2007 ANNUAL PERFORMANCE MONITORING REPORT

CIRCUITRON SUPERFUND SITE EAST FARMINGDALE, NEW YORK

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List of Acronyms

1,1,1-TCA	1,1,1-trichloroethane
1,1-DCA	1,1-dichloroethane
1,1-DCE	1,1-dichloroethene
1,2-DCE	1,2-dichloroethene (total)
bgs	below ground surface
FFS	Focused Feasibility Study
FID	Flame Ionization Detector
GAC	Granular Activated Carbon
GC/MS	Gas chromatograph/mass spectrometer
gpm	Gallons per minute
O&M	Operation and Maintenance
OU-2	Operable Unit Two
PCE	Tetrachloroethene
PLC	Programmable Logic Controller
RCRA	Resource Conservation Recovery Act
REAC	Response Engineering and Analytical Contract
ROD	Record of Decision
SVE	Soil Vapor Extraction
TCE	Trichloroethene
USACE	United States Army Corps of Engineers
USEPA	United States Environmental Protection Agency
VOC	Volatile organic compound

Section 1.0
Introduction

1.0 INTRODUCTION

This is the 2007 Annual Performance Monitoring Report for the Circuitron Corporation Superfund Site located in East Farmingdale, New York (Figure 1-1). This report presents an assessment of the groundwater data collected to date for the period January 1999 to August 2007, in accordance with the selected remedy for the site as described in the Record of Decision (ROD) (USEPA, 1994) for Operable Unit Two (OU-2). The annual report is prepared on a regular schedule incorporating new performance monitoring data. Since metals analysis was eliminated after the 2003 sampling event, this report does not contain all the historical metals data previously presented. Refer to the 2003 Annual Performance Monitoring Report for the metals data collected from January 1999 to April 2003.

This section of the report provides background information for the site, including a description of the extraction well system, the network of performance monitoring wells, and the monitoring schedule. Section 2 introduces the technical approach for the performance monitoring evaluation. Section 3 provides an assessment of the groundwater flow patterns for the site with respect to the modeled and the observed zones of capture for the OU-2 remedy. Section 4 is an evaluation of the groundwater quality data for the site. Section 5 presents a summary of the findings and conclusions. Section 6 presents recommendations for the site, and Section 7 provides the reference materials used for the preparation of this report.

1.1 BACKGROUND

Based on the results of the Focused Feasibility Study (FFS) for OU-2, completed by Roy F. Weston (Weston, 1994), elevated levels of both organic and inorganic compounds were detected in the Upper Glacial Aquifer below and near the Circuitron site. The Upper Glacial Aquifer is described as the water table aquifer that extends to a depth of 70 to 80 feet below the ground surface (bgs) at the site and overlies the Magothy Aquifer. Elevated levels (exceeding Federal and State Groundwater Drinking Water Standards) of 1,1,1-trichloroethane (1,1,1-TCA), 1,1-dichloroethene (1,1-DCE), chromium, and copper were detected in the groundwater in the upper portions (less than 40 feet below the ground surface) of the Upper Glacial Aquifer. These detections were attributed to the Circuitron facility (see Figure 1-2). Similar compounds were also detected at elevated levels in the deeper portions (greater than 60 feet bgs) of the Upper Glacial Aquifer and in the underlying Magothy Aquifer in wells located on-site in addition to the wells located upgradient and downgradient of the site. These detections in the deeper zone are believed to be the result of off-site sources other than Circuitron (Weston, 1994). After the FFS

was completed, a ROD for OU-2 was signed on September 30, 1994. The selected remedy consists of the removal of organics and inorganics from the groundwater within the upper portion of the Upper Glacial Aquifer via air stripping and metal precipitation, respectively, and re-injection of the treated groundwater. Groundwater extraction for treatment from the deeper portion of the Upper Glacial Aquifer, and the Magothy Aquifer was not included as part of the OU-2 remedy for the site. The major components of the OU-2 remedy include the following:

- Extraction of the site-related groundwater contaminant plume present in the upper 40 feet (top portion) of the saturated Upper Glacial Aquifer;
- Treatment, via precipitation and air stripping, of contaminated groundwater to drinking water standards;
- Re-injection of the treated groundwater into the Upper Glacial Aquifer via an infiltration gallery, and
- Disposal of treatment residuals at a Resource Conservation Recovery Act (RCRA) Subtitle C Facility.

1.2 GROUNDWATER EXTRACTION SYSTEM

For the OU-2 remedy, groundwater flow and contaminant transport modeling was performed (Radian, 1999) to assist in the final design of the treatment system. Specifically, modeling was used to determine the placement and pumping rates of proposed extraction wells. Several scenarios of groundwater extraction well placement and pumping rates were considered for the OU-2 remedy design. The selected design consists of three (3) extraction wells pumping at a total rate of 80 gallons per minute (gpm), a treatment system, and re-injecting treated groundwater into a trench located at the northern (upgradient) end of the site. The system has been operating since June 28, 2000.

Additional groundwater modeling was performed by URS in 2005 to evaluate the effect of halting pumping at downgradient extraction wells RW-2 and RW-3 as recommended in the Streamlined Remediation System Evaluation (RSE-Lite) report (GeoTrans, 2005). The results of the additional modeling and the RSE-Lite report were included as Appendices D and E, respectively, in the 2005 annual report.

Both URS and the United States Environmental Protection Agency (USEPA) concurred that RW-3 could be shut off in 2005 and that prior to shutting of RW-3, groundwater from all three of the extraction wells would be sampled. The analysis showed that with the exception of 1,1-dichloroethane and 1,1,1-trichloroethane, all VOCs were at less than method

detection limits in groundwater obtained from RW-1, -2 and -3. The level of 1,1-dichloroethane detected in RW-2 was 19 µg/l. The level of 1,1,1-trichloroethane detected was 4 µg/l from well RW-1, 18 µg/l from well RW-2, and 3 µg/l from well RW-3. Based on these results, USEPA agreed that RW-2 should not be turned off.

The groundwater modeling performed by URS evaluated several pump scenarios, the first with RW-1 and RW-2 pumping, RW-3 shut down, and the second with only RW-1 pumping. The resulting capture zones were compared to the current area where concentrations of 1,1,1-TCA exceed the standard of 5 µg/L. The modeling concluded that the capture zone created by RW-1 and RW-2 is sufficient to maintain hydraulic control of the affected area. Based on the recommendation of the RSE-Lite report to stop pumping at well RW-3 and supported by the groundwater modeling, RW-3 was shut down on January 5, 2005.

The groundwater extraction system currently consists of two extraction wells (RW-1 and RW-2) each equipped with a submersible well pump and piping that discharges groundwater to an on-site treatment plant. The extraction wells are positioned to pump groundwater from two areas to accomplish groundwater capture around the subject site area. Each well is constructed with a 15-feet long ASTM-A-304 stainless steel screen connected to ASTM-A-304 Schedule 40 stainless steel riser. The bottoms of the well screens for RW-1 and RW-2 were both installed to a depth of 56 feet bgs. The extraction well locations are presented in Figure 1-2. Each extraction well is pumped intermittently based on water levels in the extraction wells and the water levels in both the equalization tank and in the building sump inside the groundwater treatment plant (remediation system) building. The results of the 2005 modeling indicate that the combined flow rate of the two extraction wells should be operated at a total flowrate of 40 gpm.

1.3 GROUNDWATER MONITORING SYSTEM

Currently, there is a network of 19 monitoring wells located at and around the Circuitron site that are used for groundwater monitoring of the OU-2 remedy. Shallow wells are those wells screened in the shallow portion of the Upper Glacial Aquifer that are 34 to 40 feet deep. Deep wells are those wells screened in the deep Upper Glacial Aquifer or Magothy Aquifer that are 99 to 101 feet deep. Of the 19 wells, 12 wells are shallow and seven are deep. For the Performance Monitoring period of June 2000 to August 2007, water level data and groundwater quality data were collected from each well in the network. Water levels were measured monthly from each well in the network and groundwater samples were collected quarterly for volatile organic compounds (VOCs) and semi-annually for inorganic analyses. In 2003, well sampling

was reduced to annual sampling for VOCs and Metals. In June 2006, water level measurements were reduced from monthly to quarterly events.

Based on URS's recommendations in the 2003 Annual Performance Monitoring Report, USEPA eliminated the requirement for annual metals sampling in the monitoring wells. The sampling method was also changed from the low-flow method to the diffusive bag method. These data are used to assess the performance of the treatment system and are discussed in Sections 3 and 4 of this report.

1.4 Process Observations and Changes

The Circuitron Project Team evaluated the recommendations of the RSE-Lite Report (January 2005) and with USEPA approval implemented during 2005, those recommendations deemed appropriate. Prior to implementing the recommendation to install extra sets of filter bags, URS performed further evaluation. Based on successful history at other Operation & Maintenance (O&M) sites with citric acid treatment, URS with the concurrence of the USEPA, started on July 6, 2005 to introduce citric acid after the influent tank. Micron size of the filter bags was increased from 10 microns to 100 microns. In general, the results indicated reduction in the frequency of the filter bag changes with no major decrease in the pH at the effluent. Acetone was detected in the effluent during the months after citric acid was introduced into the system.

With the success of the citric acid came the fouling of the reinjection trench. The Project Team decided that the best solution was to waterjet the trench 3-4 times a year and treat the reinjection trench with liquid citric acid on an as-needed basis. This method continued until the mothballing of the treatment system in August 2007.

1.5 Summary of Investigation of Chlorinated Source

Response Engineering and Analytical Contract (REAC) personnel provided technical assistance to EPA Region II and performed an investigation of the unsaturated/saturated zone in the southwestern corner of the Circuitron Corporation site, near wells MW-4S and MW-4D to determine if a residual source of 1,1,1,-TCA remains. The results of this investigation were published by REAC in April 7, 2006 and are briefly summarized below.

During November 2005, REAC utilized direct push to install and sample 40 soil borings and 22 temporary monitoring wells located in the southwestern corner of the Circuitron Corporation site, predominately near wells MW-4S and MW-4D. The soil borings provided

continuous cores to a total depth of between 25 and 35 feet below ground surface (bgs). Based on screening of the soil cores for total VOCs using a Flame Ionization Detector (FID), 63 soil samples were analyzed using an on-site portable gas chromatograph/mass spectrometer (GC/MS) for VOC Target Compound List, which included TCE and PCE. Six of these soil samples were sent to an analytical laboratory for confirmation. Twenty-two (22) one-inch diameter temporary monitoring wells were installed to a depth of 5 feet below the water table (total depth of 35 ft bgs). Groundwater was obtained using disposable bailers from each of these 22 wells plus existing wells MW-1S, -1D, -4S and -4D. The groundwater samples were analyzed for VOCs using an on-site GC/MS and six samples were sent to an analytical laboratory for confirmation.

The results of this effort indicate:

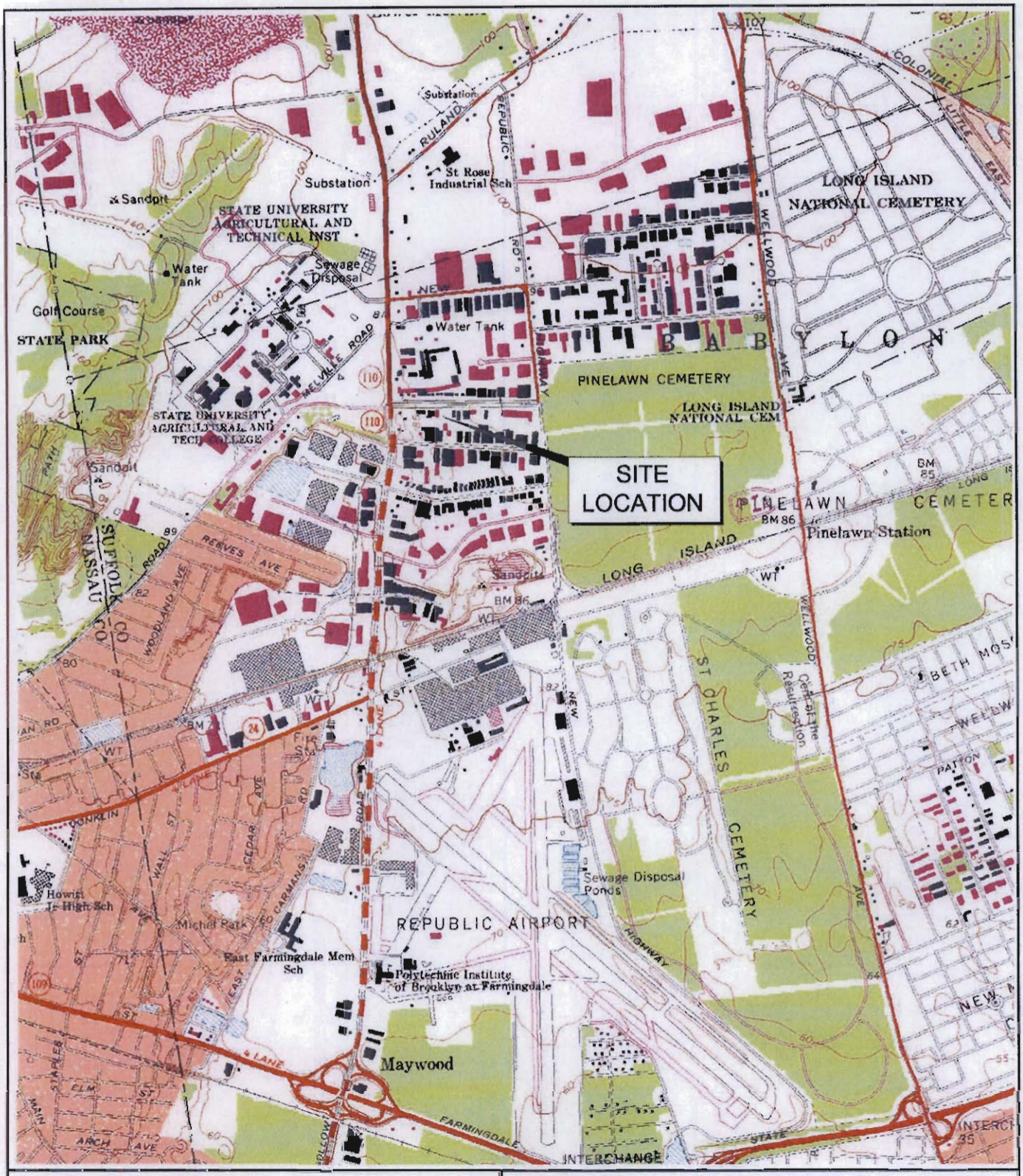
a) An accumulation of TCA dissolved in groundwater surrounding well MW-4S, with a maximum TCA concentration of 1,600 µg/l from temporary monitoring well SD-3, which is located 5 to 10 feet north of well MW-4S.

b) An accumulation of PCE dissolved in groundwater located approximately 50 feet north of well MW-4S, with a maximum concentration of 150 µg/l from temporary well R3.

c) An approximate 15-20 foot diameter area of soil, generally centered around well MW-4S, where TCA has been detected with a maximum soil concentration of 21,900,000 µg/kg at a depth of 15 ft bgs.

d) An approximate 10-15 foot diameter area of soil, located approximately 50 feet north of well MW-4S, where PCE has been detected with a maximum soil concentration of 17,200 µg/kg.

In August 2007, USEPA and its contractor under a separate contract, installed a SVE system for a pilot study. This pilot study is to be in place for a minimum of one year.



0 2000 4000

SCALE (FEET)

N

MAP SOURCE:

U.S.G.S. 7.5 MINUTE SERIES QUADRANGLES OF HUNTINGTON, N.Y., DATED 1967, PHOTOREVISED 1979 AND AMITTYVILLE, N.Y. DATED 1969, PHOTOREVISED 1979.

SITE LOCATION MAP
CIRCUITRON CORPORATION SUPERFUND SITE
EAST FARMINGDALE, NEW YORK

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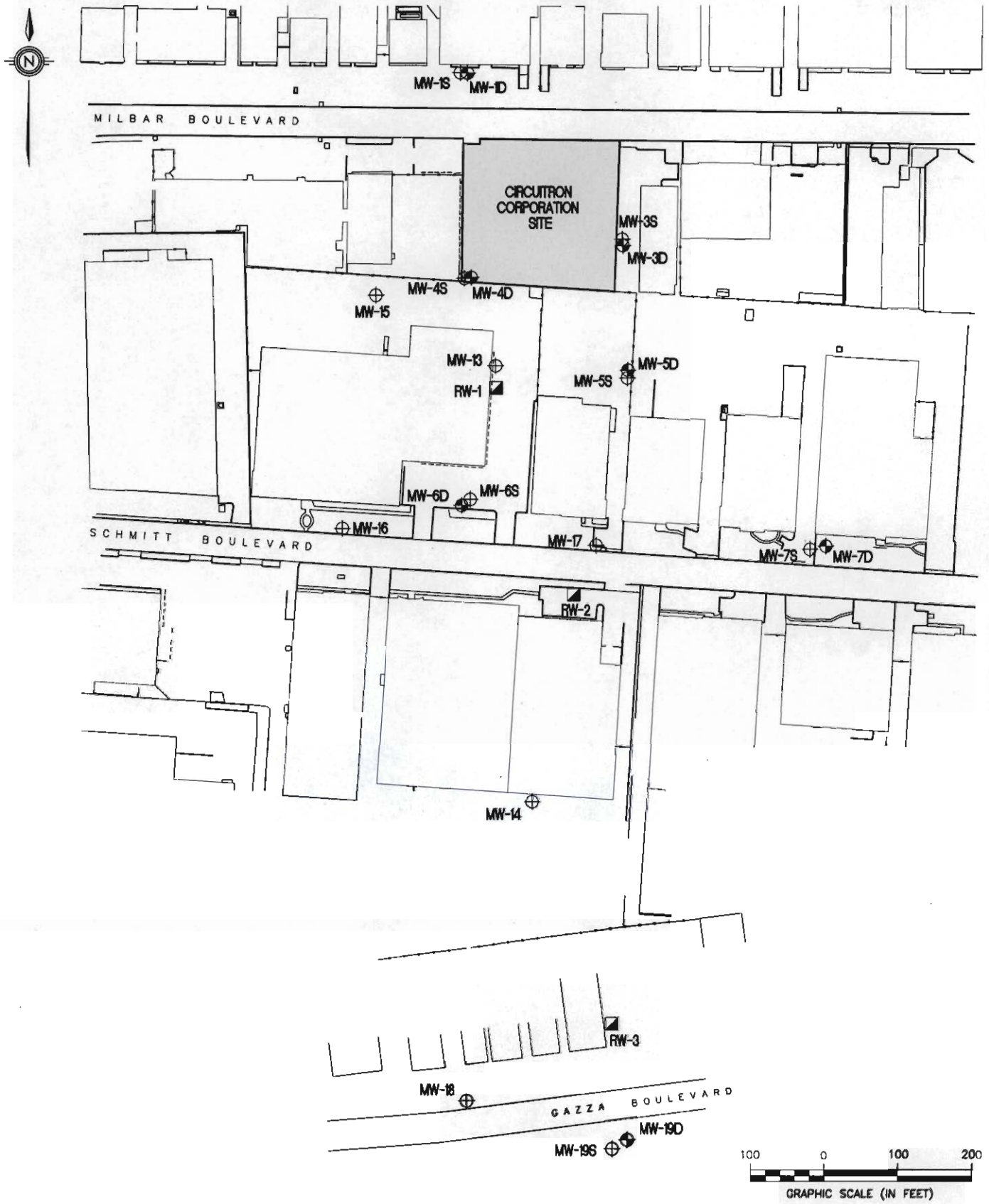
WAYNE, NEW JERSEY

DR. BY	JL	SCALE AS SHOWN	DWG. FIG 1-1.DWG	PROJ. NO.	19683807
CK'D. BY	BB	DATE	DEC 17, 2002	FIG. NO.	1-1



LEGEND

- ⊕ SHALLOW MONITORING WELL
- ⊕ DEEP MONITORING WELL
- ◪ RECOVERY WELL

Site Map

Circuitron Corporation Superfund Site
East Farmingdale, New York

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FILENAME: FIG 1-2.DWG	DATE: 4-29-03	FIGURE #: 1-2

Section 2.0
Technical Approach

Table 3-1. Horizontal Gradients (feet/feet) Upper Glacial Aquifer, Circuitron Corporation Superfund Site

Date	Traverse*			
	MW-15 (Northwest)	MW-5 (Northeast)	MW-14 (Southwest)	MW-14 (Southeast)
June 2000 (pre-pumping)	0.002	0.002	0.004	0.004
August 2002 (pumping)	0.003	0.005	0.004	0.005
April 2003 (pumping)	0.004	0.004	0.006	0.008
March 2004 (pumping)	0.002	0.002	0.006	0.006
June 2005 (pumping)	0.003	0.002	0.003	0.003
June 2006 (pumping)	0.003	0.002	0.003	0.003
July 2007 (pumping)	0.002	0.003	0.003	0.003

*Traverses used to calculate gradients are centered on these wells and follow the flow paths which are at right angles to groundwater contours.

superimposed on the modeled capture zone. Each flow path within the modeled capture zone is flowing towards one of the recovery wells, showing the complete capture of groundwater within the target area by the remediation system. The August 2002 capture zone is slightly larger than the modeled capture zone because flow paths near wells MW-7S and MW-16 are directed into the modeled capture zone. The capture zone from June 2005 is smaller than the capture zone defined for March 2004. The decrease in size is the result of discontinuing pumping at RW-3. However, as supported in the URS 2005 modeling report (Appendix D, 2005 Annual Report) the reduced capture zone still encompasses the geographic area where 1,1,1-TCA concentrations in groundwater are above the groundwater standard of 5 µg/L. The capture zone from July 2007 is similar to what was observed in 2005 and 2006 and encompasses the geographic area where 1,1,1-TCA concentrations in groundwater are above the groundwater standard of 5 µg/L.

gradient between 0.002 ft/ft and 0.004 ft/ft within the upper portion of the Upper Glacial Aquifer during January 1999 and June 2000.

3.2 PUMPING CONDITIONS

Figures 3-1c to 3-1h show the groundwater contour map and the flow pattern within the upper portion of the Upper Glacial Aquifer under pumping conditions during August 2002, April 2003, March 2004, June 2005, June 2006, and July 2007 while the system was fully operational.

The groundwater flow pattern indicates transport toward the south with a bi-directional flow component on either side of a north-south line connecting the recovery wells. West of this line, flow is predominantly to the southeast. East of this line, flow is to the southwest. The effects of pumping groundwater are evident as groundwater contours are partially wrapped around each recovery well. Groundwater flow patterns and zone of capture for August 2002, April 2003, March 2004, June 2005, June 2006, and July 2007 are presented in Figures 3-2, 3-3, 3-4, 3-5, 3-6, and 3-7, respectively. Pumping well RW-3 was turned off in January 2005. The groundwater flow paths leading to a recovery well indicates capture by that recovery well.

Table 3-1 presents hydraulic gradients observed in June 2000 (pre-pumping), August 2002, April 2003, March 2004, June 2005 (pumping), June 2006, and July 2007 conditions. A comparison of the gradients measured in August 2002, April 2003, March 2004, June 2005, June 2006, and July 2007 at which time the treatment system was operational, shows that gradients in the northern portion of the site are very similar; but that gradients are steeper around well MW-14 during the April 2003 measurements.

3.3 CAPTURE ZONE: MODELED VS. OBSERVED

Groundwater flow and contaminant transport modeling was performed by Radian International in 1999 to assist in the final design of the OU-2 remediation system. The selected design model predicts the extent of the capture zone as a result of pumping groundwater for treatment (Radian, 1999). Additional modeling was performed in 2005 to support the decision to stop pumping RW-3 (Appendix D of the 2005 Annual Report).

Figures 3-2, 3-3, 3-4, 3-5, 3-6, and 3-7 show the modeled capture zone within the upper portion of the Upper Glacial Aquifer for the groundwater contours and flow paths from August 2002, April 2003, March 2004, June 2005, June 2006, and July 2007 respectively,

3.0 GROUNDWATER FLOW

Water levels measurements from each accessible monitoring well were collected in January 1999, prior to the startup of the full-scale remediation system operation in late June 2000. Groundwater level data from January 1999 (Figure 3-1a) and mid-June 2000 (Figure 3-1b) were used to establish baseline conditions of groundwater flow within the upper portion of the Upper Glacial Aquifer under non-pumping conditions. After commencement of the remediation system operation in late June 2000, water level measurements were collected monthly from each accessible monitoring well. Beginning in January 2005, pumping was halted at the most downgradient extraction well RW-3. Groundwater level data was collected monthly during 2006 through June 2006, after which groundwater level data was collected quarterly at the request of the USEPA.

Evaluation of the groundwater flow pattern is limited to the Upper Glacial Aquifer because this zone is the target of the remediation system. Therefore, to evaluate groundwater flow patterns within the upper portion of the Upper Glacial Aquifer, groundwater contour maps were prepared to show hydraulic gradients and flow patterns under pumping and non-pumping conditions. In addition, groundwater flow patterns for August 2002 (Figure 3-1c), April 2003 (Figure 3-1d), March 2004 (Figure 3-1e), June 2005 (Figure 3-1f), June 2006 (Figure 3-1g), and July 2007 (Figure 3-1h) are compared to the modeled capture zone estimated from groundwater modeling. The comparison of measured versus modeled capture zones for August 2002, April 2003, March 2004, June 2005, June 2006, and July 2007 are presented in Figures 3-2, 3-3, 3-4, 3-5, 3-6, and 3-7 respectively. Figures 3-5, 3-6, and 3-7 illustrate that in June 2005, June 2006, and July 2007 only two extraction wells are pumping in the Upper Glacial Aquifer.

Hydrographs showing groundwater elevation over time were prepared for each well (Appendix C). These graphs indicate that the hydrographs for the individual wells generally (with a few notable exceptions) parallel one another and the hydraulic gradient has remained essentially constant during this Performance Monitoring Period.

3.1 BASELINE CONDITIONS

The baseline groundwater flow pattern recorded in January 1999 (Figure 3-1a) and June 2000 (Figure 3-1b) represents hydraulic conditions prior to operating the remediation system. These data show that groundwater flow is to the south/southeast with a hydraulic

Section 3.0
Groundwater Flow

August 2007 sampling events for various VOCs and inorganic analytes for groundwater obtained from the shallow aquifer. Beginning in June 2004, only VOC samples were collected for analysis as agreed to by USEPA. Based on USEPA's request, only one diffusion bag was utilized for sampling the wells since June 2005. The bag was placed at one foot above the bottom of the well.

Previous data were submitted to the USEPA and United States Army Corps of Engineers (USACE) as part of the Operation and Maintenance Monthly Progress Reports for the site. Comparison of the isoconcentration maps to groundwater flow paths can be used to document that the remediation system is effectively remediating compounds dissolved in groundwater. This evaluation is presented in Section 4 of this report.

Geochemical time-series graphs provide an effective technique for documenting trends over time in groundwater quality from a given well. Time-series graphs were prepared by plotting concentration levels versus time for compounds detected in groundwater samples from both the shallow and deep monitoring wells. Data obtained from the deeper Upper Glacial and Magothy Aquifer wells were prepared to document changes in groundwater chemistry over time because these wells are included in the Performance Monitoring program. However, the assessment of the OU-2 remedy is solely based on the results from the shallow Upper Glacial Aquifer.

2.0 TECHNICAL APPROACH

This evaluation assesses changes in the concentrations of compounds dissolved in groundwater relative to the observed zone of capture using hydraulic and water quality data collected during the Performance Monitoring period, which extended from January 1999 to August 2007. Isoconcentration maps, groundwater elevation contour and flow maps, and geochemical time-series graphs are used to assess the effectiveness of the remediation system for treating the groundwater present in the shallow portion of the Upper Glacial aquifer. Portions of the deep Upper Glacial Aquifer and the Magothy Aquifer are being monitored for changes in groundwater chemistry over time; therefore, time-series graphs were prepared for wells screened within this zone. However, the overall effectiveness of the remediation system is based solely on the results in the Upper Glacial Aquifer, as described in the Record of Decision (ROD).

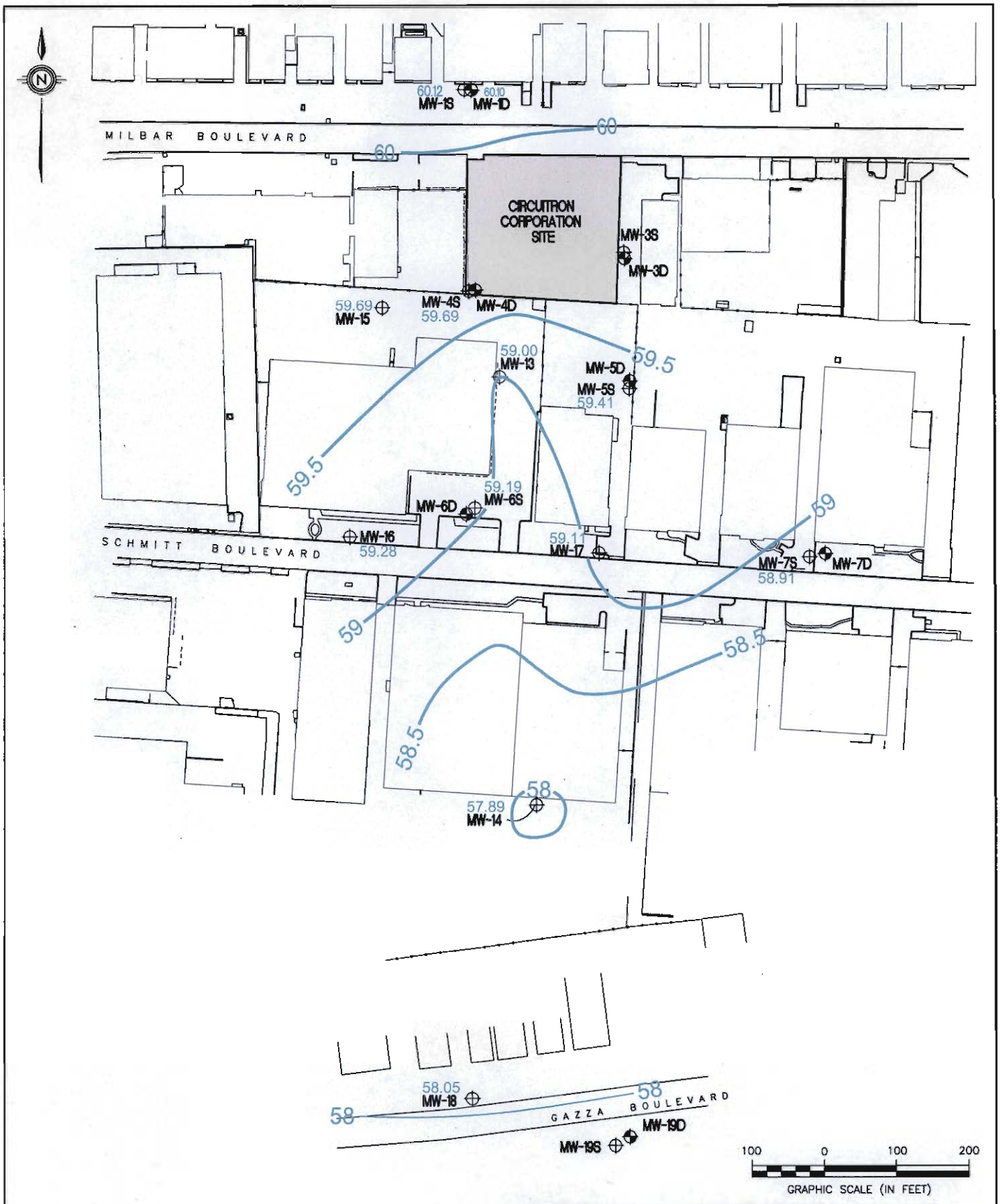
2.1 GROUNDWATER CONTOUR AND FLOW MAPS

Groundwater elevation contour maps were prepared for the groundwater present in the shallow portion of the Upper Glacial aquifer beneath the site. The effectiveness of the remediation system to induce groundwater capture is indicated by comparing the groundwater flow pattern under pumping conditions to the modeled capture zone. Compounds dissolved in groundwater obtained from wells within the capture zone will be transported toward one of two pumping wells. Groundwater capture is demonstrated if groundwater flow lines are directed toward one of the two extraction wells, as indicated by groundwater elevation contour maps prepared under pumping conditions. This assessment is presented in Section 3.

2.2 GROUNDWATER QUALITY

Groundwater quality was evaluated by preparing isoconcentration maps and geochemical time-series graphs from the sampling data obtained during the Performance Monitoring Period. Data from sampling events that occurred prior to startup of the remediation system, May 1993/February 1994 and mid-June 2000, were used as the benchmark to represent pre-remediation baseline groundwater quality conditions. These data were used to identify which volatile organic compounds (VOCs) are potentially related to historical activities at the site (site-related) or believed to not have been related to historical activities at the site (non site-related). This is discussed more fully in Section 4 of this report.

- Isoconcentration contour maps were prepared using data obtained from the June 2000, January/February 2002, April 2003, June 2004, June 2005, July 2006, and



LEGEND

- SHALLOW MONITORING WELL
- DEEP MONITORING WELL
- 58.05 GROUNDWATER ELEVATION
- GROUNDWATER ELEVATION CONTOUR LINE

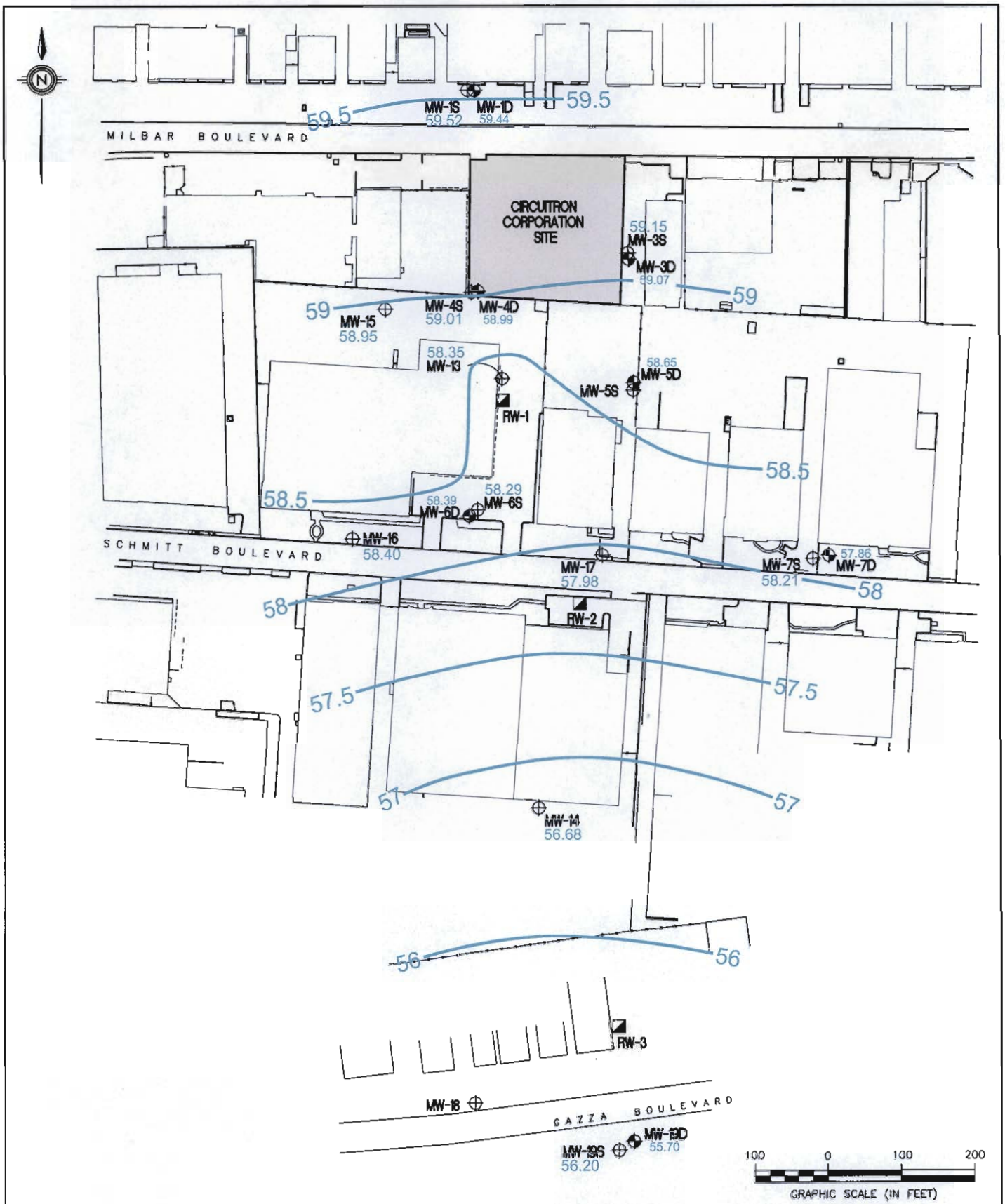
January 1999

Groundwater Elevation Contour Map (Non-pumping) Upper Glacial Aquifer

Circuitron Corporation Superfund Site
East Farmingdale, New York

URS

FILENAME: FIG 3-1a.DWG	DATE: 4-29-03	FIGURE #: 3-1a



LEGEND

- ⊕ SHALLOW MONITORING WELL
- ◆ DEEP MONITORING WELL
- ◪ RECOVERY WELL
- 56.20 GROUNDWATER ELEVATION
- GROUNDWATER ELEVATION CONTOUR LINE

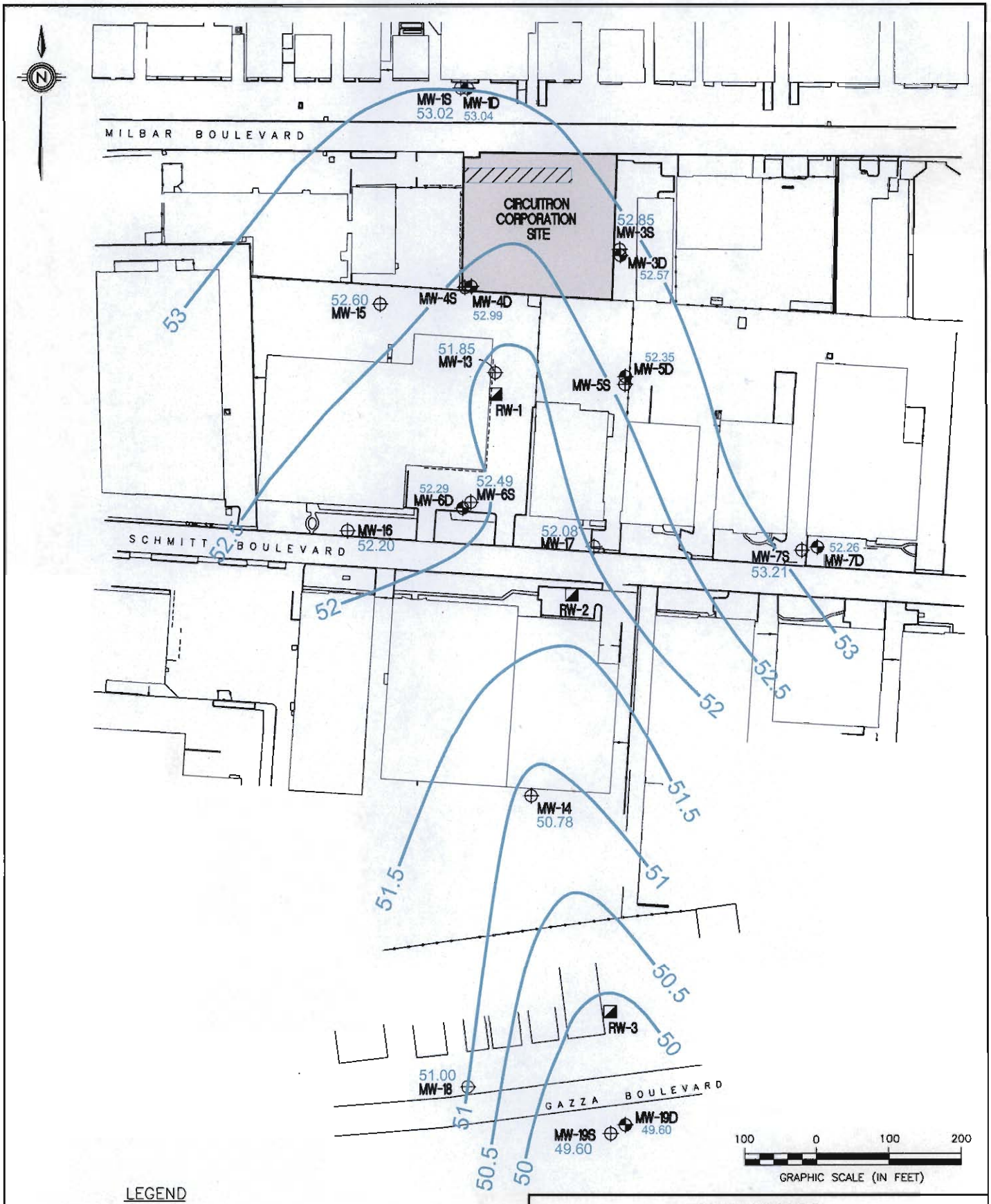
June 2000

Groundwater Elevation Contour Map (Non-pumping) Upper Glacial Aquifer

Circuitron Corporation Superfund Site
East Farmingdale, New York

URS

FILENAME: FIG 3-1b.DWG	DATE: 4-29-03	FIGURE #: 3-1b



LEGEND

- SHALLOW MONITORING WELL
- DEEP MONITORING WELL
- RECOVERY WELL
- 51.00 GROUNDWATER ELEVATION
- GROUNDWATER ELEVATION CONTOUR LINE
- NORTHERN INJECTION TRENCH

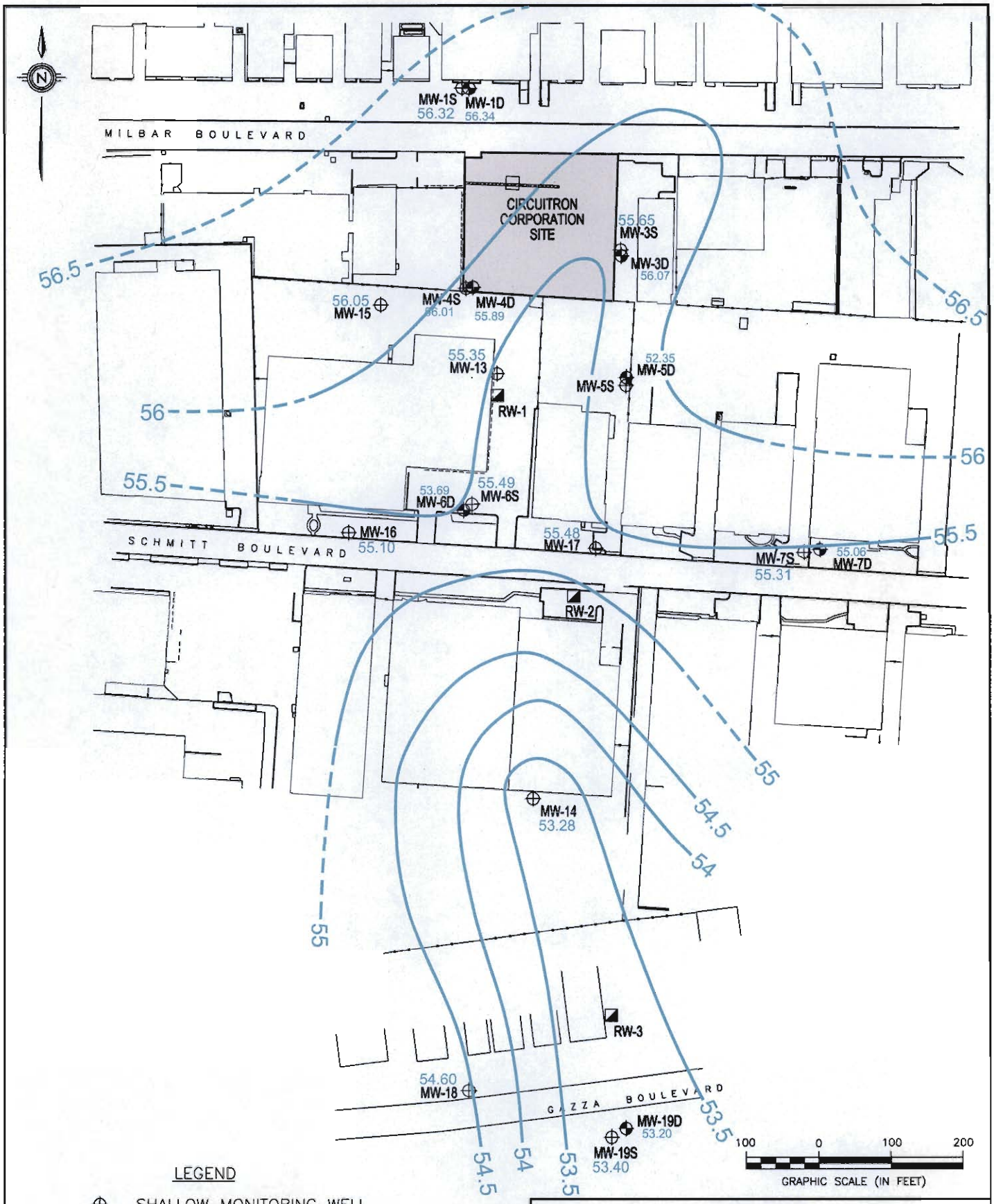
August 2002

Groundwater Elevation Contour Map (Pumping) Upper Glacial Aquifer

Circuitron Corporation Superfund Site
East Farmingdale, New York

URS

FILENAME: FIG 3-1c.DWG	DATE: 4-29-03	FIGURE #: 3-1c



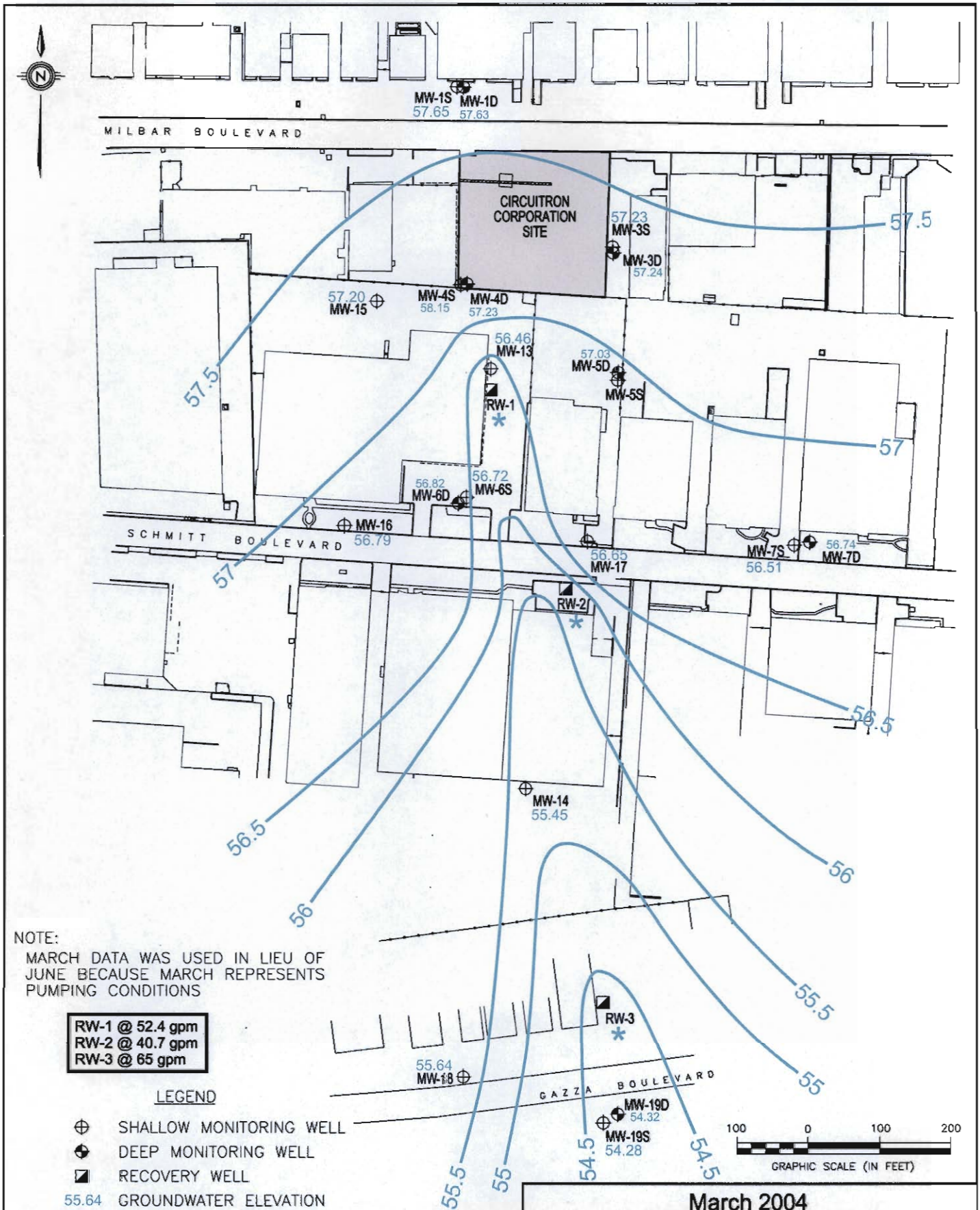
April 2003

Groundwater Elevation Contour Map (Pumping) Upper Glacial Aquifer

Circuitron Corporation Superfund Site
East Farmingdale, New York

URS

FILENAME: FIG 3-1d.DWG	DATE: 2-2-04	FIGURE #: 3-1d



NOTE:
MARCH DATA WAS USED IN LIEU OF JUNE BECAUSE MARCH REPRESENTS PUMPING CONDITIONS

RW-1 @ 52.4 gpm
RW-2 @ 40.7 gpm
RW-3 @ 65 gpm

LEGEND

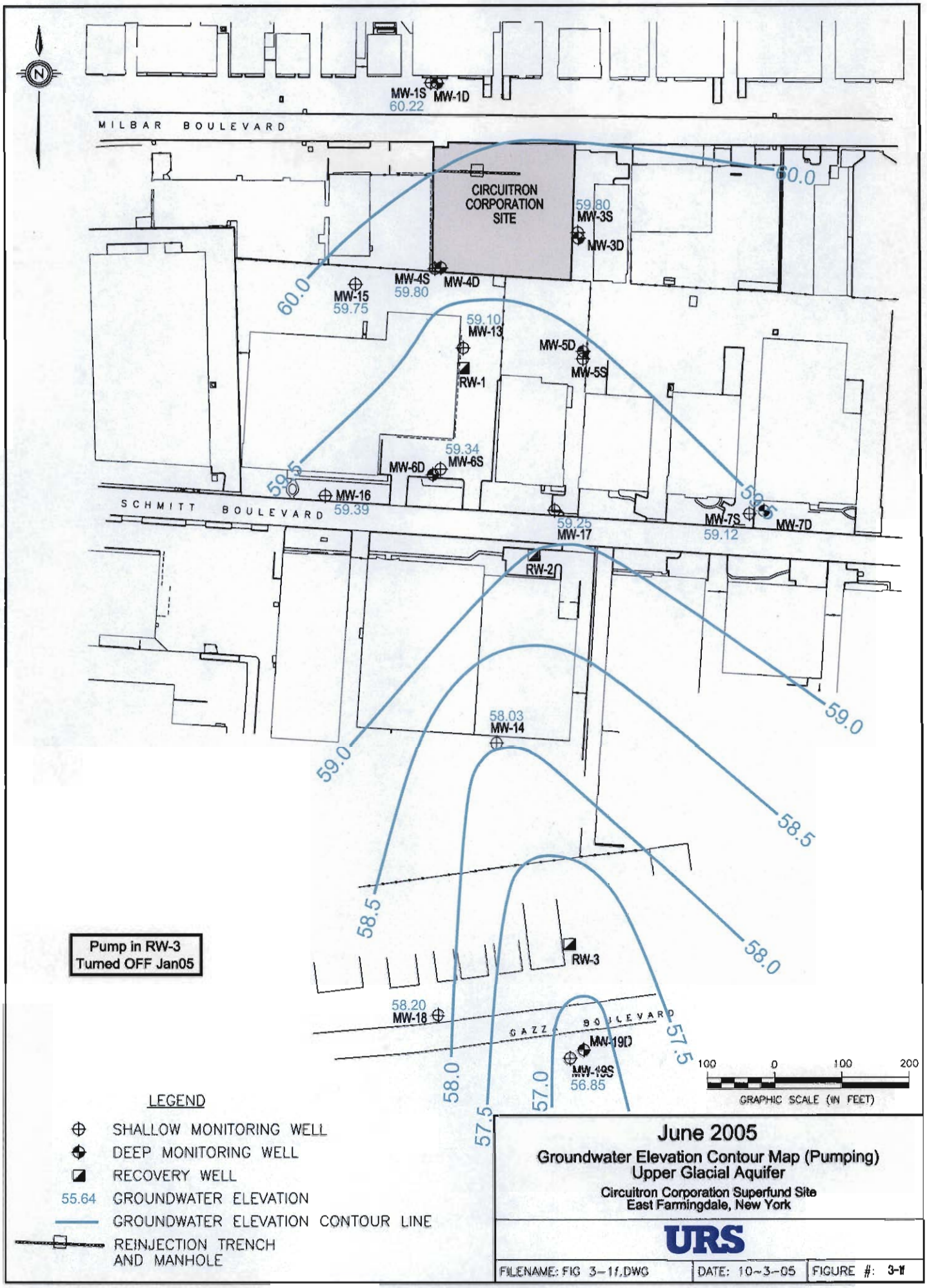
- ⊕ SHALLOW MONITORING WELL
- ◆ DEEP MONITORING WELL
- ◪ RECOVERY WELL
- 55.64 GROUNDWATER ELEVATION
- GROUNDWATER ELEVATION CONTOUR LINE
- REINJECTION TRENCH AND MANHOLE
- * GROUNDWATER ELEVATIONS FOR THE RECOVERY WELLS ARE NOT AVAILABLE AT THIS TIME PENDING VERIFICATION OF THE TOP OF CASING ELEVATIONS.

March 2004

Groundwater Elevation Contour Map (Pumping)
Upper Glacial Aquifer
Circuitron Corporation Superfund Site
East Farmingdale, New York

URS

FILENAME: FIG 3-1e.DWG	DATE: 9-1-05	FIGURE #: 3-1e



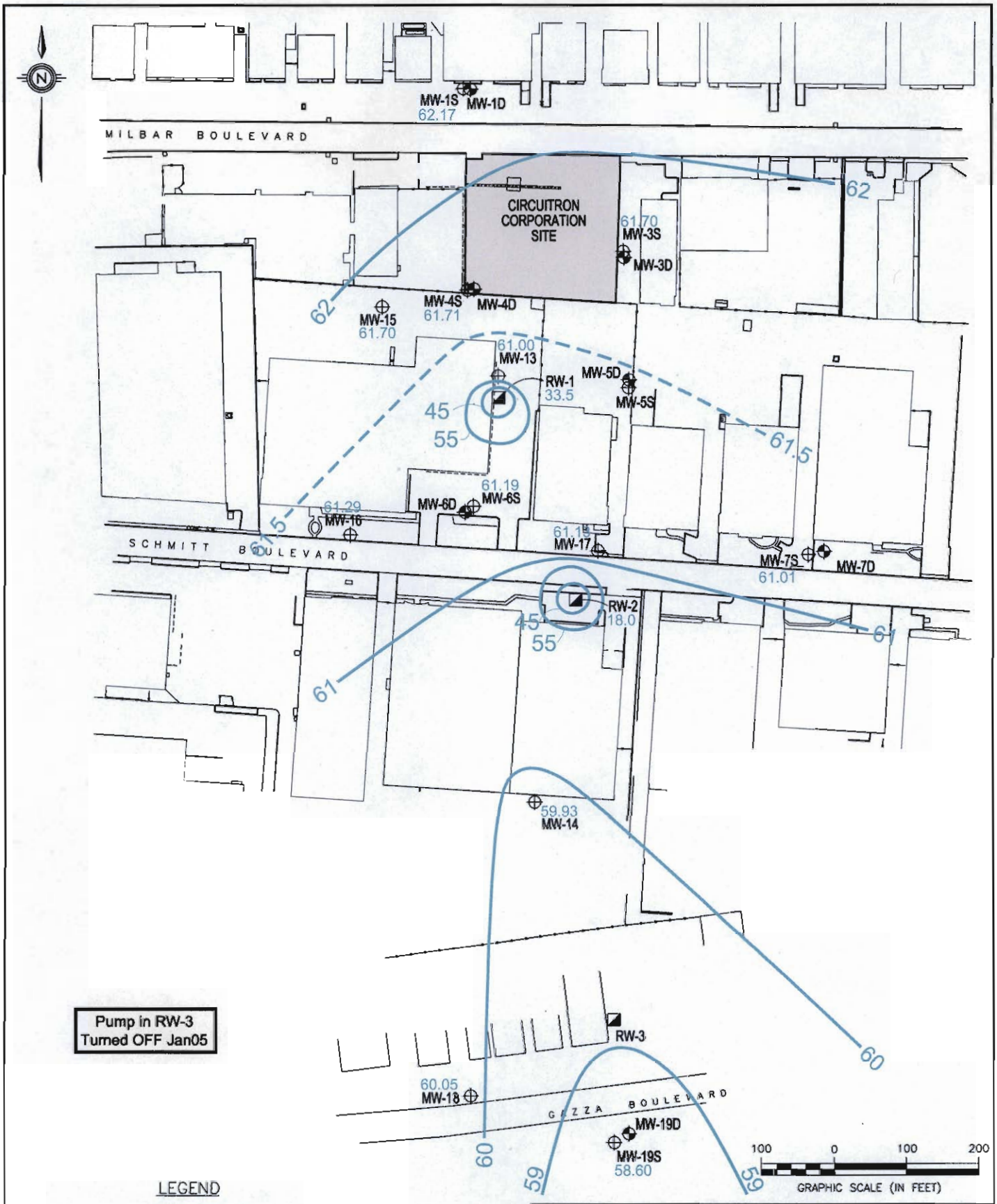
June 2005

Groundwater Elevation Contour Map (Pumping) Upper Glacial Aquifer

Circuitron Corporation Superfund Site
East Farmingdale, New York

URS

FILENAME: FIG 3-11.DWG	DATE: 10-3-05	FIGURE #: 3-11



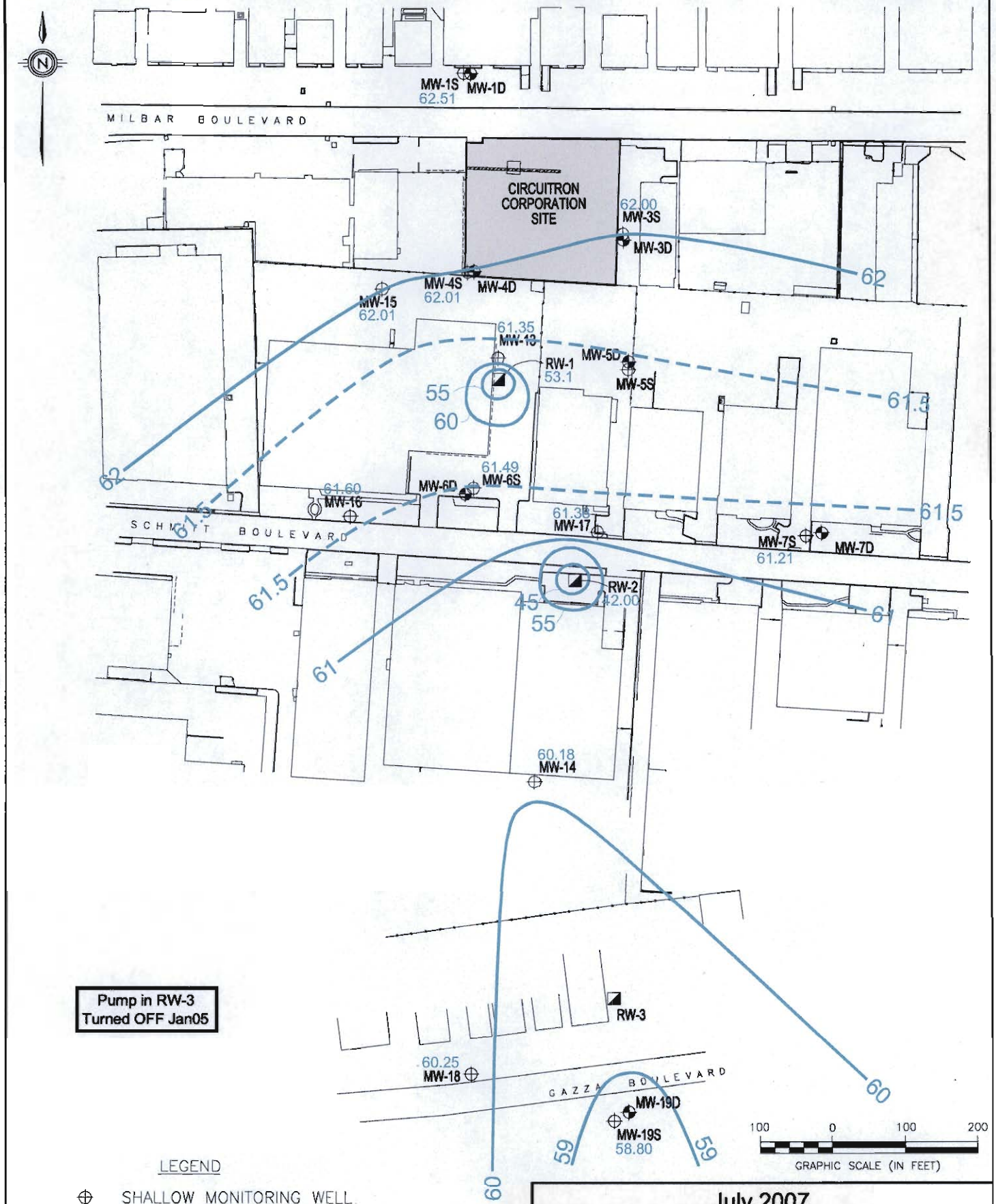
June 2006

Groundwater Elevation Contour Map (Pumping) Upper Glacial Aquifer

Circuitron Corporation Superfund Site
East Farmingdale, New York

URS

FILENAME: FIG 3-1g.DWG	DATE: 9-11-06	FIGURE #: 3-1g



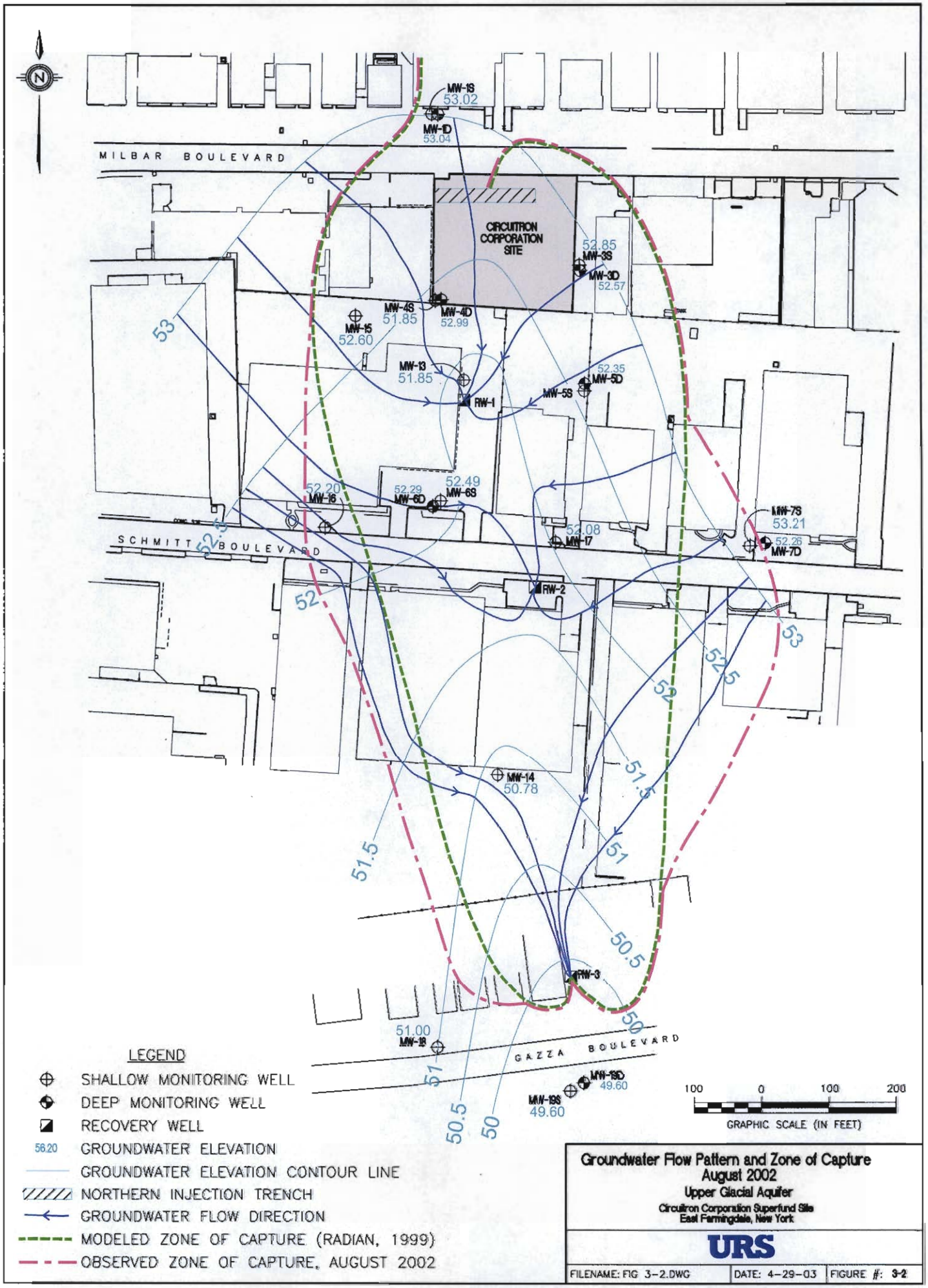
July 2007

Groundwater Elevation Contour Map (Pumping) Upper Glacial Aquifer

Circuitron Corporation Superfund Site
East Farmingdale, New York

URS

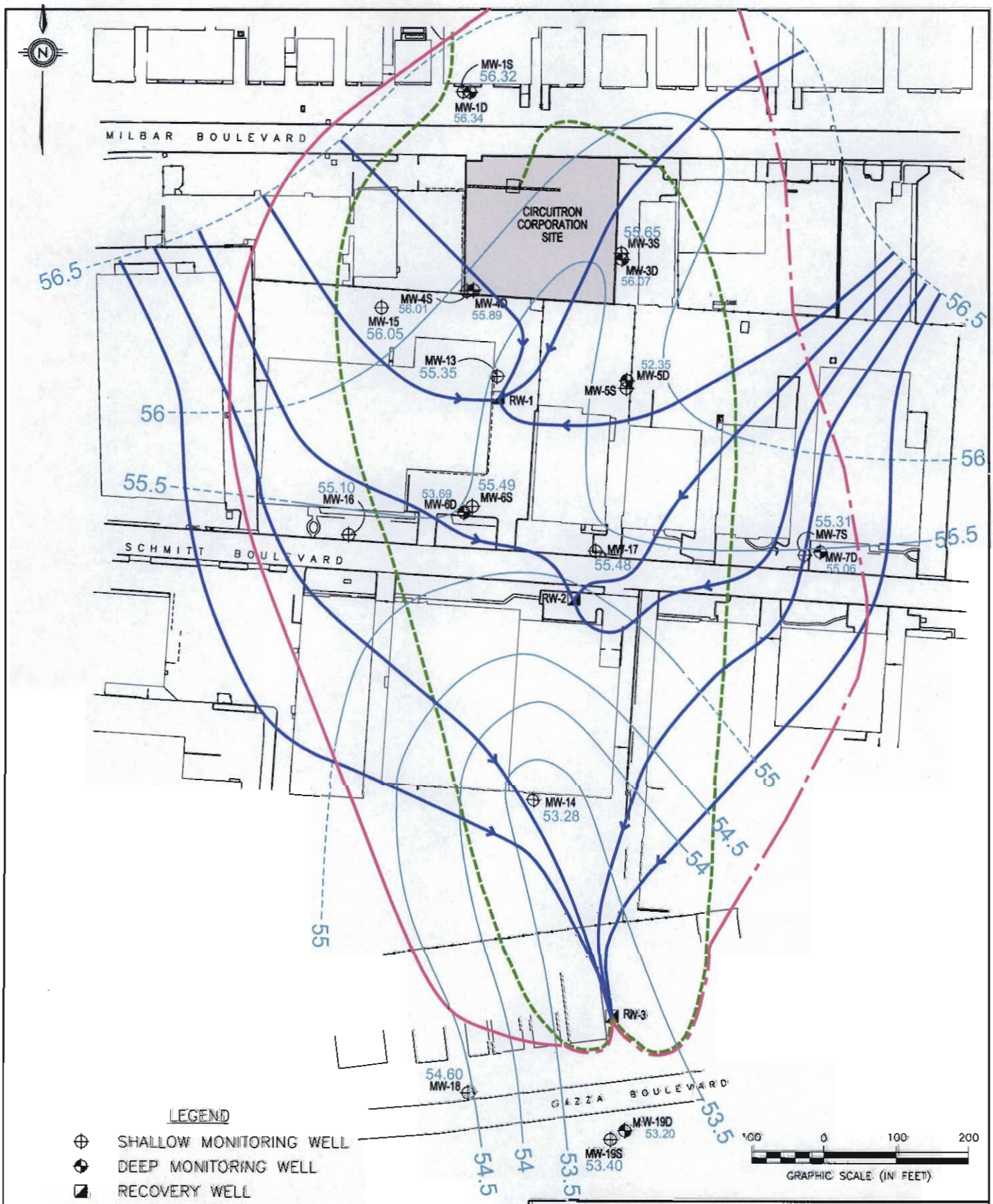
FILENAME: FIG 3-1h.DWG	DATE: 10-31-07	FIGURE #: 3-1h



Groundwater Flow Pattern and Zone of Capture
August 2002
Upper Glacial Aquifer
Circuitron Corporation Superfund Site
East Farmingdale, New York

URS

FILENAME: FIG 3-2.DWG	DATE: 4-29-03	FIGURE #: 3-2

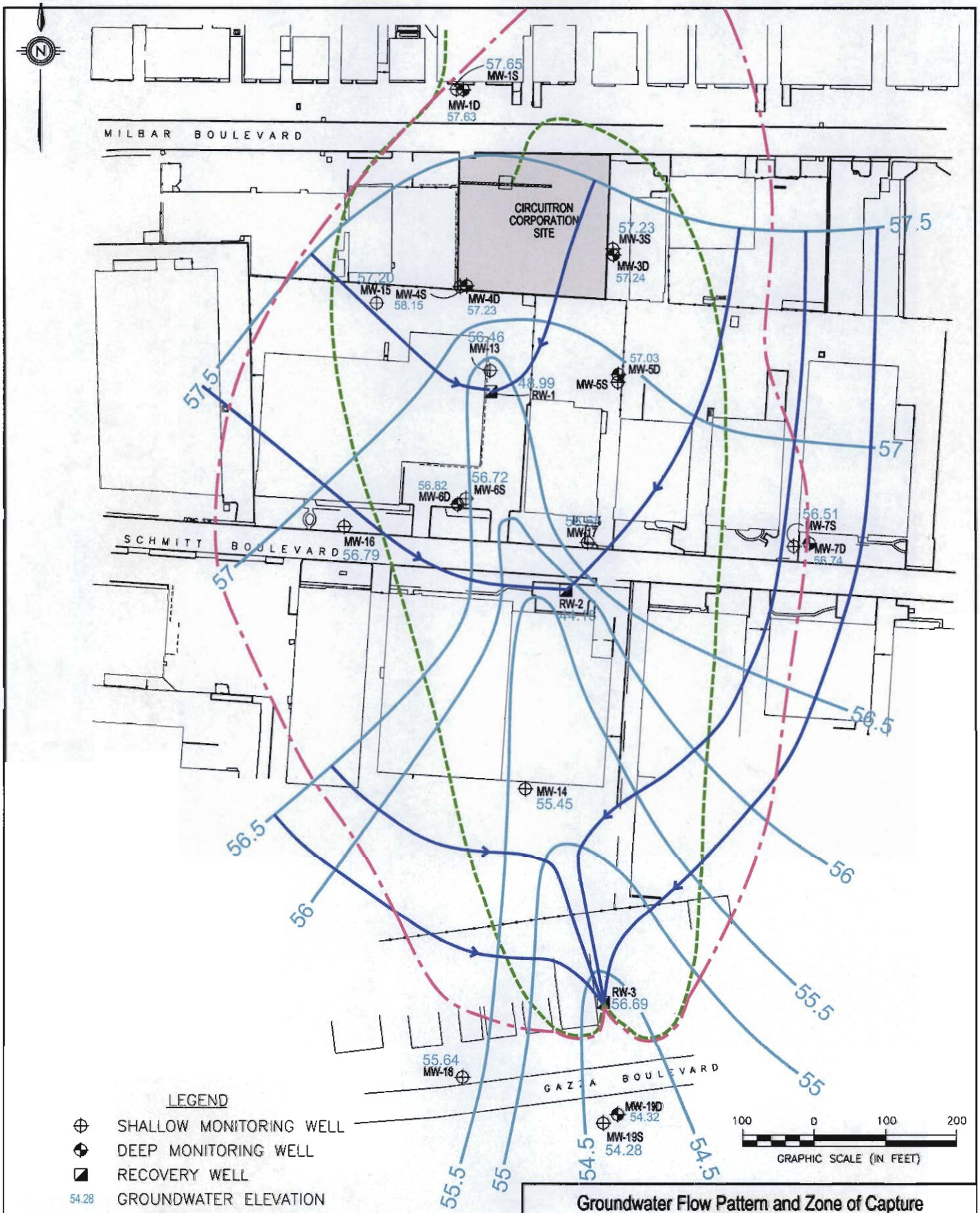


Groundwater Flow Pattern and Zone of Capture
April 2003
Upper Glacial Aquifer

Circuitron Corporation Superfund Site
East Farmingdale, New York

URS

FILENAME: FIG 3-3.DWG	DATE: 2-5-04	FIGURE #: 3-3



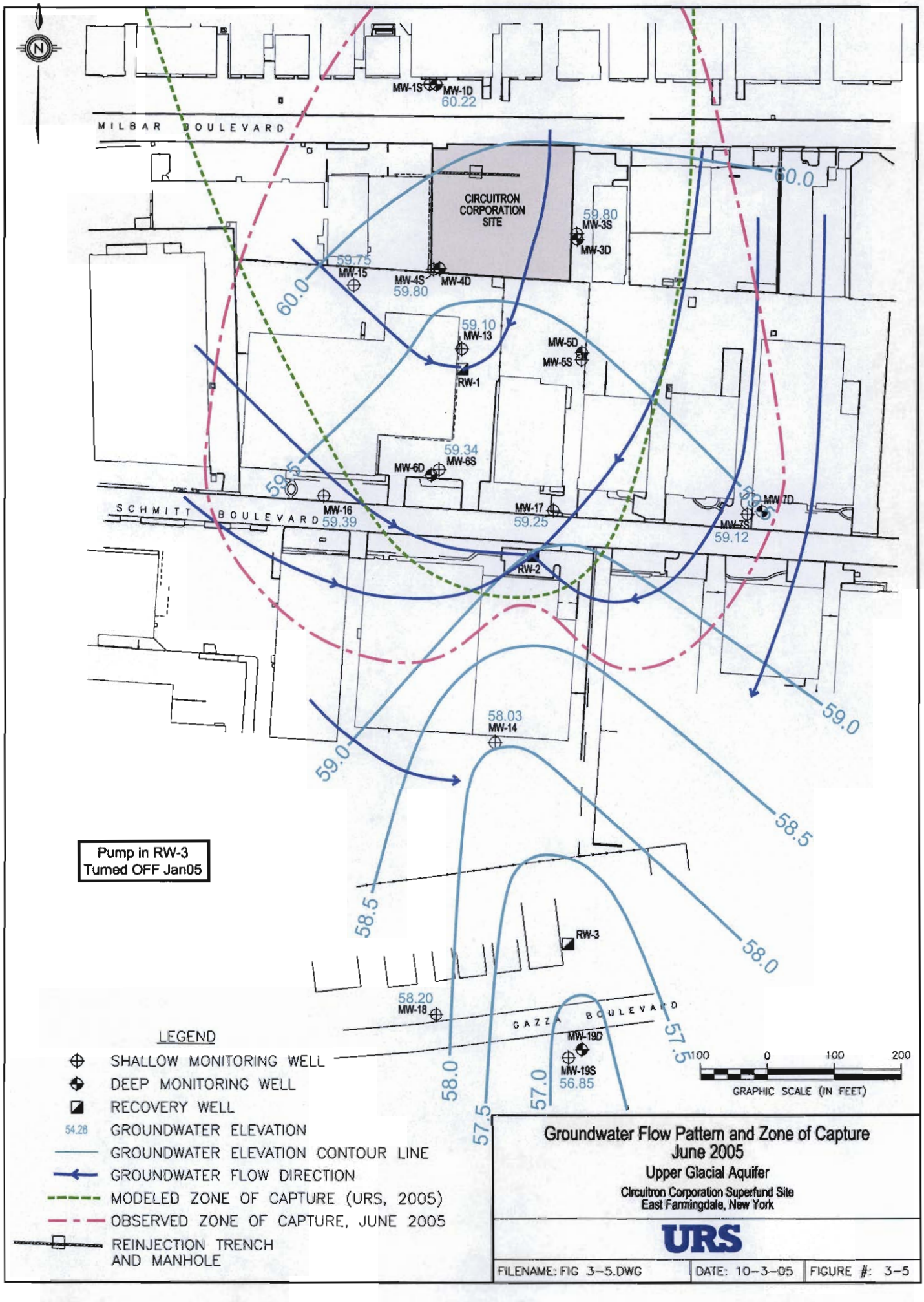
Groundwater Flow Pattern and Zone of Capture March 2004

Upper Glacial Aquifer

Circuitron Corporation Superfund Site
East Farmingdale, New York

URS

FILENAME: FIG 3-4.DWG	DATE: 2-5-04	FIGURE #: 3-4



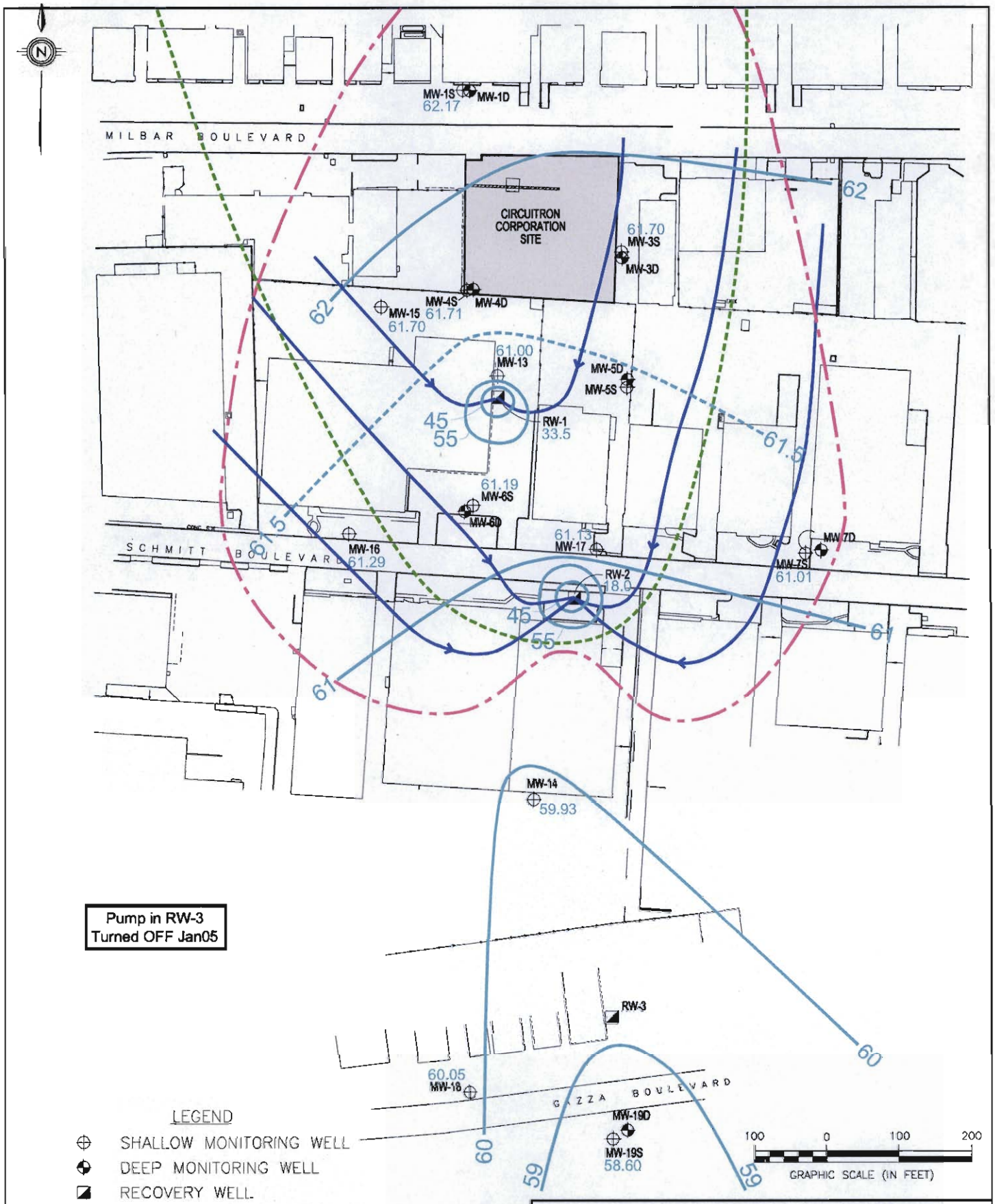
Groundwater Flow Pattern and Zone of Capture June 2005

Upper Glacial Aquifer

Circuitron Corporation Superfund Site
East Farmingdale, New York

URS

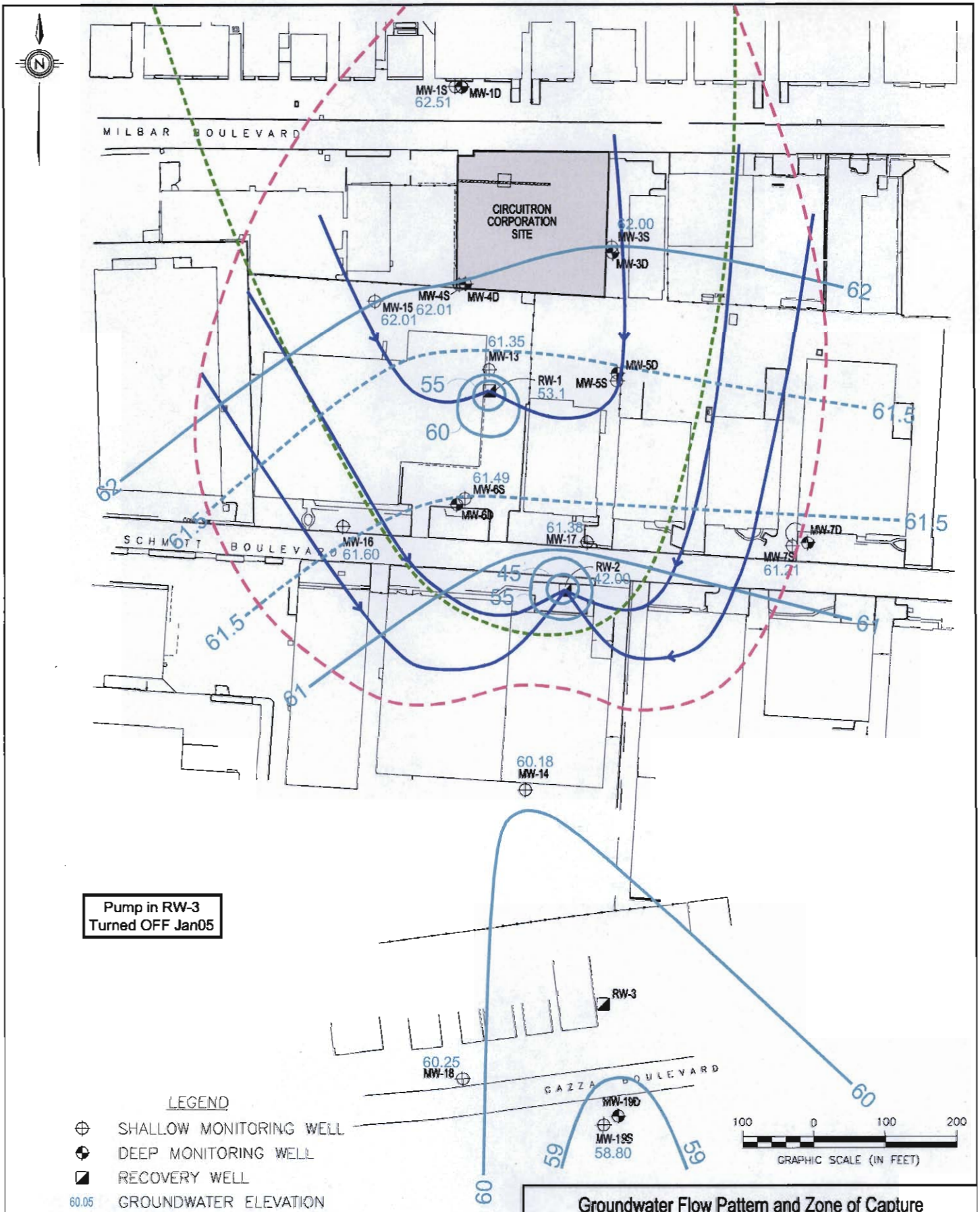
FILENAME: FIG 3-5.DWG	DATE: 10-3-05	FIGURE #: 3-5



Groundwater Flow Pattern and Zone of Capture
June 2006
Upper Glacial Aquifer
Circuitron Corporation Superfund Site
East Farmingdale, New York

URS

FILENAME: FIG 3-6.DWG	DATE: 9-11-06	FIGURE #: 3-6



Groundwater Flow Pattern and Zone of Capture
July 2007
Upper Glacial Aquifer

Circuitron Corporation Superfund Site
East Farmingdale, New York

URS

FILENAME: FIG 3-7.DWG	DATE: 11-29-07	FIGURE #: 3-7

4.0 GROUNDWATER QUALITY

During the period from June 28, 2000 to August 2007, when the OU-2 remedy was operating, groundwater samples were collected from up to 19 monitoring wells at the site. These data (presented in Appendices A-1, A-2, and A-3) were used to evaluate changes of the concentrations of compounds dissolved in the groundwater during the Performance Monitoring Period. Data from sampling events that occurred prior to startup of the remediation system, May 1993/February 1994 and mid-June 2000, were used as the benchmark to represent pre-remediation baseline groundwater quality conditions.

This section discusses the distribution of compounds detected in the shallow groundwater using isoconcentration contour maps and time-series graphs. Time-series graphs for seven deep wells included in the Performance Monitoring program were also prepared to show trends in the deeper zone of the Upper Glacial Aquifer over time and are presented in Appendix B.

4.1 EXCEEDANCES OF ACTION LEVELS

Exceedances are defined for the purposes of this report as groundwater samples analyzed that have volatile organic compounds (VOCs) or metals detected at levels exceeding the applicable Federal or State Groundwater Drinking Water Standards. These standards are referred to in this report as Action Levels. Multiple exceedances observed in groundwater from wells located outside the observed capture zone may provide data to allow recommending a change in the operation of the remediation system. Single exceedances may be anomalous and therefore recommendations for changing the operation of the remediation system will be based on only a pattern of multiple exceedances. Table 4-1 summarizes the exceedances observed in groundwater from each well and Figures 4-1a and 4-2a show exceedances of VOC compounds observed in groundwater sampled from shallow and deep wells in map view. Appendix A-2 contains the historical summary data for each monitoring well.

Of all the shallow wells, there are two, MW-18 and MW-19S that are located outside the capture zone. In the past, groundwater samples collected from MW-18 showed multiple exceedances of methylene chloride (see Appendix A-2). Groundwater samples collected from MW-19S showed multiple exceedances of methylene chloride, and single exceedances of 1,1-dichlorethane (1,1-DCA) and 1,1,1-trichlorethane (1,1,1-TCA) (see Appendix A-2). Methylene chloride is not representative of groundwater contamination because most of the associated

method blanks also showed detections of methylene chloride, and therefore, such exceedances were not used in this evaluation and are not shown on Figure 4-1a.

4.2 SITE-RELATED COMPOUNDS VS. NON SITE-RELATED COMPOUNDS

For the purposes of this document, the following criteria was used to determine if a compound is potentially related to historical activities at the site (site-related) or believed to not have been related to historical activities at the site (non site-related). The effectiveness of the remediation system will be evaluated by the presence of compounds that are believed to be site-related. Compounds that are judged to be non site-related will not be used to determine the remediation system effectiveness.

A compound will be considered site-related if:

a) It was not observed as an exceedance in groundwater obtained from the upgradient well prior to remediation system startup (May 1993/February 1994 and June 2000 sampling events) and was observed as an exceedance in groundwater from a site well during more than one sampling event; or

b) It formed from naturally occurring biodegradation, such as dichloroethenes and dichloroethanes, if the parent compound (e.g., PCE, TCE or 1,1,1-TCA) is considered to be site-related (i.e., not observed as an exceedance in groundwater from the upgradient well).

A compound will be considered as non site-related if:

a) It was observed as an exceedance in groundwater from the upgradient well prior to remediation system startup (May 1993/February 1994 and June 2000 sampling events); such compounds are considered to be background; or

b) If formed from naturally occurring biodegradation, such as dichloroethenes and dichloroethanes, if the parent compound (e.g., PCE, TCE or 1,1,1-TCA) is considered to be non site-related, (i.e., observed as an exceedance in groundwater from the upgradient well).

Data presented in Section 3 has shown that the remediation system has captured groundwater within the target zone. Therefore, site-related compounds that are observed as exceedances in groundwater from site wells are being captured by the remediation system. Additionally, site-related compounds which have been observed as exceedances in groundwater from downgradient well MW-19S have not been captured by the remediation system.

4.3 ISOCONCENTRATION MAPS

Isoconcentration maps were prepared for sampling events conducted in June 2000, January/February 2002, April 2003, June 2004, June 2005, July 2006, and August 2007 and are presented in Figures 4-3(a–g) and 4-4(a–g). Data from January/February 2002 was used in place of August 2002 data because dry conditions prevented sampling of shallow monitoring wells (MW-4S, MW-6S, and MW-7S) at that time. Isoconcentration maps were created for organic compounds (1,1-DCA and 1,1,1-TCA), which had exceedances observed in the groundwater from downgradient well MW-19S.

4.3.1 VOC Exceedances in Shallow Wells

Figure 4-1a and Table 4-1 provide a summary of the exceedances of VOCs observed to have been present in the groundwater samples from shallow wells. Concentrations of 1,1-dichloroethane (1,1-DCA) and 1,1,1-trichloroethane (1,1,1-TCA) exceeded their respective action levels in the groundwater samples collected from downgradient well MW-19S.

Isoconcentration contours of these compounds were prepared for the June 2000, January/February 2002, April 2003, June 2004, June 2005, July 2006, and August 2007 data and are presented in Figures 4-3a to 4-3g (1,1-DCA) and Figures 4-4a to 4-4g (1,1,1-TCA). Concentrations of 1,1-DCA found in groundwater for February 2002, April 2003, June 2004, June 2005, July 2006, and August 2007 are considerably less than the levels present in June 2000, and in all cases were below the action level of 5 µg/L. The most notable change in the isoconcentration maps for 1,1,1-TCA is the area encompassed by the 5 µg/L action limit contour. In April 2003, June 2004, and June 2005 this area is less than one quarter of the size that it was in June 2000. The data from August 2007 indicate all locations (except for well MW-4S) with less than 5 µg/l of 1,1,1-TCA. These significant reductions in the mass of 1,1,1-TCA in groundwater are evidence that the remediation system is effectively capturing this constituent in the shallow groundwater at the site.

The August 2007 data indicate only one well (MW-4S) exhibited levels of VOCs exceeding NY Water Quality Criteria (Figure 4-1a). Additionally, the only VOCs observed in groundwater obtained from well MW-4S to exceed NY Water Quality Criteria in August 2007 were PCE and TCA; all other VOCs in groundwater from MW-4S were less than 5 µg/l. This indicates the success of the remediation system at capturing VOCs in the shallow aquifer. Groundwater obtained from well MW-4S historically showed greater levels of VOCs than any other monitoring well (Figure 4-1a). Levels of VOCs (1,1-DCA, 1,1-DCE, 1,1,1-TCA, PCE)

detected in groundwater from this well have declined since October 2000. Levels of 1,1-DCA have declined from 14 µg/l to less than 5 µg/l. Levels of 1,1-DCE have declined from 22 µg/l to less than 5 µg/l. Levels of 1,1,1-TCA have declined from 860 µg/l to 340 µg/l. Levels of PCE have declined from 19 µg/l to 6.6 µg/l.

As noted in Section 1.5, localized treatment around MW-4S was initiated in August 2007 by the USEPA.

4.3.2 VOC Exceedances in Deep Wells

Figure 4-2a and Table 4-1 provide a summary of the exceedances of VOCs present in groundwater samples from the deep wells. These data show that multiple exceedances of 1,1-DCA, 1,1-DCE, 1,1,1-TCA, PCE, TCE, 1,2-dichloroethene (total) (1,2-DCE), and methylene chloride were observed in groundwater from various deep wells. These data also show that multiple exceedances of 1,1-DCE, 1,1,1-TCA, PCE and TCE were present in groundwater from upgradient well MW-1D, indicating these specific compounds are non site-related. These same compounds were also shown to have multiple exceedances in groundwater from downgradient well MW-19D, indicating these compounds are being transported in deeper groundwater across the site. Appendix A-2 contains the historical summary data for each monitoring well.

Figure 4-5 presents these VOCs in a cross-sectional view and shows data for wells screened in the Upper Glacial Aquifer and the deeper Magothy Aquifer for the April 2003, June 2004, June 2005, July 2006, and August 2007 sampling events and for baseline values from before the system was activated in June 2000. It is apparent from this cross-section that the PCE and TCE detected in groundwater in the Magothy Aquifer are being transported within the Magothy Aquifer under the site and that these compounds originate from a source upgradient of the subject property.

Multiple exceedances of 1,2-DCE were observed in groundwater from downgradient well MW-19D. 1,2-DCE is a daughter-product of natural biodegradation of PCE and TCE (both of which were observed as exceedances in groundwater from upgradient well MW-1D); therefore, 1,2-DCE is not considered a site-related compound.

1,1-Dichloroethane was detected as multiple exceedances in groundwater from MW-7D. 1,1-Dichloroethane is a daughter-product of natural biodegradation of 1,1,1-TCA, which was

observed as an exceedance in groundwater from upgradient well MW-1D; therefore, 1,1-DCA is not considered a site-related compound.

Methylene chloride is believed not to be representative of groundwater contamination due to its widespread detection in method blank samples, and therefore, these data were not evaluated in this report.

4.4 GEOCHEMICAL TIME-SERIES GRAPHS

Trends in groundwater quality over time are apparent in geochemical time-series graphs prepared for each monitoring well. Time-series graphs were prepared by plotting concentration levels versus time for select compounds detected in groundwater samples collected during the period extending from June 2000 through August 2007. Time-series graphs and the associated data are presented in Appendix B.

In general, the time-series graphs show the following:

- The VOCs detected in groundwater from the shallow wells show either slight decrease or no change over the Performance Monitoring Period up through June 2005 with a significant decrease after June 2005. The only exceptions to this trend are the concentrations of 1,1,1-TCA and TCE exhibited in groundwater from well MW-4S, which exhibited slight increase after June 2005; and
- The VOCs detected in groundwater from the deep wells show either slight increase or no change over the Performance Monitoring Period. The only notable change from the previous years is an increase in the concentrations of 1,1-DCE and 1,1,1-TCA detected in groundwater from well MW-19D.

The difference in trends observed in VOC levels between the shallow and the deep groundwater could be due to the remediation system treating groundwater from the shallow zone, while leaving the deeper zone unaffected.

Trends over time in the levels of compounds observed as exceedances in groundwater from downgradient shallow well MW-19S are useful to evaluate the effectiveness of the remediation system. The only VOC compounds observed as exceedances in groundwater from MW-19S and not observed as exceedances in groundwater from MW-1S are 1,1-DCA and 1,1,1-TCA.

The time-series graph shows that the levels of 1,1-DCA and 1,1,1-TCA decreased over the Performance Monitoring Period, indicating the remediation system is effective in mitigating the VOC compounds.

Table 4-1. Site-Related and Non Site-Related Compounds, Circuitron Corporation Superfund Site

(Page 1 of 4)

Media	Location	Compound	Number of Exceedance Occurrences[2]	Site-Related	Rationale[1]
Shallow Groundwater	MW-1S (Upgradient well)	1,1 Dichloroethene	1	No	These four compounds were not observed as exceedances prior to remediation system startup.
		1,1,1 Trichloroethane	1	No	
		Tetrachloroethene	1	No	
		Trichloroethene	1	No	
		Methylene chloride	1	No	Method blank artifact
		Iron	7	No	Baseline exceedance in MW-1S
		Manganese	6	No	Baseline exceedance in MW-1S
	MW-3S	1,1,1 Trichloroethane	2	Yes	
		Iron	6	No	Baseline exceedance in MW-1S
	MW-4S	1,1 Dichloroethane	4	Yes	
		1,1 Dichloroethene	2	Yes	
		1,1,1 Trichloroethane	13	Yes	
		Tetrachloroethene	11	Yes	
		Methylene chloride	3	No	Method blank artifact
		Chromium	5	Yes	
		Iron	5	No	Baseline exceedance in MW-1S
	MW-6S	1,1 Dichloroethene	1	Yes	
		1,1,1 Trichloroethane	10	Yes	
		Methylene chloride	2	No	Method blank artifact
		Antimony	1	No	Single exceedance
		Chromium	3	Yes	
		Iron	3	No	Baseline exceedance in MW-1S
	MW-7S	Methylene chloride	1	No	Method blank artifact
		Chromium	2	Yes	
		Iron	3	No	Baseline exceedance in MW-1S
	MW-13	1,1 Dichloroethane	5	Yes	
		1,1 Dichloroethene	2	Yes	
		1,1,1 Trichloroethane	11	Yes	
		Methylene chloride	1	No	Method blank artifact
		Chlorobenzene	1	No	Single exceedance
		Iron	*6	No	Baseline exceedance in MW-1S
		Manganese	1	No	Baseline exceedance in MW-1S

Table 4-1. Site-Related and Non Site-Related Compounds, Circuitron Corporation Superfund Site

(Page 2 of 4)

Media	Location	Compound	Number of Exceedance Occurrences[2]	Site-Related	Rationale[1]
Shallow Groundwater (Continued)	MW-14	1,1,1 Trichloroethane	6	Yes	
		Methylene chloride	1	No	Method blank artifact
		Iron	6	No	Baseline exceedance in MW-1S
		Manganese	3	No	Baseline exceedance in MW-1S
	MW-15	1,2 Dichloroethene (total)	3	Yes	
		Tetrachloroethene	2	Yes	
		Trichloroethene	1	Yes	
		Iron	6	No	Baseline exceedance in MW-1S
		Manganese	5	No	Baseline exceedance in MW-1S
	MW-16	Arsenic	1	No	Single exceedance
		Iron	6	No	Baseline exceedance in MW-1S
		Lead	1	No	Single exceedance
		Manganese	5	No	Baseline exceedance in MW-1S
	MW-17	1,1 Dichloroethane	1	Yes	
		1,1,1 Trichloroethane	7	Yes	
		1,1,2 Trichloroethane	2	Yes	
		Methylene chloride	1	No	Method blank artifact
		Chromium	1	No	Single exceedance
		Iron	6	No	Baseline exceedance in MW-1S
		Lead	1	No	Single exceedance
		Manganese	2	No	Baseline exceedance in MW-1S
	MW-18	Methylene chloride	2	No	Method blank artifact
		Chromium	1	No	Single exceedance
		Iron	6	No	Baseline exceedance in MW-1S
	MW-19S	1,1 Dichloroethane	1	Yes	
		1,1,1 Trichloroethane	2	Yes	
		Methylene chloride	4	No	Method blank artifact
		Chromium	2	Yes	
		Iron	6	No	Baseline exceedance in MW-1S
		Lead	1	No	Single exceedance
		Manganese	6	No	Baseline exceedance in MW-1S
		Mercury	1	No	Single exceedance

Table 4-1. Site-Related and Non Site-Related Compounds, Circuitron Corporation Superfund Site

(Page 3 of 4)

Media	Location	Compound	Number of Exceedance Occurrences[2]	Site-Related	Rationale[1]
Deep Groundwater	MW-1D (Upgradient well)	1,1 Dichloroethene	13	No	Upgradient well
		1,1,1 Trichloroethane	13	No	
		Tetrachloroethene	*5	No	
		Trichloroethene	9	No	
		Methylene chloride	2	No	
		Chromium	5	No	Upgradient well
		Iron	8	No	
		Lead	1	No	
	MW-3D	Methylene chloride	1	No	Method blank artifact
		Chromium	3	No	Baseline exceedance in MW-1D
		Iron	4	No	Baseline exceedance in MW-1D
		Manganese	1	No	Not site-related in shallow aquifer
	MW-4D	1,1 Dichloroethane	1	No	Biodegradation product of 1,1,1-TCA
		1,1 Dichloroethene	10	No	Baseline exceedance in MW-1D
		1,1,1 Trichloroethane	11	No	Baseline exceedance in MW-1D
		Tetrachloroethene	2	No	Baseline exceedance in MW-1D
		Trichloroethene	9	No	Baseline exceedance in MW-1D
		Methylene chloride	2	No	Method blank artifact
		Iron	*6	No	Baseline exceedance in MW-1D
	MW-5D	Methylene chloride	2	No	Method blank artifact
		Iron	4	No	Baseline exceedance in MW-1D
		Manganese	6	No	Not site-related in shallow aquifer
	MW-6D	1,1 Dichloroethene	5	No	Baseline exceedance in MW-1D
		1,1,1 Trichloroethane	8	No	Baseline exceedance in MW-1D
		Trichloroethene	8	No	Baseline exceedance in MW-1D
		Methylene chloride	2	No	Method blank artifact
		Chromium	5	No	Baseline exceedance in MW-1D
		Iron	5	No	Baseline exceedance in MW-1D
		Nickel	5	No	Not site-related in shallow aquifer

Table 4-1. Site-Related and Non Site-Related Compounds, Circuitron Corporation Superfund Site

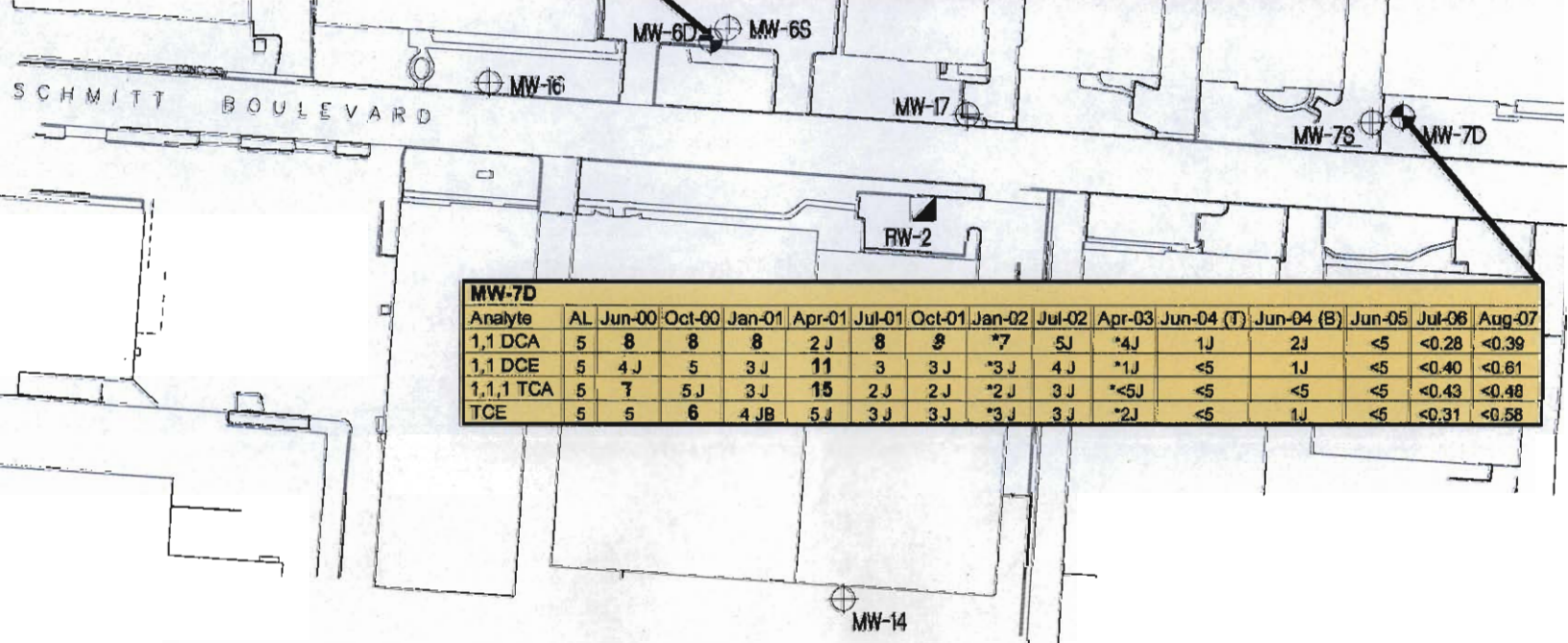
(Page 4 of 4)

Media	Location	Compound	Number of Exceedance Occurrences[2]	Site-Related	Rationale[1]
Deep Groundwater (Continued)	MW-7D	1,1 Dichloroethane	6	No	Biodegradation product of 1,1,1-TCA
		1,1 Dichloroethene	1	No	Baseline exceedance in MW-1D
		1,1,1 Trichloroethane	2	No	Baseline exceedance in MW-1D
		Trichloroethene	1	No	Baseline exceedance in MW-1D
		Methylene chloride	2	No	Method blank artifact
		Iron	*3	No	Baseline exceedance in MW-1D
	MW-19D	1,1 Dichloroethene	13	No	Baseline exceedance in MW-1D
		1,1,1 Trichloroethane	13	No	Baseline exceedance in MW-1D
		1,2 Dichloroethene (total)	11	No	Biodegradation product of PCE and TCE
		Tetrachloroethene	13	No	Baseline exceedance in MW-1D
		Trichloroethene	12	No	Baseline exceedance in MW-1D
		Chloroform	7	No	Biodegradation product of 1,1,1-TCA
		Methylene chloride	4	No	Method blank artifact
		Chromium	3	No	Baseline exceedance in MW-1D
		Iron	6	No	Baseline exceedance in MW-1D
		Lead	4	No	Baseline exceedance in MW-1D
		Manganese	5	No	Not site-related in shallow aquifer
		Nickel	1	No	Single exceedance

Notes: *Data considered in this table includes volatile organics through August 2007 and inorganics through April 2003. With concurrence from the USEPA, metals analysis was discontinued prior to the June 2004 sampling event.*

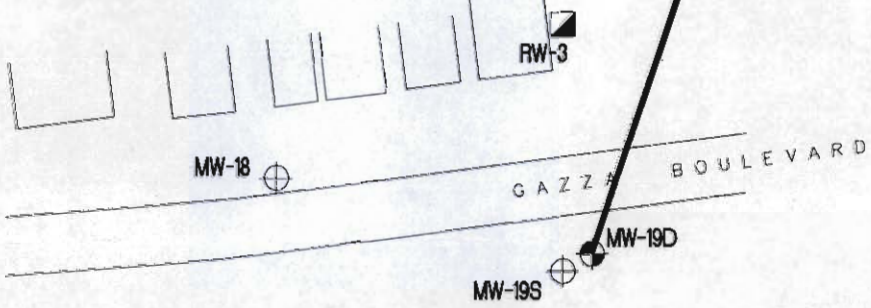
(1) Rationale:
Method blank artifact: The compound was detected in several method blanks and will not be considered site-related.
Baseline exceedance in MW-1S: The compound was observed to exceed action levels prior to remediation system startup in groundwater samples collected from the upgradient well and will not be considered site-related.
Single exceedance: The compound was observed as an exceedance in groundwater collected from a site well during only one sampling event and will not be considered site related.
Upgradient well: If a compound is observed exceeding action levels in this well, the compound will not be considered site-related in any downgradient well.
Baseline exceedance in MW-1D: The compound was observed to exceed action levels prior to remediation system startup in groundwater samples collected from the upgradient well and will not be considered site-related.
Not site-related in shallow aquifer: If a compound is determined to be non site-related in the shallow groundwater, it will not be considered site-related in deeper groundwater.
Biodegradation product: The compound is a biodegradation product of a compound that has been determined non site-related.

* Values that appear with an asterisk indicate that a duplicate sample showed a detection of the compound exceeding the action level, but analysis of the normal sample showed either a detection less than the action level or was not detected in excess of the detection limit. The number includes the duplicate exceedance.



MW-7D															
Analyte	AL	Jun-00	Oct-00	Jan-01	Apr-01	Jul-01	Oct-01	Jan-02	Jul-02	Apr-03	Jun-04 (T)	Jun-04 (B)	Jun-05	Jul-06	Aug-07
1,1 DCA	5	8	8	8	2 J	8	8	*7	5J	*4J	1J	2J	<5	<0.28	<0.39
1,1 DCE	5	4 J	5	3 J	11	3	3 J	*3 J	4 J	*1J	<5	1J	<5	<0.40	<0.61
1,1,1 TCA	5	7	5 J	3 J	15	2 J	2 J	*2 J	3 J	*<5J	<5	<5	<5	<0.43	<0.48
TCE	5	5	6	4 JB	5 J	3 J	3 J	*3 J	3 J	*2J	<5	1J	<5	<0.31	<0.58

	AL	Jun-00	Oct-00	Jan-01	Apr-01	Jul-01	Oct-01	Jan-02	Jul-02	Apr-03	Jun-04 (T)	Jun-04 (B)	Jun-04 (LF)	Jun-05	Jul-06	Aug-07
	5	14	14	12	18	19	*18	23	24	11	<5	*22	19	*24.5	*100	<0.61
	5	23	19	17	27	27	*28	30	28	16	2J	*23	22	*29.5	*71	<0.48
)	5	3J	6	<5	7	8	*8	8	10	8	<5	*8	7	*6.5	*5.1	<0.83
n	7	2J	2 J	<5	5 J	7	*7	10	14	19	2J	*32	25	*21	*5.9	<0.35
	5	46	47	50	55	65	*62	77	62	57	2J	*24	39	*19	*17.5	<0.44
	5	40	34	37	36	46	*43	55	57	33	2J	*34	32	*27	*27	<0.58



LEGEND

SHALLOW MONITORING WELL
DEEP MONITORING WELL
RECOVERY WELL
1,1 DICHLOROETHANE
1,1 DICHLOROETHENE
1,1,1 TRICHLOROETHANE
1,2 DICHLOROETHENE (TOTAL)
TETRACHLOROETHENE
TRICHLOROETHENE
ACTION LEVEL: APPLICABLE FEDERAL & STATE GROUNDWATER DRINKING WATER STANDARD
ANALYTE WAS DETECTED IN ASSOCIATED BLANK
ESTIMATED
NOT DETECTED IN EXCESS OF STATED METHOD DETECTION LIMIT
REINJECTION TRENCH AND MANHOLE

DED VALUES EXCEED ACTION LEVEL
UES MARKED WITH ASTERISK ARE THE ARITHMETIC
N OF NORMAL AND DUPLICATE SAMPLES
CONCENTRATIONS PRESENTED IN ug/L
E JUNE 2004, DIFFUSION BAG SAMPLING WAS PERFORMED:
-TOPMOST BAG; B-BOTTOM BAG
MW-19D IN JUNE 2004, DIFFUSION BAG & LOW FLOW (LF) SAMPLES
E COLLECTED AS PER USEPA'S REQUEST.

100 0 100

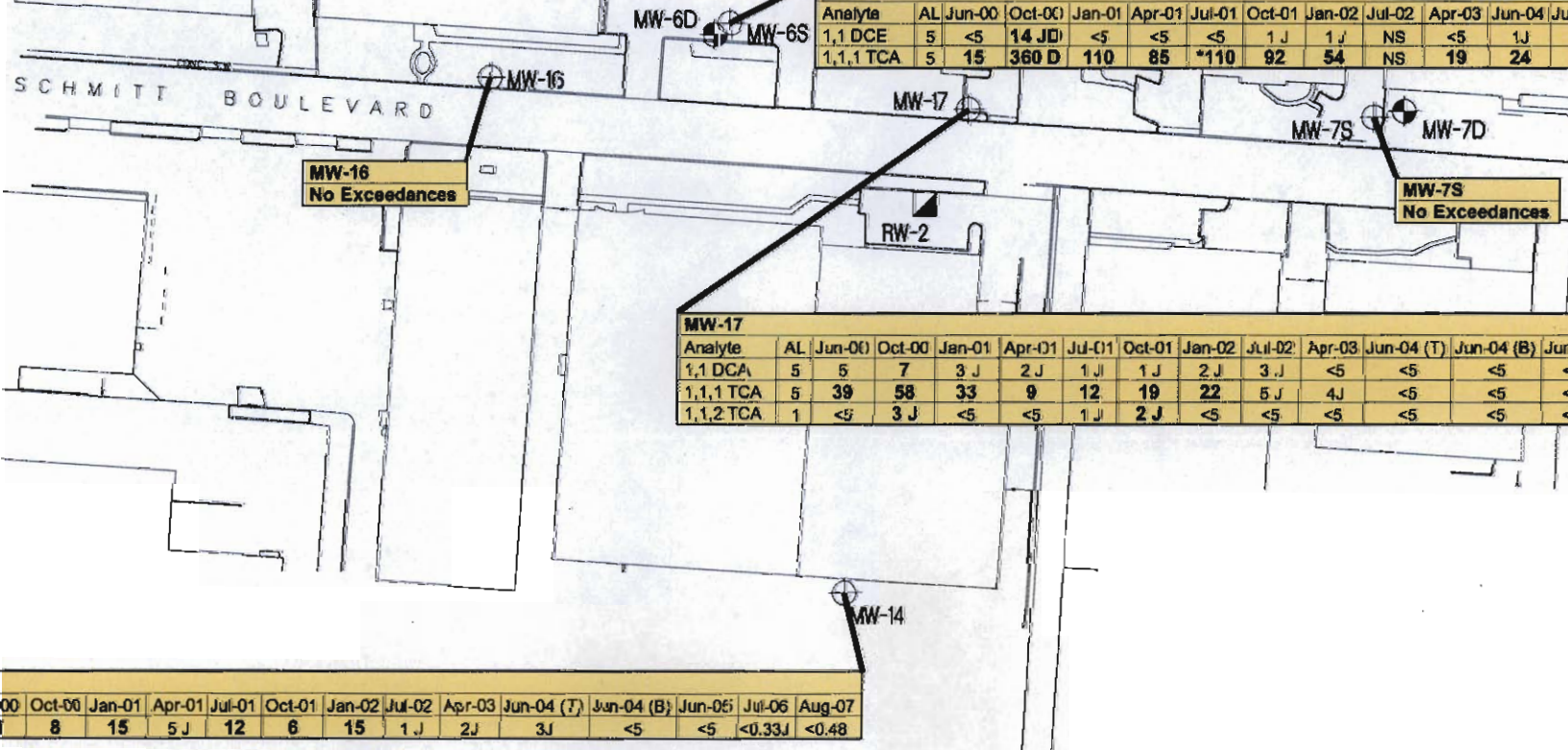
GRAPHIC SCALE (IN FE

Volatile Organic Compound Conce Exceeding Screening Criter Deep Wells

Circuitron Corporation Superfund Site
East Farmingdale, New York

URS

FILENAME: FIG 4-2A.DWG | DATE: 11-29-07 | FIG



Analyte	AL	Jun-00	Oct-00	Jan-01	Apr-01	Jul-01	Oct-01	Jan-02	Jul-02	Apr-03	Jun-04	Ju
1,1 DCE	5	<5	14 JD	<5	<5	<5	1 J	1 J	NS	<5	1J	
1,1,1 TCA	5	15	360 D	110	85	*110	92	54	NS	19	24	

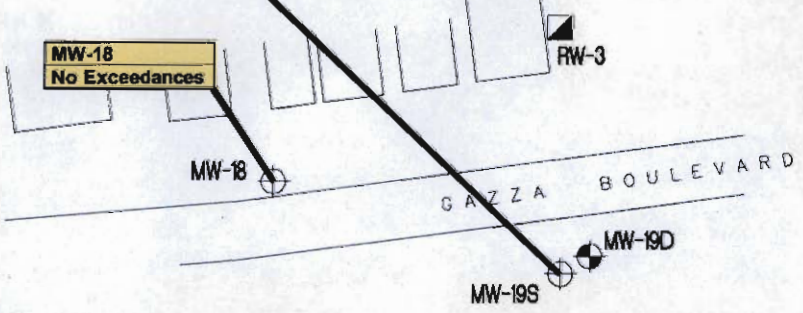
MW-17

Analyte	AL	Jun-00	Oct-00	Jan-01	Apr-01	Jul-01	Oct-01	Jan-02	Jul-02	Apr-03	Jun-04 (T)	Jun-04 (B)	Jun
1,1 DCA	5	5	7	3 J	2 J	1 J	1 J	2 J	3 J	<5	<5	<5	
1,1,1 TCA	5	39	58	33	9	12	19	22	5 J	4J	<5	<5	
1,1,2 TCA	1	<5	3 J	<5	<5	1 J	2 J	<5	<5	<5	<5	<5	

Oct-00	Jan-01	Apr-01	Jul-01	Oct-01	Jan-02	Jul-02	Apr-03	Jun-04 (T)	Jun-04 (B)	Jun-05	Jul-06	Aug-07
8	15	5 J	12	6	15	1 J	2J	3J	<5	<5	<0.33J	<0.48

MW-19S

Analyte	AL	Jun-00	Oct-00	Jan-01	Apr-01	Jul-01	Oct-01	Jan-02	Jul-02	Apr-03	Jun-04 (T)	Jun-04 (B)	Jun
1,1 DCA	5	6	4 J	3 J	4 J	5 J	3 J	3 J	3 J	4J	<5	<5	
1,1,1 TCA	5	8	5 J	1 J	<5	1 J	2 J	1 J	<5	6	<5	<5	



LEGEND

- SHALLOW MONITORING WELL
- DEEP MONITORING WELL
- RECOVERY WELL
- 1,1 DICHLOROETHANE
- 1,1 DICHLOROETHENE
- 1,1,1 TRICHLOROETHANE
- 1,1,2 TRICHLOROETHANE
- 1,2 DICHLOROETHENE (TOTAL)
- TETRACHLOROETHENE
- TRICHLOROETHENE
- ACTION LEVEL: APPLICABLE FEDERAL & STATE GROUNDWATER DRINKING WATER STANDARD
- ANALYTE WAS DETECTED IN ASSOCIATED BLANK
- ESTIMATED
- RESULTS REPORTED FROM DILUTED SAMPLE
- NOT SAMPLED, WELL DRY
- NOT DETECTED IN EXCESS OF STATED METHOD DETECTION LIMIT
- REINJECTION TRENCH AND MANHOLE

ED VALUES EXCEED ACTION LEVEL

ES MARKED WITH ASTERISK ARE THE ARITHMETIC OF NORMAL AND DUPLICATE SAMPLES

CONCENTRATIONS PRESENTED IN ug/L

E JUNE 2004, DIFFUSION BAG SAMPLING WAS PERFORMED: -TOPMOST BAG; B-BOTTOM BAG

MW-4S IN JUNE 2004, DIFFUSION BAG (DB) & LOW FLOW (LF) SAMPLES COLLECTED AS PER USEPA'S REQUEST.

100 0 100

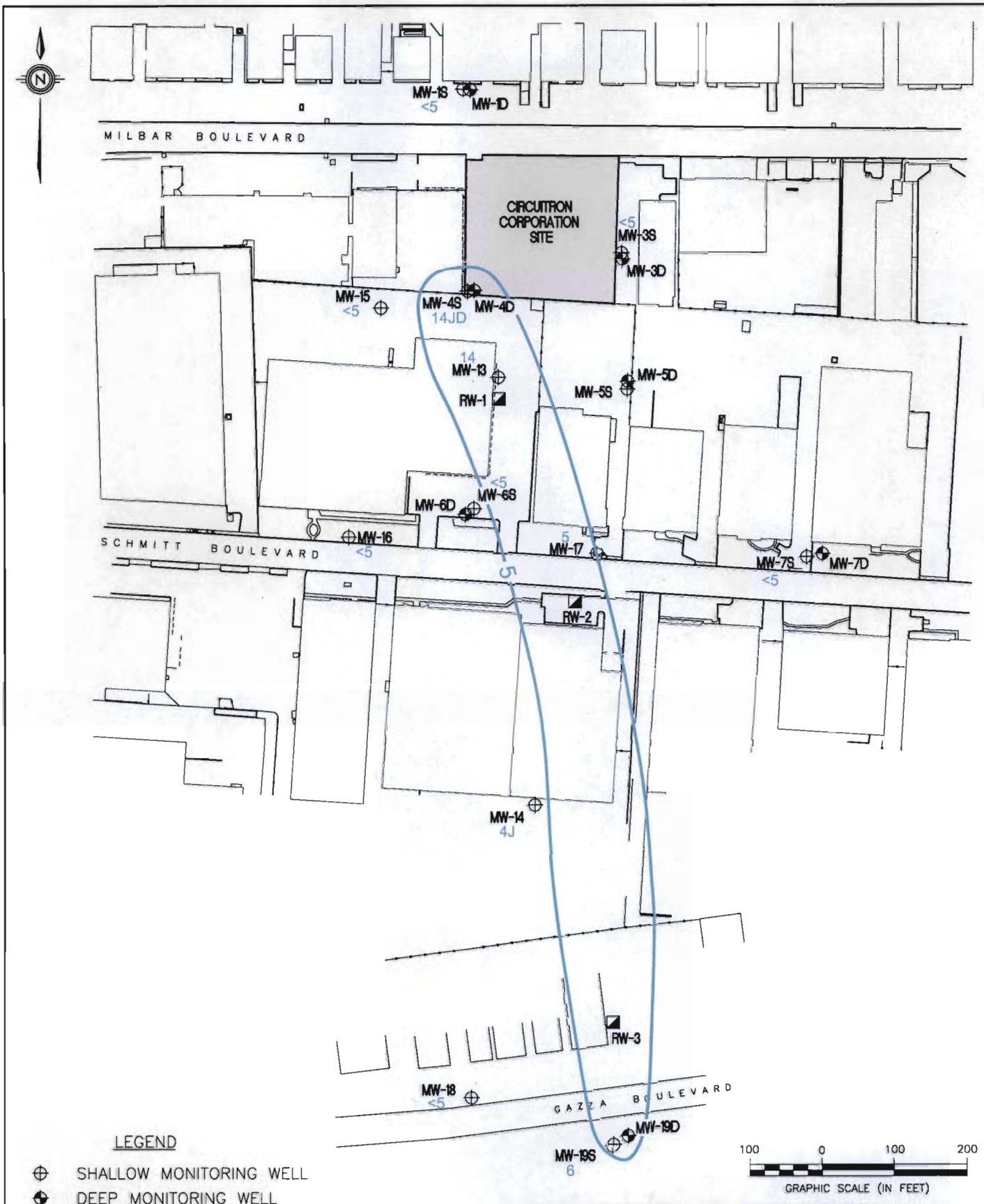
GRAPHIC SCALE (IN FE

Volatile Organic Compound Conce Exceeding Screening Criter Shallow Wells

Circuitron Corporation Superfund Site
East Farmingdale, New York

URS

FILENAME: FIG 4-1a.DWG | DATE: 11-29-07 | FI



LEGEND

- ⊕ SHALLOW MONITORING WELL
- ◆ DEEP MONITORING WELL
- ◪ RECOVERY WELL
- 4 1,1 DICHLOROETHANE (1,1 DCA) CONCENTRATION VALUE (ug/L)
- —— 1,1 DCA CONCENTRATION CONTOUR LINE

QUALIFERS:

- D RESULTS ARE REPORTED FOR THE DILUTED SAMPLES
- J ASSOCIATED VALUE IS AN ESTIMATED QUANTITY

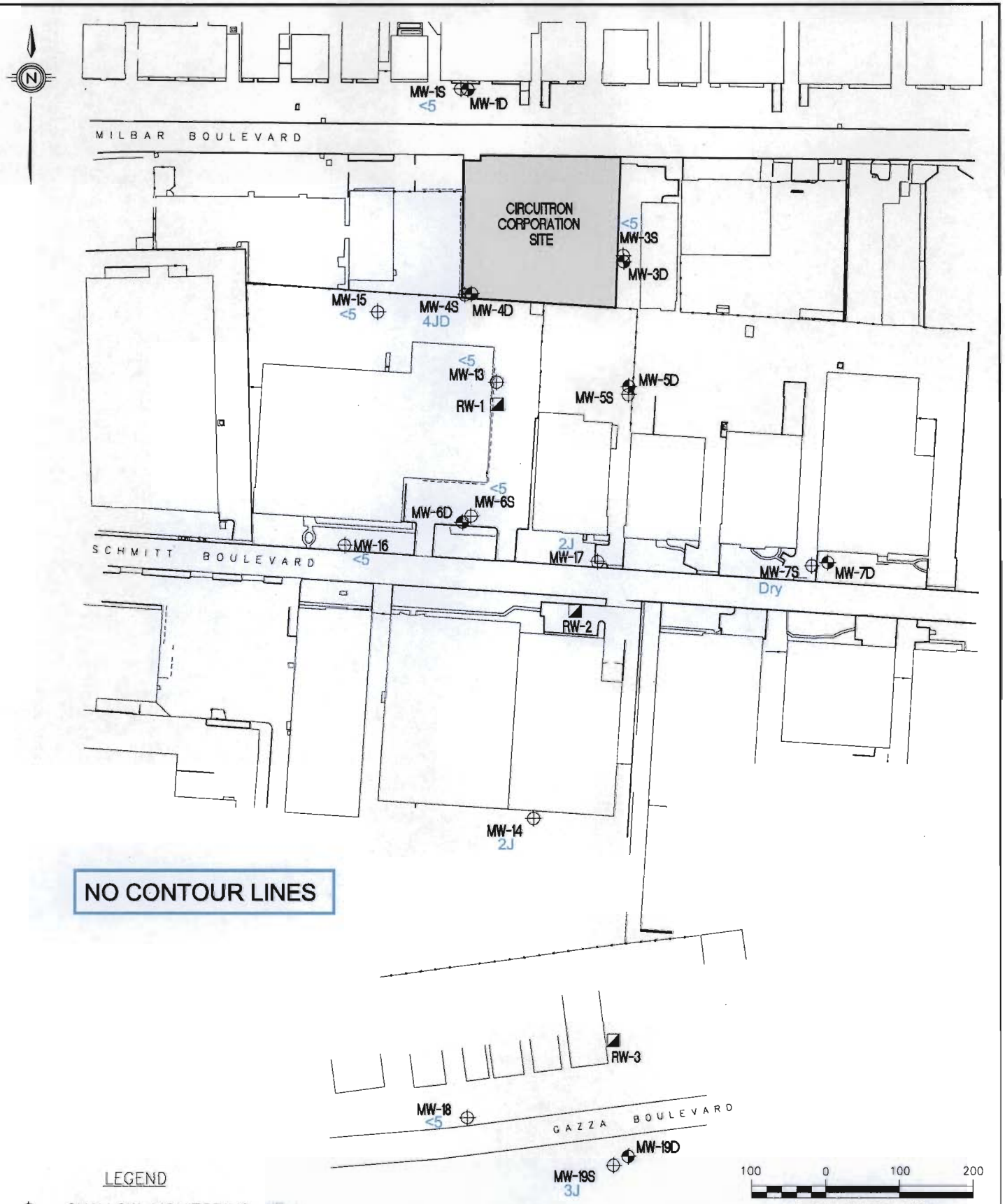
1,1 DCA June 2000

Isoconcentration Map (ug/L)
Upper Glacial Aquifer

Circuitron Corporation Superfund Site
East Farmingdale, New York

URS

FILENAME: FIG 4-3a.DWG	DATE: 4-29-03	FIGURE #: **4-3a**

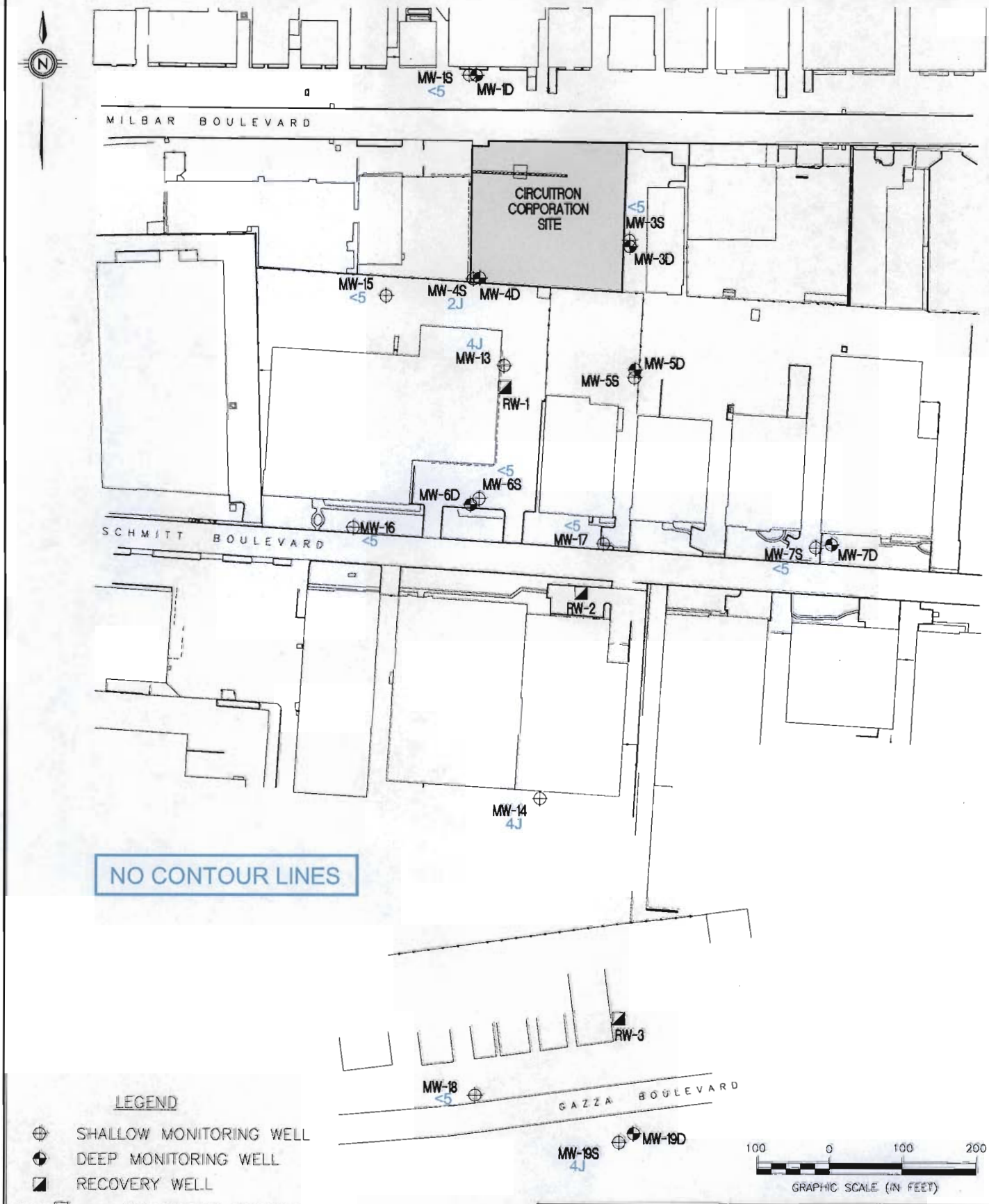


1,1 DCA February 2002

Isoconcentration Map (ug/L)
Upper Glacial Aquifer
Circuitron Corporation Superfund Site
East Farmingdale, New York

URS

FILENAME: FIG 4-3b.DWG	DATE: 4-29-03	FIGURE #: **4-3b**



LEGEND

- SHALLOW MONITORING WELL
- DEEP MONITORING WELL
- RECOVERY WELL
- REINJECTION TRENCH AND MANHOLE
- 4 1,1 DICHLOROETHANE (1,1 DCA) CONCENTRATION VALUE (ug/L)
- 1,1 DCA CONCENTRATION CONTOUR LINE

QUALIFERS:

- D RESULTS ARE REPORTED FOR THE DILUTED SAMPLES
- J ASSOCIATED VALUE IS AN ESTIMATED QUANTITY

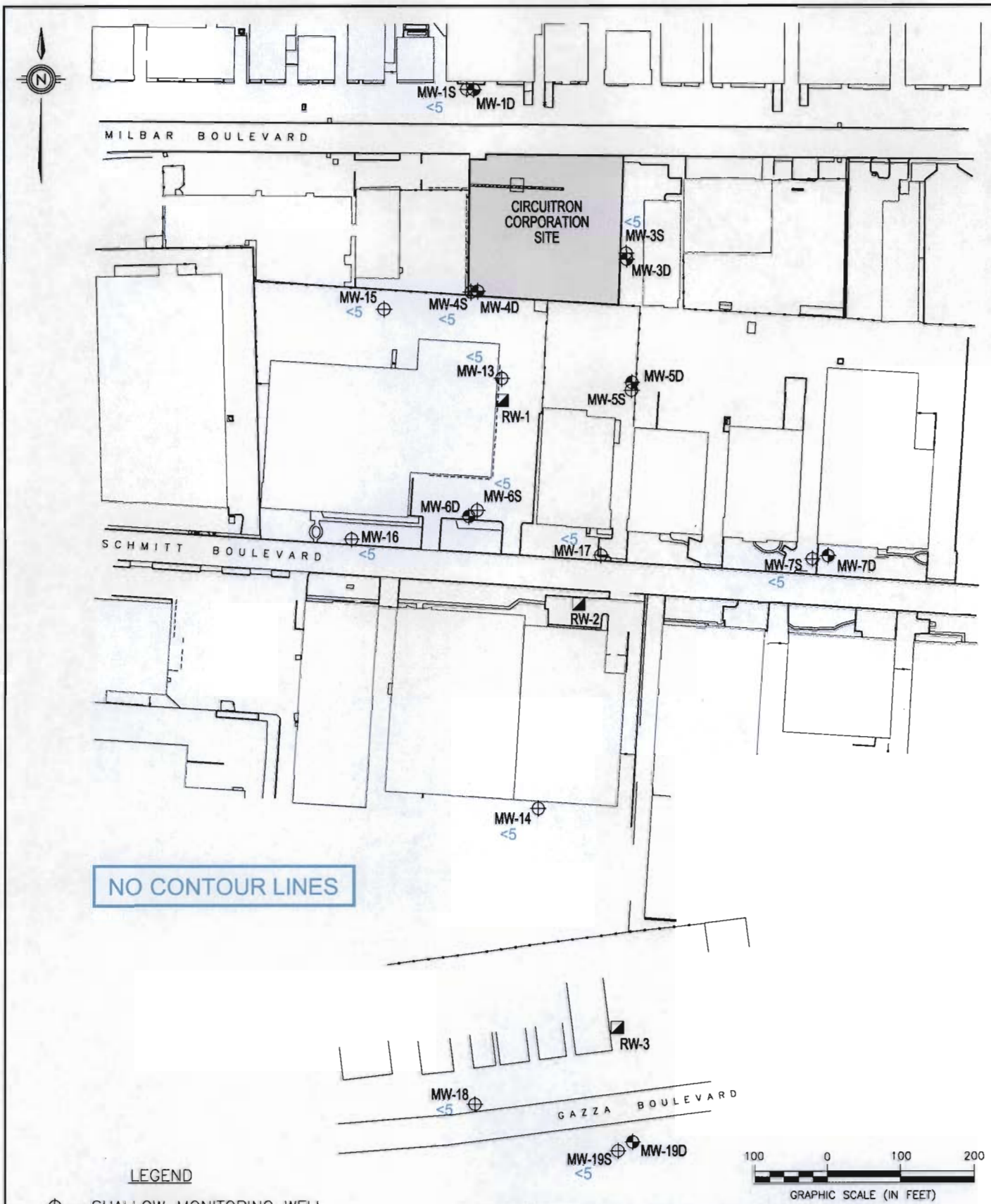
1,1 DCA April 2003

Isoconcentration Map (ug/L) Upper Glacial Aquifer

Circuitron Corporation Superfund Site
East Farmingdale, New York

URS

FILENAME: FIG 4-3c.DWG | DATE: 2-2-04 | FIGURE #: 4-3c



LEGEND

- ⊕ SHALLOW MONITORING WELL
- ⊕ DEEP MONITORING WELL
- ◪ RECOVERY WELL
- REINJECTION TRENCH AND MANHOLE
- 4 1,1 DICHLOROETHANE (1,1 DCA) CONCENTRATION VALUE (ug/L)
- 1,1 DCA CONCENTRATION CONTOUR LINE

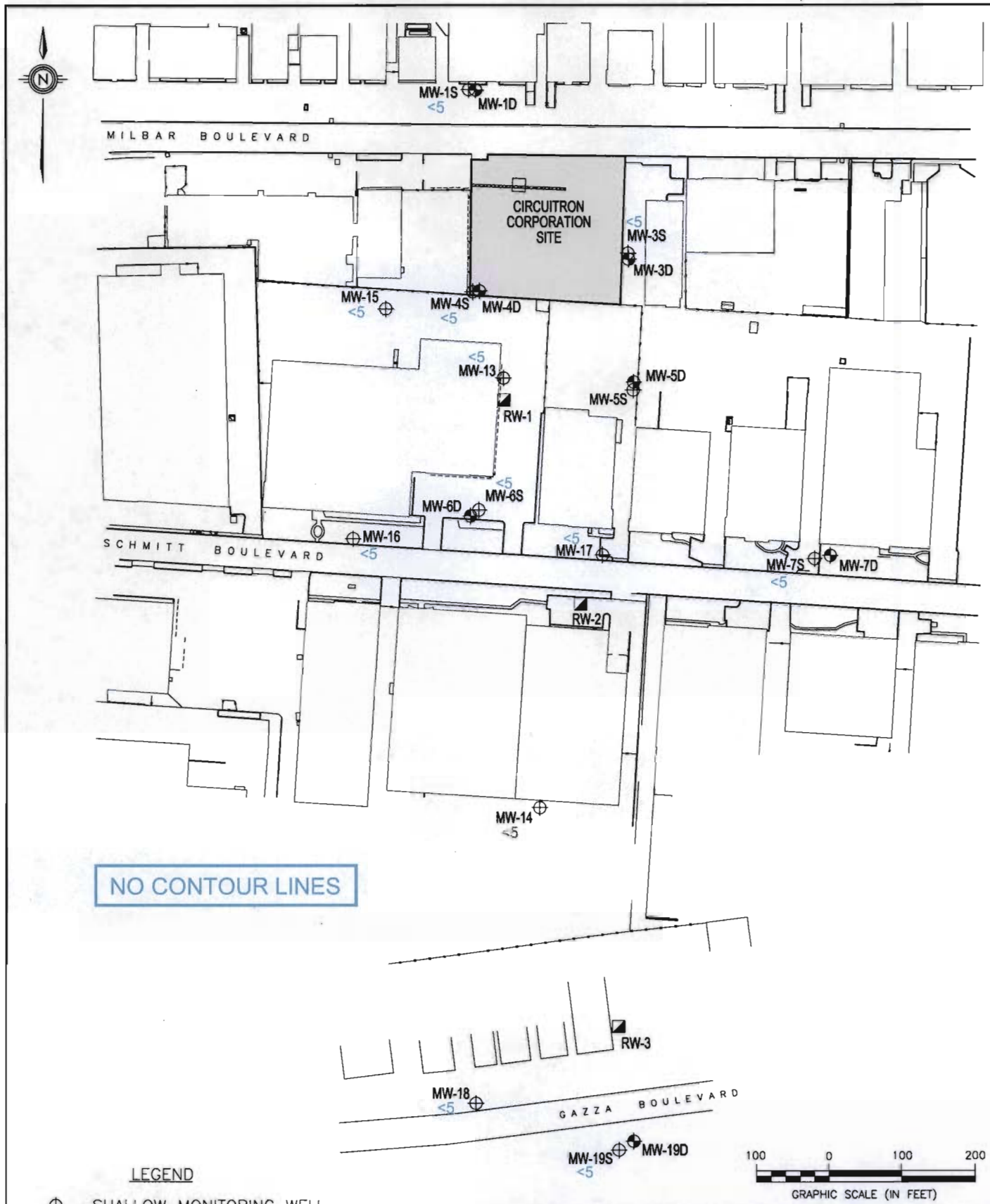
1,1 DCA June 2004

Isoconcentration Map (ug/L) Upper Glacial Aquifer

Circuitron Corporation Superfund Site
East Farmingdale, New York

URS

FILENAME: FIG 4-3d.DWG	DATE: 8-20-04	FIGURE #: 4-3d



LEGEND

- ⊕ SHALLOW MONITORING WELL
- ◆ DEEP MONITORING WELL
- ◪ RECOVERY WELL
- REINJECTION TRENCH AND MANHOLE
- 4 1,1 DICHLOROETHANE (1,1 DCA) CONCENTRATION VALUE (ug/L)
- 1,1 DCA CONCENTRATION CONTOUR LINE

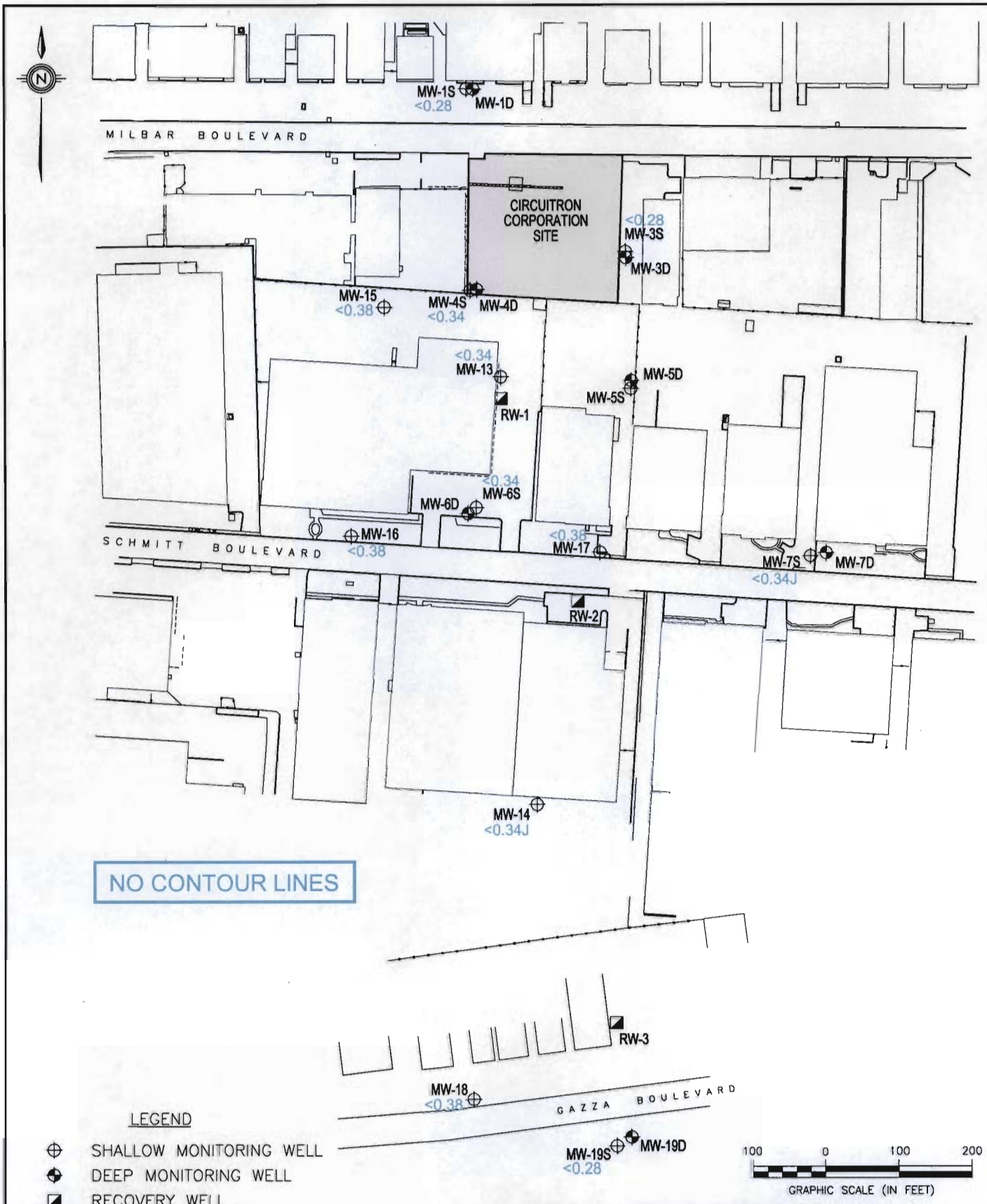
1,1 DCA June 2005

Isoconcentration Map (ug/L) Upper Glacial Aquifer

Circuitron Corporation Superfund Site
East Farmingdale, New York

URS

FILENAME: FIG 4-3e.DWG	DATE: 9-7-05	FIGURE #: 4-3e



LEGEND

- SHALLOW MONITORING WELL
- DEEP MONITORING WELL
- RECOVERY WELL
- REINJECTION TRENCH AND MANHOLE
- 4 1,1 DICHLOROETHANE (1,1 DCA) CONCENTRATION VALUE (ug/L)
- 1,1 DCA CONCENTRATION CONTOUR LINE

QUALIFERS:

J ASSOCIATED VALUE IS AN ESTIMATED QUANTITY

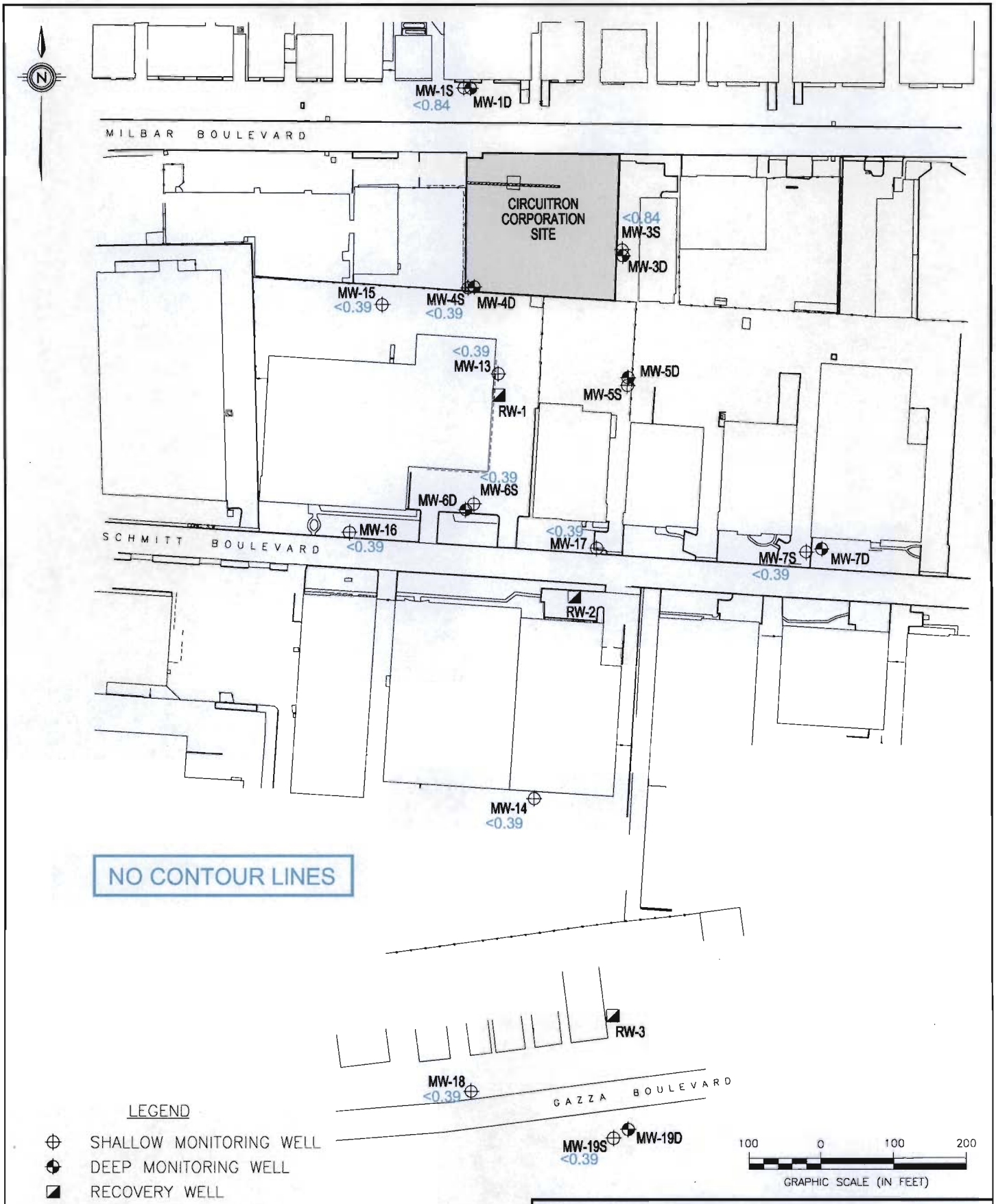
1,1 DCA July 2006

Isoconcentration Map (ug/L) Upper Glacial Aquifer

Circuitron Corporation Superfund Site
East Farmingdale, New York

URS

FILENAME: FIG 4-3f.DWG	DATE: 9-11-06	FIGURE #: 4-3f



LEGEND

- SHALLOW MONITORING WELL
- DEEP MONITORING WELL
- RECOVERY WELL
- REINJECTION TRENCH AND MANHOLE
- 4 1,1 DICHLOROETHANE (1,1 DCA) CONCENTRATION VALUE (ug/L)
- 1,1 DCA CONCENTRATION CONTOUR LINE

QUALIFERS:

J ASSOCIATED VALUE IS AN ESTIMATED QUANTITY

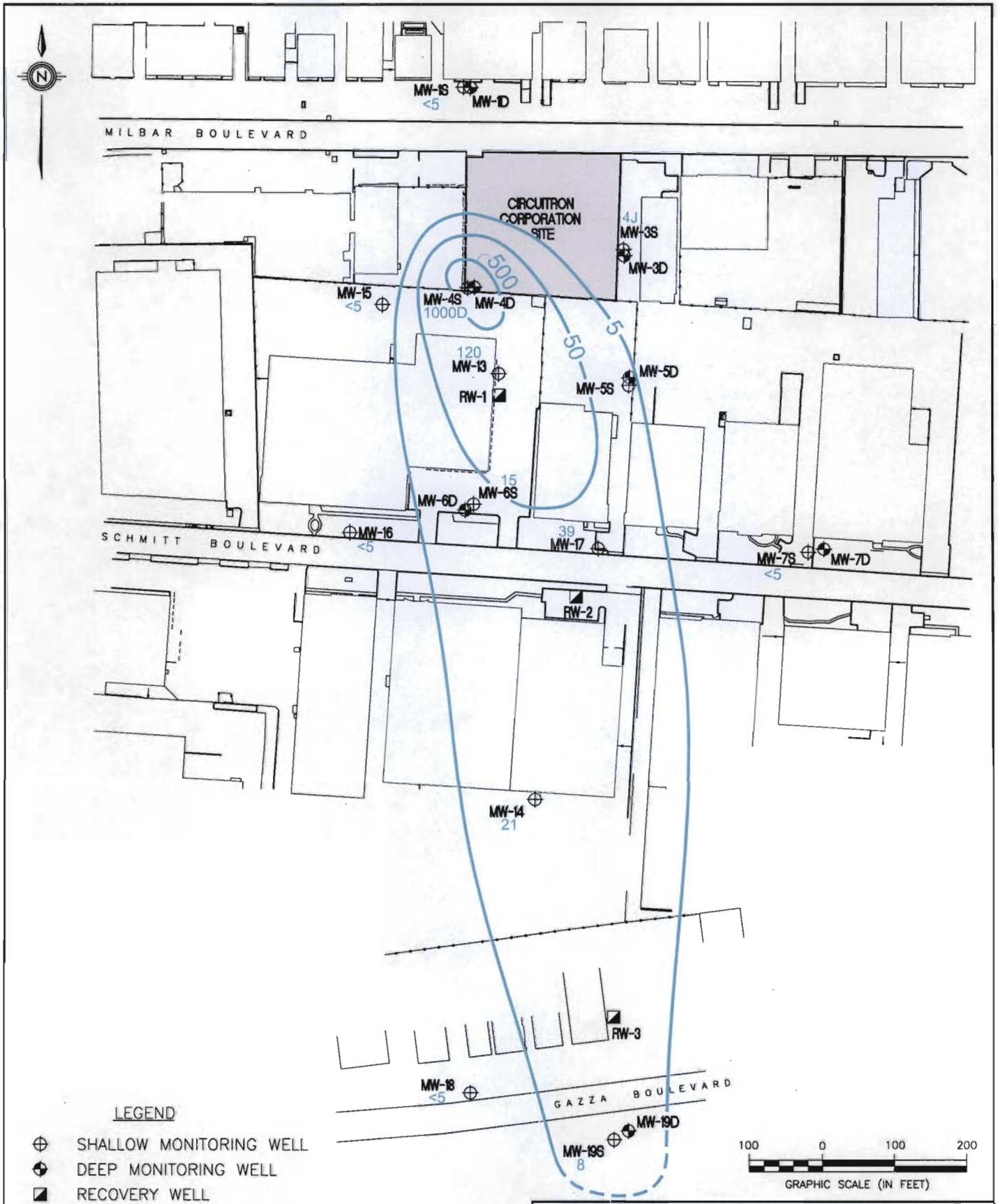
1,1 DCA August 2007

Isoconcentration Map (ug/L) Upper Glacial Aquifer

Circuitron Corporation Superfund Site
East Farmingdale, New York

URS

FILENAME: FIG 4-3g.DWG	DATE: 10-31-07	FIGURE #: 4-3g



LEGEND

- ⊕ SHALLOW MONITORING WELL
- ◆ DEEP MONITORING WELL
- ◪ RECOVERY WELL
- 8 1,1,1 TRICHLOROETHANE (1,1,1 TCA) CONCENTRATION VALUE (ug/L)
- —— 1,1,1 TCA CONCENTRATION CONTOUR LINE (DASHED WHERE INFERRED)

QUALIFERS:

- D RESULTS ARE REPORTED FOR THE DILUTED SAMPLES
- J ASSOCIATED VALUE IS AN ESTIMATED QUANTITY

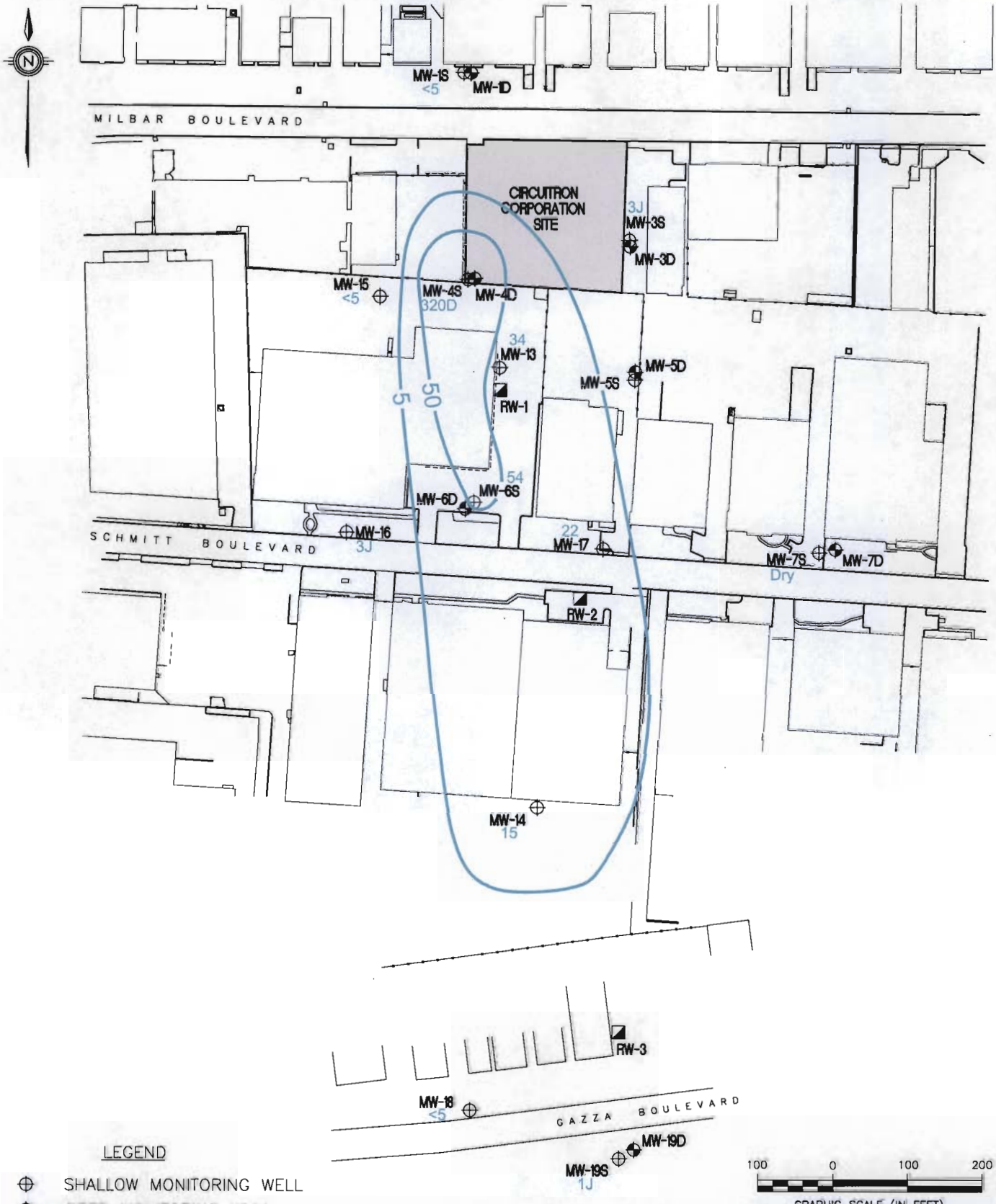
1,1,1 TCA June 2000

Isoconcentration Map (ug/L) Upper Glacial Aquifer

Circuitron Corporation Superfund Site
East Farmingdale, New York

URS

FILENAME: FIG 4-4a.DWG	DATE: 4-29-03	FIGURE #: 4-4a



LEGEND

- ⊕ SHALLOW MONITORING WELL
- ⊕ DEEP MONITORING WELL
- ◪ RECOVERY WELL
- 15 1,1,1 TRICHLOROETHANE (1,1,1 TCA) CONCENTRATION VALUE (ug/L)
- —— 1,1,1 TCA CONCENTRATION CONTOUR LINE

QUALIFERS:

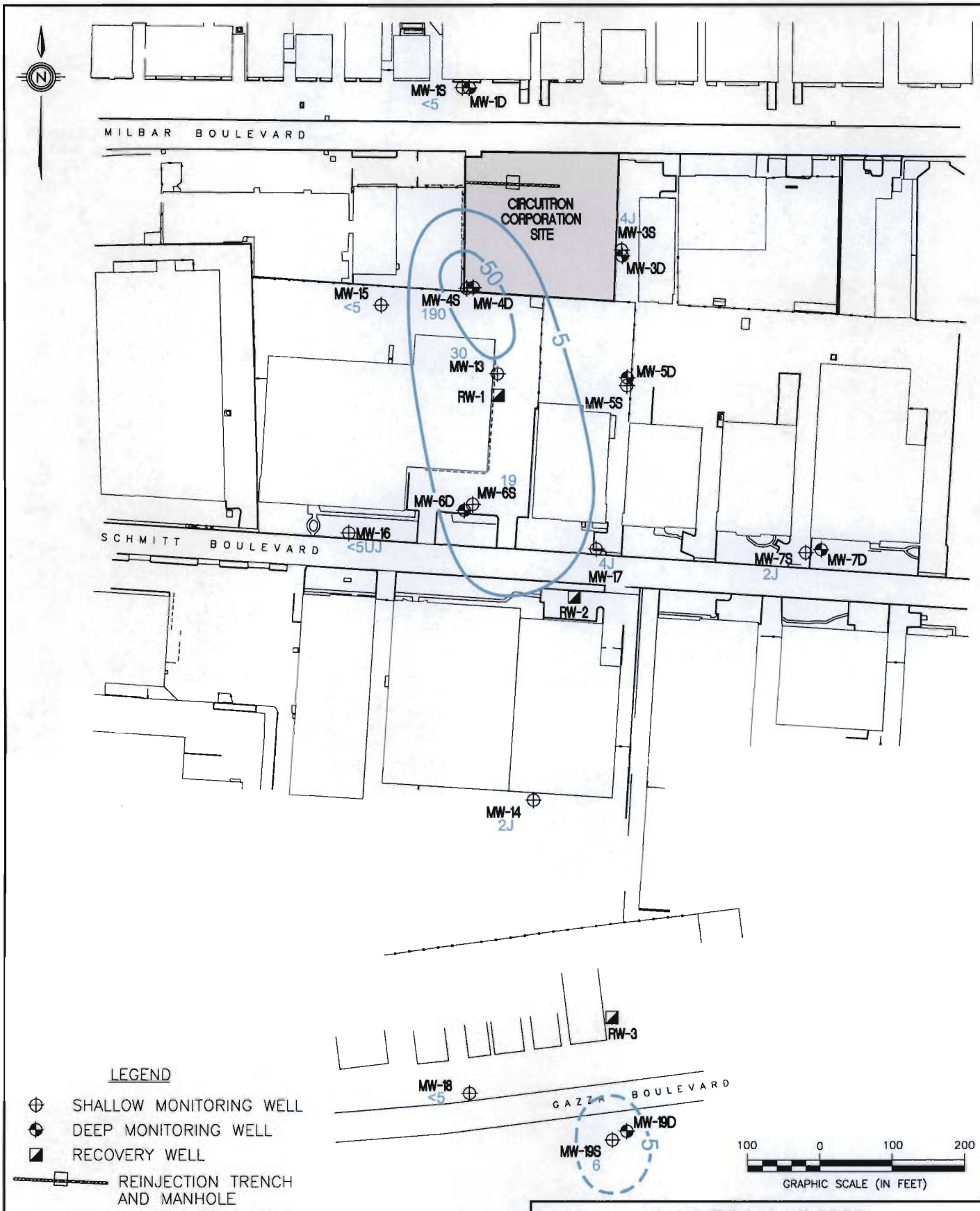
- D RESULTS ARE REPORTED FOR THE DILUTED SAMPLES
- J ASSOCIATED VALUE IS AN ESTIMATED QUANTITY

1,1,1 TCA JANUARY-FEBRUARY 2002

Isoconcentration Map (ug/L)
Upper Glacial Aquifer
Circuitron Corporation Superfund Site
East Farmingdale, New York

URS

FILENAME: FIG 4-4b.DWG	DATE: 4-29-03	FIGURE #: 4-4b



LEGEND

- ⊕ SHALLOW MONITORING WELL
- ⊕ DEEP MONITORING WELL
- ◪ RECOVERY WELL
- REINJECTION TRENCH AND MANHOLE
- 8 1,1,1 TRICHLOROETHANE (1,1,1 TCA) CONCENTRATION VALUE (ug/L)
- 1,1,1 TCA CONCENTRATION CONTOUR LINE (DASHED WHERE INFERRED)

QUALIFERS:

- D RESULTS ARE REPORTED FOR THE DILUTED SAMPLES
- J ASSOCIATED VALUE IS AN ESTIMATED QUANTITY

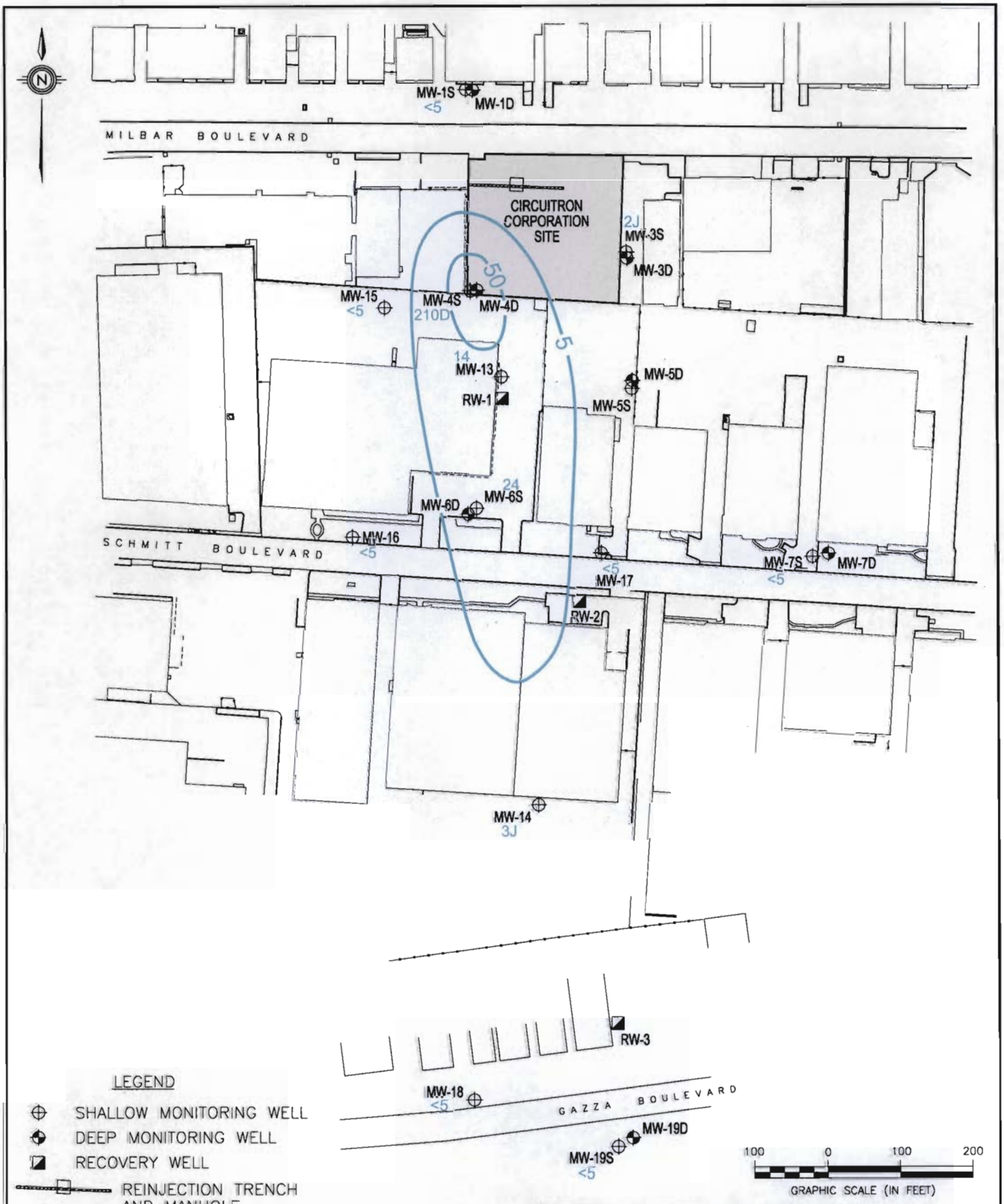
1,1,1 TCA April 2003

Isoconcentration Map (ug/L) Upper Glacial Aquifer

Circuitron Corporation Superfund Site
East Farmingdale, New York

URS

FILENAME: FIG 4-4c.DWG	DATE: 2-2-04	FIGURE #: 4-4c



LEGEND

- ⊕ SHALLOW MONITORING WELL
- ⊕ DEEP MONITORING WELL
- ◪ RECOVERY WELL
- REINJECTION TRENCH AND MANHOLE
- 8 1,1,1 TRICHLOROETHANE (1,1,1 TCA) CONCENTRATION VALUE (ug/L)
- 1,1,1 TCA CONCENTRATION CONTOUR LINE (DASHED WHERE INFERRED)

QUALIFERS:

- D RESULTS ARE REPORTED FOR THE DILUTED SAMPLES
- J ASSOCIATED VALUE IS AN ESTIMATED QUANTITY

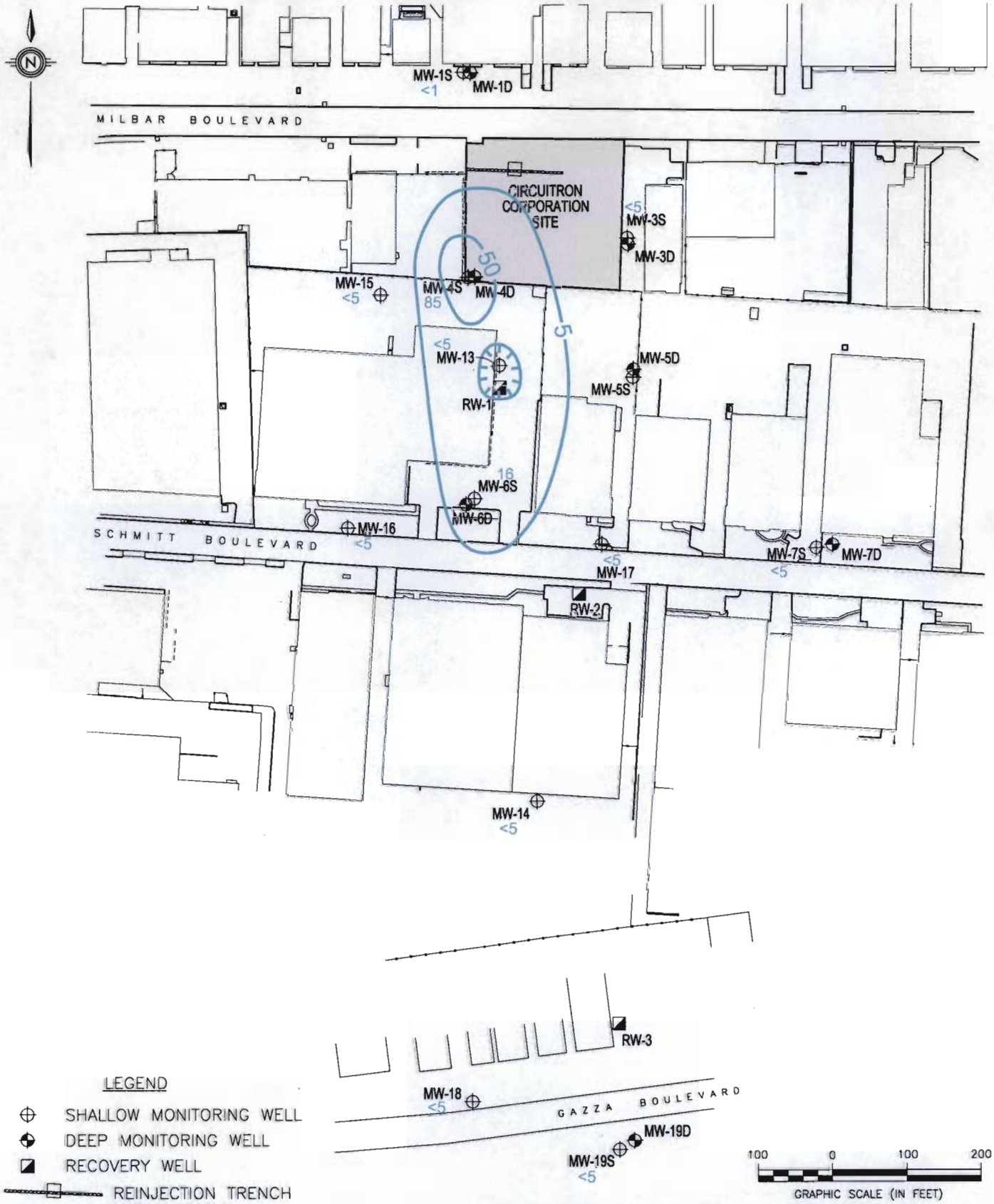
1,1,1 TCA June 2004

Isoconcentration Map (ug/L) Upper Glacial Aquifer

Circuitron Corporation Superfund Site
East Farmingdale, New York

URS

FILENAME: FIG 4-4d.DWG	DATE: 8-20-04	FIGURE #: 4-4d



LEGEND

- ⊕ SHALLOW MONITORING WELL
- ◆ DEEP MONITORING WELL
- ◪ RECOVERY WELL
- REINJECTION TRENCH AND MANHOLE
- 8 1,1,1 TRICHLOROETHANE (1,1,1 TCA) CONCENTRATION VALUE (ug/L)
- 1,1,1 TCA CONCENTRATION CONTOUR LINE (DASHED WHERE INFERRED)

QUALIFERS:

- D RESULTS ARE REPORTED FOR THE DILUTED SAMPLES
- J ASSOCIATED VALUE IS AN ESTIMATED QUANTITY

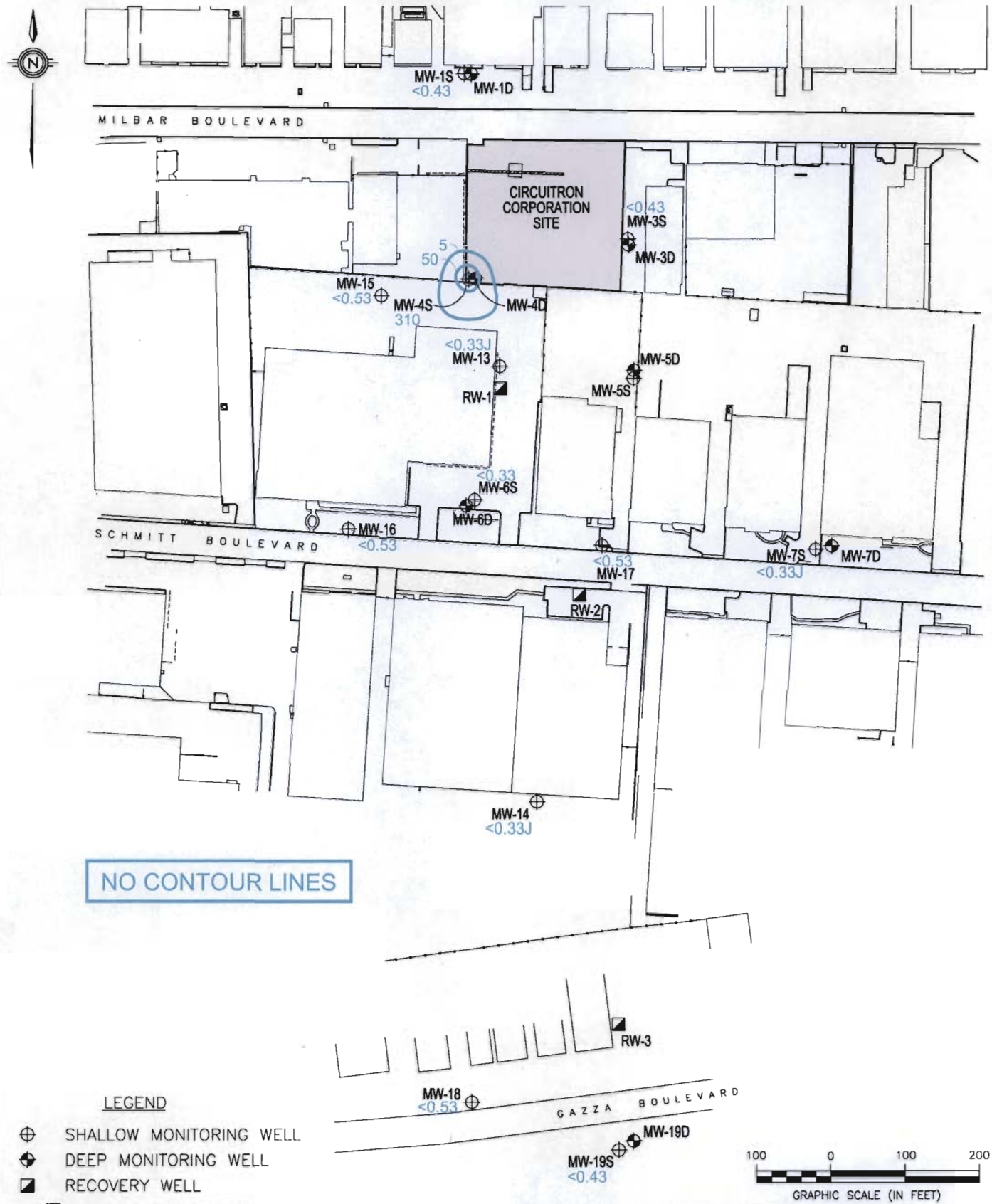
1,1,1 TCA June 2005

Isoconcentration Map (ug/L) Upper Glacial Aquifer

Circuitron Corporation Superfund Site
East Farmingdale, New York

URS

FILENAME: FIG 4-4e.DWG	DATE: 9-7-05	FIGURE #: 4-4e



LEGEND

- ⊕ SHALLOW MONITORING WELL
- ⊕ DEEP MONITORING WELL
- ◪ RECOVERY WELL
- REINJECTION TRENCH AND MANHOLE
- 8 1,1,1 TRICHLOROETHANE (1,1,1 TCA) CONCENTRATION VALUE (ug/L)
- 1,1,1 TCA CONCENTRATION CONTOUR LINE (DASHED WHERE INFERRED)

QUALIFERS:

J ASSOCIATED VALUE IS AN ESTIMATED QUANTITY

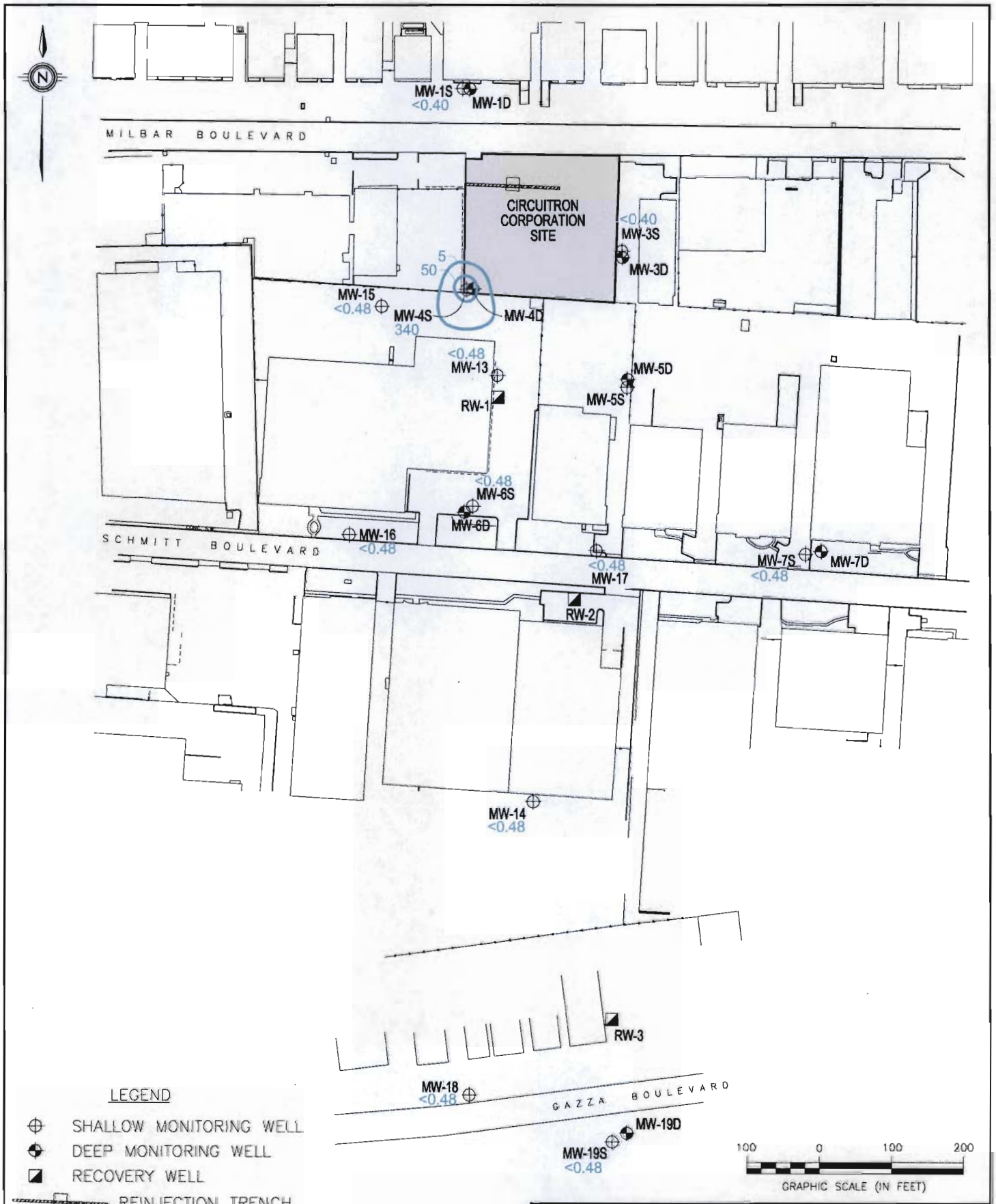
1,1,1 TCA July 2006

Isoconcentration Map (ug/L) Upper Glacial Aquifer

Circuitron Corporation Superfund Site
East Farmingdale, New York

URS

FILENAME: FIG 4-4f.DWG	DATE: 9-11-06	FIGURE #: 4-4f



LEGEND

- ⊕ SHALLOW MONITORING WELL
- ⊕ DEEP MONITORING WELL
- ◪ RECOVERY WELL
- REINJECTION TRENCH AND MANHOLE
- 8 1,1,1 TRICHLOROETHANE (1,1,1 TCA) CONCENTRATION VALUE (ug/L)
- 1,1,1 TCA CONCENTRATION CONTOUR LINE (DASHED WHERE INFERRED)

QUALIFERS:

J ASSOCIATED VALUE IS AN ESTIMATED QUANTITY

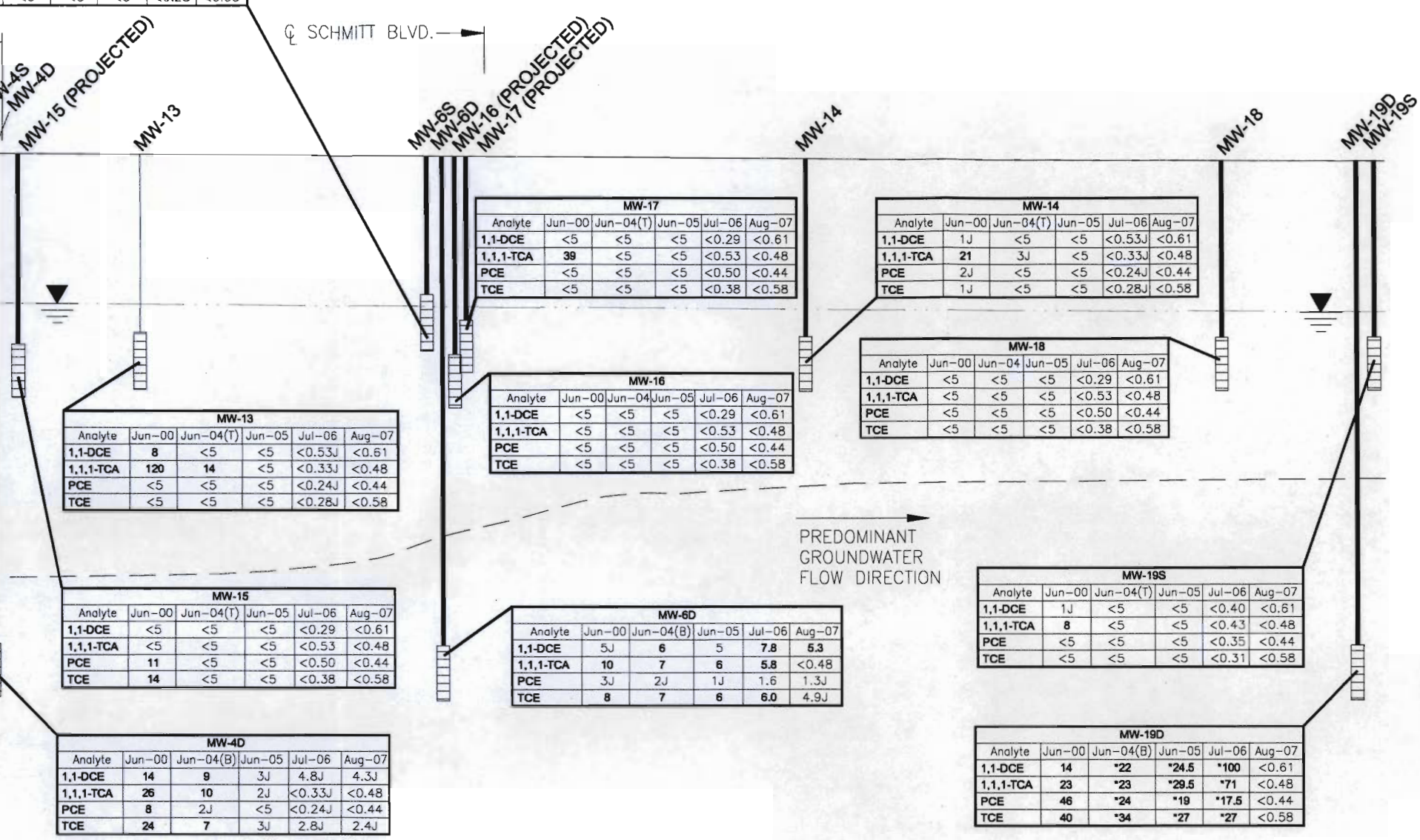
1,1,1 TCA August 2007

Isoconcentration Map (ug/L) Upper Glacial Aquifer

Circuitron Corporation Superfund Site
East Farmingdale, New York

URS

FILENAME: FIG 4-4g.DWG	DATE: 11-29-07	FIGURE #: 4-4g



MW-17

Analyte	Jun-00	Jun-04(T)	Jun-05	Jul-06	Aug-07
1,1-DCE	<5	<5	<5	<0.29	<0.61
1,1,1-TCA	39	<5	<5	<0.53	<0.48
PCE	<5	<5	<5	<0.50	<0.44
TCE	<5	<5	<5	<0.38	<0.58

MW-14

Analyte	Jun-00	Jun-04(T)	Jun-05	Jul-06	Aug-07
1,1-DCE	1J	<5	<5	<0.53J	<0.61
1,1,1-TCA	21	3J	<5	<0.33J	<0.48
PCE	2J	<5	<5	<0.24J	<0.44
TCE	1J	<5	<5	<0.28J	<0.58

MW-18

Analyte	Jun-00	Jun-04	Jun-05	Jul-06	Aug-07
1,1-DCE	<5	<5	<5	<0.29	<0.61
1,1,1-TCA	<5	<5	<5	<0.53	<0.48
PCE	<5	<5	<5	<0.50	<0.44
TCE	<5	<5	<5	<0.38	<0.58

MW-16

Analyte	Jun-00	Jun-04	Jun-05	Jul-06	Aug-07
1,1-DCE	<5	<5	<5	<0.29	<0.61
1,1,1-TCA	<5	<5	<5	<0.53	<0.48
PCE	<5	<5	<5	<0.50	<0.44
TCE	<5	<5	<5	<0.38	<0.58

MW-13

Analyte	Jun-00	Jun-04(T)	Jun-05	Jul-06	Aug-07
1,1-DCE	8	<5	<5	<0.53J	<0.61
1,1,1-TCA	120	14	<5	<0.33J	<0.48
PCE	<5	<5	<5	<0.24J	<0.44
TCE	<5	<5	<5	<0.28J	<0.58

MW-19S

Analyte	Jun-00	Jun-04(T)	Jun-05	Jul-06	Aug-07
1,1-DCE	1J	<5	<5	<0.40	<0.61
1,1,1-TCA	8	<5	<5	<0.43	<0.48
PCE	<5	<5	<5	<0.35	<0.44
TCE	<5	<5	<5	<0.31	<0.58

MW-15

Analyte	Jun-00	Jun-04(T)	Jun-05	Jul-06	Aug-07
1,1-DCE	<5	<5	<5	<0.29	<0.61
1,1,1-TCA	<5	<5	<5	<0.53	<0.48
PCE	11	<5	<5	<0.50	<0.44
TCE	14	<5	<5	<0.38	<0.58

MW-6D

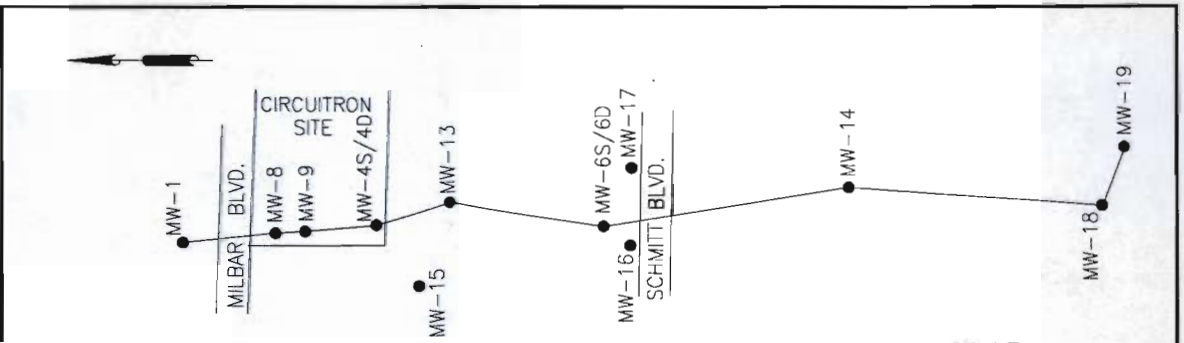
Analyte	Jun-00	Jun-04(B)	Jun-05	Jul-06	Aug-07
1,1-DCE	5J	6	5	7.8	5.3
1,1,1-TCA	10	7	6	5.8	<0.48
PCE	3J	2J	1J	1.6	1.3J
TCE	8	7	6	6.0	4.9J

MW-19D

Analyte	Jun-00	Jun-04(B)	Jun-05	Jul-06	Aug-07
1,1-DCE	14	*22	*24.5	*100	<0.61
1,1,1-TCA	23	*23	*29.5	*71	<0.48
PCE	46	*24	*19	*17.5	<0.44
TCE	40	*34	*27	*27	<0.58

MW-4D

Analyte	Jun-00	Jun-04(B)	Jun-05	Jul-06	Aug-07
1,1-DCE	14	9	3J	4.8J	4.3J
1,1,1-TCA	26	10	2J	<0.33J	<0.48
PCE	8	2J	<5	<0.24J	<0.44
TCE	24	7	3J	2.8J	2.4J



Cross-section

5.0 SUMMARY AND CONCLUSIONS

This section presents a summary of the findings and conclusions for this Annual Performance Evaluation.

5.1 GROUNDWATER FLOW

The groundwater flow pattern for the upper portion of the Upper Glacial Aquifer has changed as a result of the remediation system operation. Shallow groundwater contamination located within the observed zone of capture is being directed to the remediation system for treatment. The groundwater flow paths from August 2002, March 2004, June 2005, June 2006, and July 2007 also indicate that the observed zone of capture during that period extends beyond the modeled capture zone to include wells MW-16 and MW-7S.

5.2 GROUNDWATER QUALITY

Monitoring well MW-1S is located upgradient of the site with respect to groundwater flow direction and is the background well for the shallow portion of the Upper Glacial Aquifer for the site. Comparison of the results from each shallow well located downgradient of well MW-1S provides a benchmark to determine if the concentrations detected in the downgradient wells are site-related. A compound is considered site-related if it is observed as an exceedance in groundwater from a site well and not observed as an exceedance in groundwater obtained from the upgradient well prior to remediation system startup (February 1994 and June 2000 sampling events).

Monitoring well MW-1D is located upgradient of the site and is screened within the deep portion of the Upper Glacial Aquifer. Comparison of the results from each deep well located downgradient of well MW-1D provides a benchmark to determine if the concentrations detected in the downgradient deep wells are site-related. A compound is considered site-related if it is observed as an exceedance in groundwater from a site well and not observed as an exceedance in groundwater obtained from the upgradient well prior to remediation system startup (May 1993, February 1994 and June 2000 sampling events). The May 1993 data was also used along with the February 1994 data in this comparison because of the lead that exceeded the action level during that sampling event. A compound will not be considered site-related in groundwater from the deep aquifer unless it is determined to be site-related in shallow groundwater.

5.2.1 Shallow Wells - VOCs

VOCs present in the groundwater from the shallow portion of the Upper Glacial Aquifer within this area appear to be captured by the remediation system. Evidence for this is:

a) The levels of 1,1,1-TCA and 1,1-DCA present in January/February 2002, June 2004, June 2005, July 2006, and August 2007 are considerably less than the levels present in June 2000.

b) Both 1,1-DCA and 1,1,1-TCA were observed as an exceedance in groundwater from downgradient well MW-19S sampled prior to remediation system start-up (June 2000) and once again in April 2003 at a concentration just above the detection limit for 1,1,1-TCA of 5 µg/L. Other than this single exceedance in April 2003, these compounds were not observed as exceedances in groundwater sampled from this well during sampling events after the startup of the remediation system.

c) As of August 2007, the only shallow wells which exhibited levels of VOCs exceeding 5 µg/l are wells MW-4S and -6S. A single VOC (i.e., 1,1,1-TCA) was found in the groundwater from well MW-6S at a level exceeding 5 µg/l. Only 1,1,1-TCA and PCE were found in groundwater from well MW-4S at a level exceeding 5 µg/l.

d) The above indicates the success of the remediation system at capturing VOCs in the shallow aquifer.

5.2.2 Deep Wells - VOCs

Exceedances of 1,1-DCE, 1,1,1-TCA, PCE, and TCE were observed in groundwater from upgradient well MW-1D, sampled prior to start-up of the remediation system, indicating that these compounds are not site-related. VOCs were consistently detected in MW-1D until 2006 and 2007 when no VOCs were detected. These same compounds have historically had multiple exceedances in groundwater from downgradient well MW-19D until 2007 when no VOCs were detected. These results suggest that these chemicals (which are not site-related) are no longer being released into the deep aquifer.

In addition, multiple exceedances of 1,2-DCE were observed in groundwater from downgradient well MW-19D. The presence of 1,2-DCE will not be considered site-related because this compound is a breakdown product of PCE or TCE due to naturally occurring biodegradation. Neither PCE nor TCE were shown as site-related.

The level of 1,1-DCA in groundwater from MW-7D has been less than 5 µg/l since July 2002. Historically 1,1-DCA was observed as a multiple exceedance in groundwater from MW-7D; however, 1,1-DCA will not be considered site-related because this compound is a naturally occurring biodegradation product of 1,1,1-TCA (parent product), which was determined to be not site-related.

5.2.1 Water Quality Trends Over Time

The concentrations of VOCs have decreased in groundwater from a majority of the shallow wells located at the site during the Performance Monitoring period. The decrease in VOC concentrations during this timeframe is attributable to the successful operation of the remediation system.

Section 6.0
Recommendations

6.0 RECOMMENDATIONS

Continued operation of the remediation system under the current pumping conditions and performance monitoring is recommended for the Circuitron site because the remediation system is causing a decrease in the levels of VOCs in the shallow groundwater at the site.

It is also recommended that collection of groundwater from the deep wells for the purpose of chemical analysis be eliminated.

At this time, USEPA is conducting a pilot study at MW-4S to locally treat the contaminants at that well. During this one-year period, the GWTS is being only operated 4-6 hours every two weeks.

Section 7.0
References

7.0 REFERENCES

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Appendix A-1
Total VOC Concentrations

Appendix A-1
Total VOC Concentrations

Appendix A-1
Total VOC Concentrations

Well Type	Monitoring Well	Jun 2000	Oct 2000	Jan - Feb 2001	Apr - May 2001	Jul - Aug 2001	Oct 2001	Jan - Feb 2002	Jul - Aug 2002	Apr-03	Jun-04	Jun-05	Jul-06	Aug-07
Shallow	MW-1S	16		5		56	4	8		5				
Shallow	MW-3S	20	13	5	7	8	8	6	*4	4	2	2		
Shallow	MW-4S	1155	915	720	279	93	328	347		219	**239	*89	314.4	346.6
Shallow	MW-6S	15	374	119	89	*112	107	64		19	**25	16		
Shallow	MW-7S		*2	*2			11					1		
Shallow	MW-13	154	397	124	47	41	31	35	*14	34	**10			11.5
Shallow	MW-14	30	10	17	13	14	15	21	1	6	**3		1.3	1.3
Shallow	MW-15	68	*1	*35	29		5	*2						
Shallow	MW-16				*		1	3						
Shallow	MW-17	44	71	37	11	14	32	26	8	4				
Shallow	MW-18			13	13	*	10					5		
Shallow	MW-19S	17	34	21	14	13	16	5	5	10				
Deep	MW-1D	61	52	45	*41	7	*53	57	45	27	**26	24	8.2	3.1
Deep	MW-3D	5	2	7	4	5	5	8	1	1			1.0	
Deep	MW-4D	*94	57	49	50	41	38	43	37	*23	**34	10	10.6	9.2
Deep	MW-5D	*10	30	4	7	4	8							
Deep	MW-6D	30	24	35	14	20	31	17	37	25	**28	20	25.3	14.8
Deep	MW-7D	30	35	29	36	23	32	*28	19	*8.5	**3			
Deep	MW-19D	133	139	136	158	176	*180	214	199	146	**111	*130	*231	

Note:

VOC: Volatile Organic Compound

All concentrations in ug/L

Blank cells indicate no VOCs detected

* Values marked with an asterisk are the arithmetic mean of normal and duplicate samples

** Values marked with two asterisks are the arithmetic mean of multiple diffusive bag samples. For MW-4S and MW-19D, values are the arithmetic mean of bag samples, duplicates, and low flow samples.

Appendix A-2
Groundwater
Sampling Results by Well

Appendix A-2
Groundwater Sampling Results by Well

Groundwater Sampling Analytical Results for
MW-1D

Analyte	NY Water Quality Criteria	May 1993*	Feb 1994*	June 2001	Oct 2001	Jan - Feb 2001	Apr - May 2001	Apr - May 2001 Duplicate	July - Aug 2001	Oct 2001	Oct 2001 Duplicate	Jan - Feb 2002	July - Aug 2002	Apr-03	June-04 (topmost bag)	June-04 (bottom bag)	June-05	June-06	Aug-07
1,1 Dichloroethane	5	4.00 J	**6.00**	5 J	5 J	4 J	4 J	4 J	< 5	4 J	4 J	4 J	4 J	3J	3J	3J	3J	1.4J	<0.84
1,1 Dichloroethene	5	**31.00 J**	**24.00**	**9**	**10**	**7**	**8**	**8**	< 5	**10**	**10**	**11**	**10**	**7**	**7**	**7**	**7**	4.8J	1.5J
1,1,1 Trichloroethane	5	**84.00 J**	**99.00**	**16**	**14**	**13**	**13**	**13**	<5	**16**	**17**	**14**	**12**	**8**	**7**	**7**	**8**	<0.43	<0.40
1,2 Dichloroethene (total)	5	4.00 J	4.00	1 J	2 J	<5	1 J	1 J	<5	1 J	1 J	1 J	2 J	1J	2J	1J	<5	<0.44	<0.84
Acetone	NP	5.00 R	5.00 R	8 JB	<10	3 JB	<10	<10	<10	<10	<10	<10	<10	<10	<10UJ	<10UJ	<10UJ	<16U	<8.7
Chloroform	7	3.00 UJ	1.00 U	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<0.24	<0.53
Methylene Chloride	5	2.00 R	2.00 U	4 JB	<5	4 JB	<5	<5	**7 J**	5 B	5 JB	**10 B**	<5	<5J	<4U	<4U	<5	<0.91	<1.7
Tetrachloroethene	5	**38.00 J**	**18.00**	5 J	**6**	4 J	5	5	<5	5	**6**	**6**	5	3J	2J	1J	1J	<0.35	<0.78
Toluene	5	1.00 UJ	1.00 U	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<0.31	<0.41
Trichloroethene	5	**76.00 J**	**82.00**	**13**	**15**	**10**	**10**	**10**	<5	**11**	**11**	**11**	**12**	5J	5	5	5	2.0J	1.6J
Turbidity	5	NR	NR	**35.5**	NR	**580**	0	0	0.0	NR	NR	**34.7**	0	**12**	NR	NR	NR	NR	NR
Antimony	3	17.90U	28.30 UJ	<2.2	NR	<2.3	NR	NR	<1.9	NR	NR	<1.9	<2.2	<2.5	NR	NR	NR	NR	NR
Arsenic	25	2.30 U	1.30 UJ	<3.2	NR	<2.4	NR	NR	<2.3	NR	NR	<3.0	<2.5	<3.5	NR	NR	NR	NR	NR
Beryllium	3	0.50 U	0.20 U	0.14	NR	0.14 J	NR	NR	<0.20	NR	NR	<0.10	0.24U	<0.10	NR	NR	NR	NR	NR
Chromium	50	31.40	36.20	**567**	NR	**255 J**	NR	NR	34.9	NR	NR	**55.7**	**153**	**145**	NR	NR	NR	NR	NR
Copper	200	16.50 B	9.00 B	16.6	NR	13.4	NR	NR	5.9	NR	NR	7.2	4.9	7	NR	NR	NR	NR	NR
Iron	300	**659**	**621**	**3020**	NR	**1110**	NR	NR	**302**	NR	NR	**456**	**1170**	**637**	NR	NR	NR	NR	NR
Lead	15	**16.4**	5.30 J	7.6 UJ	NR	<2.1	NR	NR	<2.6	NR	NR	4.0	2.2U	<2.6	NR	NR	NR	NR	NR
Manganese	300	31.20	60.10	211	NR	177	NR	NR	138	NR	NR	149	160	164	NR	NR	NR	NR	NR
Mercury	0.7	0.10 UJ	0.20 U	<0.10	NR	<0.10	NR	NR	<0.10	NR	NR	<0.10	<0.10	<0.10	NR	NR	NR	NR	NR
Nickel	100	10.60 B	10.80 U	52	NR	88.2	NR	NR	16.0	NR	NR	10.8	38.3	17	NR	NR	NR	NR	NR
Top of Screen Elevation: -3.00 feet																			
Groundwater Elevation (feet):				59.44	58.54	57.44	59.80	59.80	58.24	56.54	56.54	54.74	53.04	56.34	58.47	58.47	60.19	62.14	62.49
Bottom of Screen Elevation: -13.00 feet																			

Notes. Volatile and metal concentrations presented in micrograms per liter; turbidity measurements presented in nephelometric turbidity units
Elevations referenced to mean sea level
Since June 2004, monitoring wells have been sampled for VOC's only using the diffusion bag sampling method as per USEPA's request
Diffusion bags were placed with the center at 1 ft above the bottom of the well.
NS: Not sampled
NY Water Quality Criteria: NYSDEC Regulation for Surface Waters and Groundwater, Section 703.5 (August 1999)
NP: No proposed quantification level available
NR: Not required
Bolded values exceed the NY Water Quality Criteria
*Data presented from May 1993 and February 1994 as published in the Record of Decision (USEPA 1994). These data provide a benchmark of pre-remediation conditions for the upgradient wells
Data Qualifiers:
B. The analyte was detected in the blank sample
J: Associated value is an estimated quantity
U: Compound was not detected above the associated level
UJ. Compound is not detected and the associated quantitation limit is uncertain
R: Rejected during data validation

Groundwater Sampling Results for
MW-1S

Analyte	NY Water Quality Criteria	Feb 1994*	June 2000	Oct 2000	Jan - Feb 2001	Apr - May 2001	July - Aug 2001	Oct 2001	Jan - Feb 2002	July - Aug 2002	Apr 03	Jun-03	Jan-04	Jun-05	Aug-07
1,1 Dichloroethane	5	0.70 J	<5	<5	<5	<5	5 J	<5	<5	<5	<5	<5	<5	<0.28	<0.84
1,1 Dichloroethene	5	1.00 U	<5	<5	<5	<5	**10**	<5	<5	<5	<5	<5	<5	<0.40	<0.96
1,1,1 Trichloroethane	5	0.40 J	<5	<5	<5	<5	**15**	<5	<5	<5	<5	<5	<5	<0.43	<0.40
1,2 Dichloroethene (total)	5	1.00 U	<5	<5	<5	<5	2 J	<5	<5	<5	<5	<5	<5	<0.44	<0.84
Acetone	NP	3.00 J	11 B	<10	3 JB	<10	<10	<10	<10	<10	5J	<7UJ	<10UJ	<16U	<8.7
Chloroform	7	1.00 U	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<0.24	<0.53
Methylene Chloride	5	2.00 U	5 B	<5	2 JB	<5	4 J	4 JB	**8 B**	<5	<5	<3U	<5	<0.91	<1.7
Tetrachloroethene	5	1.00 U	<5	<5	<5	<5	**8**	<5	<5	<5	<5	<5	<5	<0.35	<0.78
Toluene	5	1.00 U	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<0.31	<0.41
Trichloroethene	5	1.00 U	<5	<5	<5	<5	**12**	<5	<5	<5	<5	<5	<5	<0.31	<0.37
Turbidity	5	NR	**229**	NR	**27**	0	0.1	NR	**33.1**	0	**83**	NR	NR	NR	NR
Antimony	3	28.30 U	<2.2	NR	<2.3	NR	2.2 J	NR	<1.9	<2.2	<2.5	NR	NR	NR	NR
Arsenic	25	R	12.1	NR	18.5	NR	8.2	NR	6.0	11.1	<3.5	NR	NR	NR	NR
Beryllium	3	0.20 U	<0.10	NR	0.37 J	NR	<0.20	NR	<0.10	0.22U	<0.66U	NR	NR	NR	NR
Chromium	50	7.70 B	2.2	NR	2.2 J	NR	1.2	NR	3.3	3.1U	12.4	NR	NR	NR	NR
Copper	200	17.80 B	7.3	NR	1.9	NR	1.3	NR	3.3	<0.30	8.6	NR	NR	NR	NR
Iron	300	**52600.00**	**19400**	NR	**31200**	NR	**22000**	NR	**20000**	**24300**	**8990**	NR	NR	**15000**	NR
Lead	15	2.90 BJ	<2.3 UJ	NR	<2.1	NR	<2.6	NR	2.5	<1.7	<2.6	NR	NR	NR	NR
Manganese	300	**714.00**	**393**	NR	**559**	NR	**429**	NR	**366**	**403**	289	NR	NR	NR	NR
Mercury	0.7	0.20 U	<0.10	NR	<0.10	NR	<0.10	NR	<0.10	<0.10	<0.10	NR	NR	NR	NR
Nickel	100	10.80 U	2.2	NR	2.2	NR	<1.2	NR	3.0	4.1U	7.8	NR	NR	NR	NR
Top of Screen Elevation: 62.04 feet Groundwater Elevation (feet): Bottom of Screen Elevation: 52.04 feet			59.52	58.62	57.42	59.82	60.72	56.61	51.92	53.02	56.32	58.49	60.22	62.17	62.51

Notes: Volatile and metal concentrations presented in micrograms per liter, turbidity measurements presented in nephelometric turbidity units
Elevations referenced to mean sea level
Since June 2004, monitoring wells have been sampled for VOC's only using the diffusion bag sampling method as per USEPA's request
Diffusion bags were placed with the center at 1 ft above the bottom of the well
NS: Not sampled
NY Water Quality Criteria: NYSDEC Regulation for Surface Waters and Groundwater, Section 703.5 (August 1999)
NP: No proposed quantification level available
NR: Not required
Bolded values exceed the NY Water Quality Criteria
*Data presented from May 1993 and February 1994 is published in the Record of Decision (USEPA 1994). These data provide a benchmark of pre-remediation conditions for the upgradient wells
Data Qualifiers:
B: The analyte was detected in the blank sample
J: Associated value is an estimated quantity
U: Compound was not detected above the associated level
UJ: Compound is not detected and the associated quantitation limit is uncertain
R: Rejected during data validation

Groundwater Sampling Analytical Results for
MW-3D

Analyte	NY Water Quality Criteria	June 2003	Oct 2003	Jan - Feb 2004	Apr - May 2004	July - Aug 2004	Oct 2004	Jan - Feb 2005	July - Aug 2005	April 05	June 05 (topmost bag)	June 05 (bottom bag)	June 06	June 06	August 07
1,1 Dichloroethane	5	<5	<5	<5	<5	<5	<5	<5	<5J	<5	<5	<5	<5	<0.34	<0.84
1,1 Dichloroethene	5	<5	<5	<5	<5	<5	<5	<5	<5J	<5	<5	<5	<5	<0.53	<0.96
1,1,1 Trichloroethane	5	<5	1 J	1 J	<5	<5	1 J	1 J	1 J	1J	<5	<5	<5	<0.33	<0.40
1,1,2 Trichloroethane	1	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<0.25	<0.40
1,2 Dichloroethene (total)	5	<5	<5	<5	<5	<5	<5	<5	<5J	<5	<5	<5	<5	<0.40	<0.84
Acetone	NP	<10	<10	2 JB	4 J	<10	<10	<10	<10	<10	<10UJ	<10UJ	<10UJ	<2.7U	<8.7
Chloroform	7	<5	1 J	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<0.42	<0.53
Chloromethane	NP	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<0.51	<0.64
Methylene Chloride	5	5 JB	<5	4 JB	<5	5 J	4 JB	**7**	<5J	<5	<3U	<3U	<5	<1.2U	<1.7
Tetrachloroethene	5	<5	<5	<5	<5	<5	<5	<5	<5J	<5	<5	<5	<5	<0.24	<0.78
Toluene	5	<5	<5	<5	<5	<5	<5	<5	<5J	<5	<5	<5	<5	1.0	<0.41
Trichloroethene	5	<5	<5	<5	<5	<5	<5	<5	<5J	<5	<5	<5	<5	<0.28	<0.37
Turbidity	5	**23.3**	NR	2	**21**	0.0	NR	**114**	4.2	4	NR	NR	NR	NR	NR
Antimony	3	<2.2	NR	<2.3	NR	2.1 J	NR	<1.9	2.5U	<2.5	NR	NR	NR	NR	NR
Arsenic	25	<3.2	NR	<2.4	NR	<2.3	NR	<3.0	3.6U	<3.5	NR	NR	NR	NR	NR
Beryllium	3	<0.10	NR	0.15 J	NR	<0.20	NR	<0.10	<0.10	<0.49U	NR	NR	NR	NR	NR
Chromium	50	**86.1**	NR	7.1 J	NR	2.3	NR	**212**	**50.9**	49.7	NR	NR	NR	NR	NR
Copper	200	10.3	NR	3.9	NR	3.2	NR	17.9	14.9	8.5	NR	NR	NR	NR	NR
Iron	300	**600**	NR	176	NR	105	NR	**962**	**1080**	**793**	NR	NR	NR	NR	NR
Lead	15	7.9 J	NR	3.9	NR	<2.6	NR	11.0	10.6	6.7	NR	NR	NR	NR	NR
Manganese	300	144	NR	**418**	NR	269	NR	197	206	276	NR	NR	NR	NR	NR
Mercury	0.7	<0.10	NR	<0.10	NR	<0.10	NR	<0.10	<0.10	<0.10	NR	NR	NR	NR	NR
Nickel	100	58.1	NR	12.6	NR	8.2	NR	32.8	23.0	30.9	NR	NR	NR	NR	NR
Top of Screen Elevation: -1.65 feet															
Groundwater Elevation (feet):		59.07	57.97	56.92	59.32	57.77	56.07	54.15	52.57	56.07	57.70	57.70	59.82	-0.73	62.02
Bottom of Screen Elevation: -11.65 feet															

Notes: Volatile and metal concentrations presented in micrograms per liter; turbidity measurements presented in nephelometric turbidity units
Elevations referenced to mean sea level
Since June 2004, monitoring wells have been sampled for VOC's only using the diffusion bag sampling method as per USEPA's request
Diffusion bags were placed with the center at 1 ft above the bottom of the well.
NS: Not sampled
NY Water Quality Criteria: NYSDEC Regulation for Surface Waters and Groundwater, Section 703.5 (August 1999)
NP: No proposed quantification level available
NR: Not required
Bolded values exceed the NY Water Quality Criteria
*Data presented from May 1993 and February 1994 is published in the Record of Decision (USEPA 1994). These data provide a benchmark of pre-remediation conditions for the upgradient wells.
Data Qualifiers:
B: The analyte was detected in the blank sample
J: Associated value is an estimated quantity
U: Compound was not detected above the associated level
UJ: Compound is not detected and the associated quantitation limit is uncertain
R: Rejected during data validation

Groundwater Sampling Analytical Results for
MW-3S

Analyte	NY Water Quality Criteria	June 2000	Oct 2000	Jan - Feb 2001	Apr - May 2001	July - Aug 2001	Oct 2001	Jan - Feb 2002	July - Aug 2002	July - Aug 2002 Duplicate	April	June-04	June-05	June-06	Aug-07
1,1 Dichloroethane	5	<5	<5	<5	<5	<5	<5	<5	<5J	<5J	<5	<5	<5	<0.28	<0.84
1,1 Dichloroethene	5	<5	<5	<5	<5	<5	<5	<5	<5J	<5J	<5	<5	<5	<0.40	<0.96
1,1,1 Trichloroethane	5	4 J	**10**	5	**7**	4 J	3 J	3 J	5 J	4 J	4J	2J	2J	<0.43	<0.40
1,1,2 Trichloroethane	1	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<0.25	<0.40
1,2 Dichloroethene (total)	5	<5	<5	<5	<5	<5	<5	<5	<5J	<5J	<5	<5	<5	<0.44	<0.84
Acetone	NP	11 B	3 JB	<10	<10	<10	<10	<10	<10	<10	<10	<10UJ	<10UJ	<2.5U	<8.7
Chloroform	7	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<0.24	<0.53
Chloromethane	NP	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<0.64	<0.64
Methylene Chloride	5	5 B	<5	<5	<5	4 J	5 JB	3 J	<5J	<5J	<5	<3U	<5	<0.91	<1.7
Tetrachloroethene	5	<5	<5	<5	<5	<5	<5	<5	<5J	<5J	<5	<5	<5	<0.35	<0.78
Toluene	5	<5	<5	<5	<5	<5	<5	<5	<5J	<5J	<5	<5	<5	<0.31	<0.41
Trichloroethene	5	<5	<5	<5	<5	<5	<5	<5	<5J	<5J	<5	<5	<5	<0.31	<0.37
Turbidity	5	**57.4**	NR	**47**	4	0.0	NR	**13.3**	**10.1**	**10.1**	**30**	NR	NR	NR	NR
Antimony	3	<2.2	NR	<2.3	NR	<1.9	NR	<1.9	3.1U	<2.2	<2.5	NR	NR	NR	NR
Arsenic	25	3.4	NR	<3.4	NR	<2.3	NR	<3.0	<2.5	<2.5	<3.5	NR	NR	NR	NR
Beryllium	3	0.15	NR	<0.10	NR	<0.20	NR	<0.10	0.14U	0.22U	<0.42U	NR	NR	NR	NR
Chromium	50	10.5	NR	11.7 J	NR	1.6	NR	9.7	16.2	27.2	14.5	NR	NR	NR	NR
Copper	200	68.6	NR	34.2	NR	10.6	NR	28.0	26.4	27.0	29.1J	NR	NR	NR	NR
Iron	300	**4460**	NR	**3160**	NR	**885**	NR	**1290**	**2140**	**2400**	**1810**	NR	NR	NR	NR
Lead	15	11.6 J	NR	<2.1	NR	<2.6	NR	<2.2	5.0	6.0	4.9	NR	NR	NR	NR
Manganese	300	56.8	NR	100	NR	36.7	NR	33.7	31.4	79.9	24	NR	NR	NR	NR
Mercury	0.7	<0.10	NR	<0.10	NR	<0.10	NR	<0.10	<0.10	0.27	<0.10	NR	NR	NR	NR
Nickel	100	12.4	NR	19.4	NR	4.4	NR	10.6	24.4	23.0	11.6	NR	NR	NR	NR
Top of Screen Elevation: 60.53 feet															
Groundwater Elevation (feet):		59.15	57.45	57.22	59.34	58.25	56.10	54.35	52.85	52.85	55.65	58.10	59.80	61.70	62.00
Bottom of Screen Elevation: 50.53 feet															

Notes: Volatile and metal concentrations presented in micrograms per liter, turbidity measurements presented in nephelometric turbidity units
Elevations referenced to mean sea level
Since June 2004, monitoring wells have been sampled for VOC's only using the diffuson bag sampling method as per USEPA's request
Diffusion bags were placed with the center at 1 ft above the bottom of the well.
NS: Not sampled
NY Water Quality Criteria: NYSDEC Regulation for Surface Waters and Groundwater, Section 703.5 (August 1999)
NP: No proposed quantification level available
NR: Not required
Bolded values exceed the NY Water Quality Criteria
*Data presented from May 1993 and February 1994 is published in the Record of Decision (USEPA 1994). These data provide a benchmark of pre-remediation conditions for the upgradient wells
Data Qualifiers:
B: The analyte was detected in the blank sample
J: Associated value is an estimated quantity
U: Compound was not detected above the associated level
UJ: Compound is not detected and the associated quantitation limit is uncertain
R: Rejected during data validation

Groundwater Sampling Analytical Results for
MW-4D

Analyte	NY Water Quality Criteria	June 2000	June 2000 Duplicate	Oct 2000	Jan - Feb 2001	Apr - May 2001	July - Aug 2001	Oct 2001	Jan - Feb 2002	July - Aug 2002	Apr-03	April 2003 Duplicate	Jun-04 (topmost bag)	Jun-04 (bottom bag)	Jun-05	Jul-06	Aug-07
1,1 Dichloroethane	5	**7**	**8**	5	4 J	2 J	4 J	3 J	4 J	4 J	3J	3J	3J	4J	2J	3.0J	2.5J
1,1 Dichloroethene	5	**14**	**15**	**8**	**6**	**6**	**8**	**6**	**8**	**9J**	5J	5	**8**	**9**	3J	4.8J	4.3J
1,1,1 Trichloroethane	5	**26**	**28**	**20**	**13**	**23**	**11**	**12**	**12**	**13J**	**8**	**8**	**8**	**10**	2J	<0.33UJ	<0.48
1,2 Dichloroethene (total)	5	2 J	2 J	1 J	1 J	<5	2 J	1 J	<5	1 J	<5	<5	1J	2J	<5	<0.40UJ	<0.83
Acetone	NP	7 JB	8 JB	<10	3 JB	6 J	<10	<10	<10	<10	<10	<10	<10UJ	<10UJ	<10UJ	<2.7UJ	R
Chloroform	7	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<0.42UJ	<0.35
Chloromethane	NP	<10	<10	<10	<10	10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<0.51UJ	<0.46
Methylene Chloride	5	3 JB	4 JB	<5	**7 JB**	<5	<5	4 JB	**6**	<5J	<5J	<5J	<4U	<3U	<5	<1.6UJ	<3.0U
Tetrachloroethene	5	**8**	**8**	**6**	4 J	<5	5 J	3 J	3 J	2 J	2J	2J	2J	2J	<5	<0.24UJ	<0.44
Toluene	5	<5	<5	<5	<5	<5	<5	<5	<5	<5J	<5	<5	<5	<5	<5	<0.18UJ	<0.58
Trichloroethene	5	**24**	**25**	**17**	**11**	3 J	**11**	**9**	**10**	**8J**	5J	5	**6**	**7**	3J	2.8J	2.4J
Turbidity	5	**11.8**	**11.8**	NR	0	**18**	0.0	NR	3.6	0.8	**6**	**6**	NR	NR	NR	NR	NR
Antimony	3	<2.2	<2.2	NR	<2.3	NR	<1.9	NR	<1.9	2.4U	<2.5	<2.5	NR	NR	NR	NR	NR
Arsenic	25	<3.2	<3.2	NR	<2.4	NR	<2.3	NR	<3.0	<2.5	<3.5	<3.5	NR	NR	NR	NR	NR
Beryllium	3	0.1	<0.10	NR	0.24	NR	<0.20	NR	<0.10	0.25U	<0.10	<0.10	NR	NR	NR	NR	NR
Chromium	50	4.1	4.7	NR	6.6	NR	1.4	NR	7.9	19.9	24.5	18.4	NR	NR	NR	NR	NR
Copper	200	3.9	5.3	NR	5.5	NR	3.1	NR	6.8	6.4	5.9	4.6	NR	NR	NR	NR	NR
Iron	300	**1190**	**1510**	NR	**827**	NR	**1080**	NR	**333**	**429**	**393**	268	NR	NR	NR	NR	NR
Lead	15	6.2	3.4	NR	2.4	NR	<2.6	NR	<2.2	2.7U	<2.6	<2.6	NR	NR	NR	NR	NR
Manganese	300	118	120	NR	96.5	NR	137	NR	120	116	29.9	27.5	NR	NR	NR	NR	NR
Mercury	0.7	<0.10	<0.10	NR	<0.10	NR	<0.10	NR	<0.10	<0.10	<0.10	<0.10	NR	NR	NR	NR	NR
Nickel	100	12	11	NR	7.3	NR	5.6	NR	10.9	11.8	16.2	14.8	NR	NR	NR	NR	NR
Top of Screen Elevation: -3.00 feet																	
Groundwater Elevation (feet):		58.99	58.99	58.29	57.24	59.45	57.19	56.19	54.39	52.99	56.09	56.09	58.08	58.08	59.79	61.69	62.04
Bottom of Screen Elevation: -13.00 feet																	

Notes Volatile and metal concentrations presented in micrograms per liter, turbidity measurements presented in nephelometric turbidity units
Elevations referenced to mean sea level
Since June 2004, monitoring wells have been sampled for VOC's only using the diffusion bag sampling method as per USEPA's request
Diffusion bags were placed with the center at 1 ft above the bottom of the well.
NS: Not sampled
NY Water Quality Criteria: NYSDEC Regulation for Surface Waters and Groundwater, Section 703.5 (August 1999)
NP: No proposed quantification level available
NR: Not required
Bolded values exceed the NY Water Quality Criteria
*Data presented from May 1993 and February 1994 as published in the Record of Decision (USEPA 1994). These data provide a benchmark of pre-remediation conditions for the upgradient wells.
Data Qualifiers
B: The analyte was detected in the blank sample
J: Associated value is an estimated quantity
U: Compound was not detected above the associated level
UJ: Compound is not detected and the associated quantitation limit is uncertain
R: Rejected during data validation

Groundwater Sampling Analytical Results for
MW-4S

Analyte	NY Water Quality Criteria	June 2000	Oct 2000	Jan - Feb 2001	Apr - May 2001	July - Aug 2001	Oct 2001	Jan - Feb 2002	July - Aug 2002	Apr 03	June 04	June 04 (Duplicate)	June 04 (Low Flow)	June 05	June 05 (Duplicate)	June 06	Aug 07
1,1 Dichloroethane	5	**14 JD**	**14 JD**	**7 JD**	**7 JD**	2 J	2 JD	4 JD	NS	2J	<5	<5	<5	<5	<5	<0.34	<0.39
1,1 Dichloroethene	5	**40 JD**	**22 JD**	<5	<5	<5	3 JD	5 JD	NS	<5	4J	4J	5	1J	<5	<0.53	<0.61
1,1,1 Trichloroethane	5	**1000 D**	**860 D**	**630D**	**260 D**	**80**	**280 D**	**320 D**	NS	**190**	**200**	**210**	**260**	**92**	**85**	**310**	**340**
1,2 Dichloroethene (total)	5	<5	< 50	<5	<5	<5	<10	<10	NS	<5	<5	<5	<5	<5	<5	<0.40	<0.83
Acetone	NP	37 JBD	<10	28 JBD	<20	<10	<10	<10	NS	<10	<4U	<4U	<10	<10	<10	<2.7U	R
Chloroform	7	<50	<5	<5	<5	<5	<5	<5	NS	1J	<5	<5	<5	<5	<5	<0.42	<0.35
Chloromethane	NP	<10	<10	<10	<20	<10	<10	<10	NS	<10	<10	<10	<10	<10	<10	<0.51	<0.46
Methylene Chloride	5	**51 BD**	<5	**41 BD**	<10	<5	**28 BD**	4 JBD	NS	<5J	<1U	<2U	<2U	<5	<5	<1.4U	<1.5
Tetrachloroethene	5	**13 JD**	**19 JD**	**14 JD**	**12 D**	**11**	**15 D**	**14 D**	NS	**26**	**11**	**11**	**12**	<5	<5	4.4J	**6.6**
Toluene	5	<50	<5	<5	<5	<5	<5	<5	NS	<5	<5	<5	<5	<5	<5	<0.18	<0.58
Trichloroethene	5	<5	<50	<5	<10	<5	<10	<10	NS	<5	<5	<5	<5	<5	<5	<0.28	<0.58
Turbidity	5	**311**	NR	0	**12**	0.0	NR	**15.1**	NS	**50**	NR	NR	NR	NR	NR	NR	NR
Antimony	3	<2.2	NR	<2.3	NR	2.3 J	NR	2.1	NS	<2.5	NR	NR	NR	NR	NR	NR	NR
Arsenic	25	<3.2	NR	3.0	NR	<2.3	NR	<3.0	NS	<3.5	NR	NR	NR	NR	NR	NR	NR
Beryllium	3	<0.10	NR	0.15	NR	<0.20	NR	<0.10	NS	<0.10	NR	NR	NR	NR	NR	NR	NR
Chromium	50	**674**	NR	**114**	NR	**1110**	NR	**90.8**	NS	**380**	NR	NR	NR	NR	NR	NR	NR
Copper	200	35.1	NR	14.9	NR	35.2	NR	11.0	NS	16	NR	NR	NR	NR	NR	NR	NR
Iron	300	**3720**	NR	**632**	NR	**3740**	NR	**430**	NS	**1790**	NR	NR	NR	NR	NR	<100	<100
Lead	15	4.1 J	NR	<2.1	NR	<2.6	NR	<2.2	NS	<2.7U	NR	NR	NR	NR	NR	NR	NR
Manganese	300	97	NR	15.3	NR	37.3	NR	5.3	NS	24.2	NR	NR	NR	NR	NR	NR	NR
Mercury	0.7	<0.10	NR	<0.10	NR	<0.10	NR	<0.10	NS	<0.10	NR	NR	NR	NR	NR	NR	NR
Nickel	100	28.3	NR	9.4	NR	83.7	NR	15.4	NS	29.9	NR	NR	NR	NR	NR	NR	NR
			10x Dilution	5x Dilution	2x Dilution		2x Dilution	2x Dilution									
Top of Screen Elevation: 63.32 feet Groundwater Elevation (feet): Bottom of Screen Elevation: 53.32 feet		59.01	58.31	57.31	59.37	57.31	56.19	54.41	53.41	56.01	58.08	58.08	58.36	59.80	59.80	61.71	62.01

Notes: Volatile and metal concentrations presented in micrograms per liter, turbidity measurements presented in nephelometric turbidity units
Elevations referenced to mean sea level
Since June 2004, monitoring wells have been sampled for VOC's only using the diffusion bag sampling method as per USEPA's request
Diffusion bags were placed with the center at 1 ft above the bottom of the well.
NS: Not sampled
NY Water Quality Criteria: NYSDEC Regulation for Surface Waters and Groundwater, Section 703.5 (August 1999)
NP: No proposed quantification level available
NR: Not required
Bolded values exceed the NY Water Quality Criteria
*Data presented from May 1993 and February 1994 is published in the Record of Decision (USEPA 1994) These data provide a benchmark of pre-remediation conditions for the upgradient wells
Data Qualifiers:
B: The analyte was detected in the blank sample
J: Associated value is an estimated quantity
U: Compound was not detected above the associated level
UJ: Compound is not detected and the associated quantitation limit is uncertain
R: Rejected during data validation

Groundwater Sampling Analytical Results for
MW-5D

Analyte	NY Water Quality Criteria	June 2000	June 2000 Duplicate	Oct 2000	Jan - Feb 2001	Apr - May 2001	July - Aug 2001	Oct 2001	Jan - Feb 2002	July - Aug 2002	Apr-03	Jun-04 (topmost bag)	Jun-04 (bottom bag)	Jun-05	Jul-06	Aug-07
1,1 Dichloroethane	5	3J	3 J	3 J	2 J	2 J	1 J	<5	<5	<5	<5	<5	<5	<5	<0.34	<0.39
1,1 Dichloroethene	5	2 J	1 JB	3 J	1 J	1 J	<5	<5	<5	<5	<5	<5	<5	<5	<0.53	<0.61
1,1,1 Trichloroethane	5	3 J	3 J	3 J	1 J	2 J	1 J	<5	<5	<5	<5	<5	<5	<5	<0.33	<0.48
1,1,2 Trichloroethane	1	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<0.25	<0.70
1,2 Dichloroethene (total)	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<0.40	<0.83
Acetone	NP	<10	1 JB	<10	<10	<10	<10	<10	<5	<10	<10	<10UJ	<7UJ	<10UJ	<2.7U	R
Carbon Disulfide	NP	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<0.23	<0.51
Chlorobenzene	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<0.21	<0.38
Chloroform	7	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<0.42	<0.35
Methylene Chloride	5	<5	<5	**16 B**	<5	<5	<5	**8 B**	<5	<5	<5	<3U	<3U	<5	<1.4U	<1.5
Tetrachloroethene	5	1 J	<5	2 J	<5	1 J	1 J	<5	<5	<5	<5	<5	<5	<5	<0.24	<0.44
Toluene	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<0.18	<0.58
Trichloroethene	5	2 J	2 J	3 J	<5	1 J	1 J	<5	<5	<5	<5	<5	<5	<5	<0.28	<0.58
Turbidity	5	0	0	NR	**11**	0	0.1	NR	2	0	0	NR	NR	NR	NR	NR
Antimony	3	<2.2	<2.2	NR	<2.3	NR	2.3 UJ	NR	<1.9	<2.2	<2.5	NR	NR	NR	NR	NR
Arsenic	25	<3.2	<3.2	NR	<3.4	NR	3.9 UJ	NR	<3.0	<2.5	<3.5	NR	NR	NR	NR	NR
Beryllium	3	<0.10	<0.10	NR	<0.10	NR	<0.20	NR	<0.10	0.17U	<0.38U	NR	NR	NR	NR	NR
Chromium	50	31.8	35.8	NR	16.2 J	NR	2.6 J	NR	16.1	34.2	23.9	NR	NR	NR	NR	NR
Copper	200	59.5	65.8	NR	50.6	NR	47.9	NR	45.4	28.5J	35.5	NR	NR	NR	NR	NR
Iron	300	**2130 J**	**2750 J**	NR	**713**	NR	236	NR	245 J	**344**	**1660**	NR	NR	NR	NR	NR
Lead	15	9.4	10.5	NR	2.6	NR	<2.4	NR	3.8	2.0U	<6.5U	NR	NR	NR	NR	NR
Manganese	300	**529**	**529**	NR	**465**	NR	**628**	NR	**575**	**690**	**1200**	NR	NR	NR	NR	NR
Mercury	0.7	<0.10	<0.10	NR	<0.10	NR	<0.10	NR	<0.10	0.11	<0.13U	NR	NR	NR	NR	NR
Nickel	100	33	40.8	NR	13.2	NR	4.6	NR	11.5	5.4U	10.2	NR	NR	NR	NR	NR
Top of Screen Elevation: -3.00 feet Groundwater Elevation (feet): Bottom of Screen Elevation: -13.00 feet		58.65	58.65	57.85	57.01	59.10	57.15	55.70	54.00	52.35	55.85	57.86	57.86	59.60	61.45	61.75

Notes: Volatile and metal concentrations presented in micrograms per liter; turbidity measurements presented in nephelometric turbidity units
Elevations referenced to mean sea level
Since June 2004, monitoring wells have been sampled for VOC's only using the diffusion bag sampling method as per USEPA's request.
Diffusion bags were placed with the center at 1 ft above the bottom of the well.
NS: Not sampled
NY Water Quality Criteria: NYSDEC Regulation for Surface Waters and Groundwater, Section 703.5 (August 1999)
NP: No proposed quantification level available
NR: Not required
Bolded values exceed the NY Water Quality Criteria
*Data presented from May 1993 and February 1994 is published in the Record of Decision (USEPA 1994). These data provide a benchmark of pre-remediation conditions for the upgradient wells.
Data Qualifiers:
B: The analyte was detected in the blank sample
J: Associated value is an estimated quantity
U: Compound was not detected above the associated level
UJ: Compound is not detected and the associated quantitation limit is uncertain
R: Rejected during data validation

Groundwater Sampling Analytical Results for
MW-6D

Analyte	NY Water Quality Criteria	June 1993	Oct 1993	June-Feb 1994	Apr-May 2001	July-Aug 2001	Oct 2001	June-Feb 2002	July-Aug 2002	Apr-05	Jul-05 (Diffusion Bag)	Jul-05 (Bailing Event)	Jul-06	Jul-06	Aug-07
1,1 Dichloroethane	5	4 J	3 J	<5	2 J	2 J	2 J	2 J	4 J	3J	3J	4J	2J	3.0J	2.3J
1,1 Dichloroethene	5	5 J	4 J	3 J	3 J	3 J	3 J	4 J	**7**	5	**6**	**6**	**5**	**7.8**	**5.3**
1,1,1 Trichloroethane	5	**10**	**8**	5	5 J	4 J	5	5	**9**	**6**	**6**	**7**	**6**	**5.8**	<0.48
1,2 Dichloroethene (total)	5	<5	<5	<5	<5	<5	<5	<5	1 J	<5	1J	1J	<5	1.1J	1.0J
2-Butanone	NP	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<0.38	<0.28UJ
Acetone	NP	<10	<10	6 JB	<5	<10	<10	<10	<10	<10	<10UJ	<10	<10	<2.7U	R
Chlorobenzene	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<0.21	<0.38
Chloroform	7	<5	<5	<5	<5	<5	<5	<5	5 J	2J	1J	1J	<5	<0.42	<0.35
Methylene Chloride	5	<5	<5	**13 B**	<5	3 J	**15 B**	<5	<5	<5	<4U	**<6U**	<5	<1.4U	<1.5
Tetrachloroethene	5	3 J	3 J	3 J	<5	4 J	2 J	2 J	4 J	3J	2J	2J	1J	1.6J	1.3J
Toluene	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<0.18	<0.58
Trichloroethene	5	**8**	**6**	5	4 J	4 J	4 J	4 J	**7**	**6**	**7**	**7**	**6**	**6.0**	4.9J
Turbidity	5	0	NR	0	**6**	0.1	NR	**27.0**	**73**	0	NR	NR	NR	NR	NR
Antimony	3	<2.2	NR	<2.3	NR	<1.9	NR	2.0	<2.2	<2.5	NR	NR	NR	NR	NR
Arsenic	25	<3.2	NR	<2.4	NR	<2.3	NR	4.2 J	<2.5	<3.5	NR	NR	NR	NR	NR
Beryllium	3	<0.10	NR	0.24	NR	<0.20	NR	<0.10	0.16U	<0.21U	NR	NR	NR	NR	NR
Chromium	50	**458**	NR	**157**	NR	23.1	NR	**378**	**479**	**300**	NR	NR	NR	NR	NR
Copper	200	19.3	NR	9.7	NR	8.8	NR	28.8	15.1	<11.4U	NR	NR	NR	NR	NR
Iron	300	**3670 J**	NR	**534**	NR	180 J	NR	**1480 J**	**870**	**1500**	NR	NR	NR	NR	NR
Lead	15	2.6	NR	2.5	NR	<2.6	NR	5.7	5.2	<2.6U	NR	NR	NR	NR	NR
Manganese	300	243	NR	146	NR	79.4	NR	110	130	102	NR	NR	NR	NR	NR
Mercury	0.7	<0.10	NR	<0.10	NR	<0.10	NR	<0.10	< 0.10	<0.10	NR	NR	NR	NR	NR
Nickel	100	**449**	NR	**121**	NR	67.3	NR	**110**	**133**	**235**	NR	NR	NR	NR	NR
Top of Screen Elevation: -3.04 feet Groundwater Elevation (feet): Bottom of Screen Elevation: -13.04 feet		58.39	57.89	56.96	59.05	57.09	55.79	53.79	52.29	53.69	57.78	57.78	59.44	61.29	61.64

Notes: Volatile and metal concentrations presented in micrograms per liter, turbidity measurements presented in nephelometric turbidity units
Elevations referenced to mean sea level
Since June 2004, monitoring wells have been sampled for VOC's only using the diffusion bag sampling method as per USEPA's request
Diffusion bags were placed with the center at 1 ft above the bottom of the well.
NS: Not sampled
NY Water Quality Criteria: NYSDEC Regulation for Surface Waters and Groundwater, Section 703.5 (August 1999)
NP: No proposed quantification level available
NR: Not required
Bolded values exceed the NY Water Quality Criteria
*Data presented from May 1993 and February 1994 is published in the Record of Decision (USEPA 1994). These data provide a benchmark of pre-remediation conditions for the upgradient wells
Data Qualifiers:
B: The analyte was detected in the blank sample
J: Associated value is an estimated quantity
U: Compound was not detected above the associated level
UJ: Compound is not detected and the associated quantitation limit is uncertain
R: Rejected during data validation

Groundwater Sampling Analytical Results for
MW-6S

Analyte	NY Water Quality Criteria	June 2000	Oct 2000	Jan - Feb 2001	Apr - May 2001	July - Aug 2001	July - Aug 2001 Duplicate	Oct 2001	Jan - Feb 2002	July - Aug 2002	April	June-1	June-2	Aug-1	Aug-17
1,1 Dichloroethane	5	<5	<25	2 J	1 J	1 J	<5	<5	<5	NS	<5	<5	<5	<0.34	<0.39
1,1 Dichloroethene	5	<5	**14 JD**	<5	<5	<5	<5	1 J	1 J	NS	<5	1J	<5	<0.53	<0.61
1,1,1 Trichloroethane	5	**15**	**360 D**	**110**	**85**	**110**	**110**	**92**	**54**	NS	**19**	**24**	**16**	<0.33	<0.48
1,2 Dichloroethene (total)	5	<5	<25	<5	<5	<5	<5	<5	<5	NS	<5	<5	<5	<0.40	<0.83
2-Butanone	NP	<10	<10	<10	<10	<10	<10	<10	<10	NS	<10	<10	<10	<0.38	<0.28UJ
Acetone	NP	<10	<10	3 JB	3 J	<10	<10	<10	<10	NS	<10	<2UJ	<10	<2.7U	R
Chlorobenzene	5	<5	<5	<5	<5	<5	<5	<5	<5	NS	<5	<5	<5	<0.21	<0.38
Chloroform	7	<5	<5	<5	<5	<5	<5	<5	<5	NS	<5	<5	<5	<0.42	<0.35
Methylene Chloride	5	<5	<5	3 JB	<5	3 J	<5	**14 B**	**9 B**	NS	<5	<4U	<5	<0.47	<1.5
Tetrachloroethene	5	<5	<25	1 J	<5	<5	<5	<5	<5	NS	<5	<5	<5	<0.24	<0.44
Toluene	5	<5	<5	<5	<5	<5	<5	<5	<5	NS	<5	<5	<5	<0.18	<0.58
Trichloroethene	5	<5	<25	<5	<5	<5	<5	<5	<5	NS	<5	<5	<5	<0.28	<0.58
Turbidity	5	0	NR	0	0	0.0	NR	NR	**25.5**	NS	0	NR	NR	NR	NR
Antimony	3	<2.2	NR	<2.3	NR	<1.9	<1.9	NR	**3.4**	NS	<2.5	NR	NR	NR	NR
Arsenic	25	<3.2	NR	<2.4	NR	<2.3	<2.3	NR	<3.0	NS	<3.5	NR	NR	NR	NR
Beryllium	3	<0.10	NR	0.27	NR	<0.20	<0.20	NR	<0.10	NS	<0.16U	NR	NR	NR	NR
Chromium	50	**159**	NR	**77.7**	NR	3.9	4.2	NR	**836**	NS	38.8	NR	NR	NR	NR
Copper	200	9.7	NR	6.5	NR	3.0	3.5	NR	9.8	NS	<3.4U	NR	NR	NR	NR
Iron	300	**899 J**	NR	**463**	NR	37.3 J	27.5 J	NR	**4760**	NS	291	NR	NR	NR	NR
Lead	15	<2.3	NR	<2.1	NR	<2.6	<2.6	NR	<2.2	NS	<2.6	NR	NR	NR	NR
Manganese	300	16.7	NR	53.4	NR	28.7	28.7	NR	14.9	NS	<5.4U	NR	NR	NR	NR
Mercury	0.7	<0.10	NR	<0.10	NR	<0.10	<0.10	NR	<0.10	NS	<0.10	NR	NR	NR	NR
Nickel	100	7.9	NR	17.4	NR	7.6	7.2	NR	20.6	NS	<1.8	NR	NR	NR	NR
			5x Dilution												
Top of Screen Elevation: 62.37 feet															
Groundwater Elevation (feet):		58.29	58.29	56.79	58.95	57.59	57.59	55.69	53.89	52.49	55.49	57.72	59.34	61.19	61.49
Bottom of Screen Elevation: 52.37 feet															

Notes: Volatile and metal concentrations presented in micrograms per liter; turbidity measurements presented in nephelometric turbidity units
Elevations referenced to mean sea level
Since June 2004, monitoring wells have been sampled for VOC's only using the diffuson bag sampling method as per USEPA's request.
Diffuson bags were placed with the center at 1 ft above the bottom of the well.
NS: Not sampled
NY Water Quality Criteria: NYSDEC Regulation for Surface Waters and Groundwater, Section 703.5 (August 1999)
NP: No proposed quantification level available
NR: Not required
Bolded values exceed the NY Water Quality Criteria
*Data presented from May 1993 and February 1994 is published in the Record of Decision (USEPA 1994). These data provide a benchmark of pre-remediation conditions for the upgradient wells
Data Qualifiers:
B: The analyte was detected in the blank sample
J: Associated value is an estimated quantity
U: Compound was not detected above the associated level
UJ: Compound is not detected and the associated quantitation limit is uncertain
R: Rejected during data validation

Groundwater Sampling Analytical Results for MW-7D

Analyte	NY Water Quality Criteria	June 2000	Oct 2000	Jan - Feb 2001	Apr - May 2001	July - Aug 2001	Oct 2001	Jan - Feb 2002	Jan - Feb 2002 Duplicate	July - Aug 2002	Apr-03	April 2003 Duplicate	Jun-04 (Uppermost bag)	Jun-04 (Bottom bag)	Jun-05	Jul-06	Aug-07
1,1 Dichloroethane	5	**8**	**8**	**8**	2 J	**8**	**8**	**7**	**7**	5J	4J	4J	1J	2J	<5	<0.28	<0.39
1,1 Dichloroethene	5	4 J	5	3 J	**11**	3	3 J	3 J	3 J	4 J	1J	1J	<5	1J	<5	<0.40	<0.61
1,1,1 Trichloroethane	5	**7**	5 J	3 J	**15**	2 J	2 J	2 J	2 J	3 J	<5J	<5J	<5	<5	<5	<0.43	<0.48
1,2 Dichloroethene (total)	5	2 J	3 J	2 J	1 J	3 J	2 J	2 J	2 J	2 J	<5	1J	<5	<5	<5	<0.44	<0.83
2-Butanone	NP	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<0.92	<0.28UJ
Acetone	NP	<10	<10	2 JB	<5	<10	<10	<10	<10	<10	<10	<10	<10UJ	<10UJ	<10UJ	<2.5	R
Chlorobenzene	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<0.29	<0.38
Chloroform	7	<5	<5	<5	2 J	<5	<5	<5	<5	< 5	<5	<5	<5	<5	<5	<0.24	<0.35
Chloromethane	NP	<10	3 J	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<0.64	<0.46
Methylene Chloride	5	<5	<5	4 JB	<5	1 J	**11 B**	**8 B**	**8 B**	<5J	<5	<5	<3U	<3U	<5	<0.91	<1.5
Tetrachloroethene	5	4 J	5 J	3 J	<5	3 J	3 J	3 J	3 J	2 J	1J	1J	<5	<5	<5	<0.35	<0.44
Toluene	5	<5	<5	<5	<5	<5	<5	<5	<5	<5J	<5	<5	<5	<5	<5	<0.31	<0.58
Trichloroethene	5	5	**6**	4 JB	5 J	3 J	3 J	3 J	3 J	3 J	2J	2J	<5	1J	<5	<0.31	<0.58
Turbidity	5	0	NR	**10**	**10**	0.0	NR	**19.3**	**19.3**	0.0	**6**	**6**	NR	NR	NR	NR	NR
Antimony	3	<2.2	NR	<2.3	NR	<1.9	NR	<1.9	2.1	<2.2	<2.5	<2.5	NR	NR	NR	NR	NR
Arsenic	25	<3.2	NR	<2.4	NR	<2.3	NR	<3.0	<3.0	<2.5	<3.5	<3.5	NR	NR	NR	NR	NR
Beryllium	3	<0.10	NR	0.25 J	NR	<0.20	NR	<0.10	<0.10	0.23U	<0.60U	<0.62U	NR	NR	NR	NR	NR
Chromium	50	19.9	NR	2.7 J	NR	7.1	NR	3.3	3.6	18.6	<6.7U	<8.3U	NR	NR	NR	NR	NR
Copper	200	13.7	NR	3.1	NR	4.6	NR	5.8	7.3	13.2	3.2	4	NR	NR	NR	NR	NR
Iron	300	**544 J**	NR	94.2	NR	209 J	NR	86.0	98.8	**306**	289	**409**	NR	NR	NR	NR	NR
Lead	15	2.8	NR	<2.1	NR	<2.6	NR	<2.2	<2.2	<1.7	<2.9U	<2.6	NR	NR	NR	NR	NR
Manganese	300	47.4	NR	61.4	NR	69.3	NR	62.1	60.9	60.9	62.2	64.7	NR	NR	NR	NR	NR
Mercury	0.7	<0.10	NR	<0.10	NR	<0.10	NR	<0.10	<0.10	<0.10	<0.10	<0.10	NR	NR	NR	NR	NR
Nickel	100	13.8	NR	3.1	NR	3.7	NR	6.5	6.7	17.3	4.8	6.2	NR	NR	NR	NR	NR
Groundwater Elevation (feet):		57.86	57.46	56.46	58.74	56.96	56.01	54.46	54.46	52.26	55.06	55.06	57.21	57.21	59.15	-0.94	61.22

Top of Screen Elevation: 0.38 feet

Bottom of Screen Elevation: -9.62 feet

Notes: Volatile and metal concentrations presented in micrograms per liter; turbidity measurements presented in nephelometric turbidity units
Elevations referenced to mean sea level
Since June 2004, monitoring wells have been sampled for VOC's only using the diffusion bag sampling method as per USEPA's request
Diffusion bags were placed with the center at 1 ft above the bottom of the well
NS: Not sampled
NY Water Quality Criteria: NYSDEC Regulation for Surface Waters and Groundwater, Section 703.5 (August 1999)
NP: No proposed quantification level available
NR: Not required
Bolded values exceed the NY Water Quality Criteria
*Data presented from May 1993 and February 1994 is published in the Record of Decision (USEPA 1994). These data provide a benchmark of pre-remediation conditions for the upgradient wells.

Data Qualifiers:
B: The analyte was detected in the blank sample
J: Associated value is an estimated quantity
U: Compound was not detected above the associated level
UJ: Compound is not detected and the associated quantitation limit is uncertain
R: Rejected during data validation

Groundwater Sampling Analytical Results for
MW-7S

Analyte	NY Water Quality Criteria	June 2004	Oct 2004	Oct 2004 Duplicate	Jan - Feb 2005	Jan - Feb 2005 Duplicate	Apr - May 2005	July - Aug 2005	Oct 2005	Jan - Feb 2006	July - Aug 2006	Apr-07	Jun-07	Jun-08	Jul-09	Aug-10
1,1 Dichloroethane	5	<5	<5	<5	<5	<5	<5	<5	<5	NS	NS	<5	<5	<5	<0.34UJ	<0.39
1,1 Dichloroethene	5	<5	<5	<5	<5	<5	<5	<5	<5	NS	NS	<5	<5	<5	<0.53UJ	<0.61
1,1,1 Trichloroethane	5	<5	<5	<5	<5	<5	<5	<5	<5	NS	NS	<5	<5	<5	<0.33UJ	<0.48
1,2 Dichloroethene (total)	5	<5	<5	<5	<5	<5	<5	<5	<5	NS	NS	<5	<5	<5	<0.40UJ	<0.83
2-Butanone	NP	<10	<10	<10	<10	<10	<10	<10	<10	NS	NS	<10	<10	<10	<0.38UJ	<0.28UJ
Acetone	NP	<10	<10	2 J	<10	2 JB	<5	<10	<10	NS	NS	<10	<10UJ	<10UJ	<2.7UJ	R
Chlorobenzene	5	<5	<5	<5	<5	<5	<5	<5	<5	NS	NS	<5	<5	<5	<0.21UJ	<0.38
Chloroform	7	<5	<5	<5	<5	<5	<5	<5	<5	NS	NS	<5	<5	<5	<0.42UJ	<0.35
Chloromethane	NP	<10	<10	<10	<10	<10	<10	<10	<10	NS	NS	<10	<10	<10	<0.51UJ	<0.46
Methylene Chloride	5	<5	<5	<5	2 JB	1 JB	<5	<5	**11 B**	NS	NS	<5	<3U	<5	<1.0UJ	<1.5
Tetrachloroethene	5	<5	<5	<5	<5	<5	<5	<5	<5	NS	NS	<5	<5	<5	<0.24UJ	<0.44
Toluene	5	<5	<5	<5	<5	<5	<5	<5	<5	NS	NS	<5	<5	<5	<0.18UJ	<0.58
Trichloroethene	5	<5	<5	<5	<5	<5	<5	<5	<5	NS	NS	<5	<5	1J	<0.28UJ	<0.58
Turbidity	5	0	NR	NR	**190**	**190**	0	0.0	NR	NS	NS	5	NR	NR	NR	NR
Antimony	3	<2.2	NR	NR	<2.3	<2.3	NR	<1.9	NR	NS	NS	<2.5	NR	NR	NR	NR
Arsenic	25	<3.2	NR	NR	<3.4	<3.4	NR	<2.3	NR	NS	NS	<3.5	NR	NR	NR	NR
Beryllium	3	<0.10	NR	NR	<0.10	<0.10	NR	<0.20	NR	NS	NS	<0.62U	NR	NR	NR	NR
Chromium	50	**57.3**	NR	NR	49.4 J	39.1 J	NR	<0.90	NR	NS	NS	**126**	NR	NR	NR	NR
Copper	200	15	NR	NR	10.1	12.2	NR	3.0	NR	NS	NS	2.9	NR	NR	NR	NR
Iron	300	**912 J**	NR	NR	**498**	**427**	NR	<15.7	NR	NS	NS	**787**	NR	NR	NR	NR
Lead	15	<2.3	NR	NR	<2.1	<2.1	NR	<2.6	NR	NS	NS	<2.6	NR	NR	NR	NR
Manganese	300	245	NR	NR	155	162	NR	1.4	NR	NS	NS	88.2	NR	NR	NR	NR
Mercury	0.7	<0.10	NR	NR	<0.10	<0.10	NR	<0.10	NR	NS	NS	<0.10	NR	NR	NR	NR
Nickel	100	22.5	NR	NR	9.7	7.3	NR	1.5	NR	NS	NS	9.1	NR	NR	NR	NR
Top of Screen Elevation: 63.06 feet Groundwater Elevation (feet): Bottom of Screen Elevation: 53.06 feet		58.21	57.41	57.41	56.51	56.51	58.81	57.01	55.41	53.57	53.21	55.31	57.44	59.12	61.01	61.21

Notes: Volatile and metal concentrations presented in micrograms per liter; turbidity measurements presented in nephelometric turbidity units
Elevations referenced to mean sea level
Since June 2004, monitoring wells have been sampled for VOC's only using the diffusion bag sampling method as per USEPA's request
Diffusion bags were placed with the center at 1 ft above the bottom of the well.
NS: Not sampled
NY Water Quality Criteria: NYSDEC Regulation for Surface Waters and Groundwater, Section 703.5 (August 1999)
NP: No proposed quantification level available
NR: Not required
Bolded values exceed the NY Water Quality Criteria
*Data presented from May 1993 and February 1994 is published in the Record of Decision (USEPA 1994). These data provide a benchmark of pre-remediation conditions for the upgradient wells
Data Qualifiers:
B: The analyte was detected in the blank sample
J: Associated value is an estimated quantity
U: Compound was not detected above the associated level
UJ: Compound is not detected and the associated quantitation limit is uncertain
R: Rejected during data validation

Groundwater Sampling Analytical Results for
MW-13

Analyte	NY Water Quality Criteria	June 2003	Oct 2003	Jan - Feb 2004	Apr - May 2004	July - Aug 2004	Oct 2004	Jan - Feb 2005	July - Aug 2005	July - Aug 2005 Duplicate	April 2006	June 06 Replicate Bag	June 06 Bottom Bag	June 07	June 08	August 09
1,1 Dichloroethane	5	**14**	**40 D**	**9**	**8**	**7**	2 J	<5	3 J	3 J	4J	<5	<5	<5	<0.34UJ	<0.39
1,1 Dichloroethene	5	**8**	**7 JD**	2 J	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<0.53UJ	<0.61
1,1,1 Trichloroethane	5	**120**	**350 D**	**110**	**34**	**34**	**15**	**34**	**12**	**11**	**30**	**14**	**6**	<5	<0.33UJ	<0.48
1,1,2 Trichloroethane	1	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<0.25UJ	<0.70
1,2 Dichloroethene (total)	5	<5	< 25	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<0.40UJ	<0.83
Acetone	NP	8 JB	<10	2 JB	4 J	<10	<10	<10	<10	<10	<10	<10	<10	<10	<2.7UJ	R
Chloroform	7	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<0.42UJ	2.1J
Chloromethane	NP	<10	<10	<10	1 J	<10	<10	<10	<10	<10	<10	<10	<10	<10	<0.51UJ	<0.46
Chlorobenzene	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<0.21UJ	**9.4**
Methylene Chloride	5	4 JB	<5	1 JB	<5	<5	**14 B**	1 JB	<5	<5	<5J	<5U	<6U	<5	<1.0UJ	<1.5
Tetrachloroethene	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<0.24UJ	<0.44
Toluene	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<0.18UJ	<0.58
Trichloroethene	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<0.28UJ	<0.58
Turbidity	5	**200**	NR	0	0	0.1	NR	**22.5**	**110**	**110.0**	**45**	NR	NR	NR	NR	NR
Antimony	3	<2.2	NR	<2.3	NR	2.3 J	NR	<1.9	<2.2	<2.2	<2.5	NR	NR	NR	NR	NR
Arsenic	25	4.3	NR	<3.4	NR	4.7 J	NR	4.1 J	<2.5	<2.5	<3.5	NR	NR	NR	NR	NR
Beryllium	3	<0.10	NR	<0.10	NR	<0.20	NR	0.12	0.10U	0.10U	<0.10	NR	NR	NR	NR	NR
Chromium	50	6.3	NR	2.3 J	NR	1.5 J	NR	3.5	0.52U	16.3	<3.1U	NR	NR	NR	NR	NR
Copper	200	12.7	NR	5.6	NR	3.1	NR	10.2	1.8	2.8	4.1	NR	NR	NR	NR	NR
Iron	300	**17200**	NR	**687**	NR	**634**	NR	**2050 J**	<14.5	**707**	**919**	NR	NR	NR	290	290
Lead	15	5.2	NR	<2.1	NR	<2.4	NR	<2.2	<1.7	<1.7	<2.6	NR	NR	NR	NR	NR
Manganese	300	**365**	NR	54.9	NR	17.3	NR	26.6	32.1	31.8	28	NR	NR	NR	NR	NR
Mercury	0.7	<0.10	NR	<0.10	NR	<0.10	NR	<0.10	<0.10	<0.10	<0.10	NR	NR	NR	NR	NR
Nickel	100	12.2	NR 5x Dilution	7.2	NR	4.7	NR	6.7	3.2	5.3	<5.1U	NR	NR	NR	NR	NR
Top of Screen Elevation: 53.65 feet Groundwater Elevation (feet): Bottom of Screen Elevation: 43.65 feet		58.35	57.45	57.65	58.71	56.45	55.44	53.55	51.85	51.85	55.35	57.46	57.46	59.10	61.00	61.35

Notes: Volatile and metal concentrations presented in micrograms per liter; turbidity measurements presented in nephelometric turbidity units
Elevations referenced to mean sea level
Since June 2004, monitoring wells have been sampled for VOC's only using the diffusion bag sampling method as per USEPA's request.
Diffusion bags were placed with the center at 1 ft above the bottom of the well
NS: Not sampled
NY Water Quality Criteria: NYSDEC Regulation for Surface Waters and Groundwater, Section 703.5 (August 1999)
NP: No proposed quantification level available
NR: Not required
Bolded values exceed the NY Water Quality Criteria
*Data presented from May 1993 and February 1994 is published in the Record of Decision (USEPA 1994). These data provide a benchmark of pre-remediation conditions for the upgradient wells.
Data Qualifiers:
B: The analyte was detected in the blank sample
J: Associated value is an estimated quantity
U: Compound was not detected above the associated level
UJ: Compound is not detected and the associated quantitation limit is uncertain
R: Rejected during data validation

Groundwater Sampling Analytical Results for
MW-15

Analyte	NY Water Quality Criteria	June 2004	Oct 2004	Oct 2004 Duplicate	Jan - Feb 2001	Jan - Feb 2001 Duplicate	Apr - May 2001	July - Aug 2001	Oct 2001	Jan - Feb 2002	Jan - Feb 2002 Duplicate	July - Aug 2002	April-03	June-03 (topmost bag)	June-03 (bottom bag)	June-05	June-06	August-07
1,1 Dichloroethane	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<0.38	<0.39
1,1 Dichloroethene	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<0.29	<0.61
1,1,1 Trichloroethane	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<0.53	<0.48
1,1,2 Trichloroethane	1	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<0.44	<0.70
1,2 Dichloroethene (total)	5	**42**	1 J	1 J	**18**	**20**	**24**	<5	<5	<5	<5	<5	<5	<5	<5	<5	<0.47	<0.83
Acetone	NP	<10	<10	<10	<10	3 JB	<5	<10	<10	<10	<10	<10	<10	<10	<3U	<10	<2.8U	R
Chlorobenzene	5	1 J	<5	<5	1J	1 J	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<0.089	<0.38
Chloroform	7	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<0.93	<0.35
Chloromethane	NP	<10	<10	<10	<10	<10	<5	<10	<10	<10	<10	<10	<10	<10	<10	<10	<0.74	<0.46
Methylene Chloride	5	<5	<5	<5	<5	1 JB	5 J	<5	5 B	2 JB	2 JB	<5	<5J	<2U	<2U	<5	<2.3U	<1.5
Tetrachloroethene	5	**11**	<5	<5	**9**	**8**	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<0.50	<0.44
Toluene	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<0.32	<0.58
Trichloroethene	5	**14**	<5	<5	4 J	5 J	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<0.38	<0.58
Turbidity	5	0	NR	NR	**190**	**190**	0	0.1	NR	**19.4**	NR	0	**36**	NR	NR	NR	NR	NR
Antimony	3	<3.2	NR	NR	<2.3	<2.3	NR	2.3 UJ	NR	<1.9	<1.9	<2.2	<2.5	NR	NR	NR	NR	NR
Arsenic	25	10.6	NR	NR	6.4	6.8	NR	6.9 J	NR	4.9	7.2 J	2.5	<3.8U	NR	NR	NR	NR	NR
Beryllium	3	0.21	NR	NR	<0.10	<0.10	NR	<0.20	NR	<0.10	0.12	0.13U	<0.10	NR	NR	NR	NR	NR
Chromium	50	19.5	NR	NR	4.4 J	3.8 J	NR	1.4 UJ	NR	2.4	4.2	2.7U	8.9	NR	NR	NR	NR	NR
Copper	200	9.7	NR	NR	8.9	7.3	NR	<0.50	NR	3.8	8.5	1.3	7.8	NR	NR	NR	NR	NR
Iron	300	**39100 J**	NR	NR	**36400**	**34900**	NR	**27800**	NR	**19800 J**	**19700 J**	**29300**	**22700**	NR	NR	NR	NR	NR
Lead	15	4.6	NR	NR	4.6	3.4	NR	<2.4	NR	2.9	4.4	<1.7	<3.2U	NR	NR	NR	NR	NR
Manganese	300	**405**	NR	NR	**417**	**403**	NR	**344**	NR	199	194	**339**	**309**	NR	NR	NR	NR	NR
Mercury	0.7	<0.10	NR	NR	<0.10	<0.10	NR	<0.10	NR	<0.10	<0.10	<0.10	<0.10	NR	NR	NR	NR	NR
Nickel	100	13	NR	NR	4.8	3.8	NR	2.7	NR	3.1	3.3	1.6U	9.3	NR	NR	NR	NR	NR
Top of Screen Elevation: 54.60 feet Groundwater Elevation (feet): Bottom of Screen Elevation: 44.60 feet		58.95	58.25	58.25	57.15	57.15	59.31	57.35	56.15	54.25	54.25	52.60	56.05	58.15	58.15	59.75	61.70	62.01

Notes: Volatile and metal concentrations presented in micrograms per liter, turbidity measurements presented in nephelometric turbidity units
Elevations referenced to mean sea level
Since June 2004, monitoring wells have been sampled for VOC's only using the diffusion bag sampling method as per USEPA's request
Diffusion bags were placed with the center at 1 ft above the bottom of the well.
NS: Not sampled
NY Water Quality Criteria: NYSDEC Regulation for Surface Waters and Groundwater, Section 703.5 (August 1999)
NP: No proposed quantification level available
NR: Not required
Bolded values exceed the NY Water Quality Criteria
*Data presented from May 1993 and February 1994 is published in the Record of Decision (USEPA 1994). These data provide a benchmark of pre-remediation conditions for the upgradient wells.
Data Qualifiers:
B: The analyte was detected in the blank sample
J: Associated value is an estimated quantity
U: Compound was not detected above the associated level
UJ: Compound is not detected and the associated quantitation limit is uncertain
R: Rejected during data validation

Groundwater Sampling Analytical Results for
MW-16

Analyte	NY Water Quality Criteria	June 2000	Oct 2000	Jan - Feb 2001	Apr - May 2001	Apr - May 2001 Duplicate	July - Aug 2001	Oct 2001	Jan - Feb 2002	July - Aug 2002	Apr-03	Jun-04 (topmost bag)	Jun-04 (bottom bag)	Jun-05	Jun-06	Aug-07
1,1 Dichloroethane	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<0.38	<0.39
1,1 Dichloroethene	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<0.29	<0.61
1,1,1 Trichloroethane	5	<5	<5	<5	<5	<5	<5	<5	3 J	<5	<5J	<5	<5	<5	<0.53	<0.48
1,2 Dichloroethene (total)	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<0.47	<0.83
2-Butanone	NP	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<0.84	<0.28UJ
Acetone	NP	<10	<10	<10	<5	<5	<10	<10	<10	<10	<10	<2U	<10	<10UJ	<2.8U	R
Chlorobenzene	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<0.089	<0.38
Chloroform	7	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<0.93	<0.35
Chloromethane	NP	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<0.74	<0.46
Methylene Chloride	5	<5	<5	<5	<5	<5	<5	1 JB	<5	<5	<5	<2U	<2U	<5	<2.1U	<2.1U
Tetrachloroethene	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<0.50	<0.44
Toluene	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<0.32	<0.58
Trichloroethene	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<0.38	<0.58
Turbidity	5	**133**	NR	**47**	0	0	0.0	NR	**26.4**	**97**	**170**	NR	NR	NR	NR	NR
Antimony	3	<2.2	NR	<2.3	NR	NR	<1.9	NR	<1.9	2.2U	<2.5	NR	NR	NR	NR	NR
Arsenic	25	17.2	NR	10.4	NR	NR	5.7	NR	10.3 J	**39.8**	6.6	NR	NR	NR	NR	NR
Beryllium	3	<0.10	NR	<0.10	NR	NR	<0.20	NR	<0.10	1.30U	<0.68U	NR	NR	NR	NR	NR
Chromium	50	6.9	NR	3.6 J	NR	NR	<0.90	NR	4.4	43.6	<6.5U	NR	NR	NR	NR	NR
Copper	200	11.8	NR	7.2	NR	NR	0.89	NR	7.2	54.7	<0.60	NR	NR	NR	NR	NR
Iron	300	**33700 J**	NR	**25200**	NR	NR	**25400 J**	NR	**24600 J**	**58400**	**20900**	NR	NR	NR	NR	NR
Lead	15	3.9	NR	<2.1	NR	NR	<2.6	NR	2.7	**28.6**	<2.6	NR	NR	NR	NR	NR
Manganese	300	**524**	NR	**426**	NR	NR	**430**	NR	**363**	**438**	293	NR	NR	NR	NR	NR
Mercury	0.7	<0.10	NR	<0.10	NR	NR	<0.10	NR	<0.10	<0.10	<0.10	NR	NR	NR	NR	NR
Nickel	100	5.2	NR	2.7	NR	NR	1.9	NR	4.1	23.4U	5.7	NR	NR	NR	NR	NR
Top of Screen Elevation: 54.75 feet Groundwater Elevation (feet): Bottom of Screen Elevation: 44.75 feet		58.40	57.80	56.76	56.90	56.90	56.80	55.58	53.70	52.20	55.10	57.77	57.77	59.39	61.29	61.60

Notes: Volatile and metal concentrations presented in micrograms per liter, turbidity measurements presented in nephelometric turbidity units
Elevations referenced to mean sea level
Since June 2004, monitoring wells have been sampled for VOC's only using the diffusion bag sampling method as per USEPA's request.
Diffusion bags were placed with the center at 1 ft above the bottom of the well.
NS: Not sampled
NY Water Quality Criteria: NYSDEC Regulation for Surface Waters and Groundwater, Section 703.5 (August 1999)
NP: No proposed quantification level available
NR: Not required
Bolded values exceed the NY Water Quality Criteria
*Data presented from May 1993 and February 1994 is published in the Record of Decision (USEPA 1994). These data provide a benchmark of pre-remediation conditions for the upgradient wells
Data Qualifiers:
B: The analyte was detected in the blank sample
J: Associated value is an estimated quantity
U: Compound was not detected above the associated level
UJ: Compound is not detected and the associated quantitation limit is uncertain
R: Rejected during data validation

Groundwater Sampling Analytical Results for
MW-17

Analyte	NY Water Quality Criteria	June 2002	Oct 2002	Jan - Feb 2003	Apr - May 2003	July - Aug 2003	Oct 2003	Jan - Feb 2004	July - Aug 2004	April 05	Summer (topmost bag)	Summer (bottom bag)	July 06	June 07	August 07
1,1 Dichloroethane	5	5	**7**	3 J	2 J	1 J	1 J	2 J	3 J	<5	<5	<5	<5	<0.38	<0.39
1,1 Dichloroethene	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<0.29	<0.61
1,1,1 Trichloroethane	5	**39**	**58**	**33**	**9**	**12**	**19**	**22**	5 J	4J	<5	<5	<5	<0.53	<0.48
1,1,2 Trichloroethane	1	<5	**3 J**	<5	<5	1 J	**2 J**	<5	<5	<5	<5	<5	<5	<0.44	<0.70
1,2 Dichloroethene (total)	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<0.47	<0.83
Acetone	NP	<10	<10	<5	<5	<10	<10	<5	<10	<10	<7UJ	<10UJ	<10UJ	<2.8U	R
Carbon Disulfide	NP	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<0.18	<0.51
Chlorobenzene	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<0.089	<0.38
Chloroform	7	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<0.93	<0.35
Methylene Chloride	5	<5	<5	<5	<5	<5	**9 B**	1 JB	<5	<5	<3U	<4U	<5	<1.5U	<1.5
Tetrachloroethene	5	<5	3 J	1 J	<5	< 1	1 J	1 J	<5	<5	<5	<5	<5	<0.50	<0.44
Toluene	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<0.32	<0.58
Trichloroethene	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<0.38	<0.58
Turbidity	5	**15.9**	NR	**35**	**10**	0.1	NR	**18**	0	**200**	NR	NR	NR	NR	NR
Antimony	3	2.5	NR	<2.3	NR	2.3 UJ	NR	<1.9	<2.2	<2.5	NR	NR	NR	NR	NR
Arsenic	25	6.5	NR	<3.4	NR	3.9 UJ	NR	<3.0	<2.5	<3.5	NR	NR	NR	NR	NR
Beryllium	3	0.26	NR	<0.10	NR	<0.20	NR	<0.10	0.26U	<0.64U	NR	NR	NR	NR	NR
Chromium	50	25.9	NR	7.6 J	NR	2.6 J	NR	2.8	4.8	**65**	NR	NR	NR	NR	NR
Copper	200	79.1	NR	42.6	NR	29.2	NR	18.5	20.1	108	NR	NR	NR	NR	NR
Iron	300	**16900 J**	NR	**1600**	NR	**409**	NR	**662 J**	**982**	**11100**	NR	NR	NR	NR	NR
Lead	15	**20.1**	NR	<2.1	NR	<2.4	NR	2.3	<1.7	14.6	NR	NR	NR	NR	NR
Manganese	300	**386**	NR	73.8	NR	176	NR	108	53.7	**401**	NR	NR	NR	NR	NR
Mercury	0.7	<0.10	NR	<0.10	NR	<0.10	NR	<0.10	<0.10	<0.12	NR	NR	NR	NR	NR
Nickel	100	61.9	NR	47.4	NR	49.5	NR	22.7	14.2U	59.6	NR	NR	NR	NR	NR
Top of Screen Elevation: 58.08 feet Groundwater Elevation (feet): Bottom of Screen Elevation: 48.08 feet		57.98	57.38	57.65	58.81	56.88	58.81	51.78	52.08	55.48	57.38	57.38	59.25	61.13	61.38

Notes: Volatile and metal concentrations presented in micrograms per liter, turbidity measurements presented in nephelometric turbidity units
Elevations referenced to mean sea level
Since June 2004, monitoring wells have been sampled for VOC's only using the diffusion bag sampling method as per USEPA's request
Diffusion bags were placed with the center at 1 ft above the bottom of the well.
NS: Not sampled
NY Water Quality Criteria: NYSDEC Regulation for Surface Waters and Groundwater Section 703.5 (August 1999)
NP: No proposed quantification level available
NR: Not required
Bolded values exceed the NY Water Quality Criteria
*Data presented from May 1993 and February 1994 is published in the Record of Decision (USEPA 1994). These data provide a benchmark of pre-remediation conditions for the upgradient wells
Data Qualifiers:
B: The analyte was detected in the blank sample
J: Associated value is an estimated quantity
U: Compound was not detected above the associated level
UJ: Compound is not detected and the associated quantitation limit is uncertain
R: Rejected during data validation

Groundwater Sampling Analytical Results for
MW-18

Analyte	NY Water Quality Criteria	June 2004	Oct 2000	Jan - Feb 2001	Apr - May 2001	July - Aug 2001	July - Aug 2001 Duplicate	Oct 2001	Jan - Feb 2002	July - Aug 2002	April	June-04 (topmost bag)	June-04 (bottom bag)	June-05	June-06	Aug-07
1,1 Dichloroethane	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<0.38	<0.39
1,1 Dichloroethene	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<0.29	<0.61
1,1,1 Trichloroethane	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<0.53	<0.48
1,1,2 Trichloroethane	1	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<0.44	<0.70
1,2 Dichloroethene (total)	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<0.47	<0.83
Acetone	NP	<10	<10	7 JB	6 J	<10	<10	<10	<10	<10	<10	<4U	<4U	<10	<2.8U	R
Carbon Disulfide	NP	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<0.18	<0.51
Chlorobenzene	5	<5	<5	1 J	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<0.089	<0.38
Chloroform	7	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<0.93	<0.35
Methylene Chloride	5	<5	<5	2 JB	**7**	<5	<5	**10 B**	<5	<5	<5	<1U	<2U	<5	<0.97U	<1.5
Tetrachloroethene	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<0.50	<0.44
Toluene	5	<5	<5	2 J	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<0.32	<0.58
Trichloroethene	5	<5	<5	1 J	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<0.38	<0.58
Turbidity	5	**247**	NR	0	0	0.0	NR	NR	**16.4**	0	0	NR	NR	NR	NR	NR
Antimony	3	<2.2	NR	<2.3	NR	2.3 UJ	2.3 UJ	NR	<1.9	<2.2	<2.5	NR	NR	NR	NR	NR
Arsenic	25	6.1	NR	8.1	NR	3.9 UJ	3.9 UJ	NR	<3.0	<2.5	<3.5	NR	NR	NR	NR	NR
Beryllium	3	0.1	NR	0.55	NR	<0.20	<0.20	NR	<0.10	0.26U	<0.19U	NR	NR	NR	NR	NR
Chromium	50	31.2	NR	**80**	NR	3.2 J	3.1 J	NR	5.3	6.7	25.7	NR	NR	NR	NR	NR
Copper	200	9.7	NR	13.6	NR	0.52	<0.50	NR	3.4	0.55	<4.6U	NR	NR	NR	NR	NR
Iron	300	**9060**	NR	**13500**	NR	**905**	**381**	NR	**1170 J**	**1100**	**3850**	NR	NR	NR	NR	NR
Lead	15	4.2	NR	7.5	NR	<2.4	<2.4	NR	<2.2	1.9U	<3.2U	NR	NR	NR	NR	NR
Manganese	300	164	NR	269	NR	15.4	10.6	NR	16.6	23.4	70.4	NR	NR	NR	NR	NR
Mercury	0.7	<0.10	NR	<0.10	NR	<0.10	<0.10	NR	<0.10	<0.10	<0.10	NR	NR	NR	NR	NR
Nickel	100	16.4	NR	46.6	NR	2.9	1.9	NR	4.8	4.8U	15.6	NR	NR	NR	NR	NR
Top of Screen Elevation: 58.03 feet Groundwater Elevation (feet): Bottom of Screen Elevation: 48.03 feet		47.30	56.30	55.50	57.73	55.60	55.60	54.20	52.52	51.00	54.60	56.67	56.67	58.20	60.05	60.25

Notes: Volatile and metal concentrations presented in micrograms per liter, turbidity measurements presented in nephelometric turbidity units
Elevations referenced to mean sea level
Since June 2004, monitoring wells have been sampled for VOC's only using the diffusion bag sampling method as per USEPA's request
Diffusion bags were placed with the center at 1 ft above the bottom of the well.
NS: Not sampled
NY Water Quality Criteria: NYSDEC Regulation for Surface Waters and Groundwater, Section 703.5 (August 1999)
NP: No proposed quantification level available
NR: Not required
Bolded values exceed the NY Water Quality Criteria
*Data presented from May 1993 and February 1994 is published in the Record of Decision (USEPA 1994). These data provide a benchmark of pre-remediation conditions for the upgradient wells.
Data Qualifiers:
B: The analyte was detected in the blank sample
J: Associated value is an estimated quantity
U: Compound was not detected above the associated level
UJ: Compound is not detected and the associated quantitation limit is uncertain
R: Rejected during data validation

Groundwater Sampling Analytical Results for
MW-19D

Analyte	NY Water Quality Criteria	June 2000	Oct 2000	Jan - Feb 2001	Apr - May 2001	July - Aug 2001	Oct 2001	Oct 2001 Duplicate	Jan - Feb 2002	July - Aug 2002	Apr-03	Jun-04 (Upmost Lay)	Jun-04 (Bottom bag)	Jun-04 (Bottom bag duplicate)	Jun-04 (Low Flow)	Jun-05	Jun-05 (duplicate)	Jul-06	Jul-06 (duplicate)	Aug-07	Aug-07 (duplicate)
1,1 Dichloroethane	5	3J	4 J	4 J	4 J	4 J	4 J	4 J	3 J	4 J	2J	<5	2J	2J	3J	3J	2J	3.3J	2.6J	<0.39	<0.39
1,1 Dichloroethene	5	**14**	**14**	**12**	**18**	**19**	**19**	**18**	**23**	**24**	**11**	<5	**22**	**22**	**19**	**25**	**24**	**130**	**70**	<0.61	<0.61
1,1,1 Trichloroethane	5	**23**	**19**	**17**	**27**	**27**	**28**	**28**	**30**	**28**	**16**	2J	**23**	**23**	**22**	**30**	**29**	**82**	**60**	<0.48	<0.48
1,2 Dichloroethene (total)	5	3J	**6**	<5	**7**	**8**	**8**	**7**	**8**	**10**	**8**	<5	**8**	**8**	**7**	**7**	**6**	**5.6**	4.6J	<0.83	<0.83
2-Butanone	NP	<10	<10	<10	<10	<10	4 J	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<0.84	<0.92	<0.28UJ	<0.28UJ
Acetone	NP	<10	<10	4 JB	<10	<10	<10	<10	8 JB	<10	<10	<4U	<4U	<3U	<1U	<10	<10	<2.8U	<2.5U	R	R
Carbon Disulfide	NP	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<0.18	<0.62	<0.51	<0.51
Chlorobenzene	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<0.089	<0.29	<0.38	<0.38
Chloroform	7	2J	2 J	<5	5 J	7	7	7	**10**	**14**	**19**	2J	**31**	**32**	**25**	**21**	**21**	**7.0**	4.8J	<0.35	<0.35
Chloromethane	NP	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<0.74	<0.64	<0.46	<0.46
Methylene Chloride	5	<5	**13 B**	**12 B**	**6**	<5	**9 B**	**9 B**	<5	<5	<5	<5U	<4U	<3U	<4U	<5	<5	<2.2U	<0.91	<1.5	<3.3U
Tetrachloroethene	5	**46**	**47**	**50**	**55**	**65**	**62**	**61**	**77**	**62**	**57**	2J	**24**	**24**	**39**	**20**	**18**	**20**	**15**	<0.44	<0.44
Toluene	5	2J	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<0.32	<0.31	<0.58	<0.58
Trichloroethene	5	**40**	**34**	**37**	**36**	**46**	**43**	**43**	**55**	**57**	**33**	2J	**33**	**35**	**32**	**28**	**26**	**31**	**23**	<0.58	<0.58
Turbidity	5	**238**	NR	0	**230**	0.1	NR	NR	**659**	**250**	**990**	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Antimony	3	<2.2	NR	<2.3	NR	2.3 UJ	NR	NR	<1.9	<2.2	<2.5	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Arsenic	25	<3.2	NR	10.4	NR	5.4 J	NR	NR	12.5 J	7.8	<10.9U	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Beryllium	3	0.3	NR	1.1	NR	<0.20	NR	NR	0.47	2.60	<1.1U	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Chromium	50	43.9	NR	47.4	NR	49.5 J	NR	NR	**86.4**	**55.7**	**163**	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Copper	200	14.2	NR	26.1	NR	7.8	NR	NR	38.2	21.0	114	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Iron	300	**7240**	NR	**15000**	NR	**4730**	NR	NR	**27300 J**	**18900**	**33800**	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Lead	15	10.3	NR	**18.0**	NR	3.8	NR	NR	**22.7**	**16.3**	**34.1**	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Manganese	300	**557**	NR	**646**	NR	295	NR	NR	**568**	**429**	**724**	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Mercury	0.7	<0.10	NR	<0.10	NR	<0.10	NR	NR	<0.10	<0.10	<0.16U	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Nickel	100	32	NR	32.9	NR	36.0	NR	NR	59.1	35.7	**115**	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Top of Screen Elevation: Unknown																					
Groundwater Elevation (feet):		55.70	55.10	54.26	56.45	54.00	53.10	53.10	51.10	49.60	53.20	55.36	55.36	55.36	55.45	56.95	56.95	58.75	58.75	58.90	58.90
Bottom of Screen Elevation: Unknown																					

Notes: Volatile and metal concentrations presented in micrograms per liter, turbidity measurements presented in nephelometric turbidity units
Elevations referenced to mean sea level
Since June 2004, monitoring wells have been sampled for VOC's only using the diffusion bag sampling method as per USEPA's request.
Diffusion bags were placed with the center at 1 ft above the bottom of the well.
NS: Not sampled
NY Water Quality Criteria: NYSDEC Regulation for Surface Waters and Groundwater, Section 703.5 (August 1999)
NP: No proposed quantification level available
NR: Not required
Bolded values exceed the NY Water Quality Criteria
*Data presented from May 1993 and February 1994 is published in the Record of Decision (USEPA 1994). These data provide a benchmark of pre-remediation conditions for the upgradient wells.
Data Qualifiers:
B: The analyte was detected in the blank sample
J: Associated value is an estimated quantity
U: Compound was not detected above the associated level
UJ: Compound is not detected and the associated quantitation limit is uncertain
R: Rejected during data validation
U: Compound was not detected above the associated level

Groundwater Sampling Analytical Results for
MW-19S

Analyte	NY Water Quality Criteria	June 2000	Oct 2000	Jan - Feb 2001	Apr - May 2001	July - Aug 2001	Oct 2001	Jan - Feb 2002	July - Aug 2002	Apr-03	3/4/04 (topmost bag)	3/4/04 (bottom bag)	Jul-04	Jan-05	Aug-07
1,1 Dichloroethane	5	**6**	4 J	3 J	4 J	5 J	3 J	3 J	3 J	4J	<5	<5	<5	<0.28	<0.39
1,1 Dichloroethene	5	1J	2 J	1 J	2 J	3 J	1 J	1 J	<5	<5	<5	<5	<5	<0.40	<0.61
1,1,1 Trichloroethane	5	**8**	5 J	1 J	<5	1 J	2 J	1 J	<5	**6**	<5	<5	<5	<0.43	<0.48
1,2 Dichloroethene (total)	5	<5	1 J	<5	2 J	2 J	1 J	<5	2 J	<5	<5	<5	<5	<0.44	<0.83
2-Butanone	NP	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<0.92	<0.28UJ
Acetone	NP	<10	4 J	4 JB	<10	<10	<10	<10	<10	<10	<4U	<10	<10	<2.5UJ	R
Carbon Disulfide	NP	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<0.62	<0.51
Chlorobenzene	5	2J	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<0.29	<0.38
Chloroform	7	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<0.24	<0.35
Chloromethane	NP	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<0.64	<0.46
Methylene Chloride	5	<5	**14 B**	**12 B**	**6**	<5	**9 B**	<5	<5	<5	<2U	<2U	<5	<2.0UJ	<1.5
Tetrachloroethene	5	<5	2 J	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<0.35	<0.44
Toluene	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<0.31	<0.58
Trichloroethene	5	<5	2 J	<5	<5	2 J	<5	<5	<5	<5	<5	<5	<5	<0.31	<0.58
Turbidity	5	**64.9**	NR	0	0	0.1	NR	**62**	0	0	NR	NR	NR	NR	NR
Antimony	3	<2.2	NR	<2.3	NR	2.3 UJ	NR	<1.9	<2.2	<2.5	NR	NR	NR	NR	NR
Arsenic	25	4.1	NR	4.7	NR	3.9 UJ	NR	5.1 J	<2.5	<3.5	NR	NR	NR	NR	NR
Beryllium	3	0.37	NR	0.60	NR	<0.20	NR	0.16	0.61U	<0.10	NR	NR	NR	NR	NR
Chromium	50	**96.6**	NR	36.5	NR	1.4 UJ	NR	40.2	**121**	<6.6U	NR	NR	NR	NR	NR
Copper	200	109	NR	13.7	NR	<0.50	NR	16.4	6.3	<3.4U	NR	NR	NR	NR	NR
Iron	300	**21600**	NR	**29400**	NR	**15400**	NR	**26000 J**	**18600**	**14700**	NR	NR	NR	NR	NR
Lead	15	**34**	NR	4.6	NR	<2.4	NR	6.3	<1.7	<2.6	NR	NR	NR	NR	NR
Manganese	300	**2100**	NR	**1050**	NR	**786**	NR	**966**	**683**	**1020**	NR	NR	NR	NR	NR
Mercury	0.7	0.34	NR	0.34	NR	<0.10	NR	**0.76**	0.14	<0.15U	NR	NR	NR	NR	NR
Nickel	100	66.9	NR	26.7	NR	3.9	NR	29.1	86.8	4.0	NR	NR	NR	NR	NR
Top of Screen Elevation: Unknown															
Groundwater Elevation (feet):		56.20	55.00	54.20	56.40	54.30	53.00	51.10	49.60	53.40	55.30	55.30	56.85	58.60	58.80
Bottom of Screen Elevation: Unknown															

Notes: Volatile and metal concentrations presented in micrograms per liter; turbidity measurements presented in nephelometric turbidity units
Elevations referenced to mean sea level
Since June 2004, monitoring wells have been sampled for VOC's only using the diffusion bag sampling method as per USEPA's request
Diffusion bags were placed with the center at 1 ft above the bottom of the well.
NS: Not sampled
NY Water Quality Criteria: NYSDEC Regulation for Surface Waters and Groundwater, Section 703.5 (August 1999)
NP: No proposed quantification level available
NR: Not required
Bolded values exceed the NY Water Quality Criteria
*Data presented from May 1993 and February 1994 is published in the Record of Decision (USEPA 1994). These data provide a benchmark of pre-remediation conditions for the upgradient wells

Data Qualifiers:
B: The analyte was detected in the blank sample
J: Associated value is an estimated quantity
U: Compound was not detected above the associated level
UJ: Compound is not detected and the associated quantitation limit is uncertain
R: Rejected during data validation

Appendix A-3

Laboratory Summary Report
(Validated)

Appendix A-3
Laboratory Summary Report (Validated)

SUMMARY REPORT (Validated)
Lab: Hampton-Clarke, Inc. Veritech Laboratories
Circuitron Corporation Superfund Site
Monitoring Wells Sampling: August 2007
Volatile Organics Results

Sample ID	CC-18-MW-1S-13	CC-18-MW-1D-13	CC-18-MW-3S-13	CC-18-MW-3D-13	CC-18-MW-4S-13	CC-18-MW-4D-13	NY Water Quality
Lab Sample ID	AC32253-001	AC32253-002	AC32253-003	AC32253-004	AC32253-005	AC32253-006	Criteria
Sampling Date	08/09/2007	08/09/2007	08/09/2007	08/09/2007	08/09/2007	08/09/2007	
Volatiles (µg/L)							
1,1 Dichloroethane	<0.84	<0.84	<0.84	<0.84	<0.39	2.5 J	5
1,1 Dichloroethene	<0.96	1.5 J	<0.96	<0.96	<0.61	4.3 J	5
1,1,1 Trichloroethane	<0.40	<0.40	<0.40	<0.40	**340**	<0.48	5
1,1,2 Trichloroethane	<0.40	<0.40	<0.40	<0.40	<0.70	<0.70	1
1,2 Dichloroethene (total)	<0.84	<0.84	<0.84	<0.84	<0.83	<0.83	5
1,2 Dichloroethane	<0.51	<0.51	<0.51	<0.51	<0.30	<0.30	5
2-Butanone	<1.1	<1.1	<1.1	<1.1	<0.28 UJ	<0.28 UJ	5
Acetone	<8.7	<8.7	<8.7	<8.7	R	R	NP
Carbon Disulfide	<0.60	<0.60	<0.60	<0.60	<0.51	<0.51	NP
Chlorobenzene	<0.39	<0.39	<0.39	<0.39	<0.38	<0.38	NP
Chloroform	<0.53	<0.53	<0.53	<0.53	<0.35	<0.35	7
Chloromethane	<0.64	<0.64	<0.64	<0.64	<0.46	<0.46	NP
Methylene Chloride	<1.7	<1.7	<1.7	<1.7	<1.5	<3.0 U	5
Tetrachloroethene	<0.78	<0.78	<0.78	<0.78	**6.6**	<0.44	5
Toluene	<0.41	<0.41	<0.41	<0.41	<0.58	<0.58	5
Trichloroethene	<0.37	1.6 J	<0.37	<0.37	<0.58	2.4 J	5
TOTAL VOCs	ND	3.1	ND	ND	346.6	9.2	

NOTES:

Diffusion bags were deployed July 27, 2007 and were retrieved and sampled on August 9, 2007, except for MW-5D for which diffusion bag was deployed August 8 and retrieved on August 22, 2007.
ND: Not Detected
NP: No Proposed SPDES Permit available
<...: Laboratory Detection Limit
BOLD: Value exceeds the SPDES Permit
D: Results are reported for the diluted samples.
U: Indicates the compound was analyzed but not detected.
J: Indicates an estimated value when a compound is detected at less than the specified detection limit.
UJ: Indicates compound is not detected and the associated quantitation limit is uncertain.
B: Indicates the analyte was found in the blank as well as in the sample.
E: Indicates the analyte concentration exceeds the calibration range of the instrument.
R: Indicates the data is unusable.
NY Water Quality Criteria: NYSDEC Regulation for Surface Waters and Groundwater, Section 703.5 (August 1999).

SUMMARY REPORT (Validated)
Lab: Hampton-Clarke, Inc. Veritech Laboratories
Circuitron Corporation Superfund Site
Monitoring Wells Sampling: August 2007
Volatile Organics Results

Sample ID	CC-18-MW-6S-13	CC-18-MW-6D-13	CC-18-MW-7S-13	CC-18-MW-7D-13	CC-18-MW-13-13	CC-18-MW-14-13	NY Water Quality
Lab Sample ID	AC32253-007	AC32253-008	AC32253-009	AC32253-010	AC32253-011	AC32253-012	Criteria
Sampling Date	08/09/2007	08/09/2007	08/09/2007	08/09/2007	08/09/2007	08/09/2007	
Volatiles (µg/L)							
1,1 Dichloroethane	<0.39	2.3 J	<0.39	<0.39	<0.39	<0.39	5
1,1 Dichloroethene	<0.61	**5.3**	<0.61	<0.61	<0.61	<0.61	5
1,1,1 Trichloroethane	<0.48	<0.48	<0.48	<0.48	<0.48	<0.48	5
1,1,2 Trichloroethane	<0.70	<0.70	<0.70	<0.70	<0.70	<0.70	1
1,2 Dichloroethene (total)	<0.83	1.0 J	<0.83	<0.83	<0.83	<0.83	5
1,2 Dichloroethane	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	5
2-Butanone	<0.28 UJ	<0.28 UJ	<0.28 UJ	<0.28 UJ	<0.28 UJ	<0.28 UJ	5
Acetone	R	R	R	R	R	R	NP
Carbon Disulfide	<0.51	<0.51	<0.51	<0.51	<0.51	<0.51	NP
Chlorobenzene	<0.38	<0.38	<0.38	<0.38	**9.4**	1.3 J	NP
Chloroform	<0.35	<0.35	<0.35	<0.35	2.1 J	<0.35	7
Chloromethane	<0.46	<0.46	<0.46	<0.46	<0.46	<0.46	NP
Methylene Chloride	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	5
Tetrachloroethene	<0.44	1.3 J	<0.44	<0.44	<0.44	<0.44	5
Toluene	<0.58	<0.58	<0.58	<0.58	<0.58	<0.58	5
Trichloroethene	<0.58	4.9 J	<0.58	<0.58	<0.58	<0.58	5
TOTAL VOCs	ND	14.8	ND	ND	11.5	1.3	

NOTES:

Diffusion bags were deployed July 27, 2007 and were retrieved and sampled on August 9, 2007, except for MW-5D for which diffusion bag was deployed August 8 and retrieved on August 22, 2007.
ND: Not Detected
NP: No Proposed SPDES Permit available
<...: Laboratory Detection Limit
BOLD: Value exceeds the SPDES Permit
D: Results are reported for the diluted samples.
U: Indicates the compound was analyzed but not detected.
J: Indicates an estimated value when a compound is detected at less than the specified detection limit.
UJ: Indicates compound is not detected and the associated quantitation limit is uncertain.
B: Indicates the analyte was found in the blank as well as in the sample.
E: Indicates the analyte concentration exceeds the calibration range of the instrument.
R: Indicates the data is unusable.
NY Water Quality Criteria: NYSDEC Regulation for Surface Waters and Groundwater, Section 703.5 (August 1999).

SUMMARY REPORT (Validated)
Lab: Hampton-Clarke, Inc. Veritech Laboratories
Circuitron Corporation Superfund Site
Monitoring Wells Sampling: August 2007
Volatile Organics Results

Sample ID	CC-18-MW-15-13	CC-18-MW-16-13	CC-18-MW-17-13	CC-18-MW-18-13	CC-18-MW-19S-13	CC-18-MW-19D-13	NY Water Quality
Lab Sample ID	AC32253-013	AC32253-014	AC32253-015	AC32253-016	AC32253-017	AC32253-018	Criteria
Sampling Date	08/09/2007	08/09/2007	08/09/2007	08/09/2007	08/09/2007	08/09/2007	
Volatiles (µg/L)							
1,1 Dichloroethane	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	5
1,1 Dichloroethene	<0.61	<0.61	<0.61	<0.61	<0.61	<0.61	5
1,1,1 Trichloroethane	<0.48	<0.48	<0.48	<0.48	<0.48	<0.48	5
1,1,2 Trichloroethane	<0.70	<0.70	<0.70	<0.70	<0.70	<0.70	1
1,2 Dichloroethene (total)	<0.83	<0.83	<0.83	<0.83	<0.83	<0.83	5
1,2 Dichloroethane	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	5
2-Butanone	<0.28 UJ	<0.28 UJ	<0.28 UJ	<0.28 UJ	<0.28 UJ	<0.28 UJ	5
Acetone	R	R	R	R	R	R	NP
Carbon Disulfide	<0.51	<0.51	<0.51	<0.51	<0.51	<0.51	NP
Chlorobenzene	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	NP
Chloroform	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	7
Chloromethane	<0.46	<0.46	<0.46	<0.46	<0.46	<0.46	NP
Methylene Chloride	<1.5	<2.1 U	<1.5	<1.5	<1.5	<1.5	5
Tetrachloroethene	<0.44	<0.44	<0.44	<0.44	<0.44	<0.44	5
Toluene	<0.58	<0.58	<0.58	<0.58	<0.58	<0.58	5
Trichloroethene	<0.58	<0.58	<0.58	<0.58	<0.58	<0.58	5
TOTAL VOCs	ND	ND	ND	ND	ND	ND	

NOTES:

Diffusion bags were deployed July 27, 2007 and were retrieved and sampled on August 9, 2007, except for MW-5D for which diffusion bag was deployed August 8 and retrieved on August 22, 2007.
ND: Not Detected
NP: No Proposed SPDES Permit available
<...: Laboratory Detection Limit
BOLD: Value exceeds the SPDES Permit
D: Results are reported for the diluted samples.
U: Indicates the compound was analyzed but not detected.
J: Indicates an estimated value when a compound is detected at less than the specified detection limit.
UJ: Indicates compound is not detected and the associated quantitation limit is uncertain.
B: Indicates the analyte was found in the blank as well as in the sample.
E: Indicates the analyte concentration exceeds the calibration range of the instrument.
R: Indicates the data is unusable.
NY Water Quality Criteria: NYSDEC Regulation for Surface Waters and Groundwater, Section 703.5 (August 1999).

SUMMARY REPORT (Validated)
Lab: Hampton-Clarke, Inc. Veritech Laboratories
Circuitron Corporation Superfund Site
Monitoring Wells Sampling: August 2007
Volatile Organics Results

Sample ID	CC-18-MW-19D-13-3	CC-18-MW-5D-13	TRIP BLANK	NY Water Quality
Lab Sample ID	AC32253-019	AC32506-001	AC32253-020	Criteria
Sampling Date	08/09/2007	08/22/2007	08/09/2007	
Volatiles (µg/L)				
1,1 Dichloroethane	<0.39	<0.39	<0.31	5
1,1 Dichloroethene	<0.61	<0.61	<0.61	5
1,1,1 Trichloroethane	<0.48	<0.48	<0.82	5
1,1,2 Trichloroethane	<0.70	<0.70	<0.55	1
1,2 Dichloroethene (total)	<0.83	<0.83	<0.89	5
1,2 Dichloroethane	<0.30	<0.30	<0.29	5
2-Butanone	<0.28 UJ	<0.28 UJ	<0.66	5
Acetone	R	R	<6.7	NP
Carbon Disulfide	<0.51	<0.51	<0.40	NP
Chlorobenzene	<0.38	<0.38	<0.47	NP
Chloroform	<0.35	<0.35	<0.55	7
Chloromethane	<0.46	<0.46	<1.0	NP
Methylene Chloride	<3.3 U	<1.5	3.0 J	5
Tetrachloroethene	<0.44	<0.44	<0.46	5
Toluene	<0.58	<0.58	<0.63	5
Trichloroethene	<0.58	<0.58	<0.76	5
TOTAL VOCs	ND	ND	3	

NOTES:

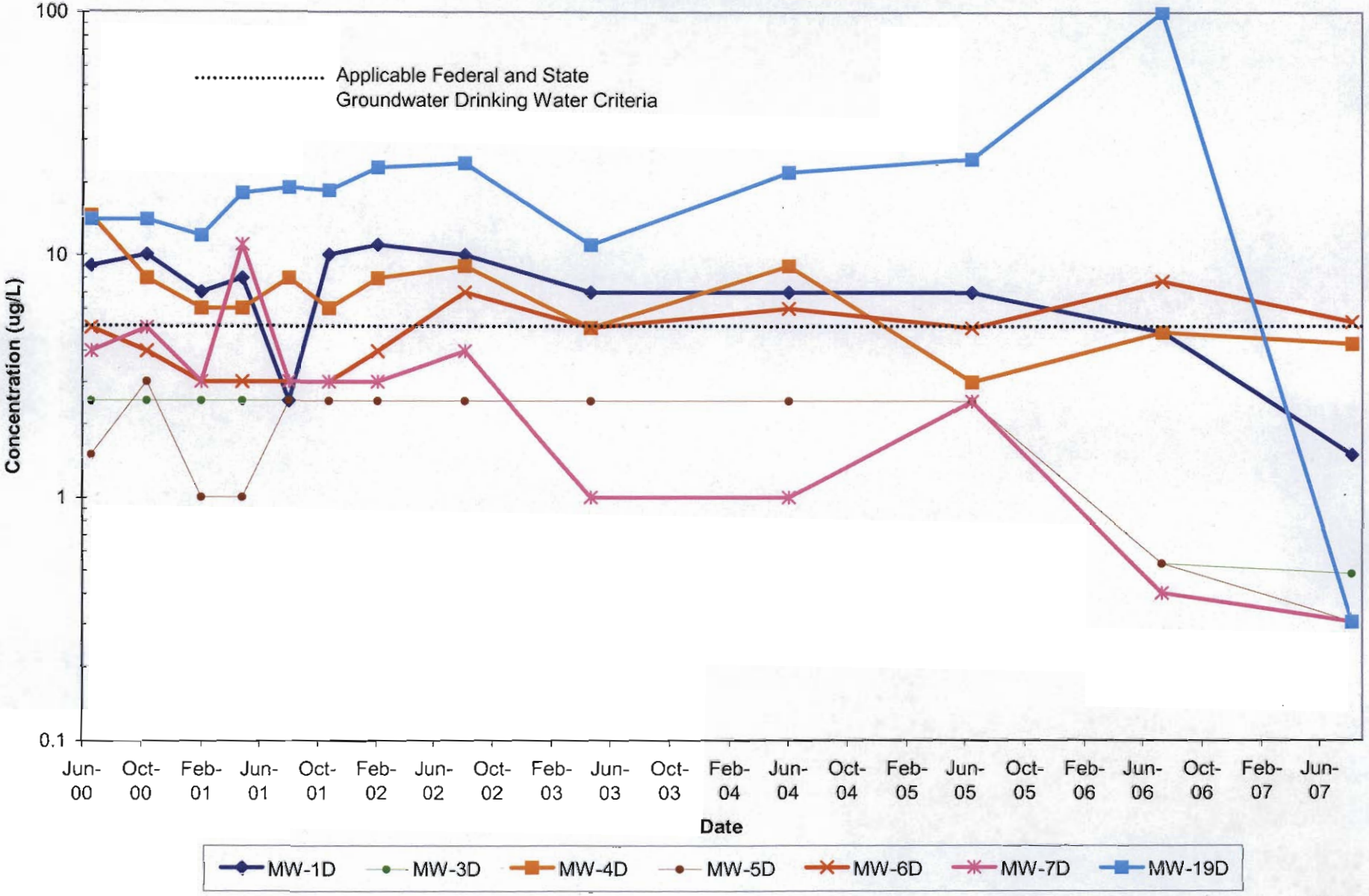
Diffusion bags were deployed July 27, 2007 and were retrieved and sampled on August 9, 2007, except for MW-5D for which diffusion bag was deployed August 8 and retrieved on August 22, 2007.
ND: Not Detected
NP: No Proposed SPDES Permit available
<...: Laboratory Detection Limit
BOLD: Value exceeds the SPDES Permit
D: Results are reported for the diluted samples.
U: Indicates the compound was analyzed but not detected.
J: Indicates an estimated value when a compound is detected at less than the specified detection limit.
UJ: Indicates compound is not detected and the associated quantitation limit is uncertain.
B: Indicates the analyte was found in the blank as well as in the sample.
E: Indicates the analyte concentration exceeds the calibration range of the instrument.
R: Indicates the data is unusable.
NY Water Quality Criteria: NYSDEC Regulation for Surface Waters and Groundwater, Section 703.5 (August 1999).

Appendix B

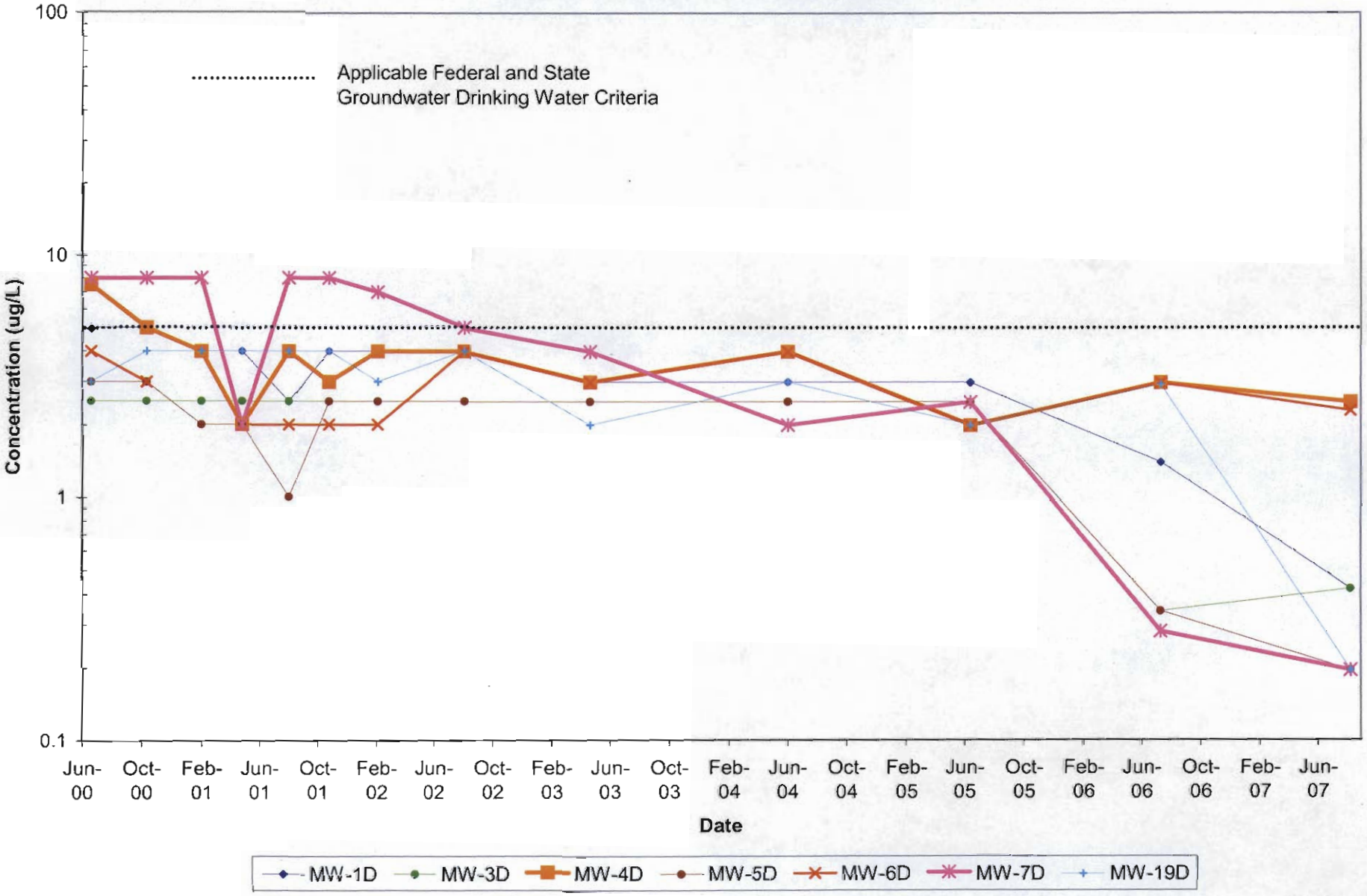
Time-Series Geochemical Graphs for
Shallow & Deep Wells

Appendix B
Time-Series Geochemical Graphs for Shallow and Deep Wells

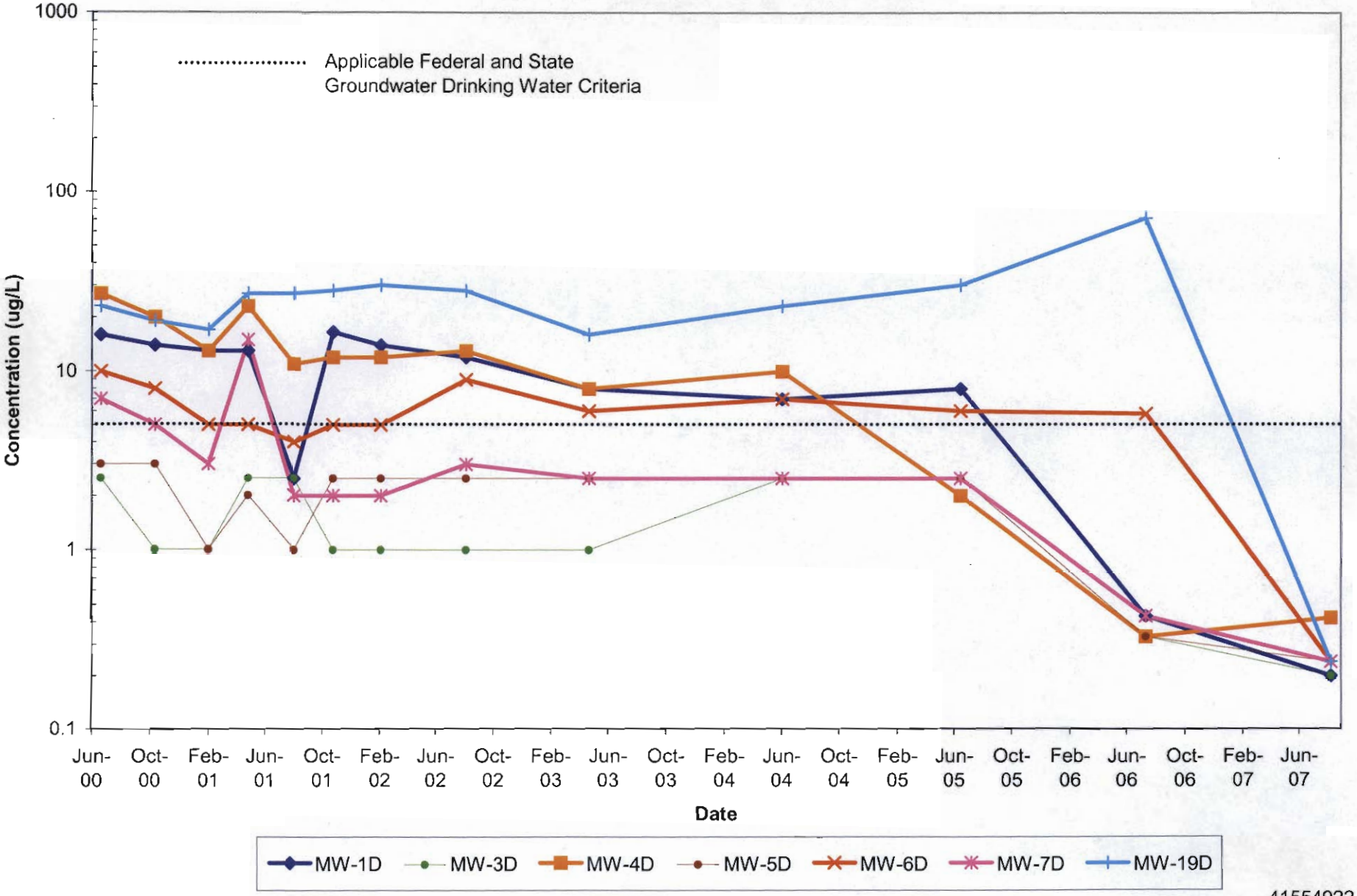
1,1-Dichloroethene Time-Series Graph
Deep Wells
CIRCUITRON CORPORATION SUPERFUND SITE



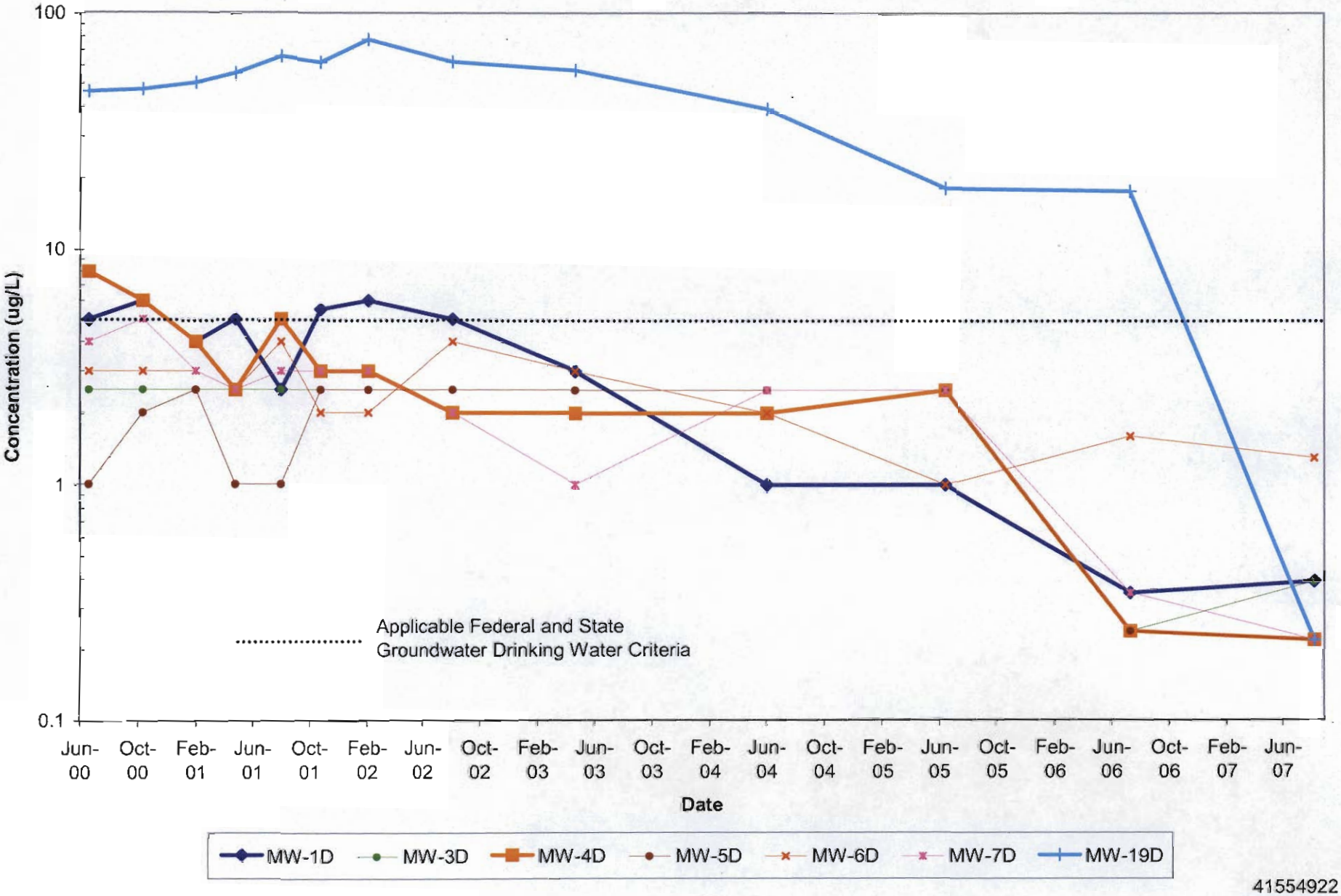
1,1-Dichloroethane Time-Series Graph
Deep Wells
CIRCUITRON CORPORATION SUPERFUND SITE



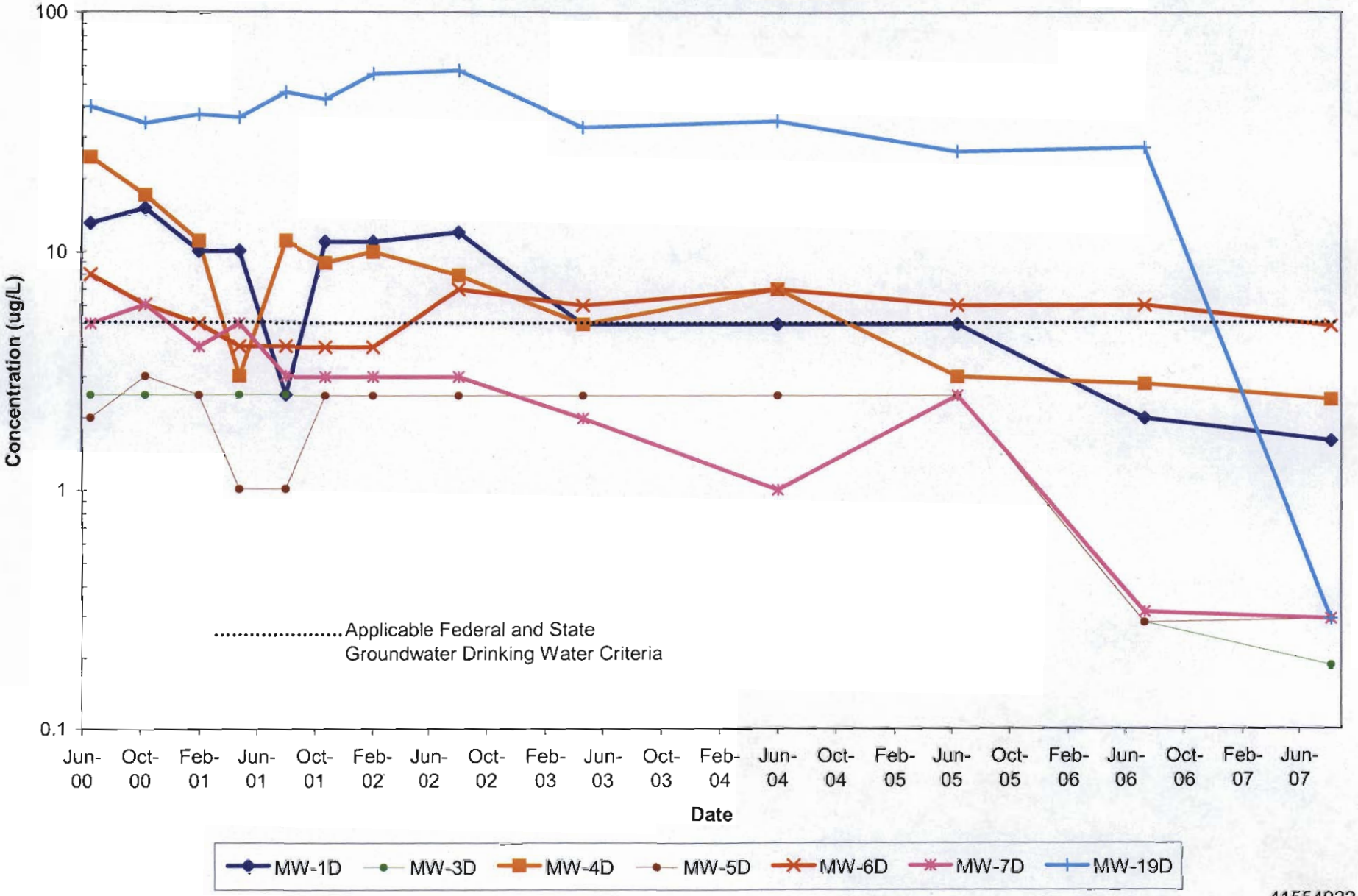
1,1,1-Trichloroethane Time-Series Graph
Deep Wells
CIRCUITRON CORPORATION SUPERFUND SITE



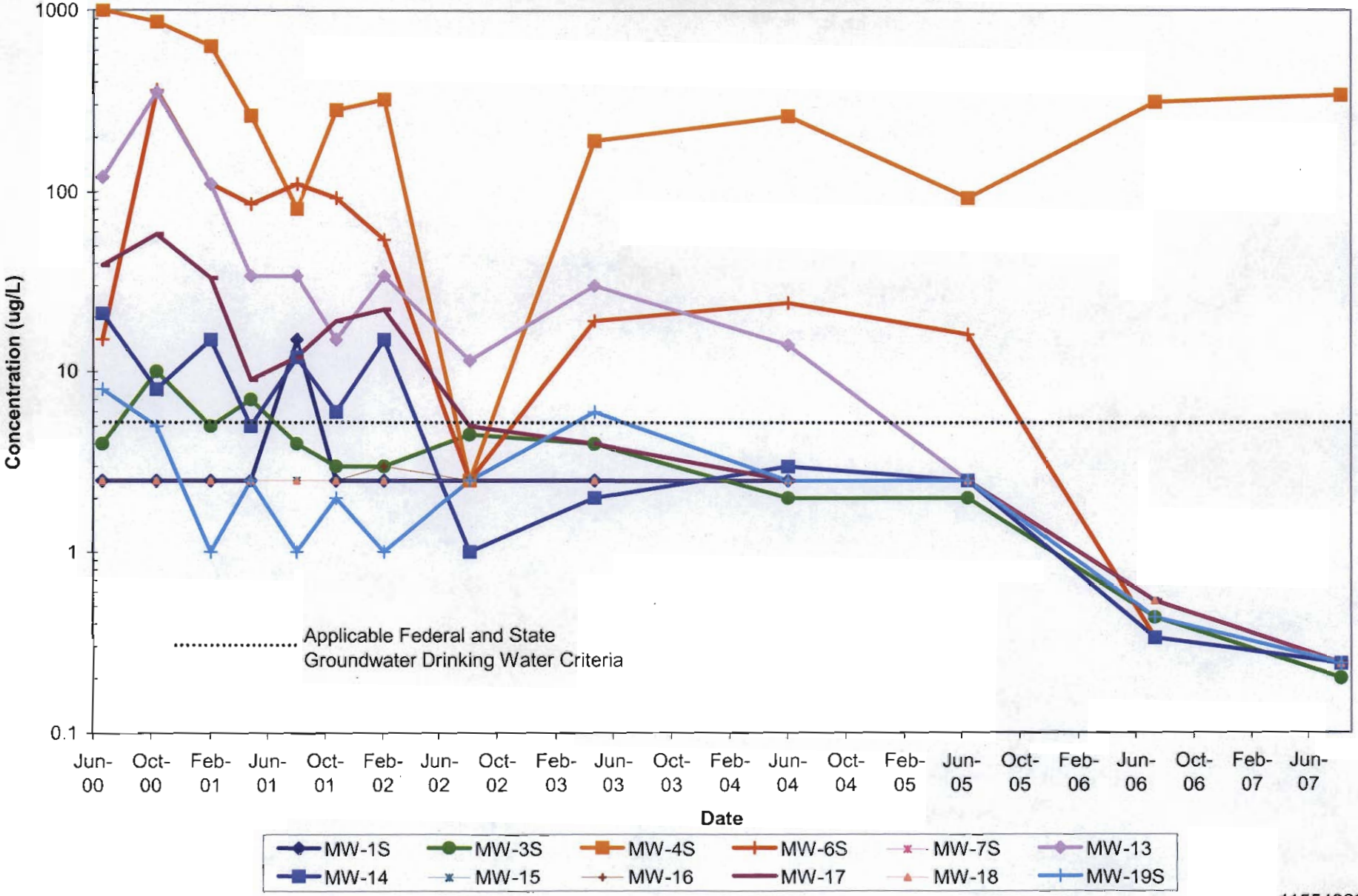
Tetrachloroethene Time-Series Graph
Deep Wells
CIRCUITRON CORPORATION SUPERFUND SITE



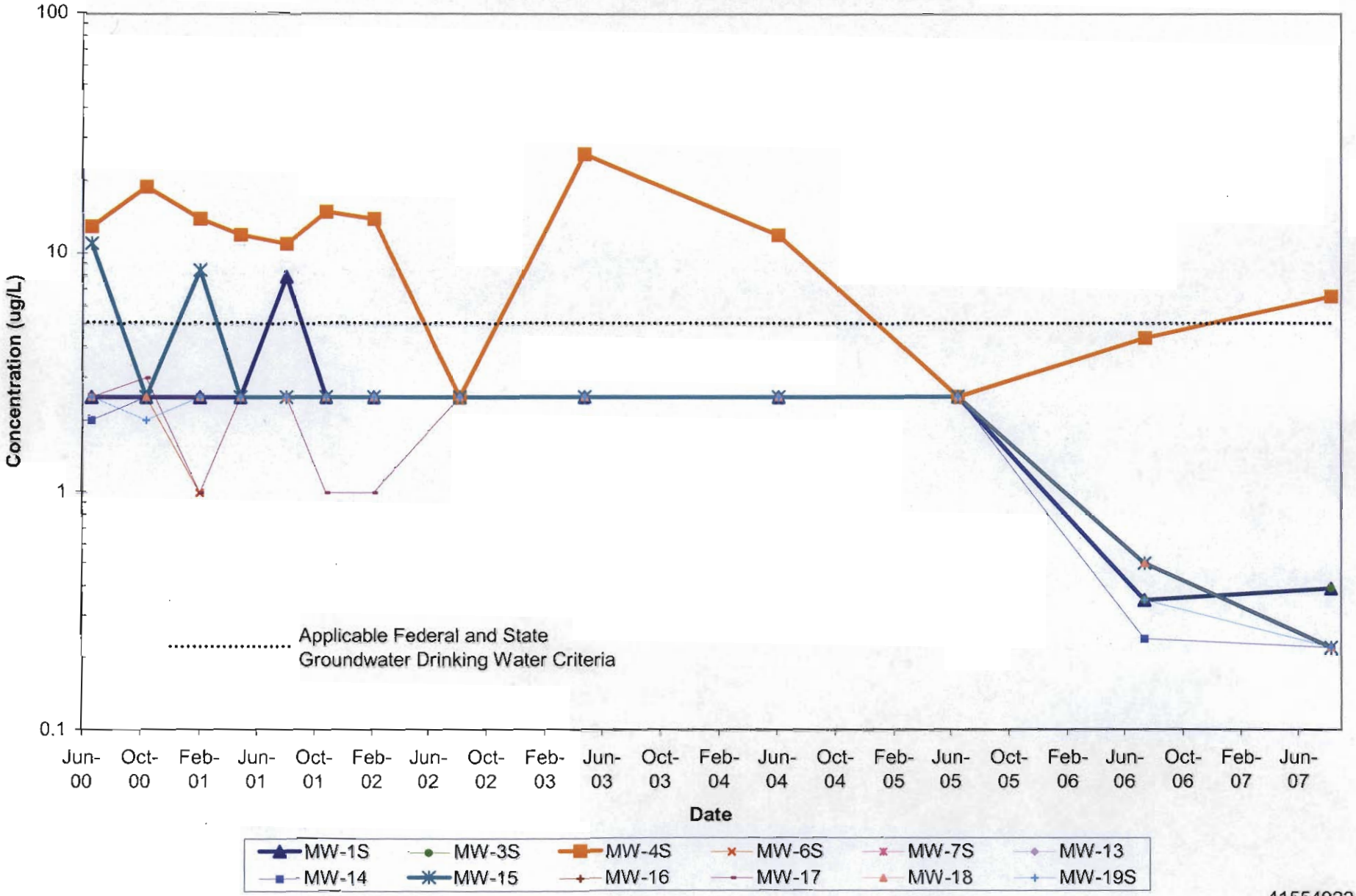
Trichloroethene Time-Series Graph
Deep Wells
CIRCUITRON CORPORATION SUPERFUND SITE



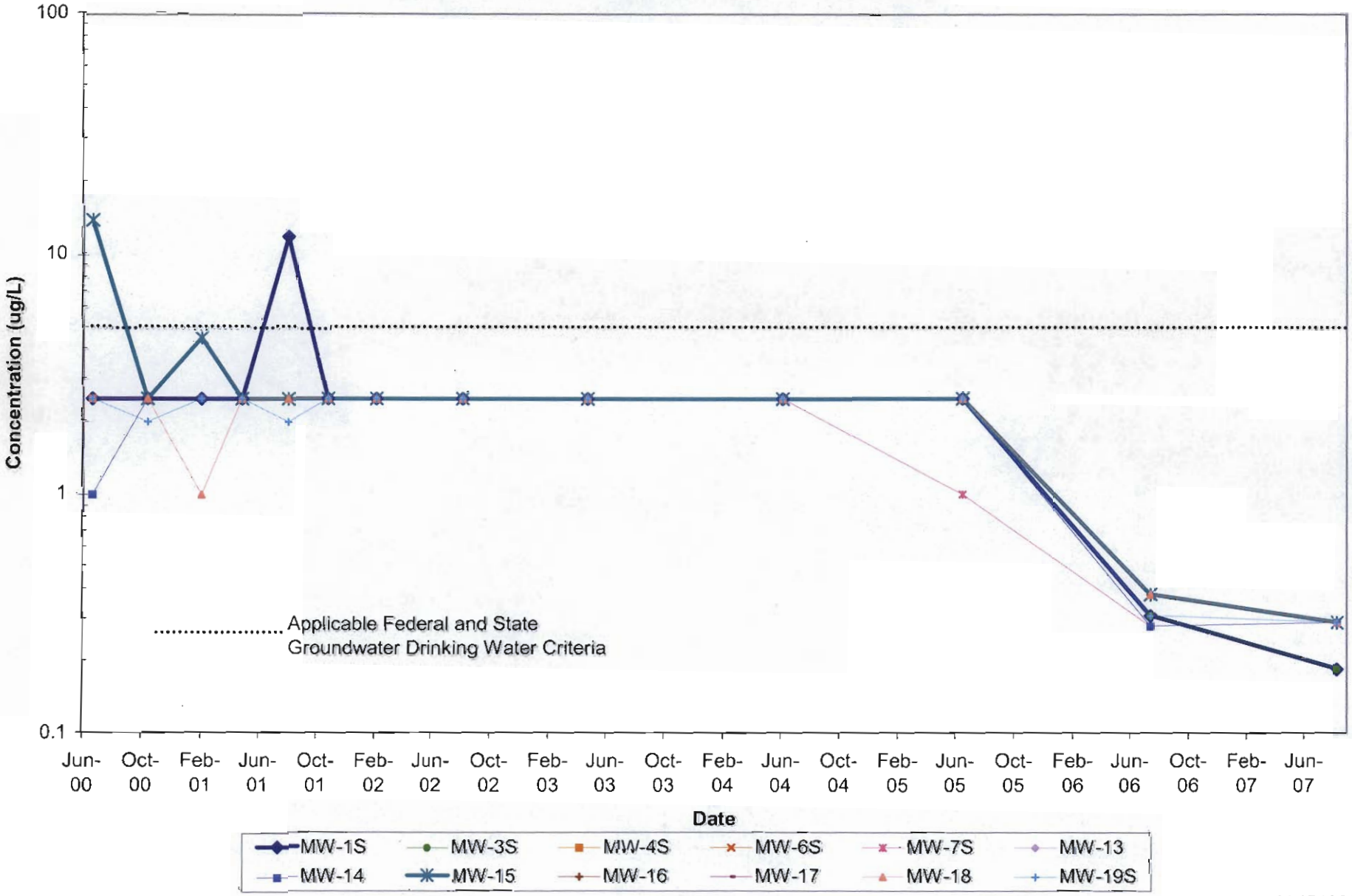
1,1,1-Trichloroethane Time-Series Graph
Shallow Wells
CIRCUITRON CORPORATION SUPERFUND SITE



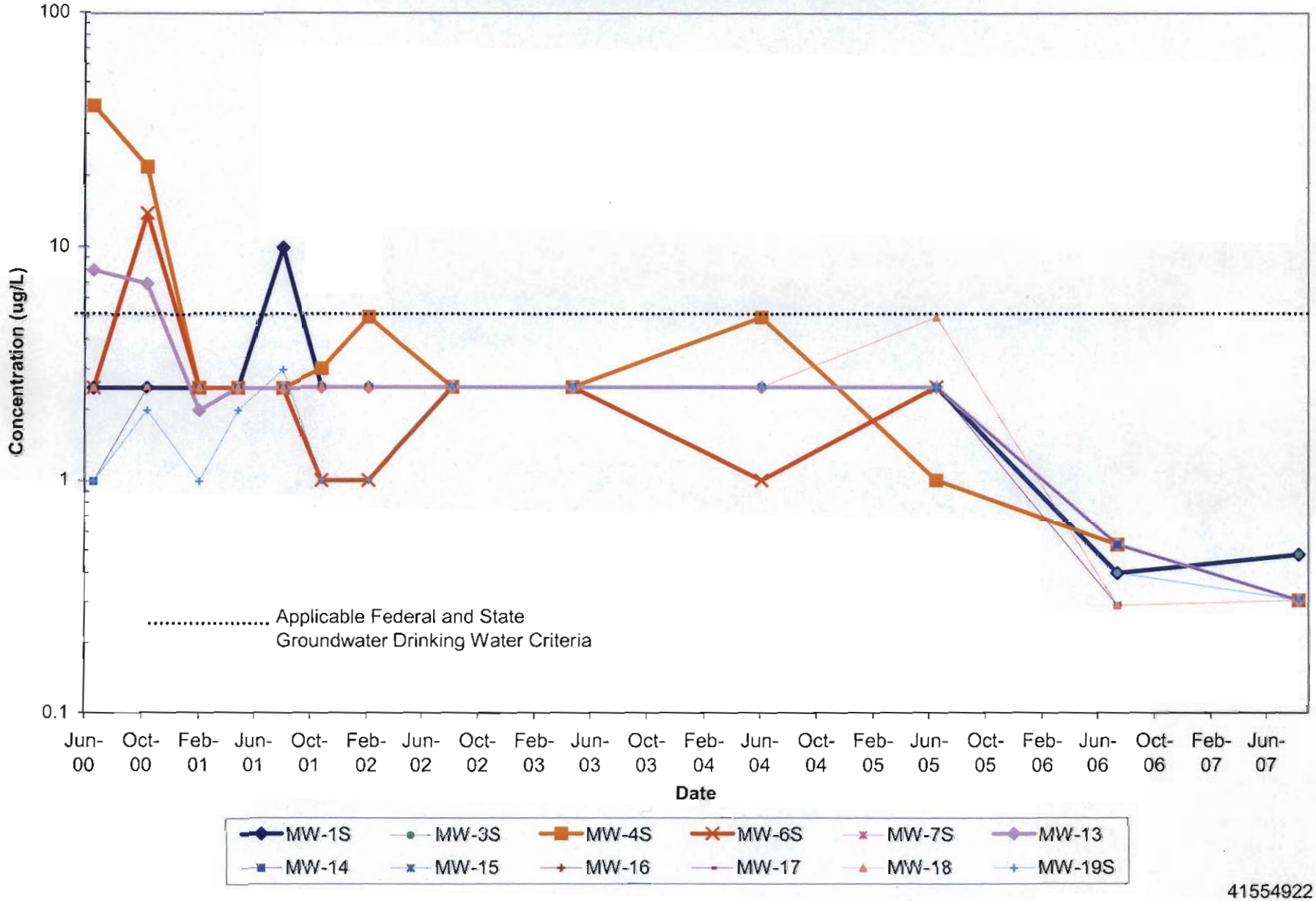
Tetrachloroethene Time-Series Graph
Shallow Wells
CIRCUITRON CORPORATION SUPERFUND SITE



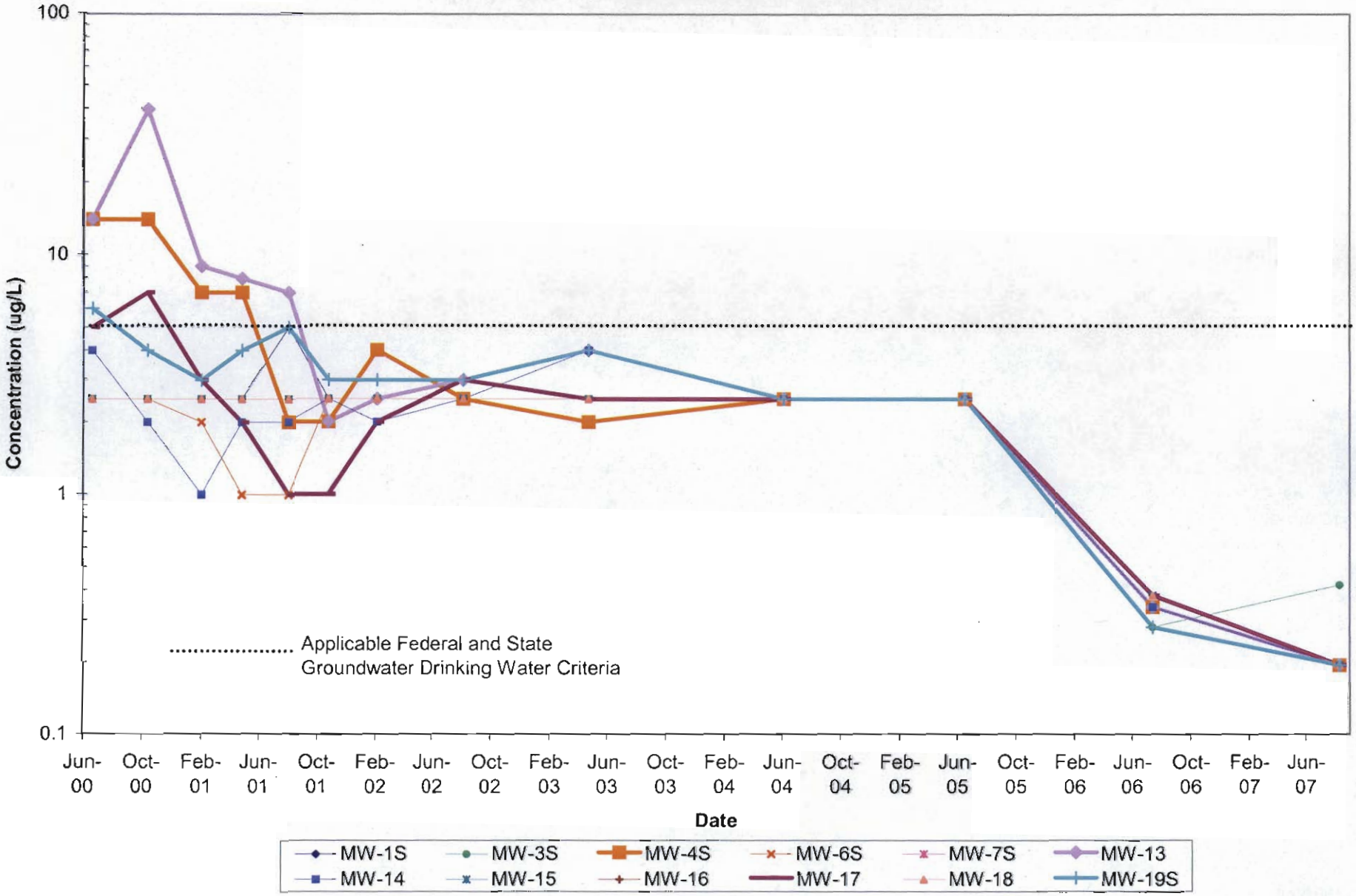
Trichloroethene Time-Series Graph
Shallow Wells
CIRCUITRON CORPORATION SUPERFUND SITE



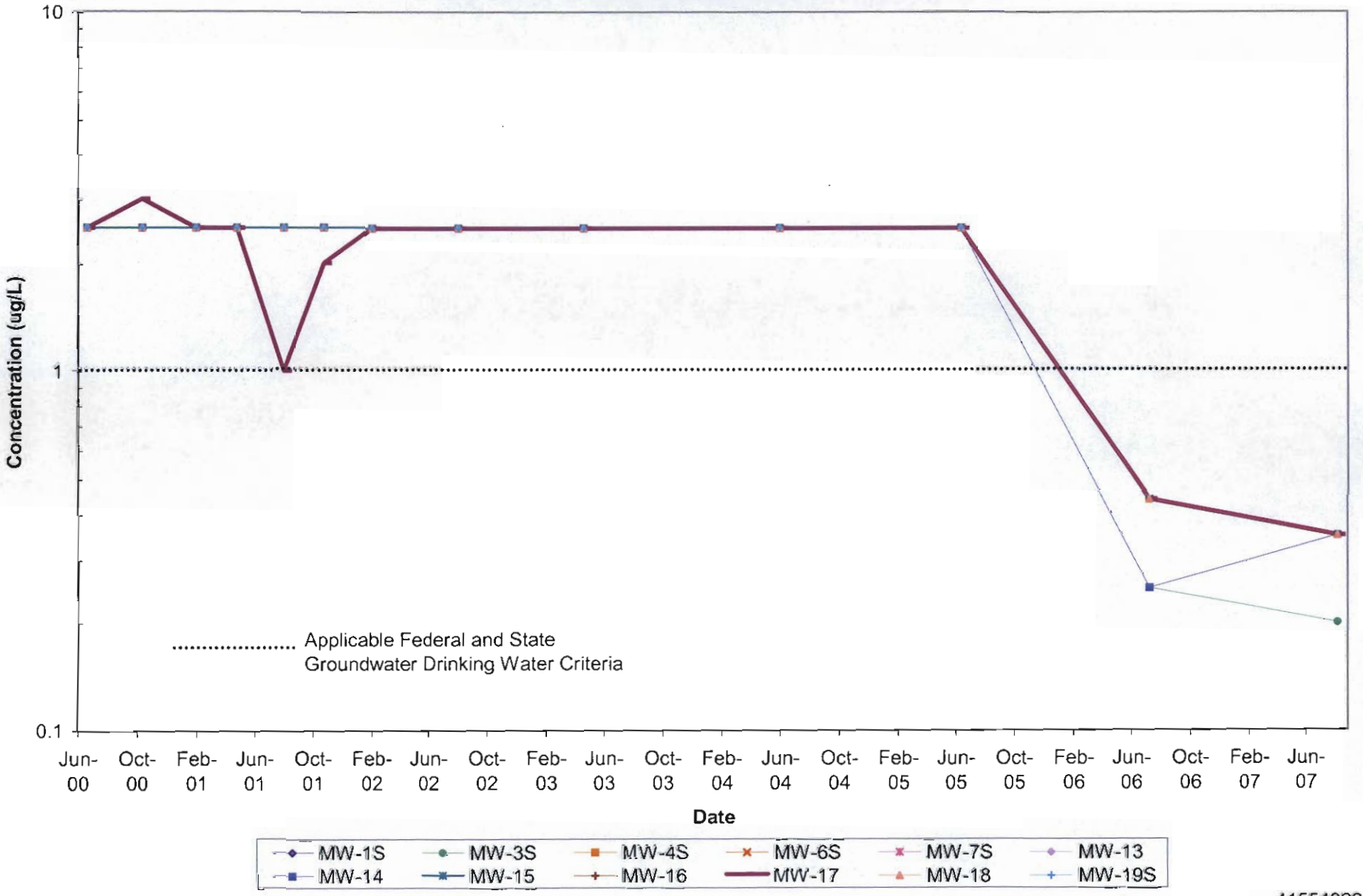
1,1-Dichloroethene Time-Series Graph
Shallow Wells
CIRCUITRON CORPORATION SUPERFUND SITE



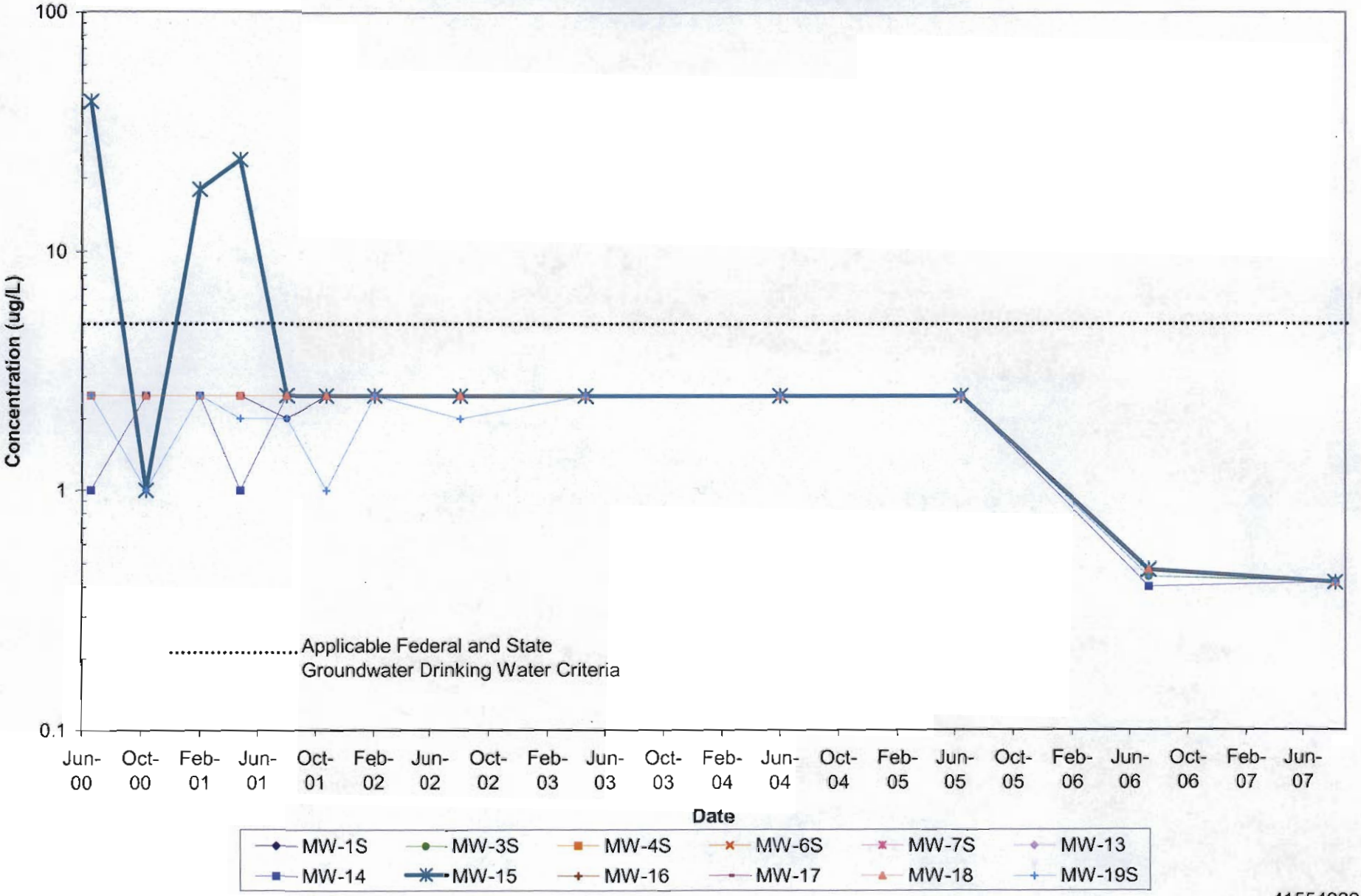
1,1-Dichloroethane Time-Series Graph
Shallow Wells
CIRCUITRON CORPORATION SUPERFUND SITE



1,1,2 Trichloroethane Time-Series Graph
Shallow Wells
CIRCUITRON CORPORATION SUPERFUND SITE

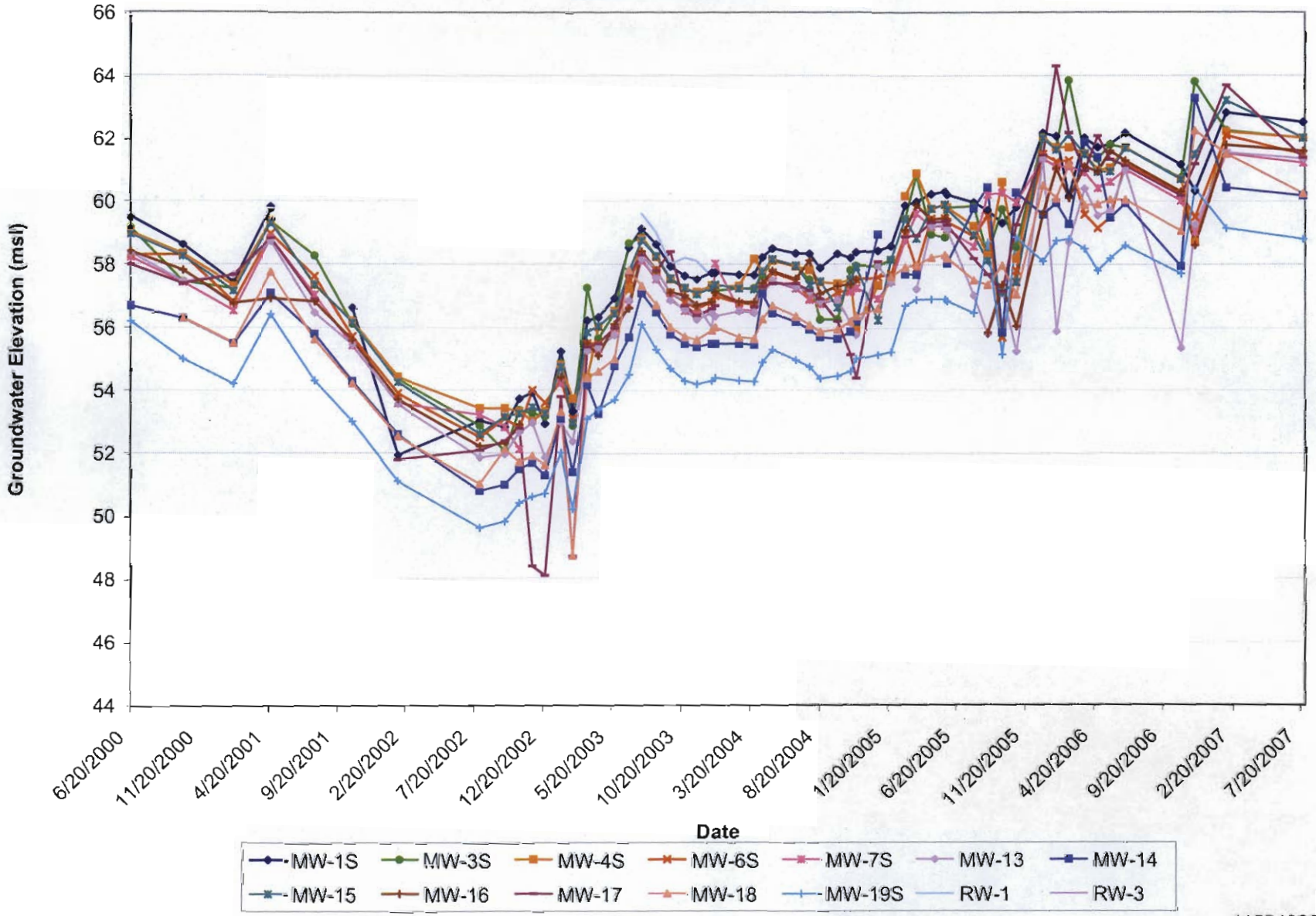


1,2 Dichloroethene (total) Time-Series Graph
Shallow Wells
CIRCUITRON CORPORATION SUPERFUND SITE

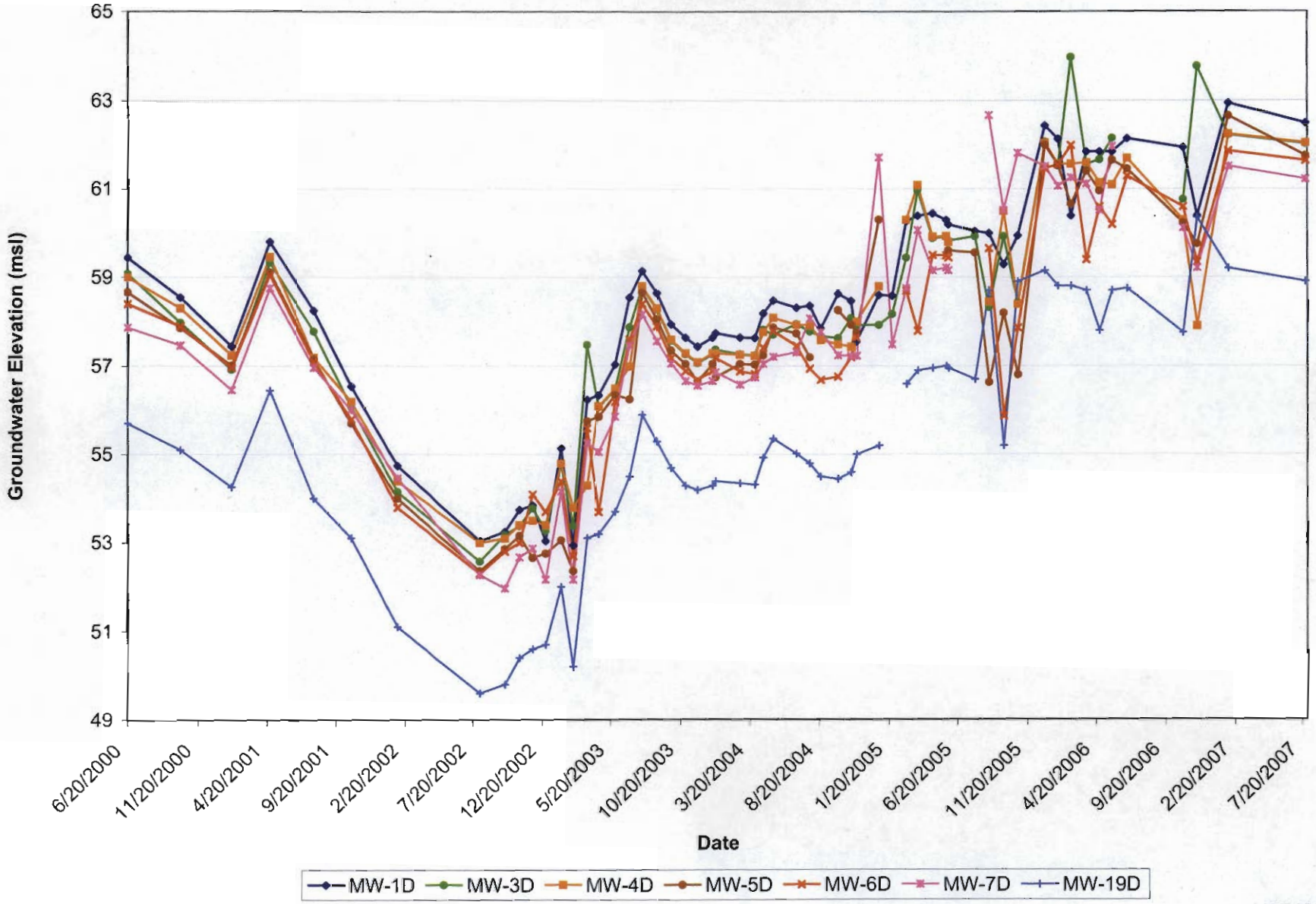


Appendix C
Hydrographs for Shallow and Deep Wells

Hydrograph of Shallow Wells
CIRCUITRON CORPORATION SUPERFUND SITE



Hydrograph of Deep Wells
CIRCUITRON CORPORATION SUPERFUND SITE

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