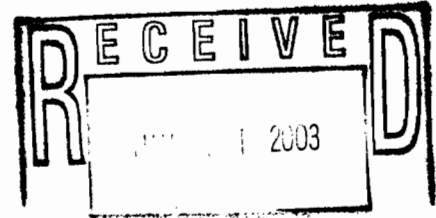


**URS**



June 20, 2003

Mr. Shewen Bian  
U.S. Army Corps of Engineers  
1900 Hempstead Turnpike Suite 316  
East Meadow, New York 11554

Re: Circuitron Corporation Superfund Site  
Annual Performance Monitoring Report

Dear Shewen:

Please find enclosed one copy of the final Annual Performance Monitoring Report for the Circuitron Superfund Site.

I have been working closely with Sharon Trocher on this report. Please do not hesitate to contact me if you have any questions.

Very truly yours,

A handwritten signature in black ink, appearing to read "Anne Fung".

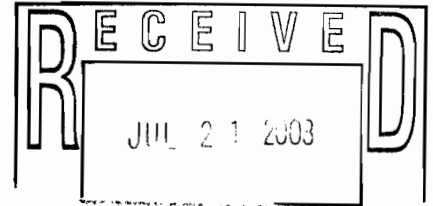
Anne Fung, P.E.  
Project Manager  
Remediation Operating Services

CC. Ms. Sharon Trocher USEPA (2 copies)  
Greg Gangemi - Site File (1 copy)  
80848002 File

*Jeff Trad - NYSDEC*

URS Corporation  
201 Willowbrook Blvd, 1<sup>st</sup> Floor  
Wayne, NJ 07470  
Tel: 973-785-0700  
Fax: 973-785-1956  
www.urscorp.com

**ANNUAL PERFORMANCE  
MONITORING REPORT**



**CIRCUITRON SUPERFUND SITE  
EAST FARMINGDALE,  
NEW YORK**

*Prepared for*  
USACE, New York

Contract No. DACW41-01-D-0004  
Delivery Order No. 002

June 2003

**URS**

13825 Sunrise Valley Drive, Suite 250  
Herndon, VA 20171-4672  
703.713.1500

201 Willowbrook Boulevard  
Wayne, New Jersey 07470  
973.785.0700

Project 80848002.660510

# TABLE OF CONTENTS

---

<b>1.0</b>	<b>INTRODUCTION.....</b>	<b>1-1</b>
1.1	Background.....	1-1
1.2	Groundwater Extraction System.....	1-2
1.3	Groundwater Monitoring System.....	1-3
<b>2.0</b>	<b>TECHNICAL APPROACH.....</b>	<b>2-1</b>
2.1	Groundwater Contour and Flow Maps.....	2-1
2.2	Groundwater Quality.....	2-1
<b>3.0</b>	<b>GROUNDWATER FLOW.....</b>	<b>3-1</b>
3.1	Baseline Conditions.....	3-1
3.2	Pumping Conditions.....	3-1
3.3	Capture Zone: Modeled Vs. Observed.....	3-2
<b>4.0</b>	<b>GROUNDWATER QUALITY.....</b>	<b>4-1</b>
4.1	Exceedances of Action Levels.....	4-1
4.2	Site-Related Vs. Non Site-Related Compounds.....	4-2
4.3	Isoconcentration Maps.....	4-3
4.3.1	VOC Exceedances in Shallow Wells.....	4-3
4.3.2	Inorganic Exceedances in Shallow Wells.....	4-4
4.3.3	VOC Exceedances in Deep Wells.....	4-5
4.3.4	Inorganic Exceedances in Deep Wells.....	4-5
4.4	Geochemical Time-Series Graphs.....	4-6
<b>5.0</b>	<b>SUMMARY AND CONCLUSIONS.....</b>	<b>5-1</b>
5.1	Groundwater Flow.....	5-1
5.2	Groundwater Quality.....	5-1
5.2.1	Shallow Wells - VOCs.....	5-2
5.2.2	Shallow Wells - Inorganic.....	5-2
5.2.3	Deep Wells - VOCs.....	5-2
5.2.4	Deep Wells - Inorganic.....	5-3
5.2.5	Water Quality Trends Over Time.....	5-3
<b>6.0</b>	<b>RECOMMENDATIONS.....</b>	<b>6-1</b>
<b>7.0</b>	<b>REFERENCES.....</b>	<b>7-1</b>

# TABLE OF CONTENTS

---

## List of Appendices

Appendix A-1	Total VOC Concentrations
Appendix A-2	Groundwater Sampling Results by Well
Appendix A-3	Laboratory Summary Report (Validated)
Appendix B	Time-Series Geochemical Graphs for Shallow and Deep Wells
Appendix C	Hydrographs for Shallow and Deep Wells
Appendix D	Chromium vs. Turbidity

## List of Tables

4-1	Site-Related and Non Site-Related Compounds, Circuitron Corporation Superfund Site.....	4-8
A-1	Total VOC Concentrations .....	A-1

# TABLE OF CONTENTS

---

## List of Figures

- 1-1 Site Location Map, Circuitron Corporation Superfund Site, East Farmingdale, New York
- 1-2 Site Map, Circuitron Corporation Superfund Site, East Farmingdale, New York
- 3-1a Groundwater Elevation Contour Map (Non-Pumping), Upper Glacial Aquifer, January 1999
- 3-1b Groundwater Elevation Contour Map (Non-Pumping), Upper Glacial Aquifer, June 2000
- 3-1c Groundwater Elevation Contour Map (Pumping), Upper Glacial Aquifer, August 2002
- 3-2 Groundwater Flow Pattern and Zone of Capture, Upper Glacial Aquifer, August 2002
- 4-1a Volatile Organic Compound Concentrations Exceeding Screening Criteria, Shallow Wells
- 4-1b Inorganic Compound Concentrations Exceeding Screening Criteria, Shallow Wells
- 4-2a Volatile Organic Compound Concentrations Exceeding Screening Criteria, Deep Wells
- 4-2b Inorganic Compound Concentrations Exceeding Screening Criteria, Deep Wells
- 4-3a 1,1-DCA June 2000, Isoconcentration Map ( $\mu\text{g/L}$ ), Upper Glacial Aquifer
- 4-3b 1,1-DCA February 2002, Isoconcentration Map ( $\mu\text{g/L}$ ), Upper Glacial Aquifer
- 4-4a 1,1,1-TCA June 2000, Isoconcentration Map ( $\mu\text{g/L}$ ), Upper Glacial Aquifer
- 4-4b 1,1,1-TCA January - February 2002, Isoconcentration Map ( $\mu\text{g/L}$ ), Upper Glacial Aquifer
- 4-5a Chromium June 2000, Isoconcentration Map ( $\mu\text{g/L}$ ), Upper Glacial Aquifer
- 4-5b Chromium January - February 2002, Isoconcentration Map ( $\mu\text{g/L}$ ), Upper Glacial Aquifer
- 4-6a Iron June 2000, Isoconcentration Map ( $\mu\text{g/L}$ ), Upper Glacial Aquifer
- 4-6b Iron January - February 2002, Isoconcentration Map ( $\mu\text{g/L}$ ), Upper Glacial Aquifer
- 4-7a Manganese June 2000, Isoconcentration Map ( $\mu\text{g/L}$ ), Upper Glacial Aquifer
- 4-7b Manganese January - February 2002, Isoconcentration Map ( $\mu\text{g/L}$ ), Upper Glacial Aquifer

# TABLE OF CONTENTS

---

## 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
gpm	gallons per minute
PCE	tetrachloroethene
RCRA	Resource Conservation Recovery Act
ROD	Record of Decision
TCE	trichloroethene
USEPA	United States Environmental Protection Agency
VOC	volatile organic compound



## **1.0 INTRODUCTION**

This is the first 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 groundwater data collected to date for the period January 1999 to August 2002, 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). Hereafter, subsequent annual reports will be prepared on a regular schedule incorporating new performance monitoring data. Each annual report will assess the relevant data collected to date for the entire Performance Monitoring period.

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 references.

## **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**

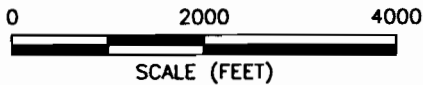
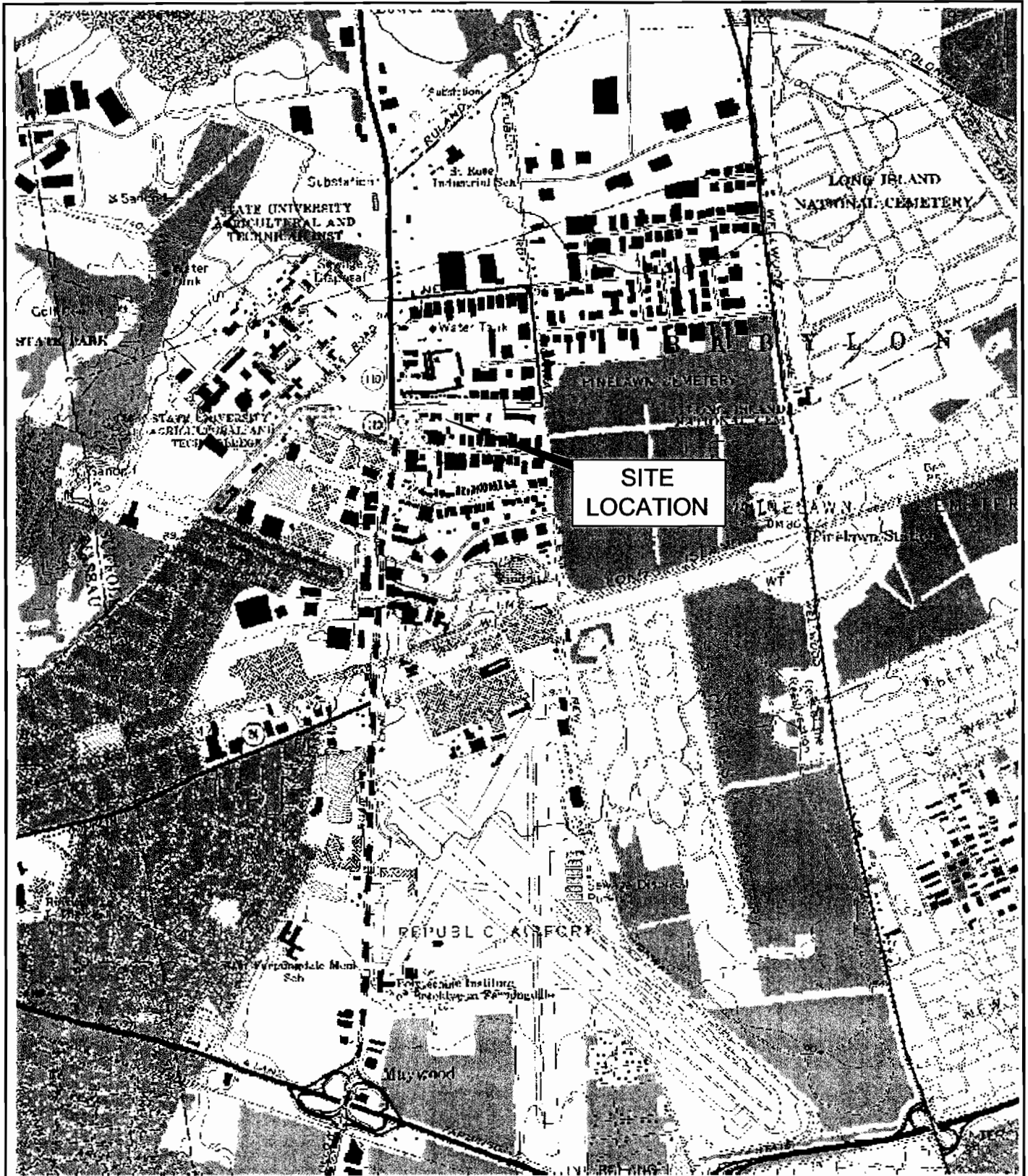
For the OU-2 remedy, groundwater flow and contaminant transport modeling was performed (Radian, 1999) to assist in designing a treatment system. Specifically, modeling was used to determine the placement and pumping rates of proposed extraction wells. Several scenarios of groundwater extraction well 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 groundwater extraction system consists of three (3) extraction wells (RW-1, RW-2, and RW-3) 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 three areas to accomplish groundwater capture around the subject site area. Each well is constructed with a 15-foot long ASTM-A-304 stainless steel screen connected to ASTM-A-304 Schedule 40 stainless steel riser. The bottom of the well screens for RW-1, RW-2, and RW-3 were installed at depths of 56 feet, 56 feet, and 54 feet bgs, respectively. 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 design total flow rate of the three extraction wells is 80 gpm, where RW-1, RW-2, and RW-3 are pumped individually at 30 gpm, 20 gpm, and 30 gpm, respectively. The system began operation on June 28, 2000.

### **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 2002, 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. These data are used to assess the performance of the treatment system and are discussed in Sections 3 and 4 of this report.



**MAP SOURCE:**

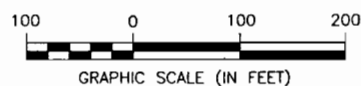
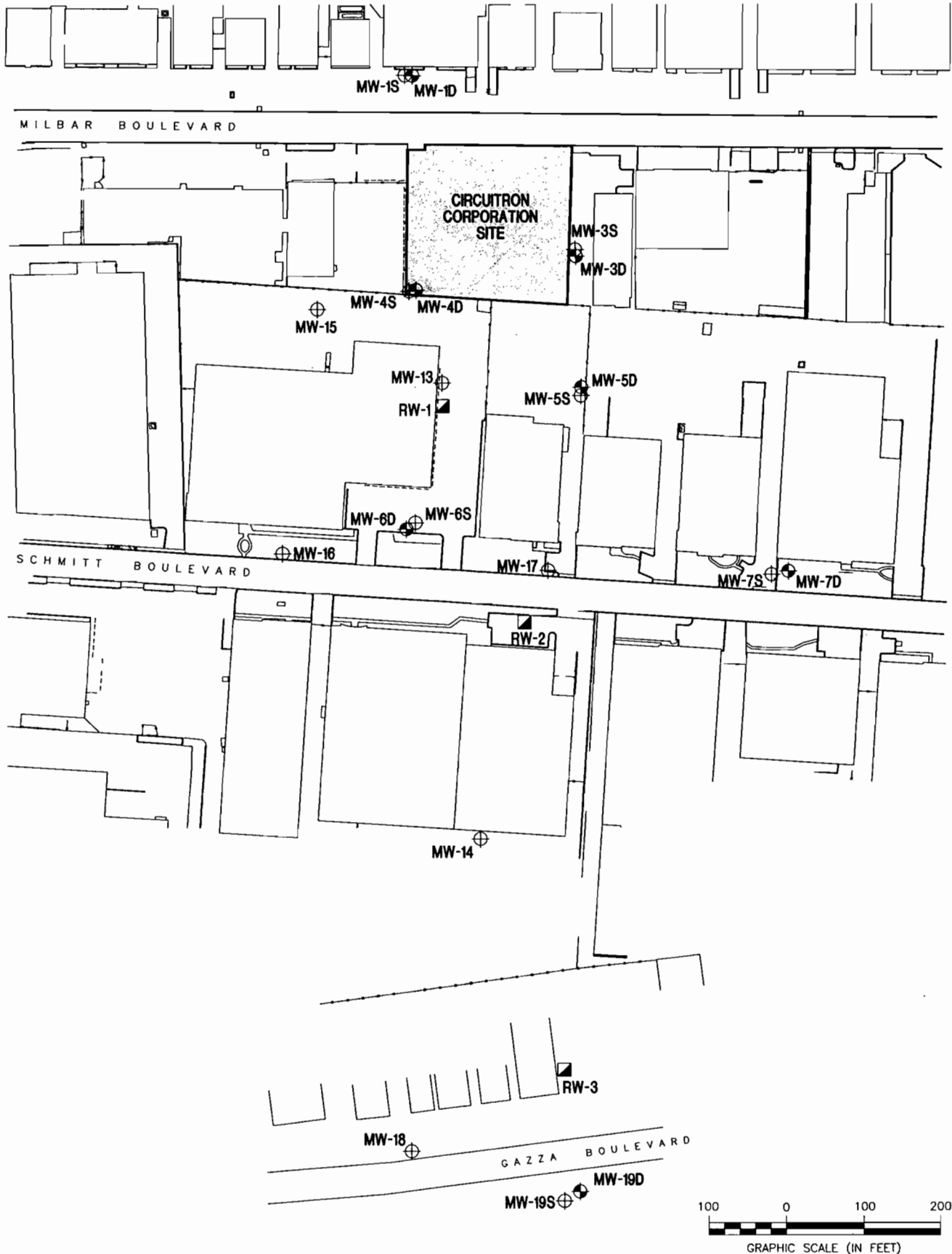
U.S.G.S. 7.5 MINUTE SERIES QUADRANGLES OF HUNTINGTON, N.Y., DATED 1967, PHOTOREVISED 1979 AND AMITTYVILLE, N.Y. DATED 1969, PHOTOREVISED 1979.

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

**URS**

WAYNE, NEW JERSEY

DR. BY	JL	SCALE AS SHOWN	DWG. CIT-AREA-MAP.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



C

C

## **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 2002. 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 three pumping wells. Groundwater capture is demonstrated if groundwater flow lines are directed toward one of the three 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 two sampling events that occurred prior to startup of the remediation system, 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) and inorganic analytes 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 and January/February 2002 sampling events for various VOCs and inorganic analytes for groundwater obtained from the shallow aquifer. Previous data were submitted to the United States Environmental Protection Agency (USEPA) 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.





### **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.

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) are compared to the modeled capture zone (Figure 3-2) estimated from the groundwater modeling (Radian, 1999).

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 the Performance Monitoring Period. Additionally, the hydrographs indicate that groundwater levels in the shallow and deep wells have decreased by an average of 6 feet in each well between June 2000 and August 2002.

#### **3.1 BASELINE CONDITIONS**

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

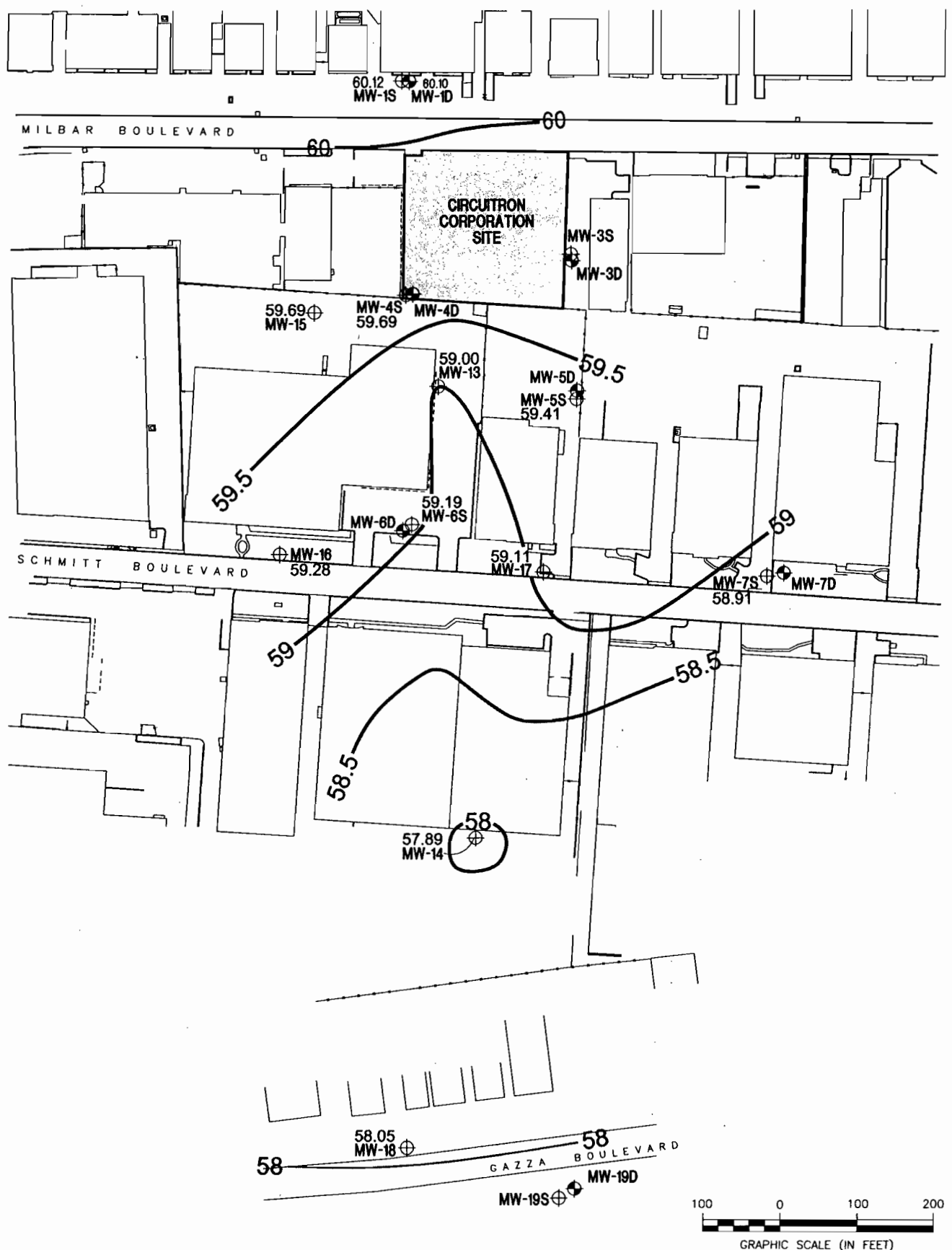
Figure 3-1c shows the groundwater contour map and the flow pattern within the upper portion of the Upper Glacial Aquifer under pumping conditions during August 2002,

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 three 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. The groundwater flow paths (Figure 3-2) leading to a recovery well indicates capture by that recovery well. The hydraulic gradient observed under pumping conditions during August 2002 ranged from 0.002 and 0.007 ft/ft.




### **3.3 CAPTURE ZONE: MODELED VS. OBSERVED**

Groundwater flow and contaminant transport modeling was performed by Radian International in 1999 to assist in the 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).

Figure 3-2 shows the modeled capture zone within the upper portion of the Upper Glacial Aquifer for a total pumping rate of 80 gpm and also shows the groundwater contours and flow paths from August 2002, 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.

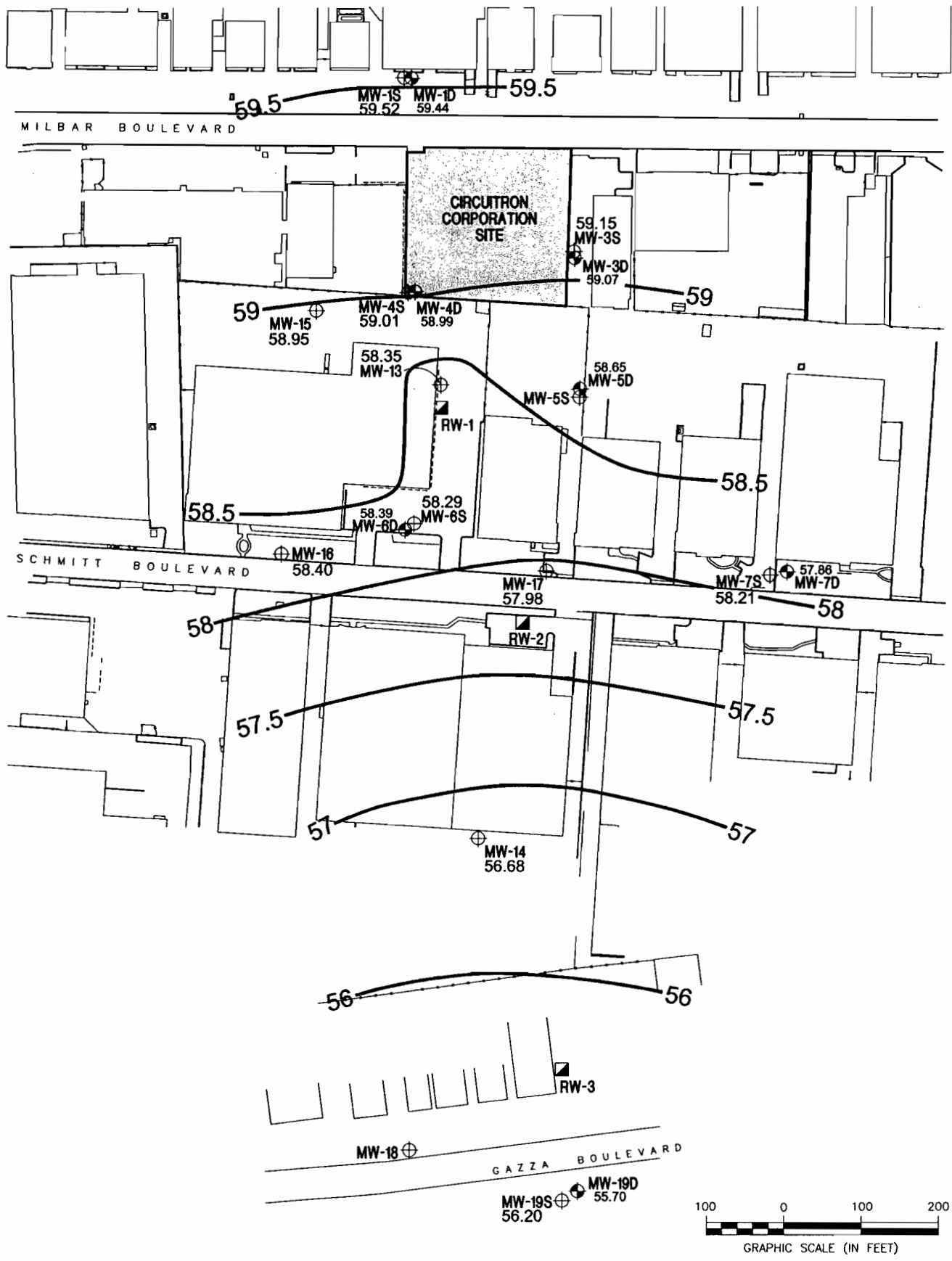


**LEGEND**

-  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**

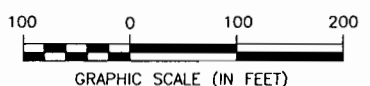


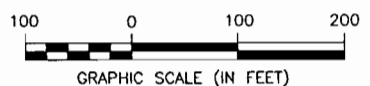
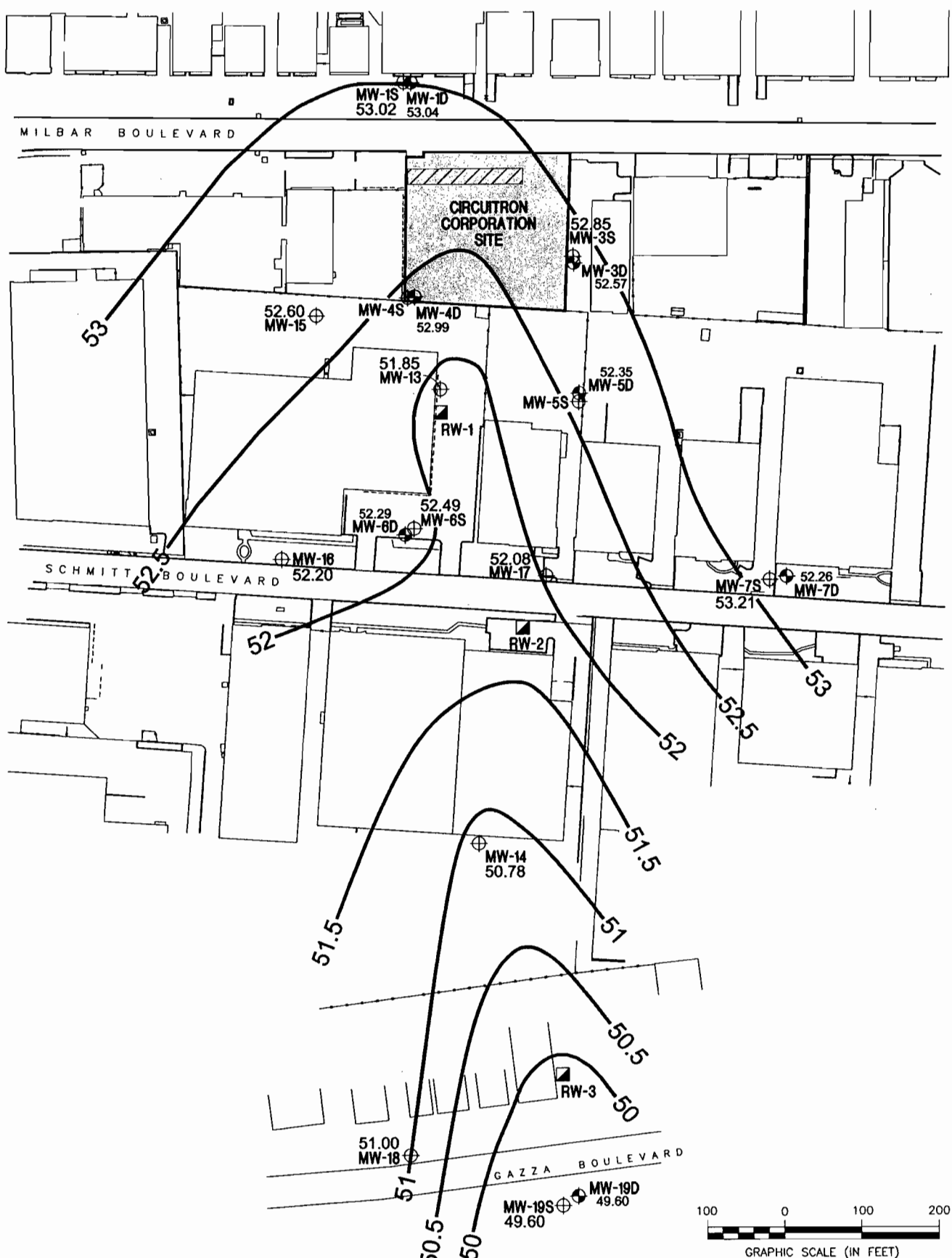


LEGEND

- ⊕ 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**



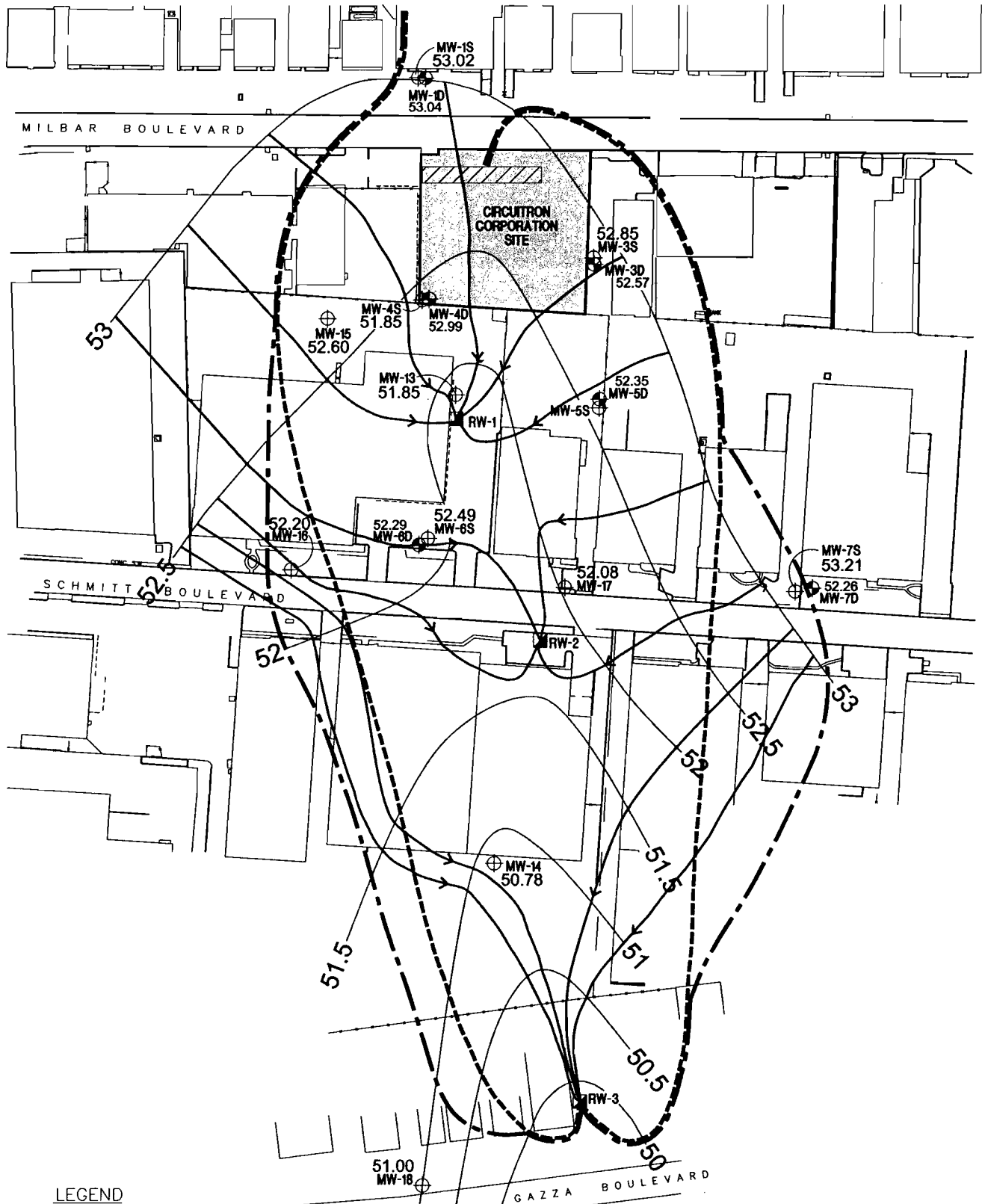


**LEGEND**

- ⊕ 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**





**LEGEND**

⊕ SHALLOW MONITORING WELL

⊕ DEEP MONITORING WELL

▨ RECOVERY WELL

56.20 GROUNDWATER ELEVATION

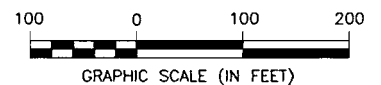
— GROUNDWATER ELEVATION CONTOUR LINE

▨ NORTHERN INJECTION TRENCH

← GROUNDWATER FLOW DIRECTION

--- MODELED ZONE OF CAPTURE (RADIAN, 1999)

--- OBSERVED ZONE OF CAPTURE, AUGUST 2002



**Groundwater Flow Pattern and Zone of Capture  
August 2002**

Upper Glacial Aquifer  
Circuitron Corporation Superfund Site  
East Farmingdale, New York

**URS**

0

0

0

## **4.0 GROUNDWATER QUALITY**

During the period from 28 June 2000 to August 2002, when the OU-2 remedy was operating, groundwater samples were collected from up to 19 monitoring wells at the site. These data (presented in Appendix 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 two sampling events that occurred prior to startup of the remediation system, 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, 4-1b, 4-2a, and 4-2b show exceedances of VOCs and inorganic compounds observed in groundwater sampled from shallow and deep wells.

Of all the shallow wells, there are two, MW-18 and MW-19S, that are located outside the capture zone. Groundwater samples collected from MW-18 showed multiple exceedances of iron and methylene chloride, and a single exceedance of chromium (Figures 4-1a and 4-1b). Groundwater samples collected from MW-19S showed multiple exceedances of iron, manganese, chromium, and methylene chloride, and single exceedances of 1,1-dichloroethane (1,1-DCA) and 1,1,1-trichloroethane (1,1,1-TCA) (Figures 4-1a and 4-



1b). 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.

## **4.2 SITE-RELATED 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 (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.
- 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 (February 1994 and June 2000 sampling events); such compounds are considered to be background.
- 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 (Figures 4-3a, 4-3b, 4-4a, 4-4b, 4-5a, 4-5b, 4-6a, 4-6b, 4-7a, and 4-7b) were prepared showing data from the June 2000 and the January/February 2002 sampling events for organic and inorganic compounds which had exceedances observed in the groundwater from downgradient well MW-19S. Three shallow monitoring wells (MW-4S, MW-6S, and MW-7S) scheduled to be sampled in August 2002 were not sampled due to dry conditions; therefore, the isoconcentration maps were prepared using data from the January/February 2002 sampling event rather than from the August 2002 sampling event.

#### **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 the downgradient well MW-19S.

Figures 4-3a and 4-3b present isoconcentration contours of 1,1-DCA in groundwater sampled in June 2000 and January/February 2002, respectively. The levels of 1,1-DCA present in January/February 2002 (Figure 4-3b) are considerably less than the levels present in June 2000 (Figure 4-3a). The January/February 2002 results for groundwater from MW-19S are less than the Action Levels, implying that the remediation system is effectively capturing the 1,1-DCA in the shallow groundwater at the site.

Figures 4-4a and 4-4b show isoconcentration contours of 1,1,1-TCA in groundwater sampled in June 2000 and January/February 2002, respectively. The levels of 1,1,1-TCA present in January/February 2002 (Figure 4-4b) are considerably less than the levels present in June 2000 (Figure 4-4a). The January/February 2002 results for groundwater from MW-19S are less than the Action Levels implying that the remediation system is effectively capturing the 1,1,1-TCA in the shallow groundwater at the site.

### 4.3.2 Inorganic Exceedances in Shallow Wells

Figure 4-1b 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 iron, manganese, chromium, lead, and mercury exceeded their respective Action Levels in the groundwater samples collected from downgradient well MW-19S. Mercury and lead were each observed as an exceedance in groundwater from downgradient well MS-19S during a single sampling event and as such are considered anomalous and are considered to be non site-related.

Figures 4-5a and 4-5b present isoconcentration contours of chromium in groundwater sampled in June 2000 and January/February 2002. The result of chromium in June 2000 and January/February 2002 are very similar, showing a slightly smaller accumulation for the January/February 2002 event. The levels of chromium detected in the samples of shallow groundwater were graphed versus turbidity to attempt to understand if there is a potential correlation (Appendix D). These graphs show that, in general, the levels of chromium rise and fall with the level of turbidity. This indicates that increased turbidity might cause increased levels of chromium. It has been well documented that chromium can sorb onto colloid-sized particles of clay minerals or ferric oxides transported within the groundwater. If the source of the chromium in the shallow groundwater from the downgradient wells and site wells is due to turbidity, then chromium would be potentially elevated artificially and not representative of groundwater and thus, not be a site-related compound. Use of dissolved rather than total sampling methods would provide data to evaluate this problem.

Figures 4-6a and 4-6b present isoconcentration contours of iron in groundwater sampled in June 2000 and January/February 2002. The results of iron in June 2000 and January/February 2002 are very similar, showing a slightly smaller accumulation for the January/February 2002 event. Iron was observed as a multiple exceedance in groundwater from upgradient well MW-1S and from downgradient well MW-19S and thus, it is not a site-related compound. Additionally, exceedances of iron are ubiquitous in all the wells sampled during the monitoring period, indicating that iron is a background compound.

Figures 4-7a and 4-7b present isoconcentration contours of manganese in groundwater sampled in June 2000 and January/February 2002. Concentrations of manganese in June 2000 and January/February 2002 are very similar, showing a slightly

smaller accumulation for the January/February 2002 event. Manganese was observed as a multiple exceedance in groundwater from upgradient well MW-1S and from downgradient well MW-19S and thus, is not a site-related compound.

### **4.3.3 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 be multiple exceedances in groundwater from downgradient well MW-19D, indicating these compounds are being transported in deeper groundwater across the site.

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.

### **4.3.4 Inorganic Exceedances in Deep Wells**

Figure 4-2b and Table 4-1 provide a summary of the exceedances of inorganic compounds observed to have been present in groundwater samples from deep wells. These data show that multiple exceedances were observed for chromium, iron, lead, manganese, and nickel.

Chromium, iron, and lead were observed as multiple exceedances in groundwater from upgradient well MW-1D and in groundwater from downgradient well MW-19D. This indicates that these compounds are not site-related and are transported in the deeper groundwater across the site.

Although nickel was detected as multiple exceedances in groundwater from deep well MW-6D, it was not detected as multiple exceedances in any other well at the site nor at the downgradient well. Nickel was not detected as an exceedance in shallow groundwater at the site; therefore, its presence in deeper groundwater will not be considered site-related.

Manganese was not observed as an exceedance in upgradient deep well MW-1D but was observed as an exceedance in groundwater from several site wells and in downgradient deep well MW-19D. This metal is not considered site-related because manganese was detected in quantifiable concentrations in groundwater from upgradient deep well MW-1D, and also because manganese was detected as a multiple exceedance in the groundwater from shallow well MW-1S, indicating that manganese is a background compound for the shallow water. Therefore, its presence in deep groundwater is likely not related to site activities.

#### **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 2002. 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;
- The levels of manganese, chromium, and iron in groundwater from the shallow wells show either slight decrease or no change over the Performance Monitoring Period;
- The VOCs detected in groundwater from the deep wells show either slight increase or no change over the Performance Monitoring Period; and

- The levels of manganese, chromium, and iron in groundwater from the deep wells show no change over the Performance Monitoring Period.

The difference in trends observed in VOCs 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 following compounds were observed as exceedances in groundwater from MW-19S and not observed as exceedances in groundwater from MW-1S:

- 1,1-DCA;
- Chromium;
- Lead; and
- Mercury.

The time-series graphs show the following for each of these compounds above:

- The levels of 1,1-DCA show a decrease over the Performance Monitoring Period, indicating the remediation system is effective in mitigating these compounds.
- Chromium meets the criteria for a site-related compound, but also appears to be correlated with levels of turbidity.
- Lead and mercury were observed as one-time exceedances in the downgradient well and are believed to not be site-related.

**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 <sup>(2)</sup>	Site-Related	Rationale <sup>(1)</sup>
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	
	MW-3S	Iron	6	No	Method blank artifact
		Manganese	6	No	
	MW-4S	1,1,1 Trichloroethane	2	Yes	Baseline exceedance in MW-1S Baseline exceedance in MW-1S
		Iron	5	No	
		1,1 Dichloroethane	4	Yes	
		1,1 Dichloroethene	2	Yes	
		1,1,1 Trichloroethane	7	Yes	
	MW-6S	Tetrachloroethene	7	Yes	Method blank artifact
		Methylene chloride	3	No	
		Chromium	4	Yes	
		Iron	4	No	
		1,1 Dichloroethene	1	Yes	
		1,1,1 Trichloroethane	7	Yes	
		Methylene chloride	2	No	
		Antimony	1	No	
Chromium		3	Yes		
Iron		3	No		
MW-7S	Methylene chloride	1	No	Single exceedance	
	Chromium	1	Yes		
MW-13	Iron	2	No	Baseline exceedance in MW-1S Method blank artifact	
	1,1 Dichloroethane	5	Yes		
	1,1 Dichloroethene	2	Yes		
	1,1,1 Trichloroethane	8	Yes		
	Methylene chloride	1	No		
	Iron	*5	No	Method blank artifact	
	Manganese	1	No		

**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 <sup>(2)</sup>	Site-Related	Rationale <sup>(1)</sup>
Shallow Groundwater (Continued)	MW-14	1,1,1 Trichloroethane	6	Yes	Method blank artifact
		Methylene chloride	1	No	
	MW-15	Iron	5	No	Baseline exceedance in MW-1S Baseline exceedance in MW-1S
		Manganese	3	No	
		1,2 Dichloroethene (total)	3	Yes	
		Tetrachloroethene Trichloroethene	2 1	Yes Yes	
	MW-16	Iron	5	No	Baseline exceedance in MW-1S Baseline exceedance in MW-1S
		Manganese	4	No	
		Arsenic	1	No	
		Iron Lead	5 1	No No	
		Manganese	5	No	
	MW-17	1,1 Dichloroethane	1	Yes	Single exceedance Baseline exceedance in MW-1S Single exceedance Baseline exceedance in MW-1S
		1,1,1 Trichloroethane	7	Yes	
		1,1,2 Trichloroethane	2	Yes	
		Methylene chloride	1	No	
		Iron Lead	5 1	No No	
		Manganese	1	No	
	MW-18	Methylene chloride	2	No	Method blank artifact Baseline exceedance in MW-1S Single exceedance Baseline exceedance in MW-1S
		Chromium	1	Yes	
		Iron	5	No	
MW-19S	1,1 Dichloroethane	1	Yes	Method blank artifact Baseline exceedance in MW-1S Single exceedance Baseline exceedance in MW-1S	
	1,1,1 Trichloroethane	1	Yes		
	Methylene chloride	4	No		
	Chromium	2	Yes		
	Iron Lead Manganese	5 1 5	No No No		
		Mercury	1	No	Single exceedance



# SECTION FOUR

# Groundwater Quality

**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 <sup>(2)</sup>	Site-Related	Rationale <sup>(1)</sup>
Deep Groundwater	MW-1D (Upgradient well)	1,1 Dichloroethene	8	No	Upgradient well
		1,1,1 Trichloroethane	8	No	
		Tetrachloroethene	*4	No	
		Trichloroethene	8	No	
	MW-3D	Methylene chloride	2	No	Upgradient well
		Chromium	4	No	
		Iron	6	No	
	MW-4D	Lead	1	No	Method blank artifact
		Methylene chloride	1	No	
		Chromium	3	No	
		Iron	3	No	
	MW-5D	Manganese	1	No	Baseline exceedance in MW-1D Baseline exceedance in MW-1D Not site-related in shallow aquifer
		1,1 Dichloroethane	1	No	
		1,1 Dichloroethene	8	No	
		1,1,1 Trichloroethane	8	No	
		Tetrachloroethene	2	No	
		Trichloroethene	7	No	
Methylene chloride		2	No		
MW-6D	Iron	5	No	Biodegradation product of 1,1,1-TCA Baseline exceedance in MW-1D Baseline exceedance in MW-1D Baseline exceedance in MW-1D Baseline exceedance in MW-1D Method blank artifact	
	Methylene chloride	2	No		
	Manganese	3	No		
MW-7D	Iron	5	No	Baseline exceedance in MW-1D Method blank artifact	
	Methylene chloride	2	No		
	Manganese	3	No		
	Iron	5	No		
MW-8D	1,1 Dichloroethane	1	No	Baseline exceedance in MW-1D Baseline exceedance in MW-1D Baseline exceedance in MW-1D Method blank artifact	
	1,1,1 Trichloroethane	3	No		
	Trichloroethene	3	No		
	Methylene chloride	2	No		
MW-9D	Chromium	4	No	Baseline exceedance in MW-1D Baseline exceedance in MW-1D Not site-related in shallow aquifer	
	Iron	4	No		
	Nickel	4	No		
	Nickel	4	No		

**Table 4-1. Site-Related and Non Site-Related Compounds, Circuitron Corporation Superfund Site**  
(Page 4 of 4)

Media	Location	Compound	Number of Exceedances <sup>(2)</sup>	Site-Related	Rationale <sup>(1)</sup>
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	
	MW-19D	Iron	2	No	Baseline exceedance in MW-1D
		1,1 Dichloroethene	8	No	Baseline exceedance in MW-1D
		1,1,1 Trichloroethane	8	No	Baseline exceedance in MW-1D
		1,2 Dichloroethene (total)	6	No	Biodegradation product of PCE and TCE
		Tetrachloroethene	8	No	Baseline exceedance in MW-1D
		Trichloroethene	8	No	Baseline exceedance in MW-1D
		Chloroform	2	No	Baseline exceedance in MW-1D
		Methylene chloride	4	No	Biodegradation product of 1,1,1-TCA
		Chromium	2	No	Method blank artifact
Iron		5	No	Baseline exceedance in MW-1D	
Lead	3	No	Baseline exceedance in MW-1D		
Manganese	4	No	Not site-related in shallow aquifer		

**Notes:**

- (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.
- (2) 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-1S		AL	Feb-94	Jun-00	Oct-00	Jan-01	Apr-01	Jul-01	Oct-01	Jan-02	Jul-02
Analyte		5	<5	<5	<5	<5	10	<5	<5	<5	<5
1,1,1 TCA		5	<5	<5	<5	15	<5	<5	<5	<5	<5
PCE		5	<5	<5	<5	8	<5	<5	<5	<5	<5
		5	<5	<5	<5	12	<5	<5	<5	<5	<5

MW-1S

MILBAR BOULEVARD

MW-3S		AL	Jun-00	Oct-00	Jan-01	Apr-01	Jul-01	Oct-01	Jan-02	Jul-02
Analyte		5	4 J	10	5	7	4 J	3 J	3 J	*4 J
1,1,1 TCA										

MW-4S		AL	Jun-00	Oct-00	Jan-01	Apr-01	Jul-01	Oct-01	Jan-02	Jul-02
Analyte		5	14 JD	14 JD	7 JD	7 JD	2 J	2 JD	4 JD	NS
DCE		5	40 JD	22 JD	<5	<5	<5	3 JD	5 JD	NS
1,1,1 TCA		5	1000 D	860 D	630 D	260 D	80	280 D	320 D	NS
PCE		5	13 JD	19 JD	14 JD	12 D	11	15 D	14 D	NS

MW-19S		AL	Jun-00	Oct-00	Jan-01	Apr-01	Jul-01	Oct-01	Jan-02	Jul-02
Analyte		5	6	4 J	3 J	4 J	5 J	3 J	3 J	3 J
1,1,1 TCA		5	8	5 J	1 J	<5	1 J	2 J	1 J	<5

MW-19S

LEGEND

- ⊕ SHALLOW MONITORING WELL
- ⊙ DEEP MONITORING WELL
- ▣ RECOVERY WELL
- 1,1 DCA
- 1,1 DCE
- 1,1,1 TCA
- 1,1,2 TCA
- 1,2 DCE(t)
- PCE TETRACHLOROETHENE
- TCE TRICHLOROETHENE
- AL ACTION LEVEL: APPLICABLE FEDERAL & STATE GROUNDWATER DRINKING WATER STANDARD
- B ANALYTE WAS DETECTED IN ASSOCIATED BLANK ESTIMATED
- J ESTIMATED
- D RESULTS REPORTED FROM DILUTED SAMPLE
- NS NOT SAMPLED, WELL DRY



### Volatile Organic Compound Concentrations Exceeding Screening Criteria Shallow Wells

Circuitron Corporation Superfund Site  
East Farmingdale, New York

**URS**

FILENAME: CIR-4.DWG      DATE: 5-30-03      FIGURE #: 4-1a

NOTES:  
 \* BOLDED VALUES EXCEED ACTION LEVEL  
 \* VALUES MARKED WITH ASTERISK ARE THE ARITHMETIC MEAN OF NORMAL AND DUPLICATE SAMPLES  
 ALL CONCENTRATIONS PRESENTED IN ug/L



East Farmingdale, New York  
Circuitron Corporation Superfund Site

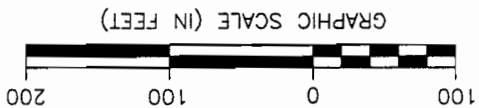
# Inorganic Compound Concentrations Exceeding Screening Criteria Shallow Wells

ALL CONCENTRATIONS PRESENTED IN ug/L  
\* VALUES MARKED WITH ASTERISK ARE ARITHMETIC MEAN OF NORMAL & DUPLICATE SAMPLES; IF EITHER THE NORMAL OR DUPLICATE SAMPLE WAS UNDETECTED, THE DETECTED VALUE IS PRESENTED

NOTES: BOLDED VALUES EXCEED ACTION LEVEL

- ⊕ SHALLOW MONITORING WELL Pb LEAD
- ⊕ DEEP MONITORING WELL Mn MANGANESE
- ⊕ RECOVERY WELL Hg MERCURY
- ⊕ AS ARSENIC
- Sb ANTIMONY
- Cr CHROMIUM
- NS NOT SAMPLED, WELL DRY
- AL ACTION LEVEL: APPLICABLE FEDERAL & STATE GROUNDWATER DRINKING WATER STANDARD
- J ESTIMATED

### LEGEND



Analyte	AL	Jun-00	Jan-01	Jul-01	Jan-02	Jul-02
Pb	15	34	4.6	< 2.4	6.3	< 1.7
As	50	96.6	36.5	1.4 UJ	40.2	121
Hg	0.7	0.34	0.34	< 0.10	0.76	0.14
Fe	300	2100	1050	786	966	683
Cr	300	21600	29400	15400	26000 J	18600

Analyte	AL	Jun-00	Jan-01	Jul-01	Jan-02	Jul-02
Pb	15	31.2	80	*3.2 J	5.3	6.7
As	50	300	9060	13500	*643	1170 J

Analyte	AL	Jun-00	Jan-01	Jul-01	Jan-02	Jul-02
Pb	15	14100	7870	6830 J	12200	14600
As	50	300	1090	217	421	374

Analyte	AL	Jun-00	Jan-01	Jul-01	Jan-02	Jul-02
Pb	15	33700 J	25200	25400 J	24600 J	58400
As	25	17.2	10.4	5.7	10.3 J	39.8
Hg	0.7	3.9	< 2.1	< 2.6	2.7	28.6
Fe	300	524	426	430	363	438

Analyte	AL	Jun-00	Jan-01	Jul-01	Jan-02	Jul-02
Pb	15	159	77.7	*4.0	836	NS
As	50	899 J	463	*32.4 J	4760	NS
Sb	3	< 2.2	< 2.3	< 1.9	3.4	NS

Analyte	AL	Jun-00	Jan-01	Jul-01	Jan-02	Jul-02
Pb	15	17200	687	634	2050 J	*707
As	50	300	365	54.9	17.3	26.6

Analyte	AL	Jun-00	Jan-01	Jul-01	Jan-02	Jul-02
Pb	15	39100 J	*35650	27800	19750 J	29300
As	50	405	*410	344	*196	339

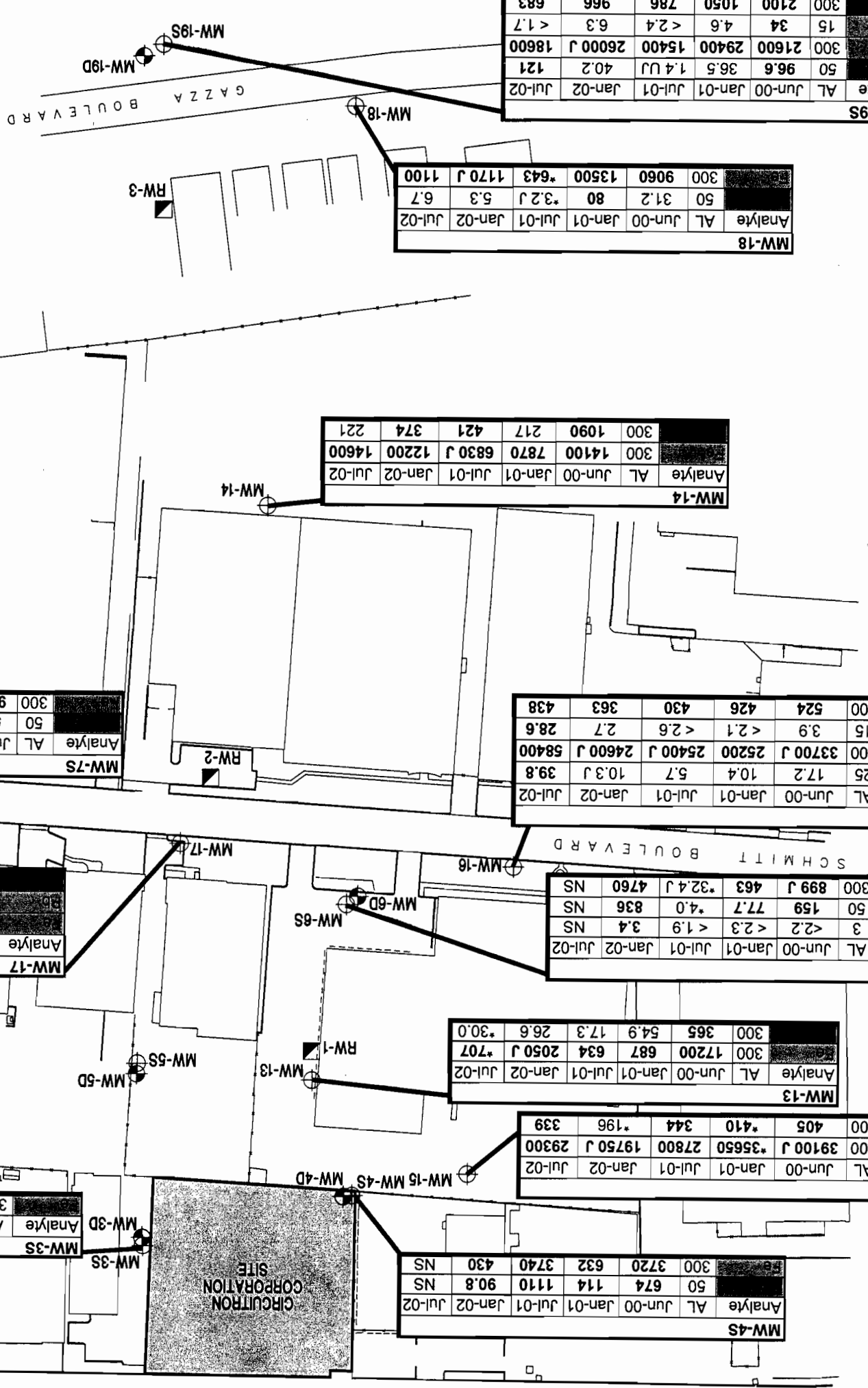
Analyte	AL	Jun-00	Jan-01	Jul-01	Jan-02	Jul-02
Pb	15	674	114	1110	90.8	NS
As	50	300	3720	632	3740	430

Analyte	AL	Feb-94	Jun-00	Jan-01	Jul-01	Jan-02	Jul-02
Pb	15	806	393	559	429	366	403
As	50	66600	19400	31200	22000	20000	24300

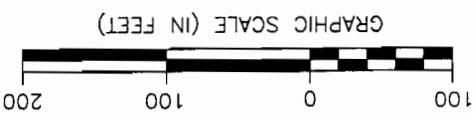
Analyte	AL	Jun-00	Jan-01	Jul-01	Jan-02	Jul-02
Pb	15	57.3	*44.2 J	< 0.90	NS	NS
As	50	300	912 J	*462	< 15.7	NS

Analyte	AL	Jun-00	Jan-01	Jul-01	Jan-02	Jul-02
Pb	15	20.1	< 2.1	< 2.4	2.3	< 1.7
As	50	16900 J	1600	409	662 J	982
Hg	0.7	300	386	73.8	176	108

Analyte	AL	Jun-00	Jan-01	Jul-01	Jan-02	Jul-02
Pb	15	4460	3160	885	1290	*2270
As	50	300	4460	3160	885	1290



**URS**  
**Volatile Organic Compound Concentrations Exceeding Screening Criteria Deep Wells**  
 Circuitron Corporation Superfund Site  
 East Farmingdale, New York



NOTES:  
 BOLDDED VALUES EXCEED ACTION LEVEL  
 \* VALUES MARKED WITH ASTERISK ARE THE ARITHMETIC MEAN OF NORMAL AND DUPLICATE SAMPLES  
 ALL CONCENTRATIONS PRESENTED IN ug/L

- ⊕ SHALLOW MONITORING WELL  
 ⊕ DEEP MONITORING WELL  
 ⊕ RECOVERY WELL  
 □ ANALYTE WAS DETECTED IN ASSOCIATED BLANK  
 B ACTION LEVEL: APPLICABLE FEDERAL & STATE  
 TCE GROUNDWATER DRINKING WATER STANDARD  
 PCE TRICHLOROETHENE  
 U ESTIMATED  
 J ANALYTE WAS DETECTED IN ASSOCIATED BLANK

LEGEND

**MW-19D**

Analyte	AL	Jun-00	Oct-00	Jan-01	Apr-01	Jul-01	Oct-01	Jan-02	Jul-02
PCE	5	40	34	37	36	46	*43	55	57
Chloroform	5	46	47	50	55	65	*62	77	62
1,1,1 TCA	5	3J	6	<5	7	8	*8	8	10
1,1,1 TCE	5	23	19	17	27	27	*28	30	28
1,1,1 DCE	5	14	14	12	18	19	*18	23	24

**MW-7D**

Analyte	AL	Jun-00	Oct-00	Jan-01	Apr-01	Jul-01	Oct-01	Jan-02	Jul-02
PCE	5	5	6	4JB	5J	3J	3J	*3J	3J
1,1,1 TCA	5	7	5J	3J	15	2J	2J	*2J	3J
1,1,1 TCE	5	4J	5	3J	11	3	3J	*3J	4J
1,1,1 DCE	5	8	8	2J	8	8	*7	5J	5J

**MW-6D**

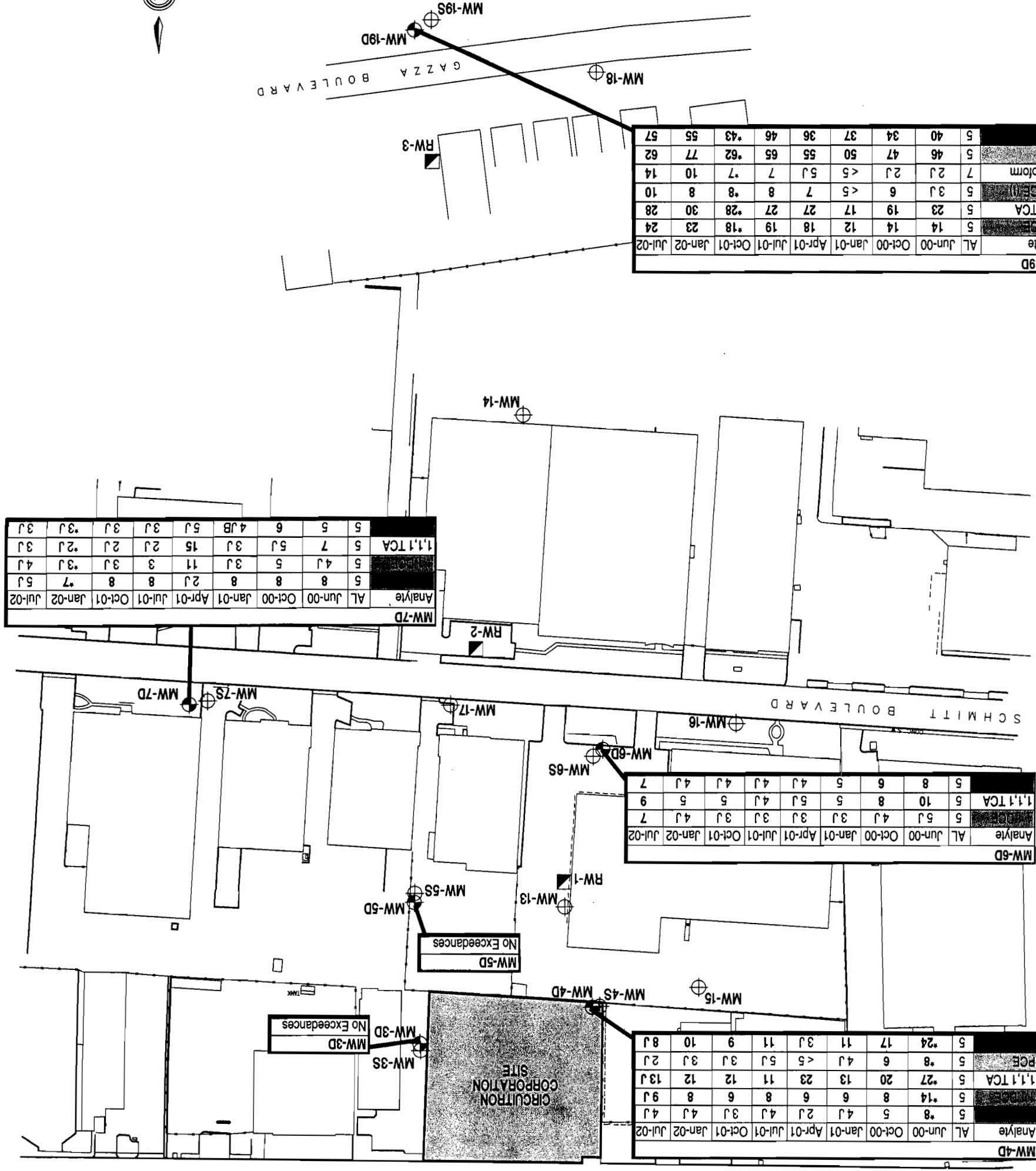
Analyte	AL	Jun-00	Oct-00	Jan-01	Apr-01	Jul-01	Oct-01	Jan-02	Jul-02
PCE	5	8	6	5	4J	4J	4J	4J	7
1,1,1 TCA	5	10	8	5	5J	4J	5	5	9
1,1,1 TCE	5	5J	4J	3J	3J	3J	3J	4J	7

**MW-4D**

Analyte	AL	Jun-00	Oct-00	Jan-01	Apr-01	Jul-01	Oct-01	Jan-02	Jul-02
PCE	5	24	17	11	3J	11	9	10	8J
1,1,1 TCA	5	8	6	4J	<5	5J	3J	3J	2J
1,1,1 TCE	5	27	20	13	23	11	12	12	13J
1,1,1 DCE	5	14	8	6	6	8	6	8	9J

**MW-1D**

Analyte	AL	Feb-94	Jun-00	Oct-00	Jan-01	Apr-01	Jul-01	Oct-01	Jan-02	Jul-02
PCE	5	82	13	15	10	*10	<5	*11	11	12
1,1,1 TCA	5	18	5J	6	4J	*5	<5	*6	6	5
1,1,1 TCE	5	99	16	14	13	*13	<5	*16	14	12
1,1,1 DCE	5	24	9	10	7	*8	<5	*10	11	10



No Exceedances

No Exceedances

MW-1S



Circuitron Corporation Superfund Site  
East Farmingdale, New York

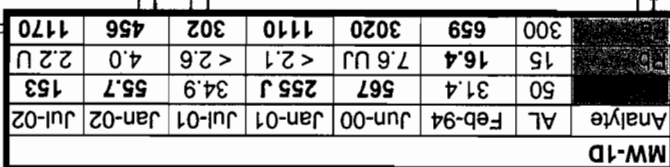
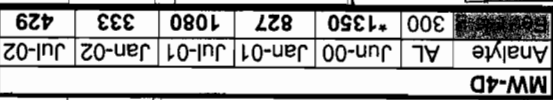
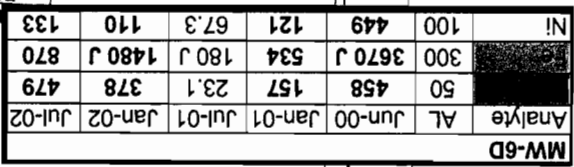
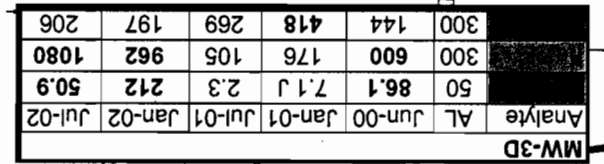
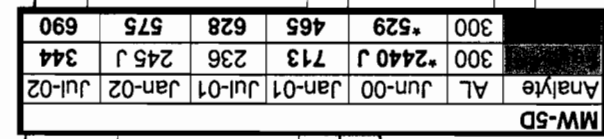
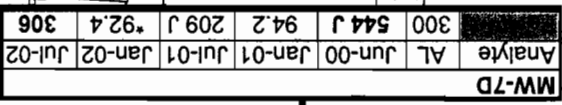
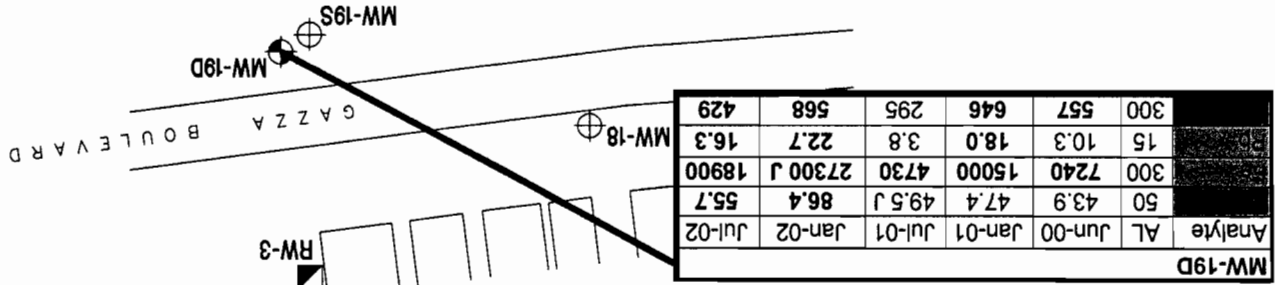
# Inorganic Compound Concentrations Exceeding Screening Criteria Deep Wells

GRAPHIC SCALE (IN FEET)



NOTES:  
BOLDED VALUES EXCEED ACTION LEVEL  
\* VALUES MARKED WITH ASTERISK ARE THE ARITHMETIC  
MEAN OF NORMAL AND DUPLICATE SAMPLES  
ALL CONCENTRATIONS PRESENTED IN ug/L

LEGEND  
 ⊕ SHALLOW MONITORING WELL  
 ⊕ DEEP MONITORING WELL  
 ⊕ RECOVERY WELL  
 ⊕ CHROMIUM  
 ⊕ IRON  
 AL ACTION LEVEL: APPLICABLE FEDERAL & STATE  
 U GROUNDWATER DRINKING WATER STANDARD  
 U COMPOUND WAS NOT DETECTED ABOVE THE  
 ASSOCIATED LEVEL  
 J ESTIMATED  
 Pb LEAD  
 Mn MANGANESE  
 Ni NICKEL

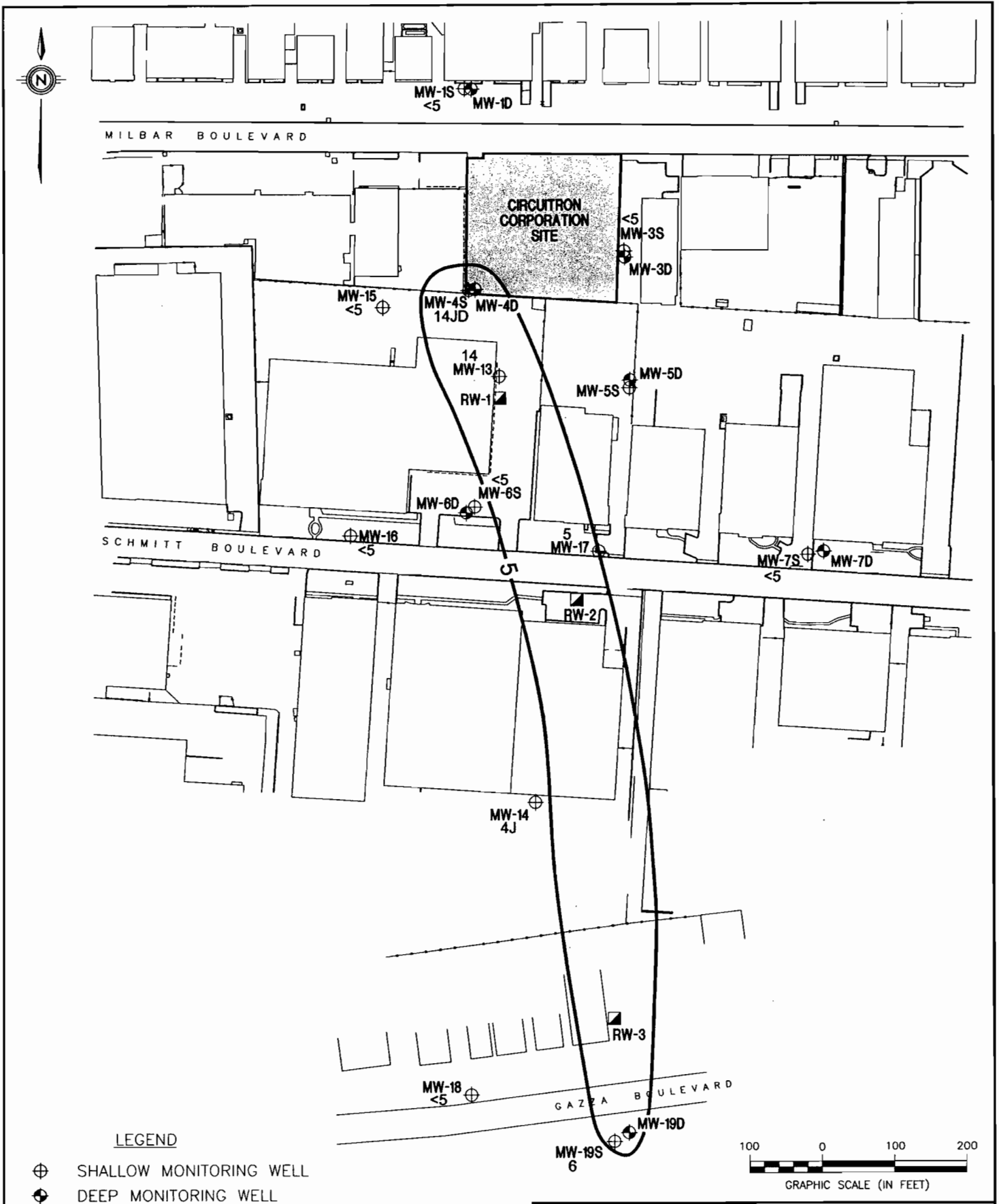


MILBAR BOULEVARD

SCHMITT BOULEVARD

GAZZA BOULEVARD

CIRCUITRON CORPORATION SITE



**LEGEND**

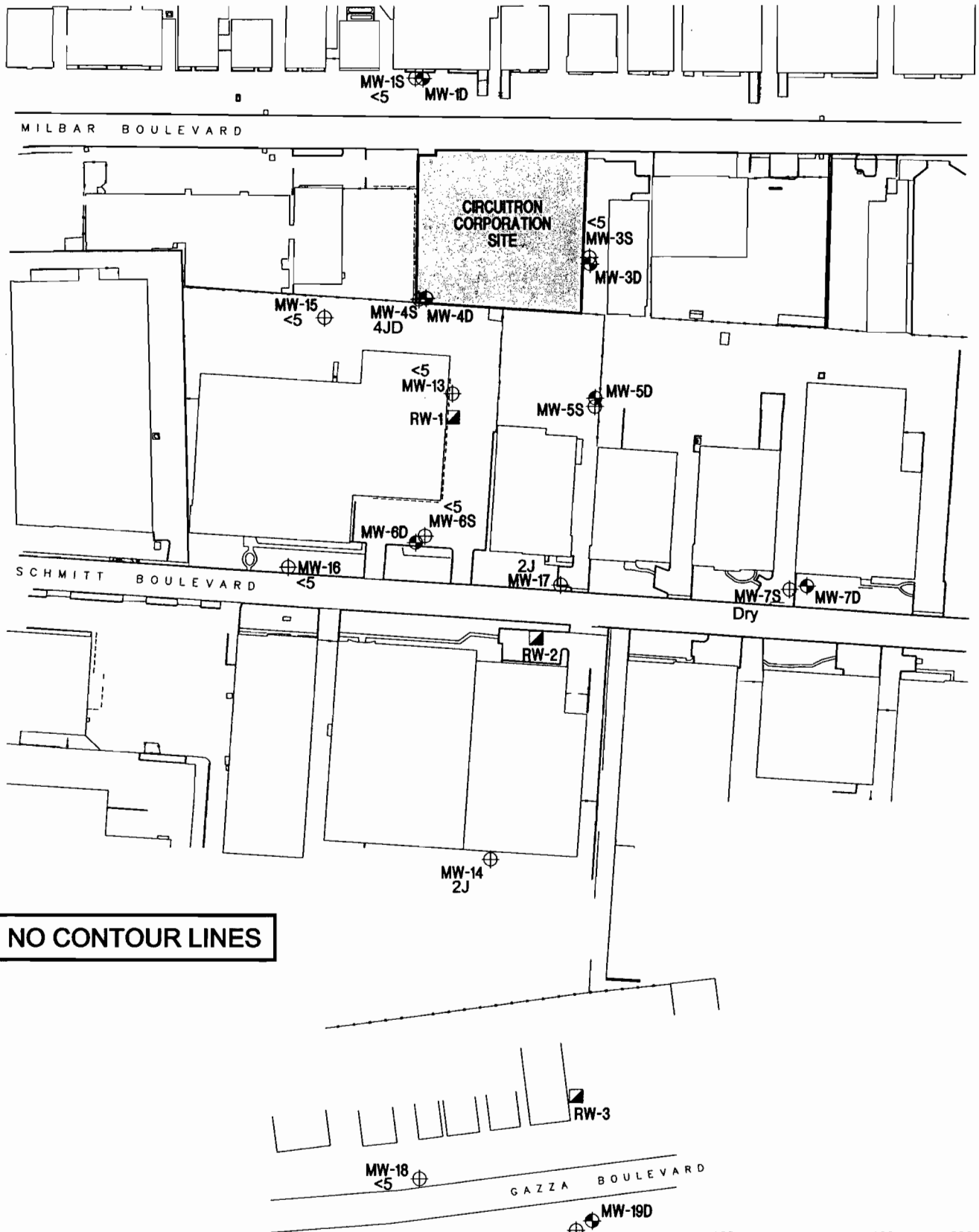
- ⊕ SHALLOW MONITORING WELL
- ⊙ DEEP MONITORING WELL
- ▣ RECOVERY WELL
- 4 1,1 DICHLOROETHANE (1,1 DCA) CONCENTRATION VALUE (ug/L)
- 1,1 DCA CONCENTRATION CONTOUR LINE

**QUALIFIERS:**

- 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**





**NO CONTOUR LINES**

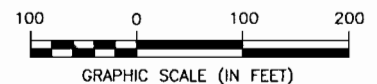
**LEGEND**

- ⊕ SHALLOW MONITORING WELL
- ⊕ DEEP MONITORING WELL
- ▣ RECOVERY WELL
- <5 1,1 DICHLOROETHANE (1,1 DCA) CONCENTRATION VALUE (ug/L)

**QUALIFIERS:**

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

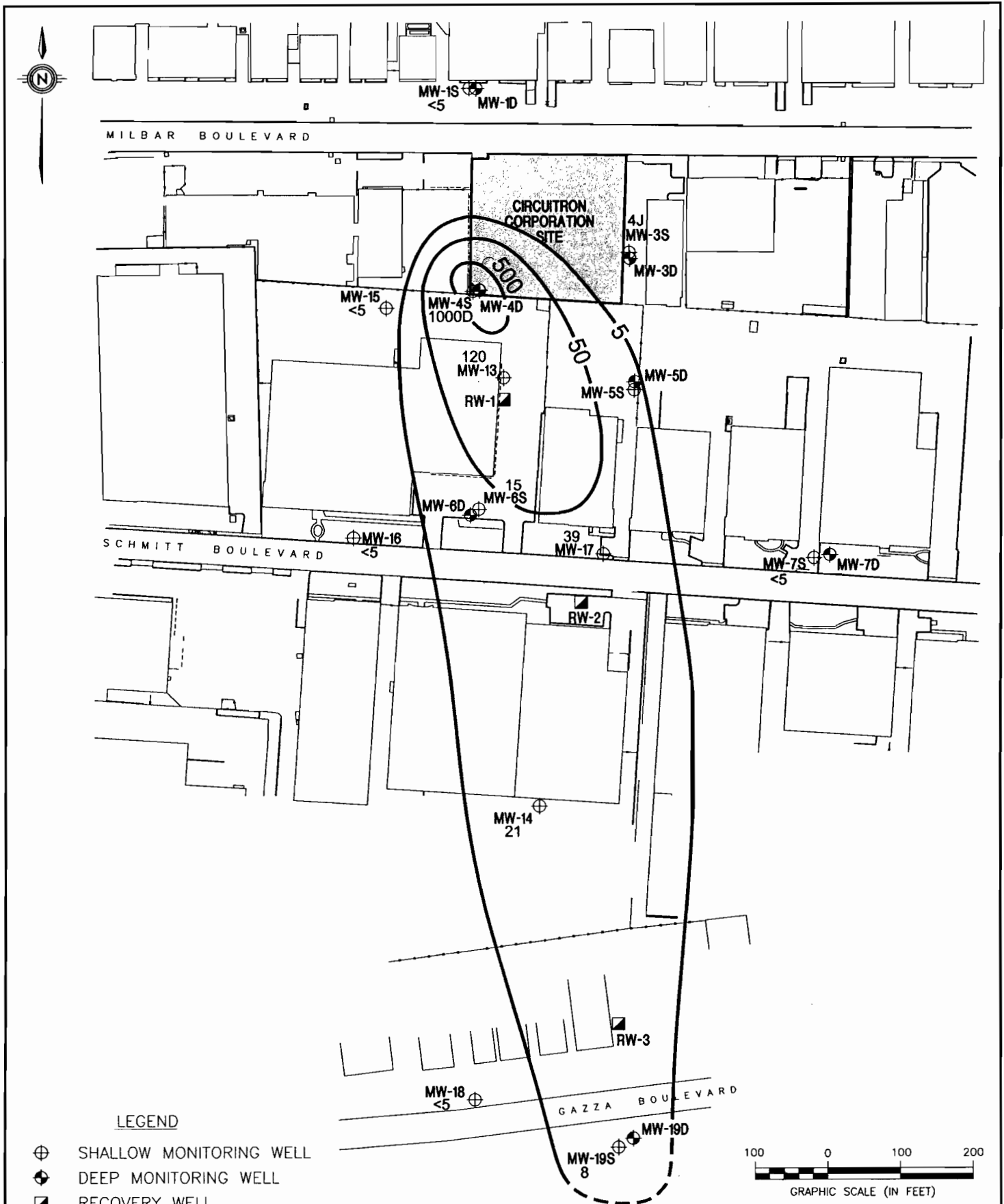
MW-18 <5  
MW-19S 3J  
MW-19D



**1,1 DCA February 2002**  
**Isoconcentration Map (ug/L)**  
**Upper Glacial Aquifer**  
**Circuitron Corporation Superfund Site**  
**East Farmingdale, New York**

**URS**





**LEGEND**

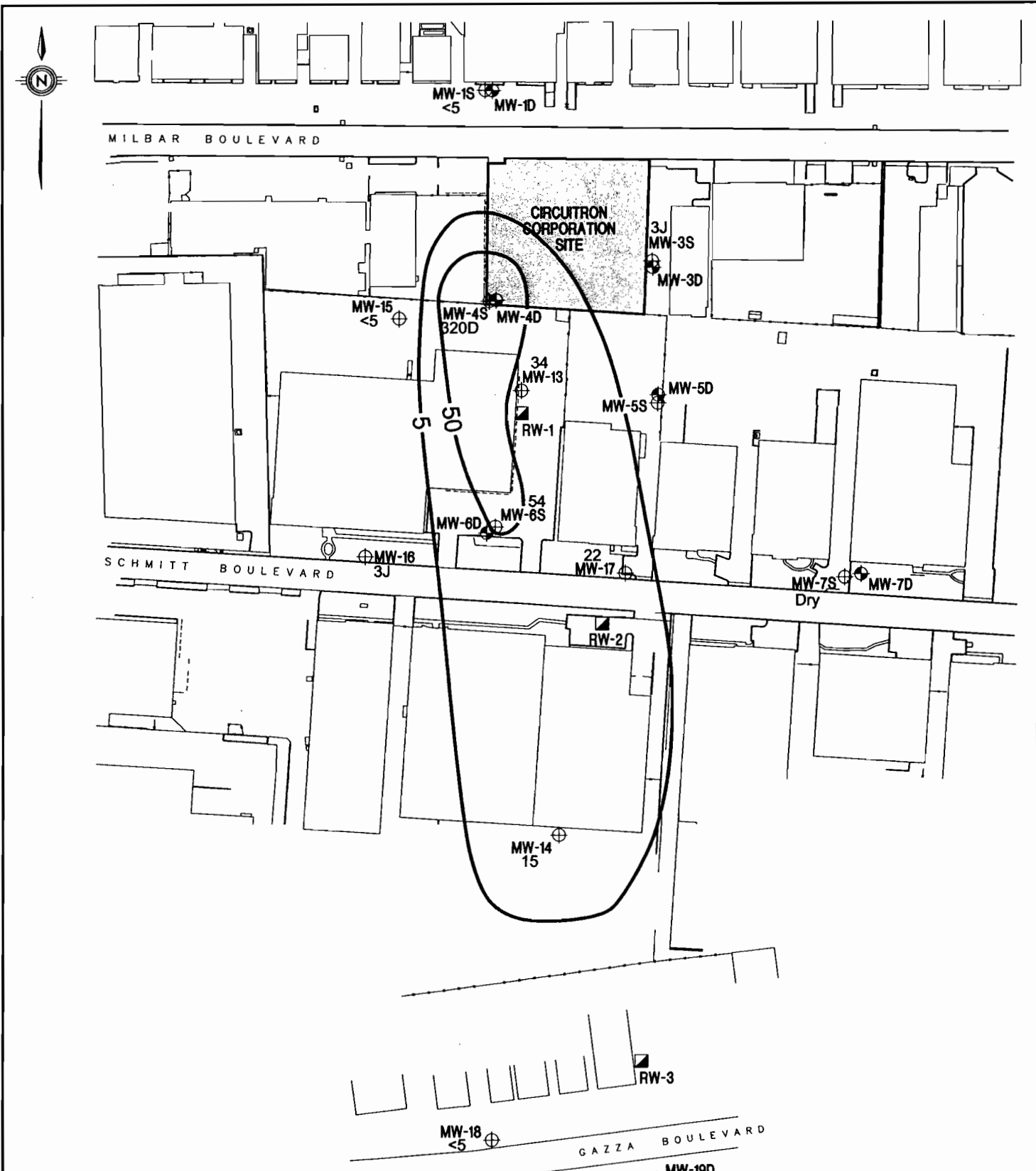
- ⊕ SHALLOW MONITORING WELL
- ⊕ DEEP MONITORING WELL
- ▣ RECOVERY WELL
- 8 1,1,1 TRICHLOROETHANE (1,1,1 TCA) CONCENTRATION VALUE (ug/L)
- 1,1,1 TCA CONCENTRATION CONTOUR LINE (DASHED WHERE INFERRED)

**QUALIFIERS:**

- 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**





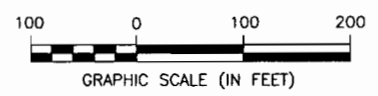
**LEGEND**

- ⊕ 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

**QUALIFIERS:**

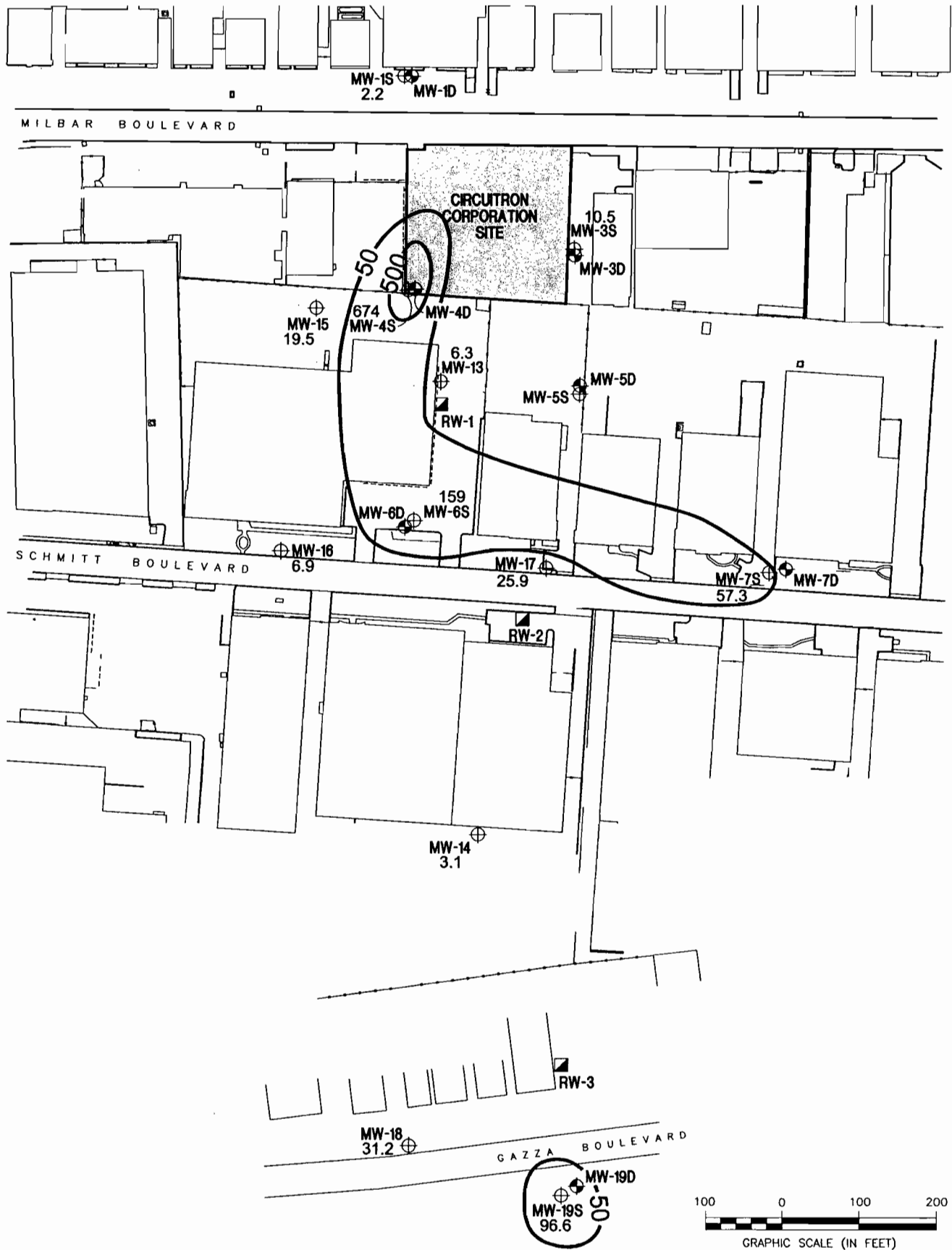
- D RESULTS ARE REPORTED FOR THE DILUTED SAMPLES
- J ASSOCIATED VALUE IS AN ESTIMATED QUANTITY

MW-18 <5  
 MW-19S 1J  
 MW-19D  
 RW-3  
 GAZA BOULEVARD



**1,1,1 TCA JANUARY-FEBRUARY 2002**  
**Isoconcentration Map (ug/L)**  
**Upper Glacial Aquifer**  
 Circuitron Corporation Superfund Site  
 East Farmingdale, New York

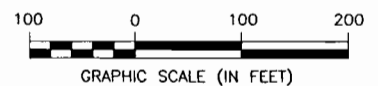


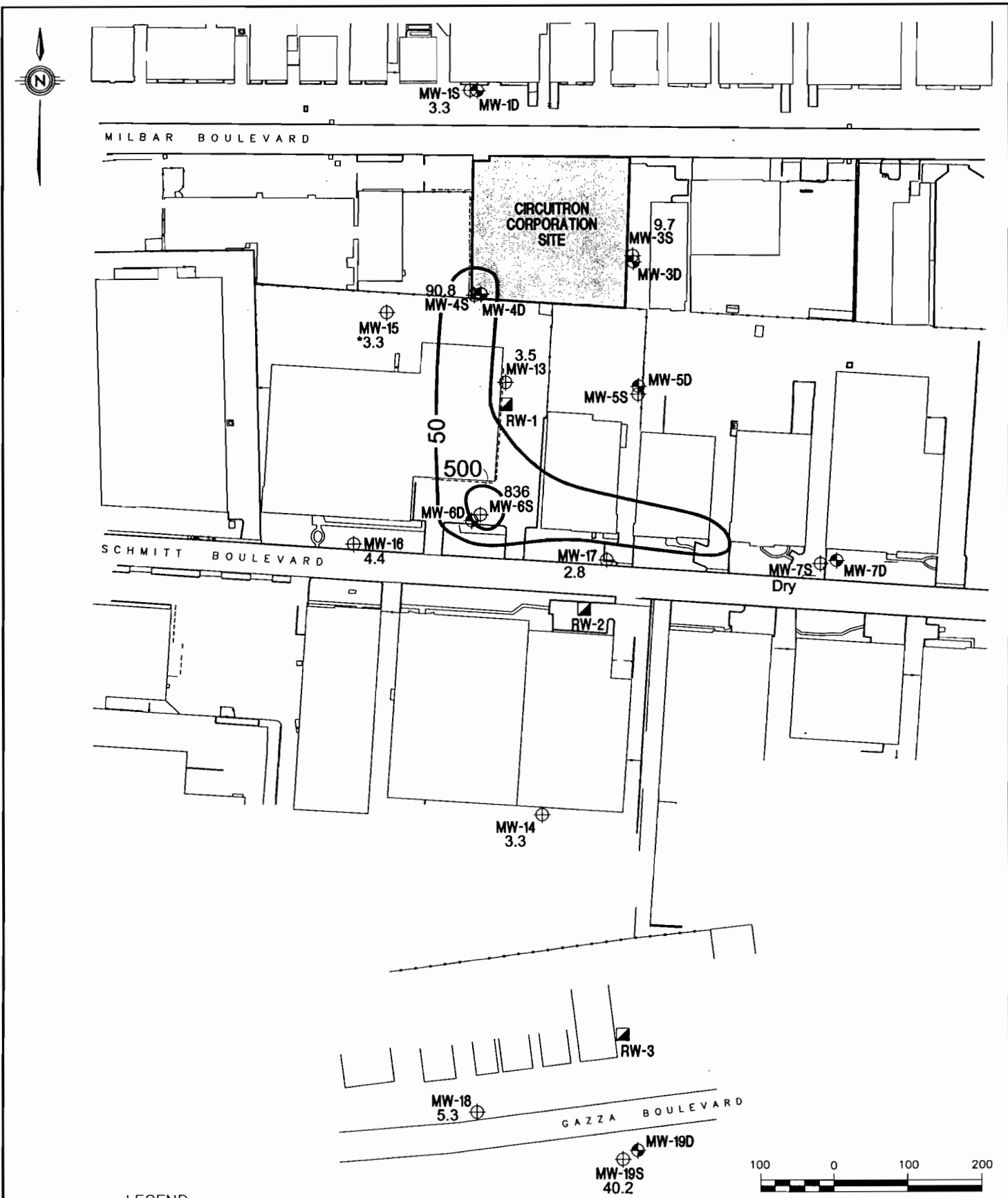


**LEGEND**

- ⊕ SHALLOW MONITORING WELL
- ⊙ DEEP MONITORING WELL
- ▣ RECOVERY WELL
- 3.1 CHROMIUM CONCENTRATION VALUE (ug/L)
- CHROMIUM CONCENTRATION CONTOUR LINE

**Chromium June 2000**  
**Isoconcentration Map (ug/L)**  
**Upper Glacial Aquifer**  
**Circuitron Corporation Superfund Site**  
**East Farmingdale, New York**





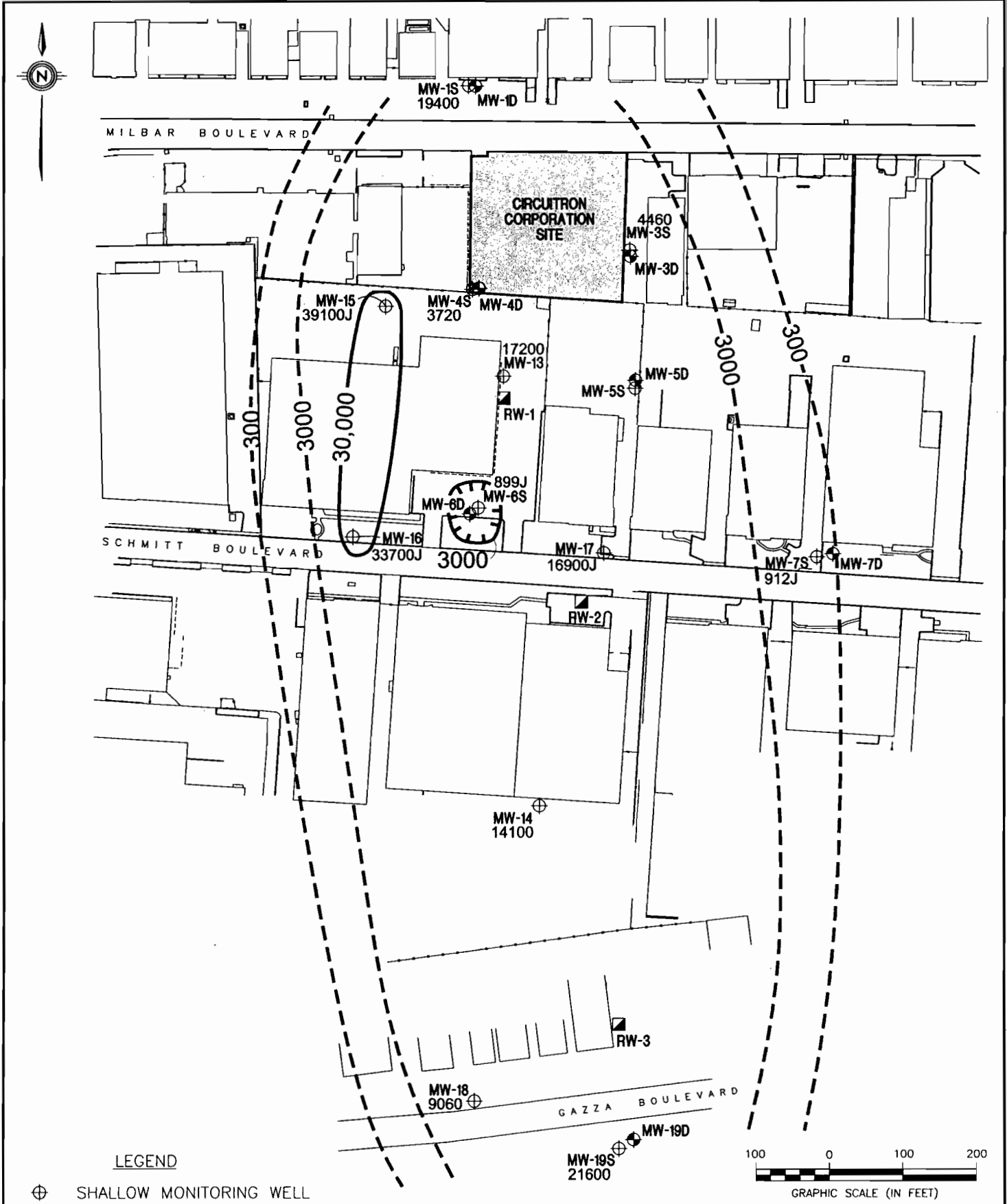
**LEGEND**

- ⊕ SHALLOW MONITORING WELL
- ⊕ DEEP MONITORING WELL
- ▣ RECOVERY WELL
- 5.3 CHROMIUM CONCENTRATION VALUE (ug/L)
- CHROMIUM CONCENTRATION CONTOUR LINE

NOTE: VALUES MARKED WITH ASTERISK IS THE ARITHMETIC MEAN OF NORMAL AND DUPLICATE SAMPLES

**Chromium January-February 2002**  
**Isoconcentration Map (ug/L)**  
**Upper Glacial Aquifer**  
 Circuitron Corporation Superfund Site  
 East Farmingdale, New York





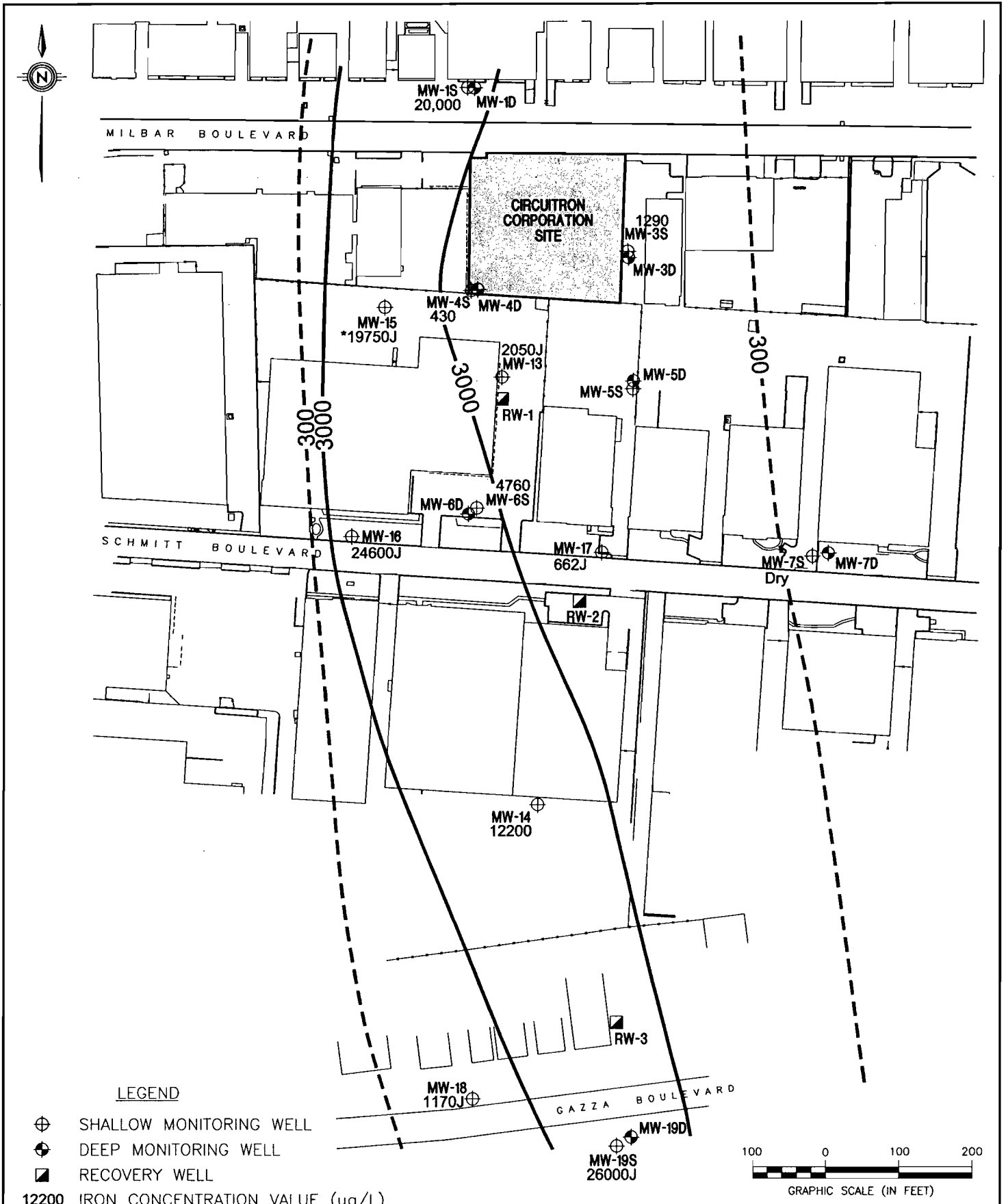
**LEGEND**

- ⊕ SHALLOW MONITORING WELL
- ⊕ DEEP MONITORING WELL
- ▣ RECOVERY WELL
- 14100 IRON CONCENTRATION VALUE (ug/L)
- IRON CONCENTRATION CONTOUR LINE (DASHED WHERE INFERRED)

QUALIFIERS:  
 J ASSOCIATED VALUE IS AN ESTIMATED QUANTITY

**IRON June 2000**  
**Isoconcentration Map (ug/L)**  
**Upper Glacial Aquifer**  
**Circuitron Corporation Superfund Site**  
**East Farmingdale, New York**





**LEGEND**

- ⊕ SHALLOW MONITORING WELL
- ⊕ DEEP MONITORING WELL
- ▣ RECOVERY WELL

12200 IRON CONCENTRATION VALUE (ug/L)  
 — IRON CONCENTRATION CONTOUR LINE  
 (DASHED WHERE INFERRED)

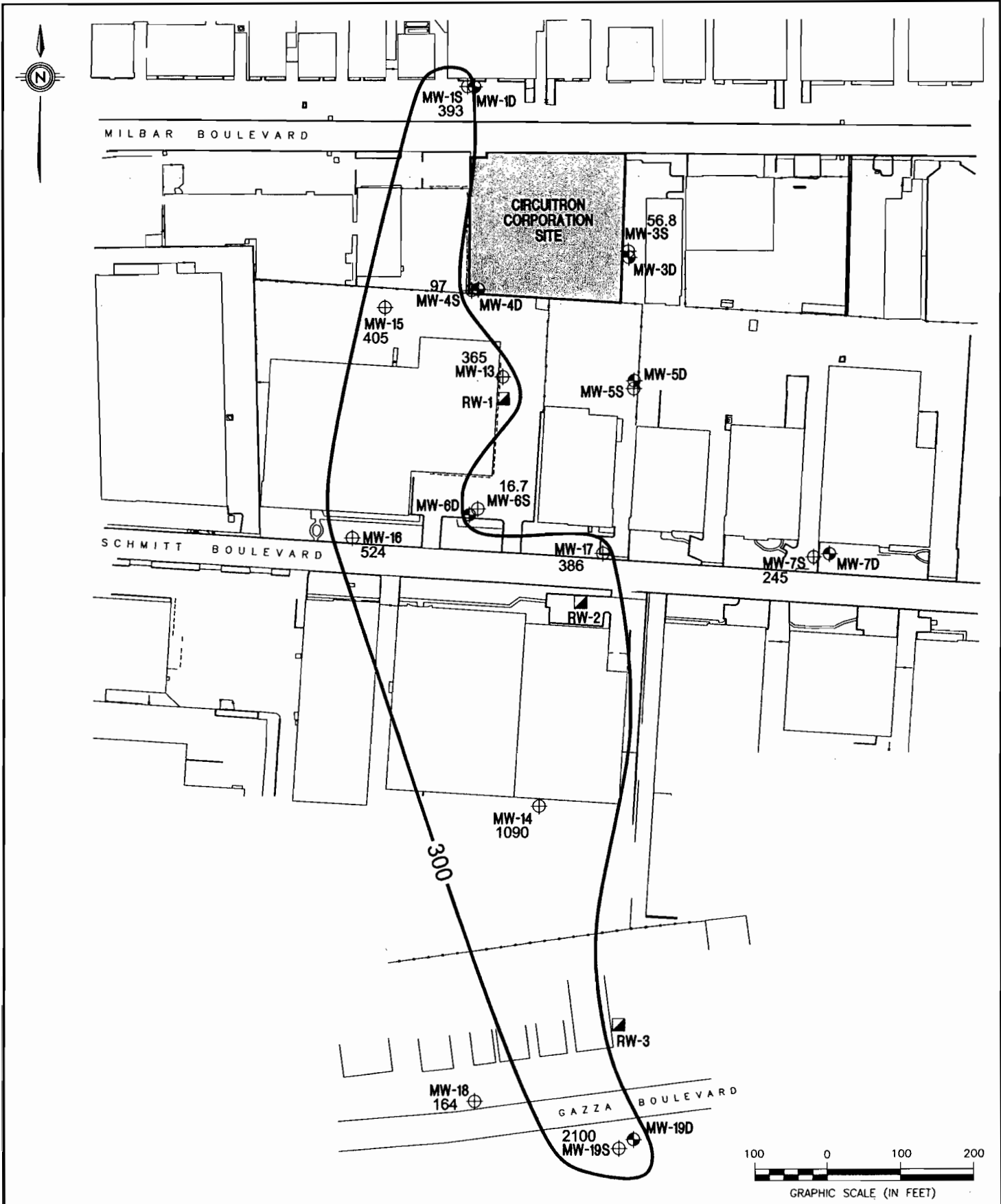
**QUALIFIERS:**

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

NOTE: VALUES MARKED WITH ASTERISK IS THE ARITHMETIC MEAN OF NORMAL AND DUPLICATE SAMPLES

**IRON January-February 2002**  
**Isoconcentration Map (ug/L)**  
**Upper Glacial Aquifer**  
**Circuitron Corporation Superfund Site**  
**East Farmingdale, New York**

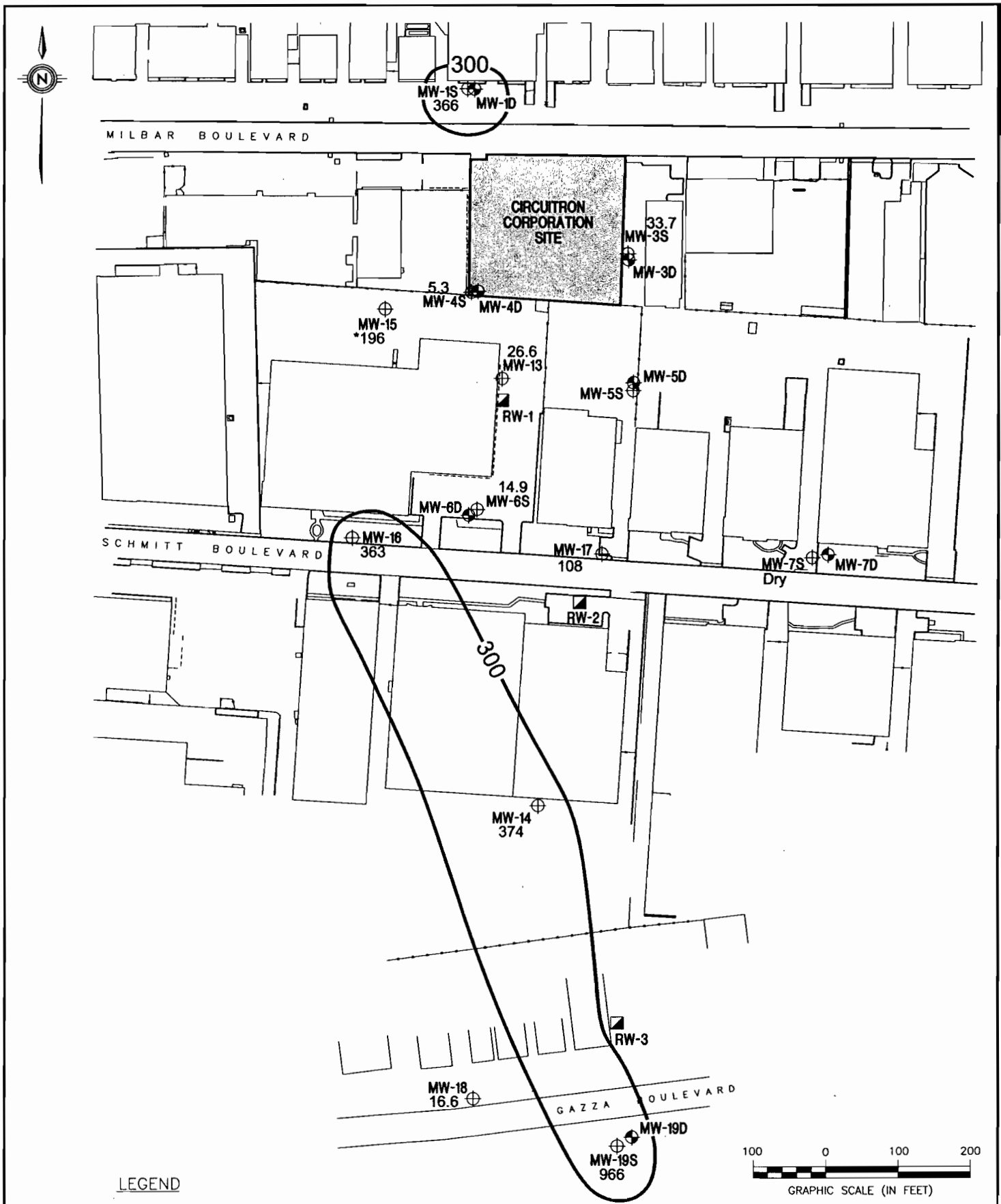




LEGEND

- ⊕ SHALLOW MONITORING WELL
- ⊙ DEEP MONITORING WELL
- ▣ RECOVERY WELL
- 1090 MANGANESE CONCENTRATION VALUE (ug/L)
- MANGANESE CONCENTRATION CONTOUR LINE

<p><b>Manganese June 2000</b>  <b>Isoconcentration Map (ug/L)</b>  <b>Upper Glacial Aquifer</b>  <b>Circuitron Corporation Superfund Site</b>  <b>East Farmingdale, New York</b></p>		
<p><b>URS</b></p>		
<p>FILENAME: CIR-17.DWG</p>	<p>DATE: 4-29-03</p>	<p>FIGURE #: 4-7a</p>



**LEGEND**

- ⊕ SHALLOW MONITORING WELL
- ⊕ DEEP MONITORING WELL
- ▣ RECOVERY WELL
- 374 MANGANESE CONCENTRATION VALUE (ug/L)
- MANGANESE CONCENTRATION CONTOUR LINE

NOTE: VALUES MARKED WITH ASTERISK IS THE ARITHMETIC MEAN OF NORMAL AND DUPLICATE SAMPLES

**Manganese January-February 2002**  
**Isoconcentration Map (ug/L)**  
**Upper Glacial Aquifer**  
**Circuitron Corporation Superfund Site**  
**East Farmingdale, New York**







**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 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 (February 1994 and June 2000 sampling events). 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 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). These compounds were not observed as exceedances in groundwater sampled from this well during sampling events after the startup of the remediation system.

**5.2.2 Shallow Wells - Inorganic**

The only inorganic compound that is potentially site-related is chromium. The effectiveness of the remediation system in removing inorganic compounds in the shallow aquifer is unclear at this time. Evidence for this is:

- a) Chromium was observed as multiple exceedances in the groundwater from downgradient well MW-19S and also in groundwater from site wells MW-4S and MW-6S, but not observed as an exceedance in groundwater from upgradient well MW-1S; therefore, it is considered site-related. However, chromium levels appear to rise and fall with the turbidity level of the sample. If the source of chromium in shallow groundwater from downgradient well MW-19S and from site wells is due to turbidity, then levels of chromium are potentially artificially elevated and not representative of groundwater and thus, not be a site-related compound. Use of dissolved rather than total sampling methods would potentially eliminate this problem.
- b) Multiple exceedances of iron and manganese were observed in groundwater from several site wells, including upgradient well MW-1S before and during operation of the remediation system. Hence, these compounds are not site-related. Each multiple exceedance in site wells can be attributed to upgradient or off-site sources.

**5.2.3 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 these compounds are not site-related. These same compounds were also shown to be multiple exceedances in groundwater from downgradient well MW-19D, indicating these compounds are being transported in the deeper groundwater across the site.

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 compound 1,1-DCA was observed as a multiple exceedance in groundwater from MW-7D. The presence of 1,1-DCA will not be considered site-related because this compound is a naturally occurring biodegradation product of 1,1,1-TCA. 1,1,1-Trichloroethane is determined to be not site-related.

#### **5.2.4 Deep Wells - Inorganic**

Chromium, iron, and lead were observed as exceedances in groundwater from upgradient well MW-1D sampled prior to start up of the remediation system, and in groundwater from downgradient well MW-19D. This indicates that chromium, iron, and lead are not site-related and are transported in the deeper groundwater across the site.

Although nickel was detected as multiple exceedances in groundwater from deep well MW-6D, nickel was not detected as an exceedance in groundwater from any other well at the site, shallow or deep. This indicates that nickel is present in an isolated area, approximately 300 feet downgradient from the site, and will not be considered related to site activities.

#### **5.2.5 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 time frame is attributable to the successful operation of the remediation system.

In contrast, inorganic concentrations in groundwater from the site wells have decreased slightly or have shown relatively little change during the Performance Monitoring Period. This may be due in part to elevated inorganic levels being indigenous to the area as

is believed to be the case for iron and manganese. However, elevated turbidity levels observed during sample preparation and other factors may also be affecting levels of chromium in groundwater samples. Therefore, the effectiveness of the remediation system in removing the inorganic compounds in the shallow aquifer is unclear at this time.



**6.0 RECOMMENDATIONS**

- 1) 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.
- 2) Stop sampling and chemical analyses of groundwater samples from the deep wells.
- 3) Stop monitoring for inorganic compounds in shallow groundwater except for chromium and turbidity. The effectiveness, if any, of the remediation system in remediating chromium from the groundwater is uncertain at this time. Evaluate chromium levels by collecting and analyzing groundwater samples for dissolved and total chromium and turbidity.





**7.0 REFERENCES**

Radian International, July 13, 1999. Final Report OU#2 Groundwater Investigation Report, Circuitron Corporation, East Farmingdale, New York.

Roy F. Weston, Inc., 1994. Focused Feasibility Study, Second Operable Unit for the Circuitron Corporation Site, East Farmingdale, New York.

URS Corporation, September 6, 2000. Operation and Maintenance Manual, Groundwater Treatment System, Circuitron Corporation, East Farmingdale, New York.

URS Corporation, August 12, 2002. Monthly Progress Report for O&M June 1, 2002 to June 30, 2002, Groundwater Treatment System, Circuitron Corporation, East Farmingdale, New York.

United States Environmental Protection Agency, Region II, September 1994. Record of Decision, Operable Unit Two (OU-2), Circuitron Corporation, East Farmingdale, Suffolk County, New York.

## Appendix A-1

**Appendix A-1**

**Total VOC Concentrations**

Table 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
Shallow	MW-1S	16	ND	5	ND	56	4	8	ND
Shallow	MW-3S	20	13	5	7	8	8	6	*4
Shallow	MW-4S	1155	915	720	279	93	328	347	NS
Shallow	MW-6S	15	374	119	89	*112	107	64	NS
Shallow	MW-7S	ND	*2	*2	ND	ND	11	NS	NS
Shallow	MW-13	154	397	124	47	41	31	35	*14
Shallow	MW-14	30	10	17	13	14	15	21	1
Shallow	MW-15	68	*1	*35	29	ND	5	*2	ND
Shallow	MW-16	ND	ND	ND	*	ND	1	3	ND
Shallow	MW-17	44	71	37	11	14	32	26	8
Shallow	MW-18	ND	ND	13	13	*	10	ND	ND
Shallow	MW-19S	17	34	21	14	13	16	5	5
Deep	MW-1D	61	52	45	*41	7	*53	57	45
Deep	MW-3D	5	2	7	4	5	5	8	1
Deep	MW-4D	*94	57	49	50	41	38	43	37
Deep	MW-5D	*10	30	4	7	4	8	ND	ND
Deep	MW-6D	30	24	35	14	20	31	17	37
Deep	MW-7D	30	35	29	36	23	32	*28	19
Deep	MW-19D	133	139	136	158	176	*180	214	199

Note: VOC: Volatile Organic Compound  
 All concentrations in µg/L.  
 ND: No VOCs detected.  
 Values marked with an asterisk are the arithmetic mean of normal and duplicate samples.  
 NS: Not Sampled.



## Appendix A-2

**Appendix A-2**

**Groundwater Sampling Results by Well**

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
1,1 Dichloroethane	5	0.70 J	<5	<5	<5	<5	5 J	<5	<5	<5
1,1 Dichloroethene	5	1.00 U	<5	<5	<5	<5	10	<5	<5	<5
1,1,1 Trichloroethane	5	0.40 J	<5	<5	<5	<5	15	<5	<5	<5
1,2 Dichloroethene (total)	5	1.00 U	<5	<5	<5	<5	2 J	<5	<5	<5
Acetone	NP	3.00 J	11 B	<10	3 JB	<10	<10	<10	<10	<10
Chloroform	7	1.00 U	<5	<5	<5	<5	<5	<5	<5	<5
Methylene Chloride	5	2.00 U	5 B	<5	2 JB	<5	4 J	4 JB	8 B	<5
Tetrachloroethene	5	1.00 U	<5	<5	<5	<5	8	<5	<5	<5
Toluene	5	1.00 U	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethene	5	1.00 U	<5	<5	<5	<5	12	<5	<5	<5
Turbidity	5	NR	229	NR	27	0	0.1	NR	33.1	0
Antimony	3	28.30 U	<2.2	NR	<2.3	NR	2.2 J	NR	<1.9	<2.2
Arsenic	25	R	12.1	NR	18.5	NR	8.2	NR	6.0	11.1
Beryllium	3	0.20 U	<0.10	NR	0.37 J	NR	<0.20	NR	<0.10	0.22U
Chromium	50	7.70 B	2.2	NR	2.2 J	NR	1.2	NR	3.3	3.1U
Copper	200	17.80 B	7.3	NR	1.9	NR	1.3	NR	3.3	<0.30
Iron	300	52600.00	19400	NR	31200	NR	22000	NR	20000	24300
Lead	15	2.90 BJ	<2.3 UJ	NR	<2.1	NR	<2.6	NR	2.5	<1.7
Manganese	300	714.00	393	NR	559	NR	429	NR	366	403
Mercury	0.7	0.20 U	<0.10	NR	<0.10	NR	<0.10	NR	<0.10	<0.10
Nickel	100	10.80 U	2.2	NR	2.2	NR	<1.2	NR	3.0	4.1U
Top of Screen Elevation: 62.04 feet										
Groundwater Elevation (feet):			59.52	58.62	57.42	59.82	60.72	56.61	51.92	53.02
Bottom of Screen Elevation: 52.04 feet										

Notes: Volatile and metal concentrations presented in micrograms per liter; turbidity measurements presented in nephelometric turbidity units  
Elevations referenced to mean sea level  
NS: Not sampled  
NY Water Quality Criteria: NYSDEC Regulation for Surface Waters and Groundwater, Section 703.5 (August 1998)  
NP: No proposed quantification level available  
NR: Not required  
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-1D

Analyte	NY Water Quality Criteria	Feb 1994*	June 2000	Oct 2000	Jan - Feb 2001	Apr - May 2001	Apr - May 2001 Duplicate	July - Aug 2001	Oct 2001	Oct 2001 Duplicate	Jan - Feb 2002	July - Aug 2002
1,1 Dichloroethane	5	6.00	5 J	5 J	4 J	4 J	4 J	<5	4 J	4 J	4 J	4 J
1,1 Dichloroethene	5	24.00	9	10	7	8	8	<5	10	10	11	10
1,1,1 Trichloroethane	5	99.00	16	14	13	13	13	<5	16	17	14	12
1,2 Dichloroethene (total)	5	4.00	1 J	2 J	<5	1 J	1 J	<5	1 J	1 J	1 J	2 J
Acetone	NP	5.00 R	8 JB	<10	3 JB	<10	<10	<10	<10	<10	<10	<10
Chloroform	7	1.00 U	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Methylene Chloride	5	2.00 U	4 JB	<5	4 JB	<5	<5	7 J	5 B	5 JB	10 B	<5
Tetrachloroethene	5	18.00	5 J	6	4 J	5	5	<5	5	6	6	5
Toluene	5	1.00 U	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethene	5	82.00	13	15	10	10	10	<5	11	11	11	12
Turbidity	5	NR	35.5	NR	580	0	0	0.0	NR	NR	34.7	0
Antimony	3	28.30 UJ	<2.2	NR	<2.3	NR	NR	<1.9	NR	NR	<1.9	<2.2
Arsenic	25	1.30 UJ	<3.2	NR	<2.4	NR	NR	<2.3	NR	NR	<3.0	<2.5
Beryllium	3	0.20 U	0.14	NR	0.14 J	NR	NR	<0.20	NR	NR	<0.10	0.24U
Chromium	50	36.20	567	NR	255 J	NR	NR	34.9	NR	NR	55.7	153
Copper	200	9.00 B	16.6	NR	13.4	NR	NR	5.9	NR	NR	7.2	4.9
Iron	300	621.00	3020	NR	1110	NR	NR	302	NR	NR	456	1170
Lead	15	5.30 J	7.6 UJ	NR	<2.1	NR	NR	<2.6	NR	NR	4.0	2.2U
Manganese	300	60.10	211	NR	177	NR	NR	138	NR	NR	149	160
Mercury	0.7	0.20 U	<0.10	NR	<0.10	NR	NR	<0.10	NR	NR	<0.10	<0.10
Nickel	100	10.80 U	52	NR	88.2	NR	NR	16.0	NR	NR	10.8	38.3
Top of Screen Elevation:	-3.00 feet											
Groundwater Elevation (feet):	59.44 58.54 57.44 59.80 58.24 56.54 56.54 59.80 58.24 56.54 54.74 53.04											
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  
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  
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 quantification 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
1,1 Dichloroethane	5	<5	<5	<5	<5	<5	<5	<5	<5J	<5J
1,1 Dichloroethene	5	<5	<5	<5	<5	<5	<5	<5	<5J	<5J
1,1,1 Trichloroethane	5	4 J	10	5	7	4 J	3 J	3 J	5 J	4 J
1,1,2 Trichloroethane	1	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,2 Dichloroethene (total)	5	<5	<5	<5	<5	<5	<5	<5	<5J	<5J
Acetone	NP	11 B	3 JB	<10	<10	<10	<10	<10	<10	<10
Chloroform	7	<5	<5	<5	<5	<5	<5	<5	<5	<5
Chloromethane	NP	<10	<10	<10	<10	<10	<10	<10	<10	<10
Methylene Chloride	5	5 B	<5	<5	<5	4 J	5 JB	3 J	<5J	<5J
Tetrachloroethene	5	<5	<5	<5	<5	<5	<5	<5	<5J	<5J
Toluene	5	<5	<5	<5	<5	<5	<5	<5	<5J	<5J
Trichloroethene	5	<5	<5	<5	<5	<5	<5	<5	<5J	<5J
<b>Turbidity</b>	<b>5</b>	<b>57.4</b>	NR	<b>47</b>	4	0.0	NR	<b>13.3</b>	<b>10.1</b>	<b>10.1</b>
Antimony	3	<2.2	NR	<2.3	NR	<1.9	NR	<1.9	3.1U	<2.2
Arsenic	25	3.4	NR	<3.4	NR	<2.3	NR	<3.0	<2.5	<2.5
Beryllium	3	0.15	NR	<0.10	NR	<0.20	NR	<0.10	0.14U	0.22U
Chromium	50	10.5	NR	11.7 J	NR	1.6	NR	9.7	16.2	27.2
Copper	200	68.6	NR	34.2	NR	10.6	NR	28.0	26.4	27.0
Iron	300	<b>4460</b>	NR	<b>3160</b>	NR	<b>885</b>	NR	<b>1290</b>	<b>2140</b>	<b>2400</b>
Lead	15	11.6 J	NR	<2.1	NR	<2.6	NR	<2.2	5.0	6.0
Manganese	300	56.8	NR	100	NR	36.7	NR	33.7	31.4	79.9
Mercury	0.7	<0.10	NR	<0.10	NR	<0.10	NR	<0.10	<0.10	0.27
Nickel	100	12.4	NR	19.4	NR	4.4	NR	10.6	24.4	23.0
<b>Top of Screen Elevation: 60.53 feet</b>										
<b>Groundwater Elevation (feet):</b>		59.15	57.45	57.22	59.34	58.25	56.10	54.35	52.85	52.85
<b>Bottom of Screen Elevation: 50.53 feet</b>										

Notes: Volatile and metal concentrations presented in micrograms per liter; turbidity measurements presented in nephelometric turbidity units

Elevations reference mean sea level

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 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

Groundwater Sampling Analytical Results for  
MW-3D

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
1,1 Dichloroethane	5	<5	<5	<5	<5	<5	<5	<5	<5J
1,1 Dichloroethene	5	<5	<5	<5	<5	<5	<5	<5	<5J
1,1,1 Trichloroethane	5	<5	1 J	1 J	<5	<5	1 J	1 J	1 J
1,1,2 Trichloroethane	1	<5	<5	<5	<5	<5	<5	<5	<5
1,2 Dichloroethene (total)	5	<5	<5	<5	<5	<5	<5	<5	<5J
Acetone	NP	<10	<10	2 JB	4 J	<10	<10	<10	<10
Chloroform	7	<5	1 J	<5	<5	<5	<5	<5	<5
Chloromethane	NP	<10	<10	<10	<10	<10	<10	<10	<10
Methylene Chloride	5	5 JB	<5	4 JB	<5	5 J	4 JB	7	<5J
Tetrachloroethene	5	<5	<5	<5	<5	<5	<5	<5	<5J
Toluene	5	<5	<5	<5	<5	<5	<5	<5	<5J
Trichloroethene	5	<5	<5	<5	<5	<5	<5	<5	<5J
<b>Turbidity</b>	<b>5</b>	<b>23.3</b>	NR	2	21	0.0	NR	114	4.2
Antimony	3	<2.2	NR	<2.3	NR	2.1 J	NR	<1.9	2.5U
Arsenic	25	<3.2	NR	<2.4	NR	<2.3	NR	<3.0	3.6U
Beryllium	3	<0.10	NR	0.15 J	NR	<0.20	NR	<0.10	<0.10
Chromium	50	<b>86.1</b>	NR	7.1 J	NR	2.3	NR	<b>212</b>	<b>50.9</b>
Copper	200	10.3	NR	3.9	NR	3.2	NR	17.9	14.9
Iron	300	<b>600</b>	NR	176	NR	105	NR	<b>962</b>	<b>1080</b>
Lead	15	7.9 J	NR	3.9	NR	<2.6	NR	11.0	10.6
Manganese	300	144	NR	<b>418</b>	NR	28 <sup>o</sup>	NR	197	206
Mercury	0.7	<0.10	NR	<0.10	NR	<0.10	NR	<0.10	<0.10
Nickel	100	58.1	NR	12.6	NR	8.2	NR	32.8	23.0
<b>Top of Screen Elevation: -1.65 feet</b>									
<b>Groundwater Elevation (feet):</b>		59.07	57.97	56.92	59.32	57.77	56.07	54.15	52.57
<b>Bottom of Screen Elevation: -11.65 feet</b>									

Notes: Volatile and metal concentrations presented in micrograms per liter; turbidity measurements presented in nephelometric turbidity units  
Elevations referenced to mean sea level

- 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 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

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
1,1 Dichloroethane	5	14 JD	14 JD	7 JD	7 JD	2 J	2 JD	4 JD	NS
1,1 Dichloroethene	5	40 JD	22 JD	<5	<5	<5	3 JD	5 JD	NS
1,1,1 Trichloroethane	5	1000 D	860 D	630D	260 D	80	280 D	320 D	NS
1,2 Dichloroethene (total)	5	<5	<50	<5	<5	<5	<10	<10	NS
Acetone	NP	37 JBD	<10	28 JBD	<20	<10	<10	<10	NS
Chloroform	7	<50	<5	<5	<5	<5	<5	<5	NS
Chloromethane	NP	<10	<10	<10	<20	<10	<10	<10	NS
Methylene Chloride	5	51 BD	<5	41 BD	<10	<5	28 BD	4 JBD	NS
Tetrachloroethene	5	13 JD	19 JD	14 JD	12 D	11	15 D	14 D	NS
Toluene	5	<50	<5	<5	<5	<5	<5	<5	NS
Trichloroethene	5	<5	<50	<5	<10	<5	<10	<10	NS
Turbidity	5	311	NR	0	12	0.0	NR	15.1	NS
Antimony	3	<2.2	NR	<2.3	NR	2.3 J	NR	2.1	NS
Arsenic	25	<3.2	NR	3.0	NR	<2.3	NR	<3.0	NS
Beryllium	3	<0.10	NR	0.15	NR	<0.20	NR	<0.10	NS
Chromium	50	674	NR	114	NR	1110	NR	90.8	NS
Copper	200	35.1	NR	14.9	NR	35.2	NR	11.0	NS
Iron	300	3720	NR	632	NR	3740	NR	430	NS
Lead	15	4.1 J	NR	<2.1	NR	<2.6	NR	<2.2	NS
Manganese	300	97	NR	15.3	NR	37.3	NR	5.3	NS
Mercury	0.7	<0.10	NR	<0.10	NR	<0.10	NR	<0.10	NS
Nickel	100	28.3	NR	9.4	NR	83.7	NR	15.4	NS
			10x Dilution	5x Dilution	2x Dilution		2x Dilution	2x Dilution	
Top of Screen Elevation: 63.32 feet		59.01	58.31	57.31	59.37	57.31	56.19	54.41	53.41
Groundwater Elevation (feet):									
Bottom of Screen Elevation: 53.32 feet									

Notes: Volatile and metal concentrations presented in micrograms per liter; turbidity measurements presented in nephelometric turbidity units  
Elevations reference mean sea level  
NS: Not sampled  
Monitoring well MW-4S was not sampled during Jul - Aug 2002 due to insufficient water  
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  
B: The analyte was detected in the blank sample  
D: Results are reported for the diluted samples  
†: Accelerated value is an estimated quantity  
Data Qualifiers:  
B: The analyte was detected in the blank sample  
D: Results are reported for the diluted samples  
†: Accelerated value is an estimated quantity

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
1,1 Dichloroethane	5	7	8	5	4 J	2 J	4 J	3 J	4 J	4 J
1,1 Dichloroethene	5	14	15	8	6	6	8	6	8	9 J
1,1,1 Trichloroethane	5	26	28	20	13	23	11	12	12	13 J
1,2 Dichloroethene (total)	5	2 J	2 J	1 J	1 J	<5	2 J	1 J	<5	1 J
Acetone	NP	7 JB	8 JB	<10	3 JB	6 J	<10	<10	<10	<10
Chloroform	7	<5	<5	<5	<5	<5	<5	<5	<5	<5
Chloromethane	NP	<10	<10	<10	<10	10	<10	<10	<10	<10
Methylene Chloride	5	3 JB	4 JB	<5	7 JB	<5	<5	4 JB	6	<5 J
Tetrachloroethene	5	8	8	6	4 J	<5	5 J	3 J	3 J	2 J
Toluene	5	<5	<5	<5	<5	<5	<5	<5	<5	<5 J
Trichloroethene	5	24	25	17	11	3 J	11	9	10	8 J
Turbidity	5	11.8	11.8	NR	0	18	0.0	NR	3.6	0.8
Antimony	3	<2.2	<2.2	NR	<2.3	NR	<1.9	NR	<1.9	2.4 U
Arsenic	25	<3.2	<3.2	NR	<2.4	NR	<2.3	NR	<3.0	<2.5
Beryllium	3	0.1	<0.10	NR	0.24	NR	<0.20	NR	<0.10	0.25 U
Chromium	50	4.1	4.7	NR	6.6	NR	1.4	NR	7.9	19.9
Copper	200	3.9	5.3	NR	5.5	NR	3.1	NR	6.8	6.4
Iron	300	1190	1510	NR	827	NR	1080	NR	333	429
Lead	15	6.2	3.4	NR	2.4	NR	<2.6	NR	<2.2	2.7 U
Manganese	300	118	120	NR	96.5	NR	137	NR	120	116
Mercury	0.7	<0.10	<0.10	NR	<0.10	NR	<0.10	NR	<0.10	<0.10
Nickel	100	12	11	NR	7.3	NR	5.6	NR	10.9	11.8
		58.99	58.99	58.29	57.24	59.45	57.19	56.19	54.39	52.99

Top of Screen Elevation: -3.00 feet

Groundwater Elevation (feet):

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 reference mean sea level

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 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

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
1,1 Dichloroethane	5	3J	3J	3J	2J	2J	1J	<5	<5	<5
1,1 Dichloroethene	5	2J	1JB	3J	1J	1J	<5	<5	<5	<5
1,1,1 Trichloroethane	5	3J	3J	3J	1J	2J	1J	<5	<5	<5
1,1,2 Trichloroethane	1	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,2 Dichloroethene (total)	5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Acetone	NP	<10	1JB	<10	<10	<10	<10	<10	<5	<10
Carbon Disulfide	NP	<5	<5	<5	<5	<5	<5	<5	<5	<5
Chlorobenzene	5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Chloroform	7	<5	<5	<5	<5	<5	<5	<5	<5	<5
Methylene Chloride	5	<5	<5	<b>16 B</b>	<5	<5	<5	<b>8 B</b>	<5	<5
Tetrachloroethene	5	1J	<5	2J	<5	1J	1J	<5	<5	<5
Toluene	5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethene	5	2J	2J	3J	<5	1J	1J	<5	<5	<5
Turbidity	5	0	0	NR	<b>11</b>	0	0.1	NR	2	0
Antimony	3	<2.2	<2.2	NR	<2.3	NR	2.3 UJ	NR	<1.9	<2.2
Arsenic	25	<3.2	<3.2	NR	<3.4	NR	3.9 UJ	NR	<3.0	<2.5
Beryllium	3	<0.10	<0.10	NR	<0.10	NR	<0.20	NR	<0.10	0.17U
Chromium	50	31.8	35.8	NR	16.2 J	NR	2.6 J	NR	16.1	34.2
Copper	200	59.5	65.8	NR	50.6	NR	47.9	NR	45.4	28.5J
Iron	300	<b>2130 J</b>	<b>2750 J</b>	NR	<b>713</b>	NR	236	NR	245 J	<b>344</b>
Lead	15	9.4	10.5	NR	2.6	NR	<2.4	NR	3.8	2.0U
Manganese	300	<b>529</b>	<b>529</b>	NR	<b>465</b>	NR	<b>628</b>	NR	<b>575</b>	<b>690</b>
Mercury	0.7	<0.10	<0.10	NR	<0.10	NR	<0.10	NR	<0.10	0.11
Nickel	100	33	40.8	NR	13.2	NR	4.6	NR	11.5	5.4U
Top of Screen Elevation: -3.00 feet										
Groundwater Elevation (feet):		58.65	58.65	57.85	57.01	59.10	57.15	55.70	54.00	52.35
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 reference mean sea level  
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  
B: The analyte was detected in the blank sample  
J: Associated value is an estimated quantity

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
1,1 Dichloroethane	5	<5	<25	2 J	1 J	1 J	<5	<5	<5	NS
1,1 Dichloroethene	5	<5	<b>14 JD</b>	<5	<5	<5	<5	1 J	1 J	NS
1,1,1 Trichloroethane	5	<b>15</b>	<b>360 D</b>	<b>110</b>	<b>85</b>	<b>110</b>	<b>110</b>	<b>92</b>	<b>54</b>	NS
1,2 Dichloroethene (total)	5	<5	<25	<5	<5	<5	<5	<5	<5	NS
2-Butanone	NP	<10	<10	<10	<10	<10	<10	<10	<10	NS
Acetone	NP	<10	<10	3 JB	3 J	<10	<10	<10	<10	NS
Chlorobenzene	5	<5	<5	<5	<5	<5	<5	<5	<5	NS
Chloroform	7	<5	<5	<5	<5	<5	<5	<5	<5	NS
Methylene Chloride	5	<5	<5	3 JB	<5	3 J	<5	<b>14 B</b>	<b>9 B</b>	NS
Tetrachloroethene	5	<5	<25	1 J	<5	<5	<5	<5	<5	NS
Toluene	5	<5	<5	<5	<5	<5	<5	<5	<5	NS
Trichloroethene	5	<5	<25	<5	<5	<5	<5	<5	<5	NS
Turbidity	5	0	NR	0	0	0.0	NR	NR	<b>25.5</b>	NS
Antimony	3	<2.2	NR	<2.3	NR	<1.9	<1.9	NR	<b>3.4</b>	NS
Arsenic	25	<3.2	NR	<2.4	NR	<2.3	<2.3	NR	<3.0	NS
Beryllium	3	<0.10	NR	0.27	NR	<0.20	<0.20	NR	<0.10	NS
Chromium	50	<b>159</b>	NR	<b>77.7</b>	NR	3.9	4.2	NR	<b>836</b>	NS
Copper	200	9.7	NR	6.5	NR	3.0	3.5	NR	9.8	NS
Iron	300	<b>899 J</b>	NR	<b>463</b>	NR	37.3 J	27.5 J	NR	<b>4760</b>	NS
Lead	15	<2.3	NR	<2.1	NR	<2.6	<2.6	NR	<2.2	NS
Manganese	300	16.7	NR	53.4	NR	28.7	28.7	NR	14.9	NS
Mercury	0.7	<0.10	NR	<0.10	NR	<0.10	<0.10	NR	<0.10	NS
Nickel	100	7.9	NR	17.4	NR	7.6	7.2	NR	20.6	NS

5x Dilution

Top of Screen Elevation: 62.37 feet  
 Groundwater Elevation (feet):  
 Bottom of Screen Elevation: 52.37 feet

58.29	58.29	56.79	58.95	57.59	57.59	55.69	53.89	52.49
-------	-------	-------	-------	-------	-------	-------	-------	-------

Notes: Volatile and metal concentrations presented in micrograms per liter; turbidity measurements presented in nephelometric turbidity units  
 Elevations reference mean sea level  
 NS: Not sampled  
 Monitoring well MW-6S was not sampled during Jul - Aug 2002 due to insufficient water  
 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 Qualifiers:**  
 D: Results are reported for the diluted sample  
 B: The analyte was detected in the blank sample

Groundwater Sampling Analytical Results for  
MW-6D

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
1,1 Dichloroethane	5	4 J	3 J	<5	2 J	2 J	2 J	2 J	4 J
1,1 Dichloroethene	5	5 J	4 J	3 J	3 J	3 J	3 J	4 J	7
1,1,1 Trichloroethane	5	10	8	5	5 J	4 J	5	5	9
1,2 Dichloroethene (total)	5	<5	<5	<5	<5	<5	<5	<5	1 J
2-Butanone	NP	<10	<10	<10	<10	<10	<10	<10	<10
Acetone	NP	<10	<10	6 JB	<5	<10	<10	<10	<10
Chlorobenzene	5	<5	<5	<5	<5	<5	<5	<5	<5
Chloroform	7	<5	<5	<5	<5	<5	<5	<5	5 J
Methylene Chloride	5	<5	<5	13 B	<5	3 J	15 B	<5	<5
Tetrachloroethene	5	3 J	3 J	3 J	<5	4 J	2 J	2 J	4 J
Toluene	5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethene	5	8	6	5	4 J	4 J	4 J	4 J	7
Turbidity	5	0	NR	0	6	0.1	NR	27.0	73
Antimony	3	<2.2	NR	<2.3	NR	<1.9	NR	2.0	<2.2
Arsenic	25	<3.2	NR	<2.4	NR	<2.3	NR	4.2 J	<2.5
Beryllium	3	<0.10	NR	0.24	NR	<0.20	NR	<0.10	0.16U
Chromium	50	458	NR	157	NR	23.1	NR	378	479
Copper	200	19.3	NR	9.7	NR	8.8	NR	28.8	15.1
Iron	300	3670 J	NR	534	NR	180 J	NR	1480 J	870
Lead	15	2.6	NR	2.5	NR	<2.6	NR	5.7	5.2
Manganese	300	243	NR	146	NR	79.4	NR	110	130
Mercury	0.7	<0.10	NR	<0.10	NR	<0.10	NR	<0.10	<0.10
Nickel	100	449	NR	121	NR	67.3	NR	110	133

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
-------	-------	-------	-------	-------	-------	-------	-------

Notes: Volatile and metal concentrations presented in micrograms per liter; turbidity measurements presented in nephelometric turbidity units

Elevations reference mean sea level

NS: Not sampled

NY Water Quality Criteria: NYSDEC Regulation for Surface Waters and Groundwater, Section 703.5 (August 1989)

NP: No proposed quantification level available

NR: Not required

Bolded values exceed the NY Water Quality Criteria

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



Groundwater Sampling Analytical Results for  
MW-7S

Analyte	NY Water Quality Criteria	June 2000	Oct 2000	Oct 2000 Duplicate	Jan - Feb 2001	Jan - Feb 2001 Duplicate	Apr - May 2001	July - Aug 2001	Oct 2001	Jan - Feb 2002	July - Aug 2002
1,1 Dichloroethane	5	<5	<5	<5	<5	<5	<5	<5	<5	NS	NS
1,1 Dichloroethene	5	<5	<5	<5	<5	<5	<5	<5	<5	NS	NS
1,1,1 Trichloroethane	5	<5	<5	<5	<5	<5	<5	<5	<5	NS	NS
1,2 Dichloroethene (total)	5	<5	<5	<5	<5	<5	<5	<5	<5	NS	NS
2-Butanone	NP	<10	<10	<10	<10	<10	<10	<10	<10	NS	NS
Acetone	NP	<10	<10	2 J	<10	2 JB	<5	<10	<10	NS	NS
Chlorobenzene	5	<5	<5	<5	<5	<5	<5	<5	<5	NS	NS
Chloroform	7	<5	<5	<5	<5	<5	<5	<5	<5	NS	NS
Chloromethane	NP	<10	<10	<10	<10	<10	<10	<10	<10	NS	NS
Methylene Chloride	5	<5	<5	<5	2 JB	1 JB	<5	<5	11 B	NS	NS
Tetrachloroethene	5	<5	<5	<5	<5	<5	<5	<5	<5	NS	NS
Toluene	5	<5	<5	<5	<5	<5	<5	<5	<5	NS	NS
Trichloroethene	5	<5	<5	<5	<5	<5	<5	<5	<5	NS	NS
Turbidity	5	0	NR	NR	190	190	0	0.0	NR	NS	NS
Antimony	3	<2.2	NR	NR	<2.3	<2.3	NR	<1.9	NR	NS	NS
Arsenic	25	<3.2	NR	NR	<3.4	<3.4	NR	<2.3	NR	NS	NS
Beryllium	3	<0.10	NR	NR	<0.10	<0.10	NR	<0.20	NR	NS	NS
Chromium	50	57.3	NR	NR	49.4 J	39.1 J	NR	<0.90	NR	NS	NS
Copper	200	15	NR	NR	10.1	12.2	NR	3.0	NR	NS	NS
Iron	300	912 J	NR	NR	498	427	NR	<15.7	NR	NS	NS
Lead	15	<2.3	NR	NR	<2.1	<2.1	NR	<2.6	NR	NS	NS
Manganese	300	245	NR	NR	155	162	NR	1.4	NR	NS	NS
Mercury	0.7	<0.10	NR	NR	<0.10	<0.10	NR	<0.10	NR	NS	NS
Nickel	100	22.5	NR	NR	9.7	7.3	NR	1.5	NR	NS	NS
Top of Screen Elevation: 63.06 feet											
Groundwater Elevation (feet):		58.21	57.41	57.41	56.51	56.51	58.81	57.01	55.41	53.57	53.21
Bottom of Screen Elevation: 53.06 feet											

Notes: Volatile and metal concentrations presented in micrograms per liter; turbidity measurements presented in nephelometric turbidity units  
Elevations reference mean sea level  
NS: Not sampled  
Monitoring well MW-7S was not sampled during Feb 2002 or Jul - Aug 2002 due to insufficient water volume  
NY Water Quality Criteria: NYSDEC Regulation for Surface Waters and Groundwater, Section 703.5 (August 1998)  
NP: No proposed quantification level available  
NR: Not required  
Bodded values exceed the NY Water Quality Criteria  
Data Qualifiers:  
R: The analyte was detected in the blank sample

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
1,1 Dichloroethane	5	8	8	8	2 J	8	8	7	7	5 J
1,1 Dichloroethene	5	4 J	5	3 J	11	3	3 J	3 J	3 J	4 J
1,1,1 Trichloroethane	5	7	5 J	3 J	15	2 J	2 J	2 J	2 J	3 J
1,2 Dichloroethene (total)	5	2 J	3 J	2 J	1 J	3 J	2 J	2 J	2 J	2 J
2-Butanone	NP	<10	<10	<10	<10	<10	<10	<10	<10	<10
Acetone	NP	<10	<10	2 JB	<5	<10	<10	<10	<10	<10
Chlorobenzene	5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Chloroform	7	<5	<5	<5	2 J	<5	<5	<5	<5	<5
Chloromethane	NP	<10	3 J	<10	<10	<10	<10	<10	<10	<10
Methylene Chloride	5	<5	<5	4 JB	<5	1 J	11 B	8 B	8 B	<5 J
Tetrachloroethene	5	4 J	5 J	3 J	<5	3 J	3 J	3 J	3 J	2 J
Toluene	5	<5	<5	<5	<5	<5	<5	<5	<5	<5 J
Trichloroethene	5	5	6	4 JB	5 J	3 J	3 J	3 J	3 J	3 J
Turbidity	5	0	NR	10	10	0.0	NR	19.3	19.3	0.0
Antimony	3	<2.2	NR	<2.3	NR	<1.9	NR	<1.9	2.1	<2.2
Arsenic	25	<3.2	NR	<2.4	NR	<2.3	NR	<3.0	<3.0	<2.5
Beryllium	3	<0.10	NR	0.25 J	NR	<0.20	NR	<0.10	<0.10	0.23 U
Chromium	50	19.9	NR	2.7 J	NR	7.1	NR	3.3	3.6	18.6
Copper	200	13.7	NR	3.1	NR	4.6	NR	5.8	7.3	13.2
Iron	300	544 J	NR	94.2	NR	209 J	NR	86.0	98.8	306
Lead	15	2.8	NR	<2.1	NR	<2.6	NR	<2.2	<2.2	<1.7
Manganese	300	47.4	NR	61.4	NR	69.3	NR	62.1	60.9	60.9
Mercury	0.7	<0.10	NR	<0.10	NR	<0.10	NR	<0.10	<0.10	<0.10
Nickel	100	13.8	NR	3.1	NR	3.7	NR	6.5	6.7	17.3
Top of Screen Elevation: 0.38 feet		57.86		57.46	58.74	56.96	56.01	54.46	54.46	52.26
Groundwater Elevation (feet):		57.86		57.46	58.74	56.96	56.01	54.46	54.46	52.26
Bottom of Screen Elevation: -9.62 feet		57.86		57.46	58.74	56.96	56.01	54.46	54.46	52.26

Notes: Volatile and metal concentrations presented in micrograms per liter; turbidity measurements presented in nephelometric turbidity units  
Elevations reference mean sea level

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  
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

Groundwater Sampling Analytical Results for  
MW-13

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
1,1 Dichloroethane	5	14	40 D	9	8	7	2 J	<5	3 J	3 J
1,1 Dichloroethene	5	8	7 JD	2 J	<5	<5	<5	<5	<5	<5
1,1,1 Trichloroethane	5	120	350 D	110	34	34	15	34	12	11
1,1,2 Trichloroethane	1	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,2 Dichloroethene (total)	5	<5	<25	<5	<5	<5	<5	<5	<5	<5
Acetone	NP	8 JB	<10	2 JB	4 J	<10	<10	<10	<10	<10
Chloroform	7	<5	<5	<5	<5	<5	<5	<5	<5	<5
Chloromethane	NP	<10	<10	<10	1 J	<10	<10	<10	<10	<10
Methylene Chloride	5	4 JB	<5	1 JB	<5	<5	14 B	1 JB	<5	<5
Tetrachloroethene	5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Toluene	5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethene	5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Turbidity	5	200	NR	0	0	0.1	NR	22.5	110	110.0
Antimony	3	<2.2	NR	<2.3	NR	2.3 J	NR	<1.9	<2.2	<2.2
Arsenic	25	4.3	NR	<3.4	NR	4.7 J	NR	4.1 J	<2.5	<2.5
Beryllium	3	<0.10	NR	<0.10	NR	<0.20	NR	0.12	0.10U	0.10U
Chromium	50	6.3	NR	2.3 J	NR	1.5 J	NR	3.5	0.52U	16.3
Copper	200	12.7	NR	5.6	NR	3.1	NR	10.2	1.8	2.8
Iron	300	17200	NR	687	NR	634	NR	2050 J	<14.5	707
Lead	15	5.2	NR	<2.1	NR	<2.4	NR	<2.2	<1.7	<1.7
Manganese	300	365	NR	54.9	NR	17.3	NR	26.6	32.1	31.8
Mercury	0.7	<0.10	NR	<0.10	NR	<0.10	NR	<0.10	<0.10	<0.10
Nickel	100	12.2	NR	7.2	NR	4.7	NR	6.7	3.2	5.3

5x Dilution

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
-------	-------	-------	-------	-------	-------	-------	-------	-------

Notes: Volatile and metal concentrations presented in micrograms per liter; turbidity measurements presented in nephelometric turbidity units  
 Elevations referenced to mean sea level  
 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 Qualifiers:  
 B: The analyte was detected in the blank sample  
 D: Results are reported for the diluted samples  
 J: Associated value is an estimated quantity

Groundwater Sampling Analytical Results for  
MW-14

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
1,1 Dichloroethane	5	4J	2J	1J	2J	2J	<5	2J	<5
1,1 Dichloroethene	5	1J	<5	<5	<5	<5	<5	<5	<5
1,1,1 Trichloroethane	5	<b>21</b>	<b>8</b>	<b>15</b>	5J	<b>12</b>	<b>6</b>	<b>15</b>	1J
1,1,2 Trichloroethane	1	<5	<5	<5	<5	<5	<5	<5	<5
1,2 Dichloroethene (total)	5	1J	<5	<5	1J	<5	<5	<5	<5
2-Butanone	NP	<10	<10	<10	<10	<10	<10	<10	<10
Acetone	NP	<10	<10	1JB	<5	<10	<10	<10	<10
Carbon Disulfide	NP	<5	<5	<5	<5	<5	<5	<5	<5
Chlorobenzene	5	<5	<5	<5	<5	<5	<5	<5	<5
Chloroform	7	<5	<5	<5	<5	<5	<5	<5	<5
Chloromethane	NP	<10	<10	<10	<5	<10	<10	<10	<10
Methylene Chloride	5	<5	<5	<5	5J	<5	<b>9B</b>	4JB	<5
Tetrachloroethene	5	2J	<5	<5	<5	<5	<5	<5	<5
Toluene	5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethene	5	1J	<5	<5	<5	<5	<5	<5	<5
Turbidity	5	<b>75</b>	NR	0	0	0.0	NR	<b>25.7</b>	0
Antimony	3	<2.2	NR	<2.3	NR	<1.9	NR	<1.9	<2.2
Arsenic	25	<3.2	NR	<3.4	NR	<2.3	NR	<3.0	<2.5
Beryllium	3	<0.10	NR	<0.10	NR	<0.20	NR	<0.10	0.22U
Chromium	50	3.1	NR	2.6J	NR	<0.90	NR	3.3	3.6U
Copper	200	3.2	NR	2.3	NR	0.87	NR	3.0	1.5
Iron	300	<b>14100</b>	NR	<b>7870</b>	NR	<b>6830J</b>	NR	<b>12200</b>	<b>14600</b>
Lead	15	2.8	NR	<2.1	NR	<2.6	NR	<2.2	<1.7
Manganese	300	<b>1090</b>	NR	217	NR	<b>421</b>	NR	<b>374</b>	221
Mercury	0.7	<0.10	NR	<0.10	NR	<0.10	NR	<0.10	<0.10
Nickel	100	6.5	NR	2.9	NR	3.6	NR	5.5	3.8U
Top of Screen Elevation: 52.58 feet									
Groundwater Elevation (feet):		56.68	56.28	55.48	57.06	55.78	54.28	52.58	50.78
Bottom of Screen Elevation: 42.58 feet									

Notes: Volatile and metal concentrations presented in micrograms per liter; turbidity measurements presented in nephelometric turbidity units

Elevations referenced to mean sea level

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 Qualifiers:

B: The analyte was detected in the blank sample

J: Associated value is an estimated quantity

Groundwater Sampling Analytical Results for  
MW-15

Analyte	NY Water Quality Criteria	June 2000	Oct 2000	Oct 2000 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
1,1 Dichloroethane	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,1 Dichloroethene	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,1,1 Trichloroethane	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,1,2 Trichloroethane	1	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,2 Dichloroethene (total)	5	<b>42</b>	1 J	1 J	<b>18</b>	<b>20</b>	<b>24</b>	<5	<5	<5	<5	<5
Acetone	NP	<10	<10	<10	3 JB	3 JB	<5	<10	<10	<10	<10	<10
Chlorobenzene	5	1 J	<5	<5	1 J	1 J	<5	<5	<5	<5	<5	<5
Chloroform	7	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Chloromethane	NP	<10	<10	<10	<10	<10	<5	<10	<10	<10	<10	<10
Methylene Chloride	5	<5	<5	<5	<5	1 JB	5 J	<5	5 B	2 JB	2 JB	<5
Tetrachloroethene	5	<b>11</b>	<5	<5	<b>9</b>	<b>8</b>	<5	<5	<5	<5	<5	<5
Toluene	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethene	5	<b>14</b>	<5	<5	4 J	5 J	<5	<5	<5	<5	<5	<5
Turbidity	5	0	NR	NR	<b>190</b>	<b>190</b>	0	0.1	NR	<b>19.4</b>	NR	0
Antimony	3	<3.2	NR	NR	<2.3	<2.3	NR	2.3 UJ	NR	<1.9	<1.9	<2.2
Arsenic	25	10.6	NR	NR	6.4	6.8	NR	6.9 J	NR	4.9	7.2 J	2.5
Beryllium	3	0.21	NR	NR	<0.10	<0.10	NR	<0.20	NR	<0.10	0.12	0.13U
Chromium	50	19.5	NR	NR	4.4 J	3.8 J	NR	1.4 UJ	NR	2.4	4.2	2.7U
Copper	200	9.7	NR	NR	8.9	7.3	NR	<0.50	NR	3.8	8.5	1.3
Iron	300	<b>39100 J</b>	NR	NR	<b>36400</b>	<b>34900</b>	NR	<b>27600</b>	NR	<b>19800 J</b>	<b>19700 J</b>	<b>29300</b>
Lead	15	4.6	NR	NR	4.6	3.4	NR	<2.4	NR	2.9	4.4	<1.7
Manganese	300	<b>405</b>	NR	NR	<b>417</b>	<b>403</b>	NR	<b>344</b>	NR	199	194	<b>339</b>
Mercury	0.7	<0.10	NR	NR	<0.10	<0.10	NR	<0.10	NR	<0.10	<0.10	<0.10
Nickel	100	13	NR	NR	4.8	3.8	NR	2.7	NR	3.1	3.3	1.6U
Top of Screen Elevation:		54.60 feet										
Groundwater Elevation (feet):		58.95	58.25	58.25	57.15	57.15	59.31	57.35	56.15	54.25	54.25	52.60
Bottom of Screen Elevation:		44.60 feet										

Notes: Volatile and metal concentrations presented in micrograms per liter; turbidity measurements presented in nephelometric turbidity units  
Elevations referenced to mean sea level

- 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 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

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
1,1 Dichloroethane	5	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,1 Dichloroethene	5	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,1,1 Trichloroethane	5	<5	<5	<5	<5	<5	<5	<5	3 J	<5
1,2 Dichloroethene (total)	5	<5	<5	<5	<5	<5	<5	<5	<5	<5
2-Butanone	NP	<10	<10	<10	<10	<10	<10	<10	<10	<10
Acetone	NP	<10	<10	<10	<5	<5	<5	<10	<10	<10
Chlorobenzene	5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Chloroform	7	<5	<5	<5	<5	<5	<5	<5	<5	<5
Chloromethane	NP	<10	<10	<10	<10	<10	<10	<10	<10	<10
Methylene Chloride	5	<5	<5	<5	<5	<5	<5	1 JB	<5	<5
Tetrachloroethene	5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Toluene	5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethene	5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Turbidity	5	133	NR	47	0	0	0.0	NR	26.4	97
Antimony	3	<2.2	NR	<2.3	NR	NR	<1.9	NR	<1.9	2.2U
Arsenic	25	17.2	NR	10.4	NR	NR	5.7	NR	10.3 J	39.8
Beryllium	3	<0.10	NR	<0.10	NR	NR	<0.20	NR	<0.10	1.30U
Chromium	50	6.9	NR	3.6 J	NR	NR	<0.90	NR	4.4	43.6
Copper	200	11.8	NR	7.2	NR	NR	0.89	NR	7.2	54.7
Iron	300	33700 J	NR	25200	NR	NR	25400 J	NR	24600 J	58400
Lead	15	3.9	NR	<2.1	NR	NR	<2.6	NR	2.7	28.6
Manganese	300	524	NR	426	NR	NR	430	NR	363	438
Mercury	0.7	<0.10	NR	<0.10	NR	NR	<0.10	NR	<0.10	<0.10
Nickel	100	5.2	NR	2.7	NR	NR	1.9	NR	4.1	23.4U

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
-------	-------	-------	-------	-------	-------	-------	-------	-------

Notes: Volatile and metal concentrations presented in micrograms per liter; turbidity measurements presented in nephelometric turbidity units  
Elevations referenced to mean sea level

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 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

Groundwater Sampling Analytical Results for  
MW-17

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
1,1 Dichloroethane	5	5	7	3 J	2 J	1 J	1 J	2 J	3 J
1,1 Dichloroethene	5	<5	<5	<5	<5	<5	<5	<5	<5
1,1,1 Trichloroethane	5	39	58	33	9	12	19	22	5 J
1,1,2 Trichloroethane	1	<5	3 J	<5	<5	1 J	2 J	<5	<5
1,2 Dichloroethene (total)	5	<5	<5	<5	<5	<5	<5	<5	<5
Acetone	NP	<10	<10	<5	<5	<10	<10	<5	<10
Carbon Disulfide	NP	<5	<5	<5	<5	<5	<5	<5	<5
Chlorobenzene	5	<5	<5	<5	<5	<5	<5	<5	<5
Chloroform	7	<5	<5	<5	<5	<5	<5	<5	<5
Methylene Chloride	5	<5	<5	<5	<5	<5	9 B	1 JB	<5
Tetrachloroethene	5	<5	3 J	1 J	<5	<1	1 J	1 J	<5
Toluene	5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethene	5	<5	<5	<5	<5	<5	<5	<5	<5
<b>Turbidity</b>	5	<b>15.9</b>	NR	<b>35</b>	<b>10</b>	0.1	NR	<b>18</b>	0
Antimony	3	2.5	NR	<2.3	NR	2.3 UJ	NR	<1.9	<2.2
Arsenic	25	6.5	NR	<3.4	NR	3.9 UJ	NR	<3.0	<2.5
Beryllium	3	0.26	NR	<0.10	NR	<0.20	NR	<0.10	0.26U
Chromium	50	25.9	NR	7.6 J	NR	2.6 J	NR	2.8	4.8
Copper	200	79.1	NR	42.6	NR	29.2	NR	18.5	20.1
Iron	300	<b>16900 J</b>	NR	<b>1600</b>	NR	<b>409</b>	NR	<b>662 J</b>	<b>982</b>
Lead	15	<b>20.1</b>	NR	<2.1	NR	<2.4	NR	2.3	<1.7
Manganese	300	<b>386</b>	NR	73.8	NR	176	NR	108	53.7
Mercury	0.7	<0.10	NR	<0.10	NR	<0.10	NR	<0.10	<0.10
Nickel	100	61.9	NR	47.4	NR	49.5	NR	22.7	14.2U
<b>Top of Screen Elevation: 58.08 feet</b>									
<b>Groundwater Elevation (feet):</b>		<b>57.98</b>	<b>57.38</b>	<b>57.65</b>	<b>58.81</b>	<b>56.88</b>	<b>58.81</b>	<b>51.78</b>	<b>52.08</b>
<b>Bottom of Screen Elevation: 48.08 feet</b>									

Notes: Volatile and metal concentrations presented in micrograms per liter; turbidity measurements presented in nephelometric turbidity units  
Elevations referenced to mean sea level

NS: Not sampled  
NY Water Quality Criteria: NYSDEC Regulation for Surface Waters and Groundwater, Section 703.5 (August 1999)  
NP: No proposed quantification level  
NR: Not required

Bolded values exceed the NY Water Quality Criteria  
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

Groundwater Sampling Analytical Results for  
MW-18

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
1,1 Dichloroethane	5	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,1 Dichloroethene	5	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,1,1 Trichloroethane	5	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,1,2 Trichloroethane	1	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,2 Dichloroethene (total)	5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Acetone	NP	<10	<10	7 JB	6 J	<10	<10	<10	<10	<10
Carbon Disulfide	NP	<5	<5	<5	<5	<5	<5	<5	<5	<5
Chlorobenzene	5	<5	<5	1 J	<5	<5	<5	<5	<5	<5
Chloroform	7	<5	<5	<5	<5	<5	<5	<5	<5	<5
Methylene Chloride	5	<5	<5	2 JB	7	<5	<5	10 B	<5	<5
Tetrachloroethene	5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Toluene	5	<5	<5	2 J	<5	<5	<5	<5	<5	<5
Trichloroethene	5	<5	<5	1 J	<5	<5	<5	<5	<5	<5
Turbidity	5	247	NR	0	0	0.0	NR	NR	16.4	0
Antimony	3	<2.2	NR	<2.3	NR	2.3 UJ	2.3 UJ	NR	<1.9	<2.2
Arsenic	25	6.1	NR	8.1	NR	3.9 UJ	3.9 UJ	NR	<3.0	<2.5
Beryllium	3	0.1	NR	0.55	NR	<0.20	<0.20	NR	<0.10	0.26U
Chromium	50	31.2	NR	80	NR	3.2 J	3.1 J	NR	5.3	6.7
Copper	200	9.7	NR	13.6	NR	0.52	<0.50	NR	3.4	0.55
Iron	300	9060	NR	13500	NR	905	381	NR	1170 J	1100
Lead	15	4.2	NR	7.5	NR	<2.4	<2.4	NR	<2.2	1.9U
Manganese	300	164	NR	269	NR	15.4	10.6	NR	16.6	23.4
Mercury	0.7	<0.10	NR	<0.10	NR	<0.10	<0.10	NR	<0.10	<0.10
Nickel	100	16.4	NR	46.6	NR	2.9	1.9	NR	4.8	4.8U
		47.30	56.30	55.50	57.73	55.60	55.60	54.20	52.52	51.00

Top of Screen Elevation: 58.03 feet

Groundwater Elevation (feet):

Bottom of Screen Elevation: 48.03 feet

Notes: Volatile and metal concentrations presented in micrograms per liter; turbidity measurements presented in nephelometric turbidity units  
Elevations referenced to mean sea level

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 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

NY Water Quality Criteria: NYSDEC Regulation for Surface Waters and Groundwater, Section 703.5 (August 1999)



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
1,1 Dichloroethane	5	6	4 J	3 J	4 J	5 J	3 J	3 J	3 J
1,1 Dichloroethene	5	1 J	2 J	1 J	2 J	3 J	1 J	1 J	<5
1,1,1 Trichloroethane	5	8	5 J	1 J	<5	1 J	2 J	1 J	<5
1,2 Dichloroethene (total)	5	<5	1 J	<5	2 J	2 J	1 J	<5	2 J
2-Butanone	NP	<10	<10	<10	<10	<10	<10	<10	<10
Acetone	NP	<10	4 J	4 JB	<10	<10	<10	<10	<10
Carbon Disulfide	NP	<5	<5	<5	<5	<5	<5	<5	<5
Chlorobenzene	5	2 J	<5	<5	<5	<5	<5	<5	<5
Chloroform	7	<5	<5	<5	<5	<5	<5	<5	<5
Chloromethane	NP	<10	<10	<10	<10	<10	<10	<10	<10
Methylene Chloride	5	<5	14 B	12 B	6	<5	9 B	<5	<5
Tetrachloroethene	5	<5	2 J	<5	<5	<5	<5	<5	<5
Toluene	5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethene	5	<5	2 J	<5	<5	2 J	<5	<5	<5
Turbidity	5	64.9	NR	0	0	0.1	NR	62	0
Antimony	3	<2.2	NR	<2.3	NR	2.3 UJ	NR	<1.9	<2.2
Arsenic	25	4.1	NR	4.7	NR	3.9 UJ	NR	5.1 J	<2.5
Beryllium	3	0.37	NR	0.60	NR	<0.20	NR	0.16	0.61 U
Chromium	50	96.6	NR	36.5	NR	1.4 UJ	NR	40.2	121
Copper	200	109	NR	13.7	NR	<0.50	NR	16.4	6.3
Iron	300	21600	NR	29400	NR	15400	NR	26000 J	18600
Lead	15	34	NR	4.6	NR	<2.4	NR	6.3	<1.7
Manganese	300	2100	NR	1050	NR	786	NR	966	683
Mercury	0.7	0.34	NR	0.34	NR	<0.10	NR	0.76	0.14
Nickel	100	66.9	NR	26.7	NR	3.9	NR	29.1	86.8
Top of Screen Elevation: Unknown									
Groundwater Elevation (feet):		56.20	55.00	54.20	56.40	54.30	53.00	51.10	49.60
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

- 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
- Bolded values exceed the NY Water Quality Criteria
- 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

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
1,1 Dichloroethane	5	3J	4J	4J	4J	4J	4J	4J	3J	4J
1,1 Dichloroethene	5	14	14	12	18	19	19	18	23	24
1,1,1 Trichloroethane	5	23	19	17	27	27	28	28	30	28
1,2 Dichloroethene (total)	5	3J	6	<5	7	8	8	7	8	10
2-Butanone	NP	<10	<10	<10	<10	<10	4J	<10	<10	<10
Acetone	NP	<10	<10	4JB	<10	<10	<10	<10	8JB	<10
Carbon Disulfide	NP	<5	<5	<5	<5	<5	<5	<5	<5	<5
Chlorobenzene	5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Chloroform	7	2J	2J	<5	5J	7	7	7	10	14
Chloromethane	NP	<10	<10	<10	<10	<10	<10	<10	<10	<10
Methylene Chloride	5	<5	13B	12B	6	<5	9B	9B	<5	<5
Tetrachloroethene	5	46	47	50	55	65	62	61	77	62
Toluene	5	2J	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethene	5	40	34	37	36	46	43	43	55	57
Turbidity	5	238	NR	0	230	0.1	NR	NR	659	250
Antimony	3	<2.2	NR	<2.3	NR	2.3UJ	NR	NR	<1.9	<2.2
Arsenic	25	<3.2	NR	10.4	NR	5.4J	NR	NR	12.5J	7.8
Beryllium	3	0.3	NR	1.1	NR	<0.20	NR	NR	0.47	2.60
Chromium	50	43.9	NR	47.4	NR	49.5J	NR	NR	86.4	55.7
Copper	200	14.2	NR	26.1	NR	7.8	NR	NR	38.2	21.0
Iron	300	7240	NR	15000	NR	4730	NR	NR	27300J	18900
Lead	15	10.3	NR	18.0	NR	3.8	NR	NR	22.7	16.3
Manganese	300	557	NR	646	NR	295	NR	NR	568	429
Mercury	0.7	<0.10	NR	<0.10	NR	<0.10	NR	NR	<0.10	<0.10
Nickel	100	32	NR	32.9	NR	36.0	NR	NR	59.1	35.7
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
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

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 Qualifiers.

B: The analyte was detected in the blank sample

J: Associated value is an estimated quantity

## Appendix A-3

**Appendix A-3**

**Laboratory Summary Report (Validated)**

**SUMMARY REPORT (VALIDATED)**

Lab: RECRA Labs  
 Circuitron Corporation Superfund Site  
 Monitoring Wells Sampling: June 2000

Sample ID	CC-18-MW-3S-01-1	CC-18-MW-3D-01-1	CC-18-MW-4S-01-1	CC-18-MW-4S-01-1	CC-18-MW-1S-01-1	CC-18-MW-1D-01-1	NY Water Quality Criteria
Lab Sample ID	0006L569-001	0006L569-002	0006L569-003	0006L569-003 (D)	0006L569-004	0006L569-005	
Sampling Date	06/13/2000	06/13/2000	06/13/2000	06/13/2000	06/14/2000	06/14/2000	
<b>Volatiles (µg/L)</b>							
Methylene Chloride	5 B	5 JB	6 B	51 BD	5 B	4 JB	5
Toluene	<5	<5	<5	<50	<5	<5	5
Chloroform	<5	<5	<5	<50	<5	<5	7
1,1 Dichloroethane	<5	<5	13	14 JD	<5	5 J	5
1,1,1 Trichloroethane	4 J	<5	900 E	1000 D	<5	16	5
Tetrachloroethane	<5	<5	13	13 JD	<5	5 J	5
Trichloroethene	<5	<5	<5	<5	<5	13	5
1,2 Dichloroethene (Total)	<5	<5	<5	<5	<5	1 J	5
1,1 Dichloroethene	<5	<5	42	40 JD	<5	9	5
Acetone	11 B	<10	8 JB	37 JBD	11 B	8 JB	NP
<b>Turbidity (NTU)</b>	57.4	23.3	311	311	229	35.5	5
<b>Total Metals (µg/L)</b>							
Iron	4460	600	3720	3720	19400	3020	300
Manganese	56.8	144	97	97	393	211	300
Arsenic	3.4	<3.2	<3.2	<3.2	12.1	<3.2	25
Beryllium	0.15	<0.10	<0.10	<0.10	<0.10	0.14	3
Chromium	10.5	86.1	674	674	2.2	567	50
Copper	68.6	10.3	35.1	35.1	7.3	16.6	200
Mercury	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.7
Nickel	12.4	58.1	28.3	28.3	2.2	52	100
Lead	11.6 J	7.9 J	4.1 J	4.1 J	2.3 UJ	7.6 UJ	15
Antimony	<2.2	<2.2	<2.2	<2.2	<2.2	<2.2	3

**NOTES:**

For Volatiles, only those compounds detected above the laboratory method detection limit are displayed.

NR: Not Required

ND: Not Detected

NP: No Proposed Quantitation Level available

<...: Laboratory Detection Limit

**BOLD:** Value exceeds the Proposed Quantitation Level

D: Results are reported for the diluted samples

J: Associated value is an estimated quantity

UJ: Element is not detected and the associated quantitation limit is uncertain.

B: The analyte was detected in the blank sample

E: Compound was detected beyond the calibration range and was subsequently analyzed at a dilution

NY Water Quality Criteria: NYSDEC Regulation for Surface Waters and Groundwater, Section 703.5 (August 1999).

**SUMMARY REPORT (VALIDATED)**

Client: URS Corporation  
 Lab: RECRA Labs  
 Circuitron Corporation Superfund Site  
 Monitoring Wells Sampling: June 2000

Sample ID	CC-18-MW-4D-01-1	CC-18-MW-4D-01-3*	CC-18-MW-13-01-1	Trip Blank 61400	NY Water Quality
Lab Sample ID	0006L569-006	0006L569-007	0006L569-008	0006L569-009	Criteria
Sampling Date	06/14/2000	06/14/2000	06/14/2000	06/14/2000	
<b>Volatiles (µg/L)</b>					
Methylene Chloride	3 JB	4 JB	4 JB	5 B	5
Toluene	<5	<5	<5	<5	5
Chloroform	<5	<5	<5	<5	7
1,1 Dichloroethane	7	8	14	<5	5
1,1,1 Trichloroethane	26	28	120	<5	5
Tetrachloroethene	8	8	<5	<5	5
Trichloroethene	24	25	<5	<5	5
1,2 Dichloroethene (Total)	2 J	2 J	<5	<5	5
1,1 Dichloroethene	14	15	8	<5	5
Acetone	7 JB	8 JB	8 JB	7 JB	NP
<b>Turbidity (NTU)</b>	<b>11.8</b>	<b>11.8</b>	<b>200</b>	<b>NR</b>	<b>5</b>
<b>Total Metals (µg/L)</b>					
Iron	1190	1510	17200	NR	300
Manganese	118	120	365	NR	300
Arsenic	<3.2	<3.2	4.3	NR	25
Beryllium	0.1	<0.10	<0.10	NR	3
Chromium	4.1	4.7	6.3	NR	50
Copper	3.9	5.3	12.7	NR	200
Mercury	<0.10	<0.10	<0.10	NR	0.7
Nickel	12	11	12.2	NR	100
Lead	6.2	3.4	5.2	NR	15
Antimony	<2.2	<2.2	<2.2	NR	3

**NOTES:**

For Volatiles, only those compounds detected above the laboratory method detection limit are displayed.  
 NR: Not Required  
 ND: Not Detected  
 NP: No Proposed Quantitation Level available  
 <...: Laboratory Detection Limit  
**BOLD: Value exceeds the Proposed Quantitation Level**  
 \* Field Duplicate  
 D: Results are reported for the diluted samples  
 J: Associated value is an estimated quantity  
 UJ: Element is not detected and the associated quantitation limit is uncertain.  
 B: The analyte was detected in the blank sample  
 NY Water Quality Criteria: NYSDEC Regulation for Surface Waters and Groundwater, Section 703.5 (August 1999).

**SUMMARY REPORT (VALIDATED)**

Client: URS Corporation  
 Lab: RECRA Labs  
 Circuitron Corporation Superfund Site  
 Monitoring Wells Sampling: June 2000

	Sample ID		CC-18-MW-14-01-1		CC-18-MW-14-01-4*		CC-18-MW-18-01-1		Trip Blank 62100		NY Water Quality Criteria	
	Lab Sample ID	Sampling Date	0006L673-001	06/21/2000	0006L673-002	06/21/2000	0006L673-003	06/21/2000	0006L673-004	06/22/2000		0006L673-005
<b>Volatiles (µg/L)</b>												
1,1 Dichloroethene	1J	14		1J		<5		<5		<5		5
Carbon Disulfide	<5	<5		<5		<5		<5		1J		NP
Acetone	<10	<10		<10		3JB		<10		<10		NP
Chlorobenzene	2J	<5		<5		<5		<5		<5		5
1,2 Dichloroethene (total)	<5	3J		1J		<5		<5		<5		5
Trichloroethene	<5	40		1J		<5		<5		<5		5
Methylene Chloride	<5	<5		<5		<5		<5		<5		5
Toluene	2J	2J		<5		<5		<5		<5		5
Chloroform	<5	2J		<5		<5		<5		<5		7
1,1 Dichloroethane	6	3J		4J		<5		<5		<5		5
1,1,1 Trichloroethane	8	23		21		<5		<5		<5		5
Tetrachloroethene	<5	46		2J		<5		<5		<5		5
<b>Turbidity (NTU)</b>			64.9	75	238		NR	247		NR		5
<b>Total Metals (µg/L)</b>												
Iron	21600	7240		14100		121		9060		NR		300
Manganese	2100	557		1090		1.9		164		NR		300
Arsenic	4.1	<3.2		<3.2		<3.2		6.1		NR		25
Beryllium	0.37	0.3		<0.10		<0.10		0.1		NR		3
Chromium	96.6	43.9		3.1		2.5		31.2		NR		50
Copper	109	14.2		3.2		3.9		9.7		NR		200
Mercury	0.34	<0.10		<0.10		<0.10		<0.10		NR		0.7
Nickel	66.9	32		6.5		2.2		16.4		NR		100
Lead	34	10.3		2.8		<2.3		4.2		NR		15
Antimony	<2.2	<2.2		<2.2		<2.2		<2.2		NR		3

**NOTES:**

For Volatiles, only those compounds detected above the laboratory method detection limit are displayed.  
 NR: Not Required  
 ND: Not Detected  
 NP: No Proposed Quantitation Level available  
 <...: Laboratory Detection Limit  
 BOLD: Value exceeds the Proposed Quantitation Level  
 \* Equipment blank  
 D: Results are reported for the diluted samples  
 J: Associated value is an estimated quantity  
 UJ: Element is not detected and the associated quantitation limit is uncertain.  
 B: The analyte was detected in the blank sample  
 NY Water Quality Criteria: NYSDEC Regulation for Surface Waters and Groundwater, Section 703.5 (August 1999).

**SUMMARY REPORT (VALIDATED)**

Client: URS Coproration  
 Lab: RECRA Labs  
 Circuitron Corporation Superfund Site  
 Monitoring Wells Sampling: June 2000

Sample ID	CC-18-MW-15-01-1	CC-18-MW-5D-01-1	CC-18-MW-5D-01-3*	CC-18-MW-17-01-1	Trip Blank 61400	NY Water Quality
Lab Sample ID	0006L636-001	0006L636-002	0006L636-003	0006L636-004	0006L636-009	Criteria
Sampling Date	06/19/2000	06/19/2000	06/19/2000	06/19/2000	06/19/2000	
<b>Volatiles (µg/L)</b>						
Methylene Chloride	<5	<5	<5	<5	<5	5
Toluene	<5	<5	<5	<5	<5	5
Chloroform	<5	<5	<5	<5	<5	7
1,1 Dichloroethane	<5	3J	3J	5	<5	5
1,1,1 Trichloroethane	<5	3J	3J	39	<5	5
Tetrachloroethene	11	1J	<5	<5	<5	5
Trichloroethene	14	2J	2J	<5	<5	5
1,2 Dichloroethene (Total)	42	<5	<5	<5	<5	5
1,1 Dichloroethene	<5	2J	1 JB	<5	<5	5
Chlorobenzene	1 J	<5	<5	<5	<5	5
Acetone	<10	<10	1 JB	<10	<10	NP
<b>Turbidity (NTU)</b>	0	0	0	15.9	NR	5
<b>Total Metals (µg/L)</b>						
Iron	39100 J	2130 J	2750 J	16900 J	NR	300
Manganese	405	529	529	386	NR	300
Arsenic	10.6	<3.2	<3.2	6.5	NR	25
Beryllium	0.21	<0.10	<0.10	0.26	NR	3
Chromium	19.5	31.8	35.8	25.9	NR	50
Copper	9.7	59.5	65.8	79.1	NR	200
Mercury	<0.10	<0.10	<0.10	<0.10	NR	0.7
Nickel	13	33	40.8	61.9	NR	100
Lead	4.6	9.4	10.5	20.1	NR	15
Antimony	<3.2	<2.2	<2.2	2.5	NR	3

**NOTES:**

For Volatiles, only those compounds detected above the laboratory method detection limit are displayed.

NR: Not Required

ND: Not Detected

NP: No Proposed Quantitation Level available

<...: Laboratory Detection Limit

**BOLD:** Value exceeds the Proposed Quantitation Level

\* Field Duplicate

D: Results are reported for the diluted samples

J: Associated value is an estimated quantity

UJ: Element is not detected and the associated quantitation limit is uncertain.

B: The analyte was detected in the blank sample

NY Water Quality Criteria: NYSDEC Regulation for Surface Waters and Groundwater, Section 703.5 (August 1999).



**SUMMARY REPORT (VALIDATED)**

Client: URS Coporation  
 Lab: RECRA Labs  
 Circuitron Corporation Superfund Site  
 Monitoring Wells Sampling: June 2000

Sample ID	CC-18-MW-7S-01-1	CC-18-MW-7D-01-1	CC-18-MW-6S-01-1	CC-18-MW-6D-01-1	CC-18-MW-16-01-1	CC-18-MW-16-01-2*	NY Water Quality Criteria
Lab Sample ID	0006L636-005	0006L636-006	0006L636-007	0006L636-008	0006L636-010	0006L636-011	
Sampling Date	06/20/2000	06/20/2000	06/20/2000	06/20/2000	06/20/2000	06/20/2000	
<b>Volatiles (µg/L)</b>							
Methylene Chloride	<5	<5	<5	<5	<5	<5	5
Toluene	<5	<5	<5	<5	<5	<5	5
Chloroform	<5	<5	<5	<5	<5	<5	7
1,1 Dichloroethane	<5	8	<5	4 J	<5	<5	5
1,1,1 Trichloroethane	<5	7	15	10	<5	<5	5
Tetrachloroethane	<5	4 J	<5	3 J	<5	<5	5
Trichloroethene	<5	5	<5	8	<5	<5	5
1,2 Dichloroethene (Total)	<5	2 J	<5	<5	<5	<5	5
1,1 Dichloroethene	<5	4 J	<5	5 J	<5	<5	5
Chlorobenzene	<5	<5	<5	<5	<5	<5	5
Acetone	<10	<10	<10	<10	<10	4 JB	NP
2-Butanone	<10	<10	<10	<10	<10	89	NP

<b>Turbidity (NTU)</b>	0	0	0	0	133	NR	5
------------------------	---	---	---	---	-----	----	---

Total Metals (µg/L)	912 J	544 J	899 J	3670 J	33700 J	92.6 J	300
Iron	245	47.4	16.7	243	524	2	300
Manganese	<3.2	<3.2	<3.2	<3.2	17.2	<3.2	25
Arsenic	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	3
Beryllium	57.3	19.9	159	458	6.9	2.9	50
Chromium	15	13.7	9.7	19.3	11.8	10.7	200
Copper	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.7
Mercury	22.5	13.8	7.9	449	5.2	1.8	100
Nickel	<2.3	2.8	<2.3	2.6	3.9	3.9	15
Lead	<2.2	<2.2	<2.2	<2.2	<2.2	96.2	3
Antimony							

**NOTES:**

For Volatiles, only those compounds detected above the laboratory method detection limit are displayed.  
 NR: Not Required  
 ND: Not Detected  
 NP: No Proposed Quantitation Level available  
 <...: Laboratory Detection Limit  
**BOLD:** Value exceeds the Proposed Quantitation Level  
 \* Sample should be labeled CC-18-MW-16-01-4 for equipment blank (Check field sampling log).  
 D: Results are reported for the diluted samples  
 J: Associated value is an estimated quantity  
 UJ: Element is not detected and the associated quantitation limit is uncertain.  
 B: The analyte was detected in the blank sample  
 NY Water Quality Criteria: NYSDEC Regulation for Surface Waters and Groundwater, Section 703.5 (August 1999).

ARY REPORT (Validated)  
 IECRA Labs  
 Circultron Corporation Superfund Site  
 Monitoring Wells Sampling: October 2000

Sample ID	CC-18-MW-6S-02-1	CC-18-MW-6D-02-1	CC-18-MW-4S-02-1	CC-18-MW-1S-02-1	CC-18-MW-1D-02-1	NY Water Quality Criteria
Lab Sample ID	0010L941-006	0010L941-007	0010L941-008	0010L941-009	0010L941-011	
Sampling Date	10/11/2000	10/11/2000	10/11/2000	10/12/2000	10/12/2000	
<b>Volatiles (µg/L)</b>						
1,1 Dichloroethane	< 25	3 J	5	< 5	5 J	5
1,1,1 Trichloroethane	360 D	8	20	< 5	14	5
Tetrachloroethane	< 25	3 J	6	< 5	6	5
Trichloroethene	< 25	6	17	< 5	15	5
1,2 Dichloroethane (Total)	< 25	< 5	1 J	< 5	2 J	5
1,1 Dichloroethene	14 JD	4 J	8	< 5	10	5

Sample ID	CC-18-MW-13-02-1	CC-18-MW-16-02-1	CC-18-MW-15-02-1	CC-18-MW-15-02-3*	Trip Blank 10/10/00	NY Water Quality Criteria
Lab Sample ID	0010L941-005	0010L941-003	0010L941-004	0010L941-002	0010L941-010	
Sampling Date	10/10/2000	10/10/2000	10/10/2000	10/10/2000	10/10/2000	
<b>Volatiles (µg/L)</b>						
1,1 Dichloroethane	40 D	5 UJ	< 5	< 5	< 5	5
1,1,1 Trichloroethane	350 D	5 UJ	< 5	< 5	< 5	5
1,2 Dichloroethane (Total)	< 25	5 UJ	1 J	1 J	< 5	5
1,1 Dichloroethene	7 JD	5 UJ	< 5	< 5	< 5	5

Sample ID	CC-18-MW-19S-02-1	CC-18-MW-19D-02-1	CC-18-MW-7S-02-1	CC-18-MW-7S-02-3*	CC-18-MW-7D-02-4**	Trip Blank 10/1700	NY Water Quality Criteria
Lab Sample ID	0010L004-006	0010L004-005	0010L004-001	0010L004-002	0010L004-003	0010L004-010	
Sampling Date	10/17/2000	10/17/2000	10/17/2000	10/17/2000	10/17/2000	10/17/2000	
<b>Volatiles (µg/L)</b>							
1,1 Dichloroethane	2 J	14	< 5	< 5	5	< 5	5
Chloroethane	< 10	< 10	< 10	< 10	3 J	< 10	< 10
Acetone	4 J	< 10	< 10	2 J	< 10	7 J	NP
1,2 Dichloroethane (total)	1 J	6	< 5	< 5	3 J	< 5	5
Trichloroethane	2 J	34	< 5	< 5	6	< 5	5
Methylene Chloride	14 B	13 B	< 5	< 5	< 5	< 5	5
Chloroform	< 5	2 J	< 5	< 5	< 5	< 5	7
1,1 Dichloroethane	4 J	4 J	< 5	< 5	8	< 5	5
1,1,1 Trichloroethane	5 J	19	< 5	< 5	5 J	< 5	5
Tetrachloroethane	2 J	47	< 5	< 5	5 J	< 5	5

Sample ID	CC-18-MW-5D-02-1	CC-18-MW-17-02-1	CC-18-MW-18-02-1	CC-18-MW-14-02-1***	CC-18-MW-3S-02-1	NY Water Quality Criteria
Lab Sample ID	0010L004-007	0010L004-008	0010L004-009	0010L004-011	0010L004-012	
Sampling Date	10/18/2000	10/18/2000	10/18/2000	10/18/2000	10/19/2000	
<b>Volatiles (µg/L)</b>						
Methylene Chloride	16 B	< 5	< 5	< 5	< 5	5
Chloroform	< 5	< 5	< 5	< 5	< 5	7
1,1 Dichloroethane	3 J	7	< 5	2 J	< 5	5
1,1,1 Trichloroethane	3 J	58	< 5	8	10	5
Tetrachloroethane	2 J	3 J	< 5	< 5	< 5	5
Trichloroethene	3 J	< 5	< 5	< 5	< 5	5
1,1 Dichloroethane	3 J	< 5	< 5	< 5	< 5	5
1,1,2 Trichloroethane	< 5	3 J	< 5	< 5	< 5	1
Acetone	< 10	< 10	< 10	< 10	3 JB	NP

**NOTES:**

For Volatiles, only those compounds detected above the laboratory method detection limit are displayed.  
 NR: Not Required  
 ND: Not Detected  
 NP: No Proposed Quantitation Level available  
 <---: Laboratory Detection Limit  
 BOLD: Value exceeds the Proposed Quantitation Level  
 D: Results are reported for the diluted sample  
 B: The analyte was detected in the blank sample  
 Turbidity was 0 NTU for all samples at time of sample collection.  
 \* Field Duplicate  
 \*\* Enrichment Blank

\*\*\*CC-18-MW-14-02-1 was used as the Matrix Spike / Matrix Spike Duplicate  
NY Water Quality Criteria: NYSDEC Regulation for Surface Waters and Groundwater, Section 703.5 (August 1999).

Definition of Validation Flags:

U: Compound was analyzed but not detected above associated level

J: Associated value is an estimated quantity

R: Data is unusable

UJ: Element is not detected and the associated quantitation limit is uncertain

SUMMARY REPORT (Validated)

Lab: RECRA Labs  
 Cicuitron Corporation Superfund Site  
 Monitoring Wells Sampling: January/February 2001

Sample ID	CC-18-MW-3S-03-1	CC-18-MW-3D-03-1	CC-18-MW-1S-03-1	CC-18-MW-1D-03-1	NY Water Quality Criteria
Lab Sample ID	0102L864-007	0102L864-005	0102L864-001	0102L864-002	
Sampling Date	01/31/2001	01/30/2001	01/29/2001	01/29/2001	
Volatiles (µg/L)					
Methylene Chloride	<5	2 JB	2 JB	4 JB	5
1,1 Dichloroethane	<5	<5	<F	4 J	5
1,1,1 Trichloroethane	5	<5	<5	13	5
Tetrachloroethene	<5	<5	<5	4 J	5
Trichloroethene	<5	<5	<5	10	5
1,1 Dichloroethene	<5	<5	<5	7	5
Acetone	<10	6 J	3 JB	3 JB	NP

Turbidity (NTU)	47	47	27	580	5
-----------------	----	----	----	-----	---

Total Metals (µg/L)	47	47	27	580	5
Iron	3160	<31.8	31200	1110	300
Manganese	100	0.28	559	177	300
Arsenic	<3.4	<2.4	18.5	<2.4	25
Beryllium	<0.10	0.10 UJ	0.37 J	0.14 J	3
Chromium	11.7 J	0.60 UJ	2.2 J	255 J	50
Copper	34.2	2.2	1.9	13.4	200
Mercury	<0.10	<0.10	<0.10	<0.10	0.7
Nickel	19.4	<0.90	2.2	88.2	100
Lead	<2.1	<2.1	<2.1	<2.1	15
Antimony	<2.3	<2.3	<2.3	<2.3	3

NOTES:

For Volatiles, only those compounds detected above the laboratory method detection limit are displayed.

NR: Not Required

ND: Not Detected

NP: No Proposed Quantitation Level available

<...: Laboratory Detection Limit

**BOLD:** Value exceeds the Proposed Quantitation Level

**D:** Results are reported for the diluted samples

**J:** Associated value is an estimated quantity

**UJ:** Element is not detected and the associated quantitation limit is uncertain.

**B:** The analyte was detected in the blank sample

**E:** Compound was detected beyond the calibration range and was subsequently analyzed at a dilution

**NY Water Quality Criteria:** NYSDEC Regulation for Surface Waters and Groundwater, Section 703.5 (August 1999).

**SUMMARY REPORT (Validated)**

Lab: RECRA Labs  
 Cicuitron Corporation Superfund Site  
 Monitoring Wells Sampling: January/February 2001

	Sample ID	CC-18-MW-4D-03-1	CC-18-MW-4S-03-1	CC-18-MW-14-031	CC-18-MW-13-03-1	Trip Blank	NY Water Quality
	Lab Sample ID	0102L943-007	0102L943-005	0102L899-001	0102L899-002	0102L899-010	Criteria
	Sampling Date	02/06/2001	02/06/2001	02/01/2001	02/01/2001	02/01/2001	
<b>Volatiles (µg/L)</b>							
Methylene Chloride	7 JB	41 BD	<5	1 JB	6 B	5	
Toluene	<5	<5	<5	<5	<5	5	
Chloroform	4 J	7 JD	1 J	9	<5	7	
1,1 Dichloroethane	13	630D	15	110	<5	5	
1,1,1 Trichloroethane	4 J	14 JD	<5	<5	<5	5	
Tetrachloroethane	11		<5	<5	<5	5	
Trichloroethene	1 J		<5	<5	<5	5	
1,2 Dichloroethene (Total)	6		<5	2 J	<5	5	
1,1 Dichloroethane	3 JB	28 JBD	1 JB	2 JB	<5	5	
Acetone					2 JB	NP	
<b>Turbidity (NTU)</b>	0	0	0	0	NR	5	
<b>Total Metals (µg/L)</b>							
Iron	827	632	7870	687	NR	300	
Manganese	96.5	15.3	217	54.9	NR	300	
Arsenic	<2.4	3.0	<3.4	<3.4	NR	25	
Beryllium	0.24	0.15	<0.10	<0.10	NR	3	
Chromium	6.6	114	2.6 J	2.3 J	NR	50	
Copper	5.5	14.9	2.3	5.6	NR	200	
Mercury	<0.10	<0.10	<0.10	<0.10	NR	0.7	
Nickel	7.3	9.4	2.9	7.2	NR	100	
Lead	2.4	<2.1	<2.1	<2.1	NR	15	
Antimony	<2.3	<2.3	<2.3	<2.3	NR	3	

**NOTES:**

For Volatiles, only those compounds detected above the laboratory method detection limit are displayed.

NR: Not Required

ND: Not Detected

NP: No Proposed Quantitation Level available

<...: Laboratory Detection Limit

**BOLD:** Value exceeds the Proposed Quantitation Level

D: Results are reported for the diluted samples

J: Associated value is an estimated quantity

UJ: Element is not detected and the associated quantitation limit is uncertain.

B: The analyte was detected in the blank sample

NY Water Quality Criteria: NYSDEC Regulation for Surface Waters and Groundwater, Section 703.5 (August 1999).

**SUMMARY REPORT (Validated)**  
**Lab: RECRA Labs**  
**Circuitron Corporation Superfund Site**  
**Monitoring Wells Sampling: January/February 2001**

	Sample ID	CC-18-MW-19S-03-1	CC-18-MW-19D-03-1	CC-18-MW18-03-1	CC-18-MW-7D-03-1	CC-18-MW-7D-03-4	NY Water Quality
	Lab Sample ID	0102L943-002	0102L943-003	0102L943-001	0102L864-003	0102L864-004	Criteria
	Sampling Date	02/06/2001	02/07/2001	02/06/2001	01/29/2001	1/29/2001	
<b>Volatiles (µg/L)</b>							
1,1 Dichloroethene	1 J	12		<5	3 J	<5	5
Acetone	4 JB	4 JB	7 JB	2 JB	8 JB	NP	NP
Chlorobenzene	<5	<5	1 J	<5	<5	5	5
1,2 Dichloroethene (total)	<5	<5	<5	2 J	<5	5	5
Trichloroethene	<5	37	1 J	4 JB	<5	5	5
Methylene Chloride	12 B	12 B	2 JB	4 JB	5 JB	5	5
Toluene	<5	<5	2 J	<5	<5	5	5
1,1 Dichloroethane	3 J	4 J	<5	8	<5	5	5
1,1,1 Trichloroethane	1 J	17	<5	3 J	<5	5	5
Tetrachloroethene	<5	50	<5	3 J	<5	5	5

	0	0	0	10	10	10	5
<b>Turbidity (NTU)</b>	0	0	0	10	10	10	5
<b>Total Metals (µg/L)</b>							
Iron	29400	15000	13500	94.2	29.9	300	300
Manganese	1050	646	269	61.4	0.75	300	300
Arsenic	4.7	10.4	8.1	<2.4	<2.4	25	25
Beryllium	0.60	1.1	0.55	0.25 J	0.10 UJ	3	3
Chromium	36.5	47.4	80	2.7 J	0.60 UJ	50	50
Copper	13.7	26.1	13.6	3.1	4.5	200	200
Mercury	0.34	<0.10	<0.10	<0.10	<0.10	0.7	0.7
Nickel	26.7	32.9	46.6	3.1	1.3	100	100
Lead	4.6	18.0	7.5	<2.1	<2.1	15	15
Antimony	<2.3	<2.3	<2.3	<2.3	<2.3	3	3

**NOTES:**

For Volatiles, only those compounds detected above the laboratory method detection limit are displayed.

NR: Not Required

ND: Not Detected

NP: No Proposed Quantitation Level available

<...: Laboratory Detection Limit

**BOLD:** Value exceeds the Proposed Quantitation Level

D: Results are reported for the diluted samples

J: Associated value is an estimated quantity

UJ: Element is not detected and the associated quantitation limit is uncertain.

B: The analyte was detected in the blank sample

NY Water Quality Criteria: NYSDEC Regulation for Surface Waters and Groundwater, Section 703.5 (August 1999).

SUMMARY REPORT (Validated)

Lab: RECRA Labs

Circuitron Corporation Superfund Site

Monitoring Wells Sampling: January/February 2001

Sample ID	CC-18-MW-15-03-1	CC-18-MW-15-03-3	CC-18-MW-5D-03-1	CC-18-MW-17-03-1	Trip Blank	NY Water Quality
Lab Sample ID	0102L899-003	0102L899-011	0102L899-006	0102L899-005	0102L864-006	Criteria
Sampling Date	02/01/2001	02/01/2001	01/31/2001	01/31/2001	01/29/2001	
<b>Volatiles (µg/L)</b>						
Methylene Chloride	< 5	1 JB	< 5	< 5	11 B	5
1,1 Dichloroethane	< 5	< 5	2 J	3 J	< 5	5
1,1,1 Trichloroethane	< 5	< 5	1 J	33	< 5	5
Tetrachloroethene	9	8	< 5	1 J	< 5	5
Trichloroethene	4 J	5 J	< 5	< 5	< 5	5
1,2 Dichloroethene (Total)	18	20	< 5	< 5	< 5	5
1,1 Dichloroethene	< 5	< 5	1 J	< 5	< 5	5
Chlorobenzene	1 J	1 J	< 5	< 5	< 5	5
1,1,2 Trichloroethane	< 5	< 5	< 5	< 5	< 5	1
Acetone	< 10	3 JB	< 10	< 5	2 J	NP
<b>Turbidity (NTU)</b>	190	190	11	35	NR	5
<b>Total Metals (µg/L)</b>						
Iron	36400	34900	713	1600	NR	300
Manganese	417	403	465	73.8	NR	300
Arsenic	6.4	6.8	< 3.4	< 3.4	NR	25
Beryllium	< 0.10	< 0.10	< 0.10	< 0.10	NR	3
Chromium	4.4 J	3.8 J	16.2 J	7.6 J	NR	50
Copper	8.9	7.3	50.6	42.6	NR	200
Mercury	< 0.10	< 0.10	< 0.10	< 0.10	NR	0.7
Nickel	4.8	3.8	13.2	47.4	NR	100
Lead	4.6	3.4	2.6	< 2.1	NR	15
Antimony	< 2.3	< 2.3	< 2.3	< 2.3	NR	3

NOTES:

For Volatiles, only those compounds detected above the laboratory method detection limit are displayed.

NR: Not Required

ND: Not Detected

NP: No Proposed Quantitation Level available

<...: Laboratory Detection Limit

**BOLD:** Value exceeds the Proposed Quantitation Level

D: Results are reported for the diluted samples

J: Associated value is an estimated quantity

UJ: Element is not detected and the associated quantitation limit is uncertain.

B: The analyte was detected in the blank sample

NY Water Quality Criteria: NYSDEC Regulation for Surface Waters and Groundwater, Section 703.5 (August 1999).

**SUMMARY REPORT (Validated)**

Lab: RECRA Labs  
 Circuitron Corporation Superfund Site  
 Monitoring Wells Sampling: January/February 2001

	Sample ID	CC-18-MW-7S-03-1	CC-18-MW-7S-03-3	CC-18-MW-6S-03-1	CC-18-MW-6D-03-1	CC-18-MW-16-03-1	NY Water Quality Criteria
Lab Sample ID	0102L899-007	0102L899-008	0102L943-006	0102L943-004	0102L899-004	0102L899-004	
Sampling Date	01/31/2001	01/31/2001	02/06/2001	02/06/2001	02/06/2001	01/31/2001	
<b>Volatiles (µg/L)</b>							
Methylene Chloride	2 JB	1 JB	3 JB	13 B		< 5	5
1,1 Dichloroethane	< 5	< 5	2 J	< 5		< 5	5
1,1,1 Trichloroethane	< 5	< 5	110	5		< 5	5
Tetrachloroethane	< 5	< 5	1 J	3 J		< 5	5
Trichloroethane	< 5	< 5	< 5	5		< 5	5
1,1 Dichloroethane	< 5	< 5	< 5	3 J		< 5	5
Acetone	< 10	2 JB	3 JB	6 JB		< 10	NP
<b>Turbidity (NTU)</b>	190	190	0	0	47		5
<b>Total Metals (µg/L)</b>							
Iron	496	427	463	534	25200		300
Manganese	155	162	53.4	146	426		300
Arsenic	< 3.4	< 3.4	< 2.4	< 2.4	10.4		25
Beryllium	< 0.10	< 0.10	0.27	0.24	< 0.10		3
Chromium	49.4 J	39.1 J	77.7	157	3.6 J		50
Copper	10.1	12.2	6.5	9.7	7.2		200
Mercury	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10		0.7
Nickel	9.7	7.3	17.4	121	2.7		100
Lead	< 2.1	< 2.1	< 2.1	2.5	< 2.1		15
Antimony	< 2.3	< 2.3	< 2.3	< 2.3	< 2.3		3

**NOTES:**

For Volatiles, only those compounds detected above the laboratory method detection limit are displayed.

NR: Not Required

ND: Not Detected

NP: No Proposed Quantitation Level available

<...: Laboratory Detection Limit

**BOLD:** Value exceeds the Proposed Quantitation Level

D: Results are reported for the diluted samples

J: Associated value is an estimated quantity

UJ: Element is not detected and the associated quantitation limit is uncertain.

B: The analyte was detected in the blank sample

NY Water Quality Criteria: NYSDEC Regulation for Surface Waters and Groundwater, Section 703.5 (August 1999).



**SUMMARY REPORT (Validated)**

Lab: RECRA Labs  
 Circuitron Corporation Superfund Site  
 Monitoring Wells Sampling: April / May 2001

Sample ID	CC-18-MW-7S-04-1	CC-18-MW-7D-04-1	CC-18-MW-17-04-1	CC-18-MW-6S-04-1	CC-18-MW-6D-04-1	Trip Blank	NY Water Quality Criteria
Lab Sample ID	0104L632-001	0104L632-002	0104L632-003	0104L632-004	0104L632-005	0104L632-011	
Sampling Date	04/24/2001	04/25/2001	04/25/2001	04/25/2001	04/25/2001	04/26/2001	
<b>Volatiles (µg/L)</b>							
1,1 Dichloroethane	< 5	2 J	2 J	1 J	2 J	< 5	5
1,1,1 Trichloroethane	< 5	15	9	85	5 J	< 5	5
Trichloroethene	< 5	5 J	< 5	< 5	< 5	< 5	5
1,2 Dichloroethene (Total)	< 5	1 J	< 5	< 5	< 5	< 5	5
1,1 Dichloroethene	< 5	11	< 5	< 5	3 J	< 5	5
Chloroform	< 5	2 J	< 5	< 5	< 5	< 5	7
Acetone	< 5	< 5	< 5	3 J	< 5	< 5	NP
Methylene Chloride	< 5	< 5	< 5	< 5	< 5	12	5
<b>Turbidity (NTU)</b>	0	10	10	0	6	NR	5

Sample ID	CC-18-MW-16-04-1	CC-18-MW-16-04-3*	CC-18-MW-13-04-1	CC-18-MW-14-04-1	CC-18-MW-15-04-1	Trip Blank	NY Water Quality Criteria
Lab Sample ID	0104L632-006	0104L632-007	0104L632-008	0104L632-009	0104L632-010	0104L632-010	
Sampling Date	04/26/2001	04/26/2001	04/26/2001	04/26/2001	04/26/2001	04/26/2001	
<b>Volatiles (µg/L)</b>							
1,1 Dichloroethane	< 5	< 5	8	2 J	< 5	< 5	5
1,1,1 Trichloroethane	< 5	< 5	34	5 J	< 5	< 5	5
1,2 Dichloroethene (Total)	< 5	< 5	< 5	1 J	24	< 5	5
Methylene Chloride	< 5	< 5	< 5	5 J	5 J	< 5	5
Acetone	< 5	< 5	4 J	< 5	< 5	< 5	NP
Chloromethane	< 10	< 10	1 J	< 5	< 5	< 5	NP
<b>Turbidity (NTU)</b>	0	0	0	0	0	0	5

Sample ID	CC-18-MW-3S-04-1	CC-18-MW-3D-04-1	CC-18-MW-4S-04-1	CC-18-MW-4D-04-1	Trip Blank	NY Water Quality Criteria
Lab Sample ID	0105L675-001	0105L675-002	0105L675-003	0105L675-004	0105L675-012	0105L675-012
Sampling Date	04/30/2001	04/30/2001	04/30/2001	04/30/2001	04/30/2001	04/30/2001
<b>Volatiles (µg/L)</b>						
1,1 Dichloroethane	< 5	< 5	7 JD	2 J	< 5	< 5
1,1,1 Trichloroethane	7	< 5	280 D	23	< 5	< 5
1,1 Dichloroethene	< 5	< 5	< 5	6	< 5	< 5
Tetrachloroethene	< 5	< 5	12 D	< 5	< 5	< 5
Trichloroethane	< 5	< 5	< 10	3 J	< 5	< 5
Methylene Chloride	< 5	< 5	< 10	< 5	13	< 5
Acetone	< 10	4 J	< 20	6 J	< 10	< 10
Chloromethane	< 10	< 10	< 20	10	< 10	< 10
<b>Turbidity (NTU)</b>	4	21	12	18	NR	NR

**SUMMARY REPORT (Validated)**

Lab: RECRA Labs  
 Circutiron Corporation Superfund Site  
 Monitoring Wells Sampling: April / May 2001

Sample ID	CC-18-MW-1D-04-1	CC-18-MW-1D-04-3*	CC-18-MW-1D-04-4**	CC-18-MW-1S-04-1	CC-18-MW-5D-04-1	NY Water Quality Criteria
Lab Sample ID	0105L675-005	0105L675-006	0105L675-013	0105L675-007	0105L675-008	
Sampling Date	05/01/2001	05/01/2001	05/01/2001	05/01/2001	05/01/2001	
<b>Volatiles (µg/L)</b>						
1,1 Dichloroethene	8	8	<5	<5	1J	5
1,2 Dichloroethene (total)	1J	1J	<5	<5	<5	5
Trichloroethene	10	10	<5	<5	1J	5
Methylene Chloride	<5	<5	5	<5	5	5
1,1 Dichloroethane	4J	4J	<5	<5	2J	5
1,1,1 Trichloroethane	13	13	<5	<5	2J	5
Tetrachloroethene	5	5	<5	<5	1J	5
Acetone	<10	<10	5JB	<10	<10	NP

Sample ID	CC-18-MW-19S-04-1	CC-18-MW-19D-04-1	CC-18-MW-18-04-1	NY Water Quality Criteria
Lab Sample ID	0105L675-010	0105L675-011	0105L675-014	
Sampling Date	05/02/2001	05/02/2001	05/02/2001	
<b>Volatiles (µg/L)</b>				
Methylene Chloride	6	6	1J	5
Chloroform	<5	5J	<5	7
1,1 Dichloroethane	4J	4J	<5	5
1,1,1 Trichloroethane	<5	27	<5	5
Tetrachloroethene	<5	55	<5	5
Trichloroethene	<5	36	<5	5
1,1 Dichloroethane	2J	18	<5	5
1,2 Dichloroethane (total)	2J	7	<5	5
Acetone	<10	<10	<10	NP

Sample ID	CC-18-MW-19S-04-1	CC-18-MW-19D-04-1	CC-18-MW-18-04-1	NY Water Quality Criteria
Lab Sample ID	0105L675-010	0105L675-011	0105L675-009	
Sampling Date	05/02/2001	05/02/2001	05/01/2001	
<b>Turbidity (NTU)</b>	0	0	0	5

Sample ID	CC-18-MW-19S-04-1	CC-18-MW-19D-04-1	CC-18-MW-18-04-1	NY Water Quality Criteria
Lab Sample ID	0105L675-010	0105L675-011	0105L675-009	
Sampling Date	05/02/2001	05/02/2001	05/01/2001	
<b>Turbidity (NTU)</b>	0	230	0	5

**NOTES:**

For Volatiles, only those compounds detected above the laboratory method detection limit are displayed.

NR: Not Required

ND: Not Detected

NP: No Proposed Quantitation Level available

<->: Laboratory Detection Limit

**BOLD:** Value exceeds the Proposed Quantitation Level

D: Results are reported for the diluted samples

B: The analyte was detected in the blank sample

\* Field Duplicate

\*\* Equipment Blank

NY Water Quality Criteria: NYSDEC Regulation for Surface Waters and Groundwater, Section 703.5 (August 1999).

Definition of Validation Flags:

U: Compound was analyzed but not detected above associated level

J: Associated value is an estimated quantity

R: Data is unusable

UJ: Element is not detected and the associated quantitation limit is uncertain

**SUMMARY REPORT (Validated)**

Lab: RECRA Labs  
 Circuitron Corporation Superfund Site  
 Monitoring Wells Sampling: July/August 2001

Volatiles (µg/L)	Sample ID		CC-18-MW-1S-05-1		CC-18-MW-1D-05-1		CC-18-MW-3S-05-1		CC-18-MW-3D-05-1		CC-18-MW-16-05-1		NY Water Quality Criteria
	Lab Sample ID	Sampling Date	0108L455-001	07/30/2001	0108L455-002	07/30/2001	0108L455-003	07/31/2001	0108L455-004	07/31/2001	0108L476-008	08/02/2001	
Methylene Chloride	4 J		7 J		4 J		5 J		<5		<5		5
1,1 Dichloroethane	5 J		<5		<5		<5		<5		<5		5
1,1,1 Trichloroethane	15		<5		4 J		<5		<5		<5		5
Tetrachloroethene	8		<5		<5		<5		<5		<5		5
Trichloroethene	12		<5		<5		<5		<5		<5		5
1,1 Dichloroethene	10		<5		<5		<5		<5		<5		5
1,2-Dichloroethene (Total)	2 J		<5		<5		<5		<5		<5		5
<b>Turbidity (NTU)</b>	0.1		0.0		0.0		0.0		0.0		0.0		5
<b>Total Metals (µg/L)</b>													
Iron	22000		302		885		105		25400 J		300		300
Manganese	429		138		36.7		269		430		300		300
Arsenic	8.2		<2.3		<2.3		<2.3		5.7		25		25
Beryllium	<0.20		<0.20		<0.20		<0.20		<0.20		3		3
Chromium	1.2		34.9		1.6		2.3		<0.90		50		50
Copper	1.3		5.9		10.6		3.2		0.89		200		200
Mercury	<0.10		<0.10		<0.10		<0.10		<0.10		0.7		0.7
Nickel	<1.2		16.0		4.4		8.2		1.9		100		100
Lead	<2.6		<2.6		<2.6		<2.6		<2.6		15		15
Antimony	2.2 J		<1.9		<1.9		2.1 J		<1.9		3		3

**NOTES:**

For Volatiles, only those compounds detected above the laboratory method detection limit are displayed.

NR: Not Required

ND: Not Detected

NP: No Proposed Quantitation Level available

<...: Laboratory Detection Limit

**BOLD:** Value exceeds the Proposed Quantitation Level

D: Results are reported for the diluted samples

J: Associated value is an estimated quantity

UJ: Element is not detected and the associated quantitation limit is uncertain.

B: The analyte was detected in the blank sample

E: Compound was detected beyond the calibration range and was subsequently analyzed at a dilution

NY Water Quality Criteria: NYSDEC Regulation for Surface Waters and Groundwater, Section 703.5 (August 1999).

SUMMARY REPORT (Validated)

Lab: RECRA Labs  
 Cicuitron Corporation Superfund Site  
 Monitoring Wells Sampling: July/August 2001

	Sample ID		CC-18-MW-4S-05-1		CC-18-MW-4D-05-1		CC-18-MW-6S-05-1		CC-18-MW-6S-05-3*		Trip Blank		NY Water Quality Criteria
	Lab Sample ID	0108L455-005	07/31/2001	0108L455-006	07/31/2001	0108L476-001	08/01/2001	0108L476-006	08/02/2001	0108L455-007	07/31/2001		
<b>Volatiles (µg/L)</b>													
Methylene Chloride	< 5	< 5	3 J	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	5
1,1 Dichloroethane	2 J	4 J	1 J	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	5
1,1,1 Trichloroethane	80	110	110	11	110	110	110	110	110	110	110	110	5
Tetrachloroethane	11	5 J	< 5	5 J	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	5
Trichloroethene	< 5	11	< 5	11	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	5
1,2 Dichloroethene (Total)	< 5	2 J	< 5	2 J	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	5
1,1 Dichloroethene	< 5	8	< 5	8	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	5
<b>Turbidity (NTU)</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NR	NR	NR	NR	NR	5
<b>Total Metals (µg/L)</b>													
Iron	3740	1080	37.3 J	1080	37.3 J	37.3 J	37.3 J	27.5 J	27.5 J	NR	NR	NR	300
Manganese	37.3	137	28.7	137	28.7	28.7	28.7	28.7	28.7	NR	NR	NR	300
Arsenic	< 2.3	< 2.3	< 2.3	< 2.3	< 2.3	< 2.3	< 2.3	< 2.3	< 2.3	NR	NR	NR	25
Beryllium	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	NR	NR	NR	3
Chromium	1110	1.4	3.9	1.4	3.9	3.9	4.2	4.2	4.2	NR	NR	NR	50
Copper	35.2	3.1	3.0	3.1	3.0	3.0	3.5	3.5	3.5	NR	NR	NR	200
Mercury	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	NR	NR	NR	0.7
Nickel	83.7	5.6	7.6	5.6	7.6	7.6	7.2	7.2	7.2	NR	NR	NR	100
Lead	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6	NR	NR	NR	15
Antimony	2.3 J	< 1.9	< 1.9	< 1.9	< 1.9	< 1.9	< 1.9	< 1.9	< 1.9	NR	NR	NR	3

NOTES:

For Volatiles, only those compounds detected above the laboratory method detection limit are displayed.

NR: Not Required

ND: Not Detected

NP: No Proposed Quantitation Level available

<...: Laboratory Detection Limit

**BOLD:** Value exceeds the Proposed Quantitation Level

D: Results are reported for the diluted samples

J: Associated value is an estimated quantity

UJ: Element is not detected and the associated quantitation limit is uncertain.

B: The analyte was detected in the blank sample

\* Field Duplicate

NY Water Quality Criteria: NYSDEC Regulation for Surface Waters and Groundwater, Section 703.5 (August 1999).

1

2

3

4

5

**SUMMARY REPORT (Validated)**

Lab: RECRA Labs  
 Circuitron Corporation Superfund Site  
 Monitoring Wells Sampling: July/August 2001

Sample ID	CC-18-MW-6D-05-1	CC-18-MW-7S-05-1	CC-18-MW-7D-05-1	CC-18-MW-7D-05-4**	CC-18-MW-14-05-1	Trip Blank	NY Water Quality
Lab Sample ID	0108L476-002	0108L476-003	0108L476-004	0108L476-005	0108L476-007	0108L476-009	Criteria
Sampling Date	08/01/2001	08/01/2001	08/01/2001	08/01/2001	08/02/2001	08/02/2001	
<b>Volatiles (µg/L)</b>							
1,1 Dichloroethene	3 J	< 5	3	< 5	< 5	< 5	5
1,2 Dichloroethene (total)	< 5	< 5	3 J	< 5	< 5	< 5	5
Trichloroethene	4 J	< 5	3 J	< 5	< 5	< 5	5
Methylene Chloride	3 J	< 5	1 J	< 5	< 5	< 5	5
1,1 Dichloroethane	2 J	< 5	8	< 5	2 J	< 5	5
1,1,1 Trichloroethane	4 J	< 5	2 J	< 5	12	< 5	5
Tetrachloroethene	4 J	< 5	3 J	< 5	< 5	< 5	5

<b>Turbidity (NTU)</b>	0.1	0.0	0.0	NR	0.0	NR	5
------------------------	-----	-----	-----	----	-----	----	---

<b>Total Metals (µg/L)</b>							
Iron	180 J	< 15.7	209 J	18.5 J	6830 J	NR	300
Manganese	79.4	1.4	69.3	0.18	421	NR	300
Arsenic	< 2.3	< 2.3	< 2.3	< 2.3	< 2.3	NR	25
Beryllium	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	NR	3
Chromium	23.1	< 0.90	7.1	< 0.90	< 0.90	NR	50
Copper	8.8	3.0	4.6	1.6	0.87	NR	200
Mercury	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	NR	0.7
Nickel	67.3	1.5	3.7	< 1.2	3.6	NR	100
Lead	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6	NR	15
Antimony	< 1.9	< 1.9	< 1.9	< 1.9	< 1.9	NR	3

**NOTES:**

For Volatiles, only those compounds detected above the laboratory method detection limit are displayed.

NR: Not Required

ND: Not Detected

NP: No Proposed Quantitation Level available

<...: Laboratory Detection Limit

**BOLD:** Value exceeds the Proposed Quantitation Level

**D:** Results are reported for the diluted samples

**J:** Associated value is an estimated quantity

**UJ:** Element is not detected and the associated quantitation limit is uncertain.

**B:** The analyte was detected in the blank sample

\*\* Equipment Blank

NY Water Quality Criteria: NYSDEC Regulation for Surface Waters and Groundwater, Section 703.5 (August 1999).

**SUMMARY REPORT (Validated)**  
**Lab: RECRA Labs**  
**Circuitron Corporation Superfund Site**  
**Monitoring Wells Sampling: July/August 2001**

	Sample ID	CC-18-MW-13-05-1	CC-18-MW-5D-05-1	CC-18-MW-17-05-1	CC-18-MW-15-05-1	Trip Blank	NY Water Quality
Lab Sample ID	0108L514-001	0108L514-002	0108L514-003	0108L514-004	0108L514-011		Criteria
Sampling Date	08/07/2001	08/07/2001	08/07/2001	08/07/2001	08/09/2001		
<b>Volatiles (µg/L)</b>							
1,1 Dichloroethane	7	1 J	1 J	<5	<5	<5	5
1,1,1 Trichloroethane	34	1 J	12	<5	<5	<5	5
Tetrachloroethene	<5	1 J	<1	<5	<5	<5	5
Trichloroethene	<5	1 J	<5	<5	<5	<5	5
1,1,2 Trichloroethane	<5	<5	1 J	<5	<5	<5	1
<b>Turbidity (NTU)</b>							
	0.1	0.1	0.1	0.1	0.1	NR	5
<b>Total Metals (µg/L)</b>							
Iron	634	236	409	27800	NR	NR	300
Manganese	17.3	628	176	344	NR	NR	300
Arsenic	4.7 J	3.9 UJ	3.9 UJ	6.9 J	NR	NR	25
Beryllium	<0.20	<0.20	<0.20	<0.20	NR	NR	3
Chromium	1.5 J	2.6 J	2.6 J	1.4 UJ	NR	NR	50
Copper	3.1	47.9	29.2	<0.50	NR	NR	200
Mercury	<0.10	<0.10	<0.10	<0.10	NR	NR	0.7
Nickel	4.7	4.6	49.5	2.7	NR	NR	100
Lead	<2.4	<2.4	<2.4	<2.4	NR	NR	15
Antimony	2.3 J	2.3 UJ	2.3 UJ	2.3 UJ	NR	NR	3

**NOTES:**

For Volatiles, only those compounds detected above the laboratory method detection limit are displayed.

NR: Not Required

ND: Not Detected

NP: No Proposed Quantitation Level available

<...: Laboratory Detection Limit

**BOLD:** Value exceeds the Proposed Quantitation Level

D: Results are reported for the diluted samples

J: Associated value is an estimated quantity

UJ: Element is not detected and the associated quantitation limit is uncertain.

B: The analyte was detected in the blank sample

NY Water Quality Criteria: NYSDEC Regulation for Surface Waters and Groundwater, Section 703.5 (August 1999).

**SUMMARY REPORT (Validated)**

Lab: RECRA Labs  
 Circuitron Corporation Superfund Site  
 Monitoring Wells Sampling: July/August 2001

Sample ID	CC-18-MW-19S-05-1	CC-18-MW-19S-05-4**	CC-18-MW-19D-05-1	CC-18-MW-19D-05-4**	CC-18-MW-18-05-3*	NY Water Quality Criteria
Lab Sample ID	0108L514-005	0108L514-006	0108L514-007	0108L514-008	0108L514-009	0108L514-010
Sampling Date	08/08/2001	08/08/2001	08/08/2001	08/08/2001	08/08/2001	08/08/2001
Volatiles (µg/L)						
1,1 Dichloroethane	5 J	< 5	4 J	< 5	< 5	< 5
1,1,1 Trichloroethane	1 J	< 5	27	< 5	< 5	< 5
Tetrachloroethene	< 5	< 5	65	< 5	< 5	< 5
Trichloroethane	2 J	< 5	46	< 5	< 5	< 5
1,1 Dichloroethene	3 J	< 5	19	< 5	< 5	< 5
1,2 Dichloroethene (total)	2 J	< 5	8	< 5	< 5	< 5
Chloroform	< 5	< 5	7	< 5	< 5	< 5

Turbidity (NTU)	0.1	NR	0.1	NR	0.0	NR
Total Metals (µg/L)						
Iron	15400	34.8	4730	36.7	905	381
Manganese	786	0.58	295	0.54	15.4	10.6
Arsenic	3.9 UJ	3.9 UJ	5.4 J	3.9 UJ	3.9 UJ	3.9 UJ
Beryllium	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
Chromium	1.4 UJ	1.4 UJ	49.5 J	1.4 UJ	3.2 J	3.1 J
Copper	< 0.50	6.0	7.8	5.6	0.52	< 0.50
Mercury	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Nickel	3.9	2.3	36.0	2.6	2.9	1.9
Lead	< 2.4	< 2.4	3.8	< 2.4	< 2.4	< 2.4
Antimony	2.3 UJ	2.3 UJ	2.3 UJ	2.3 UJ	2.3 UJ	2.3 UJ

**NOTES:**

For Volatiles, only those compounds detected above the laboratory method detection limit are displayed.  
 NR: Not Required  
 ND: Not Detected  
 NP: No Proposed Quantitation Level available  
 <...: Laboratory Detection Limit  
**BOLD:** Value exceeds the Proposed Quantitation Level  
 D: Results are reported for the diluted samples  
 J: Associated value is an estimated quantity  
 UJ: Element is not detected and the associated quantitation limit is uncertain.  
 B: The analyte was detected in the blank sample  
 \* Field Duplicate  
 \*\* Equipment Blank  
 NY Water Quality Criteria: NYSDEC Regulation for Surface Waters and Groundwater, Section 703.5 (August 1999).



SUMMARY 1T (Validated)

Lab: RECRA  
 Circuitron Corporation Superfund Site  
 Monitoring Wells Sampling: October 2001

Sample ID	CC-18-MW-1S-06-1	CC-18-MW-1D-06-1	CC-18-MW-1D-06-1-3*	CC-18-MW-15-06-1	CC-18-MW-13-06-1	NY Water Quality Criteria
Lab Sample ID	0110L206-005	0110L206-006	0110L206-007	0110L206-008	0110L206-009	
Sampling Date	10/23/2001	10/23/2001	10/23/2001	10/23/2001	10/23/2001	
<b>Volatiles (µg/L)</b>						
Methylene Chloride	4 JB	5 B	5 JB	5 B	14 B	5
1,1 Dichloroethane	<5	4 J	4 J	<5	2 J	5
1,1,1 Trichloroethane	<5	16	17	<5	15	5
Tetrachloroethene	<5	5	6	<5	<5	5
Trichloroethene	<5	11	11	<5	<5	5
1,2 Dichloroethene (Total)	<5	1 J	1 J	<5	<5	5
1,1 Dichloroethene	<5	10	10	<5	<5	5

Sample ID	CC-18-MW-4S-06-1	CC-18-MW-4D-06-1	CC-18-MW-3D-06-1	CC-18-MW-3S-06-1	Trip Blank	NY Water Quality Criteria
Lab Sample ID	0110L206-001	0110L206-002	0110L206-003	0110L206-004	0110L206-010	
Sampling Date	10/22/2001	10/22/2001	10/22/2001	10/22/2001	10/22/2001	
<b>2 X Dilution</b>						
Methylene Chloride	28 BD	4 JB	4 JB	5 JB	15 B	5
1,1 Dichloroethane	2 JD	3 J	<5	<5	<5	5
1,1,1 Trichloroethane	280 D	12	1 J	3 J	<5	5
Tetrachloroethene	15 D	3 J	<5	<5	<5	5
Trichloroethene	<10	9	<5	<5	<5	5
1,2 Dichloroethene (Total)	<10	1 J	<5	<5	<5	5
1,1 Dichloroethene	3 JD	6	<5	<5	<5	5

NOTES:

For Volatiles, only those compounds detected above the laboratory method detection limit are displayed.

NR: Not Required

ND: Not Detected

NP: No Proposed Quantitation Level available

<...: Laboratory Detection Limit

BOLD: Value exceeds the Proposed Quantitation Level

D: Results are reported for the diluted samples

J: Associated value is an estimated quantity

UJ: Element is not detected and the associated quantitation limit is uncertain.

B: The analyte was detected in the blank sample

\* Field Duplicate

NY Water Quality Criteria: NYSDEC Regulation for Surface Waters and Groundwater, Section 703.5 (August 1999).

SUMMARY 1. JRT (Validated)  
 Lab: RECRA Labs  
 Circuitron Corporation Superfund Site  
 Monitoring Wells Sampling: October 2001

	Sample ID	CC-18-MW-6D-06-1	CC-18-MW-6S-06-1	CC-18-MW-7S-06-1	CC-18-MW-7D-06-1	CC-18-EB-06-4	NY Water Quality Criteria
	Lab Sample ID	0110L206-011	0110L206-012	0110L206-013	0110L206-014	0110L206-015	
	Sampling Date	10/24/2001	10/24/2001	10/24/2001	10/24/2001	10/24/2001	
<b>Volatiles (µg/L)</b>							
Methylene Chloride	15 B	14 B	11 B	11 B	11 B	11 B	5
1,1 Dichloroethane	2 J	<5	<5	8	<5	<5	5
1,1,1 Trichloroethane	5	92	<5	2 J	<5	<5	5
Tetrachloroethene	2 J	<5	<5	3 J	<5	<5	5
Trichloroethene	4 J	<5	<5	3 J	<5	<5	5
1,2 Dichloroethene (Total)	<5	<5	<5	2 J	<5	<5	5
1,1 Dichloroethene	3 J	1 J	<5	3 J	<5	<5	5
Toluene	<5	<5	<5	<5	<5	1 J	5

	Sample ID	CC-18-MW-16-06-1	CC-18-MW-14-06-1	CC-18-MW-19D-06-1	CC-18-MW-19D-06-1-3*	CC-18-MW-19S-06-1	NY Water Quality Criteria
	Lab Sample ID	0110L206-016	0110L206-017	0110L206-018	0110L206-019	0110L206-020	
	Sampling Date	10/25/2001	10/25/2001	10/25/2001	10/25/2001	10/25/2001	
<b>Volatiles (µg/L)</b>							
Methylene Chloride	1 JB	9 B	9 B	9 B	9 B	9 B	5
1,1 Dichloroethane	<5	<5	4 J	4 J	4 J	3 J	5
1,1,1 Trichloroethane	<5	6	28	28	28	2 J	5
Tetrachloroethene	<5	<5	62	61	61	<5	5
Trichloroethene	<5	<5	43	43	43	<5	5
1,2 Dichloroethene (Total)	<5	<5	8	7	7	1 J	5
1,1 Dichloroethene	<5	<5	19	18	18	1 J	5
Chloroform	<5	<5	7	7	7	<5	7
2-Butanone	<10	<10	4 J	<10	<10	<10	NP

**NOTES:**

For Volatiles, only those compounds detected above the laboratory method detection limit are displayed.

NR: Not Required

ND: Not Detected

NP: No Proposed Quantitation Level available

<...: Laboratory Detection Limit

**BOLD:** Value exceeds the Proposed Quantitation Level

D: Results are reported for the diluted samples

J: Associated value is an estimated quantity

UJ: Element is not detected and the associated quantitation limit is uncertain.

B: The analyte was detected in the blank sample

\* Field Duplicate

NY Water Quality Criteria: NYSDEC Regulation for Surface Waters and Groundwater, Section 703.5 (August 1999).

SUMMARY, RT (Validated)

Lab: RECRA Labs

Circuitron Corporation Superfund Site

Monitoring Wells Sampling: October 2001

Volatiles (µg/L)	Sample ID	CC-18-MW-17-06-1	CC-18-MW18-06-1	CC-18-MW-5D-06-1	Trip Blank	CC-18-EB1-06-4	NY Water Quality
	Lab Sample ID	0110L227-001	0110L227-002	0110L227-003	0110L227-004	0110L227-005	Criteria
	Sampling Date	10/29/2001	10/29/2001	10/30/2001	10/29/2001	10/29/2001	
Methylene Chloride	9 B	10 B	8 B	8 B	8 B	8 B	5
1,1 Dichloroethane	1 J	<5	<5	<5	<5	<5	5
1,1,1 Trichloroethane	19	<5	<5	<5	<5	<5	5
Tetrachloroethane	1 J	<5	<5	<5	<5	<5	5
Toluene	<5	<5	<5	<5	<5	1 J	5
1,1,2 Trichloroethane	2 J	<5	<5	<5	<5	<5	1

NOTES:

For Volatiles, only those compounds detected above the laboratory method detection limit are displayed.

NR: Not Required

ND: Not Detected

NP: No Proposed Quantitation Level available

<...: Laboratory Detection Limit

BOLD: Value exceeds the Proposed Quantitation Level

D: Results are reported for the diluted samples

J: Associated value is an estimated quantity

UJ: Element is not detected and the associated quantitation limit is uncertain.

B: The analyte was detected in the blank sample

\* Field Duplicate

\*\* Equipment Blank

NY Water Quality Criteria: NYSDEC Regulation for Surface Waters and Groundwater, Section 703.5 (August 1989).

**SUMMARY REPORT (Validated)**

Lab: RECRA Labs  
 Cicultron Corporation Superfund Site  
 Monitoring Wells Sampling: January/February 2002

Sample ID	CC-18-MW-3D-07-1	CC-18-MW-3S-07-1	CC-18-MW-4D-07-1	CC-18-MW-4S-07-1	CC-18-MW-1S-07-1	CC-18-MW-1D-07-1	NY Water Quality Criteria
Lab Sample ID	0202L906-001	0202L906-002	0202L906-003	0202L906-004	0202L906-005	0202L906-006	
Sampling Date	01/29/2002	01/29/2002	01/29/2002	01/29/2002	01/30/2002	01/30/2002	
<b>2 X Dilution</b>							
<b>Volatiles (µg/L)</b>							
Methylene Chloride	7	3 J	6	4 JBD	8 B	10 B	5
1,1 Dichloroethane	<5	<5	4 J	4 JD	<5	4 J	5
1,1,1 Trichloroethane	1 J	3 J	12	320 D	<5	14	5
Tetrachloroethene	<5	<5	3 J	14 D	<5	6	5
Trichloroethene	<5	<5	10	<10	<5	11	5
1,1 Dichloroethene	<5	<5	8	5 JD	<5	11	5
1,2-Dichloroethene (Total)	<5	<5	<5	<10	<5	1 J	5
<b>Turbidity (NTU)</b>	114	13.3	3.6	15.1	33.1	34.7	5
<b>Total Metals (µg/L)</b>							
Iron	962	1290	333	430	20000	456	300
Manganese	197	33.7	120	5.3	366	149	300
Arsenic	<3.0	<3.0	<3.0	<3.0	6.0	<3.0	25
Beryllium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	3
Chromium	212	9.7	7.9	90.8	3.3	55.7	50
Copper	17.9	28.0	6.8	11.0	3.3	7.2	200
Mercury	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.7
Nickel	32.8	10.6	10.9	15.4	3.0	10.8	100
Lead	11.0	<2.2	<2.2	<2.2	2.5	4.0	15
Antimony	<1.9	<1.9	<1.9	2.1	<1.9	<1.9	3

**NOTES:**

For Volatiles, only those compounds detected above the laboratory method detection limit are displayed.

NR: Not Required

ND: Not Detected

NP: No Proposed Quantitation Level available

<...: Laboratory Detection Limit

**BOLD:** Value exceeds the Proposed Quantitation Level

D: Results are reported for the diluted samples

J: Associated value is an estimated quantity

UJ: Element is not detected and the associated quantitation limit is uncertain.

B: The analyte was detected in the blank sample

E: Compound was detected beyond the calibration range and was subsequently analyzed at a dilution

NY Water Quality Criteria: NYSDEC Regulation for Surface Waters and Groundwater, Section 703.5 (August 1999).

**SUMMARY REPORT (Validated)**

Lab: RECRA Labs  
 Circuitron Corporation Superfund Site  
 Monitoring Wells Sampling: January/February 2002

Sample ID	CC-18-MW-7D-07-1*	CC-18-MW-7D-07-3**	CC-18-MW-6S-07-1	CC-18-MW-14-07-1	CC-18-MW-15-07-1	Trip Blank	NY Water Quality
Lab Sample ID	0202L906-007	0202L906-008	0202L906-009	0202L906-010	0202L933-001	0202L906-011	Criteria
Sampling Date	01/30/2002	01/30/2002	01/30/2002	01/30/2002	02/04/2002		
<b>Volatiles (µg/L)</b>							
Methylene Chloride	8 B	8 B	9 B	4 JB	2 JB	4 JB	5
1,1 Dichloroethane	7	7	<5	2 J	<5	<5	5
1,1,1 Trichloroethane	2 J	2 J	54	15	<5	<5	5
Tetrachloroethene	3 J	3 J	<5	<5	<5	<5	5
Trichloroethene	3 J	3 J	<5	<5	.5	<5	5
1,2 Dichloroethene (Total)	2 J	2 J	<5	<5	<5	<5	5
1,1 Dichloroethene	3 J	3 J	1 J	<5	<5	<5	5
<b>Turbidity (NTU)</b>	19.3	19.3	25.5	25.7	19.4	NR	5
<b>Total Metals (µg/L)</b>							
Iron	86.0	98.8	4760	12200	19800 J	NR	300
Manganese	62.1	60.9	14.9	374	199	NR	300
Arsenic	<3.0	<3.0	<3.0	<3.0	4.9	NR	25
Beryllium	<0.10	<0.10	<0.10	<0.10	<0.10	NR	3
Chromium	3.3	3.6	886	3.3	2.4	NR	50
Copper	5.8	7.3	9.8	3.0	3.8	NR	200
Mercury	<0.10	<0.10	<0.10	<0.10	<0.10	NR	0.7
Nickel	6.5	6.7	20.6	5.5	3.1	NR	100
Lead	<2.2	<2.2	<2.2	<2.2	2.9	NR	15
Antimony	<1.9	2.1	3.4	<1.9	<1.9	NR	3

**NOTES:**

For Volatiles, only those compounds detected above the laboratory method detection limit are displayed.

NR: Not Required

ND: Not Detected

NP: No Proposed Quantitation Level available

<...: Laboratory Detection Limit

**BOLD:** Value exceeds the Proposed Quantitation Level

D: Results are reported for the diluted samples

J: Associated value is an estimated quantity

UJ: Element is not detected and the associated quantitation limit is uncertain.

B: The analyte was detected in the blank sample

\* Well MW 7S was inspected 3 times during the 2 weeks sampling period. The well was dry.

\*\* Field Duplicate

NY Water Quality Criteria: NYSDEC Regulation for Surface Waters and Groundwater, Section 703.5 (August 1999).

**SUMMARY REPORT (Validated)**

Lab: RECRA Labs  
 Circuitron Corporation Superfund Site  
 Monitoring Wells Sampling: January/February 2002

Sample ID	CC-18-MW-15-07-3*	CC-18-MW-13-07-1	CC-18-MW-18-07-1	CC-18-MW-16-07-1	CC-18-MW-6D-071	CC-18-MW-19S-07-1	NY Water Quality Criteria
Lab Sample ID	0202L933-002	0202L933-003	0202L933-004	0202L933-005	0202L933-006	0202L933-007	
Sampling Date	02/04/2002	02/04/2002	02/05/2002	02/05/2002	02/05/2002	02/05/2002	
<b>Volatiles (µg/L)</b>							
1,1 Dichloroethene	< 5	< 5	< 5	< 5	4 J	1 J	5
Trichloroethene	< 5	< 5	< 5	< 5	4 J	< 5	5
Methylene Chloride	2 JB	1 JB	< 5	< 5	< 5	< 5	5
1,1 Dichloroethane	< 5	< 5	< 5	< 5	2 J	3 J	5
1,1,1 Trichloroethane	< 5	34	< 5	3 J	5	1 J	5
Tetrachloroethene	< 5	< 5	< 5	< 5	2 J	< 5	5
<b>Turbidity (NTU)</b>	NR	22.5	16.4	26.4	27.0	62	5
<b>Total Metals (µg/L)</b>							
Iron	19700 J	2050 J	1170 J	24600 J	1480 J	26000 J	300
Manganese	194	26.6	16.6	363	110	966	300
Arsenic	7.2 J	4.1 J	< 3.0	10.3 J	4.2 J	5.1 J	25
Beryllium	0.12	0.12	< 0.10	< 0.10	< 0.10	0.16	3
Chromium	4.2	3.5	5.3	4.4	378	40.2	50
Copper	8.5	10.2	3.4	7.2	28.8	16.4	200
Mercury	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.76	0.7
Nickel	3.3	6.7	4.8	4.1	110	29.1	100
Lead	4.4	< 2.2	< 2.2	2.7	5.7	6.3	15
Antimony	< 1.9	< 1.9	< 1.9	< 1.9	2.0	< 1.9	3

**NOTES:**

For Volatiles, only those compounds detected above the laboratory method detection limit are displayed.

NR: Not Required

ND: Not Detected

NP: No Proposed Quantitation Level available

<...: Laboratory Detection Limit

**BOLD:** Value exceeds the Proposed Quantitation Level

D: Results are reported for the diluted samples

J: Associated value is an estimated quantity

UJ: Element is not detected and the associated quantitation limit is uncertain.

B: The analyte was detected in the blank sample

\* Field Duplicate

NY Water Quality Criteria: NYSDEC Regulation for Surface Waters and Groundwater, Section 703.5 (August 1999).

**SUMMARY REPORT (Validated)**

Lab: RECRA Labs

Circuitron Corporation Superfund Site

Monitoring Wells Sampling: January/February 2002

Sample ID	CC-18-MW-19S-07-4*	CC-18-MW-19D-07-1	CC-18-MW-5D-07-1	CC-18-MW-5D-07-4*	CC-18-MW-17-07-1	Trip Blank	NY Water Quality
Lab Sample ID	0202L933-008	0202L933-009	0202L933-010	0202L933-011	0202L933-012	0202L933-013	Criteria
Sampling Date	02/05/2002	02/05/2002	02/06/2002	02/06/2002	02/06/2002	02/06/2002	
<b>Volatiles (µg/L)</b>							
1,1 Dichloroethane	< 5	3 J	< 5	< 5	2 J	< 5	5
1,1 Dichloroethene	< 5	23	< 5	< 5	< 5	< 5	5
1,1,1 Trichloroethane	< 5	30	< 5	< 5	22	< 5	5
Tetrachloroethane	< 5	77	< 5	< 5	1 J	< 5	5
Trichloroethene	< 5	55	< 5	< 5	< 5	< 5	5
Methylene Chloride	2 J	< 5	< 5	< 5	1 JB	5	5
1,2 Dichloroethene (Total)	< 5	8	< 5	< 5	< 5	< 5	5
Chloroform	< 5	10	< 5	< 5	< 5	< 5	7
Acetone	130 B	8 JB	< 5	< 5	< 5	< 5	NP
Carbon Disulfide	2 J	< 5	< 5	< 5	< 5	< 5	NP

Turbidity (NTU)	NR	659	2	NR	18	NR	5
<b>Total Metals (µg/L)</b>							
Iron	139 J	27300 J	245 J	110 J	662 J	NR	300
Manganese	1.0	568	575	3.0	108	NR	300
Arsenic	< 3.0	12.5 J	< 3.0	< 3.0	< 3.0	NR	25
Beryllium	< 0.10	0.47	< 0.10	< 0.10	< 0.10	NR	3
Chromium	1.3	86.4	16.1	0.82	2.8	NR	50
Copper	2.4	38.2	45.4	6.5	18.5	NR	200
Mercury	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	NR	0.7
Nickel	2.6	59.1	11.5	3.0	22.7	NR	100
Lead	< 2.2	22.7	3.8	< 2.2	2.3	NR	15
Antimony	< 1.9	< 1.9	< 1.9	< 1.9	< 1.9	NR	3

**NOTES:**

For Volatiles, only those compounds detected above the laboratory method detection limit are displayed.

NR: Not Required

ND: Not Detected

NP: No Proposed Quantitation Level available

<...: Laboratory Detection Limit

**BOLD:** Value exceeds the Proposed Quantitation Level

**D:** Results are reported for the diluted samples

**J:** Associated value is an estimated quantity

**UJ:** Element is not detected and the associated quantitation limit is uncertain.

**B:** The analyte was detected in the blank sample

\* Equipment Blank

NY Water Quality Criteria: NYSDEC Regulation for Surface Waters and Groundwater, Section 703.5 (August 1999).

**SUMMARY REPORT (Validated)**

Lab: Lionville Labs  
 Circutron Corporation Superfund Site  
 Monitoring Wells Sampling: July/August 2002

Wells MW4S, MW6S and MW7S were inspected 3 times during the July/August 2002 sampling period. The wells were dry and could not be sampled.

Sample ID	CC-18-MW-3D-8-1	CC-18-MW-3S-8-1	CC-18-MW-3S-8-3*	CC-18-MW-7D-8-1	CC-18-MW-4D-8-1	Trip blank	NY Water Quality Criteria
Lab Sample ID	0207L268-001	0207L268-002	0207L268-003	0207L268-004	0207L268-005	0207L268-006	
Sampling Date	07/22/2002	07/22/2002	07/22/2002	07/24/2002	07/25/2002	07/25/2002	
<b>Volatiles (µg/L)</b>							
Methylene Chloride	< 5J	< 5J	< 5J	< 5J	< 5J	1 JB	5
1,1 Dichloroethane	< 5J	< 5J	< 5J	5J	4 J	< 5J	5
1,1,1 Trichloroethane	1 J	5 J	4 J	3 J	13J	< 5J	5
Tetrachloroethene	< 5J	< 5J	< 5J	2 J	2 J	< 5J	5
Trichloroethene	< 5J	< 5J	< 5J	3 J	8J	< 5J	5
1,1 Dichloroethene	< 5J	< 5J	< 5J	4 J	9J	< 5J	5
1,2-Dichloroethene (Total)	< 5J	< 5J	< 5J	2 J	1 J	< 5J	5
Toluene	< 5J	< 5J	< 5J	< 5J	< 5J	3 J	5
<b>Turbidity (NTU)</b>							
	4.2	10.1	10.1	0.0	0.8	NR	5
<b>Total Metals (µg/L)</b>							
Iron	1080	2140	2400	306	429	NR	300
Manganese	206	31.4	79.9	60.9	116	NR	300
Arsenic	3.6U	< 2.5	< 2.5	< 2.5	< 2.5	NR	25
Beryllium	< 0.10	0.14U	0.22U	0.23U	0.25U	NR	3
Chromium	50.9	16.2	27.2	18.6	19.9	NR	50
Copper	14.9	26.4	27.0	13.2	6.4	NR	200
Mercury	< 0.10	< 0.10	0.27	< 0.10	< 0.10	NR	0.7
Nickel	23.0	24.4	23.0	17.3	11.8	NR	100
Lead	10.6	5.0	6.0	< 1.7	2.7U	NR	15
Antimony	2.5U	3.1U	< 2.2	< 2.2	2.4U	NR	3

**NOTES:**

For Volatiles, only those compounds detected above the laboratory method detection limit are displayed.

NR: Not Required

ND: Not Detected

NP: No Proposed Quantitation Level available

<...: Laboratory Detection Limit

**BOLD:** Value exceeds the Proposed Quantitation Level

**D:** Results are reported for the diluted samples

**U:** Compound was not detected above associated level; blank contamination exists

**J:** Associated value is an estimated quantity

**UJ:** Element is not detected and the associated quantitation limit is uncertain.

**B:** The analyte was detected in the blank sample

**E:** Compound was detected beyond the calibration range and was subsequently analyzed at a dilution

Cooler Temperature was 9C when received at the lab

\* Field Duplicate of MW-3S

NY Water Quality Criteria: NYSDEC Regulation for Surface Waters and Groundwater, Section 703.5 (August 1999).



SUMMARY REPORT (Validated)

Lab: Lionville Labs  
 Circultron Corporation Superfund Site  
 Monitoring Wells Sampling: July/August 2002

	Sample ID	CC-18-MW-6D-8-1	CC-18-MW-13-8-1	CC-18-MW-13-3-1*	CC-18-MW-15-8-1	CC-18-MW-16-8-1	CC-18-MW-17-8-1	NY Water Quality
	Lab Sample ID	0208L407-001	0208L407-002	0208L407-003	0208L407-004	0208L407-005	0208L407-008	Criteria
	Sampling Date	08/05/2002	08/05/2002	08/05/2002	08/06/2002	08/06/2002	08/07/2002	
<b>Volatiles (µg/L)</b>								
1,1 Dichloroethane	4 J	3 J	3 J	< 5	< 5	< 5	3 J	5
1,1,1 Trichloroethane	9	12	11	< 5	< 5	< 5	5 J	5
Tetrachloroethene	4 J	< 5	< 5	< 5	< 5	< 5	< 5	5
Trichloroethene	7	< 5	< 5	< 5	< 5	< 5	< 5	5
1,2 Dichloroethene (Total)	1 J	< 5	< 5	< 5	< 5	< 5	< 5	5
1,1 Dichloroethene	7	< 5	< 5	< 5	< 5	< 5	< 5	5
Chloroform	5 J	< 5	< 5	< 5	< 5	< 5	< 5	7
<b>Turbidity (NTU)</b>								
	73	110	110.0	0	97	0	0	5
<b>Total Metals (µg/L)</b>								
Iron	870	<14.5	707	29300	58400	982	300	300
Manganese	130	32.1	31.8	339	438	53.7	300	300
Arsenic	< 2.5	< 2.5	< 2.5	2.5	39.8	< 2.5	25	25
Beryllium	0.16U	0.10U	0.10U	0.13U	1.30U	0.26U	3	3
Chromium	479	0.52U	16.3	2.7U	43.6	4.8	50	50
Copper	15.1	1.8	2.8	1.3	54.7	20.1	200	200
Mercury	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.7	0.7
Nickel	133	3.2	5.3	1.6U	23.4U	14.2U	100	100
Lead	5.2	< 1.7	< 1.7	< 1.7	28.6	< 1.7	15	15
Antimony	< 2.2	< 2.2	< 2.2	< 2.2	2.2U	< 2.2	3	3

NOTES:

For Volatiles, only those compounds detected above the laboratory method detection limit are displayed.

NR: Not Required

ND: Not Detected

NP: No Proposed Quantitation Level available

<...: Laboratory Detection Limit

**BOLD:** Value exceeds the Proposed Quantitation Level

D: Results are reported for the diluted samples

U: Compound was not detected above associated level; blank contamination exists

J: Associated value is an estimated quantity

UJ: Element is not detected and the associated quantitation limit is uncertain.

B: The analyte was detected in the blank sample

\* Field Duplicate of MW-13

NY Water Quality Criteria: NYSDEC Regulation for Surface Waters and Groundwater, Section 703.5 (August 1999).

**SUMMARY REPORT (Validated)**

Lab: Lionville Labs  
 Cicultron Corporation Superfund Site  
 Monitoring Wells Sampling: July/August 2002

Sample ID	CC-18-MW-5D-4-1*	CC-18-MW-5D-8-1	CC-18-MW-14-8-1	CC-18-MW-18-8-1	CC-18-MW-1S-4-1**	CC-18-MW-1S-8-1	NY Water Quality Criteria
Lab Sample ID	0208L407-006	0208L407-006	0208L407-009	0208L407-010	0208L407-011	0208L407-012	
Sampling Date	08/07/2002	08/07/2002	08/07/2002	08/07/2002	08/08/2002	08/08/2002	
Volatiles (µg/L)	< 5	< 5	1 J	< 5	< 5	< 5	5
1,1,1 Trichloroethane							
Turbidity (NTU)	0	0	0	0	0	0	5
Total Metals (µg/L)							
Iron	58.9U	344	14600	1100	26U	24300	300
Manganese	1.8U	690	221	23.4	2.0U	403	300
Arsenic	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	11.1	25
Beryllium	0.11U	0.17U	0.22U	0.26U	0.16U	0.22U	3
Chromium	0.74U	34.2	3.6U	6.7	< 0.50	3.1U	50
Copper	< 0.30	28.5J	1.5	0.55	< 0.30	< 0.30	200
Mercury	< 0.10	0.11	< 0.10	< 0.10	< 0.10	< 0.10	0.7
Nickel	4.1U	5.4U	3.8U	4.8U	< 0.9*	4.1U	100
Lead	< 1.7	2.0U	< 1.7	1.9U	1.9U	< 1.7	15
Antimony	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	3

**NOTES:**

For Volatiles, only those compounds detected above the laboratory method detection limit are displayed.

NR: Not Required

ND: Not Detected

NP: No Proposed Quantitation Level available

<...: Laboratory Detection Limit

**BOLD:** Value exceeds the Proposed Quantitation Level

D: Results are reported for the diluted samples

U: Compound was not detected above associated level; blank contamination exists

J: Associated value is an estimated quantity

UJ: Element is not detected and the associated quantitation limit is uncertain.

B: The analyte was detected in the blank sample

\* Equipment Blank associated with MW-5D

\*\* Equipment Blank associated with MW-1S

NY Water Quality Criteria: NYSDEC Regulation for Surface Waters and Groundwater, Section 703.5 (August 1999).

**SUMMARY REPORT (Validated)**  
 Lab: Lionville Labs  
 Circultron Corporation Superfund Site  
 Monitoring Wells Sampling: July/August 2002

Sample ID	CC-18-MW-1D-8-1	CC-18-MW-19S-8-1	CC-18-MW-19D-8-1	Trip Blank	NY Water Quality
Lab Sample ID	0208L407-013	0208L407-014	0208L407-015	0208L407-016	Criteria
Sampling Date	08/08/2002	08/08/2002	08/08/2002	08/08/2002	
<b>Volatiles (µg/L)</b>					
1,1 Dichloroethane	4 J	3 J	4 J	< 5	5
1,1 Dichloroethene	10	< 5	24	< 5	5
1,1,1 Trichloroethane	12	< 5	28	< 5	5
Tetrachloroethene	5	< 5	62	< 5	5
Trichloroethene	12	< 5	57	< 5	5
Methylene Chloride	< 5	< 5	< 5	2 J	5
1,2 Dichloroethene (Total)	2 J	2 J	10	< 5	5
Chloroform	< 5	< 5	14	< 5	7
Toluene	< 5	< 5	< 5	2 J	5

Turbidity (NTU) 0 0 250 NR 5

Total Metals (µg/L)	18600	18900	NR	300
Iron	1170	18600	NR	300
Manganese	160	683	NR	300
Arsenic	< 2.5	< 2.5	NR	25
Beryllium	0.24U	0.61U	NR	3
Chromium	153	121	NR	50
Copper	4.9	6.3	NR	200
Mercury	< 0.10	0.14	NR	0.7
Nickel	38.3	86.8	NR	100
Lead	2.2U	< 1.7	NR	15
Antimony	< 2.2	< 2.2	NR	3

**NOTES:**

For Volatiles, only those compounds detected above the laboratory method detection limit are displayed.

NR: Not Required

ND: Not Detected

NP: No Proposed Quantitation Level available

<...: Laboratory Detection Limit

**BOLD:** Value exceeds the Proposed Quantitation Level

D: Results are reported for the diluted samples

U: Compound was not detected above associated level; blank contamination exists

J: Associated value is an estimated quantity

UJ: Element is not detected and the associated quantitation limit is uncertain.

B: The analyte was detected in the blank sample

NY Water Quality Criteria: NYSDEC Regulation for Surface Waters and Groundwater, Section 703.5 (August 1999).

## Appendix B

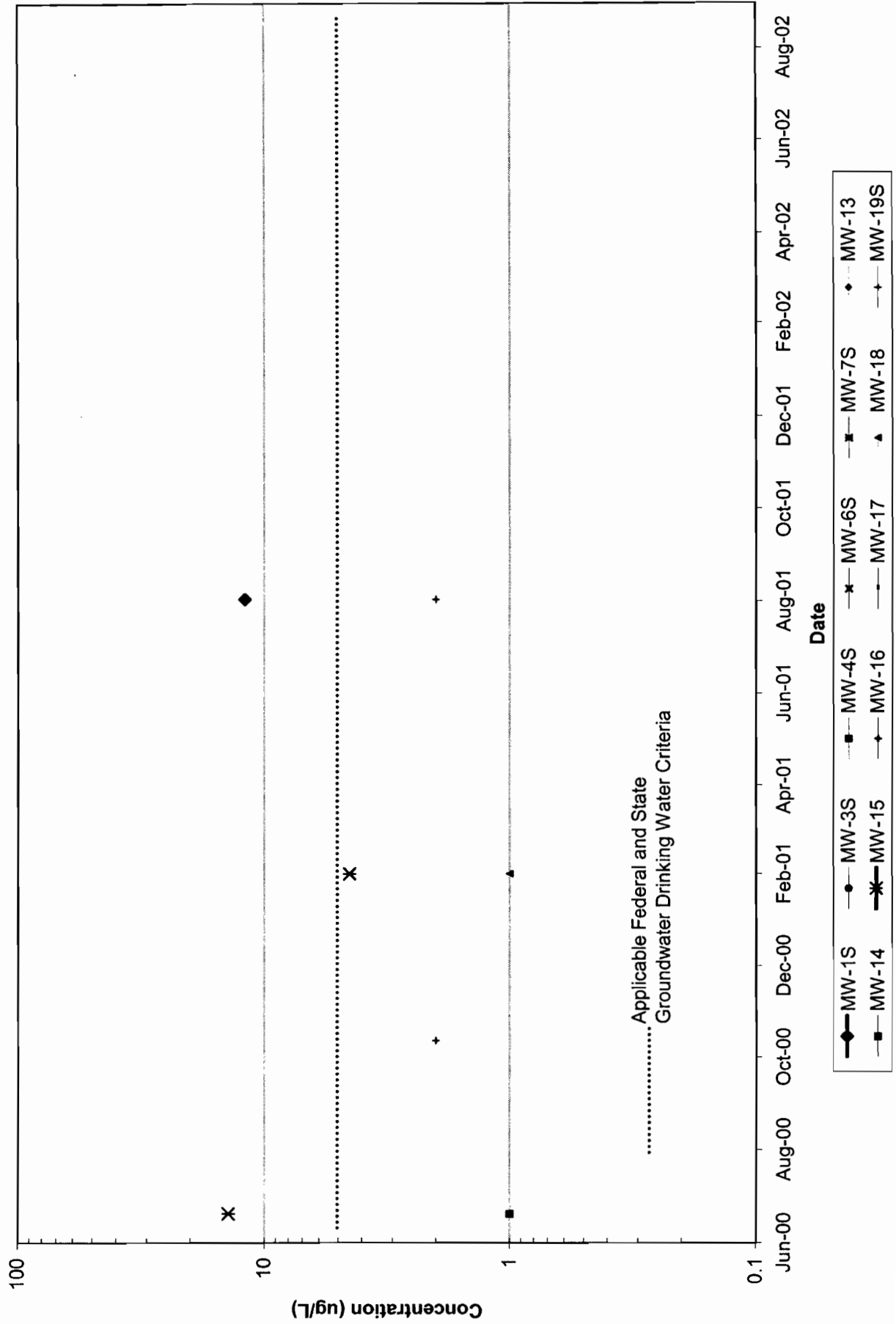
**Appendix B**

**Time-Series Geochemical Graphs for Shallow and Deep Wells**





**Trichloroethene Time-Series Graph  
Shallow Wells  
CIRCUITRON CORPORATION SUPERFUND SITE**





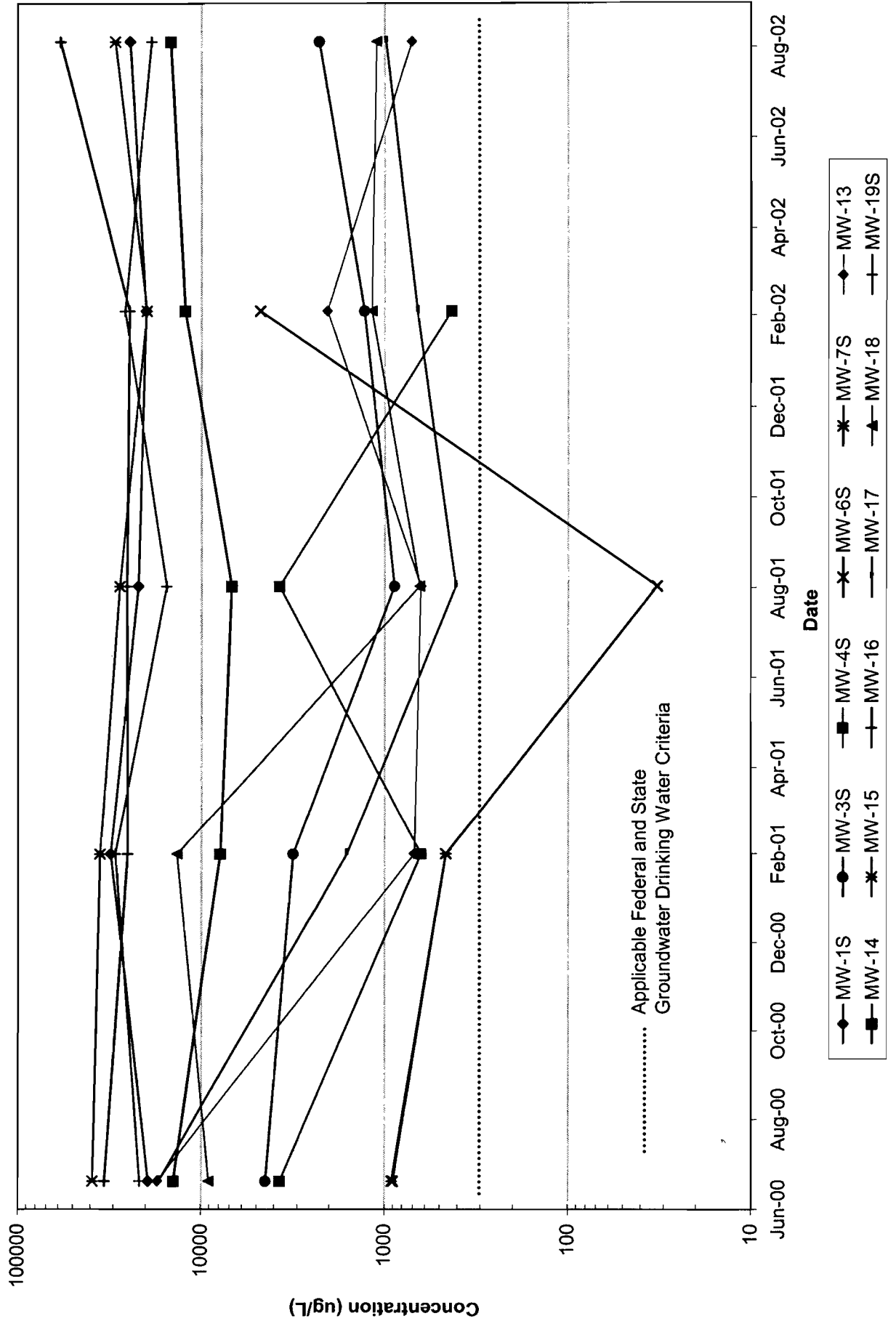




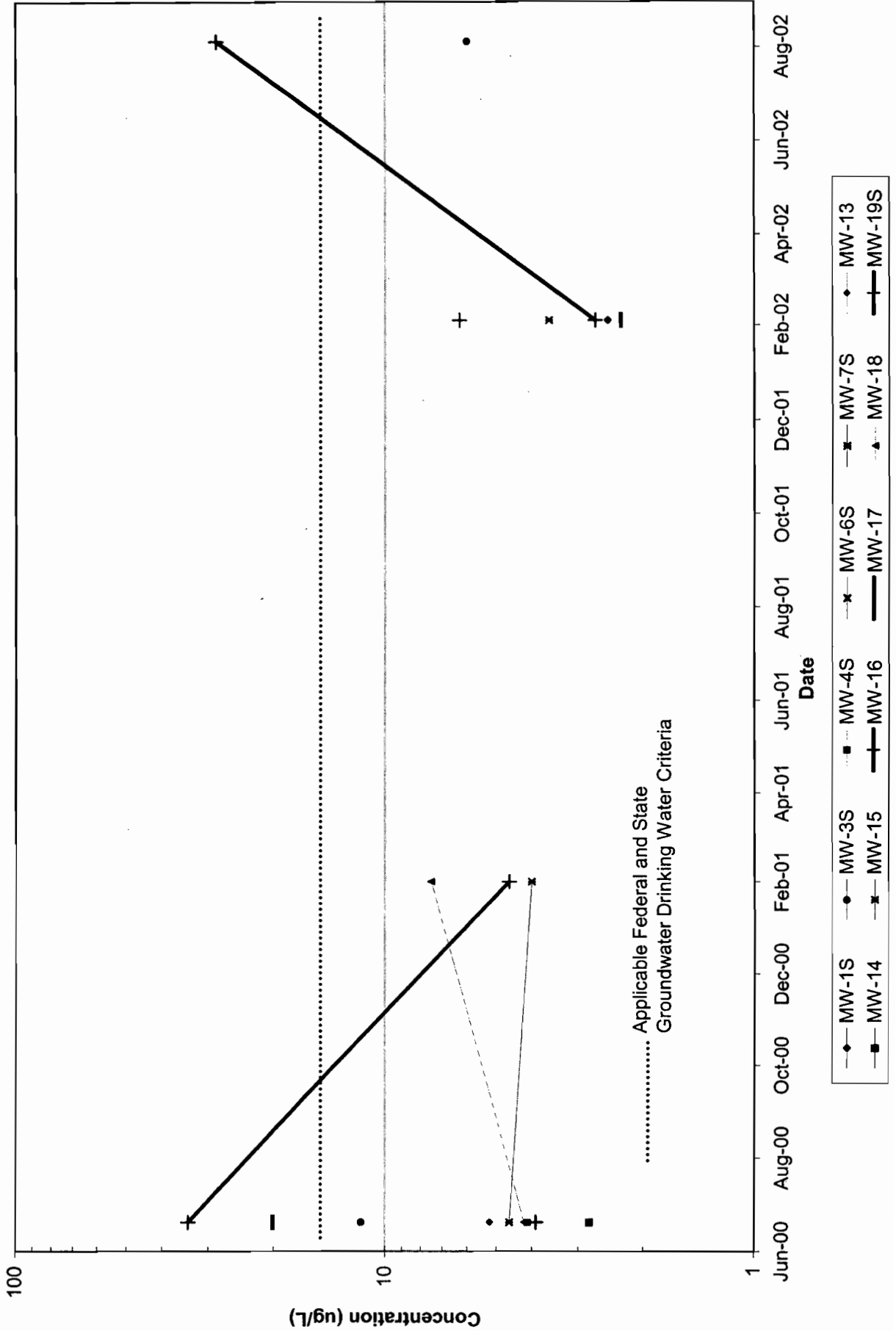




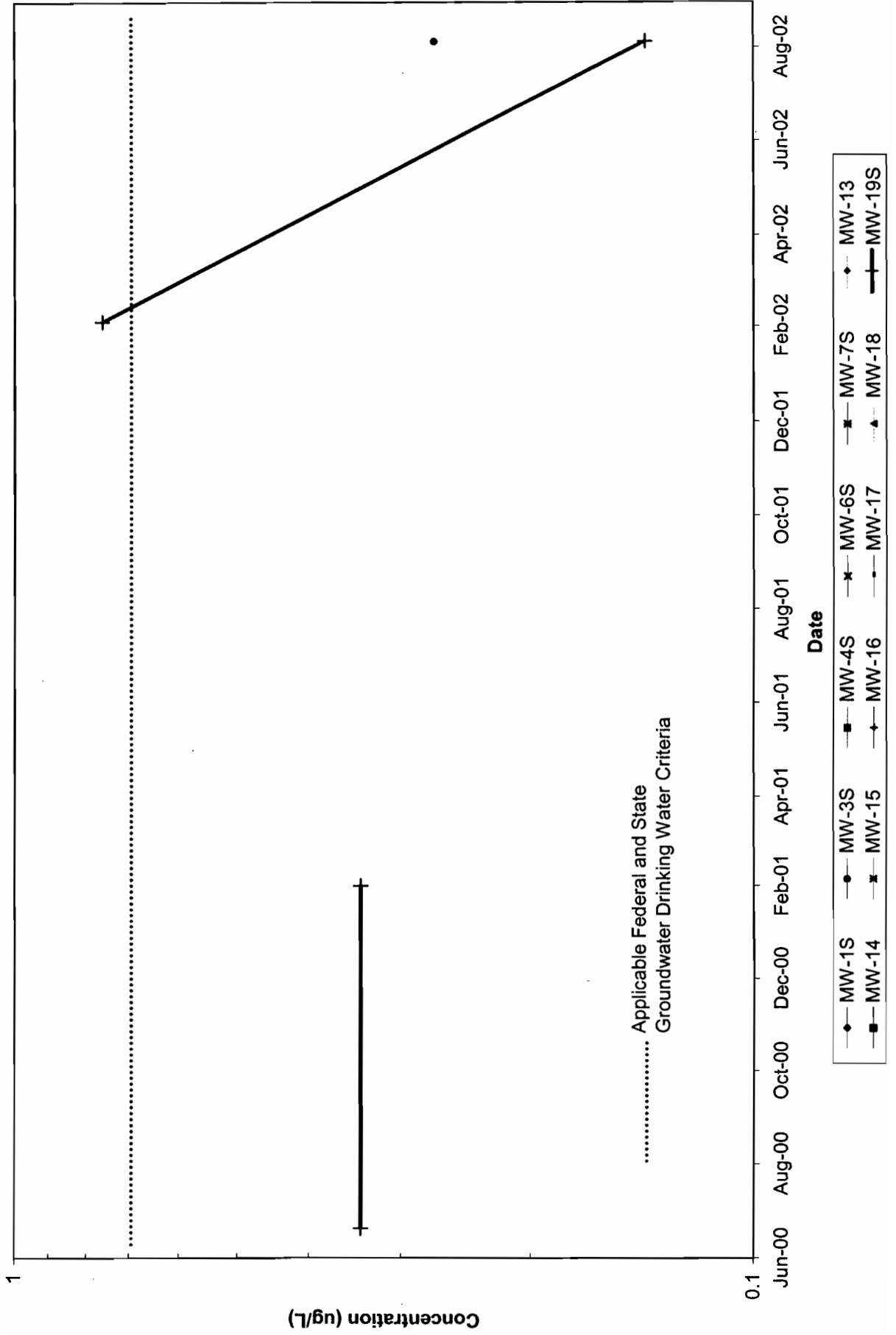
# Iron Time-Series Graph Shallow Wells CIRCUITRON CORPORATION SUPERFUND SITE



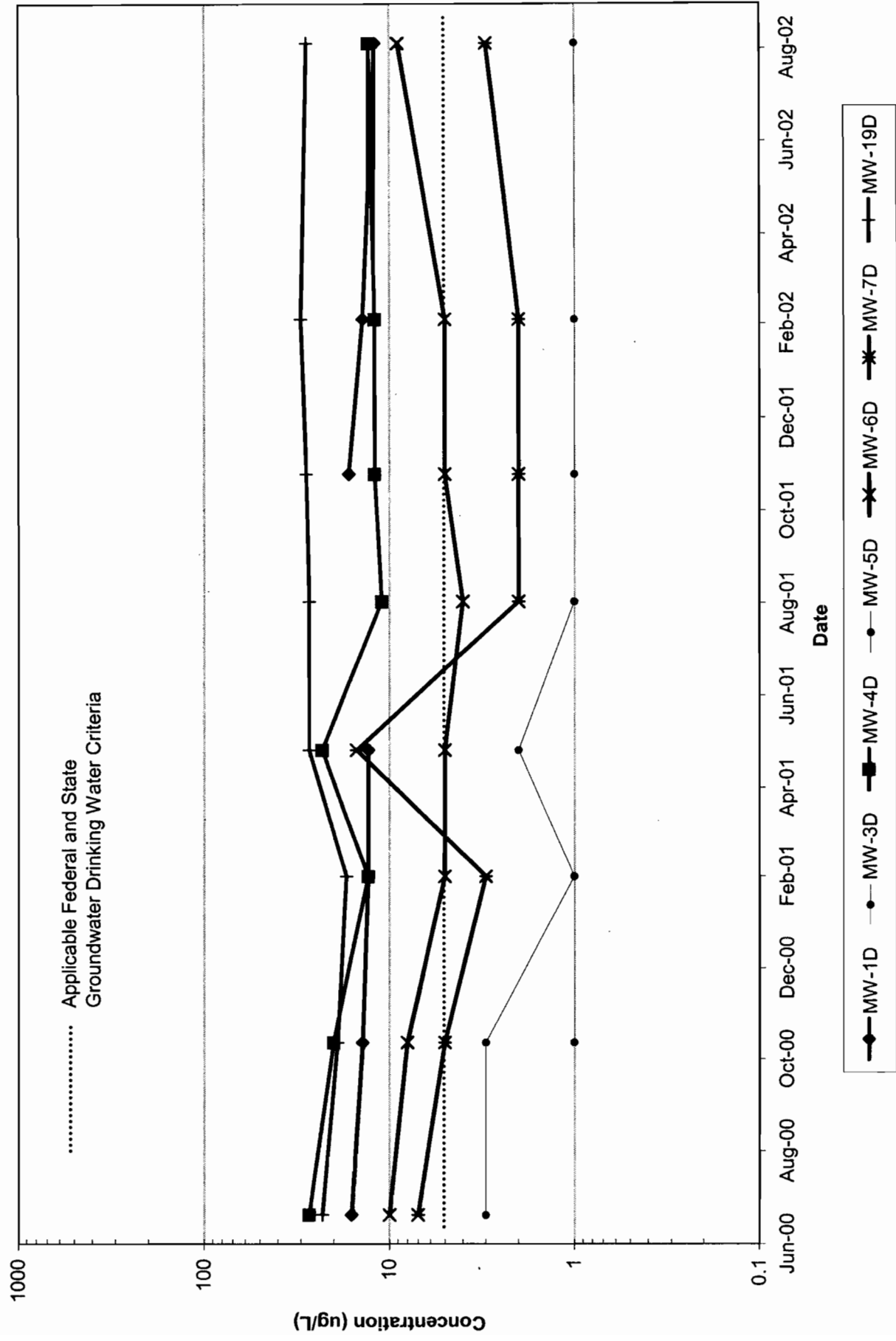
**Lead Time-Series Graph**  
**Shallow Wells**  
**CIRCUITRON CORPORATION SUPERFUND SITE**



**Mercury Time-Series Graph**  
**Shallow Wells**  
**CIRCUITRON CORPORATION SUPERFUND SITE**



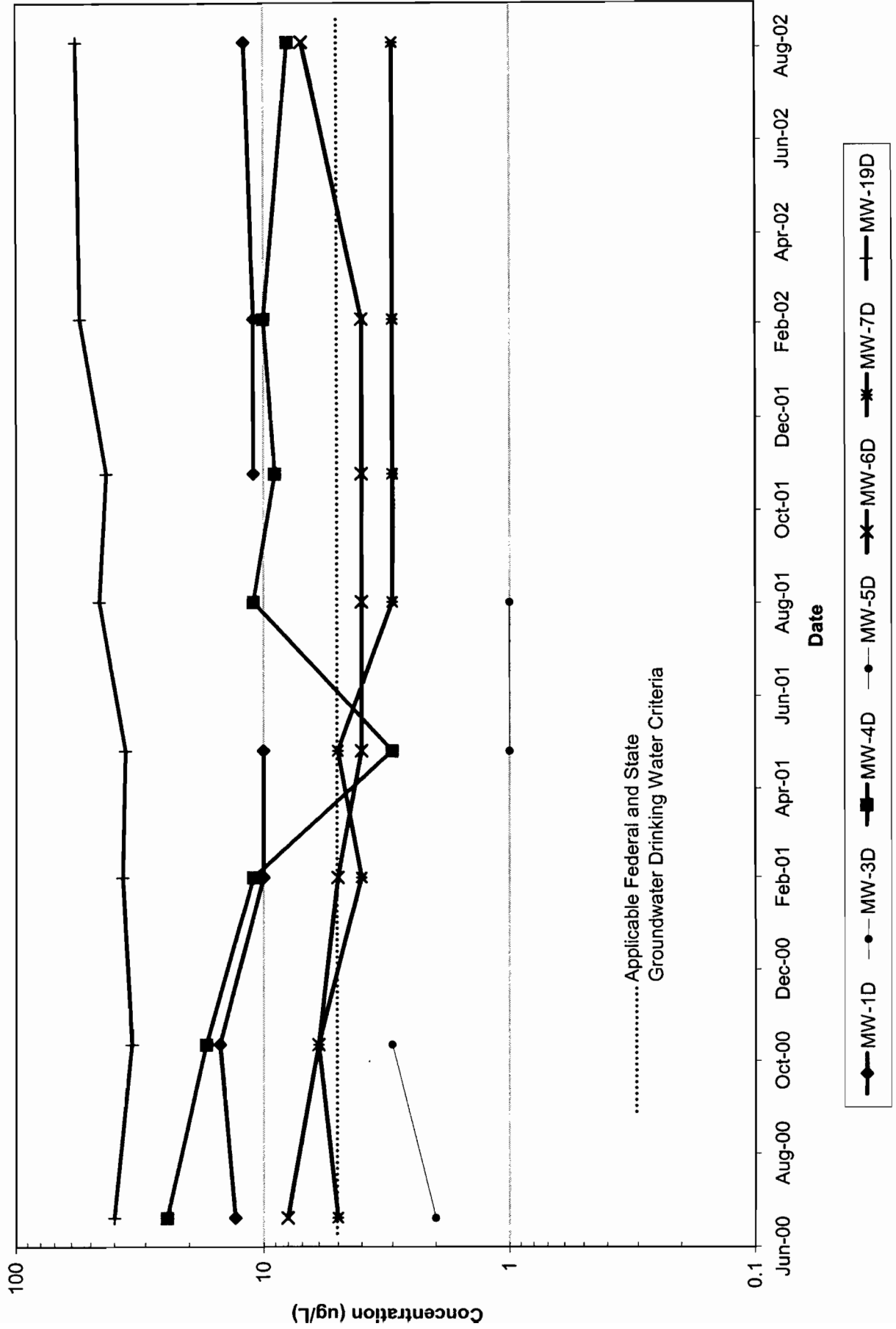
# 1,1,1-Trichloroethane Time-Series Graph Deep Wells CIRCUITRON CORPORATION SUPERFUND SITE





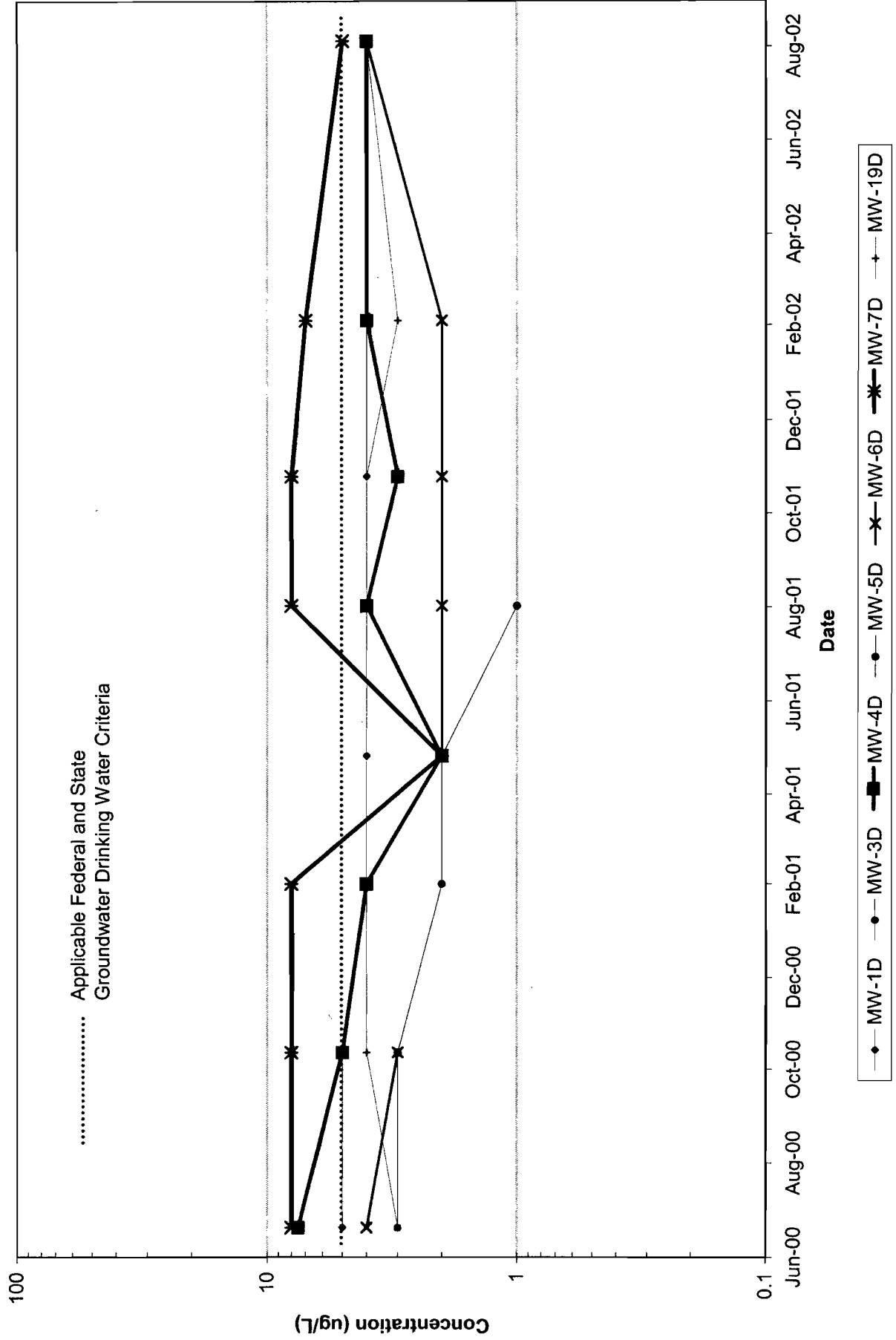


Trichloroethene Time-Series Graph  
 Deep Wells  
 CIRCUITRON CORPORATION SUPERFUND SITE

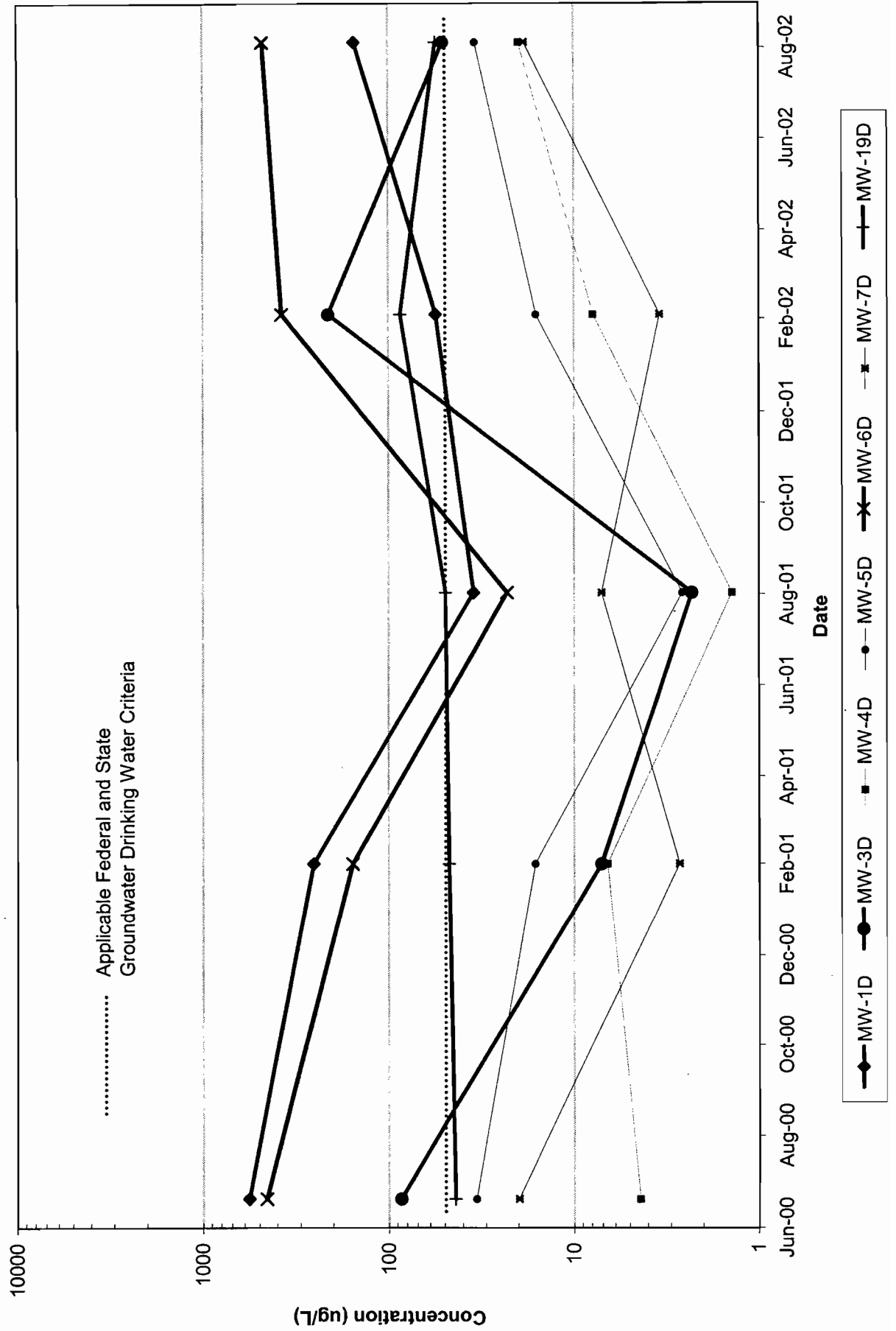




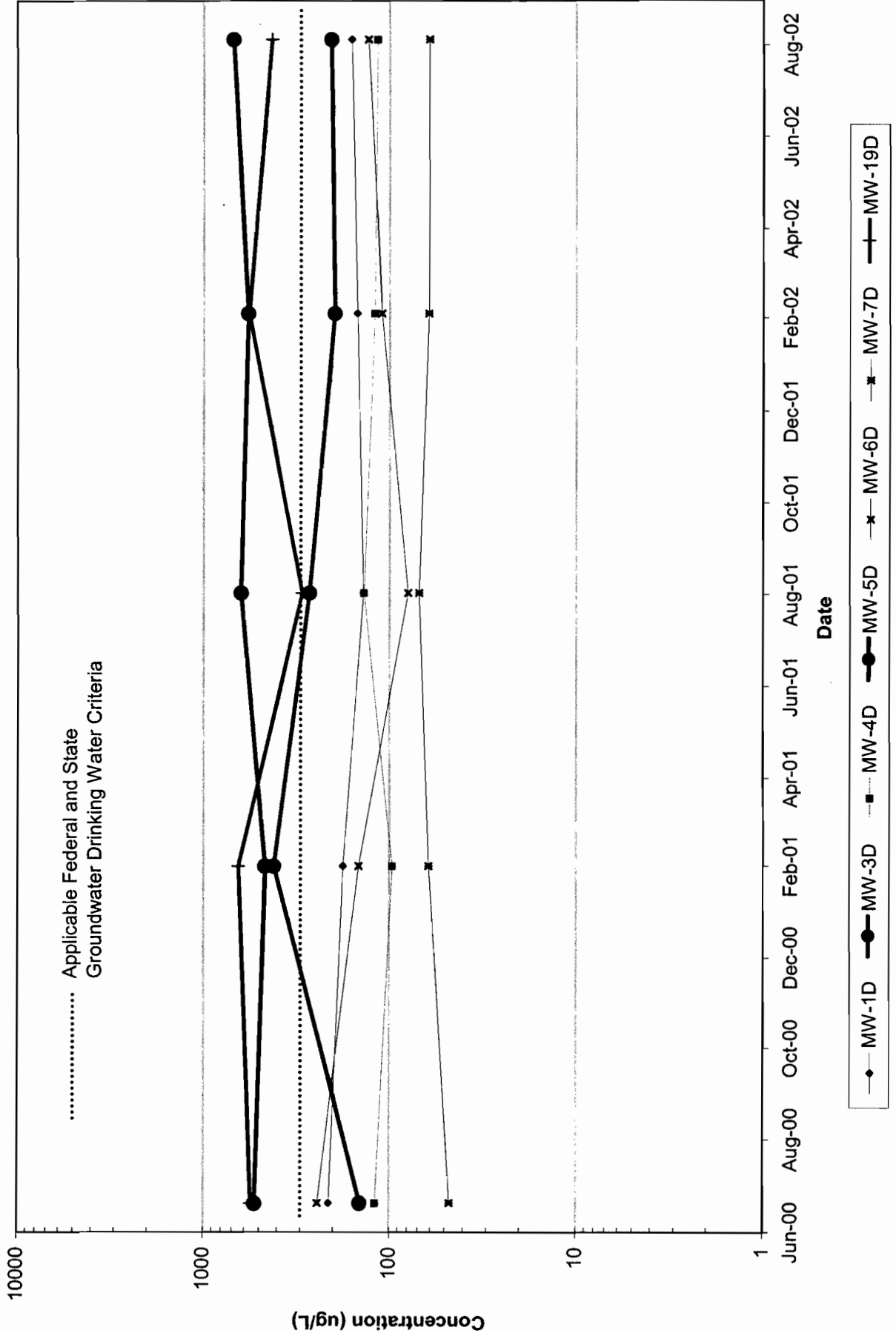
# 1,1-Dichloroethane Time-Series Graph Deep Wells CIRCUITRON CORPORATION SUPERFUND SITE



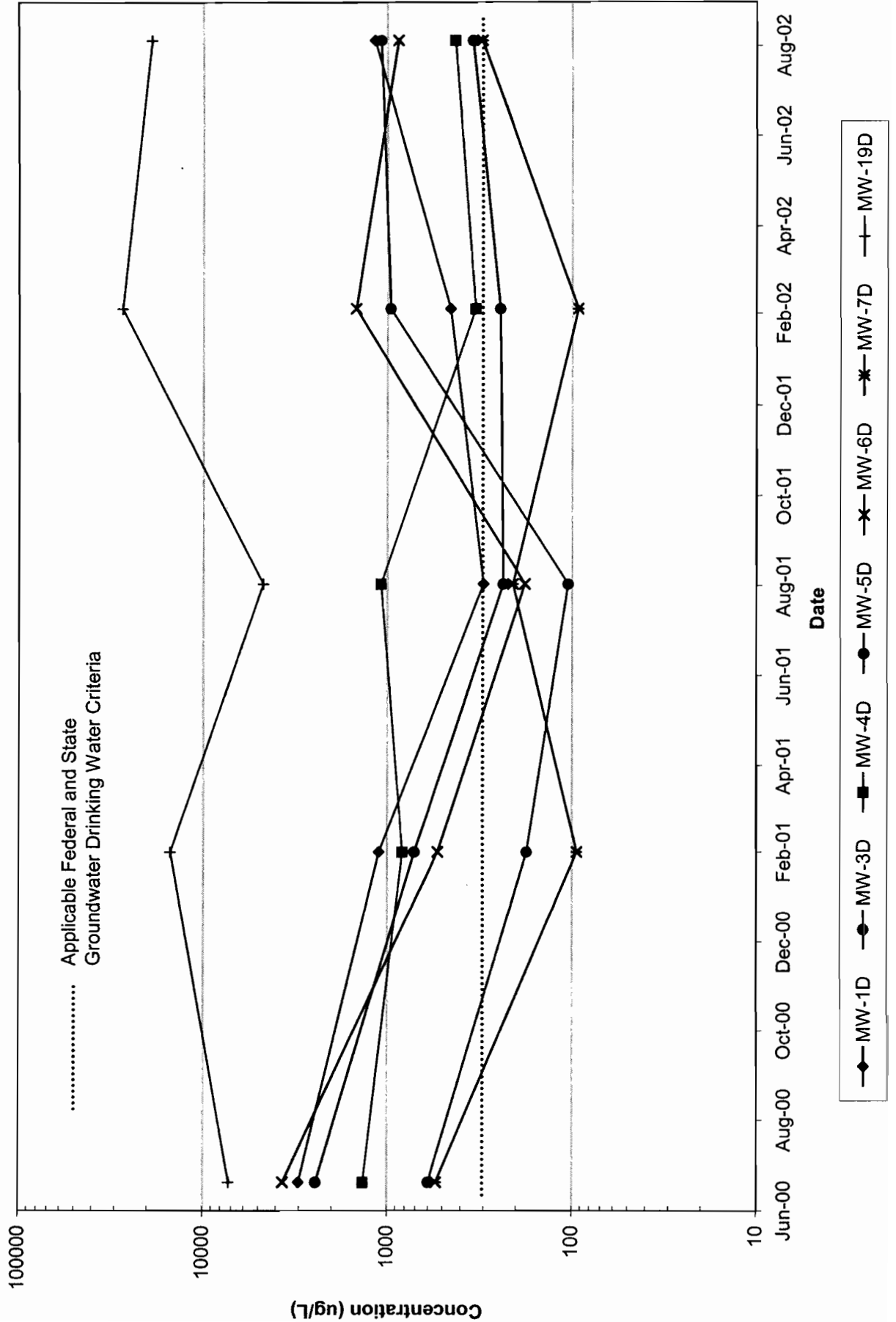
# Chromium Time-Series Graph Deep Wells CIRCUITRON CORPORATION SUPERFUND SITE



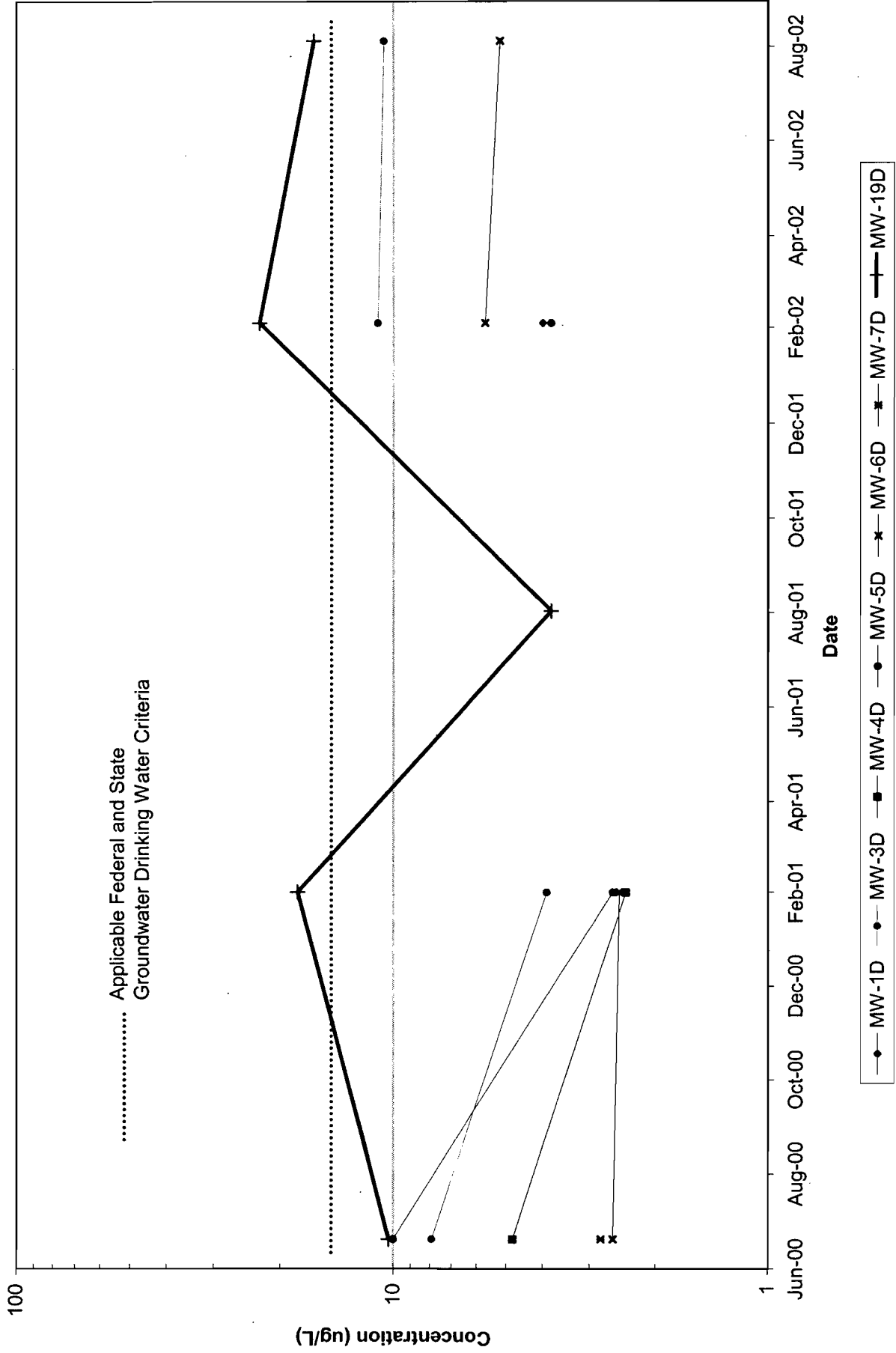
# Manganese Time-Series Graph Deep Wells CIRCUITRON CORPORATION SUPERFUND SITE



# Iron Time-Series Graph Deep Wells CIRCUITRON CORPORATION SUPERFUND SITE



**Lead Time-Series Graph  
Deep Wells  
CIRCUITRON CORPORATION SUPERFUND SITE**



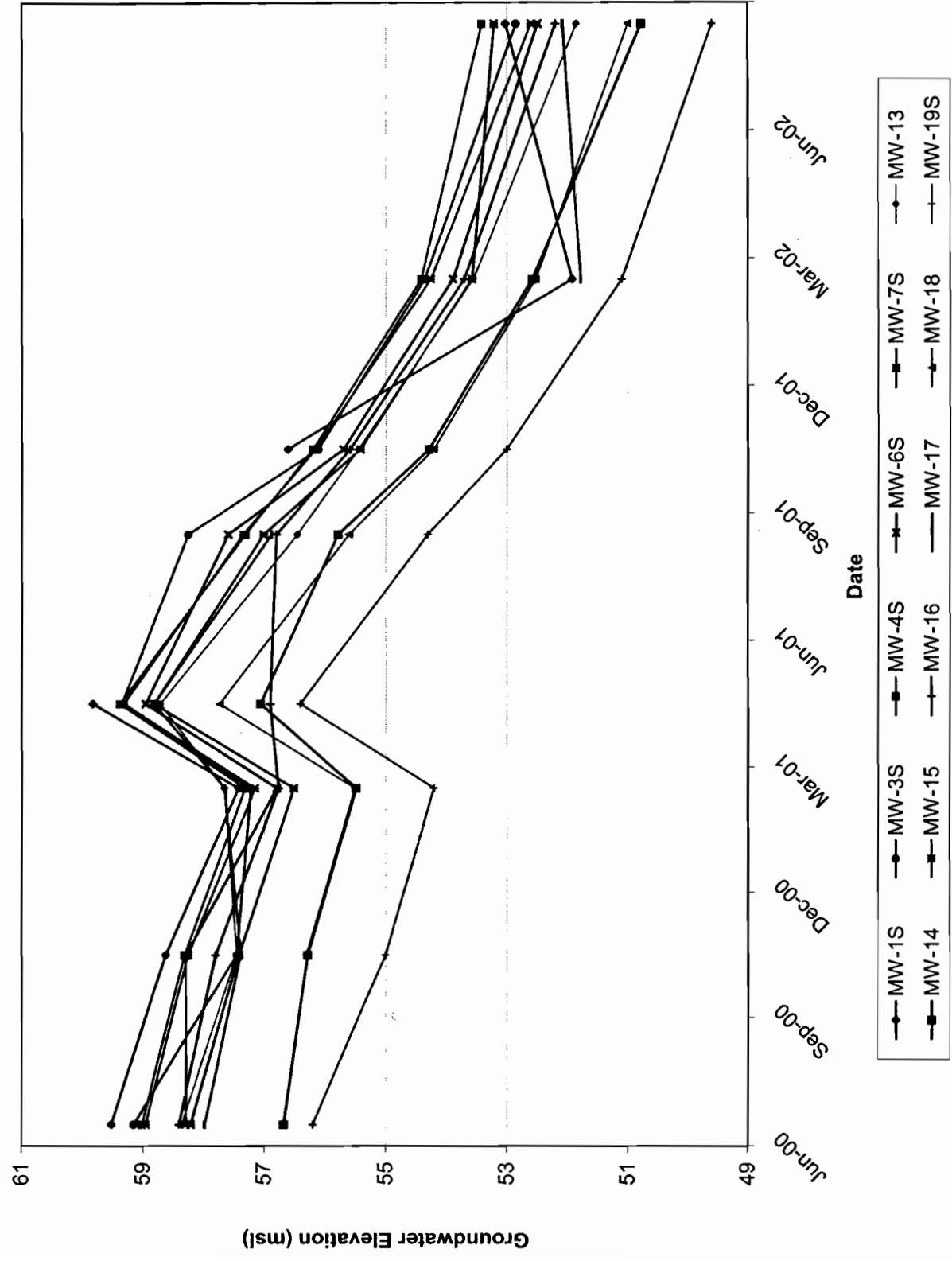


## Appendix C

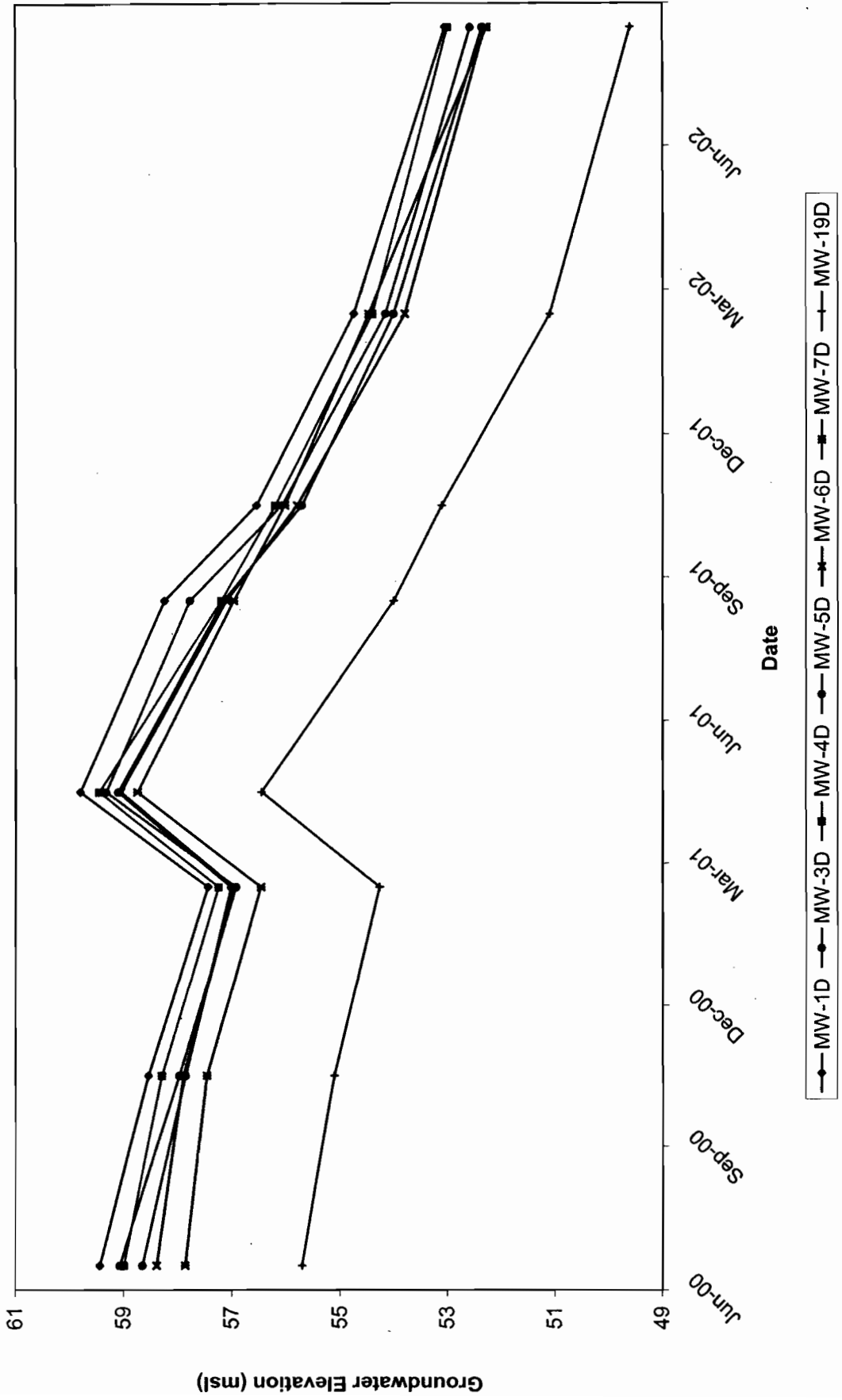
**Appendix C**

**Hydrographs for Shallow & Deep Wells**

### Hydrograph of Shallow Wells CIRCUITRON CORPORATION SUPERFUND SITE



# Hydrograph of Deep Wells CIRCUITRON SUPERFUND SITE

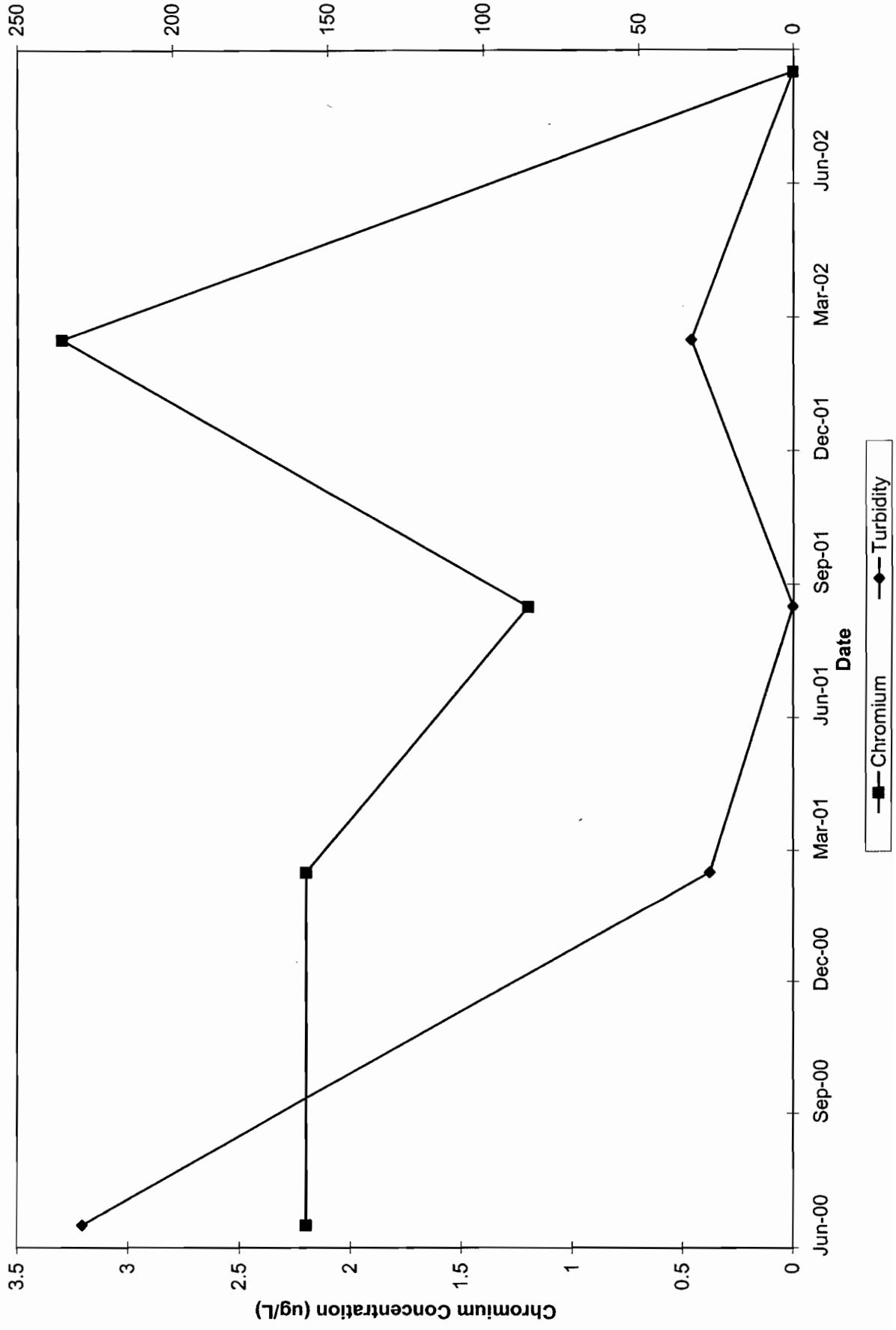


## Appendix D

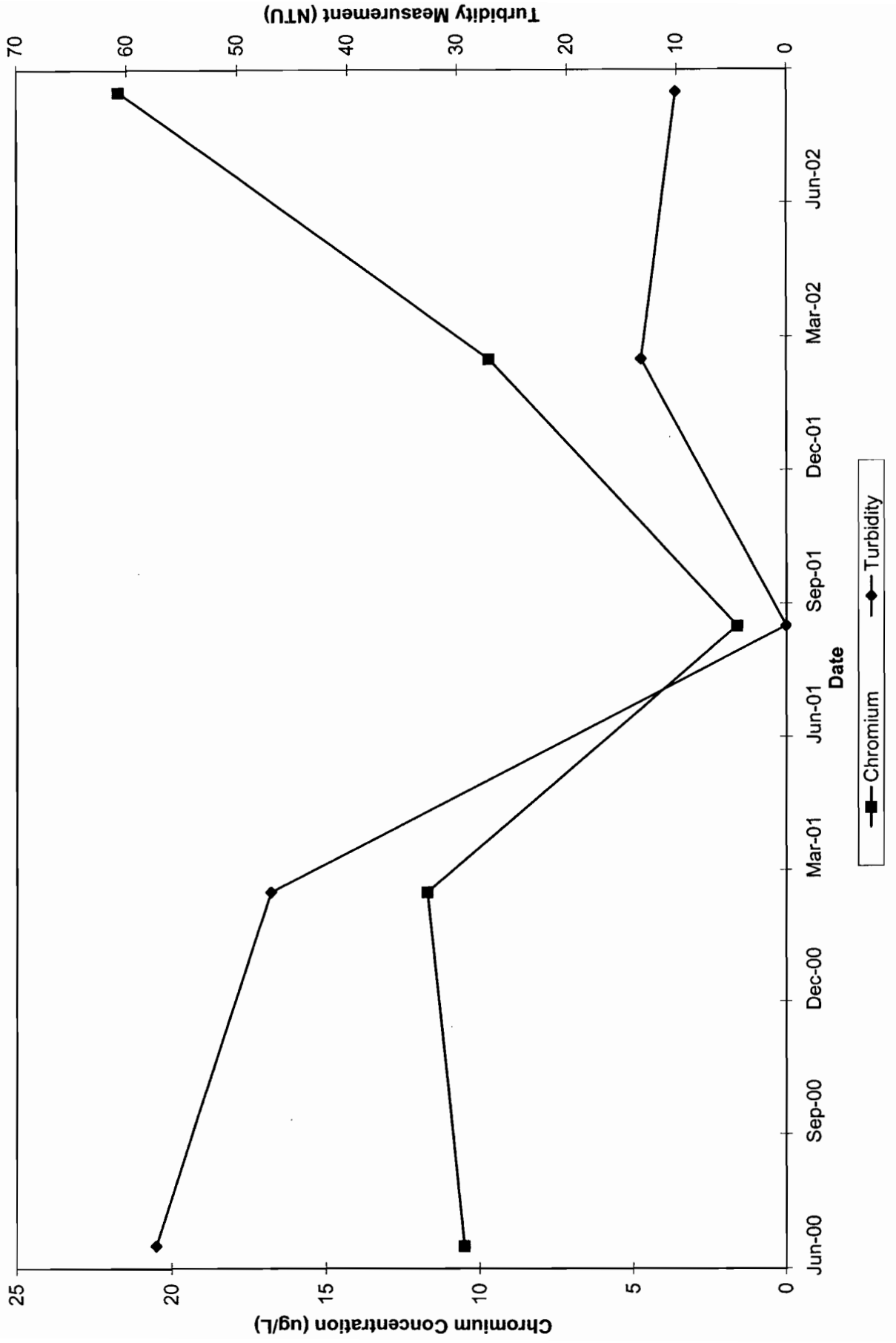
**Appendix D**

**Chromium vs. Turbidity**

**Comparison of Chromium Concentrations to Turbidity in Groundwater at MW-1S**  
CIRCUITRON CORPORATION SUPERFUND SITE

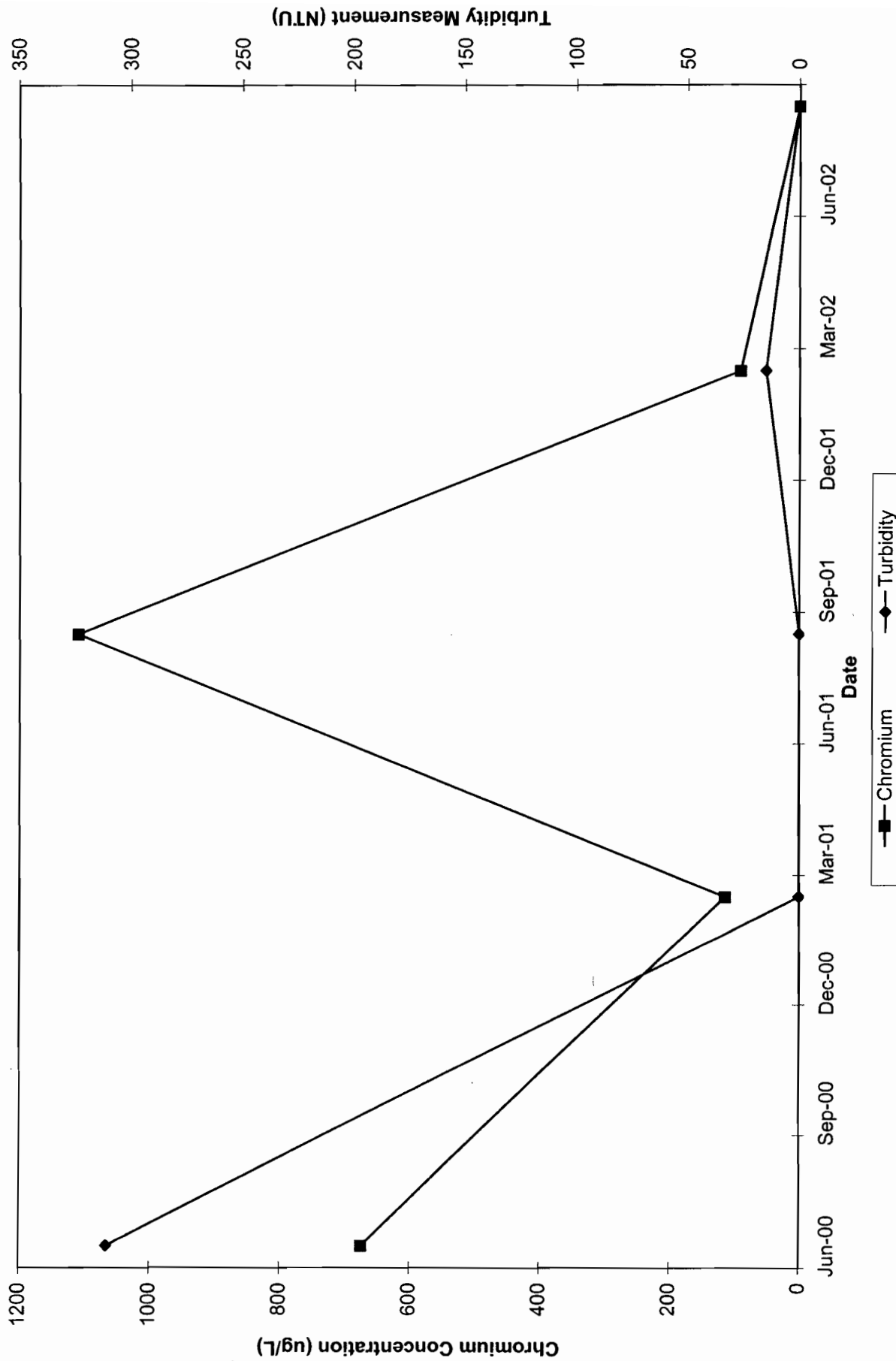


Comparison of Chromium Concentrations to Turbidity in Groundwater at MW-3S  
CIRCUITRON CORPORATION SUPERFUND SITE

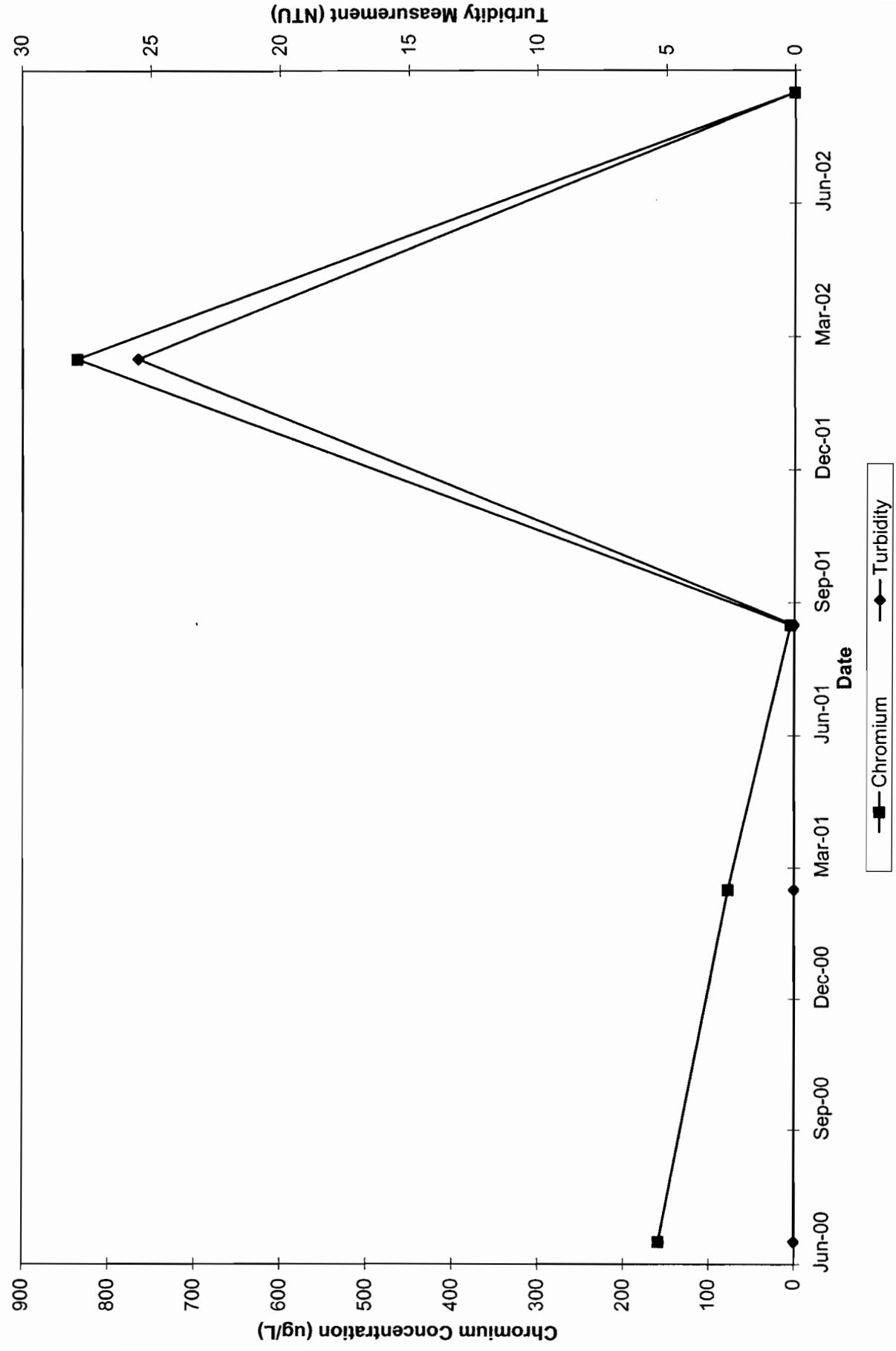




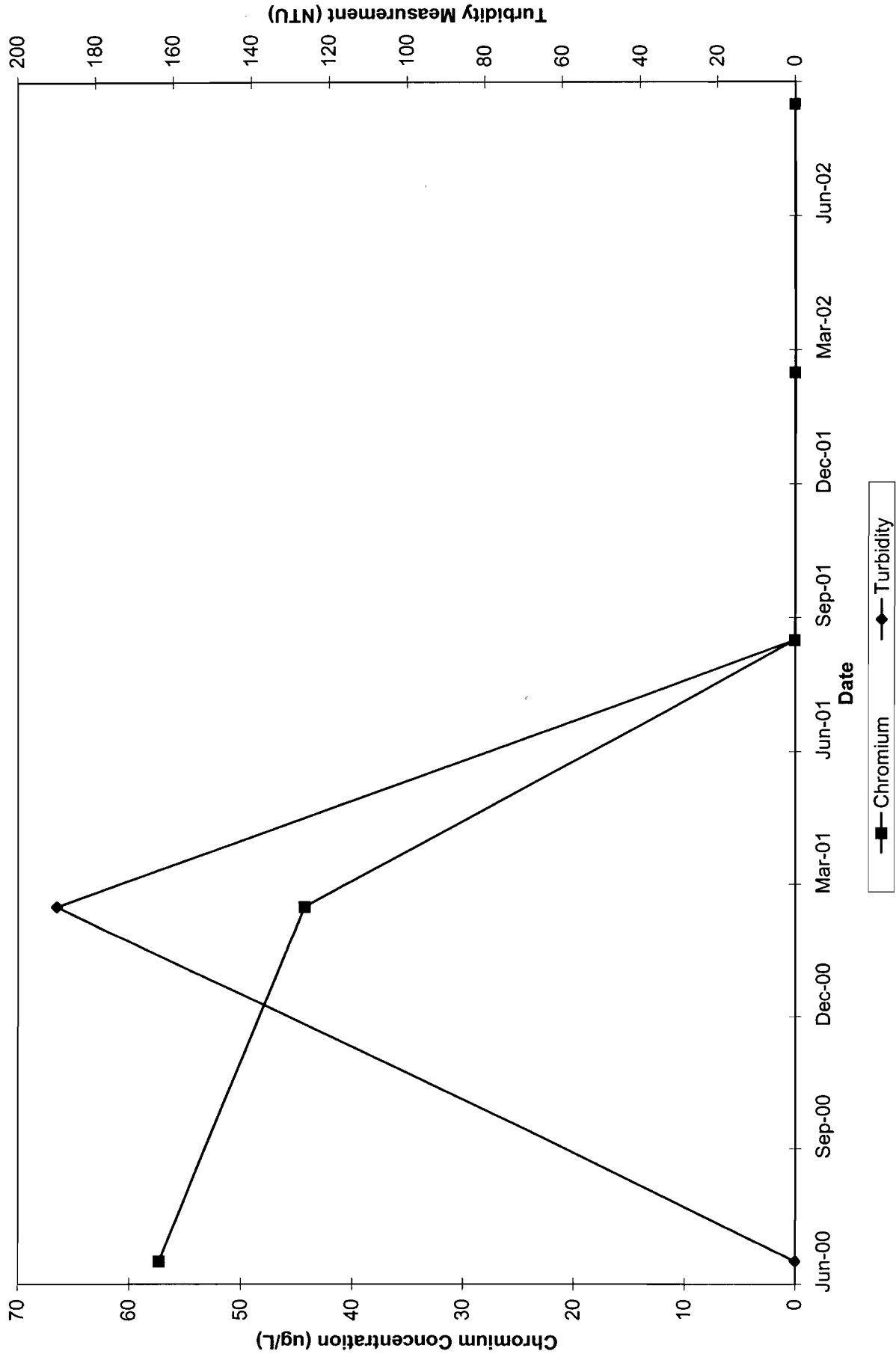
**Comparison of Chromium Concentrations to Turbidity in Groundwater at MW-4S  
CIRCUITRON CORPORATION SUPERFUND SITE**



**Comparison of Chromium Concentrations to Turbidity in Groundwater at MW-6S  
CIRCUITRON CORPORATION SUPERFUND SITE**



**Comparison of Chromium Concentrations to Turbidity in Groundwater at MW-7S**  
CIRCUITRON CORPORATION SUPERFUND SITE



**Comparison of Chromium Concentrations to Turbidity in Groundwater at MW-19S**  
**CIRCUITRON CORPORATION SUPERFUND SITE**

