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February 29, 2012

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Subject: 2011 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 2011 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. In addition to one bound copy of the report, enclosed is a CD containing a complete PDF version of the report.

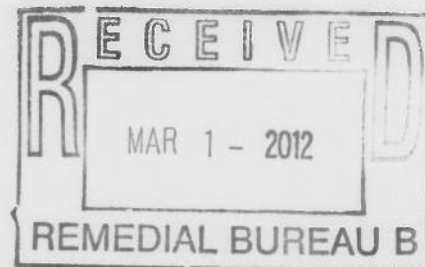
Should you have any questions concerning this report, please contact me at 703-257-2582 or by email at [whalen@us.ibm.com](mailto:whalen@us.ibm.com).

Sincerely,

Kevin Whalen  
Program Manager, IBM Corporate Environmental Affairs

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**2011 ANNUAL REPORT  
GROUNDWATER MONITORING PROGRAM  
FORMER IBM FACILITY  
OWEGO, NEW YORK  
6NYCRR PART 373 PERMIT NO. 7-4930-00095/00005**

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**Prepared for:**

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**February 28, 2012**

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## Table of Contents

1	INTRODUCTION .....	1
1.1	Regulatory Reference .....	1
1.2	Organization of Report .....	1
1.3	Background Information.....	2
1.4	Overview of Site Hydrogeology.....	2
2	GROUNDWATER MONITORING PROGRAM.....	4
2.1	Groundwater Extraction Wells .....	4
2.1.1	Summary of Significant Maintenance Activities.....	4
2.1.2	Pumping Volumes.....	5
2.1.3	Evaluation of Treatment Efficiency.....	6
2.2	Groundwater Monitoring Wells.....	6
2.2.1	Groundwater Elevation Measurements.....	6
2.2.2	Monitoring Well Inspections and Dedicated Equipment.....	7
2.2.3	Groundwater Sampling .....	7
2.2.3.1	Groundwater Chemistry Results.....	8
2.2.3.1.1	Volatile Organic Compounds .....	8
2.2.3.2	Quality Control Results for Environmental Blanks.....	11
3	EVALUATION OF HYDROGEOLOGY AND HYDROGEOCHEMISTRY .....	12
3.1	Groundwater Extraction.....	12
3.1.1	Northern Part of the Site .....	12
3.1.1.1	Parking Lot 001 Area.....	12
3.1.1.2	Tank Farm Area .....	12
3.1.2	Southern Part of the Site .....	13
3.2	Hydrogeology .....	13
3.2.1	Tank Farm Area .....	13
3.2.2	Parking Lot 001 Area.....	14
3.2.3	Southern Areas.....	15
3.2.3.1	Tower View Drive and Waste Management Areas .....	15
3.2.3.2	Southern Boundary Area.....	15
3.3	Hydrogeochemistry.....	16
3.3.1	Chemical Transformations.....	16
3.3.2	Tank Farm Area and Parking Lot 001 Area.....	17
3.3.2.1	Alluvial Zone Chemistry.....	17
3.3.2.2	Till/Bedrock Zone Chemistry .....	17
3.3.3	Southern Areas.....	18
3.3.3.1	Alluvial Zone Chemistry.....	18

3.3.3.2	Till/Bedrock Zone Chemistry .....	19
3.3.4	Graphical and Statistical Evaluations .....	19
3.3.5	VOC Mass Removal .....	21
3.3.6	Maps of Total VOCs, TCA, and TCE.....	22

### Table of Figures

Figure 1-1	Site Location Map
Figure 1-2	Groundwater Elevation Contour Map - Till/Bedrock - Third and Fourth Quarters 2011
Figure 1-3	Groundwater Elevation Contour Map - Alluvium/Sand & Gravel - Third and Fourth Quarters 2011
Figure 3-1	TCA-Series Isoconcentration Contour Map - Alluvium/Sand & Gravel (Alluvial Zone) - Third and Fourth Quarters 2011
Figure 3-2	TCE-Series Isoconcentration Contour Map - Alluvium/Sand & Gravel (Alluvial Zone) - Third and Fourth Quarters 2011
Figure 3-3	TCA-Series Isoconcentration Contour Map - Till/Bedrock Zone - Third and Fourth Quarters 2011
Figure 3-4	TCE-Series Isoconcentration Contour Map - Till/Bedrock Zone - Third and Fourth Quarters 2011
Figure 3-5	Methylene Chloride Isoconcentration Contour Map, Till/Bedrock Zone - Third Quarter 2011
Figure 3-6	Total Volatile Organic Compounds - Concentration in Groundwater (ug/l) - Third and Fourth Quarters 2011
Figure 3-7	1,1,1-Trichloroethane Concentration Map - Third and Fourth Quarters 2011
Figure 3-8	Trichloroethene Concentration Map - Third and Fourth Quarters 2011

*Third Quarter 2011 groundwater elevations were measured on July 18, 2011 in the Waste Management Area, Southern and Western Boundary Areas, and Tower View Drive / Mirror Lake Area in the southern part of the Site.*

*Fourth Quarter 2011 groundwater elevations were measured on October 17, 2011 in the Tank Farm Area and Parking Lot 001 Area in the northern part of the Site.*

*Third Quarter 2011 groundwater sampling occurred in July 2011 in the Waste Management Area, Southern and Western Boundary Areas, and Tower View Drive / Mirror Lake Area in the southern part of the Site.*

*Fourth Quarter 2011 groundwater sampling occurred in October 2011 in the Tank Farm Area and Parking Lot 001 Area in the northern part of the Site.*

## Table of Appendices

Appendix A	Extraction Well Pumping Volumes (Table A-1) and VOC Mass Removal Calculations (Table A-2)
Appendix B	Table B-1: Well Specifications, Corrective Action Monitoring Program Table B-2a: Hydraulic Effectiveness Monitoring Wells Table B-2b: Contaminant Reduction Monitoring Wells
Appendix C	2011 Groundwater Elevation Data and 2011 Well Inspection Summary with Dedicated Equipment Assignments
Appendix D	2011 Sampling Plan - Groundwater Monitoring Program
Appendix E	Chains of Custody - Third and Fourth Quarters 2011
Appendix F	2011 Groundwater Analytical Chemistry Data for Extraction and Monitoring Wells
Appendix G	2011 Quality Control Analytical Chemistry Data for Environmental Blanks

## Table of Plates

Plate 1	Well Location Map - Corrective Action Monitoring Program
Plate 2	Time vs. Concentration Graphs for Quarterly Monitoring Wells

# 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, 2011, 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, 2011 was also presented in the 2011 Semiannual Data Report previously submitted to NYSDEC on August 30, 2011. 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 2011 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 (TFA) and the Parking Lot 001 Area (P001 Area) in the northern part of the Site, and the Waste Management Area (WMA), Tower View Drive/Mirror Lake Area (TVD/MLA), Southern Boundary Area (SBA) and Western Boundary Area (WBA) 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

In June 1987, IBM submitted a Resource Conservation and Recovery Act (RCRA) Post-Closure Permit Application to NYSDEC and the United States Environmental Protection Agency (USEPA) for the Waste Management Area (WMA) at the Site. As required by RCRA regulations, IBM established a quarterly Groundwater Monitoring Program for the Site, including the WMA. The groundwater monitoring network and its operation, maintenance, and reporting conditions were subsequently incorporated into the Site's Part 373 Permit. The Part 373 Permit required the preparation of Groundwater Monitoring Plan (GMP), which NYSDEC approved in March 1995. In conjunction with the renewal of the Site's Part 373 Permit, IBM submitted a new GMP in December 2006. The new GMP was approved by NYSDEC on January 4, 2007 and replaced the original 1995 GMP. The corrective action groundwater monitoring network is explained in detail in the GMP, which includes a description of the groundwater treatment process, wells, sampling frequencies, site-specific parameter list, 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 very low hydraulic conductivity and is not an important water-transmitting unit.

The site-wide groundwater elevation contour map shown on Figure 1-2 was constructed for the till/bedrock zone using October 2011 data from the northern part of the Site and July 2011 data from the southern part of the Site. A similar map was published in the 2011 Semiannual Data Report using January and April 2011 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 is tributary to the Susquehanna River. The Susquehanna River is located approximately 800 feet southwest of the Site's southern boundary, as shown on Figure 1-1.

A second groundwater elevation contour map (Figure 1-3) was constructed for the alluvial zone using October 2011 data from the northern part of the site and July 2011 data from the southern part of the site. This map shows the discontinuous nature of the alluvial zone, where groundwater flow is strongly influenced by the extraction wells in the P001 Area, southern WMA and WBA, and SBA. The alluvial zone is generally absent in the TFA and in the northern portions of the WMA and TVD/MLA.



## 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 Groundwater Sciences Corporation.

### 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, well 415 pumps from the till/bedrock zone;
2. In the Parking Lot 001 Area, well 412 pumps primarily from the alluvial zone, well 413 pumps from till/bedrock zone, and well 414 pumps from both the alluvial and till/bedrock zones;
3. In the Waste Management Area, well 404 pumps from both the alluvial and till/bedrock zones and 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 3.8 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 systems in 2011:

1. The pump in extraction well 415 was replaced on January 31 and March 30.
2. The system piping for P001 Area extraction wells 412, 413, and 414 was cleaned on March 30. A new flow meter was installed on April 1.
3. The flow meters for wells 413, 415 and the discharge from the P001 Area extraction wells were cleaned on April 21.

4. The concrete pad at monitoring well 617 was repaired on May 3 after it was damaged by flooding in late April.
5. Severe thunderstorms on May 26 shut down power to the site, including the extraction wells and groundwater treatment facility (GTF). Groundwater extraction and treatment resumed following restoration of electrical power by NYSEG on May 31.
6. A new process logic controller (PLC) was installed in the GTF on August 17.
7. A new submersible pump was installed in extraction well 413 in late August. The well previously was part of the jet pump circuit with extraction wells 412 and 414.
8. The flow meters for extraction wells 404 and 405 were replaced on August 23.
9. The stripper feed flow meter in the GTF was volume tested on August 26. This meter measures flow of treated groundwater to NPDES-permitted Outfall 001.
10. The flow meter for extraction well 415 was tested on August 26.
11. A series of electrical outages caused by severe storms forced the shutdown of all systems on August 28. The extraction wells and GTF were restarted on August 29.
12. The discharge piping between the P001 Area wells and the main discharge line leading to the GTF was cleaned by water-jetting on August 30 and September 21.
13. Severe flooding from the remnants of Tropical Storm Lee forced the shutdown of all systems on September 8. The extraction wells and GTF were restarted on September 12.
14. The pump in extraction well 404 were pulled on September 21 using a crane and was replaced with a larger pump.

### **2.1.2 Pumping Volumes**

Table A-1 in Appendix A shows pumping volumes for the extraction wells in the Waste Management Area (wells 404 and 405), Parking Lot 001 Area (wells 412, 413, and 414) and Tank Farm Area (well 415). This table shows the gallons pumped monthly in 2011 from each metered

well. (A combined total is recorded for the three P001 Area extraction wells, which are not individually metered). The volume of groundwater extracted in 2011 was 153.6 million gallons, an increase of 13% over the volume pumped in 2010, and 42% more than was pumped in 2009.

### **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 2011 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 2011, resulting in a removal efficiency approaching 100 percent.

## **2.2 Groundwater Monitoring Wells**

At the beginning of 2011, the Site's Corrective Action Monitoring Program consisted of 140 wells. Physical specifications for the monitoring and extraction wells used in 2011 are listed on Table 1 of Appendix B. This table has been updated to reflect changes in the well field.

### **2.2.1 Groundwater Elevation Measurements**

Groundwater elevations were measured in the 140 wells listed on Table 2a of Appendix B. These include 130 on-Site wells, four offsite wells (540, 541, 542, 543) in the Route 17C interchange area south of the Southern Boundary Area, and six offsite wells (521, 522, 524, 529, 532, 534) on the Moore Tire property located west of the P001 Area.

Groundwater elevations were measured quarterly on January 20, April 19, July 18, and October 17, 2011. The tabulated groundwater elevation data for 2011 are presented in Appendix C. Groundwater elevation data for prior years has been published in previous annual reports and is maintained in a web-accessible geographic information system (GIS) database by Conestoga-Rovers and Associates (CRA). 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 is typically the top of the inner well casing ("TOC Elevation").

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

In addition to the inspection performed at the time each monitoring well is sampled, a comprehensive annual inspection of the well field was performed during the quarterly sampling events in January and April 2011. 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 table shows the depth at which each PDB sampler is set below the well's measuring reference point. The PDB samplers are typically set at the midpoint of the water column in each well.

### **2.2.3 Groundwater Sampling**

Table 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 2b of the GMP were sampled voluntarily to supplement the GMP sampling plan; this supplemental list includes the groundwater extraction wells when they are pumping.

The 2011 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 2011 occurred on January 21 to 26, April 20 to 25, July 18 to 25, and October 17 to 20. All groundwater samples collected during 2011 were analyzed by Lancaster Laboratories, Inc. (NYSDOH ELAP #10670). The completed chains of custody for the third and

fourth quarters of 2011 are reproduced in Appendix E of this report. The chains of custody for the first and second quarters were published in Appendix E of the 2011 Semiannual Data Report.

Of the wells that were scheduled to be sampled in the northern part of the Site during the second and fourth quarters, none was dry. (Well 114 in the TFA was dry in October, but is not routinely sampled). Of the wells that were scheduled to be sampled in the southern part of the Site during the first and third quarters, only well 620 was dry in July and could not be sampled.

The remainder of this section discusses the analytical results for environmental samples collected during 2011, including groundwater monitoring well, extraction well, and QA/QC samples.

### **2.2.3.1 Groundwater Chemistry Results**

Chemistry data generated from groundwater monitoring activities is maintained in a web-accessible GIS database by CRA. This GIS 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 CRA 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 2011 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 primary parameters detected and of concern at the Site are trichloroethene (TCE), 1,1,1-trichloroethane (TCA), and several transformation products of TCE and TCA. Transformation products of TCA include 1,1-dichloroethane (11-DCA), 1,1-dichloroethene (11-DCE), and chloroethane. Transformation products of TCE include cis-1,2-dichloroethene (c12-DCE) and vinyl chloride, the latter of which can also be produced by transformation of 11-DCE in the TCA series. Methylene chloride (dichloromethane) historically has been detected at the Site but is now detected mostly in the till/bedrock zone of the TFA and P001 Area. Including TCE, TCA, several

transformation products of each, and methylene chloride, 12 VOCs were detected in groundwater in 2011 at concentrations greater than the New York State Groundwater Quality Standard (NYSQS). 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 2011, and the monitoring well and extraction well where the maximum concentration was detected. As was the case in 2010, the NYSGQS was not exceeded in any well for chloroethane, dichlorodifluoromethane (Freon 12), trichloromethane (chloroform), and trichlorofluoromethane (Freon 11) in 2011.

<b>Table 2-1. Analytical Parameters for the Groundwater Monitoring Program*</b>			
<b>Parameter</b>	<b>NYSGQS (ug/l)</b>	<b>Maximum Concentration Measured in a Monitoring Well in 2011</b>	<b>Maximum Concentration Measured in an Extraction Well in 2011</b>
<b><i>Detected at a concentration greater than the NYSGQS:</i></b>			
1,1,1-Trichloroethane (TCA)	5	5,000 ug/l @ 353	4,100 ug/l @ 414
1,1-Dichloroethane (11-DCA)	5	3,100 ug/l @ 609	12,000 ug/l @ 414
1,1-Dichloroethene (11-DCE)	5	1,700 ug/l @ 353	2,000 ug/l @ 415
Tetrachloroethene (PCE)	5	22 ug/l @ 610	51 ug/l @ 415
Trichloroethene (TCE)	5	3,700 ug/l @ 353	1,400 ug/l @ 415
cis-1,2-Dichloroethene (c12-DCE)	5	320 ug/l @ 128	6,000 ug/l @ 415
Vinyl chloride	2	49 ug/l @ 625	320 ug/l @ 415
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	5	440 ug/l @ 609	620 ug/l @ 414
1,2-dichloro-1,2,2-trifluoroethane (Freon 123a)	5	58 ug/l @ 609	330 ug/l @ 414
Methylene chloride (DCM)	5	13 ug/l @ 612	2.2 ug/l @ 412
1,2-Dichloroethane	0.6	2.7 ug/l @ 612	0.1 ug/l @ 404, 413
1,1,2-Trichloroethane	1	6.5 ug/l @ 128	17 ug/l @ 415
<b><i>Not detected at a concentration greater than the NYSGQS:</i></b>			
Chloroethane	5	3.5 ug/l @ 368	1.8 ug/l @ 412
Dichlorodifluoromethane (Freon 12)	5	0.3 ug/l @ 382	1.7 ug/l @ 404
Trichloromethane (Chloroform)	7	1.6 ug/l @ 627	1.8 ug/l @ 414
Trichlorofluoromethane (Freon 11)	5	Not detected	Not detected
*from Table 1-1 of <i>Groundwater Monitoring Plan, Former IBM Facility, Owego, New York</i> (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 2011 for quality control purposes. The analytical chemistry data for these environmental blank samples is presented in Appendix G.

Trip blanks were prepared by the laboratory for each sampling round using analyte-free deionized (DI) water for each cooler containing VOC samples. The purpose of the trip blanks is to detect contamination during 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. 17 trip blanks were collected in 2011 and the analytical results for these trip blanks are presented in Appendix G. Groundwater samples associated with each trip blank can be determined by noting the dates over which the trip blanks are valid (refer to “Sample Description” heading in Appendix G).

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. 18 equipment rinse blanks were collected in 2011 from water level indicators and the analytical results for these blanks are presented in Appendix G.

Seven VOCs on the Site’s parameter list (Table 2-1) were detected in environmental blanks in 2011; two VOCs were detected at concentrations greater than 0.5 ug/l. TCE was detected in 15 of 18 equipment rinse blanks and in 16 of 17 trip blanks at concentrations ranging from 0.1 to 1.7 ug/l. None of the groundwater analytical chemistry results from monitoring wells appeared to be correlated with these detections. Methylene chloride was detected in 14 of 18 equipment rinse blanks and in 13 of 17 trip blanks in 2011. The highest concentration of methylene chloride in a blank sample was 0.8 ug/l and the source is likely the analytical laboratory, where methylene chloride is used. Groundwater analytical chemistry data was qualified as necessary in accordance with EPA Region 2 data validation procedures.



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

This section is an evaluation of the groundwater monitoring data collected during 2011. 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 2011 from the Site's groundwater extraction wells.

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

Hydraulic control and contaminant removal in the northern part of the Site was accomplished by the operation of the TFA and P001 Area extraction well systems.

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

The three extraction wells in the P001 Area (412, 413 and 414) are shown on Plate 1. A sample of the combined metered flow is collected quarterly and analyzed for the same parameters as the samples from the individual extraction wells. In this way, VOC mass removal for the P001 extraction wells can be calculated in the absence of individual well flow readings (refer to Section 3.3.5). The monthly flow from the P001 extraction wells ranged from 114,000 to 532,000 gallons in 2011, as shown on the pumping summary, Table A-1 of Appendix A. Most of the contaminant mass removed in the P001 Area is pumped from the alluvial zone by extraction wells 412 and 414; the concentration of VOCs in those two wells is roughly ten times higher than in well 413, which pumps only from the till/bedrock zone.

###### **3.1.1.2 Tank Farm Area**

TFA extraction well 415 (Plate 1) pumps from the till/bedrock zone and replaced extraction wells 408 and 409 in April 2009. In comparison to the P001 Area and WMA extraction wells, the volume extracted from well 415 is low and accounted for only 0.3% of groundwater extraction at the Site in 2011. However, the concentration of VOCs in well 415 is high relative to other extraction wells

and the mass removed by well 415 is comparable to the mass removed by the three P001 Area extraction wells, which pumped 10 times more groundwater combined in 2011 than well 415.

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

Wells 404 and 405 extract groundwater in the southern part of the Site and accounted for more than 97% of the groundwater volume extracted in 2011. They also accounted for about 77% of the total VOC mass removed by groundwater extraction in 2011 (refer to Section 3.3.5). Combined monthly flows from the two WMA extraction wells ranged from 9.6 to 16.8 million gallons in 2011, as shown in Appendix A. This represents an average increase of 1.4 million gallons (Mgal) per month versus 2010, 3.8 Mgal per month versus 2009, and is the result of continuing measures taken to improve the operation of extraction wells 404 and 405. These measures include cleaning the discharge piping and replacing the well pumps,

## **3.2 Hydrogeology**

As explained in Section 1.2 and shown on Plate 1, the TFA is located in the northeastern part of the Site and the P001 Area is located in the northwestern part of the Site. The WMA, TVD/MLA, WBA, and SBA 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 TFA consist primarily of till overlying bedrock, with some localized areas of fill. The monitoring wells in this area are completed in the fill, till, till/bedrock zone, or shallow bedrock. The shallow “alluvial zone” water-bearing unit present to the west of the TFA appears to be absent in the TFA itself. The till/bedrock zone is the most important water-transmitting unit in the TFA and extraction well 415 is screened in this unit.

The groundwater flow divide shown on the site-wide groundwater elevation contour map for the till/bedrock zone on October 17, 2011 (Figure 1-2) 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 TVD/ML Area.

### 3.2.2 Parking Lot 001 Area

The P001 Area is underlain by a bedrock valley originating as a closed depression roughly centered on monitoring well 380 (not shown on the maps). Well 380 was decommissioned in 2006 during a parking lot construction project and was located between existing monitoring well 393 and extraction well 413. Subsurface investigations in the early 1990s determined that the buried bedrock valley extends westward from the well 380 location, passing through a narrow throat at well 378 on Lakeview Parkway (Plate 1), and opening up to the west of well 378. In the P001 Area, this bedrock valley contains four hydrogeologic 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 areas. The primary water-bearing units identified 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 1-2 shows the groundwater elevation contours for the till/bedrock zone in the P001 Area on October 17, 2011. The generalized direction of groundwater flow in the till/bedrock zone is indicated by the flow arrows on this map, and the influence of P001 Area extraction wells 413 and 414 in the till/bedrock zone is apparent. Figure 1-2 also shows a groundwater flow divide roughly coincident with the route 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 onto the northern part of the WMA. This groundwater flow is ultimately captured by WMA extraction well 404.

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 1-3 shows the groundwater elevation contours for the alluvial zone in the P001 Area on October 17, 2011. The influence of P001 Area extraction wells 412 and 414 on groundwater flow in the alluvial zone is similar that shown on Figure 1-2 for wells 413 and 414 in the till/bedrock zone. The groundwater flow divide in the alluvial zone during the fourth quarter of 2011 was

located slightly west of Lake View Parkway. Groundwater in the alluvial zone east of the flow divide is captured by the P001 Area extraction wells. Groundwater on the west side of the divide flows to the southwest through a zone of coarse alluvium (previously mapped) extending across the center of the Moore Tire property and back onto the Owego facility north of Building 352. As is the case with groundwater in the till/bedrock zone, groundwater in the alluvial zone that is not captured by the P001 Area extraction wells is ultimately captured by WMA extraction wells 404 and 405.

### **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, 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 Tower View Drive and Waste Management Areas**

The direction of groundwater flow in the till/bedrock zone of the southern part of the Site on July 18, 2011 is shown by the flow arrows on Figure 1-2. In the east-central portion of the Site, groundwater generally flows to the southwest through the TVD/MLA and toward WMA extraction well 404. Groundwater flow in the till/bedrock zone through the northern portion of the WMA is generally to the south toward WMA extraction well 404. Extraction well 405 pumps primarily from the alluvial zone (sand and gravel) and, therefore, does not significantly affect groundwater flow in the till/bedrock zone.

#### **3.2.3.2 Southern Boundary Area**

As shown on Figure 1-2, flow in the till/bedrock zone of the SBA is generally to the northeast and north toward extraction well 404. The limit of groundwater capture by WMA extraction well 404 in the till/bedrock zone extends off site to the south of the railroad tracks (Figure 1-2, note potentiometric contour “795”).

An alluvial zone consisting primarily of sand and gravel overlies till in the SBA. As shown on Figure 1-2, horizontal gradients in the alluvial zone of the SBA are very low (less than 0.01) in the

vicinity of the railroad tracks. The southern limit of capture by WMA extraction wells 404 and 405 in the alluvial zone, as indicated by the flow divide shown on Figure 1-3, was on-Site about 500 feet north of the railroad tracks in July 2011.

### **3.3 Hydrogeochemistry**

In the P001 Area and southern part of Site, TCA, TCE and their transformation products are the primary parameters of concern. The site-wide distributions of TCA, TCE, and their transformation products are shown on a series of isoconcentration contour maps for the till/bedrock and alluvial zones (Figures 3-1 through 3-4). Methylene chloride is limited in distribution to a few wells in the TFA and P001 Area. Figure 3-5 is an isoconcentration contour map for methylene chloride in the till/bedrock zone.

#### **3.3.1 Chemical Transformations**

Transformation of TCA and TCE can occur at various rates in different parts of the same groundwater plume. As a result, characterizing the spatial distribution and changes in concentration of these constituents and their transformation products is difficult if one examines only the source constituents (TCA or TCE). The isoconcentration contour maps (Figures 3-1 through 3-4) show data incorporating mass lost due to transformation of TCA or TCE by reductive dehalogenation (in this case, the loss of chlorine ions). This was done by expressing the concentrations of all chemical degradation products in terms of the source constituent. The TCA-series concentration was calculated by multiplying concentrations of 11-DCA, 11-DCE, and chloroethane by the ratio of the molecular weight of TCA to the molecular weight of each degradation product, and then summing the products. In this way, all concentrations of TCA, 11-DCA, 11-DCE, and chloroethane dissolved in groundwater for a particular sample are expressed as a total TCA-series concentration, thereby approximating the TCA concentration that theoretically could have been measured if none of the TCA had been transformed to its degradation products. The same procedure was performed for the TCE series parameters such that the vinyl chloride, c12-DCE, and TCE concentrations were expressed as a total TCE-series concentration.

### 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 3-1 and 3-2 show isoconcentration contours for the TCA- and TCE-series parameters in the alluvial zone, which includes sand and gravel units of glacial origin as well as alluvium. The isoconcentration contours shown on these two figures have not been extended to the east of the P001 Area and into the Tank Farm Area because the alluvial zone is generally absent or has not been well-defined in that area. (Fill and till lie directly on top of bedrock in most of the TFA.) Figures 3-1 and 3-2 show plumes of both TCA- and TCE-series parameters extending from an area of concentrations historically greater than 1,000 ug/l in the vicinity of well 613 (but now less than 1000 ug/l), to the southwest toward the southeast corner of the Moore Tire property. These same constituents also are present in five on-site wells (398, 601, 602, 603, and 608) in the extreme western portion of the P001 Area north of Building 352 and north of the WMA. East of the groundwater flow divide shown on Figures 3-1 and 3-2, the TCA- and TCE-series plumes are captured by P001 Area extraction wells 412 and 414. The groundwater flow divides on Figures 3-1 and 3-2 are identical to the divide shown on the groundwater elevation contour map for the alluvial zone (Figure 1-3).

#### 3.3.2.2 Till/Bedrock Zone Chemistry

Isoconcentration contour maps for TCA- and TCE-series parameters in the till/bedrock zone are shown on Figures 3-3 and 3-4. The TCA-series and TCE-series plumes in the northern part of the Site extend from the Tank Farm source area westward toward the P001 Area extraction wells and across Lakeview Parkway onto the Moore Tire property west of the P001 Area extraction wells. The plumes in the TFA with concentrations greater than 1,000 ug/l are mostly captured by extraction well 415. P001 Area extraction wells 413 and 414 intercept groundwater plumes between the eastern groundwater flow divide created by extraction well 415 in the TFA and the western flow divide situated around Lake View Parkway. These flow divides are identical to those shown on the groundwater elevation contour map for the till/bedrock zone (Figure 1-2).

The distribution of methylene chloride in the till/bedrock zone of the northern part of the Site during the third quarter of 2011 is shown on Figure 3-5. Concentrations of methylene chloride have decreased significantly in the till/bedrock zone since the 1990s, and what little methylene chloride remains appears to be captured by extraction well 414. The maximum concentration of methylene chloride was 12 ug/l at well 612 and the estimated plume contour is shown at a limit of 1 ug/l on Figure 3-5.

### **3.3.3 Southern Areas**

The isoconcentration contour maps (Figures 3-1 through 3-4) show the distribution of TCA- and TCE-series parameters in the southern part of the Site during the third quarter of 2011. Methylene chloride was not contoured in the southern part of the Site because it was not detected there.

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

The distributions of TCA- and TCE-series parameters in the alluvial zone of the southern part of the Site are shown on Figures 3-1 and 3-2.

In the southern alluvial zone, a low-level (less than 10 ug/l) TCA-series plume (Figure 3-1) is located in the vicinity of monitoring wells 101, 318, 319, 322, 323, and 625 near the southern boundary of the Site. This plume does not appear to extend off-site because TCA-series parameters were not detected at greater than 1 ug/l in offsite wells 540, 541, 542, and 543 in July 2011. In contrast, the TCE-series plume in the southern alluvial zone (Figure 3-2) extends offsite, south of the railroad tracks in the Route 17C interchange, where low concentrations of VOCs (less than 3 ug/l) have been detected at wells 541, 542, and 543, as shown on Figure 3-2.

Figure 3-1 shows TCA plumes originating on site in the central TVD/MLA and in the central part of the WMA. Groundwater chemistry data from wells 621 and 623 suggests that the eastern TCA-series plumes in the TVD/MLA and WMA are captured by WMA extraction wells 404 and 405. The southern limit of the TCA-series plume in the TVD/MLA probably lies north of shallow monitoring well 374 on the north side of Mirror Lake (Figure 3-1), where concentrations are typically at or below the limits of detection. 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.

### 3.3.3.2 Till/Bedrock Zone Chemistry

Figures 3-3 and 3-4 show the TCA- and TCE-series isoconcentration contours for the till/bedrock zone. With regard to the distribution of TCA-series parameters in the southern part of the Site, Figure 3-3 shows a plume originating north of Tower View Drive near the southern end of Building 002, a plume originating from off-Site west of Barnes Creek (in the vicinity of wells 160 and 162), and a plume centered on the northern part of the WMA east of Building 352 and northeast of the Old Waste Treatment Plant (Old WTP). The TVD/MLA and WMA TCA-series plumes (Figure 3-3) merge south of the Old WTP, and are captured by WMA extraction well 404.

The TCE-series isoconcentration contour map for the till/bedrock zone in the southern part of the Site is shown on Figure 3-4. Like the map showing the distribution of TCA-series parameters (Figure 3-3), this map 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 with a lobe extending to the south toward SBA monitoring well 628.

### 3.3.4 Graphical and Statistical Evaluations

Graphs of TCA- and TCE-series concentrations versus time for key monitoring and extraction wells for the years 2000 through 2011 are shown on Plate 2. These wells are located either near the boundaries of the Site in the P001, TFA, SBA, and WMA, or off-site in the Moore Tire Area. They represent all of the wells that are sampled quarterly in accordance with the sampling plan presented in Appendix D.

Concentration trends in many of these wells are apparent by inspection. To determine whether the observed changes in chemical concentrations over time are statistically significant, analytical data from the past eight years 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 point. 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 4.1, 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 for trend analysis was nearly five years (20 quarterly samples) from January 2007 to October 2011.

The statistical trend test results for these wells are summarized on Table 3-1. As shown on Table 3-1, the concentration trend in most of the 18 quarterly wells is indeterminate, i.e., neither a statistically increasing nor decreasing trend could be confirmed. In the P001 Area, concentrations TCA- and TCE-series parameters are increasing at monitoring well 393 and at extraction well 412. In the Tank Farm Area, the concentration of TCA-series parameters is decreasing at extraction well 415 (based on two years of data). In the off-Site Moore Tire Area, concentrations of TCA- and TCE-series parameters are increasing at monitoring well 522. In the SBA, concentrations of TCA- and TCE-series parameters are decreasing at monitoring wells 323 and 625 and increasing at well 319 (TCE-series only).

<b>Table 3-1. Statistical Evaluation of Trends in Water Quality at Quarterly Monitoring Wells (2007-2011)</b>				
<b>Site Area</b>	<b>Well</b>	<b>TCA-Series Trend</b>	<b>TCE-Series Trend</b>	<b>Hydrogeologic Zone Monitored</b>
<b>P001 Area (Monitoring)</b>	393	Increasing	Increasing	Till/Bedrock
	399	None	None	Alluvial
	606	None	None	Alluvial
	607	None	None	Till/Bedrock
<b>P001 Area (Extraction)</b>	412	Increasing	Increasing	Alluvial
	413	None	None	Till/Bedrock
	414	None	Increasing	Alluvial & Till/Bedrock
<b>Tank Farm Area* (Extraction)</b>	415	Decreasing	None	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	None	None	Alluvial
	319	None	Increasing	Alluvial
	322	None	None	Alluvial
	323	Decreasing	Decreasing	Alluvial
	625	Decreasing	Decreasing	Alluvial
<b>Waste Management Area (Extraction)</b>	404	None	None	Alluvial & Till/Bedrock
	405	None	None	Alluvial
<p>The Mann-Kendall test was used to evaluate concentration trends.            "None" means that the concentration trend is indeterminate.            * Two years of data (eight quarters) was available for extraction well 415, from 2010-2011.</p>				

### 3.3.5 VOC Mass Removal

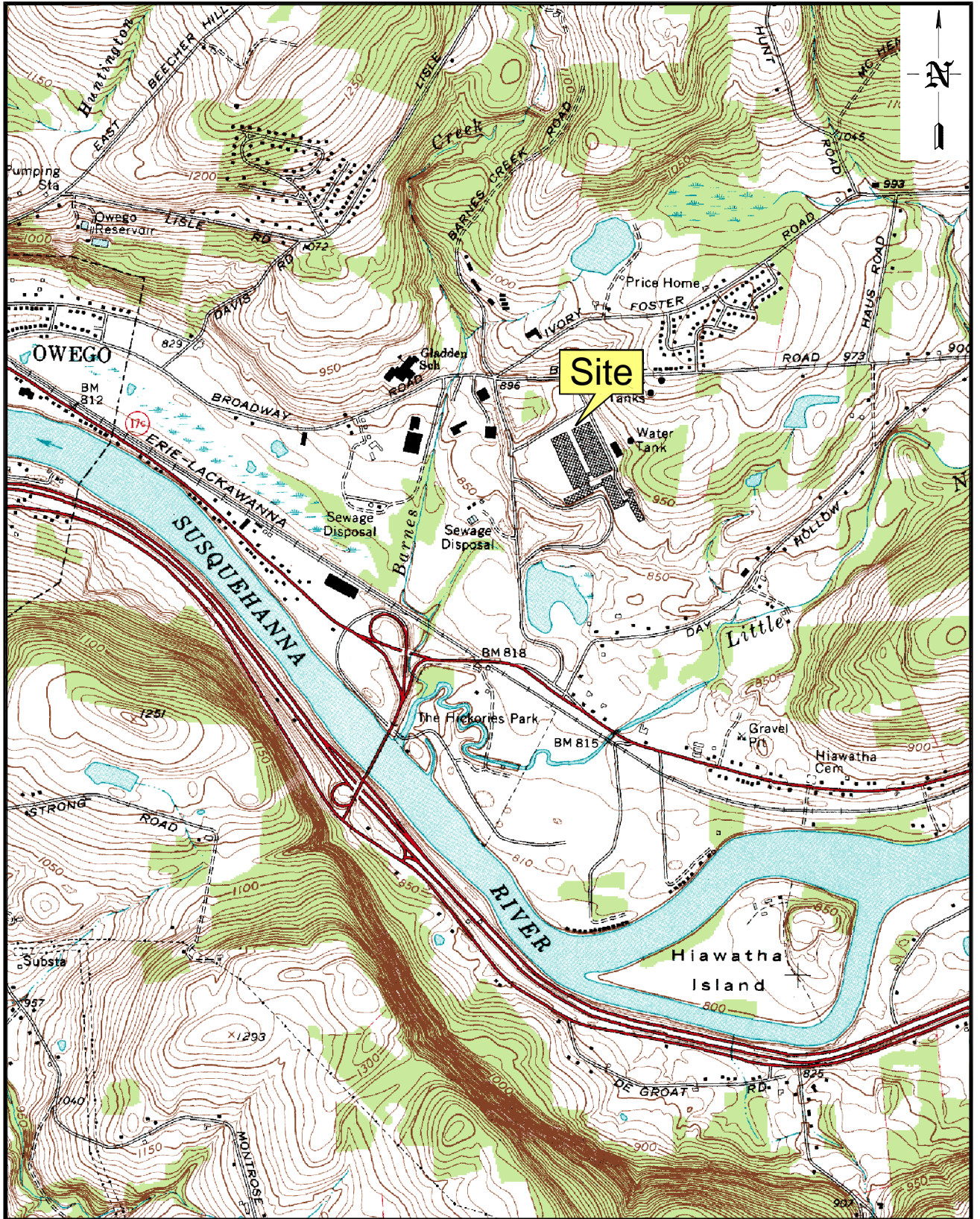
Table A-2 in Appendix A shows the dissolved VOC mass pumped by the groundwater extraction wells during 2011 and subsequently removed via the Site's packed-column air stripping tower. The

total VOC mass was calculated quarterly for each extraction well (or for the combined output in the case of the P001 Area extraction wells) by multiplying the quarterly volume pumped from each well (from Table A-1 of Appendix A) by the VOC concentrations measured during the associated quarterly sampling event (refer to the analytical chemistry data in Appendix F). By these calculations, the total VOC mass removed in 2011 was 414 pounds, which is a significant increase over the annual range of 214 to 392 pounds during the previous seven years. The increase is primarily from two sources: (1) increased pumping volumes from WMA extraction well 404 beginning in November 2009 and later from WMA extraction well 405, and (2) higher concentrations of VOCs at TFA extraction well 415 at comparable flows relative to the previous combination of extraction wells 408 and 409 in the TFA. The 44 pounds removed by well 415 in 2011 and 128 pounds removed from 2009 to 2011 is a significant increase over the 29 pounds removed by the combination of extraction wells 408 and 409 during the three-year period from 2006 to 2008.

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

As required by the GMP, Figure 3-6 is a map 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. The map shows results for the southern wells sampled during the third quarter of 2011 and for the northern wells sampled during the fourth quarter of 2011. 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 3-7 and 3-8 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 1 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 3-1 through 3-4) because TCA and TCE generally are the greatest contributors to total VOC concentration at most of the monitoring wells.



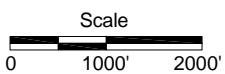
Portion of the Apalachin, NY  
7.5-minute USGS Quadrangle  
(1988)

Figure 1-1



Corporate Environmental Affairs

Site Location Map



93004-068-A5 / 2-20-09

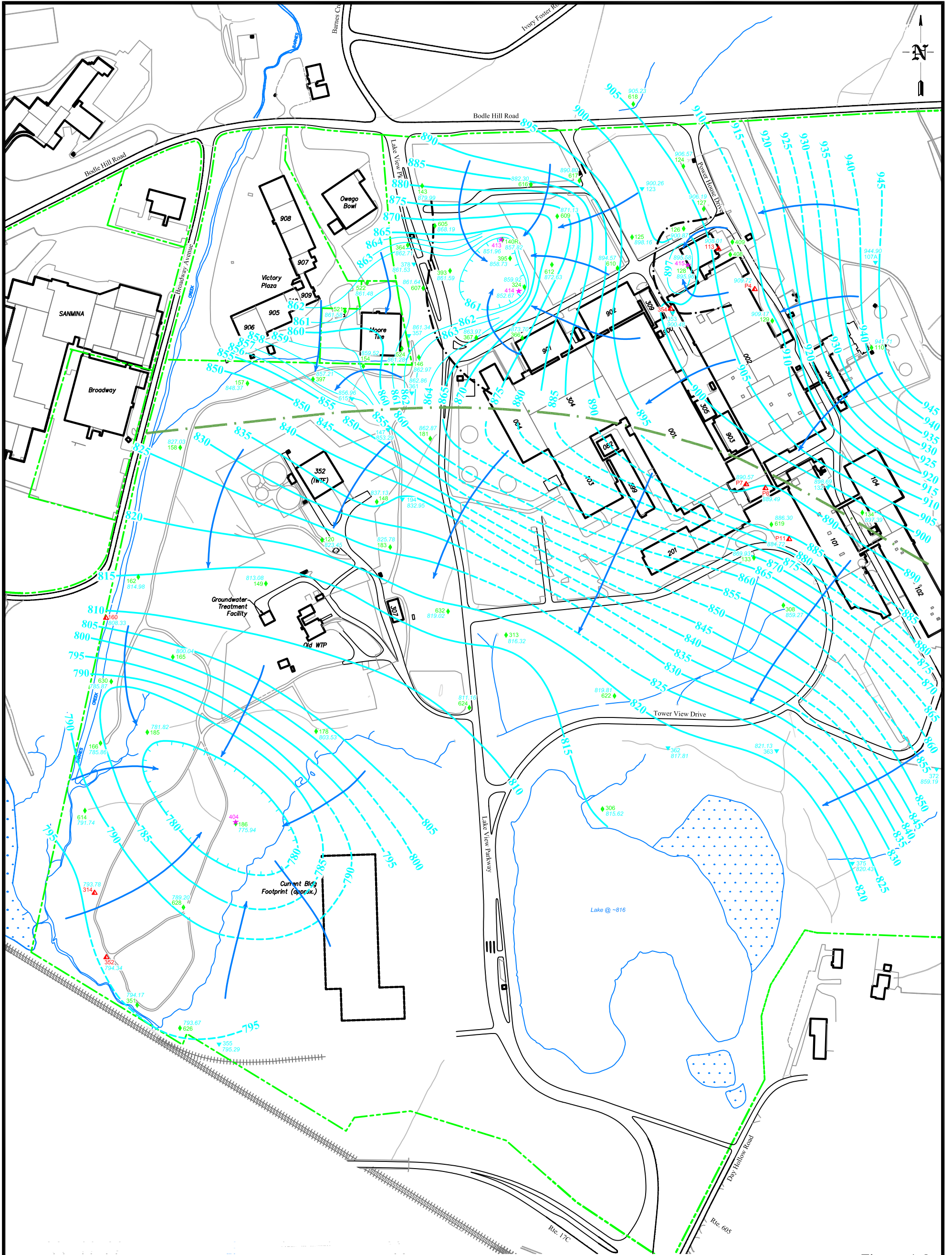
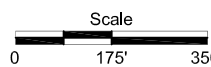



Figure 1-2

- ▼ - Bedrock monitoring well
- ▲ - Till monitoring well
- ◆ - Soil/Bedrock monitoring well
- ★ - Withdrawal well
- Property Line
- ← - Swamp area
- - Direction of Groundwater Flow
- 796.47 - Groundwater Elevation (feet amsl)
- 795 - Groundwater Elevation Contour (feet amsl)
- - Inferred Groundwater Elevation Contour
- Groundwater Flow Divide
- Line of Separation Between Northern and Southern Sampling Events

Northern Area wells measured October 17, 2011; Southern Area wells measured July 18, 2011.

Note: Some wells that monitor the lower till were used to construct this map.






Owego, New York

### Till/Bedrock Groundwater Elevation Contour Map Third and Fourth Quarters, 2011

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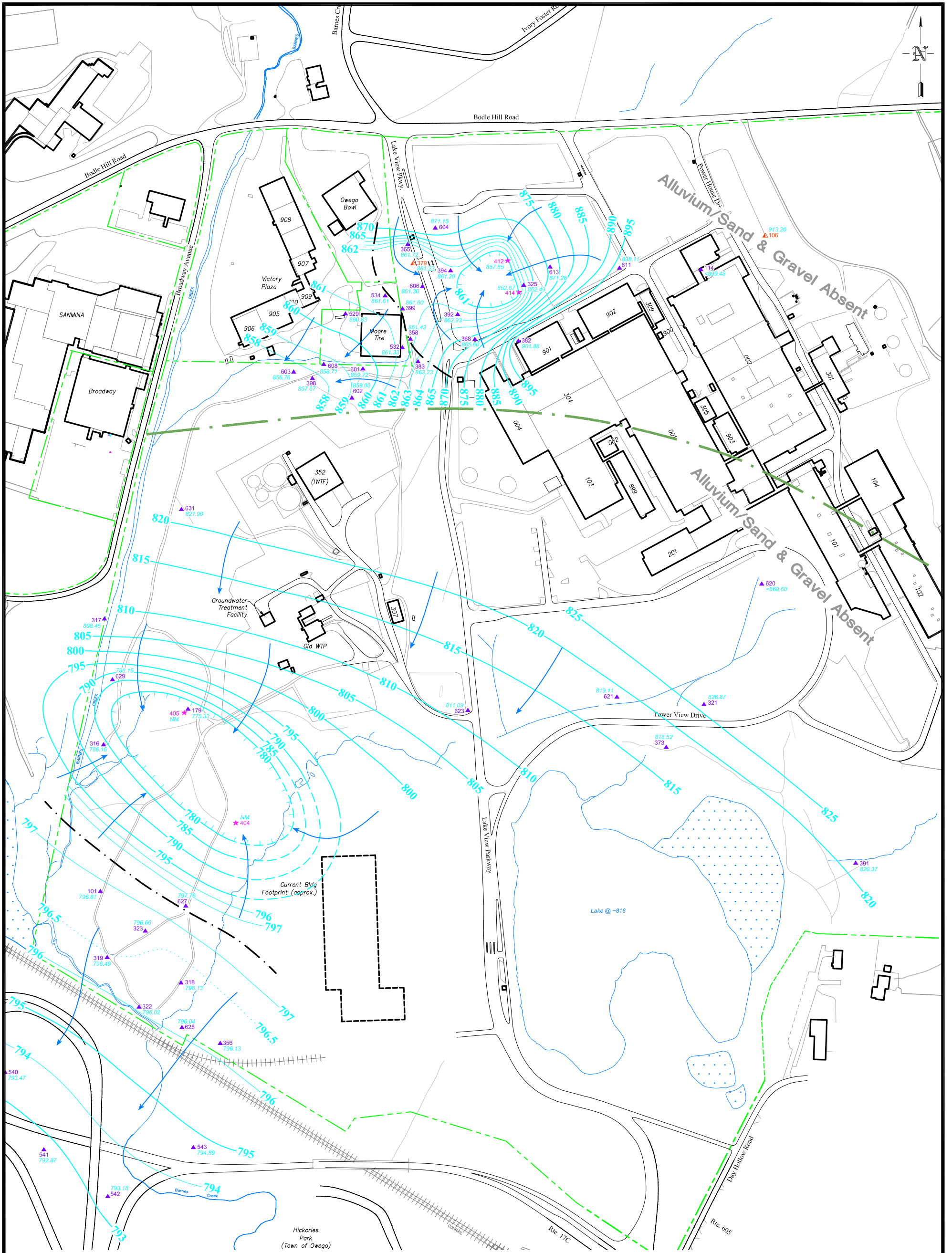



Figure 1-3

- ▲ - Soil monitoring well
- ▲ - Till monitoring well
- ★ - Withdrawal well
- - Property Line
- - Line of Separation Between Northern and Southern Sampling Events
- - Swamp area
- 796.38 - Groundwater Elevation (feet amsl)
- NM - Not Measured
- 800 - Groundwater Elevation Contour (feet amsl)
- - Supplemental Groundwater Elevation Contour
- - Direction of Groundwater Flow
- - Groundwater Flow Divide

Note: Groundwater elevations for wells P1, P2, 161, 163, 386, 387 and 374 were not used because these wells monitor a shallow alluvial unit that is different from the outwash unit monitored by other wells in the southern areas.

Northern Areas measured October 17, 2011; Southern Areas measured July 18, 2011.




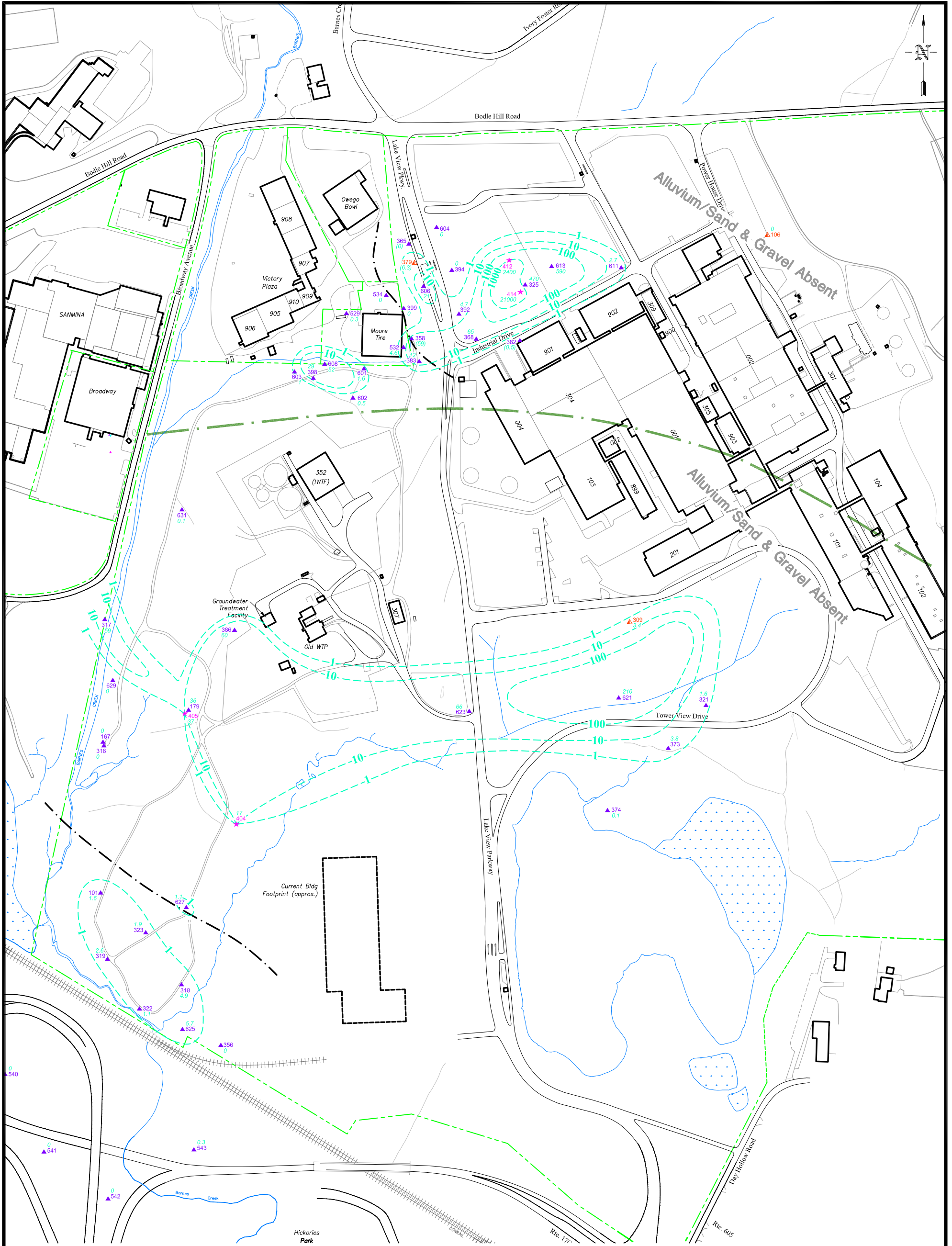


Owego, New York

### Alluvium/Sand & Gravel Groundwater Elevation Contour Map Third and Fourth Quarters, 2011

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- ▲ - Soil monitoring well
- ▲ - Till monitoring well
- ★ - Withdrawal well
- 4.3 - TCA-Series Concentration (ug/l)
- (65) - Previous sampling result (for wells sampled annually)
- - Swamp area
- 100---
- TCA-Series Concentration Contour (ug/l)
- Groundwater Flow Divide
- Property Line
- Line of Separation Between Northern and Southern Sampling Events

Calculation:  

$$\text{TCA Series} = \text{TCA} + 1,1\text{-DCA} \left( \frac{133.42}{98.97} \right) + 1,1\text{-DCE} \left( \frac{133.42}{96.95} \right) + \text{CEA} \left( \frac{133.42}{64.52} \right)$$
 where
 


- TCA = 1,1,1-Trichloroethane
- 1,1-DCA = 1,1-Dichloroethane
- 1,1-DCE = 1,1-Dichloroethene
- CEA = Chloroethane

Notes: Wells 106, 309 and 379, which monitor the upper till, were also used to construct this map. Values shown have been rounded to two significant figures or one significant figure if less than 10 ug/l.  
 Extraction wells 413 and 414 pump from the till/bedrock zone.  
 Extraction wells 412 and 414 pump from the alluvial zone.

Northern Area wells sampled October 2011.  
 Southern Area wells sampled July 2011.



Figure 3-1




Owego, New York

### Alluvium/Sand & Gravel TCA-Series Isoconcentration Contour Map

#### Third and Fourth Quarters, 2011

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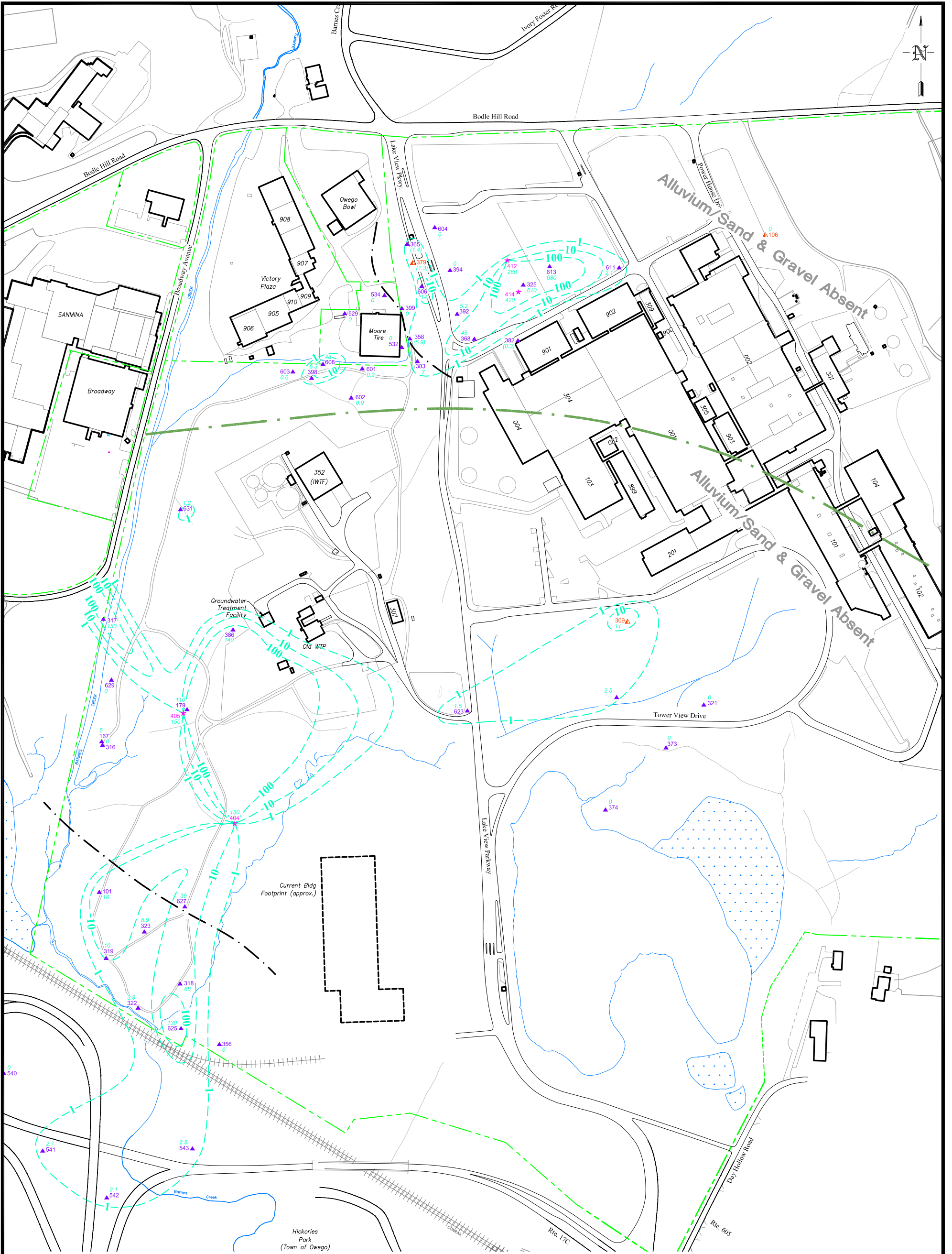


Figure 3-2

- ▲ - Soil monitoring well
- ▲ - Till monitoring well
- ★ - Withdrawal well
- 45 - TCE-Series Concentration (µg/l)
- (0.3) - Previous sampling result (for wells sampled annually)
- TCE-Series Concentration Contour (µg/l)
- Groundwater Flow Divide
- Property Line
- Line of Separation between Northern and Southern Sampling Events
- Swamp area

Calculation:  

$$\text{TCE Series} = \text{TCE} + 1,2\text{-DCE(TOT)} \left( \frac{131.4}{96.95} \right) + \text{VC} \left( \frac{131.4}{62.5} \right)$$

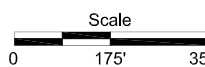
where

- TCE = Trichloroethene
- 1,2-DCE(TOT) = Total 1,2-Dichloroethene
- VC = Vinyl Chloride

Notes: Wells 106, 309 and 379, which monitor the upper till, were also used to construct this map. Values shown have been rounded to two significant figures or one significant figure if less than 10 µg/l.

Extraction wells 413 and 414 pump from the till/bedrock zone.  
 Extraction wells 412 and 414 pump from the alluvial zone.

Northern Area wells sampled October 2011.  
 Southern Area wells sampled July 2011.



### Alluvium/Sand & Gravel TCE-Series Isoconcentration Contour Map Third and Fourth Quarters, 2011

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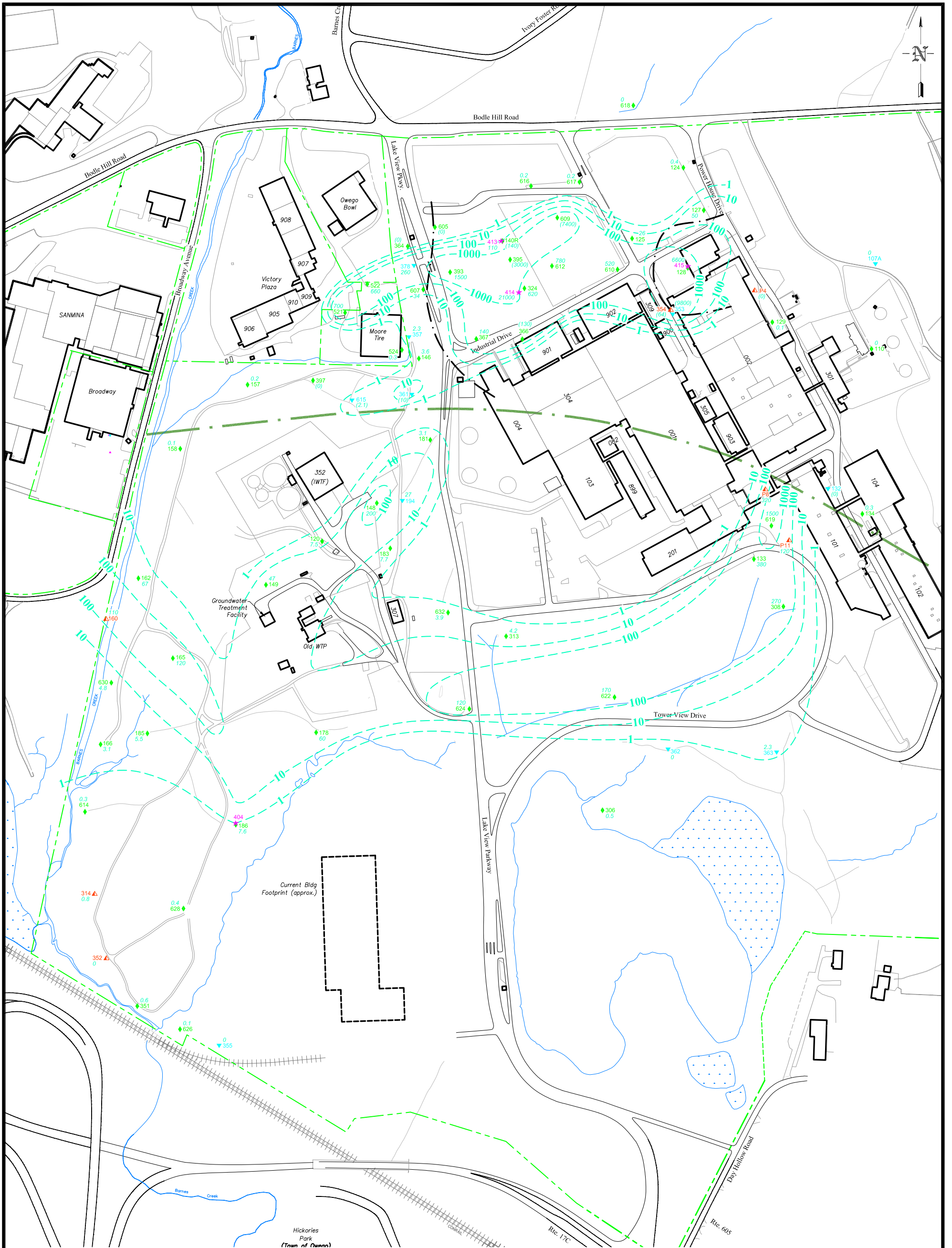


Figure 3-3

- ▼ - Bedrock monitoring well
- ◆ - Soil/Bedrock monitoring well
- ▲ - Till monitoring well
- ★ - Withdrawal well
- 5.9 - TCA-Series Concentration (ug/l)
- (0.4) - Previous sample result (for wells sampled annually)
- 100 - TCA-Series Concentration Contour (ug/l)
- Groundwater Flow Divide
- Property Line
- Line of Separation Between Northern and Southern Sampling Events
- Swamp area

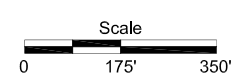
Calculation:  


$$\text{TCA Series} = \text{TCA} + 1,1\text{-DCA} \left( \frac{133.42}{98.97} \right) + 1,1\text{-DCE} \left( \frac{133.42}{96.95} \right) + \text{CEA} \left( \frac{133.42}{64.52} \right)$$
 where
 

TCA = 1,1,1-Trichloroethane
1,1-DCA = 1,1-Dichloroethane
1,1-DCE = 1,1-Dichloroethene
CEA = Chloroethane

Northern Area wells sampled October 2011.  
 Southern Area wells sampled July 2011.

Notes: Some wells that monitor the lower till or the bedrock were used to construct this map.  
 Values shown have been rounded to two significant figures or one significant figure if less than 10 ug/l.






Owego, New York

**Till/Bedrock TCA-Series  
 Isoconcentration Contour Map  
 Third and Fourth Quarters, 2011**

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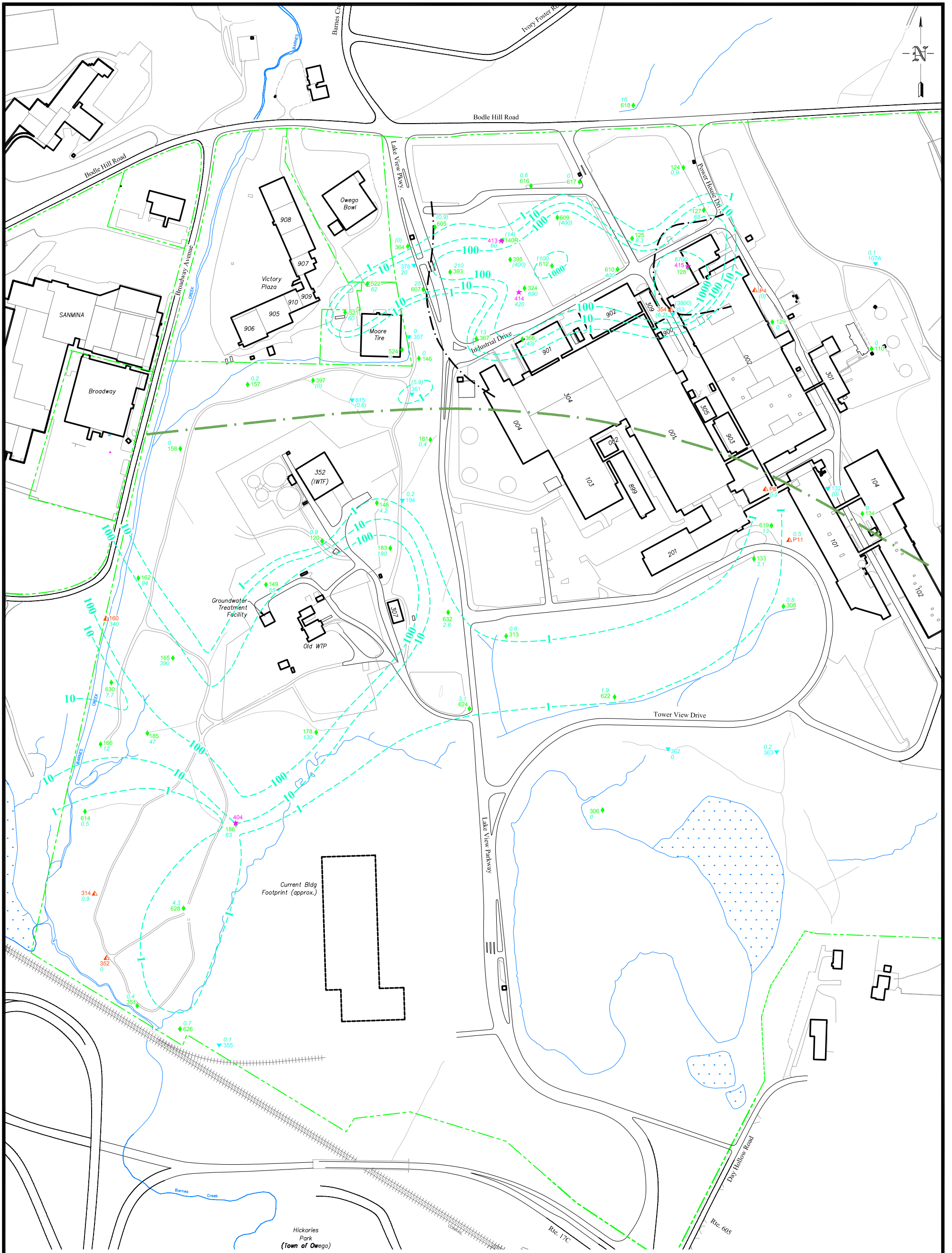


Figure 3-4

- ▼ - Bedrock monitoring well
- ◆ - Soil/Bedrock monitoring well
- ▲ - Till monitoring well
- ★ - Withdrawal well
- 5 - TCE-Series Concentration (µg/l)
- (0.1) - Previous sample result (for wells sampled annually)
- 100 - TCE-Series Concentration Contour (µg/l)
- - - Groundwater Flow Divide
- - - Property Line
- - - Line of Separation Between Northern and Southern Sampling Events
- Swamp area

Calculation:

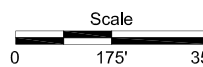
$$\text{TCE Series} = \text{TCE} + 1,2\text{-DCE(TOT)} \left( \frac{131.4}{96.95} \right) + \text{VC} \left( \frac{131.4}{62.5} \right)$$

where

- TCE = Trichloroethene
- 1,2-DCE(TOT) = Total 1,2-Dichloroethene
- VC = Vinyl Chloride

Notes: Some wells that monitor the lower till or the bedrock were used to construct this map. Values shown have been rounded to two significant figures, or one significant figure if less than 10 µg/l.

Northern Area wells sampled October 2011.  
Southern Area wells sampled July 2011.



Till/Bedrock TCE-Series  
Isoconcentration Contour Map  
Third and Fourth Quarters, 2011

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93004-074-H2

CHECKED & APPROVED BY: CAR



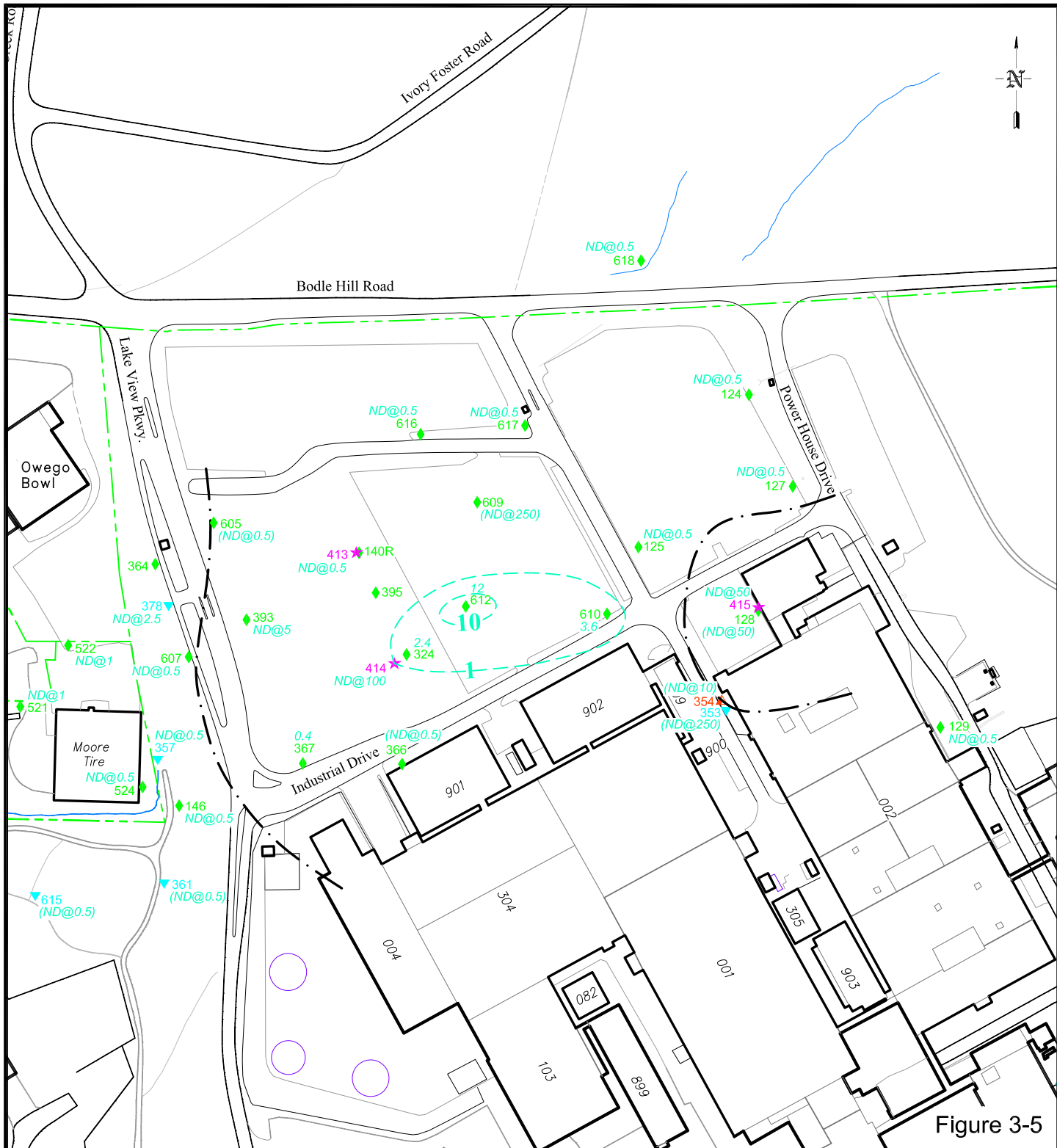


Figure 3-5

- ▼ - Bedrock monitoring well
- ◆ - Soil/Bedrock monitoring well
- ▲ - Till monitoring well
- ★ - Withdrawal well
- 10 --- - Methylene Chloride Concentration Contour (ug/l; October 2011)
- 0.4 - Methylene Chloride Concentration (ug/l; October 2011)
- ND@X - Not Detected at Laboratory Detection Limit "X"
- - Groundwater Flow Divide
- - Property Line



Till/Bedrock Methylene Chloride  
Concentration Contour Map  
Fourth Quarter, 2011

DRAWN BY: MHM	DATE: 2/23/12	DRAWING NO.
CHECKED & APPROVED BY: CAR		93004-081-D1



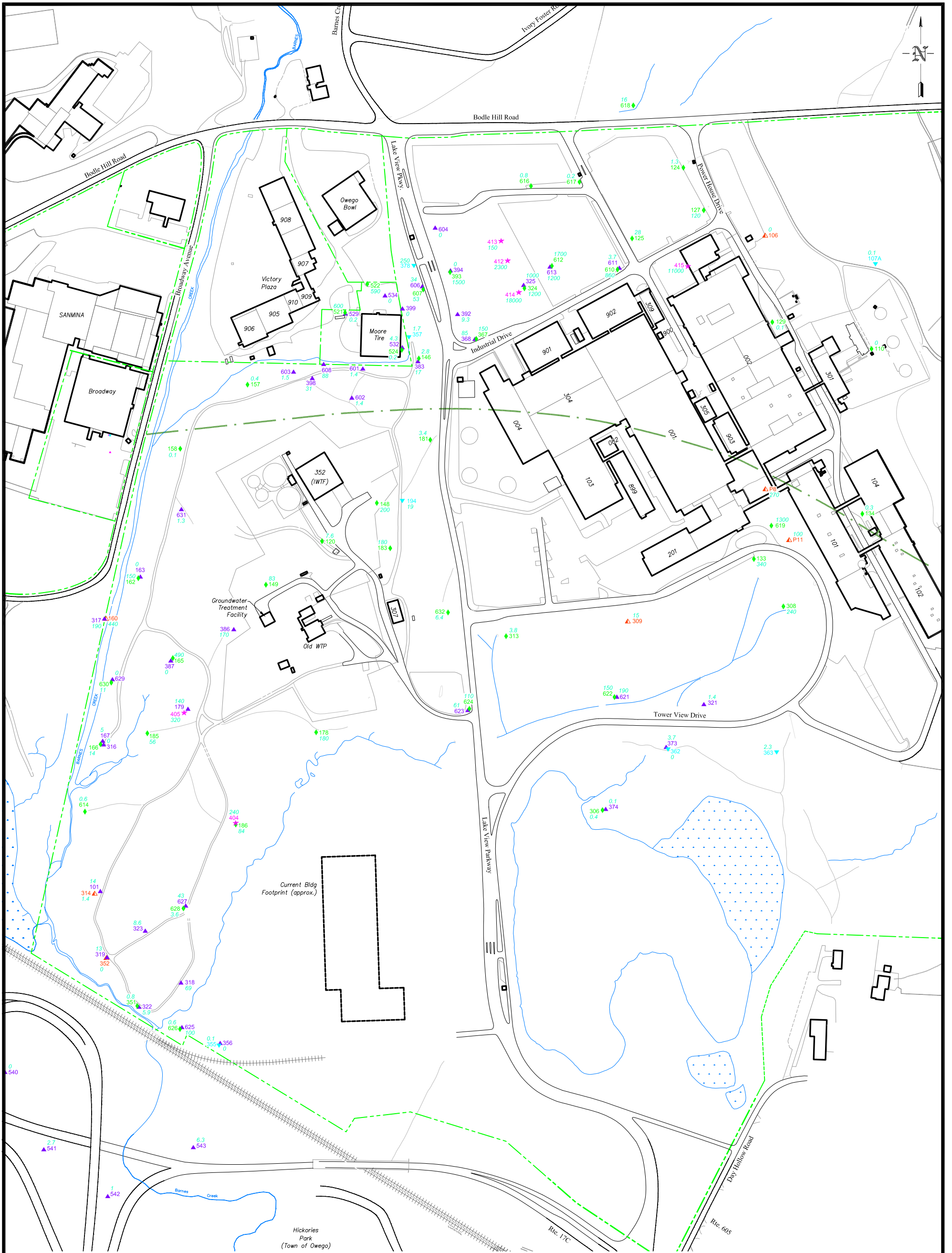
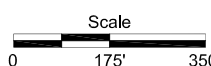



Figure 3-6

- ▼ - Bedrock monitoring well
- ▲ - Soil monitoring well
- ◆ - Soil/Bedrock monitoring well
- ▲ - Till monitoring well
- ★ - Withdrawal well
- 1.2 - Total VOCs Concentration (µg/l)
- - Property Line
- - Site Area Boundary
- - Swamp area

Northern Area wells sampled October 2011; Southern Area wells sampled July 2011.

Note: Values shown have been rounded to two significant figures or one significant figure if less than 10 µg/l.






Owego, New York

### Total Volatile Organic Compounds (VOCs) Concentration in Groundwater (µg/l) Third and Fourth Quarters, 2011

DRAWN BY: MHM	DATE: 2/23/12	DRAWING NO.
CHECKED & APPROVED BY: CAR		93004-078-G1



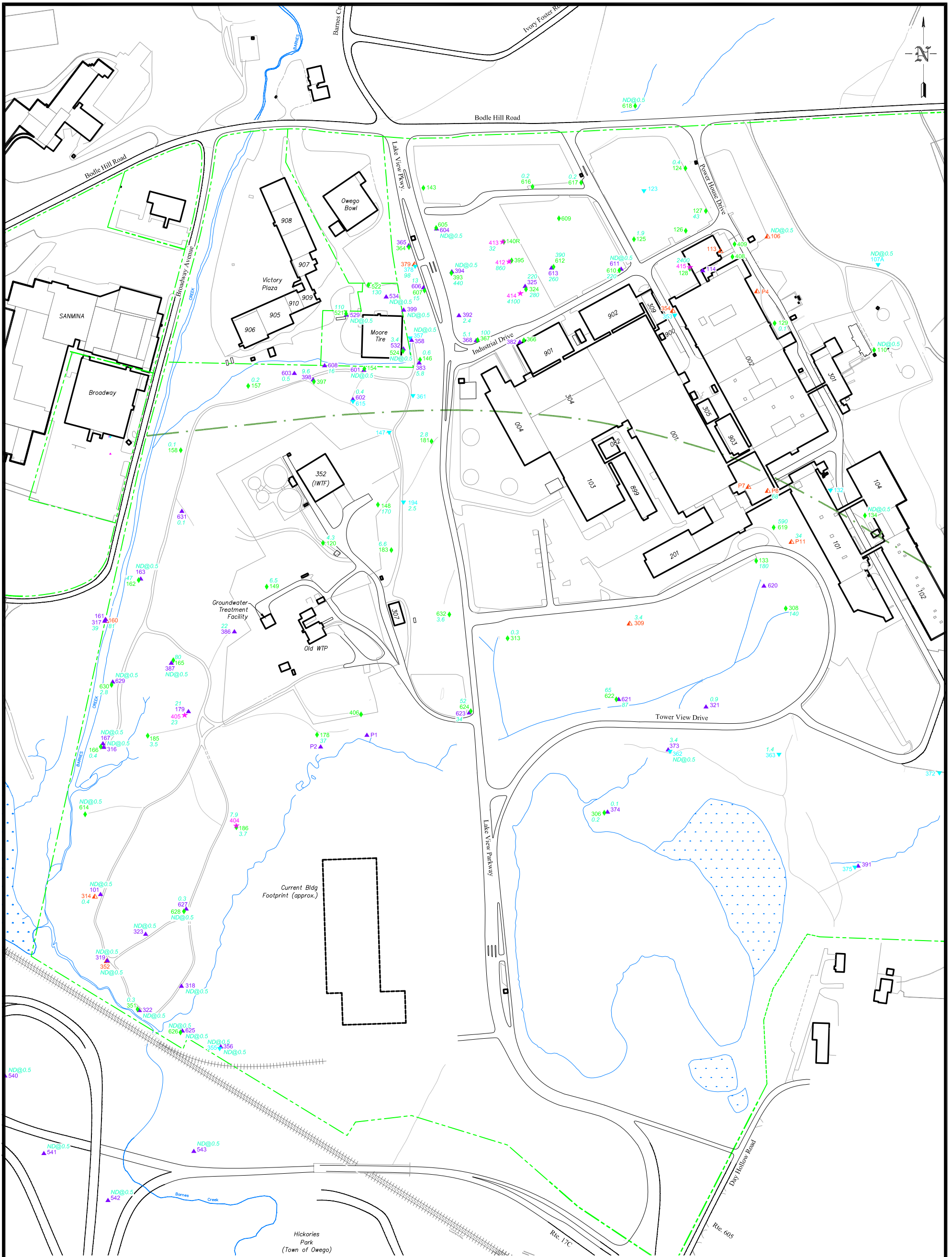
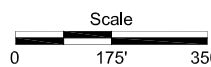



Figure 3-7

- 2 - 1,1,1-Trichloroethane Concentration (ug/l)
- ND@0.5 - Not Detected at Laboratory Detection Limit "X"
- ▼ - Bedrock monitoring well
- ▲ - Soil monitoring well
- ◆ - Soil/Bedrock monitoring well
- ▲ - Till monitoring well
- ★ - Withdrawal well
- - Property Line
- - Site Area Boundary
- - Swamp area

Northern Area wells sampled October 2011; Southern Area wells sampled July 2011.

Note: Values shown have been rounded to two significant figures or one significant figure if less than 10 ug/l.






Owego, New York

### 1,1,1-Trichloroethane Concentrations Third and Fourth Quarters, 2011

DRAWN BY: MHM	DATE: 2/7/12	DRAWING NO.
CHECKED & APPROVED BY: CAR		93004-027-Q



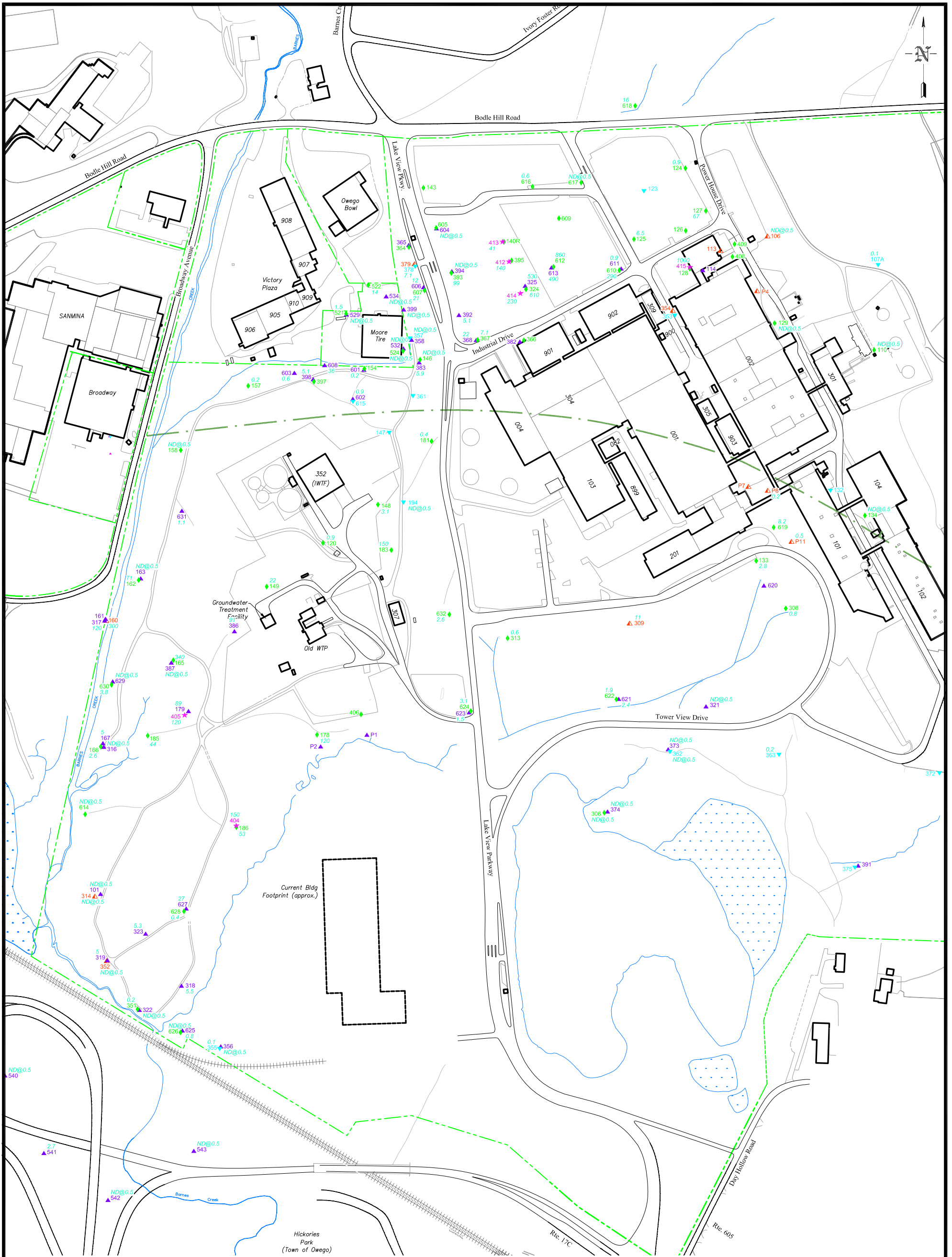



Figure 3-8

- 1.8 - Trichloroethene Concentration (ug/l)
- ND@0.5 - Not Detected at Laboratory Detection Limit "X"
- ▼ - Bedrock monitoring well
- ▲ - Soil monitoring well
- ◆ - Soil/Bedrock monitoring well
- ▲ - Till monitoring well
- ★ - Withdrawal well
- - Property Line
- - Site Area Boundary
- - Swamp area

Northern Area wells sampled October 2011; Southern Area wells sampled July 2011.

Note: Values shown have been rounded to two significant figures or one significant figure if less than 10 ug/l.




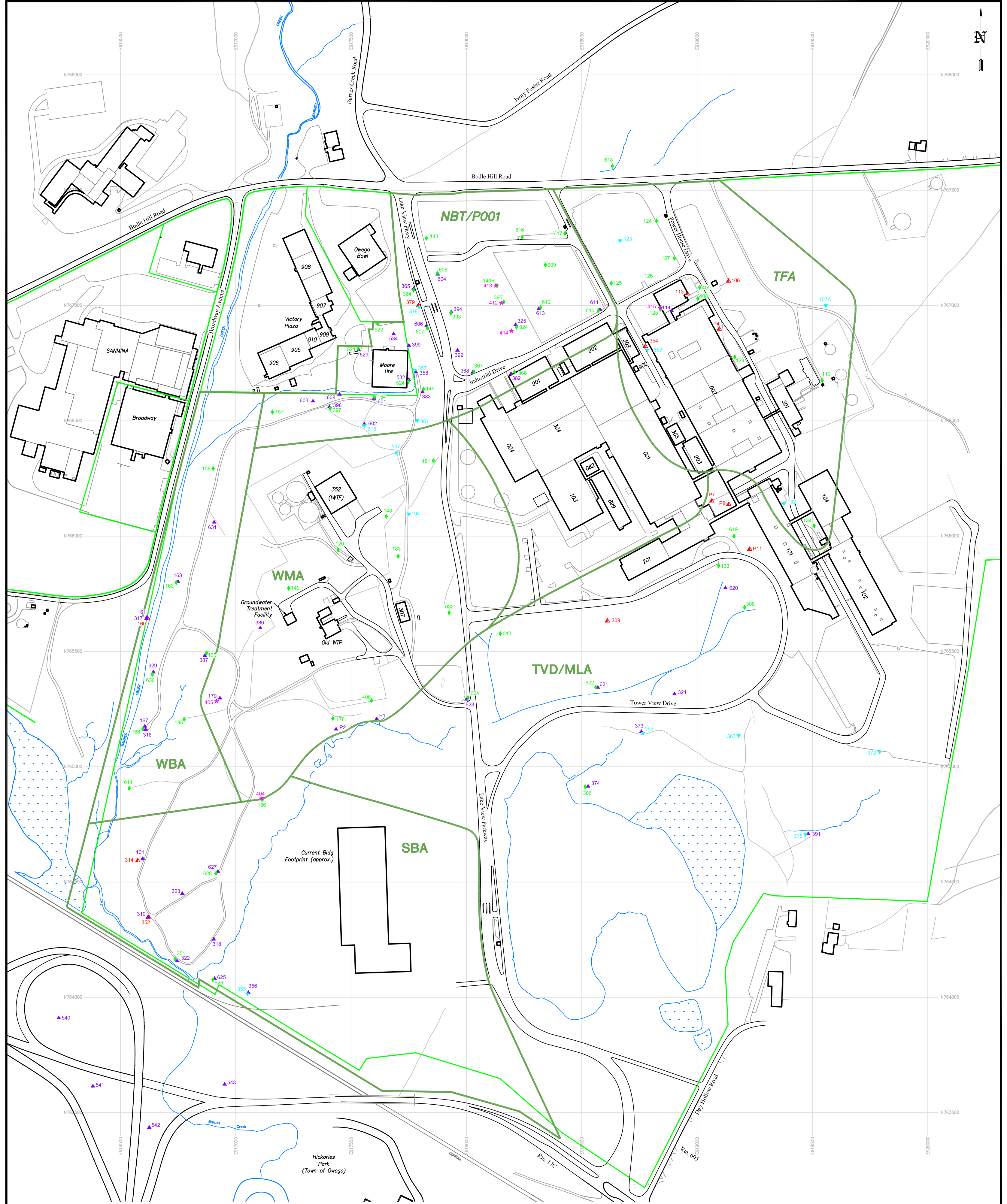


Owego, New York

### Trichloroethene Concentrations Third and Fourth Quarters, 2011

DRAWN BY: MHM	DATE: 2/7/12	DRAWING NO.
CHECKED & APPROVED BY: CAR		93004-028-Q






- ▼ - Bedrock monitoring well
- ▲ - Soil monitoring well
- ▲ - Till monitoring well
- ◆ - Soil/Bedrock monitoring well
- ★ - Withdrawal Well
- - Property Line
- ☁ - Swamp area

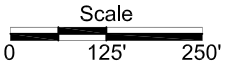
- |  |   |
|--|---|
| <b>NORTHERN AREAS</b>                                    | <b>SOUTHERN AREAS</b>                       |
| NBT/P001 - Northwest Bedrock Trough/Parking Lot 001 Area | WMA - Waste Management Area                 |
| TFA - Tank Farm Area                                     | SBA - Southern Boundary Area                |
| — - Site Area Boundary                                   | WBA - Western Boundary Area                 |
|  | TVD/MLA - Tower View Drive/Mirror Lake Area |

Plate 1



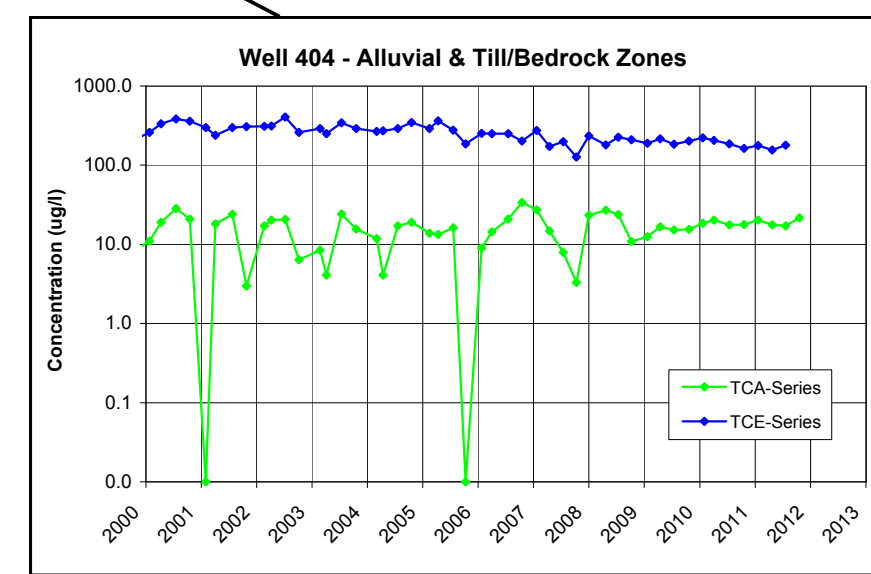
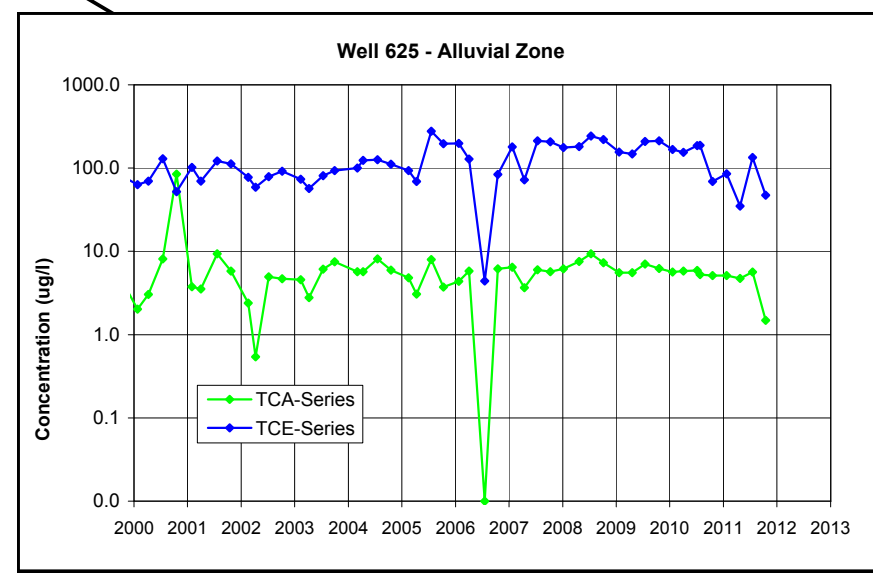
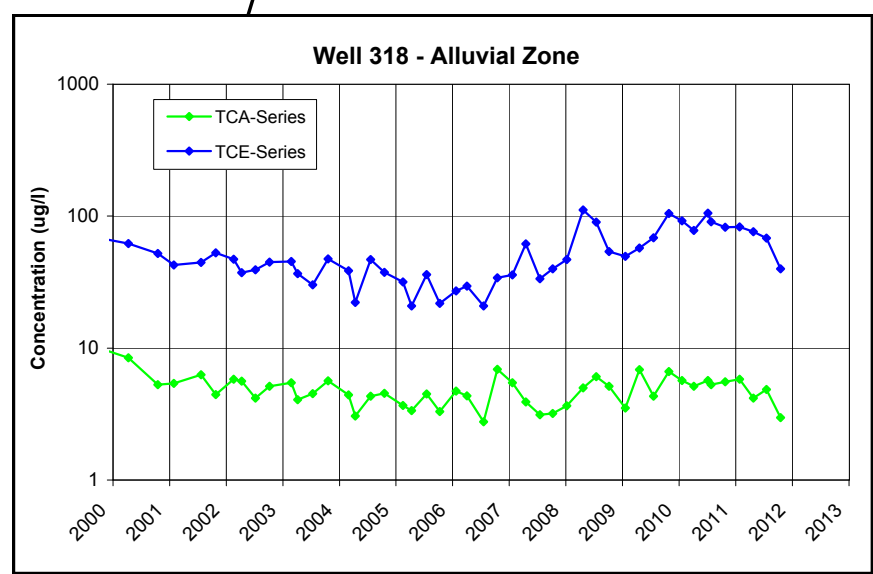
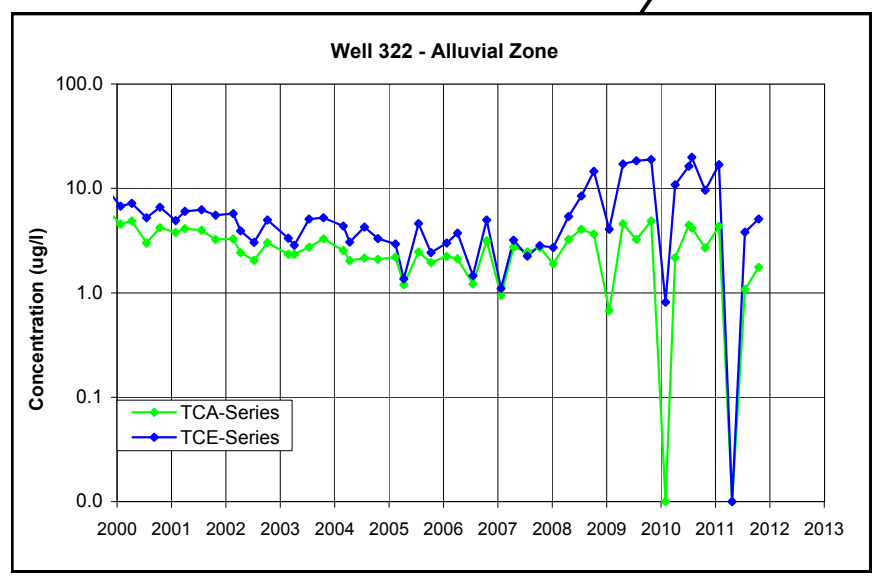
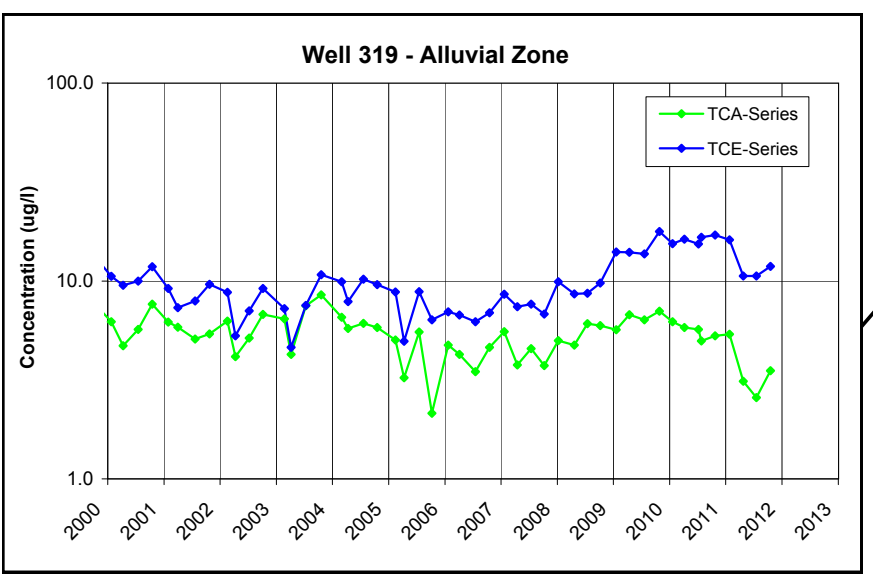
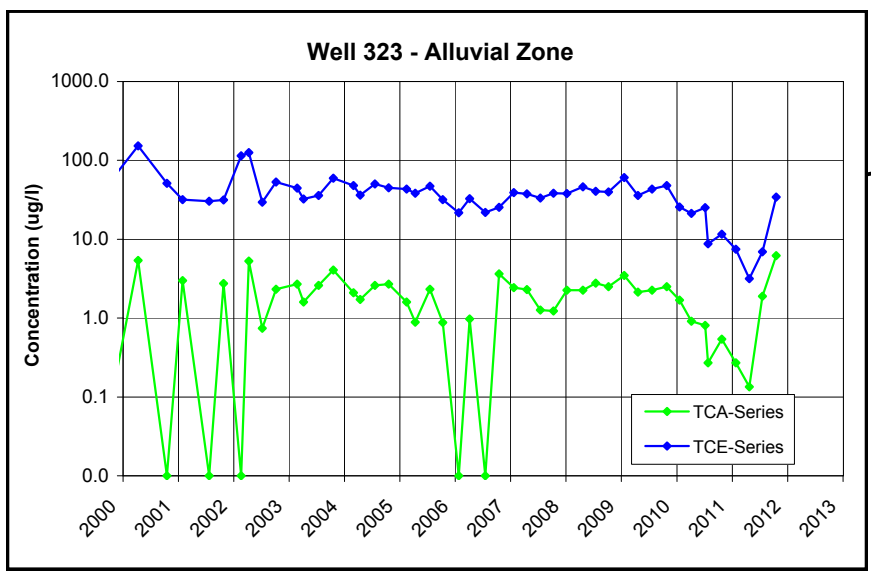
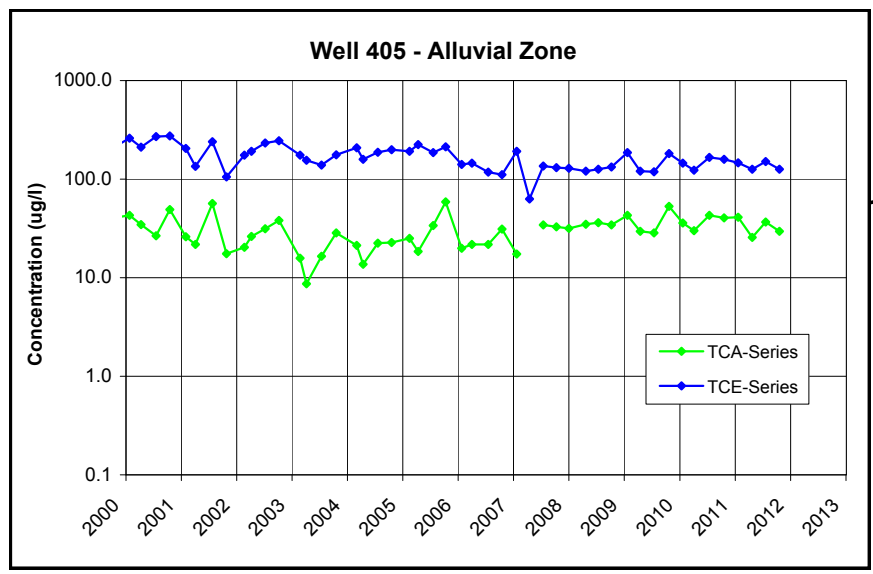
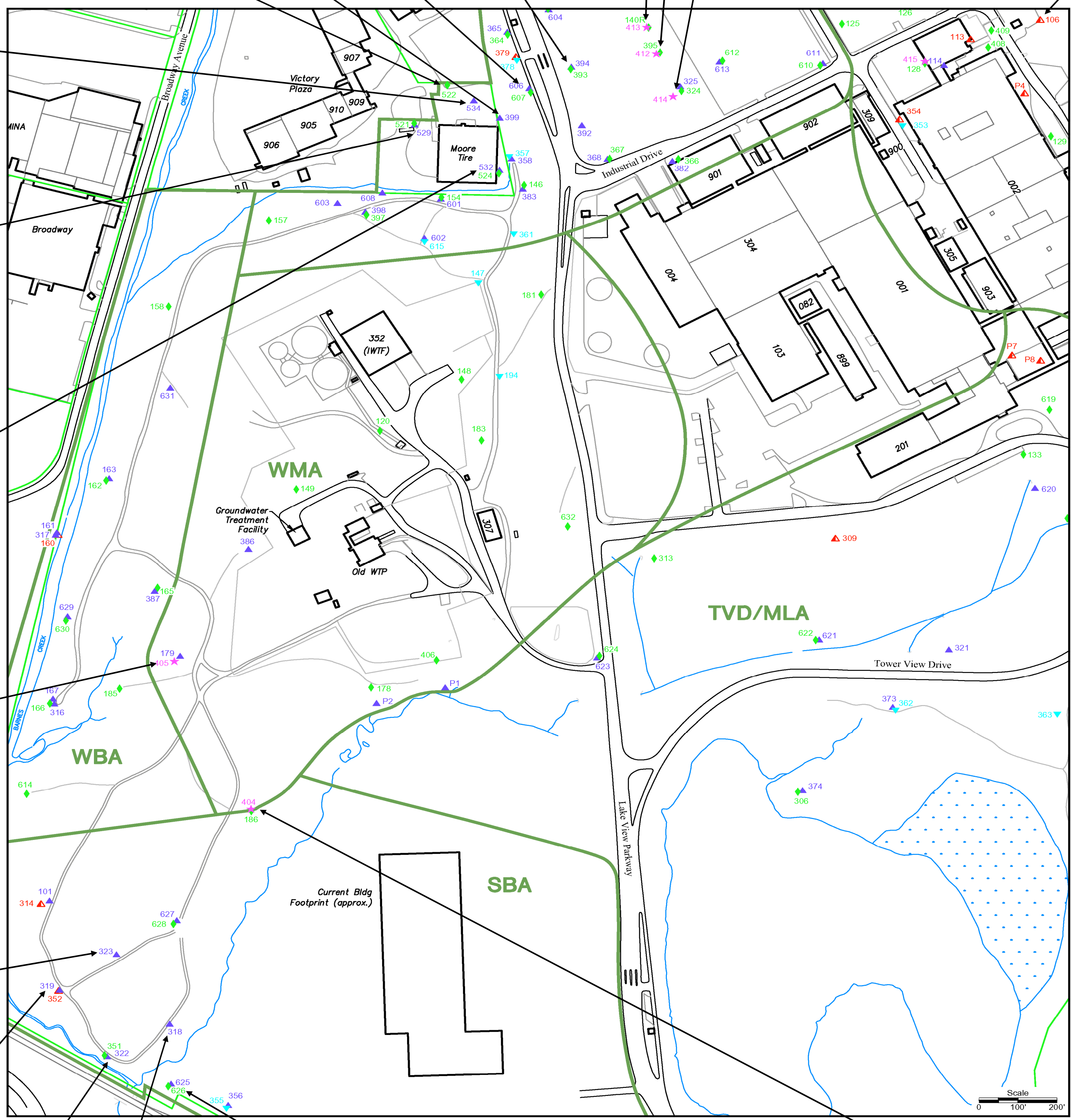
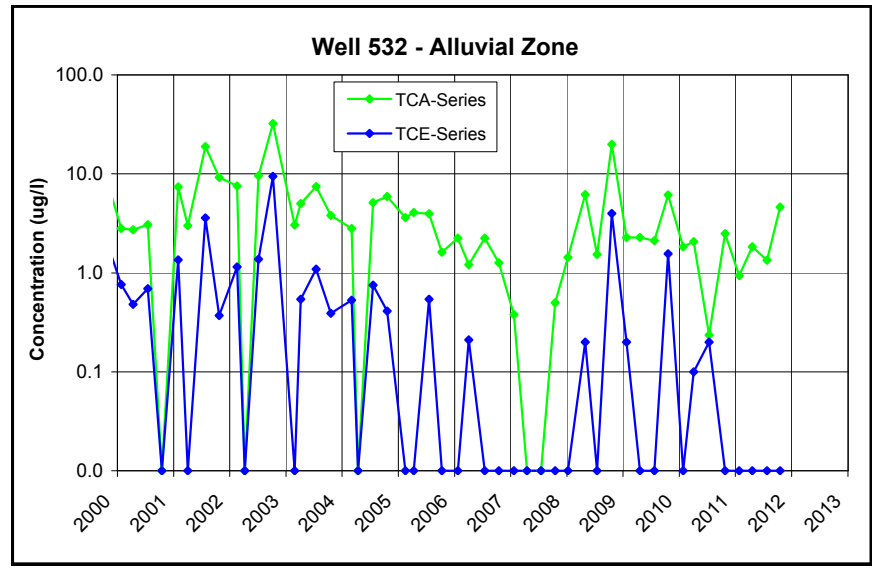
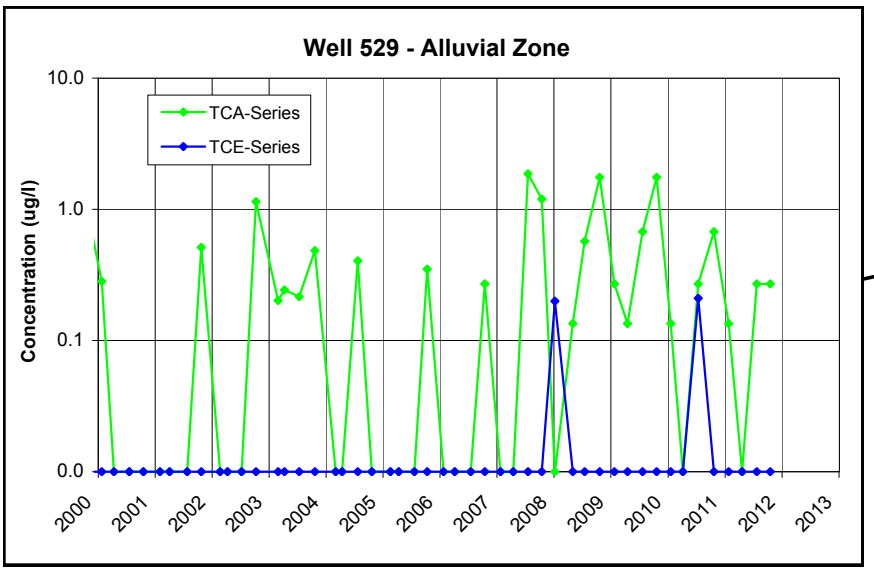
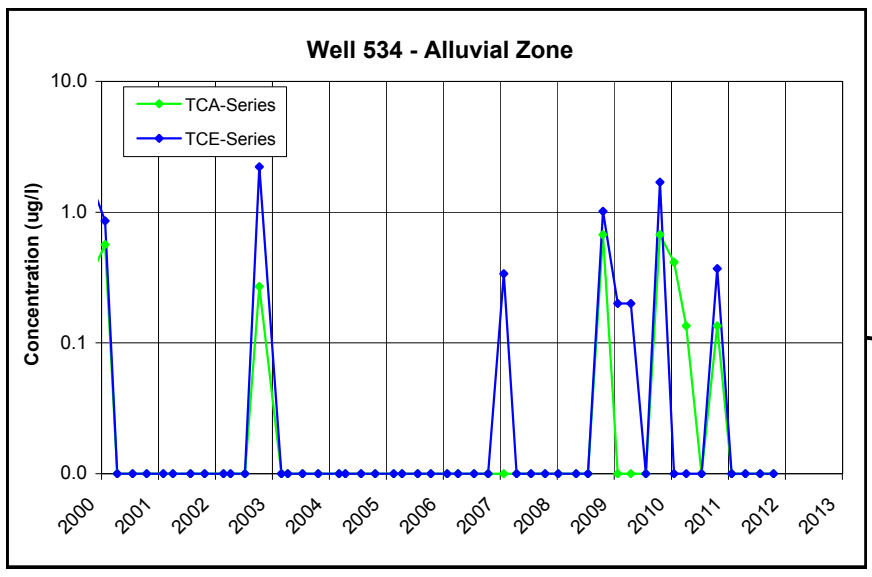
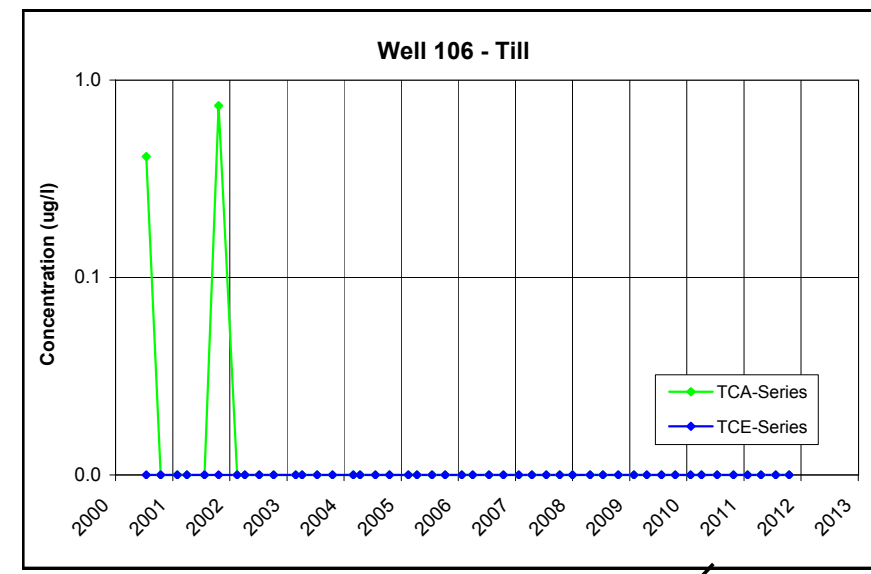
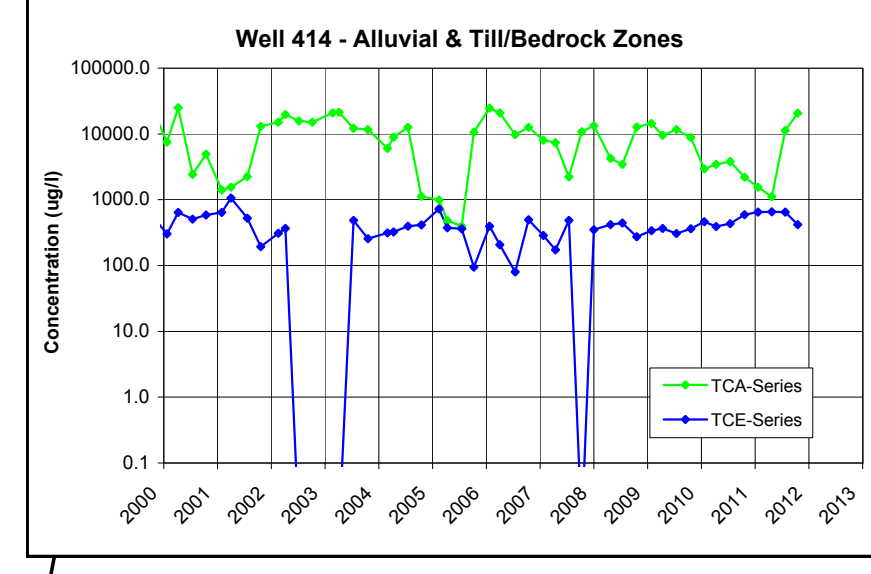
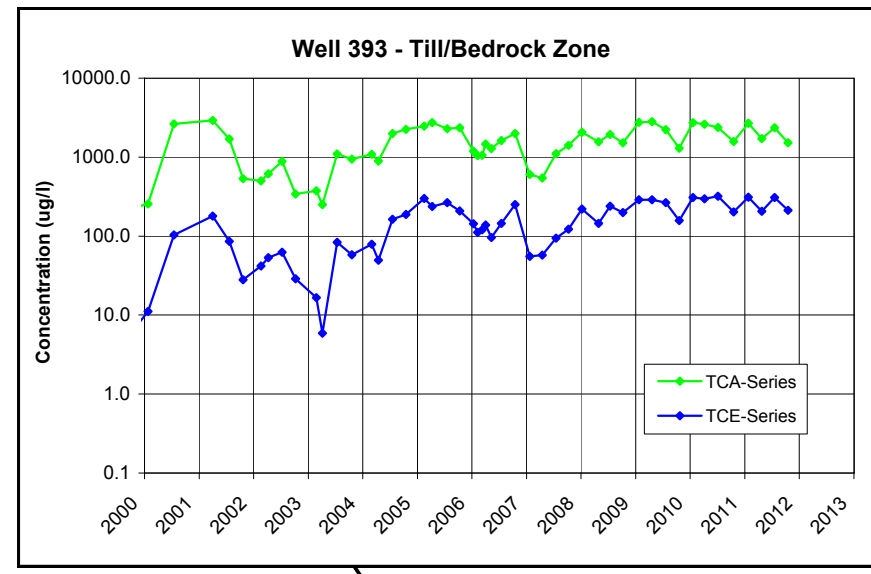
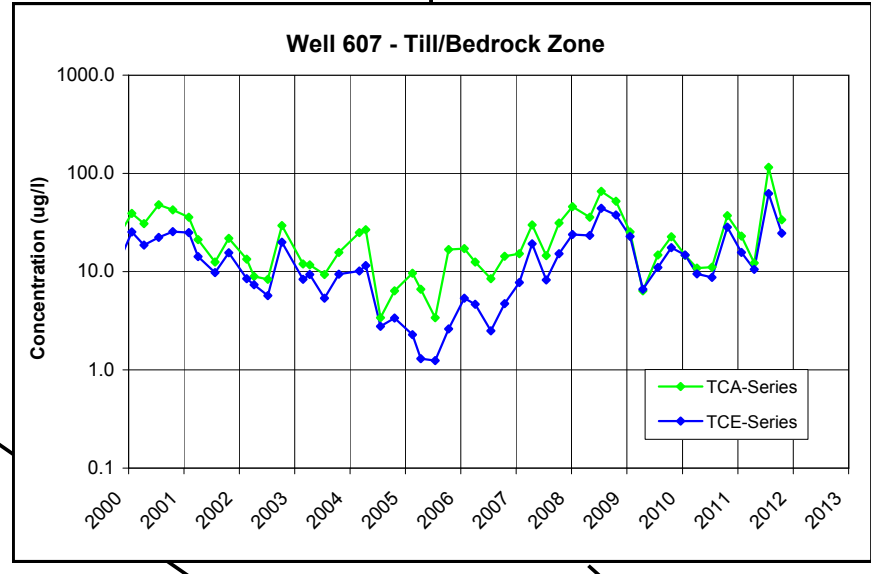
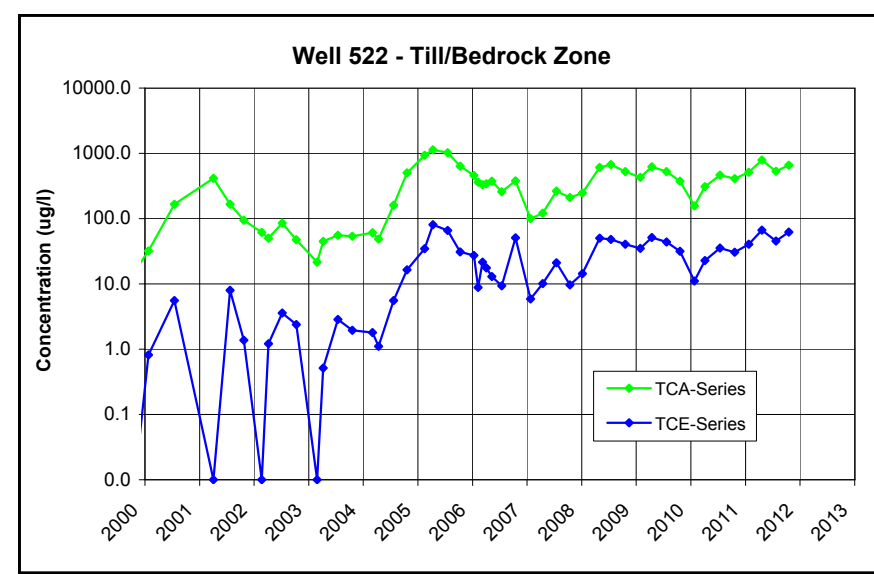
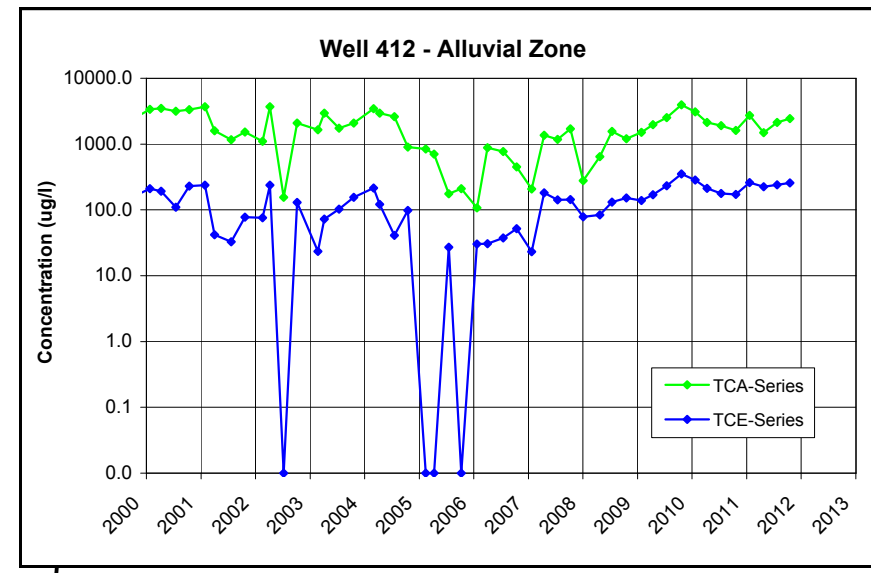
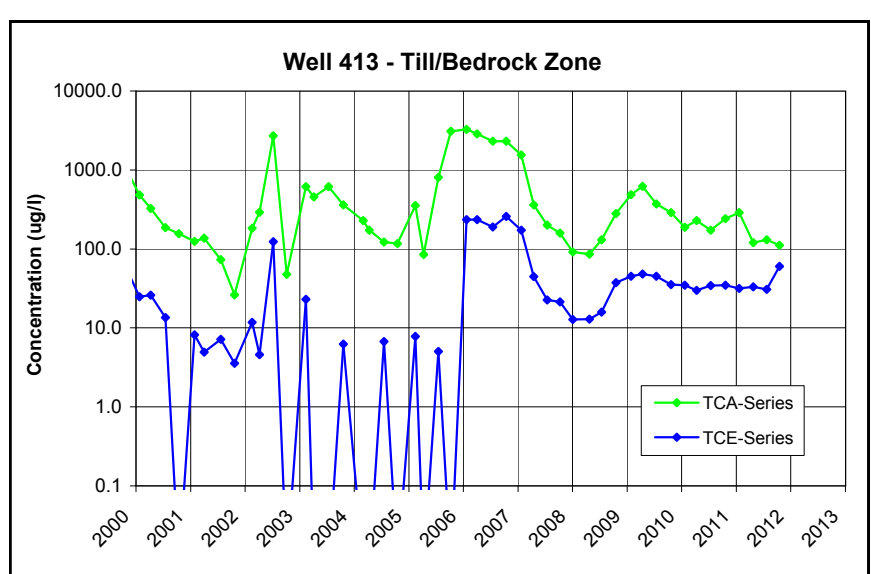
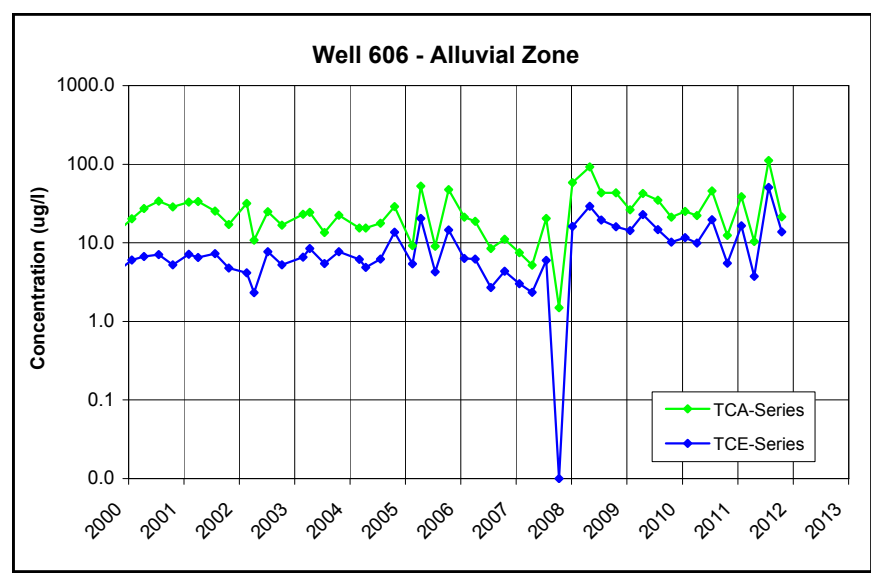
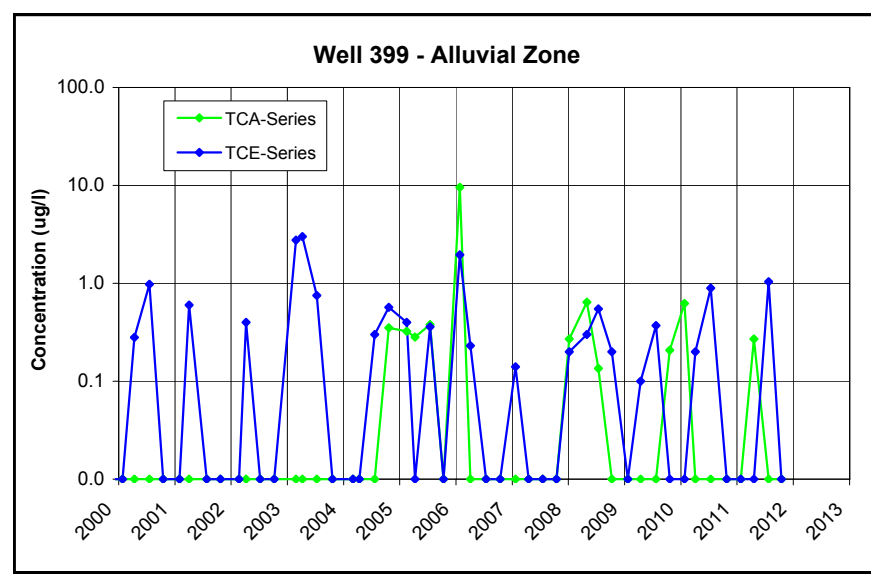
Well Location Map  
Corrective Action Monitoring Program

DRAWN BY: MHM	DATE: 6/9/10	DRAWING NO.
CHECKED & APPROVED BY: CAR		93004-016-P1



**GROUNDWATER SCIENCES CORPORATION**

Photogrammetric digital mapping by L. Robert Kimball & Associates, Inc., Ebensburg, Pennsylvania.  
Date of photography: May 8, 1995; field surveying of property lines not performed.



- ▼ Bedrock monitoring well
  - ▲ Soil monitoring well
  - ▲ Till monitoring well
  - ▲ Soil/Bedrock monitoring well
  - ▲ Withdrawal Well
  - Property Line
  - Swamp area
- NORTHERN AREAS:**
- NBT/POZ - Northwell Bedrock Trough/Parking Lot 001 Area
  - TFA - Tank Farm Area
  - Site Area Boundary
- SOUTHERN AREAS:**
- WMA - Waste Management Area
  - SBA - Southern Boundary Area
  - WBA - Western Boundary Area
  - TVD/MLA - Tower View Drive/Mirror Lake Area

Plate 2



Time vs. Concentration Graphs  
Quarterly Monitoring Wells

Drawn by: NEM DATE: 2/24/11  
Checked & Approved by: C.A.R. 93004-016-P4

Photogrammetric digital mapping by L. Robert Kimball & Associates, Inc., Ebensburg, Pennsylvania  
Date of photography: May 8, 1995; field surveying of property lines not performed.

Scale  
0 100' 200'

GROUNDWATER SCIENCES CORPORATION



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**APPENDIX A**

**EXTRACTION WELL PUMPING VOLUMES  
January 2008 – December 2011**

**VOC MASS REMOVAL CALCULATIONS  
2011**

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

Month	Waste Management Area			Tank Farm Area			Parking Lot 001 Area	Site Total
	404	405	406	408	409	415	412/413/414	
Jan-08	1,445,500	4,197,700	2,271,000	21,334	149	0	303,000	8,238,683
Feb-08	1,532,900	4,511,000	2,422,900	23,062	274	0	373,200	8,863,336
Mar-08	1,312,000	3,800,600	2,013,500	36,951	461	0	332,100	7,495,612
Apr-08	1,437,600	4,427,900	2,353,400	28,470	679	0	364,900	8,612,949
May-08	1,454,900	4,524,000	2,426,600	3,122	738	0	348,200	8,757,560
Jun-08	1,464,800	3,882,600	2,093,800	0	1,429	0	277,400	7,720,029
Jul-08	2,920,600	5,313,600	2,325,600	0	1,009	0	234,100	10,794,909
Aug-08	3,189,700	5,755,700	2,402,500	0	936	0	283,900	11,632,736
Sep-08	2,248,200	6,937,500	1,420,100	0	1,905	0	468,400	11,076,105
Oct-08	2,589,300	5,719,300	0	0	836	0	496,800	8,806,236
Nov-08	2,236,800	5,089,600	0	0	88	0	427,200	7,753,688
Dec-08	2,497,800	5,810,900	0	0	65	0	474,700	8,783,465
Jan-09	2,487,622	5,895,860	0	0	233	0	410,611	8,794,326
Feb-09	2,253,891	4,340,524	0	0	556	0	357,597	6,952,568
Mar-09	2,521,453	6,069,810	0	0	487	13	357,411	8,949,173
Apr-09	2,484,303	5,711,551	0	0	0	38,162	344,637	8,578,653
May-09	2,671,916	6,081,103	0	0	0	33,929	391,194	9,178,142
Jun-09	2,521,186	5,858,369	0	0	0	37,601	376,467	8,793,622
Jul-09	2,562,399	5,969,124	0	0	0	31,194	346,005	8,908,722
Aug-09	2,457,975	5,884,108	0	0	0	28,080	302,188	8,672,350
Sep-09	2,379,345	5,655,320	0	0	0	23,721	391,297	8,449,683
Oct-09	3,377,841	5,929,535	0	0	0	21,308	454,021	9,782,705
Nov-09	4,568,023	5,641,420	0	0	0	23,750	400,889	10,634,082
Dec-09	4,621,225	5,770,911	0	0	0	24,989	300,330	10,717,456
Jan-10	4,396,182	5,556,750	0	0	0	27,369	238,780	10,219,081
Feb-10	4,038,273	5,197,824	0	0	0	12,224	230,566	9,478,886
Mar-10	4,433,471	5,369,015	0	0	0	44,386	290,281	10,137,154
Apr-10	6,436,965	6,326,760	0	0	0	39,522	261,992	13,065,240
May-10	6,510,560	6,451,611	0	0	0	31,960	271,329	13,265,461
Jun-10	5,930,163	6,195,637	0	0	0	24,688	244,348	12,394,835
Jul-10	5,392,602	5,971,867	0	0	0	14,169	213,663	11,592,302
Aug-10	5,070,130	5,550,114	0	0	0	6,022	290,688	10,916,954
Sep-10	5,242,448	3,800,193	0	0	0	14,313	333,390	9,390,343
Oct-10	5,378,261	6,262,219	0	0	0	23,545	258,707	11,922,732
Nov-10	5,119,109	6,354,180	0	0	0	15,089	280,201	11,768,579
Dec-10	5,199,329	6,597,933	0	0	0	20,242	235,555	12,053,059
Jan-11	4,870,051	6,173,773	0	0	0	15,142	210,862	11,269,828
Feb-11	4,212,925	5,382,137	0	0	0	32,111	140,638	9,767,811
Mar-11	5,141,492	7,191,585	0	0	0	38,727	113,720	12,485,525
Apr-11	5,061,281	7,093,311	0	0	0	57,766	419,706	12,632,064
May-11	4,688,475	6,229,846	0	0	0	35,927	276,524	11,230,771
Jun-11	5,614,152	7,232,555	0	0	0	36,983	361,370	13,245,060
Jul-11	4,692,700	6,954,156	0	0	0	39,277	317,354	12,003,488
Aug-11	4,798,221	6,336,725	0	0	0	33,173	318,896	11,487,015
Sep-11	5,041,059	5,981,423	0	0	0	36,521	532,346	11,591,349
Oct-11	9,328,384	7,471,917	0	0	0	41,629	521,344	17,363,275
Nov-11	7,916,458	7,170,235	0	0	0	30,310	402,230	15,519,233
Dec-11	7,423,559	7,279,364	0	0	0	33,535	354,249	15,090,707

Notes:

Well 406 was deactivated in September 2008 following NYSDEC approval of a new operational plan.

Well 408 was shut down in May 2008 due to an irreparable blockage in the discharge line.

Well 409 was shut down in March 2009 and was replaced by well 415.

**Table A-2: 2011 VOC Mass Removal Calculations  
Former IBM Facility, Owego, New York**

**Chemical Concentrations (ug/l)**

Location	Period	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride	1,1,1-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	Chloroethane	1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)	1,2-Dichloro-1,2,2-Trifluoroethane (Freon 123a)	Other VOCs	Volume Pumped (gallons)
Well 404	Qtr 1	0.2	150.0	20.0	0.3	11.0	5.5	1.4	0.0	49.0	6.6	0.5	14,224,468
	Qtr 2	0.2	130.0	19.0	0.2	8.5	5.4	1.3	0.0	45.0	6.6	0.6	15,363,908
	Qtr 3	0.2	150.0	21.0	0.3	7.9	5.4	1.4	0.0	45.0	7.3	0.6	14,531,980
	Qtr 4	0.2	160.0	23.0	0.4	11.0	6.1	1.7	0.0	56.0	11.0	3.1	24,668,401
Well 405	Qtr 1	0.5	120.0	19.0	0.2	24.0	5.8	6.7	0.0	130.0	6.8	0.4	18,747,495
	Qtr 2	0.3	92.0	25.0	0.2	15.0	4.0	3.8	0.0	77.0	4.0	0.3	20,555,712
	Qtr 3	0.5	120.0	22.0	0.3	23.0	4.8	5.3	0.0	140.0	7.3	0.4	19,272,305
	Qtr 4	0.4	100.0	19.0	0.2	19.0	3.4	4.3	0.0	60.0	5.1	1.5	21,921,516
Well 415	Qtr 1	51.0	1400.0	6000.0	320.0	3200.0	2500.0	2000.0	0.0	270.0	24.0	17.0	85,981
	Qtr 2	33.0	780.0	3700.0	150.0	2100.0	1700.0	1200.0	0.0	190.0	0.0	14.0	130,675
	Qtr 3	43.0	1300.0	5100.0	270.0	2500.0	2100.0	1700.0	0.0	270.0	21.0	14.0	108,971
	Qtr 4	33.0	1000.0	3900.0	190.0	2400.0	1800.0	1300.0	0.0	160.0	0.0	14.0	105,475
P001 Area (412, 413, 414)	Qtr 1	0.0	100.0	45.0	4.1	330.0	490.0	41.0	1.2	20.0	6.5	0.0	465,220
	Qtr 2	1.2	200.0	68.0	4.5	450.0	740.0	67.0	1.4	35.0	13.0	0.0	1,057,600
	Qtr 3	1.2	210.0	67.0	4.6	420.0	880.0	60.0	1.6	36.0	13.0	0.0	1,168,596
	Qtr 4	0.0	160.0	57.0	4.1	400.0	780.0	48.0	1.5	33.0	12.0	0.0	1,277,823
<b>Totals</b>												<b>153,686,126</b> gallons	

**Pounds of Chemicals Removed**

Location	Period	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride	1,1,1-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	Chloroethane	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)	Pounds Removed (January - December 2010)
Well 404	Qtr 1	0.02	17.82	2.38	0.04	1.31	0.65	0.17	0.00	5.82	0.78	0.06	29.04	142.0
	Qtr 2	0.03	16.68	2.44	0.03	1.09	0.69	0.17	0.00	5.77	0.85	0.08	27.81	
	Qtr 3	0.02	18.20	2.55	0.04	0.96	0.66	0.17	0.00	5.46	0.89	0.07	29.01	
	Qtr 4	0.04	32.96	4.74	0.08	2.27	1.26	0.35	0.00	11.53	2.27	0.64	56.13	
Well 405	Qtr 1	0.08	18.78	2.97	0.03	3.76	0.91	1.05	0.00	20.35	1.06	0.06	49.06	178.1
	Qtr 2	0.05	15.79	4.29	0.03	2.57	0.69	0.65	0.00	13.22	0.69	0.05	38.04	
	Qtr 3	0.08	19.31	3.54	0.05	3.70	0.77	0.85	0.00	22.53	1.17	0.06	52.07	
	Qtr 4	0.07	18.30	3.48	0.04	3.48	0.62	0.79	0.00	10.98	0.93	0.27	38.97	
Well 415	Qtr 1	0.04	1.01	4.31	0.23	2.30	1.79	1.44	0.00	0.19	0.02	0.01	11.33	43.7
	Qtr 2	0.04	0.85	4.04	0.16	2.29	1.85	1.31	0.00	0.21	0.00	0.02	10.77	
	Qtr 3	0.04	1.18	4.64	0.25	2.27	1.91	1.55	0.00	0.25	0.02	0.01	12.12	
	Qtr 4	0.03	0.88	3.43	0.17	2.11	1.59	1.14	0.00	0.14	0.00	0.01	9.51	
P001 Area (412, 413, 414)	Qtr 1	0.00	0.39	0.17	0.02	1.28	1.90	0.16	0.00	0.08	0.03	0.00	4.03	50.5
	Qtr 2	0.01	1.77	0.60	0.04	3.97	6.53	0.59	0.01	0.31	0.11	0.00	13.95	
	Qtr 3	0.01	2.05	0.65	0.04	4.10	8.59	0.59	0.02	0.35	0.13	0.00	16.52	
	Qtr 4	0.00	1.71	0.61	0.04	4.27	8.32	0.51	0.02	0.35	0.13	0.00	15.96	
<b>Totals</b>												<b>414.3</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)	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	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	13.12	901.79	4	5.3	PVC	Till*	TFA	UG
107A	767000.3	919557.6	961.80	960.3	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	20.11	926.77	4	5.3	PVC	Till/Bedrock	TFA	UG
113	767051.4	918957.9	914.83	912.1	25	887.0	12.72	902.11	4	5.3	PVC	Till	TFA	DG
114	766976.5	918889.9	916.13	913.4	22	891.6	16.65	899.48	4	5.3	PVC	Fill	TFA	DG
120	765939.9	917443.6	846.20	844.7	24	820.7	39.58	806.62	6	18	OH	Till/Bedrock	WMA	DG
123	765871.9	919093.3	903.96	904.5	18	886.0	21.89	882.07	4	4	PVC	Bedrock	TFA	DG
124	767366.9	918823.9	911.43	908.5	20	888.4	25.14	886.29	4	4	PVC	Till/Bedrock	TFA	SG
125	767096.6	918627.9	905.36	905.7	24	881.3	24.86	880.50	4	4	PVC	S & G/Bedrock	TFA	DG
126	767128.9	918825.2	908.95	909.4	22	886.9	23.90	885.05	4	4	PVC	Till/Bedrock	TFA	DG
127	767204.2	918901.6	909.65	909.8	18	891.2	19.54	890.11	4	4	PVC	S & G/Bedrock	TFA	DG
128	766984.2	918840.7	914.23	912.5	22	890.5	24.86	889.37	2	5	PVC, 10-slot	Till/Bedrock	TFA	DG
129	766776.9	919163.6	912.10	912.0	7.5	906.4	8.35	903.75	4	4	PVC	Till/Bedrock	TFA	DG
132	766141.1	919376.3	915.31	912.0	14	898.1	21.20	894.11	4	4	PVC	Bedrock	TFA	DG
133	767281.5	918665.9	897.22	894.3	26	867.5	31.50	865.72	4	4	PVC	Till/Bedrock	TVD/MLA	DG
134	766044.5	919507.4	916.46	913.9	36	876.5	42.89	873.57	4	4	PVC	Till/Bedrock	TFA	DG
140R	767086.4	918134.6	889.14	887.0	41.5	845.5	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	29.05	855.76	4	4	PVC	Till/Bedrock	NBT/P001	DG
146	766637.9	917813.3	868.04	865.6	22	843.6	25.86	842.18	4	4	PVC	Till/Bedrock	NBT/P001	DG
147	766361.6	917695.9	871.57	868.9	20	848.5	27.28	844.29	4	4	PVC	Bedrock	WMA	DG
148	766085.9	917652.8	857.87	854.6	32	823.1	34.91	822.96	4	5	PVC	Till/Bedrock	WMA	DG
149	765773.6	917229.3	834.27	831.6	29	802.5	33.57	800.70	4	4	PVC	Till/Bedrock	WMA	DG
154	766603.6	917601.3	861.70	860.2	21	839.2	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	20.02	834.11	4	10	PVC	Till/Bedrock	NBT/P001	DG
158	766293.2	916902.0	838.28	836.2	37	799.1	39.76	798.52	4	10	PVC	Till/Bedrock	WBA	SG
160	765642.6	916618.6	824.31	821.6	60	761.4	58.46	765.85	4	10	PVC	Basal Till	WBA	SG
161	765648.6	916615.3	824.96	821.8	NE	NE	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	50.43	775.07	4	10	PVC	Till/Bedrock	WBA	SG
163	765802.6	916749.6	825.40	823.8	NE	NE	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	44.21	773.29	4	10	PVC	Till/Bedrock	WBA	SG
166	765164.2	916597.5	813.71	812.0	87	724.5	90.56	723.15	4	15	PVC	Till/Bedrock	WBA	SG
167	765175.2	916605.7	813.26	811.7	NE	NE	25.52	787.74	4	10	PVC	Silt	WBA	SG
178	765209.7	917421.0	812.22	809.2	32	776.8	36.38	775.84	4	10	PVC, 10 slot	Gravel/Bedrock	WMA	DG
179	765297.4	916931.4	818.32	815.6	NE	NE	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	40.60	854.05	4	5	PVC	Till/Bedrock	WMA	DG
183	765912.9	917704.1	851.83	848.9	25	823.9	30.50	821.33	4	5	PVC	Till/Bedrock	WMA	DG
185	765206.1	916776.3	815.54	813.0	89	723.9	94.20	721.34	4	20	PVC	S & G/Bedrock	WBA	DG
186	764857.7	917114.0	820.32	817.8	92	725.9	96.27	724.05	4	30	PVC	S & G/Bedrock	SBA	DG
194	766096.0	917750.2	862.70	861.4	36	824.3	113.37	749.33	5	62	S/OH	Bedrock	WMA	DG
306	764912.6	918514.9	821.04	817.8	58	760.1	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	29.99	846.27	4	10	PVC	Till/Bedrock	TVD/MLA	DG
309	765632.1	918611.4	874.69	872.4	27	845.1	32.17	842.52	4	5	PVC	Till	TVD/MLA	DG
313	765577.1	918146.7	849.79	847.3	35	812.0	39.50	810.29	4	NR	PVC	Till/Bedrock*	TVD/MLA	DG
314	764592.4	916575.0	813.82	811.1	98	713.0	100.43	713.39	4	5	PVC	Basal Till	SBA	DG
316	765161.3	916608.8	813.46	812.0	NE	NE	48.99	764.47	4	10	PVC	Glaciolac., vf sand, silt, clay	WBA	DG
317	765642.2	916612.3	823.00	820.6	NE	NE	47.16	775.84	4	10	PVC	Outwash S & G	WBA	DG
318	764251.6	916904.6	814.19	811.9	NE	NE	47.32	766.87	4	10	PVC	Outwash S & G	SBA	DG
319	764348.5	916622.4	806.89	804.3	NE	NE	45.23	761.66	4	10	PVC	Outwash Sand	SBA	DG
321	765315.2	918902.2	853.72	852.1	NE	NE	39.56	814.16	4	10	PVC	S & G/Till	TVD/MLA	DG
322	764159.2	916744.3	806.20	803.8	NE	NE	45.74	760.46	4	10	PVC	Outwash S & G	SBA	DG
323	764450.0	916768.0	813.67	811.6	NE	NE	47.35	766.32	4	10	PVC	Outwash Sand	SBA	DG
324	766906.2	918216.7	892.67	890.8	50.0	840.8	53.43	839.24	2	10	PVC, 10 slot	Till/Bedrock	NBT/P001	DG
325	766916.7	918213.5	892.15	890.5	NE	NE	42.61	849.54	2	5	PVC, 10 slot	Alluvial Gravel	NBT/P001	DG
351	764164.5	916737.6	805.62	804.1	86	718.1	90.40	715.22	2	5	PVC	Till/Bedrock	SBA	DG
352	764346.6	916619.9	806.48	804.6	84.8	719.8	87.41	719.07	2	5	PVC	Basal Till	SBA	DG
353	766807.8	918783.5	912.87	913.3	23	890.3	28.57	884.30	2	5	PVC	Bedrock	TFA	DG
354	766823.0	918775.7	912.85	913.4	NE	NE	17.25	895.60	2	5	PVC	Till	TFA	DG
355	764015.2	917050.3	813.42	811.3	89.5	721.8	97.90	715.52	2	5	PVC	Bedrock	SBA	DG
356	764020.7	917054.5	813.31	811.5	NE	NE	70.32	742.99	2	5	PVC	Outwash S & G	SBA	DG
357	766720.9	917775.4	863.91	861.8	24.5	837.3	34.53	829.38	2	5	PVC	Bedrock	NBT/P001	DG
358	766711.3	917781.0	864.08	861.8	NE	NE	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	35.39	833.03	2	5	PVC	Bedrock	NBT/P001	DG
362	765146.5	918765.3	832.69	829.8	58	771.8	66.64	766.05	2	5	PVC	Bedrock	TVD/MLA	DG

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

Well	Northing <small>(grid feet)</small>	Easting <small>(grid feet)</small>	Current M.P. Elevation <small>(ft amsl)</small>	Current Ground Surface Elevation <small>(ft amsl)</small>	Depth to Bedrock <small>(ft bgs)</small>	Bedrock Elevation <small>(ft amsl)</small>	Baseline Depth to Bottom from M.P. <small>(ft)</small>	Baseline Elevation of Bottom <small>(ft amsl)</small>	Well Diameter <small>(in)</small>	Screen Length <small>(ft)</small>	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	45.53	809.54	2	5	PVC	Bedrock	TVD/MLA	DG
364	767066.3	917771.0	897.72	896.0	60.5	835.5	65.27	832.45	2	5	PVC	Till/Bedrock	NBT/P001	SG
365	767072.2	917770.3	898.02	896.2	NE	NE	45.86	852.16	2	5	PVC	Alluvial S & G	NBT/P001	SG
366	766711.7	918208.6	912.48	910.7	37.2	873.5	42.99	869.49	2	5	PVC	Till/Bedrock	NBT/P001	DG
367	766712.8	918032.6	910.15	908.9	67	841.9	72.55	837.60	2	5	PVC	Till/Bedrock	NBT/P001	DG
368	766710.2	918027.1	910.25	908.8	NE	NE	49.42	860.83	2	5	PVC	Alluvial f. Sand, Silt, G	NBT/P001	DG
372	765064.9	919791.2	904.96	903.5	58	845.5	65.82	839.14	2	5	PVC	Bedrock	TVD/MLA	SG
373	765151.7	918758.2	832.19	829.5	NE	NE	45.70	786.49	2	10	PVC	Outwash S & G	TVD/MLA	DG
374	764914.9	918527.1	821.25	818.6	NE	NE	20.54	800.71	2	10	PVC	Sand & Gravel	TVD/MLA	DG
375	764705.6	919469.4	833.00	831.4	38	793.4	45.58	787.42	2	5	PVC	Bedrock	TVD/MLA	SG
378	766993.8	917794.6	900.05	898.0	65.5	832.5	77.22	822.83	2	5	PVC	Bedrock	NBT/P001	DG
379	767000.4	917792.4	899.67	897.8	NE	NE	51.92	847.75	2	5	PVC	Till	NBT/P001	DG
382	766704.2	918193.3	912.59	910.4	NE	NE	22.58	890.01	2	5	PVC	Fill	NBT/P001	DG
383	766625.0	917810.0	867.39	864.6	NE	NE	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	17.46	804.80	2	5	PVC	Alluvial S & G	WMA	DG
387	765481.8	916866.0	817.59	815.1	NE	NE	15.52	802.07	2	5	PVC	Alluvial S&G & Silt	WBA	DG
391	764709.2	919481.7	833.75	831.5	NE	NE	30.18	803.57	2	10	PVC	Outwash S & G	TVD/MLA	SG
392	766805.5	917961.4	896.07	894.0	NE	NE	45.07	851.00	2	10	PVC, 10 slot	Alluvial S&G & Silt	NBT/P001	DG
393	766967.9	917932.7	892.69	890.5	59	831.5	65.19	827.50	2	5	PVC, 10 slot	Till/Bedrock	NBT/P001	DG
394	766972.3	917934.2	892.51	890.5	NE	NE	47.01	845.50	2	10	PVC, 10 slot	Alluvial S&G & Silt	NBT/P001	DG
395	767015.6	918162.0	890.07	888.1	59.5	828.6	65.10	824.97	2	5	PVC, 10 slot	Till/Bedrock	NBT/P001	DG
397	766554.2	917409.1	865.79	863.6	34	829.6	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	18.07	847.30	2	10	PVC, 10 slot	Alluvial S&G & Silt	NBT/P001	DG
399	766826.6	917750.8	867.38	865.3	NE	NE	16.59	850.79	2	10	PVC, 10 slot	Alluvial S&G & Silt	NBT/P001	DG
404	764862.8	917113.2	NA	NA	92	725.8	NA	NA	10	5 10 5	S, 6 slot S, 6 slot S, 10 slot	Alluvial Zone Alluvial Zone / Till Till/Bedrock Zone	WMA	DG
405	765284.0	916916.7	NA	NA	86.5	728.5	NA	NA	10	10 5	S, 8 slot S, 10 slot	Alluvial Zone Till	WMA	DG
412	767010.9	918152.3	890.34	NA	26	845.1	NA	NA	6	10	S, 60 slot	Alluvial Zone	NBT/P001	DG
413	767086.5	918127.5	889.28	NA	28.5	843.6	NA	NA	6	10	S, 60 slot	Till/Bedrock Zone	NBT/P001	DG
414	766889.8	918195.1	893.23	NA	50	841.3	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	35.40	878.98	6	5	SS, 35 slot	Till/Bedrock Zone	TFA	DG
521	766813.4	917531.5	863.78	861.6	36	825.6	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	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	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	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	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	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	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	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	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	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	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	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	17.95	846.23	2	10	PVC, 10 slot	Alluvial S&G	NBT/P001	DG
604	767135.5	917876.0	885.48	-883.0	NE	NE	21.88	863.60	2	10	PVC, 10 slot	Alluvial Silt & Sand	NBT/P001	DG
605	767139.6	917874.6	885.23	-883.0	45.5	842.0	45.73	839.50	2	5	PVC, 10 slot	Till/Bedrock	NBT/P001	DG
606	766911.5	917826.6	900.10	900.7	NE	NE	47.40	852.70	2	5	PVC, 10 slot	Alluvial S&G and Silt	NBT/P001	DG
607	766901.8	917830.3	900.64	900.9	58	842.9	60.24	840.40	2	5	PVC, 10 slot	Till/Bedrock	NBT/P001	DG
608	766614.6	917449.8	861.51	859.1	NE	NE	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	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	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	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	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	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	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	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	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	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	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	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	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	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)	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	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	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	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	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	92.41	716.19	2	5	PVC, 10 slot	Till/Bedrock	SBA	DG
627	764545.6	916922.9	812.96	811.2	NE	NE	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	100.50	711.93	2	5	PVC, 10 slot	Till/Bedrock	SBA	DG
629	765410.2	916642.9	818.39	816.2	NE	NE	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	93.55	724.08	2	5	PVC, 10 slot	Till/Bedrock	WBA	SG
631	766060.3	916906.3	829.38	828.0	NE	NE	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	39.34	813.90	2	5	PVC, 10 slot	Till/Bedrock	WMA	DG
P01	765207.2	917610.9	810.62	808.7	NE	NE	11.23	799.39	2	5	PVC	S & G	WMA	DG
P02	765162.9	917434.9	809.61	807.8	NE	NE	10.49	799.12	2	5	PVC	S & G	WMA	DG
P04	766897.6	919096.5	914.73	913.6	19.5	894.1	20.31	894.42	2	5	PVC	Till	TFA	DG
P07	766152.6	919063.9	894.47	895.4	6.5	888.8	5.55	888.92	2	NL	S	Till*	TVD/MLA	DG
P08	766137.6	919137.3	894.70	895.3	9.5	886.3	8.73	885.97	2	NL	S	Till*	TVD/MLA	DG
P11	765943.1	919227.8	895.21	895.5	15.5	879.5	14.84	880.37	2	NL	S	Till*	TVD/MLA	DG

**Key:**

DG: Downgradient from source area	S: Steel
ft amsl: Feet above mean sea level	SBA: Southern Boundary Area
ft bgs: Feet below ground surface	SG: Side gradient to source area
Glaciolac.: Glaciolacustrine	TFA: Tank Farm Area
NBT/P001: Northwest Bedrock Trough/ Parking Lot 001 Area	TVD/MLA: Tower View Drive/Mirror Lake Area
M.P.: Measurement point	UG: Upgradient from source area
NA: Not available	WBA: Western Boundary Area
NE: Not encountered	WMA: Waste Management Area
NL: No log available	* Uncertain
NR: Not recorded	+ Casing has been significantly extended since well installation and emplacement of fill
OH: Open hole completion	

**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	889.14	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	892.67	766906.2	918216.7	NBT/P001		X
325	892.15	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	863.91	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	897.72	767066.3	917771.0	NBT/P001		X
365	898.02	767072.2	917770.3	NBT/P001		X
366	912.48	766711.7	918208.6	NBT/P001		X
367	910.15	766712.8	918032.6	NBT/P001		X
368	910.25	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	



**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			
378	900.05	766993.8	917794.6	NBT/P001		X
379	899.67	767000.4	917792.4	NBT/P001		X
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	896.07	766805.5	917961.4	NBT/P001		X
393	892.69	766967.9	917932.7	NBT/P001		X
394	892.51	766972.3	917934.2	NBT/P001		X
395	890.07	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	867.38	766826.6	917750.8	NBT/P001		X
412	890.34	767010.9	918152.3	NBT/P001		X
413	889.28	767086.5	918127.5	NBT/P001		X
414	893.23	766889.8	918195.1	NBT/P001		X
415	914.38	766989.0	918841.0	TFA		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	900.10	766911.5	917826.6	NBT/P001		X
607	900.64	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.

**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	

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

Well	Site Area	Site Region	Sampling Frequency	List "A"	List "B"
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	
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 8021 or Method

*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 2a for a complete list and schedule of groundwater elevation measurements.

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**APPENDIX C**

**GROUNDWATER ELEVATION DATA  
January 1, 2011 - December 31, 2011**

**2011 WELL INSPECTION SUMMARY WITH  
DEDICATED EQUIPMENT ASSIGNMENTS**

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**Former Owego, New York Facility  
Groundwater Elevation Data**

**Southern Areas (WMA, WBA, SBA TVD/MLA)**

**Northern Areas (NBT/P001, TFA)**

Well Number	TOC Elevation	01/20/2011 DTW	01/20/2011 GWE
101	814.01	18.18	795.83
120	846.20	23.55	822.65
133	897.22	27.33	869.89
147	871.57	18.01	853.56
148	857.87	21.00	836.87
149	834.27	22.14	812.13
158	838.28	11.30	826.98
160	824.31	14.52	809.79
161	824.96	14.76	810.20
162	825.50	11.27	814.23
163	825.40	11.95	813.45
165	817.50	13.90	803.60
166	813.71	28.14	785.57
167	813.26	8.82	804.44
178	812.22	10.04	802.18
179	818.32	42.00	776.32
181	894.65	31.33	863.32
183	851.83	26.42	825.41
185	815.54	33.67	781.87
186	820.32	44.95	775.37
194	862.70	30.00	832.70
306	821.04	6.17	814.87
308	876.26	18.11	858.15
309	874.69	29.38	845.31
313	849.79	33.85	815.94
314	813.82	20.40	793.42
316	813.46	27.49	785.97
317	823.00	13.07	809.93
318	814.19	18.81	795.38
319	806.89	11.27	795.62
321	853.72	27.57	826.15
322	806.20	10.87	795.33
323	813.67	17.99	795.68
351	805.62	12.09	793.53
352	806.48	12.49	793.99
355	813.42	18.64	794.78
356	813.31	17.74	795.57
362	832.69	15.76	816.93
363	855.07	34.66	820.41
372	904.96	46.70	858.26
373	832.19	14.83	817.36
374	821.25	6.58	814.67
375	833.00	13.33	819.67
386	822.26	14.00	808.26
387	817.59	13.14	804.45
391	833.75	14.16	819.59
540	810.55	17.06	793.49
541	812.11	19.06	793.05
542	806.40	13.06	793.34
543	823.64	29.06	794.58
614	811.80	20.61	791.19
619	896.45	9.75	886.70
620	887.16	17.39	869.77
621	841.97	24.15	817.82
622	842.11	23.50	818.61
623	852.67	42.49	810.18
624	853.46	43.20	810.26
625	808.77	13.40	795.37
626	808.60	15.54	793.06
627	812.96	17.65	795.31
628	812.43	24.91	787.52
629	818.39	31.96	786.43
630	817.63	31.50	786.13
631	829.38	7.80	821.58
632	853.24	34.46	818.78
P01	810.62	3.41	807.21
P02	809.61	7.35	802.26
P07	894.47	3.70	890.77
P08	894.70	6.42	888.28
P11	895.21	10.60	884.61

DRY = Water level less than bottom elevation  
 TOC = Top of casing or measuring point  
 DTW = Depth to water from top of casing (ft)  
 GWE = Groundwater elevation (ft amsl)

Well Number	TOC Elevation	04/19/2011 DTW	04/19/2011 GWE
106	914.91	1.99	912.92
107A	961.80	14.88	946.92
110	946.88	2.60	944.28
113	914.83	6.11	908.72
114	916.13	12.67	903.46
123	903.96	3.31	900.65
124	911.43	3.77	907.66
125	905.36	6.66	898.70
126	908.95	7.61	901.34
127	909.65	2.71	906.94
128	914.23	19.42	894.81
129	912.10	2.62	909.48
132	915.31	14.81	900.50
134	916.46	17.62	898.84
140R	889.14	28.11	861.03
143	884.81	2.58	882.23
146	868.04	4.37	863.67
154	861.70	1.73	859.97
157	854.13	5.28	848.85
324	892.67	29.74	862.93
325	892.15	26.56	865.59
353	912.87	11.75	901.12
354	912.85	9.51	903.34
357	863.91	1.78	862.13
358	864.08	1.90	862.18
361	868.42	4.24	864.18
364	897.72	33.16	864.56
365	898.02	34.11	863.91
366	912.48	37.27	875.21
367	910.15	44.10	866.05
368	910.25	42.61	867.64
378	900.05	36.67	863.38
379	899.67	36.25	863.42
382	912.59	10.97	901.62
383	867.39	3.55	863.84
392	896.07	31.70	864.37
393	892.69	29.08	863.61
394	892.51	28.78	863.73
395	890.07	28.67	861.40
397	865.79	7.51	858.28
398	865.37	5.72	859.65
399	867.38	4.36	863.02
412	890.34	29.68	860.66
413	889.28	30.07	859.21
414	893.23	35.72	857.51
415	914.38	19.92	894.46
521	863.78	1.11	862.67
522	864.46	1.58	862.88
524	866.28	4.31	861.97
529	863.93	2.85	861.08
532	866.34	4.69	861.65
534	862.88	1.39	861.49
601	862.08	2.22	859.86
602	862.15	2.41	859.74
603	864.18	5.34	858.84
604	885.48	12.34	873.14
605	885.23	15.83	869.40
606	900.10	36.78	863.32
607	900.64	36.92	863.72
608	861.51	2.30	859.21
609	895.16	24.07	871.09
610	909.10	14.39	894.71
611	909.11	10.56	898.55
612	903.93	30.85	873.08
613	903.94	31.83	872.11
615	862.69	4.66	858.03
616	888.18	5.33	882.85
617	895.77	4.91	890.86
618	909.29	1.45	907.84
P04	914.73	4.83	909.90
540	810.55	9.90	800.65
541	812.11	11.67	800.44
542	806.40	5.94	800.46
543	823.64	22.75	800.89

**Former Owego, New York Facility  
Groundwater Elevation Data**

**Southern Areas (WMA, WBA, SBA TVD/MLA)**

**Northern Areas (NBT/P001, TFA)**

Well Number	TOC Elevation	07/18/2011 DTW	07/18/2011 GWE
101	814.01	17.20	796.81
120	846.20	22.75	823.45
133	897.22	27.29	869.93
147	871.57	18.28	853.29
148	857.87	20.74	837.13
149	834.27	21.19	813.08
158	838.28	11.25	827.03
160	824.31	15.98	808.33
161	824.96	16.56	808.40
162	825.50	10.52	814.98
163	825.40	11.50	813.90
165	817.50	17.46	800.04
166	813.71	27.85	785.86
167	813.26	8.76	804.50
178	812.22	8.69	803.53
179	818.32	42.99	775.33
181	894.65	31.78	862.87
183	851.83	26.05	825.78
185	815.54	33.72	781.82
186	820.32	44.38	775.94
194	862.70	29.75	832.95
306	821.04	5.42	815.62
308	876.26	16.99	859.27
309	874.69	28.97	845.72
313	849.79	33.47	816.32
314	813.82	20.04	793.78
316	813.46	27.30	786.16
317	823.00	14.55	808.45
318	814.19	18.06	796.13
319	806.89	10.40	796.49
321	853.72	26.85	826.87
322	806.20	10.18	796.02
323	813.67	17.01	796.66
351	805.62	11.45	794.17
352	806.48	12.14	794.34
355	813.42	18.13	795.29
356	813.31	17.18	796.13
362	832.69	14.88	817.81
363	855.07	33.94	821.13
372	904.96	45.77	859.19
373	832.19	13.67	818.52
374	821.25	6.00	815.25
375	833.00	12.57	820.43
386	822.26	13.18	809.08
387	817.59	15.27	802.32
391	833.75	13.38	820.37
540	810.55	17.08	793.47
541	812.11	19.24	792.87
542	806.40	13.22	793.18
543	823.64	28.75	794.89
614	811.80	20.06	791.74
619	896.45	10.15	886.30
620	887.16	Dry	<869.60
621	841.97	22.86	819.11
622	842.11	22.30	819.81
623	852.67	41.58	811.09
624	853.46	42.30	811.16
625	808.77	12.73	796.04
626	808.60	14.93	793.67
627	812.96	15.20	797.76
628	812.43	23.23	789.20
629	818.39	32.24	786.15
630	817.63	31.76	785.87
631	829.38	7.48	821.90
632	853.24	34.22	819.02
P01	810.62	2.69	807.93
P02	809.61	5.97	803.64
P07	894.47	3.90	890.57
P08	894.70	5.21	889.49
P11	895.21	10.49	884.72

DRY = Water level less than bottom elevation  
 TOC = Top of casing or measuring point  
 DTW = Depth to water from top of casing (ft)  
 GWE = Groundwater elevation (ft amsl)

Well Number	TOC Elevation	10/17/2011 DTW	10/17/2011 GWE
106	914.91	1.71	913.20
107A	961.80	16.90	944.90
110	946.88	5.17	941.71
113	914.83	6.82	908.01
114	916.13	Dry	<899.48
123	903.96	3.70	900.26
124	911.43	4.86	906.57
125	905.36	7.20	898.16
126	908.95	8.08	900.87
127	909.65	3.46	906.19
128	914.23	18.27	895.96
129	912.10	2.93	909.17
132	915.31	16.62	898.69
134	916.46	19.07	897.39
140R	889.14	31.32	857.82
143	884.81	4.82	879.99
146	868.04	5.07	862.97
154	861.70	2.18	859.52
157	854.13	5.76	848.37
324	892.67	32.75	859.92
325	892.15	29.66	862.49
353	912.87	12.39	900.48
354	912.85	10.70	902.15
357	863.91	2.57	861.34
358	864.08	2.65	861.43
361	868.42	5.56	862.86
364	897.72	35.01	862.71
365	898.02	36.30	861.72
366	912.48	38.78	873.70
367	910.15	46.18	863.97
368	910.25	44.65	865.60
378	900.05	38.52	861.53
379	899.67	38.44	861.23
382	912.59	10.71	901.88
383	867.39	4.16	863.23
392	896.07	33.14	862.93
393	892.69	31.10	861.59
394	892.51	31.31	861.20
395	890.07	31.34	858.73
397	865.79	8.58	857.21
398	865.37	7.70	857.67
399	867.38	5.78	861.60
412	890.34	32.49	857.85
413	889.28	37.32	851.96
414	893.23	40.56	852.67
415	914.38	18.80	895.58
521	863.78	2.20	861.58
522	864.46	2.98	861.48
524	866.28	5.00	861.28
529	863.93	3.10	860.83
532	866.34	5.01	861.33
534	862.88	1.27	861.61
601	862.08	2.36	859.72
602	862.15	3.10	859.05
603	864.18	7.42	856.76
604	885.48	14.33	871.15
605	885.23	17.04	868.19
606	900.10	38.80	861.30
607	900.64	39.00	861.64
608	861.51	2.80	858.71
609	895.16	24.03	871.13
610	909.10	14.53	894.57
611	909.11	11.00	898.11
612	903.93	31.30	872.63
613	903.94	32.68	871.26
615	862.69	5.73	856.96
616	888.18	5.88	882.30
617	895.77	4.97	890.80
618	909.29	4.06	905.23
P04	914.73	5.01	909.72
540	810.55	13.43	797.12
541	812.11	15.52	796.59
542	806.40	9.68	796.72
543	823.64	25.70	797.94

## 2011 Well Inspection Summary with Dedicated Equipment Assignments

Well ID	Reference DTB	2011 Measured DTB	Depth Differential	Well Tag Condition?	Reference Point Visible?	Standpipe Paint Condition?	Sanitary Seal Condition?	Dedicated Equipment
101	40.95	40.96	-0.01	Good	Yes	Good	Good	PDB@37.9'
106	13.12	13.15	-0.03	Good	Yes	Good	Good	PDB@10.9'
107A	64.96	64.57	0.39	Good	Yes	Good	Good	PDB@~60'
110	20.11	21.09	-0.98	Good	Yes	Manhole	Good	PDB@15.9'
113	12.72	12.60	0.12	Good	Yes	Good	Good	None
114	14.7	13.52	1.18	Good	Yes	Good	Good	None
120	39.58	39.35	0.23	Good	Yes	Good	Good	PDB@24.0'
123	21.89	21.83	0.06	Good	Yes	Manhole	Good	None
124	25.14	25.22	-0.08	Good	Yes	Good	Good	PDB@23.9'
125	24.86	24.11	0.75	Good	Yes	Manhole	Good	PDB@23.6'
126	23.9	23.90	0.00	Good	Yes	Manhole	Good	None
127	19.54	19.02	0.52	Good	Yes	Manhole	Good	PDB@18.8'
128	24.86	24.70	0.16	Good	Yes	Good	Good	PDB@22.2'
129	8.35	7.41	0.94	Good	Yes	Manhole	Good	PDB@5.4'
132	21.2	21.16	0.04	Good	Yes	Good	Good	PDB@19.3'
133	31.5	31.46	0.04	Good	Yes	Good	Good	PDB@28.9'
134	42.89	42.70	0.19	Good	Yes	Good	Good	PDB@39.6'
140R	45.14	44.99	0.15	Good	Yes	Good	Good	PDB@42.6'
143	29.05	28.90	0.15	Good	Yes	Manhole	Good	None
146	25.86	25.85	0.01	Good	Yes	Good	Good	PDB@24.4'
147	27.28	27.25	0.03	Good	Yes	Good	Good	None
148	34.91	34.86	0.05	Good	Yes	Good	Good	PDB@34.8'
149	33.57	33.02	0.55	Good	Yes	Good	Good	PDB@31.7'
154	25.56	25.39	0.17	Good	Yes	Good	Good	None
157	20.02	19.68	0.34	Good	Yes	Good	Good	PDB@15.5'
158	39.76	39.39	0.37	Good	Yes	Good	Good	PDB@35.1'
160	58.46	58.41	0.05	Good	Yes	Good	Good	PDB@57.2'
161	22.74	22.60	0.14	Good	Yes	Good	Good	None
162	50.43	50.38	0.05	Good	Yes	Good	Good	PDB@45.8'
163	25.49	25.27	0.22	Good	Yes	Good	Good	PDB@21.6'
165	44.21	43.83	0.38	Good	Yes	Good	Good	PDB@38.0'
166	90.56	90.53	0.03	Good	Yes	Good	Good	PDB@84.7'
167	25.52	25.23	0.29	Good	Yes	Good	Good	PDB@20.5'
178	36.38	36.34	0.04	Good	Yes	Good	Good	PDB@35.6'
179	71.51	71.34	0.17	Good	Yes	Good	Good	PDB@70.7'
181	40.6	40.58	0.02	Good	Yes	Good	Good	PDB@38.0'
183	30.5	30.49	0.01	Good	Yes	Good	Good	PDB@27.5'
185	94.2	94.09	0.11	Good	Yes	Good	Good	Ded. 2" SP
186	96.27	96.03	0.24	Good	Yes	Good	Good	Ded. 2" SP
194	113.37	112.40	0.97	Good	Yes	Good	Good	Ded. 2" SP
306	62.5	62.28	0.22	Good	Yes	Good	Good	PDB
308	29.99	29.95	0.04	Good	Yes	Good	Good	PDB@25.1'
309	32.17	32.05	0.12	Good	Yes	Good	Good	PDB@26.8'
313	39.5	39.83	-0.33	Good	Yes	Good	Good	PDB@36.0'
314	100.43	100.18	0.25	Good	Yes	Good	Good	PDB@98.2'
316	48.99	48.88	0.11	Good	Yes	Good	Good	PDB@44.5'
317	47.16	47.05	0.11	Good	Yes	Good	Good	PDB@42.4'
318	47.32	47.23	0.09	Good	Yes	Good	Good	PDB@43.3'
319	45.23	44.85	0.38	Good	Yes	Good	Good	PDB@40.6'
321	39.56	39.50	0.06	Good	Yes	Good	Good	PDB@35.6'
322	45.74	45.43	0.31	Good	Yes	Good	Good	PDB@41.5'
323	47.35	46.99	0.36	Good	Yes	Good	Good	PDB@42.1'
324	53.43	53.63	-0.20	Good	Yes	Good	Good	PDB@48.4'
325	42.61	42.54	0.07	Good	Yes	Good	Good	PDB@39.1'
351	90.4	90.23	0.17	Good	Yes	Good	Good	Ded. 2" SP
352	87.41	NA*	NA*	Good	Yes	Good	Good	Ded. 2" SP
353	28.57	28.43	0.14	Good	Yes	Manhole	Good	PDB@26.1'
354	17.25	17.10	0.15	Good	Yes	Manhole	Good	Bailer-3'
355	97.9	97.86	0.04	Good	Yes	Good	Good	PDB@95.1'

## 2011 Well Inspection Summary with Dedicated Equipment Assignments

Well ID	Reference DTB	2011 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	34.40	0.13	Good	Yes	Good	Good	PDB@32.1'
358	17.64	17.10	0.54	Good	Yes	Good	Good	PDB@14.3'
361	35.39	35.22	0.17	Good	Yes	Good	Good	PDB@33.1'
362	66.64	66.50	0.14	Good	Yes	Good	Good	PDB@63.9'
363	45.53	45.35	0.18	Good	Yes	Good	Good	PDB@43.6'
364	65.27	65.11	0.16	Good	Yes	Good	Good	PDB@62.7'
365	45.86	45.68	0.18	Good	Yes	Good	Good	PDB@43.3'
366	42.99	42.83	0.16	Good	No	Good	Good	Bailer-3'
367	72.55	72.33	0.22	Good	Yes	Good	Good	PDB@69.8'
368	49.42	48.71	0.71	Good	Yes	Good	Good	Bailer-3'
372	65.82	65.39	0.43	Good	Yes	Good	Good	None
373	45.7	45.64	0.06	Good	Yes	Good	Good	PDB@40.7'
374	20.54	20.84	-0.30	Good	Yes	Good	Good	PDB@15.7'
375	45.58	45.82	-0.24	Good	Yes	Good	Good	None
378	77.22	77.90	-0.68	Good	Yes	Good	Good	PDB@74.0'
379	51.92	52.54	-0.62	Good	Yes	Good	Good	PDB@49.4'
382	22.58	22.35	0.23	Good	No	Good	Good	PDB@19.7'
383	16.99	16.71	0.28	Good	Yes	Good	Good	PDB@14.3'
386	17.46	17.33	0.13	Good	Yes	Good	Good	PDB@14.9'
387	15.52	15.37	0.15	Good	Yes	Good	Good	PDB@12.5'
391	30.18	30.19	-0.01	Good	Yes	Good	Good	None
392	45.07	46.11	-1.04	Good	Yes	Good	Good	PDB@40.1'
393	65.19	64.91	0.28	Good	Yes	Good	Good	PDB@62.7'
394	47.01	47.28	-0.27	Good	Yes	Good	Good	PDB@42.0'
395	65.1	64.95	0.15	Good	Yes	Good	Good	PDB@62.0'
397	39.69	39.85	-0.16	Good	Yes	Good	Good	PDB@37.2'
398	18.07	18.55	-0.48	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	Good	NA	None
405	Extraction Well - Inaccessible			Good	Yes	Good	NA	None
406	Former Extraction Well - Inaccessible			Good	Yes	Good	NA	None
408	Former Extraction Well - Inaccessible			Good	Yes	Good	NA	None
409	Former Extraction Well - Inaccessible			Good	Yes	Good	NA	None
410	Former Extraction Well - Inaccessible			Good	Yes	Good	NA	None
412	Extraction Well - Inaccessible			Good	Yes	Good	NA	Bailer-3'
413	Extraction Well - Inaccessible			Good	Yes	Good	NA	Bailer-3'
414	Extraction Well - Inaccessible			Good	Yes	Good	NA	Bailer-3'
415	Extraction Well - Inaccessible			Good	Yes	Good	NA	None
521	39.55	39.50	0.05	Good	Yes	Manhole	Good	PDB@38.2'
522	34.08	33.93	0.15	Good	Yes	Good	Good	PDB@31.2'
524	36.17	36.07	0.10	Good	Yes	Good	Good	PDB@33.2'
529	13.76	13.77	-0.01	Good	Yes	Manhole	Good	PDB@11.4'
532	16.58	17.17	-0.59	Good	Yes	Good	Good	PDB@12.3'
534	13.34	13.20	0.14	Good	Yes	Manhole	Good	PDB@8.5'
540	51.03	50.92	0.11	Good	Yes	Good	None	PDB@46.3'
541	55.03	54.92	0.11	Good	Yes	Good	None	PDB@50.1'
542	44.64	44.59	0.05	Good	Yes	Good	None	PDB@39.4'
543	54.27	54.16	0.11	Good	Yes	Good	None	PDB@49.0'
601	15.56	15.40	0.16	Good	Yes	Good	Good	PDB@10.1'
602	19.54	19.31	0.23	Good	Yes	Good	Good	PDB@13.1'
603	17.95	17.78	0.17	Good	Yes	Good	Good	PDB@13.0'
604	22.14	22.00	0.14	Good	Yes	Manhole	Good	PDB@21.5'
605	46.5	46.33	0.17	Good	Yes	Manhole	Good	PDB@47.7'
606	47.4	47.35	0.05	Good	Yes	Manhole	Good	PDB@44.9'
607	59.74	59.66	0.08	Good	Yes	Manhole	Good	PDB@57.7'
608	16.77	16.61	0.16	Good	Yes	Good	Good	PDB@11.4'
609	51.66	51.71	-0.05	Good	Yes	Manhole	Good	PDB@49.2'
610	32.4	32.04	0.36	Good	Yes	Manhole	Good	PDB@29.9'



## 2011 Well Inspection Summary with Dedicated Equipment Assignments

Well ID	Reference DTB	2011 Measured DTB	Depth Differential	Well Tag Condition?	Reference Point Visible?	Standpipe Paint Condition?	Sanitary Seal Condition?	Dedicated Equipment
611	13.41	13.28	0.13	Good	Yes	Manhole	Good	Peristaltic
612	56.64	56.90	-0.26	Good	Yes	Manhole	Good	PDB@55.9'
613	41.63	41.46	0.17	Good	Yes	Manhole	Good	PDB@36.4'
614	105.42	105.08	0.34	Good	Yes	Good	Good	PDB@102.6'
615	46.07	45.90	0.17	Good	Yes	Good	Good	PDB@42.7'
616	31.56	31.39	0.17	Good	Yes	Good	Good	PDB@28.0'
617	37.34	37.10	0.24	Good	Yes	Manhole	Good	PDB@34.7'
618	28.86	28.70	0.16	Good	Yes	Good	Good	PDB@26.6'
619	15.07	14.88	0.19	Good	Yes	Manhole	Good	PDB@12.2'
620	17.56	17.41	0.15	Good	Yes	Good	Good	Peristaltic
621	37.41	37.15	0.26	Good	Yes	Good	Good	PDB@32.0'
622	46.53	46.38	0.15	Good	Yes	Good	Good	PDB@43.6'
623	54.59	54.41	0.18	Good	Yes	Good	Good	PDB@49.0'
624	64.39	64.20	0.19	Good	Yes	Good	Good	PDB@61.5'
625	44.58	44.37	0.21	Good	Yes	Good	Good	PDB@39.0'
626	92.41	92.26	0.15	Good	Yes	Good	Good	PDB@91.1'
627	50.91	50.80	0.11	Good	Yes	Good	Good	PDB@44.8'
628	100.5	100.58	-0.08	Good	Yes	Good	Good	PDB@97.0'
629	51.45	51.26	0.19	Good	Yes	Good	Good	PDB@45.2'
630	93.55	93.35	0.20	Good	Yes	Good	Good	PDB@90.1'
631	31.53	31.35	0.18	Good	Yes	Good	Good	PDB@27.9'
632	39.34	39.15	0.19	Good	Yes	Good	Good	PDB@35.9'
P1	11.23	11.11	0.12	Good	Yes	Good	Good	None
P2	10.49	10.35	0.14	Good	Yes	Good	Good	None
P4	20.31	20.35	-0.04	Good	Yes	Good	Good	PDB@17.6'
P7	5.55	5.08	0.47	Good	Yes	Manhole	Good	None
P8	8.73	8.65	0.08	Good	Yes	Manhole	Good	PDB@~6.7'
P11	14.84	14.60	0.24	Good	Yes	Manhole	Good	PDB@11'

**Key:**

DTB = Depth to Bottom

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

\* PVC pipe is damaged below grade; depth to bottom cannot be measured.

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**

**2011 SAMPLING PLAN**

**GROUNDWATER MONITORING PROGRAM**

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**Former Owego, New York Facility  
2011 Groundwater Monitoring Plan**

Well	Site Area	Site Region	Southern Areas (Semiannual)	Northern Areas (Annual)	Southern Areas (Annual)	Northern Areas (Semiannual)	Sampling Frequency	Program	Unit Monitored
			1st Quarter 2011	2nd Quarter 2011	3rd Quarter 2011	4th Quarter 2011			
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  
2011 Groundwater Monitoring Plan**

Well	Site Area	Site Region	Southern Areas (Semiannual)	Northern Areas (Annual)	Southern Areas (Annual)	Northern Areas (Semiannual)	Sampling Frequency	Program	Unit Monitored
			1st Quarter 2011	2nd Quarter 2011	3rd Quarter 2011	4th Quarter 2011			
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
412	NBT/P001	North	X	X	X	X	Q	V	Till/Bedrock
413	NBT/P001	North	X	X	X	X	Q	V	Alluvial Sand & Gravel/Till/Bedrock
414	NBT/P001	North	X	X	X	X	Q	V	Till/Bedrock
AP Wells*	NBT/P001	North	X	X	X	X	Q	V	Not applicable
415	TFA	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?
<b>Sample Count:</b>			<b>57</b>	<b>72</b>	<b>79</b>	<b>54</b>	<b>Total:</b>	<b>262</b>	

Key:

X Collect sample  
 Q Quarterly  
 S Semiannually  
 A Annually  
 \* Combined flow from wells 412, 413, 414  
 GMP Groundwater Monitoring Program Well  
 V Voluntary Sampling Well

MT: Moore Tire Area (off-site)  
 NBT/P001: NW Bedrock Trough/P001 Area  
 SBA: Southern Boundary Area (some off-site)  
 TFA: Tank Farm Area  
 TVD/MLA: Tower View Drive/Mirror Lake Area  
 WBA: Western Boundary Area  
 WMA: Waste Management Area

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**APPENDIX E**

**CHAINS OF CUSTODY**  
**Third and Fourth Quarters 2011**

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IBM Chain of Custody



For Lancaster Laboratories use only  
 Acct. #: 6911 Group #: 1257272 Sample #: 6350107-34

COC # 00519

Please print. Instructions on reverse side correspond with circled numbers.

Client: IBM Acct. #: 06911  
 Project Name: Change 2nd of Gw Supply  
 Project Name# (cont.): 93004.30  
 Sampler: JRonis Project State: NY  
 P.O.#: CA93004.09 IBM PM: K. Whalen  
 Check one:  Routine Lab GW  Routine GTF O&M  
 Non-Routine Investigation  Non-Routine Upgrades/Installs  
 OU: Routine (Endicott Non-Routine only)

Matrix (4):  
 Grab  Composite   
 Soil  Water  Other   
 Possible Check # NPDES Applicable

(5) Analyses Requested  
 Preservation Codes: A

For Lab Use Only  
 FSC: \_\_\_\_\_  
 SCR #: \_\_\_\_\_  
 Preservation Codes:  
 H=HCl T=Thiosulfate  
 N=HNO<sub>3</sub> B=NaOH  
 S=H<sub>2</sub>SO<sub>4</sub> O=Other

Temperature of samples upon receipt (if requested) (6): \_\_\_\_\_

Sample Identification	Date Collected	Time Collected	Grab	Composite	Soil	Water	Other	Total # of Containers	Remarks/SSOW
OTB 110718 JAR	7/18/11	1730	X			GW		3 X	Imp Blank
00541 110718P		1747							
00542 110718P		1804							
00540 110718P		1823							
00543 110718P		1839							
0EQ 110718W/L/D		1900							Egup. Blank.
00P11 110718P		1926							
00355 110719P	7/19/11	627							
00356 110719P		641							
00625 110719P		702							

Turnaround Time Requested (TAT) (please check):  Normal  Rush  
 (Rush TAT is subject to Lancaster Laboratories approval and surcharge.)  
 Date results are needed: 10 Days  
 Rush results requested by (please check):  Phone  E-mail  
 Phone #: \_\_\_\_\_ E-mail: \_\_\_\_\_

Data Package Options (please check if required)  
 Type I (Validation/NJ Reg)  TX TRRP-13  SDG Complete?  Yes  No  
 Type III (Reduced NJ)  MA MCP  
 Type VI (Raw Data Only)  CT RCP  
 NY ASP A  Site-specific QC (MS/MSD/Dup)?  Yes  No  
 NY ASP B (If yes, indicate QC sample and submit triplicate volume.)

Relinquished by: AR Date: 7/19/11 Time: 1900 Received by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
 Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_ Received by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
 Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_ Received by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
 Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_ Received by: Suzette Lehman Date: 7/21/11 Time: 0915

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IBM Chain of Custody



For Lancaster Laboratories use only  
 Acct. #: 6911 Group #: 1257272 Sample #: 6350107-34

COC # 00520

Please print. Instructions on reverse side correspond with circled numbers.

Client: IBM Acct. #: 06911  
 Project Name: Change 2nd of Gw Supply  
 Project Name# (cont.): 93004.30  
 Sampler: JRonis Project State: NY  
 P.O.#: CA93004.09 IBM PM: K. Whalen  
 Check one:  Routine Lab GW  Routine GTF O&M  
 Non-Routine Investigation  Non-Routine Upgrades/Installs  
 OU: Routine (Endicott Non-Routine only)

Matrix (4):  
 Grab  Composite   
 Soil  Water  Other   
 Possible Check # NPDES Applicable

(5) Analyses Requested  
 Preservation Codes: A

For Lab Use Only  
 FSC: \_\_\_\_\_  
 SCR #: \_\_\_\_\_  
 Preservation Codes:  
 H=HCl T=Thiosulfate  
 N=HNO<sub>3</sub> B=NaOH  
 S=H<sub>2</sub>SO<sub>4</sub> O=Other

Temperature of samples upon receipt (if requested) (6): \_\_\_\_\_

Sample Identification	Date Collected	Time Collected	Grab	Composite	Soil	Water	Other	Total # of Containers	Remarks/SSOW
00626 110719P	7/19/11	718	X			GW		3 X	
00321 110719P		753							
00308 110719P		817							
00133 110719P		834							
00309 110719P		850							
00313 110719P		911							
00621 110719P		929							
00622 110719P		940							
00615 110719P		1007							
00078 110719P		1034							

Turnaround Time Requested (TAT) (please check):  Normal  Rush  
 (Rush TAT is subject to Lancaster Laboratories approval and surcharge.)  
 Date results are needed: 10 Days  
 Rush results requested by (please check):  Phone  E-mail  
 Phone #: \_\_\_\_\_ E-mail: \_\_\_\_\_

Data Package Options (please check if required)  
 Type I (Validation/NJ Reg)  TX TRRP-13  SDG Complete?  Yes  No  
 Type III (Reduced NJ)  MA MCP  
 Type VI (Raw Data Only)  CT RCP  
 NY ASP A  Site-specific QC (MS/MSD/Dup)?  Yes  No  
 NY ASP B (If yes, indicate QC sample and submit triplicate volume.)

Relinquished by: AR Date: 7/19/11 Time: 1900 Received by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
 Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_ Received by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
 Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_ Received by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
 Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_ Received by: Suzette Lehman Date: 7/21/11 Time: 0915

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IBM Chain of Custody



For Lancaster Laboratories use only  
 Acct #: 6911 Group #: 1257272 Sample #: 6350107-34 COC # 00521

Please print. Instructions on reverse side correspond with circled numbers.

Client: IBM Acct #: 06911  
 Project Name: Orange Jrd at New Supply  
 Project Name# (cont.): 13004, 30  
 Sampler: J Ronis Project State: NY  
 P.O.#: CA93004.09 IBM PM: K. Whalen  
 Check one:  Routine Lab GW  Routine GTF O&M  
 Non-Routine Investigation  Non-Routine Upgrades/Installs  
 OU: Routine (Endicott Non-Routine only)

Matrix: Gr  
 Composite:  Soil  Water  Other  
 Potable Check if Available:  NPDES Available:   
 Total # of Containers: 3  
 Analyses Requested: H  
 Preservation Codes: H  
 For Lab Use Only: FSC: \_\_\_\_\_ SCR #: \_\_\_\_\_  
 Preservation Codes: H=HCl, T=Thiosulfate, N=HNO<sub>3</sub>, B=NaOH, S=H<sub>2</sub>SO<sub>4</sub>, O=Other

Sample Identification	Date Collected	Time Collected	Grab	Composite	Soil	Water	Other	Total # of Containers	Remarks/SSOW	Temperature of samples upon receipt (if requested)
<u>CEG110719WLID</u>	<u>7/19/11</u>	<u>1055</u>	<u>X</u>			<u>Gr</u>		<u>3</u>	<u>Equip Blank</u>	
<u>00393110719</u>		<u>1230</u>								
<u>00357110719</u>		<u>1310</u>								
<u>00350110719</u>		<u>1340</u>								
<u>00194110719</u>		<u>1515</u>								
<u>00185110719</u>		<u>1638</u>								
<u>00186110719</u>		<u>1603</u>								
<u>00306110719</u>		<u>1735</u>								

Turnaround Time Requested (TAT) (please check):  Normal  Rush  
 (Rush TAT is subject to Lancaster Laboratories approval and surcharge.)  
 Date results are needed: 10 Days  
 Rush results requested by (please check):  Phone  E-mail  
 Phone #: \_\_\_\_\_ E-mail: \_\_\_\_\_

Data Package Options (please check if required) SDG Complete?  Yes  No  
 Type I (Validation/NJ Reg)  TX TRRP-13  
 Type III (Reduced NJ)  MA MCP  
 Type VI (Raw Data Only)  CT RCP  
 NY ASP A  Site-specific QC (MS/MSD/Dup)?  Yes  No  
 NY ASP B (If yes, indicate QC sample and submit replicate volume.)

Relinquished by: [Signature] Date: 7/15/11 Time: 1900  
 Received by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
 Received by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
 Received by: [Signature] Date: 7/21/11 Time: 0915

\* NYSD E C B

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IBM Chain of Custody



For Lancaster Laboratories use only  
 Acct #: 6911 Group #: 1257272 Sample #: 6350107-34 COC # 00522

Please print. Instructions on reverse side correspond with circled numbers.

Client: IBM Acct #: 06911  
 Project Name: Orange Jrd at New Supply  
 Project Name# (cont.): 13004, 30  
 Sampler: J Ronis Project State: NY  
 P.O.#: CA93004.09 IBM PM: K. Whalen  
 Check one:  Routine Lab GW  Routine GTF O&M  
 Non-Routine Investigation  Non-Routine Upgrades/Installs  
 OU: Routine (Endicott Non-Routine only)

Matrix: Gr  
 Composite:  Soil  Water  Other  
 Potable Check if Available:  NPDES Available:   
 Total # of Containers: 3  
 Analyses Requested: H  
 Preservation Codes: H  
 For Lab Use Only: FSC: \_\_\_\_\_ SCR #: \_\_\_\_\_  
 Preservation Codes: H=HCl, T=Thiosulfate, N=HNO<sub>3</sub>, B=NaOH, S=H<sub>2</sub>SO<sub>4</sub>, O=Other

Sample Identification	Date Collected	Time Collected	Grab	Composite	Soil	Water	Other	Total # of Containers	Remarks/SSOW	Temperature of samples upon receipt (if requested)
<u>OTB110719JAL</u>	<u>7/19/11</u>	<u>1100</u>	<u>X</u>			<u>Gr</u>		<u>3</u>	<u>Equip Blank</u>	
<u>00394110719P</u>	<u>7/19/11</u>	<u>743</u>								
<u>00300110719P</u>		<u>702</u>								
<u>00373110719P</u>		<u>738</u>								
<u>00363110719P</u>		<u>752</u>								
<u>CEG110719WLID</u>		<u>836</u>							<u>Equip Blank</u>	
<u>00318110719P</u>		<u>857</u>								
<u>00322110719P</u>		<u>917</u>								
<u>00319110719P</u>		<u>936</u>								
<u>00607110719P</u>		<u>959</u>								

Turnaround Time Requested (TAT) (please check):  Normal  Rush  
 (Rush TAT is subject to Lancaster Laboratories approval and surcharge.)  
 Date results are needed: 10 Days  
 Rush results requested by (please check):  Phone  E-mail  
 Phone #: \_\_\_\_\_ E-mail: \_\_\_\_\_

Data Package Options (please check if required) SDG Complete?  Yes  No  
 Type I (Validation/NJ Reg)  TX TRRP-13  
 Type III (Reduced NJ)  MA MCP  
 Type VI (Raw Data Only)  CT RCP  
 NY ASP A  Site-specific QC (MS/MSD/Dup)?  Yes  No  
 NY ASP B (If yes, indicate QC sample and submit replicate volume.)

Relinquished by: [Signature] Date: 7/19/11 Time: 1800  
 Received by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
 Received by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
 Received by: [Signature] Date: 7/21/11 Time: 1010

\* NYSD E C B

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# IBM Chain of Custody



For Lancaster Laboratories use only

Acct #: 06911 Group #: 12578 Sample #: 63532124

COC # 00523

Please print. Instructions on reverse side correspond with circled numbers.

Client: IBM Acct #: 06911  
 Project Name: Charge and Ground Sampling  
 Project Name# (cont.): 73004.30  
 Sampler: J. Ronis Project State: NY  
 P.O.#: CA93004.09 IBM PM: K. Whalen  
 Check one:  Routine Lab GW  Routine GTF O&M  
 Non-Routine Investigation  Non-Routine Upgrades/Installs  
 OU: Routine (Endicott Non-Routine only)

**(5) Analyses Requested**  
 Preservation Codes

**For Lab Use Only**  
 FSC: \_\_\_\_\_  
 SCR #: \_\_\_\_\_  
 Preservation Codes:  
 H=HCl T=Thiosulfate  
 N=HNO<sub>3</sub> B=NaOH  
 S=H<sub>2</sub>SO<sub>4</sub> O=Other

Temperature of samples upon receipt (if requested)

Sample Identification	Date Collected	Time Collected	Grab	Composite	Soil	Water	Other	Total # of Containers	Remarks/SSOW
<u>C0608110700P</u>	<u>7/20/11</u>	<u>1014</u>	<u>X</u>			<u>GW</u>		<u>3</u>	
<u>C06393110700P</u>		<u>1047</u>							
<u>C06314110700P</u>		<u>1107</u>							
<u>C06101110700P</u>		<u>1133</u>							
<u>C06121110700P</u>		<u>1252</u>							
<u>C06173110700P</u>		<u>1301</u>							
<u>C06178110700P</u>		<u>1344</u>							
<u>C06166110700P</u>		<u>1412</u>							
<u>C06316110700P</u>		<u>1427</u>							
<u>C06167110700P</u>		<u>1446</u>							

**(7) Turnaround Time Requested (TAT) (please check):**  Normal  Rush  
 (Rush TAT is subject to Lancaster Laboratories approval and surcharge.)  
 Date results are needed: 10 Days  
 Rush results requested by (please check):  Phone  E-mail  
 Phone #: \_\_\_\_\_ E-mail: \_\_\_\_\_

**(8) Data Package Options (please check if required)**  
 Type I (Validation/NJ Reg)  TX TRRP-13  Yes  No  
 Type II (Reduced NJ)  MA MCP  Yes  No  
 Type VI (Raw Data Only)  CT RCP  Yes  No  
 NY ASP A  Site-specific QC (MS/MSD/Dup)?  Yes  No  
 NY ASP B (If yes, indicate QC sample and submit triplicate volume.)

Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_ Received by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
 Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_ Received by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
 Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_ Received by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
 Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_ Received by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

SDG Complete?  Yes  No

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\* NY SDEC B

# IBM Chain of Custody



For Lancaster Laboratories use only

Acct #: 06911 Group #: 12578 Sample #: 63532124

COC # 00525

Please print. Instructions on reverse side correspond with circled numbers.

Client: IBM Acct #: 06911  
 Project Name: Charge and Ground Sampling  
 Project Name# (cont.): 73004.30  
 Sampler: J. Ronis Project State: NY  
 P.O.#: CA93004.09 IBM PM: K. Whalen  
 Check one:  Routine Lab GW  Routine GTF O&M  
 Non-Routine Investigation  Non-Routine Upgrades/Installs  
 OU: Routine (Endicott Non-Routine only)

**(5) Analyses Requested**  
 Preservation Codes

**For Lab Use Only**  
 FSC: \_\_\_\_\_  
 SCR #: \_\_\_\_\_  
 Preservation Codes:  
 H=HCl T=Thiosulfate  
 N=HNO<sub>3</sub> B=NaOH  
 S=H<sub>2</sub>SO<sub>4</sub> O=Other

Temperature of samples upon receipt (if requested)

Sample Identification	Date Collected	Time Collected	Grab	Composite	Soil	Water	Other	Total # of Containers	Remarks/SSOW
<u>C0609110700P</u>	<u>7/20/11</u>	<u>1517</u>	<u>X</u>			<u>GW</u>		<u>3</u>	
<u>C0630110700P</u>		<u>1535</u>							
<u>C06317110700P</u>		<u>1603</u>							
<u>C06160110700P</u>		<u>1622</u>							

**(7) Turnaround Time Requested (TAT) (please check):**  Normal  Rush  
 (Rush TAT is subject to Lancaster Laboratories approval and surcharge.)  
 Date results are needed: 10 Days  
 Rush results requested by (please check):  Phone  E-mail  
 Phone #: \_\_\_\_\_ E-mail: \_\_\_\_\_

**(8) Data Package Options (please check if required)**  
 Type I (Validation/NJ Reg)  TX TRRP-13  Yes  No  
 Type II (Reduced NJ)  MA MCP  Yes  No  
 Type VI (Raw Data Only)  CT RCP  Yes  No  
 NY ASP A  Site-specific QC (MS/MSD/Dup)?  Yes  No  
 NY ASP B (If yes, indicate QC sample and submit triplicate volume.)

Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_ Received by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
 Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_ Received by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
 Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_ Received by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
 Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_ Received by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

SDG Complete?  Yes  No

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\* NY SDEC B



IBM Chain of Custody



For Lancaster Laboratories use only  
 Acct. # 6911 Group # 1359034 Sample # 6354327-50 COC # 00524

Please print. Instructions on reverse side correspond with circled numbers.

Client: IBM Acct. # 6911  
 Project Name # 37040000 IBM Chain of Custody  
 Project Name # (cont.) 7304130  
 Sampler: J. Reavis Project State: NY  
 P.O. # AR9304-31 IBM PM: K. Whelan  
 Check one:  Routine Lab GW  Routine GTF O&M  
 Non-Routine Investigation  Non-Routine Upgrades/Installs  
 (Endcutoff Non-Routine only)  
 OU: Residue

Matrix (4):  
 Soil:  Potable  Check #  NPDES Applicable  
 Water:  Other:   
 Total # of Containers: 3 From 13/122

(5) Analyses Requested  
 Preservation Codes

For Lab Use Only  
 FSC: \_\_\_\_\_  
 SCR #: \_\_\_\_\_  
 Preservation Codes:  
 H=HCl T=Thiosulfate  
 N=HNO<sub>3</sub> B=NaOH  
 S=H<sub>2</sub>SO<sub>4</sub> O=Other

Temperature of samples upon receipt (if requested): \_\_\_\_\_

Sample Identification	Date Collected	Time Collected	Grab	Composite	Soil	Water	Other	Total # of Containers	Remarks/SSOW
<u>OTB110701-JR</u>	<u>7/20/11</u>	<u>1145</u>	<u>X</u>			<u>W</u>		<u>3</u>	<u>Imp Blank</u>
<u>C7162110701-JR</u>	<u>7/21/11</u>	<u>728</u>							
<u>C7163110701-JR</u>		<u>746</u>							
<u>C7158110701-P</u>		<u>811</u>							
<u>C7163110701-P</u>		<u>837</u>							
<u>CEG110701WLID</u>		<u>851</u>							<u>Equip Blank</u>
<u>C7136110701-P</u>		<u>1016</u>							
<u>C71387110701-P</u>		<u>1034</u>							
<u>C7165110701-P</u>		<u>1047</u>							
<u>C7163110701-P</u>		<u>1118</u>							

Turnaround Time Requested (TAT) (please check):  Normal  Rush  
 (Rush TAT is subject to Lancaster Laboratories approval and surcharge.)  
 Date results are needed: 10 Days  
 Rush results requested by (please check):  Phone  E-mail  
 Phone #: \_\_\_\_\_ E-mail: \_\_\_\_\_

Data Package Options (please check if required):  
 Type I (Validation/NJ Reg)  TX TRRP-13  SDG Complete?  Yes  No  
 Type III (Reduced NJ)  MA MCP  
 Type VI (Raw Data Only)  CT RCP  
 NY ASP A  Site-specific QC (MS/MSD/Dup)?  Yes  No  
 NY ASP B (If yes, indicate QC sample and submit triplicate volume.)

Relinquished by: [Signature] Date: 7/20/11 Time: 1145 Received by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_ Received by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_ Received by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_ Received by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

\* NYSDEC B

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IBM Chain of Custody



For Lancaster Laboratories use only  
 Acct. # 6911 Group # 1359034 Sample # 6354327-50 COC # 00526

Please print. Instructions on reverse side correspond with circled numbers.

Client: IBM Acct. # 6911  
 Project Name # 37040000 IBM Chain of Custody  
 Project Name # (cont.) 7304130  
 Sampler: J. Reavis Project State: NY  
 P.O. # AR9304-31 IBM PM: K. Whelan  
 Check one:  Routine Lab GW  Routine GTF O&M  
 Non-Routine Investigation  Non-Routine Upgrades/Installs  
 (Endcutoff Non-Routine only)  
 OU: Residue

Matrix (4):  
 Soil:  Potable  Check #  NPDES Applicable  
 Water:  Other:   
 Total # of Containers: 3 From 13/122

(5) Analyses Requested  
 Preservation Codes

For Lab Use Only  
 FSC: \_\_\_\_\_  
 SCR #: \_\_\_\_\_  
 Preservation Codes:  
 H=HCl T=Thiosulfate  
 N=HNO<sub>3</sub> B=NaOH  
 S=H<sub>2</sub>SO<sub>4</sub> O=Other

Temperature of samples upon receipt (if requested): \_\_\_\_\_

Sample Identification	Date Collected	Time Collected	Grab	Composite	Soil	Water	Other	Total # of Containers	Remarks/SSOW
<u>C7181110701-P</u>	<u>7/21/11</u>	<u>1139</u>	<u>X</u>			<u>W</u>		<u>3</u>	<u>Imp Blank</u>
<u>C7181110701-JR</u>		<u>1015</u>							
<u>C7149110701-P</u>		<u>1307</u>							
<u>C71301110701-P</u>		<u>1308</u>							
<u>C7148110701-P</u>		<u>1359</u>							
<u>C7183110701-P</u>		<u>1434</u>							
<u>C7163110701-P</u>		<u>1457</u>							
<u>C71634110701-P</u>		<u>1502</u>							
<u>CEG110701WLID</u>	<u>7/20/11</u>	<u>607</u>							<u>Equip Blank</u>
<u>C7181110701-P</u>		<u>654</u>							

Turnaround Time Requested (TAT) (please check):  Normal  Rush  
 (Rush TAT is subject to Lancaster Laboratories approval and surcharge.)  
 Date results are needed: 10 Days  
 Rush results requested by (please check):  Phone  E-mail  
 Phone #: \_\_\_\_\_ E-mail: \_\_\_\_\_

Data Package Options (please check if required):  
 Type I (Validation/NJ Reg)  TX TRRP-13  SDG Complete?  Yes  No  
 Type III (Reduced NJ)  MA MCP  
 Type VI (Raw Data Only)  CT RCP  
 NY ASP A  Site-specific QC (MS/MSD/Dup)?  Yes  No  
 NY ASP B (If yes, indicate QC sample and submit triplicate volume.)

Relinquished by: [Signature] Date: 7/21/11 Time: 1140 Received by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_ Received by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_ Received by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_ Received by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

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**IBM Chain of Custody**



For Lancaster Laboratories use only  
 Acct. #: 6911 Group #: 1253024 Sample #: 6354997-50 **COC #** 00502

Please print. Instructions on reverse side correspond with circled numbers.

Client: IBM Acct. #: 6911  
 Project Name: 3rd GH Camp Sample  
 Project Name# (cont.): 33004304  
 Sampler: JICONS Project State: NY  
 P.O.#: CAR 93004.09 IBM PM: K. Whelan  
 Check one:  Routine Lab GW  Routine GTF O&M  
 Non-Routine Investigation  Non-Routine Upgrades/Installs  
 OUI: Routine (Endcott Non-Routine only)

**(5) Analyses Requested**  
 Preservation Codes

For Lab Use Only  
 FSC: \_\_\_\_\_  
 SCR #: \_\_\_\_\_

Preservation Codes  
 H=HCl T=Thiosulfate  
 N=HNO<sub>3</sub> B=NaOH  
 S=H<sub>2</sub>SO<sub>4</sub> O=Other

Temperature of samples upon receipt (if requested)

Sample Identification	Date Collected	Time Collected	Grab	Composite	Soil	Water	Other	Total # of Containers	Remarks/SSOW
<u>C 4115 110700</u>	<u>7/25/11</u>	<u>717</u>	<u>X</u>		<u>G</u>			<u>3</u>	
<u>C 1747 110700</u>		<u>710</u>							
<u>C 4104 110700</u>		<u>816</u>							
<u>C 4105 110700</u>		<u>833</u>							

**(7) Turnaround Time Requested (TAT)** (please check)  Normal  Rush  
 (Rush TAT is subject to Lancaster Laboratories approval and surcharge)  
 Date results are needed: 10 Days  
 Rush results requested by (please check):  Phone  E-mail  
 Phone #: \_\_\_\_\_ E-mail: \_\_\_\_\_

**(8) Data Package Options** (please check if required)  
 Type I (Validation/NJ Reg)  TX TRRP-13  SDG Complete?  Yes  No  
 Type III (Reduced NJ)  MA MCP  
 Type VI (Raw Data Only)  CT RCP  
 NY ASP A  Site-specific QC (MS/MSD/Dup)?  Yes  No  
 NY ASP B (If yes, indicate QC sample and submit duplicate volume.)

Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_ Received by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_ Received by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_ Received by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_ Received by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

\* NY SDEC B

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**IBM Chain of Custody**



For Lancaster Laboratories use only  
 Acct. #: 6911 Group #: 1253024 Sample #: 6357660-73 **COC #** 00503

Please print. Instructions on reverse side correspond with circled numbers.

Client: IBM Acct. #: 6911  
 Project Name: 3rd GH Camp Sample  
 Project Name# (cont.): 33004304  
 Sampler: JICONS Project State: NY  
 P.O.#: CAR 93004.09 IBM PM: K. Whelan  
 Check one:  Routine Lab GW  Routine GTF O&M  
 Non-Routine Investigation  Non-Routine Upgrades/Installs  
 OUI: Routine (Endcott Non-Routine only)

**(5) Analyses Requested**  
 Preservation Codes

For Lab Use Only  
 FSC: \_\_\_\_\_  
 SCR #: \_\_\_\_\_

Preservation Codes  
 H=HCl T=Thiosulfate  
 N=HNO<sub>3</sub> B=NaOH  
 S=H<sub>2</sub>SO<sub>4</sub> O=Other

Temperature of samples upon receipt (if requested)

Sample Identification	Date Collected	Time Collected	Grab	Composite	Soil	Water	Other	Total # of Containers	Remarks/SSOW
<u>OTB 110700</u>	<u>7/25/11</u>	<u>1130</u>	<u>X</u>		<u>G</u>			<u>3</u>	<u>Imp Blank</u>
<u>C 4530 110705P</u>		<u>1147</u>							
<u>C 4531 110705P</u>		<u>1209</u>							<u>Equip Blank</u>
<u>C 4532 110705P</u>		<u>1312</u>							
<u>C 4533 110705P</u>		<u>1333</u>							
<u>C 4534 110705P</u>		<u>1357</u>							
<u>C 4535 110705P</u>		<u>1415</u>							
<u>C 4536 110705P</u>		<u>1506</u>							
<u>C 4537 110705P</u>		<u>1517</u>							
<u>C 4538 110705P</u>		<u>1539</u>							

**(7) Turnaround Time Requested (TAT)** (please check)  Normal  Rush  
 (Rush TAT is subject to Lancaster Laboratories approval and surcharge)  
 Date results are needed: 10 Days  
 Rush results requested by (please check):  Phone  E-mail  
 Phone #: \_\_\_\_\_ E-mail: \_\_\_\_\_

**(8) Data Package Options** (please check if required)  
 Type I (Validation/NJ Reg)  TX TRRP-13  SDG Complete?  Yes  No  
 Type III (Reduced NJ)  MA MCP  
 Type VI (Raw Data Only)  CT RCP  
 NY ASP A  Site-specific QC (MS/MSD/Dup)?  Yes  No  
 NY ASP B (If yes, indicate QC sample and submit duplicate volume.)

Relinquished by: \_\_\_\_\_ Date: 7/26/11 Time: 1300 Received by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_ Received by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_ Received by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_ Received by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

\* NY SDEC B

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For Lancaster Laboratories use only  
 Acct #: 6911 Group #: 135358 Sample #: 6357660-73 COC # 00504

Please print. Instructions on reverse side correspond with circled numbers.

Client: JIM Acct #: 6911  
 Project Name: Change 3rd of Gw Sample  
 Project Name (cont.): 33004.30  
 Sampler: JKO/LS Project State: NY  
 P.O.#: CAR93004.09 IBM PM: K. Whelan  
 Check one:  Routine Lab GW  Routine GTF O&M  
 Non-Routine Investigation  Non-Routine Upgrades/Installs  
 OU: Routine (Endcott Non-Routine only)

Matrix (4): Potable  Check if NPDES Applicable  
 Soil  Water  Other

(5) Analyses Requested: Preservation Codes

For Lab Use Only: FSC: SCR #: Preservation Codes: H=HC, T=Thiosulfate, N=HNO<sub>3</sub>, B=NaOH, S=H<sub>2</sub>SO<sub>4</sub>, O=Other

Temperature of samples upon receipt (if requested) (6)

Sample Identification	Date Collected	Time Collected	Grab	Composite	Soil	Water	Other	Total # of Containers	Remarks/SSOW
CP107A110725P	7/25/11	1557	X					3 X	
CP114110725		1613							
CP112110725		1629							
CP113110725		1647							

Turnaround Time Requested (TAT) (please check):  Normal  Rush  
 Date results are needed: 10/2/11  
 Rush results requested by (please check):  Phone  E-mail  
 Phone #: E-mail:

Data Package Options (please check if required):  
 Type I (Validation/NJ Reg)  TX TRRP-13  SDG Complete? Yes  No  
 Type III (Reduced NJ)  MA MCP  
 Type VI (Raw Data Only)  CT RCP  
 NY ASP A  Site-specific QC (MS/MSD/Dup)? Yes  No  
 NY ASP B (If yes, indicate QC sample and submit triplicate volume.)

X NY SDEC B

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For Lancaster Laboratories use only  
 Acct #: 6911 Group #: 1272657 Sample #: 6446215-38 COC # 00567

Please print. Instructions on reverse side correspond with circled numbers.

Client: JIM Acct #: 6911  
 Project Name: Change 4th of Gw Sample  
 Project Name (cont.): 33004.30  
 Sampler: JKO/LS Project State: NY  
 P.O.#: CAR93004.09 IBM PM: K. Whelan  
 Check one:  Routine Lab GW  Routine GTF O&M  
 Non-Routine Investigation  Non-Routine Upgrades/Installs  
 OU: Routine (Endcott Non-Routine only)

Matrix (4): Potable  Check if NPDES Applicable  
 Soil  Water  Other

(5) Analyses Requested: Preservation Codes

For Lab Use Only: FSC: SCR #: Preservation Codes: H=HC, T=Thiosulfate, N=HNO<sub>3</sub>, B=NaOH, S=H<sub>2</sub>SO<sub>4</sub>, O=Other

Temperature of samples upon receipt (if requested) (6)

Sample Identification	Date Collected	Time Collected	Grab	Composite	Soil	Water	Other	Total # of Containers	Remarks/SSOW
OTB111017JAL	10/17/11	1730	X					3 X	trip blank
CP109111017P		1751							
CP134111017P		1806							
CP106111017P		1824							
CEG111017WLD		1840							Equip. Blank
CP124111018P	10/18/11	707							
CP127111018P		723							
CP125111018P		743							
CP161111018P		803							
CP161111018		820							

Turnaround Time Requested (TAT) (please check):  Normal  Rush  
 Date results are needed: 10/2/11  
 Rush results requested by (please check):  Phone  E-mail  
 Phone #: E-mail:

Data Package Options (please check if required):  
 Type I (Validation/NJ Reg)  TX TRRP-13  SDG Complete? Yes  No  
 Type III (Reduced NJ)  MA MCP  
 Type VI (Raw Data Only)  CT RCP  
 NY ASP A  Site-specific QC (MS/MSD/Dup)? Yes  No  
 NY ASP B (If yes, indicate QC sample and submit triplicate volume.)

X NY SDEC B

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 Acct. #: 6911 Group #: 1272657 Sample #: LM46215-38 COC # 00568

Please print. Instructions on reverse side correspond with circled numbers.

Client: IBM Acct. #: 06911  
 Project Name: Owego HRCQ GWS Supply  
 Project Name (cont.): 93004.30  
 Sampler: J. Konis Project State: NY  
 P.O. #: CA 93004.09 IBM PM: K. Whelan  
 Check one:  Routine Lab GW  Routine GTF O&M  
 Non-Routine Investigation  Non-Routine Upgrades/Installs  
 OU: Routine (Endcott Non-Routine only)

Matrix: H  
 Total # of Containers: 2  
 Potable Check if Applicable:  NPDES  NPDES

Analyses Requested: H  
 Preservation Codes: H

For Lab Use Only  
 FSC: \_\_\_\_\_  
 SCR #: \_\_\_\_\_  
 Preservation Codes: H=HCl T=Thiosulfate  
 N=HNO<sub>3</sub> B=NaOH  
 S=H<sub>2</sub>SO<sub>4</sub> O=Other

Sample Identification	Date Collected	Time Collected	Grab	Composite	Soil	Water	Other	Total # of Containers	Remarks/SSOW
<u>00612 110 18P</u>	<u>10/18/11</u>	<u>901</u>	<u>X</u>			<u>GW</u>		<u>2</u>	
<u>00613 110 18P</u>		<u>910</u>							
<u>00617 110 18P</u>		<u>925</u>							
<u>00611 1018 WL ID</u>		<u>943</u>							<u>Equip. Blank</u>
<u>00534 110 18P</u>		<u>1011</u>							
<u>00539 110 18P</u>		<u>1028</u>							
<u>00501 110 18P</u>		<u>1039</u>							
<u>00399 110 18P</u>		<u>1056</u>							
<u>00500 110 18P</u>		<u>1117</u>							
<u>00618 110 18P</u>		<u>1139</u>							

Turnaround Time Requested (TAT) (please check):  Normal  Rush  
 (Rush TAT is subject to Lancaster Laboratories approval and surcharge.)  
 Date results are needed: 10 days  
 Rush results requested by (please check):  Phone  E-mail  
 Phone #: \_\_\_\_\_ E-mail: \_\_\_\_\_

Data Package Options (please check if required)  
 Type I (Validation/NJ Reg)  TX TRRP-13  
 Type III (Reduced NJ)  MA MCP  
 Type VI (Raw Data Only)  CT RCP  
 NY ASP A  Site-specific QC (MS/MSD/Dup)?  Yes  No  
 NY ASP B (If yes, indicate QC sample and submit triplicate volume.)

SDG Complete?  Yes  No

Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_ Received by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
 Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_ Received by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
 Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_ Received by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

Temperature of samples upon receipt (if requested): \_\_\_\_\_

\* NYSDEC B

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IBM Chain of Custody



For Lancaster Laboratories use only  
 Acct. #: 6911 Group #: 1272657 Sample #: LM46215-38 COC # 00569

Please print. Instructions on reverse side correspond with circled numbers.

Client: IBM Acct. #: 06911  
 Project Name: Owego HRCQ GWS Supply  
 Project Name (cont.): 93004.30  
 Sampler: J. Konis Project State: NY  
 P.O. #: CA 93004.09 IBM PM: K. Whelan  
 Check one:  Routine Lab GW  Routine GTF O&M  
 Non-Routine Investigation  Non-Routine Upgrades/Installs  
 OU: Routine (Endcott Non-Routine only)

Matrix: H  
 Total # of Containers: 2  
 Potable Check if Applicable:  NPDES  NPDES

Analyses Requested: H  
 Preservation Codes: H

For Lab Use Only  
 FSC: \_\_\_\_\_  
 SCR #: \_\_\_\_\_  
 Preservation Codes: H=HCl T=Thiosulfate  
 N=HNO<sub>3</sub> B=NaOH  
 S=H<sub>2</sub>SO<sub>4</sub> O=Other

Sample Identification	Date Collected	Time Collected	Grab	Composite	Soil	Water	Other	Total # of Containers	Remarks/SSOW
<u>00107A 110 18P</u>	<u>10/18/11</u>	<u>1249</u>	<u>X</u>			<u>GW</u>		<u>2</u>	
<u>00110 110 18P</u>		<u>1238</u>							
<u>00600 110 18P</u>		<u>1404</u>							
<u>00398 110 18P</u>		<u>1420</u>							

Turnaround Time Requested (TAT) (please check):  Normal  Rush  
 (Rush TAT is subject to Lancaster Laboratories approval and surcharge.)  
 Date results are needed: 10 days  
 Rush results requested by (please check):  Phone  E-mail  
 Phone #: \_\_\_\_\_ E-mail: \_\_\_\_\_

Data Package Options (please check if required)  
 Type I (Validation/NJ Reg)  TX TRRP-13  
 Type III (Reduced NJ)  MA MCP  
 Type VI (Raw Data Only)  CT RCP  
 NY ASP A  Site-specific QC (MS/MSD/Dup)?  Yes  No  
 NY ASP B (If yes, indicate QC sample and submit triplicate volume.)

SDG Complete?  Yes  No

Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_ Received by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
 Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_ Received by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
 Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_ Received by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

Temperature of samples upon receipt (if requested): \_\_\_\_\_

\* NYSDEC B

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IBM Chain of Custody



For Lancaster Laboratories use only  
 Acct. #: 6911 Group #: 172658 Sample #: 6446239-62 COC # 00570

Please print. Instructions on reverse side correspond with circled numbers.

Client: IBM Acct. #: 06911  
 Project Name: Overseas H&R of Gw Sampling  
 Project Name: (cont.) 93004, 30  
 Sampler: J. Ronis Project State: NY  
 P.O. #: CAR 93004 29 IBM PM: K. Whelan  
 Check one:  Routine Lab GW  Routine GTF O&M  
 Non-Routine Investigation  Non-Routine Upgrades/Installs  
 OU: Routine (Endcott Non-Routine only)

Matrix:  Potable  Check if Applicable  NPDES

Analyses Requested: H  
 Preservation Codes: H

For Lab Use Only  
 FSC: \_\_\_\_\_  
 SCR #: \_\_\_\_\_

Preservation Codes:  
 H=HCl T=Thiosulfate  
 N=HNO<sub>3</sub> B=NaOH  
 S=H<sub>2</sub>SO<sub>4</sub> O=Other

Temperature of samples upon receipt (if requested): \_\_\_\_\_

Sample Identification	Date Collected	Time Collected	Grab	Composite	Soil	Water	Other	Total # of Containers	Remarks/SSOW
OTB1110187AR	10/18/11	1300	X			Gw		2	Top Blank
0037811018P		1443							
00606111018P		1504							
00607111018P		1518							
00625111018P		1606							
00357111018P		1637							
00504111018P		1654							
00529111018P		1714							
00146111019P	10/19/11	717							
00383111019P		727							

Turnaround Time Requested (TAT) (please check):  Normal  Rush  
 (Rush TAT is subject to Lancaster Laboratories approval and surcharge.)  
 Date results are needed: 10 days  
 Rush results requested by (please check):  Phone  E-mail  
 Phone #: \_\_\_\_\_ E-mail: \_\_\_\_\_

Data Package Options (please check if required):  
 Type I (Validation/NJ Reg)  TX TRRP-13  SDG Complete? Yes  No  
 Type III (Reduced NJ)  MA MCP  
 Type VI (Raw Data Only)  CT RCP  
 NY ASP A  Site-specific QC (MS/MSD/Dup)? Yes  No  
 NY ASP B (If yes, indicate QC sample and submit replicate volume.)

Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_ Received by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
 Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_ Received by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
 Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_ Received by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

\*NYSDEC B

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IBM Chain of Custody



For Lancaster Laboratories use only  
 Acct. #: 6911 Group #: 172658 Sample #: 6446239-62 COC # 00571

Please print. Instructions on reverse side correspond with circled numbers.

Client: IBM Acct. #: 06911  
 Project Name: Overseas H&R of Gw Sampling  
 Project Name: (cont.) 93004, 30  
 Sampler: J. Ronis Project State: NY  
 P.O. #: CAR 93004 29 IBM PM: K. Whelan  
 Check one:  Routine Lab GW  Routine GTF O&M  
 Non-Routine Investigation  Non-Routine Upgrades/Installs  
 OU: Routine (Endcott Non-Routine only)

Matrix:  Potable  Check if Applicable  NPDES

Analyses Requested: H  
 Preservation Codes: H

For Lab Use Only  
 FSC: \_\_\_\_\_  
 SCR #: \_\_\_\_\_

Preservation Codes:  
 H=HCl T=Thiosulfate  
 N=HNO<sub>3</sub> B=NaOH  
 S=H<sub>2</sub>SO<sub>4</sub> O=Other

Temperature of samples upon receipt (if requested): \_\_\_\_\_

Sample Identification	Date Collected	Time Collected	Grab	Composite	Soil	Water	Other	Total # of Containers	Remarks/SSOW
00601111019P	10/19/11	743	X			Gw		2	
00608111019P		806							
00603111019P		823							
00157111019P		848							
00393111019		939							
00394111019P		954							
00318111019P		1022							
00329111019P		1042							
00319111019P		1145							
00323111019P		1339							

Turnaround Time Requested (TAT) (please check):  Normal  Rush  
 (Rush TAT is subject to Lancaster Laboratories approval and surcharge.)  
 Date results are needed: 10 days  
 Rush results requested by (please check):  Phone  E-mail  
 Phone #: \_\_\_\_\_ E-mail: \_\_\_\_\_

Data Package Options (please check if required):  
 Type I (Validation/NJ Reg)  TX TRRP-13  SDG Complete? Yes  No  
 Type III (Reduced NJ)  MA MCP  
 Type VI (Raw Data Only)  CT RCP  
 NY ASP A  Site-specific QC (MS/MSD/Dup)? Yes  No  
 NY ASP B (If yes, indicate QC sample and submit replicate volume.)

Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_ Received by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
 Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_ Received by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
 Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_ Received by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

\*NYSDEC B

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For Lancaster Laboratories use only  
 Acct #: 6911 Group #: 1272659 Sample #: 1446239-62 COC # 00572

Please print. Instructions on reverse side correspond with circled numbers.

Client: IBM Acct. #: 06911  
 Project Name: Case 444 CH Gw Supply  
 Project Name: (cont.) 93004.30  
 Sampler: J. Ronis Project State: NY  
 P.O. #: CAR93004.09 IBM PM: K. Whelan  
 Check one:  Routine Lab GW  Routine GTF O&M  
 Non-Routine Investigation  Non-Routine Upgrades/Installs  
 OU: Routine (Endcott Non-Routine only)

Matrix (4):  
 Potable Check if Applicable  
 NPDES  
 Other

(5) Analyses Requested  
 Preservation Codes

For Lab Use Only  
 FSC: \_\_\_\_\_  
 SCR #: \_\_\_\_\_

Preservation Codes (6):  
 H=HCl T=Thiosulfate  
 N=HNO<sub>3</sub> B=NaOH  
 S=H<sub>2</sub>SO<sub>4</sub> O=Other

Temperature of samples upon receipt (if requested)

Sample Identification	Date Collected	Time Collected	Grab	Composite	Soil	Water	Other	Total # of Containers	Remarks/SSOW
0036711019P	10/19/11	1414	X			Gw		6	
0036811019		1434							
0039211019P		1452							
0EQ11019WLD		1730							Egmp. Blank

Turnaround Time Requested (TAT) (please check):  Normal  Rush  
 (Rush TAT is subject to Lancaster Laboratories approval and surcharge.)  
 Date results are needed: 10/20/11  
 Rush results requested by (please check):  Phone  E-mail  
 Phone #: \_\_\_\_\_ E-mail: \_\_\_\_\_

Data Package Options (please check if required):  
 Type I (Validation/NJ Reg)  TX TRRP-13  SDG Complete? Yes  No  
 Type III (Reduced NJ)  MA MCP  
 Type VI (Raw Data Only)  CT RCP  
 NY ASP A  Site-specific QC (MS/MSD/Dup)? Yes  No  
 NY ASP B (If yes, indicate QC sample and submit triplicate volume.)

\*NYSDEC B

Lancaster Laboratories, Inc., 2425 New Holland Pike, Lancaster, PA 17601 (717) 656-2300 Fax: (717) 656-6766  
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For Lancaster Laboratories use only  
 Acct #: 6911 Group #: 1272659 Sample #: 1446263-76 COC # 00573

Please print. Instructions on reverse side correspond with circled numbers.

Client: IBM Acct. #: 06911  
 Project Name: Case 444 CH Gw Supply  
 Project Name: (cont.) 93004.30  
 Sampler: J. Ronis Project State: NY  
 P.O. #: CAR93004.09 IBM PM: K. Whelan  
 Check one:  Routine Lab GW  Routine GTF O&M  
 Non-Routine Investigation  Non-Routine Upgrades/Installs  
 OU: Routine (Endcott Non-Routine only)

Matrix (4):  
 Potable Check if Applicable  
 NPDES  
 Other

(5) Analyses Requested  
 Preservation Codes

For Lab Use Only  
 FSC: \_\_\_\_\_  
 SCR #: \_\_\_\_\_

Preservation Codes (6):  
 H=HCl T=Thiosulfate  
 N=HNO<sub>3</sub> B=NaOH  
 S=H<sub>2</sub>SO<sub>4</sub> O=Other

Temperature of samples upon receipt (if requested)

Sample Identification	Date Collected	Time Collected	Grab	Composite	Soil	Water	Other	Total # of Containers	Remarks/SSOW
0TB11019-JAR	10/19/11	1145	X			Gw		6	Imp Blank
0060411019P		1512							
0035411019P		1530							
0032511019P		1542							
0061611019P		1604							
0041211019		1632							
0041311019		1650							
0041411019		1709							
0EJET11020	10/20/11	227							
0S00111020		808							

Turnaround Time Requested (TAT) (please check):  Normal  Rush  
 (Rush TAT is subject to Lancaster Laboratories approval and surcharge.)  
 Date results are needed: 10/20/11  
 Rush results requested by (please check):  Phone  E-mail  
 Phone #: \_\_\_\_\_ E-mail: \_\_\_\_\_

Data Package Options (please check if required):  
 Type I (Validation/NJ Reg)  TX TRRP-13  SDG Complete? Yes  No  
 Type III (Reduced NJ)  MA MCP  
 Type VI (Raw Data Only)  CT RCP  
 NY ASP A  Site-specific QC (MS/MSD/Dup)? Yes  No  
 NY ASP B (If yes, indicate QC sample and submit triplicate volume.)

\*NYSDEC B

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For Lancaster Laboratories use only  
 Acct. #: 6911 Group #: 1272659 Sample #: 6446263-76 COC # 00574

Please print. Instructions on reverse side correspond with circled numbers.

Client: IBM Acct. #: 06911  
 Project Name: Cherry Hill OH Sewer  
 Project Name# (cont.): 93004, 30  
 Sampler: J. Lewis Project State: NY  
 P.O.#: CA9300409 IBM PM: K. Whelan  
 Check one:  Routine Lab GW  Routine GTF O&M  
 Non-Routine Investigation  Non-Routine Upgrades/Installs  
 OU: Routine (Endcott Non-Routine only)

(5) Analyses Requested  
 Preservation Codes  
 For Lab Use Only  
 FSC: \_\_\_\_\_  
 SCR #: \_\_\_\_\_  
 Preservation Codes  
 H=HCl T=Thiosulfate  
 N=HNO<sub>3</sub> B=NaOH  
 S=H<sub>2</sub>SO<sub>4</sub> O=Other

Sample Identification	Date Collected	Time Collected	Grab	Composite	Matrix			Total # of Containers	Remarks/SSOW
					Soil	Water	Other		
<u>0041511000</u>	<u>10/20/11</u>	<u>836</u>	<u>X</u>		<u>W</u>		<u>3</u>		
<u>0040411000</u>		<u>901</u>							
<u>0040511000</u>		<u>912</u>							
<u>0EG11100001D</u>		<u>936</u>						<u>Equip. Blank</u>	

(7) Turnaround Time Requested (TAT) (please check):  Normal  Rush  
 (Rush TAT is subject to Lancaster Laboratories approval and surcharge.)  
 Date results are needed: 10 Days  
 Rush results requested by (please check):  Phone  E-mail  
 Phone #: \_\_\_\_\_ E-mail: \_\_\_\_\_

(8) Data Package Options (please check if required)  
 Type I (Validation/NJ Reg)  TX TRRP-13  SDG Complete?  Yes  No  
 Type III (Reduced NJT)  MA MCP  
 Type VI (Raw Data Only)  CT RCP  
 NY ASP A  Site-specific QC (MS/MSD/Dup)?  Yes  No  
 NY ASP B (If yes, indicate QC sample and submit triplicate volume.)

Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_ Received by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
 Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_ Received by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
 Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_ Received by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

NY SDEC B

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**APPENDIX F**

**GROUNDWATER ANALYTICAL CHEMISTRY DATA  
FOR EXTRACTION AND MONITORING WELLS  
January 1, 2011 – December 31, 2011**

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**Groundwater Analytical Chemistry Data**  
**6 NYCRR Part 373 Permit No. 7-4930-00095/00005, Owego, New York**

January 1, 2011 - December 31, 2011

Sample Location		101	101	106	106	106	106
Sample Description		GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL
Sample Date		01/26/2011	07/20/2011	01/25/2011	04/20/2011	07/25/2011	10/17/2011
Laboratory Sample I.D.		6194197	6353364	6193081	6266772	6357669	6446218
Sample Comment Codes		P	P	P	P	P	P
Parameter	Units						
<b>Indicator Parameters</b>							
PH	SU	6.59	7.49	7.06	7.89	7.58	7.84
SPECIFIC CONDUCTANCE	umhos/cm	352	448	372	396	395	378
TEMPERATURE	C	9.1	11.2	4.7	7.3	16.0	15.7
TURBIDITY	NTU	1.42	0.37	5.16	2.31	0.32	0.81
<b>Volatile Organics</b>							
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	4.7	1.2	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1-DICHLOROETHENE	ug/l	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	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	59	13	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	0.2 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	0.1 J	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5

February 24, 2012

IBM Corporation

1-1

**Groundwater Analytical Chemistry Data**  
**6 NYCRR Part 373 Permit No. 7-4930-00095/00005, Owego, New York**

January 1, 2011 - December 31, 2011

Sample Location		107A	107A	107A	107A	110	110
Sample Description		GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL
Sample Date		01/25/2011	04/20/2011	07/25/2011	10/18/2011	04/20/2011	10/18/2011
Laboratory Sample I.D.		6193080	6266770	6357670	6446235	6266771	6446236
Sample Comment Codes		P	P	P	P	P	P
Parameter	Units						
<b>Indicator Parameters</b>							
PH	SU	7.24	8.01	7.85	7.66	7.11	7.13
SPECIFIC CONDUCTANCE	umhos/cm	336	315	324	326	2776	1512
TEMPERATURE	C	9.1	9.7	13.3	10.3	9.7	14.4
TURBIDITY	NTU	2.04	4.40	0.31	0.63	3.69	1.15
<b>Volatile Organics</b>							
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	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	0.1 J	ND@0.5	ND@0.5	0.1 J	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

February 24, 2012

IBM Corporation

2-1

**Groundwater Analytical Chemistry Data**  
**6 NYCRR Part 373 Permit No. 7-4930-00095/00005, Owego, New York**

January 1, 2011 - December 31, 2011

Sample Location		120	120	124	124	125	125
Sample Description		GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL
Sample Date		01/25/2011	07/21/2011	04/20/2011	10/18/2011	04/20/2011	10/18/2011
Laboratory Sample I.D.		6194187	6354240	6266781	6446220	6266782	6446222
Sample Comment Codes		P	P	P	P	P	P
<b>Parameter</b>	<b>Units</b>						
<b>Indicator Parameters</b>							
PH	SU	6.19	6.72	6.47	7.09	7.17	7.57
SPECIFIC CONDUCTANCE	umhos/cm	1768	1548	1204	864	23030	3468
TEMPERATURE	C	10.6	13.9	9.4	15.6	9.7	15.8
TURBIDITY	NTU	1.71	0.34	2.47	0.87	1.90	0.91
<b>Volatile Organics</b>							
1,1,1-TRICHLOROETHANE	ug/l	6.7	4.3	0.3 J	0.4 J	0.9	1.9
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	3.5	2.0	ND@0.5	ND@0.5	7.7	17
1,1-DICHLOROETHENE	ug/l	0.6	0.4 J	ND@0.5	ND@0.5	0.4 J	0.7
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	0.5 J
1,2-DICHLOROETHANE	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	0.7	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	0.2 J	0.2 J
TRICHLOROETHENE	ug/l	1.1	0.9	0.4 J	0.9	4.9	6.5
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

February 24, 2012

IBM Corporation

3-1

**Groundwater Analytical Chemistry Data**  
**6 NYCRR Part 373 Permit No. 7-4930-00095/00005, Owego, New York**

January 1, 2011 - December 31, 2011

Sample Location		127	127	128	129	129	132
Sample Description		GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL
Sample Date		04/20/2011	10/18/2011	04/20/2011	04/20/2011	10/17/2011	04/20/2011
Laboratory Sample I.D.		6266783	6446221	6266778	6266773	6446216	6266775
Sample Comment Codes		P	P	P	P	P	P
<b>Parameter</b>	<b>Units</b>						
<b>Indicator Parameters</b>							
PH	SU	6.52	7.15	6.17	10.03	9.14	7.76
SPECIFIC CONDUCTANCE	umhos/cm	4790	1448	13290	892	403	279
TEMPERATURE	C	9.7	16.9	11.8	6.9	16.5	10.3
TURBIDITY	NTU	1.17	0.73	2.06	2.27	1.93	1.88
<b>Volatile Organics</b>							
1,1,1-TRICHLOROETHANE	ug/l	36	43	330	ND@0.5	0.1 J	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	38	ND@0.5	ND@0.5	ND@0.5
1,1,2-TRICHLOROETHANE	ug/l	ND@0.5	ND@0.5	6.5	ND@0.5	ND@0.5	ND@0.5
1,1-DICHLOROETHANE	ug/l	1.5	1.7	96	ND@0.5	ND@0.5	ND@0.5
1,1-DICHLOROETHENE	ug/l	3.3	3.3	280	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	ug/l	ND@0.5	ND@0.5	1.5 J	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	0.1 J	0.2 J	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHENE	ug/l	0.8	0.8	320	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	0.2 J	0.3 J	10	ND@0.5	ND@0.5	ND@0.5
TRICHLOROETHENE	ug/l	49	67	130	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	1.2 J	ND@0.5	ND@0.5	ND@0.5

February 24, 2012

IBM Corporation

4-1

**Groundwater Analytical Chemistry Data**  
**6 NYCRR Part 373 Permit No. 7-4930-00095/00005, Owego, New York**  
 January 1, 2011 - December 31, 2011

Sample Location	133	133	134	134	140R	146	
Sample Description	GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL	
Sample Date	01/24/2011	07/19/2011	04/20/2011	10/17/2011	04/21/2011	04/25/2011	
Laboratory Sample I.D.	6193068	6350120	6266774	6446217	6267656	6269706	
Sample Comment Codes	P	P	P	P	P	P	
<b>Parameter</b>	<b>Units</b>						
<b>Indicator Parameters</b>							
PH	SU	6.80	7.10	8.20	7.66	6.33	7.18
SPECIFIC CONDUCTANCE	umhos/cm	8110	7670	382	382	1398	2367
TEMPERATURE	C	12.7	15.7	15.0	19.3	14.4	9.9
TURBIDITY	NTU	4.95	0.52	1.89	1.21	1.84	2.05
<b>Volatile Organics</b>							
1,1,1-TRICHLOROETHANE	ug/l	190	180	ND@0.5	ND@0.5	36	0.2 J
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	3.7	6.3	ND@0.5	ND@0.5	4.5	ND@0.5
1,1,2-TRICHLOROETHANE	ug/l	0.1 J	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1-DICHLOROETHANE	ug/l	140	130	0.2 J	0.2 J	69	0.5
1,1-DICHLOROETHENE	ug/l	19	20	ND@0.5	ND@0.5	8.4	ND@0.5
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	1.7	1.8	ND@0.5	ND@0.5	1.3	ND@0.5
1,2-DICHLOROETHANE	ug/l	0.4 J	0.5 J	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CHLOROETHANE	ug/l	0.4 J	0.3 J	ND@0.5	ND@0.5	0.5 J	ND@0.5
CHLOROFORM (TRICHLOROMETHANE)	ug/l	0.1 J	0.1 J	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHENE	ug/l	0.1 J	0.1 J	ND@0.5	ND@0.5	2.8	ND@0.5
DICHLORODIFLUOROMETHANE (FREON 12)	ug/l	ND@0.5	ND@0.5	0.2 J	0.1 J	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	2.3	2.8	ND@0.5	ND@0.5	9.0	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	0.1 J	0.1 J	ND@0.5	ND@0.5	0.6	ND@0.5

February 24, 2012

IBM Corporation

5-1

**Groundwater Analytical Chemistry Data**  
**6 NYCRR Part 373 Permit No. 7-4930-00095/00005, Owego, New York**  
 January 1, 2011 - December 31, 2011

Sample Location	146	148	148	149	149	157	
Sample Description	GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL	
Sample Date	10/19/2011	01/25/2011	07/21/2011	01/25/2011	07/21/2011	04/25/2011	
Laboratory Sample I.D.	6446247	6194186	6354241	6194189	6354239	6269705	
Sample Comment Codes	P	P	P	P	P	P	
<b>Parameter</b>	<b>Units</b>						
<b>Indicator Parameters</b>							
PH	SU	6.85	6.14	6.54	6.58	6.71	6.21
SPECIFIC CONDUCTANCE	umhos/cm	2468	958	871	744	741	189
TEMPERATURE	C	12.7	11.3	14.4	9.5	14.0	9.5
TURBIDITY	NTU	1.00	1.93	0.28	1.68	0.70	2.47
<b>Volatile Organics</b>							
1,1,1-TRICHLOROETHANE	ug/l	0.6	270	170	12	6.5	0.1 J
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	4.2	3.3	ND@0.5	ND@0.5	ND@0.5
1,1,2-TRICHLOROETHANE	ug/l	ND@0.5	1.4	1.2	ND@0.5	ND@0.5	ND@0.5
1,1-DICHLOROETHANE	ug/l	2.1	2.9	2.3	36	23	ND@0.5
1,1-DICHLOROETHENE	ug/l	0.1 J	21	17	12	6.9	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	ug/l	ND@0.5	0.2 J	0.1 J	0.2 J	0.1 J	ND@0.5
CHLOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	0.2 J	ND@0.5	ND@0.5
CHLOROFORM (TRICHLOROMETHANE)	ug/l	ND@0.5	0.2 J	0.2 J	ND@0.5	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHENE	ug/l	ND@0.5	0.8	0.8	27	24	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	3.4	3.1	28	22	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	0.4 J	ND@0.5	ND@0.5

February 24, 2012

IBM Corporation

6-1

**Groundwater Analytical Chemistry Data**  
**6 NYCRR Part 373 Permit No. 7-4930-00095/00005, Owego, New York**

January 1, 2011 - December 31, 2011

Sample Location		157	158	160	160	162	162
Sample Description		GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL
Sample Date		10/19/2011	07/21/2011	01/24/2011	07/20/2011	01/25/2011	07/21/2011
Laboratory Sample I.D.		6446252	6354230	6193075	6353374	6194193	6354228
Sample Comment Codes		P	P	P	P	P	P
<b>Parameter</b>	<b>Units</b>						
<b>Indicator Parameters</b>							
PH	SU	6.56	6.79	6.91	7.65	6.86	7.35
SPECIFIC CONDUCTANCE	umhos/cm	211	705	683	586	593	519
TEMPERATURE	C	14.5	14.5	7.5	13.1	9.5	16.0
TURBIDITY	NTU	0.86	0.70	1.79	0.61	1.78	0.74
<b>Volatile Organics</b>							
1,1,1-TRICHLOROETHANE	ug/l	0.2 J	0.1 J	59	81	18	47
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@1	0.4 J	ND@0.5	0.4 J
1,1,2-TRICHLOROETHANE	ug/l	ND@0.5	ND@0.5	ND@1	ND@1	ND@0.5	ND@0.5
1,1-DICHLOROETHANE	ug/l	ND@0.5	ND@0.5	3.8	4.6	1.1	3.9
1,1-DICHLOROETHENE	ug/l	ND@0.5	ND@0.5	14	20	3.4	11
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@1	ND@1	ND@0.5	ND@0.5
1,2-DICHLOROETHANE	ug/l	ND@0.5	ND@0.5	ND@1	ND@1	ND@0.5	ND@0.5
CHLOROETHANE	ug/l	ND@0.5	ND@0.5	ND@1	ND@1	ND@0.5	ND@0.5
CHLOROFORM (TRICHLOROMETHANE)	ug/l	ND@0.5	ND@0.5	ND@1	ND@1	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHENE	ug/l	ND@0.5	ND@0.5	22	32	4.6	17
DICHLORODIFLUOROMETHANE (FREON 12)	ug/l	ND@0.5	ND@0.5	ND@1	ND@1	ND@0.5	ND@0.5
METHYLENE CHLORIDE (DICHLOROMETHANE)	ug/l	ND@0.5	ND@0.5	ND@1	ND@1	ND@0.5	ND@0.5
TETRACHLOROETHENE	ug/l	ND@0.5	ND@0.5	0.2 J	0.3 J	0.3 J	0.3 J
TRICHLOROETHENE	ug/l	0.2 J	ND@0.5	200	300	84	71
TRICHLOROFLUOROMETHANE (FREON 11)	ug/l	ND@0.5	ND@0.5	ND@1	ND@1	ND@0.5	ND@0.5
VINYL CHLORIDE	ug/l	ND@0.5	ND@0.5	ND@1	ND@1	ND@0.5	0.2 J

February 24, 2012

IBM Corporation

7-1

**Groundwater Analytical Chemistry Data**  
**6 NYCRR Part 373 Permit No. 7-4930-00095/00005, Owego, New York**

January 1, 2011 - December 31, 2011

Sample Location		163	165	165	166	166	167
Sample Description		GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL
Sample Date		07/21/2011	01/26/2011	07/21/2011	01/25/2011	07/20/2011	01/25/2011
Laboratory Sample I.D.		6354229	6194203	6354235	6194191	6353368	6194192
Sample Comment Codes		P	P	P	P	P	P
<b>Parameter</b>	<b>Units</b>						
<b>Indicator Parameters</b>							
PH	SU	7.10	5.90	7.02	6.71	7.40	5.34
SPECIFIC CONDUCTANCE	umhos/cm	365	498	426	838	905	323
TEMPERATURE	C	15.2	8.4	15.4	9.0	13.1	8.5
TURBIDITY	NTU	0.85	1.25	0.33	1.81	0.32	1.53
<b>Volatile Organics</b>							
1,1,1-TRICHLOROETHANE	ug/l	ND@0.5	20	80 E	0.5	0.4 J	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	0.3 J	0.6	1.4	0.9	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	15	7.4	2.0	1.8	ND@0.5
1,1-DICHLOROETHENE	ug/l	ND@0.5	13	25 E	0.3 J	0.2 J	ND@0.5
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	1.7	1.2	ND@0.5
1,2-DICHLOROETHANE	ug/l	ND@0.5	0.1 J	0.1 J	0.1 J	ND@0.5	ND@0.5
CHLOROETHANE	ug/l	ND@0.5	0.3 J	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CHLOROFORM (TRICHLOROMETHANE)	ug/l	ND@0.5	ND@0.5	0.2 J	ND@0.5	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHENE	ug/l	ND@0.5	100	35 E	5.5	6.8	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	0.2 J	ND@0.5	ND@0.5	ND@0.5
TRICHLOROETHENE	ug/l	ND@0.5	4.8	340 E	4.1	2.6	5.2
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	2.6	0.1 J	0.1 J	ND@0.5	ND@0.5

February 24, 2012

IBM Corporation

8-1

**Groundwater Analytical Chemistry Data**  
**6 NYCRR Part 373 Permit No. 7-4930-00095/00005, Owego, New York**

January 1, 2011 - December 31, 2011

Sample Location		167	178	178	179	179	181
Sample Description		GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL
Sample Date		07/20/2011	01/26/2011	07/20/2011	01/26/2011	07/20/2011	07/21/2011
Laboratory Sample I.D.		6353370	6194201	6353367	6194202	6353366	6354237
Sample Comment Codes		P	P	P	P	P	P
<b>Parameter</b>	<b>Units</b>						
<b>Indicator Parameters</b>							
PH	SU	6.86	5.49	6.48	6.33	7.26	6.56
SPECIFIC CONDUCTANCE	umhos/cm	3205	2313	1761	522	433	789
TEMPERATURE	C	11.1	8.0	12.4	8.5	12.6	16.5
TURBIDITY	NTU	0.62	1.07	0.33	1.01	0.63	0.52
<b>Volatile Organics</b>							
1,1,1-TRICHLOROETHANE	ug/l	ND@0.5	46	37	23	21	2.8
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	0.9	0.7	4.9	5.6	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	18	13	2.9	3.5	0.2 J
1,1-DICHLOROETHENE	ug/l	ND@0.5	4.4	4.0	7.7	7.7	ND@0.5
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	0.2 J	ND@0.5	0.2 J	0.4 J	ND@0.5
1,2-DICHLOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	0.1 J	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	0.4 J	0.3 J	0.2 J	0.3 J	ND@0.5
CIS-1,2-DICHLOROETHENE	ug/l	ND@0.5	7.2	9.0	13	13	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	0.5 J	0.6	0.2 J	0.2 J	ND@0.5
TRICHLOROETHENE	ug/l	5.0	110	120	100	89	0.4 J
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

February 24, 2012

IBM Corporation

9-1

**Groundwater Analytical Chemistry Data**  
**6 NYCRR Part 373 Permit No. 7-4930-00095/00005, Owego, New York**

January 1, 2011 - December 31, 2011

Sample Location		183	183	185	185	186	186
Sample Description		GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL
Sample Date		01/25/2011	07/21/2011	01/26/2011	07/19/2011	01/26/2011	07/19/2011
Laboratory Sample I.D.		6193083	6354242	6194181	6350132	6194182	6350133
Sample Comment Codes		P	P				
<b>Parameter</b>	<b>Units</b>						
<b>Indicator Parameters</b>							
PH	SU	5.64	7.13	5.83	7.25	5.91	7.63
SPECIFIC CONDUCTANCE	umhos/cm	877	751	732	971	982	1037
TEMPERATURE	C	8.9	13.2	10.4	11.0	10.2	11.4
TURBIDITY	NTU	2.28	0.32	4.67	35.7	3.55	2.97
<b>Volatile Organics</b>							
1,1,1-TRICHLOROETHANE	ug/l	13	6.6	3.3	3.5	2.8	3.7
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@1	ND@1	3.8	3.8	13	15
1,1,2-TRICHLOROETHANE	ug/l	ND@1	ND@1	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1-DICHLOROETHANE	ug/l	1.2	0.6 J	1.0	1.2	1.8	2.3
1,1-DICHLOROETHENE	ug/l	0.6 J	0.2 J	0.3 J	0.3 J	0.5 J	0.6
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@1	ND@1	0.6	0.7	1.4	1.4
1,2-DICHLOROETHANE	ug/l	ND@1	ND@1	0.2 J	0.2 J	ND@0.5	ND@0.5
CHLOROETHANE	ug/l	ND@1	ND@1	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CHLOROFORM (TRICHLOROMETHANE)	ug/l	1.6	1.4	0.2 J	0.2 J	0.1 J	0.2 J
CIS-1,2-DICHLOROETHENE	ug/l	20	19	1.8	2.2	6.1	7.7
DICHLORODIFLUOROMETHANE (FREON 12)	ug/l	ND@1	ND@1	ND@0.5	ND@0.5	ND@0.5	ND@0.5
METHYLENE CHLORIDE (DICHLOROMETHANE)	ug/l	ND@1	ND@1	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TETRACHLOROETHENE	ug/l	ND@1	ND@1	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TRICHLOROETHENE	ug/l	260	150	37	44	30	53
TRICHLOROFLUOROMETHANE (FREON 11)	ug/l	ND@1	ND@1	ND@0.5	ND@0.5	ND@0.5	ND@0.5
VINYL CHLORIDE	ug/l	ND@1	ND@1	0.1 J	0.1 J	ND@0.5	ND@0.5

February 24, 2012

IBM Corporation

10-1

**Groundwater Analytical Chemistry Data**  
**6 NYCRR Part 373 Permit No. 7-4930-00095/00005, Owego, New York**  
 January 1, 2011 - December 31, 2011

Sample Location		194	194	306	308	308	309
Sample Description		GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL
Sample Date		01/26/2011	07/19/2011	07/19/2011	01/24/2011	07/19/2011	01/24/2011
Laboratory Sample I.D.		6194209	6350131	6350134	6193071	6350119	6193072
Sample Comment Codes					P	P	P
<b>Parameter</b>	<b>Units</b>						
<b>Indicator Parameters</b>							
PH	SU	6.37	7.43	6.44	5.85	6.28	5.38
SPECIFIC CONDUCTANCE	umhos/cm	693	909	1602	2315	2486	7090
TEMPERATURE	C	11.2	12.2	10.6	10.2	16.1	8.2
TURBIDITY	NTU	11.7	356	1.99	13.9	0.78	2.62
<b>Volatile Organics</b>							
1,1,1-TRICHLOROETHANE	ug/l	2.6	2.5	0.2 J	170	140	3.4
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	2.6	2.7	ND@0.5
1,1,2-TRICHLOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@1	ND@1	ND@0.5
1,1-DICHLOROETHANE	ug/l	16	11	0.2 J	84	85	ND@0.5
1,1-DICHLOROETHENE	ug/l	2.8	2.7	ND@0.5	13	8.7	ND@0.5
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	1.2	1	ND@0.5
1,2-DICHLOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	0.3 J	0.2 J	ND@0.5
CHLOROETHANE	ug/l	2.3	2.7	ND@0.5	0.4 J	0.2 J	ND@0.5
CHLOROFORM (TRICHLOROMETHANE)	ug/l	ND@0.5	ND@0.5	ND@0.5	0.2 J	ND@1	0.2 J
CIS-1,2-DICHLOROETHENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@1	ND@1	ND@0.5
DICHLORODIFLUOROMETHANE (FREON 12)	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@1	ND@1	ND@0.5
METHYLENE CHLORIDE (DICHLOROMETHANE)	ug/l	ND@0.5	ND@0.5	ND@0.5	0.5 J	ND@1	ND@0.5
TETRACHLOROETHENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@1	ND@1	ND@0.5
TRICHLOROETHENE	ug/l	ND@0.5	ND@0.5	ND@0.5	0.6 J	0.8 J	11
TRICHLOROFLUOROMETHANE (FREON 11)	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@1	ND@1	ND@0.5
VINYL CHLORIDE	ug/l	0.1 J	0.1 J	ND@0.5	ND@1	ND@1	ND@0.5

February 24, 2012

IBM Corporation

11-1

**Groundwater Analytical Chemistry Data**  
**6 NYCRR Part 373 Permit No. 7-4930-00095/00005, Owego, New York**  
 January 1, 2011 - December 31, 2011

Sample Location		309	313	314	316	316	317
Sample Description		GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL
Sample Date		07/19/2011	07/19/2011	07/20/2011	01/25/2011	07/20/2011	01/24/2011
Laboratory Sample I.D.		6350121	6350122	6353363	6194190	6353369	6193076
Sample Comment Codes		P	P	P	P	P	P
<b>Parameter</b>	<b>Units</b>						
<b>Indicator Parameters</b>							
PH	SU	6.12	7.09	7.17	7.15	7.91	5.96
SPECIFIC CONDUCTANCE	umhos/cm	6970	1055	492	438	436	480
TEMPERATURE	C	13.7	14.3	11.1	8.4	12.4	6.2
TURBIDITY	NTU	0.44	1.02	0.46	1.96	0.74	2.11
<b>Volatile Organics</b>							
1,1,1-TRICHLOROETHANE	ug/l	3.4	0.3 J	0.4 J	ND@0.5	ND@0.5	6.9
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	2.4	0.2 J	ND@0.5	ND@0.5	0.4 J
1,1-DICHLOROETHENE	ug/l	ND@0.5	0.5	0.1 J	ND@0.5	ND@0.5	1.4
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	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	0.1 J	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	0.7	ND@0.5	ND@0.5	1.7
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	11	0.6	ND@0.5	ND@0.5	ND@0.5	20
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

February 24, 2012

IBM Corporation

12-1

**Groundwater Analytical Chemistry Data**  
**6 NYCRR Part 373 Permit No. 7-4930-00095/00005, Owego, New York**

January 1, 2011 - December 31, 2011

Sample Location	317	318	318	318	318	319	
Sample Description	GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL	
Sample Date	07/20/2011	01/26/2011	04/25/2011	07/20/2011	10/19/2011	01/26/2011	
Laboratory Sample I.D.	6353373	6194194	6269701	6353357	6446255	6194196	
Sample Comment Codes	P	P	P	P	P	P	
<b>Parameter</b>	<b>Units</b>						
<b>Indicator Parameters</b>							
PH	SU	8.00	5.94	7.89	7.47	9.07	6.47
SPECIFIC CONDUCTANCE	umhos/cm	444	467	459	478	199	320
TEMPERATURE	C	14.5	8.9	10.6	14.7	10.2	8.7
TURBIDITY	NTU	0.44	1.19	1.98	0.76	1.15	1.62
<b>Volatile Organics</b>							
1,1,1-TRICHLOROETHANE	ug/l	39	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	0.2 J	4.9	3.6	4.4	2.7	1.9
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	2.9	3.5	2.8	3.0	1.8	3.2
1,1-DICHLOROETHENE	ug/l	12	0.8	0.3 J	0.6	0.4 J	0.7
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	13	9.3	9.5	6.9	2.8
1,2-DICHLOROETHANE	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	0.1 J
CIS-1,2-DICHLOROETHENE	ug/l	19	56	53	46	27	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	0.1 J	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TRICHLOROETHENE	ug/l	120	6.1	4.5	5.5	3.0	4.2
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	0.4 J	ND@0.5	0.2 J	0.1 J	0.2 J

February 24, 2012

IBM Corporation

13-1

**Groundwater Analytical Chemistry Data**  
**6 NYCRR Part 373 Permit No. 7-4930-00095/00005, Owego, New York**

January 1, 2011 - December 31, 2011

Sample Location	319	319	319	321	321	322	
Sample Description	GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL	
Sample Date	04/25/2011	07/20/2011	10/19/2011	01/24/2011	07/19/2011	01/26/2011	
Laboratory Sample I.D.	6269703	6353359	6446257	6193070	6350118	6194195	
Sample Comment Codes	P	P	P	P	P	P	
<b>Parameter</b>	<b>Units</b>						
<b>Indicator Parameters</b>							
PH	SU	7.38	7.19	7.53	5.63	6.43	6.85
SPECIFIC CONDUCTANCE	umhos/cm	341	298	333	1308	980	362
TEMPERATURE	C	9.5	13.6	10.6	10.8	15.3	8.7
TURBIDITY	NTU	1.77	3.23	1.16	8.84	1.37	1.61
<b>Volatile Organics</b>							
1,1,1-TRICHLOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	5.2	0.9	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	1.4	1.3	1.6	ND@0.5	ND@0.5	1.9
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	1.6	2.1	2.2	0.5	2.9
1,1-DICHLOROETHENE	ug/l	0.4 J	0.3 J	0.5 J	0.1 J	ND@0.5	0.3 J
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	1.5	1.1	1.8	ND@0.5	ND@0.5	4.9
1,2-DICHLOROETHANE	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	0.1 J	0.1 J	0.1 J	ND@0.5	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHENE	ug/l	4.5	3.8	4.5	ND@0.5	ND@0.5	11
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	4.5	5.0	4.5	0.1 J	ND@0.5	0.1 J
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	0.6	ND@0.5	ND@0.5	0.9

February 24, 2012

IBM Corporation

14-1

**Groundwater Analytical Chemistry Data**  
**6 NYCRR Part 373 Permit No. 7-4930-00095/00005, Owego, New York**

January 1, 2011 - December 31, 2011

Sample Location		322	322	322	323	323	323
Sample Description		GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL
Sample Date		04/25/2011	07/20/2011	10/19/2011	01/26/2011	04/25/2011	07/20/2011
Laboratory Sample I.D.		6269702	6353358	6446256	6194199	6269704	6353362
Sample Comment Codes		P	P	P	P	P	P
<b>Parameter</b>	<b>Units</b>						
<b>Indicator Parameters</b>							
PH	SU	7.35	7.37	8.33	5.09	6.21	6.52
SPECIFIC CONDUCTANCE	umhos/cm	414	418	239	271	256	265
TEMPERATURE	C	9.9	11.9	11.3	8.7	10.7	11.9
TURBIDITY	NTU	1.63	0.59	0.74	1.50	2.09	0.50
<b>Volatile Organics</b>							
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	0.7	1.4	0.7	0.3 J	0.3 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	ND@0.5	0.8	1.2	0.2 J	0.1 J	1.2
1,1-DICHLOROETHENE	ug/l	ND@0.5	ND@0.5	0.1 J	ND@0.5	ND@0.5	0.2 J
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	1.8	3.0	1.2	0.6	0.4 J
1,2-DICHLOROETHANE	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	2.2	2.9	0.3 J	0.1 J	1.2
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	0.1 J	5.2	2.2	5.3
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	0.4 J	0.5	0.9	0.4 J	ND@0.5

February 24, 2012

IBM Corporation

15-1

**Groundwater Analytical Chemistry Data**  
**6 NYCRR Part 373 Permit No. 7-4930-00095/00005, Owego, New York**

January 1, 2011 - December 31, 2011

Sample Location		323	324	324	325	325	351
Sample Description		GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL
Sample Date		10/19/2011	04/21/2011	10/19/2011	04/21/2011	10/19/2011	01/26/2011
Laboratory Sample I.D.		6446258	6267653	6446265	6267654	6446266	6194183
Sample Comment Codes		P	P	P	P	P	
<b>Parameter</b>	<b>Units</b>						
<b>Indicator Parameters</b>							
PH	SU	6.63	6.14	5.84	5.56	5.23	5.37
SPECIFIC CONDUCTANCE	umhos/cm	270	5250	5290	4016	4755	535
TEMPERATURE	C	10.6	14.2	11.6	14.2	11.8	9.7
TURBIDITY	NTU	0.97	2.56	2.89	2.71	1.37	2.49
<b>Volatile Organics</b>							
1,1,1-TRICHLOROETHANE	ug/l	0.1 J	280	280	230	220	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	2.3	9.5	10	11	10	ND@0.5
1,1,2-TRICHLOROETHANE	ug/l	ND@0.5	1.5 J	1.6 J	1.3 J	1.3 J	ND@0.5
1,1-DICHLOROETHANE	ug/l	3.7	89	130	80	85	ND@0.5
1,1-DICHLOROETHENE	ug/l	0.8	120	120	98	100	ND@0.5
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	3.1	ND@2.5	2.4 J	1.1 J	1.7 J	ND@0.5
1,2-DICHLOROETHANE	ug/l	ND@0.5	0.6 J	0.7 J	ND@2.5	0.7 J	ND@0.5
CHLOROETHANE	ug/l	ND@0.5	ND@2.5	0.7 J	ND@2.5	0.6 J	ND@0.5
CHLOROFORM (TRICHLOROMETHANE)	ug/l	0.2 J	0.7 J	0.7 J	0.6 J	0.6 J	ND@0.5
CIS-1,2-DICHLOROETHENE	ug/l	8.2	56	56	72	55	ND@0.5
DICHLORODIFLUOROMETHANE (FREON 12)	ug/l	ND@0.5	ND@2.5	ND@2.5	ND@2.5	ND@2.5	ND@0.5
METHYLENE CHLORIDE (DICHLOROMETHANE)	ug/l	ND@0.5	2.1 J	2.4 J	2.1 J	2.9	ND@0.5
TETRACHLOROETHENE	ug/l	ND@0.5	1.9 J	1.7 J	7.3	7.4	ND@0.5
TRICHLOROETHENE	ug/l	23	600	610	550	530	0.1 J
TRICHLOROFLUOROMETHANE (FREON 11)	ug/l	ND@0.5	ND@2.5	ND@2.5	ND@2.5	ND@2.5	ND@0.5
VINYL CHLORIDE	ug/l	0.1 J	2.1 J	2.5 J	1.1 J	2.4 J	0.2 J

February 24, 2012

IBM Corporation

16-1



**Groundwater Analytical Chemistry Data**  
**6 NYCRR Part 373 Permit No. 7-4930-00095/00005, Owego, New York**

January 1, 2011 - December 31, 2011

Sample Location		351	352	353	354	355	356
Sample Description		GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL
Sample Date		07/19/2011	07/19/2011	04/20/2011	04/20/2011	07/19/2011	07/19/2011
Laboratory Sample I.D.		6350129	6350130	6266779	6266780	6350114	6350115
Sample Comment Codes				P		P	P
<b>Parameter</b>	<b>Units</b>						
<b>Indicator Parameters</b>							
PH	SU	7.35	7.62	7.26	7.58	8.04	7.63
SPECIFIC CONDUCTANCE	umhos/cm	416	321	991	243	743	957
TEMPERATURE	C	11.0	12.4	12.4	10.2	13.6	15.1
TURBIDITY	NTU	1000	>1000	1.95	75.6	0.59	0.58
<b>Volatile Organics</b>							
1,1,1-TRICHLOROETHANE	ug/l	0.3 J	ND@0.5	5000	57	ND@0.5	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@25	ND@1	ND@0.5	ND@0.5
1,1,2-TRICHLOROETHANE	ug/l	ND@0.5	ND@0.5	5.5 J	ND@1	ND@0.5	ND@0.5
1,1-DICHLOROETHANE	ug/l	0.2 J	ND@0.5	1800	ND@1	ND@0.5	ND@0.5
1,1-DICHLOROETHENE	ug/l	ND@0.5	ND@0.5	1700	5.4	ND@0.5	ND@0.5
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@25	ND@1	ND@0.5	ND@0.5
1,2-DICHLOROETHANE	ug/l	ND@0.5	ND@0.5	ND@25	ND@1	ND@0.5	ND@0.5
CHLOROETHANE	ug/l	ND@0.5	ND@0.5	ND@25	ND@1	ND@0.5	ND@0.5
CHLOROFORM (TRICHLOROMETHANE)	ug/l	ND@0.5	ND@0.5	ND@25	ND@1	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHENE	ug/l	ND@0.5	ND@0.5	94	ND@1	ND@0.5	ND@0.5
DICHLORODIFLUOROMETHANE (FREON 12)	ug/l	ND@0.5	ND@0.5	ND@25	ND@1	ND@0.5	ND@0.5
METHYLENE CHLORIDE (DICHLOROMETHANE)	ug/l	ND@0.5	ND@0.5	ND@25	ND@1	ND@0.5	ND@0.5
TETRACHLOROETHENE	ug/l	ND@0.5	ND@0.5	ND@25	ND@1	ND@0.5	ND@0.5
TRICHLOROETHENE	ug/l	0.2 J	ND@0.5	3700	6.2	0.1 J	ND@0.5
TRICHLOROFLUOROMETHANE (FREON 11)	ug/l	ND@0.5	ND@0.5	ND@25	ND@1	ND@0.5	ND@0.5
VINYL CHLORIDE	ug/l	0.1 J	ND@0.5	7.4 J	ND@1	ND@0.5	ND@0.5

February 24, 2012

IBM Corporation

17-1

**Groundwater Analytical Chemistry Data**  
**6 NYCRR Part 373 Permit No. 7-4930-00095/00005, Owego, New York**

January 1, 2011 - December 31, 2011

Sample Location		357	357	358	361	362	363
Sample Description		GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL
Sample Date		04/21/2011	10/18/2011	04/21/2011	04/25/2011	07/20/2011	07/20/2011
Laboratory Sample I.D.		6267668	6446244	6267670	6269708	6353353	6353355
Sample Comment Codes		P	P	P	P	P	P
<b>Parameter</b>	<b>Units</b>						
<b>Indicator Parameters</b>							
PH	SU	7.30	7.10	6.87	6.32	7.30	6.28
SPECIFIC CONDUCTANCE	umhos/cm	1845	2099	2688	1152	1164	5550
TEMPERATURE	C	9.4	11.2	7.5	11.6	13.6	14.6
TURBIDITY	NTU	1.61	0.96	1.69	1.95	0.42	2.20
<b>Volatile Organics</b>							
1,1,1-TRICHLOROETHANE	ug/l	0.3 J	ND@0.5	27	6.4	ND@0.5	1.4
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	0.8	0.2 J	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	2.7	1.7	20	2.0	ND@0.5	0.7
1,1-DICHLOROETHENE	ug/l	ND@0.5	ND@0.5	3.6	0.7	ND@0.5	ND@0.5
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	0.9	ND@0.5	ND@0.5	ND@0.5
1,2-DICHLOROETHANE	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	ND@0.5	ND@0.5	0.6	1.3	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	4.7	4.1	ND@0.5	0.2 J
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	0.2 J	ND@0.5	ND@0.5	ND@0.5

February 24, 2012

IBM Corporation

18-1

**Groundwater Analytical Chemistry Data**  
**6 NYCRR Part 373 Permit No. 7-4930-00095/00005, Owego, New York**

January 1, 2011 - December 31, 2011

Sample Location		364	365	366	367	367	368
Sample Description		GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL
Sample Date		04/20/2011	04/20/2011	04/22/2011	04/21/2011	10/19/2011	04/21/2011
Laboratory Sample I.D.		6267644	6267645	6267673	6267672	6446259	6267671
Sample Comment Codes		P	P		P	P	
<b>Parameter</b>	<b>Units</b>						
<b>Indicator Parameters</b>							
PH	SU	6.68	6.30	6.50	6.41	6.09	6.64
SPECIFIC CONDUCTANCE	umhos/cm	1822	1986	1850	1645	1855	3545
TEMPERATURE	C	12.5	13.3	11.8	11.6	13.0	11.4
TURBIDITY	NTU	1.99	2.09	38.6	4.55	0.88	145
<b>Volatile Organics</b>							
1,1,1-TRICHLOROETHANE	ug/l	ND@0.5	ND@0.5	78	89	100	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	1.4	3.7	3.3	ND@0.5
1,1,2-TRICHLOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	0.1 J	ND@0.5
1,1-DICHLOROETHANE	ug/l	ND@0.5	ND@0.5	23	9.9	9.9	8.2
1,1-DICHLOROETHENE	ug/l	ND@0.5	ND@0.5	13	23	22	0.4 J
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	1.4	1.1	1.3	0.4 J
1,2-DICHLOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	0.1 J	0.1 J	ND@0.5
CHLOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	1.7
CHLOROFORM (TRICHLOROMETHANE)	ug/l	ND@0.5	ND@0.5	0.8	0.6	0.6	0.1 J
CIS-1,2-DICHLOROETHENE	ug/l	ND@0.5	ND@0.5	8.1	3.2	3.3	2.1
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	0.4 J	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	32	8.0	7.1	1.3
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	0.8	0.9	1.4

February 24, 2012

IBM Corporation

19-1

**Groundwater Analytical Chemistry Data**  
**6 NYCRR Part 373 Permit No. 7-4930-00095/00005, Owego, New York**

January 1, 2011 - December 31, 2011

Sample Location		368	373	373	374	374	378
Sample Description		GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL
Sample Date		10/19/2011	01/24/2011	07/20/2011	01/24/2011	07/20/2011	04/20/2011
Laboratory Sample I.D.		6446260	6193065	6353354	6193064	6353352	6267646
Sample Comment Codes			P	P	P	P	P
<b>Parameter</b>	<b>Units</b>						
<b>Indicator Parameters</b>							
PH	SU	6.26	6.37	6.08	6.77	7.17	6.73
SPECIFIC CONDUCTANCE	umhos/cm	3286	1152	1062	719	758	1705
TEMPERATURE	C	12.8	8.6	11.6	9.2	11.4	13.0
TURBIDITY	NTU	192	10.8	1.10	3.02	0.49	2.18
<b>Volatile Organics</b>							
1,1,1-TRICHLOROETHANE	ug/l	5.1	5.3	3.4	0.1 J	0.1 J	160
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	8.8
1,1,2-TRICHLOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@2.5
1,1-DICHLOROETHANE	ug/l	34	0.7	0.3 J	ND@0.5	ND@0.5	300
1,1-DICHLOROETHENE	ug/l	4.8	0.1 J	ND@0.5	ND@0.5	ND@0.5	20
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	1.3	ND@0.5	ND@0.5	ND@0.5	ND@0.5	6.2
1,2-DICHLOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@2.5
CHLOROETHANE	ug/l	3.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	1.8 J
CHLOROFORM (TRICHLOROMETHANE)	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@2.5
CIS-1,2-DICHLOROETHENE	ug/l	9.9	ND@0.5	ND@0.5	ND@0.5	ND@0.5	23
DICHLORODIFLUOROMETHANE (FREON 12)	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@2.5
METHYLENE CHLORIDE (DICHLOROMETHANE)	ug/l	0.2 J	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@2.5
TETRACHLOROETHENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@2.5
TRICHLOROETHENE	ug/l	22	0.1 J	ND@0.5	ND@0.5	ND@0.5	14
TRICHLOROFLUOROMETHANE (FREON 11)	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@2.5
VINYL CHLORIDE	ug/l	4.4	ND@0.5	ND@0.5	ND@0.5	ND@0.5	4.8

February 24, 2012

IBM Corporation

20-1

**Groundwater Analytical Chemistry Data**  
**6 NYCRR Part 373 Permit No. 7-4930-00095/00005, Owego, New York**

January 1, 2011 - December 31, 2011

Sample Location		378	379	382	383	383	386
Sample Description		GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL
Sample Date		10/18/2011	04/20/2011	04/22/2011	04/25/2011	10/19/2011	07/21/2011
Laboratory Sample I.D.		6446240	6267647	6267674	6269707	6446248	6354233
Sample Comment Codes		P	P	P	P	P	P
<b>Parameter</b>	<b>Units</b>						
<b>Indicator Parameters</b>							
PH	SU	6.63	6.86	6.21	6.80	6.75	6.20
SPECIFIC CONDUCTANCE	umhos/cm	1846	1885	2438	3458	2799	504
TEMPERATURE	C	11.4	13.0	9.9	8.8	14.0	16.8
TURBIDITY	NTU	0.78	2.05	5.28	2.37	0.78	1.09
<b>Volatile Organics</b>							
1,1,1-TRICHLOROETHANE	ug/l	98	1.2	0.5 J	2.7	5.8	22
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	11	ND@0.5	ND@0.5	ND@0.5	0.2 J	0.5 J
1,1,2-TRICHLOROETHANE	ug/l	ND@2.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1-DICHLOROETHANE	ug/l	110	3.4	ND@0.5	1.0	3.1	18
1,1-DICHLOROETHENE	ug/l	5.8	0.4 J	ND@0.5	0.5 J	1.3	9.7
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	5.2	ND@0.5	ND@0.5	ND@0.5	0.2 J	ND@0.5
1,2-DICHLOROETHANE	ug/l	ND@2.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CHLOROETHANE	ug/l	0.6 J	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CHLOROFORM (TRICHLOROMETHANE)	ug/l	ND@2.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHENE	ug/l	4.7	0.7	ND@0.5	0.3 J	0.8	33
DICHLORODIFLUOROMETHANE (FREON 12)	ug/l	ND@2.5	ND@0.5	0.3 J	ND@0.5	ND@0.5	ND@0.5
METHYLENE CHLORIDE (DICHLOROMETHANE)	ug/l	ND@2.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TETRACHLOROETHENE	ug/l	ND@2.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TRICHLOROETHENE	ug/l	7.1	0.1 J	0.3 J	3.8	5.9	91
TRICHLOROFLUOROMETHANE (FREON 11)	ug/l	ND@2.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
VINYL CHLORIDE	ug/l	3.1	0.1 J	ND@0.5	ND@0.5	ND@0.5	ND@0.5

February 24, 2012

IBM Corporation

21-1

**Groundwater Analytical Chemistry Data**  
**6 NYCRR Part 373 Permit No. 7-4930-00095/00005, Owego, New York**

January 1, 2011 - December 31, 2011

Sample Location		387	392	392	393	393	393
Sample Description		GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL
Sample Date		07/21/2011	04/21/2011	10/19/2011	01/26/2011	04/21/2011	07/19/2011
Laboratory Sample I.D.		6354234	6267652	6446261	6194184	6267648	6350128
Sample Comment Codes		P	P	P			
<b>Parameter</b>	<b>Units</b>						
<b>Indicator Parameters</b>							
PH	SU	NA	6.87	7.07	6.91	7.00	6.63
SPECIFIC CONDUCTANCE	umhos/cm	NA	4390	2484	2391	2241	2389
TEMPERATURE	C	NA	13.4	11.1	11.6	13.2	12.4
TURBIDITY	NTU	NA	2.16	3.89	166	80.7	120
<b>Volatile Organics</b>							
1,1,1-TRICHLOROETHANE	ug/l	ND@0.5	14	2.4	930	550	760
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	0.7	ND@0.5	110	56	85
1,1,2-TRICHLOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@5	ND@5	ND@5
1,1-DICHLOROETHANE	ug/l	ND@0.5	8.2	1.3	1200	810	1100
1,1-DICHLOROETHENE	ug/l	ND@0.5	1.5	0.4 J	100	57	85
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	0.6	ND@0.5	21	12	17
1,2-DICHLOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@5	ND@5	ND@5
CHLOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	1.7 J	ND@5	1.4 J
CHLOROFORM (TRICHLOROMETHANE)	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@5	ND@5	ND@5
CIS-1,2-DICHLOROETHENE	ug/l	ND@0.5	1.9	0.1 J	100	72	100
DICHLORODIFLUOROMETHANE (FREON 12)	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@5	ND@5	ND@5
METHYLENE CHLORIDE (DICHLOROMETHANE)	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@5	ND@5	ND@5
TETRACHLOROETHENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@5	ND@5	ND@5
TRICHLOROETHENE	ug/l	ND@0.5	16	5.1	140	90	140
TRICHLOROFLUOROMETHANE (FREON 11)	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@5	ND@5	ND@5
VINYL CHLORIDE	ug/l	ND@0.5	ND@0.5	ND@0.5	17	8.7	15

February 24, 2012

IBM Corporation

22-1

**Groundwater Analytical Chemistry Data**  
**6 NYCRR Part 373 Permit No. 7-4930-00095/00005, Owego, New York**

January 1, 2011 - December 31, 2011

Sample Location		393	394	394	395	397	398
Sample Description		GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL
Sample Date		10/19/2011	04/21/2011	10/19/2011	04/21/2011	04/22/2011	04/22/2011
Laboratory Sample I.D.		6446253	6267649	6446254	6267655	6267675	6267676
Sample Comment Codes			P	P	P	P	P
<b>Parameter</b>	<b>Units</b>						
<b>Indicator Parameters</b>							
PH	SU	7.04	6.68	6.60	6.87	7.31	6.72
SPECIFIC CONDUCTANCE	umhos/cm	2060	2838	2976	2663	548	273
TEMPERATURE	C	11.3	15.1	12.7	13.9	10.3	7.4
TURBIDITY	NTU	173	1.81	0.99	2.25	2.40	1.57
<b>Volatile Organics</b>							
1,1,1-TRICHLOROETHANE	ug/l	440	ND@0.5	ND@0.5	1100	ND@0.5	6.7
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	43	ND@0.5	ND@0.5	130	ND@0.5	0.3 J
1,1,2-TRICHLOROETHANE	ug/l	ND@5	ND@0.5	ND@0.5	ND@5	ND@0.5	ND@0.5
1,1-DICHLOROETHANE	ug/l	740	ND@0.5	ND@0.5	1300	ND@0.5	6.4
1,1-DICHLOROETHENE	ug/l	61	ND@0.5	ND@0.5	110	ND@0.5	3.0
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	13	ND@0.5	ND@0.5	23	ND@0.5	0.5 J
1,2-DICHLOROETHANE	ug/l	ND@5	ND@0.5	ND@0.5	ND@5	ND@0.5	ND@0.5
CHLOROETHANE	ug/l	1.1 J	ND@0.5	ND@0.5	1.2 J	ND@0.5	ND@0.5
CHLOROFORM (TRICHLOROMETHANE)	ug/l	ND@5	ND@0.5	ND@0.5	ND@5	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHENE	ug/l	72	ND@0.5	ND@0.5	130	ND@0.5	0.6
DICHLORODIFLUOROMETHANE (FREON 12)	ug/l	ND@5	ND@0.5	ND@0.5	ND@5	ND@0.5	ND@0.5
METHYLENE CHLORIDE (DICHLOROMETHANE)	ug/l	ND@5	ND@0.5	ND@0.5	ND@5	ND@0.5	ND@0.5
TETRACHLOROETHENE	ug/l	ND@5	ND@0.5	ND@0.5	ND@5	ND@0.5	ND@0.5
TRICHLOROETHENE	ug/l	99	ND@0.5	ND@0.5	190	ND@0.5	3.3
TRICHLOROFLUOROMETHANE (FREON 11)	ug/l	ND@5	ND@0.5	ND@0.5	ND@5	ND@0.5	ND@0.5
VINYL CHLORIDE	ug/l	7.4	ND@0.5	ND@0.5	15	ND@0.5	ND@0.5

February 24, 2012

IBM Corporation

23-1

**Groundwater Analytical Chemistry Data**  
**6 NYCRR Part 373 Permit No. 7-4930-00095/00005, Owego, New York**

January 1, 2011 - December 31, 2011

Sample Location		398	399	399	399	399	404
Sample Description		GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL	GW EXTR WELL
Sample Date		10/18/2011	01/25/2011	04/21/2011	07/25/2011	10/18/2011	01/21/2011
Laboratory Sample I.D.		6446238	6193085	6267663	6357666	6446232	6189829
Sample Comment Codes		P	P	P	P	P	
<b>Parameter</b>	<b>Units</b>						
<b>Indicator Parameters</b>							
PH	SU	6.65	5.56	6.83	6.61	6.99	6.59
SPECIFIC CONDUCTANCE	umhos/cm	903	3176	978	3695	1838	1163
TEMPERATURE	C	12.3	7.2	6.8	15.2	12.8	10.1
TURBIDITY	NTU	0.91	1.27	1.84	0.88	0.98	8.13
<b>Volatile Organics</b>							
1,1,1-TRICHLOROETHANE	ug/l	9.6	ND@0.5	ND@0.5	ND@0.5	ND@0.5	11
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	0.4 J	ND@0.5	ND@0.5	ND@0.5	ND@0.5	49
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	9.8	ND@0.5	0.2 J	ND@0.5	ND@0.5	5.5
1,1-DICHLOROETHENE	ug/l	4.7	ND@0.5	ND@0.5	ND@0.5	ND@0.5	1.4
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	0.7	ND@0.5	ND@0.5	ND@0.5	ND@0.5	6.6
1,2-DICHLOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	0.1 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	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	0.4 J
CIS-1,2-DICHLOROETHENE	ug/l	0.9	ND@0.5	ND@0.5	0.3 J	ND@0.5	20
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	0.2 J
TRICHLOROETHENE	ug/l	5.1	ND@0.5	ND@0.5	ND@0.5	ND@0.5	150
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	0.3 J	ND@0.5	0.3 J

February 24, 2012

IBM Corporation

24-1

**Groundwater Analytical Chemistry Data**  
**6 NYCRR Part 373 Permit No. 7-4930-00095/00005, Owego, New York**

January 1, 2011 - December 31, 2011

Sample Location	404	404	404	405	405	405
Sample Description	GW EXTR WELL	GW EXTR WELL	GW EXTR WELL	GW EXTR WELL	GW EXTR WELL	GW EXTR WELL
Sample Date	04/25/2011	07/22/2011	10/20/2011	01/21/2011	04/25/2011	07/22/2011
Laboratory Sample I.D.	6269713	6354249	6446274	6189830	6269714	6354250
Sample Comment Codes						

Parameter	Units	404	404	404	405	405	405
<b>Indicator Parameters</b>							
PH	SU	7.33	7.12	7.60	6.36	7.26	7.17
SPECIFIC CONDUCTANCE	umhos/cm	1100	848	1190	763	619	730
TEMPERATURE	C	11.0	13.2	11.2	9.7	9.2	12.5
TURBIDITY	NTU	2.80	0.69	2.20	4.38	3.54	0.79
<b>Volatile Organics</b>							
1,1,1-TRICHLOROETHANE	ug/l	8.5	7.9	11	24	15	23
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	45	45	56	130	77	140
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	5.4	5.4	6.1	5.8	4.0	4.8
1,1-DICHLOROETHENE	ug/l	1.3	1.4	1.7	6.7	3.8	5.3
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	6.6	7.3	11	6.8	4.0	7.3
1,2-DICHLOROETHANE	ug/l	0.1 J	0.1 J	0.1 J	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	0.5 J	0.5	1.3	0.4 J	0.3 J	0.4 J
CIS-1,2-DICHLOROETHENE	ug/l	19	21	23	19	25	22
DICHLORODIFLUOROMETHANE (FREON 12)	ug/l	ND@0.5	ND@0.5	1.7	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	0.2 J	0.2 J	0.2 J	0.5	0.3 J	0.5 J
TRICHLOROETHENE	ug/l	130	150	160	120	92	120
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	0.3 J	0.4 J	0.2 J	0.2 J	0.3 J

February 24, 2012

IBM Corporation

25-1

**Groundwater Analytical Chemistry Data**  
**6 NYCRR Part 373 Permit No. 7-4930-00095/00005, Owego, New York**

January 1, 2011 - December 31, 2011

Sample Location	405	412	412	412	412	412,413,414
Sample Description	GW EXTR WELL	GW EXTR WELL	GW EXTR WELL	GW EXTR WELL	GW EXTR WELL	COMB GW EXTR
Sample Date	10/20/2011	01/21/2011	04/25/2011	07/25/2011	10/19/2011	01/21/2011
Laboratory Sample I.D.	6446275	6189825	6269709	6357672	6446268	6189823
Sample Comment Codes						

Parameter	Units	405	412	412	412	412	412,413,414
<b>Indicator Parameters</b>							
PH	SU	7.57	5.89	6.79	6.83	6.57	6.37
SPECIFIC CONDUCTANCE	umhos/cm	499	2400	2485	2560	2595	2883
TEMPERATURE	C	12.5	10.4	13.6	13.9	11.6	12.1
TURBIDITY	NTU	1.39	39.0	142	70.3	90.4	19.2
<b>Volatile Organics</b>							
1,1,1-TRICHLOROETHANE	ug/l	19	1000	550	690	860	330
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	60	71	70	77	66	20
1,1,2-TRICHLOROETHANE	ug/l	ND@0.5	ND@5	ND@5	ND@5	ND@5	ND@5
1,1-DICHLOROETHANE	ug/l	3.4	1200	620	1000	1100	490
1,1-DICHLOROETHENE	ug/l	4.3	84	73	69	75	41
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	5.1	22	10	16	19	6.5
1,2-DICHLOROETHANE	ug/l	ND@0.5	ND@5	ND@5	ND@5	ND@5	ND@5
CHLOROETHANE	ug/l	ND@0.5	1.8 J	1.3 J	ND@5	ND@5	1.2 J
CHLOROFORM (TRICHLOROMETHANE)	ug/l	0.3 J	ND@5	ND@5	ND@5	ND@5	ND@5
CIS-1,2-DICHLOROETHENE	ug/l	19	84	62	76	84	45
DICHLORODIFLUOROMETHANE (FREON 12)	ug/l	1.2	ND@5	ND@5	ND@5	ND@5	ND@5
METHYLENE CHLORIDE (DICHLOROMETHANE)	ug/l	ND@0.5	ND@5	ND@5	ND@5	2.2 J	ND@5
TETRACHLOROETHENE	ug/l	0.4 J	ND@5	ND@5	ND@5	ND@5	ND@5
TRICHLOROETHENE	ug/l	100	130	130	130	140	100
TRICHLOROFLUOROMETHANE (FREON 11)	ug/l	ND@0.5	ND@5	ND@5	ND@5	ND@5	ND@5
VINYL CHLORIDE	ug/l	0.2 J	7.8	5.3	3.1 J	2.1 J	4.1 J

February 24, 2012

IBM Corporation

26-1

**Groundwater Analytical Chemistry Data**  
**6 NYCRR Part 373 Permit No. 7-4930-00095/00005, Owego, New York**

January 1, 2011 - December 31, 2011

Sample Location	412,413,414	412,413,414	412,413,414	413	413	413
Sample Description	COMB GW EXTR	COMB GW EXTR	COMB GW EXTR	GW EXTR WELL	GW EXTR WELL	GW EXTR WELL
Sample Date	04/21/2011	07/22/2011	10/20/2011	01/21/2011	04/25/2011	07/25/2011
Laboratory Sample I.D.	6267657	6354248	6446271	6189826	6269710	6357673
Sample Comment Codes						

Parameter	Units	412,413,414	412,413,414	412,413,414	413	413	413
<b>Indicator Parameters</b>							
PH	SU	6.49	6.61	6.73	5.65	6.68	6.62
SPECIFIC CONDUCTANCE	umhos/cm	2947	3051	3010	1398	1970	2064
TEMPERATURE	C	13.5	15.4	12.6	9.2	14.8	14.6
TURBIDITY	NTU	2.38	0.96	27.4	72.7	417	145
<b>Volatile Organics</b>							
1,1,1-TRICHLOROETHANE	ug/l	450	420	400	53	28	29
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	35	36	33	4.2	2.7	3.4
1,1,2-TRICHLOROETHANE	ug/l	ND@5	ND@5	ND@5	ND@0.5	ND@0.5	ND@0.5
1,1-DICHLOROETHANE	ug/l	740	880	780	160	57	66
1,1-DICHLOROETHENE	ug/l	67	60	48	14	11	8.8
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	13	13	12	3.7	1.0	1.4
1,2-DICHLOROETHANE	ug/l	ND@5	ND@5	ND@5	0.1 J	ND@0.5	ND@0.5
CHLOROETHANE	ug/l	1.4 J	1.6 J	1.5 J	0.9	0.2 J	0.1 J
CHLOROFORM (TRICHLOROMETHANE)	ug/l	ND@5	ND@5	ND@5	1.1	0.3 J	0.5 J
CIS-1,2-DICHLOROETHENE	ug/l	68	67	57	7.4	8.5	7.2
DICHLORODIFLUOROMETHANE (FREON 12)	ug/l	ND@5	ND@5	ND@5	ND@0.5	ND@0.5	ND@0.5
METHYLENE CHLORIDE (DICHLOROMETHANE)	ug/l	ND@5	ND@5	ND@5	ND@0.5	ND@0.5	ND@0.5
TETRACHLOROETHENE	ug/l	1.2 J	1.2 J	ND@5	0.1 J	ND@0.5	0.1 J
TRICHLOROETHENE	ug/l	200	210	160	19	21	21
TRICHLOROFLUOROMETHANE (FREON 11)	ug/l	ND@5	ND@5	ND@5	ND@0.5	ND@0.5	ND@0.5
VINYL CHLORIDE	ug/l	4.5 J	4.6 J	4.1 J	1.2	0.3 J	ND@0.5

February 24, 2012

IBM Corporation

27-1

**Groundwater Analytical Chemistry Data**  
**6 NYCRR Part 373 Permit No. 7-4930-00095/00005, Owego, New York**

January 1, 2011 - December 31, 2011

Sample Location	413	414	414	414	414	415
Sample Description	GW EXTR WELL	GW EXTR WELL	GW EXTR WELL	GW EXTR WELL	GW EXTR WELL	GW EXTR WELL
Sample Date	10/19/2011	01/21/2011	04/25/2011	07/25/2011	10/19/2011	01/21/2011
Laboratory Sample I.D.	6446269	6189824	6269711	6357671	6446270	6189828
Sample Comment Codes						

Parameter	Units	413	414	414	414	414	415
<b>Indicator Parameters</b>							
PH	SU	6.42	5.63	6.38	6.32	5.97	6.89
SPECIFIC CONDUCTANCE	umhos/cm	2700	3400	3108	2468	2550	3629
TEMPERATURE	C	11.7	9.7	14.2	14.3	11.6	19.2
TURBIDITY	NTU	6.78	30.5	146	301	223	48.9
<b>Volatile Organics</b>							
1,1,1-TRICHLOROETHANE	ug/l	32	560	350	2600	4100	3200
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	2.2	38	52	590	620	270
1,1,2-TRICHLOROETHANE	ug/l	ND@0.5	1.1 J	1.2 J	ND@50	ND@100	17 J
1,1-DICHLOROETHANE	ug/l	44	610	400	6200	12000	2500
1,1-DICHLOROETHENE	ug/l	14	120	160	230	260	2000
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	1	9.8	10	170	330	24 J
1,2-DICHLOROETHANE	ug/l	0.1 J	ND@5	ND@5	ND@50	ND@100	ND@50
CHLOROETHANE	ug/l	0.2 J	ND@5	1.1 J	ND@50	ND@100	ND@50
CHLOROFORM (TRICHLOROMETHANE)	ug/l	ND@0.5	1.8 J	1.3 J	ND@50	ND@100	ND@50
CIS-1,2-DICHLOROETHENE	ug/l	13	120	150	140	90 J	6000
DICHLORODIFLUOROMETHANE (FREON 12)	ug/l	ND@0.5	ND@5	ND@5	ND@50	ND@100	ND@50
METHYLENE CHLORIDE (DICHLOROMETHANE)	ug/l	ND@0.5	ND@5	ND@5	ND@50	ND@100	ND@50
TETRACHLOROETHENE	ug/l	ND@0.5	2.9 J	4.1 J	ND@50	ND@100	51
TRICHLOROETHENE	ug/l	41	480	450	420	230	1400
TRICHLOROFLUOROMETHANE (FREON 11)	ug/l	ND@0.5	ND@5	ND@5	ND@50	ND@100	ND@50
VINYL CHLORIDE	ug/l	0.8	1.7 J	1.4 J	19 J	31 J	320

February 24, 2012

IBM Corporation

28-1

**Groundwater Analytical Chemistry Data**  
**6 NYCRR Part 373 Permit No. 7-4930-00095/00005, Owego, New York**

January 1, 2011 - December 31, 2011

Sample Location	415	415	415	521	521	522
Sample Description	GW EXTR WELL	GW EXTR WELL	GW EXTR WELL	GW MON WELL	GW MON WELL	GW MON WELL
Sample Date	04/25/2011	07/22/2011	10/20/2011	04/21/2011	10/18/2011	01/24/2011
Laboratory Sample I.D.	6269712	6354247	6446273	6267658	6446231	6193078
Sample Comment Codes				P	P	P

Parameter	Units	415	415	415	521	521	522
<b>Indicator Parameters</b>							
PH	SU	6.83	6.78	6.71	7.03	7.01	6.06
SPECIFIC CONDUCTANCE	umhos/cm	5390	4730	5180	2276	2383	2232
TEMPERATURE	C	15.8	18.3	16.6	15.2	12.7	9.5
TURBIDITY	NTU	2.37	1.19	3.13	2.85	1.06	2.70
<b>Volatile Organics</b>							
1,1,1-TRICHLOROETHANE	ug/l	2100	2500	2400	91	110	91
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	190	270	160	9.8	9.6	8.5
1,1,2-TRICHLOROETHANE	ug/l	14 J	14 J	14 J	ND@1	ND@1	ND@1
1,1-DICHLOROETHANE	ug/l	1700	2100	1800	310	410	290
1,1-DICHLOROETHENE	ug/l	1200	1700	1300	23	26	20
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@50	21 J	ND@50	5.1	8	4.7
1,2-DICHLOROETHANE	ug/l	ND@50	ND@50	ND@50	ND@1	ND@1	ND@1
CHLOROETHANE	ug/l	ND@50	ND@50	ND@50	1.3	1.8	1.1
CHLOROFORM (TRICHLOROMETHANE)	ug/l	ND@50	ND@50	ND@50	ND@1	ND@1	ND@1
CIS-1,2-DICHLOROETHENE	ug/l	3700	5100	3900	20	23	17
DICHLORODIFLUOROMETHANE (FREON 12)	ug/l	ND@50	ND@50	ND@50	ND@1	ND@1	ND@1
METHYLENE CHLORIDE (DICHLOROMETHANE)	ug/l	ND@50	ND@50	ND@50	ND@1	ND@1	ND@1
TETRACHLOROETHENE	ug/l	33 J	43 J	33 J	ND@1	ND@1	ND@1
TRICHLOROETHENE	ug/l	780	1300	1000	2.6	1.5	5.7
TRICHLOROFLUOROMETHANE (FREON 11)	ug/l	ND@50	ND@50	ND@50	ND@1	ND@1	ND@1
VINYL CHLORIDE	ug/l	150	270	190	6.8	13	5.7

February 24, 2012

IBM Corporation

29-1

**Groundwater Analytical Chemistry Data**  
**6 NYCRR Part 373 Permit No. 7-4930-00095/00005, Owego, New York**

January 1, 2011 - December 31, 2011

Sample Location	522	522	522	524	524	529
Sample Description	GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL
Sample Date	04/21/2011	07/25/2011	10/18/2011	04/21/2011	10/18/2011	01/25/2011
Laboratory Sample I.D.	6267664	6357664	6446233	6267665	6446245	6193084
Sample Comment Codes	P	P	P	P	P	P

Parameter	Units	522	522	522	524	524	529
<b>Indicator Parameters</b>							
PH	SU	6.98	6.87	7.06	7.45	7.11	5.65
SPECIFIC CONDUCTANCE	umhos/cm	2205	2169	2241	1998	2116	783
TEMPERATURE	C	9.8	14.9	11.9	9.1	11.7	8.5
TURBIDITY	NTU	1.59	0.37	0.78	2.17	0.90	1.48
<b>Volatile Organics</b>							
1,1,1-TRICHLOROETHANE	ug/l	160	94	130	ND@0.5	ND@0.5	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	16	11	15	ND@0.5	ND@0.5	ND@0.5
1,1,2-TRICHLOROETHANE	ug/l	ND@1	ND@1	ND@1	ND@0.5	ND@0.5	ND@0.5
1,1-DICHLOROETHANE	ug/l	430	300	360	0.1 J	0.2 J	0.1 J
1,1-DICHLOROETHENE	ug/l	31	21	29	ND@0.5	ND@0.5	ND@0.5
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	6.8	5.2	7.1	ND@0.5	ND@0.5	ND@0.5
1,2-DICHLOROETHANE	ug/l	ND@1	ND@1	ND@1	ND@0.5	ND@0.5	ND@0.5
CHLOROETHANE	ug/l	1.1	1.0	1.1	ND@0.5	ND@0.5	ND@0.5
CHLOROFORM (TRICHLOROMETHANE)	ug/l	ND@1	ND@1	ND@1	ND@0.5	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHENE	ug/l	29	19	26	ND@0.5	ND@0.5	ND@0.5
DICHLORODIFLUOROMETHANE (FREON 12)	ug/l	ND@1	ND@1	ND@1	ND@0.5	ND@0.5	ND@0.5
METHYLENE CHLORIDE (DICHLOROMETHANE)	ug/l	ND@1	0.4 J	ND@1	ND@0.5	ND@0.5	ND@0.5
TETRACHLOROETHENE	ug/l	ND@1	ND@1	ND@1	ND@0.5	ND@0.5	ND@0.5
TRICHLOROETHENE	ug/l	13	7.8	14	ND@0.5	ND@0.5	ND@0.5
TRICHLOROFLUOROMETHANE (FREON 11)	ug/l	ND@1	ND@1	ND@1	ND@0.5	ND@0.5	ND@0.5
VINYL CHLORIDE	ug/l	6.7	5.7	6.1	ND@0.5	ND@0.5	ND@0.5

February 24, 2012

IBM Corporation

30-1

**Groundwater Analytical Chemistry Data**  
**6 NYCRR Part 373 Permit No. 7-4930-00095/00005, Owego, New York**

January 1, 2011 - December 31, 2011

Sample Location		529	529	529	532	532	532
Sample Description		GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL
Sample Date		04/21/2011	07/25/2011	10/18/2011	01/25/2011	04/21/2011	07/25/2011
Laboratory Sample I.D.		6267659	6357663	6446230	6194188	6267666	6357661
Sample Comment Codes		P	P	P	P	P	P
<b>Parameter</b>	<b>Units</b>						
<b>Indicator Parameters</b>							
PH	SU	7.22	6.90	7.09	5.88	7.24	6.66
SPECIFIC CONDUCTANCE	umhos/cm	984	914	922	1845	2008	1991
TEMPERATURE	C	11.0	19.0	15.7	7.7	7.6	17.0
TURBIDITY	NTU	3.83	0.81	1.20	1.60	1.52	1.02
<b>Volatile Organics</b>							
1,1,1-TRICHLOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	0.4 J	1.3	0.8
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	0.2 J	0.2 J	0.4 J	0.4 J	0.4 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-DICHLOROETHANE	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	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

February 24, 2012

IBM Corporation

31-1

**Groundwater Analytical Chemistry Data**  
**6 NYCRR Part 373 Permit No. 7-4930-00095/00005, Owego, New York**

January 1, 2011 - December 31, 2011

Sample Location		532	534	534	534	534	540
Sample Description		GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL
Sample Date		10/18/2011	01/24/2011	04/21/2011	07/25/2011	10/18/2011	01/26/2011
Laboratory Sample I.D.		6446246	6193077	6267661	6357665	6446229	6194206
Sample Comment Codes		P	P	P	P	P	P
<b>Parameter</b>	<b>Units</b>						
<b>Indicator Parameters</b>							
PH	SU	6.91	5.91	7.44	7.17	6.87	6.55
SPECIFIC CONDUCTANCE	umhos/cm	2013	1923	1527	1763	1846	751
TEMPERATURE	C	13.6	6.5	11.0	20.9	16.1	9.7
TURBIDITY	NTU	1.07	4.12	2.58	1.29	1.72	2.03
<b>Volatile Organics</b>							
1,1,1-TRICHLOROETHANE	ug/l	3.4	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	0.8	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	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	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

February 24, 2012

IBM Corporation

32-1



**Groundwater Analytical Chemistry Data**  
**6 NYCRR Part 373 Permit No. 7-4930-00095/00005, Owego, New York**

January 1, 2011 - December 31, 2011

Sample Location	540	541	541	542	542	543	
Sample Description	GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL	
Sample Date	07/18/2011	01/26/2011	07/18/2011	01/26/2011	07/18/2011	01/26/2011	
Laboratory Sample I.D.	6350110	6194207	6350108	6194208	6350109	6194205	
Sample Comment Codes	P	P	P	P	P	P	
<b>Parameter</b>	<b>Units</b>						
<b>Indicator Parameters</b>							
PH	SU	7.43	5.58	6.46	6.30	7.01	5.57
SPECIFIC CONDUCTANCE	umhos/cm	743	1314	1352	875	788	2480
TEMPERATURE	C	13.6	8.9	14.5	9.2	15.6	8.2
TURBIDITY	NTU	0.68	1.61	1.19	1.67	0.89	3.23
<b>Volatile Organics</b>							
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	1.4
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	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	1.8
1,2-DICHLOROETHANE	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	2.1
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	2.1	2.7	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	1.2	1.0	ND@0.5

February 24, 2012

IBM Corporation

33-1

**Groundwater Analytical Chemistry Data**  
**6 NYCRR Part 373 Permit No. 7-4930-00095/00005, Owego, New York**

January 1, 2011 - December 31, 2011

Sample Location	543	601	601	602	602	603	
Sample Description	GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL	
Sample Date	07/18/2011	04/22/2011	10/19/2011	04/22/2011	10/18/2011	04/22/2011	
Laboratory Sample I.D.	6350111	6267682	6446249	6267680	6446237	6267677	
Sample Comment Codes	P	P	P	P	P	P	
<b>Parameter</b>	<b>Units</b>						
<b>Indicator Parameters</b>							
PH	SU	6.59	6.68	7.11	6.68	7.18	6.74
SPECIFIC CONDUCTANCE	umhos/cm	1664	2129	2520	1918	849	118
TEMPERATURE	C	14.3	7.4	14.2	7.9	11.6	7.5
TURBIDITY	NTU	0.73	1.73	1.13	1.60	0.97	1.7
<b>Volatile Organics</b>							
1,1,1-TRICHLOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	3.4	0.4 J	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	1.6	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	0.8	1.2	1.3	0.1 J	ND@0.5
1,1-DICHLOROETHENE	ug/l	ND@0.5	ND@0.5	ND@0.5	1.0	ND@0.5	ND@0.5
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	2.4	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,2-DICHLOROETHANE	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	2.1	ND@0.5	ND@0.5	0.7	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	0.1 J	0.2 J	14	0.9	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

February 24, 2012

IBM Corporation

34-1

**Groundwater Analytical Chemistry Data**  
**6 NYCRR Part 373 Permit No. 7-4930-00095/00005, Owego, New York**

January 1, 2011 - December 31, 2011

Sample Location		603	604	604	605	606	606
Sample Description		GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL
Sample Date		10/19/2011	04/21/2011	10/19/2011	04/21/2011	01/25/2011	04/20/2011
Laboratory Sample I.D.		6446251	6267650	6446264	6267651	6193086	6266793
Sample Comment Codes		P	P	P	P	P	P
<b>Parameter</b>	<b>Units</b>						
<b>Indicator Parameters</b>							
PH	SU	6.96	6.28	6.11	6.35	5.55	6.49
SPECIFIC CONDUCTANCE	umhos/cm	413	3305	4002	1294	8400	1826
TEMPERATURE	C	13.9	13.2	14.6	13.4	10.1	12.4
TURBIDITY	NTU	1.27	1.59	1.46	3.73	1.86	2.00
<b>Volatile Organics</b>							
1,1,1-TRICHLOROETHANE	ug/l	0.5 J	ND@0.5	ND@0.5	ND@0.5	21	5.4
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	1.1	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	0.4 J	ND@0.5	ND@0.5	ND@0.5	7.1	1.9
1,1-DICHLOROETHENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	6.0	1.8
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	0.4 J	ND@0.5
1,2-DICHLOROETHANE	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	0.1 J	ND@0.5
CIS-1,2-DICHLOROETHENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	1.8	0.7
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	0.6	ND@0.5	ND@0.5	0.9	14	2.8
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	ND@0.5	ND@0.5

February 24, 2012

IBM Corporation

35-1

**Groundwater Analytical Chemistry Data**  
**6 NYCRR Part 373 Permit No. 7-4930-00095/00005, Owego, New York**

January 1, 2011 - December 31, 2011

Sample Location		606	606	607	607	607	607
Sample Description		GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL
Sample Date		07/25/2011	10/18/2011	01/25/2011	04/20/2011	07/25/2011	10/18/2011
Laboratory Sample I.D.		6357667	6446241	6193087	6267643	6357668	6446242
Sample Comment Codes		P	P	P	P	P	P
<b>Parameter</b>	<b>Units</b>						
<b>Indicator Parameters</b>							
PH	SU	6.27	6.67	6.29	7.12	6.29	7.06
SPECIFIC CONDUCTANCE	umhos/cm	5700	2047	1059	1653	1270	1676
TEMPERATURE	C	14.1	11.1	10.9	12.3	14.9	11.3
TURBIDITY	NTU	0.43	0.99	2.39	2.19	0.45	0.73
<b>Volatile Organics</b>							
1,1,1-TRICHLOROETHANE	ug/l	50	13	9.1	4.4	56	15
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	2.2	0.9	0.4 J	0.2 J	2.3	0.7
1,1,2-TRICHLOROETHANE	ug/l	0.2 J	ND@0.5	ND@0.5	ND@0.5	0.2 J	ND@0.5
1,1-DICHLOROETHANE	ug/l	23	2.9	5.5	3.5	22	7.1
1,1-DICHLOROETHENE	ug/l	22	3.3	4.7	2.3	21	6.7
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	1.1	0.2 J	ND@0.5	ND@0.5	1	0.3 J
1,2-DICHLOROETHANE	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	0.2 J	ND@0.5
CHLOROFORM (TRICHLOROMETHANE)	ug/l	0.3 J	ND@0.5	ND@0.5	ND@0.5	0.3 J	ND@0.5
CIS-1,2-DICHLOROETHENE	ug/l	9.5	1.0	1.2	0.6	9.9	2.1
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	35	12	13	9.3	46	21
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	1.3	0.2 J	0.5 J	0.2 J	1.5	0.4 J

February 24, 2012

IBM Corporation

36-1

**Groundwater Analytical Chemistry Data**  
**6 NYCRR Part 373 Permit No. 7-4930-00095/00005, Owego, New York**

January 1, 2011 - December 31, 2011

Sample Location		608	608	609	610	610	611
Sample Description		GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL
Sample Date		04/22/2011	10/19/2011	04/20/2011	04/20/2011	10/18/2011	04/20/2011
Laboratory Sample I.D.		6267681	6446250	6266788	6266784	6446223	6266785
Sample Comment Codes		P	P	P	P	P	
<b>Parameter</b>	<b>Units</b>						
<b>Indicator Parameters</b>							
PH	SU	7.02	6.86	6.94	5.12	5.54	6.59
SPECIFIC CONDUCTANCE	umhos/cm	1551	2274	2135	11060	7680	24060
TEMPERATURE	C	8.8	14.2	13.1	12.6	14.8	9.8
TURBIDITY	NTU	1.37	1.14	1.83	3.24	0.92	1.69
<b>Volatile Organics</b>							
1,1,1-TRICHLOROETHANE	ug/l	1.7	16	3000	190	220	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	0.9	440	14	15	ND@0.5
1,1,2-TRICHLOROETHANE	ug/l	ND@0.5	ND@0.5	ND@5	3.2	3.1	ND@0.5
1,1-DICHLOROETHANE	ug/l	6.7	17	3100	98	93	1.8
1,1-DICHLOROETHENE	ug/l	1.8	9.1	150	100	130	0.1 J
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	0.5 J	1.1	58	1.4	1.5	ND@0.5
1,2-DICHLOROETHANE	ug/l	ND@0.5	ND@0.5	1.5 J	1.2	1.3	ND@0.5
CHLOROETHANE	ug/l	ND@0.5	0.5	2.3 J	0.1 J	0.1 J	ND@0.5
CHLOROFORM (TRICHLOROMETHANE)	ug/l	ND@0.5	ND@0.5	ND@5	0.9	1.0	ND@0.5
CIS-1,2-DICHLOROETHENE	ug/l	3.7	5.4	130	86	82	0.4 J
DICHLORODIFLUOROMETHANE (FREON 12)	ug/l	ND@0.5	ND@0.5	ND@5	ND@0.5	ND@0.5	ND@0.5
METHYLENE CHLORIDE (DICHLOROMETHANE)	ug/l	ND@0.5	ND@0.5	ND@5	4.1	3.6	ND@0.5
TETRACHLOROETHENE	ug/l	ND@0.5	ND@0.5	ND@5	18	22	ND@0.5
TRICHLOROETHENE	ug/l	4.2	36	200	250	290	0.7
TRICHLOROFLUOROMETHANE (FREON 11)	ug/l	ND@0.5	ND@0.5	ND@5	ND@0.5	ND@0.5	ND@0.5
VINYL CHLORIDE	ug/l	1.3	2.0	12	0.7	0.6	0.1 J

February 24, 2012

IBM Corporation

37-1

**Groundwater Analytical Chemistry Data**  
**6 NYCRR Part 373 Permit No. 7-4930-00095/00005, Owego, New York**

January 1, 2011 - December 31, 2011

Sample Location		611	612	612	613	613	614
Sample Description		GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL
Sample Date		10/18/2011	04/20/2011	10/18/2011	04/20/2011	10/18/2011	07/20/2011
Laboratory Sample I.D.		6446224	6266786	6446225	6266787	6446226	6353365
Sample Comment Codes			P	P	P	P	P
<b>Parameter</b>	<b>Units</b>						
<b>Indicator Parameters</b>							
PH	SU	6.79	6.02	5.95	5.44	5.31	7.48
SPECIFIC CONDUCTANCE	umhos/cm	11100	6050	5390	8260	9200	414
TEMPERATURE	C	15.4	13.1	15.0	13.2	13.4	11.4
TURBIDITY	NTU	6.43	1.83	1.61	1.88	1.04	0.66
<b>Volatile Organics</b>							
1,1,1-TRICHLOROETHANE	ug/l	ND@0.5	370	390	250	260	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	10	9.4	8.2	7.6	ND@0.5
1,1,2-TRICHLOROETHANE	ug/l	ND@0.5	2.9 J	2.8 J	2.1 J	2.0 J	ND@0.5
1,1-DICHLOROETHANE	ug/l	1.9	150	140	140	140	0.2 J
1,1-DICHLOROETHENE	ug/l	0.1 J	150	140	100	100	ND@0.5
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	2.2 J	2.3 J	2.0 J	2.0 J	ND@0.5
1,2-DICHLOROETHANE	ug/l	ND@0.5	2.7 J	2.7 J	1.7 J	1.7 J	ND@0.5
CHLOROETHANE	ug/l	ND@0.5	2.6 J	2.9 J	2.5	2.3 J	ND@0.5
CHLOROFORM (TRICHLOROMETHANE)	ug/l	ND@0.5	ND@5	ND@5	0.6 J	0.6 J	ND@0.5
CIS-1,2-DICHLOROETHENE	ug/l	0.7	160	150	140	130	0.4 J
DICHLORODIFLUOROMETHANE (FREON 12)	ug/l	ND@0.5	ND@5	ND@5	ND@2.5	ND@2.5	ND@0.5
METHYLENE CHLORIDE (DICHLOROMETHANE)	ug/l	ND@0.5	13	12	6.7	6.4	ND@0.5
TETRACHLOROETHENE	ug/l	ND@0.5	3.8 J	3.9 J	11	9.8	ND@0.5
TRICHLOROETHENE	ug/l	0.9	850	860	490	490	ND@0.5
TRICHLOROFLUOROMETHANE (FREON 11)	ug/l	ND@0.5	ND@5	ND@5	ND@2.5	ND@2.5	ND@0.5
VINYL CHLORIDE	ug/l	0.1 J	9.9	9.6	8.0	8.2	ND@0.5

February 24, 2012

IBM Corporation

38-1

**Groundwater Analytical Chemistry Data**  
**6 NYCRR Part 373 Permit No. 7-4930-00095/00005, Owego, New York**

January 1, 2011 - December 31, 2011

Sample Location		615	616	616	617	617	618
Sample Description		GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL
Sample Date		04/22/2011	04/20/2011	10/19/2011	04/20/2011	10/18/2011	04/20/2011
Laboratory Sample I.D.		6267679	6266789	6446267	6266791	6446227	6266792
Sample Comment Codes		P	P	P	P	P	P
<b>Parameter</b>	<b>Units</b>						
<b>Indicator Parameters</b>							
PH	SU	6.90	6.69	6.82	7.02	6.78	7.00
SPECIFIC CONDUCTANCE	umhos/cm	1809	621	595	1390	836	470
TEMPERATURE	C	10.3	12.8	13.2	12.8	14.0	8.3
TURBIDITY	NTU	1.61	2.06	3.07	1.63	1.24	2.36
<b>Volatile Organics</b>							
1,1,1-TRICHLOROETHANE	ug/l	0.6	0.1 J	0.2 J	0.1 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	0.3 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	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	ND@0.5	0.6	0.6	ND@0.5	ND@0.5	14
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

February 24, 2012

IBM Corporation

39-1

**Groundwater Analytical Chemistry Data**  
**6 NYCRR Part 373 Permit No. 7-4930-00095/00005, Owego, New York**

January 1, 2011 - December 31, 2011

Sample Location		618	619	621	621	622	622
Sample Description		GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL
Sample Date		10/18/2011	07/19/2011	01/24/2011	07/19/2011	01/24/2011	07/19/2011
Laboratory Sample I.D.		6446234	6350125	6193073	6350123	6193074	6350124
Sample Comment Codes		P	P	P	P	P	P
<b>Parameter</b>	<b>Units</b>						
<b>Indicator Parameters</b>							
PH	SU	6.95	7.34	5.11	6.09	5.54	6.13
SPECIFIC CONDUCTANCE	umhos/cm	493	1439	2786	2960	2878	3108
TEMPERATURE	C	10.2	18.8	9.9	13.6	11.1	14.0
TURBIDITY	NTU	1.24	0.64	2.49	0.91	2.10	2.28
<b>Volatile Organics</b>							
1,1,1-TRICHLOROETHANE	ug/l	ND@0.5	590	130	87	34	65
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	51	5.0	4.3	0.8	2.1
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	550	130	82	66	74
1,1-DICHLOROETHENE	ug/l	ND@0.5	87	12	7.9	3.8	5.3
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	5.3	2.3	1.6	1.5	1.5
1,2-DICHLOROETHANE	ug/l	ND@0.5	2.1 J	0.3 J	0.2 J	0.2 J	0.2 J
CHLOROETHANE	ug/l	ND@0.5	1.5 J	0.3 J	0.2 J	0.3 J	0.2 J
CHLOROFORM (TRICHLOROMETHANE)	ug/l	ND@0.5	ND@5	0.2 J	0.2 J	0.2 J	0.2 J
CIS-1,2-DICHLOROETHENE	ug/l	ND@0.5	1.1 J	0.1 J	0.1 J	ND@0.5	ND@0.5
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	16	8.2	2.6	2.4	1.1	1.9
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	1.8 J	ND@0.5	ND@0.5	0.1 J	ND@0.5

February 24, 2012

IBM Corporation

40-1

**Groundwater Analytical Chemistry Data**  
**6 NYCRR Part 373 Permit No. 7-4930-00095/00005, Owego, New York**

January 1, 2011 - December 31, 2011

Sample Location		623	624	625	625	625	625
Sample Description		GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL
Sample Date		07/21/2011	07/21/2011	01/24/2011	04/25/2011	07/19/2011	10/18/2011
Laboratory Sample I.D.		6354243	6354244	6193066	6269699	6350116	6446243
Sample Comment Codes		P	P	P	P	P	P
<b>Parameter</b>	<b>Units</b>						
<b>Indicator Parameters</b>							
PH	SU	6.85	6.28	6.40	7.44	7.32	7.40
SPECIFIC CONDUCTANCE	umhos/cm	4139	1872	725	594	550	644
TEMPERATURE	C	13.7	12.8	6.2	11.7	14.3	10.0
TURBIDITY	NTU	0.56	0.32	8.52	1.83	1.58	1.30
<b>Volatile Organics</b>							
1,1,1-TRICHLOROETHANE	ug/l	34	52	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	0.9	1.6	0.8	0.3 J	1.3	0.7
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	22	44	3.7	3.5	3.9	1.1
1,1-DICHLOROETHENE	ug/l	1.6	5.6	0.1 J	ND@0.5	0.3 J	ND@0.5
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	0.6	0.8	21	13	23	7.9
1,2-DICHLOROETHANE	ug/l	ND@0.5	0.2 J	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CHLOROETHANE	ug/l	ND@0.5	0.1 J	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CHLOROFORM (TRICHLOROMETHANE)	ug/l	ND@0.5	0.2 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	9.7	2.4	22	2.1
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	1.5	3.1	0.5	0.2 J	0.8	0.3 J
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	34	15	49	21

February 24, 2012

IBM Corporation

41-1

**Groundwater Analytical Chemistry Data**  
**6 NYCRR Part 373 Permit No. 7-4930-00095/00005, Owego, New York**

January 1, 2011 - December 31, 2011

Sample Location		626	626	627	627	628	629
Sample Description		GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL
Sample Date		01/24/2011	07/19/2011	01/26/2011	07/20/2011	07/20/2011	07/20/2011
Laboratory Sample I.D.		6193067	6350117	6194198	6353360	6353361	6353371
Sample Comment Codes		P	P	P	P	P	P
<b>Parameter</b>	<b>Units</b>						
<b>Indicator Parameters</b>							
PH	SU	6.55	7.38	5.88	6.12	7.15	7.27
SPECIFIC CONDUCTANCE	umhos/cm	651	515	500	407	548	359
TEMPERATURE	C	9.4	13.4	7.8	13.1	12.0	13.7
TURBIDITY	NTU	6.27	0.71	1.32	0.68	0.63	0.44
<b>Volatile Organics</b>							
1,1,1-TRICHLOROETHANE	ug/l	ND@0.5	ND@0.5	0.5 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	4.3	2.6	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	0.1 J	0.7	0.4 J	0.3 J	ND@0.5
1,1-DICHLOROETHENE	ug/l	ND@0.5	ND@0.5	0.3 J	0.2 J	ND@0.5	ND@0.5
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	0.7	ND@0.5	3.7	1.7	0.2 J	ND@0.5
1,2-DICHLOROETHANE	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	1.6	0.9	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHENE	ug/l	0.7	0.5	12	9.0	2.4	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	1.2	ND@0.5	ND@0.5
TRICHLOROETHENE	ug/l	0.2 J	ND@0.5	34	27	0.4 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	0.2 J	ND@0.5	0.3 J	ND@0.5

February 24, 2012

IBM Corporation

42-1

**Groundwater Analytical Chemistry Data**  
**6 NYCRR Part 373 Permit No. 7-4930-00095/00005, Owego, New York**

January 1, 2011 - December 31, 2011

Sample Location		630	631	631	632	632	P04
Sample Description		GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL	GW MON WELL
Sample Date		07/20/2011	01/26/2011	07/21/2011	01/25/2011	07/21/2011	04/20/2011
Laboratory Sample I.D.		6353372	6194204	6354231	6193082	6354236	6266777
Sample Comment Codes		P	P	P	P	P	P
<b>Parameter</b>	<b>Units</b>						
<b>Indicator Parameters</b>							
PH	SU	7.37	6.04	6.61	4.83	6.07	7.13
SPECIFIC CONDUCTANCE	umhos/cm	755	407	293	1355	1020	397
TEMPERATURE	C	13.5	9.2	14.0	9.1	15.7	9.1
TURBIDITY	NTU	0.66	3.55	0.72	2.43	0.45	1.62
<b>Volatile Organics</b>							
1,1,1-TRICHLOROETHANE	ug/l	2.8	0.6	0.1 J	ND@0.5	3.6	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	0.6	0.2 J	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1-DICHLOROETHENE	ug/l	0.9	ND@0.5	ND@0.5	ND@0.5	0.2 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	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	2.9	2.0	0.1 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	3.8	5.2	1.1	ND@0.5	2.6	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

February 24, 2012

IBM Corporation

43-1

**Groundwater Analytical Chemistry Data**  
**6 NYCRR Part 373 Permit No. 7-4930-00095/00005, Owego, New York**

January 1, 2011 - December 31, 2011

Sample Location		P08	P11
Sample Description		GW MON WELL	GW MON WELL
Sample Date		07/19/2011	07/18/2011
Laboratory Sample I.D.		6350126	6350113
Sample Comment Codes		P	P
<b>Parameter</b>	<b>Units</b>		
<b>Indicator Parameters</b>			
PH	SU	7.58	7.01
SPECIFIC CONDUCTANCE	umhos/cm	1513	1197
TEMPERATURE	C	21.8	18.2
TURBIDITY	NTU	0.48	0.94
<b>Volatile Organics</b>			
1,1,1-TRICHLOROETHANE	ug/l	68	34
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	15	3.6
1,1,2-TRICHLOROETHANE	ug/l	ND@0.5	ND@0.5
1,1-DICHLOROETHANE	ug/l	170	55
1,1-DICHLOROETHENE	ug/l	13	4.5
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	3.8	1.5
1,2-DICHLOROETHANE	ug/l	0.3 J	0.1 J
CHLOROETHANE	ug/l	0.9	0.5 J
CHLOROFORM (TRICHLOROMETHANE)	ug/l	1.0	0.5 J
CIS-1,2-DICHLOROETHENE	ug/l	0.2 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	0.2 J	0.5 J
TRICHLOROFLUOROMETHANE (FREON 11)	ug/l	ND@0.5	ND@0.5
VINYL CHLORIDE	ug/l	0.2 J	ND@0.5

February 24, 2012

IBM Corporation

44-1

**Groundwater Analytical Chemistry Data**  
**6 NYCRR Part 373 Permit No. 7-4930-00095/00005, Owego, New York**  
January 1, 2011 - December 31, 2011

**Explanation of Reporting Conventions and Key to Comment Codes**

**Reporting Conventions**

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

**Code      Explanation**

E	Concentration exceeds the calibration range of the GC/MS instrument
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**

**QUALITY CONTROL ANALYTICAL CHEMISTRY DATA  
FOR ENVIRONMENTAL BLANKS  
January 1, 2011 – December 31, 2011**

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**Quality Control Analytical Chemistry Data**  
**6 NYCRR Part 373 Permit No. 7-4930-00095/00005, Owego, New York**

January 1, 2011 - December 31, 2011

Sample Location	EQ RINSE BLK	EQ RINSE BLK	EQ RINSE BLK	EQ RINSE BLK	EQ RINSE BLK	EQ RINSE BLK
Sample Description	WTR LVL IND	WTR LVL IND	WTR LVL IND	WTR LVL IND	WTR LVL IND	WTR LVL IND
Sample Date	01/21/2011	01/24/2011	01/25/2011	01/26/2011	04/20/2011	04/21/2011
Laboratory Sample I.D.	6189827	6193069	6193079	6194200	6266776	6267662
Sample Comment Codes						

Parameter	Units	EQ RINSE BLK	EQ RINSE BLK	EQ RINSE BLK	EQ RINSE BLK	EQ RINSE BLK	EQ RINSE BLK
<b>Volatile Organics</b>							
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	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	0.8	0.8	0.8	0.8	ND@0.5	0.2 J
TETRACHLOROETHENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TRICHLOROETHENE	ug/l	0.2 J	0.3 J	0.2 J	0.2 J	0.4 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	ND@0.5	ND@0.5

February 24, 2012

IBM Corporation

1-1

**Quality Control Analytical Chemistry Data**  
**6 NYCRR Part 373 Permit No. 7-4930-00095/00005, Owego, New York**

January 1, 2011 - December 31, 2011

Sample Location	EQ RINSE BLK	EQ RINSE BLK	EQ RINSE BLK	EQ RINSE BLK	EQ RINSE BLK	EQ RINSE BLK
Sample Description	WTR LVL IND	WTR LVL IND	WTR LVL IND	WTR LVL IND	WTR LVL IND	WTR LVL IND
Sample Date	04/22/2011	04/25/2011	07/18/2011	07/19/2011	07/20/2011	07/21/2011
Laboratory Sample I.D.	6267678	6269700	6350112	6350127	6353356	6354232
Sample Comment Codes						

Parameter	Units	EQ RINSE BLK	EQ RINSE BLK	EQ RINSE BLK	EQ RINSE BLK	EQ RINSE BLK	EQ RINSE BLK
<b>Volatile Organics</b>							
1,1,1-TRICHLOROETHANE	ug/l	ND@0.5	ND@0.5	0.2 J	0.3 J	0.2 J	0.1 J
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	0.3 J	ND@0.5	ND@0.5	0.3 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	ND@0.5	ND@0.5	0.3 J	0.3 J	0.2 J	0.2 J
1,1-DICHLOROETHENE	ug/l	ND@0.5	ND@0.5	0.1 J	0.1 J	ND@0.5	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	ND@0.5
1,2-DICHLOROETHANE	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	0.4 J	0.4 J	0.3 J	0.3 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	0.3 J	0.3 J	ND@0.5	ND@0.5	ND@0.5	0.4 J
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	1.6	1.6	1.3	1.4
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

February 24, 2012

IBM Corporation

2-1

**Quality Control Analytical Chemistry Data**  
**6 NYCRR Part 373 Permit No. 7-4930-00095/00005, Owego, New York**

January 1, 2011 - December 31, 2011

Sample Location	EQ RINSE BLK	EQ RINSE BLK	EQ RINSE BLK	EQ RINSE BLK	EQ RINSE BLK	EQ RINSE BLK
Sample Description	WTR LVL IND	WTR LVL IND	WTR LVL IND	WTR LVL IND	WTR LVL IND	WTR LVL IND
Sample Date	07/22/2011	07/25/2011	10/17/2011	10/18/2011	10/19/2011	10/20/2011
Laboratory Sample I.D.	6354245	6357662	6446219	6446228	6446262	6446276
Sample Comment Codes						

Parameter	Units						
<b>Volatile Organics</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	0.2 J	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	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	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	0.3 J	0.3 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	0.4 J	0.2 J	0.5	0.5	0.6	0.6
TETRACHLOROETHENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TRICHLOROETHENE	ug/l	1.3	1.3	0.2 J	0.1 J	0.2 J	0.2 J
TRICHLOROFUOROMETHANE (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

February 24, 2012

IBM Corporation

3-1

**Quality Control Analytical Chemistry Data**  
**6 NYCRR Part 373 Permit No. 7-4930-00095/00005, Owego, New York**

January 1, 2011 - December 31, 2011

Sample Location	TRIP BLANK	TRIP BLANK	TRIP BLANK	TRIP BLANK	TRIP BLANK	TRIP BLANK
Sample Description	1/21-1/22	1/24-1/27	1/25-1/28	1/26-1/28	4/20-4/22	4/20-4/22
Sample Date	01/21/2011	01/24/2011	01/25/2011	01/26/2011	04/20/2011	04/20/2011
Laboratory Sample I.D.	6189821	6193063	6194185	6194180	6266769	6266790
Sample Comment Codes						

Parameter	Units						
<b>Volatile Organics</b>							
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	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	0.8	0.8	0.8	0.8	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	0.2 J	0.2 J	0.2 J	0.3 J	0.4 J	0.4 J
TRICHLOROFUOROMETHANE (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

February 24, 2012

IBM Corporation

4-1

**Quality Control Analytical Chemistry Data**  
**6 NYCRR Part 373 Permit No. 7-4930-00095/00005, Owego, New York**

January 1, 2011 - December 31, 2011

Sample Location	TRIP BLANK	TRIP BLANK	TRIP BLANK	TRIP BLANK	TRIP BLANK	TRIP BLANK
Sample Description	4/21-4/23	4/22-4/23	4/25-4/27	7/18-7/20	7/19-7/22	7/20-7/23
Sample Date	04/21/2011	04/22/2011	04/25/2011	07/18/2011	07/19/2011	07/20/2011
Laboratory Sample I.D.	6267660	6267669	6269698	6350107	6353351	6354227
Sample Comment Codes						

Parameter	Units					
<b>Volatile Organics</b>						
1,1,1-TRICHLOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	0.2 J	0.3 J
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
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	0.3 J	0.3 J
1,1-DICHLOROETHENE	ug/l	ND@0.5	ND@0.5	ND@0.5	0.1 J	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@0.5
1,2-DICHLOROETHANE	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	0.4 J	0.4 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	0.2 J	0.3 J	0.3 J	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	0.1 J	0.1 J	1.6	1.7
TRICHLOROFUOROMETHANE (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

February 24, 2012

IBM Corporation

5-1

**Quality Control Analytical Chemistry Data**  
**6 NYCRR Part 373 Permit No. 7-4930-00095/00005, Owego, New York**

January 1, 2011 - December 31, 2011

Sample Location	TRIP BLANK	TRIP BLANK	TRIP BLANK	TRIP BLANK	TRIP BLANK
Sample Description	7/21-7/23	7/25-7/27	10/17-10/21	10/18-10/21	10/19-10/21
Sample Date	07/21/2011	07/25/2011	10/17/2011	10/18/2011	10/19/2011
Laboratory Sample I.D.	6354238	6357660	6446215	6446239	6446263
Sample Comment Codes					

Parameter	Units					
<b>Volatile Organics</b>						
1,1,1-TRICHLOROETHANE	ug/l	0.1 J	0.1 J	ND@0.5	ND@0.5	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	0.2 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
1,1-DICHLOROETHANE	ug/l	0.2 J	0.2 J	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
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	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	0.3 J	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
METHYLENE CHLORIDE (DICHLOROMETHANE)	ug/l	0.4 J	0.2 J	0.5	0.5 J	0.5
TETRACHLOROETHENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TRICHLOROETHENE	ug/l	1.3	1.4	0.2 J	0.2 J	0.2 J
TRICHLOROFUOROMETHANE (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

February 24, 2012

IBM Corporation

6-1

**Quality Control Analytical Chemistry Data**  
**6 NYCRR Part 373 Permit No. 7-4930-00095/00005, Owego, New York**  
January 1, 2011 - December 31, 2011

**Explanation of Reporting Conventions and Key to Comment Codes**

**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).