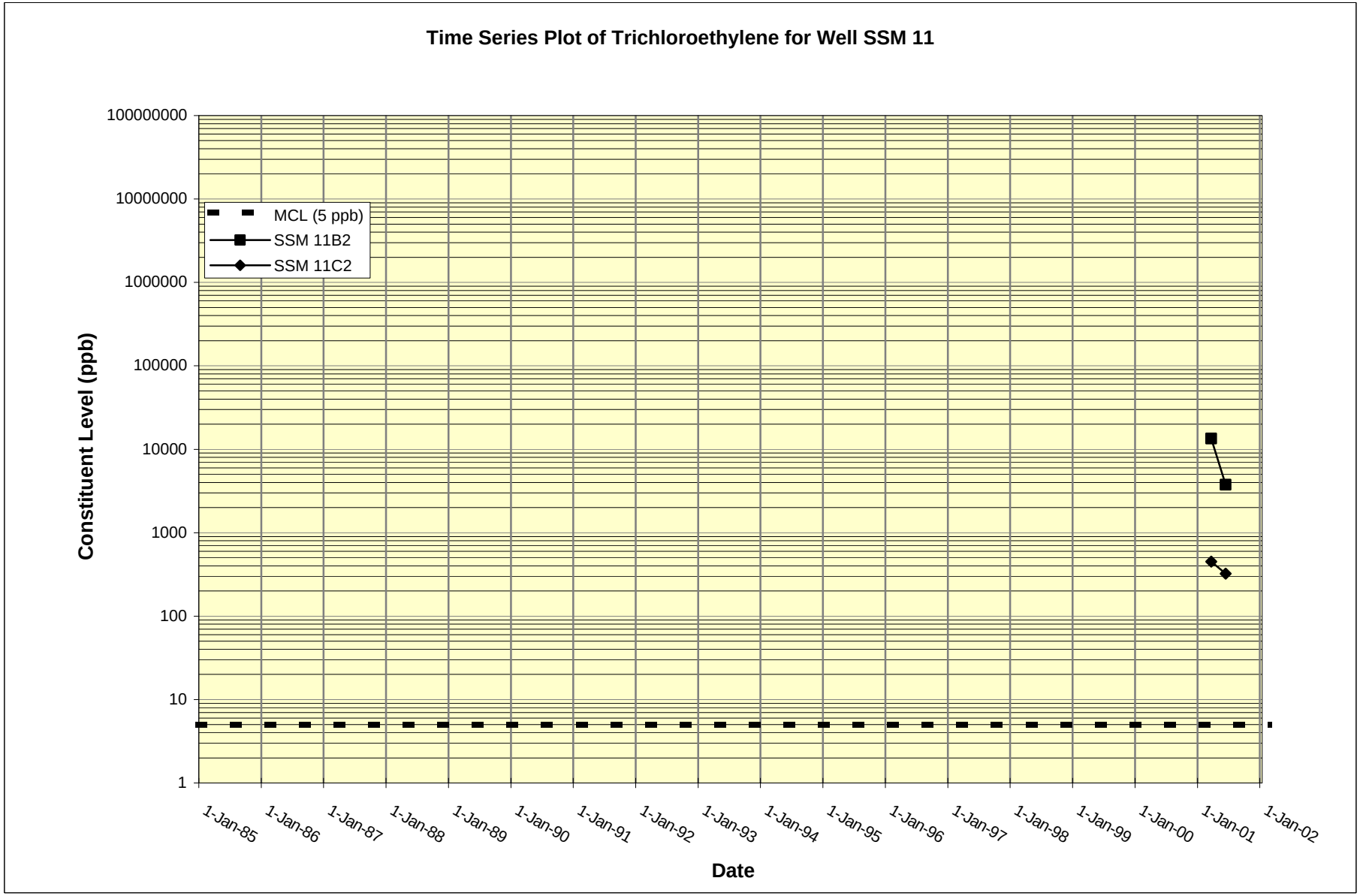
Time Series Plot of Trichloroethylene for Well SSM 11
Constituent Level (ppb)
100000000
10000000
1000000
100000
10000
1000
100
10
1
MCL (5 ppb)
SSM 11B2
SSM 11C2
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
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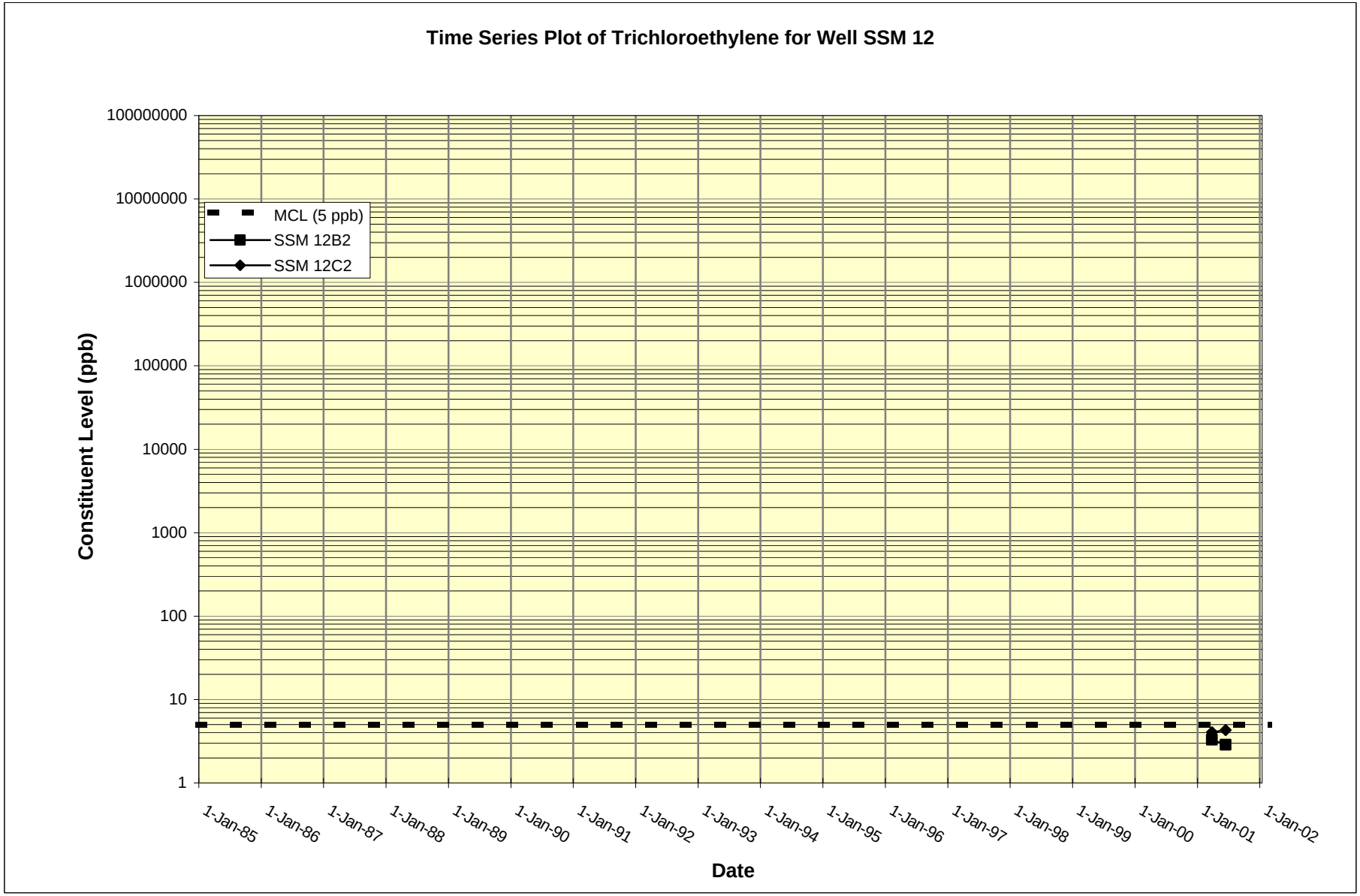
Time Series Plot of Trichloroethylene for Well SSM 12
Constituent Level (ppb)
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1000
100
10
1
MCL (5 ppb)
SSM 12B2
SSM 12C2
1-Jan-85
1-Jan-86
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1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
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1-Jan-93
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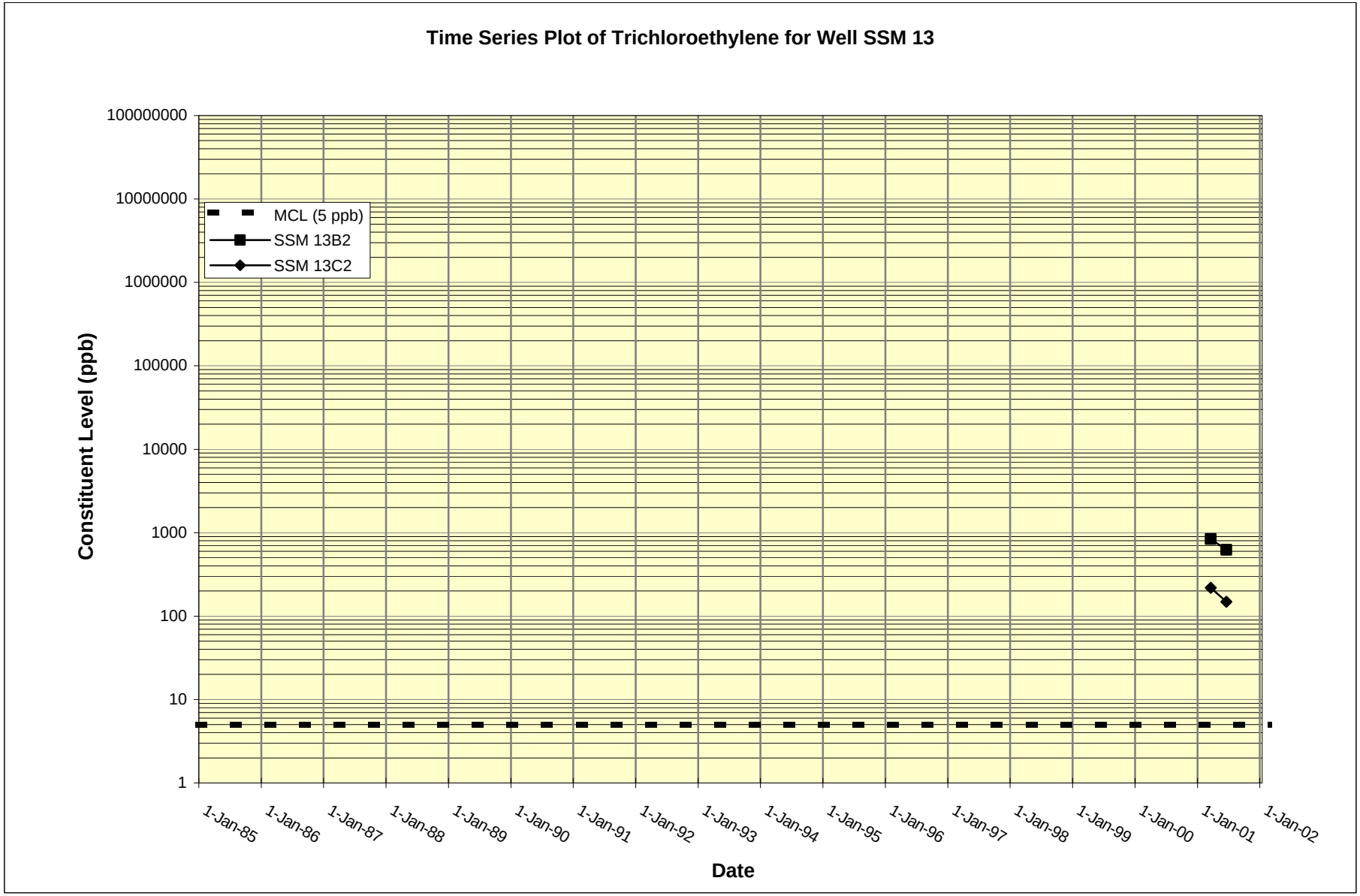
Time Series Plot of Trichloroethylene for Well SSM 13
Constituent Level (ppb)
100000000
10000000
1000000
100000
10000
1000
100
10
1
MCL (5 ppb)
SSM 13B2
SSM 13C2
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
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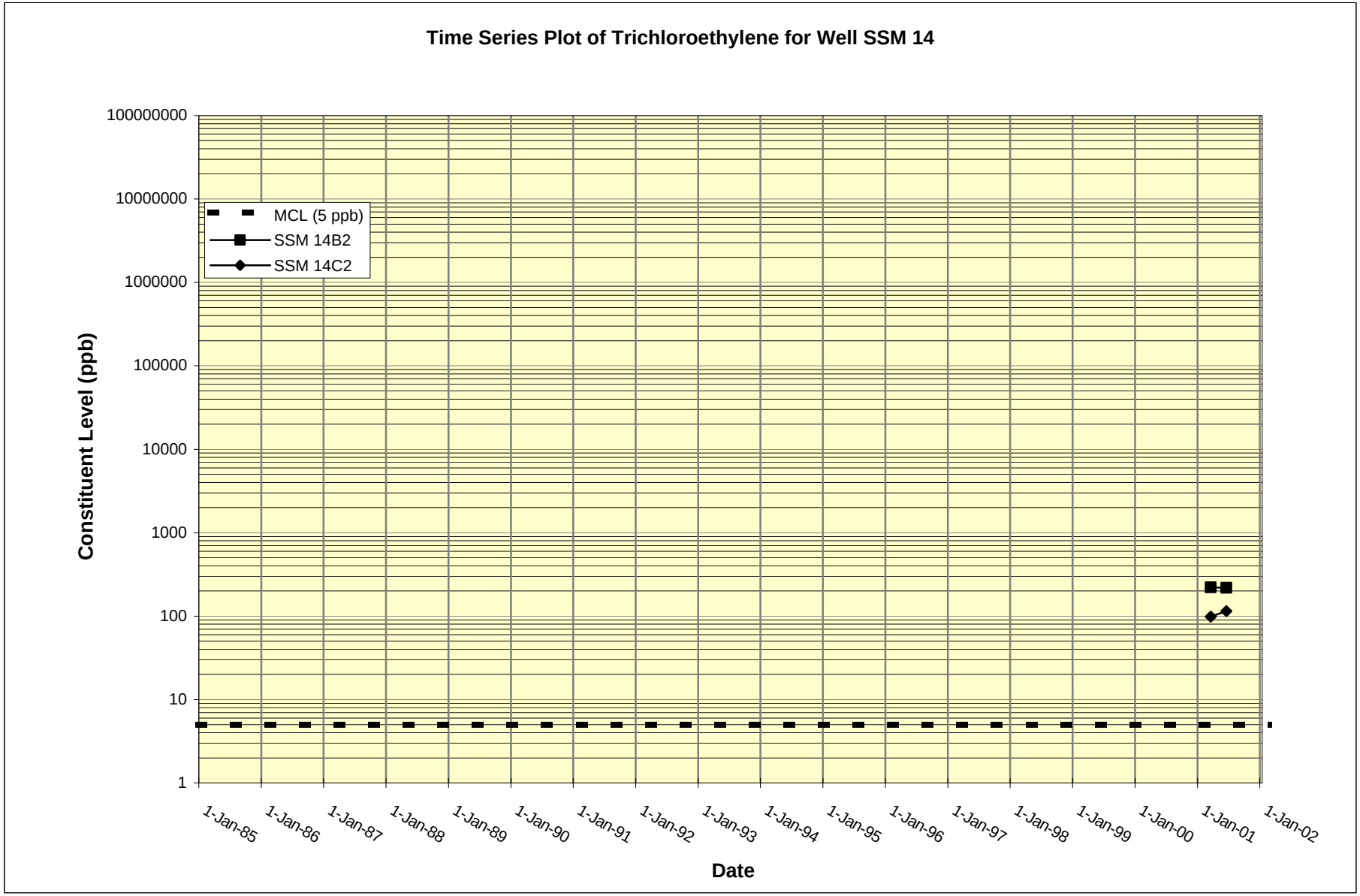
Time Series Plot of Trichloroethylene for Well SSM 14
Constituent Level (ppb)
100000000
10000000
1000000
100000
10000
1000
100
10
1
MCL (5 ppb)
SSM 14B2
SSM 14C2
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
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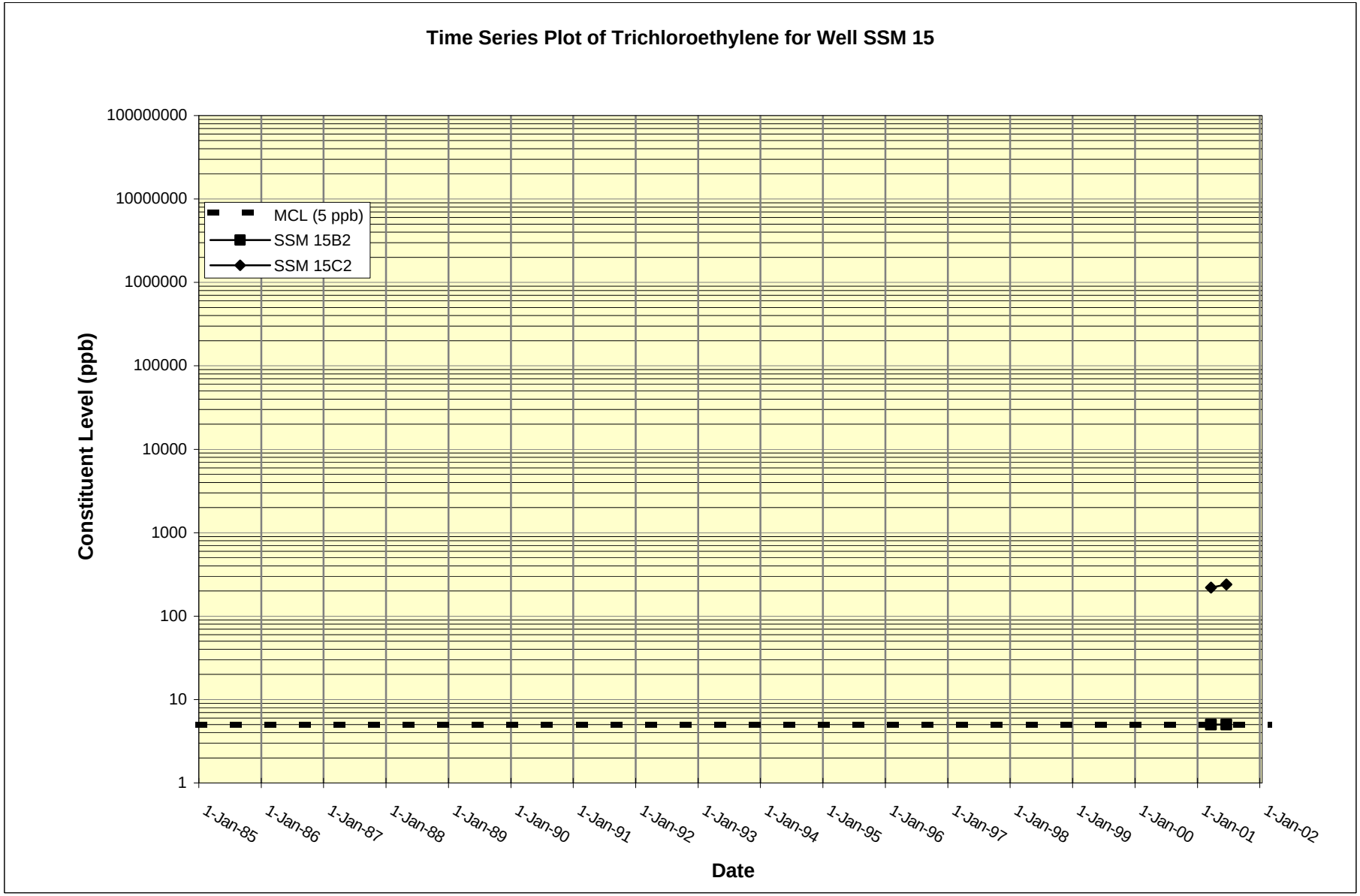
Time Series Plot of Trichloroethylene for Well SSM 15
Constituent Level (ppb)
100000000
10000000
1000000
100000
10000
1000
100
10
1
MCL (5 ppb)
SSM 15B2
SSM 15C2
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
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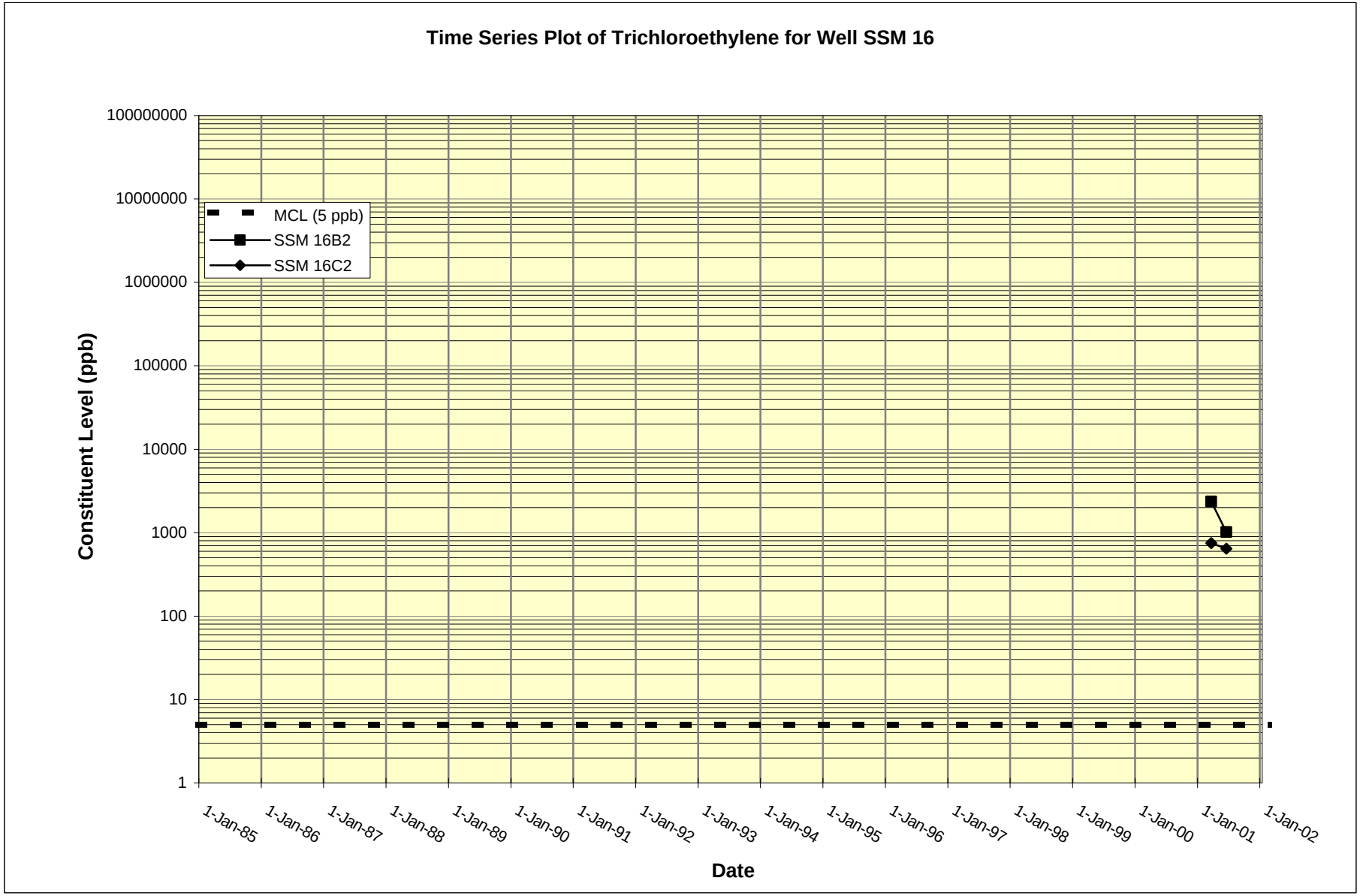
1-Jan-02
Date


Time Series Plot of Trichloroethylene for Well SSM 16
Constituent Level (ppb)
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10000000
1000000
100000
10000
1000
100
10
1
MCL (5 ppb)
SSM 16B2
SSM 16C2
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
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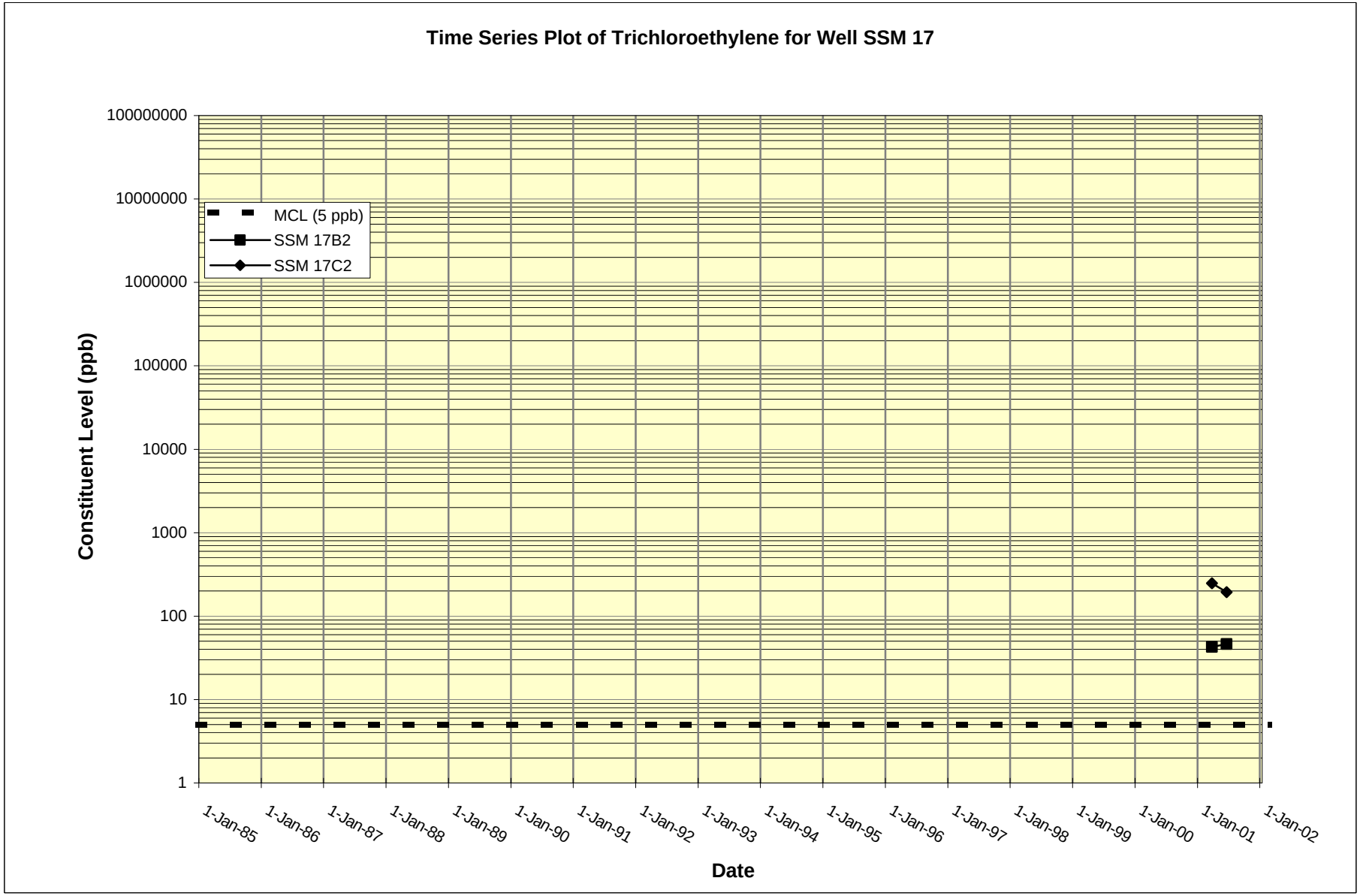
Time Series Plot of Trichloroethylene for Well SSM 17
Constituent Level (ppb)
100000000
10000000
1000000
100000
10000
1000
100
10
1
MCL (5 ppb)
SSM 17B2
SSM 17C2
1-Jan-85
1-Jan-86
1-Jan-87
1-Jan-88
1-Jan-89
1-Jan-90
1-Jan-91
1-Jan-92
1-Jan-93
1-Jan-94
1-Jan-95
1-Jan-96
1-Jan-97
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1-Jan-01
1-Jan-02
Date

Appendix G

Hydrographs

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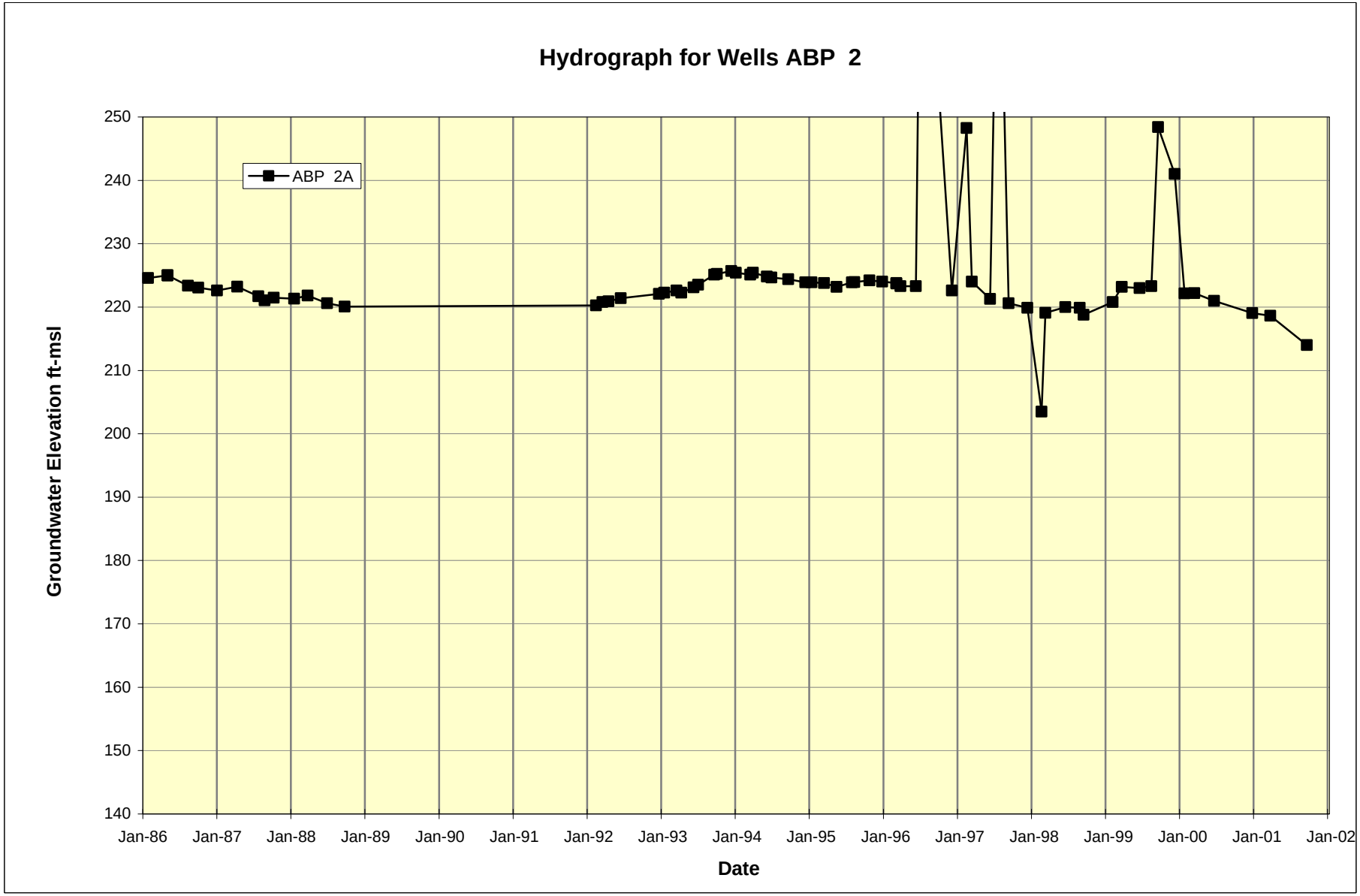
Hydrograph for Wells ABP 2
ABP 2A
Groundwater Elevation ft-msl
250
240
230
220
210
200
190
180
170
160
150
140
Jan-86
Jan-87
Jan-88
Jan-89
Jan-90
Jan-91
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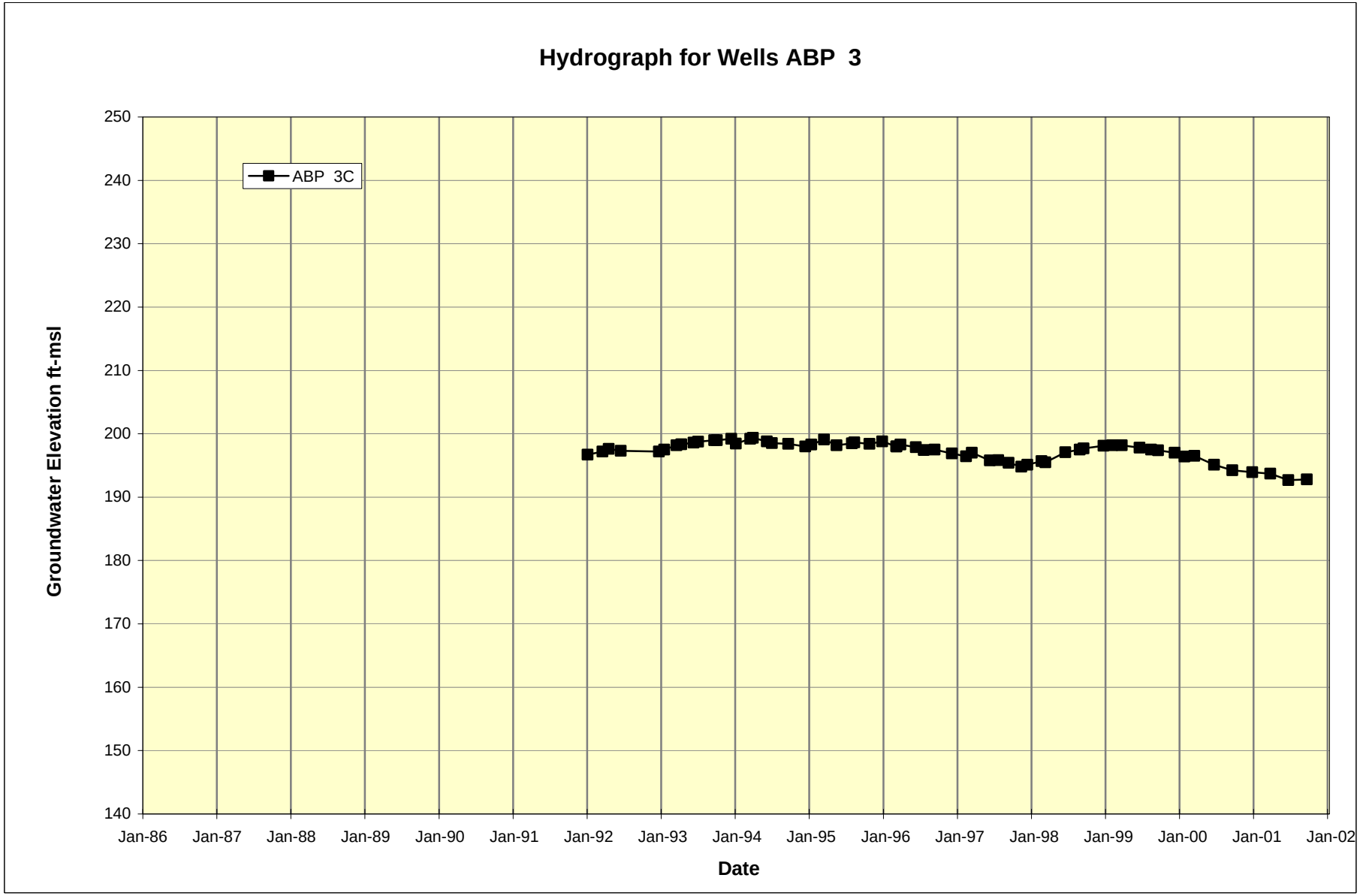
Jan-99
Jan-00
Jan-01
Jan-02
Date


Hydrograph for Wells ABP 3
ABP 3C
Groundwater Elevation ft-msl
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240
230
220
210
200
190
180
170
160
150
140
Jan-86
Jan-87
Jan-88
Jan-89
Jan-90
Jan-91
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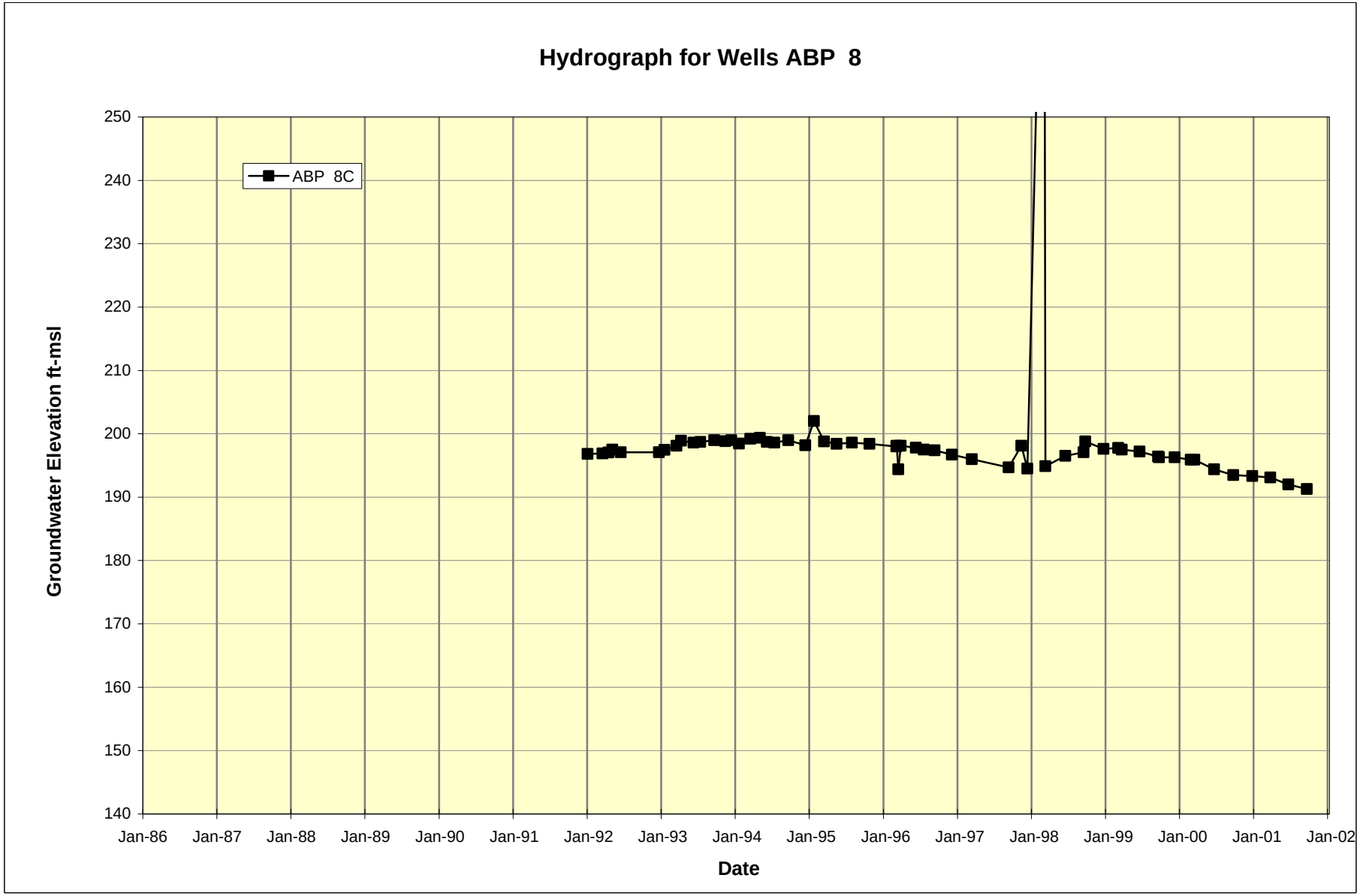
Jan-01
Jan-02
Date


Hydrograph for Wells ABP 8
ABP 8C
Groundwater Elevation ft-msl
250
240
230
220
210
200
190
180
170
160
150
140
Jan-86
Jan-87
Jan-88
Jan-89
Jan-90
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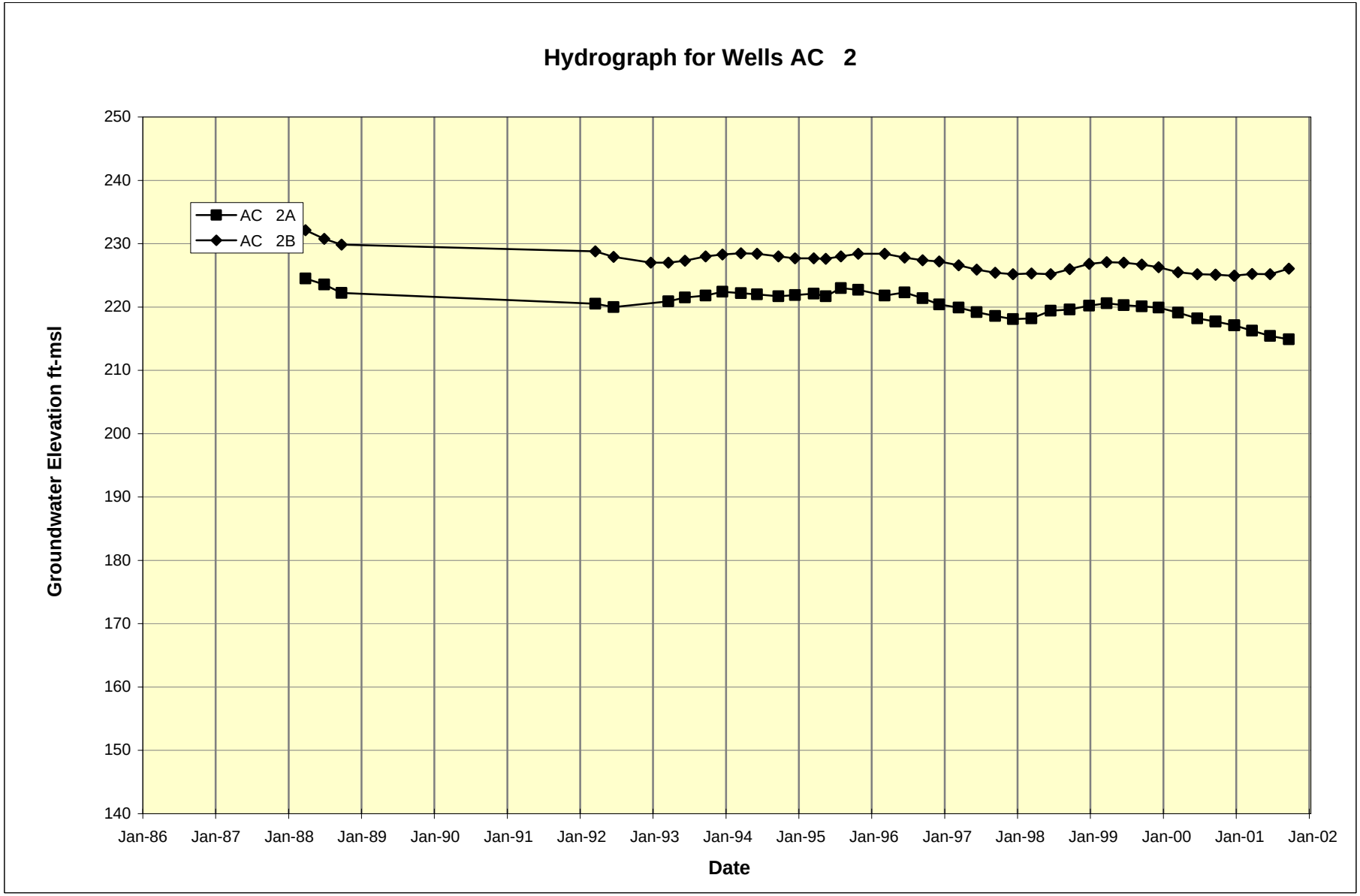
Jan-01
Jan-02
Date


Hydrograph for Wells AC 2
AC 2A
AC 2B
Groundwater Elevation ft-msl
250
240
230
220
210
200
190
180
170
160
150
140
Jan-86
Jan-87
Jan-88
Jan-89
Jan-90
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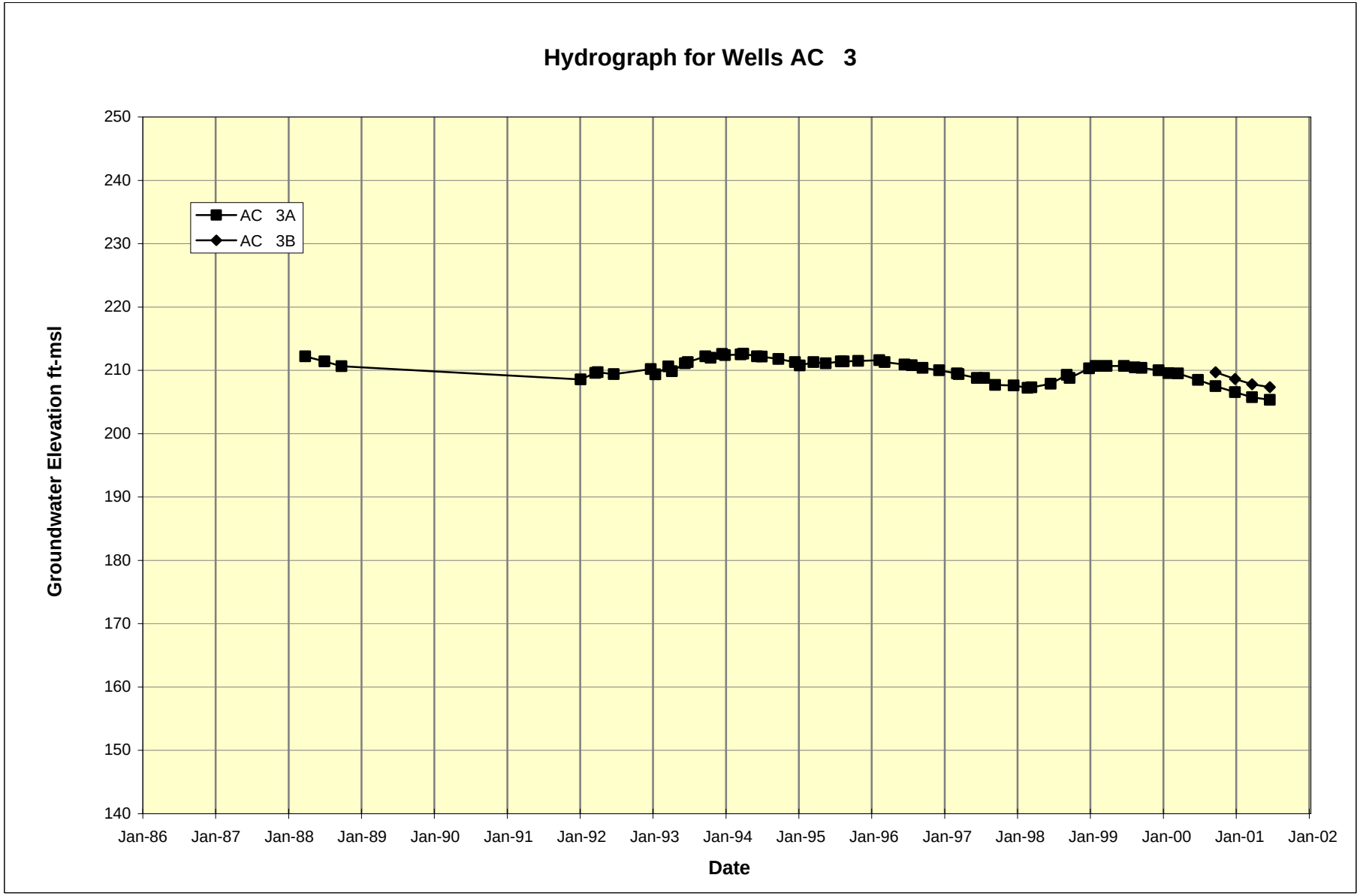
Hydrograph for Wells AC 3
AC 3A
AC 3B
Groundwater Elevation ft-msl
250
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140
Jan-86
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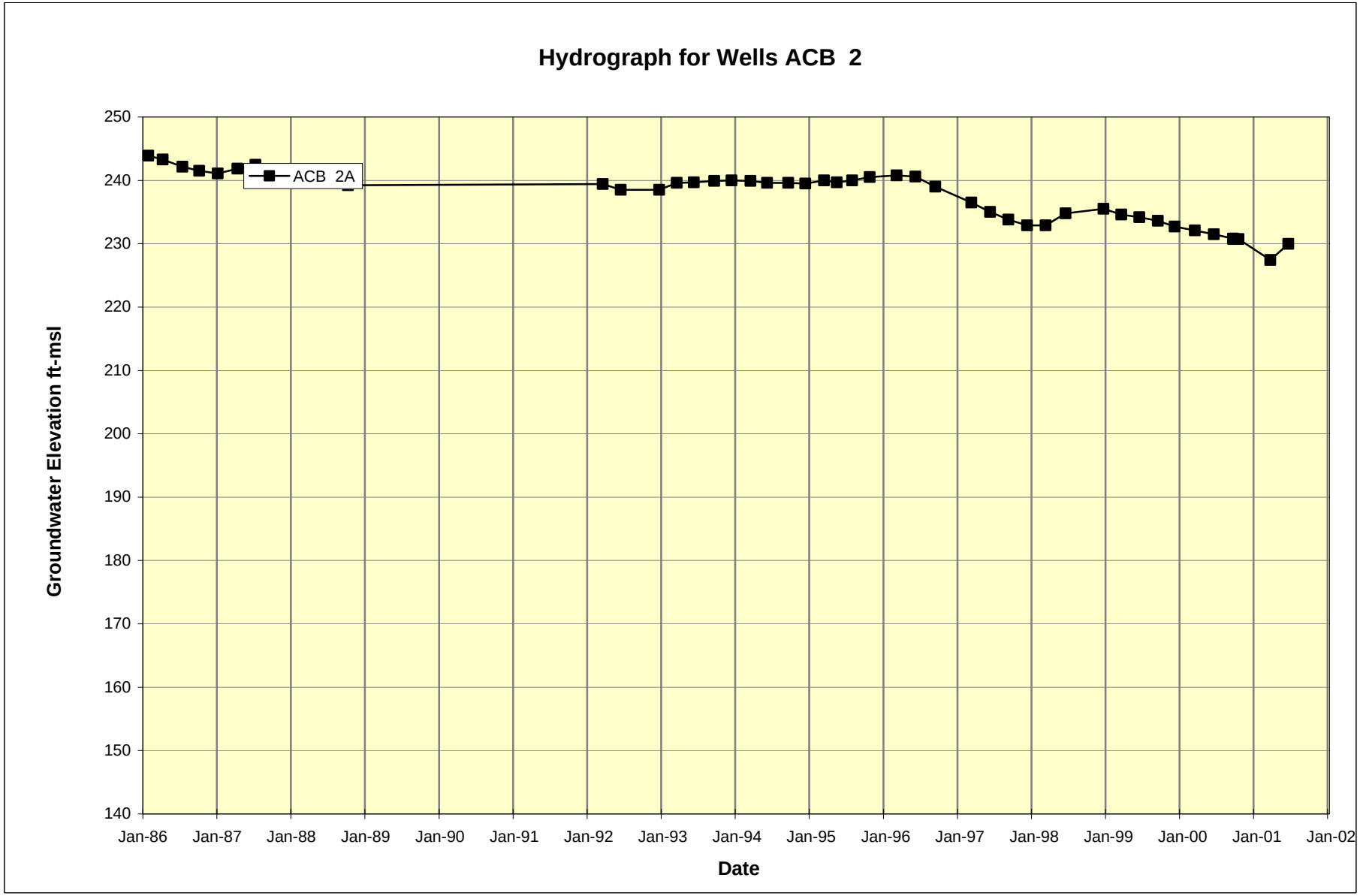
Hydrograph for Wells ACB 2
ACB 2A
Groundwater Elevation ft-msl
250
240
230
220
210
200
190
180
170
160
150
140
Jan-86
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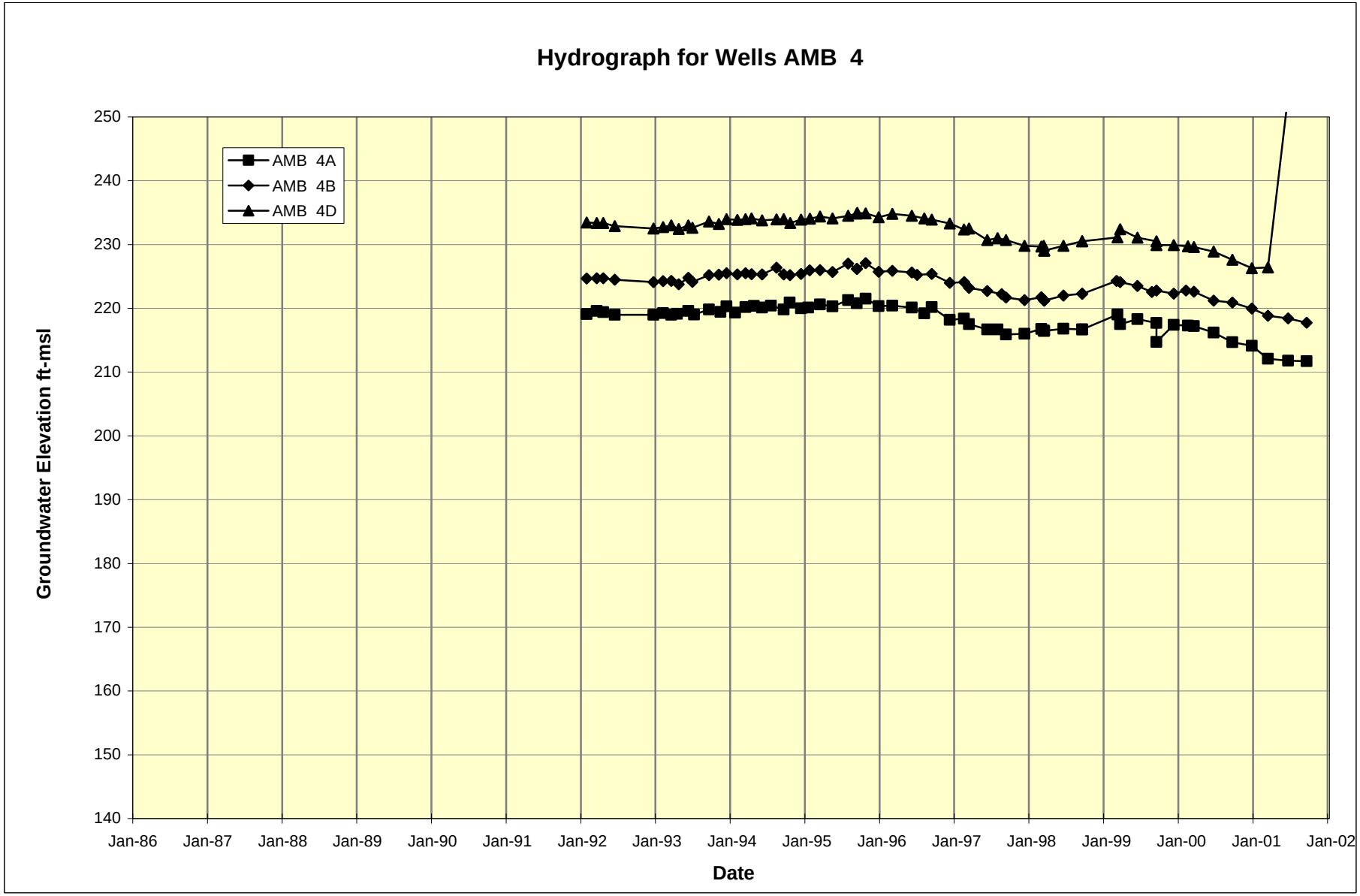
Hydrograph for Wells AMB 4
AMB 4A
AMB 4B
AMB 4D
Groundwater Elevation ft-msl
250
240
230
220
210
200
190
180
170
160
150
140
Jan-86
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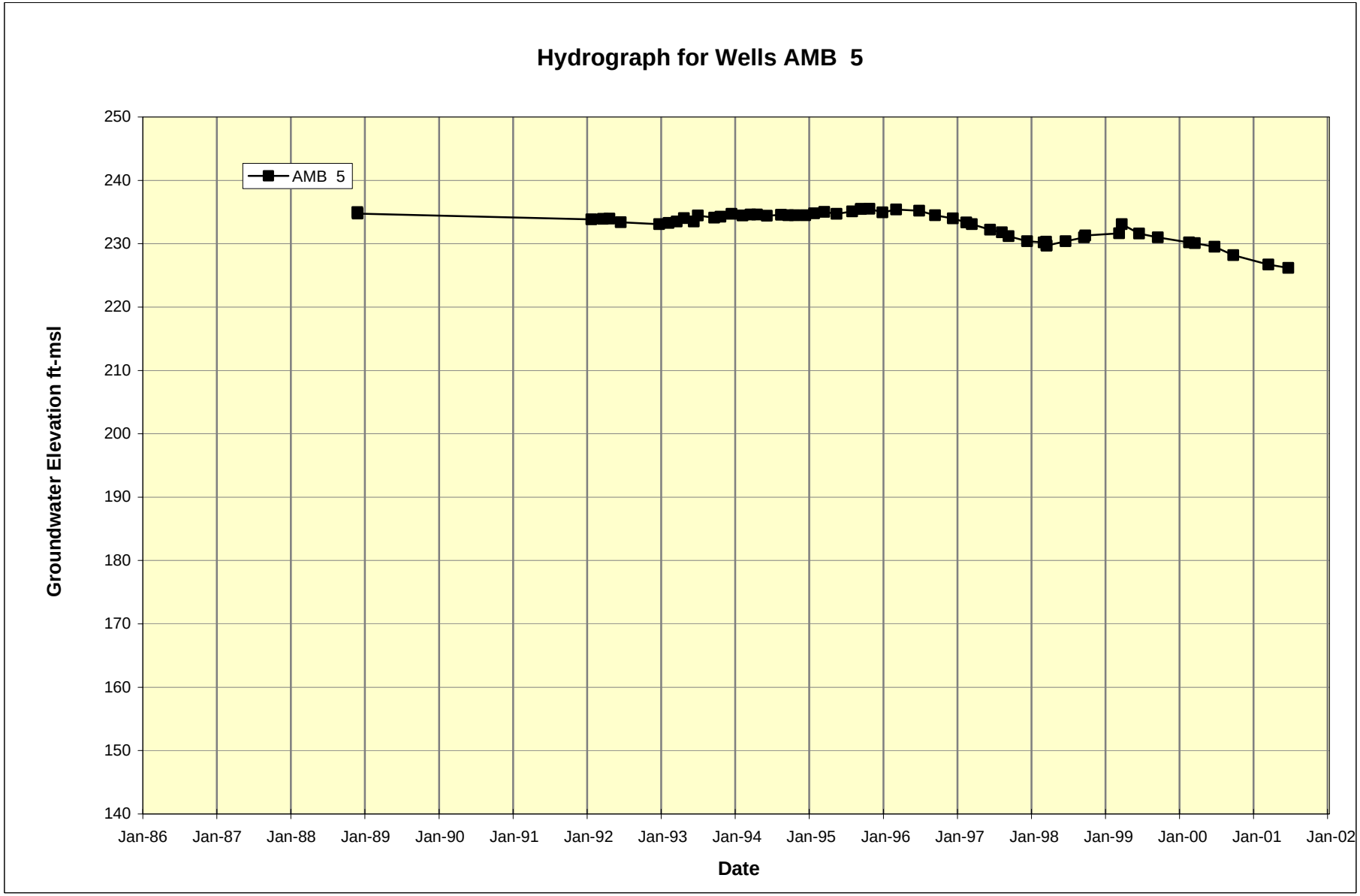
Hydrograph for Wells AMB 5
AMB 5
Groundwater Elevation ft-msl
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220
210
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190
180
170
160
150
140
Jan-86
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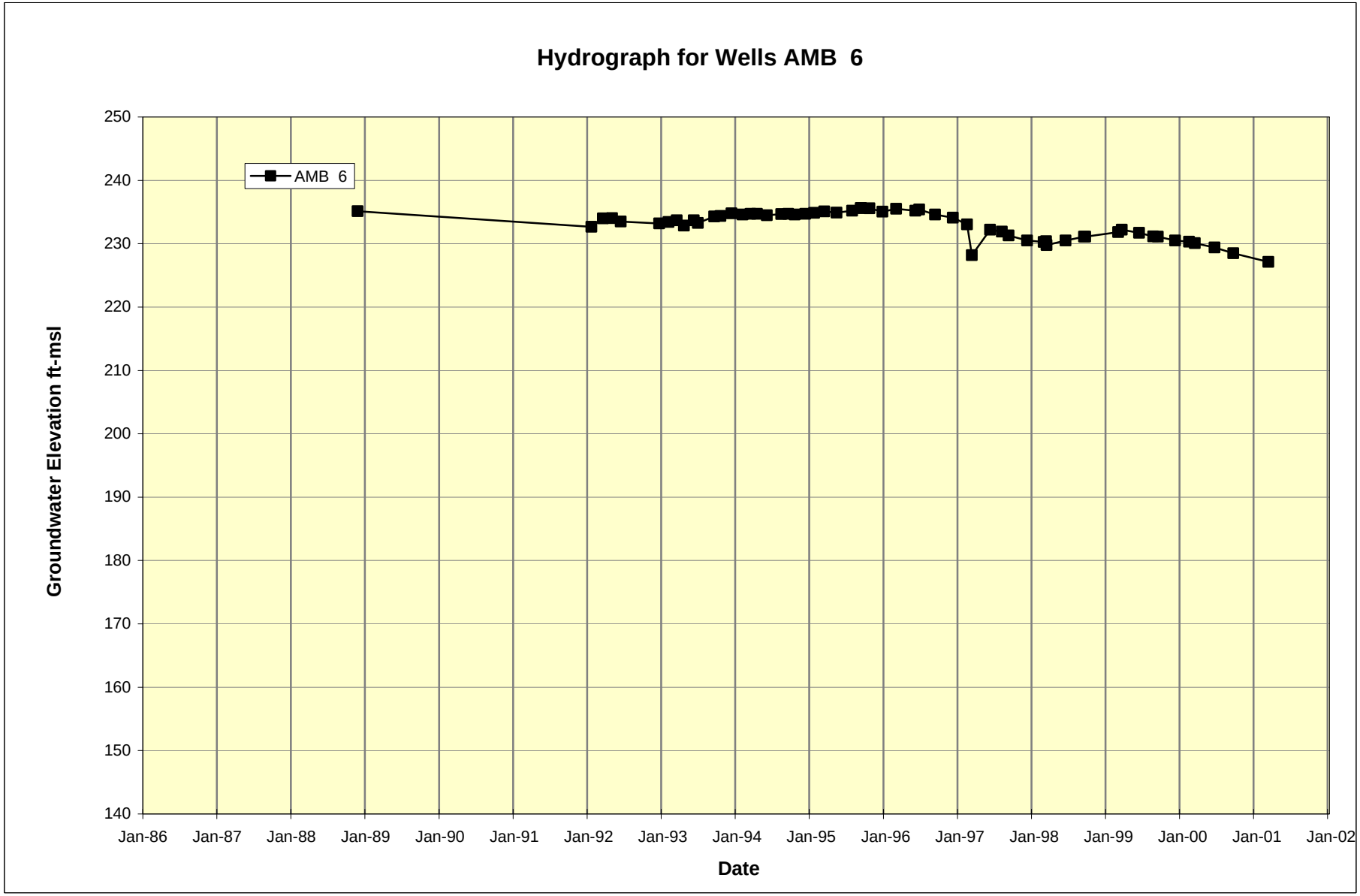
Date


Hydrograph for Wells AMB 6
AMB 6
Groundwater Elevation ft-msl
250
240
230
220
210
200
190
180
170
160
150
140
Jan-86
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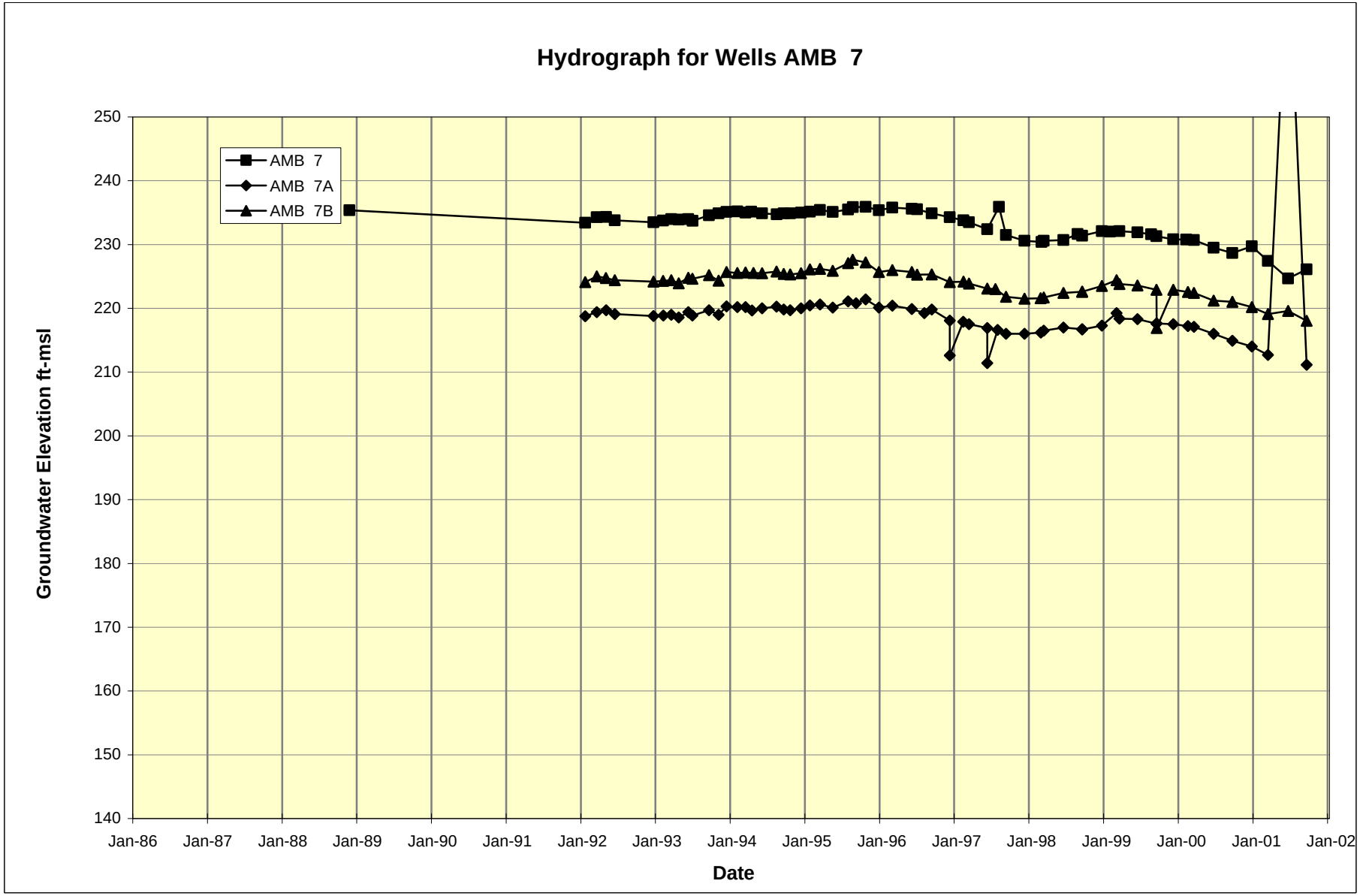
Hydrograph for Wells AMB 7
AMB 7
AMB 7A
AMB 7B
Groundwater Elevation ft-msl
250
240
230
220
210
200
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180
170
160
150
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Jan-86
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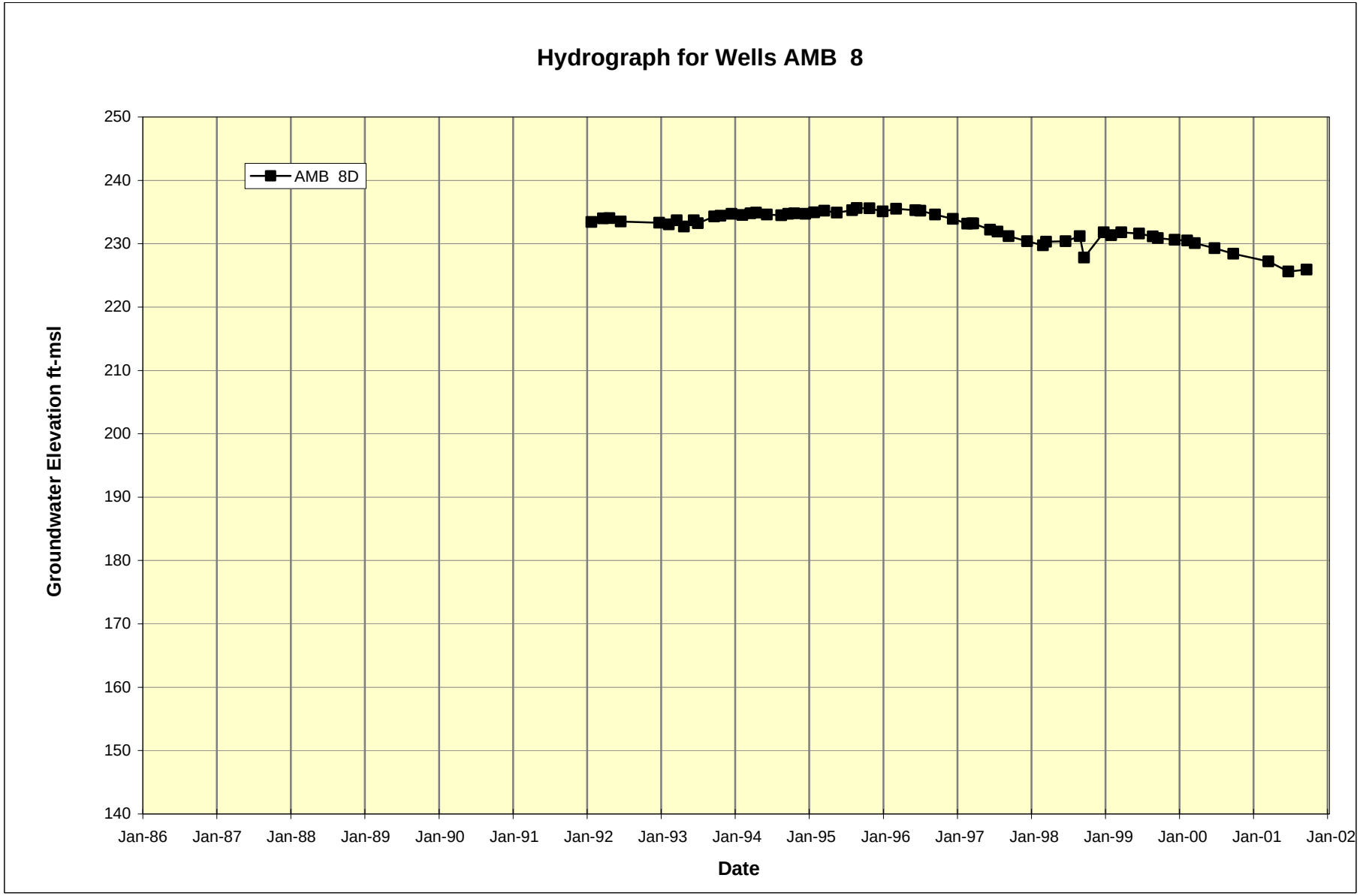
Hydrograph for Wells AMB 8
AMB 8D
Groundwater Elevation ft-msl
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240
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220
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200
190
180
170
160
150
140
Jan-86
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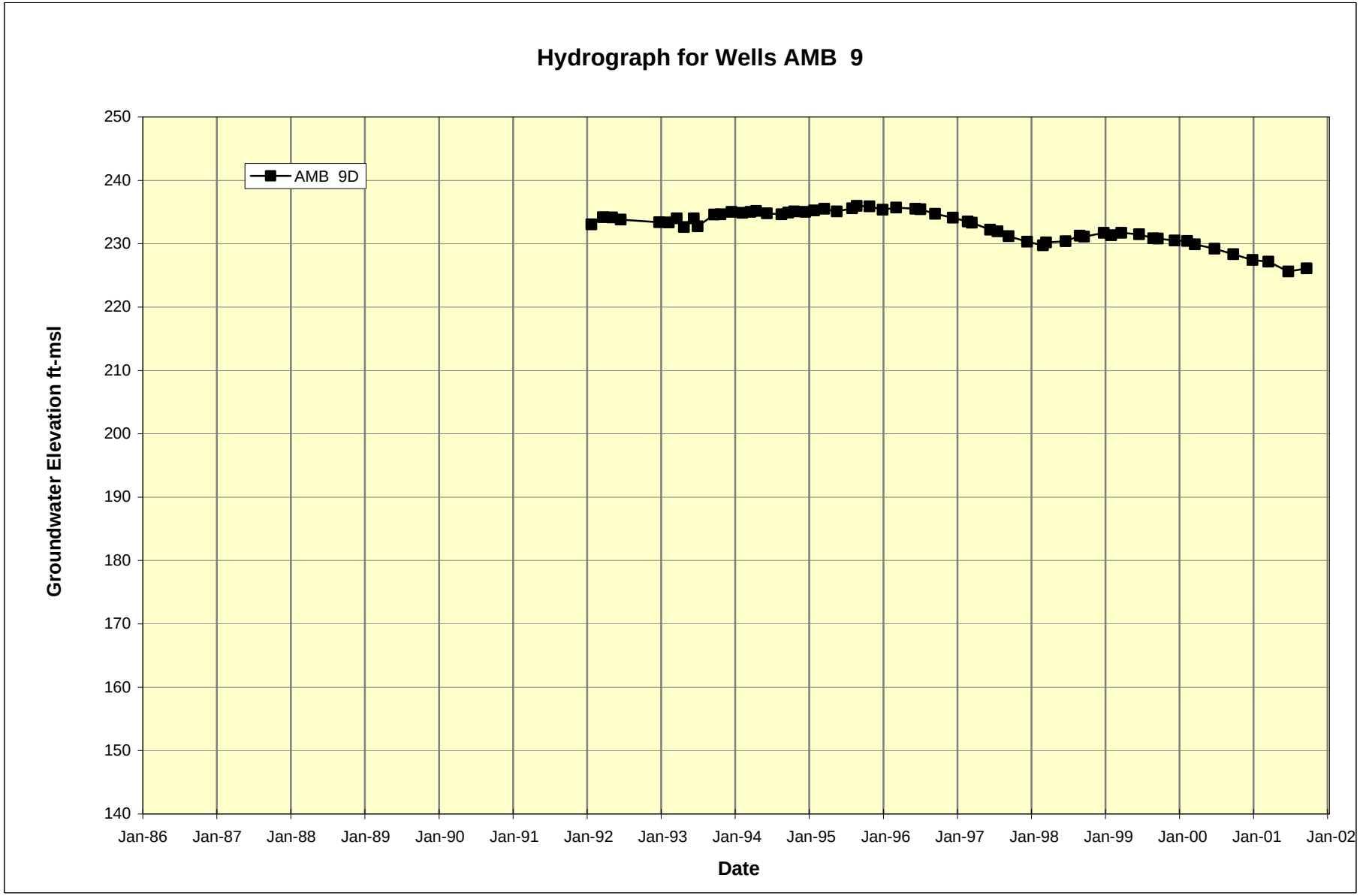
Hydrograph for Wells AMB 9
AMB 9D
Groundwater Elevation ft-msl
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140
Jan-86
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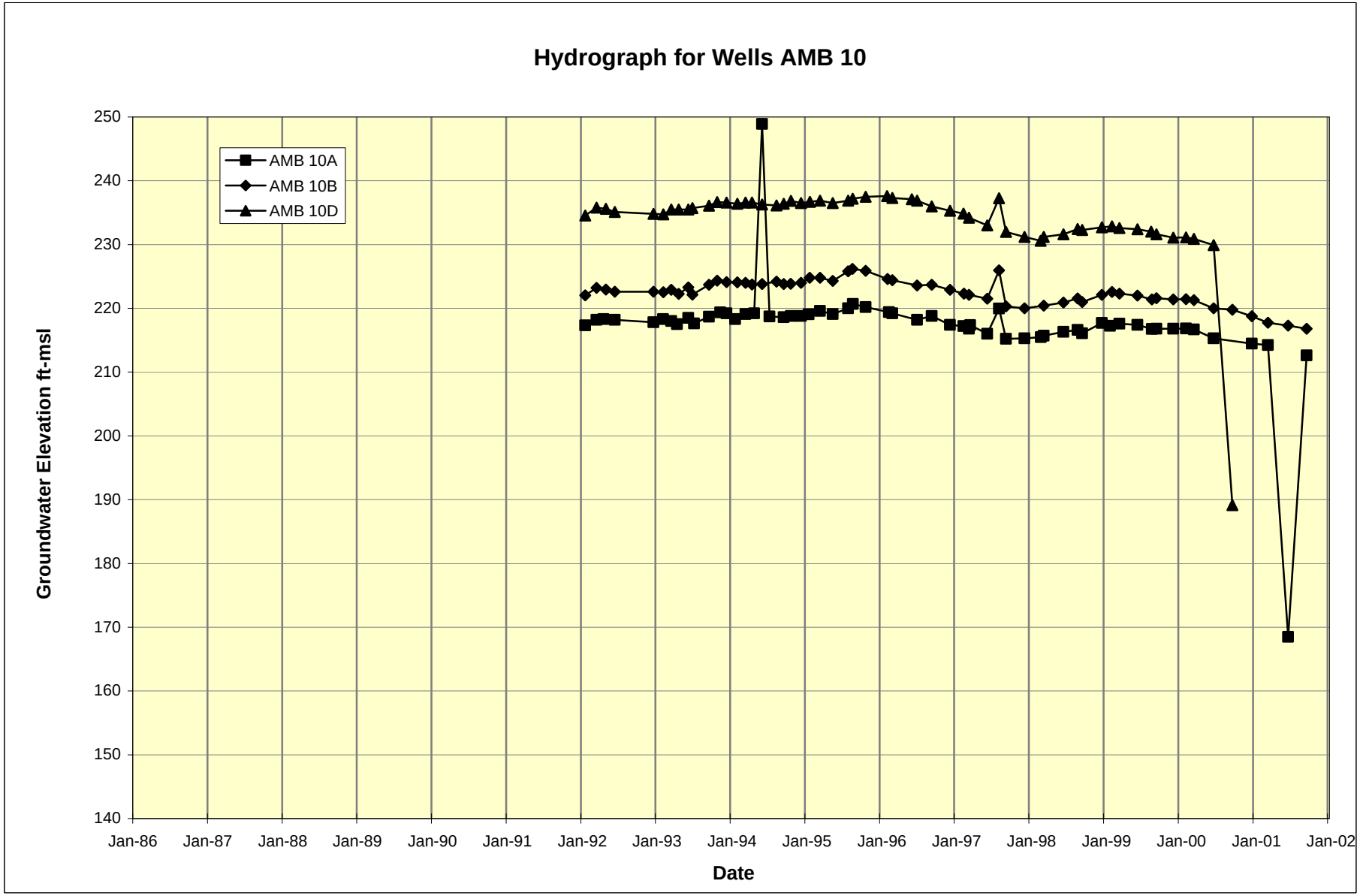
Hydrograph for Wells AMB 10
AMB 10A
AMB 10B
AMB 10D
Groundwater Elevation ft-msl
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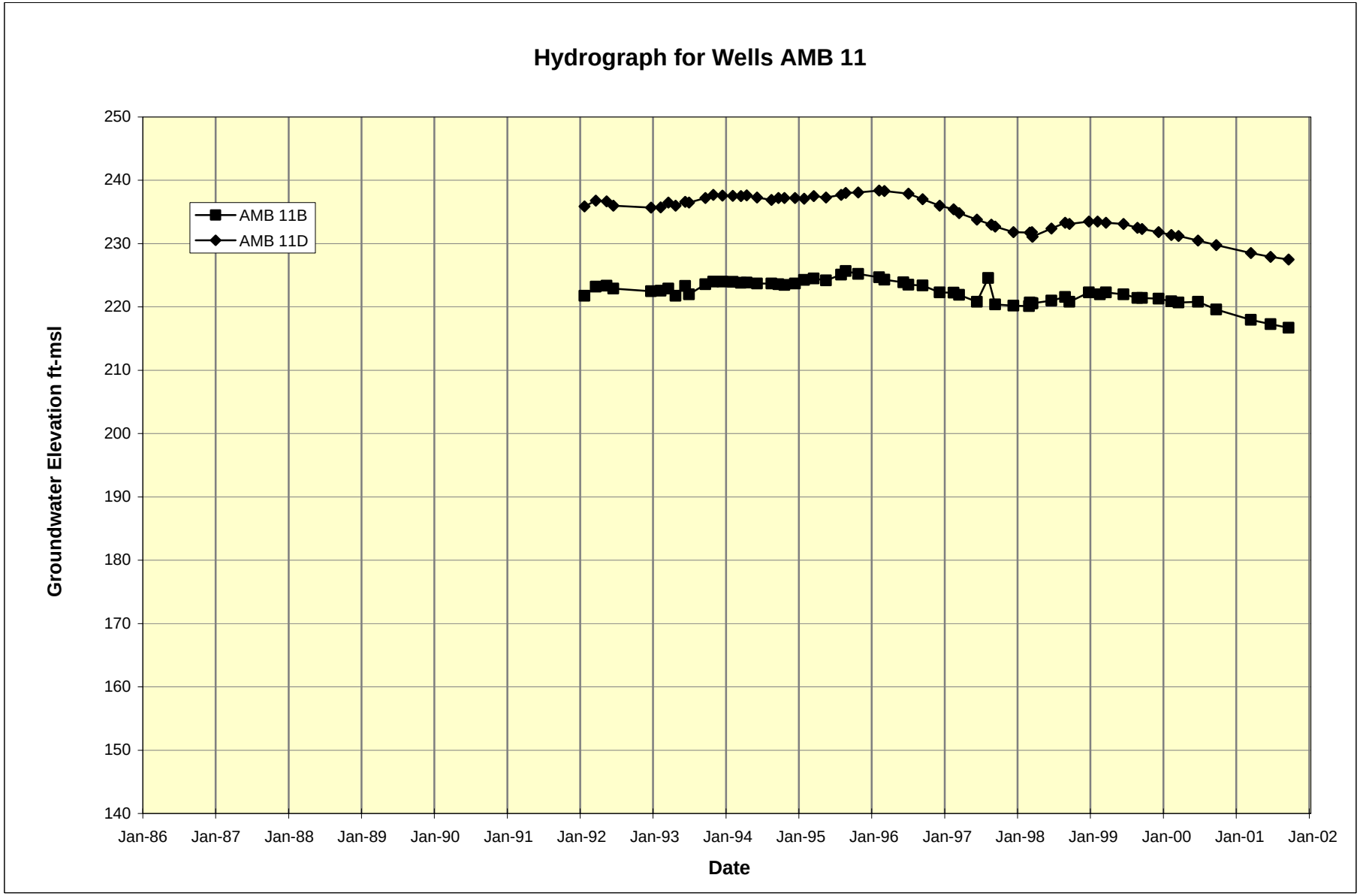
Hydrograph for Wells AMB 11
AMB 11B
AMB 11D
Groundwater Elevation ft-msl
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150
140
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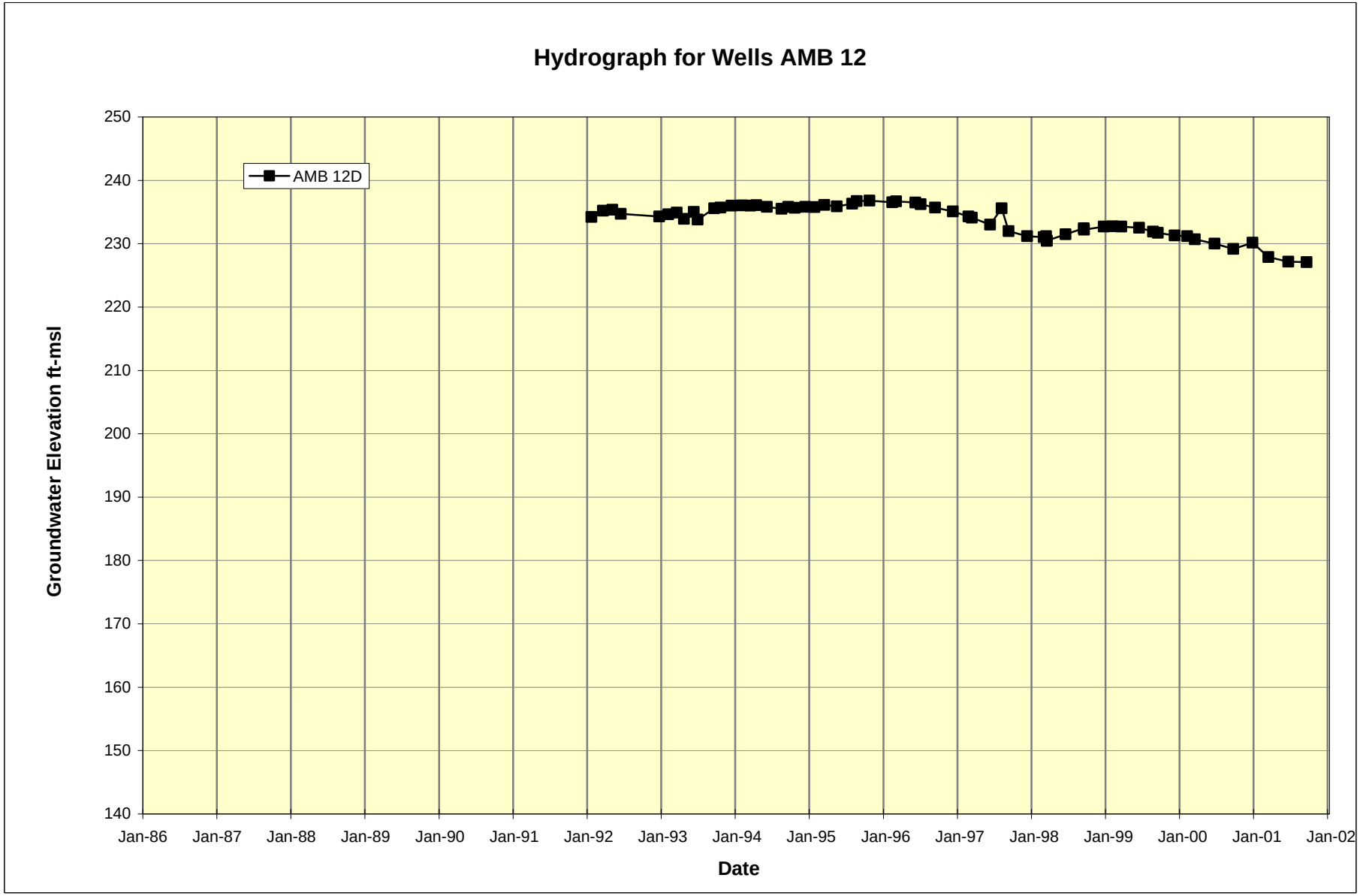
Date


Hydrograph for Wells AMB 12
AMB 12D
Groundwater Elevation ft-msl
250
240
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Jan-86
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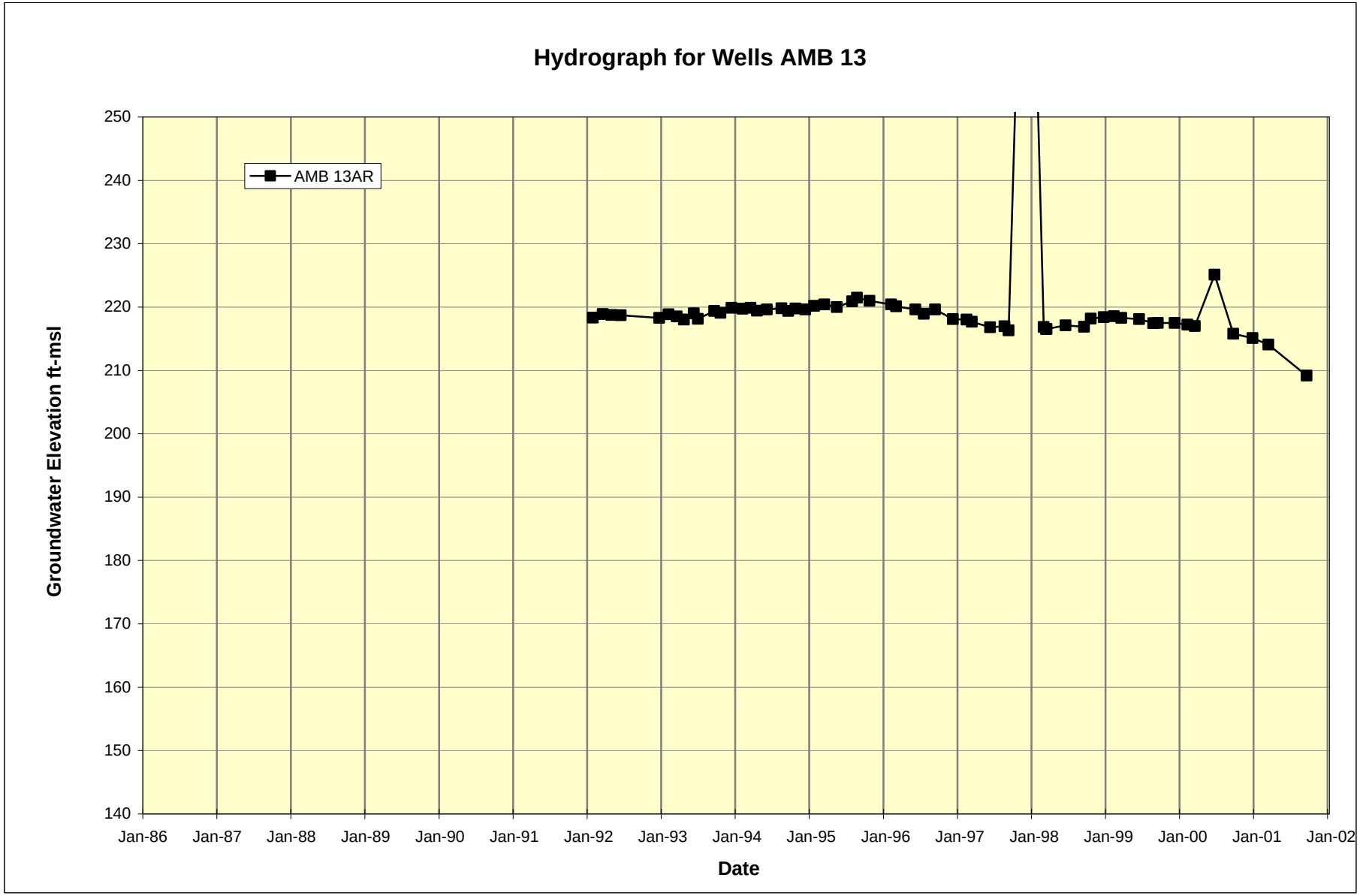
Date


Hydrograph for Wells AMB 13
AMB 13AR
Groundwater Elevation ft-msl
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Jan-86
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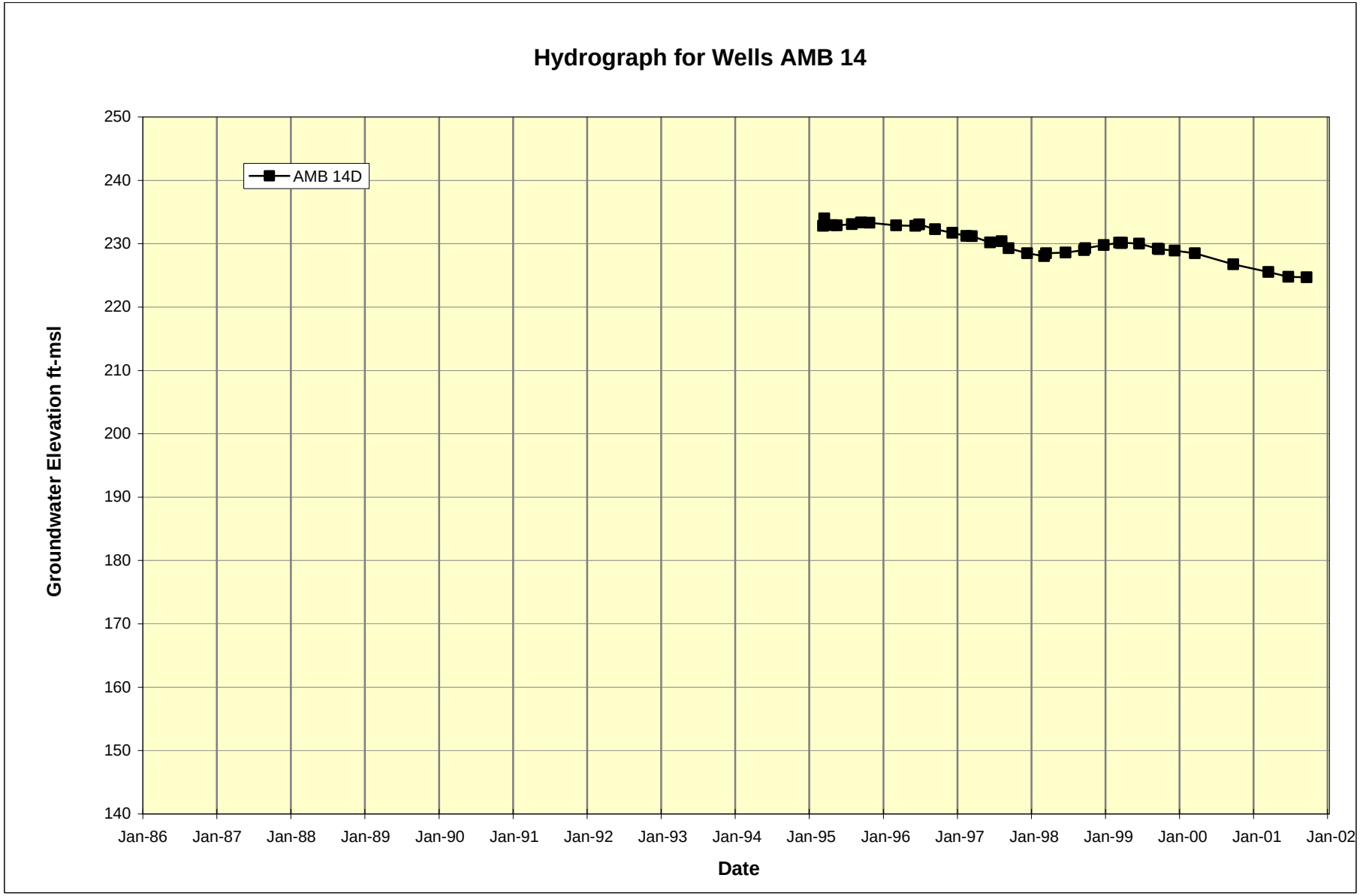
Date


Hydrograph for Wells AMB 14
AMB 14D
Groundwater Elevation ft-msl
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240
230
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210
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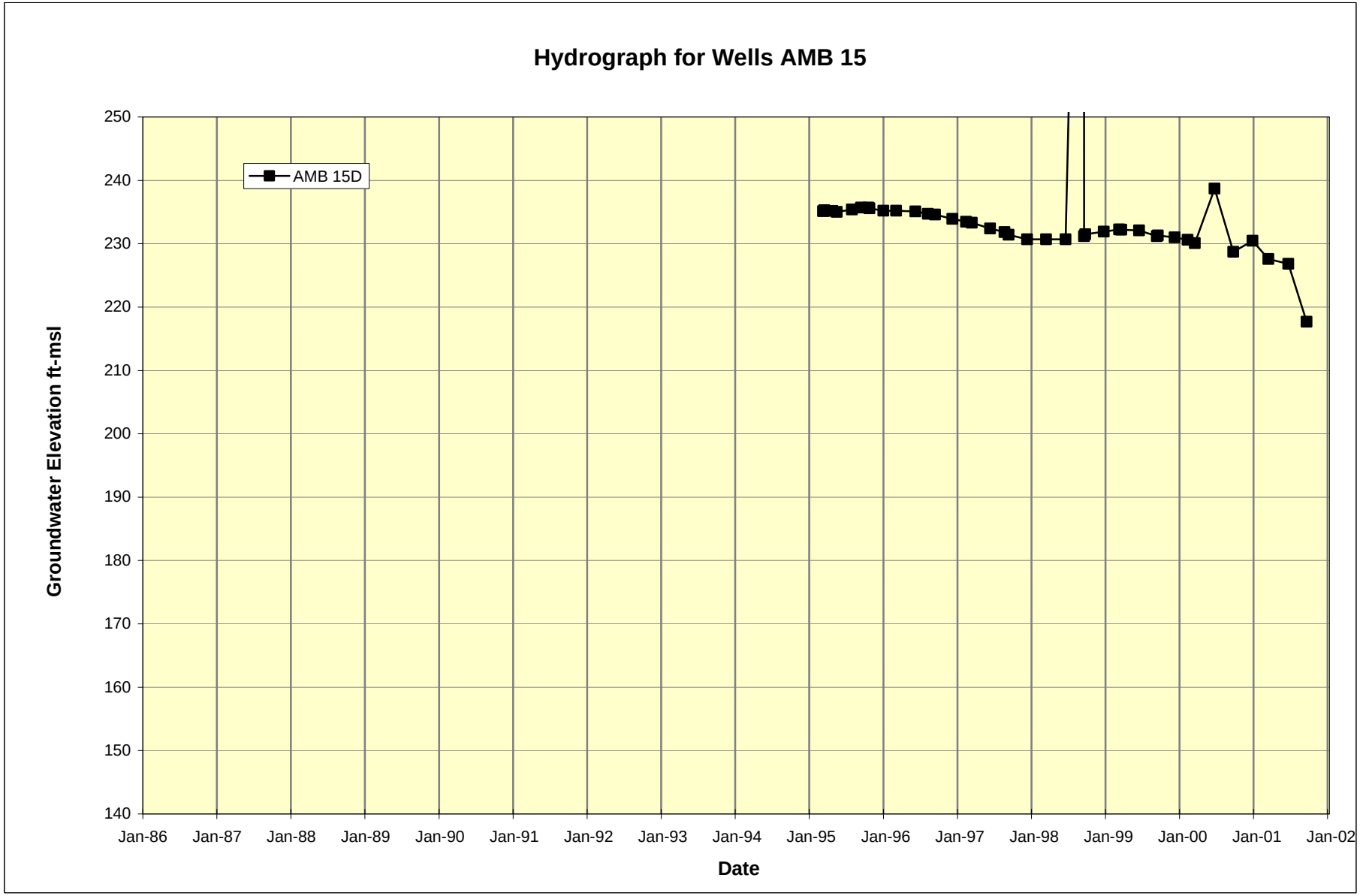
Date


Hydrograph for Wells AMB 15
AMB 15D
Groundwater Elevation ft-msl
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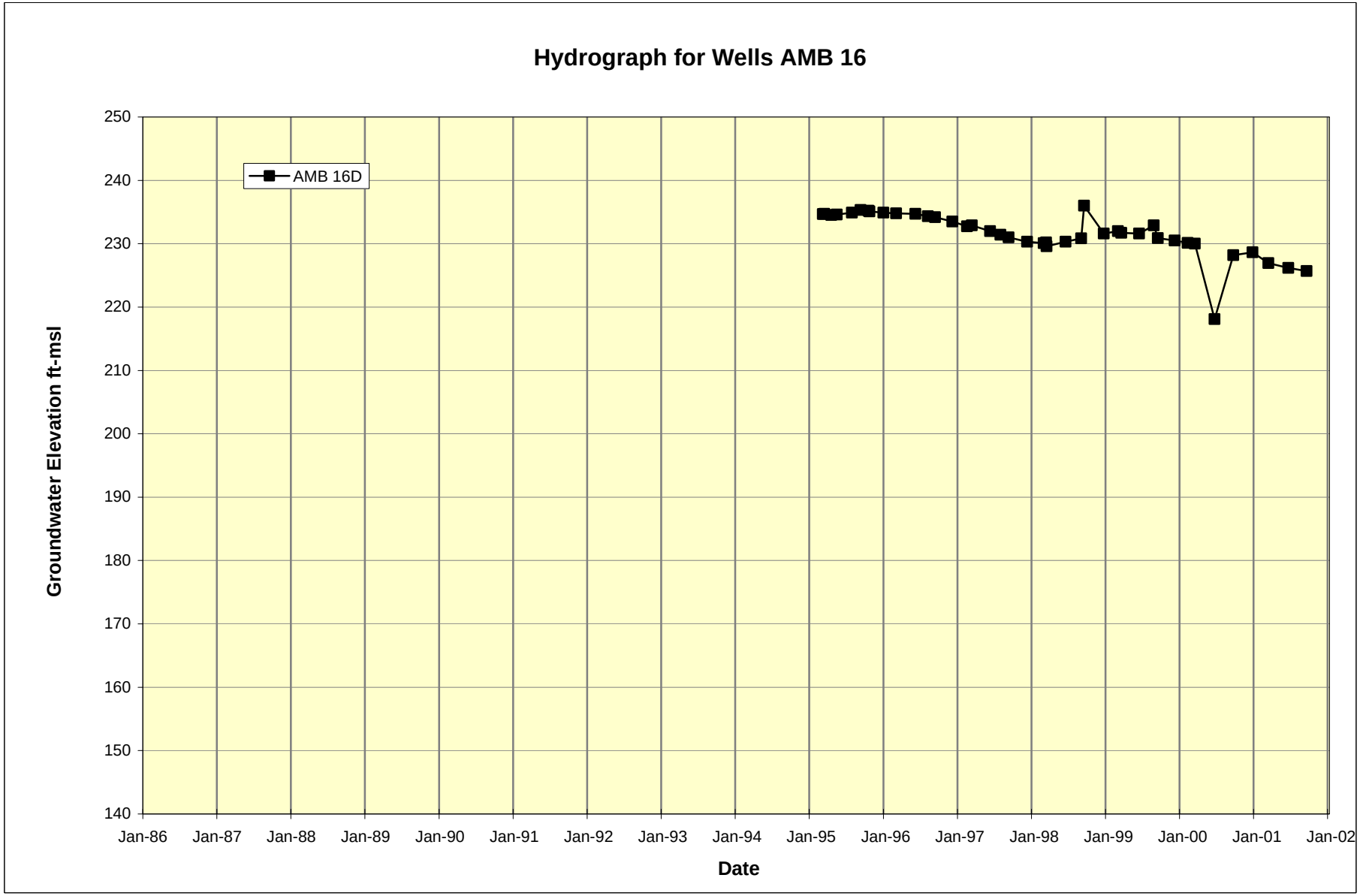
Date


Hydrograph for Wells AMB 16
AMB 16D
Groundwater Elevation ft-msl
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Jan-86
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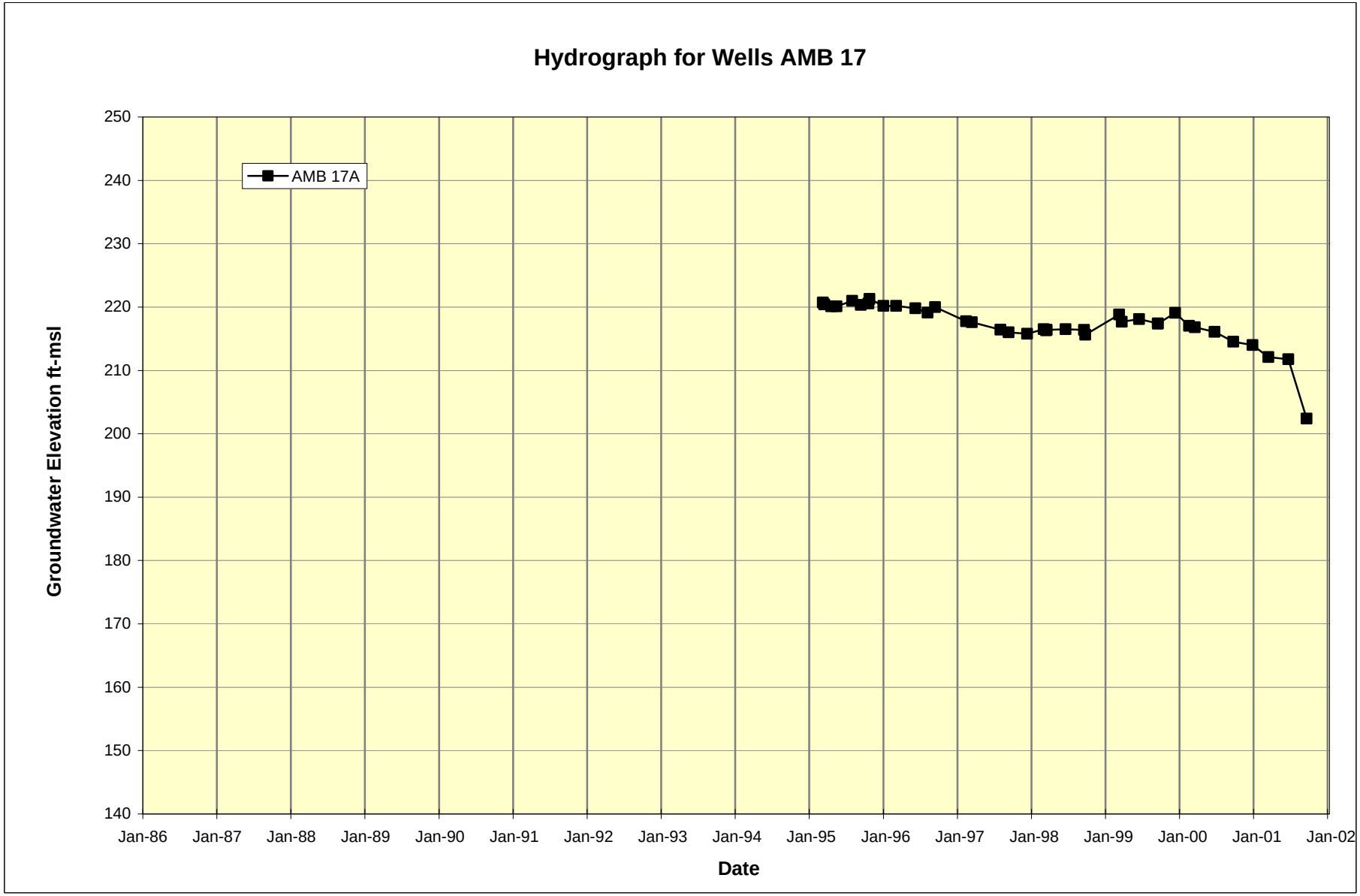
Hydrograph for Wells AMB 17
AMB 17A
Groundwater Elevation ft-msl
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Jan-86
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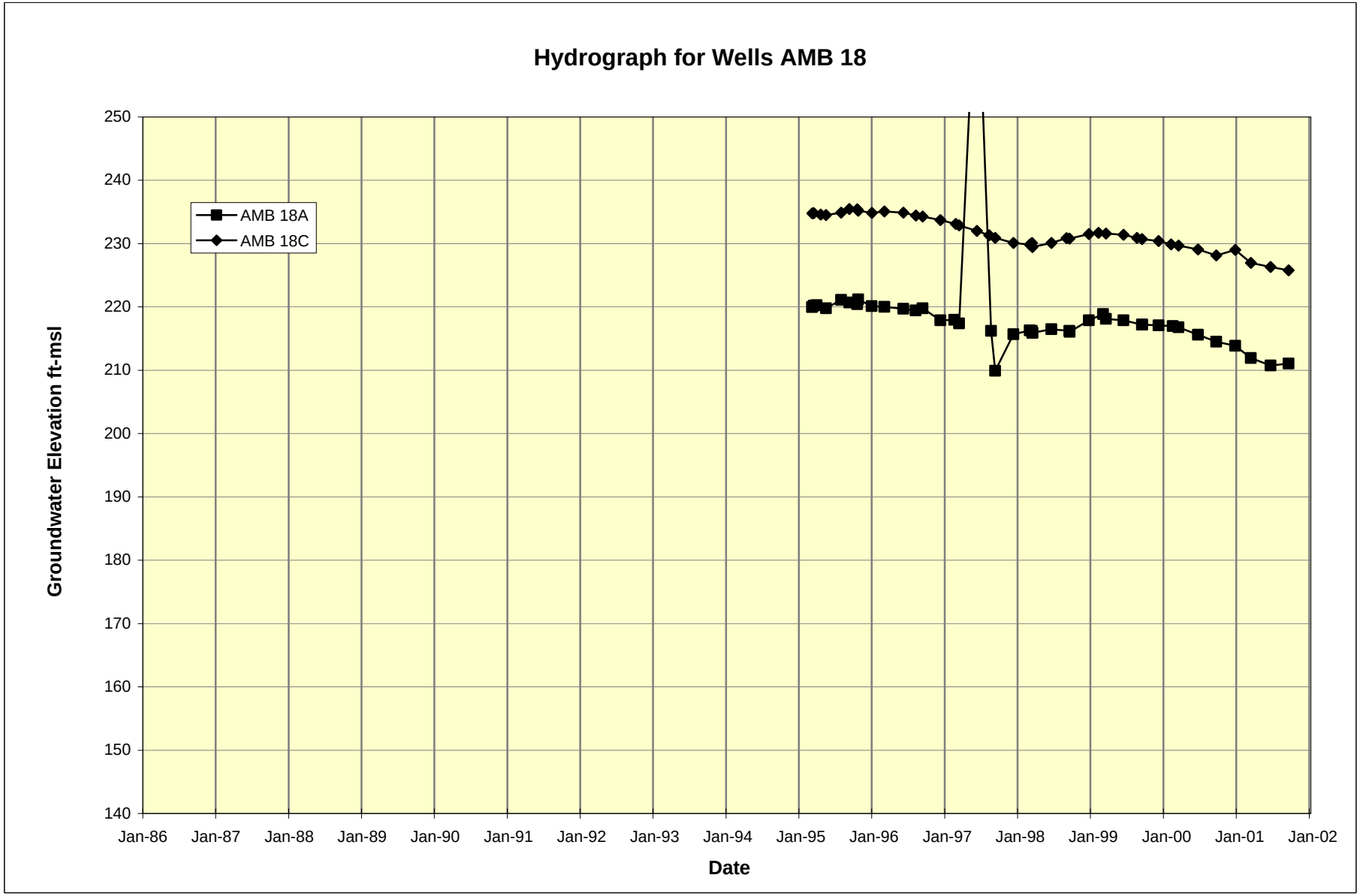
Hydrograph for Wells AMB 18
AMB 18A
AMB 18C
Groundwater Elevation ft-msl
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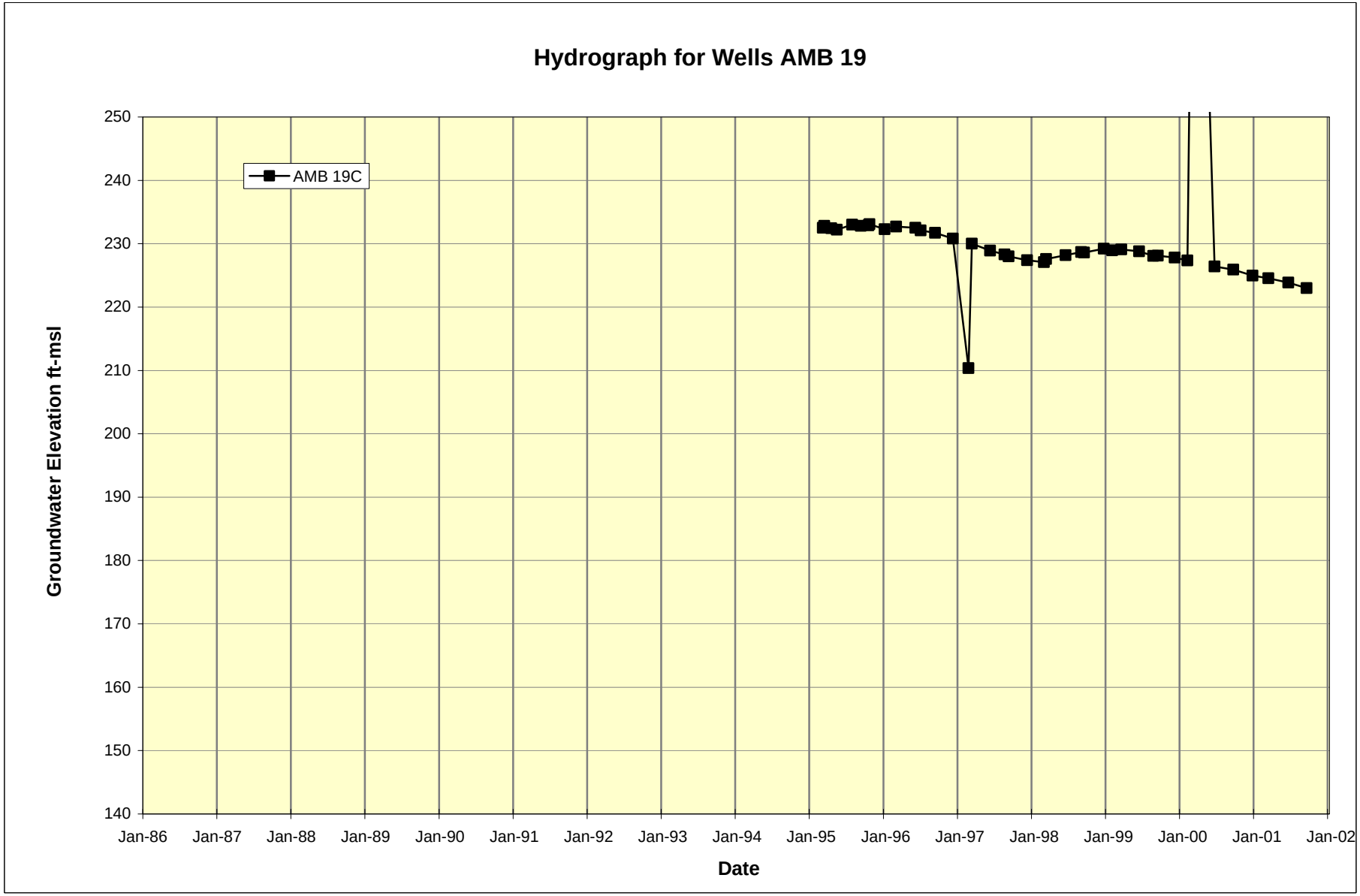
Hydrograph for Wells AMB 19
AMB 19C
Groundwater Elevation ft-msl
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Jan-86
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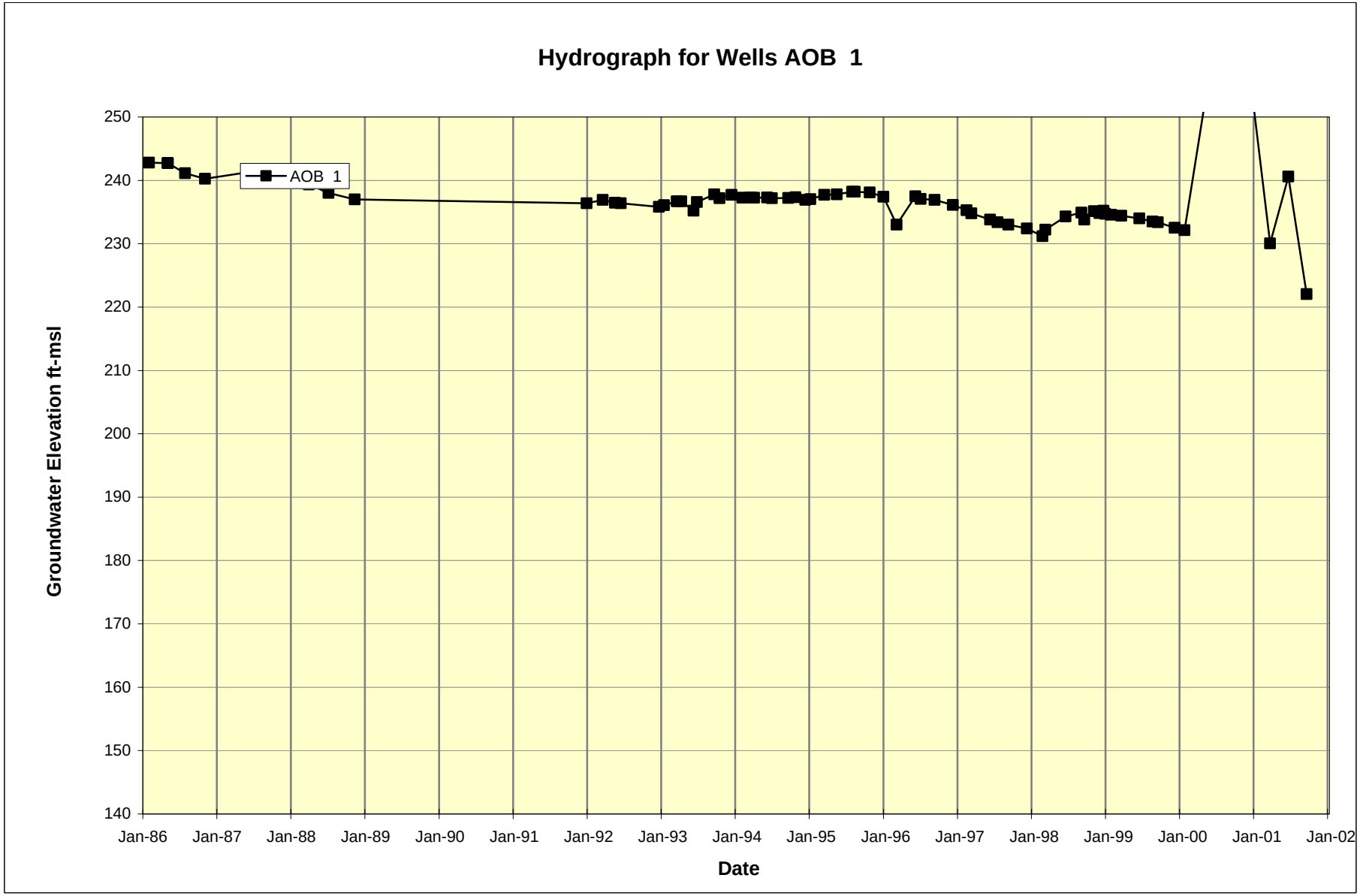
Hydrograph for Wells AOB 1
AOB 1
Groundwater Elevation ft-msl
250
240
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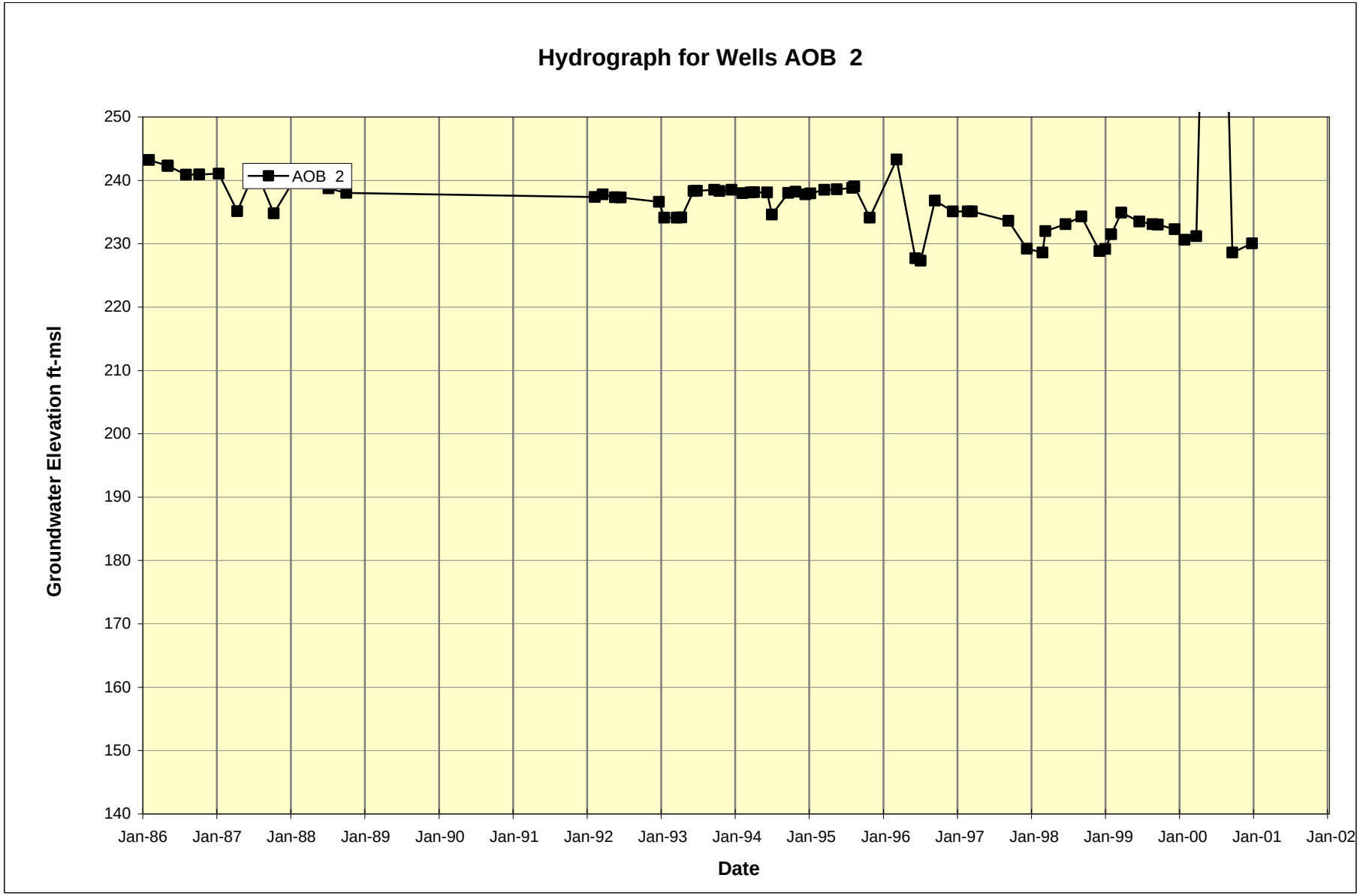
Hydrograph for Wells AOB 2
AOB 2
Groundwater Elevation ft-msl
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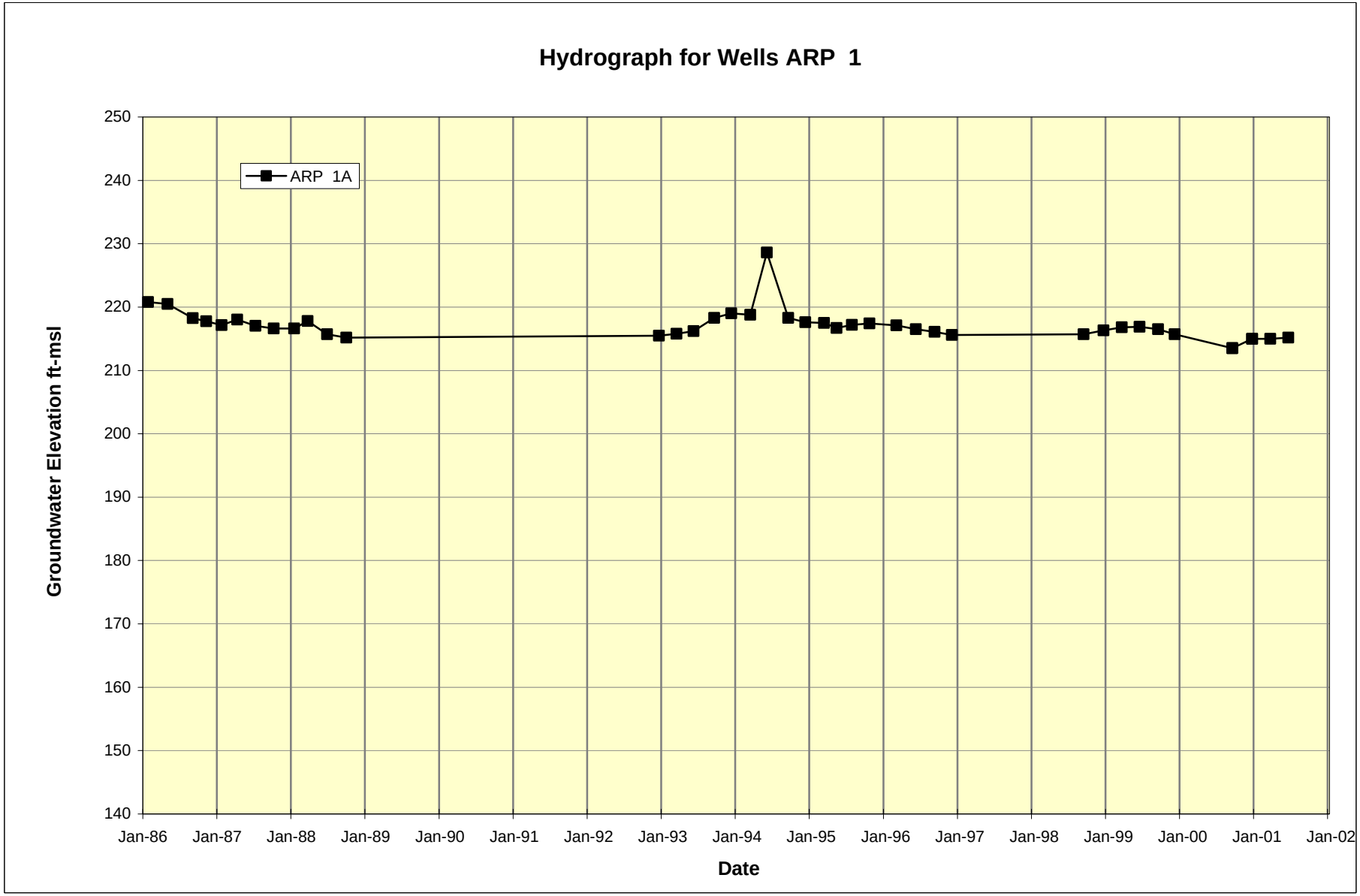
Hydrograph for Wells ARP 1
ARP 1A
Groundwater Elevation ft-msl
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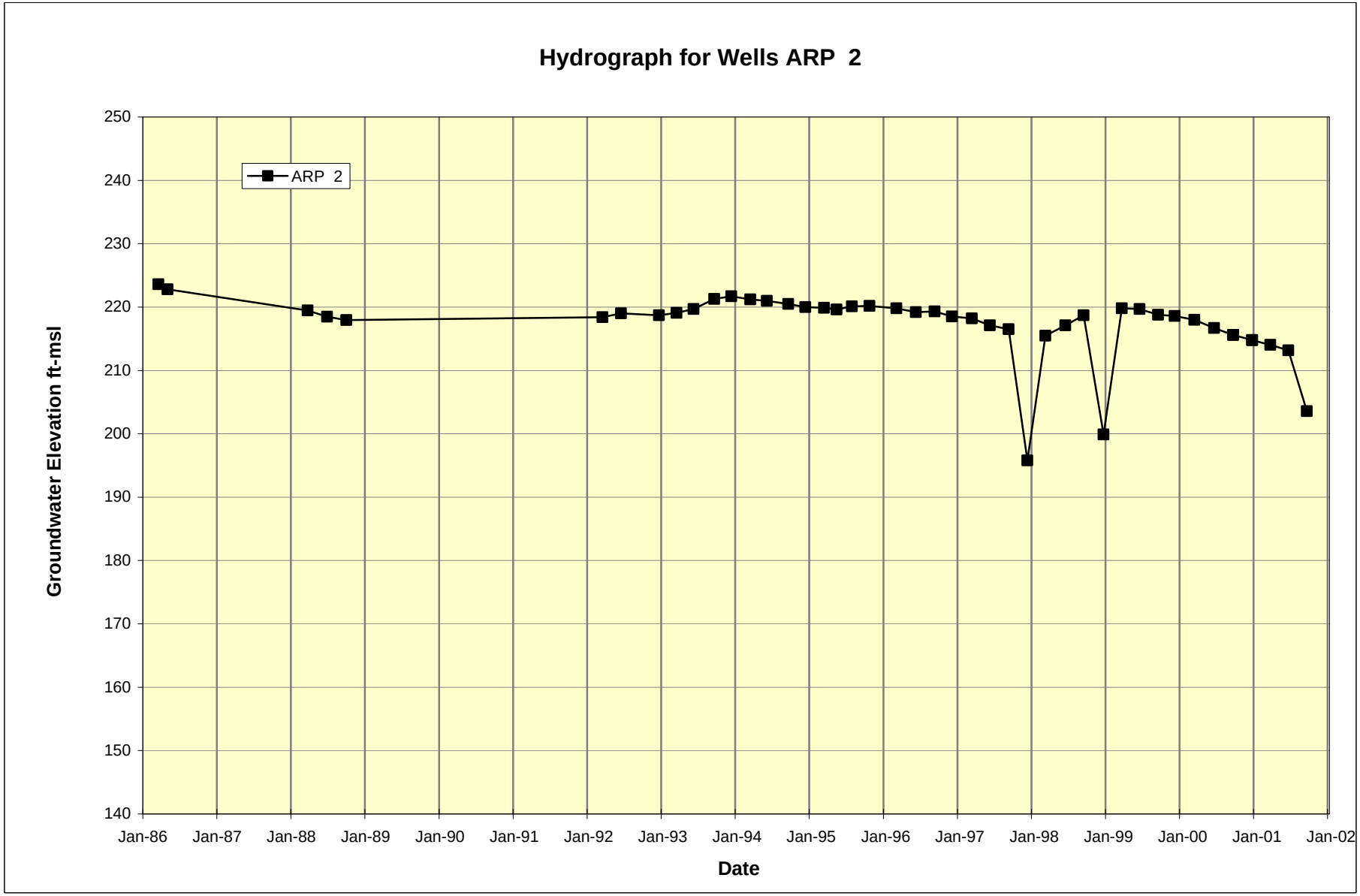
Hydrograph for Wells ARP 2
ARP 2
Groundwater Elevation ft-msl
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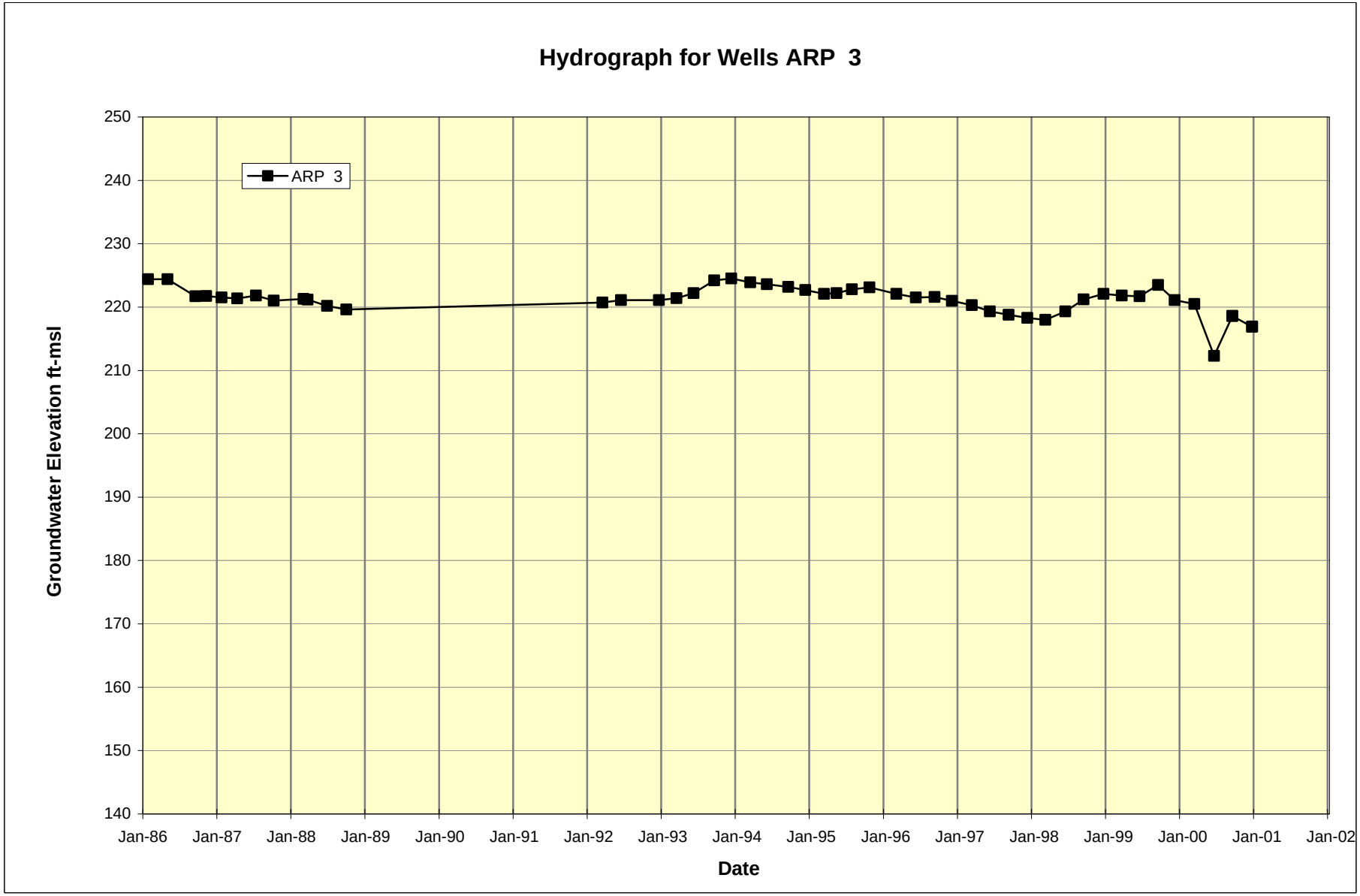
Hydrograph for Wells ARP 3
ARP 3
Groundwater Elevation ft-msl
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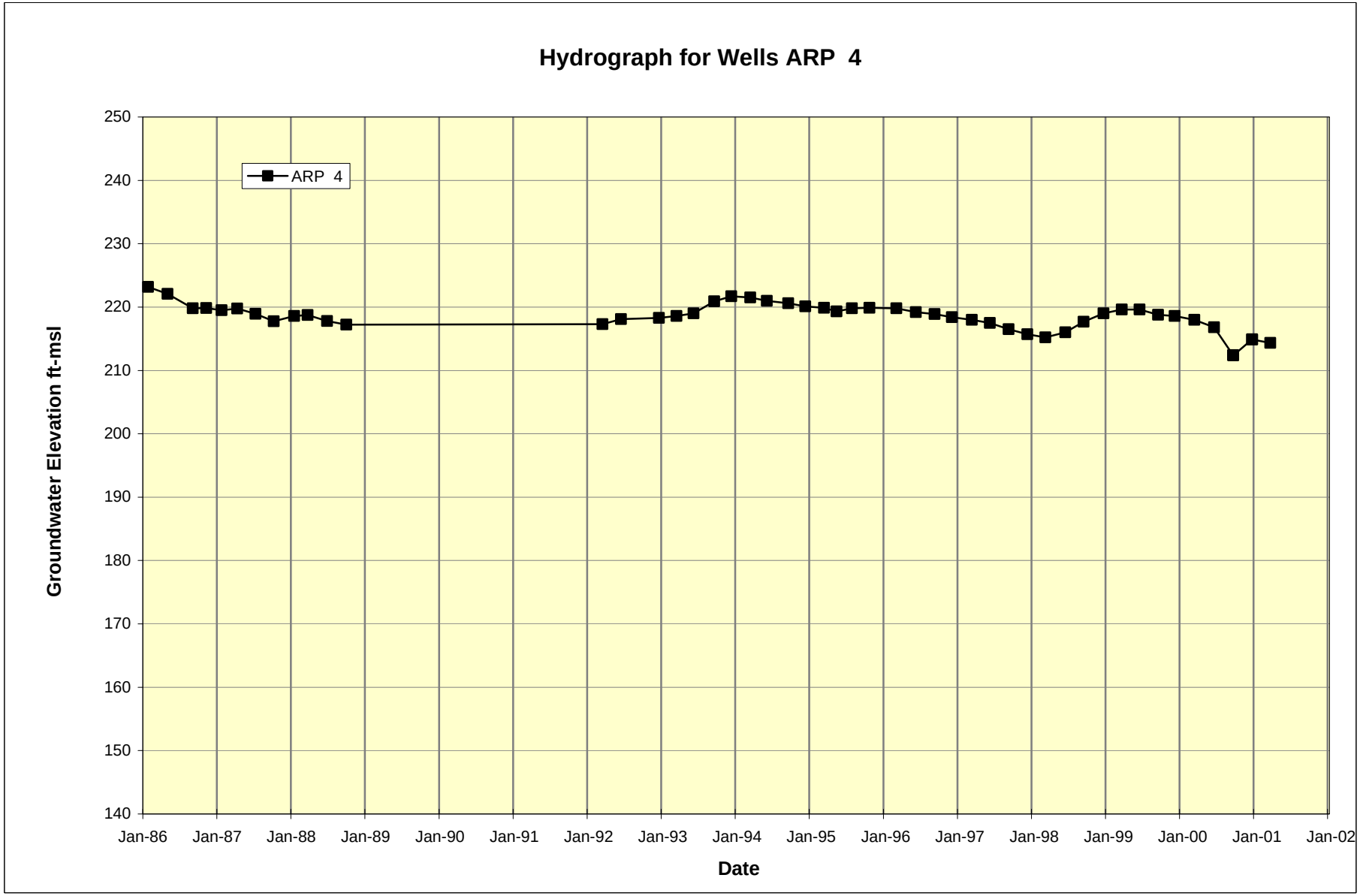
Hydrograph for Wells ARP 4
ARP 4
Groundwater Elevation ft-msl
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Jan-86
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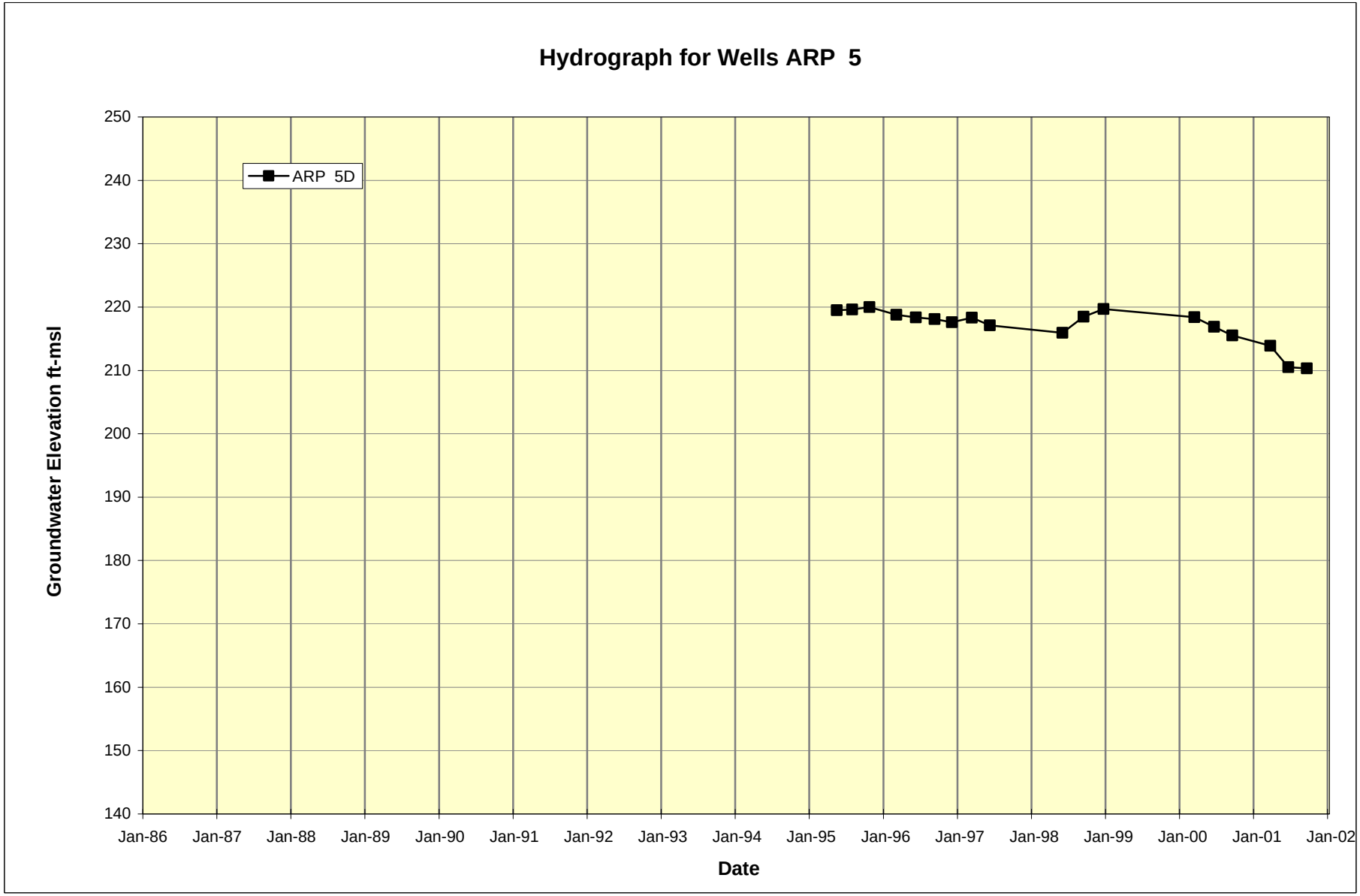
Hydrograph for Wells ARP 5
ARP 5D
Groundwater Elevation ft-msl
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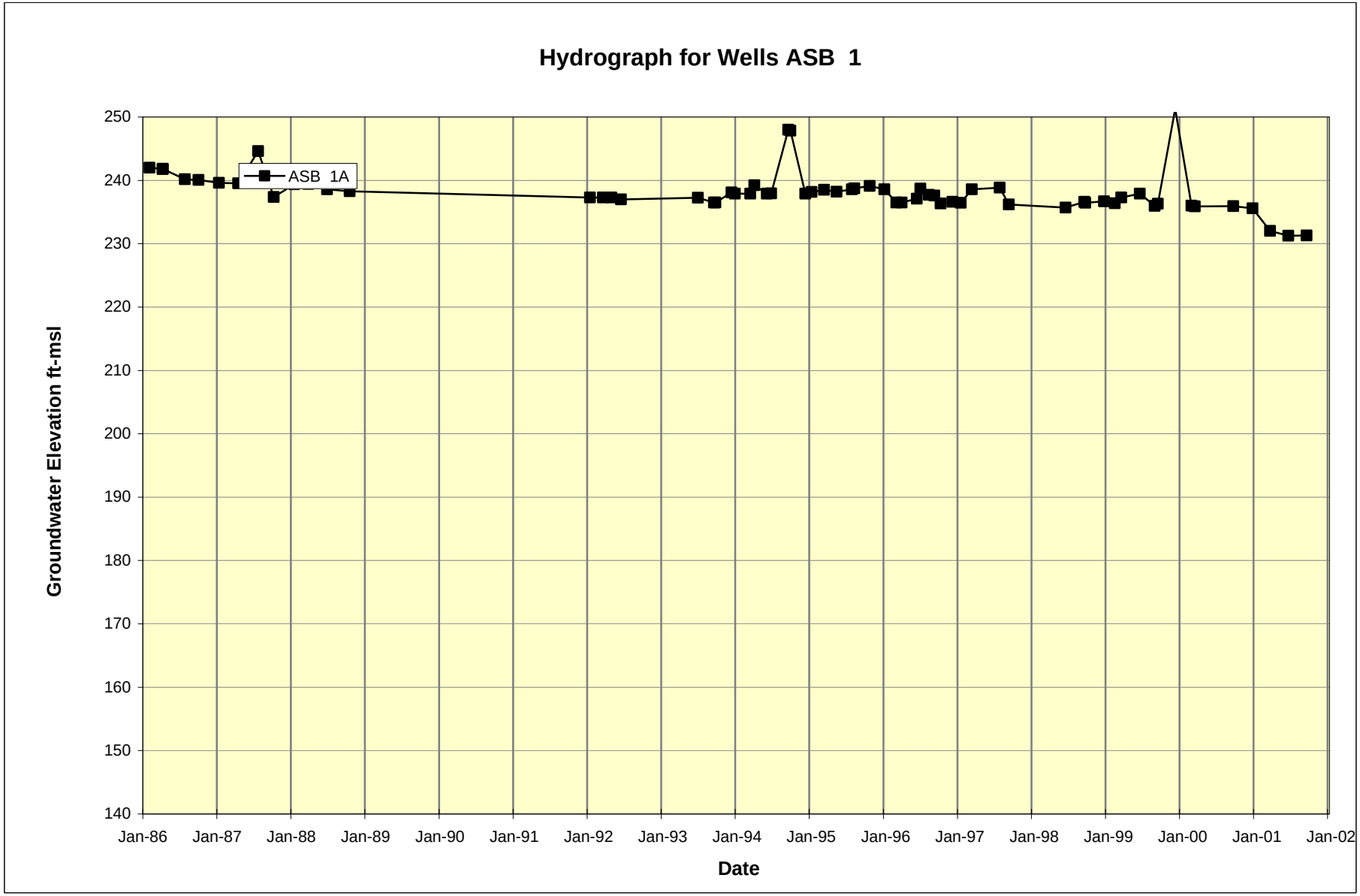
Hydrograph for Wells ASB 1
ASB 1A
Groundwater Elevation ft-msl
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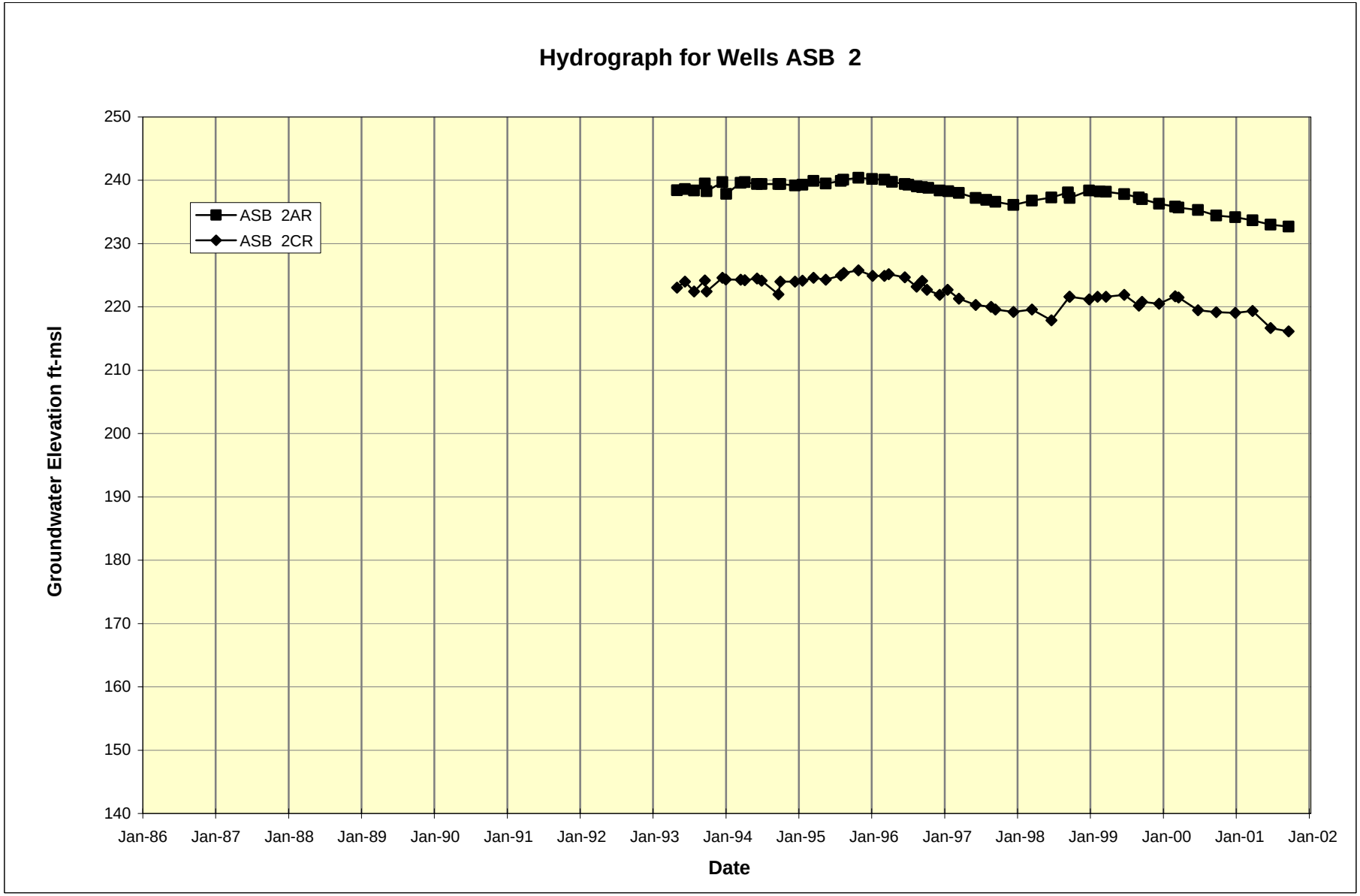
Hydrograph for Wells ASB 2
ASB 2AR
ASB 2CR
Groundwater Elevation ft-msl
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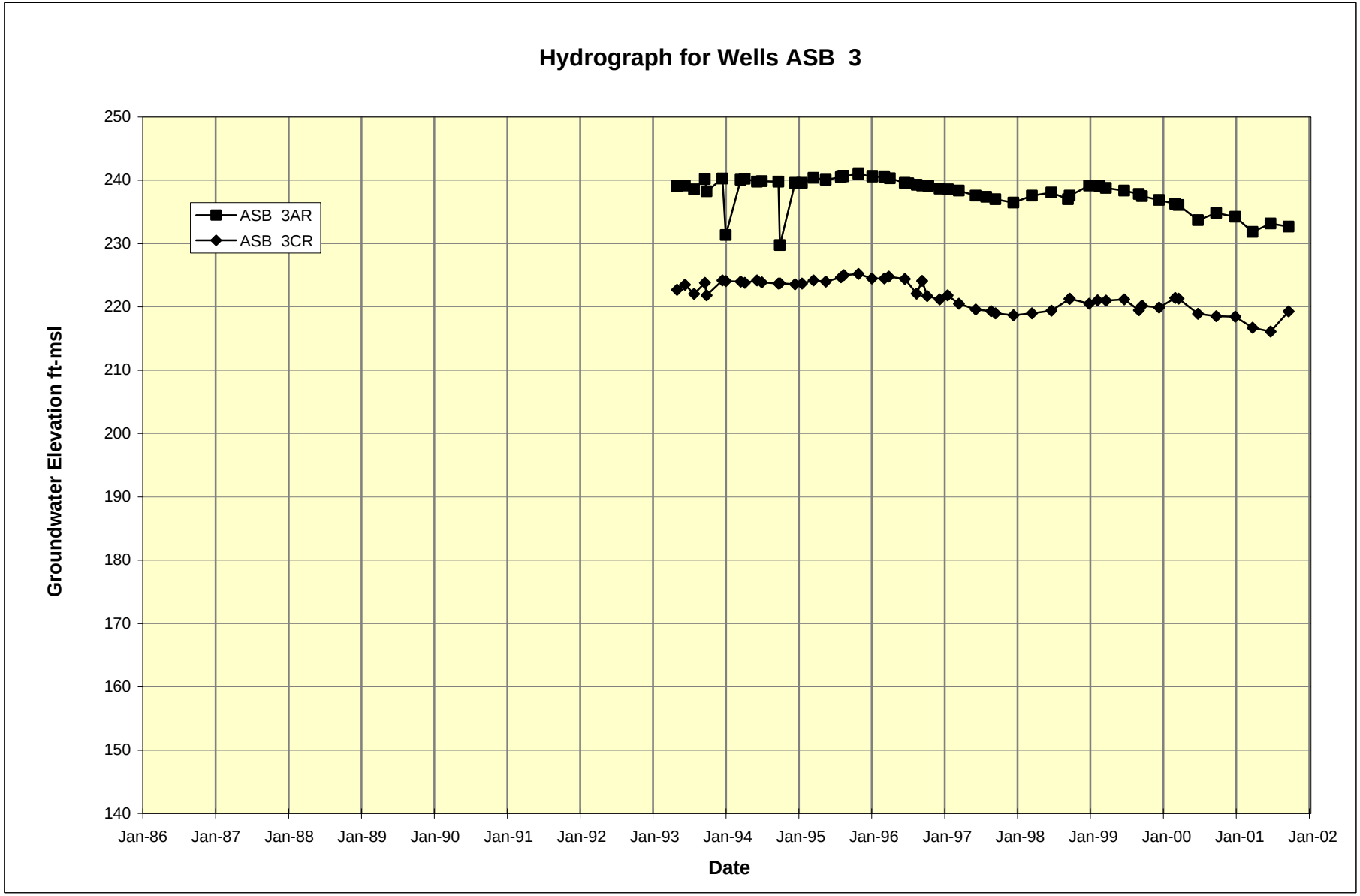
Hydrograph for Wells ASB 3
ASB 3AR
ASB 3CR
Groundwater Elevation ft-msl
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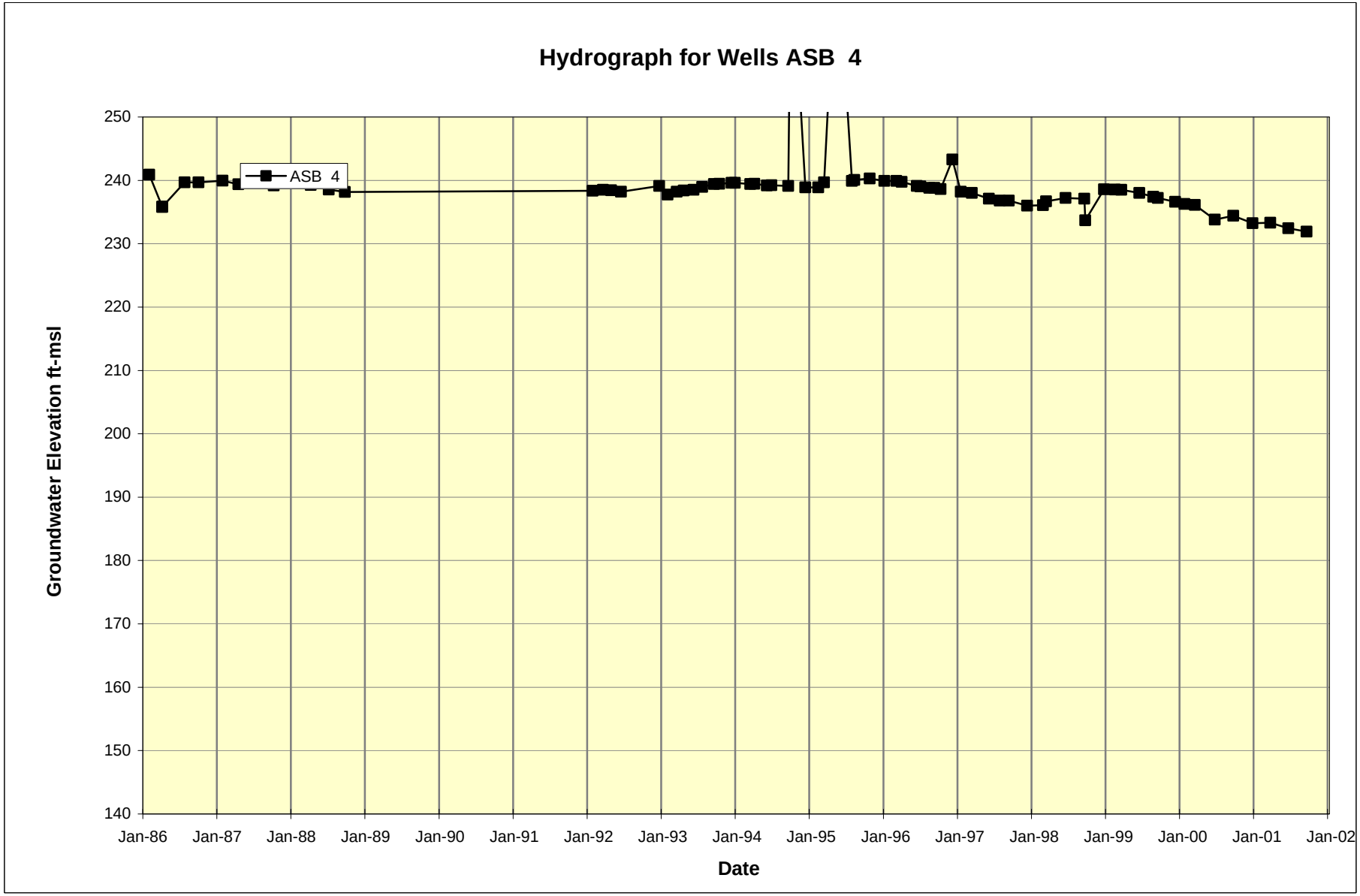
Hydrograph for Wells ASB 4
ASB 4
Groundwater Elevation ft-msl
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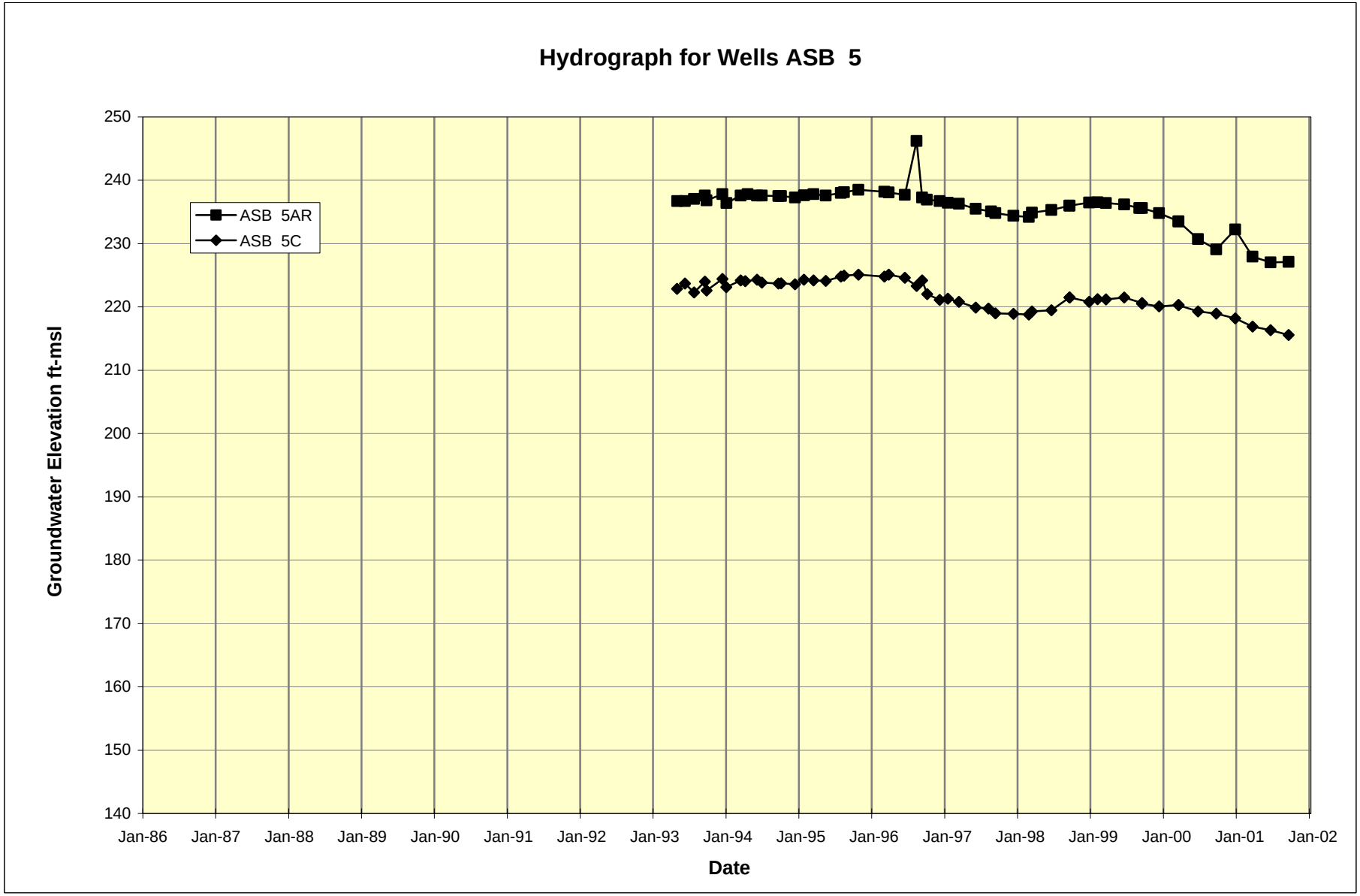
Hydrograph for Wells ASB 5
ASB 5AR
ASB 5C
Groundwater Elevation ft-msl
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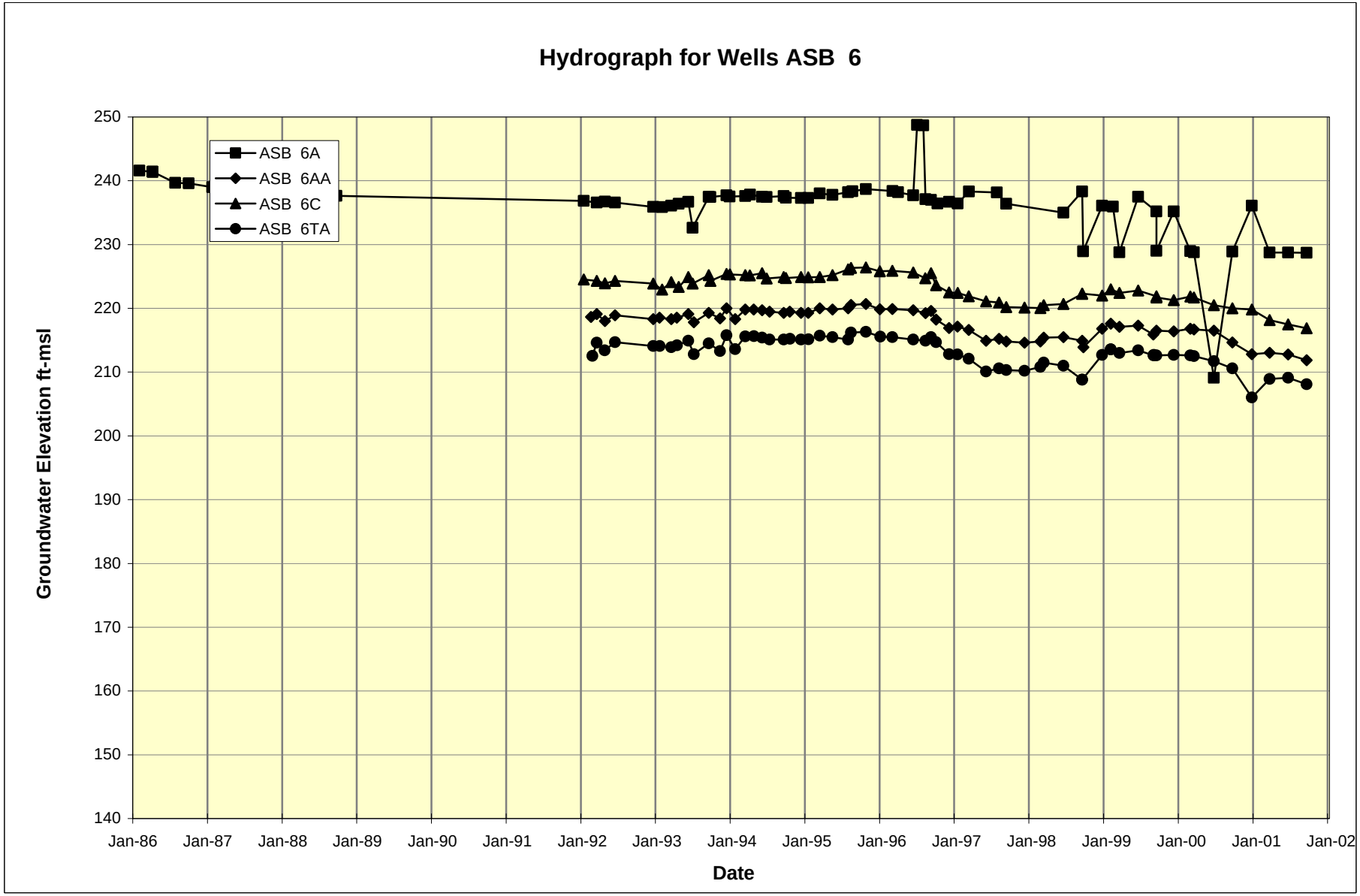
Hydrograph for Wells ASB 6
ASB 6A
ASB 6AA
ASB 6C
ASB 6TA
Groundwater Elevation ft-msl
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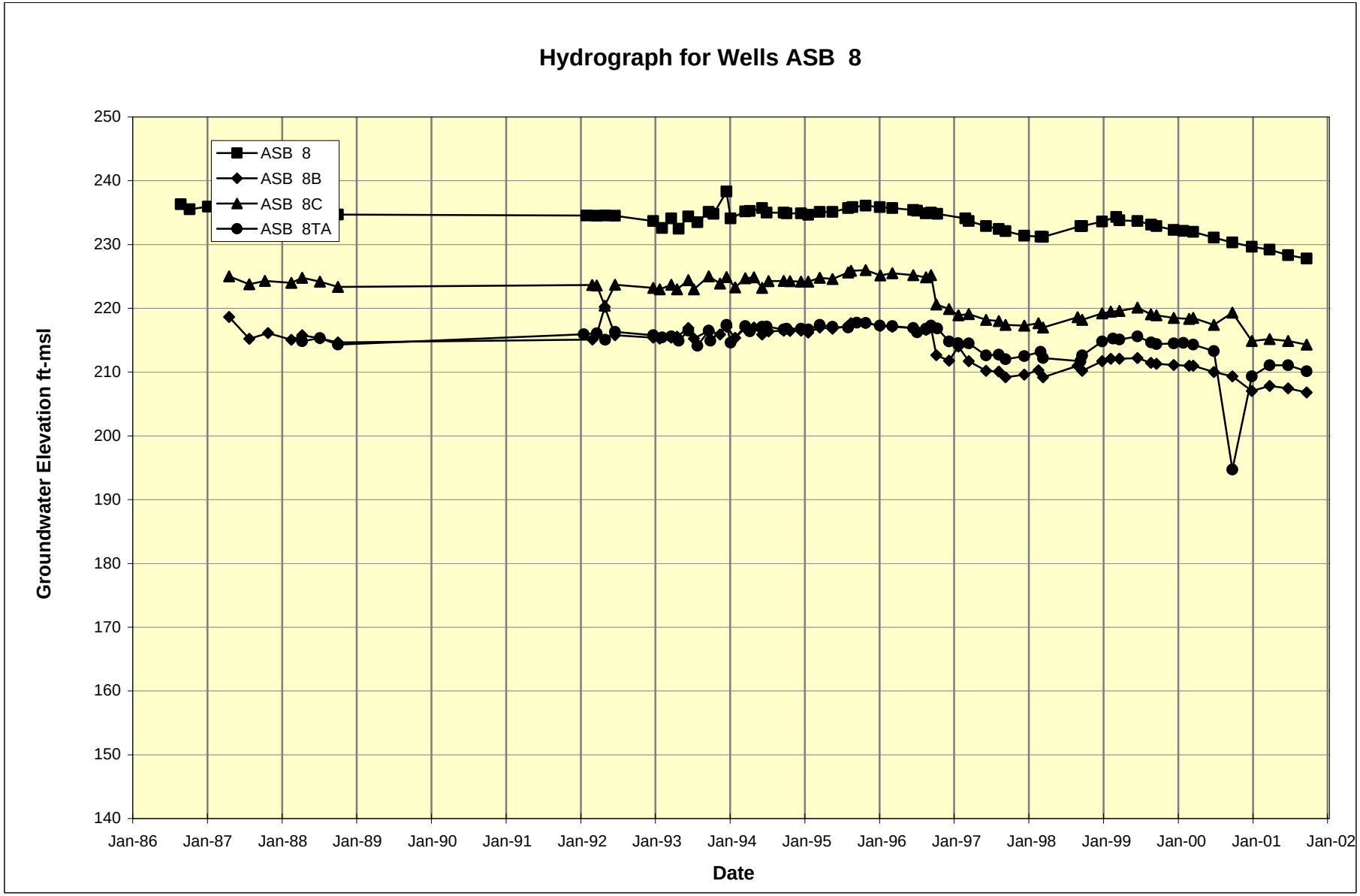
Hydrograph for Wells ASB 8
ASB 8
ASB 8B
ASB 8C
ASB 8TA
Groundwater Elevation ft-msl
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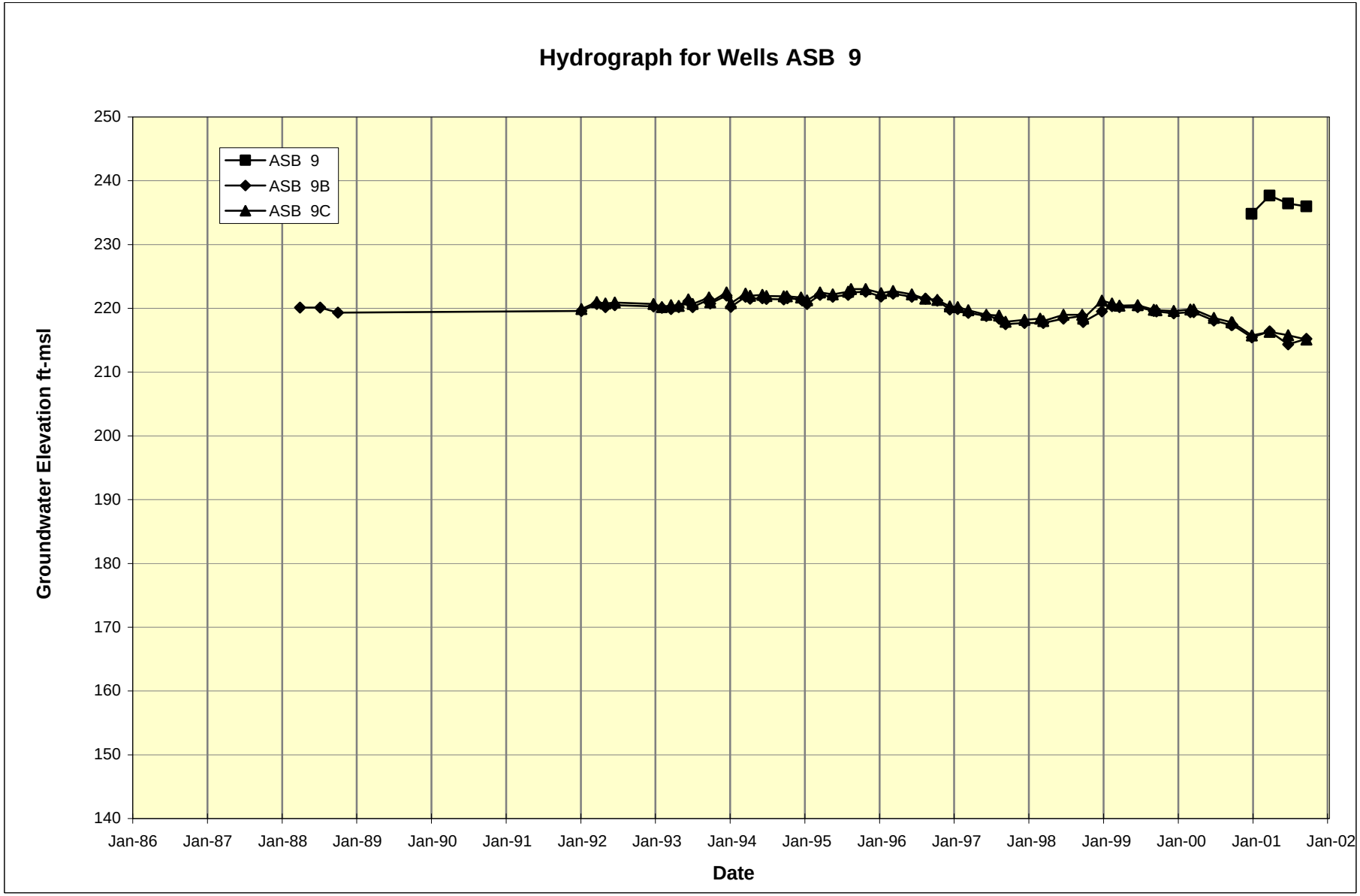
Hydrograph for Wells ASB 9
ASB 9
ASB 9B
ASB 9C
Groundwater Elevation ft-msl
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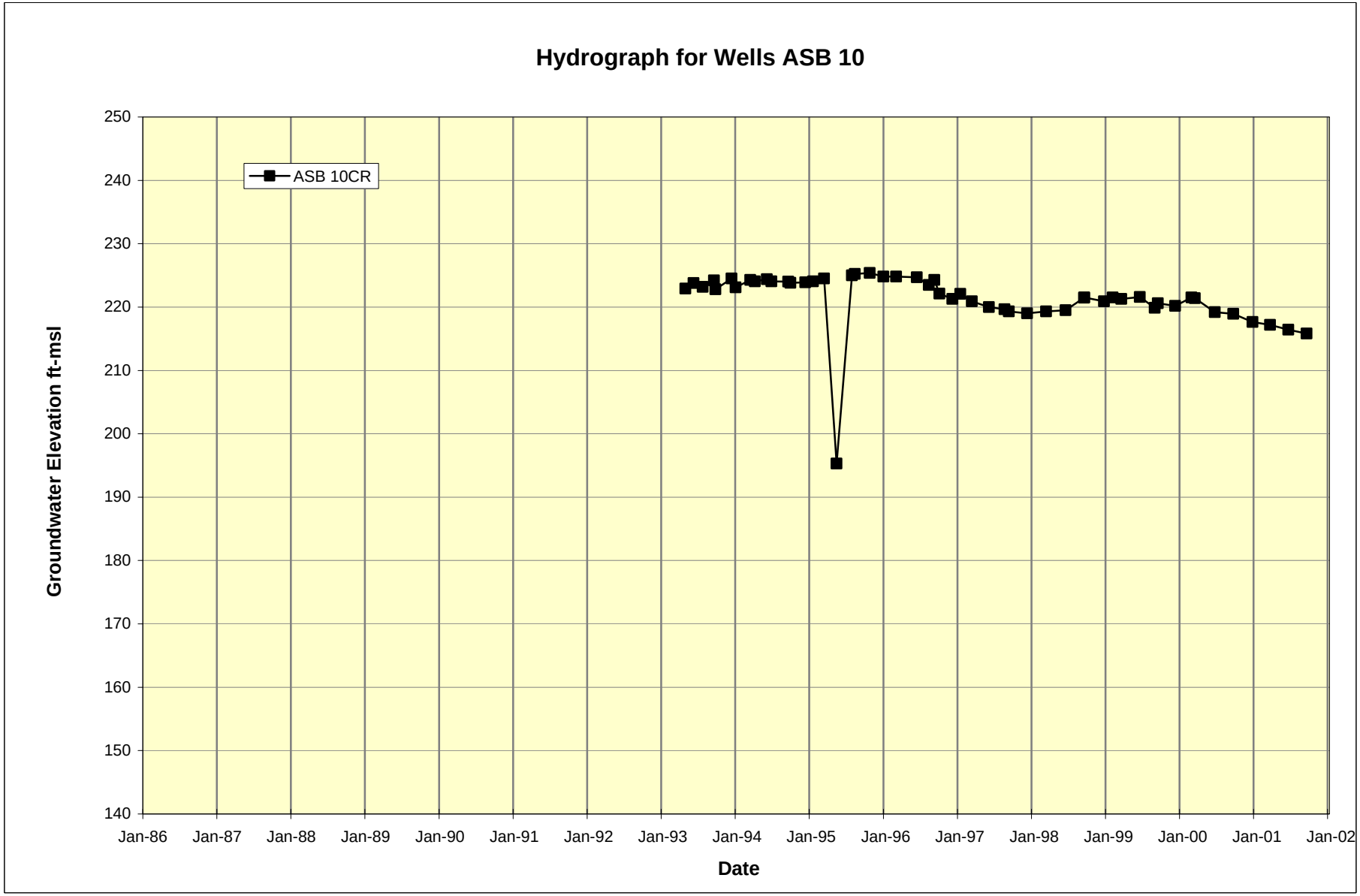
Hydrograph for Wells ASB 10
ASB 10CR
Groundwater Elevation ft-msl
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Jan-86
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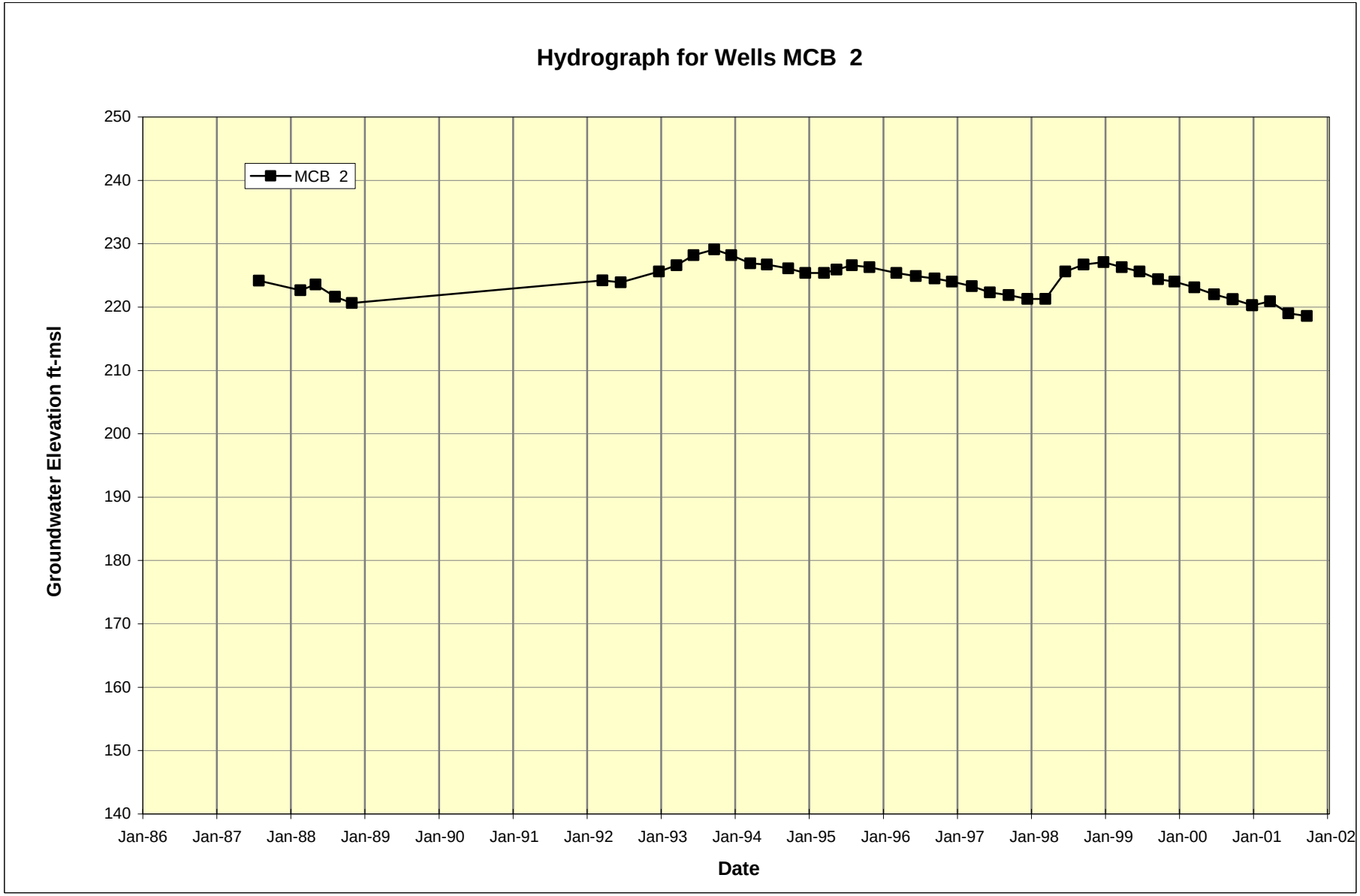
Hydrograph for Wells MCB 2
MCB 2
Groundwater Elevation ft-msl
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Jan-86
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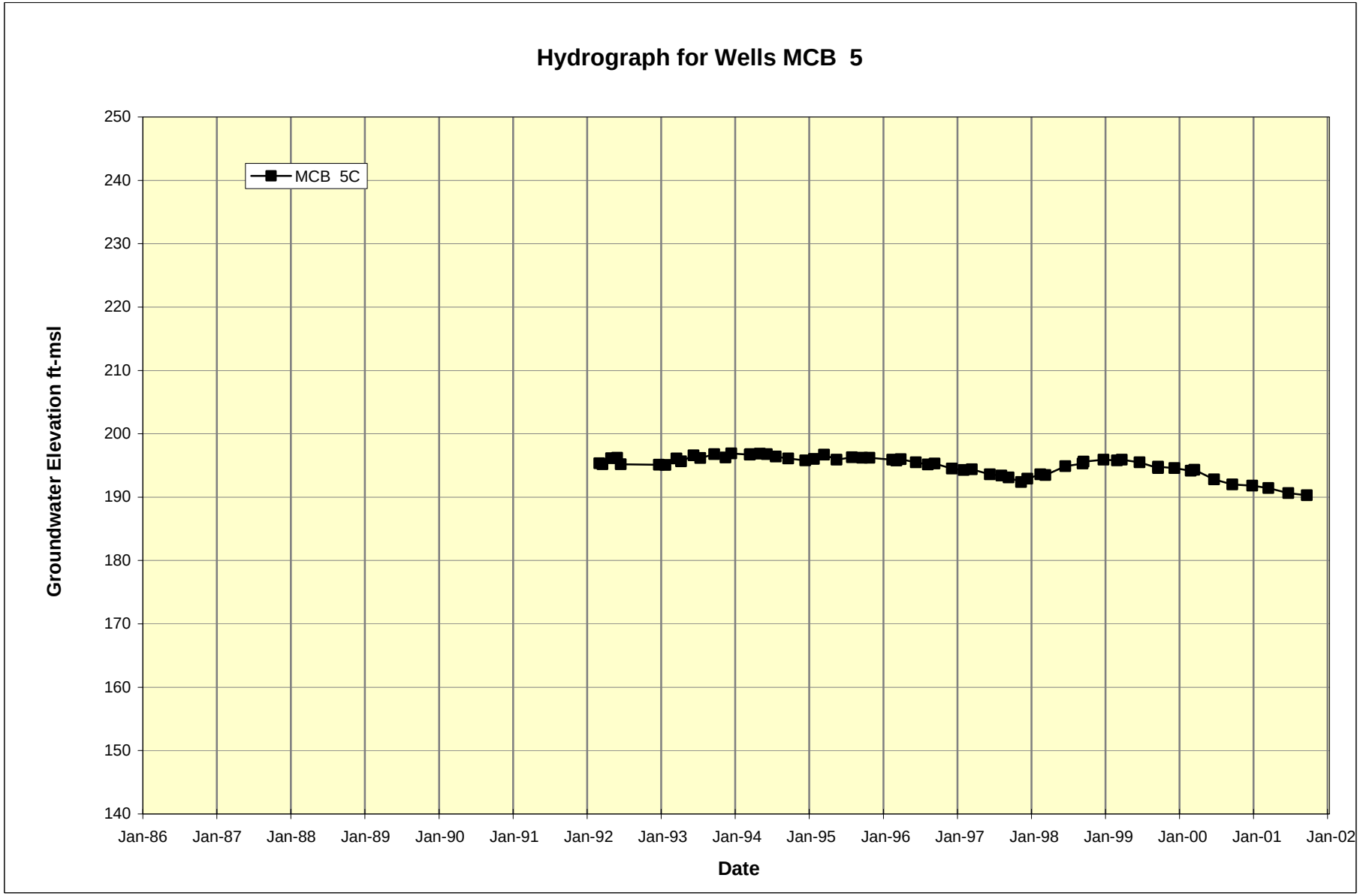
Hydrograph for Wells MCB 5
MCB 5C
Groundwater Elevation ft-msl
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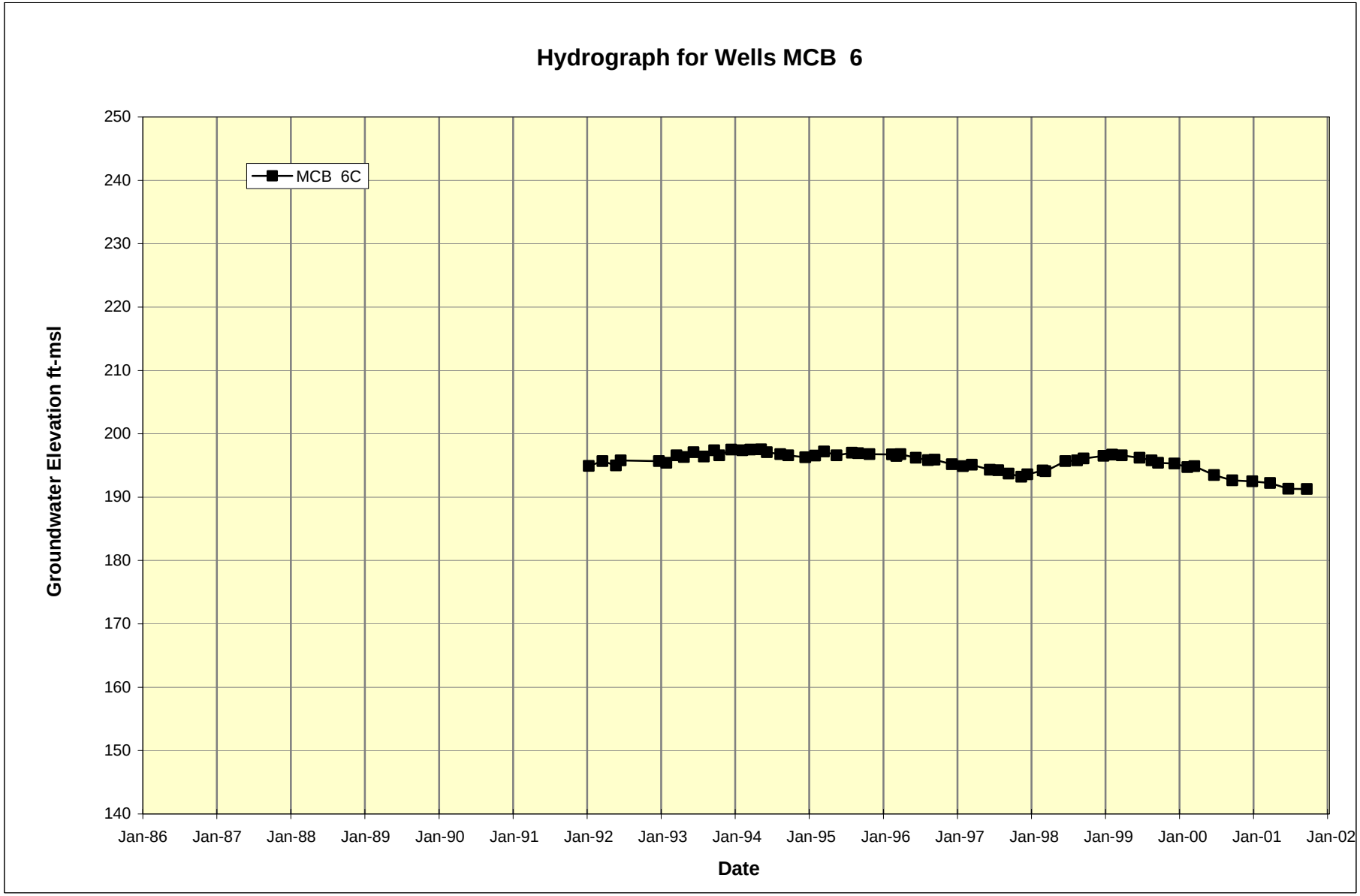
Hydrograph for Wells MCB 6
MCB 6C
Groundwater Elevation ft-msl
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Jan-86
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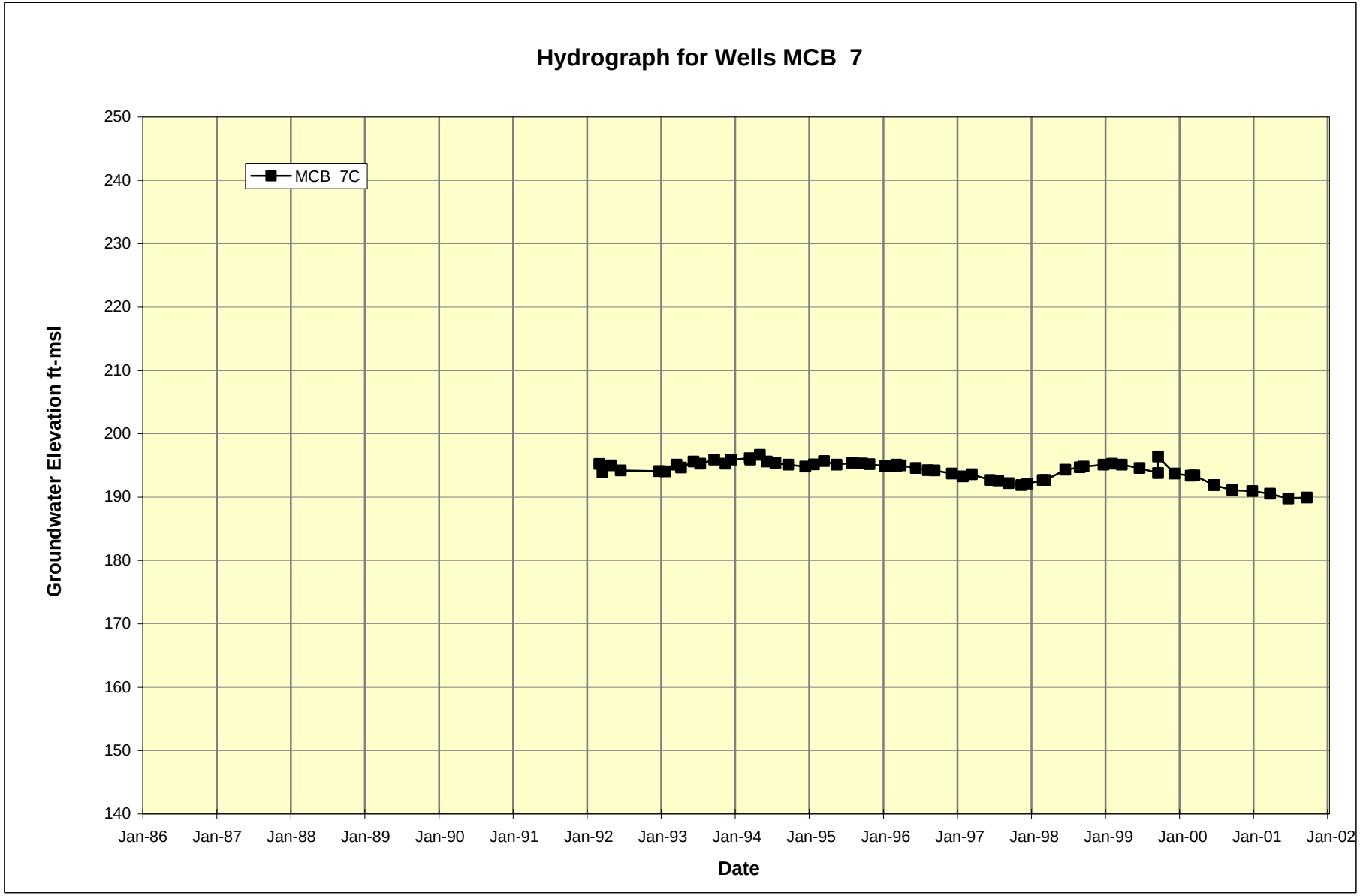
Hydrograph for Wells MCB 7
MCB 7C
Groundwater Elevation ft-msl
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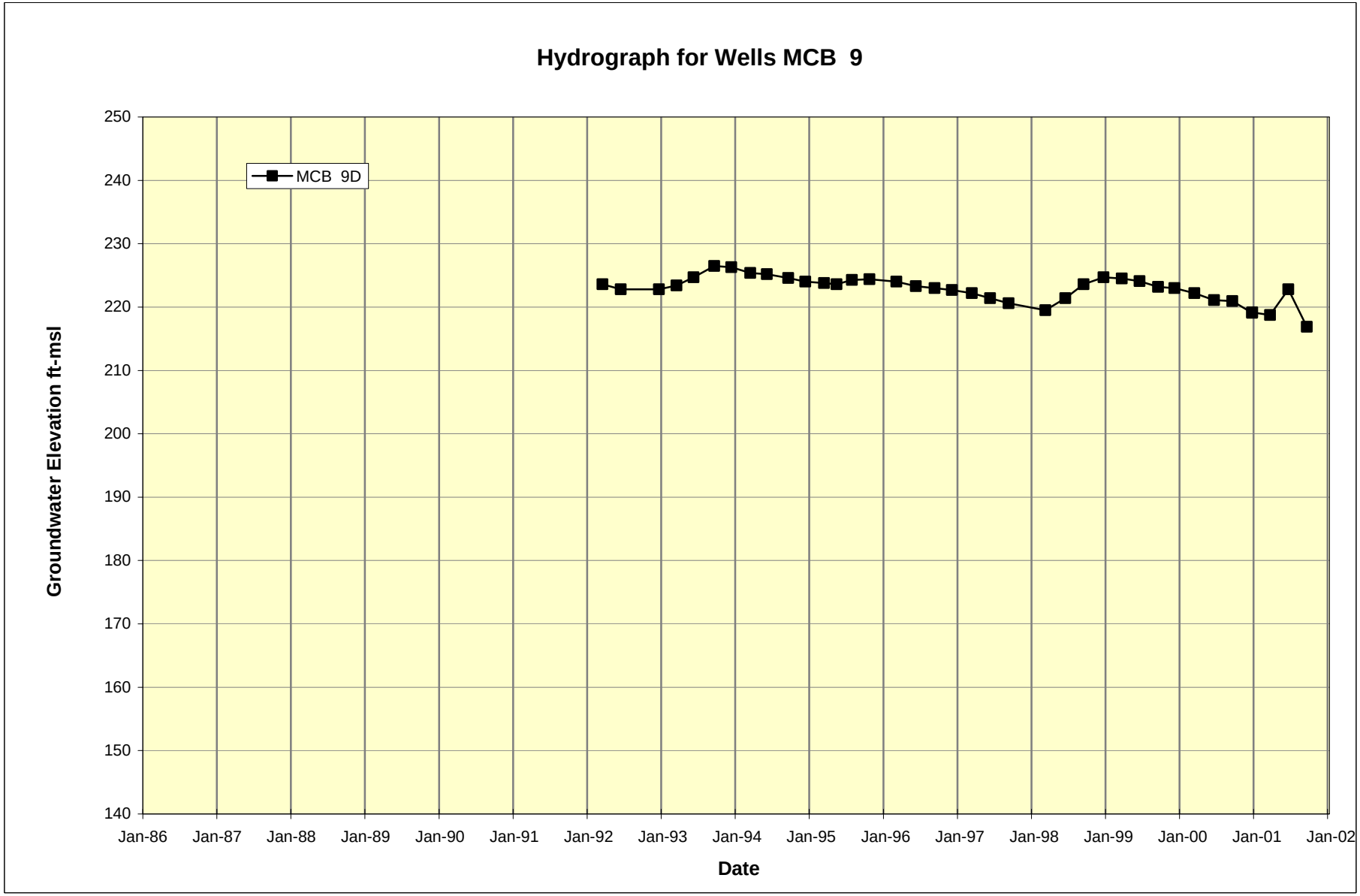
Hydrograph for Wells MCB 9
MCB 9D
Groundwater Elevation ft-msl
250
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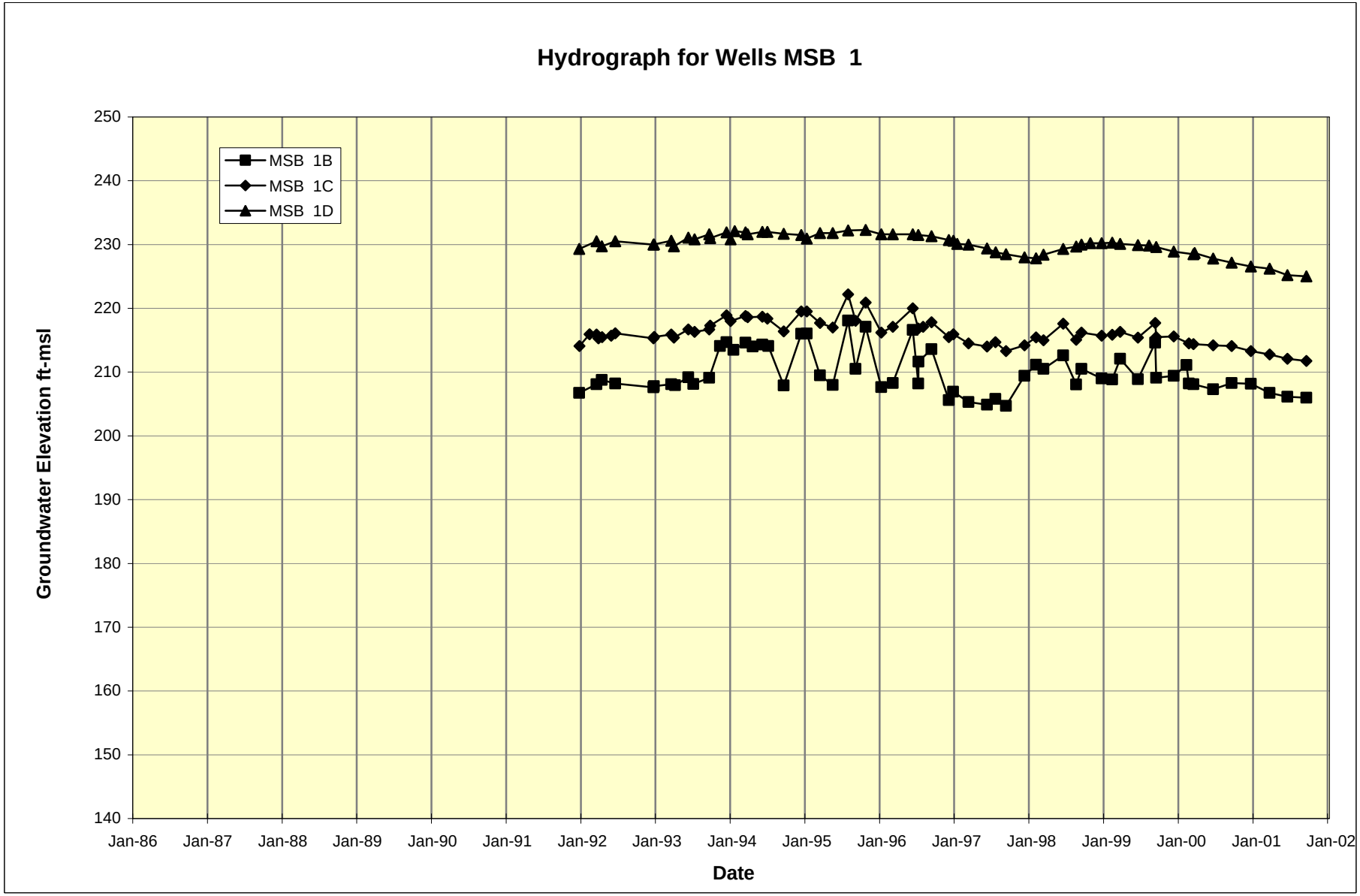
Hydrograph for Wells MSB 1
MSB 1B
MSB 1C
MSB 1D
Groundwater Elevation ft-msl
250
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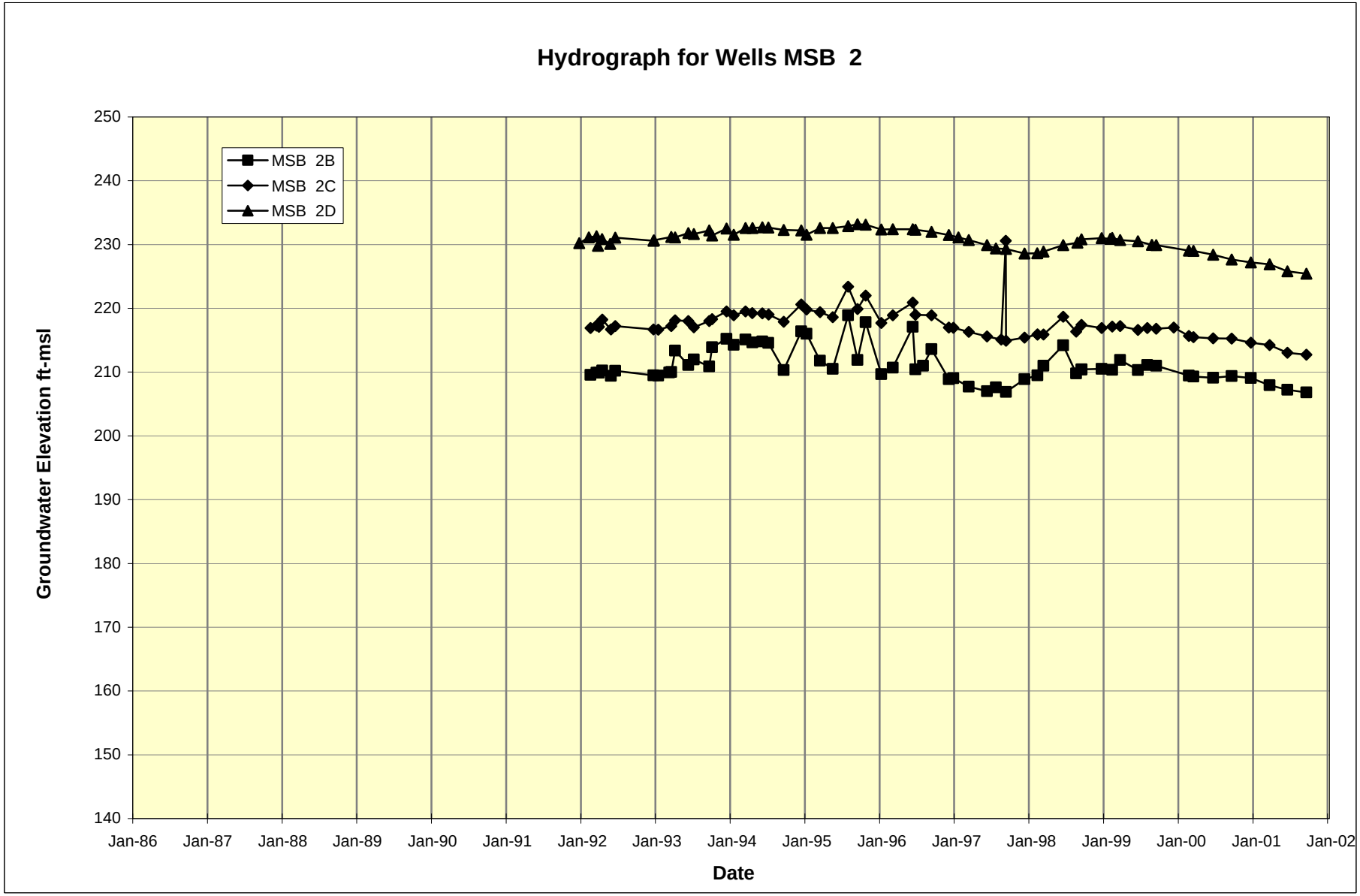
Hydrograph for Wells MSB 2
MSB 2B
MSB 2C
MSB 2D
Groundwater Elevation ft-msl
250
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230
220
210
200
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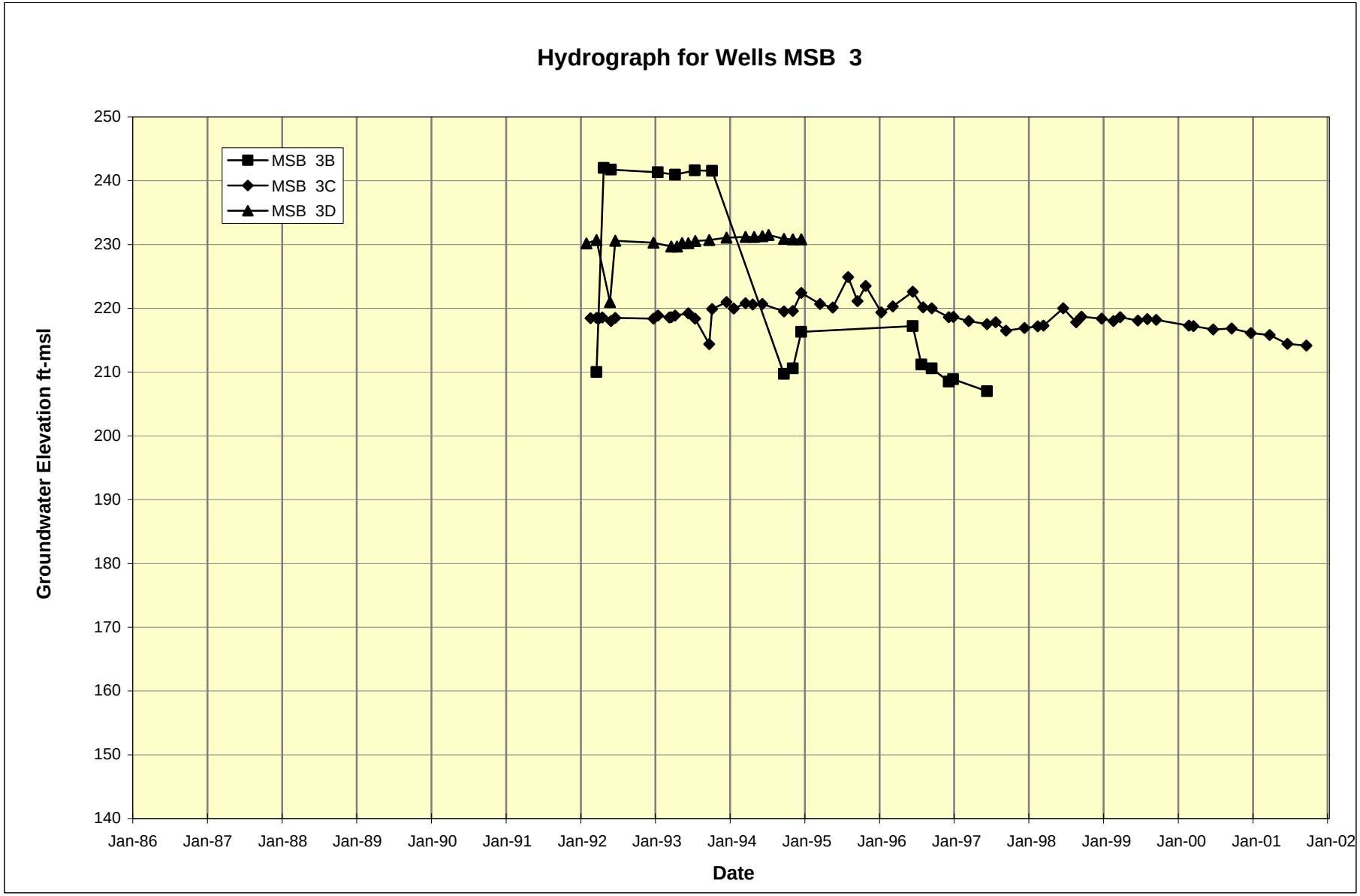
Date


Hydrograph for Wells MSB 3
MSB 3B
MSB 3C
MSB 3D
Groundwater Elevation ft-msl
250
240
230
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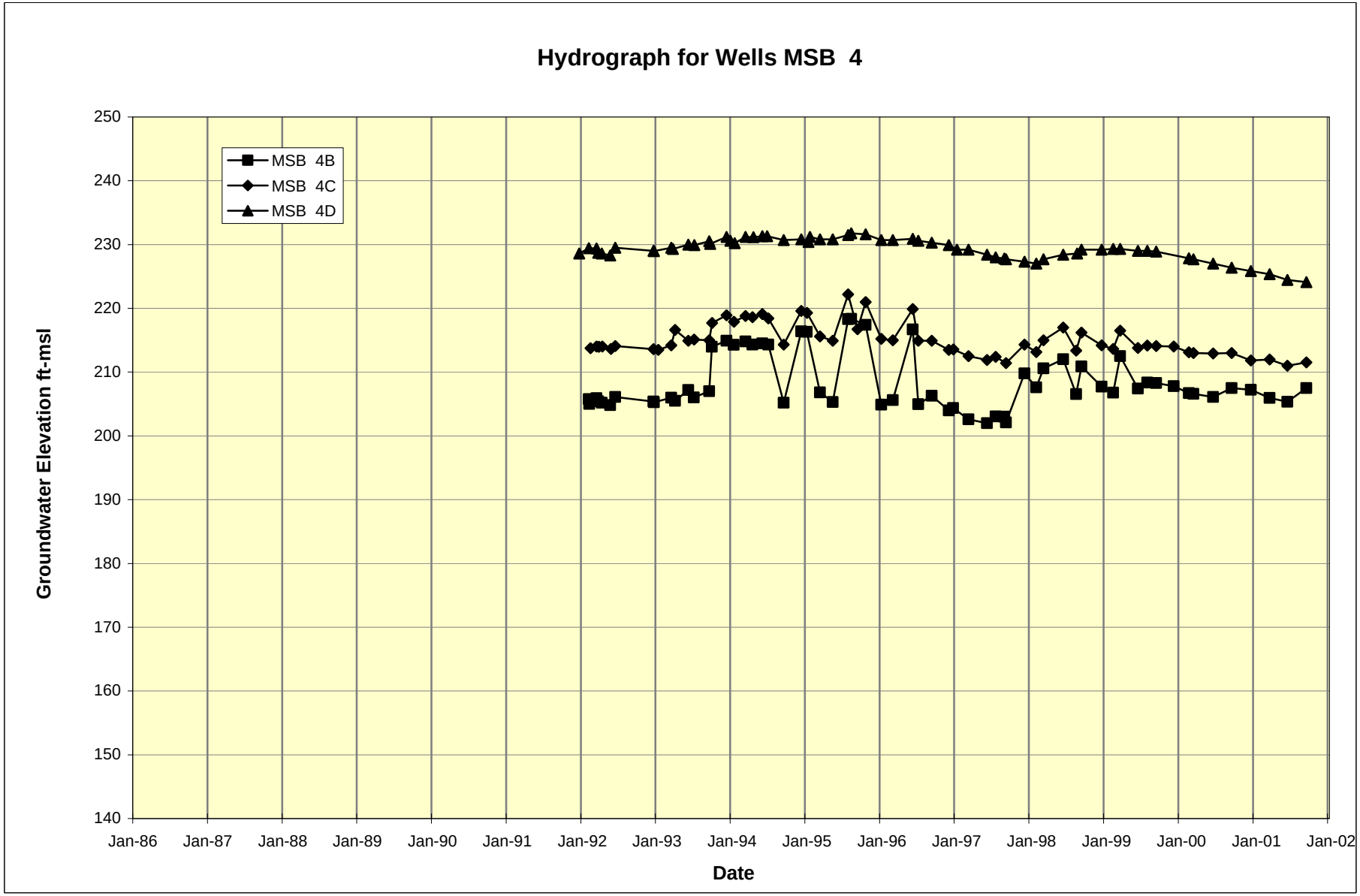
Date


Hydrograph for Wells MSB 4
MSB 4B
MSB 4C
MSB 4D
Groundwater Elevation ft-msl
250
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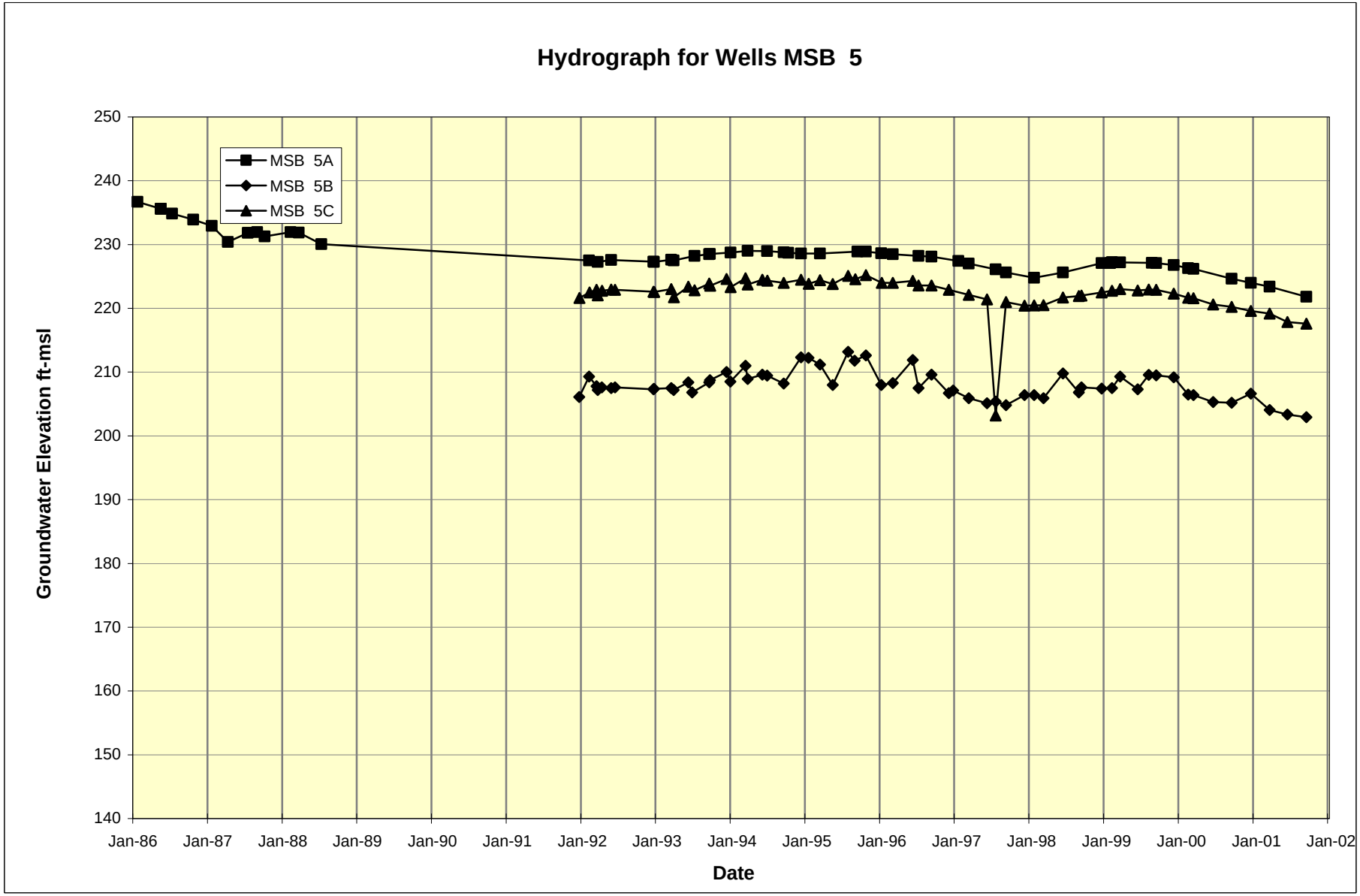
Hydrograph for Wells MSB 5
MSB 5A
MSB 5B
MSB 5C
Groundwater Elevation ft-msl
250
240
230
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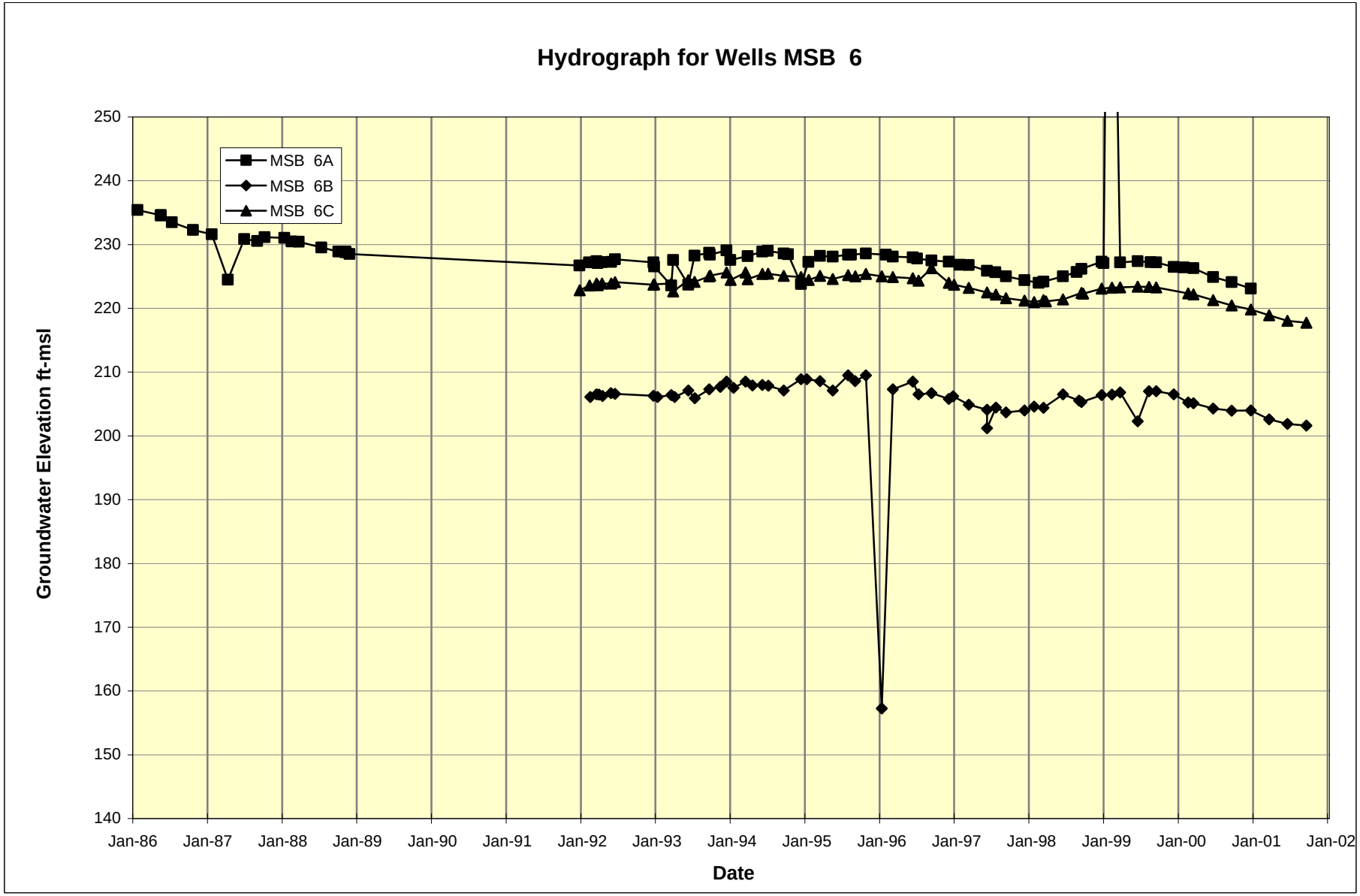
Hydrograph for Wells MSB 6
MSB 6A
MSB 6B
MSB 6C
Groundwater Elevation ft-msl
250
240
230
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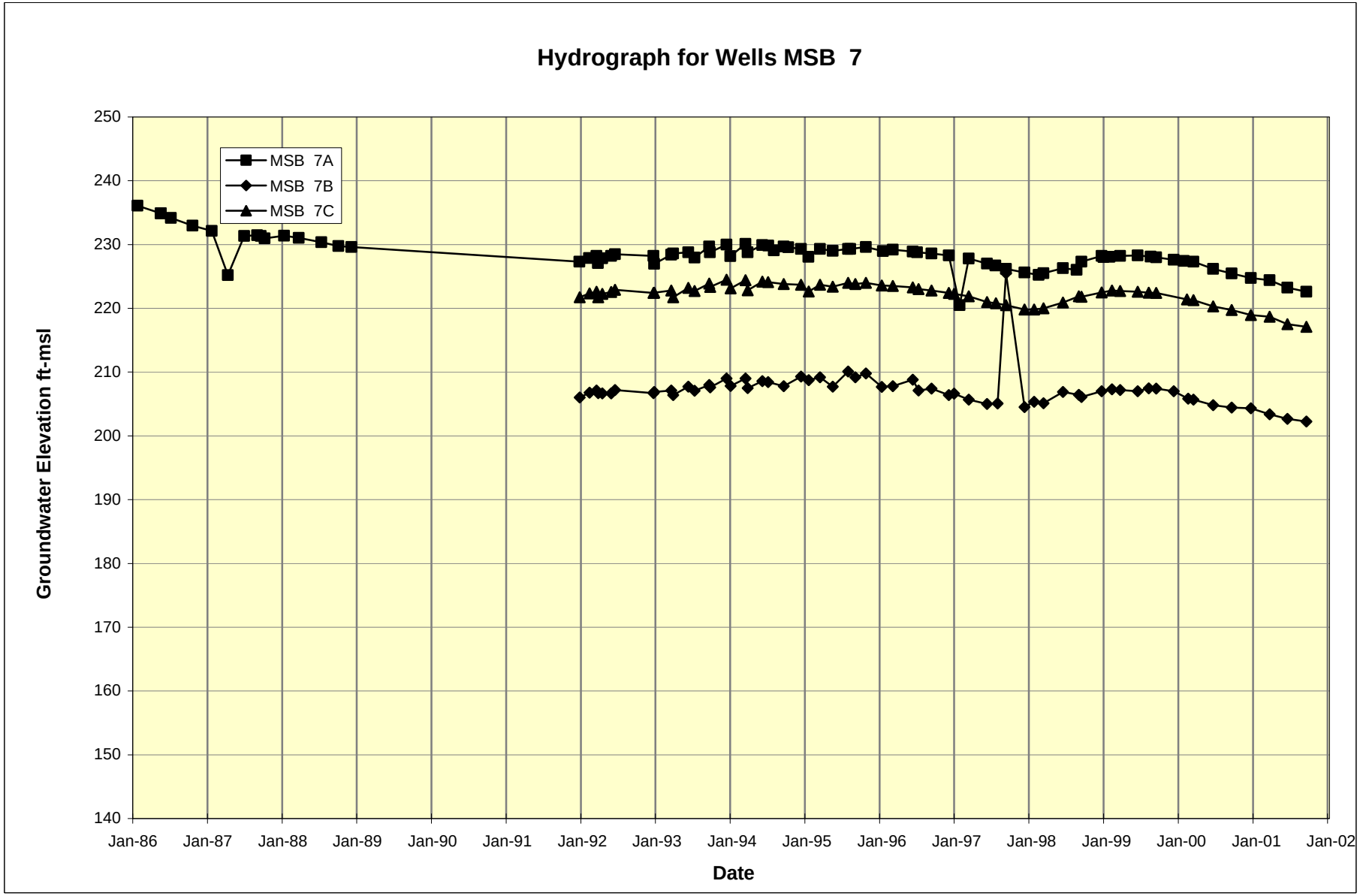
Hydrograph for Wells MSB 7
MSB 7A
MSB 7B
MSB 7C
Groundwater Elevation ft-msl
250
240
230
220
210
200
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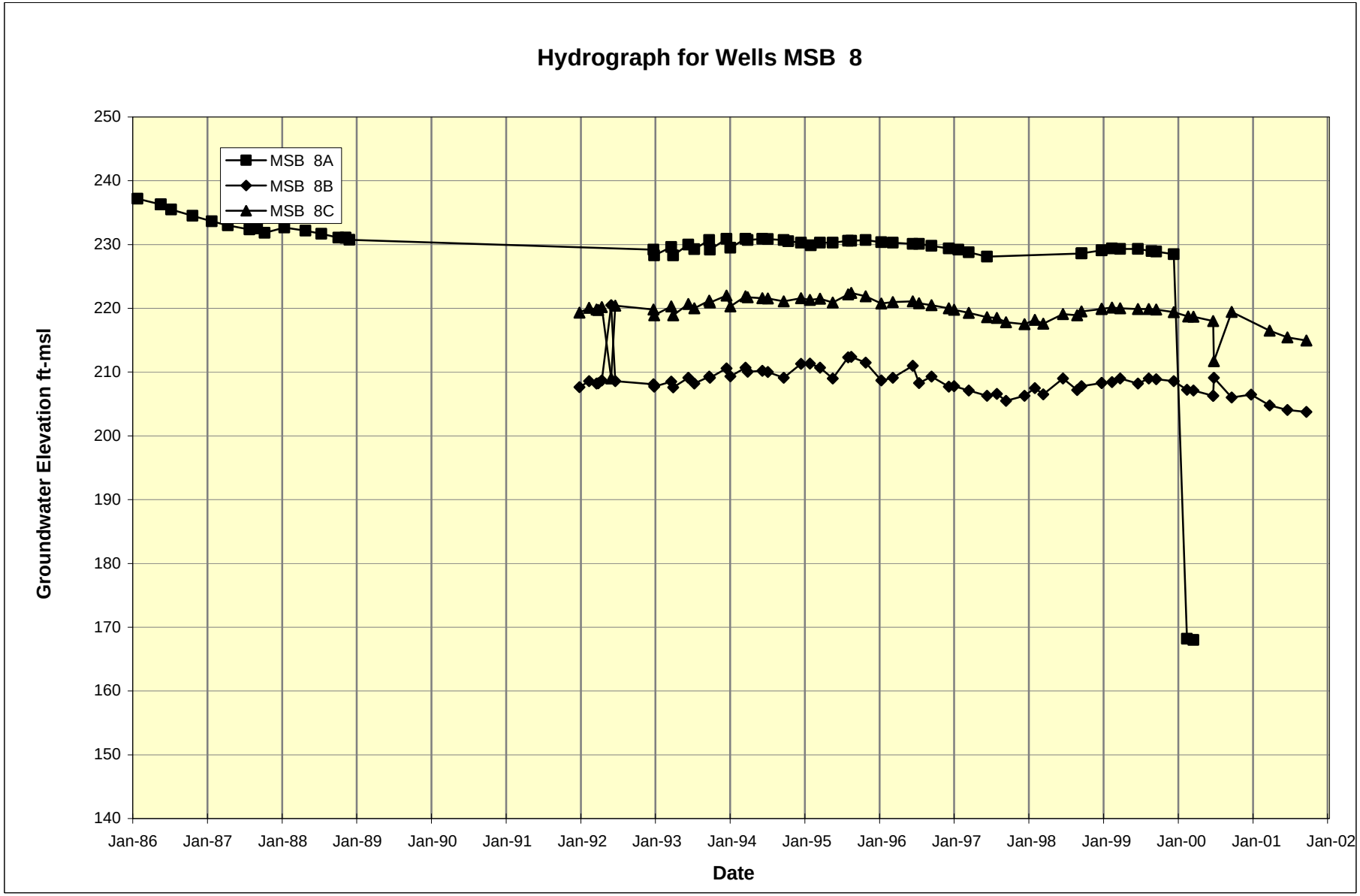
Hydrograph for Wells MSB 8
MSB 8A
MSB 8B
MSB 8C
Groundwater Elevation ft-msl
250
240
230
220
210
200
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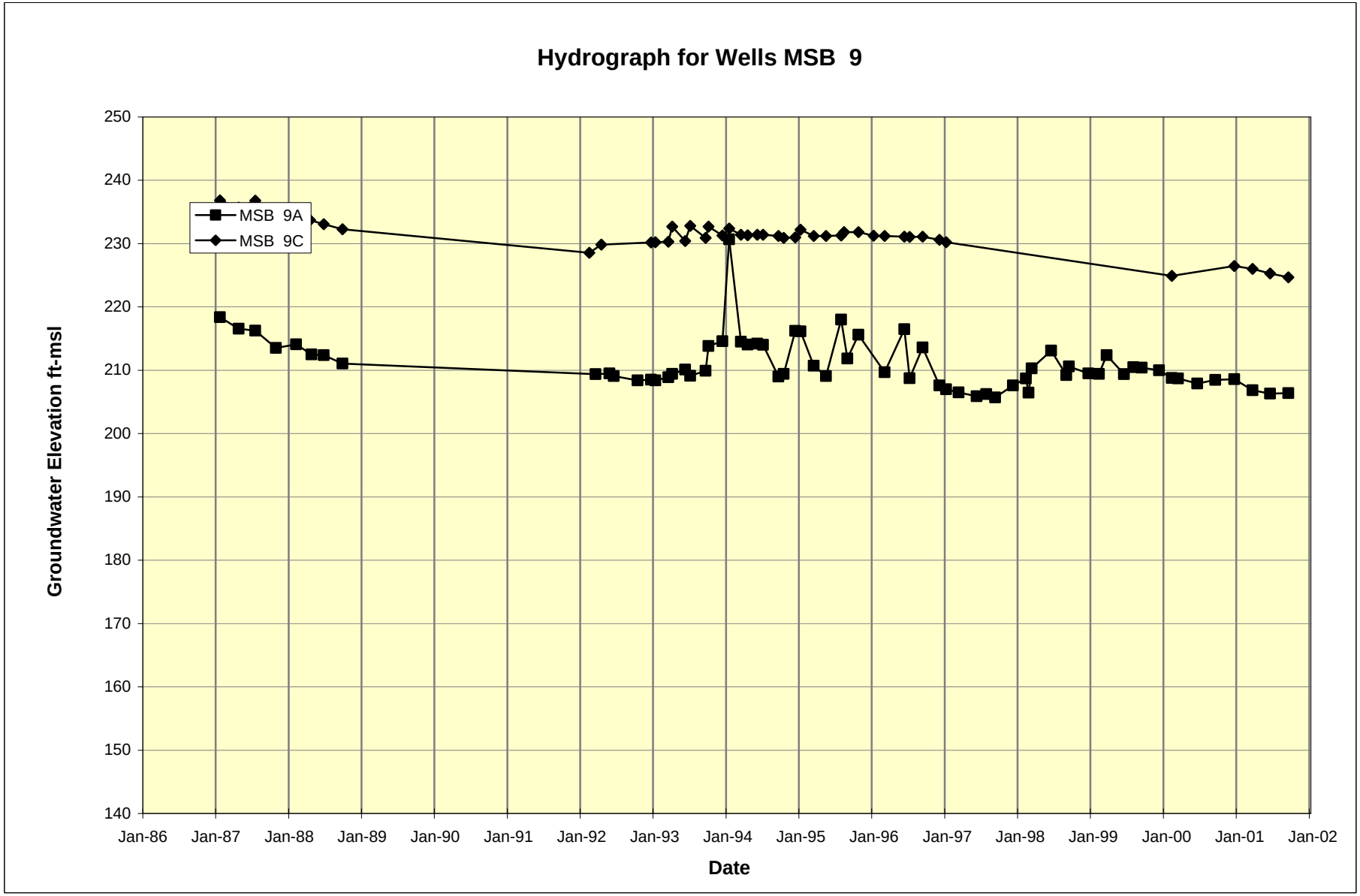
Hydrograph for Wells MSB 9
MSB 9A
MSB 9C
Groundwater Elevation ft-msl
250
240
230
220
210
200
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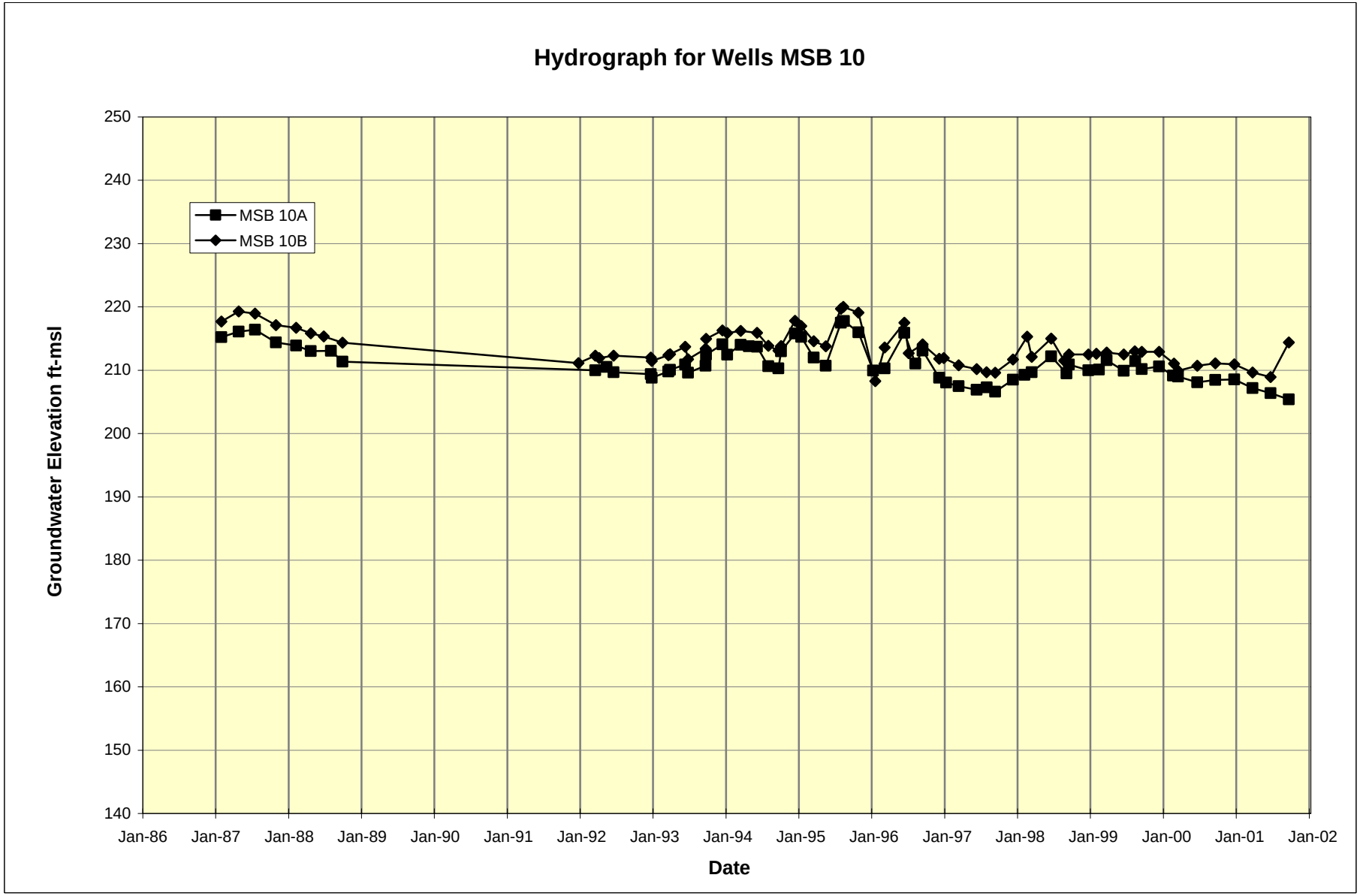
Hydrograph for Wells MSB 10
MSB 10A
MSB 10B
Groundwater Elevation ft-msl
250
240
230
220
210
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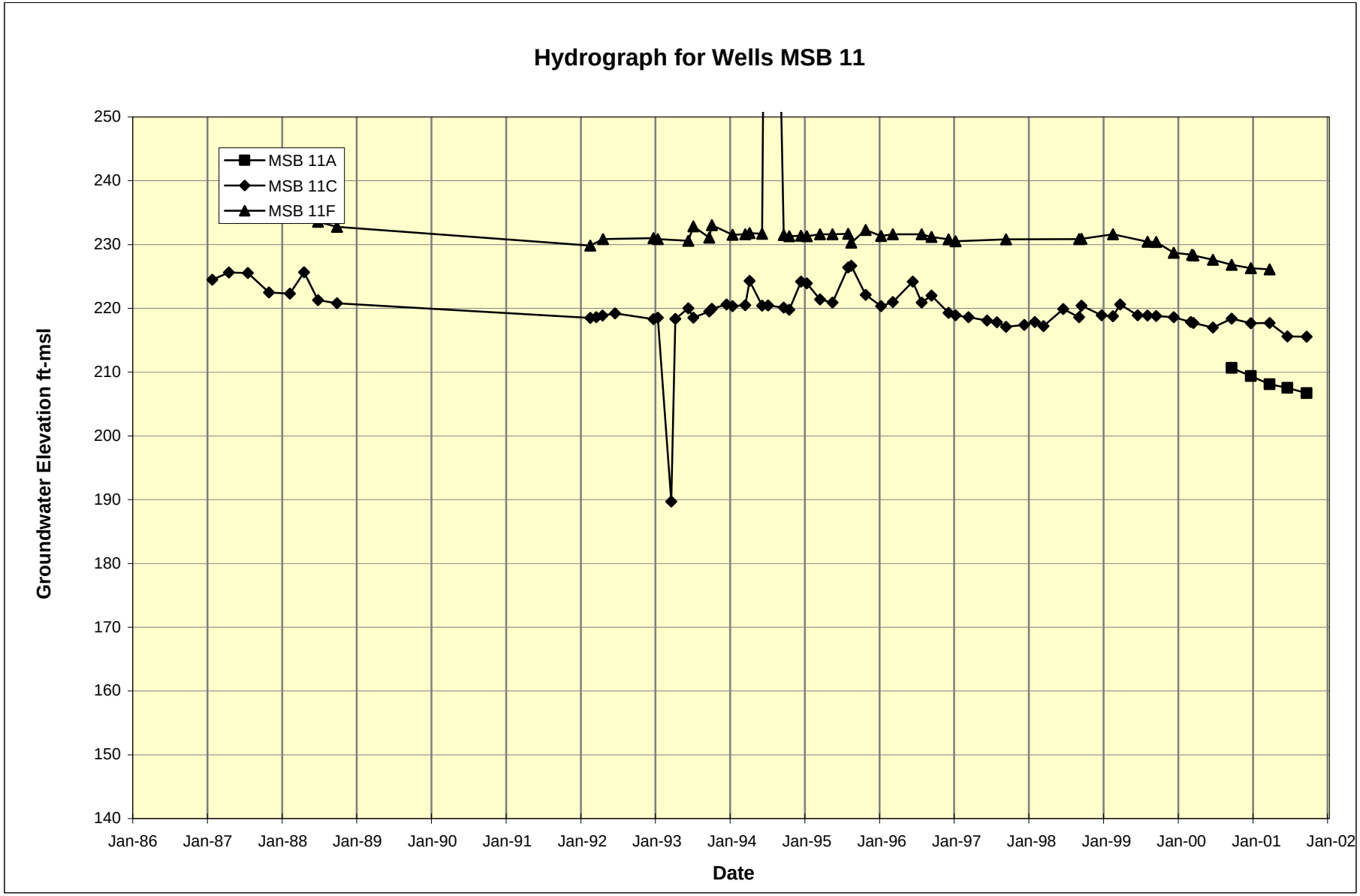
Hydrograph for Wells MSB 11
MSB 11A
MSB 11C
MSB 11F
Groundwater Elevation ft-msl
250
240
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220
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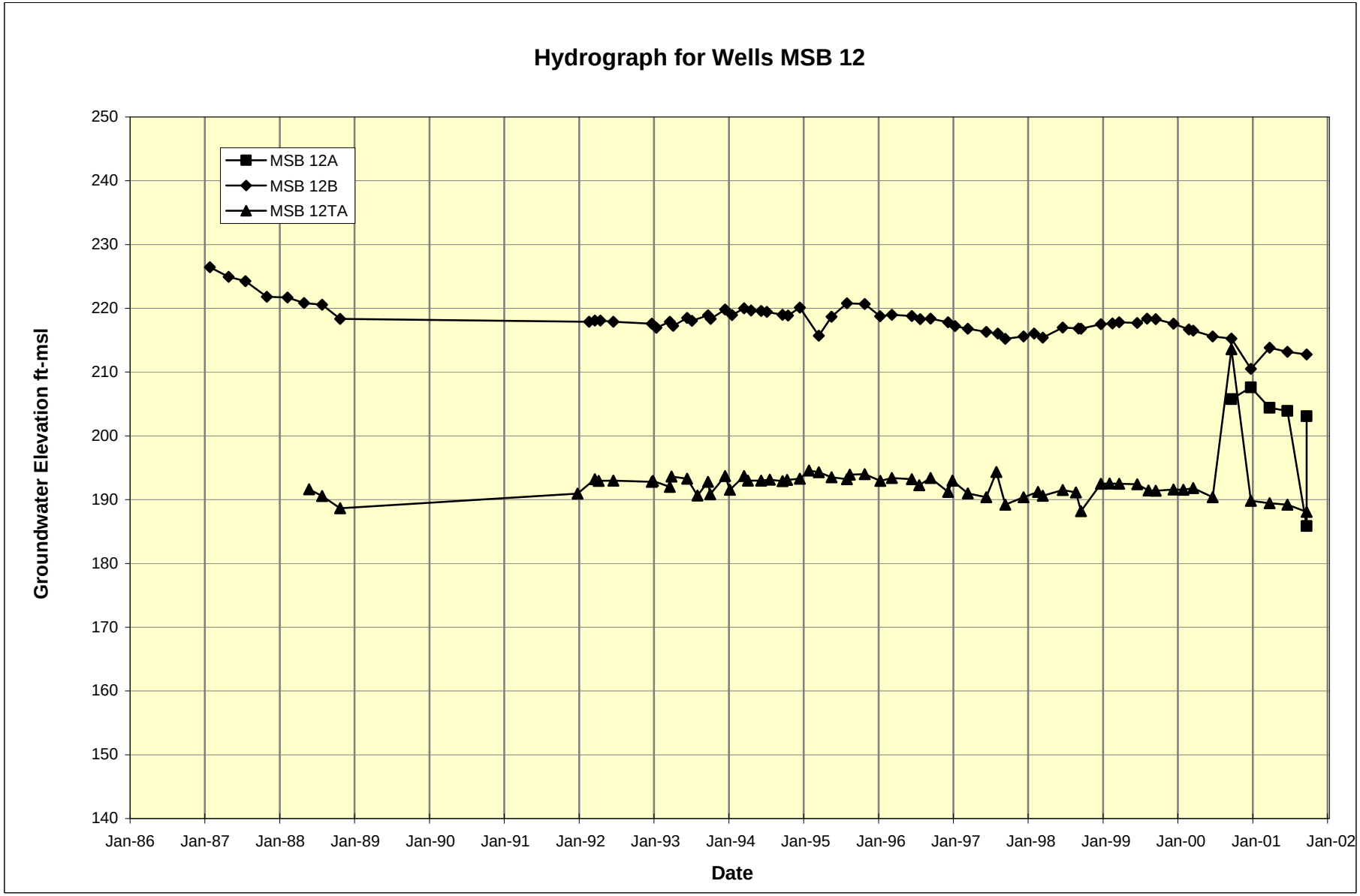
Hydrograph for Wells MSB 12
MSB 12A
MSB 12B
MSB 12TA
Groundwater Elevation ft-msl
250
240
230
220
210
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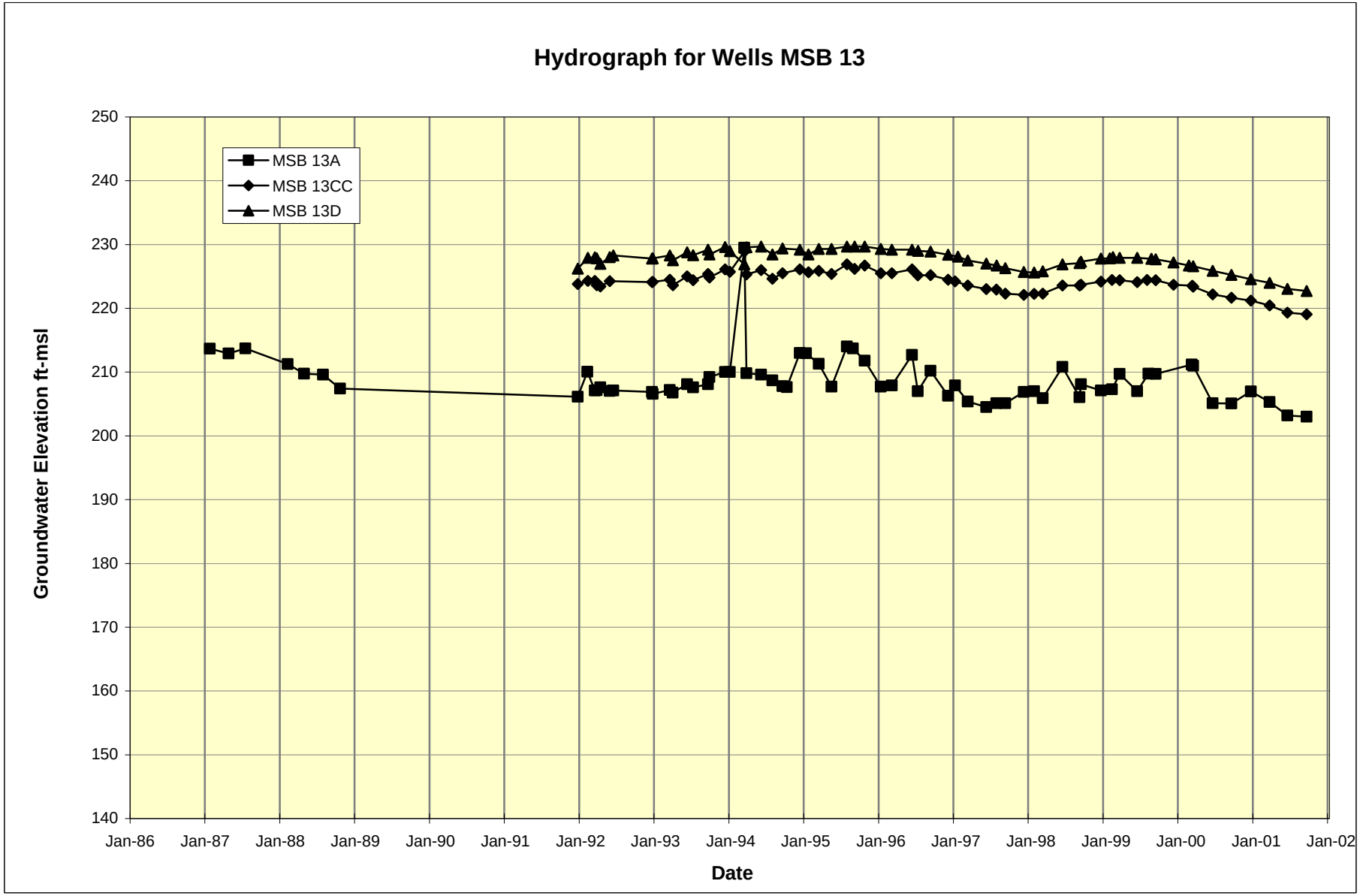
Hydrograph for Wells MSB 13
MSB 13A
MSB 13CC
MSB 13D
Groundwater Elevation ft-msl
250
240
230
220
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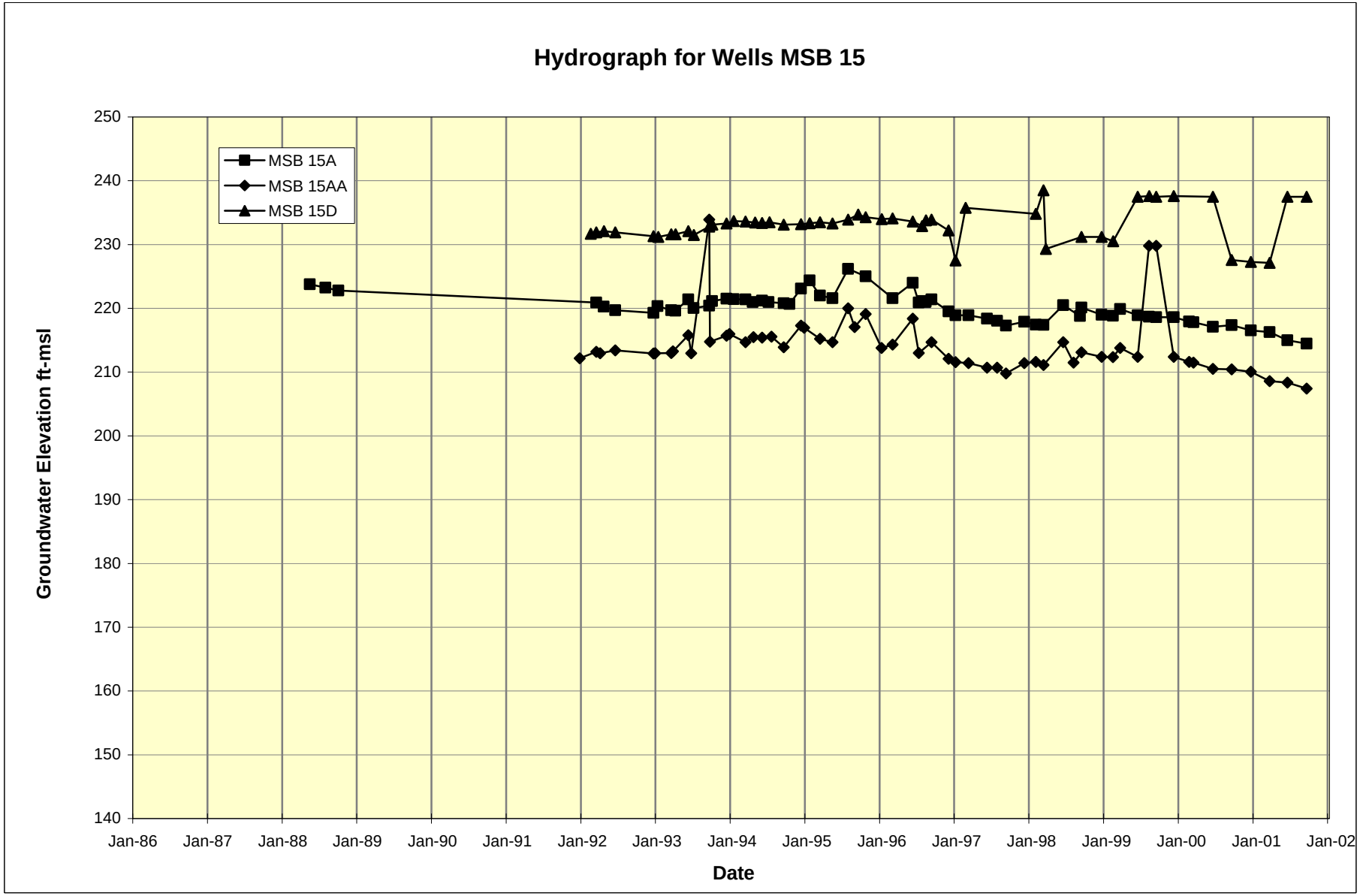
Hydrograph for Wells MSB 15
MSB 15A
MSB 15AA
MSB 15D
Groundwater Elevation ft-msl
250
240
230
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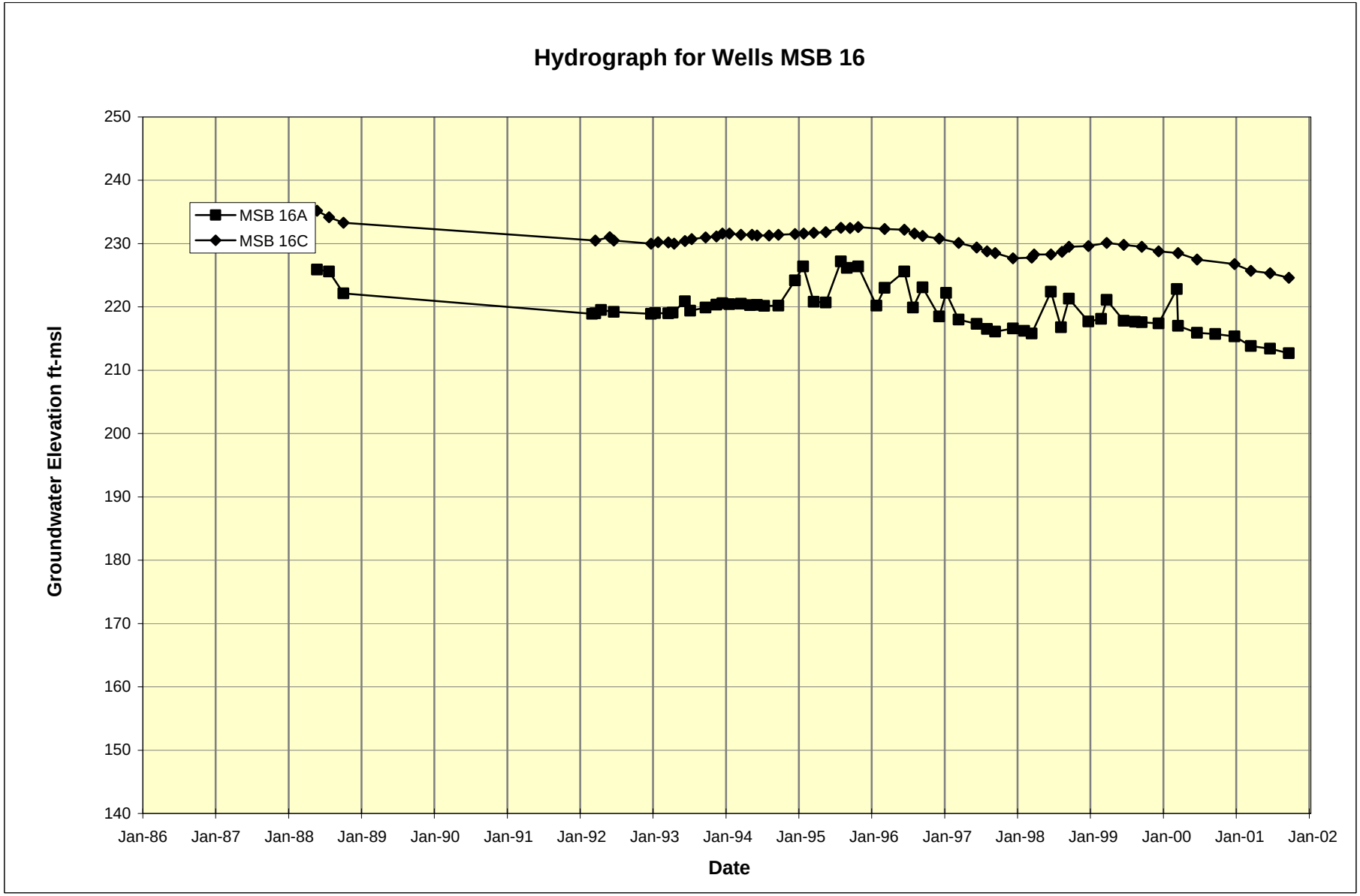
Hydrograph for Wells MSB 16
MSB 16A
MSB 16C
Groundwater Elevation ft-msl
250
240
230
220
210
200
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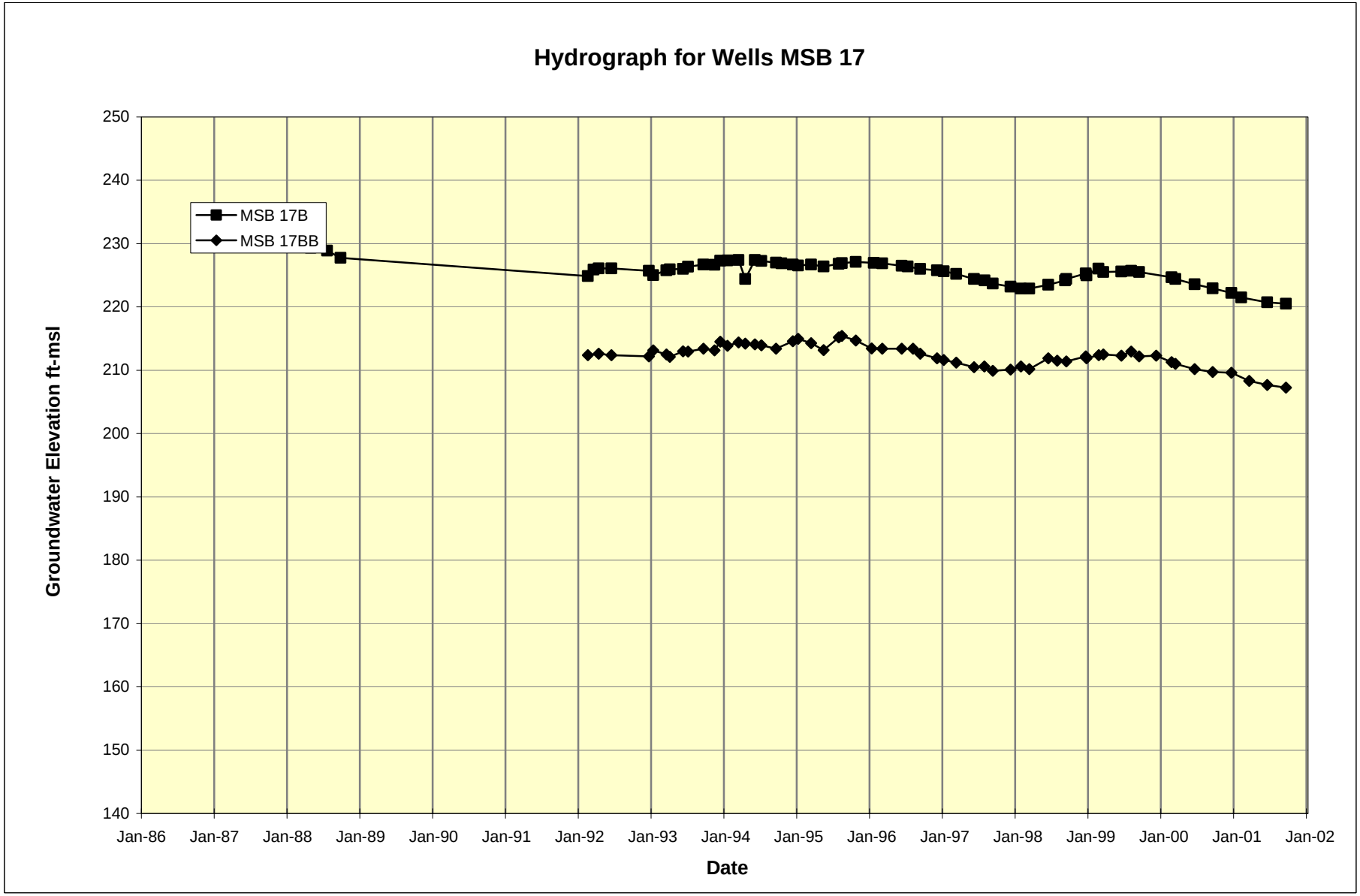
Hydrograph for Wells MSB 17
MSB 17B
MSB 17BB
Groundwater Elevation ft-msl
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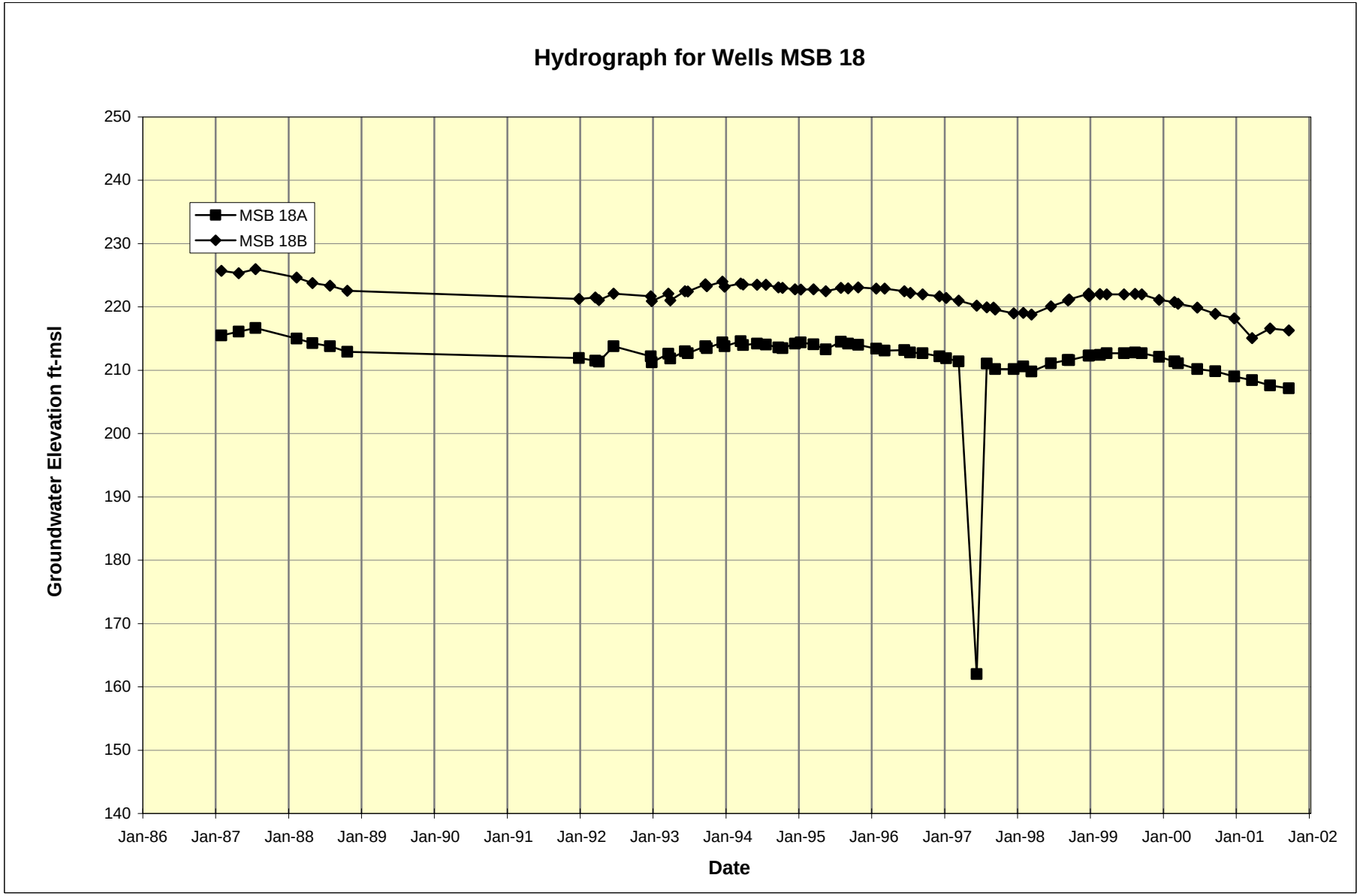
Hydrograph for Wells MSB 18
MSB 18A
MSB 18B
Groundwater Elevation ft-msl
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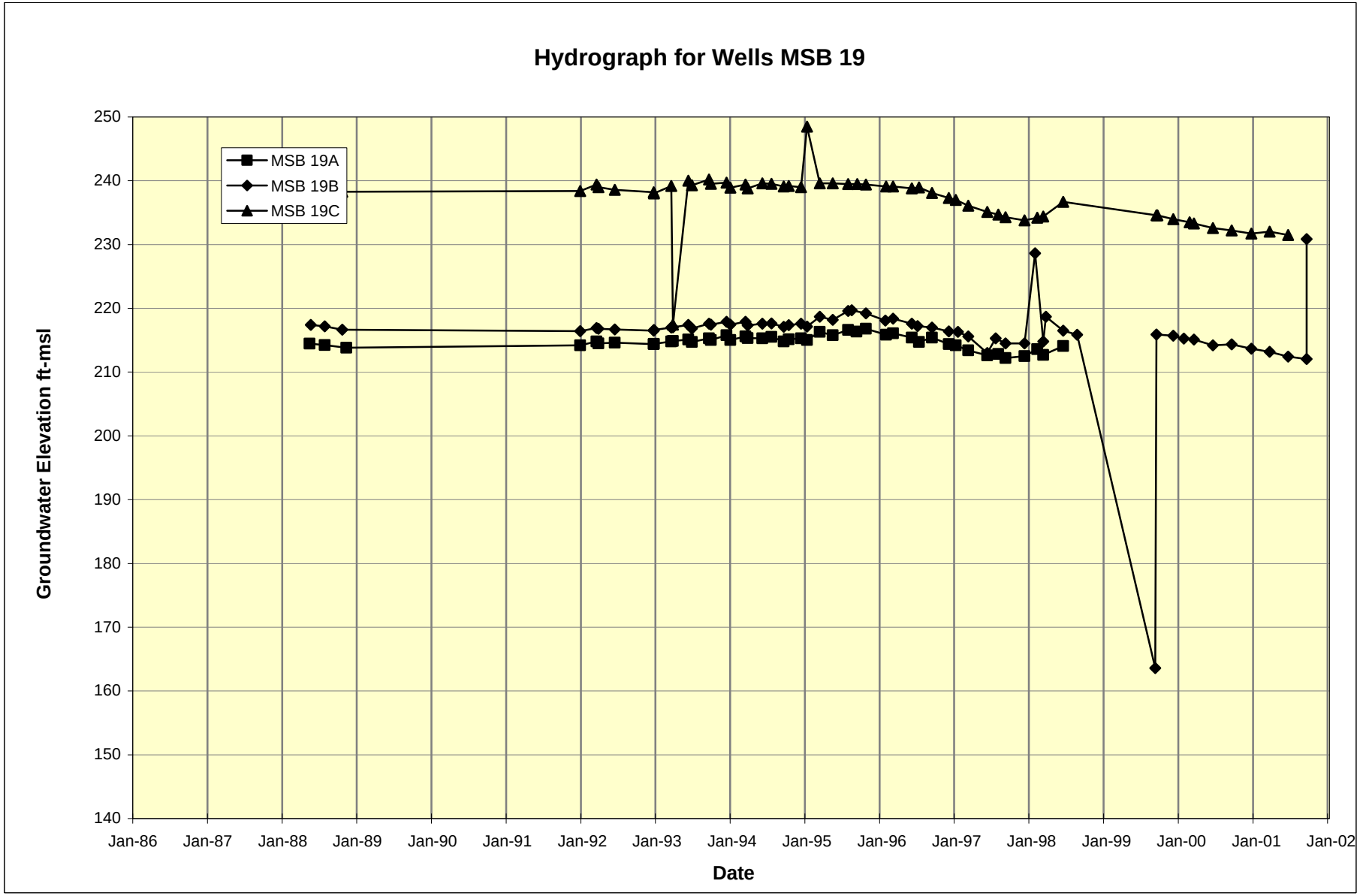
Hydrograph for Wells MSB 19
MSB 19A
MSB 19B
MSB 19C
Groundwater Elevation ft-msl
250
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220
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170
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Jan-86
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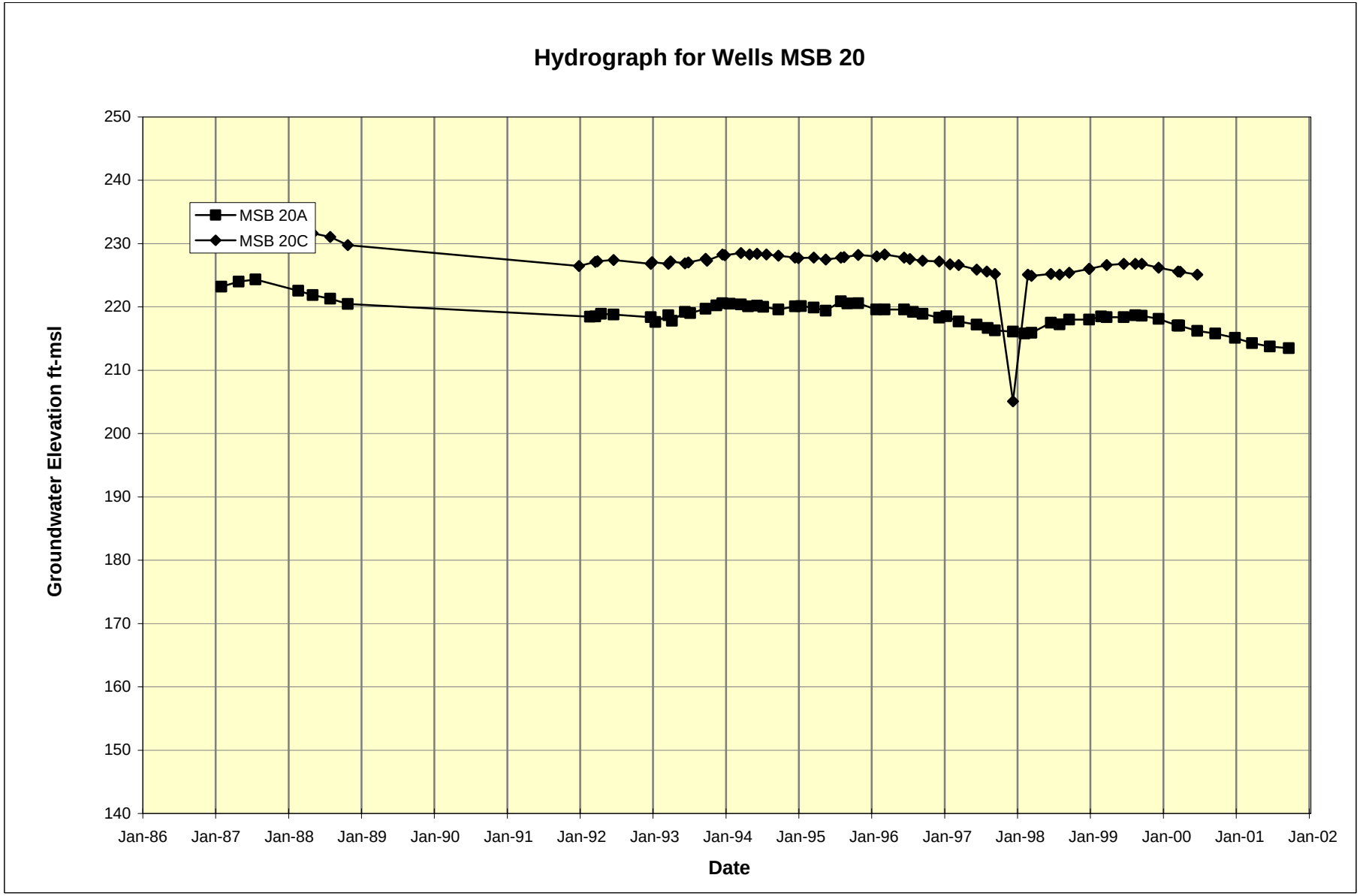
Hydrograph for Wells MSB 20
MSB 20A
MSB 20C
Groundwater Elevation ft-msl
250
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Jan-86
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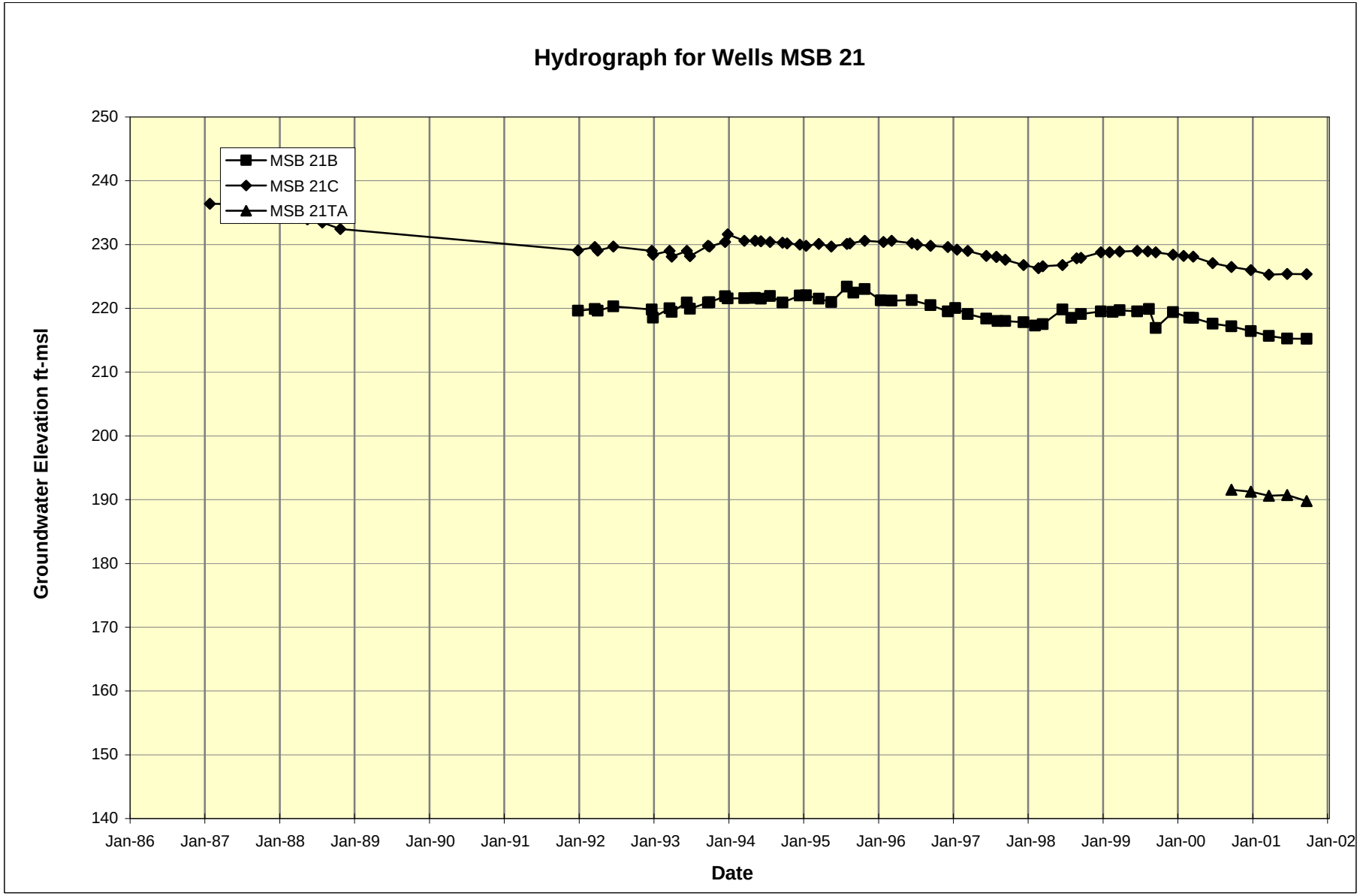
Hydrograph for Wells MSB 21
MSB 21B
MSB 21C
MSB 21TA
Groundwater Elevation ft-msl
250
240
230
220
210
200
190
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170
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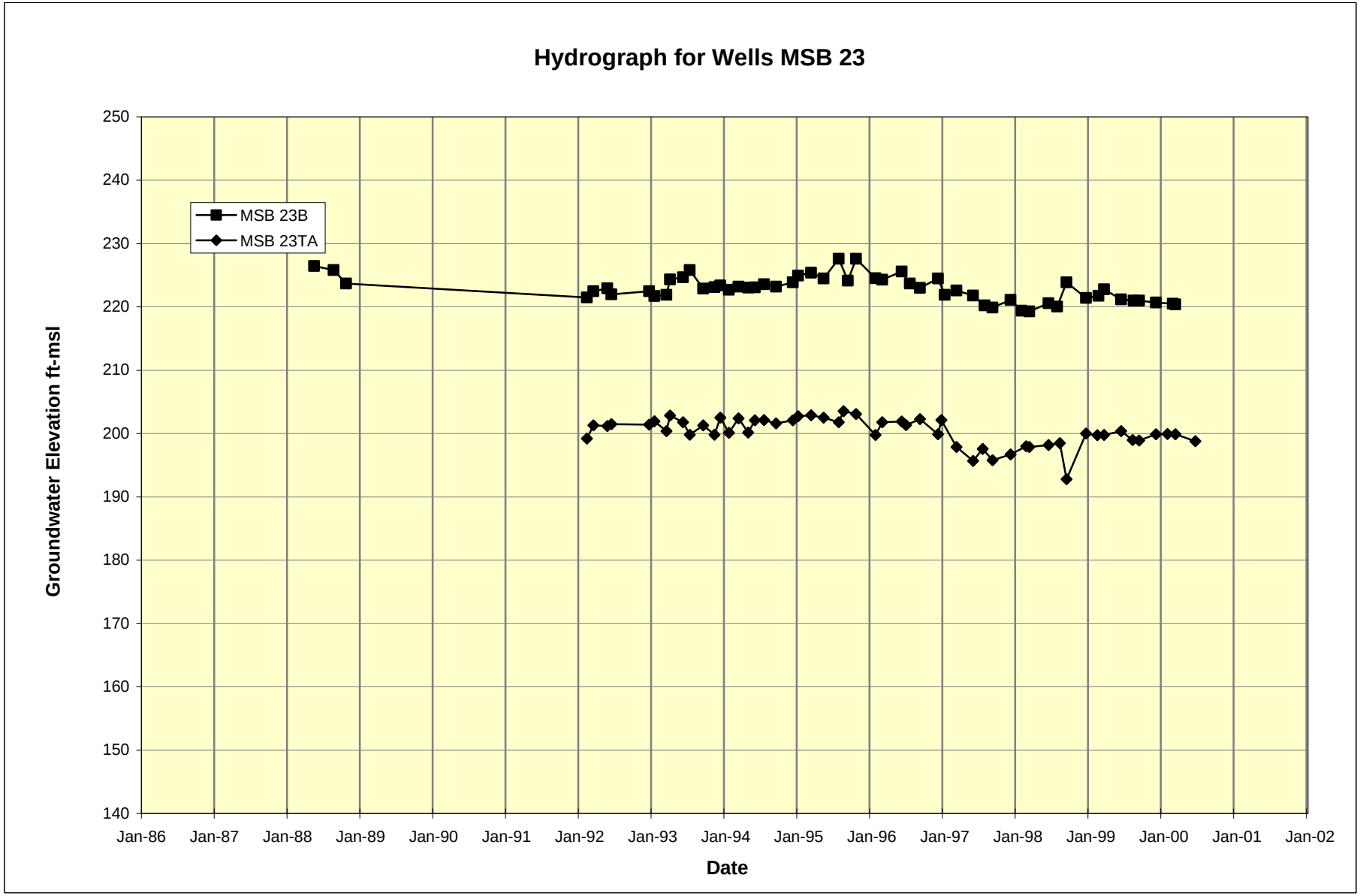
Hydrograph for Wells MSB 23
MSB 23B
MSB 23TA
Groundwater Elevation ft-msl
250
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230
220
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200
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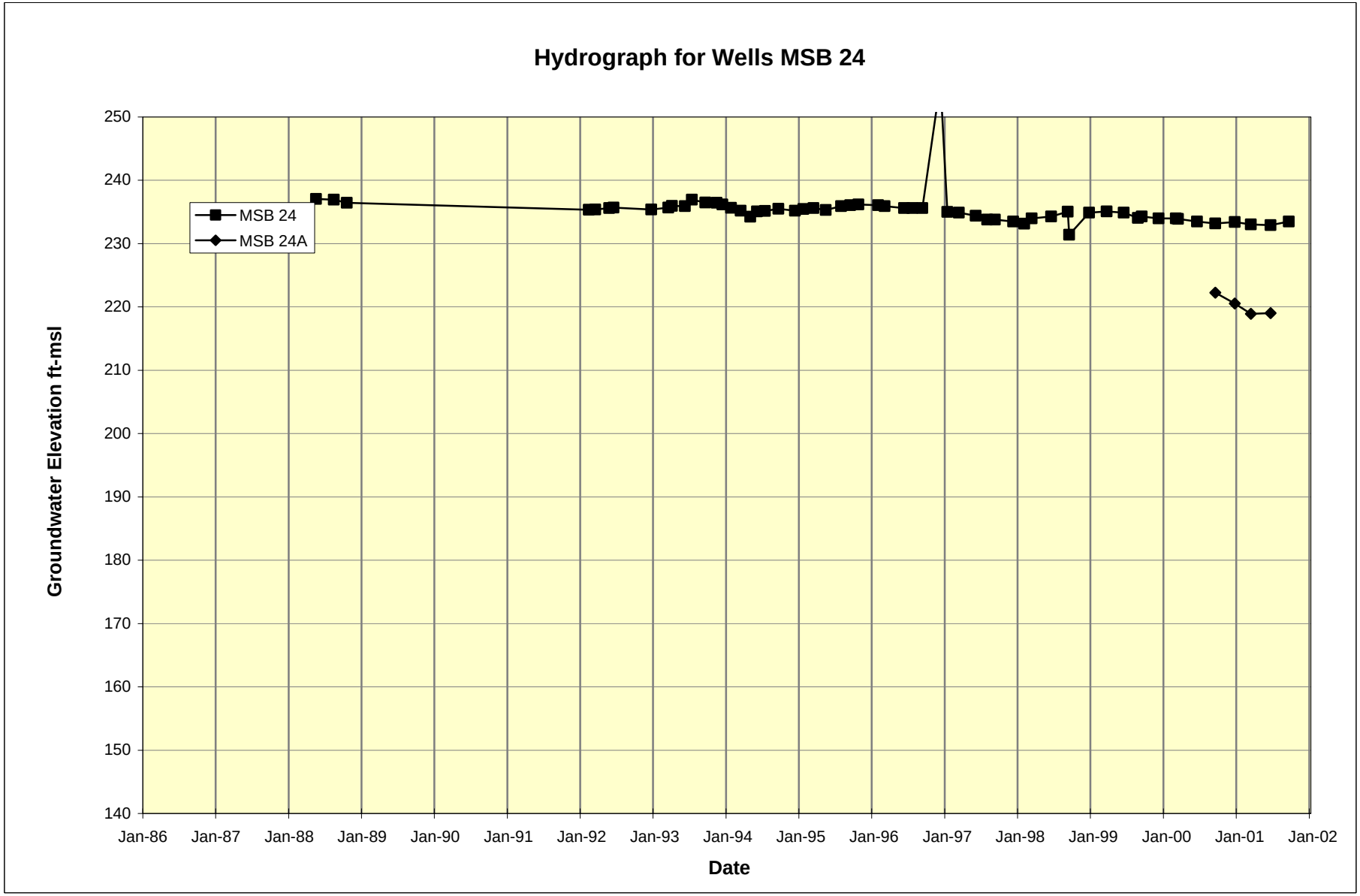
Hydrograph for Wells MSB 24
MSB 24
MSB 24A
Groundwater Elevation ft-msl
250
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220
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200
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Jan-86
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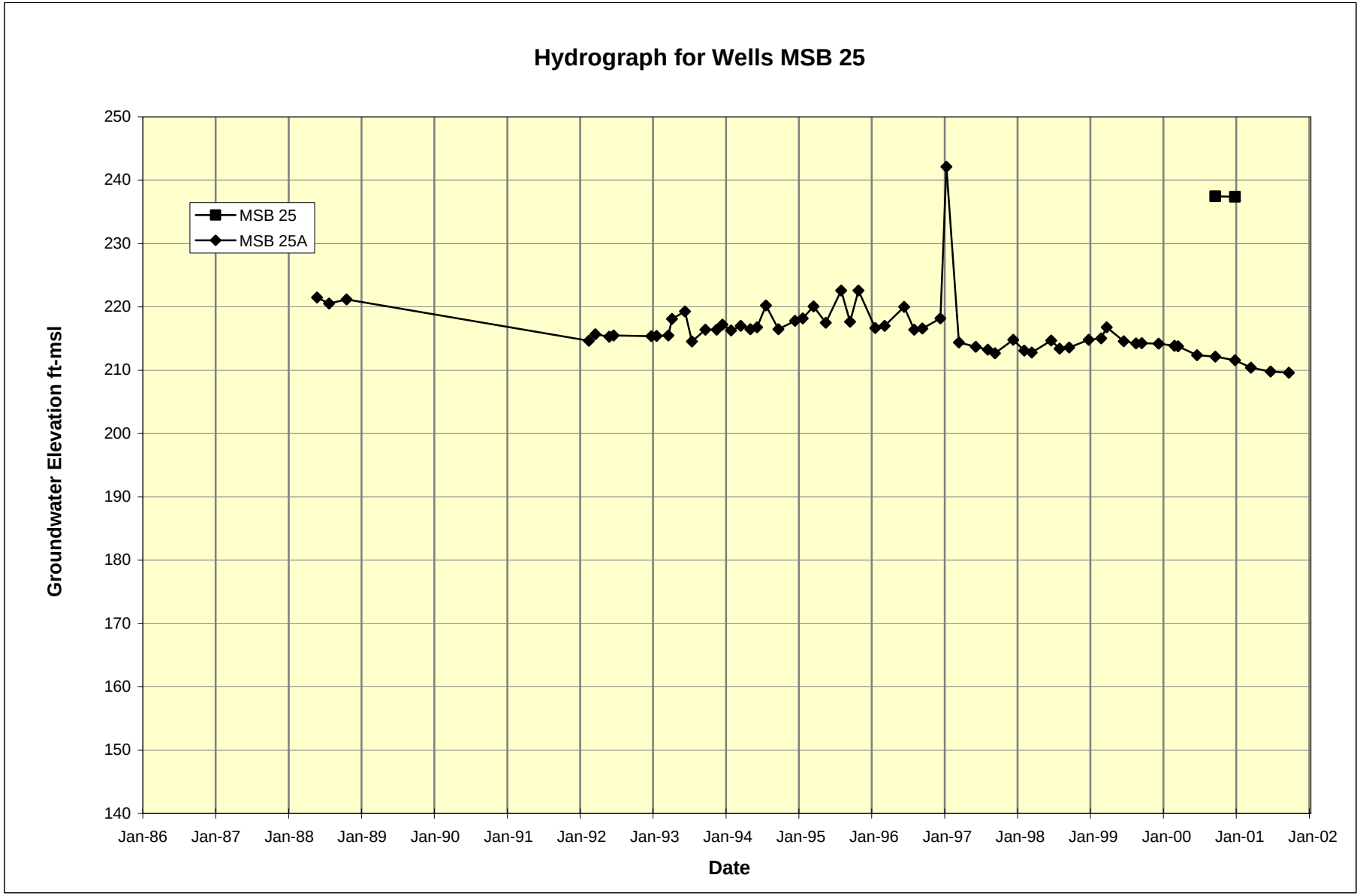
Hydrograph for Wells MSB 25
MSB 25
MSB 25A
Groundwater Elevation ft-msl
250
240
230
220
210
200
190
180
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Jan-86
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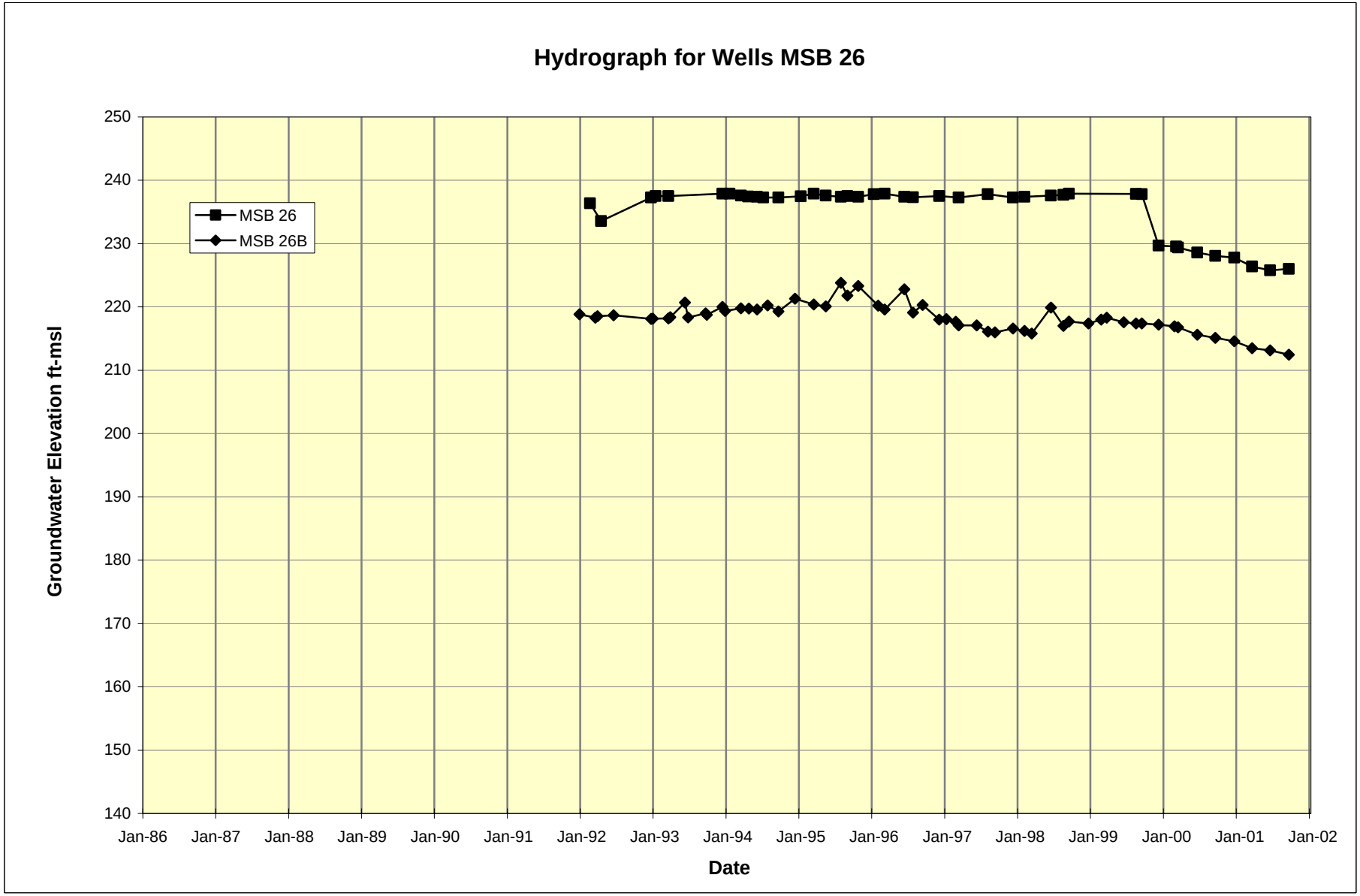
Hydrograph for Wells MSB 26
MSB 26
MSB 26B
Groundwater Elevation ft-msl
250
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220
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Jan-86
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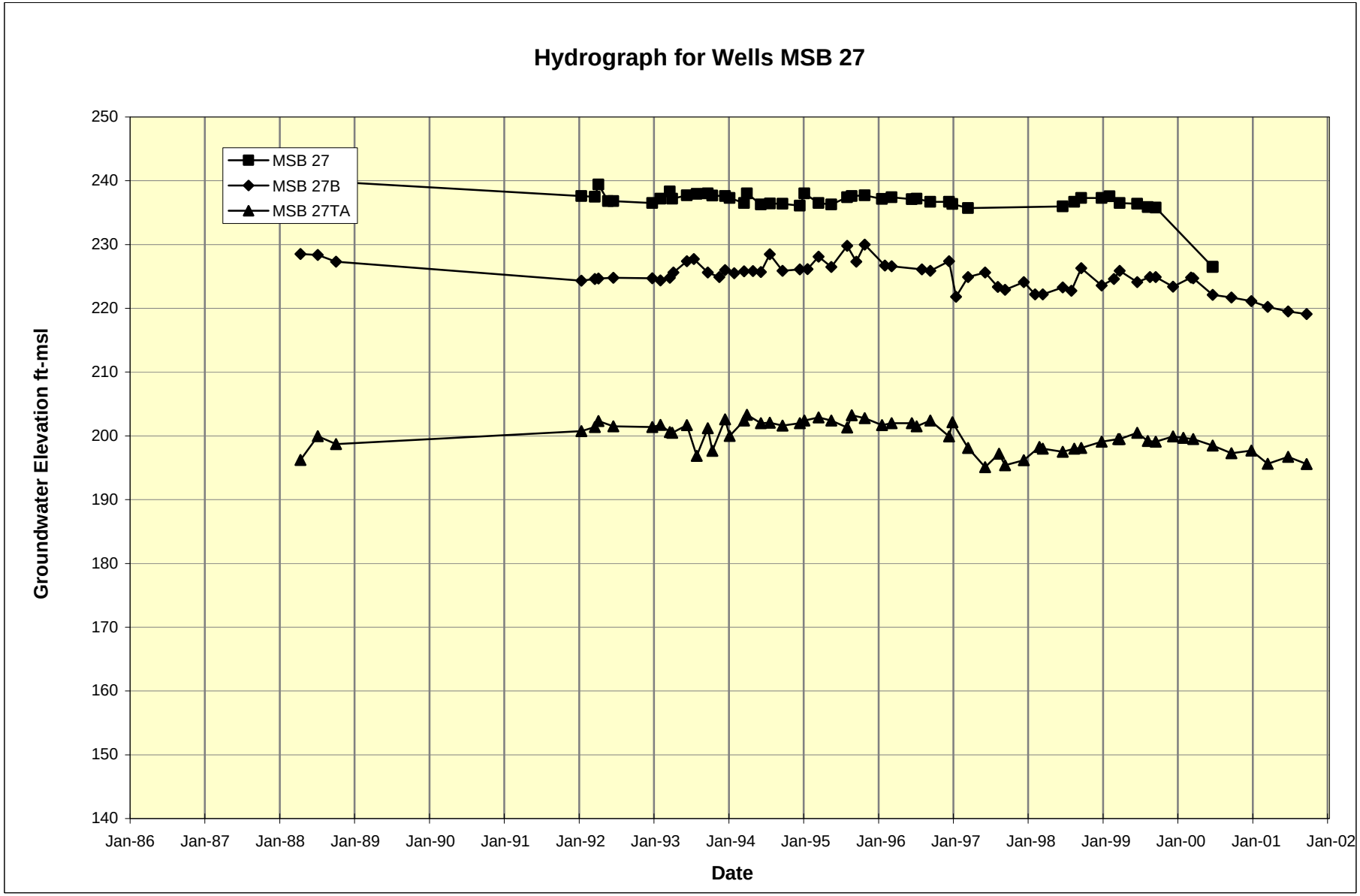
Hydrograph for Wells MSB 27
MSB 27
MSB 27B
MSB 27TA
Groundwater Elevation ft-msl
250
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220
210
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Jan-86
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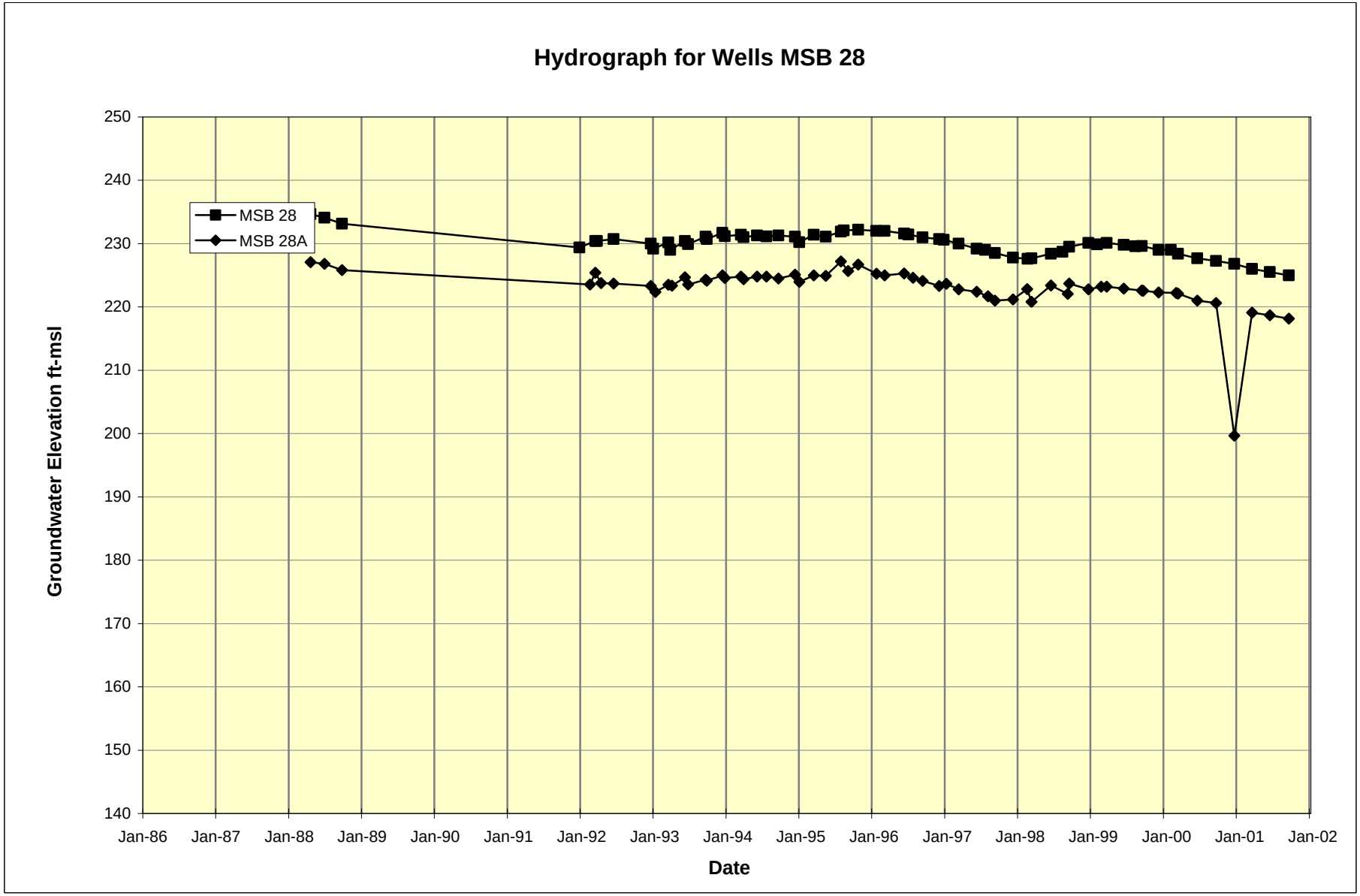
Hydrograph for Wells MSB 28
MSB 28
MSB 28A
Groundwater Elevation ft-msl
250
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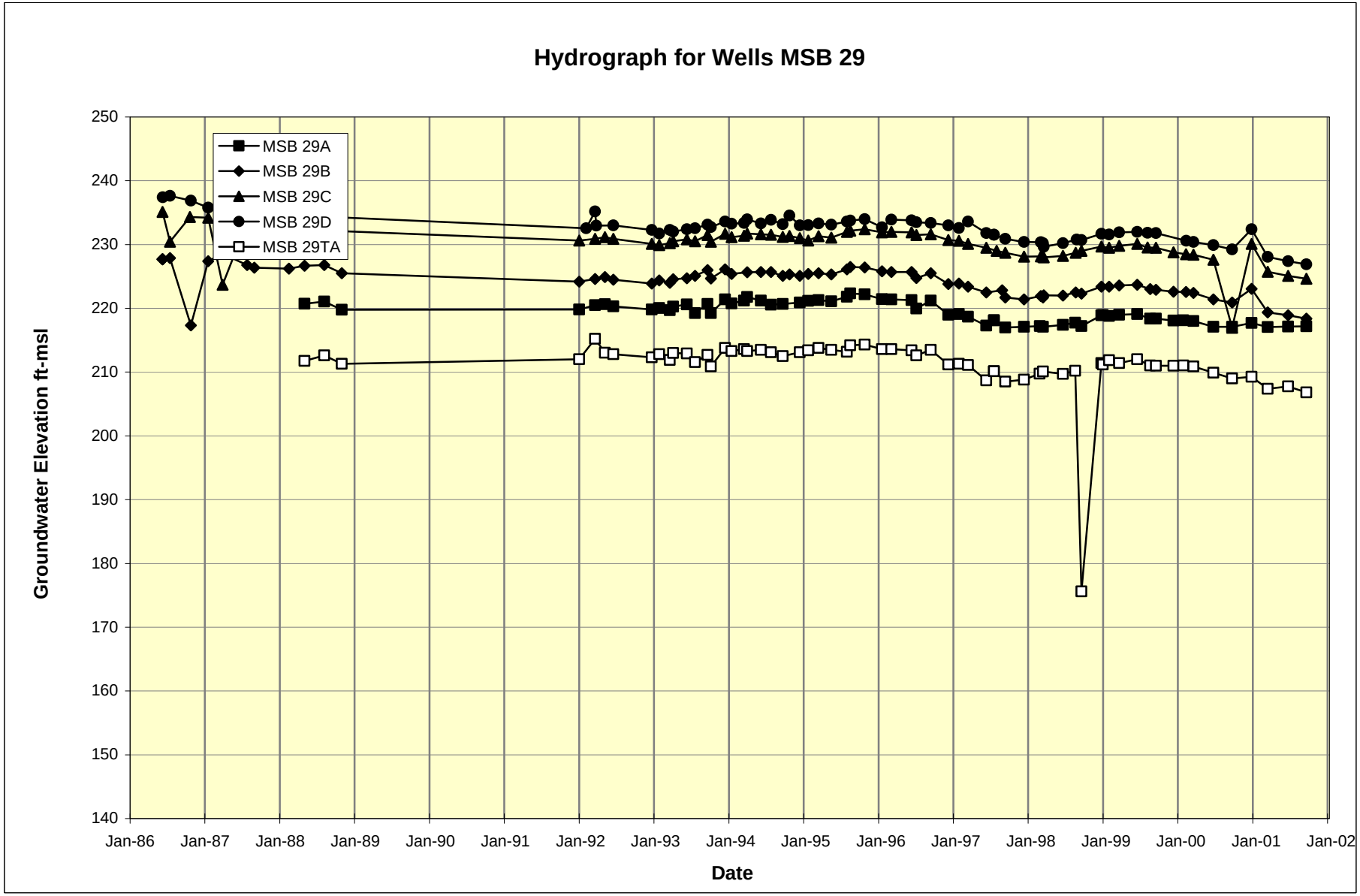
Hydrograph for Wells MSB 29
MSB 29A
MSB 29B
MSB 29C
MSB 29D
MSB 29TA
Groundwater Elevation ft-msl
250
240
230
220
210
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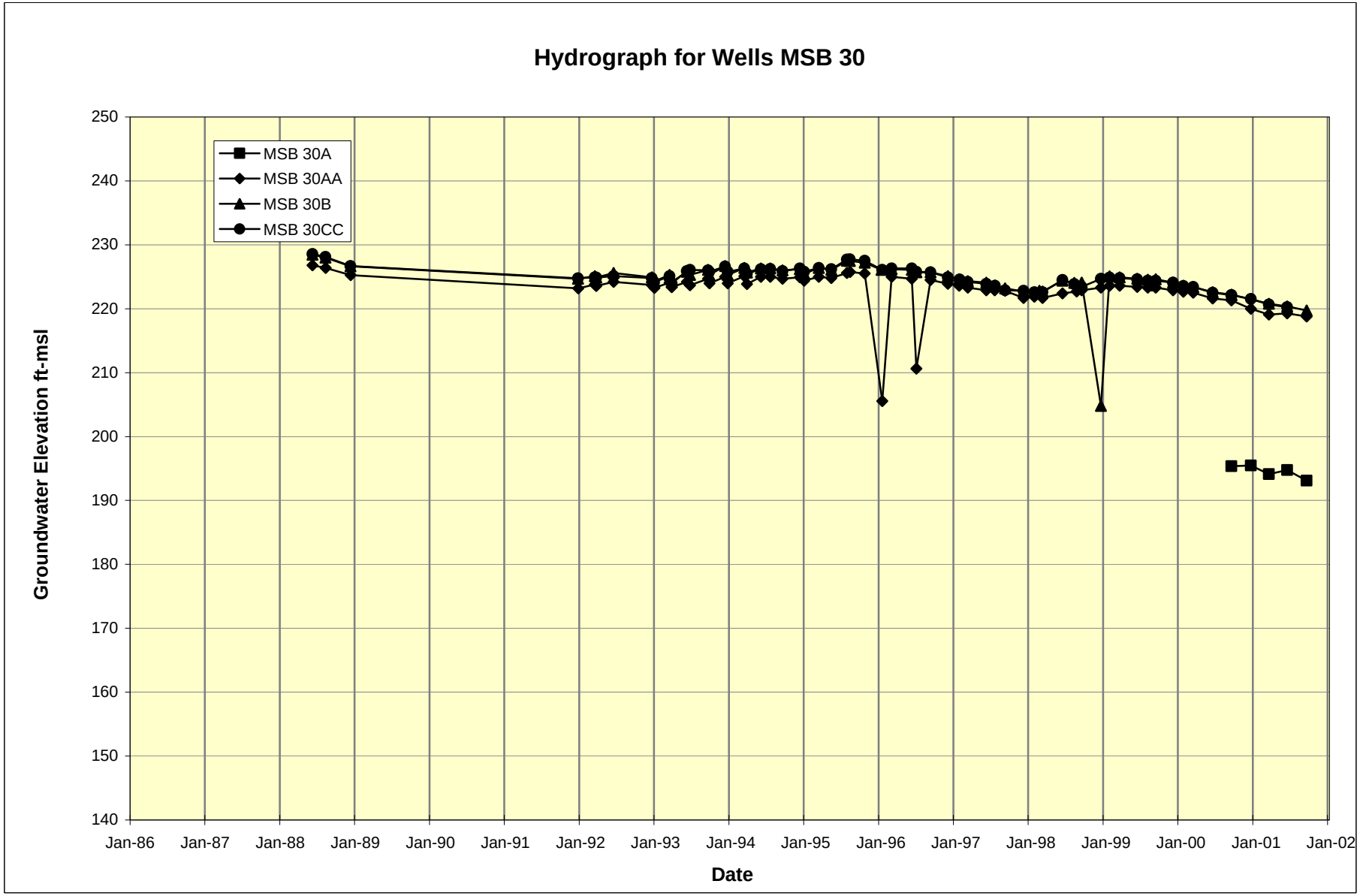
Hydrograph for Wells MSB 30
MSB 30A
MSB 30AA
MSB 30B
MSB 30CC
Groundwater Elevation ft-msl
250
240
230
220
210
200
190
180
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Jan-86
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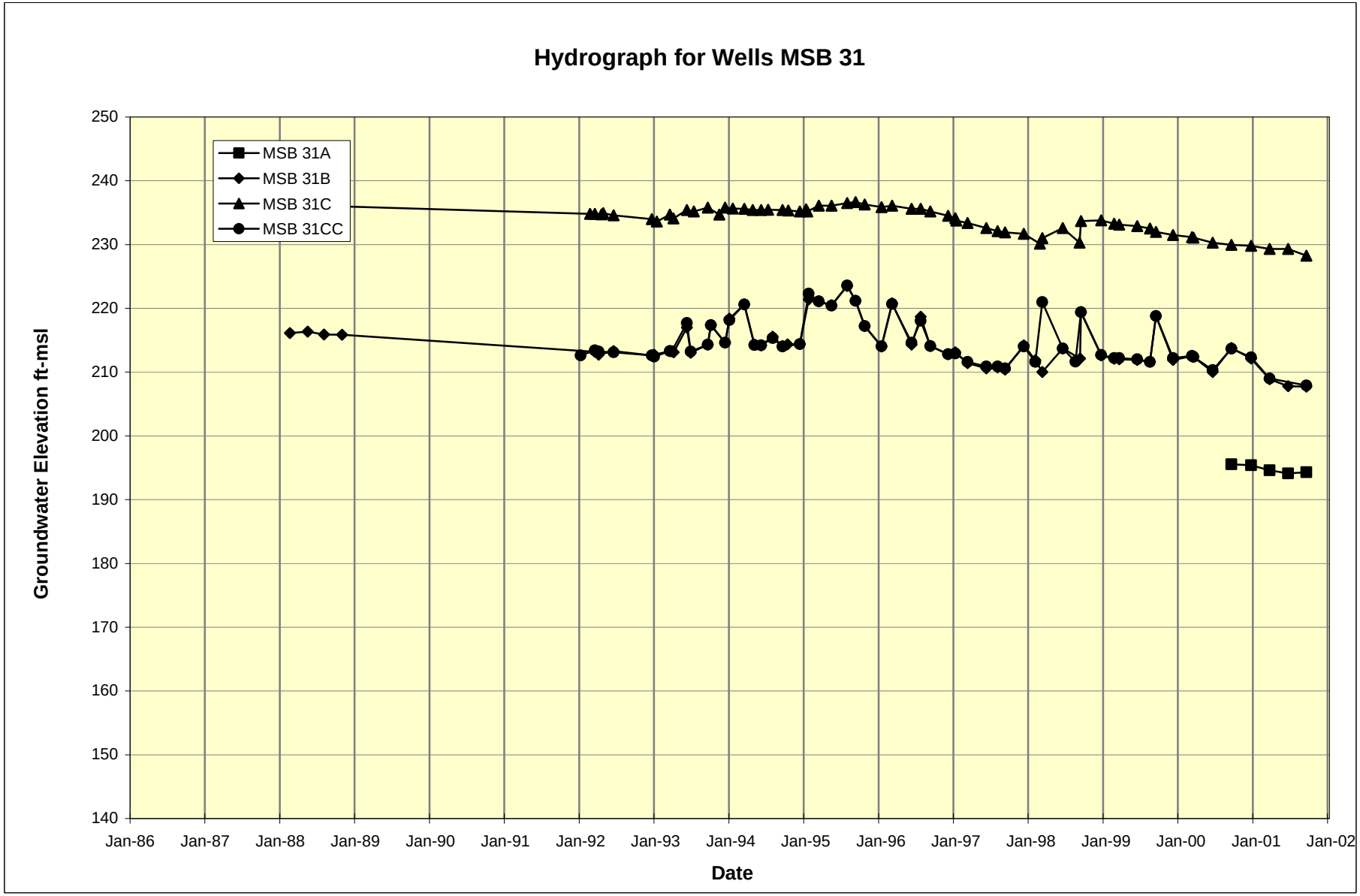
Hydrograph for Wells MSB 31
MSB 31A
MSB 31B
MSB 31C
MSB 31CC
Groundwater Elevation ft-msl
250
240
230
220
210
200
190
180
170
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Jan-86
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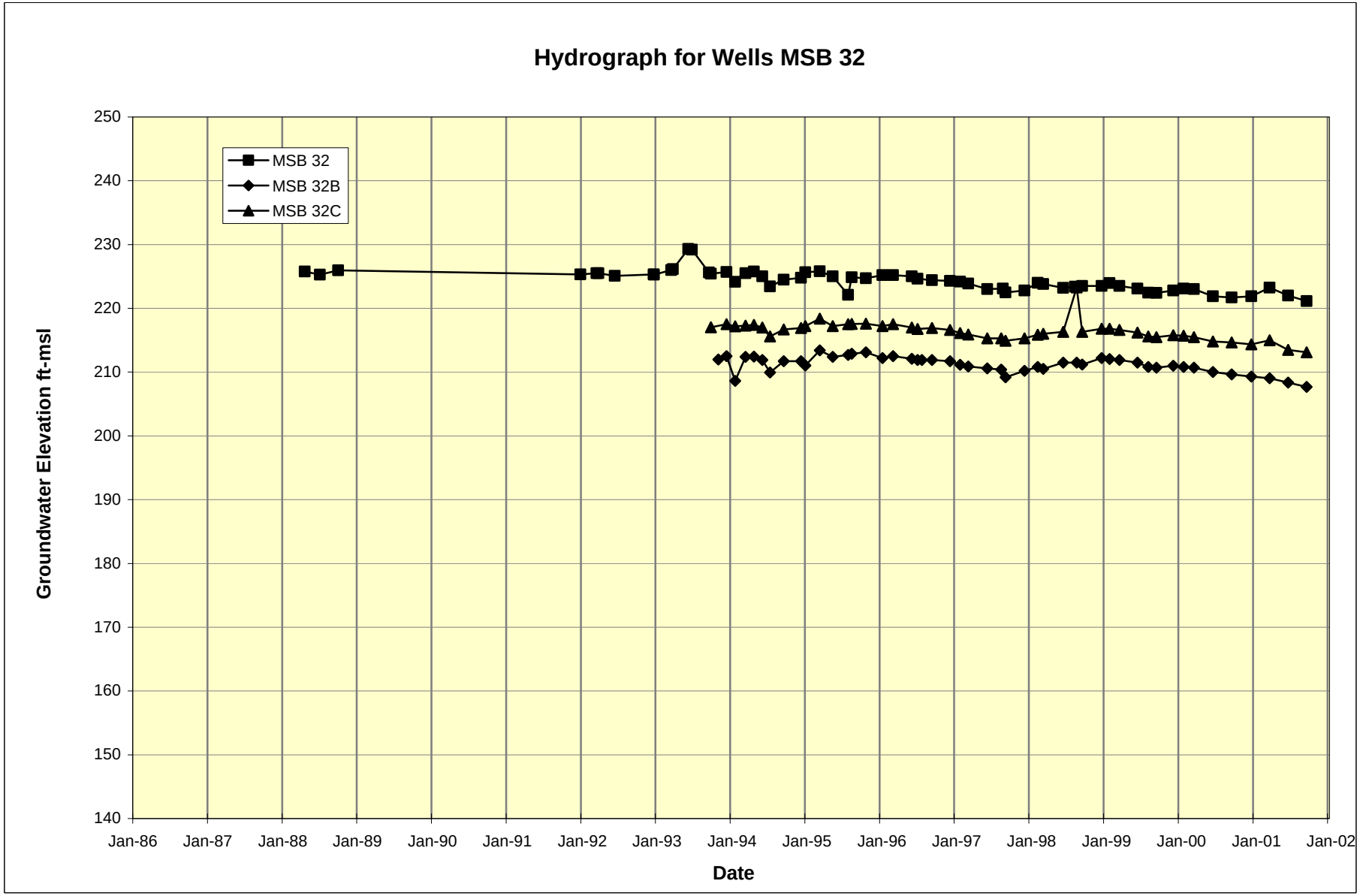
Date


Hydrograph for Wells MSB 32
MSB 32
MSB 32B
MSB 32C
Groundwater Elevation ft-msl
250
240
230
220
210
200
190
180
170
160
150
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Jan-86
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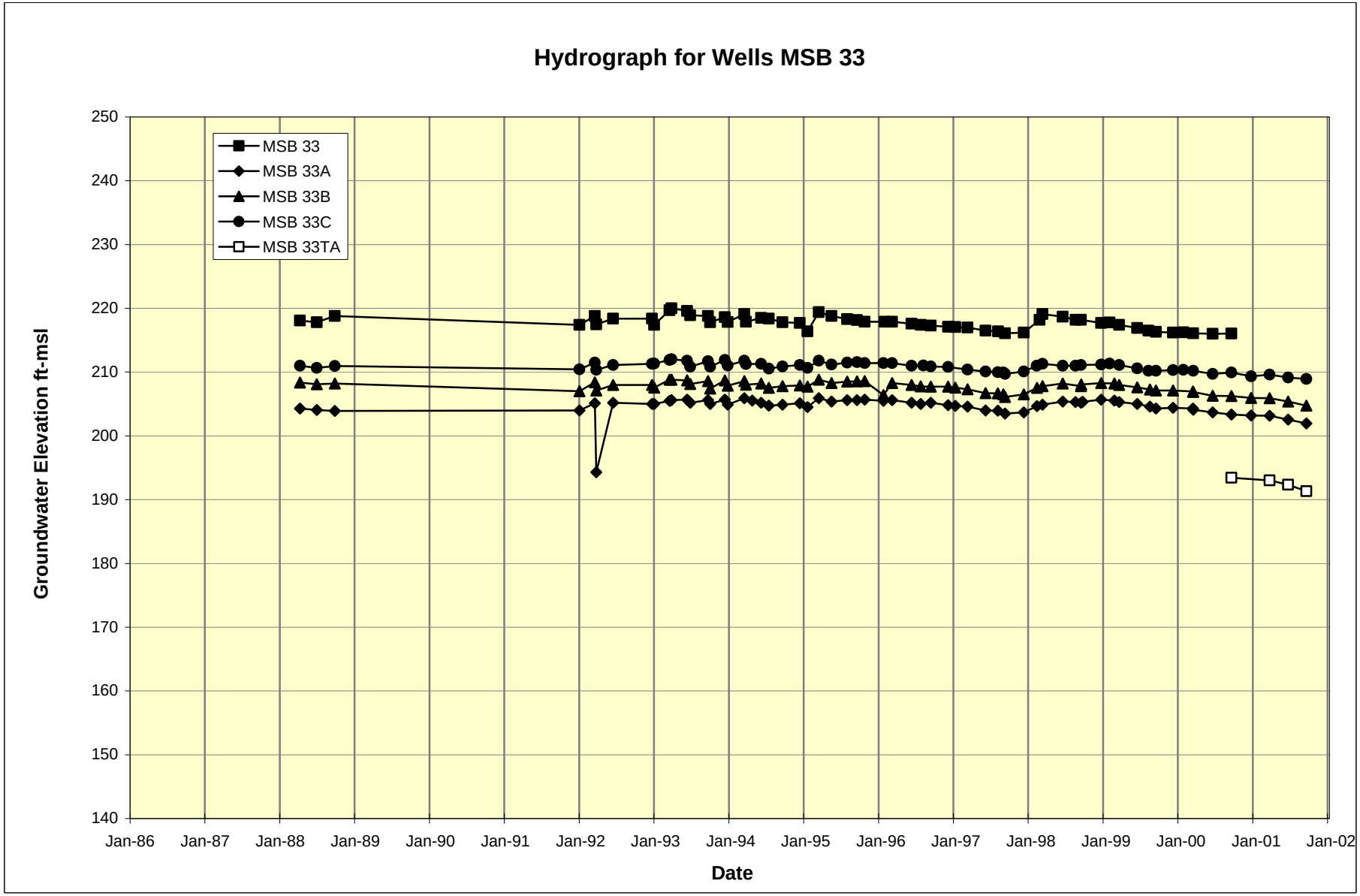
Hydrograph for Wells MSB 33
MSB 33
MSB 33A
MSB 33B
MSB 33C
MSB 33TA
Groundwater Elevation ft-msl
250
240
230
220
210
200
190
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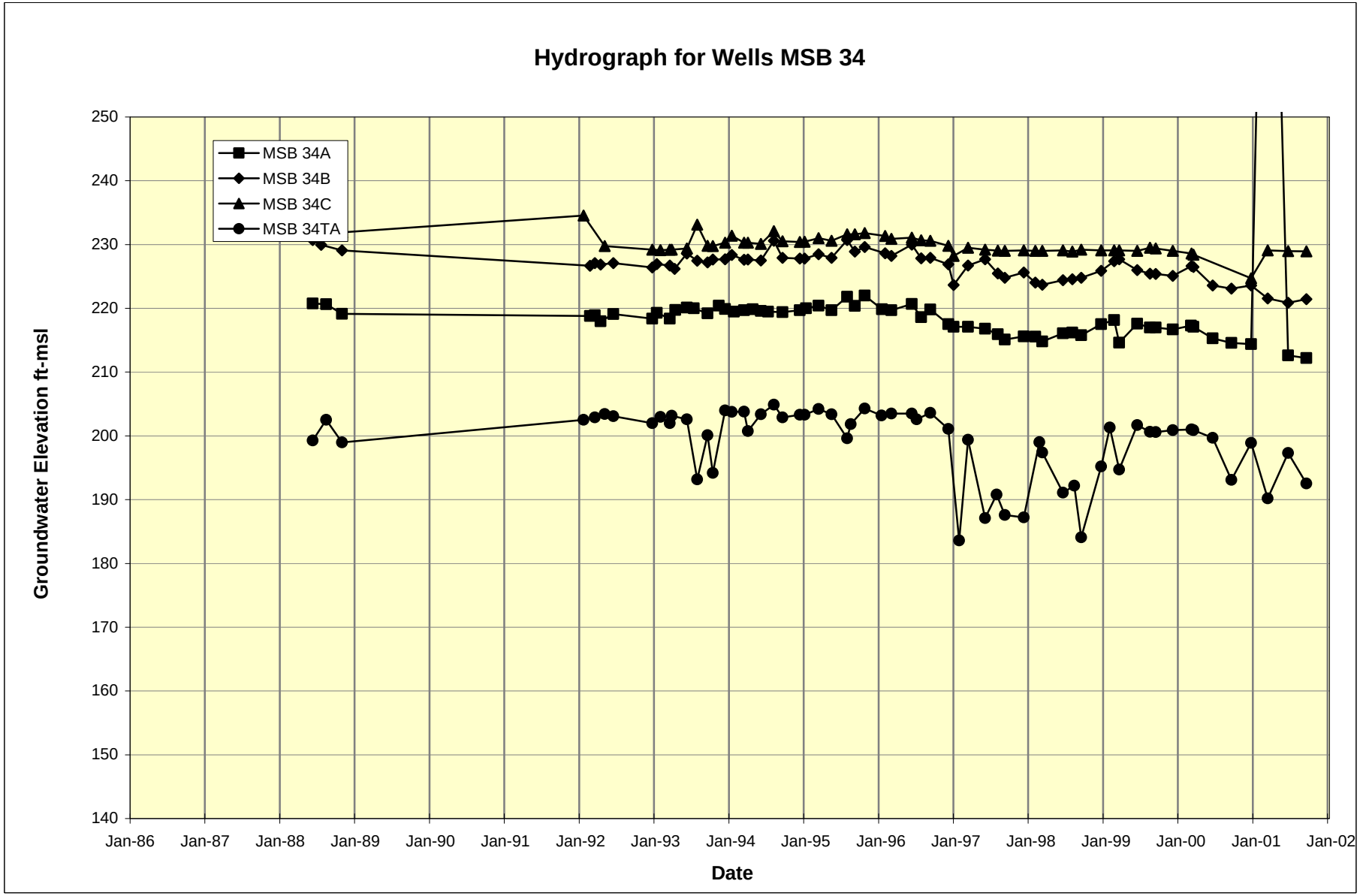
Hydrograph for Wells MSB 34
MSB 34A
MSB 34B
MSB 34C
MSB 34TA
Groundwater Elevation ft-msl
250
240
230
220
210
200
190
180
170
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Jan-86
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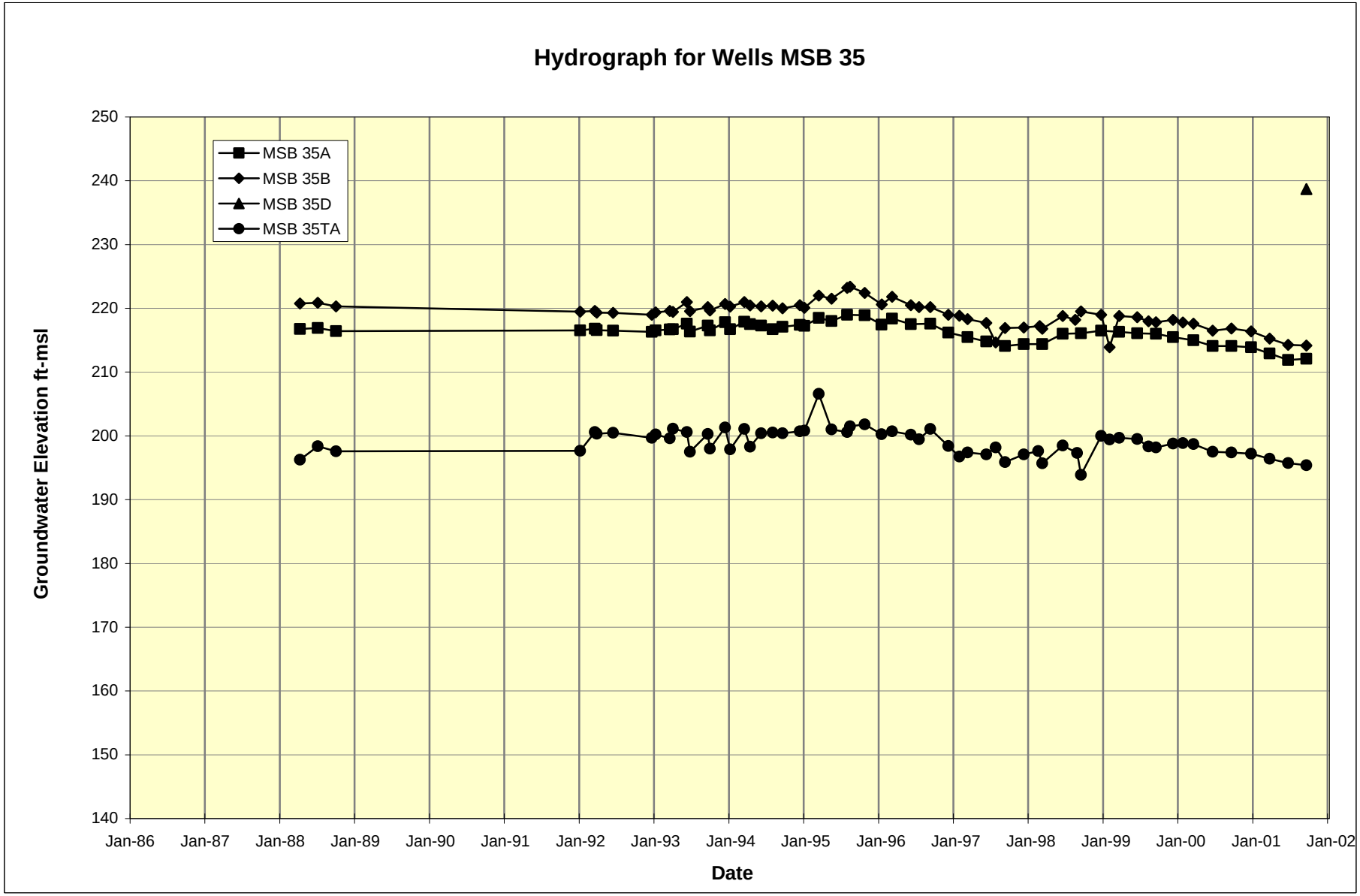
Date


Hydrograph for Wells MSB 35
MSB 35A
MSB 35B
MSB 35D
MSB 35TA
Groundwater Elevation ft-msl
250
240
230
220
210
200
190
180
170
160
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Jan-86
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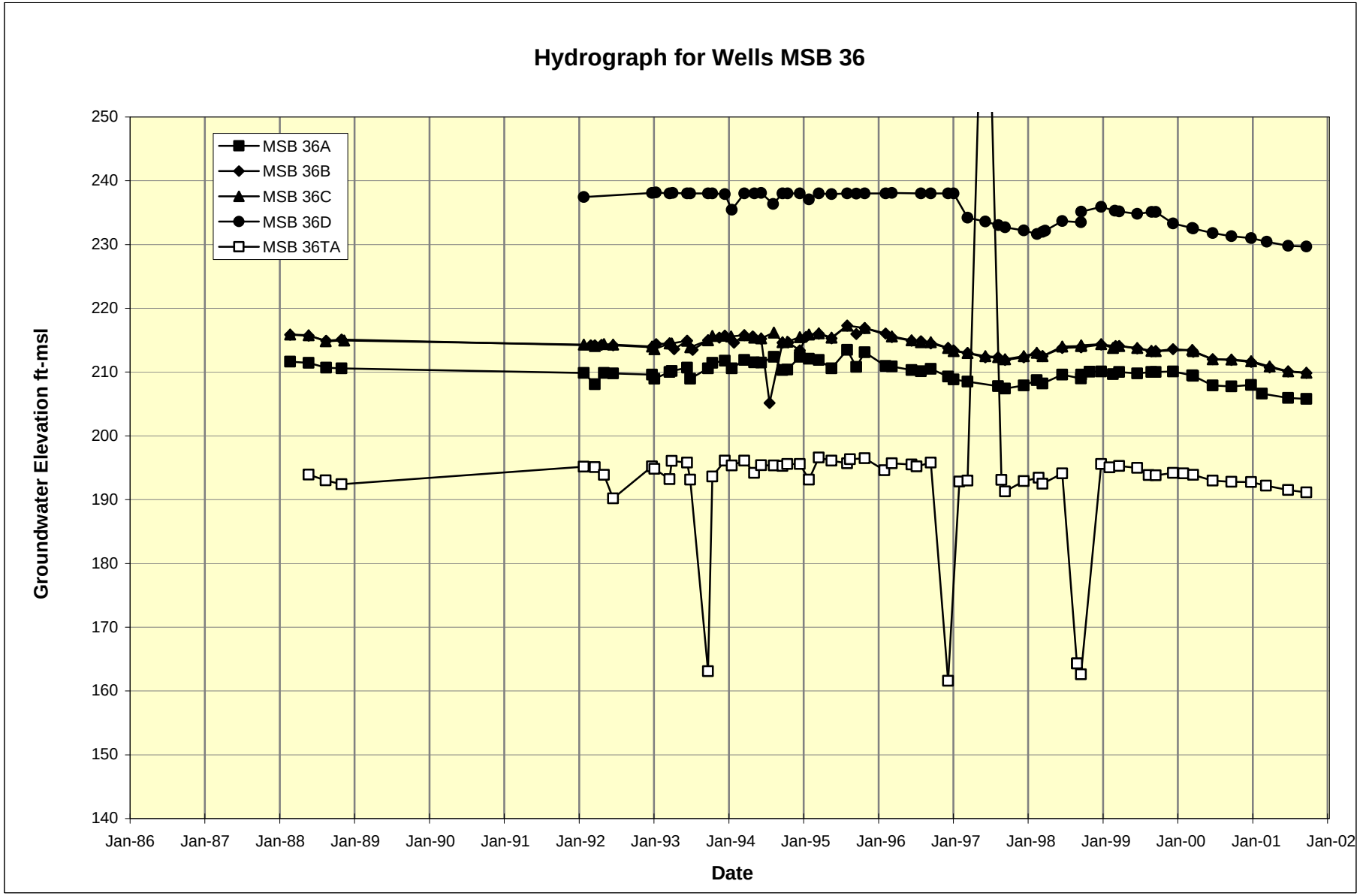
Date


Hydrograph for Wells MSB 36
MSB 36A
MSB 36B
MSB 36C
MSB 36D
MSB 36TA
Groundwater Elevation ft-msl
250
240
230
220
210
200
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180
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Jan-86
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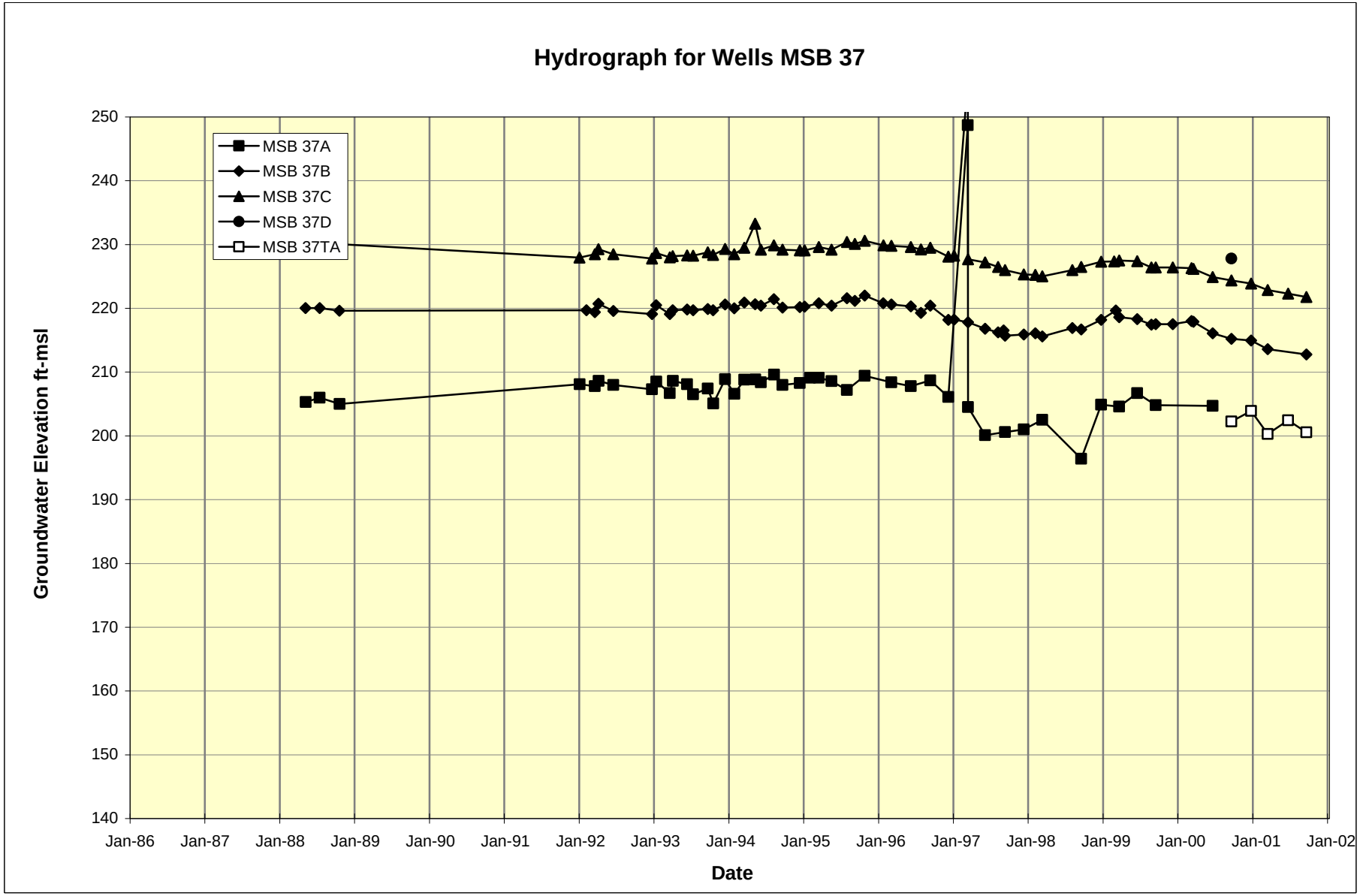
Hydrograph for Wells MSB 37
MSB 37A
MSB 37B
MSB 37C
MSB 37D
MSB 37TA
Groundwater Elevation ft-msl
250
240
230
220
210
200
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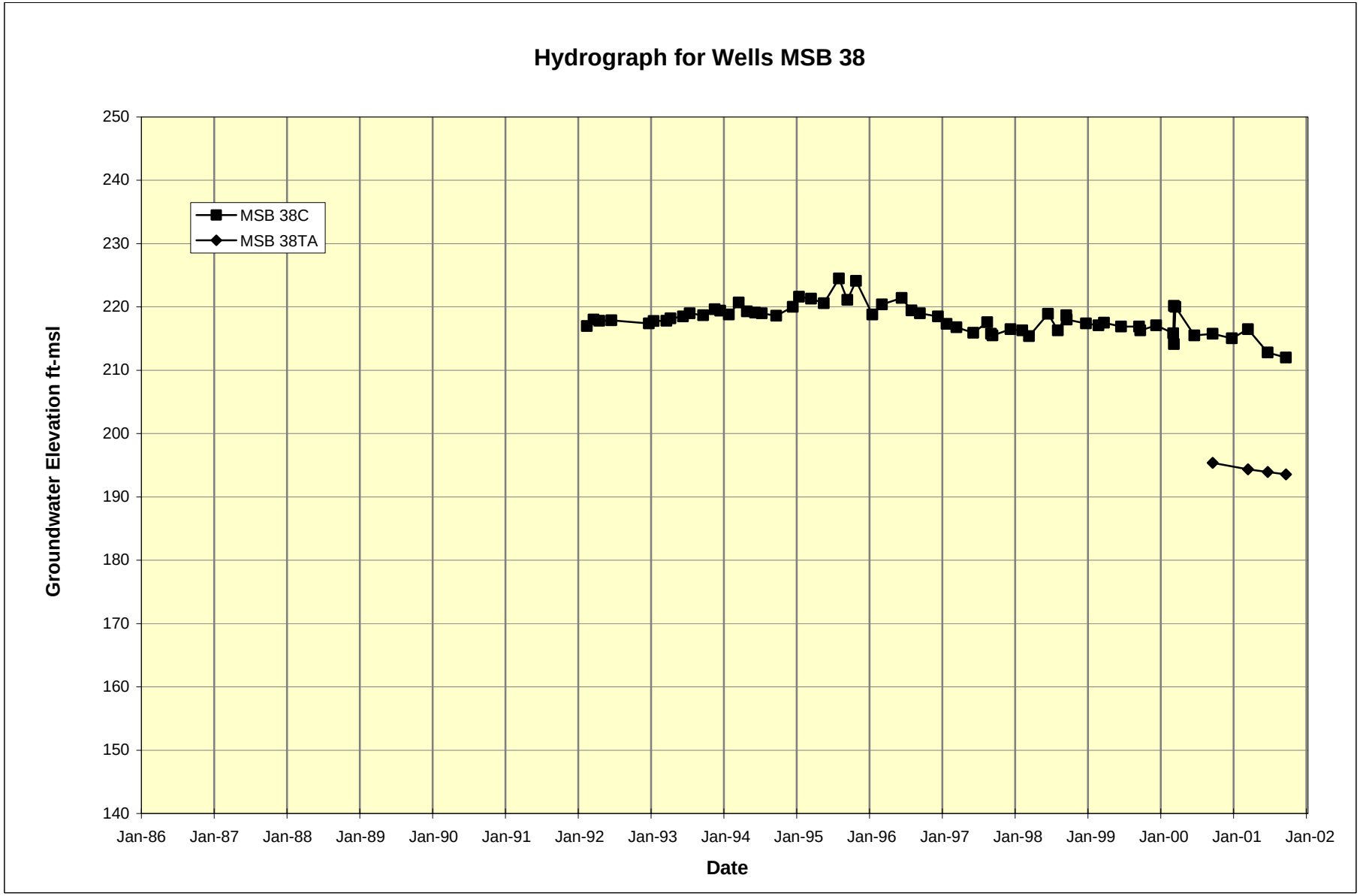
Hydrograph for Wells MSB 38
MSB 38C
MSB 38TA
Groundwater Elevation ft-msl
250
240
230
220
210
200
190
180
170
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Jan-86
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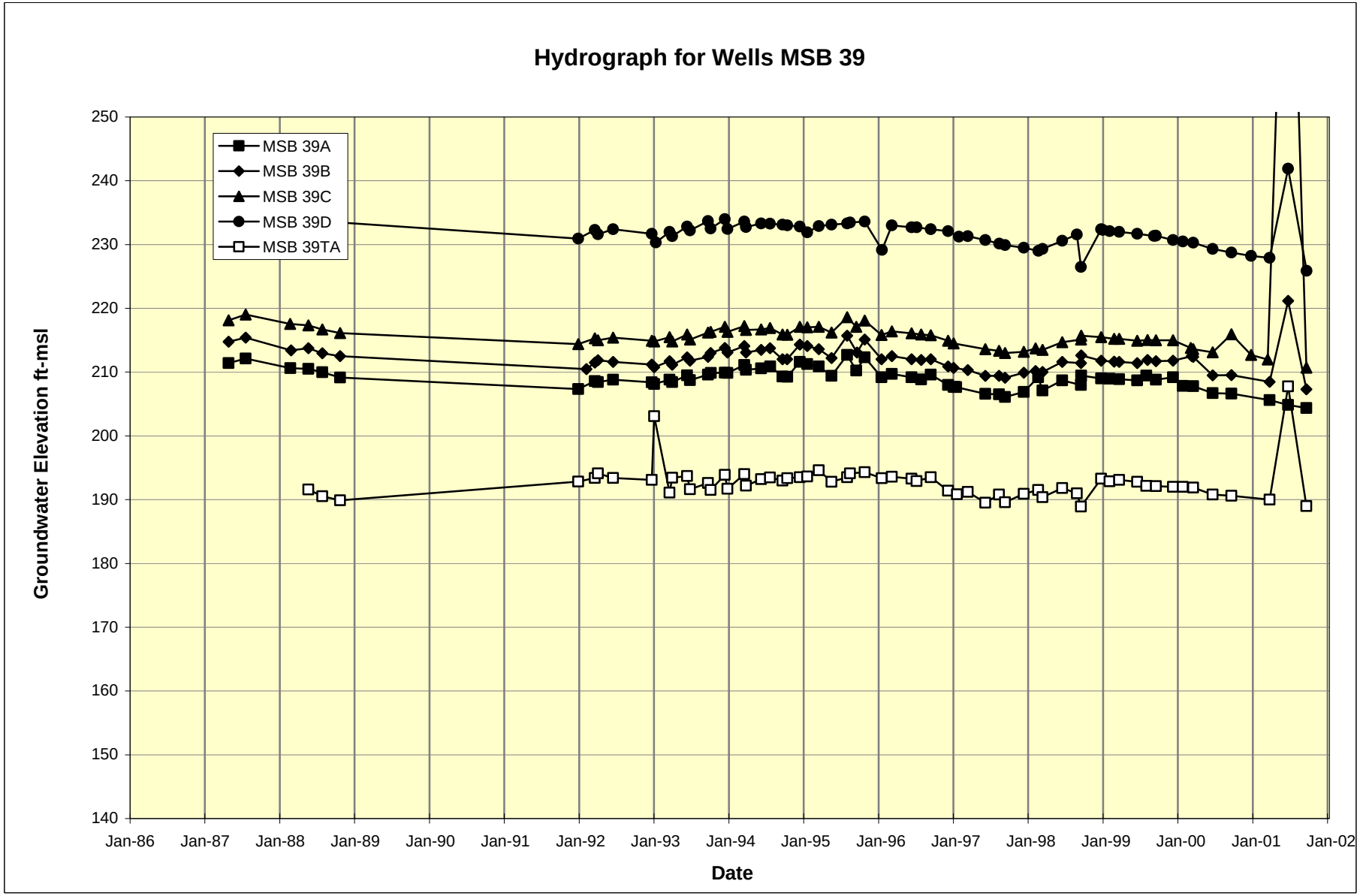
Hydrograph for Wells MSB 39
MSB 39A
MSB 39B
MSB 39C
MSB 39D
MSB 39TA
Groundwater Elevation ft-msl
250
240
230
220
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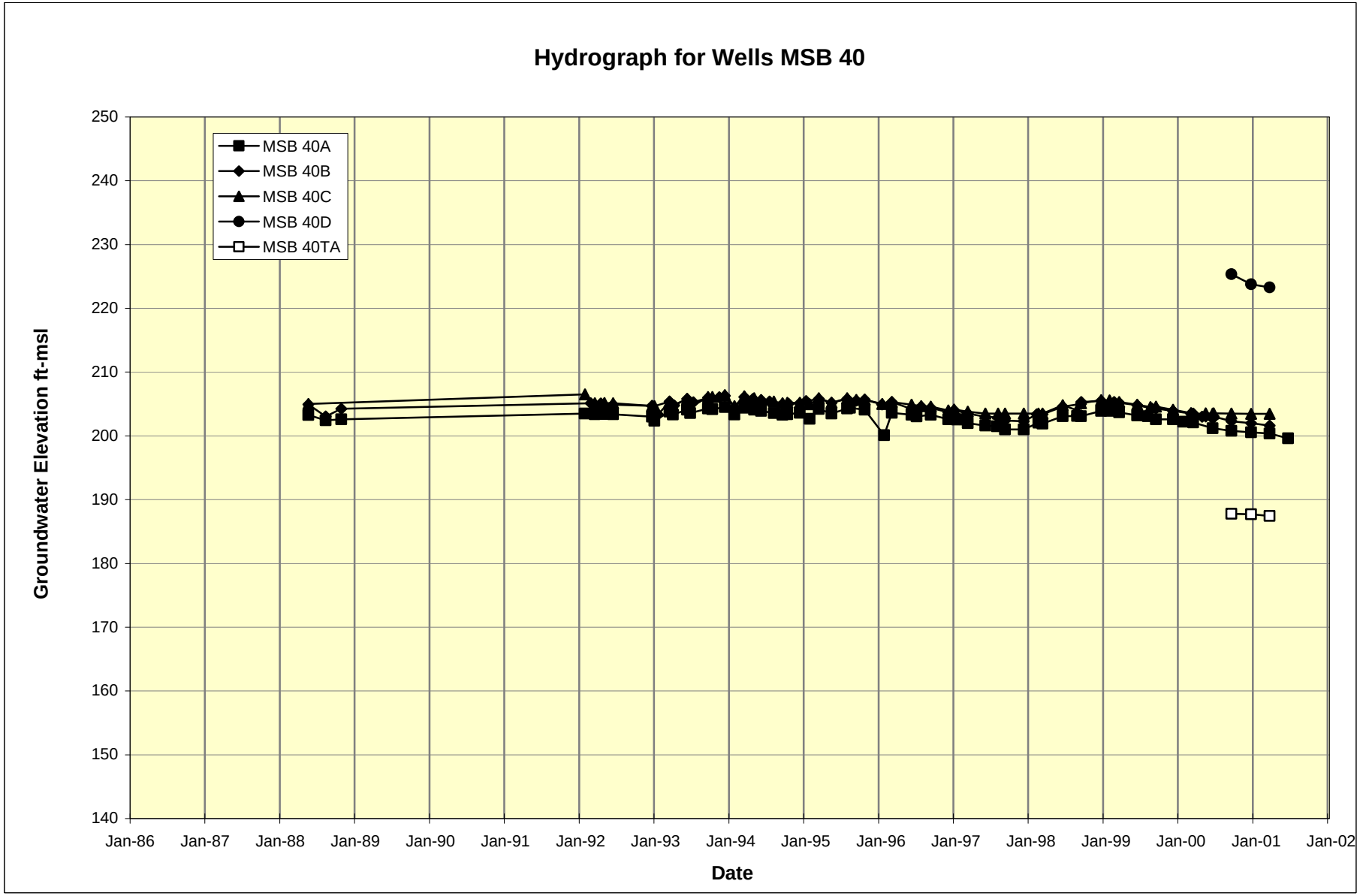
Date


Hydrograph for Wells MSB 40
MSB 40A
MSB 40B
MSB 40C
MSB 40D
MSB 40TA
Groundwater Elevation ft-msl
250
240
230
220
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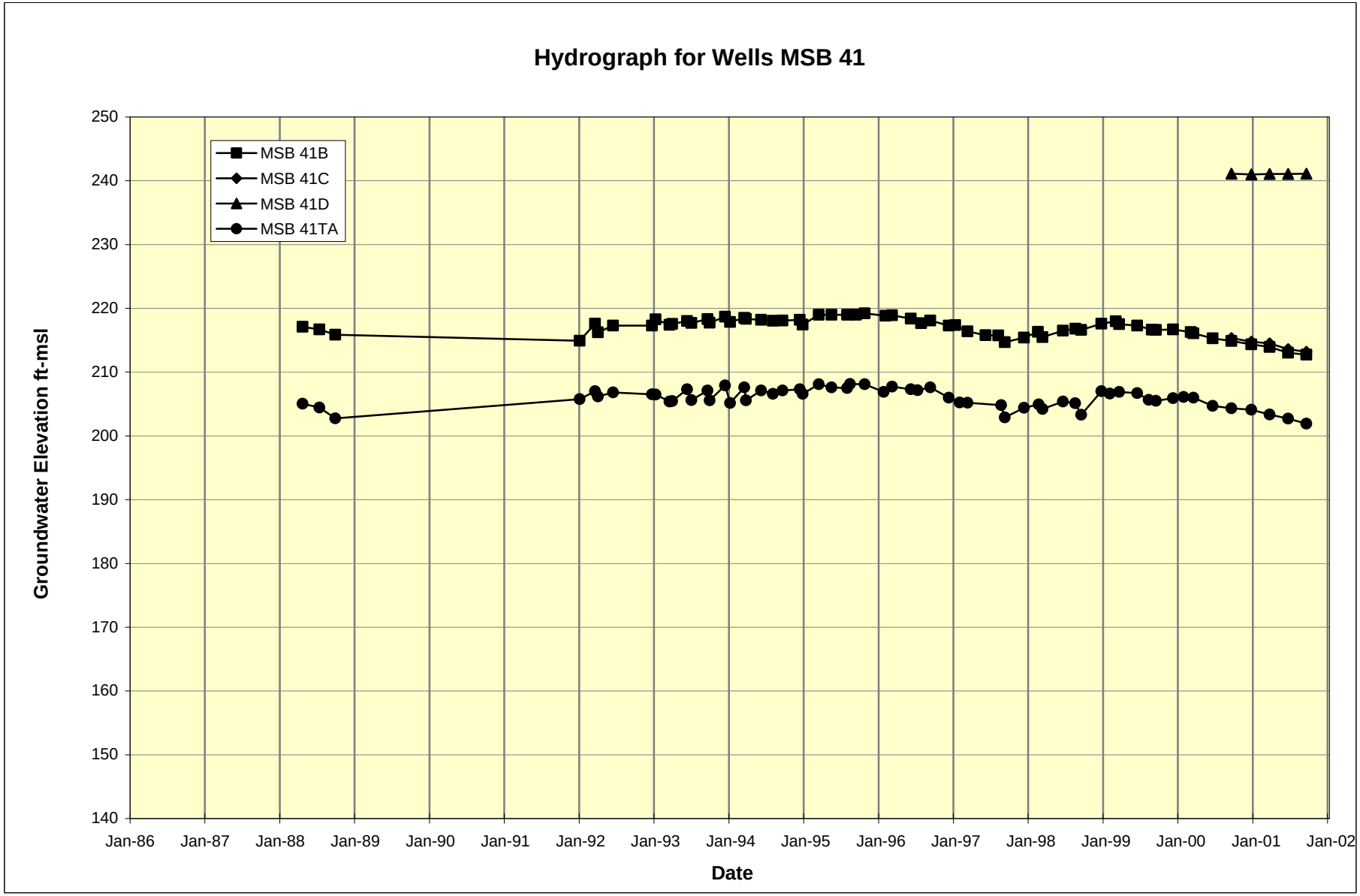
Hydrograph for Wells MSB 41
MSB 41B
MSB 41C
MSB 41D
MSB 41TA
Groundwater Elevation ft-msl
250
240
230
220
210
200
190
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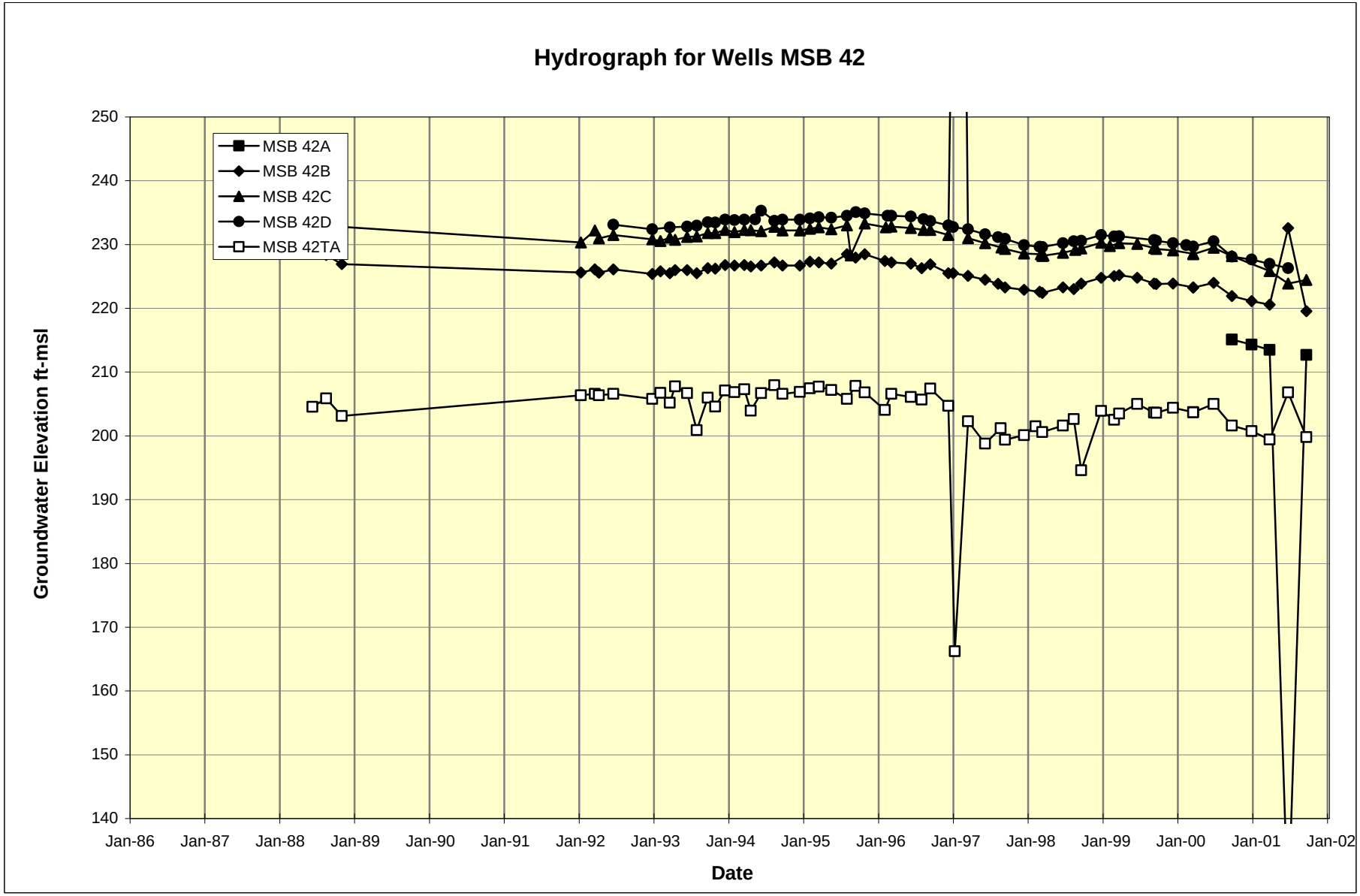
Hydrograph for Wells MSB 42
MSB 42A
MSB 42B
MSB 42C
MSB 42D
MSB 42TA
Groundwater Elevation ft-msl
250
240
230
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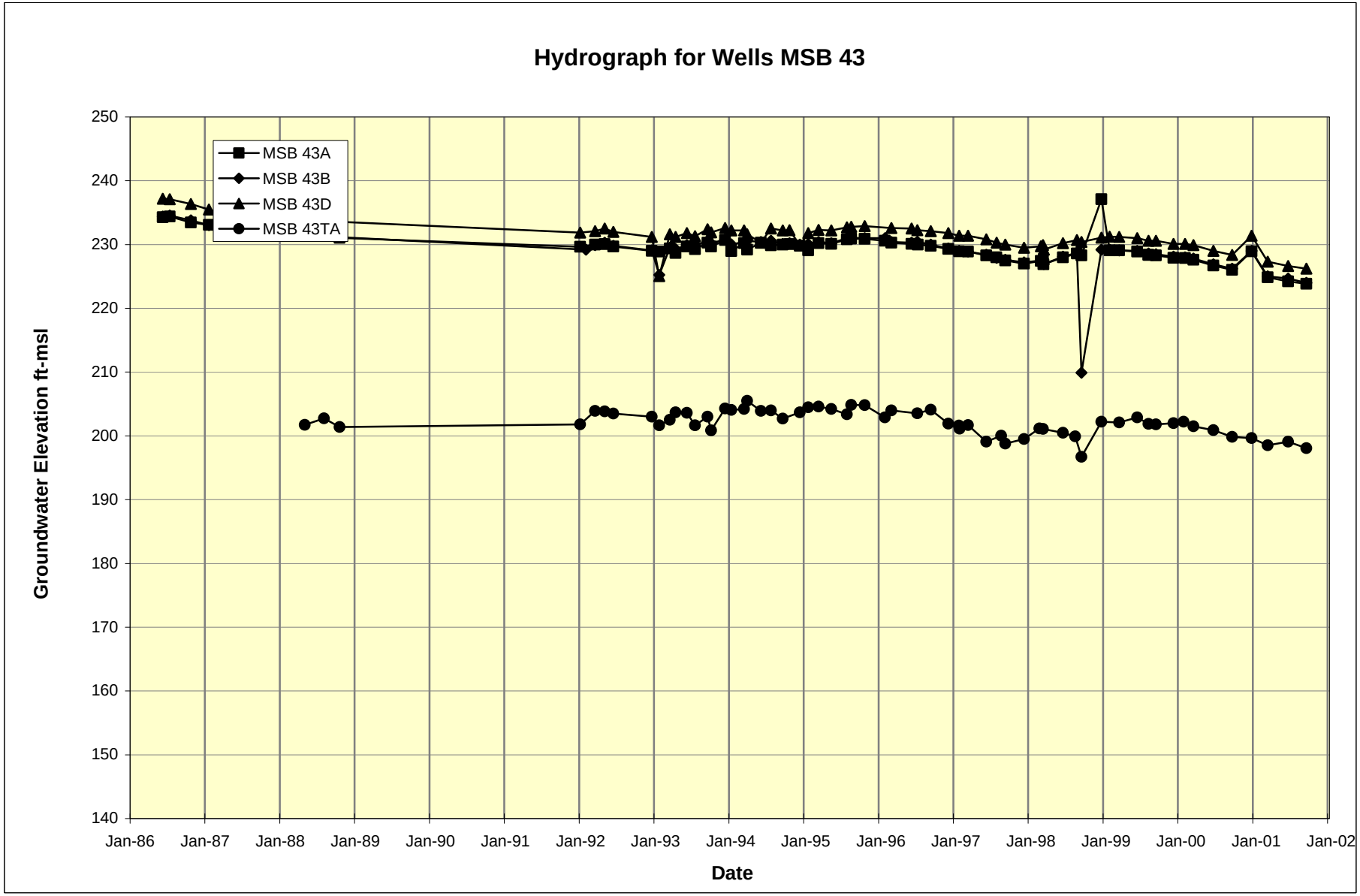
Hydrograph for Wells MSB 43
MSB 43A
MSB 43B
MSB 43D
MSB 43TA
Groundwater Elevation ft-msl
250
240
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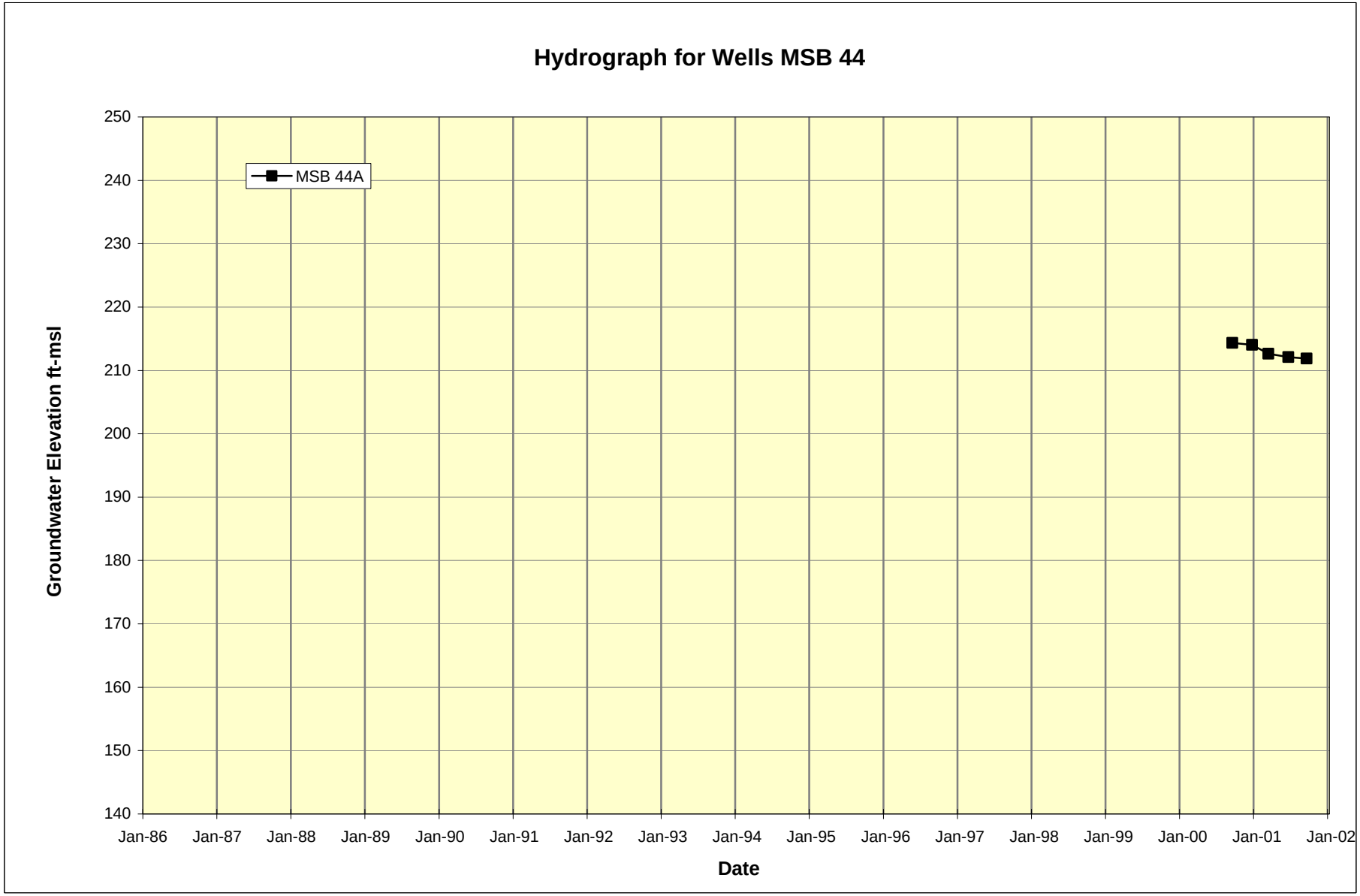
Hydrograph for Wells MSB 44
MSB 44A
Groundwater Elevation ft-msl
250
240
230
220
210
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190
180
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Jan-86
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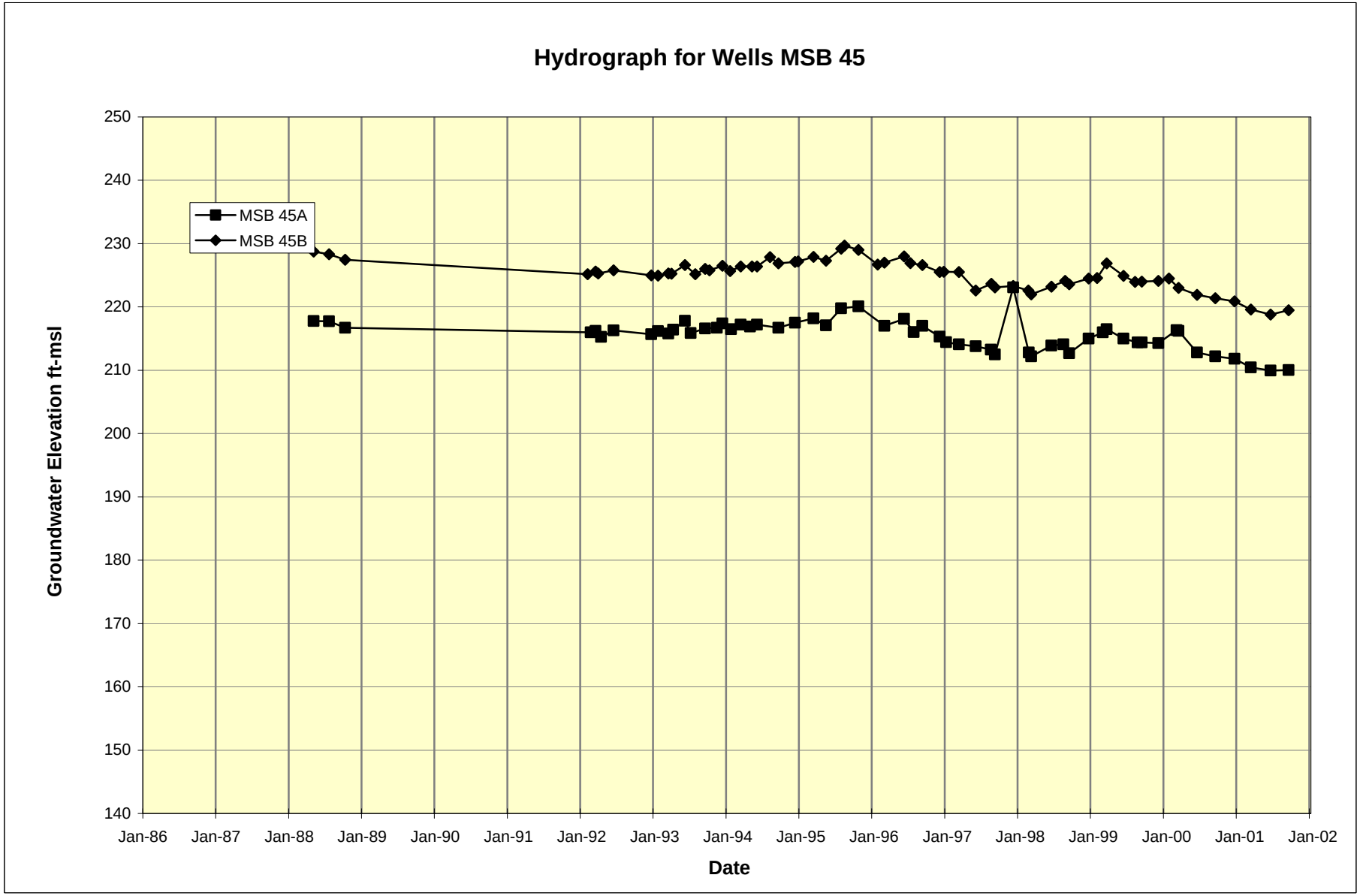
Hydrograph for Wells MSB 45
MSB 45A
MSB 45B
Groundwater Elevation ft-msl
250
240
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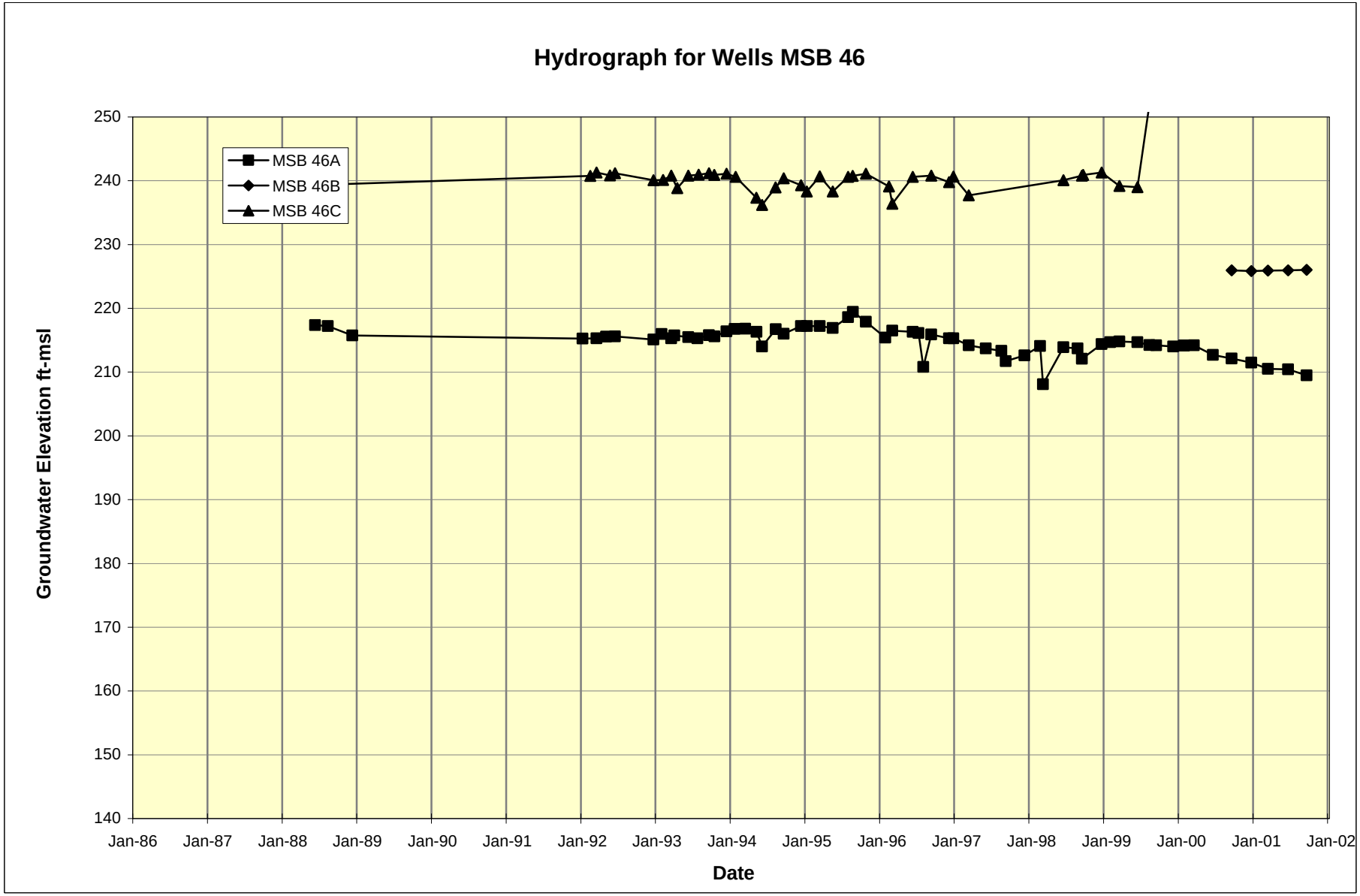
Hydrograph for Wells MSB 46
MSB 46A
MSB 46B
MSB 46C
Groundwater Elevation ft-msl
250
240
230
220
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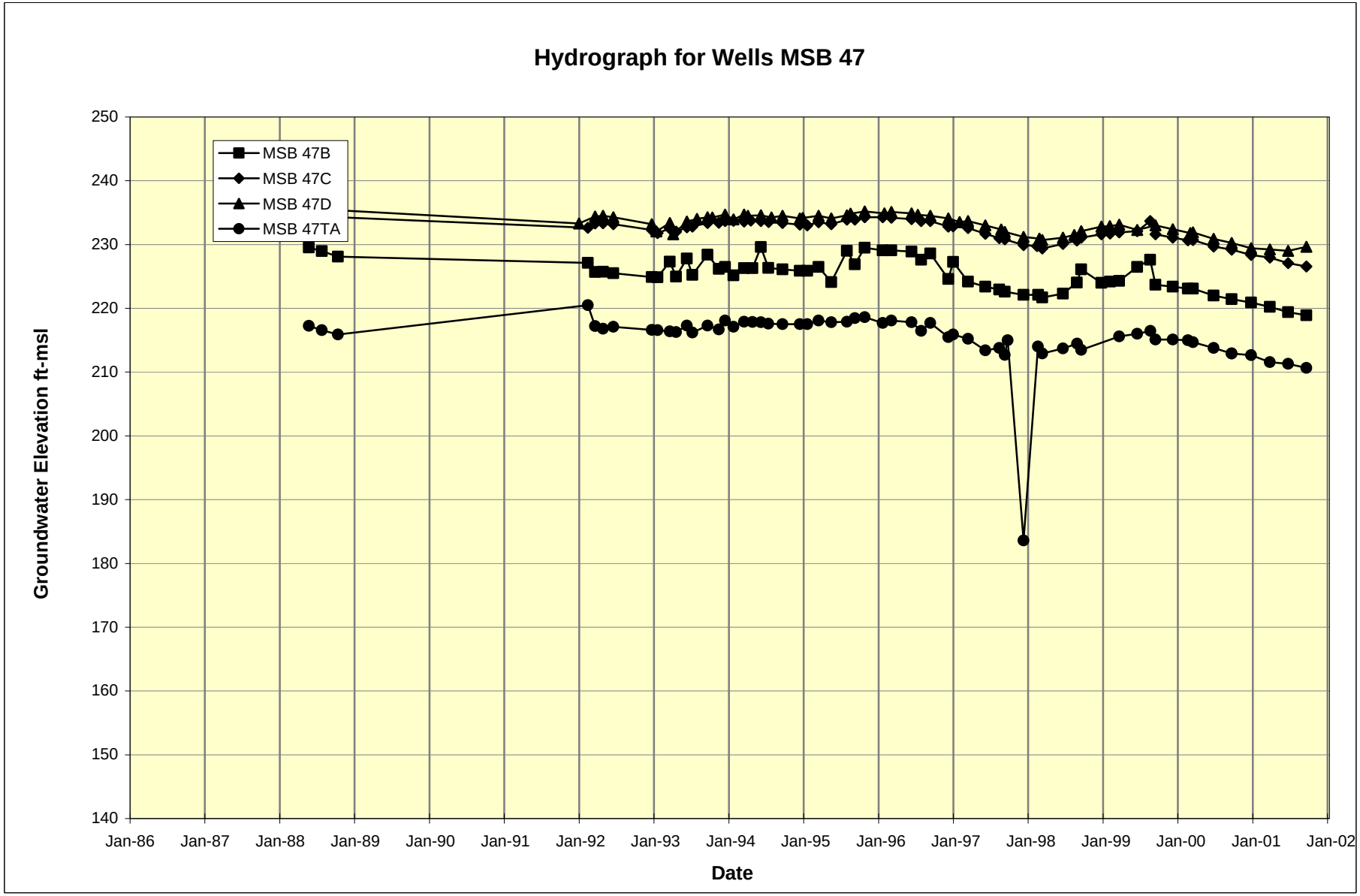
Hydrograph for Wells MSB 47
MSB 47B
MSB 47C
MSB 47D
MSB 47TA
Groundwater Elevation ft-msl
250
240
230
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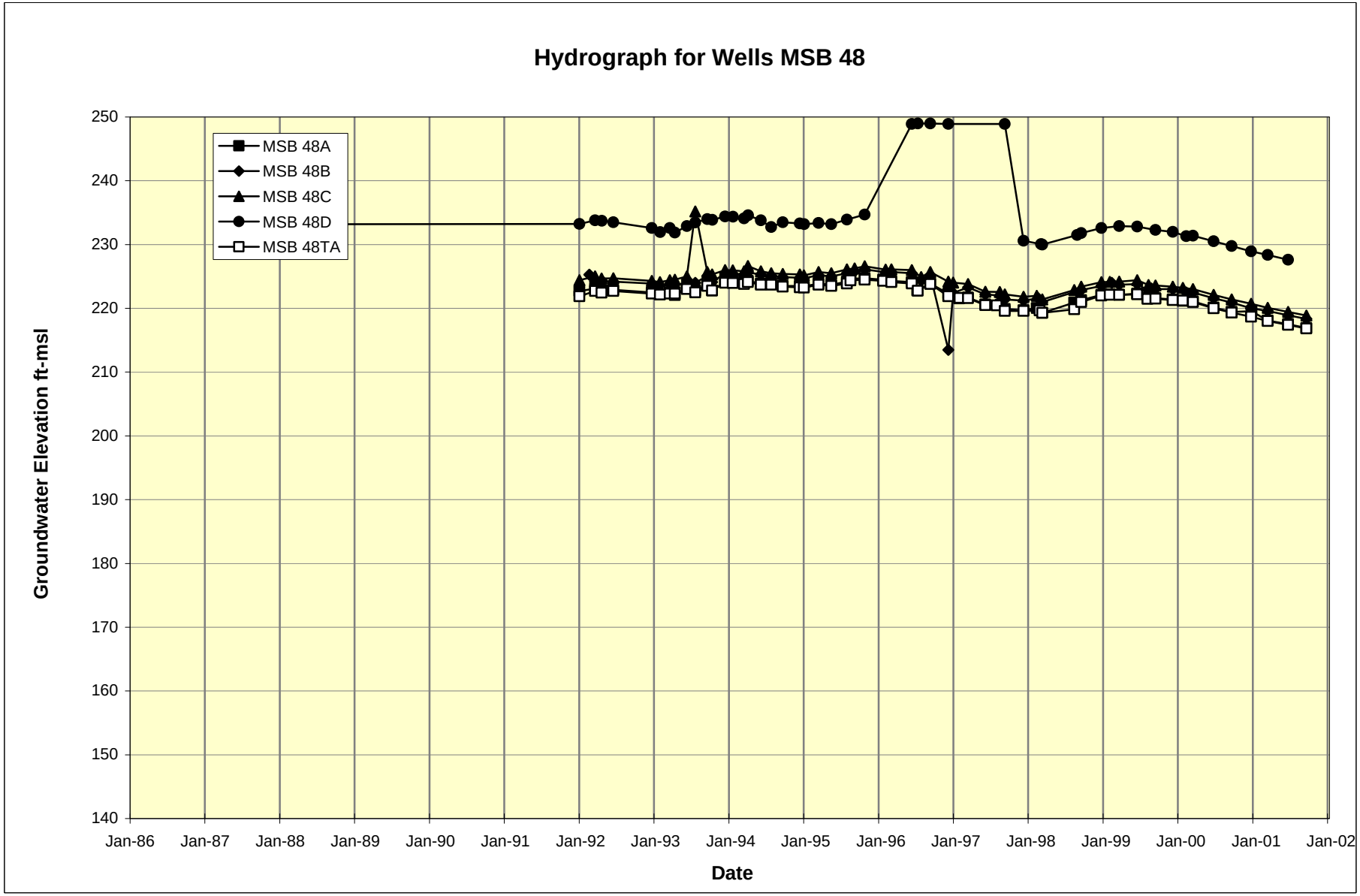
Hydrograph for Wells MSB 48
MSB 48A
MSB 48B
MSB 48C
MSB 48D
MSB 48TA
Groundwater Elevation ft-msl
250
240
230
220
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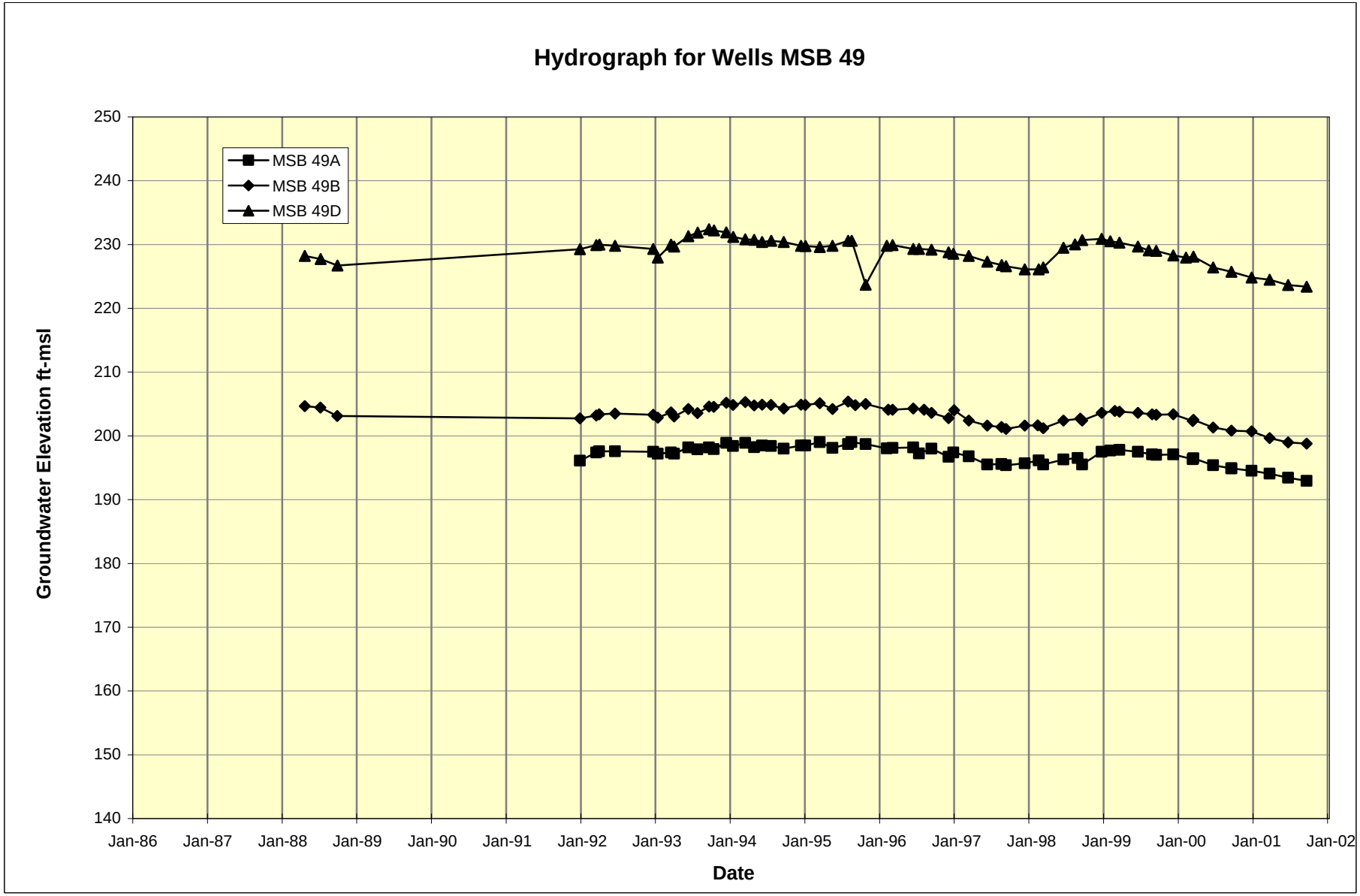
Hydrograph for Wells MSB 49
MSB 49A
MSB 49B
MSB 49D
Groundwater Elevation ft-msl
250
240
230
220
210
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190
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170
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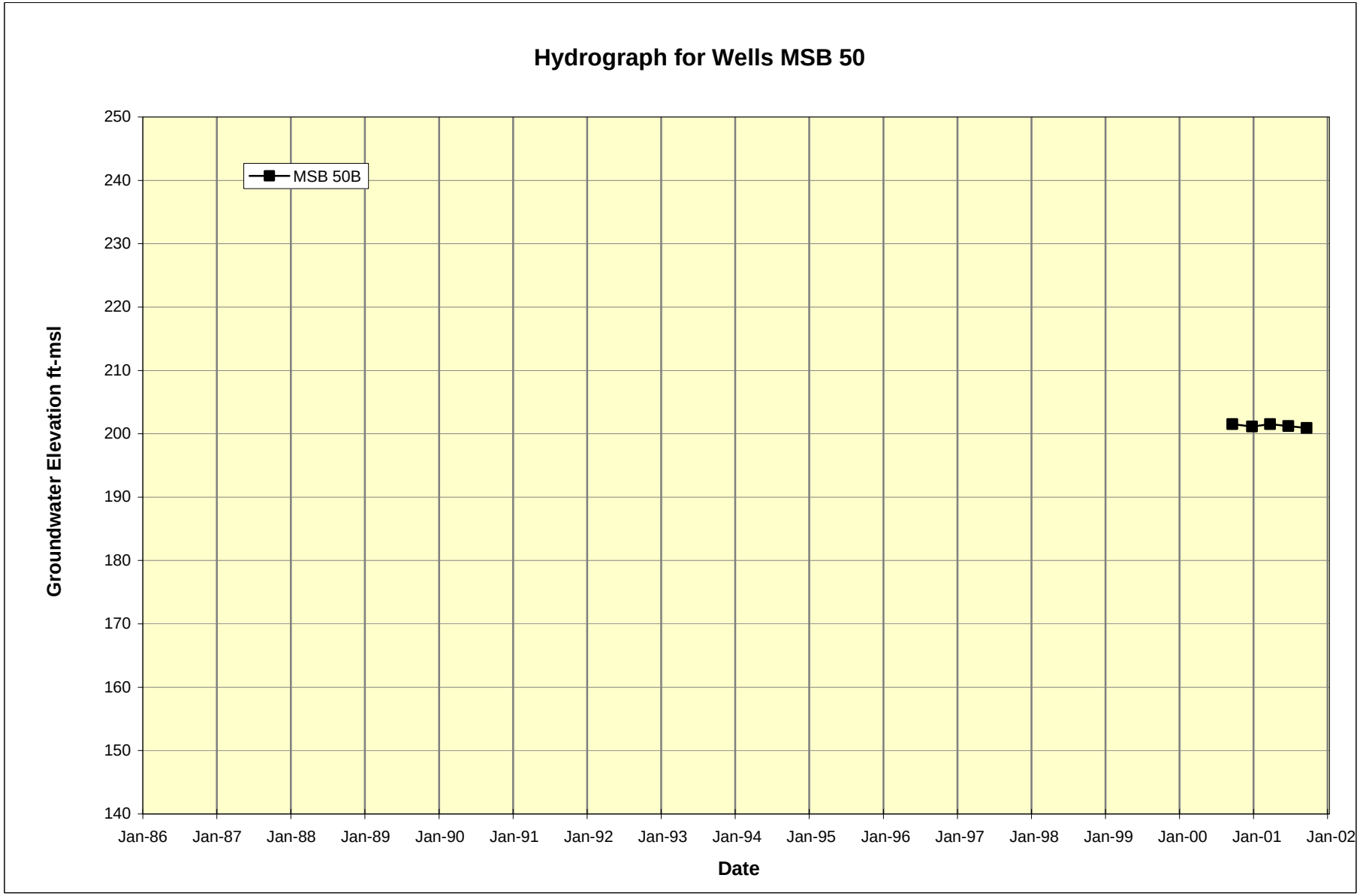
Hydrograph for Wells MSB 50
MSB 50B
Groundwater Elevation ft-msl
250
240
230
220
210
200
190
180
170
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Jan-86
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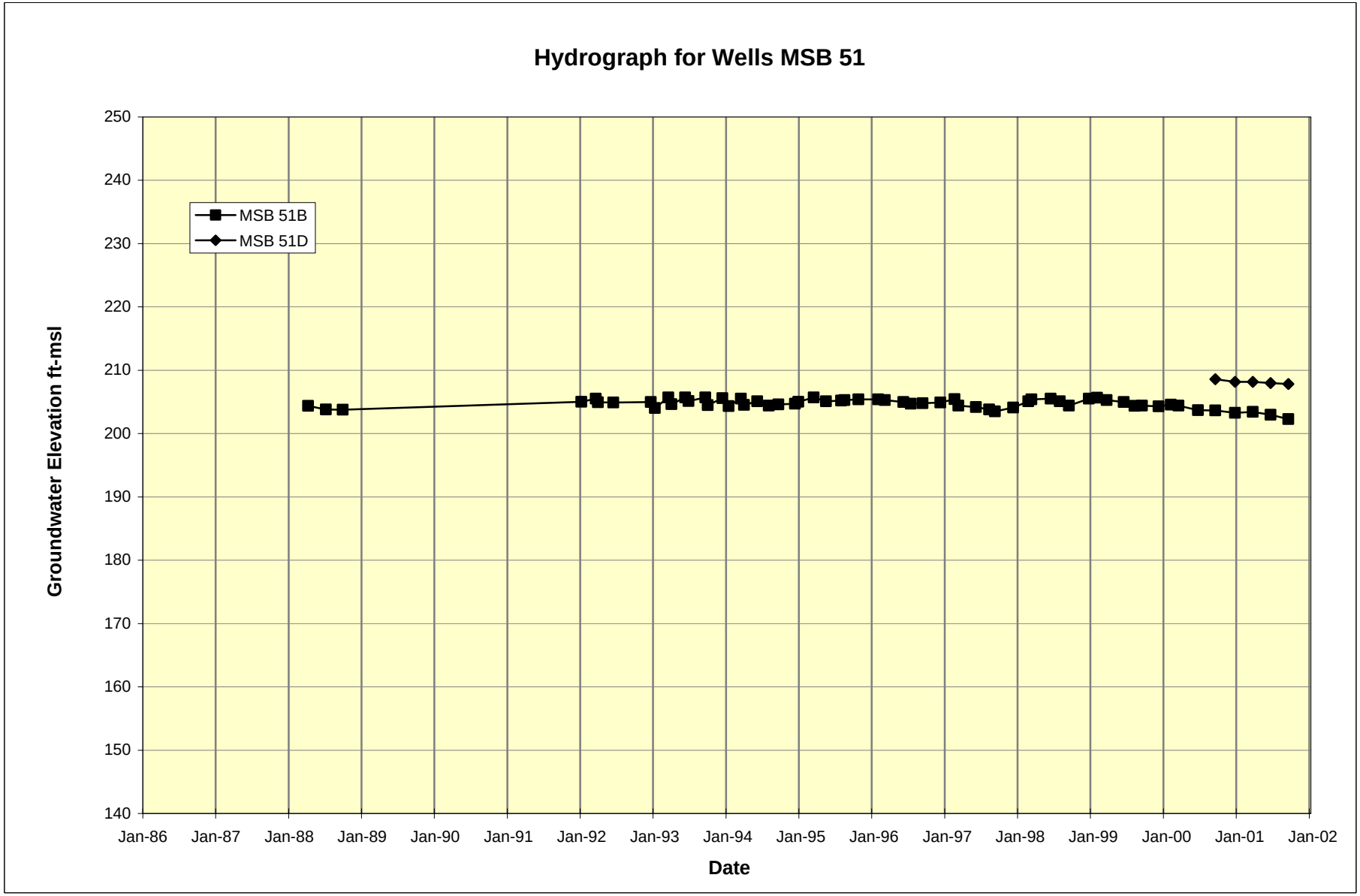
Hydrograph for Wells MSB 51
MSB 51B
MSB 51D
Groundwater Elevation ft-msl
250
240
230
220
210
200
190
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Jan-86
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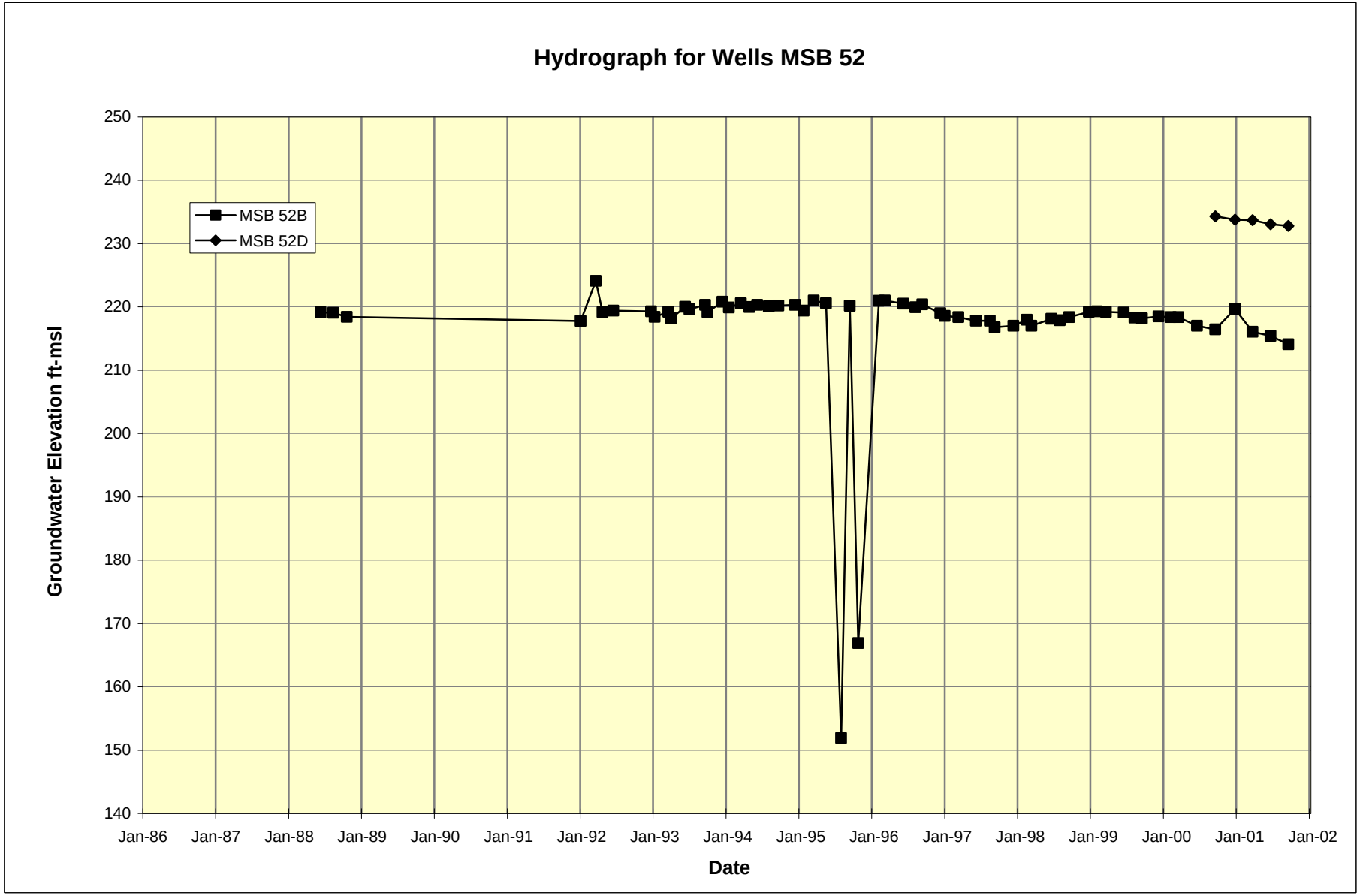
Hydrograph for Wells MSB 52
MSB 52B
MSB 52D
Groundwater Elevation ft-msl
250
240
230
220
210
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Jan-86
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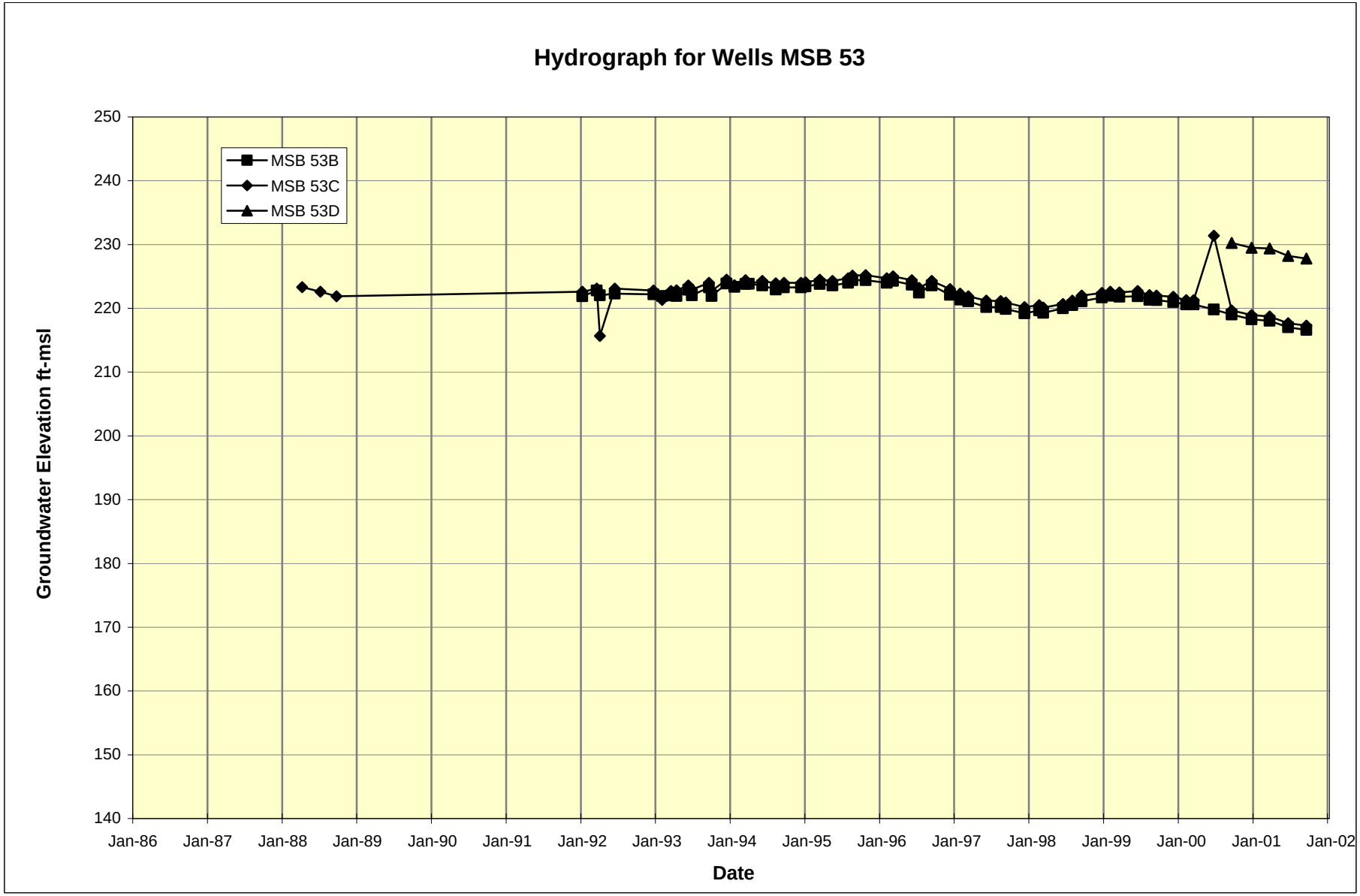
Hydrograph for Wells MSB 53
MSB 53B
MSB 53C
MSB 53D
Groundwater Elevation ft-msl
250
240
230
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210
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Jan-86
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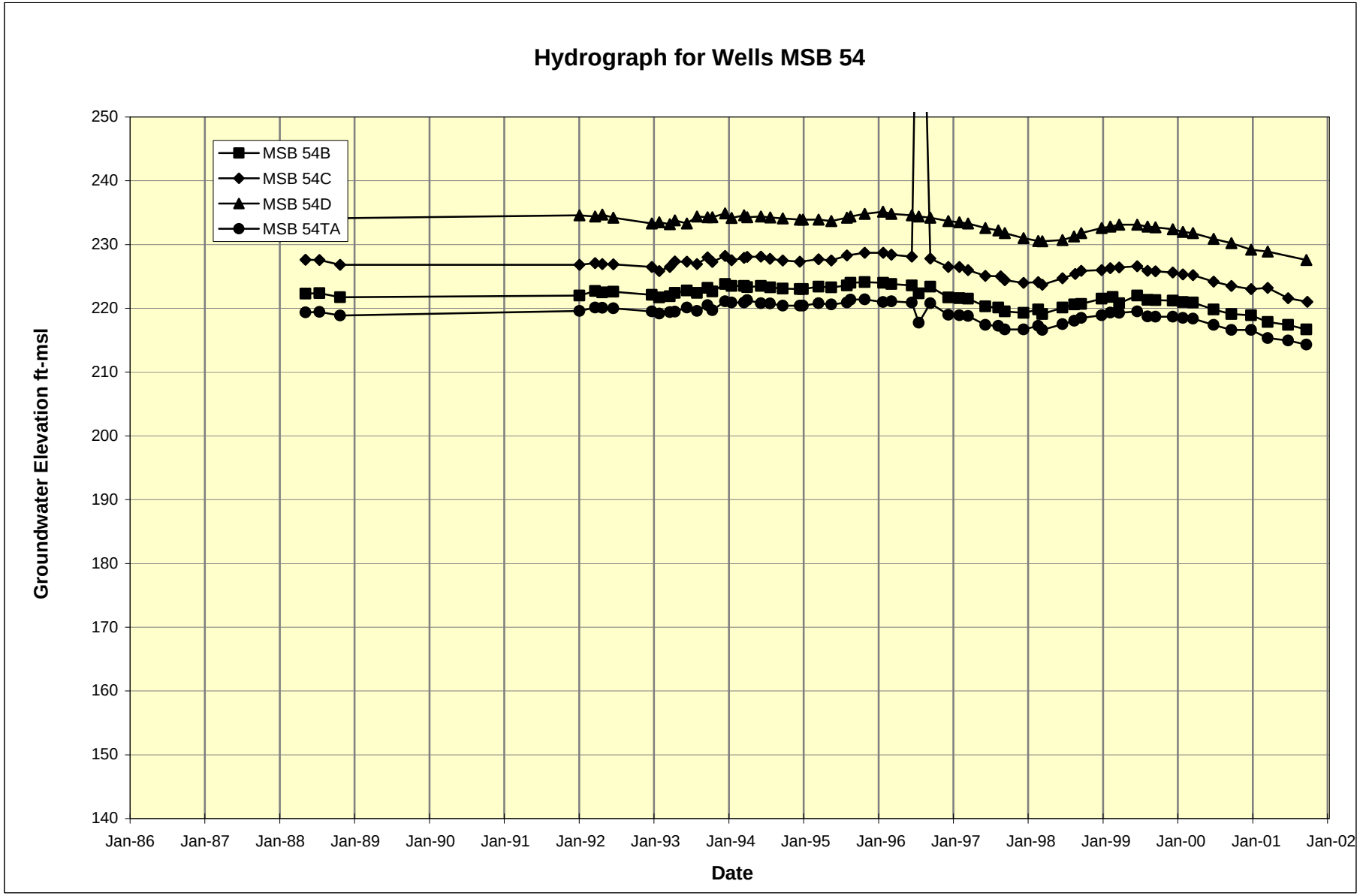
Date


Hydrograph for Wells MSB 54
MSB 54B
MSB 54C
MSB 54D
MSB 54TA
Groundwater Elevation ft-msl
250
240
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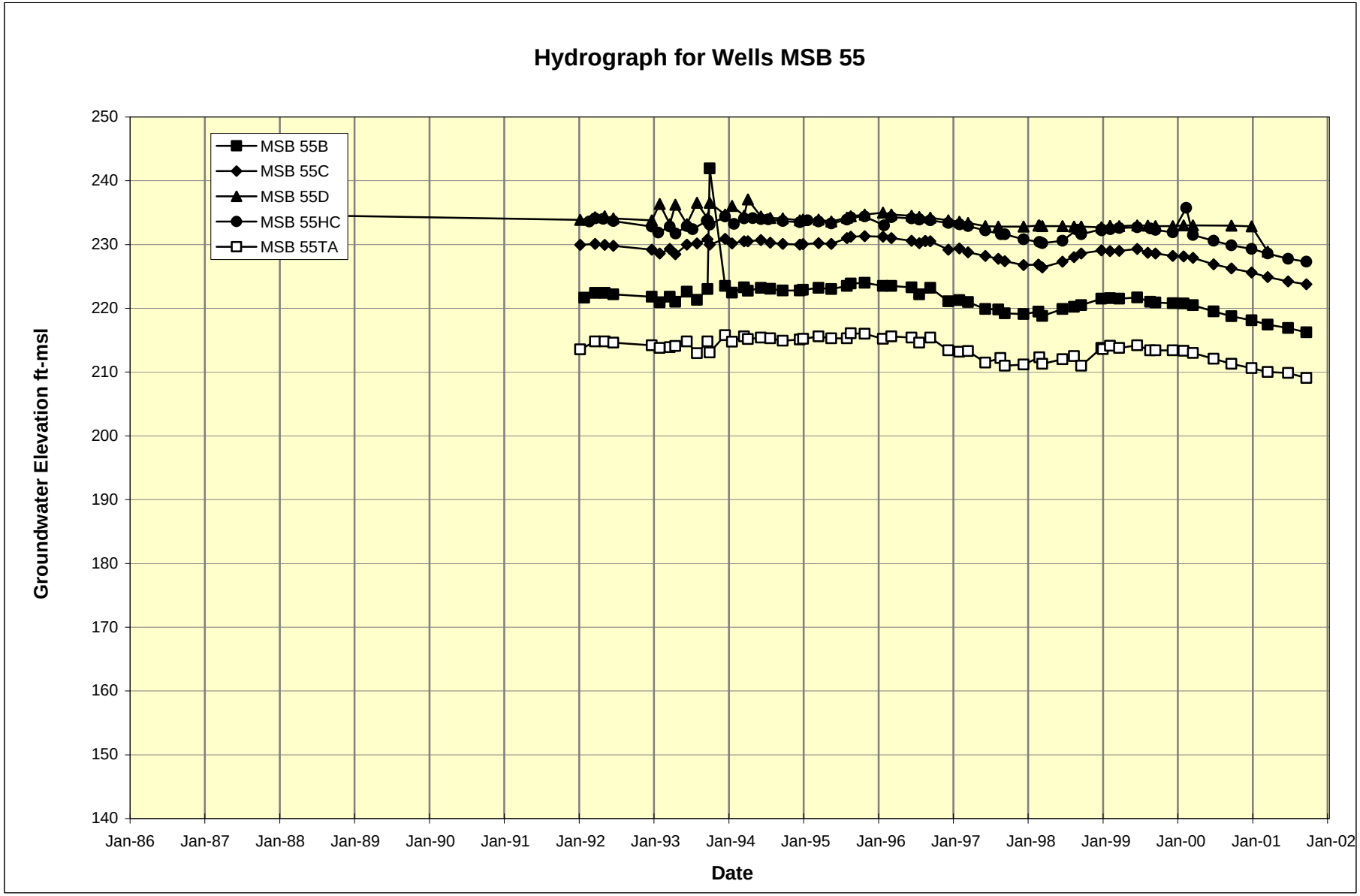
Date


Hydrograph for Wells MSB 55
MSB 55B
MSB 55C
MSB 55D
MSB 55HC
MSB 55TA
Groundwater Elevation ft-msl
250
240
230
220
210
200
190
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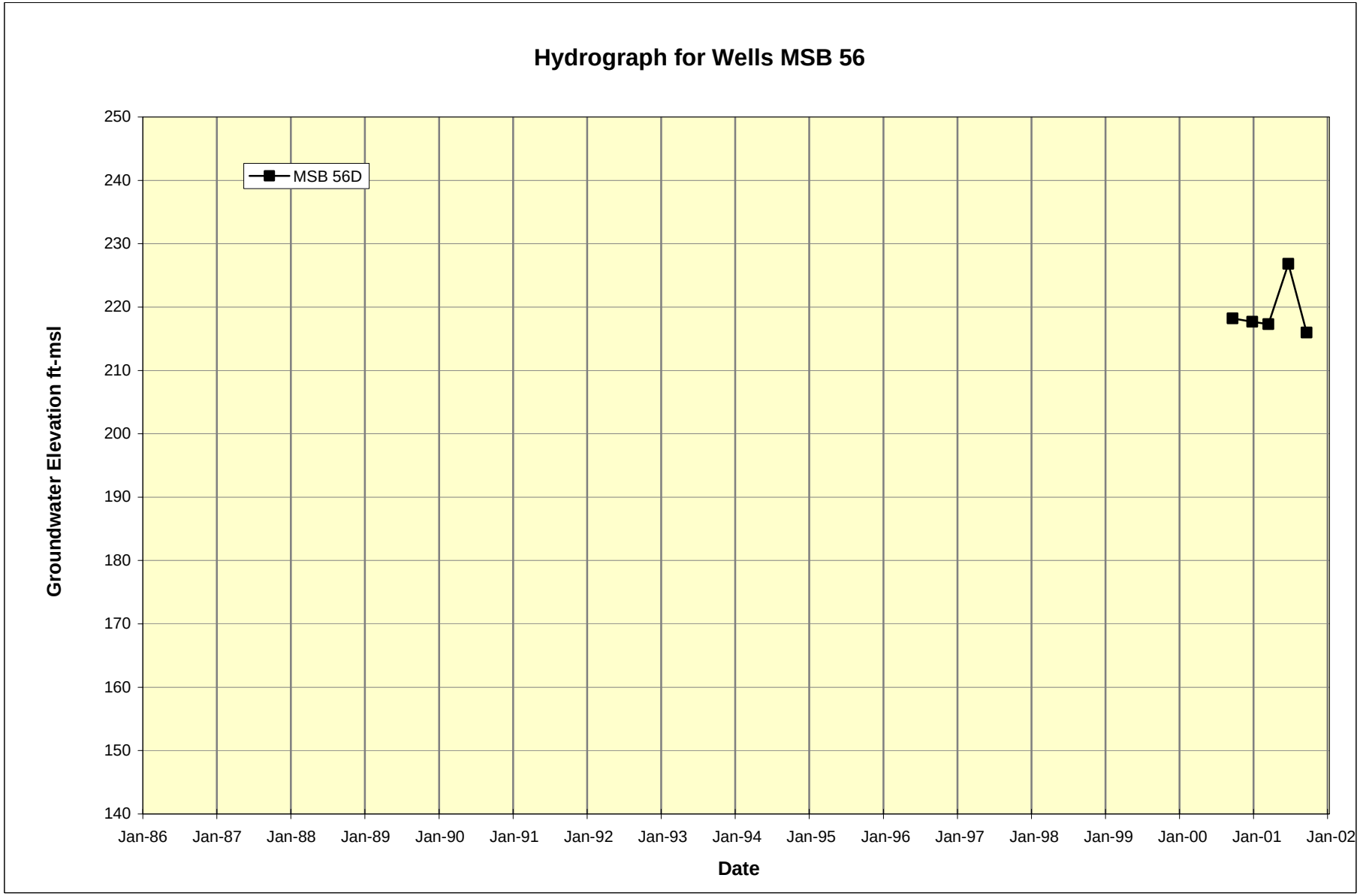
Hydrograph for Wells MSB 56
MSB 56D
Groundwater Elevation ft-msl
250
240
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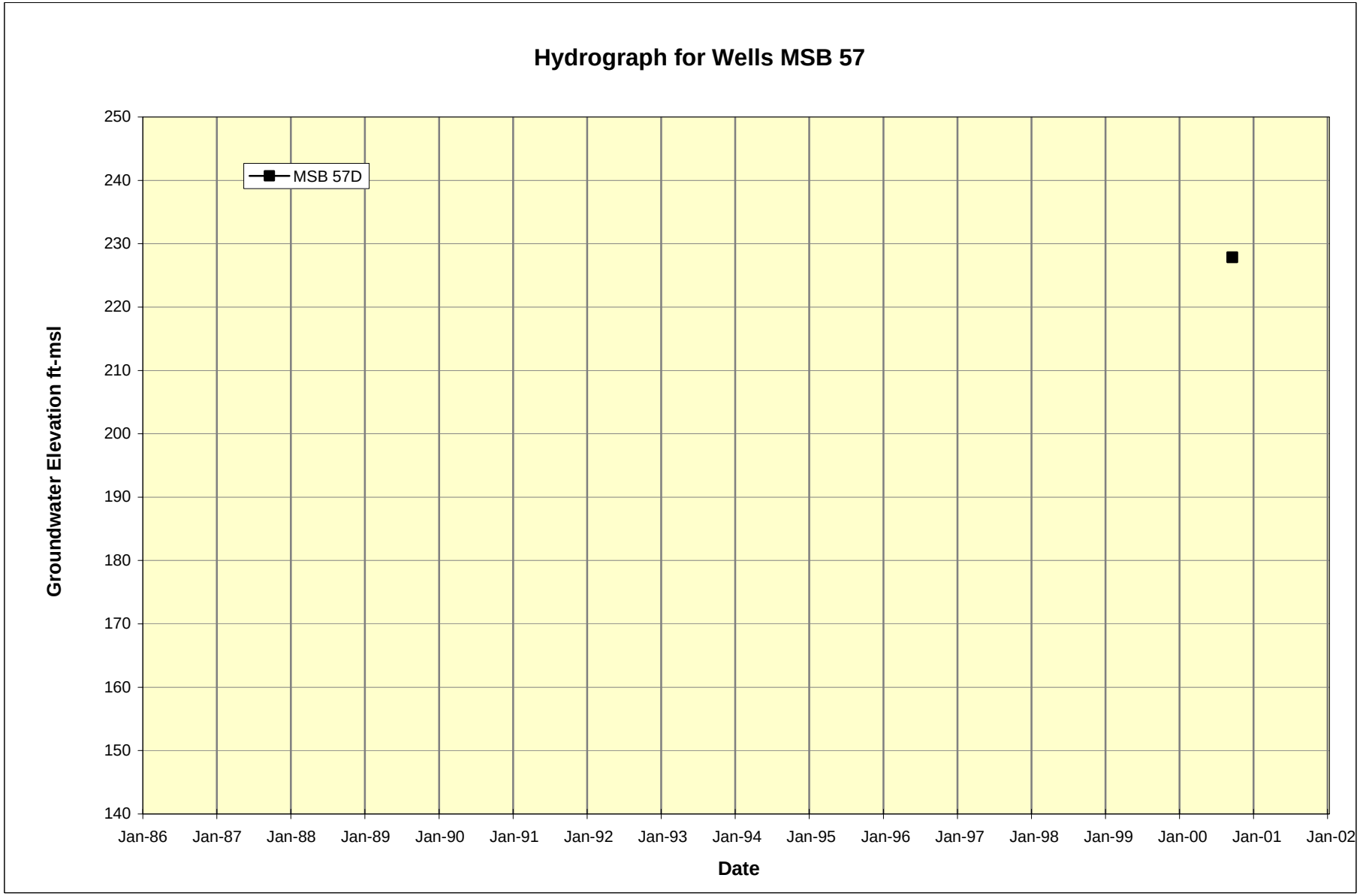
Date


Hydrograph for Wells MSB 57
MSB 57D
Groundwater Elevation ft-msl
250
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Jan-86
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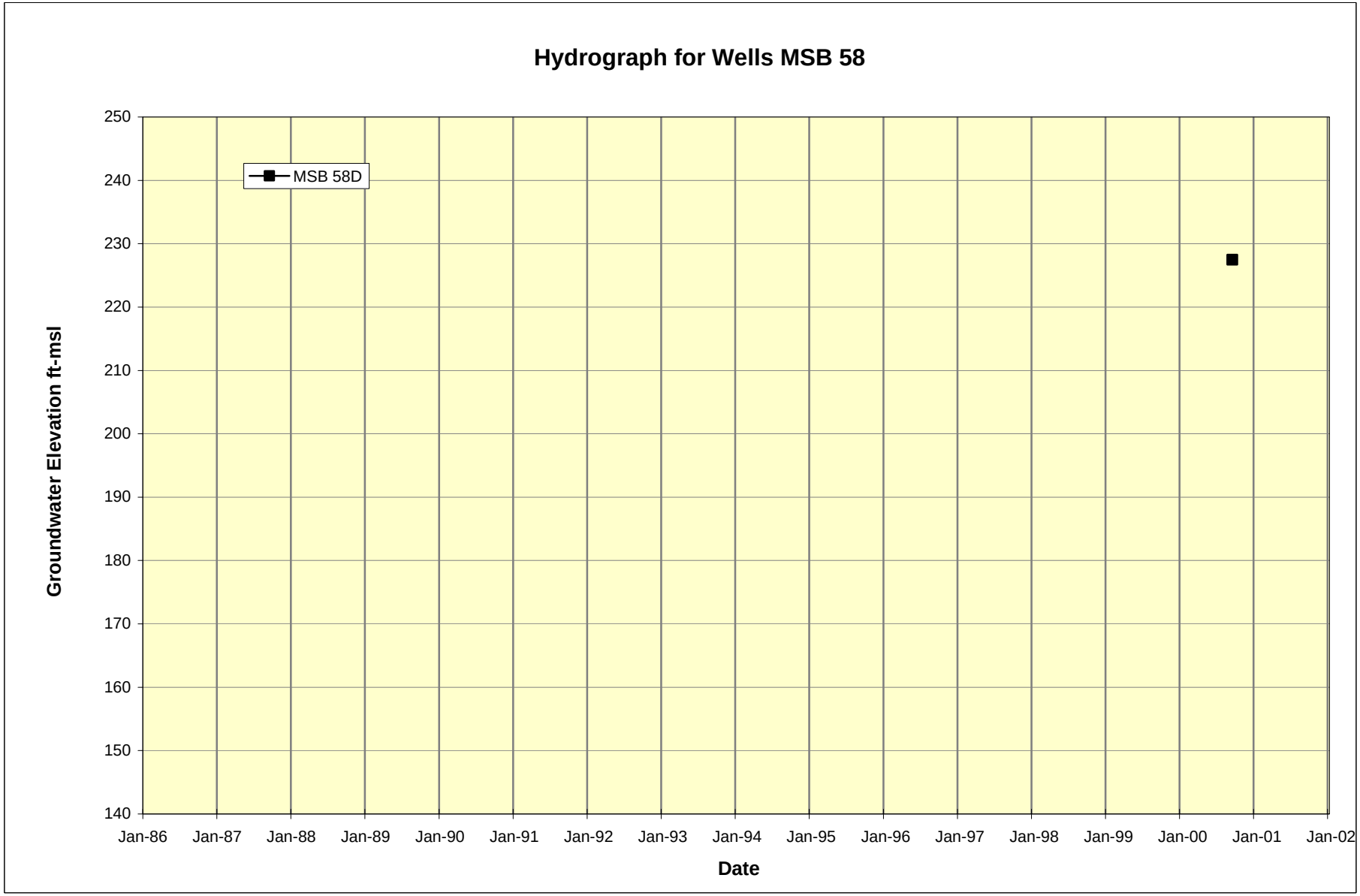
Hydrograph for Wells MSB 58
MSB 58D
Groundwater Elevation ft-msl
250
240
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Jan-86
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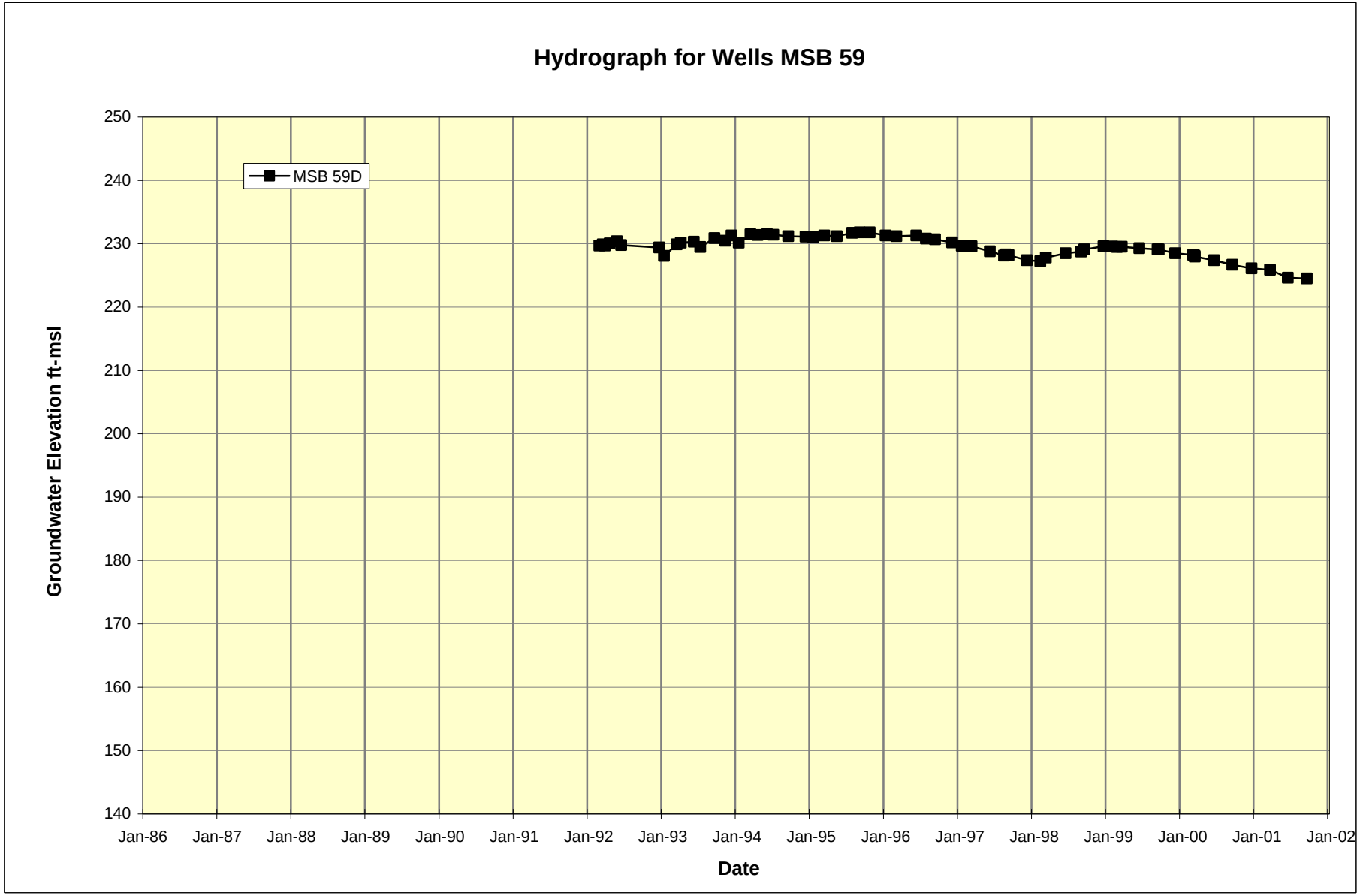
Hydrograph for Wells MSB 59
MSB 59D
Groundwater Elevation ft-msl
250
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Jan-86
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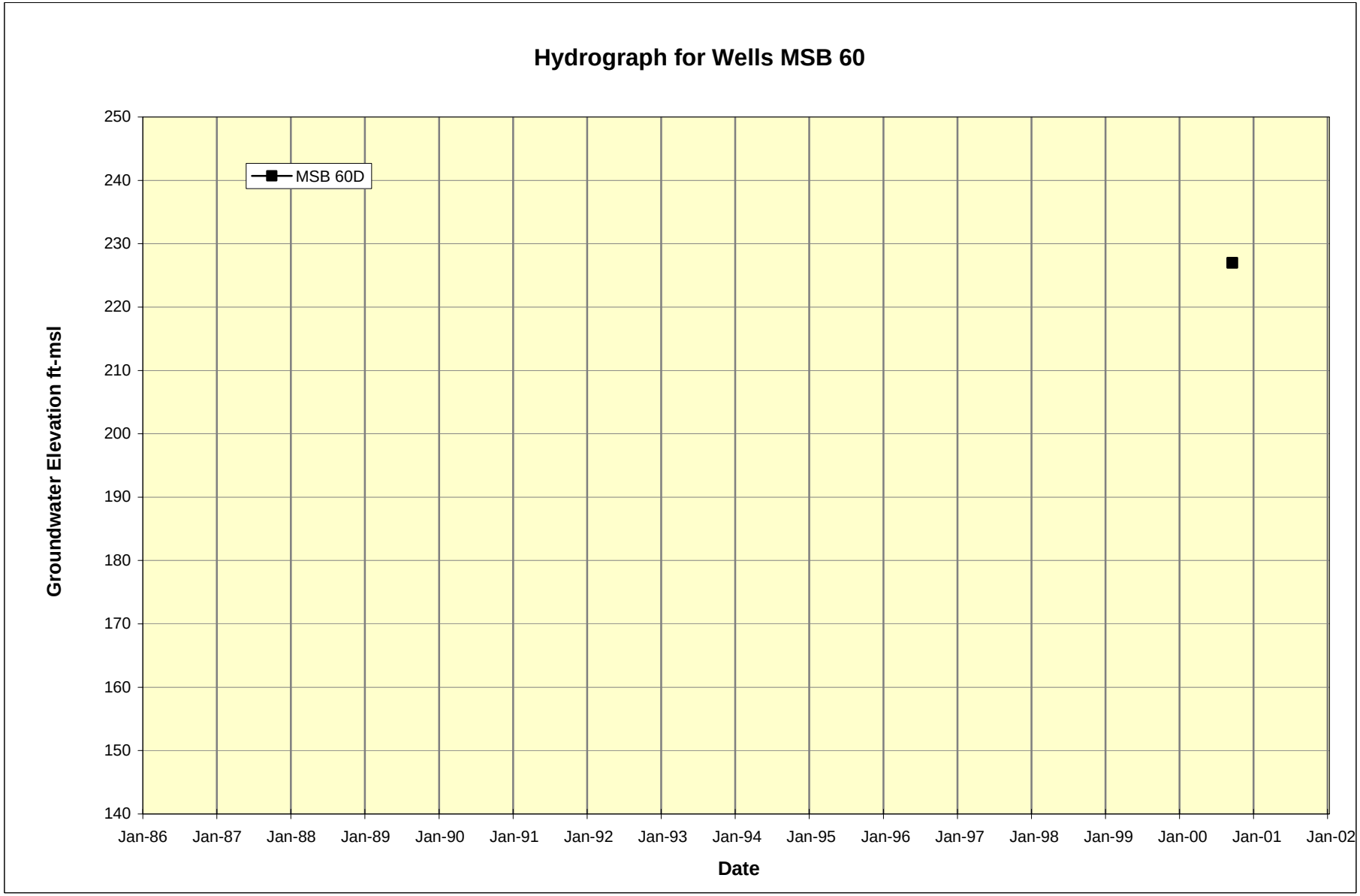
Hydrograph for Wells MSB 60
MSB 60D
Groundwater Elevation ft-msl
250
240
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Jan-86
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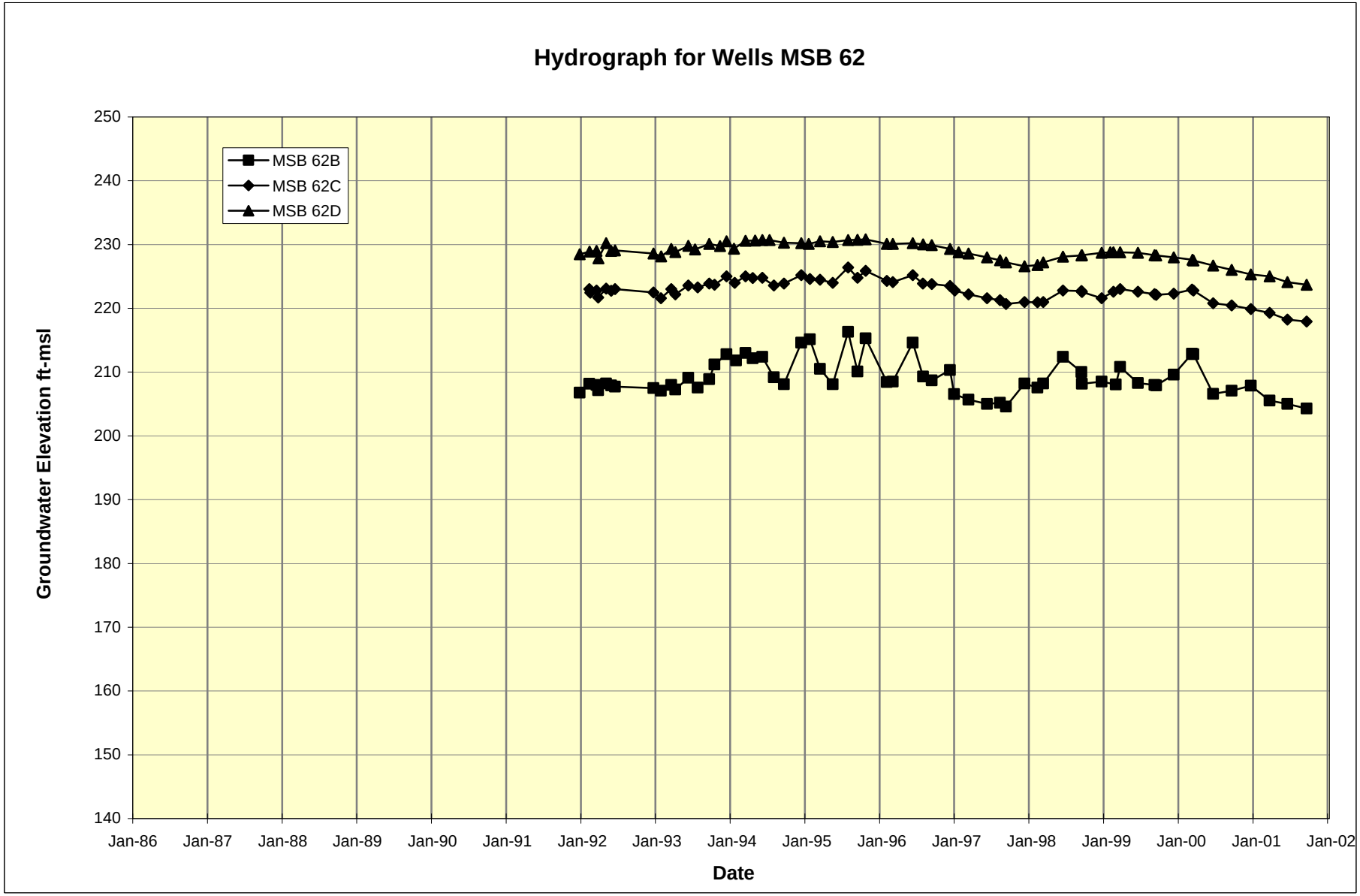
Hydrograph for Wells MSB 62
MSB 62B
MSB 62C
MSB 62D
Groundwater Elevation ft-msl
250
240
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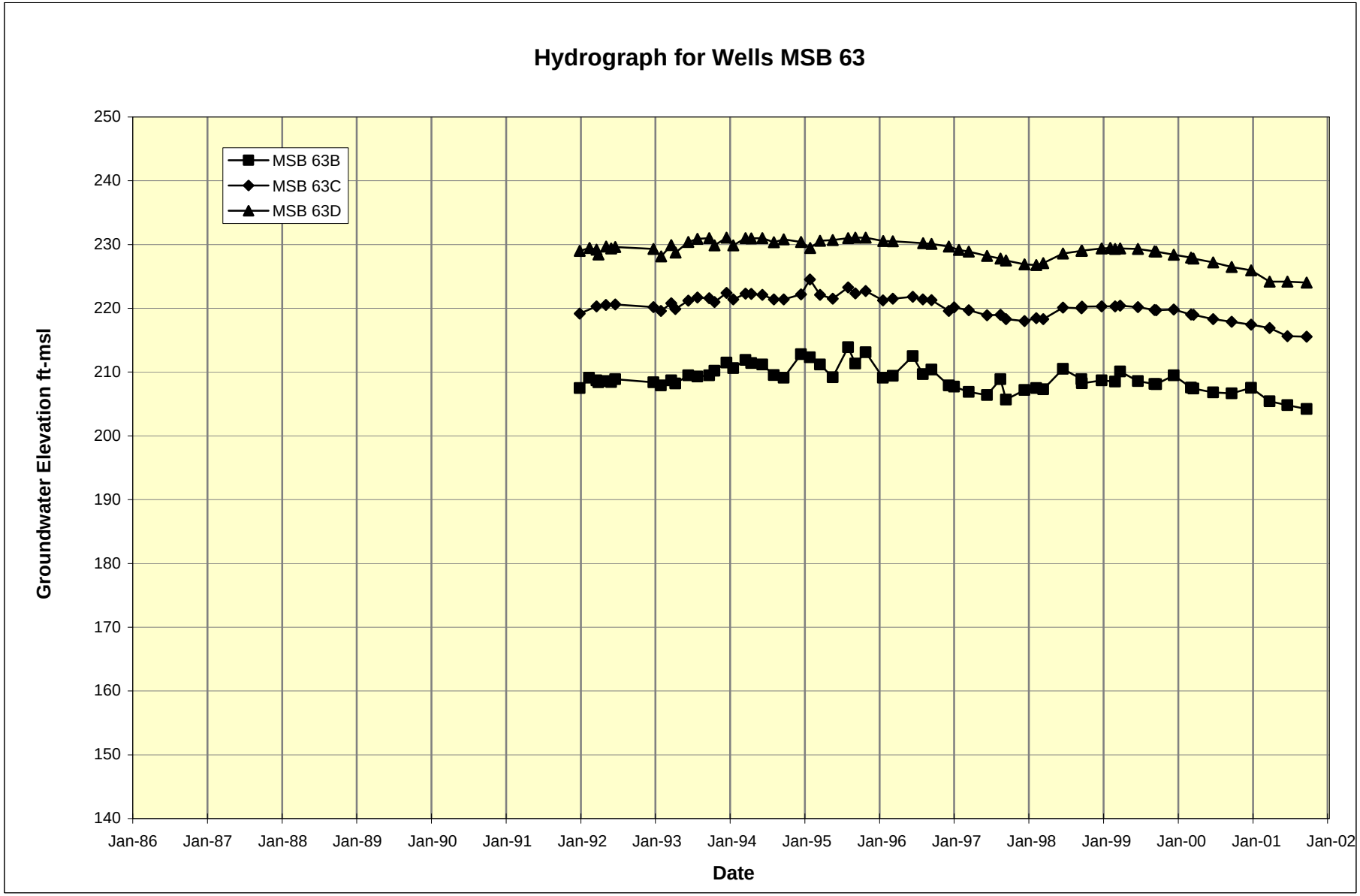
Hydrograph for Wells MSB 63
MSB 63B
MSB 63C
MSB 63D
Groundwater Elevation ft-msl
250
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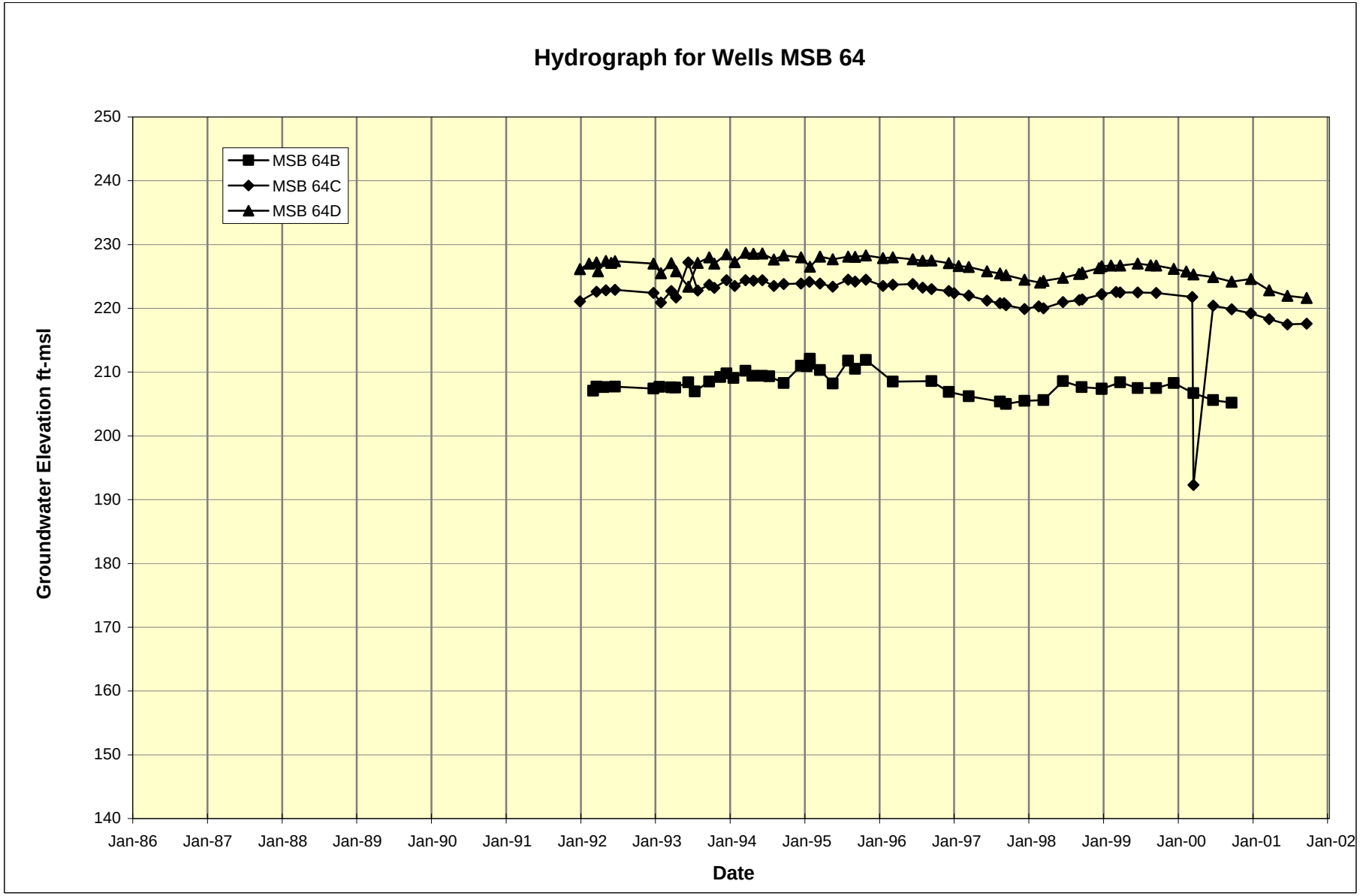
Hydrograph for Wells MSB 64
MSB 64B
MSB 64C
MSB 64D
Groundwater Elevation ft-msl
250
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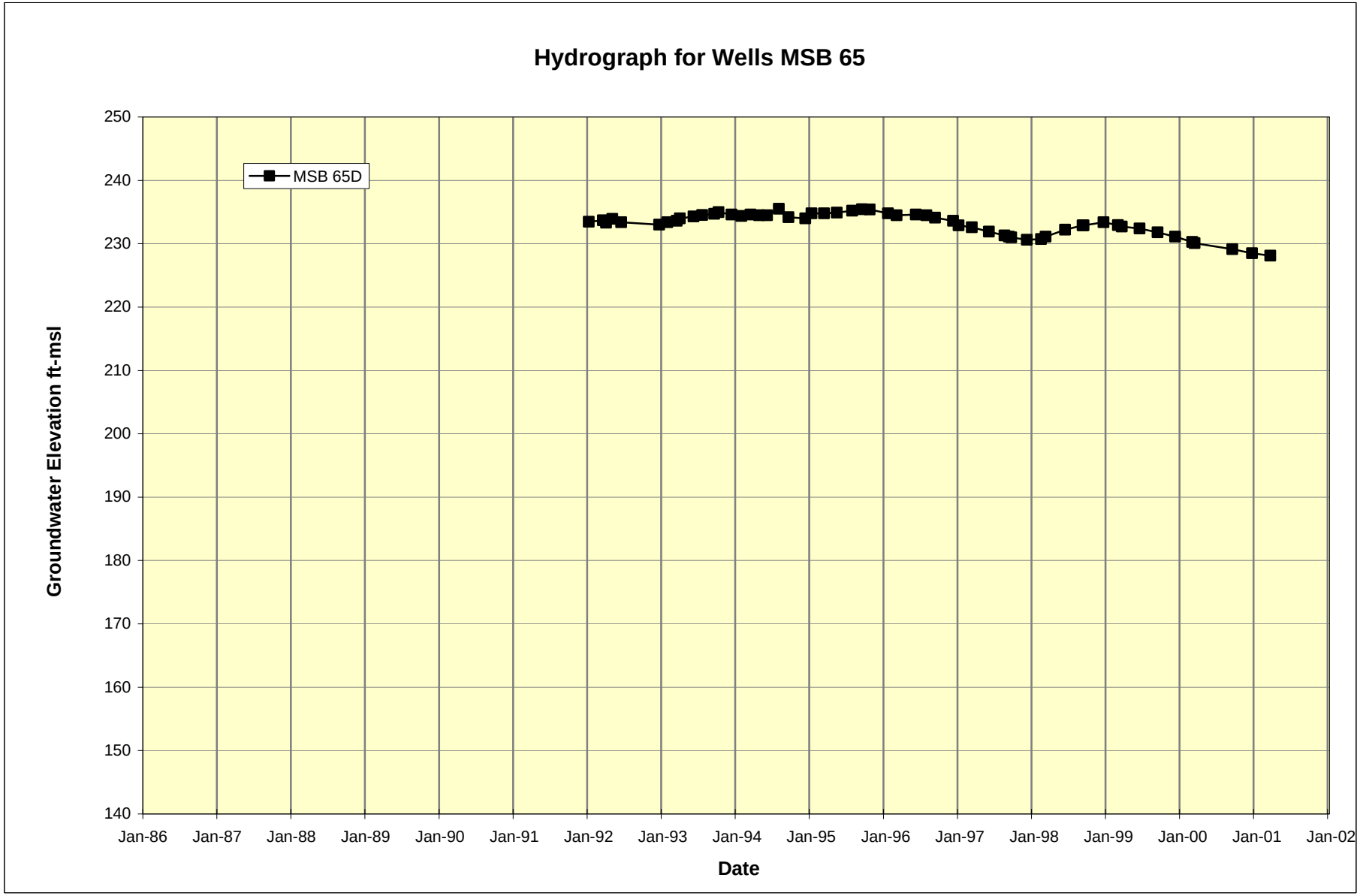
Hydrograph for Wells MSB 65
MSB 65D
Groundwater Elevation ft-msl
250
240
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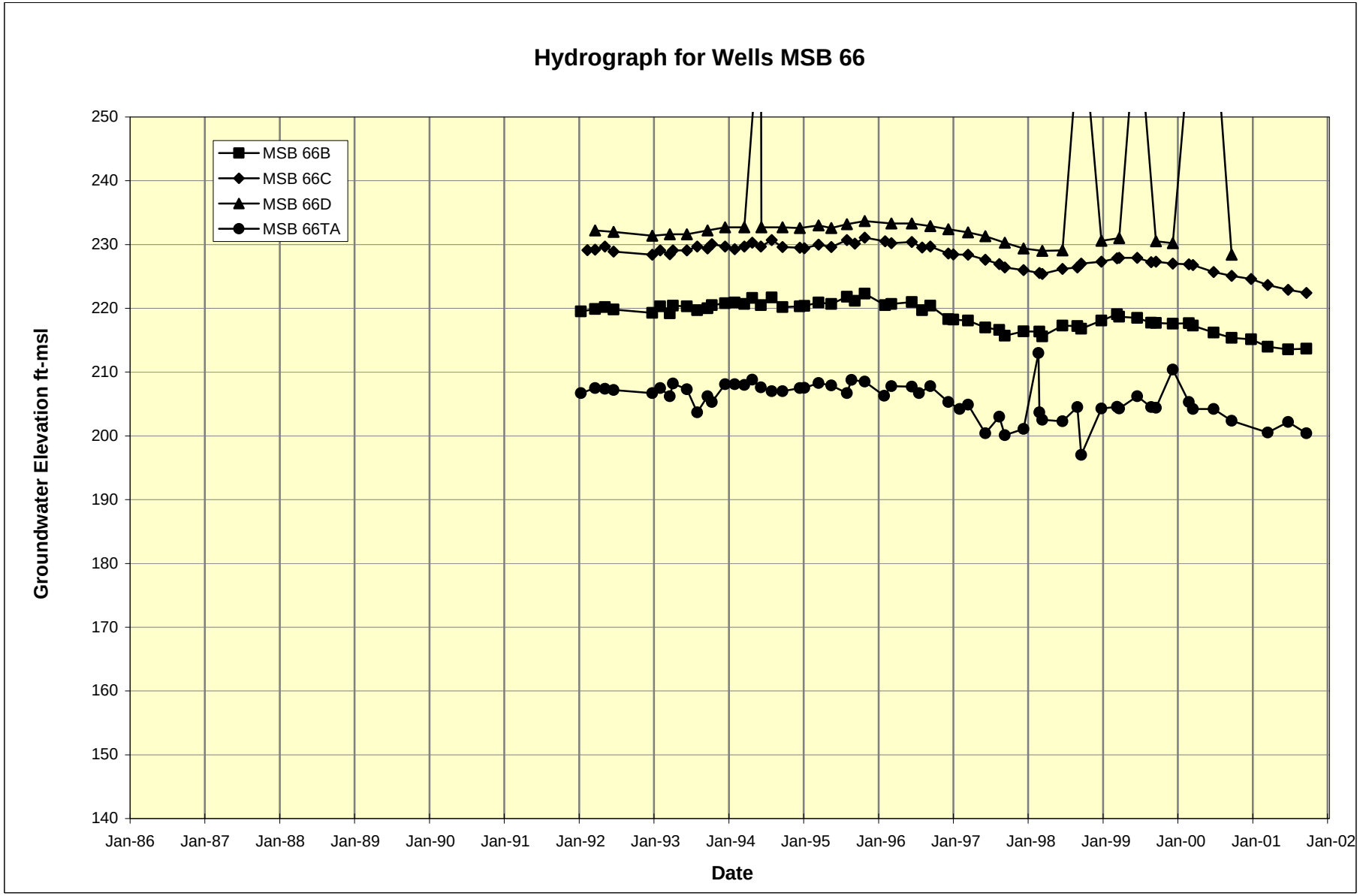
Hydrograph for Wells MSB 66
MSB 66B
MSB 66C
MSB 66D
MSB 66TA
Groundwater Elevation ft-msl
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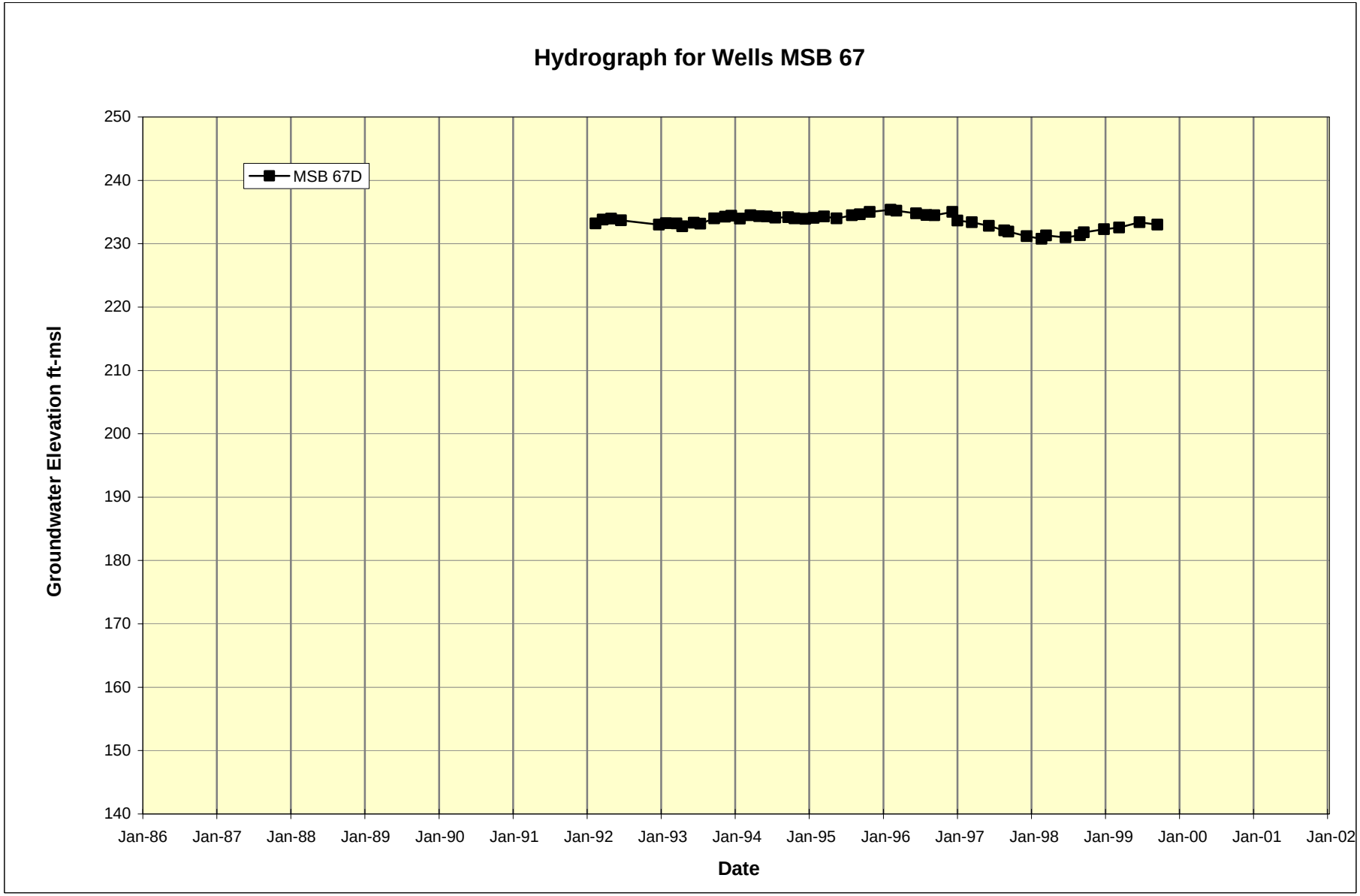
Hydrograph for Wells MSB 67
MSB 67D
Groundwater Elevation ft-msl
250
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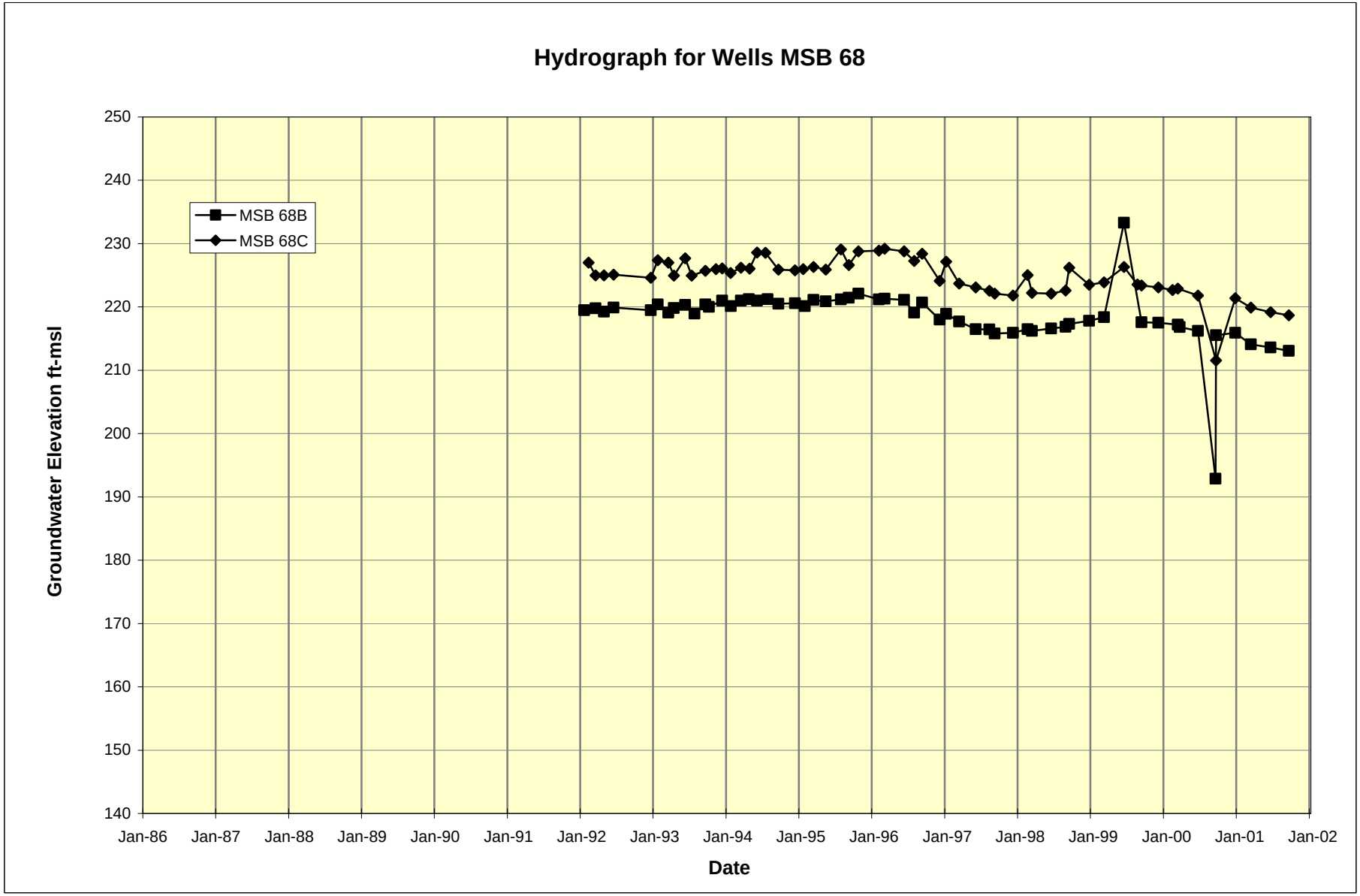
Hydrograph for Wells MSB 68
MSB 68B
MSB 68C
Groundwater Elevation ft-msl
250
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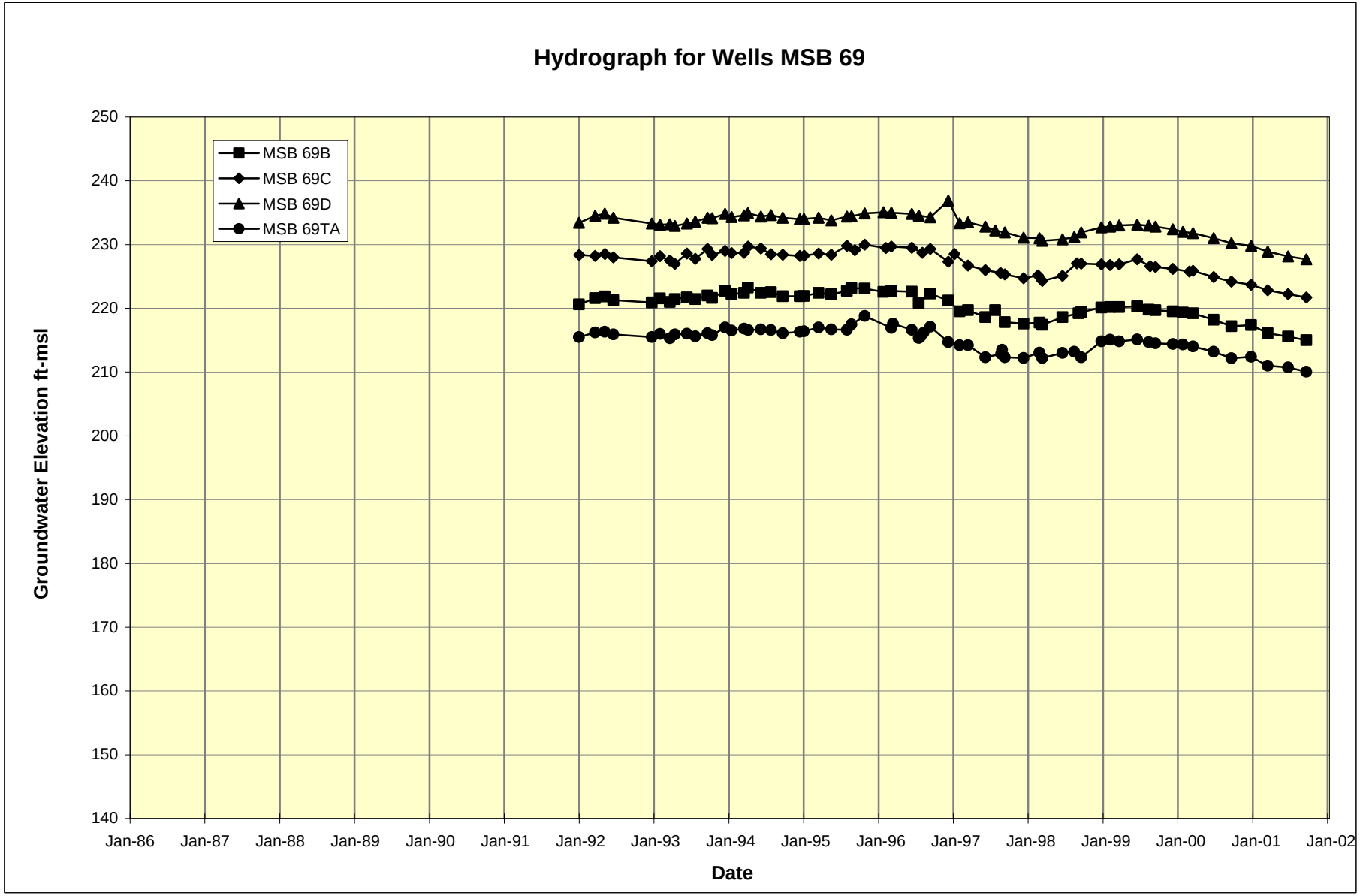
Hydrograph for Wells MSB 69
MSB 69B
MSB 69C
MSB 69D
MSB 69TA
Groundwater Elevation ft-msl
250
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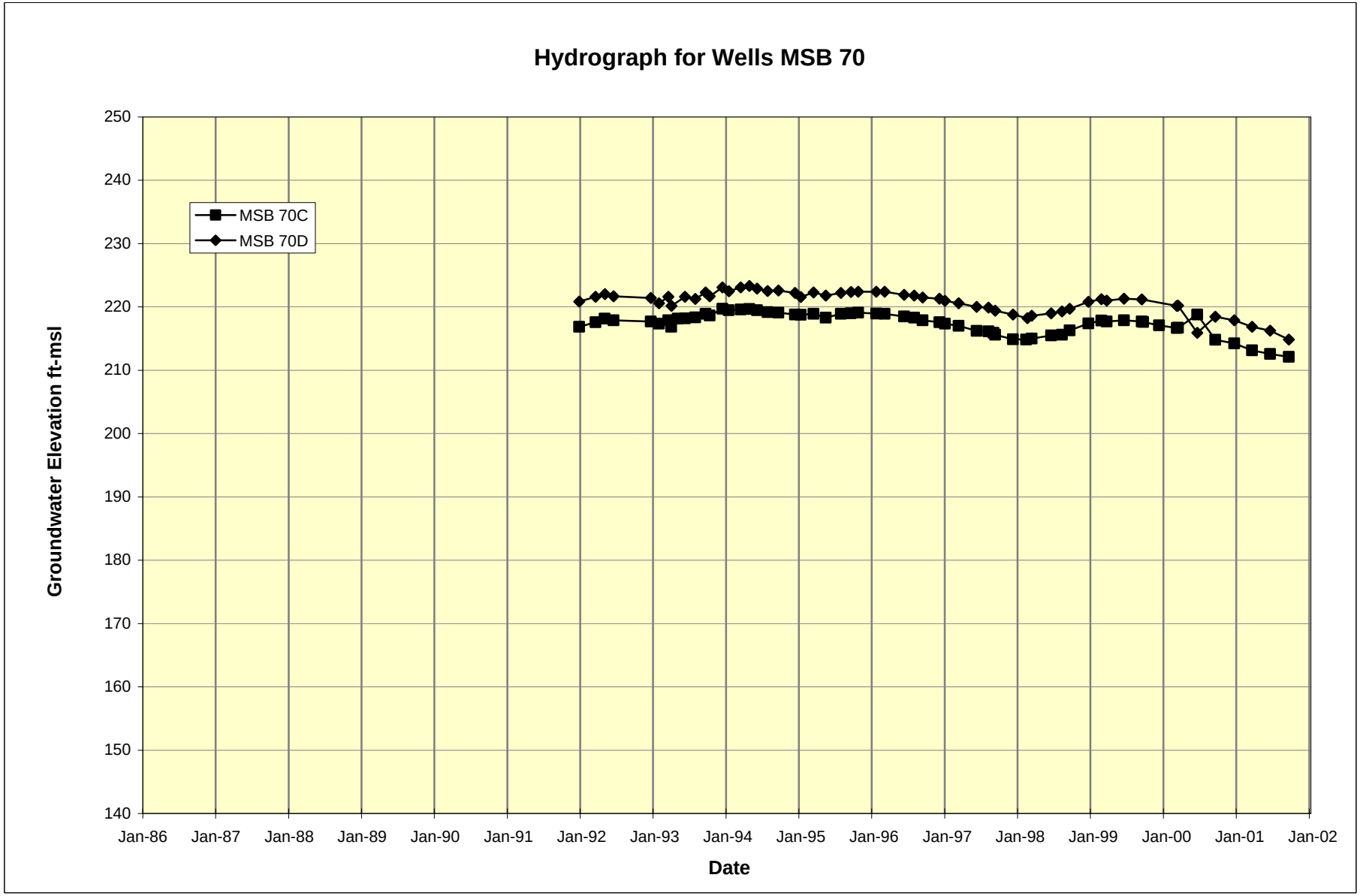
Hydrograph for Wells MSB 70
MSB 70C
MSB 70D
Groundwater Elevation ft-msl
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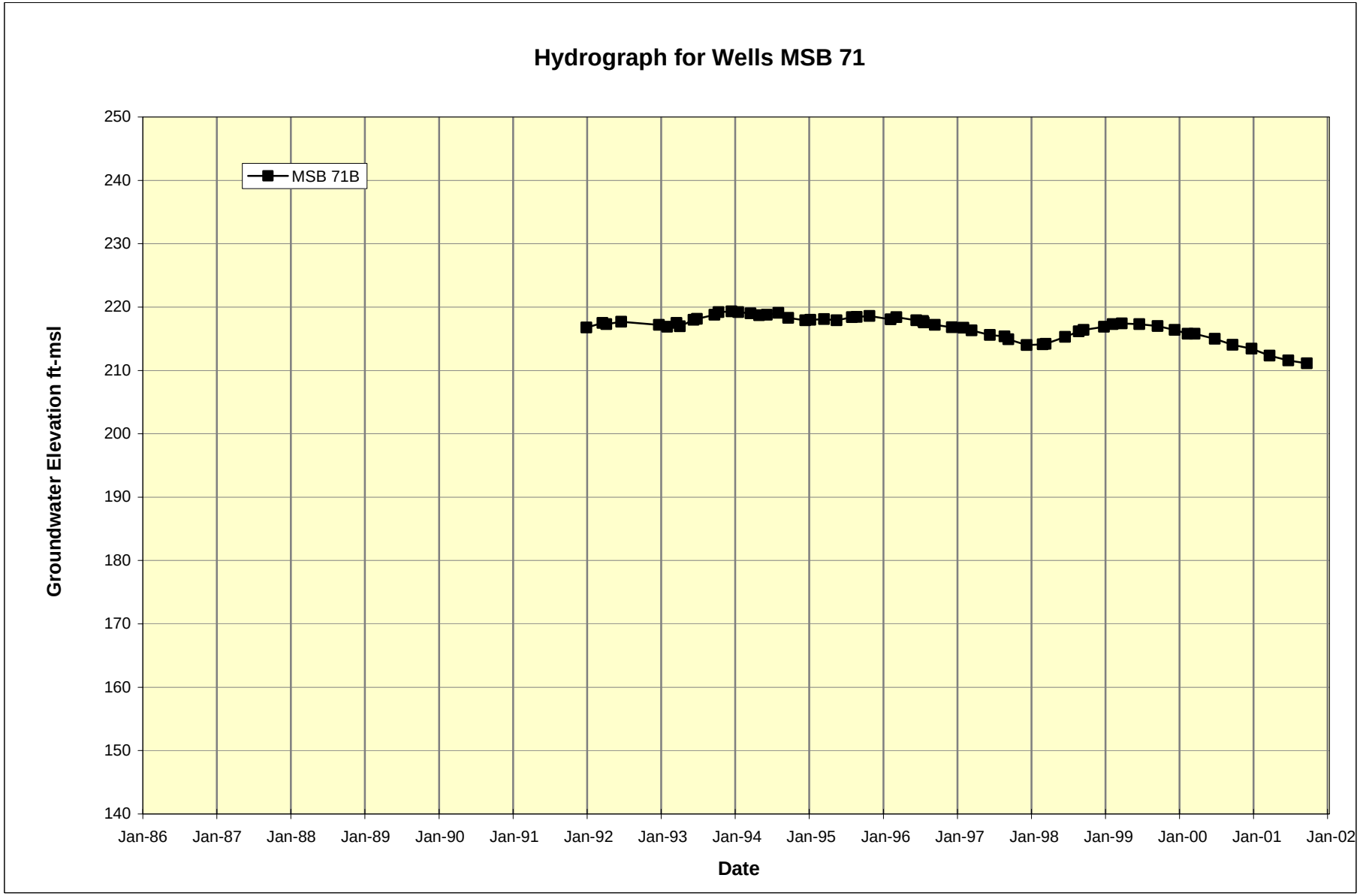
Hydrograph for Wells MSB 71
MSB 71B
Groundwater Elevation ft-msl
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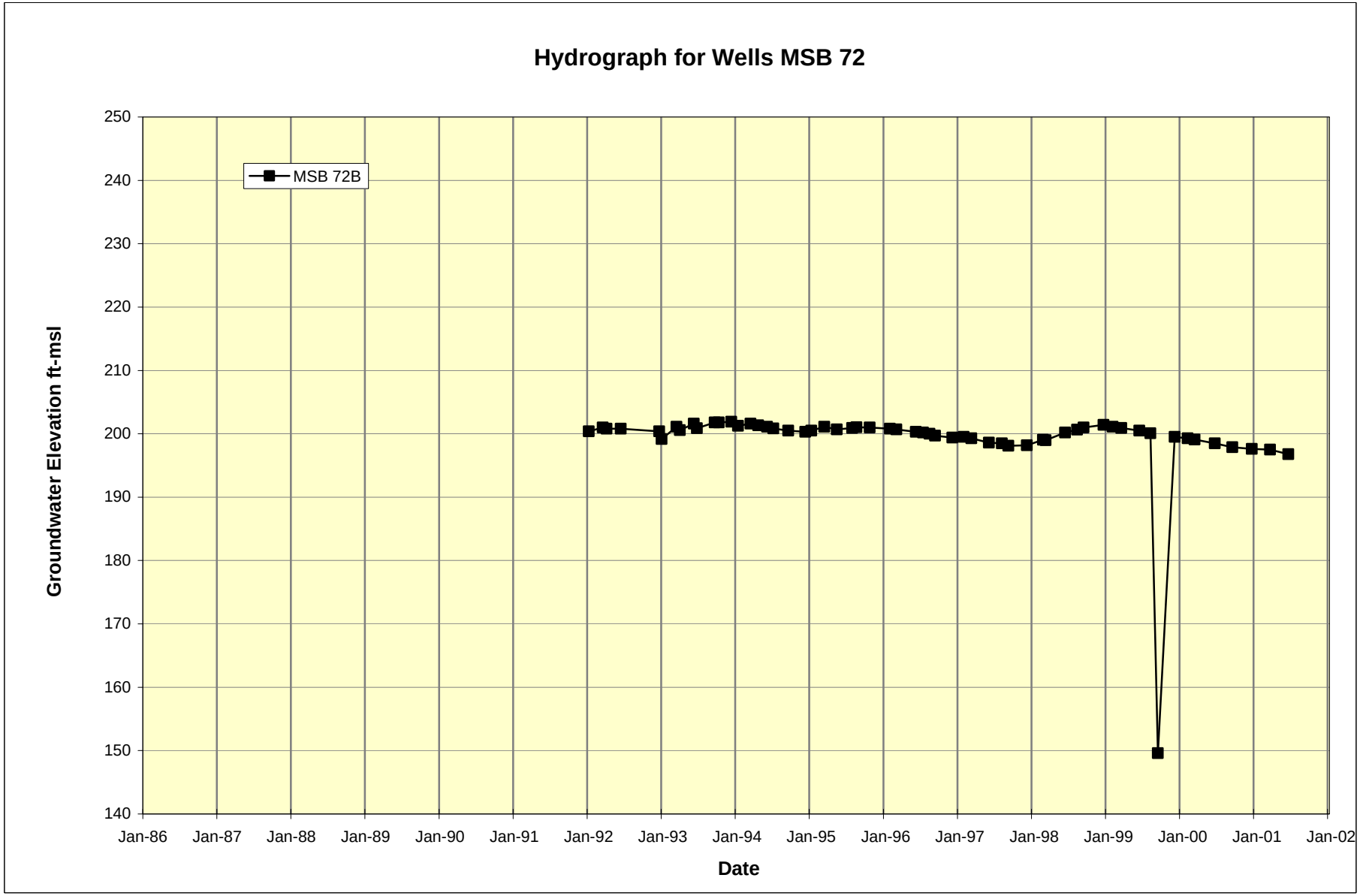
Hydrograph for Wells MSB 72
MSB 72B
Groundwater Elevation ft-msl
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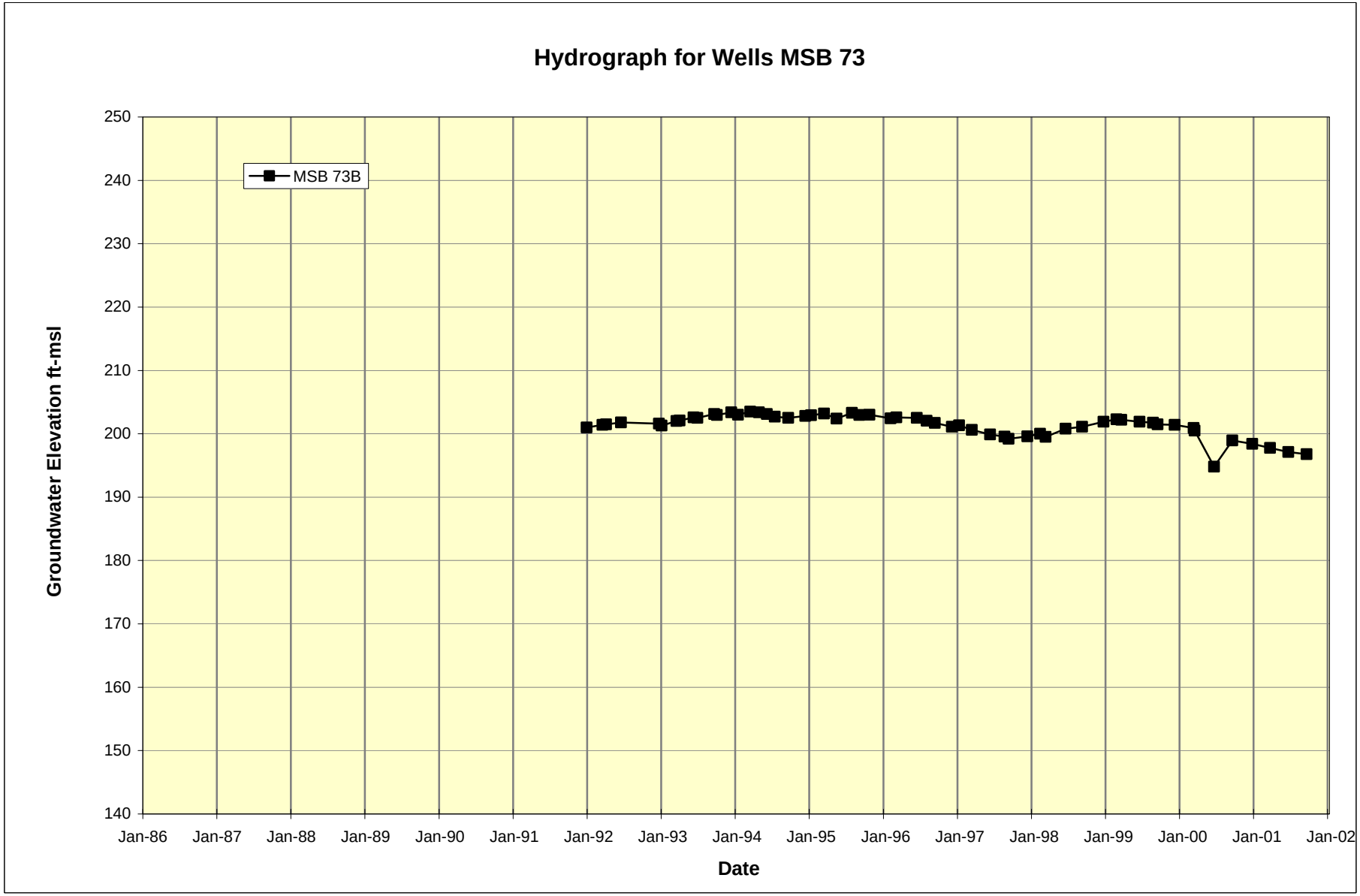
Hydrograph for Wells MSB 73
MSB 73B
Groundwater Elevation ft-msl
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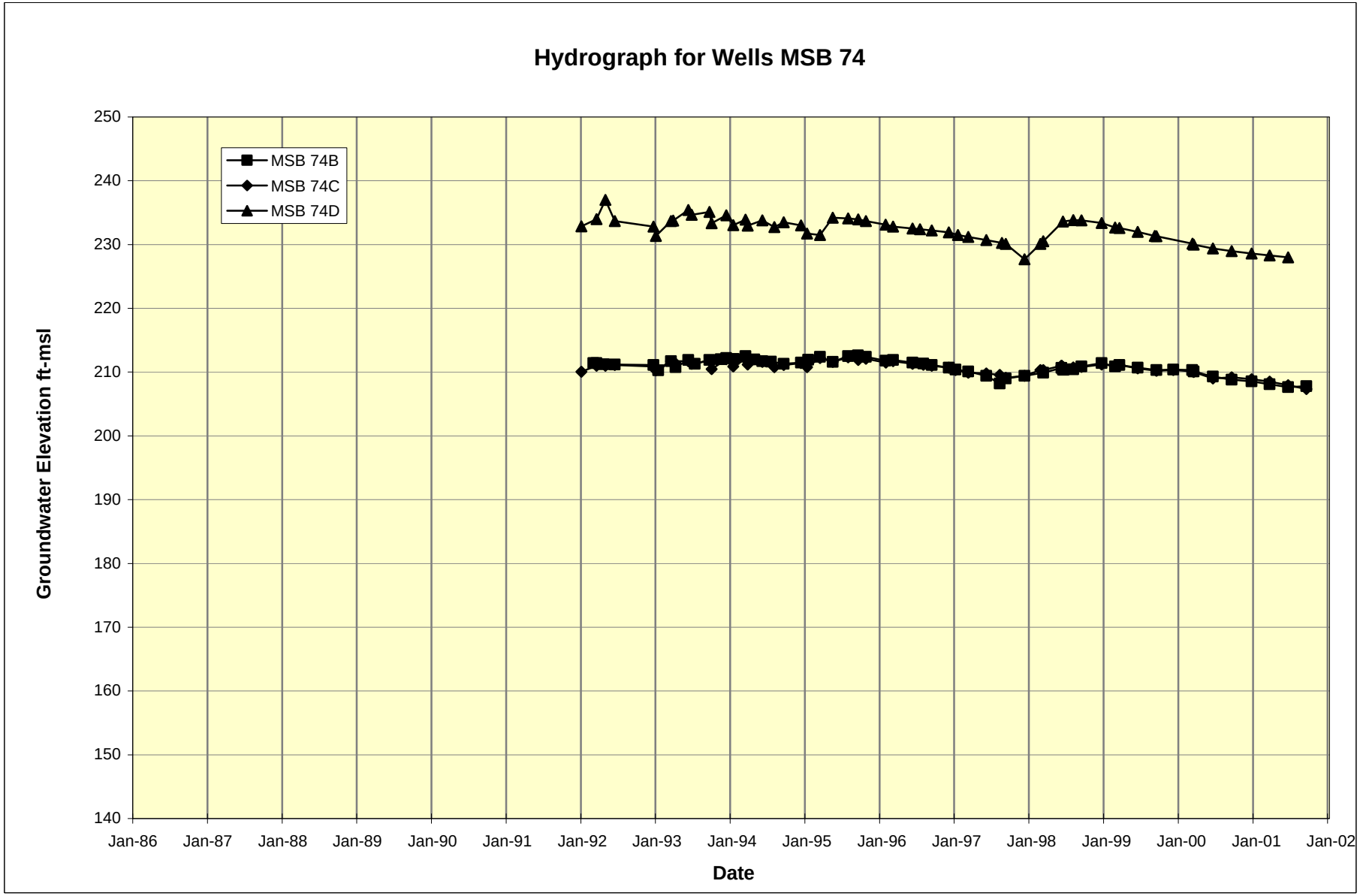
Hydrograph for Wells MSB 74
MSB 74B
MSB 74C
MSB 74D
Groundwater Elevation ft-msl
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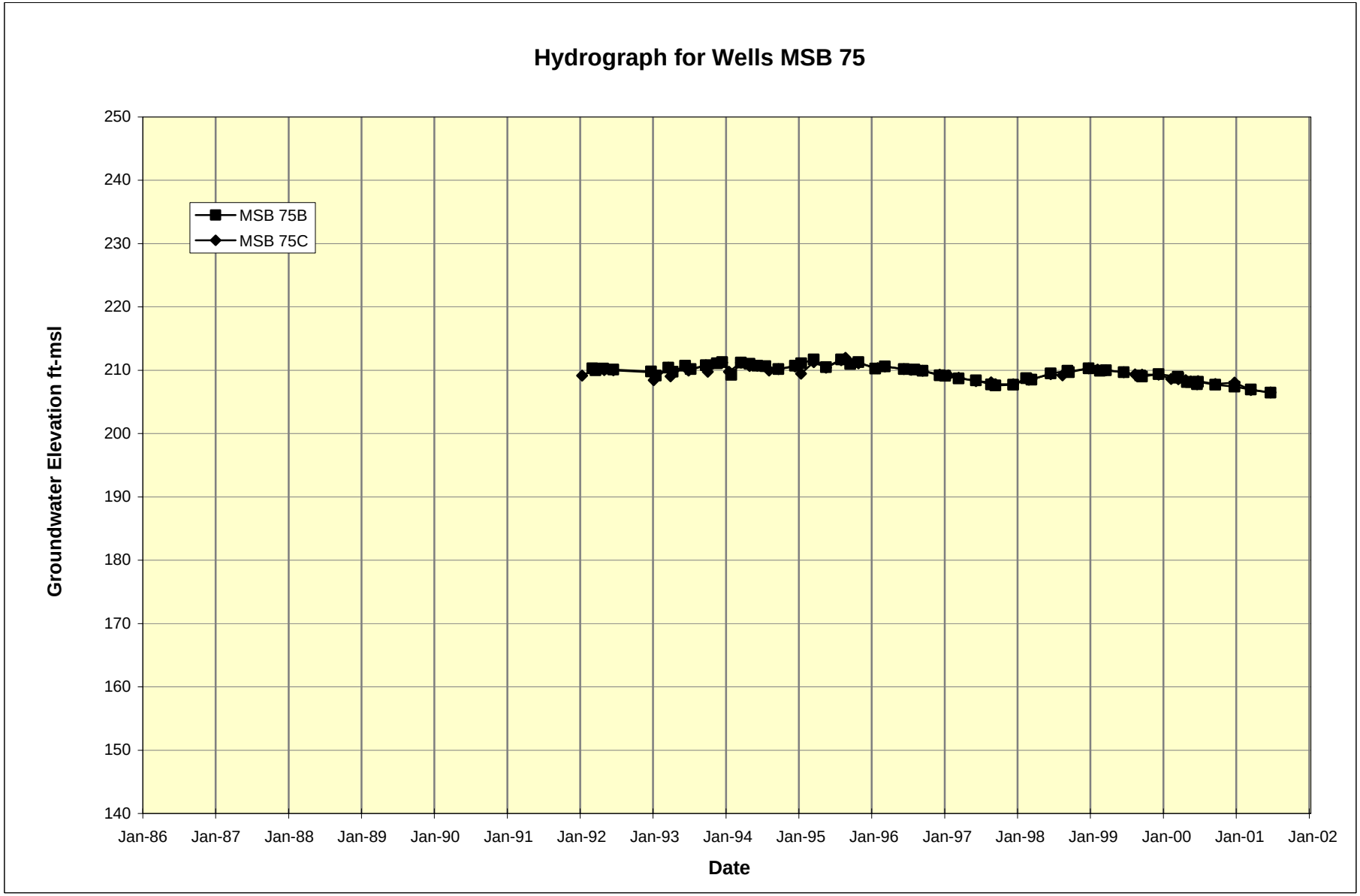
Hydrograph for Wells MSB 75
MSB 75B
MSB 75C
Groundwater Elevation ft-msl
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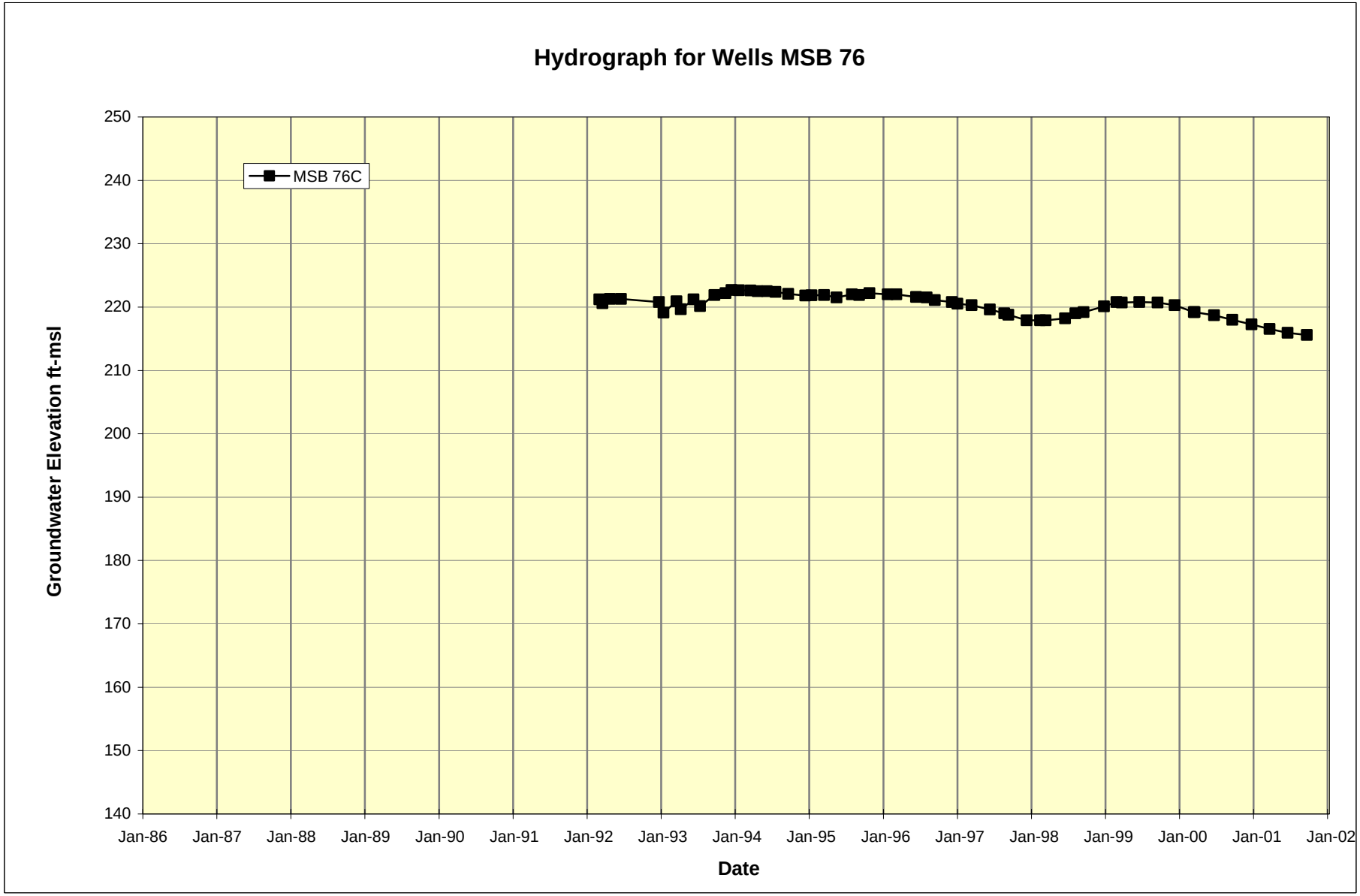
Hydrograph for Wells MSB 76
MSB 76C
Groundwater Elevation ft-msl
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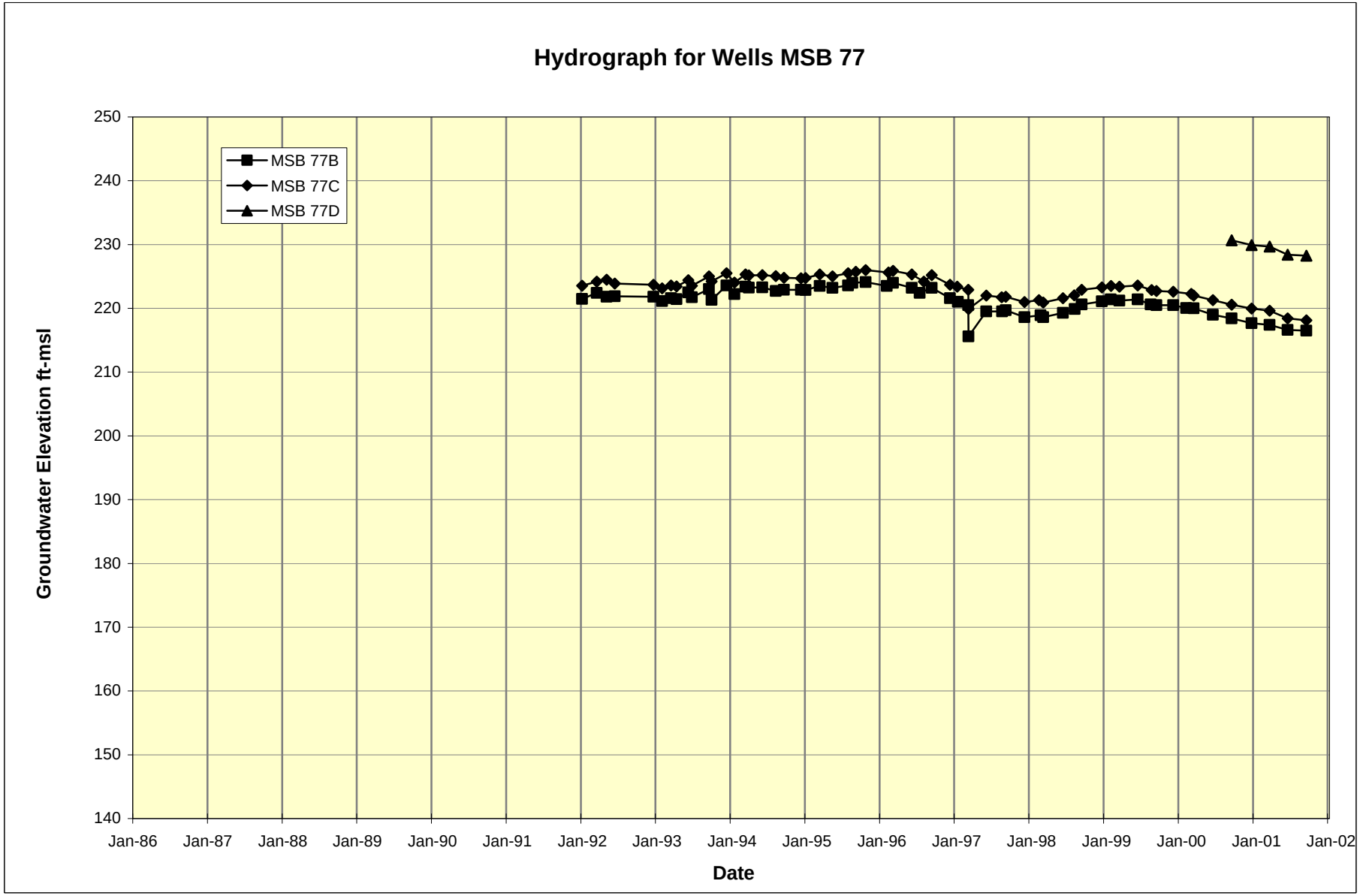
Hydrograph for Wells MSB 77
MSB 77B
MSB 77C
MSB 77D
Groundwater Elevation ft-msl
250
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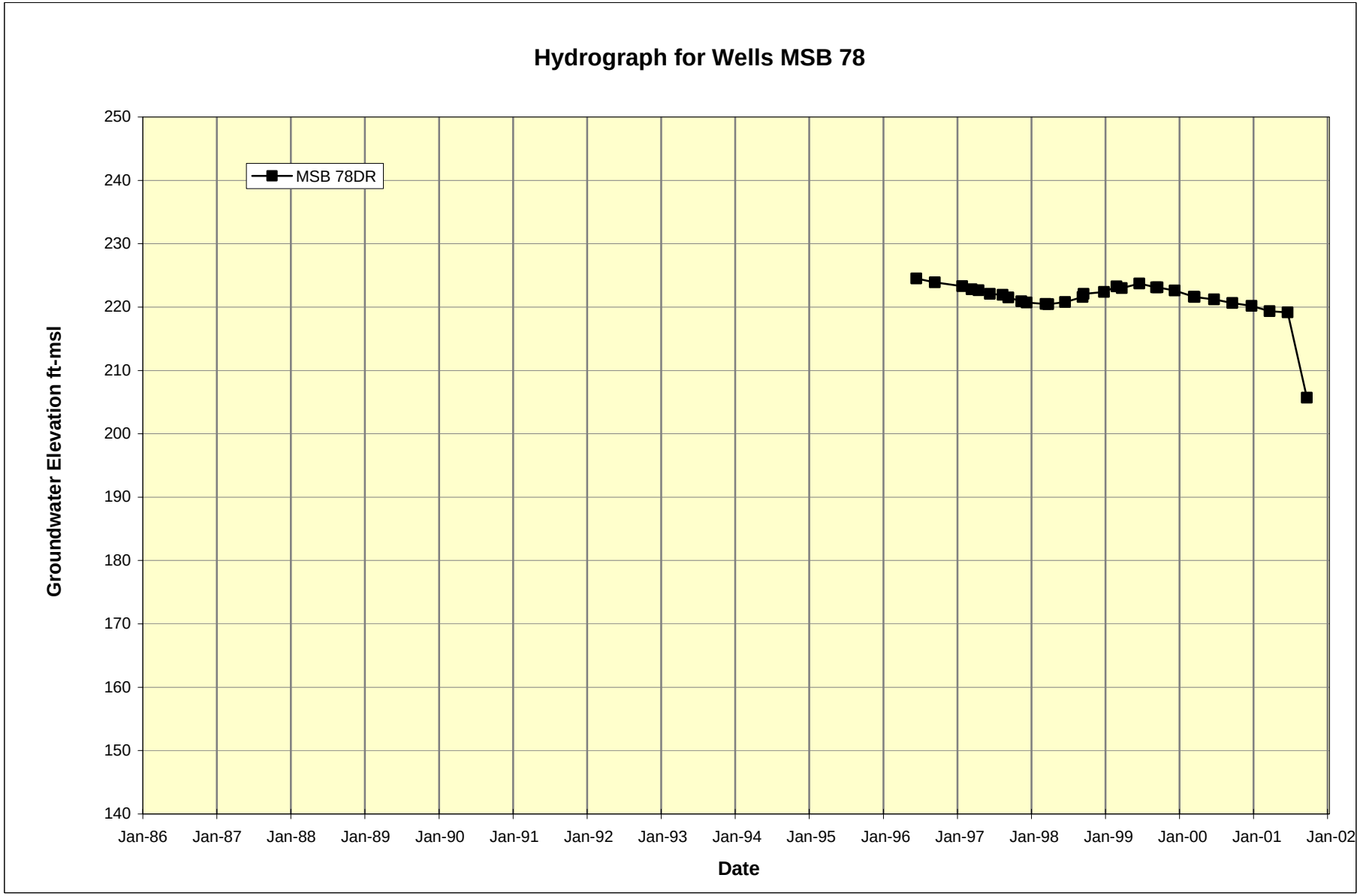
Hydrograph for Wells MSB 78
MSB 78DR
Groundwater Elevation ft-msl
250
240
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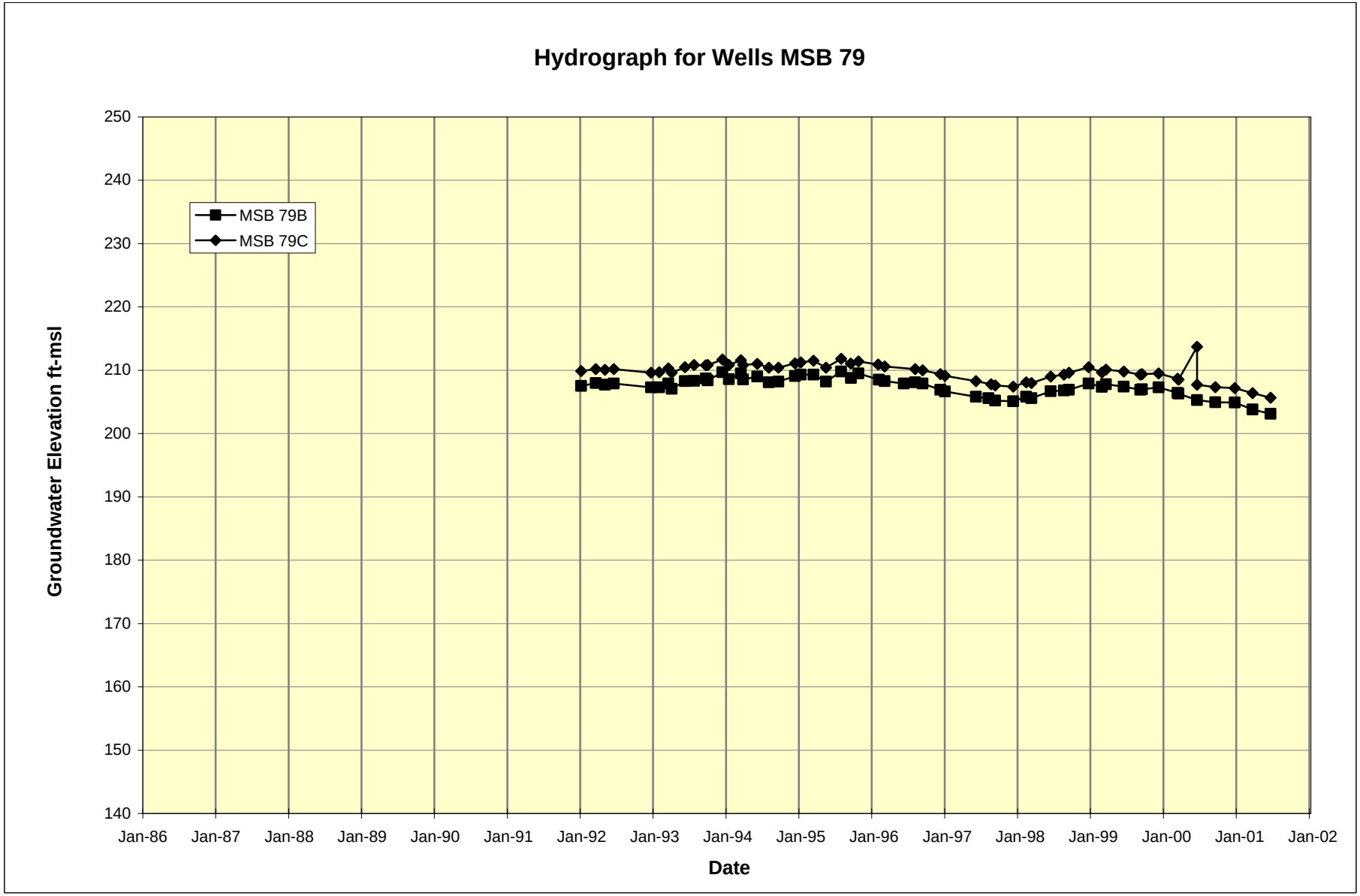
Hydrograph for Wells MSB 79
MSB 79B
MSB 79C
Groundwater Elevation ft-msl
250
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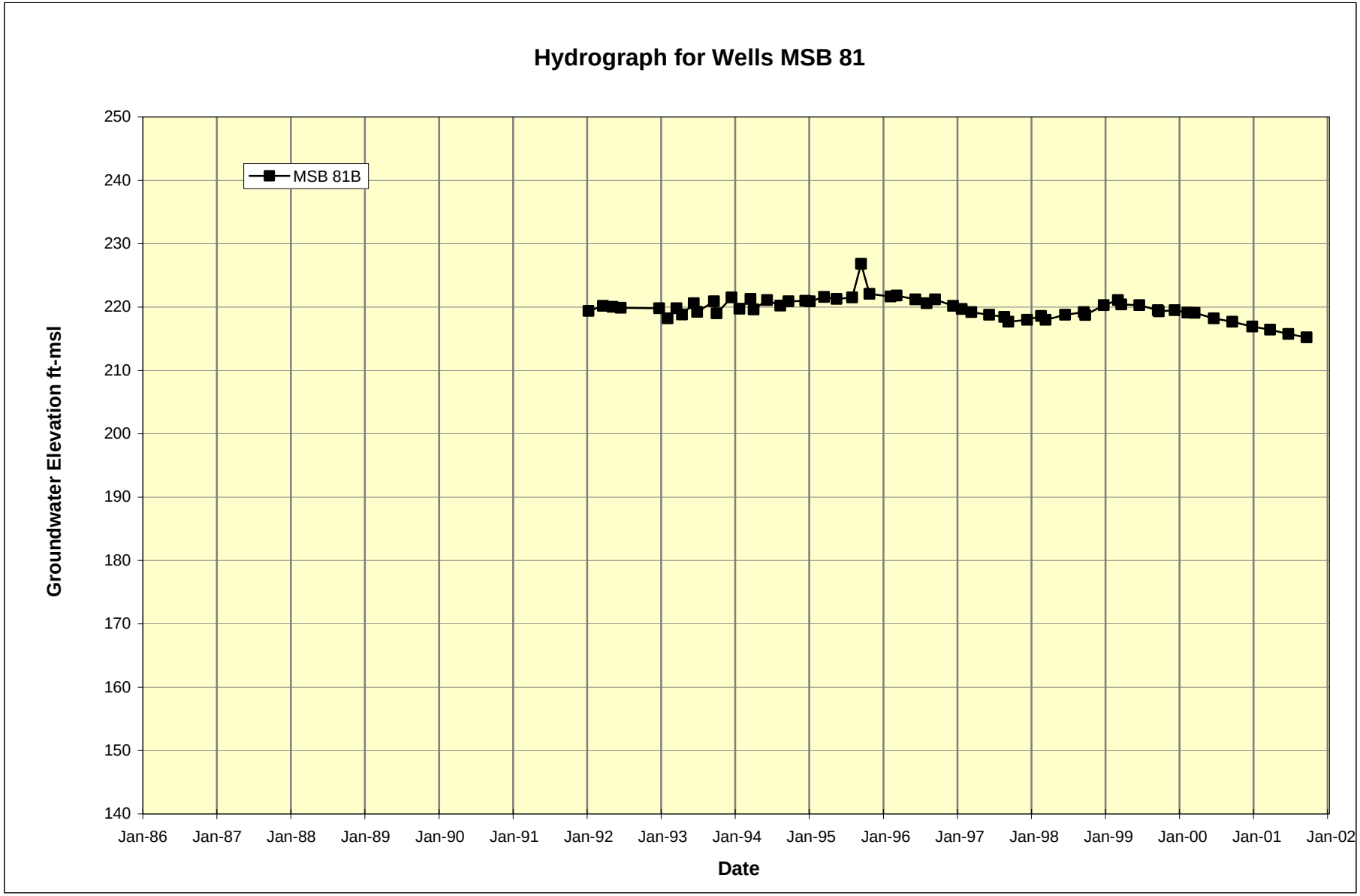
Hydrograph for Wells MSB 81
MSB 81B
Groundwater Elevation ft-msl
250
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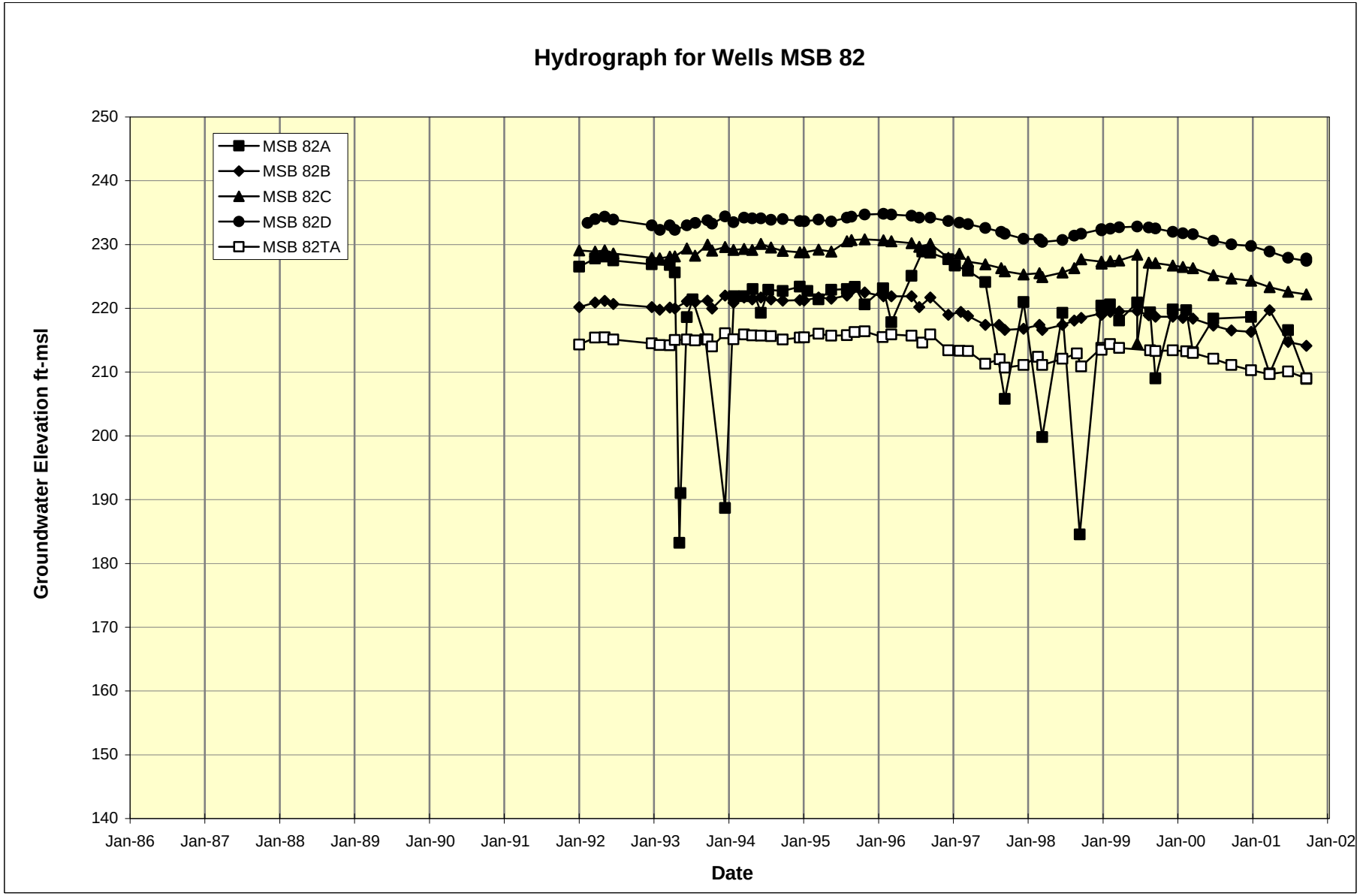
Hydrograph for Wells MSB 82
MSB 82A
MSB 82B
MSB 82C
MSB 82D
MSB 82TA
Groundwater Elevation ft-msl
250
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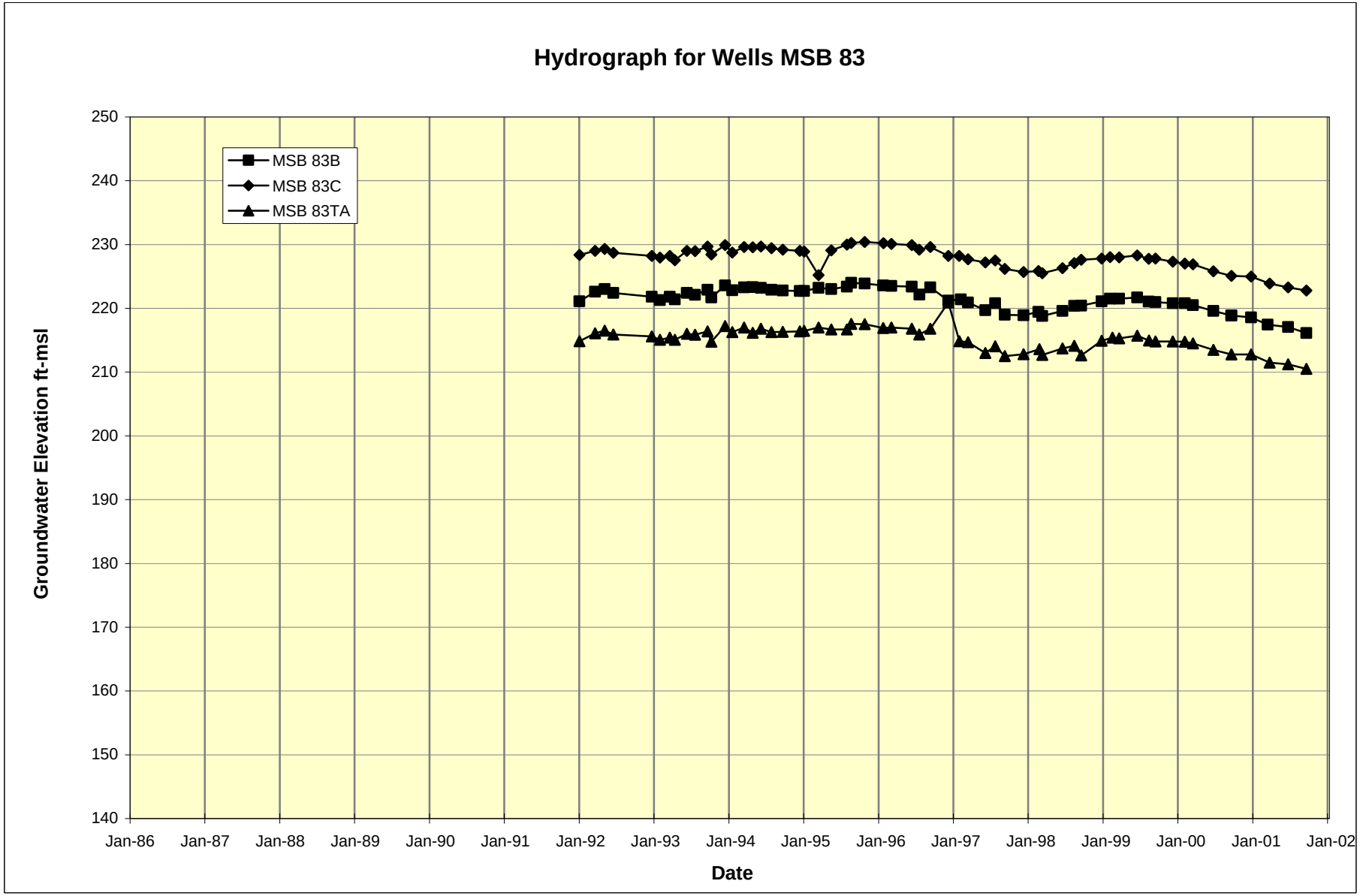
Hydrograph for Wells MSB 83
MSB 83B
MSB 83C
MSB 83TA
Groundwater Elevation ft-msl
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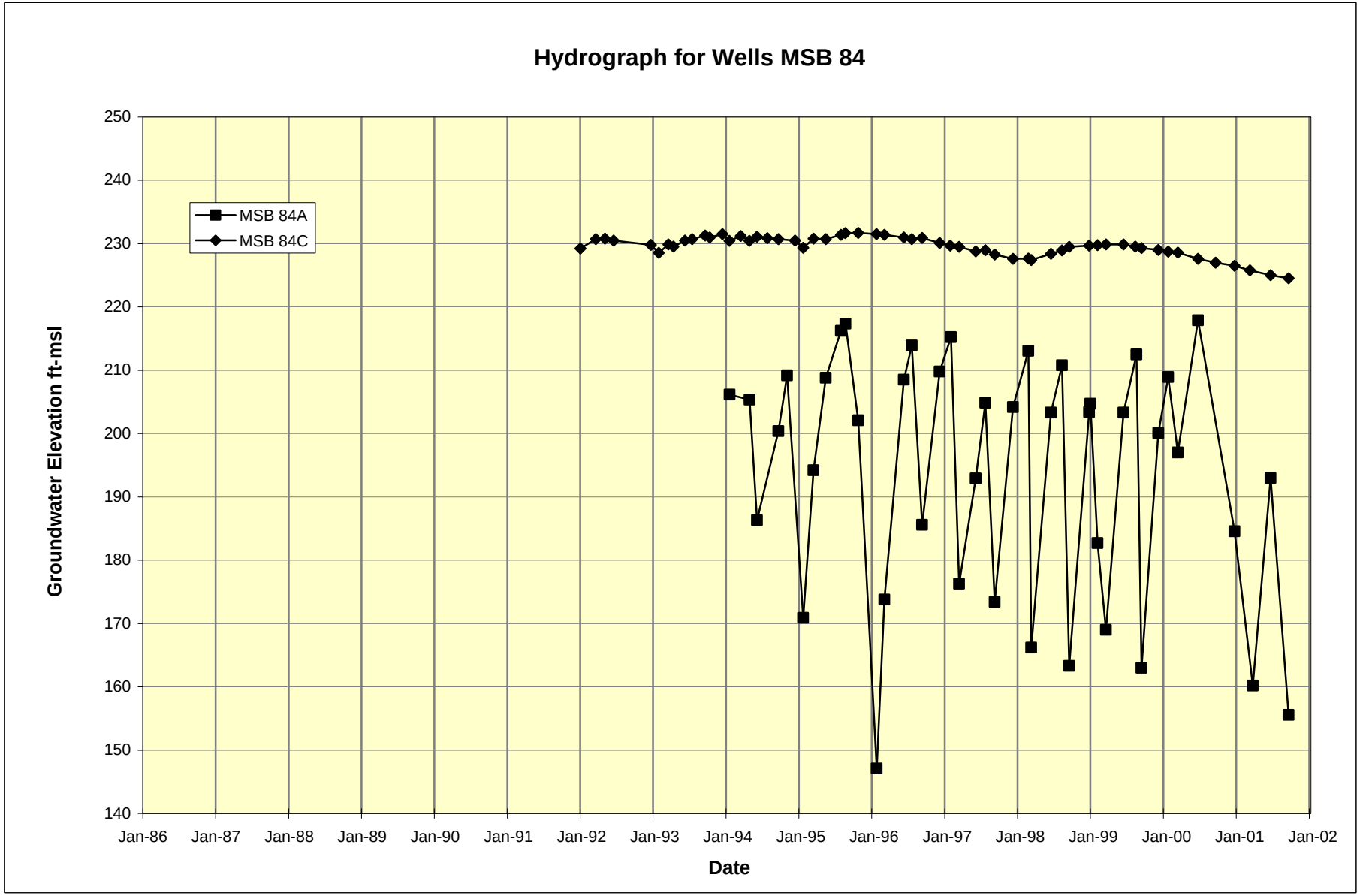
Hydrograph for Wells MSB 84
MSB 84A
MSB 84C
Groundwater Elevation ft-msl
250
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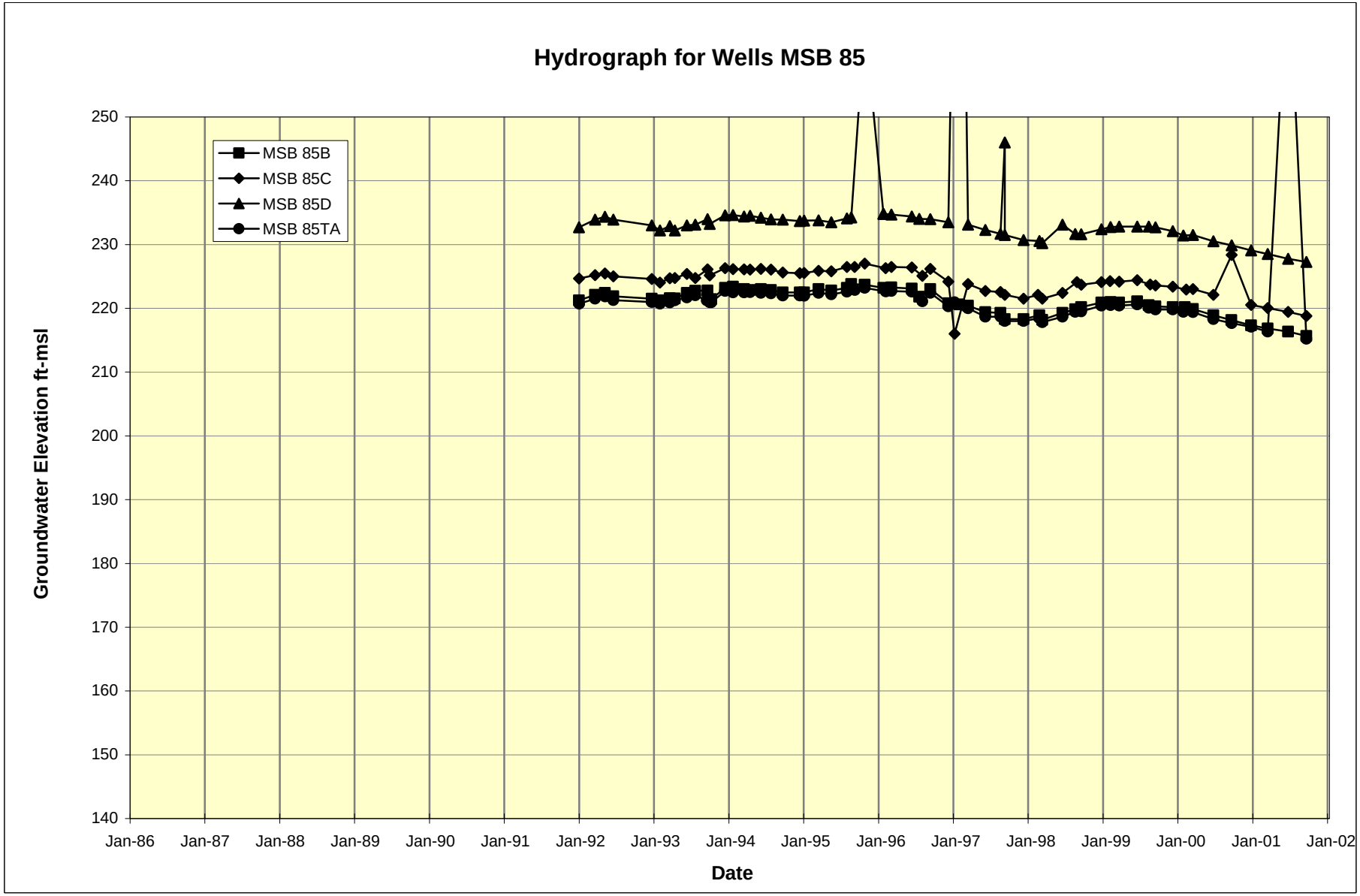
Hydrograph for Wells MSB 85
MSB 85B
MSB 85C
MSB 85D
MSB 85TA
Groundwater Elevation ft-msl
250
240
230
220
210
200
190
180
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Jan-86
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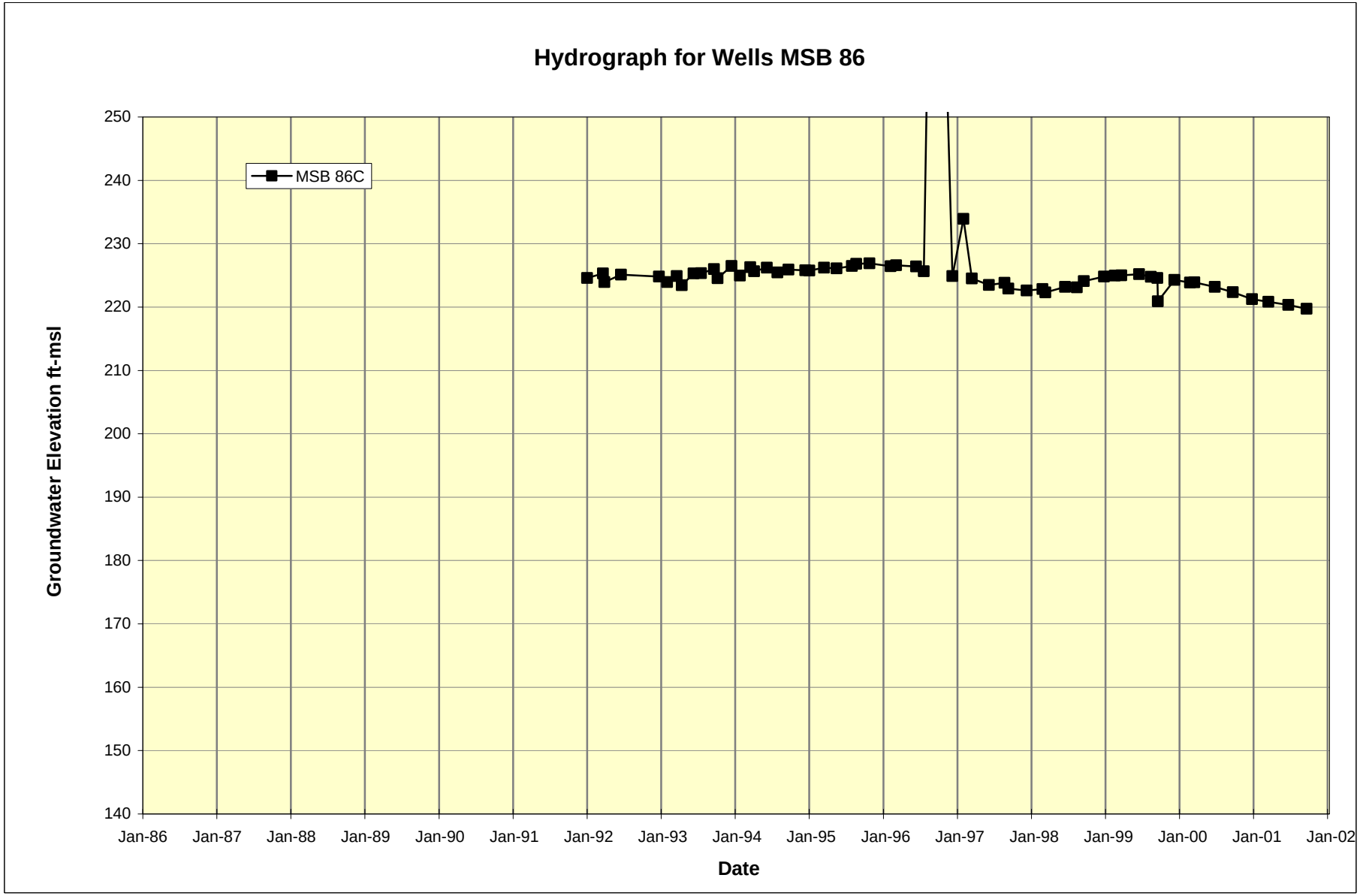
Date


Hydrograph for Wells MSB 86
MSB 86C
Groundwater Elevation ft-msl
250
240
230
220
210
200
190
180
170
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150
140
Jan-86
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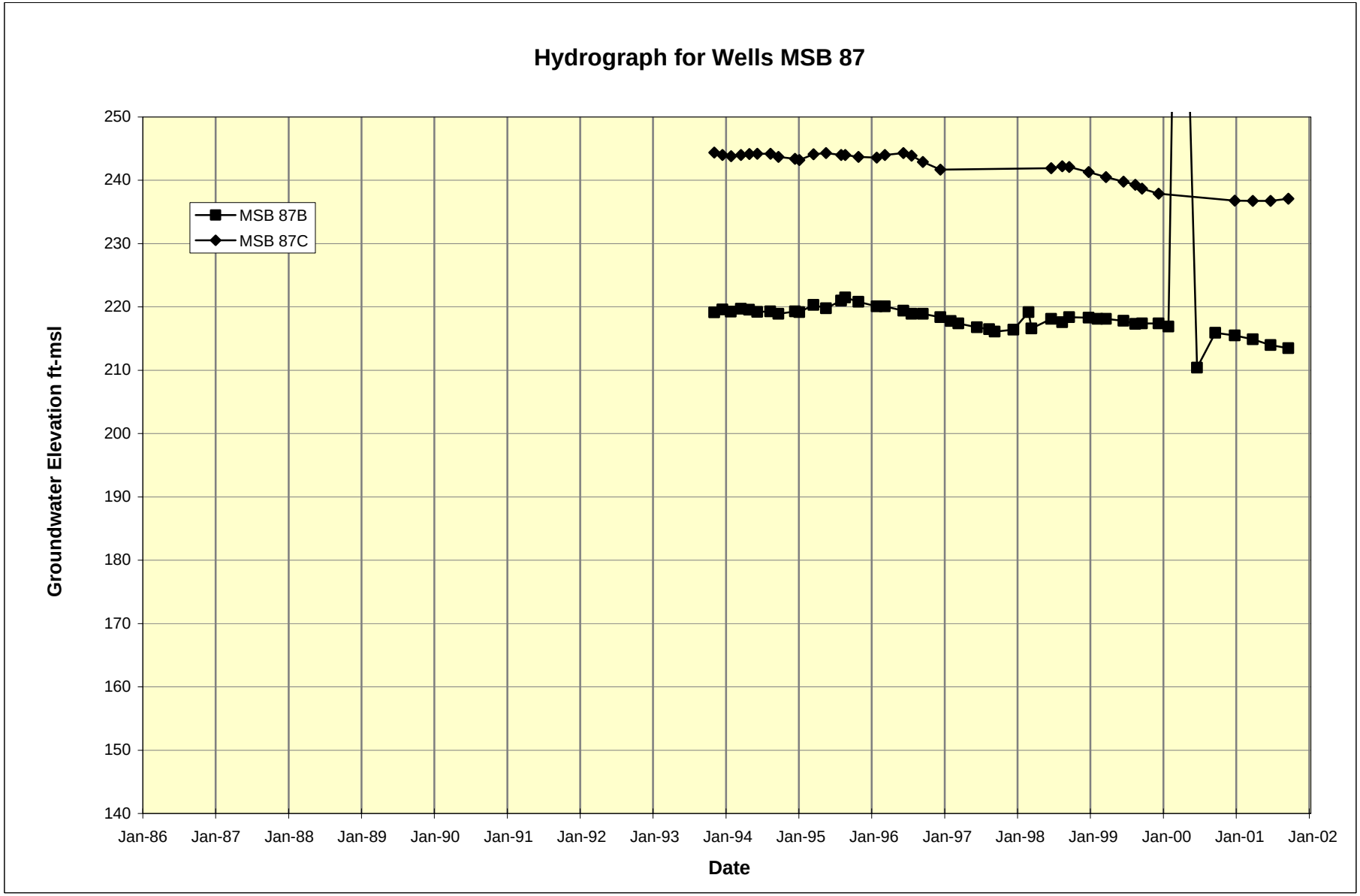
Hydrograph for Wells MSB 87
MSB 87B
MSB 87C
Groundwater Elevation ft-msl
250
240
230
220
210
200
190
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150
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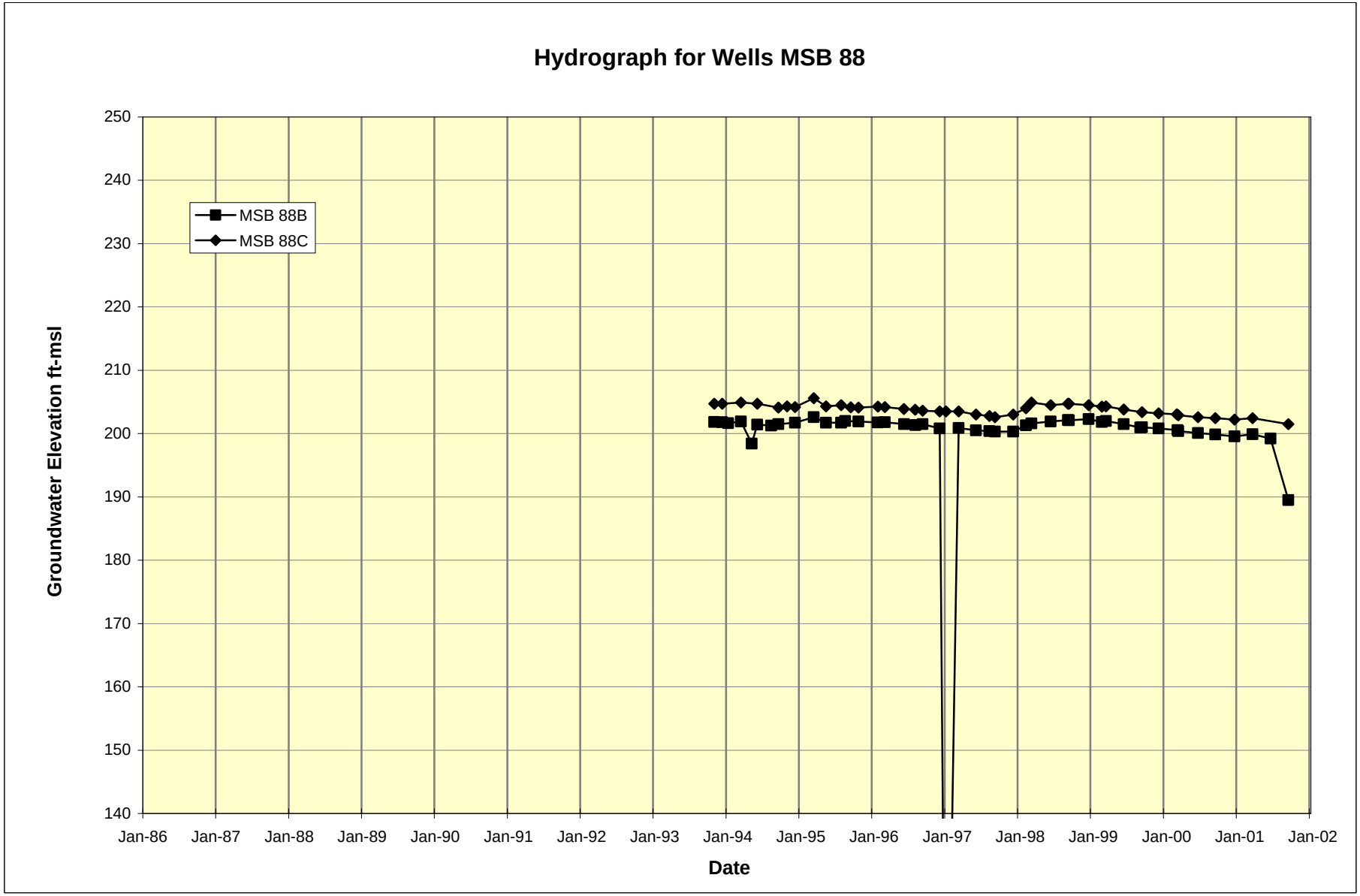
Hydrograph for Wells MSB 88
MSB 88B
MSB 88C
Groundwater Elevation ft-msl
250
240
230
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180
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150
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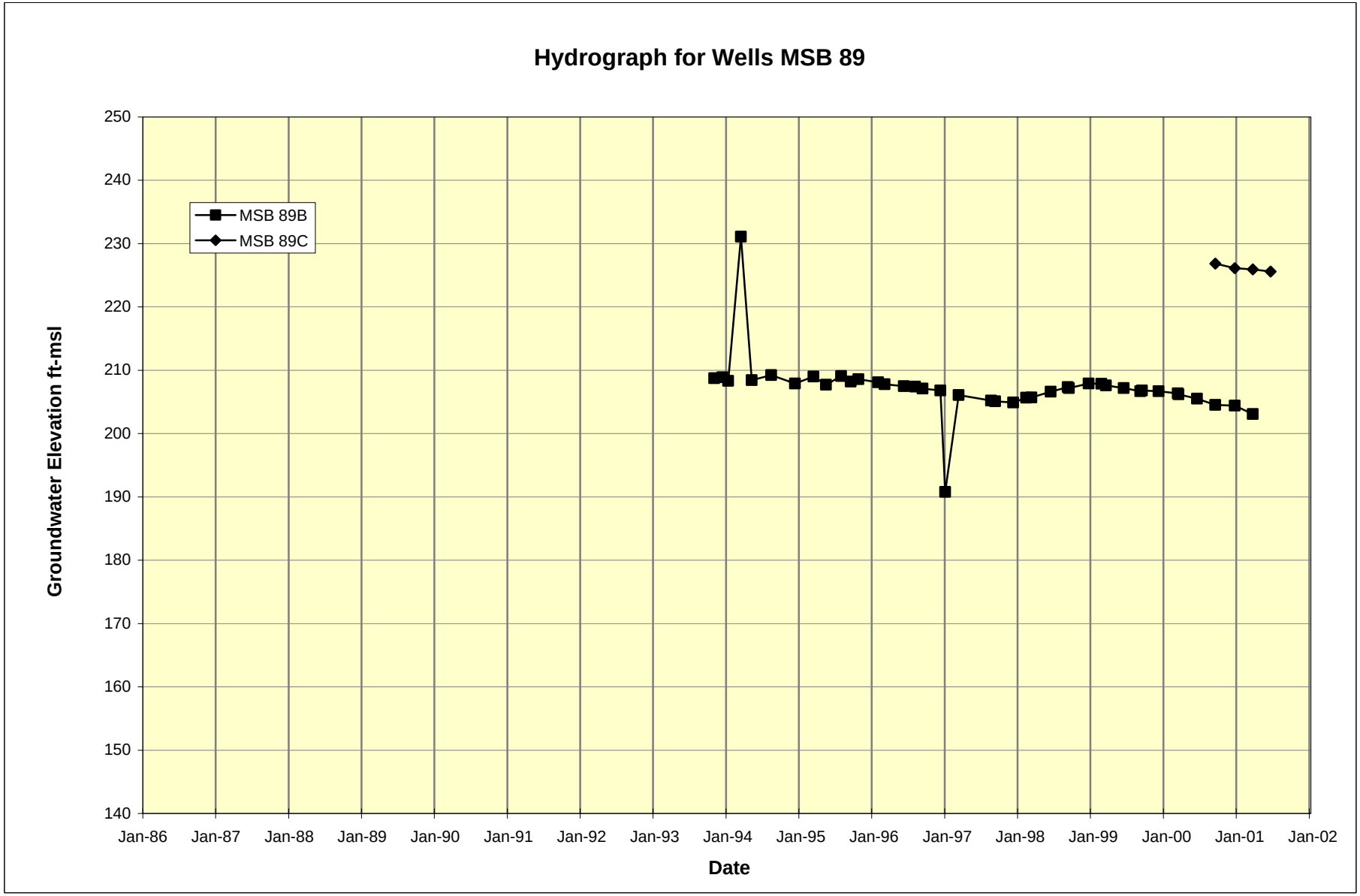
Date


Hydrograph for Wells MSB 89
MSB 89B
MSB 89C
Groundwater Elevation ft-msl
250
240
230
220
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200
190
180
170
160
150
140
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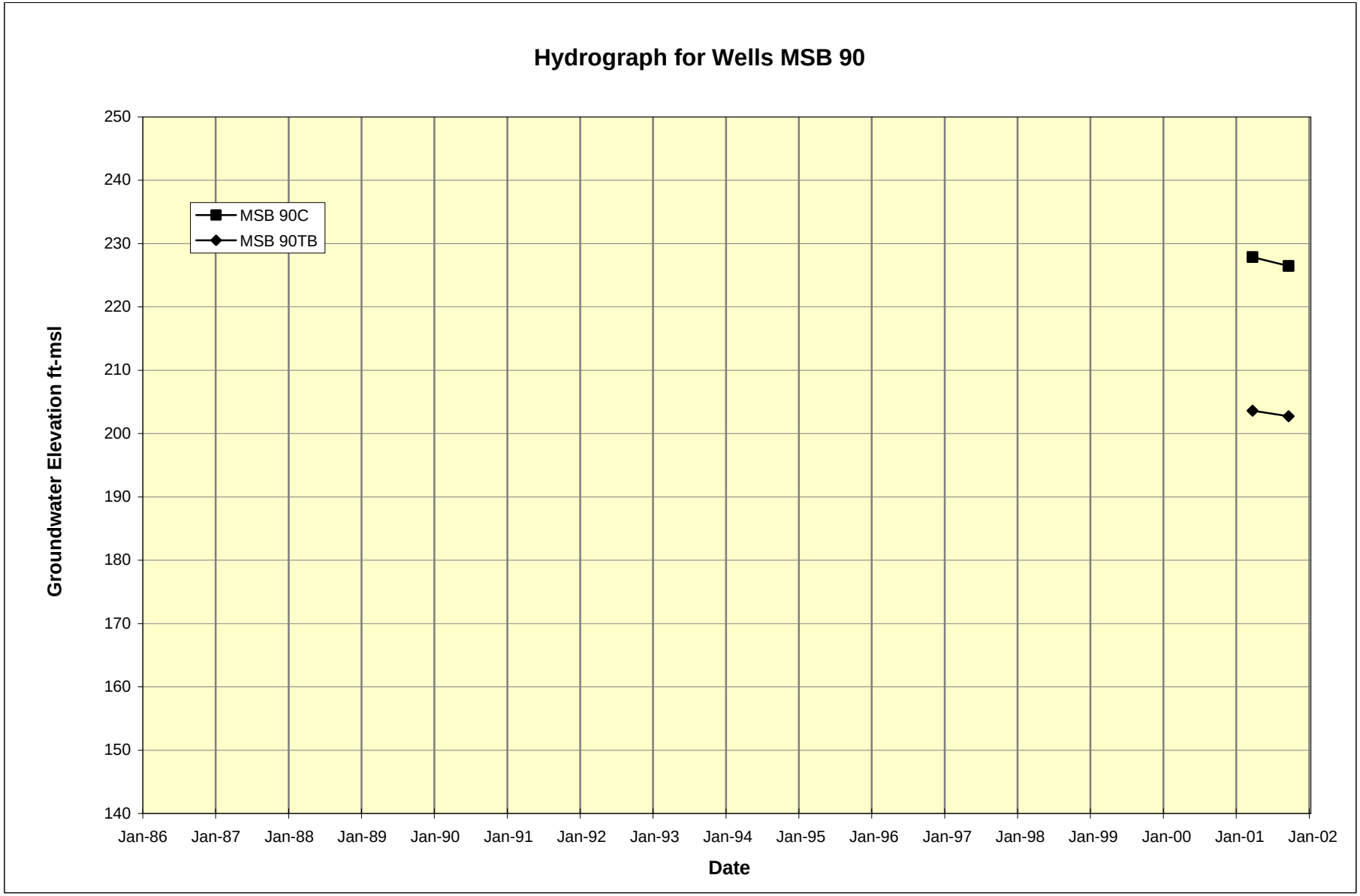
Date


Hydrograph for Wells MSB 90
MSB 90C
MSB 90TB
Groundwater Elevation ft-msl
250
240
230
220
210
200
190
180
170
160
150
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Jan-86
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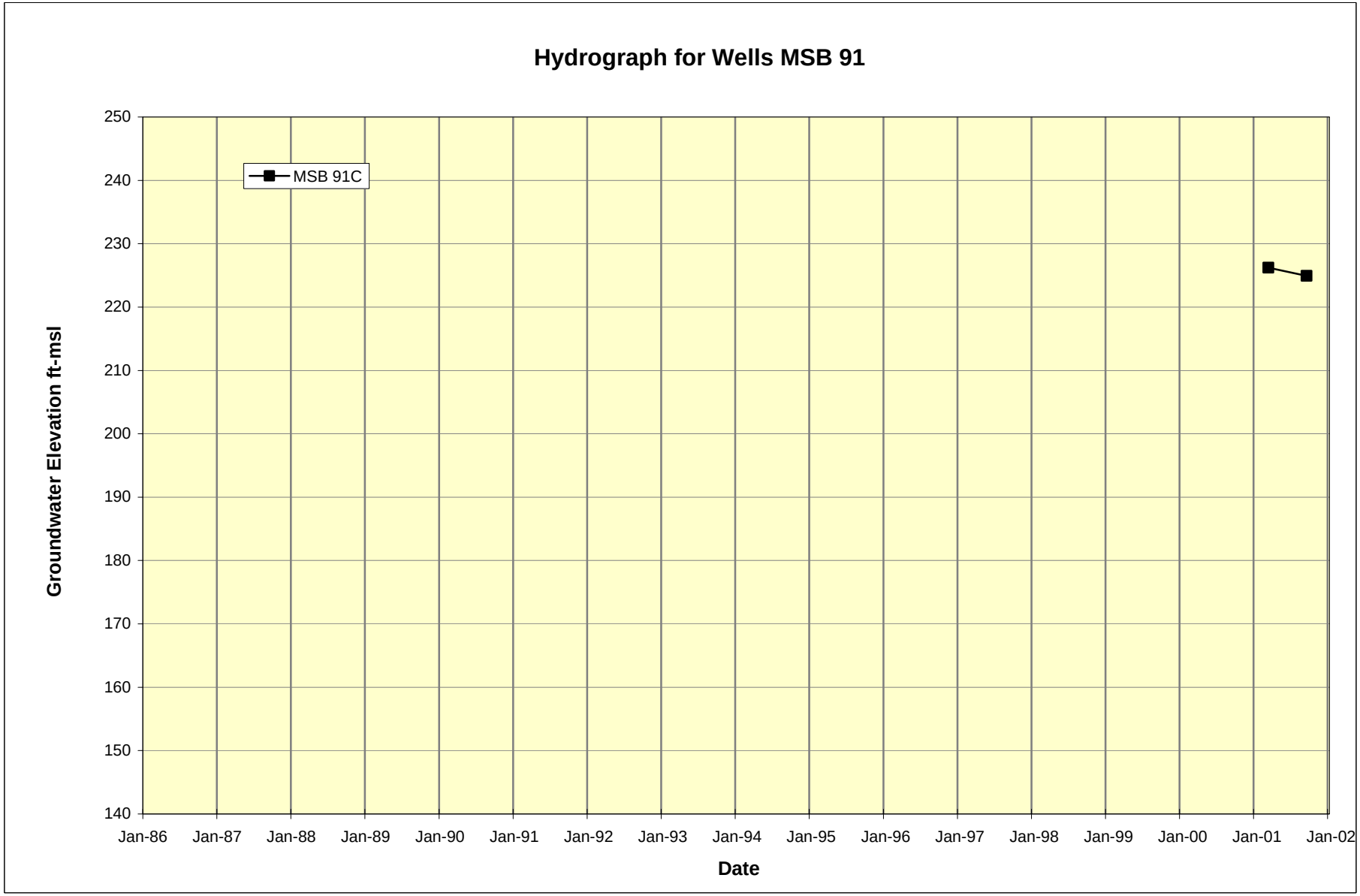
Hydrograph for Wells MSB 91
MSB 91C
Groundwater Elevation ft-msl
250
240
230
220
210
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Jan-86
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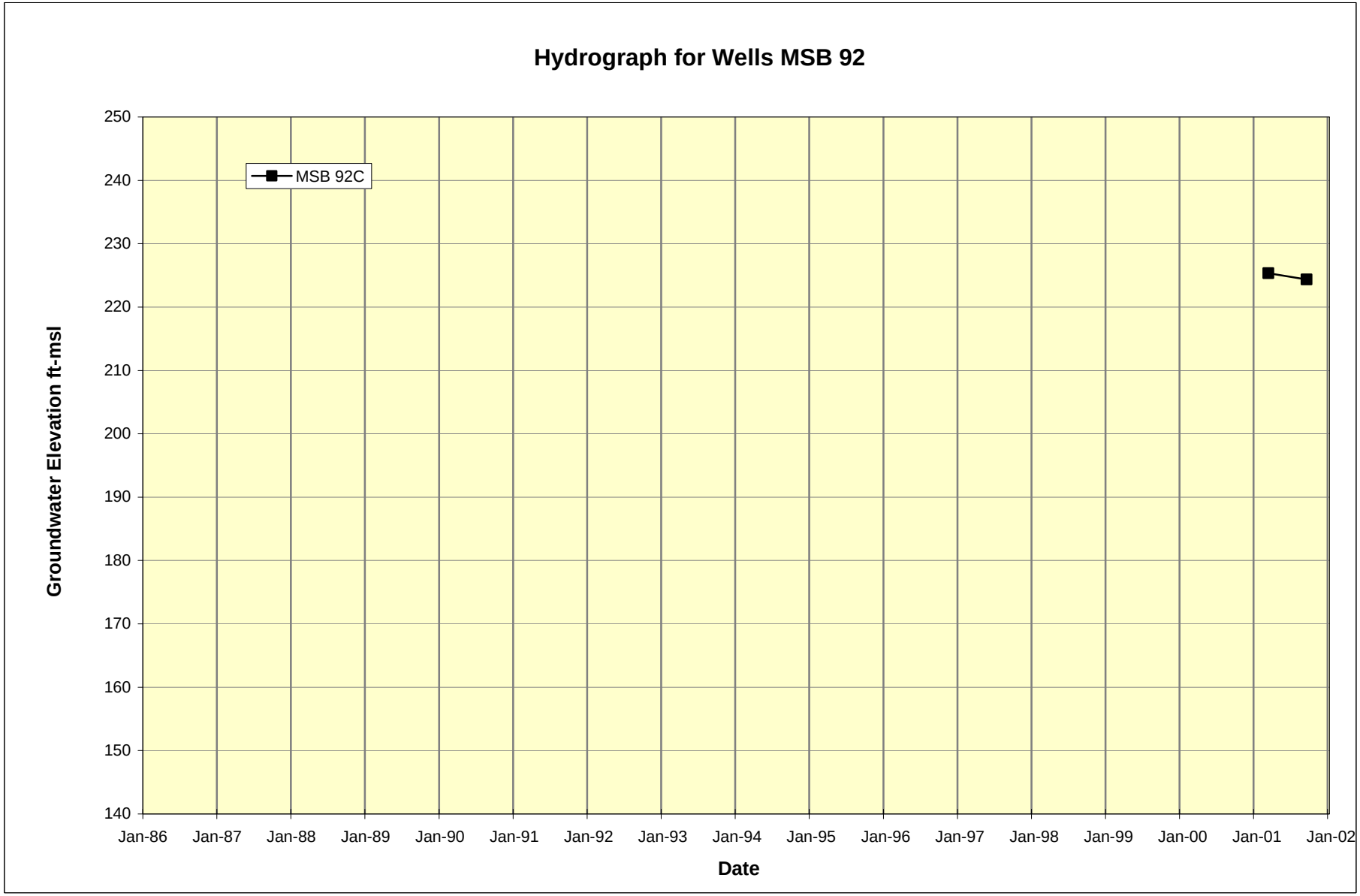
Hydrograph for Wells MSB 92
MSB 92C
Groundwater Elevation ft-msl
250
240
230
220
210
200
190
180
170
160
150
140
Jan-86
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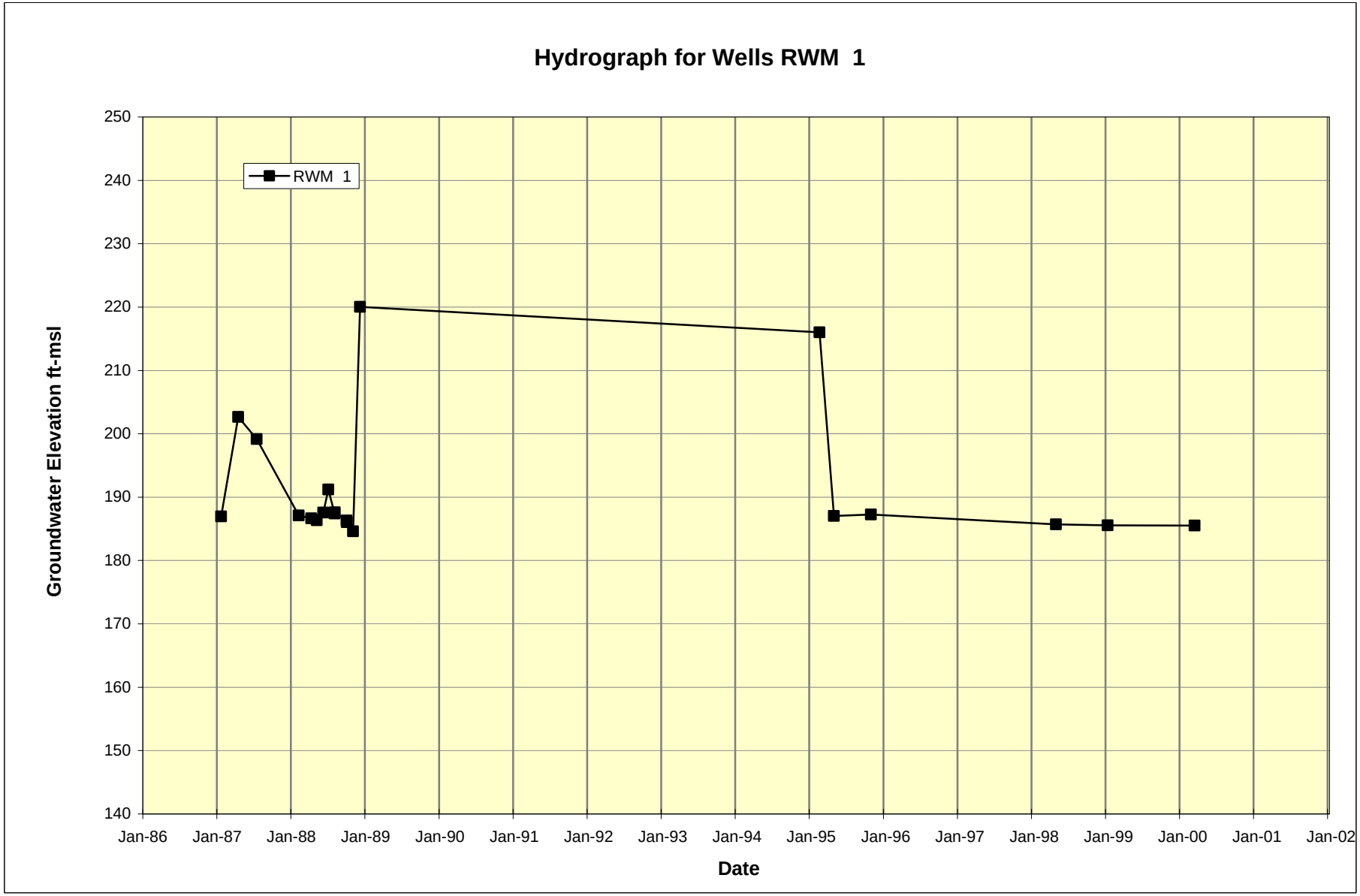
Hydrograph for Wells RWM 1
RWM 1
Groundwater Elevation ft-msl
250
240
230
220
210
200
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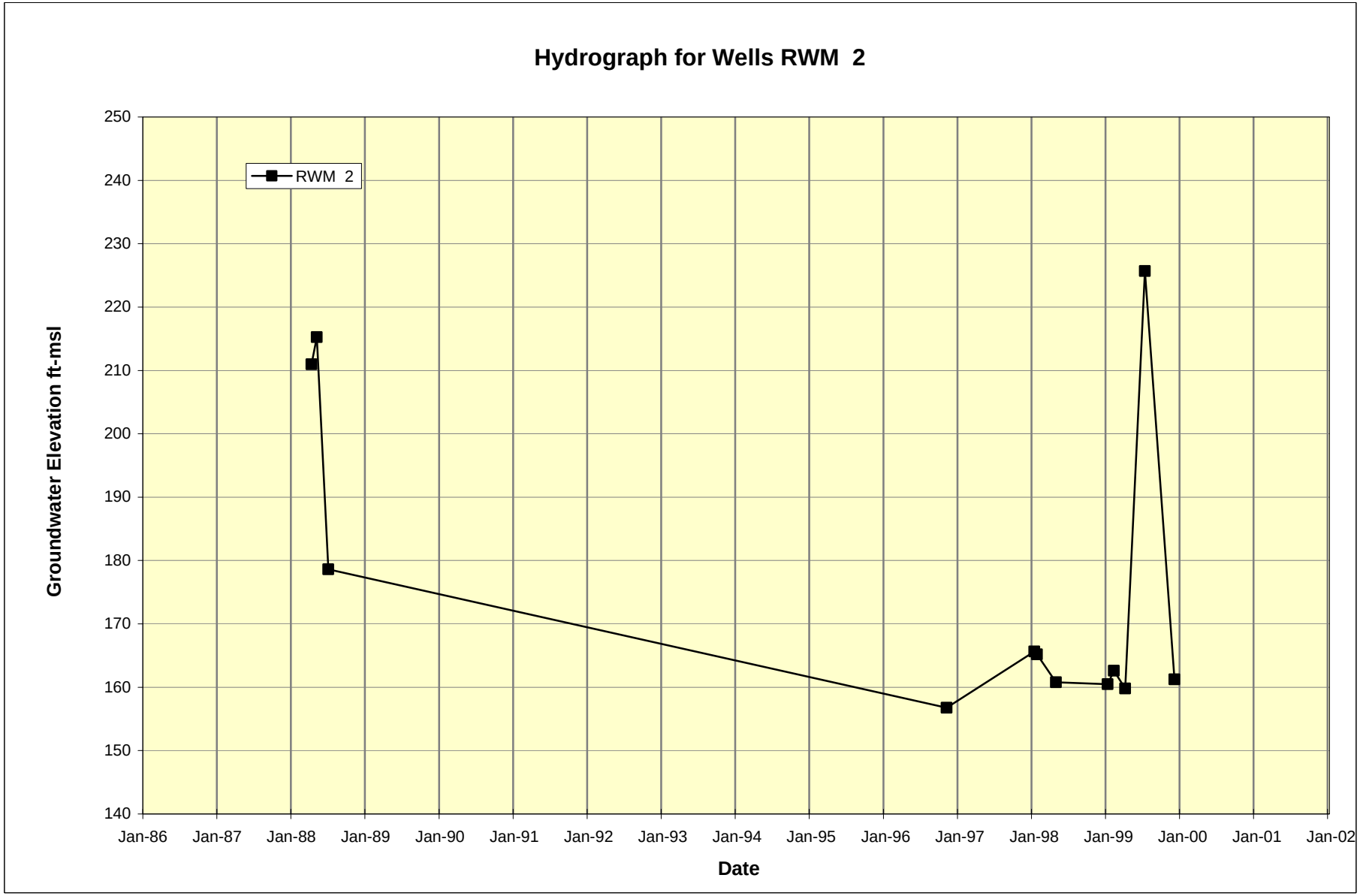
Hydrograph for Wells RWM 2
RWM 2
Groundwater Elevation ft-msl
250
240
230
220
210
200
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Jan-86
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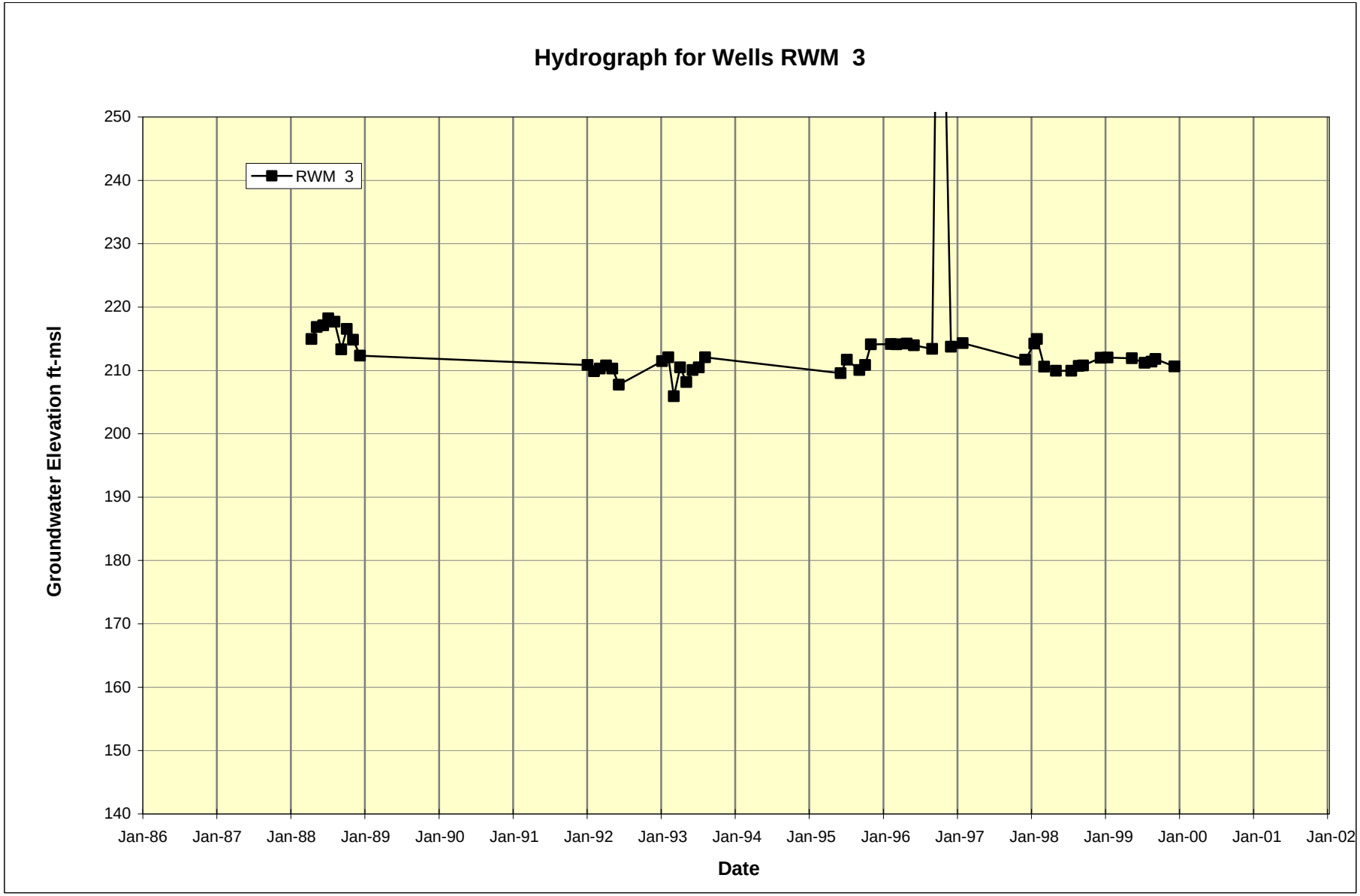
Hydrograph for Wells RWM 3
RWM 3
Groundwater Elevation ft-msl
250
240
230
220
210
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190
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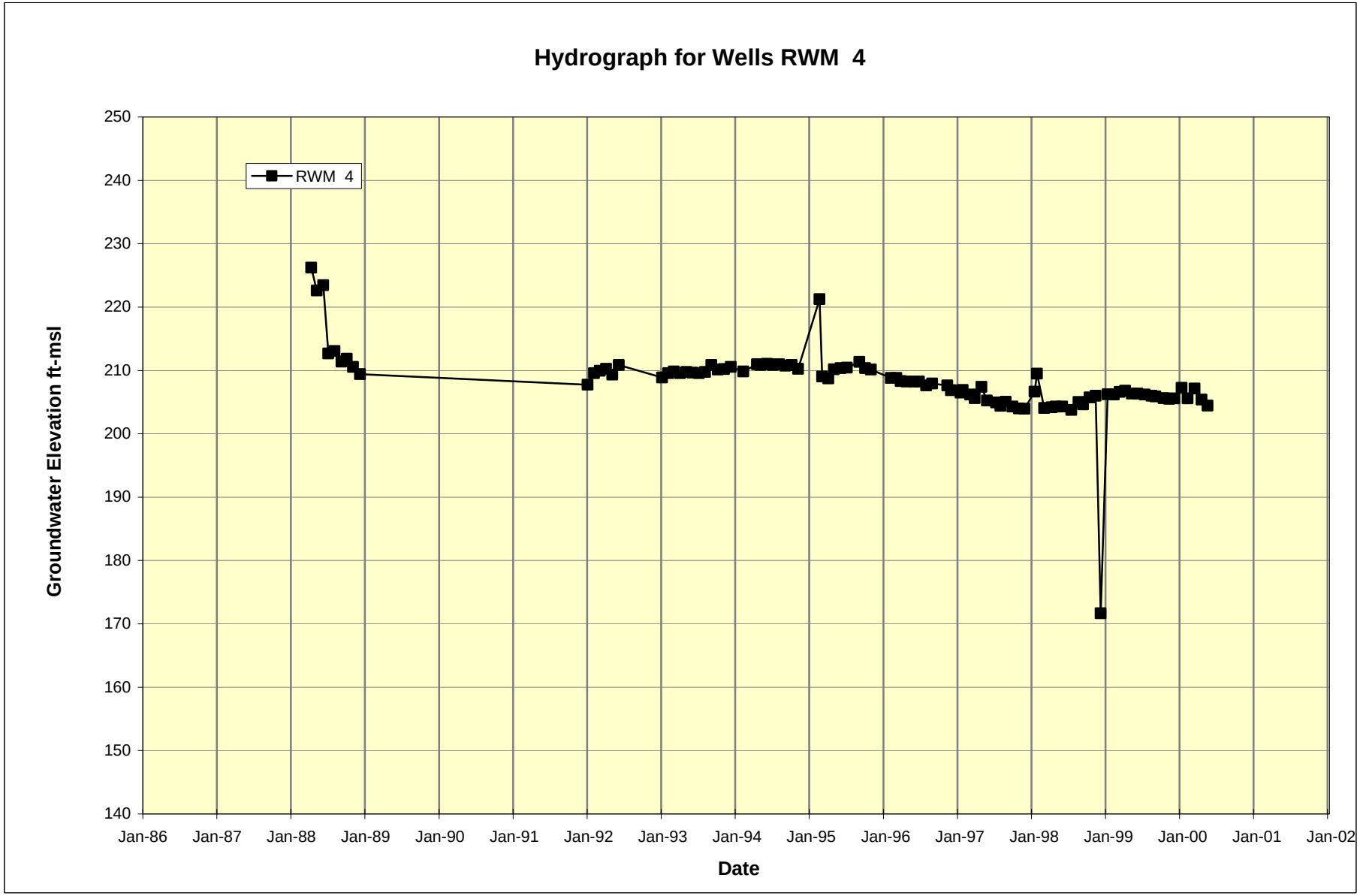
Hydrograph for Wells RWM 4
RWM 4
Groundwater Elevation ft-msl
250
240
230
220
210
200
190
180
170
160
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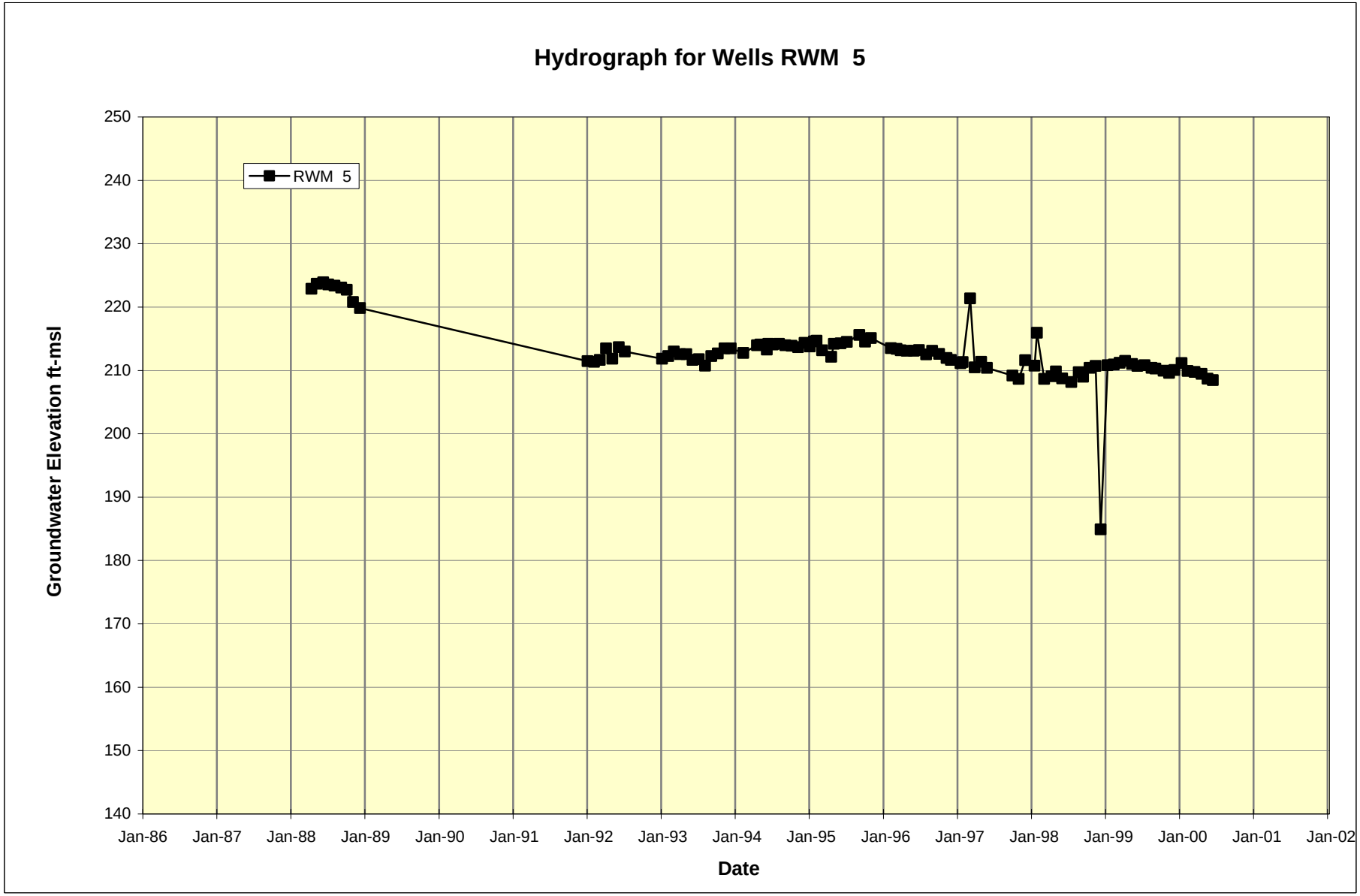
Hydrograph for Wells RWM 5
RWM 5
Groundwater Elevation ft-msl
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230
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210
200
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180
170
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Jan-86
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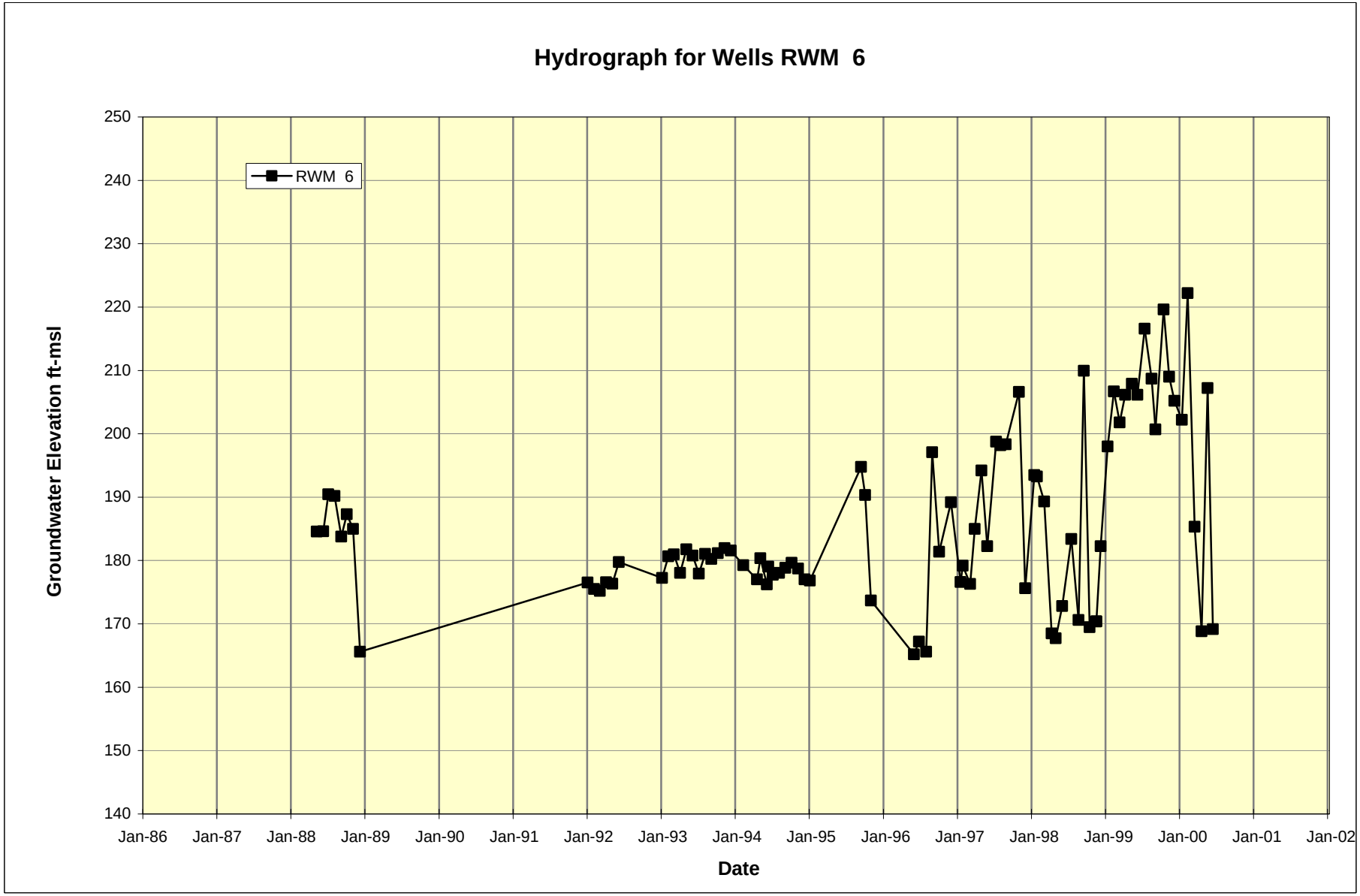
Hydrograph for Wells RWM 6
RWM 6
Groundwater Elevation ft-msl
250
240
230
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210
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180
170
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Jan-86
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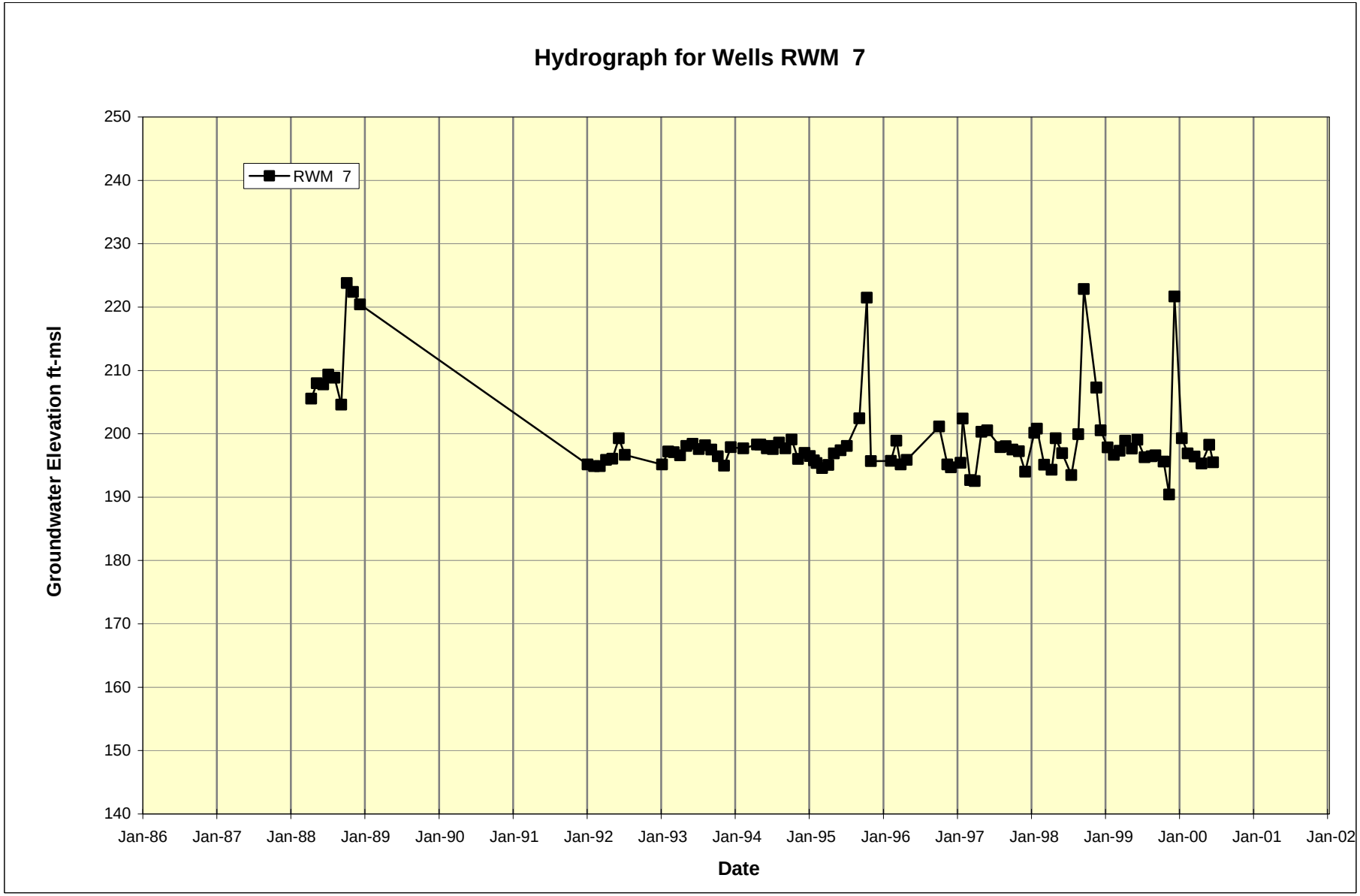
Hydrograph for Wells RWM 7
RWM 7
Groundwater Elevation ft-msl
250
240
230
220
210
200
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180
170
160
150
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Jan-86
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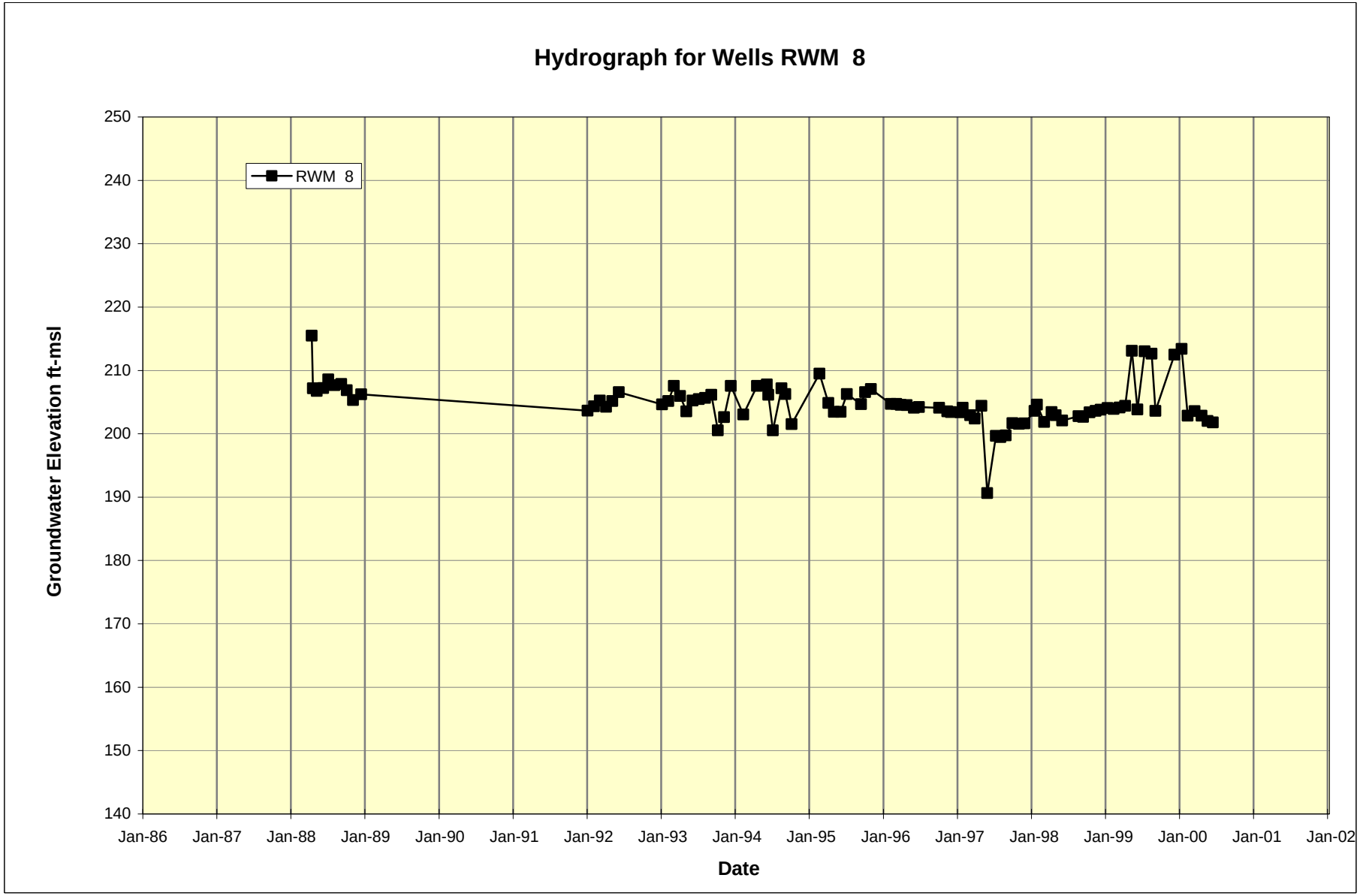
Hydrograph for Wells RWM 8
RWM 8
Groundwater Elevation ft-msl
250
240
230
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210
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180
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Jan-86
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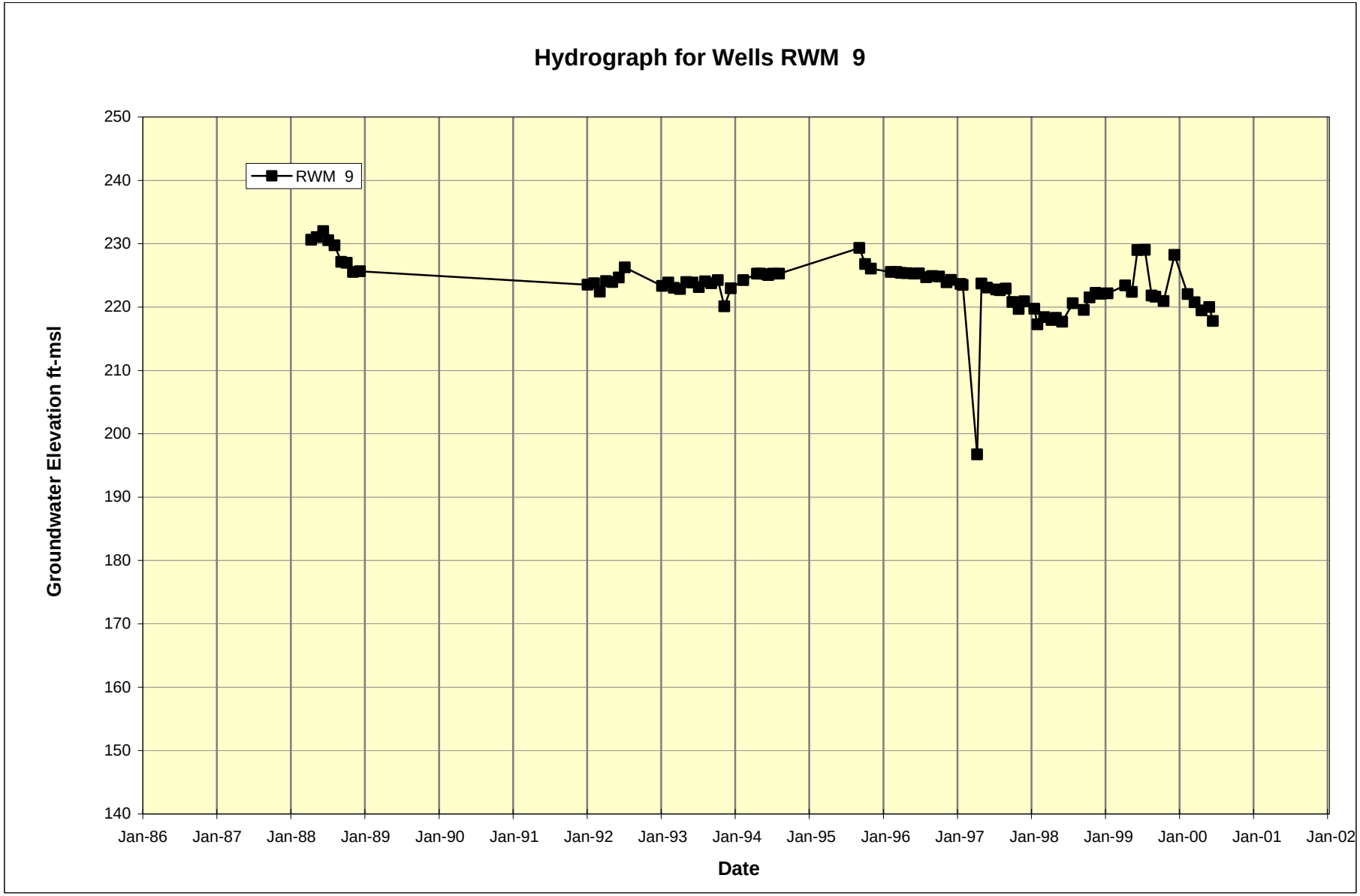
Hydrograph for Wells RWM 9
RWM 9
Groundwater Elevation ft-msl
250
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230
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Jan-86
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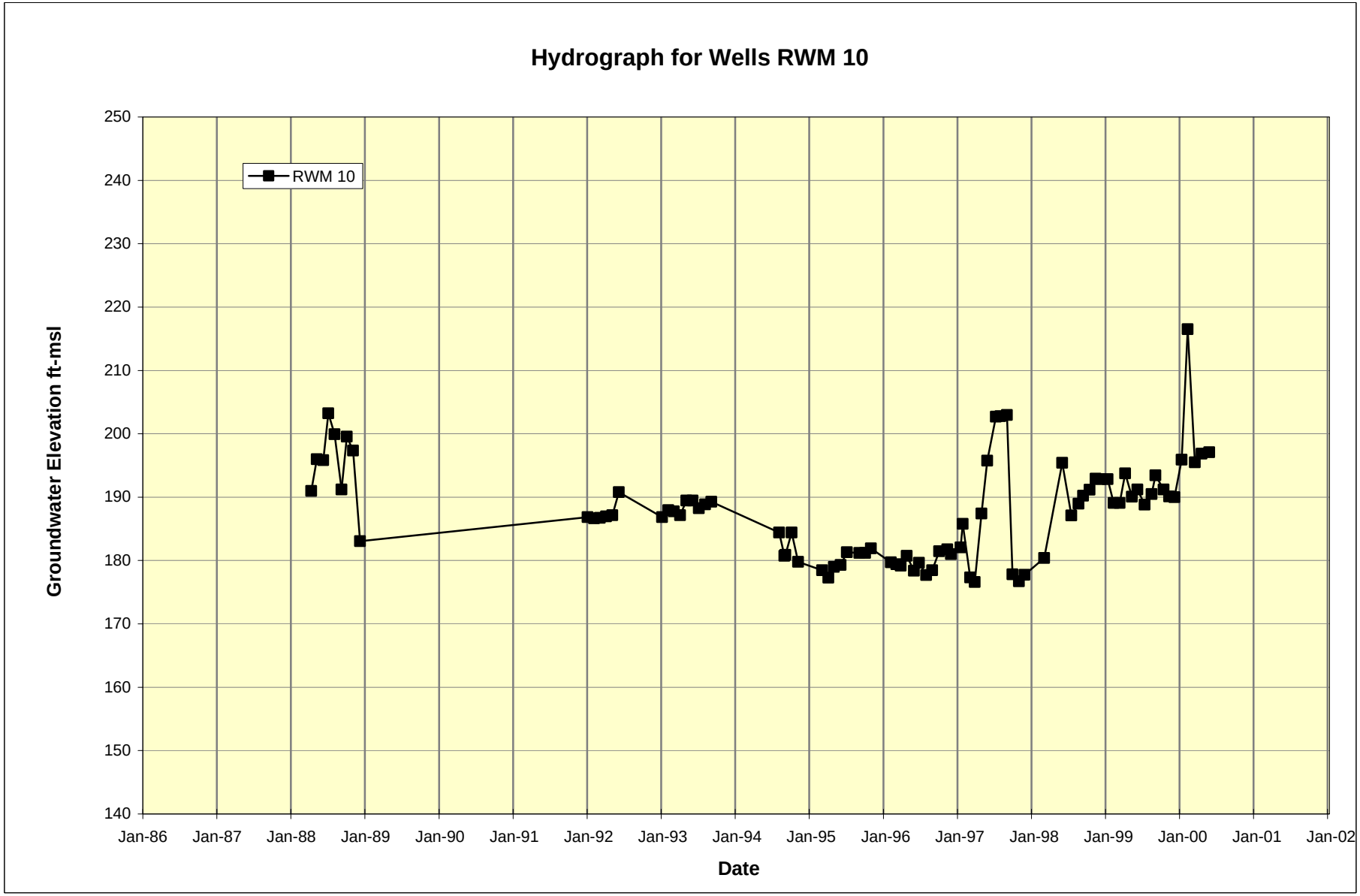
Hydrograph for Wells RWM 10
RWM 10
Groundwater Elevation ft-msl
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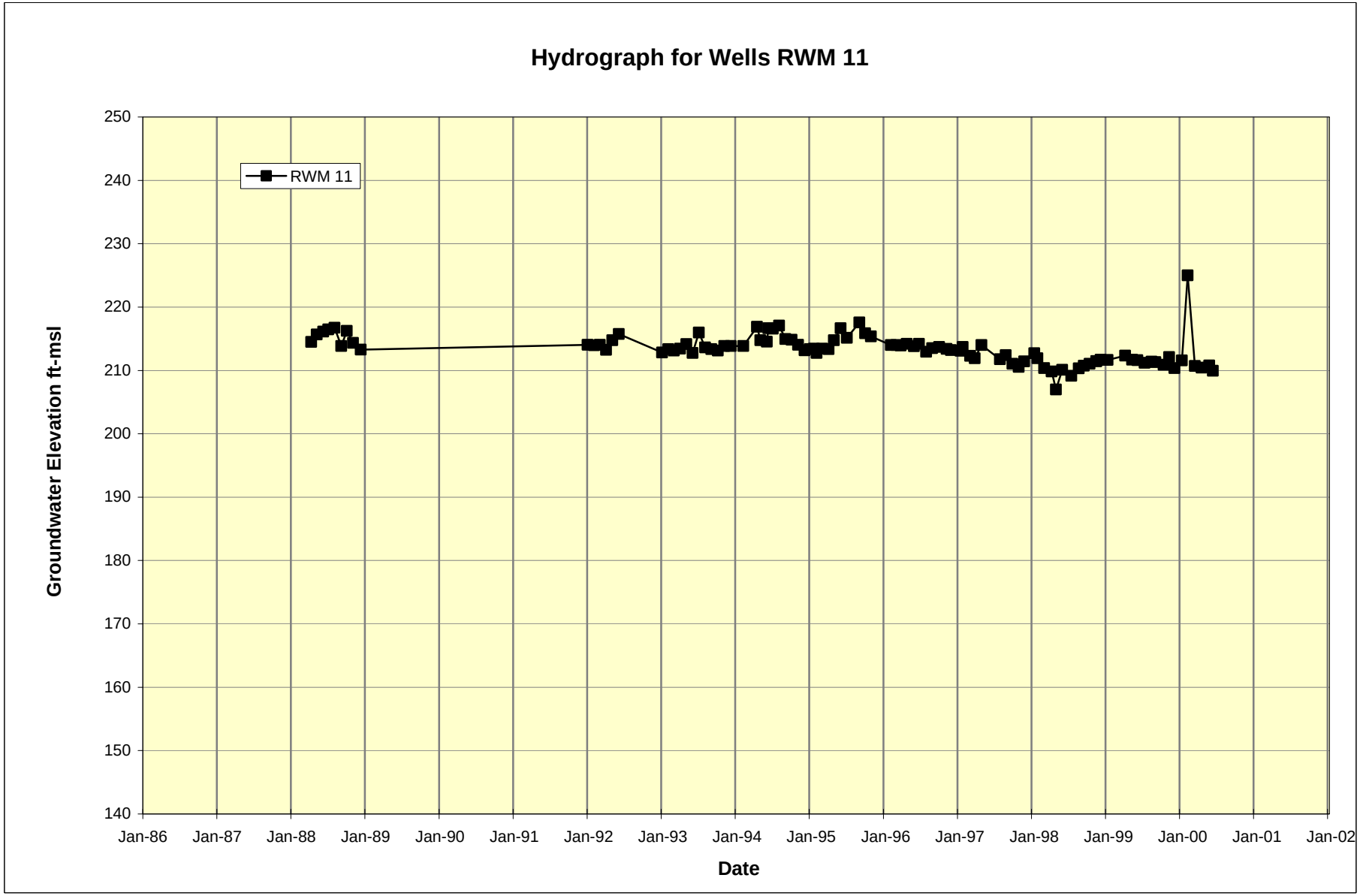
Hydrograph for Wells RWM 11
RWM 11
Groundwater Elevation ft-msl
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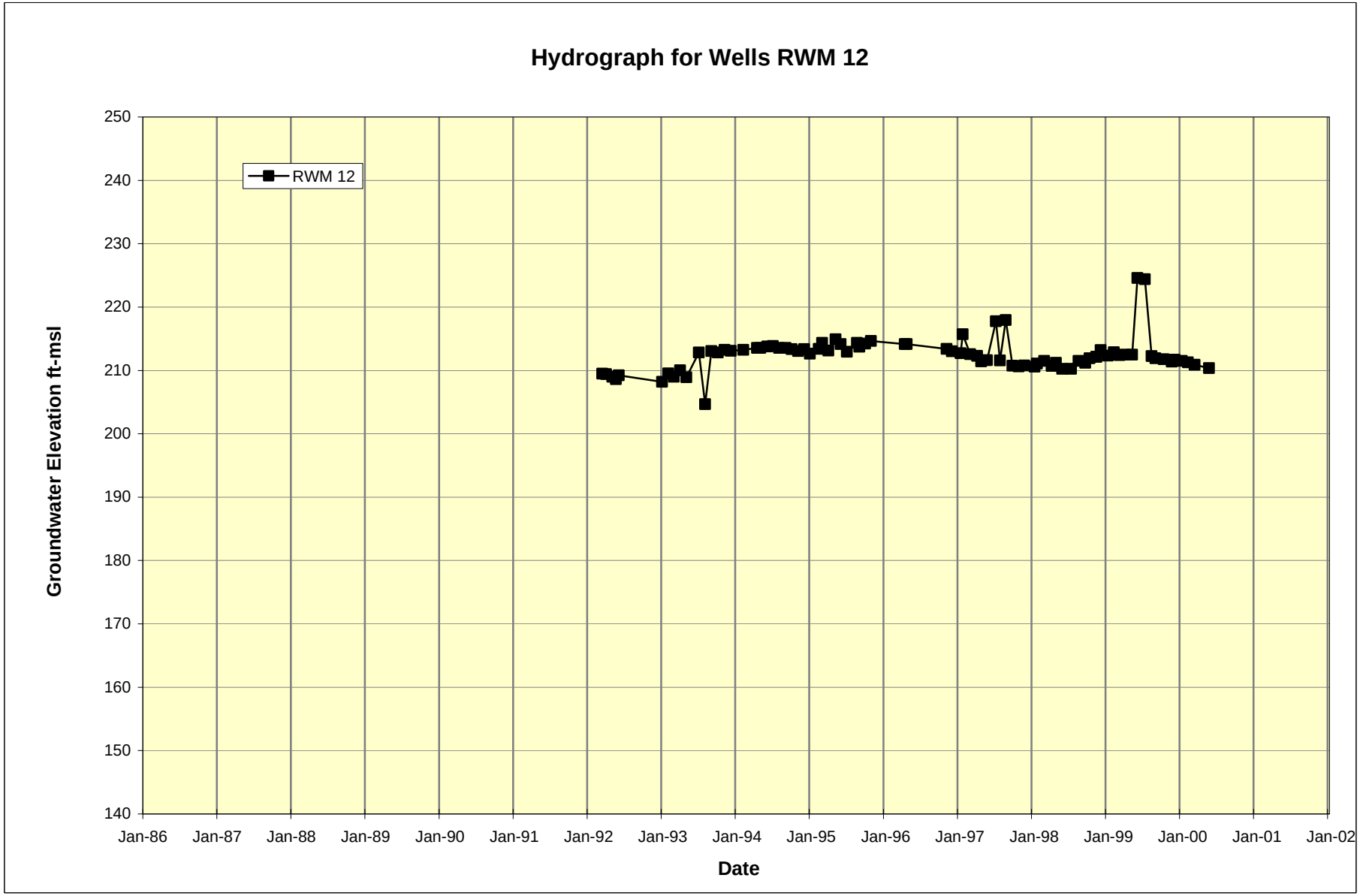
Hydrograph for Wells RWM 12
RWM 12
Groundwater Elevation ft-msl
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240
230
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210
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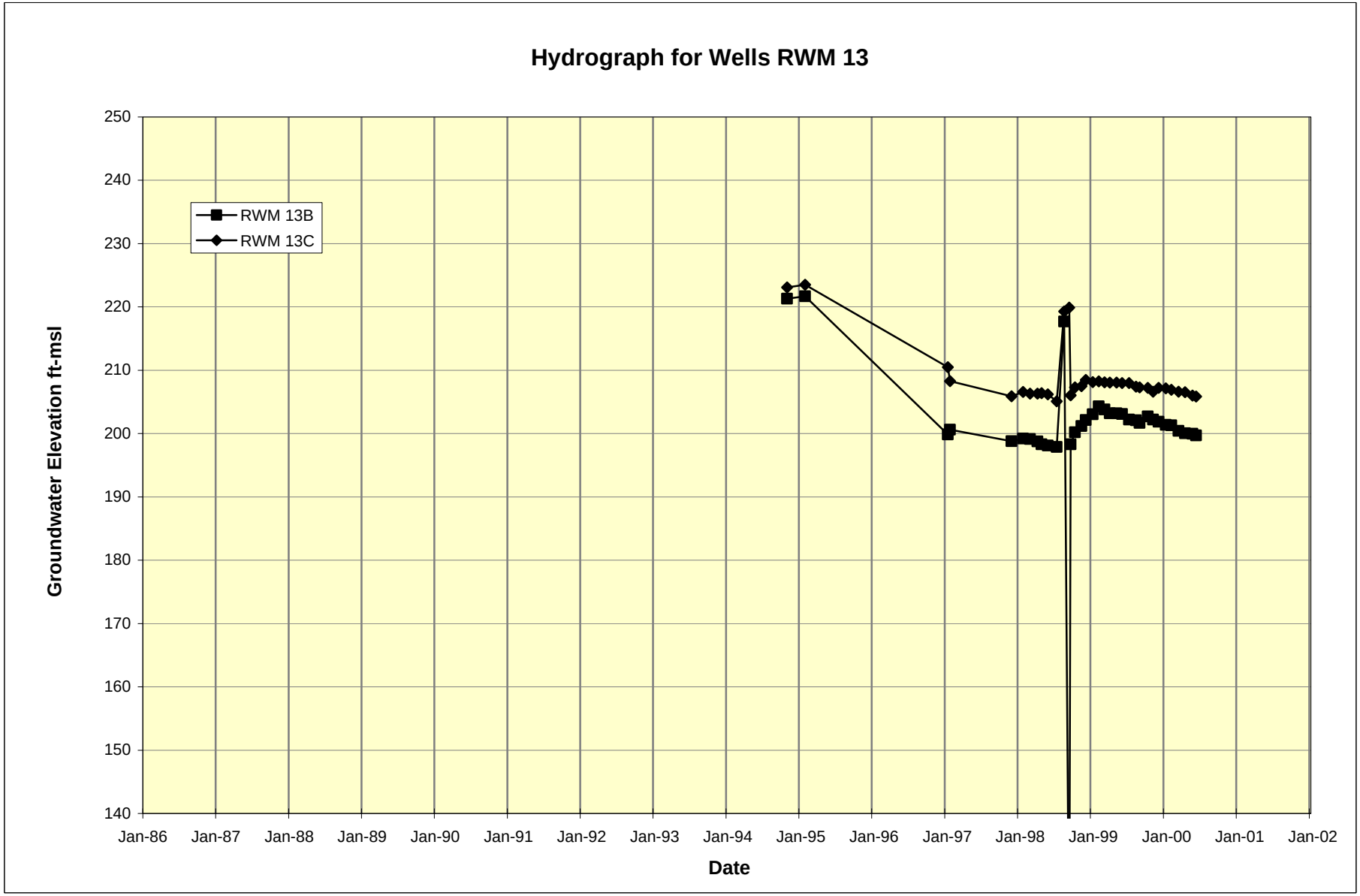
Hydrograph for Wells RWM 13
RWM 13B
RWM 13C
Groundwater Elevation ft-msl
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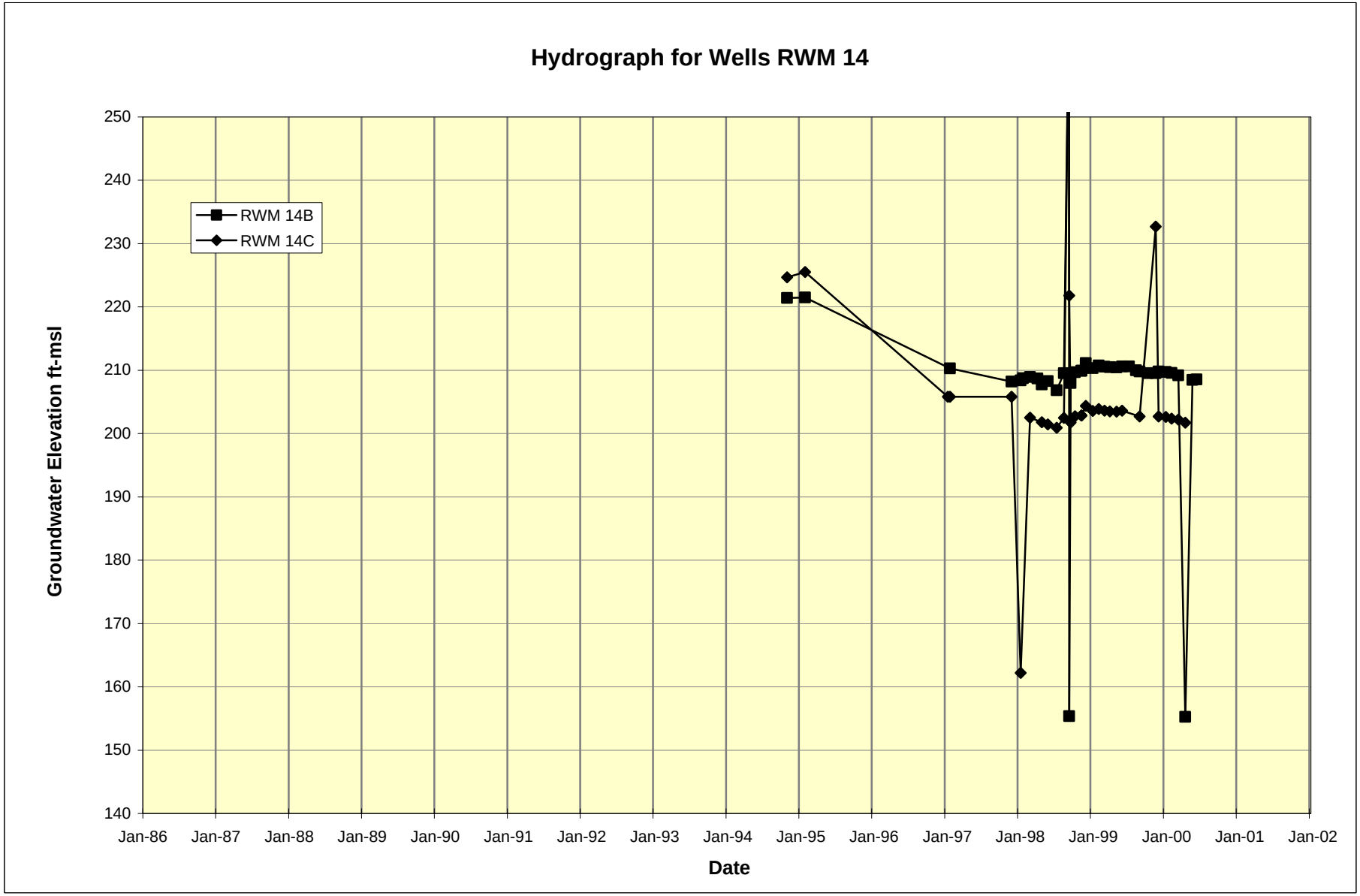
Hydrograph for Wells RWM 14
RWM 14B
RWM 14C
Groundwater Elevation ft-msl
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190
180
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Jan-86
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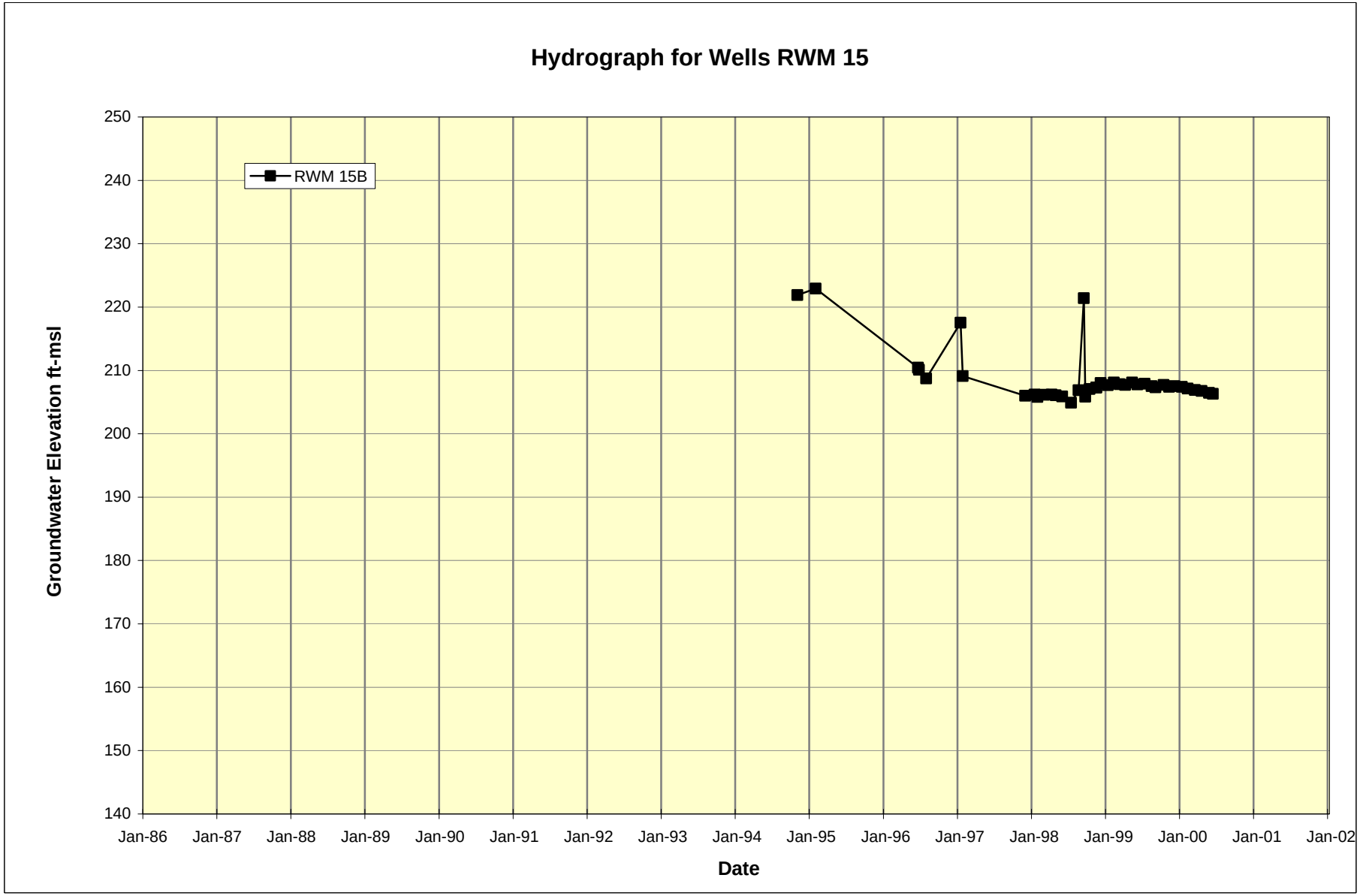
Hydrograph for Wells RWM 15
RWM 15B
Groundwater Elevation ft-msl
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230
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180
170
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Jan-86
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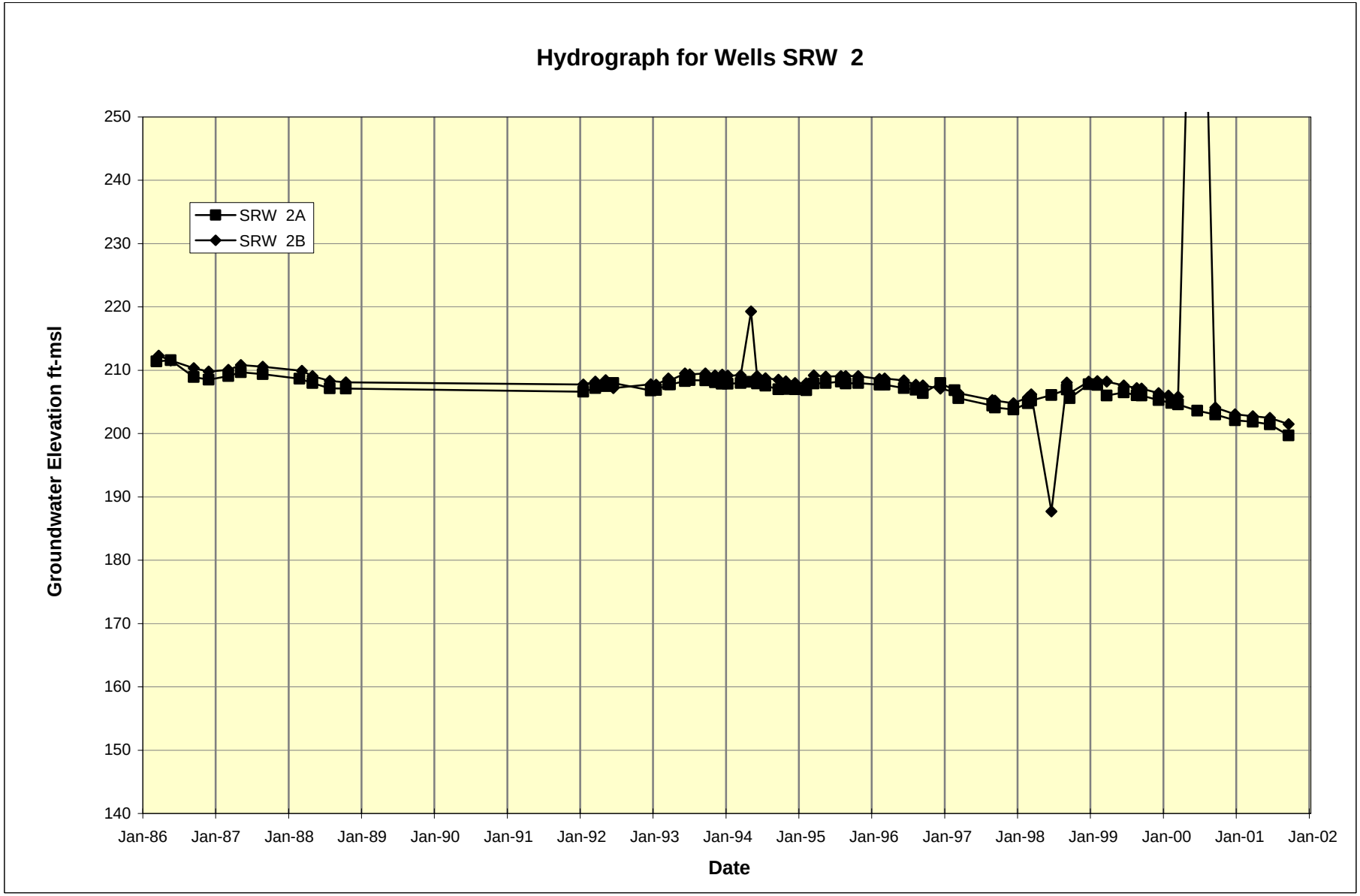
Hydrograph for Wells SRW 2
SRW 2A
SRW 2B
Groundwater Elevation ft-msl
250
240
230
220
210
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Jan-86
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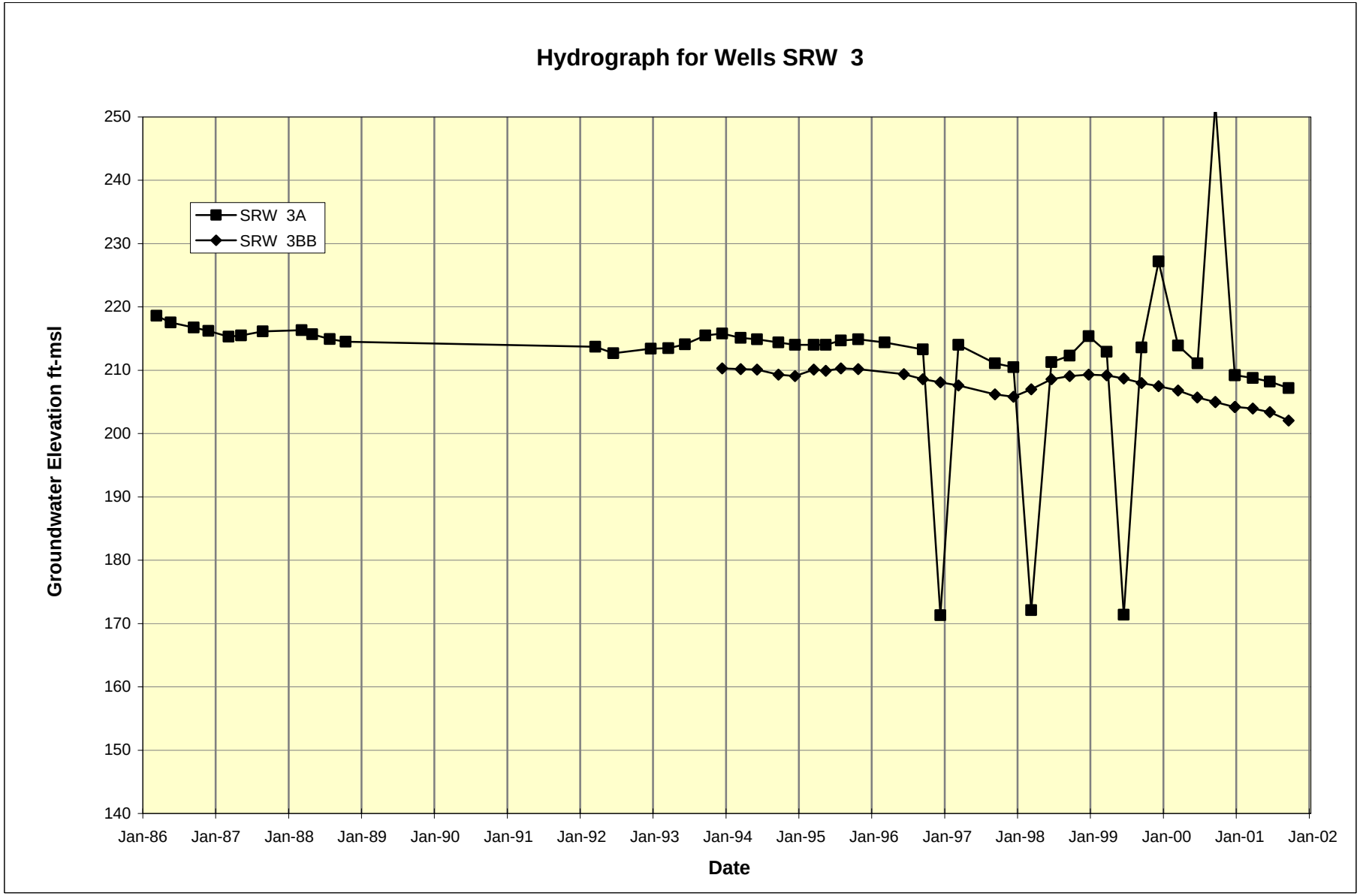
Hydrograph for Wells SRW 3
SRW 3A
SRW 3BB
Groundwater Elevation ft-msl
250
240
230
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Jan-86
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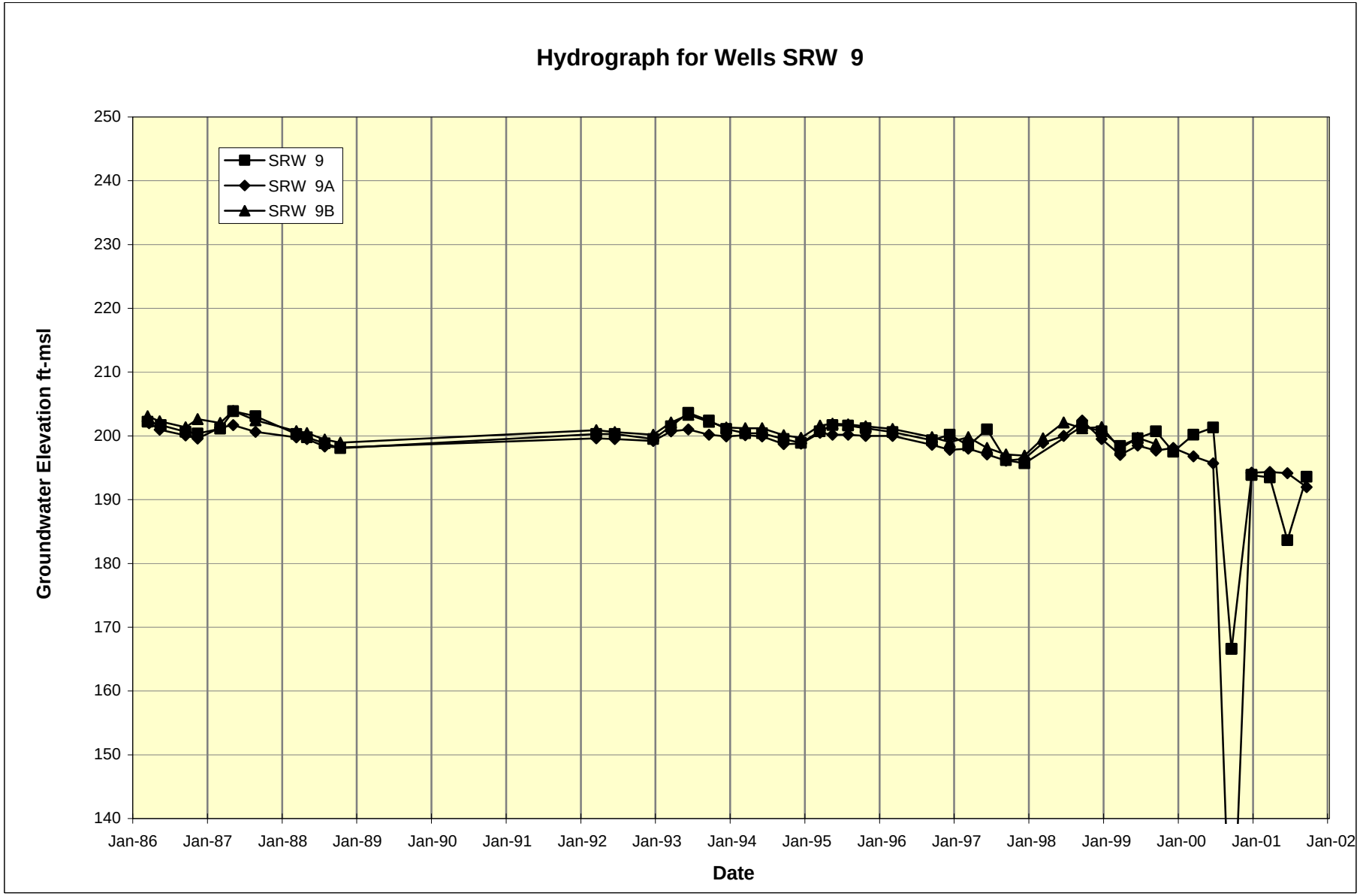
Hydrograph for Wells SRW 9
SRW 9
SRW 9A
SRW 9B
Groundwater Elevation ft-msl
250
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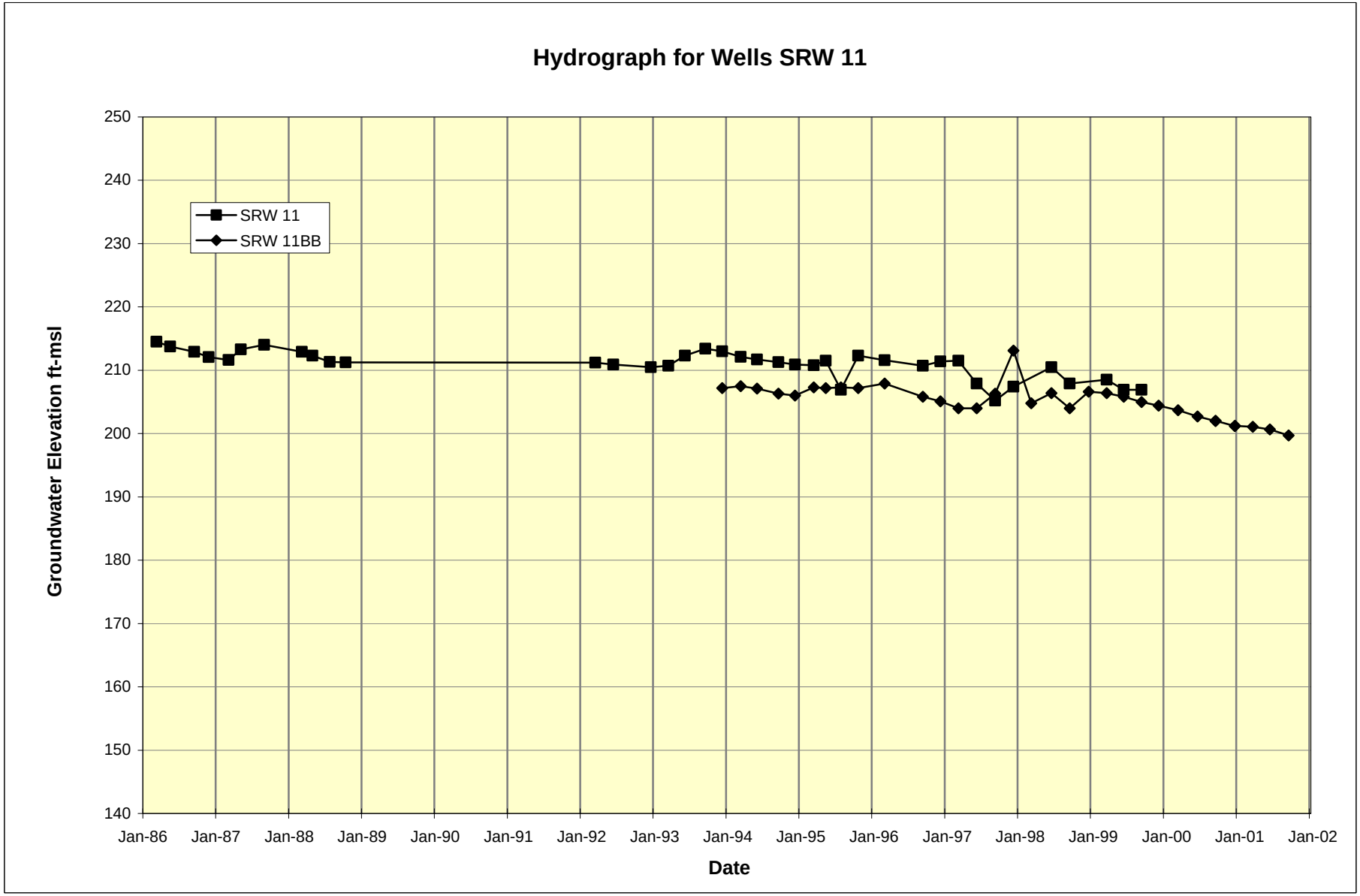
Hydrograph for Wells SRW 11
SRW 11
SRW 11BB
Groundwater Elevation ft-msl
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Jan-86
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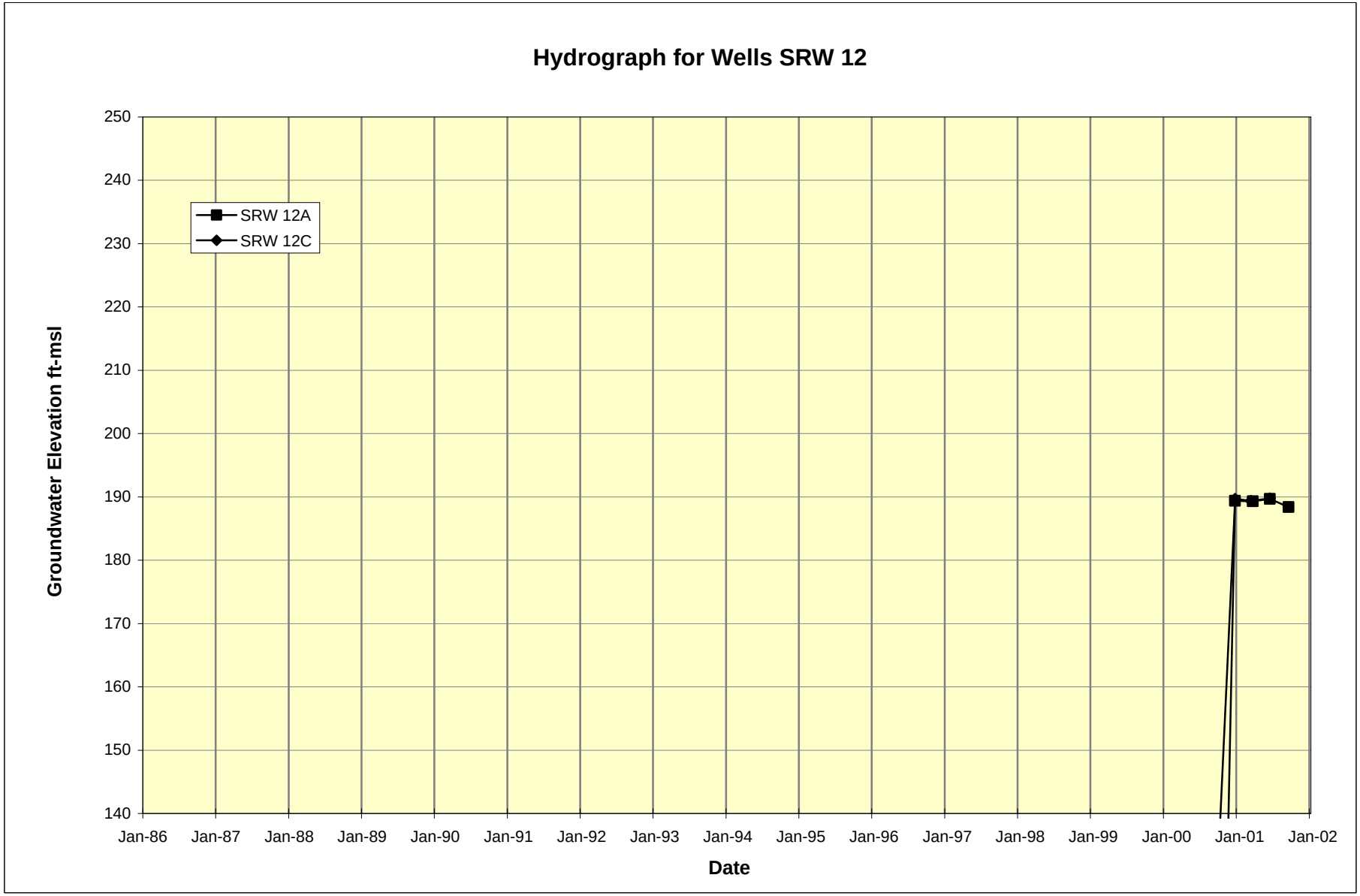
Hydrograph for Wells SRW 12
SRW 12A
SRW 12C
Groundwater Elevation ft-msl
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220
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Jan-97
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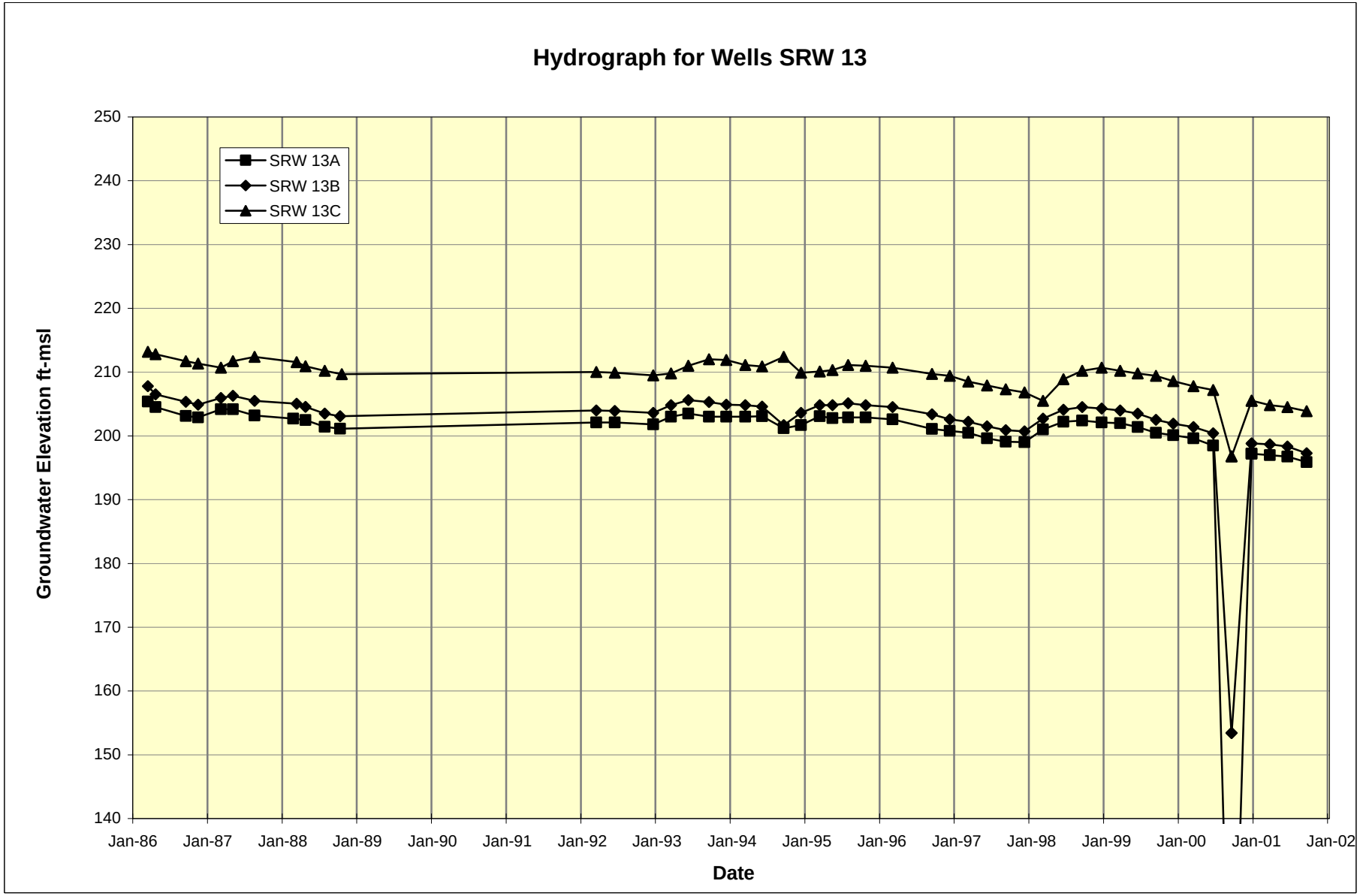
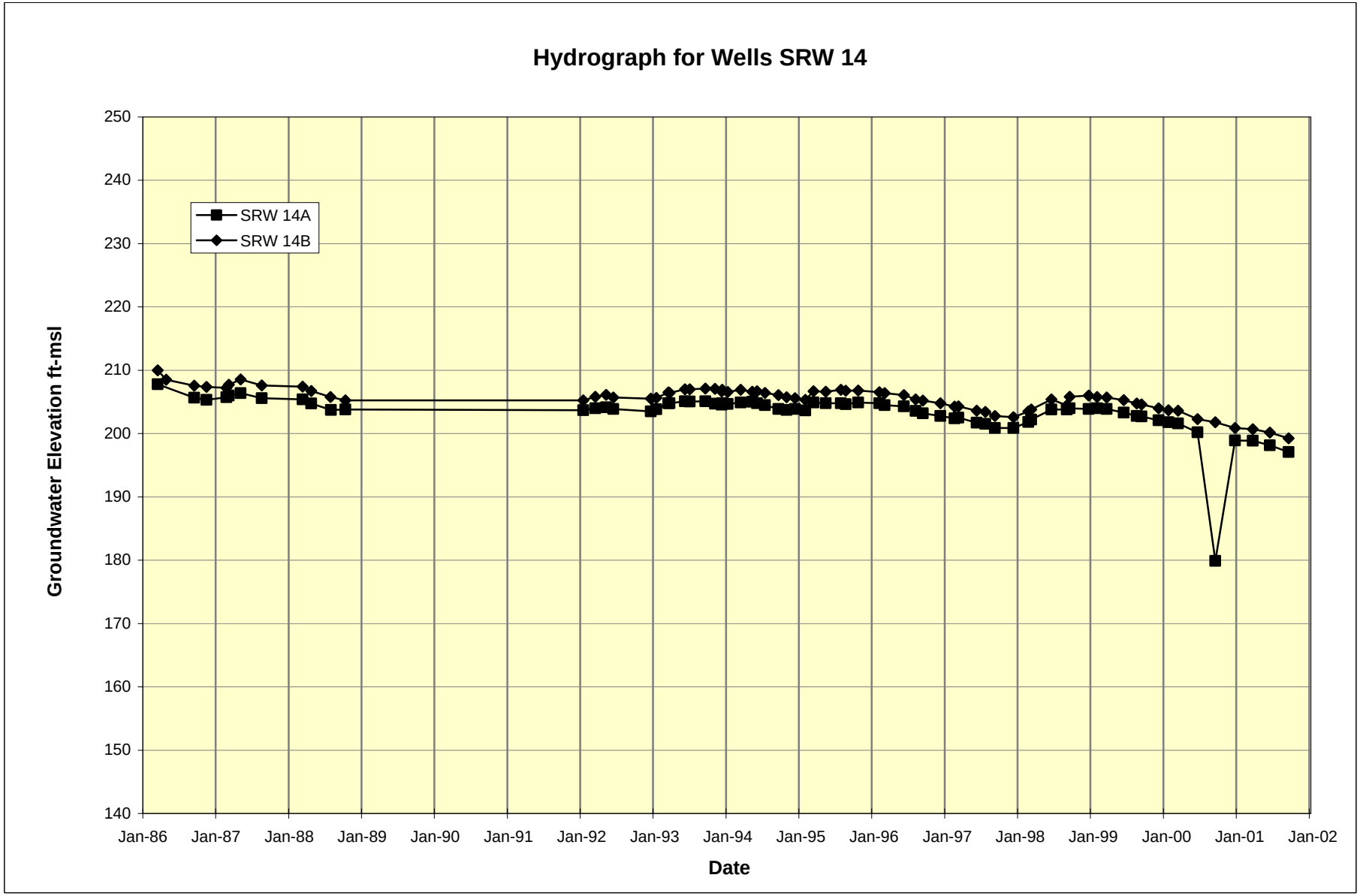
Date


Hydrograph for Wells SRW 13
SRW 13A
SRW 13B
SRW 13C
Groundwater Elevation ft-msl
250
240
230
220
210
200
190
180
170
160
150
140
Jan-86
Jan-87
Jan-88
Jan-89
Jan-90
Jan-91
Jan-92
Jan-93
Jan-94
Jan-95
Jan-96
Jan-97
Jan-98
Jan-99
Jan-00
Jan-01
Jan-02
Date


Hydrograph for Wells SRW 14
SRW 14A
SRW 14B
Groundwater Elevation ft-msl
250
240
230
220
210
200
190
180
170
160
150
140
Jan-86
Jan-87
Jan-88
Jan-89
Jan-90
Jan-91
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Jan-97
Jan-98
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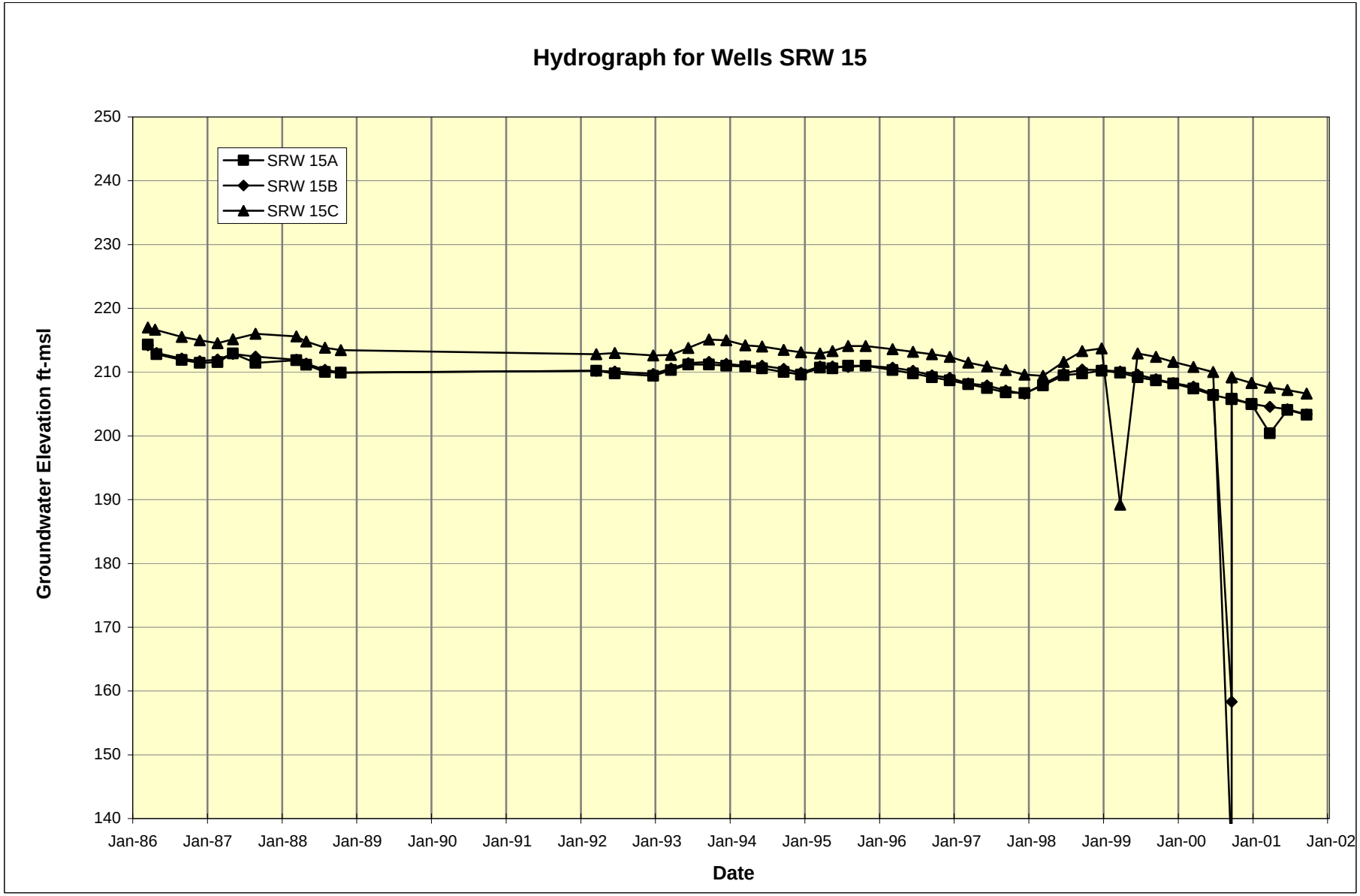
Jan-00
Jan-01
Jan-02
Date


Hydrograph for Wells SRW 15
SRW 15A
SRW 15B
SRW 15C
Groundwater Elevation ft-msl
250
240
230
220
210
200
190
180
170
160
150
140
Jan-86
Jan-87
Jan-88
Jan-89
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Jan-91
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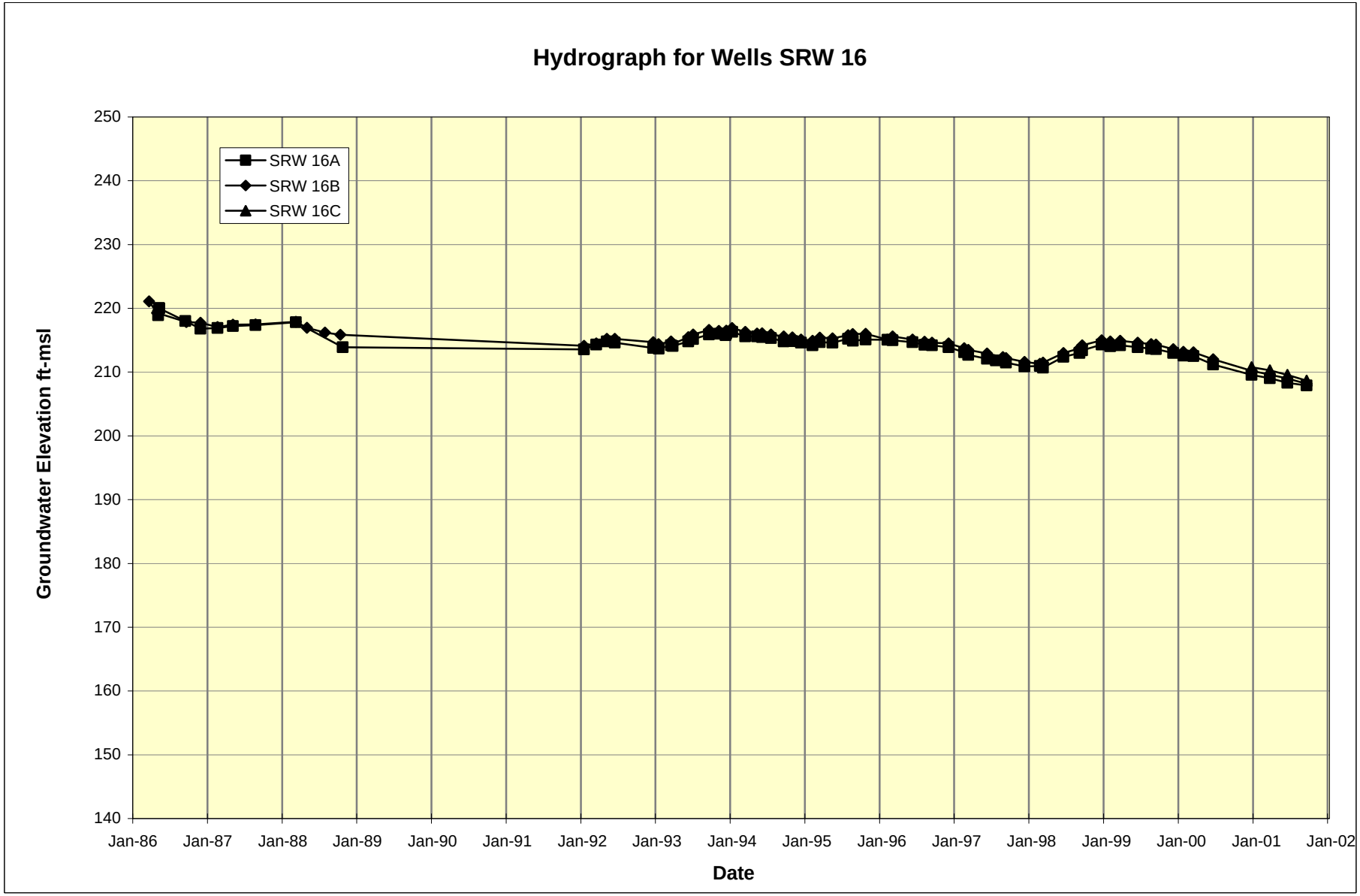
Date


Hydrograph for Wells SRW 16
SRW 16A
SRW 16B
SRW 16C
Groundwater Elevation ft-msl
250
240
230
220
210
200
190
180
170
160
150
140
Jan-86
Jan-87
Jan-88
Jan-89
Jan-90
Jan-91
Jan-92
Jan-93
Jan-94
Jan-95
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Jan-99
Jan-00
Jan-01
Jan-02
Date

Appendix H

Maps

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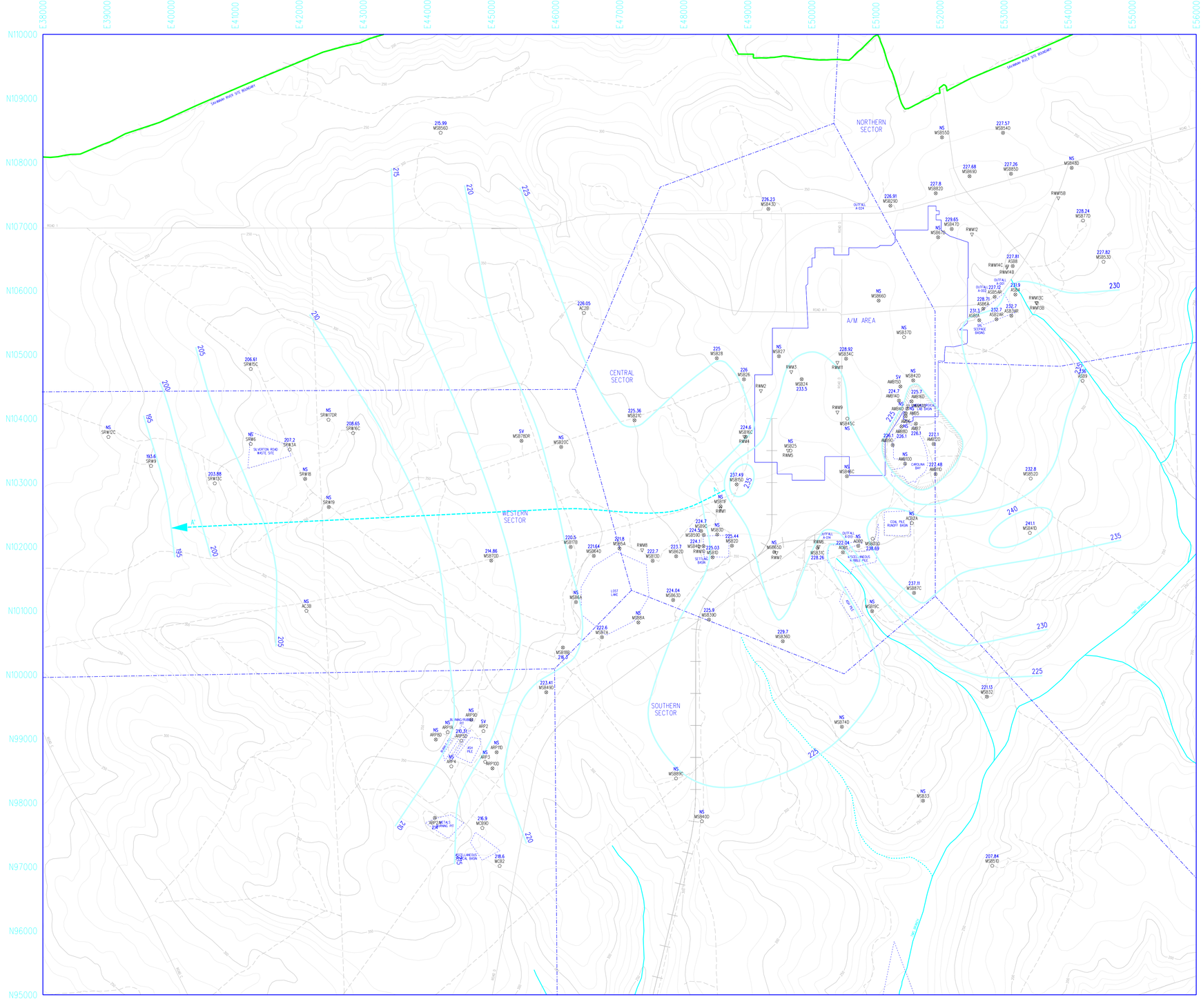
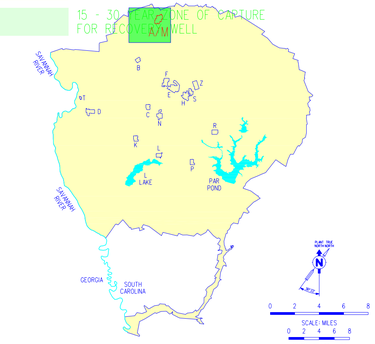


LEGEND

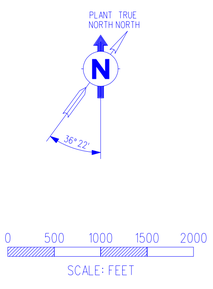
- MONITORING WELL
- RECOVERY WELL
- PIEZOMETER
- 200.5 WATER TABLE ELEVATION (3Q01) FEET ABOVE MSL
- NS NOT SAMPLED
- SV SUSPECT VALUE (NOT USED IN CONTOURING)

- POTENTIOMETRIC SURFACE CONTOUR M-AREA AQUIFER ZONE (3Q01) CONTOUR INTERVAL = 5 FEET
- APPROXIMATE FLOW PATH A - A' = 8,700 FEET (FLOW RATE = 195 FEET / YEAR)

- SRS SITE BOUNDARY
- A/M-AREA GROUNDWATER SECTOR BOUNDARY
- A/M-AREA FENCE BOUNDARY
- STREAM
- INTERMITTENT STREAM
- SRS TOPOGRAPHIC CONTOUR (10 FOOT INTERVAL)
- SRS MAIN/PAVED ROAD
- SRS SECONDARY ROAD
- SRS RAILROAD
- 0 - 5 YEAR ZONE OF CAPTURE FOR RECOVERY WELL
- 5 - 15 YEAR ZONE OF CAPTURE FOR RECOVERY WELL
- 15 - 30 YEAR ZONE OF CAPTURE FOR RECOVERY WELL



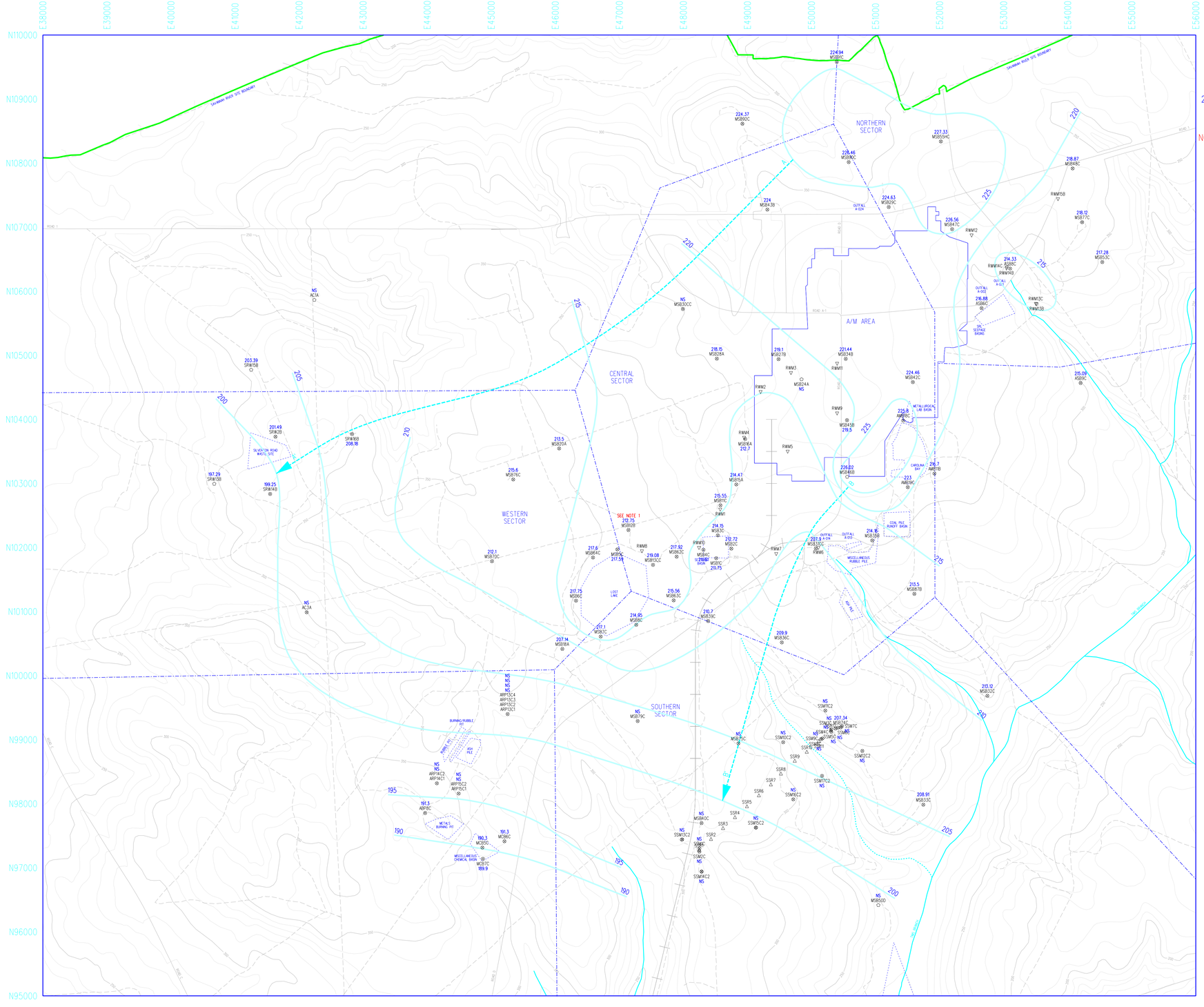
SAVANNAH RIVER SITE



Map 1.
Potentiometric Surface Map of the
M-Area Aquifer Zone at the
M-Area and Met Lab HWMFs,
Third Quarter 2001

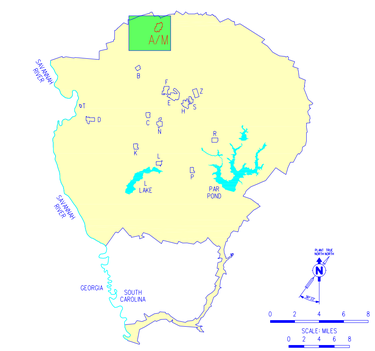
Map 1. Potentiometric Surface Map of the M-Area Aquifer Zone at the M-Area and Met Lab HWMFs, Third Quarter 2001

MWA6931

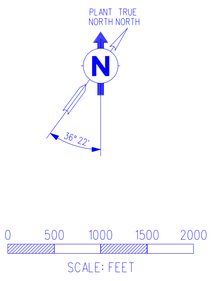


LEGEND

- ⊗ MONITORING WELL
- ▽ RECOVERY WELL
- △ RECIRCULATION WELL
- ⬠ PIEZOMETER
- 200.5 WATER TABLE ELEVATION (3Q01) FEET ABOVE MSL
- NS NOT SAMPLED
- SV SUSPECT VALUE (NOT USED IN CONTOURING)
- NOTE 1 LOW VALUE THOUGHT TO BE UNREPRESENTATIVE OF AQUIFER CONCENTRATIONS DUE TO LESS THAN OPTIMUM SCREEN PLACEMENT. NOT USED IN CONTOURING.
- POTENTIOMETRIC SURFACE CONTOUR UPPER LOST LAKE AQUIFER ZONE (3Q01) CONTOUR INTERVAL = 5 FEET
- APPROXIMATE FLOW PATH
  - A - A' = 9,600 FEET (FLOW RATE = 214 FEET / YEAR)
  - B - B' = 5,300 FEET (FLOW RATE = 384 FEET / YEAR)
- SRS SITE BOUNDARY
- A/M-AREA GROUNDWATER SECTOR BOUNDARY
- A/M-AREA FENCE BOUNDARY
- STREAM
- INTERMITTENT STREAM
- SRS TOPOGRAPHIC CONTOUR (10 FOOT INTERVAL)
- SRS MAIN/PAVED ROAD
- SRS SECONDARY ROAD
- SRS RAILROAD



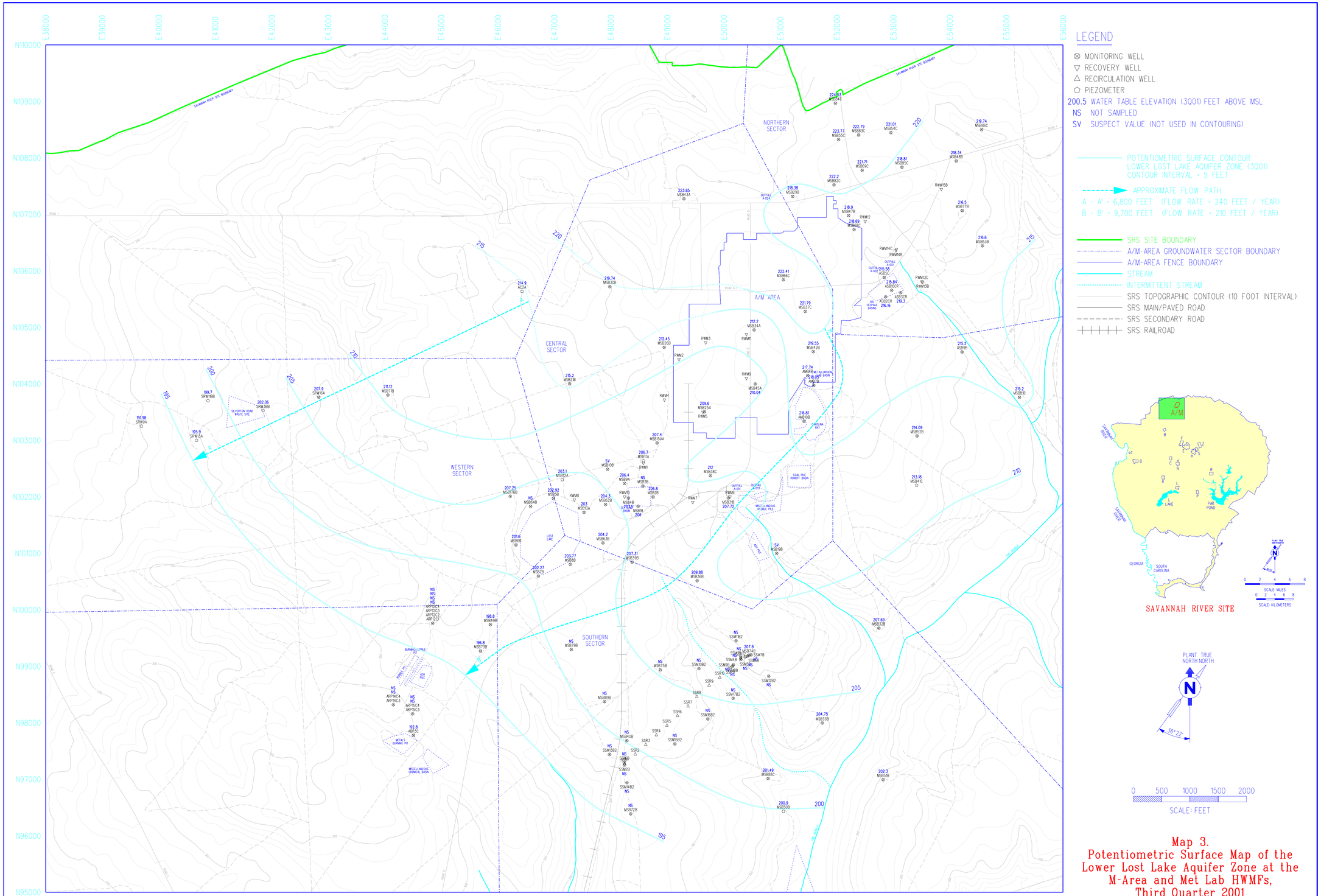
SAVANNAH RIVER SITE



Map 2.
Potentiometric Surface Map of the Upper Lost Lake Aquifer Zone at the M-Area and Met Lab HWMFs, Third Quarter 2001

Map 2. Potentiometric Surface Map of the Upper Lost Lake Aquifer Zone at the M-Area and Met Lab HWMFs, Third Quarter 2001

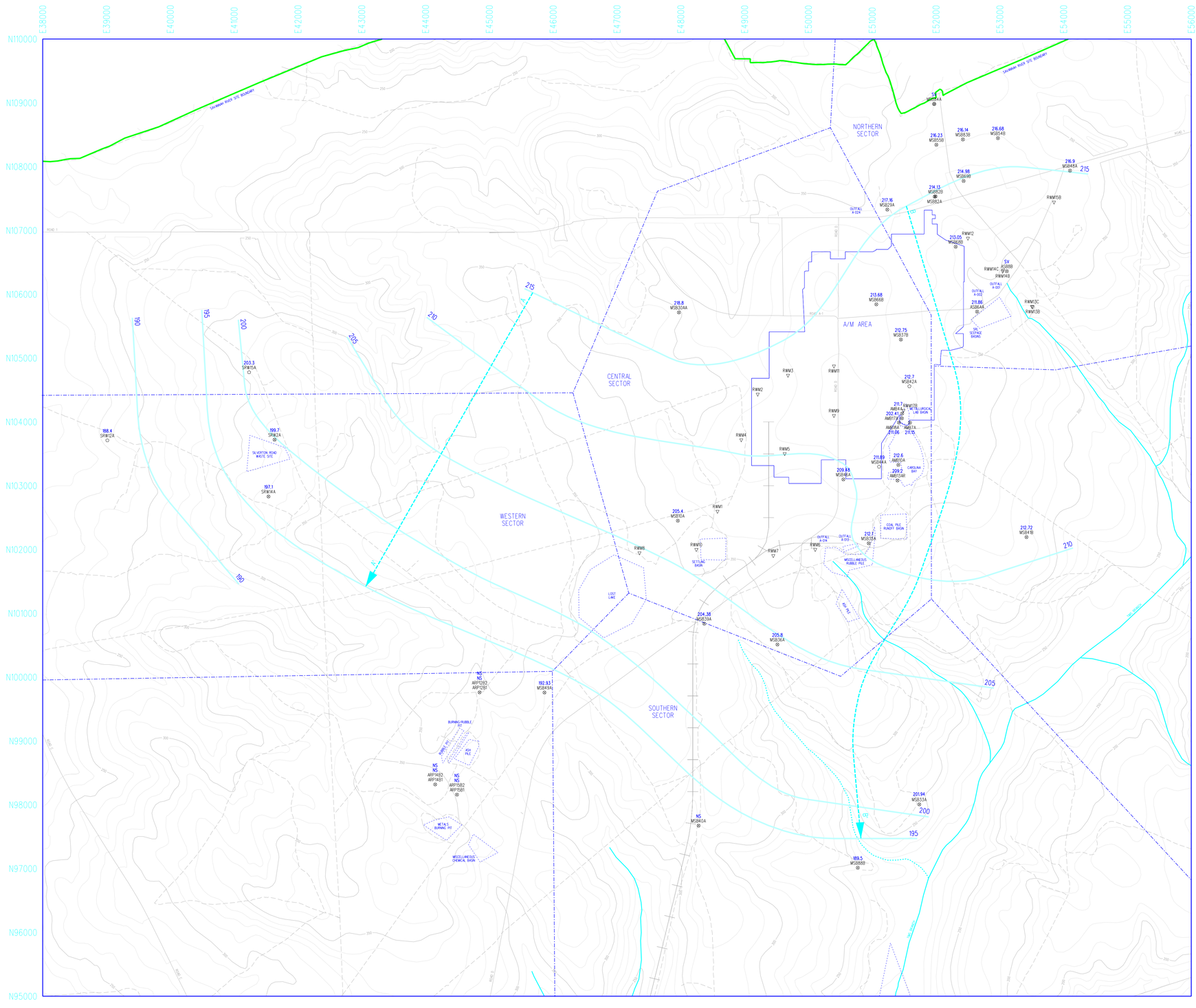
MWA6932



Map 3.
Potentiometric Surface Map of the
Lower Lost Lake Aquifer Zone at the
M-Area and Met Lab HWMFs,
Third Quarter 2001

Map 3. Potentiometric Surface Map of the Lower Lost Lake Aquifer Zone at the M-Area and Met Lab HWMFs, Third Quarter 2001

MWA6933

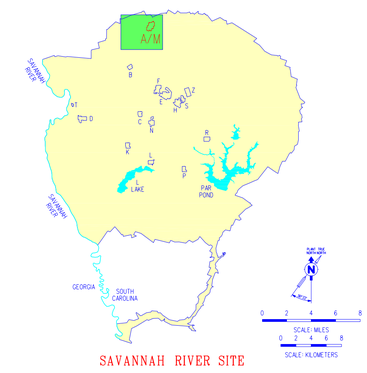


LEGEND

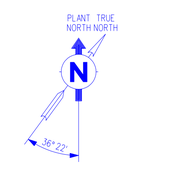
- ⊗ MONITORING WELL
- ▽ RECOVERY WELL
- ⬠ PIEZOMETER
- 200.5 WATER TABLE ELEVATION (3Q01) FEET ABOVE MSL
- NS NOT SAMPLED
- SV SUSPECT VALUE (NOT USED IN CONTOURING)

- POTENTIOMETRIC SURFACE CONTOUR MIDDLE SAND OF THE CBCU (3Q01) CONTOUR INTERVAL = 5 FEET
- APPROXIMATE FLOW PATH
  - A - A' = 5,300 FEET (FLOW RATE = 307 FEET / YEAR)
  - B - B' = 10,600 FEET (FLOW RATE = 154 FEET / YEAR)

- SRS SITE BOUNDARY
- A/M-AREA GROUNDWATER SECTOR BOUNDARY
- A/M-AREA FENCE BOUNDARY
- STREAM
- INTERMITTENT STREAM
- SRS TOPOGRAPHIC CONTOUR (10 FOOT INTERVAL)
- SRS MAIN/PAVED ROAD
- SRS SECONDARY ROAD
- SRS RAILROAD



SAVANNAH RIVER SITE



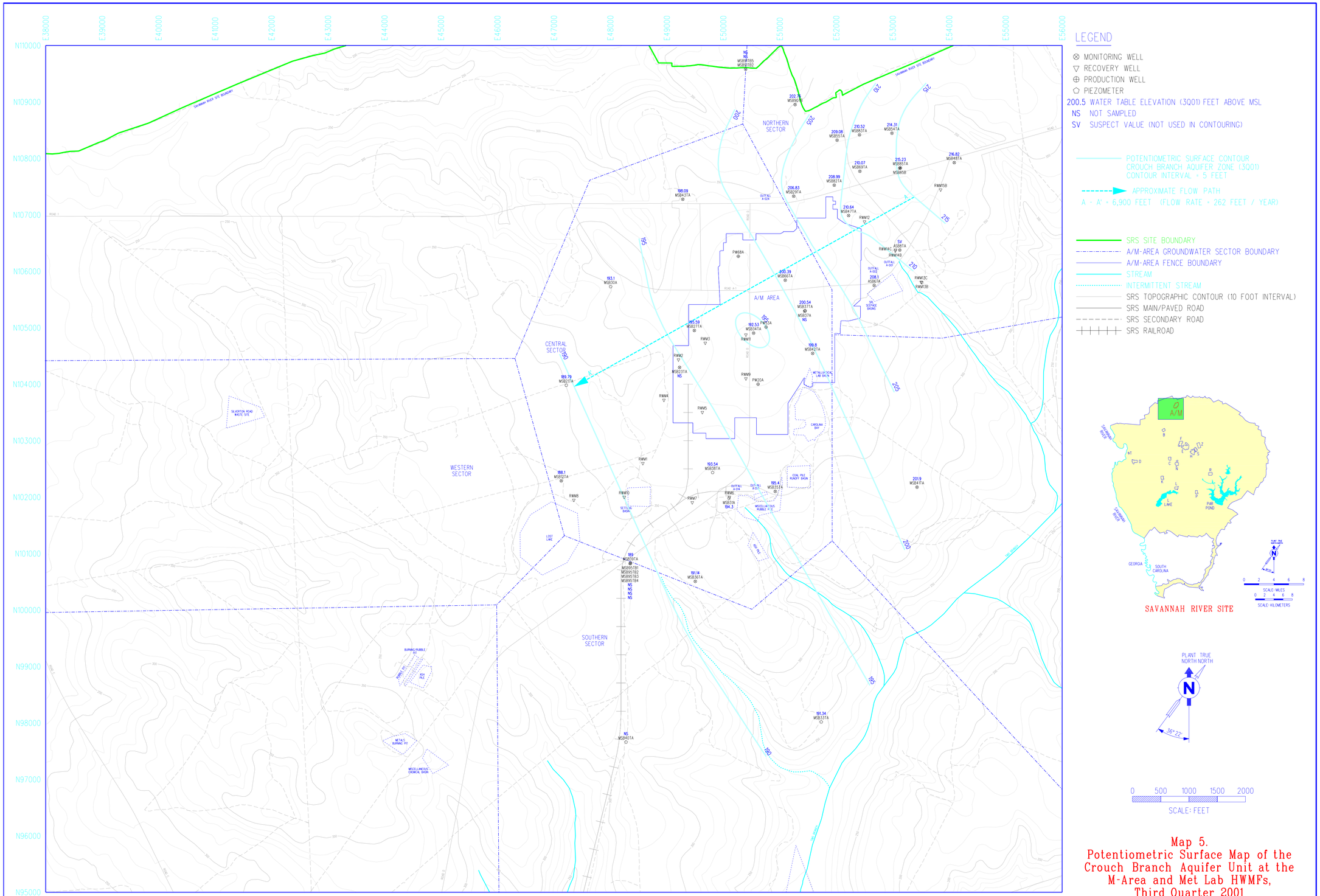
0 500 1000 1500 2000

SCALE: FEET

Map 4.
Potentiometric Surface Map of the Middle Sand Aquifer Zone of the Crouch Branch Confining Unit at the M-Area and Met Lab HWMFs, Third Quarter 2001

Map 4. Potentiometric Surface Map of the Middle Sand Aquifer Zone of the Crouch Branch Confining Unit at the M-Area and Met Lab HWMFs, Third Quarter 2001

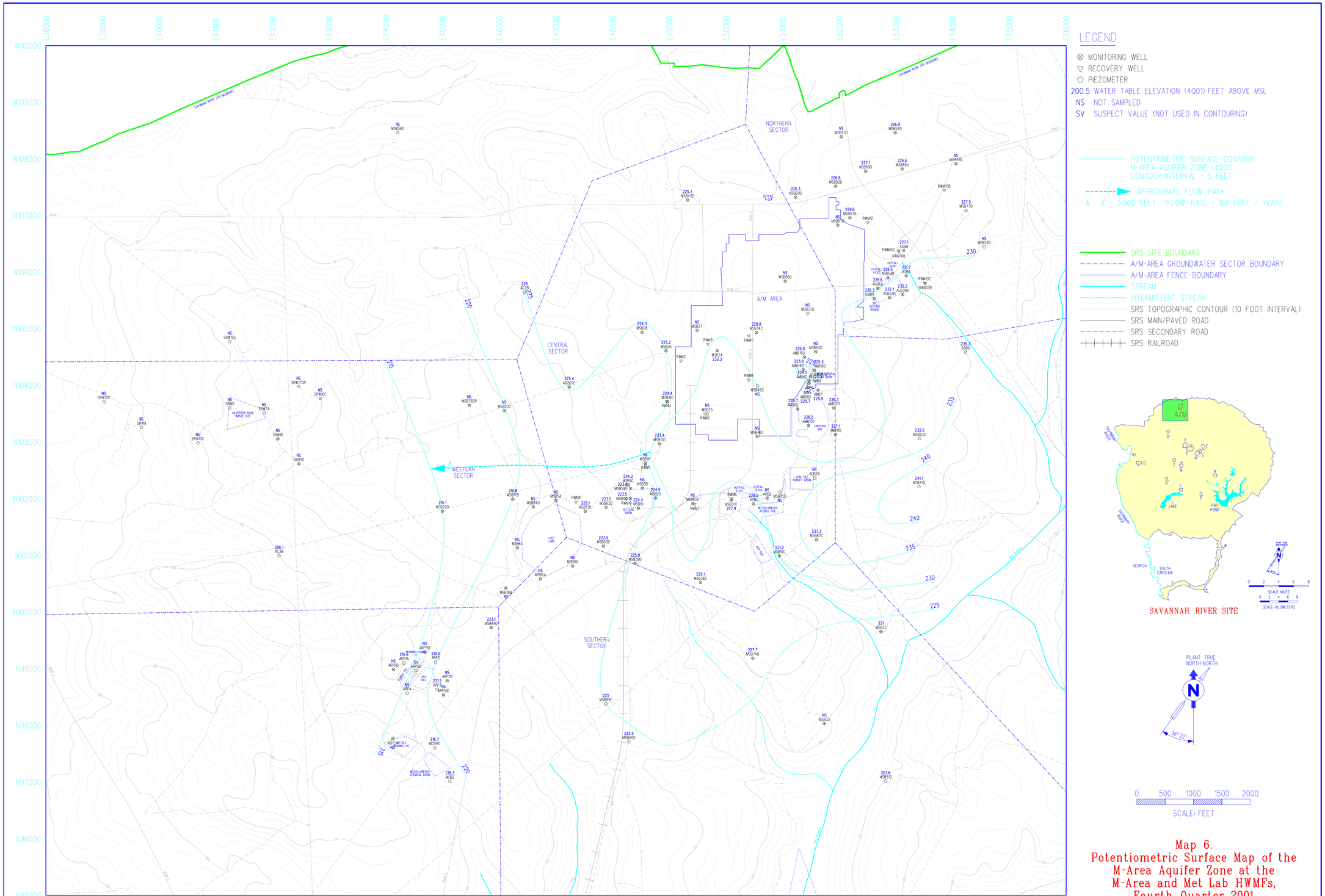
MWA6934



Map 5.
Potentiometric Surface Map of the Crouch Branch Aquifer Unit at the M-Area and Met Lab HWMFs, Third Quarter 2001

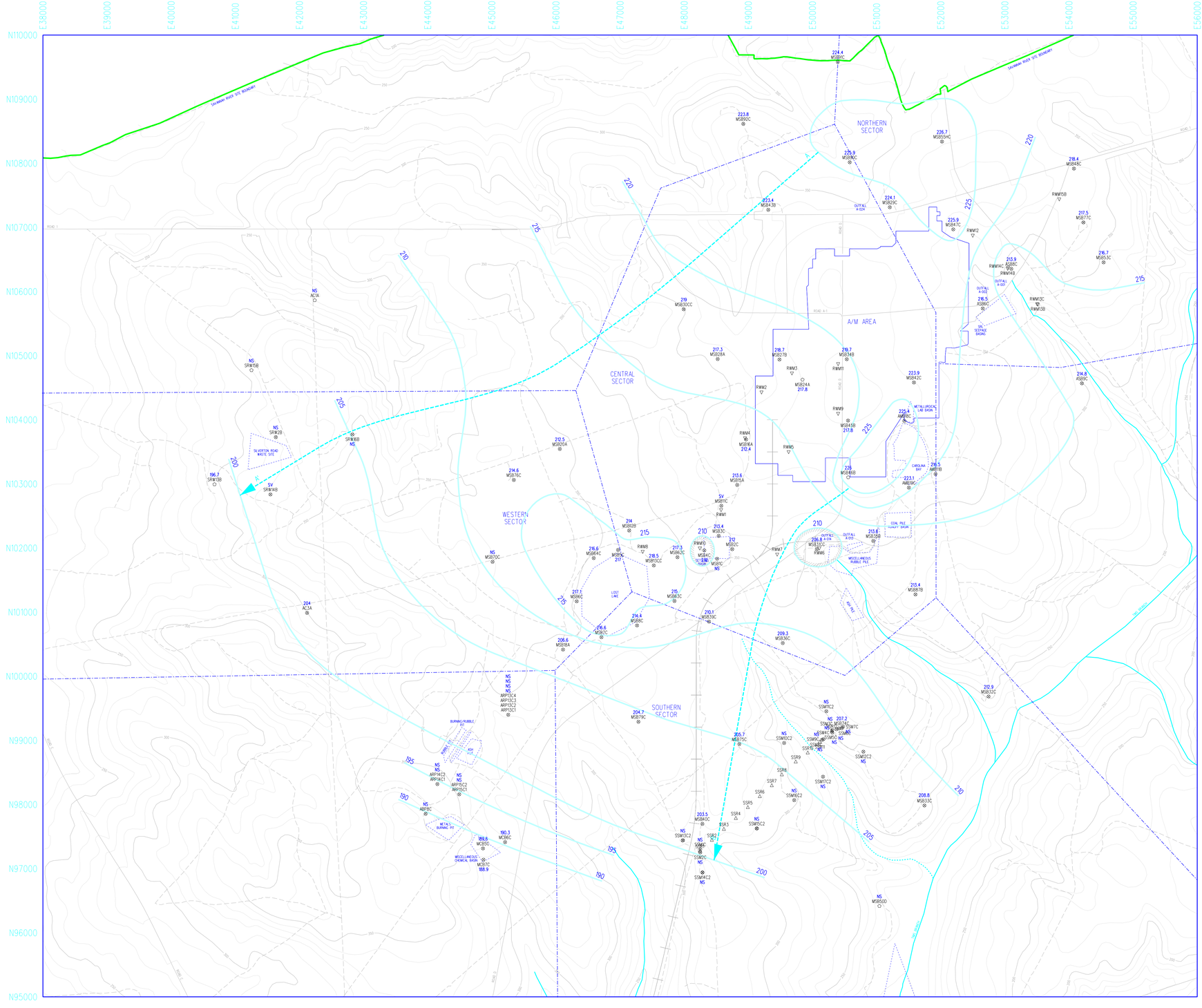
Map 5. Potentiometric Surface Map of the Crouch Branch Aquifer Unit at the M-Area and Met Lab HWMFs, Third Quarter 2001

MWA6935



Map 6. Potentiometric Surface Map of the M-Area Aquifer Zone at the M-Area and Met Lab HWMFs, Fourth Quarter 2001

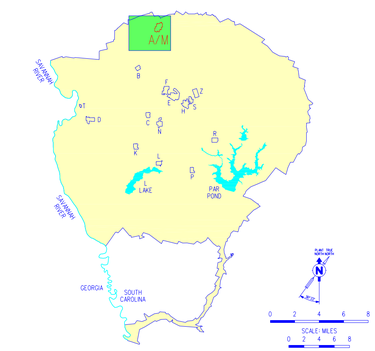
MWA6936

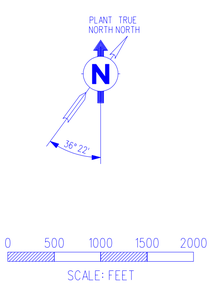


LEGEND

- ⊗ MONITORING WELL
- ▽ RECOVERY WELL
- △ RECIRCULATION WELL
- ⬠ PIEZOMETER
- 200.5 WATER TABLE ELEVATION (4Q01) FEET ABOVE MSL
- NS NOT SAMPLED
- SV SUSPECT VALUE (NOT USED IN CONTOURING)

- POTENTIOMETRIC SURFACE CONTOUR UPPER LOST LAKE AQUIFER ZONE (4Q01) CONTOUR INTERVAL = 5 FEET
- APPROXIMATE FLOW PATH
  - A - A' = 10,600 FEET (FLOW RATE = 192 FEET / YEAR)
  - B - B' = 6,400 FEET (FLOW RATE = 318 FEET / YEAR)
- SRS SITE BOUNDARY
- A/M-AREA GROUNDWATER SECTOR BOUNDARY
- A/M-AREA FENCE BOUNDARY
- STREAM
- INTERMITTENT STREAM
- SRS TOPOGRAPHIC CONTOUR (10 FOOT INTERVAL)
- SRS MAIN/PAVED ROAD
- SRS SECONDARY ROAD
- SRS RAILROAD

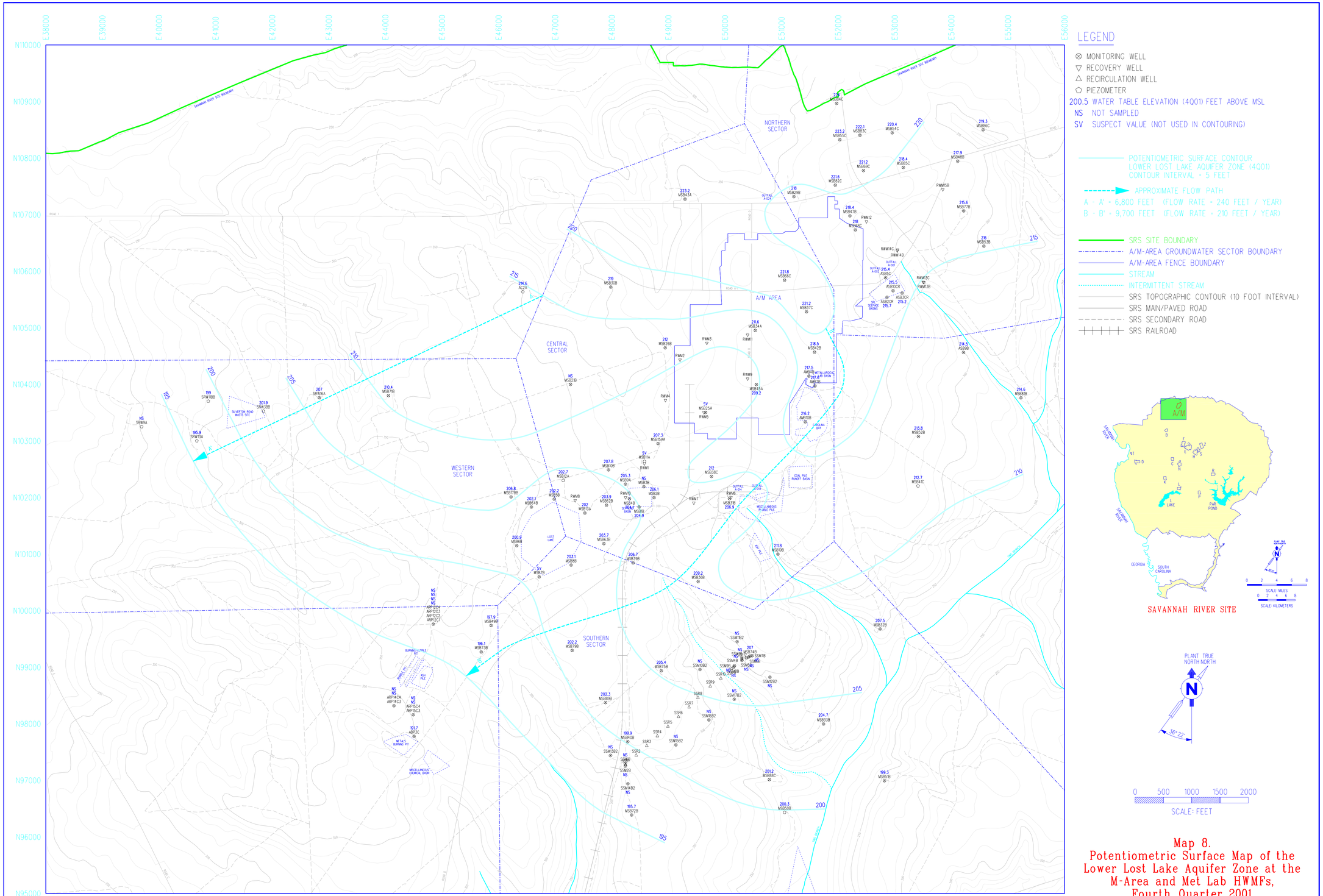




Map 7.
Potentiometric Surface Map of the Upper Lost Lake Aquifer Zone at the M-Area and Met Lab HWMFs,
Fourth Quarter 2001

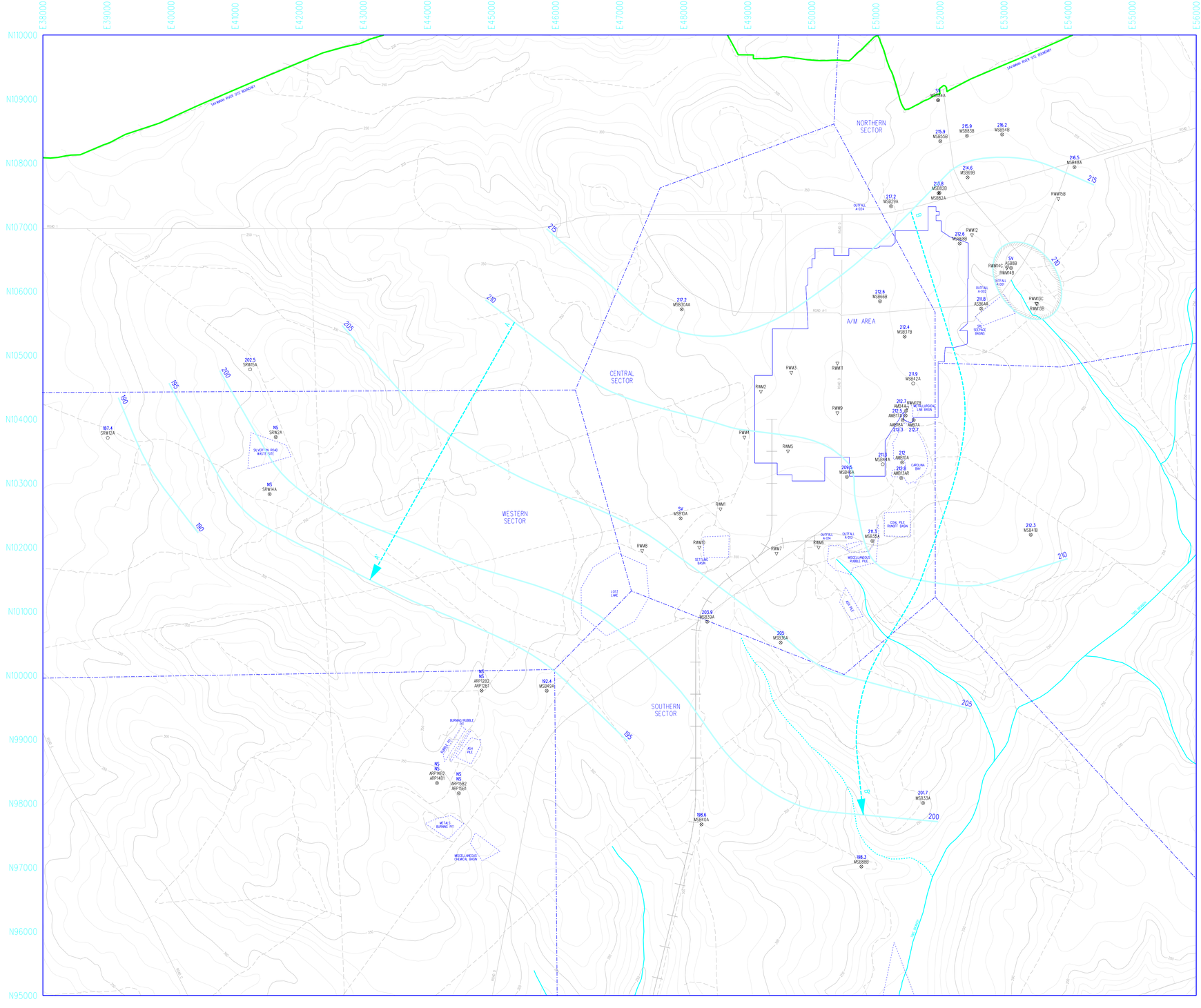
Map 7. Potentiometric Surface Map of the Upper Lost Lake Aquifer Zone at the M-Area and Met Lab HWMFs, Fourth Quarter 2001

MWA6937



Map 8. Potentiometric Surface Map of the Lower Lost Lake Aquifer Zone at the M-Area and Met Lab HWMFs, Fourth Quarter 2001

MWA6938

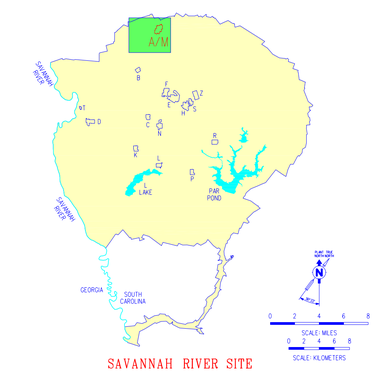


LEGEND

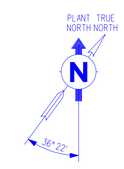
- ⊗ MONITORING WELL
- ▽ RECOVERY WELL
- ⬠ PIEZOMETER
- 200.5 WATER TABLE ELEVATION (4Q01) FEET ABOVE MSL
- NS NOT SAMPLED
- SV SUSPECT VALUE (NOT USED IN CONTOURING)

- POTENTIOMETRIC SURFACE CONTOUR MIDDLE SAND OF THE CBCU (4Q01) CONTOUR INTERVAL = 5 FEET
- APPROXIMATE FLOW PATH
  - A - A' = 4,600 FEET (FLOW RATE = 354 FEET / YEAR)
  - B - B' = 9,900 FEET (FLOW RATE = 123 FEET / YEAR)

- SRS SITE BOUNDARY
- A/M-AREA GROUNDWATER SECTOR BOUNDARY
- A/M-AREA FENCE BOUNDARY
- STREAM
- INTERMITTENT STREAM
- SRS TOPOGRAPHIC CONTOUR (10 FOOT INTERVAL)
- SRS MAIN/PAVED ROAD
- SRS SECONDARY ROAD
- SRS RAILROAD



SAVANNAH RIVER SITE

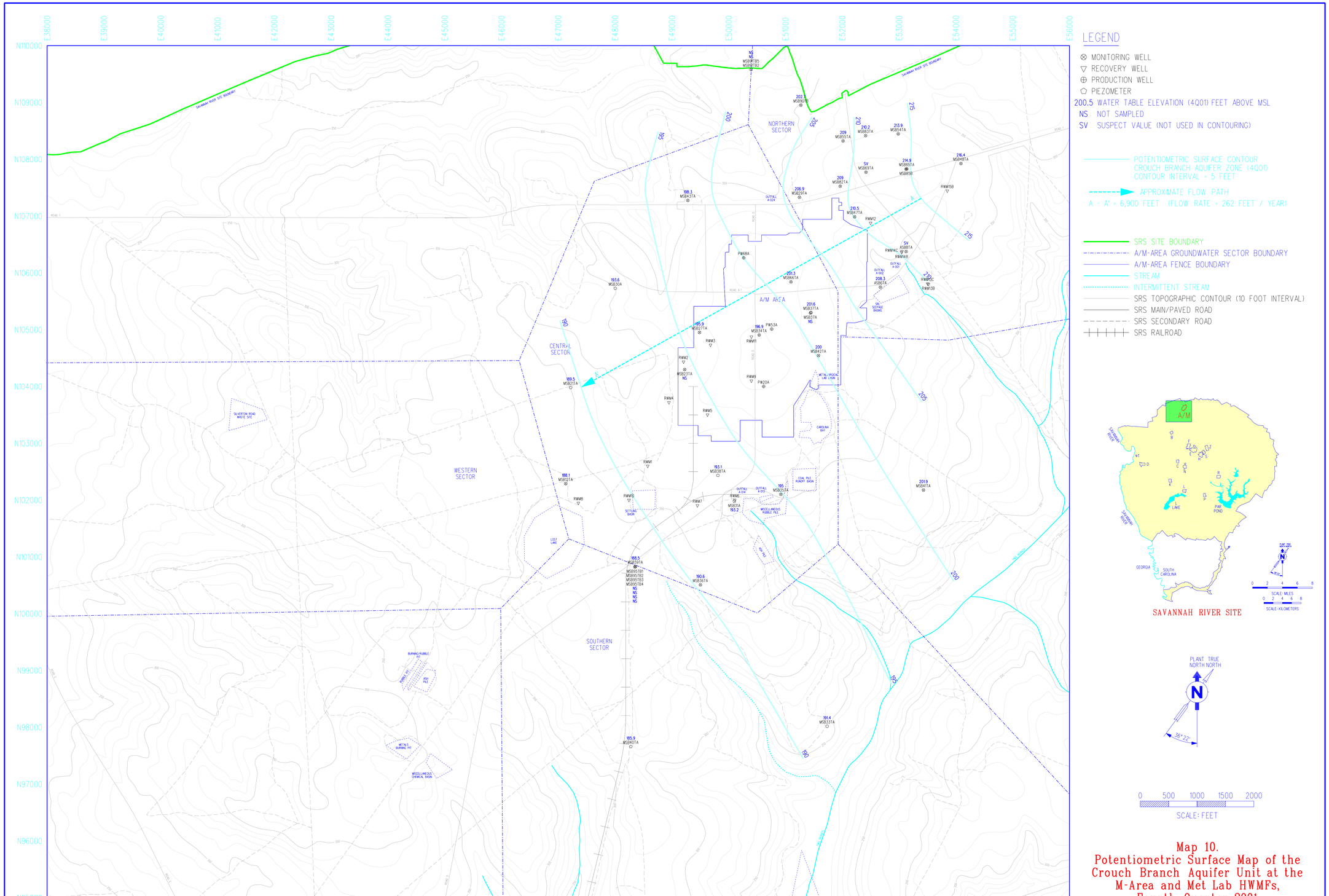


0 500 1000 1500 2000
SCALE: FEET

Map 9.
Potentiometric Surface Map of the Middle Sand Aquifer Zone of the Crouch Branch Confining Unit at the M-Area and Met Lab HWMFs, Fourth Quarter 2001

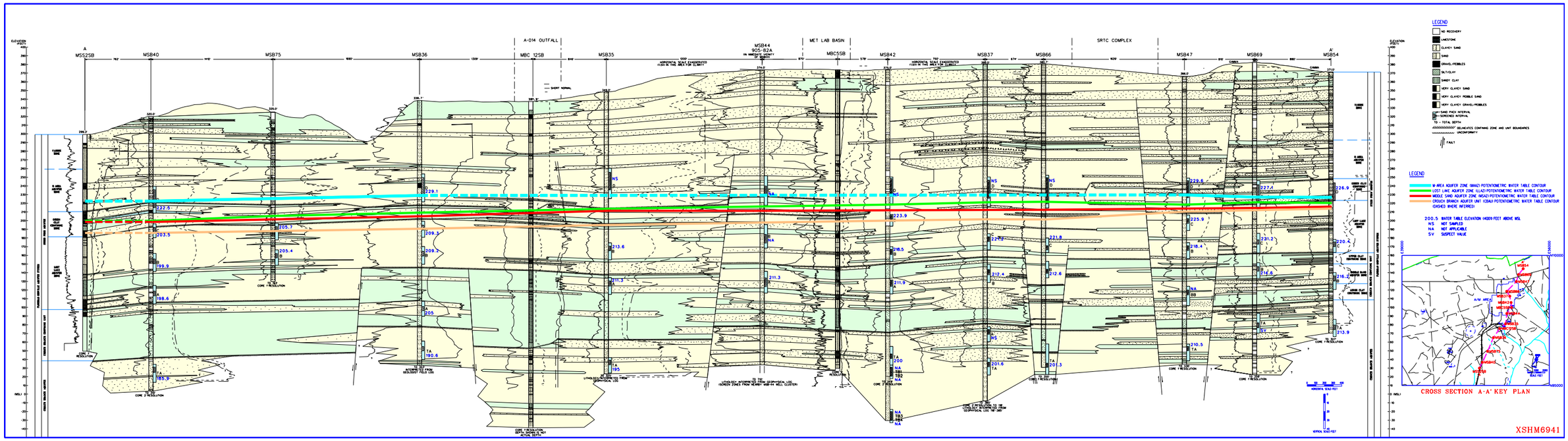
Map 9. Potentiometric Surface Map of the Middle Sand Aquifer Zone of the Crouch Branch Confining Unit at the M-Area and Met Lab HWMFs, Fourth Quarter 2001

MWA6939

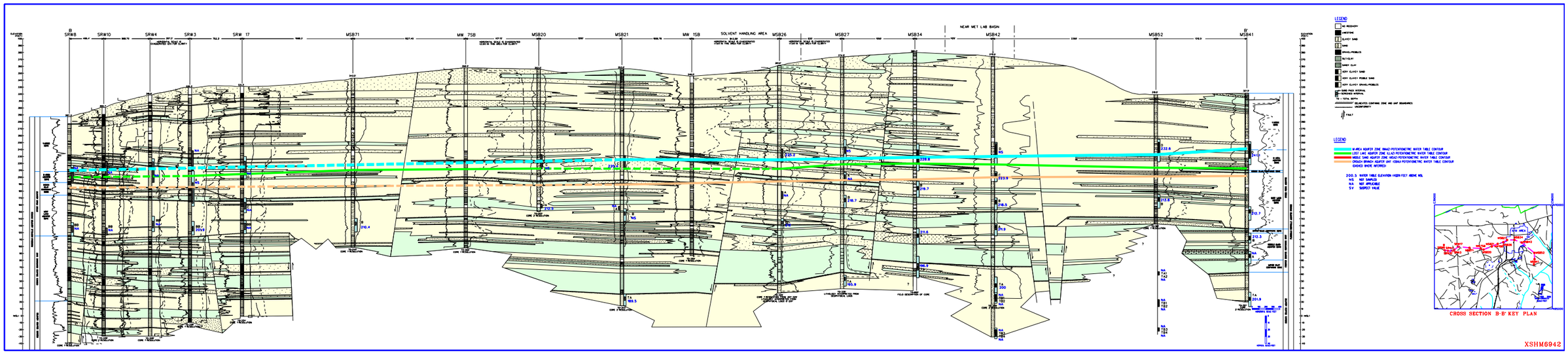


Map 10. Potentiometric Surface Map of the Crouch Branch Aquifer Unit at the M-Area and Met Lab HWMFs, Fourth Quarter 2001

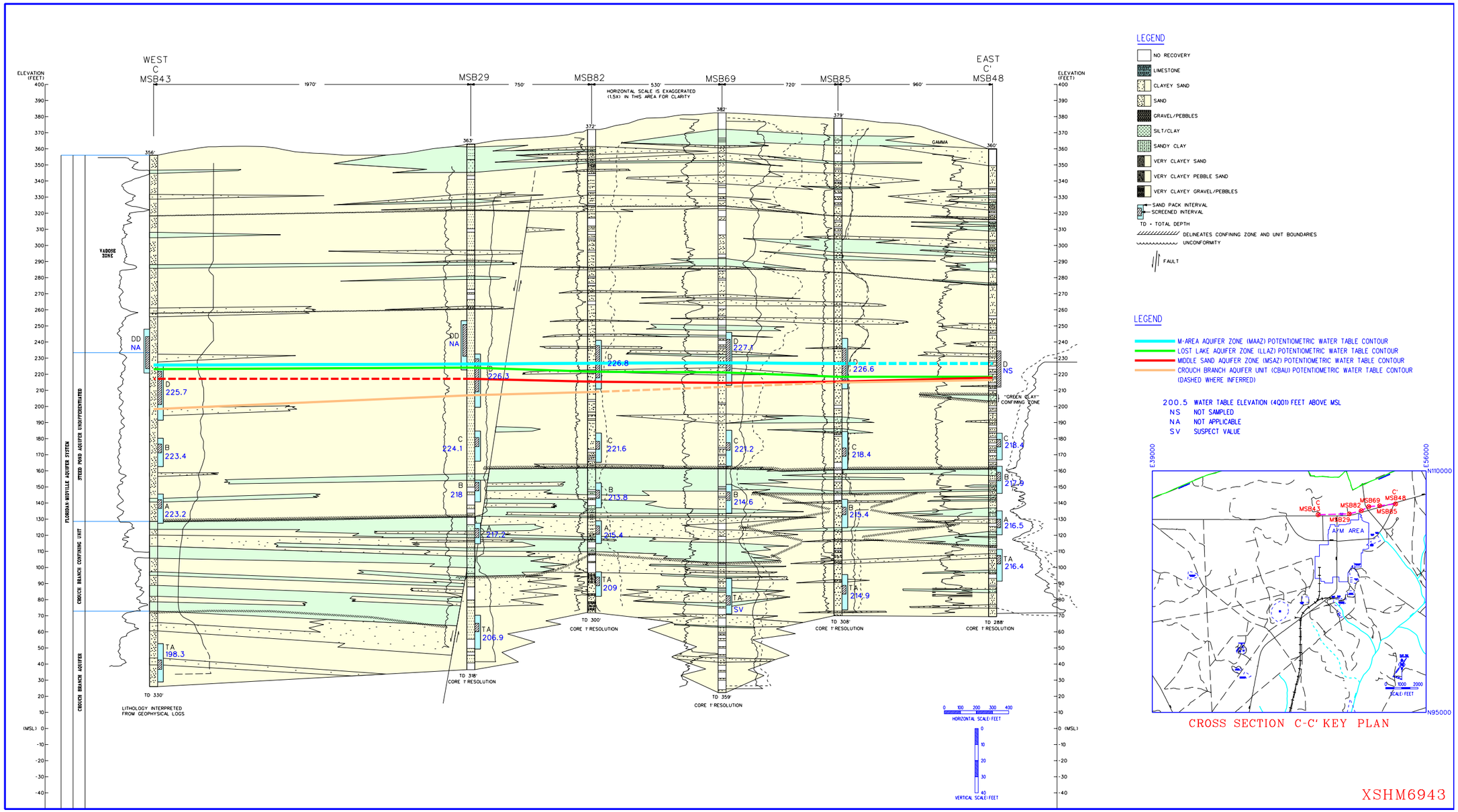
MWA6940



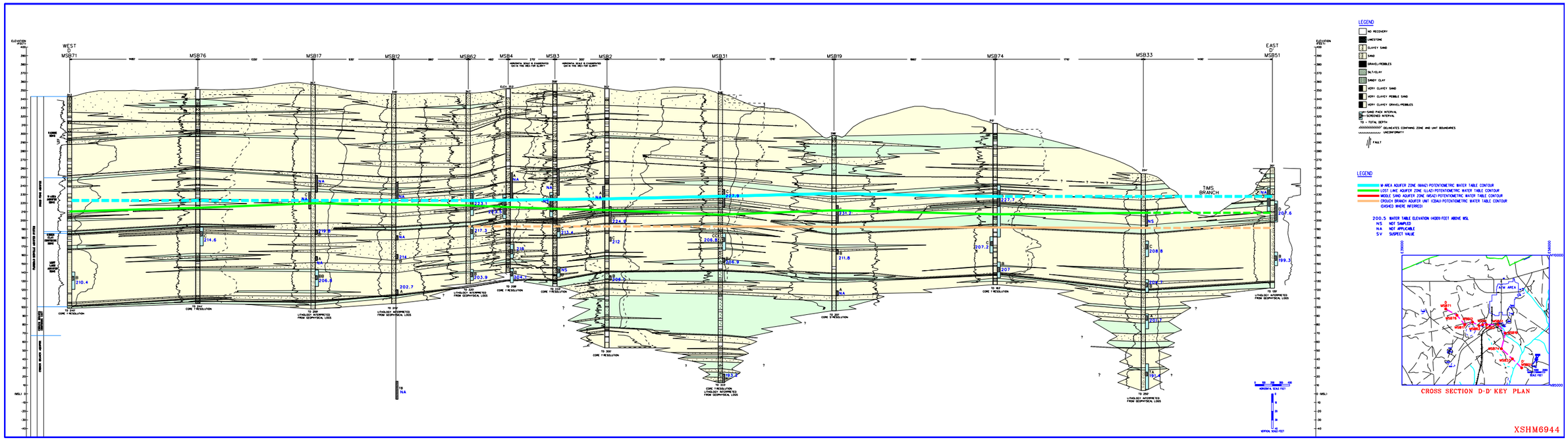
Map 11.
Potentiometric Cross-Section A-A'
at the M-Area HWMF, Fourth Quarter 2001



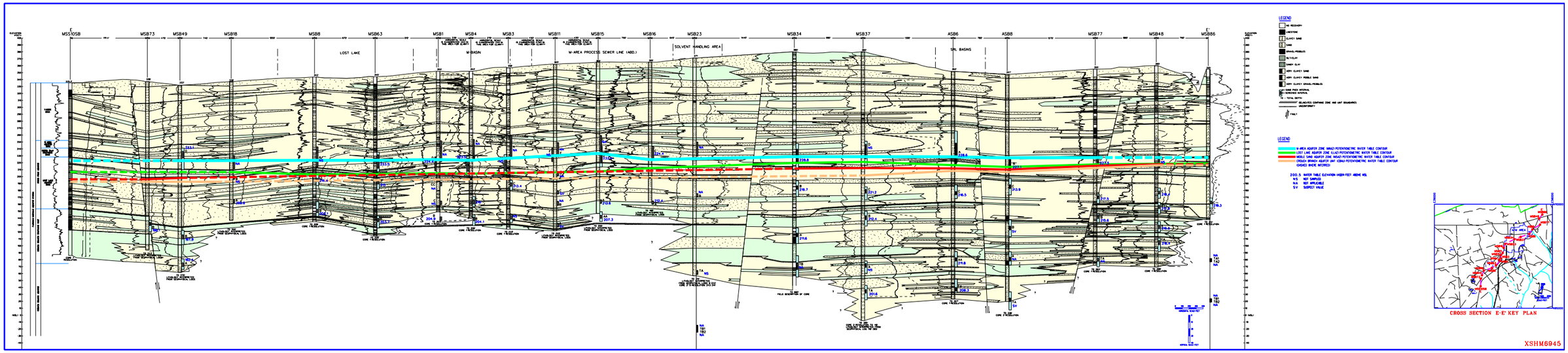
Map 12.
Potentiometric Cross-Section B-B'
at the M-Area HWMF, Fourth Quarter 2001



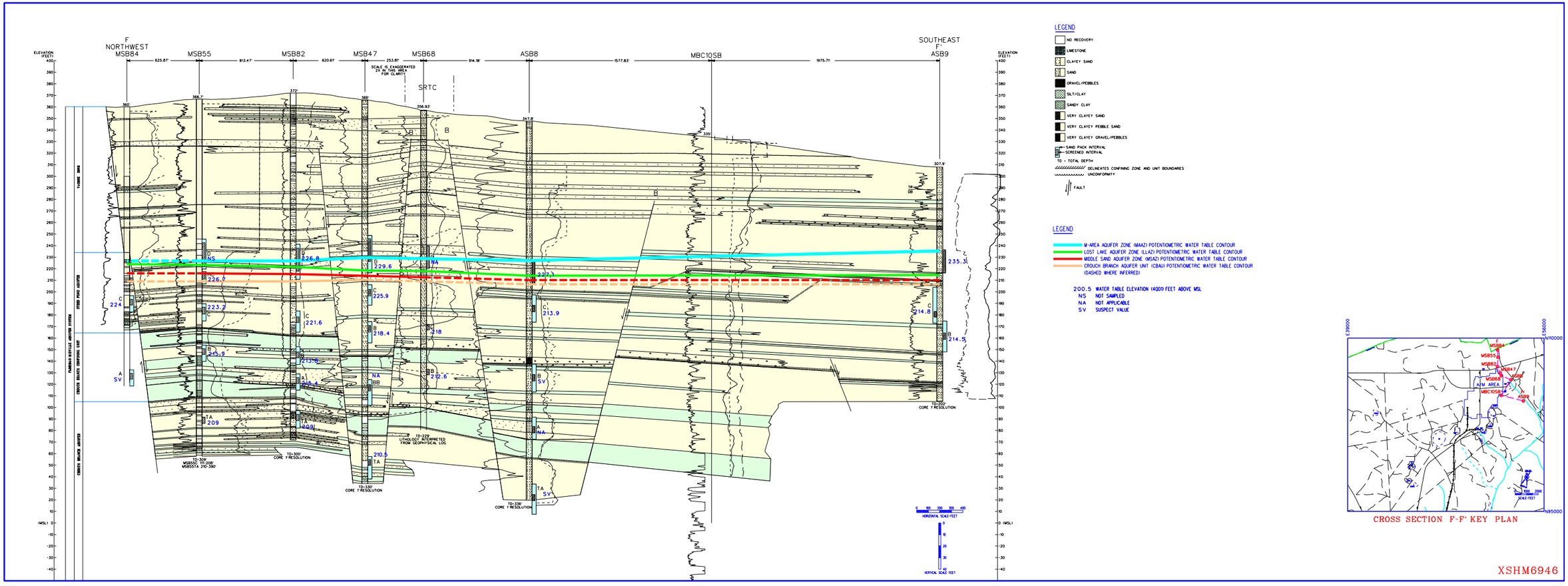
Map 13.
Potentiometric Cross-Section C-C'
at the M-Area HWMF, Fourth Quarter 2001



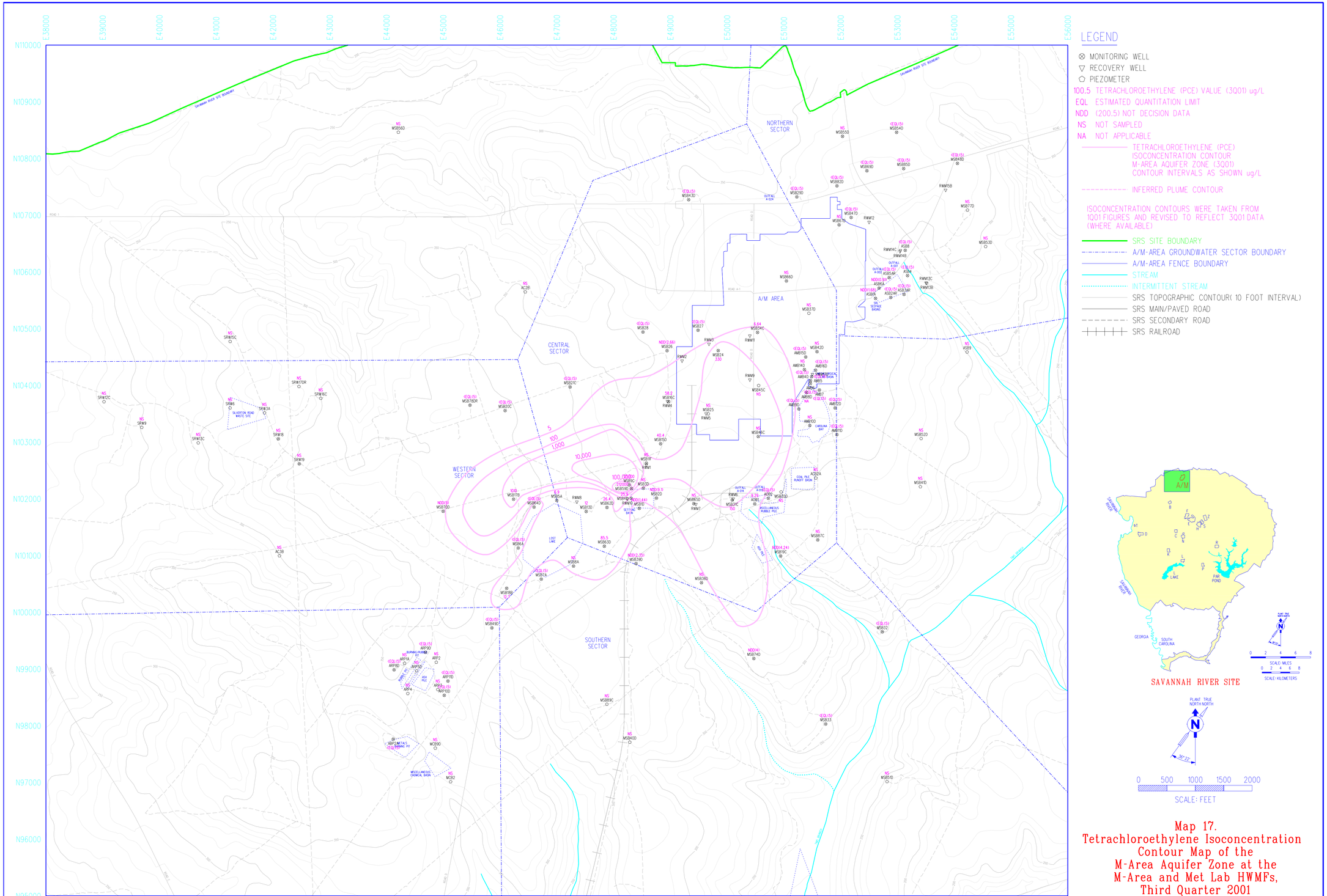
Map 14.
Potentiometric Cross-Section D-D'
at the M-Area HWMF, Fourth Quarter 2001



Map 15.
Potentiometric Cross-Section E-E'
at the M-Area HWMF, Fourth Quarter 2001



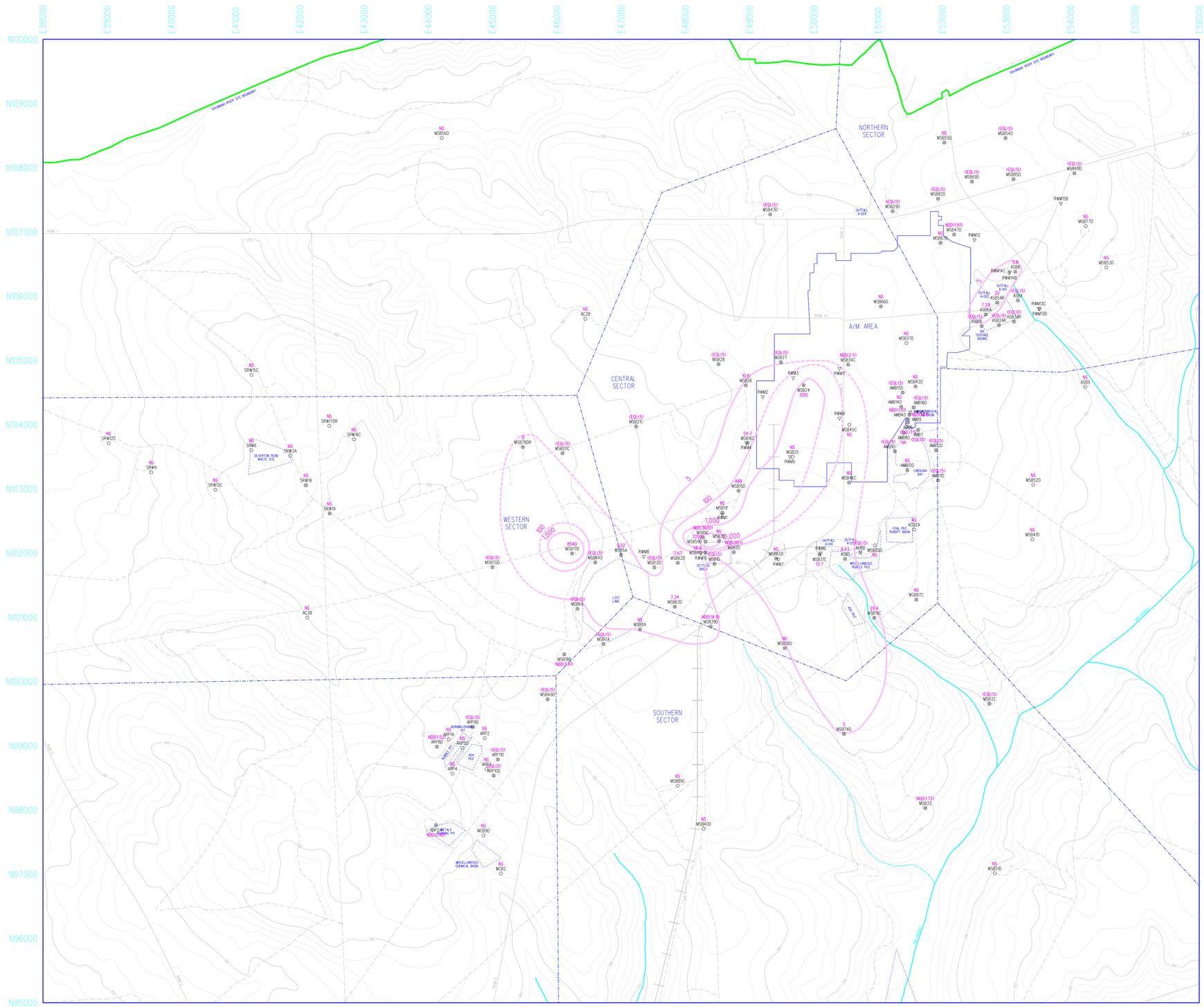
Map 16.
Potentiometric Cross-Section F-F'
at the M-Area HWMF, Fourth Quarter 2001



Map 17.
Tetrachloroethylene Isoconcentration Contour Map of the M-Area Aquifer Zone at the M-Area and Met Lab HWMFs, Third Quarter 2001

Map 17. Tetrachloroethylene Isoconcentration Contour Map of the M-Area Aquifer Zone at the M-Area and Met Lab HWMFs, Third Quarter 2001

MPA6947

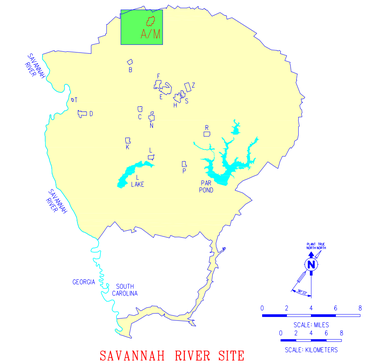


LEGEND

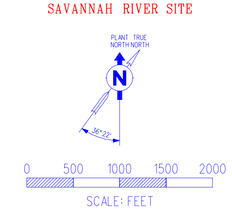
- ⊗ MONITORING WELL
- ▽ RECOVERY WELL
- ⬠ PIEZOMETER
- 100.5 TRICHLOROETHYLENE (TCE) VALUE (3Q01) ug/L
- EQL ESTIMATED QUANTITATION LIMIT
- NDD (200.5) NOT DECISION DATA
- NS NOT SAMPLED
- NA NOT APPLICABLE
- TRICHLOROETHYLENE (TCE) ISOCONCENTRATION CONTOUR M-AREA AQUIFER ZONE (3Q01) CONTOUR INTERVALS AS SHOWN ug/L
- INFERRED PLUME CONTOUR

ISOCONCENTRATION CONTOURS WERE TAKEN FROM 1Q01 FIGURES AND REVISED TO REFLECT 3Q01 DATA (WHERE AVAILABLE)

- SRS SITE BOUNDARY
- A/M-AREA GROUNDWATER SECTOR BOUNDARY
- A/M-AREA FENCE BOUNDARY
- STREAM
- INTERMITTENT STREAM
- SRS TOPOGRAPHIC CONTOUR (10 FOOT INTERVAL)
- SRS MAIN/PAVED ROAD
- SRS SECONDARY ROAD
- SRS RAILROAD



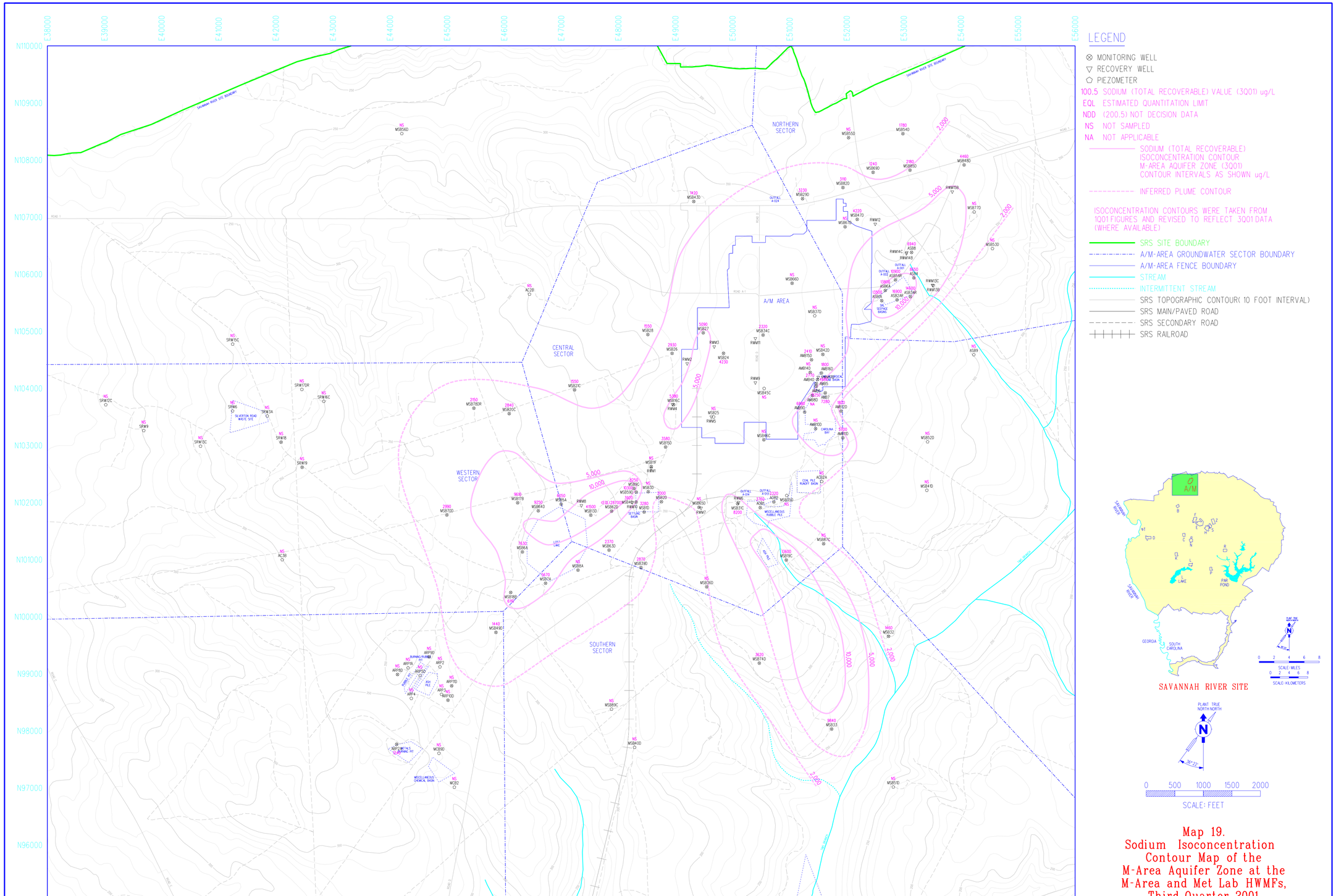
SAVANNAH RIVER SITE



Map 18.
Trichloroethylene Isoconcentration Contour Map of the M-Area Aquifer Zone at the M-Area and Met Lab HWMFs, Third Quarter 2001

Map 18. Trichloroethylene Isoconcentration Contour Map of the M-Area Aquifer Zone at the M-Area and Met Lab HWMFs, Third Quarter 2001

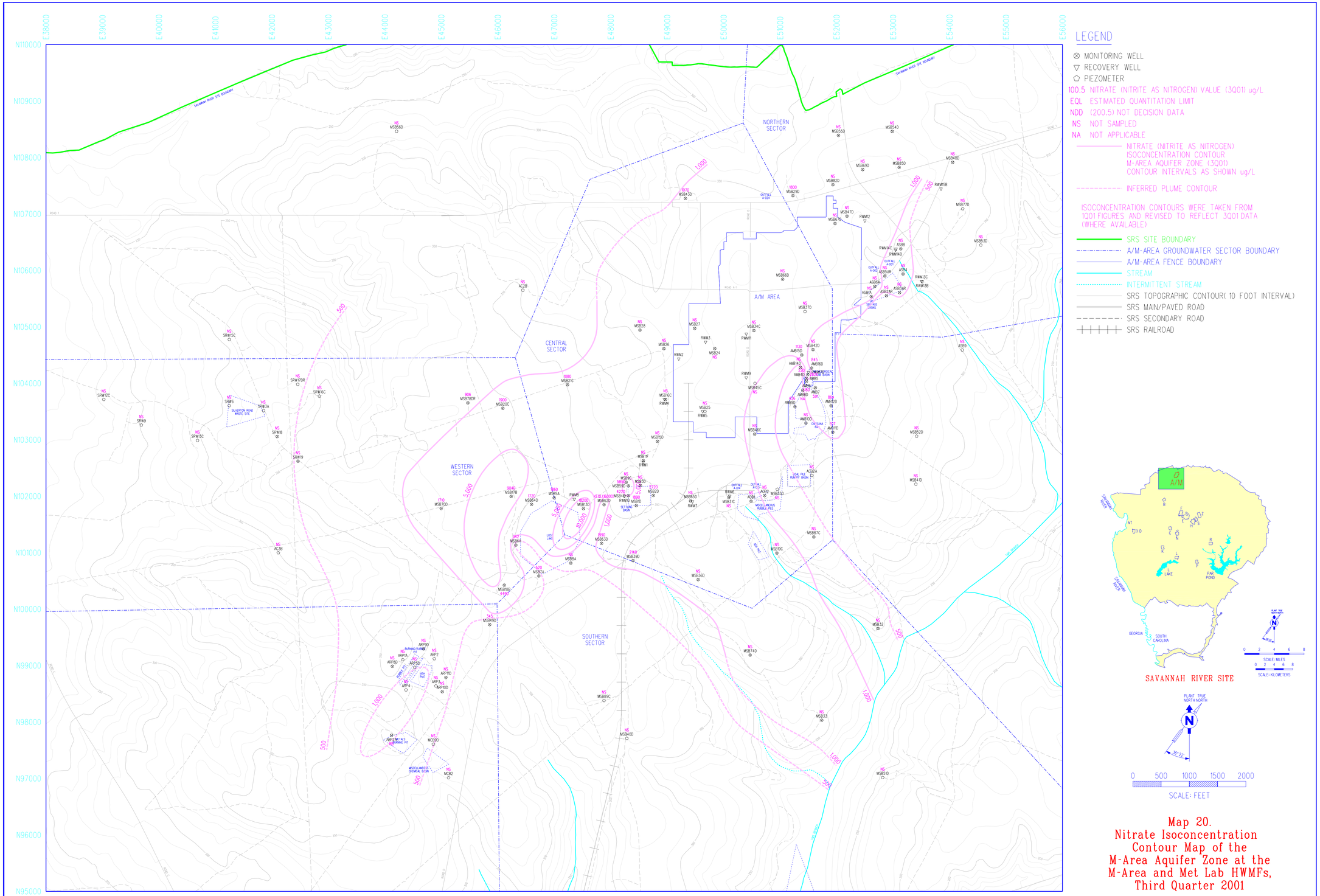
MPA6948



Map 19.
Sodium Isoconcentration
Contour Map of the
M-Area Aquifer Zone at the
M-Area and Met Lab HWMFs,
Third Quarter 2001

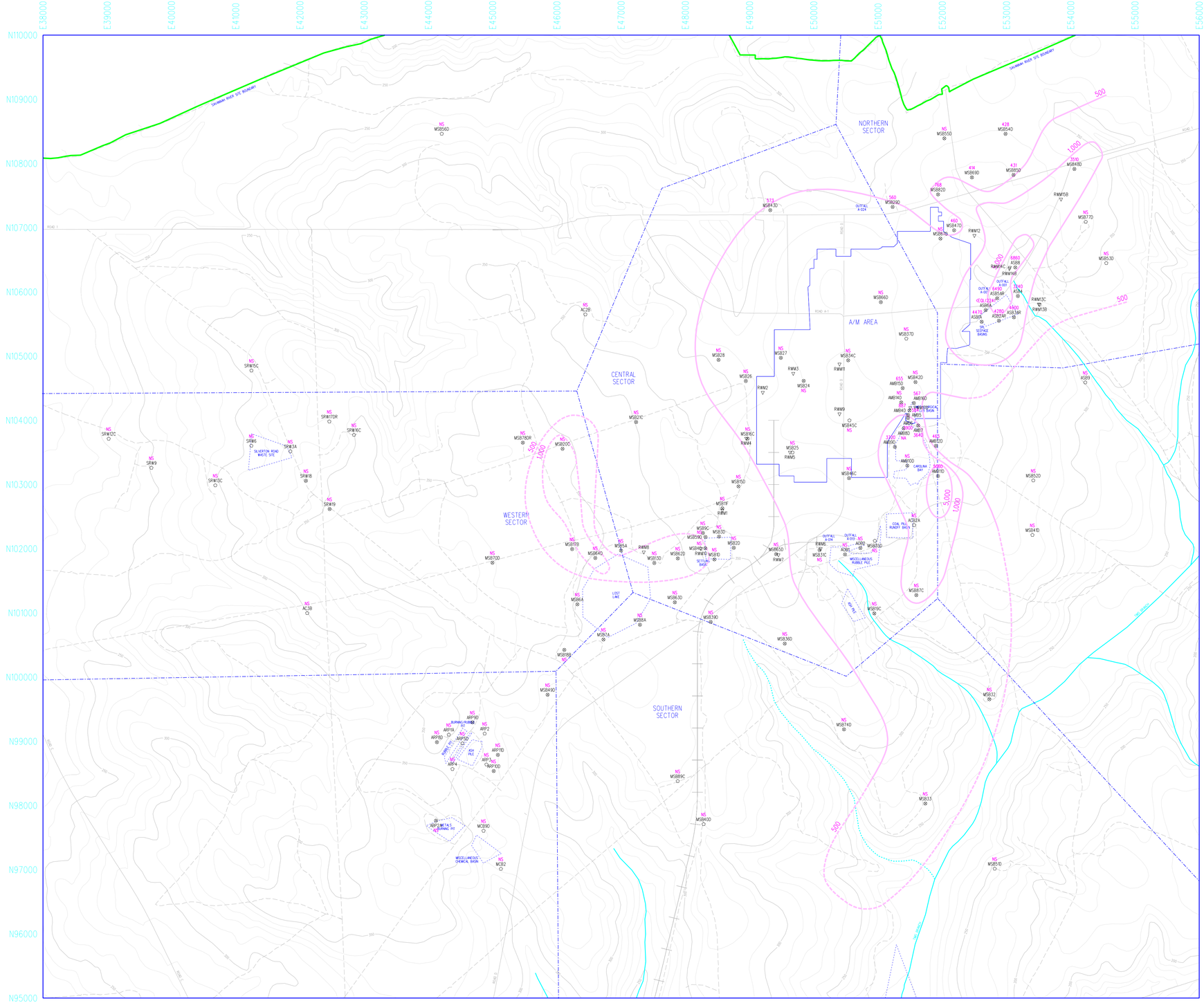
Map 19. Sodium Isoconcentration Contour Map of the M-Area Aquifer Zone at the M-Area and Met Lab HWMFs, Third Quarter 2001

MPA6949



Map 20. Nitrate Isoconcentration Contour Map of the M-Area Aquifer Zone at the M-Area and Met Lab HWMFs, Third Quarter 2001

MPA6950

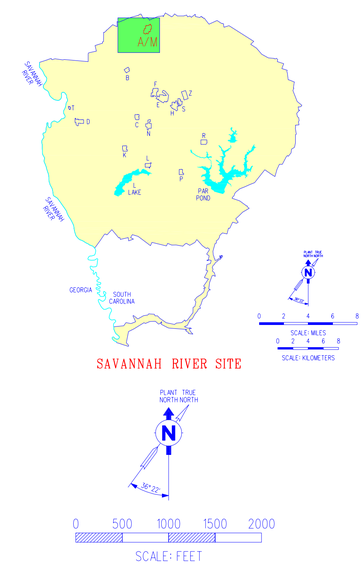


LEGEND

- MONITORING WELL
- RECOVERY WELL
- PIEZOMETER
- 100.5 SULFATE VALUE (3Q01) ug/L
- EQL ESTIMATED QUANTITATION LIMIT
- NDD (200.5) NOT DECISION DATA
- NS NOT SAMPLED
- NA NOT APPLICABLE
- SULFATE ISOCONCENTRATION CONTOUR M-AREA AQUIFER ZONE (3Q01) CONTOUR INTERVALS AS SHOWN ug/L
- INFERRED PLUME CONTOUR

ISOCONCENTRATION CONTOURS WERE TAKEN FROM 1Q01 FIGURES AND REVISED TO REFLECT 3Q01 DATA (WHERE AVAILABLE)

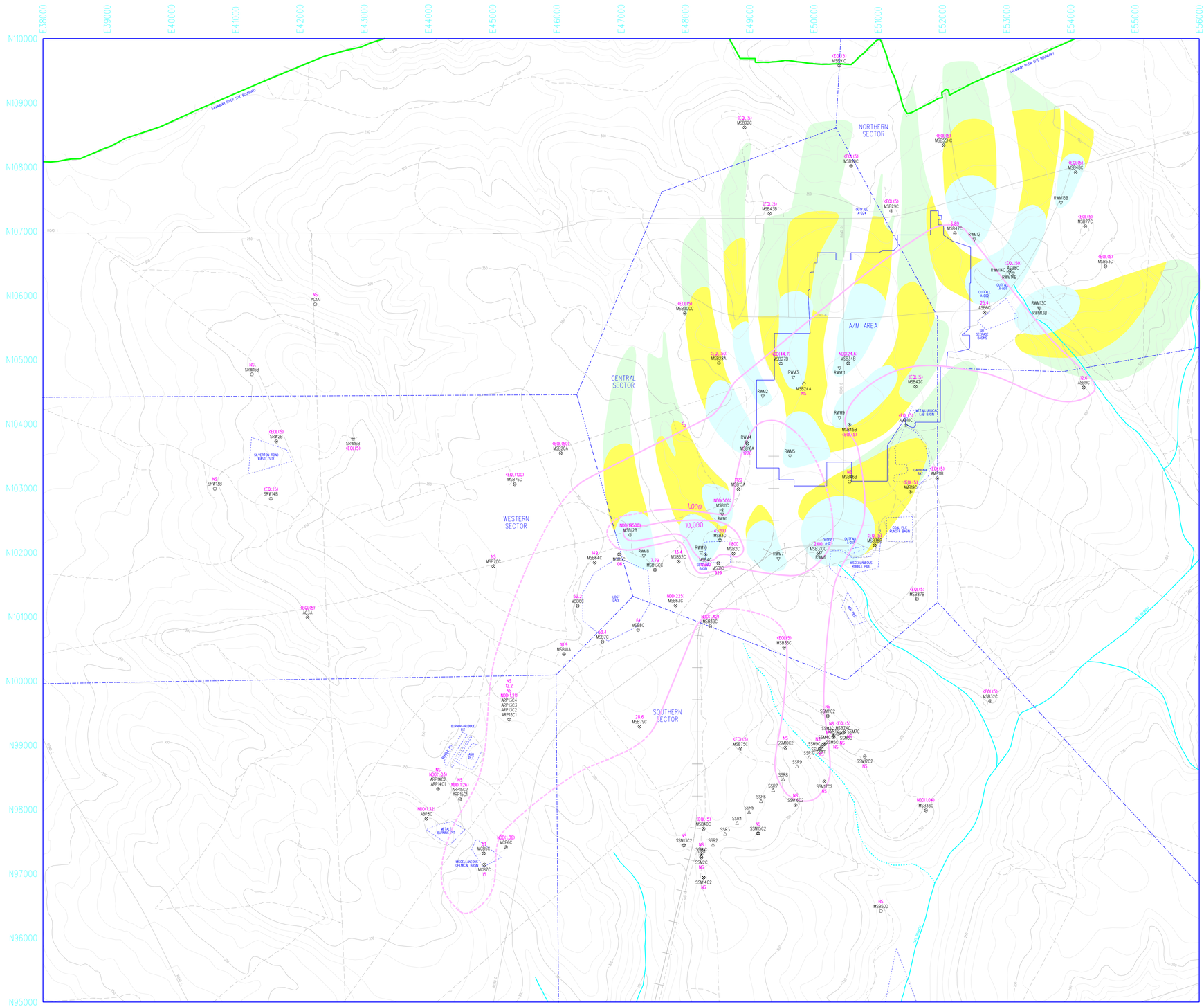
- SRS SITE BOUNDARY
- A/M-AREA GROUNDWATER SECTOR BOUNDARY
- A/M-AREA FENCE BOUNDARY
- STREAM
- INTERMITTENT STREAM
- SRS TOPOGRAPHIC CONTOUR(10 FOOT INTERVAL)
- SRS MAIN/PAVED ROAD
- SRS SECONDARY ROAD
- SRS RAILROAD



Map 21.
Sulfate Isoconcentration
Contour Map of the
M-Area Aquifer Zone at the
M-Area and Met Lab HWMFs,
Third Quarter 2001

Map 21. Sulfate Isoconcentration Contour Map of the M-Area Aquifer Zone at the M-Area and Met Lab HWMFs, Third Quarter 2001

MPA6951



LEGEND

- MONITORING WELL
- RECOVERY WELL
- RECIRCULATION WELL
- PIEZOMETER

100.5 TETRACHLOROETHYLENE (PCE) VALUE (3Q01) ug/L
EQL ESTIMATED QUANTITATION LIMIT
NDD (200.5) NOT DECISION DATA
NS NOT SAMPLED
NA NOT APPLICABLE

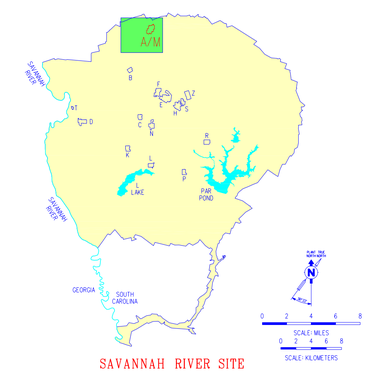
TETRACHLOROETHYLENE (PCE) ISOCONCENTRATION CONTOUR UPPER LOST LAKE AQUIFER ZONE (3Q01) CONTOUR INTERVALS AS SHOWN ug/L

INFERRED PLUME CONTOUR

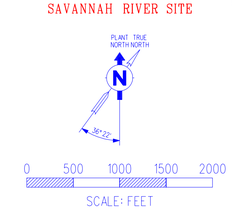
ISOCONCENTRATION CONTOURS WERE TAKEN FROM 1Q01 FIGURES AND REVISED TO REFLECT 3Q01 DATA (WHERE AVAILABLE)

- SRS SITE BOUNDARY
- A/M-AREA GROUNDWATER SECTOR BOUNDARY
- A/M-AREA FENCE BOUNDARY
- STREAM
- INTERMITTENT STREAM
- SRS TOPOGRAPHIC CONTOUR (10 FOOT INTERVAL)
- SRS MAIN/PAVED ROAD
- SRS SECONDARY ROAD
- SRS RAILROAD

- 0 - 5 YEAR ZONE OF CAPTURE FOR RECOVERY/RECIRCULATION WELL
- 5 - 15 YEAR ZONE OF CAPTURE FOR RECOVERY/RECIRCULATION WELL
- 15 - 30 YEAR ZONE OF CAPTURE FOR RECOVERY/RECIRCULATION WELL



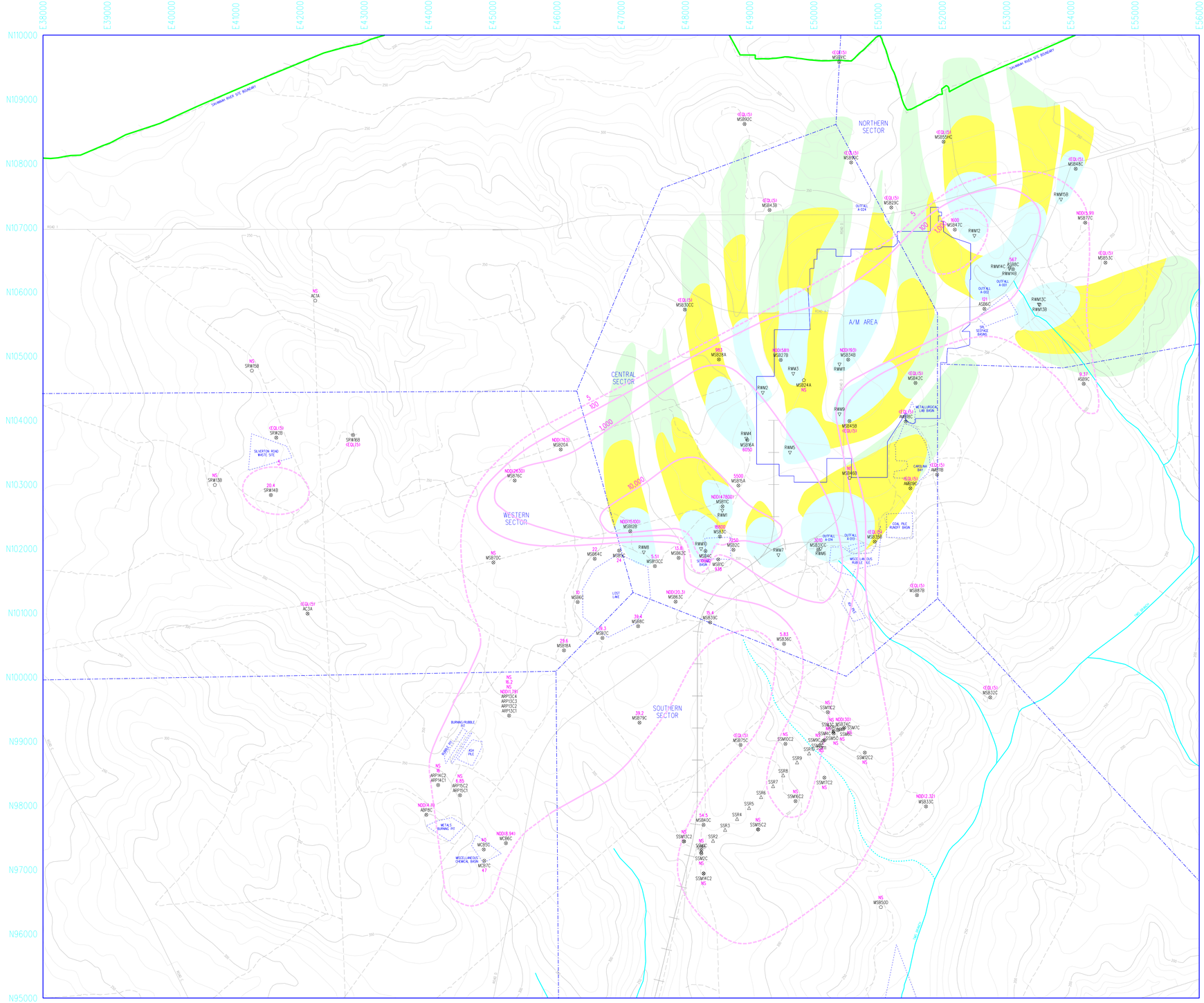
SAVANNAH RIVER SITE



Map 22.
Zone of Capture and
Tetrachloroethylene Isoconcentration
Contour Map of the
Upper Lost Lake Aquifer Zone at the
M-Area and Met Lab HWMFs,
Third Quarter 2001

Map 22. Zone of Capture and Tetrachloroethylene Isoconcentration Contour Map of the Upper Lost Lake Aquifer Zone at the M-Area and Met Lab HWMFs, Third Quarter 2001

MPA6952



LEGEND

- MONITORING WELL
- RECOVERY WELL
- RECIRCULATION WELL
- PIEZOMETER

100.5 TRICHLOROETHYLENE (TCE) VALUE (3Q01) ug/L
EQL ESTIMATED QUANTITATION LIMIT
NDD NOT (200.5) DECISION DATA
NS NOT SAMPLED
NA NOT APPLICABLE

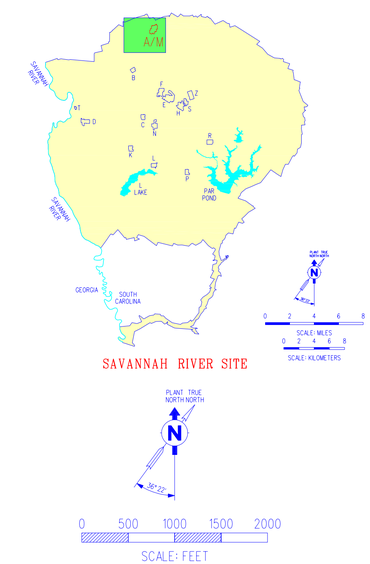
TRICHLOROETHYLENE (TCE) ISOCONCENTRATION CONTOUR UPPER LOST LAKE AQUIFER ZONE (3Q01) CONTOUR INTERVALS AS SHOWN ug/L

INFERRED PLUME CONTOUR

ISOCONCENTRATION CONTOURS WERE TAKEN FROM 1Q01 FIGURES AND REVISED TO REFLECT 3Q01 DATA (WHERE AVAILABLE)

- SRS SITE BOUNDARY
- A/M-AREA GROUNDWATER SECTOR BOUNDARY
- A/M-AREA FENCE BOUNDARY
- STREAM
- INTERMITTENT STREAM
- SRS TOPOGRAPHIC CONTOUR (10 FOOT INTERVAL)
- SRS MAIN/PAVED ROAD
- SRS SECONDARY ROAD
- SRS RAILROAD

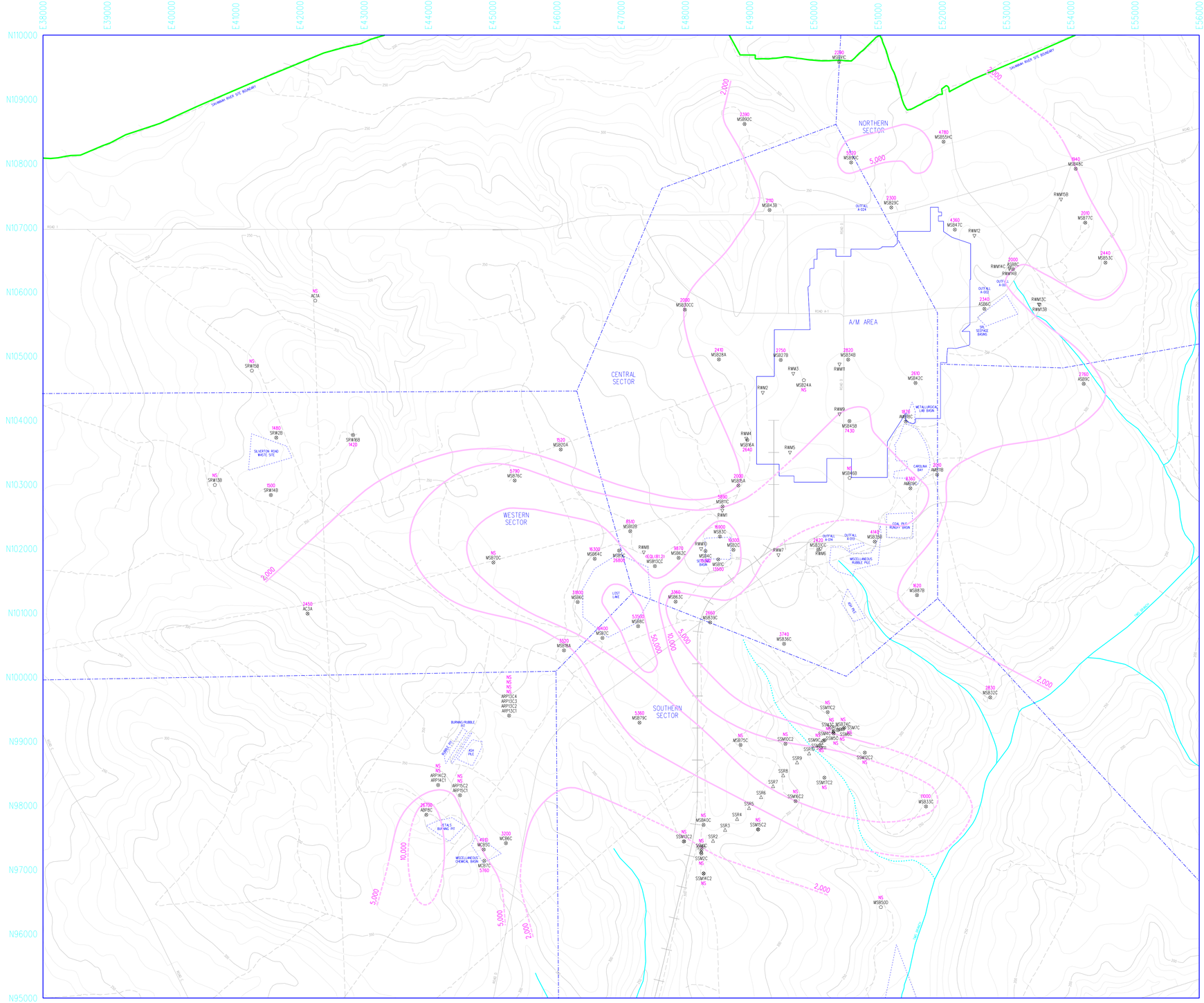
- 0 - 5 YEAR ZONE OF CAPTURE FOR RECOVERY/RECIRCULATION WELL
- 5 - 15 YEAR ZONE OF CAPTURE FOR RECOVERY/RECIRCULATION WELL
- 15 - 30 YEAR ZONE OF CAPTURE FOR RECOVERY/RECIRCULATION WELL



Map 23.
Zone of Capture and
Trichloroethylene Isoconcentration
Contour Map of the
Upper Lost Lake Aquifer Zone at the
M-Area and Met Lab HWMFs,
Third Quarter 2001

Map 23. Zone of Capture and Trichloroethylene Isoconcentration Contour Map of the Upper Lost Lake Aquifer Zone at the M-Area and Met Lab HWMFs, Third Quarter 2001

MPA6953

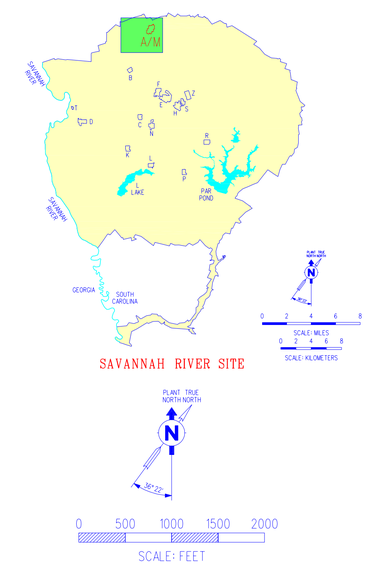


LEGEND

- MONITORING WELL
- RECOVERY WELL
- RECIRCULATION WELL
- PIEZOMETER
- 100.5 SODIUM (TOTAL RECOVERABLE) VALUE (3Q01) ug/L
- EQL ESTIMATED QUANTITATION LIMIT
- NDD (200.5) NOT DECISION DATA
- NS NOT SAMPLED
- NA NOT APPLICABLE
- SODIUM (TOTAL RECOVERABLE) ISOCONCENTRATION CONTOUR UPPER LOST LAKE AQUIFER ZONE (3Q01) CONTOUR INTERVALS AS SHOWN ug/L
- INFERRED PLUME CONTOUR

ISOCONCENTRATION CONTOURS WERE TAKEN FROM 1Q01 FIGURES AND REVISED TO REFLECT 3Q01 DATA (WHERE AVAILABLE)

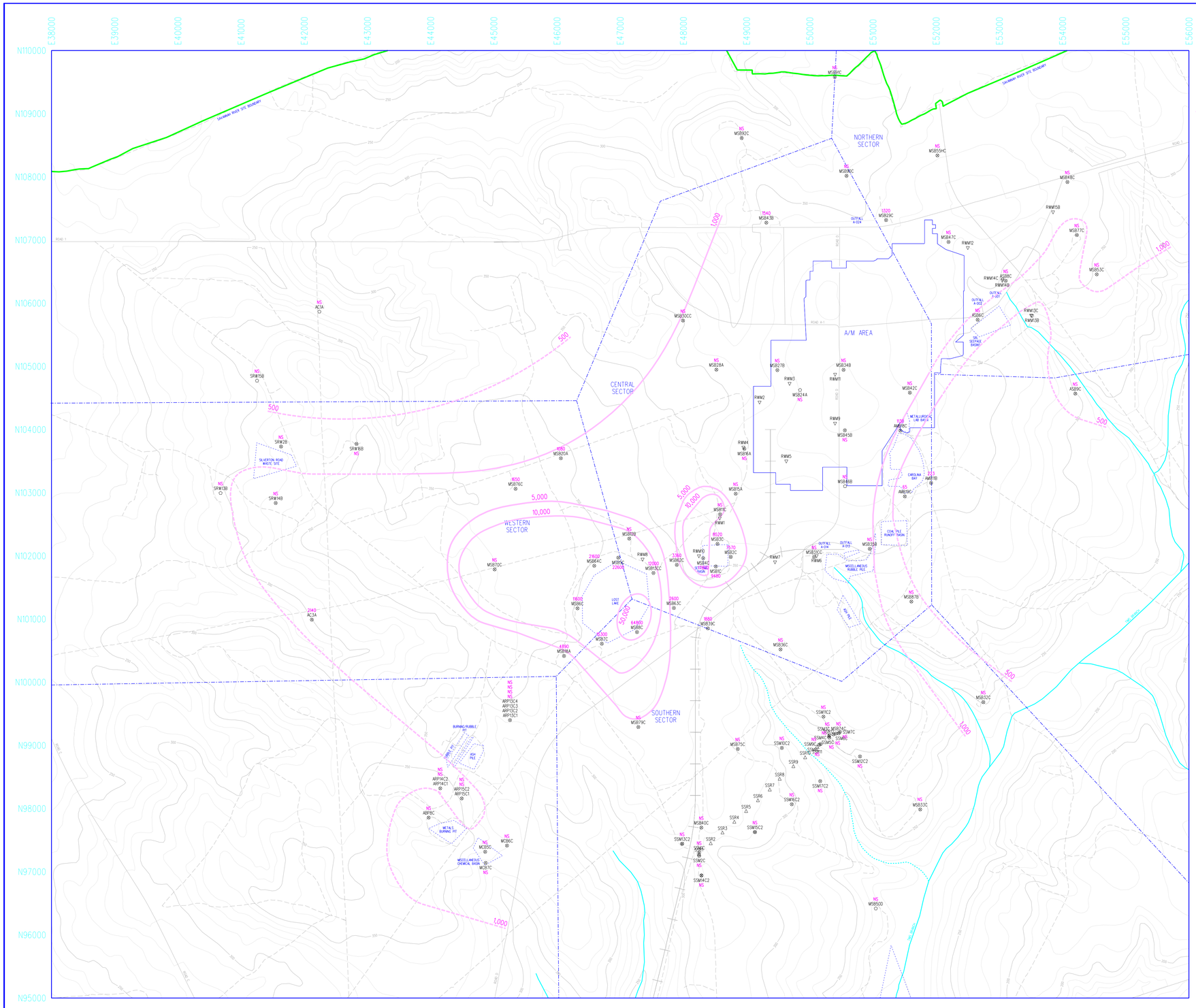
- SRS SITE BOUNDARY
- A/M-AREA GROUNDWATER SECTOR BOUNDARY
- A/M-AREA FENCE BOUNDARY
- STREAM
- INTERMITTENT STREAM
- SRS TOPOGRAPHIC CONTOUR (10 FOOT INTERVAL)
- SRS MAIN/PAVED ROAD
- SRS SECONDARY ROAD
- SRS RAILROAD



Map 24.
Sodium Isoconcentration
Contour Map of the
Upper Lost Lake Aquifer Zone at the
M-Area and Met Lab HWMFs,
Third Quarter 2001

Map 24. Sodium Isoconcentration Contour Map of the Upper Lost Lake Aquifer Zone at the M-Area and Met Lab HWMFs, Third Quarter 2001

MPA6954



LEGEND

- ⊗ MONITORING WELL
- ▽ RECOVERY WELL
- △ RECIRCULATION WELL
- ⬠ PIEZOMETER

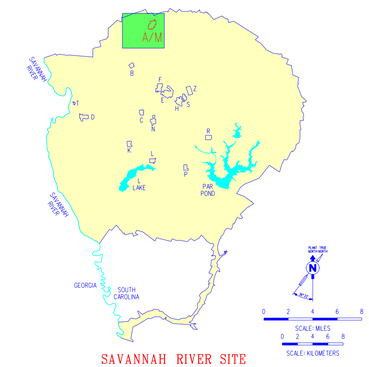
100.5 NITRATE (NITRITE AS NITROGEN) VALUE (3Q01) ug/L
EQL ESTIMATED QUANTITATION LIMIT
NDD (200.5) NOT DECISION DATA
NS NOT SAMPLED
NA NOT APPLICABLE

NITRATE (NITRITE AS NITROGEN) ISOCONCENTRATION CONTOUR UPPER LOST LAKE AQUIFER ZONE (3Q01) CONTOUR INTERVALS AS SHOWN ug/L

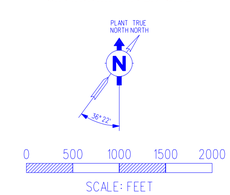
INFERRED PLUME CONTOUR

ISOCONCENTRATION CONTOURS WERE TAKEN FROM 1Q01 FIGURES AND REVISED TO REFLECT 3Q01 DATA (WHERE AVAILABLE)

- SRS SITE BOUNDARY
- A/M-AREA GROUNDWATER SECTOR BOUNDARY
- A/M-AREA FENCE BOUNDARY
- STREAM
- INTERMITTENT STREAM
- SRS TOPOGRAPHIC CONTOUR (10 FOOT INTERVAL)
- SRS MAIN/PAVED ROAD
- SRS SECONDARY ROAD
- SRS RAILROAD



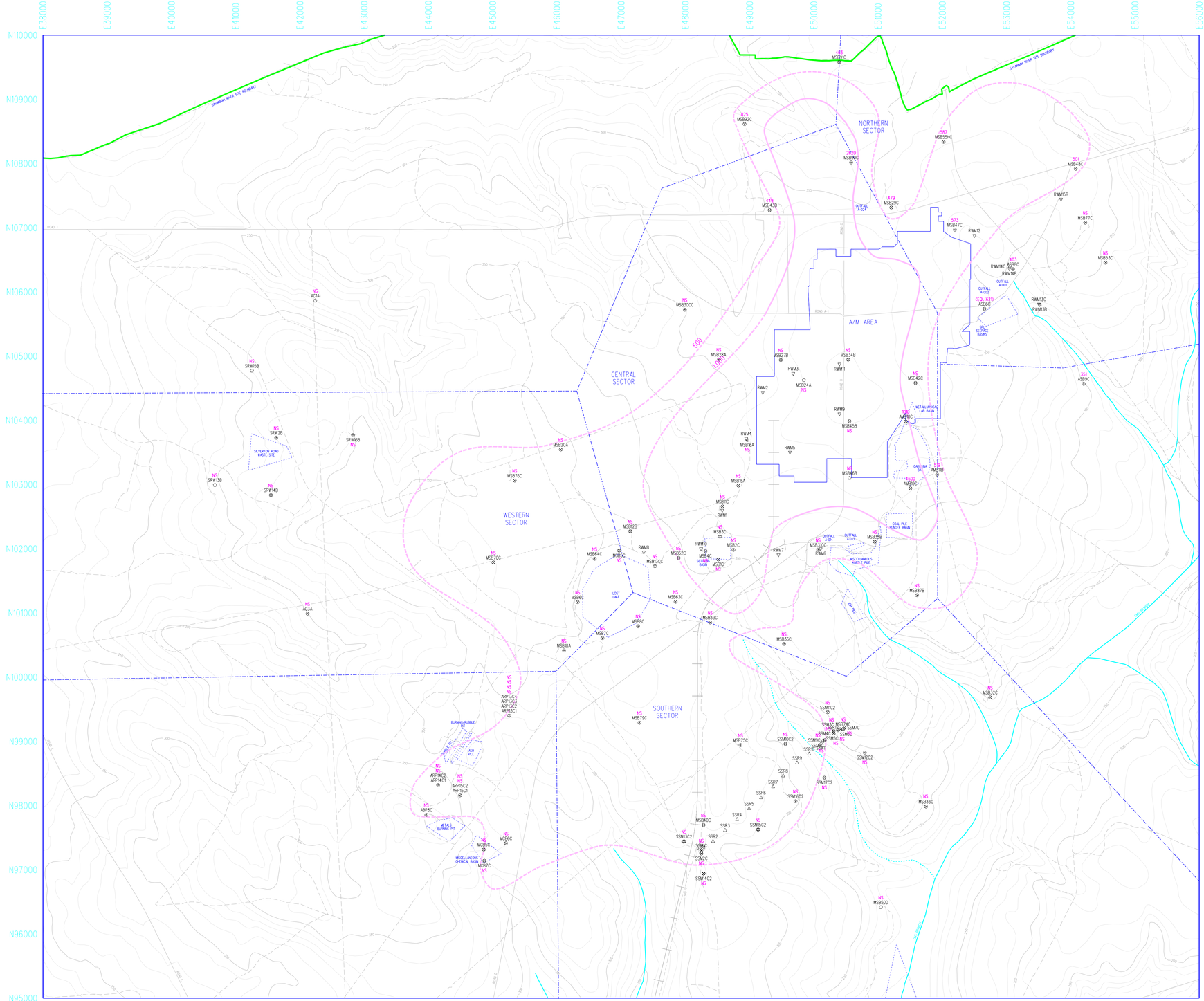
SAVANNAH RIVER SITE



Map 25.
Nitrate Isoconcentration
Contour Map of the
Upper Lost Lake Aquifer Zone at the
M-Area and Met Lab HWMFs,
Third Quarter 2001

Map 25. Nitrate Isoconcentration Contour Map of the Upper Lost Lake Aquifer Zone at the M-Area and Met Lab HWMFs, Third Quarter 2001

MPA6955



LEGEND

- MONITORING WELL
- RECOVERY WELL
- RECIRCULATION WELL
- PIEZOMETER

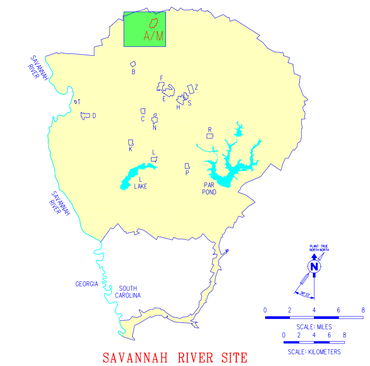
100.5 SULFATE VALUE (3Q01) ug/L
EQL ESTIMATED QUANTITATION LIMIT
NDD (200.5) NOT DECISION DATA
NS NOT SAMPLED
NA NOT APPLICABLE

SULFATE ISOCONCENTRATION CONTOUR UPPER LOST LAKE AQUIFER ZONE (3Q01) CONTOUR INTERVALS AS SHOWN ug/L

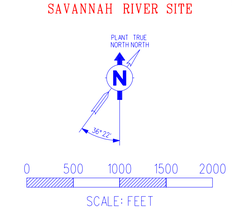
INFERRED PLUME CONTOUR

ISOCONCENTRATION CONTOURS WERE TAKEN FROM 1Q01 FIGURES AND REVISED TO REFLECT 3Q01 DATA (WHERE AVAILABLE)

- SRS SITE BOUNDARY
- A/M-AREA GROUNDWATER SECTOR BOUNDARY
- A/M-AREA FENCE BOUNDARY
- STREAM
- INTERMITTENT STREAM
- SRS TOPOGRAPHIC CONTOUR (10 FOOT INTERVAL)
- SRS MAIN/PAVED ROAD
- SRS SECONDARY ROAD
- SRS RAILROAD



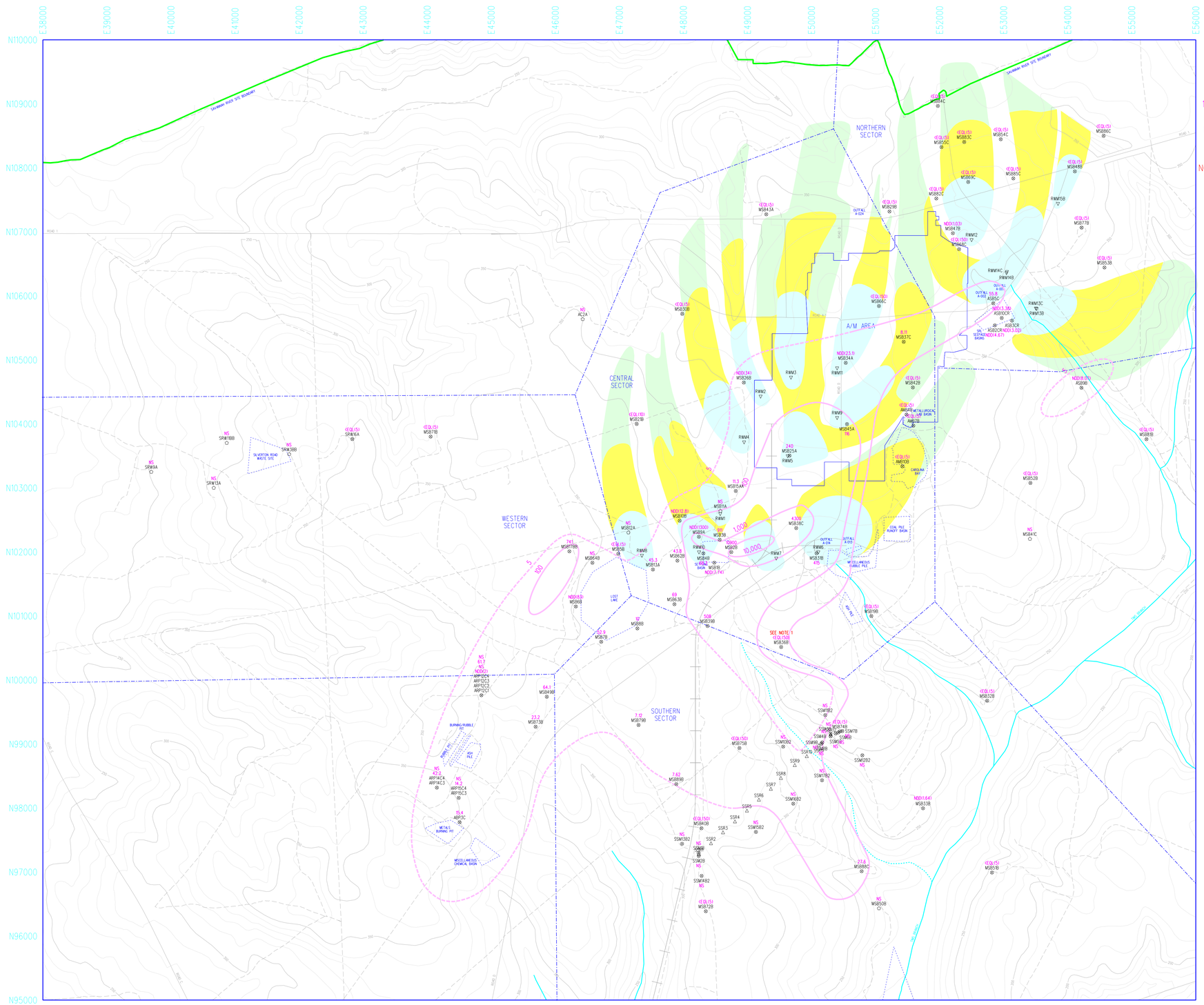
SAVANNAH RIVER SITE



Map 26.
Sulfate Isoconcentration
Contour Map of the
Upper Lost Lake Aquifer Zone at the
M-Area and Met Lab HWMFs,
Third Quarter 2001

Map 26. Sulfate Isoconcentration Contour Map of the Upper Lost Lake Aquifer Zone at the M-Area and Met Lab HWMFs, Third Quarter 2001

MPA6956



LEGEND

- ⊗ MONITORING WELL
- ▽ RECOVERY WELL
- △ RECIRCULATION WELL
- ⬠ PIEZOMETER

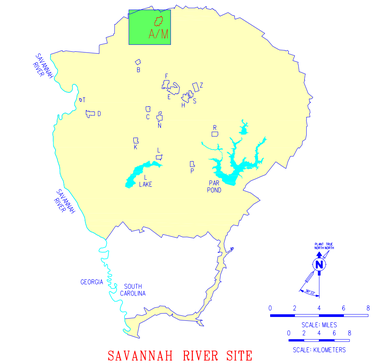
100.5 TETRACHLOROETHYLENE (PCE) VALUE (3Q01) ug/L
EQL ESTIMATED QUANTITATION LIMIT
NDD (200.5) NOT DECISION DATA
NS NOT SAMPLED
NA NOT APPLICABLE
NOTE 1 LOW VALUE THOUGHT TO BE UNREPRESENTATIVE OF AQUIFER CONCENTRATIONS DUE TO LESS THAN OPTIMUM SCREEN PLACEMENT. NOT USED IN CONTOURING.

TETRACHLOROETHYLENE (PCE) ISOCONCENTRATION CONTOUR LOWER LOST LAKE AQUIFER ZONE (3Q01) CONTOUR INTERVALS AS SHOWN ug/L
INFERRED PLUME CONTOUR

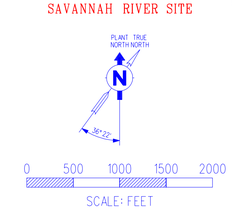
ISOCONCENTRATION CONTOURS WERE TAKEN FROM 1Q01 FIGURES AND REVISED TO REFLECT 3Q01 DATA (WHERE AVAILABLE)

- SRS SITE BOUNDARY
- A/M-AREA GROUNDWATER SECTOR BOUNDARY
- A/M-AREA FENCE BOUNDARY
- STREAM
- INTERMITTENT STREAM
- SRS TOPOGRAPHIC CONTOUR (10 FOOT INTERVAL)
- SRS MAIN/PAVED ROAD
- SRS SECONDARY ROAD
- SRS RAILROAD

- 0 - 5 YEAR ZONE OF CAPTURE FOR RECOVERY/RECIRCULATION WELL
- 5 - 15 YEAR ZONE OF CAPTURE FOR RECOVERY/RECIRCULATION WELL
- 15 - 30 YEAR ZONE OF CAPTURE FOR RECOVERY/RECIRCULATION WELL



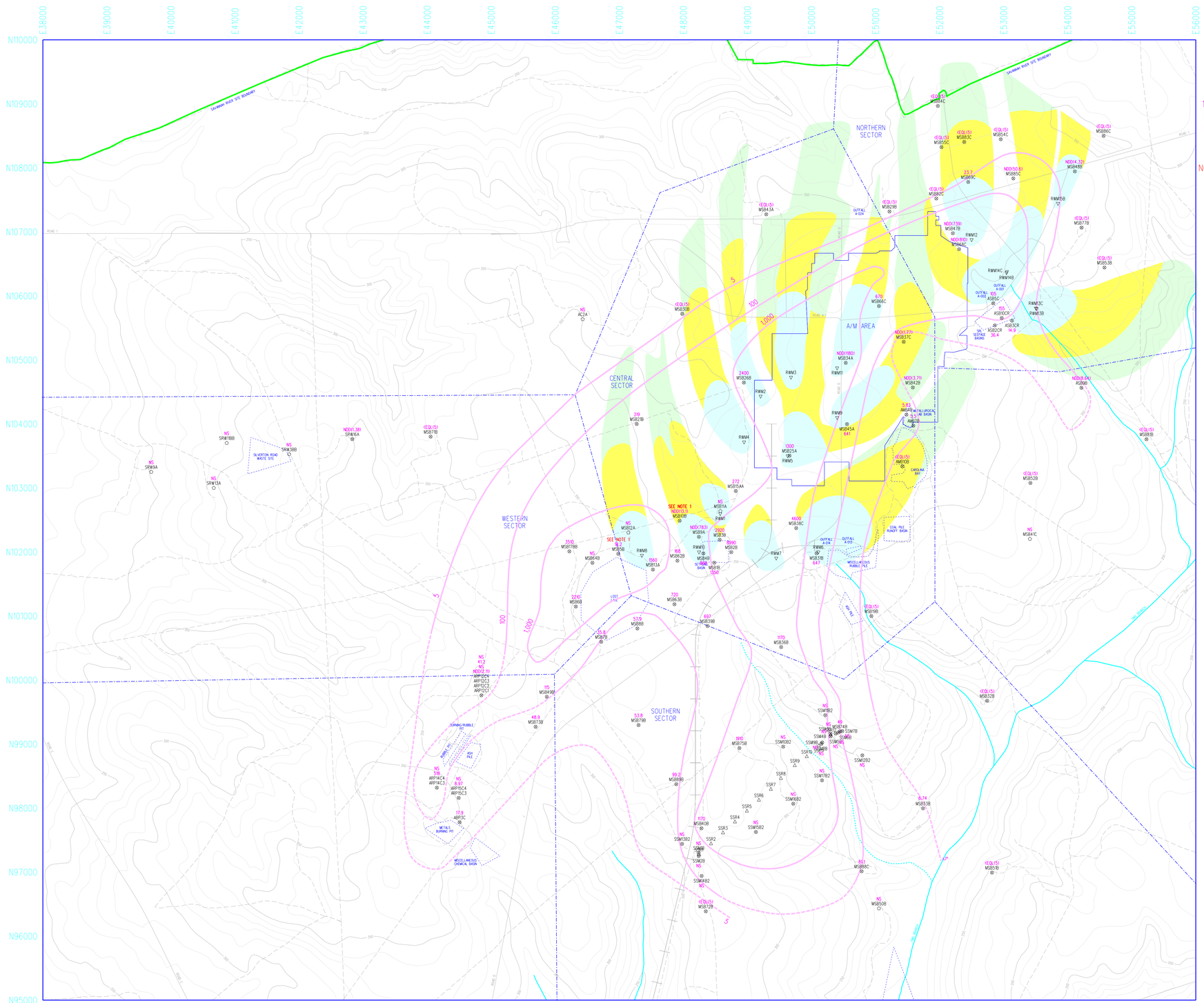
SAVANNAH RIVER SITE



Map 27.
Zone of Capture and
Tetrachloroethylene Isoconcentration
Contour Map of the
Lower Lost Lake Aquifer Zone at the
M-Area and Met Lab HWMFs,
Third Quarter 2001

Map 27. Zone of Capture and Tetrachloroethylene Isoconcentration Contour Map of the Lower Lost Lake Aquifer Zone at the M-Area and Met Lab HWMFs, Third Quarter 2001

MPA6957



LEGEND

- MONITORING WELL
- RECOVERY WELL
- RECIRCULATION WELL
- PIEZOMETER

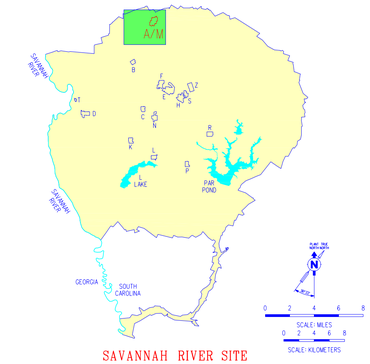
100.5 TRICHLOROETHYLENE (TCE) VALUE (3Q01) ug/L
EQL ESTIMATED QUANTITATION LIMIT
NDD (200.5) NOT DECISION DATA
NS NOT SAMPLED
NA NOT APPLICABLE
NOTE 1 LOW VALUE THOUGHT TO BE UNREPRESENTATIVE OF AQUIFER CONCENTRATIONS DUE TO LESS THAN OPTIMUM SCREEN PLACEMENT. NOT USED IN CONTOURING.

TRICHLOROETHYLENE (TCE) ISOCONCENTRATION CONTOUR LOWER LOST LAKE AQUIFER ZONE (3Q01) CONTOUR INTERVALS AS SHOWN ug/L
INFERRED PLUME CONTOUR

ISOCONCENTRATION CONTOURS WERE TAKEN FROM 1Q01 FIGURES AND REVISED TO REFLECT 3Q01 DATA (WHERE AVAILABLE)

- SRS SITE BOUNDARY
- A/M-AREA GROUNDWATER SECTOR BOUNDARY
- A/M-AREA FENCE BOUNDARY
- STREAM
- INTERMITTENT STREAM
- SRS TOPOGRAPHIC CONTOUR (10 FOOT INTERVAL)
- SRS MAIN/PAVED ROAD
- SRS SECONDARY ROAD
- SRS RAILROAD

- 0 - 5 YEAR ZONE OF CAPTURE FOR RECOVERY/RECIRCULATION WELL
- 5 - 15 YEAR ZONE OF CAPTURE FOR RECOVERY/RECIRCULATION WELL
- 15 - 30 YEAR ZONE OF CAPTURE FOR RECOVERY/RECIRCULATION WELL



SAVANNAH RIVER SITE

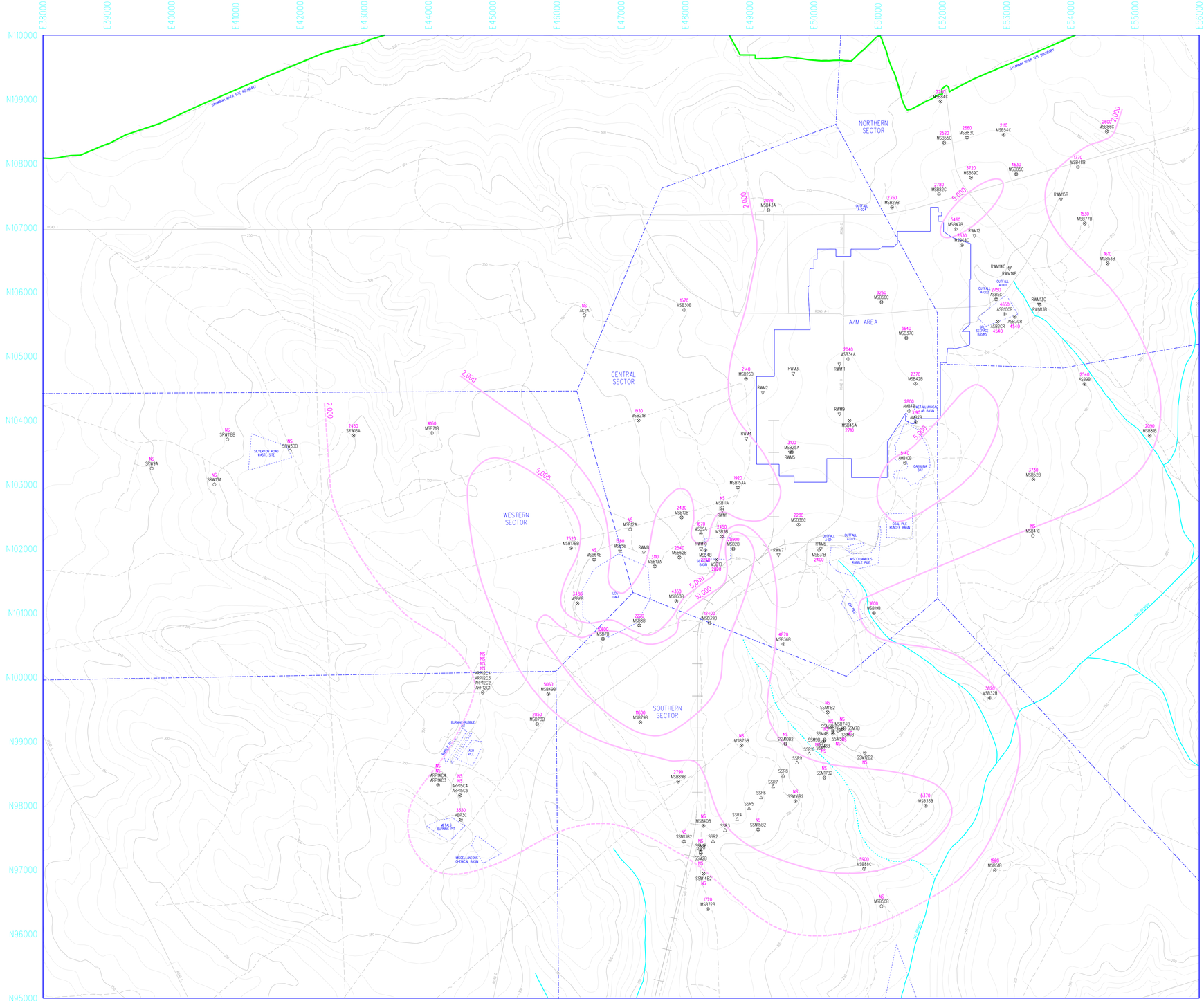
PLANT TRUE NORTH NORTH
36°33'

0 500 1000 1500 2000
SCALE: FEET

Map 28.
Zone of Capture and Trichloroethylene Isoconcentration Contour Map of the Lower Lost Lake Aquifer Zone at the M-Area and Met Lab HWMFs, Third Quarter 2001

Map 28. Zone of Capture and Trichloroethylene Isoconcentration Contour Map of the Lower Lost Lake Aquifer Zone at the M-Area and Met Lab HWMFs, Third Quarter 2001

MPA6958

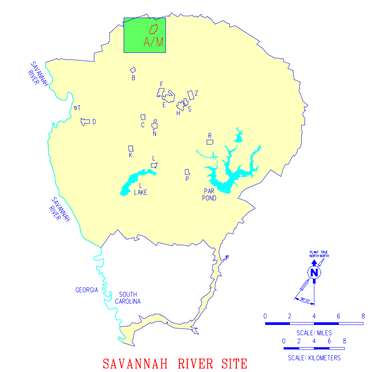


LEGEND

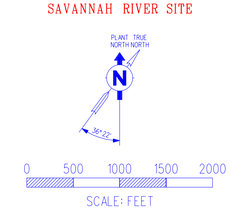
- ⊗ MONITORING WELL
- ▽ RECOVERY WELL
- △ RECIRCULATION WELL
- ⬠ PIEZOMETER
- 100.5 SODIUM (TOTAL RECOVERABLE) VALUE (3Q01) ug/L
- EQL ESTIMATED QUANTITATION LIMIT
- NDD (200.5) NOT DECISION DATA
- NS NOT SAMPLED
- NA NOT APPLICABLE
- SODIUM (TOTAL RECOVERABLE) ISOCONCENTRATION CONTOUR LOWER LOST LAKE AQUIFER ZONE (3Q01) CONTOUR INTERVALS AS SHOWN ug/L
- INFERRED PLUME CONTOUR

ISOCONCENTRATION CONTOURS WERE TAKEN FROM 1Q01 FIGURES AND REVISED TO REFLECT 3Q01 DATA (WHERE AVAILABLE)

- SRS SITE BOUNDARY
- A/M-AREA GROUNDWATER SECTOR BOUNDARY
- A/M-AREA FENCE BOUNDARY
- STREAM
- INTERMITTENT STREAM
- SRS TOPOGRAPHIC CONTOUR (10 FOOT INTERVAL)
- SRS MAIN/PAVED ROAD
- SRS SECONDARY ROAD
- SRS RAILROAD



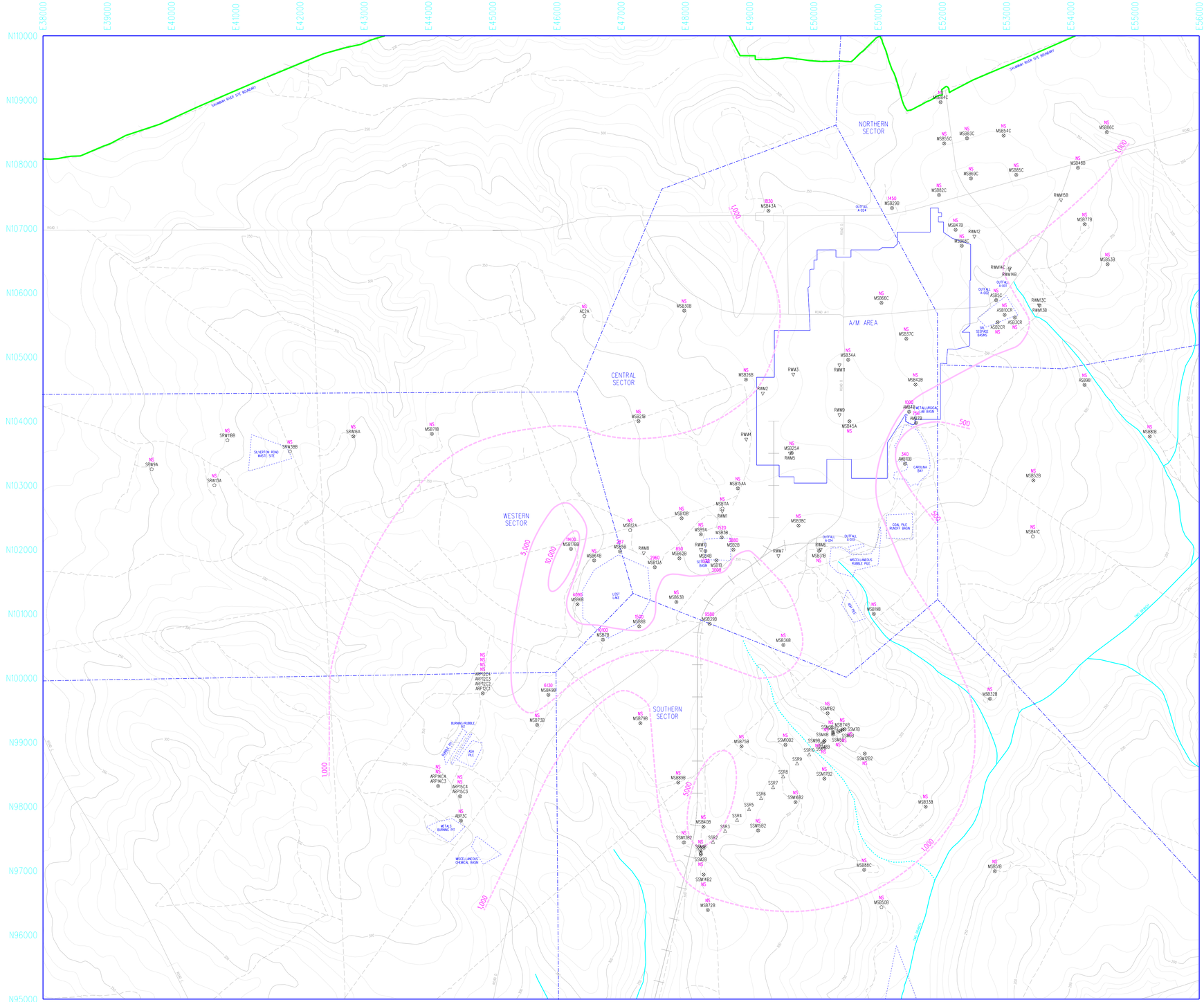
SAVANNAH RIVER SITE



Map 29.
Sodium Isoconcentration
Contour Map of the
Lower Lost Lake Aquifer Zone at the
M-Area and Met Lab HWMFs,
Third Quarter 2001

Map 29. Sodium Isoconcentration Contour Map of the Lower Lost Lake Aquifer Zone at the M-Area and Met Lab HWMFs, Third Quarter 2001

MPA6959

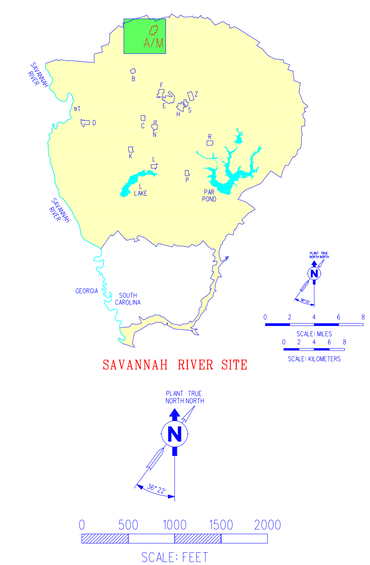


LEGEND

- ⊗ MONITORING WELL
- ▽ RECOVERY WELL
- △ RECIRCULATION WELL
- ⬠ PIEZOMETER
- 100.5 NITRATE (NITRITE AS NITROGEN) VALUE (3Q01) ug/L
- EQL ESTIMATED QUANTITATION LIMIT
- NDD (200.5) NOT DECISION DATA
- NS NOT SAMPLED
- NA NOT APPLICABLE
- NITRATE (NITRITE AS NITROGEN) ISOCONCENTRATION CONTOUR LOWER LOST LAKE AQUIFER ZONE (3Q01) CONTOUR INTERVALS AS SHOWN ug/L
- INFERRED PLUME CONTOUR

ISOCONCENTRATION CONTOURS WERE TAKEN FROM 1Q01 FIGURES AND REVISED TO REFLECT 3Q01 DATA (WHERE AVAILABLE)

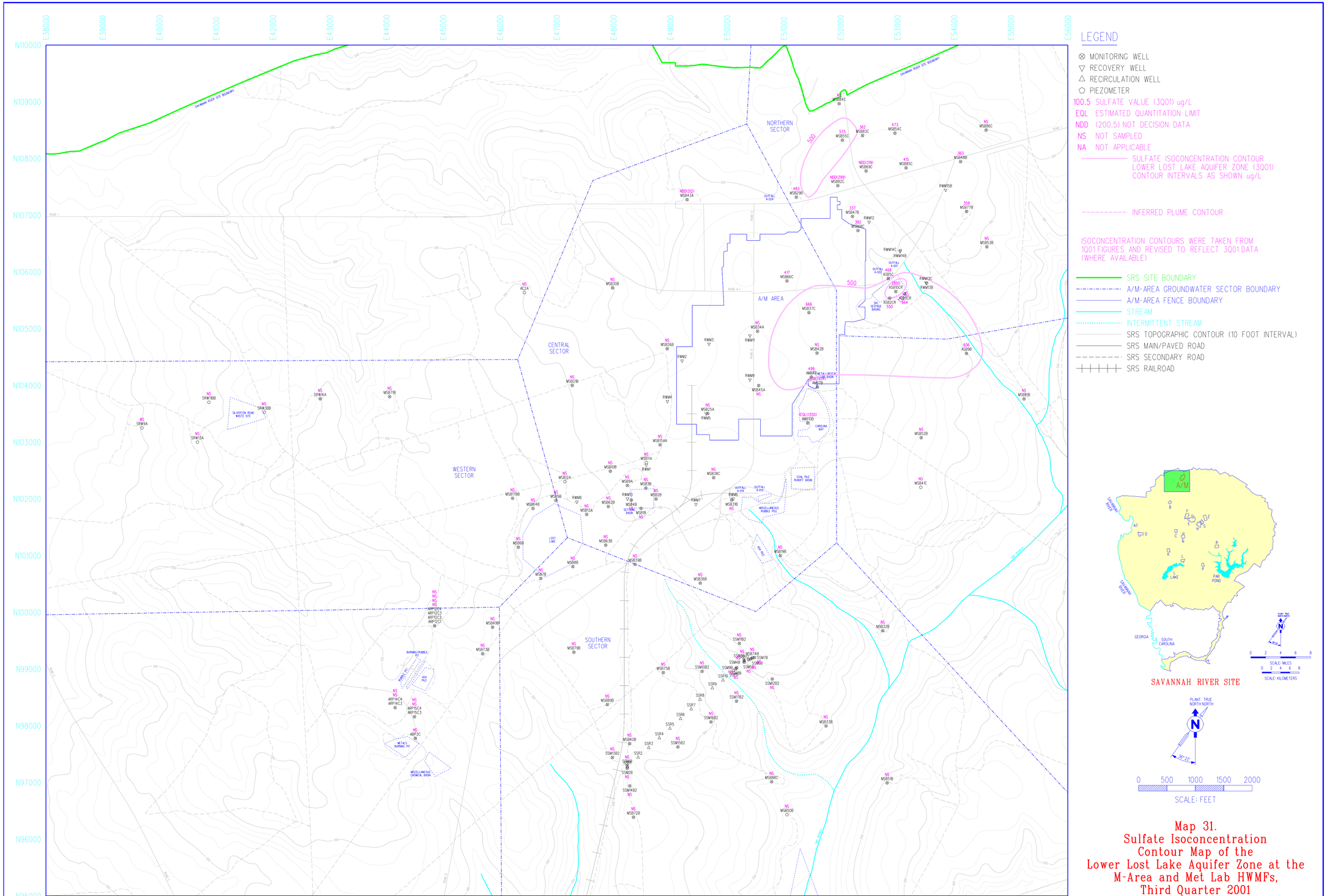
- SRS SITE BOUNDARY
- A/M-AREA GROUNDWATER SECTOR BOUNDARY
- A/M-AREA FENCE BOUNDARY
- STREAM
- INTERMITTENT STREAM
- SRS TOPOGRAPHIC CONTOUR (10 FOOT INTERVAL)
- SRS MAIN/PAVED ROAD
- SRS SECONDARY ROAD
- SRS RAILROAD



Map 30.
Nitrate Isoconcentration
Contour Map of the
Lower Lost Lake Aquifer Zone at the
M-Area and Met Lab HWMFs,
Third Quarter 2001

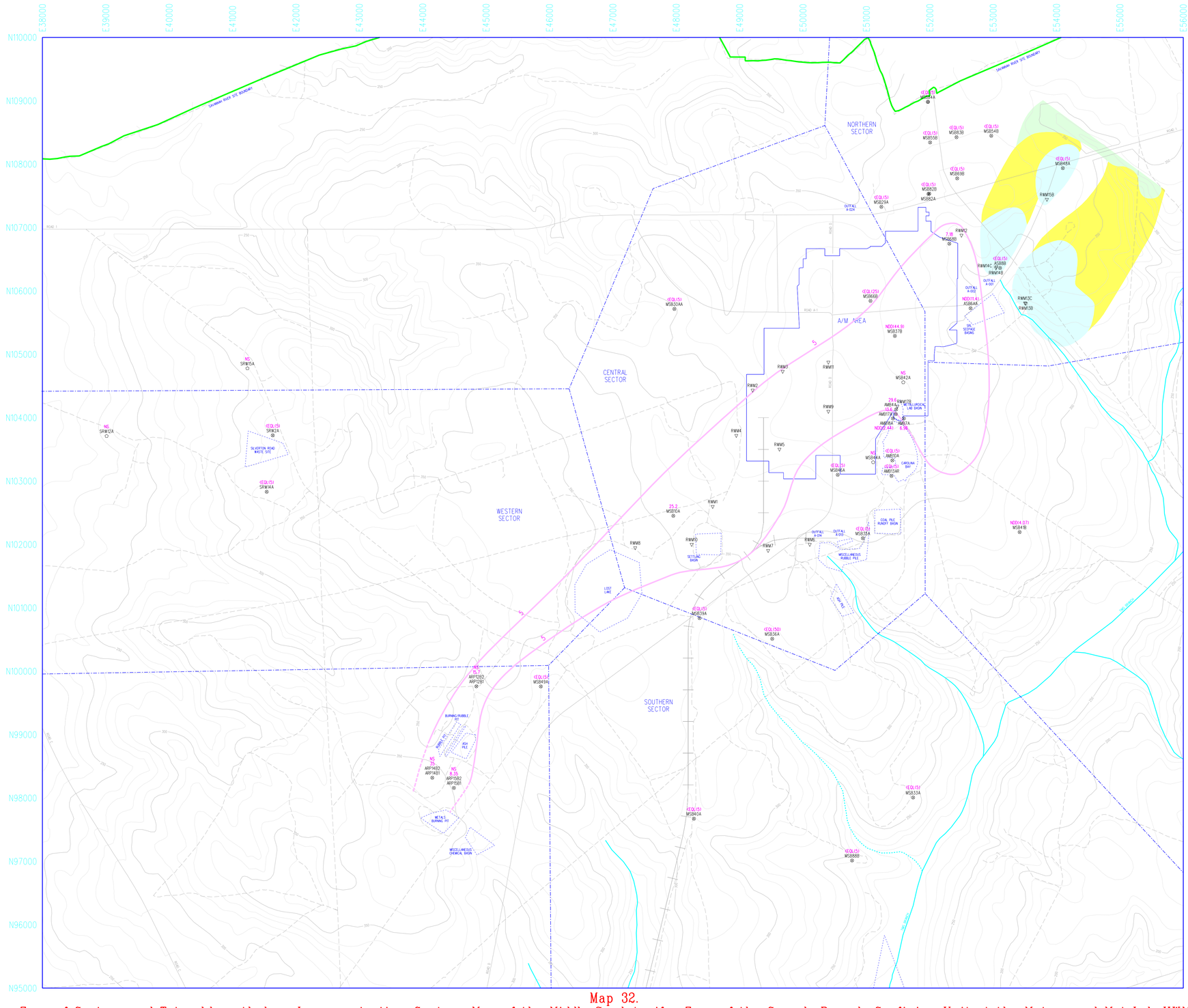
Map 30. Nitrate Isoconcentration Contour Map of the Lower Lost Lake Aquifer Zone at the M-Area and Met Lab HWMFs, Third Quarter 2001

MPA6960



Map 31. Sulfate Isoconcentration Contour Map of the Lower Lost Lake Aquifer Zone at the M-Area and Met Lab HWMFs, Third Quarter 2001

MPA6961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SAVANNAH RIVER SITE BOUNDARY
NORTHERN SECTOR
CENTRAL SECTOR
WESTERN SECTOR
SOUTHERN SECTOR
A/M AREA
SILVERTON ROAD WASTE SITE
METALS BURNING PIT
MISCELLANEOUS CHEMICAL BASIN
BURNING/RUBBLE PIT
RUBBLE PIT
ASH PILE
LOST LAKE
SETTLING BASIN
MISCELLANEOUS RUBBLE PILE
COAL PILE RUNOFF BASIN
CAROLINA BAY
METALLURGICAL LAB BASIN
OUTFALL A-024
OUTFALL A-032
OUTFALL A-033
OUTFALL A-037
SP-SEEPAGE BASINS
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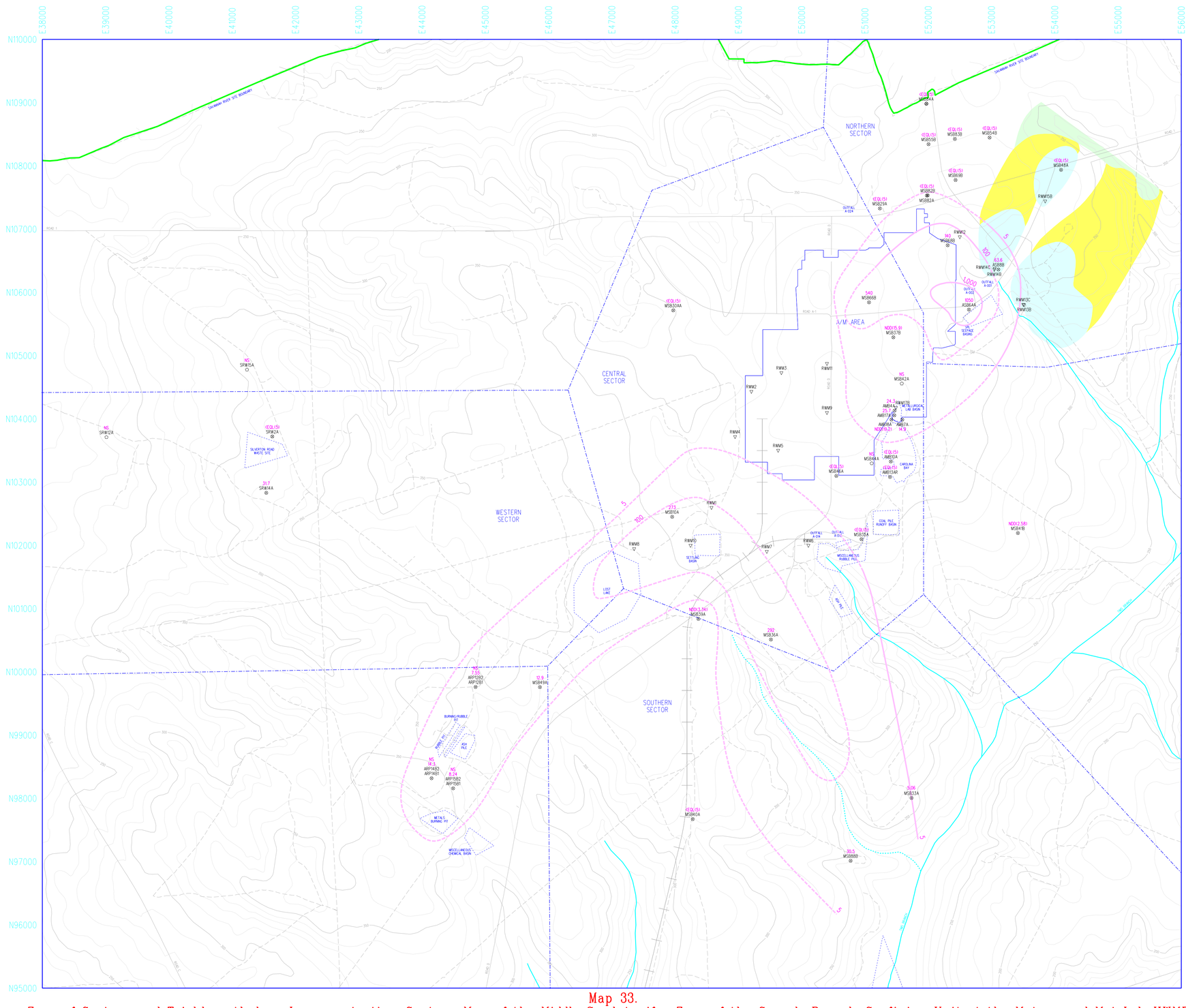
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LOST LAKE
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MISCELLANEOUS RUBBLE PILE
COAL PILE RUNOFF BASIN
CAROLINA BAY
METALLURGICAL LAB BASIN
SEEPAGE BASINS
BURNING/RUBBLE PIT
ASH PILE
METALS BURNING PIT
MISCELLANEOUS CHEMICAL BASIN
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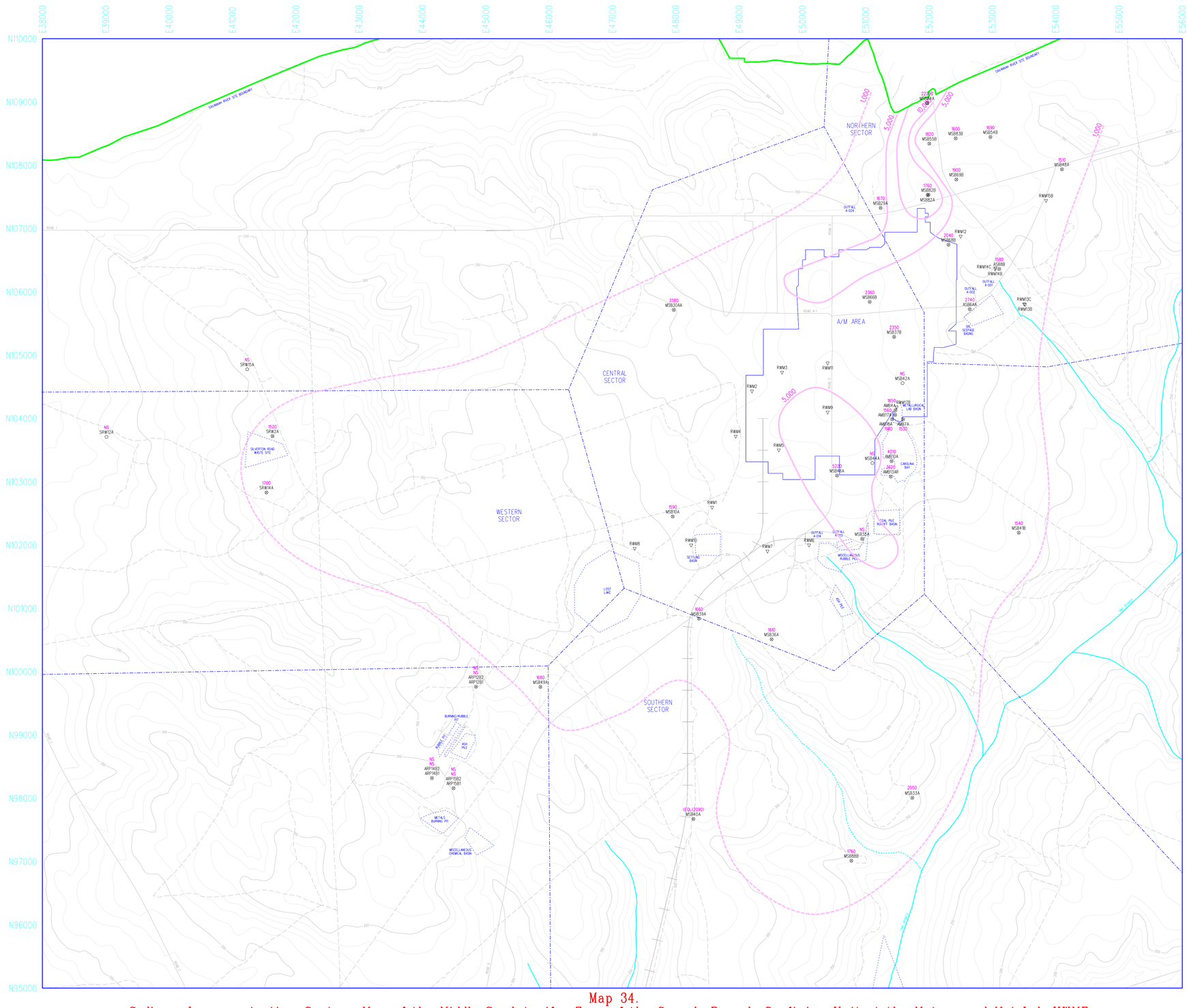
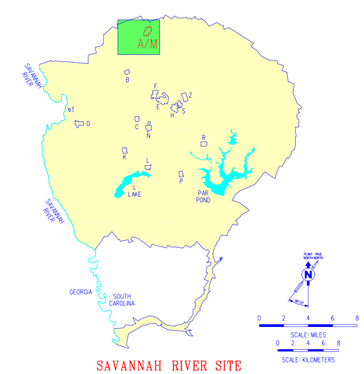


LEGEND

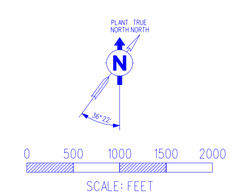
- ⊗ MONITORING WELL
- ▽ RECOVERY WELL
- ⬠ PIEZOMETER
- 100.5 SODIUM (TOTAL RECOVERABLE) VALUE (3Q01) ug/L
- EQL ESTIMATED QUANTITATION LIMIT
- NDD (200.5) NOT DECISION DATA
- NS NOT SAMPLED
- NA NOT APPLICABLE
- SODIUM (TOTAL RECOVERABLE) ISOCONCENTRATION CONTOUR MIDDLE SAND AQUIFER ZONE OF THE CBCU (3Q01) CONTOUR INTERVALS AS SHOWN ug/L
- INFERRED PLUME CONTOUR

ISOCONCENTRATION CONTOURS WERE TAKEN FROM 1Q01 FIGURES AND REVISED TO REFLECT 3Q01 DATA (WHERE AVAILABLE)

- SRS SITE BOUNDARY
- A/M-AREA GROUNDWATER SECTOR BOUNDARY
- A/M-AREA FENCE BOUNDARY
- STREAM
- INTERMITTENT STREAM
- SRS TOPOGRAPHIC CONTOUR (10 FOOT INTERVAL)
- SRS MAIN/PAVED ROAD
- SRS SECONDARY ROAD
- SRS RAILROAD



SAVANNAH RIVER SITE



Map 34.
Sodium Isoconcentration Contour Map of the Middle Sand Aquifer Zone of the Crouch Branch Confining Unit at the M-Area and Met Lab HWMFs, Third Quarter 2001

Map 34.
Sodium Isoconcentration Contour Map of the Middle Sand Aquifer Zone of the Crouch Branch Confining Unit at the M-Area and Met Lab HWMFs, Third Quarter 2001

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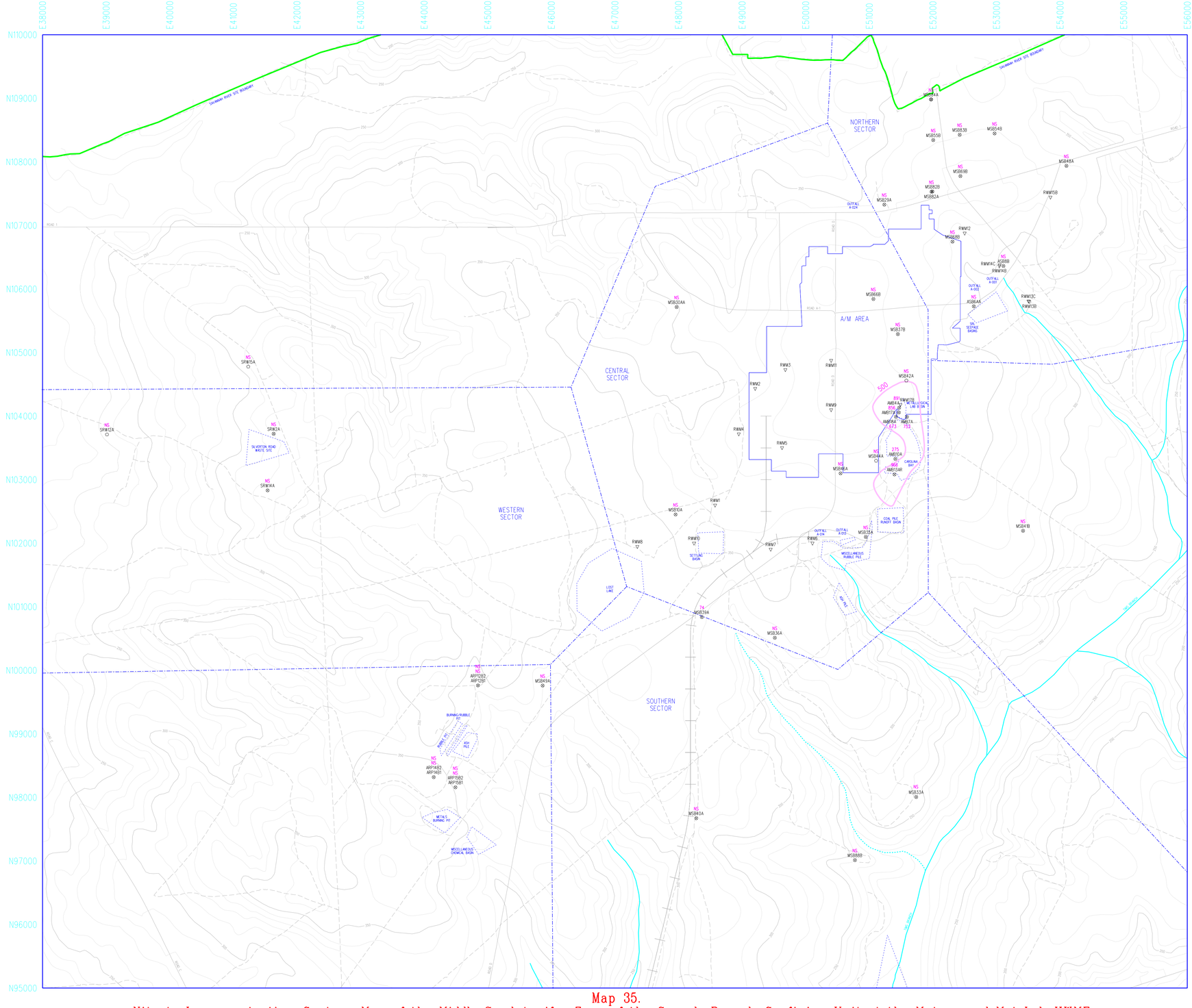

Map 35.
Nitrate Isoconcentration Contour Map of the Middle Sand Aquifer Zone of the Crouch Branch Confining Unit at the M-Area and Met Lab HWMFs,
Third Quarter 2001

Map 35.
Nitrate Isoconcentration Contour Map of the Middle Sand Aquifer Zone of the Crouch Branch Confining Unit at the M-Area and Met Lab HWMFs,
Third Quarter 2001

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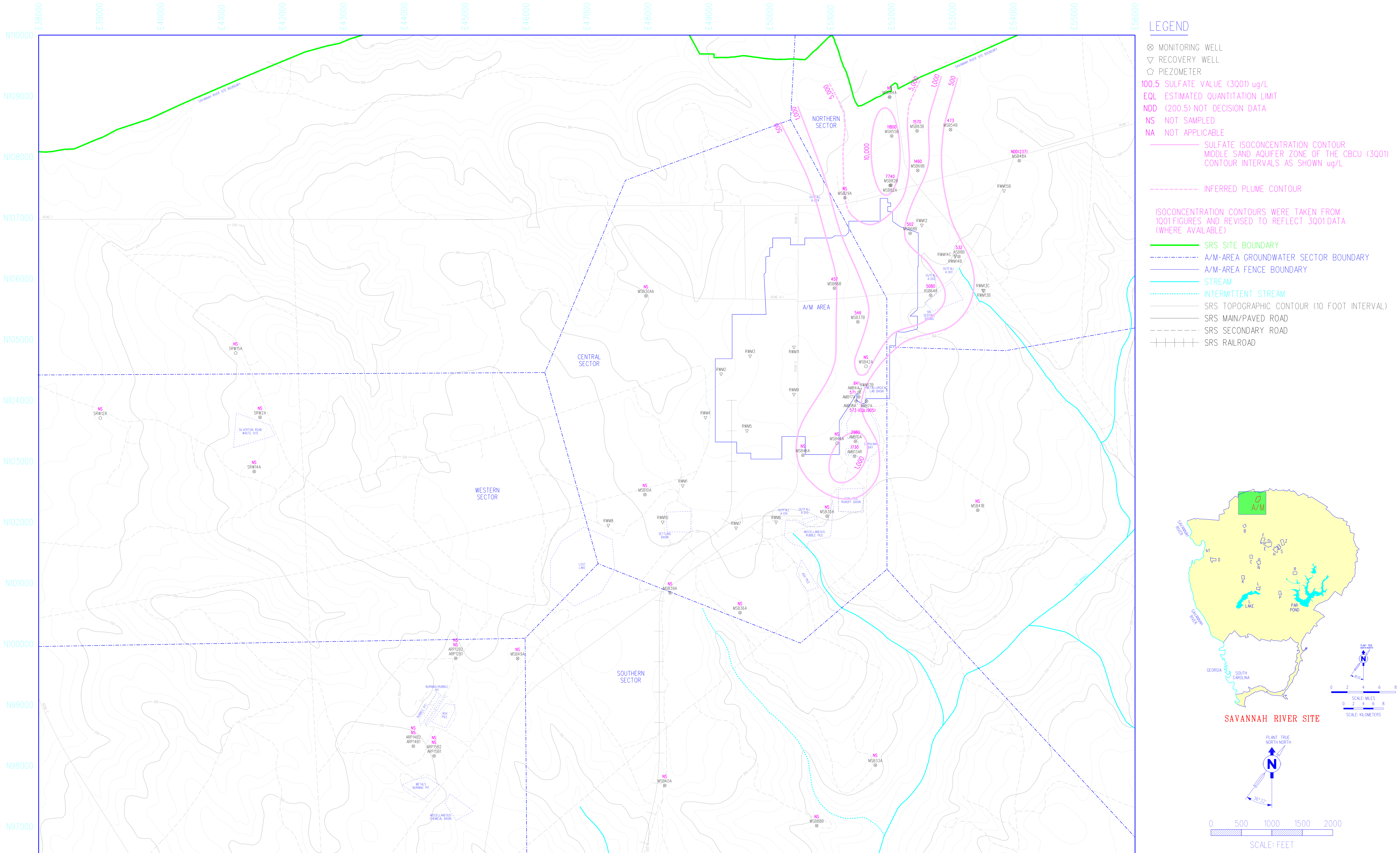
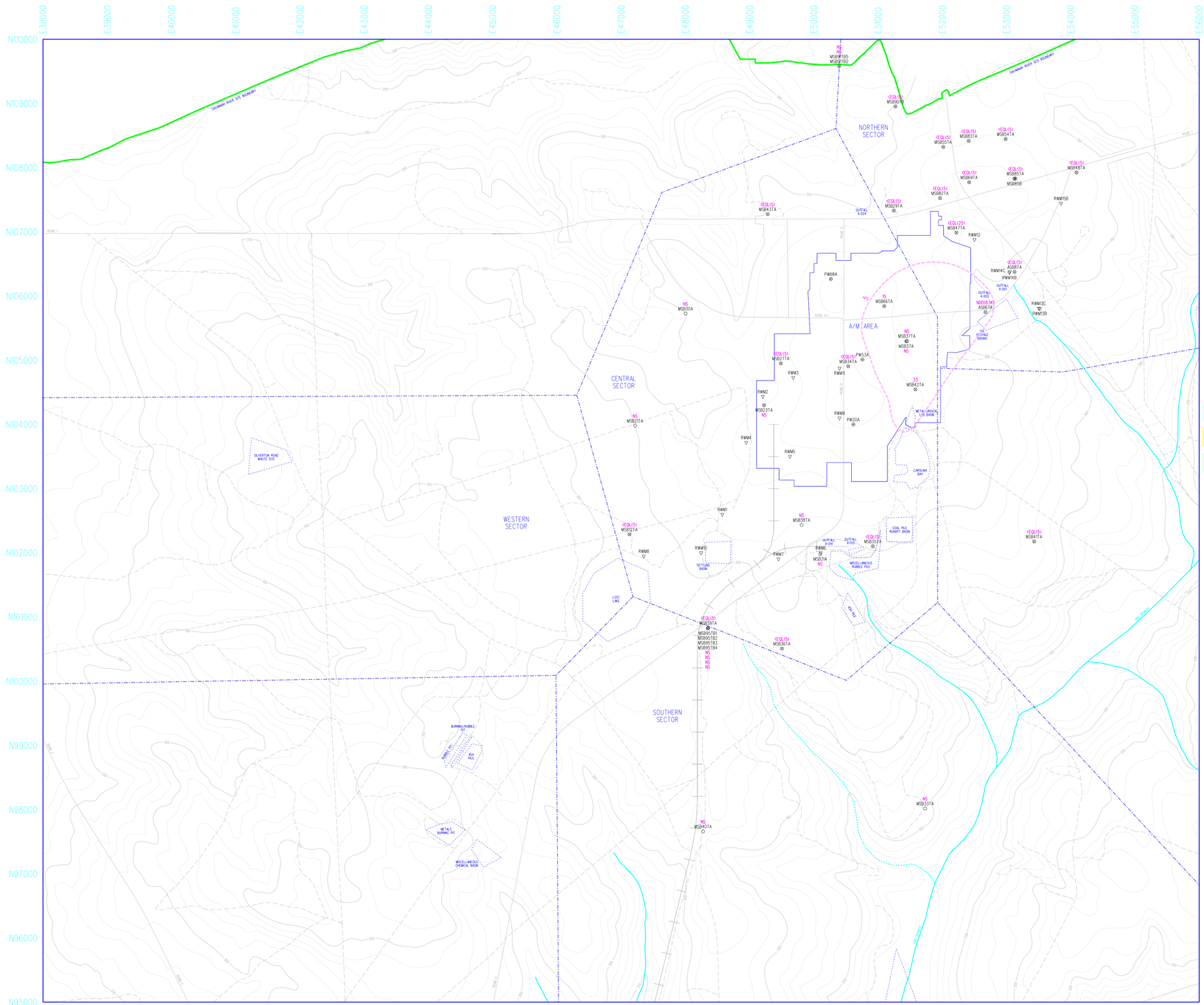


Map 36.
Sulfate Isoconcentration
Contour Map of the
Middle Sand Aquifer Zone of the
Crouch Branch Confining Unit at the
M-Area and Met Lab HWMFs,
Third Quarter 2001

MPA6966

Map 36.
Sulfate Isoconcentration Contour Map of the Middle Sand Aquifer Zone of the Crouch Branch Confining Unit at the M-Area and Met Lab HWMFs,
Third Quarter 2001



LEGEND

- ⊗ MONITORING WELL
- ▽ RECOVERY WELL
- ⊕ PRODUCTION WELL
- ⬠ PIEZOMETER
- 100.5 TETRACHLOROETHYLENE (PCE) VALUE (3Q01) ug/L
- EQL ESTIMATED QUANTITATION LIMIT
- NDD (200.5) NOT DECISION DATA
- NS NOT SAMPLED
- NA NOT APPLICABLE
- TETRACHLOROETHYLENE (PCE) ISOCONCENTRATION CONTOUR CROUCH BRANCH AQUIFER UNIT (3Q01) CONTOUR INTERVALS AS SHOWN ug/L
- INFERRED PLUME CONTOUR

ISOCONCENTRATION CONTOURS WERE TAKEN FROM 1Q01 FIGURES AND REVISED TO REFLECT 3Q01 DATA (WHERE AVAILABLE)

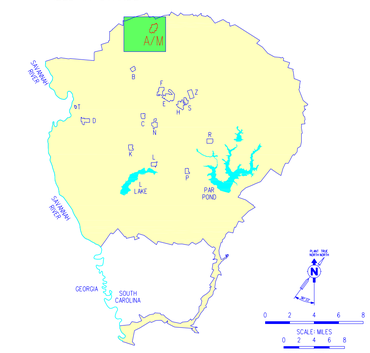
- SRS SITE BOUNDARY
- A/M-AREA GROUNDWATER SECTOR BOUNDARY
- A/M-AREA FENCE BOUNDARY
- STREAM
- INTERMITTENT STREAM
- SRS TOPOGRAPHIC CONTOUR (10 FOOT INTERVAL)
- SRS MAIN/PAVED ROAD
- SRS SECONDARY ROAD
- SRS RAILROAD

0 - 5 YEAR ZONE OF CAPTURE FOR PRODUCTION WELLS 905-20A AND 905-53A

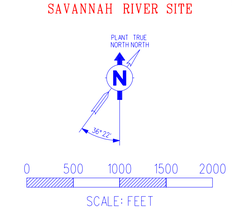
5 - 15 YEAR ZONE OF CAPTURE FOR PRODUCTION WELLS 905-20A AND 905-53A

15 - 30 YEAR ZONE OF CAPTURE FOR PRODUCTION WELLS 905-20A AND 905-53A

PRODUCTION WELL MODE OF OPERATION IS TO HAVE ONE WELL OPERATING WITH THE OTHER WELL HELD IN STANDBY



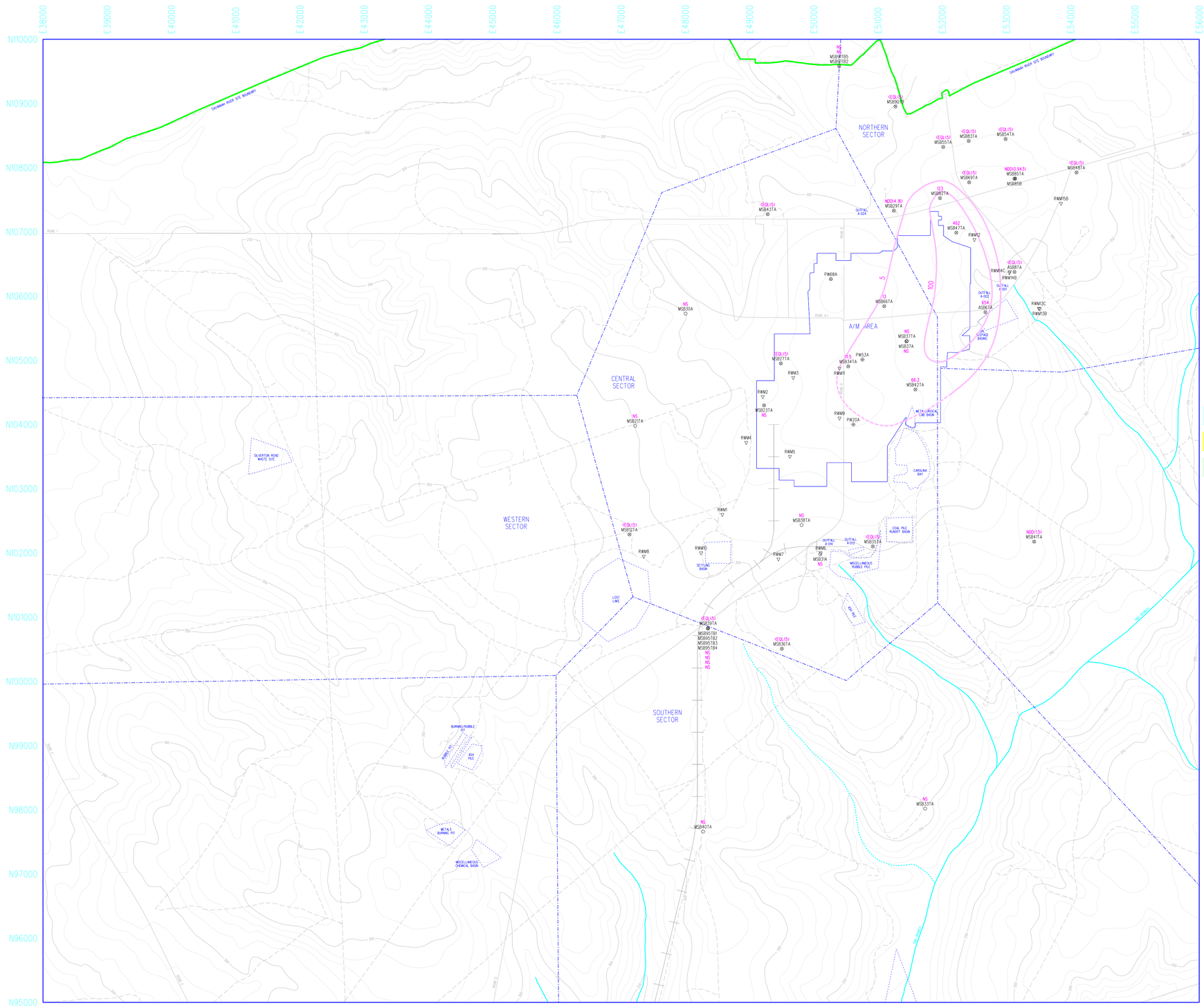
SAVANNAH RIVER SITE



Map 37.
Zone of Capture and
Tetrachloroethylene Isoconcentration
Contour Map of the
Crouch Branch Aquifer Unit at the
M-Area and Met Lab HWMFs,
Third Quarter 2001

Map 37. Zone of Capture and Tetrachloroethylene Isoconcentration Contour Map of the Crouch Branch Aquifer Unit at the M-Area and Met Lab HWMFs, Third Quarter 2001

MPA6967



LEGEND

- ⊗ MONITORING WELL
- ▽ RECOVERY WELL
- ⊕ PRODUCTION WELL
- ⬠ PIEZOMETER

100.5 TRICHLOROETHYLENE (TCE) VALUE (3Q01) ug/L
EQL ESTIMATED QUANTITATION LIMIT
NDD (200.5) NOT DECISION DATA
NS NOT SAMPLED
NA NOT APPLICABLE

TRICHLOROETHYLENE (TCE) ISOCONCENTRATION CONTOUR CROUCH BRANCH AQUIFER UNIT (3Q01) CONTOUR INTERVALS AS SHOWN ug/L

INFERRED PLUME CONTOUR

ISOCONCENTRATION CONTOURS WERE TAKEN FROM 1Q01 FIGURES AND REVISED TO REFLECT 3Q01 DATA (WHERE AVAILABLE)

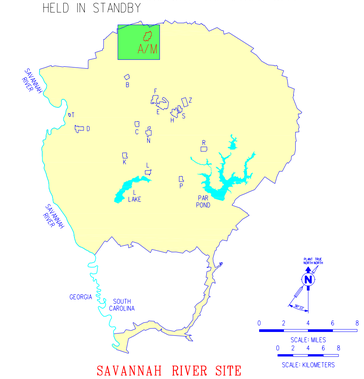
- SRS SITE BOUNDARY
- A/M-AREA GROUNDWATER SECTOR BOUNDARY
- A/M-AREA FENCE BOUNDARY
- STREAM
- INTERMITTENT STREAM
- SRS TOPOGRAPHIC CONTOUR (10 FOOT INTERVAL)
- SRS MAIN/PAVED ROAD
- SRS SECONDARY ROAD
- SRS RAILROAD

0 - 5 YEAR ZONE OF CAPTURE FOR PRODUCTION WELLS 905-20A AND 905-53A

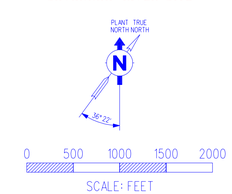
5 - 15 YEAR ZONE OF CAPTURE FOR PRODUCTION WELLS 905-20A AND 905-53A

15 - 30 YEAR ZONE OF CAPTURE FOR PRODUCTION WELLS 905-20A AND 905-53A

PRODUCTION WELL MODE OF OPERATION IS TO HAVE ONE WELL OPERATING WITH THE OTHER WELL HELD IN STANDBY



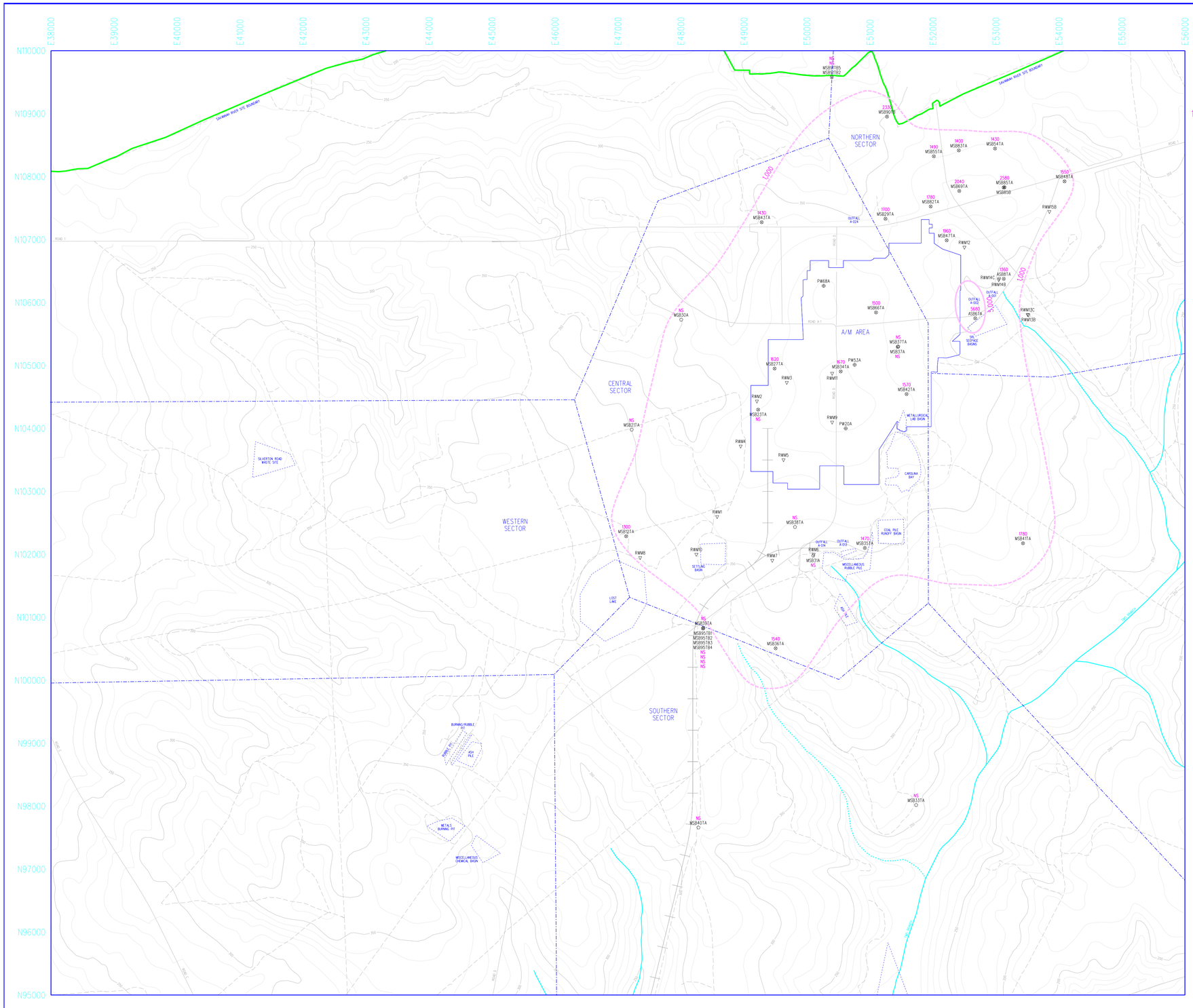
SAVANNAH RIVER SITE



Map 38.
Zone of Capture and Trichloroethylene Isoconcentration Contour Map of the Crouch Branch Aquifer Unit at the M-Area and Met Lab HWMFs, Third Quarter 2001

Map 38. Zone of Capture and Trichloroethylene Isoconcentration Contour Map of the Crouch Branch Aquifer Unit at the M-Area and Met Lab HWMFs, Third Quarter 2001

MPA6968

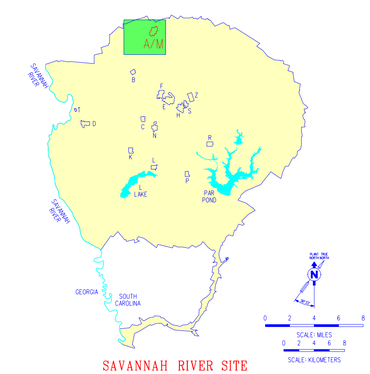


LEGEND

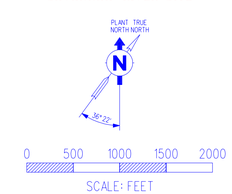
- ⊗ MONITORING WELL
- ▽ RECOVERY WELL
- ⊕ PRODUCTION WELL
- ⬠ PIEZOMETER
- 100.5 SODIUM (TOTAL RECOVERABLE) VALUE (3Q01) ug/L
- EQL ESTIMATED QUANTITATION LIMIT
- NDD (200.5) NOT DECISION DATA
- NS NOT SAMPLED
- NA NOT APPLICABLE
- SODIUM (TOTAL RECOVERABLE) ISOCONCENTRATION CONTOUR CROUCH BRANCH AQUIFER UNIT (3Q01) CONTOUR INTERVALS AS SHOWN ug/L
- INFERRED PLUME CONTOUR

ISOCONCENTRATION CONTOURS WERE TAKEN FROM 1Q01 FIGURES AND REVISED TO REFLECT 3Q01 DATA (WHERE AVAILABLE)

- SRS SITE BOUNDARY
- A/M-AREA GROUNDWATER SECTOR BOUNDARY
- A/M-AREA FENCE BOUNDARY
- STREAM
- INTERMITTENT STREAM
- SRS TOPOGRAPHIC CONTOUR (10 FOOT INTERVAL)
- SRS MAIN/PAVED ROAD
- SRS SECONDARY ROAD
- SRS RAILROAD



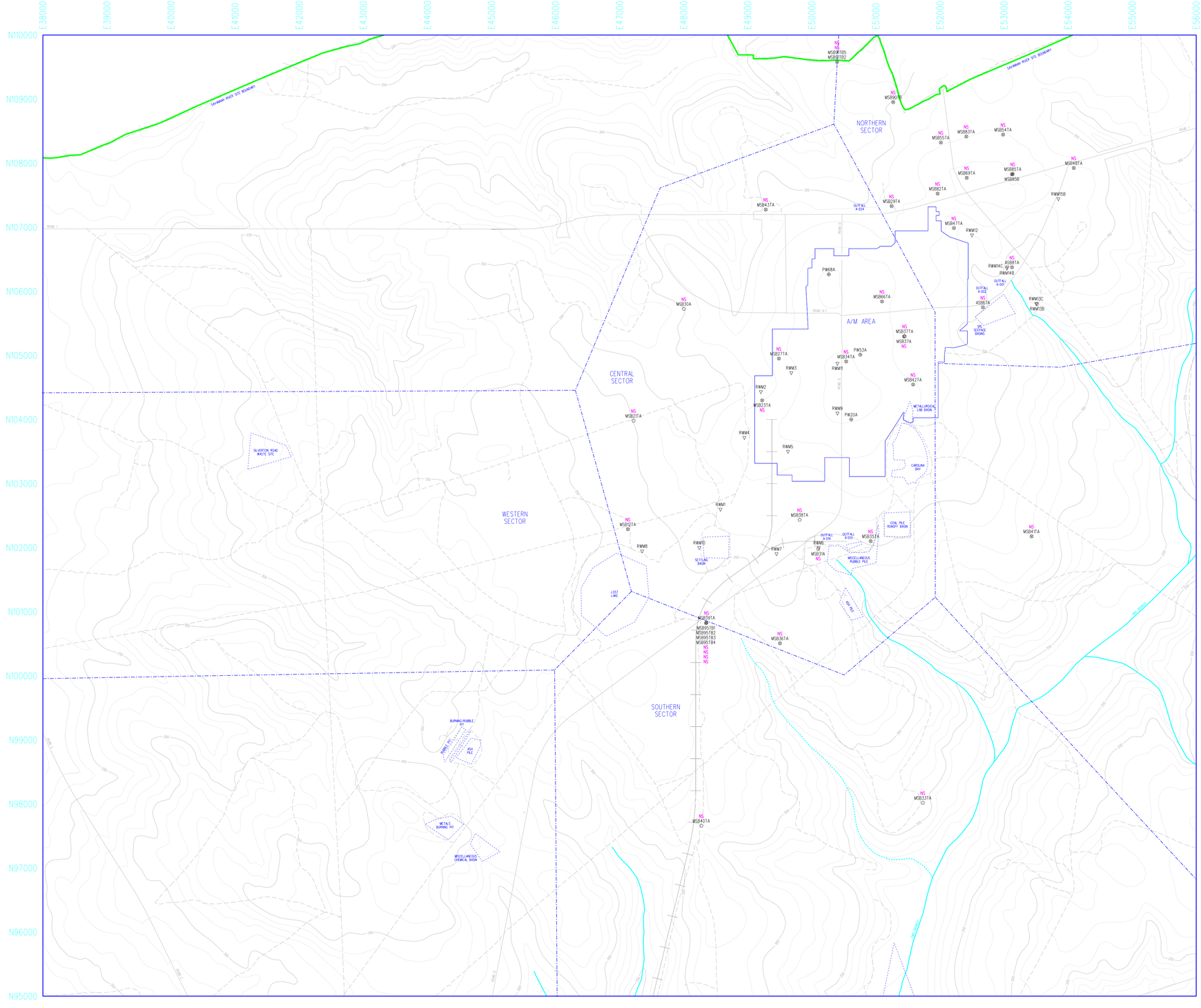
SAVANNAH RIVER SITE



Map 39.
Sodium Isoconcentration
Contour Map of the
Crouch Branch Aquifer Unit at the
M-Area and Met Lab HWMFs,
Third Quarter 2001

Map 39. Sodium Isoconcentration Contour Map of the Crouch Branch Aquifer Unit at the M-Area and Met Lab HWMFs, Third Quarter 2001

MPA6969

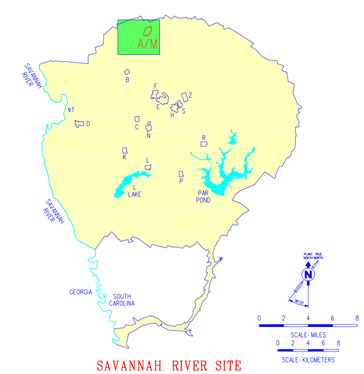


LEGEND

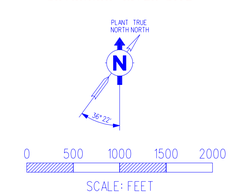
- ⊗ MONITORING WELL
- ▽ RECOVERY WELL
- ⊕ PRODUCTION WELL
- ⬠ PIEZOMETER
- 100.5 NITRATE (NITRITE AS NITROGEN) VALUE (3Q01) ug/L
- EQL ESTIMATED QUANTITATION LIMIT
- NDD (200.5) NOT DECISION DATA
- NS NOT SAMPLED
- NA NOT APPLICABLE
- NITRATE (NITRITE AS NITROGEN) ISOCONCENTRATION CONTOUR CROUCH BRANCH AQUIFER UNIT (3Q01) CONTOUR INTERVALS AS SHOWN ug/L
- INFERRED PLUME CONTOUR

ISOCONCENTRATION CONTOURS WERE TAKEN FROM 1Q01 FIGURES AND REVISED TO REFLECT 3Q01 DATA (WHERE AVAILABLE)

- SRS SITE BOUNDARY
- A/M-AREA GROUNDWATER SECTOR BOUNDARY
- A/M-AREA FENCE BOUNDARY
- STREAM
- INTERMITTENT STREAM
- SRS TOPOGRAPHIC CONTOUR (10 FOOT INTERVAL)
- SRS MAIN/PAVED ROAD
- SRS SECONDARY ROAD
- SRS RAILROAD



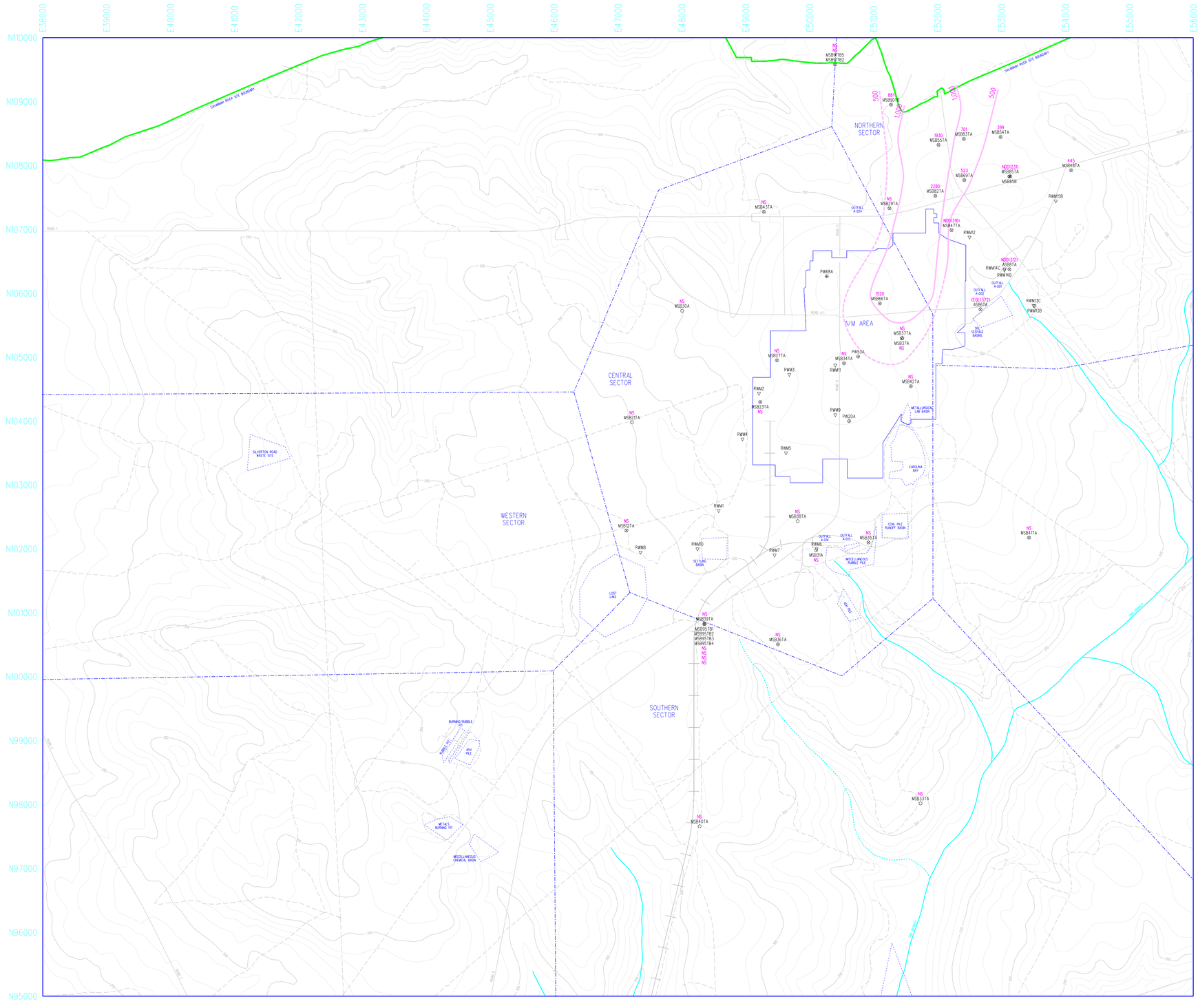
SAVANNAH RIVER SITE



Map 40.
Nitrate Isoconcentration
Contour Map of the
Crouch Branch Aquifer Unit at the
M-Area and Met Lab HWMFs,
Third Quarter 2001

Map 40. Nitrate Isoconcentration Contour Map of the Crouch Branch Aquifer Unit at the M-Area and Met Lab HWMFs, Third Quarter 2001

MPA6970

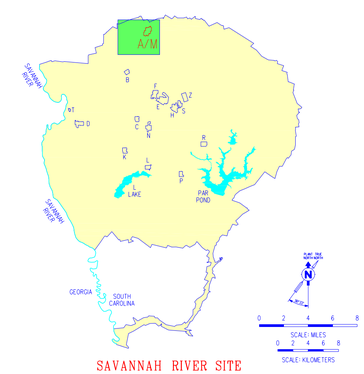


LEGEND

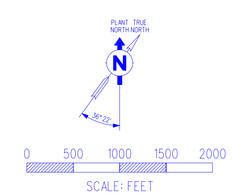
- MONITORING WELL
- RECOVERY WELL
- PRODUCTION WELL
- PIEZOMETER
- 100.5 SULFATE VALUE (3Q01) ug/L
- EQL ESTIMATED QUANTITATION LIMIT
- NDD (200.5) NOT DECISION DATA
- NS NOT SAMPLED
- NA NOT APPLICABLE
- SULFATE ISOCONCENTRATION CONTOUR CROUCH BRANCH AQUIFER UNIT (3Q01) CONTOUR INTERVALS AS SHOWN ug/L
- INFERRED PLUME CONTOUR

ISOCONCENTRATION CONTOURS WERE TAKEN FROM 1Q01 FIGURES AND REVISED TO REFLECT 3Q01 DATA (WHERE AVAILABLE)

- SRS SITE BOUNDARY
- A/M-AREA GROUNDWATER SECTOR BOUNDARY
- A/M-AREA FENCE BOUNDARY
- STREAM
- INTERMITTENT STREAM
- SRS TOPOGRAPHIC CONTOUR (10 FOOT INTERVAL)
- SRS MAIN/PAVED ROAD
- SRS SECONDARY ROAD
- SRS RAILROAD



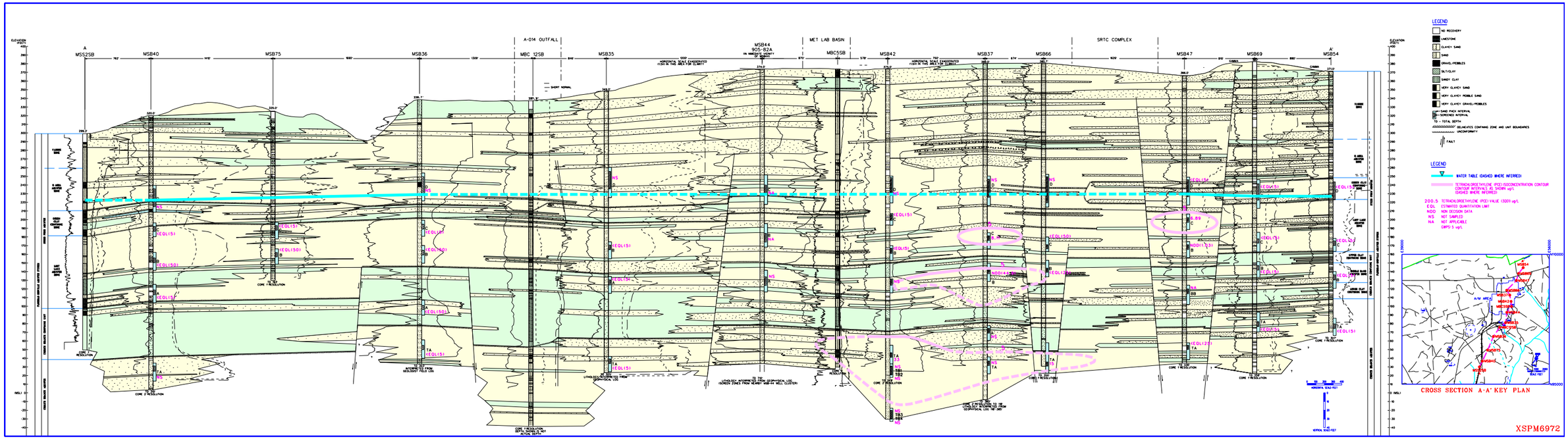
SAVANNAH RIVER SITE



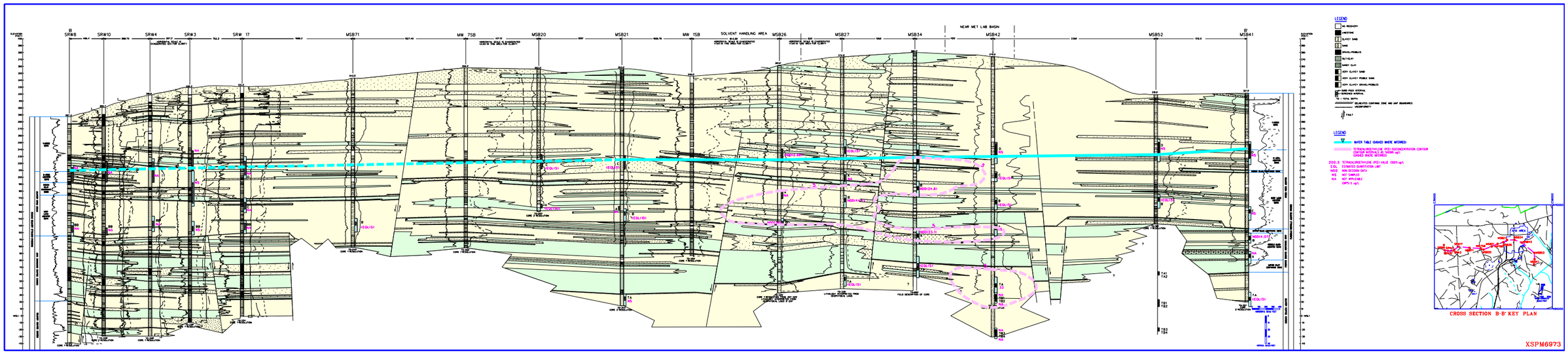
Map 41.
Sulfate Isoconcentration
Contour Map of the
Crouch Branch Aquifer Unit at the
M-Area and Met Lab HWMFs,
Third Quarter 2001

Map 41. Sulfate Isoconcentration Contour Map of the Crouch Branch Aquifer Unit at the M-Area and Met Lab HWMFs, Third Quarter 2001

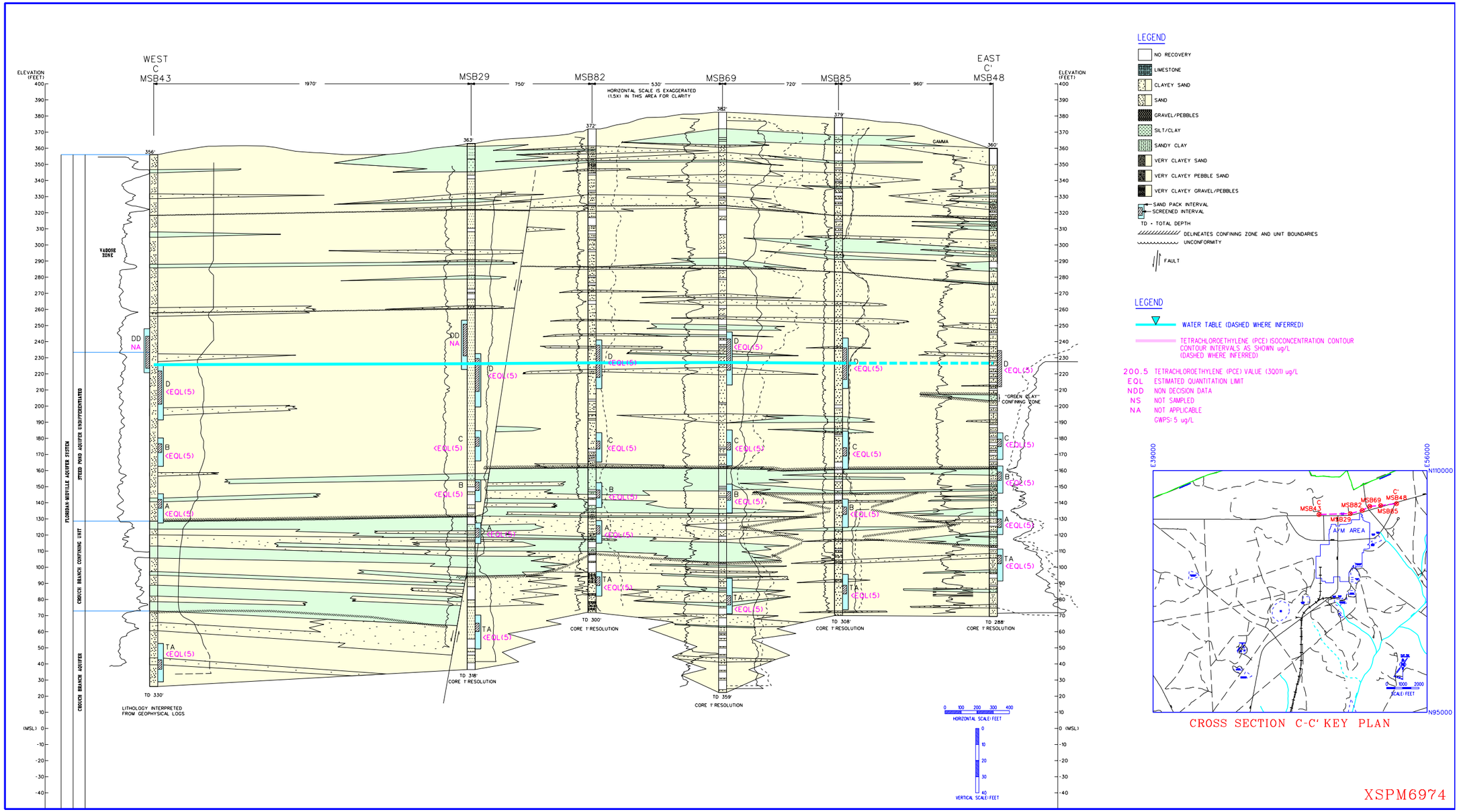
MPA6971



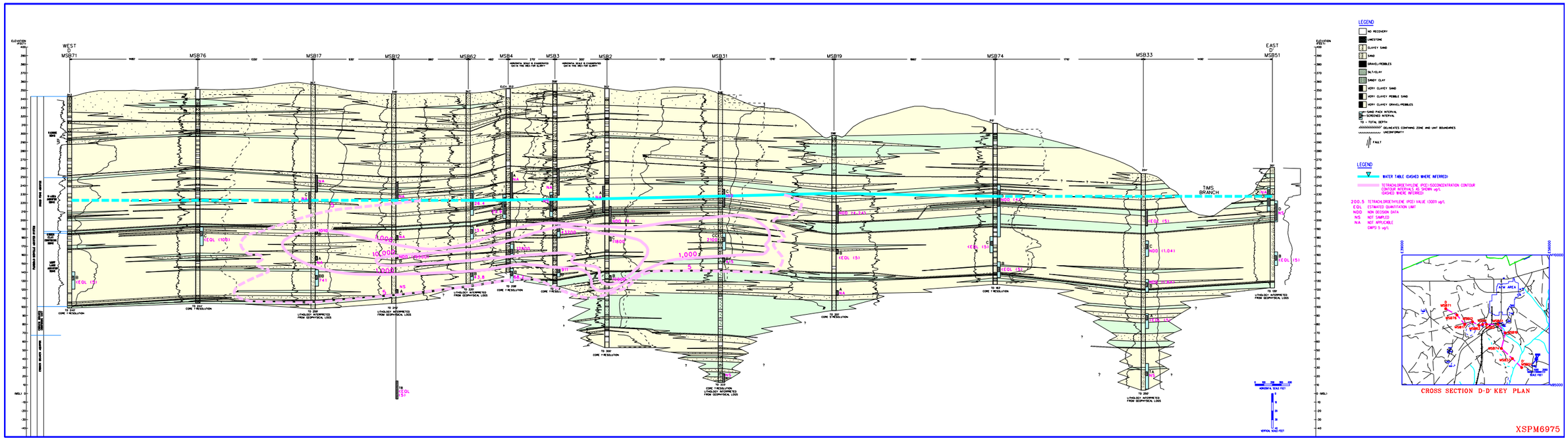
Map 42.
Tetrachloroethylene Isoconcentration Cross-Section A-A'
at the M-Area HWMF, Third Quarter 2001



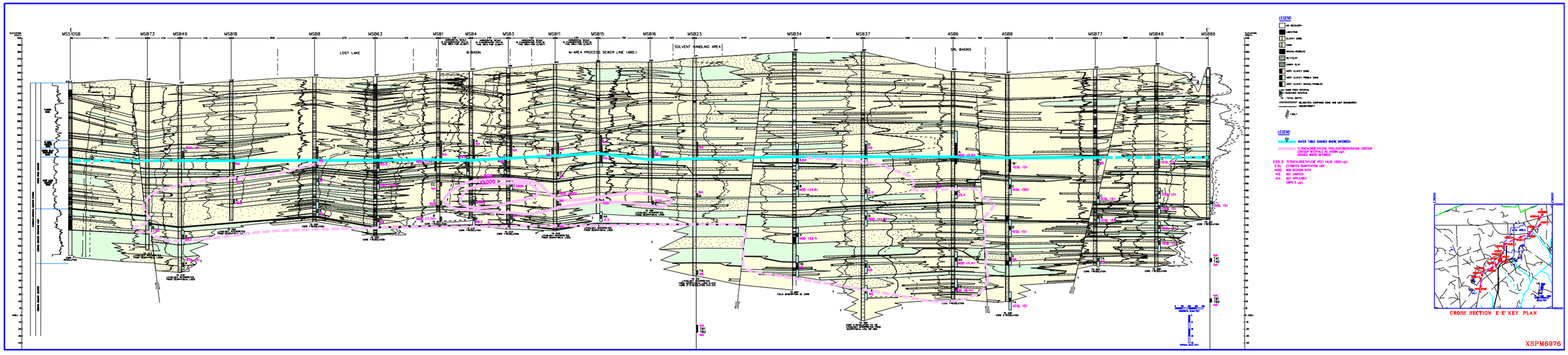
Map 43.
Tetrachloroethylene Isoconcentration Cross-Section B-B'
at the M-Area HWMF, Third Quarter 2001



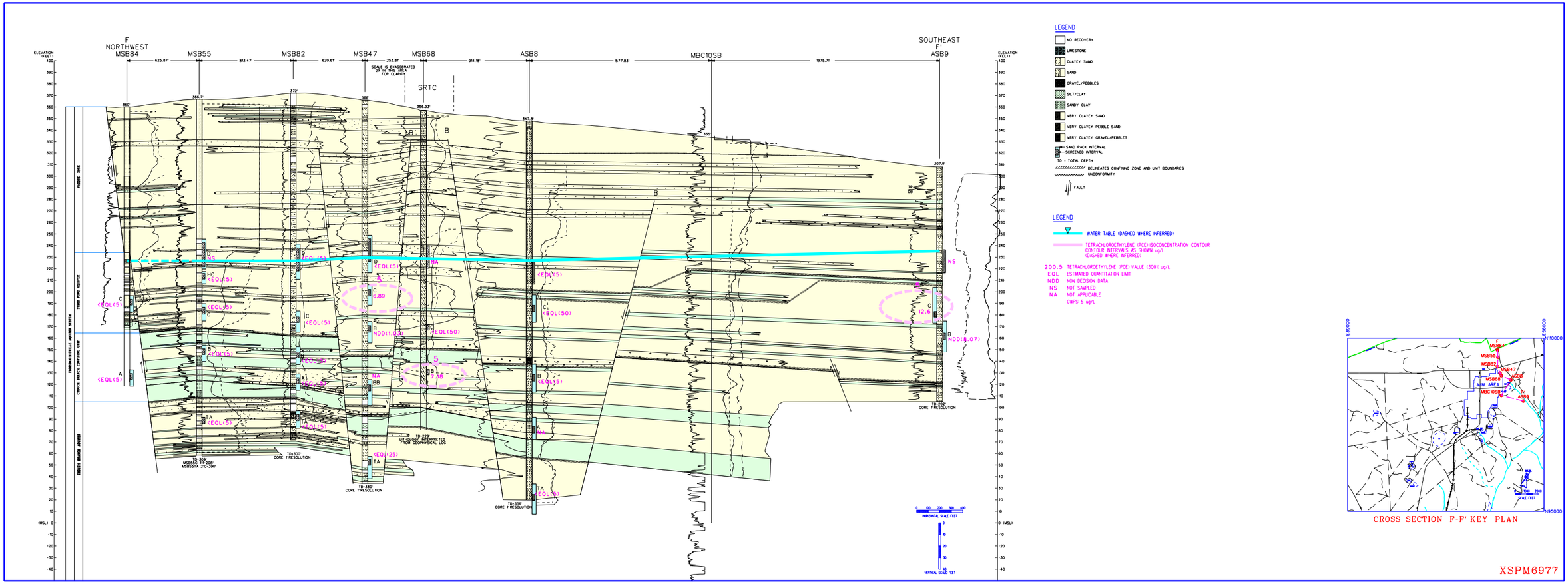
Map 44.
Tetrachloroethylene Isoconcentration Cross-Section C-C'
at the M-Area HWMF, Third Quarter 2001



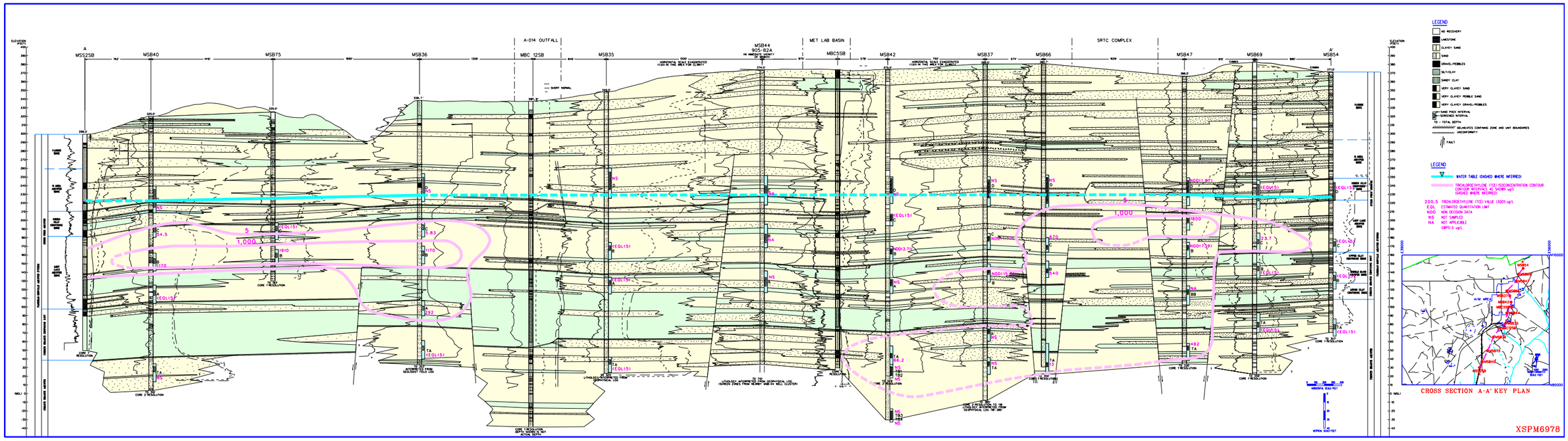
Map 45.
Tetrachloroethylene Isoconcentration Cross-Section D-D'
at the M-Area HWMF, Third Quarter 2001



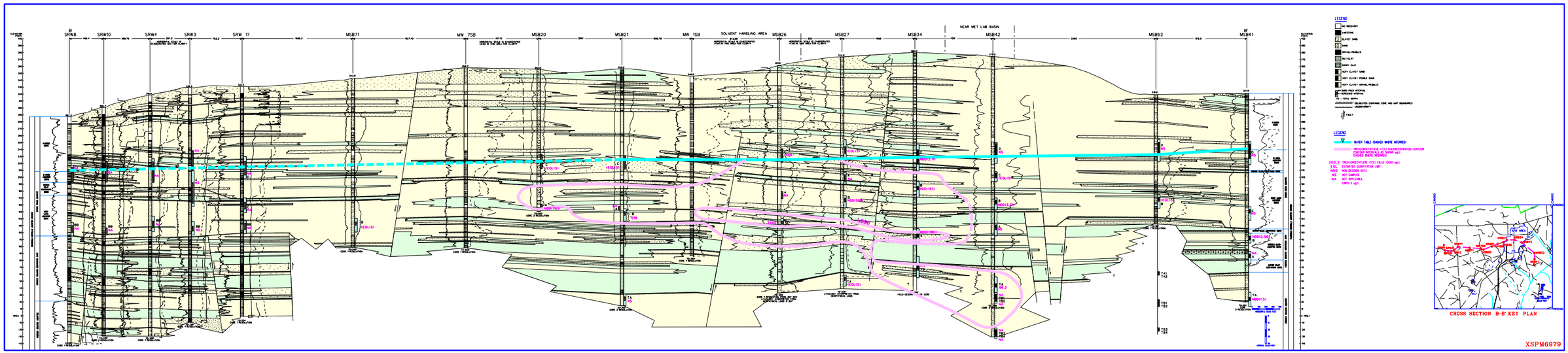
Map 46.
Tetrachloroethylene Isoconcentration Cross-Section E-E'
at the M-Area HWMF, Third Quarter 2001



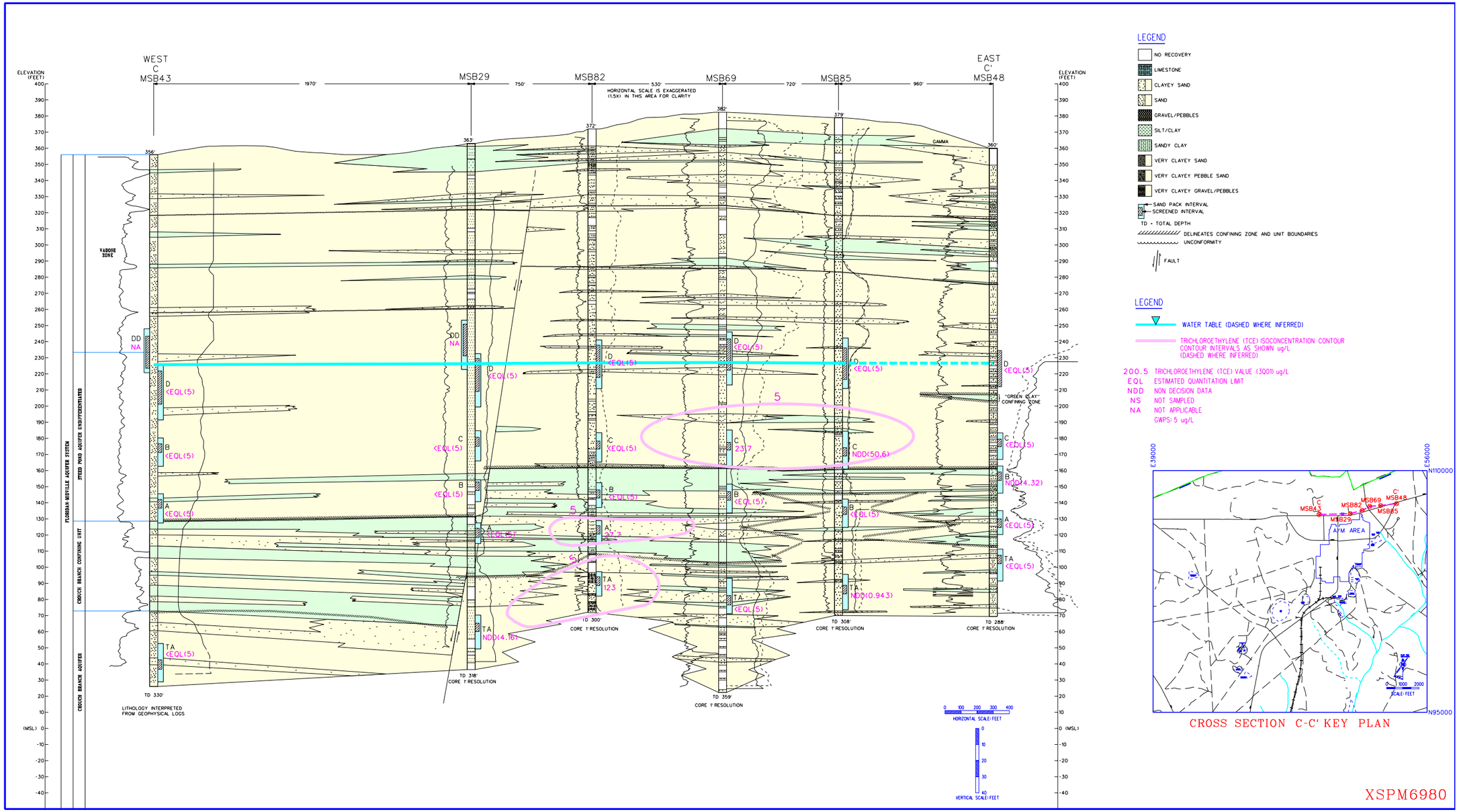
Map 47.
Tetrachloroethylene Isoconcentration Cross-Section F-F'
at the M-Area HWMF, Third Quarter 2001



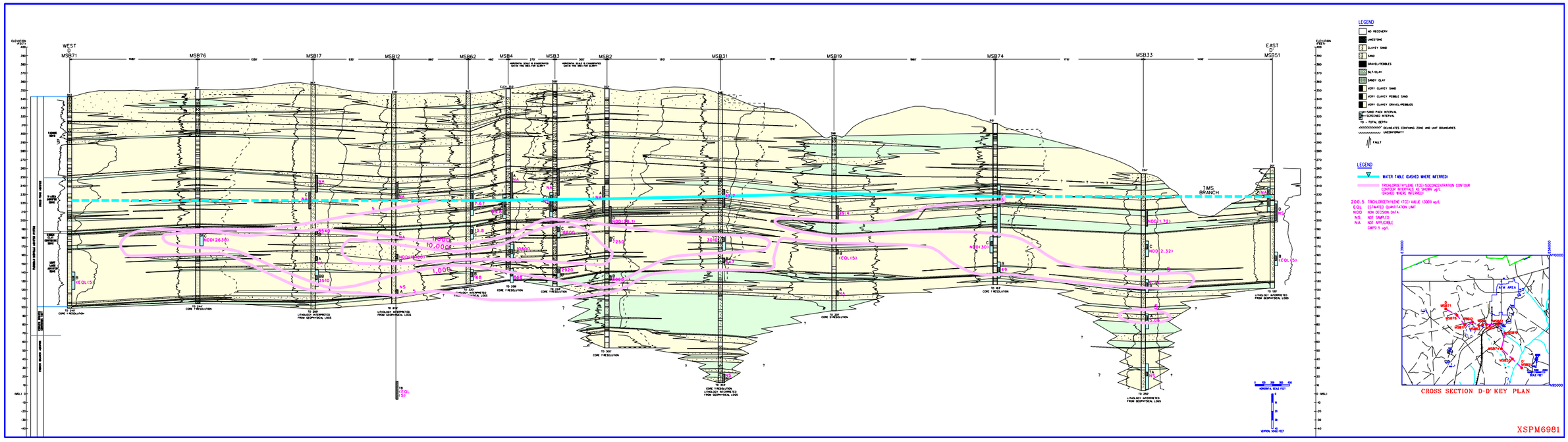
Map 48.
Trichloroethylene Isoconcentration Cross-Section A-A'
at the M-Area HWMF, Third Quarter 2001



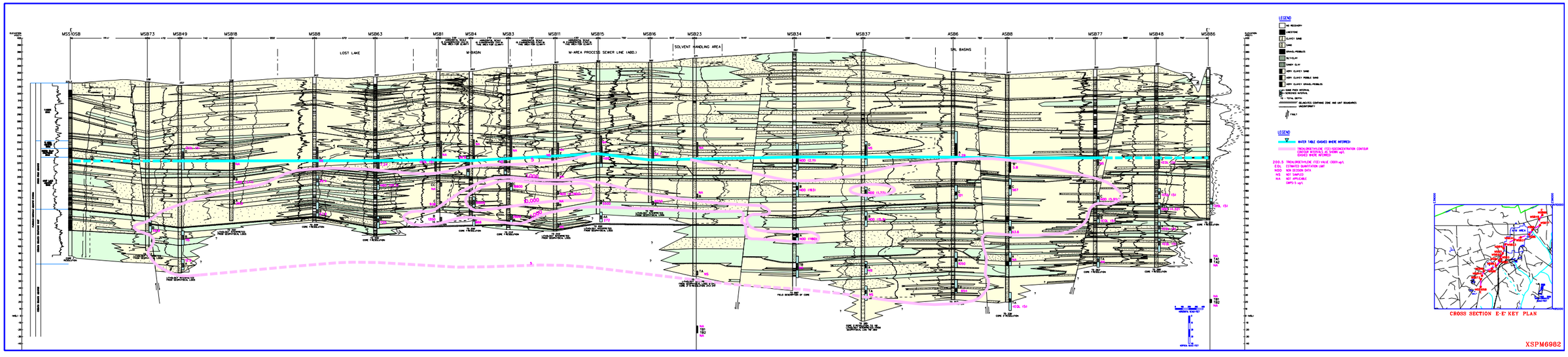
Map 49.
Trichloroethylene Isoconcentration Cross-Section B-B'
at the M-Area HWMF, Third Quarter 2001



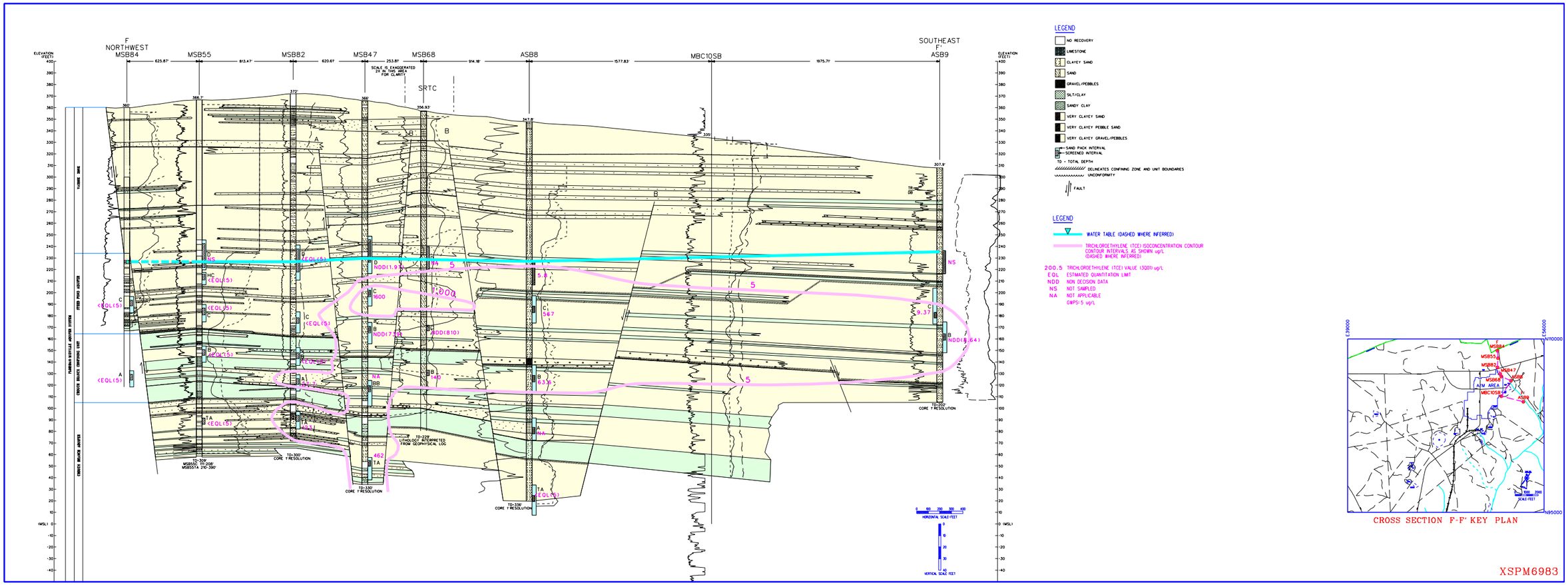
Map 50.
Trichloroethylene Isoconcentration Cross-Section C-C'
at the M-Area HWMF, Third Quarter 2001



Map 51.
Trichloroethylene Isoconcentration Cross-Section D-D'
at the M-Area HWMF, Third Quarter 2001



Map 52.
Trichloroethylene Isoconcentration Cross-Section E-E'
at the M-Area HWMF, Third Quarter 2001



Map 53.
Trichloroethylene Isoconcentration Cross-Section F-F'
at the M-Area HWMF, Third Quarter 2001