ARCADIS BBL

Infrastructure, environment, facilities

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

INDUSTRIAL

Subject:
McKesson Envirosystems
Bear Street Site
Syracuse, New York
Site No. 07-34-020

Date:
June 8, 2007

Contact:
David J. Ulm

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315.671.9210

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Our ref:
B0026003.0000

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 ARCADIS of New York, Inc. (ARCADIS 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 of July 2006 through December 2006. 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 (Site O&M Plan) (BBL, Revised August 1999a) and a December 29, 1999, letter from David J. Ulm of ARCADIS BBL (formerly Blasland, Bouck & Lee, Inc. [BBL]) to Michael J. Ryan, P.E., of NYSDEC presenting the long-term process control monitoring program as an addendum to the Site O&M Plan (BBL, 1999b). The Site O&M Plan and the addendum are collectively referred to herein as the Site O&M Plan.

The site is divided into two operable units (OUs): OU No. 1 - Unsaturated Soil, and OU No. 2 - Saturated Soils and Groundwater. As a part of the NYSDEC-selected remedy for both of these OUs, 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 NYSDEC in biannual reports. A site description and history, along with a description of the remedial actions completed and the ongoing O&M activities, are detailed in the previous biannual reports, including BBL's August 2001 Biannual Report covering the period from July 2000 through December 2000 (BBL, 2001). That information has not changed and is, therefore, not repeated herein.

In the Biannual Report for the July 2005 to December 2005 reporting period, modifications to the existing treatment activities were proposed for Areas 1, 2 and 3. The modifications were based on the slow rate of aniline anaerobic biodegradation and its continued elevated concentration in groundwater samples, as seen in the November 2005 groundwater sampling results. An in-situ aerobic bioremediation treatment program was proposed as an alternate approach to lower aniline concentrations at each area, and consists of replacing the Revised Anaerobic Mineral Media (RAMM) and Suga-Lik® (Blackstrap Molasses) with an oxygen source and macronutrients. In July 2006, NYSDEC (Mark Mateunas) verbally approved this modification. The modifications were implemented in August 2006 and are briefly summarized in this report.

During this reporting period (July 2006 through December 2006), 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 775,700 gallons of water were pumped from the withdrawal trench and introduced into the Area 3 infiltration trenches, as detailed herein.

NYSDEC was notified of the November 2006 process control monitoring event (including hydraulic and chemicals of concern [COC] monitoring) prior to the commencement of the monitoring activities.

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

- **I. RAMM and Suga-Lik® Introduction Activities** – A description of the RAMM and Suga-Lik® introduction activities conducted in July 2006.

- **II. In-situ Aerobic Bioremediation Treatment Program Activities** – A description of the in-situ aerobic bioremediation treatment program activities conducted between August 2006 and December 2006.

- **III. Hydraulic Process Control Monitoring** – A description of the results of the hydraulic control monitoring activities conducted between July 2006 and December 2006.

- **IV. Intermediate Monitoring Event, COC Process Control and Biannual Groundwater Monitoring Program** – A description of the September 2006 intermediate sampling results, the November 2006 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 December 2006.

- **V. Conclusions** – Conclusions based on the results of the process control monitoring activities.

- **VI. Recommendations** – Recommendations for the in-situ aerobic bioremediation treatment program and monitoring activities.

I. RAMM and Suga-Lik® Introduction Activities

The RAMM and Suga-Lik® introduction activities listed below were conducted in July 2006. See Figure 1 for referenced locations.

- Introduced approximately 100 gallons of RAMM-amended groundwater into each of the three areas.

- Added Suga-Lik® with RAMM into the two Area 1 infiltration trenches by manually filling each of the standpipes located in the infiltration 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.

- Introduced RAMM and Suga-Lik® into three piezometers (PZ-G, PZ-Q and PZ-R) located within the shallow hydrogeologic unit of Area 1 to better distribute a readily degradable carbon source that otherwise may not reach these areas if distributed through the infiltration trenches only.

- Introduced RAMM into piezometer PZ-S, well point WP-4 and well point WP-5 located downgradient of Area 1, near monitoring well MW-33.

- Introduced RAMM and Suga-Lik® into piezometer PZ-W located downgradient of Area 2, near monitoring well MW-36.

- Introduced RAMM and Suga-Lik® 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.

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

Pursuant to the Biannual Report for the period between July 2005 and December 2005, the in-situ anaerobic bioremediation treatment program was discontinued in July 2006 and the in-situ aerobic bioremediation treatment program described below was initiated in August 2006.

II. In-situ Aerobic Bioremediation Treatment Program Activities

An in-situ aerobic bioremediation treatment program was approved as an alternate approach to lowering aniline concentrations at each area. This treatment program consists of replacing the RAMM and Suga-Lik® with an oxygen source and macronutrients. The oxygen source is dilute hydrogen peroxide (H_2O_2), and the macronutrients include nitrogen and phosphorus in the form of Miracle-Gro®. This modification is anticipated to change the environmental conditions in the shallow hydrogeologic unit, switching the reducing (anaerobic) conditions to oxidizing (aerobic) conditions. The potential for aerobic biodegradation of aniline at the site was established during the successful in-situ biodegradation of unsaturated soils performed in 1994/1995 and confirmed in the treatability study conducted in 1996 (BBL, 1996). Under oxidizing conditions, the other COCs present at the site are also anticipated to continue to degrade.

The in-situ aerobic bioremediation treatment program was initiated on August 10, 2006. The following activities were conducted (see Figure 1 for referenced locations).

- Added H_2O_2/nutrient-amended groundwater into the infiltration trenches in Areas 1, 2 and 3 twice per week for the first 4 weeks. Following this 4-week program, the H_2O_2/nutrient-amended groundwater was injected once per week.

- Added H_2O_2/nutrient-amended groundwater into piezometers in Area 1 (PZ-G, PZ-Q and PZ-S), Area 2 (PZ-W) and Area 3 (PZ-E); and to well points in Area 1 (WP-4 and WP-5) and Area 3 (WP-1, WP-2, WP-3, WP-6, WP-7 and WP-8) to better distribute dissolved oxygen (DO) into the shallow hydrogeologic unit.

- Measured DO levels in the field once per week in Area 1 (MW-33) and Area 3 (MW-27 and MW-28).

The H_2O_2/nutrient-amended groundwater injection process is consistent with the previous RAMM introduction activities at each area. H_2O_2 was added to the groundwater at a concentration of 100 parts per million (ppm), and nutrients were added at a carbon:nitrogen:phosphorus ratio of 50:25:10. The effectiveness of aerobic biodegradation and its continuous application is assessed in Section V using the aniline and DO data collected from the June and November 2006 biannual sampling events and the September 2006 intermediate sampling event.

III. 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 surface water-level measurement was obtained from a staff gauge located in the Barge Canal adjacent to the site. The hydraulic process control monitoring activities were conducted on October 30, 2006. The monitoring locations are shown on Figure 1.

Table 1 summarizes the groundwater-level measurements obtained during the October 2006 hydraulic monitoring event, as well as those obtained since June 1998 (immediately prior to commencing the in-situ anaerobic bioremediation treatment activities). Figure 2 depicts the potentiometric surface of the site's shallow hydrogeologic unit using the October 30, 2006 data set. Site-wide groundwater elevations for this round were generally the highest since startup of the treatment system. One explanation may be the fact that Syracuse received a significant rainfall (i.e., 1.15 inches) two days prior to the monitoring event. 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 1.25 gallons per minute (gpm) to 4.32 gpm from July 2006 through December 2006.

- The withdrawal of groundwater continues to induce a hydraulic gradient in Area 3 from perimeter monitoring wells MW-23S and MW-17R toward the withdrawal trench. Due to the unusually high groundwater levels at the time of monitoring (October 30, 2006), there was not a hydraulic gradient from perimeter monitoring well MW-25S toward the trench. This condition is expected to be short lived based on the historical operational data set for the site.

- 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 typically increases the rate at which H_2O_2/nutrient-amended groundwater moves through the area of relatively higher concentrations of COCs (between the secondary infiltration and recovery trenches). At the time that the site-wide round of water-level data was collected, the level for piezometer PZ-E suggested a slight groundwater mound existed at this location between the injection trenches in Area 3. The presence of a slight mound would indicate that, at the time the water-level data were collected, there may not have been an increased hydraulic gradient across the area of relatively higher COC concentrations. Although groundwater levels were generally above average for all site wells, the magnitude of the rise at PZ-E appears to be slightly greater than the other wells. This condition may be due to preferential recharge of precipitation in the area near PZ-E during higher rainfall events. Regardless of the cause, this condition is expected to be short-lived, based on the historical operational data set.

- The hydraulic data obtained over the 8-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 1.29 millisiemens per centimeter (mS/cm) to 2.09 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.

IV. Intermediate Monitoring Event, COC Process Control and Biannual Groundwater Monitoring Program

To monitor the effectiveness of the in-situ aerobic biodegradation treatment program an intermediate monitoring event was performed on September 12, 2006. Aniline and N,N-dimethylaniline were analyzed for each sample. The monitoring locations are shown in Table 2. In addition, upon commencement of the in-situ aerobic biodegradation treatment program, DO levels were measured on weekly basis at monitoring locations MW-27, MW-28 and MW-33. Table 3 summarizes these DO measurements.

The COC process control and Biannual Groundwater Monitoring Program activities were conducted on October 30, 2006 through November 1, 2006, in accordance with the long-term COC process control monitoring program presented in the Site O&M Plan. In addition, the following groundwater quality parameters were also measured in the field during the November 2006 COC sampling event: temperature, conductivity, 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 are provided in Table 4. The monitoring locations are shown on Figure 1.

In accordance with the requirements of the NYSDEC-approved monitoring program, laboratory analytical results for the September 2006 and November 2006 samples were validated. A summary of the validated COC groundwater analytical results is presented in Table 5 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 activities and the first half year of the aerobic bioremediation treatment. 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 September 2006 and the November 2006 sampling events are presented in Attachment B. A summary of the COC analytical results and DO measurements 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 during June, September and November 2006 were generally low, ranging from not detected to concentrations just slightly greater than their respective NYSDEC Groundwater Quality Standard, with the exception of aniline concentrations detected in the groundwater samples collected at MW-33. All COC concentrations detected at monitoring wells within Area 1 were approximately the same or decreased over the three sampling events.

- The aniline concentrations detected at MW-33 increased from 370 parts per billion (ppb) in June 2006 to 940 ppb in September 2006; however, the aniline concentration decreased to 84 ppb in November 2006, which is the lowest aniline concentration detected at MW-33 since May 2003. Aniline was not detected in the groundwater sample collected from the monitoring well located downgradient of MW-33 (i.e., MW-3S).

- Weekly DO levels were measured at MW-33 from August 28, 2006 to December 14, 2006 and are summarized in Table 3. The DO levels ranged from 0.16 to 0.57 ppm; however, aerobic conditions in groundwater are generally indicated when DO levels are greater than 2 ppm.

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 concentrations detected in the groundwater samples collected from TW-02RR and MW-36.

- The aniline concentration detected at TW-02RR decreased from 10,000 ppb in June 2006 to 7,600 ppb in September 2006. The aniline concentration continued to decrease in November 2006 to 2,100 ppb, which is the lowest aniline concentration detected at TW-02RR since November 2003. No other COCs, except benzene, xylene and acetone, were detected at concentrations greater than their respective NYSDEC Groundwater Quality Standard in the June and November 2006 groundwater samples collected at this location. The benzene and xylene concentrations were consistent between June and November 2006 sampling events; however, the only acetone concentration to exceed the NYSDEC Groundwater Quality Standard (50 ppb) was detected in November 2006 (78 ppb).

- The aniline concentrations detected at MW-36 decreased from 76 ppb in June 2006 to 3.5 ppb in September 2006, which is below the NYSDEC Groundwater Quality Standard of 5 ppb; however, the aniline concentration increased to 420 ppb in November 2006. No other COCs, except benzene, N,N-dimethylaniline and acetone, were detected at concentrations greater than their respective NYSDEC Groundwater Quality Standard in the June, September and November 2006 groundwater samples collected at this location. The benzene and N,N-dimethylaniline concentrations were consistent between the June and November 2006 sampling events; however, acetone was detected at a concentration that exceeded the NYSDEC Groundwater Quality Standard (50 ppb) only in the groundwater sample collected in November 2006 (130 ppb).

- No DO levels were measured in Area 2 during this reporting period.

<u>Area 3</u>

- As presented on Figure 4 and in Attachment A, the concentrations of COCs detected in groundwater samples collected from monitoring wells within Area 3 were generally consistent during the June, September and November 2006 sampling events.

- 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

(Figure 4). The aniline concentrations detected at MW-8SR increased from 23,000 ppb in June 2006 to 52,000 ppb in September 2006; however, the aniline concentration decreased to 28,000 ppb in November 2006. The other COCs detected at concentrations greater than their respective NYSDEC Groundwater Quality Standard in the groundwater sample collected from MW-8SR in November 2006 were consistent with previously detected concentrations.

- The aniline concentrations detected at MW-27 decreased from 14,000 ppb in June 2006 to 1,700 ppb in September 2006; however, the aniline concentration increased to 33,000 ppb in the groundwater sample collected during the November 2006 event. The other COCs detected in the groundwater sample collected from MW-27 in November 2006 were relatively low and consistent with previously detected concentrations.

- Monitoring well MW-28 is also located within Area 3 and historically exhibited relatively higher concentrations of methylene chloride and aniline. The aniline concentrations detected at MW-28 decreased from 430 ppb in June 2006 to 280 ppb in September 2006; however, the aniline concentration increased to 1,000 ppb in November 2006. The other COCs have generally not been detected in groundwater samples collected from MW-28, or detected at concentrations just slightly greater than their respective NYSDEC Groundwater Quality Standard.

- The aniline concentrations detected at MW-30 decreased from 240 ppb in June 2006 to 29 ppb in September. The aniline concentration detected in the groundwater sample in November 2006 increased to 200 ppb. No other COCs were detected in this sample at concentrations greater than their respective NYSDEC Groundwater Quality Standard. Prior to June 2006, aniline has not been detected above the NYSDEC Groundwater Quality Standard (5 ppb) at this location. Aniline was not detected in groundwater samples collected from MW-18, which is a perimeter monitoring well location downgradient of MW-30.

- Weekly DO levels were measured at MW-28 from August 21 to December 14, 2006 and at MW-27 from August 28 to December 14, 2006 and are summarized in Table 3. The DO levels at MW-28 ranged from 0.21 to 3.35 ppm; however, the DO levels were only greater than 2 ppm on August 21 and 28, 2006. The DO levels at MW-27 ranged from 0.21 to 0.88 ppm.

Downgradient Perimeter Monitoring Locations

As presented on Figure 4, COCs were not detected above their respective NYSDEC Groundwater Quality Standards at any of the downgradient perimeter monitoring locations during the September and November 2006 sampling events.

V. Conclusions

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

- A closed loop hydraulic cell continues to be maintained in Area 3.
- Operation of the Area 3 treatment system has not caused the freshwater/saltwater interface to upcone to the base of the withdrawal trench.
- COCs were not detected above the NYSDEC Groundwater Quality Standards at the perimeter sampling locations in November 2006, 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 bioremediation treatment activities began in 1998 demonstrate a significant decrease in COC concentrations since commencement of these activities. The concentrations continue to remain low since the aerobic bioremediation treatment program was introduced. The COC concentrations in this area were mostly non-detect. A few COCs (e.g., benzene, ethylbenzene and xylene) continue to be present at concentrations slightly greater than their respective NYSDEC Groundwater Quality Standard.
- Based on the DO levels measured in Area 1, it is not apparent that aerobic conditions were achieved; however, the continuous decrease in aniline concentrations detected within Area 1 (i.e., MW-33) indicates that the in-situ aerobic bioremediation treatment program is facilitating the reduction of aniline.

- In the area immediately downgradient of Area 1, aniline has been detected in MW-33. The November 2006 aniline concentration (84 ppb) was approximately 97% lower than the November 2004 concentration (2,700 ppb).

- 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; however, the November 2006 aniline concentration (2,100 ppb) was approximately 79% lower than the June 2006 concentration (10,000 ppb) at TW-02RR, indicating that the in-situ aerobic bioremediation treatment program is facilitating the reduction of aniline. In addition, a few COCs (e.g., acetone, benzene, xylene and N,N-dimethylaniline) were present within Area 2 at concentrations slightly greater than their respective NYSDEC Groundwater Quality Standard in November 2006.

- The September 2006 aniline concentration at MW-36 in Area 2 (3.5 ppb) was approximately 95% lower than the June 2006 concentration (76 ppb); however, in November 2006 the aniline concentration increased to 420 ppb. The decrease in aniline concentration at MW-36 occurred when the system was being amended more frequently. The increase in aniline concentration detected at MW-36 in November 2006 indicate that there may be an oxygen sink in this area and the amount of oxygen source introduced initially during the in-situ aerobic bioremediation treatment is necessary for the continuous reduction of aniline.

- The concentrations of most COCs detected at Area 3 monitoring locations above their respective NYSDEC Groundwater Quality Standard have decreased or remained relatively the same since commencement of the in-situ anaerobic bioremediation treatment activities in 1998, with the exception of MW-8S/MW-8SR, MW-27, and MW-30. In MW-8S/MW-8SR, methylene chloride decreased from 1,200,000 ppb in June 2004 to not detected since June 2005. Both aniline and BTEX compounds (benzene, toluene, ethylbenzene and xylene) increased at MW-27, while only aniline increased at MW-30 (all other COCs at MW-30 remained below NYSDEC Groundwater Quality Standards). In November 2006, aniline was present at MW-27 at a concentration of 33,000 ppb and at MW-30 at a concentration of 200 ppb, which were both lower than the aniline concentrations detected in November 2005 (37,000 ppb and 240 ppb, respectively).

- Based on the DO levels measured in Area 3, it is not apparent that aerobic conditions were achieved; however, the decrease in aniline concentrations detected at MW-27 and MW-28 during the September 2006 sampling event indicates that the in-situ aerobic bioremediation treatment program facilitated the reduction of aniline. The decrease in aniline concentrations occurred when the system was being amended more frequently. The increase in aniline concentrations detected at MW-27 and MW-28 during the November 2006 sampling event indicates that there may be an oxygen sink created by the aniline mass that exceeds the mass of oxygen in this area. Also, the rate or aerobic activity is less than the rate of aniline desorption and dissolution. Therefore, the amount of oxygen source introduced initially may be necessary for the continuous reduction of aniline.

- The total COC concentration measured at MW-8SR in November 2006 is approximately 12% lower than those measured in November 2005; however, aniline concentrations are still elevated (e.g., 28,000 ppb in November 2006).

- Although an aniline concentration reduction of approximately 46% was detected from September 2006 to November 2006, COC concentrations detected at MW-8SR are considerably higher than those detected at any other location in the three treatment areas. Therefore, the oxygen source requirement for effective in-situ aerobic bioremediation to occur may be considerably higher at MW-8SR than at other locations in the three treatment areas.

VI. Recommendations

Given the slow rate of aniline anaerobic biodegradation and its continued elevated concentration in groundwater samples, modifications to the existing treatment activities were proposed for Areas 1, 2 and 3 in the previous Biannual Report. As previously discussed, the NYSDEC verbally approved the modifications in July 2006. The modifications were implemented in August 2006.

Based on the DO measurements in all three areas, it is recommended that the oxygen source (diluted H_2O_2) be introduced into all three areas at a concentration of twice the initial amount (H_2O_2 was initially added to the groundwater at a concentration of 100 ppm). The increased concentration of H_2O_2 will be introduced weekly, beginning June 2007. In addition, the macronutrients (Miracle-Gro®) will also be added weekly at the same carbon:nitrogen: phosphorus ratio of 50:25:10 that was initially introduced. The H_2O_2/nutrient-amended groundwater will be injected into the infiltration trenches. The H_2O_2/nutrient-amended groundwater will be introduced into Area 1 at PZ-5, WP-4, and WP-5; Area 2 at piezometer PZ-W; and Area 3 at piezometer PZ-E and at well points WP-1 through WP-3 and WP-6 through WP-8.

DO levels will be measured in the field at MW-33 in Area 1, MW-36 in Area 2, and continue to be measured in the field at MW-27 and MW-28 in Area 3 once per week or until aerobic conditions in groundwater are apparent (i.e., DO greater than 2 ppm). The Biannual Groundwater Monitoring Program activities summarized in Table 4 will continue to be conducted at the site. The first biannual sampling event of 2007 is anticipated to be conducted in June 2007. Similar to the intermediate sampling event conducted in September 2006, a supplemental sampling event will be conducted during August 2007, approximately two months after initiating modifications to the in-situ aerobic bioremediation treatment program. Monitoring locations are presented in Table 2. Groundwater samples will be collected and analyzed for aniline and N,N-dimethylaniline during this supplemental sampling event.

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

The effectiveness of aerobic biodegradation and its continuous application will be assessed in the next Biannual Report using the aniline and DO data collected from the June 2006 biannual sampling event, September 2006 intermediate sampling event, November 2006 biannual sampling event, June 2007 biannual sampling event and August 2007 supplemental sampling event. In addition, the next Biannual Report for the January 2007 to June 2007 reporting period will further describe activities conducted to implement the in-situ aerobic bioremediation treatment activities and any operational problems encountered. It will also provide data collected and an assessment of the effectiveness of this new treatment approach.

As discussed in this Biannual Report and summarized in Table 4, 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 groundwater that contains concentrations of COCs in excess of their respective NYSDEC Groundwater Quality Standard is migrating beyond the site boundary.

If you have any questions or require additional information, please do not hesitate to contact me at (315) 671-9210.

Sincerely,

ARCADIS of New York, Inc.

David J. Ulm
Senior Vice President

Attachments

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TABLES

Table 1. Summary of Select Groundwater Level Measurements, 2006 Biannual 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	8/5/98 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	4/14/99 Week 39
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	363.17
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	365.41
MW-6D	377.07	365.75	366.01	366.29										365.25	365.15	365.23	365.36	365.23	365.06	365.62
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	365.22
MW-9D	376.76**	365.78					365.14	365.10						365.25	365.16	365.22	365.36	365.26	365.08	365.65
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	365.02
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	364.50
MW-18	372.57	362.64													361.90	361.93	362.05	362.05	361.84	362 18
MW-19	376.00	362.42													361.78	361.84	361.98	361.87	361.89	362.15
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	364.69
MW-23S	372.61	363.99	363.43	364.04	362.92	362.50	362.41		362.40	362.66		362.54	362.67	362.68	362.56	362.52	363.35	362.66	362.46	363.64
MW-24DR	375.14	365.41													364.63	364.67	364.81	364.69	364.54	364.96
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	364.87
MW-25D	373.67	365.43													364.74	364.76		364.77	364.64	365.07
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	363.89
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	365.02
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	365.28
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	365.78
PZ-9D	377.29	365.73					365.47	365.28						365.12	365.03	365.08	365.24		364.94	365.50
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	363.81
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	363.91
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	365.79
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	365.79
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	364.93
PZ-F	377.06	366.17					365.56	365.50						365.37	365.27	365.52	365.73	365.62	365.27	366.36
PZ-G	377.16	366.21					365.66	365.60						365.46	365.36	365.60	365.76	365.71	365.44	366.44
PZ-HR	376.99	366.16					365.54							365.44	365.34	365.54	365.84	365.60	365.39	366.34
PZ-I	375.15	366.56					365.86	365.64						365.88	365.57	365.90	366.59	366.05	365.76	366.93
PZ-J	374.89	366.15					365.53	365.40						365.53	365.39	365.55	365.93	365.59	365 47	366.21
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	363.87
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	363.69
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	364.06
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	365 87
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	364 01
PZ-P	376.89	366.25					365.65	365.60						365.52	365.39	365.61	365.78	365.73	365.44	366.43
PZ-Q	377.61	366.23					365.64	365 57						365.45	365.35	365.59	365.70	365.71	365.42	366 44
PZ-R	377.05	366.23		366.94			365.65	365.57						365.50	365.38	365.61	365.81	365.67	365.47	366.46
PZ-S	378.13	366.19					365.57	365.52						365.43	365.35	365.57	365.94	365.65	365.40	366.39
PZ-T	376.25	366.14					365.54	365.43						365.52	365.38	365.58	365.96	365.64	365 47	366.34
PZ-U	375 35	365 99		366.81			365.50	365.33						365.37	365.30	365 49	365.91	365.55	365.40	366.17
PZ-V	375.78	366.07					365 48	365.35						365.43	365.29	365 47	365.90	365.52	365.37	366.20
PZ-W	375.78	366.07					365 46	365.31						365.41	365.28	365.44	365.78	365.53	365.33	366.15

See Notes on Page 3.

Table 1. Summary of Select Groundwater Level Measurements, 2006 Biannual Process Control Monitoring Report, McKesson Envirosystems Former Bear Street Facility, Syracuse, New York

Location	Reference Elevation (feet AMSL)	6/3/99 Week 46	7/13/99 Week 52	3/27/00	6/1/00	9/18/00	11/14/00	3/19/01	9/24/01	4/15/02	6/3/02	6/18/02	10/7/02	1/20/03	5/5/03	10/27/03	6/14/04	11/1/04	6/6/05	10/31/05	6/5/06	10/30/06
Canal	393.39*	363.22	362.78	363.73	363.75	362.75^	363.24	363.01	362.96	364.59	363.64	364.17	362.19	^^	363.34	363.34	363.39	363.39	364.39^^^	363.84	363.69	364.29
Collection Sump	372.81	362.45	361.87	362.99	361.48	361.69	361.66	361.59	362.04	362.27	361.50	361.42	362.05	361.90	361.91	361.86	362.11	362.00	361.49	362.96	361.70	363.18
MW-3S	376.54	365.26		357.10						367.70	366.26	367.50	364.26	366.27	366.38	366.98	366.65	365.54	365.82	368.11	368.19	369.08
MW-3D	375.56	364.92	364.57	355.64	365.57	364.81	355.16	365.40	364.54	364.16	364.55	365.10	363.92	365.10	365.53	365.05	365.59	365.27	365.36	366.25	366.07	366.90
MW-6D	377.07	365.12	364.79	365.85	365.77	364.97	365.34	365.64	364.75	364.22	364.62	365.21	364.07	365.31	365.75	365.24	365.80	365.46	365.59	366.45	366.29	367.07
MW-8D	374.68	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**	365.17	364.83	365.88	365.80	365.01	365.36	365.68	364.76	364.05	364.47	365.10	364.00	365.31	365.79	365.26	365.85	365.51	365.64	366.47	366.34	366.91
MW-11D	373.68	364.60	364.18	365.24	365.18	364.46	364.81	364.96	364.18	364.07	364.44	364.92	363.73	364.81	365.17	364.75	365.26	364.93	364.00	365.94	365.78	366.53
MW-11S	373.50	363.88	363.39	364.72	364.35	363.55	363.86	364.48	363.33	363.57	363.89	364.33	363.09	364.15	364.38	363.89	364.34	363.98	364.12	365.06	365.04	366.11
MW-18	372.57	361.79	361.38	362.43	361.77	361.71	362.08	362.17	361.50	361.65	362.09	362.50	361.37	362.26	362.69	362.26	362.62	362.29	362.37	363.17	363.07	363.82
MW-19	376.00	361.80	361.46	362.58	361.88	361.90	362.25	362.44	361.82	361.83	362.11	362.57	361.51	362.52	361.91	362.46	362.89	362.59	362.69	363.50	363.38	364.09
MW-23I	372.77	364.28	363.83	364.99	364.93	364.25	364.58	364.73	363.99	363.99	364.34	364.80	363.62	364.60	365.01	364.56	364.99	364.67	364.77	365.66	365.47	366.43
MW-23S	372.61	362.94	362.42	363.85	363.17	362.64	362.87	363.59	362.36	363.97	363.38	363.68	362.50	362.26	363.31	362.81	363.04	362.77	362.80	364.05	363.80	365.28
MW-24DR	375.14	364.49	364.09	365.19	364.60	364.39	364.77	364.91	364.16	364.06	364.43	364.90	363.71	364.75	365.13	364.69	365.19	364.86	364.94	365.90	365.74	366.59
MW-24SR	375.55	364.41	363.95	365.12	365.55	364.30	364.60	364.86	364.05	364.00	364.40	364.86	363.64	364.69	365.03	364.62	365.12	364.78	364.88	365.81	365.66	366.49
MW-25D	373.67	364.64	364.20	365.28	365.20	364.51	364.84	364.97	364.22	364.19	364.57	365.02	363.82	364.82	365.24	364.74	365.26	364.93	365.00	364.49	365.77	366.64
MW-25S	373.39	363.20	364.75	364.12	363.69	362.94	363.23	364.14	362.61	364.39	363.83	364.21	362.74	363.61	363.67	363.19	363.49	363.08	363.14	365.63	364.13	365.26
PZ-4D	376.11	364.60	364.22	365.28	365.21	364.49	364.82	365.03	364.22	364.06	364.43	364.94	363.73	364.81	365.23	364.78	365.28	364.96	365.07	365.96	365.85	366.64
PZ-5D	375.58	364.86	364.47	365.57	365.48	364.71	365.10	365.36	364.46	364.12	364.47	365.03	363.81	365.05	365.49	365.02	365.53	365.20	365.29	365.19	365.98	366.87
PZ-8D	375.83	365.08	365.00																			
PZ-9D	377.29	365.04	364.68	365.70	365.72	364.87	365.16	365.55	364.60	363.75	364.14	364.79	363.71	365.08	365.64	365.09	365.68	365.35	365.48	366.33	366.19	366.91
PZ-A	373.94	363.12	362.61	363.95	363.15	362.75	362.91	363.56	362.58	363.92	363.05	363.22	362.59	^^	363.40	363.57	363.18	362.89	362.96	364.20	364.14	365.62
PZ-B	373.92	363.19	362.67	364.08	363.32	362.79	362.94	363.94	362.55	364.44	363.24	363.40	362.65	363.39	363.47	363.89	363.21	362.92	362.92	364.32	364.32	365.85
PZ-C	374.85	365.10	364.75	366.04	366.04	365.03	365.35	366.39	364.54	365.68	365.38	366.26	364.19	365.65	365.76	365.44	366.07	365.50	365.65	366.65	366.45	367.14
PZ-D	375.12	365.18	364.89	366.09	366.10	365.10	365.46	366.36	364.65	365.58	365.41	366.21	364.21	365.65	365.84	365.53	366.11	365.62	365.75	366.75	366.57	367.68
PZ-E	374.12	364.20	363.81	365.16	365.03	363.92	364.40	365.90	363.49	366.51	364.63	364.77	363.47	364.94	365.00	366.92	364.58	364.07	364.47	365.25	366.51	368.13
PZ-F	377.06	365.53	365.11	366.89	366.72	365.27	365.70	367.06	364.93	365.50	365.51	366.29	364.29	366.25	366.41	365.46	366.65	365.75	366.13	367.59	367.16	368.32
PZ-G	377.16	365.61	365.17	366.89	366.80	365.36	365.75	367.11	364.93	365.39	365.53	366.22	364.36	366.35	366.46	365.43	366.68	365.81	366.14	367.76	366.97	368.64
PZ-HR	376.99	365.55	365.11	366.80	366.68	365.33	365.66	367.02	364.91	365.39	365.46	366.19	364.24	366.22	366.41	365.50	366.62	365.81	366.12	367.56	367.14	368.31
PZ-I	375.15	365.79	365.23	367.30	367.23	365.55	366.08	367.81	364.91	366.29	366.16	367.05	364.22	366.58	366.90	365.97	367.01	365.26	366.41	368.02	367.82	369.00
PZ-J	374.89	365.53	365.14	366.55	366.50	365.32	365.64	366.69	364.96	365.10	365.18	365.89	364.21	365.96	366.73	365.61	366.45	365.86	366.07	367.29	367.04	367.96
PZ-K	373.19	363.13	362.59	363.97	363.19	362.69	362.86	363.53	362.49	363.82	363.19	363.48	362.56	363.25	363.36	363.12	363.13	362.84	362.97	364.21	364.01	365.58
PZ-L	374.62	363.00	362.47	363.84	363.03	362.61	362.68	363.42	362.47	363.44	362.96	363.26	362.53	363.42	363.25	363.06	363.04	362.79	362.91	364.02	363.89	365.23
PZ-M	374.35	363.40	362.90	364.22	363.54	363.05	363.24	363.86	362.90	363.93	363.37	363.62	362.82	363.60	363.77	363.66	363.61	363.31	363.45	364.53	364.40	365.60
PZ-N	376.94***	365.19	364.87	366.17	366.12	NM	365.35	366.43	364.47	366.60	365.29	366.13	364.09	365.54	365.74	364.48	365.95	365.47	365.53	366.56	366.41	367.51
PZ-O	375.36	363.25	362.73	364.22	363.57	362.86	363.06	364.22	362.64	364.47	363.63	363.98	362.75	363.61	363.53	363.36	363.43	363.04	363.13	364.36	364.26	365.42
PZ-P	376.89	365.59	365.18	366.85	366.73	365.34	365.77	367.02	364.93	365.31	365.48	366.19	364.25	366.25	366.45	365.53	366.65	365.87	366.20	367.63	367.19	368.30
PZ-Q	377.61	365.60	365.16	366.93	366.78	365.26	365.76	367.21	364.89	366.11	365.70	366.41	364.41	366.40	366.55	365.38	366.77	365.85	366.21	367.80	367.16	368.61
PZ-R	377.05	365.61	365.20	366.89	366.81	365.37	365.72	367.21	364.93	365.40	365.58	366.31	364.31	366.34	366.46	365.31	366.72	365.85	366.17	367.73	367.15	368.51
PZ-S	378.13	365.56	365.15	366.84	366.73	365.32	365.71	367.12	364.90	365.27	365.53	366.29	364.31	366.29	366.42	365.42	367.18	367.10	366.31	367.83	367.20	372.48
PZ-T	376.25	365.53	365.10	366.71	366.65	365.29	375.70	366.90	364.90	365.34	365.37	366.10	364.20	366.16	366.38	365.74	366.54	365.85	366.13	367.48	367.15	368.04
PZ-U	375.35	365.46	365.08	366.55	366.49	365.22	365.60	366.75	364.85	365.18	365.23	365.96	364.18	366.00	365.83	365.66	366.43	365.82	366.05	367.33	367.07	367.99
PZ-V	375.78	365.44	365.06	366.54	366.50	365.25	365.58	366.76	364.83	365.30	365.24	365.97	364.15	365.98	366.71	365.84	366.44	365.76	365.99	367.33	367.06	367.97
PZ-W	375.78	365.41	365.02	366.49	366.41	365.20	365.59	366.63	364.85	365.05	365.12	365.86	364.09	365.88	366.18	365.49	366.36	365.72	365.98	367.21	366.94	367.79

See Notes on Page 3.

Table 1. Summary of Select Groundwater Level Measurements, 2006 Biannual Process Control Monitoring Report, McKesson Envirosystems Former Bear Street Facility, Syracuse, New York

Notes:

1. Weeks 1, 2, 3, 4, 13, 18, 22, 23, 25, 26, 39, 46, and 52 are weeks after the initial introduction of Revised Anaerobic Mineral Media (RAMM) into the three impacted areas.
2. 8/10, 8/11, and 8/12/98 water level measurements were taken during the initial discrete RAMM injection event.
3. AMSL = Above Mean Sea Level (NGVD of 1929)
4. The groundwater level in PZ-8D was not measured on 3/27/00 and 6/1/00 because this piezometer was damaged and subsequently 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. ** = 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.
9. *** = 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.
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.
12. The canal waterlevel measurement for the 2005 second quarter long-term process control monitoring program was obtained on November 1, 2005
13. ^^^ = The water level measurement of the canal collected during the first 2005 monitoring was not measured from the correct measuring point. The spring 2005 measurement was taken approximately 3 feet higher than the surveyed measuring point. This value reflects the corrected canal water level for the spring 2005 monitoring event.

Table 2. Intermediate Sampling Event, 2006 Biannual Process Control Monitoring Report, McKesson Envirosystems Former Bear Street Facility, Syracuse, New York

Monitoring Location	September Intermediate Event
Area 1	
MW-31	C
MW-33	C
Area 2	
TW-02RR	C
MW-36	C
Area 3	
MW-8SR	C
MW-27	C
MW-28	C

Notes:
1. C = Monitoring for the aniline and N,N-dimethylaniline.
2. Field groundwater parameters including pH, temperature, conductivity, dissolved oxygen (DO), and oxidation/ reduction potential (ORP) are measured during this COC sampling event.
3. Each of the monitoring wells and piezometers were checked for the presence (if any) of non-aqueous phase liquid (NAPL).

Table 3. Summary of Dissolved Oxygen Measurements, 2006 Biannual Process Control Monitoring Report, McKesson Envirosystems Former Bear Street Facility, Syracuse, New York

Monitoring Date	Dissolved Oxygen (ppm)		
	MW-33 (Area 1)	MW-27 (Area 3)	MW-28 (Area 3)
8/21/2006	NM	NM	3.35
8/28/2006	0.28	0.88	2.18
9/1/2006	0.53	0.41	0.40
9/8/2006	0.22	0.42	0.53
9/21/2006	0.17	0.21	0.37
9/29/2006	0.28	0.37	0.40
10/6/2006	0.16	0.43	0.29
10/13/2006	0.21	0.33	0.31
10/28/2006	0.17	0.24	0.29
11/10/2006	0.37	0.33	0.38
11/16/2006	0.27	0.23	0.21
11/22/2006	0.41	0.37	0.42
12/4/2006	0.29	0.23	0.32
12/7/2006	0.24	0.22	0.29
12/14/2006	0.57	0.27	0.32

Notes:
1. NM = Not measured.
2. Dissolved oxygen levels measured in parts per million (ppm).

Table 4. Revised Long-Term Hydraulic and COC Process Control Monitoring Schedule, 2006 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
Upgradient		
MW-1	C	C
MW-3S	C	C
MW-3D	H	H
Area 1		
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
Area 2		
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
Area 3		
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 2.

Table 4. Revised Long-Term Hydraulic and COC Process Control Monitoring Schedule, 2006 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
Downgradient Perimeter Monitoring Locations		
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

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.*

Table 5. Summary of Historical Groundwater Monitoring Data, 2006 Biannual Process Control Monitoring Report, McKesson Envirosystems Former Bear Street Facility, Syracuse, New York

Monitoring Well	Sampling Date	Screen Elev. (ft. AMSL) Top	Bottom	Acetone	Benzene	Toluene	Ethyl-benzene	Xylene[A]	Methanol	Trichloro-ethene	Aniline	N,N-Dimethyl-aniline	Methylene Chloride
NYSDEC Groundwater Quality Standards (Part 700)				50	1	5	5	5	NA	5	5	1	5
MW-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
	11/05			<1.3 J	<0.3	<0.4	<0.5	<0.5	<1,000	<0.4	<1.0	<1.0 J	<0.5
	6/06			<5.0 J	<1.0 J	<5.0 J	<4.0 J	<5.0 J	<1,000 J	<1.0 J	<1.0 J	<1.0 J	<3.0 J
	11/06			<5.0	<1.0	<5.0	<4.0	<5.0	<500	<1.0	<1.0	<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)[B]**	**4 J**	<10
	4/02			<12	<5	<5	<5	<10	**370 J**	<5	**1.7 J**	<5	<5

See Notes on Page 17.

Table 5. Summary of Historical Groundwater Monitoring Data, 2006 Biannual Process Control Monitoring Report, McKesson Envirosystems Former Bear Street Facility, Syracuse, New York

Monitoring Well	Sampling Date	Screen Elev. (ft. AMSL) Top	Screen Elev. (ft. AMSL) Bottom	Acetone	Benzene	Toluene	Ethyl-benzene	Xylene[A]	Methanol	Trichloro-ethene	Aniline	N,N-Dimethyl-aniline	Methylene Chloride
NYSDEC Groundwater Quality Standards (Part 700)				50	1	5	5	5	NA	5	5	1	5
MW-3S (cont'd.)	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	**4 J**	<5	<5
	6/04			**6 J**	<10	<10	<10	<20	<1,000	<10	**0.8 J**	<6	<10
	11/04			<25	<10	<10	<10	<20	**150 J**	<10	**4 J**	<5	<10
	6/05			<5.0 J	<1.0	<5.0	<4.0	<5.0	<1,000	<1.0	**15**	<1.0	<3.0
	11/05			<1.3 J	<0.3	<0.4	<0.5	<0.4	<1,000	<0.4	<1.0	<1.0 J	<0.5
	6/06			<5.0	<1.0	<5.0	<4.0	<5.0	<1,000	<1.0	<1.0	<1.0	<3.0
	11/06			<5.0	<1.0	<5.0	<4.0	<5 0	<500	<1.0	<1.0	<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[C]	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[D] (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[D]	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[D] (Replaced by MW-8S)[E]	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	<250,000D	<250,000D	<250,000D	<250,000D	**22,000**	**60,000 JD**	<25,000D	**380,000 D**	**7,700,000 D**
	9/98			<10,000 J	<10,000	<10,000	<10,000	<10,000	**7,900**	**3,300 J**	**1,200 J**	**26,000 D**	**140,000**
	2/99			<20,000	<20,000	<20,000	<20,000	<20,000	**16,000JN**	**11,000 J**	**30,000 D**	**120,000 D**	**650,000 DB**
	7/99			**10 J**	**22 J**	**240 J**	**58 J**	**220 J**	**17,000**	**11,000 J**	**24,000**	**77,000**	**450,000 D**
	3/00			<100,000	<100,000	<100,000	<100,000	<100,000	**30,000 J**	<100,000	**62,000**	**270,000 D**	**1,300,000**
	9/00			<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	**184 DJ**	<1,000	<500	**35,000 D**	**5,300 D**	**10,000 D**
	6/05			**81 J**	**13**	**100**	**53**	**180**	<1,000	<1.0	**30,000**	<200	<3.0
	11/05			**15 J**	**13**	**130**	**66**	**260**	<1,000	<1.0	**32,000**	<260 J	<3.0

See Notes on Page 17.

Table 5. Summary of Historical Groundwater Monitoring Data, 2006 Biannual 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[A]	Methanol	Trichloro-ethene	Aniline	N,N-Dimethyl-aniline	Methylene Chloride
		Top	Bottom										
NYSDEC Groundwater Quality Standards (Part 700)				50	1	5	5	5	NA	5	5	1	5
MW-8SR	6/06			48	15	120	79	260	<1,000	<1.0	23,000	<200	<3.0
(cont'd.)	9/06			NS	NS	NS	NS	NS	NS	NS	52,000 (51,000)	<520 (<520)	NS
	11/06			28	16	100	84	270	<500	<1.0	28,000	<200	<3.0
MW-9[D]	1/89	365.6	356	1,600	NA	64	130	270	<1,000	<10	660	1,200	1,500
(Replaced by MW-9S)	11/89			<1,000	48	25	60	60	<1,000	<10	670	150	<10
	11/91			<100	<10	9	19	30	<1,000	<1	95	18	<1
	8/95			<1,000	11 JD	26 JD	69 D	226 JD	<1,000	<50	50	28	110 D
	7/99			<10	4 J	2 J	9 J	18	<1,000	<10	<10	5 J	<10
	3/00			<10	2 J	2 J	11	21	<1,000 J	<10	2 J	9 J	<10
	9/00			<10 J	11 J	2 J	6 J	18 J	<1,000	<10 J	1 J	6 J	<10 J
	3/01			<10	1 J	3 J	17	61	<1,000	<10	2 J	11	<10
	9/01			<10	10	3 J	7 J	35	<1,000 J	<10	<10	10	<10
	4/02			<23	10	2 J	6	17 J	370 J	<5	9	43	<5
	10/02			16 J	38	40	2 J	15 J	<1,000	<10	<5	2 J	<10
	5/03			<12	11	<5	7	18	<1,000	<5	0.9 J	3 J	<5
	10/03			<12	2 J	<5	5	19	<1,000	<5	1 J	<5	<5
	6/04			14 J	6 J	2 J	8 J	19 J	<1,000	<10	<5	<5	<10
	11/04			<25	4 J	2 J	9 J	30 J	<1,000	<10	<5	<5	<10
	6/05			44 J	1.9	3.2 J	24	64	<1,000	<1.0	2.6	1.9	<3.0
	11/05			<1.3 J	3.5	3.8	11	33	<1,000	<0.4	1.4	6.1 J	<0.5
	6/06			<5.0 J	1.1 J	2.3 J	25 J	60 J	<1,000 J	<1.0 J	<1.1 J	3.6 J	<3.0 J
	11/06			<5.0	1.4	3.5 J	23	63	<500	<1.0	0.5 J	3.3 J	<3.0
MW-10[D]	1/89	355.5	345.9	<1,000,000	<10,000	<10,000	<10,000	<10,000	210,000	<10,000	720	9,400	520,000
(Replaced by MW-9D)	11/89			<100,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	900	2,400	26,000
	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[D]	1/89	355.1	345.5	<100	<1	<1	<1	<1	8,400	<1	<12	<12	1
(Replaced MW-6D)	11/89			<100	<1	<1	<1	<1	<1,000	<1	230	<52	<1
	8/95			<1,000	<5	<5	<5	<5	<1,000	<5	<5	<10	<10
MW-11S	12/94	359.9	354.9	<380	<10	<10	<10	<10	880	<10	<5	<10	<10
	8/95			<1,000	<5	<5	<5	<5	<1,000	<5	<5	<10	<26
	10/95			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

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Table 5. Summary of Historical Groundwater Monitoring Data, 2006 Biannual Process Control Monitoring Report, McKesson Envirosystems Former Bear Street Facility, Syracuse, New York

Monitoring Well	Sampling Date	Screen Elev. (ft. AMSL) Top	Bottom	Acetone	Benzene	Toluene	Ethyl-benzene	Xylene[A]	Methanol	Trichloro-ethene	Aniline	N,N-Dimethyl-aniline	Methylene Chloride
NYSDEC Groundwater Quality Standards (Part 700)				50	1	5	5	5	NA	5	5	1	5
MW-12D[D] (Replaced MW-8D)[E]	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
MW-14D[C]	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[C]	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[C] (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)[F]**	**110 (<5)[F]**	<5
	10/02			<25 J	**14**	<10	<10	<20	<1,000	<10	<5[G]	<5[G]	<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
	11/05			<5.0 J	<1.0	<5.0	<4.0	<5.0	<1,000	<1.0	<1 0	<1.0 J	<3.0
	6/06			<5.0	**0.8 J**	<5.0	<4.0	<5 0	<1,000	<1.0	<1.1	<1.1	<3.0
	11/06			R	<1.0	<5 0	<4.0	<5.0	<500	<1 0	<1 0	<1.0 J	<3.0

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Table 5. Summary of Historical Groundwater Monitoring Data, 2006 Biannual Process Control Monitoring Report, McKesson Envirosystems Former Bear Street Facility, Syracuse, New York

Monitoring Well	Sampling Date	Screen Elev. (ft. AMSL) Top	Bottom	Acetone	Benzene	Toluene	Ethyl-benzene	Xylene[A]	Methanol	Trichloro-ethene	Aniline	N,N-Dimethyl-aniline	Methylene Chloride
NYSDEC Groundwater Quality Standards (Part 700)				50	1	5	5	5	NA	5	5	1	5
MW-18	11/89	325.15	316.15	<100	<1	<1	<1	<1	<1,000	<1	<10	<10	<1
	11/90			<100	<1	<1	<1	<3	<1,000	<1	<10	<10	<1
	11/91			<100	<1	<1	<1	<3	<1,000	<1	<10	<10	<1
	11/92			<100	<1	<1	<1	<3	<1,000	<1	<10	<10	<1
	12/94			<10	<5	<5	<5	<5	<200	<5	<5	<10	<5
	8/95			<1,000	<5	<5	<5	<5	<1,000	<5	<5	<10	<10
	2/96			<1,000	<10	<10	<10	<10	<1,000	<10	<5	<10	<10
	8/96			<10	<10	<10	<10	<10	<1,000	<10	<5	<10	<10
	2/97			<10	<10	<10	<10	<10	<1,000	<10	<5	<10	<10
	8/97			<10	<10	<10	<10	<10	<1,000	<10	<5	<10	<10
	9/98			<10	<10	<10	<10	<10	<1,000	<10	<5[H]	<10	<10
	2/99			<10	<10	<10	<10	<10	<1,000	<10	<10	<10	<10
	7/99			<10 J	<10	<10	<10	<10	<1,000	<10	<10	<10	<10
	3/00			<10	<10	<10	<10	<10	<1,000 J	<10	<5	<10	<10
	9/00			<10 J	<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)[F]	**200 D** (<5)[F]	<10
	10/02			**6 J**	<10	<10	<10	<20	<1,000	<10	<5[G]	<5[G]	<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
	11/05			<5.0 J	<1.0	<5.0	<4.0	<5.0	<1,000	<1.0	<1.1	<1.1 J	<3.0
	6/06			<5.0	<1.0	<5.0	<4.0	<5.0	<1,000	<1.0	<1.0	<1.0	<3.0
	11/06			R	<1.0	<5.0	<4.0	<5.0	<500	<1.0	<1.0	<1.0 J	<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[H]	**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

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Table 5. Summary of Historical Groundwater Monitoring Data, 2006 Biannual Process Control Monitoring Report, McKesson Envirosystems Former Bear Street Facility, Syracuse, New York

Monitoring Well	Sampling Date	Screen Elev. (ft. AMSL) Top	Bottom	Acetone	Benzene	Toluene	Ethyl-benzene	Xylene[A]	Methanol	Trichloro-ethene	Aniline	N,N-Dimethyl-aniline	Methylene Chloride
NYSDEC Groundwater Quality Standards (Part 700)				50	1	5	5	5	NA	5	5	1	5
MW-19	3/00			<10	<10	<10	<10	<10	<1,000 J	<10	<5	<10	<10
(cont'd.)	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[G]	<5[G]	<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
	6/04			<25	<10	<10	<10	<20	<1,000	<10	<5	<5	<10
	11/04			<25	<10	<10	<10	<20	<1,000	<10	<5	<5	<10
	6/05			<5.0 J	<1.0	<5.0	<4.0	<5.0	<1,000	<1.0	<1.1	<1.1	<3.0
	11/05			<5.0 J	<1.0	<5.0	<4.0	<5.0	<1,000	<1.0	<1.0	<1.0 J	<3.0
	6/06			<5.0	<1.0	<5.0	<4.0	<5.0	<1,000	<1.0	<1.0	<1.0	<3.0
	11/06			R	<1.0	<5.0	<4.0	<5.0	<500	<1.0	<1.0	<1.0 J	<3.0
MW-20[C]	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[C]	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[H]**	**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[G]	<5[G]	<10
	5/03			<62	<25	<25	<25	<50	**380 J**	<25	<5	<5	<25
	10/03			<12	<5	<5	<5	<10	<1,000	<5	**60**	<5	<5

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Table 5. Summary of Historical Groundwater Monitoring Data, 2006 Biannual 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[A]	Methanol	Trichloro-ethene	Aniline	N,N-Dimethyl-aniline	Methylene Chloride
		Top	Bottom										
NYSDEC Groundwater Quality Standards (Part 700)				50	1	5	5	5	NA	5	5	1	5
MW-23S	6/04			<25	<10	<10	<10	<20	<1,000	<10	<5	<5	<10
(cont'd.)	11/04			--	--	--	--	--	<1,000	--	<5	<5	--
	6/05			<5.0 J	<1.0	<5.0	<4.0	<5.0	<1,000	<1.0	<1.0	<1.0	<3.0
	11/05			<5.0 J	<1.0	<5.0	<4.0	<5.0	<1,000	<1.0	<1 0	<1.0 J	<3.0
	6/06			<5 0 J	<1.0	<5.0	<4.0	<5.0	<1,000	<1.0	<1.2	<1.2	<3.0
	11/06			R	<1.0	<5.0	<4.0	<5 0	<500	<1.0	<1.0	<1.0 J	<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
	9/98			<10	<10	<10	<10	<10	<1,000	<10	<5[H]	<10	<10
	2/99			<10	<10	<10	<10	<10	<1,000	<10	<10	<10	<10 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[G]	<5[G]	<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
	11/05			<5.0 J	<1.0	<5.0	<4.0	<5.0	<1,000	<1.0	<1.0	<1.0 J	<3.0
	6/06			<5.0 J	<1.0	**0.6 J**	<4.0	<5.0	<1,000	<1 0	<1.0	<1.0	<3.0
	11/06			R	<1.0	<5.0	<4.0	<5 0	<500	<1.0	<1.0	<1.0 J	<3.0
MW-24S[C]	12/94	358.4	352.4	<10	<5	<5	<5	<5	<1,000	<5	<5	<10	<5
(Replaced by MW-24SR)	8/95			<1,000	<5	<5	<5	<5	<1,000	<5	<5	<10	<10
	2/96			<1,000	<10	<10	<10	<10	<1,000	<10	<5	<10	<10
	2/97			<1,000	<10	<10	<10	<10	<1,000	<10	<5	<10	<10
	9/98			<10	<10	<10	<10	<10	<1,000	<10	<5[H]	<10	<10
	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[F]			NS	NS	NS	NS	NS	NS	NS	ND	ND	NS
	10/02			<25 J	<10	<10	<10	<20 J	<1,000	<10	<5[G]	<5[G]	<10
	10/03			<12	<5	<5	<5	<10	<1,000	<5	**16**	<6	<5

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Table 5. Summary of Historical Groundwater Monitoring Data, 2006 Biannual Process Control Monitoring Report, McKesson Envirosystems Former Bear Street Facility, Syracuse, New York

Monitoring Well	Sampling Date	Screen Elev. (ft. AMSL) Top	Bottom	Acetone	Benzene	Toluene	Ethyl-benzene	Xylene[A]	Methanol	Trichloro-ethene	Aniline	N,N-Dimethyl-aniline	Methylene Chloride
NYSDEC Groundwater Quality Standards (Part 700)				50	1	5	5	5	NA	5	5	1	5
MW-24S[C]	6/04[J]			<25	<10	<10	<10	<20	<1,000	<10	<5	<5	<10
(cont'd.)	11/04			--	--	--	--	--	<1,000	--	<5	<5	--
	6/05			<5.0 J	<1.0	<5.0	<4.0	<5.0	<1,000	<1.0	<1.0	<1.0	<3.0
	11/05			<5.0 J	<1.0	<5.0	<4.0	<5.0	<1,000	<1.0	<1.0	<1.0 J	<3.0
	11/06			R	<1.0	<5.0	<4.0	<5.0	<500	<1.0	<1.0	<1.0 J	<3.0
MW-24D[C]	12/94	334.4	341.2	<10	<5	<5	<5	<5	<1,000	<5	<5	<10	<5
(Replaced by MW-24DR)	8/95			<1,000	<5	<5	<5	<5	<1,000	<5	<5	<10	<10
	2/96			<1,000	<10	<10	<10	<10	<1,000	<10	<5	<10	<10
	2/97			<1,000	<10	<10	<10	<10	<1,000	<10	<5	<10	<10
	9/98			<10	<10	<10	<10	<10	<1,000	<10	<5[H]	<10	<10
	7/99			<10 J	<10 J	<10 J	<10 J	<10 J	<1,000	<10 J	<10	<10	<10 J
	9/00			<10 J	<10 J	<10 J	<10 J	<10 J	<1,000 J	<10 J	<10 J	<10	<10 J
	9/01			<10	<10	<10	<10	<10	<1,000	<10	<10	<10	<10
	6/02[F]			NS	NS	NS	NS	NS	NS	NS	ND	ND	NS
	10/02			<25 J	<10	<10	<10	<20 J	<1,000	<10	<5[G]	<5[G]	<10
	10/03			<12	<5	<5	<5	<10	<1,000	<5	**0.5 J**	<5	<5
	11/04			--	--	--	--	--	<1,000	--	<5	<5	--
	6/05			<5 J	<1	<5	<4	<5	<1,000	<1	<1	<1	<3
	11/05			<5.0 J	<1.0	<5.0	<4.0	<5.0	<1,000	<1.0	<1.1	<1.1 J	<3.0
	11/06			R	<1.0	<5.0	<4.0	<5.0	<500	<1.0	<1.0	<1.0 J	<3.0
MW-25S	8/95	361.2	356.2	<1,000	<5	<5	<5	<5	<1,000	<5	<5	**0.7 J**	<10
	10/95			NA	<5	<5	<5	<5	NA	<5	<5	<10	<5
	8/96			<10	<10	<10	<10	<10	<1,000	<10	<5	<10	<10
	8/97			<10	<10	<10	<10	<10	<1,000	<10	<5	<10	<10
	2/99			<10	<10	<10	<10	<10	<1,000	<10	**130**	<10	<10 J
	6/99			<10 J	<10	<10	<10	<10	<1,000 J	<10	**110 J**	**21 J**	<10 J
	7/99			<10 J	<10	<10	<10	<10	<1,000	<10	**5 J**	<10	<10
	3/00			<10	<10	<10	<10	<10	<1,000 J	<10	<5	<10	<10
	9/00			<10 J	<10 J	<10 J	<10 J	<10 J	<1,000 J	<10 J	<10 J	<10	<10 J
	3/01			<10	<10	<10	<10	<10	<1,000	<10	<10	<10	<10
	9/01			<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[G]	<5[G]	<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

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Table 5. Summary of Historical Groundwater Monitoring Data, 2006 Biannual Process Control Monitoring Report, McKesson Envirosystems Former Bear Street Facility, Syracuse, New York

Monitoring Well	Sampling Date	Screen Elev. (ft. AMSL) Top	Bottom	Acetone	Benzene	Toluene	Ethyl-benzene	Xylene[A]	Methanol	Trichloro-ethene	Aniline	N,N-Dimethyl-aniline	Methylene Chloride
NYSDEC Groundwater Quality Standards (Part 700)				50	1	5	5	5	NA	5	5	1	5
MW-25S	11/04			--	--	--	--	--	<1,000	--	<5	<5	--
(cont'd.)	6/05			<5.0 J	<1.0	<5.0	<4.0	<5.0	<1,000	<1.0	<1.1	<1.1	<3.0
	11/05			<5.0 J	<1.0	<5.0	<4.0	<5.0	<1,000	<1.0	<1.0	<1.0 J	<3.0
	6/06			<5.0 J	<1.0	<5.0	<4.0	<5.0	<1,000	<1.0	<1.0	<1.0	<3.0
	11/06			R	<1.0	<5.0	<4.0	<5.0	<500	<1.0	<1.0	<1.0 J	<3.0
MW-25D	8/95	349.55	344.55	<1,000	<5	<5	<5	<5	<1,000	<5	<5	**1 J**	<5
	10/95			NA	<5	<5	<5	<5	NA	**3 J**	<5	<10	<5
	8/96			**15**	<10	<10	<10	<10	<1,000	<10	<5	<10	<10
	8/97			<10	<10	<10	<10	<10	<1,000	<10	<5	<11	<10
	2/99			<10	<10	<10	<10	<10	<1,000	<10	<10	<10	<10 J
	3/00			<10	<10	<10	<10	<10	<1,000 J	<10	<5	<10	<10
	3/01			<10	<10	<10	<10	<10	<1,000	<10	**5 J**	<10	<10
	4/02			<10	<5	<5	<5	<10	<1,000	<5	<5	<5	<5
	5/03			<12	<5	<5	<5	<5	<1,000	<5	<5	<5	<5
	6/04			<25	<10	<10	<10	<20	<1,000	<10	<5	<5	<10
	6/05			<5.0 J	<1.0	<5.0	<4.0	<5.0	<1,000	<1.0	<1.0	<1.0	<3.0
	6/06			<5.0 J	<1.0	**0.7 J**	<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
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
	11/05			**35 J (37 J)**	**11 (12)**	**77 (78)**	**26 (26)**	**86 (88)**	<1,000 (<1,000)	<1.0 (<1.0)	**37,000 (38,000)**	<270 J (<260 J)	<3.0 (<3 0)
	6/06			**5.3 J (5.8 J)**	**9.5 J (8.9 J)**	**50 J (48 J)**	**25 J (25 J)**	**66 J (63 J)**	<1,000 J (<1,000 J)	<1.0 J (<1.0 J)	**14,000 J (12,000 J)**	<100 J (<100 J)	<3.0 J (<3.0 J)
	9/06			NS	NS	NS	NS	NS	NS	NS	**1,700**	<10	NS
	11/06			**31 (24)**	**14 (14)**	**71 (71)**	**42 (45)**	**91 (110)**	<500 (<500)	<1.0 (<1.0)	**33,000 (33,000)**	<210 (<200)	<3.0 (<3.0)
MW-28	9/98	363.6	355.6	<5,000 J	<5,000	<5,000	<5,000	<5,000	**2,200**	<5,000	**546 D[H]**	**54**	**64,000 J**
	7/99			<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**

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Table 5. Summary of Historical Groundwater Monitoring Data, 2006 Biannual Process Control Monitoring Report, McKesson Envirosystems Former Bear Street Facility, Syracuse, New York

Monitoring Well	Sampling Date	Screen Elev. (ft. AMSL) Top	Bottom	Acetone	Benzene	Toluene	Ethyl-benzene	Xylene[A]	Methanol	Trichloro-ethene	Aniline	N,N-Dimethyl-aniline	Methylene Chloride
NYSDEC Groundwater Quality Standards (Part 700)				50	1	5	5	5	NA	5	5	1	5
MW-28	10/02			**14 J**	**8 J**	**6 J**	**11**	**12 J**	<1,000	<10	**2,700 D**	R	<10
(cont'd.)	5/03			**13**	**4 J**	**2 J**	**2 J**	**8 J**	<1,000	<5	**1,000 DJ**	**3 J**	**52**
	10/03			**24**	**11**	**6**	**12**	**13 J**	<1,000	<5	**1,900 D**	<5	<5
	6/04			**20 J**	**4 J**	**2 J**	**5 J**	**4 J**	<1,000	<10	**910 D**	<5	<10
	11/04			<120 (<25)	<50 (4 J)	<50 (<10)	<50 (5 J)	<100 (3 J)	**190 J**	<50 (<10)	**640 DJ**	<5	<50 (<10)
	6/05			**5.2 J**	**4.5**	**1.2 J**	**4.6**	**3.9 J**	<1,000	<1.0	**630**	<5.0	<3.0
	11/05			**6.8 J (7.8 J)**	**6.1 (5.8)**	<5.0 (<5.0)	**4.7 (4.7)**	<5.0 (<5.0)	<1,000 (<1,000)	<1.0 (<1.0)	**380 J (350 J)**	<2.2 (<2.1)	<3.0 (<3.0)
	6/06			<5.0 J (<5.0 J)	**6.0 J (6.3 J)**	**1.2 J (1.3 J)**	**5.3 J (5.4 J)**	**4.2 J (4.3 J)**	<500 J (<1,000 J)	<1.0 J (<1.0 J)	**430 J (530 J)**	<2.1 J (<5.0 J)	<3.0 J (<3.0 J)
	9/06			NS	NS	NS	NS	NS	NS	NS	**280**	<2.2	NS
	11/06			**12**	**8.2**	**1.4 J**	**5.6**	**4.4 J**	<500	<1.0	**1,000**	<5.2	<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**
	5/03			<12	<5	<5	<5	<10	<1,000	<5	**19**	**1 J**	<3
	10/03			<12	<5	<5	<5	<10	<1,000	<5	**2 J**	<5	<5
	6/04			<25	<10	<10	<10	<20	<1,000	<10	**3 J**	<5	<10
	11/04			<120	<50	<50	<50	<100	**420 J**	<50	<5	<5	<50
	6/05			<5.0 J	<1.0	<5.0	<4.0	<5.0	<1,000	<1.0	<1.0	<1.0	<3.0
	11/05			<5.0 J	<1.0	<5.0	<4.0	<5.0	<1,000	<1.0	<1.0	<1.0 J	<3.0
	6/06			<5.0	<1.0	<5.0	<4.0	<5.0	<1,000	<1.0	<1.0	<1.0	<3.0
	11/06			**5.4**	<1.0	<5.0	<4.0	<5.0	<500	<1.0	**0.4 J**	<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

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Table 5. Summary of Historical Groundwater Monitoring Data, 2006 Biannual Process Control Monitoring Report, McKesson Envirosystems Former Bear Street Facility, Syracuse, New York

Monitoring Well	Sampling Date	Screen Elev. (ft. AMSL) Top	Bottom	Acetone	Benzene	Toluene	Ethyl-benzene	Xylene[A]	Methanol	Trichloro-ethene	Aniline	N,N-Dimethyl-aniline	Methylene Chloride
NYSDEC Groundwater Quality Standards (Part 700)				50	1	5	5	5	NA	5	5	1	5
MW-30	11/04			<120	<50	<50	<50	<100	<1,000	<50	<5	<5	<50
(cont'd.)	6/05			<5.0 J	**0.3 J**	<5.0	<4.0	<5.0	<1,000	<1.0	<1.0	<1.0	<3.0
	11/05			<5.0 J	**0.7 J**	**0.6 J**	<4.0	**0.5 J**	<1,000	<1.0	**240**	<1.0 J	<3.0
	6/06			<5.0	**0.6 J**	**0.4 J**	<4.0	<5.0	<1,000	<1.0	**29**	<1.0	<3.0
	11/06			**11**	**1.0**	<5.0	<4.0	<5.0	<500	<1.0	**200**	<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	**660 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	**86**	<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
	11/05			<1.3 J	**6.7**	<0.4	<0.5	**0.6**	<1,000	<0.4	**16**	<1.0 J	<0.5
	6/06			<5.0 J	**11 J**	**0.6 J**	<4.0 J	**1.7 J**	<1,000 J	<1.0 J	<1.0 J	**2.4 J**	<3.0 J
	9/06			NS	NS	NS	NS	NS	NS	NS	**1.6**	**3.4**	NS
	11/06			R	**6.9**	<5.0	<4.0	<5.0	<500	<1.0	**0.4 J**	**1.1 J**	<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
	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
	11/05			<5.0 J	<1.0	<5.0	<4.0	<5.0	<1,000	<1.0	<1.0	<1.0 J	<3.0
	6/06			<5.0 J	<1.0 J	<5.0 J	<4.0 J	<5.0 J	<1,000 J	<1.0 J	<1.0 J	<1.0 J	<3.0 J
	11/06			R	<1.0	**0.8 J**	<4.0	<5.0	<500	<1.0	<1.0	<1.0 J	<3.0

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Table 5. Summary of Historical Groundwater Monitoring Data, 2006 Biannual Process Control Monitoring Report, McKesson Envirosystems Former Bear Street Facility, Syracuse, New York

Monitoring Well	Sampling Date	Screen Elev. (ft. AMSL) Top	Bottom	Acetone	Benzene	Toluene	Ethyl-benzene	Xylene[A]	Methanol	Trichloro-ethene	Aniline	N,N-Dimethyl-aniline	Methylene Chloride
NYSDEC Groundwater Quality Standards (Part 700)				50	1	5	5	5	NA	5	5	1	5
MW-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
	11/05			<5.0 J	16	1.8 J	<4.0	<5.0	<1,000	<1.0	3,500	<25 J	<3.0
	6/06			<5.0 J	6.7 J	0.7 J	<4.0 J	<5.0 J	<1,000 J	<1.0 J	370 J	3.5 J	<3.0 J
	9/06			NS	NS	NS	NS	NS	NS	NS	940	8.0	NS
	11/06			17 J	8.6	0.7 J	<4.0	<5.0	<500	<1.0	84	2.9 J	<3.0
MW-34	9/98	362.7	354.7	<10	<10	<10	<10	<10	<1,000	<10	83	<10	<10
	7/99			2 J	0.9 J	1 J	<10	<10	<1,000	<10	380 D	2 J	<10
	3/00			<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
	11/05			20 J	<0.3	0.9	<0.5	1.1	<1,000	<0.4	12	2 J	<0.5
	6/06			6.4	0.6 J	0.5 J	<4.0	<5.0	<1,000	<1.0	16	2.3	<3.0
	11/06			49 J	<1.0	0.6 J	<4.0	0.6 J	<500	<1.0	9.9	1.2 J	<3.0
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

See Notes on Page 17.

Table 5. Summary of Historical Groundwater Monitoring Data, 2006 Biannual Process Control Monitoring Report, McKesson Envirosystems Former Bear Street Facility, Syracuse, New York

Monitoring Well	Sampling Date	Screen Elev. (ft. AMSL) Top	Bottom	Acetone	Benzene	Toluene	Ethyl-benzene	Xylene[A]	Methanol	Trichloro-ethene	Aniline	N,N-Dimethyl-aniline	Methylene Chloride
NYSDEC Groundwater Quality Standards (Part 700)				50	1	5	5	5	NA	5	5	1	5
MW-35 (cont'd.)	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
	11/05			<5.0 J	<1.0	<5.0	<4.0	<5.0	<1,000	<1.0	<1.0	<1.0 J	<3.0
	6/06			<5.0	<1.0	<5.0	<4.0	<5.0	<1,000	<1.0	0.4 J	<1.0	<3.0
	11/06			R	<1.0	<5.0	<4.0	<5.0	<500	<1.0	1.1	<1.0 J	<3.0
MW-36	9/98	363.6	355.6	<10	<10	<10	<10	<10	<1,000	<10	290 D	6 J	<10
	2/99			<10	<10	<10	<10	<10	<1,000	<10	860 D	4 J	<10
	7/99			8 J	0.8 J	<10	<10	<10	<1,000	<10	250	<10	<10
	3/00			<10 J	<10	<10	<10	<10	<1,000 J	<10	60	7 J	<10
	9/00			5 J	<10 J	<10 J	<10 J	<10 J	<1,000 J	<10 J	8 J	6 J	<5
	3/01			<10	<10	<10	<10	<10	<1,000	<10	<10	<10	<10
	9/01			54	<10	<10	<10	<10	<1,000 J	<10	350 D	6 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
	11/05			77 J	3.6	2.0 J	0.6 J	2.8 J	<1,000	<1.0	1,600	<10 J	<3.0
	6/06			25	1.6	0.7 J	<4.0	1.2 J	<1,000	<1.0	76	1.9	<3.0
	9/06			NS	NS	NS	NS	NS	NS	NS	3.5	1.2	NS
	11/06			130 J	3.6	1.2 J	<4.0	1.1 J	<500	<1.0	420	1.7 J	<3.0
TW-01	12/96	365.1	355.4	<10	82	4 J	6 J	4 J	<1,000	<10	2,090 D	13	4 J
	9/98			<10	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
	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

See Notes on Page 17.

Table 5. Summary of Historical Groundwater Monitoring Data, 2006 Biannual Process Control Monitoring Report, McKesson Envirosystems Former Bear Street Facility, Syracuse, New York

Monitoring Well	Sampling Date	Screen Elev. (ft. AMSL) Top	Bottom	Acetone	Benzene	Toluene	Ethyl-benzene	Xylene[A]	Methanol	Trichloro-ethene	Aniline	N,N-Dimethyl-aniline	Methylene Chloride
NYSDEC Groundwater Quality Standards (Part 700)				50	1	5	5	5	NA	5	5	1	5
TW-01	6/04			6 J	3 J	<10	<10	<20	<1,000	<10	<5	<5	<10
(cont'd.)	11/04			<25	2 J	<10	<10	<20	<1,000	<10	<5	<5	<10
	6/05			<5.0 J	1.8	<5.0	<4.0	<5.0	<1,000	<1.0	<1.0	<1.0	<3.0
	11/05			<1.3 J	1.9	<0.4	<0.5	<0.4	<1,000	<0.4	<1.0	<1.0 J	<0.5
	6/06			<5.0 J	1 J	<5.0 J	<4.0 J	<5.0 J	<1,000 J	<1.0 J	<1.0 J	0.8 J	<3.0 J
	11/06			R	0.7 J	<5.0	<4.0	<5.0	<500	<1.0	<1.0	<1.0 J	<3.0
TW-02[C]	12/96	363.3	353.3	53	10	77	16	65	<1,000	585 D	15,900 JD	3,920 D	42,449 D
(Replaced by TW-02R)[E]	9/98			<500 J	<500 J	<500 J	<500 J	53,000	5,000	300 J	38,000 D	61,000 D	66,000 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
TW-02RR	11/04	363.3	353.3	18 J	4 J	8 J	4 J	16 J	<1,000	<10	7,100 D	<5	<10
	6/05			7.2 J	3.5	2.1 J	3.6 J	9.5	<1,000	0.3 J	8,400	<50	<3.0
	11/05			26 J	6	4.1	3.6	11	<1,000	<0.4	14,000	<110 J	<0.5
	6/06			16	4.4	1.3 J	2.7 J	6.7	<1,000	<1.0	10,000	<100	<3.0
	9/06			NS	NS	NS	NS	NS	NS	NS	7,600	<52	NS
	11/06			78 J	4.9	1.4 J	2.2 J	6.2	<500	<1.0	2,100	<10 J	<3.0
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
	6/06			<5.0	<1.0	0.5 J	<4.0	<5.0	<1,000	<1.0	<1.0	<1.0	<3.0

See Notes on Page 17.

Table 5. Summary of Historical Groundwater Monitoring Data, 2006 Biannual Process Control Monitoring Report, McKesson Envirosystems Former Bear Street Facility, Syracuse, New York

Monitoring Well	Sampling Date	Screen Elev. (ft. AMSL) Top	Bottom	Acetone	Benzene	Toluene	Ethyl-benzene	Xylene[A]	Methanol	Trichloro-ethene	Aniline	N,N-Dimethyl-aniline	Methylene Chloride
NYSDEC Groundwater Quality Standards (Part 700)				50	1	5	5	5	NA	5	5	1	5
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)[F]	<5 (<5)[F]	<5
	10/02			<25 J	<10	<10	<10	<20 J	<1,000	<10	<5[G]	<5[G]	<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
	6/06			<5.0	<1.0	**0.6 J**	<4.0	<5.0	<1,000	<1.0	<1.0	<1.0	<3.0
PZ-5D	11/89	353.5	348.6	<100	<1	<1	<1	<1	<1,000	<1	<10	<10	<1
	12/94			<10	<5	<5	<5	<5	<200	<5	<5	<10	<5
	2/96			<1,000	<10	<10	<10	<10	<1,000	<10	<5	<10	<10
	2/97			<1,000	<10	<10	<10	<10	<1,000	<10	<5	<10	<10
	9/98			<10	<10	<10	<10	<10	<1,000	<10	<5[H]	<10	<12
	7/99			<10 J	<10 J	<10 J	<10 J	<10 J	<1,000	<10 J	<10	<10	<10 J
	9/00			<10 J	<10 J	<10 J	<10 J	<10 J	<1,000 J	<10 J	<10 J	<10	<10 J
	9/01			<10	<10	<10	<10	<10	<1,000	<10	<10	<10	<10
	10/02			<25 J	<10	<10	<10	<20 J	<1,000	<10	<5[G]	<5[G]	<10
	10/03			<12	<5	<5	<5	<10	<1,000	<5	**45**	<5	<5
	6/04[J]			<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
	11/05			<5.0 J	<1.0	**0.7 J**	<4.0	<5.0	<1,000	<1.0	<1.0	<1.0 J	<3.0
	11/06			R	<1.0	<5.0	<4.0	<5.0	<500	<1.0	<1.0	<1.0 J	<3.0

See Notes on Page 17.

Table 5. Summary of Historical Groundwater Monitoring Data, 2006 Biannual Process Control Monitoring Report, McKesson Envirosystems Former Bear Street Facility, Syracuse, New York

Monitoring Well	Sampling Date	Screen Elev. (ft. AMSL) Top	Screen Elev. (ft. AMSL) Bottom	Acetone	Benzene	Toluene	Ethyl-benzene	Xylene[A]	Methanol	Trichloro-ethene	Aniline	N,N-Dimethyl-aniline	Methylene Chloride
NYSDEC Groundwater Quality Standards (Part 700)				50	1	5	5	5	NA	5	5	1	5
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[H]	<10	<12
	6/99			<10 J	<10	<10	<10	<10	<1,000	<10	<10 J	<10 J	<10 J
	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[G]	<5[G]	<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
	11/05			<5.0 J	<1.0	<5.0	<4.0	<5.0	<1,000	<1.0	<1.0	<1.0 J	<3.0
	11/06			R	<1.0	<5.0	<4.0	<5.0	<500	<1.0	<1.0	<1.0 J	<3 0
PZ-8S[I]	9/98	362.6	357.7	<10	<10	<10	<10	<10	<1,000	<10	<10	<10	<10
PZ-11D[D]	11/89	352.09	347.19	<100	<1	<1	<1	<1	<1,000	<1	<11	<11	<1
PZ-11S[D]	11/89	359.09	354 19	<100	<1	<1	<1	<1	<1,000	<1	<11	<11	<1
PZ-12D[D]	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[D]	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[C]	11/89	349.4	344.4	<100	<1	<1	<1	<1	<1,000	<1	<11	<11	<1
PZ-13S[C]	11/89	359.5	354.5	<100	<1	2	<1	**2**	<1,000	<1	<11	<11	<1

See Notes on Page 17.

Table 5. Summary of Historical Groundwater Monitoring Data, 2006 Biannual Process Control Monitoring Report, McKesson Envirosystems Former Bear Street Facility, Syracuse, New York

General Notes:

1 Concentrations are presented in micrograms per liter (ug/L), which is equivalent to parts per billion (ppb).
2. Compounds detected are indicated by bold-faced type
3. Detections exceeding New York State Department of Environmental Conservation (NYSDEC) Groundwater Standards (Part 700) are indicated by shading.
4. Replacement wells for MW-6, MW-8, MW-9, MW-10, MW-11, and MW-12D were installed 8/95.
5. Replacement wells for MW-17, MW-24S, MW-24D, and TW-02 were installed 11/97 - 12/97.
6. The laboratory analytical results for the duplicate sample collected from monitoring well MW-23S during the 7/99 sampling event indicated the presence of methanol at 5.1 mg/L. Because methanol was not detected in the original sample, the duplicate results were determined, based on the results of the data validation process, to be unacceptable. Furthermore, methanol has not been previously detected in groundwater samples collected from this monitoring well. Accordingly, the detection of methanol appears to be the result of a laboratory error and not representative of actual groundwater quality in the vicinity of monitoring well MW-23S.
7. N,N-dimethylaniline data for 10/02 sampling event for MW-1, MW-3S, MW-28, MW-29, MW-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.
10. The sampling event in September 2006 was an interim sampling event to gauge the effects of the in-situ aerobic biodegradation treatment activities.

Superscript Notes:

[A] = Data presented is total xylenes (m- and p-xylenes and o-xylenes). For the 1995 data, the listed quantitation limit applies to the analyses conducted for m- and p-xylenes and o-xylenes.
[B] = 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.
[C] = 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.
[D] = 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).
[E] = 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.
[F] = 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.
[G] = MW-17R, MW-18, MW-19, MW-23S, MW-23I, MW-24DR, MW-24SR, MW-25S, PZ-4S, PZ-5S, and PZ-5D wells/peizometers were resampled for aniline and N,N-dimethylaniline during 1/03, because the 10/02 results were rejected due to matrix spike and matrix spike duplicate recoveries below control limits. These wells and piezometers are perimeter monitoring locations.
[H] = MW-18, MW-19, MW-23I, MW-23S, MW24DR, MW-24SR, MW-28, PZ-5S, and PZ-5D wells/piezometers were resampled for aniline during 12/98, because the 9/98 results were rejected due to laboratory error.
[I] = Piezometer PZ-8S was decommissioned 8/2000.
[J] = 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.

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
U = Undetected.
R = The sample results were rejected
-- = Sample results are not available. (See Note 9.)

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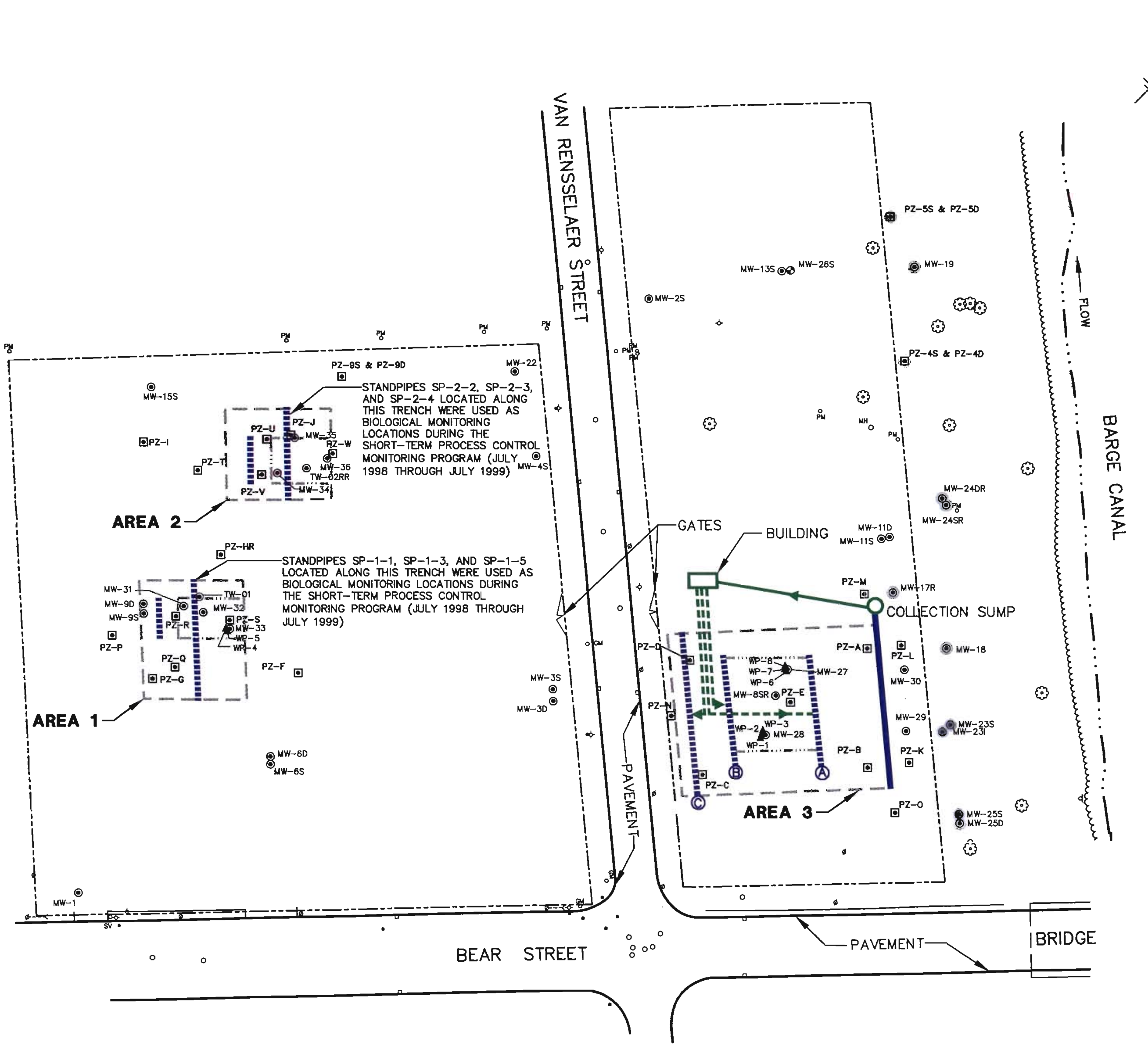
FIGURES



LEGEND:

- UTILITY POLE
- CATCH BASIN
- PM ○ PETROLEUM PIPE LINE MARKER
- GM ○ GAS LINE MARKER
- SV ○ SEWER VENT
- HYDRANT
- WATER VALVE
- MANHOLE
- PROPERTY LINE
- MW-19 GROUNDWATER MONITORING WELL
- BIANNUAL DOWNGRADIENT PERIMETER GROUNDWATER MONITORING LOCATION
- PZ-A PIEZOMETER
- MW-26S PUMPING WELL
- WP-8 ▲ WELL POINT
- BOUNDARY OF IMPACTED AREA
- GROUNDWATER WITHDRAWAL TRENCH
- (A) GROUNDWATER INFILTRATION TRENCH AND IDENTIFICATION
- PIPING TO BUILDING
- PIPING FROM BUILDING
- AREA OF RELATIVELY HIGHER CONCENTRATIONS OF COCs

NOTES:

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

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SITE PLAN

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FIGURE
1

[SYR-85-LEAD] SYR-85-RCB WLJ KFS L: ON=*, OFF=REF*
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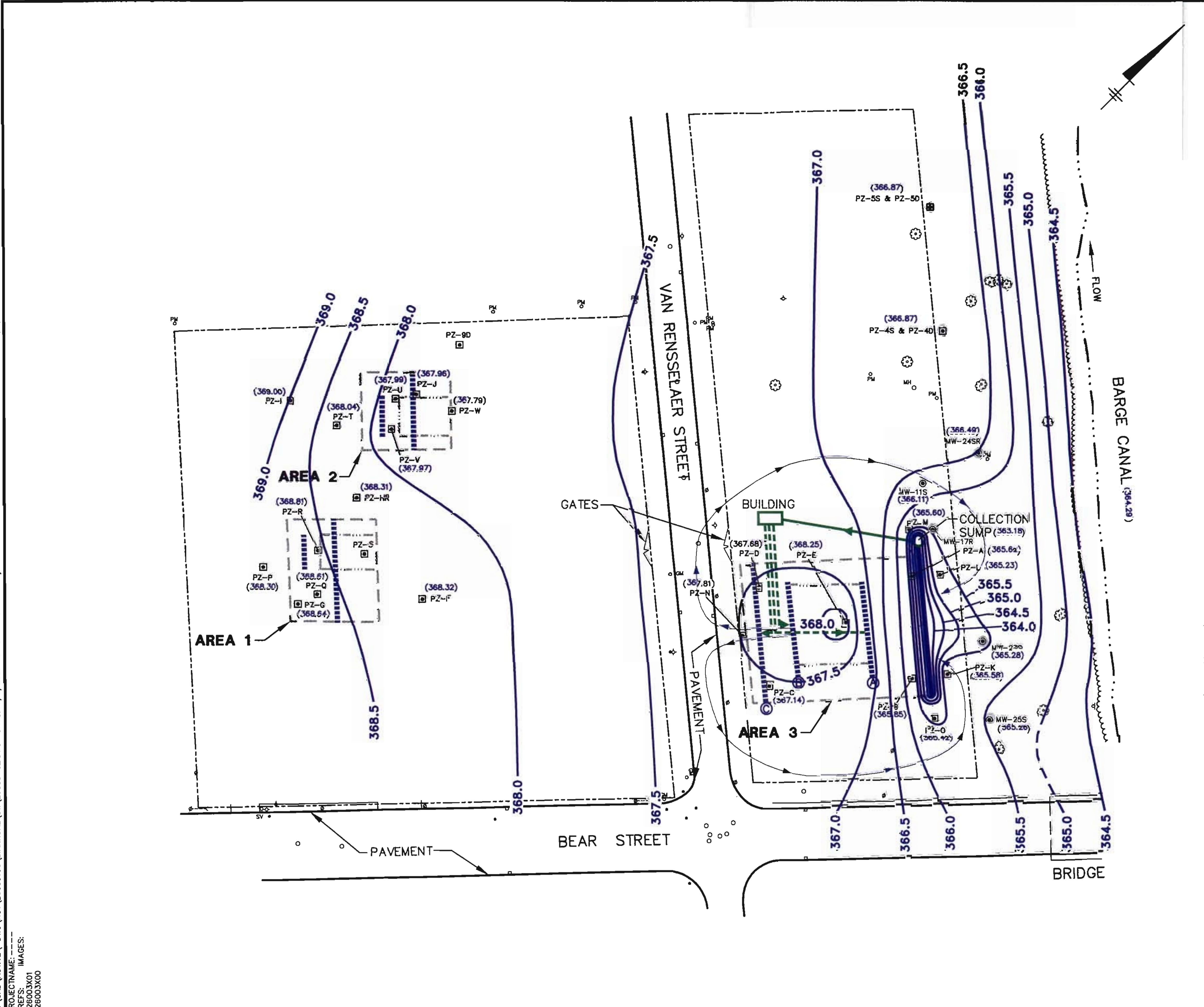

LEGEND:

- UTILITY POLE
- CATCH BASIN
- PM ○ PETROLEUM PIPE LINE MARKER
- GM ○ GAS LINE MARKER
- SV ○ SEWER VENT
- HYDRANT
- WATER VALVE
- MANHOLE
- PROPERTY LINE
- MW-19 GROUNDWATER MONITORING WELL
- BIANNUAL DOWNGRADIENT 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
- 366.5 GROUNDWATER ELEVATION CONTOUR (FEET ABOVE MEAN SEA LEVEL) DASHED WHERE INFERRED
- (366.49) 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.

0 100' 200'
GRAPHIC SCALE

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POTENTIOMETRIC SURFACE OF THE SHALLOW HYDROGEOLOGIC UNIT SAND LAYER - OCTOBER 30, 2006

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FIGURE
2

TW-02R

Date	10/03	6/04
Acetone	68	140 J
Benzene	28	19 J
Toluene	75 J	39 J
Ethylbenzene	<5	31 J
Xylene	<10	111 J
Methanol	<1,000	<1,000
Trichloroethene	2 J	<10 J
Aniline	92,000 D	82,000
N,N-dimethylaniline	<260	<5,200
Methylene Chloride	91	4 J

TW-02RR

Date	11/04	6/05	11/05	6/06	9/06	11/06
Acetone	18 J	7.2 J	26 J	16	–	78 J
Benzene	4 J	3.6	6	4.4	–	4.9
Toluene	8 J	2.1 J	4.1	1.3 J	–	1.4 J
Ethylbenzene	4 J	3.6 J	3.6	2.7 J	–	2.2 J
Xylene	16 J	9.6	11	6.7	–	6.2
Methanol	<1,000	<1,000	<1,000	<1,000	–	<500
Trichloroethene	<10	0.3 J	<0.4	<1.0	–	<1.0
Aniline	7,100 D	8,400	14,000	10,000	7,600	2,100
N,N-dimethylaniline	<5.0	<50	<110 J	<100	<52	<10 J
Methylene Chloride	<10	<3.0	<0.5	<3.0	–	<3.0

MW-35

Date	10/03	6/04	11/04	6/05	11/05	6/06	11/06
Acetone	5 J	<25	<25	<5.0 J	<5.0 J	<5.0	R
Benzene	<5.0	<10	<10	<1.0	<1.0	<1.0	<1.0
Toluene	<5.0	<10	<10	<5.0	<5.0	<5.0	<5.0
Ethylbenzene	<5.0	<10	<10	<4.0	<4.0	<4.0	<4.0
Xylene	<10	<20	<20	<5.0	<5.0	<5.0	<5.0
Methanol	<1000	<1000	240 J	<1,000	<1,000	<1,000	<500
Trichloroethene	<5.0	<10	<10	<1.0	<1.0	<1.0	<1.0
Aniline	4 J	30	82	<1.0	<1.0	0.4 J	1.1
N,N-dimethylaniline	<5.0	4 J	<5.0	<1.0	<1.0 J	<1.0	<1.0 J
Methylene Chloride	<5.0	<10	<10	<3.0	<3.0	<3.0	<3.0

MW-36

Date	10/03	6/04	11/04	6/05	11/05	6/06	9/06	11/06
Acetone	580 D	22 J	13 J	24 J	77 J	25	–	130 J
Benzene	<5.0	<10 J	<10	2.1	3.8	1.8	–	3.6
Toluene	<5.0	<10 J	<10	<5.0	2.0 J	0.7 J	–	1.2 J
Ethylbenzene	<5.0	<10 J	<10	<4.0	0.6 J	<4.0	–	<4.0
Xylene	<10	<20 J	<20	1.0 J	2.8 J	1.2 J	–	1.1 J
Methanol	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	–	<500
Trichloroethene	<5.0	<10 J	<10	<1.0	<1.0	<1.0	–	<1.0
Aniline	100	33	22	1,200	1,800	76	3.5	420
N,N-dimethylaniline	<5.0	7	<5.0	<5.4	<10 J	1.9	1.2	1.7 J
Methylene Chloride	<5.0	<10 J	<10	<3.0	<3.0	<3.0	–	<3.0

MW-34

Date	10/03	6/04	11/04	6/05	11/05	6/06	11/06
Acetone	9 J	24 J	<25	5.6 J	20 J	6.4	49 J
Benzene	<5.0	<10	<10	0.7 J	<0.3	0.6 J	<1.0
Toluene	<5.0	<10	<10	0.9 J	0.9	0.5 J	0.6 J
Ethylbenzene	<5	<10	<10	<4.0	<0.5	<4.0	<4.0
Xylene	<10	<20	<20	1.2 J	1.1	<5.0	0.6 J
Methanol	<1000	<1000	180 J	<1,000	<1,000	<1,000	<500
Trichloroethene	<5.0	<10	<10	0.4 J	<0.4	<1.0	<1.0
Aniline	18	30	14	16	12	16	9.9
N,N-dimethylaniline	<5.0	<5.0	<5.0	2.5	2 J	2.3	1.2 J
Methylene Chloride	<5.0	<10	<10	<3.0	<0.5	<3.0	<3.0

TW-01

Date	10/03	6/04	11/04	6/05	11/05	6/06	11/06
Acetone	<12	6 J	<25	<5.0 J	<1.3 J	<5.0 J	R
Benzene	6	3 J	2 J	1.8	1.9	1 J	0.7 J
Toluene	<5.0	<10	<10	<5.0	<0.4	<5.0 J	<5.0
Ethylbenzene	<5.0	<10	<10	<4.0	<0.5	<4.0 J	<4.0
Xylene	<10	<20	<20	<5.0	<0.4	<5.0 J	<5.0
Methanol	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000 J	<500
Trichloroethene	<5.0	<10	<10	<1.0	<0.4	<1.0 J	<1.0
Aniline	0.6 J	<5.0	<5.0	<1.0	<1.0	<1.0 J	<1.0
N,N-dimethylaniline	<5.0	<5.0	<5.0	<1.0	<1.0 J	0.8 J	<1.0 J
Methylene Chloride	<5.0	<10	<10	<3.0	<0.5	<3.0 J	<3.0

MW-31

Date	10/03	6/04	11/04	6/05	11/05	6/06	9/06	11/06
Acetone	1,200 D	15 J	<25	<5.0 J	<1.3 J	<5.0 J	–	R
Benzene	13	12	9 J	11	6.7	11 J	–	6.9
Toluene	<5.0	<10	<10	<5.0	<0.4	0.6 J	–	<5.0
Ethylbenzene	<5.0	<10	<10	<4.0	<0.5	<4.0 J	–	<4.0
Xylene	<5.0	<20	<20	1.3 J	0.6	1.7 J	–	<5.0
Methanol	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000 J	–	<500
Trichloroethene	<5.0	<10	<10	<1.0	<0.4	<1.0 J	–	<1.0
Aniline	88	3 J	<5.0	3.2	16	<1.0 J	1.6	0.4 J
N,N-dimethylaniline	<5.0	<5.0	<5.0	2.7	<1.0 J	2.4 J	3.4	1.1 J
Methylene Chloride	<5.0	<10	<10	<3.0	<0.5	3.4	–	<3.0

MW-9S

Date	10/03	6/04	11/04	6/05	11/05	6/06	11/06
Acetone	<12	14 J	<25	44 J	<1.3 J	<5.0 J	<5.0
Benzene	2 J	6 J	4 J	1.9	3.5	1.1 J	1.4
Toluene	<5	2 J	2 J	3.2 J	3.8	2.3 J	3.5 J
Ethylbenzene	5	8 J	9 J	24	11	25 J	23
Xylene	19	19 J	30 J	64	33	60 J	63
Methanol	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000 J	<500
Trichloroethene	<5.0	<10	<10	<1.0	<0.4	<1.0 J	<1.0
Aniline	1 J	<5.0	<5.0	2.6	1.4	<1.1 J	0.5 J
N,N-dimethylaniline	<5.0	<5.0	<5.0	1.9	6.1 J	3.8 J	3.3 J
Methylene Chloride	<5.0	<10	<10	<3.0	<0.5	<3.0 J	<3.0

MW-32

Date	10/03	6/04	11/04	6/05	11/05	6/06	11/06
Acetone	20	6 J	<25	<5.0 J	<5.0 J	<5.0 J	R
Benzene	2 J	1 J	<10	1	<1.0	<1.0 J	<1.0
Toluene	<5.0	<10	<10	<5.0	<5.0	<5.0 J	0.8 J
Ethylbenzene	<5.0	<10	<10	<4.0	<4.0	<4.0 J	<4.0
Xylene	<10	<20	<20	<5.0	<5.0	<5.0 J	<5.0
Methanol	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000 J	<500
Trichloroethene	<5.0	<10	<10	<1.0	<1.0	<1.0 J	<1.0
Aniline	<5.0	1 J	<5.0	0.4 J	<1.0	<1.0 J	<1.0
N,N-dimethylaniline	<5.0	<5.0	<5.0	<1.0	<1.0 J	<1.0 J	<1.0 J
Methylene Chloride	<5.0	<10	<10	<3.0	<3.0	<3.0 J	<3.0

MW-1

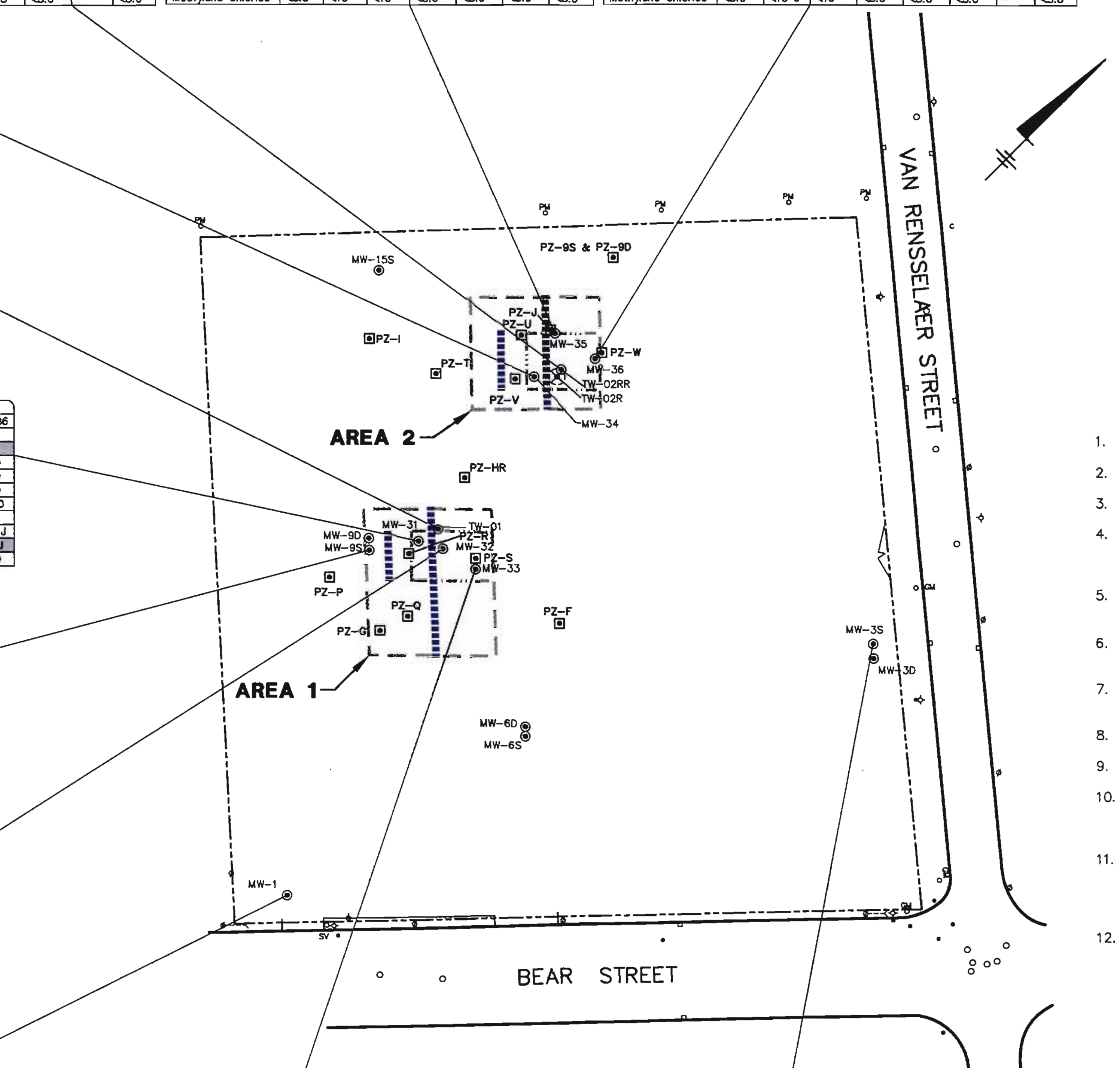
Date	10/03	8/04	11/04	6/05	11/05	6/06	11/06
Acetone	<12	<25	–	<5.0 J	<1.3 J	<5.0 J	<5.0
Benzene	<5.0	<10	–	<1.0	<0.3	<1.0 J	<1.0
Toluene	<5.0	<10	–	<5.0	<0.4	<5.0 J	<5.0
Ethylbenzene	<5.0	<10	–	<4.0	<0.5	<4.0 J	<4.0
Xylene	<10	<20	–	<0.5	<0.5	<5.0 J	<5.0
Methanol	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000 J	<500
Trichloroethene	<5.0	<10	–	<1.0	<0.4	<1.0 J	<1.0
Aniline	2 J	<5.0	<5.0	0.2 J	<1.0	<1.0 J	<1.0
N,N-Dimethylaniline	<5.0	<5.0	<5.0	<1.0	<1.0 J	<1.0 J	<1.0
Methylene Chloride	<5.0	<10	–	<3.0	<0.5	<3.0 J	<3.0

MW-33

Date	10/03	6/04	11/04	6/05	11/05	6/06	9/06	11/06
Acetone	22	9 J	–	<5.0 J	<5.0 J	<5.0 J		17 J
Benzene	2 J	12 J	–	11	16	6.7 J	–	8.6
Toluene	<5.0	<10 J	–	1.0 J	1.8 J	0.7 J	–	0.7 J
Ethylbenzene	<5.0	<10 J	–	<4.0	<4.0	<4.0 J	–	<4.0
Xylene	<10	<20 J	–	<5.0	<5.0	<5.0 J	–	<5.0
Methanol	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000 J	–	<500
Trichloroethene	<5.0	<10 J	–	<1.0	<1.0	<1.0 J	–	<1.0
Aniline	1,900 D	2,700 D	2,700 D	1,800	3,500	370 J	940	84
N,N-dimethylaniline	<6.0	5 J	5 J	<10	<25 J	3.5 J	8.0	2.9 J
Methylene Chloride	<5.0	<10 J	–	<3.0	<3.0	<3.0 J	–	<3.0

MW-3S

Date	10/03	6/04	11/04	6/05	11/05	6/06	11/06
Acetone	<12	6 J	<25	<5.0 J	<1.3 J	<5.0	<5.0
Benzene	<5.0	<10	<10	<1.0	<0.3	<1.0	<1.0
Toluene	<5.0	<10	<10	<5.0	<0.4	<5.0	<5.0
Ethylbenzene	<5.0	<10	<10	<4.0	<0.5	<4.0	<4.0
Xylene	<10	<20	<20	<5.0	<0.4	<5.0	<5.0
Methanol	<1,000	<1,000	150 J	<1,000	<1,000	<1,000	<500
Trichloroethene	<5.0	<10	<10	<1.0	<0.4	<1.0	<1.0
Aniline	4 J	0.8 J	4 J	15	<1.0	<1.0	<1.0
N,N-dimethylaniline	<5.0	<6.0	<5.0	<1.0	<1.0 J	<1.0	<1.0
Methylene Chloride	<5.0	<10	<10	<3.0	<0.5	<3.0	<3.0



LEGEND:

- UTILITY POLE
- CATCH BASIN
- PM — PETROLEUM PIPE LINE MARKER
- GM — GAS LINE MARKER
- SV — 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

SAMPLE IDENTIFICATION

MW-35

Date	10/03	6/04	11/04	6/05	11/05	6/06	11/06
Acetone	5 J	<25	<25	<5.0 J	<5.0 J	<5.0	R
Benzene	<5.0	<10	<10	<1.0	<1.0	<1.0	<1.0
Toluene	<5.0	<10	<10	<5.0	<5.0	<5.0	<5.0
Ethylbenzene	<5.0	<10	<10	<4.0	<4.0	<4.0	<4.0
Xylene	<10	<20	<20	<5.0	<5.0	<5.0	<5.0
Methanol	<1000	<1000	240 J	<1,000	<1,000	<1,000	<500
Trichloroethene	<5.0	<10	<10	<1.0	<1.0	<1.0	<1.0
Aniline	4 J	30	82	<1.0	<1.0	0.4 J	1.1
N,N-dimethylaniline	<5.0	4 J	<5.0	<1.0	<1.0 J	<1.0	<1.0 J
Methylene Chloride	<5.0	<10	<10	<3.0	<3.0	<3.0	<3.0

CONCENTRATION (ppb)

DETECTIONS EXCEEDING NYSDEC GROUNDWATER QUALITY STANDARDS ARE INDICATED BY SHADING.

NOTES:

1. REPLACED MONITORING WELLS ARE IDENTIFIED WITH AN "R" (e.g., MW-24DR).
2. TRENCH LOCATIONS ARE APPROXIMATE.
3. MONITORING LOCATIONS ARE APPROXIMATE.
4. FIGURE ONLY SHOWS COC CONCENTRATIONS AT MONITORING LOCATIONS WITHIN THE IMPACTED AREAS AND THE CHEMICAL PROCESS CONTROL MONITORING LOCATIONS.
5. ONLY COC CONCENTRATIONS DETECTED OR THAT HAVE BEEN DETECTED ARE PRESENTED ON THIS FIGURE (SEE ATTACHMENT A FIGURE 1).
6. < = COMPOUND WAS ANALYZED FOR BUT NOT DETECTED. THE ASSOCIATED VALUE IS THE COMPOUND QUANTITATION LIMIT.
7. J = THE COMPOUND WAS POSITIVELY IDENTIFIED; HOWEVER THE ASSOCIATED NUMERICAL VALUE IS AN ESTIMATED CONCENTRATION ONLY.
8. D = CONCENTRATION IS BASED ON DILUTED SAMPLE ANALYSIS.
9. R = THE SAMPLE RESULT WAS REJECTED.
10. 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.
11. 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 BIANNUAL REPORT, THESE MONITORING WELLS WERE NOT RESAMPLED.
12. THE 9/06 SAMPLING EVENT WAS AN INTERIM SAMPLING EVENT, ANALYZING FOR ANILINE & N,N-DIMETHYLANILINE ONLY.

0 100' 200'

GRAPHIC SCALE

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GROUNDWATER MONITORING DATA SUMMARY FOR OCTOBER 2003 - NOVEMBER 2006 AREAS 1 & 2

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FIGURE
3

[SYR-85-LEAD] SYR-85-RCB RCA KFS L: ON=*, OFF=REF
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26003X01

MW-27								
Date	10/03	6/04	11/04	6/05	11/05	6/06	9/06	11/06
Acetone	170	23 J	<120 (28)	31 J	35 J (37 J)	5.3 J (5.8 J)	–	31 (24)
Benzene	5	5 J	<50 (4 J)	6.1	11 (12)	9.5 J (8.9 J)	–	14 (14)
Toluene	<5.0	4 J	<50 (2 J)	16	77 (78)	50 J (48 J)	–	71 (71)
Ethylbenzene	<5.0	2 J	<50 (<10)	5.8	28 (28)	25 J (25 J)	–	42 (45)
Xylene	3 J	8 J	<100 (<20)	15	86 (88)	66 J (63 J)	–	91 (110)
Methanol	<1,000	<1,000	<1,000	<1,000	<1,000 (<1,000)	<1,000 J (<1,000 J)	–	<500 (<500)
Trichloroethene	<5.0	<10	<50 (<10)	<1.0	<1.0 (<1.0)	<1.0 J (<1.0 J)	–	<1.0 (<1.0)
Aniline	3,700 D	3,700 D	1,100 D J	5,200	37,000 (38,000)	14,000 J (12,000 J)	1,700	33,000 (33,000)
N,N-dimethylaniline	<5.0	20 J	<5.0	<23	<270 J (<260 J)	<100 J (<100 J)	<10	<210 (<200)
Methylene Chloride	240 D	<10	310 (490 D)	<3.0	<3.0 (<3.0)	<3.0 J (<3.0 J)	–	<3.0 (<3.0)

MW-19							
Date	10/03	6/04	11/04	6/05	11/05	6/06	11/06
Acetone	<11	<25	<25	<5.0 J	<5.0 J	<5.0	R
Benzene	<5.0	<10	<10	<1.0	<1.0	<1.0	<1.0
Toluene	<5.0	<10	<10	<5.0	<5.0	<5.0	<5.0
Ethylbenzene	<5.0	<10	<10	<4.0	<4.0	<4.0	<4.0
Xylene	<10	<20	<20	<5.0	<5.0	<5.0	<5.0
Methanol	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<500
Trichloroethene	<5.0	<10	<10	<1.0	<1.0	<1.0	<1.0
Aniline	51 J	<5.0	<5.0	<1.1	<1.0	<1.0	<1.0
N,N-dimethylaniline	18 J	<5.0	<5.0	<1.1	<1.0 J	<1.0	<1.0 J
Methylene Chloride	<5.0	<10	<10	<3.0	<3.0	<3.0	<3.0

MW-24DR					
Date	10/03	11/04	6/05	11/05	11/06
Acetone	<12	–	<5.0 J	<5.0 J	R
Benzene	<5.0	–	<1.0	<1.0	<1.0
Toluene	<5.0	–	<5.0	<5.0	<5.0
Ethylbenzene	<5.0	–	<4.0	<4.0	<4.0
Xylene	<10	–	<5.0	<5.0	<5.0
Methanol	<1,000	<1,000	<1,000	<1,000	<500
Trichloroethene	<5.0	–	<1.0	<1.0	<1.0
Aniline	0.5 J	<5.0	<1.0	<1.1	<1.0
N,N-Dimethylaniline	<5.0	<5.0	<1.0	<1.1 J	<1.0 J
Methylene Chloride	<5.0	–	<3.0	<3.0	<3.0

PZ-4S			
Date	6/04	6/05	6/06
Aniline	<5.0	<1.0	<1.0
N,N-dimethylaniline	<5.0	<1.0	<1.0
Toluene	<10	<5.0	0.6 J

PZ-5D						
Date	10/03	6/04	11/04	6/05	11/05	11/06
Aniline	46	<5.0	<5.0	<1.0	<1.0	<1.0

PZ-5S					
Date	10/03	11/04	6/05	11/05	11/06
Acetone	<12	–	<5.0 J	<5.0 J	R

PZ-4D			
Date	6/04	6/05	6/06
N,N-dimethylaniline	<5.0	<1.0	<1.0
Toluene	<10	<5.0	0.5 J

MW-24SR						
Date	10/03	6/04	11/04	6/05	11/05	11/06
Acetone	<12	<25	–	<5.0 J	<5.0 J	R
Benzene	<5.0	<10	–	<1.0	<1.0	<1.0
Toluene	<5.0	<10	–	<5.0	<5.0	<5.0
Ethylbenzene	<5.0	<10	–	<4.0	<4.0	<4.0
Xylene	<10	<20	–	<5.0	<5.0	<5.0
Methanol	<1,000	<1,000	<1,000	<1,000	<1,000	<500
Trichloroethene	<5.0	<10	–	<1.0	<1.0	<1.0
Aniline	16	<5.0	<5.0	<1.0	<1.0	<1.0
N,N-Dimethylaniline	<6.0	<5.0	<5.0	<1.0	<1.0 J	<1.0 J
Methylene Chloride	<5.0	<10	–	<3.0	<3.0	<3.0

MW-17R							
Date	11/03	6/04	11/04	6/05	11/05	6/06	11/06
Acetone	<12	<25	–	<5.0 J	<5.0 J	<5.0	R
Benzene	7	5 J	–	<1.0	<1.0	0.8 J	<1.0
Toluene	<5.0	<10	–	<5.0	<5.0	<5.0	<5.0
Ethylbenzene	<5.0	<10	–	<4.0	<4.0	<4.0	<4.0
Xylene	<10	<20	–	<5.0	<5.0	<5.0	<5.0
Methanol	<1,000	<1,000	200 J	<1,000	<1,000	<1,000	<500
Trichloroethene	<5.0	<10	–	<1.0	<1.0	<1.0	<1.0
Aniline	<5.0	<5.0	<5.0	<1.0	<1.0	<1.1	<1.0
N,N-dimethylaniline	<5.0	<5.0	<5.0	<1.0	<1.0 J	<1.1	<1.0 J
Methylene Chloride	<5.0	<10	–	<3.0	<3.0	<3.0	<3.0

MW-18							
Date	10/03	6/04	11/04	6/05	11/05	6/06	11/06
Acetone	<12	<25	–	<5.0 J	<5.0 J	<5.0	R
Benzene	<5.0	<10	–	<1.0	<1.0	<1.0	<1.0
Toluene	<5.0	<10	–	<5.0	<5.0	<5.0	<5.0
Ethylbenzene	<5.0	<10	–	<4.0	<4.0	<4.0	<4.0
Xylene	<10	<20	–	<5.0	<5.0	<5.0	<5.0
Methanol	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<500
Trichloroethene	<5.0	<10	–	<1.0	<1.0	<1.0	<1.0
Aniline	0.7 J	R	<5.0	<1.0	<1.1	<1.0	<1.0
N,N-Dimethylaniline	<5.0	R	<5.0	<1.0	<1.1 J	<1.0	<1.0 J
Methylene Chloride	<5.0	<10	–	<3.0	<3.0	<3.0	<3.0

MW-30							
Date	10/03	6/04	11/04	6/05	11/05	6/06	11/06
Acetone	<12	<25	<120	<5.0 J	<5.0 J	<5.0	11
Benzene	<5.0	<10	<50	0.3 J	0.7 J	0.6 J	1.0
Toluene	<5.0	<10	<50	<5.0	0.6 J	0.4 J	<5.0
Ethylbenzene	<5.0	<10	<50	<4.0	<4.0	<4.0	<4.0
Xylene	<10	<20	<100	<5.0	0.5 J	<5.0	<5.0
Methanol	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<500
Trichloroethene	<5.0	<10	<50	<1.0	<1.0	<1.0	<1.0
Aniline	4 J	<5.0	<5.0	<1.0	240	29	200
N,N-dimethylaniline	<5.0	<5.0	<5.0	<1.0	<1.0 J	<1.0	<1.0
Methylene Chloride	<5.0	<10	<50	<3.0	<3.0	<3.0	<3.0

MW-8S		
Date	10/03	6/04
Acetone	21	<25
Benzene	25	40
Toluene	330 D	330 EJ
Ethylbenzene	93	110
Xylene	360	400
Methanol	1,200 J	<1,000
Trichloroethene	3,100 D	5,900 D
Aniline	67,000 D	56,000
N,N-dimethylaniline	24,000 D	51,000
Methylene Chloride	400,000 D	1,200,000 D

MW-8SR						
Date	11/04	6/05	11/05	6/06	9/06	11/06
Acetone	<1,200	81 J	15 J	48	–	28
Benzene	<500	13	13	15	–	16
Toluene	100 DJ	100	130	120	–	100
Ethylbenzene	<500	53	66	79		84
Xylene	164 DJ	180	260	260	–	270
Methanol	<1,000	<1,000	<1,000	<1,000	–	<500
Trichloroethene	<500	<1.0	<1.0	[illegible]	–	<1.0
Aniline	35,000 D	30,000	32,000	23,000	52,000 (51,000)	28,000
N,N-dimethylaniline	5,300 D	<200	<260 J	<200	<520 (<520)	<200
Methylene Chloride	10,000 D	<3.0	<3.0	<3.0	–	<3.0

MW-23S							
Date	10/03	6/04	11/04	6/05	11/05	6/06	11/06
Acetone	<12	<25	–	<5.0 J	<5.0 J	<5.0 J	R
Benzene	<5.0	<10	–	<1.0	<1.0	<1.0	<1.0
Toluene	<5.0	<10	–	<5.0	<5.0	<5.0	<5.0
Ethylbenzene	<5.0	<10	–	<4.0	<4.0	<4.0	<4.0
Xylene	<10	<20	–	<5.0	<5.0	<5.0	<5.0
Methanol	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<500
Trichloroethene	<5.0	<10	–	<1.0	<1.0	<1.0	<1.0
Aniline	60	<5.0	<5.0	<1.0	<1.0	<1.2	<1.0
N,N-dimethylaniline	<5.0	<5.0	<5.0	<1.0	<1.0 J	<1.2	<1.0 J
Methylene Chloride	<5.0	<10	–	<3.0	<3.0	<3.0	<3.0

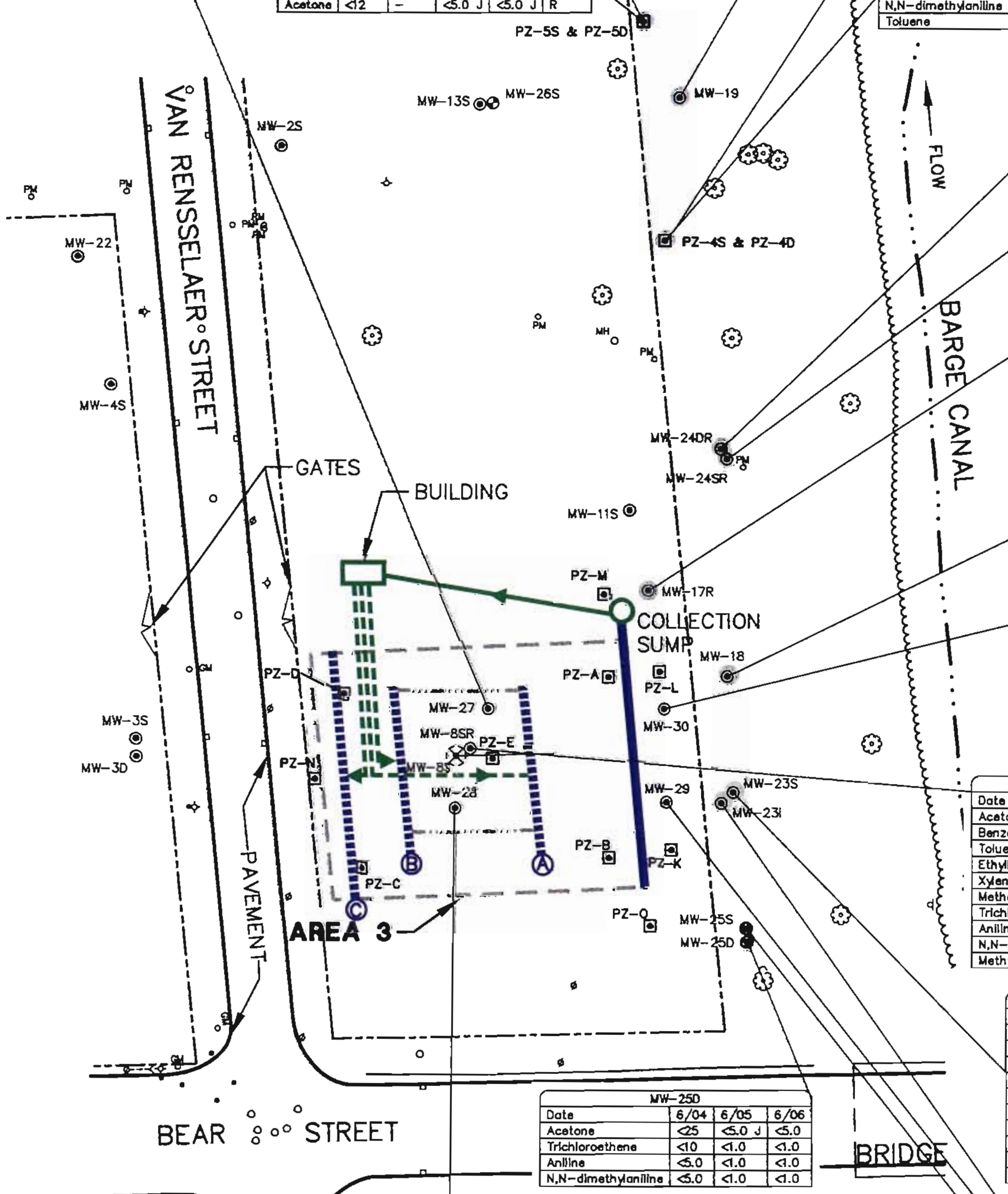
MW-23I							
Date	10/03	6/04	11/04	6/05	11/05	6/06	11/06
Acetone	<12	<25	–	<5.0 J	<5.0 J	<5.0 J	R
Benzene	<5.0	<10	–	<1.0	<1.0	<1.0	<1.0
Toluene	<5.0	<10	–	<5.0	<5.0	0.6 J	<5.0
Ethylbenzene	<5.0	<10	–	<4.0	<4.0	<4.0	<4.0
Xylene	<10	<20	–	<5.0	<5.0	<5.0	<5.0
Methanol	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<500
Trichloroethene	<5.0	<10	–	<1.0	<1.0	<1.0	<1.0
Aniline	<5.0	1 J	<5.0	<1.0	<1.0	<1.0	<1.0
N,N-Dimethylaniline	<5.0	<5.0	<5.0	<1.0	<1.0 J	<1.0	<1.0 J
Methylene Chloride	<5.0	<10	–	<3.0	<3.0	<3.0	<3.0

MW-25D			
Date	6/04	6/05	6/06
Acetone	<25	<5.0 J	<5.0
Trichloroethene	<10	<1.0	<1.0
Aniline	<5.0	<1.0	<1.0
N,N-dimethylaniline	<5.0	<1.0	<1.0

MW-28								
Date	10/03	6/04	11/04	6/05	11/05	6/06	9/06	11/06
Acetone	24	20 J	<120 (<25)	5.2 J	6.8 J (7.8 J)	<5.0J (<5.0 J)	–	12
Benzene	11	4 J	<50 (4 J)	4.5	6.1 (5.8)	6.0J (6.3 J)	–	8.2
Toluene	8	2 J	<50 (<10)	1.2 J	<5.0 (<5.0)	1.2 J (1.3 J)	–	1.4 J
Ethylbenzene	12	5 J	<50 (5 J)	4.6	4.7 (4.7)	5.3J (5.4 J)	–	5.6
Xylene	13 J	4 J	<100 (3 J)	3.9 J	<5.0 (<5.0)	4.2 J (4.3 J)	–	4.4 J
Methanol	<1,000	<1,000	190 J	<1,000	<1,000 (<1,000)	<500J(<1,000 J)	–	<500
Trichloroethene	<5	<10	<50 (<10)	<1.0	<1.0 (<1.0)	<1.0J (<1.0 J)	–	<1.0
Aniline	1,900 D	910 D	640 D J	630	380 (350)	430J (530 J)	280	1,000
N,N-dimethylaniline	<5.0	<5.0	<5.0	<5.0	<2.2 J (<2.1 J)	<2.1J (<5.0 J)	<2.2	<5.2
Methylene Chloride	<5.0	<10	<50 (<10)	<3.0	<3.0 (<3.0)	<3.0J (<3.0 J)	–	<3.0

MW-25S							
Date	11/03	6/04	11/04	6/05	11/05	6/06	11/06
Acetone	<12	<25	–	<5.0 J	<5.0 J	<5.0 J	R
Benzene	<5.0	<10	–	<1.0	<1.0	<1.0	<1.0
Toluene	<5.0	<10	–	<4.0	<5.0	<5.0	<5.0
Ethylbenzene	<5.0	<10	–	<4.0	<4.0	<4.0	<4.0
Xylene	<10	<20	–	<5.0	<5.0	<5.0	<5.0
Methanol	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<500
Trichloroethene	<5.0	<10	–	<1.0	<1.0	<1.0	<1.0
Aniline	<5.0	<5.0	<5	<1.1	<1.0	<1.0	<1.0
N,N-dimethylaniline	<5.0	<5.0	<5.0	<1.1	<1.0 J	<1.0	<1.0 J
Methylene Chloride	<5.0	<10	–	<3.0	<3.0	<3.0	<3.0

MW-29							
Date	10/03	6/04	11/04	6/05	11/05	6/06	11/06
Acetone	<12	<25	<120	<5.0 J	<5.0 J	<5.0	5.4
Benzene	<5.0	<10	<50	<1.0	<1.0	<1.0	<1.0
Toluene	<5.0	<10	<50	<5.0	<5.0	<5.0	<5.0
Ethylbenzene	<5	<10	<50	<4.0	<4.0	<4.0	<4.0
Xylene	<10	<20	<100	<5.0	<5.0	<5.0	<5.0
Methanol	<1,000	<1,000	420 J	<1,000	<1,000	<1,000	<500
Trichloroethene	<5.0	<10	<50	<1.0	<1.0	<1.0	<1.0
Aniline	2 J	3 J	<5.0	<1.0	<1.0	<1.0	0.4 J
N,N-dimethylaniline	<5.0	<5.0	<5.0	<1.0	<1.0 J	<1.0	<1.0
Methylene Chloride	<5.0	<10	<50	<3.0	<3.0	<3.0	<3.0



LEGEND:

- UTILITY POLE
- CATCH BASIN
- PMO PETROLEUM PIPE LINE MARKER
- GMO GAS LINE MARKER
- HYDRANT
- WATER VALVE
- MANHOLE
- PROPERTY LINE
- MW-19 GROUNDWATER MONITORING WELL
- PZ-A PIEZOMETER
- BIANNUAL DOWNGRADIENT PERIMETER GROUNDWATER MONITORING LOCATION
- MW-26S PUMPING WELL
- MW-8S REMOVED GROUNDWATER MONITORING WELL
- BOUNDARY OF IMPACTED AREA
- GROUNDWATER WITHDRAWAL TRENCH
- GROUNDWATER INFILTRATION TRENCH
- PIPING TO BUILDING
- PIPING FROM BUILDING
- AREA OF RELATIVELY HIGHER CONCENTRATIONS OF COCs

CONCENTRATION (ppb)

SAMPLE IDENTIFICATION

MW-8S		
Date	10/03	6/04
Acetone	21	<25
Benzene	25	40
Toluene	330 D	330 EJ
Ethylbenzene	93	110
Xylene	360	400
Methanol	[illegible]	<1,000
Trichloroethene	3,100 D	5,900 D
Aniline	67,000 D	56,000
N,N-dimethylaniline	24,000 D	51,000
Methylene Chloride	400,000 D	1,200,000 D

DETECTIONS EXCEEDING NYSDEC GROUNDWATER QUALITY STANDARDS ARE INDICATED BY SHADING.

NOTES:

1. REPLACED MONITORING WELLS ARE IDENTIFIED WITH AN "R" (e.g., MW-24DR).
2. TRENCH LOCATIONS ARE APPROXIMATE.
3. MONITORING LOCATIONS ARE APPROXIMATE.
4. FIGURE ONLY SHOWS COC CONCENTRATIONS AT MONITORING LOCATIONS WITHIN THE IMPACTED AREAS AND THE CHEMICAL PROCESS CONTROL MONITORING LOCATIONS.
5. ONLY COC CONCENTRATIONS DETECTED OR HAVE BEEN DETECTED ARE PRESENTED ON THIS FIGURE (SEE ATTACHMENT A FIGURE 2).
6. < = COMPOUND WAS ANALYZED FOR BUT NOT DETECTED. THE ASSOCIATED VALUE IS THE COMPOUND QUANTITATION LIMIT.
7. J = THE COMPOUND WAS POSITIVELY IDENTIFIED; HOWEVER THE ASSOCIATED NUMERICAL VALUE IS AN ESTIMATED CONCENTRATION ONLY.
8. D = CONCENTRATION IS BASED ON DILUTED SAMPLE ANALYSIS.
9. R = THE SAMPLE RESULT WAS REJECTED.
10. E = THE COMPOUND WAS QUANTITATED ABOVE THE CALIBRATION RANGE.
11. THE 6/04 SAMPLING EVENT ANILINE AND N,N-DIMETHYLANILINE DATA FOR MW-18 WERE REJECTED DUE TO THE DEVIATION FROM A SURROGATE RECOVERY BELOW 10 PERCENT. THIS MONITORING WELL WAS NOT RESAMPLED.
12. DURING THE AUGUST 2004 SUPPLEMENTAL REMEDIAL ACTIVITIES, MONITORING WELL MW-8S WAS REMOVED AND MW-8SR WAS CONSTRUCTED DOWNGRADIENT OF THE SOIL REMOVAL AREA IN THE VICINITY OF MW-8S.
13. THE 11/04 SAMPLING EVENT VOLATILE ORGANIC COMPOUND (VOC) DATA FOR MW-17R, MW-18, MW-23I, MW-23S, MW-24DR, MW-24SR, MW-25S, PZ-5D, AND PZ-5S WERE INADVERTENTLY LOST DUE TO LABORATORY EQUIPMENT FAILURE. AS DETAILED IN THE BIANNUAL REPORT, THESE MONITORING WELLS WERE NOT RESAMPLED.
14. THE 11/04 SAMPLING EVENT VOC INITIAL DATA FOR MW-27, MW-28, MW-29, AND MW-30 WERE INADVERTENTLY LOST DUE TO LABORATORY EQUIPMENT FAILURE. HOWEVER, VALID DATA WAS OBTAINED FROM SUBSEQUENT DILUTIONS OF THESE SAMPLES, RESULTING IN HIGHER DETECTION LIMITS. THE VOC RESULTS OBTAINED FROM THE DUPLICATE SAMPLES COLLECTED AT MW-27 AND MW-28 HAVE LOWER DETECTION LIMITS AND ARE PRESENTED ON THIS FIGURE IN PARENTHESES.
15. THE 9/06 SAMPLING EVENT WAS AN INTERIM SAMPLING EVENT, ANALYZING FOR ANILINE & N,N-DIMETHYLANILINE ONLY.

0 100' 200'

GRAPHIC SCALE

McKESSON ENVIROSYSTEMS
FORMER BEAR STREET FACILITY
SYRACUSE, NEW YORK

BIANNUAL PROCESS CONTROL MONITORING REPORT

GROUNDWATER MONITORING DATA SUMMARY FOR OCTOBER 2003 - NOVEMBER 2006 AREA 3

ARCADIS BBL
Infrastructure, environment, facilities

FIGURE
4

[SYR-85-LEAD] SYR-85-RCB RCA KFS L: ON=*, OFF=REF
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ARCADIS BBL

ATTACHMENTS

ARCADIS BBL

Attachment A

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
Benzene	<10	0.7 J	<10	<10 J	<10	<10	<5	<10	<5
Aniline	6 J	3 J	<10	<10	<10	<10	3 J	2 J	1,000
N,N-dimethylaniline	5 J	4 J	2 J	3 J	<10	2 J	4 J	R	<100
Acetone	<10	<10	<10 J	<10 J	<10	<10	<13	<25	<12

TW-02R											
Date	12/96	9/98	2/99	7/99	3/00	9/00	3/01	9/01	4/02	10/02	5/03
Acetone	53	<500 J	<1,000	630	<1,000 J	190 J	81	57	240	110 J	240
Benzene	10	<500 J	<1,000	37	<1,000	28 J	19	25	19	15	30
Toluene	77	<500 J	190 J	240 J	160 J	95 J	68	70	65	19	130
Ethylbenzene	18	<500 J	<1,000	31	<1,000	35 J	28	31	23	23	49
Xylene	65	140 J	150 J	150	240 J	160 J	130	140	96	65	228
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	585 D	300 J	<1,000	55	<1,000	6 J	<10	<20	<5	<10	<5
Aniline	15,900 JD	38,000 D	83,000 D	100,000 D	64,000 D	79,000	67,000 D	63,000 D	1,090,000 D	80,000 D	160,000 D
N,N-dimethylaniline	3,920 D	61,000 D	7,900	3,500 J	3,900	<10,000	650 J	32	<5,300	10 J	230
Methylene Chloride	42,449 D	86,000 D	14,000 B	9,700 D	13,000	390 J	400 D	48 B	14	<10	97

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	2 J	<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	83	380 D	200 D	320 D	700 D	76	640 D	380 DJ	140
N,N-dimethylaniline	<10	2 J	3 J	4 J	5 J	3 J	15	2 J	3 J

TW-01											
Date	12/96	9/98	2/99	7/99	3/00	9/00	3/01	9/01	4/02	10/02	5/03
Benzene	82	15	24	16	16	11 J	5 J	10	3 J	7 J	7
Toluene	4 J	<10	2 J	1 J	<10	<10 J	<10	<10	<5	<10	<5
Ethylbenzene	6 J	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	<10	<20	<10
Aniline	2,090 D	4,400 DEJ	9,000 D	4,400 D	280 D	15	<10	<10	8	<5	<5
N,N-dimethylaniline	13	4 J	5 J	4 J	4 J	2 J	3 J	2 J	13	R	1 J
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	12	16	16	12 J	11	14	9	11	9
Aniline	34	230 D	3 J	10	<10	91 D	804 D	560 D	0.9 J
N,N-dimethylaniline	4 J	3 J	4 J	6 J	5 J	3 J	21	1 J	3 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	1,600	<1,000	<100	<1,000	<10	<10	<10 J	<10	<10	<23	16 J	<12
Benzene	NA	48	<10	11 JD	4 J	2 J	11 J	1 J	10	10	38	11
Toluene	64	25	9	28 JD	2 J	2 J	2 J	3 J	3 J	2 J	40	<5
Ethylbenzene	130	60	19	69 D	9 J	11	8 J	17	7 J	6	2 J	7
Xylene	270	60	30	226 JD	18	21	18 J	61	35	17 J	15 J	18
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	680	670	95	50	<10	2 J	1 J	2 J	<10	9	<5	0.9 J
N,N-dimethylaniline	1,200	150	18	28	5 J	9 J	6 J	11	10	43	2 J	3 J
Methylene Chloride	1,500	<10	<1	110 D	<10	<10	<10 J	<10	<10	<5	<10	<5

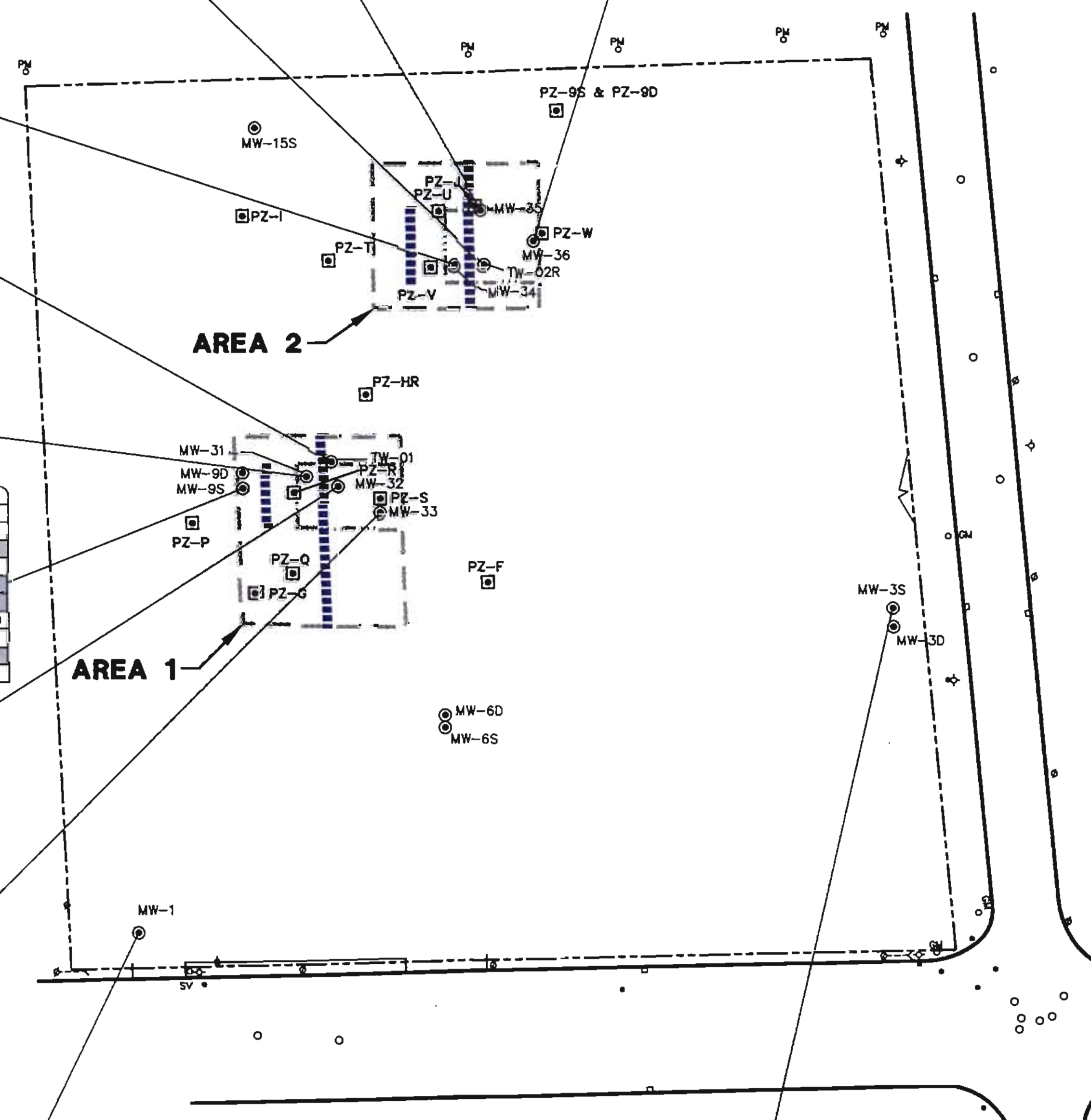
MW-32									
Date	9/98	7/99	3/00	9/00	3/01	9/01	4/02	10/02	5/03
Acetone	<10	3 J	<10	<10 J	<10	<10	<15	<25	<12
Benzene	16	14	5 J	12 J	5 J	10	4 J	4 J	<5
Toluene	2 J	2 J	<10	<10 J	<10	<10	<5	<10	<5
Ethylbenzene	5 J	4 J	<10	<10 J	<10	<10	<5	<10	<5
Xylene	3 J	<10	<10	<10 J	<10	<10	<10	<20	<10
Trichloroethene	<10	56	<10	<10 J	<10	<10	<5	<10	<5
Aniline	6,300 D	<10	800 D	4,500 D	1,900 D	1,100 D	4,620 D	50	0.6 J
N,N-dimethylaniline	4 J	3 J	<10	<10	2 J	2 J	11	R	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	88
Benzene	<10	<10	2 J	<10	4 J	<20	5 J	3 J	4 J	13
Toluene	<10	<10	0.7 J	<10	1 J	<20	<10	<5	<10	<5
Aniline	9 J	120	150	51	540 D	1,300 D	1,900 D	2,780 D	290 D	2,000
N,N-dimethylaniline	6 J	6 J	8 J	7 J	23	18	12	21	3 J	35 J
Methylene Chloride	<10	<10	5 J	11	330 DJ	370 B	<18	19	4 J	2,800 D

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	<3	<3	<3	<5	<10	<10	<10	5 J	<10	<10	<10	<20	<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 J	<1,000	<1,000	<1,000 J	990 J	<1,000	<1,000
Aniline	<10	<11	<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	54	<20	12 J	9 J
Benzene	<10	<10	0.8 J	<10	<10 J	<10	<10	<5	<10	<5
Aniline	290 D	660 D	250	60	8 J	<10	350 D	9	2 J	67
N,N-dimethylaniline	6 J	4 J	<10	7 J	6 J	<10	5 J	41	2 J	4 J
Methylene Chloride	<10	<10	<10	<10	2 J	<10	<10	<5	<10	<5

MW-3S														
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	2,900	<1,000	<10	<10	<10 J	<10 J	<10	<10	<12	<25	<12
Benzene	<1	<100	<100	11	<5	<10	1 J	<10	1 J	<10	3 J	<5	<10	<5
Toluene	<1	120	<100	10	<5	<10	0.7 J	<10	2 J	<10	8 J	<5	<10	<5
Ethylbenzene	<1	<100	<100	4	<5	<10	<10	<10	<10 J	<10	1 J	<5	<10	<5
Xylene	<1	<100	<100	31	<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	<1,000 J	<1,000	<1,000	<1,000 J	370 J	<1,000	<1,000
Trichloroethene	50	1,100	100	<10	<5	<10	<10	<10	<10 J	<10	<10	<5	<10	<5
Aniline	<10	<11	<52	790	15	<10	9 J	<10	2 J	<10	690 D (69*)	1.7 J	<5	<5
N,N-dimethylaniline	<10	5,570	440	170	2 J	<10	<10	<10	1 J	<10	4 J	<5	R	<5
Methylene Chloride	110	4,700	2,700	<10	<10	<10	<10	<10	<10 J	<10	<10	<5	<10	<5



LEGEND:

- UTILITY POLE
- CATCH BASIN
- PM PETROLEUM PIPE LINE MARKER
- GM GAS LINE MARKER
- SV 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

SAMPLE IDENTIFICATION

MW-35									
Date	9/98	7/99	3/00	9/00	3/01	9/01	4/02	10/02	5/03
Benzene	<10	0.7 J	<10	<10 J	<10	<10	<5	<10	<5
Aniline	6 J	3 J	<10	<10	<10	<10	3 J	2 J	1,000
N,N-dimethylaniline	5 J	4 J	2 J	3 J	<10	2 J	4 J	R	<100
Acetone	<10	<10	<10 J	<10 J	<10	<10	<13	<25	<12

CONCENTRATION (ppb)

NOTES:

1. REPLACED MONITORING WELLS ARE IDENTIFIED WITH AN "R" (e.g., MW-24DR).
2. TRENCH LOCATIONS ARE APPROXIMATE.
3. MONITORING LOCATIONS ARE APPROXIMATE.
4. FIGURE ONLY SHOWS COC CONCENTRATIONS AT MONITORING LOCATIONS WITHIN THE IMPACTED AREAS AND THE CHEMICAL PROCESS CONTROL MONITORING LOCATIONS.
5. ONLY DETECTED COCs ARE PRESENTED ON THIS FIGURE.
6. < = COMPOUND WAS ANALYZED FOR BUT NOT DETECTED. THE ASSOCIATED VALUE IS THE COMPOUND QUANTITATION LIMIT.
7. J = THE COMPOUND WAS POSITIVELY IDENTIFIED; HOWEVER THE ASSOCIATED NUMERICAL VALUE IS AN ESTIMATED CONCENTRATION ONLY.
8. D = CONCENTRATION IS BASED ON DILUTED SAMPLE ANALYSIS.
9. E = IDENTIFIES COMPOUNDS WHOSE CONCENTRATIONS EXCEED THE CALIBRATION RANGE OF THE INSTRUMENTS.
10. R = THE SAMPLE RESULT WAS REJECTED.
11. B = THE COMPOUND HAS BEEN FOUND IN THE SAMPLE AS WELL AS IN ITS ASSOCIATED BLANK; ITS PRESENCE IN THE SAMPLE MAY BE SUSPECT.
12. N = THIS ANALYSIS INDICATES THE PRESENCE OF A COMPOUND FOR WHICH THERE IS PRESUMPTIVE EVIDENCE TO MAKE AN TENTATIVE IDENTIFICATION.
13. DETECTIONS EXCEEDING NYSDEC GROUNDWATER QUALITY STANDARDS ARE INDICATED BY SHADING.
14. *= MW-3S WAS RESAMPLED ON 11/8/01 DUE TO ANILINE DETECTION DURING 9/2001 SAMPLING EVENT AT A CONCENTRATION OF 690 PPB. ANILINE WAS DETECTED ON 11/8/01 AT A CONCENTRATION OF 69 PPB.
15. THE 10/02 SAMPLING EVENT N,N-DIMETHYLANILINE DATA FOR MW-1, MW-3S, MW-32, MW-35, AND TW-01 WERE REJECTED DUE TO MATRIX SPIKE AND MATRIX SPIKE DUPLICATE RECOVERIES BELOW CONTROL LIMITS. THESE MONITORING WELLS WERE NOT RESAMPLED.

0 100' 200'

GRAPHIC SCALE

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

GROUNDWATER MONITORING DATA SUMMARY FOR 1988 - MAY 2003 AREAS 1 & 2

ARCADIS BBL
Infrastructure, environment, facilities

FIGURE
1

MW-27									
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	<10	<18	9 J	<12
Benzene	3 J	4 J	6 J	4 J	5 J	5 J	7	3 J	8
Toluene	4 J	2 J	<10	<10	<10	<10	11	<10	11
Ethylbenzene	<10	3 J	8 J	3 J	5 J	2 J	12	<10	23
Xylene	3 J	8 J	2 J	1 J	2 J	<10	28	<20	51
Aniline	340 DJ	740 D	110 D	16 J	260 D	26	176,000 DJ	2,700 D	15,000 DJ
N,N-dimethylaniline	<10	<10	1 J	2 J	2 J	<10	19 J	100 J	11
Methylene Chloride	<10	<10	<10	1 J	<10	<10	<5	60 JN	43
Trichloroethene	<10	<10	<10	<10 J	<10	<10	<5	4 J	<5

PZ-5S										
Date	11/89	12/94	2/96	2/97	9/98	6/99	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^

PZ-5D									
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^

MW-19																	
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	5 J	<10	<10	<10	<10	<10	<10	<5	<5^	<5
Acetone	<100	<10	<1,000	<1,000	<10	<10	<10	<10	<10	<10 J	<10	<10 J	<10	<10	<10	<25 J	<12
Aniline	<10	<5	<5	<5	<5	<5	<5	<5	<10	<10	<5	<10 J	<10	<10	<5	<5	<5

PZ-4S														
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
Aniline	<10	<10	<10	<10	<5	<5	<6	<10	<5	<5	<10	8 (<5)**	<5^	<5
N,N-dimethylaniline	<10	<10	<10	<10	<10	<10	<10	<10	<10 J	<10	3 J	<5 (<5)**	<5^	<5

PZ-4D														
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	<12	<10	<10	<10	<10	<5	<5

MW-24DR										
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^

MW-24SR											
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	ND**	<5^

MW-17R														
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	<100	<1,000	NA	11	<10	<10	<10	<10 J	<10	<10	<10	<25 J	<12
Benzene	<1	<1	<1	<5	<5	<10	<10	1 J	8 J	15 J	8 J	5 J	6	14	8
Trichloroethene	<1	<1	<1	<5	2J	<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 J	<1,000	<1,000	620 J	<1,000	<1,000
Aniline	<10	<10	<10	<5	NA	<5	<5	<10	<5	24 J	<10	<10	150 (<5)**	<5^	<5
N,N-dimethylaniline	<10	<10	<10	<10	NA	<10	<10	<10	<10	4 J	<10	<10	110 (<5)**	<5^	<5
Methylene Chloride	<1	<1	<1	<11	<5	<10	<10	<10 J	<10	1 J	<10	<10	<5	<10	<5

MW-30										
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	<62
Benzene	<10	<10	0.7 J	<10	<10 J	<10	2 J	<5	<10	<25
Trichloroethene	<10	<10	0.5 J	<10	<10 J	<10	<10	<5	<10	<25
Aniline	<10	<10	<10	18	9 J	8 J	8 J	250	R	18
N,N-dimethylaniline	<10	2 J	1 J	2 J	2 J	2 J	1 J	210	R	0.6 J
Methylene Chloride	<10	<10	<10	4 J	2 J	<10	<10	<5	<10	8 J

MW-18																			
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	<200	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000 J	<1,000 J	<1,000	<1,000	720 J	<1,000	280 J
Aniline	<10	<10	<10	<10	<5	<5	<5	<5	<5	<5	<5	<10	<10	<5	<10 J	<10	<10	280 D (<5)**	<5^	<5
N,N-Dimethylaniline	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	200 D (<5)**	<5^	<5
Acetone	<100	<100	<100	<100	<10	<1,000	<1,000	<10	<10	<10	<10	<10	<10 J	<10	<10 J	<10	<10	<10	6 J	<12

MW-29										
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	450 D	24 J	30	7 J	3 J	8	19
N,N-dimethylaniline	13	4 J	4 J	6 J	4 J	4 J	2 J	9	R	1 J
Methylene Chloride	<10	<10	<10	<10	<10 J	<10	<10	<6	4 JN	<3

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	<62
Aniline	<5	<5	<5	7	11	92	56	<10	<10 J	<10	<5	<10 J	<10	<10	<5	<5^	<5
N,N-dimethylaniline	<10	<10	<10	<10	<10	<10	7 J	10	2 J	<10	2 J	2 J	<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 J

MW-23I																
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	<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

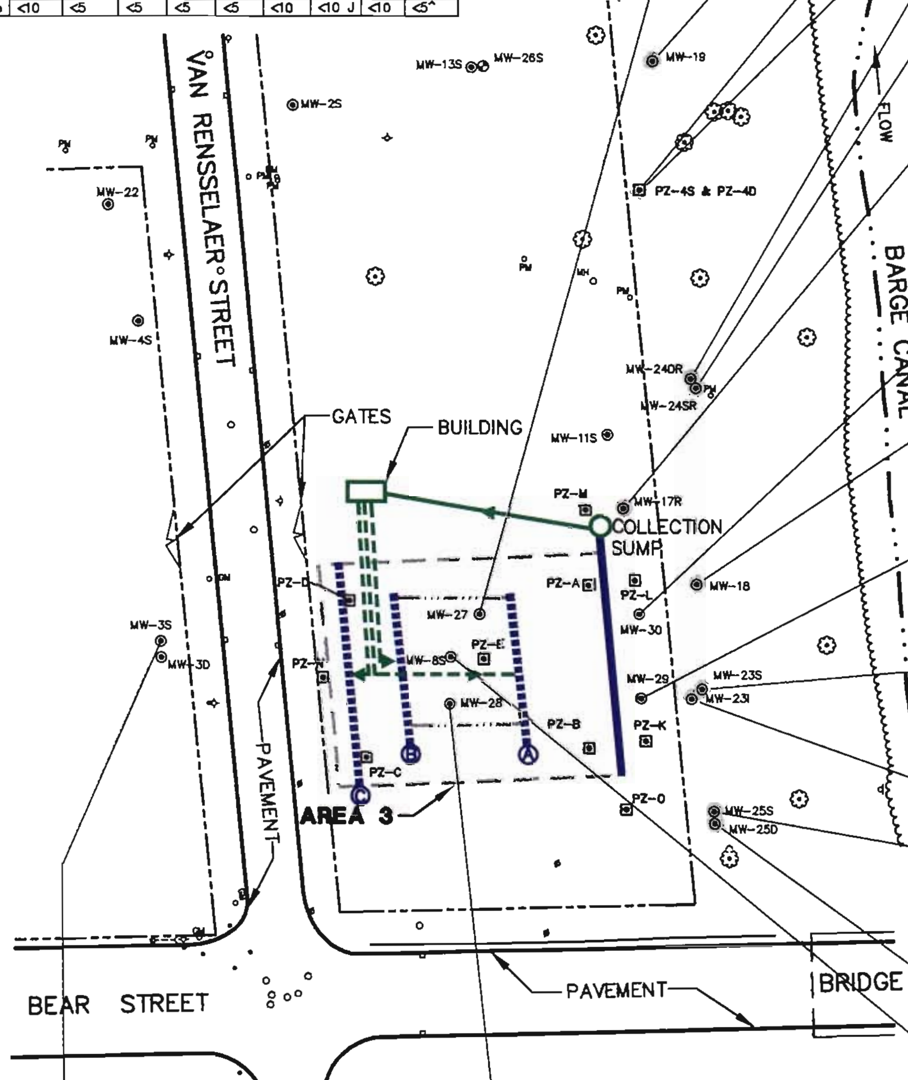
MW-25S														
Date	8/95	10/95	8/96	8/97	2/99	6/99	7/99	3/00	9/00	3/01	9/01	4/02	10/02	5/03
Aniline	<5	<5	<5	<5	130	110 J	5 J	<5	<10 J	<10	<10	<5	<5^	<5
N,N-dimethylaniline	0.7 J	<10	<10	<10	<10	21 J	<10	<10	<10	<10	<10	<5	<5^	<5

MW-25D										
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	<5	<5
N,N-dimethylaniline	1 J	<10	<10	<11	<10	<10	<10	<10	<5	<5
Aniline	<5	<5	<5	<5	<5	<10	<5	5 J	<5	<5

MW-8S														
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	470,000	<1,000,000	<1,000	<10,000 J	<20,000	10 J	<100,000	<50,000 J	<50,000	<400	2,100	120 J	<12
Benzene	<10,000	<10,000	<10,000	<250,000 D	<10,000	<20,000	22 J	<100,000	<50,000 J	<50,000	<400	50 J	23	20 J
Toluene	<10,000	<10,000	<10,000	<250,000 D	<10,000	<20,000	240 J	<100,000	<50,000 J	<50,000	430	410	310	600 D
Ethylbenzene	<10,000	<10,000	<10,000	<250,000 D	<10,000	<20,000	58 J	<100,000	<50,000 J	<50,000	170 J	100 J	73	81
Xylene	<10,000	<10,000	<30,000	<250,000 D	<10,000	<20,000	220 J	<100,000	<50,000 J	<50,000	680	400	287	300
Methanol	430,000	300,000	150,000	22,000	7,900	16,000 JN	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	60,000 JD	3,300 J	11,000 J	11,000 J	<100,000	9,200 J	11,000 J	18,000 JD	9,800 J	3,100	6,700 D
Aniline	2,900	8,500	8,000	<25,000 D	1,200 J	30,000 D	74,000	62,000	42,000 J	90,000 D	21,000	793,000 D	80,000	79,000 D
N,N-dimethylaniline	24,000	52,000	33,000	380,000 D	28,000 D	120,000 D	77,000	270,000 D	59,000	120,000 D	29,000	773,000 D	21,000 J	29 J
Methylene Chloride	3,200,000	2,800,000	1,600,000	7,700,000 D	140,000	650,000 DB	450,000 D	1,300,000	540,000 BJ	990,000	440,000 BD	660,000 D	320,000	910,000 D

MW-28									
Date	9/98	7/99	3/00	9/00	3/01	9/01	4/02	10/02	5/03
Benzene	<5,000	<500	<10,000	<1,000 J	<400	<400	8	8 J	4 J
Toluene	<5,000	<500	<10,000	<1,000 J	<400	<400	6	6 J	2 J
Ethylbenzene	<5,000	<500	<10,000	<1,000 J	<400	<400	9	11	2 J
Xylene	<5,000	<500	<10,000	<1,000 J	<400	<400	10 J	12 J	8 J
Methanol	2,200	<1,000	<1,000 J	<1,000 J	<1,000	<1,000 J	<1,000	<1,000	<1,000
Aniline	546 D	1,100 D	1,300 D	540 DJ	3,200 D	1,000 D	33,400 D	2,700 D	1,000 DJ
N,N-dimethylaniline	54	40	30	<10	7 J	<10	57	R	3 J
Methylene Chloride	64,000 J	39,000 D	130,000 J	8,100 BJ	5,900 B	4,700 B	4,600 D	<10	52
Acetone	<5,000 J	<500 J	<10,000	<1,000 J	<400	<400	<49	14 J	13

MW-3S														
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	2,900	<1,000	<10	<10	<10 J	<10 J	<10	<10	<12	<25	<12
Benzene	<1	<100	<100	10	<5	<10	1 J	<10	1 J	<10	3 J	<5	<10	<5
Toluene	<1	120	<100	10	<5	<10	0.7 J	<10	2 J	<10	8 J	<5	<10	<5
Ethylbenzene	<1	<100	<100	4	<5	<10	<10	<10	<10 J	<10	1 J	<5	<10	<5
Xylene	<1	<100	<100	31	<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	<1,000 J	<1,000	<1,000	<1,000 J	370 J	<1,000	<1,000
Trichloroethene	50	1,100	100	<10	<5	<10	<10	<10	<10 J	<10	<10	<5	<10	<5
Aniline	<10	<11	<52	790	15	<10	9 J	<10	2 J	<10	690 D (69*)	1.7 J	<5	<5
N,N-dimethylaniline	<10	5,570	440	170	2 J	<10	<10	<10	1 J	<10	4 J	<5	R	<5
Methylene Chloride	110	4,700	2,700	<10	<10	<10	<10	<10	<10 J	<10	<10	<5	<10	<5



LEGEND:

- UTILITY POLE
- CATCH BASIN
- PM PETROLEUM PIPE LINE MARKER
- GM GAS LINE MARKER
- HYDRANT
- WATER VALVE
- MANHOLE
- PROPERTY LINE
- MW-19 GROUNDWATER MONITORING WELL
- PZ-A PIEZOMETER
- OR BIANNUAL DOWNGRADIENT PERIMETER GROUNDWATER MONITORING LOCATION
- MW-26S PUMPING WELL
- BOUNDARY OF IMPACTED AREA
- GROUNDWATER WITHDRAWAL TRENCH
- GROUNDWATER INFILTRATION TRENCH
- PIPING TO BUILDING
- PIPING FROM BUILDING
- AREA OF RELATIVELY HIGHER CONCENTRATIONS OF COCs

SAMPLE IDENTIFICATION

MW-25		
Date	8/95	10/95
Acetone	<1,000	NA
Trichloroethene	<5	3 J
N,N-dimethylaniline	1 J	<10
Aniline	<5	<5

CONCENTRATION (ppb)

NOTES:

1. REPLACED MONITORING WELLS ARE IDENTIFIED WITH AN "R" (e.g., MW-24DR).
2. TRENCH LOCATIONS ARE APPROXIMATE.
3. MONITORING LOCATIONS ARE APPROXIMATE.
4. FIGURE ONLY SHOWS COC CONCENTRATIONS AT MONITORING LOCATIONS WITHIN THE IMPACTED AREAS AND THE CHEMICAL PROCESS CONTROL MONITORING LOCATIONS.
5. ONLY DETECTED COCs ARE PRESENTED ON THIS FIGURE.
6. < = COMPOUND WAS ANALYZED FOR BUT NOT DETECTED. THE ASSOCIATED VALUE IS THE COMPOUND QUANTITATION LIMIT.
7. J = THE COMPOUND WAS POSITIVELY IDENTIFIED; HOWEVER THE ASSOCIATED NUMERICAL VALUE IS AN ESTIMATED CONCENTRATION ONLY.
8. D = CONCENTRATION IS BASED ON DILUTED SAMPLE ANALYSIS.
9. E = IDENTIFIES COMPOUNDS WHOSE CONCENTRATIONS EXCEED THE CALIBRATION RANGE OF THE INSTRUMENTS.
10. B = THE COMPOUND HAS BEEN FOUND IN THE SAMPLE AS WELL AS IN ITS ASSOCIATED BLANK; ITS PRESENCE IN THE SAMPLE MAY BE SUSPECT.
11. N = THIS ANALYSIS INDICATES THE PRESENCE OF A COMPOUND FOR WHICH THERE IS PRESUMPTIVE EVIDENCE TO MAKE AN TENTATIVE IDENTIFICATION.
12. R = THE SAMPLE RESULT WAS REJECTED.
13. DETECTIONS EXCEEDING NYSDEC GROUNDWATER QUALITY STANDARDS ARE INDICATED BY SHADING.
14. THE ANILINE DATA FOR THE 9/98 SAMPLING EVENT FOR MW-18, MW-19, MW-23S, MW-23I, MW-24SR, MW-24DR, MW-28, PZ-5S AND PZ-5D WERE OBTAINED IN 12/98, BECAUSE THE 9/98 RESULTS WERE REJECTED DUE TO LABORATORY ERROR.
15. * = 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.
16. ** = MONITORING WELLS MW-17R, MW-18, AND PZ-4S WERE RESAMPLED FOR ANILINE AND N,N-DIMETHYLANILINE ON JUNE 18, 2002 DUE TO N,N-DIMETHYLANILINE AND/ OR ANILINE DETECTION AT THESE PERIMETER MONITORING LOCATIONS DURING THE APRIL 2002 SAMPLING EVENT. THE RESULTS OF THIS RESAMPLING EVENT ARE SHOWN IN PARENTHESIS. MONITORING WELLS MW-24SR AND MW-24DR WERE ALSO SAMPLED ON JUNE 18, 2002 FOR ANALYSIS OF ANILINE AND N,N-DIMETHYLANILINE. THESE COMPOUNDS WERE NOT DETECTED.
17. ^ = THE ANILINE AND N,N-DIMETHYLANILINE DATA FOR THE 10/02 SAMPLING EVENT FOR MW-17R, MW-18, MW-19, MW-23S, MW-23I, MW-24SR, MW-24DR, MW-25S, PZ-4S, PZ-5S, AND PZ-5D WERE OBTAINED IN 1/03, BECAUSE THE 10/02 RESULTS WERE REJECTED DUE TO MATRIX SPIKE AND MATRIX SPIKE DUPLICATE RECOVERIES BELOW CONTROL LIMITS.
18. THE 10/02 SAMPLING EVENT N,N-DIMETHYLANILINE DATA FOR MW-3S, MW-28 AND MW-29 AND THE 10/02 SAMPLING EVENT ANILINE AND N,N-DIMETHYLANILINE DATA FOR MW-30 WERE REJECTED DUE TO MATRIX SPIKE AND MATRIX SPIKE DUPLICATE RECOVERIES BELOW CONTROL LIMITS. THESE MONITORING WELLS WERE NOT RESAMPLED.

0 120' 240'

GRAPHIC SCALE

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

GROUNDWATER MONITORING DATA SUMMARY FOR 1988 - MAY 2003 AREA 3

ARCADIS BBL
infrastructure, environment, facilities

FIGURE 2

SYR-85-RCB LJP WLJ L: ON=*, OFF=REF*
G:\CAD\ACTIVE\-DWG\ACT\26003190\BIANNUAL\REVISED\26003C02.DWG SAVED:1/4/2007 11:56 AM LAYOUT:Layout1 PAGESETUP:---- PENTABLE:PLTFULL.CTB PRINTED:6/6/2007 11:03 AM BY:KSTINSON
XREFS: 26003X00 26003X01 IMAGES:

ARCADIS BBL

Attachment B

Validated Data Packages

DATA USABILITY SUMMARY REPORT

MCKESSON

BEAR STREET

SDG #X050

SEMIVOLATILE ANALYSES

Analyses performed by:

Severn Trent Laboratories
Edison, New Jersey

Review performed by:

ARCADIS BBL
Infrastructure, environment, facilities

Syracuse, New York
Report #6417

<u>Summary</u>

The following is an assessment of the data package for sample delivery group (SDG) #X050 for sampling from the McKesson Bear Street Site. Included with this assessment are the data review check sheets used in the review of the package and corrected sample results. Analyses were performed on the following samples:

Sample ID	Lab ID	Matrix	Sample Date	Analysis				
				VOC	SVOC	PCB	MET	MISC
MW31	769684	Water	9/12/2006		X			
MW33	769685	Water	9/12/2006		X			
TW02RR	769686	Water	9/12/2006		X			
MW8SR	769687	Water	9/12/2006		X			
DUP91206	769688	Water	9/12/2006		X			
MW27	769689	Water	9/12/2006		X			
MW28	769690	Water	9/12/2006		X			
MW36	769691	Water	9/12/2006		X			

Notes:

1. Matrix spike/matrix spike duplicate (MS/MSD) analyses performed on sample location MW8SR.
2. Sample location DUP91206 is the field duplicate of parent sample location MW8SR.

SEMI-VOLATILE ORGANIC COMPOUND (SVOC) ANALYSES

Introduction

Analyses were performed according to (United Stated Environmental Protection Agency) USEPA SW-846 Method 8270 as referenced in NYSDEC-ASP. Data were reviewed in accordance with USEPA National Functional Guidelines of October 1999.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with USEPA National Functional Guidelines:

- U The 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.
- B The compound has been found in the sample as well as its associated blank, its presence in the sample may be suspect.
- N The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification.
- 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.
- E The compound was quantitated above the calibration range.
- D Concentration is based on a diluted sample analysis.
- C Identification confirmed by gas chromatograph/mass spectrometer (GC/MS).
- UJ The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.
- R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant QC problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

Data Assessment

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 8270	Water	7 days from collection to extraction and 40 days from extraction to analysis	Cooled @ 4 °C
	Soil	14 days from collection to extraction and 40 days from extraction to analysis	Cooled @ 4 °C

All samples were analyzed within the specified holding times.

2. Blank Contamination

Quality assurance blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

No compounds were detected in the associated blanks.

3. Mass Spectrometer Tuning

Mass spectrometer performance was acceptable.

System performance and column resolution were acceptable.

4. Calibration

Satisfactory instrument calibration is established to insure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

4.1 Initial Calibration

The method specifies percent relative standard deviation (%RSD) and relative response factor (RRF) limits for select compounds only. A technical review of the data applies limits to all compounds with no exceptions.

All target compounds associated with the initial calibration standards must exhibit a %RSD less than the control limit (15%) or a correlation coefficient greater than 0.99 and an RRF value greater than control limit (0.05).

4.2 Continuing Calibration

All target compounds associated with the continuing calibration standard must exhibit a percent difference (%D) less then the control limit (20%) and RRF value greater than control limit (0.05).

All calibration criteria were within the control limits.

5. Surrogates/System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. SVOC analysis requires that two of the three SVOC surrogate compounds within each fraction exhibit recoveries within the laboratory-established acceptance limits.

Sample locations associated with surrogates exhibiting recoveries outside of the control limits presented in the following table.

Sample Locations	Surrogate	Recovery
MW8SR DUP91206	Nitrobenzene-d5	D
	2-Fluorobiphenyl	D
	Terphenyl-d14	D

Upper control limit (UL)
Lower control limit (LL)
Diluted (D)
Acceptable (AC)

The criteria used to evaluate the surrogate recoveries are presented in the following table. In the case of a surrogate deviation, the sample results associated with the deviant fraction are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> UL	Non-detect	No Action
	Detect	J
< LL but > 10%	Non-detect	J
	Detect	J
< 10%	Non-detect	R
	Detect	J
One of three surrogate exhibiting recovery outside the control limits but greater than 10%.	Non-detect	No Action
	Detect	
Surrogates diluted below the calibration curve due to the high concentration of a target compounds	Non-detect	No Action
	Detect	

6. Internal Standard Performance

Internal standard performance criteria insure that the GC/MS sensitivity and response are stable during every sample analysis. The criteria requires the internal standard compounds associated with the SVOC to exhibit area counts that are not greater than two times (+100%) or less than one-half (-50%) the area counts of the associated continuing calibration standard.

All internal standard areas and retention times were within established limits.

7. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit a percent recovery within the laboratory-established acceptance limits. The relative percent difference (RPD) between the MS/MSD recoveries must exhibit an RPD within the laboratory-established acceptance limits.

> Note: The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations were the compounds concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater.

The MS/MSD exhibited acceptable recoveries and RPD between MS/MSD recoveries.

8. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The compounds associated with the LCS analysis must exhibit a percent recovery within the laboratory-established acceptance limits.

All compounds associated with the LCS analysis exhibited recoveries within the control limits.

9. Field Duplicate Analysis

Field duplicate analysis is used to assess the precision and accuracy of the field sampling procedures and analytical method. A control limit of 50% for water matrices and 100% for soil matrices is applied to the RPD between the parent sample and the field duplicate.

Results for duplicate samples are summarized in the following table.

Sample ID/Duplicate ID	Compound	Sample Result	Duplicate Result	RPD
MW8SR/DUP91206	Aniline	52000	51000	1.9%

ND = Not detected.
AC = The field duplicate RPD is acceptable when the RPD between parent sample and field duplicate sample is less than one times the RL and where the parent sample and/or duplicate concentration is less than five times the RL.

The calculated RPDs between the parent sample and field duplicate were acceptable.

10. Compound Identification

Compounds are identified on the GC/MS by using the analytes relative retention time and ion spectra.

All identified compounds met the specified criteria.

11. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

Data Validation Checklist

Semivolatile Organics Data Validation Checklist

	YES	NO	NA
Data Completeness and Deliverables			
Have any missing deliverables been received and added to the data package?		X	
Is there a narrative or cover letter present?	X		
Are the sample numbers included in the narrative?	X		
Are the sample chain-of-custodies present?	X		
Do the chain-of-custodies indicate any problems with sample receipt or sample condition?		X	
Holding Times			
Have any holding times been exceeded?		X	
Surrogate Recovery			
Are the surrogate recovery forms present?	X		
Are all samples listed on the surrogate recovery form?	X		
Were two or more base-neutral or acid surrogate recoveries outside control limits for any sample or blank?		X	
If yes, were the samples reanalyzed?			X
Are there any transcription/calculation errors between the raw data and the summary form?		X	
Matrix Spikes			
Is there a MS recovery form present?	X		
Were MSs analyzed at the required frequency	X		
How many spike recoveries were outside of QC limits?			
0 out of 11			
How many RPDs for MS/MSD were outside of QC limits?			
0 out of 22			
Blanks			
Is the method blank summary form present?	X		
Has a method blank been analyzed for each set of samples or for each 20 samples, whichever is more frequent?	X		
Has a blank been analyzed for each system used?	X		
Do any method blanks have positive results?		X	
Are field/rinse blanks associated with every sample?		X	
Do any field/rinse blanks have positive results?			X
Tuning and Mass Calibration			
Are the GC/MS tuning forms present for DFTPP?	X		

	YES	NO	NA
Are the bar graph spectrum and mass/charge listing provided for each DFTPP?	X		
Has a DFTPP been analyzed for each 12 hours of analysis per instrument?	X		
Have the ion abundance criteria been met for each instrument used?	X		
Target Analytes			
Is an organics analysis data sheet present for each of the following:			
Samples	X		
Matrix spikes	X		
Blanks	X		
Are the reconstructed ion chromatograms present for each of the following:			
Samples	X		
Matrix spikes	X		
Blanks	X		
Is the chromatographic performance acceptable?	X		
Are the mass spectra of the identified compounds present?	X		
Are all ions present in the standard mass spectrum at a relative intensity of 10% or greater also present in the sample spectrum?	X		
Do the samples and standard relative ion intensities agree within 20%?	X		
Tentatively Identified Compounds			
Are all the TIC summary forms present?		X	
Are the mass spectra for the tentatively identified compounds and their associated "best match" spectra present?			X
Are any target compounds listed as TICs?			X
Are all ions present in the reference mass spectrum with a relative intensity greater than 10% also present in the sample mass spectrum?			X
Do the TIC and "best match" spectrum agree within 20%?			X
Quantitation and Detection Limits			
Are there any transcription/calculation errors in the Form 1 results?		X	
Are the reporting limits adjusted to reflect sample dilutions, and for soils, sample moisture?	X		
Standard Data			
Are the quantitation reports and reconstructed ion chromatograms present for the initial and continuing calibration standards?	X		
Initial Calibration			
Are the initial calibration forms present for each instrument used?	X		
Are the response factor RSDs within acceptable limits?	X		
Are the average RRF minimum requirements met?	X		

	YES	NO	NA
Are there any transcription/calculation error in reporting the RRF or RSD?		X	
Continuing Calibration			
Are the continuing calibration forms present for each day and each instrument?	X		
Has a continuing calibration standard been analyzed for each 12 hours of analysis per instrument?	X		
All %D within acceptable limits?	X		
Are all RF minimum requirements met?	X		
Are there any transcription/calculation errors in reporting of RF or %D?		X	
Internal Standards			
Are internal standard areas of every sample within the upper and lower limits for each continuing calibration?	X		
Are the retention times of the internal standards within 30 seconds of the associated calibration standard?	X		
Field Duplicates			
Were field duplicates submitted with the samples?	X		

Corrected Sample Analysis Data Sheets

Client ID: **MW31**
Site: McKesson

Lab Sample No: **769684**
Lab Job No: X050

Date Sampled: 09/12/06
Date Received: 09/14/06
Date Extracted: 09/18/06
Date Analyzed: 09/29/06
GC Column: DB-5
Instrument ID: BNAMS3.i
Lab File ID: t28532.d

Matrix: WATER
Level: LOW
Sample Volume: 990 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 1.0

SEMI-VOLATILE ORGANICS - GC/MS
METHOD 8270C

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Aniline	1.6	1.0
N,N-Dimethylaniline	3.4	1.0

Client ID: **MW33**
Site: McKesson

Lab Sample No: **769685**
Lab Job No: X050

Date Sampled: 09/12/06
Date Received: 09/14/06
Date Extracted: 09/18/06
Date Analyzed: 09/29/06
GC Column: DB-5
Instrument ID: BNAMS3.i
Lab File ID: t28533.d

Matrix: WATER
Level: LOW
Sample Volume: 980 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 5.0

SEMI-VOLATILE ORGANICS - GC/MS
METHOD 8270C

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Aniline	940	5.1
N,N-Dimethylaniline	8.0	5.1

Client ID: **TW02RR**
Site: McKesson

Lab Sample No: **769686**
Lab Job No: X050

Date Sampled: 09/12/06
Date Received: 09/14/06
Date Extracted: 09/18/06
Date Analyzed: 09/29/06
GC Column: DB-5
Instrument ID: BNAMS3.i
Lab File ID: t28534.d

Matrix: WATER
Level: LOW
Sample Volume: 960 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 50.0

SEMI-VOLATILE ORGANICS - GC/MS
METHOD 8270C

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Aniline	7600	52
N,N-Dimethylaniline	ND	52

Client ID: **MW8SR**
Site: McKesson

Lab Sample No: **769687**
Lab Job No: X050

Date Sampled: 09/12/06
Date Received: 09/14/06
Date Extracted: 09/18/06
Date Analyzed: 09/29/06
GC Column: DB-5
Instrument ID: BNAMS3.i
Lab File ID: t28535.d

Matrix: WATER
Level: LOW
Sample Volume: 970 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 500.0

SEMI-VOLATILE ORGANICS - GC/MS
METHOD 8270C

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Aniline	52000	520
N,N-Dimethylaniline	ND	520

Client ID: **DUP91206**
Site: McKesson

Lab Sample No: **769688**
Lab Job No: X050

Date Sampled: 09/12/06
Date Received: 09/14/06
Date Extracted: 09/18/06
Date Analyzed: 09/29/06
GC Column: DB-5
Instrument ID: BNAMS3.i
Lab File ID: t28538.d

Matrix: WATER
Level: LOW
Sample Volume: 960 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 500.0

SEMI-VOLATILE ORGANICS - GC/MS
METHOD 8270C

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Aniline	51000	520
N,N-Dimethylaniline	ND	520

Client ID: **MW27**
Site: McKesson

Lab Sample No: **769689**
Lab Job No: X050

Date Sampled: 09/12/06
Date Received: 09/14/06
Date Extracted: 09/18/06
Date Analyzed: 09/29/06
GC Column: DB-5
Instrument ID: BNAMS3.i
Lab File ID: t28539.d

Matrix: WATER
Level: LOW
Sample Volume: 950 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 10.0

SEMI-VOLATILE ORGANICS - GC/MS
METHOD 8270C

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Aniline	1700	10
N,N-Dimethylaniline	ND	10

Client ID: **MW28**
Site: McKesson

Lab Sample No: **769690**
Lab Job No: X050

Date Sampled: 09/12/06
Date Received: 09/14/06
Date Extracted: 09/18/06
Date Analyzed: 09/30/06
GC Column: DB-5
Instrument ID: BNAMS3.i
Lab File ID: t28540.d

Matrix: WATER
Level: LOW
Sample Volume: 930 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 2.0

SEMI-VOLATILE ORGANICS - GC/MS
METHOD 8270C

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Aniline	280	2.2
N,N-Dimethylaniline	ND	2.2

Client ID: **MW36**
Site: McKesson

Lab Sample No: **769691**
Lab Job No: X050

Date Sampled: 09/12/06
Date Received: 09/14/06
Date Extracted: 09/18/06
Date Analyzed: 09/30/06
GC Column: DB-5
Instrument ID: BNAMS3.i
Lab File ID: t28546.d

Matrix: WATER
Level: LOW
Sample Volume: 980 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 1.0

SEMI-VOLATILE ORGANICS - GC/MS
METHOD 8270C

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Aniline	3.5	1.0
N,N-Dimethylaniline	1.2	1.0

Laboratory Narrative

SEVERN TRENT STL

SDG NARRATIVE

STL EDISON

SDG No. X050

STL Edison Sample	Client ID
769684	MW31
769685	MW33
769686	TW02RR
769687	MW8SR
769687MS	MW8SRMS
769687SD	MW8SRMSD
769688	DUP91206
769689	MW27
769690	MW28
769691	MW36

Sample Receipt:

Sample delivery conforms with requirements.

Base/Neutral and/or Acid Extractable Organics (GC/MS):

Sample 769687, and 769688 surrogate recoveries have been diluted out.

I certify that this data package is in compliance with the protocols in NYSDEC ASP B both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this package has been authorized by the Laboratory Manager or his designee

Michael J. Urban

Michael J.Urban
Laboratory Manager

NYSDEC Sample Identification and Analysis Summary Sheets

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY
SEMIVOLATILE (BNA)
ANALYSES

Laboratory Sample ID	Matrix	Date Collected	Date Rec'd at Lab	Date Extracted	Date Analyzed
769684	WATER	9/12/06	9/14/06	9/18/06	9/29/06
769685	WATER	9/12/06	9/14/06	9/18/06	9/29/06
769686	WATER	9/12/06	9/14/06	9/18/06	9/29/06
769687	WATER	9/12/06	9/14/06	9/18/06	9/29/06
769687MS	WATER	9/12/06	9/14/06	9/18/06	9/28/06
769687SD	WATER	9/12/06	9/14/06	9/18/06	9/28/06
769688	WATER	9/12/06	9/14/06	9/18/06	9/29/06
769689	WATER	9/12/06	9/14/06	9/18/06	9/29/06
769690	WATER	9/12/06	9/14/06	9/18/06	9/30/06
769691	WATER	9/12/06	9/14/06	9/18/06	9/30/06

10/95

Sample Compliance Report

SAMPLE COMPLIANCE REPORT

Sample Delivery Group	Sampling Date	ASP Protocol	Sample ID	Matrix	Compliancy[1]					Noncompliance
					VOC	SVOC	PCB	MET	MISC	
X050	9/12/2006	2005	MW31	Water	--	Yes	--	--	--	
X050	9/12/2006	2005	MW33	Water	--	Yes	--	--	--	
X050	9/12/2006	2005	TW02RR	Water	--	Yes	--	--	--	
X050	9/12/2006	2005	MW8SR	Water	--	Yes	--	--	--	
X050	9/12/2006	2005	DUP91206	Water	--	Yes	--	--	--	
X050	9/12/2006	2005	MW27	Water	--	Yes	--	--	--	
X050	9/12/2006	2005	MW28	Water	--	Yes	--	--	--	
X050	9/12/2006	2005	MW36	Water	--	Yes	--	--	--	

1 Samples which are compliant with no added validation qualifiers are listed as "yes". Samples which are non-compliant or which have added qualifiers are listed as "no". A "no" designation does not necessarily indicate that the data have been rejected or are otherwise unusable.

DATA USABILITY SUMMARY REPORT

MCKESSON

BEAR STREET

SDG #Z054

VOLATILE, SEMIVOLATILE AND
METHANOL ANALYSES

Analyses performed by:

Severn Trent Laboratories
Edison, New Jersey

Review performed by:

ARCADIS BBL
Infrastructure, environment, facilities

Syracuse, New York
Report #6421

<u>Summary</u>

The following is an assessment of the data package for sample delivery group (SDG) #Z054 for sampling from the McKesson Bear Street Site. Included with this assessment are the data review check sheets used in the review of the package and corrected sample results. Analyses were performed on the following samples:

Sample ID	Lab ID	Matrix	Sample Date	Analysis				
				VOC	SVOC	PCB	MET	MISC
PZ5D	781663	Water	10/30/2006	X	X			X
PZ5S	781664	Water	10/30/2006	X	X			X
MW24SR	781665	Water	10/30/2006	X	X			X
MW24DR	781666	Water	10/30/2006	X	X			X
MW19	781667	Water	10/30/2006	X	X			X
MW18	781668	Water	10/30/2006	X	X			X
MW25S	781669	Water	10/30/2006	X	X			X
MW23I	781670	Water	10/31/2006	X	X			X
MW23S	781671	Water	10/31/2006	X	X			X
Trip Blank	781672	Water	10/31/2006	X				
MW17R	781673	Water	10/31/2006	X	X			X
MW32	781674	Water	10/31/2006	X	X			X
TW01	781675	Water	10/31/2006	X	X			X
MW33	781676	Water	10/31/2006	X	X			X
MW31	781673	Water	10/31/2006	X	X			X
MW9S	781678	Water	10/31/2006	X	X			X
TW02RR	781679	Water	10/31/2006	X	X			X
MW35	781680	Water	10/31/2006	X	X			X
MW34	781681	Water	10/31/2006	X	X			X
MW36	781682	Water	10/31/2006	X	X			X

Notes:

1. Matrix spike/matrix spike duplicate (MS/MSD) analyses performed for volatiles on sample location MW32.
2. Matrix spike/matrix spike duplicate (MS/MSD) analyses performed for methanol on sample location PZ5D.
3. Miscellaneous parameters include methanol.

VOLATILE ORGANIC COMPOUND (VOC) ANALYSES

Introduction

Analyses were performed according to (United Stated Environmental Protection Agency) USEPA SW-846 Method 8260 as referenced in NYSDEC-ASP. Data were reviewed in accordance with USEPA National Functional Guidelines of October 1999.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with USEPA National Functional Guidelines:

- U The 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.
- B The compound has been found in the sample as well as its associated blank, its presence in the sample may be suspect.
- N The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification.
- 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.
- E The compound was quantitated above the calibration range.
- D Concentration is based on a diluted sample analysis.
- C Identification confirmed by gas chromatograph/mass spectrometer (GC/MS).
- UJ The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.
- R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

Data Assessment

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 8260	Water	14 days from collection to analysis	Cooled @ 4 °C; preserved to a pH of less than 2.
	Soil	14 days from collection to analysis	Cooled @ 4 °C.

All samples were analyzed within the specified holding times.

2. Blank Contamination

Quality assurance blanks (i.e., method, trip, and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Trip blanks measure contamination of samples during shipment. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

No compounds were detected in the associated blanks.

3. Mass Spectrometer Tuning

Mass spectrometer performance was acceptable.

System performance and column resolution were acceptable.

4. Calibration

Satisfactory instrument calibration is established to insure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

4.1 Initial Calibration

The method specifies percent relative standard deviation (%RSD) and relative response factor (RRF) limits for select compounds only. A technical review of the data applies limits to all compounds with no exceptions.

All target compounds associated with the initial calibration standards must exhibit a %RSD less than the control limit (15%) or a correlation coefficient greater than 0.99 and an RRF value greater than control limit (0.05).

4.2 Continuing Calibration

All target compounds associated with the continuing calibration standard must exhibit a percent difference (%D) less then the control limit (20%) and RRF value greater than control limit (0.05).

All compounds associated with the calibrations were within the specified control limits, with the exception of the compounds presented in the following table.

<table>
<tr><th>Sample Locations</th><th>Compound</th><th>Initial/Continuing</th><th>Criteria</th></tr>
<tr><td rowspan="2">PZ5D
PZ5S
MW24SR
MW24DR
MW19
MW18
MW25S
MW23I
MW23S
Trip Blank
MW17R
MW32
TW01
MW33
MW31
TW02RR
MW35
MW34
MW36</td><td rowspan="2">Acetone</td><td>CCV %D</td><td>-28.2%
-33.0%</td></tr>
<tr><td>CCV RRF</td><td>0.0085
0.0080</td></tr>
</table>

The criteria used to evaluate the initial and continuing calibration are presented in the following table. In the case of a calibration deviation, the sample results are qualified.

<table>
<tr><th>Initial/Continuing</th><th>Criteria</th><th>Sample Result</th><th>Qualification</th></tr>
<tr><td rowspan="6">Initial and Continuing Calibration</td><td rowspan="2">RRF <0.05</td><td>Non-detect</td><td>R</td></tr>
<tr><td>Detect</td><td>J</td></tr>
<tr><td rowspan="2">RRF <0.01[1]</td><td>Non-detect</td><td>R</td></tr>
<tr><td>Detect</td><td>J</td></tr>
<tr><td rowspan="2">RRF >0.05 or RRF >0.01[1]</td><td>Non-detect</td><td rowspan="2">No Action</td></tr>
<tr><td>Detect</td></tr>
<tr><td rowspan="2">Initial Calibration</td><td rowspan="2">%RSD > 15% or a correlation coefficient <0.99</td><td>Non-detect</td><td>UJ</td></tr>
<tr><td>Detect</td><td>J</td></tr>
<tr><td rowspan="4">Continuing Calibration</td><td rowspan="2">%D >20% (increase in sensitivity)</td><td>Non-detect</td><td>No Action</td></tr>
<tr><td>Detect</td><td>J</td></tr>
<tr><td rowspan="2">%D >20% (decrease in sensitivity)</td><td>Non-detect</td><td>UJ</td></tr>
<tr><td>Detect</td><td>J</td></tr>
</table>

1. RRF of 0.01 only applies to compounds which are typically poor responding compounds (i.e. ketones, 1,4-Dioxane, etc.)

5. Surrogates/System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. VOC analysis requires that all surrogates associated with the analysis exhibit recoveries within the laboratory-established acceptance limits.

All surrogate recoveries were within control limits.

6. Internal Standard Performance

Internal standard performance criteria insure that the GC/MS sensitivity and response are stable during every sample analysis. The criteria requires the internal standard compounds associated with the VOC exhibit area counts that are not greater than two times (+100%) or less than one-half (-50%) of the area counts of the associated continuing calibration standard.

All internal standard areas and retention times were within established limits.

7. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit a percent recovery within the laboratory-established acceptance limits. The relative percent difference (RPD) between the MS/MSD recoveries must exhibit an RPD within the laboratory-established acceptance limits.

> Note: The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the compound concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater.

The MS/MSD exhibited acceptable recoveries and RPD between MS/MSD recoveries.

8. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The compounds associated with the LCS analysis must exhibit a percent recovery within the laboratory-established acceptance limits.

All compounds associated with the LCS analysis exhibited recoveries within the control limits.

9. Field Duplicate Analysis

Field duplicate analysis is used to assess the precision and accuracy of the field sampling procedures and analytical method. A control limit of 50% for water matrices and 100% for soil matrices is applied to the RPD between the parent sample and the field duplicate.

A field duplicate was not performed on a sample location associated with this SDG.

10. Compound Identification

Compounds are identified on the GC/MS by using the analytes relative retention time and ion spectra.

All identified compounds met the specified criteria.

11. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

Data Validation Checklist

Volatile Organics Data Validation Checklist

	YES	NO	NA
Data Completeness and Deliverables			
Have any missing deliverables been received and added to the data package?		X	
Is there a narrative or cover letter present?	X		
Are the sample numbers included in the narrative?	X		
Are the sample chain-of-custodies present?	X		
Do the chain-of-custodies indicate any problems with sample receipt or sample condition?		X	
Holding Times			
Have any holding times been exceeded?		X	
Surrogate Recovery			
Are surrogate recovery forms present?	X		
Are all samples listed on the surrogate recovery form?	X		
Was one or more surrogate recovery outside control limits for any sample or blank?		X	
If yes, were the samples reanalyzed?			X
Are there any transcription/calculation errors between the raw data and the summary form?		X	
Matrix Spikes			
Is there a MS recovery form present?	X		
Were matrix spikes analyzed at the required frequency?	X		
How many spike recoveries were outside of QC limits?			
0 out of 32			
How many RPDs for MS/MSD were outside of QC limits?			
0 out of 16			
Blanks			
Is a method blank summary form present?	X		
Has a method blank been analyzed for each day or for each 20 samples, whichever is more frequent?	X		
Has a blank been analyzed at least once every 12 hours for each system used?	X		
Do any method/instrument blanks have positive results?		X	
Are trip/field/rinse blanks associated with every sample?	X		
Do any trip/field/rinse blanks have positive results?		X	

	YES	NO	NA
Tuning and Mass Calibration			
Are the GC/MS tuning forms present for BFB?	X		
Are the bar graph spectrum and mass/charge listing provided for each BFB?	X		
Has a BFB been analyzed for each 12 hours of analysis per instrument?	X		
Have the ion abundance criteria been met for each instrument used?	X		
Target Analytes			
Is an organics analysis data sheet present for each of the following:			
Samples	X		
Matrix spikes	X		
Blanks	X		
Are the reconstructed ion chromatograms present for each of the following:			
Samples	X		
Matrix spikes	X		
Blanks	X		
Is the chromatographic performance acceptable?	X		
Are the mass spectra of the identified compounds present?	X		
Are all ions present in the standard mass spectrum at a relative intensity of 10% or greater also present in the sample spectrum?	X		
Do the samples and standard relative ion intensities agree within 20%?	X		
Tentatively Identified Compounds			
Are all the TIC summary forms present?		X	
Are the mass spectra for the tentatively identified compounds and their associated "best match" spectra present?			X
Are any target compounds listed as TICs?			X
Are all ions present in the reference mass spectrum with a relative intensity greater than 10% also present in the sample mass spectrum?			X
Do the TIC and "best match" spectrum agree within 20%?			X
Quantitation and Detection Limits			
Are there any transcription/calculation errors in the Form 1 results?		X	
Are the reporting limits adjusted to reflect sample dilutions and, for soils, sample moisture?	X		
Standard Data			
Are the quantitation reports and reconstructed ion chromatograms present for the initial and continuing calibration standards?	X		

	YES	NO	NA
Initial Calibration			
Are the initial calibration forms present for each instrument used?	X		
Are the response factor RSDs within acceptable limits?	X		
Are the average RRFs minimum requirements met?	X		
Are there any transcription/calculation errors in reporting the RRFs or RSDs?		X	
Continuing Calibration			
Are the continuing calibration forms present for each day and each instrument?	X		
Has a continuing calibration standard been analyzed for each 12 hours of analysis per instrument?	X		
All %D within acceptable limits?		X	
Are all RF minimum requirements met?		X	
Are there any transcription/calculation errors in reporting of RF or %D?		X	
Internal Standards			
Are internal standard areas of every sample within the upper and lower limits for each continuing calibration?	X		
Are the retention times of the internal standards within 30 seconds of the associated calibration standard?	X		
Field Duplicates			
Were field duplicates submitted with the samples?		X	

SEMI-VOLATILE ORGANIC COMPOUND (SVOC) ANALYSES

Introduction

Analyses were performed according to (United Stated Environmental Protection Agency) USEPA SW-846 Method 8270 as referenced in NYSDEC-ASP. Data were reviewed in accordance with USEPA National Functional Guidelines of October 1999.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with USEPA National Functional Guidelines:

- U The 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.
- B The compound has been found in the sample as well as its associated blank, its presence in the sample may be suspect.
- N The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification.
- 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.
- E The compound was quantitated above the calibration range.
- D Concentration is based on a diluted sample analysis.
- C Identification confirmed by gas chromatograph/mass spectrometer (GC/MS).
- UJ The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.
- R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant QC problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

Data Assessment

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 8270	Water	7 days from collection to extraction and 40 days from extraction to analysis	Cooled @ 4 °C
	Soil	14 days from collection to extraction and 40 days from extraction to analysis	Cooled @ 4 °C

All samples were analyzed within the specified holding times.

2. Blank Contamination

Quality assurance blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

No compounds were detected in the associated blanks.

3. Mass Spectrometer Tuning

Mass spectrometer performance was acceptable.

System performance and column resolution were acceptable.

4. Calibration

Satisfactory instrument calibration is established to insure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

4.1 Initial Calibration

The method specifies percent relative standard deviation (%RSD) and relative response factor (RRF) limits for select compounds only. A technical review of the data applies limits to all compounds with no exceptions.

All target compounds associated with the initial calibration standards must exhibit a %RSD less than the control limit (15%) or a correlation coefficient greater than 0.99 and an RRF value greater than control limit (0.05).

4.2 Continuing Calibration

All target compounds associated with the continuing calibration standard must exhibit a percent difference (%D) less then the control limit (20%) and RRF value greater than control limit (0.05).

All calibration criteria were within the control limits.

5. Surrogates/System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. SVOC analysis requires that two of the three SVOC surrogate compounds within each fraction exhibit recoveries within the laboratory-established acceptance limits.

Sample locations associated with surrogates exhibiting recoveries outside of the control limits presented in the following table.

Sample Locations	Surrogate	Recovery
MW18	Nitrobenzene-d5	AC
	2-Fluorobiphenyl	< LL but > 10%
	Terphenyl-d14	AC

Lower control limit (LL)
Acceptable (AC)

The criteria used to evaluate the surrogate recoveries are presented in the following table. In the case of a surrogate deviation, the sample results associated with the deviant fraction are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> UL	Non-detect	No Action
	Detect	J
< LL but > 10%	Non-detect	J
	Detect	J
< 10%	Non-detect	R
	Detect	J
One of three surrogate exhibiting recovery outside the control limits but greater than 10%.	Non-detect	No Action
	Detect	
Surrogates diluted below the calibration curve due to the high concentration of a target compounds	Non-detect	No Action
	Detect	

6. Internal Standard Performance

Internal standard performance criteria insure that the GC/MS sensitivity and response are stable during every sample analysis. The criteria requires the internal standard compounds associated with the

SVOC to exhibit area counts that are not greater than two times (+100%) or less than one-half (-50%) the area counts of the associated continuing calibration standard.

All internal standard areas and retention times were within established limits.

7. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit a percent recovery within the laboratory-established acceptance limits. The relative percent difference (RPD) between the MS/MSD recoveries must exhibit an RPD within the laboratory-established acceptance limits.

A MS/MSD was not performed on a sample location associated with this SDG.

8. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The compounds associated with the LCS analysis must exhibit a percent recovery within the laboratory-established acceptance limits.

Sample locations associated with LCS analysis exhibiting recoveries outside of the control limits presented in the following table.

Sample Locations	Compound	Recovery
PZ5D PZ5S MW24SR MW24DR MW19 MW18 MW25S MW23I MW23S MW17R MW32 TW01 MW33 MW31 MW9S TW02RR MW35 MW34 MW36	n,n-Dimethylaniline	<LL but >10%

The criteria used to evaluate the LCS recoveries are presented in the following table. In the case of an LCS deviation, the sample results are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> the upper control limit (UL)	Non-detect	No Action
	Detect	J
< the lower control limit (LL) but > 10%	Non-detect	J
	Detect	J

Control Limit	Sample Result	Qualification
< 10%	Non-detect	R
	Detect	J

9. Field Duplicate Analysis

Field duplicate analysis is used to assess the precision and accuracy of the field sampling procedures and analytical method. A control limit of 50% for water matrices and 100% for soil matrices is applied to the RPD between the parent sample and the field duplicate.

A field duplicate was not performed on a sample location associated with this SDG.

10. Compound Identification

Compounds are identified on the GC/MS by using the analytes relative retention time and ion spectra.

All identified compounds met the specified criteria.

11. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

Data Validation Checklist

Semivolatile Organics Data Validation Checklist

	YES	NO	NA
Data Completeness and Deliverables			
Have any missing deliverables been received and added to the data package?		X	
Is there a narrative or cover letter present?	X		
Are the sample numbers included in the narrative?	X		
Are the sample chain-of-custodies present?	X		
Do the chain-of-custodies indicate any problems with sample receipt or sample condition?		X	
Holding Times			
Have any holding times been exceeded?		X	
Surrogate Recovery			
Are the surrogate recovery forms present?	X		
Are all samples listed on the surrogate recovery form?	X		
Were two or more base-neutral or acid surrogate recoveries outside control limits for any sample or blank?		X	
If yes, were the samples reanalyzed?			X
Are there any transcription/calculation errors between the raw data and the summary form?		X	
Matrix Spikes			
Is there a MS recovery form present?		X	
Were MSs analyzed at the required frequency		X	
How many spike recoveries were outside of QC limits? NA out of NA			
How many RPDs for MS/MSD were outside of QC limits? NA out of NA			
Blanks			
Is the method blank summary form present?	X		
Has a method blank been analyzed for each set of samples or for each 20 samples, whichever is more frequent?	X		
Has a blank been analyzed for each system used?	X		
Do any method blanks have positive results?		X	
Are field/rinse blanks associated with every sample?		X	
Do any field/rinse blanks have positive results?			X
Tuning and Mass Calibration			
Are the GC/MS tuning forms present for DFTPP?	X		

	YES	NO	NA
Are the bar graph spectrum and mass/charge listing provided for each DFTPP?	X		
Has a DFTPP been analyzed for each 12 hours of analysis per instrument?	X		
Have the ion abundance criteria been met for each instrument used?	X		
Target Analytes			
Is an organics analysis data sheet present for each of the following:			
Samples	X		
Matrix spikes			X
Blanks	X		
Are the reconstructed ion chromatograms present for each of the following:			
Samples	X		
Matrix spikes			X
Blanks	X		
Is the chromatographic performance acceptable?	X		
Are the mass spectra of the identified compounds present?	X		
Are all ions present in the standard mass spectrum at a relative intensity of 10% or greater also present in the sample spectrum?	X		
Do the samples and standard relative ion intensities agree within 20%?	X		
Tentatively Identified Compounds			
Are all the TIC summary forms present?		X	
Are the mass spectra for the tentatively identified compounds and their associated "best match" spectra present?			X
Are any target compounds listed as TICs?			X
Are all ions present in the reference mass spectrum with a relative intensity greater than 10% also present in the sample mass spectrum?			X
Do the TIC and "best match" spectrum agree within 20%?			X
Quantitation and Detection Limits			
Are there any transcription/calculation errors in the Form 1 results?		X	
Are the reporting limits adjusted to reflect sample dilutions, and for soils, sample moisture?	X		
Standard Data			
Are the quantitation reports and reconstructed ion chromatograms present for the initial and continuing calibration standards?	X		
Initial Calibration			
Are the initial calibration forms present for each instrument used?	X		
Are the response factor RSDs within acceptable limits?	X		
Are the average RRF minimum requirements met?	X		

	YES	NO	NA
Are there any transcription/calculation error in reporting the RRF or RSD?		X	
Continuing Calibration			
Are the continuing calibration forms present for each day and each instrument?	X		
Has a continuing calibration standard been analyzed for each 12 hours of analysis per instrument?	X		
All %D within acceptable limits?	X		
Are all RF minimum requirements met?	X		
Are there any transcription/calculation errors in reporting of RF or %D?		X	
Internal Standards			
Are internal standard areas of every sample within the upper and lower limits for each continuing calibration?	X		
Are the retention times of the internal standards within 30 seconds of the associated calibration standard?	X		
Field Duplicates			
Were field duplicates submitted with the samples?		X	

MISCELLANEOUS ANALYSES

Introduction

Analyses were performed according to United States Environmental Protection Agency (USEPA) SW-846 Method 8015 as referenced in NYSDEC-ASP. Data were reviewed in accordance with USEPA National Functional Guidelines of October 1994.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with National Functional Guidelines:

U The 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.

B The reported value was obtained from a reading less than the RL but greater than or equal to the IDL.

M Duplicate injection precision not met.

N Spiked sample recovery not within control limits.

* Duplicate analysis not within control limits.

E The reported value is estimated due to the presence of interference.

UJ The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.

R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

Data Assessment

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time
Methanol by SW846 8015	Water	7 days from collection to extraction, 40 days from extraction to analysis
	Soil	14 days from collection to extraction, 40 days from extraction to analysis

All samples were analyzed within the specified holding times.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

No analytes were detected above the reporting limit in the associated blanks.

3. Calibration

Satisfactory instrument calibration is established to insure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

All target compounds associated with the initial calibration standards must exhibit a %RSD less than the control limit (15%) or a correlation coefficient greater than 0.99 and an RRF value greater than control limit (0.05).

All target compounds associated with the continuing calibration standard must exhibit a percent difference (%D) less then the control limit (20%) and RRF value greater than control limit (0.05).

All calibration verification standard recoveries were within the control limit.

4. MS/MSD Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit a percent recovery within the laboratory established acceptance limits. The relative percent difference (RPD) between the MS/MSD recoveries must exhibit a RPD within the laboratory established acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations were the compounds concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater.

The MS/MSD exhibited acceptable recoveries and RPD between MS/MSD recoveries.

5. LCS Analysis

The LCS analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The compounds associated with the LSC analysis must exhibit a percent recovery within the laboratory-established acceptance limits.

The laboratory control sample exhibited results within the control limit.

6. Field Duplicate Analysis

Field duplicate analysis is used to assess the precision and accuracy of the field sampling procedures and analytical method.

A field duplicate was not performed on a sample location associated with this SDG.

7. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

Data Validation Checklist

Data Validation Checklist

	YES	NO	NA
Data Completeness and Deliverables			
Have any missing deliverables been received and added to the data package?		X	
Is there a narrative or cover letter present?	X		
Are the sample numbers included in the narrative?	X		
Are the sample chain-of-custodies present?	X		
Do the chain-of-custodies indicate any problems with sample receipt or sample condition?		X	
Holding Times			
Have any holding times been exceeded?		X	
Surrogate Recovery			
Are surrogate recovery forms present?	X		
Are all samples listed on the surrogate recovery form?	X		
Was one or more surrogate recovery outside control limits for any sample or blank?		X	
If yes, were the samples reanalyzed?			X
Are there any transcription/calculation errors between the raw data and the summary form?		X	
Matrix Spikes			
Is there a MS recovery form present?	X		
Were matrix spikes analyzed at the required frequency?	X		
How many spike recoveries were outside of QC limits?			
0 out of 16			
How many RPDs for MS/MSD were outside of QC limits?			
0 out of 8			
Blanks			
Is a method blank summary form present?	X		
Has a method blank been analyzed for each day or for each 20 samples, whichever is more frequent?	X		
Has a blank been analyzed at least once every 12 hours for each system used?	X		
Do any method/instrument blanks have positive results?		X	
Are trip/field/rinse blanks associated with every sample?		X	
Do any trip/field/rinse blanks have positive results?			X

	YES	NO	NA
Target Analytes			
Is an organics analysis data sheet present for each of the following:			
Samples	X		
Matrix spikes	X		
Blanks	X		
Are the reconstructed ion chromatograms present for each of the following:			
Samples	X		
Matrix spikes	X		
Blanks	X		
Is the chromatographic performance acceptable?	X		
Are the mass spectra of the identified compounds present?			X
Are all ions present in the standard mass spectrum at a relative intensity of 10% or greater also present in the sample spectrum?			X
Do the samples and standard relative ion intensities agree within 20%?			X
Quantitation and Detection Limits			
Are there any transcription/calculation errors in the Form 1 results?		X	
Are the reporting limits adjusted to reflect sample dilutions and, for soils, sample moisture?	X		
Standard Data			
Are the quantitation reports and reconstructed ion chromatograms present for the initial and continuing calibration standards?	X		
Initial Calibration			
Are the initial calibration forms present for each instrument used?	X		
Are the response factor RSDs within acceptable limits?	X		
Are the average RRFs minimum requirements met?	X		
Are there any transcription/calculation errors in reporting the RRFs or RSDs?		X	
Continuing Calibration			
Are the continuing calibration forms present for each day and each instrument?	X		
Has a continuing calibration standard been analyzed for each 12 hours of analysis per instrument?	X		
All %D within acceptable limits?	X		
Are all RF minimum requirements met?	X		
Are there any transcription/calculation errors in reporting of RF or %D?		X	
Field Duplicates			
Were field duplicates submitted with the samples?		X	

Corrected Sample Analysis Data Sheets

Client ID: **PZ5D**
Site: McKesson Bear St.

Lab Sample No: **781663**
Lab Job No: Z054

Date Sampled: 10/30/06
Date Received: 11/01/06
Date Analyzed: 11/07/06
GC Column: Rtx-VMS
Instrument ID: VOAMS4.i
Lab File ID: d55534.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 8260B

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Methylene Chloride	ND	3.0
Acetone	~~ND~~ R	~~5.0~~
Trichloroethene	ND	1.0
Benzene	ND	1.0
Toluene	ND	5.0
Ethylbenzene	ND	4.0
Xylene (Total)	ND	5.0

Client ID: **PZ5S**
Site: McKesson Bear St.

Lab Sample No: **781664**
Lab Job No: Z054

Date Sampled: 10/30/06
Date Received: 11/01/06
Date Analyzed: 11/07/06
GC Column: Rtx-VMS
Instrument ID: VOAMS4.i
Lab File ID: d55535.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 8260B

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Methylene Chloride	ND	3.0
Acetone	~~ND~~ R	~~5.0~~
Trichloroethene	ND	1.0
Benzene	ND	1.0
Toluene	ND	5.0
Ethylbenzene	ND	4.0
Xylene (Total)	ND	5.0

Client ID: **MW24SR**
Site: McKesson Bear St.

Lab Sample No: **781665**
Lab Job No: Z054

Date Sampled: 10/30/06
Date Received: 11/01/06
Date Analyzed: 11/07/06
GC Column: Rtx-VMS
Instrument ID: VOAMS4.i
Lab File ID: d55536.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 8260B

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Methylene Chloride	ND	3.0
Acetone	~~ND~~ R	~~5.0~~
Trichloroethene	ND	1.0
Benzene	ND	1.0
Toluene	ND	5.0
Ethylbenzene	ND	4.0
Xylene (Total)	ND	5.0

Client ID: **MW24DR**
Site: McKesson Bear St.

Lab Sample No: **781666**
Lab Job No: Z054

Date Sampled: 10/30/06
Date Received: 11/01/06
Date Analyzed: 11/07/06
GC Column: Rtx-VMS
Instrument ID: VOAMS4.i
Lab File ID: d55537.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 8260B

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Methylene Chloride	ND	3.0
Acetone	~~ND~~ R	~~5.0~~
Trichloroethene	ND	1.0
Benzene	ND	1.0
Toluene	ND	5.0
Ethylbenzene	ND	4.0
Xylene (Total)	ND	5.0

Client ID: **MW19**
Site: McKesson Bear St.

Lab Sample No: **781667**
Lab Job No: Z054

Date Sampled: 10/30/06
Date Received: 11/01/06
Date Analyzed: 11/09/06
GC Column: Rtx-VMS
Instrument ID: VOAMS4.i
Lab File ID: d55586.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 8260B

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Methylene Chloride	ND	3.0
Acetone	~~ND~~ R	~~5.0~~
Trichloroethene	ND	1.0
Benzene	ND	1.0
Toluene	ND	5.0
Ethylbenzene	ND	4.0
Xylene (Total)	ND	5.0

Client ID: **MW18**
Site: McKesson Bear St.

Lab Sample No: **781668**
Lab Job No: Z054

Date Sampled: 10/30/06
Date Received: 11/01/06
Date Analyzed: 11/09/06
GC Column: Rtx-VMS
Instrument ID: VOAMS4.i
Lab File ID: d55587.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 8260B

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Methylene Chloride	ND	3.0
Acetone	~~ND~~ R	~~5.0~~
Trichloroethene	ND	1.0
Benzene	ND	1.0
Toluene	ND	5.0
Ethylbenzene	ND	4.0
Xylene (Total)	ND	5.0

Client ID: **MW25S**
Site: McKesson Bear St.

Lab Sample No: **781669**
Lab Job No: Z054

Date Sampled: 10/30/06
Date Received: 11/01/06
Date Analyzed: 11/07/06
GC Column: Rtx-VMS
Instrument ID: VOAMS4.i
Lab File ID: d55540.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 8260B

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Methylene Chloride	ND	3.0
Acetone	~~ND~~ R	~~5.0~~
Trichloroethene	ND	1.0
Benzene	ND	1.0
Toluene	ND	5.0
Ethylbenzene	ND	4.0
Xylene (Total)	ND	5.0

Client ID: **MW23I**
Site: McKesson Bear St.

Lab Sample No: **781670**
Lab Job No: Z054

Date Sampled: 10/31/06
Date Received: 11/01/06
Date Analyzed: 11/09/06
GC Column: Rtx-VMS
Instrument ID: VOAMS4.i
Lab File ID: d55588.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 8260B

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Methylene Chloride	ND	3.0
Acetone	~~ND~~ R	~~5.0~~
Trichloroethene	ND	1.0
Benzene	ND	1.0
Toluene	ND	5.0
Ethylbenzene	ND	4.0
Xylene (Total)	ND	5.0

Client ID: **MW23S**
Site: McKesson Bear St.

Lab Sample No: **781671**
Lab Job No: Z054

Date Sampled: 10/31/06
Date Received: 11/01/06
Date Analyzed: 11/07/06
GC Column: Rtx-VMS
Instrument ID: VOAMS4.i
Lab File ID: d55542.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 8260B

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Methylene Chloride	ND	3.0
Acetone	~~ND~~ R	~~5.0~~
Trichloroethene	ND	1.0
Benzene	ND	1.0
Toluene	ND	5.0
Ethylbenzene	ND	4.0
Xylene (Total)	ND	5.0

Client ID: **Trip_Blank**
Site: McKesson Bear St.

Lab Sample No: **781672**
Lab Job No: Z054

Date Sampled: 10/31/06
Date Received: 11/01/06
Date Analyzed: 11/07/06
GC Column: Rtx-VMS
Instrument ID: VOAMS4.i
Lab File ID: d55533.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 8260B

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Methylene Chloride	ND	3.0
Acetone	~~ND~~ R	~~5.0~~
Trichloroethene	ND	1.0
Benzene	ND	1.0
Toluene	ND	5.0
Ethylbenzene	ND	4.0
Xylene (Total)	ND	5.0

Client ID: **MW17R**
Site: McKesson Bear St.

Lab Sample No: **781673**
Lab Job No: Z054

Date Sampled: 10/31/06
Date Received: 11/01/06
Date Analyzed: 11/07/06
GC Column: Rtx-VMS
Instrument ID: VOAMS4.i
Lab File ID: d55543.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 8260B

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Methylene Chloride	ND	3.0
Acetone	~~ND~~ R	~~5.0~~
Trichloroethene	ND	1.0
Benzene	ND	1.0
Toluene	ND	5.0
Ethylbenzene	ND	4.0
Xylene (Total)	ND	5.0

Client ID: **MW32**
Site: McKesson Bear St.

Lab Sample No: **781674**
Lab Job No: Z054

Date Sampled: 10/31/06
Date Received: 11/01/06
Date Analyzed: 11/07/06
GC Column: Rtx-VMS
Instrument ID: VOAMS4.i
Lab File ID: d55544.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 8260B

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Methylene Chloride	ND	3.0
Acetone	~~ND~~ R	~~5.0~~
Trichloroethene	ND	1.0
Benzene	ND	1.0
Toluene	0.8J	5.0
Ethylbenzene	ND	4.0
Xylene (Total)	ND	5.0

Client ID: **TW01**
Site: McKesson Bear St.

Lab Sample No: **781675**
Lab Job No: Z054

Date Sampled: 10/31/06
Date Received: 11/01/06
Date Analyzed: 11/07/06
GC Column: Rtx-VMS
Instrument ID: VOAMS4.i
Lab File ID: d55547.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 8260B

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Methylene Chloride	ND	3.0
Acetone	~~ND~~ R	~~5.0~~
Trichloroethene	ND	1.0
Benzene	0.7J	1.0
Toluene	ND	5.0
Ethylbenzene	ND	4.0
Xylene (Total)	ND	5.0

Client ID: **MW33**
Site: McKesson Bear St.

Lab Sample No: **781676**
Lab Job No: Z054

Date Sampled: 10/31/06
Date Received: 11/01/06
Date Analyzed: 11/07/06
GC Column: Rtx-VMS
Instrument ID: VOAMS4.i
Lab File ID: d55548.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 8260B

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Methylene Chloride	ND	3.0
Acetone	17 J	5.0
Trichloroethene	ND	1.0
Benzene	8.6	1.0
Toluene	0.7J	5.0
Ethylbenzene	ND	4.0
Xylene (Total)	ND	5.0

Client ID: **MW31**
Site: McKesson Bear St.

Lab Sample No: **781677**
Lab Job No: Z054

Date Sampled: 10/31/06
Date Received: 11/01/06
Date Analyzed: 11/09/06
GC Column: Rtx-VMS
Instrument ID: VOAMS4.i
Lab File ID: d55589.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 8260B

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Methylene Chloride	ND	3.0
Acetone	~~ND~~ R	~~5.0~~
Trichloroethene	ND	1.0
Benzene	6.9	1.0
Toluene	ND	5.0
Ethylbenzene	ND	4.0
Xylene (Total)	ND	5.0

Client ID: **MW9S**
Site: McKesson Bear St.

Lab Sample No: **781678**
Lab Job No: Z054

Date Sampled: 10/31/06
Date Received: 11/01/06
Date Analyzed: 11/14/06
GC Column: Rtx-VMS
Instrument ID: VOAMS10.i
Lab File ID: bb80170.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 8260B

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Methylene Chloride	ND	3.0
Acetone	ND	5.0
Trichloroethene	ND	1.0
Benzene	1.4	1.0
Toluene	3.5J	5.0
Ethylbenzene	23	4.0
Xylene (Total)	63	5.0

Client ID: **TW02RR**
Site: McKesson Bear St.

Lab Sample No: **781679**
Lab Job No: Z054

Date Sampled: 10/31/06
Date Received: 11/01/06
Date Analyzed: 11/09/06
GC Column: Rtx-VMS
Instrument ID: VOAMS4.i
Lab File ID: d55591.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 8260B

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Methylene Chloride	ND	3.0
Acetone	78 J	5.0
Trichloroethene	ND	1.0
Benzene	4.9	1.0
Toluene	1.4J	5.0
Ethylbenzene	2.2J	4.0
Xylene (Total)	6.2	5.0

Client ID: **MW35**
Site: McKesson Bear St.

Lab Sample No: **781680**
Lab Job No: Z054

Date Sampled: 10/31/06
Date Received: 11/01/06
Date Analyzed: 11/09/06
GC Column: Rtx-VMS
Instrument ID: VOAMS4.i
Lab File ID: d55592.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 8260B

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Methylene Chloride	ND	3.0
Acetone	~~ND~~ R	~~5.0~~
Trichloroethene	ND	1.0
Benzene	ND	1.0
Toluene	ND	5.0
Ethylbenzene	ND	4.0
Xylene (Total)	ND	5.0

Client ID: **MW34**
Site: McKesson Bear St.

Lab Sample No: **781681**
Lab Job No: Z054

Date Sampled: 10/31/06
Date Received: 11/01/06
Date Analyzed: 11/09/06
GC Column: Rtx-VMS
Instrument ID: VOAMS4.i
Lab File ID: d55593.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 8260B

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Methylene Chloride	ND	3.0
Acetone	49 J	5.0
Trichloroethene	ND	1.0
Benzene	ND	1.0
Toluene	0.6J	5.0
Ethylbenzene	ND	4.0
Xylene (Total)	0.6J	5.0

Client ID: **MW36**
Site: McKesson Bear St.

Lab Sample No: **781682**
Lab Job No: Z054

Date Sampled: 10/31/06
Date Received: 11/01/06
Date Analyzed: 11/09/06
GC Column: Rtx-VMS
Instrument ID: VOAMS4.i
Lab File ID: d55594.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 8260B

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Methylene Chloride	ND	3.0
Acetone	130 J	5.0
Trichloroethene	ND	1.0
Benzene	3.6	1.0
Toluene	1.2J	5.0
Ethylbenzene	ND	4.0
Xylene (Total)	1.1J	5.0

Client ID: **PZ5D**
Site: McKesson Bear St.

Lab Sample No: **781663**
Lab Job No: Z054

Date Sampled: 10/30/06
Date Received: 11/01/06
Date Extracted: 11/05/06
Date Analyzed: 11/12/06
GC Column: DB-5
Instrument ID: BNAMS1.i
Lab File ID: r31213.d

Matrix: WATER
Level: LOW
Sample Volume: 970 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 1.0

SEMI-VOLATILE ORGANICS - GC/MS
METHOD 8270C

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Aniline	ND	1.0
N,N-Dimethylaniline	ND J	1.0

Client ID: **PZ5S**
Site: McKesson Bear St.

Lab Sample No: **781664**
Lab Job No: Z054

Date Sampled: 10/30/06
Date Received: 11/01/06
Date Extracted: 11/05/06
Date Analyzed: 11/12/06
GC Column: DB-5
Instrument ID: BNAMS1.i
Lab File ID: r31214.d

Matrix: WATER
Level: LOW
Sample Volume: 970 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 1.0

SEMI-VOLATILE ORGANICS - GC/MS
METHOD 8270C

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Aniline	ND	1.0
N,N-Dimethylaniline	ND J	1.0

Client ID: **MW24SR**
Site: McKesson Bear St.

Lab Sample No: **781665**
Lab Job No: Z054

Date Sampled: 10/30/06
Date Received: 11/01/06
Date Extracted: 11/05/06
Date Analyzed: 11/12/06
GC Column: DB-5
Instrument ID: BNAMS1.i
Lab File ID: r31215.d

Matrix: WATER
Level: LOW
Sample Volume: 970 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 1.0

SEMI-VOLATILE ORGANICS - GC/MS
METHOD 8270C

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Aniline	ND	1.0
N,N-Dimethylaniline	ND J	1.0

Client ID: **MW24DR**
Site: McKesson Bear St.

Lab Sample No: **781666**
Lab Job No: Z054

Date Sampled: 10/30/06
Date Received: 11/01/06
Date Extracted: 11/05/06
Date Analyzed: 11/12/06
GC Column: DB-5
Instrument ID: BNAMS1.i
Lab File ID: r31216.d

Matrix: WATER
Level: LOW
Sample Volume: 980 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 1.0

SEMI-VOLATILE ORGANICS - GC/MS
METHOD 8270C

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Aniline	ND	1.0
N,N-Dimethylaniline	ND J	1.0

Client ID: **MW19**
Site: McKesson Bear St.

Lab Sample No: **781667**
Lab Job No: Z054

Date Sampled: 10/30/06
Date Received: 11/01/06
Date Extracted: 11/05/06
Date Analyzed: 11/12/06
GC Column: DB-5
Instrument ID: BNAMS1.i
Lab File ID: r31217.d

Matrix: WATER
Level: LOW
Sample Volume: 980 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 1.0

SEMI-VOLATILE ORGANICS - GC/MS
METHOD 8270C

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Aniline	ND	1.0
N,N-Dimethylaniline	ND J	1.0

Client ID: **MW18**
Site: McKesson Bear St.

Lab Sample No: **781668**
Lab Job No: Z054

Date Sampled: 10/30/06
Date Received: 11/01/06
Date Extracted: 11/05/06
Date Analyzed: 11/12/06
GC Column: DB-5
Instrument ID: BNAMS1.i
Lab File ID: r31218.d

Matrix: WATER
Level: LOW
Sample Volume: 980 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 1.0

SEMI-VOLATILE ORGANICS - GC/MS
METHOD 8270C

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Aniline	ND	1.0
N,N-Dimethylaniline	ND J	1.0

Client ID: **MW25S**
Site: McKesson Bear St.

Lab Sample No: **781669**
Lab Job No: Z054

Date Sampled: 10/30/06
Date Received: 11/01/06
Date Extracted: 11/05/06
Date Analyzed: 11/12/06
GC Column: DB-5
Instrument ID: BNAMS1.i
Lab File ID: r31219.d

Matrix: WATER
Level: LOW
Sample Volume: 980 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 1.0

SEMI-VOLATILE ORGANICS - GC/MS
METHOD 8270C

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Aniline	ND	1.0
N,N-Dimethylaniline	ND J	1.0

Client ID: **MW23I**
Site: McKesson Bear St.

Lab Sample No: **781670**
Lab Job No: Z054

Date Sampled: 10/31/06
Date Received: 11/01/06
Date Extracted: 11/05/06
Date Analyzed: 11/12/06
GC Column: DB-5
Instrument ID: BNAMS1.i
Lab File ID: r31226.d

Matrix: WATER
Level: LOW
Sample Volume: 980 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 1.0

SEMI-VOLATILE ORGANICS - GC/MS
METHOD 8270C

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Aniline	ND	1.0
N,N-Dimethylaniline	ND J	1.0

Client ID: **MW23S**
Site: McKesson Bear St.

Lab Sample No: **781671**
Lab Job No: Z054

Date Sampled: 10/31/06
Date Received: 11/01/06
Date Extracted: 11/05/06
Date Analyzed: 11/13/06
GC Column: DB-5
Instrument ID: BNAMS1.i
Lab File ID: r31243.d

Matrix: WATER
Level: LOW
Sample Volume: 980 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 1.0

SEMI-VOLATILE ORGANICS - GC/MS
METHOD 8270C

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Aniline	ND	1.0
N,N-Dimethylaniline	ND J	1.0

Client ID: **MW17R**
Site: McKesson Bear St.

Lab Sample No: **781673**
Lab Job No: Z054

Date Sampled: 10/31/06
Date Received: 11/01/06
Date Extracted: 11/05/06
Date Analyzed: 11/13/06
GC Column: DB-5
Instrument ID: BNAMS1.i
Lab File ID: r31227.d

Matrix: WATER
Level: LOW
Sample Volume: 980 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 1.0

SEMI-VOLATILE ORGANICS - GC/MS
METHOD 8270C

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Aniline	ND	1.0
N,N-Dimethylaniline	ND J	1.0

Client ID: **MW32**
Site: McKesson Bear St.

Lab Sample No: **781674**
Lab Job No: Z054

Date Sampled: 10/31/06
Date Received: 11/01/06
Date Extracted: 11/05/06
Date Analyzed: 11/13/06
GC Column: DB-5
Instrument ID: BNAMS1.i
Lab File ID: r31228.d

Matrix: WATER
Level: LOW
Sample Volume: 1000 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 1.0

SEMI-VOLATILE ORGANICS - GC/MS
METHOD 8270C

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Aniline	ND J	1.0
N,N-Dimethylaniline	ND J	1.0

Client ID: **TW01**
Site: McKesson Bear St.

Lab Sample No: **781675**
Lab Job No: Z054

Date Sampled: 10/31/06
Date Received: 11/01/06
Date Extracted: 11/05/06
Date Analyzed: 11/13/06
GC Column: DB-5
Instrument ID: BNAMS1.i
Lab File ID: r31229.d

Matrix: WATER
Level: LOW
Sample Volume: 970 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 1.0

SEMI-VOLATILE ORGANICS - GC/MS
METHOD 8270C

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Aniline	ND	1.0
N,N-Dimethylaniline	ND J	1.0

Client ID: **MW33**
Site: McKesson Bear St.

Lab Sample No: **781676**
Lab Job No: Z054

Date Sampled: 10/31/06
Date Received: 11/01/06
Date Extracted: 11/05/06
Date Analyzed: 11/13/06
GC Column: DB-5
Instrument ID: BNAMS1.i
Lab File ID: r31230.d

Matrix: WATER
Level: LOW
Sample Volume: 980 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 1.0

SEMI-VOLATILE ORGANICS - GC/MS
METHOD 8270C

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Aniline	84	1.0
N,N-Dimethylaniline	2.9 J	1.0

Client ID: **MW31**
Site: McKesson Bear St.

Lab Sample No: **781677**
Lab Job No: Z054

Date Sampled: 10/31/06
Date Received: 11/01/06
Date Extracted: 11/05/06
Date Analyzed: 11/13/06
GC Column: DB-5
Instrument ID: BNAMS1.i
Lab File ID: r31231.d

Matrix: WATER
Level: LOW
Sample Volume: 980 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 1.0

SEMI-VOLATILE ORGANICS - GC/MS
METHOD 8270C

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Aniline	0.4J	1.0
N,N-Dimethylaniline	1.1 J	1.0

Client ID: **MW9S**
Site: McKesson Bear St.

Lab Sample No: **781678**
Lab Job No: Z054

Date Sampled: 10/31/06
Date Received: 11/01/06
Date Extracted: 11/05/06
Date Analyzed: 11/13/06
GC Column: DB-5
Instrument ID: BNAMS1.i
Lab File ID: r31232.d

Matrix: WATER
Level: LOW
Sample Volume: 980 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 1.0

SEMI-VOLATILE ORGANICS - GC/MS
METHOD 8270C

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Aniline	0.5J	1.0
N,N-Dimethylaniline	3.3 J	1.0

Client ID: **TW02RR**
Site: McKesson Bear St.

Lab Sample No: **781679**
Lab Job No: Z054

Date Sampled: 10/31/06
Date Received: 11/01/06
Date Extracted: 11/05/06
Date Analyzed: 11/13/06
GC Column: DB-5
Instrument ID: BNAMS1.i
Lab File ID: r31244.d

Matrix: WATER
Level: LOW
Sample Volume: 980 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 10.0

SEMI-VOLATILE ORGANICS - GC/MS
METHOD 8270C

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Aniline	2100	10
N,N-Dimethylaniline	ND J	10

Client ID: **MW35**
Site: McKesson Bear St.

Lab Sample No: **781680**
Lab Job No: Z054

Date Sampled: 10/31/06
Date Received: 11/01/06
Date Extracted: 11/05/06
Date Analyzed: 11/13/06
GC Column: DB-5
Instrument ID: BNAMS1.i
Lab File ID: r31234.d

Matrix: WATER
Level: LOW
Sample Volume: 980 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 1.0

SEMI-VOLATILE ORGANICS - GC/MS
METHOD 8270C

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Aniline	1.1 J	1.0
N,N-Dimethylaniline	ND	1.0

Client ID: **MW34**
Site: McKesson Bear St.

Lab Sample No: **781681**
Lab Job No: Z054

Date Sampled: 10/31/06
Date Received: 11/01/06
Date Extracted: 11/05/06
Date Analyzed: 11/13/06
GC Column: DB-5
Instrument ID: BNAMS1.i
Lab File ID: r31235.d

Matrix: WATER
Level: LOW
Sample Volume: 980 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 1.0

SEMI-VOLATILE ORGANICS - GC/MS
METHOD 8270C

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Aniline	9.9	1.0
N,N-Dimethylaniline	1.2 J	1.0

Client ID: **MW36**
Site: McKesson Bear St.

Lab Sample No: **781682**
Lab Job No: Z054

Date Sampled: 10/31/06
Date Received: 11/01/06
Date Extracted: 11/05/06
Date Analyzed: 11/13/06
GC Column: DB-5
Instrument ID: BNAMS1.i
Lab File ID: r31245.d

Matrix: WATER
Level: LOW
Sample Volume: 980 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 2.0

SEMI-VOLATILE ORGANICS - GC/MS
METHOD 8270C

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Aniline	420	2.0
N,N-Dimethylaniline	1.7J / J	2.0

Client ID: **PZ5D**
Site: McKesson Bear St.

Lab Sample No: **781663**
Lab Job No: Z054

Date Sampled: 10/30/06
Date Received: 11/01/06
Date Analyzed: 11/03/06
GC Column: DB624
Instrument ID: BNAGC5.i
Lab File ID: gc5f9831.d

Matrix: WATER
Level: LOW
Injection Volume: 1.0 ul
Final Volume: 0.0 mL
Dilution Factor: 1.0

NONHALOGENATED ORGANICS - GC/FID
ALCOHOLS

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Methanol	ND	500

Client ID: **PZ5S**
Site: McKesson Bear St.

Lab Sample No: **781664**
Lab Job No: Z054

Date Sampled: 10/30/06
Date Received: 11/01/06
Date Analyzed: 11/03/06
GC Column: DB624
Instrument ID: BNAGC5.i
Lab File ID: gc5f9832.d

Matrix: WATER
Level: LOW
Injection Volume: 1.0 ul
Final Volume: 0.0 mL
Dilution Factor: 1.0

NONHALOGENATED ORGANICS - GC/FID
ALCOHOLS

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Methanol	ND	500

Client ID: **MW24SR**
Site: McKesson Bear St.

Lab Sample No: **781665**
Lab Job No: Z054

Date Sampled: 10/30/06
Date Received: 11/01/06
Date Analyzed: 11/03/06
GC Column: DB624
Instrument ID: BNAGC5.i
Lab File ID: gc5f9833.d

Matrix: WATER
Level: LOW
Injection Volume: 1.0 ul
Final Volume: 0.0 mL
Dilution Factor: 1.0

NONHALOGENATED ORGANICS - GC/FID
ALCOHOLS

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Methanol	ND	500

Client ID: **MW24DR**
Site: McKesson Bear St.

Lab Sample No: **781666**
Lab Job No: Z054

Date Sampled: 10/30/06
Date Received: 11/01/06
Date Analyzed: 11/03/06
GC Column: DB624
Instrument ID: BNAGC5.i
Lab File ID: gc5f9834.d

Matrix: WATER
Level: LOW
Injection Volume: 1.0 ul
Final Volume: 0.0 mL
Dilution Factor: 1.0

NONHALOGENATED ORGANICS - GC/FID
ALCOHOLS

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Methanol	ND	500

Client ID: **MW19**
Site: McKesson Bear St.

Lab Sample No: **781667**
Lab Job No: Z054

Date Sampled: 10/30/06
Date Received: 11/01/06
Date Analyzed: 11/03/06
GC Column: DB624
Instrument ID: BNAGC5.i
Lab File ID: gc5f9835.d

Matrix: WATER
Level: LOW
Injection Volume: 1.0 ul
Final Volume: 0.0 mL
Dilution Factor: 1.0

NONHALOGENATED ORGANICS - GC/FID
ALCOHOLS

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Methanol	ND	500

Client ID: **MW18**
Site: McKesson Bear St.

Lab Sample No: **781668**
Lab Job No: Z054

Date Sampled: 10/30/06
Date Received: 11/01/06
Date Analyzed: 11/03/06
GC Column: DB624
Instrument ID: BNAGC5.i
Lab File ID: gc5f9836.d

Matrix: WATER
Level: LOW
Injection Volume: 1.0 ul
Final Volume: 0.0 mL
Dilution Factor: 1.0

NONHALOGENATED ORGANICS - GC/FID
ALCOHOLS

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Methanol	ND	500

Client ID: **MW25S**
Site: McKesson Bear St.

Lab Sample No: **781669**
Lab Job No: Z054

Date Sampled: 10/30/06
Date Received: 11/01/06
Date Analyzed: 11/03/06
GC Column: DB624
Instrument ID: BNAGC5.i
Lab File ID: gc5f9837.d

Matrix: WATER
Level: LOW
Injection Volume: 1.0 ul
Final Volume: 0.0 mL
Dilution Factor: 1.0

NONHALOGENATED ORGANICS - GC/FID
ALCOHOLS

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Methanol	ND	500

Client ID: **MW23I**
Site: McKesson Bear St.

Lab Sample No: **781670**
Lab Job No: Z054

Date Sampled: 10/31/06
Date Received: 11/01/06
Date Analyzed: 11/03/06
GC Column: DB624
Instrument ID: BNAGC5.i
Lab File ID: gc5f9839.d

Matrix: WATER
Level: LOW
Injection Volume: 1.0 ul
Final Volume: 0.0 mL
Dilution Factor: 1.0

NONHALOGENATED ORGANICS - GC/FID
ALCOHOLS

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Methanol	ND	500

Client ID: **MW23S**
Site: McKesson Bear St.

Lab Sample No: **781671**
Lab Job No: Z054

Date Sampled: 10/31/06
Date Received: 11/01/06
Date Analyzed: 11/03/06
GC Column: DB624
Instrument ID: BNAGC5.i
Lab File ID: gc5f9840.d

Matrix: WATER
Level: LOW
Injection Volume: 1.0 ul
Final Volume: 0.0 mL
Dilution Factor: 1.0

NONHALOGENATED ORGANICS - GC/FID
ALCOHOLS

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Methanol	ND	500

Client ID: **MW17R**
Site: McKesson Bear St.

Lab Sample No: **781673**
Lab Job No: Z054

Date Sampled: 10/31/06
Date Received: 11/01/06
Date Analyzed: 11/03/06
GC Column: DB624
Instrument ID: BNAGC5.i
Lab File ID: gc5f9841.d

Matrix: WATER
Level: LOW
Injection Volume: 1.0 ul
Final Volume: 0.0 mL
Dilution Factor: 1.0

NONHALOGENATED ORGANICS - GC/FID
ALCOHOLS

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Methanol	ND	500

Client ID: **MW32**
Site: McKesson Bear St.

Lab Sample No: **781674**
Lab Job No: Z054

Date Sampled: 10/31/06
Date Received: 11/01/06
Date Analyzed: 11/03/06
GC Column: DB624
Instrument ID: BNAGC5.i
Lab File ID: gc5f9842.d

Matrix: WATER
Level: LOW
Injection Volume: 1.0 ul
Final Volume: 0.0 mL
Dilution Factor: 1.0

NONHALOGENATED ORGANICS - GC/FID
ALCOHOLS

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Methanol	ND	500

Client ID: **TW01**
Site: McKesson Bear St.

Lab Sample No: **781675**
Lab Job No: Z054

Date Sampled: 10/31/06
Date Received: 11/01/06
Date Analyzed: 11/03/06
GC Column: DB624
Instrument ID: BNAGC5.i
Lab File ID: gc5f9843.d

Matrix: WATER
Level: LOW
Injection Volume: 1.0 ul
Final Volume: 0.0 mL
Dilution Factor: 1.0

NONHALOGENATED ORGANICS - GC/FID
ALCOHOLS

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Methanol	ND	500

Client ID: **MW33**
Site: McKesson Bear St.

Lab Sample No: **781676**
Lab Job No: Z054

Date Sampled: 10/31/06
Date Received: 11/01/06
Date Analyzed: 11/03/06
GC Column: DB624
Instrument ID: BNAGC5.i
Lab File ID: gc5f9844.d

Matrix: WATER
Level: LOW
Injection Volume: 1.0 ul
Final Volume: 0.0 mL
Dilution Factor: 1.0

NONHALOGENATED ORGANICS - GC/FID
ALCOHOLS

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Methanol	ND	500

Client ID: **MW31**
Site: McKesson Bear St.

Lab Sample No: **781677**
Lab Job No: Z054

Date Sampled: 10/31/06
Date Received: 11/01/06
Date Analyzed: 11/03/06
GC Column: DB624
Instrument ID: BNAGC5.i
Lab File ID: gc5f9845.d

Matrix: WATER
Level: LOW
Injection Volume: 1.0 ul
Final Volume: 0.0 mL
Dilution Factor: 1.0

NONHALOGENATED ORGANICS - GC/FID
ALCOHOLS

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Methanol	ND	500

Client ID: **MW9S**
Site: McKesson Bear St.

Lab Sample No: **781678**
Lab Job No: Z054

Date Sampled: 10/31/06
Date Received: 11/01/06
Date Analyzed: 11/03/06
GC Column: DB624
Instrument ID: BNAGC5.i
Lab File ID: gc5f9846.d

Matrix: WATER
Level: LOW
Injection Volume: 1.0 ul
Final Volume: 0.0 mL
Dilution Factor: 1.0

NONHALOGENATED ORGANICS - GC/FID
ALCOHOLS

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Methanol	ND	500

Client ID: **TW02RR**
Site: McKesson Bear St.

Lab Sample No: **781679**
Lab Job No: Z054

Date Sampled: 10/31/06
Date Received: 11/01/06
Date Analyzed: 11/03/06
GC Column: DB624
Instrument ID: BNAGC5.i
Lab File ID: gc5f9847.d

Matrix: WATER
Level: LOW
Injection Volume: 1.0 ul
Final Volume: 0.0 mL
Dilution Factor: 1.0

NONHALOGENATED ORGANICS - GC/FID
ALCOHOLS

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Methanol	ND	500

Client ID: **MW35**
Site: McKesson Bear St.

Lab Sample No: **781680**
Lab Job No: Z054

Date Sampled: 10/31/06
Date Received: 11/01/06
Date Analyzed: 11/03/06
GC Column: DB624
Instrument ID: BNAGC5.i
Lab File ID: gc5f9848.d

Matrix: WATER
Level: LOW
Injection Volume: 1.0 ul
Final Volume: 0.0 mL
Dilution Factor: 1.0

NONHALOGENATED ORGANICS - GC/FID
ALCOHOLS

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Methanol	ND	500

Client ID: **MW34**
Site: McKesson Bear St.

Lab Sample No: **781681**
Lab Job No: Z054

Date Sampled: 10/31/06
Date Received: 11/01/06
Date Analyzed: 11/03/06
GC Column: DB624
Instrument ID: BNAGC5.i
Lab File ID: gc5f9850.d

Matrix: WATER
Level: LOW
Injection Volume: 1.0 ul
Final Volume: 0.0 mL
Dilution Factor: 1.0

NONHALOGENATED ORGANICS - GC/FID
ALCOHOLS

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Methanol	ND	500

Client ID: **MW36**
Site: McKesson Bear St.

Lab Sample No: **781682**
Lab Job No: Z054

Date Sampled: 10/31/06
Date Received: 11/01/06
Date Analyzed: 11/03/06
GC Column: DB624
Instrument ID: BNAGC5.i
Lab File ID: gc5f9851.d

Matrix: WATER
Level: LOW
Injection Volume: 1.0 ul
Final Volume: 0.0 mL
Dilution Factor: 1.0

NONHALOGENATED ORGANICS - GC/FID
ALCOHOLS

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Methanol	ND	500

Laboratory Narrative

ılatile Organic Analysis (GC/MS):

All data conforms with method requirements.

Base/Neutral and/or Acid Extractable Organics (GC/MS):

QA batch # 4367: MS/BS % recovery of N,N-Dimethylanailine iis outside advisory limits.

Sample # 781668: S- 2-Fluorobiphenyl surrogate std recovery is biased low (Insufficient volume to reextract sample). Sample extract reanalyzed confirming low recovery.

Nonhalogenated Organic Analysis (GC/FID):

All data conforms with method requirements.

I certify that this data package is in compliance with the protocols in NYSDEC ASP B both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this package has been authorized by the Laboratory Manager or his designee

Michael J. Urban

Michael J.Urban
Laboratory Manager

SDG NARRATIVE

STL EDISON

SDG No. Z054

STL Edison Sample	Client ID
781663	PZ5D
781663MS	PZ5DMS
781663SD	PZ5DMSD
781664	PZ5S
781665	MW24SR
781666	MW24DR
781667	MW19
781668	MW18
781669	MW25S
781670	MW23I
781671	MW23S
781672	Trip Blank
781673	MW17R
781674	MW32
781674MS	MW32MS
781674SD	MW32MSD
781675	TW01
781676	MW33
781677	MW31
781678	MW9S
781679	TW02RR
781680	MW35
781681	MW34
781682	MW36

Sample Receipt:

Sample delivery conforms with requirements.

NYSDEC Sample Identification and Analysis Summary Sheets

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY
VOLATILE (VOA)
ANALYSES

Laboratory Sample ID	Matrix	Date Collected	Date Rec'd at Lab	Date Extracted	Date Analyzed
781663	WATER	10/30/06	11/1/06		11/7/06
781664	WATER	10/30/06	11/1/06		11/7/06
781665	WATER	10/30/06	11/1/06		11/7/06
781666	WATER	10/30/06	11/1/06		11/7/06
781667	WATER	10/30/06	11/1/06		11/9/06
781668	WATER	10/30/06	11/1/06		11/9/06
781669	WATER	10/30/06	11/1/06		11/7/06
781670	WATER	10/31/06	11/1/06		11/9/06
781671	WATER	10/31/06	11/1/06		11/7/06
781672	WATER	10/31/06	11/1/06		11/7/06
781673	WATER	10/31/06	11/1/06		11/7/06
781674	WATER	10/31/06	11/1/06		11/7/06
781674MS	WATER	10/31/06	11/1/06		11/7/06
781674SD	WATER	10/31/06	11/1/06		11/7/06
781675	WATER	10/31/06	11/1/06		11/7/06
781676	WATER	10/31/06	11/1/06		11/7/06
781677	WATER	10/31/06	11/1/06		11/9/06
781678	WATER	10/31/06	11/1/06		11/14/06
781679	WATER	10/31/06	11/1/06		11/9/06
781680	WATER	10/31/06	11/1/06		11/9/06
781681	WATER	10/31/06	11/1/06		11/9/06
781682	WATER	10/31/06	11/1/06		11/9/06

10/95

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY
SEMIVOLATILE (BNA)
ANALYSES

Laboratory Sample ID	Matrix	Date Collected	Date Rec'd at Lab	Date Extracted	Date Analyzed
781663	WATER	10/30/06	11/1/06	11/5/06	11/12/06
781664	WATER	10/30/06	11/1/06	11/5/06	11/12/06
781665	WATER	10/30/06	11/1/06	11/5/06	11/12/06
781666	WATER	10/30/06	11/1/06	11/5/06	11/12/06
781667	WATER	10/30/06	11/1/06	11/5/06	11/12/06
781668R1	WATER	10/30/06	11/1/06	11/5/06	11/12/06
781668	WATER	10/30/06	11/1/06	11/5/06	11/12/06
781669	WATER	10/30/06	11/1/06	11/5/06	11/12/06
781670	WATER	10/31/06	11/1/06	11/5/06	11/12/06
781671	WATER	10/31/06	11/1/06	11/5/06	11/13/06
781673	WATER	10/31/06	11/1/06	11/5/06	11/13/06
781674	WATER	10/31/06	11/1/06	11/5/06	11/13/06
781675	WATER	10/31/06	11/1/06	11/5/06	11/13/06
781676	WATER	10/31/06	11/1/06	11/5/06	11/13/06
781677	WATER	10/31/06	11/1/06	11/5/06	11/13/06
781678	WATER	10/31/06	11/1/06	11/5/06	11/13/06
781679	WATER	10/31/06	11/1/06	11/5/06	11/13/06
781680	WATER	10/31/06	11/1/06	11/5/06	11/13/06
781681	WATER	10/31/06	11/1/06	11/5/06	11/13/06
781682	WATER	10/31/06	11/1/06	11/5/06	11/13/06

10/95

Sample Compliance Report

SAMPLE COMPLIANCE REPORT

Sample Delivery Group	Sampling Date	ASP Protocol	Sample ID	Matrix	Compliancy[1]					Noncompliance
					VOC	SVOC	PCB	MET	MISC	
Z054	10/30/2006	2005	PZ5D	Water	No	No	--	--	Yes	VOC – CCAL RRF;%D SVOC – LCS % REC
Z054	10/30/2006	2005	PZ5S	Water	No	No	--	--	Yes	VOC – CCAL RRF;%D SVOC – LCS % REC
Z054	10/30/2006	2005	MW24SR	Water	No	No	--	--	Yes	VOC – CCAL RRF;%D SVOC – LCS % REC
Z054	10/30/2006	2005	MW24DR	Water	No	No	--	--	Yes	VOC – CCAL RRF;%D SVOC – LCS % REC
Z054	10/30/2006	2005	MW19	Water	No	No	--	--	Yes	VOC – CCAL RRF;%D SVOC – LCS % REC
Z054	10/30/2006	2005	MW18	Water	No	No	--	--	Yes	VOC – CCAL RRF;%D SVOC – LCS % REC
Z054	10/30/2006	2005	MW25S	Water	No	No	--	--	Yes	VOC – CCAL RRF;%D SVOC – LCS % REC
Z054	10/31/2006	2005	MW23I	Water	No	No	--	--	Yes	VOC – CCAL RRF;%D SVOC – LCS % REC
Z054	10/31/2006	2005	MW23S	Water	No	No	--	--	Yes	VOC – CCAL RRF;%D SVOC – LCS % REC
Z054	10/31/2006	2005	Trip Blank	Water	No	--	--	--	--	VOC – CCAL RRF;%D
Z054	10/31/2006	2005	MW17R	Water	No	No	--	--	Yes	VOC – CCAL RRF;%D SVOC – LCS % REC
Z054	10/31/2006	2005	MW32	Water	No	No	--	--	Yes	VOC – CCAL RRF;%D SVOC – LCS % REC
Z054	10/31/2006	2005	TW01	Water	No	No	--	--	Yes	VOC – CCAL RRF;%D SVOC – LCS % REC
Z054	10/31/2006	2005	MW33	Water	No	No	--	--	Yes	VOC – CCAL RRF;%D SVOC – LCS % REC
Z054	10/31/2006	2005	MW31	Water	No	No	--	--	Yes	VOC – CCAL RRF;%D SVOC – LCS % REC
Z054	10/31/2006	2005	MW9S	Water	Yes	No	--	--	Yes	SVOC – LCS % REC

Sample Delivery Group	Sampling Date	ASP Protocol	Sample ID	Matrix	Compliancy[1]					Noncompliance
					VOC	SVOC	PCB	MET	MISC	
Z054	10/31/2006	2005	TW02RR	Water	No	No	--	--	Yes	VOC – CCAL RRF;%D SVOC – LCS % REC
Z054	10/31/2006	2005	MW35	Water	No	No	--	--	Yes	VOC – CCAL RRF;%D SVOC – LCS % REC
Z054	10/31/2006	2005	MW34	Water	No	No	--	--	Yes	VOC – CCAL RRF;%D SVOC – LCS % REC
Z054	10/31/2006	2005	MW36	Water	No	No	--	--	Yes	VOC – CCAL RRF;%D SVOC – LCS % REC

1 Samples which are compliant with no added validation qualifiers are listed as "yes". Samples which are non-compliant or which have added qualifiers are listed as "no". A "no" designation does not necessarily indicate that the data have been rejected or are otherwise unusable.

DATA USABILITY SUMMARY REPORT

MCKESSON

BEAR STREET

SDG #Z150

VOLATILE, SEMIVOLATILE AND
METHANOL ANALYSES

Analyses performed by:

Severn Trent Laboratories
Edison, New Jersey

Review performed by:

ARCADIS BBL
Infrastructure, environment, facilities

Syracuse, New York
Report #6419

Summary

The following is an assessment of the data package for sample delivery group (SDG) #Z150 for sampling from the McKesson Bear Street Site. Included with this assessment are the data review check sheets used in the review of the package and corrected sample results. Analyses were performed on the following samples:

Sample ID	Lab ID	Matrix	Sample Date	Analysis				
				VOC	SVOC	PCB	MET	MISC
MW1	782286	Water	11/1/2006	X	X			X
MW3S	782287	Water	11/1/2006	X	X			X
MW27	782288	Water	11/1/2006	X	X			X
MW8SR	782289	Water	11/1/2006	X	X			X
DUP11106	782290	Water	11/1/2006	X	X			X
MW28	782291	Water	11/1/2006	X	X			X
MW29	782292	Water	11/1/2006	X	X			X
MW30	782293	Water	11/1/2006	X	X			X
Trip Blank	782294	Water	11/1/2006	X				

Notes:

1. Matrix spike/matrix spike duplicate (MS/MSD) analyses performed on sample location MW8SR.
2. Sample location DUP11106 is the field duplicate of parent sample location MW27.
3. Miscellaneous parameters include methanol.

VOLATILE ORGANIC COMPOUND (VOC) ANALYSES

Introduction

Analyses were performed according to (United Stated Environmental Protection Agency) USEPA SW-846 Method 8260 as referenced in NYSDEC-ASP. Data were reviewed in accordance with USEPA National Functional Guidelines of October 1999.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with USEPA National Functional Guidelines:

- U — The 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.
- B — The compound has been found in the sample as well as its associated blank, its presence in the sample may be suspect.
- N — The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification.
- 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.
- E — The compound was quantitated above the calibration range.
- D — Concentration is based on a diluted sample analysis.
- C — Identification confirmed by gas chromatograph/mass spectrometer (GC/MS).
- UJ — The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.
- R — The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

Data Assessment

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 8260	Water	14 days from collection to analysis	Cooled @ 4 °C; preserved to a pH of less than 2.
	Soil	14 days from collection to analysis	Cooled @ 4 °C.

All samples were analyzed within the specified holding times.

2. Blank Contamination

Quality assurance blanks (i.e., method, trip, and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Trip blanks measure contamination of samples during shipment. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

No compounds were detected in the associated blanks.

3. Mass Spectrometer Tuning

Mass spectrometer performance was acceptable.

System performance and column resolution were acceptable.

4. Calibration

Satisfactory instrument calibration is established to insure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

4.1 Initial Calibration

The method specifies percent relative standard deviation (%RSD) and relative response factor (RRF) limits for select compounds only. A technical review of the data applies limits to all compounds with no exceptions.

All target compounds associated with the initial calibration standards must exhibit a %RSD less than the control limit (15%) or a correlation coefficient greater than 0.99 and an RRF value greater than control limit (0.05).

4.2 Continuing Calibration

All target compounds associated with the continuing calibration standard must exhibit a percent difference (%D) less then the control limit (20%) and RRF value greater than control limit (0.05).

All calibration criteria were within the control limits.

5. Surrogates/System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. VOC analysis requires that all surrogates associated with the analysis exhibit recoveries within the laboratory-established acceptance limits.

All surrogate recoveries were within control limits.

6. Internal Standard Performance

Internal standard performance criteria insure that the GC/MS sensitivity and response are stable during every sample analysis. The criteria requires the internal standard compounds associated with the VOC exhibit area counts that are not greater than two times (+100%) or less than one-half (-50%) of the area counts of the associated continuing calibration standard.

All internal standard areas and retention times were within established limits.

7. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit a percent recovery within the laboratory-established acceptance limits. The relative percent difference (RPD) between the MS/MSD recoveries must exhibit an RPD within the laboratory-established acceptance limits.

> Note: The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the compound concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater.

The MS/MSD exhibited acceptable recoveries and RPD between MS/MSD recoveries.

8. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The compounds associated with the LCS analysis must exhibit a percent recovery within the laboratory-established acceptance limits.

All compounds associated with the LCS analysis exhibited recoveries within the control limits.

9. Field Duplicate Analysis

Field duplicate analysis is used to assess the precision and accuracy of the field sampling procedures and analytical method. A control limit of 50% for water matrices and 100% for soil matrices is applied to the RPD between the parent sample and the field duplicate.

Results for duplicate samples are summarized in the following table.

Sample ID/Duplicate ID	Compound	Sample Result	Duplicate Result	RPD
MW27/DUP11106	Acetone	31	24	25.4%
	Benzene	14	14	0.0%
	Toluene	71	71	0.0%
	Ethylbenzene	42	45	0.0%
	Xylene(Total)	91	110	18.9%

ND = Not detected.
AC = The field duplicate RPD is acceptable when the RPD between parent sample and field duplicate sample is less than one times the RL and where the parent sample and/or duplicate concentration is less than five times the RL.

The calculated RPDs between the parent sample and field duplicate were acceptable.

10. Compound Identification

Compounds are identified on the GC/MS by using the analytes relative retention time and ion spectra.

All identified compounds met the specified criteria.

11. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

Data Validation Checklist

Volatile Organics Data Validation Checklist

	YES	NO	NA
Data Completeness and Deliverables			
Have any missing deliverables been received and added to the data package?		X	
Is there a narrative or cover letter present?	X		
Are the sample numbers included in the narrative?	X		
Are the sample chain-of-custodies present?	X		
Do the chain-of-custodies indicate any problems with sample receipt or sample condition?		X	
Holding Times			
Have any holding times been exceeded?		X	
Surrogate Recovery			
Are surrogate recovery forms present?	X		
Are all samples listed on the surrogate recovery form?	X		
Was one or more surrogate recovery outside control limits for any sample or blank?		X	
If yes, were the samples reanalyzed?			X
Are there any transcription/calculation errors between the raw data and the summary form?		X	
Matrix Spikes			
Is there a MS recovery form present?	X		
Were matrix spikes analyzed at the required frequency?	X		
How many spike recoveries were outside of QC limits?			
0 out of 32			
How many RPDs for MS/MSD were outside of QC limits?			
0 out of 16			
Blanks			
Is a method blank summary form present?	X		
Has a method blank been analyzed for each day or for each 20 samples, whichever is more frequent?	X		
Has a blank been analyzed at least once every 12 hours for each system used?	X		
Do any method/instrument blanks have positive results?		X	
Are trip/field/rinse blanks associated with every sample?	X		
Do any trip/field/rinse blanks have positive results?		X	

	YES	NO	NA
Tuning and Mass Calibration			
Are the GC/MS tuning forms present for BFB?	X		
Are the bar graph spectrum and mass/charge listing provided for each BFB?	X		
Has a BFB been analyzed for each 12 hours of analysis per instrument?	X		
Have the ion abundance criteria been met for each instrument used?	X		
Target Analytes			
Is an organics analysis data sheet present for each of the following:			
Samples	X		
Matrix spikes	X		
Blanks	X		
Are the reconstructed ion chromatograms present for each of the following:			
Samples	X		
Matrix spikes	X		
Blanks	X		
Is the chromatographic performance acceptable?	X		
Are the mass spectra of the identified compounds present?	X		
Are all ions present in the standard mass spectrum at a relative intensity of 10% or greater also present in the sample spectrum?	X		
Do the samples and standard relative ion intensities agree within 20%?	X		
Tentatively Identified Compounds			
Are all the TIC summary forms present?		X	
Are the mass spectra for the tentatively identified compounds and their associated "best match" spectra present?			X
Are any target compounds listed as TICs?			X
Are all ions present in the reference mass spectrum with a relative intensity greater than 10% also present in the sample mass spectrum?			X
Do the TIC and "best match" spectrum agree within 20%?			X
Quantitation and Detection Limits			
Are there any transcription/calculation errors in the Form 1 results?		X	
Are the reporting limits adjusted to reflect sample dilutions and, for soils, sample moisture?	X		
Standard Data			
Are the quantitation reports and reconstructed ion chromatograms present for the initial and continuing calibration standards?	X		

	YES	NO	NA
Initial Calibration			
Are the initial calibration forms present for each instrument used?	X		
Are the response factor RSDs within acceptable limits?	X		
Are the average RRFs minimum requirements met?	X		
Are there any transcription/calculation errors in reporting the RRFs or RSDs?		X	
Continuing Calibration			
Are the continuing calibration forms present for each day and each instrument?	X		
Has a continuing calibration standard been analyzed for each 12 hours of analysis per instrument?	X		
All %D within acceptable limits?	X		
Are all RF minimum requirements met?	X		
Are there any transcription/calculation errors in reporting of RF or %D?		X	
Internal Standards			
Are internal standard areas of every sample within the upper and lower limits for each continuing calibration?	X		
Are the retention times of the internal standards within 30 seconds of the associated calibration standard?	X		
Field Duplicates			
Were field duplicates submitted with the samples?	X		

SEMI-VOLATILE ORGANIC COMPOUND (SVOC) ANALYSES

Introduction

Analyses were performed according to (United Stated Environmental Protection Agency) USEPA SW-846 Method 8270 as referenced in NYSDEC-ASP. Data were reviewed in accordance with USEPA National Functional Guidelines of October 1999.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with USEPA National Functional Guidelines:

U The 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.

B The compound has been found in the sample as well as its associated blank, its presence in the sample may be suspect.

N The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification.

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.

E The compound was quantitated above the calibration range.

D Concentration is based on a diluted sample analysis.

C Identification confirmed by gas chromatograph/mass spectrometer (GC/MS).

UJ The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.

R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant QC problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

Data Assessment

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 8270	Water	7 days from collection to extraction and 40 days from extraction to analysis	Cooled @ 4 °C
	Soil	14 days from collection to extraction and 40 days from extraction to analysis	Cooled @ 4 °C

All samples were analyzed within the specified holding times.

2. Blank Contamination

Quality assurance blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

No compounds were detected in the associated blanks.

3. Mass Spectrometer Tuning

Mass spectrometer performance was acceptable.

System performance and column resolution were acceptable.

4. Calibration

Satisfactory instrument calibration is established to insure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

4.3 Initial Calibration

The method specifies percent relative standard deviation (%RSD) and relative response factor (RRF) limits for select compounds only. A technical review of the data applies limits to all compounds with no exceptions.

All target compounds associated with the initial calibration standards must exhibit a %RSD less than the control limit (15%) or a correlation coefficient greater than 0.99 and an RRF value greater than control limit (0.05).

4.4 Continuing Calibration

All target compounds associated with the continuing calibration standard must exhibit a percent difference (%D) less then the control limit (20%) and RRF value greater than control limit (0.05).

All calibration criteria were within the control limits.

5. Surrogates/System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. SVOC analysis requires that two of the three SVOC surrogate compounds within each fraction exhibit recoveries within the laboratory-established acceptance limits.

All surrogate recoveries were within control limits.

6. Internal Standard Performance

Internal standard performance criteria insure that the GC/MS sensitivity and response are stable during every sample analysis. The criteria requires the internal standard compounds associated with the SVOC to exhibit area counts that are not greater than two times (+100%) or less than one-half (-50%) the area counts of the associated continuing calibration standard.

All internal standard areas and retention times were within established limits.

7. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit a percent recovery within the laboratory-established acceptance limits. The relative percent difference (RPD) between the MS/MSD recoveries must exhibit an RPD within the laboratory-established acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations were the compounds concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater.

The MS/MSD exhibited acceptable recoveries and RPD between MS/MSD recoveries.

8. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The compounds associated with the LCS analysis must exhibit a percent recovery within the laboratory-established acceptance limits.

All compounds associated with the LCS analysis exhibited recoveries within the control limits.

9. Field Duplicate Analysis

Field duplicate analysis is used to assess the precision and accuracy of the field sampling procedures and analytical method. A control limit of 50% for water matrices and 100% for soil matrices is applied to the RPD between the parent sample and the field duplicate.

Results for duplicate samples are summarized in the following table.

Sample ID/Duplicate ID	Compound	Sample Result	Duplicate Result	RPD
MW27/DUP11106	Aniline	33000	33000	0.0%

ND = Not detected.
AC = The field duplicate RPD is acceptable when the RPD between parent sample and field duplicate sample is less than one times the RL and where the parent sample and/or duplicate concentration is less than five times the RL.

The calculated RPDs between the parent sample and field duplicate were acceptable.

10. Compound Identification

Compounds are identified on the GC/MS by using the analytes relative retention time and ion spectra.

All identified compounds met the specified criteria.

11. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

Data Validation Checklist

Semivolatile Organics Data Validation Checklist

	YES	NO	NA
Data Completeness and Deliverables			
Have any missing deliverables been received and added to the data package?		X	
Is there a narrative or cover letter present?	X		
Are the sample numbers included in the narrative?	X		
Are the sample chain-of-custodies present?	X		
Do the chain-of-custodies indicate any problems with sample receipt or sample condition?		X	
Holding Times			
Have any holding times been exceeded?		X	
Surrogate Recovery			
Are the surrogate recovery forms present?	X		
Are all samples listed on the surrogate recovery form?	X		
Were two or more base-neutral or acid surrogate recoveries outside control limits for any sample or blank?		X	
If yes, were the samples reanalyzed?			X
Are there any transcription/calculation errors between the raw data and the summary form?		X	
Matrix Spikes			
Is there a MS recovery form present?	X		
Were MSs analyzed at the required frequency	X		
How many spike recoveries were outside of QC limits?			
_0_ out of _22_			
How many RPDs for MS/MSD were outside of QC limits?			
_0_ out of _11_			
Blanks			
Is the method blank summary form present?	X		
Has a method blank been analyzed for each set of samples or for each 20 samples, whichever is more frequent?	X		
Has a blank been analyzed for each system used?	X		
Do any method blanks have positive results?		X	
Are field/rinse blanks associated with every sample?		X	
Do any field/rinse blanks have positive results?			X
Tuning and Mass Calibration			
Are the GC/MS tuning forms present for DFTPP?	X		

	YES	NO	NA
Are the bar graph spectrum and mass/charge listing provided for each DFTPP?	X		
Has a DFTPP been analyzed for each 12 hours of analysis per instrument?	X		
Have the ion abundance criteria been met for each instrument used?	X		
Target Analytes			
Is an organics analysis data sheet present for each of the following:			
Samples	X		
Matrix spikes	X		
Blanks	X		
Are the reconstructed ion chromatograms present for each of the following:			
Samples	X		
Matrix spikes	X		
Blanks	X		
Is the chromatographic performance acceptable?	X		
Are the mass spectra of the identified compounds present?	X		
Are all ions present in the standard mass spectrum at a relative intensity of 10% or greater also present in the sample spectrum?	X		
Do the samples and standard relative ion intensities agree within 20%?	X		
Tentatively Identified Compounds			
Are all the TIC summary forms present?		X	
Are the mass spectra for the tentatively identified compounds and their associated "best match" spectra present?			X
Are any target compounds listed as TICs?			X
Are all ions present in the reference mass spectrum with a relative intensity greater than 10% also present in the sample mass spectrum?			X
Do the TIC and "best match" spectrum agree within 20%?			X
Quantitation and Detection Limits			
Are there any transcription/calculation errors in the Form 1 results?		X	
Are the reporting limits adjusted to reflect sample dilutions, and for soils, sample moisture?	X		
Standard Data			
Are the quantitation reports and reconstructed ion chromatograms present for the initial and continuing calibration standards?	X		
Initial Calibration			
Are the initial calibration forms present for each instrument used?	X		
Are the response factor RSDs within acceptable limits?	X		
Are the average RRF minimum requirements met?	X		

	YES	NO	NA
Are there any transcription/calculation error in reporting the RRF or RSD?		X	
Continuing Calibration			
Are the continuing calibration forms present for each day and each instrument?	X		
Has a continuing calibration standard been analyzed for each 12 hours of analysis per instrument?	X		
All %D within acceptable limits?	X		
Are all RF minimum requirements met?	X		
Are there any transcription/calculation errors in reporting of RF or %D?		X	
Internal Standards			
Are internal standard areas of every sample within the upper and lower limits for each continuing calibration?	X		
Are the retention times of the internal standards within 30 seconds of the associated calibration standard?	X		
Field Duplicates			
Were field duplicates submitted with the samples?	X		

MISCELLANEOUS ANALYSES

Introduction

Analyses were performed according to United States Environmental Protection Agency (USEPA) SW-846 Method 8015 as referenced in NYSDEC-ASP. Data were reviewed in accordance with USEPA National Functional Guidelines of October 1994.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with National Functional Guidelines:

U The 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.

B The reported value was obtained from a reading less than the RL but greater than or equal to the IDL.

M Duplicate injection precision not met.

N Spiked sample recovery not within control limits.

* Duplicate analysis not within control limits.

E The reported value is estimated due to the presence of interference.

UJ The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.

R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

Data Assessment

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time
Methanol by SW846 8015	Water	7 days from collection to extraction, 40 days from extraction to analysis
	Soil	14 days from collection to extraction, 40 days from extraction to analysis

All samples were analyzed within the specified holding times.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

No analytes were detected above the reporting limit in the associated blanks.

3. Calibration

Satisfactory instrument calibration is established to insure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

All target compounds associated with the initial calibration standards must exhibit a %RSD less than the control limit (15%) or a correlation coefficient greater than 0.99 and an RRF value greater than control limit (0.05).

All target compounds associated with the continuing calibration standard must exhibit a percent difference (%D) less then the control limit (20%) and RRF value greater than control limit (0.05).

All calibration verification standard recoveries were within the control limit.

4. MS/MSD Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit a percent recovery within the laboratory established acceptance limits. The relative percent difference (RPD) between the MS/MSD recoveries must exhibit a RPD within the laboratory established acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations were the compounds concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater.

The MS/MSD exhibited acceptable recoveries and RPD between MS/MSD recoveries.

5. LCS Analysis

The LCS analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The compounds associated with the LSC analysis must exhibit a percent recovery within the laboratory-established acceptance limits.

The laboratory control sample exhibited results within the control limit.

6. Field Duplicate Analysis

Field duplicate analysis is used to assess the precision and accuracy of the field sampling procedures and analytical method.

Results for duplicate samples are summarized in the following table.

Sample ID/Duplicate ID	Compound	Sample Result	Duplicate Result	RPD
MW27/DUP11106	Methanol	ND(500)	ND(500)	AC

ND = Not detected.
AC = The field duplicate RPD is acceptable when the RPD between parent sample and field duplicate sample is less than one times the RL and where the parent sample and/or duplicate concentration is less than five times the RL.

The calculated RPDs between the parent sample and field duplicate were acceptable.

7. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

Data Validation Checklist

Data Validation Checklist

	YES	NO	NA
Data Completeness and Deliverables			
Have any missing deliverables been received and added to the data package?		X	
Is there a narrative or cover letter present?	X		
Are the sample numbers included in the narrative?	X		
Are the sample chain-of-custodies present?	X		
Do the chain-of-custodies indicate any problems with sample receipt or sample condition?		X	
Holding Times			
Have any holding times been exceeded?		X	
Surrogate Recovery			
Are surrogate recovery forms present?	X		
Are all samples listed on the surrogate recovery form?	X		
Was one or more surrogate recovery outside control limits for any sample or blank?		X	
If yes, were the samples reanalyzed?			X
Are there any transcription/calculation errors between the raw data and the summary form?		X	
Matrix Spikes			
Is there a MS recovery form present?	X	X	
Were matrix spikes analyzed at the required frequency?	X	X	
How many spike recoveries were outside of QC limits?			
0 out of 16			
How many RPDs for MS/MSD were outside of QC limits?			
0 out of 8			
Blanks			
Is a method blank summary form present?	X		
Has a method blank been analyzed for each day or for each 20 samples, whichever is more frequent?	X		
Has a blank been analyzed at least once every 12 hours for each system used?	X		
Do any method/instrument blanks have positive results?		X	
Are trip/field/rinse blanks associated with every sample?		X	
Do any trip/field/rinse blanks have positive results?			X

	YES	NO	NA
Target Analytes			
Is an organics analysis data sheet present for each of the following:			
Samples	X		
Matrix spikes	X		
Blanks	X		
Are the reconstructed ion chromatograms present for each of the following:			
Samples	X		
Matrix spikes	X		
Blanks	X		
Is the chromatographic performance acceptable?	X		
Are the mass spectra of the identified compounds present?			X
Are all ions present in the standard mass spectrum at a relative intensity of 10% or greater also present in the sample spectrum?			X
Do the samples and standard relative ion intensities agree within 20%?			X
Quantitation and Detection Limits			
Are there any transcription/calculation errors in the Form 1 results?		X	
Are the reporting limits adjusted to reflect sample dilutions and, for soils, sample moisture?	X		
Standard Data			
Are the quantitation reports and reconstructed ion chromatograms present for the initial and continuing calibration standards?	X		
Initial Calibration			
Are the initial calibration forms present for each instrument used?	X		
Are the response factor RSDs within acceptable limits?	X		
Are the average RRFs minimum requirements met?	X		
Are there any transcription/calculation errors in reporting the RRFs or RSDs?		X	
Continuing Calibration			
Are the continuing calibration forms present for each day and each instrument?	X		
Has a continuing calibration standard been analyzed for each 12 hours of analysis per instrument?	X		
All %D within acceptable limits?	X		
Are all RF minimum requirements met?	X		
Are there any transcription/calculation errors in reporting of RF or %D?		X	
Field Duplicates			
Were field duplicates submitted with the samples?	X		

Corrected Sample Analysis Data Sheets

Client ID: **MW1**
Site: Syracuse

Lab Sample No: **782286**
Lab Job No: Z150

Date Sampled: 11/01/06
Date Received: 11/02/06
Date Analyzed: 11/08/06
GC Column: Rtx-VMS
Instrument ID: VOAMS10.i
Lab File ID: bb80074.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 8260B

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Methylene Chloride	ND	3.0
Acetone	ND	5.0
Trichloroethene	ND	1.0
Benzene	ND	1.0
Toluene	ND	5.0
Ethylbenzene	ND	4.0
Xylene (Total)	ND	5.0

Client ID: **MW3S**
Site: Syracuse

Lab Sample No: **782287**
Lab Job No: Z150

Date Sampled: 11/01/06
Date Received: 11/02/06
Date Analyzed: 11/08/06
GC Column: Rtx-VMS
Instrument ID: VOAMS10.i
Lab File ID: bb80075.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 8260B

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Methylene Chloride	ND	3.0
Acetone	ND	5.0
Trichloroethene	ND	1.0
Benzene	ND	1.0
Toluene	ND	5.0
Ethylbenzene	ND	4.0
Xylene (Total)	ND	5.0

Client ID: **MW27**
Site: Syracuse

Lab Sample No: **782288**
Lab Job No: Z150

Date Sampled: 11/01/06
Date Received: 11/02/06
Date Analyzed: 11/08/06
GC Column: Rtx-VMS
Instrument ID: VOAMS10.i
Lab File ID: bb80076.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 8260B

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Methylene Chloride	ND	3.0
Acetone	31	5.0
Trichloroethene	ND	1.0
Benzene	14	1.0
Toluene	71	5.0
Ethylbenzene	42	4.0
Xylene (Total)	91	5.0

Client ID: **MW8SR**
Site: Syracuse

Lab Sample No: **782289**
Lab Job No: Z150

Date Sampled: 11/01/06
Date Received: 11/02/06
Date Analyzed: 11/08/06
GC Column: Rtx-VMS
Instrument ID: VOAMS10.i
Lab File ID: bb80077.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 8260B

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Methylene Chloride	ND	3.0
Acetone	28	5.0
Trichloroethene	ND	1.0
Benzene	16	1.0
Toluene	100	5.0
Ethylbenzene	84	4.0
Xylene (Total)	270	5.0

Client ID: **DUP11106**
Site: Syracuse

Lab Sample No: **782290**
Lab Job No: Z150

Date Sampled: 11/01/06
Date Received: 11/02/06
Date Analyzed: 11/08/06
GC Column: Rtx-VMS
Instrument ID: VOAMS10.i
Lab File ID: bb80078.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 8260B

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Methylene Chloride	ND	3.0
Acetone	24	5.0
Trichloroethene	ND	1.0
Benzene	14	1.0
Toluene	71	5.0
Ethylbenzene	45	4.0
Xylene (Total)	110	5.0

Client ID: **MW28**
Site: Syracuse

Lab Sample No: **782291**
Lab Job No: Z150

Date Sampled: 11/01/06
Date Received: 11/02/06
Date Analyzed: 11/09/06
GC Column: Rtx-VMS
Instrument ID: VOAMS10.i
Lab File ID: bb80097.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 8260B

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Methylene Chloride	ND	3.0
Acetone	12	5.0
Trichloroethene	ND	1.0
Benzene	8.2	1.0
Toluene	1.4J	5.0
Ethylbenzene	5.6	4.0
Xylene (Total)	4.4J	5.0

Client ID: **MW29**
Site: Syracuse

Lab Sample No: **782292**
Lab Job No: Z150

Date Sampled: 11/01/06
Date Received: 11/02/06
Date Analyzed: 11/09/06
GC Column: Rtx-VMS
Instrument ID: VOAMS10.i
Lab File ID: bb80098.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 8260B

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Methylene Chloride	ND	3.0
Acetone	5.4	5.0
Trichloroethene	ND	1.0
Benzene	ND	1.0
Toluene	ND	5.0
Ethylbenzene	ND	4.0
Xylene (Total)	ND	5.0

Client ID: **MW30**
Site: Syracuse

Lab Sample No: **782293**
Lab Job No: Z150

Date Sampled: 11/01/06
Date Received: 11/02/06
Date Analyzed: 11/08/06
GC Column: Rtx-VMS
Instrument ID: VOAMS10.i
Lab File ID: bb80081.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 8260B

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Methylene Chloride	ND	3.0
Acetone	11	5.0
Trichloroethene	ND	1.0
Benzene	1.0	1.0
Toluene	ND	5.0
Ethylbenzene	ND	4.0
Xylene (Total)	ND	5.0

Client ID: **TripBlank**
Site: Syracuse

Lab Sample No: **782294**
Lab Job No: Z150

Date Sampled: 11/01/06
Date Received: 11/02/06
Date Analyzed: 11/08/06
GC Column: Rtx-VMS
Instrument ID: VOAMS10.i
Lab File ID: bb80070.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 8260B

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Methylene Chloride	ND	3.0
Acetone	ND	5.0
Trichloroethene	ND	1.0
Benzene	ND	1.0
Toluene	ND	5.0
Ethylbenzene	ND	4.0
Xylene (Total)	ND	5.0

Client ID: **MW1**
Site: Syracuse

Lab Sample No: **782286**
Lab Job No: Z150

Date Sampled: 11/01/06
Date Received: 11/02/06
Date Extracted: 11/06/06
Date Analyzed: 11/13/06
GC Column: DB-5
Instrument ID: BNAMS1.i
Lab File ID: r31246.d

Matrix: WATER
Level: LOW
Sample Volume: 970 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 1.0

SEMI-VOLATILE ORGANICS - GC/MS
METHOD 8270C

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Aniline	ND	1.0
N,N-Dimethylaniline	ND	1.0

Client ID: **MW3S**
Site: Syracuse

Lab Sample No: **782287**
Lab Job No: Z150

Date Sampled: 11/01/06
Date Received: 11/02/06
Date Extracted: 11/06/06
Date Analyzed: 11/13/06
GC Column: DB-5
Instrument ID: BNAMS1.i
Lab File ID: r31247.d

Matrix: WATER
Level: LOW
Sample Volume: 980 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 1.0

SEMI-VOLATILE ORGANICS - GC/MS
METHOD 8270C

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Aniline	ND	1.0
N,N-Dimethylaniline	ND	1.0

Client ID: **MW27**
Site: Syracuse

Lab Sample No: **782288**
Lab Job No: Z150

Date Sampled: 11/01/06
Date Received: 11/02/06
Date Extracted: 11/06/06
Date Analyzed: 11/14/06
GC Column: DB-5
Instrument ID: BNAMS1.i
Lab File ID: r31265.d

Matrix: WATER
Level: LOW
Sample Volume: 950 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 200.0

SEMI-VOLATILE ORGANICS - GC/MS
METHOD 8270C

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Aniline	33000	210
N,N-Dimethylaniline	ND	210

Client ID: **MW8SR**
Site: Syracuse

Lab Sample No: **782289**
Lab Job No: Z150

Date Sampled: 11/01/06
Date Received: 11/02/06
Date Extracted: 11/06/06
Date Analyzed: 11/13/06
GC Column: DB-5
Instrument ID: BNAMS1.i
Lab File ID: r31250.d

Matrix: WATER
Level: LOW
Sample Volume: 980 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 200.0

SEMI-VOLATILE ORGANICS - GC/MS
METHOD 8270C

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Aniline	28000	200
N,N-Dimethylaniline	ND	200

Client ID: **DUP11106**
Site: Syracuse

Lab Sample No: **782290**
Lab Job No: Z150

Date Sampled: 11/01/06
Date Received: 11/02/06
Date Extracted: 11/06/06
Date Analyzed: 11/14/06
GC Column: DB-5
Instrument ID: BNAMS1.i
Lab File ID: r31266.d

Matrix: WATER
Level: LOW
Sample Volume: 990 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 200.0

SEMI-VOLATILE ORGANICS - GC/MS
METHOD 8270C

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Aniline	33000	200
N,N-Dimethylaniline	ND	200

Client ID: **MW28**
Site: Syracuse

Lab Sample No: **782291**
Lab Job No: Z150

Date Sampled: 11/01/06
Date Received: 11/02/06
Date Extracted: 11/06/06
Date Analyzed: 11/14/06
GC Column: DB-5
Instrument ID: BNAMS1.i
Lab File ID: r31264.d

Matrix: WATER
Level: LOW
Sample Volume: 970 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 5.0

SEMI-VOLATILE ORGANICS - GC/MS
METHOD 8270C

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Aniline	1000	5.2
N,N-Dimethylaniline	ND	5.2

Client ID: **MW29**
Site: Syracuse

Lab Sample No: **782292**
Lab Job No: Z150

Date Sampled: 11/01/06
Date Received: 11/02/06
Date Extracted: 11/06/06
Date Analyzed: 11/13/06
GC Column: DB-5
Instrument ID: BNAMS1.i
Lab File ID: r31248.d

Matrix: WATER
Level: LOW
Sample Volume: 980 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 1.0

SEMI-VOLATILE ORGANICS - GC/MS
METHOD 8270C

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Aniline	0.4J	1.0
N,N-Dimethylaniline	ND	1.0

Client ID: **MW30**
Site: Syracuse

Lab Sample No: **782293**
Lab Job No: Z150

Date Sampled: 11/01/06
Date Received: 11/02/06
Date Extracted: 11/06/06
Date Analyzed: 11/13/06
GC Column: DB-5
Instrument ID: BNAMS1.i
Lab File ID: r31249.d

Matrix: WATER
Level: LOW
Sample Volume: 980 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 1.0

SEMI-VOLATILE ORGANICS - GC/MS
METHOD 8270C

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Aniline	200	1.0
N,N-Dimethylaniline	ND	1.0

Client ID: **MW1**
Site: Syracuse

Lab Sample No: **782286**
Lab Job No: Z150

Date Sampled: 11/01/06
Date Received: 11/02/06
Date Analyzed: 11/03/06
GC Column: DB624
Instrument ID: BNAGC5.i
Lab File ID: gc5f9852.d

Matrix: WATER
Level: LOW
Injection Volume: 1.0 ul
Final Volume: 0.0 mL
Dilution Factor: 1.0

NONHALOGENATED ORGANICS - GC/FID
ALCOHOLS

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Methanol	ND	500

Client ID: **MW3S**
Site: Syracuse

Lab Sample No: **782287**
Lab Job No: Z150

Date Sampled: 11/01/06
Date Received: 11/02/06
Date Analyzed: 11/03/06
GC Column: DB624
Instrument ID: BNAGC5.i
Lab File ID: gc5f9853.d

Matrix: WATER
Level: LOW
Injection Volume: 1.0 ul
Final Volume: 0.0 mL
Dilution Factor: 1.0

NONHALOGENATED ORGANICS - GC/FID
ALCOHOLS

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Methanol	ND	500

Client ID: **MW27**
Site: Syracuse

Lab Sample No: **782288**
Lab Job No: Z150

Date Sampled: 11/01/06
Date Received: 11/02/06
Date Analyzed: 11/03/06
GC Column: DB624
Instrument ID: BNAGC5.i
Lab File ID: gc5f9854.d

Matrix: WATER
Level: LOW
Injection Volume: 1.0 ul
Final Volume: 0.0 mL
Dilution Factor: 1.0

NONHALOGENATED ORGANICS - GC/FID
ALCOHOLS

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Methanol	ND	500

Client ID: **MW8SR**
Site: Syracuse

Lab Sample No: **782289**
Lab Job No: Z150

Date Sampled: 11/01/06
Date Received: 11/02/06
Date Analyzed: 11/03/06
GC Column: DB624
Instrument ID: BNAGC5.i
Lab File ID: gc5f9855.d

Matrix: WATER
Level: LOW
Injection Volume: 1.0 ul
Final Volume: 0.0 mL
Dilution Factor: 1.0

NONHALOGENATED ORGANICS - GC/FID
ALCOHOLS

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Methanol	ND	500

Client ID: **DUP11106**
Site: Syracuse

Lab Sample No: **782290**
Lab Job No: Z150

Date Sampled: 11/01/06
Date Received: 11/02/06
Date Analyzed: 11/04/06
GC Column: DB624
Instrument ID: BNAGC5.i
Lab File ID: gc5f9856.d

Matrix: WATER
Level: LOW
Injection Volume: 1.0 ul
Final Volume: 0.0 mL
Dilution Factor: 1.0

NONHALOGENATED ORGANICS - GC/FID
ALCOHOLS

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Methanol	ND	500

Client ID: **MW28**
Site: Syracuse

Lab Sample No: **782291**
Lab Job No: Z150

Date Sampled: 11/01/06
Date Received: 11/02/06
Date Analyzed: 11/04/06
GC Column: DB624
Instrument ID: BNAGC5.i
Lab File ID: gc5f9857.d

Matrix: WATER
Level: LOW
Injection Volume: 1.0 ul
Final Volume: 0.0 mL
Dilution Factor: 1.0

NONHALOGENATED ORGANICS - GC/FID
ALCOHOLS

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Methanol	ND	500

Client ID: **MW29**
Site: Syracuse

Lab Sample No: **782292**
Lab Job No: Z150

Date Sampled: 11/01/06
Date Received: 11/02/06
Date Analyzed: 11/04/06
GC Column: DB624
Instrument ID: BNAGC5.i
Lab File ID: gc5f9858.d

Matrix: WATER
Level: LOW
Injection Volume: 1.0 ul
Final Volume: 0.0 mL
Dilution Factor: 1.0

NONHALOGENATED ORGANICS - GC/FID
ALCOHOLS

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Methanol	ND	500

Client ID: **MW30**
Site: Syracuse

Lab Sample No: **782293**
Lab Job No: Z150

Date Sampled: 11/01/06
Date Received: 11/02/06
Date Analyzed: 11/04/06
GC Column: DB624
Instrument ID: BNAGC5.i
Lab File ID: gc5f9859.d

Matrix: WATER
Level: LOW
Injection Volume: 1.0 ul
Final Volume: 0.0 mL
Dilution Factor: 1.0

NONHALOGENATED ORGANICS - GC/FID
ALCOHOLS

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Methanol	ND	500

Laboratory Narrative

SEVERN TRENT STL

SDG NARRATIVE

STL EDISON

SDG No. Z150

STL Edison Sample	Client ID
782286	MW1
782287	MW3S
782288	MW27
782289	MW8SR
782289MS	MW8SRMS
782289SD	MW8SRMSD
782290	DUP11106
782291	MW28
782292	MW29
782293	MW30
782294	TripBlank

Sample Receipt:

Sample delivery conforms with requirements.

Volatile Organic Analysis (GC/MS):

All data conforms with method requirements.

Base/Neutral and/or Acid Extractable Organics (GC/MS):

QA batch # 4371: MS/MSD % recoveries were diluted out; except for Aniline and 4-Chloroaniline sample amount is too high for spike level (blank spike recoveries within QC limits)

Sample 782288, 782289, and 782290 surrogate recoveries have been diluted out.

nhalogenated Organic Analysis (GC/FID):

All data conforms with method requirements.

I certify that this data package is in compliance with the protocols in NYSDEC ASP B both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this package has been authorized by the Laboratory Manager or his designee

Michael J. Urban

Michael J.Urban
Laboratory Manager

NYSDEC Sample Identification and Analysis Summary Sheets

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY
SEMIVOLATILE (BNA)
ANALYSES

Laboratory Sample ID	Matrix	Date Collected	Date Rec'd at Lab	Date Extracted	Date Analyzed
782286	WATER	11/1/06	11/2/06	11/6/06	11/13/06
782287	WATER	11/1/06	11/2/06	11/6/06	11/13/06
782288	WATER	11/1/06	11/2/06	11/6/06	11/14/06
782289	WATER	11/1/06	11/2/06	11/6/06	11/13/06
782289MS	WATER	11/1/06	11/2/06	11/6/06	11/13/06
782289SD	WATER	11/1/06	11/2/06	11/6/06	11/13/06
782290	WATER	11/1/06	11/2/06	11/6/06	11/14/06
782291	WATER	11/1/06	11/2/06	11/6/06	11/14/06
782292	WATER	11/1/06	11/2/06	11/6/06	11/13/06
782293	WATER	11/1/06	11/2/06	11/6/06	11/13/06

10/95

Sample Compliance Report

SAMPLE COMPLIANCE REPORT

Sample Delivery Group	Sampling Date	ASP Protocol	Sample ID	Matrix	Compliancy[1]					Noncompliance
					VOC	SVOC	PCB	MET	MISC	
Z150	11/1/2006	2005	MW1	Water	Yes	Yes	--	--	Yes	
Z150	11/1/2006	2005	MW3S	Water	Yes	Yes	--	--	Yes	
Z150	11/1/2006	2005	MW27	Water	Yes	Yes	--	--	Yes	
Z150	11/1/2006	2005	MW8SR	Water	Yes	Yes	--	--	Yes	
Z150	11/1/2006	2005	DUP11106	Water	Yes	Yes	--	--	Yes	
Z150	11/1/2006	2005	MW28	Water	Yes	Yes	--	--	Yes	
Z150	11/1/2006	2005	MW29	Water	Yes	Yes	--	--	Yes	
Z150	11/1/2006	2005	MW30	Water	Yes	Yes	--	--	Yes	
Z150	11/1/2006	2005	Trip Blank	Water	Yes	--	--	--	--	

1 Samples which are compliant with no added validation qualifiers are listed as "yes". Samples which are non-compliant or which have added qualifiers are listed as "no". A "no" designation does not necessarily indicate that the data have been rejected or are otherwise unusable.