

Transmitted via Overnight Delivery

July 14, 2006

Mr. Mark Mateunas Bureau of Hazardous Site Control New York State Department of Environmental Conservation 625 Broadway, 12th Floor Albany, NY 12233-7012

Re: McKesson Envirosystems Bear Street Site Syracuse, New York Site No. 07-34-020 BBL Project #: 0260.26003 #10

Dear Mr. Mateunas:

This *Biannual Process Control Monitoring Report* (Biannual Report) for the McKesson Envirosystems, Bear Street Site (the site), located at 400 Bear Street in Syracuse, New York has been prepared by Blasland, Bouck & Lee, Inc., an ARCADIS company (BBL), on behalf of McKesson Corporation (McKesson), to present a description of the operation and maintenance (O&M) activities conducted and the monitoring results obtained during the period from July 2005 through December 2005. This report has been prepared in accordance with the requirements of the New York State Department of Environmental Conservation- (NYSDEC-) approved *Site Operation and Maintenance Plan* (BBL, Revised August 1999) and a December 29, 1999 letter from David J. Ulm of BBL to Michael J. Ryan, P.E. of the NYSDEC, presenting the long-term process control monitoring program as an addendum to the Site O&M Plan. The Site O&M Plan and the addendum are collectively referred to herein as the O&M Plan.

The site is divided into two operable units: Operable Unit No. 1 (OU No. 1) - Unsaturated Soil and Operable Unit No. 2 (OU No. 2) - Saturated Soils and Groundwater. As a part of the NYSDEC-selected remedy for both of these operable units, there has been and continues to be ongoing O&M activities. Since completing the OU No. 1 remedial activities in 1994/1995 and commencing the OU No. 2 in-situ anaerobic bioremediation treatment activities in July 1998, the details regarding the O&M activities and the results of the process control monitoring program have been provided to the NYSDEC in biannual reports. A site description and history, along with a description of the remedial actions completed and the ongoing O&M activities being conducted, were detailed in the previous biannual reports, including BBL's August 2001 Biannual Report covering the period from July 2000 through December 2000. That information has not changed and is not repeated herein.

During this reporting period (July 2005 through December 2005), no substantial system repairs were required and no unusual observations were made regarding system operations. The Area 3 in-situ anaerobic bioremediation treatment system has operated satisfactorily during this reporting period without

interruption and approximately 764,000 gallons of water were pumped from the withdrawal trench and introduced into the Area 3 infiltration trenches as detailed herein.

The NYSDEC was notified of the November 2005 process control monitoring event (including hydraulic, biological, and chemicals of concern [COC] monitoring) prior to the commencement of the monitoring activities. Based on your June 2, 2005 telephone conversation with BBL (Cathy Geraci), the NYSDEC approved the elimination of the biological monitoring activities from the Process Control Monitoring Program. The NYSDEC, however, did not approve the changes to the COC monitoring activities proposed in the November 2004 *Biannual Process Control Monitoring Report*. This decision was documented in BBL's June 2005 Biannual Report to the NYSDEC. The June 2005 monitoring event was the first round of the revised Process Control Monitoring Program and that program is detailed in Table 1.

The information provided in this letter has been organized into the following sections:

- <u>I. RAMM and Suga-Lik[®] Introduction Activities</u> A description of the Revised Anaerobic Mineral Media (RAMM) and Suga-Lik[®] (Blackstrap Molasses) introduction activities conducted between July 2005 and December 2005.
- <u>II. Hydraulic Process Control Monitoring</u> A description of the results of the hydraulic control monitoring activities conducted between July 2005 and December 2005.
- <u>III. COC Process Control and Biannual Groundwater Monitoring Program</u> A description of the November 2005 results of the COC process control and biannual groundwater monitoring program, and a summary of the COC data obtained at the site from 1989 through November 2005.
- <u>IV. Conclusions</u> Conclusions based on the results of the process control monitoring activities.
- <u>V. Recommendations</u> Recommendations for the in-situ anaerobic bioremediation treatment program and monitoring activities.

I. RAMM and Suga-Lik[®] Introduction Activities

Based on the results of the process control monitoring activities, the continued addition of RAMM into each of the three areas and the continued addition of Suga-Lik[®] (with the RAMM) in Areas 1 and 3, and downgradient of Area 2 were recommended in the June 2005 *Biannual Process Control Monitoring Report* to further stimulate the anaerobic biodegradation of the COCs. Specifically, the RAMM and Suga-Lik[®] introduction activities listed below have been conducted. See Figure 1 for referenced locations.

- Continued to introduce approximately 100 gallons of RAMM-amended groundwater into each of the three areas on a monthly basis.
- Continued to add Suga-Lik[®] with RAMM into the two Area 1 infiltration trenches on a monthly basis by manually filling each of the standpipes located in these trenches. Suga-Lik[®] has been added during these monthly RAMM introduction activities to provide an easily metabolized carbon source to further stimulate the growth of the indigenous bacteria. Suga-Lik[®] provides electron donors, while RAMM provides nutrients and electron acceptors.

- Continued to introduce RAMM and Suga-Lik[®] on a monthly basis into three piezometers (PZ-G, PZ-Q, and PZ-R) located within the shallow hydrogeologic unit of Area 1 to better distribute a readily degradable carbon source that otherwise may not reach these areas if distributed through the infiltration trenches only.
- Continued to introduce RAMM on a monthly basis into PZ-S, WP-4, and WP-5 located downgradient of Area 1, near monitoring well MW-33. As identified in the previous Biannual Report, Suga-Lik[®] additions at these locations were discontinued in April 2005 to further stimulate the biodegradation rate of aniline in the vicinity of MW-33.
- Continued to introduce RAMM and Suga-Lik[®] on a monthly basis into piezometer PZ-W located downgradient of Area 2, near monitoring well MW-36.
- Continued to introduce RAMM and Suga-Lik[®] on a monthly basis into six well points (WP-1, WP-2, WP-3, WP-6, WP-7, and WP-8) within Area 3, near monitoring wells MW-27 and MW-28. These well points were installed during the August 2004 supplemental remedial activities.

Approximately 10 gallons of the RAMM/Suga-Lik[®] solution has been introduced into each of the aforementioned piezometers and well points, and approximately 100 gallons of RAMM and/or Suga-Lik[®] solution has been introduced into Areas 1, 2, and 3 on a monthly basis. The amount of Suga-Lik[®] added to the RAMM has been proportional to the levels of COCs detected, at the dilution ratio of approximately 1,000:1.

II. Hydraulic Process Control Monitoring

As part of the hydraulic process control monitoring activities, groundwater-level measurements were obtained at existing monitoring wells and piezometers that are screened entirely within the sand layer of the shallow hydrogeologic unit and located in and around each of the three areas. Additionally, a groundwater-level measurement was obtained from a staff gauge located in the Barge Canal adjacent to the site. The hydraulic process control monitoring activities were conducted on October 31, 2005. The monitoring locations are shown on Figure 1.

Table 2 summarizes the groundwater level measurements obtained during the fall 2005 hydraulic monitoring event, as well as those obtained since June 1998 (immediately prior to commencing the in-situ anaerobic bioremediation treatment activities). Figure 2 depicts the potentiometric surface of the site's shallow hydrogeologic unit using the October 31, 2005 data set, which is consistent with previous hydraulic monitoring events. The results and corresponding conclusions of the hydraulic process control monitoring are also summarized below.

- A closed-loop hydraulic cell continues to be maintained in Area 3, as shown on Figure 2.
- The groundwater withdrawal rate in Area 3 ranged from approximately 0.92 gallon per minute (gpm) to 4.28 gpm. These rates continue to induce a higher hydraulic gradient across the area of relatively higher concentrations of COCs within Area 3 (relative to baseline conditions), while maintaining hydraulic containment in Area 3.
- In Area 3, approximately 75% of the recovered groundwater continues to be introduced to the secondary infiltration trench "B" and the remaining 25% continues to be introduced to the secondary infiltration trench "A." This introduction of recovered groundwater into the secondary

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infiltration trenches increases the rate at which RAMM-amended groundwater moves through the area of relatively higher concentrations of COCs (between the secondary infiltration and recovery trenches). The withdrawal of groundwater continues to induce a hydraulic gradient in Area 3 from perimeter monitoring wells MW-23S, MW-25S, and MW-17R toward the withdrawal trench.

- No discernable, long-term hydraulic effects were identified at or near Areas 1 and 2 as a result of introducing RAMM or RAMM/Suga-Lik[®] into these areas on a monthly basis.
- The hydraulic data obtained over the 7-year operating history of the treatment system in Area 3 has consistently indicated no discernable effect on the hydraulic gradient of the deep hydrogeologic unit.
- The weekly conductivity measurements of groundwater pumped from the withdrawal trench in Area 3 ranged from 1.12 millisiemens per centimeter (mS/cm) to 2.24 mS/cm, which is within the range of the conductivity levels measured prior to system operation (1 mS/cm to 4 mS/cm). These measurements are well below the measured conductivity of the deep unit, which is greater than the calibration range of the field instrument (10 mS/cm). These data indicate that the operation of the Area 3 treatment system has not caused the freshwater/saltwater interface to upcone to the base of the withdrawal trench.

III. COC Process Control and Biannual Groundwater Monitoring Program

The COC process control and biannual groundwater monitoring activities were conducted on October 31, 2005 through November 4, 2005, in accordance with the long-term COC process control monitoring program presented in the O&M Plan. In addition, the following groundwater quality parameters were also measured in the field during the November 2005 COC sampling event: temperature, conductivity, dissolved oxygen (DO), and oxidation/reduction potential (ORP). The existing monitoring wells and piezometers that were used to conduct the long-term process control monitoring program and a schedule for implementing this program were provided in Table 1. The monitoring locations are shown on Figure 1.

In accordance with the requirements of the NYSDEC-approved monitoring program, laboratory analytical results for the November 2005 samples were validated. A summary of the validated COC groundwater analytical results is presented in Table 3 and shown on Figures 3 and 4. These figures also present the COC groundwater analytical results obtained during the biannual monitoring events conducted since October 2003, collectively presenting the results obtained after the first five years of implementing the insitu anaerobic bioremediation treatment activities. The COC groundwater analytical results obtained prior to October 2003 are presented in Attachment A. Copies of the validated analytical laboratory reports associated with the November 2005 sampling event are provided under separate cover. A summary of the COC analytical results is provided below for each of the three areas, and the downgradient perimeter monitoring locations. The presence or absence of non-aqueous phase liquid (NAPL) was also assessed in existing monitoring wells and piezometers during the process control monitoring event. NAPL was not identified in any of the monitoring wells or piezometers used during the process control monitoring program.

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Area 1

- As shown on Figure 3 and in Attachment A, the COC concentrations detected in groundwater samples collected from monitoring wells within Area 1 were generally low, ranging from not detected to concentrations just slightly greater than their respective NYSDEC Groundwater Quality Standard. These data demonstrate a significant decrease in COC concentrations in Area 1 since commencement of the in-situ anaerobic bioremediation treatment activities, except for aniline concentrations measured at MW-33. For example, the aniline concentration detected at MW-32 was 6,300 parts per billion (ppb) in September 1998, but aniline has not been detected above the NYSDEC Groundwater Quality Standard at this location since May 2003. Similarly, the aniline concentration detected at TW-01 in February 1999 was 9,000 ppb, but aniline has not been detected above the NYSDEC Groundwater Quality Standard of 5 ppb since October 2002.
- The aniline concentration (3,500 ppb) detected in the groundwater sample collected from the monitoring well located immediately downgradient of Area 1 (MW-33) was approximately 50% higher in November 2005, compared to the aniline concentrations detected in June 2005 (1,800 ppb). As previously noted, Suga-Lik[®] additions at locations near MW-33 were discontinued in April 2005 to further stimulate the biodegradation rate of aniline in the vicinity of this monitoring well. Aniline was not detected in the groundwater sample collected from the monitoring well located downgradient of MW-33 (MW-3S).

Area 2

- As shown on Figure 3 and in Attachment A, the COC concentrations detected in groundwater samples collected from monitoring wells within Area 2 were generally low, with the exception of the aniline concentration (14,000 ppb) detected in the groundwater sample collected from TW-02RR, which is an approximate 60% increase from June 2005 (8,400 ppb). Since commencement of the bioremediation treatment activities, the COC concentrations at this location have significantly decreased: N,N-dimethylaniline and methylene chloride were not detected in November 2005 compared to detected at TW-02RR in November 2005 was slightly higher than June 2005, but is approximately 83% lower than the concentrations previously detected prior to the completion of the August 2004 supplemental remedial activities conducted in Area 2: aniline was detected in June 2004 at a concentration of 82,000 ppb, compared to 14,000 ppb in November 2005.
- In the November 2005 groundwater sample collected from monitoring well MW-36 (located downgradient of Area 2), the aniline concentration (1,600 ppb) was slightly higher than June 2005 (1,200 ppb). No other COCs were detected in this sample at concentrations greater than their respective NYSDEC Groundwater Quality Standard, except for benzene and acetone, which were detected at 3.6 ppb and 77 ppb, respectively.

<u>Area 3</u>

• As presented on Figure 4 and in Attachment A, the concentrations of most COCs that were previously detected at Area 3 monitoring locations above their respective NYSDEC Groundwater Quality Standards have decreased or remained relatively the same since implementation of the insitu anaerobic bioremediation treatment activities, except at MW-27 and MW-30, where aniline concentrations increased from June 2005 (see below).

- The aniline concentration detected in the groundwater sample collected during November 2005 from monitoring well MW-27 (37,000 ppb) was higher than the previous detection of 5,200 ppb (June 2005). The other COCs detected in the groundwater sample collected from MW-27 in November 2005 were relatively low, consistent with previously detected concentrations.
- In the November 2005 groundwater sample collected from monitoring well MW-30 (located downgradient of Area 3), the aniline concentration (240 ppb) was anomalously high. No other COCs were detected in this sample at concentrations greater than their respective NYSDEC Groundwater Quality Standard. Aniline was not detected in groundwater samples collected from MW-18, which is downgradient of MW-30.
- Monitoring well MW-8SR is located in the center of Area 3 and within the area that has been identified as containing relatively higher concentrations of COCs (see Figure 4). The November 2005 groundwater sample collected at MW-8SR had significantly lower COC concentrations compared to those detected prior to the completion of the August 2004 supplemental remedial activities conducted in Area 3: the total COC concentration was reduced approximately 95% from 1,313,780 ppb in June 2004 (in MW-8S) to 32,484 ppb in November 2005.
- Monitoring well MW-28 is also located within Area 3 and historically had exhibited relatively higher concentrations of methylene chloride and aniline. The methylene chloride concentrations at this location have decreased from 64,000 ppb (September 1998) to non-detect since October 2003. The aniline concentrations detected since the August 2004 supplemental remedial activities (640 ppb in November 2004, 630 ppb in June 2005, and 380 ppb in November 2005) are the lowest concentrations detected at this location since September 2000. Figure 2 of Attachment A presents the data for this well from September 2000 to May 2003. The other COCs have generally been not detected in the groundwater samples collected from MW-28 or detected at concentrations just slightly greater than their respective NYSDEC Groundwater Quality Standard.

Downgradient Perimeter Monitoring Locations

As presented on Figure 4, COCs were not detected above their respective NYSDEC Groundwater Quality Standards at any of the downgradient perimeter monitoring locations during November 2005.

IV. Conclusions

The process control monitoring data presented in this Biannual Report will continue to be used to monitor the effectiveness of the in-situ anaerobic bioremediation treatment activities. The conclusions presented below are based on the process control monitoring data obtained to date.

- A closed loop hydraulic cell continues to be maintained in Area 3.
- Operation of the Area 3 treatment system has not caused the freshwater/saltwater interface to upcone to the base of the withdrawal trench.
- COCs were not detected above the NYSDEC Groundwater Quality Standards at the perimeter sampling locations in November 2005, which is consistent with prior perimeter groundwater data, obtained in some cases since 1989.

- The COC concentrations detected in the groundwater samples collected from Area 1 since the insitu anaerobic bioremediation treatment activities began in 1998 demonstrate a significant decrease in COC concentrations since commencement of these activities. The COC concentrations detected in this area were mostly not detected. A few COCs (e.g., benzene, ethylbenzene, xylene) were present at concentrations slightly greater than their respective NYSDEC Groundwater Quality Standard.
- In the area immediately downgradient of Area 1, aniline has been detected in MW-33. The June 2005 aniline concentration (1,800 ppb) was approximately 33% lower than the November 2004 concentration (2,700 ppb). However, the aniline concentration most recently observed in November 2005 (3,500 ppb) indicates an approximate 50% increase from June 2005.
- The COC groundwater concentrations within Area 2 have been and continue to be relatively low, with the exception of aniline detected at monitoring location TW-02RR. After completing the August 2004 supplemental remedial activities, however, the aniline concentration detected at TW-02RR showed an approximate 83% decrease: 82,000 ppb in June 2004 compared to 14,000 ppb in November 2005. The November 2005 aniline concentration is higher than the concentrations detected in November 2004 (7,100 ppb) and June 2005 (8,400 ppb). A few COCs (e.g., acetone, benzene, xylene, N,N-dimethylaniline) were present at concentrations slightly greater than their respective NYSDEC Groundwater Quality Standard.
- In the November 2005 groundwater sample collected downgradient of Area 2 (MW-36), the aniline concentration (1,600 ppb) increased from the June 2005 concentration (1,200 ppb). Both the June and November 2005 aniline concentrations at MW-36 are anomalous in that historical concentrations indicated a general decreasing trend and the majority of prior samples exhibited aniline concentrations at or below 100 ppb.
- The concentrations of most COCs detected at Area 3 monitoring locations above their respective NYSDEC Groundwater Quality Standard have decreased or remained relatively the same since commencement of the in-situ anaerobic bioremediation treatment activities in 1998, with the exception of MW-27 and MW-30. Both aniline and BTEX compounds increased at MW-27, while only aniline increased at MW-30 (all other COCs at MW-30 remained below NYSDEC Groundwater Quality Standards). In November 2005, aniline was present at MW-27 at a concentration of 37,000 ppb, while in MW-30 the aniline concentration was 240 ppb.
- The total COC concentration measured at MW-8SR in November 2005 is approximately 95% lower than as measured in June 2005; however, aniline concentrations are still elevated (e.g., 32,000 ppb in November 2005).

V. Recommendations

Given the slow rate of aniline anaerobic biodegradation and its continued elevated concentration in groundwater samples, modifications to the existing treatment activities are proposed for Areas 1, 2, and 3. An in-situ aerobic bioremediation treatment program is proposed as an alternate approach to lower aniline concentrations at each Area, and would consist of replacing the RAMM and Suga-Lik[®] with an oxygen source and macronutrients. The oxygen source would be dilute hydrogen peroxide (H₂O₂), and the macronutrients would include nitrogen and phosphorus in the form of Miracle-Gro[®]. This modification should result in a change in environmental conditions in the shallow hydrogeologic unit, switching the

reducing (anaerobic) conditions to oxidizing (aerobic) conditions. The potential for aerobic biodegradation of aniline at the Site was established during the successful *in situ* biodegradation of unsaturated soils performed in 1994/1995 and confirmed in the treatability study conducted in 1996. Under oxidizing conditions, the other COCs present at the Site would also continue to be degraded.

The use of H_2O_2 as an oxygen source for groundwater is well established, with 1 mole of H_2O_2 producing $\frac{1}{2}$ mole of oxygen, as shown below.

catalase
H₂O₂
$$\rightarrow$$
 $\frac{1}{2}O_2 + H_2O$

Based on this relationship, 100 milligrams per liter (mg/L) of H_2O_2 will produce 50 mg/L of oxygen. H_2O_2 will be added to the groundwater at a concentration of 100 mg/L, and nutrients will be added at a carbon:nitrogen:phosphorus ratio of 50:25:10. Therefore, to create a 100 mg/L H_2O_2 solution, approximately two liters of 3 percent H_2O_2 (available at any local grocery store) will be added to 150 gallons of water. At this concentration of H_2O_2 , the indigenous bacteria will not be lysed.

Starting approximately 1 week after NYSDEC approval, H_2O_2 /nutrient-amended groundwater would be injected into the filtration trenches in Areas 1, 2, and 3 twice per week for 4 weeks, then once per week for 2 months or until aerobic conditions are established. The H_2O_2 /nutrient-amended groundwater injection process would be consistent with the existing RAMM introduction activities at each Area. Additionally, H_2O_2 /nutrient-amended groundwater would be introduced into piezometers in Area 1 (PZ-S), Area 2 (PZ-W), and Area 3 (PZ-E) to better distribute DO into the shallow hydrogeologic unit. DO levels would be measured in the field once per week until aerobic conditions in groundwater are apparent (i.e., DO greater than 2 mg/L). The effectiveness of aerobic biodegradation and its continuous application would be assessed using the aniline and DO data collected from three sampling events: a biannual sampling event, one intermediate sampling event, and a second biannual sampling event. The anticipated schedule is as follows:

Date	Milestone
Week of June 5, 2006	Biannual sampling event
Week of July 31, 2006	NYSDEC approval of aerobic bioremediation treatment activities
Week of August 7, 2006	H ₂ O ₂ /nutrient-amended groundwater would be injected twice per week
Week of August 14, 2006	• H ₂ O ₂ /nutrient-amended groundwater would be injected twice per week
Week of August 21, 2006	H ₂ O ₂ /nutrient-amended groundwater would be injected twice per week
Week of August 28, 2006	H ₂ O ₂ /nutrient-amended groundwater would be injected twice per week
Week of September 4, 2006	 H₂O₂/nutrient-amended groundwater would be injected once per week Intermediate sampling event
Week of September 11, 2006	• H ₂ O ₂ /nutrient-amended groundwater would be injected once per week
Week of September 18, 2006	H ₂ O ₂ /nutrient-amended groundwater would be injected once per week
Week of September 25, 2006	H ₂ O ₂ /nutrient-amended groundwater would be injected once per week
Week of October 2, 2006	H ₂ O ₂ /nutrient-amended groundwater would be injected once per week
Week of October 9, 2006	H ₂ O ₂ /nutrient-amended groundwater would be injected once per week
Week of October 16, 2006	H ₂ O ₂ /nutrient-amended groundwater would be injected once per week
Week of October 23, 2006	H ₂ O ₂ /nutrient-amended groundwater would be injected once per week
Week of October 30, 2006	Biannual sampling event

The in-situ aerobic biodegradation treatment activities would be conducted in accordance with the site-specific Health and Safety Plan (BBL, 1999).

A letter report will be submitted to the NYSDEC approximately 60 days after data from the intermediate sampling and the relevant biannual process control monitoring sampling events are validated. This letter report will describe activities conducted to implement the in-situ aerobic bioremediation treatment activities and any operational problems encountered. It will also provide all data collected and an assessment of the approach.

As discussed in this report and summarized in Table 1, the monitoring activities conducted at the site are included in the Biannual Groundwater Monitoring Program and the revised Process Control Monitoring Program. The activities included in the Biannual Groundwater Monitoring Program will continue, and include the biannual collection of chemical and hydraulic data from downgradient perimeter wells/piezometers to determine whether or not groundwater that contains concentrations of COCs in excess of their respective NYSDEC Groundwater Quality Standard is migrating beyond the site boundary.

The first sampling event of 2006 was conducted the week of June 5, 2006. A summary of the O&M activities and the results of the process control monitoring activities will continue to be presented to the NYSDEC on a biannual basis.

If you have any questions or require additional information, please do not hesitate to contact me at (315) 446-9120.

Sincerely,

BLASLAND, BOUCK & EE, INC.

David J. Um Senior Vice President

JDL/plf Attachments

 cc: Mr. Jim Burke, P.E., New York State Department of Environmental Conservation Mr. Gerald J. Rider, Jr., New York State Department of Environmental Conservation Mr. Chris Mannes, New York State Department of Environmental Conservation Ms. Henriette Hamel, R.S., New York State Department of Health Ms. Jean A. Mescher, McKesson Corporation Mr. Christopher R. Young, P.G., de maximis, inc.

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Tables



TABLE 1

REVISED LONG-TERM HYDRAULIC AND COC PROCESS CONTROL MONITORING SCHEDULE

2005 BIANNUAL PROCESS CONTROL MONITORING REPORT McKESSON ENVIROSYSTEMS FORMER BEAR STREET FACILITY SYRACUSE, NEW YORK

Monitoring Location		npling Schedule
	First Sampling Event	Second Sampling Event
Upgradient		
MW-1	C	С
MW-3S	С	<u> </u>
MW-3D Area 1	H H	H
		с
TW-01	С	н
MW-6D		
MW-9S	C	С
MW-9D	<u>н</u>	Н
MW-31	C	С
MW-32	<u> </u>	<u> </u>
MW-33	<u> </u>	С
PZ-F	<u>н</u>	Н
PZ-G	Н	<u>H</u>
PZ-HR	Н	Н
PZ-P	Н	Н
PZ-Q	н	нн
PZ-R	н	Н
PZ-S	H	Н
Area 2		
TW-02RR	С	<u> </u>
PZ-9D	н	н
MW-34	С	C
MW-35	С	С
MW-36	С	С
PZ-I	н	н
PZ-J	Н	н
PZ-T	H	н
PZ-U	H	н
PZ-V	Н	н
PZ-W	Н	н
Area 3		
MW-8SR	C	С
MW-27	С	С
MW-28	С	С
MW-29	С	С
MW-30	С	C
PZ-A	н	н
PZ-B	Н	H

TABLE 1 REVISED LONG-TERM HYDRAULIC AND COC PROCESS CONTROL MONITORING SCHEDULE

2005 BIANNUAL PROCESS CONTROL MONITORING REPORT McKESSON ENVIROSYSTEMS FORMER BEAR STREET FACILITY SYRACUSE, NEW YORK

	Annual Samp	ling Schedule
Monitoring Location		Second Sampling Event
PZ-C	H	H
PZ-D	H	Н
PZ-E	Н	Н
PZ-K	н	Н
PZ-L	Н	н
PZ-M	Н	н
PZ-N	Н	Н
PZ-0	Н	Н
MW-11S	H	Н
MW-11D	Н	Н
Downgradient Perimeter Monitori	ng Locations	
MW-17R	C	С
MW-18	С, Н	С, Н
MW-19	С, Н	С, Н
MW-231	С, Н	С, Н
MW-23S	C, H	C, H
MW-24SR	<u> </u>	С, Н
MW-24DR	н	С, Н
MW-25S	С, Н	С, Н
MW-25D	С, Н	<u> </u>
PZ-4S	C	
PZ-4D	С, Н	Н
PZ-5S		С
PZ-5D	<u>_H</u>	С, Н

<u>Notes:</u>

- 1. H = Hydraulic Monitoring (Groundwater Level Measurements).
- 2. C = Monitoring for the Chemicals of Concern (COCs).
- 3. The hydraulic monitoring identified in this table will be conducted on a semi-annual basis. The hydraulic monitoring also includes measuring the conductivity of groundwater recovered from Area 3 from a sampling port located before the equalization tank.
- 4. Field groundwater parameters including pH, temperature, conductivity, dissolved oxygen (DO), and oxidation/reduction potential (ORP) are measured during each COC sampling event.
- 5. Each of the monitoring wells and piezometers used for hydraulic and COC monitoring during the semi-annual monitoring event are checked for the presence (if any) of non-aqueous phase liquid (NAPL).
- Based on the results obtained, the scope and/or the frequency for the hydraulic and/or COC components of the long-term process control monitoring program, as detailed herein, may be modified. Any modifications would be made in consultation with the New York State Department of Environmental Conservation (NYSDEC).
- 7. This table is based on the NYSDEC-approved Operation and Maintenance (O&M) Plan (BBL, Revised August 1999), including the NYSDEC-approved December 29, 1999 Addendum with the modifications detailed in the October 2004 Biannual Process Control Monitoring Report.

TABLE 2 SUMMARY OF SELECT GROUNDWATER LEVEL MEASUREMENTS

2005 BIANNUAL PROCESS CONTROL MONITORING REPORT McKESSON ENVIROSYSTEMS - FORMER BEAR STREET FACILITY, SYRACUSE, NEW YORK

	Reference	6/10/98	6/22/98	7/6/98	7/20/98	7/27/98	8/5/98	8/10/98	8/10/98	8/11/98	. 8/11/98	8/12/98	8/12/98	10/16/98	11/17/98	12/16/98	12/22/98	1/6/99	1/13/99-
Location	Elevation (feet AMSL)	Static	100		Week 1	Week 2	Week 3	(morning) Week 4	(afternoon) Week 4	(morning) Week 4	(afternoon) Week 4	(morning) Week 4	(afternoon) Week 4	Week 13	Week 18	Week 22	Week 23	Week 25	Week 26
Canal	393.39*	362.91	363.37	363.72	363.08	363.08	362.94	TTOUR 4	362.78	362.94	TTOUR +		362.84	363.27	TYCOR IO	363,14	362.21	363.11	VIVOR 20
Collection Sump	372.81	364.33	363.08	363.68	362.50	361.31	361.83	361,89	362.14	361.00	361,71	361,95	362.31	362.01	361.48	361.75	363.09	361.93	361.73
MW-3S	376.54	365,93	366.25	367.82	366.20	001.01	001.00	365.29	002.14	001.00	001111	001.00	002.01	002.01	365.25	365.67	366.81	365.67	365.25
MW-3D	375.56	365.63	365.87	366.16			364.97	364.85						365.08	365.00	365.04		365.04	364.91
MW-6D	377.07	365.75	366.01	366.29										365.25	365.15	365.23	365.36	365.23	365.06
MW-8D	374.68	365.51	365.74	366.05			364.80		364.67	364.79	364.88	364.87	364.87	364.93	364.83	364.86		364.88	364.74
MW-9D	376.76***	365.78					365.14	365.10						365.25	365.16	365.22	365.36	365.26	365.08
MW-11D	373.68	365.46	365.67	365.29			364.62	364.49	364.50	364.62		364.69	364.67	364.77	364.68	364.73		364.73	364.57
MW-11S	373.50	364.88	364.62	365.11	364.12	363.70	363.58	363.52	363.58	363.73		363.69	363.74	363.74	363.69	363.69	364.27	363.79	363.61
MW-18	372.57	362.64													361.90	361.93	362.05	362.05	361.84
MW-19	376.00	362.42													361.78	361.84	361.98	361.87	361.89
MW-231	372.77	365.04	365.34	365.72			364.34		364.45	364.16			364.43	364.43	364.34	364.36		364.47	364.26
MW-23S	372.61	363.99	363.43	364.04	362.92	362.50	362.41		362.40	362.66		362.54	362.67	362.68	362.56	362.52	363.35	362.66	362.46
MW-24DR	375.14	365.41													364.63	364.67	364.81	364.69	364.54
MW-24SR	375.55	365.15	365.32	365.66	364.91	364.45	364.27		364.20				364.36	364.47	364.37	364.44	364.66	364.50	364.33
MW-25D	373.67	365.43						_							364.74	364.76		364.77	364.64
MW-25S	373.39	363.91	363.64	364.14	363.21	362.95	362.75		362.75			362.89	362.96	363.01	362.89	362.87	363.48	362.96	362.79
PZ-4D	376,11	365.46	365.73	366.01	365.21	364.83	364.63		364.54	364.67	364.75	364.74	364,70	364.80	364.69	364.73	364.87	364.72	364.55
PZ-5D	375.58	365.66	365.91	366.18	365.36	365.07	364.84		364.76	364.88	364.94	364.93	364.91	364.99	364.89	364.93	365.09	364.94	364.78
PZ-8D	375.83	365.90	366.11	366.35			365.25	365.13	365.83					365.35	365.27	365,33	365,48	365.33	365,19
PZ-9D	377.29	365.73					365.47	365.28						365.12	365.03	365.08	365.24		364.94
PZ-A	373.94	364.49	363.69	364.28	363.13	362.58	362.56	362.62	362.76	363.39	362.82	362.64	363.02	362.75	362.56	362.60	364.04	362.72	362.56
PZ-B	373.92	364.49		364.21	363.02	362.62	362.50	363.26	362.71	363.00	362.97	362.59	363.01	362.67	362.54	362.51	364.27	362.62	363.45
PZ-C	374.85	365.69		367.02	365.93	365.97	365.47	365.38	365.30	365.54	365.99	365.53	365.54	365.56	365.52	365.52	365.97	365.18	365.02
PZ-D	375.12	365.78	366.25	366.99	365.99	365.91	365.53	365.37	365.30	365.53	366.06	365.58	365.67	365.59	365.55	365.53	366.06	365.25	365.12
PZ-E	374.12	364.75	364.25	364.86	363.73	364.00	363.41	363.61	363.54	364.22	364.67	364.67	364.08	363.57	363.67	363.53	366.41	363.57	363.52
PZ-F	377.06	366.17					365.56	365.50						365.37	365.27	365.52	365.73	365.62	365.27
PZ-G	377.16	366.21	<u> </u>				365.66	365.60						365.46	365.36	365.60	365.76	365.71	365.44
PZ-HR	376.99	366.16			ļ		365.54							365.44	365.34	365.54	365.84	365.60	365.39
PZ-1	375.15	366.56	<u> </u>			ļ	365,86	365.64						365.88	365.57	365.90	366.59	366.05	365.76
PZ-J	374.89	366.15	<u> </u>				365.53	365.40						365.53	365.39	365.55	365.93	365.59	365.47
PZ-K	373.19	364.53		364.35	363.27	362.69	362.69	362.71	362.75	362.92	362.80	362.78	362.98	362.82	362.66	362.66	363.70	362.78	362.58
PZ-L	374.62	364.25		364.18	363.04	362.42	362.48	362.44		362.88	362.63	362.57	362.84	362.65	362.40	362.51	363.59	362.65	362.45
PZ-M	374.35	364.70		364.64	363.52	362.96	362.96	362.96	363.09	363.29	363.15	363.05	363.30	363.12	362.93	363.01	364.07	363.13	362.94
PZ-N	376.94**	365.79	366.37	367.06	365.99	365.91	365.53	365.39	365.33	365.55	365.97	365.58	365.59	365.59	365.55	365.56	366.09	365.31	365.12
PZ-O	375.36	364.29	363.68	364.29	363.21	362.84	362.72	362.87	362.78	363.05	362.97	362.80	363.03	362.81	362.74	362.75	363.74	362.87	362.68
PZ-P	376.89	366.25					365.65	365.60		ļ				365.52	365.39	365.61	365.78	365.73	365.44
PZ-Q	377.61	366.23					365.64	365.57					L	365.45	365.35	365.59	365.70	365.71	365.42
PZ-R	377.05	366.23		366.94			365.65	365.57		L				365.50	365.38	365.61	365.81	365.67	365.47
PZ-S	378.13	366.19				L	365.57	365.52						365.43	365.35	365.57	365.94	365.65	365.40
PZ-T	376.25	366.14					365.54	365.43						365.52	365.38	365.58	365.96	365.64	365.47
PZ-U	375.35	365.99		366.81			365.50	365.33						365.37	365.30	365.49	365.91	365.55	365.40
PZ-V	375.78	366.07					365.48	365.35						365.43	365.29	365.47	365.90	365.52	365.37
PZ-W	375.78	366.07					365.46	365.31						365.41	365.28	365.44	365.78	365.53	365.33

TABLE 2 SUMMARY OF SELECT GROUNDWATER LEVEL MEASUREMENTS

2005 BIANNUAL PROCESS CONTROL MONITORING REPORT McKESSON ENVIROSYSTEMS - FORMER BEAR STREET FACILITY, SYRACUSE, NEW YORK

	Reference	4/14/99	6/3/99	7/13/99	3/27/00	6/1/00	9/18/00	11/14/00	3/19/01	9/24/01	4/15/02	6/3/02	6/18/02	10/7/02	1/20/03	. 5/5/03	10/27/03	6/14/04	11/1/04	6/6/05	10/31/06
Location	Elevation (feet AMSL)	Week 39	Week 46	Week 52		1997 B.	1. 1. 254				atta a	24.22						den an	201	. A starte	T Lane
Canal	393.39*		363.22	362.78	363.73	363.75	362.75^	363.24	363.01	362.96	364.59	363.64	364.17	362.19	~~	363.34	363.34	363.39	363.39	364.39^^^	363.84
Collection Sump	372.81	363.17	362.45	361.87	362.99	361.48	361.69	361.66	361.59	362.04	362.27	361.50	361.42	362.05	361.90	361.91	361.86	362.11	362.00	361.49	362.96
MW-3S	376.54		365.26		357.10						367.70	366.26	367.50	364.26	366.27	366.38	366.98	366.65	365.54	365.82	368.11
MW-3D	375.56	365.41	364.92	364.57	355.64	365.57	364.81	355.16	365.40	364.54	364.16	364.55	365.10	363.92	365.10	365.53	365.05	365.59	365.27	365.36	366.25
MW-6D	377.07	365.62	365.12	364.79	365.85	365.77	364.97	365.34	365.64	364.75	364.22	364.62	365.21	364.07	365,31	365.75	365.24	365.80	365.46	365.59	366.45
MW-8D	374.68	365.22	364.77	364.35	365.42	365.36	364.62	364.94	365.18	364.34	364.13	364.51	365.01	363.82	\$	365.30	364.83	365.39			
MW-9D	376.76***	365.65	365.17	364.83	365.88	365.80	365.01	365,36	365.68	364.76	364.05	364.47	365.10	364.00	365.31	365.79	365.26	365.85	365.51	365.64	366.47
MW-11D	373.68	365.02	364.60	364.18	365.24	365.18	364.46	364.81	364.96	364.18	364.07	364.44	364.92	363.73	364.81	365.17	364.75	365.26	364.93	364.00	365.94
MW-11S	373.50	364.50	363.88	363.39	364.72	364.35	363.55	363.86	364.48	363.33	363.57	363.89	364.33	363.09	364.15	364.38	363.89	364.34	363.98	364.12	365.06
MW-18	372.57	362.18	361.79	361.38	362.43	361.77	361.71	362.08	362.17	361.50	361.65	362.09	362.50	361.37	362.26	362.69	362.26	362.62	362.29	362.37	363.17
MW-19	376.00	362.15	361.80	361.46	362.58	361.88	361.90	362.25	362.44	361.82	361.83	362.11	362.57	361.51	362.52	361.91	362.46	362.89	362.59	362.69	363.50
MW-231	372.77	364.69	364.28	363.83	364.99	364.93	364.25	364.58	364.73	363.99	363.99	364.34	364.80	363.62	364.60	365.01	364.56	364.99	364.67	364.77	365.66
MW-23S	372.61	363.64	362.94	362.42	363.85	363.17	362.64	362.87	363.59	362.36	363.97	363.38	363.68	362.50	362.26	363.31	362.81	363.04	362.77	362.80	364.05
MW-24DR	375.14	364.96	364.49	364.09	365.19	364.60	364.39	364.77	364.91	364.16	364.06	364.43	364.90	363.71	364.75	365.13	364.69	365.19	364.86	364.94	365.90
MW-24SR	375.55	364.87	364.41	363.95	365.12	365.55	364.30	364.60	364.86	364.05	364.00	364.40	364.86	363.64	364.69	365.03	364.62	365.12	364.78	364.88	365.81
MW-25D	373.67	365.07	364.64	364.20	365.28	365.20	364,51	364.84	364.97	364.22	364.19	364.57	365.02	363.82	364.82	365.24	364.74	365.26	364.93	365.00	364.49
MW-25S	373.39	363.89	363.20	364.75	364.12	363.69	362.94	363.23	364.14	362.61	364.39	363.83	364.21	362.74	363.61	363.67	363.19	363.49	363.08	363.14	365.63
PZ-4D	376.11	365.02	364.60	364.22	365.28	365.21	364.49	364.82	365.03	364.22	364.06	364.43	364.94	363.73	364.81	365.23	364.78	365.28	364.96	365.07	365.96
PZ-5D	375.58	365.28	364.86	364.47	365.57	365.48	364.71	365.10	365.36	364.46	364.12	364.47	365.03	363.81	365.05	365.49	365.02	365.53	365.20	365.29	365.19
PZ-8D	375.83	365.78	365.08	365.00																	
PZ-9D	377.29	365.50	365.04	364.68	365.70	365.72	364.87	365.16	365.55	364.60	363.75	364.14	364.79	363.71	365.08	365.64	365.09	365.68	365.35	365.48	366.33
PZ-A	373.94	363.81	363.12	362.61	363.95	363.15	362.75	362.91	363.56	362.58	363.92	363.05	363.22	362.59	~^	363.40	363.57	363.18	362.89	362.96	364.20
PZ-B	373.92	363.91	363.19	362.67	364.08	363.32	362.79	362.94	363.94	362.55	364.44	363.24	363.40	362.65	363.39	363.47	363.89	363.21	362.92	362.92	364.32
PZ-C	374.85	365.79	365.10	364.75	366.04	366.04	365.03	365.35	366.39	364.54	365.68	365.38	366.26	364.19	365.65	365.76	365.44	366.07	365.50	365.65	366.65
PZ-D	375.12	365,79	365.18	364.89	366.09	366,10	365.10	365.46	366.36	364.65	365.58	365.41	366.21	364.21	365.65	365.84	365,53	366,11	365.62	365.75	366.75
PZ-E	374.12	364.93	364.20	363.81	365.16	365.03	363.92	364.40	365.90	363.49	366.51	364.63	364.77	363.47	364.94	365.00	366.92	364.58	364.07	364.47	365.25
PZ-F	377.06	366.36	365.53	365.11	366.89	366.72	365.27	365.70	367.06	364.93	365.50	365.51	366.29	364.29	366.25	366.41	365.46	366.65	365.75	366,13	367.59
PZ-G	377.16	366.44	365.61	365.17	366.89	366.80	365.36	365.75	367.11	364.93	365.39	365.53	366.22	364.36	366,35	366.46	365,43	366.68	365.81	366,14	367.76
PZ-HR	376.99	366.34	365.55	365.11	366.80	366.68	365.33	365.66	367.02	364.91	365.39	365.46	366.19	364.24	366.22	366.41	365.50	366,62	365.81	366.12	367.56
PZ-I	375.15	366.93	365.79	365.23	367.30	367.23	365.55	366.08	367,81	364.91	366.29	366.16	367.05	364.22	366,58	366,90	365,97	367,01	365.26	366.41	368.02
PZ-J	374.89	366.21	365.53	365.14	366.55	366.50	365.32	365.64	366.69	364.96	365.10	365.18	365.89	364.21	365.96	366.73	365.61	366.45	365.86	366.07	367.29
PZ-K	373.19	363.87	363.13	362.59	363.97	363.19	362.69	362.86	363.53	362.49	363.82	363.19	363.48	362.56	363.25	363.36	363.12	363.13	362.84	362.97	364.21
PZ-L	374.62	363.69	363.00	362.47	363.84	363.03	362.61	362.68	363.42	362.47	363.44	362.96	363.26	362.53	363.42	363.25	363.06	363.04	362.79	362.91	364.02
PZ-M	374.35	364.06	363.40	362.90	364.22	363.54	363.05	363.24	363.86	362.90	363.93	363.37	363.62	362.82	363.60	363.77	363.66	363.61	363.31	363.45	364.53
PZ-N	376.94**	365.87	365.19	364.87	366.17	366.12	NM	365.35	366.43	364.47	366.60	365.29	366.13	364.09	365.54	365.74	364.48	365.95	365.47	365.53	366.56
PZ-O	375.36	364.01	363.25	362.73	364.22	363.57	362.86	363.06	364.22	362.64	364.47	363.63	363.98	362.75	363.61	363.53	363.36	363.43	363.04	363.13	364.36
PZ-P	376.89	366.43	365.59	365.18	366.85	366.73	365.34	365.77	367.02	364.93	365.31	365.48	366.19	364.25	366.25	366.45	365.53	366.65	365.87	366.20	367.63
PZ-Q	377.61	366.44	365.60	365.16	366.93	366.78	365.26	365.76	367.21	364.89	366.11	365.70	366.41	364.41	366.40	366.55	365.38	366.77	365.85	366.21	367.80
PZ-R	377.05	366.46	365.61	365.20	366.89	366.81	365.37	365.72	367.21	364.93	365.40	365.58	366.31	364,31	366.34	366.46	365.31	366.72	365.85	366.17	367.73
PZ-S	378.13	366.39	365.56	365.15	366.84	366.73	365.32	365.71	367.12	364.90	365.27	365.53	366.29	364.31	366.29	366.42	365.42	367.18	367,10	366.31	367.83
PZ-T	376.25	366.34	365.53	365.10	366.71	366.65	365.29	375.70	366.90	364.90	365.34	365.37	366.10	364.20	366.16	366.38	365.74	366.54	365.85	366.13	367.48
PZ-U	375.35	366.17	365.46	365.08	366.55	366.49	365.22	365.60	366.75	364.85	365.18	365.23	365.96	364,18	366.00	365.83	365.66	366.43	365.82	366.05	367.33
PZ-V	375.78	366.20	365.44	365.06	366.54	366.50	365.25	365.58	366.76	364.83	365.30	365.24	365.97	364.15	365,98	366.71	365,84	366.44	365.76	365.99	367.33
PZ-W	375.78	366.15	365.41	365.02	366.49	366.41	365.20	365.59	366.63	364.85	365.05	365.12	365.86	364.09	365.88	366.18	365.49	366.36	365.72	365.98	367.21

TABLE 2 SUMMARY OF SELECT GROUNDWATER LEVEL MEASUREMENTS

2005 BIANNUAL PROCESS CONTROL MONITORING REPORT McKESSON ENVIROSYSTEMS - FORMER BEAR STREET FACILITY, SYRACUSE, NEW YORK

Notes:

1. Weeks 1, 2, 3, 4, 13, 18, 22, 23, 25, 26, 39, 46, and 52 are weeks after the initial introduction of Revised Anaerobic Mineral Media (RAMM) into the three impacted areas.

2. 8/10, 8/11, and 8/12/98 water level measurements were taken during the initial discrete RAMM injection event.

3. AMSL = Above Mean Sea Level (NGVD of 1929)

4. The ground-water level in PZ-8D was not measured on 3/27/00 and 6/1/00 because this piezometer was damaged. This piezometer was decommissioned on August 30, 2000.

5. ^ = The canal water-level measurement for the third quarter of the first year of the long-term process control monitoring program was obtained on September 29, 2000.

6. * = The reference elevation for canal gauging point was 363.06 feet AMSL prior to 11/16/00. The canal gauging point was re-marked and re-surveyed 11/16/00. The new reference elevation is 393.39 feet AMSL.

7. NM = The groundwater level in PZ-N was not measured on 9/18/00 because this piezometer was damaged. This piezometer was repaired and subsequently resurveyed on 11/16/00. The new reference elevation for PZ-N is 376.94 feet AMSL.

8. ** = The reference elevation for PZ-N was 376.02 feet AMSL prior to 11/16/00 and, as noted above, the new reference elevation is 376.94 feet AMSL.

9. *** = Monitoring well MW-9D inner PVC pipe was reduced (cut) by 11/2 inches on 9/19/01. The reference elevation prior to 9/19/01 was 376.88 feet AMSL. The new reference elevation for MW-9D is 376.76 feet AMSL.

10. ^^ = Due to frigid weather conditions, the groundwater level in PZ-A and MW-8D could not be measured on 1/20/03, because the locks were frozen. The canal water-level for the 1/03 resampling event could not be measured due to strong winds and ice on the water surface.

11. Monitoring location MW-8D wes decommissioned on August 3, 2004.

12. The canal water-level measurement for the 2005 second quarter long-term process control monitoring program was obtained on November 1, 2005.

13. *** = The water level measurement of the canal collected during the first 2005 monitoring was not measured from the correct measuring point. The spring 2005 measurement was taken approximately 3 feet higher than the surveyed measuring point. This value reflects the corrected canal water level for the Spring 2005 monitoring.

2005 BIANNUAL PROCESS CONTROL MONITORING REPORT McKESSON ENVIROSYSTEMS - FORMER BEAR STREET FACILITY, SYRACUSE, NEW YORK

	Sampling	COOLERS & State & Carter	n Elev. MSL)				Ethyl-			Trichloro-			
Monitoring Well	Date	Тор	Bottom	Acetone	Benzene	Toluene	benzene	Xylene ^A	Methanol	ethene	Aniline	N,N-Dimethyl- aniline	Methylene Chloride
NYSDEC Groundwater Quali	ty Standards (Part 700)		50	1	5	5	5	NA	5	5	1	5
MW-1	3/88	370.3	355.3	<100	<1	<1	<1	<1	<1,000	<1	<10	<10	<1
	1/89			<100	<1	<1	<1	<1	<1,000	<1	<11	<11	<1
	11/89			<100	<1	<1	<1	<1	<1,000	<1	<10	<10	<1
	11/90			<100	<1	<1	<1	<3	<1,000	<1	<10	<10	<1
	11/91			<100	<1	<1	<1	<3	<1,000	<1	<10	<10	<1
	11/92			<100	<1	<1	<1	<3	<1,000	<1	<10	<10	<1
	8/95			<1,000	<5	<5	<5	<5	<1,000	<5	<5	<10	<10
	9/98			<10	<10	<10	<10	<10	<1,000	<10	<10	<10	<10
	7/99			0.7 JN	<10	<10	<10	<10	<1,000	<10	<10	<10	<10
	3/00			<10	<10	<10	<10	<10	<1,000 J	<10	<5	<10	<10
	9/00			8 J	<10 J	3 J	<10 J	<u>5</u> J	<1,000	<10 J	<10 J	<10	<10 J
	3/01			<10	<10	<10	<10	<10	<1,000	<10	<10	<10	10
	9/01			<10	<10	<10	<10	<10	<1,000 J	<10	<10	<10	<10
	4/02			<12	<5	<5	<5	<10	990 J	<5	<5	<5	<5
	10/02			<25	<10	<10	<10	<20	<1,000	<10	<5	R	<10
	5/03			<12	<5	<5	<5	<10	<1,000	<5	<5	<5	<5
	10/03			<12	<5	<5	<5	<10	<1,000	<5	2 J	<5	<5
	6/04			<25	<10	<10	<10	<20	<1,000	<10	<5	<5	<10
	11/04								<1,000		<5	<5	
	6/05			<5.0 J	<1.0	<5,0	<4.0	<5.0	<1,000	<1.0	0.2 J	<1.0	<3.0
	11/05			<1.3 J	<0.3	<0.4	<0.5	<0.5	<1,000	<0.4	<1.0	<1.0 J	<0.5
MW-2S	3/88	368,1	353.1	<1,000	1,900	110	610	2,800	<1,000	<10	<10	<10	<10
	1/89			<1,000	2,000	65	330	1,200	<1,000	<10	<11	<11	<10
	11/89			<1,000	1,800	<100	360	810	38,000	<100	<100	<100	<100
MW-3S	3/88	365.1	350,1	<100	<1	<1	<1	<1	<1,000	. 50	<10	<10	
	1/89			<10,000	<100	120	<100	<100	<1,000	1,100	<11	5,570	-4,700
	11/89			<10,000	<100	<100	<100	<100	<1,000	100	<52	440	2,700
	11/91			2,900	10	10	4	31	<1,000	<10	790	170	<10
	8/95			<1,000	<5	<5	<5	<5	<1,000	<5	15	2 J	<10
	9/98			<10	<10	<10	<10	<10	<1,000	<10	<10	<10	<10
	7/99			<10	1 J	0.7 J	<10	<10	<1,000	<10	9J .	<10	<10
	3/00			<10 J	<10	<10	<10	<10	<1,000 J	<10	<10	<10	<10
	9/00			<10 J	1 J	2 J	<10 J	<10 J	<1,000	<10 J	2 J	1 J	<10 J
	3/01			<10	<10	<10	<10	<10	<1,000	<10	<10	<10	<10
	9/01			<10	3 J	8 J	1 J	2 J	<1,000 J	<10	690 D (69)'	4 J	<10
	4/02			<12	<5	<5	<5	<10	370 J	<5	1.7 J	<5	<5

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			n Elev. MSL)						a an				
Monitoring Well	Sampling Date	Тор	Bottom	Acetone	Benzene	Toluene	Ethyl- benzene	Xylene ^A	Methanol	Trichloro- ethene	Aniline	N,N-Dimethyl- aniline	Methylene Chloride
NYSDEC Groundwater Qualit		Part 700)		50	1	5	5	5	NA	5	5	1	5
MW-3S	10/02			<25	<10	<10	<10	<20	<1,000	<10	<5	R	<10
(Cont'd.)	5/03			<12	<5	<5	<5	<10	<1,000	<5	<5	<5	<5
	10/03			<12	<5	<5	<5	<10	<1,000	<5	4 J	<5	<5
	6/04			6 J	<10	<10	<10	<20	<1,000	<10	0.8 J	<6	<10
	11/04			<25	<10	<10	<10	<20	150 J	<10	4 J	<5	<10
	6/05			<5.0 J	<1.0	<5.0	<4.0	<5.0	<1,000	<1.0	15	<1.0	<3.0
	11/05			<1.3 J	<0.3	<0.4	<0.5	<0.4	<1,000	<0.4	<1.0	<1.0 J	<0.5
MW-3D	8/95	343.8	339	<1,000	<25 D	<25 D	<25 D	<25 D	<1,000	<25 D	1 J	5 J	200 D
MW-4S	3/88	365.5	350.5	<100	<1	<1	<1	<1	<1,000	<1	<10	<10	<1
	1/89			<100	<1	<1	<1	<1	<1,000	<1	<11	19	280
	11/89			<100	<1	<1	<1	<1	<1,000	<1	<10	<10	<1
MW-5 ^F	3/88	363.3	348.3	<100	<1	<1	<1	<1	<1,000	<1	230	130	<1
	1/89			<100	<1	<1	<1	<1	<1,000	<1	34	<11	<1
	11/89			<100	<1	<1	<1	<1	<1,000	<1	17	<10	<1
MW-6 ^c	1/89	365.5	355.9	<100	<1	<1	<1	<1	<1,000	<1	<11	<11	<1
(Replaced by MW-6S)	11/89			<10	<1	<1	<1	<1	<1,000	<1	<10	<10	<1
	8/95			<1,000	<5	<5	<5	<5	<1,000	<5	<5	<10	<10
MW-7 ^c	1/89	367	357.4	<100	<1	<1	<1	2	<1,000	<1	<11	<11	100
	11/89			<100	<1	<1	<1	<1	<1,000	<1	<10	<10	<1
MW-8 ^C	1/89	364.7	355.1	<1,000,000	<10,000	<10,000	<10,000	<10,000	430,000	<10,000	2,900	24,000	3,200,000
(Replaced by MW-8S) ^N	11/89			470,000	<10,000	<10,000	<10,000	<10,000	300,000	<10,000	8,500	52,000	-2,800,000
	11/91			<1,000,000	<10,000	<10,000	<10,000	<30,000	150,000	<10,000	8,000	33,000	4,600,000
	8/95			<1,000	<250,000D	<250,000D	<250,000D	<250,000D	22,000	60,000 JD	<25,000D	380,000 D	7,700,000 D
	9/98			<10,000 J	<10,000	<10,000	<10,000	<10,000	7,900	3,300 J 👘	1,200 J	26,000 D	140,000
	2/99			<20,000	<20,000	<20,000	<20,000	<20,000	16,000JN	11,000 J	30,000 D	120,000 D	650,000 DB
	7/99			10 J	22 J	240 J	58 J	220 J	17,000	11,000 J	24,000	77,000	450,000 D
	3/00			<100,000	<100,000	<100,000	<100,000	<100,000	30,000 J	<100,000	62,000	270,000 D	1,300,000
	9/00	1		<50,000 J	<50,000 J	<50,000 J	<50,000 J	<50,000 J	14,000 J	9,200 J	42,000 J	59,000	540,000 BJ
	3/01	1		<50,000	<50,000	<50,000	<50,000	<50,000	53,000	11,000 J	90,000 D	120,000 D	990,000
	9/01			<400	<400	430	170 J	680	8,900 J	18,000 JD	21,000	29,000	440,000 BD
	4/02			2,100	50 J	410	100 J	400	<1,000	9,600 J	793,000 D	773,000 D	660,000 D
	10/02	1		120 J	23	310	73	267	<1,000	3,100	80,000	21,000 J	320,000
	5/03	1		<12	20 J	600 D	81	300	<1,000	6,700 D	* 79,000 D	29 J	910,000 D
	10/03	1		21	25	330 D	93	360	1,200 J	3,100 D<>	67,000 D	24,000 D	400,000 D
	6/04			<25	40	330 EJ	110	400	<1,000	5,900 D	56,000	51,000	1,200,000 D

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	Sampling	2393 million 2 million 2 million	an Elev. AMSL)	7. 1 .		Ť.	Ethyl-			Trichloro-		N,N-Dimethyl-'	Methylene
Monitoring Well	Date	Тор	Bottom	Acetone	Benzene	Toluene	benzene	Xylene ^A	Methanol	ethene	Aniline	aniline	
NYSDEC Groundwater Qualit	y Standards (Part 700)		50	1	5	5	5	NA	5	5	1	5
MW-8SR	11/04	362.7	352.7	<1,200	<500	100 DJ	<500	164 DJ	<1,000	<500	35,000 D	5,300 D	10,000 D
	6/05			81 J	13	100	53	180	<1,000	<1.0	30,000	<200	<3.0
	11/05			15 J	13	130	- 66.	260	<1,000	<1.0	32,000	<260 J	<3.0
MW-9 ^c	1/89	365.6	356	1,600	NA	64	130	270	<1,000	<10	660	1,200	1,500
(Replaced by MW-9S)	11/89			<1,000	48	25	60	60	<1,000	<10	670	150	<10
	11/91]		<100	<10	9	19	30	<1,000	<1	95	18	<1
	8/95			<1,000	11 JD	26 JD	69 D	226 JD	<1,000	<50	50	28	🛸 110 D
	7/99			<10	4 J	2 J	9 J	18	<1,000	<10	<10	5 J	<10
	3/00	1		<10	- 2 J	2 J	11	21	<1,000 J	<10	2 J	9 J	<10
	9/00			<10 J	🔄 11 J 🔿	2 J	6 J	18 J	<1,000	<10 J	1 J	6 J 🦷	<10 J
	3/01			<10	1 J	3 J	17	61	<1,000	<10	2 J	11	<10
	9/01			<10	10	3 J	7 J	35	<1,000 J	<10	<10	10,	<10
	4/02			<23	10	2 J	6	17 J	370 J	<5	9	43	<5
	10/02			16 J	38	40	2 J	-+- 15 J	<1,000	<10	<5	2 J	<10
	5/03			<12	11	<5	7	18	<1,000	<5	0.9 J	3 J 🖓 🖄 👘	<5 <
	10/03			<12	2 J	<5	5	19.	<1,000	<5	1 J	<5	<5
	6/04			14 J	6 J	2 J	8 J	19 J	<1,000	<10	<5	<5	<10
	11/04			<25	4 J	2 J	9.J	30 J	<1,000	<10	<5	<5	<10
	6/05			44 J	1.9	3.2 J	24	64	<1,000	<1.0	2.6	1.9	<3.0
	11/05			<1.3 J	3.5	3.8	11	. 33	<1,000	<0.4	1.4	6.4 J	<0.5
MW-10 ^C	1/89	355.5	345.9	<1,000,000	<10,000	<10,000	<10,000	<10,000	210,000	<10,000	* 720	9,400	520,000
(Replaced by MW-9D)	11/89			<100,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	900	2,400	
	11/91			<100	<1	3	2	<3	<1,000	<1	230	<10	41
	8/95			<1,000	<25 UD	<25 UD	<25 UD	<25 UD	<1,000	<25 UD	<5	<10	350 D *
MW-11 ^c	1/89	355.1	345.5	<100	<1	<1	<1	<1	8,400	<1	<12	<12	1
(Replaced MW-6D)	11/89			<100	<1	<1	<1	<1	<1,000	<1	230	<52	<1
	8/95			<1,000	<5	<5	<5	<5	<1,000	<5	<5	<10	<10
MW-11S	12/94	359.9	354.9	<380	<10	<10	<10	<10	880	<10	<5	<10	<10
	8/95			<1,000	<5	<5	<5	<5	<1,000	<5	<5	<10	<26
	10/95		<u> </u>	NA	<5	<5	<5	<5	NA	<5	NA	NA	<5
MW-11D	12/94	349.8	344.8	<310	<5	<5	<5	<5	2,100	<5	<5	<10	<5
	8/95	1		<1,000	<5	<5	<5	<5	<1,000	<5	<5	<10	<10
	10/95			NA	<5	<5	<5	<5	NA	<5	NA	NA	<5

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		Scree	on Elev.							1.1		a dia art	
Reason and the	Sampling	(ft. /	AMSL)		4.15		Ethyl-			Trichloro-		N,N-Dimethyl-	Methylene
Monitoring Well	Date	Тор	Bottom	Acetone	Benzene	Toluene	benzene	Xylene ^A	Methanol	ethene	Aniline	aniline	Chlo <u>ride</u>
NYSDEC Groundwater Quality	y Standards (Part 700)		50	1	5	5	5	NA	5	5	1	5
MW-12D ^C	1/89	354.8	345.2	<100,000	<1,000	<1,000	<1,000	<1,000	12,000	<1,000	67	410	120,000
(Replaced MW-8D) ^N	11/89			69,000	<1,000	<1,000	<1,000	<1,000	39,000	<1,000	<1,000	4,900	360,000
	11/91			<1,000,000	<10,000	<10,000	<10,000	<30,000	<10,000	<10,000	750	5,800	220,000
	<u></u> 8/95			<1,000	450 JD	430 JD	430 JD	1,250 JD	<1,000	<1,300 D	30 D	230 D	<13,000 D
	8/96			13	<10	<10	<10	<10	<1,000	2 J	<5	<10	40
MW-13S	11/89	368.7	359.1	<100	3	<1	<1	<1	<1,000	<1	<52	<52	<1
	11/90			<100	<1	<1	<1	<3	<u><1,000</u>	<1	<10	<10	<1
	11/91			<100	<1	<1	<1	<3	<1,000	<1	<10	<10	<1
	11/92			<100	<1	<1	<1	<3	<1,000	<1	<10	<10	<1
MW-14D ^F	1/89	359	349.4	<100	<1	<1	<1	<1	<1,000	<1	<11	<11	<1
	11/89	L		<100	<1	<1	<1	<1	<1,000	<1	<10	<10	<1
MW-15S	1/89	370	360.25	<100	<1	<1	<1	<1	<1,000	<1	<11	<11	<1
	11/89			<100	<1	<1	<1	<1	<1,000	<1	<52	<52	<1
MW-16D ^F	1/89	350.8	341.2	<100	<1	<1	<1	<1	<1,000	<1	<11	<11	<1
	11/89			<100	<1	<1	<1	<1	<1,000	<1	<10	<10	<1
MW-17 ^F	11/90	365.7	356.1	<100	<1	<1	<1	<3	<1,000	<1	<10	<10	<1
(Replaced by MW-17R)	11/91			<100	<1	<1	<1	<3	<1,000	<1	<10	<10	<1
	11/92			<100	<1	<1	<1	<3	<1,000	<1	<10	<10	<1
	8/95	J		<1,000	<5	<5	<5	<5	<1,000	<5	<5	<10	<11
	10/95		1	NA	<5	<5	<5	<5	NA	2 J	NA	NA	<5
	8/96			11	<10	<10	<10	<10	<1,000	<10	<5	<10	<10
	8/97			<10	<10	<10	<10	<10	<1,000	<10	<5	<10	<10
	2/99		}	<10	1 J	<10	<10	<10	<1,000	<10	<10	<10	<10 J
	3/00		1	<10	- 8 J	<10	<10	<10	<1,000 J	<10	<5	<10	<10
	9/00			<10 J	15 J	<10 J	<10 J	<10 J	<1,000 J	<10 J	24 J	4 J 🕺 🖉 👘	1 J
	3/01			<10	8 J -	<10	<10	<10	<1,000	<10	<10	<10	<10
	9/01			<10	5 J	<10	<10	<10	<1,000	<10	<10	<10	<10
	4/02			<10	6.	<5	<5	<10	620 J	<5	150 (<5) ⁸	110 (<5)	<5
	10/02			<25 J	14	<10	<10	<20	<1,000	<10	<5 ^L	<5 ^L	<10
	5/03			<12	8	<5	<5	<5	<1,000	<5	<5	<5	<5
	11/03]	1	<12	7	<5	<5	<10	<1,000	<5	<5	<5	<5
	6/04	1		<25	5 J	<10	<10	<20	<1,000	<10	<5	<5	<10
	1 1/04								200 J		<5	<5	-
	6/05			<5.0 J	<1.0	<5.0	<4.0	<5.0	<1,000	<1.0	<1.0	<1.0	<3.0
	11/05			<5.0 J	<1.0	<5.0	<4.0	<5.0	<1,000	<1.0	<1.0	<1.0 J	<3.0

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	Sampling		n Elev. MSL)				Ethyl-			Trichloro-		N,N-Dimethyl-	Methylene
Monitoring Well	Date	Тор	Bottom	Acetone	Benzene	Toluene	benzene	Xylene ^A	Methanol	ethene	Aniline	aniline	Chloride
NYSDEC Groundwater Quality	ty Standards (Part 700)		50	1	5	5	5	NA	5	5	1	5
MW-18	11/89	325.15	316.15	<100	<1	<1	<1	<1	<1,000	<1	<10	<10	<1
	11/90			<100	<1	<1	<1	<3	<1,000	<1	<10	<10	<1
	11/91			<100	<1	<1	<1	<3	<1,000	<1	<10	<10	<1
	11/92			<100	<1	<1	<1	<3	<1,000	<1	<10	<10	<1
	12/94			<10	<5	<5	<5	<5	<200	<5	<5	<10	<5
	8/95			<1,000	<5	<5	<5	<5	<1,000	<5	<5	<10	<10
	2/96			<1,000	<10	<10	<10	<10	<1,000	<10	<5	<10	<10
	8/96			<10	<10	<10	<10	<10	<1,000	<10	<5	<10	<10
	2/97]		<10	<10	<10	<10	<10	<1,000	<10	<5	<10	<10
	8/97			<10	<10	<10	<10	<10	<1,000	<10	<5	<10	<10
	9/98			<10	<10	<10	<10	<10	<1,000	<10	<5 ^H	<10	<10
	2/99			<10	<10	<10	<10	<10	<1,000	<10	<10	<10	<10
	7/99			<10 J	<10	<10	<10	<10	<1,000	<10	<10	<10	<10
	3/00			<10	<10	<10	<10	<10	<1,000 J	<10	<5	<10	<10
	9/00			<10 J	<1,000 J	<10 J	<10 J	<10	<10 J				
	3/01			<10	<10	<10	<10	<10	<1,000	<10	<10	<10	<10
	9/01			<10	<10	<10	<10	<10	<1,000	<10	<10	<10	<10
	4/02			<10	<10	<10	<10	<20	720 J	<10	280 D (<5) ^K	- 200 D (<5) [*]	<10
	10/02			6 J	<10	<10	<10	<20	<1,000	<10	<5 ^L	<5 ^L	<10
1	5/03			<12	<5	<5	<5	<5	280 J	<5	<5	<5	<5
	10/03			<12	<5	<5	<5	<10	<1,000	<5	0.7 J	<5	<5
1	6/04			<25	<10	<10	<10	<20	<1,000	<10	R	R	<10
	11/04								<1,000		<5	<5	-
	6/05			<5.0 J	<1.0	<5.0	<4.0	<5.0	<1,000	<1.0	<1.0	<1.0	<3.0
	11/05			<5.0 J	<1.0	<5.0	<4.0	<5.0	<1,000	<1.0	<1.1	<1.1 J	<3.0
MW-19	11/89	318.45	309.45	<100	<1	<1	<1	<1	<1,000	<1	<10	<10	<1
	12/94		1	<10	<5	<5	<5	<5	<200	<5	<5	<10	<5
	8/95			<1,000	<5	<5	<5	<5	<1,000	<5	<5	<10	<12
	10/95	1		NA	<5	<5	<5	<5	NA	<5	NA	NA	<5
	2/96	1		<1,000	<10	<10	<10	<10	<1,000	<10	<5	<10	<10
	8/96			<10	<10	<10	<10	<10	<1,000	<10	<5	<10	<10
	2/97			<10	<10	<10	<10	<10	<1,000	<10	<5	<10	<10
	8/97	1		<10	<10	<10	<10	<10	<1,000	<10	<5	<10	<10
	9/98	1		<10	<10	<10	<10	<10	<1,000	<10	<5 ^H	5 J	<11
	2/99			<10	<10	<10	<10	<10	<1,000	<10	<10	<10	<10
	7/99	L		<10 J	<1,000	<10 J	<10	<10	<10 J				

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		differences and the second second	n Elev.				-						20 T (K.F.)
	Sampling		MSL)				Ethyl-			Trichloro-		N,N-Dimethyl-	Methylene
Monitoring Well	Date	Top	Bottom	Acetone	Benzene	Toluene	benzene	Xylene [^]	Methanol	ethene	Aniline	aniline	Chloride
NYSDEC Groundwater Quality		Part 700)		50	1	5	5	5	NA	5	5	1	5
MW-19	3/00			<10	<10	<10	<10	<10	<1,000 J	<10	<5	<10	<10
(Cont'd.)	9/00	1		<10 J	<10 J	<10 J	<10 J	<10 J	<1,000 J	<10 J	<10 J	<10	<10 J
	3/01			<10	<10	<10	<10	<10	<1,000	<10	<10	<10	<10
	9/01 4/02	-		<10	<10	<10	<10	<10	<1,000	<10	<10	<10	<10
	10/02	{		<10	<5	<5	<5	<10	<1,000	<5	<5 <5 ^L	<5 <5 ^L	<5
	5/03			<25 J <12	<10	<10	<10	<20 J	<1,000	<10			<10
		4			<5	<5	<5	<5	<1,000	<5	<5	<5	<5
	10/03	-		<11	<5	<5	<5	<10	<1,000	<5	51 J		<5
	6/04			<25	<10	<10	<10	<20	<1,000	<10	<5	<5	<10
	11/04			<25	<10	<10	<10	<20	<1,000	<10	<5	<5	<10
	6/05			<5.0 J	<1.0	<5.0	<4.0	<5.0	<1,000	<1.0	<1.1	<1.1	<3.0
	11/05			<5.0 J	<1.0	<5.0	<4.0	<5.0	<1,000	<1.0	<1.0	<1.0 J	<3.0
MW-20 [₽]	11/89	329.85	320.85	<100	<1	<1	<1	<1	<1,000	<1	<10	<10	<1
	11/90			<100	<1	<1	<1	<3	<1,000	<1	<10	<10	<1
	11/91			<100	<1	<1	<1	<3	<1,000	<1	<10	<10	<1
	11/92			<100	<1	<1	<1	<3	<1,000	<1	<10	<10	<1
MW-21 ^F	11/89	323.65	314.65	<100	<5	<1	<1	<1	<1,000	<1	<10	<10	<1
MW-22	11/89	368.55	359.55	<100	<1	<1	<1	<1	<1,000	<1	<10	<10	<1
MW-23S	12/94	364.1	354.1	<10	<5	<5	<5	<5	<200	<5	<5	<10	<5
	8/95			<1,000	<5	<5	<5	<5	<1,000	<5	<5	<10	<10
	2/96]		<1,000	<10	<10	<10	<10	<1,000	<10	<5	<10	<10
	8/96			<10	<10	<10	<10	<10	<1,000	<10	+7-+	<10	<10
	2/97			<10	<10	<10	<10	<10	<1,000	<10	11	<10	<10
	8/97		l	12	<10	<10	<10	<10	<1,000	<10	92	<10	<10
	9/98			<10	<10	<10	<10	<10	<1,000	<10	56	7 J	<10
	2/99			<10	<10	<10	<10	<10	<1,000	<10	<10	10	<10 J
	6/99			<10 J	<10	<10	<10	<10	<1,000 J	<10	<10 J	2 J 🕬 🕚	<10 J
	7/99			<10 J	<10	<10	<10	<10	<1,000	<10	<10	<10	<10
	3/00			<10	<10	<10	<10	<10	<1,000 J	<10	<5	2 J	<10
	9/00			<10 J	<10 J	<10 J	<10 J	<10 J	<1,000 J	<10 J	<10 J	2 J	<10 J
	3/01]		<10	<10	<10	<10	<10	<1,000	<10	<10	<10	<10
	9/01]		<10	<10	<10	<10	<10	<1,000	<10	<10	<10	<10
	4/02			<10	<5	<5	<5	<10	<1,000	<5	<5	<5	<5
	10/02			<25 J	<10	<10	<10	<20 J	<1,000	<10	<5 ^L	<5 ^L	<10
	5/03]		<62	<25	<25	<25	<50	380 J	<25	<5	<5	<25
	10/03			<12	<5	<5	<5	<10	<1,000	<5	60	<5	<5

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Monitoring Well	Sampling Date	Тор	Bottom	Acetone	Benzene	Toluene	Ethyl- benzene	Xylene ^A	Methanol	Trichloro- ethene	Aniline	N,N-Dimethyl- aniline	Methylene Chloride
NYSDEC Groundwater Quality	/ Standards (Part 700)		50	1	5	5	5	NA	5	5	1	5
MW-23S	6/04			<25	<10	<10	<10	<20	<1,000	<10	<5	<5	<10
(Cont'd.)	11/0 4						-		<1,000		<5	<5	-
	6/05			<5.0 J	<1.0	<5.0	<4.0	<5.0	<1,000	<1.0	<1.0	<1.0	<3.0
	11/05			<5.0 J	<1.0	<5.0	<4.0	<5.0	<1,000	<1.0	<1.0	<1.0 J	<3.0
MW-231	12/94	341.2	336.2	<10	<5	<5	<5	<5	<200	<5	<5	<10	<5
	8/95			<1,000	<5	<5	<5	<5	<1,000	<5	<5	<10	<10
	2/96			<1,000	<10	<10	<10	<10	<1,000	<10	<5	<10	<10
	8/96			<10	<10	<10	<10	<10	<1,000	<10	<5	<10	<10
	2/97			<10	<10	<10	<10	<10	<1,000	<10	<5	<10	<10
	8/97			<10	<10	<10	<10	<10	<1,000	<10	<5	<11	<10
	9/98			<10	<10	<10	<10	<10	<1,000	<10	<5"	<10	<10
1	2/99			<10	<10	<10	<10	<10	<1,000	<10	<10	<10	<10 J
	7/99			<10 J	<10	<10	<10	<10	<1,000	<10	<10	<10	<10
	3/00			<10	<10	<10	<10	<10	<1,000 J	<10	<5	<10	<10
	9/00			<10 J	<10 J	<10 J	<10 J	<10 J	<1,000 J	<10 J	<10 J	<10	<10 J
	3/01			<10	<10	<10	<10	<10	<1,000	<10	<10	<10	<10
	9/01	-		4 J	<10	<10	<10	2 J	<1,000	<10	<10	<10	<10
	4/02			<10	<5	<5	<5	<10	<1,000	<5	<5	<5	2 J
	10/02			<25 J	<10	<10	<10	<20 J	<1,000	<10	<5	<5 ^L	<10
	5/03			<12	<5	<5	<5	<5	<1,000	<5	<5	<5	<5
	10/03 6/04	-		<12	<5	<5	<5	<10	<1,000	<5	<5	<5	<5
	11/04	{		<25	<10	<10	<10	<20	<1,000	<10	1 J	<5	<10
	6/05								<1,000		<5	<5	
	11/05			<5.0 J	<1.0	<5.0	<4.0	<5.0	<1,000	<1.0	<1.0	<1.0	<3.0
MW-24S ^F		050.4		<5.0 J	<1.0	<5.0	<4.0	<5.0	<1,000	<1.0	<1.0	<1.0 J	<3.0
	12/94	358.4	352.4	<10	<5	<5	<5	<5	<1,000	<5	<5	<10	<5
(Replaced by MW-24SR)	8/95			<1,000	<5	<5	<5	<5	<1,000	<5	<5	<10	<10
	2/96			<1,000	<10	<10	<10	<u><</u> 10	<1,000	<10	<5	<10	<10
	2/97				<10	<10	<10	<10	<1,000	<10	<5	<10	<10
	9/98	1		<10	<10	<10	<10	<10	<1,000	<10	<5 ^H	<10	<10
	6/99	1		<10 J	<10	<10	<10	<10	<1,000 J	<10	<10 J	<10 J	<10 J
	7/99			<10 J	<10	<10	<10	<10	<1,000	<10	<10	<10	<10
	3/00]		<10 J	<10 J	<10 J	<10 J	<10 J	<1,000 J	<10 J	<10 J	<10	<10 J
	9/01			<10	<10	<10	<10	<10	<1,000	<10	<10	<10	<10
	6/02 ^K			NS	NS	NS	NS	NS	NS	NS	ND	ND	NS
F	10/02]		<25 J	<10	<10	<10	<20 J	<1,000	<10	<5 ^L	<5 ^L	<10
	10/03]		<12	<5	<5	<5	<10	<1,000	<5		<6	<5

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	Sampling	1 986 338 Junio 3436 1938	in Elev. MSL)			2.	Edh.d	-		. Trichloro-	and an exception of the second		
Monitoring Well	Date	Тор	Bottom	Acetone	Benzene	Toluene	Ethyl- benzene	Xylene ^A	Methanol	22 August 100 12 August 10	Aniline	N,N-Dimethyl- aniline	Methylene Chioride
NYSDEC Groundwater Qualit	y Standards (Part 700)		50	1	5	5	5	NA	5	5	1	5
MW-245	6/04			<25	<10	<10	<10	<20	<1,000	<10	<5	<5	<10
(Replaced by MW-24SR)	11/04]							<1,000		<5	<5	
(Cont'd.)	6/05			<5.0 J	<1.0	<5.0	<4.0	<5.0	<1,000	<1.0	<1.0	<1.0	<3.0
	11/05			<5.0 J	<1.0	<5.0	<4.0	<5.0	<1,000	<1.0	<1.0	<1.0 J	<3.0
MW-24D ^F	12/94	334.4	341.2	<10	<5	<5	<5	<5	<1,000	<5	<5	<10	<5
(Replaced by MW-24DR)	8/95]		<1,000	<5	<5	<5	<5	<1,000	<5	<5	<10	<10
	2/96]		<1,000	<10	<10	<10	<10	<1,000	<10	<5	<10	<10
	2/97			<1,000	<10	<10	<10	<10	<1,000	<10	<5	<10	<10
	9/98			<10	<10	<10	<10	<10	<1,000	<10	<5 ^H	<10	<10
	7/99			<10 J	<10 J	<10 J	<10 J	<10 J	<1,000	<10 J	<10	<10	<10 J
	9/00			<10 J	<10 J	<10 J	<10 J	<10 J	<1,000 J	<10 J	<10 J	<10	<10 J
	9/01			<10	<10	<10	<10	<10	<1,000	<10	<10	<10	<10
	6/02 ^K			NS	NS	NS	NS	NS	NS	NS	ND	ND	NS
	10/02			<25 J	<10	<10	<10	<20 J	<1,000	<10	<5 ^L	<5 ^L	<10
	10/03			<12	<5	<5	<5	<10	<1,000	<5	0.5 J	<5	<5
	11/04								<1,000		<5	<5	
	6/05			<5 J	<1	<5	<4	<5	<1,000	<1	<1	<1	<3
	11/05			<5.0 J	<1.0	<5.0	<4.0	<5.0	<1,000	<1.0	<1.1	<1.1 J	<3.0
MW-25S	8/95	361.2	356.2	<1,000	<5	<5	<5	<5	<1,000	<5	<5	0.7 J	<10
	10/95			NA	<5	<5	<5	<5	NA	<5	<5	<10	<5
	8/96			<10	<10	<10	<10	<10	<1,000	<10	<5	<10	<10
	8/97			<10	<10	<10	<10	<10	<1,000	<10	<5	<10	<10
	2/99			<10	<10	<10	<10	<10	<1,000	<10	130	<10	<10 J
	6/99			<10 J	<10	<10	<10	<10	<1,000 J	<10	110 J	21 J	<10 J
	7/99			<10 J	<10	<10	<10	<10	<1,000	<10	5 J	<10	<10
	3/00			<10	<10	<10	<10	<10	<1,000 J	<10	<5	<10	<10
	9/00			10 J	<10 J	<10 J	<10 J	<10 J	<1,000 J	<10 J	<10 J	<10	<10 J
	3/01			<10	<10	<10	<10	<10	<1,000	<10	<10	<10	<10
	9/01	1		<10	<10	<10	<10	<10	<1,000	<10	<10	<10	<10
	4/02	1		<10	<5	<5	<5	<10	<1,000	<5	<5	<5	<5
	10/02	1		<25	<10	<10	<10	<20	<1,000	<10	<5 ^L	<5 ^L	<10
	5/03	4		<12	<5	<5	<5	<5	<1,000	<5	<5	<5	<5
	11/03	1		<12	<5	<5	<5	<10	<1,000	<5	<5	<5	<5
	6/04			<25	<10	<10	<10	<20	<1,000	<10	<5	<5	<10

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			n Elev.		an an the state of			e de la compañía de l				Sector and	e call Second
	Sampling	10 10 10 10	MSL)				Ethyl-			Trichloro-		N,N-Dimethyl-	Methylene
Monitoring Well	Date	Тор	Bottom	Acetone	Benzene	Toluene	benzene	Xyiene^	Methanol	ethene	Aniline	aniline	Chloride
NYSDEC Groundwater Quality		Part 700)		50	1	5	5	5	NA	5	5	1	5
MW-25S	11/04								<1,000		<5	<5	
(Cont'd.)	6/05			<5.0 J	<1.0	<5.0	<4.0	<5,0	<1,000	<1.0	<1.1	<1.1	<3.0
	11/05			<5.0 J	<1.0	<5.0	<4.0	<5.0	<1,000	<1.0	<1.0	<1.0 J	<3.0
MW-25D	8/95	349.55	344.55	<1,000	<5	<5	<5	<5	<1,000	<5	<5	1 J	<5
	10/95			NA	<5	<5	<5	<5	NA	3 J	<5	<10	<5
	8/96			15	<10	<10	<10	<10	<1,000	<10	<5	<10	<10
	8/97			<10	<10	<10	<10	<10	<1,000	<10	<5	<11	<10
	2/99			<10	<10	<10	<10	<10	<1,000	<10	<10	<10	<10 J
	3/00			<10	<10	<10	<10	<10	<1,000 J	<10	<5	<10	<10
	3/01			<10	<10	<10	<10	<10	<1,000	<10	5 J	<10	<10
	4/02			<10	<5	<5	<5	<10	<1,000	<5	<5	<5	<5
	5/03			<12	<5	<5	<5	<5	<1,000	<5	<5	<5	<5
	6/04			<25	<10	<10	<10	<20	<1,000	<10	<5	<5	<10
	6/05			<5.0 J	<1.0	<5.0	<4.0	<5.0	<1,000	<1.0	<1.0	<1.0	<3.0
MW-26	12/96	365	3 55.3	<10	<10	<10	<10	<10	<1,000	<10	<5	<10	<10
MW-27	9/98	3 62.5	354.5	23	3 J	4 J	<10	3 J	<1,000	<10	340 DJ	<10	<10
	7/99			<10 J	4 J	2 J	3 J	8 J	<1,000	<10	740 D**	<10	<10
	3/00			<10	6 J	<10	8 J 🧼	2 J	<1,000 J	<10	2 110 D 3	1 J	<10
	9/00			<10 J	A J	<10 J	3 J	1 J	<1,000 J	<10 J	16 J	2J	1 J
	3/01			<10	-5 J	<10	5 J	2 J	<1,000	<10	260 D	2 J	<10
	9/01			<10	5 J	<10	2 J	<10	<1,000 J	<10	26	<10	<10
	4/02			<18	7	- 11	12	26	<1,000	<5	176,000 DJ	19 J	<5
	10/02			6 E	3 J	<10	<10	<20	<1,000	4 J	2,700 D	100 J	60 JN
	5/03			<12	8	11	23	51	<1,000	<5	15,000 DJ	11 👘 🍅	-43
1	10/03			170	5	<5	<5	3 J	<1,000	<5	3,700 D	<5	240 D
	6/04			23 J	5 J	4 J	2 J	6 J	<1,000	<10	3,700 D	20 J	<10
[11/04	1		<120 (28)	<50 (4 J)	<50 (2 J)	<50 (<10)	<100 (<20)	<1,000	<50 (<10)	1,100 DJ	<5	-310 (490 D)
	6/05			31 J	6.1	15	5.8	15	<1,000	<1.0	5,200	<23	<3.0
ĺ	11/05			35 J (37 J)	11 (12)	77 (78)	26 (26)	86 (88)	<1,000 (<1,000)	<1.0 (<1.0)	37,000 (38,000)	<270 J (<260 J)	<3.0 (<3.0)
MW-28	9/98	363.6	355.6	<5,000 J	<5,000	<5,000	<5,000	<5,000	2,200	<5,000	546 D ^H	54	64,000 J
	7/99	1		<500 J	<500	<500	<500	<500	<1,000	<500	· ^ 1,100 D	40	39,000 D
	3/00	1		<10,000	<10,000	<10,000	<10,000	<10,000	<1,000 J	<10,000	1,300 D	30	130,000 J
	9/00	1		<1,000 J	<1,000 J	<1,000 J	<1.000 J	<1,000 J	<1,000 J	<1,000 J	540 DJ	<10	8,100 BJ
	3/01	1		<400	<400	<400	<400	<400	<1,000	<400	3,200 D	7 J	5,900 B
	9/01	1		<400	<400	<400	<400	<400	<1,000 J	<400	1,000 D	<10	4,700 B
	4/02	1		<49	8	6	.9	10 J	<1,000	<5	33,400 D	57	4,600 D

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	Sampling	10.00.20.00122	an Elev. AMSL)				Ethyl-			Trichloro-		N.N-Dimethyl-	Methylene								
Monitoring Well	Date	Тор	Bottom	Acetone	Benzene	Toluene	benzene	Xylene ^A	Methanol	ethene	Aniline	aniline	Chloride								
NYSDEC Groundwater Quality	y Standards (Part 700)		50	1	5	5	5	NA	5	5	1	5								
MW-28	10/02			14 J	6 J	6 J	11 🕠	- 12 J	<1,000	<10	2,700 D	R	<10								
(Cont'd.)	5/03			13	4 J	2 J	2 J	8 J	<1,000	<5	1,000 DJ	3 J 🛸	52 🐨								
	10/03		Í	24	11	6	- 12	13 J	<1,000	<5	1,900 D	<5	<5								
	6/04			20 J	4 J	2 J	5 J	4 J	<1,000	<10	910 D	<5	<10								
	11/04			<120 (<25)	<50 (4 J)	<50 (<10)	<50 (5 J)	<100 (3 J)	190 J	<50 (<10)	640 DJ	<5	<50 (<10)								
	6/05			5.2 J	4.5	1.2 J	4.6	3.9 J	<1,000	<1.0	630	<5.0	<3.0								
	11/05			6.8 J (7.8 J)	6.1 (5.8)	<5.0 (<5.0)	4.7 (4.7)	<5.0 (<5.0)	<1,000 (<1,000)	<1.0 (<1.0)	380 J (350 J) -	<2.2 (<2.1)	<3.0 (<3.0)								
MW-29	9/98	362.9	345.9	<10	<10	<10	<10	2 J	<1,000	<10	<10	13	<10								
	2/99			7J	<10	<10	<10	1 J	<1,000	<10	5 J	4 J	<10								
	7/99			<10	<10	<10	<10	<10	<1,000	<10	2 J	4 J=c	<10								
	3/00	l		<10	<10	<10	<10	<10	<1,000 J	<10	450 D	6 J 🖓	<10								
	9/00			<10 J	<10 J	<10 J	<10 J	<10 J	<1,000 J	<10 J	24.1		<10 J								
	3/01			<10	<10	<10	<10	<10	<1,000	<10	30	4 J	<10								
	9/01	[<10	<10	<10	<10	<10	<1,000	<10	7.Jps	2J	<10								
	4/02			<10	<5	<5	<5	<10	<1,000	<5	3 J	9	<6								
	10/02			<25 J	<10	<10	<10	<20	<1,000	<10	8	R	4 JN								
	5/03]			<12	<5	<5	<5	<10	<1,000	<5	19	1 J	<3							
	10/03			<12	<5	<5	<5	<10	<1,000	<5	2 J	<5	<5								
	6/04			<25	<10	<10	<10	<20	<1,000	<10	3 J	<5	<10								
	11/04			<120	<50	<50	<50	<100	420 J	<50	<5	<5	<50								
	6/05			<5.0 J	<1.0	<5.0	<4.0	<5.0	<1,000	<1.0	<1.0	<1.0	<3.0								
	11/05			<5.0 J	<1.0	<5.0	<4.0	<5.0	<1,000	<1.0	<1.0	<1.0 J	<3.0								
MW-30	9/98	363.5	355.5	<10	<10	<10	<10	<10	<1,000	<10	<10	<10	<10								
	2/99			7 J	<10	<10	<10	<10	<1,000	<10	<10	2 J	<10								
	7/99			<10	0.7 J	<10	<10	<10	<1,000	0.5 J	<10	1 J	<10								
	3/00			<10	<10	<10	<10	<10	<1,000 J	<10	18	2J	4 J								
	9/00	1		<10 J	<10 J	<10 J	<10 J	<10 J	<1,000 J	<10 J	9 J	`` 2J	2 J								
	3/01			<10	<10	<10	<10	<10	<1,000	<10	8 J	2 J	<10								
	9/01	4/02 10/02 5/03	1	4 J	2 J	<10	<10	<10	<1,000 J	<10	8.J	1J	<10								
	4/02			<10	<5	<5	<5	<10	<1,000	<5	250	210	<5								
	10/02							l t			[<10	<10	<10	<20 J	<1,000	<10	R	R	<10
								<62	<25	<25	<25	<50	<1,000	<25	18	0.6 J	8 J .				
	10/03	1		<12	<5	<5	<5	<10	<1,000	<5	4 J	<5	<5								
	6/04			<25	<10	<10	<10	<20	<1,000	<10	<5	<5	<10								

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	Sampling	Show and the	n Elev. MSL)		14.5 17.5 - 9.6 - 9.0	an ann an	Ethvi-		984 (six) 1	Trichloro-		N.N-Dimethyl-	Methylene
Monitoring Well	Date	Тор	Bottom	Acetone	Benzene	Toluene	benzene	Xylene ^A	Methanol	ethene 🕬			and the second
NYSDEC Groundwater Qualit	y Standards (Part 700)		50	1	5	5	5	NA	5	5	1	5
MW-30	11/04			<120	<50	<50	<50	<100	<1,000	<50	<5	<5	<50
(Cont'd.)	6/05			<5.0 J	0.3 J	<5.0	<4.0	<5.0	<1,000	<1.0	<1.0	<1.0	<3.0
	11/05			<5.0 J	0.7 J	0.6 J	<4.0	0.5 J	<1,000	<1.0	240	<1.0 J	<3.0
MW-31	9/98	363.7	355.4	<10	12	<10	<10	<10	<1,000	<10	. 34 -	4J	<10
	7/99			<10	16	<10	<10	<10	<1,000	<10	230 D	- 3 J 👫	<10
	3/00			<10	16	<10	<10	<10	<1,000 J	<10	3 J	4.J 😸	<10
	9/00			<10 J	12 J	<10 J	<10 J	<10 J	<1,000	<10 J	i≥!=10	· 6 J	<10 J
	3/01			21	- 11	<10	<10	<10	<1,000	<10	<10	5 J	<10
	9/01			<10	14	<10	<10	<10	<1,000 J	<10	91 D	Barrie B. J. Statist	<10
	4/02			<14	9	<5	<5	<10	<1,000	<5	804 D 👘	213-	<5
	10/02			<25	110-2	<10	<10	<20	<1,000	<10	560 D	1 J	<10
	5/03			<12		<5	<5	<10	<1,000	<5	U.9 J	3 J	<5
	10/03			1,200 D	13	<5	<5	<5	<1,000	<5		<5	<5
	6/04			15 J		<10	<10	<20	<1,000	<10	3 J	<5	<10
	11/04			<25	9 J	<10	<10	<20	<1,000	<10	<5	<5	<10
	6/05			<5.0 J	11	<5.0	<4.0	1.3 J	<1,000	<1.0	3.2	2.7.	<3.0
	11/05			<1.3 J	6.7	<0.4	<0.5	0.6	<1,000	<0.4	16 -	<1.0 J	<0.5
MW-32	9/98	364	356	<10	- 16	2 J	5 J	3 J	<1,000	<10	5 76,300 D	4 J	<10
	7/99			3 J	14	2 J	4 J	<10	<1,000	56	<10	3 J 🦷	<10
	3/00			<10	5 J	<10	<10	<10	<1,000 J	<10		<10	<10
	9/00]		<10 J	12 J	<10 J	<10 J	<10 J	<1,000	<10 J	4,500 D	<10	<10 J
	3/01			<10		<10	<10	<10	<1,000	<10	1,900 0	2J	<10
	9/01			<10	10	<10	<10	<10	<1,000 J	<10	1,100 D	-2 J	<10
	4/02			<15	4 J	<5	<5	<10	<1,000	<5			<5
	10/02	l		<25	4 J	<10	<10	<20	<1,000	<10	50	R	<10
	5/03	j		<12	<5	<5	<5	<10	<1,000	<5	0.6 J	0.7 J	<5
	10/03			20	-2J	<5	<5	<10	<1,000	<5	<5	<5	<5
	6/04			6 J	1 J	<10	<10	<20	<1,000	<10	1 J	<5	<10
	11/04	ļ		<25	<10	<10	<10	<20	<1,000	<10	<5	<5	<10
	6/05			<5.0 J	1.0	<5.0	<4.0	<5.0	<1,000	<1.0	0.4 J	<1.0	<3.0
	11/05			<5.0 J	<1.0	<5.0	<4.0	<5.0	<1,000	<1.0	<1.0	<1.0 J	<3.0

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			n Elev.												
	Sampling	(ft. A Top	MSL) Bottom				Ethyl-			Trichloro-		N,N-Dimethyl-	Methylene		
Monitoring Well NYSDEC Groundwater Qualit	Date	10° 2' 3000 4 5 - 1	Bottom	50	Benzene	Toluene 5	benzene 5	Xylene [*] 5	NA NA	ethene 5	Aniline 5	aniline 1	Chloride 5		
MW-33	9/98	344.1	356,1	<10	<10	<10	<10	<10	<1,000	<10	· 9J	6 J	 <10		
	2/99		000.1	<10	<10	<10	<10	<10	<1,000	<10	120	61 2	<10		
	7/99	1		5 J	2 J	0.7 J	<10	<10	<1,000	<10	150	8 J	<23		
	3/00	1		<10 J	<10	<10	<10	<10	<1,000 J	<10	51.	7.J	7. 11		
	9/00	1	í.	45 J	4 J	1 J	<10 J	<10 J	<1,000	<10 J	540 D	-23	*** 330 DJS***		
	3/01			17 J	<20	<20	<20	<20	<1,000	<20	1,300 0	16 - 16	* 370 B		
	9/01			21	5 J	<10	<10	<10	<1,000 J	<10	+1:900 D	14 × 1412	<18		
	4/02	1		<18	3 J ·	<5	<5	<10	<1,000	<5	2,780 D		19		
	10/02			11 J	4 J	<10	<10	<20	<1,000	<10	290 D	······································	4 J		
	5/03			- 88	13	<5	<5	<10	<1,000	<5	2,000	535 J	2,800 D		
	10/03]		22	2 J	<5	<5	<10	<1,000	<5	1,900 D	<6	<5		
	6/04			9 J	.12 J	<10 J	<10 J	<20 J	<1,000	<10 J	2,700 D	5 J-5	<10 J		
	11/04				-				<1,000		2,700 D	5 J. 💱			
	<u>6/05</u>	1		<5.0 J	11	1.0 J	<4.0	<5.0	<1,000	<1.0	1,800	<10	<3.0		
	11/05			<5.0 J	16	1.8 J	<4.0	<5.0	<1,000	<1.0	3,500	<25 J	<3.0		
MW-34	9/98	362.7	354.7	<10	<10	<10	<10	<10	<1,000	<10	83	<10	<10		
	7/99	1		2 J	0.9 J	1 J	<10	<10	<1,000	<10	380 D 🦇	2 J 😽	<10		
	3/00	1			<10 J	1 J	2 J	<10	<10	<1,000 J	<10	200 D	3.0	<10	
	9/00			<10 J	<10 J	<10 J	<10 J	<10 J	<1,000	<10 J	320 D	4 J	<10 J		
	3/01	1		<10	<10	2 J	<10	2 J	<1,000	<10	2 700 D	5 J	<10		
	9/01	1		7 J	÷ 2 J	2 J	<10	2 J	<1,000 J	<10	76 - 78 - 5 ×	33J	<10		
	4/02	4		<32	<5	<5	<5	<10	<1,000	<5	640 D	15\$	<5		
	10/02	1		37 J	<10	<10	<10	<20	<1,000	<10	+380 DJ	<u> </u>	<10		
	5/03	4		16	<5	<5	<5	<10	<1,000	<5		an 31 P	<5		
	10/03	4		9 J	<5	<5	<5	<10	<1,000	<5	18 18	<5	<5		
	6/04	4		24 J	<10	<10	<10	<20	<1,000	<10	30	<5	<10		
	11/04	4		<25	_<10	<10	<10	<20	180 J	<10	14	<5	<10		
	6/05	4		5.6 J	0.7 J	0.9 J	<4.0	1.2 J	<1,000	0.4 J	16	2.5	<3.0		
	11/05			20 J	<0.3	0.9	<0.5	1.1	<1,000	<0.4	12.	2 J 🖓	<0.5		
MW-35	9/98	363	355	<10	<10	<10	<10	<10	<1,000	<10	6 J 🕅	5.J.	<10		
	7/99 3/00	4		<10	0.7 J	<10	<10	<10	<1,000	<10	3 J	4J	<10		
		4		<10 J	<10	<10	<10	<10	<1,000 J	<10	<10	2 J	<10		
	9/00	4		<10 J	<10 J	<10 J	<10 J	<10 J	<1,000	<10 J	<10	- 3 J -	<10 J		
	3/01	4				<10	<10	<10	<10	<10	<1,000	<10	<10	<10	<10
	9/01 4/02	4		<10	<10	<10	<10	<10	<1,000 J	<10		2.1	<10		
	4/02			<13	<5	<5	<5	<10	<1,000	<5	3 J		<5		

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		Scree	n Elev.	i in talan						Second Second	the second second second				
	Sampling	(ft. A	MSL)				Ethyl-			Trichloro-	A SPL	N,N-Dimethyl-	Methylene		
Monitoring Well	Date	Тор	Bottom	Acetone	Benzene	Toluene	benzene	Xylene ^A	Methanol	ethene	Aniline	aniline	Chloride		
NYSDEC Groundwater Qualit	y Standards (Part 700)		50	1	5	5	5	NA	5	5	1	5		
MW-35	10/02			<25	<10	<10	<10	<20	<1,000	<10	2 J	R	<10		
(Cont'd.)	5/03			<12	<5	<5	<5	<10	<1,000	<5	1,000	<100	<5		
	10/03			5 J	<5	<5	<5	<10	<1,000	<5	4 J	<5	<5		
	6/04			<25	<10	<10	<10	<20	<1,000	<10	× 30	4.)	<10		
	11/04			<25	<10	<10	<10	<20	240 J	<10	82	<5	<10		
	6/05			<5.0 J	<1.0	<5.0	<4.0	<5.0	<1,000	<1.0	<1.0	<1.0	<3.0		
	11/05			<5.0 J	< <u>1.0</u>	<5.0	<4.0	<5.0	<1,000	<1.0	<1.0	<1.0 J	<3.0		
MW-36	9/98	363.6	355.6	<10	<10	<10	<10	<10	<1,000	<10	290 D	6 J 🤇	<10		
	2/99			<10	<10	<10	<10	<10	<1,000	<10	860 D	4 J	<10		
	7/99			8 J	0.8 J	<10	<10	<10	<1,000	<10	250	<10	<10		
	3/00			<10 J	<10	<10	<10	<10	<1,000 J	<10	60	-7 J	<10		
	9/00			5 J	<10 J	<10 J	<10 J	<10 J	<1,000 J	<10 J	8.J .	6 J 👘	<5		
	3/01			<10	<10	<10	<10	<10	<1,000	<10	<10	<10	<10		
	9/01			54	<10	<10	<10	<10	<1,000 J	<10	_ 350 D	5 J. 1	<10		
	4/02			<20	<5	<5	<5	<10	<1,000	<5	2.48 A.9	416	<5		
	10/02			12 J	<10	<10	<10	<20	<1,000	<10	2 J	217	<10		
	5/03			9 J	<5	<5	<5	<10	<1,000	<5	67	41	<5		
	10/03]		580 D	<5	<5	<5	<10	<1,000	<5	100	<5	<5		
	6/04			22 J	<10 J	<10 J	<10 J	<20 J	<1,000	<10 J	33	2.5 Three years	<10 J		
	11/04			13 J	<10	<10	<10	<20	<1,000	<10	- 22	<5	<10		
	6/05			24 J	2.1	<5.0	<4.0	1.0 J	<1,000	<1.0	1,200	<5.4	<3.0		
	11/05			77 J	3.6	2.0 J	0.6 J	2.8 J	<1,000	<1.0	₩ ¹ 1:600	<10 J	<3.0		
TW-01	12/96	365.1	355.4	<10	82	4 J	6 J	4 J	<1,000	<10	2,090 D	13	4 J		
	9/98			<10	(d) 15	<10	4 J	<10	<1,000	<10	4,400 DEJ	43624	<10		
	2/99]		<10	- 24	2 J	2 J	2 J	<1,000	<10	9,000 D	5 J 🖏 🏂	<10		
	7/99			<10	16	1 J	3 J	<10	<1,000	<10	4,400 D	4 J	<10		
	3/00]		<10	16	<10	<10	<10	<1,000 J	<10	280 D	4 J	<10		
]	9/00	1		<10 J	11 J 🚽	<10 J	<10 J	<10 J	<1,000	<10 J	15	2 J 😪	<10 J		
	3/01			<10	5 J	<10	<10	<10	<1,000	<10	<10	3 J 👘	<10		
	9/01]				<10	10	<10	<10	<10	<1,000 J	<10	<10		<10
	4/02						<14	3 J	<5	<5	<10	<1,000	<5	8	13 4
	10/02			<25	7 J	<10	<10	<20	<1,000	<10	<5	R	<10		
	5/03	1		<12	7	<5	<5	<10	<1,000	<5	<5	1 J	<5		
	10/03	1		<12	6	<5	<5	<10	<1,000	<5	0.6 J	<5	<5		

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		9 X8 2 Z Z	n Elev, MSL)								TESPA MALL		
Monitoring Well	Sampling Date	Тор	Bottom	Acetone	Benzene	Toluene	Ethyl- benzene	Xylene ^A	Methanol	Trichloro- ethene	Aniline	N,N-Dimethyl- aniline	Methylene Chloride
NYSDEC Groundwater Quality	y Standards ((Part 700)		50	1	5	5	5	NA	5	5	1	5
TW-01	6/04			6 J	3 J	<10	<10	<20	<1,000	<10	<5	<5	<10
(Cont'd.)	11/04			<25	2 J	<10	<10	<20	<1,000	<10	<5	<5	<10
	6/05			<5.0 J	1.8	<5.0	<4.0	<5.0	<1,000	<1.0	<1.0	<1.0	<3.0
	11/05			<1.3 J	1.9	<0.4	<0.5	<0.4	<1,000	<0.4	<1.0	<1.0 J	<0.5
TW-02 ^F	12/96	363.3	353.3	53	10	.77	16	65	<1,000	585 D	15,900 JD		42,449 D
(Replaced by TW-02R) ^N	9/98			<500 J	<500 J	<500 J	<500 J	53,000	5,000	300 J	38,000 D.	61,000 D	86,000 D
	2/99]		<1,000	<1,000	190 J 🔍	<1,000	150 J	14,000JN	<1,000	83,000 D	7,900	14,000 B
	7/99			630	37	240 J	31 ~	150	<1,000	55.	100,000 D存储	3,500 J	9,700 D
	3/00			<1,000 J	<1,000	160 J	<1,000	240 J 👘	<1,000 J	<1,000	64,000 D	3,900	13,000
	9/00			190 J	28 J	95 J	35 J	160 J	<1,000	6 J	79;000	<10,000	390 J 👋
	3/01			81	19	68	- 28	130	<1,000	<10	67,000 D	650 3 5	400 D
	9/01			57.	25	- 70	31	140	<1,000 J	<20		32 .	48 B
	4/02			240	- 19	65	23	96	<1,000	<5	1,090,000 D	<5,300	14
	10/02			110 J	15	19	23	65	<1,000	<10	80,000 D 👐	10 J-	<10
	5/03			240	a 30 🔅	130	49	226	<1,000	<5	160,000 D	230	97
	10/03]		68	28	∼	<5	<10	<1,000	2 J	92,000 D	<260	91
	6/04			140 J	- 19 J	7 39 J-	- 31 J	111 J	<1,000	<10 J	82,000	<5,200	4 J
TW-02RR	11/04	363.3	353.3	18 J	4 J	- 8 J	4 J	16 J	<1,000	<10	7,100 D	<5	<10
	6/05			7.2 J	3.6	2.1 J	3.6 J	9.6	<1,000	0.3 J	8,400	<50	<3.0
	11/05			26 J	6	4.1	3.6	11	<1,000	<0.4	14,000	<110 J	<0.5
PZ-4D	11/89	350.8	345.9	<100	<1	<1	<1	<1	<1,000	<1	<10	<10	<1
	11/90			<100	<1	<1	<1	<3	<1,000	<1	<10	<10	<1
	11/91			<100	<1	<1	<1	<3	<1,000	<1	<10	<10	<1
	11/92			<100	<1	<1	<1	<3	<1,000	<1	<10	<10	<1
	8/95	1		<1,000	<5	<5	<5	<5	<1,000	<5	<5	0.8 J	<5
	10/95	1		NA	<5	<5	<5	<5	NA	<5	<5	<10	<5
	8/96			<10	<10	<10	<10	<10	<1,000	<10	<5	<10	<10
	8/97			<10	<10	<10	<10	<10	<1,000	<10	<6	<12	<10
	2/99	1		<10	<10	<10	<10	<10	<1,000	<10	<10	<10	<10 J
	3/00			<10	<10	<10	<10	<10	<1,000 J	<10	<5	<10	<10
	3/01			<10	<10	<10	<10	<10	<1,000	<10	<10	<10	<10
	4/02			<10	<5	<5	<5	<10	<1,000	<5	<5	<5	<5
	5/03			<12	<5	<5	<5	<5	<1,000	<5	<5	<5	<5
	6/04			<25	<10	<10	<10	<20	<1,000	<10	<5	<5	<10
	6/05			<5.0 J	<1.0	<5.0	<4.0	<5.0	<1,000	<1.0	<1.0	<1.0	<3.0

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		1	n Elev. MSL)									82751	
Monitoring Well	Sampling Date	Тор	Bottom	Acetone	Benzene	Toluene	Ethyl- benzene	Xylene ^A	Methanol	 Trichloro- ethene 	Aniline	N,N-Dimethyl- aniline	Methylene Chioride
NYSDEC Groundwater Qualit	a a contract of the	Part 700)		50	1	5	5	5	NA	5	5	1	5
PZ-4S	11/89	362.79	357.88	<100	<1	<1	<1	<1	<1,000	<1	<10	<10	<1
	11/90	1		<100	<1	<1	<1	<1	<1,000	<1	<10	<10	<1
	11/91			<100	<1	<1	<1	<1	<1,000	<1	<10	<10	<1
	11/92			<100	<1	<1	<1	<1	<1,000	<1	<10	<10	<1
	8/95	1		<1,000	<5	<5	<5	<5	<1,000	<5	<5	<10	<18
	10/95]		NA	<5	<5	<5	<5	NA	<5	NA	NA	<5
	8/96]		<10	<10	<10	<10	<10	<1,000	<10	<5	<10	<10
	8/97			<10	<10	<10	<10	<10	<1,000	<10	<5	<10	<10
	2/99			<10	<10	<10	<10	<10	<1,000	<10	<10	<10	<10
	6/99			<10 J	<10	<10	<10	<10	<1,000 J	<10	<10 J	<10 J	<10 J
	3/00			<10	<10	<10	<10	<10	<1,000 J	<10	<5	<10	<10
	3/01			<10	<10	<10	<10	<10	<1,000	<10	<10	3 J 👫	<10
	4/02]		<14	<5	<5	<5	<10	<1,000	<5	⊻8 (<5) ⁶	<5 (<5) ^K	<5
	10/02	:		<25 J	<10	<10	<10	<20 J	<1,000	<10	<5 ^L	<5 ^L	<10
	5/03			<12	<5	<5	<5	<5	<1,000	<5	<5	<5	<5
	6/04			<25	<10	<10	<10	<20	<1,000	<10	<5	<5	<10
	6/05			<5.0 J	<1.0	<5.0	<4.0	<5.0	<1,000	<1.0	<1.0	<1.0	<3.0
PZ-5D	11/89	353.5	348.6	<100	<1	<1	<1	<1	<1,000	<1	<10	<10	<1
	12/94]		<10	<5	<5	<5	<5	<200	<5	<5	<10	<5
	2/96			<1,000	<10	<10	<10	<10	<1,000	<10	<5	<10	<10
	2/97			<1,000	<10	<10	<10	<10	<1,000	<10	<5	<10	<10
	9/98			<10	<10	<10	<10	<10	<1,000	<10	<5 ^H	<10	<12
	7/99)	<10 J	<10 J	<10 J	<10 J	<10 J	<1,000	<10 J	<10	<10	<10 J
	9/00			<10 J	<10 J	<10 J	<10 J	<10 J	<1,000 J	<10 J	<10 J	<10	<10 J
	9/01			<10	<10	<10	<10	<10	<1,000	<10	<10	<10	<10
	10/02			<25 J	<10	<10	<10	<20 J	<1,000	<10	<5 ^L	<5 ^L	<10
	10/03			<12	<5	<5	<5	<10	<1,000	<5	46	<5	<5
	6/04		l	<25	<10	<10	<10	<20	<1,000	<10	<5	<5	<10
	11/04		ļ						<1,000		<5	<5	
	6/05			<5.0 J	<1.0	<5.0	<4.0	<5.0	<1,000	<1.0	<1.0	<1.0	<3.0
	11/05]		<5.0 J	<1.0	0.7 J	<4.0	<5.0	<1,000	<1.0	<1.0	<1.0 J	<3.0

2005 BIANNUAL PROCESS CONTROL MONITORING REPORT McKESSON ENVIROSYSTEMS - FORMER BEAR STREET FACILITY, SYRACUSE, NEW YORK

	Sampling	The same shall be	n Elev. MSL) Bottom			440	Ethyl-			Trichloro-		N,N-Dimethyl-	Methylene
Monitoring Well NYSDEC Groundwater Quality	Date		Bottom	Acetone 50	Benzene	Toluene 5	benzene	Xylene ^A 5	Methanol NA	ethene 5	Aniline 5	aniline	Chloride
PZ-5S	11/89	361.42	356.52	<100	<1	<1	<1	<1	<1,000	<1	5 	<11	<u>5</u>
F 2-55	12/94	301.42	330.32	<10	<5	<5	<5	<5	<200	<5	<5	<10	<5
	2/96			<1.000	<10	<10	<10	<10	<1.000	<10	<5	<10	<10
	2/90	í l		5 J	<10	<10	<10	<10	<1.000	<10	<5	<10	<10
	9/98	-		<10	<10	<10	<10	<10	<1,000	<10	<5 ^H	<10	<12
	6/99	-		<10 J	<10	<10	<10	<10	<1,000	<10	 <10 J	<10 J	 <10 J
	7/99	4		<10 J	<10 J	<10 J	<10 J	<10 J	<1,000 J	<10 J	<10 5	<10 J	<10 J
	9/00			<10 J	<10 J	<10 J	<10 J	<10 J	<1,000 J	<10 J	<10 J	<10	<10 J
	9/01			7 J	<10 J	<10	<10 J	<10	<1,000 J	<10 3	<10 5	<10	<10 5
	10/02			<25 J	<10	<10	<10	<10 <20 J	<1,000	<10	<10 <5 ^L	<5 ^L	<10
	10/02	-		<12	<5	<5	<5	<10	<1,000	<5	<5	<5	<5
	11/04								<1,000		<5	<5	
	6/05		1	<5.0 J	<1.0	<5.0	<4.0	<5.0	<1,000	<1.0	<1.1	<1.1	<3.0
	11/05	-		<5.0 J	<1.0	<5.0	<4.0	<5.0	<1,000	<1.0	<1.0	<1.0 J	<3.0
PZ-85	9/98	362.6	357.7	<10	<1.0	<10	<10	<10	<1,000	<10	<10	<10	<10
PZ-11D ^C	11/89	352.09	347.19	<100	<1	<1	<1	<1	<1,000	<1	<11	<10	<1
PZ-11S ^C	11/89	359.09	354.19	<100	<1	<1	<1	<1	<1,000	<1	<11	<11	<1
PZ-12D ^C	11/89	350	345.1	<100	<1	<1	<1	<1	<1,000	<1	<53	<53	<1
	11/90		040.1	<100	<1	<1		<1	<1,000	<1	<10	<10	<1
	11/91	1		<100	<1	<1	<1	<1	3	<1	<10	<10	<1
	11/92			<100	<1	<1	<1	<1	<1.000	<1	<10	<10	<1
PZ-12S ^C	11/89	360	355.1	<100	<1	<1	<1	<1	<1,000	<1	<10	<10	
	11/90	1		<100	<1	<1	<1	<3	<1,000	<1	<10	<10	<1
	11/91	1		<100	<1	<1	<1	<3	6	<1	<10	<10	5
	11/92	1		<100	<1	<1	<1	<3	<1.000	<1	<10	<10	<u>5</u> <1
PZ-13D ^F	11/89	349,4	344.4	<100	<1	<1	<1	<1	<1,000	<1	<11	<11	<1
PZ-13S ^F	11/89	359.5	354.5	<100	<1	2	<1	2	<1.000	<1	<11	<11	<1

2005 BIANNUAL PROCESS CONTROL MONITORING REPORT McKESSON ENVIROSYSTEMS - FORMER BEAR STREET FACILITY, SYRACUSE, NEW YORK

General Notes:

- 1. Concentrations are presented in micrograms per liter (ug/L), which is equivalent to parts per billion (ppb).
- 2. Compounds detected are indicated by bold-faced type.
- 3. Detections exceeding New York State Department of Environmental Conservation (NYSDEC) Groundwater Standards (Part 700) are indicated by shading.
- 4. Replacement wells for MW-6, MW-8, MW-9, MW-10, MW-11, and MW-12D were installed 8/95.
- 5. Replacement wells for MW-17, MW-24S, MW-24D, and TW-02 were installed 11/97 12/97.
- 6. The laboratory analytical results for the duplicate sample collected from monitoring well MW-23S during the 7/99 sampling event, indicated the presence of methanol at 5.1 mg/L. Because methanol was not detected in the original sample, the duplicate results were determined, based on the results of the data validation process, to be unacceptable. Furthermore, methanol has not been previously detected in groundwater samples collected from this monitoring well. Accordingly, the detection of methanol appears to be the result of a laboratory error and not representative of actual groundwater quality in the vicinity of monitoring well MW-23S.
- 7. N,N-dimethylaniline data for 10/02 sampling event for MW-1, MW-3S, MW-28, MW-29, MW-35, and TW-01 were rejected due to matrix spike and matrix spike duplicate recoveries below control limits. Aniline and N,N-dimethylaniline data for 10/02 sampling event for MW-30 were rejected due to matrix spike duplicate recoveries below control limits. These wells and piezometers are not perimeter monitoring locations and were not resampled.
- 8. Aniline and N,N-dimethylaniline results of nondetect for the 6/04 sampling event at MW-18 were rejected due to the deviation from a surrogate recovery that was below 10 percent. This well was not resampled.
- Volatile organic compound (VOC) results for the 11/04 sampling event were inadvertently lost due to laboratory equipment failure for monitoring locations MW-1, MW-17R, MW-18, MW-23I, MW-23S, MW-24DR, MW-24SR, MW-25, MW-33, PZ-5D, and PZ-5S. In addition, the initial VOC results were also irretrievable due to laboratory equipment failure for monitoring locations MW-27, MW-29, and MW-30; however, results for subsequent dilutions of these groundwater samples were valid, but the detection limits were high. The duplicate sample VOC results for MW-27 and MW-28 have lower detection limits and are presented in parentheses. These wells were not resampled.

Superscript Notes:

- A = Data presented is total xylenes (m- and p-xylenes and o-xylenes). For the 1995 data, the listed quantitation limit applies to the analyses conducted for m- and p-xylenes and o-xylenes.
- ^c = Wells/piezometers MW-6, MW-7, MW-8, MW-9, MW-10, MW-11, MW-12D, PZ-11D, PZ-11D, PZ-12D, and PZ-12S were abandoned during OU No.1 soil remediation activities (1994).
- F = Wells/piezometers MW-5, MW-14D, MW-16D, MW-17, MW-20, MW-21, MW-24S, MW-24D, TW-02, PZ-13S, and PZ-13D were abandoned 11/97 1/98.
- G = Piezometer PZ-8S was decommissioned 8/2000.
- * = MW-18, MW-19, MW-231, MW-23S, MW24DR, MW-24SR, MW-28, PZ-5S, and PZ-5D wells/piezometers were resampled for aniline during 12/98, because the 9/98 results were rejected due to laboratory error.
- ¹ = Because aniline was detected at monitoring well MW-3S at a concentration of 690 ug/l during the September 2001 sampling event, this well was resampled for aniline on November 8, 2001. Aniline was detected in MW-3S during the November 8, 2001 resampling event at a concentration of 69 ug/l.
- K= MW-17R, MW-18, and PZ-4S wells/piezometers were resampled for aniline and N,N-dimethylaniline on June 18, 2002 because N,N-dimethylaniline and/or aniline was detected during the April 2002 sampling event. The results of this additional sampling event are shown in parenthesis. MW-24SR and MW-24DR were also sampled for aniline and N,N-dimethylaniline on June 18, 2002, because N,N-dimethylaniline and/or aniline was detected at nearby perimeter monitoring locations during the April 2002 sampling event.
- L = MW-17R, MW-18, MW-19, MW-23S, MW-23S, MW-24DR, MW-24SR, MW-25S, PZ-4S, PZ-5S, and PZ-5D wells/peizometers were resampled for aniline and N,N-dimethylaniline during 1/03, because the 10/02 results were rejected due to matrix spike and matrix spike duplicate recoveries below control limits. These wells and piezometers are perimeter monitoring locations.
- M = MW-24SR and PZ-5D well and piezometer were sampled during the June 2004 sampling event because N,N-dimethylaniline and/or aniline was detected at nearby perimeter monitoring locations during the October 2003 sampling event.
- N = Wells MW-8S, MW-8D, and TW-02R were abandoned in 8/04 and replacement wells MW-8SR and TW-02RR were installed in 8/04.

Abbreviations:

AMSL = Above Mean Sea Level (NGVD of 1929)

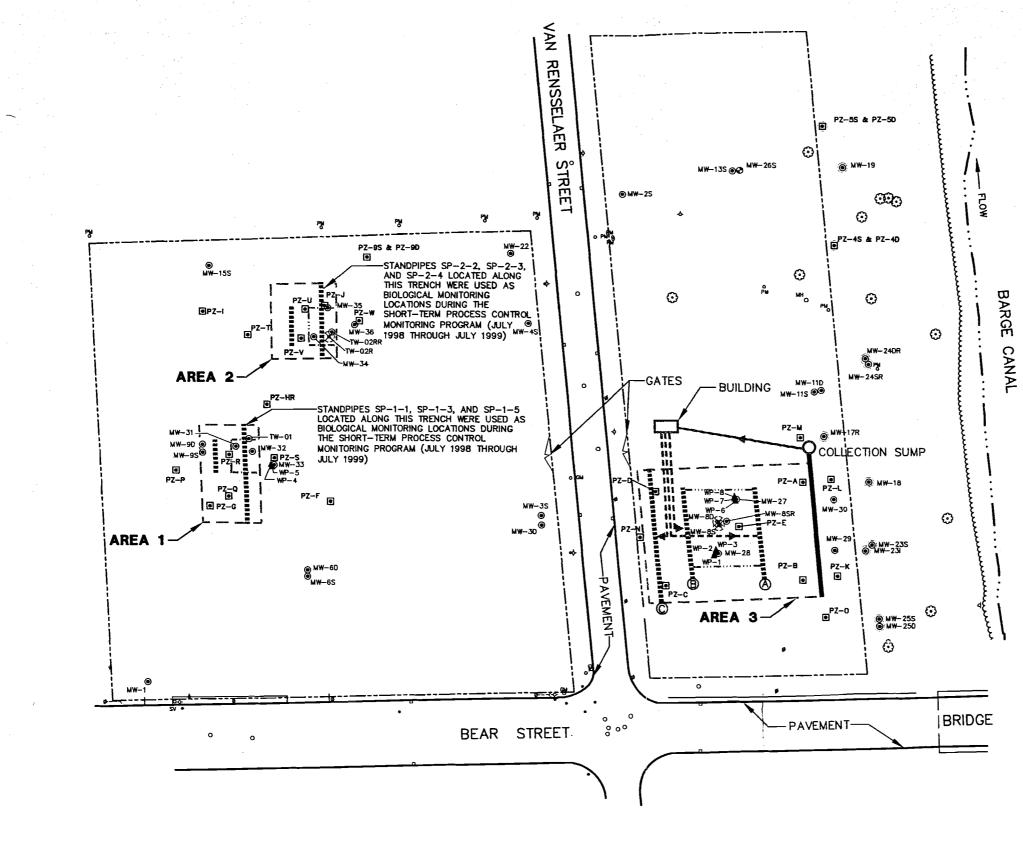
- NA Not available
- ND Not detected.
- NS Not sampled.

Analytical Qualifiers:

- D = Indicates the presence of a compound in a secondary dilution analysis.
- J = The compound was positively identified; however, the numerical value is an estimated concentration only.
- E = The compound was quantitated above the calibration range.
- JN = The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification. The associated numerical value is an estimated concentration only.
- B = The compound has been found in the sample as well as its associated blank, its presence in the sample may be suspect.
- < = Compound was not detected at the listed quantitation limit.
- R = The sample results were rejected.
- --= Samples results are not available (See Note 9.)

Figures



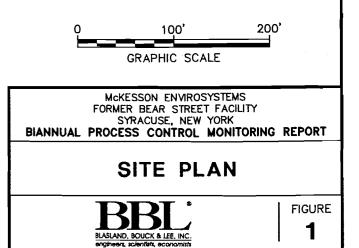


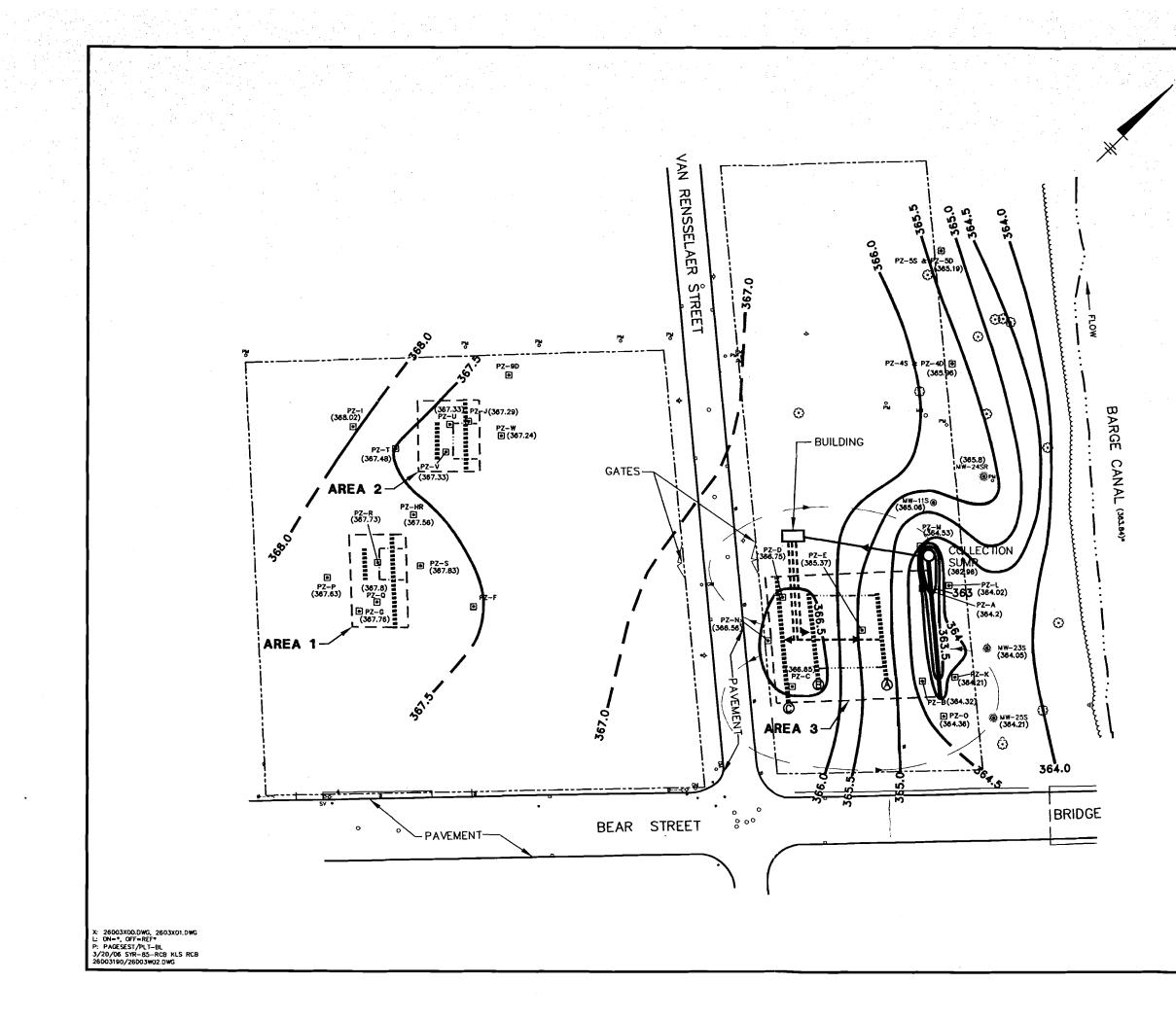
X: 26003X00.DWG, 26003X01.DWG L: 0N=*, OFF=RE7* P: PAGESEST/PLT-8L 6/7/05 SYR-85-R08 LIP LAF 26003190/BIANNUAL/REVISED/28003801.DWG

	LEGEND:
\$	UTILITY POLE
D	CATCH BASIN
PM 0	PETROLEUM PIPE LINE MARKER
GM O	GAS LINE MARKER
SV O	SEWER VENT
٠	HYDRANT
•	WATER VALVE
o .	MANHOLE
	PROPERTY LINE
MW -19⊚	GROUNDWATER MONITORING WELL
MW-85 1	ABANDONED/REMOVED GROUNDWATER MONITORING WELL
E 0R (e)	BIANNUAL DOWNGRADIENT PERIMETER GROUNDWATER MONITORING LOCATION
PZ-A 🖲	PIEZOMETER
MW-265 🤁	PUMPING WELL
₩P-8 🛦	WELL POINT
ニニニリ	BOUNDARY OF IMPACTED AREA
	GROUNDWATER WITHDRAWAL TRENCH
Ø	GROUNDWATER INFILTRATION TRENCH AND IDENTIFICATION
	PIPING TO BUILDING
	PIPING FROM BUILDING
	AREA OF RELATIVELY HIGHER CONCENTRATIONS OF COCs

NOTES:

- 1. REPLACED MONITORING WELLS ARE IDENTIFIED WITH AN "R" (e.g., MW-24DR).
- 2. LOCATIONS ARE APPROXIMATE.

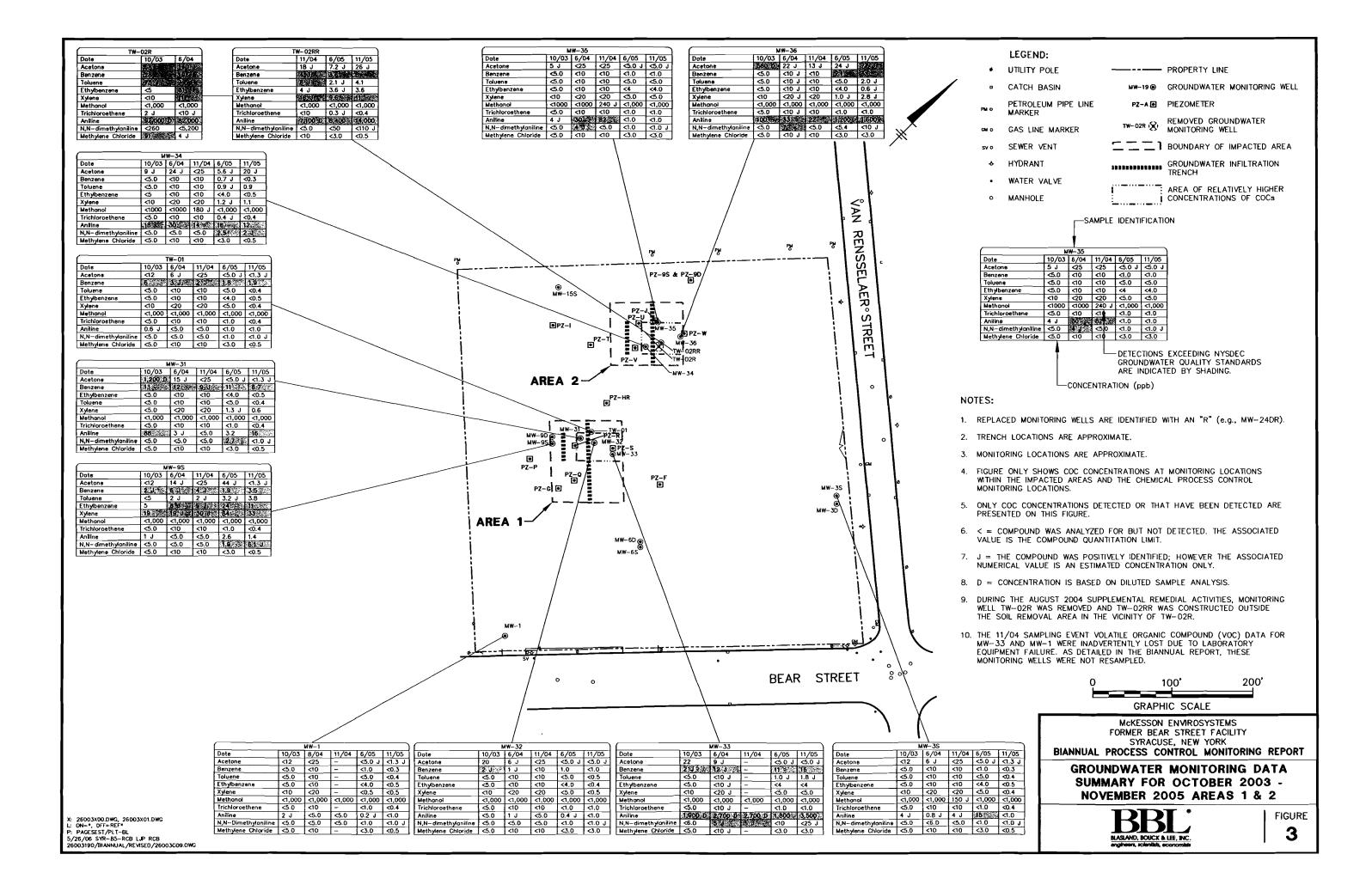


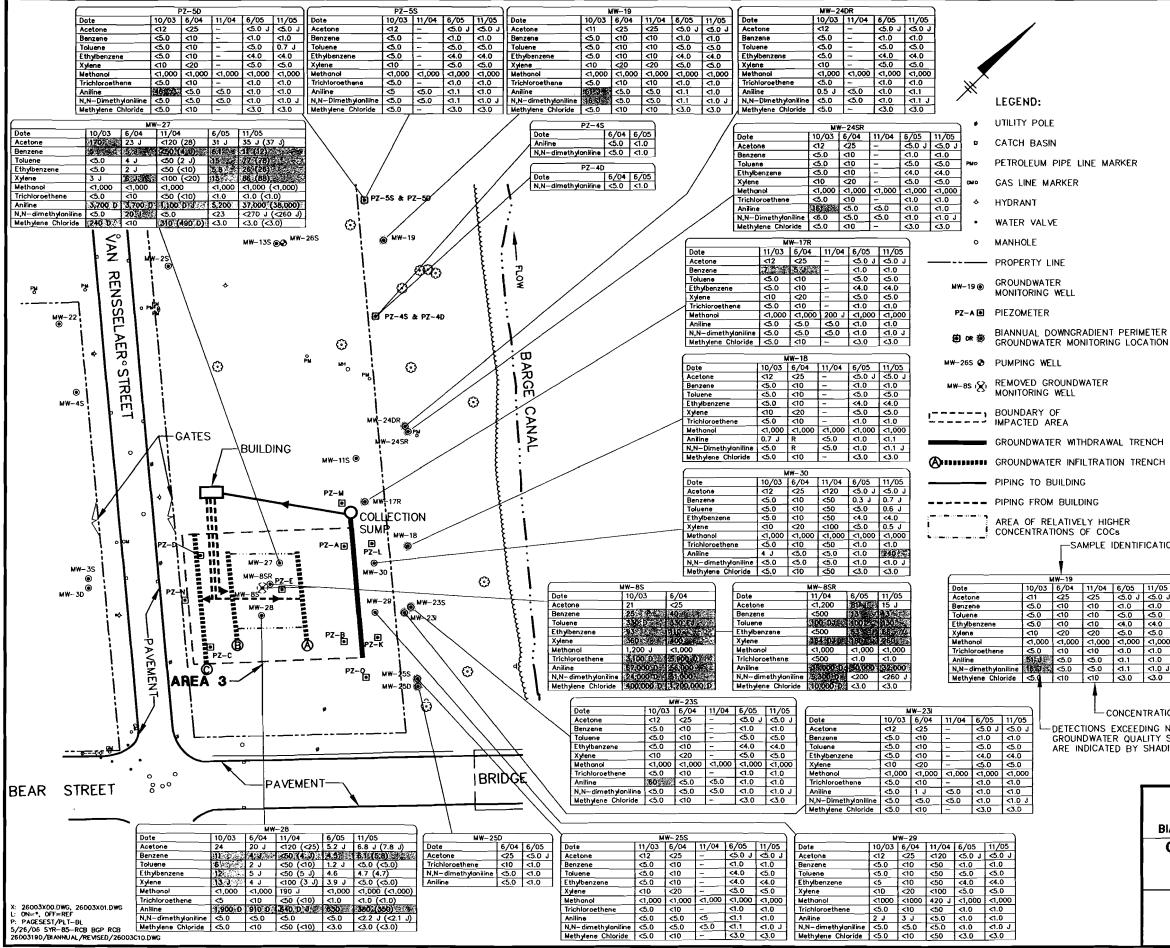


1		
		LEGEND:
	۹	UTILITY POLE
	. 0 .	CATCH BASIN
	Ph O	PETROLEUM PIPE LINE MARKER
	GM 0	GAS LINE MARKER
	24 O	SEWER VENT
	♦	HYDRANT
	•	WATER VALVE
	. 0	MANHOLE
		PROPERTY LINE
	₩₩ -19 @	GROUNDWATER MONITORING WELL
	(B) 98 (B)	BIANNUAL DOWNGRADIENT PERIMETER GROUNDWATER MONITORING LOCATION
	PZ-A 🖻	PIEZOMETER
	ニニニ	BOUNDARY OF IMPACTED AREA
		GROUNDWATER WITHDRAWAL TRENCH
	© ———	GROUNDWATER INFILTRATION TRENCH AND IDENTIFICATION
		PIPING TO BUILDING
		PIPING FROM BUILDING
		AREA OF RELATIVELY HIGHER CONCENTRATIONS OF COCS
	365.0	GROUNDWATER ELEVATION CONTOUR (FEET ABOVE MEAN SEA LEVEL) DASHED WHERE INFERRED
	(365.8)	GROUNDWATER ELEVATION (FEET ABOVE MEAN SEA LEVEL)
	> -	INFERRED GROUNDWATER FLOW PATH
N	OTES:	
1.	THIS FIGURE ONL LOCATIONS.	Y IDENTIFIES THE HYDRAULIC MONITORING
2.		DRING WELLS AND PIEZOMETERS ARE AN "R" (e.g., MW24DR).
3.	ELEVATIONS BASE DATUM OF 1929.	ED ON NATIONAL GEODETIC VERTICAL
4.	*CANAL MEASURE 2005.	MENT WAS TAKEN ON NOVEMBER 1,
	0	100' 200'
		GRAPHIC SCALE
ſ		ACKESSON ENVIROSYSTEMS
	FO	RMER BEAR STREET FACILITY SYRACUSE, NEW YORK
	BIANNUAL PRO	CESS CONTROL MONITORING REPORT
		TRIC SURFACE OF THE SHALLOW
	HYDROG	EOLOGIC UNIT-SAND LAYER October 31, 2005

BLASLAND, BOUCK & LEF, INC. sngineers, aclandist, economisti

FIGURE 2





1.	REPLACED MONITORING WELLS ARE IDENTIFIED
	WITH AN "R" (e.g., MW-24DR).

- 2. TRENCH LOCATIONS ARE APPROXIMATE.
- MONITORING LOCATIONS ARE APPROXIMATE.
- FIGURE ONLY SHOWS COC CONCENTRATIONS AT MONITORING LOCATIONS WITHIN THE IMPACTED AREAS AND THE CHEMICAL PROCESS CONTROL MONITORING LOCATIONS.
- ONLY COC CONCENTRATIONS DETECTED OR HAVE BEEN DETECTED ARE PRESENTED ON THIS FIGURE 5.
- < = COMPOUND WAS ANALYZED FOR BUT NOT 6. DETECTED. THE ASSOCIATED VALUE IS THE COMPOUND QUANTITATION LIMIT.
- J = THE COMPOUND WAS POSITIVELY IDENTIFIED;7. HOWEVER THE ASSOCIATED NUMERICAL VALUE IS AN ESTIMATED CONCENTRATION ONLY.
- D = CONCENTRATION IS BASED ON DILUTED 8. SAMPLE ANALYSIS.
- R = THE SAMPLE RESULT WAS REJECTED.9.
- THE 6/04 SAMPLING EVENT ANILINE AND N,N--DIMETHYLANILINE DATA FOR MW-18 WERE REJECTED DUE TO THE DEVIATION FROM A SURROGATE RECOVERY BELOW 10 PERCENT, THIS MONITORING WELL WAS NOT RESAMPLED.
- DURING THE AUGUST 2004 SUPPLEMENTAL 11. REMEDIAL ACTIVITIES, MONITORING WELL MW-8S WAS REMOVED AND MW-8SR WAS CONSTRUCTED DOWNGRADIENT OF THE SOIL REMOVAL AREA IN THE VICINITY OF MW-8S.
- 12. THE 11/04 SAMPLING EVENT VOLATILE ORGANIC COMPOUND (VOC) DATA FOR MW-17R, MW-18, MW-231, MW-23S, MW-24DR, MW-24SR, MW-25S, PZ-5D, AND PZ-5S WERE INADVERTENTLY LOST DUE TO LABORATORY EQUIPMENT FAILURE. AS DETAILED IN THE BIANNUAL REPORT, THESE MONITORING WELLS WERE NOT RESAMPLED.
- THE 11/04 SAMPLING EVENT VOC INITIAL DATA 13. FOR MW-27, MW-28, MW-29, AND MW-30 WERE INADVERTENTLY LOST DUE TO LABORATORY EQUIPMENT FAILURE. HOWEVER, VALID DATA WAS OBTAINED FROM SUBSEQUENT DILUTIONS OF THESE SAMPLES, RESULTING IN HIGHER DETECTION LIMITS. THE VOC RESULTS OBTAINED FROM THE DUPLICATE SAMPLES COLLECTED AT MW-27 AND MW-28 HAVE LOWER DETECTION LIMITS AND ARE PRESENTED ON THIS FIGURE IN PARENTHESES.

	LITY STANDARDS SHADING. 0 100' 200'
_	GRAPHIC SCALE
	McKESSON ENVIROSYSTEMS FORMER BEAR STREET FACILITY SYRACUSE, NEW YORK BIANNUAL PROCESS CONTROL MONITORING REPORT
	GROUNDWATER MONITORING DATA SUMMARY FOR OCTOBER 2003 - NOVEMBER 2005 AREA 3
	BBBL° FIGURE BLASLAND, BOUCK & LEE, INC. 4 origineers, scientifica, economistic 4

-SAMPLE IDENTIFICATION

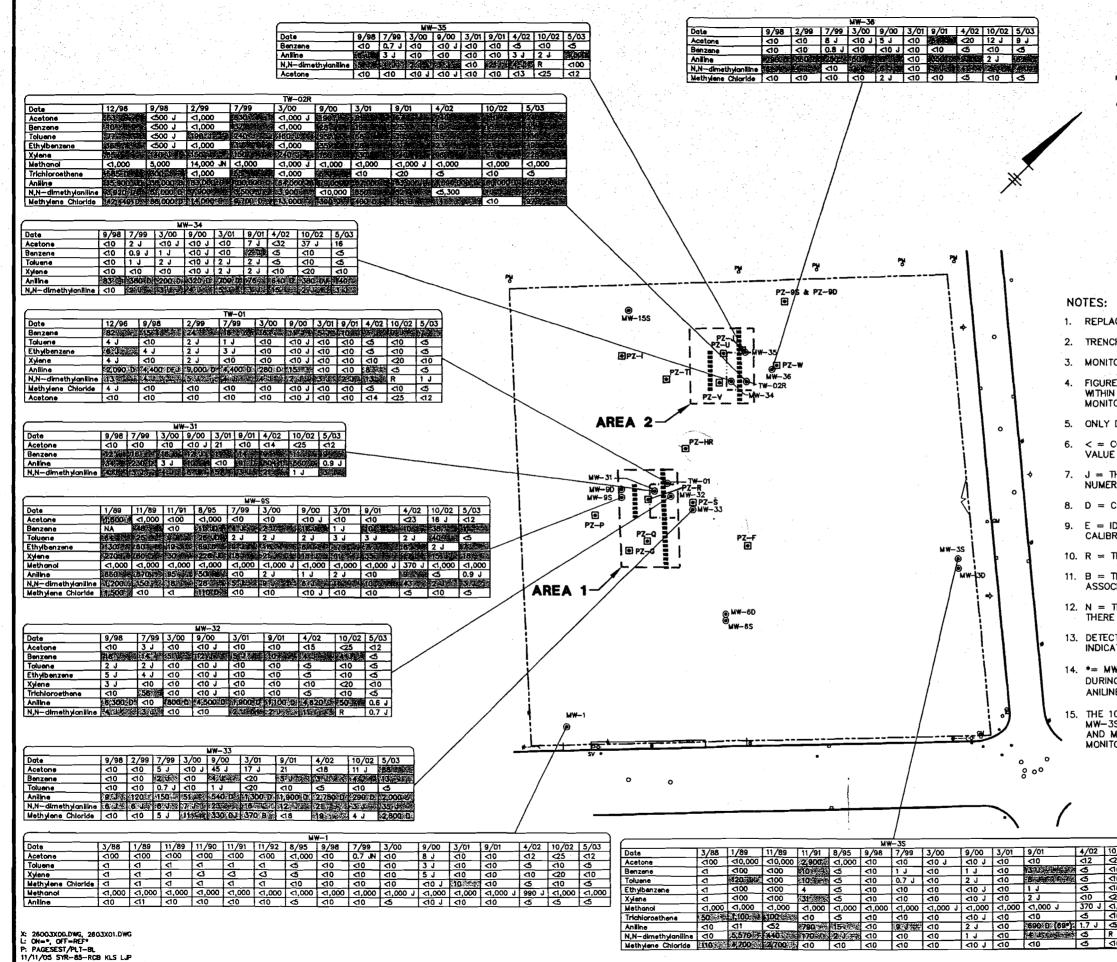
/04	6/05	11/05
25	<5.0 J	<5.0 J
10	<1.0	<1.0
10	<5.0	<5.0
0	<4.0	<4.0
20	<0.0	<5.0
1,000	<1,000	<1,000
0	⊲1.0	<1.0
5.0	d .1	<1.0
5.0	<1.1	<1.0 J
10	<3.0	<3.0
1		

-CONCENTRATION (ppb) -DETECTIONS EXCEEDING NYSDEC

Attachment A

Groundwater Monitoring Data Summary Figures for 1988 - May 2003





6003190/BIANNUAL/REVISED/26003C01.DWG

	LEGEND:		
	UTILITY POLE	•	-PROPERTY LINE
٥	CATCH BASIN	₩₩-19 🖲	GROUNDWATER MONITORING WELL
PH 0	PETROLEUM PIPE LINE MARKER	PZ-A 🖻	PIEZOMETER BOUNDARY OF IMPACTED AREA
GNI 0 57 0	GAS LINE MARKER SEWER VENT	I	GROUNDART OF IMPACTED AREA GROUNDWATER INFILTRATION TRENCH
*	HYDRANT WATER VALVE		AREA OF RELATIVELY HIGHER CONCENTRATIONS OF COCS
0	MANHOLE	s	AMPLE IDENTIFICATION

			- MW	-35					
Date	9/98	7/99	3/00	9/00	3/01	9/01	4/02	10/02	5/03
Benzene	<10	0.7 J	<10	<10 J	<10	<10	ŝ	d 0	3
Aniline	1.1.2	3 J	<10	10	<10	<u> 10</u>	3 J	2 1	12,000
N,N-dimethylaniline	SAM	2.15	之间的		<10		10.1	R	<100
Acetone	<10	<10	<10 J	<10 J	<10	<10	43	⊲5	<12

-CONCENTRATION (ppb)

1. REPLACED MONITORING WELLS ARE IDENTIFIED WITH AN "R" (e.g., MW-24DR).

2. TRENCH LOCATIONS ARE APPROXIMATE.

3. MONITORING LOCATIONS ARE APPROXIMATE.

FIGURE ONLY SHOWS COC CONCENTRATIONS AT MONITORING LOCATIONS WITHIN THE IMPACTED AREAS AND THE CHEMICAL PROCESS CONTROL MONITORING LOCATIONS.

5. ONLY DETECTED COCs ARE PRESENTED ON THIS FIGURE.

< = compound was analyzed for but not detected. The associated value is the compound quantitation limit.

7. J = THE COMPOUND WAS POSITIVELY IDENTIFIED; HOWEVER THE ASSOCIATED NUMERICAL VALUE IS AN ESTIMATED CONCENTRATION ONLY.

8. D = CONCENTRATION IS BASED ON DILUTED SAMPLE ANALYSIS.

9. E = IDENTIFIES COMPOUNDS WHOSE CONCENTRATIONS EXCEED THE CALIBRATION RANGE OF THE INSTRUMENTS.

10. R = THE SAMPLE RESULT WAS REJECTED.

11. B = THE COMPOUND HAS BEEN FOUND IN THE SAMPLE AS WELL AS IN ITS ASSOCIATED BLANK; ITS PRESENCE IN THE SAMPLE MAY BE SUSPECT.

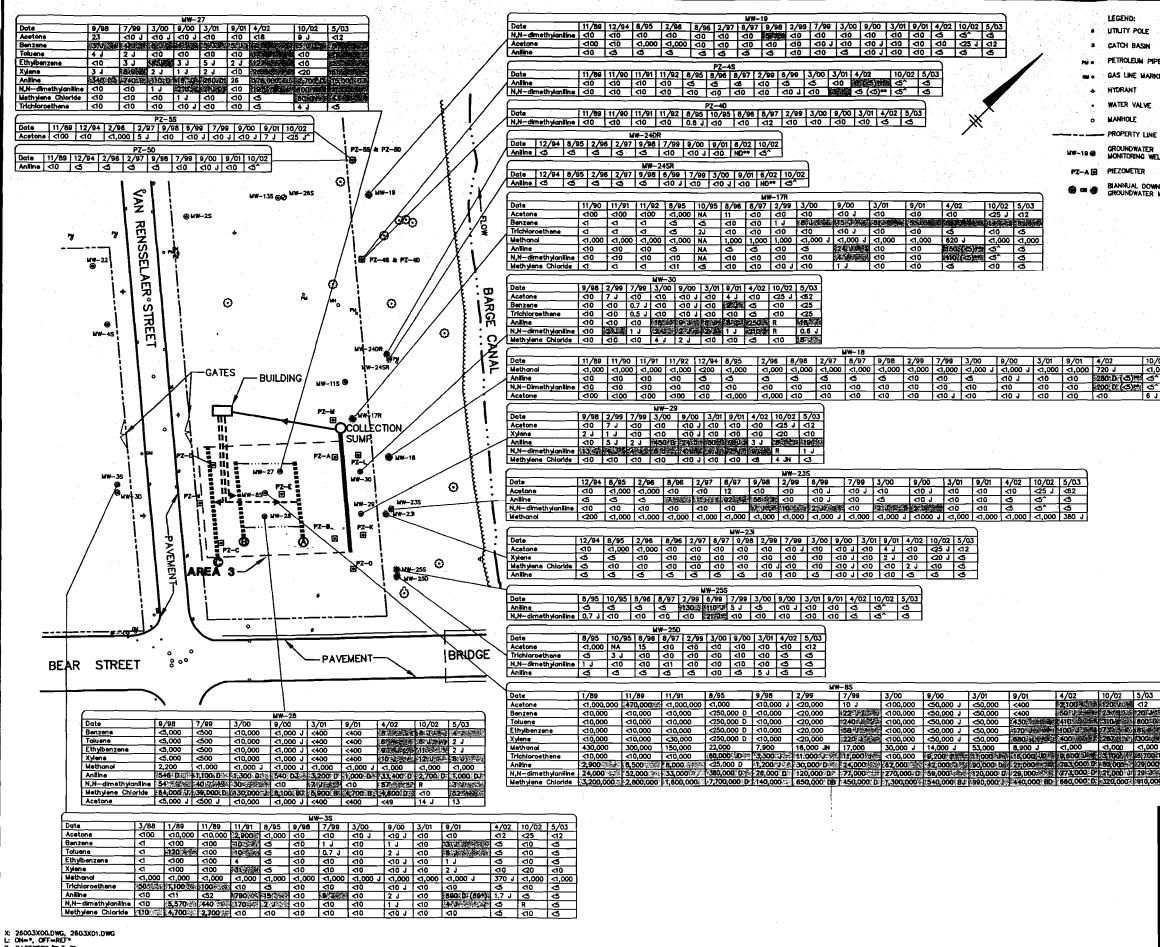
12. N = THIS ANALYSIS INDICATES THE PRESENCE OF A COMPOUND FOR WHICH THERE IS PRESUMPTIVE EVIDENCE TO MAKE AN TENTATIVE IDENTIFICATION.

13. DETECTIONS EXCEEDING NYSDEC GROUNDWATER QUALITY STANDARDS ARE INDICATED BY SHADING.

14. *= MW-3S WAS RESAMPLED ON 11/8/01 DUE TO ANILINE DETECTION DURING 9/2001 SAMPLING EVENT AT A CONCENTRATION OF 690 PPB. ANILINE WAS DETECTED ON 11/8/01 AT A CONCENTRATION OF 69 PPB.

15. THE 10/02 SAMPLING EVENT N.N-DIMETHYLANILINE DATA FOR MW-1, MW-3S, MW-32, MW-35, AND TW-01 WERE REJECTED DUE TO MATRIX SPIKE AND MATRIX SPIKE DUPLICATE RECOVERIES BELOW CONTROL LIMITS. THESE MONITORING WELLS WERE NOT RESAMPLED.

		0 100' 200'
		GRAPHIC SCALE
		MCKESSON ENVIROSYSTEMS FORMER BEAR STREET FACILITY SYRACUSE, NEW YORK
0/02 25 10	5/03	BIANNUAL PROCESS CONTROL MONITORING REPORT
10	<12 3	GROUNDWATER MONITORING DATA
10	6	
10 20	6	SUMMARY FOR 1988 - MAY 2003
20	<10	
1,000	<1,000	AREAS 1 & 2
10 5	4	
	6	FIGURE
10	5	
		BLASLAND, BOUCK & LEE, INC. engineers, scientists, economists

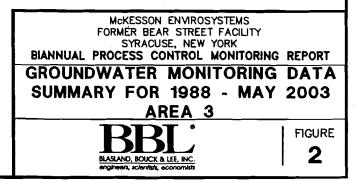


PAGESEST/PLT-BL 1/11/05 SYR-85-RCB KLS LJP 6003190/BIANNUAL/REVISED/28003C02.DWG

LEGEND:					
UTILITY POLE	WW-265 @ PUMPH	NG WELL			n a tainn an tainn. Tainn an tainn an tai
CATCH BASIN		TED AREA			1.181
PETROLEUM PIPE LINE MARKER			-	TOFNICH	
GAS LINE MARKER		DWATER W			
HYDRANT	COMPRESSES GROUN	IDWATER IN	FILTRATIC	IN TRENCH	
WATER VALVE		TO BUILDIN	·.		
MANHOLE		FROM BUIL		159	
PROPERTY LINE		NTRATIONS			
GROUNDWATER MONITORING WELL		SAN	IPLE IDEN	NTIFICATION	÷1
PIEZOMETER	MW-2				
	Date		10/95	1 1 L L	
BIANNUAL DOWNGRADIENT PERIMETER	Acetone		NA	· · ·	
GROUNDWATER MONITORING LOCATION	Trichioroethene		3 J		
	N,N-dimethyloniline		40		
	Antine	0			
	CONCENTRATION (J	ррь) —	·* .	· •	
NOTES:					
1. REPLACED	MONITORING WELLS ARE	e identifiet	а нти с	N "R" (e.g.,	

- 2. TRENCH LOCATIONS ARE APPROXIMATE.
- 3. MONITORING LOCATIONS ARE APPROXIMATE.
- FIGURE ONLY SHOWS COC CONCENTRATIONS AT MONITORING LOCATIONS WITHIN THE IMPACTED AREAS AND THE CHEMICAL PROCESS CONTROL MONITORING LOCATIONS.
- 5. ONLY DETECTED COC& ARE PRESENTED ON THIS FIGURE.
- < = CONPOUND WAS ANALYZED FOR BUT NOT DETECTED, THE ASSOCIATED VALUE IS THE COMPOUND QUANTITATION LIMIT.
- J = THE COMPOUND WAS POSITIVELY IDENTIFIED; HOWEVER THE ASSOCIATED NUMERICAL VALUE IS AN ESTIMATED CONCENTRATION ONLY.
- 8. D = CONCENTRATION IS BASED ON DILUTED SAMPLE ANALYSIS.
- 9. E = identifies compounds whose concentrations exceed the caubration range of the instruments.
- 10. 8 THE COMPOUND HAS BEEN FOUND IN THE SAMPLE AS WELL AS IN ITS ASSOCIATED BLANK; ITS PRESENCE IN THE SAMPLE MAY BE SUSPECT.
- N = THIS ANALYSIS INDICATES THE PRESENCE OF A COMPOUND FOR WHICH THERE IS PRESUMPTIVE EVIDENCE TO MAKE AN TENTATIVE IDENTIFICATION.
- 12. R THE SAMPLE RESULT WAS REJECTED.
- 13. DETECTIONS EXCEEDING NYSDEC GROUNDWATER QUALITY STANDARDS ARE INDICATED BY SHADING.
- 14. THE ANKLINE DATA FOR THE 9/98 SAMPLING EVENT FOR MW-18, MW-19, MW-235, MW-234, MW-245R, MW-240R, MW-28, PZ-55 AND PZ-50 WERE OBTAINED IN 12/98, BECAUSE THE 9/98 RESULTS WERE REJECTED DUE TO LABORATORY ERROR.
- 15. = MW-35 WAS RESAMPLED ON 11/8/01 DUE TO ANILINE DETECTION DURING 9/2001 SAMPLING EVENT AT A CONCENTRATION OF 690 PPB. ANILINE WAS DETECTED ON 11/8/01 AT A CONCENTRATION OF 69 PPB.
- 16. ** = MONITORING WELLS MW-17R, MW-18, AND PZ-4S WERE RESAMPLED FOR ANILINE AND NN-DIMETHYLANILINE ON JUNE 18, 2002 DUE TO NN-DIMETHYLANILINE AND/ OR ANILINE DETECTION AT THESE PERMETER MONITORING LOCATIONS DURING THE APRIL 2002 SAMPLING EVENT. THE RESULTS OF THIS RESAMPLING EVENT ARE SHOWN IN PARENTHESIS. MONITORING WELLS MW-24SR AND MW-24DR WERE ALSO SAMPLED ON JUNE 18, 2002 FOR ANALYSIS OF ANULMS-24DR WERE ALSO SAMPLED ON JUNE 18, 2002 FOR ANALYSIS OF ANULMS-AND NN-DIMETHYLANILINE. THESE COMPOUNDS WERE NOT DETECTED.
- ^ → THE ANILINE AND N,N-DIMETHYLANILINE DATA FOR THE 10/02 SAMPLING EVENT FOR MW-17R, MW-18, MW-19, MW-23S, MW-23I, MW-24SR, MW-24OR, MW-25S, PZ-4S, PZ-5S, AND PZ-5D WERE OBTAINED IN 1/03, BECAUSE THE 10/02 RESULTS WERE RELECTED DUE TO MATRIX SPIKE AND MATRIX SPIKE DUPLICATE RECOVERIES BELOW CONTROL INNTS. UMITS
- 18. THE 10/02 SAMPLING EVENT N.N-DIMETHYLANILINE DATA FOR MW-3S, MW-28 AND MW-29 AND THE 10/02 SAMPLING EVENT ANILINE AND N.N-DIMETHYLANILINE DATA FOR MW-30 WERE REJECTED DUE TO MATRIX SPIKE AND WATRIX SPIKE DUPLOCATE RECOVERIES BELOW CONTROL LIMITS. THESE MONITORING WELLS WERE NOT RESAMPLED.

0 120' 240' GRAPHIC SCALE



/02	10/02	5/03
20 J	<1,000	280 J
80 D (C)	ත^	0
00 D (<5)**	ର୍ବ	\$
10	6 J	<12

10/02 5/03

<1,000 <1,000