

*Transmitted Via Overnight Delivery*

November 14, 2005

Mr. Mark Mateunas  
Bureau of Hazardous Site Control  
New York State Department of Environmental Conservation  
625 Broadway, 12<sup>th</sup> 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. (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 January 2005 through June 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 (January 2005 through June 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 910,000 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 June 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), NYSDEC approved the elimination of the biological monitoring activities from the Process Control Monitoring Program. 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 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:

- **I. RAMM and Suga-Lik® Introduction Activities** – A description of the Revised Anaerobic Mineral Media (RAMM) and Suga-Lik® (Blackstrap Molasses) introduction activities conducted between January 2005 and June 2005.
- **II. Hydraulic Process Control Monitoring** – A description of the results of the hydraulic control monitoring activities conducted between January 2005 and June 2005.
- **III. COC Process Control and Biannual Groundwater Monitoring Program** – A description of the June 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 June 2005.
- **IV. Conclusions** – Conclusions based on the results of the process control monitoring activities.
- **V. Recommendations** – 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.

- Continuing to introduce approximately 100 gallons of RAMM-amended groundwater into each of the three areas on a monthly basis.
- Continuing 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.

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- Continuing to introduce RAMM and Suga-Lik<sup>®</sup> on a monthly basis into four 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.
- Continuing 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<sup>®</sup> additions at these locations were discontinued in April 2005 to further stimulate the biodegradation rate of aniline in the vicinity of MW-33.
- Continuing to introduce RAMM and Suga-Lik<sup>®</sup> on a monthly basis into piezometer PZ-W located downgradient of Area 2, near monitoring well MW-36.
- Continuing to introduce RAMM and Suga-Lik<sup>®</sup> 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<sup>®</sup> solution has been introduced into each of the aforementioned piezometers and well points, and approximately 100 gallons of RAMM and/or Suga-Lik<sup>®</sup> solution has been introduced into Areas 1, 2, and 3 on a monthly basis. The amount of Suga-Lik<sup>®</sup> 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 June 6, 2005. The monitoring locations are shown on Figure 1.

Table 2 summarizes the groundwater level measurements obtained during the June 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 June 6, 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 1.0 gallon per minute (gpm) to 6.81 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 infiltration trenches increases the rate at which RAMM-amended groundwater moves through the area of

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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 6½-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 1.36 millisiemens per centimeter (mS/cm) to 2.10 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 June 6, 2005 through June 10, 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 June 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 the previous biannual progress report. The monitoring locations are shown on Figure 1.

In addition to the monitoring locations that were scheduled to be sampled during the first sampling event in 2005 (Table 1), groundwater samples from monitoring locations MW-24DR, MW-24SR, PZ-5D, and PZ-5S were also collected and analyzed for COCs. As identified in the previous biannual report, these locations were sampled in June 2005 because the VOC data was inadvertently lost due to laboratory equipment failure during the November 2004 sampling event. As identified in Table 1, these locations were not scheduled to be sampled again until the second sampling event of 2005.

In accordance with the requirements of the NYSDEC-approved monitoring program, laboratory analytical results for the June 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 in-situ anaerobic bioremediation treatment program. 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 June 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.

### 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 program. For example, the aniline concentration detected at MW-32 was 6,300 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 (1,800 ppb) detected in the groundwater sample collected from the monitoring well located immediately downgradient of Area 1 (MW-33) was approximately 33% lower in June 2005 compared to the aniline concentrations detected in 2004 (2,700 ppb). As previously noted, Suga-Lik<sup>®</sup> 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 detected at 15 ppb 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 detected in the groundwater sample collected from TW-02RR. 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 June 2005 compared to detections of 61,000 ppb and 86,000 ppb, respectively in September 1998. The aniline concentration detected at TW-02RR in June 2005 is approximately 90% 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 8,400 ppb in June 2005.
- In the June 2005 groundwater sample collected from monitoring well MW-36 (located downgradient of Area 2), the aniline concentration (1,200 ppb) was anomalously high. No other COCs were detected in this sample at concentrations greater than their respective NYSDEC Groundwater Quality Standard, except for benzene which was detected at 2.1 ppb.

### Area 3

- 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 during implementation of the in-situ anaerobic bioremediation treatment program.

- 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 June 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 to 30,427 ppb in June 2005. Additionally, the total concentration of COCs detected in June 2005 was approximately 40% lower than the concentration detected during the previous sampling event (November 2004): N,N-dimethylaniline, and methylene chloride were not detected in June 2005, and were previously detected at 5,300 ppb and 10,000 ppb, respectively.
- The aniline concentration detected in the groundwater sample collected during June 2005 from monitoring well MW-27 (5,200 ppb) was higher than the previous detection of 1,100 ppb (November 2004). The other COCs detected in the groundwater sample collected from MW-27 in June 2005 were relatively low, consistent with previously detected concentrations.
- 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 generally non-detect. The aniline concentrations detected since the August 2004 supplemental remedial activities (640 ppb and 630 ppb, November 2004 and June 2005, respectively) are the lowest concentrations detected at this location since September 2000. 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 previously discussed above, the November 2004 VOC results were inadvertently lost for all but one (MW-19) of the downgradient perimeter monitoring locations due to laboratory equipment failure. Each of these locations was, however, sampled and analyzed for COCs during the June 2005 sampling event, including perimeter monitoring locations MW-24DR, MW-24SR, PZ-5D, and PZ-5S that were not scheduled to be sampled until the second sampling event of 2005 (Table 1). 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 June 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 program. 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 June 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 in-situ anaerobic treatment program began in 1998 demonstrate a significant decrease in COC concentrations since commencement of the in-situ anaerobic bioremediation treatment program. The COC concentrations detected in this area were either not detected or detected at concentrations only slightly greater than their respective NYSDEC Groundwater Quality Standard.
- In the area immediately downgradient of Area 1, Suga-Lik<sup>®</sup> additions were discontinued to further stimulate the biodegradation rate of aniline in this area. The June 2005 aniline concentration (1,800 ppb) was approximately 33% lower than the previously detected concentration (2,700 ppb, November 2004).
- 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 90% decrease: 82,000 ppb in June 2004 compared to 8,400 ppb in June 2005.
- In the June 2005 groundwater sample collected downgradient of Area 2 (MW-36), the aniline concentration (1,200 ppb) was anomalously high. No other COCs were detected in the June 2005 groundwater sample collected from MW-36 at concentrations greater than their respective NYSDEC Groundwater Quality Standard, except for benzene which was detected at 2.1 ppb. This well was sampled during the October 2005 process control monitoring event and an evaluation of the results will be presented in the next biannual report.
- 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 program in 1998. After completion of the August 2004 supplemental remedial activities conducted to further address COCs at MW-8S, the total COC concentration measured at MW-8SR is approximately 95% lower.

## **V. Recommendations**

Based on the process control monitoring data obtained to date and the conclusions summarized above, the addition of RAMM and/or Suga-Lik<sup>®</sup> in each of the three areas and the hydraulic control activities in Area 3 will continue to be implemented consistent with the operation procedures described in Section I.

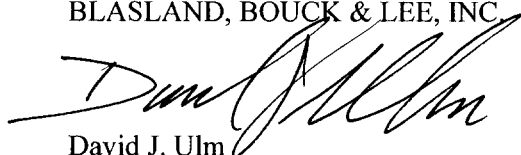
As discussed in this report and summarized in Table 1, the monitoring activities conducted at the site are included in the Biannual Groundwater Monitoring Program and the revised Process Control Monitoring Program. The activities included in the Biannual Groundwater Monitoring Program will continue, 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 second sampling event of 2005 was conducted during the week of October 31, 2005. 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 & LEE, INC.



David J. Ulm  
Senior Vice President

CWS/jlc  
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.



## ***Tables***

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

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

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

SEE NOTES ON PAGE 3.

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

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

Monitoring Location	Annual Sampling Schedule	
	First Sampling Event	Second Sampling Event
PZ-B	H	H
PZ-C	H	H
PZ-D	H	H
PZ-E	H	H
PZ-K	H	H
PZ-L	H	H
PZ-M	H	H
PZ-N	H	H
PZ-O	H	H
MW-11S	H	H
MW-11D	H	H
<b>Downgradient Perimeter Monitoring Locations</b>		
MW-17R	C	C
MW-18	C, H	C, H
MW-19	C, H	C, H
MW-23I	C, H	C, H
MW-23S	C, H	C, H
MW-24SR	H	C, H
MW-24DR	H	C, H
MW-25S	C, H	C, H
MW-25D	C, H	H
PZ-4S	C	
PZ-4D	C, H	H
PZ-5S		C
PZ-5D	H	C, H

SEE NOTES ON PAGE 3.

**TABLE 1**  
**REVISED LONG-TERM HYDRAULIC AND COC PROCESS CONTROL MONITORING SCHEDULE**  
**BIANNUAL PROCESS CONTROL MONITORING REPORT**  
**McKESSON ENVIROSYSTEMS - FORMER BEAR STREET FACILITY, SYRACUSE, NEW YORK**

**Notes:**

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).
6. 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*.
8. Monitoring locations MW-24DR, MW-24SR, PZ-5D, and PZ-5S will be additionally sampled for COCs during the first biannual sampling event in 2005, because the November 2004 VOC data for these locations were inadvertently lost due to laboratory equipment failure.

**TABLE 2**  
**SUMMARY OF SELECT GROUNDWATER LEVEL MEASUREMENTS**

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

Location	Reference Elevation (feet AMSL)	6/10/98 Static	6/22/98	7/6/98	7/20/98 Week 1	7/27/98 Week 2	8/6/98 Week 3	8/10/98 (morning) Week 4	8/10/98 (afternoon) Week 4	8/11/98 (morning) Week 4	8/11/98 (afternoon) Week 4	8/12/98 (morning) Week 4	8/12/98 (afternoon) Week 4	10/16/98 Week 13	11/17/98 Week 18	12/16/98 Week 22	12/22/98 Week 23	1/6/99 Week 25	1/13/99 Week 26
Canal	393.39*	362.91	363.37	363.72	363.08	363.08	362.94		362.78	362.94			362.84	363.27		363.14	362.21	363.11	
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	366.26	367.82	366.20			365.29							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-23I	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	362.52	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	363.60	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	366.29	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					365.66	365.60						365.46	365.36	365.60	365.76	365.71	365.44
PZ-HR	376.99	366.16					365.54							365.44	365.34	365.54	365.84	365.60	365.39
PZ-I	375.15	366.56					365.86	365.64						365.88	365.57	365.90	366.59	366.05	365.76
PZ-J	374.89	366.15					365.53	365.40						365.53	365.39	365.55	365.93	365.59	365.47
PZ-K	373.19	364.53	363.78	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	363.59	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	364.09	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						365.52	365.39	365.61	365.78	365.73	365.44
PZ-Q	377.61	366.23					365.64	365.57						365.45	365.35	365.59	365.70	365.71	365.42
PZ-R	377.05	366.23		366.94			365.65	365.57						365.50	365.38	365.61	365.81	365.67	365.47
PZ-S	378.13	366.19					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**

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

Location	Reference Elevation (feet AMSL)	4/14/99 Week 39	6/3/99 Week 46	7/13/99 Week 52	9/27/00	6/1/00	8/18/00	11/14/00	3/19/01	5/24/01	7/15/02	8/3/02	8/18/02	10/7/02	1/20/03	3/5/03	10/27/03	8/14/04	11/1/04	2/6/05
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	361.39
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	361.46
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
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
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
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
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
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
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
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
MW-23I	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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
PZ-N	376.94**	365.87	365.19	364.87	366.17	366.12	NM	365.35	366.43	364.47	366.39	365.53	366.29	364.09	365.54	365.74	364.48	365.95	365.47	365.53
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
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
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
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
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
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
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
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
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

**TABLE 2**  
**SUMMARY OF SELECT GROUNDWATER LEVEL MEASUREMENTS**  
**OCTOBER 2005 BIENNIAL 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 1½ 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 was decommissioned on August 3, 2004.

**TABLE 3**  
**SUMMARY OF HISTORICAL GROUNDWATER MONITORING DATA**

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

Monitoring Well	Sampling Date	Screen Elev. (ft. AMSL)		Acetone	Benzene	Toluene	Ethyl-benzene	Xylene <sup>A</sup>	Methanol	Trichloro-ethene	Aniline	N,N-Dimethyl-aniline	Methylene Chloride
		Top	Bottom										
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	5 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
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	110
	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	9 J	<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
	10/02			<25	<10	<10	<10	<20	<1,000	<10	<5	R	<10



**TABLE 3**  
**SUMMARY OF HISTORICAL GROUNDWATER MONITORING DATA**

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

Monitoring Well	Sampling Date	Screen Elev. (ft. AMSL)		Acetone	Benzene	Toluene	Ethyl-benzene	Xylene <sup>A</sup>	Methanol	Trichloro-ethene	Aniline	N,N-Dimethyl-aniline	Methylene Chloride
		Top	Bottom										
MW-3S (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
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 <sup>F</sup>	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 <sup>C</sup> (Replaced by MW-6S)	1/89	365.5	355.9	<100	<1	<1	<1	<1	<1,000	<1	<11	<11	<1
	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 <sup>C</sup>	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 <sup>C</sup> (Replaced by MW-8S) <sup>N</sup>	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
	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	1,600,000
	8/95			<1,000	<250,000 D	<250,000 D	<250,000 D	<250,000 D	22,000	60,000 JD	<25,000 D	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	16,000 JN	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			<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			<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			120 J	23	310	73	267	<1,000	3,100	80,000	21,000 J	320,000
	5/03			<12	20 J	600 D	81	300	<1,000	6,700 D	79,000 D	29 J	910,000 D
	10/03			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
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

**TABLE 3**  
**SUMMARY OF HISTORICAL GROUNDWATER MONITORING DATA**

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

Monitoring Well	Sampling Date	Screen Elev. (ft. AMSL)		Acetone	Benzene	Toluene	Ethyl-benzene	Xylene <sup>A</sup>	Methanol	Trichloro-ethene	Aniline	N,N-Dimethyl-aniline	Methylene Chloride
		Top	Bottom										
MW-9 <sup>C</sup> (Replaced by MW-9S)	1/89	365.6	356	1,600	NA	64	130	270	<1,000	<10	660	1,200	1,500
	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			<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
MW-10 <sup>C</sup> (Replaced by MW-9D)	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
	11/89			<100,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	900	2,400	28,000
	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 <sup>C</sup> (Replaced MW-6D)	1/89	355.1	345.5	<100	<1	<1	<1	<1	8,400	<1	<12	<12	1
	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			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			<1,000	<5	<5	<5	<5	<1,000	<5	<5	<10	<10
	10/95			NA	<5	<5	<5	<5	NA	<5	NA	NA	<5
MW-12D <sup>C</sup> (Replaced MW-8D) <sup>N</sup>	1/89	354.8	345.2	<100,000	<1,000	<1,000	<1,000	<1,000	12,000	<1,000	67	410	120,000
	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
	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	<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

**TABLE 3**  
**SUMMARY OF HISTORICAL GROUNDWATER MONITORING DATA**

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

Monitoring Well	Sampling Date	Screen Elev. (ft. AMSL)		Acetone	Benzene	Toluene	Ethyl- benzene	Xylene <sup>A</sup>	Methanol	Trichloro- ethene	Aniline	N,N-Dimethyl- aniline	Methylene Chloride
		Top	Bottom										
MW-14D <sup>F</sup>	1/89	359	349.4	<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-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 <sup>F</sup>	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 <sup>F</sup> (Replaced by MW-17R)	11/90	365.7	356.1	<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	<11
	10/95			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			<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) <sup>K</sup>	110 (<5) <sup>K</sup>	<5
	10/02			<25 J	14	<10	<10	<20	<1,000	<10	<5 <sup>L</sup>	<5 <sup>L</sup>	<10
	5/03			<12	8	<5	<5	<5	<1,000	<5	<5	<5	<5
	11/03			<12	7	<5	<5	<10	<1,000	<5	<5	<5	<5
	6/04			<25	5 J	<10	<10	<20	<1,000	<10	<5	<5	<10
	11/04			--	--	--	--	--	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
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

**TABLE 3**  
**SUMMARY OF HISTORICAL GROUNDWATER MONITORING DATA**

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

Monitoring Well	Sampling Date	Screen Elev. (ft. AMSL)		Acetone	Benzene	Toluene	Ethyl-benzene	Xylene <sup>A</sup>	Methanol	Trichloro-ethene	Aniline	N,N-Dimethyl-aniline	Methylene Chloride
		Top	Bottom										
MW-18 (Cont'd.)	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 <sup>H</sup>	<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	<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			<10	<10	<10	<10	<10	<1,000	<10	<10	<10	<10
	4/02			<10	<10	<10	<10	<20	720 J	<10	280 D (<5) <sup>K</sup>	200 D (<5) <sup>K</sup>	<10
	10/02			6 J	<10	<10	<10	<20	<1,000	<10	<5 <sup>L</sup>	<5 <sup>L</sup>	<10
	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
	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
MW-19	11/89	318.45	309.45	<100	<1	<1	<1	<1	<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	<12
	10/95			NA	<5	<5	<5	<5	NA	<5	NA	NA	<5
	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 <sup>H</sup>	5 J	<11
	2/99			<10	<10	<10	<10	<10	<1,000	<10	<10	<10	<10
	7/99			<10 J	<10 J	<10 J	<10 J	<10 J	<1,000	<10 J	<10	<10	<10 J
	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			<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 <sup>L</sup>	<5 <sup>L</sup>	<10
	5/03			<12	<5	<5	<5	<5	<1,000	<5	<5	<5	<5
	10/03			<11	<5	<5	<5	<10	<1,000	<5	51 J	16 J	<5

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Monitoring Well	Sampling Date	Screen Elev. (ft. AMSL)		Acetone	Benzene	Toluene	Ethyl-benzene	Xylene <sup>A</sup>	Methanol	Trichloro-ethene	Aniline	N,N-Dimethyl-aniline	Methylene Chloride
		Top	Bottom										
MW-19 (Cont'd.)	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
MW-20 <sup>F</sup>	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 <sup>F</sup>	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			12	<10	<10	<10	<10	<1,000	<10	92	<10	<10
	9/98			<10	<10	<10	<10	<10	<1,000	<10	56 <sup>H</sup>	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 <sup>L</sup>	<5 <sup>L</sup>	<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
	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	<1.0	<1.0	<3.0
MW-23I	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

**TABLE 3**  
**SUMMARY OF HISTORICAL GROUNDWATER MONITORING DATA**

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

Monitoring Well	Sampling Date	Screen Elev. (ft. AMSL)		Acetone	Benzene	Toluene	Ethylbenzene	Xylene <sup>A</sup>	Methanol	Trichloroethene	Aniline	N,N-Dimethylaniline	Methylene Chloride
		Top	Bottom										
MW-23I (Cont'd.)	9/98			<10	<10	<10	<10	<10	<1,000	<10	<5 <sup>H</sup>	<10	<10
	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 <sup>L</sup>	<5 <sup>L</sup>	<10
	5/03			<12	<5	<5	<5	<5	<1,000	<5	<5	<5	<5
	10/03			<12	<5	<5	<5	<10	<1,000	<5	<5	<5	<5
	6/04			<25	<10	<10	<10	<20	<1,000	<10	1 J	<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	<1.0	<1.0	<3.0
MW-24S <sup>F</sup> (Replaced by MW-24SR)	12/94	358.4	352.4	<10	<5	<5	<5	<5	<1,000	<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
	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 <sup>H</sup>	<10	<10
	6/99			<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 <sup>K</sup>			NS	NS	NS	NS	NS	NS	NS	ND	ND	NS
	10/02			<25 J	<10	<10	<10	<20 J	<1,000	<10	<5 <sup>L</sup>	<5 <sup>L</sup>	<10
	10/03			<12	<5	<5	<5	<10	<1,000	<5	16	<6	<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	<1.0	<1.0	<3.0
MW-24D <sup>F</sup> (Replaced by MW-24DR)	12/94	334.4	341.2	<10	<5	<5	<5	<5	<1,000	<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
	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 <sup>H</sup>	<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

**TABLE 3**  
**SUMMARY OF HISTORICAL GROUNDWATER MONITORING DATA**

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

Monitoring Well	Sampling Date	Screen Elev. (ft. AMSL)		Acetone	Benzene	Toluene	Ethyl-benzene	Xylene <sup>A</sup>	Methanol	Trichloro-ethene	Aniline	N,N-Dimethyl-aniline	Methylene Chloride
		Top	Bottom										
MW-24D (Cont'd.)	9/01			<10	<10	<10	<10	<10	<1,000	<10	<10	<10	<10
	6/02 <sup>K</sup>			NS	NS	NS	NS	NS	NS	NS	ND	ND	NS
	10/02			<25 J	<10	<10	<10	<20 J	<1,000	<10	<5 <sup>L</sup>	<5 <sup>L</sup>	<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
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			<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	<10	<10	<10	<20	<1,000	<10	<5 <sup>L</sup>	<5 <sup>L</sup>	<10
	5/03			<12	<5	<5	<5	<5	<1,000	<5	<5	<5	<5
	11/03			<12	<5	<5	<5	<10	<1,000	<5	<5	<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	<1.1	<1.1	<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	355.3	<10	<10	<10	<10	<10	<1,000	<10	<5	<10	<10

**TABLE 3**  
**SUMMARY OF HISTORICAL GROUNDWATER MONITORING DATA**

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

Monitoring Well	Sampling Date	Screen Elev. (ft. AMSL)		Acetone	Benzene	Toluene	Ethyl-benzene	Xylene <sup>A</sup>	Methanol	Trichloro-ethene	Aniline	N,N-Dimethyl-aniline	Methylene Chloride
		Top	Bottom										
MW-27	9/98	362.5	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	110 D	1 J	<10
	9/00			<10 J	4 J	<10 J	3 J	1 J	<1,000 J	<10 J	16 J	2 J	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			9 J	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
	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			<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
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 <sup>H</sup>	54	64,000 J
	7/99			<500 J	<500	<500	<500	<500	<1,000	<500	1,100 D	40	39,000 D
	3/00			<10,000	<10,000	<10,000	<10,000	<10,000	<1,000 J	<10,000	1,300 D	30	130,000 J
	9/00			<1,000 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			<400	<400	<400	<400	<400	<1,000	<400	3,200 D	7 J	5,900 B
	9/01			<400	<400	<400	<400	<400	<1,000 J	<400	1,000 D	<10	4,700 B
	4/02			<49	8	6	9	10 J	<1,000	<5	33,400 D	57	4,600 D
	10/02			14 J	8 J	6 J	11	12 J	<1,000	<10	2,700 D	R	<10
	5/03			13	4 J	2 J	2 J	8 J	<1,000	<5	1,000 DJ	3 J	52
	10/03			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
MW-29	9/98	362.9	345.9	<10	<10	<10	<10	2 J	<1,000	<10	<10	13	<10
	2/99			7 J	<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	<10
	3/00			<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 J	4 J	<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 J	2 J	<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



**TABLE 3**  
**SUMMARY OF HISTORICAL GROUNDWATER MONITORING DATA**

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

Monitoring Well	Sampling Date	Screen Elev. (ft. AMSL)		Acetone	Benzene	Toluene	Ethyl-benzene	Xylene <sup>A</sup>	Methanol	Trichloro-ethene	Aniline	N,N-Dimethyl-aniline	Methylene Chloride
		Top	Bottom										
MW-29 (Cont'd.)	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
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	2 J	4 J
	9/00			<10 J	<10 J	<10 J	<10 J	<10 J	<1,000 J	<10 J	9 J	2 J	2 J
	3/01			<10	<10	<10	<10	<10	<1,000	<10	8 J	2 J	<10
	9/01			4 J	2 J	<10	<10	<10	<1,000 J	<10	8 J	1 J	<10
	4/02			<10	<5	<5	<5	<10	<1,000	<5	250	210	<5
	10/02			<25 J	<10	<10	<10	<20 J	<1,000	<10	R	R	<10
	5/03			<62	<25	<25	<25	<50	<1,000	<25	18	0.6 J	8 J
	10/03			<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
	11/04			<120	<50	<50	<50	<100	<1,000	<50	<5	<5	<50
	6/05			<5.0 J	0.3 J	<5.0	<4.0	<5.0	<1,000	<1.0	<1.0	<1.0	<3.0
MW-31	9/98	363.7	355.4	<10	12	<10	<10	<10	<1,000	<10	34	4 J	<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	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	3 J	<10
	4/02			<14	9	<5	<5	<10	<1,000	<5	804 D	21	<5
	10/02			<25	11	<10	<10	<20	<1,000	<10	560 D	1 J	<10
	5/03			<12	9	<5	<5	<10	<1,000	<5	0.9 J	3 J	<5
	10/03			1,200 D	13	<5	<5	<5	<1,000	<5	88	<5	<5
	6/04			15 J	12	<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
MW-32	9/98	364	356	<10	16	2 J	5 J	3 J	<1,000	<10	6,300 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	800 D	<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	5 J	<10	<10	<10	<1,000	<10	1,900 D	2 J	<10

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

Monitoring Well	Sampling Date	Screen Elev. (ft. AMSL)		Acetone	Benzene	Toluene	Ethyl-benzene	Xylene <sup>A</sup>	Methanol	Trichloro-ethene	Aniline	N,N-Dimethyl-aniline	Methylene Chloride
		Top	Bottom										
MW-32 (Cont'd.)	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	4,620 D	11	<5
	10/02			<25	4 J	<10	<10	<20	<1,000	<10	50	R	<10
	5/03			<12	<5	<5	<5	<10	<1,000	<5	0.6 J	0.7 J	<5
	10/03			20	2 J	<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			<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
MW-33	9/98	344.1	356.1	<10	<10	<10	<10	<10	<1,000	<10	9 J	6 J	<10
	2/99			<10	<10	<10	<10	<10	<1,000	<10	120	6 J	<10
	7/99			5 J	2 J	0.7 J	<10	<10	<1,000	<10	150	8 J	<23
	3/00			<10 J	<10	<10	<10	<10	<1,000 J	<10	51	7 J	11
	9/00			45 J	4 J	1 J	<10 J	<10 J	<1,000	<10 J	540 D	23	330 DJ
	3/01			17 J	<20	<20	<20	<20	<1,000	<20	1,300 D	16	370 B
	9/01			21	5 J	<10	<10	<10	<1,000 J	<10	1,900 D	12	<18
	4/02			<18	3 J	<5	<5	<10	<1,000	<5	2,780 D	21	19
	10/02			11 J	4 J	<10	<10	<20	<1,000	<10	290 D	3 J	4 J
	5/03			88	13	<5	<5	<10	<1,000	<5	2,000	35 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	<10 J
	11/04			--	--	--	--	--	<1,000	--	2,700 D	5 J	--
	6/05			<5.0 J	11	1.0 J	<4.0	<5.0	<1,000	<1.0	1,800	<10	<3.0
				<10	<10	<10	<10	<10	<1,000	<10	83	<10	<10
				2 J	0.9 J	1 J	<10	<10	<1,000	<10	380 D	2 J	<10
MW-34	3/00	362.7	354.7	<10 J	1 J	2 J	<10	<10	<1,000 J	<10	200 D	3 J	<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			<10	<10	2 J	<10	2 J	<1,000	<10	700 D	5 J	<10
	9/01			7 J	2 J	2 J	<10	2 J	<1,000 J	<10	76	3 J	<10
	4/02			<32	<5	<5	<5	<10	<1,000	<5	640 D	15	<5
	10/02			37 J	<10	<10	<10	<20	<1,000	<10	380 DJ	2 J	<10
	5/03			16	<5	<5	<5	<10	<1,000	<5	140	3 J	<5
	10/03			9 J	<5	<5	<5	<10	<1,000	<5	18	<5	<5
	6/04			24 J	<10	<10	<10	<20	<1,000	<10	30	<5	<10
	11/04			<25	<10	<10	<10	<20	180 J	<10	14	<5	<10
	6/05			5.6 J	0.7 J	0.9 J	<4.0	1.2 J	<1,000	0.4 J	16	2.5	<3.0

**TABLE 3**  
**SUMMARY OF HISTORICAL GROUNDWATER MONITORING DATA**

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

Monitoring Well	Sampling Date	Screen Elev. (ft. AMSL)		Acetone	Benzene	Toluene	Ethyl-benzene	Xylene <sup>A</sup>	Methanol	Trichloro-ethene	Aniline	N,N-Dimethyl-aniline	Methylene Chloride
		Top	Bottom										
MW-35	9/98	363	355	<10	<10	<10	<10	<10	<1,000	<10	6 J	5 J	<10
	7/99			<10	0.7 J	<10	<10	<10	<1,000	<10	3 J	4 J	<10
	3/00			<10 J	<10	<10	<10	<10	<1,000 J	<10	<10	2 J	<10
	9/00			<10 J	<10 J	<10 J	<10 J	<10 J	<1,000	<10 J	<10	3 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 J	<10	<10	2 J	<10
	4/02			<13	<5	<5	<5	<10	<1,000	<5	3 J	4 J	<5
	10/02			<25	<10	<10	<10	<20	<1,000	<10	2 J	R	<10
	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 J	<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
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	<10
	4/02			<20	<5	<5	<5	<10	<1,000	<5	9	41	<5
	10/02			12 J	<10	<10	<10	<20	<1,000	<10	2 J	2 J	<10
	5/03			9 J	<5	<5	<5	<10	<1,000	<5	67	4 J	<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	7	<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
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	15	<10	4 J	<10	<1,000	<10	4,400 DEJ	4 J	<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			<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	2 J	<10
	4/02			<14	3 J	<5	<5	<10	<1,000	<5	8	13	<5

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

Monitoring Well	Sampling Date	Screen Elev. (ft. AMSL)		Acetone	Benzene	Toluene	Ethyl-benzene	Xylene <sup>A</sup>	Methanol	Trichloro-ethene	Aniline	N,N-Dimethyl-aniline	Methylene Chloride
		Top	Bottom										
TW-01 (Cont'd.)	10/02			<25	7 J	<10	<10	<20	<1,000	<10	<5	R	<10
	5/03			<12	7	<5	<5	<10	<1,000	<5	<5	1 J	<5
	10/03			<12	6	<5	<5	<10	<1,000	<5	0.6 J	<5	<5
	6/04			6 J	3 J	<10	<10	<20	<1,000	<10	<5	<5	<10
	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
TW-02 <sup>F</sup> (Replaced by TW-02R) <sup>N</sup>	12/96	363.3	353.3	53	10	77	16	65	<1,000	585 D	15,900 JD	3,920 D	42,449 D
	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	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 J	400 D
	9/01			57	25	70	31	140	<1,000 J	<20	63,000 D	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	30	130	49	226	<1,000	<5	160,000 D	230	97
	10/03			68	28	75 J	<5	<10	<1,000	2 J	92,000 D	<260	91
	6/04			140 J	19 J	39 J	31 J	111 J	<1,000	<10 J	82,000	<5,200	4 J
	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
TW-02RR													
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			<1,000	<5	<5	<5	<5	<1,000	<5	<5	0.8 J	<5
	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	<6	<12	<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	<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

**TABLE 3**  
**SUMMARY OF HISTORICAL GROUNDWATER MONITORING DATA**

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

Monitoring Well	Sampling Date	Screen Elev. (ft. AMSL)		Acetone	Benzene	Toluene	Ethylbenzene	Xylene <sup>A</sup>	Methanol	Trichloroethene	Aniline	N,N-Dimethylaniline	Methylene Chloride
		Top	Bottom										
PZ-4S	11/89	362.79	357.88	<100	<1	<1	<1	<1	<1,000	<1	<10	<10	<1
	11/90			<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			<1,000	<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) <sup>K</sup>	<5 (<5) <sup>K</sup>	<5
	10/02			<25 J	<10	<10	<10	<20 J	<1,000	<10	<5 <sup>L</sup>	<5 <sup>L</sup>	<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 <sup>H</sup>	<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 <sup>L</sup>	<5 <sup>L</sup>	<10
	10/03			<12	<5	<5	<5	<10	<1,000	<5	46	<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	<1.0	<1.0	<3.0
PZ-5S	11/89	361.42	356.52	<100	<1	<1	<1	<1	<1,000	<1	<11	<11	<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			5 J	<10	<10	<10	<10	<1,000	<10	<5	<10	<10
	9/98			<10	<10	<10	<10	<10	<1,000	<10	<5 <sup>H</sup>	<10	<12
	6/99			<10 J	<10	<10	<10	<10	<1,000	<10	<10 J	<10 J	<10 J

**TABLE 3**  
**SUMMARY OF HISTORICAL GROUNDWATER MONITORING DATA**

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

Monitoring Well	Sampling Date	Screen Elev. (ft. AMSL)		Acetone	Benzene	Toluene	Ethylbenzene	Xylene <sup>A</sup>	Methanol	Trichloroethene	Aniline	N,N-Dimethylaniline	Methylene Chloride
		Top	Bottom										
PZ-5S (Cont'd.)	7/99			<10 J	<10 J	<10 J	<10 J	<10 J	<1,000 J	<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			7 J	<10	<10	<10	<10	<1,000	<10	<10	<10	<10
	10/02			<25 J	<10	<10	<10	<20 J	<1,000	<10	<5 <sup>L</sup>	<5 <sup>L</sup>	<10
	10/03			<12	<5	<5	<5	<10	<1,000	<5	<5	<5	<5
	11/04			--	--	--	--	--	<1,000	--	<5	<5	--
	6/05			<5.0 J	<1.0	<5.0	<4.0	<5.0	<1,000	<1.0	<1.1	<1.1	<3.0
PZ-8S <sup>G</sup>	9/98	362.6	357.7	<10	<10	<10	<10	<10	<1,000	<10	<10	<10	<10
PZ-11D <sup>C</sup>	11/89	352.09	347.19	<100	<1	<1	<1	<1	<1,000	<1	<11	<11	<1
PZ-11S <sup>C</sup>	11/89	359.09	354.19	<100	<1	<1	<1	<1	<1,000	<1	<11	<11	<1
PZ-12D <sup>C</sup>	11/89	350	345.1	<100	<1	<1	<1	<1	<1,000	<1	<53	<53	<1
	11/90			<100	<1	<1	<1	<1	<1,000	<1	<10	<10	<1
	11/91			<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 <sup>C</sup>	11/89	360	355.1	<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	6	<1	<10	<10	5
	11/92			<100	<1	<1	<1	<3	<1,000	<1	<10	<10	<1
PZ-13D <sup>F</sup>	11/89	349.4	344.4	<100	<1	<1	<1	<1	<1,000	<1	<11	<11	<1
PZ-13S <sup>F</sup>	11/89	359.5	354.5	<100	<1	2	<1	2	<1,000	<1	<11	<11	<1
NYSDEC Groundwater Standards (Part 700)				50	1	5	5	5	NA	5	5	1	5

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**SUMMARY OF HISTORICAL GROUNDWATER MONITORING DATA**

**OCTOBER 2005 BIENNIAL 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-32, 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 and 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.
9. 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-28, 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:**

- <sup>A</sup> = 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.
- <sup>C</sup> = Wells/piezometers MW-6, MW-7, MW-8, MW-9, MW-10, MW-11, MW-12D, PZ-11D, PZ-11S, PZ-12D, and PZ-12S were abandoned during OU No. 1 soil remediation activities (1994).
- <sup>F</sup> = 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.
- <sup>G</sup> = Piezometer PZ-8S was decommissioned 8/2000.
- <sup>H</sup> = MW-18, MW-19, MW-23I, MW-23S, MW-24DR, 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.
- <sup>I</sup> = 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.
- <sup>K</sup> = 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.
- <sup>L</sup> = MW-17R, MW-18, MW-19, MW-23S, MW-23I, MW-24DR, MW-24SR, MW-25S, PZ-4S, PZ-5S, and PZ-5D wells/piezometers 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.
- <sup>M</sup> = 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.
- <sup>N</sup> = 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.

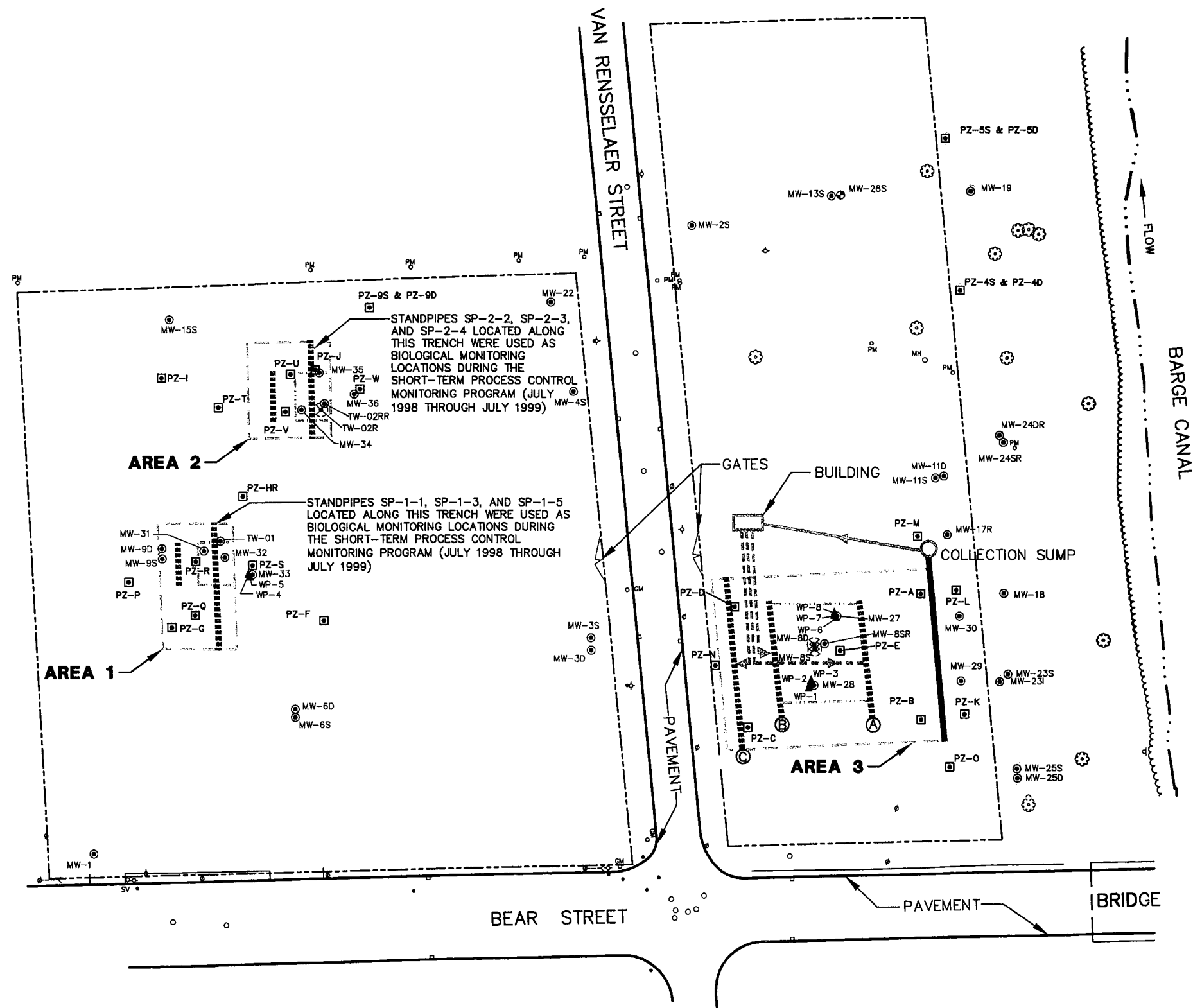
R = The sample results were rejected.

== Samples results are not available (See Note 9.)

## ***Figures***

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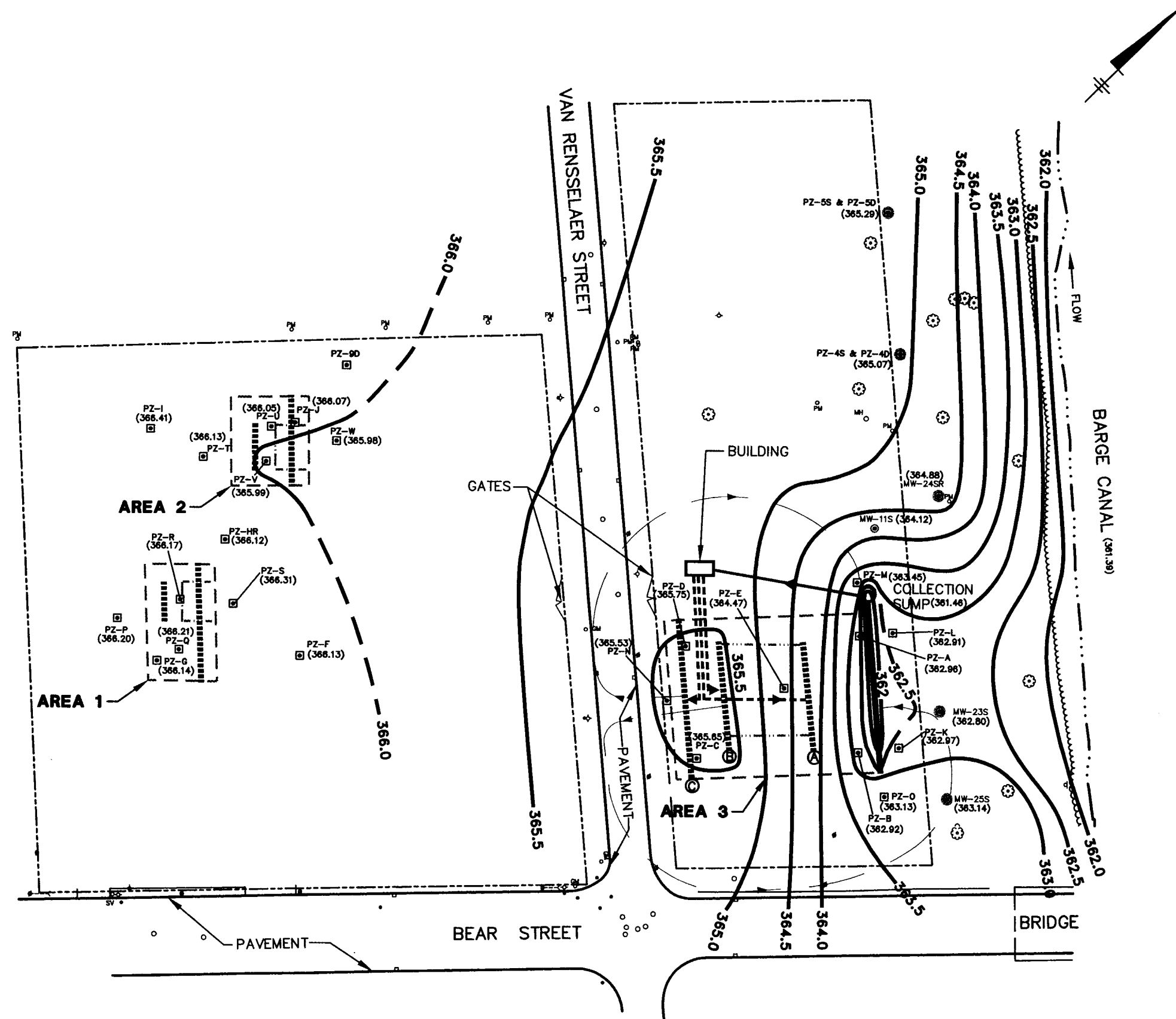


McKESON ENVROSYSTEMS  
FORMER BEAR STREET FACILITY  
SYRACUSE, NEW YORK  
BIANNUAL PROCESS CONTROL MONITORING REPORT

## SITE PLAN

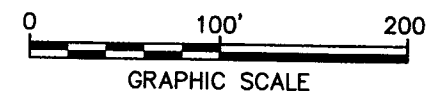
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FIGURE  
**1**



- LEGEND:**
- UTILITY POLE
  - CATCH BASIN
  - PETROLEUM PIPE LINE MARKER
  - GAS LINE MARKER
  - sv ○ SEWER VENT
  - ◇ HYDRANT
  - WATER VALVE
  - MANHOLE
  - PROPERTY LINE
  - MW-19 ○ GROUNDWATER MONITORING WELL
  - or ● BIENNIAL DOWNGRADE PERIMETER GROUNDWATER MONITORING LOCATION
  - PZ-A □ PIEZOMETER
  - 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
  - (362.91) GROUNDWATER ELEVATION (FEET ABOVE MEAN SEA LEVEL)
  - INFERRED GROUNDWATER FLOW PATH

- NOTES:**
1. THIS FIGURE ONLY IDENTIFIES THE HYDRAULIC MONITORING LOCATIONS.
  2. REPLACED MONITORING WELLS AND PIEZOMETERS ARE IDENTIFIED WITH AN "R" (e.g., MW-24DR).
  3. ELEVATIONS BASED ON NATIONAL GEODETIC VERTICAL DATUM OF 1929.



McKESON ENVROSYSTEMS  
FORMER BEAR STREET FACILITY  
SYRACUSE, NEW YORK

**BIENNIAL PROCESS CONTROL MONITORING REPORT**

**POTENTIOMETRIC SURFACE OF THE  
SHALLOW HYDROGEOLOGIC UNIT  
SAND LAYER - JUNE 6, 2005**

**BBL**  
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engineers, scientists, economists

FIGURE  
**2**

X: 26003X00.DWG, 2603X01.DWG  
L: ON=\*, OFF=REF\*  
P: PAGESET/PLT-BL  
11/11/05 SYR-B5-RCB KLS LJP  
26003190/BIENNIAL/GW/26003W01.DWG

TW-02R			
Date	10/03	6/04	6/05
Acetone			
Benzene			
Toluene			
Ethylbenzene	<5		
Xylene	<10		
Methanol	<1,000	<1,000	
Trichloroethene	2 J	<10 J	
Aniline			
N,N-dimethylaniline	<260	<5,200	
Methylene Chloride	4 J		

TW-02RR			
Date	11/04	6/05	
Acetone	18 J	7.2 J	
Benzene			
Toluene		2.1 J	
Ethylbenzene	4 J	3.6 J	
Xylene			
Methanol	<1,000	<1,000	
Trichloroethene	<10	0.3 J	
Aniline			
N,N-dimethylaniline	<5	<50	
Methylene Chloride	<10	<3.0	

MW-35			
Date	10/03	6/04	11/04 6/05
Benzene	<5	<10	<1.0
Aniline	4 J		
N,N-dimethylaniline	<5	<5	<1.0
Acetone	5 J	<25	<5.0 J
Methanol	<1000	<1000	240 J <1,000

MW-36			
Date	10/03	6/04	11/04 6/05
Acetone		22 J	13 J 24 J
Benzene	<5	<10 J	<1.0
Aniline			
N,N-dimethylaniline	<5	<5	<5.4
Methylene Chloride	<5	<10 J	<1.0
Xylene	<10	<20 J	<2.0 1.0 J

MW-34			
Date	10/03	6/04	11/04 6/05
Acetone	9 J	24 J	<25 5.6 J
Benzene	<5	<10	<1.0 0.7 J
Toluene	<5	<10	<1.0 0.9 J
Xylene	<10	<20	<2.0 1.2 J
Aniline			
N,N-dimethylaniline	<5	<5	<5
Methanol	<1000	<1000	180 J <1,000
Trichloroethene	<5	<10	<1.0 0.4 J

TW-01			
Date	10/03	6/04	11/04 6/05
Benzene	<5	<10	<1.0 <5.0
Toluene	<5	<10	<1.0 <4.0
Ethylbenzene	<5	<10	<1.0 <5.0
Xylene	<10	<20	<2.0 <5.0
Aniline	0.8 J	<5	<1.0
N,N-dimethylaniline	<5	<5	<1.0
Methylene Chloride	<5	<10	<1.0 <3.0
Acetone	<12	6 J	<25 <5.0 J

MW-31			
Date	10/03	6/04	11/04 6/05
Acetone		15 J	<25 <5.0 J
Benzene			
Aniline		3 J	<5 3.2
N,N-dimethylaniline	<5	<5	<5
Xylene	<5	<20	<2.0 1.3 J

MW-9S			
Date	10/03	6/04	11/04 6/05
Acetone	<12	14 J	<25 44 J
Benzene			
Toluene	<5	2 J	2 J 3.2 J
Ethylbenzene	5		
Xylene			
Methanol	<1,000	<1,000	<1,000 <1,000
Aniline	1 J	<5	<5 2.6
N,N-dimethylaniline	<5	<5	<5
Methylene Chloride	<5	<10	<1.0 <3.0

MW-32			
Date	10/03	6/04	11/04 6/05
Acetone	20	6 J	<25 <5.0 J
Benzene		1 J	<1.0 1.0
Toluene	<5	<10	<1.0 <5.0
Ethylbenzene	<5	<10	<1.0 <4.0
Xylene	<10	<20	<2.0 <5.0
Trichloroethene	<5	<10	<1.0
Aniline	<5	1 J	<5 0.4 J
N,N-dimethylaniline	<5	<5	<5 <1.0

MW-33			
Date	10/03	6/04	11/04 6/05
Acetone	22	9 J	- <5.0 J
Benzene			
Toluene	<5	<10 J	- 1.0 J
Aniline			
N,N-dimethylaniline	<5		<10
Methylene Chloride	<5	<10 J	- <3.0

MW-1			
Date	10/03	8/04	11/04 6/05
Acetone	<12	<25	- <5.0 J
Benzene	<5	<10	- <5.0
Toluene	<5	<10	- <5.0
Xylene	<10	<20	- <5.0
Methylene Chloride	<5	<10	- <3.0
Methanol	<1,000	<1,000	<1,000 <1,000
Aniline	2 J	<5	<5 0.2 J

MW-3S			
Date	10/03	6/04	11/04 6/05
Acetone	<12	6 J	<25 <5.0 J
Benzene	<5	<10	<1.0
Toluene	<5	<10	<1.0 <5.0
Ethylbenzene	<5	<10	<1.0 <4.0
Xylene	<10	<20	<2.0 <5.0
Methanol	<1,000	<1,000	150 J <1,000
Trichloroethene	<5	<10	<1.0
Aniline	4 J	0.8 J	4 J
N,N-dimethylaniline	<5	<5	<5 <1.0
Methylene Chloride	<5	<10	<1.0 <3.0

# LEGEND:

- UTILITY POLE
- CATCH BASIN
- PETROLEUM PIPE LINE MARKER
- GAS LINE MARKER
- SEWER VENT
- HYDRANT
- WATER VALVE
- MANHOLE
- PROPERTY LINE
- MW-19 GROUNDWATER MONITORING WELL
- PZ-A PIEZOMETER
- TW-02R REMOVED GROUNDWATER MONITORING WELL
- BOUNDARY OF IMPACTED AREA
- GROUNDWATER INFILTRATION TRENCH
- AREA OF RELATIVELY HIGHER CONCENTRATIONS OF COCs

MW-35			
Date	10/03	6/04	11/04 6/05
Benzene	<5	<10	<1.0
Aniline	4 J		<1.0
N,N-dimethylaniline	<5		<1.0
Acetone	5 J	<25	<25 <5.0 J
Methanol	<1000	<1000	240 J <1,000

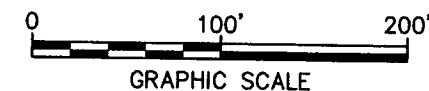
SAMPLE IDENTIFICATION

DETECTIONS EXCEEDING NYSDEC GROUNDWATER QUALITY STANDARDS ARE INDICATED BY SHADING.

CONCENTRATION (ppb)

## NOTES:

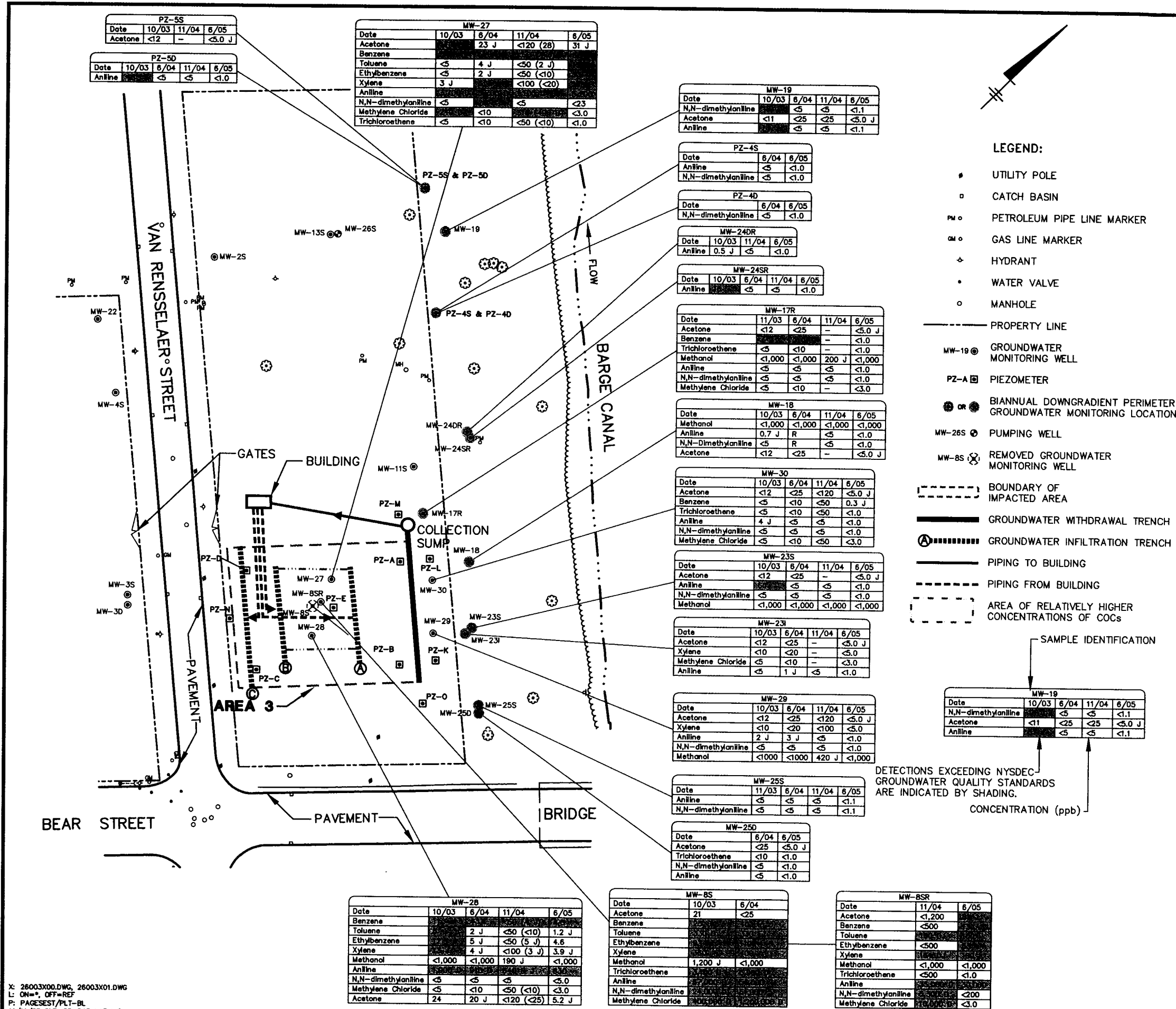
- REPLACED MONITORING WELLS ARE IDENTIFIED WITH AN "R" (e.g., MW-24DR).
- TRENCH LOCATIONS ARE APPROXIMATE.
- MONITORING LOCATIONS ARE APPROXIMATE.
- FIGURE ONLY SHOWS COC CONCENTRATIONS AT MONITORING LOCATIONS WITHIN THE IMPACTED AREAS AND THE CHEMICAL PROCESS CONTROL MONITORING LOCATIONS.
- ONLY COC CONCENTRATIONS DETECTED OR THAT HAVE BEEN DETECTED ARE PRESENTED ON THIS FIGURE.
- < = COMPOUND 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.
- D = CONCENTRATION IS BASED ON DILUTED SAMPLE ANALYSIS.
- DURING THE AUGUST 2004 SUPPLEMENTAL REMEDIAL ACTIVITIES, MONITORING WELL TW-02R WAS REMOVED AND TW-02RR WAS CONSTRUCTED OUTSIDE THE SOIL REMOVAL AREA IN THE VICINITY OF TW-02R.
- THE 11/04 SAMPLING EVENT VOLATILE ORGANIC COMPOUND (VOC) DATA FOR MW-33 AND MW-1 WERE INADVERTENTLY LOST DUE TO LABORATORY EQUIPMENT FAILURE. AS DETAILED IN THE BIENNIAL REPORT, THESE MONITORING WELLS WERE NOT RESAMPLED.



## McKESSON ENVROSYSYSTEMS FORMER BEAR STREET FACILITY SYRACUSE, NEW YORK BIENNIAL PROCESS CONTROL MONITORING REPORT GROUNDWATER MONITORING DATA SUMMARY FOR OCTOBER 2003 - JUNE 2005 AREAS 1 & 2

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FIGURE  
3



X: 26003X00.DWG, 26003X01.DWG  
L: ON=\*, OFF=REF  
P: PAGESET/PLT-BL  
11/11/05 SYR-85-RCB LAF LJP  
26003190/BIENNIAL/REVISED/26003C10.DWG

# **Attachment A**

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## **Groundwater Monitoring Data Summary Figures for 1988 – May 2003**

MW-35											
Date	9/98	7/99	3/00	9/00	3/01	9/01	4/02	10/02	5/03		
Acetone	<10	0.7 J	<10	<10 J	<10	<10	<5	<10	<5		
Benzene		3 J	<10	<10	<10	<10	3 J	2 J			
Aniline					<10			R	<100		
N,N-dimethylaniline					<10						
Acetone	<10	<10	<10 J	<10 J	<10	<10	<13	<25	<12		

TW-02R											
Date	12/98	9/98	2/99	7/99	3/00	9/00	3/01	9/01	4/02	10/02	5/03
Acetone		<500 J	<1,000		<1,000 J						
Benzene		<500 J	<1,000		<1,000						
Toluene		<500 J									
Ethylbenzene		<500 J	<1,000		<1,000						
Xylene											
Methanol	<1,000	5,000	14,000 JN	<1,000	<1,000 J	<1,000	<1,000	<1,000 J	<1,000	<1,000	<1,000
Trichloroethene			<1,000		<1,000		<10	<20	<5	<10	<5
Aniline											
N,N-dimethylaniline					<10,000				<5,300		
Methylene Chloride									<10		

MW-34											
Date	9/98	7/99	3/00	9/00	3/01	9/01	4/02	10/02	5/03		
Acetone	<10	2 J	<10 J	<10 J	<10	7 J	<32	37 J	16		
Benzene	<10	0.9 J	1 J	<10 J	<10		<5	<10	<5		
Toluene	<10	1 J	2 J	<10 J	2 J	2 J	<5	<10	<5		
Xylene	<10	<10	<10	<10 J	2 J	2 J	<10	<20	<10		
Aniline											
N,N-dimethylaniline	<10										

TW-01											
Date	12/98	9/98	2/99	7/99	3/00	9/00	3/01	9/01	4/02	10/02	5/03
Benzene											
Toluene	4 J	<10	2 J	1 J	<10	<10 J	<10	<10	<5	<10	<5
Ethylbenzene	4 J		2 J	3 J	<10	<10 J	<10	<10	<5	<10	<5
Xylene	4 J	<10	2 J	<10	<10	<10 J	<10	<10	<20	<10	
Aniline											
N,N-dimethylaniline	4 J	<10	<10	<10	<10	<10 J	<10	<10	<5	<10	<5
Methylene Chloride	4 J	<10	<10	<10	<10	<10 J	<10	<10	<5	<10	<5
Acetone	<10	<10	<10	<10	<10	<10 J	<10	<10	<14	<25	<12

MW-31											
Date	9/98	7/99	3/00	9/00	3/01	9/01	4/02	10/02	5/03		
Acetone	<10	<10	<10	<10 J	21	<10	<14	<25	<12		
Benzene											
Aniline			3 J		<10				0.9 J		
N,N-dimethylaniline									1 J		

MW-9S											
Date	1/89	11/89	11/91	8/95	7/99	3/00	9/00	3/01	9/01	4/02	10/02 5/03
Acetone		<1,000	<100	<1,000	<10	<10	<10	<10	<10	<25	16 J <12
Benzene	NA		<10						1 J		
Toluene					2 J	2 J	2 J	3 J	3 J	2 J	<5
Ethylbenzene											2 J
Xylene											
Methanol	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000 J	<1,000	<1,000	<1,000 J	370 J	<1,000 <1,000
Aniline					<10	2 J	2 J	<10		<5	0.9 J
N,N-dimethylaniline											
Methylene Chloride		<10	<1		<10	<10	<10 J	<10	<10	<5	<5

MW-32											
Date	9/98	7/99	3/00	9/00	3/01	9/01	4/02	10/02	5/03		
Acetone	<10	3 J	<10	<10 J	<10	<10	<15	<25	<12		
Benzene											
Toluene	2 J	2 J	<10	<10 J	<10	<10	<5	<10	<5		
Ethylbenzene	5 J	4 J	<10	<10 J	<10	<10	<5	<10	<5		
Xylene	3 J	<10	<10	<10 J	<10	<10	<10	<20	<10		
Trichloroethene	<10		<10	<10 J	<10	<10	<5	<10	<5		
Aniline		<10							0.6 J		
N,N-dimethylaniline			<10	<10					0.7 J		

MW-33										
Date	9/98	2/99	7/99	3/00	9/00	3/01	9/01	4/02	10/02	5/03
Acetone	<10	<10	5 J	<10 J	45 J	17 J	21	<18	11 J	
Benzene	<10	<10	<10	<10	<10	<20	<10	<5	<10	<5
Toluene	<10	<10	0.7 J	<10	1 J	<20	<10	<5	<10	<5
Aniline										
N,N-dimethylaniline										
Methylene Chloride	<10	<10	5 J				<18		4 J	

MW-1															
Date	3/88	1/89	11/89	11/90	11/91	11/92	8/95	9/98	7/99	3/00	9/00	3/01	9/01	4/02	10/02 5/03
Acetone	<100	<100	<100	<100	<100	<100	<1,000	<10	0.7 JN	<10	8 J	<10	<10	<12	<25 <12
Toluene	<1	<1	<1	<1	<1	<1	<5	<10	<10	<10	3 J	<10	<10	<5	<10 <5
Xylene	<1	<1	<1	<1	<1	<1	<5	<10	<10	<10	5 J	<10	<10	<5	<10 <10
Methylene Chloride	<1	<1	<1	<1	<1	<1	<10	<10	<10	<10	<10 J	<10	<10	<5	<10 <5
Methanol	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	990 J	<1,000 <1,000
Aniline	<10	<1	<10	<10	<10	<10	<5	<10	<10	<5	<10 J	<10	<10	<5	<5 <5

MW-36															
Date	9/98	2/99	7/99	3/00	9/00	3/01	9/01	4/02	10/02	5/03					
Acetone	<10	<10	8 J	<10 J	5 J	<10		<20	12 J	9 J					
Benzene	<10	<10	0.8 J	<10	<10 J	<10	<10	<5	<10	<5					
Aniline															
N,N-dimethylaniline			<10					<10							
Methylene Chloride	<10	<10	<10	<10	2 J	<10	<10	<5	<10	<5					

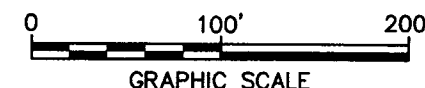
# LEGEND:

- UTILITY POLE
- CATCH BASIN
- PETROLEUM PIPE LINE MARKER
- GAS LINE MARKER
- SEWER VENT
- HYDRANT
- WATER VALVE
- MANHOLE
- PROPERTY LINE
- MW-19 GROUNDWATER MONITORING WELL
- PZ-A PIEZOMETER
- BOUNDARY OF IMPACTED AREA
- GROUNDWATER INFILTRATION TRENCH
- AREA OF RELATIVELY HIGHER CONCENTRATIONS OF COCs

MW-35											
Date	9/98	7/99	3/00	9/00	3/01	9/01	4/02	10/02	5/03		
Acetone	<10	0.7 J	<10	<10 J	<10	<10	<5	<10	<5		
Benzene		3 J	<10	<10	<10	<10	3 J	2 J			
Aniline					<10			R	<100		
N,N-dimethylaniline					<10						
Acetone	<10	<10	<10 J	<10 J	<10	<10	<13	<25	<12		

## NOTES:

- REPLACED MONITORING WELLS ARE IDENTIFIED WITH AN "R" (e.g., MW-24DR).
- 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 DETECTED COCs ARE PRESENTED ON THIS FIGURE.
- < = COMPOUND 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.
- D = CONCENTRATION IS BASED ON DILUTED SAMPLE ANALYSIS.
- E = IDENTIFIES COMPOUNDS WHOSE CONCENTRATIONS EXCEED THE CALIBRATION RANGE OF THE INSTRUMENTS.
- R = THE SAMPLE RESULT WAS REJECTED.
- B = 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.
- DETECTIONS EXCEEDING NYSDEC GROUNDWATER QUALITY STANDARDS ARE INDICATED BY SHADING.
- \*= 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.
- 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.



## McKESSON ENVROSYSTEMS FORMER BEAR STREET FACILITY SYRACUSE, NEW YORK BIANNUAL PROCESS CONTROL MONITORING REPORT GROUNDWATER MONITORING DATA SUMMARY FOR 1988 - MAY 2003 AREAS 1 & 2

**BBL**  
BLASLAND, BOUCK & LEE, INC.  
engineers, scientists, economists

FIGURE  
1

X: 26003X00.DWG, 26003X01.DWG  
L: ON=\*, OFF=RE\*  
P: PAGESET/PLT-BL  
11/11/05 SYR-85-RCB KLS LJP  
26003190/BIANNUAL/REVISED/26003C01.DWG

Date	9/98	7/99	3/00	9/00	3/01	9/01	4/02	10/02	5/03
Acetone	23	<10 J	<10 J	<10 J	<10 J	<10 J	<18	9 J	<12
Benzene	4 J	2 J	<10	<10	<10	<10		<10	
Toluene	<10	3 J	<10	3 J	5 J	2 J		<10	
Ethylbenzene	3 J	2 J	1 J	2 J	<10			<20	
Aniline									
N,N-dimethylaniline	<10	<10	1 J		<10				
Methylene Chloride	<10	<10	<10	1 J	<10	<5			
Trichloroethene	<10	<10	<10 J	<10	<10	<5		4 J	<5

Date	11/89	12/94	2/96	2/97	9/98	8/99	7/99	9/00	9/01	10/02
Acetone	<100	<10	<1,000	5 J	<10	<10 J	<10 J	<10 J	7 J	<25 J

Date	11/89	12/94	2/96	2/97	9/98	7/99	9/00	9/01	10/02
Aniline	<10	<5	<5	<5	<5	<10	<10 J	<10	<5

Date	11/89	12/94	8/95	2/96	8/96	2/97	8/97	9/98	2/99	7/99	3/00	9/00	3/01	9/01	4/02	10/02	5/03
N,N-dimethylaniline	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<5	<5	<5
Acetone	<100	<10	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<25 J	<12	<12
Aniline	<10	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5

Date	11/89	11/90	11/91	11/92	8/95	8/96	8/97	2/99	6/99	3/00	3/01	4/02	10/02	5/03
N,N-dimethylaniline	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<5	<5	<5

Date	11/89	11/90	11/91	11/92	8/95	10/95	8/96	8/97	2/99	3/00	9/00	3/01	4/02	5/03
N,N-dimethylaniline	<10	<10	<10	<10	0.8 J	<10	<10	<10	<10	<10	<10	<10	<5	<5

Date	12/94	8/95	2/96	2/97	9/98	7/99	9/00	9/01	6/02	10/02
Aniline	<5	<5	<5	<5	<5	<10	<10 J	<10	ND**	<5

Date	12/94	8/95	2/96	2/97	9/98	6/99	7/99	3/00	9/01	6/02	10/02
Aniline	<5	<5	<5	<5	<5	<10 J	<10	<10 J	<10	<10	<5

Date	11/90	11/91	11/92	8/95	10/95	8/96	8/97	2/99	3/00	9/00	3/01	9/01	4/02	10/02	5/03
Acetone	<100	<100	<1,000	NA	11	<10	<10	<10	<10	<10 J	<10	<10	<10	<25 J	<12
Benzene	<1	<1	<1	<5	<5	<10	<10	1 J	<10	<10 J	<10	<10	<5	<10	<5
Trichloroethene	<1	<1	<1	<5	2 J	<10	<10	<10	<10	<10 J	<10	<10	<5	<10	<5
Methanol	<1,000	<1,000	<1,000	<1,000	NA	1,000	1,000	1,000	<1,000 J	<1,000	<1,000	<1,000	620 J	<1,000	<1,000
Aniline	<10	<10	<10	<5	NA	<10	<10	<10	<10	<10	<10	<10	<5	<10	<5
N,N-dimethylaniline	<10	<10	<10	<10	NA	<10	<10	<10	<10	<10	<10	<10	<5	<10	<5
Methylene Chloride	<1	<1	<1	<1	<5	<10	<10	<10 J	<10	1 J	<10	<10	<5	<10	<5

Date	9/98	2/99	7/99	3/00	9/00	3/01	9/01	4/02	10/02	5/03
Acetone	<10	7 J	<10	<10	<10 J	<10	4 J	<10	<25 J	<52
Benzene	<10	<10	0.7 J	<10	<10 J	<10	<5	<10	<10	<25
Trichloroethene	<10	<10	0.5 J	<10	<10 J	<10	<10	<5	<10	<25
Aniline	<10	<10	<10							
N,N-dimethylaniline	<10		1 J							
Methylene Chloride	<10	<10	<10	4 J	2 J	<10	<10	<5	<10	<5

Date	11/89	11/90	11/91	11/92	12/94	8/95	2/96	8/96	2/97	8/97	9/98	2/99	7/99	3/00	9/00	3/01	9/01	4/02	10/02	5/03
Methanol	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000 J	<1,000	<1,000	720 J	<1,000	250 J
Aniline	<10	<10	<10	<10	<5	<5	<5	<5	<5	<5	<10	<10	<10	<10	<10	<10	<10	<5	<5	<5
N,N-dimethylaniline	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<5	<5	<5
Acetone	<100	<100	<100	<100	<100	<1,000	<1,000	<10	<10	<10	<10	<10	<10	<10	<10 J	<10	<10	<10	<10	6 J

Date	9/98	2/99	7/99	3/00	9/00	3/01	9/01	4/02	10/02	5/03
Acetone	<10	7 J	<10	<10	<10 J	<10	<10	<10	<25 J	<12
Xylene	2 J	1 J	<10	<10	<10 J	<10	<10	<10	<20	<10
Aniline	<10	5 J	2 J							
N,N-dimethylaniline	<10									
Methylene Chloride	<10	<10	<10	<10	<10 J	<10	<10	<5	4 J	<5

MW-23S																	
Date	12/94	8/95	2/96	8/96	2/97	8/97	9/98	2/99	6/99	7/99	3/00	9/00	3/01	9/01	4/02	10/02	5/03
Acetone	<10	<1,000	<1,000	<10	<10	12	<10	<10	<10 J	<10 J	<10	<10 J	<10	<10	<10	<25 J	<32
Aniline	<5	<5	<5					<10	<10 J	<10	<5	<10 J	<10	<10	<5	<5*	<5
N,N-dimethylaniline	<10	<10	<10	<10	<10	<10				<10			<10	<10	<5	<5*	<5
Methanol	<200	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000 J	<1,000	<1,000 J	<1,000 J	<1,000	<1,000	<1,000	<1,000	380

MW-231																
Date	12/94	8/95	2/96	8/96	2/97	8/97	9/98	2/99	7/99	3/00	9/00	3/01	9/01	4/02	10/02	5/03
Acetone	<10	<1,000	<1,000	<10	<10	<10	<10	<10	<10 J	<10	<10 J	<10	4 J	<10	<25 J	<12
Xylene	<5	<5	<10	<10	<10	<10	<10	<10	<10	<10 J	<10 J	<10	2 J	<10	<20 J	<5
Methylene Chloride	<5	<10	<10	<10	<10	<10	<10	<10 J	<10	<10	<10 J	<10	<10	2 J	<10	<5
Aniline	<5	<5	<5	<5	<5	<5	<5	<10	<10	<5	<10 J	<10	<10	<5	<5	<5

Date	8/95	10/95	8/96	8/97	2/99	6/99	7/99	3/00	9/00	3/01	9/01	4/02	10/02	5/03
Aniline	<5	<5	<5	<5	<10	<10	<10	<10	<10	<10	<10	<5	<5	<5
N,N-dimethylaniline	0.7 J	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<5	<5	<5

Date	8/95	10/95	8/96	8/97	2/99	3/00	9/00	3/01	4/02	5/03
Acetone	<1,000	NA	15	<10	<10	<10	<10	<10	<10	<12
Trichloroethene	<5	3 J	<10	<10	<10	<10	<10	<10	<10	<5
N,N-dimethylaniline	1 J	<10	<10	<10	<10	<10	<10	<10	<5	<5
Aniline	<5	<5	<5	<5	<10	<10	<5	5 J	<5	<5

Date	1/89	11/89	11/91	8/95	9/98	2/99	7/99	3/00	9/00	3/01	9/01	4/02	10/02	5/03
Acetone	<1,000,000	<1,000,000	<1,000,000	<1,000	<10,000 J	<20,000	10 J	<100,000	<50,000 J	<50,000	<400			
Benzene	<10,000	<10,000	<10,000	<250,000 D	<10,000	<20,000		<100,000	<50,000 J	<50,000	<400			
Toluene	<10,000	<10,000	<10,000	<250,000 D	<10,000	<20,000		<100,000	<50,000 J	<50,000	<400			
Ethylbenzene	<10,000	<10,000	<10,000	<250,000 D	<10,000	<20,000		<100,000	<50,000 J	<50,000				
Xylene	<10,000	<10,000	<10,000	<250,000 D	<10,000	<20,000		<100,000	<50,000 J	<50,000				
Methanol	430,000	300,000	150,000	22,000	7,900	18,000 J	17,000	30,000 J	14,000 J	53,000	8,900 J	<1,000	<1,000	<1,000
Trichloroethene	<10,000	<10,000	<10,000					<100,000						
Aniline				<25,000 D										
N,N-dimethylaniline														
Methylene Chloride														

Date	9/98	7/99	3/00	9/00	3/01	9/01	4/02	10/02	5/03
Acetone	<5,000	<500	<10,000	<1,000 J	<400	<400			
Benzene	<5,000	<500	<10,000	<1,000 J	<400	<400			
Toluene	<5,000	<500	<10,000	<1,000 J	<400	<400			
Ethylbenzene	<5,000	<500	<10,000	<1,000 J	<400	<400			
Xylene	<5,000	<500	<10,000	<1,000 J	<400	<400			
Methanol	2,200	<1,000	<1,000 J	<1,000 J	<1,000	<1,000 J	<1,000	<1,000	<1,000
Aniline									
N,N-dimethylaniline									
Methylene Chloride									
Acetone	<5,000 J	<500 J	<10,000	<1,000 J	<400	<400	<49	14 J	13

Date	3/88	1/89	11/89	11/91	8/95	9/98	7/99	3/00	9/00	3/01	9/01	4/02	10/02	5/03
Acetone	<100	<10,000	<10,000		<1,000	<10	<10	<10 J	<10 J	<10	<10	<12	<25	<12
Benzene	<1	<100	<100		<5	<10	1 J	<10	1 J	<10	<10	<5	<10	<5
Toluene	<1		<100		<5	<10	0.7 J	<10	2 J	<10		<5	<10	<5
Ethylbenzene	<1	<100	<100	4	<5	<10	<10	<10	<10 J	<10	1 J	<5	<10	<5
Xylene	<1	<100	<100		<5	<10	<10	<10	<10 J	<10	2 J	<10	<20	<10
Methanol	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000 J	<1,000	<1,000	<1,000 J	<1,000 J	370 J	<1,000	<1,000
Trichloroethene				<10		<10	<10	<10 J	<10 J	<10	<10	<5	<10	<5
Aniline	<10	<1	<52			<10	<10	<10	2 J	<10		<5	<10	<5
N,N-dimethylaniline	<10	<5	<52			<10	<10	<10	1 J	<10			R	<5
Methylene Chloride		<100	<100	<10	<10	<10	<10	<10 J	<10 J	<10	<10	<5	<10	<5