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February 28, 2017

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Subject: 2016 Annual Report, Groundwater Monitoring Program  
Former IBM Facility, Owego, New York

Reference: 6NYCRR Part 373 Hazardous Waste Management Permit  
No. 7-4930-00095/00005

Dear Ms. LaClair:

Enclosed is the 2016 Annual Report for the Groundwater Monitoring Program at the former IBM facility in Owego, New York. This report is being submitted in accordance with the facility's Part 373 Permit and Groundwater Monitoring Plan. An EDD for the data in this report is also being submitted to NYENVDATA.

Should you have any questions concerning this report, please contact me at 703-257-2582 or by email at [brandon.ashby@ibm.com](mailto:brandon.ashby@ibm.com).

Sincerely,

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**2016 ANNUAL REPORT  
GROUNDWATER MONITORING PROGRAM  
FORMER IBM FACILITY  
OWEGO, NEW YORK  
6NYCRR PART 373 PERMIT NO. 7-4930-00095/00005**

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**February 28, 2017**

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**GROUNDWATER SCIENCES CORPORATION**

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*Third Quarter 2016 groundwater elevations were measured on July 18, 2016 in the Tank Farm Area and Parking Lot 001 Area in the northern part of the Site.*

*Fourth Quarter 2016 groundwater elevations were measured on October 24, 2016 in the Waste Management Area, Southern and Western Boundary Areas, and Tower View Drive / Mirror Lake Area in the southern part of the Site.*

*Third Quarter 2016 groundwater sampling occurred in July 2016 in the Tank Farm Area and Parking Lot 001 Area in the northern part of the Site.*

*Fourth Quarter 2016 groundwater sampling occurred in October 2016 in the Waste Management Area, Southern and Western Boundary Areas, and Tower View Drive / Mirror Lake Area in the southern part of the Site.*

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- Appendix B Table B-1: Well Specifications, Corrective Action Monitoring Program  
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- Plate 1 Well Location Map - Corrective Action Monitoring Program

# **1 INTRODUCTION**

This report has been prepared by Groundwater Sciences Corporation (GSC) for the International Business Machines Corporation (IBM). Its purpose is to satisfy the annual reporting requirements for IBM's former Owego, New York facility (the "Site"), located approximately one mile southeast of the village of Owego, New York (Figure 1-1).

## **1.1 Regulatory Reference**

This annual report is being submitted to the New York State Department of Environmental Conservation (NYSDEC), Division of Environmental Remediation in accordance with Modules II.H (Corrective Action Program) and III.D (Reporting Requirements for Groundwater Monitoring) of the Site's 6NYCRR Part 373 Hazardous Waste Management Permit (Part 373 Permit) No. 7-4930-00095/00005, with an effective date of March 30, 2010. Groundwater monitoring data generated from January 1 to December 31, 2016, including groundwater extraction volumes, groundwater elevations, and analytical chemistry data, is presented in this report. Groundwater monitoring data generated between January 1 and June 30, 2016 was also presented in the 2016 Semiannual Data Report previously submitted to NYSDEC on August 30, 2016. In accordance with the Module II.H.3 requirements, contaminant levels and the effectiveness of the corrective measures program are evaluated in this report.

## **1.2 Organization of Report**

This report is organized as follows. Section 1.3 provides background on the Groundwater Monitoring Program and Section 1.4 provides an overview of the Site's hydrogeologic setting. Section 2 discusses the groundwater sampling and related data collected during 2016 for the Groundwater Monitoring Program, including extraction well pumping data and quality control (QC) analytical chemistry data. Section 3 evaluates the groundwater extraction, hydrogeology, and groundwater chemistry in various areas of the Site, including the Tank Farm Area and the Parking Lot 001 Area (P001 Area) in the northern part of the Site, and the former Waste Management Area, Tower View Drive and Mirror Lake Areas, Southern Boundary Area and Western Boundary Area in the southern part of the Site. These areas and all active monitoring and extraction wells are shown on Plate 1.

### 1.3 Background Information

IBM submitted a Resource Conservation and Recovery Act (RCRA) Post-Closure Permit Application to NYSDEC and the United States Environmental Protection Agency (USEPA) in June 1987 for the former Waste Management Area at the Site. As required by RCRA regulations, IBM established a quarterly Groundwater Monitoring Program for the Site, including the former Waste Management Area. The groundwater monitoring network and its operation, maintenance, and reporting conditions were subsequently incorporated into the Site's Part 373 Permit, which required the preparation of Groundwater Monitoring Plan (GMP). The GMP was approved by NYSDEC in March 1995 and has been revised several times in the past 21 years as extraction wells and monitoring wells have been added or removed, and the site-specific list of analytical parameters has been changed. The GMP describes the corrective action groundwater monitoring network in detail, including the groundwater treatment process, wells, sampling frequencies, analytical parameters, and semiannual and annual reporting requirements.

### 1.4 Overview of Site Hydrogeology

The hydrogeology of the former IBM Owego Site consists of three primary geologic zones or units: (1) bedrock, consisting of shale and siltstone of the Devonian West Falls Group; (2) unconsolidated sediments of glacial origin consisting of a dense mixture of clay, silt, sand, gravel, and boulders (“till”); and (3) other unconsolidated sediments of various depositional origins, including alluvium, glaciolacustrine silt, glaciofluvial sands and gravels (“outwash”) and fill. The bedrock is weathered to varying degrees on its upper surface, and this zone of weathered bedrock is very thin or absent in some areas. The till and other unconsolidated sediments are discontinuous units that vary greatly in thickness and hydraulic conductivity across the Site. Where they are present, the alluvium and glaciofluvial deposits (primarily outwash sands and gravels) form the principal shallow water-transmitting unit and are referred to in this report as the alluvial zone. The upper part of the bedrock, including the interface between the weathered bedrock and the fine-grained unconsolidated sediments (including the bottom of the till) typically transmits water and is referred to in this report as the till/bedrock zone. The till typically exhibits a very low hydraulic conductivity and is not an important water-transmitting unit.

Groundwater elevation contour maps were constructed for the till/bedrock zone using July 2016 data from the northern part of the Site (Figure 1-2A) and October 2016 data from the southern part of the Site (Figures 1-2B and 1-2C). Similar maps were published in the 2016 Semiannual Data Report using January and April 2016 data from the till/bedrock zone. Except where influenced by the extraction wells, groundwater flow in the till/bedrock zone is generally from northeast to southwest across the Site toward Barnes Creek, which flows into the Susquehanna River. The Susquehanna River is located approximately 800 feet southwest of the Site's southern boundary, as shown on Figure 1-1.

Groundwater elevation contour maps were also constructed for the alluvial zone using July 2016 data from the northern part of the site (Figure 1-3A) and October 2016 data from the southern part of the site (Figures 1-3B and 1-3C). These maps show the discontinuous nature of the alluvial zone, where groundwater flow is strongly influenced by the extraction wells in the P001 Area and former Waste Management Area. The alluvial zone is generally absent in the Tank Farm Area and in the northern portions of the former Waste Management Area and in the Tower View Drive and Mirror Lake Areas.

## 2 GROUNDWATER MONITORING PROGRAM

Quarterly field activities for the groundwater monitoring program consist of groundwater elevation measurements, groundwater sampling, and well inspections. These activities were performed in accordance with the GMP by qualified field personnel from GSC.

### 2.1 Groundwater Extraction Wells

The Site's groundwater extraction and treatment system consists of six extraction wells and a packed-column air stripping tower designed to remove volatile organic compounds (VOCs) from groundwater. As shown on Plate 1, the extraction wells are located in three areas:

1. In the Tank Farm Area, extraction well 415 pumps from the till/bedrock zone.
2. In the Parking Lot 001 Area, extraction well 413 pumps from till/bedrock zone, and extraction well 414 pumps from both the alluvial and till/bedrock zones. Extraction well 416 was installed in June 2015 and began sustained pumping from the till/bedrock zone in August 2015.
3. In the Waste Management Area, extraction well 404 pumps from both the alluvial and till/bedrock zones and extraction well 405 pumps primarily from the alluvial zone. Wells 404 and 405 have multiple screened intervals.

Except for brief periods of testing and maintenance, the system has operated continuously since April 1990. About 4.5 billion gallons of groundwater have been extracted and treated since 1985.

#### **2.1.1 Summary of Significant Maintenance Activities**

The following significant maintenance activities were performed on the groundwater monitoring wells, extraction wells, and treatment system in 2016:

1. Well 414 was shut down on January 29 and March 8 in preparation for converting the well from a jet pump to a submersible pump. The well was televewed with a downhole camera to evaluate its condition and to determine the optimal depth for setting a submersible pump. It was then cleaned by brushing and airlifting on March 15 and was televewed again on March 16 to assess the results of the well cleaning.

2. Well 413 was cleaned by brushing and airlifting on March 16 and was televewed with a downhole camera to assess the results of the well cleaning and to determine the optimal depth for setting a new submersible pump, which was installed on March 17. This work was done to improve the operating efficiency of the well in conjunction with work being done in the nearby P001 Area pump house (see below).
3. The steel casings in wells 413 and 414 were lined with a fiberglass resin liner on March 29 and 30 to repair deterioration in the steel.
4. A new submersible pump and motor were installed in well 414 on March 31. These replaced the former jet pump system and allow for individual flow metering of the well, which was not possible with the jet pump.
5. The groundwater conveyance line from well 415 to the GTF was flushed on April 7.
6. The P001 Area pump house upgrade project was completed on April 8. The upgrades included the removal of the old jet pump system equipment, installation of permanent piping from extraction well 416 to the pump house, a new piping manifold, and electrical wiring for the new submersible pump in well 414. The interior of the pump house was rebuilt, the floor was recoated, individual flow meters and sampling ports were installed for each well, five control boxes were consolidated into one panel, and a holding tank was added to contain material removed from extraction wells following cleaning activities.
7. Replacement of 2000 feet of corroded stainless steel discharge piping and other upgrades in the conveyance tunnel leading from the P001 Area to the GTF were completed on April 27. Many leaks had been previously identified in the steel piping and these leaks were being contained and collected in the tunnel. The steel piping was replaced with 4-inch Schedule 80 PVC piping.
8. The surface completions of monitoring wells 357 and 358 were repaired on May 3. These two wells are adjacent to a wetland and it was necessary to channel water away from the wells, and remove mud and vegetation to improve access. The concrete well

- pads supporting the protective steel well casings were reinforced with additional concrete.
9. Flow calibrations were performed on extraction wells 413, 414, and 416 on May 6.
  10. The surface completions of monitoring wells 166 and 167 were repaired on May 11. These two wells are located in a wetland area adjacent to Barnes Creek. It was necessary to raise the concrete well pads to a level above the saturated ground surface to improve the stability of the protective steel well casings.
  11. All extraction wells were shut down on May 19 for upgrades to the GTF and replacement of the packing in the air stripping tower.
  12. The submersible pump and motor in well 405 were replaced on May 25 due to failure of the pump.
  13. A new water level transducer was installed in extraction well 405 on July 15 following failure of the previous transducer.
  14. The submersible pump in extraction well 414 was replaced on August 16 due to failure of the pump.
  15. The pump and underground wiring were removed from former extraction well 410 on August 17 in preparation for decommissioning.
  16. The pump in well 415 was cleaned on August 23 as part of routine maintenance of the well.
  17. The GTF was temporarily shut down for wiring changes on September 8.
  18. Wells 404 and 405 were shut down for inspection and cleaning on September 14 as part of routine maintenance of the wells.
  19. The flow meter in extraction well 416 was cleaned on September 26.

20. The submersible pump in well 416 was replaced on October 17 due to failure of the pump.
21. The pitless adapter assembly in well 404 was pulled for repair on October 18. This assembly connects the discharge piping from the pump directly to a port in the side of the steel well casing where buried discharge piping leads from the well to the GTF.
22. Wells 404 and 405 were shut down on October 26 to remove the pumps and inspect the wells in preparation for televiwing on October 27. Both wells returned to service on October 28.
23. The pump in well 414 was replaced on December 13 due to failure of the pump.
24. The flow meters for wells 404 and 405, and the air stripper flow meter were calibrated on December 15 as part of the annual routine calibration requirement.

### **2.1.2 Pumping Volumes**

The pumping volume at each extraction well is recorded electronically. Table A-1 in Appendix A shows metered monthly pumping volumes in 2016 for the extraction wells in the Waste Management Area (wells 404 and 405), Parking Lot 001 Area (wells 412, 413, and 416) and Tank Farm Area (well 415). Well 416 was converted to electronic metering in April 2016 when the P001 Area pump house was upgraded. The volume of groundwater extracted in 2016 was 114.4 million gallons (Mgal), somewhat less than the average annual flow during the previous 15 years (127.5 Mgal). This decline can be attributed, in part, to shutdowns that occurred for well maintenance activities and for replacement of the discharge piping in the conveyance tunnel, as described in Section 2.1.1.

### **2.1.3 Evaluation of Treatment Efficiency**

Treatment efficiency for the groundwater treatment system was calculated by comparing concentrations of VOCs in the GTF influent with the concentrations of VOCs in the treated effluent discharged from the air stripping tower. The influent and effluent were sampled monthly in 2016 in accordance with the Site's National Pollutant Discharge Elimination System (NPDES) Permit

Number NY0244597. No EPA Method 624 VOCs were detected in any of the monthly effluent samples collected in 2016, resulting in a removal efficiency approaching 100 percent.

## **2.2 Groundwater Monitoring Wells**

The Site's Corrective Action Monitoring Program consists of 142 wells. Physical specifications for the monitoring and extraction wells used in 2016 are listed on Table B-1 of Appendix B.

### **2.2.1 Groundwater Elevation Measurements**

Groundwater elevations were measured in 140 of the 142 wells listed on Table B-2a of Appendix B. (Extraction wells 404 and 405 are not accessible for manual groundwater elevation measurements.) These include 130 on-Site wells, four off-Site wells (540, 541, 542, 543) in the Route 17C interchange area south of the Southern Boundary Area, and six off-Site wells (521, 522, 524, 529, 532, 534) on the Moore Tire property located west of the P001 Area.

Groundwater elevations were calculated by subtracting the measured depth to water from the surveyed elevation of the measuring point listed in Appendix C. The designated measuring point for most wells is the top of the inner well casing (i.e., "TOC Elevation"). Groundwater elevations were measured quarterly on January 11, May 26, July 18, and October 24, 2016. The tabulated groundwater elevation data for 2016 are presented in Appendix C. Supplemental groundwater elevations were measured in the P001 Area on April 22 and May 18 to continue to evaluate the operation of extraction well 416, which was installed in 2015, and the effectiveness of extraction in the P001 Area. Groundwater elevation data for prior years has been published in previous annual reports and is maintained in an Access database.

### **2.2.2 Monitoring Well Inspections and Dedicated Equipment**

In addition to the inspection performed when each monitoring well was sampled, a comprehensive annual inspection of the well field was performed during the January and April 2016 sampling events. This inspection included the following items: (1) measurement of depth to well bottom and comparison of this depth to the reference depth to determine the need for redevelopment, (2) assessment of the legibility of the well tag and visibility of the survey mark, (3) determination of whether the well standpipe needs to be painted and whether the location should be cleared of

brush/weeds, (4) assessment of the condition of the well seal, and (5) description of dedicated equipment (if any) and the condition of the bailer cable.

The well inspection summary table in Appendix C also shows the type of sampling device used in each well. Polyethylene diffusion bag (PDB) sampling devices are used in many monitoring wells and significantly reduce the volume of purge water generated during groundwater sampling. The PDB samplers are typically set at the midpoint of the water column in each well.

### **2.2.3 Groundwater Sampling**

Table B-2b of Appendix B lists the wells that are required by the GMP to be sampled and analyzed quarterly, semiannually, or annually. Other wells not listed on Table B-2b of the GMP were sampled voluntarily, including the groundwater extraction wells when pumping.

The 2016 sampling schedule for the groundwater monitoring program is summarized in Appendix D. For wells sampled semiannually, a staggered quarterly sampling arrangement was approved by NYSDEC, whereby the sampling events in the northern and southern parts of the Site are scheduled in alternating quarters so as to evenly distribute the sampling field work over the course of the year.

The quarterly sampling events for 2016 occurred on January 11 to 14, May 18 to 26, July 18 to 20, and October 25 to 27. All groundwater samples collected during 2016 were analyzed by Eurofins Lancaster Laboratories Environmental (NYSDOH ELAP #10670). Copies of the completed chains of custody (COCs) for 2016 are included in Appendix E of this report. The COCs for the first and second quarters were also published in Appendix E of the 2016 Semiannual Data Report.

None of the wells that were scheduled to be sampled in the northern part of the Site during the first and third quarters were dry. (Well 114 in the Tank Farm Area was dry in January and July, but it is not routinely sampled). Of the wells that were scheduled to be sampled in the southern part of the Site, only well 620 in the Tower View Drive Area was dry during the second and fourth quarter sampling events.

The remainder of this section discusses the analytical results for samples collected in 2016 from groundwater monitoring wells and extraction wells, and for field QA/QC samples.

### **2.2.3.1 Groundwater Chemistry Results**

Chemistry data generated from groundwater monitoring activities is maintained in a database by GHD, Inc. (GHD). This database contains groundwater analytical chemistry and field quality control (QC) data from 1993 to the present. Analytical chemistry data generated by the laboratory is transmitted to GHD and GSC electronically. The data is periodically reviewed for outliers, new high or low concentrations, and missing data.

A summary printout of the groundwater analytical chemistry data for all samples collected in 2016 from monitoring wells and extraction wells is presented in Appendix F. This summary includes results for pH, temperature, turbidity, and specific conductance measured in the field at the time of sampling. The summary data presented in Appendix F are shown in alphanumeric ascending order by sample location, and chronologically by sample date for each location.

#### **2.2.3.1.1 Volatile Organic Compounds**

The principal chemicals detected and of concern at the Site are chlorinated ethanes and ethenes. These and other chlorinated volatile organic compounds (CVOCs) are discussed further in Section 3.3.1. Twelve CVOCs were detected in groundwater in 2016 at concentrations greater than the applicable New York State Groundwater Quality Standard (NYSGQS).

Table 2-1 lists the 16 parameters analyzed in groundwater for the Site's Groundwater Monitoring Program together with the NYSGQS for each parameter, the maximum concentration of each parameter measured in 2016, and the monitoring well and extraction well where the maximum concentrations were detected. Dichlorodifluoromethane (Freon 12) has not been detected at concentrations greater than its NYSGQS (5 micrograms per liter (ug/L)) since 2007 and trichloromethane (chloroform) has not been detected at concentrations greater than its NYSGQS (7 ug/L) since 2008. Freon 11 has not been detected in any groundwater sample since January 2006.

Minimum, median, and maximum concentrations for the monitoring wells and extraction wells during the 24-year period from 1993 to 2016 are summarized in Appendix G.

**Table 2-1. Analytical Parameters for the Groundwater Monitoring Program\***

Parameter	NYSGQS (ug/L)	Maximum Concentration Measured in a Monitoring Well in 2016	Maximum Concentration Measured in an Extraction Well in 2016
<b><i>Detected at a concentration greater than the NYSGQS:</i></b>			
1,1,1-Trichloroethane (111-TCA)	5	3,600 ug/L @ 609	2,000 ug/L @ 415
1,1-Dichloroethane (11-DCA)	5	2,600 ug/L @ 609	1,400 ug/L @ 414
1,1-Dichloroethene (11-DCE)	5	1,100 ug/L @ 128	1,400 ug/L @ 415
Tetrachloroethene (PCE)	5	21 ug/L @ 610	15 ug/L @ 415
Trichloroethene (TCE)	5	910 ug/L @ 353	2,200 ug/L @ 415
cis-1,2-Dichloroethene (c12-DCE)	5	770 ug/L @ 128	3,500 ug/L @ 415
Vinyl chloride	2	35 ug/L @ 378	230 ug/L @ 415
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	5	490 ug/L @ 609	160 ug/L @ 415
1,2-dichloro-1,2,2-trifluoroethane (Freon 123a)	5	60 ug/L @ 609	26 ug/L @ 414
Methylene chloride (DCM)	5	8.8 ug/L @ 612	Not detected
1,2-Dichloroethane	0.6	4.1 ug/L @ 128	2.9 ug/L @ 415
1,1,2-Trichloroethane	1	12 ug/L @ 128	7.2 ug/L @ 415
<b><i>Not detected at a concentration greater than the NYSGQS:</i></b>			
Dichlorodifluoromethane (Freon 12)	5	2.6 ug/L @ 382	Not detected
Chloroethane	5	3.5 ug/L @ 140R	3.6 ug/L @ 416
Trichloromethane (Chloroform)	7	3.3 ug/L @ 128	1.7 ug/L @ 404
Trichlorofluoromethane (Freon 11)	5	Not detected	Not detected

\*from Table 1-1 of *Groundwater Monitoring Plan, Former IBM Facility, Owego, New York* (December 2006).

NYSGQS = New York State Groundwater Quality Standard (from 6 NYCRR Part 703.5, Table 1, Class GA)

ug/L = micrograms per liter

### **2.2.3.2 Quality Control Results for Environmental Blanks**

Environmental blanks, consisting of equipment rinse blanks and trip blanks, were collected and analyzed in 2016 for quality control purposes. The analytical chemistry data for these environmental blank samples is presented in Appendix H.

Trip blanks were prepared by the laboratory for each sampling round using analyte-free deionized (DI) water for each cooler containing samples for CVOC analysis. The purpose of the trip blanks is to detect contamination encountered or generated during sample transportation or storage. A trip blank was the first item placed into each cooler by the laboratory and accompanied the sample containers from the laboratory to the field sampling locations and back to the laboratory. Fifteen trip blanks were collected in 2016 and the analytical results for these trip blanks are presented in Appendix H. Groundwater samples associated with each trip blank can be determined by noting the “Sample Date” of the trip blank in Appendix H and cross-checking this date with the trip blanks listed on the COCs in Appendix E. All trip blanks labels begin with the letters “OTB” in the “Sample Identification” section of the COC.

Equipment rinse blanks were collected to confirm the efficiency of decontamination procedures by rinsing non-dedicated equipment such as water level indicators with analyte-free deionized water and catching the rinse water in sample bottles for analysis. Fourteen equipment rinse blanks were collected in 2016 from water level indicators and the analytical results for these blanks are presented in Appendix H.

Five CVOCs on the Site’s parameter list (Table 2-1) were detected in environmental blanks in 2016. Four of these VOCs were detected at estimated concentrations (“J” qualified) greater than or equal to the method detection limit (0.1 ug/L) but less than the limit of quantitation (0.5 ug/L). Only one CVOC was detected at a concentration greater than the limit of quantitation: TCE was detected at concentrations of 0.5 to 1.0 ug/L in 9 of 14 equipment rinse blanks collected in 2016 from water level indicators and in the three trip blanks from the October 2016 sampling event. None of the groundwater analytical chemistry results from monitoring wells required qualification based on the detections of VOCs in trip blanks.

### **3 EVALUATION OF HYDROGEOLOGY AND HYDROGEOCHEMISTRY**

This section evaluates the groundwater monitoring data collected during 2016. Current data are presented in the form of potentiometric and isoconcentration contour maps and are also evaluated in the context of historical trends. As required by the Site's Part 373 Permit, this evaluation includes a delineation of the limits of hydraulic control in areas with sufficient data for such delineation.

#### **3.1 Groundwater Extraction**

As noted in Section 2.1.2, Table A-1 of Appendix A contains a table of volumes pumped in 2016 from the Site's groundwater extraction wells. Details of this pumping data are discussed below.

##### **3.1.1 Northern Part of the Site**

Hydraulic control and contaminant removal in the northern part of the Site is accomplished by the operation of the Tank Farm Area and P001 Area extraction wells.

###### **3.1.1.1 Parking Lot 001 Area**

Plate 1 and Figure 1-2A show the locations of the three extraction wells (413, 414, and 416) in the P001 Area. The combined monthly flow from the P001 extraction wells in 2016 ranged from 281,000 to 436,000 gallons, as shown on Table A-1 of Appendix A.

Well 416 pumped approximately 400,000 gallons in 2016 at an average rate of 0.8 gallons per minute (gpm). With an average total CVOC concentration of 1,500 ug/L from quarterly samples, pumping from well 416 removed an estimated five pounds of CVOCs in 2016.

Extraction wells 413 and 414 were pumped at monthly average rates of 4.7 gpm and 2.5 gpm, respectively, in 2016. However, the higher total CVOC concentrations from the combined alluvial and till/bedrock zones at well 414 (1,500 to 2,400 ug/L) relative to total CVOC concentrations from the till/bedrock zone at well 413 (200 to 800 ug/L) resulted in well 414 removing more than twice the mass in 2016, estimated at 19 pounds for well 414 versus 8 pounds for well 413 (based on quarterly sampling data).

### **3.1.1.2 Tank Farm Area**

Tank Farm Area extraction well 415 (Figure 1-2A) pumped from the till/bedrock zone at an average rate of approximately 0.7 gpm in 2016. Compared to the other extraction wells at the Site, the volume extracted from well 415 is low and accounted for 0.3% of groundwater extraction in 2016. However, the concentration of total CVOCs in well 415 was high (7,600 to 11,000 ug/L) relative to all of the other extraction wells and, consequently, the total CVOC mass recovered by well 415 (about 28 pounds in 2016) was comparable to the combined CVOC mass recovered by the three P001 Area extraction wells.

### **3.1.2 Southern Part of the Site**

Wells 404 and 405 extract groundwater in the southern part of the Site (Figure 1-3B) and accounted for more than 96% of the groundwater volume pumped in 2016. As shown on Table A-1 of Appendix A, the combined monthly flows from the two former Waste Management Area extraction wells ranged from 7.1 to 10.5 Mgal/month in 2016, with an average combined pumping rate of 208 gpm for the year.

## **3.2 Hydrogeology**

As explained in Section 1.2 and shown on Plate 1, the Tank Farm Area is located in the northeastern part of the Site and the P001 Area is located in the northwestern part of the Site. The former Waste Management Area, Tower View Drive and Mirror Lake Areas, Western Boundary Area, and Southern Boundary Area are all located in the southern part of the Site. The hydrogeology of the northern and southern parts of the Site is discussed separately in the following sections.

### **3.2.1 Tank Farm Area**

The geologic units in the Tank Farm Area consist primarily of till overlying bedrock, with some localized areas of fill. The monitoring wells in this area are screened in the fill, till, till/bedrock zone, or shallow bedrock. The shallow water-bearing “alluvial zone” unit present to the west of the Tank Farm Area appears to be absent in the Tank Farm Area. As a result, the till/bedrock zone is the most important water-transmitting unit in the Tank Farm Area and extraction well 415 is screened in that unit.

The groundwater flow divide shown on the Parking Lot 001 and Tank Farm Areas groundwater elevation contour map for the till/bedrock zone on July 18, 2016 (Figure 1-2A) delineates the area where groundwater is captured by extraction well 415. Outside this area of capture, the direction of groundwater flow in the till/bedrock zone is generally to the west toward the P001 Area and to the southwest toward the Tower View Drive and Mirror Lake Areas.

### **3.2.2 Parking Lot 001 Area**

The P001 Area is underlain by a bedrock valley originating as a closed depression in the bedrock surface with its deepest point situated between till/bedrock wells 393 and 395 (Plate 1 and Figure 1-2A). Subsurface investigations in the early 1990s determined that the buried bedrock valley extends westward from this depression, passing through a narrow throat at bedrock well 378 on Lakeview Parkway, and opening up off-Site to the southwest of well 378 beneath the Moore Tire property. In the P001 Area, this bedrock valley contains four hydrogeological units, from lowermost to uppermost: (1) weathered bedrock, (2) till, (3) sand, silt, and gravel, and (4) fill, which is more than 20 feet thick in some places. The primary water-bearing units in the P001 Area are the till/bedrock zone (straddling units 1 and 2) and the alluvial zone (unit 3).

Detailed groundwater elevation contour maps have been constructed semiannually since 1993 for both the till/bedrock zone and the alluvial zone in the P001 Area. Figure 1-2A shows the groundwater elevation contours for the till/bedrock zone in the P001 Area constructed from water level elevation data collected on July 18, 2016. The generalized direction of groundwater flow in the till/bedrock zone is indicated by the flow arrows on this map, and the hydraulic influence of P001 Area extraction wells 413 and 414 in the till/bedrock zone is apparent. Figure 1-2A also shows a groundwater flow divide in the vicinity of Lake View Parkway. On the eastern side of this flow divide, groundwater flow in the till/bedrock zone is captured by the P001 Area extraction wells. On the western side of the divide, groundwater flows to the southwest across the Moore Tire property and back onto the Site in the northern part of the former Waste Management Area.

The location of this groundwater flow divide in the till/bedrock zone fluctuates in response to variability in pumping rates of the P001 Area extraction wells. During periods of reduced pumping, the flow divide lies farther east of the property line between the Site and the Moore Tire and Owego Bowl properties, and closer to the P001 Area extraction wells.

Figure 1-3A shows the groundwater elevation contours for the alluvial zone in the P001 Area on July 18, 2016. Extraction well 414 is the only well influencing groundwater flow in the alluvial zone in the P001 Area. The groundwater flow divide in the alluvial zone during the third quarter of 2016 was situated near or west of Lake View Parkway. Groundwater in the alluvial zone east of the flow divide is captured by extraction well 414. Groundwater in the alluvial zone west of the flow divide flows to the southwest through a zone of coarse alluvium extending across the center of the Moore Tire property and back onto the Site north of Building 352.

### **3.2.3 Southern Areas**

Weathered bedrock and till overlie competent bedrock in the southern part of the Site. In the southern and central portions of the southern part of the Site, the till is overlain by relatively permeable outwash sand and gravel and, in some areas, by low-permeability glaciolacustrine silt. The entire area is covered by a surficial layer of post-glacial alluvium. (Note: This surficial alluvium is different from the deeper “alluvial zone” discussed elsewhere in this report.)

#### **3.2.3.1 Waste Management, Western Boundary, and Southern Boundary Areas**

As shown on Figure 1-2B, groundwater flow in the till/bedrock zone in the northern part of the former Waste Management Area is to the south and southwest toward extraction well 404. Flow in the till/bedrock zone of the Southern Boundary Area is generally to the northeast and north toward extraction well 404. The groundwater contour in Figure 1-2B incorporates data from several wells screened in the lower part of the till (but not in weathered bedrock) because they appear to be hydraulically connected to the till/bedrock zone. Although the limit of groundwater capture by extraction well 404 in the till/bedrock zone may extend off-Site to the south of the railroad tracks (note potentiometric contour “794” on Figure 1-2B), there are no off-Site wells screened in the till/bedrock zone in that area.

An alluvial zone consisting primarily of sand and gravel overlies the till in the Southern Boundary Area. As shown on Figure 1-3B, horizontal gradients in the alluvial zone of the Southern Boundary Area are very low (less than 0.01) in the vicinity of the railroad tracks. These low gradients are indicated by groundwater elevations ranging from 794.41 feet to 794.76 feet over an area of several acres at wells 101, 323, 319, 627, 322, 318, 625 and 356. The southern limit of capture by

extraction wells 404 and 405 in the alluvial zone is indicated by the groundwater flow divide located south of wells 101, 323, and 318 on Figure 1-3B.

### **3.2.3.2 Tower View Drive and Mirror Lake Areas**

The direction of groundwater flow in the till/bedrock zone in the Tower View Drive and Mirror Lake Areas of the Site on October 24, 2016 is shown by the flow arrows on Figure 1-2C. In these areas, groundwater generally flows to the southwest toward extraction well 404 in the former Waste Management Area. Groundwater flow in the limited alluvial zone through the Tower View Drive Area (Figure 1-3C) also is generally to the southwest toward extraction well 404 and extraction well 405, which pumps primarily from the alluvial zone (sand and gravel).

## **3.3 Hydrogeochemistry**

This section presents an analysis of the chemical concentration data collected in 2016, including an assessment of trends at specific locations.

### **3.3.1 Chemicals of Concern**

As noted in Section 2.2.3.1.1, the chemicals of concern at the Site include chlorinated ethanes, chlorinated ethenes, and several other CVOCs.

#### **3.3.1.1 Chlorinated Ethanes**

The chlorinated ethanes present in groundwater at the Site are 1,1,1-trichloroethane (111-TCA), 1,1-dichloroethane (11-DCA), and chloroethane. 111-TCA is a primary solvent that was used in many industrial applications. 111-TCA degrades to 11-DCA anaerobically by biologically-mediated reductive dechlorination under methanogenic conditions. 111-TCA also degrades to 1,1-dichloroethene (11-DCE, an ethene) by dehydrohalogenation, which is an abiotic elimination reaction common in groundwater. Under conditions favorable to sequential reductive dechlorination, 11-DCE may degrade further to chloroethene (vinyl chloride, VC) and 11-DCA may degrade to chloroethane (CEA). Biodegradation of 11-DCE to VC requires sulfate-reducing or methanogenic (i.e., anaerobic) conditions that may exist in some areas of the Site. An alternative source of 11-DCA in groundwater is as an impurity in the manufacture of 111-TCA, where 11-DCA was used as an intermediate, rather than from degradation of 111-TCA.

### **3.3.1.2 Chlorinated Ethenes**

The chlorinated ethenes present in groundwater at the Site are trichloroethene (TCE), cis-1,2-dichloroethene (c12-DCE), 11-DCE, and VC. Like 111-TCA, TCE is a primary solvent that was used in various industrial applications. TCE degrades preferentially to c12-DCE or to trans-1,2-dichloroethene under conditions favorable to biologically-mediated reductive dechlorination. As noted in Section 3.3.1.1, 11-DCE (an ethene) is created by abiotic dehydrohalogenation of 111-TCA (an ethane). VC is created by sequential reductive dechlorination of both c12-DCE and 11-DCE.

### **3.3.1.3 Other Compounds**

Other compounds present in groundwater at the Site include methylene chloride (dichloromethane, DCM), Freon 113 (1,1,2-trichloro-1,2,2-trifluoroethane), and Freon 123a (1,2-dichloro-1,2,2-trifluoroethane), which is created by the reductive dechlorination of Freon 113 in groundwater. The distribution of methylene chloride is limited to a few wells in the Tank Farm Area and P001 Area because it degrades both aerobically and anaerobically and is rarely transported beyond the immediate vicinity of a source zone. In 2016, Freon 113 and Freon 123a were detected in limited areas of both the alluvial and till/bedrock zones with the highest concentrations in the till/bedrock zone at monitoring well 609 in the central part of the P001 Area and at extraction well 415 in the Tank Farm Area as listed on Table 2-1.

### **3.3.1.4 Standardization of Chlorinated Ethane and Ethene Concentrations**

As noted above, degradation of 111-TCA and TCE, the principal groundwater contaminants at the Site, can occur biotically or abiotically under either aerobic or anaerobic conditions. Due to the complexity of possible degradation pathways and rates, characterizing the spatial and temporal changes in concentrations of chlorinated ethanes and ethenes can be difficult if one only examines the individual chemical species (i.e., 111-TCA, 11-DCA, 11-DCE, TCE, c12-DCE, VC, etc.). Therefore, rather than preparing separate isoconcentration contour maps and concentration vs. time trend graphs for each chemical species, this report presents chemical concentration maps showing a standardized sum of specific related CVOC concentrations adjusted to account for the loss of chlorine ions via mechanisms such as anaerobic biodegradation and abiotic dehydrogenation. As

explained below, this standardization procedure was performed by expressing the concentrations of CVOCs related through chemical degradation in terms of the parent chemicals 111-TCA and TCE.

The standardized TCA-series concentration was calculated by multiplying concentrations of 11-DCA, 11-DCE, and chloroethane by the ratio of the molecular weight of 111-TCA to the molecular weight of each degradation product, and then summing the products. In this way, all of the dissolved concentrations of 111-TCA, 11-DCA, 11-DCE, and chloroethane in groundwater for a particular sample were expressed as a total TCA-series concentration, thereby approximating the concentration of 111-TCA, which theoretically could have been measured if 111-TCA had not been degraded. (Note: Although 11-DCE is an ethene compound, it was included in the TCA-series group of CVOCs because its source at the Site is believed to be primarily from degradation of 111-TCA, an ethane compound).

The same procedure was performed for the ethene compounds such that TCE, c12-DCE, and vinyl chloride concentrations were expressed as a total TCE-series concentration.

The formulas for calculating these series concentrations are shown on Figures 3-1A/B/C through 3-4A/B/C, which are sets of isoconcentration contour maps for these standardized TCA-series and TCE-series parameters. The isoconcentration contour limits shown on these maps are based on the NYSGQS, which is 5 ug/L for all of the TCA-series and TCE-series parameters except vinyl chloride, for which the NYSGQS is 2 ug/L. The isoconcentration contour intervals are 5, 50, 500, and 5000 ug/L, in keeping with the order-of-magnitude convention for showing concentrations of CVOC plumes in plan view.

### **3.3.2 Tank Farm Area and Parking Lot 001 Area**

The following discussion focuses on the groundwater chemistry of the alluvial and till/bedrock zones in the Tank Farm Area and Parking Lot 001 Area in the northern part of the Site.

#### **3.3.2.1 Alluvial Zone Chemistry**

Figures 3-1A and 3-2A are isoconcentration contour maps showing the distribution of TCA- and TCE-series parameters in the alluvial zone, which includes sand and gravel units of glacial origin as well as more recent alluvium. These figures do not show isoconcentration contours east of the P001

Area and in the Tank Farm Area because the alluvial zone is generally absent or not well-defined in those areas. (As noted in Section 3.2.1, fill and till lie directly on top of bedrock in most of the Tank Farm Area.) Figures 3-1A and 3-2A show plumes of both TCA- and TCE-series parameters extending from an area of concentrations historically greater than 1,000 ug/L (but now less than 1,000 ug/L) in the vicinity of well 613, to the southwest toward the intersection of Lake View Parkway and Industrial Drive (see well 368). These same constituents also are present in four on-Site wells (398, 602, 603, and 608) in the extreme western portion of the P001 Area north of Building 352 and southwest of the Moore Tire property. East of the groundwater flow divide shown on Figures 3-1A and 3-2A, the TCA- and TCE-series plumes are captured by P001 Area extraction well 414. The groundwater flow divides on Figures 3-1A and 3-2A are the same as the divides shown on the groundwater elevation contour map for the alluvial zone (Figure 1-3A).

### **3.3.2.2 Till/Bedrock Zone Chemistry**

Figures 3-3A and 3-4A are isoconcentration contour maps showing the distribution of TCA- and TCE-series parameters in the till/bedrock zone. These figures show TCA-series and TCE-series plumes in the northern part of the Site extending from the Tank Farm Area source westward toward the P001 Area extraction wells and across Lakeview Parkway onto the Moore Tire property west of the P001 Area extraction wells. Plume concentrations greater than 500 ug/L in the Tank Farm Area are captured by extraction well 415. P001 Area extraction wells 413, 414, and 416 intercept groundwater plumes in the till/bedrock zone between the extraction well 415 capture zone and the western groundwater flow divide near Lake View Parkway. These flow divides are identical to those shown on the groundwater elevation contour map for the till/bedrock zone (Figure 1-2A).

The off-Site portion of the plume (west of the P001 Area, near Moore Tire) is not currently being effectively captured by on-site groundwater extraction operations from the till/bedrock zone. Concentrations of contaminants of concern in this area have been flat or increasing in some cases in recent years. IBM recognizes the need to perform additional investigations and remedial activities to address the offsite portion of this plume. IBM is currently undertaking a preliminary remedial assessment of potential options to supplement, enhance, and/or replace the existing groundwater extraction and treatment operations in this area. We anticipate conducting additional sampling and potential pilot testing of one or more of the options identified in the assessment during 2017. The

findings of the preliminary remedial assessment will be provided to NYSDEC for comment prior to any further assessment or remedial measures.

Figure 3-5 shows the distribution of methylene chloride in July 2016 in the till/bedrock zone. Methylene chloride (dichloromethane or DCM) was detected in only a few wells shown on Figure 3-5. The maximum concentration of methylene chloride detected in 2016 was 8.2 ug/L at monitoring well 612 and the small methylene chloride plume that remains appears to be captured by extraction well 414, where methylene chloride was not detected.

### **3.3.3 Southern Areas**

The following discussion focuses on the groundwater chemistry of the alluvial and till/bedrock zones in the southern part of the Site, including the former Waste Management Area, Southern Boundary and Western Boundary Areas, Tower View Drive and Mirror Lake Area. Methylene chloride was not detected in the southern part of the Site and therefore was not contoured separately.

#### **3.3.3.1 Alluvial Zone Chemistry**

Figures 3-1B and 3-2B are isoconcentration contour maps showing the distribution of TCA- and TCE-series parameters in October 2016 in the alluvial zone of the former Waste Management Area, Southern Boundary and Western Boundary Areas. West of these areas, Figures 3-1C and 3-2C show the distribution of TCA- and TCE-series parameters in October 2016 in the alluvial zone of the Tower View Drive and Mirror Lake Areas.

Figure 3-1B shows a TCA-series plume in the central part of the former Waste Management Area where several surface impoundments for treating manufacturing process wastes were located. (These surface impoundments were removed in the late 1980s.) TCA-series parameters were also detected at monitoring wells 318, 319, 322, 323, 625, and 627 in the Southern Boundary Area. However, TCA-series parameters were not detected farther south in off-Site wells 540, 541, and 542 in October 2016.

Figure 3-2B shows a TCE-series plume in the central part of the former Waste Management Area where the former surface impoundments were located. However, in contrast to the TCA-series

plume, Figure 3-2B shows a plume with TCE-series concentrations ranging from 19 ug/L at well 319 to 120 ug/L at well 318 in the Southern Boundary Area. The northern part of this plume is captured by extraction well 404. Unlike the TCA-series plume, TCE-series parameters were detected off-Site in the alluvial zone, south of the Southern Boundary Area in the Route 17C interchange, where concentrations of CVOCs greater than 1 ug/L but less than the NYSGQS were detected at wells 541, 542, and 543 in October 2016, as shown on Figure 3-2B.

Figure 3-1C shows a TCA-series plume with highest concentrations in the central Tower View Drive and Mirror Lake Areas. TCA-series concentrations at well 621 (240 ug/L, Figure 3-1C) on the north side of Tower View Drive and at well 623 on Lake View Parkway (69 ug/L, Figure 3-1B), together with groundwater flow directions shown on Figures 1-3B and 1-3C, suggest that this plume is captured by extraction wells 404 and 405 in the former Waste Management Area. The southern limit of the TCA-series plume in the Tower View Drive and Mirror Lake Areas lies north of shallow monitoring well 374 on the north side of Mirror Lake (Figure 3-1C), where concentrations are typically at or below the limits of detection (0.1 ug/L for individual CVOC species). Well 374 monitors a shallow alluvial unit that is different from the alluvial zone outwash unit monitored by other wells in the southern part of the Site.

Detections of TCE-series constituents in the Tower View Drive and Mirror Lake Areas were limited to two wells, as shown on Figure 3-2C: well 309 (10 ug/L) which monitors the lower part of the till, and well 621 (2.5 ug/L), which is screened in the alluvial zone. These detections are insufficient for interpolating or inferring a connection to the TCE-series plumes in the former Waste Management Area (Figure 3-1B).

### **3.3.3.2 Till/Bedrock Zone Chemistry**

Figures 3-3B, 3-3C, 3-4B, and 3-4C show the TCA- and TCE-series isoconcentration contours for the till/bedrock zone in the southern areas. With regard to the distribution of TCA-series parameters in the southern part of the Site, Figure 3-3B shows two apparent plume source areas: (1) off-Site west of Barnes Creek near wells 160 and 162, and (2) on-Site in the northern part of the former Waste Management Area near well 148 east of Building 352 and northeast of the Old Waste Treatment Plant (designated “Old WTP” on the maps). The source of the off-Site plume west of Barnes Creek is the former Robintech/Compudyne site at 1200 Taylor Road (NYSDEC Site Code

754007), now owned by Sanmina-SCI. The presence of 111-TCA, TCE and their degradation products at the Sanmina-SCI site is unrelated to the former IBM Owego site and has been attributed to a former chemical storage area located beneath a portion of Sanmina-SCI's main manufacturing building. A third apparent source area lies on-Site to the east in the Tower View Drive and Mirror Lake Areas. Figure 3-3C shows this apparent source area near the southern end of Building 002. The TCA-series plumes in the Tower View Drive and Mirror Lake Areas (Figure 3-3C) and former Waste Management Area (Figure 3-3B) merge south of the Old WTP, and are ultimately captured by extraction well 404.

The TCE-series isoconcentration contour map for the till/bedrock zone in the western part of the southern areas is shown on Figure 3-4B. Like the map showing the distribution of TCA-series parameters (Figure 3-3B), Figure 3-4B shows a plume with concentrations greater than 100 ug/L being drawn onto the Site from the west near monitoring wells 160 and 162 and a plume centered on the Old WTP. Detections of TCE-series parameters in the Southern Boundary Area south of extraction well 404 were less than the NYSGQS in 2016. Detections of TCE-series parameters in the Tower View Drive and Mirror Lake Areas (Figure 3-4C) were also less than the NYSGQS, except at well 619 between Buildings 101 and 201, which is the same apparent source area as the TCA-series plume shown on Figure 3-3C for the till/bedrock zone.

### **3.3.4 Graphical and Statistical Evaluations**

In addition to evaluating the maximum concentrations of individual CVOCs in groundwater relative to groundwater standards (Table 2-1), trends in the concentration of CVOCs in groundwater were evaluated graphically using plots of concentration vs. time, and statistically, using non-parametric tests.

#### **3.3.4.1 Concentration vs. Time**

Graphs of TCA- and TCE-series concentrations versus time for key monitoring and extraction wells for the years 2000 through 2016 are shown on Figure 3-6. The monitoring wells are located near the boundaries of the Site in the P001 Area, Tank Farm Area, Southern Boundary Area, former Waste Management Area, and off-Site in the Moore Tire Area. They represent wells that are sampled quarterly in accordance with the sampling plan presented in Appendix D.

### 3.3.4.2 Statistical Tests for Trend

Concentration trends in many of the wells shown on Figure 3-6 are apparent by inspection of the concentration vs. time graphs. To determine whether the observed graphical trends in chemical concentrations over time are statistically significant, groundwater analytical chemistry data was evaluated using a non-parametric statistical test, as specified in Section 7.3.3 of the Groundwater Monitoring Plan. This statistical test for trend, the Mann-Kendall test, is based on the concept that a lack of trend should correspond to a time-series plot fluctuating randomly about a constant mean level, without a visually apparent upward or downward pattern. If an increasing trend really exists, then the sample taken first from any randomly selected pair of measurements should have a lower concentration, on average, than the measurement collected at a later time. The Mann-Kendall test does not require that the data be normally distributed and is valid even where data are missing, tied, or censored at the reporting limit (e.g., “not detected at limit X”).

ProUCL version 5.0, a statistical software package, was used to identify statistically significant trends at a significance level of  $\alpha = 0.05$ , which corresponds to a confidence limit of 95%. ProUCL was created for USEPA to address statistical issues described in various CERCLA and RCRA guidance documents. The period used for trend analysis was ten years (40 quarterly samples) from January 2007 to October 2016.

The test results for concentration trends at 18 wells are summarized on Table 3-1 and the ProUCL output is shown in Appendix I. The TCA-series and TCE-series trends were tested separately for each well. As shown on Table 3-1, the concentration trend in 12 of the 36 tests is indeterminate, i.e., neither a statistically increasing nor decreasing trend could be confirmed.

In the P001 Area, concentrations of TCE-series parameters are increasing over the 10-year test period at till/bedrock monitoring well 393 near Lake View Parkway and at extraction wells 413 and 414. The concentration trend for TCA-series parameters at well 393 is also increasing over the same period.

In the Tank Farm Area, concentrations of both TCA-series and TCE-series parameters are decreasing at extraction well 415 (based on nearly eight years of data since the well began pumping in March 2009).

In the off-Site Moore Tire Area, concentrations of TCA- and TCE-series parameters are indeterminate at alluvial zone monitoring wells 529, 532, and 534, and are increasing at till/bedrock zone monitoring well 522. Since most of the detections at wells 529 and 534 are less than 1 ug/L, and there are many non-detects, the results reported by the Mann-Kendall test are not meaningful for assessing concentration trends in these wells.

In the Southern Boundary Area, concentrations of both TCA- and TCE-series parameters in the alluvial zone are decreasing at monitoring wells 625 and 322 near the Site's southern property boundary; these trends are easily confirmed by inspection of the corresponding concentration vs. time graphs on Figure 3-6. The TCA-series trend at well 319 is also decreasing. At well 323 farther to the north, concentrations of TCA-series and TCE-series parameters are indeterminate over the 10-year test period, and there appears to be significant seasonal variation in concentration. North of well 625, concentrations of both TCA-series and TCE-series parameters are increasing at well 318. Concentrations of TCE-series parameters are also weakly increasing at well 319, although this trend is not obvious on inspection of the well's concentration vs. time graph on Figure 3-6. Well 319 was the only monitoring well tested with a statistically significant increasing trend for TCE-series parameters and a decreasing trend for TCA-series parameters.

In the Waste Management Area, the long-term trend in both TCA-series and TCE-series concentrations is decreasing at extraction well 404, which pumps from both the alluvial zone and from the till/bedrock zone. These trends are apparent by inspection. The graphical concentration trends at alluvial zone extraction well 405 (Figure 3-6) are statistically confirmed as decreasing for TCE-series parameters and indeterminate for TCA-series parameters.

**Table 3-1. Statistical Evaluation of Trends in Water Quality at Quarterly Monitoring Wells (2007-2016)**

Site Area	Well	TCA-Series Trend	TCE-Series Trend	Hydrogeologic Zone Monitored
<b>P001 Area (Monitoring)</b>	393	Increasing	Increasing	Till/Bedrock
	399	Decreasing**	None	Alluvial
	606	Decreasing	Decreasing	Alluvial
	607	None	Decreasing	Till/Bedrock
<b>P001 Area (Extraction)</b>	413	None	Increasing	Till/Bedrock
	414	Decreasing	Increasing	Alluvial & Till/Bedrock
<b>Tank Farm Area* (Extraction)</b>	415	Decreasing	Decreasing	Till/Bedrock
<b>Moore Tire Area (Off-Site Monitoring)</b>	522	Increasing	Increasing	Till/Bedrock
	529	None	None**	Alluvial
	532	None	None	Alluvial
	534	None**	None**	Alluvial
<b>Southern Boundary Area (Monitoring)</b>	318	Increasing	Increasing	Alluvial
	319	Decreasing	Increasing	Alluvial
	322	Decreasing	Decreasing	Alluvial
	323	None	None	Alluvial
	625	Decreasing	Decreasing	Alluvial
<b>Waste Management Area (Extraction)</b>	404	Decreasing	Decreasing	Alluvial & Till/Bedrock
	405	None	Decreasing	Alluvial

The Mann-Kendall test was used to evaluate concentration trends at a significance level of  $\alpha = 0.05$ .  
 "None" means that the concentration trend is indeterminate.  
 \* Nearly eight years of data (31 quarters) from 2009-2016 was available for extraction well 415.  
 \*\* The Mann-Kendall test result is not meaningful because most detections are less than 1 ug/L and there are many non-detects.

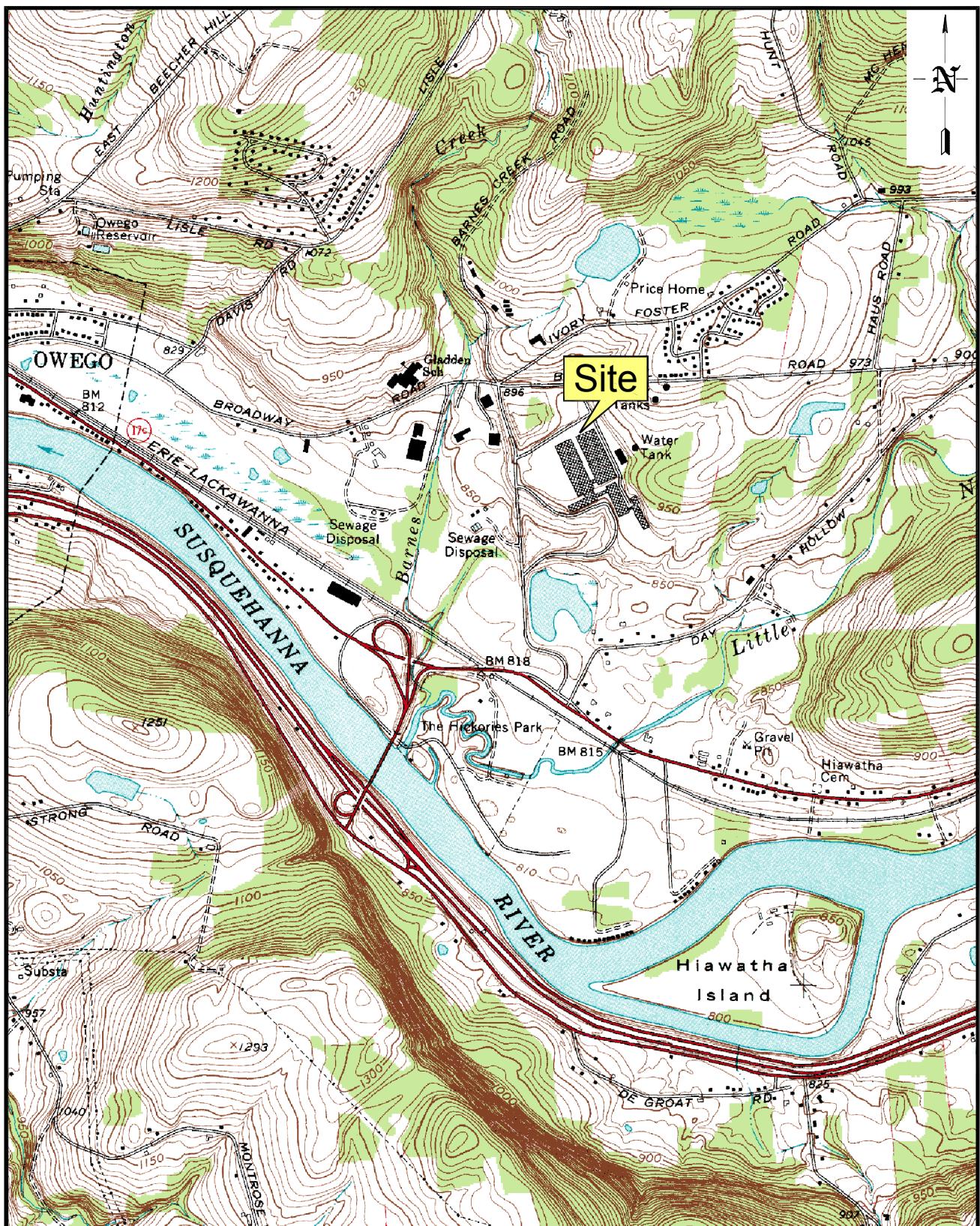
### **3.3.5 VOC Mass Removal**

Table A-2 in Appendix A shows the dissolved mass of VOCs pumped by the groundwater extraction wells during 2016 and subsequently removed via the Site's packed-column air stripping tower. The total VOC mass was calculated by multiplying the monthly GTF influent concentration from NPDES compliance sampling by the monthly volume of groundwater pumped through the air stripping tower. [Note: The volume pumped through the air stripper (116.2 Mgal) differs slightly (by less than 2%) from the total volume pumped from the extraction wells (114.4 Mgal) due to metering differences.] Based on these calculations, the total VOC mass removed from groundwater in 2016 was 292 pounds, and the cumulative total VOC mass removed since 1998 is 6,800 pounds.

### **3.3.6 Maps of Total VOCs, TCA, and TCE**

As required by the GMP, Figures 3-7A through 3-7C are maps showing the total concentration in groundwater of VOCs on the Site's parameter list, as specified on Table 1-1 of the GMP and Module II, Table II-3 of the Part 373 Permit. These maps show results for wells in northern areas that were sampled during the third quarter of 2016 (Figure 3-7A) and for wells in southern areas that were sampled during the fourth quarter of 2016 (Figures 3-7B and 3-7C). The total VOC value posted at each well has been rounded to two significant figures (or to one significant figure if less than 1 ug/L).

As required by the GMP, Figures 3-8A through 3-8C and Figures 3-9A through 3-9C are maps of the TCA and TCE distribution, respectively, showing only these VOCs and not the sum of their transformation series component VOCs. The approximate boundaries of both the alluvial and till/bedrock zone plumes at a limit of the NYSGQS (5 ug/L) are not shown on these maps. However, these boundaries would be similar to the plume limits shown on the TCA- and TCE-series isoconcentration maps (Figures 3-1A through 3-4C) because TCA and TCE are significant contributors to the total VOC concentration at most of the monitoring wells.

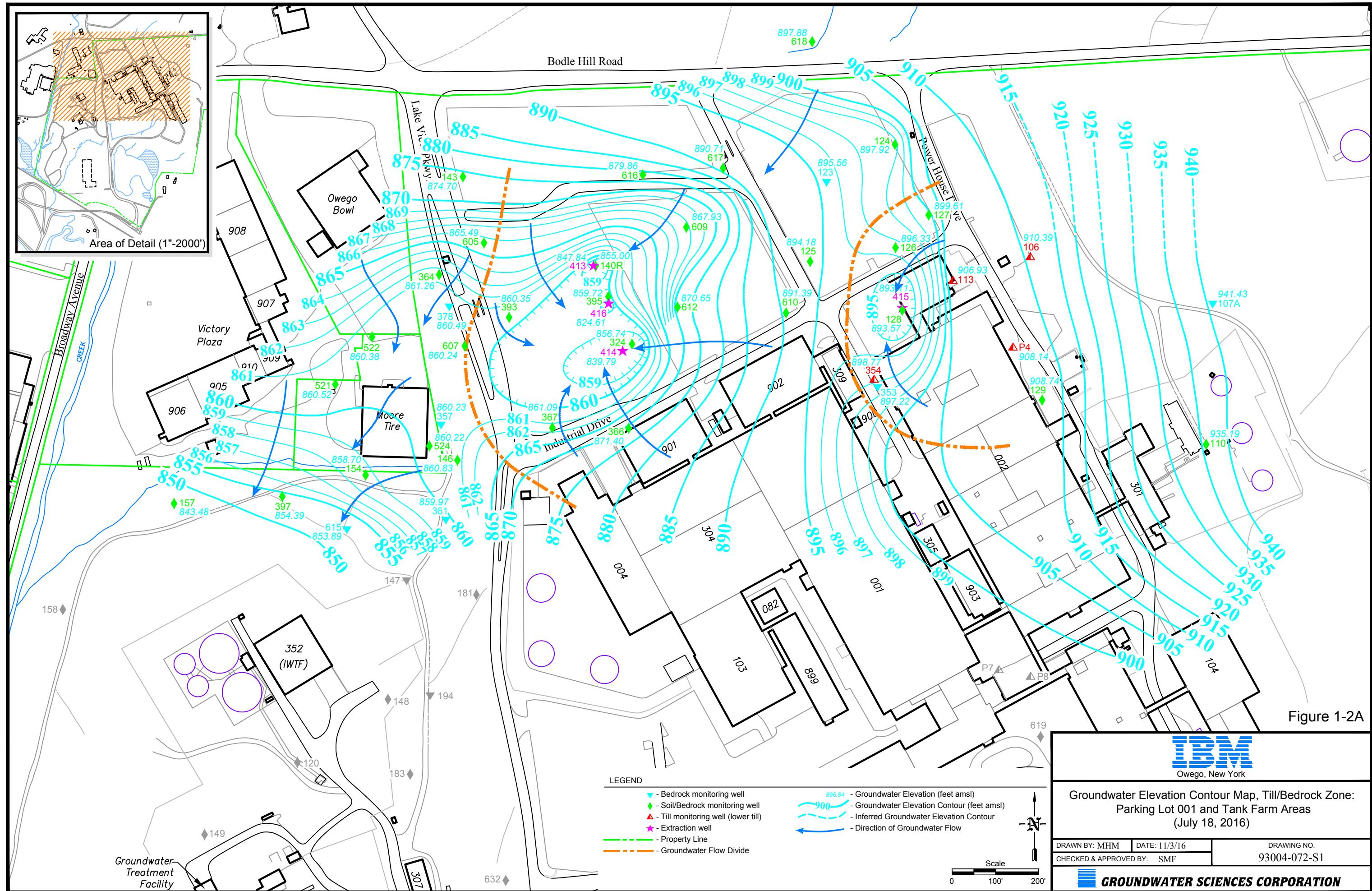


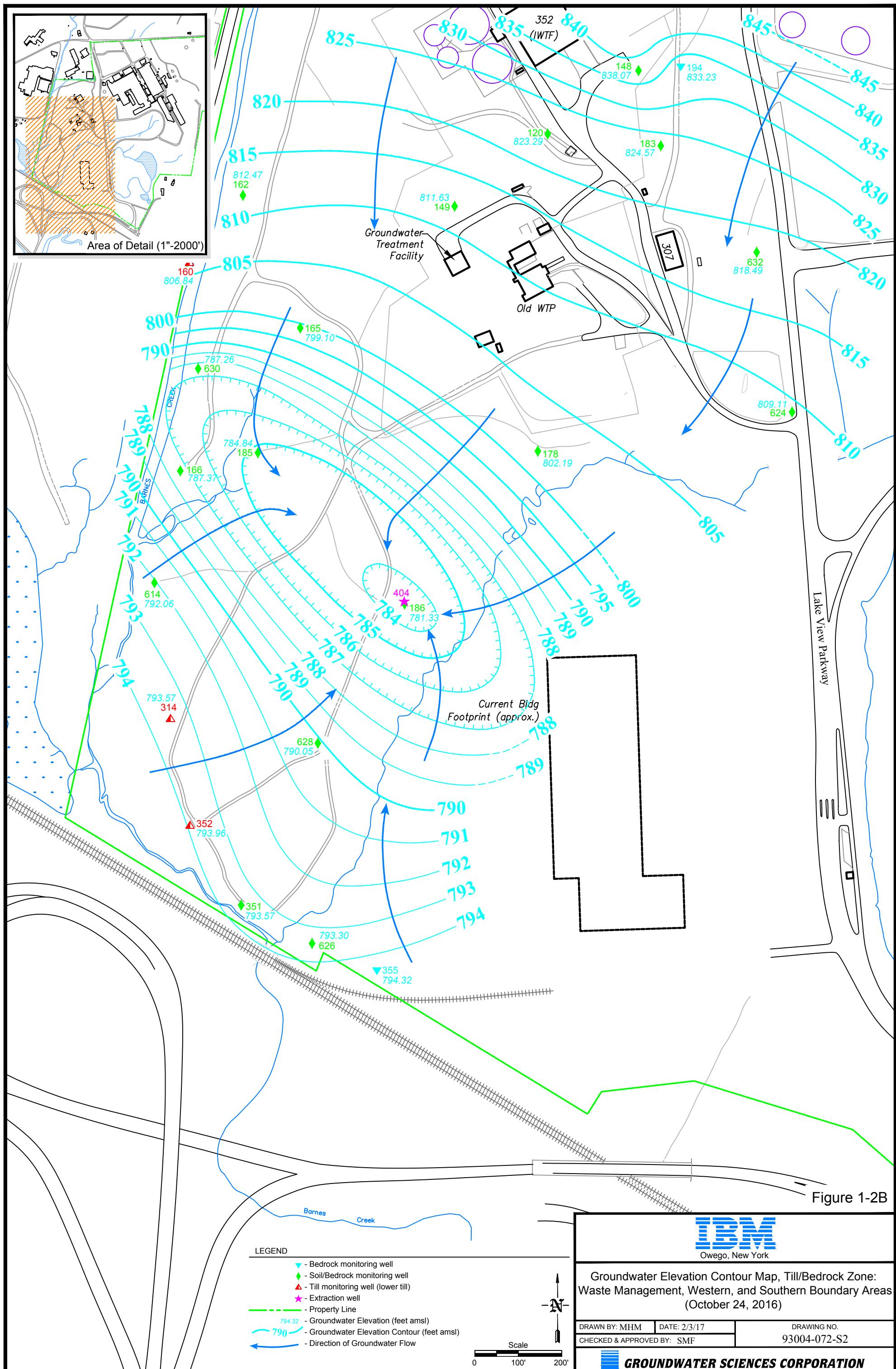
Portion of the Apalachin, NY  
7.5-minute USGS Quadrangle  
(1988)

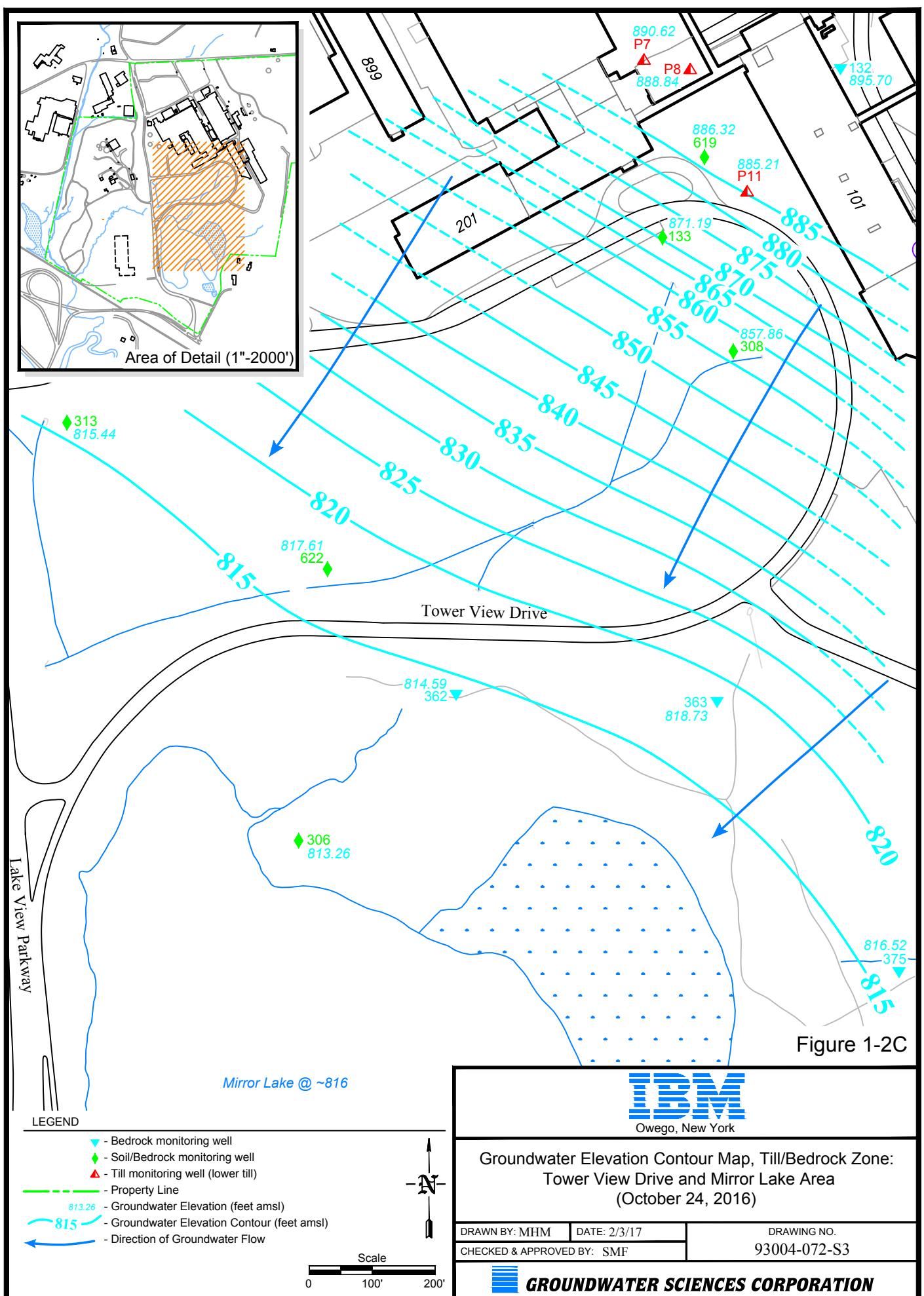
Figure 1-1

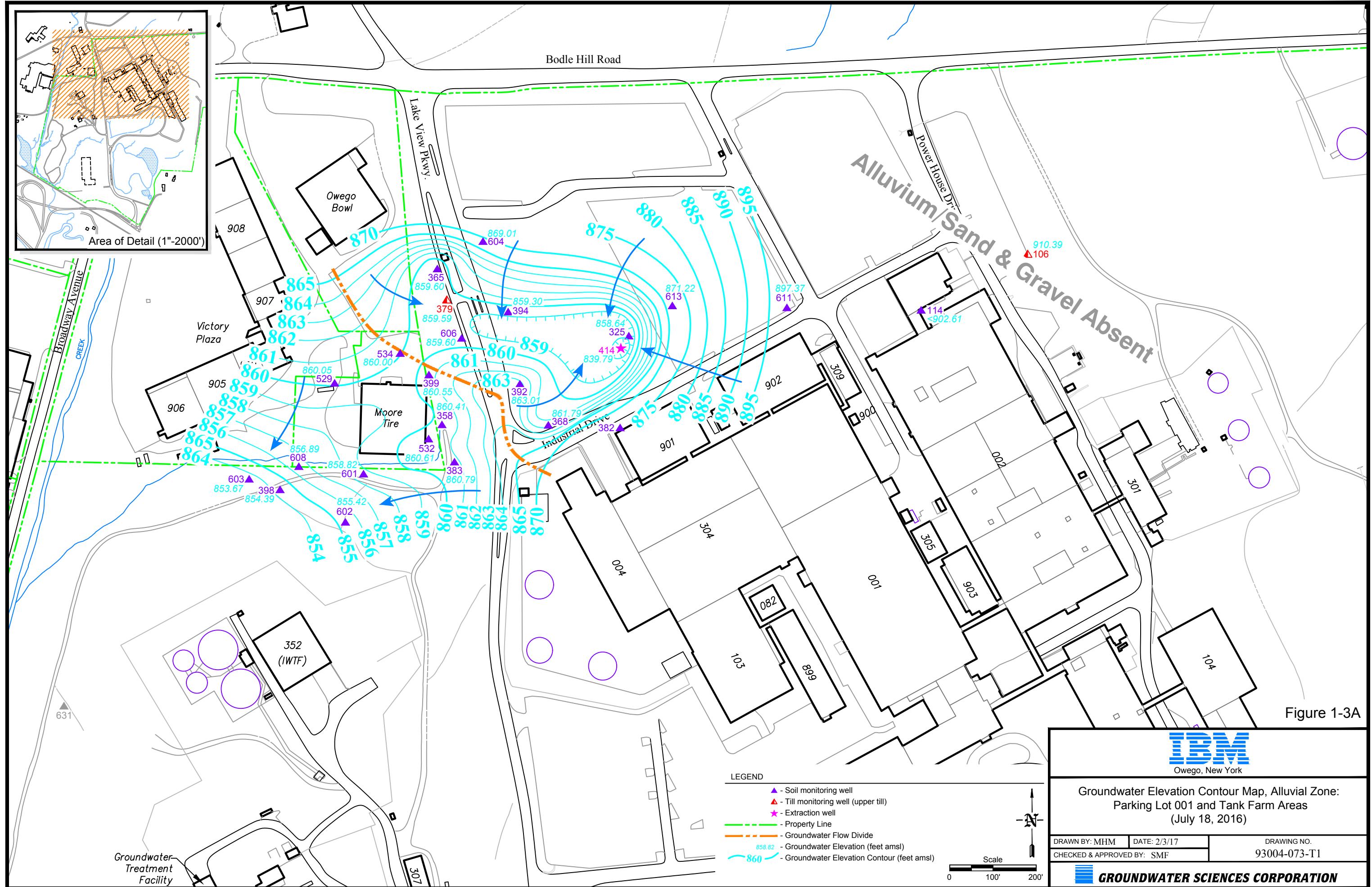


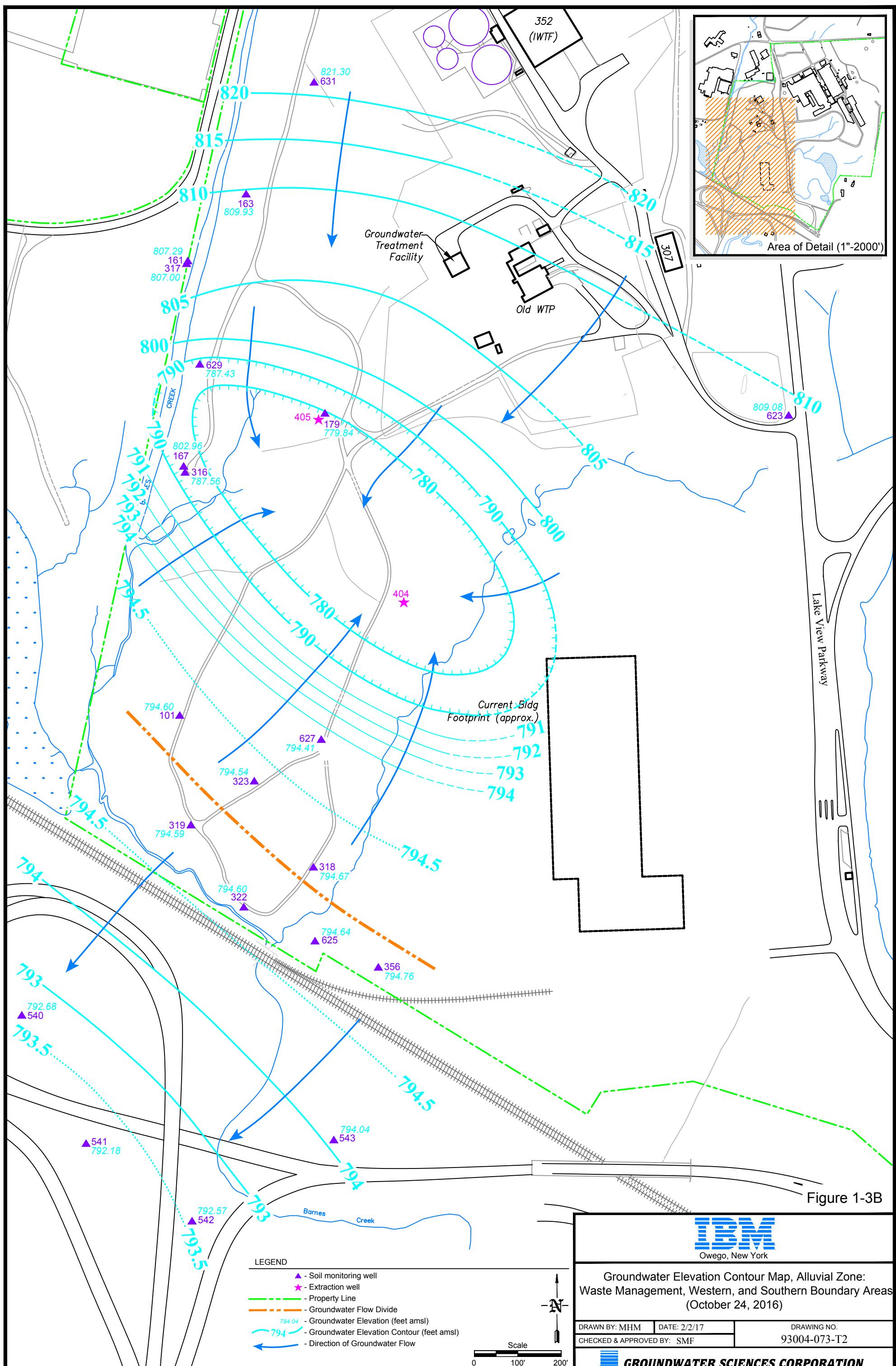
Site Location Map

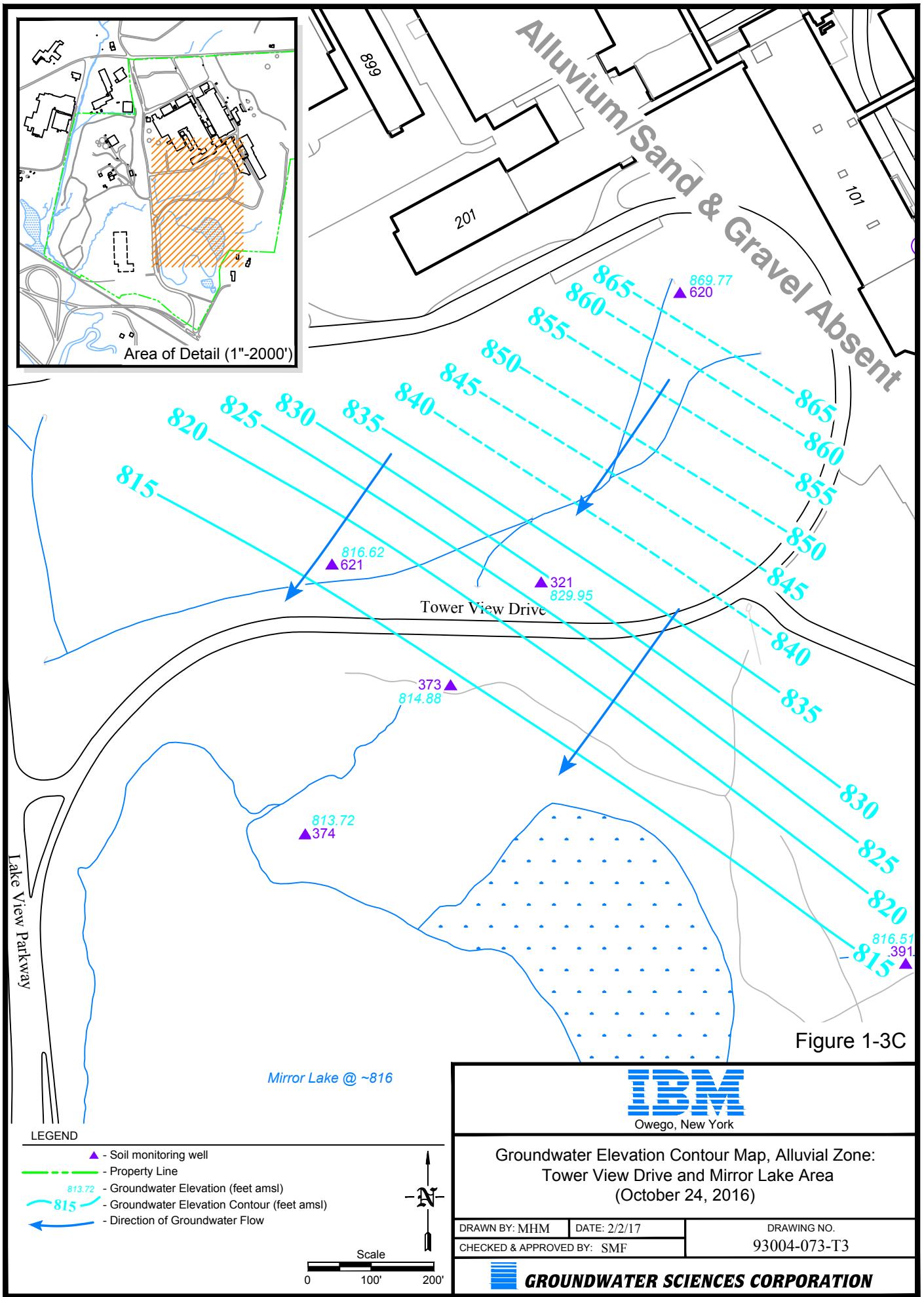


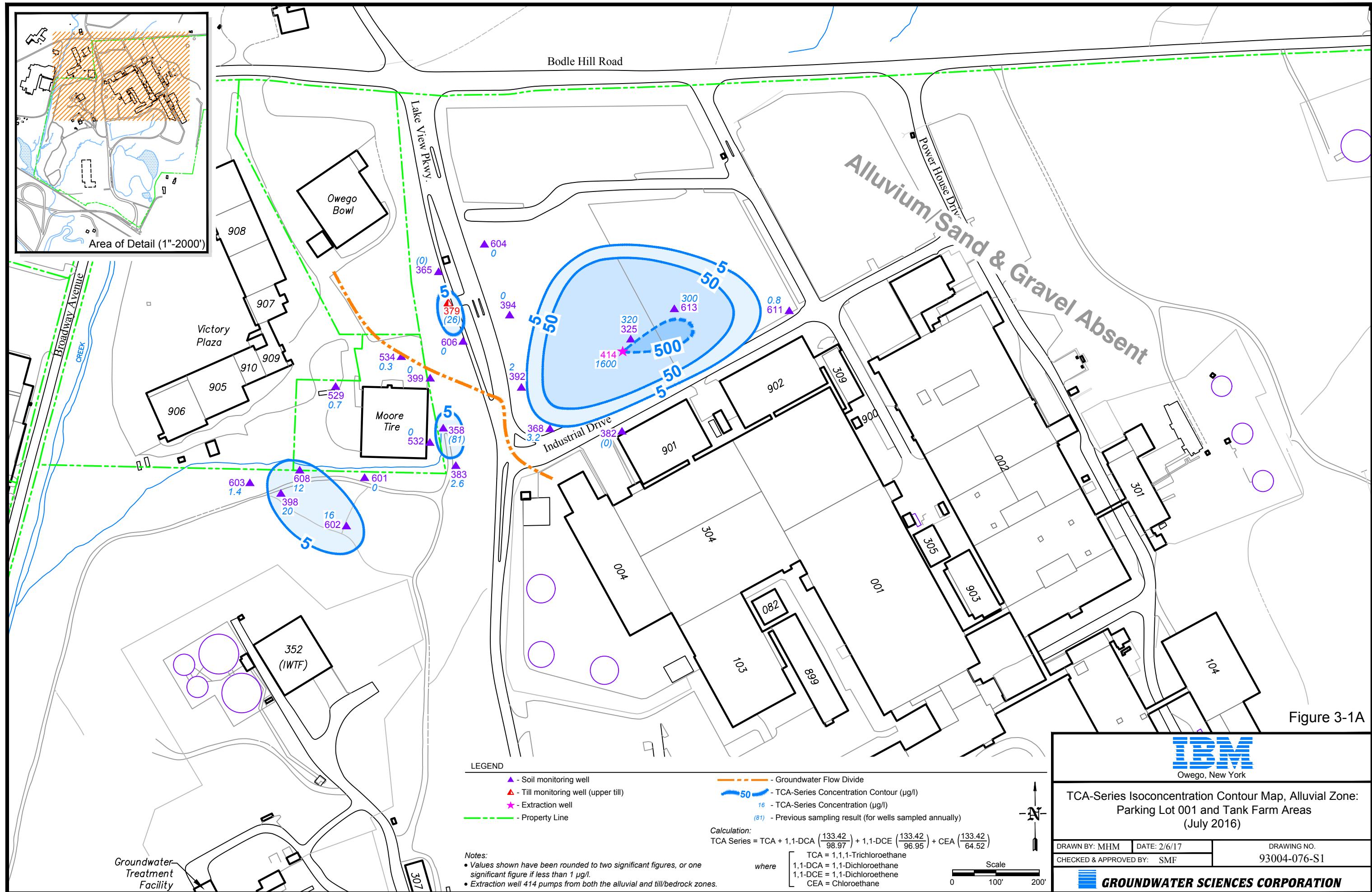


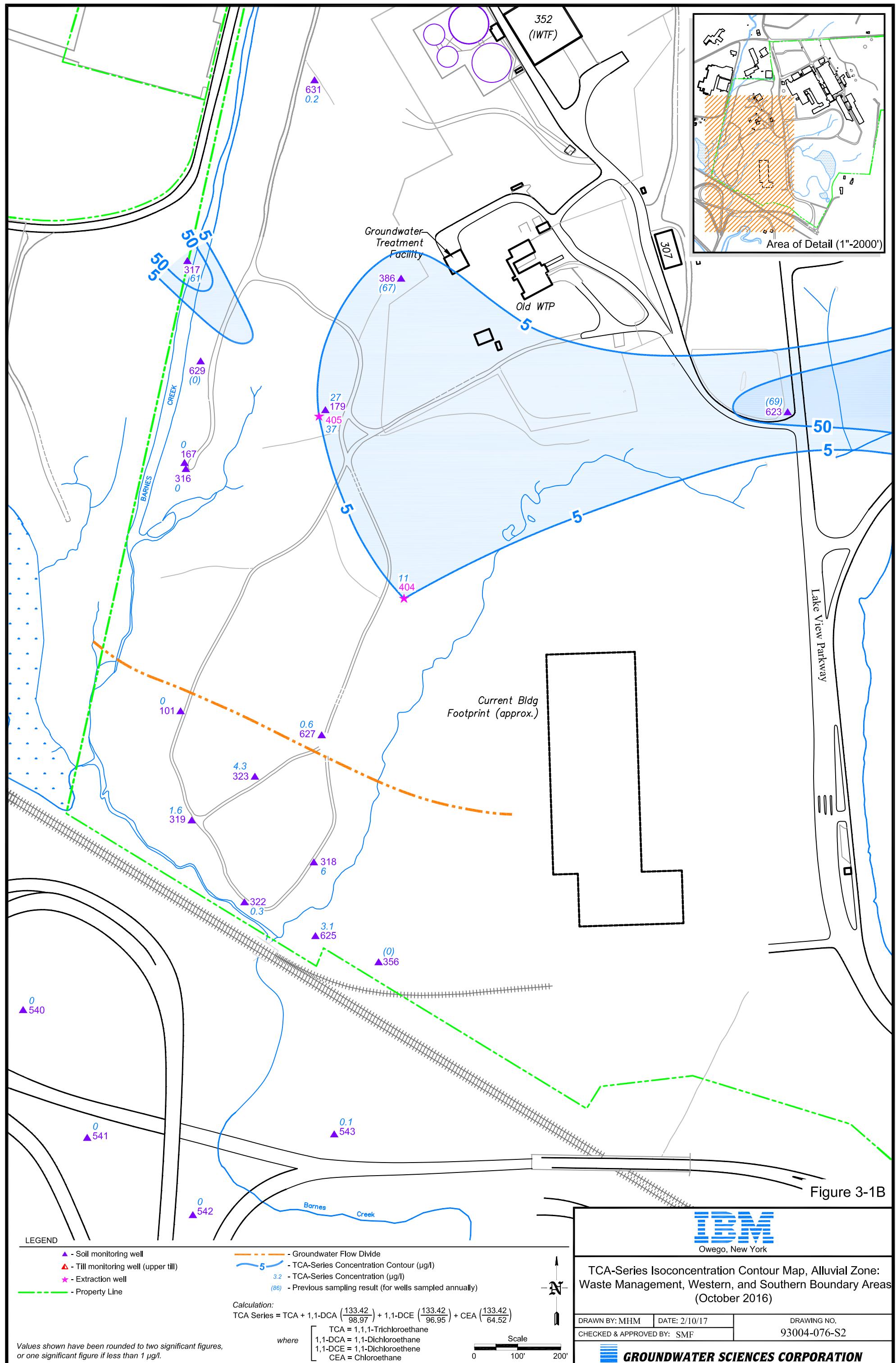


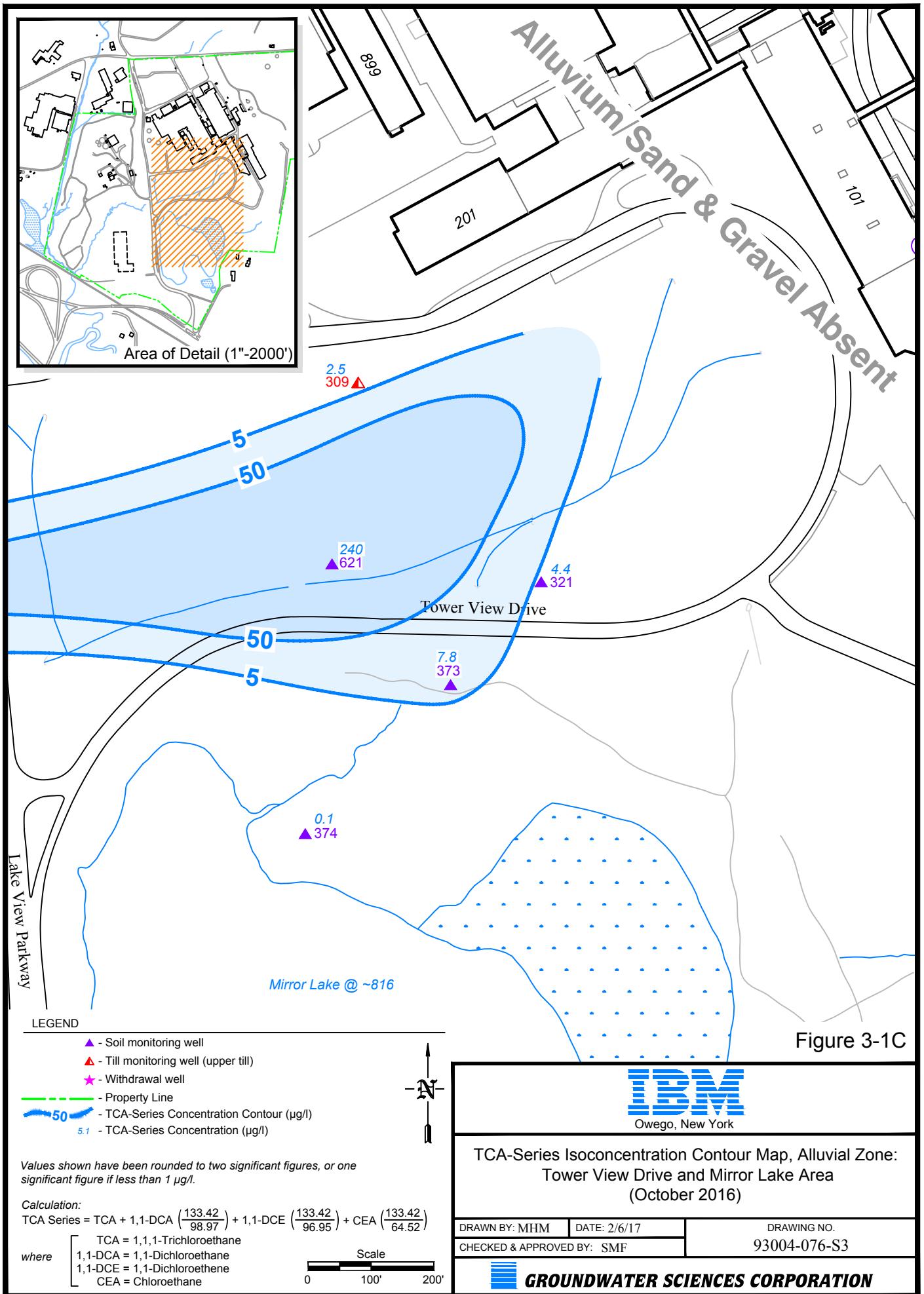


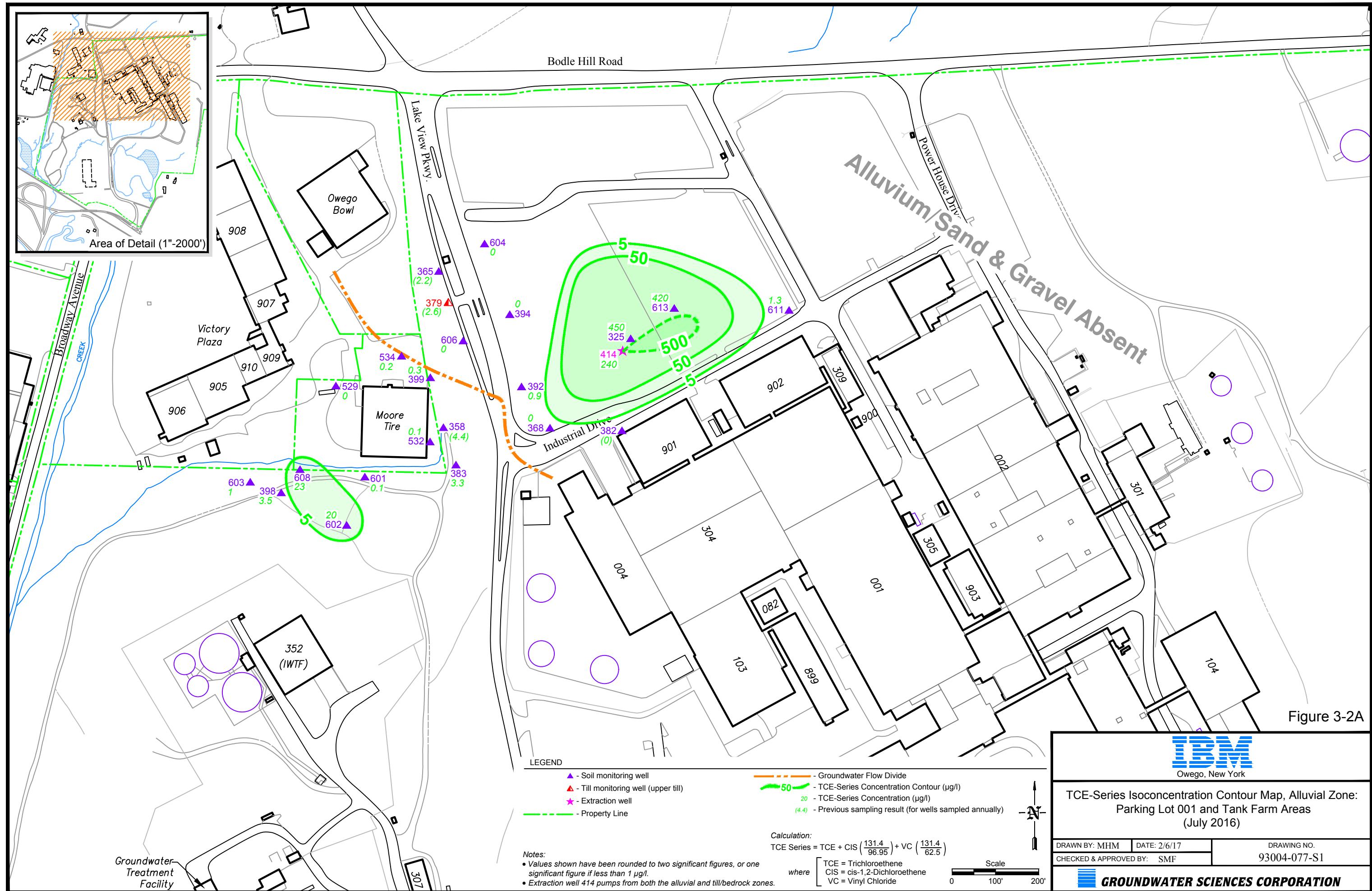


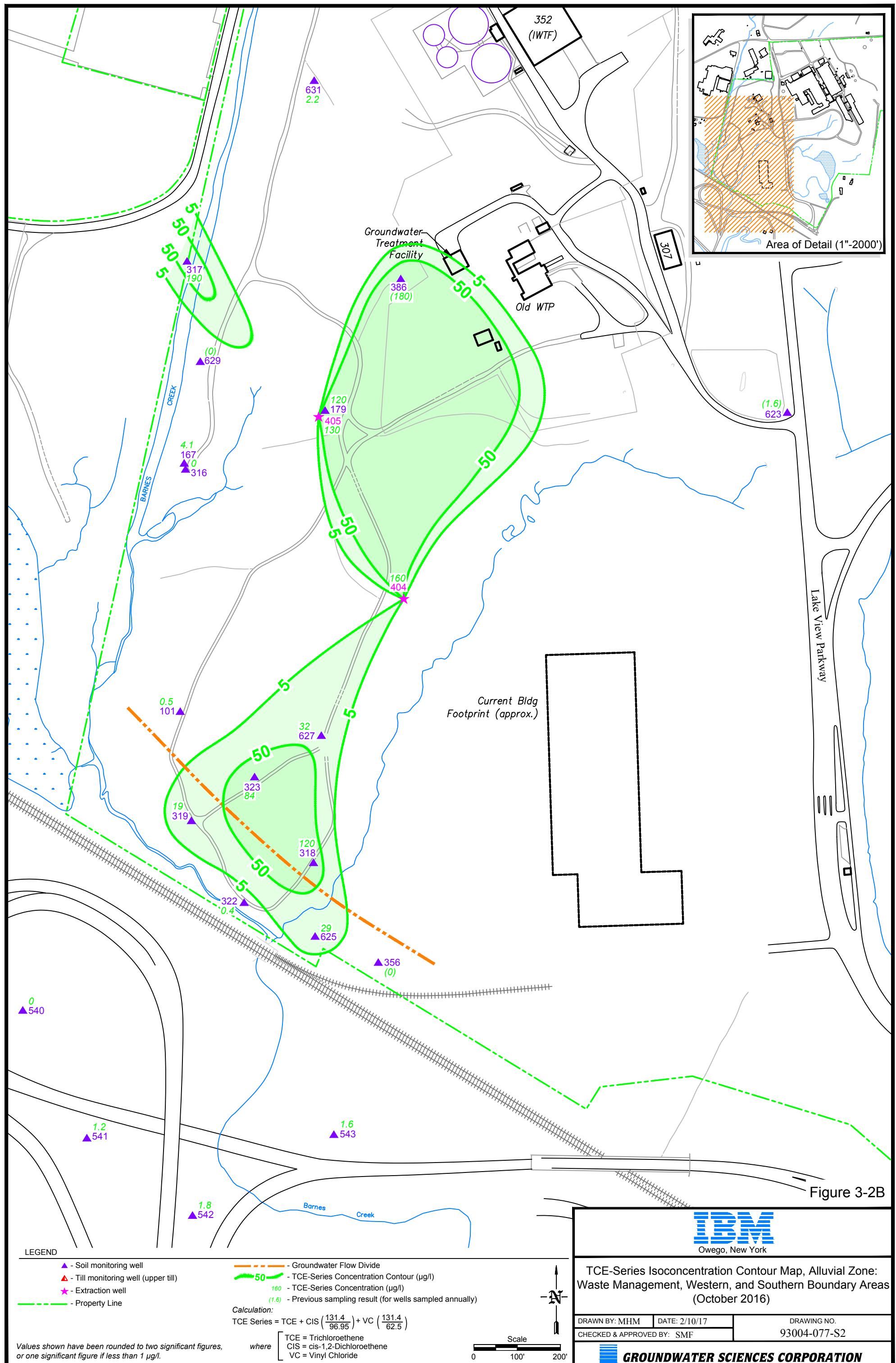


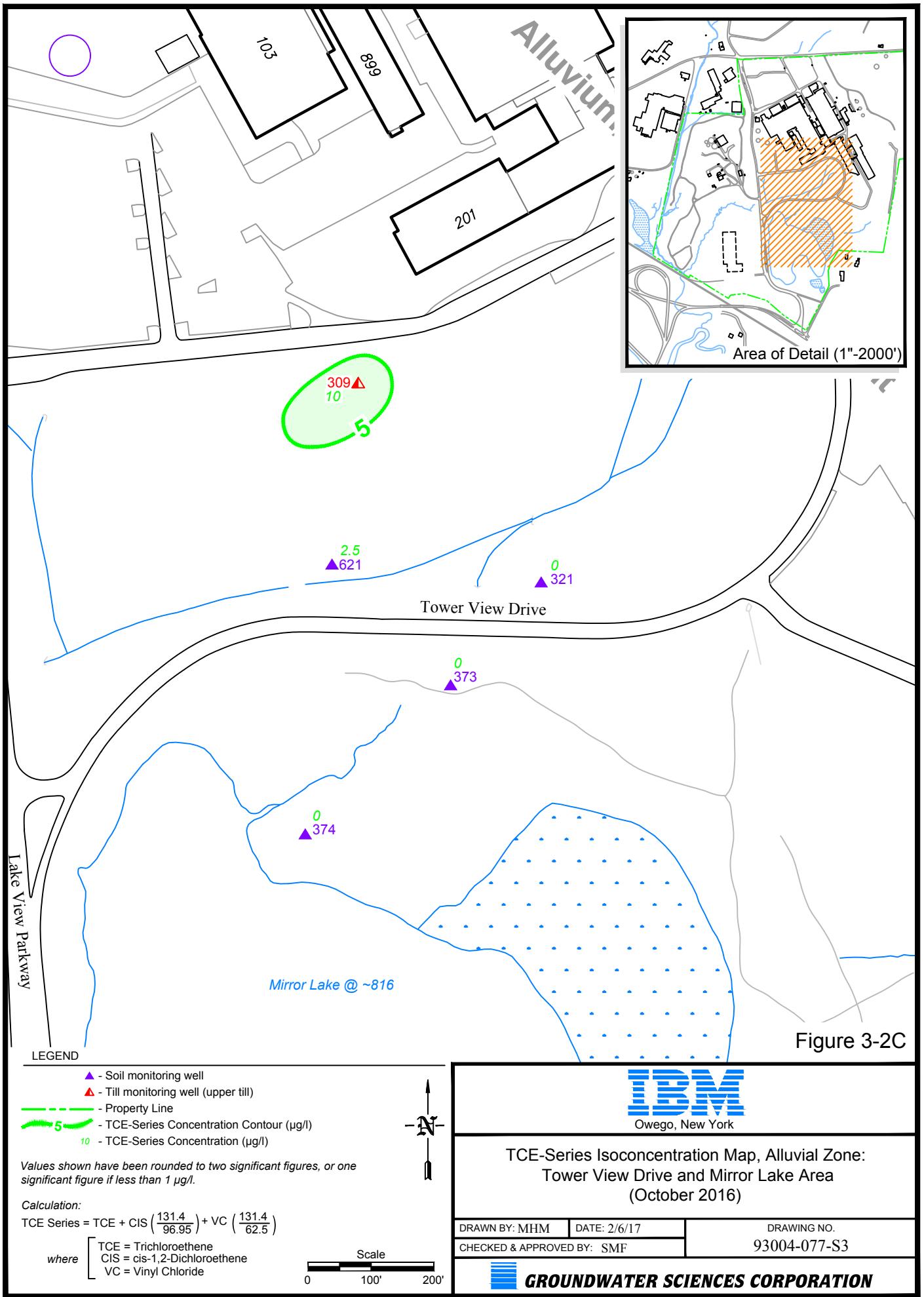


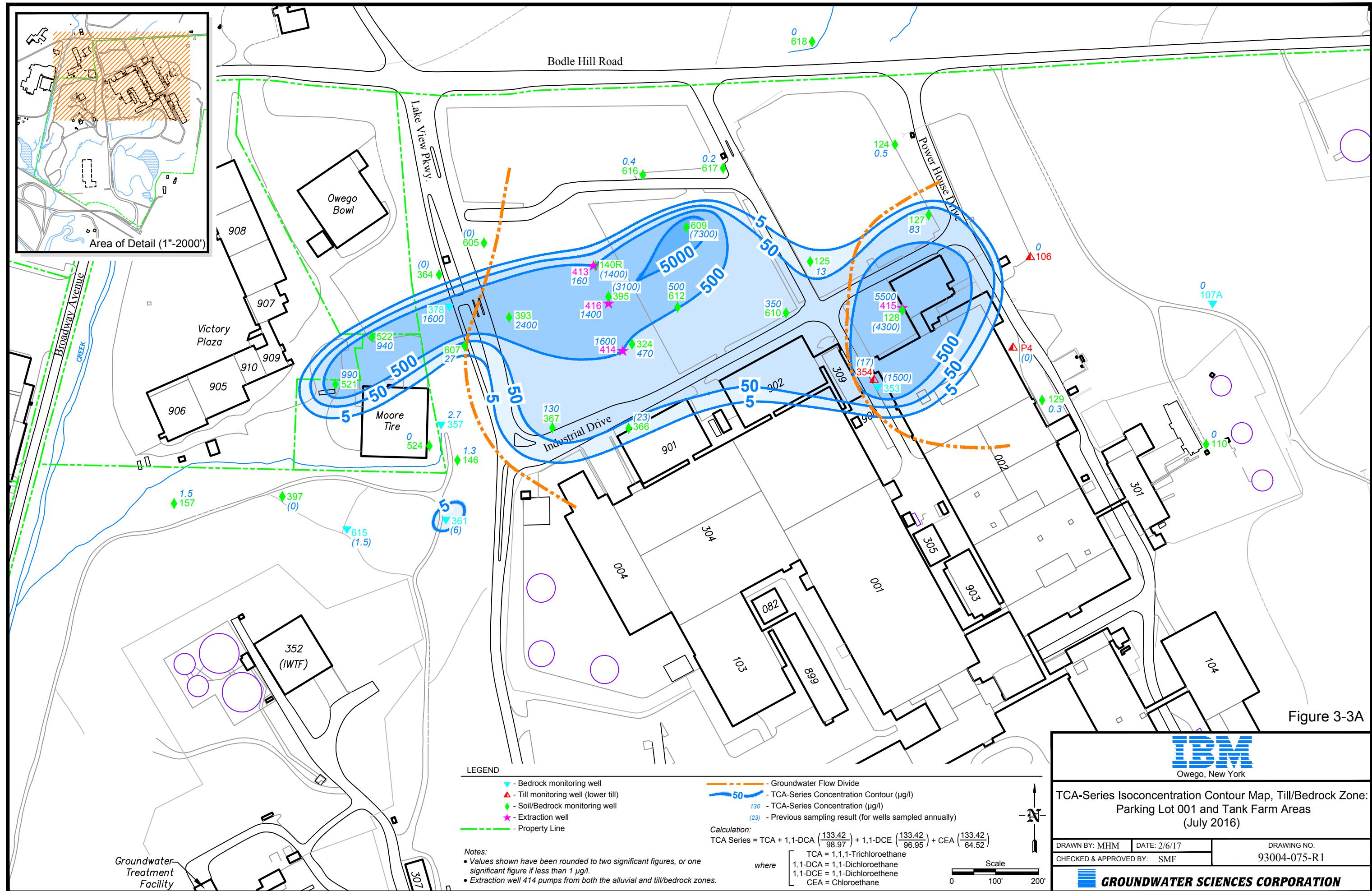


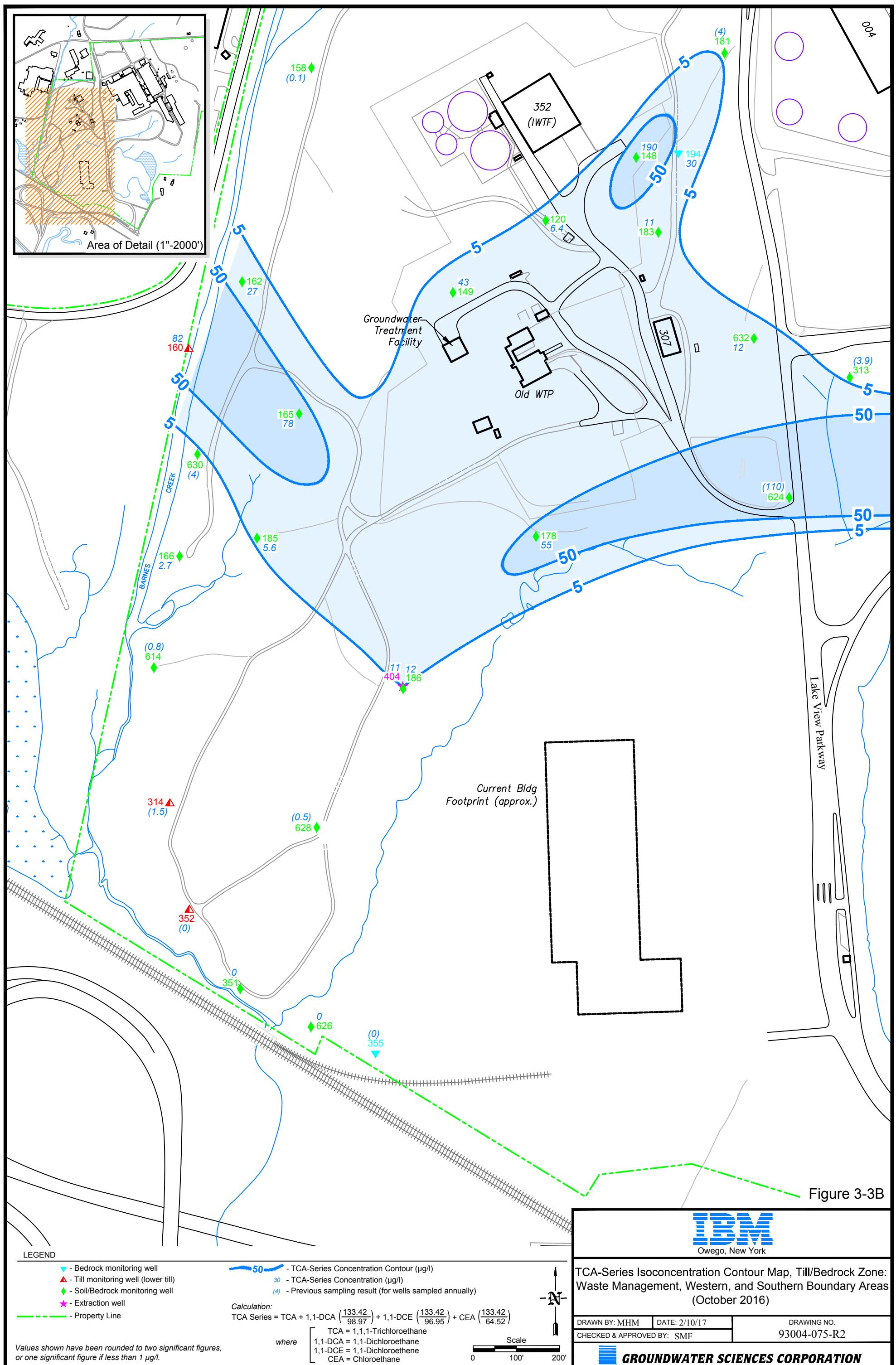


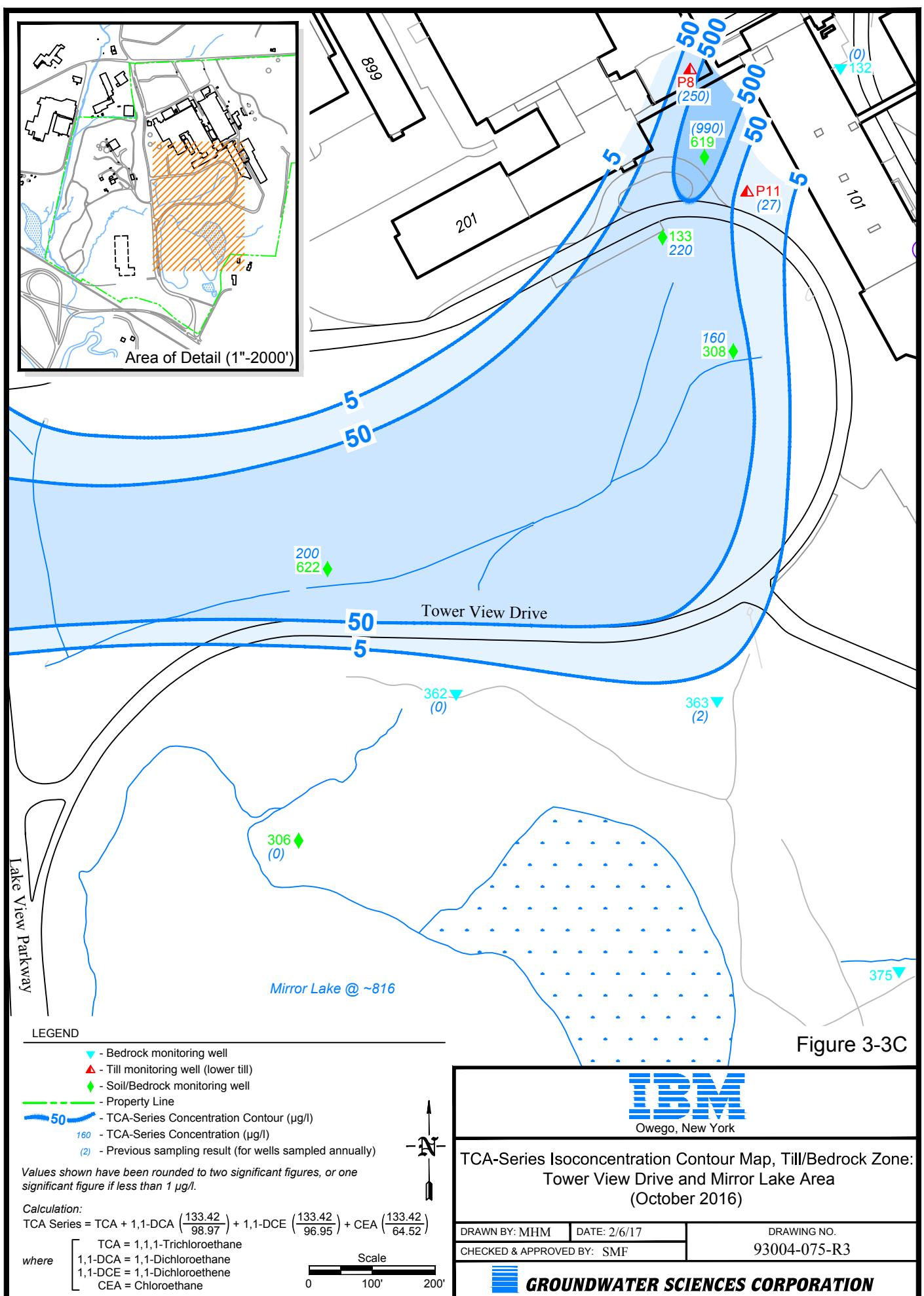




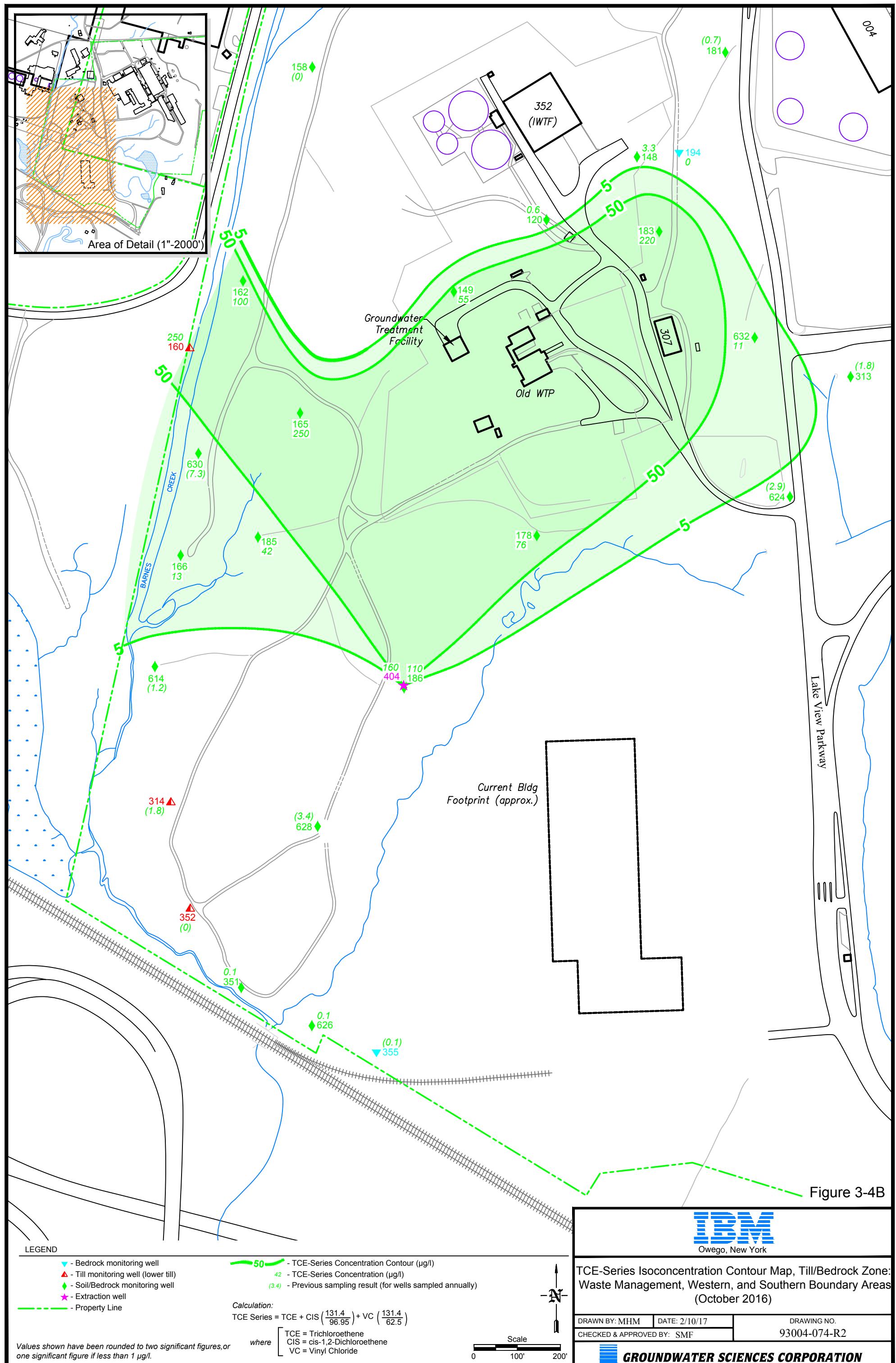


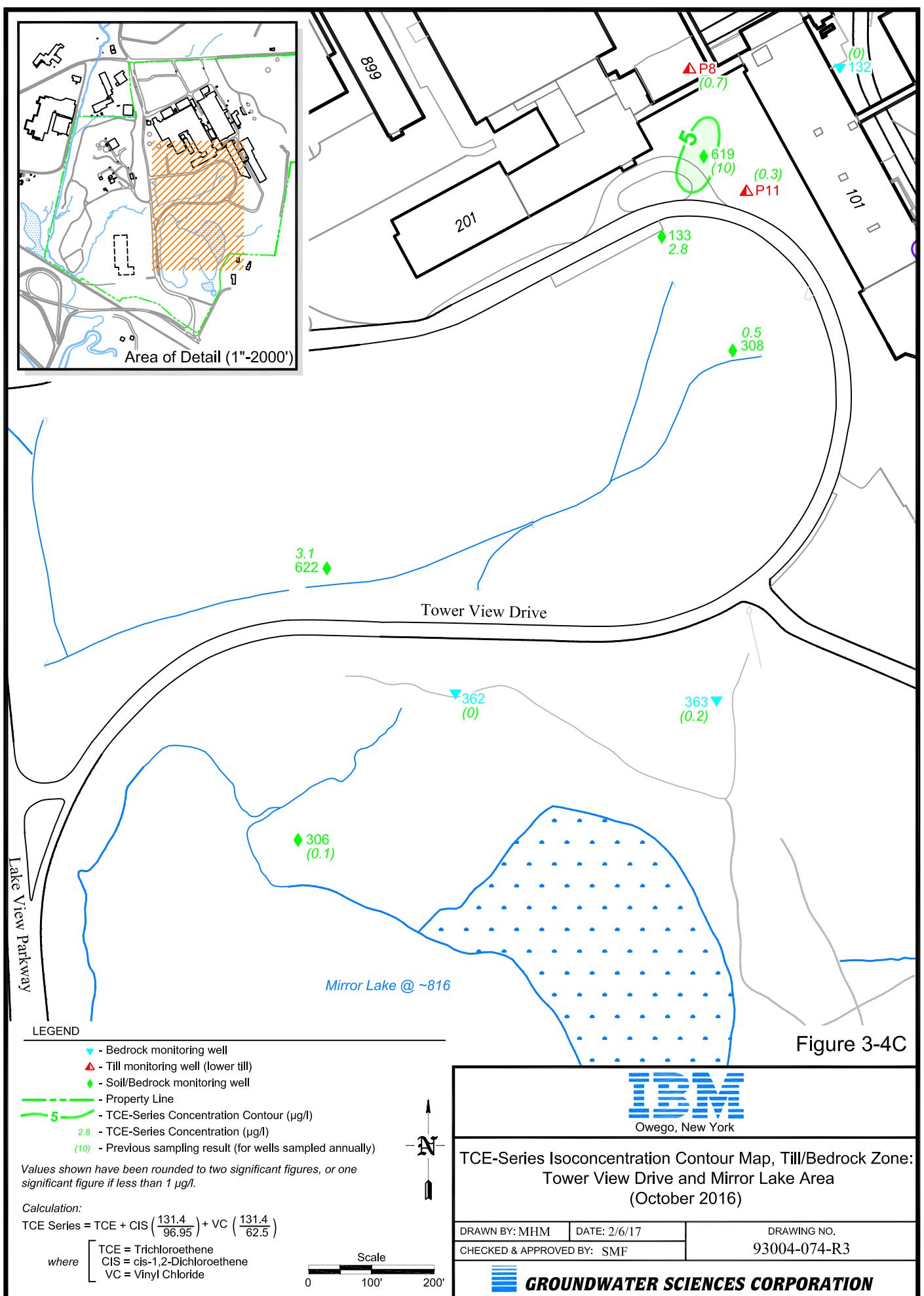












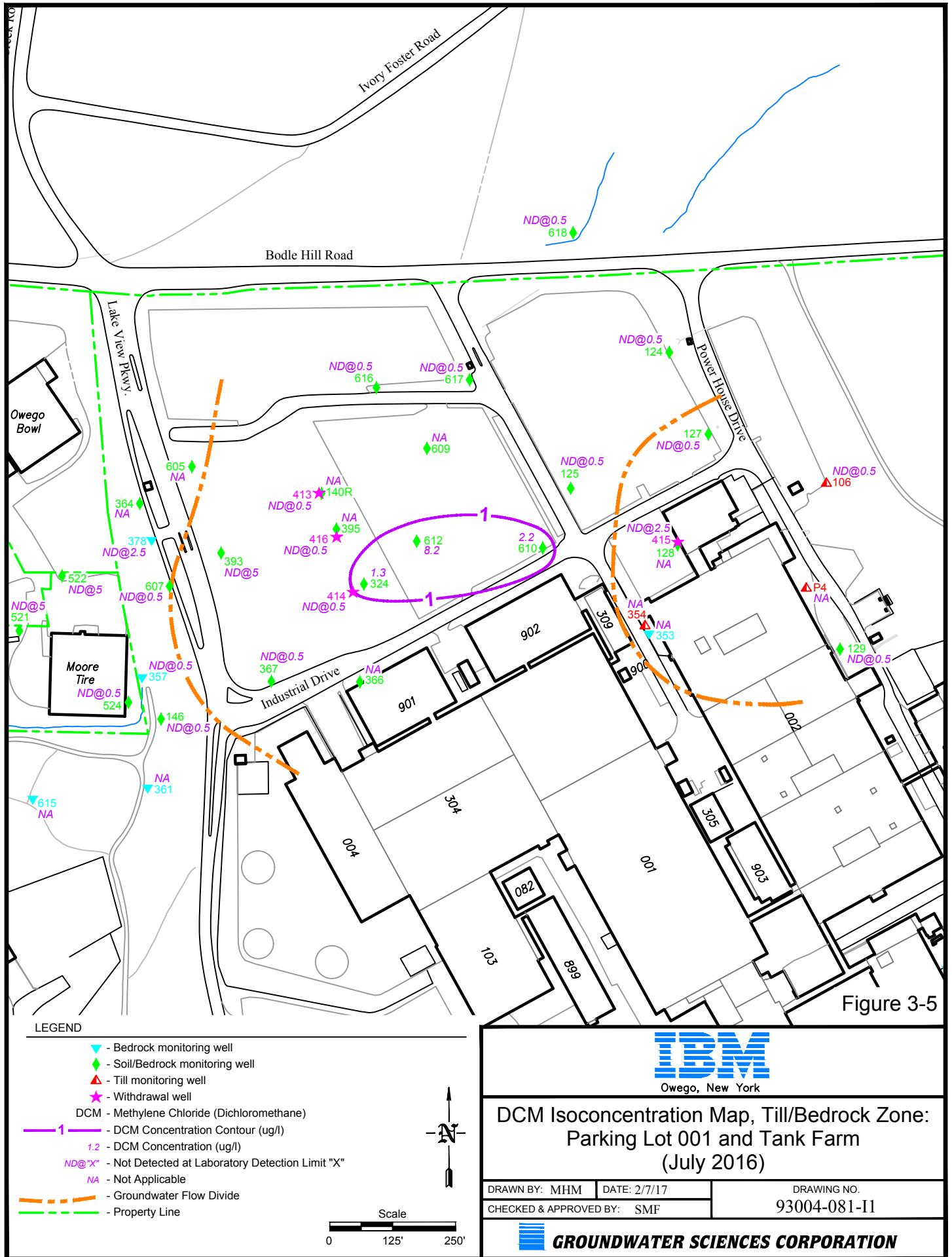
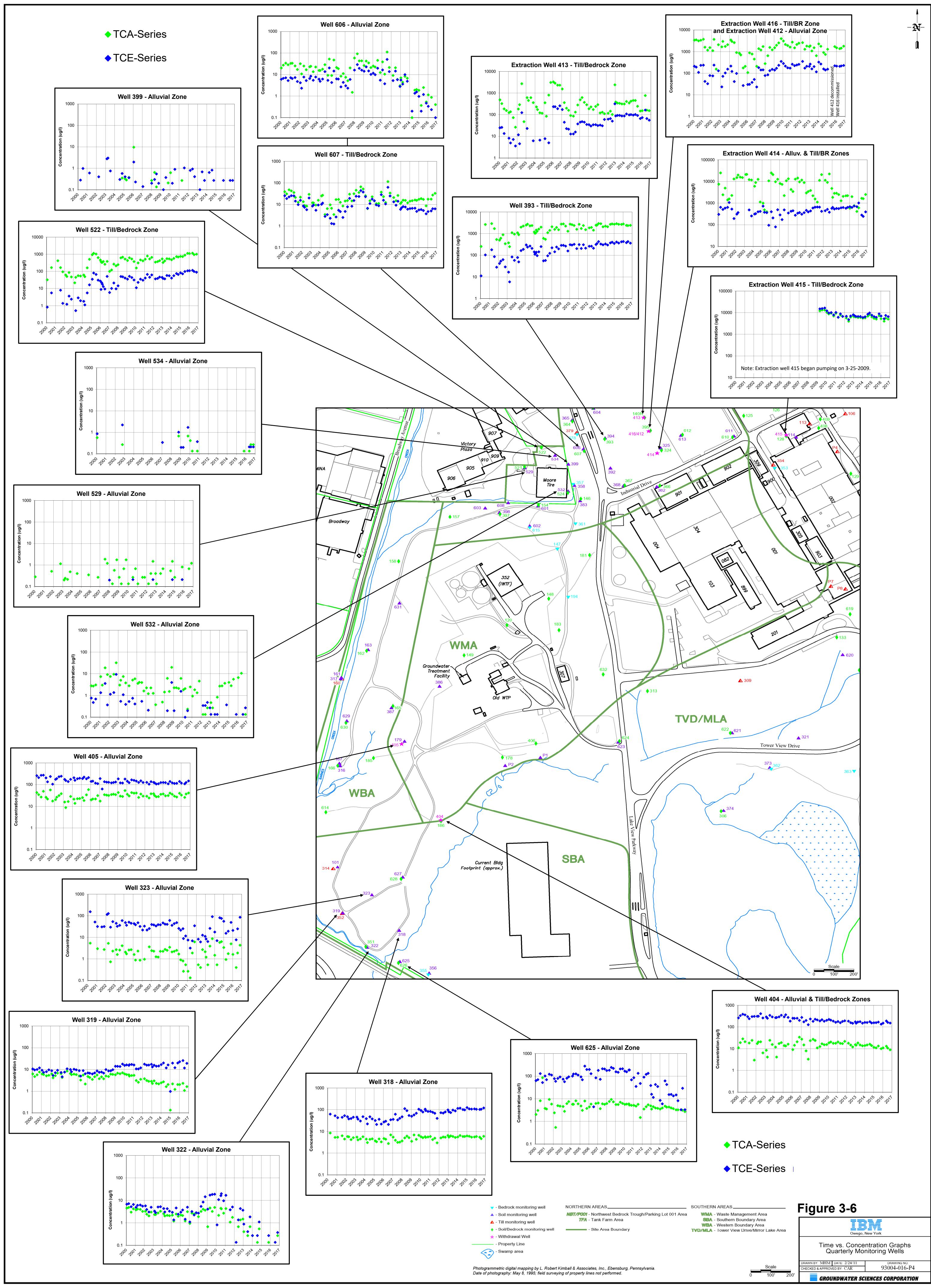
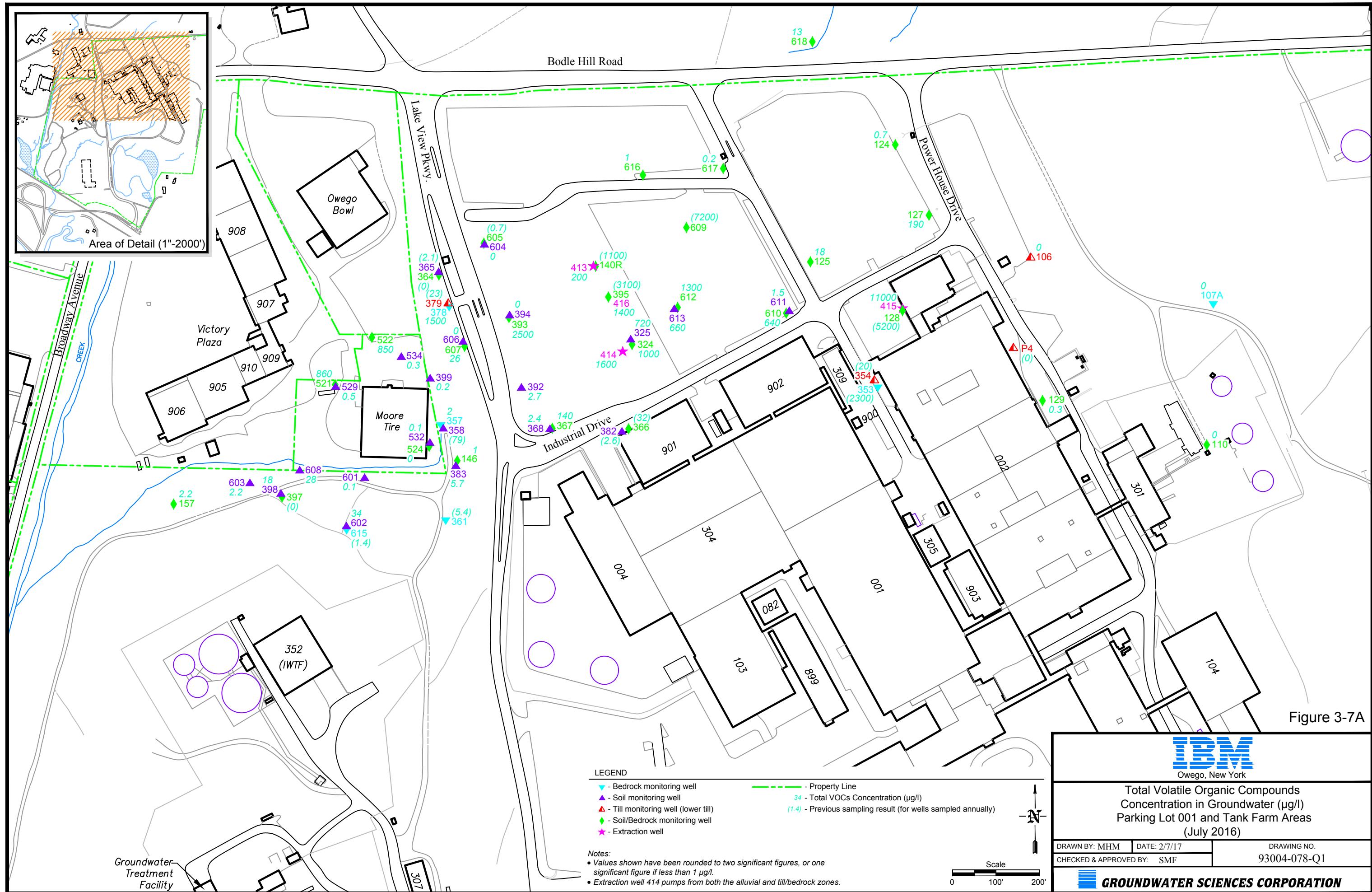
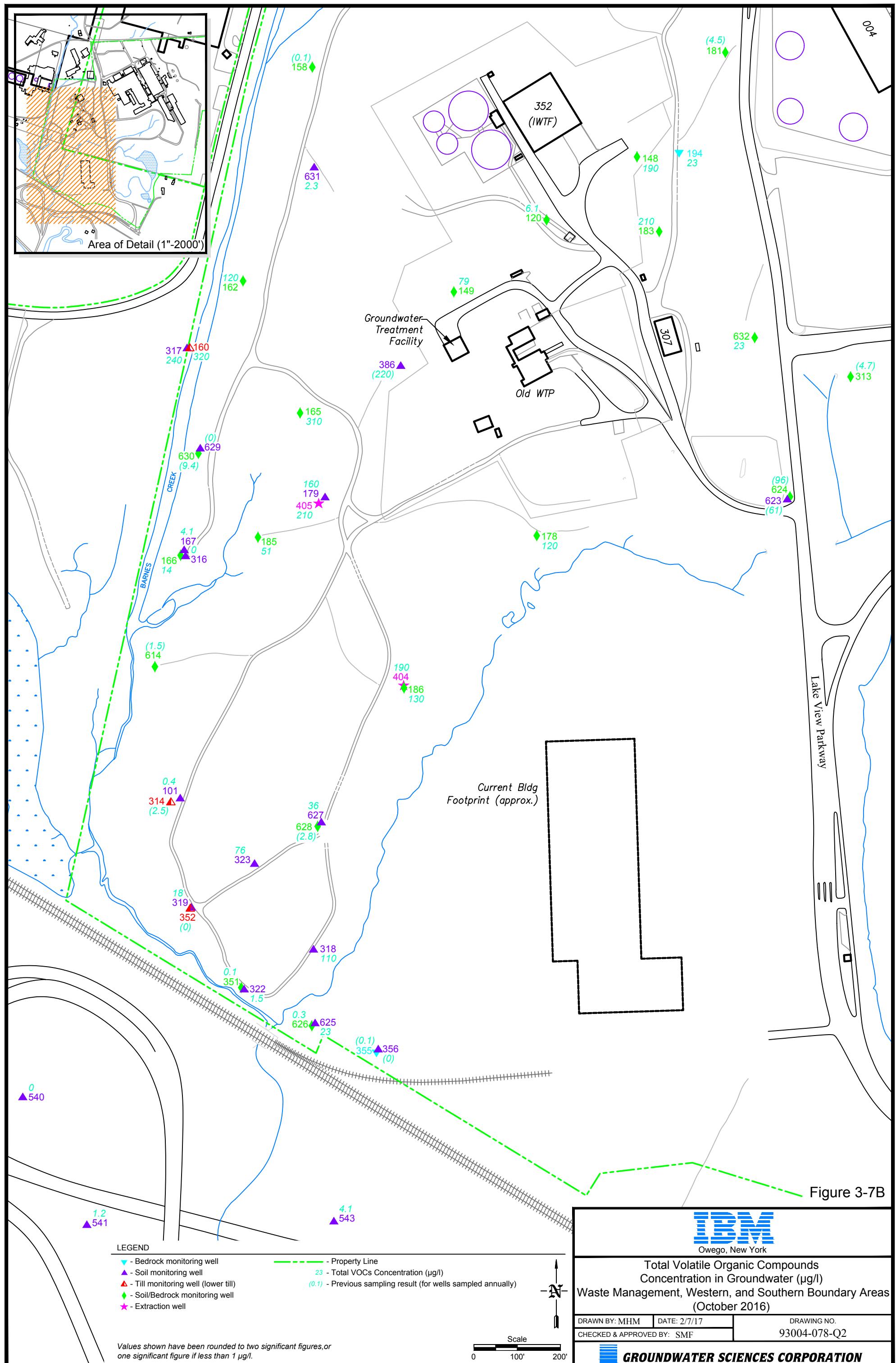
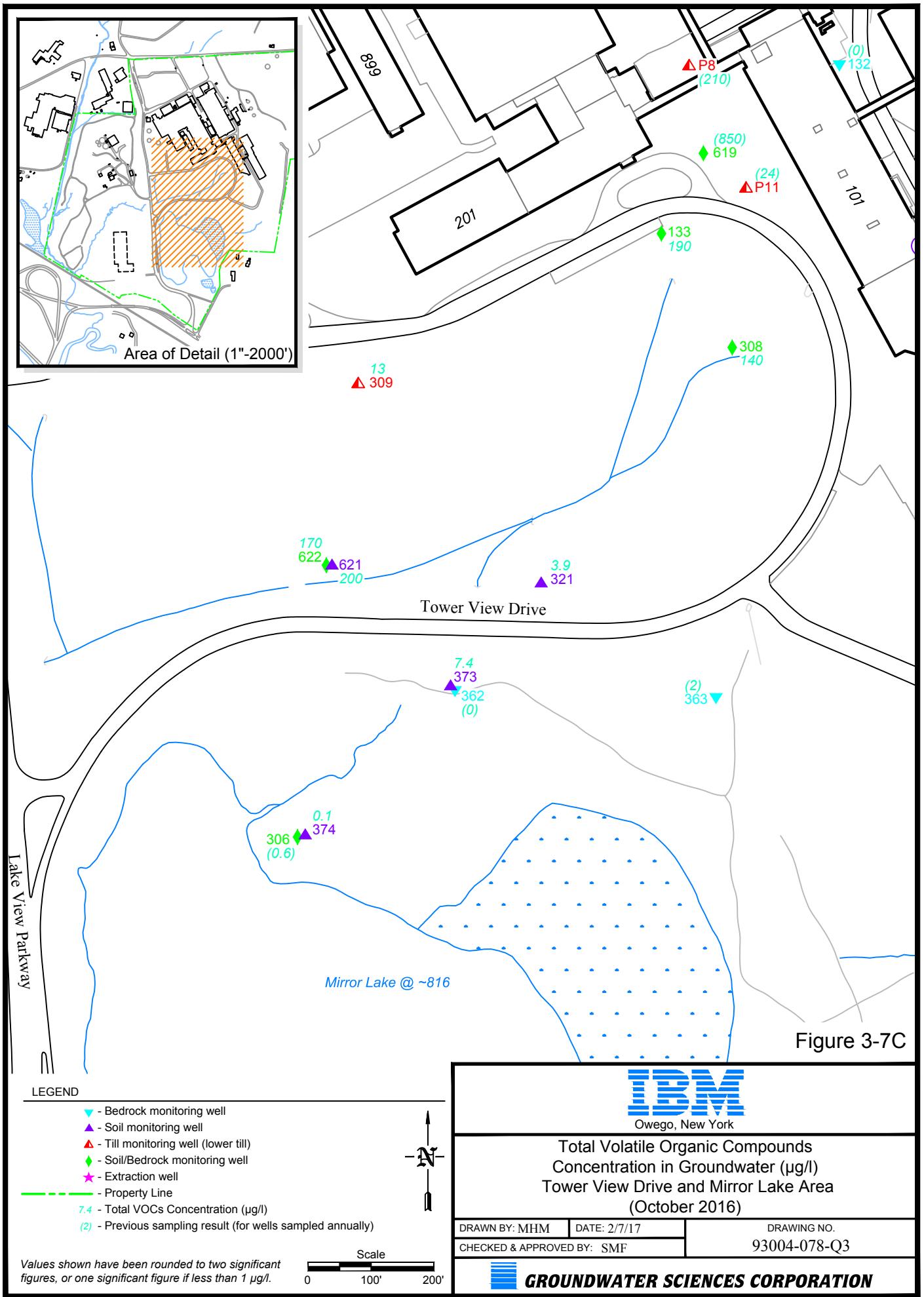


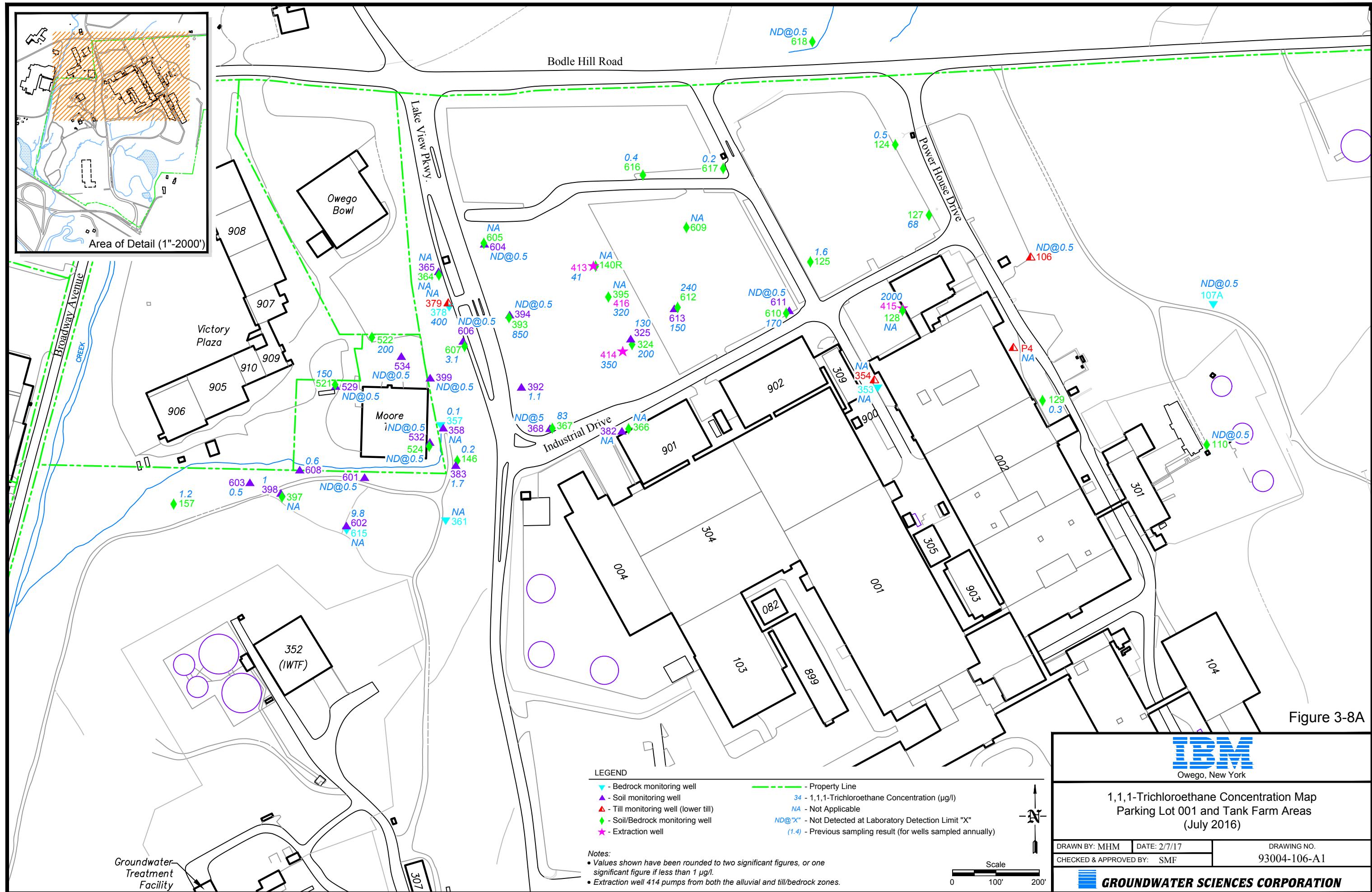
Figure 3-5

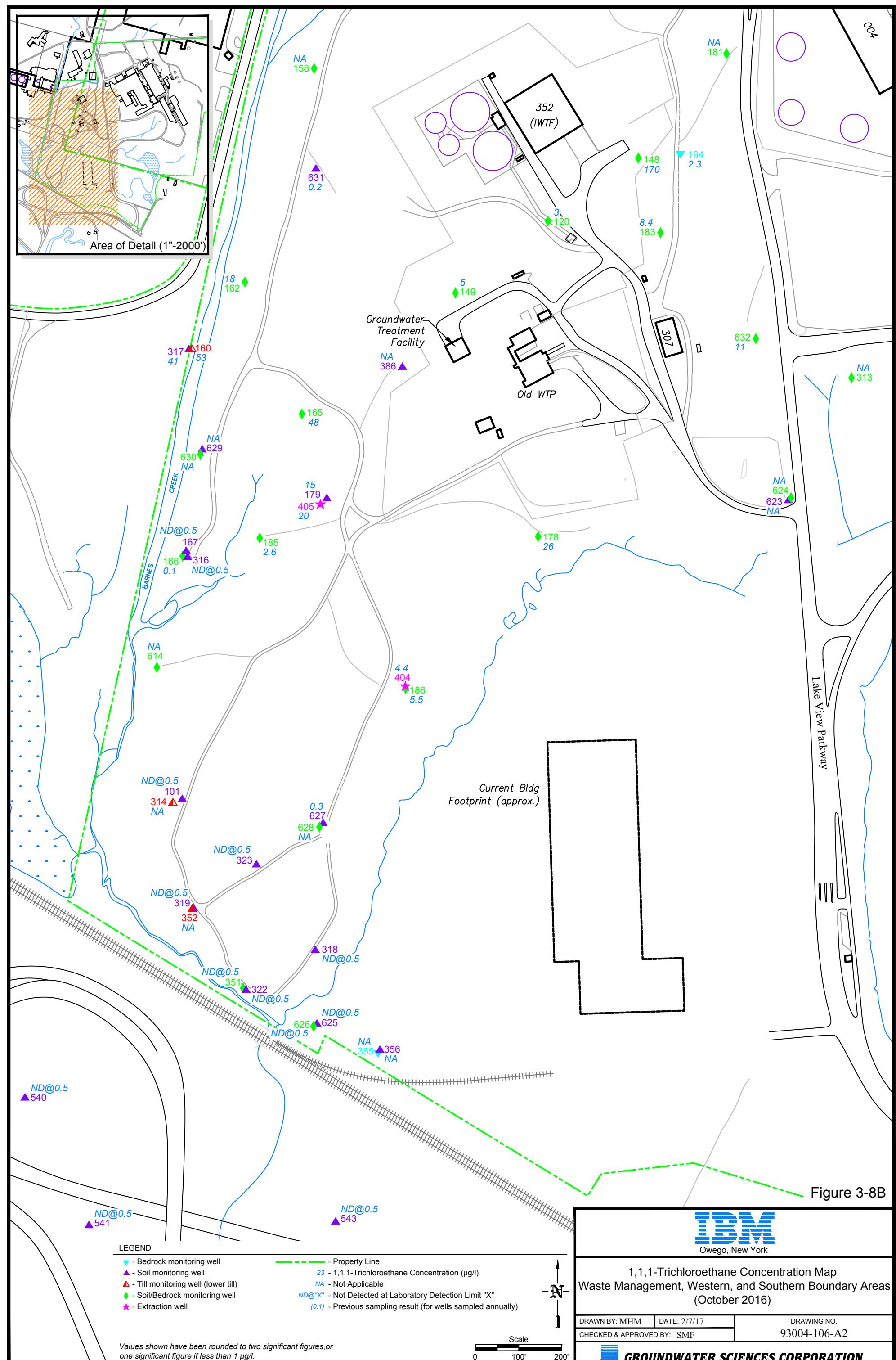


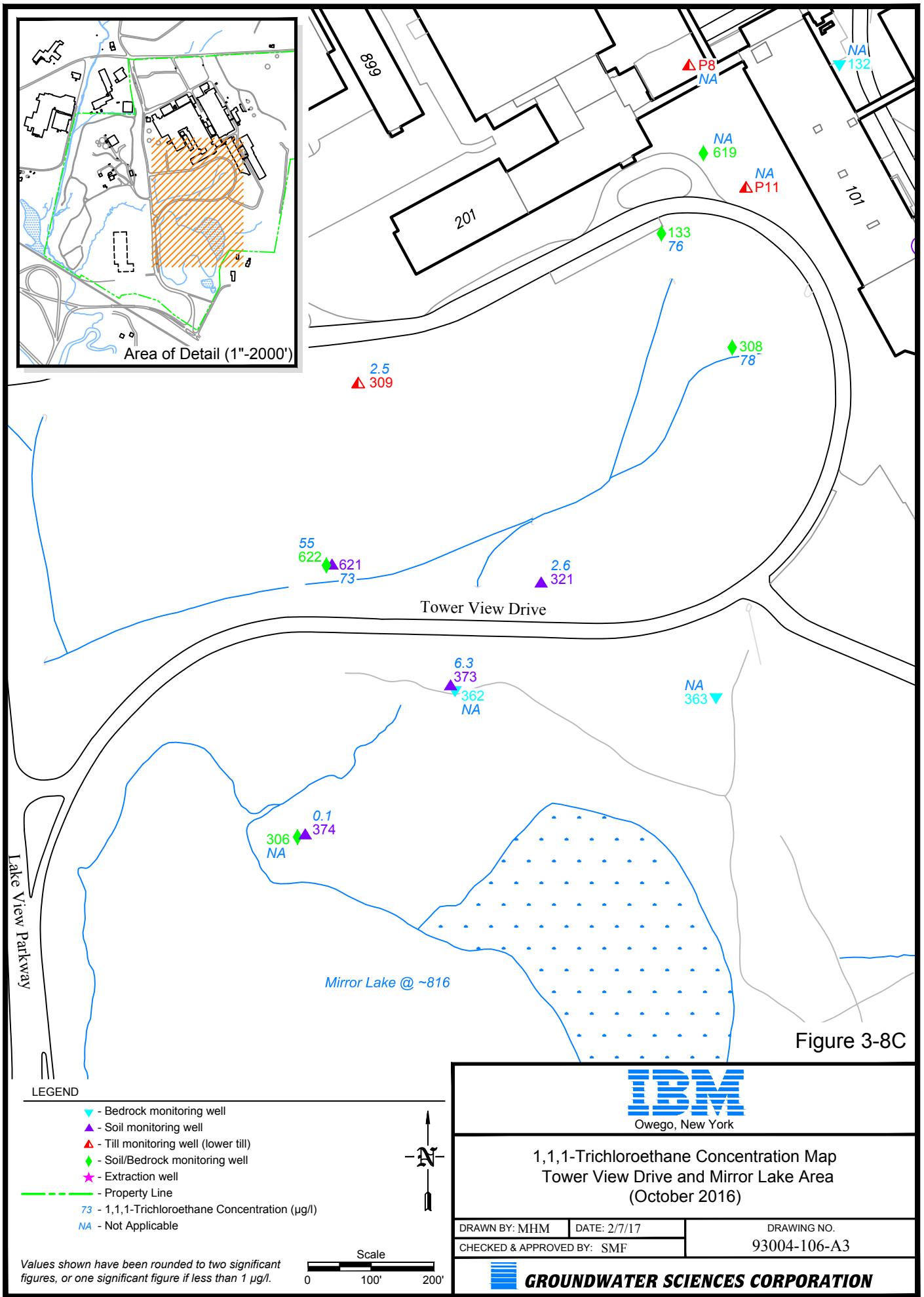


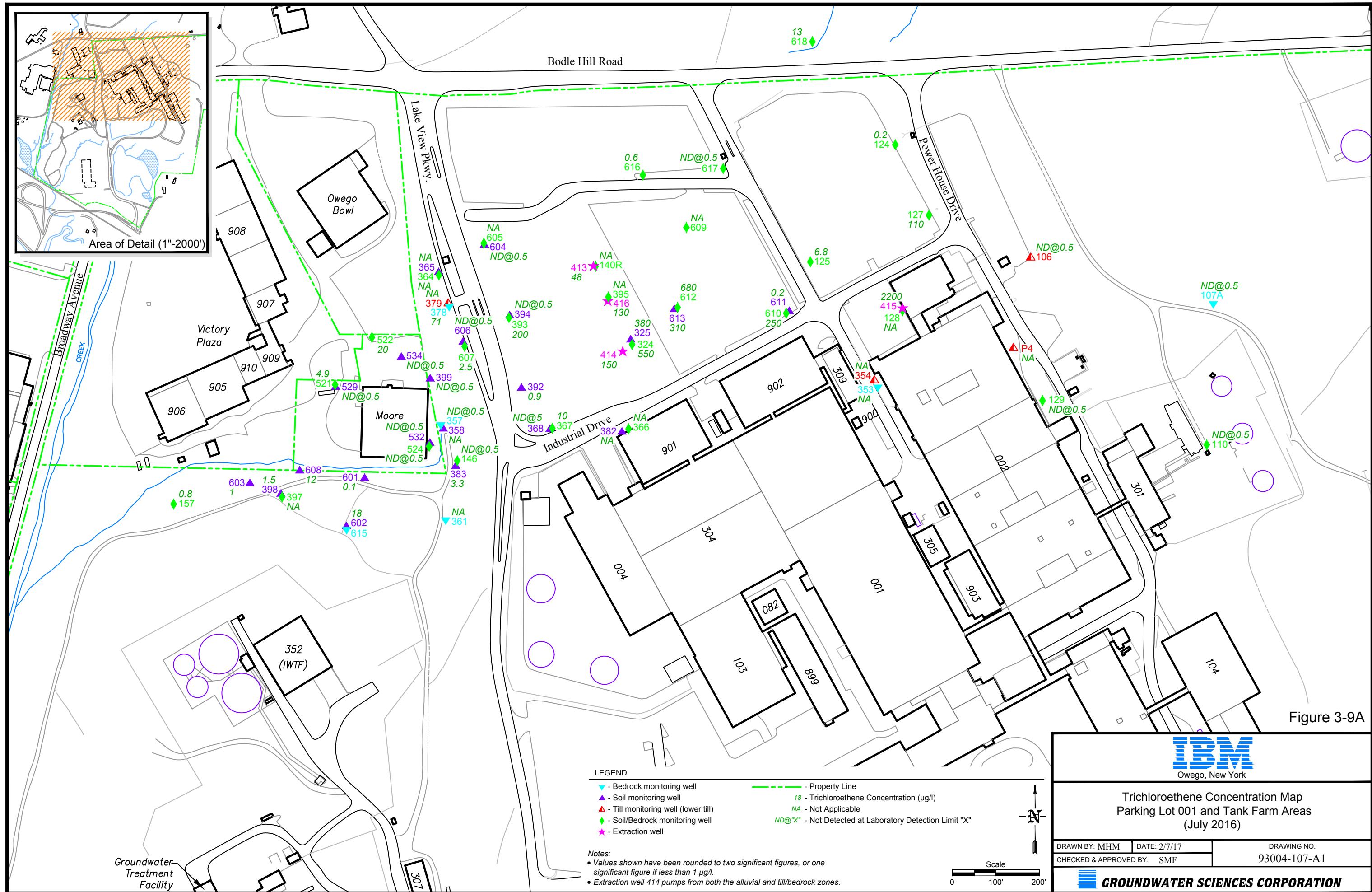


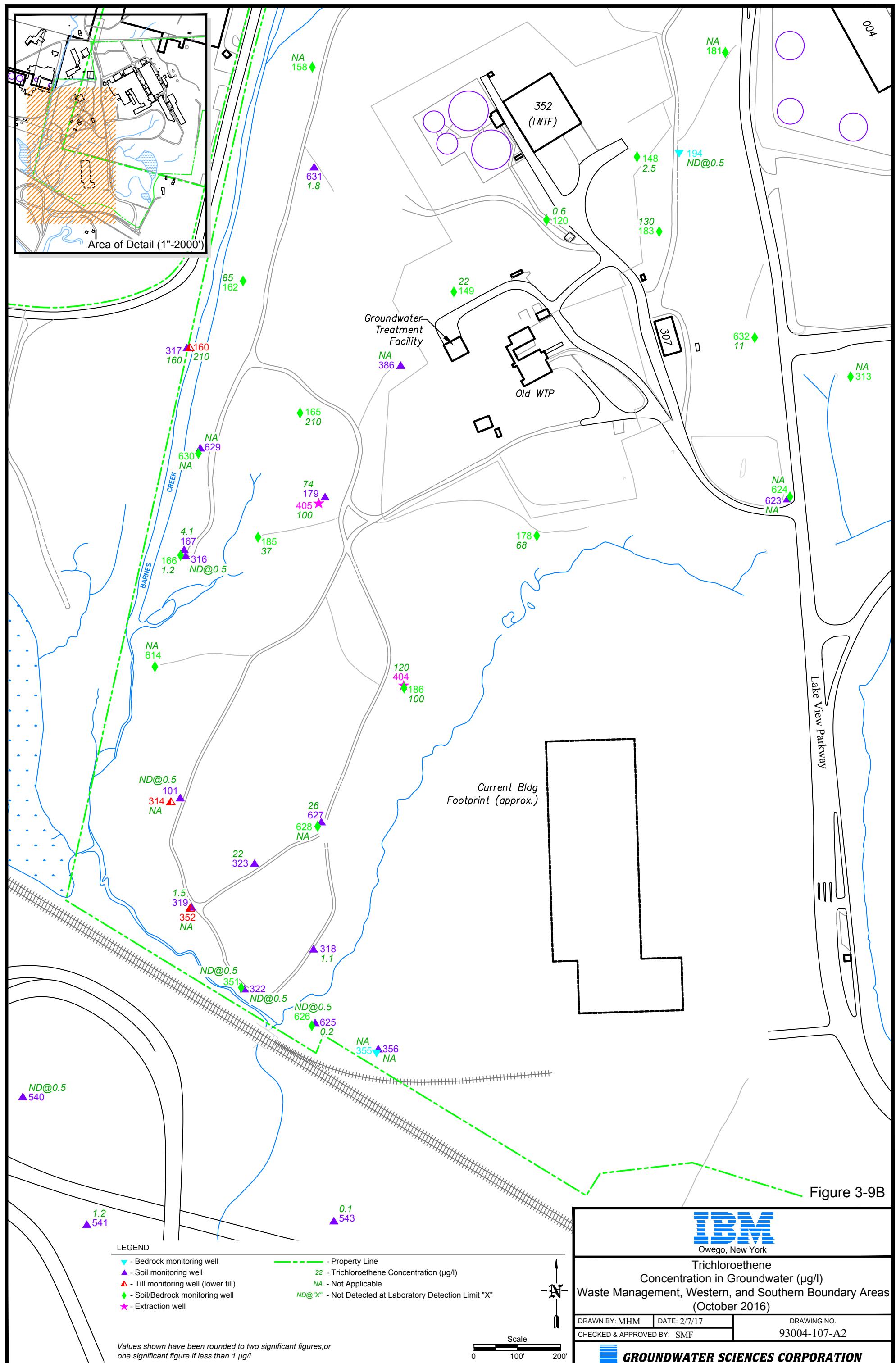


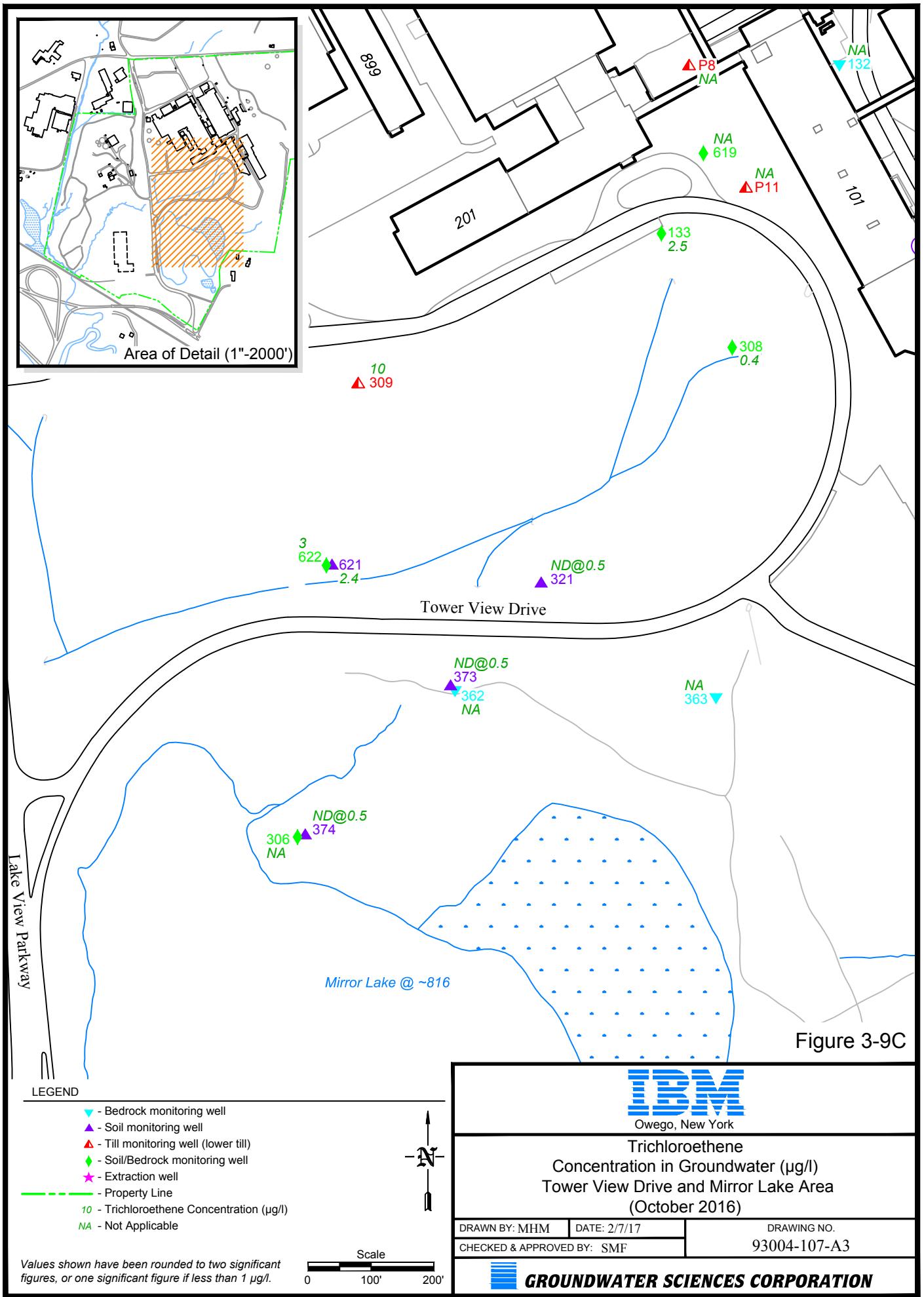












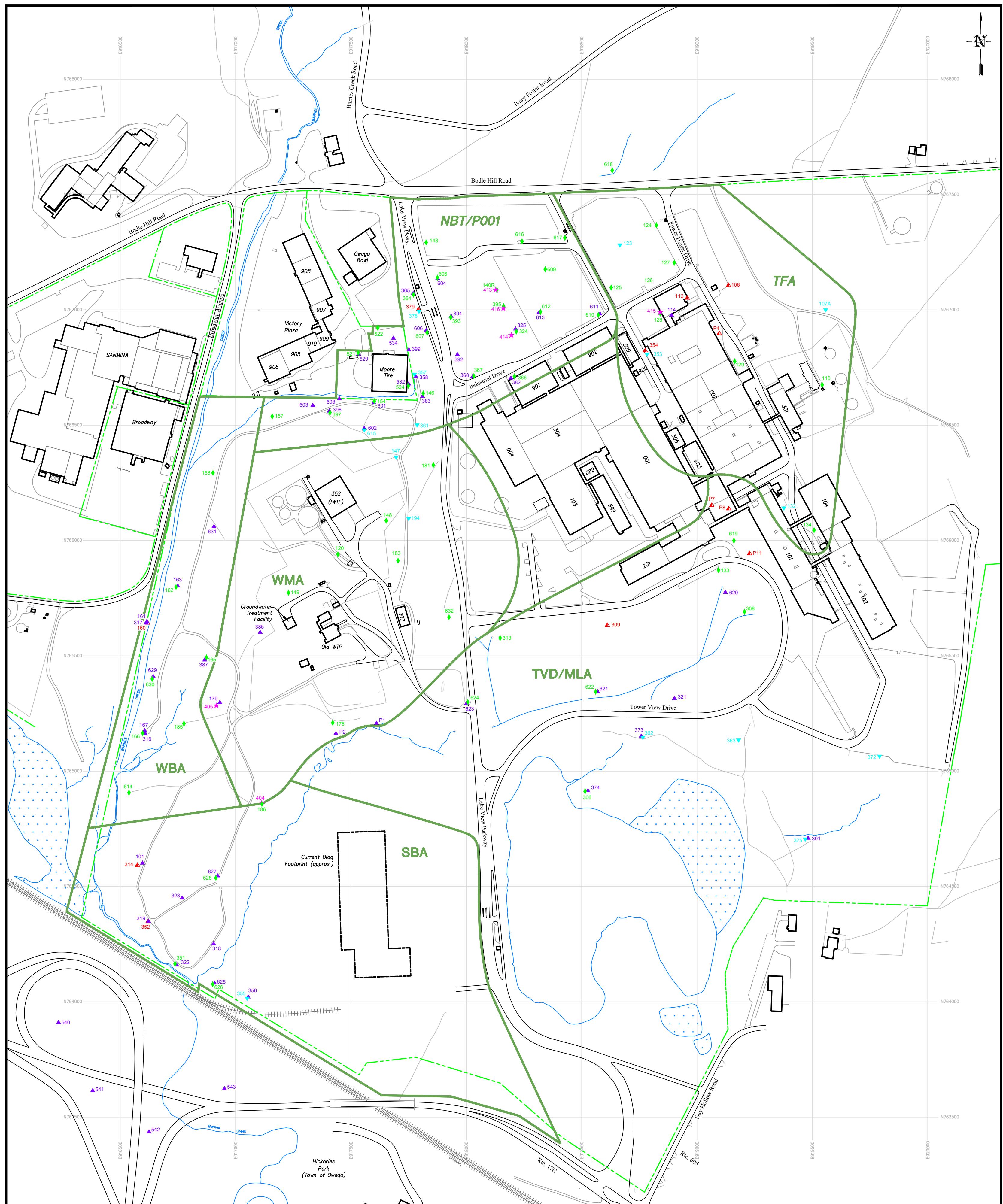


Plate 1

**IBM**  
Owego, New York

Well Location Map  
Corrective Action Monitoring Program

DRAWN BY: MIMM DATE: 8/18/16 DRAWING NO.  
CHECKED & APPROVED BY: CAR 93004-016-R1

GROUNDWATER SCIENCES CORPORATION

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## **APPENDIX A**

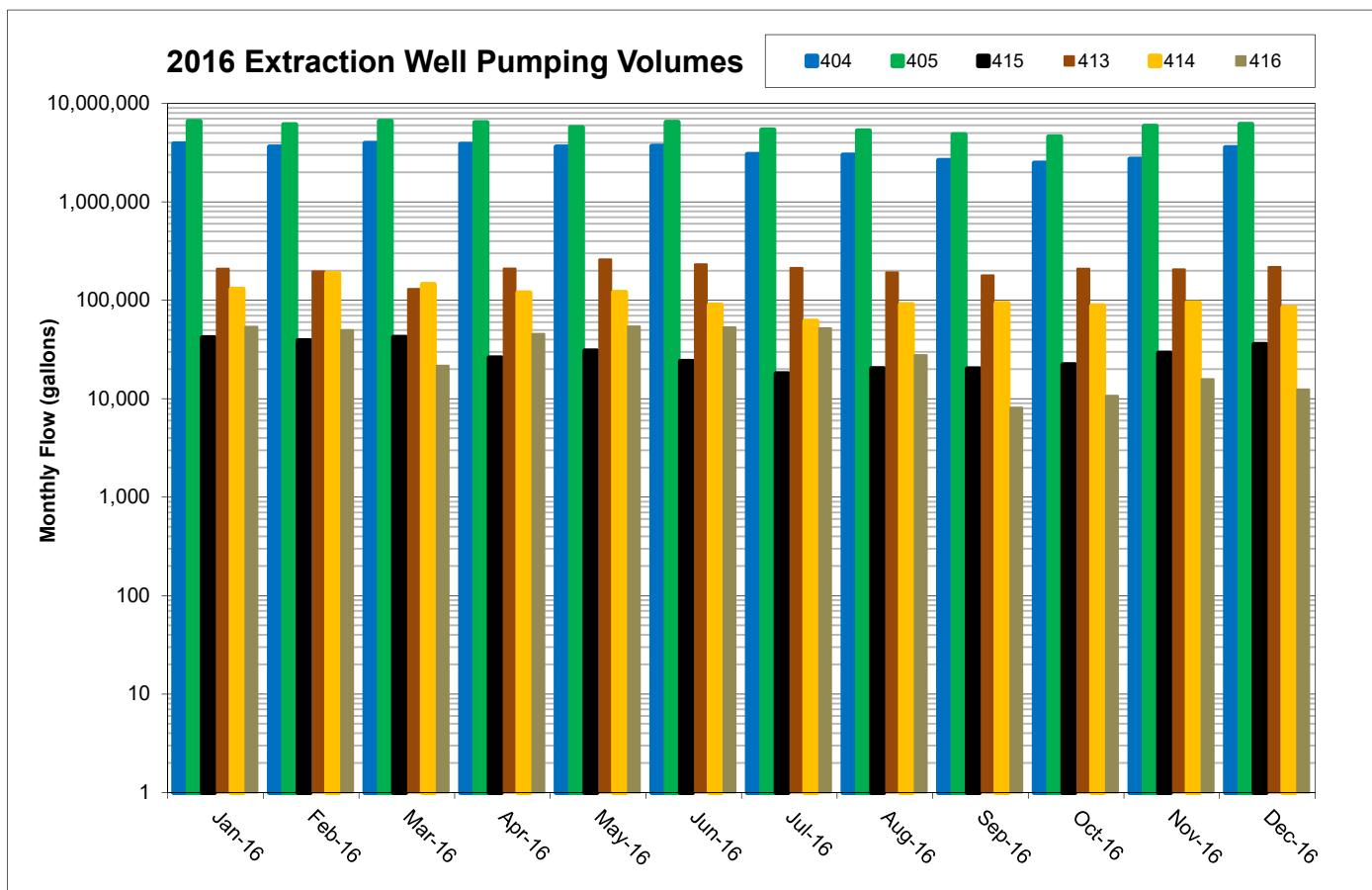
**TABLE A-1: EXTRACTION WELL PUMPING VOLUMES**  
**TABLE A-2: VOC MASS REMOVAL CALCULATIONS**  
**January 2016 – December 2016**

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**Table A-1: 2016 Extraction Well Pumping Volumes (gallons)**  
**Former IBM Facility, Owego, New York**

Month	Waste Management Area		Parking Lot 001 Area			Tank Farm Area 415	Site Total
	404	405	414	413	416		
Jan-16	3,887,045	6,559,471	129,744	210,224	54,000	41,745	10,882,228
Feb-16	3,618,987	6,079,360	188,115	197,063	50,000	38,958	10,172,484
Mar-16	3,934,771	6,593,427	145,000	130,747	21,700	42,027	10,867,671
Apr-16	3,843,150	6,399,349	119,000	210,899	45,700	26,014	10,644,112
May-16	3,620,545	5,690,629	120,507	261,101	54,300	30,652	9,777,734
Jun-16	3,679,124	6,448,143	89,527	232,696	53,437	24,003	10,526,930
Jul-16	3,032,117	5,394,773	61,376	214,098	52,096	17,999	8,772,460
Aug-16	2,992,635	5,270,126	90,623	193,038	27,792	20,252	8,594,467
Sep-16	2,638,855	4,815,768	93,092	179,366	8,139	20,138	7,755,358
Oct-16	2,480,346	4,574,726	87,991	209,956	10,741	22,219	7,385,980
Nov-16	2,713,994	5,871,647	94,265	206,404	15,845	29,090	8,931,244
Dec-16	3,564,703	6,136,462	84,455	218,616	12,453	35,622	10,052,309
<i>*Figures in italics were calculated from totalizer readings of flow meters.</i>						Total	114,362,977



**Table A-2: 2016 VOC Mass Removal Calculations**  
**Former IBM Facility, Owego, New York**

**Concentrations of Chemicals in Air Stripper Influent (ug/L)**

Month	Trichloroethene	cis-1,2-Dichloroethene	1,1,1-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)	1,2-Dichloro-1,2,2-Trifluoroethane (Freon 123a)	Other VOCs	Volume Pumped through GTF* (gallons)
<b>Jan</b>	120.0	33.0	22.0	18.0	7.0	46.0	4.0	0.0	10,975,200
<b>Feb</b>	120.0	31.0	27.0	26.0	7.0	56.0	5.0	0.0	10,212,400
<b>Mar</b>	120.0	30.0	25.0	27.0	7.0	47.0	6.0	0.0	11,062,700
<b>Apr</b>	140.0	43.0	38.0	57.0	10.0	55.0	6.0	1.6	10,937,400
<b>May</b>	140.0	37.0	34.0	41.0	9.0	54.0	5.0	0.7	10,104,900
<b>Jun</b>	140.0	37.0	31.0	28.0	7.0	38.0	4.0	0.9	10,815,400
<b>Jul</b>	140.0	36.0	37.0	43.0	9.0	61.0	5.0	0.7	9,000,200
<b>Aug</b>	140.0	35.0	40.0	47.0	12.0	53.0	6.0	1.4	8,693,700
<b>Sep</b>	150.0	37.0	38.0	43.0	11.0	55.0	5.0	1.9	7,813,400
<b>Oct</b>	130.0	36.0	37.0	44.0	10.0	47.0	5.0	0.6	7,504,700
<b>Nov</b>	130.0	35.0	34.0	31.0	9.0	43.0	4.0	0.5	9,001,600
<b>Dec</b>	130.0	33.0	30.0	34.0	9.0	45.0	5.0	0.7	10,114,200

\*The volume pumped through the GTF differs slightly from the volume pumped

**Total** **116,235,800**

from the extraction wells due to metering differences.

**gallons**

**Pounds of Chemicals Removed by Air Stripping**

Month	Trichloroethene	cis-1,2-Dichloroethene	1,1,1-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)	1,2-Dichloro-1,2,2-Trifluoroethane (Freon 123a)	Other VOCs	Total VOCs Removed (pounds)
<b>Jan</b>	11.0	3.0	2.0	1.6	0.6	4.2	0.4	0.0	22.9
<b>Feb</b>	10.2	2.6	2.3	2.2	0.6	4.8	0.4	0.0	23.2
<b>Mar</b>	11.1	2.8	2.3	2.5	0.6	4.3	0.6	0.0	24.2
<b>Apr</b>	12.8	3.9	3.5	5.2	0.9	5.0	0.5	0.1	32.0
<b>May</b>	11.8	3.1	2.9	3.5	0.8	4.6	0.4	0.1	27.1
<b>Jun</b>	12.6	3.3	2.8	2.5	0.6	3.4	0.4	0.1	25.8
<b>Jul</b>	10.5	2.7	2.8	3.2	0.7	4.6	0.4	0.1	24.9
<b>Aug</b>	10.2	2.5	2.9	3.4	0.9	3.8	0.4	0.1	24.3
<b>Sep</b>	9.8	2.4	2.5	2.8	0.7	3.6	0.3	0.1	22.2
<b>Oct</b>	8.1	2.3	2.3	2.8	0.6	2.9	0.3	0.0	19.4
<b>Nov</b>	9.8	2.6	2.6	2.3	0.7	3.2	0.3	0.0	21.5
<b>Dec</b>	11.0	2.8	2.5	2.9	0.8	3.8	0.4	0.1	24.2
<b>Totals</b>	<b>128.9</b>	<b>34.2</b>	<b>31.3</b>	<b>35.0</b>	<b>8.5</b>	<b>48.3</b>	<b>4.9</b>	<b>0.7</b>	<b>292</b>

**pounds**

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## **APPENDIX B**

- TABLE B-1: WELL SPECIFICATIONS, CORRECTIVE ACTION MONITORING PROGRAM**
- TABLE B-2a: HYDRAULIC EFFECTIVENESS MONITORING WELLS FOR GROUNDWATER ELEVATION MEASUREMENTS**
- TABLE B-2b: CONTAMINANT REDUCTION MONITORING WELLS FOR GROUNDWATER SAMPLING**
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**Table B-1: Well Specifications**  
**Corrective Action Monitoring Program**

Well	Northing (grid feet)	Easting (grid feet)	Current M.P. Elevation (ft amsl)	Current Ground Surface Elevation (ft amsl)	Depth to Bedrock (ft bgs)	Bedrock Elevation (ft amsl)	Screened Depth Interval (ft bgs)	Baseline Depth to Bottom from M.P. (ft)	Baseline Elevation of Bottom (ft amsl)	Well Diameter (in)	Screen Length (ft)	Well Construction Material	Geologic Unit Monitored	Site Area	Up, Down, or Side Gradient		
101	764601.1	916596.6	814.01	811.2	NE	NE	30	-	40	40.95	773.06	6	10	S, 25 slot	Outwash Sand	SBA	DG
106	767106.1	919136.5	914.91	912.9	11.6	901.2	6.3	-	11.6	13.12	901.79	4	5.3	PVC	Till*	TFA	UG
107A	767000.3	919557.6	961.80	960.3	NL	NL	NL	-	NL	64.96	896.84	2	NL	PVC	Bedrock	TFA	UG
110	766674.6	919542.5	946.88	947.9	15.5	931.3	14.3	-	19.6	20.11	926.77	4	5.3	PVC	Till/Bedrock	TFA	UG
113	767051.4	918957.9	914.83	912.1	25	887.0	4.9	-	10.2	12.72	902.11	4	5.3	PVC	Till	TFA	DG
114	766976.5	918889.9	916.13	913.4	22	891.6	9.4	-	14.7	16.65	899.48	4	5.3	PVC	Fill	TFA	DG
120	765939.9	917443.6	846.20	844.7	24	820.7	20	-	25	39.58	806.62	6	5	OH	Till/Bedrock	WMA	DG
123	765871.9	919093.3	903.96	904.5	18	886.0	19	-	23	21.89	882.07	4	4	PVC	Bedrock	TFA	DG
124	767366.9	918823.9	911.43	908.5	20	888.4	19	-	23	25.14	886.29	4	4	PVC	Till/Bedrock	TFA	SG
125	767096.6	918627.9	905.36	905.7	24	881.3	22	-	26	24.86	880.50	4	4	PVC	S & G/Bedrock	TFA	DG
126	767128.9	918825.2	908.95	909.4	22	886.9	21	-	25	23.90	885.05	4	4	PVC	Till/Bedrock	TFA	DG
127	767204.2	918901.6	909.65	909.8	18	891.2	17	-	21	19.54	890.11	4	4	PVC	S & G/Bedrock	TFA	DG
128	766984.2	918840.7	914.23	912.5	22	890.5	20	-	24	24.86	889.37	2	4	PVC, 10-slot	Till/Bedrock	TFA	DG
129	766776.9	919163.6	912.10	912.0	7.5	906.4	6	-	10	8.35	903.75	4	4	PVC	Till/Bedrock	TFA	DG
132	766141.1	919376.3	915.31	912.0	14	898.1	14	-	18	21.20	894.11	4	4	PVC	Bedrock	TFA	DG
133	767281.5	918665.9	897.22	894.3	26	867.5	24	-	28	31.50	865.72	4	4	PVC	Till/Bedrock	TVD/MLA	DG
134	766044.5	919507.4	916.46	913.9	36	876.5	35	-	39	42.89	873.57	4	4	PVC	Till/Bedrock	TFA	DG
140R	767086.4	918134.6	889.17	886.9	41.5	845.5	38	-	43	45.14	844.00	2	5	PVC, 20-slot	Till/Bedrock	NBT/P001	DG
143	767292.3	917826.1	884.81	885.5	19.5	866.5	17	-	21	29.05	855.76	4	4	PVC	Till/Bedrock	NBT/P001	DG
146	766637.9	917813.3	868.04	865.6	22	843.6	20	-	24	25.86	842.18	4	4	PVC	Till/Bedrock	NBT/P001	DG
147	766361.6	917695.9	871.57	868.9	20	848.5	20	-	24	27.28	844.29	4	4	PVC	Bedrock	WMA	DG
148	766085.9	917652.8	857.87	854.6	32	823.1	29	-	34	34.91	822.96	4	5	PVC	Till/Bedrock	WMA	DG
149	765773.6	917229.3	834.27	831.6	29	802.5	27	-	31	33.57	800.70	4	4	PVC	Till/Bedrock	WMA	DG
154	766603.6	917601.3	861.70	860.2	21	839.2	14	-	24	25.56	836.14	2	10	PVC, 10-slot	Till/Bedrock	NBT/P001	DG
157	766538.0	917158.9	854.13	852.7	16	836.6	9	-	19	20.02	834.11	4	10	PVC	Till/Bedrock	NBT/P001	DG
158	766293.2	916902.0	838.28	836.2	37	799.1	28	-	38	39.76	798.52	4	10	PVC	Till/Bedrock	WBA	SG
160	765642.6	916618.6	824.31	821.6	60	761.4	49.5	-	59.5	58.46	765.85	4	10	PVC	Basal Till	WBA	SG
161	765648.6	916615.3	824.96	821.8	NE	NE	10	-	20	22.74	802.22	4	10	PVC	Alluvial silt and gravel	WBA	SG
162	765798.6	916741.9	825.50	823.7	47	776.5	39	-	49	50.43	775.07	4	10	PVC	Till/Bedrock	WBA	SG
163	765802.6	916749.6	825.40	823.8	NE	NE	15	-	25	25.49	799.91	4	10	PVC	Alluvial silt and gravel	WBA	SG
165	765493.3	916873.7	817.50	815.6	40	775.4	31	-	41	44.21	773.29	4	10	PVC	Till/Bedrock	WBA	SG
166	765164.2	916597.5	813.71	812.0	87	724.5	78	-	88	90.56	723.15	4	10	PVC	Till/Bedrock	WBA	SG
167	765175.2	916605.7	813.26	811.7	NE	NE	14	-	24	25.52	787.74	4	10	PVC	Silt	WBA	SG
178	765209.7	917421.0	812.22	809.2	32	776.8	30	-	35	36.38	775.84	4	5	PVC, 10 slot	Gravel/Bedrock	WMA	DG
179	765297.4	916931.4	818.32	815.6	NE	NE	66	-	70	71.51	746.81	4	4	PVC, 8 slot	Outwash Sand	WMA	DG
181	766327.2	917857.1	894.65	893.2	37	855.7	34	-	39	40.60	854.05	4	5	PVC	Till/Bedrock	WMA	DG
183	765912.9	917704.1	851.83	848.9	25	823.9	22	-	27	30.50	821.33	4	5	PVC	Till/Bedrock	WMA	DG
185	765206.1	916776.3	815.54	813.0	89	723.9	71	-	91	94.20	721.34	4	20	PVC	S & G/Bedrock	WBA	DG
186	764857.7	917114.0	820.32	817.8	92	725.9	64	-	94	96.27	724.05	4	30	PVC	S & G/Bedrock	SBA	DG
194	766096.0	917750.2	862.70	861.4	36	824.3	48	-	110	113.37	749.33	5	62	S/OH	Bedrock	WMA	DG
306	764912.6	918514.9	821.04	817.8	58	760.1	40	-	60	62.50	758.54	4	20	PVC	S & G/Bedrock	TVD/MLA	DG
308	765690.7	919205.9	876.26	873.1	25	847.9	17	-	27	29.99	846.27	4	10	PVC	Till/Bedrock	TVD/MLA	DG
309	765632.1	918611.4	874.69	872.4	27	845.1	22	-	27	32.17	842.52	4	5	PVC	Till	TVD/MLA	DG
313	765577.1	918146.7	849.79	847.3	35	812.0	31	-	35	39.50	810.29	4	4	PVC	Till/Bedrock*	TVD/MLA	DG
314	764592.4	916575.0	813.82	811.1	98	713.0	93	-	98	100.43	713.39	4	5	PVC	Basal Till	SBA	DG
316	765161.3	916608.8	813.46	812.0	NE	NE	38	-	48	48.99	764.47	4	10	PVC	Glaciolac., fl sand, silt, clay	WBA	DG
317	765642.2	916612.3	823.00	820.6	NE	NE	35	-	45	47.16	775.84	4	10	PVC	Outwash S & G	WBA	DG
318	764251.6	916904.6	814.19	811.9	NE	NE	36	-	46	47.32	766.87	4	10	PVC	Outwash S & G	SBA	DG
319	764348.5	916622.4	806.89	804.3	NE	NE	33	-	43	45.23	761.66	4	10	PVC	Outwash Sand	SBA	DG
321	765315.2	918902.2	853.72	852.1	NE	NE	29	-	39	39.56	814.16	4	10	PVC	S & G/Till	TVD/MLA	DG
322	764159.2	916744.3	806.20	803.8	NE	NE	34	-	44	45.74	760.46	4	10	PVC	Outwash S & G	SBA	DG
323	764450.0	916768.0	813.67	811.6	NE	NE	35	-	45	47.35	766.32	4	10	PVC	Outwash Sand	SBA	DG
324	766906.2	918216.7	892.60	890.8	50.0	840.8	41.5	-	51.5	53.36	839.24	2	10	PVC, 10 slot	Till/Bedrock	NBT/P001	DG
325	766916.7	918213.5	892.08	890.6	NE	NE	35	-	40	42.54	849.54	2	5	PVC, 10 slot	Alluvial Gravel	NBT/P001	DG
351	764164.5	916737.6	805.62	804.1	86	718.1	83.5	-	88.5	90.40	715.22	2	5	PVC	Till/Bedrock	SBA	DG
352	764346.6	916619.9	806.48	804.6	84.8	719.8	80	-	85	87.41	719.07	2	5	PVC	Basal Till	SBA	DG
353	766807.8	918783.5	912.87	913.3	23	890.3	24	-	29	28.57	884.30	2	5	PVC	Bedrock	TFA	DG
354	766823.0	918775.7	912.85	913.4	NE	NE	13	-	18	17.25	895.60	2	5	PVC	Till	TFA	DG
355	764015.2	917050.3	813.42	811.3	89.5	721.8	90.5	-	95.5	97.90	715.52	2	5	PVC	Bedrock	SBA	DG
356	764020.7	917054.5	813.31	811.5	NE	NE	63.2	-	68.2	70.32	742.99	2	5	PVC	Outwash S & G	SBA	DG
357	766720.9	917775.4	863.89	862.0	24.5	837.3	27.5	-	32.5	34.51	829.38	2	5	PVC	Bedrock	NBT/P001	DG
358	766711.3	917781.0	864.08	861.8	NE	NE	9.5	-	14.5	17.64	846.44	2	5	PVC	Alluvial S & G	NBT/P001	DG
361	766501.5	917786.6	868.42	865.8	28	837.8	28	-	33	35.39	833.03	2	5	PVC	Bedrock	NBT/P001	DG
362	765146.5	918765.3	832.69	829.8	58	771.8	58.5	-	63.5	66.64	766.05	2	5	PVC	Bedrock	TVD/MLA	DG

**Table B-1: Well Specifications**  
**Corrective Action Monitoring Program**

Well	Northing (grid feet)	Easting (grid feet)	Current M.P. Elevation (ft amsl)	Current Ground Surface Elevation (ft amsl)	Depth to Bedrock (ft bgs)	Bedrock Elevation (ft amsl)	Screened Depth Interval (ft bgs)	Baseline Depth to Bottom from M.P. (ft)	Baseline Elevation of Bottom (ft amsl)	Well Diameter (in)	Screen Length (ft)	Well Construction Material	Geologic Unit Monitored	Site Area	Up, Down, or Side Gradient	
363	765135.4	919180.1	855.07	852.5	38.5	814.0	38.5	-	43.5	45.53	809.54	2	5	PVC	Bedrock	TVD/MLA DG
364	767066.3	917771.0	897.68	896.0	60.5	835.5	58.5	-	63.5	65.23	832.45	2	5	PVC	Till/Bedrock	NBT/P001 SG
365	767072.2	917770.3	898.00	896.2	NE	NE	39	-	44	45.84	852.16	2	5	PVC	Alluvial S & G	NBT/P001 SG
366	766711.7	918208.6	912.48	910.7	37.2	873.5	36	-	41	42.99	869.49	2	5	PVC	Till/Bedrock	NBT/P001 DG
367	766712.8	918032.6	910.08	908.3	67	841.9	66	-	71	72.48	837.60	2	5	PVC	Till/Bedrock	NBT/P001 DG
368	766710.2	918027.1	910.15	908.1	NE	NE	42.5	-	47.5	49.32	860.83	2	5	PVC	Alluvial f. Sand, Slt, G	NBT/P001 DG
372	765064.9	919791.2	904.96	903.5	58	845.5	58.5	-	63.5	65.82	839.14	2	5	PVC	Bedrock	TVD/MLA SG
373	765151.7	918758.2	832.19	829.5	NE	NE	33	-	43	45.70	786.49	2	10	PVC	Outwash S & G	TVD/MLA DG
374	764914.9	918527.1	821.25	818.6	NE	NE	8	-	18	20.54	800.71	2	10	PVC	Sand & Gravel	TVD/MLA DG
375	764705.6	919469.4	833.00	831.4	38	793.4	38.5	-	43.5	45.58	787.42	2	5	PVC	Bedrock	TVD/MLA SG
378	766993.8	917794.6	900.02	898.0	65.5	832.5	69.5	-	74.5	77.19	822.83	2	5	PVC	Bedrock	NBT/P001 DG
379	767000.4	917792.4	899.66	897.9	NE	NE	45	-	50	51.91	847.75	2	5	PVC	Till	NBT/P001 DG
382	766704.2	918193.3	912.59	910.4	NE	NE	15	-	20	22.58	890.01	2	5	PVC	Fill	NBT/P001 DG
383	766625.0	917810.0	867.39	864.6	NE	NE	9	-	14	16.99	850.40	2	5	PVC	Alluvial Silt & f. Sand	NBT/P001 DG
386	765601.5	917106.5	822.26	819.4	NE	NE	9.5	-	14.5	17.46	804.80	2	5	PVC	Alluvial S & G	WMA DG
387	765481.8	916866.0	817.59	815.1	NE	NE	7.5	-	12.5	15.52	802.07	2	5	PVC	Alluvial S&G & Silt	WBA DG
391	764709.2	919481.7	833.75	831.5	NE	NE	18	-	28	30.18	803.57	2	10	PVC	Outwash S & G	TVD/MLA SG
392	766805.5	917961.4	895.98	893.8	NE	NE	33	-	43	44.98	851.00	2	10	PVC, 10 slot	Alluvial S&G & Silt	NBT/P001 DG
393	766967.9	917932.7	892.55	890.4	59	831.5	58	-	63	65.05	827.50	2	5	PVC, 10 slot	Till/Bedrock	NBT/P001 DG
394	766972.3	917934.2	892.29	890.3	NE	NE	35	-	45	46.79	845.50	2	10	PVC, 10 slot	Alluvial S&G & Silt	NBT/P001 DG
395	767015.6	918162.0	890.04	887.7	59.5	828.6	57.5	-	62.5	65.07	824.97	2	5	PVC, 10 slot	Till/Bedrock	NBT/P001 DG
397	766554.2	917409.1	865.79	863.6	34	829.6	32.5	-	37.5	39.69	826.10	2	5	PVC, 10 slot	Till/Bedrock	NBT/P001 DG
398	766561.0	917406.4	865.37	863.3	NE	NE	6	-	16	18.07	847.30	2	10	PVC, 10 slot	Alluvial S&G & Silt	NBT/P001 DG
399	766826.6	917750.8	867.33	865.6	NE	NE	4	-	14	16.54	850.79	2	10	PVC, 10 slot	Alluvial S&G & Silt	NBT/P001 DG
404	764862.8	917113.2	NA	NA	92	725.8	37	-	42	NA	NA	10	5	S, 6 slot	Alluvial Zone	WMA DG
					55		65					10	10	S, 6 slot	Alluvial Zone / Till	
					87		92					5	5	S, 10 slot	Till/Bedrock Zone	
405	765284.0	916916.7	NA	NA	86.5	728.5	53	-	63	NA	NA	10	10	S, 8 slot	Alluvial Zone	WMA DG
					82		87					5	5	S, 10 slot	Till	
413	767086.5	918127.5	889.16	886.7	28.5	843.6	24	-	34	NA	NA	6	10	S, 60 slot	Till/Bedrock Zone	NBT/P001 DG
414	766889.8	918195.1	893.11	891.0	50	841.3	37	-	57	NA	NA	6	20	S, 20 slot	Alluvial & Till/Bedrock Zones	NBT/P001 DG
415	766989.0	918841.0	914.38	912.0	25	887.5	23	-	28	35.40	878.98	6	5	SS, 35 slot	Till/Bedrock Zone	TFA DG
416	767004.4	918161.1	890.58	888.1	59	829.1	53.5	-	63.5	71.00	819.58	6	10	SS, 50 slot	Till/Bedrock Zone	NBT/P001 DG
521	766813.4	917531.5	863.78	861.6	36	825.6	33.5	-	38.5	41.13	822.65	2	5	PVC, 10 slot	Till/Bedrock	NBT/P001 DG
522	766922.5	917616.3	864.46	862.3	28	834.3	26.5	-	31.5	34.08	830.38	2	5	PVC, 10 slot	Till/Bedrock	NBT/P001 DG
524	766671.0	917748.5	866.28	864.1	31	833.1	28.5	-	33.5	36.17	830.11	2	5	PVC, 10 slot	Till/Bedrock	NBT/P001 DG
529	766807.5	917532.6	863.93	861.8	NE	NE	6	-	12.5	14.90	849.03	2	6.5	PVC, 10 slot	All. Silt, Sand, Gravel	NBT/P001 DG
532	766678.4	917750.1	866.34	864.0	NE	NE	6	-	14	16.58	849.76	2	8	PVC, 10 slot	All. Silt, Sand, Gravel	NBT/P001 DG
534	766876.5	917684.3	862.88	863.4	NE	NE	4	-	14	13.34	849.54	2	10	PVC, 10 slot	All. Silt, Sand, Gravel	NBT/P001 DG
540	763910.4	916233.3	810.55	808.2	>52	<756.2	39	-	49	51.06	759.49	2	10	PVC, 10 slot	Outwash Sand	SBA DG
541	753614.5	916380.7	812.11	809.6	>56	<753.6	42.5	-	52.5	55.07	757.04	2	10	PVC, 10 slot	Outwash S & G	SBA DG
542	763435.0	916624.5	806.40	804.0	>80	<724.0	32	-	42	44.65	761.75	2	10	PVC, 10 slot	Outwash S & G	SBA DG
543	763621.1	916951.9	823.64	820.6	>56	<764.6	41	-	51	54.30	769.34	2	10	PVC, 10 slot	Outwash S & G	SBA DG
601	766597.3	917599.5	862.08	860.0	NE	NE	3	-	13	15.56	846.52	2	10	PVC, 10 slot	Alluvial S&G/Silt	NBT/P001 DG
602	766485.9	917557.5	862.15	860.1	NE	NE	5	-	17	19.54	842.61	2	12	PVC, 10 slot	Alluvial Silt & Sand	NBT/P001 DG
603	766585.3	917334.9	864.18	861.9	NE	NE	5.75	-	15.75	17.95	846.23	2	10	PVC, 10 slot	Alluvial S&G	NBT/P001 DG
604	767135.5	917876.0	885.48	885.8	NE	NE	14	-	24	21.88	863.60	2	10	PVC, 10 slot	Alluvial Silt & Sand	NBT/P001 DG
605	767139.6	917874.6	885.23	900.6	45.5	842.0	43	-	48	45.73	839.50	2	5	PVC, 10 slot	Till/Bedrock	NBT/P001 DG
606	766911.5	917826.6	900.06	900.6	NE	NE	43	-	48	47.36	852.70	2	5	PVC, 10 slot	Alluvial S&G and Silt	NBT/P001 DG
607	766901.8	917830.3	900.46	900.9	58	842.9	55.5	-	60.5	60.06	840.40	2	5	PVC, 10 slot	Till/Bedrock	NBT/P001 DG
608	766614.6	917449.8	861.51	859.1	NE	NE	4	-	14	16.77	844.74	2	10	PVC, 10 slot	All. Silt, Sand, Gravel	NBT/P001 DG
609	767176.0	918342.1	895.16	895.5	49.5	846.0	47	-	52	51.66	843.50	2	5	PVC, 10 slot	Till/Bedrock	NBT/P001 DG
610	766978.1	918572.3	909.10	909.7	30.5	879.2	28	-	33	32.40	876.70	2	5	PVC, 10 slot	Till/Bedrock	NBT/P001 DG
611	766982.3	918579.3	909.11	909.7	NE	NE	4	-	14	13.41	895.70	2	10	PVC, 10 slot	Fill/All. Sand & Silt	NBT/P001 DG
612	766991.4	918321.7	903.93	904.5	56.1	848.4	54	-	59	56.64	847.29	2	5	PVC, 10 slot	Till/Bedrock	NBT/P001 DG
613	766986.7	918314.2	903.94	904.5	NE	NE	32	-	42	41.63	862.31	2	10	PVC, 10 slot	All. Sand, Silt, Gravel	NBT/P001 DG
614	764906.7	916538.0	811.80	809.2	101	708.2	97.5	-	102.5	105.42	706.38	2	5	PVC, 10 slot	Till/Bedrock	WBA DG
615	766479.4	917558.0	862.69	860.5	33	827.5	38	-	43	46.07	816.62	2	5	PVC, 10 slot	Bedrock	NBT/P001 DG
616	767296.7	918241.6	888.18	885.2	26.5	858.7	23.5	-	28.5	31.56	856.62	2	5	PVC, 10 slot	Till/Bedrock	NBT/P001 DG
617	767312.2	918427.0	895.77	896.1	35	861.1	32.5	-	37.5	37.34	858.43	2	5	PVC, 10 slot	Till/Bedrock	NBT/P001 DG
618	767604.5	918632.7	909.29	906.2	24	879.4	21	-	26	28.86	880.43	2	5	PVC, 10 slot	Till/Bedrock	TFA UG
619	765999.4	919160.0	896.45	896.8	13.5	883.3	10	-	15	15.07	881.38	2	5	PVC, 10 slot	Till/Bedrock	TVD/MLA DG
620	765775.4	919122.9	887.16	884.2	NE	NE	4.5	-	14.5	17.56	869.60	2	10	PVC, 10 slot	All. Sand, Silt, Gravel	TVD/MLA DG
621	765343.7	918569.7	841.97	840.0	NE	NE	25	-	35	37.41	804.56	2	10	PVC, 10 slot	Outwash Silt&Gravel	TVD/MLA DG

**Table B-1: Well Specifications**  
**Corrective Action Monitoring Program**

Well	Northing (grid feet)	Easting (grid feet)	Current M.P. Elevation (ft amsl)	Current Ground Surface Elevation (ft amsl)	Depth to Bedrock (ft bgs)	Bedrock Elevation (ft amsl)	Screened Depth Interval (ft bgs)	Baseline Depth to Bottom from M.P. (ft)	Baseline Elevation of Bottom (ft amsl)	Well Diameter (in)	Screen Length (ft)	Well Construction Material	Geologic Unit Monitored	Site Area	Up, Down, or Side Gradient	
622	765344.6	918560.8	842.11	840.0	42	798.0	39	-	44	46.53	795.58	2	5	PVC, 10 slot	Till/Bedrock	TVD/MLA DG
623	765292.6	918000.3	852.67	850.7	NE	NE	42	-	52	54.59	798.08	2	10	PVC, 10 slot	Outwash Sand&Gravel	TVD/MLA DG
624	765299.7	918006.4	853.46	851.5	60.5	791.0	52	-	57	64.39	789.07	2	5	PVC, 10 slot	Till/Bedrock	TVD/MLA DG
625	764081.1	916908.4	808.77	806.8	NE	NE	32	-	42	44.58	764.19	2	10	PVC, 10 slot	Outwash Sand	SBA DG
626	764076.2	916901.0	808.60	804.5	86.5	718.0	84.5	-	89.5	92.41	716.19	2	5	PVC, 10 slot	Till/Bedrock	SBA DG
627	764545.6	916922.9	812.96	811.2	NE	NE	38	-	48	50.91	762.05	2	10	PVC, 10 slot	Outwash Sand	SBA DG
628	764537.3	916914.3	812.43	810.9	95.5	715.4	93	-	98	100.50	711.93	2	5	PVC, 10 slot	Till/Bedrock	SBA DG
629	765410.2	916642.9	818.39	816.2	NE	NE	38	-	48	51.45	766.94	2	10	PVC, 10 slot	Silt, f. Sand, Gravel	WBA SG
630	765399.8	916638.6	817.63	815.5	88	727.5	85.5	-	90.5	93.55	724.08	2	5	PVC, 10 slot	Till/Bedrock	WBA SG
631	766060.3	916906.3	829.38	828.0	NE	NE	24	-	29	31.53	797.85	2	5	PVC, 10 slot	Outwash Sand&Gravel	WBA UG
632	765667.6	917925.0	853.24	850.8	34	816.8	31	-	36	39.34	813.90	2	5	PVC, 10 slot	Till/Bedrock	WMA DG
P01	765207.2	917610.9	810.62	808.7	NE	NE	5	-	10	11.23	799.39	2	5	PVC	S & G	WMA DG
P02	765162.9	917434.9	809.61	807.8	NE	NE	5	-	10	10.49	799.12	2	5	PVC	S & G	WMA DG
P04	766897.6	919096.5	914.73	913.6	19.5	894.1	14	-	19	20.31	894.42	2	5	PVC	Till	TFA DG
P07	766152.6	919063.9	894.47	895.4	6.5	888.8	NL	-	NL	5.55	888.92	2	NL	S	Till*	TVD/MLA DG
P08	766137.6	919137.3	894.70	895.3	9.5	886.3	NL	-	NL	8.73	885.97	2	NL	S	Till*	TVD/MLA DG
P11	765943.1	919227.8	895.21	895.5	15.5	879.5	NL	-	NL	14.84	880.37	2	NL	S	Till*	TVD/MLA DG

**Key:**

DG: Downgradient from source area  
 ft amsl: Feet above mean sea level  
 ft bgs: Feet below ground surface  
 Glaciolac.: Glaciolacustrine  
 NBT/P001: Northwest Bedrock Trough/  
     Parking Lot 001 Area  
 M.P.: Measurement point  
 NA: Not available or not accessible  
 NE: Not encountered  
 NL: No log available  
 OH: Open hole completion  
 PVC: Polyvinyl chloride

S&G: Sand and Gravel  
 S,SS: Steel, Stainless Steel  
 SBA: Southern Boundary Area  
 SG: Side gradient to source area  
 TFA: Tank Farm Area  
 TVD/MLA: Tower View Drive/Mirror Lake Area  
 UG: Upgradient from source area  
 WBA: Western Boundary Area  
 WMA: Waste Management Area  
 \* Uncertain

**Table B-2a: Hydraulic Effectiveness Monitoring Wells  
for Groundwater Elevation Measurements**

Well	M.P. Elev. (ft amsl)	Planar Coordinates		Site Area	List "A"	List "B"
		Northing	Easting			
101	814.01	764601.1	916596.6	SBA	X	
106	914.91	767106.1	919136.5	TFA		X
107A	961.80	767000.3	919557.6	TFA		X
110	946.88	766674.6	919542.5	TFA		X
113	914.83	767051.4	918957.9	TFA		X
114	916.13	766976.5	918889.9	TFA		X
120	846.20	765939.9	917443.6	WMA	X	
123	903.96	765871.9	919093.3	TFA		X
124	911.43	767366.9	918823.9	TFA		X
125	905.36	767096.6	918627.9	TFA		X
126	908.95	767128.9	918825.2	TFA		X
127	909.65	767204.2	918901.6	TFA		X
128	914.23	766984.2	918840.7	TFA		X
129	912.10	766776.9	919163.6	TFA		X
132	915.31	766141.1	919376.3	TFA		X
133	897.22	767281.5	918665.9	TVD/ML	X	
134	916.46	766044.5	919507.4	TFA		X
140R	889.17	767086.4	918134.6	NBT/P001		X
143	884.81	767292.3	917826.1	NBT/P001		X
146	868.04	766637.9	917813.3	NBT/P001		X
147	871.57	766361.6	917695.9	WMA	X	
148	857.87	766085.9	917652.8	WMA	X	
149	834.27	765773.6	917229.3	WMA	X	
154	861.70	766603.6	917601.3	NBT/P001		X
157	854.13	766538.0	917158.9	NBT/P001		X
158	838.28	766293.2	916902.0	WBA	X	
160	824.31	765642.6	916618.6	WBA	X	
161	824.96	765648.6	916615.3	WBA	X	
162	825.50	765798.6	916741.9	WBA	X	
163	825.40	765802.6	916749.6	WBA	X	
165	817.50	765493.3	916873.7	WBA	X	
166	813.71	765164.2	916597.5	WBA	X	
167	813.26	765175.2	916605.7	WBA	X	
178	812.22	765209.7	917421.0	WMA	X	
179	818.32	765297.4	916931.4	WMA	X	
181	894.65	766327.2	917857.1	WMA	X	
183	851.83	765912.9	917704.1	WMA	X	
185	815.54	765206.1	916776.3	WBA	X	
186	820.32	764857.7	917114.0	SBA	X	
194	862.70	766096.0	917750.2	WMA	X	
306	821.04	764912.6	918514.9	TVD/ML	X	
308	876.26	765690.7	919205.9	TVD/ML	X	
309	874.69	765632.1	918611.4	TVD/ML	X	
313	849.79	765577.1	918146.7	TVD/ML	X	
314	813.82	764592.4	916575.0	SBA	X	
316	813.46	765161.3	916608.8	WBA	X	
317	823.00	765642.2	916612.3	WBA	X	
318	814.19	764251.6	916904.6	SBA	X	
319	806.89	764348.5	916622.4	SBA	X	
321	853.72	765315.2	918902.2	TVD/ML	X	
322	806.20	764159.2	916744.3	SBA	X	
323	813.67	764450.0	916768.0	SBA	X	
324	892.60	766906.2	918216.7	NBT/P001		X
325	892.08	766916.7	918213.5	NBT/P001		X
351	805.62	764164.5	916737.6	SBA	X	
352	806.48	764346.6	916619.9	SBA	X	
353	912.87	766807.8	918783.5	TFA		X
354	912.85	766823.0	918775.7	TFA		X
355	813.42	764015.2	917050.3	SBA	X	
356	813.31	764020.7	917054.5	SBA	X	
357	863.89	766720.9	917775.4	NBT/P001		X
358	864.08	766711.3	917781.0	NBT/P001		X
361	868.42	766501.5	917786.6	NBT/P001		X
362	832.69	765146.5	918765.3	TVD/ML	X	
363	855.07	765135.4	919180.1	TVD/ML	X	
364	897.68	767066.3	917771.0	NBT/P001		X
365	898.00	767072.2	917770.3	NBT/P001		X
366	912.48	766711.7	918208.6	NBT/P001		X
367	910.08	766712.8	918032.6	NBT/P001		X
368	910.15	766710.2	918027.1	NBT/P001		X
372	904.96	765064.9	919791.2	TVD/ML	X	
373	832.19	765151.7	918758.2	TVD/ML	X	
374	821.25	764914.9	918527.1	TVD/ML	X	
375	833.00	764705.6	919469.4	TVD/ML	X	
378	900.02	766993.8	917794.6	NBT/P001		X
379	899.66	767000.4	917792.4	NBT/P001		X

**Table B-2a: Hydraulic Effectiveness Monitoring Wells  
for Groundwater Elevation Measurements**

Well	M.P. Elev. (ft amsl)	Planar Coordinates		Site Area	List "A"	List "B"
		Northing	Easting			
382	912.59	766704.2	918193.3	NBT/P001		X
383	867.39	766625.0	917810.0	NBT/P001		X
386	822.26	765601.5	917106.5	WMA	X	
387	817.59	765481.8	916866.0	WBA	X	
391	833.75	764709.2	919481.7	TVD/ML	X	
392	895.98	766805.5	917961.4	NBT/P001		X
393	892.55	766967.9	917932.7	NBT/P001		X
394	892.29	766972.3	917934.2	NBT/P001		X
395	890.04	767015.6	918162.0	NBT/P001		X
397	865.79	766554.2	917409.1	NBT/P001		X
398	865.37	766561.0	917406.4	NBT/P001		X
399	867.33	766826.6	917750.8	NBT/P001		X
413	889.16	767086.5	918127.5	NBT/P001		X
414	893.11	766889.8	918195.1	NBT/P001		X
415	914.38	766989.0	918841.0	TFA		X
416	890.58	767004.4	918161.1	NBT/P001		X
521	863.78	766813.4	917531.5	MT		X
522	864.46	766922.5	917616.3	MT		X
524	866.28	766671.0	917748.5	MT		X
529	863.93	766807.5	917532.6	MT		X
532	866.34	766678.4	917750.1	MT		X
534	862.88	766876.5	917684.3	MT		X
540	810.55	763910.4	916233.3	SBA	X	
541	812.11	753614.5	916380.7	SBA	X	
542	806.40	763435.0	916624.5	SBA	X	
543	823.64	763621.1	916951.9	SBA	X	
601	862.08	766597.3	917599.5	NBT/P001		X
602	862.15	766485.9	917557.5	NBT/P001		X
603	864.18	766585.3	917334.9	NBT/P001		X
604	885.48	767135.5	917876.0	NBT/P001		X
605	885.23	767139.6	917874.6	NBT/P001		X
606	900.06	766911.5	917826.6	NBT/P001		X
607	900.46	766901.8	917830.3	NBT/P001		X
608	861.51	766614.6	917449.8	NBT/P001		X
609	895.16	767176.0	918342.1	NBT/P001		X
610	909.10	766978.1	918572.3	NBT/P001		X
611	909.11	766982.3	918579.3	NBT/P001		X
612	903.93	766991.4	918321.7	NBT/P001		X
613	903.94	766986.7	918314.2	NBT/P001		X
614	811.80	764906.7	916538.0	WBA	X	
615	862.69	766479.4	917558.0	NBT/P001		X
616	888.18	767296.7	918241.6	NBT/P001		X
617	895.77	767312.2	918427.0	NBT/P001		X
618	909.29	767604.5	918632.7	TFA		X
619	896.45	765999.4	919160.0	TVD/ML	X	
620	887.16	765775.4	919122.9	TVD/ML	X	
621	841.97	765343.7	918569.7	TVD/ML	X	
622	842.11	765344.6	918560.8	TVD/ML	X	
623	852.67	765292.6	918000.3	TVD/ML	X	
624	853.46	765299.7	918006.4	TVD/ML	X	
625	808.77	764081.1	916908.4	SBA	X	
626	808.60	764076.2	916901.0	SBA	X	
627	812.96	764545.6	916922.9	SBA	X	
628	812.43	764537.3	916914.3	SBA	X	
629	818.39	765410.2	916642.9	WBA	X	
630	817.63	765399.8	916638.6	WBA	X	
631	829.38	766060.3	916906.3	WBA	X	
632	853.24	765667.6	917925.0	WMA	X	
P01	810.62	765207.2	917610.9	WMA	X	
P02	809.61	765162.9	917434.9	WMA	X	
P04	914.73	766897.6	919096.5	TFA		X
P07	894.47	766152.6	919063.9	TVD/ML	X	
P08	894.70	766137.6	919137.3	TVD/ML	X	
P11	895.21	765943.1	919227.8	TVD/ML	X	

Planar coordinates are relative to the New York State grid and are expressed in feet.

Lists "A" and "B" are to be alternated as follows:

In Year 1, List "A" wells shall be measured in the first and third quarters; List "B" wells in the second and fourth quarters. In Year 2, List "A" wells shall be measured in the second and fourth quarters; List "B" wells in the first and third quarters. Years 3, 5, 7, etc. shall be the same as Year 1 and Years 4, 6, 8, etc. shall be the same as Year 2.

**Key:**

MT = Moore Tire Area (off-site)

NBT/P001 = NW Bedrock Trough/P001 Area

SBA = Southern Boundary Area

TFA = Tank Farm Area

TVD/MLA = Tower View Drive/Mirror Lake Area

WBA = Western Boundary Area

WMA = Waste Management Area

**Table B-2b: Contaminant Reduction Monitoring Wells  
for Groundwater Sampling**

Well	Site Area	Site Region	Sampling Frequency	List "A"	List "B"
107A*	TFA	North	Q	X	X
110	TFA	North	S		X
124	TFA	North	S		X
125	TFA	North	S		X
127	TFA	North	S		X
128	TFA	North	A		X
129	TFA	North	S		X
132	TFA	North	A		X
134	TFA	North	S		X
353	TFA	North	A		X
354	TFA	North	A		X
618	TFA	North	S		X
P04	TFA	North	A		X
521	MT	North	S		X
522	MT	North	Q	X	X
524	MT	North	S		X
529	MT	North	Q	X	X
532	MT	North	Q	X	X
534	MT	North	Q	X	X
140R	NBT/P001	North	A		X
146	NBT/P001	North	S		X
157	NBT/P001	North	S		X
324	NBT/P001	North	S		X
325	NBT/P001	North	S		X
357	NBT/P001	North	S		X
358	NBT/P001	North	A		X
378	NBT/P001	North	S		X
383	NBT/P001	North	S		X
392	NBT/P001	North	S		X
393	NBT/P001	North	Q	X	X
394	NBT/P001	North	S		X
397	NBT/P001	North	A		X
398	NBT/P001	North	S		X
399	NBT/P001	North	Q	X	X
603	NBT/P001	North	S		X
604	NBT/P001	North	S		X
605	NBT/P001	North	A		X
606	NBT/P001	North	Q	X	X
607	NBT/P001	North	Q	X	X
608	NBT/P001	North	S		X
609	NBT/P001	North	A		X
610	NBT/P001	North	S		X
611	NBT/P001	North	S		X
612	NBT/P001	North	S		X
613	NBT/P001	North	S		X
615	NBT/P001	North	A		X
616	NBT/P001	North	S		X
617	NBT/P001	North	S		X
101	SBA	South	S	X	
186	SBA	South	S	X	
314	SBA	South	A	X	
318	SBA	South	Q	X	X
319	SBA	South	Q	X	X
322	SBA	South	Q	X	X
323	SBA	South	Q	X	X
351	SBA	South	S	X	
352	SBA	South	A	X	
355	SBA	South	A	X	
356	SBA	South	A	X	
625	SBA	South	Q	X	X
626	SBA	South	S	X	
627	SBA	South	S	X	
540	SBA	South	S	X	
541	SBA	South	S	X	
542	SBA	South	S	X	
543	SBA	South	S	X	
133	TVD/MLA	South	S	X	
306	TVD/MLA	South	A	X	
308	TVD/MLA	South	S	X	
309	TVD/MLA	South	S	X	
313	TVD/MLA	South	A	X	
321	TVD/MLA	South	S	X	
362	TVD/MLA	South	A	X	
363	TVD/MLA	South	A	X	
373	TVD/MLA	South	S	X	
374	TVD/MLA	South	S	X	

**Table B-2b: Contaminant Reduction Monitoring Wells  
for Groundwater Sampling**

Well	Site Area	Site Region	Sampling Frequency	List "A"	List "B"
619	TVD/MLA	South	A	X	
620	TVD/MLA	South	S	X	
621	TVD/MLA	South	S	X	
622	TVD/MLA	South	S	X	
P08	TVD/MLA	South	A	X	
P11	TVD/MLA	South	A	X	
158	WBA	South	A	X	
160	WBA	South	S	X	
162	WBA	South	S	X	
163	WBA	South	A	X	
165	WBA	South	S	X	
166	WBA	South	S	X	
167	WBA	South	S	X	
185	WBA	South	S	X	
316	WBA	South	S	X	
317	WBA	South	S	X	
614	WBA	South	A	X	
631	WBA	South	S	X	
120	WMA	South	S	X	
148	WMA	South	S	X	
149	WMA	South	S	X	
178	WMA	South	S	X	
179	WMA	South	S	X	
181	WMA	South	A	X	
183	WMA	South	S	X	
194	WMA	South	S	X	
403	WMA	South	S	X	
632	WMA	South	S	X	

*Key:*

MT = Moore Tire Area (off-site)

NBT/P001 = NW Bedrock Trough/P001 Area

SBA = Southern Boundary Area

TFA = Tank Farm Area

TVD/MLA = Tower View Drive/Mirror Lake Area

WBA = Western Boundary Area

WMA = Waste Management Area

A = Annual

S = Semiannual

Q = Quarterly

\* Site-wide upgradient well to be sampled quarterly.

X = Analyze all samples for volatile organic compounds by SW846 Method 8260C.

*Lists "A" and "B" are to be alternated as follows:*

In Year 1, List "A" wells shall be sampled in the first and third quarters; List "B" wells in the second and fourth quarters. In Year 2, List "A" wells shall be sampled in the second and fourth quarters; List "B" wells in the first and third quarters. Years 3, 5, 7, etc. shall be the same as Year 1 and Years 4, 6, 8, etc. shall be the same as Year 2. All listed monitoring wells are hydraulic effectiveness monitoring wells. Refer to Table B-2a for a complete list and schedule of groundwater elevation measurements.

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## **APPENDIX C**

### **GROUNDWATER ELEVATION DATA January 1, 2016 - December 31, 2016**

### **2016 WELL INSPECTION SUMMARY WITH DEDICATED EQUIPMENT ASSIGNMENTS**

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**Former Owego, New York Facility**

2/9/2017

**Groundwater Elevation Data**

Well ID	Date of Measurement	Top of Casing Elevation (ft amsl)	Depth to Water (ft below TOC)	Groundwater Elevation (ft amsl)
106	1/11/2016	914.91	2.69	912.22
107A	1/11/2016	961.80	21.93	939.87
110	1/11/2016	946.88	9.26	937.62
113	1/11/2016	914.83	6.40	908.43
114	1/11/2016	916.13	DRY	<899.48
123	1/11/2016	903.96	6.09	897.87
124	1/11/2016	911.43	8.83	902.60
125	1/11/2016	905.36	9.34	896.02
126	1/11/2016	908.95	10.8	898.15
127	1/11/2016	909.65	6.82	902.83
128	1/11/2016	914.23	20.52	893.71
129	1/11/2016	912.10	3.06	909.04
132	1/11/2016	915.31	16.2	899.11
134	1/11/2016	916.46	19.62	896.84
140R	1/11/2016	889.17	31.33	857.84
143	1/11/2016	884.81	8.44	876.37
146	1/11/2016	868.04	5.42	862.62
154	1/11/2016	861.70	1.96	859.74
157	1/11/2016	854.13	7.38	846.75
324	1/11/2016	892.60	28.85	863.75
325	1/11/2016	892.08	27.76	864.32
353	1/11/2016	912.87	14.43	898.44
354	1/11/2016	912.85	13.04	899.81
357	1/11/2016	863.89	2.31	861.58
358	1/11/2016	864.08	2.40	861.68
361	1/11/2016	868.42	6.01	862.41
364	1/11/2016	897.68	33.94	863.74
365	1/11/2016	898.00	35.63	862.37
366	1/11/2016	912.48	39.49	872.99
367	1/11/2016	910.08	45.77	864.31

**Former Owego, New York Facility**

2/9/2017

**Groundwater Elevation Data**

Well ID	Date of Measurement	Top of Casing Elevation (ft amsl)	Depth to Water (ft below TOC)	Groundwater Elevation (ft amsl)
368	1/11/2016	910.15	44.80	865.35
378	1/11/2016	900.02	37.04	862.98
379	1/11/2016	899.66	37.75	861.91
382	1/11/2016	912.59	11.55	901.04
383	1/11/2016	867.39	7.72	859.67
392	1/11/2016	895.98	31.91	864.07
393	1/11/2016	892.55	29.70	862.85
394	1/11/2016	892.29	30.68	861.61
395	1/11/2016	890.04	27.49	862.55
397	1/11/2016	865.79	9.48	856.31
398	1/11/2016	865.37	9.29	856.08
399	1/11/2016	867.33	4.55	862.78
413	1/11/2016	889.16	37.58	851.58
414	1/11/2016	893.11	29.95	863.16
415	1/11/2016	914.38	21.18	893.20
416	1/11/2016	890.58	65.63	824.95
521	1/11/2016	863.78	1.76	862.02
522	1/11/2016	864.46	1.92	862.54
524	1/11/2016	866.28	4.85	861.43
529	1/11/2016	863.93	3.17	860.76
532	1/11/2016	866.34	4.93	861.41
534	1/11/2016	862.88	2.32	860.56
540	1/11/2016	810.55	14.54	796.01
541	1/11/2016	812.11	16.18	795.93
542	1/11/2016	806.40	10.19	796.21
543	1/11/2016	823.64	26.76	796.88
601	1/11/2016	862.08	2.51	859.57
602	1/11/2016	862.15	3.74	858.41
603	1/11/2016	864.18	8.87	855.31
604	1/11/2016	885.48	14.41	871.07

**Former Owego, New York Facility**

2/9/2017

**Groundwater Elevation Data**

Well ID	Date of Measurement	Top of Casing Elevation (ft amsl)	Depth to Water (ft below TOC)	Groundwater Elevation (ft amsl)
605	1/11/2016	885.23	17.45	867.78
606	1/11/2016	900.06	38.27	861.79
607	1/11/2016	900.46	37.90	862.56
608	1/11/2016	861.51	3.53	857.98
609	1/11/2016	895.16	24.87	870.29
610	1/11/2016	909.10	16.66	892.44
611	1/11/2016	909.11	12.83	896.28
612	1/11/2016	903.93	32.27	871.66
613	1/11/2016	903.94	31.85	872.09
615	1/11/2016	862.69	6.73	855.96
616	1/11/2016	888.18	7.08	881.10
617	1/11/2016	895.77	4.25	891.52
618	1/11/2016	909.29	5.54	903.75
P04	1/11/2016	914.73	5.80	908.93
140R	4/22/2016	889.17	27.77	861.40
146	4/22/2016	868.04	5.32	862.72
154	4/22/2016	861.70	2.13	859.57
324	4/22/2016	892.60	27.80	864.80
325	4/22/2016	892.08	27.66	864.42
357	4/22/2016	863.89	1.86	862.03
358	4/22/2016	864.08	1.78	862.30
361	4/22/2016	868.42	5.80	862.62
364	4/22/2016	897.68	33.21	864.47
365	4/22/2016	898.00	34.73	863.27
366	4/22/2016	912.48	39.88	872.60
367	4/22/2016	910.08	45.32	864.76
368	4/22/2016	910.15	44.60	865.55
378	4/22/2016	900.02	36.24	863.78
379	4/22/2016	899.66	36.81	862.85
383	4/22/2016	867.39	4.69	862.70

**Former Owego, New York Facility**

2/9/2017

**Groundwater Elevation Data**

Well ID	Date of Measurement	Top of Casing Elevation (ft amsl)	Depth to Water (ft below TOC)	Groundwater Elevation (ft amsl)
392	4/22/2016	895.98	31.96	864.02
393	4/22/2016	892.55	28.65	863.90
394	4/22/2016	892.29	29.38	862.91
395	4/22/2016	890.04	24.81	865.23
397	4/22/2016	865.79	9.31	856.48
399	4/22/2016	867.33	4.26	863.07
413	4/22/2016	889.16	27.6	861.56
414	4/22/2016	893.11	28.43	864.68
416	4/22/2016	890.58	26.17	864.41
521	4/22/2016	863.78	1.50	862.28
522	4/22/2016	864.46	1.22	863.24
524	4/22/2016	866.28	4.47	861.81
529	4/22/2016	863.93	3.18	860.75
532	4/22/2016	866.34	4.75	861.59
534	4/22/2016	862.88	1.40	861.48
601	4/22/2016	862.08	2.42	859.66
604	4/22/2016	885.48	13.87	871.61
605	4/22/2016	885.23	16.70	868.53
606	4/22/2016	900.06	37.43	862.63
607	4/22/2016	900.46	36.99	863.47
608	4/22/2016	861.51	3.38	858.13
609	4/22/2016	895.16	23.82	871.34
610	4/22/2016	909.10	15.44	893.66
611	4/22/2016	909.11	11.51	897.60
612	4/22/2016	903.93	31.86	872.07
613	4/22/2016	903.94	30.33	873.61
616	4/22/2016	888.18	6.38	881.80
140R	5/18/2016	889.17	33.84	855.33
146	5/18/2016	868.04	5.66	862.38
154	5/18/2016	861.70	2.24	859.46

**Former Owego, New York Facility**

2/9/2017

**Groundwater Elevation Data**

Well ID	Date of Measurement	Top of Casing Elevation (ft amsl)	Depth to Water (ft below TOC)	Groundwater Elevation (ft amsl)
324	5/18/2016	892.60	35.07	857.53
325	5/18/2016	892.08	29.84	862.24
357	5/18/2016	863.89	2.91	860.98
358	5/18/2016	864.08	3.03	861.05
361	5/18/2016	868.42	6.14	862.28
364	5/18/2016	897.68	35.33	862.35
365	5/18/2016	898.00	37.12	860.88
366	5/18/2016	912.48	39.87	872.61
367	5/18/2016	910.08	47.4	862.68
368	5/18/2016	910.15	45.84	864.31
378	5/18/2016	900.02	38.62	861.40
379	5/18/2016	899.66	39.21	860.45
383	5/18/2016	867.39	4.92	862.47
392	5/18/2016	895.98	32.21	863.77
393	5/18/2016	892.55	31.27	861.28
394	5/18/2016	892.29	32.16	860.13
395	5/18/2016	890.04	29.57	860.47
397	5/18/2016	865.79	9.22	856.57
399	5/18/2016	867.33	5.05	862.28
413	5/18/2016	889.16	40.48	848.68
414	5/18/2016	893.11	53.32	839.79
416	5/18/2016	890.58	66.03	824.55
521	5/18/2016	863.78	2.44	861.34
522	5/18/2016	864.46	5.15	859.31
524	5/18/2016	866.28	5.31	860.97
529	5/18/2016	863.93	3.40	860.53
532	5/18/2016	866.34	5.18	861.16
534	5/18/2016	862.88	1.74	861.14
601	5/18/2016	862.08	2.54	859.54
604	5/18/2016	885.48	14.56	870.92

**Former Owego, New York Facility**

2/9/2017

**Groundwater Elevation Data**

Well ID	Date of Measurement	Top of Casing Elevation (ft amsl)	Depth to Water (ft below TOC)	Groundwater Elevation (ft amsl)
605	5/18/2016	885.23	18.16	867.07
606	5/18/2016	900.06	39.62	860.44
607	5/18/2016	900.46	39.26	861.20
608	5/18/2016	861.51	3.22	858.29
609	5/18/2016	895.16	26.05	869.11
610	5/18/2016	909.10	15.62	893.48
611	5/18/2016	909.11	11.42	897.69
612	5/18/2016	903.93	32.28	871.65
613	5/18/2016	903.94	31.50	872.44
616	5/18/2016	888.18	6.81	881.37
101	5/26/2016	814.01	16.56	797.45
120	5/26/2016	846.20	21.92	824.28
133	5/26/2016	897.22	26.80	870.42
147	5/26/2016	871.57	17.43	854.14
148	5/26/2016	857.87	19.68	838.19
149	5/26/2016	834.27	19.34	814.93
158	5/26/2016	838.28	10.73	827.55
160	5/26/2016	824.31	10.55	813.76
161	5/26/2016	824.96	10.61	814.35
162	5/26/2016	825.50	8.38	817.12
163	5/26/2016	825.40	9.23	816.17
165	5/26/2016	817.50	5.53	811.97
166	5/26/2016	813.71	17.76	795.95
167	5/26/2016	813.26	7.12	806.14
178	5/26/2016	812.22	6.78	805.44
179	5/26/2016	818.32	21.73	796.59
181	5/26/2016	894.65	30.75	863.90
183	5/26/2016	851.83	25.11	826.72
185	5/26/2016	815.54	27.63	787.91
186	5/26/2016	820.32	36.40	783.92

**Former Owego, New York Facility**

2/9/2017

**Groundwater Elevation Data**

Well ID	Date of Measurement	Top of Casing Elevation (ft amsl)	Depth to Water (ft below TOC)	Groundwater Elevation (ft amsl)
194	5/26/2016	862.70	28.14	834.56
306	5/26/2016	821.04	4.92	816.12
308	5/26/2016	876.26	15.88	860.38
309	5/26/2016	874.69	27.93	846.76
313	5/26/2016	849.79	32.83	816.96
314	5/26/2016	813.82	17.46	796.36
316	5/26/2016	813.46	17.14	796.32
317	5/26/2016	823.00	8.66	814.34
318	5/26/2016	814.19	17.43	796.76
319	5/26/2016	806.89	9.77	797.12
321	5/26/2016	853.72	25.66	828.06
322	5/26/2016	806.20	9.53	796.67
323	5/26/2016	813.67	16.31	797.36
351	5/26/2016	805.62	9.87	795.75
352	5/26/2016	806.48	10.47	796.01
355	5/26/2016	813.42	16.95	796.47
356	5/26/2016	813.31	16.49	796.82
362	5/26/2016	832.69	14.28	818.41
363	5/26/2016	855.07	32.85	822.22
372	5/26/2016	904.96	43.61	861.35
373	5/26/2016	832.19	13.04	819.15
374	5/26/2016	821.25	5.47	815.78
375	5/26/2016	833.00	11.56	821.44
386	5/26/2016	822.26	10.06	812.20
387	5/26/2016	817.59	5.10	812.49
391	5/26/2016	833.75	12.37	821.38
540	5/26/2016	810.55	15.90	794.65
541	5/26/2016	812.11	18.02	794.09
542	5/26/2016	806.40	12.02	794.38
543	5/26/2016	823.64	27.94	795.70

**Former Owego, New York Facility**

2/9/2017

**Groundwater Elevation Data**

Well ID	Date of Measurement	Top of Casing Elevation (ft amsl)	Depth to Water (ft below TOC)	Groundwater Elevation (ft amsl)
614	5/26/2016	811.80	15.92	795.88
619	5/26/2016	896.45	10.32	886.13
620	5/26/2016	887.16	17.37	869.79
621	5/26/2016	841.97	22.05	819.92
622	5/26/2016	842.11	21.37	820.74
623	5/26/2016	852.67	41.11	811.56
624	5/26/2016	853.46	41.78	811.68
625	5/26/2016	808.77	11.98	796.79
626	5/26/2016	808.60	13.00	795.60
627	5/26/2016	812.96	14.53	798.43
628	5/26/2016	812.43	17.75	794.68
629	5/26/2016	818.39	20.00	798.39
630	5/26/2016	817.63	19.33	798.30
631	5/26/2016	829.38	6.97	822.41
632	5/26/2016	853.24	33.56	819.68
P01	5/26/2016	810.62	2.44	808.18
P02	5/26/2016	809.61	4.31	805.30
P07	5/26/2016	894.47	3.98	890.49
P08	5/26/2016	894.70	6.25	888.45
P11	5/26/2016	895.21	11.13	884.08
106	7/18/2016	914.91	4.52	910.39
107A	7/18/2016	961.80	20.37	941.43
110	7/18/2016	946.88	11.69	935.19
113	7/18/2016	914.83	7.90	906.93
114	7/18/2016	916.13	DRY	<899.48
123	7/18/2016	903.96	8.40	895.56
124	7/18/2016	911.43	13.51	897.92
125	7/18/2016	905.36	11.18	894.18
126	7/18/2016	908.95	12.62	896.33
127	7/18/2016	909.65	10.04	899.61

**Former Owego, New York Facility**

2/9/2017

**Groundwater Elevation Data**

Well ID	Date of Measurement	Top of Casing Elevation (ft amsl)	Depth to Water (ft below TOC)	Groundwater Elevation (ft amsl)
128	7/18/2016	914.23	20.66	893.57
129	7/18/2016	912.10	3.36	908.74
132	7/18/2016	915.31	19.61	895.70
134	7/18/2016	916.46	21.97	894.49
140R	7/18/2016	889.17	34.17	855.00
143	7/18/2016	884.81	10.11	874.70
146	7/18/2016	868.04	7.21	860.83
154	7/18/2016	861.70	3.00	858.70
157	7/18/2016	854.13	10.65	843.48
324	7/18/2016	892.60	35.86	856.74
325	7/18/2016	892.08	33.44	858.64
353	7/18/2016	912.87	15.65	897.22
354	7/18/2016	912.85	14.08	898.77
357	7/18/2016	863.89	3.66	860.23
358	7/18/2016	864.08	3.67	860.41
361	7/18/2016	868.42	8.45	859.97
364	7/18/2016	897.68	36.42	861.26
365	7/18/2016	898.00	38.40	859.60
366	7/18/2016	912.48	41.08	871.40
367	7/18/2016	910.08	48.99	861.09
368	7/18/2016	910.15	48.36	861.79
378	7/18/2016	900.02	39.53	860.49
379	7/18/2016	899.66	40.07	859.59
382	7/18/2016	912.59	12.49	900.10
383	7/18/2016	867.39	6.60	860.79
392	7/18/2016	895.98	32.97	863.01
393	7/18/2016	892.55	32.20	860.35
394	7/18/2016	892.29	32.99	859.30
395	7/18/2016	890.04	30.32	859.72
397	7/18/2016	865.79	11.40	854.39

**Former Owego, New York Facility**

2/9/2017

**Groundwater Elevation Data**

Well ID	Date of Measurement	Top of Casing Elevation (ft amsl)	Depth to Water (ft below TOC)	Groundwater Elevation (ft amsl)
398	7/18/2016	865.37	10.98	854.39
399	7/18/2016	867.33	6.78	860.55
413	7/18/2016	889.16	41.32	847.84
414	7/18/2016	893.11	53.32	839.79
415	7/18/2016	914.38	21.27	893.11
416	7/18/2016	890.58	65.97	824.61
521	7/18/2016	863.78	3.26	860.52
522	7/18/2016	864.46	4.08	860.38
524	7/18/2016	866.28	6.06	860.22
529	7/18/2016	863.93	3.88	860.05
532	7/18/2016	866.34	5.73	860.61
534	7/18/2016	862.88	2.88	860.00
540	7/18/2016	810.55	17.87	792.68
541	7/18/2016	812.11	19.93	792.18
542	7/18/2016	806.40	13.83	792.57
543	7/18/2016	823.64	29.6	794.04
601	7/18/2016	862.08	3.26	858.82
602	7/18/2016	862.15	6.73	855.42
603	7/18/2016	864.18	10.51	853.67
604	7/18/2016	885.48	16.47	869.01
605	7/18/2016	885.23	19.74	865.49
606	7/18/2016	900.06	40.46	859.60
607	7/18/2016	900.46	40.22	860.24
608	7/18/2016	861.51	4.62	856.89
609	7/18/2016	895.16	27.23	867.93
610	7/18/2016	909.10	17.71	891.39
611	7/18/2016	909.11	11.74	897.37
612	7/18/2016	903.93	33.28	870.65
613	7/18/2016	903.94	32.72	871.22
615	7/18/2016	862.69	8.80	853.89

**Former Owego, New York Facility**

2/9/2017

**Groundwater Elevation Data**

Well ID	Date of Measurement	Top of Casing Elevation (ft amsl)	Depth to Water (ft below TOC)	Groundwater Elevation (ft amsl)
616	7/18/2016	888.18	8.32	879.86
617	7/18/2016	895.77	5.06	890.71
618	7/18/2016	909.29	11.41	897.88
P04	7/18/2016	914.73	6.59	908.14
101	10/24/2016	814.01	19.41	794.60
120	10/24/2016	846.20	22.91	823.29
133	10/24/2016	897.22	26.03	871.19
147	10/24/2016	871.57	17.88	853.69
148	10/24/2016	857.87	19.80	838.07
149	10/24/2016	834.27	22.64	811.63
158	10/24/2016	838.28	11.86	826.42
160	10/24/2016	824.31	17.47	806.84
161	10/24/2016	824.96	17.67	807.29
162	10/24/2016	825.50	13.03	812.47
163	10/24/2016	825.40	15.47	809.93
165	10/24/2016	817.50	18.40	799.10
166	10/24/2016	813.71	26.34	787.37
167	10/24/2016	813.26	10.30	802.96
178	10/24/2016	812.22	10.03	802.19
179	10/24/2016	818.32	38.48	779.84
181	10/24/2016	894.65	28.53	866.12
183	10/24/2016	851.83	27.26	824.57
185	10/24/2016	815.54	30.70	784.84
186	10/24/2016	820.32	38.99	781.33
194	10/24/2016	862.70	29.47	833.23
306	10/24/2016	821.04	7.78	813.26
308	10/24/2016	876.26	18.40	857.86
309	10/24/2016	874.69	28.86	845.83
313	10/24/2016	849.79	34.35	815.44
314	10/24/2016	813.82	20.25	793.57

**Former Owego, New York Facility**

2/9/2017

**Groundwater Elevation Data**

Well ID	Date of Measurement	Top of Casing Elevation (ft amsl)	Depth to Water (ft below TOC)	Groundwater Elevation (ft amsl)
316	10/24/2016	813.46	25.90	787.56
317	10/24/2016	823.00	16.00	807.00
318	10/24/2016	814.19	19.52	794.67
319	10/24/2016	806.89	12.30	794.59
321	10/24/2016	853.72	23.77	829.95
322	10/24/2016	806.20	11.60	794.60
323	10/24/2016	813.67	19.13	794.54
351	10/24/2016	805.62	12.05	793.57
352	10/24/2016	806.48	12.52	793.96
355	10/24/2016	813.42	19.10	794.32
356	10/24/2016	813.31	18.55	794.76
362	10/24/2016	832.69	18.10	814.59
363	10/24/2016	855.07	36.34	818.73
372	10/24/2016	904.96	44.54	860.42
373	10/24/2016	832.19	17.31	814.88
374	10/24/2016	821.25	7.53	813.72
375	10/24/2016	833.00	16.48	816.52
386	10/24/2016	822.26	15.88	806.38
387	10/24/2016	817.59	DRY	<802.21
391	10/24/2016	833.75	17.24	816.51
540	10/24/2016	810.55	16.68	793.87
541	10/24/2016	812.11	18.37	793.74
542	10/24/2016	806.40	12.47	793.93
543	10/24/2016	823.64	29.13	794.51
614	10/24/2016	811.80	19.74	792.06
619	10/24/2016	896.45	10.13	886.32
620	10/24/2016	887.16	17.39	869.77
621	10/24/2016	841.97	25.35	816.62
622	10/24/2016	842.11	24.50	817.61
623	10/24/2016	852.67	43.59	809.08

**Former Owego, New York Facility**

2/9/2017

**Groundwater Elevation Data**

Well ID	Date of Measurement	Top of Casing Elevation (ft amsl)	Depth to Water (ft below TOC)	Groundwater Elevation (ft amsl)
624	10/24/2016	853.46	44.35	809.11
625	10/24/2016	808.77	14.13	794.64
626	10/24/2016	808.60	15.30	793.30
627	10/24/2016	812.96	18.55	794.41
628	10/24/2016	812.43	22.38	790.05
629	10/24/2016	818.39	30.96	787.43
630	10/24/2016	817.63	30.37	787.26
631	10/24/2016	829.38	8.08	821.30
632	10/24/2016	853.24	34.75	818.49
P01	10/24/2016	810.62	3.84	806.78
P02	10/24/2016	809.61	7.36	802.25
P07	10/24/2016	894.47	3.85	890.62
P08	10/24/2016	894.70	5.86	888.84
P11	10/24/2016	895.21	10.00	885.21

## 2016 Well Inspection Summary with Dedicated Equipment Assignments

Well ID	Reference DTB	2016 Measured DTB	Depth Differential	Well Tag Condition?	Reference Point Visible?	Standpipe Paint Condition?	Sanitary Seal Condition?	Dedicated Equipment
101	40.95	40.87	0.08	Good	Yes	Repaint	Good	PDB@37.9'
106	13.12	13.18	-0.06	Good	Yes	Good	Good	PDB@10.9'
107A	64.96	64.53	0.43	Good	Yes	Good	Good	PDB@~60'
110	20.11	21.17	-1.06	Good	Yes	Manhole	Good	PDB@15.9'
113	12.72	12.63	0.09	Good	Yes	Good	Good	None
114	14.70	13.33	1.37	Good	Yes	Good	Good	None
120	39.58	39.35	0.23	Good	Yes	Good	Good	PDB@24.0'
123	21.89	21.90	-0.01	Good	Yes	Manhole	Good	None
124	25.14	25.26	-0.12	Good	Yes	Good	Good	PDB@23.9'
125	24.86	24.20	0.66	Good	Yes	Manhole	Good	PDB@23.6'
126	23.90	23.91	-0.01	Good	Yes	Manhole	Good	None
127	19.54	19.04	0.50	Good	Yes	Manhole	Good	PDB@18.8'
128	24.86	24.51	0.35	Good	Yes	Good	Good	PDB@22.2'
129	8.35	7.47	0.88	Good	Yes	Manhole	Good	PDB@5.4'
132	21.20	21.20	0.00	Good	Yes	Good	Good	PDB@19.3'
133	31.50	31.47	0.03	Good	Yes	Good	Good	PDB@28.9'
134	42.89	42.37	0.52	Good	Yes	Good	Good	PDB@39.6'
140R	45.14	44.99	0.15	Good	Yes	Good	Godd	PDB@42.6'
143	29.05	28.90	0.15	Good	Yes	Manhole	Good	None
146	25.86	25.92	-0.06	Good	Yes	Good	Good	PDB@24.4'
147	27.28	27.25	0.03	Good	Yes	Good	Good	None
148	34.91	34.87	0.04	Good	Yes	Good	Good	PDB@34.8'
149	33.57	32.04	1.53	Good	Yes	Good	Good	PDB@31.7'
154	25.56	25.38	0.18	Good	Yes	Good	Good	None
157	20.02	19.83	0.19	Good	Yes	Repaint	Good	PDB@15.5'
158	39.76	39.43	0.33	Good	Yes	Repaint	Good	PDB@35.1'
160	58.46	58.45	0.01	Good	Yes	Repaint	Good	PDB@57.2'
161	22.74	22.62	0.12	Good	Yes	Repaint	Good	None
162	50.43	50.37	0.06	Good	Yes	Repaint	Good	PDB@45.8'
163	25.49	25.28	0.21	Good	Yes	Repaint	Good	PDB@21.6'
165	44.21	43.92	0.29	Good	Yes	Repaint	Good	PDB@38.0'
166	90.56	90.47	0.09	Good	Yes	Repaint	Good	PDB@84.7'
167	25.52	25.24	0.28	Good	Yes	Repaint	Good	PDB@20.5'
178	36.38	36.32	0.06	Good	Yes	Repaint	Good	PDB@35.6'
179	71.51	71.31	0.20	Good	Yes	Repaint	Good	PDB@70.7'
181	40.60	40.68	-0.08	Good	Yes	Good	Good	PDB@38.0'
183	30.50	30.72	-0.22	Good	Yes	Good	Good	PDB@27.5'
185	94.20	94.07	0.13	Good	Yes	Repaint	Good	Ded. 2" SP
186	96.27	95.80	0.47	Good	Yes	Repaint	Good	Ded. 2" SP
194	113.37	111.47	1.90	Good	Yes	Good	Good	Ded. 2" SP
306	62.50	62.27	0.23	Good	Yes	Good	Good	Ded. 2" SP
308	29.99	29.97	0.02	Good	Yes	Good	Good	PDB@25.1'
309	32.17	32.13	0.04	Good	Yes	Good	Good	PDB@26.8'
313	39.50	39.91	-0.41	Good	Yes	Good	Good	PDB@36.0'
314	100.43	100.13	0.30	Good	Yes	Repaint	Good	PDB@98.2'
316	48.99	48.91	0.08	Good	Yes	Repaint	Good	PDB@44.5'
317	47.16	46.95	0.21	Good	Yes	Repaint	Good	PDB@42.4'
318	47.32	47.30	0.02	Good	Yes	Repaint	Good	PDB@43.3'
319	45.23	44.48	0.75	Good	Yes	Repaint	Good	PDB@40.6'
321	39.56	39.50	0.06	Good	Yes	Good	Good	PDB@35.6'
322	45.74	45.00	0.74	Good	Yes	Repaint	Good	PDB@41.5'
323	47.35	46.95	0.40	Good	Yes	Repaint	Good	PDB@42.1'
324	53.43	53.70	-0.27	Good	Yes	Good	Good	PDB@48.4'
325	42.61	42.55	0.06	Good	Yes	Good	Good	PDB@39.1'
351	90.40	90.15	0.25	Good	Yes	Repaint	Good	Ded. 2" SP
352	87.41	87.19	0.22	Good	Yes	Repaint	Good	Ded. 2" SP
353	28.57	28.42	0.15	Good	Yes	Manhole	Good	PDB@26.1'
354	17.25	17.14	0.11	Good	Yes	Manhole	Good	Bailer-3'
355	97.90	97.89	0.01	Good	Yes	Good	Good	PDB@95.1'

## 2016 Well Inspection Summary with Dedicated Equipment Assignments

Well ID	Reference DTB	2016 Measured DTB	Depth Differential	Well Tag Condition?	Reference Point Visible?	Standpipe Paint Condition?	Sanitary Seal Condition?	Dedicated Equipment
356	70.32	70.10	0.22	Good	Yes	Good	Good	PDB@67.5'
357	34.53	34.37	0.16	Good	Yes	Repaint	Good	PDB@32.1'
358	17.64	17.08	0.56	Good	Yes	Repaint	Good	PDB@14.3'
361	35.39	35.23	0.16	Good	Yes	Good	Good	PDB@33.1'
362	66.64	66.48	0.16	Good	Yes	Good	Good	PDB@63.9'
363	45.53	45.33	0.20	Good	Yes	Good	Good	PDB@43.6'
364	65.27	65.10	0.17	Good	Yes	Good	Good	PDB@62.7'
365	45.86	45.66	0.20	Good	Yes	Good	Good	PDB@43.3'
366	42.99	42.90	0.09	Good	Yes	Good	Good	Bailer-3'
367	72.55	72.30	0.25	Good	Yes	Good	Good	PDB@69.8'
368	49.42	48.70	0.72	Good	Yes	Good	Good	Bailer-3'
372	65.82	65.40	0.42	Good	Yes	Good	Good	None
373	45.70	45.58	0.12	Good	Yes	Good	Good	PDB@40.7'
374	20.54	20.86	-0.32	Good	Yes	Good	Good	PDB@15.7'
375	45.58	45.60	-0.02	Good	Yes	Repaint	Good	None
378	77.22	77.11	0.11	Good	Yes	Good	Good	PDB@74.0'
379	51.92	52.55	-0.63	Good	Yes	Good	Good	PDB@49.4'
382	22.58	22.40	0.18	Good	Yes	Good	Good	PDB@19.7'
383	16.99	16.70	0.29	Good	Yes	Good	Good	PDB@14.3'
386	17.46	17.32	0.14	Good	Yes	Good	Good	PDB@14.9'
387	15.52	15.37	0.15	Good	Yes	Repaint	Good	PDB@12.5'
391	30.18	30.20	-0.02	Good	Yes	Good	Good	None
392	45.07	46.15	-1.08	Good	Yes	Good	Good	PDB@40.1'
393	65.19	64.91	0.28	Good	Yes	Good	Good	Ded. 2" SP
394	47.01	47.31	-0.30	Good	Yes	Good	Good	PDB@42.0'
395	65.10	64.41	0.69	Good	Yes	Good	Good	PDB@62.0'
397	39.69	39.85	-0.16	Good	Yes	Good	Good	PDB@37.2'
398	18.07	18.54	-0.47	Good	Yes	Good	Good	PDB@13.1'
399	16.59	16.55	0.04	Good	Yes	Good	Good	PDB@11.1'
404	Extraction Well - Inaccessible			Good	Yes	Repaint	NA	None
405	Extraction Well - Inaccessible			Good	Yes	Repaint	NA	None
413	Extraction Well - Inaccessible			Good	Yes	Repaint	NA	None
414	Extraction Well - Inaccessible			Good	Yes	Repaint	NA	Bailer-3'
415	Extraction Well - Inaccessible			Good	Yes	NA	NA	None
416	Extraction Well - Inaccessible			Good	Yes	NA	N	None
521	39.55	39.47	0.08	Good	Yes	Manhole	Good	PDB@38.2'
522	34.08	33.90	0.18	Replace	Yes	Good	Good	PDB@31.2'
524	36.17	36.06	0.11	Good	Yes	Good	Good	PDB@33.2'
529	13.76	13.75	0.01	Good	Yes	Manhole	Good	PDB@11.4'
532	16.58	17.14	-0.56	Good	Yes	Good	Good	PDB@12.3'
534	13.34	12.99	0.35	Good	Yes	Manhole	Good	PDB@8.5'
540	51.03	50.84	0.19	Good	Yes	Good	None	PDB@46.3'
541	55.03	54.90	0.13	Good	Yes	Good	None	PDB@50.1'
542	44.64	43.95	0.69	Good	Yes	Good	None	PDB@39.4'
543	54.27	54.15	0.12	Good	Yes	Repaint	None	PDB@49.0'
601	15.56	15.39	0.17	Good	Yes	Good	Good	PDB@10.1'
602	19.54	19.34	0.20	Good	Yes	Repaint	Good	PDB@13.1'
603	17.95	17.76	0.19	Good	Yes	Good	Good	PDB@13.0'
604	22.14	22.00	0.14	Good	Yes	Manhole	Good	PDB@21.5'
605	46.50	46.35	0.15	Good	Yes	Manhole	Good	PDB@47.7'
606	47.40	47.38	0.02	Good	Yes	Manhole	Good	PDB@44.9'
607	59.74	59.64	0.10	Good	Yes	Manhole	Good	PDB@57.7'
608	16.77	16.40	0.37	Replace	Yes	Repaint	Good	PDB@11.4'
609	51.66	52.31	-0.65	Good	Yes	Manhole	Good	PDB@49.2'
610	32.40	32.04	0.36	Good	Yes	Manhole	Good	PDB@29.9'
611	13.41	13.33	0.08	Good	Yes	Manhole	Good	Peristaltic
612	56.64	56.92	-0.28	Good	Yes	Manhole	Good	PDB@55.9'
613	41.63	41.46	0.17	Good	Yes	Manhole	Good	PDB@36.4'
614	105.42	104.51	0.91	Good	Yes	Repaint	Good	PDB@102.6'

## 2016 Well Inspection Summary with Dedicated Equipment Assignments

Well ID	Reference DTB	2016 Measured DTB	Depth Differential	Well Tag Condition?	Reference Point Visible?	Standpipe Paint Condition?	Sanitary Seal Condition?	Dedicated Equipment
615	46.07	45.96	0.11	Good	Yes	Repaint	Good	PDB@42.7'
616	31.56	31.38	0.18	Good	Yes	Good	Good	PDB@28.0'
617	37.34	37.14	0.20	Good	Yes	Manhole	Good	PDB@34.7'
618	28.86	28.70	0.16	Good	Yes	Good	Good	PDB@26.6'
619	15.07	14.90	0.17	Good	Yes	Manhole	Good	PDB@12.2'
620	17.56	17.40	0.16	Good	Yes	Good	Good	Peristaltic
621	37.41	37.17	0.24	Good	Yes	Good	Good	PDB@32.0'
622	46.53	46.41	0.12	Good	Yes	Good	Good	PDB@43.6'
623	54.59	54.40	0.19	Good	Yes	Good	Good	PDB@49.0'
624	64.39	64.20	0.19	Replace	Yes	Repaint	Good	PDB@61.5'
625	44.58	44.24	0.34	Good	Yes	Good	Good	PDB@39.0'
626	92.41	92.14	0.27	Good	Yes	Good	Good	PDB@91.1'
627	50.91	50.80	0.11	Good	Yes	Repaint	Good	PDB@44.8'
628	100.50	100.54	-0.04	Good	Yes	Repaint	Good	PDB@97.0'
629	51.45	51.24	0.21	Good	Yes	Repaint	Good	PDB@45.2'
630	93.55	93.34	0.21	Good	Yes	Repaint	Good	PDB@90.1'
631	31.53	31.35	0.18	Good	Yes	Repaint	Good	PDB@27.9'
632	39.34	39.13	0.21	Good	Yes	Good	Good	PDB@35.9'
P01	11.23	11.11	0.12	Good	Yes	Repaint	Good	None
P02	10.49	10.33	0.16	Good	Yes	Repaint	Good	None
P04	20.31	20.38	-0.07	Good	Yes	Good	Good	PDB@17.6'
P07	5.55	5.18	0.37	Good	Yes	Manhole	Good	None
P08	8.73	8.70	0.03	Good	Yes	Manhole	Good	PDB@~6.7'
P11	14.84	14.63	0.21	Good	Yes	Manhole	Good	PDB@11'

**Key:**

DTB = Depth to Bottom

Ded. 2" SP = Dedicated 2-inch diameter submersible pump

Length of bailer in feet is indicated where a bailer is used.

PDB@X = Polyethylene diffusion bag sampling device set at indicated depth below top of casing.

All measurements in feet.

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## **APPENDIX D**

### **2016 SAMPLING PLAN GROUNDWATER MONITORING PROGRAM**

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**Former Owego, New York Facility  
2016 Groundwater Monitoring Plan**

Well	Site Area	Site Region	Northern (Annual)	Southern (Annual)	Northern (Semiannual)	Southern (Semiannual)	Sampling Frequency	Program	Unit Monitored
			1st Quarter 2016	2nd Quarter 2016	3rd Quarter 2016	4th Quarter 2016			
101	SBA	South		X		X	S	GMP	Outwash Sand
106	TFA	North	X	X	X	X	Q	V	Till?
107A	TFA	North	X	X	X	X	Q	GMP	Bedrock
110	TFA	North	X		X		S	GMP	Till/Bedrock
120	WMA	South		X		X	S	GMP	Till/Bedrock
124	TFA	North	X		X		S	GMP	Till/Bedrock
125	TFA	North	X		X		S	GMP	Sand & Gravel/Bedrock
127	TFA	North	X		X		S	GMP	Sand & Gravel/Bedrock
128	TFA	North	X				A	GMP	Till/Bedrock
129	TFA	North	X		X		S	GMP	Till/Bedrock
132	TFA	North	X				A	GMP	Bedrock
133	TVD/MLA	South		X		X	S	GMP	Till/Bedrock
134	TFA	North	X		X		S	GMP	Till/Bedrock
140R	NBT/P001	North	X				A	GMP	Till/Bedrock
146	NBT/P001	North	X		X		S	GMP	Till/Bedrock
148	WMA	South		X		X	S	GMP	Till/Bedrock
149	WMA	South		X		X	S	GMP	Till/Bedrock
157	NBT/P001	North	X		X		S	GMP	Till/Bedrock
158	WBA	South		X			A	GMP	Till/Bedrock
160	WBA	South		X		X	S	GMP	Basal Till
162	WBA	South		X		X	S	GMP	Till/Bedrock
163	WBA	South		X			A	GMP	Alluvial Silt and Gravel
165	WBA	South		X		X	S	GMP	Till/Bedrock
166	WBA	South		X		X	S	GMP	Till/Bedrock
167	WBA	South		X		X	S	GMP	Silt
178	WMA	South		X		X	S	GMP	Gravel/Bedrock
179	WMA	South		X		X	S	GMP	Outwash Sand
181	WMA	South		X			A	GMP	Till/Bedrock
183	WMA	South		X		X	S	GMP	Till/Bedrock
185	WBA	South		X		X	S	GMP	Sand & Gravel/Bedrock
186	SBA	South		X		X	S	GMP	Sand & Gravel/Bedrock
194	WMA	South		X		X	S	GMP	Bedrock
306	TVD/MLA	South		X			A	GMP	Sand & Gravel/Bedrock
308	TVD/MLA	South		X		X	S	GMP	Till/Bedrock
309	TVD/MLA	South		X		X	S	GMP	Till
313	TVD/MLA	South		X			A	GMP	Till/Bedrock?
314	SBA	South		X			A	GMP	Basal Till
316	WBA	South		X		X	S	GMP	Glaciolac., vf sand, silt, clay
317	WBA	South		X		X	S	GMP	Outwash Sand & Gravel
318	SBA	South	X	X	X	X	Q	GMP	Outwash Sand & Gravel
319	SBA	South	X	X	X	X	Q	GMP	Outwash Sand
321	TVD/MLA	South		X		X	S	GMP	Sand & Gravel/Till
322	SBA	South	X	X	X	X	Q	GMP	Outwash Sand & Gravel
323	SBA	South	X	X	X	X	Q	GMP	Outwash Sand
324	NBT/P001	North	X		X		S	GMP	Till/Bedrock
325	NBT/P001	North	X		X		S	GMP	Alluvial Gravel
351	SBA	South		X		X	S	GMP	Till/Bedrock
352	SBA	South		X			A	GMP	Basal Till
353	TFA	North	X				A	GMP	Bedrock
354	TFA	North	X				A	GMP	Till
355	SBA	South		X			A	GMP	Bedrock
356	SBA	South		X			A	GMP	Outwash Sand & Gravel
357	NBT/P001	North	X		X		S	GMP	Bedrock
358	NBT/P001	North	X				A	GMP	Alluvial Sand & Gravel
361	NBT/P001	North	X				A	V	Bedrock
362	TVD/MLA	South		X			A	GMP	Bedrock
363	TVD/MLA	South		X			A	GMP	Bedrock
364	NBT/P001	North	X				A	V	Till/Bedrock
365	NBT/P001	North	X				A	V	Alluvial Sand & Gravel
366	NBT/P001	North	X				A	V	Till/Bedrock
367	NBT/P001	North	X		X		S	V	Till/Bedrock
368	NBT/P001	North	X		X		S	V	Alluvial Silt, Sand, Gravel
373	TVD/MLA	South		X		X	S	GMP	Outwash Sand & Gravel
374	TVD/MLA	South		X		X	S	GMP	Sand & Gravel
378	NBT/P001	North	X		X		S	GMP	Bedrock
379	NBT/P001	North	X				A	V	Till
382	NBT/P001	North	X				A	V	Fill
383	NBT/P001	North	X		X		S	GMP	Alluvial Silt & f. Sand
386	WMA	South		X			A	V	Alluvial Sand & Gravel

**Former Owego, New York Facility  
2016 Groundwater Monitoring Plan**

Well	Site Area	Site Region	Northern (Annual)	Southern (Annual)	Northern (Semiannual)	Southern (Semiannual)	Sampling Frequency	Program	Unit Monitored
			1st Quarter 2016	2nd Quarter 2016	3rd Quarter 2016	4th Quarter 2016			
387	WBA	South		X			A	V	Alluvial Silt, Sand, Gravel
392	NBT/P001	North	X		X		S	GMP	Alluvial Silt, Sand, Gravel
393	NBT/P001	North	X	X	X	X	Q	GMP	Till/Bedrock
394	NBT/P001	North	X		X		S	GMP	Alluvial Silt, Sand, Gravel
395	NBT/P001	North	X				A	V	Till/Bedrock
397	NBT/P001	North	X				A	GMP	Till/Bedrock
398	NBT/P001	North	X		X		S	GMP	Alluvial Silt, Sand, Gravel
399	NBT/P001	North	X	X	X	X	Q	GMP	Alluvial Silt, Sand, Gravel
404	WMA	South	X	X	X	X	Q	V	Silt, Sand & Gravel
405	WMA	South	X	X	X	X	Q	V	Sand & Gravel/Till/Bedrock
413	NBT/P001	North	X	X	X	X	Q	V	Till/Bedrock
414	NBT/P001	North	X	X	X	X	Q	V	Alluvial Sand & Gravel/Till/Bedrock
415	TFA	North	X	X	X	X	Q	V	Till/Bedrock
416	NBT/P001	North	X	X	X	X	Q	V	Till/Bedrock
521	MT	North	X		X		S	GMP	Till/Bedrock
522	MT	North	X	X	X	X	Q	GMP	Till/Bedrock
524	MT	North	X		X		S	GMP	Till/Bedrock
529	MT	North	X	X	X	X	Q	GMP	Alluvial Silt, Sand, Gravel
532	MT	North	X	X	X	X	Q	GMP	Alluvial Silt, Sand, Gravel
534	MT	North	X	X	X	X	Q	GMP	Alluvial Silt, Sand, Gravel
540	SBA	South		X		X	S	GMP	Outwash Sand & Gravel
541	SBA	South		X		X	S	GMP	Outwash Sand & Gravel
542	SBA	South		X		X	S	GMP	Outwash Sand & Gravel
543	SBA	South		X		X	S	GMP	Outwash Sand & Gravel
601	NBT/P001	North	X		X		S	V	Alluvial Silt, Sand, Gravel
602	NBT/P001	North	X		X		S	V	Alluvial Silt & Sand
603	NBT/P001	North	X		X		S	GMP	Alluvial Sand & Gravel
604	NBT/P001	North	X		X		S	GMP	Alluvial Silt & Sand
605	NBT/P001	North	X				A	GMP	Till/Bedrock
606	NBT/P001	North	X	X	X	X	Q	GMP	Alluvial Silt, Sand, Gravel
607	NBT/P001	North	X	X	X	X	Q	GMP	Till/Bedrock
608	NBT/P001	North	X		X		S	GMP	Alluvial Silt, Sand, Gravel
609	NBT/P001	North	X				A	GMP	Till/Bedrock
610	NBT/P001	North	X		X		S	GMP	Till/Bedrock
611	NBT/P001	North	X		X		S	GMP	Fill/Alluvial Sand & Silt
612	NBT/P001	North	X		X		S	GMP	Till/Bedrock
613	NBT/P001	North	X		X		S	GMP	Alluvial Silt, Sand, Gravel
614	WBA	South		X			A	GMP	Till/Bedrock
615	NBT/P001	North	X				A	GMP	Bedrock
616	NBT/P001	North	X		X		S	GMP	Till/Bedrock
617	NBT/P001	North	X		X		S	GMP	Till/Bedrock
618	TFA	North	X		X		S	GMP	Till/Bedrock
619	TVD/MLA	South		X			A	GMP	Till/Bedrock
620	TVD/MLA	South		X		X	S	GMP	Alluvial Sand & Gravel/Till
621	TVD/MLA	South		X		X	S	GMP	Outwash Sand & Gravel
622	TVD/MLA	South		X		X	S	GMP	Till/Bedrock
623	TVD/MLA	South		X			A	V	Fill/Alluvial Sand & Silt
624	TVD/MLA	South		X			A	V	Till/Bedrock
625	SBA	South	X	X	X	X	Q	GMP	Outwash Sand & Gravel
626	SBA	South		X		X	S	GMP	Till/Bedrock
627	SBA	South		X		X	S	GMP	Outwash Sand & Gravel
628	SBA	South		X			A	V	Till/Bedrock
629	WBA	South		X			A	V	Outwash Silt, Sand, Gravel
630	WBA	South		X			A	V	Till/Bedrock
631	WBA	South		X		X	S	GMP	Outwash Sand & Gravel
632	WMA	South		X		X	S	GMP	Till/Bedrock
P04	TFA	North	X				A	GMP	Till
P08	TVD/MLA	South		X			A	GMP	Till?
P11	TVD/MLA	South		X			A	GMP	Till?

Sample Count: 71    78    53    56    Total: 258

**Key:**

X Collect sample

MT: Moore Tire Area (off-site)

Q Quarterly frequency

NBT/P001: NW Bedrock Trough/P001 Area

S Semiannual frequency

SBA: Southern Boundary Area (some off-site)

A Annual frequency

TFA: Tank Farm Area

\* Combined flow from wells 413 and 414

TVD/MLA: Tower View Drive/Mirror Lake Area

GMP Groundwater Monitoring Program Well

WBA: Western Boundary Area

V Voluntary Sampling Well

WMA: Waste Management Area

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**APPENDIX E**

**CHAINS OF CUSTODY**

**2016**

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### **IBM Chain of Custody**

eurofins

Lancaster Laboratories  
Environmental

For Eurofins Lancaster Laboratories Environmental use only  
Acc. # 1911 Group # 1623659 Sample # 8206136-65  
Instructions on reverse side correspond with circled numbers.

**COC #** 018093

1 Environmental		Client Information			4 Matrix		Analyses Requested			For Lab Use Only		
Client	Acct #	SSOW #	Project Name	Project State	Sediment	Ground	Surface		Preservation Code	SCR#		
12M CEP Chicago	6911	9300H,3D	1st City GW Supply	NY	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		H	18274P3		
IBM PM			K. Whalen	Sample	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		T			
P.O.			CAR 9300H,3D	Ronis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		N			
Check One:		<input checked="" type="checkbox"/> Routine Lab GW <input type="checkbox"/> Routine GTF Q&M		Sediment	Portable	NPDES	Air		B			
		<input type="checkbox"/> Non-Routine Investigation <input type="checkbox"/> Non-Routine Upgrades/Installs		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		C			
OU:		Routine		(Endicott Non-Routine only)	Total # of Containers				S			
2 Sample Identification		Collected		3 Composite	Date	Time	Grab	Soil	Water	Oil		
OTB160111TAR		1/11/16 1515		X				Grn				
OTB160111P		1/11/16 1533										
OTB160111P		1/11/16 1517										
OTB160111P		1/11/16 1604										
OTB160111P		1/11/16 1634										
OTB160111P		1/11/16 1644										
OTB160111WLB		1/11/16 1702										
OTB160111P		1/11/16 1705										
OTB160111P		1/11/16 1708										
OTB160111P		1/11/16 1710										
7 Turnaround Time Requested (TAT) (please circle)		Rushed by Standard		Date	Date	Time	Received By			Date	Time	
		Rush		3/16/16	1/11/16	14:05	Signed			1/11/16	14:00	
(Rush TAT is subject to Lancaster Laboratories approval and surcharges.)				Date	Date	Time	Received By			Date	Time	
Date results are needed: 1/14/16				1/13/16	1/13/16	1704	Signed			1/14/16	1600	
E-mail:				Date	Date	Time	Received By			Date	Time	
8 Data Package Options (please circle if required)		Reinquainted by		Date	Date	Time	Received By			Date	Time	
Type I (Validation/NJ Reg)	TX TRRP-13	NY ASP A			1/14/16	1/14/16	14:00	Signed			1/14/16	1600
Type III (Reduced NJ)	MA MCP	NY ASP B										
Type VI (Raw Data Only)	CT RCP											
SDG Complete?		Yes	No	Site-specific QC (MS/MSD/Dup)?		Yes		No	Temperature upon receipt		0.5	°C

W MYSDEB B

Eurofins Lancaster Laboratories Environmental, LLC • 2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300  
The white copy should accompany samples to Eurofins Lancaster Laboratories Environmental. The yellow copy should be retained by the client.

第2章

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*IBM Chain of Custody*

eurofins

Lancaster Laboratories

Acct. # 6911 For Eurofins Lancaster Laboratories Environmental use only  
Group # 16023654 Sample # 80069356-65

COC # 018094

Environmental			Client Information			Matrix			Analyses Requested			For Lab Use Only		
1	Project Name # 1st Ct Gw Supply		Act # GAI	SSOW # 93004.3P					Preservation Code			SCR#		
Client IBM PM P.O.	K. Whalen	Project State NY	Samples J Roni's				Sediment	<input checked="" type="checkbox"/>	Ground	<input type="checkbox"/>	Surface		Preservation Codes	
				<input type="checkbox"/>	Potable	<input type="checkbox"/>	NPDES	<input type="checkbox"/>	Air	<input type="checkbox"/>		H = HCl	T = Thiosulfate	
				<input type="checkbox"/>	Oil	<input type="checkbox"/>						N = HNO <sub>3</sub>	B = NaOH	
							Total # of Containers					S = H <sub>2</sub> SO <sub>4</sub>	O = Other	
Check One:			<input checked="" type="checkbox"/> Routine Lab GW	<input type="checkbox"/> Routine GTF O&M								Remarks		
			<input type="checkbox"/> Non-Routine Investigation	<input type="checkbox"/> Non-Routine Upgrades/Installs										
OU: Routine			(Endicott Non-Routine only)											
2	Collected		3	Composite										
Sample Identification			Date	Time	Grab	Soil	Water	NPDES	Air					
00393160112	1/12/16	749	X	GW										
00394160112P		809										Topsoil		
00399160112P		813												
0039160112W1D		900												
0052160112P		916												
0059160112P		926												
0059160112P		943												
0060160112P		1006												
0060160112P		1016												
00110160112P		1038	↓			↓	↓	↓	↓					
7	Turnaround Time Requested (TAT) (please circle)			Received by	Date	Time	Received by	Date	Time					
	Standard	Rush	<input checked="" type="radio"/>	1/13/16	1709									
(Rush TAT is subject to Lancaster Laboratories approval and surcharges.)			Released/checked by	Date	Time	Received by	Date	Time						
Data results are needed: 10 Days			Relinquished by	Date	Time	Received by	Date	Time						
E-mail:			Relinquished by	Date	Time	Received by	Date	Time						
8	Data Package Options (please circle if required)			Site-specific QC (MS/MSD/Dup)?	Yes	No	Received by	Date	Time					
Type I (Validation/NJ Reg)	TX TRRP-13	NY ASP A					<input checked="" type="radio"/>	1/14/16	1000	Temperature upon receipt		C		
Type III (Reduced NJ)	MA MCP	NY ASP B												
Type VI (Raw Data Only)	CT RCP													
SDG Complete?	Yes	No												

ANSWER

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2023-07-14

Master Laboratories En Page 38 of 41

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Lancaster Laboratories  
Environmental

Acc.# 6291

For Eurolins Lancaster Laboratories Environmental use only  
Group # 1623659 Sample # 8206136  
Indications on reverse side correspond with circled numbers.

**COC # 018095**

Client Information		Matrix		Analyses Requested		For Lab Use Only	
Client Project Name/ID IBM I/M P.O.	Acct # SSOW # Project State Sample			Preservation Code		SCR#	
K. Whalen CAR 93004.39				H		Preservation Codes	
						H = HCl	T = Thiosulfate
						N = HNO <sub>3</sub>	B = NaOH
						S = H <sub>2</sub> SO <sub>4</sub>	O = Other
						(6) Remarks	
Check One:		<input checked="" type="checkbox"/> Routine Lab GW <input type="checkbox"/> Routine GTF O&M					
<input type="checkbox"/> Non-Routine Investigation		<input type="checkbox"/> Non-Routine Upgrades/installs					
OU: Routine		(Endicott Non-Routine only)					
Sample Identification		Collected	3 Grab	Composite	Sediment	Ground	Surface
		Date	Time	Soil	Potable	NPDES	Air
		0/1/16	1101	GW	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		0/1/16	1102		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		0/1/16	1103		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		0/1/16	1104		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		0/1/16	1105		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		0/1/16	1106		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		0/1/16	1107		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		0/1/16	1108		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		0/1/16	1109		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		0/1/16	1110		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		0/1/16	1111		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		0/1/16	1112		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		0/1/16	1113		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		0/1/16	1114		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		0/1/16	1115		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		0/1/16	1116		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		0/1/16	1117		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		0/1/16	1118		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		0/1/16	1119		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		0/1/16	1120		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		0/1/16	1121		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		0/1/16	1122		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		0/1/16	1123		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7 Turnaround Time Requested (TAT) (please circle)		Retain until	1/2/16	Date	Time	Received by	Date
<input checked="" type="radio"/> Standard <input type="radio"/> Rush		Retained by		1700			Time
(Rush TAT is subject to Lancaster Laboratories approval and surcharges.)		Reinquaried by					
Date results are needed: 10 Days		Retain until		Date	Time	Received by	Date
E-mail:		Retain until		1/14/16	1000		Time
8 Data Package Options (please circle if required)		Site-specific QC (MS/MSD/Dup)?	Yes	No	Received by	Theresa Abel	Date
Type I (Validation/NJ Reg)	TX TRRP-13	NY ASP A					Time
Type III (Reduced NJ)	MA MCP	NY ASP B					
Type VI (Raw Data Only)	CT RCP						
SDG Complete?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	(If yes, indicate QC sample and submit triplicate volume.)				Temperature upon receipt ( °S ) °C

\* NYS DEC B

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7053 0719

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eurofins

Lancaster Laboratories

Acc # 1091

For Eurofins Lancaster Laboratories Environmental use only  
Group # 1623996 Sample # 82084

CDC # 018096

Client Information		Matrix		Analyses Requested		For Lab Use Only					
Project Name/ID HBM ID# P.O. #	Acct # SSOW # Sample ID	Sediment	Ground	Analyses Requested Preservation Code		SCR#	Preservation Codes				
1st Qtr Pub Supply K. Whetstone CAR93004.39	C911 93004.39 MP J. Ronis	<input type="checkbox"/>	<input checked="" type="checkbox"/> <input type="checkbox"/>				H = HCl N = HNO <sub>3</sub> S = H <sub>2</sub> SO <sub>4</sub> O = Other				
Check One:		<input checked="" type="checkbox"/> Routine Lab GW <input type="checkbox"/> Routine GTF O&M									
<input type="checkbox"/> Non-Routine Investigation <input type="checkbox"/> Non-Routine Upgrades/Installs											
OU: Routine (Endicott Non-Routine only)											
(2) Sample Identification		Collected		Total # of Containers		Remarks					
		Date	Time	Grab	Composite	Soil	Potable	NPDES	Air	Total # of Containers	
C0136160112.P		1/2/16	1115	X		Water					trip island
C0136160112.P			1503			Oil					
C0136160112.P			1501								
C0136160112.P			1540								
C0136160112.P			1540								
C0136160112.P		1/3/16	735								
C0136160112.P			747								
C0136160112.P			808								
C0136160112.P			825								
C0136160112.P			838								
C0136160112.P			856								
7) Turnaround Time Requested (TAT) (please circle)		Reinstituted by		Date	Temp	Received by	Date	Time			9)
Standard				1/4/16	1700						
Rush											
(Rush TAT is subject to Lancaster Laboratories approval and surcharges.)											
Data results are needed: 10 days											
E-mail:											
8) Data Package Options (please circle if required)											
Type I (Validation/NJ Reg)	TX TRRP-13	NY ASP A	Reinstituted by		Date	Time	Received by	Date	Time		
Type III (Reduced NJ)	MA MCP	NY ASP B									
Type VI (Raw Data Only)	CT RCP										
Site-specific QC (MS/MSD/Dup)?											
Yes      No											
(If yes, indicate QC sample and submit triplicate volume.)											
SDS Complete? Yes      No											
Temperature upon receipt 0 2 °C											

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Lancaster Laboratories  
Environmental

Acct. # 60411 For Eurofins Lancaster Laboratories Environmental use only  
Group # 1623994 Sample # 8208417-46  
Instructions on reverse side correspond with circled numbers.

COC # 018097

<b>1) Client Information</b>			<b>4) Matrix</b>			<b>5) Analyses Requested</b> Preservation Code		
Client: IBM CEP Oneida 60411 Project Name #: 1st Ct Gw Supply SSW #: 9300430 IBM P.M. K. Whalen Project State: NY P.O. # CAR 9300430 Sample: Jtronis Check One: <input checked="" type="checkbox"/> Routine Lab GW <input type="checkbox"/> Routine GTF O&M <input type="checkbox"/> Non-Routine Investigation <input type="checkbox"/> Non-Routine Upgrades/Installs OU: Routine (Endeavor Non-Routine only)			<input type="checkbox"/> Sediment <input type="checkbox"/> Ground <input type="checkbox"/> Surface <input type="checkbox"/> Soil <input type="checkbox"/> Potable <input type="checkbox"/> NPDES <input type="checkbox"/> Air <input type="checkbox"/> Water <input type="checkbox"/> Oil Total # of Containers: 2 X			For Lab Use Only SCR# <b>Preservation Codes</b> H = HCl T = Thiosulfate N = HNO <sub>3</sub> B = NaOH S = H <sub>2</sub> SO <sub>4</sub> O = Other		
						<b>6) Remarks</b> <p style="margin-left: 20px;">Exp Blk</p>		
<b>2) Sample Identification</b>			<b>3) Collected</b>			<b>7) Turnaround Time Requested (TAT) (please circle)</b>		
Sample Identification: 00360160113 1/16/916 X 00359160113P 924 003616013WLID 955 00365160113P 1029 00318160113P 1043 00329160113P 1059 00319160113P 1113 00343160113P 1133 00157160113P 1150 00603160113P 1249 V			Collected Date: 1/16/916 Time: X Grab: GW Composite: 2 X			Requisitioned by Standard Date: 1/16/16 Time: 1700 Received by Date: Time: 9 Rush Date: Time: Received by Date: Time: Requisitioned by Date: Time: Received by Date: Time: Requisitioned by Date: Time: Received by Date: Time: Site-specific QC (MS/MSD/Dup)? Yes No		
						Temperature upon receipt: 0 - 2 °C		

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# IBM Chain of Custody

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Lancaster Laboratories  
Environmental

Acct. # 60411 For Eurofins Lancaster Laboratories Environmental use only  
Group # 1623994 Sample # 8208417-46  
Instructions on reverse side correspond with circled numbers.

COC # 017798

<b>1) Client Information</b>			<b>4) Matrix</b>			<b>5) Analyses Requested</b> Preservation Code		
Client: IBM CEP Oneida 60411 Project Name #: 1st Ct Gw Supply SSW #: 9300430 IBM P.M. K. Whalen Project State: NY P.O. # CAR 9300430 Sample: Jtronis Check One: <input checked="" type="checkbox"/> Routine Lab GW <input type="checkbox"/> Routine GTF O&M <input type="checkbox"/> Non-Routine Investigation <input type="checkbox"/> Non-Routine Upgrades/Installs OU: Routine (Endeavor Non-Routine only)			<input type="checkbox"/> Sediment <input type="checkbox"/> Ground <input type="checkbox"/> Surface <input type="checkbox"/> Soil <input type="checkbox"/> Potable <input type="checkbox"/> NPDES <input type="checkbox"/> Air <input type="checkbox"/> Water <input type="checkbox"/> Oil Total # of Containers: 2 X			For Lab Use Only SCR# <b>Preservation Codes</b> H = HCl T = Thiosulfate N = HNO <sub>3</sub> B = NaOH S = H <sub>2</sub> SO <sub>4</sub> O = Other		
						<b>6) Remarks</b>		
<b>2) Sample Identification</b>			<b>3) Collected</b>			<b>7) Turnaround Time Requested (TAT) (please circle)</b>		
Sample Identification: 00340160113P 1/16/309 X 0035160113P 325 00324160113P 336 00325160113P 346 00350160113P 340 00394160113P 419 00616160113P 1433 00305160113P 501 00362160113P 1511 00357160113P 1/16/742 V			Collected Date: 1/16/309 Time: X Grab: GW Composite: 2 X			Requisitioned by Standard Date: 1/16/16 Time: 1700 Received by Date: Time: 9 Rush Date: Time: Received by Date: Time: Requisitioned by Date: Time: Received by Date: Time: Requisitioned by Date: Time: Received by Date: Time: Site-specific QC (MS/MSD/Dup)? Yes No		
						Temperature upon receipt: 0 - 2 °C		

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Lancaster Laboratories  
Environmental

Acct. # 6911 For Euroline Lancaster Laboratories Environmental use only  
Group # 1624165 Sample # S-209493-S13  
Instructions on reverse side correspond with circled numbers.

**COC # 017797**

1 Environmental		Client Information			4 Matrix		5 Analyses Requested			For Lab Use Only	
Client Project Name/ IBM PM P.O.	Acid # SSOW # Project State Supplied				Sediment	Ground	Surface		Preservation Code	SCR#	
IBM CEP Owego 1st Gw Supply Kwhalen CAR 9300H.39.	6911 9300H.39 NY ✓ Ronis				<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>				
Check One:		<input checked="" type="checkbox"/> Routine Lab GW <input type="checkbox"/> Routine GTF O&M									
<input type="checkbox"/> Non-Routine Investigation		<input type="checkbox"/> Non-Routine Upgrades/Installs									
OU:	Routine		(Endicott Non-Routine only)								
2 Sample Identification		Collected		3 Grab	Composite	Soil	Potable	NPDES	Air	Total # of Containers	Remarks
OTB 160114P		Date 1/16/16	Time 6:50	Grab X	Composite	Soil Gw	Potable	NPDES	Air	3 X	Imp blank
00398 160114P		1/16/16	7:53								Imp blank
00368 160114P			8:09								
OTB 160114P			8:30								
00146 160114P			8:45								
00359 160114P			9:05								
00358 160114P			9:17								
00361 160114P			9:43								
00383 160114P			10:01								
00524 160114P			10:19								
7 Turnaround Time Requested (TAT) (please circle)		Standard		Rush	Request by	Date 1/15/16	Time 11:00	Received by	Date	Time	8
(Rush TAT is subject to Lancaster Laboratories approval and surcharges.)					Relinquished by	Date	Time	Received by	Date	Time	
Date results are needed: 10 days					Relinquished by	Date	Time	Received by	Date	Time	
E-mail:					Relinquished by	Date	Time	Received by	Date	Time	
8 Data Package Options (please circle if required)					Site-specific QC (MS/MSD/Dup)?						
Type I (Validation/NJ Reg)	TX TRRP-13	NY ASP A	Yes			No			Temperature upon receipt 2-8 °C		
Type III (Reduced NJ)	MA MCP	NY ASP B									
Type VI (Raw Data Only)	CT RCP										
SDS Complete?	Yes	No									

~~300 complete.~~

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### ***IBM Chain of Custody***

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Lancaster Laboratories

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Acct. # 6911 Group # 1624163 Sample # 20249493-513

COC # 017799

Client Information		Matrix		Analyses Requested		For Lab Use Only				
Client Project Name IB/M PM P.O.	Acct # SSOW # Project State Site Number	<input type="checkbox"/> Sediment	<input checked="" type="checkbox"/> Ground	<input type="checkbox"/> Surface	<input type="checkbox"/> Total # of Containers	<input type="checkbox"/> SCR#	Preservation Codes <i>H = HCl      T = Thiosulfate N = HNO<sub>3</sub>      B = NaOH S = H<sub>2</sub>SO<sub>4</sub>      O = Other</i>			
IJM CEP Oneida 1st GW Supply K. Whalen. CAR93004.39	C911 93004.39 NY JTCoris	<input type="checkbox"/> Potable	<input type="checkbox"/> NPDES	<input type="checkbox"/> Air	<i>113/123a</i>					
Check One:		<input checked="" type="checkbox"/> Routine Lab GW	<input type="checkbox"/> Routine GTF O&M	<input type="checkbox"/> Non-Routine Investigation	<input type="checkbox"/> Non-Routine Upgrades/Installs	Remarks				
OU: Routine		(Endicott Non-Routine only)								
Sample Identification		Collected	Composite	Soil	Water	Oil				
0053160114P C160160114P CEG160114W-1D 0500160114 00415160114 CETET160114 00A13160114 00A16160114 00414160114 00A01160114	1/14/16 1030 1048 1100 1308 1244 1304 1314 1323 1427 1450	X					Egypt Bank			
7 Turnaround Time Requested (TAT) (please circle) Standard      Rush		Reinquainted by		Date	Date	Temp	Received by	Date	Date	Time
(Rush TAT is subject to Lancaster Laboratories approval and surcharges.)		<i>[Signature]</i>		1/15/16	1100		<i>[Signature]</i>			
Date results are needed: 101353		Reinquainted by		Date	Date	Temp	Received by	Date	Date	Time
E-mail:		Reinquainted by		Date	Date	Temp	Received by	Date	Date	Time
8 Data Package Options (please circle if required)		Reinquainted by		Date	Date	Temp	Received by	Date	Date	Time
Type I (Validation/NJ Reg)	TX TRRP-13	NY ASP A					<i>[Signature]</i>	1/16/16	0940	
Type III (Reduced NJ)	MA MCP	NY ASP B								
Type VI (Raw Data Only)	CT RCP									
SDG Complete?	Yes	No								
Site-specific QC (MS/MSD/Dup)? Yes      No										
If yes, indicate QC sample and submit triplicate volume.										
Temperature upon receipt <i>2.8 °C</i>										

NY DEC P

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Lancaster  
Laboratories

Acct. # 6911

For Eurofins Lancaster Laboratories use only  
Group # 164163 Sample # 540493-513  
Instructions on reverse side correspond with circled numbers.

COC # 16815

<b>1) Client Information</b>				<b>4) Matrix</b>				<b>5) Analyses Requested</b> Preservation Code				For Lab Use Only																					
Client: IBM CEP Oswego 6911 Project Number: 1st GTF GW Supply 93004.30 IBM PM: K. Whalen NY P.O.: CAR93004.30 Samples: V. Ronis				<input type="checkbox"/> Sediment <input checked="" type="checkbox"/> Ground <input type="checkbox"/> Surface <input type="checkbox"/> Portable <input type="checkbox"/> NPDES <input type="checkbox"/> Air <input type="checkbox"/> Oil				<input type="checkbox"/> Total # of Containers				SCR#																					
Check One: <input checked="" type="checkbox"/> Routine Lab GW <input type="checkbox"/> Routine GTF O&M <input type="checkbox"/> Non-Routine Investigation <input type="checkbox"/> Non-Routine Upgrades/Installs OU: Routine												<b>Preservation Codes</b> H = HCl      T = Thiosulfate N = HNO <sub>3</sub> B = NaOH S = H <sub>2</sub> SO <sub>4</sub> O = Other																					
												<b>6) Remarks</b>																					
<b>2) Sample Identification</b>  <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th colspan="2">Collected</th> <th rowspan="2">Grab</th> <th rowspan="2">Composite</th> <th rowspan="2">Soil</th> <th rowspan="2">Water</th> <th rowspan="2">Oil</th> <th rowspan="2">Total # of Containers</th> </tr> <tr> <th>Date</th> <th>Time</th> </tr> <tr> <td>0040516014</td> <td>1/14/16</td> <td>X</td> <td></td> <td>GW</td> <td></td> <td></td> <td>3 X</td> </tr> </table>				Collected		Grab	Composite	Soil	Water	Oil	Total # of Containers	Date	Time	0040516014	1/14/16	X		GW			3 X												
				Collected								Grab	Composite	Soil	Water	Oil	Total # of Containers																
Date	Time																																
0040516014	1/14/16	X		GW			3 X																										
<b>7) Turnaround Time Requested (TAT) (please circle)</b> <input checked="" type="radio"/> Standard <input type="radio"/> Rush (Rush TAT is subject to Lancaster Laboratories approval and surcharges.) Date results are needed: 10 days Rush results requested by (please circle) E-mail: Phone: E-mail: Phone:				<input checked="" type="checkbox"/> Received by Date: 1/5/16 Time: 1700D				<input type="checkbox"/> Received by Date: Time: <input type="checkbox"/> Received by Date: Time: <input type="checkbox"/> Received by Date: Time:				<input type="checkbox"/> Date: Time: <b>9</b>																					
				<input type="checkbox"/> Relinquished by Date: Time: <input type="checkbox"/> Relinquished by Date: Time: <input type="checkbox"/> Relinquished by Date: Time:				<input type="checkbox"/> Received by Date: 1/16/16 Time: 0900D				<input type="checkbox"/> Date: Time: <input type="checkbox"/> Date: Time: <input type="checkbox"/> Date: Time:																					
<b>8) Data Package Options (please circle if required)</b> Type I (Validation/NJ Reg) TX TRRP-13 NY ASP A Type III (Reduced NJ) MA MCP NY ASP B Type VI (Raw Data Only) CT RCP SDG Complete? Yes <input type="checkbox"/> No				<input type="checkbox"/> Site-specific QC (MS/MSD/Dup)?				<input checked="" type="radio"/> Yes <input type="radio"/> No				Temperature upon receipt 24.8 °C																					

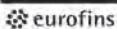
NYSDEC B

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7052.02

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Lancaster Laboratories  
Environmental

Acct. # 6911

For Eurofins Lancaster Laboratories Environmental use only  
Group # 1663016 Sample # 5364946-8390019  
Instructions on reverse side correspond with circled numbers.

COC # 018134

<b>1) Client Information</b>				<b>4) Matrix</b>				<b>5) Analyses Requested</b> Preservation Code				For Lab Use Only																					
Client: IBM CEP Oswego 6911 Project Number: 1st GTF GW Supply 93004.30 IBM PM: Kevin Whalen NY P.O.: CAR93004.30 Samples: V. Ronis				<input type="checkbox"/> Sediment <input checked="" type="checkbox"/> Ground <input type="checkbox"/> Surface <input type="checkbox"/> Portable <input type="checkbox"/> NPDES <input type="checkbox"/> Air <input type="checkbox"/> Oil				<input type="checkbox"/> Total # of Containers				SCR#																					
Check One: <input checked="" type="checkbox"/> Routine Lab GW <input type="checkbox"/> Routine GTF O&M <input type="checkbox"/> Non-Routine Investigation <input type="checkbox"/> Non-Routine Upgrades/Installs OU: Routine												<b>Preservation Codes</b> H = HCl      T = Thiosulfate N = HNO <sub>3</sub> B = NaOH S = H <sub>2</sub> SO <sub>4</sub> O = Other																					
												<b>6) Remarks</b>																					
<b>2) Sample Identification</b>  <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th colspan="2">Collected</th> <th rowspan="2">Grab</th> <th rowspan="2">Composite</th> <th rowspan="2">Soil</th> <th rowspan="2">Water</th> <th rowspan="2">Oil</th> <th rowspan="2">Total # of Containers</th> </tr> <tr> <th>Date</th> <th>Time</th> </tr> <tr> <td>01/16/16</td> <td>9:30</td> <td>X</td> <td></td> <td>GW</td> <td></td> <td></td> <td>3 X</td> </tr> </table>				Collected		Grab	Composite	Soil	Water	Oil	Total # of Containers	Date	Time	01/16/16	9:30	X		GW			3 X												
				Collected								Grab	Composite	Soil	Water	Oil	Total # of Containers																
Date	Time																																
01/16/16	9:30	X		GW			3 X																										
<b>7) Turnaround Time Requested (TAT) (please circle)</b> <input checked="" type="radio"/> Standard <input type="radio"/> Rush (Rush TAT is subject to Lancaster Laboratories approval and surcharges.) Date results are needed: 10 days E-mail:				<input checked="" type="checkbox"/> Received by Date: 5/15/16 Time: 1800D				<input type="checkbox"/> Received by Date: Time: <input type="checkbox"/> Received by Date: Time: <input type="checkbox"/> Received by Date: Time:				<input type="checkbox"/> Date: Time: <b>9</b>																					
				<input type="checkbox"/> Relinquished by Date: Time: <input type="checkbox"/> Relinquished by Date: Time: <input type="checkbox"/> Relinquished by Date: Time:				<input type="checkbox"/> Received by Date: 5/19/16 Time: 0905				<input type="checkbox"/> Date: Time: <input type="checkbox"/> Date: Time: <input type="checkbox"/> Date: Time:																					
<b>8) Data Package Options (please circle if required)</b> Type I (Validation/NJ Reg) TX TRRP-13 NY ASP A Type III (Reduced NJ) MA MCP NY ASP B Type VI (Raw Data Only) CT RCP SDG Complete? Yes <input type="checkbox"/> No				<input type="checkbox"/> Site-specific QC (MS/MSD/Dup)?				<input checked="" type="radio"/> Yes <input type="radio"/> No				Temperature upon receipt 0.3 °C																					

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Acct. # 6911 For Eurofins Lancaster Laboratories Environmental use only  
Group # 330318 Sample # 638998-6390014  
Instructions on reverse. Safe correspond with circled numbers.

COC # 018135

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Acct. # 6911 For Eurofins Lancaster Laboratories Environmental use only  
Group # 1003618 Sample # 5389946-8390019

COC # 018136

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Acct. # 6911

For Eurofins Lancaster Laboratories Environmental use only  
Group # 1664277 Sample # 6343212-31  
Instructions on reverse side correspond with circled numbers.

COC # 018137

<b>1) Client Information</b>		<b>4) Matrix</b>		<b>5) Analyses Requested</b> Preservation Code		<b>For Lab Use Only</b>	
Client: <b>IBM Owego</b> Acct. # <b>6911</b> Project Number: <b>Ind/Gt/Gw Scaphy</b> SSWW #: <b>930041.30</b> IBM PM: <b>Kevin Whalen</b> Project State: <b>NY</b> P.O. #: <b>CAR93004.39</b> Signature: <b>J. Ronis</b>		<input type="checkbox"/> Sediment <input checked="" type="checkbox"/> Ground <input type="checkbox"/> Surface <input type="checkbox"/> Soil <input type="checkbox"/> Potable <input type="checkbox"/> NPDES <input type="checkbox"/> Air <input type="checkbox"/> Composite <input type="checkbox"/> Water <input type="checkbox"/> Oil		<b>H</b> <b>T</b> <b>N</b> <b>S</b> <b>O</b> <b>A</b> <b>D</b> <b>E</b> <b>M</b> <b>R</b> <b>I</b> <b>C</b> <b>L</b> <b>U</b> <b>P</b> <b>V</b> <b>W</b> <b>X</b> <b>Z</b>		SCR#	
Check One: <input checked="" type="checkbox"/> Routine Lab GW <input type="checkbox"/> Routine GTF O&M <input checked="" type="checkbox"/> Non-Routine Investigation <input type="checkbox"/> Non-Routine Upgrades/installs OU: <b>Routine</b> (Endicott Non-Routine only)						<b>Preservation Codes</b> H = HCl      T = Thiosulfate N = HNO <sub>3</sub> B = NaOH S = H <sub>2</sub> SO <sub>4</sub> O = Other	
						<b>6) Remarks</b>	
<b>2) Sample Identification</b>		<b>3) Collected</b>					
<b>Sample Identification</b> <b>STB160515042</b> <b>00186160519</b> <b>00351600519</b> <b>00352160519</b> <b>00185160519</b> <b>00194160519</b> <b>00304160519</b> <b>00391160519P</b> <b>01C0160519W1-10</b> <b>00263160519P</b>		<b>Collected</b> Date: <b>5/18/16</b> Time: <b>1500</b> Grab: <b>X</b> Composite: <b>GW</b>	<b>3)</b> Date: <b>5/19</b> Time: <b>700</b> Grab: <b>GW</b> Composite: <b>GW</b>	<b>4)</b> Soil: <b>GW</b> Total # of Containers: <b>3 X</b>		<b>5)</b> Analyses Requested Preservation Code <b>H</b> <b>T</b> <b>N</b> <b>S</b> <b>O</b> <b>A</b> <b>D</b> <b>E</b> <b>M</b> <b>R</b> <b>I</b> <b>C</b> <b>L</b> <b>U</b> <b>P</b> <b>V</b> <b>W</b> <b>X</b> <b>Z</b>	
<b>7) Turnaround Time Requested (TAT) (please circle)</b>							
<b>Standard</b> <b>Rush</b> (Rush TAT is subject to Lancaster Laboratories approval and surcharges.) Date results are needed: <b>10 Days</b>				Re-requested by: <b>5/20/16 700</b> Date: <b>5/20/16</b> Time: <b>700</b> Received by: _____ Date: _____ Time: _____		Date: _____ Time: _____	
<b>8) Data Package Options (please circle if required)</b>							
Type I (Validation/NJ Reg) TX TRP-13 NY ASP A Type III (Reduced NJ) MA MCP NY ASP B Type VI (Raw Data Only) CT RCP				Site-specific QC (MS/MSD/Dup)? Yes <b>○</b> No <b>○</b> (If yes, indicate QC sample and submit triplicate volume.)		Received by: <b>B. J. Ronis</b> Date: <b>5-21-16</b> Time: <b>10:00</b> Temperature upon receipt: <b>0.6</b> °C	
SDG Complete? Yes <b>○</b> No <b>○</b>							

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For Eurofins Lancaster Laboratories Environmental use only  
Group # 1664277 Sample # 6343212-31  
Instructions on reverse side correspond with circled numbers.

COC # 018138

<b>1) Client Information</b>		<b>4) Matrix</b>		<b>5) Analyses Requested</b> Preservation Code		<b>For Lab Use Only</b>	
Client: <b>IBM Owego</b> Acct. # <b>6911</b> Project Number: <b>Ind/Gt/Gw Scaphy</b> SSWW #: <b>930041.30</b> IBM PM: <b>Kevin Whalen</b> Project State: <b>NY</b> P.O. #: <b>CAR93004.39</b> Signature: <b>J. Ronis</b>		<input type="checkbox"/> Sediment <input checked="" type="checkbox"/> Ground <input type="checkbox"/> Surface <input type="checkbox"/> Soil <input type="checkbox"/> Potable <input type="checkbox"/> NPDES <input type="checkbox"/> Air <input type="checkbox"/> Composite <input type="checkbox"/> Water <input type="checkbox"/> Oil		<b>H</b> <b>T</b> <b>N</b> <b>S</b> <b>O</b> <b>A</b> <b>D</b> <b>E</b> <b>M</b> <b>R</b> <b>I</b> <b>C</b> <b>L</b> <b>U</b> <b>P</b> <b>V</b> <b>W</b> <b>X</b> <b>Z</b>		SCR#	
Check One: <input checked="" type="checkbox"/> Routine Lab GW <input type="checkbox"/> Routine GTF O&M <input checked="" type="checkbox"/> Non-Routine Investigation <input type="checkbox"/> Non-Routine Upgrades/installs OU: <b>Routine</b> (Endicott Non-Routine only)						<b>Preservation Codes</b> H = HCl      T = Thiosulfate N = HNO <sub>3</sub> B = NaOH S = H <sub>2</sub> SO <sub>4</sub> O = Other	
						<b>6) Remarks</b>	
<b>2) Sample Identification</b>		<b>3) Collected</b>					
<b>Sample Identification</b> <b>00373160519P</b> <b>00363160519P</b> <b>00355160519P</b> <b>00358160519P</b> <b>00605160519P</b> <b>00606160519P</b> <b>005213160519P</b> <b>00540160519P</b> <b>00511160519P</b> <b>00512160519P</b>		<b>Collected</b> Date: <b>5/19/16</b> Time: <b>1337</b> Grab: <b>X</b> Composite: <b>GW</b>	<b>3)</b> Date: <b>5/19</b> Time: <b>1150</b> Grab: <b>GW</b> Composite: <b>GW</b>	<b>4)</b> Soil: <b>GW</b> Total # of Containers: <b>3 X</b>		<b>5)</b> Analyses Requested Preservation Code <b>H</b> <b>T</b> <b>N</b> <b>S</b> <b>O</b> <b>A</b> <b>D</b> <b>E</b> <b>M</b> <b>R</b> <b>I</b> <b>C</b> <b>L</b> <b>U</b> <b>P</b> <b>V</b> <b>W</b> <b>X</b> <b>Z</b>	
<b>7) Turnaround Time Requested (TAT) (please circle)</b>							
<b>Standard</b> <b>Rush</b> (Rush TAT is subject to Lancaster Laboratories approval and surcharges.) Date results are needed: <b>10 Days</b>				Re-requested by: <b>5/20/16 700</b> Date: <b>5/20/16</b> Time: <b>700</b> Received by: _____ Date: _____ Time: _____		Date: _____ Time: _____	
<b>8) Data Package Options (please circle if required)</b>							
Type I (Validation/NJ Reg) TX TRP-13 NY ASP A Type III (Reduced NJ) MA MCP NY ASP B Type VI (Raw Data Only) CT RCP				Site-specific QC (MS/MSD/Dup)? Yes <b>○</b> No <b>○</b> (If yes, indicate QC sample and submit triplicate volume.)		Received by: <b>B. J. Ronis</b> Date: <b>5-21-16</b> Time: <b>10:00</b> Temperature upon receipt: <b>0.6</b> °C	
SDG Complete? Yes <b>○</b> No <b>○</b>							

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Acct. # 6911 For Eurofins Lancaster Laboratories Environmental use only  
Group # 160127B Sample # 3343232-1(1)  
Instructions on reverse side correspond with circled numbers.

**COC # 018139**

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Acct. # 6911 For Eurofins Lancaster Laboratories Environmental Use Only  
Group # 1601278 Sample # 0543232-4111  
Instructions on reverse side correspond with circled numbers.

COC # 018140

Environmental		Client Information		Matrix		Analyses Requested		For Lab Use Only	
Client Project Name IRM/PM P.O.	IBM Onwyo A&GT GW Supply Kevin Whalen CAR93004,39	6911 SSOW # NY Sample	6911 93004,39 TRON's	Sediment Potable Water NPDES Oil Composite Ground Surface Air	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	H Total # of Containers 13 13 13 13 13	Preservation Code H = HCl N = HNO <sub>3</sub> S = H <sub>2</sub> SO <sub>4</sub> T = Thiosulfate B = NaOH O = Other	SCR#	
Check One: <input checked="" type="checkbox"/> Routine Lab GW <input type="checkbox"/> Routine GTF O&M <input type="checkbox"/> Non-Routine Investigation OU: Routine								Preservation Codes	
								Remarks	
Sample Identification C04113160519 C04114160519 C04116160519		Collected Date 5/19/16 Time 1748 X Grab 1717 Composite 1735		Soil Oil					
7 Turnaround Time Requested (TAT) (please circle) Standard Rush (Rush TAT is subject to Lancaster Laboratories approval and surcharges.) Date results are needed: 10/25/16		Revised by Date 5/20/16 Time 700		Received by Date Time		Received by Date Time		Date Time	
		Revised by Date Time		Received by Date Time		Received by Date Time		Date Time	
E-mail:		Revised by Date Time		Received by Date Time		Received by Date Time		Date Time	
8 Data Package Options (please circle if required)		Site-specific QC (MS/MSD/Dup)? Yes No							
Type I (Validation/NJ Reg) Type III (Reduced NJ) Type VI (Raw Data Only)		TX TRRP-13 MA MCP CT RCP		NY ASP A NY ASP B				Temperature upon receipt _____ C	
SDG Complete? Yes No									

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Acct. # 6911 For Eurofins Lancaster Laboratories Environmental use only  
Group # 105855 Sample # 6100012-37  
Instructions on reverse side correspond with circled numbers.

COC # 018141

Client Information				Matrix				Analyses Requested				For Lab Use Only	
Client IBI M Owyay Project Manager IBI PM P.O. PO#	Acct # 0511 SSOW # 931043P	Project State NY	Sample JTRNS	Sediment	Ground	Surface		H	M	MEK	SCR#		
Kevin Whalen				<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>							
				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>							
Check One:	<input checked="" type="checkbox"/> Routine Lab GW	<input type="checkbox"/> Routine GTF Q&M											
<input type="checkbox"/> Non-Routine Investigation				<input type="checkbox"/> Non-Routine Upgrades/Installs (Endicott Non-Routine only)									
OU: Routine													
Sample Identification				Collected	Grab	Composite	Sediment	Water	NPDES	Air	Total # of Containers	Remarks	
CTB160523TAK	5/24/16	10:30	X	Soil	Water							Dup Blank	
CB1386160523P		10:43											
CB179160523P	1/7	10:57											
CB175160523P		11:4											
CB1039160523P	2/8	11:34											
CB638160523P		11:4											
CB318160523P		11:57											
CB320160523P		214											
CB323160523P		1207											
CB349160523P		1207											
7 Turnaround Time-Requested (TAT) (please circle)	Standard      Rush				Received by SCL	Date 5/25/16	Time 7:00P	Received by	Date	Time			
(Rush TAT is subject to Lancaster Laboratories approval and surcharges.)					Refrigerated by	Date	Time	Received by	Date	Time			
Date results are needed: 10 days					Refrigerated by	Date	Time	Received by	Date	Time			
E-mail:					Refrigerated by	Date	Time	Received by	Date	Time			
8 Data Package Options (please circle if required)					Site-specific QC (MS/MSD/Dup)?	Yes	No	Received by Mustafa	Date 5/26/16	Time 1600			
Type I (Validation/NJ Reg)	TX TRRP-13 NY ASP A												
Type III (Reduced NJ)	MA MCP NY ASP B												
Type VI (Raw Data Only)	CT RCP												
SDG Complete?	Yes	No	(If yes, indicate QC sample and submit triplicate volume.)				Temperature upon receipt				15 °C		

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Acct. # 6911 For Eurofins Lancaster Laboratories Environmental use only  
Group # 1065875 Sample # 8400c-12-37  
Instructions on reverse side correspond with circled numbers.

COC # 018142

Environmental		Client Information		Matrix		Analyses Requested		For Lab Use Only	
Client Name: <b>TBM Enviro</b> Project Name: <b>Endicott GW Supply</b> P.O. # <b>CALG3004.39.</b>		Acc# <b>901</b> SSOW # <b>93004.39</b> Project State <b>NY</b> Subsite <b>WTRNS</b>				Preservation Code		SCR#	
Check One:		<input checked="" type="checkbox"/> Routine Lab GW <input type="checkbox"/> Routine GTF D&M							
<input type="checkbox"/> Non-Routine Investigation		<input type="checkbox"/> Non-Routine Upgrades/Installs							
OU: <b>Routine</b>		(Endicott Non-Routine only)							
(2) Sample Identification		Collected		(3) Grab	Composite	Total # of Containers		Remarks	
		Date	Time	Sediment	Ground	Surface			
				Potable	NPDES	Air			
				Water	Oil				
				Soil					
OEG1605A3W1D		5/25/16	1250	X	GW	3X			
OHD1605A3P			1300						
OHD314605A3P			1329						
OHD14605A3P			1350						
OHD387605A3P			1412						
OHD651605A3P			1420						
OHD31605A3P			1437						
OHD1605A3P			1447						
OHD1671605A3P			1450						
OHD21605A3P			1515	V					
7 Turnaround Time Requested (TAT) (please circle)		Standard		Refrigerated by		Date	Time	Date	Time
		Rush		<i>[Signature]</i>		5/25/16	7000		
(Rush TAT is subject to Lancaster Laboratories approval and surcharges.)		Date results are needed:		Refrigerated by		Date	Time	Date	Time
		<i>[Signature]</i>							
E-mail:				Refrigerated by		Date	Time	Date	Time
8 Data Package Options (please circle if required)				Refrigerated by					
Type I (Validation/NJ Reg)		TX TRRP-13		NY ASP A		Site-specific QC (MS/MSD/DIN)		Temperature upon receipt	
Type III (Reduced NJ)		MA MCP		NY ASP B		Yes		15 °C	
Type VI (Raw Data Only)		CT RCP				No			
SDG Complete?		Yes							
If yes, indicate QC sample and submit triplicate volume.									

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Acct. # C911

For Eurofins Lancaster Laboratories Environmental use only  
Group # 1665875 Sample # 8400012-37  
Instructions on reverse side correspond with circled numbers.

COC # 018143

(1) Client Information		(4) Matrix		(5) Analyses Requested Preservation Code		For Lab Use Only	
Client: IBM cargo Project Name: Int'l Gt Grn Supply IBM PM: Kevin Whalen P.O.: CAR93004, JR Check One: <input checked="" type="checkbox"/> Routine Lab GW <input type="checkbox"/> Routine GTF Q&M <input type="checkbox"/> Non-Routine Investigation <input type="checkbox"/> Non-Routine Upgrades/Installs OU: Route 1		Acc# C911 SSOW #: 93004, 30 Project State: NY Sample: Ron's		Sediment <input type="checkbox"/> Ground <input checked="" type="checkbox"/> Surface <input type="checkbox"/> Potable <input type="checkbox"/> NPDES <input type="checkbox"/> Air <input type="checkbox"/> Oil <input type="checkbox"/>		SCR#	
						<b>Preservation Codes</b> H = HCl T = Thioulate N = HNO <sub>3</sub> B = NaOH S = H <sub>2</sub> SO <sub>4</sub> O = Other	
						(6) Remarks	
(2) Sample Identification		(3) Collected		(4) Matrix		(5) Analyses Requested	
Sample Identification 0063160523P 001602160523P 00163160523P 00631160523P 00155160523P 00631160523P 00160160523R		Collected Date 10/16 Time 15:25 X Grab Composite Soil Water Oil Total # of Containers		Sediment <input type="checkbox"/> Ground <input checked="" type="checkbox"/> Surface <input type="checkbox"/> Potable <input type="checkbox"/> NPDES <input type="checkbox"/> Air <input type="checkbox"/> Oil <input type="checkbox"/>		Analyses Requested Preservation Code	
(7) Turnaround Time Requested (TAT) (please circle) Standard Rush (Rush TAT is subject to Lancaster Laboratories approval and surcharges.) Date results are needed: 10 Days		Received by <i>John</i> Date 10/25/16 Time 7:00 Relinquished by <i>John</i> Date <i>10/25/16</i> Time <i>7:00</i> Received by <i>John</i> Date <i>10/25/16</i> Time <i>7:00</i> Relinquished by <i>John</i> Date <i>10/25/16</i> Time <i>7:00</i> Received by <i>John</i> Date <i>10/25/16</i> Time <i>7:00</i> Relinquished by <i>John</i> Date <i>10/25/16</i> Time <i>7:00</i> Site-specific QC (MS/MSD/Dup)? Yes No		Received by <i>John</i> Date <i>10/25/16</i> Time <i>7:00</i> Received by <i>John</i> Date <i>10/25/16</i> Time <i>7:00</i>		(8) Data Package Options (please circle if required) Type I (Validation/NJ Reg) TX TRP-13 NY ASP A Type III (Reduced NJ) MA MCP NY ASP B Type VI (Raw Data Only) CT RCP	
SDG Complete? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>						Temperature upon receipt 15 °C	

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For Eurofins Lancaster Laboratories Environmental use only  
Group # 1665832 Sample # 8400110-55  
Instructions on reverse side correspond with circled numbers.

COC # 018144

(1) Client Information		(4) Matrix		(5) Analyses Requested Preservation Code		For Lab Use Only	
Client: IBM cargo Project Name: Int'l Gt Grn Supply IBM PM: Kevin Whalen P.O.: CAR93004, JR Check One: <input checked="" type="checkbox"/> Routine Lab GW <input type="checkbox"/> Routine GTF Q&M <input type="checkbox"/> Non-Routine Investigation <input type="checkbox"/> Non-Routine Upgrades/Installs OU: Route 1		Acc# C911 SSOW #: 93004, 30 Project State: NY Sample: Ron's		Sediment <input type="checkbox"/> Ground <input checked="" type="checkbox"/> Surface <input type="checkbox"/> Potable <input type="checkbox"/> NPDES <input type="checkbox"/> Air <input type="checkbox"/> Oil <input type="checkbox"/>		SCR#	
						<b>Preservation Codes</b> H = HCl T = Thioulate N = HNO <sub>3</sub> B = NaOH S = H <sub>2</sub> SO <sub>4</sub> O = Other	
						(6) Remarks	
(2) Sample Identification		(3) Collected		(4) Matrix		(5) Analyses Requested	
Sample Identification 003160523R 00160160523P 002317160523P 00023160523P 00024160523P 00104160523P 00404160523P 00149160523P 00150160523P 00148160523P		Collected Date 10/16 Time 15:20 X Grab Composite Soil Water Oil Total # of Containers		Sediment <input type="checkbox"/> Ground <input checked="" type="checkbox"/> Surface <input type="checkbox"/> Potable <input type="checkbox"/> NPDES <input type="checkbox"/> Air <input type="checkbox"/> Oil <input type="checkbox"/>		Analyses Requested Preservation Code	
(7) Turnaround Time Requested (TAT) (please circle) Standard Rush (Rush TAT is subject to Lancaster Laboratories approval and surcharges.) Date results are needed: 10 Days		Received by <i>John</i> Date 10/06/16 Time 17:00 Relinquished by <i>John</i> Date <i>10/06/16</i> Time <i>17:00</i> Received by <i>John</i> Date <i>10/06/16</i> Time <i>17:00</i> Relinquished by <i>John</i> Date <i>10/06/16</i> Time <i>17:00</i> Received by <i>John</i> Date <i>10/06/16</i> Time <i>17:00</i>		Received by <i>John</i> Date <i>10/06/16</i> Time <i>17:00</i> Received by <i>John</i> Date <i>10/06/16</i> Time <i>17:00</i>		(8) Data Package Options (please circle if required) Type I (Validation/NJ Reg) TX TRP-13 NY ASP A Type III (Reduced NJ) MA MCP NY ASP B Type VI (Raw Data Only) CT RCP	
SDG Complete? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>						Temperature upon receipt 15 °C	

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Acct. # 6911 For Eurofins Lancaster Laboratories Environmental use only  
Group # 1C66356 Sample # 640240-55  
Instructions on reverse side correspond with circled numbers.

COC # 018145

<b>1) Client Information</b>		<b>4) Matrix</b>		<b>5) Analyses Requested</b> Preservation Code		For Lab Use Only	
Client Name: BM Zweig Project Name: BM & Cw Supply IBM PM: Kevin Whalen P.O. #: CA293004.39 Check One: <input checked="" type="checkbox"/> Routine Lab GW <input type="checkbox"/> Routine GTF O&M <input type="checkbox"/> Non-Routine Investigation <input type="checkbox"/> Non-Routine Upgrades/installs OU: Routine		Group # 6911 SSCW # 93004.39 Project State NY Sample J. Renis		Sediment <input type="checkbox"/> Ground <input type="checkbox"/> Surface <input type="checkbox"/>  Soil <input type="checkbox"/> Potable Water <input type="checkbox"/> NPDES <input type="checkbox"/> Air <input type="checkbox"/> Oil <input type="checkbox"/>		H <input type="checkbox"/> N <input type="checkbox"/> S <input type="checkbox"/> O <input type="checkbox"/>	
						SCR#	
						<b>Preservation Codes</b> H = HCl T = Thiosulfate N = HNO <sub>3</sub> B = NaOH S = H <sub>2</sub> SO <sub>4</sub> O = Other	
						<b>6) Remarks</b> Equip blank.	
<b>2) Sample Identification</b>  OFG1605A0WL1D 5/26/16 0538 X Grab OFG1605A05JDP 5/26/16 1 Soil OFG1605A05JDP 5/26/16 2 Soil OFG1605A05JDP 5/26/16 3 Soil OFG1605A05JDP 5/26/16 4 Soil OFG1605A05JDP 5/26/16 5 Soil OFG1605A05JDP 5/26/16 6 Soil OFG1605A05JDP 5/26/16 7 Soil OFG1605A05JDP 5/26/16 8 Soil OFG1605A05JDP 5/26/16 9 Soil OFG1605A05JDP 5/26/16 10 Soil OFG1605A05JDP 5/26/16 11 Soil OFG1605A05JDP 5/26/16 12 Soil OFG1605A05JDP 5/26/16 13 Soil OFG1605A05JDP 5/26/16 14 Soil OFG1605A05JDP 5/26/16 15 Soil OFG1605A05JDP 5/26/16 16 Soil OFG1605A05JDP 5/26/16 17 Soil OFG1605A05JDP 5/26/16 18 Soil OFG1605A05JDP 5/26/16 19 Soil OFG1605A05JDP 5/26/16 20 Soil OFG1605A05JDP 5/26/16 21 Soil OFG1605A05JDP 5/26/16 22 Soil OFG1605A05JDP 5/26/16 23 Soil OFG1605A05JDP 5/26/16 24 Soil OFG1605A05JDP 5/26/16 25 Soil OFG1605A05JDP 5/26/16 26 Soil OFG1605A05JDP 5/26/16 27 Soil OFG1605A05JDP 5/26/16 28 Soil OFG1605A05JDP 5/26/16 29 Soil OFG1605A05JDP 5/26/16 30 Soil OFG1605A05JDP 5/26/16 31 Soil OFG1605A05JDP 5/26/16 32 Soil OFG1605A05JDP 5/26/16 33 Soil OFG1605A05JDP 5/26/16 34 Soil OFG1605A05JDP 5/26/16 35 Soil OFG1605A05JDP 5/26/16 36 Soil OFG1605A05JDP 5/26/16 37 Soil OFG1605A05JDP 5/26/16 38 Soil OFG1605A05JDP 5/26/16 39 Soil OFG1605A05JDP 5/26/16 40 Soil OFG1605A05JDP 5/26/16 41 Soil OFG1605A05JDP 5/26/16 42 Soil OFG1605A05JDP 5/26/16 43 Soil OFG1605A05JDP 5/26/16 44 Soil OFG1605A05JDP 5/26/16 45 Soil OFG1605A05JDP 5/26/16 46 Soil OFG1605A05JDP 5/26/16 47 Soil OFG1605A05JDP 5/26/16 48 Soil OFG1605A05JDP 5/26/16 49 Soil OFG1605A05JDP 5/26/16 50 Soil OFG1605A05JDP 5/26/16 51 Soil OFG1605A05JDP 5/26/16 52 Soil OFG1605A05JDP 5/26/16 53 Soil OFG1605A05JDP 5/26/16 54 Soil OFG1605A05JDP 5/26/16 55 Soil OFG1605A05JDP 5/26/16 56 Soil OFG1605A05JDP 5/26/16 57 Soil OFG1605A05JDP 5/26/16 58 Soil OFG1605A05JDP 5/26/16 59 Soil OFG1605A05JDP 5/26/16 60 Soil OFG1605A05JDP 5/26/16 61 Soil OFG1605A05JDP 5/26/16 62 Soil OFG1605A05JDP 5/26/16 63 Soil OFG1605A05JDP 5/26/16 64 Soil OFG1605A05JDP 5/26/16 65 Soil OFG1605A05JDP 5/26/16 66 Soil OFG1605A05JDP 5/26/16 67 Soil OFG1605A05JDP 5/26/16 68 Soil OFG1605A05JDP 5/26/16 69 Soil OFG1605A05JDP 5/26/16 70 Soil OFG1605A05JDP 5/26/16 71 Soil OFG1605A05JDP 5/26/16 72 Soil OFG1605A05JDP 5/26/16 73 Soil OFG1605A05JDP 5/26/16 74 Soil OFG1605A05JDP 5/26/16 75 Soil OFG1605A05JDP 5/26/16 76 Soil OFG1605A05JDP 5/26/16 77 Soil OFG1605A05JDP 5/26/16 78 Soil OFG1605A05JDP 5/26/16 79 Soil OFG1605A05JDP 5/26/16 80 Soil OFG1605A05JDP 5/26/16 81 Soil OFG1605A05JDP 5/26/16 82 Soil OFG1605A05JDP 5/26/16 83 Soil OFG1605A05JDP 5/26/16 84 Soil OFG1605A05JDP 5/26/16 85 Soil OFG1605A05JDP 5/26/16 86 Soil OFG1605A05JDP 5/26/16 87 Soil OFG1605A05JDP 5/26/16 88 Soil OFG1605A05JDP 5/26/16 89 Soil OFG1605A05JDP 5/26/16 90 Soil OFG1605A05JDP 5/26/16 91 Soil OFG1605A05JDP 5/26/16 92 Soil OFG1605A05JDP 5/26/16 93 Soil OFG1605A05JDP 5/26/16 94 Soil OFG1605A05JDP 5/26/16 95 Soil OFG1605A05JDP 5/26/16 96 Soil OFG1605A05JDP 5/26/16 97 Soil OFG1605A05JDP 5/26/16 98 Soil OFG1605A05JDP 5/26/16 99 Soil OFG1605A05JDP 5/26/16 100 Soil		Sediment <input type="checkbox"/> Ground <input type="checkbox"/> Surface <input type="checkbox"/>  Soil <input type="checkbox"/> Potable Water <input type="checkbox"/> NPDES <input type="checkbox"/> Air <input type="checkbox"/> Oil <input type="checkbox"/>		Total # of Containers 123			
		<b>7) Turnaround Time Requested (TAT) (please circle)</b> Standard <input checked="" type="checkbox"/> Rush <input type="checkbox"/> (Rush TAT is subject to Lancaster Laboratories approval and surcharges.) Date results are needed: 10 Days		Received by <i>[Signature]</i> Date 5/26/16 Time 1700 Relinquished by _____ Date _____ Time _____ Received by _____ Date _____ Time _____ Relinquished by _____ Date _____ Time _____ Received by _____ Date _____ Time _____ Relinquished by _____ Date _____ Time _____ Received by _____ Date _____ Time _____		Date _____ Time _____	
<b>9) Data Package Options (please circle if required)</b> Type I (Validation/NJ Reg) TX TRP-13 NY ASP A Type III (Reduced NJ) MA MCP NY ASP B Type VI (Raw Data Only) CT RCP SDG Complete? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		Site-specific QC (MS/MSD/Dup)? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> (If yes, indicate QC sample and submit triplicate volume.)		Received by <i>[Signature]</i> Date 5/27/16 Time 0955 Temperature upon receipt 1 - 1 °C		Date _____ Time _____	

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The white copy should accompany samples to Eurofins Lancaster Laboratories Environmental. The yellow copy should be retained by the client.

7052 0713

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Lancaster Laboratories  
Environmental

Acct # 6911

For Eurofins Lancaster Laboratories Environmental use only.  
Group # 1065432 Sample # 0445838-62  
Instructions on reverse side correspond with circled numbers.

COC # 018387

Client Information			Matrix			Analyses Requested			For Lab Use Only	
Client <i>IBM CEP Owego</i>	Acct # <i>6911</i>	SSOW # <i>9300430</i>	Sediment	Ground	Surface	Potable	NPDES	Air	Preservation Code	SCR#
Project Name/ <i>3rd St Gw Supply</i>	Project State <i>NY</i>	OU: <i>Routine</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	H	<i>188964</i>
IBM PM <i>Kevin Whalen</i>	P.O. # <i>CAR9300439</i>	Sample <i>J. Ronis</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	T	
Check One:			<input checked="" type="checkbox"/> Routine Lab GW	<input type="checkbox"/> Routine GTF O&M	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N	
			<input type="checkbox"/> Non-Routine Investigation	<input type="checkbox"/> Non-Routine Upgrades/Installs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	S	
(OU: <i>Routine</i> (Endicott Non-Routine only))									Remarks	
Sample Identification			Collected			Total # of Containers				
Date	Time	Grab	Composite	Soil	Water	Oil	Air	Total # of Containers		
<i>01031160718P</i>	<i>7/18/16 16:20</i>	<input checked="" type="checkbox"/>			<i>GW</i>			<i>3 X</i>	<i>up, blank</i>	
<i>00394160718P</i>	<i>7/18/16 16:57</i>		<input checked="" type="checkbox"/>							
<i>00611160718P</i>	<i>7/18/16 17:17</i>									
<i>00602160718P</i>	<i>7/18/16 17:31</i>									
<i>00603160718P</i>	<i>7/18/16 17:43</i>									
<i>00604160718P</i>	<i>7/18/16 18:01</i>								<i>Empty tank</i>	
<i>00605160718P</i>	<i>7/18/16 18:33</i>									
<i>00606160718P</i>	<i>7/18/16 19:07</i>									
<i>00607160718P</i>	<i>7/18/16 19:39</i>									
<i>00608160718P</i>	<i>7/18/16 20:11</i>									
Turnaround Time Requested (TAT) (please circle)			Relinquished by			Date	Time	Received by	Date	Time
<input checked="" type="checkbox"/> Standard			<i>Rush</i>			<i>5/18/16</i>	<i>14:35</i>	<i>John Abo</i>	<i>7/24/16</i>	<i>0932</i>
(Rush TAT is subject to Lancaster Laboratories approval and surcharges.)			Relinquished by			<i>7/20/16</i>	<i>9:00</i>	<i>Received by</i>	<i>Date</i>	<i>Time</i>
Date results are needed: <i>10/15/16</i>			Relinquished by			<i>Date</i>	<i>Time</i>	<i>Received by</i>	<i>Date</i>	<i>Time</i>
E-mail:			Relinquished by			<i>Date</i>	<i>Time</i>	<i>Received by</i>	<i>Date</i>	<i>Time</i>
Data Package Options (please circle if required)			Site-specific QC (MS/MSD/Dup)?			<i>Yes</i>	<i>No</i>	<i>Received by</i>	<i>Date</i>	<i>Time</i>
Type I (Validation/NJ Reg)	TX TRRP-13	NY ASP A				<i>John Abo</i>	<i>7/24/16</i>	<i>0932</i>	<i>Temperature upon receipt</i>	<i>41.2 - 0.8°C</i>
Type III (Reduced NJ)	MA MCP	NY ASP B								
Type VI (Raw Data Only)	CT RCP									
SDG Complete?	Yes	<input type="checkbox"/>								

*NYSDEC B*

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Client Information			Matrix			Analyses Requested			For Lab Use Only	
Client <i>IBM CEP Owego</i>	Acct # <i>6911</i>	SSOW # <i>9300430</i>	Sediment	Ground	Surface	Potable	NPDES	Air	Preservation Code	SCR#
Project Name/ <i>3rd St Gw Supply</i>	Project State <i>NY</i>	OU: <i>Routine</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	H	
IBM PM <i>Kevin Whalen</i>	P.O. # <i>CAR9300439</i>	Sample <i>J. Ronis</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	T	
Check One:			<input checked="" type="checkbox"/> Routine Lab GW	<input type="checkbox"/> Routine GTF O&M	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N	
			<input type="checkbox"/> Non-Routine Investigation	<input type="checkbox"/> Non-Routine Upgrades/Installs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	S	
(OU: <i>Routine</i> (Endicott Non-Routine only))									Remarks	
Sample Identification			Collected			Total # of Containers				
Date	Time	Grab	Composite	Soil	Water	Oil	Air	Total # of Containers		
<i>00601160719P</i>	<i>7/19/16 04:11</i>	<input checked="" type="checkbox"/>			<i>GW</i>			<i>3 X</i>		
<i>00602160719P</i>	<i>7/19/16 05:50</i>		<input checked="" type="checkbox"/>							
<i>00603160719P</i>	<i>7/19/16 07:12</i>			<input checked="" type="checkbox"/>						
<i>00604160719P</i>	<i>7/19/16 08:23</i>				<input checked="" type="checkbox"/>					
<i>00605160719P</i>	<i>7/19/16 09:40</i>					<input checked="" type="checkbox"/>				
<i>00606160719P</i>	<i>7/19/16 10:53</i>						<input checked="" type="checkbox"/>			
<i>00607160719P</i>	<i>7/19/16 12:16</i>							<input checked="" type="checkbox"/>		
<i>00608160719P</i>	<i>7/19/16 13:31</i>									
<i>00609160719P</i>	<i>7/19/16 14:49</i>									
<i>00610160719P</i>	<i>7/19/16 16:08</i>									
Turnaround Time Requested (TAT) (please circle)			Relinquished by			Date	Time	Received by	Date	Time
<input checked="" type="checkbox"/> Standard			<i>Rush</i>			<i>7/20/16</i>	<i>9:00</i>	<i>Received by</i>	<i>Date</i>	<i>Time</i>
(Rush TAT is subject to Lancaster Laboratories approval and surcharges.)			Relinquished by			<i>Date</i>	<i>Time</i>	<i>Received by</i>	<i>Date</i>	<i>Time</i>
Date results are needed: <i>10/15/16</i>			Relinquished by			<i>Date</i>	<i>Time</i>	<i>Received by</i>	<i>Date</i>	<i>Time</i>
E-mail:			Relinquished by			<i>Date</i>	<i>Time</i>	<i>Received by</i>	<i>Date</i>	<i>Time</i>
Data Package Options (please circle if required)			Site-specific QC (MS/MSD/Dup)?			<i>Yes</i>	<i>No</i>	<i>Received by</i>	<i>Date</i>	<i>Time</i>
Type I (Validation/NJ Reg)	TX TRRP-13	NY ASP A				<i>John Abo</i>	<i>7/24/16</i>	<i>0932</i>	<i>Temperature upon receipt</i>	<i>41.2 - 0.8°C</i>
Type III (Reduced NJ)	MA MCP	NY ASP B								
Type VI (Raw Data Only)	CT RCP									
SDG Complete?	Yes	<input type="checkbox"/>								

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Environmental

Acct. # C911

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Group # 10854132 Sample # 6485636-62  
Instructions on reverse side correspond with circled numbers.

COC # 018307

Client Information			Matrix			Analyses Requested			For Lab Use Only																																																																																											
<b>Client:</b> <b>IMC E&amp;P Owego</b> (C911) <b>Project Name/#:</b> <b>3rd St Oil Inv Supply</b> SSWW # <b>IBM PM:</b> <b>Kevin Whalen</b> Project State <b>P.O. #:</b> <b>CAR93001129</b> Sample <b>OU:</b> <b>Routine</b> (Endicott Non-Routine only)			<b>Sediment</b> <input type="checkbox"/> Ground <input type="checkbox"/> Surface  <b>Soil</b> <input type="checkbox"/> Portable <input type="checkbox"/> NPPES <input type="checkbox"/> Air  <b>Composite</b> <input type="checkbox"/> Water <input type="checkbox"/> Oil			<b>Analyses Requested</b> <b>Preservation Code</b> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>			<b>For Lab Use Only</b> <b>SCR#</b>  <b>Preservation Codes</b> H = HC T = Thiosulfate N = HNO <sub>3</sub> B = NaOH S = H <sub>2</sub> SO <sub>4</sub> O = Other <b>Remarks</b> <i>Sample Black</i>																																																																																											
<b>Check One:</b> <input checked="" type="checkbox"/> Routine Lab GW <input type="checkbox"/> Routine GTF O&M <input type="checkbox"/> Non-Routine Investigation <input type="checkbox"/> Non-Routine Upgrades/Installs																																																																																																				
<b>OU:</b> <b>Routine</b> (Endicott Non-Routine only)																																																																																																				
<b>Sample Identification</b> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2">Collected</th> <th rowspan="2">Grab</th> <th rowspan="2">Composite</th> <th rowspan="2">Soil</th> <th rowspan="2">Ground</th> <th rowspan="2">Surface</th> <th rowspan="2">Portable</th> <th rowspan="2">NPPES</th> <th rowspan="2">Air</th> <th rowspan="2">Water</th> <th rowspan="2">Oil</th> <th rowspan="2">Total # of Containers</th> </tr> <tr> <th>Date</th> <th>Time</th> </tr> </thead> <tbody> <tr> <td>01025160719 P</td> <td>7/19/16 0938</td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>3 X</td> </tr> <tr> <td>01025160719 W-LD</td> <td>927</td> <td></td> </tr> <tr> <td>00534160719 P</td> <td>1046</td> <td></td> </tr> <tr> <td>00359160719 P</td> <td>1019</td> <td></td> </tr> <tr> <td>00539160719 P</td> <td>1034</td> <td></td> </tr> <tr> <td>(-)</td> <td></td> </tr> </tbody> </table>			Collected		Grab	Composite	Soil	Ground	Surface	Portable	NPPES	Air	Water	Oil	Total # of Containers	Date	Time	01025160719 P	7/19/16 0938	X										3 X	01025160719 W-LD	927												00534160719 P	1046												00359160719 P	1019												00539160719 P	1034												(-)																	
Collected		Grab	Composite	Soil												Ground	Surface	Portable	NPPES	Air	Water	Oil	Total # of Containers																																																																													
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<b>Turnaround Time Requested (TAT) (please circle)</b> <input checked="" type="checkbox"/> Standard <input type="checkbox"/> Rush (Rush TAT is subject to Lancaster Laboratories approval and surcharges.) Date results are needed: <b>10/10/16</b>			<b>Relinquished by</b> <i>DK</i> Date <b>7/20/16</b> Time <b>1800</b> <b>Relinquished by</b> <i>DK</i> Date      Time <b>Relinquished by</b> <i>DK</i> Date      Time <b>Relinquished by</b> <i>DK</i> Date      Time			<b>Received by</b> <i>DK</i> Date      Time <b>Received by</b> <i>DK</i> Date      Time <b>Received by</b> <i>DK</i> Date      Time <b>Received by</b> <i>DK</i> Date      Time			<b>Date</b> <b>Time</b> <b>Date</b> <b>Time</b> <b>Date</b> <b>Time</b> <b>Date</b> <b>Time</b>																																																																																											
<b>E-mail:</b> <b>Data Package Options (please circle if required)</b> Type I (Validation/NJ Reg)      TX TRP-13      NY ASP A Type III (Reduced NJ)      MA MCP      NY ASP B Type VI (Raw Data Only)      CT RCP SDG Complete?      Yes <input type="checkbox"/> No			<b>Relinquished by</b> <i>DK</i> Date      Time <b>Site-specific QC (MS/MSD/Dup) ?</b> Yes <input checked="" type="checkbox"/> No (If yes, indicate QC sample and submit triplicate volume.)			<b>Received by</b> <i>DK</i> Date <b>7/20/16</b> Time <b>0930</b> <b>Temperature upon receipt</b> <b>4.7 - 0.8°C</b>																																																																																														

\* XYSDEC B

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Client Information			Matrix			Analyses Requested			For Lab Use Only																																																																																																																																															
<b>Client:</b> <b>IMC E&amp;P Owego</b> (C911) <b>Project Name/#:</b> <b>3rd St Oil Inv Supply</b> SSWW # <b>IBM PM:</b> <b>Kevin Whalen</b> Project State <b>P.O. #:</b> <b>CAR93001129</b> Sample <b>OU:</b> <b>Routine</b> (Endicott Non-Routine only)			<b>Sediment</b> <input type="checkbox"/> Ground <input type="checkbox"/> Surface  <b>Soil</b> <input type="checkbox"/> Portable <input type="checkbox"/> NPPES <input type="checkbox"/> Air  <b>Composite</b> <input type="checkbox"/> Water <input type="checkbox"/> Oil			<b>Analyses Requested</b> <b>Preservation Code</b> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>			<b>For Lab Use Only</b> <b>SCR#</b>  <b>Preservation Codes</b> H = HC T = Thiosulfate N = HNO <sub>3</sub> B = NaOH S = H <sub>2</sub> SO <sub>4</sub> O = Other <b>Remarks</b> <i>Sample Black</i>																																																																																																																																															
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\* XYSDEC B

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7052 1215

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Group # 1065433 Sample # 8485863-87  
Instructions on reverse side correspond with circled numbers.

COC # 018309

Client Information				Matrix				Analyses Requested				For Lab Use Only																																																																	
												SCR#																																																																	
<b>Client:</b> IBM CEP Owego <b>Project Name/Ref:</b> 3rd Gt Gw Supply <b>IBM PM:</b> Kevin Whalen <b>P.O. #:</b> CAR 93004.39				<b>Acct #:</b> 6911 <b>SSOW #:</b> 93004.39 <b>Project State:</b> NY <b>Sample:</b> JONIS				<b>Sediment</b> <input type="checkbox"/> Ground <input type="checkbox"/> Surface  <b>Soil</b> <input type="checkbox"/> Potable <input type="checkbox"/> NPDES <input type="checkbox"/> Air  <b>Composite</b> <input type="checkbox"/> Water <input type="checkbox"/> Oil				<b>Analyses Requested</b> <b>Preservation Code</b> H (HCl) T = Thiosulfate N = HNO <sub>3</sub> B = NaOH S = H <sub>2</sub> SO <sub>4</sub> O = Other																																																																	
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Acct. # 6911 For Eurofins Lancaster Laboratories Environmental use only.  
Group # 1065433 Sample # 8485863-87  
Instructions on reverse side correspond with circled numbers.

COC # 018311

Client Information				Matrix				Analyses Requested				For Lab Use Only																																			
												SCR#																																			
<b>Client:</b> IBM CEP Owego <b>Project Name/Ref:</b> 3rd Gt Gw Supply <b>IBM PM:</b> Kevin Whalen <b>P.O. #:</b> CAR 93004.39				<b>Acct #:</b> 6911 <b>SSOW #:</b> 93004.39 <b>Project State:</b> NY <b>Sample:</b> JONIS				<b>Sediment</b> <input type="checkbox"/> Ground <input type="checkbox"/> Surface  <b>Soil</b> <input type="checkbox"/> Potable <input type="checkbox"/> NPDES <input type="checkbox"/> Air  <b>Composite</b> <input type="checkbox"/> Water <input type="checkbox"/> Oil				<b>Analyses Requested</b> <b>Preservation Code</b> H (HCl) T = Thiosulfate N = HNO <sub>3</sub> B = NaOH S = H <sub>2</sub> SO <sub>4</sub> O = Other																																			
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00322160720P	17:00	751	V																																												
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Acct. # 6911 For Eurofins Lancaster Laboratories Environmental use only  
Group # 108605 Sample # 818864(3-52)  
Instructions on reverse side correspond with circled numbers.

**COC # 018310**

Client Information				Matrix			Analyses Requested			For Lab Use Only						
Client IBM CEP Oregon	Acct # 6911	SSOW # 93004.30					Preservation Code			SCR#						
Project Name/# 3rd Qtr Gw Supply		Project State NY														
IBM PM Kevin Whalen		Sample JTRON'S														
P.O.# CAR 93004.30																
For Compliance: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No																
Check One:				<input checked="" type="checkbox"/> Routine Lab GW	<input type="checkbox"/> Routine GTF O&M											
				<input type="checkbox"/> Non-Routine Investigation	<input type="checkbox"/> Non-Routine Upgrades/Installs											
ou: Routine				(Endicott Non-Routine only)												
Sample Identification			Collected		Composite		Sediment		Potable		NPDES		Air		Total # of Containers	Remarks
Date	Time	Grab	Soil	Water	NPDES	Oil	Air									
0031600719	7/19/16	1530	X	Q				C	X							
003191600720	7/19	2008														
003231600720		830														
0041600720		833														
004151600720		831														
004131600720		907														
004141600720		914														
004161600720		923														
004041600720		945														
004051600720		950														
Turnaround Time Requested (TAT) (please circle)				Relinquished by	Date	Time	Received by	Date	Time							
(Standard) Rush				<u>J. R.</u>	7/21/16	1800										
(Rush TAT is subject to Lancaster Laboratories approval and surcharges.)				Relinquished by	Date	Time	Received by	Date	Time							
Date results are needed: <u>10 days</u>				Relinquished by	Date	Time	Received by	Date	Time							
E-mail:				Relinquished by	Date	Time	Received by	Date	Time							
Data Package Options (please circle if required)				Site-specific QC (MS/MSD/Dup)?								Temperature upon receipt				
Type I (Validation/NJ Reg)	TX TRRP-13	NY ASP A		Yes	No											
Type III (Reduced NJ)	MA MCP	NY ASP B														
Type VI (Raw Data Only)	CT RCP															
SDG Complete?	Yes	No														
				(If yes, indicate QC sample and submit triplicate volume.)								3.9 °C				

\* NYSECB

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Acct. # 6911 Group # 1725851 Sample # 8605540-64  
Instructions on reverse side correspond with circled numbers.

COC # 018459

X NYSDFC B

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Lancaster Laboratories  
Environmental

For Eurofins Lancaster Laboratories Environmental Use Only  
Acct. # 6911 Group # 1725851 Sample # 3665540-64  
Instructions on reverse side correspond with circled numbers.

COC # 018460

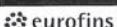
Client Information		Matrix		Analyses Requested		For Lab Use Only	
Client IBN CEP Owego	Act# 6911	SSOW # 93004.39		Preservation Code		SCR#	
Project Name// Wkng Gw Sampling	Project State NY	Project State Samplers				Preservation Codes	
IBM PM Kevin Whalen						H = HCl	T = Thiosulfate
P.O.# CAR93004.39	J Konis					N = HNO <sub>3</sub>	B = NaOH
For Compliance: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No						S = H <sub>2</sub> SO <sub>4</sub>	O = Other
Check One:		<input checked="" type="checkbox"/> Routine Lab GW	<input type="checkbox"/> Routine GTF O&M			Remarks	
		<input type="checkbox"/> Non-Routine Investigation	<input type="checkbox"/> Non-Routine Upgrades/Installs				
OU: Routine		(Endicott Non-Routine only)					
Sample Identification		Collected		Composite			
Date	Time	Grab	Composite	Soil	Water	NPDES	Air
C00627161425P	10/05/16 1000	X		GW			
C001610025WLID	1016						
C01071610025P	10140						
C01061610025P	1055						
C03041610025P	1115						
C05341610025P	1132						
C05311610025P	1149						
C05301610025P	1204						
C00601610025P	1243						
C00671610025P	1257	V					
Turnaround Time Requested (TAT) (please circle)				Furnished by			
Standard	Rush	<i>[Signature]</i>		Date 10/06/16	Time 1700P	Received by	Date
(Rush TAT is subject to Lancaster Laboratories approval and surcharges.)				Date	Time	Received by	Date
Date results are needed: 10/12/16				Date	Time	Received by	Date
E-mail:				Date	Time	Received by	Date
Data Package Options (please circle if required)				Date	Time	Received by	Date
Type I (Validation/NJ Reg)	TX TRRP-13	NY ASP A					
Type III (Reduced NJ)	MA MCP	NY ASP B					
Type VI (Raw Data Only)	CT RCP						
SDG Complete?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No					
Site-specific QC (MS/MSD/Dup)?				Temperature upon receipt			
Yes				0.3 °C			
<i>(If yes, indicate QC sample and submit triplicate volume.)</i>				1.4 °C			

X NYJ DEC 'B

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Environmental

Acct. # 6911 For Eurofins Lancaster Laboratories Environmental use only  
Group # 1725851 Sample # 8665500-64  
Logistics/Traceability: sample number with circled numbers

**COC # 018461**

Client Information		Matrix			Analyses Requested		For Lab Use Only	
Client IBM CEP Gwego	Acq# <u>(CH)</u>	SSOW # <u>93004130</u>			Preservation Code		SCR#	
Project Name/ ANH GW Sampling	Project State <u>NY</u>	Sample Type <u>Soil</u>	<input type="checkbox"/>	<input checked="" type="checkbox"/> Ground	<input type="checkbox"/>			
B/M PM <u>Kevin Whalen</u>	Sampler <u>JTRONIS</u>		<input type="checkbox"/>	<input type="checkbox"/> Surface	<input type="checkbox"/>			
P.O. <u>CAR93004139</u>			<input type="checkbox"/>	<input type="checkbox"/> Air	<input type="checkbox"/>			
For Compliance:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/>	<input type="checkbox"/> Potable	<input type="checkbox"/>			
Check One:	<input checked="" type="checkbox"/> Routine Lab GW		<input type="checkbox"/> Sediment	<input type="checkbox"/> NPDES	<input type="checkbox"/>			
	<input type="checkbox"/> Non-Routine Investigation		<input type="checkbox"/>	<input type="checkbox"/> Oil	<input type="checkbox"/>			
OU: <u>Routine</u>	(Endicott Non-Routine only)		<input type="checkbox"/>	<input type="checkbox"/> Total # of Containers	<input type="checkbox"/>			
Sample Identification		Collected	Grab	Composite	Soil	Water	NPDES	Oil
001AS161005P	10/28/16 13:16	X	Gw	3	X			
001AD0161005P	10/28/16 13:33							
00149161005P	10/28/16 14:14							
00183161005P	10/28/16 14:29							
001532161005P	10/28/16 14:49							
Turnaround Time Requested (TAT) (please circle)	Standard	Rush	Relinquished by	Date	Time	Received by	Date	Time
(Rush TAT is subject to Lancaster Laboratories approval and surcharges.)			<u>John</u>	<u>10/20/16</u>	<u>1700</u>			
Date results are needed:	<u>10/15/16</u>		Relinquished by	Date	Time	Received by	Date	Time
E-mail:			Relinquished by	Date	Time	Received by	Date	Time
Data Package Options (please circle if required)		Site-specific QC (MS/MSD/Dup?)			Temperature upon receipt			
Type I (Validation/NJ Reg)	TX TRRP-13	NY ASP A	Yes	No	<u>John Abdo</u>	<u>10/27/16</u>	<u>0940</u>	<u>03</u> °C
Type III (Reduced NJ)	MA MCP	NY ASP B						
Type VI (Raw Data Only)	CT RCP							
SDG Complete?	<input type="checkbox"/> Yes	<input type="checkbox"/> No						
(If yes, indicate QC sample and submit triplicate volume.)								

X 1145 DEC B

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3050-1015

# IBM Chain of Custody

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Acct. # 6911 For Eurofins Lancaster Laboratories Environmental use only  
Group # 1725553 Sample # 8065566-91  
Instructions on reverse side correspond with circled numbers.

COC # 018462

Client Information		Matrix				Analyses Requested		For Lab Use Only	
Client: IBM CEP Owego (6911) Project Name: HK CEP Sampling SSWW # 93004.30 IBM PM: Kevin Whalen Project State: NY P.O. # CAR 93004.39 Sampler: T. Ronis		Sediment <input type="checkbox"/> Ground <input checked="" type="checkbox"/> Surface <input type="checkbox"/> Composite <input type="checkbox"/> Portable <input type="checkbox"/> NPDES <input type="checkbox"/> Air <input type="checkbox"/> Soil <input type="checkbox"/> Water <input type="checkbox"/> Oil <input type="checkbox"/>				Preservation Code: H (1) I (1) S (1) T (1) N (1) O (1)		SCR#	
For Compliance: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Check One: <input checked="" type="checkbox"/> Routine Lab GW <input type="checkbox"/> Routine GTF O&M <input type="checkbox"/> Non-Routine Investigation <input type="checkbox"/> Non-Routine Upgrades/Installs OU: Routine (Endicott Non-Routine only)									
Sample Identification		Collected		Grab	Composite	Soil	Water	Oil	Total # of Containers
Date	Time								
07/16/16	13:26	X							
07/16/16	15:47								
07/16/16	15:55								
07/16/16	16:26								
07/16/16	16:46								
07/16/16	16:51								
07/16/16	16:59								
07/16/16	17:01								
07/16/16	17:02								
07/16/16	17:04								
07/16/16	17:05								
07/16/16	17:06								
07/16/16	17:07								
07/16/16	17:08								
Turnaround Time Requested (TAT) (please circle)		Relinquished by		Date	Time	Received by	Date		Time
<input checked="" type="checkbox"/> Standard <input type="checkbox"/> Rush		<i>S. Ronis</i>		10/26/16	17:00				
(Rush TAT is subject to Lancaster Laboratories approval and surcharges.)		Relinquished by							
Date results are needed: 10/15/16		Relinquished by							
E-mail:		Relinquished by							
Data Package Options (please circle if required)		Relinquished by							
Type I (Validation/NJ Reg)	TX TRRP-13 NY ASP A	Site-specific QC (MS/MSD/Dup)?		Yes	No				
Type III (Reduced NJ)	MA MCP NY ASP B								
Type VI (Raw Data Only)	CT RCP								
SDG Complete?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No								
(If yes, indicate QC sample and submit triplicate volume.)									

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7052 1215

Client Information		Matrix				Analyses Requested		For Lab Use Only	
Client: IBM CEP Owego (6911) Project Name: HK CEP Sampling SSWW # 93004.30 IBM PM: Kevin Whalen Project State: NY P.O. # CAR 93004.39 Sampler: T. Ronis		Sediment <input type="checkbox"/> Ground <input checked="" type="checkbox"/> Surface <input type="checkbox"/> Composite <input type="checkbox"/> Portable <input type="checkbox"/> NPDES <input type="checkbox"/> Air <input type="checkbox"/> Soil <input type="checkbox"/> Water <input type="checkbox"/> Oil <input type="checkbox"/>				Preservation Code: H (1) I (1) S (1) T (1) N (1) O (1)		SCR#	
For Compliance: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Check One: <input checked="" type="checkbox"/> Routine Lab GW <input type="checkbox"/> Routine GTF O&M <input type="checkbox"/> Non-Routine Investigation <input type="checkbox"/> Non-Routine Upgrades/Installs OU: Routine (Endicott Non-Routine only)									
Sample Identification		Collected		Grab	Composite	Soil	Water	Oil	Total # of Containers
Date	Time								
07/16/16	14:38	X							
07/16/16	15:52								
07/16/16	16:17								
07/16/16	16:33								
07/16/16	16:48								
07/16/16	16:57								
07/16/16	17:04								
07/16/16	17:30								
07/16/16	17:51								
07/16/16	18:45								
Turnaround Time Requested (TAT) (please circle)		Relinquished by		Date	Time	Received by	Date		Time
<input checked="" type="checkbox"/> Standard <input type="checkbox"/> Rush		<i>S. Ronis</i>		10/26/16	17:00				
(Rush TAT is subject to Lancaster Laboratories approval and surcharges.)		Relinquished by							
Date results are needed: 10/15/16		Relinquished by							
E-mail:		Relinquished by							
Data Package Options (please circle if required)		Relinquished by							
Type I (Validation/NJ Reg)	TX TRRP-13 NY ASP A	Site-specific QC (MS/MSD/Dup)?		Yes	No				
Type III (Reduced NJ)	MA MCP NY ASP B								
Type VI (Raw Data Only)	CT RCP								
SDG Complete?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No								
(If yes, indicate QC sample and submit triplicate volume.)									

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7052 1215

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Environmental

Acct. # 60111 For Eurofins Lancaster Laboratories Environmental use only  
Group # 178583 Sample # 816556-91  
Instructions on reverse side correspond with circled numbers.

COC # 018464

\* ATM.SDEC B

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Lancaster Laboratories  
Environmental

Acct. # 6961 For Eurofins Lancaster Laboratories Environmental use only  
Group # 172708 Sample # \_\_\_\_\_

867128C-29b COC # 018465

Client Information		Matrix		Analyses Requested		For Lab Use Only				
Client Name Project Manager IBI RM P.O.	Project # SSN# Project State Sampled			Preservation Code		SCR#				
IBM CEP Owego LHCH GW Sampling Kevin Whalen CAR 93-021-09	Act # 6711 93041, 30 NY JTRONIS			H						
For Compliance: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No										
Check One:										
<input checked="" type="checkbox"/> Routine Lab GW <input type="checkbox"/> Routine GTF O&M <input type="checkbox"/> Non-Routine Investigation <input type="checkbox"/> Non-Routine Upgrades/Installs										
OU: Routine (Endicott Non-Routine only)										
Sample Identification		Collected	Composite	Sediment	Ground	Surface				
Date	Time	Grab		<input type="checkbox"/> Soil	<input type="checkbox"/> Potable Water	<input type="checkbox"/> NPDES	<input type="checkbox"/> Oil	<input type="checkbox"/> Air	Total # of Containers	
07/13/16	11:47	X		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3 X	
07/18/16	16:02			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
07/18/16	16:03			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
07/19/16	16:03			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
07/31/16	16:03			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
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07/31/16	16:03			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
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07/31/16	16:03			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
07/31/16	16:03			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
07/31/16	16:03			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
07/31/16	16:03			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
07/31/16	16:03			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
07/31/16	16:03			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
07/31/16	16:03			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
07/31/16	16:03			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
07/31/16	16:03			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
07/31/16	16:03			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
07/31/16	16:03			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
07/31/16	16:03			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
07/31/16	16:03			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
07/31/16	16:03			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
07/31/16	16:03			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
07/31/16	16:03			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input			

\*NYSDEC 'B

The white copy should accompany samples to Eurofins Lancaster Laboratories Environmental. The yellow copy should be retained by the client.

### ***IBM Chain of Custody***

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## **APPENDIX F**

### **GROUNDWATER ANALYTICAL CHEMISTRY DATA FOR EXTRACTION AND MONITORING WELLS**

**January 1, 2016 – December 31, 2016**

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**Groundwater Analytical Chemistry Data**

**Owego, New York**

January 1, 2016 - December 31, 2016

Sample Location	101	101	106	106	106	106
Sample Description	GW MON WELL					
Sample Date	05/23/2016	10/26/2016	01/12/2016	05/19/2016	07/19/2016	10/25/2016
Laboratory Sample I.D.	8400023	8665587	8206965	8393241	8485876	8665553
Sample Comment Codes	P	P	P	P	P	P

Parameter	Units
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**Indicator Parameters**

PH	SU	7.61	8.03	7.59	7.34	7.2	7.03
SPECIFIC CONDUCTANCE	umhos/cm	405	365	504	564	600	860
TEMPERATURE	C	10.4	10.8	6.6	11.6	17.3	15.9
TURBIDITY	NTU	2.4	0.65	0.58	2.55	2.04	0.44

**Volatile Organics**

1,1,1-TRICHLOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1,2-TRICHLOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1-DICHLOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1-DICHLOROETHENE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,2-DICHLOROETHANE (EDC)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CHLOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CHLOROFORM (TRICHLOROMETHANE)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHENE	ug/L	0.1 J	0.4 J	ND@0.5	ND@0.5	ND@0.5	ND@0.5
DICHLORODIFLUOROMETHANE (FREON 12)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
METHYLENE CHLORIDE (DICHLOROMETHANE)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TETRACHLOROETHENE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TRICHLOROETHENE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TRICHLOROFLUOROMETHANE (FREON 11)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
VINYL CHLORIDE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5

**Groundwater Analytical Chemistry Data**

**Owego, New York**

January 1, 2016 - December 31, 2016

Sample Location	107A	107A	107A	107A	110	110
Sample Description	GW MON WELL					
Sample Date	01/12/2016	05/19/2016	07/19/2016	10/25/2016	01/12/2016	07/19/2016
Laboratory Sample I.D.	8206964	8393240	8485878	8665552	8206955	8485877
Sample Comment Codes	P	P	P	P	P	P

Parameter	Units
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**Indicator Parameters**

PH	SU	7.49	7.84	7.56	7.52	6.76	6.92
SPECIFIC CONDUCTANCE	umhos/cm	335	419	379	386	2530	3210
TEMPERATURE	C	10.6	12.3	12.7	11.9	12.9	14.9
TURBIDITY	NTU	0.55	11.8	5.72	0.45	0.53	2.76

**Volatile Organics**

1,1,1-TRICHLOROETHANE	ug/L	0.1 J	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1,2-TRICHLOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1-DICHLOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1-DICHLOROETHENE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,2-DICHLOROETHANE (EDC)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CHLOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CHLOROFORM (TRICHLOROMETHANE)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHENE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
DICHLORODIFLUOROMETHANE (FREON 12)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
METHYLENE CHLORIDE (DICHLOROMETHANE)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TETRACHLOROETHENE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TRICHLOROETHENE	ug/L	0.4 J	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TRICHLOROFLUOROMETHANE (FREON 11)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
VINYL CHLORIDE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5

**Groundwater Analytical Chemistry Data**

**Owego, New York**

January 1, 2016 - December 31, 2016

Sample Location	120	120	124	124	125	125
Sample Description	GW MON WELL					
Sample Date	05/26/2016	10/25/2016	01/12/2016	07/19/2016	01/11/2016	07/19/2016
Laboratory Sample I.D.	8402148	8665561	8208419	8485882	8206938	8485858
Sample Comment Codes	P	P	P	P	P	P

Parameter	Units
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**Indicator Parameters**

PH	SU	6.94	6.88	6.39	6	7.35	6.47
SPECIFIC CONDUCTANCE	umhos/cm	1110	1010	1140	1290	1920	179
TEMPERATURE	C	12.9	12.2	9.2	13.9	12.1	17.6
TURBIDITY	NTU	2.57	0.5	0.35	2.33	0.81	15.8

**Volatile Organics**

1,1,1-TRICHLOROETHANE	ug/L	1.6	3	ND@0.5	0.5 J	2.2	1.6
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1,2-TRICHLOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1-DICHLOROETHANE	ug/L	1.9	2.3	ND@0.5	ND@0.5	20	7.9
1,1-DICHLOROETHENE	ug/L	0.3 J	0.2 J	ND@0.5	ND@0.5	0.5	0.4 J
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	0.3 J	ND@0.5
1,2-DICHLOROETHANE (EDC)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CHLOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CHLOROFORM (TRICHLOROMETHANE)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHENE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	1.4	0.9
DICHLORODIFLUOROMETHANE (FREON 12)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
METHYLENE CHLORIDE (DICHLOROMETHANE)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TETRACHLOROETHENE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	0.3 J	0.3 J
TRICHLOROETHENE	ug/L	0.5	0.6	0.8	0.2 J	7.5	6.8
TRICHLOROFLUOROMETHANE (FREON 11)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
VINYL CHLORIDE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	0.2 J	ND@0.5

**Groundwater Analytical Chemistry Data**

**Owego, New York**

January 1, 2016 - December 31, 2016

Sample Location	127	127	128	129	129	132
Sample Description	GW MON WELL					
Sample Date	01/11/2016	07/19/2016	01/12/2016	01/12/2016	07/19/2016	01/12/2016
Laboratory Sample I.D.	8206937	8485869	8208418	8206956	8485875	8206962
Sample Comment Codes	P	P	P	P	P	P

Parameter	Units
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**Indicator Parameters**

PH	SU	6.56	6.74	6.25	8.24	8.55	7.06
SPECIFIC CONDUCTANCE	umhos/cm	5410	4200	5800	21110	1730	344
TEMPERATURE	C	12.1	15.2	13.1	6.8	23.1	12.9
TURBIDITY	NTU	1	3.4	0.43	0.88	1.23	0.51

**Volatile Organics**

1,1,1-TRICHLOROETHANE	ug/L	70	68	2300	ND@0.5	0.3 J	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/L	ND@0.5	ND@0.5	140	ND@0.5	ND@0.5	ND@0.5
1,1,2-TRICHLOROETHANE	ug/L	ND@0.5	ND@0.5	12	ND@0.5	ND@0.5	ND@0.5
1,1-DICHLOROETHANE	ug/L	3.8	3.9	330	ND@0.5	ND@0.5	ND@0.5
1,1-DICHLOROETHENE	ug/L	5.4	7	1100	ND@0.5	ND@0.5	ND@0.5
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/L	ND@0.5	ND@0.5	2.3 J	ND@0.5	ND@0.5	ND@0.5
1,2-DICHLOROETHANE (EDC)	ug/L	ND@0.5	ND@0.5	4.1 J	ND@0.5	ND@0.5	ND@0.5
CHLOROETHANE	ug/L	ND@0.5	ND@0.5	ND@5.0	ND@0.5	ND@0.5	ND@0.5
CHLOROFORM (TRICHLOROMETHANE)	ug/L	0.1 J	0.1 J	3.3 J	ND@0.5	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHENE	ug/L	1.4	1.8	770	ND@0.5	ND@0.5	ND@0.5
DICHLORODIFLUOROMETHANE (FREON 12)	ug/L	ND@0.5	ND@0.5	ND@5.0	ND@0.5	ND@0.5	ND@0.5
METHYLENE CHLORIDE (DICHLOROMETHANE)	ug/L	ND@0.5	ND@0.5	ND@5.0	ND@0.5	ND@0.5	ND@0.5
TETRACHLOROETHENE	ug/L	0.4 J	0.3 J	7.6	ND@0.5	ND@0.5	ND@0.5
TRICHLOROETHENE	ug/L	91	110	560	ND@0.5	ND@0.5	ND@0.5
TRICHLOROFLUOROMETHANE (FREON 11)	ug/L	ND@0.5	ND@0.5	ND@5.0	ND@0.5	ND@0.5	ND@0.5
VINYL CHLORIDE	ug/L	ND@0.5	ND@0.5	14	ND@0.5	ND@0.5	ND@0.5

**Groundwater Analytical Chemistry Data**

**Owego, New York**

January 1, 2016 - December 31, 2016

Sample Location	133	133	134	134	140R	140R
Sample Description	GW MON WELL					
Sample Date	05/19/2016	10/25/2016	01/12/2016	07/19/2016	01/13/2016	05/18/2016
Laboratory Sample I.D.	8393235	8665547	8206961	8485873	8208437	8390011
Sample Comment Codes	P	P	P	P	P	P

Parameter	Units
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**Indicator Parameters**

PH	SU	6.57	6.2	7.54	7.63	6.29	6.23
SPECIFIC CONDUCTANCE	umhos/cm	9540	8900	403	454	2040	1810
TEMPERATURE	C	14.5	13.3	18	18.4	11.3	15.1
TURBIDITY	NTU	2.58	0.39	0.57	1.49	0.67	2.97

**Volatile Organics**

1,1,1-TRICHLOROETHANE	ug/L	110	76	ND@0.5	ND@0.5	200	190
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/L	3.6	2.1	ND@0.5	ND@0.5	26	24
1,1,2-TRICHLOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@2.5	ND@2.5
1,1-DICHLOROETHANE	ug/L	91	88	0.1 J	0.1 J	800	760
1,1-DICHLOROETHENE	ug/L	20	16	ND@0.5	ND@0.5	56	54
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/L	1.6	1.4	ND@0.5	ND@0.5	10	10
1,2-DICHLOROETHANE (EDC)	ug/L	0.3 J	0.3 J	ND@0.5	ND@0.5	ND@2.5	ND@2.5
CHLOROETHANE	ug/L	0.2 J	0.2 J	ND@0.5	ND@0.5	3.5	3.2
CHLOROFORM (TRICHLOROMETHANE)	ug/L	0.1 J	0.1 J	ND@0.5	ND@0.5	ND@2.5	ND@2.5
CIS-1,2-DICHLOROETHENE	ug/L	0.2 J	0.1 J	ND@0.5	ND@0.5	23	23
DICHLORODIFLUOROMETHANE (FREON 12)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@2.5	ND@2.5
METHYLENE CHLORIDE (DICHLOROMETHANE)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@2.5	ND@2.5
TETRACHLOROETHENE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@2.5	ND@2.5
TRICHLOROETHENE	ug/L	3.2	2.5	0.2 J	ND@0.5	4.4	4.6
TRICHLOROFLUOROMETHANE (FREON 11)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@2.5	ND@2.5
VINYL CHLORIDE	ug/L	0.1 J	0.1 J	ND@0.5	ND@0.5	8	7.9

**Groundwater Analytical Chemistry Data**

**Owego, New York**

January 1, 2016 - December 31, 2016

Sample Location	146	146	146	148	148	149
Sample Description	GW MON WELL					
Sample Date	01/14/2016	05/18/2016	07/19/2016	05/26/2016	10/25/2016	05/26/2016
Laboratory Sample I.D.	8209497	8390018	8485852	8402149	8665560	8402147
Sample Comment Codes	P	P	P	P	P	P

Parameter	Units
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**Indicator Parameters**

PH	SU	6.92	6.56	6.68	6.19	6.27	7.1
SPECIFIC CONDUCTANCE	umhos/cm	2280	2990	3020	980	790	1110
TEMPERATURE	C	8.3	12.1	15	12.6	13.6	12
TURBIDITY	NTU	0.38	8.62	1.72	1.89	0.62	4.05

**Volatile Organics**

1,1,1-TRICHLOROETHANE	ug/L	0.7	0.2 J	0.2 J	140	170	2.8
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	2.6	2 J	ND@0.5
1,1,2-TRICHLOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	1	1 J	ND@0.5
1,1-DICHLOROETHANE	ug/L	2.4	0.6	0.8	1.8	1.7 J	14
1,1-DICHLOROETHENE	ug/L	0.2 J	ND@0.5	ND@0.5	18	11	3.4
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@2.5	ND@0.5
1,2-DICHLOROETHANE (EDC)	ug/L	ND@0.5	ND@0.5	ND@0.5	0.1 J	ND@2.5	ND@0.5
CHLOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@2.5	ND@0.5
CHLOROFORM (TRICHLOROMETHANE)	ug/L	ND@0.5	ND@0.5	ND@0.5	0.2 J	ND@2.5	ND@0.5
CIS-1,2-DICHLOROETHENE	ug/L	ND@0.5	ND@0.5	ND@0.5	0.7	0.6 J	14
DICHLORODIFLUOROMETHANE (FREON 12)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@2.5	ND@0.5
METHYLENE CHLORIDE (DICHLOROMETHANE)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@2.5	ND@0.5
TETRACHLOROETHENE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@2.5	ND@0.5
TRICHLOROETHENE	ug/L	0.2 J	ND@0.5	ND@0.5	2.9	2.5 J	18
TRICHLOROFLUOROMETHANE (FREON 11)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@2.5	ND@0.5
VINYL CHLORIDE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@2.5	ND@0.5

**Groundwater Analytical Chemistry Data**

**Owego, New York**

January 1, 2016 - December 31, 2016

Sample Location	149	157	157	158	160	160
Sample Description	GW MON WELL					
Sample Date	10/25/2016	01/13/2016	07/19/2016	05/23/2016	05/26/2016	10/26/2016
Laboratory Sample I.D.	8665562	8208435	8485846	8400036	8402141	8665576
Sample Comment Codes	P	P	P	P	P	P

Parameter	Units
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**Indicator Parameters**

PH	SU	6.73	6	6.56	6.83	7.31	7.51
SPECIFIC CONDUCTANCE	umhos/cm	1040	749	1740	240	573	537
TEMPERATURE	C	12.3	7.2	13	11.3	11.7	13.1
TURBIDITY	NTU	0.56	0.56	2.66	2.52	1.49	0.78

**Volatile Organics**

1,1,1-TRICHLOROETHANE	ug/L	5	0.6	1.2	0.1 J	27	53
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@1	ND@1.0
1,1,2-TRICHLOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@1	ND@1.0
1,1-DICHLOROETHANE	ug/L	21	ND@0.5	0.2 J	ND@0.5	2.2	5.3
1,1-DICHLOROETHENE	ug/L	6.9	ND@0.5	ND@0.5	ND@0.5	8	16
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@1	ND@1.0
1,2-DICHLOROETHANE (EDC)	ug/L	0.1 J	ND@0.5	ND@0.5	ND@0.5	ND@1	ND@1.0
CHLOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@1	ND@1.0
CHLOROFORM (TRICHLOROMETHANE)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@1	ND@1.0
CIS-1,2-DICHLOROETHENE	ug/L	24	ND@0.5	ND@0.5	ND@0.5	15	33
DICHLORODIFLUOROMETHANE (FREON 12)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@1	ND@1.0
METHYLENE CHLORIDE (DICHLOROMETHANE)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@1	ND@1.0
TETRACHLOROETHENE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@1	0.2 J
TRICHLOROETHENE	ug/L	22	0.3 J	0.8	ND@0.5	120	210
TRICHLOROFLUOROMETHANE (FREON 11)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@1	ND@1.0
VINYL CHLORIDE	ug/L	0.2 J	ND@0.5	ND@0.5	ND@0.5	ND@1	ND@1.0

**Groundwater Analytical Chemistry Data**

**Owego, New York**

January 1, 2016 - December 31, 2016

Sample Location	162	162	163	165	165	166
Sample Description	GW MON WELL					
Sample Date	05/23/2016	10/25/2016	05/23/2016	05/23/2016	10/26/2016	05/23/2016
Laboratory Sample I.D.	8400033	8665568	8400034	8400027	8665574	8400029
Sample Comment Codes	P	P	P	P	P	P

Parameter	Units
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**Indicator Parameters**

PH	SU	7.49	7.09	6.72	6.66	6.68	7.23
SPECIFIC CONDUCTANCE	umhos/cm	553	430	426	311	403	573
TEMPERATURE	C	12	15.5	9.6	11.5	10.9	11.8
TURBIDITY	NTU	3.87	0.74	5.47	1.49	0.55	1.72

**Volatile Organics**

1,1,1-TRICHLOROETHANE	ug/L	8.8	18	ND@0.5	23	48	0.2 J
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/L	ND@0.5	0.2 J	ND@0.5	0.2 J	0.4 J	0.5
1,1,2-TRICHLOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@1.0	ND@0.5
1,1-DICHLOROETHANE	ug/L	0.7	1.4	ND@0.5	2.9	5.7	1.6
1,1-DICHLOROETHENE	ug/L	2.7	5.5	ND@0.5	12	16	0.2 J
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@1.0	1.4
1,2-DICHLOROETHANE (EDC)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@1.0	0.1 J
CHLOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@1.0	ND@0.5
CHLOROFORM (TRICHLOROMETHANE)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@1.0	ND@0.5
CIS-1,2-DICHLOROETHENE	ug/L	5.1	12	ND@0.5	20	26	7.5
DICHLORODIFLUOROMETHANE (FREON 12)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@1.0	ND@0.5
METHYLENE CHLORIDE (DICHLOROMETHANE)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@1.0	ND@0.5
TETRACHLOROETHENE	ug/L	0.2 J	0.3 J	ND@0.5	0.1 J	ND@1.0	ND@0.5
TRICHLOROETHENE	ug/L	54	85	ND@0.5	130	210	1.2
TRICHLOROFLUOROMETHANE (FREON 11)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@1.0	ND@0.5
VINYL CHLORIDE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@1.0	0.9

**Groundwater Analytical Chemistry Data**

**Owego, New York**

January 1, 2016 - December 31, 2016

Sample Location	166	167	167	178	178	179
Sample Description	GW MON WELL					
Sample Date	10/26/2016	05/23/2016	10/26/2016	05/23/2016	10/26/2016	05/23/2016
Laboratory Sample I.D.	8665570	8400030	8665571	8400015	8665582	8400014
Sample Comment Codes	P	P	P	P	P	P

Parameter	Units
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**Indicator Parameters**

PH	SU	7.08	6.17	6.03	6.7	7.01	6.92
SPECIFIC CONDUCTANCE	umhos/cm	496	346	305	2540	2230	480
TEMPERATURE	C	10.1	10.4	11.4	11.6	13	10.8
TURBIDITY	NTU	1.14	1.43	0.51	2.48	0.7	3.63

**Volatile Organics**

1,1,1-TRICHLOROETHANE	ug/L	0.1 J	ND@0.5	ND@0.5	24	26	18
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/L	0.5 J	ND@0.5	ND@0.5	0.6	0.5 J	2.7
1,1,2-TRICHLOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1-DICHLOROETHANE	ug/L	1.7	ND@0.5	ND@0.5	17	18	2.6
1,1-DICHLOROETHENE	ug/L	0.2 J	ND@0.5	ND@0.5	5.1	3.6	6.2
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/L	1.4	ND@0.5	ND@0.5	0.2 J	0.2 J	ND@0.5
1,2-DICHLOROETHANE (EDC)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CHLOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CHLOROFORM (TRICHLOROMETHANE)	ug/L	ND@0.5	ND@0.5	ND@0.5	0.2 J	0.2 J	0.1 J
CIS-1,2-DICHLOROETHENE	ug/L	7.7	ND@0.5	ND@0.5	7.4	6.2	10
DICHLORODIFLUOROMETHANE (FREON 12)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
METHYLENE CHLORIDE (DICHLOROMETHANE)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TETRACHLOROETHENE	ug/L	ND@0.5	ND@0.5	ND@0.5	0.4 J	0.2 J	0.1 J
TRICHLOROETHENE	ug/L	1.2	4	4.1	69	68	53
TRICHLOROFLUOROMETHANE (FREON 11)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
VINYL CHLORIDE	ug/L	0.8	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5

**Groundwater Analytical Chemistry Data**

**Owego, New York**

January 1, 2016 - December 31, 2016

Sample Location	179	181	183	183	185	185
Sample Description	GW MON WELL					
Sample Date	10/26/2016	05/26/2016	05/26/2016	10/25/2016	05/19/2016	10/27/2016
Laboratory Sample I.D.	8665588	8402152	8402151	8665563	8393216	8671288
Sample Comment Codes	P	P	P	P	P	P

Parameter	Units
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**Indicator Parameters**

PH	SU	7.4	6.4	6.67	6.5	7.02	6.95
SPECIFIC CONDUCTANCE	umhos/cm	387	810	680	730	1030	920
TEMPERATURE	C	10.2	13.2	12.1	11.4	11	10.5
TURBIDITY	NTU	0.36	2.15	1.99	0.7	7.04	2.16

**Volatile Organics**

1,1,1-TRICHLOROETHANE	ug/L	15	3.2	10	8.4	2	2.6
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/L	27	ND@0.5	ND@0.5	ND@0.5	1.6	4
1,1,2-TRICHLOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1-DICHLOROETHANE	ug/L	3.7	0.4 J	1	1.6	0.6	1.8
1,1-DICHLOROETHENE	ug/L	5	0.2 J	0.8	0.5 J	0.2 J	0.4 J
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/L	3.6	ND@0.5	ND@0.5	ND@0.5	ND@0.5	1
1,2-DICHLOROETHANE (EDC)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	0.2 J
CHLOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CHLOROFORM (TRICHLOROMETHANE)	ug/L	0.2 J	ND@0.5	1.7	1.2	ND@0.5	0.2 J
CIS-1,2-DICHLOROETHENE	ug/L	32	ND@0.5	45	66	2.3	3.8
DICHLORODIFLUOROMETHANE (FREON 12)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
METHYLENE CHLORIDE (DICHLOROMETHANE)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TETRACHLOROETHENE	ug/L	0.1 J	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TRICHLOROETHENE	ug/L	74	0.7	170	130	22	37
TRICHLOROFLUOROMETHANE (FREON 11)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
VINYL CHLORIDE	ug/L	1.8	ND@0.5	0.3 J	0.2 J	ND@0.5	ND@0.5

**Groundwater Analytical Chemistry Data**

**Owego, New York**

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Sample Location	186	186	194	194	306	308
Sample Description	GW MON WELL					
Sample Date	05/19/2016	10/27/2016	05/19/2016	10/27/2016	05/19/2016	05/19/2016
Laboratory Sample I.D.	8393213	8671287	8393217	8671289	8393218	8393234
Sample Comment Codes					P	

Parameter	Units
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**Indicator Parameters**

PH	SU	6.87	6.68	6.82	7.2	7.52	6.61
SPECIFIC CONDUCTANCE	umhos/cm	1840	1490	1010	890	1360	2570
TEMPERATURE	C	12	11.3	11.4	11.6	10.5	12.7
TURBIDITY	NTU	31.2	1.41	108	41	14.6	1.94

**Volatile Organics**

1,1,1-TRICHLOROETHANE	ug/L	9.5	5.5	3.4	2.3	ND@0.5	53
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/L	20	13	ND@0.5	ND@0.5	ND@0.5	1.3
1,1,2-TRICHLOROETHANE	ug/L	ND@0.5	ND@1.0	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1-DICHLOROETHANE	ug/L	5.6	3.9	21	17	ND@0.5	32
1,1-DICHLOROETHENE	ug/L	1.2	0.7 J	4.4	3.5	ND@0.5	6
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/L	2	1.3	ND@0.5	ND@0.5	ND@0.5	0.5 J
1,2-DICHLOROETHANE (EDC)	ug/L	ND@0.5	ND@1.0	ND@0.5	ND@0.5	ND@0.5	0.1 J
CHLOROETHANE	ug/L	ND@0.5	ND@1.0	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CHLOROFORM (TRICHLOROMETHANE)	ug/L	0.3 J	0.3 J	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHENE	ug/L	10	7	ND@0.5	ND@0.5	ND@0.5	ND@0.5
DICHLORODIFLUOROMETHANE (FREON 12)	ug/L	ND@0.5	ND@1.0	ND@0.5	ND@0.5	0.4 J	ND@0.5
METHYLENE CHLORIDE (DICHLOROMETHANE)	ug/L	ND@0.5	ND@1.0	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TETRACHLOROETHENE	ug/L	0.2 J	ND@1.0	ND@0.5	ND@0.5	0.1 J	ND@0.5
TRICHLOROETHENE	ug/L	110	100	0.3 J	ND@0.5	0.1 J	0.3 J
TRICHLOROFLUOROMETHANE (FREON 11)	ug/L	ND@0.5	ND@1.0	ND@0.5	ND@0.5	ND@0.5	ND@0.5
VINYL CHLORIDE	ug/L	ND@0.5	ND@1.0	ND@0.5	ND@0.5	ND@0.5	ND@0.5

**Groundwater Analytical Chemistry Data**

**Owego, New York**

January 1, 2016 - December 31, 2016

Sample Location	308	309	309	313	314	316
Sample Description	GW MON WELL					
Sample Date	10/25/2016	05/19/2016	10/25/2016	05/19/2016	05/23/2016	05/23/2016
Laboratory Sample I.D.	8665546	8393236	8665548	8393237	8400024	8400028
Sample Comment Codes	P	P	P	P	P	P

Parameter	Units
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**Indicator Parameters**

PH	SU	6.09	5.78	5.89	6.65	7.63	7.58
SPECIFIC CONDUCTANCE	umhos/cm	2360	7810	9230	1580	301	494
TEMPERATURE	C	13	12.9	12.6	13.3	12	12.7
TURBIDITY	NTU	0.38	2	0.41	1.63	2.04	1.97

**Volatile Organics**

1,1,1-TRICHLOROETHANE	ug/L	78	2.4	2.5	0.2 J	0.4 J	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/L	1.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1,2-TRICHLOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1-DICHLOROETHANE	ug/L	54	ND@0.5	ND@0.5	2.2	0.5	ND@0.5
1,1-DICHLOROETHENE	ug/L	8.7	0.1 J	ND@0.5	0.5 J	0.3 J	ND@0.5
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/L	0.7	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,2-DICHLOROETHANE (EDC)	ug/L	0.2 J	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CHLOROETHANE	ug/L	0.2 J	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CHLOROFORM (TRICHLOROMETHANE)	ug/L	0.1 J	ND@0.5	0.1 J	ND@0.5	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHENE	ug/L	0.1 J	ND@0.5	ND@0.5	ND@0.5	1.3	ND@0.5
DICHLORODIFLUOROMETHANE (FREON 12)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
METHYLENE CHLORIDE (DICHLOROMETHANE)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TETRACHLOROETHENE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TRICHLOROETHENE	ug/L	0.4 J	10	10	1.8	ND@0.5	ND@0.5
TRICHLOROFLUOROMETHANE (FREON 11)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
VINYL CHLORIDE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5

**Groundwater Analytical Chemistry Data**

**Owego, New York**

January 1, 2016 - December 31, 2016

Sample Location	316	317	317	318	318	318
Sample Description	GW MON WELL					
Sample Date	10/26/2016	05/26/2016	10/26/2016	01/13/2016	05/23/2016	07/20/2016
Laboratory Sample I.D.	8665569	8402142	8665577	8208431	8400018	8485886
Sample Comment Codes	P	P	P	P	P	P

Parameter	Units
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**Indicator Parameters**

PH	SU	7.31	7.32	9.16	7.82	8.2	8.21
SPECIFIC CONDUCTANCE	umhos/cm	423	478	402	298	356	384
TEMPERATURE	C	10.2	13.7	13.2	8.9	11.5	12
TURBIDITY	NTU	0.64	1.56	0.55	0.99	1.56	4.01

**Volatile Organics**

1,1,1-TRICHLOROETHANE	ug/L	ND@0.5	10	41	ND@0.5	ND@0.5	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/L	ND@0.5	ND@0.5	ND@1.0	1.9	3.1	2.3
1,1,2-TRICHLOROETHANE	ug/L	ND@0.5	ND@0.5	ND@1.0	ND@0.5	ND@0.5	ND@0.5
1,1-DICHLOROETHANE	ug/L	ND@0.5	0.8	3.7	3.4	3.2	2.7
1,1-DICHLOROETHENE	ug/L	ND@0.5	3.3	11	0.9	0.8	0.7
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/L	ND@0.5	ND@0.5	ND@1.0	10	11	8.3
1,2-DICHLOROETHANE (EDC)	ug/L	ND@0.5	ND@0.5	ND@1.0	0.1 J	ND@0.5	ND@0.5
CHLOROETHANE	ug/L	ND@0.5	ND@0.5	ND@1.0	ND@0.5	ND@0.5	ND@0.5
CHLOROFORM (TRICHLOROMETHANE)	ug/L	ND@0.5	ND@0.5	ND@1.0	ND@0.5	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHENE	ug/L	ND@0.5	5.6	21	75	74	76
DICHLORODIFLUOROMETHANE (FREON 12)	ug/L	ND@0.5	ND@0.5	ND@1.0	0.6	ND@0.5	ND@0.5
METHYLENE CHLORIDE (DICHLOROMETHANE)	ug/L	ND@0.5	ND@0.5	ND@1.0	ND@0.5	ND@0.5	ND@0.5
TETRACHLOROETHENE	ug/L	ND@0.5	0.1 J	0.3 J	ND@0.5	ND@0.5	ND@0.5
TRICHLOROETHENE	ug/L	ND@0.5	42	160	1.2	1.2	1.1
TRICHLOROFLUOROMETHANE (FREON 11)	ug/L	ND@0.5	ND@0.5	ND@1.0	ND@0.5	ND@0.5	ND@0.5
VINYL CHLORIDE	ug/L	ND@0.5	ND@0.5	ND@1.0	0.8	0.3 J	0.3 J

**Groundwater Analytical Chemistry Data**

**Owego, New York**

January 1, 2016 - December 31, 2016

Sample Location	318	319	319	319	319	319	321
Sample Description	GW MON WELL						
Sample Date	10/26/2016	01/13/2016	05/23/2016	07/20/2016	10/26/2016	05/19/2016	
Laboratory Sample I.D.	8665585	8208433	8400021	8488644	8665586	8393233	
Sample Comment Codes	P	P	P	P	P	P	P

Parameter	Units
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**Indicator Parameters**

PH	SU	7.79	9.6	7.68	7.74	9.83	6.04
SPECIFIC CONDUCTANCE	umhos/cm	322	335	496	504	356	1490
TEMPERATURE	C	9.8	8.4	11.1	12.3	12.1	12.9
TURBIDITY	NTU	0.48	0.82	2.09	1.7	0.45	1.52

**Volatile Organics**

1,1,1-TRICHLOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	2.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/L	1.8	0.7	0.6	0.6	0.8	ND@0.5
1,1,2-TRICHLOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1-DICHLOROETHANE	ug/L	3.5	1.3	1.5	0.7	1	1.2
1,1-DICHLOROETHENE	ug/L	0.9	0.2 J	0.2 J	0.1 J	0.2 J	0.2 J
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/L	11	2.1	2.5	1.1	1.4	ND@0.5
1,2-DICHLOROETHANE (EDC)	ug/L	0.1 J	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CHLOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CHLOROFORM (TRICHLOROMETHANE)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHENE	ug/L	86	14	14	7.2	12	ND@0.5
DICHLORODIFLUOROMETHANE (FREON 12)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
METHYLENE CHLORIDE (DICHLOROMETHANE)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TETRACHLOROETHENE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TRICHLOROETHENE	ug/L	1.2	1.2	1.4	1.5	2	ND@0.5
TRICHLOROFLUOROMETHANE (FREON 11)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
VINYL CHLORIDE	ug/L	0.8	1.2	2.5	0.2 J	0.4 J	ND@0.5

**Groundwater Analytical Chemistry Data**

**Owego, New York**

January 1, 2016 - December 31, 2016

Sample Location	321	322	322	322	322	322	323
Sample Description	GW MON WELL						
Sample Date	10/25/2016	01/13/2016	05/23/2016	07/20/2016	10/26/2016	01/13/2016	
Laboratory Sample I.D.	8665545	8208432	8400019	8485887	8665584	8208434	
Sample Comment Codes	P	P	P	P	P	P	P

Parameter	Units
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**Indicator Parameters**

PH	SU	5.9	7.67	7.35	7.32	7.31	6.09
SPECIFIC CONDUCTANCE	umhos/cm	1430	370	439	436	371	249
TEMPERATURE	C	12	8.6	11.1	11.7	12.5	8.6
TURBIDITY	NTU	0.31	0.87	1.88	1.27	0.43	0.57

**Volatile Organics**

1,1,1-TRICHLOROETHANE	ug/L	2.6	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	0.2 J	0.5 J
1,1,2-TRICHLOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1-DICHLOROETHANE	ug/L	1.3	ND@0.5	ND@0.5	ND@0.5	0.2 J	1
1,1-DICHLOROETHENE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	0.2 J
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/L	ND@0.5	0.4 J	ND@0.5	0.3 J	0.8	0.8
1,2-DICHLOROETHANE (EDC)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CHLOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CHLOROFORM (TRICHLOROMETHANE)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHENE	ug/L	ND@0.5	ND@0.5	ND@0.5	0.1 J	0.2 J	1.4
DICHLORODIFLUOROMETHANE (FREON 12)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
METHYLENE CHLORIDE (DICHLOROMETHANE)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TETRACHLOROETHENE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TRICHLOROETHENE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	0.1 J	18
TRICHLOROFLUOROMETHANE (FREON 11)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
VINYL CHLORIDE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	0.5

**Groundwater Analytical Chemistry Data**

**Owego, New York**

January 1, 2016 - December 31, 2016

Sample Location	323	323	323	324	324	324
Sample Description	GW MON WELL					
Sample Date	05/23/2016	07/20/2016	10/26/2016	01/13/2016	05/18/2016	07/19/2016
Laboratory Sample I.D.	8400020	8488645	8665583	8208439	8390013	8485883
Sample Comment Codes	P	P	P	P	P	P

Parameter	Units
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**Indicator Parameters**

PH	SU	6.24	5.36	6.04	6.67	5.71	5.72
SPECIFIC CONDUCTANCE	umhos/cm	305	314	291	4770	6040	6210
TEMPERATURE	C	11.9	12.1	11	10.6	14.8	14.8
TURBIDITY	NTU	1.84	3.1	0.54	0.8	2.44	2.15

**Volatile Organics**

1,1,1-TRICHLOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	200	210	200
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/L	0.3 J	0.4 J	1.1	6.7	11	8.1
1,1,2-TRICHLOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	1.2 J	1.4 J	1.2 J
1,1-DICHLOROETHANE	ug/L	0.3 J	1.2	2.6	86	140	89
1,1-DICHLOROETHENE	ug/L	ND@0.5	0.2 J	0.6	110	110	110
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/L	0.7	0.6	1.4	ND@2.5	2.3 J	1 J
1,2-DICHLOROETHANE (EDC)	ug/L	ND@0.5	ND@0.5	ND@0.5	0.6 J	0.7 J	0.6 J
CHLOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	0.6 J	0.6 J	0.8 J
CHLOROFORM (TRICHLOROMETHANE)	ug/L	ND@0.5	ND@0.5	ND@0.5	0.5 J	0.5 J	0.6 J
CIS-1,2-DICHLOROETHENE	ug/L	0.4 J	1.4	39	48	48	50
DICHLORODIFLUOROMETHANE (FREON 12)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@2.5	ND@2.5	ND@2.5
METHYLENE CHLORIDE (DICHLOROMETHANE)	ug/L	ND@0.5	ND@0.5	ND@0.5	1.3 J	1.2 J	1.3 J
TETRACHLOROETHENE	ug/L	ND@0.5	ND@0.5	ND@0.5	1.2 J	1.6 J	1.9 J
TRICHLOROETHENE	ug/L	5.7	22	31	480	530	550
TRICHLOROFLUOROMETHANE (FREON 11)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@2.5	ND@2.5	ND@2.5
VINYL CHLORIDE	ug/L	0.7	0.4 J	0.3 J	2.9	3.5	3.9

**Groundwater Analytical Chemistry Data**

**Owego, New York**

January 1, 2016 - December 31, 2016

Sample Location	325	325	351	351	352	353
Sample Description	GW MON WELL					
Sample Date	01/13/2016	07/19/2016	05/19/2016	10/27/2016	05/19/2016	01/12/2016
Laboratory Sample I.D.	8208440	8485884	8393214	8671290	8393215	8206957
Sample Comment Codes	P	P			P	

Parameter	Units
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**Indicator Parameters**

PH	SU	6.16	5.53	7.38	7.12	7.58	8.78
SPECIFIC CONDUCTANCE	umhos/cm	4310	5820	740	544	433	960
TEMPERATURE	C	11.8	14	10.6	10.5	9.7	14.7
TURBIDITY	NTU	1.02	1.86	160	129	864	1.02

**Volatile Organics**

1,1,1-TRICHLOROETHANE	ug/L	160	130	ND@0.5	ND@0.5	ND@0.5	820
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/L	11	6.5	ND@0.5	ND@0.5	ND@0.5	ND@5.0
1,1,2-TRICHLOROETHANE	ug/L	0.9 J	1.1 J	ND@0.5	ND@0.5	ND@0.5	ND@5.0
1,1-DICHLOROETHANE	ug/L	66	65	0.1 J	ND@0.5	ND@0.5	290
1,1-DICHLOROETHENE	ug/L	79	74	ND@0.5	ND@0.5	ND@0.5	210
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/L	1.2 J	1.5 J	0.3 J	ND@0.5	ND@0.5	ND@5.0
1,2-DICHLOROETHANE (EDC)	ug/L	ND@2.5	0.7 J	ND@0.5	ND@0.5	ND@0.5	ND@5.0
CHLOROETHANE	ug/L	ND@2.5	ND@2.5	ND@0.5	ND@0.5	ND@0.5	ND@5.0
CHLOROFORM (TRICHLOROMETHANE)	ug/L	ND@2.5	0.5 J	ND@0.5	ND@0.5	ND@0.5	ND@5.0
CIS-1,2-DICHLOROETHENE	ug/L	57	48	0.2 J	0.1 J	ND@0.5	23
DICHLORODIFLUOROMETHANE (FREON 12)	ug/L	ND@2.5	ND@2.5	ND@0.5	ND@0.5	ND@0.5	ND@5.0
METHYLENE CHLORIDE (DICHLOROMETHANE)	ug/L	1.9 J	2.1 J	ND@0.5	ND@0.5	ND@0.5	ND@5.0
TETRACHLOROETHENE	ug/L	6.4	6.5	ND@0.5	ND@0.5	ND@0.5	ND@5.0
TRICHLOROETHENE	ug/L	420	380	ND@0.5	ND@0.5	ND@0.5	910
TRICHLOROFLUOROMETHANE (FREON 11)	ug/L	ND@2.5	ND@2.5	ND@0.5	ND@0.5	ND@0.5	ND@5.0
VINYL CHLORIDE	ug/L	1.4 J	2.9	0.3 J	ND@0.5	ND@0.5	ND@5.0

**Groundwater Analytical Chemistry Data**

**Owego, New York**

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Sample Location	354	355	356	357	357	357
Sample Description	GW MON WELL					
Sample Date	01/12/2016	05/19/2016	05/19/2016	01/14/2016	05/18/2016	07/19/2016
Laboratory Sample I.D.	8206958	8393224	8393225	8209498	8390015	8485849
Sample Comment Codes		P	P	P	P	P

Parameter	Units
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**Indicator Parameters**

PH	SU	7.08	7.99	7.5	7.12	7.01	7.18
SPECIFIC CONDUCTANCE	umhos/cm	107	366	171	1620	2130	2180
TEMPERATURE	C	15.2	11.9	10.8	9.8	12.4	15.8
TURBIDITY	NTU	377	1.9	2.02	0.46	60.3	1.77

**Volatile Organics**

1,1,1-TRICHLOROETHANE	ug/L	15	ND@0.5	ND@0.5	0.1 J	0.2 J	0.1 J
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1,2-TRICHLOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1-DICHLOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	1.7	2.1	1.9
1,1-DICHLOROETHENE	ug/L	1.8	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,2-DICHLOROETHANE (EDC)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CHLOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CHLOROFORM (TRICHLOROMETHANE)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHENE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
DICHLORODIFLUOROMETHANE (FREON 12)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
METHYLENE CHLORIDE (DICHLOROMETHANE)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TETRACHLOROETHENE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TRICHLOROETHENE	ug/L	3.2	0.1 J	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TRICHLOROFLUOROMETHANE (FREON 11)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
VINYL CHLORIDE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5

**Groundwater Analytical Chemistry Data**

**Owego, New York**

January 1, 2016 - December 31, 2016

Sample Location	358	361	361	362	363	364
Sample Description	GW MON WELL					
Sample Date	01/14/2016	01/14/2016	05/18/2016	05/19/2016	05/19/2016	01/13/2016
Laboratory Sample I.D.	8209499	8209500	8390019	8393221	8393223	8208421
Sample Comment Codes	P	P	P	P	P	P

Parameter	Units
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**Indicator Parameters**

PH	SU	6.52	6.7	5.92	7.58	6.22	6.92
SPECIFIC CONDUCTANCE	umhos/cm	2250	1130	1380	470	5450	1760
TEMPERATURE	C	9.3	6.7	11.9	10.3	11.4	11.3
TURBIDITY	NTU	0.52	0.38	2.62	1.82	1.78	1.42

**Volatile Organics**

1,1,1-TRICHLOROETHANE	ug/L	48	0.9	4	ND@0.5	1.1	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/L	1.3	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1,2-TRICHLOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1-DICHLOROETHANE	ug/L	19	3.4	3.1	ND@0.5	0.7	ND@0.5
1,1-DICHLOROETHENE	ug/L	5.2	0.4 J	0.6	ND@0.5	ND@0.5	ND@0.5
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/L	1	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,2-DICHLOROETHANE (EDC)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CHLOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CHLOROFORM (TRICHLOROMETHANE)	ug/L	0.2 J	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHENE	ug/L	0.3 J	0.2 J	0.7	ND@0.5	ND@0.5	ND@0.5
DICHLORODIFLUOROMETHANE (FREON 12)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
METHYLENE CHLORIDE (DICHLOROMETHANE)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TETRACHLOROETHENE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TRICHLOROETHENE	ug/L	3.6	0.5 J	1.8	ND@0.5	0.2 J	ND@0.5
TRICHLOROFLUOROMETHANE (FREON 11)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
VINYL CHLORIDE	ug/L	0.2 J	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5

**Groundwater Analytical Chemistry Data**

**Owego, New York**

January 1, 2016 - December 31, 2016

Sample Location	365	366	367	367	367	368
Sample Description	GW MON WELL					
Sample Date	01/13/2016	01/13/2016	01/13/2016	05/18/2016	07/19/2016	01/13/2016
Laboratory Sample I.D.	8208422	8208427	8208425	8390008	8485880	8208426
Sample Comment Codes	P		P	P	P	

Parameter	Units
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**Indicator Parameters**

PH	SU	6	6.56	6.24	5.76	5.69	6.26
SPECIFIC CONDUCTANCE	umhos/cm	1880	1880	1950	2240	2380	3380
TEMPERATURE	C	11.1	12.5	11	14	15.9	12.1
TURBIDITY	NTU	0.73	22.1	0.35	1.78	2.55	1.59

**Volatile Organics**

1,1,1-TRICHLOROETHANE	ug/L	ND@0.5	12	69	70	83	ND@5.0
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/L	ND@0.5	ND@0.5	2.9	3.2	3	ND@5.0
1,1,2-TRICHLOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	0.1 J	0.2 J	ND@5.0
1,1-DICHLOROETHANE	ug/L	ND@0.5	5.7	10	12	12	2.4 J
1,1-DICHLOROETHENE	ug/L	ND@0.5	2.4	21	23	23	ND@5.0
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/L	ND@0.5	0.5	1	1.2	1.2	ND@5.0
1,2-DICHLOROETHANE (EDC)	ug/L	ND@0.5	ND@0.5	0.1 J	0.1 J	ND@0.5	ND@5.0
CHLOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@5.0
CHLOROFORM (TRICHLOROMETHANE)	ug/L	ND@0.5	0.2 J	0.5	0.6	0.6	ND@5.0
CIS-1,2-DICHLOROETHENE	ug/L	0.2 J	2.6	4.1	5.1	4.9	1.5 J
DICHLORODIFLUOROMETHANE (FREON 12)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@5.0
METHYLENE CHLORIDE (DICHLOROMETHANE)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@5.0
TETRACHLOROETHENE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@5.0
TRICHLOROETHENE	ug/L	1.9	8.4	8.3	10	10	ND@5.0
TRICHLOROFLUOROMETHANE (FREON 11)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@5.0
VINYL CHLORIDE	ug/L	ND@0.5	ND@0.5	0.8	0.9	1.4	ND@5.0

**Groundwater Analytical Chemistry Data**

**Owego, New York**

January 1, 2016 - December 31, 2016

Sample Location	368	373	373	374	374	378
Sample Description	GW MON WELL					
Sample Date	07/19/2016	05/19/2016	10/25/2016	05/19/2016	10/25/2016	01/13/2016
Laboratory Sample I.D.	8485881	8393222	8665541	8393219	8665542	8208423
Sample Comment Codes	P	P	P	P	P	P

Parameter	Units
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**Indicator Parameters**

PH	SU	NA	6.75	6.2	7.01	6.98	7.12
SPECIFIC CONDUCTANCE	umhos/cm	NA	1050	1020	594	720	1800
TEMPERATURE	C	NA	10	12.1	10.3	14.1	12.4
TURBIDITY	NTU	NA	1.79	0.6	2.87	0.92	0.33

**Volatile Organics**

1,1,1-TRICHLOROETHANE	ug/L	ND@5	3.7	6.3	ND@0.5	0.1 J	730
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/L	ND@5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	77
1,1,2-TRICHLOROETHANE	ug/L	ND@5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@2.5
1,1-DICHLOROETHANE	ug/L	2.4 J	0.8	1	ND@0.5	ND@0.5	1100
1,1-DICHLOROETHENE	ug/L	ND@5	0.2 J	0.1 J	ND@0.5	ND@0.5	110
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/L	ND@5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	21
1,2-DICHLOROETHANE (EDC)	ug/L	ND@5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@2.5
CHLOROETHANE	ug/L	ND@5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	1.4 J
CHLOROFORM (TRICHLOROMETHANE)	ug/L	ND@5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	1 J
CIS-1,2-DICHLOROETHENE	ug/L	ND@5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	120
DICHLORODIFLUOROMETHANE (FREON 12)	ug/L	ND@5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@2.5
METHYLENE CHLORIDE (DICHLOROMETHANE)	ug/L	ND@5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@2.5
TETRACHLOROETHENE	ug/L	ND@5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@2.5
TRICHLOROETHENE	ug/L	ND@5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	130
TRICHLOROFLUOROMETHANE (FREON 11)	ug/L	ND@5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@2.5
VINYL CHLORIDE	ug/L	ND@5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	21

**Groundwater Analytical Chemistry Data**

**Owego, New York**

January 1, 2016 - December 31, 2016

Sample Location	378	378	379	382	383	383
Sample Description	GW MON WELL					
Sample Date	05/18/2016	07/19/2016	01/13/2016	01/13/2016	01/14/2016	07/19/2016
Laboratory Sample I.D.	8390005	8485866	8208424	8208428	8209501	8485853
Sample Comment Codes	P	P	P	P	P	P

Parameter	Units
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**Indicator Parameters**

PH	SU	6.9	7.05	6.55	6.34	6.65	6.6
SPECIFIC CONDUCTANCE	umhos/cm	1930	1950	1980	1870	2550	3130
TEMPERATURE	C	11.9	13.2	11.4	11	7.8	15.4
TURBIDITY	NTU	1.68	5.36	0.38	1.29	0.46	1.88

**Volatile Organics**

1,1,1-TRICHLOROETHANE	ug/L	670	400	6.6	ND@0.5	2.1	1.7
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/L	62	19	0.8	ND@0.5	ND@0.5	ND@0.5
1,1,2-TRICHLOROETHANE	ug/L	ND@2.5	ND@2.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1-DICHLOROETHANE	ug/L	1100	840	13	ND@0.5	0.6	0.5 J
1,1-DICHLOROETHENE	ug/L	89	63	1	ND@0.5	0.3 J	0.2 J
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/L	22	16	0.2 J	ND@0.5	ND@0.5	ND@0.5
1,2-DICHLOROETHANE (EDC)	ug/L	ND@2.5	ND@2.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CHLOROETHANE	ug/L	1.4 J	1.8 J	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CHLOROFORM (TRICHLOROMETHANE)	ug/L	ND@2.5	ND@2.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHENE	ug/L	100	86	1.1	ND@0.5	0.1 J	ND@0.5
DICHLORODIFLUOROMETHANE (FREON 12)	ug/L	ND@2.5	ND@2.5	ND@0.5	2.6	ND@0.5	ND@0.5
METHYLENE CHLORIDE (DICHLOROMETHANE)	ug/L	ND@2.5	ND@2.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TETRACHLOROETHENE	ug/L	ND@2.5	ND@2.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TRICHLOROETHENE	ug/L	110	71	0.3 J	ND@0.5	3.2	3.3
TRICHLOROFLUOROMETHANE (FREON 11)	ug/L	ND@2.5	ND@2.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
VINYL CHLORIDE	ug/L	26	35	0.4 J	ND@0.5	ND@0.5	ND@0.5

**Groundwater Analytical Chemistry Data**

**Owego, New York**

January 1, 2016 - December 31, 2016

Sample Location	386	387	392	392	393	393
Sample Description	GW MON WELL					
Sample Date	05/23/2016	05/23/2016	01/13/2016	07/19/2016	01/12/2016	05/18/2016
Laboratory Sample I.D.	8400013	8400026	8208441	8485854	8206946	8390014
Sample Comment Codes	P	P	P	P	P	P

Parameter	Units
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**Indicator Parameters**

PH	SU	6.42	7.46	6.87	6.86	7	6.52
SPECIFIC CONDUCTANCE	umhos/cm	650	303	2830	3680	2730	3100
TEMPERATURE	C	13	12.8	10.5	14.3	12.5	14
TURBIDITY	NTU	2.13	1.86	0.72	1.88	67.7	131

**Volatile Organics**

1,1,1-TRICHLOROETHANE	ug/L	17	ND@0.5	0.6	1.1	1000	770
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/L	0.4 J	ND@0.5	ND@0.5	ND@0.5	130	100
1,1,2-TRICHLOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@5.0	ND@5
1,1-DICHLOROETHANE	ug/L	21	ND@0.5	0.5 J	0.7	1200	1100
1,1-DICHLOROETHENE	ug/L	16	ND@0.5	ND@0.5	ND@0.5	120	110
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	23	21
1,2-DICHLOROETHANE (EDC)	ug/L	0.1 J	ND@0.5	ND@0.5	ND@0.5	ND@5.0	ND@5
CHLOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	1.8 J	1.4 J
CHLOROFORM (TRICHLOROMETHANE)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@5.0	ND@5
CIS-1,2-DICHLOROETHENE	ug/L	38	ND@0.5	ND@0.5	ND@0.5	140	130
DICHLORODIFLUOROMETHANE (FREON 12)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@5.0	ND@5
METHYLENE CHLORIDE (DICHLOROMETHANE)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@5.0	ND@5
TETRACHLOROETHENE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@5.0	ND@5
TRICHLOROETHENE	ug/L	130	ND@0.5	0.5 J	0.9	200	170
TRICHLOROFLUOROMETHANE (FREON 11)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@5.0	ND@5
VINYL CHLORIDE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	20	17

**Groundwater Analytical Chemistry Data**

**Owego, New York**

January 1, 2016 - December 31, 2016

Sample Location	393	393	394	394	395	395
Sample Description	GW MON WELL					
Sample Date	07/18/2016	10/27/2016	01/13/2016	07/18/2016	01/13/2016	05/18/2016
Laboratory Sample I.D.	8485839	8671291	8208442	8485840	8208438	8390012
Sample Comment Codes			P	P	P	P

Parameter	Units
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**Indicator Parameters**

PH	SU	6.51	7.04	6.51	6.41	7.07	6.88
SPECIFIC CONDUCTANCE	umhos/cm	3170	2740	2740	3710	2000	2640
TEMPERATURE	C	12.9	13.7	10.9	14.8	10.2	13.4
TURBIDITY	NTU	99.1	43.1	0.69	1.45	0.53	2.21

**Volatile Organics**

1,1,1-TRICHLOROETHANE	ug/L	850	800	ND@0.5	ND@0.5	1200	1000
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/L	110	97	ND@0.5	ND@0.5	130	120
1,1,2-TRICHLOROETHANE	ug/L	ND@5	ND@5.0	ND@0.5	ND@0.5	ND@5.0	ND@5
1,1-DICHLOROETHANE	ug/L	1000	1100	ND@0.5	ND@0.5	1300	1200
1,1-DICHLOROETHENE	ug/L	110	95	ND@0.5	ND@0.5	110	130
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/L	21	19	ND@0.5	ND@0.5	21	24
1,2-DICHLOROETHANE (EDC)	ug/L	ND@5	ND@5.0	ND@0.5	ND@0.5	ND@5.0	ND@5
CHLOROETHANE	ug/L	1.6 J	1.2 J	ND@0.5	ND@0.5	1.3 J	1.6 J
CHLOROFORM (TRICHLOROMETHANE)	ug/L	ND@5	ND@5.0	ND@0.5	ND@0.5	ND@5.0	ND@5
CIS-1,2-DICHLOROETHENE	ug/L	140	120	ND@0.5	ND@0.5	130	150
DICHLORODIFLUOROMETHANE (FREON 12)	ug/L	ND@5	ND@5.0	ND@0.5	ND@0.5	ND@5.0	ND@5
METHYLENE CHLORIDE (DICHLOROMETHANE)	ug/L	ND@5	ND@5.0	ND@0.5	ND@0.5	ND@5.0	ND@5
TETRACHLOROETHENE	ug/L	ND@5	ND@5.0	ND@0.5	ND@0.5	ND@5.0	ND@5
TRICHLOROETHENE	ug/L	200	170	0.1 J	ND@0.5	180	210
TRICHLOROFLUOROMETHANE (FREON 11)	ug/L	ND@5	ND@5.0	ND@0.5	ND@0.5	ND@5.0	ND@5
VINYL CHLORIDE	ug/L	19	14	ND@0.5	ND@0.5	16	19

**Groundwater Analytical Chemistry Data**

**Owego, New York**

January 1, 2016 - December 31, 2016

Sample Location	397	398	398	399	399	399
Sample Description	GW MON WELL					
Sample Date	01/14/2016	01/14/2016	07/18/2016	01/12/2016	05/18/2016	07/19/2016
Laboratory Sample I.D.	8208446	8209494	8485843	8206948	8390001	8485861
Sample Comment Codes	P	P	P	P	P	P

Parameter	Units
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**Indicator Parameters**

PH	SU	7.81	6.28	6.52	6.95	6.79	6.36
SPECIFIC CONDUCTANCE	umhos/cm	481	1350	1610	2280	2380	4380
TEMPERATURE	C	8	8.2	13	4.3	12.8	15.4
TURBIDITY	NTU	0.33	0.37	2.26	0.57	10.3	7.92

**Volatile Organics**

1,1,1-TRICHLOROETHANE	ug/L	ND@0.5	7.9	1	ND@0.5	ND@0.5	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/L	ND@0.5	0.4 J	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1,2-TRICHLOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1-DICHLOROETHANE	ug/L	ND@0.5	9.5	10	ND@0.5	ND@0.5	ND@0.5
1,1-DICHLOROETHENE	ug/L	ND@0.5	4.7	3.5	ND@0.5	ND@0.5	ND@0.5
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/L	ND@0.5	0.6	0.6	ND@0.5	ND@0.5	ND@0.5
1,2-DICHLOROETHANE (EDC)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CHLOROETHANE	ug/L	ND@0.5	ND@0.5	0.3 J	ND@0.5	ND@0.5	ND@0.5
CHLOROFORM (TRICHLOROMETHANE)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHENE	ug/L	ND@0.5	2.2	1.2	ND@0.5	ND@0.5	0.2 J
DICHLORODIFLUOROMETHANE (FREON 12)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
METHYLENE CHLORIDE (DICHLOROMETHANE)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TETRACHLOROETHENE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TRICHLOROETHENE	ug/L	ND@0.5	8.7	1.5	ND@0.5	ND@0.5	ND@0.5
TRICHLOROFLUOROMETHANE (FREON 11)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
VINYL CHLORIDE	ug/L	ND@0.5	0.5 J	0.2 J	ND@0.5	ND@0.5	ND@0.5

**Groundwater Analytical Chemistry Data**

**Owego, New York**

January 1, 2016 - December 31, 2016

Sample Location	399	404	404	404	404	405
Sample Description	GW MON WELL	GW EXTR WELL				
Sample Date	10/25/2016	01/14/2016	05/26/2016	07/20/2016	10/26/2016	01/14/2016
Laboratory Sample I.D.	8665554	8209512	8402145	8488651	8665590	8209513
Sample Comment Codes	P					

Parameter	Units
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**Indicator Parameters**

PH	SU	6.26	7.44	6.88	7.21	6.61	7.29
SPECIFIC CONDUCTANCE	umhos/cm	5030	1000	1290	1270	1120	750
TEMPERATURE	C	14.6	10.3	11.5	12.8	11.3	10.4
TURBIDITY	NTU	0.68	1.74	2.14	4.48	0.62	0.4

**Volatile Organics**

1,1,1-TRICHLOROETHANE	ug/L	ND@0.5	4.5	5.2	4.4	3.3	19
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/L	ND@0.5	19	29	23	16	73
1,1,2-TRICHLOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1-DICHLOROETHANE	ug/L	ND@0.5	3.8	4.4	3.6	3.3	5.9
1,1-DICHLOROETHENE	ug/L	ND@0.5	0.9	1.3	1	0.8	4.4
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/L	ND@0.5	5.9	8.3	6.1	5.1	3.4
1,2-DICHLOROETHANE (EDC)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CHLOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CHLOROFORM (TRICHLOROMETHANE)	ug/L	ND@0.5	0.6	1.7	0.8	0.5 J	0.2 J
CIS-1,2-DICHLOROETHENE	ug/L	0.2 J	29	35	30	30	17
DICHLORODIFLUOROMETHANE (FREON 12)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
METHYLENE CHLORIDE (DICHLOROMETHANE)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TETRACHLOROETHENE	ug/L	ND@0.5	0.1 J	0.1 J	0.1 J	0.1 J	0.5 J
TRICHLOROETHENE	ug/L	ND@0.5	110	140	120	110	95
TRICHLOROFLUOROMETHANE (FREON 11)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
VINYL CHLORIDE	ug/L	ND@0.5	0.3 J	0.3 J	0.4 J	0.2 J	ND@0.5

**Groundwater Analytical Chemistry Data**

**Owego, New York**

January 1, 2016 - December 31, 2016

Sample Location	405	405	405	413	413	413
Sample Description	GW EXTR WELL					
Sample Date	05/26/2016	07/20/2016	10/26/2016	01/14/2016	05/19/2016	07/20/2016
Laboratory Sample I.D.	8402146	8488652	8665591	8209509	8393242	8488648
Sample Comment Codes						

Parameter	Units
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**Indicator Parameters**

PH	SU	6.81	6.97	6.67	6.37	6.19	6.12
SPECIFIC CONDUCTANCE	umhos/cm	790	1130	1030	2450	3220	2730
TEMPERATURE	C	19.3	11	10.7	14.4	19.7	14.4
TURBIDITY	NTU	3.51	2.16	0.47	0.96	6.65	8.16

**Volatile Organics**

1,1,1-TRICHLOROETHANE	ug/L	14	20	22	42	190	41
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/L	39	59	73	4.2	26	3.4
1,1,2-TRICHLOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	0.2 J	ND@0.5
1,1-DICHLOROETHANE	ug/L	4.7	6.6	7.4	67	390	77
1,1-DICHLOROETHENE	ug/L	4	5.9	6.7	15	37	12
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/L	3	3.1	3.5	1.3	11	1.3
1,2-DICHLOROETHANE (EDC)	ug/L	ND@0.5	ND@0.5	ND@0.5	0.1 J	0.3 J	0.1 J
CHLOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	0.2 J	1	0.2 J
CHLOROFORM (TRICHLOROMETHANE)	ug/L	0.2 J	0.2 J	0.2 J	0.1 J	0.2 J	0.1 J
CIS-1,2-DICHLOROETHENE	ug/L	18	19	21	15	33	12
DICHLORODIFLUOROMETHANE (FREON 12)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
METHYLENE CHLORIDE (DICHLOROMETHANE)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TETRACHLOROETHENE	ug/L	0.4 J	0.5 J	0.5 J	0.2 J	0.7	0.2 J
TRICHLOROETHENE	ug/L	85	100	120	51	110	48
TRICHLOROFLUOROMETHANE (FREON 11)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
VINYL CHLORIDE	ug/L	ND@0.5	0.1 J	ND@0.5	1	4.2	1

**Groundwater Analytical Chemistry Data**

**Owego, New York**

January 1, 2016 - December 31, 2016

Sample Location	413	414	414	414	414	415
Sample Description	GW EXTR WELL					
Sample Date	10/27/2016	01/14/2016	05/19/2016	07/20/2016	10/27/2016	01/14/2016
Laboratory Sample I.D.	8671294	8209511	8393243	8488649	8671295	8209507
Sample Comment Codes						

Parameter	Units
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**Indicator Parameters**

PH	SU	6.55	6.24	6.34	6.3	6.46	6.62
SPECIFIC CONDUCTANCE	umhos/cm	2350	2860	3920	4050	3320	4750
TEMPERATURE	C	12.8	13.8	18.7	15	12.6	15.4
TURBIDITY	NTU	3.44	138	12.2	75	2.4	1.81

**Volatile Organics**

1,1,1-TRICHLOROETHANE	ug/L	34	250	360	350	510	1800
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/L	3.8	9	52	45	70	140
1,1,2-TRICHLOROETHANE	ug/L	ND@0.5	0.9 J	ND@2.5	0.3 J	ND@5.0	ND@50
1,1-DICHLOROETHANE	ug/L	76	160	900	870	1400	1300
1,1-DICHLOROETHENE	ug/L	12	100	60	54	73	1200
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/L	1.4	1.9 J	18	19	26	ND@50
1,2-DICHLOROETHANE (EDC)	ug/L	0.1 J	ND@2.5	ND@2.5	0.4 J	ND@5.0	ND@50
CHLOROETHANE	ug/L	0.3 J	ND@2.5	1.4 J	2	1.2 J	ND@50
CHLOROFORM (TRICHLOROMETHANE)	ug/L	ND@0.5	1 J	ND@2.5	0.2 J	ND@5.0	ND@50
CIS-1,2-DICHLOROETHENE	ug/L	12	150	56	51	78	3400
DICHLORODIFLUOROMETHANE (FREON 12)	ug/L	ND@0.5	ND@2.5	ND@2.5	ND@0.5	ND@5.0	ND@50
METHYLENE CHLORIDE (DICHLOROMETHANE)	ug/L	ND@0.5	ND@2.5	ND@2.5	ND@0.5	ND@5.0	ND@50
TETRACHLOROETHENE	ug/L	0.1 J	6.5	1.1 J	0.9	1.8 J	15 J
TRICHLOROETHENE	ug/L	38	810	190	150	270	2000
TRICHLOROFLUOROMETHANE (FREON 11)	ug/L	ND@0.5	ND@2.5	ND@2.5	ND@0.5	ND@5.0	ND@50
VINYL CHLORIDE	ug/L	0.7	1.3 J	6.6	11	8	180

**Groundwater Analytical Chemistry Data**

**Owego, New York**

January 1, 2016 - December 31, 2016

Sample Location	415	415	415	416	416	416
Sample Description	GW EXTR WELL					
Sample Date	05/18/2016	07/20/2016	10/27/2016	01/14/2016	05/19/2016	07/20/2016
Laboratory Sample I.D.	8390009	8488647	8671296	8209510	8393244	8488650
Sample Comment Codes						

Parameter	Units
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**Indicator Parameters**

PH	SU	6.36	6.55	6.71	6.67	6.36	6.55
SPECIFIC CONDUCTANCE	umhos/cm	7360	5600	440	3190	3950	4060
TEMPERATURE	C	15.4	17.7	16.4	11.7	19.3	15.7
TURBIDITY	NTU	111	6.94	119	18.7	11.6	23.8

**Volatile Organics**

1,1,1-TRICHLOROETHANE	ug/L	1300	2000	1600	350	300	320
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/L	130	160	120	46	33	37
1,1,2-TRICHLOROETHANE	ug/L	ND@50	7.2	ND@50	ND@5.0	ND@5	0.3 J
1,1-DICHLOROETHANE	ug/L	1000	1200	1300	740	730	770
1,1-DICHLOROETHENE	ug/L	1000	1400	1200	100	56	59
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/L	ND@50	10	ND@50	11	13	16
1,2-DICHLOROETHANE (EDC)	ug/L	ND@50	2.9	ND@50	ND@5.0	ND@5	0.4 J
CHLOROETHANE	ug/L	ND@50	1 J	ND@50	3.6 J	1.6 J	2.4
CHLOROFORM (TRICHLOROMETHANE)	ug/L	ND@50	1.5 J	ND@50	ND@5.0	ND@5	0.2 J
CIS-1,2-DICHLOROETHENE	ug/L	2400	3500	3100	64	51	50
DICHLORODIFLUOROMETHANE (FREON 12)	ug/L	ND@50	ND@2.5	ND@50	ND@5.0	ND@5	ND@0.5
METHYLENE CHLORIDE (DICHLOROMETHANE)	ug/L	ND@50	ND@2.5	ND@50	ND@5.0	ND@5	ND@0.5
TETRACHLOROETHENE	ug/L	12 J	14	15 J	ND@5.0	ND@5	0.7
TRICHLOROETHENE	ug/L	1600	2200	2000	110	130	130
TRICHLOROFLUOROMETHANE (FREON 11)	ug/L	ND@50	ND@2.5	ND@50	ND@5.0	ND@5	ND@0.5
VINYL CHLORIDE	ug/L	160	230	160	8	4.2 J	9.8

**Groundwater Analytical Chemistry Data**

**Owego, New York**

January 1, 2016 - December 31, 2016

Sample Location	416	521	521	521	522	522
Sample Description	GW EXTR WELL	GW MON WELL				
Sample Date	10/27/2016	01/12/2016	05/18/2016	07/19/2016	01/12/2016	05/18/2016
Laboratory Sample I.D.	8671293	8206950	8390002	8485864	8206952	8390004
Sample Comment Codes		P	P	P	P	P

Parameter	Units
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**Indicator Parameters**

PH	SU	6.57	6.75	6.58	6.67	7.24	6.57
SPECIFIC CONDUCTANCE	umhos/cm	32.3	2670	3000	2980	2540	2850
TEMPERATURE	C	12.5	7.7	12.7	20.8	5.7	11.2
TURBIDITY	NTU	10.3	0.82	1.28	4.27	0.57	1.86

**Volatile Organics**

1,1,1-TRICHLOROETHANE	ug/L	490	60	140	150	260	240
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/L	31	ND@5.0	16	13	27	31
1,1,2-TRICHLOROETHANE	ug/L	ND@5.0	ND@5.0	ND@5	ND@5	ND@10	ND@5
1,1-DICHLOROETHANE	ug/L	880	440	600	590	580	630
1,1-DICHLOROETHENE	ug/L	77	11	34	28	43	46
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/L	11	8.2	9.4	10	10	11
1,2-DICHLOROETHANE (EDC)	ug/L	ND@5.0	ND@5.0	ND@5	ND@5	ND@10	ND@5
CHLOROETHANE	ug/L	1.3 J	2.7 J	2.7 J	3.3 J	ND@10	1.2 J
CHLOROFORM (TRICHLOROMETHANE)	ug/L	ND@5.0	2.6 J	ND@5	ND@5	ND@10	ND@5
CIS-1,2-DICHLOROETHENE	ug/L	81	25	33	35	46	47
DICHLORODIFLUOROMETHANE (FREON 12)	ug/L	ND@5.0	ND@5.0	ND@5	ND@5	ND@10	ND@5
METHYLENE CHLORIDE (DICHLOROMETHANE)	ug/L	ND@5.0	ND@5.0	ND@5	ND@5	ND@10	ND@5
TETRACHLOROETHENE	ug/L	ND@5.0	ND@5.0	ND@5	ND@5	ND@10	ND@5
TRICHLOROETHENE	ug/L	110	ND@5.0	5.4	4.9 J	26	28
TRICHLOROFLUOROMETHANE (FREON 11)	ug/L	ND@5.0	ND@5.0	ND@5	ND@5	ND@10	ND@5
VINYL CHLORIDE	ug/L	4.6 J	25	20	25	10	11

**Groundwater Analytical Chemistry Data**

**Owego, New York**

January 1, 2016 - December 31, 2016

Sample Location	522	522	524	524	524	524	529
Sample Description	GW MON WELL						
Sample Date	07/19/2016	10/25/2016	01/14/2016	05/18/2016	07/19/2016	01/12/2016	
Laboratory Sample I.D.	8485865	8665557	8209502	8390017	8485850	8206951	
Sample Comment Codes	P	P	P	P	P	P	P

Parameter	Units
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**Indicator Parameters**

PH	SU	6.7	6.94	7.38	6.84	7.02	6.76
SPECIFIC CONDUCTANCE	umhos/cm	2910	2110	1680	2190	2230	1070
TEMPERATURE	C	17.1	16.1	7.2	12.5	15.9	8.7
TURBIDITY	NTU	3.05	0.73	0.51	4.51	1.48	0.76

**Volatile Organics**

1,1,1-TRICHLOROETHANE	ug/L	200	200	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/L	21	22	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1,2-TRICHLOROETHANE	ug/L	ND@5	ND@2.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1-DICHLOROETHANE	ug/L	510	560	0.2 J	ND@0.5	ND@0.5	ND@0.5
1,1-DICHLOROETHENE	ug/L	38	36	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/L	9	9.1	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,2-DICHLOROETHANE (EDC)	ug/L	ND@5	ND@2.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CHLOROETHANE	ug/L	1.6 J	1.1 J	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CHLOROFORM (TRICHLOROMETHANE)	ug/L	ND@5	ND@2.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHENE	ug/L	39	39	ND@0.5	ND@0.5	ND@0.5	ND@0.5
DICHLORODIFLUOROMETHANE (FREON 12)	ug/L	ND@5	ND@2.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
METHYLENE CHLORIDE (DICHLOROMETHANE)	ug/L	ND@5	ND@2.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TETRACHLOROETHENE	ug/L	ND@5	ND@2.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TRICHLOROETHENE	ug/L	20	20	0.2 J	ND@0.5	ND@0.5	ND@0.5
TRICHLOROFLUOROMETHANE (FREON 11)	ug/L	ND@5	ND@2.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
VINYL CHLORIDE	ug/L	12	7.6	ND@0.5	ND@0.5	ND@0.5	ND@0.5

**Groundwater Analytical Chemistry Data**

**Owego, New York**

January 1, 2016 - December 31, 2016

Sample Location	529	529	529	532	532	532
Sample Description	GW MON WELL					
Sample Date	05/18/2016	07/19/2016	10/25/2016	01/14/2016	05/18/2016	07/19/2016
Laboratory Sample I.D.	8390003	8485862	8665556	8209503	8390016	8485851
Sample Comment Codes	P	P	P	P	P	P

Parameter	Units
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**Indicator Parameters**

PH	SU	6.79	6.77	6.58	6.77	6.54	6.64
SPECIFIC CONDUCTANCE	umhos/cm	1143	1300	1270	1140	1940	2440
TEMPERATURE	C	11.9	19.6	17.9	7.7	11.3	15.2
TURBIDITY	NTU	2.83	1.5	0.8	0.38	25.3	1.61

**Volatile Organics**

1,1,1-TRICHLOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	3.6	5.7	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1,2-TRICHLOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1-DICHLOROETHANE	ug/L	ND@0.5	0.5	0.9	2.3	3.3	ND@0.5
1,1-DICHLOROETHENE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	0.3 J	ND@0.5
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,2-DICHLOROETHANE (EDC)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CHLOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CHLOROFORM (TRICHLOROMETHANE)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHENE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	0.1 J
DICHLORODIFLUOROMETHANE (FREON 12)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
METHYLENE CHLORIDE (DICHLOROMETHANE)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TETRACHLOROETHENE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TRICHLOROETHENE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TRICHLOROFLUOROMETHANE (FREON 11)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
VINYL CHLORIDE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5

**Groundwater Analytical Chemistry Data**

**Owego, New York**

January 1, 2016 - December 31, 2016

Sample Location	532	534	534	534	534	534	540
Sample Description	GW MON WELL						
Sample Date	10/25/2016	01/12/2016	05/18/2016	07/19/2016	10/25/2016	05/19/2016	
Laboratory Sample I.D.	8665564	8206947	8390000	8485860	8665555	8393229	
Sample Comment Codes	P	P	P	P	P	P	P

Parameter	Units
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**Indicator Parameters**

PH	SU	6.17	6.67	6.79	6.75	6.96	7.43
SPECIFIC CONDUCTANCE	umhos/cm	1960	2750	2380	2470	2380	820
TEMPERATURE	C	12.4	9.3	12.8	20.4	18.5	10.8
TURBIDITY	NTU	0.69	0.86	10.3	3.6	0.83	2.27

**Volatile Organics**

1,1,1-TRICHLOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1,2-TRICHLOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1-DICHLOROETHANE	ug/L	0.1 J	ND@0.5	0.1 J	0.2 J	0.2 J	ND@0.5
1,1-DICHLOROETHENE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,2-DICHLOROETHANE (EDC)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CHLOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CHLOROFORM (TRICHLOROMETHANE)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHENE	ug/L	0.2 J	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
DICHLORODIFLUOROMETHANE (FREON 12)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
METHYLENE CHLORIDE (DICHLOROMETHANE)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TETRACHLOROETHENE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TRICHLOROETHENE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TRICHLOROFLUOROMETHANE (FREON 11)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
VINYL CHLORIDE	ug/L	ND@0.5	ND@0.5	0.1 J	0.1 J	0.1 J	ND@0.5

**Groundwater Analytical Chemistry Data**

**Owego, New York**

January 1, 2016 - December 31, 2016

Sample Location	540	541	541	542	542	543
Sample Description	GW MON WELL					
Sample Date	10/26/2016	05/19/2016	10/26/2016	05/19/2016	10/26/2016	05/19/2016
Laboratory Sample I.D.	8665579	8393230	8665580	8393231	8665581	8393228
Sample Comment Codes	P	P	P	P	P	P

Parameter	Units
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**Indicator Parameters**

PH	SU	7.24	7.35	7.26	8.17	6.89	6.6
SPECIFIC CONDUCTANCE	umhos/cm	730	700	608	1370	1100	1850
TEMPERATURE	C	11	11.2	11.3	12.1	12.5	12.7
TURBIDITY	NTU	0.4	2.26	0.44	1.67	3.35	1.86

**Volatile Organics**

1,1,1-TRICHLOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	1.5
1,1,2-TRICHLOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1-DICHLOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	0.1 J
1,1-DICHLOROETHENE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	1.8
1,2-DICHLOROETHANE (EDC)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CHLOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CHLOROFORM (TRICHLOROMETHANE)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHENE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	1.3
DICHLORODIFLUOROMETHANE (FREON 12)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
METHYLENE CHLORIDE (DICHLOROMETHANE)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TETRACHLOROETHENE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TRICHLOROETHENE	ug/L	ND@0.5	1.4	1.2	ND@0.5	0.1 J	ND@0.5
TRICHLOROFLUOROMETHANE (FREON 11)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
VINYL CHLORIDE	ug/L	ND@0.5	ND@0.5	ND@0.5	1	0.8	ND@0.5

**Groundwater Analytical Chemistry Data**

**Owego, New York**

January 1, 2016 - December 31, 2016

Sample Location	543	601	601	602	602	603
Sample Description	GW MON WELL					
Sample Date	10/26/2016	01/14/2016	07/19/2016	01/13/2016	07/18/2016	01/13/2016
Laboratory Sample I.D.	8665578	8209504	8485848	8208445	8485842	8208436
Sample Comment Codes	P	P	P	P	P	P

Parameter	Units
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**Indicator Parameters**

PH	SU	6.59	6.66	6.33	7.4	5.97	6.23
SPECIFIC CONDUCTANCE	umhos/cm	1760	2570	2640	950	3340	1360
TEMPERATURE	C	11.8	6.4	18	7.3	12.9	5.8
TURBIDITY	NTU	0.45	0.64	1.46	0.35	6.06	0.35

**Volatile Organics**

1,1,1-TRICHLOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	0.8	9.8	0.3 J
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/L	1.2	ND@0.5	ND@0.5	ND@0.5	0.3 J	ND@0.5
1,1,2-TRICHLOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1-DICHLOROETHANE	ug/L	0.1 J	0.2 J	ND@0.5	0.2 J	2.6	0.5
1,1-DICHLOROETHENE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	2.2	ND@0.5
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/L	1.6	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,2-DICHLOROETHANE (EDC)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CHLOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CHLOROFORM (TRICHLOROMETHANE)	ug/L	ND@0.5	ND@0.5	ND@0.5	0.1 J	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHENE	ug/L	1.1	ND@0.5	ND@0.5	ND@0.5	1.3	ND@0.5
DICHLORODIFLUOROMETHANE (FREON 12)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
METHYLENE CHLORIDE (DICHLOROMETHANE)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TETRACHLOROETHENE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TRICHLOROETHENE	ug/L	0.1 J	0.1 J	0.1 J	1.9	18	0.6
TRICHLOROFLUOROMETHANE (FREON 11)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
VINYL CHLORIDE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5

**Groundwater Analytical Chemistry Data**

**Owego, New York**

January 1, 2016 - December 31, 2016

Sample Location	603	604	604	605	606	606
Sample Description	GW MON WELL					
Sample Date	07/19/2016	01/12/2016	07/19/2016	01/12/2016	01/12/2016	05/18/2016
Laboratory Sample I.D.	8485845	8206959	8485855	8206960	8206953	8390006
Sample Comment Codes	P	P	P	P	P	P

Parameter	Units
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**Indicator Parameters**

PH	SU	6.49	5.96	6.01	6.31	7.18	6.5
SPECIFIC CONDUCTANCE	umhos/cm	1680	3480	3850	113	428	973
TEMPERATURE	C	13.5	13.2	15.6	13.2	11.3	12.1
TURBIDITY	NTU	2.07	6.55	5.44	0.76	0.56	1.81

**Volatile Organics**

1,1,1-TRICHLOROETHANE	ug/L	0.5 J	ND@0.5	ND@0.5	0.2 J	0.2 J
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1,2-TRICHLOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1-DICHLOROETHANE	ug/L	0.7	ND@0.5	ND@0.5	0.6	0.4 J
1,1-DICHLOROETHENE	ug/L	ND@0.5	ND@0.5	ND@0.5	0.1 J	0.1 J
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,2-DICHLOROETHANE (EDC)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CHLOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CHLOROFORM (TRICHLOROMETHANE)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHENE	ug/L	ND@0.5	ND@0.5	ND@0.5	0.1 J	0.1 J
DICHLORODIFLUOROMETHANE (FREON 12)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
METHYLENE CHLORIDE (DICHLOROMETHANE)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TETRACHLOROETHENE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TRICHLOROETHENE	ug/L	1	ND@0.5	ND@0.5	0.2 J	0.1 J
TRICHLOROFLUOROMETHANE (FREON 11)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
VINYL CHLORIDE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5

**Groundwater Analytical Chemistry Data**

**Owego, New York**

January 1, 2016 - December 31, 2016

Sample Location	606	606	607	607	607	607
Sample Description	GW MON WELL					
Sample Date	07/19/2016	10/25/2016	01/12/2016	05/18/2016	07/19/2016	10/25/2016
Laboratory Sample I.D.	8485867	8665558	8206954	8390007	8485868	8665559
Sample Comment Codes	P	P	P	P	P	P

Parameter	Units
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**Indicator Parameters**

PH	SU	6.83	6.77	6.56	6.77	6.63	6.83
SPECIFIC CONDUCTANCE	umhos/cm	153	244	209	539	710	287
TEMPERATURE	C	12.8	11.7	10.3	12.6	13.3	12
TURBIDITY	NTU	3.14	0.53	0.65	1.75	20.6	0.66

**Volatile Organics**

1,1,1-TRICHLOROETHANE	ug/L	ND@0.5	ND@0.5	2.1	2.1	3.1	2.9
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1,2-TRICHLOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1-DICHLOROETHANE	ug/L	ND@0.5	0.3 J	10	9.9	16	20
1,1-DICHLOROETHENE	ug/L	ND@0.5	ND@0.5	1.4	1.6	1.9	2.1
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	0.2 J	0.3 J
1,2-DICHLOROETHANE (EDC)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CHLOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CHLOROFORM (TRICHLOROMETHANE)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHENE	ug/L	ND@0.5	ND@0.5	0.5	0.6	0.8	1
DICHLORODIFLUOROMETHANE (FREON 12)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
METHYLENE CHLORIDE (DICHLOROMETHANE)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TETRACHLOROETHENE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TRICHLOROETHENE	ug/L	ND@0.5	0.1 J	2.3	2.7	2.5	2.6
TRICHLOROFLUOROMETHANE (FREON 11)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
VINYL CHLORIDE	ug/L	ND@0.5	ND@0.5	0.8	0.7	1.3	1.1

**Groundwater Analytical Chemistry Data**

**Owego, New York**

January 1, 2016 - December 31, 2016

Sample Location	608	608	609	610	610	611
Sample Description	GW MON WELL					
Sample Date	01/14/2016	07/19/2016	01/12/2016	01/11/2016	07/19/2016	01/11/2016
Laboratory Sample I.D.	8209495	8485847	8206945	8206940	8485872	8206941
Sample Comment Codes	P	P	P	P	P	P

Parameter	Units
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**Indicator Parameters**

PH	SU	6.81	6.43	7	6.27	5.9	NA
SPECIFIC CONDUCTANCE	umhos/cm	1640	2260	2290	3070	2710	NA
TEMPERATURE	C	6.3	15.4	12.1	11.3	14.7	NA
TURBIDITY	NTU	0.47	1.51	1.21	1.46	3.14	NA

**Volatile Organics**

1,1,1-TRICHLOROETHANE	ug/L	1.3	0.6	3600	170	170	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/L	0.3 J	ND@0.5	490	7.9	7.1	ND@0.5
1,1,2-TRICHLOROETHANE	ug/L	ND@0.5	ND@0.5	ND@25	2.3 J	2.2 J	ND@0.5
1,1-DICHLOROETHANE	ug/L	9.7	6.4	2600	51	44	0.7
1,1-DICHLOROETHENE	ug/L	3	1.8	140	95	86	ND@0.5
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/L	0.6	0.4 J	60	ND@2.5	ND@2.5	ND@0.5
1,2-DICHLOROETHANE (EDC)	ug/L	ND@0.5	ND@0.5	ND@25	0.7 J	0.6 J	ND@0.5
CHLOROETHANE	ug/L	ND@0.5	ND@0.5	ND@25	ND@2.5	ND@2.5	ND@0.5
CHLOROFORM (TRICHLOROMETHANE)	ug/L	ND@0.5	ND@0.5	ND@25	0.6 J	0.6 J	ND@0.5
CIS-1,2-DICHLOROETHENE	ug/L	4.2	4	120	62	52	0.4 J
DICHLORODIFLUOROMETHANE (FREON 12)	ug/L	ND@0.5	ND@0.5	ND@25	ND@2.5	ND@2.5	ND@0.5
METHYLENE CHLORIDE (DICHLOROMETHANE)	ug/L	ND@0.5	ND@0.5	ND@25	2.4 J	2.2 J	ND@0.5
TETRACHLOROETHENE	ug/L	ND@0.5	ND@0.5	ND@25	19	21	ND@0.5
TRICHLOROETHENE	ug/L	14	12	170	270	250	0.3 J
TRICHLOROFLUOROMETHANE (FREON 11)	ug/L	ND@0.5	ND@0.5	ND@25	ND@2.5	ND@2.5	ND@0.5
VINYL CHLORIDE	ug/L	3.8	2.8	12 J	ND@2.5	ND@2.5	0.1 J

**Groundwater Analytical Chemistry Data**

**Owego, New York**

January 1, 2016 - December 31, 2016

Sample Location	611	612	612	613	613	614
Sample Description	GW MON WELL					
Sample Date	07/18/2016	01/12/2016	07/19/2016	01/12/2016	07/19/2016	05/23/2016
Laboratory Sample I.D.	8485841	8206943	8485870	8206944	8485871	8400025
Sample Comment Codes		P	P	P	P	P

Parameter	Units
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**Indicator Parameters**

PH	SU	6.15	6.33	6.64	5.16	4.96	7.28
SPECIFIC CONDUCTANCE	umhos/cm	30580	2870	1780	9550	10430	247
TEMPERATURE	C	18.2	12.6	14.1	11.5	14.7	11.6
TURBIDITY	NTU	17.7	0.67	3.48	0.89	3.97	1.74

**Volatile Organics**

1,1,1-TRICHLOROETHANE	ug/L	ND@0.5	260	240	170	150	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/L	ND@0.5	6.5	5.2	4.5	3.8	ND@0.5
1,1,2-TRICHLOROETHANE	ug/L	ND@0.5	2.2 J	2.1 J	1.4	1.3	ND@0.5
1,1-DICHLOROETHANE	ug/L	0.6	120	99	68	54	0.5 J
1,1-DICHLOROETHENE	ug/L	ND@0.5	100	91	64	52	0.1 J
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/L	ND@0.5	ND@5.0	ND@5	0.9 J	1	ND@0.5
1,2-DICHLOROETHANE (EDC)	ug/L	ND@0.5	2.1 J	2.2 J	1.1	1.1	ND@0.5
CHLOROETHANE	ug/L	ND@0.5	1.7 J	1.9 J	1.4	1.9	ND@0.5
CHLOROFORM (TRICHLOROMETHANE)	ug/L	ND@0.5	ND@5.0	ND@5	0.4 J	0.5 J	ND@0.5
CIS-1,2-DICHLOROETHENE	ug/L	0.5 J	140	120	83	66	0.9
DICHLORODIFLUOROMETHANE (FREON 12)	ug/L	ND@0.5	ND@5.0	ND@5	ND@1.0	ND@1	ND@0.5
METHYLENE CHLORIDE (DICHLOROMETHANE)	ug/L	ND@0.5	8.8	8.2	4.2	3.9	ND@0.5
TETRACHLOROETHENE	ug/L	ND@0.5	3.5 J	3.4 J	8.9	9.6	ND@0.5
TRICHLOROETHENE	ug/L	0.2 J	660	680	350	310	ND@0.5
TRICHLOROFLUOROMETHANE (FREON 11)	ug/L	ND@0.5	ND@5.0	ND@5	ND@1.0	ND@1	ND@0.5
VINYL CHLORIDE	ug/L	0.2 J	8.8	10	6.1	8.7	ND@0.5

**Groundwater Analytical Chemistry Data**

**Owego, New York**

January 1, 2016 - December 31, 2016

Sample Location	615	616	616	617	617	618
Sample Description	GW MON WELL					
Sample Date	01/13/2016	01/13/2016	07/19/2016	01/11/2016	07/19/2016	01/12/2016
Laboratory Sample I.D.	8208444	8208443	8485885	8206939	8485856	8208420
Sample Comment Codes	P	P	P	P	P	P

Parameter	Units
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**Indicator Parameters**

PH	SU	7.54	7.13	6.08	6.34	7.29	7.19
SPECIFIC CONDUCTANCE	umhos/cm	1630	601	840	539	670	425
TEMPERATURE	C	8.2	11.1	18	9.1	18.5	9
TURBIDITY	NTU	0.25	0.58	2.68	0.96	7.77	0.39

**Volatile Organics**

1,1,1-TRICHLOROETHANE	ug/L	0.1 J	0.2 J	0.4 J	0.2 J	0.2 J	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1,2-TRICHLOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1-DICHLOROETHANE	ug/L	0.8	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1-DICHLOROETHENE	ug/L	0.1 J	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,2-DICHLOROETHANE (EDC)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CHLOROETHANE	ug/L	0.1 J	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CHLOROFORM (TRICHLOROMETHANE)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHENE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
DICHLORODIFLUOROMETHANE (FREON 12)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
METHYLENE CHLORIDE (DICHLOROMETHANE)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TETRACHLOROETHENE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TRICHLOROETHENE	ug/L	ND@0.5	0.6	0.6	ND@0.5	ND@0.5	11
TRICHLOROFLUOROMETHANE (FREON 11)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
VINYL CHLORIDE	ug/L	0.3 J	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5

**Groundwater Analytical Chemistry Data**

**Owego, New York**

January 1, 2016 - December 31, 2016

Sample Location	618	619	621	621	622	622
Sample Description	GW MON WELL					
Sample Date	07/19/2016	05/26/2016	05/19/2016	10/25/2016	05/19/2016	10/25/2016
Laboratory Sample I.D.	8485857	8402153	8393238	8665549	8393239	8665550
Sample Comment Codes	P	P	P	P	P	P

Parameter	Units
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**Indicator Parameters**

PH	SU	6.38	6.75	5.93	5.84	6.58	6.54
SPECIFIC CONDUCTANCE	umhos/cm	561	3100	3660	3860	2670	2620
TEMPERATURE	C	13.6	13.1	13.7	12	12.1	12.4
TURBIDITY	NTU	19.1	2.16	1.84	0.54	3.28	0.32

**Volatile Organics**

1,1,1-TRICHLOROETHANE	ug/L	ND@0.5	320	71	73	44	55
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/L	ND@0.5	22	4.5	4.3	1.8	2.5
1,1,2-TRICHLOROETHANE	ug/L	ND@0.5	ND@5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1-DICHLOROETHANE	ug/L	ND@0.5	420	100	110	77	95
1,1-DICHLOROETHENE	ug/L	ND@0.5	78	11	10	6.4	8.6
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/L	ND@0.5	4 J	2.4	2.2	2.1	2.2
1,2-DICHLOROETHANE (EDC)	ug/L	ND@0.5	1.7 J	0.2 J	0.2 J	0.2 J	0.2 J
CHLOROETHANE	ug/L	ND@0.5	ND@5	0.2 J	0.2 J	0.2 J	0.1 J
CHLOROFORM (TRICHLOROMETHANE)	ug/L	ND@0.5	ND@5	0.1 J	0.1 J	0.1 J	0.1 J
CIS-1,2-DICHLOROETHENE	ug/L	ND@0.5	1 J	0.1 J	0.1 J	0.1 J	0.1 J
DICHLORODIFLUOROMETHANE (FREON 12)	ug/L	ND@0.5	ND@5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
METHYLENE CHLORIDE (DICHLOROMETHANE)	ug/L	ND@0.5	ND@5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TETRACHLOROETHENE	ug/L	ND@0.5	ND@5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TRICHLOROETHENE	ug/L	13	6.4	2.4	2.4	2.2	3
TRICHLOROFLUOROMETHANE (FREON 11)	ug/L	ND@0.5	ND@5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
VINYL CHLORIDE	ug/L	ND@0.5	1.3 J	ND@0.5	ND@0.5	0.2 J	ND@0.5

**Groundwater Analytical Chemistry Data**

**Owego, New York**

January 1, 2016 - December 31, 2016

Sample Location	623	624	625	625	625	625	625
Sample Description	GW MON WELL						
Sample Date	05/26/2016	05/26/2016	01/13/2016	05/19/2016	07/19/2016	10/25/2016	
Laboratory Sample I.D.	8402143	8402144	8208430	8393226	8485879	8665543	
Sample Comment Codes	P	P	P	P	P	P	P

Parameter	Units
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**Indicator Parameters**

PH	SU	6.11	6.23	7.16	7.48	7.32	7.12
SPECIFIC CONDUCTANCE	umhos/cm	2780	1650	623	840	850	810
TEMPERATURE	C	13.5	12.7	8.6	11.3	11.6	11.1
TURBIDITY	NTU	2.25	2.2	0.84	1.93	6.12	1.23

**Volatile Organics**

1,1,1-TRICHLOROETHANE	ug/L	28	42	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/L	0.6	1.4	ND@0.5	ND@0.5	0.3 J	ND@0.5
1,1,2-TRICHLOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1-DICHLOROETHANE	ug/L	27	42	2.4	2.4	2.3	2
1,1-DICHLOROETHENE	ug/L	3.3	6.6	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/L	0.7	0.8	1.4	2	5.6	3
1,2-DICHLOROETHANE (EDC)	ug/L	0.1 J	0.2 J	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CHLOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CHLOROFORM (TRICHLOROMETHANE)	ug/L	ND@0.5	0.1 J	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHENE	ug/L	ND@0.5	ND@0.5	0.3 J	0.1 J	1.1	0.1 J
DICHLORODIFLUOROMETHANE (FREON 12)	ug/L	ND@0.5	ND@0.5	0.1 J	ND@0.5	ND@0.5	ND@0.5
METHYLENE CHLORIDE (DICHLOROMETHANE)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TETRACHLOROETHENE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TRICHLOROETHENE	ug/L	1.6	2.9	0.2 J	ND@0.5	0.2 J	ND@0.5
TRICHLOROFLUOROMETHANE (FREON 11)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
VINYL CHLORIDE	ug/L	ND@0.5	ND@0.5	3.6	1.5	13	1.5

**Groundwater Analytical Chemistry Data**

**Owego, New York**

January 1, 2016 - December 31, 2016

Sample Location	626	626	627	627	628	629
Sample Description	GW MON WELL					
Sample Date	05/19/2016	10/25/2016	05/23/2016	10/26/2016	05/23/2016	05/23/2016
Laboratory Sample I.D.	8393227	8665544	8400016	8665573	8400017	8400031
Sample Comment Codes	P	P	P	P	P	P

Parameter	Units
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**Indicator Parameters**

PH	SU	6.92	6.6	6.06	5.51	6.49	7.21
SPECIFIC CONDUCTANCE	umhos/cm	790	760	351	265	120	401
TEMPERATURE	C	10	10.6	11.1	10	9.9	11.9
TURBIDITY	NTU	3.46	0.33	2.75	0.3	2.78	2.77

**Volatile Organics**

1,1,1-TRICHLOROETHANE	ug/L	ND@0.5	ND@0.5	0.4 J	0.3 J	ND@0.5	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/L	ND@0.5	ND@0.5	2.7	2.1	ND@0.5	ND@0.5
1,1,2-TRICHLOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1-DICHLOROETHANE	ug/L	ND@0.5	ND@0.5	0.3 J	0.2 J	0.3 J	ND@0.5
1,1-DICHLOROETHENE	ug/L	ND@0.5	ND@0.5	0.1 J	ND@0.5	0.1 J	ND@0.5
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/L	ND@0.5	ND@0.5	1.7	1.2	ND@0.5	ND@0.5
1,2-DICHLOROETHANE (EDC)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CHLOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CHLOROFORM (TRICHLOROMETHANE)	ug/L	0.2 J	0.2 J	1.3	1.2	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHENE	ug/L	ND@0.5	0.1 J	5.1	4.6	1.7	ND@0.5
DICHLORODIFLUOROMETHANE (FREON 12)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
METHYLENE CHLORIDE (DICHLOROMETHANE)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TETRACHLOROETHENE	ug/L	ND@0.5	ND@0.5	0.7	0.6	ND@0.5	ND@0.5
TRICHLOROETHENE	ug/L	ND@0.5	ND@0.5	27	26	0.3 J	ND@0.5
TRICHLOROFLUOROMETHANE (FREON 11)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
VINYL CHLORIDE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	0.4 J	ND@0.5

**Groundwater Analytical Chemistry Data**

**Owego, New York**

January 1, 2016 - December 31, 2016

Sample Location	630	631	631	632	632	P04
Sample Description	GW MON WELL					
Sample Date	05/23/2016	05/23/2016	10/25/2016	05/23/2016	10/26/2016	01/12/2016
Laboratory Sample I.D.	8400032	8400035	8665567	8400037	8665575	8206963
Sample Comment Codes	P	P	P	P	P	P

Parameter	Units
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**Indicator Parameters**

PH	SU	7.26	6.71	6.4	5.79	6.04	6.7
SPECIFIC CONDUCTANCE	umhos/cm	720	466	418	3450	2500	609
TEMPERATURE	C	11.8	11.8	13.4	13.2	10.8	10
TURBIDITY	NTU	5.43	2.13	1.27	2.47	0.51	0.47

**Volatile Organics**

1,1,1-TRICHLOROETHANE	ug/L	1.5	0.4 J	0.2 J	11	11	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	0.3 J	0.3 J	ND@0.5
1,1,2-TRICHLOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1-DICHLOROETHANE	ug/L	0.9	0.2 J	ND@0.5	0.4 J	0.4 J	ND@0.5
1,1-DICHLOROETHENE	ug/L	0.9	ND@0.5	ND@0.5	0.8	0.4 J	ND@0.5
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,2-DICHLOROETHANE (EDC)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CHLOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CHLOROFORM (TRICHLOROMETHANE)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHENE	ug/L	3.5	1.2	0.3 J	ND@0.5	ND@0.5	ND@0.5
DICHLORODIFLUOROMETHANE (FREON 12)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
METHYLENE CHLORIDE (DICHLOROMETHANE)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TETRACHLOROETHENE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TRICHLOROETHENE	ug/L	2.6	4.3	1.8	12	11	ND@0.5
TRICHLOROFLUOROMETHANE (FREON 11)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
VINYL CHLORIDE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5

**Groundwater Analytical Chemistry Data**

**Owego, New York**

January 1, 2016 - December 31, 2016

<b>Sample Location</b>	P08	P11
<b>Sample Description</b>	GW MON WELL	GW MON WELL
<b>Sample Date</b>	05/26/2016	05/26/2016
<b>Laboratory Sample I.D.</b>	8402154	8402155
<b>Sample Comment Codes</b>	P	P

<b>Parameter</b>	<b>Units</b>
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**Indicator Parameters**

PH	SU	7.4	7.02
SPECIFIC CONDUCTANCE	umhos/cm	2680	750
TEMPERATURE	C	15.5	12.5
TURBIDITY	NTU	1.15	1.69

**Volatile Organics**

1,1,1-TRICHLOROETHANE	ug/L	45	12
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/L	11	0.4 J
1,1,2-TRICHLOROETHANE	ug/L	ND@0.5	ND@0.5
1,1-DICHLOROETHANE	ug/L	140	10
1,1-DICHLOROETHENE	ug/L	9.9	0.8
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/L	3.2	ND@0.5
1,2-DICHLOROETHANE (EDC)	ug/L	0.1 J	ND@0.5
CHLOROETHANE	ug/L	0.5 J	ND@0.5
CHLOROFORM (TRICHLOROMETHANE)	ug/L	0.2 J	0.1 J
CIS-1,2-DICHLOROETHENE	ug/L	0.1 J	ND@0.5
DICHLORODIFLUOROMETHANE (FREON 12)	ug/L	ND@0.5	ND@0.5
METHYLENE CHLORIDE (DICHLOROMETHANE)	ug/L	ND@0.5	ND@0.5
TETRACHLOROETHENE	ug/L	ND@0.5	ND@0.5
TRICHLOROETHENE	ug/L	0.4 J	0.3 J
TRICHLOROFLUOROMETHANE (FREON 11)	ug/L	ND@0.5	ND@0.5
VINYL CHLORIDE	ug/L	0.1 J	ND@0.5

**Groundwater Analytical Chemistry Data**

**Owego, New York**

January 1, 2016 - December 31, 2016

**Reporting Conventions**

NA        Not Analyzed  
ND@X      Not Detected at Detection Limit X

**Code      Explanation**

J           Estimated value: the result is  $\geq$  the Method Detection Limit (MDL) and  $<$  the Limit of Quantitation (LOQ).  
P           Sampled with a passive diffusion bag (PDB) sampling device.

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## **APPENDIX G**

### **STATISTICAL SUMMARY OF GROUNDWATER CHEMISTRY DATA 1993 - 2016**

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**Statistical Summary of Groundwater Chemistry Data**  
**Former IBM Owego Site, 1993-2016**

Well Identifier	Statistic	Concentrations in micrograms per liter (ug/L)															
		1,1,1-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	Chloroethane	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride	Freon 113	Freon 123a	Methylene Chloride	Chloroform	Dichlorodifluoromethane (Freon 12)	Trichlorofluoromethane (Freon 11)	1,1,2-Trichloroethane	1,2-Dichloroethane
101	COUNT	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49
101	MAX	ND	7.9	1.1	0.1	ND	140	65	0.4	1.5	0.8	ND	14	ND	0.06	ND	ND
101	MEDIAN	ND	ND	ND	ND	ND	0.74	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
101	MIN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
106	COUNT	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66
106	MAX	0.41	0.55	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
106	MEDIAN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
106	MIN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
107A	COUNT	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66
107A	MAX	1.14	0.48	ND	ND	ND	0.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
107A	MEDIAN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
107A	MIN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
110	COUNT	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
110	MAX	ND	ND	ND	ND	ND	0.1	ND	0.18	ND	ND	ND	ND	ND	ND	ND	ND
110	MEDIAN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
110	MIN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
120	COUNT	52	52	52	52	52	52	52	52	52	51	52	52	52	52	52	52
120	MAX	75	4.9	12	ND	ND	3.3	0.15	ND	ND	ND	ND	ND	ND	ND	ND	ND
120	MEDIAN	15.9	0.83	0.4	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
120	MIN	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

**Statistical Summary of Groundwater Chemistry Data**

Former IBM Owego Site, 1993-2016

Well Identifier	Statistic	Concentrations in micrograms per liter (ug/L)															
		1,1,1-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	Chloroethane	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride	Freon 113	Freon 123a	Methylene Chloride	Chloroform	Dichlorodifluoromethane (Freon 12)	Trichlorofluoromethane (Freon 11)	1,1,2-Trichloroethane	1,2-Dichloroethane
124	COUNT	49	49	49	49	49	49	49	49	49	48	49	49	49	49	49	49
124	MAX	16	8	4	ND	ND	1.1	12	ND	ND	ND	19	ND	ND	ND	ND	ND
124	MEDIAN	0.34	ND	ND	ND	ND	0.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
124	MIN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
125	COUNT	64	64	64	64	64	64	64	64	63	63	64	64	64	64	64	64
125	MAX	4100	490	650	0.1	19	2600	290	3.7	50	2.3	25	ND	ND	ND	2.9	ND
125	MEDIAN	347	131	79.95	ND	0.2	322.5	56.5	ND	ND	ND	ND	ND	ND	ND	ND	ND
125	MIN	0.5	0.7	ND	ND	ND	2.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
127	COUNT	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
127	MAX	2000	300	240	0.1	2.6	2015	141.6	18	4.3	ND	230	2.3	ND	ND	0.71	ND
127	MEDIAN	70.75	5.1	7.025	ND	ND	112	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND
127	MIN	ND	ND	ND	ND	ND	28.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
128	COUNT	40	40	40	40	40	40	40	40	39	38	40	40	40	40	40	40
128	MAX	30822	11199	6903	ND	40	560	22204	564	1895	283	19000	3.3	ND	ND	160	200
128	MEDIAN	14447	5122	3122	ND	ND	ND	11319.5	ND	393	ND	ND	ND	ND	ND	ND	ND
128	MIN	180	93	190	ND	ND	ND	270	ND	ND	ND	ND	ND	ND	ND	ND	ND
129	COUNT	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49
129	MAX	18	26	8	1	ND	25	0.32	0.2	ND	ND	0.37	ND	ND	ND	ND	0.21
129	MEDIAN	0.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
129	MIN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

**Statistical Summary of Groundwater Chemistry Data**

Former IBM Owego Site, 1993-2016

Well Identifier	Statistic	Concentrations in micrograms per liter (ug/L)															
		1,1,1-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	Chloroethane	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride	Freon 113	Freon 123a	Methylene Chloride	Chloroform	Dichlorodifluoromethane (Freon 12)	Trichlorofluoromethane (Freon 11)	1,1,2-Trichloroethane	1,2-Dichloroethane
132	COUNT	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26
132	MAX	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.1	ND	ND	ND	ND
132	MEDIAN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
132	MIN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
133	COUNT	65	65	65	65	65	65	65	65	64	63	65	65	65	65	65	65
133	MAX	1106	350	56	0.4	ND	8.68	0.2	0.2	41	2.62	5.3	0.2	ND	ND	0.1	0.5
133	MEDIAN	180	95.9	13.7	ND	ND	ND	ND	ND	3.4	ND	ND	ND	ND	ND	ND	ND
133	MIN	49	26	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
134	COUNT	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
134	MAX	0.2	0.2	ND	ND	ND	0.2	ND	ND	1.9	ND	ND	0.58	0.2	ND	ND	ND
134	MEDIAN	ND	0.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
134	MIN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
140R	COUNT	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14
140R	MAX	210	830	56	4.1	ND	9	23	8.4	26	11	3.11	ND	ND	ND	ND	0.1
140R	MEDIAN	76	125	11.6	1.05	ND	4.7	3.3	1.05	8	1.9	ND	ND	ND	ND	ND	ND
140R	MIN	32.3	41.5	3.83	ND	ND	3.4	1.45	ND	ND	ND	ND	ND	ND	ND	ND	ND
146	COUNT	61	61	61	61	61	61	61	61	61	60	61	61	61	61	61	61
146	MAX	14	5.3	2.22	0.6	ND	27	1.6	ND	1.9	2.4	0.34	ND	0.43	ND	ND	ND
146	MEDIAN	5.4	1.6	0.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
146	MIN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

**Statistical Summary of Groundwater Chemistry Data**

Former IBM Owego Site, 1993-2016

Well Identifier	Statistic	Concentrations in micrograms per liter (ug/L)															
		1,1,1-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	Chloroethane	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride	Freon 113	Freon 123a	Methylene Chloride	Chloroform	Dichlorodifluoromethane (Freon 12)	Trichlorofluoromethane (Freon 11)	1,1,2-Trichloroethane	1,2-Dichloroethane
148	COUNT	50	50	50	50	50	50	50	50	50	49	50	50	50	50	50	50
148	MAX	980	8.9	190	ND	ND	4.52	0.9	ND	7	ND	ND	0.2	ND	ND	1.4	0.2
148	MEDIAN	299	ND	15.65	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
148	MIN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
149	COUNT	66	66	66	66	66	66	66	66	65	64	66	66	66	66	66	66
149	MAX	146	70	24	0.2	ND	353	85	0.4	ND	ND	0.59	ND	ND	ND	ND	0.2
149	MEDIAN	15	23	5.85	ND	ND	32	22.08	ND	ND	ND	ND	ND	ND	ND	ND	ND
149	MIN	2.05	6.6	ND	ND	ND	8.5	6.3	ND	ND	ND	ND	ND	ND	ND	ND	ND
157	COUNT	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45
157	MAX	1.6	0.7	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
157	MEDIAN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
157	MIN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
158	COUNT	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28
158	MAX	1.4	ND	ND	ND	ND	0.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
158	MEDIAN	0.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
158	MIN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
160	COUNT	65	65	65	65	65	65	65	65	64	63	65	65	65	65	65	65
160	MAX	170	17.8	42.1	ND	1.2	540	59	0.1	8.8	12	2.1	0.58	ND	ND	ND	0.2
160	MEDIAN	59	1.1	12	ND	ND	200	14	ND	ND	ND	ND	ND	ND	ND	ND	ND
160	MIN	0.34	ND	ND	ND	ND	12.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

**Statistical Summary of Groundwater Chemistry Data**

Former IBM Owego Site, 1993-2016

Well Identifier	Statistic	Concentrations in micrograms per liter (ug/L)															
		1,1,1-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	Chloroethane	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride	Freon 113	Freon 123a	Methylene Chloride	Chloroform	Dichlorodifluoromethane (Freon 12)	Trichlorofluoromethane (Freon 11)	1,1,2-Trichloroethane	1,2-Dichloroethane
162	COUNT	65	65	65	65	65	65	65	65	65	63	65	65	65	65	65	65
162	MAX	500	33	200	ND	15.7	1790	180	1	2.7	ND	7.2	1	ND	ND	0.1	0.4
162	MEDIAN	92.6	0.52	22	ND	ND	315	25.6	ND	ND	ND	ND	ND	ND	ND	ND	ND
162	MIN	ND	ND	ND	ND	ND	38	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
163	COUNT	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27
163	MAX	0.8	ND	0.2	ND	ND	5.3	0.2	ND	ND	ND	ND	ND	ND	ND	ND	ND
163	MEDIAN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
163	MIN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
165	COUNT	60	60	60	60	60	60	60	60	59	59	60	60	60	60	60	60
165	MAX	122	25	31.4	0.3	0.4	370	100	2.6	3.96	0.2	3.8	0.2	0.51	ND	ND	0.2
165	MEDIAN	50	1.1	10.5	ND	ND	165	12	ND	ND	ND	ND	ND	ND	ND	ND	ND
165	MIN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
166	COUNT	50	50	50	50	50	50	50	50	49	48	50	50	50	50	50	50
166	MAX	1.2	2.1	0.3	ND	ND	14.8	9.4	1.2	2.3	3.57	ND	ND	0.2	ND	ND	1.19
166	MEDIAN	0.515	0.79	ND	ND	ND	4.415	1.6	ND	0.69	0.57	ND	ND	ND	ND	ND	ND
166	MIN	ND	ND	ND	ND	ND	0.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
167	COUNT	52	52	52	52	52	52	52	52	51	50	52	52	52	52	52	52
167	MAX	1.5	ND	ND	ND	ND	17	ND	ND	ND	ND	ND	ND	0.33	ND	ND	ND
167	MEDIAN	ND	ND	ND	ND	ND	5.85	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
167	MIN	ND	ND	ND	ND	ND	3.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

**Statistical Summary of Groundwater Chemistry Data**

Former IBM Owego Site, 1993-2016

Well Identifier	Statistic	Concentrations in micrograms per liter (ug/L)															
		1,1,1-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	Chloroethane	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride	Freon 113	Freon 123a	Methylene Chloride	Chloroform	Dichlorodifluoromethane (Freon 12)	Trichlorofluoromethane (Freon 11)	1,1,2-Trichloroethane	1,2-Dichloroethane
178	COUNT	64	64	64	64	64	64	64	64	64	63	64	64	64	64	64	64
178	MAX	120	20	19	ND	0.6	340	18	ND	1.1	0.2	1.2	0.4	ND	ND	ND	ND
178	MEDIAN	46	13	1.65	ND	ND	150	6.95	ND	ND	ND	ND	ND	ND	ND	ND	ND
178	MIN	24	ND	ND	ND	ND	68	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
179	COUNT	80	80	80	80	80	80	80	80	80	79	80	80	80	80	80	80
179	MAX	58.6	12	10	ND	0.7	440	219	1.8	140	11	ND	0.3	5.5	1	ND	0.1
179	MEDIAN	21	1.35	4.26	ND	ND	88.25	9.75	ND	3.2	ND	ND	ND	ND	ND	ND	ND
179	MIN	8	ND	ND	ND	ND	27	1.99	ND	ND	ND	ND	ND	ND	ND	ND	ND
181	COUNT	32	32	32	32	32	32	32	32	32	31	32	32	32	32	32	32
181	MAX	22	3.8	2	0.39	ND	1.21	0.32	ND	0.41	0.66	ND	ND	ND	ND	ND	ND
181	MEDIAN	7.3	0.095	ND	ND	ND	0.405	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
181	MIN	2.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
183	COUNT	56	56	56	56	56	56	56	56	56	55	56	56	56	56	56	56
183	MAX	25	1.8	0.8	ND	0.1	710	77	0.3	0.3	ND	0.5	2.39	ND	ND	ND	ND
183	MEDIAN	10	ND	ND	ND	ND	273.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
183	MIN	ND	ND	ND	ND	ND	100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
185	COUNT	73	73	73	73	73	73	73	73	73	72	73	73	73	73	73	73
185	MAX	8.8	3.5	0.81	ND	ND	180	35.1	0.1	6.9	2.1	ND	2.2	0.7	ND	ND	0.89
185	MEDIAN	2.96	0.7	ND	ND	ND	53.8	2	ND	2.57	0.3	ND	ND	ND	ND	ND	ND
185	MIN	ND	ND	ND	ND	ND	22	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

**Statistical Summary of Groundwater Chemistry Data**

Former IBM Owego Site, 1993-2016

Well Identifier	Statistic	Concentrations in micrograms per liter (ug/L)															
		1,1,1-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	Chloroethane	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride	Freon 113	Freon 123a	Methylene Chloride	Chloroform	Dichlorodifluoromethane (Freon 12)	Trichlorofluoromethane (Freon 11)	1,1,2-Trichloroethane	1,2-Dichloroethane
186	COUNT	64	64	64	64	64	64	64	64	64	63	64	64	64	64	64	64
186	MAX	19	77	7.3	ND	0.27	351	108	0.51	128	222	1	6.2	4.44	ND	ND	0.45
186	MEDIAN	4.905	1.9	0.065	ND	ND	83.5	9.7	ND	14.65	1.3	ND	ND	ND	ND	ND	ND
186	MIN	ND	ND	ND	ND	ND	ND	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND
194	COUNT	66	66	66	66	66	66	66	66	64	63	66	66	66	66	66	66
194	MAX	100	33	22	5.6	ND	0.3	0.41	0.2	0.98	0.2	0.3	ND	ND	ND	ND	ND
194	MEDIAN	24.65	21	2.715	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
194	MIN	0.8	6.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
306	COUNT	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29
306	MAX	0.67	0.2	ND	ND	0.2	0.6	ND	ND	ND	ND	ND	ND	0.5	ND	ND	ND
306	MEDIAN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
306	MIN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
308	COUNT	65	65	65	65	65	65	65	65	63	62	65	65	65	65	65	65
308	MAX	611	198	99	0.8	ND	4.43	1.3	0.1	8.2	1.3	0.5	0.2	ND	ND	ND	0.5
308	MEDIAN	318	84	8.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
308	MIN	45	24	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
309	COUNT	59	59	59	59	59	59	59	59	59	58	59	59	59	59	59	59
309	MAX	24	15	2.5	ND	ND	19	0.13	ND	0.65	ND	0.1	0.2	1.1	ND	ND	ND
309	MEDIAN	2.7	ND	ND	ND	ND	9.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
309	MIN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

**Statistical Summary of Groundwater Chemistry Data**

Former IBM Owego Site, 1993-2016

Well Identifier	Statistic	Concentrations in micrograms per liter (ug/L)															
		1,1,1-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	Chloroethane	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride	Freon 113	Freon 123a	Methylene Chloride	Chloroform	Dichlorodifluoromethane (Freon 12)	Trichlorofluoromethane (Freon 11)	1,1,2-Trichloroethane	1,2-Dichloroethane
313	COUNT	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
313	MAX	15.5	2.7	0.93	ND	ND	51.6	ND	ND	0.33	ND	ND	0.5	ND	ND	ND	ND
313	MEDIAN	5	0.99	0.19	ND	ND	19	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
313	MIN	ND	ND	ND	ND	ND	0.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
314	COUNT	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26
314	MAX	0.77	0.57	0.3	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND
314	MEDIAN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
314	MIN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
316	COUNT	47	47	47	47	47	47	47	47	46	46	47	47	47	47	47	47
316	MAX	2.9	0.25	ND	ND	ND	0.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
316	MEDIAN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
316	MIN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
317	COUNT	79	79	79	79	79	79	79	79	77	76	79	79	79	79	79	79
317	MAX	77.2	4.9	19	ND	0.3	244	27.3	ND	0.5	ND	0.61	0.1	ND	ND	ND	ND
317	MEDIAN	21.3	0.22	4	ND	ND	75	4.3	ND	ND	ND	ND	ND	ND	ND	ND	ND
317	MIN	1.3	ND	ND	ND	ND	5.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
318	COUNT	98	98	98	98	98	98	98	98	97	96	98	98	98	98	98	98
318	MAX	3.6	7	2	ND	ND	48	90	0.8	17	37	ND	0.92	3.01	15	ND	0.22
318	MEDIAN	ND	3.46	0.61	ND	ND	16.25	12.035	0.05	5.6	11	ND	ND	ND	ND	ND	ND
318	MIN	ND	0.32	ND	ND	ND	1	0.62	ND	0.7	ND	ND	ND	ND	ND	ND	ND

**Statistical Summary of Groundwater Chemistry Data**

Former IBM Owego Site, 1993-2016

Well Identifier	Statistic	Concentrations in micrograms per liter (ug/L)															
		1,1,1-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	Chloroethane	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride	Freon 113	Freon 123a	Methylene Chloride	Chloroform	Dichlorodifluoromethane (Freon 12)	Trichlorofluoromethane (Freon 11)	1,1,2-Trichloroethane	1,2-Dichloroethane
319	COUNT	103	103	103	103	103	103	103	103	102	101	103	103	103	103	103	103
319	MAX	9.7	5.1	4.2	ND	ND	30	14	2.5	3.6	3.7	ND	0.27	0.36	2	ND	0.2
319	MEDIAN	ND	2.77	0.36	ND	ND	4.48	2.74	ND	1.255	1.4	ND	ND	ND	ND	ND	ND
319	MIN	ND	ND	ND	ND	ND	0.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
321	COUNT	66	66	66	66	66	66	66	66	64	63	66	66	66	66	66	66
321	MAX	9	3.5	0.68	ND	ND	17	0.8	ND	ND	ND	ND	ND	ND	ND	ND	ND
321	MEDIAN	2.65	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
321	MIN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
322	COUNT	103	103	103	103	103	103	103	103	103	103	103	103	103	103	103	103
322	MAX	ND	4.3	0.41	ND	0.18	0.92	13	1.05	9.7	18	ND	ND	2.6	4.5	ND	ND
322	MEDIAN	ND	1.83	ND	ND	ND	0.1	2.9	ND	3.74	5	ND	ND	ND	ND	ND	ND
322	MIN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
323	COUNT	95	95	95	95	95	95	95	95	95	94	95	95	95	95	95	95
323	MAX	0.2	5.3	1.1	ND	0.1	142	39	0.9	5.5	17.7	ND	0.3	2.14	1	ND	0.21
323	MEDIAN	ND	1.3	ND	ND	ND	30.4	1.74	ND	1.1	1.9	ND	ND	ND	ND	ND	ND
323	MIN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
324	COUNT	68	68	68	68	68	68	68	68	67	67	68	68	68	68	68	68
324	MAX	8800	6919	1400	1.5	2.1	825	215	5.8	370	127	92	1	ND	ND	1.8	0.8
324	MEDIAN	428.5	226.5	120	ND	ND	500	44	ND	15.4	ND	ND	ND	ND	ND	ND	ND
324	MIN	200	79	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

**Statistical Summary of Groundwater Chemistry Data**

Former IBM Owego Site, 1993-2016

Well Identifier	Statistic	Concentrations in micrograms per liter (ug/L)															
		1,1,1-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	Chloroethane	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride	Freon 113	Freon 123a	Methylene Chloride	Chloroform	Dichlorodifluoromethane (Freon 12)	Trichlorofluoromethane (Freon 11)	1,1,2-Trichloroethane	1,2-Dichloroethane
325	COUNT	52	52	52	52	52	52	52	52	52	51	52	52	52	52	52	52
325	MAX	1100	162	330	1	16	1400	122	4.3	19.1	1.7	15	0.6	ND	ND	1.3	0.7
325	MEDIAN	207.5	70	74.2	ND	4.55	439	37.5	ND	3.4	ND	2.1	ND	ND	ND	ND	ND
325	MIN	85.9	41.3	26.7	ND	ND	250	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
351	COUNT	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41
351	MAX	0.3	0.57	ND	ND	ND	0.2	1.1	0.68	0.89	1.9	ND	ND	0.2	ND	ND	ND
351	MEDIAN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
351	MIN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
352	COUNT	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27
352	MAX	0.2	0.1	ND	ND	ND	ND	0.1	ND	ND	ND	ND	ND	ND	ND	ND	ND
352	MEDIAN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
352	MIN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
353	COUNT	34	34	34	34	34	34	34	34	34	33	34	34	34	34	34	34
353	MAX	31000	5900	8500	ND	ND	4683	349	15	147	ND	368	2.8	ND	ND	8.4	ND
353	MEDIAN	20983.5	3168.5	2401	ND	ND	3477	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
353	MIN	ND	290	210	ND	ND	823	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
354	COUNT	26	26	26	26	26	26	26	26	26	25	26	26	26	26	26	26
354	MAX	7300	190	2000	ND	50	2900	15.6	ND	3.7	ND	14	1	ND	ND	4.9	ND
354	MEDIAN	699.5	ND	86.95	ND	ND	132	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
354	MIN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

**Statistical Summary of Groundwater Chemistry Data**

Former IBM Owego Site, 1993-2016

Well Identifier	Statistic	Concentrations in micrograms per liter (ug/L)															
		1,1,1-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	Chloroethane	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride	Freon 113	Freon 123a	Methylene Chloride	Chloroform	Dichlorodifluoromethane (Freon 12)	Trichlorofluoromethane (Freon 11)	1,1,2-Trichloroethane	1,2-Dichloroethane
355	COUNT	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25
355	MAX	ND	ND	ND	ND	ND	0.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
355	MEDIAN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
355	MIN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
356	COUNT	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25
356	MAX	ND	ND	ND	ND	ND	0.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
356	MEDIAN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
356	MIN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
357	COUNT	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62
357	MAX	0.7	4.3	0.2	ND	ND	ND	ND	0.3	0.23	ND	0.29	ND	0.62	ND	ND	ND
357	MEDIAN	ND	0.085	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
357	MIN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
358	COUNT	46	46	46	46	46	46	46	46	46	45	46	46	46	46	46	46
358	MAX	72	37	15	2	ND	35	3.36	1.1	2	3	0.27	0.2	0.33	2	ND	0.06
358	MEDIAN	13	17	5.55	ND	ND	10	0.995	ND	0.18	0.9	ND	ND	ND	ND	ND	ND
358	MIN	5.9	6.3	0.87	ND	ND	1.56	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
361	COUNT	33	33	33	33	33	33	33	33	33	32	33	33	33	33	33	33
361	MAX	6.4	7.4	0.8	0.16	ND	4.1	1.3	ND	0.2	ND	0.13	0.1	ND	ND	ND	ND
361	MEDIAN	2.1	1.23	ND	ND	ND	0.85	0.3	ND	ND	ND	ND	ND	ND	ND	ND	ND
361	MIN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

**Statistical Summary of Groundwater Chemistry Data**

Former IBM Owego Site, 1993-2016

Well Identifier	Statistic	Concentrations in micrograms per liter (ug/L)															
		1,1,1-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	Chloroethane	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride	Freon 113	Freon 123a	Methylene Chloride	Chloroform	Dichlorodifluoromethane (Freon 12)	Trichlorofluoromethane (Freon 11)	1,1,2-Trichloroethane	1,2-Dichloroethane
362	COUNT	31	31	31	31	31	31	31	31	31	30	31	31	31	31	31	31
362	MAX	0.54	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	ND
362	MEDIAN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
362	MIN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
363	COUNT	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34
363	MAX	8.6	5	1	ND	ND	0.69	ND	ND	ND	ND	ND	ND	0.84	ND	ND	ND
363	MEDIAN	1.905	0.71	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
363	MIN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
364	COUNT	33	33	33	33	33	33	33	33	33	32	33	33	33	33	33	33
364	MAX	ND	ND	ND	ND	ND	ND	0.1	ND	ND	ND	ND	ND	ND	ND	ND	ND
364	MEDIAN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
364	MIN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
365	COUNT	37	37	37	37	37	37	37	37	37	36	37	37	37	37	37	37
365	MAX	ND	ND	ND	ND	ND	14	0.51	ND	ND	ND	ND	ND	ND	ND	ND	ND
365	MEDIAN	ND	ND	ND	ND	ND	4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
365	MIN	ND	ND	ND	ND	ND	0.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
366	COUNT	34	34	34	34	34	34	34	34	32	31	34	34	34	34	34	34
366	MAX	180	39	37	ND	0.92	138	16	0.54	6.8	4	1.6	1	ND	0.38	ND	ND
366	MEDIAN	28.45	8.7	5.6	ND	ND	22.2	2.6	ND	0.14	0.92	ND	ND	ND	ND	ND	ND
366	MIN	ND	3.61	ND	ND	ND	5.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

**Statistical Summary of Groundwater Chemistry Data**

Former IBM Owego Site, 1993-2016

Well Identifier	Statistic	Concentrations in micrograms per liter (ug/L)															
		1,1,1-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	Chloroethane	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride	Freon 113	Freon 123a	Methylene Chloride	Chloroform	Dichlorodifluoromethane (Freon 12)	Trichlorofluoromethane (Freon 11)	1,1,2-Trichloroethane	1,2-Dichloroethane
367	COUNT	52	52	52	52	52	52	52	52	52	50	52	52	52	52	52	52
367	MAX	144	12	24	0.1	ND	10	5.1	1.4	4.4	1.4	1.46	0.6	2.5	ND	0.2	0.1
367	MEDIAN	81.5	4.64	9.1	ND	ND	2.7	ND	ND	2.05	ND	ND	ND	ND	ND	ND	ND
367	MIN	52	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
368	COUNT	46	46	46	46	46	46	46	46	45	45	46	46	46	46	46	46
368	MAX	31	53	15	4.6	0.2	71	32.2	7.5	0.6	2.1	0.45	0.81	0.84	ND	ND	ND
368	MEDIAN	ND	12	0.9	0.1	ND	2.325	8.815	1	ND	0.4	ND	ND	ND	ND	ND	ND
368	MIN	ND	2.25	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
373	COUNT	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58
373	MAX	22	3	0.77	ND	ND	0.9	0.1	ND	0.16	ND	ND	ND	ND	ND	ND	ND
373	MEDIAN	5.3	0.985	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
373	MIN	3.25	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
374	COUNT	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47
374	MAX	0.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7	ND	ND	ND
374	MEDIAN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
374	MIN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
378	COUNT	91	91	91	91	91	91	91	91	90	89	91	91	91	91	91	91
378	MAX	989	1200	110	2.3	ND	150	120	36	83	30	1.4	1	0.62	25	0.1	0.1
378	MEDIAN	35.5	54.8	2.52	ND	ND	1.1	2.36	ND	0.61	ND	ND	ND	ND	ND	ND	ND
378	MIN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

**Statistical Summary of Groundwater Chemistry Data**

Former IBM Owego Site, 1993-2016

Well Identifier	Statistic	Concentrations in micrograms per liter (ug/L)															
		1,1,1-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	Chloroethane	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride	Freon 113	Freon 123a	Methylene Chloride	Chloroform	Dichlorodifluoromethane (Freon 12)	Trichlorofluoromethane (Freon 11)	1,1,2-Trichloroethane	1,2-Dichloroethane
379	COUNT	35	35	35	35	35	35	35	35	35	34	35	35	35	35	35	35
379	MAX	117	32	1.8	ND	ND	0.3	2.97	1.1	2.8	2.8	ND	ND	ND	ND	ND	ND
379	MEDIAN	ND	ND	ND	ND	ND	ND	0.4	ND	ND	ND	ND	ND	ND	ND	ND	ND
379	MIN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
382	COUNT	31	31	31	31	31	31	31	31	31	30	31	31	31	31	31	31
382	MAX	0.7	ND	ND	ND	ND	0.3	ND	ND	ND	ND	ND	ND	3.4	ND	ND	ND
382	MEDIAN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.75	ND	ND	ND
382	MIN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
383	COUNT	61	61	61	61	61	61	61	61	61	60	61	61	61	61	61	61
383	MAX	15	4.4	3	0.4	ND	23	1.1	ND	0.53	0.2	0.22	ND	0.69	ND	ND	ND
383	MEDIAN	6.3	1.9	0.9	ND	ND	6.1	0.19	ND	ND	ND	ND	ND	ND	ND	ND	ND
383	MIN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
386	COUNT	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29
386	MAX	87	29	19	ND	0.1	207	269	0.8	6.9	4.08	ND	0.1	ND	ND	ND	0.2
386	MEDIAN	32	16	7	ND	ND	120	35.1	ND	0.3	ND	ND	ND	ND	ND	ND	ND
386	MIN	14.9	6	ND	ND	ND	69.9	14	ND	ND	ND	ND	ND	ND	ND	ND	ND
387	COUNT	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
387	MAX	ND	ND	ND	ND	ND	0.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
387	MEDIAN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
387	MIN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

**Statistical Summary of Groundwater Chemistry Data**

Former IBM Owego Site, 1993-2016

Well Identifier	Statistic	Concentrations in micrograms per liter (ug/L)															
		1,1,1-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	Chloroethane	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride	Freon 113	Freon 123a	Methylene Chloride	Chloroform	Dichlorodifluoromethane (Freon 12)	Trichlorofluoromethane (Freon 11)	1,1,2-Trichloroethane	1,2-Dichloroethane
392	COUNT	65	65	65	65	65	65	65	65	65	64	65	65	65	65	65	65
392	MAX	138	48	47	1.9	ND	280	25	1.7	4.5	3.2	1.2	0.6	ND	ND	0.4	ND
392	MEDIAN	24.1	6	4.4	ND	ND	47.6	2.39	ND	ND	ND	ND	ND	ND	ND	ND	ND
392	MIN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
393	COUNT	95	95	95	95	95	95	95	95	95	94	95	95	95	95	95	95
393	MAX	1857	1300	120	2.7	ND	200	140	20	130	26	38.9	ND	0.2	ND	ND	0.2
393	MEDIAN	419	644	43.1	ND	ND	56	45	ND	31.3	2.42	ND	ND	ND	ND	ND	ND
393	MIN	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
394	COUNT	63	63	63	63	63	63	63	63	63	61	63	63	63	63	63	63
394	MAX	13	6.5	1.3	ND	ND	2.3	0.33	ND	0.31	ND	ND	ND	0.45	ND	ND	ND
394	MEDIAN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
394	MIN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
395	COUNT	35	35	35	35	35	35	35	35	35	34	35	35	35	35	35	35
395	MAX	9514	10002	1665	2.7	ND	1307	507	20	314	42	683	ND	ND	ND	ND	ND
395	MEDIAN	2200	1500	110	ND	ND	183	116	ND	130	ND	ND	ND	ND	ND	ND	ND
395	MIN	970	770	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
397	COUNT	25	25	25	25	25	25	25	25	25	24	25	25	25	25	25	25
397	MAX	ND	ND	ND	ND	ND	0.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
397	MEDIAN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
397	MIN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

**Statistical Summary of Groundwater Chemistry Data**

Former IBM Owego Site, 1993-2016

Well Identifier	Statistic	Concentrations in micrograms per liter (ug/L)															
		1,1,1-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	Chloroethane	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride	Freon 113	Freon 123a	Methylene Chloride	Chloroform	Dichlorodifluoromethane (Freon 12)	Trichlorofluoromethane (Freon 11)	1,1,2-Trichloroethane	1,2-Dichloroethane
398	COUNT	62	62	62	62	62	62	62	62	61	62	62	62	62	62	62	62
398	MAX	73	13	12	0.3	ND	17.6	2.2	0.6	1.6	0.99	0.55	0.14	0.12	ND	ND	ND
398	MEDIAN	13.3	7	3.95	ND	ND	3.95	0.4	ND	0.3	0.42	ND	ND	ND	ND	ND	ND
398	MIN	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
399	COUNT	97	97	97	97	97	97	97	97	97	96	97	97	97	97	97	97
399	MAX	35	12	11	1.2	ND	14	1.1	0.3	1	1	0.51	ND	ND	ND	ND	0.2
399	MEDIAN	ND	ND	ND	ND	ND	0.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
399	MIN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
404	COUNT	104	104	104	104	104	104	104	104	102	101	104	104	104	104	104	104
404	MAX	24	13	3.5	1.5	0.2	440	35	0.7	96	24	ND	41	16.5	13.6	ND	0.1
404	MEDIAN	7.75	4.84	ND	ND	ND	232.5	20	ND	46.5	9.3	ND	2.3	ND	ND	ND	ND
404	MIN	ND	ND	ND	ND	ND	98	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
405	COUNT	105	105	105	105	105	105	105	105	105	103	105	105	105	105	105	105
405	MAX	50	8.2	24	ND	0.8	395	50	0.3	220	14	87	17	9.8	ND	ND	0.1
405	MEDIAN	21.3	4.1	3.1	ND	ND	140	23	ND	73	3.3	ND	ND	ND	ND	ND	ND
405	MIN	ND	ND	ND	ND	ND	56	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
413	COUNT	107	107	107	107	107	107	107	107	105	104	107	107	107	107	107	107
413	MAX	1385	1521	69.6	11	1.7	220	101	5.1	86.7	22	22	9285	55	ND	19	2.2
413	MEDIAN	64.7	74	8.3	ND	ND	23	3.6	ND	1.9	0.125	ND	1.9	ND	ND	ND	ND
413	MIN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

**Statistical Summary of Groundwater Chemistry Data**

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Well Identifier	Statistic	Concentrations in micrograms per liter (ug/L)															
		1,1,1-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	Chloroethane	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride	Freon 113	Freon 123a	Methylene Chloride	Chloroform	Dichlorodifluoromethane (Freon 12)	Trichlorofluoromethane (Freon 11)	1,1,2-Trichloroethane	1,2-Dichloroethane
414	COUNT	104	104	104	104	104	104	104	104	103	102	104	104	104	104	104	104
414	MAX	12724	14000	520	11	6.5	810	580	38	911	330	28	2394	1.1	36	2.3	2.3
414	MEDIAN	1742	1150	120	ND	ND	265	84.5	ND	70	4.05	ND	ND	ND	ND	ND	ND
414	MIN	4.57	1.98	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
415	COUNT	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
415	MAX	4300	4200	2500	1	65	2700	10000	510	490	42	50	1.5	ND	ND	32	2.9
415	MEDIAN	2300	1700	1400	ND	32	1500	3800	230	200	ND	ND	ND	ND	ND	10	ND
415	MIN	1300	1000	790	ND	12	700	2400	140	110	ND	ND	ND	ND	ND	ND	ND
416	COUNT	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
416	MAX	490	880	110	4.2	0.7	130	81	9.8	49	16	ND	0.2	ND	ND	0.3	0.4
416	MEDIAN	350	770	77	2.4	ND	110	64	8	37	12	ND	ND	ND	ND	ND	ND
416	MIN	300	730	56	1.3	ND	110	50	4.2	31	11	ND	ND	ND	ND	ND	ND
521	COUNT	73	73	73	73	73	73	73	73	71	70	73	73	73	73	73	73
521	MAX	150	600	34	51	ND	5.6	35	25	16	13	0.3	2.6	0.33	ND	ND	ND
521	MEDIAN	11.6	34	1.96	0.59	ND	ND	0.67	0.72	ND	ND	ND	ND	ND	ND	ND	ND
521	MIN	ND	0.18	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
522	COUNT	103	103	103	103	103	103	103	103	103	102	103	103	103	103	103	103
522	MAX	381	630	48	1.6	ND	30	47	18	36	12	0.4	ND	0.3	11	ND	ND
522	MEDIAN	56.8	130	6.5	ND	ND	0.34	6.5	0.4	1.58	ND	ND	ND	ND	ND	ND	ND
522	MIN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

**Statistical Summary of Groundwater Chemistry Data**

Former IBM Owego Site, 1993-2016

Well Identifier	Statistic	Concentrations in micrograms per liter (ug/L)															
		1,1,1-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	Chloroethane	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride	Freon 113	Freon 123a	Methylene Chloride	Chloroform	Dichlorodifluoromethane (Freon 12)	Trichlorofluoromethane (Freon 11)	1,1,2-Trichloroethane	1,2-Dichloroethane
524	COUNT	56	56	56	56	56	56	56	56	56	55	56	56	56	56	56	56
524	MAX	ND	0.2	ND	ND	ND	0.2	ND	ND	0.58	ND	ND	ND	ND	ND	ND	ND
524	MEDIAN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
524	MIN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
529	COUNT	91	91	91	91	91	91	91	91	91	90	91	91	91	91	91	91
529	MAX	1.06	4.9	0.36	0.43	ND	0.2	ND	0.1	ND	ND	ND	ND	ND	ND	ND	ND
529	MEDIAN	ND	0.06	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
529	MIN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
532	COUNT	96	96	96	96	96	96	96	96	96	96	96	96	96	96	96	96
532	MAX	15	16.7	3.56	0.12	ND	8	1.04	0.3	0.46	0.96	0.23	ND	ND	ND	ND	ND
532	MEDIAN	1	0.75	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
532	MIN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
534	COUNT	92	92	92	92	92	92	92	92	89	89	92	92	92	92	92	92
534	MAX	1.2	1.6	0.09	0.2	ND	2	1	0.22	ND	ND	0.37	ND	0.85	ND	ND	ND
534	MEDIAN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
534	MIN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
540	COUNT	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43
540	MAX	ND	ND	ND	ND	ND	0.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
540	MEDIAN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
540	MIN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

**Statistical Summary of Groundwater Chemistry Data**

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Well Identifier	Statistic	Concentrations in micrograms per liter (ug/L)															
		1,1,1-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	Chloroethane	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride	Freon 113	Freon 123a	Methylene Chloride	Chloroform	Dichlorodifluoromethane (Freon 12)	Trichlorofluoromethane (Freon 11)	1,1,2-Trichloroethane	1,2-Dichloroethane
541	COUNT	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44
541	MAX	0.1	ND	ND	ND	ND	2.7	0.3	0.1	ND	ND	ND	ND	ND	ND	ND	ND
541	MEDIAN	ND	ND	ND	ND	ND	1.205	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
541	MIN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
542	COUNT	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47
542	MAX	ND	ND	ND	ND	ND	0.2	ND	1.2	1.8	ND	ND	ND	ND	ND	ND	ND
542	MEDIAN	ND	ND	ND	ND	ND	ND	ND	0.4	ND	ND	ND	ND	ND	ND	ND	ND
542	MIN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
543	COUNT	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55
543	MAX	1.8	1.36	1.8	ND	ND	8.5	17.4	ND	5.9	10	ND	0.94	1.18	1.8	ND	ND
543	MEDIAN	ND	0.2	ND	ND	ND	ND	3.93	ND	1.44	2.5	ND	ND	ND	ND	ND	ND
543	MIN	ND	ND	ND	ND	ND	ND	0.9	ND	0.3	ND	ND	ND	ND	ND	ND	ND
601	COUNT	62	62	62	62	62	62	62	62	58	58	62	62	62	62	62	62
601	MAX	2.1	6.3	0.42	0.54	ND	0.86	0.15	ND	ND	0.57	0.4	ND	0.94	ND	ND	ND
601	MEDIAN	ND	1.35	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
601	MIN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
602	COUNT	65	65	65	65	65	65	65	65	59	59	65	65	65	65	65	65
602	MAX	41	9.5	7.8	0.16	ND	90	6.1	ND	2.6	0.67	1.3	0.45	0.67	ND	ND	ND
602	MEDIAN	16	4.4	2.2	ND	ND	35	3.5	ND	ND	ND	ND	ND	ND	ND	ND	ND
602	MIN	0.2	ND	ND	ND	ND	0.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

**Statistical Summary of Groundwater Chemistry Data**

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Well Identifier	Statistic	Concentrations in micrograms per liter (ug/L)															
		1,1,1-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	Chloroethane	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride	Freon 113	Freon 123a	Methylene Chloride	Chloroform	Dichlorodifluoromethane (Freon 12)	Trichlorofluoromethane (Freon 11)	1,1,2-Trichloroethane	1,2-Dichloroethane
603	COUNT	60	60	60	60	60	60	60	60	57	57	60	60	60	60	60	60
603	MAX	3.9	3.8	0.17	ND	ND	2.7	0.32	ND	ND	ND	ND	ND	ND	ND	ND	ND
603	MEDIAN	0.49	0.635	ND	ND	ND	0.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
603	MIN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
604	COUNT	50	50	50	50	50	50	50	50	47	47	50	50	50	50	50	50
604	MAX	ND	ND	ND	ND	ND	0.2	ND	ND	ND	ND	0.11	0.14	ND	ND	ND	ND
604	MEDIAN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
604	MIN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
605	COUNT	44	44	44	44	44	44	44	44	41	41	44	44	44	44	44	44
605	MAX	0.1	ND	ND	ND	ND	1.8	0.1	ND	ND	ND	ND	ND	0.63	ND	ND	ND
605	MEDIAN	ND	ND	ND	ND	ND	0.305	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
605	MIN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
606	COUNT	105	105	105	105	105	105	105	105	97	97	105	105	105	105	105	105
606	MAX	50	23	22	0.35	ND	35	9.5	3.4	2.2	1.1	0.48	0.3	ND	ND	0.2	ND
606	MEDIAN	13.1	1.6	2.37	ND	ND	3.2	0.68	0.21	ND	ND	ND	ND	ND	ND	ND	ND
606	MIN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
607	COUNT	103	103	103	103	103	103	103	103	98	98	103	103	103	103	103	103
607	MAX	71	22	21	0.2	ND	46	9.9	1.5	2.3	1	0.48	0.3	ND	ND	1.3	ND
607	MEDIAN	10	2.6	4.1	ND	ND	8.5	0.6	0.33	0.2	ND	ND	ND	ND	ND	ND	ND
607	MIN	ND	ND	0.4	ND	ND	1.24	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

**Statistical Summary of Groundwater Chemistry Data**

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Well Identifier	Statistic	Concentrations in micrograms per liter (ug/L)															
		1,1,1-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	Chloroethane	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride	Freon 113	Freon 123a	Methylene Chloride	Chloroform	Dichlorodifluoromethane (Freon 12)	Trichlorofluoromethane (Freon 11)	1,1,2-Trichloroethane	1,2-Dichloroethane
608	COUNT	66	66	66	66	66	66	66	66	60	60	66	66	66	66	66	66
608	MAX	220	21	44	2.4	ND	140	7.32	6.6	3.2	1.46	0.51	0.2	ND	ND	ND	ND
608	MEDIAN	14	8.5	5	ND	ND	28.05	1.6	0.215	0.35	0.5	ND	ND	ND	ND	ND	ND
608	MIN	0.6	2	1.8	ND	ND	4.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
609	COUNT	44	44	44	44	44	44	44	44	38	38	44	44	44	44	44	44
609	MAX	25949	4664	319	2.3	28	480	356	16	1144	150	ND	ND	166	ND	0.65	16
609	MEDIAN	8456.5	2804	116	ND	ND	130	84.45	ND	485	ND	ND	ND	ND	ND	ND	ND
609	MIN	226	186	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
610	COUNT	56	56	56	56	56	56	56	56	48	48	56	56	54	54	56	56
610	MAX	1200	182	250	0.3	68	1300	139.6	0.7	29	2	16	2.2	ND	ND	9.3	1.5
610	MEDIAN	224.5	68	100	ND	21	396	49.5	ND	9	ND	2.4	ND	ND	ND	ND	ND
610	MIN	58.7	12.1	22.5	ND	ND	95.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
611	COUNT	50	50	50	50	50	50	50	50	47	47	50	50	50	50	50	50
611	MAX	9.9	23	1.3	0.12	0.26	6.5	5.1	0.4	ND	ND	0.14	ND	0.45	ND	ND	ND
611	MEDIAN	ND	2.705	ND	ND	ND	0.7	0.39	ND	ND	ND	ND	ND	ND	ND	ND	ND
611	MIN	ND	0.59	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
612	COUNT	65	65	65	65	65	65	65	65	57	57	65	65	65	65	65	65
612	MAX	2900	350	710	150	4.4	2700	310	120	33	2.4	86	2.1	ND	ND	4	3.3
612	MEDIAN	714	160	177	ND	ND	956	140	ND	ND	ND	11	ND	ND	ND	ND	ND
612	MIN	4.66	ND	1.5	ND	ND	9.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

**Statistical Summary of Groundwater Chemistry Data**

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Well Identifier	Statistic	Concentrations in micrograms per liter (ug/L)															
		1,1,1-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	Chloroethane	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride	Freon 113	Freon 123a	Methylene Chloride	Chloroform	Dichlorodifluoromethane (Freon 12)	Trichlorofluoromethane (Freon 11)	1,1,2-Trichloroethane	1,2-Dichloroethane
613	COUNT	68	68	68	68	68	68	68	68	60	60	68	68	68	68	68	68
613	MAX	2200	250	480	18	25	2200	220	29	39	2	44	1.2	32	ND	6.2	2
613	MEDIAN	673.5	140	156	ND	7.55	703.5	120	ND	4.55	ND	5.65	ND	ND	ND	ND	ND
613	MIN	101	54	51	ND	ND	259	66	ND	ND	ND	ND	ND	ND	ND	ND	ND
614	COUNT	33	33	33	33	33	33	33	33	32	32	33	33	33	33	33	33
614	MAX	0.85	0.95	0.2	ND	ND	0.54	1.3	ND	ND	ND	ND	ND	0.34	ND	ND	ND
614	MEDIAN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
614	MIN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
615	COUNT	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24
615	MAX	3.9	1.4	0.3	0.1	ND	0.2	ND	0.3	ND	ND	ND	ND	ND	ND	ND	ND
615	MEDIAN	0.39	0.35	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
615	MIN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
616	COUNT	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
616	MAX	0.54	0.1	ND	ND	ND	18	ND	ND	1.7	ND	ND	ND	1.5	ND	ND	ND
616	MEDIAN	0.05	ND	ND	ND	ND	0.355	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
616	MIN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
617	COUNT	49	49	49	49	49	49	49	49	48	48	49	49	49	49	49	49
617	MAX	4.5	0.45	0.13	ND	6.6	2.97	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
617	MEDIAN	0.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
617	MIN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

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Former IBM Owego Site, 1993-2016

Well Identifier	Statistic	Concentrations in micrograms per liter (ug/L)															
		1,1,1-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	Chloroethane	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride	Freon 113	Freon 123a	Methylene Chloride	Chloroform	Dichlorodifluoromethane (Freon 12)	Trichlorofluoromethane (Freon 11)	1,1,2-Trichloroethane	1,2-Dichloroethane
618	COUNT	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
618	MAX	0.2	6.1	0.2	ND	ND	25	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
618	MEDIAN	ND	ND	ND	ND	ND	14	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
618	MIN	ND	ND	ND	ND	ND	3.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
619	COUNT	29	29	29	29	29	29	29	29	28	28	29	29	29	29	29	29
619	MAX	9489	4040	623	3.3	ND	9.1	3	4.4	1659	17	193	0.1	68	ND	0.1	6.5
619	MEDIAN	1386	871	110	ND	ND	ND	ND	ND	58.05	ND	ND	ND	ND	ND	ND	ND
619	MIN	320	380	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
620	COUNT	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13
620	MAX	76	40	ND	ND	ND	ND	ND	ND	0.26	0.28	ND	ND	ND	ND	ND	ND
620	MEDIAN	3.85	0.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
620	MIN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
621	COUNT	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49
621	MAX	452	242	36	0.3	ND	296	81	ND	42	42	ND	7.5	ND	0.79	ND	0.3
621	MEDIAN	100	103	8.6	ND	ND	2.1	ND	ND	3.2	ND	ND	ND	ND	ND	ND	ND
621	MIN	5.4	5.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
622	COUNT	59	59	59	59	59	59	59	59	58	58	59	59	59	59	59	59
622	MAX	438	242	35	0.3	ND	4.7	0.2	0.2	13	2.2	ND	0.3	ND	ND	ND	1
622	MEDIAN	119	95	6.9	ND	ND	1.7	ND	ND	1.67	ND	ND	ND	ND	ND	ND	ND
622	MIN	18	42.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

**Statistical Summary of Groundwater Chemistry Data**

Former IBM Owego Site, 1993-2016

Well Identifier	Statistic	Concentrations in micrograms per liter (ug/L)															
		1,1,1-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	Chloroethane	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride	Freon 113	Freon 123a	Methylene Chloride	Chloroform	Dichlorodifluoromethane (Freon 12)	Trichlorofluoromethane (Freon 11)	1,1,2-Trichloroethane	1,2-Dichloroethane
623	COUNT	27	27	27	27	27	27	27	27	26	26	27	27	27	27	27	27
623	MAX	180	78	12	ND	ND	2.57	ND	0.97	2.9	1.3	ND	0.2	2.4	ND	ND	0.1
623	MEDIAN	65.6	36.4	2.5	ND	ND	1.4	ND	ND	0.6	ND	ND	ND	ND	ND	ND	ND
623	MIN	26	18	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
624	COUNT	28	28	28	28	28	28	28	28	26	26	28	28	28	28	28	28
624	MAX	273	94	19	0.1	0.52	4.8	ND	ND	5.7	2.7	ND	0.8	3.3	ND	ND	0.2
624	MEDIAN	97.5	54	5.05	ND	ND	2.925	ND	ND	1.15	0.1	ND	ND	ND	ND	ND	ND
624	MIN	23	19	2.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
625	COUNT	110	110	110	110	110	110	110	110	109	108	110	110	110	110	110	110
625	MAX	75.2	7.8	3.53	ND	0.17	72	194	63	22	28	4.86	0.73	13.8	11	ND	0.1
625	MEDIAN	ND	3.5	ND	ND	ND	9.1	34.9	0.285	8.1	13.6	ND	ND	0.795	ND	ND	ND
625	MIN	ND	ND	ND	ND	ND	ND	0.1	ND	ND	0.24	ND	ND	ND	ND	ND	ND
626	COUNT	46	46	46	46	46	46	46	46	46	46	46	46	46	46	46	46
626	MAX	1.1	0.2	ND	ND	ND	2.6	0.8	ND	ND	0.7	ND	0.2	ND	ND	ND	ND
626	MEDIAN	ND	ND	ND	ND	ND	0.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
626	MIN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
627	COUNT	51	51	51	51	51	51	51	51	49	49	51	51	51	51	51	51
627	MAX	2.3	7.8	1.9	ND	1.23	68	16	0.5	15	28	ND	2.6	0.23	ND	ND	2.9
627	MEDIAN	0.3	0.48	ND	ND	0.6	32.5	7.6	ND	3.15	2.6	ND	1	ND	ND	ND	ND
627	MIN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

**Statistical Summary of Groundwater Chemistry Data**

Former IBM Owego Site, 1993-2016

Well Identifier	Statistic	Concentrations in micrograms per liter (ug/L)															
		1,1,1-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	Chloroethane	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride	Freon 113	Freon 123a	Methylene Chloride	Chloroform	Dichlorodifluoromethane (Freon 12)	Trichlorofluoromethane (Freon 11)	1,1,2-Trichloroethane	1,2-Dichloroethane
628	COUNT	35	35	35	35	35	35	35	35	33	33	35	35	35	35	35	35
628	MAX	1.4	1.24	0.63	ND	ND	6.9	9.2	0.6	0.51	1.58	0.13	ND	0.45	ND	ND	ND
628	MEDIAN	ND	ND	ND	ND	ND	0.99	1.9	ND	ND	ND	ND	ND	ND	ND	ND	ND
628	MIN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
629	COUNT	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24
629	MAX	ND	ND	ND	ND	ND	0.28	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
629	MEDIAN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
629	MIN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
630	COUNT	34	34	34	34	34	34	34	34	33	33	34	34	34	34	34	34
630	MAX	15	1.2	4.2	ND	ND	32	11.3	ND	ND	ND	0.48	ND	ND	ND	ND	ND
630	MEDIAN	6.5	0.635	1.215	ND	ND	13.15	2.9	ND	ND	ND	ND	ND	ND	ND	ND	ND
630	MIN	0.8	ND	ND	ND	ND	1.4	0.65	ND	ND	ND	ND	ND	ND	ND	ND	ND
631	COUNT	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42
631	MAX	1.1	0.26	ND	ND	ND	7.2	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND
631	MEDIAN	0.205	ND	ND	ND	ND	2.6	0.55	ND	ND	ND	ND	ND	ND	ND	ND	ND
631	MIN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
632	COUNT	45	45	45	45	45	45	45	45	43	43	45	45	45	45	45	45
632	MAX	119	2.4	5	ND	ND	51.7	0.2	ND	0.79	ND	0.9	0.2	ND	ND	ND	ND
632	MEDIAN	33.1	0.5	0.6	ND	ND	27	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
632	MIN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

**Statistical Summary of Groundwater Chemistry Data**

Former IBM Owego Site, 1993-2016

Well Identifier	Statistic	Concentrations in micrograms per liter (ug/L)															
		1,1,1-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	Chloroethane	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride	Freon 113	Freon 123a	Methylene Chloride	Chloroform	Dichlorodifluoromethane (Freon 12)	Trichlorofluoromethane (Freon 11)	1,1,2-Trichloroethane	1,2-Dichloroethane
P04	COUNT	26	26	26	26	26	26	26	26	26	24	26	26	26	26	26	26
P04	MAX	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
P04	MEDIAN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
P04	MIN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
P08	COUNT	34	34	34	34	34	34	34	34	32	32	34	34	34	34	34	34
P08	MAX	12000	2200	2300	1.5	0.6	0.9	0.6	0.2	530	30	ND	1	0.1	6.7	ND	1
P08	MEDIAN	631.5	732	15	ND	ND	ND	ND	ND	17.6	1.2	ND	ND	ND	ND	ND	ND
P08	MIN	31	96	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
P11	COUNT	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29
P11	MAX	3500	900	97	0.5	0.55	0.65	ND	ND	53	8.8	1.3	0.5	28	ND	ND	0.1
P11	MEDIAN	77.6	101	2.14	ND	ND	ND	ND	ND	0.4	ND	ND	ND	ND	ND	ND	ND
P11	MIN	12	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

**Key:**

COUNT = Sample Count (including duplicate samples)

MAX = Maximum Concentration (micrograms per liter)

MEDIAN = Median Concentration (micrograms per liter)

MIN = Minimum Concentration (micrograms per liter)

ND = Not Detected

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## **APPENDIX H**

### **QUALITY CONTROL ANALYTICAL CHEMISTRY DATA FOR ENVIRONMENTAL BLANKS January 1, 2016 – December 31, 2016**

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**Quality Control Analytical Data for Environmental Blanks**

Owego, New York

January 1, 2016 - December 31, 2016

Sample Location	EQ RINSE BLK	Sample Description	EQ RINSE BLK	Sample Date	EQ RINSE BLK	Laboratory Sample I.D.	EQ RINSE BLK	Sample Location	EQ RINSE BLK	Sample Description	EQ RINSE BLK	Sample Date	EQ RINSE BLK	Laboratory Sample I.D.	EQ RINSE BLK				
WTR LVL IND	WTR LVL IND	01/11/2016	8206942	WTR LVL IND	WTR LVL IND	01/12/2016	8206949	WTR LVL IND	WTR LVL IND	01/13/2016	8208429	01/14/2016	8209505	WTR LVL IND	WTR LVL IND	05/18/2016	8389999	05/19/2016	8393220

Parameter	Units	EQ RINSE BLK J	Parameter	Units	EQ RINSE BLK J										
1,1,1-TRICHLOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	1,1,1-TRICHLOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	0.1 J
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	1,1,2-TRICHLOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1,2-TRICHLOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	1,1-DICHLOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1-DICHLOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	1,1-DICHLOROETHENE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	0.2 J
1,1-DICHLOROETHENE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	1,2-DICHLOROETHANE (EDC)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CHLOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	CHLOROFORM (TRICHLOROMETHANE)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CHLOROFORM (TRICHLOROMETHANE)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	CIS-1,2-DICHLOROETHENE	ug/L	0.2 J	0.2 J	0.2 J	0.2 J	ND@0.5	0.2 J
CIS-1,2-DICHLOROETHENE	ug/L	0.2 J	DICHLORODIFLUOROMETHANE (FREON 12)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5					
DICHLORODIFLUOROMETHANE (FREON 12)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	METHYLENE CHLORIDE (DICHLOROMETHANE)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	0.4 J	ND@0.5
METHYLENE CHLORIDE (DICHLOROMETHANE)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	TETRACHLOROETHENE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TETRACHLOROETHENE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	TRICHLOROETHENE	ug/L	1	1	0.9	0.8	ND@0.5	0.8
TRICHLOROETHENE	ug/L	1	1	0.9	0.8	ND@0.5	ND@0.5	TRICHLOROFLUOROMETHANE (FREON 11)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TRICHLOROFLUOROMETHANE (FREON 11)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	VINYL CHLORIDE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5

**Quality Control Analytical Data for Environmental Blanks**

Owego, New York

January 1, 2016 - December 31, 2016

<b>Sample Location</b>	EQ RINSE BLK	<b>Sample Description</b>	EQ RINSE BLK	<b>Sample Date</b>	EQ RINSE BLK	<b>Laboratory Sample I.D.</b>	EQ RINSE BLK	<b>Sample Location</b>	EQ RINSE BLK
WTR LVL IND	WTR LVL IND	05/23/2016	05/26/2016	07/18/2016	07/19/2016	8400022	8402150	8485844	8485859

<b>Parameter</b>	<b>Units</b>								
1,1,1-TRICHLOROETHANE	ug/L	0.1 J	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	0.1 J
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/L	ND@0.5							
1,1,2-TRICHLOROETHANE	ug/L	ND@0.5							
1,1-DICHLOROETHANE	ug/L	0.2 J	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	0.2 J
1,1-DICHLOROETHENE	ug/L	ND@0.5							
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/L	ND@0.5							
1,2-DICHLOROETHANE (EDC)	ug/L	ND@0.5							
CHLOROETHANE	ug/L	ND@0.5							
CHLOROFORM (TRICHLOROMETHANE)	ug/L	ND@0.5							
CIS-1,2-DICHLOROETHENE	ug/L	0.2 J	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	0.2 J
DICHLORODIFLUOROMETHANE (FREON 12)	ug/L	ND@0.5							
METHYLENE CHLORIDE (DICHLOROMETHANE)	ug/L	ND@0.5	0.5 J	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	0.2 J
TETRACHLOROETHENE	ug/L	ND@0.5							
TRICHLOROETHENE	ug/L	0.7	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	0.7
TRICHLOROFLUOROMETHANE (FREON 11)	ug/L	ND@0.5							
VINYL CHLORIDE	ug/L	ND@0.5							

**Quality Control Analytical Data for Environmental Blanks**

**Owego, New York**

**January 1, 2016 - December 31, 2016**

<b>Sample Location</b>	EQ RINSE BLK	<b>Sample Description</b>	EQ RINSE BLK	<b>Sample Date</b>	TRIP BLANK	<b>Laboratory Sample I.D.</b>	TRIP BLANK	<b>Parameter</b>	TRIP BLANK	<b>Parameter</b>	TRIP BLANK
	WTR LVL IND		WTR LVL IND		1/11-1/14				1/12-1/15		1/13-1/16
	10/26/2016		10/27/2016		01/11/2016				01/12/2016		01/13/2016
	8665572		8671292		8206936				8208417		8209493
											8209496

<b>Parameter</b>	<b>Units</b>	<b>EQ RINSE BLK</b>	<b>EQ RINSE BLK</b>	<b>TRIP BLANK</b>	<b>TRIP BLANK</b>	<b>TRIP BLANK</b>	<b>TRIP BLANK</b>
1,1,1-TRICHLOROETHANE	ug/L	0.1 J	0.1 J	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1,2-TRICHLOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1-DICHLOROETHANE	ug/L	0.2 J	0.2 J	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1-DICHLOROETHENE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,2-DICHLOROETHANE (EDC)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CHLOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CHLOROFORM (TRICHLOROMETHANE)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHENE	ug/L	0.2 J	0.2 J	ND@0.5	ND@0.5	ND@0.5	ND@0.5
DICHLORODIFLUOROMETHANE (FREON 12)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
METHYLENE CHLORIDE (DICHLOROMETHANE)	ug/L	0.2 J	0.3 J	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TETRACHLOROETHENE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TRICHLOROETHENE	ug/L	0.6	0.7	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TRICHLOROFLUOROMETHANE (FREON 11)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
VINYL CHLORIDE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5

**Quality Control Analytical Data for Environmental Blanks**

Owego, New York

**January 1, 2016 - December 31, 2016**

<b>Sample Location</b>	TRIP BLANK					
<b>Sample Description</b>	5/18-5/19	5/18-5/21	5/19-5/21	5/23-5/26	5/23-5/27	7/18-7/21
<b>Sample Date</b>	05/18/2016	05/18/2016	05/19/2016	05/23/2016	05/23/2016	07/18/2016
<b>Laboratory Sample I.D.</b>	8389998	8393212	8393232	8400012	8402140	8485838

<b>Parameter</b>	<b>Units</b>					
1,1,1-TRICHLOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1,2-TRICHLOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1-DICHLOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1-DICHLOROETHENE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,2-DICHLOROETHANE (EDC)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CHLOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CHLOROFORM (TRICHLOROMETHANE)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHENE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
DICHLORODIFLUOROMETHANE (FREON 12)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
METHYLENE CHLORIDE (DICHLOROMETHANE)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TETRACHLOROETHENE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TRICHLOROETHENE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TRICHLOROFLUOROMETHANE (FREON 11)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
VINYL CHLORIDE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5

**Quality Control Analytical Data for Environmental Blanks**

Owego, New York

**January 1, 2016 - December 31, 2016**

<b>Sample Location</b>	TRIP BLANK	TRIP BLANK	TRIP BLANK	TRIP BLANK	TRIP BLANK
<b>Sample Description</b>	7/19-7/21	7/19-7/22	10/25-10/27	10/25-10/27	10/26-10/29
<b>Sample Date</b>	07/19/2016	07/19/2016	10/25/2016	10/25/2016	10/26/2016
<b>Laboratory Sample I.D.</b>	8485863	8488643	8665540	8665566	8671286

<b>Parameter</b>	<b>Units</b>				
1,1,1-TRICHLOROETHANE	ug/L	ND@0.5	ND@0.5	0.1 J	0.1 J
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1,2-TRICHLOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1-DICHLOROETHANE	ug/L	ND@0.5	ND@0.5	0.2 J	0.2 J
1,1-DICHLOROETHENE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,2-DICHLOROETHANE (EDC)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CHLOROETHANE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CHLOROFORM (TRICHLOROMETHANE)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHENE	ug/L	ND@0.5	ND@0.5	0.2 J	0.2 J
DICHLORODIFLUOROMETHANE (FREON 12)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5
METHYLENE CHLORIDE (DICHLOROMETHANE)	ug/L	ND@0.5	ND@0.5	0.2 J	0.2 J
TETRACHLOROETHENE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TRICHLOROETHENE	ug/L	ND@0.5	ND@0.5	0.7	0.6
TRICHLOROFUOROMETHANE (FREON 11)	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5
VINYL CHLORIDE	ug/L	ND@0.5	ND@0.5	ND@0.5	ND@0.5

**Quality Control Analytical Data for Environmental Blanks**

**Owego, New York**

**January 1, 2016 - December 31, 2016**

**Reporting Conventions**

NA        Not Analyzed  
ND@X      Not Detected at Detection Limit X

**Code      Explanation**

J        Estimated value: the result is  $\geq$  the Method Detection Limit (MDL) and  $<$  the Limit of Quantitation (LOQ).

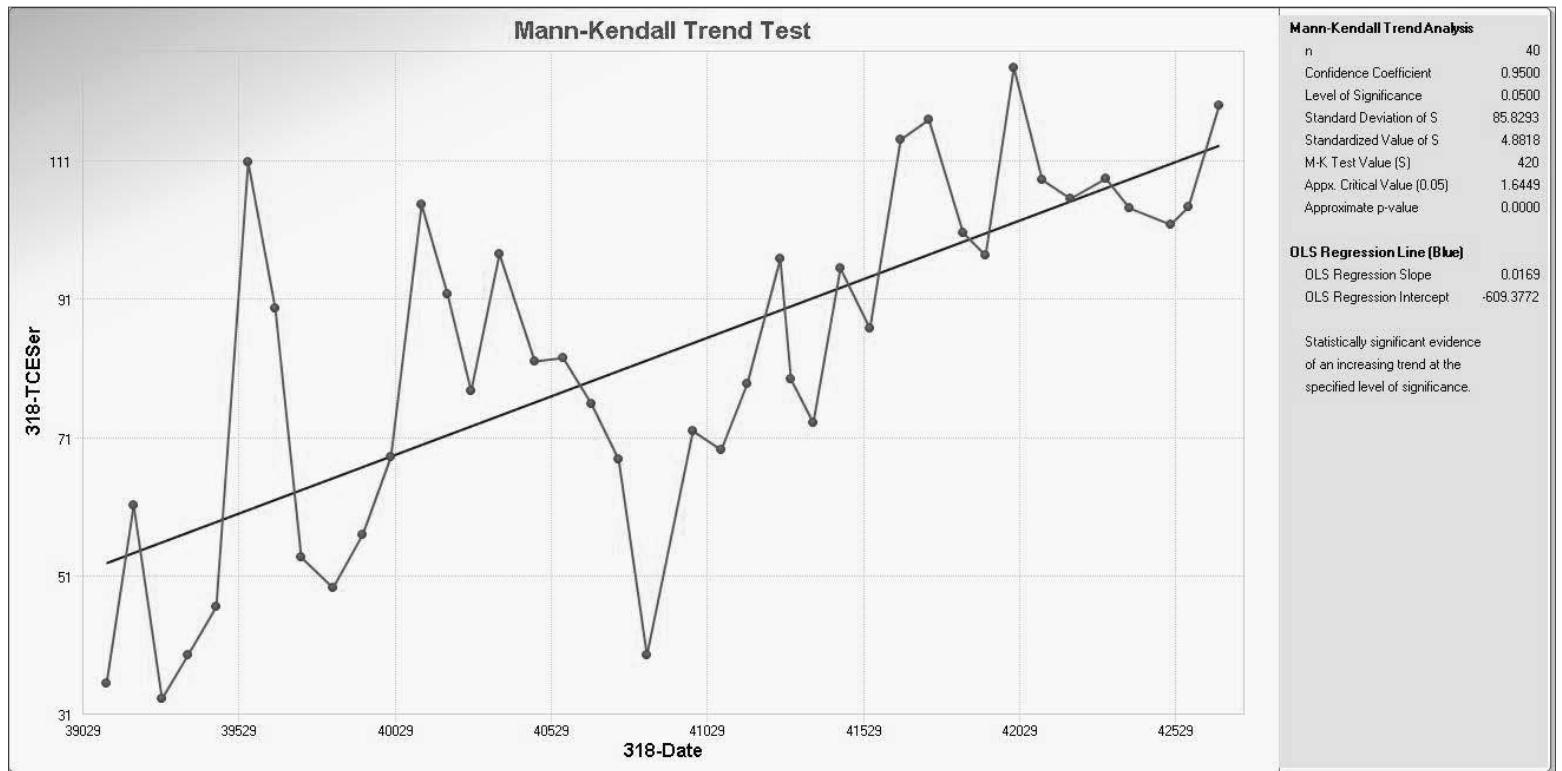
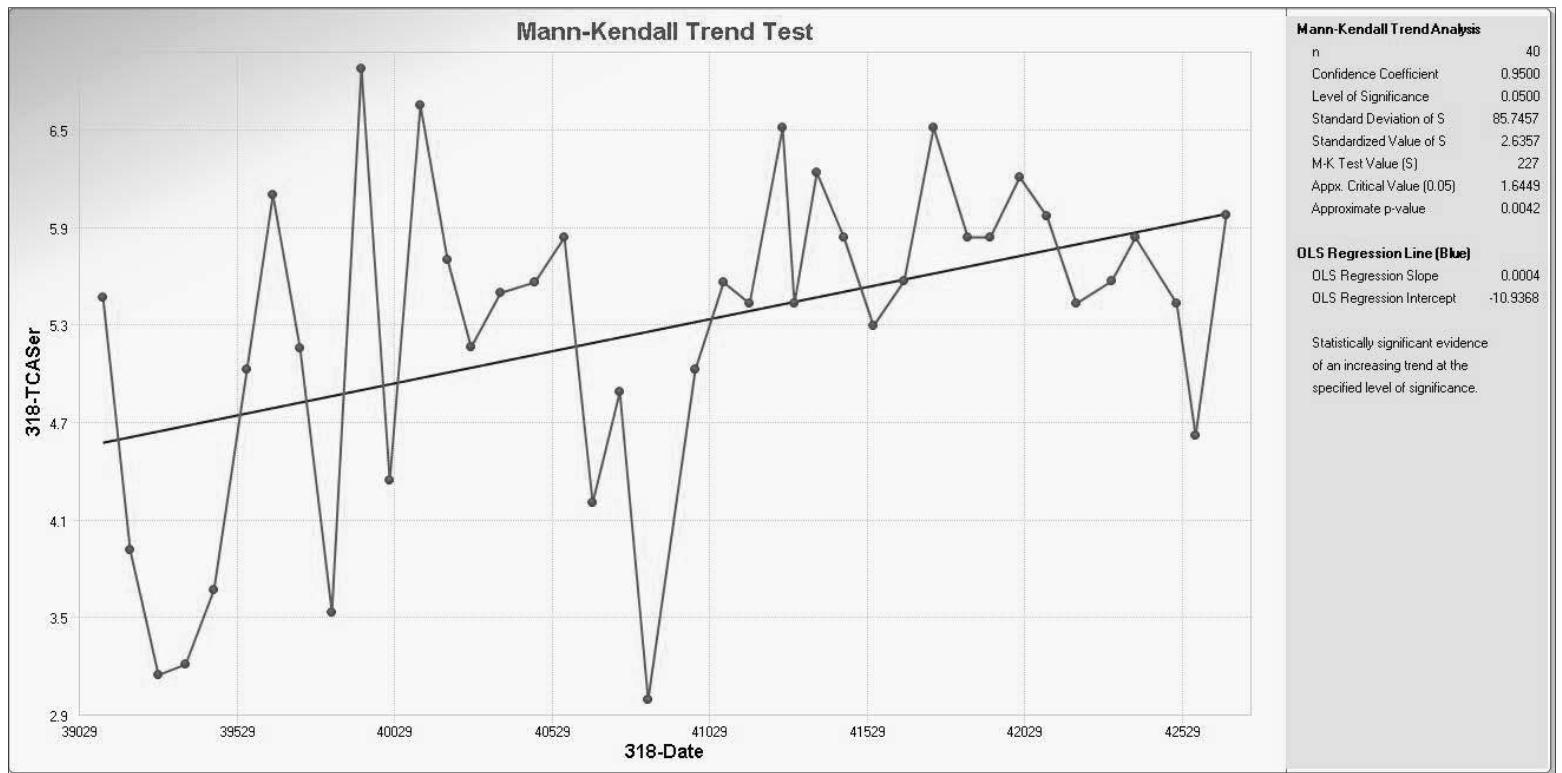
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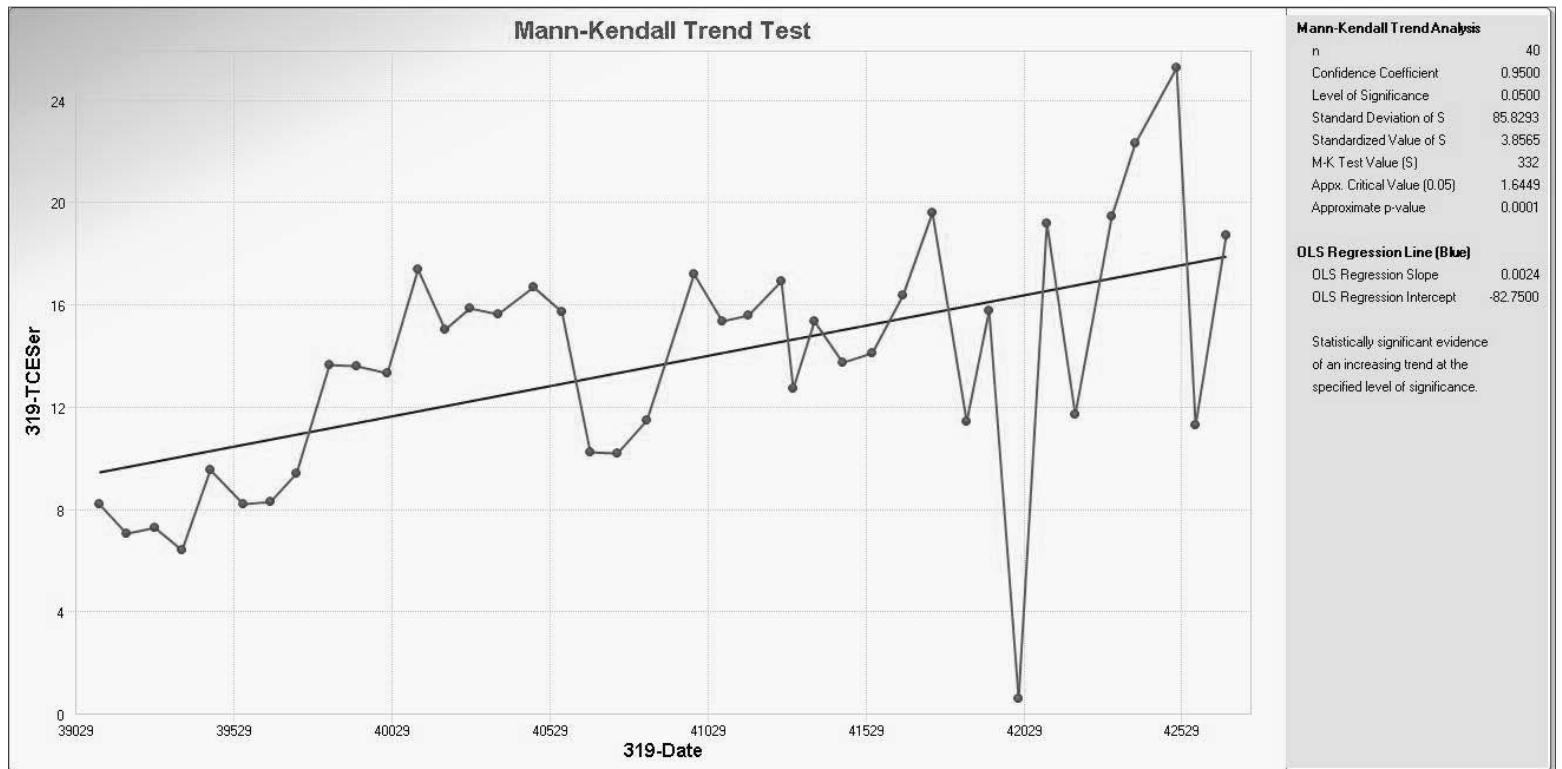
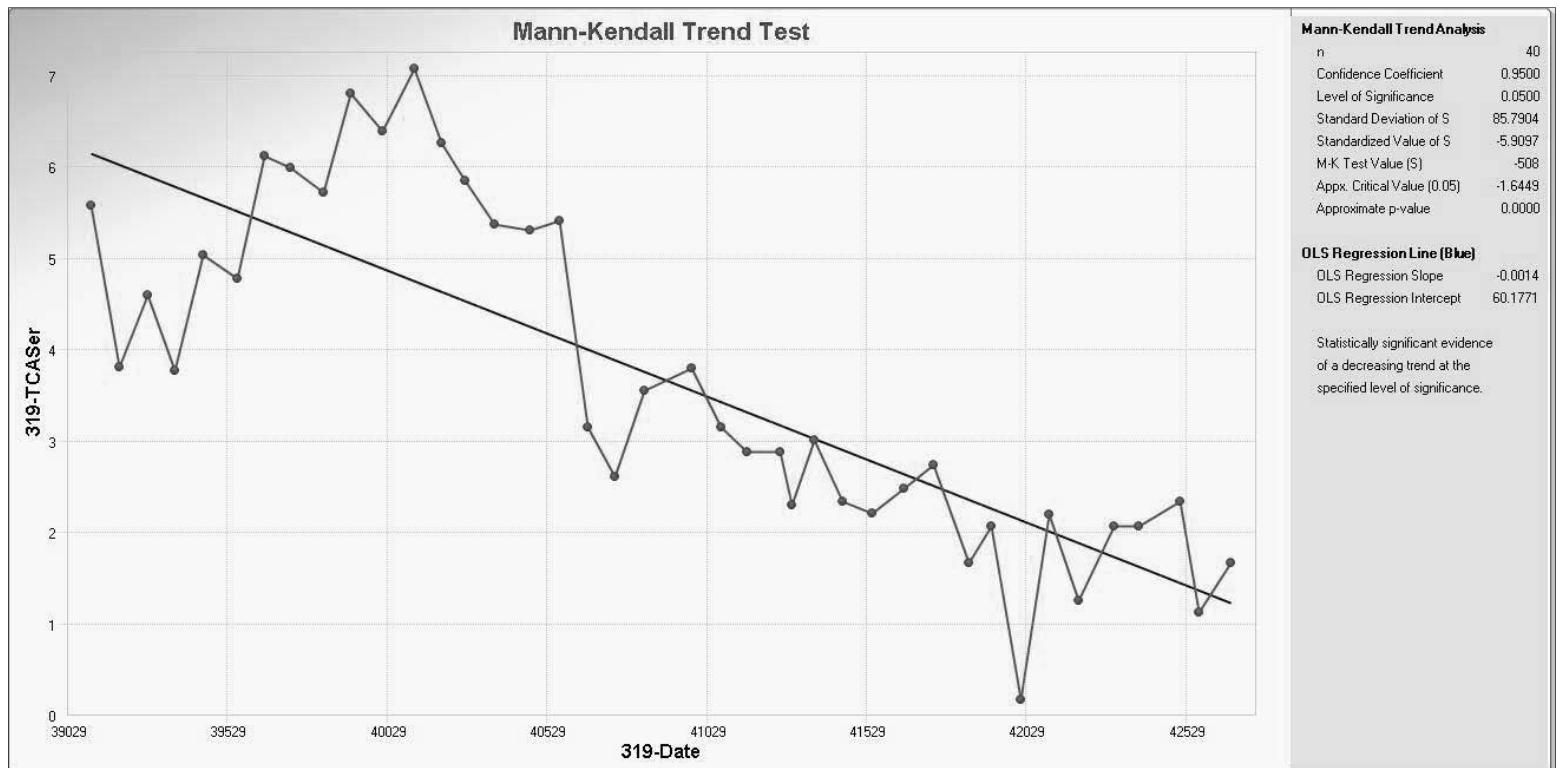
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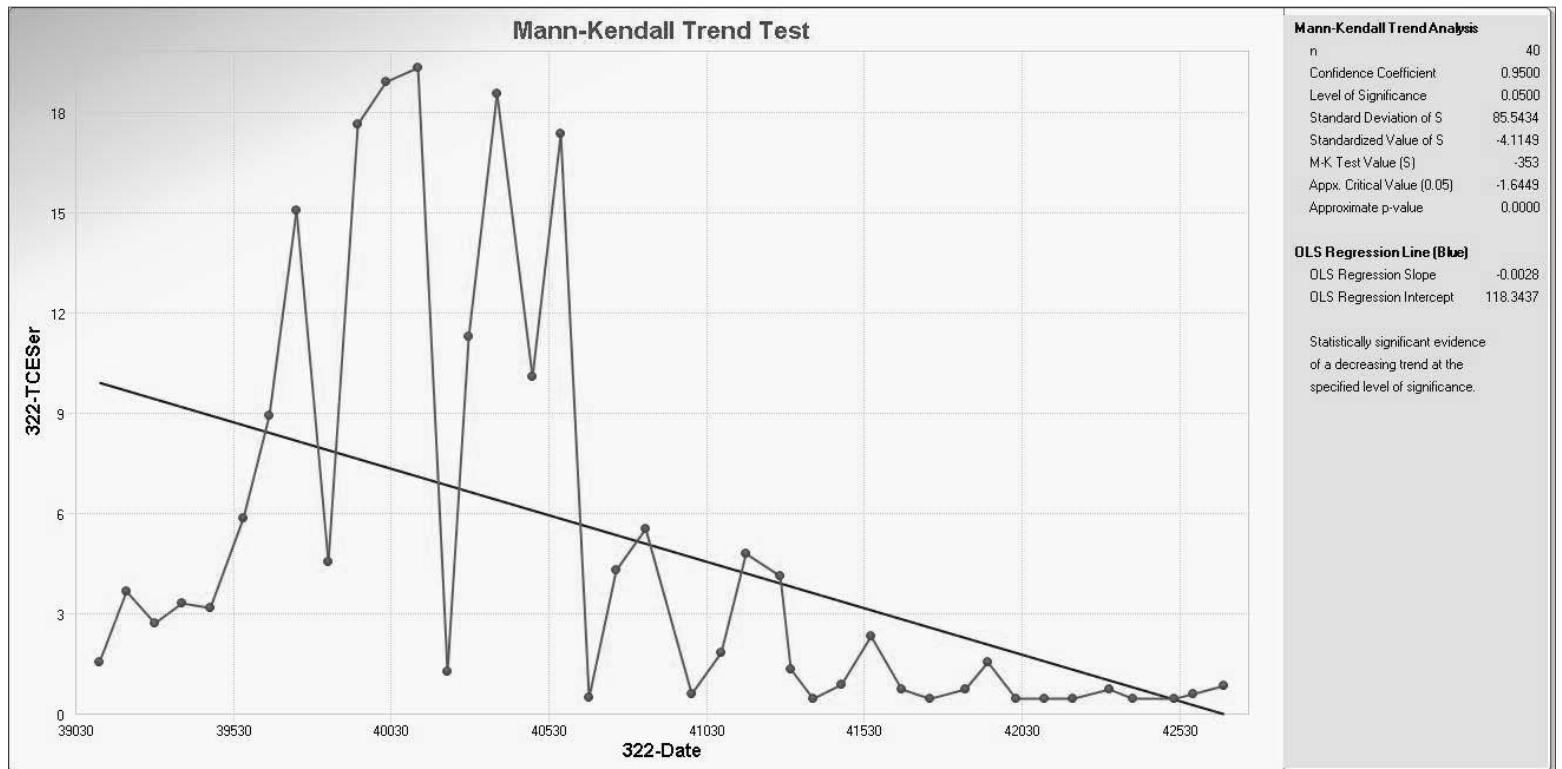
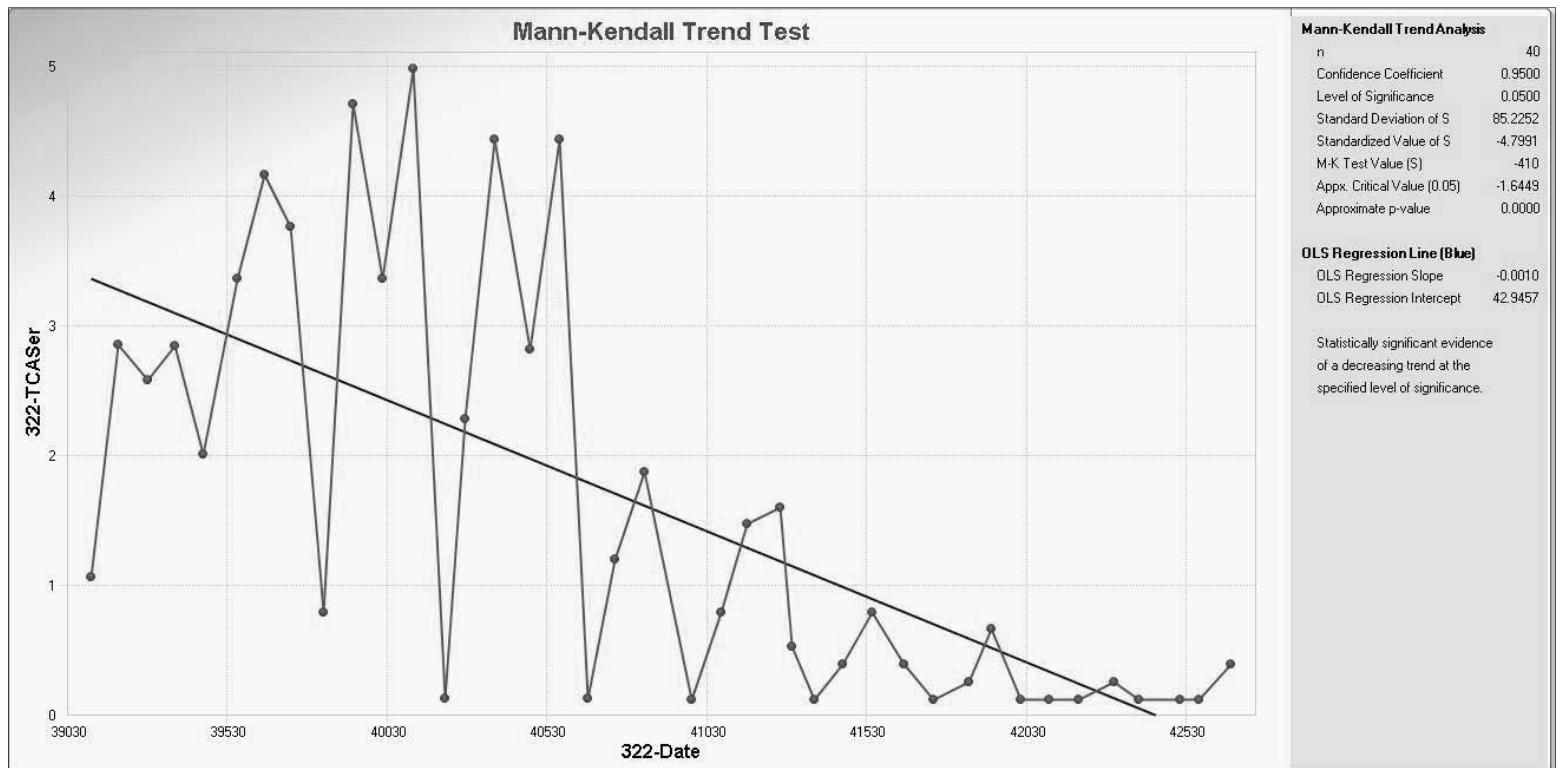
## **APPENDIX I**

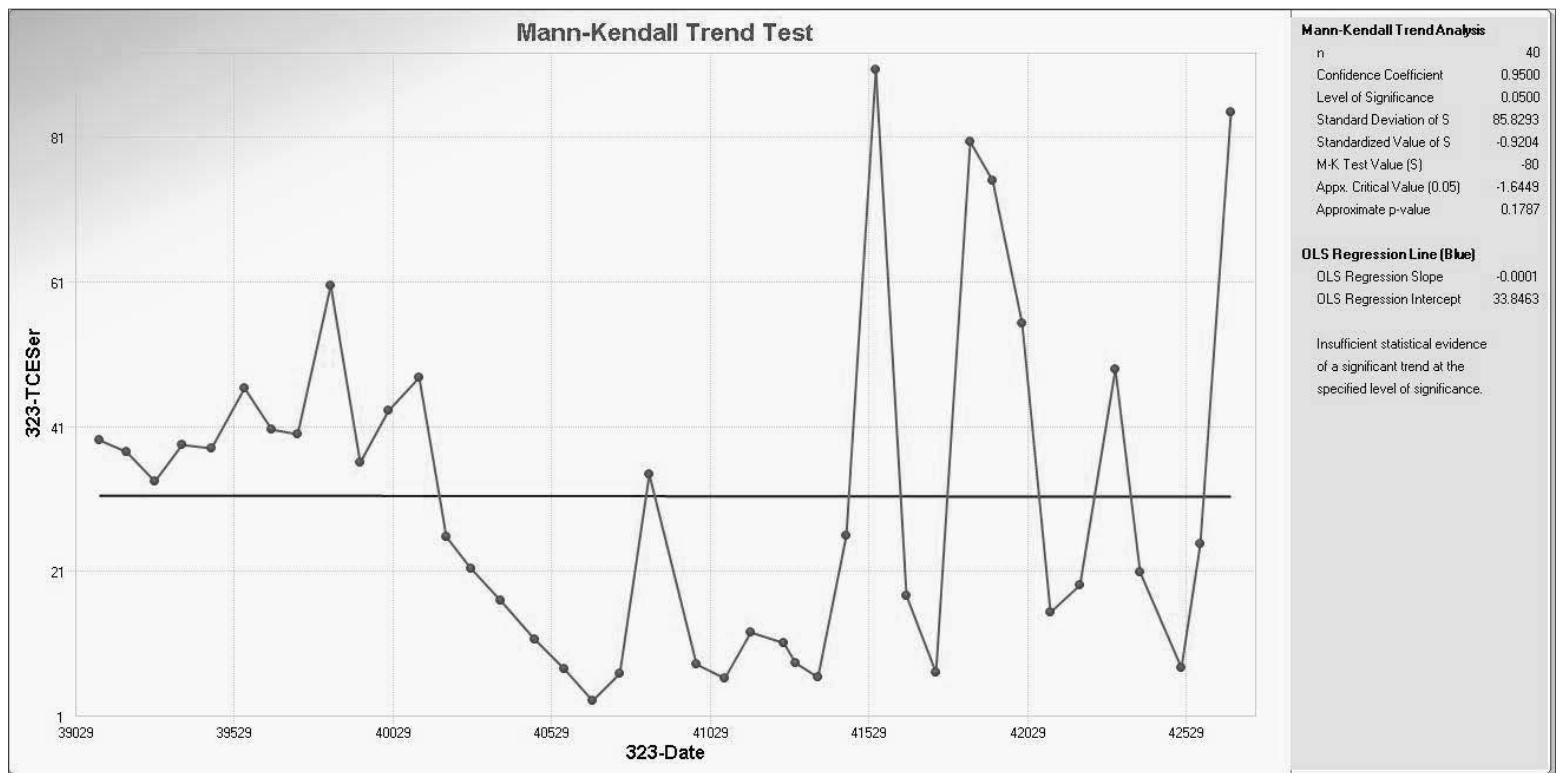
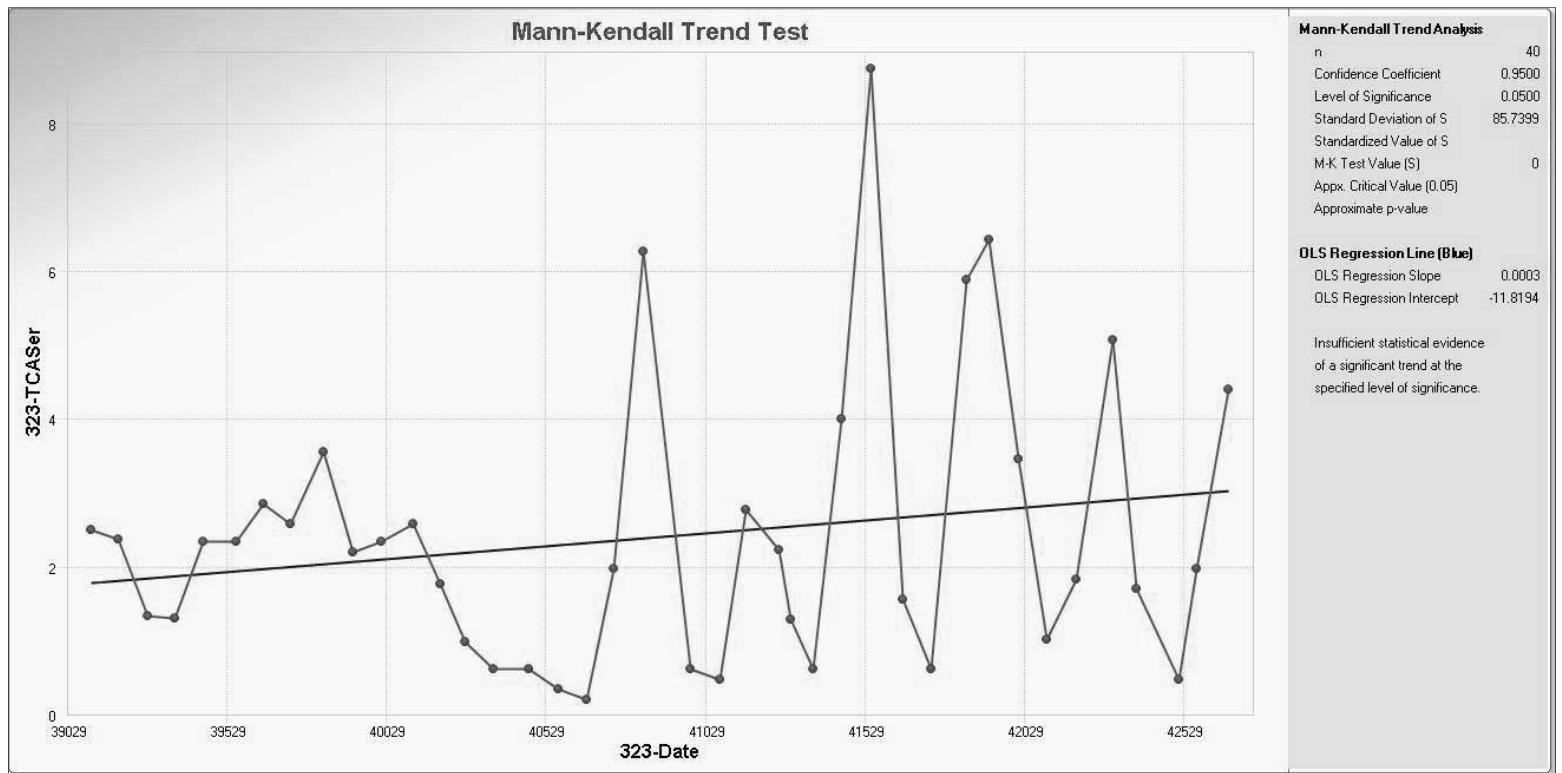
### **Mann-Kendall Trend Test Results from ProUCL v. 5.0**

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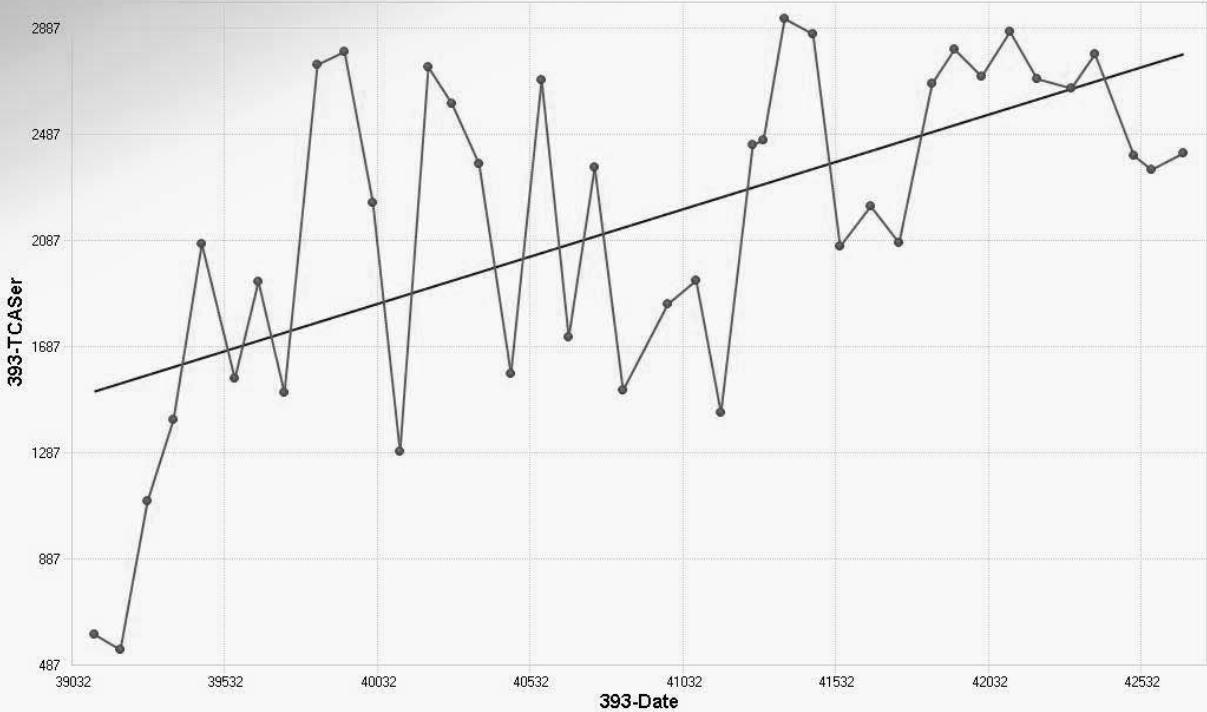








### Mann-Kendall Trend Test



### Mann-Kendall Trend Analysis

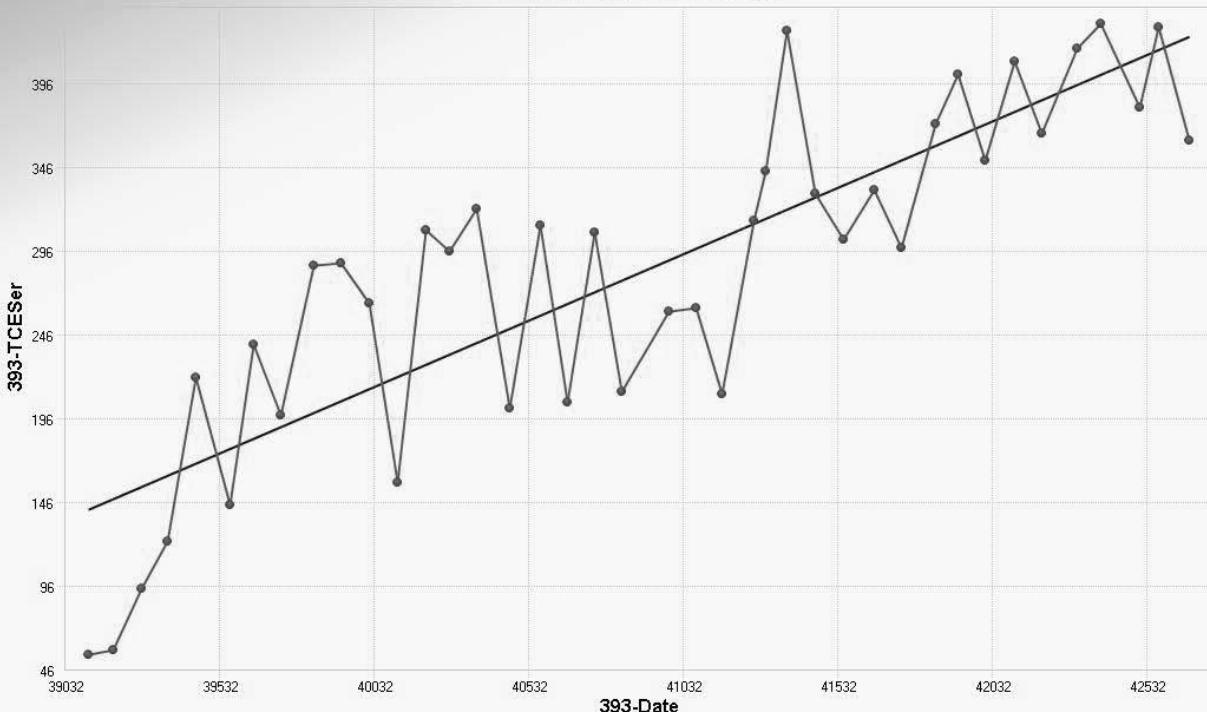
n	40
Confidence Coefficient	0.9500
Level of Significance	0.0500
Standard Deviation of S	85.8293
Standardized Value of S	3.5070
M-K Test Value (S)	302
Appx. Critical Value (0.05)	1.6449
Approximate p-value	0.0002

### OLS Regression Line (Blue)

OLS Regression Slope	0.3564
OLS Regression Intercept	-12,420.7663

Statistically significant evidence of an increasing trend at the specified level of significance.

### Mann-Kendall Trend Test



### Mann-Kendall Trend Analysis

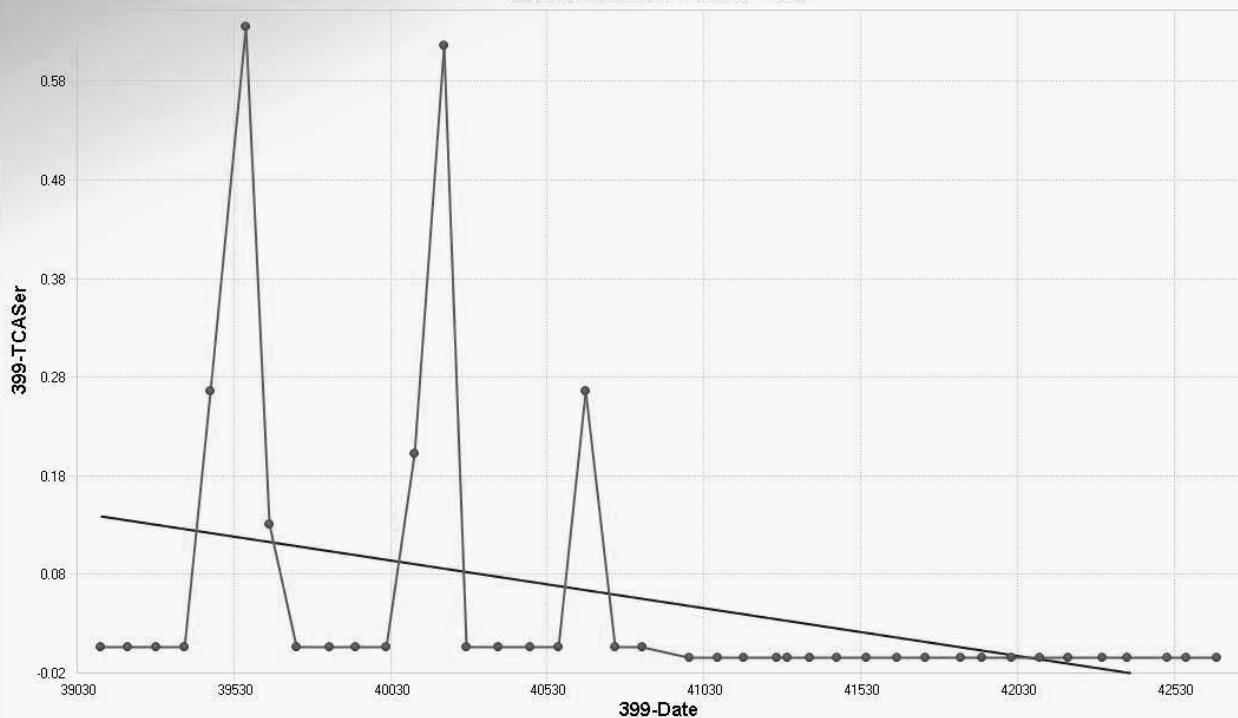
n	40
Confidence Coefficient	0.9500
Level of Significance	0.0500
Standard Deviation of S	85.8293
Standardized Value of S	6.2566
M-K Test Value (S)	538
Appx. Critical Value (0.05)	1.6449
Approximate p-value	0.0000

### OLS Regression Line (Blue)

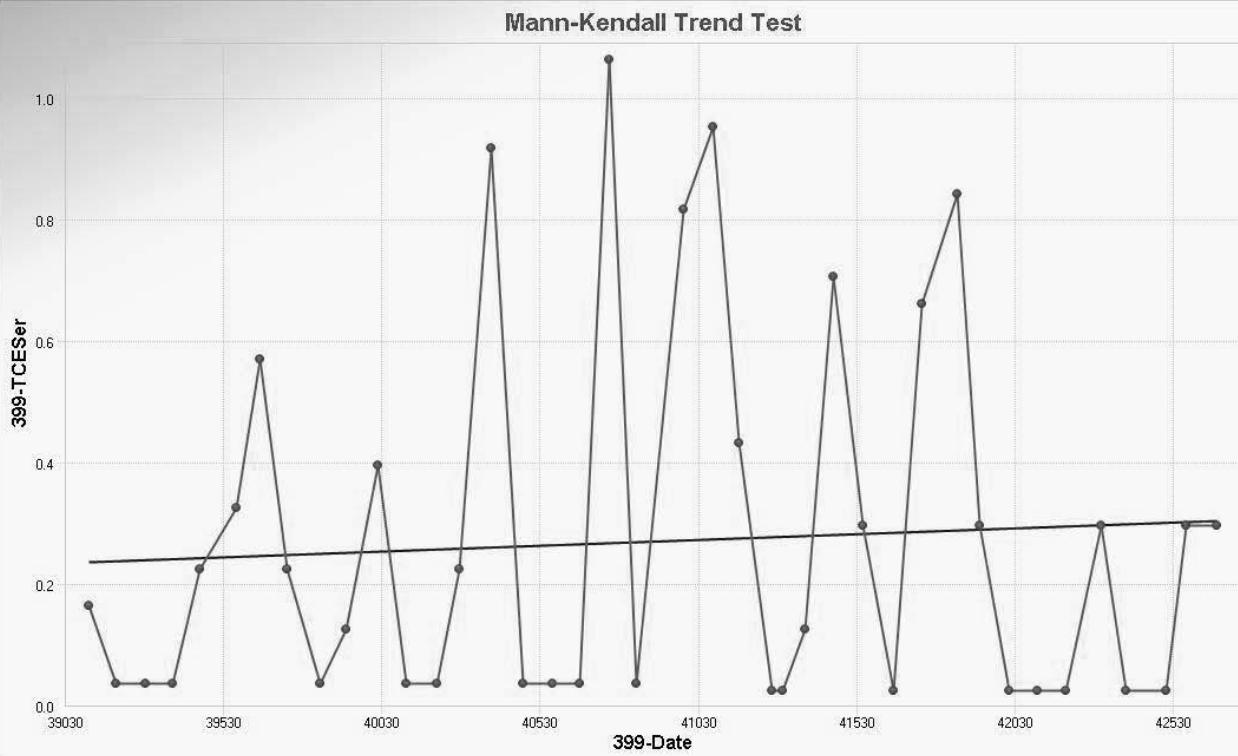
OLS Regression Slope	0.0794
OLS Regression Intercept	-2,964.2642

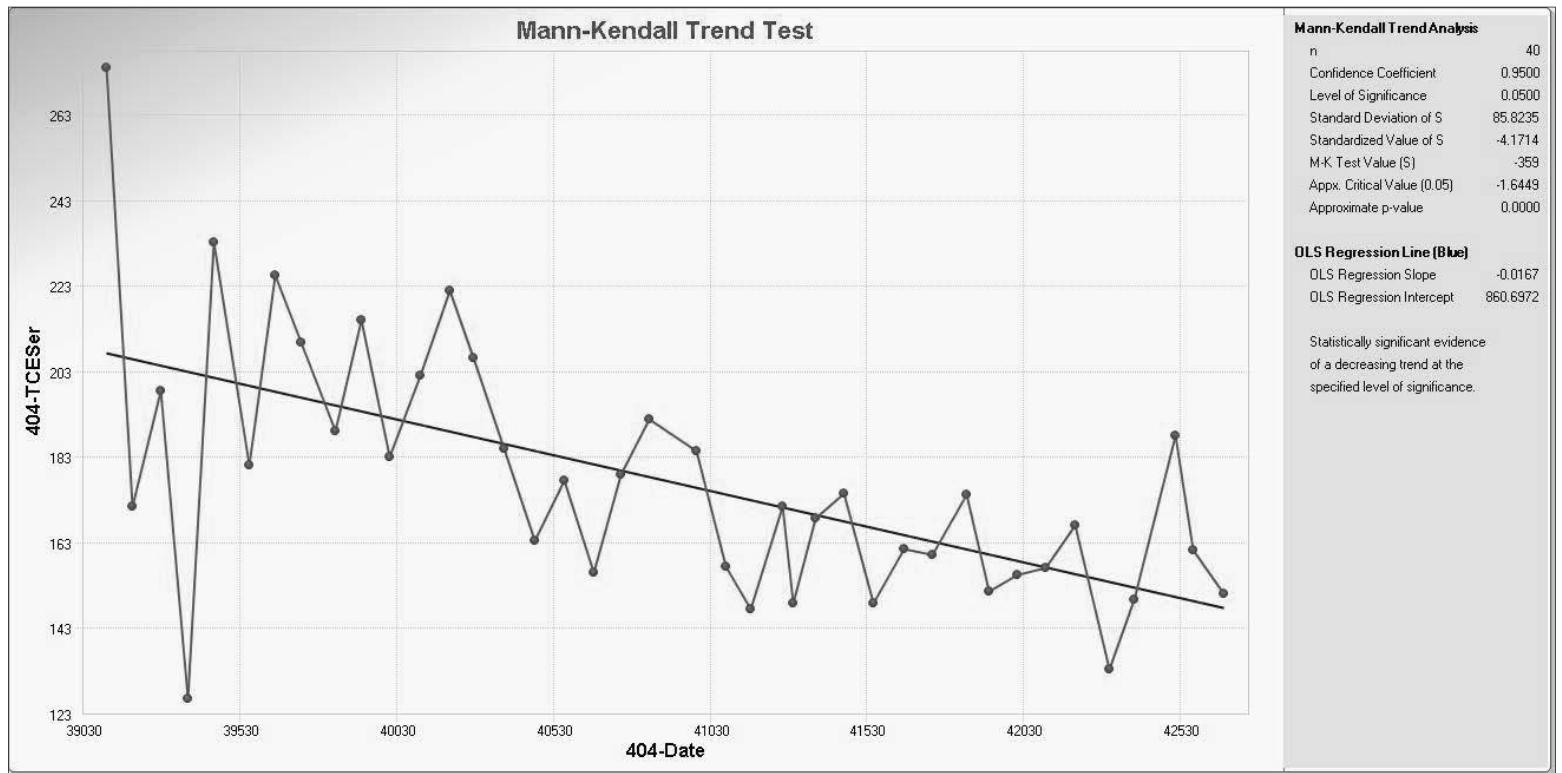
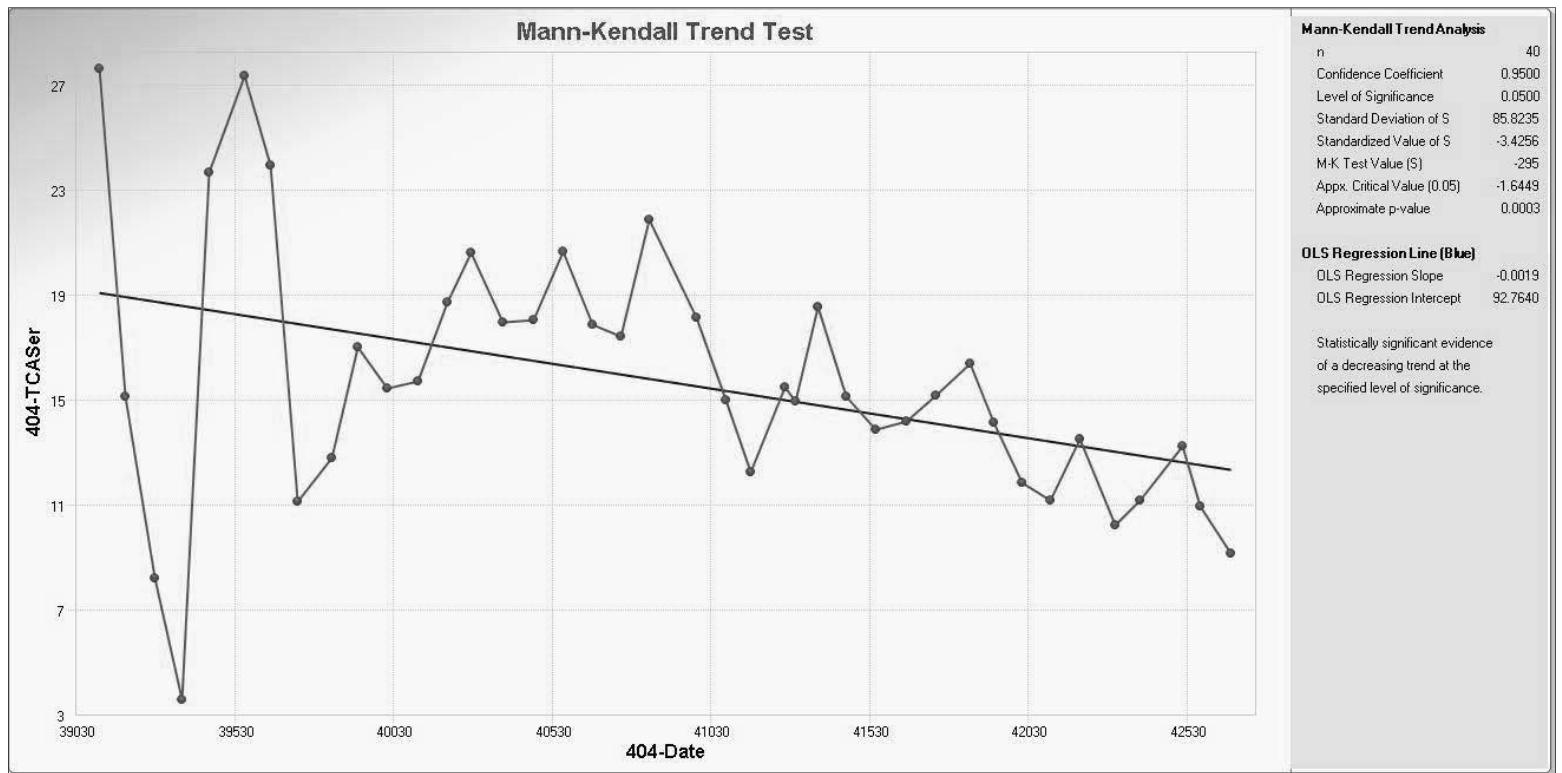
Statistically significant evidence of an increasing trend at the specified level of significance.

### Mann-Kendall Trend Test

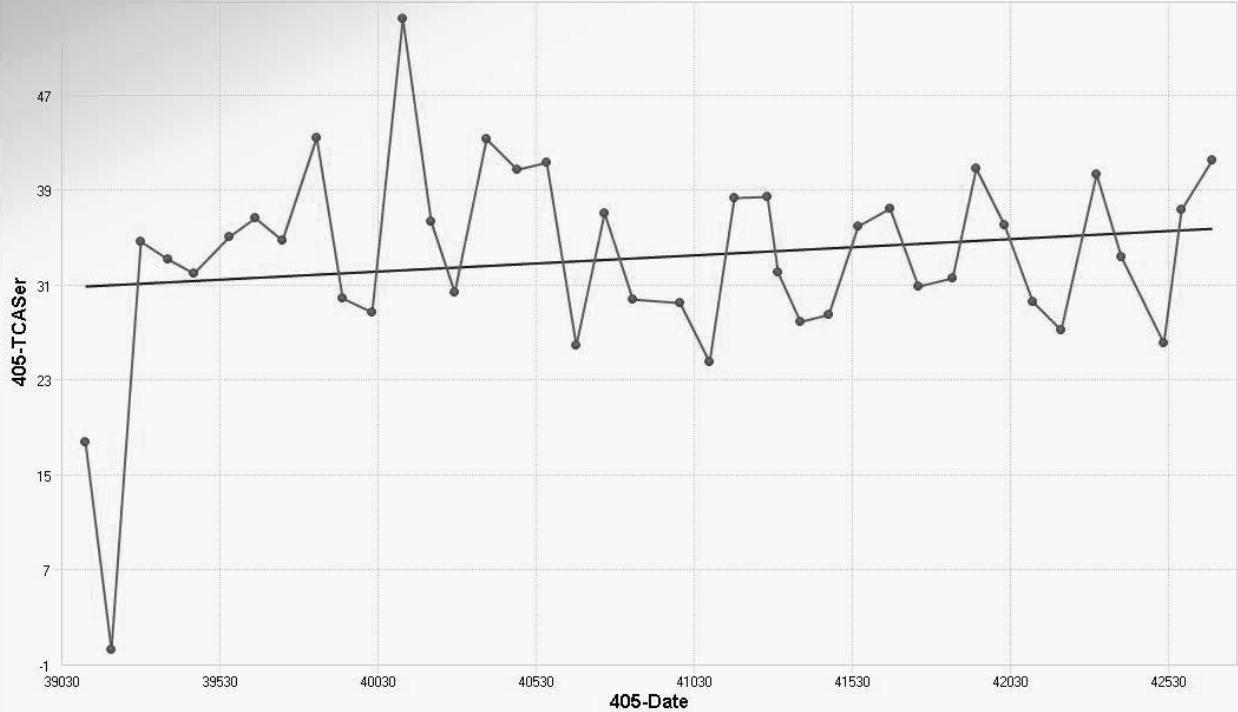


### Mann-Kendall Trend Test

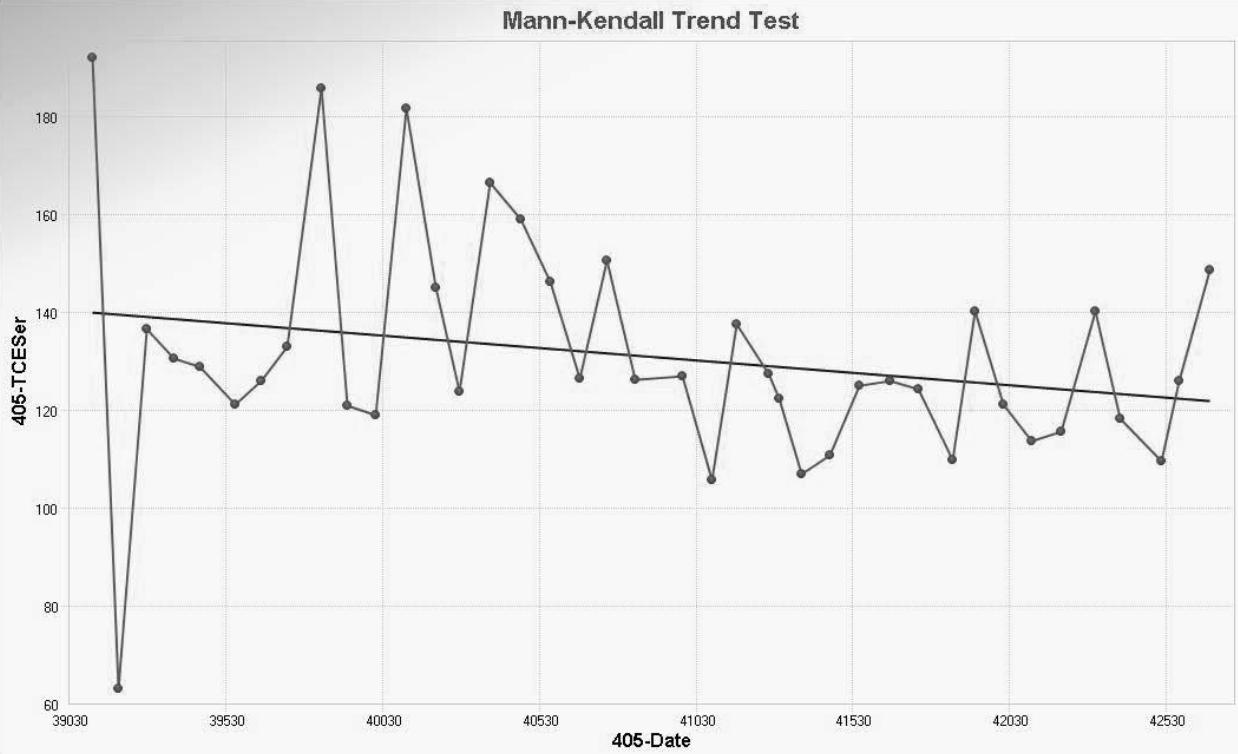




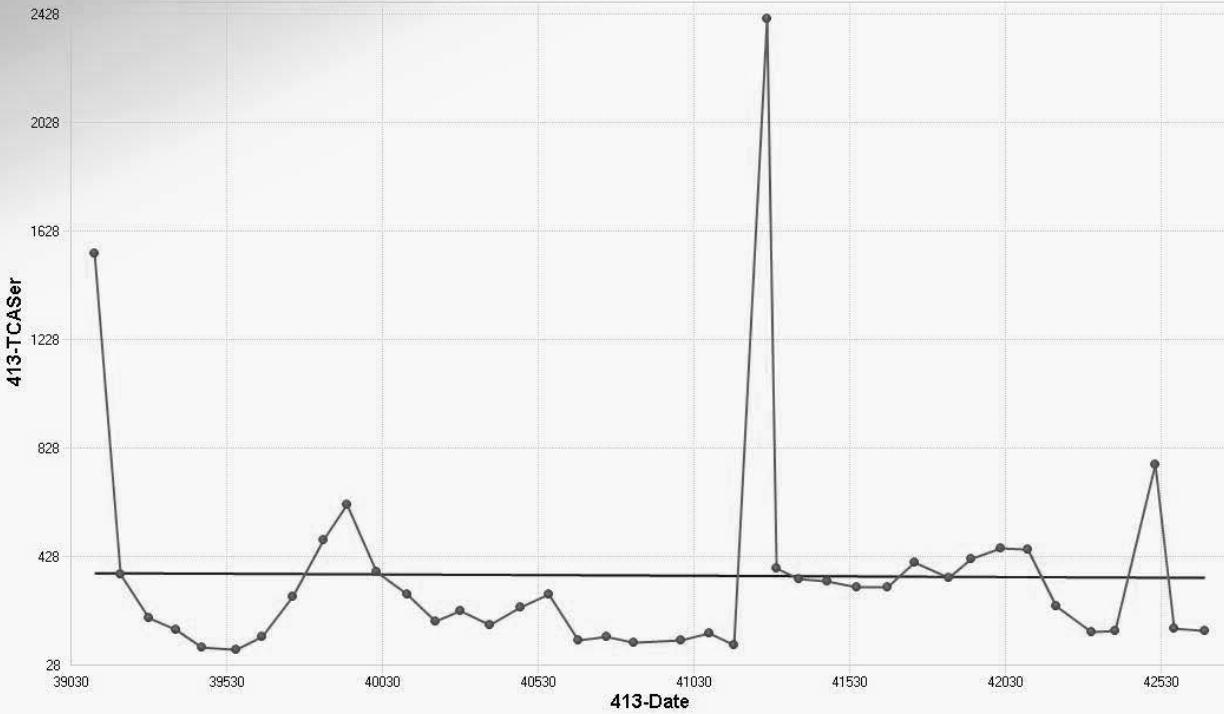
### Mann-Kendall Trend Test



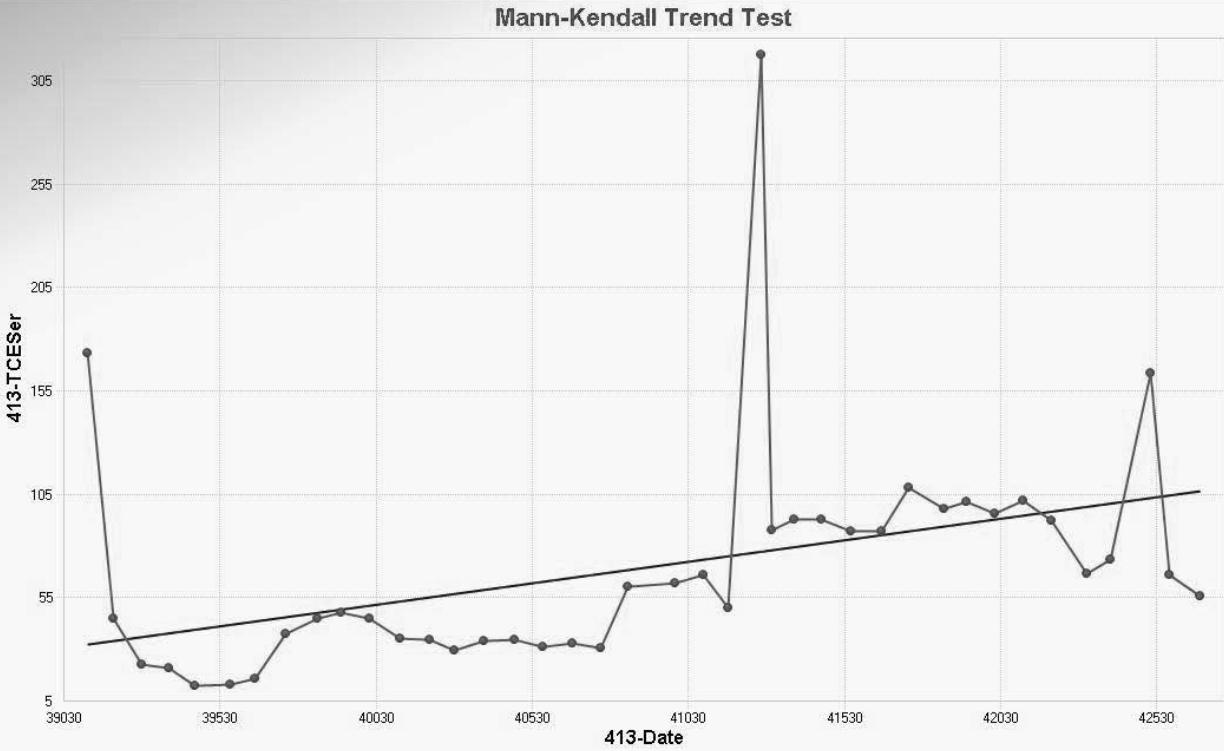
### Mann-Kendall Trend Test



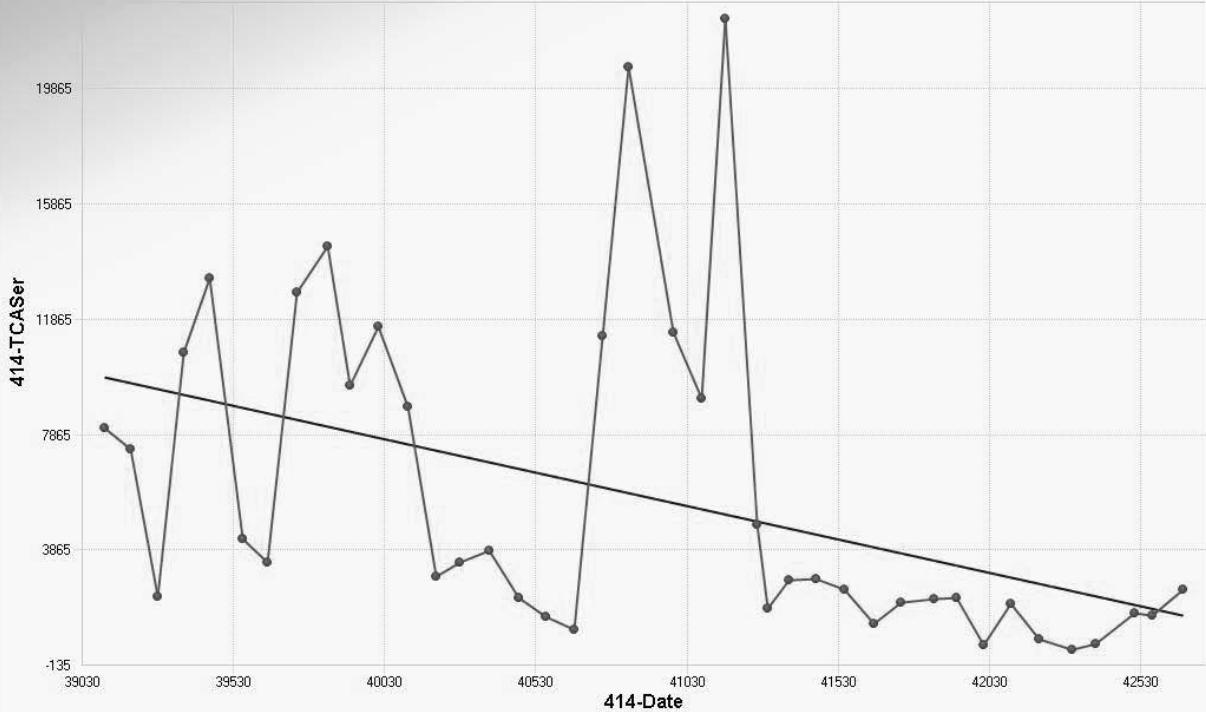
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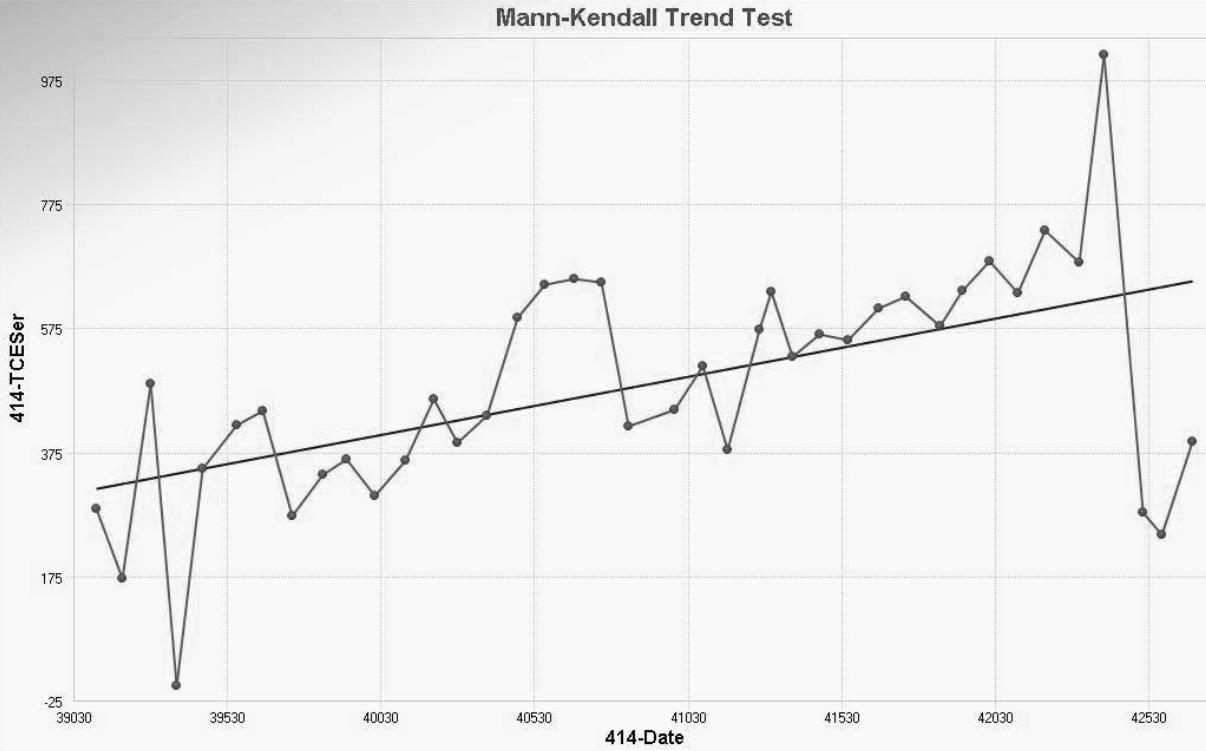
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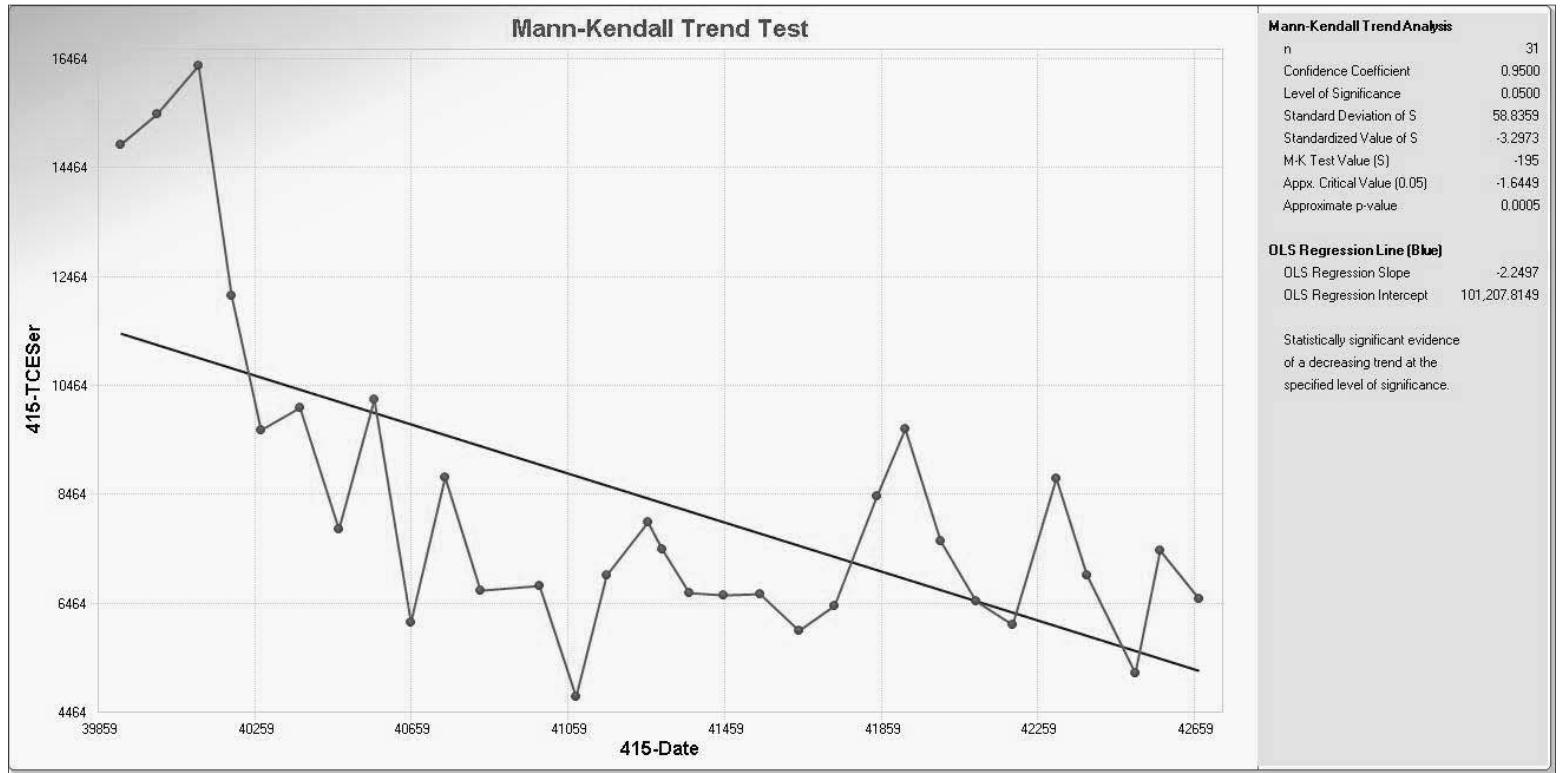
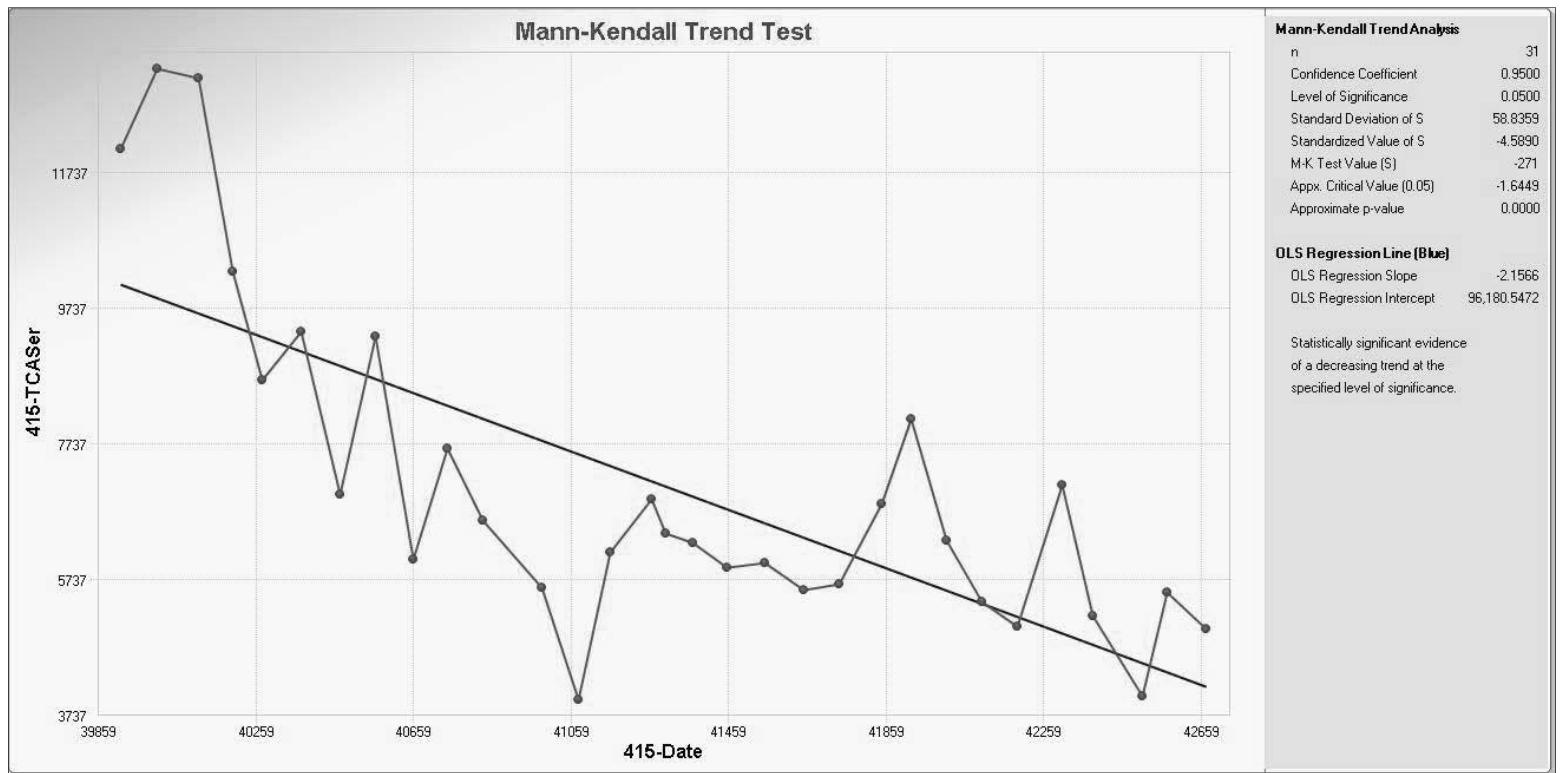


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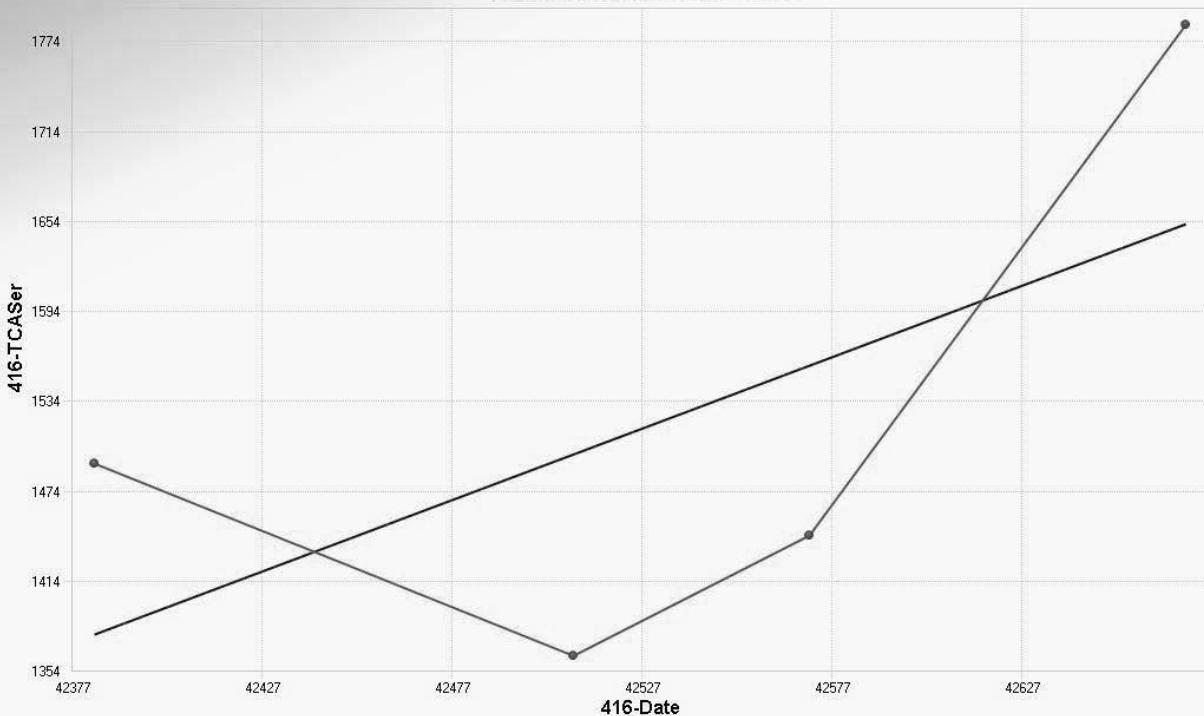


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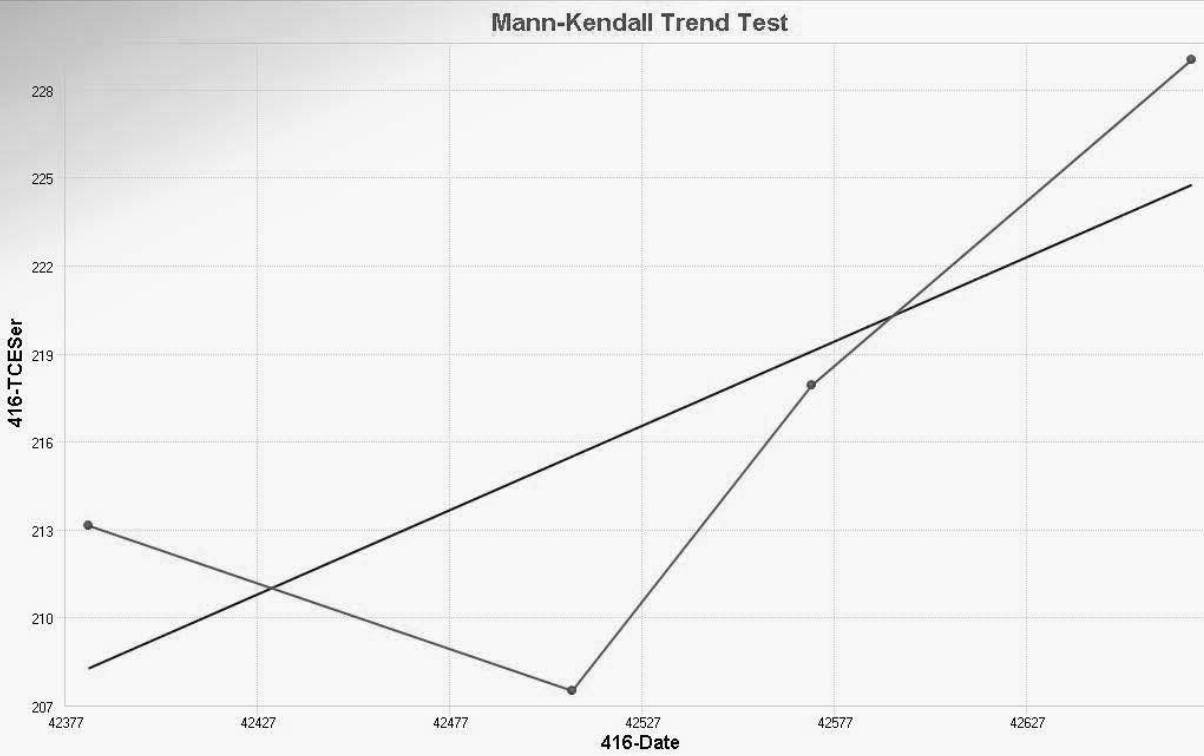




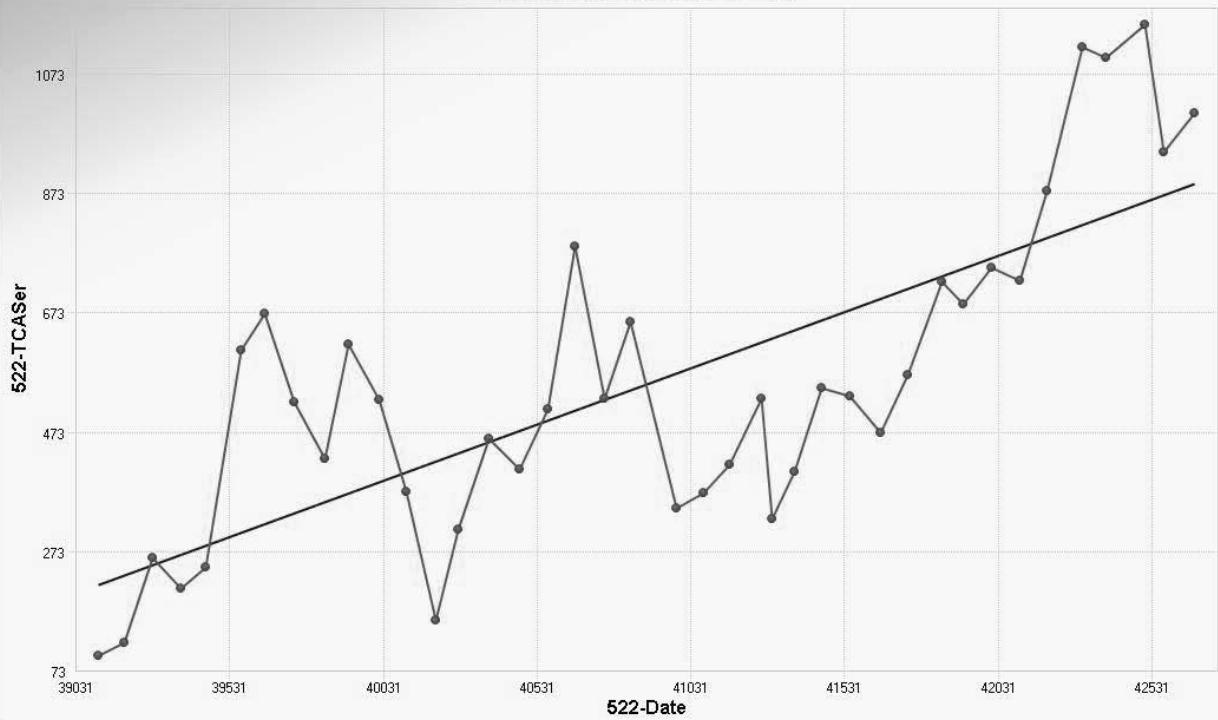
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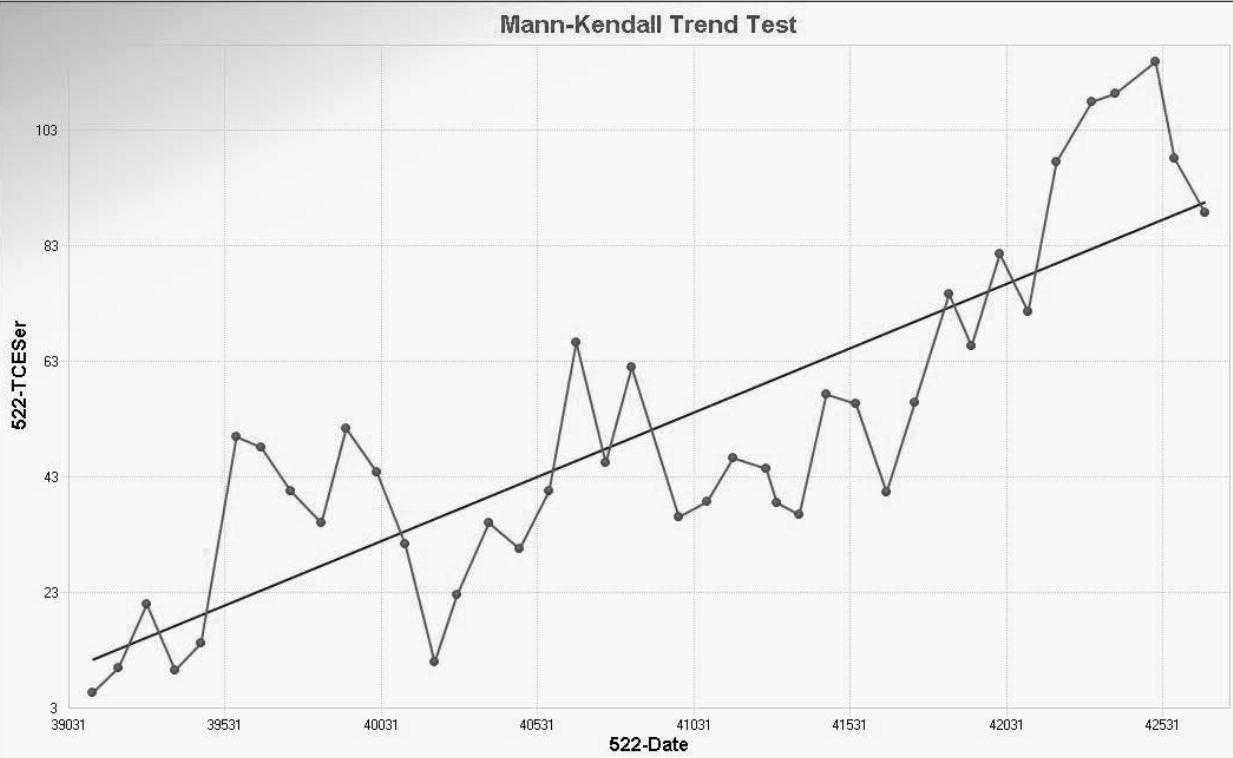
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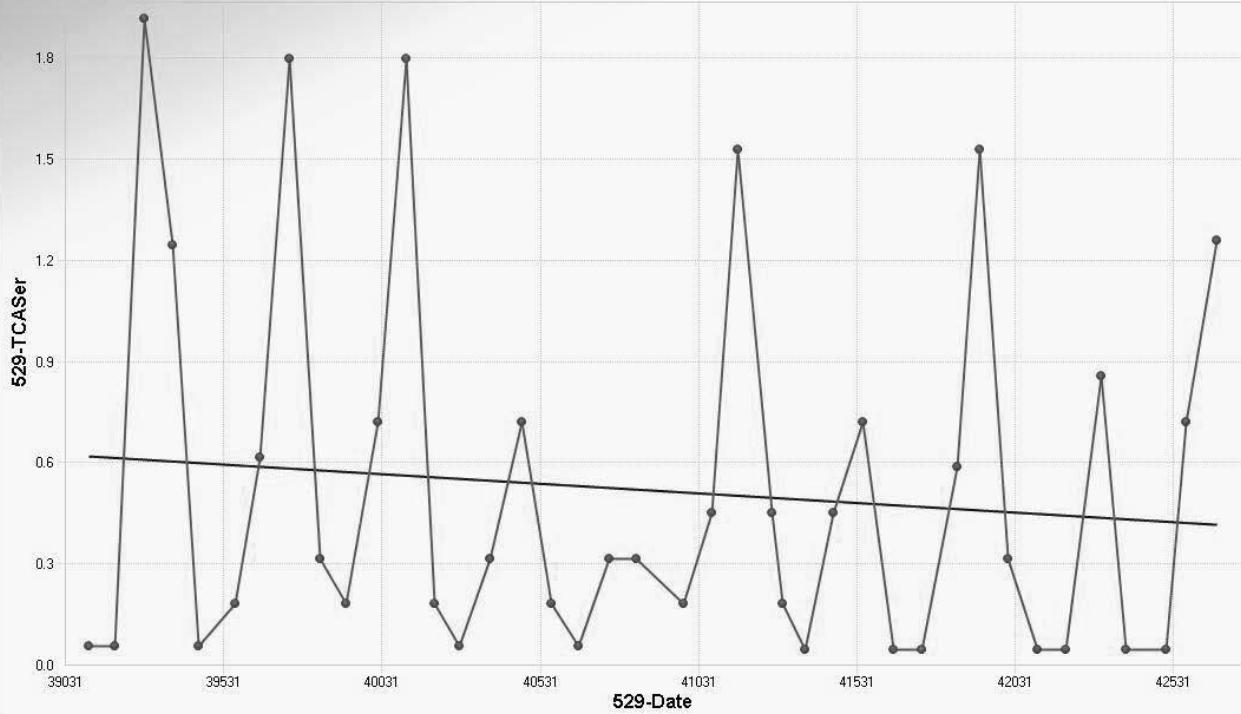
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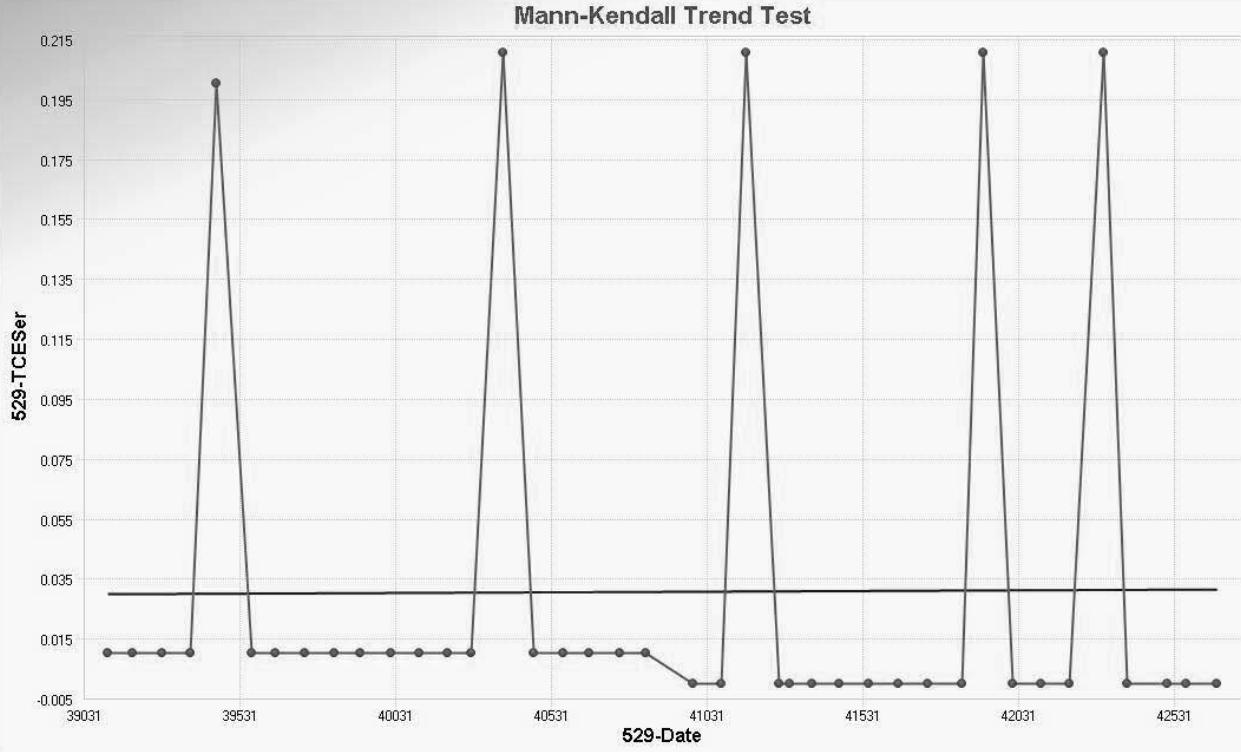
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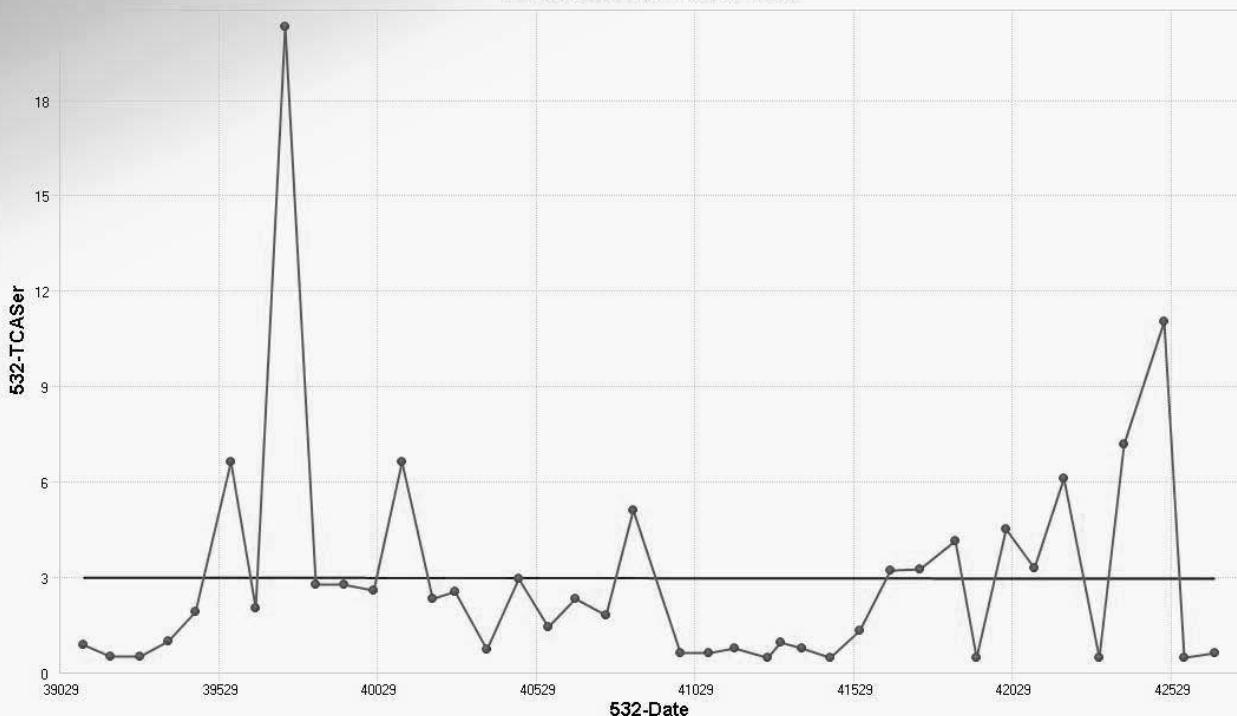
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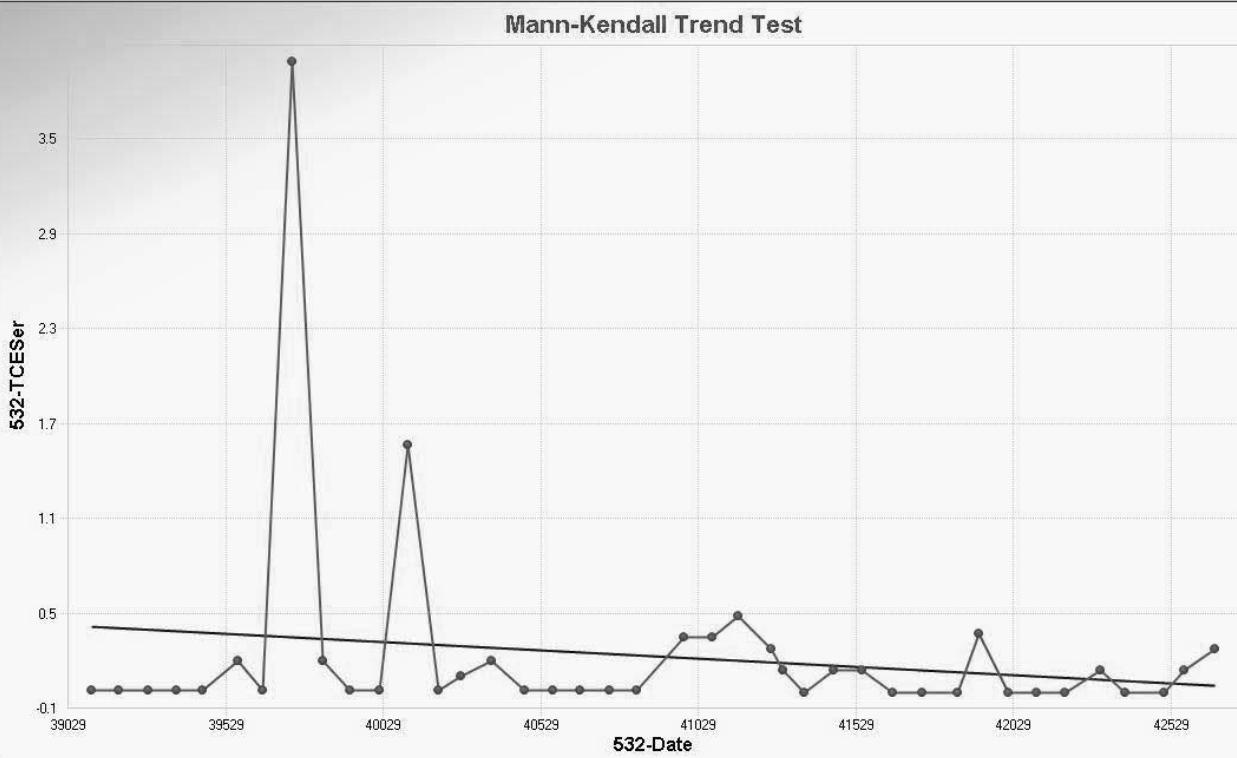
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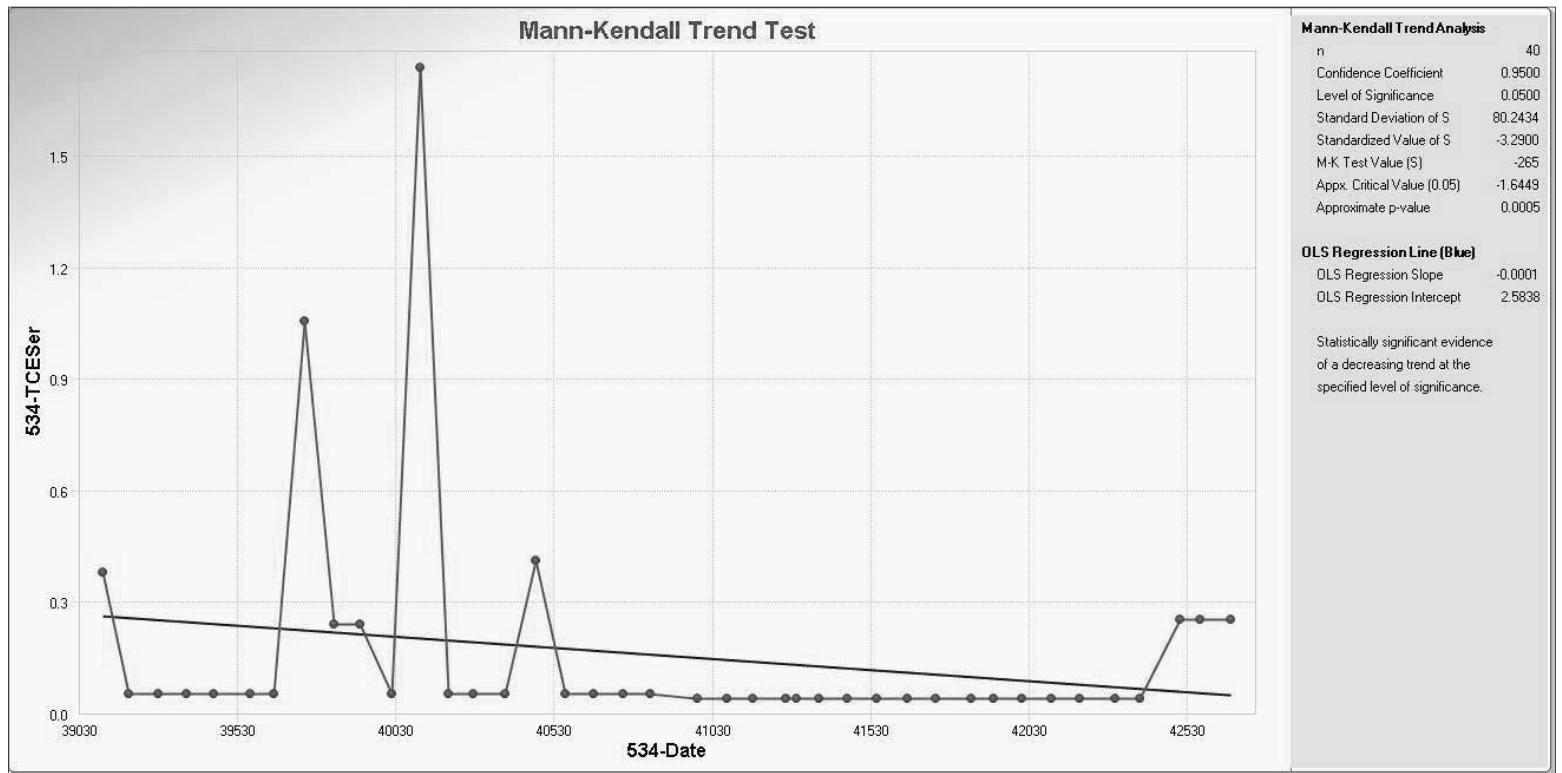
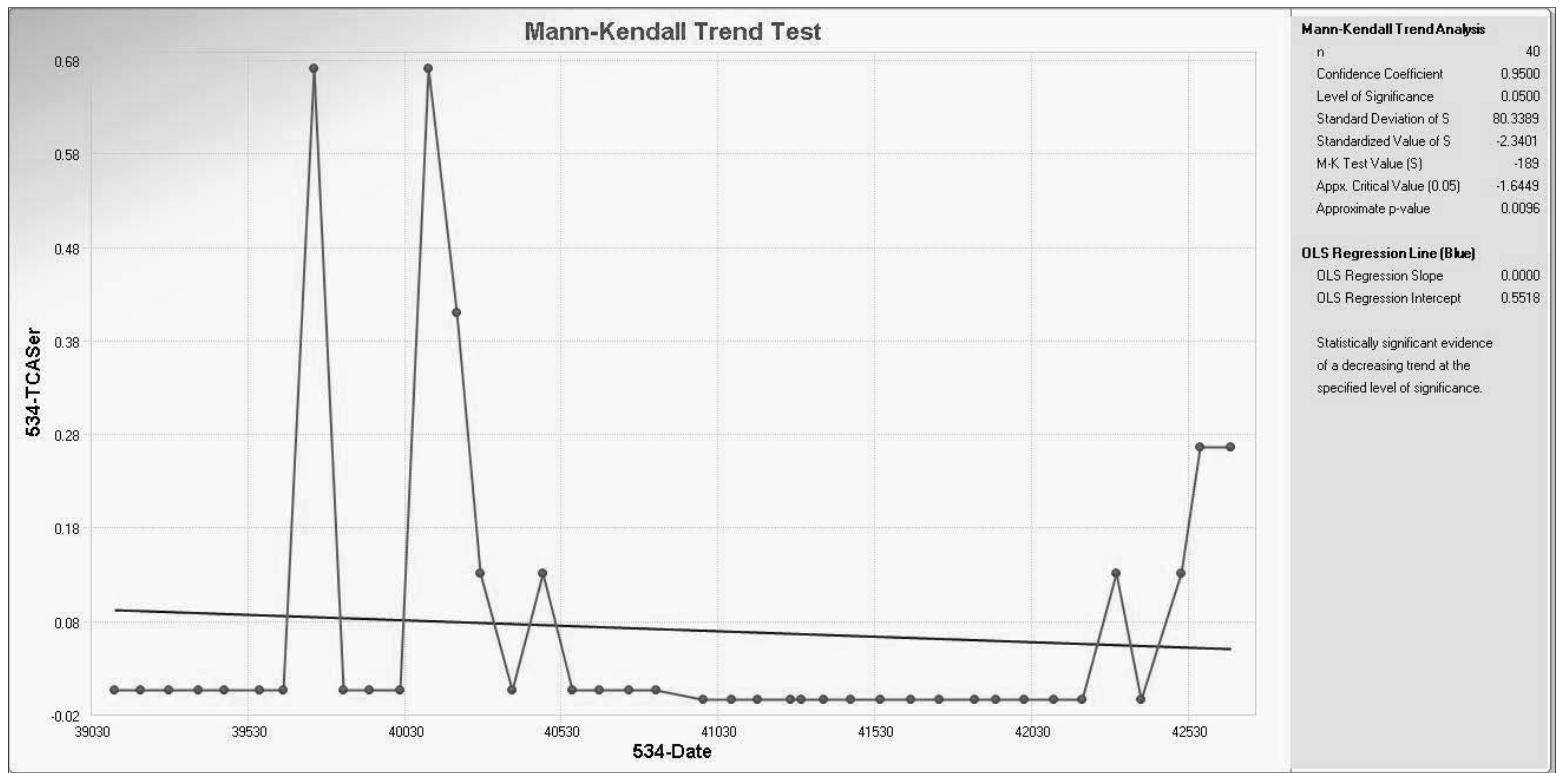


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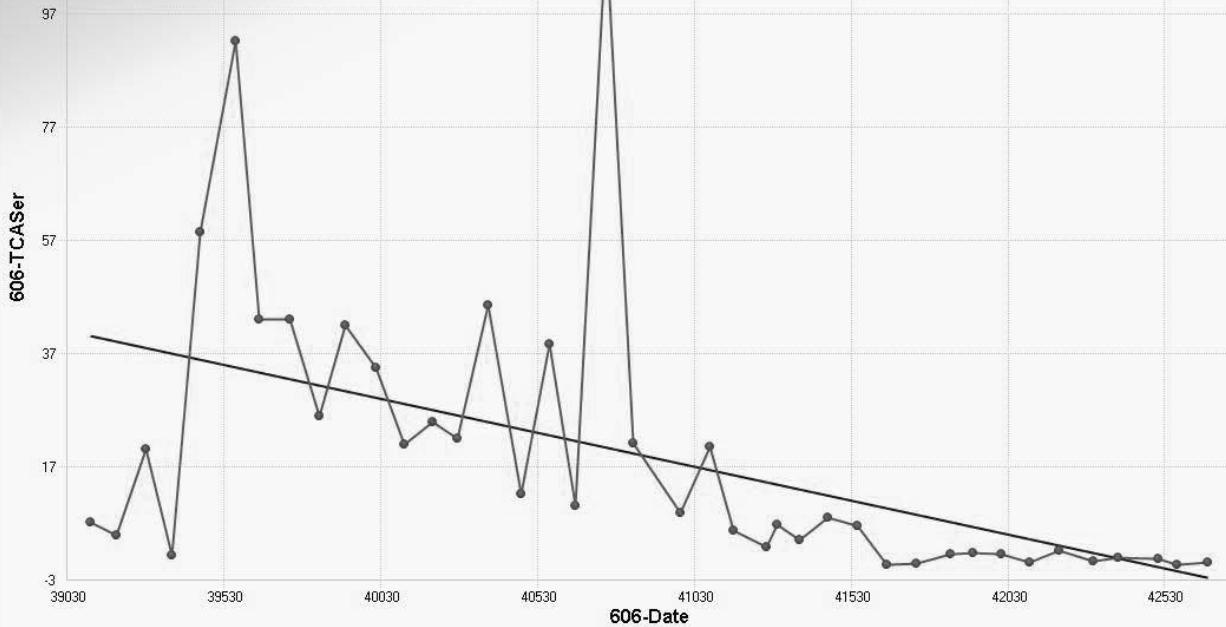


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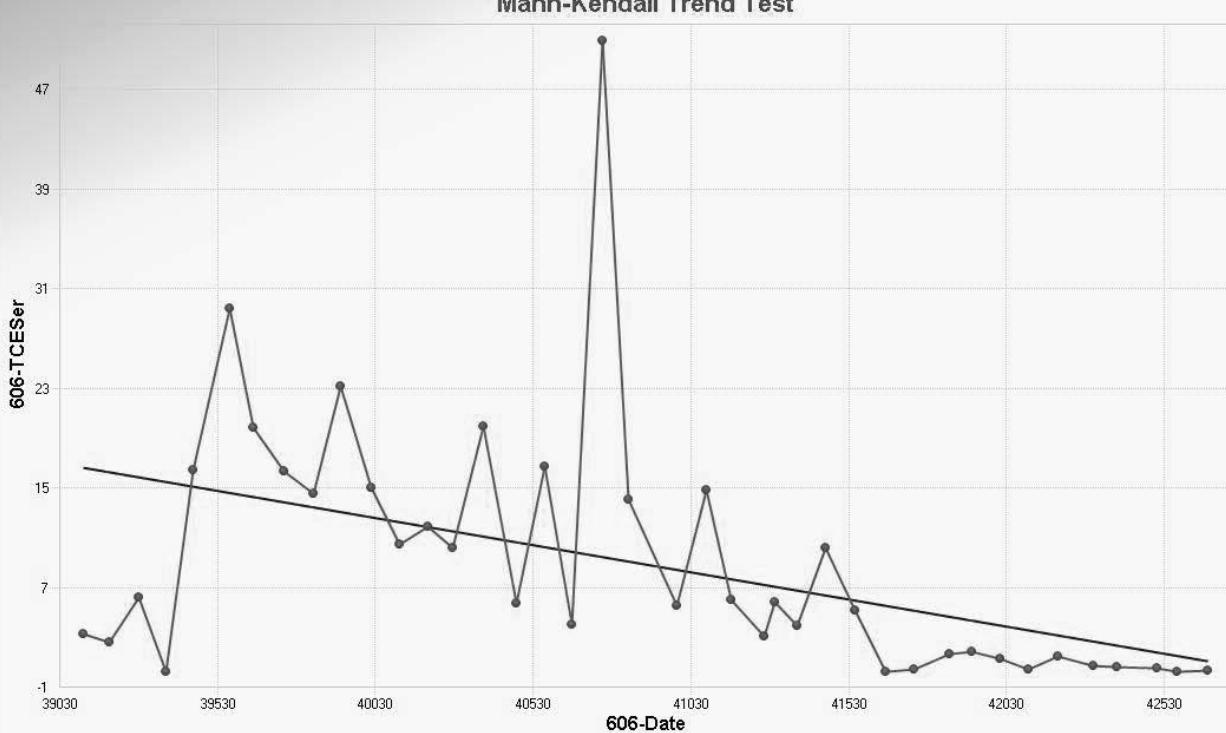




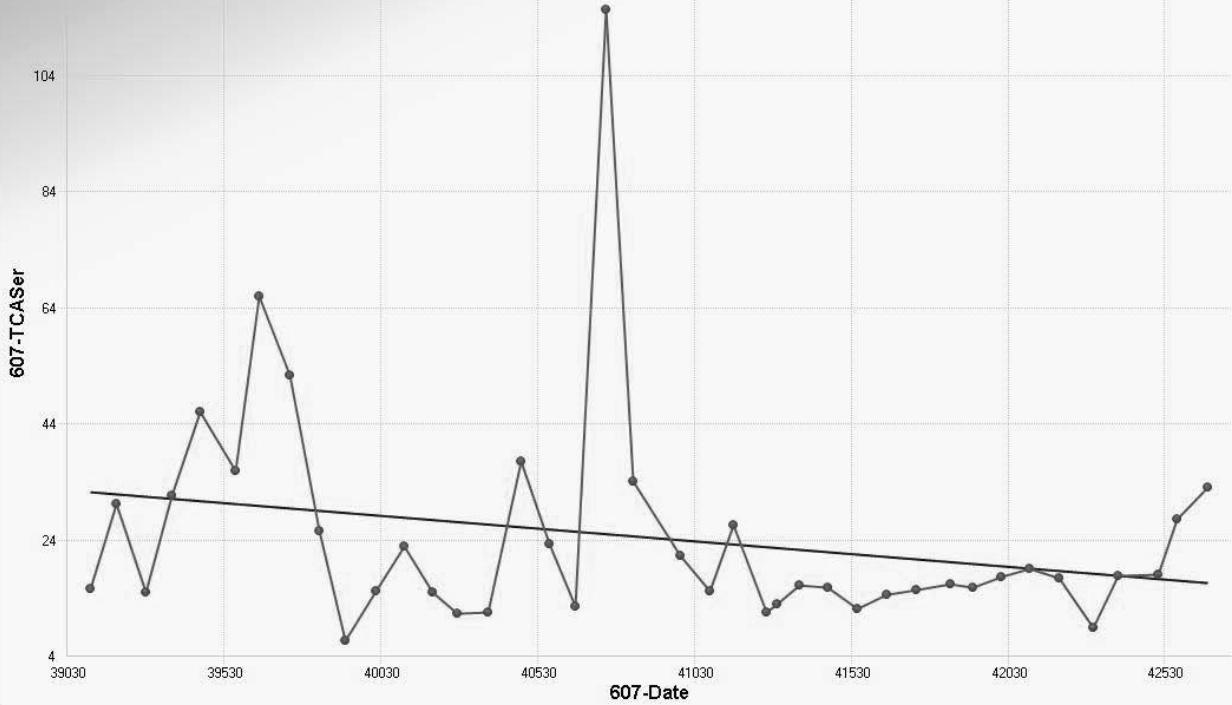
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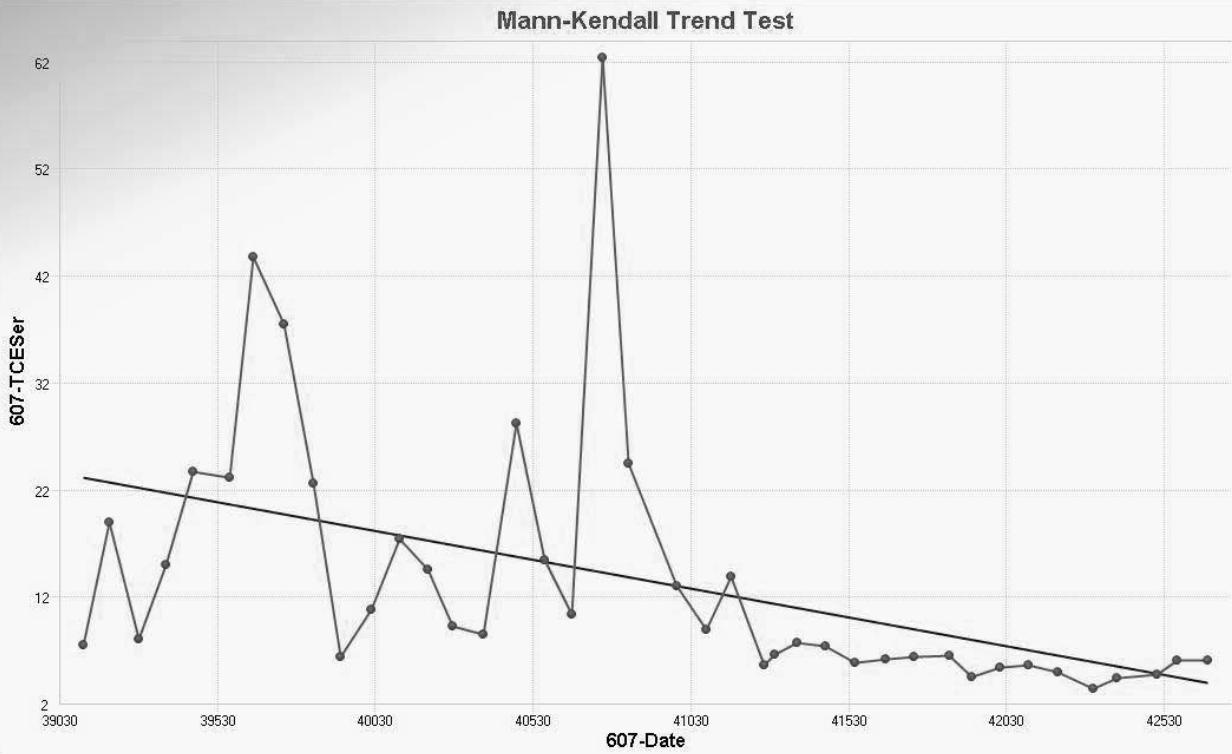
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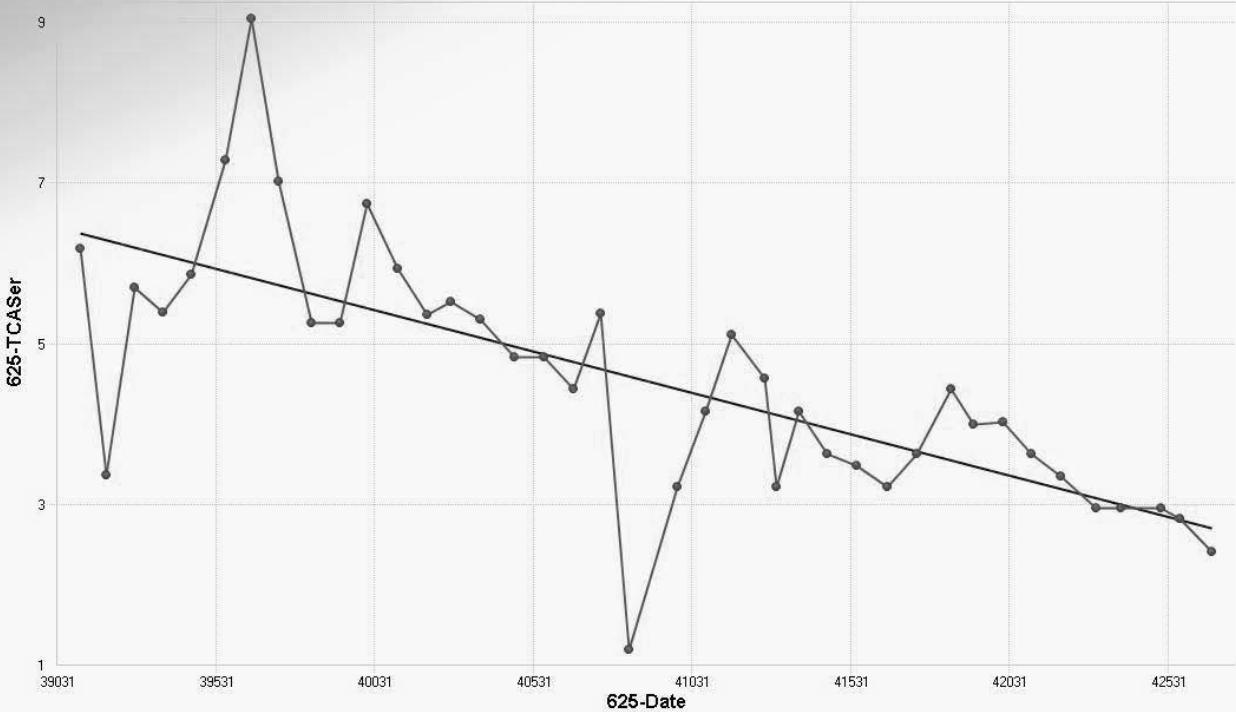
### Mann-Kendall Trend Test



### Mann-Kendall Trend Test



### Mann-Kendall Trend Test



### Mann-Kendall Trend Test

