



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

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

Dear Mr. Rider:

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). This report describes the operation and maintenance (O&M) activities conducted and the monitoring results obtained from January through June 2007. This report was 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) (Blasland, Bouck, & Lee, Inc. [BBL] Revised August 1999a). It was also prepared in accordance with a December 29, 1999 letter from David J. Ulm, of ARCADIS BBL (formerly BBL) to Michael J. Ryan, P.E., of NYSDEC, which presented 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): OU1 - Unsaturated Soil and OU2 - Saturated Soil and Groundwater. The NYSDEC-selected remedy for both OUs includes ongoing O&M activities. Since completing OU1 remedial activities in 1994/1995 and commencing OU2 in-situ anaerobic bioremediation treatment activities in July 1998, biannual reports have been submitted to NYSDEC, detailing both the O&M activities and the results of the process control monitoring program. A site description and history, along with a description of completed remedial actions and ongoing O&M activities, are detailed in previous biannual reports, including BBL's August 2001 Biannual Report, which documented remedial activities from July

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Our ref:
B0026003.00190 #10

Imagine the result

2000 through December 2000 (BBL, 2001). That information remains the same; therefore, it is not repeated herein.

As detailed in the June 2007 Biannual Report, the OU2 in-situ anaerobic treatment program was modified to an in-situ aerobic treatment program in August 2006 upon NYSDEC approval. The in-situ aerobic bioremediation treatment program consists of amending the groundwater with an oxygen source and macronutrients.

During this reporting period (January through June 2007), no substantial system repairs were required and system operations functioned properly. The Area 3 in-situ anaerobic bioremediation treatment system operated satisfactorily during this reporting period without interruption, and approximately 1,000,131 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 June 2007 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. In-situ Aerobic Bioremediation Treatment Program Activities** – Describes the in-situ aerobic bioremediation treatment program activities conducted between January and June 2007.
- **II. Hydraulic Process Control Monitoring** – Describes the results of the hydraulic control monitoring activities conducted between January and June 2007.
- **III. Intermediate Monitoring Event, COC Process Control and Biannual Groundwater Monitoring Program** – Describes the June 2007 results of the COC process control and Biannual Groundwater Monitoring Program, and provides a summary of the COC data obtained at the Site from 1989 through June 2007.
- **IV. Conclusions** – Provides conclusions based on the results of the process control monitoring activities.

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

I. In-situ Aerobic Bioremediation Treatment Program Activities

The in-situ aerobic bioremediation treatment program was verbally approved by NYSDEC in July 2006 as an alternate approach to lowering aniline concentrations at the three areas. This treatment program consists of introducing an oxygen source and macronutrients into Areas 1, 2 and 3. The oxygen source is dilute hydrogen peroxide (H_2O_2), and the macronutrients include nitrogen and phosphorus in the form of Miracle-Gro[®]. The in-situ aerobic bioremediation treatment program was initiated on August 10, 2006, and the following activities were conducted as part of this treatment program (see Figure 1 for referenced locations).

- Added H_2O_2 /nutrient-amended groundwater into the infiltration trenches in Areas 1, 2 and 3 once per week.
- Added H_2O_2 /nutrient-amended groundwater into piezometers in Area 1 (PZ-S, PZ-G, PZ-Q, and PZ-R), 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) once per week 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).

H_2O_2 was added to the groundwater at a concentration of 200 parts per million (ppm), and nutrients were added at a carbon:nitrogen:phosphorus ratio of 50:25:10.

II. Hydraulic Process Control Monitoring

As part of the hydraulic process control monitoring activities, groundwater-level measurements were obtained at existing monitoring wells and piezometers that are screened entirely within the sand layer of the shallow hydrogeologic unit and located in and around each of the three areas. Additionally, a 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 June 6, 2007. The monitoring locations are shown on Figure 1.

Table 1 summarizes the groundwater-level measurements obtained during the June 2007 hydraulic monitoring event, as well as those obtained since June 1998 (immediately prior to commencing the in-situ anaerobic bioremediation treatment activities). Figure 2 depicts the potentiometric surface of the Site's shallow hydrogeologic unit using the June, 6 2007 data set. Site-wide groundwater elevations for this round were consistent with elevations measured since the startup of the treatment system. 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 2.05 gallons per minute (gpm) to 4.87 gpm from January through June 2007.
- 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.
- 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 H₂O₂/nutrient-amended groundwater moves through the area of relatively higher concentrations of COCs (between the secondary infiltration and recovery trenches).
- The hydraulic data obtained over the 8.5-year operating history of the treatment system in Area 3 have 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 millisiemens per centimeter (mS/cm) to 2.13 mS/cm, which is within the range of the conductivity levels measured prior to system operation (1 mS/cm to 4 mS/cm). These measurements are well below the measured conductivity of the deep unit, which is greater than the calibration range of the field instrument (10 mS/cm). These data indicate that the operation of the Area 3

treatment system has not caused the freshwater/saltwater interface to upcone to the base of the withdrawal trench.

III. COC Process Control and Biannual Groundwater Monitoring Program

The COC process control and Biannual Groundwater Monitoring Program activities were conducted from June 6, through June 11, 2007, in accordance with the Site O&M Plan. In addition, the following groundwater quality parameters were measured in the field during the June 2007 COC sampling event: temperature, conductivity, DO and oxidation/reduction potential. 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 2. The monitoring locations are shown on Figure 1.

In accordance with the requirements of the NYSDEC-approved monitoring program, laboratory analytical results for June 2007 samples were validated. A summary of the validated COC groundwater analytical results is presented in Table 3 and shown on Figures 3 and 4. These figures also present the COC groundwater analytical results obtained during the biannual monitoring events conducted from September 2006, which collectively presents the results obtained from the start of the in-situ aerobic bioremediation treatment activities. The COC groundwater analytical results obtained prior to September 2006 are presented in Attachment A. Copies of the validated analytical laboratory reports associated with the June 2007 sampling event are presented in Attachment B. A summary of the COC analytical results and DO measurements, and the downgradient perimeter monitoring locations for each of the three areas is presented herein.

During the June 2007 sampling event, the presence or absence of non-aqueous phase liquid (NAPL) was also assessed in existing monitoring wells and piezometers based on observations made 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.

To monitor the effectiveness of the in-situ aerobic biodegradation treatment program, DO levels were measured on a weekly basis at monitoring locations MW-27, MW-28 and MW-33 beginning in January 2007 and at MW-36 beginning in June 2007. Table 4 summarizes these DO measurements.

In addition, to monitor the effectiveness of the in-situ aerobic biodegradation treatment program an intermediate monitoring event was performed on August 2, 2007. The monitoring locations are shown in Table 5. Aniline and N,N-dimethylaniline were analyzed for each sample. The validated results of this sampling event will be reported in the next biannual report.

The COC analytical results and DO measurements, along with the downgradient perimeter monitoring locations for each area are summarized below.

Area 1

- COC concentrations detected in groundwater samples collected from Area 1 monitoring wells during June 2007 were generally low, ranging from non-detect to concentrations just slightly greater than their respective NYSDEC Groundwater Quality Standard (Figure 3 and Attachment A). The exceptions were ethylbenzene and xylene concentrations in the groundwater samples collected at MW-9S. All COC concentrations detected at Area 1 monitoring wells were approximately equal to or below concentrations detected during the November 2006 sampling event.
- Ethylbenzene concentrations detected at MW-9S increased from 23 parts per billion (ppb) in November 2006 to 42 ppb in June 2007. Xylene concentrations detected at MW-9S increased from 63 ppb in November 2006 to 110 ppb in June 2007. The aniline concentrations detected at MW-33 decreased from 84 ppb in November 2006 to 46 ppb in June 2007.
- Weekly DO levels were measured at MW-33 from January 7, to June 29, 2007 and are summarized in Table 4. The DO levels ranged from 0 to 0.62 ppm.

Area 2

- COC concentrations detected in groundwater samples collected from Area 2 monitoring wells were generally low, with the exception of the aniline concentrations detected in the groundwater samples collected from TW-02RR and MW-36 (Figure 3 and Attachment A).
- Benzene and xylene concentrations were consistent with past sampling events at TW-02RR. While the aniline concentration detected at TW-02RR increased from 2,100 ppb in November 2006 to 6,800 ppb in June 2007, this concentration is still

lower than the 7,600 ppm detected in September 2006. The only COCs that were detected at concentrations greater than their respective NYSDEC Groundwater Quality Standards in the June 2007 sampling event were benzene and xylene.

- Benzene and xylene concentrations were consistent with past sampling events at MW-36. The aniline concentrations detected at MW-36 increased from 420 ppb in November 2006 to 1,300 ppb in June 2007. The only COCs that were detected at concentrations greater than their respective NYSDEC Groundwater Quality Standard in the June 2007 sampling event were benzene and xylene.
- Weekly DO levels were measured in Area 2 (MW-36) from June 7, 2007 to June 29, 2007 and are summarized in Table 4.

Area 3

- COC concentrations detected in groundwater samples collected from Area 3 monitoring wells were generally lower during the June 2007 sampling event than during previous sampling events (Figure 4 and Attachment A).
- 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 decreased from 28,000 ppb in November 2006 to 2,700 ppb in June 2007, which is the lowest aniline concentration detected at MW-8SR since in-situ bioremediation treatment activities began in 1998. The other COC concentrations exceeding their respective NYSDEC Groundwater Quality Standard in the groundwater sample collected from MW-8SR in June 2007 were consistent with previously detected concentrations.
- Aniline concentrations detected at MW-27 decreased from 33,000 ppb in November 2006 to 1,100 ppb in June 2007. Benzene, toluene, ethylbenzene and xylene concentrations detected in the groundwater sample collected from MW-27 in June 2007 also decreased from the concentrations detected in November 2006 (i.e., 40, 87, 67 and 74%, respectively). The other COCs detected in the groundwater sample collected from MW-27 in June 2007 were below their respective NYSDEC Groundwater Quality Standard 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 1,000 ppb in November 2006 to 60 ppb in June 2007, which is the lowest aniline concentration detected in groundwater at MW-28 since the in-situ bioremediation treatment activities began in 1998. Methylene chloride concentrations continue to be below detection limits in groundwater sampled from MW-28 since the May 2005 sampling event. 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 200 ppb in November 2006 to 30 ppb in June 2007 sampling event. No other COCs were detected in this sample at concentrations greater than their respective NYSDEC Groundwater Quality Standard.
- Weekly DO levels were measured at MW-28 and MW-27 from January 7, to June 29, 2007 and are summarized in Table 4. Aerobic conditions in groundwater are generally indicated when DO levels are greater than 2 ppm. The DO levels at MW-28 ranged from 0.21 to 2.76 ppm. The DO levels at MW-27 ranged from 0.20 to 1.87 ppm.

Downgradient Perimeter Monitoring Locations

COCs were not detected above their respective NYSDEC Groundwater Quality Standards at any of the downgradient perimeter monitoring locations during the June 2007 sampling event (Figure 4).

IV. Conclusions

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

- A closed loop hydraulic cell continues to be maintained in Area 3.
- Operation of the Area 3 treatment system has not caused the freshwater/saltwater interface to upcone to the base of the withdrawal trench.
- COCs were not detected above the NYSDEC Groundwater Quality Standards at the perimeter sampling locations in June 2007, which is consistent with prior perimeter groundwater data obtained, in some cases, since 1989.
- COC concentrations detected in the groundwater samples collected from Area 1 demonstrate a significant decrease since the in-situ anaerobic bioremediation treatment activities began in July 1998. COC concentrations have continued to remain low since the in-situ aerobic bioremediation treatment program was introduced in August 2006. The COCs in this area were mostly non-detect. A few COCs (e.g., aniline, N,N-dimethylaniline, 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 (i.e., DO levels greater than 2 ppm) 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 June 2007 aniline concentration (46 ppb) was approximately 88% lower than the June 2006 concentration (370 ppb) (i.e., prior to initiating the in-situ aerobic bioremediation treatment program).
- 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, which increased from 2,100 ppb in November 2006 to 6,800 ppb in June 2007. However, the June 2007 aniline concentration is still lower than the concentration detected in June 2006 (10,000 ppb) prior to initiating the in-situ aerobic bioremediation treatment program. In addition, aniline and N,N-dimethylaniline concentrations decreased and were non-detect at MW-34 in June 2007. The June 2007 results from TW-02RR and MW-34 indicate that the in-situ aerobic bioremediation treatment program is facilitating the reduction of aniline.

- Based on the DO levels measured in Area 2, it is not apparent that aerobic conditions were achieved. In addition, the June 2007 aniline concentration at MW-36 in Area 2 (1,300 ppb) was higher than the November 2006 aniline concentration (420 ppb). The low DO levels and the increase in aniline concentration detected at MW-36 in June 2007 indicates that there may be an oxygen sink in this area and a higher amount of oxygen source is necessary for the continuous reduction of aniline.
- Since initiating the in-situ bioremediation treatment activities in 1998, most COCs detected at Area 3 monitoring locations have decreased or remained relatively the same. In particular, aniline concentrations at MW-8SR, MW-27 and MW-28 have decreased significantly (i.e., 88, 92 and 86%, respectively) between the end of the anaerobic treatment program in June 2006 and the June 2007 sampling event (i.e., after the initiation of the aerobic treatment program in June 2007).
- Although the weekly DO levels measured in Area 3 during June did exceed 2 ppm, it is not apparent that continuous aerobic conditions were achieved; however, the lower aniline concentrations detected at MW-8SR, MW-27 and MW-28 during the June 2007 sampling event indicates that the in-situ aerobic bioremediation treatment program facilitated the reduction of aniline. The increased amount of oxygen source introduced appears to be necessary for the continuous reduction of aniline.

V. Recommendations

Consistent with the previous Biannual Report, it is recommended that the oxygen source (diluted H_2O_2) continue to be introduced into Area 1 and Area 3 at a concentration of 200 ppm. However, based on the increases in aniline concentrations observed in Area 2 it is recommended that the diluted H_2O_2 be introduced into Area 2 at an increased concentration of 400 ppm beginning in November 2007.

Diluted H_2O_2 will continue to be introduced weekly in all three areas. In addition, the macronutrients (Miracle-Gro[®]) will also be added weekly at the same carbon:nitrogen:phosphorus ratio of 50:25:10. The H_2O_2 /nutrient-amended groundwater will be injected into the infiltration trenches. The H_2O_2 /nutrient-amended groundwater will also be introduced into Area 1 at PZ-S, PZ-Q, PZ-G, PZ-R, 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 continue to be measured in the field at MW-33 in Area 1, MW-36 in Area 2, and 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). In addition to elevated DO levels, an increased heterotrophic bacteria population would also indicate that H_2O_2 is enhancing the biodegradation processes occurring at the Site (i.e., the growth of COC-degrading bacteria is being enhanced). Therefore, it is recommended that the heterotrophic bacteria populations be measured at MW-3S, MW-27 and MW-28 during the next biannual sampling event. Background heterotrophic bacteria population would be measured from MW-3S and then compared to the populations measured at MW-27 and MW-28 where DO levels have begun to increase.

The Biannual Groundwater Monitoring Program activities will continue to be conducted at the Site (Table 2). As previously discussed, a supplemental sampling event was conducted on August 2, 2007, and groundwater samples were collected and analyzed for aniline and N,N-dimethylaniline. The monitoring locations used for this supplemental sampling event are presented in Table 5. The second biannual sampling event of 2007 is anticipated to be conducted in November 2007.

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

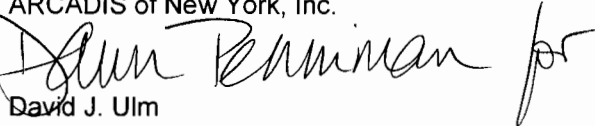
The effectiveness of aerobic biodegradation and its continuous application will be assessed in the next Biannual Report using the aniline and DO data collected from the supplemental sampling event conducted in August and the November 2007 sampling event. In addition, the next Biannual Report for the July to December 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 2, 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 will 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.

A handwritten signature in black ink, appearing to read "David J. Ulm for".

David J. Ulm
Senior Vice President

Attachments

Copies:

Mr. Jim Burke, P.E., NYSDEC (w/out Attachment B)
Mr. Chris Mannes, NYSDEC (w/out Attachment B)
Ms. Henriette Hamel, R.S., NYSDOH (w/out Attachment B)
Ms. Jean A. Mescher, McKesson Corporation (w/out Attachment B)
Mr. Christopher R. Young, P.G., de maximis, inc. (w/out Attachment B)

ARCADIS BBL

Tables

Table 1. Summary of Select Groundwater Level Measurements, 2007 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
Canal	393.39*	362.91	363.37	363.72	363.08	363.08	362.94		362.78	362.94			362.84	363.27	
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
MW-3S	376.54	365.93	366.26	367.82	366.20			365.29							365.25
MW-3D	375.56	365.63	365.87	366.16			364.97	364.85						365.08	365.00
MW-6D	377.07	365.75	366.01	366.29										365.25	365.15
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
MW-9D	376.76**	365.78					365.14	365.10						365.25	365.16
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
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
MW-18	372.57	362.64													361.90
MW-19	376.00	362.42													361.78
MW-23I	372.77	365.04	365.34	365.72			364.34		364.45	364.16			364.43	364.43	364.34
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
MW-24DR	375.14	365.41													364.63
MW-24SR	375.55	365.15	365.32	365.66	364.91	364.45	364.27		364.20				364.36	364.47	364.37
MW-25D	373.67	365.43													364.74
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
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
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
PZ-8D	375.83	365.90	366.11	366.35			365.25	365.13	365.83					365.35	365.27
PZ-9D	377.29	365.73					365.47	365.28						365.12	365.03
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
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
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
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
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
PZ-F	377.06	366.17					365.56	365.50						365.37	365.27
PZ-G	377.16	366.21					365.66	365.60						365.46	365.36
PZ-HR	376.99	366.16					365.54							365.44	365.34
PZ-I	375.15	366.56					365.86	365.64						365.88	365.57
PZ-J	374.89	366.15					365.53	365.40						365.53	365.39
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
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
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
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
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
PZ-P	376.89	366.25					365.65	365.60						365.52	365.39
PZ-Q	377.61	366.23					365.64	365.57						365.45	365.35
PZ-R	377.05	366.23		366.94			365.65	365.57						365.50	365.38
PZ-S	378.13	366.19					365.57	365.52						365.43	365.35
PZ-T	376.25	366.14					365.54	365.43						365.52	365.38
PZ-U	375.35	365.99		366.81			365.50	365.33						365.37	365.30
PZ-V	375.78	366.07					365.48	365.35						365.43	365.29
PZ-W	375.78	366.07					365.46	365.31						365.41	365.28

See Notes on Page 4.

Table 1. Summary of Select Groundwater Level Measurements, 2007 Biannual Process Control Monitoring Report,
McKesson Envirosystems Former Bear Street Facility, Syracuse, New York

Location	Reference Elevation (feet AMSL)	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	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
Canal	393.39*	363.14	362.21	363.11			363.22	362.78	363.73	363.75	362.75^	363.24	363.01	362.96	364.59
Collection Sump	372.81	361.75	363.09	361.93	361.73	363.17	362.45	361.87	362.99	361.48	361.69	361.66	361.59	362.04	362.27
MW-3S	376.54	365.67	366.81	365.67	365.25		365.26		357.10						367.70
MW-3D	375.56	365.04		365.04	364.91	365.41	364.92	364.57	355.64	365.57	364.81	355.16	365.40	364.54	364.16
MW-6D	377.07	365.23	365.36	365.23	365.06	365.62	365.12	364.79	365.85	365.77	364.97	365.34	365.64	364.75	364.22
MW-8D	374.68	364.86		364.88	364.74	365.22	364.77	364.35	365.42	365.36	364.62	364.94	365.18	364.34	364.13
MW-9D	376.76**	365.22	365.36	365.26	365.08	365.65	365.17	364.83	365.88	365.80	365.01	365.36	365.68	364.76	364.05
MW-11D	373.68	364.73		364.73	364.57	365.02	364.80	364.18	365.24	365.18	364.46	364.81	364.96	364.18	364.07
MW-11S	373.50	363.69	364.27	363.79	363.61	364.50	363.88	363.39	364.72	364.35	363.55	363.86	364.48	363.33	363.57
MW-18	372.57	361.93	362.05	362.05	361.84	362.18	361.79	361.38	362.43	361.77	361.71	362.08	362.17	361.50	361.65
MW-19	376.00	361.84	361.98	361.87	361.89	362.15	361.80	361.46	362.58	361.88	361.90	362.25	362.44	361.82	361.83
MW-23I	372.77	364.36		364.47	364.26	364.69	364.28	363.83	364.99	364.93	364.25	364.58	364.73	363.99	363.99
MW-23S	372.61	362.52	363.35	362.66	362.46	363.64	362.94	362.42	363.85	363.17	362.64	362.87	363.59	362.36	363.97
MW-24DR	375.14	364.67	364.81	364.69	364.54	364.96	364.49	364.09	365.19	364.60	364.39	364.77	364.91	364.16	364.06
MW-24SR	375.55	364.44	364.66	364.50	364.33	364.87	364.41	363.95	365.12	365.55	364.30	364.60	364.86	364.05	364.00
MW-25D	373.67	364.76		364.77	364.64	365.07	364.64	364.20	365.28	365.20	364.51	364.84	364.97	364.22	364.19
MW-25S	373.39	362.87	363.48	362.96	362.79	363.89	363.20	364.75	364.12	363.69	362.94	363.23	364.14	362.61	364.39
PZ-4D	376.11	364.73	364.87	364.72	364.55	365.02	364.60	364.22	365.28	365.21	364.49	364.82	365.03	364.22	364.06
PZ-5D	375.58	364.93	365.09	364.94	364.78	365.28	364.86	364.47	365.57	365.48	364.71	365.10	365.36	364.46	364.12
PZ-6D	375.83	365.33	365.48	365.33	365.19	365.78	365.08	365.00							
PZ-9D	377.29	365.08	365.24		364.94	365.50	365.04	364.68	365.70	365.72	364.87	365.16	365.55	364.60	363.75
PZ-A	373.94	362.60	364.04	362.72	362.56	363.81	363.12	362.61	363.95	363.15	362.75	362.91	363.56	362.58	363.92
PZ-B	373.92	362.51	364.27	362.62	363.45	363.91	363.19	362.67	364.08	363.32	362.79	362.94	363.94	362.55	364.44
PZ-C	374.85	365.52	365.97	365.18	365.02	365.79	365.10	364.75	366.04	366.04	365.03	365.35	366.39	364.54	365.68
PZ-D	375.12	365.53	366.06	365.25	365.12	365.79	365.18	364.89	366.09	366.10	365.10	365.46	366.36	364.65	365.58
PZ-E	374.12	363.53	366.41	363.57	363.52	364.93	364.20	363.81	365.16	365.03	363.92	364.40	365.90	363.49	366.51
PZ-F	377.06	365.52	365.73	365.62	365.27	366.36	365.53	365.11	366.89	366.72	365.27	365.70	367.06	364.93	365.50
PZ-G	377.16	365.60	365.76	365.71	365.44	366.44	365.61	365.17	366.89	366.80	365.36	365.75	367.11	364.93	365.39
PZ-HR	376.99	365.54	365.84	365.60	365.39	366.34	365.55	365.11	366.80	366.68	365.33	365.66	367.02	364.91	365.39
PZ-I	375.15	365.90	366.59	366.05	365.76	366.93	365.79	365.23	367.30	367.23	365.55	366.08	367.81	364.91	366.29
PZ-J	374.89	365.55	365.93	365.59	365.47	366.21	365.53	365.14	366.55	366.50	365.32	365.64	366.69	364.96	365.10
PZ-K	373.19	362.66	363.70	362.78	362.58	363.87	363.13	362.59	363.97	363.19	362.69	362.86	363.53	362.49	363.82
PZ-L	374.62	362.51	363.59	362.65	362.45	363.69	363.00	362.47	363.84	363.03	362.61	362.68	363.42	362.47	363.44
PZ-M	374.35	363.01	364.07	363.13	362.94	364.06	363.40	362.90	364.22	363.54	363.05	363.24	363.86	362.90	363.93
PZ-N	376.94***	365.56	366.09	365.31	365.12	365.87	365.19	364.87	366.17	366.12	NM	365.35	366.43	364.47	366.60
PZ-O	375.36	362.75	363.74	362.87	362.68	364.01	363.25	362.73	364.22	363.57	362.86	363.06	364.22	362.64	364.47
PZ-P	376.89	365.61	365.78	365.73	365.44	366.43	365.59	365.18	366.85	366.73	365.34	365.77	367.02	364.93	365.31
PZ-Q	377.61	365.59	365.70	365.71	365.42	366.44	365.60	365.16	366.93	366.78	365.26	365.76	367.21	364.89	366.11
PZ-R	377.05	365.61	365.81	365.67	365.47	366.46	365.61	365.20	366.89	366.81	365.37	365.72	367.21	364.93	365.40
PZ-S	378.13	365.57	365.94	365.65	365.40	366.39	365.56	365.15	366.84	366.73	365.32	365.71	367.12	364.90	365.27
PZ-T	376.25	365.58	365.96	365.64	365.47	366.34	365.53	365.10	366.71	366.65	365.29	375.70	366.90	364.90	365.34
PZ-U	375.35	365.49	365.91	365.55	365.40	366.17	365.46	365.08	366.55	366.49	365.22	365.60	366.75	364.85	365.18
PZ-V	375.78	365.47	365.90	365.52	365.37	366.20	365.44	365.06	366.54	366.50	365.25	365.58	366.76	364.83	365.30
PZ-W	375.78	365.44	365.78	365.53	365.33	366.15	365.41	365.02	366.49	366.41	365.20	365.59	366.63	364.85	365.05

See Notes on Page 4.

Table 1. Summary of Select Groundwater Level Measurements, 2007 Biannual Process Control Monitoring Report,
McKesson EnviroSystems Former Bear Street Facility, Syracuse, New York

Location	Reference Elevation (feet AMSL)	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	6/6/07
Canal	393.39*	363.64	364.17	362.19	^^	363.34	363.34	363.39	363.39	364.39***	363.84	363.69	364.29	362.99
Collection Sump	372.81	361.50	361.42	362.05	361.90	361.91	361.86	362.11	362.00	361.49	362.96	361.70	363.18	362.26
MW-3S	376.54	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	364.55	365.10	363.92	365.10	365.53	365.05	365.59	365.27	365.36	366.25	366.07	366.90	365.52
MW-6D	377.07	364.62	365.21	364.07	365.31	365.75	365.24	365.80	365.46	365.59	366.45	366.29	367.07	365.72
MW-8D	374.88	364.51	365.01	363.82	^^	365.30	364.83	365.39						
MW-9D	376.76**	364.47	365.10	364.00	365.31	365.79	365.26	365.85	365.51	365.64	366.47	366.34	366.91	365.83
MW-11D	373.68	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	363.89	364.33	363.09	364.15	364.38	363.89	364.34	363.98	364.12	365.06	365.04	366.11	364.27
MW-18	372.57	362.09	362.50	361.37	362.26	362.69	362.26	362.62	362.29	362.37	363.17	363.07	363.82	362.63
MW-19	376.00	362.11	362.57	361.51	362.52	361.91	362.48	362.89	362.59	362.69	363.50	363.38	364.09	362.93
MW-23I	372.77	364.34	364.80	363.62	364.60	365.01	364.56	364.99	364.67	364.77	365.66	365.47	366.43	365.02
MW-23S	372.61	363.38	363.68	362.50	362.26	363.31	362.81	363.04	362.77	362.80	364.05	363.80	365.28	362.98
MW-24DR	375.14	364.43	364.90	363.71	364.75	365.13	364.69	365.19	364.86	364.94	365.90	365.74	366.59	365.28
MW-24SR	375.55	364.40	364.86	363.64	364.69	365.03	364.82	365.12	364.78	364.88	365.81	365.66	366.49	365.21
MW-25D	373.67	364.57	365.02	363.82	364.82	365.24	364.74	365.26	364.93	365.00	364.49	365.77	366.64	365.30
MW-25S	373.39	363.83	364.21	362.74	363.61	363.67	363.19	363.49	363.08	363.14	365.63	364.13	365.26	363.32
PZ-4D	376.11	364.43	364.94	363.73	364.81	365.23	364.78	365.28	364.96	365.07	365.96	365.85	366.64	365.29
PZ-5D	375.58	364.47	365.03	363.81	365.05	365.49	365.02	365.53	365.20	365.29	365.19	365.98	366.87	365.49
PZ-8D	375.83													
PZ-9D	377.29	364.14	364.79	363.71	365.08	365.64	365.09	365.68	365.35	365.48	366.33	366.19	366.91	365.26
PZ-A	373.94	363.05	363.22	362.59	^^	363.40	363.57	363.18	362.89	362.96	364.20	364.14	365.62	363.11
PZ-B	373.92	363.24	363.40	362.65	363.39	363.47	363.89	363.21	362.92	362.92	364.32	364.32	365.85	363.12
PZ-C	374.85	365.38	366.26	364.19	365.65	365.76	365.44	366.07	365.50	365.65	366.65	366.45	367.14	365.85
PZ-D	375.12	365.41	366.21	364.21	365.65	365.84	365.53	366.11	365.62	365.75	366.75	366.57	367.68	365.98
PZ-E	374.12	364.63	364.77	363.47	364.94	365.00	366.92	364.58	364.07	364.47	365.25	366.51	368.13	365.16
PZ-F	377.06	365.51	366.29	364.29	366.25	366.41	365.46	366.65	365.75	366.13	367.59	367.16	368.32	366.18
PZ-G	377.16	365.53	366.22	364.36	366.35	366.46	365.43	366.68	365.81	366.14	367.76	366.97	368.64	366.28
PZ-HR	376.99	365.46	366.19	364.24	366.22	366.41	365.50	366.62	365.81	366.12	367.56	367.14	368.31	366.23
PZ-I	375.15	366.16	367.05	364.22	366.58	366.90	365.97	367.01	365.26	366.41	368.02	367.82	369.00	366.49
PZ-J	374.89	365.18	365.89	364.21	365.96	366.73	365.61	366.45	365.86	366.07	367.29	367.04	367.96	366.16
PZ-K	373.19	363.19	363.48	362.56	363.25	363.36	363.12	363.13	362.84	362.97	364.21	364.01	365.58	363.36
PZ-L	374.62	362.96	363.26	362.53	363.42	363.25	363.06	363.04	362.79	362.91	364.02	363.89	365.23	362.94
PZ-M	374.35	363.37	363.62	362.82	363.60	363.77	363.66	363.61	363.31	363.45	364.53	364.40	365.80	363.54
PZ-N	376.94***	365.29	366.13	364.09	365.54	365.74	364.48	365.95	365.47	365.53	366.56	366.41	367.51	365.76
PZ-O	375.36	363.63	363.98	362.75	363.61	363.53	363.36	363.43	363.04	363.13	364.36	364.26	365.42	363.22
PZ-P	376.89	365.48	366.19	364.25	366.25	366.45	365.53	366.65	365.87	366.20	367.63	367.19	368.30	366.31
PZ-Q	377.61	365.70	366.41	364.41	366.40	366.55	365.38	366.77	365.85	366.21	367.80	367.16	368.61	366.33
PZ-R	377.05	365.58	366.31	364.31	366.34	366.46	365.31	366.72	365.85	366.17	367.73	367.15	368.51	366.19
PZ-S	378.13	365.53	366.29	364.31	366.29	366.42	365.42	367.18	367.10	366.31	367.83	367.20	372.48	366.51
PZ-T	376.25	365.37	366.10	364.20	366.16	366.38	365.74	366.54	365.85	366.13	367.48	367.15	368.04	366.24
PZ-U	375.35	365.23	365.96	364.18	366.00	365.83	365.66	366.43	365.82	366.05	367.33	367.07	367.99	366.07
PZ-V	375.78	365.24	365.97	364.15	365.98	366.71	365.84	366.44	365.76	365.99	367.33	367.06	367.97	366.17
PZ-W	375.78	365.12	365.86	364.09	365.88	366.18	365.49	366.36	365.72	365.98	367.21	366.94	367.79	366.01

See Notes on Page 4.

**Table 1. Summary of Select Groundwater Level Measurements, 2007 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. Revised Long-Term Hydraulic and COC Process Control Monitoring Schedule, 2007
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 2. Revised Long-Term Hydraulic and COC Process Control Monitoring Schedule, 2007 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 3. Summary of Historical Groundwater Monitoring Data, 2007 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-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	5.0 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	<5.0	<5.0	<5.0	<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
	6/07			<5	<1.0	<5.0	<4.0	<5.0	<500	<1.0	<5.0	<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	4.0	31	<1,000	<10	790	170	<10
	8/95			<1,000	<5	<5	<5	<5	<1,000	<5.0	15	2.0 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	<5.0	1.7 J	<5	<5

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Table 3. Summary of Historical Groundwater Monitoring Data, 2007 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-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			6.0 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	<5.0	<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
	6/07			<5.0	<1.0	<5.0	<4.0	<5.0	<500	<1.0	<5.0	<1.0	<3.0
MW-3D	8/95	343.8	339	<1,000	<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	28,000 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	164 DJ	<1,000	<500	35,000 D	5,300 D	10,000 D
	6/05			81 J	13	100	53	180	<1,000	<1.0	30,000	<200	<3.0
	11/05			15 J	13	130	66	260	<1,000	<1.0	32,000	<260 J	<3.0

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Table 3. Summary of Historical Groundwater Monitoring Data, 2007 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 (cont'd.)	8/06			48	15	120	79	260	<1,000	<1.0	23,000	<200	<3.0
	9/06			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
	6/07			58	14	110	83	250	<500	<2.0	2,700	<22	<6.0
MW-9 ^D (Replaced by MW-9S)	1/89	365.6	356	1,600	NA	64	130	270	<1,000	<10	660	1,200	1,500
	11/89			<1,000	48	25	60	60	<1,000	<10	670	150	<10
	11/91			<100	<10	9	19	30	<1,000	<1.0	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	5.0 J	<10
	3/00			<10	2 J	2 J	11	21	<1,000 J	<10	2.0 J	9.0 J	<10
	9/00			<10 J	11 J	2 J	6.0 J	18 J	<1,000	<10 J	1.0 J	6.0 J	<10 J
	3/01			<10	1 J	3 J	17	61	<1,000	<10	2.0 J	11	<10
	9/01			<10	10	3 J	7.0 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	<5.0	2.0 J	<10
	5/03			<12	11	<5	7	18	<1,000	<5.0	0.9 J	3.0 J	<5
	10/03			<12	2 J	<5	5	19	<1,000	<5.0	1.0 J	<5.0	<5
	6/04			14 J	6 J	2.0 J	8 J	19 J	<1,000	<10	<5.0	<5.0	<10
	11/04			<25	4 J	2 J	9 J	30 J	<1,000	<10	<5.0	<5.0	<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	3.8 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
	6/07			<5.0	1.4	3.3 J	42	110	<500	<1.0	<5.0	4.1	<3.0
MW-10 ^D (Replaced by MW-9D)	1/89	355.5	345.9	<1,000,000	<10,000	<10,000	<10,000	<10,000	210,000	<10,000	720	9,400	520,000
	11/89			<100,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	900	2,400	28,000
	11/91			<100	<1	3.0	2.0	<3.0	<1,000	<1	230	<10	41
	8/95			<1,000	<25 UD	<25 UD	<25 UD	<25 UD	<1,000	<25 UD	<5.0	<10	350 D
MW-11 ^D (Replaced MW-6D)	1/89	355.1	345.5	<100	<1	<1	<1	<1	8,400	<1	<12	<12	1
	11/89			<100	<1	<1	<1	<1	<1,000	<1	230	<52	<1
	8/95			<1,000	<5	<5	<5	<5	<1,000	<5	<5	<10	<10
MW-11S	12/94	359.9	354.9	<380	<10	<10	<10	<10	880	<10	<5	<10	<10
	8/95			<1,000	<5	<5	<5	<5	<1,000	<5	<5	<10	<26
	10/95			NA	<5	<5	<5	<5	NA	<5	NA	NA	<5
MW-11D	12/94	349.8	344.8	<310	<5	<5	<5	<5	2,100	<5	<5	<10	<5
	8/95			<1,000	<5	<5	<5	<5	<1,000	<5	<5	<10	<10
	10/95			NA	<5	<5	<5	<5	NA	<5	NA	NA	<5

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Table 3. Summary of Historical Groundwater Monitoring Data, 2007 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-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	2.0 J	<5	<10	40
MW-13S	11/89	368.7	359.1	<100	3	<1	<1	<1	<1,000	<1.0	<52	<52	<1.0
	11/90			<100	<1	<1	<1	<3	<1,000	<1.0	<10	<10	<1.0
	11/91			<100	<1	<1	<1	<3	<1,000	<1.0	<10	<10	<1.0
	11/92			<100	<1	<1	<1	<3	<1,000	<1.0	<10	<10	<1.0
MW-14D ^C	1/89	359	349.4	<100	<1	<1	<1	<1	<1,000	<1.0	<11	<11	<1.0
	11/89			<100	<1	<1	<1	<1	<1,000	<1.0	<10	<10	<1.0
MW-15S	1/89	370	360.25	<100	<1	<1	<1	<1	<1,000	<1.0	<11	<11	<1.0
	11/89			<100	<1	<1	<1	<1	<1,000	<1.0	<52	<52	<1.0
MW-16D ^C	1/89	350.8	341.2	<100	<1	<1	<1	<1	<1,000	<1.0	<11	<11	<1.0
	11/89			<100	<1	<1	<1	<1	<1,000	<1.0	<10	<10	<1.0
MW-17 ^C (Replaced by MW-17R)	11/90	365.7	356.1	<100	<1	<1	<1	<3	<1,000	<1.0	<10	<10	<1.0
	11/91			<100	<1	<1	<1	<3	<1,000	<1.0	<10	<10	<1.0
	11/92			<100	<1	<1	<1	<3	<1,000	<1.0	<10	<10	<1.0
	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	<5.0	<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
	8/06			<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
	6/07			<5.0	0.7 J	<5.0	<4.0	<5.0	<500	<1.0	<5.0	<1.0	<3.0

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Table 3. Summary of Historical Groundwater Monitoring Data, 2007 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-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	<10	<1
	11/91			<100	<1	<1	<1	<3	<1,000	<1	<10	<10	<10	<1
	11/92			<100	<1	<1	<1	<3	<1,000	<1	<10	<10	<10	<1
	12/94			<10	<5	<5	<5	<5	<200	<5	<5	<10	<10	<5
	8/95			<1,000	<5	<5	<5	<5	<1,000	<5	<5	<10	<10	<10
	2/96			<1,000	<10	<10	<10	<10	<1,000	<10	<5	<10	<10	<10
	8/96			<10	<10	<10	<10	<10	<1,000	<10	<5	<10	<10	<10
	2/97			<10	<10	<10	<10	<10	<1,000	<10	<5	<10	<10	<10
	8/97			<10	<10	<10	<10	<10	<1,000	<10	<5	<10	<10	<10
	9/98			<10	<10	<10	<10	<10	<1,000	<10	<5 ^H	<10	<10	<10
	2/99			<10	<10	<10	<10	<10	<1,000	<10	<10	<10	<10	<10
	7/99			<10 J	<10	<10	<10	<10	<1,000	<10	<10	<10	<10	<10
	3/00			<10	<10	<10	<10	<10	<1,000 J	<10	<5	<10	<10	<10
	9/00			<10 J	<10 J	<10 J	<10 J	<10 J	<1,000 J	<10 J	<10 J	<10 J	<10	<10 J
	3/01			<10	<10	<10	<10	<10	<1,000	<10	<10	<10	<10	<10
	9/01			<10	<10	<10	<10	<10	<1,000	<10	<10	<10	<10	<10
	4/02			<10	<10	<10	<10	<20	720 J	<10	280 D (<5) ^H	200 D (<5) ^H	<10	<10
	10/02			6 J	<10	<10	<10	<20	<1,000	<10	<5 ^H	<5 ^H	<10	<10
	5/03			<12	<5	<5	<5	<5	280 J	<5	<5	<5	<5	<5
	10/03			<12	<5	<5	<5	<10	<1,000	<5	0.7 J	<5	<5	<5
	6/04			<25	<10	<10	<10	<20	<1,000	<10	R	R	<10	<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	<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	<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	<1.0	<3.0
	11/06			R	<1.0	<5.0	<4.0	<5.0	<500	<1.0	<1.0	<1.0 J	<1.0 J	<3.0
	6/07			<5.0	<1.0	<5.0	<4.0	<5.0	<500	<1.0	<5.0	<1.0	<1.0	<3
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 3. Summary of Historical Groundwater Monitoring Data, 2007 Biannual Process Control Monitoring Report,
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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-19 (cont'd.)	3/00			<10	<10	<10	<10	<10	<1,000 J	<10	<5	<10	<10
	9/00			<10 J	<10 J	<10 J	<10 J	<10 J	<1,000 J	<10 J	<10 J	<10	<10 J
	3/01			<10	<10	<10	<10	<10	<1,000	<10	<10	<10	<10
	9/01			<10	<10	<10	<10	<10	<1,000	<10	<10	<10	<10
	4/02			<10	<5	<5	<5	<10	<1,000	<5	<5	<5	<5
	10/02			<25 J	<10	<10	<10	<20 J	<1,000	<10	<5 ^d	<5 ^d	<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
	6/07			<5.0	<1.0	<5.0	<4.0	<5.0	<500	<1.0	<5.5	<1.1	<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	314.85	<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 ^d	<5 ^d	<10
	5/03			<62	<25	<25	<25	<50	380 J	<25	<5	<5	<25
	10/03			<12	<5	<5	<5	<10	<1,000	<5	60	<5	<5

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Monitoring Well	Sampling Date	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 (cont'd.)	6/04			<25	<10	<10	<10	<20	<1,000	<10	<5	<5	<10
	11/04			--	--	--	--	<1,000	--	<5	<5	--	
	6/05			<5.0 J	<1.0	<5.0	<4.0	<5.0	<1,000	<1.0	<1.0	<1.0	<3.0
	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
	6/07			<5.0	<1.0	<5.0	<4.0	<5.0	<500	<1.0	<5.0	<1.0	<3
MW-23I	12/94	341.2	336.2	<10	<5.0	<5	<5.0	<5.0	<200	<5.0	<5.0	<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
	6/07			<5.0	<1.0	<5.0	<4.0	<5.0	<500	<1.0	<5.0	<1.0	<3.0
MW-24S ^C (Replaced by MW-24SR)	12/94	358.4	352.4	<10	<5	<5	<5	<5	<1,000	<5	<5	<10	<5
	8/95			<1,000	<5	<5	<5	<5	<1,000	<5	<5	<10	<10
	2/96			<1,000	<10	<10	<10	<10	<1,000	<10	<5	<10	<10
	2/97			<1,000	<10	<10	<10	<10	<1,000	<10	<5	<10	<10
	9/98			<10	<10	<10	<10	<10	<1,000	<10	<5 ^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

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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-24S ^C (cont'd.)	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
	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	<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 (Replaced by MW-24DR)	12/94	334.4	341.2	<10	<5	<5	<5	<5	<1,000	<5	<5	<10	<5
8/95	<1,000			<5	<5	<5	<5	<1,000	<5	<5	<10	<10	
2/96	<1,000			<10	<10	<10	<10	<1,000	<10	<5	<10	<10	
2/97	<1,000			<10	<10	<10	<10	<1,000	<10	<5	<10	<10	
9/98	<10			<10	<10	<10	<10	<1,000	<10	<5 ^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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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-25S (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	<1.1	<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
	6/07			<5.0	<1.0	<5.0	<4.0	<5.0	<500	<1.0	<5	<1	<3.0
MW-25D	8/95	349.55	344.55	<1,000	<5	<5	<5	<5	<1,000	<5	<5	1 J	<5
	10/95			NA	<5	<5	<5	<5	NA	3 J	<5	<10	<5
	8/96			15	<10	<10	<10	<10	<1,000	<10	<5	<10	<10
	8/97			<10	<10	<10	<10	<10	<1,000	<10	<5	<11	<10
	2/99			<10	<10	<10	<10	<10	<1,000	<10	<10	<10	<10 J
	3/00			<10	<10	<10	<10	<10	<1,000 J	<10	<5	<10	<10
	3/01			<10	<10	<10	<10	<10	<1,000	<10	5 J	<10	<10
	4/02			<10	<5	<5	<5	<10	<1,000	<5	<5	<5	<5
	5/03			<12	<5	<5	<5	<5	<1,000	<5	<5	<5	<5
	6/04			<25	<10	<10	<10	<20	<1,000	<10	<5	<5	<10
	6/05			<5.0 J	<1.0	<5.0	<4.0	<5.0	<1,000	<1.0	<1.0	<1.0	<3.0
	6/06			<5.0 J	<1.0	0.7 J	<4.0	<5.0	<1,000	<1.0	<1.0	<1.0	<3.0
	6/07			12 J	<1.0	<5.0	<4.0	<5.0	<500	<1.0	<5.0	<1.0	<3
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)
	6/07			21	8.4	9.5	14	24	<500	<1.0	1100	<10	<3.0

See Notes on Page 18.

Table 3. Summary of Historical Groundwater Monitoring Data, 2007 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-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	
	10/02			14 J	8 J	6 J	11	12 J	<1,000	<10	2,700 D	R	<10	
	5/03			13	4 J	2 J	2 J	8 J	<1,000	<5	1,000 DJ	3 J	52	
	10/03			24	11	6	12	13 J	<1,000	<5	1,900 D	<5	<5	
	6/04			20 J	4 J	2 J	5 J	4 J	<1,000	<10	910 D	<5	<10	
	11/04			<120 (<25)	<50 (4 J)	<50 (<10)	<50 (5 J)	<100 (3 J)	190 J	<50 (<10)	640 DJ	<5	<50 (<10)	
	6/05			5.2 J	4.5	1.2 J	4.6	3.9 J	<1,000	<1.0	630	<5.0	<3.0	
	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	
	6/07			13	4.6	0.4 J	0.8 J	0.6 J	<500	<1.0	60	<1.0	<3.0	
MW-29	9/98	362.9	345.9	<10	<10	<10	<10	2 J	<1,000	<10	<10	13	<10	
	2/99			7 J	<10	<10	<10	1 J	<1,000	<10	5 J	4 J	<10	
	7/99			<10	<10	<10	<10	<10	<1,000	<10	2 J	4 J	<10	
	3/00			<10	<10	<10	<10	<10	<1,000 J	<10	450 D	6 J	<10	
	9/00			<10 J	<10 J	<10 J	<10 J	<10 J	<1,000 J	<10 J	24 J	4 J	<10 J	
	3/01			<10	<10	<10	<10	<10	<1,000	<10	30	4 J	<10	
	9/01			<10	<10	<10	<10	<10	<1,000	<10	7 J	2 J	<10	
	4/02			<10	<5	<5	<5	<10	<1,000	<5	3 J	9	<6	
	10/02			<25 J	<10	<10	<10	<20	<1,000	<10	8	R	4 JN	
	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	
	6/07			<5.0	<1.0	<5.0	<4.0	0.5 J	<500	<1.0	<5.5	<1.1	<3.0	

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Table 3. Summary of Historical Groundwater Monitoring Data, 2007 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-30	9/98	363.5	355.5	<10	<10	<10	<10	<10	<1,000	<10	<10	<10	<10
	2/99			7 J	<10	<10	<10	<10	<1,000	<10	<10	2 J	<10
	7/99			<10	0.7 J	<10	<10	<10	<1,000	0.5 J	<10	1 J	<10
	3/00			<10	<10	<10	<10	<10	<1,000 J	<10	18	2 J	4 J
	9/00			<10 J	<10 J	<10 J	<10 J	<10 J	<1,000 J	<10 J	9 J	2 J	2 J
	3/01			<10	<10	<10	<10	<10	<1,000	<10	8 J	2 J	<10
	9/01			4 J	2 J	<10	<10	<10	<1,000 J	<10	8 J	1 J	<10
	4/02			<10	<5	<5	<5	<10	<1,000	<5	250	210	<5
	10/02			<25 J	<10	<10	<10	<20 J	<1,000	<10	R	R	<10
	5/03			<62	<25	<25	<25	<50	<1,000	<25	18	0.6 J	8 J
	10/03			<12	<5	<5	<5	<10	<1,000	<5	4 J	<5	<5
	6/04			<25	<10	<10	<10	<20	<1,000	<10	<5	<5	<10
	11/04			<120	<50	<50	<50	<100	<1,000	<50	<5	<5	<50
	6/05			<5.0 J	0.3 J	<5.0	<4.0	<5.0	<1,000	<1.0	<1.0	<1.0	<3.0
	11/05			<5.0 J	0.7 J	0.8 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
	6/07			<5.0	<1.0	<5.0	<4.0	<5.0	<500	<1.0	30	<1.1	<3.0
MW-31	9/98	363.7	355.4	<10	12	<10	<10	<10	<1,000	<10	34	4 J	<10
	7/99			<10	16	<10	<10	<10	<1,000	<10	230 D	3 J	<10
	3/00			<10	16	<10	<10	<10	<1,000 J	<10	3 J	4 J	<10
	9/00			<10 J	12 J	<10 J	<10 J	<10 J	<1,000	<10 J	10	6 J	<10 J
	3/01			21	11	<10	<10	<10	<1,000	<10	<10	5 J	<10
	9/01			<10	14	<10	<10	<10	<1,000 J	<10	91 D	3 J	<10
	4/02			<14	9	<5	<5	<10	<1,000	<5	804 D	21	<5
	10/02			<25	11	<10	<10	<20	<1,000	<10	560 D	1 J	<10
	5/03			<12	9	<5	<5	<10	<1,000	<5	9.9 J	3 J	<5
	10/03			1,200 D	13	<5	<5	<5	<1,000	<5	88	<5	<5
	6/04			15 J	12	<10	<10	<20	<1,000	<10	3 J	<5	<10
	11/04			<25	9 J	<10	<10	<20	<1,000	<10	<5	<5	<10
	6/05			<5.0 J	11	<5.0	<4.0	1.3 J	<1,000	<1.0	3.2	2.7	<3.0
	11/05			<1.3 J	6.7	<0.4	<0.5	0.8	<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
	6/07			<5.0	14	0.7 J	<4.0	1.3 J	<500	<1.0	<5.0	2.0	<3.0

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Table 3. Summary of Historical Groundwater Monitoring Data, 2007 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-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	19	<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
	6/07			<5.0	<1.0	<5.0	<4.0	<5.0	<500	<1.0	<5.0	<1.0	<3.0
MW-33	9/98	344.1	356.1	<10	<10	<10	<10	<10	<1,000	<10	9 J	6 J	<10
	2/99			<10	<10	<10	<10	<10	<1,000	<10	120	0 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	1,340 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	15	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			
6/07	<5.0	5.7	0.4 J	<4.0	<5.0	<500	<1.0	46	2.6	<3.0			

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Table 3. Summary of Historical Groundwater Monitoring Data, 2007 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-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	390 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	
	6/07			22	0.9 J	0.5 J	<4.0	0.6 J	<500	<1.0	<5.0	<1.0	<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	
	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	8.2	<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	
	6/07			13	<1.0	<5.0	<4.0	<5.0	<500	<1.0	<5.0	<1.0	<3.0	
MW-36	9/98	363.6	355.6	<10	<10	<10	<10	<10	<1,000	<10	290 D	6 J	<10	
	2/99			<10	<10	<10	<10	<10	<1,000	<10	860 D	4 J	<10	
	7/99			8 J	0.8 J	<10	<10	<10	<1,000	<10	250	<10	<10	
	3/00			<10 J	<10	<10	<10	<10	<1,000 J	<10	60	7 J	<10	
	9/00			5 J	<10 J	<10 J	<10 J	<10 J	<1,000 J	<10 J	8 J	6 J	<5	
	3/01			<10	<10	<10	<10	<10	<1,000	<10	<10	<10	<10	

See Notes on Page 18.

**Table 3. Summary of Historical Groundwater Monitoring Data, 2007 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-36 (cont'd.)	9/01			54	<10	<10	<10	<10	<1,000 J	<10	350 D	5 J	<10
	4/02			<20	<5	<5	<5	<10	<1,000	<5	9	41	<5
	10/02			12 J	<10	<10	<10	<20	<1,000	<10	2 J	2 J	<10
	5/03			9 J	<5	<5	<5	<10	<1,000	<5	67	4 J	<5
	10/03			580 D	<5	<5	<5	<10	<1,000	<5	100	<5	<5
	6/04			22 J	<10 J	<10 J	<10 J	<20 J	<1,000	<10 J	33	7	<10 J
	11/04			13 J	<10	<10	<10	<20	<1,000	<10	22	<5	<10
	6/05			24 J	2.1	<5.0	<4.0	1.0 J	<1,000	<1.0	1,200	<5.4	<3.0
	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
	6/07			33	4.6	1.4 J	0.8 J	5.0	<500	<1.0	1,300	<10	<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
	6/04			6 J	3 J	<10	<10	<20	<1,000	<10	<5	<5	<10
	11/04			<25	2 J	<10	<10	<20	<1,000	<10	<5	<5	<10
	6/05			<5.0 J	1.8	<5.0	<4.0	<5.0	<1,000	<1.0	<1.0	<1.0	<3.0
	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
	6/07			7.8	0.5 J	<5.0	<4.0	<5.0	<500	<1.0	<5.0	<1.0	<3.0
TW-02 ^C (Replaced by TW-02R) ^E	12/96	363.3	353.3	53	10	77	16	65	<1,000	585 D	15,900 JD	3,920 D	42,449 D
	9/98			<500 J	<500 J	<500 J	<500 J	53,000	5,000	300 J	38,000 D	61,000 D	86,000 D
	2/99			<1,000	<1,000	190 J	<1,000	150 J	14,000JN	<1,000	83,000 D	7,900	14,000 B
	7/99			630	37	240 J	31	150	<1,000	55	100,000 D	3,500 J	9,700 D
	3/00			<1,000 J	<1,000	160 J	<1,000	240 J	<1,000 J	<1,000	64,000 D	3,900	13,000
	9/00			190 J	28 J	95 J	35 J	160 J	<1,000	6 J	79,000	<10,000	390 J
	3/01			81	19	68	28	130	<1,000	<10	67,000 D	650 J	400 D
	9/01			57	25	70	31	140	<1,000 J	<20	63,000 D	32	48 B

See Notes on Page 18.

**Table 3. Summary of Historical Groundwater Monitoring Data, 2007 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
TW-02 ^c (cont'd.)	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	3.6	2.1 J	3.6 J	9.6	<1,000	0.3 J	8,400	<50	<3.0
	11/05			26 J	6	4.1	3.6	11	<1,000	<0.4	14,000	<110 J	<0.5
	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
	6/07			17	5.5	1.3 J	4.0	8.8	<500	<1.0	6,800	<100	<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
	6/07			<5.0	<1.0	<5.0	<4.0	<5.0	<500	<1.0	<5.5	<1.1	<3
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

See Notes on Page 18.

Table 3. Summary of Historical Groundwater Monitoring Data, 2007 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
PZ-4S (cont'd.)	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
	6/07			<5.0	<1.0	<5.0	<4.0	<5.0	<500	<1.0	<5.5	<1.1	<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	46	<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
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	
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

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**Table 3. Summary of Historical Groundwater Monitoring Data, 2007 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
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 18.

**Table 3. Summary of Historical Groundwater Monitoring Data, 2007 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/piezometers were resampled for aniline and N,N-dimethylaniline during 1/03, because the 10/02 results were rejected due to matrix spike and matrix spike duplicate recoveries below control limits. These wells and piezometers are perimeter monitoring locations.
- ^H = MW-18, MW-19, MW-23I, MW-23S, MW-24DR, MW-24SR, MW-28, PZ-5S, and PZ-5D wells/piezometers were resampled for aniline during 12/98, because the 9/98 results were rejected due to laboratory error.
- ^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.)

**Table 4. Summary of Dissolved Oxygen Measurements, 2007 Biannual Process Control Monitoring Report, McKesson EnviroSystems
Former Bear Street Facility, Syracuse, New York**

Monitoring Date	Dissolved Oxygen (ppm)			
	MW-33 (Area 1)	MW-36 (Area 2)	MW-27 (Area 3)	MW-28 (Area 3)
1/7/2007	0.30	-	0.27	0.21
1/12/2007	0.24	-	0.27	0.30
1/19/2007	0.23	-	0.20	0.37
1/26/2007	0.26	-	0.61	0.57
2/9/2007	0.24	-	0.28	0.44
2/22/2007	0.33	-	0.44	0.30
3/2/2007	0.62	-	0.20	0.36
3/16/2007	0.29	-	0.37	0.55
3/23/2007	0.25	-	0.22	0.46
3/30/2007	0.47	-	0.45	0.79
4/5/2007	0.31	-	0.59	0.91
4/19/2007	0.32	-	0.27	0.73
4/26/2007	0.26	-	0.49	0.48
5/11/2007	0.50	-	0.43	0.58
5/25/2007	0.22	-	0.53	0.81
6/1/2007	0.30	-	0.32	0.70
6/7/2007	0	0	0.19	2.23
6/29/2007	0.48	0.90	1.87	2.76

Table 5. Intermediate Sampling Event, 2007 Biannual Process Control Monitoring Report, McKesson EnviroSystems Former Bear Street Facility, Syracuse, New York

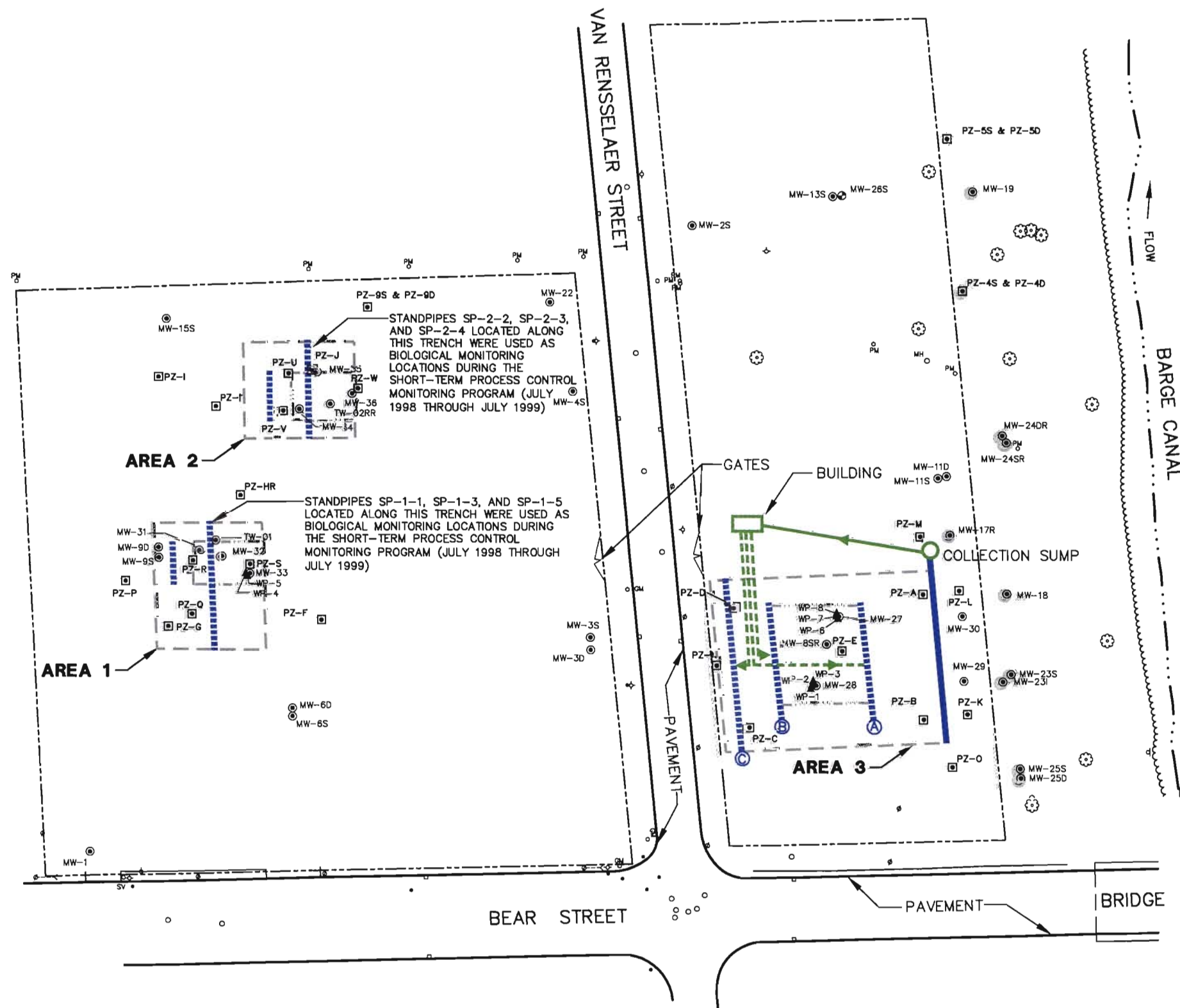
Monitoring Location	August Intermediate Event
Area 1	
MW-31	C
MW-33	C
Area 2	
TW-02RR	C
MW-36	C
Area 3	
MW-8SR	C
MW-27	C
MW-28	C

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).

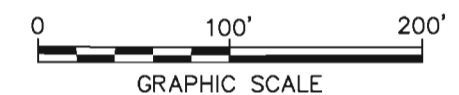
ARCADIS_{BBL}

Figures



- LEGEND:
- UTILITY POLE
 - CATCH BASIN
 - PETROLEUM PIPE LINE MARKER
 - GAS LINE MARKER
 - SEWER VENT
 - HYDRANT
 - WATER VALVE
 - MANHOLE
 - PROPERTY LINE
 - GROUNDWATER MONITORING WELL
 - BIANNUAL DOWNGRADE PERIMETER GROUNDWATER MONITORING LOCATION
 - PIEZOMETER
 - PUMPING WELL
 - WELL POINT
 - 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
 - TREE LINE
 - EDGE OF BARGE CANAL

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

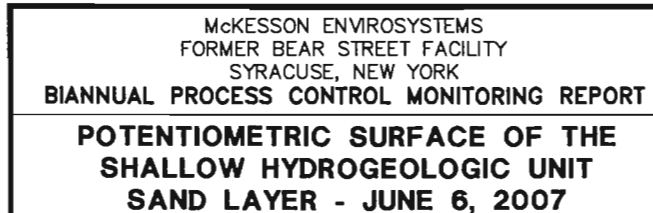


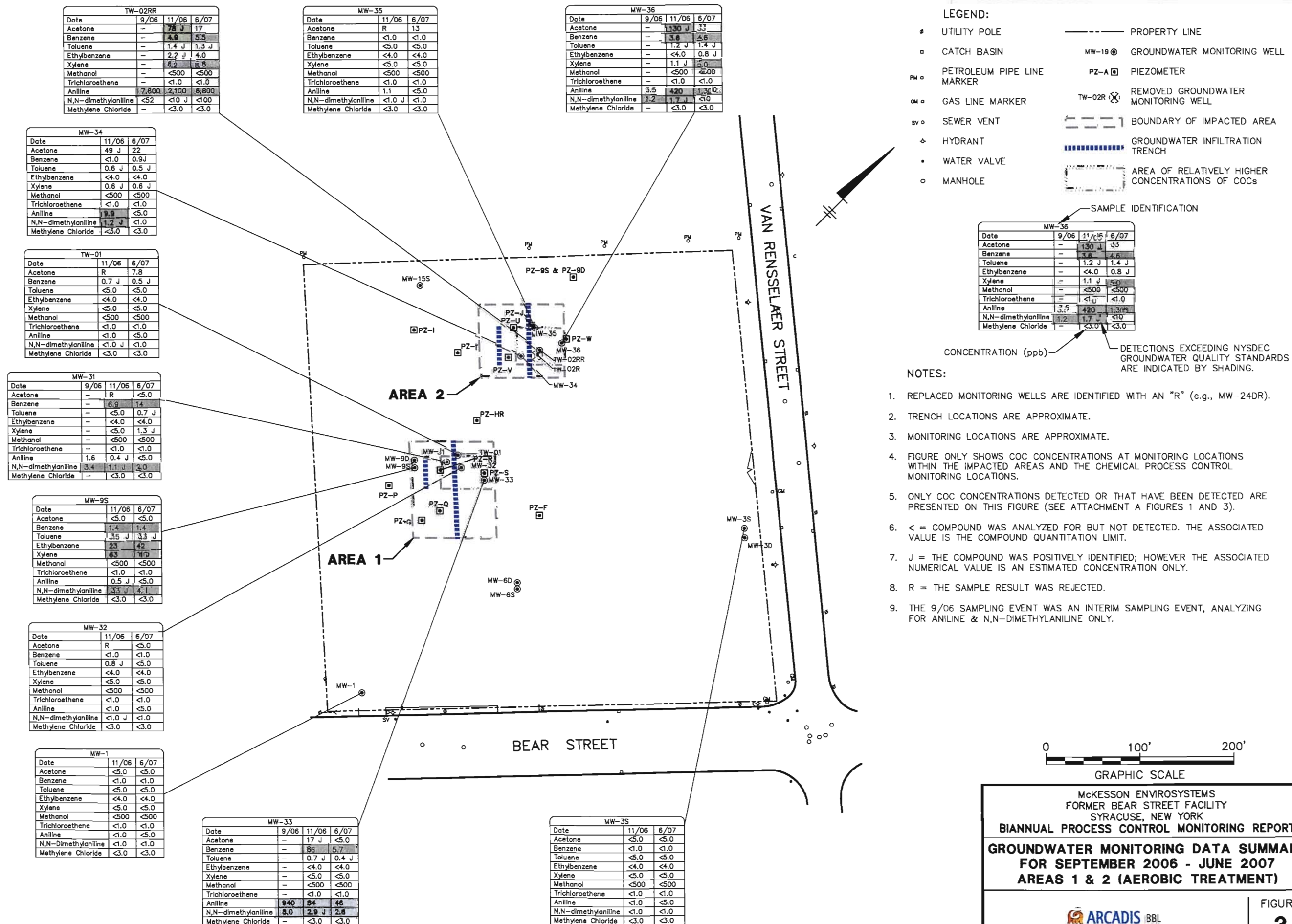
MCKESSON ENVROSYSYSTEMS
FORMER BEAR STREET FACILITY
SYRACUSE, NEW YORK
BIANNUAL PROCESS CONTROL MONITORING REPORT

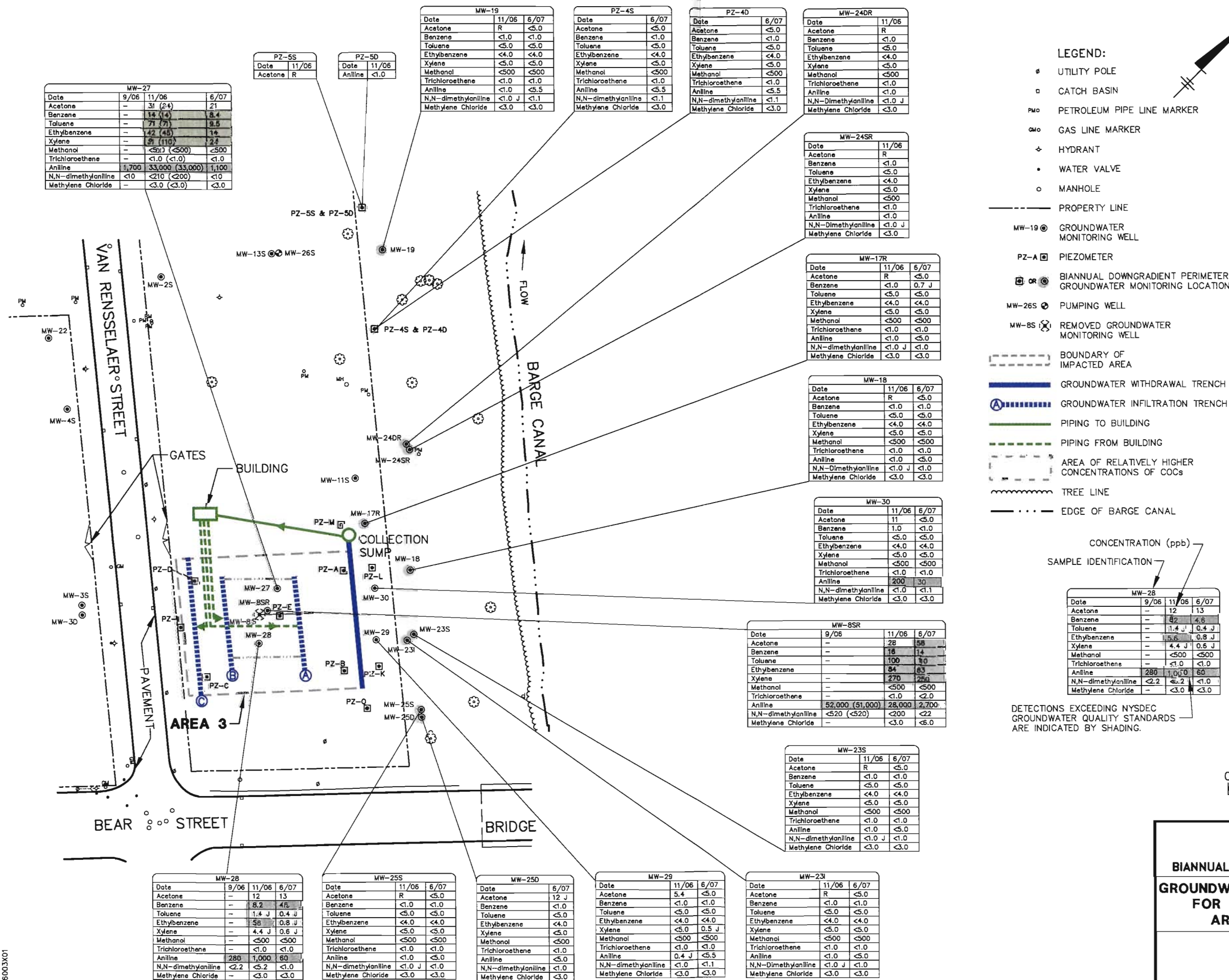
SITE PLAN

Infrastructure, environment, facilities

FIGURE
1







CONCENTRATION (ppb)
SAMPLE IDENTIFICATION

Date	9/06	11/06	6/07
Acetone	-	12	13
Benzene	-	8.2	4.6
Toluene	-	1.4 J	0.4 J
Ethylbenzene	-	5.6	0.8 J
Xylene	-	4.4 J	0.6 J
Methanol	-	<500	<500
Trichloroethene	-	<1.0	<1.0
Aniline	280	1,000	60
N,N-dimethylaniline	<2.2	<6.2	<1.0
Methylene Chloride	-	<3.0	<3.0

DETECTIONS EXCEEDING NYSDEC GROUNDWATER QUALITY STANDARDS ARE INDICATED BY SHADING.



McKESON ENVROSYSTEMS
FORMER BEAR STREET FACILITY
SYRACUSE, NEW YORK
BIANNUAL PROCESS CONTROL MONITORING REPORT
GROUNDWATER MONITORING DATA SUMMARY
FOR SEPTEMBER 2006 - JUNE 2007
AREA 3 (AEROBIC TREATMENT)



ARCADIS BBL

Attachment A

Groundwater Monitoring Data
Summary Figures for 1988 – May
2003 and Summary Figures for
October 2003 – June 2006

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	5 J	<20	12 J	9 J
Benzene	<10	<10	0.8 J	<10	<10 J	<10	<10	<5	<10	<5
Aniline	290 D	860 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-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 D	140	
N,N-dimethylaniline	<10	2 J	3 J	4 J	5 J	3 J	15	2 J	3 J	

	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	580 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-32									
Date	9/98	7/99	3/00	9/00	3/01	9/01	4/02	10/02	5/03	
Acetone	3	3	<10	<10	<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	<10	<10	<5	<10	<5	
Ethylbenzene	5 J	4 J	<10	<10	<10	<10	<5	<10	<5	
Xylene	3 J	<10	<10	<10	<10	<10	<10	<20	<10	
Trichloroethene	<10	56	<10	<10	<10	<10	<5	<10	<5	
Aniline	6,300 D	<10	800 D	4,500 D	1,900 D	1,100 D	4,820 D	56	0.6 J	
N,N-dimethylaniline	4 J	3 J	<10	<10	2 J	2 J	11	R	0.7 J	

MW-1																
Date	3/88	1/89	11/89	11/90	11/91	11/92	8/95	9/98	7/99	3/00	9/00	3/01	9/01	4/02	10/02	5/03
Acesolene	<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	<1	<10	<10	<10	<10	<5	<10	<5	<10	<10	<10	<10	<5	<5	<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	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 J	<1,000	<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

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

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	1.00
N,N-dimethylaniline	5 J	4 J	2 J	3 J	<10	2 J	4 J	R	<10
Acetone	<10	<10	<10 J	<10 J	<10	<10	<1.3	<2.5	<1.2

—CONCENTRATION (ppb)

-
- 0 100' 200'
- GRAPHIC SCALE



ARCADIS BB
infrastructure environment facilities

FIGURE
1



FIGURE
2

TW-02R			
Date	10/03	6/04	11/06
Acetone	88	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 J	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	9.8	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	<4 J	<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
Acetone	5 J	<25	<25	<5.0 J	<5.0 J	R
Benzene	<5.0	<10	<10	<1.0	<1.0	<1.0
Toluene	<5.0	<10	<10	<5.0	<5.0	<5.0
Ethylbenzene	<5.0	<10	<10	<4.0	<4.0	<4.0
Xylene	<10	<20	<20	<5.0	<5.0	<5.0
Methanol	<1,000	<1,000	240 J	<1,000	<1,000	<500
Trichloroethene	<5.0	<10	<10	<1.0	<1.0	<1.0
Aniline	4 J	30	82	<1.0	<1.0	0.4 J
N,N-dimethylaniline	<5.0	4 J	<5.0	<1.0	<1.0	<1.0 J
Methylene Chloride	<5.0	<10	<10	<3.0	<3.0	<3.0

MW-36						
Date	10/03	6/04	11/04	6/05	11/05	6/06
Acetone	580 D	22 J	13 J	24 J	77 J	25
Benzene	<5.0	<10 J	<10	2.1	3.6	1.6
Toluene	<5.0	<10 J	<10	<5.0	2.0 J	0.7 J
Ethylbenzene	<5.0	<10 J	<10	<4.0	0.6 J	<4.0
Xylene	<10	<20 J	<20	1.0 J	2.8 J	1.2 J
Methanol	<1,000	<1,000	<1,000	<1,000	<1,000	<500
Trichloroethene	<5.0	<10 J	<10	<1.0	<1.0	<1.0
Aniline	100	33	22	1,200	1,600	78
N,N-dimethylaniline	<5.0	7	<5.0	<5.4	<10 J	1.9
Methylene Chloride	<5.0	<10 J	<10	<3.0	<3.0	<3.0

MW-34						
Date	10/03	6/04	11/04	6/05	11/05	6/06
Acetone	9 J	24 J	<25	5.6 J	20 J	6.4
Benzene	<5.0	<10	<10	0.7 J	<0.3	0.6 J
Toluene	<5.0	<10	<10	0.9 J	0.9	0.5 J
Ethylbenzene	<5	<10	<10	<4.0	<0.5	<4.0
Xylene	<10	<20	<20	1.2 J	1.1	<5.0
Methanol	<1,000	<1,000	180 J	<1,000	<1,000	<500
Trichloroethene	<5.0	<10	<10	0.4 J	<0.4	<1.0
Aniline	18	30	14	16	12	9.9
N,N-dimethylaniline	<5.0	<5.0	<5.0	2.5	2 J	2.3
Methylene Chloride	<5.0	<10	<10	<3.0	<0.5	<3.0

TW-01						
Date	10/03	6/04	11/04	6/05	11/05	6/06
Acetone	<12	6 J	<25	<5.0 J	<1.3 J	<5.0 J
Benzene	5	3 J	2 J	1.8	1.9	1 J
Toluene	<5.0	<10	<10	<5.0	<0.4	<5.0 J
Ethylbenzene	<5.0	<10	<10	<4.0	<0.5	<4.0 J
Xylene	<10	<20	<20	<5.0	<0.4	<5.0 J
Methanol	<1,000	<1,000	<1,000	<1,000	<1,000	<500
Trichloroethene	<5.0	<10	<10	<1.0	<0.4	<1.0 J
Aniline	0.6 J	<5.0	<5.0	<1.0	<1.0	<1.0 J
N,N-dimethylaniline	<5.0	<5.0	<5.0	<1.0	<1.0 J	0.8 J
Methylene Chloride	<5.0	<10	<10	<3.0	<0.5	<3.0 J

MW-31						
Date	10/03	6/04	11/04	6/05	11/05	6/06
Acetone	1,200 D	15 J	<25	<5.0 J	<1.3 J	<5.0 J
Benzene	13	12	9 J	11	6.7	11 J
Toluene	<5.0	<10	<10	<5.0	<0.4	0.6 J
Ethylbenzene	<5.0	<10	<10	<4.0	<0.5	<4.0 J
Xylene	<5.0	<20	<20	1.3 J	0.6	1.7 J
Methanol	<1,000	<1,000	<1,000	<1,000	<1,000	<500
Trichloroethene	<5.0	<10	<10	<1.0	<0.4	<1.0 J
Aniline	88	3 J	<5.0	3.2	16	<1.0 J
N,N-dimethylaniline	<5.0	<5.0	<5.0	2.7	<1.0 J	2.4 J
Methylene Chloride	<5.0	<10	<10	<3.0	<0.5	3.4

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

MW-32						
Date	10/03	6/04	11/04	6/05	11/05	6/06
Acetone	20	6 J	<25	<5.0 J	<5.0 J	R
Benzene	2 J	1 J	<10	1	<1.0	<1.0 J
Toluene	<5.0	<10	<10	<5.0	<5.0	<0.8 J
Ethylbenzene	<5.0	<10	<10	<4.0	<4.0	<4.0 J
Xylene	<10	<20	<20	<5.0	<5.0	<5.0 J
Methanol	<1,000	<1,000	<1,000	<1,000	<1,000	<500
Trichloroethene	<5.0	<10	<10	<1.0	<1.0	<1.0
Aniline	<5.0	1 J	<5.0	0.4 J	<1.0	<1.0 J
N,N-dimethylaniline	<5.0	<5.0	<5.0	<1.0	<1.0 J	<1.0 J
Methylene Chloride	<5.0	<10	<10	<3.0	<3.0	<3.0 J

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

MW-33						
Date	10/03	6/04	11/04	6/05	11/05	6/06
Acetone	22	9 J		<5.0 J	<5.0 J	17 J
Benzene	2 J	12 J		11	16	6.7 J
Toluene	<5.0	<10 J		1.0 J	1.8 J	0.7 J
Ethylbenzene	<5.0	<10 J		<4.0	<4.0	<4.0 J
Xylene	<10	<20 J		<5.0	<5.0	<5.0 J
Methanol	<1,000	<1,000	<1,000	<1,000	<1,000	<500
Trichloroethene	<5.0	<10 J		<1.0	<1.0	<1.0 J
Aniline	1,900 D	2,700 D	2,700 D	1,800	3,500	370 J
N,N-dimethylaniline	<6.0	5 J	5 J	<10	<25 J	3.5 J
Methylene Chloride	<5.0	<10 J		<3.0	<3.0	<3.0 J

MW-3S						
Date	10/03	6/04	11/04	6/05	11/05	6/06
Acetone	<12	6 J	<25	<5.0 J	<1.3 J	<5.0 J
Benzene	<5.0	<10	<10	<1.0	<0.3	<1.0 J
Toluene	<5.0	<10	<10	<5.0	<0.4	<5.0 J
Ethylbenzene	<5.0	<10	<10	<4.0	<0.5	<4.0 J
Xylene	<10	<20	<20	<5.0	<0.4	<5.0 J
Methanol	<1,000	<1,000	150 J	<1,000	<1,000	<500
Trichloroethene	<5.0	<10	<10	<1.0	<0.4	<1.0 J
Aniline	4 J	0.8 J	4 J	15	<1.0	<1.0 J
N,N-dimethylaniline	<5.0	<6.0	<5.0	<1.0	<1.0 J	<1.0 J
Methylene Chloride	<5.0	<10	<10	<3.0	<0.5	<3.0 J

LEGEND:

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

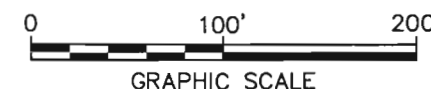
SAMPLE IDENTIFICATION

MW-35						
Date	10/03	6/04	11/04	6/05	11/05	6/06
Acetone	5 J	<25	<25	<5.0 J	<5.0 J	R
Benzene	<5.0	<10	<10	<1.0	<1.0	<1.0
Toluene	<5.0	<10	<10	<5.0	<5.0	<5.0
Ethylbenzene	<5.0	<10	<10	<4.0	<4.0	<4.0
Xylene	<10	<20	<20	<5.0	<5.0	<5.0
Methanol	<1,000	<1,000	240 J	<1,000	<1,000	<500
Trichloroethene	<5.0	<10	<10	<1.0	<1.0	<1.0
Aniline	4 J	30	82	<1.0	<1.0	0.4 J
N,N-dimethylaniline	<5.0	4 J	<5.0	<1.0	<1.0 J	<1.0 J
Methylene Chloride	<5.0	<10	<10	<3.0	<3.0	<3.0

CONCENTRATION (ppb) - DETECTIONS EXCEEDING NYSDEC GROUNDWATER QUALITY STANDARDS ARE INDICATED BY SHADING.

NOTES:

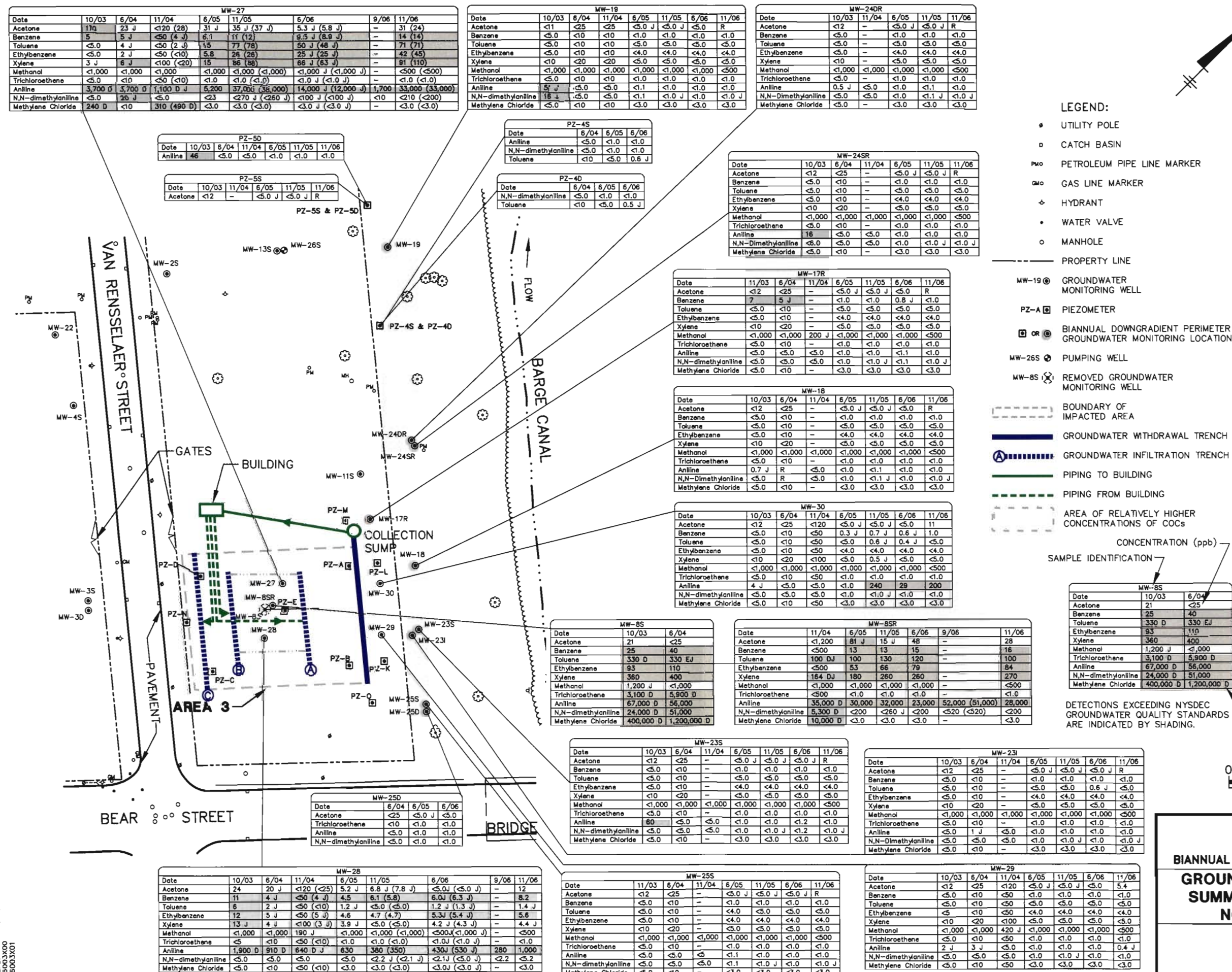
- REPLACED MONITORING WELLS ARE IDENTIFIED WITH AN "R" (e.g., MW-24DR).
- TRENCH LOCATIONS ARE APPROXIMATE.
- MONITORING LOCATIONS ARE APPROXIMATE.
- FIGURE ONLY SHOWS COC CONCENTRATIONS AT MONITORING LOCATIONS WITHIN THE IMPACTED AREAS AND THE CHEMICAL PROCESS CONTROL MONITORING LOCATIONS.
- ONLY COC CONCENTRATIONS DETECTED OR THAT HAVE BEEN DETECTED ARE PRESENTED ON THIS FIGURE (SEE ATTACHMENT A FIGURE 1).
- < = COMPOUND WAS ANALYZED FOR BUT NOT DETECTED. THE ASSOCIATED VALUE IS THE COMPOUND QUANTITATION LIMIT.
- J = THE COMPOUND WAS POSITIVELY IDENTIFIED; HOWEVER THE ASSOCIATED NUMERICAL VALUE IS AN ESTIMATED CONCENTRATION ONLY.
- D = CONCENTRATION IS BASED ON DILUTED SAMPLE ANALYSIS.
- R = THE SAMPLE RESULT WAS REJECTED.
- DURING THE AUGUST 2004 SUPPLEMENTAL REMEDIAL ACTIVITIES, MONITORING WELL TW-02R WAS REMOVED AND TW-02RR WAS CONSTRUCTED OUTSIDE THE SOIL REMOVAL AREA IN THE VICINITY OF TW-02R.
- THE 11/04 SAMPLING EVENT VOLATILE ORGANIC COMPOUND (VOC) DATA FOR MW-33 AND MW-1 WERE INADVERTENTLY LOST DUE TO LABORATORY EQUIPMENT FAILURE. AS DETAILED IN THE BIENNIAL REPORT, THESE MONITORING WELLS WERE NOT RESAMPLED.
- THE 9/06 SAMPLING EVENT WAS AN INTERIM SAMPLING EVENT, ANALYZING FOR ANILINE & N,N-DIMETHYLANILINE ONLY.



McKESSON ENVROSYSTEMS FORMER BEAR STREET FACILITY SYRACUSE, NEW YORK BIENNIAL PROCESS CONTROL MONITORING REPORT

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





ARCADIS BBL

Attachment B

Validated Analytical Laboratory
Report

DATA USABILITY SUMMARY REPORT

MCKESSON

BEAR STREET

SDG #H365

VOLATILE, SEMIVOLATILE AND
METHANOL ANALYSES

Analyses performed by:

Severn Trent Laboratories
Edison, New Jersey

Review performed by:



Syracuse, New York
Report #7098R

Summary

The following is an assessment of the data package for sample delivery group (SDG) #H365 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:

[illegible]

Notes:

1. Miscellaneous parameters include methanol.

VOLATILE ORGANIC COMPOUND (VOC) ANALYSES

Introduction

Analyses were performed according to (United States 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.

All compounds associated with the QA blanks exhibited a concentration less than the MDL, with the exception of the compounds listed in the following table. Sample results associated with the following sample locations were qualified.

Sample Locations	Compounds	Sample Result	Qualification
All sample locations	Methylene Chloride	Sample results <RL	No Action

RL = reporting limit

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 than 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.

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 for all target compounds.

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.

No field duplicates were included with this data set.

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
<u>Data Completeness and Deliverables</u>			
Have any missing deliverables been received and added to the data package?	<u> </u>	<u> X </u>	<u> </u>
Is there a narrative or cover letter present?	<u> X </u>	<u> </u>	<u> </u>
Are the sample numbers included in the narrative?	<u> X </u>	<u> </u>	<u> </u>
Are the sample chain-of-custodies present?	<u> X </u>	<u> </u>	<u> </u>
Do the chain-of-custodies indicate any problems with sample receipt or sample condition?	<u> </u>	<u> X </u>	<u> </u>
<u>Holding Times</u>			
Have any holding times been exceeded?	<u> </u>	<u> X </u>	<u> </u>
<u>Surrogate Recovery</u>			
Are surrogate recovery forms present?	<u> X </u>	<u> </u>	<u> </u>
Are all samples listed on the surrogate recovery form?	<u> X </u>	<u> </u>	<u> </u>
Was one or more surrogate recovery outside control limits for any sample or blank?	<u> </u>	<u> X </u>	<u> </u>
If yes, were the samples reanalyzed?	<u> </u>	<u> </u>	<u> X </u>
Are there any transcription/calculation errors between the raw data and the summary form?	<u> </u>	<u> X </u>	<u> </u>
<u>Matrix Spikes</u>			
Is there a MS recovery form present?	<u> X </u>	<u> </u>	<u> </u>
Were matrix spikes analyzed at the required frequency?	<u> X </u>	<u> </u>	<u> </u>
How many spike recoveries were outside of QC limits?			
<u> 2 </u> out of <u> 32 </u>			
How many RPDs for MS/MSD were outside of QC limits?			
<u> 1 </u> out of <u> 16 </u>			
<u>Blanks</u>			
Is a method blank summary form present?	<u> X </u>	<u> </u>	<u> </u>
Has a method blank been analyzed for each day or for each 20 samples, whichever is more frequent?	<u> X </u>	<u> </u>	<u> </u>
Has a blank been analyzed at least once every 12 hours for each system used?	<u> X </u>	<u> </u>	<u> </u>
Do any method/instrument blanks have positive results?	<u> </u>	<u> X </u>	<u> </u>
Are trip/field/rinse blanks associated with every sample?	<u> X </u>	<u> </u>	<u> </u>
Do any trip/field/rinse blanks have positive results?	<u> X </u>	<u> </u>	<u> </u>

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

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

SEMI-VOLATILE ORGANIC COMPOUND (SVOC) ANALYSES

Introduction

Analyses were performed according to (United States 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 than 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
MW-19	Nitrobenzene-d5	AC
	2-Fluorobiphenyl	AC
	Terphenyl-d14	> UL
MW-27	Nitrobenzene-d5	D
	2-Fluorobiphenyl	D
	Terphenyl-d14	D

Upper control limit (UL)

Acceptable (AC)

Diluted (D)

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.

The MS/MSD exhibited acceptable recoveries and RPD between MS/MSD recoveries for all target compounds.

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 sample locations exhibited acceptable LCS recoveries.

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.

No field duplicates were included with this data set.

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
<u>Data Completeness and Deliverables</u>			
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	
<u>Holding Times</u>			
Have any holding times been exceeded?		X	
<u>Surrogate Recovery</u>			
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	
<u>Matrix Spikes</u>			
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?			
<u>4</u> out of <u>32</u>			
How many RPDs for MS/MSD were outside of QC limits?			
<u>0</u> out of <u>16</u>			
<u>Blanks</u>			
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
<u>Tuning and Mass Calibration</u>			
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?	<u>X</u>	<u> </u>	<u> </u>
Has a DFTPP been analyzed for each 12 hours of analysis per instrument?	<u>X</u>	<u> </u>	<u> </u>
Have the ion abundance criteria been met for each instrument used?	<u>X</u>	<u> </u>	<u> </u>
<u>Target Analytes</u>			
Is an organics analysis data sheet present for each of the following:			
Samples	<u>X</u>	<u> </u>	<u> </u>
Matrix spikes	<u>X</u>	<u> </u>	<u> </u>
Blanks	<u>X</u>	<u> </u>	<u> </u>
Are the reconstructed ion chromatograms present for each of the following:			
Samples	<u>X</u>	<u> </u>	<u> </u>
Matrix spikes	<u>X</u>	<u> </u>	<u> </u>
Blanks	<u>X</u>	<u> </u>	<u> </u>
Is the chromatographic performance acceptable?	<u>X</u>	<u> </u>	<u> </u>
Are the mass spectra of the identified compounds present?	<u>X</u>	<u> </u>	<u> </u>
Are all ions present in the standard mass spectrum at a relative intensity of 10% or greater also present in the sample spectrum?	<u>X</u>	<u> </u>	<u> </u>
Do the samples and standard relative ion intensities agree within 20%?	<u>X</u>	<u> </u>	<u> </u>
<u>Tentatively Identified Compounds</u>			
Are all the TIC summary forms present?	<u> </u>	<u>X</u>	<u> </u>
Are the mass spectra for the tentatively identified compounds and their associated "best match" spectra present?	<u> </u>	<u> </u>	<u>X</u>
Are any target compounds listed as TICs?	<u> </u>	<u> </u>	<u>X</u>
Are all ions present in the reference mass spectrum with a relative intensity greater than 10% also present in the sample mass spectrum?	<u> </u>	<u> </u>	<u>X</u>
Do the TIC and "best match" spectrum agree within 20%?	<u> </u>	<u> </u>	<u>X</u>
<u>Quantitation and Detection Limits</u>			
Are there any transcription/calculation errors in the Form 1 results?	<u> </u>	<u>X</u>	<u> </u>
Are the reporting limits adjusted to reflect sample dilutions, and for soils, sample moisture?	<u>X</u>	<u> </u>	<u> </u>
<u>Standard Data</u>			
Are the quantitation reports and reconstructed ion chromatograms present for the initial and continuing calibration standards?	<u>X</u>	<u> </u>	<u> </u>
<u>Initial Calibration</u>			
Are the initial calibration forms present for each instrument used?	<u>X</u>	<u> </u>	<u> </u>
Are the response factor RSDs within acceptable limits?	<u>X</u>	<u> </u>	<u> </u>
Are the average RRF minimum requirements met?	<u>X</u>	<u> </u>	<u> </u>

	YES	NO	NA
Are there any transcription/calculation error in reporting the RRF or RSD?	_____	X	_____
<u>Continuing Calibration</u>			
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	_____
<u>Internal Standards</u>			
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	_____	_____
<u>Field Duplicates</u>			
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 than 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 where 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 LCS 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.

No field duplicates were included with this data set.

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
<u>Data Completeness and Deliverables</u>			
Have any missing deliverables been received and added to the data package?	<u> </u>	<u> X </u>	<u> </u>
Is there a narrative or cover letter present?	<u> X </u>	<u> </u>	<u> </u>
Are the sample numbers included in the narrative?	<u> X </u>	<u> </u>	<u> </u>
Are the sample chain-of-custodies present?	<u> X </u>	<u> </u>	<u> </u>
Do the chain-of-custodies indicate any problems with sample receipt or sample condition?	<u> </u>	<u> X </u>	<u> </u>
<u>Holding Times</u>			
Have any holding times been exceeded?	<u> </u>	<u> X </u>	<u> </u>
<u>Surrogate Recovery</u>			
Are surrogate recovery forms present?	<u> X </u>	<u> </u>	<u> </u>
Are all samples listed on the surrogate recovery form?	<u> X </u>	<u> </u>	<u> </u>
Was one or more surrogate recovery outside control limits for any sample or blank?	<u> </u>	<u> X </u>	<u> </u>
If yes, were the samples reanalyzed?	<u> </u>	<u> </u>	<u> X </u>
Are there any transcription/calculation errors between the raw data and the summary form?	<u> </u>	<u> X </u>	<u> </u>
<u>Matrix Spikes</u>			
Is there a MS recovery form present?	<u> X </u>	<u> </u>	<u> </u>
Were matrix spikes analyzed at the required frequency?	<u> X </u>	<u> </u>	<u> </u>
How many spike recoveries were outside of QC limits?			
<u> 0 </u> out of <u> 2 </u>			
How many RPDs for MS/MSD were outside of QC limits?			
<u> 0 </u> out of <u> 1 </u>			
<u>Blanks</u>			
Is a method blank summary form present?	<u> X </u>	<u> </u>	<u> </u>
Has a method blank been analyzed for each day or for each 20 samples, whichever is more frequent?	<u> X </u>	<u> </u>	<u> </u>
Has a blank been analyzed at least once every 12 hours for each system used?	<u> X </u>	<u> </u>	<u> </u>
Do any method/instrument blanks have positive results?	<u> </u>	<u> X </u>	<u> </u>
Are trip/field/rinse blanks associated with every sample?	<u> </u>	<u> X </u>	<u> </u>
Do any trip/field/rinse blanks have positive results?	<u> </u>	<u> </u>	<u> X </u>

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

Corrected Sample Analysis Data Sheets

Client ID: MW-38
Site: McKesson/Bear St.

Lab Sample No: 836575
Lab Job No: H365

Date Sampled: 06/08/07
Date Received: 06/09/07
Date Analyzed: 06/15/07
GC Column: Rtx-VMS
Instrument ID: VOAMS3.i
Lab File ID: ca18726.d

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

VOLATILE ORGANICS - GC/MS
METHOD 8260B

<u>Parameter</u>	<u>Analytical Result</u> <u>Units: ug/l</u>	<u>Quantitation</u>
		<u>Limit</u> <u>Units: ug/l</u>
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: MW-27
Site: McKesson/Bear St.

Lab Sample No: 836576
Lab Job No: H365

Date Sampled: 06/08/07
Date Received: 06/09/07
Date Analyzed: 06/15/07
GC Column: Rtx-VMS
Instrument ID: VOAMS3.i
Lab File ID: ca18727.d

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

VOLATILE ORGANICS - GC/MS
METHOD 8260B

<u>Parameter</u>	<u>Analytical Result</u> <u>Units: ug/l</u>	<u>Quantitation</u> <u>Limit</u> <u>Units: ug/l</u>
Methylene Chloride	ND	3.0
Acetone	21	5.0
Trichloroethene	ND	1.0
Benzene	8.4	1.0
Toluene	9.5	5.0
Ethylbenzene	14	4.0
Xylene (Total)	24	5.0

Client ID: MW-8SR
Site: McKesson/Bear St.

Lab Sample No: 836577
Lab Job No: H365

Date Sampled: 06/08/07
Date Received: 06/09/07
Date Analyzed: 06/15/07
GC Column: Rtx-VMS
Instrument ID: VOAMS3.i
Lab File ID: cal8728.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 2.0

VOLATILE ORGANICS - GC/MS
METHOD 8260B

<u>Parameter</u>	<u>Analytical Result</u> <u>Units: ug/l</u>	<u>Quantitation</u> <u>Limit</u> <u>Units: ug/l</u>
Methylene Chloride	ND	6.0
Acetone	58	10
Trichloroethene	ND	2.0
Benzene	14	2.0
Toluene	110	10
Ethylbenzene	83	8.0
Xylene (Total)	250	10

Client ID: MW-30
Site: McKesson/Bear St.

Lab Sample No: 836578
Lab Job No: H365

Date Sampled: 06/08/07
Date Received: 06/09/07
Date Analyzed: 06/15/07
GC Column: Rtx-VMS
Instrument ID: VOAMS3.i
Lab File ID: ca18729.d

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

VOLATILE ORGANICS - GC/MS
METHOD 8260B

<u>Parameter</u>	<u>Analytical Result</u> <u>Units: ug/l</u>	<u>Quantitation</u> <u>Limit</u> <u>Units: ug/l</u>
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: MW-28
Site: McKesson/Bear St.

Lab Sample No: 836579
Lab Job No: H365

Date Sampled: 06/08/07
Date Received: 06/09/07
Date Analyzed: 06/15/07
GC Column: Rtx-VMS
Instrument ID: VOAMS3.i
Lab File ID: ca18730.d

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

VOLATILE ORGANICS - GC/MS
METHOD 8260B

<u>Parameter</u>	<u>Analytical Result</u> <u>Units: ug/l</u>	<u>Quantitation</u> <u>Limit</u> <u>Units: ug/l</u>
Methylene Chloride	ND	3.0
Acetone	13	5.0
Trichloroethene	ND	1.0
Benzene	4.6	1.0
Toluene	0.4J	5.0
Ethylbenzene	0.8J	4.0
Xylene (Total)	0.6J	5.0

Client ID: MW-17R
Site: McKesson/Bear St.

Lab Sample No: 836580
Lab Job No: H365

Date Sampled: 06/08/07
Date Received: 06/09/07
Date Analyzed: 06/15/07
GC Column: Rtx-VMS
Instrument ID: VOAMS3.i
Lab File ID: ca18731.d

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

VOLATILE ORGANICS - GC/MS
METHOD 8260B

<u>Parameter</u>	<u>Analytical Result</u> <u>Units: ug/l</u>	<u>Quantitation</u> <u>Limit</u> <u>Units: ug/l</u>
Methylene Chloride	ND	3.0
Acetone	ND	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: MW-19
Site: McKesson/Bear St.

Lab Sample No: 836581
Lab Job No: H365

Date Sampled: 06/08/07
Date Received: 06/09/07
Date Analyzed: 06/15/07
GC Column: Rtx-VMS
Instrument ID: VOAMS3.i
Lab File ID: cal8732.d

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

VOLATILE ORGANICS - GC/MS
METHOD 8260B

<u>Parameter</u>	<u>Analytical Result</u> <u>Units: ug/l</u>	<u>Quantitation</u> <u>Limit</u> <u>Units: ug/l</u>
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: MW-29
Site: McKesson/Bear St.

Lab Sample No: 836582
Lab Job No: H365

Date Sampled: 06/08/07
Date Received: 06/09/07
Date Analyzed: 06/15/07
GC Column: Rtx-VMS
Instrument ID: VOAMS3.i
Lab File ID: ca18733.d

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

VOLATILE ORGANICS - GC/MS
METHOD 8260B

<u>Parameter</u>	<u>Analytical Result</u> <u>Units: ug/l</u>	<u>Quantitation</u> <u>Limit</u> <u>Units: ug/l</u>
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)	0.5J	5.0

Client ID: TRIPBLANK
Site: McKesson/Bear St.

Lab Sample No: 836583
Lab Job No: H365

Date Sampled: 06/08/07
Date Received: 06/09/07
Date Analyzed: 06/15/07
GC Column: Rtx-VMS
Instrument ID: VOAMS3.i
Lab File ID: ca18725.d

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

VOLATILE ORGANICS - GC/MS
METHOD 8260B

<u>Parameter</u>	<u>Analytical Result</u> <u>Units: ug/l</u>	<u>Quantitation</u>
		<u>Limit</u> <u>Units: ug/l</u>
Methylene Chloride	5.8	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: MW-3S
Site: McKesson/Bear St.

Lab Sample No: 836575
Lab Job No: H365

Date Sampled: 06/08/07
Date Received: 06/09/07
Date Extracted: 06/12/07
Date Analyzed: 06/13/07
GC Column: DB-5
Instrument ID: BNAMS8.i
Lab File ID: aa8540.d

Matrix: WATER
Level: LOW
Sample Volume: 950 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 1.0

SEMI-VOLATILE ORGANICS - GC/MS
METHOD 8270C

<u>Parameter</u>	<u>Analytical Result</u> <u>Units: ug/l</u>	<u>Quantitation</u> <u>Limit</u> <u>Units: ug/l</u>
Aniline	ND	5
N,N-Dimethylaniline	ND	1.0

Client ID: MW-27
Site: McKesson/Bear St.

Lab Sample No: 836576
Lab Job No: H365

Date Sampled: 06/08/07
Date Received: 06/09/07
Date Extracted: 06/12/07
Date Analyzed: 06/15/07
GC Column: DB-5
Instrument ID: BNAMS2.i
Lab File ID: s28587.d

Matrix: WATER
Level: LOW
Sample Volume: 970 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 10.0

SEMI-VOLATILE ORGANICS - GC/MS
METHOD 8270C

<u>Parameter</u>	<u>Analytical Result</u> <u>Units: ug/l</u>	<u>Quantitation</u> <u>Limit</u> <u>Units: ug/l</u>
Aniline	1100	50
N,N-Dimethylaniline	ND	10

Client ID: MW-8SR
Site: McKesson/Bear St.

Lab Sample No: 836577
Lab Job No: H365

Date Sampled: 06/08/07
Date Received: 06/09/07
Date Extracted: 06/12/07
Date Analyzed: 06/15/07
GC Column: DB-5
Instrument ID: BNAMS2.i
Lab File ID: s28584.d

Matrix: WATER
Level: LOW
Sample Volume: 900 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 20.0

SEMI-VOLATILE ORGANICS - GC/MS
METHOD 8270C

<u>Parameter</u>	<u>Analytical Result</u> <u>Units: ug/l</u>	<u>Quantitation</u> <u>Limit</u> <u>Units: ug/l</u>
Aniline	2700	110
N,N-Dimethylaniline	ND	22

Client ID: MW-30
Site: McKesson/Bear St.

Lab Sample No: 836578
Lab Job No: H365

Date Sampled: 06/08/07
Date Received: 06/09/07
Date Extracted: 06/12/07
Date Analyzed: 06/13/07
GC Column: DB-5
Instrument ID: BNAMS8.i
Lab File ID: aa8545.d

Matrix: WATER
Level: LOW
Sample Volume: 870 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 1.0

SEMI-VOLATILE ORGANICS - GC/MS
METHOD 8270C

<u>Parameter</u>	<u>Analytical Result</u> <u>Units: ug/l</u>	<u>Quantitation</u> <u>Limit</u> <u>Units: ug/l</u>
Aniline	30	5.5
N,N-Dimethylaniline	ND	1.1

Client ID: MW-28
Site: McKesson/Bear St.

Lab Sample No: 836579
Lab Job No: H365

Date Sampled: 06/08/07
Date Received: 06/09/07
Date Extracted: 06/12/07
Date Analyzed: 06/13/07
GC Column: DB-5
Instrument ID: BNAMS8.i
Lab File ID: aa8546.d

Matrix: WATER
Level: LOW
Sample Volume: 950 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 1.0

SEMI-VOLATILE ORGANICS - GC/MS
METHOD 8270C

<u>Parameter</u>	<u>Analytical Result</u> <u>Units: ug/l</u>	<u>Quantitation</u> <u>Limit</u> <u>Units: ug/l</u>
Aniline	60	5
N,N-Dimethylaniline	ND	1.0

Client ID: MW-17R
Site: McKesson/Bear St.

Lab Sample No: 836580
Lab Job No: H365

Date Sampled: 06/08/07
Date Received: 06/09/07
Date Extracted: 06/12/07
Date Analyzed: 06/13/07
GC Column: DB-5
Instrument ID: BNAMS8.i
Lab File ID: aa8547.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

<u>Parameter</u>	<u>Analytical Result</u> <u>Units: ug/l</u>	<u>Quantitation</u> <u>Limit</u> <u>Units: ug/l</u>
Aniline	ND	5
N,N-Dimethylaniline	ND	1.0

Client ID: MW-19
Site: McKesson/Bear St.

Lab Sample No: 836581
Lab Job No: H365

Date Sampled: 06/08/07
Date Received: 06/09/07
Date Extracted: 06/12/07
Date Analyzed: 06/13/07
GC Column: DB-5
Instrument ID: BNAMS8.i
Lab File ID: aa8548.d

Matrix: WATER
Level: LOW
Sample Volume: 900 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 1.0

SEMI-VOLATILE ORGANICS - GC/MS
METHOD 8270C

<u>Parameter</u>	<u>Analytical Result</u> <u>Units: ug/l</u>	<u>Quantitation</u> <u>Limit</u> <u>Units: ug/l</u>
Aniline	ND	5.5
N,N-Dimethylaniline	ND	1.1

Client ID: MW-29
Site: McKesson/Bear St.

Lab Sample No: 836582
Lab Job No: H365

Date Sampled: 06/08/07
Date Received: 06/09/07
Date Extracted: 06/12/07
Date Analyzed: 06/13/07
GC Column: DB-5
Instrument ID: BNAMS8.i
Lab File ID: aa8549.d

Matrix: WATER
Level: LOW
Sample Volume: 900 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 1.0

SEMI-VOLATILE ORGANICS - GC/MS
METHOD 8270C

<u>Parameter</u>	<u>Analytical Result</u> <u>Units: ug/l</u>	<u>Quantitation</u> <u>Limit</u> <u>Units: ug/l</u>
Aniline	ND	5.5
N,N-Dimethylaniline	ND	1.1

Client ID: MW-3S
Site: McKesson/Bear St.

Lab Sample No: 836575
Lab Job No: H365

Date Sampled: 06/08/07
Date Received: 06/09/07
Date Analyzed: 06/12/07
GC Column: DB624
Instrument ID: BNAGC5.i
Lab File ID: gc5f1765.d

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

NONHALOGENATED ORGANICS - GC/FID
ALCOHOLS

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

Client ID: MW-27
Site: McKesson/Bear St.

Lab Sample No: 836576
Lab Job No: H365

Date Sampled: 06/08/07
Date Received: 06/09/07
Date Analyzed: 06/12/07
GC Column: DB624
Instrument ID: BNAGC5.i
Lab File ID: gc5f1766.d

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

NONHALOGENATED ORGANICS - GC/FID
ALCOHOLS

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

Client ID: MW-8SR
Site: McKesson/Bear St.

Lab Sample No: 836577
Lab Job No: H365

Date Sampled: 06/08/07
Date Received: 06/09/07
Date Analyzed: 06/12/07
GC Column: DB624
Instrument ID: BNAGC5.i
Lab File ID: gc5f1764.d

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

NONHALOGENATED ORGANICS - GC/FID
ALCOHOLS

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

Client ID: MW-30
Site: McKesson/Bear St.

Lab Sample No: 836578
Lab Job No: H365

Date Sampled: 06/08/07
Date Received: 06/09/07
Date Analyzed: 06/12/07
GC Column: DB624
Instrument ID: BNAGC5.i
Lab File ID: gc5f1767.d

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

NONHALOGENATED ORGANICS - GC/FID
ALCOHOLS

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

Client ID: MW-28
Site: McKesson/Bear St.

Lab Sample No: 836579
Lab Job No: H365

Date Sampled: 06/08/07
Date Received: 06/09/07
Date Analyzed: 06/12/07
GC Column: DB624
Instrument ID: BNAGC5.i
Lab File ID: gc5f1768.d

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

NONHALOGENATED ORGANICS - GC/FID
ALCOHOLS

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

Client ID: MW-17R
Site: McKesson/Bear St.

Lab Sample No: 836580
Lab Job No: H365

Date Sampled: 06/08/07
Date Received: 06/09/07
Date Analyzed: 06/12/07
GC Column: DB624
Instrument ID: BNAGC5.i
Lab File ID: gc5f1769.d

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

NONHALOGENATED ORGANICS - GC/FID
ALCOHOLS

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

Client ID: MW-19
Site: McKesson/Bear St.

Lab Sample No: 836581
Lab Job No: H365

Date Sampled: 06/08/07
Date Received: 06/09/07
Date Analyzed: 06/12/07
GC Column: DB624
Instrument ID: BNAGC5.i
Lab File ID: gc5f1771.d

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

NONHALOGENATED ORGANICS - GC/FID
ALCOHOLS

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

Client ID: MW-29
Site: McKesson/Bear St.

Lab Sample No: 836582
Lab Job No: H365

Date Sampled: 06/08/07
Date Received: 06/09/07
Date Analyzed: 06/12/07
GC Column: DB624
Instrument ID: BNAGC5.i
Lab File ID: gc5f1772.d

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

NONHALOGENATED ORGANICS - GC/FID
ALCOHOLS

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

Laboratory Narrative

STL Edison
777 New Durham Road
Edison, NJ 08817

Tel: 732 549 3900 Fax: 732 549 3679
www.stl-inc.com

SDG NARRATIVE

STL EDISON

SDG No. H365

<u>STL Edison Sample</u>	<u>Client ID</u>
836575	MW-3S
836576	MW-27
836577	MW-8SR
836578	MW-30
836579	MW-28
836580	MW-17R
836581	MW-19
836582	MW-29
836583	TRIPBLANK

Sample Receipt:

Sample delivery conforms with requirements.

Volatile Organic Analysis (GC/MS):

QA batch 6125: MS/MSD % recoveries of Chlorobenzene are outside of Q.C. limits (sample amount is too high for spike level).

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

QA batch # 4959: MS/MSD % recoveries of 2-Methylnaphthalene are biased high.

QA batch # 4959: MS/MSD % recoveries of pentachlorophenol are biased low.

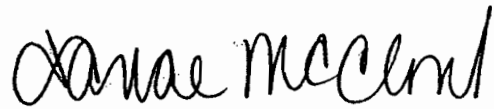
Sample # 836576: S-All surrogate standard recoveries are biased low (Insufficient volume to re extract sample). Sample extract reanalyzed confirming low recoveries.

Sample 836581: S-Terphenyl-d14 surrogate standard recovery is biased high.

Nonhalogenated Organic Analysis (GC/FID):

All data conforms with method requirements.

I certify that the test results contained in this data package meet all requirements of NELAC 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 Director or their designee, as verified by the following signature.



Janae McCloud
Project Manager

6/25/07

NYSDEC Sample Identification and Analysis Summary Sheets

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE IDENTIFICATION AND ANALYTICAL REQUIREMENT SUMMARY

[illegible]

**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
836575	WATER	6/8/07	6/9/07		6/15/07
836576	WATER	6/8/07	6/9/07		6/15/07
836577	WATER	6/8/07	6/9/07		6/15/07
836577MS	WATER	6/8/07	6/9/07		6/15/07
836577SD	WATER	6/8/07	6/9/07		6/15/07
836578	WATER	6/8/07	6/9/07		6/15/07
836579	WATER	6/8/07	6/9/07		6/15/07
836580	WATER	6/8/07	6/9/07		6/15/07
836581	WATER	6/8/07	6/9/07		6/15/07
836582	WATER	6/8/07	6/9/07		6/15/07
836583	WATER	6/8/07	6/9/07		6/15/07

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
836575	WATER	6/8/07	6/9/07	6/12/07	6/13/07
836576R1	WATER	6/8/07	6/9/07	6/12/07	6/14/07
836576	WATER	6/8/07	6/9/07	6/12/07	6/15/07
836577	WATER	6/8/07	6/9/07	6/12/07	6/15/07
836577MS	WATER	6/8/07	6/9/07	6/12/07	6/15/07
836577SD	WATER	6/8/07	6/9/07	6/12/07	6/15/07
836578	WATER	6/8/07	6/9/07	6/12/07	6/13/07
836579	WATER	6/8/07	6/9/07	6/12/07	6/13/07
836580	WATER	6/8/07	6/9/07	6/12/07	6/13/07
836581	WATER	6/8/07	6/9/07	6/12/07	6/13/07
836582	WATER	6/8/07	6/9/07	6/12/07	6/13/07

10/95

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

**SAMPLE PREPARATION AND ANALYSIS SUMMARY
SEMIVOLATILE (BNA)
ANALYSES**

Laboratory Sample ID	Matrix	Analytical Protocol	Extraction Method	Auxiliary Cleanup	Dil/Conc Factor
836575	WATER	1989 NYSDEC ASP - Revision 10/95	Liquid-Liquid		1.00
836575	WATER	1989 NYSDEC ASP - Revision 10/95	Liquid-Liquid		1.00
836576R1	WATER	1989 NYSDEC ASP - Revision 10/95	Liquid-Liquid		10.00
836576	WATER	1989 NYSDEC ASP - Revision 10/95	Liquid-Liquid		1.00
836576	WATER	1989 NYSDEC ASP - Revision 10/95	Liquid-Liquid		10.00
836577	WATER	1989 NYSDEC ASP - Revision 10/95	Liquid-Liquid		1.00
836577	WATER	1989 NYSDEC ASP - Revision 10/95	Liquid-Liquid		20.00
836577MS	WATER	1989 NYSDEC ASP - Revision 10/95	Liquid-Liquid		1.00
836577MS	WATER	1989 NYSDEC ASP - Revision 10/95	Liquid-Liquid		20.00
836577SD	WATER	1989 NYSDEC ASP - Revision 10/95	Liquid-Liquid		1.00
836577SD	WATER	1989 NYSDEC ASP - Revision 10/95	Liquid-Liquid		20.00
836578	WATER	1989 NYSDEC ASP - Revision 10/95	Liquid-Liquid		1.00
836578	WATER	1989 NYSDEC ASP - Revision 10/95	Liquid-Liquid		1.00
836579	WATER	1989 NYSDEC ASP - Revision 10/95	Liquid-Liquid		1.00
836579	WATER	1989 NYSDEC ASP - Revision 10/95	Liquid-Liquid		1.00
836580	WATER	1989 NYSDEC ASP - Revision 10/95	Liquid-Liquid		1.00
836580	WATER	1989 NYSDEC ASP - Revision 10/95	Liquid-Liquid		1.00
836581	WATER	1989 NYSDEC ASP - Revision 10/95	Liquid-Liquid		1.00
836581	WATER	1989 NYSDEC ASP - Revision 10/95	Liquid-Liquid		1.00
836582	WATER	1989 NYSDEC ASP - Revision 10/95	Liquid-Liquid		1.00
836582	WATER	1989 NYSDEC ASP - Revision 10/95	Liquid-Liquid		

10/95

Sample Compliance Report

SAMPLE COMPLIANCE REPORT

Sample Delivery Group	Sampling Date	ASP Protocol	Sample ID	Matrix	Compliance ¹					Noncompliance
					VOC	SVOC	PCB	MET	MISC	
H365	6/08/2007	2005	MW-3S	Water	Yes	Yes	--	--	Yes	
H365	6/08/2007	2005	MW-27	Water	Yes	Yes	--	--	Yes	
H365	6/08/2007	2005	MW-8SR	Water	Yes	Yes	--	--	Yes	
H365	6/08/2007	2005	MW-30	Water	Yes	Yes	--	--	Yes	
H365	6/08/2007	2005	MW-28	Water	Yes	Yes	--	--	Yes	
H365	6/08/2007	2005	MW-17R	Water	Yes	Yes	--	--	Yes	
H365	6/08/2007	2005	MW-19	Water	Yes	No	--	--	Yes	SVOC - surrogate
H365	6/08/2007	2005	MW-29	Water	Yes	Yes	--	--	Yes	
H365	6/08/2007	2005	Trip Blank	Water	Yes	Yes	--	--	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 #H397

VOLATILE, SEMIVOLATILE AND
METHANOL ANALYSES

Analyses performed by:

Severn Trent Laboratories
Edison, New Jersey

Review performed by:



Syracuse, New York
Report #7095R

Summary

The following is an assessment of the data package for sample delivery group (SDG) #H397 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:

[illegible]

Notes:

1. Miscellaneous parameters include methanol.
2. Sample location DUP-02 is the field duplicate of parent sample location MW-18.

VOLATILE ORGANIC COMPOUND (VOC) ANALYSES

Introduction

Analyses were performed according to (United States 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.

All compounds associated with the QA blanks exhibited a concentration less than the MDL, with the exception of the compounds listed in the following table. Sample results associated with the following sample locations were qualified.

Sample Locations	Compounds	Sample Result	Qualification
PZ-4S PZ-4D MW-23S MW-18 MW-25D	Methylene Chloride	Detected sample results <RL and <BAL	U at the PQL
DUP-02 MW-23I MW-25S	Methylene Chloride	Sample results <RL	No Action

RL = reporting limit

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 than 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.

Sample Locations	Compound	Initial/Continuing	Criteria
DUP-02	Acetone	CCV %D	22.3%
PZ-4D			20.4%
MW-23S			
MW-18			
MW-25S			
MW-25D			
PZ-4S			
Trip Blank			

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.

Initial/Continuing	Criteria	Sample Result	Qualification
Initial and Continuing Calibration	RRF <0.05	Non-detect	R
		Detect	J
	RRF <0.01 ¹	Non-detect	R
		Detect	J
	RRF >0.05 or RRF >0.01 ¹	Non-detect	No Action
		Detect	
Initial Calibration	%RSD > 15% or a correlation coefficient <0.99	Non-detect	UJ
		Detect	J
Continuing Calibration	%D >20% (increase in sensitivity)	Non-detect	No Action
		Detect	J
	%D >20% (decrease in sensitivity)	Non-detect	UJ
		Detect	J

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.

Results for duplicate samples are summarized in the following table.

Sample ID/Duplicate ID	Compound	Sample Result	Duplicate Result	RPD
MW-18/DUP-02	All compounds	ND	ND	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.

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
<u>Data Completeness and Deliverables</u>			
Have any missing deliverables been received and added to the data package?	<u> </u>	<u> X </u>	<u> </u>
Is there a narrative or cover letter present?	<u> X </u>	<u> </u>	<u> </u>
Are the sample numbers included in the narrative?	<u> X </u>	<u> </u>	<u> </u>
Are the sample chain-of-custodies present?	<u> X </u>	<u> </u>	<u> </u>
Do the chain-of-custodies indicate any problems with sample receipt or sample condition?	<u> </u>	<u> X </u>	<u> </u>
<u>Holding Times</u>			
Have any holding times been exceeded?	<u> </u>	<u> X </u>	<u> </u>
<u>Surrogate Recovery</u>			
Are surrogate recovery forms present?	<u> X </u>	<u> </u>	<u> </u>
Are all samples listed on the surrogate recovery form?	<u> X </u>	<u> </u>	<u> </u>
Was one or more surrogate recovery outside control limits for any sample or blank?	<u> </u>	<u> X </u>	<u> </u>
If yes, were the samples reanalyzed?	<u> </u>	<u> </u>	<u> X </u>
Are there any transcription/calculation errors between the raw data and the summary form?	<u> </u>	<u> X </u>	<u> </u>
<u>Matrix Spikes</u>			
Is there a MS recovery form present?	<u> X </u>	<u> </u>	<u> </u>
Were matrix spikes analyzed at the required frequency?	<u> X </u>	<u> </u>	<u> </u>
How many spike recoveries were outside of QC limits?			
<u> 0 </u> out of <u> 32 </u>			
How many RPDs for MS/MSD were outside of QC limits?			
<u> 0 </u> out of <u> 16 </u>			
<u>Blanks</u>			
Is a method blank summary form present?	<u> X </u>	<u> </u>	<u> </u>
Has a method blank been analyzed for each day or for each 20 samples, whichever is more frequent?	<u> X </u>	<u> </u>	<u> </u>
Has a blank been analyzed at least once every 12 hours for each system used?	<u> X </u>	<u> </u>	<u> </u>
Do any method/instrument blanks have positive results?	<u> </u>	<u> X </u>	<u> </u>
Are trip/field/rinse blanks associated with every sample?	<u> X </u>	<u> </u>	<u> </u>
Do any trip/field/rinse blanks have positive results?	<u> X </u>	<u> </u>	<u> </u>

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

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

SEMI-VOLATILE ORGANIC COMPOUND (SVOC) ANALYSES

Introduction

Analyses were performed according to (United States 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 than 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
PZ-4S	Nitrobenzene-d5	AC
MW-23S	2-Fluorobiphenyl	AC
MW-23I	Terphenyl-d14	< LL but > 10%
MW-25S		

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.

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 sample locations exhibited acceptable LCS recoveries.

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
MW-18/DUP-02	All compounds	ND	ND	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 field duplicate RPDs were acceptable.

10. Compound Identification

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

No target compounds were identified in the samples.

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
<u>Data Completeness and Deliverables</u>			
Have any missing deliverables been received and added to the data package?	<u> </u>	<u> X </u>	<u> </u>
Is there a narrative or cover letter present?	<u> X </u>	<u> </u>	<u> </u>
Are the sample numbers included in the narrative?	<u> X </u>	<u> </u>	<u> </u>
Are the sample chain-of-custodies present?	<u> X </u>	<u> </u>	<u> </u>
Do the chain-of-custodies indicate any problems with sample receipt or sample condition?	<u> </u>	<u> X </u>	<u> </u>
<u>Holding Times</u>			
Have any holding times been exceeded?	<u> </u>	<u> X </u>	<u> </u>
<u>Surrogate Recovery</u>			
Are the surrogate recovery forms present?	<u> X </u>	<u> </u>	<u> </u>
Are all samples listed on the surrogate recovery form?	<u> X </u>	<u> </u>	<u> </u>
Were two or more base-neutral or acid surrogate recoveries outside control limits for any sample or blank?	<u> </u>	<u> X </u>	<u> </u>
If yes, were the samples reanalyzed?	<u> </u>	<u> </u>	<u> X </u>
Are there any transcription/calculation errors between the raw data and the summary form?	<u> </u>	<u> X </u>	<u> </u>
<u>Matrix Spikes</u>			
Is there a MS recovery form present?	<u> </u>	<u> X </u>	<u> </u>
Were MSs analyzed at the required frequency	<u> </u>	<u> X </u>	<u> </u>
How many spike recoveries were outside of QC limits?	<u> 0 </u> out of <u> 32 </u>		
How many RPDs for MS/MSD were outside of QC limits?	<u> 0 </u> out of <u> 16 </u>		
<u>Blanks</u>			
Is the method blank summary form present?	<u> X </u>	<u> </u>	<u> </u>
Has a method blank been analyzed for each set of samples or for each 20 samples, whichever is more frequent?	<u> X </u>	<u> </u>	<u> </u>
Has a blank been analyzed for each system used?	<u> X </u>	<u> </u>	<u> </u>
Do any method blanks have positive results?	<u> </u>	<u> X </u>	<u> </u>
Are field/rinse blanks associated with every sample?	<u> </u>	<u> X </u>	<u> </u>
Do any field/rinse blanks have positive results?	<u> </u>	<u> </u>	<u> X </u>
<u>Tuning and Mass Calibration</u>			
Are the GC/MS tuning forms present for DFTPP?	<u> X </u>	<u> </u>	<u> </u>

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

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

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 than 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 where 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 LCS 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
MW-18/DUP-02	All compounds	ND	ND	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 field duplicate RPDs 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
<u>Data Completeness and Deliverables</u>			
Have any missing deliverables been received and added to the data package?	<u> </u>	<u> X </u>	<u> </u>
Is there a narrative or cover letter present?	<u> X </u>	<u> </u>	<u> </u>
Are the sample numbers included in the narrative?	<u> X </u>	<u> </u>	<u> </u>
Are the sample chain-of-custodies present?	<u> X </u>	<u> </u>	<u> </u>
Do the chain-of-custodies indicate any problems with sample receipt or sample condition?	<u> </u>	<u> X </u>	<u> </u>
<u>Holding Times</u>			
Have any holding times been exceeded?	<u> </u>	<u> X </u>	<u> </u>
<u>Surrogate Recovery</u>			
Are surrogate recovery forms present?	<u> X </u>	<u> </u>	<u> </u>
Are all samples listed on the surrogate recovery form?	<u> X </u>	<u> </u>	<u> </u>
Was one or more surrogate recovery outside control limits for any sample or blank?	<u> </u>	<u> X </u>	<u> </u>
If yes, were the samples reanalyzed?	<u> </u>	<u> </u>	<u> X </u>
Are there any transcription/calculation errors between the raw data and the summary form?	<u> </u>	<u> X </u>	<u> </u>
<u>Matrix Spikes</u>			
Is there a MS recovery form present?	<u> X </u>	<u> </u>	<u> </u>
Were matrix spikes analyzed at the required frequency?	<u> X </u>	<u> </u>	<u> </u>
How many spike recoveries were outside of QC limits?			
<u> 0 </u> out of <u> 2 </u>			
How many RPDs for MS/MSD were outside of QC limits?			
<u> 0 </u> out of <u> 1 </u>			
<u>Blanks</u>			
Is a method blank summary form present?	<u> X </u>	<u> </u>	<u> </u>
Has a method blank been analyzed for each day or for each 20 samples, whichever is more frequent?	<u> X </u>	<u> </u>	<u> </u>
Has a blank been analyzed at least once every 12 hours for each system used?	<u> X </u>	<u> </u>	<u> </u>
Do any method/instrument blanks have positive results?	<u> </u>	<u> X </u>	<u> </u>
Are trip/field/rinse blanks associated with every sample?	<u> </u>	<u> X </u>	<u> </u>
Do any trip/field/rinse blanks have positive results?	<u> </u>	<u> </u>	<u> X </u>

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

Corrected Sample Analysis Data Sheets

Client ID: PZ-4S
Site: McKesson/Bear St.

Lab Sample No: 836696
Lab Job No: H397

Date Sampled: 06/11/07
Date Received: 06/12/07
Date Analyzed: 06/15/07
GC Column: Rtx-VMS
Instrument ID: VOAMS10.i
Lab File ID: bb81203.d

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

VOLATILE ORGANICS - GC/MS
METHOD 8260B

<u>Parameter</u>	<u>Analytical Result</u> <u>Units: ug/l</u>	<u>Quantitation</u> <u>Limit</u> <u>Units: ug/l</u>
Methylene Chloride	0.85 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: PZ-4D
Site: McKesson/Bear St.

Lab Sample No: 836697
Lab Job No: H397

Date Sampled: 06/11/07
Date Received: 06/12/07
Date Analyzed: 06/15/07
GC Column: Rtx-VMS
Instrument ID: VOAMS10.i
Lab File ID: bb81196.d

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

VOLATILE ORGANICS - GC/MS
METHOD 8260B

<u>Parameter</u>	<u>Analytical Result</u> <u>Units: ug/l</u>	<u>Quantitation</u> <u>Limit</u> <u>Units: ug/l</u>
Methylene Chloride	0.65 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: MW-23S
Site: McKesson/Bear St.

Lab Sample No: 836698
Lab Job No: H397

Date Sampled: 06/11/07
Date Received: 06/12/07
Date Analyzed: 06/15/07
GC Column: Rtx-VMS
Instrument ID: VOAMS10.i
Lab File ID: bb81197.d

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

VOLATILE ORGANICS - GC/MS
METHOD 8260B

<u>Parameter</u>	<u>Analytical Result</u> <u>Units: ug/l</u>	<u>Quantitation</u>
		<u>Limit</u> <u>Units: ug/l</u>
Methylene Chloride	0.85 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: MW-23I
Site: McKesson/Bear St.

Lab Sample No: 836699
Lab Job No: H397

Date Sampled: 06/11/07
Date Received: 06/12/07
Date Analyzed: 06/15/07
GC Column: Rtx-VMS
Instrument ID: VOAMS10.i
Lab File ID: bb81214.d

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

VOLATILE ORGANICS - GC/MS
METHOD 8260B

<u>Parameter</u>	<u>Analytical Result</u> <u>Units: ug/l</u>	<u>Quantitation</u> <u>Limit</u> <u>Units: ug/l</u>
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: MW-18
Site: McKesson/Bear St.

Lab Sample No: 836700
Lab Job No: H397

Date Sampled: 06/11/07
Date Received: 06/12/07
Date Analyzed: 06/15/07
GC Column: Rtx-VMS
Instrument ID: VOAMS10.i
Lab File ID: bb81199.d

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

VOLATILE ORGANICS - GC/MS
METHOD 8260B

<u>Parameter</u>	<u>Analytical Result</u> <u>Units: ug/l</u>	<u>Quantitation</u> <u>Limit</u> <u>Units: ug/l</u>
Methylene Chloride	0.63 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: MW-25S
Site: McKesson/Bear St.

Lab Sample No: 836701
Lab Job No: H397

Date Sampled: 06/11/07
Date Received: 06/12/07
Date Analyzed: 06/15/07
GC Column: Rtx-VMS
Instrument ID: VOAMS10.i
Lab File ID: bb81200.d

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

VOLATILE ORGANICS - GC/MS
METHOD 8260B

<u>Parameter</u>	<u>Analytical Result</u>		<u>Quantitation</u>
	<u>Units: ug/l</u>		<u>Limit</u>
			<u>Units: ug/l</u>
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: MW-25D
Site: McKesson/Bear St.

Lab Sample No: 836702
Lab Job No: H397

Date Sampled: 06/11/07
Date Received: 06/12/07
Date Analyzed: 06/15/07
GC Column: Rtx-VMS
Instrument ID: VOAMS10.i
Lab File ID: bb81201.d

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

VOLATILE ORGANICS - GC/MS
METHOD 8260B

Parameter	Analytical Result	Quantitation
	Units: ug/l	Limit Units: ug/l
Methylene Chloride	0.50 ND	3.0
Acetone	12 J	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: Dup 02
Site: McKesson/Bear St.

Lab Sample No: 836703
Lab Job No: H397

Date Sampled: 06/11/07
Date Received: 06/12/07
Date Analyzed: 06/25/07
GC Column: Rtx-VMS
Instrument ID: VOAMS3.i
Lab File ID: ca18923.d

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

VOLATILE ORGANICS - GC/MS
METHOD 8260B

<u>Parameter</u>	<u>Analytical Result</u> <u>Units: ug/l</u>	<u>Quantitation</u> <u>Limit</u> <u>Units: ug/l</u>
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: Trip Blank
Site: McKesson/Bear St.

Lab Sample No: 836704
Lab Job No: H397

Date Sampled: 06/11/07
Date Received: 06/12/07
Date Analyzed: 06/15/07
GC Column: Rtx-VMS
Instrument ID: VOAMS10.i
Lab File ID: bb81195.d

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

VOLATILE ORGANICS - GC/MS
METHOD 8260B

<u>Parameter</u>	Analytical Result <u>Units: ug/l</u>	Quantitation
		Limit <u>Units: ug/l</u>
Methylene Chloride	2.0J	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: PZ-4S
Site: McKesson/Bear St.

Lab Sample No: 836696
Lab Job No: H397

Date Sampled: 06/11/07
Date Received: 06/12/07
Date Extracted: 06/13/07
Date Analyzed: 06/14/07
GC Column: DB-5
Instrument ID: BNAMS8.i
Lab File ID: aa8579.d

Matrix: WATER
Level: LOW
Sample Volume: 930 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 1.0

SEMI-VOLATILE ORGANICS - GC/MS
METHOD 8270C

<u>Parameter</u>	<u>Analytical Result</u> <u>Units: ug/l</u>	<u>Quantitation</u> <u>Limit</u> <u>Units: ug/l</u>
Aniline	ND	5.5
N,N-Dimethylaniline	ND	1.1

Client ID: PZ-4D
Site: McKesson/Bear St.

Lab Sample No: 836697
Lab Job No: H397

Date Sampled: 06/11/07
Date Received: 06/12/07
Date Extracted: 06/13/07
Date Analyzed: 06/14/07
GC Column: DB-5
Instrument ID: BNAMS8.i
Lab File ID: aa8591.d

Matrix: WATER
Level: LOW
Sample Volume: 910 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 1.0

SEMI-VOLATILE ORGANICS - GC/MS
METHOD 8270C

<u>Parameter</u>	<u>Analytical Result</u> <u>Units: ug/l</u>	<u>Quantitation</u> <u>Limit</u> <u>Units: ug/l</u>
Aniline	ND	5.5
N,N-Dimethylaniline	ND	1.1

Client ID: MW-23S
Site: McKesson/Bear St.

Lab Sample No: 836698
Lab Job No: H397

Date Sampled: 06/11/07
Date Received: 06/12/07
Date Extracted: 06/13/07
Date Analyzed: 06/14/07
GC Column: DB-5
Instrument ID: BNAMS8.i
Lab File ID: aa8581.d

Matrix: WATER
Level: LOW
Sample Volume: 950 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 1.0

SEMI-VOLATILE ORGANICS - GC/MS
METHOD 8270C

<u>Parameter</u>	<u>Analytical Result</u> <u>Units: ug/l</u>	<u>Quantitation</u> <u>Limit</u> <u>Units: ug/l</u>
Aniline	ND	5
N,N-Dimethylaniline	ND	1.0

Client ID: MW-23I
Site: McKesson/Bear St.

Lab Sample No: 836699
Lab Job No: H397

Date Sampled: 06/11/07
Date Received: 06/12/07
Date Extracted: 06/13/07
Date Analyzed: 06/14/07
GC Column: DB-5
Instrument ID: BNAMS8.i
Lab File ID: aa8592.d

Matrix: WATER
Level: LOW
Sample Volume: 960 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 1.0

SEMI-VOLATILE ORGANICS - GC/MS
METHOD 8270C

<u>Parameter</u>	<u>Analytical Result</u> <u>Units: ug/l</u>	<u>Quantitation</u> <u>Limit</u> <u>Units: ug/l</u>
Aniline	ND	5
N,N-Dimethylaniline	ND	1.0

Client ID: MW-18
Site: McKesson/Bear St.

Lab Sample No: 836700
Lab Job No: H397

Date Sampled: 06/11/07
Date Received: 06/12/07
Date Extracted: 06/13/07
Date Analyzed: 06/14/07
GC Column: DB-5
Instrument ID: BNAMS8.i
Lab File ID: aa8593.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

<u>Parameter</u>	<u>Analytical Result</u> <u>Units: ug/l</u>	<u>Quantitation</u> <u>Limit</u> <u>Units: ug/l</u>
Aniline	ND	5
N,N-Dimethylaniline	ND	1.0

Client ID: MW-25S
Site: McKesson/Bear St.

Lab Sample No: 836701
Lab Job No: H397

Date Sampled: 06/11/07
Date Received: 06/12/07
Date Extracted: 06/13/07
Date Analyzed: 06/14/07
GC Column: DB-5
Instrument ID: BNAMS8.i
Lab File ID: aa8594.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

<u>Parameter</u>	<u>Analytical Result</u> <u>Units: ug/l</u>	<u>Quantitation</u> <u>Limit</u> <u>Units: ug/l</u>
Aniline	ND	5
N,N-Dimethylaniline	ND	1.0

Client ID: MW-25D
Site: McKesson/Bear St.

Lab Sample No: 836702
Lab Job No: H397

Date Sampled: 06/11/07
Date Received: 06/12/07
Date Extracted: 06/13/07
Date Analyzed: 06/15/07
GC Column: DB-5
Instrument ID: BNAMS2.i
Lab File ID: s28590.d

Matrix: WATER
Level: LOW
Sample Volume: 950 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 1.0

SEMI-VOLATILE ORGANICS - GC/MS
METHOD 8270C

<u>Parameter</u>	<u>Analytical Result</u> <u>Units: ug/l</u>	<u>Quantitation</u> <u>Limit</u> <u>Units: ug/l</u>
Aniline	ND	5
N,N-Dimethylaniline	ND	1.0

Client ID: Dup 02
Site: McKesson/Bear St.

Lab Sample No: 836703
Lab Job No: H397

Date Sampled: 06/11/07
Date Received: 06/12/07
Date Extracted: 06/13/07
Date Analyzed: 06/15/07
GC Column: DB-5
Instrument ID: BNAMS2.i
Lab File ID: s28591.d

Matrix: WATER
Level: LOW
Sample Volume: 950 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 1.0

SEMI-VOLATILE ORGANICS - GC/MS
METHOD 8270C

<u>Parameter</u>	<u>Analytical Result</u> <u>Units: ug/l</u>	<u>Quantitation</u> <u>Limit</u> <u>Units: ug/l</u>
Aniline	ND	5
N,N-Dimethylaniline	ND	1.0

Client ID: PZ-4S
Site: McKesson/Bear St.

Lab Sample No: 836696
Lab Job No: H397

Date Sampled: 06/11/07
Date Received: 06/12/07
Date Analyzed: 06/13/07
GC Column: DB624
Instrument ID: BNAGC5.i
Lab File ID: gc5f1779.d

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

NONHALOGENATED ORGANICS - GC/FID
ALCOHOLS

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

Client ID: PZ-4D
Site: McKesson/Bear St.

Lab Sample No: 836697
Lab Job No: H397

Date Sampled: 06/11/07
Date Received: 06/12/07
Date Analyzed: 06/13/07
GC Column: DB624
Instrument ID: BNAGC5.i
Lab File ID: gc5f1780.d

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

NONHALOGENATED ORGANICS - GC/FID
ALCOHOLS

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

Client ID: MW-23S
Site: McKesson/Bear St.

Lab Sample No: 836698
Lab Job No: H397

Date Sampled: 06/11/07
Date Received: 06/12/07
Date Analyzed: 06/13/07
GC Column: DB624
Instrument ID: BNAGC5.i
Lab File ID: gc5f1781.d

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

NONHALOGENATED ORGANICS - GC/FID
ALCOHOLS

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

Client ID: MW-23I
Site: McKesson/Bear St.

Lab Sample No: 836699
Lab Job No: H397

Date Sampled: 06/11/07
Date Received: 06/12/07
Date Analyzed: 06/13/07
GC Column: DB624
Instrument ID: BNAGC5.i
Lab File ID: gc5f1782.d

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

NONHALOGENATED ORGANICS - GC/FID
ALCOHOLS

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

Client ID: MW-18
Site: McKesson/Bear St.

Lab Sample No: 836700
Lab Job No: H397

Date Sampled: 06/11/07
Date Received: 06/12/07
Date Analyzed: 06/13/07
GC Column: DB624
Instrument ID: BNAGC5.i
Lab File ID: gc5f1785.d

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

NONHALOGENATED ORGANICS - GC/FID
ALCOHOLS

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

Client ID: MW-25S
Site: McKesson/Bear St.

Lab Sample No: 836701
Lab Job No: H397

Date Sampled: 06/11/07
Date Received: 06/12/07
Date Analyzed: 06/13/07
GC Column: DB624
Instrument ID: BNAGC5.i
Lab File ID: gc5f1786.d

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

NONHALOGENATED ORGANICS - GC/FID
ALCOHOLS

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

Client ID: MW-25D
Site: McKesson/Bear St.

Lab Sample No: 836702
Lab Job No: H397

Date Sampled: 06/11/07
Date Received: 06/12/07
Date Analyzed: 06/13/07
GC Column: DB624
Instrument ID: BNAGC5.i
Lab File ID: gc5f1788.d

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

NONHALOGENATED ORGANICS - GC/FID
ALCOHOLS

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

Client ID: Dup 02
Site: McKesson/Bear St.

Lab Sample No: 836703
Lab Job No: H397

Date Sampled: 06/11/07
Date Received: 06/12/07
Date Analyzed: 06/13/07
GC Column: DB624
Instrument ID: BNAGC5.i
Lab File ID: gc5f1789.d

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

NONHALOGENATED ORGANICS - GC/FID
ALCOHOLS

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

Laboratory Narrative

SDG NARRATIVE

STL Edison
777 New Durham Road
Edison, NJ 08817

Tel: 732 549 3900 Fax: 732 549 3679
www.stl-inc.com

STL EDISON**SDG No. H397****STL Edison Sample****Client ID**

836696	PZ-4S
836697	PZ-4D
836698	MW-23S
836699	MW-23I
836700	MW-18
836701	MW-25S
836702	MW-25D
836703	Dup_02
836704	Trip_Blank

Sample Receipt:

Sample delivery conforms to requirements.

Volatile Organic Analysis (GC/MS):

All data conforms with method requirements.

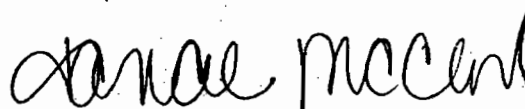
Base/Neutral and/or Acid Extractable Organics (GC/MS):

Sample 836696/701: S-Terphenyl-d14 surrogate standard recovery is biased low.

Nonhalogenated Organic Analysis (GC/FID):

All data conforms with method requirements.

I certify that the test results contained in this data package meet all requirements of NELAC 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 Director or their designee, as verified by the following signature.



Janae McCloud
Project Manager

6/29/07

NYSDEC Sample Identification and Analysis Summary Sheets

SAMPLE IDENTIFICATION AND ANALYTICAL REQUIREMENT SUMMARY

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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
836696	WATER	6/11/07	6/12/07		6/15/07
836697	WATER	6/11/07	6/12/07		6/15/07
836698	WATER	6/11/07	6/12/07		6/15/07
836699	WATER	6/11/07	6/12/07		6/15/07
836700	WATER	6/11/07	6/12/07		6/15/07
836700MS	WATER	6/11/07	6/12/07		6/15/07
836700SD	WATER	6/11/07	6/12/07		6/15/07
836701	WATER	6/11/07	6/12/07		6/15/07
836702	WATER	6/11/07	6/12/07		6/15/07
836703	WATER	6/11/07	6/12/07		6/25/07
836704	WATER	6/11/07	6/12/07		6/15/07

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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
836696	WATER	6/11/07	6/12/07	6/13/07	6/14/07
836697	WATER	6/11/07	6/12/07	6/13/07	6/14/07
836698	WATER	6/11/07	6/12/07	6/13/07	6/14/07
836699	WATER	6/11/07	6/12/07	6/13/07	6/14/07
836700	WATER	6/11/07	6/12/07	6/13/07	6/14/07
836701	WATER	6/11/07	6/12/07	6/13/07	6/14/07
836702	WATER	6/11/07	6/12/07	6/13/07	6/15/07
836703	WATER	6/11/07	6/12/07	6/13/07	6/15/07

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NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

**SAMPLE PREPARATION AND ANALYSIS SUMMARY
SEMIVOLATILE (BNA)
ANALYSES**

Laboratory Sample ID	Matrix	Analytical Protocol	Extraction Method	Auxiliary Cleanup	Dil/Conc Factor
836696	WATER	1989 NYSDEC ASP - Revision 10/95	Liquid-Liquid		1.00
836696	WATER	1989 NYSDEC ASP - Revision 10/95	Liquid-Liquid		1.00
836697	WATER	1989 NYSDEC ASP - Revision 10/95	Liquid-Liquid		1.00
836697	WATER	1989 NYSDEC ASP - Revision 10/95	Liquid-Liquid		1.00
836698	WATER	1989 NYSDEC ASP - Revision 10/95	Liquid-Liquid		1.00
836698	WATER	1989 NYSDEC ASP - Revision 10/95	Liquid-Liquid		1.00
836699	WATER	1989 NYSDEC ASP - Revision 10/95	Liquid-Liquid		1.00
836699	WATER	1989 NYSDEC ASP - Revision 10/95	Liquid-Liquid		1.00
836700	WATER	1989 NYSDEC ASP - Revision 10/95	Liquid-Liquid		1.00
836700	WATER	1989 NYSDEC ASP - Revision 10/95	Liquid-Liquid		1.00
836700MS	WATER	1989 NYSDEC ASP - Revision 10/95	Liquid-Liquid		1.00
836700SD	WATER	1989 NYSDEC ASP - Revision 10/95	Liquid-Liquid		1.00
836701	WATER	1989 NYSDEC ASP - Revision 10/95	Liquid-Liquid		1.00
836701	WATER	1989 NYSDEC ASP - Revision 10/95	Liquid-Liquid		1.00
836702	WATER	1989 NYSDEC ASP - Revision 10/95	Liquid-Liquid		1.00
836702	WATER	1989 NYSDEC ASP - Revision 10/95	Liquid-Liquid		1.00
836703	WATER	1989 NYSDEC ASP - Revision 10/95	Liquid-Liquid		1.00
836703	WATER	1989 NYSDEC ASP - Revision 10/95	Liquid-Liquid		1.00

10/95

Sample Compliance Report

SAMPLE COMPLIANCE REPORT

Sample Delivery Group	Sampling Date	ASP Protocol	Sample ID	Matrix	Compliance ¹					Noncompliance
					VOC	SVOC	PCB	MET	MISC	
H397	6/11/2007	2005	PZ-4S	Water	No	Yes	--	--	Yes	VOC – CCAL , Blank
H397	6/11/2007	2005	PZ-4D	Water	No	Yes	--	--	Yes	VOC – CCAL, Blank
H397	6/11/2007	2005	MW-23S	Water	No	Yes	--	--	Yes	VOC – CCAL, Blank
H397	6/11/2007	2005	MW-23I	Water	Yes	Yes	--	--	Yes	
H397	6/11/2007	2005	MW-18	Water	No	Yes	--	--	Yes	VOC – CCAL, Blank
H397	6/11/2007	2005	MW-25S	Water	No	Yes	--	--	Yes	VOC – CCAL
H397	6/11/2007	2005	MW-25D	Water	No	Yes	--	--	Yes	VOC – CCAL, Blank
H397	6/11/2007	2005	DUP-02	Water	No	Yes	--	--	Yes	VOC – CCAL
H397	6/11/2007	2005	Trip Blank	Water	No	Yes	--	--	Yes	VOC – CCAL

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 #H320

VOLATILE, SEMIVOLATILE AND
METHANOL ANALYSES

Analyses performed by:

Severn Trent Laboratories
Edison, New Jersey

Review performed by:



Syracuse, New York
Report #7127R

Summary

The following is an assessment of the data package for sample delivery group (SDG) #H320 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:

[illegible]

Notes:

1. Miscellaneous parameters include methanol.

VOLATILE ORGANIC COMPOUND (VOC) ANALYSES

Introduction

Analyses were performed according to (United States 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.

All compounds associated with the QA blanks exhibited a concentration less than the MDL, with the exception of the compounds listed in the following table. Sample results associated with the following sample locations were qualified.

Sample Locations	Compounds	Sample Result	Qualification
All sample locations	Methylene Chloride	Sample results <RL	No Action

RL = reporting limit

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 than 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.

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 for all target compounds.

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
TW-01/DUP-01	Acetone	7.8	8.6	9.7%
	Benzene	0.5 J	0.4 J	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.

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
<u>Data Completeness and Deliverables</u>			
Have any missing deliverables been received and added to the data package?	<u> </u>	<u> X </u>	<u> </u>
Is there a narrative or cover letter present?	<u> X </u>	<u> </u>	<u> </u>
Are the sample numbers included in the narrative?	<u> X </u>	<u> </u>	<u> </u>
Are the sample chain-of-custodies present?	<u> X </u>	<u> </u>	<u> </u>
Do the chain-of-custodies indicate any problems with sample receipt or sample condition?	<u> </u>	<u> X </u>	<u> </u>
<u>Holding Times</u>			
Have any holding times been exceeded?	<u> </u>	<u> X </u>	<u> </u>
<u>Surrogate Recovery</u>			
Are surrogate recovery forms present?	<u> X </u>	<u> </u>	<u> </u>
Are all samples listed on the surrogate recovery form?	<u> X </u>	<u> </u>	<u> </u>
Was one or more surrogate recovery outside control limits for any sample or blank?	<u> </u>	<u> X </u>	<u> </u>
If yes, were the samples reanalyzed?	<u> </u>	<u> </u>	<u> X </u>
Are there any transcription/calculation errors between the raw data and the summary form?	<u> </u>	<u> X </u>	<u> </u>
<u>Matrix Spikes</u>			
Is there a MS recovery form present?	<u> X </u>	<u> </u>	<u> </u>
Were matrix spikes analyzed at the required frequency?	<u> X </u>	<u> </u>	<u> </u>
How many spike recoveries were outside of QC limits?			
<u> 0 </u> out of <u> 32 </u>			
How many RPDs for MS/MSD were outside of QC limits?			
<u> 0 </u> out of <u> 16 </u>			
<u>Blanks</u>			
Is a method blank summary form present?	<u> X </u>	<u> </u>	<u> </u>
Has a method blank been analyzed for each day or for each 20 samples, whichever is more frequent?	<u> X </u>	<u> </u>	<u> </u>
Has a blank been analyzed at least once every 12 hours for each system used?	<u> X </u>	<u> </u>	<u> </u>
Do any method/instrument blanks have positive results?	<u> </u>	<u> X </u>	<u> </u>
Are trip/field/rinse blanks associated with every sample?	<u> X </u>	<u> </u>	<u> </u>
Do any trip/field/rinse blanks have positive results?	<u> X </u>	<u> </u>	<u> </u>

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

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

SEMI-VOLATILE ORGANIC COMPOUND (SVOC) ANALYSES

Introduction

Analyses were performed according to (United States 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 than 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
MW-33	Nitrobenzene-d5	AC
MW-34	2-Fluorobiphenyl	AC
MW-01	Terphenyl-d14	< LL but > 10%
TW-02RR	Nitrobenzene-d5	D
MW-36	2-Fluorobiphenyl	D
	Terphenyl-d14	D

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

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.

The MS/MSD exhibited acceptable recoveries and RPD between MS/MSD recoveries for all target compounds.

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 sample locations exhibited acceptable LCS recoveries.

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
TW-01/DUP-01	All compounds	ND	ND	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.

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
<u>Data Completeness and Deliverables</u>			
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	
<u>Holding Times</u>			
Have any holding times been exceeded?		X	
<u>Surrogate Recovery</u>			
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	
<u>Matrix Spikes</u>			
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?			
<u>0</u> out of <u>32</u>			
How many RPDs for MS/MSD were outside of QC limits?			
<u>0</u> out of <u>16</u>			
<u>Blanks</u>			
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
<u>Tuning and Mass Calibration</u>			
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?	<u>X</u>	<u> </u>	<u> </u>
Has a DFTPP been analyzed for each 12 hours of analysis per instrument?	<u>X</u>	<u> </u>	<u> </u>
Have the ion abundance criteria been met for each instrument used?	<u>X</u>	<u> </u>	<u> </u>
<u>Target Analytes</u>			
Is an organics analysis data sheet present for each of the following:			
Samples	<u>X</u>	<u> </u>	<u> </u>
Matrix spikes	<u>X</u>	<u> </u>	<u> </u>
Blanks	<u>X</u>	<u> </u>	<u> </u>
Are the reconstructed ion chromatograms present for each of the following:			
Samples	<u>X</u>	<u> </u>	<u> </u>
Matrix spikes	<u>X</u>	<u> </u>	<u> </u>
Blanks	<u>X</u>	<u> </u>	<u> </u>
Is the chromatographic performance acceptable?	<u>X</u>	<u> </u>	<u> </u>
Are the mass spectra of the identified compounds present?	<u>X</u>	<u> </u>	<u> </u>
Are all ions present in the standard mass spectrum at a relative intensity of 10% or greater also present in the sample spectrum?	<u>X</u>	<u> </u>	<u> </u>
Do the samples and standard relative ion intensities agree within 20%?	<u>X</u>	<u> </u>	<u> </u>
<u>Tentatively Identified Compounds</u>			
Are all the TIC summary forms present?	<u> </u>	<u>X</u>	<u> </u>
Are the mass spectra for the tentatively identified compounds and their associated "best match" spectra present?	<u> </u>	<u> </u>	<u>X</u>
Are any target compounds listed as TICs?	<u> </u>	<u> </u>	<u>X</u>
Are all ions present in the reference mass spectrum with a relative intensity greater than 10% also present in the sample mass spectrum?	<u> </u>	<u> </u>	<u>X</u>
Do the TIC and "best match" spectrum agree within 20%?	<u> </u>	<u> </u>	<u>X</u>
<u>Quantitation and Detection Limits</u>			
Are there any transcription/calculation errors in the Form 1 results?	<u> </u>	<u>X</u>	<u> </u>
Are the reporting limits adjusted to reflect sample dilutions, and for soils, sample moisture?	<u>X</u>	<u> </u>	<u> </u>
<u>Standard Data</u>			
Are the quantitation reports and reconstructed ion chromatograms present for the initial and continuing calibration standards?	<u>X</u>	<u> </u>	<u> </u>
<u>Initial Calibration</u>			
Are the initial calibration forms present for each instrument used?	<u>X</u>	<u> </u>	<u> </u>
Are the response factor RSDs within acceptable limits?	<u>X</u>	<u> </u>	<u> </u>
Are the average RRF minimum requirements met?	<u>X</u>	<u> </u>	<u> </u>

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

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 than 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 where 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 LCS 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
TW-01/DUP-01	All compounds	ND	ND	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
<u>Data Completeness and Deliverables</u>			
Have any missing deliverables been received and added to the data package?	<u> </u>	<u> X </u>	<u> </u>
Is there a narrative or cover letter present?	<u> X </u>	<u> </u>	<u> </u>
Are the sample numbers included in the narrative?	<u> X </u>	<u> </u>	<u> </u>
Are the sample chain-of-custodies present?	<u> X </u>	<u> </u>	<u> </u>
Do the chain-of-custodies indicate any problems with sample receipt or sample condition?	<u> </u>	<u> X </u>	<u> </u>
<u>Holding Times</u>			
Have any holding times been exceeded?	<u> </u>	<u> X </u>	<u> </u>
<u>Surrogate Recovery</u>			
Are surrogate recovery forms present?	<u> X </u>	<u> </u>	<u> </u>
Are all samples listed on the surrogate recovery form?	<u> X </u>	<u> </u>	<u> </u>
Was one or more surrogate recovery outside control limits for any sample or blank?	<u> </u>	<u> X </u>	<u> </u>
If yes, were the samples reanalyzed?	<u> </u>	<u> </u>	<u> X </u>
Are there any transcription/calculation errors between the raw data and the summary form?	<u> </u>	<u> X </u>	<u> </u>
<u>Matrix Spikes</u>			
Is there a MS recovery form present?	<u> X </u>	<u> </u>	<u> </u>
Were matrix spikes analyzed at the required frequency?	<u> X </u>	<u> </u>	<u> </u>
How many spike recoveries were outside of QC limits?			
<u> 0 </u> out of <u> 2 </u>			
How many RPDs for MS/MSD were outside of QC limits?			
<u> 0 </u> out of <u> 1 </u>			
<u>Blanks</u>			
Is a method blank summary form present?	<u> X </u>	<u> </u>	<u> </u>
Has a method blank been analyzed for each day or for each 20 samples, whichever is more frequent?	<u> X </u>	<u> </u>	<u> </u>
Has a blank been analyzed at least once every 12 hours for each system used?	<u> X </u>	<u> </u>	<u> </u>
Do any method/instrument blanks have positive results?	<u> </u>	<u> X </u>	<u> </u>
Are trip/field/rinse blanks associated with every sample?	<u> </u>	<u> X </u>	<u> </u>
Do any trip/field/rinse blanks have positive results?	<u> </u>	<u> </u>	<u> X </u>

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

Corrected Sample Analysis Data Sheets

Client ID: MW-31
Site: Syracuse

Lab Sample No: 836272
Lab Job No: H320

Date Sampled: 06/06/07
Date Received: 06/08/07
Date Analyzed: 06/13/07
GC Column: Rtx-VMS
Instrument ID: VOAMS3.i
Lab File ID: cal8670.d

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

VOLATILE ORGANICS - GC/MS
METHOD 8260B

<u>Parameter</u>	<u>Analytical Result</u> <u>Units: ug/l</u>	<u>Quantitation</u>
		<u>Limit</u> <u>Units: ug/l</u>
Methylene Chloride	ND	3.0
Acetone	ND	5.0
Trichloroethene	ND	1.0
Benzene	14	1.0
Toluene	0.7J	5.0
Ethylbenzene	ND	4.0
Xylene (Total)	1.3J	5.0

Client ID: MW-32
Site: Syracuse

Lab Sample No: 836273
Lab Job No: H320

Date Sampled: 06/06/07
Date Received: 06/08/07
Date Analyzed: 06/13/07
GC Column: Rtx-VMS
Instrument ID: VOAMS3.i
Lab File ID: ca18671.d

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

VOLATILE ORGANICS - GC/MS
METHOD 8260B

<u>Parameter</u>	<u>Analytical Result</u> <u>Units: ug/l</u>	<u>Quantitation</u> <u>Limit</u> <u>Units: ug/l</u>
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: TW-01
Site: Syracuse

Lab Sample No: 836274
Lab Job No: H320

Date Sampled: 06/07/07
Date Received: 06/08/07
Date Analyzed: 06/13/07
GC Column: Rtx-VMS
Instrument ID: VOAMS3.i
Lab File ID: ca18672.d

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

VOLATILE ORGANICS - GC/MS
METHOD 8260B

<u>Parameter</u>	<u>Analytical Result</u> <u>Units: ug/l</u>	<u>Quantitation</u> <u>Limit</u> <u>Units: ug/l</u>
Methylene Chloride	ND	3.0
Acetone	7.8	5.0
Trichloroethene	ND	1.0
Benzene	0.5J	1.0
Toluene	ND	5.0
Ethylbenzene	ND	4.0
Xylene (Total)	ND	5.0

Client ID: MW-33
Site: Syracuse

Lab Sample No: 836275
Lab Job No: H320

Date Sampled: 06/07/07
Date Received: 06/08/07
Date Analyzed: 06/13/07
GC Column: Rtx-VMS
Instrument ID: VOAMS3.i
Lab File ID: ca18673.d

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

VOLATILE ORGANICS - GC/MS
METHOD 8260B

<u>Parameter</u>	<u>Analytical Result</u> <u>Units: ug/l</u>	<u>Quantitation</u> <u>Limit</u> <u>Units: ug/l</u>
Methylene Chloride	ND	3.0
Acetone	ND	5.0
Trichloroethene	ND	1.0
Benzene	5.7	1.0
Toluene	0.4J	5.0
Ethylbenzene	ND	4.0
Xylene (Total)	ND	5.0

Client ID: DUP-01
Site: Syracuse

Lab Sample No: 836276
Lab Job No: H320

Date Sampled: 06/07/07
Date Received: 06/08/07
Date Analyzed: 06/13/07
GC Column: Rtx-VMS
Instrument ID: VOAMS3.i
Lab File ID: cal8674.d

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

VOLATILE ORGANICS - GC/MS
METHOD 8260B

<u>Parameter</u>	<u>Analytical Result</u> <u>Units: ug/l</u>	<u>Quantitation</u> <u>Limit</u> <u>Units: ug/l</u>
Methylene Chloride	ND	3.0
Acetone	8.6	5.0
Trichloroethene	ND	1.0
Benzene	0.4J	1.0
Toluene	ND	5.0
Ethylbenzene	ND	4.0
Xylene (Total)	ND	5.0

Client ID: MW-34
Site: Syracuse

Lab Sample No: 836277
Lab Job No: H320

Date Sampled: 06/07/07
Date Received: 06/08/07
Date Analyzed: 06/13/07
GC Column: Rtx-VMS
Instrument ID: VOAMS3.i
Lab File ID: cal8675.d

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

VOLATILE ORGANICS - GC/MS
METHOD 8260B

<u>Parameter</u>	<u>Analytical Result</u> <u>Units: ug/l</u>	<u>Quantitation</u>
		<u>Limit</u> <u>Units: ug/l</u>
Methylene Chloride	ND	3.0
Acetone	22	5.0
Trichloroethene	ND	1.0
Benzene	0.9J	1.0
Toluene	0.5J	5.0
Ethylbenzene	ND	4.0
Xylene (Total)	0.6J	5.0

Client ID: MW-35
Site: Syracuse

Lab Sample No: 836278
Lab Job No: H320

Date Sampled: 06/07/07
Date Received: 06/08/07
Date Analyzed: 06/13/07
GC Column: Rtx-VMS
Instrument ID: VOAMS3.i
Lab File ID: cal8677.d

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

VOLATILE ORGANICS - GC/MS
METHOD 8260B

<u>Parameter</u>	<u>Analytical Result</u> <u>Units: ug/l</u>	<u>Quantitation</u>
		<u>Limit</u> <u>Units: ug/l</u>
Methylene Chloride	ND	3.0
Acetone	13	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: TW-02RR
Site: Syracuse

Lab Sample No: 836279
Lab Job No: H320

Date Sampled: 06/07/07
Date Received: 06/08/07
Date Analyzed: 06/13/07
GC Column: Rtx-VMS
Instrument ID: VOAMS3.i
Lab File ID: ca18678.d

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

VOLATILE ORGANICS - GC/MS
METHOD 8260B

<u>Parameter</u>	<u>Analytical Result</u> <u>Units: ug/l</u>	<u>Quantitation</u> <u>Limit</u> <u>Units: ug/l</u>
Methylene Chloride	ND	3.0
Acetone	17	5.0
Trichloroethene	ND	1.0
Benzene	5.5	1.0
Toluene	1.3J	5.0
Ethylbenzene	4.0	4.0
Xylene (Total)	8.8	5.0

Client ID: MW-36
Site: Syracuse

Lab Sample No: 836280
Lab Job No: H320

Date Sampled: 06/07/07
Date Received: 06/08/07
Date Analyzed: 06/13/07
GC Column: Rtx-VMS
Instrument ID: VOAMS3.i
Lab File ID: cal8679.d

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

VOLATILE ORGANICS - GC/MS
METHOD 8260B

<u>Parameter</u>	<u>Analytical Result</u> <u>Units: ug/l</u>	<u>Quantitation</u> <u>Limit</u> <u>Units: ug/l</u>
Methylene Chloride	ND	3.0
Acetone	33	5.0
Trichloroethene	ND	1.0
Benzene	4.6	1.0
Toluene	1.4J	5.0
Ethylbenzene	0.8J	4.0
Xylene (Total)	5.0	5.0

Client ID: MW-9S
Site: Syracuse

Lab Sample No: 836281
Lab Job No: H320

Date Sampled: 06/07/07
Date Received: 06/08/07
Date Analyzed: 06/13/07
GC Column: Rtx-VMS
Instrument ID: VOAMS3.i
Lab File ID: ca18685.d

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

VOLATILE ORGANICS - GC/MS
METHOD 8260B

<u>Parameter</u>	<u>Analytical Result</u> <u>Units: ug/l</u>	<u>Quantitation</u>
		<u>Limit</u> <u>Units: ug/l</u>
Methylene Chloride	ND	3.0
Acetone	ND	5.0
Trichloroethene	ND	1.0
Benzene	1.4	1.0
Toluene	3.3J	5.0
Ethylbenzene	42	4.0
Xylene (Total)	110	5.0

Client ID: MW-01
Site: Syracuse

Lab Sample No: 836282
Lab Job No: H320

Date Sampled: 06/07/07
Date Received: 06/08/07
Date Analyzed: 06/13/07
GC Column: Rtx-VMS
Instrument ID: VOAMS3.i
Lab File ID: cal8680.d

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

VOLATILE ORGANICS - GC/MS
METHOD 8260B

<u>Parameter</u>	<u>Analytical Result</u> <u>Units: ug/l</u>	<u>Quantitation</u> <u>Limit</u> <u>Units: ug/l</u>
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: TRIPBLANK
Site: Syracuse

Lab Sample No: 836283
Lab Job No: H320

Date Sampled: 06/07/07
Date Received: 06/08/07
Date Analyzed: 06/13/07
GC Column: Rtx-VMS
Instrument ID: VOAMS3.i
Lab File ID: cal8666.d

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

VOLATILE ORGANICS - GC/MS
METHOD 8260B

<u>Parameter</u>	<u>Analytical Result</u> <u>Units: ug/l</u>	<u>Quantitation</u> <u>Limit</u> <u>Units: ug/l</u>
Methylene Chloride	1.7J	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: MW-31
Site: Syracuse

Lab Sample No: 836272
Lab Job No: H320

Date Sampled: 06/06/07
Date Received: 06/08/07
Date Extracted: 06/11/07
Date Analyzed: 06/12/07
GC Column: DB-5
Instrument ID: BNAMS8.i
Lab File ID: aa8484.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

<u>Parameter</u>	<u>Analytical Result</u> <u>Units: ug/l</u>	<u>Quantitation</u> <u>Limit</u> <u>Units: ug/l</u>
Aniline	ND	5
N,N-Dimethylaniline	2.0	1.0

Client ID: MW-32
Site: Syracuse

Lab Sample No: 836273
Lab Job No: H320

Date Sampled: 06/06/07
Date Received: 06/08/07
Date Extracted: 06/11/07
Date Analyzed: 06/12/07
GC Column: DB-5
Instrument ID: BNAMS8.i
Lab File ID: aa8485.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

<u>Parameter</u>	<u>Analytical Result</u> <u>Units: ug/l</u>	<u>Quantitation</u> <u>Limit</u> <u>Units: ug/l</u>
Aniline	ND	5
N,N-Dimethylaniline	ND	1.0

Client ID: TW-01
Site: Syracuse

Lab Sample No: 836274
Lab Job No: H320

Date Sampled: 06/07/07
Date Received: 06/08/07
Date Extracted: 06/11/07
Date Analyzed: 06/12/07
GC Column: DB-5
Instrument ID: BNAMS8.i
Lab File ID: aa8486.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

<u>Parameter</u>	<u>Analytical Result</u> <u>Units: ug/l</u>	<u>Quantitation</u> <u>Limit</u> <u>Units: ug/l</u>
Aniline	ND	5
N,N-Dimethylaniline	ND	1.0

Client ID: MW-33
Site: Syracuse

Lab Sample No: 836275
Lab Job No: H320

Date Sampled: 06/07/07
Date Received: 06/08/07
Date Extracted: 06/11/07
Date Analyzed: 06/12/07
GC Column: DB-5
Instrument ID: BNAMS8.i
Lab File ID: aa8487.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

<u>Parameter</u>	<u>Analytical Result</u> <u>Units: ug/l</u>	<u>Quantitation</u> <u>Limit</u> <u>Units: ug/l</u>
Aniline	46	5
N,N-Dimethylaniline	2.6	1.0

Client ID: DUP-01
Site: Syracuse

Lab Sample No: 836276
Lab Job No: H320

Date Sampled: 06/07/07
Date Received: 06/08/07
Date Extracted: 06/11/07
Date Analyzed: 06/12/07
GC Column: DB-5
Instrument ID: BNAMS8.i
Lab File ID: aa8488.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

<u>Parameter</u>	<u>Analytical Result</u> <u>Units: ug/l</u>	<u>Quantitation</u> <u>Limit</u> <u>Units: ug/l</u>
Aniline	ND	5
N,N-Dimethylaniline	ND	1.0

Client ID: MW-34
Site: Syracuse

Lab Sample No: 836277
Lab Job No: H320

Date Sampled: 06/07/07
Date Received: 06/08/07
Date Extracted: 06/11/07
Date Analyzed: 06/12/07
GC Column: DB-5
Instrument ID: BNAMS8.i
Lab File ID: aa8489.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

<u>Parameter</u>	<u>Analytical Result</u> <u>Units: ug/l</u>	<u>Quantitation</u> <u>Limit</u> <u>Units: ug/l</u>
Aniline	ND	5
N,N-Dimethylaniline	ND	1.0

Client ID: MW-35
Site: Syracuse

Lab Sample No: 836278
Lab Job No: H320

Date Sampled: 06/07/07
Date Received: 06/08/07
Date Extracted: 06/11/07
Date Analyzed: 06/12/07
GC Column: DB-5
Instrument ID: BNAMS8.i
Lab File ID: aa8490.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

<u>Parameter</u>	<u>Analytical Result</u> <u>Units: ug/l</u>	<u>Quantitation</u> <u>Limit</u> <u>Units: ug/l</u>
Aniline	ND	5
N,N-Dimethylaniline	ND	1.0

Client ID: TW-02RR
Site: Syracuse

Lab Sample No: 836279
Lab Job No: H320

Date Sampled: 06/07/07
Date Received: 06/08/07
Date Extracted: 06/11/07
Date Analyzed: 06/13/07
GC Column: DB-5
Instrument ID: BNAMS8.i
Lab File ID: aa8550.d

Matrix: WATER
Level: LOW
Sample Volume: 1000 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 100.0

SEMI-VOLATILE ORGANICS - GC/MS
METHOD 8270C

<u>Parameter</u>	<u>Analytical Result</u> <u>Units: ug/l</u>	<u>Quantitation</u> <u>Limit</u> <u>Units: ug/l</u>
Aniline	6800	500
N,N-Dimethylaniline	ND	100

Client ID: MW-36
Site: Syracuse

Lab Sample No: 836280
Lab Job No: H320

Date Sampled: 06/07/07
Date Received: 06/08/07
Date Extracted: 06/11/07
Date Analyzed: 06/14/07
GC Column: DB-5
Instrument ID: BNAMS8.i
Lab File ID: aa8553.d

Matrix: WATER
Level: LOW
Sample Volume: 990 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 10.0

SEMI-VOLATILE ORGANICS - GC/MS
METHOD 8270C

<u>Parameter</u>	<u>Analytical Result</u> <u>Units: ug/l</u>	<u>Quantitation</u> <u>Limit</u> <u>Units: ug/l</u>
Aniline	1300	50
N,N-Dimethylaniline	ND	10

Client ID: MW-9S
Site: Syracuse

Lab Sample No: 836281
Lab Job No: H320

Date Sampled: 06/07/07
Date Received: 06/08/07
Date Extracted: 06/11/07
Date Analyzed: 06/12/07
GC Column: DB-5
Instrument ID: BNAMS8.i
Lab File ID: aa8491.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

<u>Parameter</u>	<u>Analytical Result</u> <u>Units: ug/l</u>	<u>Quantitation</u> <u>Limit</u> <u>Units: ug/l</u>
Aniline	ND	5
N,N-Dimethylaniline	4.1	1.0

Client ID: MW-01
Site: Syracuse

Lab Sample No: 836282
Lab Job No: H320

Date Sampled: 06/07/07
Date Received: 06/08/07
Date Extracted: 06/11/07
Date Analyzed: 06/12/07
GC Column: DB-5
Instrument ID: BNAMS8.i
Lab File ID: aa8492.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

<u>Parameter</u>	<u>Analytical Result</u> <u>Units: ug/l</u>	<u>Quantitation</u> <u>Limit</u> <u>Units: ug/l</u>
Aniline	ND	5
N,N-Dimethylaniline	ND	1.0

Client ID: MW-31
Site: Syracuse

Lab Sample No: 836272
Lab Job No: H320

Date Sampled: 06/06/07
Date Received: 06/08/07
Date Analyzed: 06/12/07
GC Column: DB624
Instrument ID: BNAGC5.i
Lab File ID: gc5f1742.d

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

NONHALOGENATED ORGANICS - GC/FID
ALCOHOLS

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

Client ID: MW-32
Site: Syracuse

Lab Sample No: 836273
Lab Job No: H320

Date Sampled: 06/06/07
Date Received: 06/08/07
Date Analyzed: 06/12/07
GC Column: DB624
Instrument ID: BNAGC5.i
Lab File ID: gc5f1743.d

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

NONHALOGENATED ORGANICS - GC/FID
ALCOHOLS

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

Client ID: TW-01
Site: Syracuse

Lab Sample No: 836274
Lab Job No: H320

Date Sampled: 06/07/07
Date Received: 06/08/07
Date Analyzed: 06/12/07
GC Column: DB624
Instrument ID: BNAGC5.i
Lab File ID: gc5f1741.d

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

NONHALOGENATED ORGANICS - GC/FID
ALCOHOLS

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

Client ID: MW-33
Site: Syracuse

Lab Sample No: 836275
Lab Job No: H320

Date Sampled: 06/07/07
Date Received: 06/08/07
Date Analyzed: 06/12/07
GC Column: DB624
Instrument ID: BNAGC5.i
Lab File ID: gc5f1744.d

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

NONHALOGENATED ORGANICS - GC/FID
ALCOHOLS

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

Client ID: DUP-01
Site: Syracuse

Lab Sample No: 836276
Lab Job No: H320

Date Sampled: 06/07/07
Date Received: 06/08/07
Date Analyzed: 06/12/07
GC Column: DB624
Instrument ID: BNAGC5.i
Lab File ID: gc5f1745.d

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

NONHALOGENATED ORGANICS - GC/FID
ALCOHOLS

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

Client ID: MW-34
Site: Syracuse

Lab Sample No: 836277
Lab Job No: H320

Date Sampled: 06/07/07
Date Received: 06/08/07
Date Analyzed: 06/12/07
GC Column: DB624
Instrument ID: BNAGC5.i
Lab File ID: gc5f1746.d

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

NONHALOGENATED ORGANICS - GC/FID
ALCOHOLS

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

Client ID: MW-35
Site: Syracuse

Lab Sample No: 836278
Lab Job No: H320

Date Sampled: 06/07/07
Date Received: 06/08/07
Date Analyzed: 06/12/07
GC Column: DB624
Instrument ID: BNAGC5.i
Lab File ID: gc5f1748.d

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

NONHALOGENATED ORGANICS - GC/FID
ALCOHOLS

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

Client ID: TW-02RR
Site: Syracuse

Lab Sample No: 836279
Lab Job No: H320

Date Sampled: 06/07/07
Date Received: 06/08/07
Date Analyzed: 06/12/07
GC Column: DB624
Instrument ID: BNAGC5.i
Lab File ID: gc5f1749.d

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

NONHALOGENATED ORGANICS - GC/FID
ALCOHOLS

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

Client ID: MW-36
Site: Syracuse

Lab Sample No: 836280
Lab Job No: H320

Date Sampled: 06/07/07
Date Received: 06/08/07
Date Analyzed: 06/12/07
GC Column: DB624
Instrument ID: BNAGC5.i
Lab File ID: gc5f1750.d

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

NONHALOGENATED ORGANICS - GC/FID
ALCOHOLS

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

Client ID: MW-9S
Site: Syracuse

Lab Sample No: 836281
Lab Job No: H320

Date Sampled: 06/07/07
Date Received: 06/08/07
Date Analyzed: 06/12/07
GC Column: DB624
Instrument ID: BNAGC5.i
Lab File ID: gc5f1751.d

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

NONHALOGENATED ORGANICS - GC/FID
ALCOHOLS

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

Client ID: MW-01
Site: Syracuse

Lab Sample No: 836282
Lab Job No: H320

Date Sampled: 06/07/07
Date Received: 06/08/07
Date Analyzed: 06/12/07
GC Column: DB624
Instrument ID: BNAGC5.i
Lab File ID: gc5f1752.d

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

NONHALOGENATED ORGANICS - GC/FID
ALCOHOLS

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

Laboratory Narrative

STL Edison
777 New Durham Road
Edison, NJ 08817

Tel: 732 549 3900 Fax: 732 549 3679
www.stl-inc.com

SDG NARRATIVE

STL EDISON

SDG No. H320

<u>STL Edison Sample</u>	<u>Client ID</u>
836272	MW-31
836273	MW-32
836274	TW-01
836275	MW-33
836276	DUP-01
836277	MW-34
836278	MW-35
836279	TW-02RR
836280	MW-36
836281	MW-9S
836282	MW-01

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):

Samples 836275/277/280/282: S-Terphenyl-d14 surrogate standard recovery is biased low.

Nonhalogenated Organic Analysis (GC/FID):

All data conforms with method requirements.

I certify that the test results contained in this data package meet all requirements of NELAC 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 Director or their designee, as verified by the following signature.



Janae McCloud
Project Manager

6/29/07 -

NYSDEC Sample Identification and Analysis Summary Sheets

SAMPLE IDENTIFICATION AND ANALYTICAL REQUIREMENT SUMMARY

[illegible]

1 - Analysis includes Wetchemistry (PHC)

**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
836272	WATER	6/6/07	6/8/07		6/13/07
836273	WATER	6/6/07	6/8/07		6/13/07
836274	WATER	6/7/07	6/8/07		6/13/07
836274MS	WATER	6/7/07	6/8/07		6/13/07
836274SD	WATER	6/7/07	6/8/07		6/13/07
836275	WATER	6/7/07	6/8/07		6/13/07
836276	WATER	6/7/07	6/8/07		6/13/07
836277	WATER	6/7/07	6/8/07		6/13/07
836278	WATER	6/7/07	6/8/07		6/13/07
836279	WATER	6/7/07	6/8/07		6/13/07
836280	WATER	6/7/07	6/8/07		6/13/07
836281	WATER	6/7/07	6/8/07		6/13/07
836282	WATER	6/7/07	6/8/07		6/13/07
836283	WATER	6/7/07	6/8/07		6/13/07

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
836272	WATER	6/6/07	6/8/07	6/11/07	6/12/07
836273	WATER	6/6/07	6/8/07	6/11/07	6/12/07
836274	WATER	6/7/07	6/8/07	6/11/07	6/12/07
836275	WATER	6/7/07	6/8/07	6/11/07	6/12/07
836276	WATER	6/7/07	6/8/07	6/11/07	6/12/07
836277	WATER	6/7/07	6/8/07	6/11/07	6/12/07
836278	WATER	6/7/07	6/8/07	6/11/07	6/12/07
836279	WATER	6/7/07	6/8/07	6/11/07	6/13/07
836280	WATER	6/7/07	6/8/07	6/11/07	6/14/07
836281	WATER	6/7/07	6/8/07	6/11/07	6/12/07
836282	WATER	6/7/07	6/8/07	6/11/07	6/12/07

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

**SAMPLE PREPARATION AND ANALYSIS SUMMARY
SEMIVOLATILE (BNA)
ANALYSES**

Laboratory Sample ID	Matrix	Analytical Protocol	Extraction Method	Auxiliary Cleanup	Dil/Conc Factor
836272	WATER	1989 NYSDEC ASP - Revision 10/95	Liquid-Liquid		1.00
836272	WATER	1989 NYSDEC ASP - Revision 10/95	Liquid-Liquid		1.00
836273	WATER	1989 NYSDEC ASP - Revision 10/95	Liquid-Liquid		1.00
836273	WATER	1989 NYSDEC ASP - Revision 10/95	Liquid-Liquid		1.00
836274	WATER	1989 NYSDEC ASP - Revision 10/95	Liquid-Liquid		1.00
836274	WATER	1989 NYSDEC ASP - Revision 10/95	Liquid-Liquid		1.00
836274MS	WATER	1989 NYSDEC ASP - Revision 10/95	Liquid-Liquid		1.00
836274SD	WATER	1989 NYSDEC ASP - Revision 10/95	Liquid-Liquid		1.00
836275	WATER	1989 NYSDEC ASP - Revision 10/95	Liquid-Liquid		1.00
836275	WATER	1989 NYSDEC ASP - Revision 10/95	Liquid-Liquid		1.00
836276	WATER	1989 NYSDEC ASP - Revision 10/95	Liquid-Liquid		1.00
836276	WATER	1989 NYSDEC ASP - Revision 10/95	Liquid-Liquid		1.00
836277	WATER	1989 NYSDEC ASP - Revision 10/95	Liquid-Liquid		1.00
836277	WATER	1989 NYSDEC ASP - Revision 10/95	Liquid-Liquid		1.00
836278	WATER	1989 NYSDEC ASP - Revision 10/95	Liquid-Liquid		1.00
836278	WATER	1989 NYSDEC ASP - Revision 10/95	Liquid-Liquid		1.00
836279	WATER	1989 NYSDEC ASP - Revision 10/95	Liquid-Liquid		2.00
836279	WATER	1989 NYSDEC ASP - Revision 10/95	Liquid-Liquid		1.00
836280	WATER	1989 NYSDEC ASP - Revision 10/95	Liquid-Liquid		1.00
836280	WATER	1989 NYSDEC ASP - Revision 10/95	Liquid-Liquid		10.00
836281	WATER	1989 NYSDEC ASP - Revision 10/95	Liquid-Liquid		1.00
836281	WATER	1989 NYSDEC ASP - Revision 10/95	Liquid-Liquid		1.00
836282	WATER	1989 NYSDEC ASP - Revision 10/95	Liquid-Liquid		1.00
836282	WATER	1989 NYSDEC ASP - Revision 10/95	Liquid-Liquid		1.00

10/95

Sample Compliance Report

SAMPLE COMPLIANCE REPORT

Sample Delivery Group	Sampling Date	ASP Protocol	Sample ID	Matrix	Compliance ¹					Noncompliance
					VOC	SVOC	PCB	MET	MISC	
H320	6/06/2007	2005	MW-31	Water	Yes	Yes	--	--	Yes	
H320	6/06/2007	2005	MW-32	Water	Yes	Yes	--	--	Yes	
H320	6/07/2007	2005	TW-01	Water	Yes	Yes	--	--	Yes	
H320	6/07/2007	2005	MW-33	Water	Yes	No	--	--	Yes	SVOC - surrogate
H320	6/07/2007	2005	DUP-01	Water	Yes	Yes	--	--	Yes	
H320	6/07/2007	2005	MW-34	Water	Yes	No	--	--	Yes	SVOC - surrogate
H320	6/07/2007	2005	MW-35	Water	Yes	Yes	--	--	Yes	
H320	6/07/2007	2005	TW-02RR	Water	Yes	No	--	--	Yes	SVOC - surrogate
H320	6/07/2007	2005	MW-36	Water	Yes	No	--	--	Yes	SVOC - surrogate
H320	6/07/2007	2005	MW-9S	Water	Yes	Yes	--	--	Yes	
H320	6/07/2007	2005	MW-01	Water	Yes	No	--	--	Yes	SVOC - surrogate
H320	6/07/2007	2005	TRIPBLANK	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.