8976 Wellington Road
Manassas, VA 20109

March 30, 2016

George Heitzman
Division of Environmental Remediation
New York State Dept. of Environmental Conservation
625 Broadway, 11th Floor
Albany, NY 12233-7014

Re: Former IBM Kingston Facility (TechCity Site)
Site Number: 356002
Order on Consent Index: D3-10023-6-11
2015 Annual Groundwater Monitoring Report

Dear Mr. Heitzman:

Enclosed please find the 2015 Annual Groundwater Monitoring Report for the former IBM Kingston Facility (TechCity Site). In July 2011, the Part 373 RCRA for the Site was superseded by a Part 375 Order on Consent (Order). This groundwater monitoring report is being submitted per NYSDEC's request. Future groundwater monitoring reports will be included as part of the Periodic Review Reports once the Interim Site Management Plan is approved.

If you have any questions, please call Dean Chartrand at (703) 257-2583.

Sincerely yours,

M. E. Meyers
Manager, Environmental Remediation
Corporate Environmental Affairs

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Former IBM Kingston Facility (TechCity)
Site Number: 356002
Order on Consent Index: D3-10023-6-11

2015 ANNUAL GROUNDWATER MONITORING REPORT

Prepared for:

IBM Corporate Environmental Affairs
8976 Wellington Road
Manassas, VA 20109

March 30, 2016

Prepared by:

Groundwater Sciences Corporation

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111-TCA	1,1,1-Trichlorethane
112-TCA	1,1,2-Trichloroethane
11-DCA	1,1-Dichloroethane
11-DCE	1,1-Dichloroethene
12-DCA	1,2-Dichloroethane
12-DCBZ	1,2-Dichlorobenzene
12-DCE	1,2-Dichloroethene (total)
13-DCBZ	1,3-Dichlorobenzene
14-DCBZ	1,4-Dichlorobenzene
CBZ	Chlorobenzene
CEA	Chloroethane
CIS13-DCPRE	Cis-1,2-Dichloropropene
DCDFM	Dichlorodifluoromethane
DCM	Methylene Chloride (Dicholoromethane)
Freon® 113	1,1,2-Trichloro-1,2,2-Trifluoroethane
Freon® 123a	1,2-Dichloro-1,2,2-Trifluoroethane
PCE	Tetrachloroethene
TCE	Trichloroethylene
TCM	Chloroform (Trichloromethane)
VC	Vinyl Chloride

1.0 INTRODUCTION

This Annual Groundwater Monitoring Report, prepared by Groundwater Sciences Corporation (GSC) on behalf of International Business Machines Corporation (IBM), presents the results of the groundwater monitoring and remediation system operation, maintenance, and monitoring activities conducted during the 2015 calendar year at the TechCity (Former IBM Kingston Site (the Site) located at 300 Enterprise Drive, Kingston, Ulster County, New York (see Figure 1-1).

The Site is listed as a Class 4 Site (Site # 356002) in the Registry of Inactive Hazardous Waste Disposal Sites in New York State and is managed in compliance with the Order on Consent (Order), Index # D3-10023-6-11, signed with New York State Department of Environmental Conservation (NYSDEC) by IBM and TechCity on July 8, 2011.

Section 2.0 of this report presents a Site overview. Section 3.0 reports the results of the inspections and maintenance of the closed former Industrial Waste Sludge Lagoon (IWSL). Section 4.0 includes a discussion of the analytical data for groundwater samples collected during the previous annual period (January 1, 2015 through December 31, 2015). Section 5.0 presents the results of the groundwater remediation system operations including a report on the contaminant recovery levels and treatment efficiency data. Section 6.0 provides a summary listing of reports on other activities completed. Section 7.0 provides reference listing of historical documents used in the preparation of this report.

2.0 SITE OVERVIEW

The following sections provide details on Site, including current Site conditions and the Site chronology.

2.1 Site Background

The Site is located north of the City of Kingston in the Town of Ulster, Ulster County, New York and is bounded by John M. Clarke Drive and Route 9W to the east, Old Neighborhood Road and Route 209 to the north, Esopus Creek to the west and Boices Lane to the south (see Figure 2-1).

The approximately 258-acre property was first developed by IBM from farmland during the 1950s. The primary activities included the manufacturing of electric typewriters and the development, manufacture and testing of computer systems and related components and technologies. IBM ceased operations during the early-1990s and the property was subsequently subdivided into multiple parcels. In 1998, IBM sold the Site to AG Properties of Kingston, LLC and Ulster Business Complex, LLC. The Site is currently managed by TechCity Properties, Inc. (TechCity).

The portion of the Site located east of Enterprise Drive is referred to as the East Campus and includes the majority of the buildings at the Site, many of which are vacant. The portion located west of Enterprise Drive is referred to as the West Campus and includes Buildings 201 (B201), Building 202 (B202) and Building 203 (B203); a large parking area south and west of this building complex; and generally undeveloped land further to the southwest and north of this building complex.

IBM completed extensive RCRA Facility Investigations (RFIs) beginning in the 1990s through 2002 to delineate the occurrence and extent of volatile organic compounds (VOCs) in groundwater beneath the Site. Beginning in 2008, IBM began and/or completed additional investigations of SWMUs that have become accessible as the result of TechCity's redevelopment activities.. Corrective Measures implemented by IBM include the operation and maintenance of a perimeter control system that intercepts the groundwater plume. The perimeter control system consists of two stormwater sewer systems; an unsaturated portion of the surficial sand unit that underlies the site; a utility trench barrier wall; and a groundwater collection system (see Figure 2-1).

The site was listed as a Class 4 Site (Site # 356002) in the Registry of Inactive Hazardous Waste Disposal Sites in New York State and was managed in compliance with the October 4, 1996 Hazardous Waste Management Permit #3-5154-00067/00090 (6 NYCRR Part 373) (RCRA Permit) until the Order on Consent (Order), Index # D3-10023-6-11, for Site 356002, was signed with New York State Department of Environmental Conservation (NYSDEC) by IBM and TechCity on July 8, 2011.

The Order, which supersedes and replaces the former RCRA Permit, divided the Site into ten Operable Units (OUs). The locations of the OUs are depicted in Figure 2-1. Table 2-1 presents a list of the OUs, including TechCity's proposed use for each OU, and which OUs remain listed as a Class 4 Inactive Hazardous Waste Disposal Site.

Table 2-1: Listing of Operable Units, Proposed Use and Status

Operable Unit	Proposed Use	Status
OU 1	Commercial	
OU 2	Commercial	
OU 3	Commercial	Included as part of the Class 4 Inactive Hazardous Waste Disposal Site # 356002
OU 3a	Commercial	Included as part of the Class 4 Inactive Hazardous Waste Disposal Site # 356002
OU 4	Restricted Residential	
OU 4a	Commercial	
OU 5	Commercial	Included as part of the Class 4 Inactive Hazardous Waste Disposal Site # 356002
OU 6	Commercial	
OU 7	Commercial	
OU 8	Commercial	

2.2 Generalized Geology

The Site is located within the Hudson-Mohawk Lowland Physiographic Province. The bedrock underlying the western portion of the Site consists of siltstone and shale of the Middle Devonian Age Lower Hamilton Group. The eastern portion of the Site is underlain by both the Lower Hamilton Group and the Lower Devonian Age Onondaga Limestone. The exact location and nature of the contact between these units is not known. The Lower Hamilton Group forms a north-northwest trending bedrock high approximately coincident with Enterprise Drive, and is described as a calcareous shale in boring logs completed during previous Site investigations.

Literature on regional geologic conditions indicate that a glacially-derived sand and gravel unit directly overlies the bedrock west of Enterprise Drive and a glacial till unit overlies the bedrock east of Enterprise Drive. These unconsolidated units are overlain by a varved silt and clay unit that is interpreted to be of lacustrine origin, with a thickness of zero feet in an area where it is absent proximate to the bedrock high, to over 180-feet in the central portion of East Campus as determined by previous Site borings. The clay portion of the varved silt and clay unit serves as an aquitard throughout most the Site, except in the localized area in the vicinity of the bedrock high where it is absent.

A well sorted, fine to coarse-grained sand of lacustrine origin, with intermittent, thin, silty-clay zones, overlies the varved silt and clay (or bedrock where the varved silt and clay is absent in the vicinity of the bedrock high). This surficial sand unit ranges in thickness across the Site from approximately 6-feet in the area of the bedrock ridge to greater than 30-feet in the central portion of the East Campus. A discontinuous transition zone of relatively fine-grained materials is present at the base of the surficial sand unit in some areas of the Site (GSC, 1997).

Generalized descriptions of the near-surface lithologic units encountered at the Site are as follows:

- **Surficial SAND Unit:** Consists of a light brown, fine to medium grained sand containing variable amounts of finer-grained silt and clay. This unit is typically saturated below a depth of approximately 6 to 7-feet below ground surface (ft bgs).
- **SILTY-SAND and CLAY Transition Unit:** Consists of variable amounts of reddish-brown to gray silt, sand, and clay. Typical appearance in a soil core is a silty-sand matrix

containing thin lenses of silt and sandy clay. This unit, if present, is generally encountered between 15 to 20-ft bgs in the vicinity of B001.

- **Varved CLAY Unit:** Consists of red-brown and gray, plastic, cohesive, wet clay with intermittent silt zones. Typical appearance in a soil core is clay with laminae of silt and sometimes very fine-grained sand. This unit is typically encountered at approximately 20 to 25-ft bgs in the B001 area, with greater or lesser depths of first occurrence in localized areas.

The thickness of the sand unit increases and the thickness of the transition unit decreases coinciding with a shallowing of the depth to top-of-clay along the western edge of a clay unit "valley" identified in the *RCRA Facility Investigation on Groundwater Plumes* report (GSC, 1997b). This valley is deepest below B001 and B003 (i.e., approximately 30 ft bgs to the top of the clay unit) and extends southward to the east of Building B025 (B025) and then west towards Boices Lane.

2.3 Generalized Hydrogeology

The varved clay unit serves as an aquitard throughout most the Site. Therefore groundwater in the bedrock and in the deep sand and gravel and glacial till units that underlie the varved silt and clay is under confined conditions. Groundwater within the surficial sand unit that overlies the varved silt and clay unit is unconfined. The surficial sand unit is typically unsaturated in the area of the bedrock high along Enterprise Drive.

The estimated horizontal hydraulic conductivity of the surficial sand unit ranges from approximately 65 feet per day (ft/day) to 270 ft/day (i.e., 2.3×10^{-2} centimeters per second [cm/sec] to 9.5×10^{-2} cm/sec), with an average hydraulic conductivity of approximately 100 ft/day [2.3×10^{-2} cm/sec]. The horizontal hydraulic conductivity of the varved silt and clay unit has been estimated at approximately one (1) foot per day [3.5×10^{-4} cm/sec]. The vertical hydraulic conductivity of this unit is likely significantly lower than its horizontal hydraulic conductivity due to the horizontal bedding structure. The low vertical hydraulic conductivity and thickness of the unit support the designation of the varved silt and clay as an aquitard.

3.0 FORMER INDUSTRIAL WASTE SLUDGE LAGOON AREA

The former Industrial Waste Sludge Lagoon (IWSL), designated as OU-5, was rectangular in shape, approximately 158 feet by 60 feet by 10 feet deep and covered an area of approximately 9,500 square feet (0.22 acres). As constructed in 1955, the lagoon was lined with a six inch layer of clay. In 1978, the sludge lagoon was reconstructed and lined with a 45 mil thick membrane liner with nylon reinforcement. Closure of the sludge lagoon commenced on December 1, 1984 in accordance with a NYSDEC approved closure plan. Sludge and solids were removed in addition to the liner.

Trace levels of residual constituents were left in place below the liner (i.e., below an elevation of 141 feet). Two feet of crushed limestone was place to an elevation of 143 feet. The lagoon was then backfilled with clean sand to within 6 inches of finished grade and covered with top soil and seeded. Certification of closure was provided to NYSDEC on June 12, 1985.

In addition to the groundwater monitoring network, OU-5 currently includes two other Engineering Control systems associated with the former IWSL that potentially require maintenance: the IWSL cover system and the security fence. The former IWSL is enclosed within an 8-foot high chain-link fence and all gates are locked except when in use. Warning signs are posted around the fence and bear the legend “Danger – Unauthorized Personnel Keep Out”.

The lagoon cover system and security fence were inspected quarterly in 2015. Routine maintenance activities were conducted to preserve the integrity and functionality of the soil cover system and included mowing and reseeding as necessary to maintain the grass cover on the closed unit. No repairs were required to either the chain-link security fence or the cover system during the previous annual period.

4.0 GROUNDWATER MONITORING RESULTS

An updated and revised Groundwater Monitoring Plan was approved by the NYSDEC on August 7, 2013 and was implemented during the third quarter 2013. The following sections detail the monitoring completed during the reporting period.

4.1 Summary of Field Activities

4.1.1 Groundwater Monitoring Well Sampling

No routine groundwater samples were collected during the reporting period. Non-routine samples were collected as part of the Solid Waste Management Unit S (SWMU S) In-Situ Thermal Desorption project and are reported on in other reports.

4.1.2 Physical Well Inventory and Maintenance

It should be noted that due to ongoing asbestos abatement work during 2015 many monitoring wells were inaccessible for measurements. Therefore, only accessible wells and piezometers, were inspected during the monitoring period. During each groundwater elevation measurement event, each accessible monitoring well was inspected for integrity in accordance with the Groundwater Monitoring System Inspection Plan.

4.1.3 Groundwater Elevation Measurements

In addition the GMP monitoring requirements, IBM measured water levels in the hydraulic effectiveness wells during the first, third and fourth quarters. In addition, a full round of water levels were collected in all accessible wells during the Physical Well Inventory which occurred during the second and into the third quarter. The results of each of these water level surveys were converted to groundwater elevations and are presented in Appendix B.

4.2 Groundwater Flow

Groundwater elevation measurements were used to generate groundwater elevation contour maps for the shallow water table aquifer underlying most of the developed portion of the site. Three groundwater elevation contour maps were prepared, one for the first, third and fourth quarters 2015, included as Figures 4-1 through Figure 4-3. An enlargement of the northern portion of the Site,

including the Groundwater Collection System (GWCS) and the installed trench extension, are included on these figures. Also shown on these figures are the locations of the storm sewer systems on the Site, the location of the GWCS trench (including the trench extension) and the utility trench barrier wall.

An east-west trending groundwater divide has been identified at the Site underlying B001, Building 002 (B002), B003, Building 004 (B004) and Building 005 (B005) (see Figures 4-1 through Figure 4-3). Groundwater to the north of the divide flows west and northwest. Groundwater to the south of the divide flows west and southwest. The water table gradient in the eastern portion of the Site and in the vicinity of the GWCS is reportedly higher than the water table gradient in the south and central portion of the Site, and estimated horizontal groundwater flow velocities range from approximately 0.8 ft/day to 2 ft/day (GSC, 1997b).

Groundwater flow is influenced by the presence of the perimeter control system (see Figures 4-1 through Figure 4-3), which is composed of:

- A 42-inch diameter storm sewer pipe that extends from east to west along a line south of B001 through B005, and then passes under Enterprise Drive to the south of B201.
- An unsaturated portion of the surficial sand unit that intersects the 42-inch storm sewer south of B201, and extends east-northeast back across Enterprise Drive, and then continues toward the north portion of the Site.
- The GWCS extends along the western and northern perimeter of the North Parking Lot Area. The GWCS is comprised of a set of groundwater cut-off trenches. Water collected in the trenches is treated via air stripping.
- A 60-inch diameter storm sewer pipe that intersects the GWCS and extends along the western portion of the North Parking Lot Area.
- A utility trench barrier wall, consisting of an approximately 250-foot long trench backfilled with clay with the base keyed into the Varved Clay Unit and the top of the barrier wall completed a minimum of two feet above the recorded high water table. This barrier wall

was installed to mitigate the potential for groundwater migration along the underground utility pipes which ultimately terminate at the former IWTF.

4.3 Chemical Constituents in Groundwater

Identified constituents of concern in the surficial sand aquifer include the following chlorinated VOCs: 1,1,1-trichloroethance [111-TCA], trichloroethene [TCE] and tetrachloroethene [PCE], and related degradation products (i.e., 1,1-dichloroethene [1,1-DCE], 1,1-dichloroethane [1,1-DCA], 1,2-cis-dichloroethene [1,2-DCE] and 1,2-dichloroethane [1,2-DCA]). Other VOCs have been detected in groundwater, including carbon tetrachloride, Freon® and petroleum hydrocarbons; however, concentrations of these VOCs are generally lower and less extensive than the chlorinated compounds.

Four groundwater plumes have been identified at the Site, including:

- The North Parking Lot Area (NPLA) Plume (located to the north of B001 and B003) is primarily composed of TCE and 111-TCA, and to a lesser degree PCE. Based on historic groundwater quality sampling and soil vapor screening investigations, the source areas for this plume are likely associated with historic manufacturing activities in B001, B002, B003, B004 and B005S including industrial waste sewer lines located beneath these buildings (as noted below) and north of B001 and B003. Concentrations of PCE, TCE and 111-TCA in the NPLA Plume appear to originate in the central and western portions of the eastern campus.

- The B005 Plume Area, located beneath B001, B002, B003, B004 and B005, is primarily composed of TCE and 111-TCA. Based on historic groundwater quality sampling and soil vapor screening investigations, this plume is believed to have originated from activities in B001, B003, B004 and B005S.

- An isolated PCE plume, extending from the southern portion of B005 to the 42-inch sewer and originating from a release(s) at a PCE tank located in the southeastern corner of B005.

- The Industrial Waste Treatment Facility (IWTF) Plume, located near Building 036 (B036). The plume in this area is not likely to have originated from the IWTF, but is believed to have migrated from the eastern campus plume along the underground utility pipes prior to the installation of the utility trench barrier wall.

Figure 4-4 presents a generalized depiction of areas where groundwater is impacted by VOCs that has been inferred based on historical monitoring data and corresponds to the following compounds: PCE; TCE; 12-DCE; VC; 111-TCA; 11-DCE; 11-DCA; Freon® 113; 12-DCA; TCM and 112-TCA. Compounds less frequently detected include: 12-DCBZ; 13-DCBZ; 14-DCBZ; CBZ and; CEA. This map also includes the delineation of the limits of hydraulic control shown as the Site control perimeter. In general, groundwater plumes in the shallow sand aquifer are contained within this boundary with the exception of those plumes associated with the former IWSL area.

5.0 GROUNDWATER REMEDIATION SYSTEM OPERATION, MAINTENANCE AND MONITORING (OM&M)

The Groundwater Remediation System consists of the GWCS and NPLA together with the associated treatment system. The OM&M Plan details the various components of the ongoing operations and maintenance of the system. Maintenance includes such items as pump replacement and routine cleaning of the air stripper units and components.

5.1 Groundwater Remediation System Components

5.1.1 Groundwater Collection System (GWCS)

The two main elements of the GWCS are the interceptor trench and the lateral trench as shown on Figure 5-1. The interceptor portion of the GWCS lies more or less perpendicular to the direction of groundwater flow. The trench has been keyed into the relatively impermeable lacustrine silt and clay unit beneath the surficial sand water-bearing unit and, as such, fully intercepts groundwater flow.

From December 1986 through the end of June 1994, the interceptor trench portion of the GWCS consisted of five manholes which are connected by 6-inch diameter perforated pipe. Water recovered from these trenches was passed through the on-site Industrial Waste Treatment Facility (IWTF) for removal of volatile organic compounds (VOCs) using counter-current air stripping towers. During early 1994, upgrades to the GWCS included the installation of new pumps in the associated trench manholes, the construction of a new treatment building and the installation of shallow tray aerator units.

As of July 8, 1994, these units were put on-line and groundwater collected by the GWCS was conveyed to the treatment building, subjected to tray aeration and discharged to sanitary sewer. Additionally, the northwest leg of the GWCS was extended approximately 240 feet with three additional trench manholes and one pump station installed, Figure 5-1. The trench extension project was completed in May 1995. On July 10, 1996 the discharge from the tray-aerators was connected to the storm sewer system under a New York State Department of Environmental Conservation (NYSDEC) State Pollutant Discharge Elimination System (SPDES) permit.

5.1.2 North Parking Lot Area (Passive Groundwater Collection System)

Beginning in 1996, IBM initiated a storm-sewer re-routing project at the Site. This project involved the installation of a new storm sewer system and re-routing of certain connections to mitigate groundwater infiltration in to the storm system in the area between and near B003 and B005N. Compliance with SPDES Permit discharge limits at several outfalls to the storm system was the primary focus of the project; however, as a secondary result is the continued use of the now inactive storm sewer line as a collection trench for infiltrating groundwater. The end result of the re-routing project is such that storm water and dry weather flows meeting the SPDES permit limits continue to discharge to the outfalls and the groundwater collected in the inactive system is re-routed to the GWCS treatment building prior to discharge to a SPDES-permitted outfall. The NPLA system, consisting of two pump stations, Pump Station-1 (PS-1), Pump Station-2 (PS-2), and associated conveyance piping, went online in December 1997.

5.1.3 Groundwater Treatment System

There is one groundwater treatment system installed and operating at the Site to treat groundwater extracted by the GWCS and the NPLA. The system consists of a 1200 gallon, 4-foot diameter, conical bottom grit tank, two (2) Type 304L stainless steel North East Environmental Products Shallow Tray air strippers (Model 2641), the electrical supply and distribution system, instrumentation and controls.

The GTF is designed to treat in excess of 120,000 gallons per day or approximately 83 gallons per minute (gpm) of groundwater. The average treatment system flow rate is typically between 30 to 50 gpm. The maximum SPDES permitted limit is 120,000 gallons per day or approximately 83 gpm.

5.2 Summary of Operations

Daily operating data for the GWCS and NPLA are presented in Appendix B. With the exception of minimal downtime for routine maintenance activities and minor repairs, the groundwater treatment system was operated in accordance with the Operations, Maintenance and Monitoring Plan.

Appendix C contains a summary printout of the GWCS and NPLA sampling data for the reporting period and also includes treatment system monitoring results for the samples collected under the SPDES Permit including the final effluent from the treatment system, Outfall 01A.

5.3 Evaluation of the Groundwater Remediation System

The Groundwater Remediation System including the GWCS, NPLA and the on-site treatment system operated as designed during the reporting period and VOC effluent concentrations were within the SPDEs permit effluent limits.

Mass removal calculations for the Groundwater Remediation System are presented in Appendix D. Approximately 20.3 million gallons of groundwater was collected and treated from the GWCS or, on average, 55,787 gallons per day over the 2015 calendar year. The average pumping rate was approximately 38.7 gpm. For this annual period, approximately 44.25 pounds of VOCs were removed by the GWCS.

Approximately 4.1 million gallons of groundwater was collected from the NPLA pump stations or, on average, 5,948 gallons per day over the 2015 calendar year. For this annual period, approximately 0.34 pounds of VOCs were removed by the NPLA.

6.0 OTHER ACTIVITIES AND REPORTING

Several activities were conducted at the Site in 2015 under the oversight of NYSDEC including implementation of the NYSDEC approved Final Interim Corrective Measure work plan for SWMU S. Following is a summary of activities and submittals in 2015:

- Implemented and completed the In-Situ Thermal Desorption (ISTD) remedy for SWMU S;

- Interim Corrective Measure Construction Completion Report, SWMU S: Former B001 Waste TCA Tanks, October 2015.

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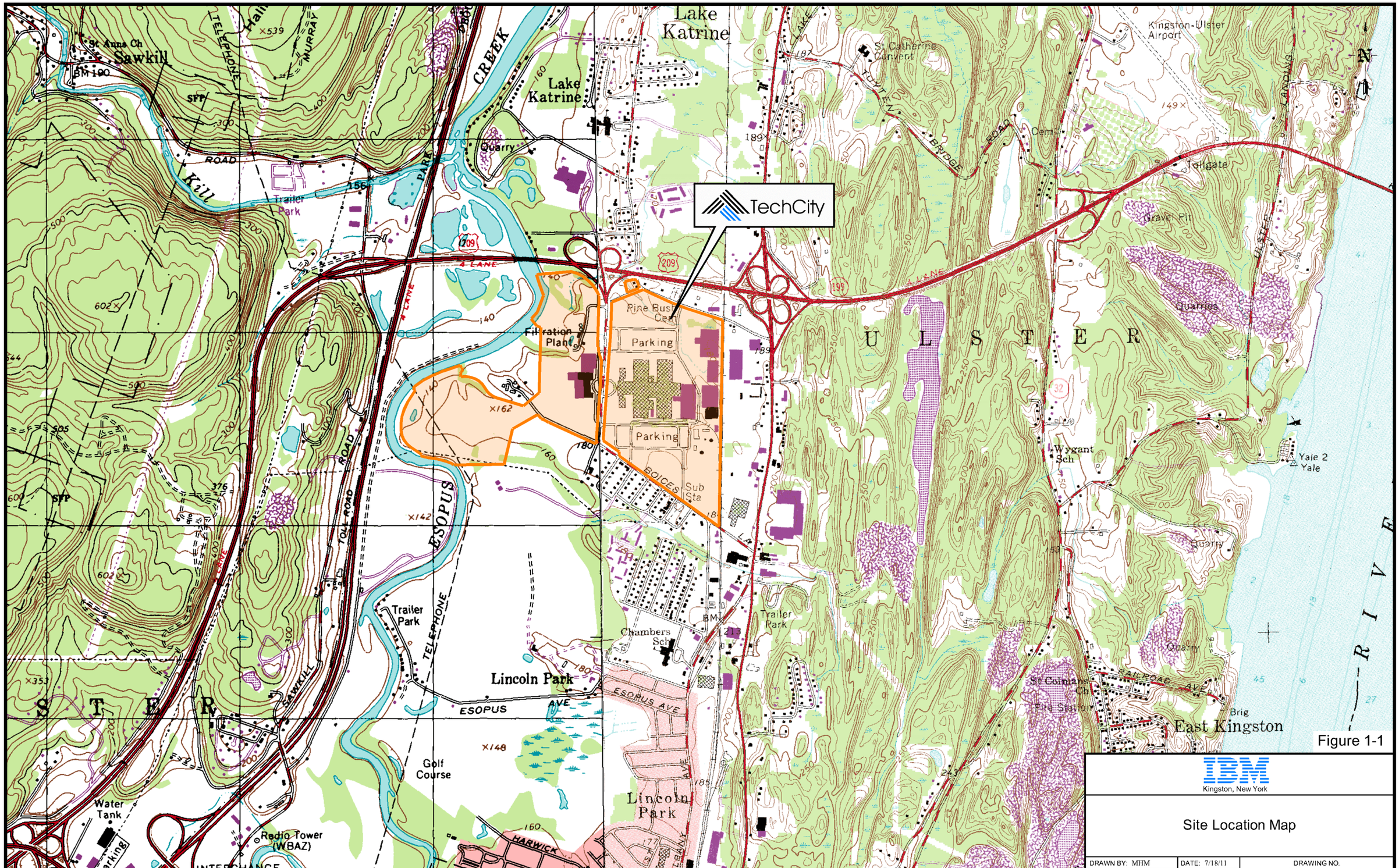


Portions of the Kingston East (1963, photorevised 1980) and Kingston West (1997) 7.5 Minute USGS Quadrangles

Scale
0 750' 1500'

Figure 1-1

IBM
Kingston, New York

Site Location Map

DRAWN BY: MHM	DATE: 7/18/11	DRAWING NO. 93002-059-E7
CHECKED & APPROVED BY: DAB		

GROUNDWATER SCIENCES CORPORATION

SOLID WASTE MANAGEMENT UNITS (SWMUs)

A: B029 Chemical Distribution Center
B: B036 Container Storage Area
C: Former B058
D: Former Waste Acetone Storage Tank
E: Former Waste IPA Storage Tank
F: Former East Side Waste Tanks
G: Former Waste PCE Tank
H: Former East SRP Tank
I: Former West SRP
J: Wastewater Treatment Tanks
K: Emergency Wastewater Holding Tanks
L: Former Industrial Waste Sludge Lagoon
M: Industrial Waste Sewer Lines
N: Inactive B036 Construction and Debris Landfill
O: Salt Barn Parking Lot Sand Fill Area
P: Former B035 Dry Well
Q: Former B031 Lagoon
R: Former Waste TCA Tank (B005(S))
S: Former Waste TCA Tank (B001)
T: Former Waste Oil Tank
U: North Parking Lot Area Plume
V: B005 Plume
W: Former B004 Separator Tank
X: B031 Separator
Y: Former Fluoride Wastewater Ejector Tank
Z: Inactive B033 Septic System
AA: Inactive B031 Septic System
AB: Former B001 TCA Recovery Unit
AC: Former B005(S) Solvent Recovery Process Unit
AD: Former Fire Training Area
AE: B202 Elevator No. 2
AF: Inactive West Demolition Debris Fill Area

Groundwater Collection System
60" Storm
Utility Trench Barrier Wall
42" Storm
Esopus Creek
Route 209
Old Neighborhood Road
Enterprise Drive
Mountain View Court
Boices Lane
Oak View Drive
B049 GWCS Treatment Bldg.
PS2
PS1
B029
B052
B005N
B064
B043
B034
B023
B022
B021
B001
B002
B003
B004
Former B005S
B042
B033
B051
B038
Former B058 Area
B031
B056
B047
B032
COOLING TWRS.
B202
B203
B212
B211
B201
B024
B035
B025
B070
1
2
3
3a
4
4a
5
6
7
8

Figure 2-1

IBM
Kingston, New York

Site Layout and Area Map

DRAWN BY: MHM	DATE: 9/16/11	DRAWING NO. 93002-113-D6
CHECKED & APPROVED BY: DAB		

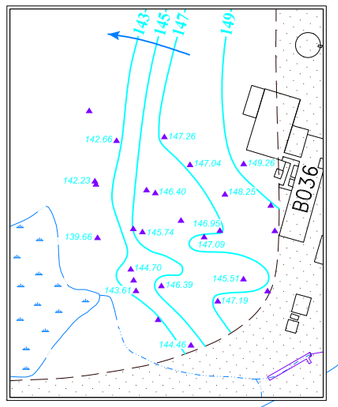
GROUNDWATER SCIENCES CORPORATION

LEGEND

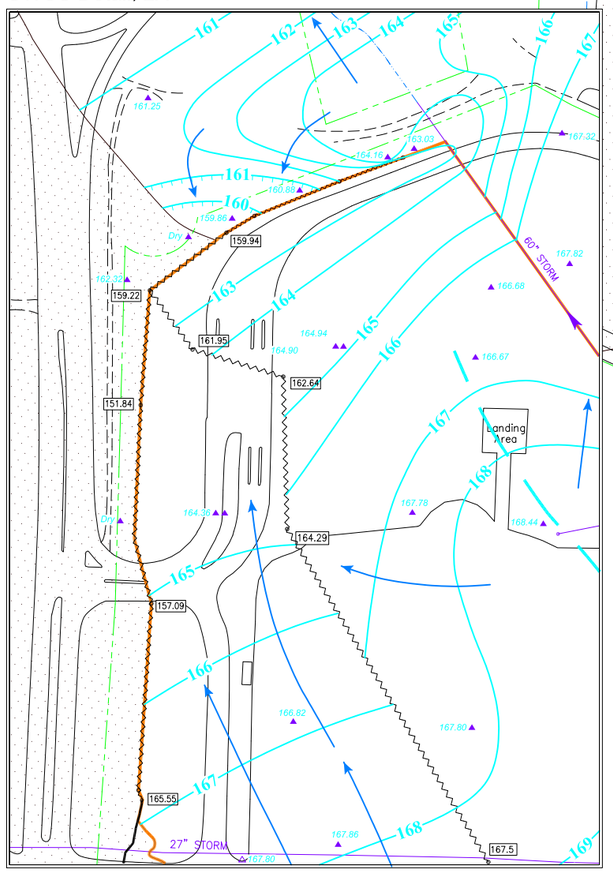
- Storm Sewer Line
- Area of 1,1,1-Trichloroethane/ Tricholoroethene >5 µg/l (5/08)
- Groundwater Collection System (GWCS)
- Utility Trench Barrier Wall
- Solid Waste Management Unit
- # - Operable Unit
- Property Line

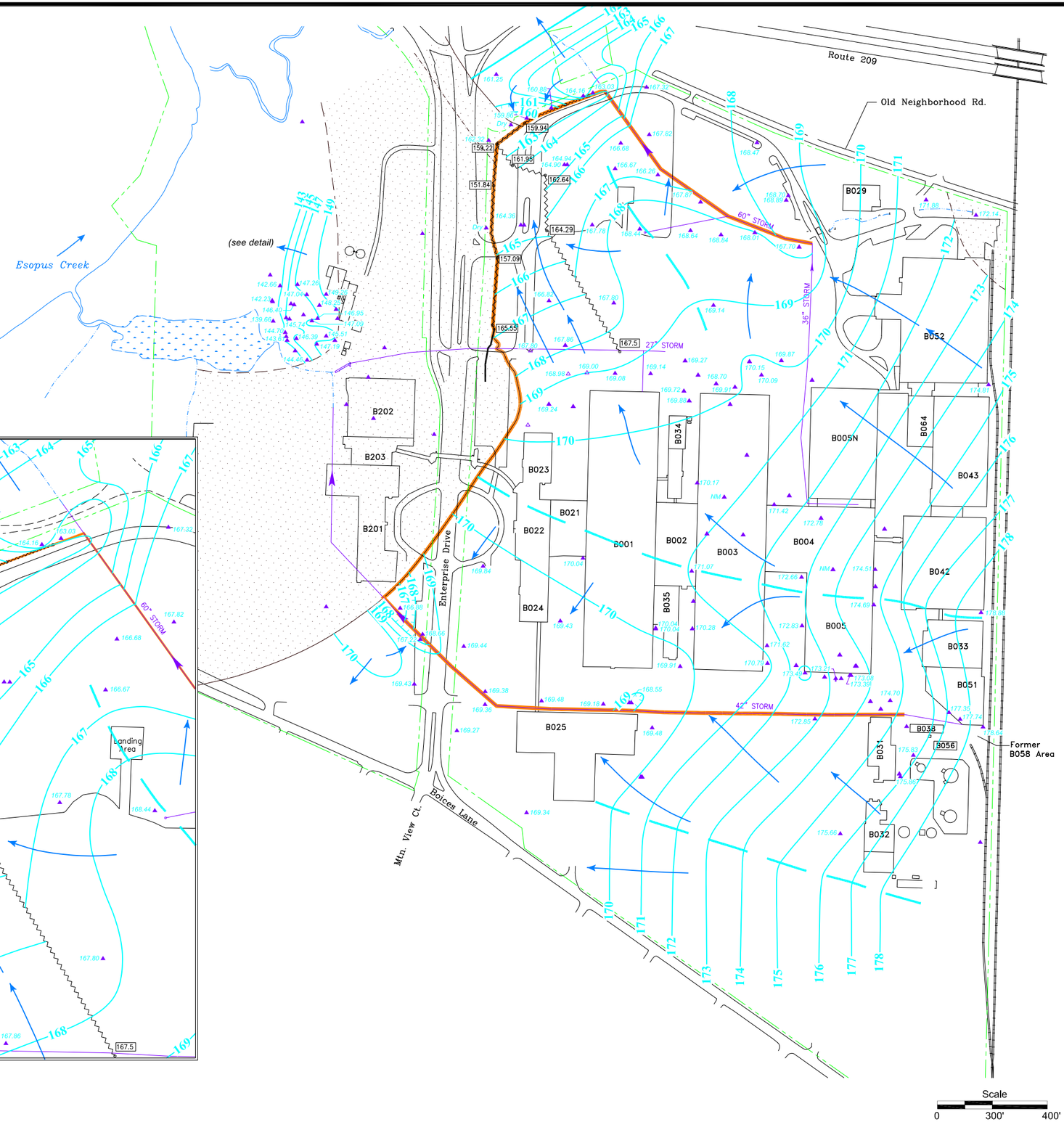
Scale
0 220' 440'

IWSL Detail, 2X



GWCS Detail, 2X





LEGEND

- ▲ - Monitoring Well Location (installed in soil)
- △ - Temporary Monitoring Point
- ○ - North Parking Lot Area Pump Station
- Property Line
- Site Control Perimeter
- 179 - Groundwater Elevation Contour
- 178.88 - Groundwater Elevation
- NM - Not Measured
- Groundwater Divide
- Inferred Direction of Groundwater Flow
- Groundwater Collection System (GWCS)
- GWCS Trench Extension
- 162.64 - GWCS Invert Elevation
- Subsurface Utility Trench Barrier Wall
- Perennially Saturated Shallow Sand Absent

Scale
0 300' 400'

Figure 4-1

IBM
Kingston, New York

Surficial Sand Aquifer
Groundwater Elevation Contour Map
March 17, 2015 (First Quarter 2015)

DRAWN BY: MHM	DATE: 3/14/16	DRAWING NO. 93002-118-Q1
CHECKED & APPROVED BY: CES		

GROUNDWATER SCIENCES CORPORATION

IWSL Detail, 2X

GWCS Detail, 2X

Route 209

Old Neighborhood Rd.

Esopus Creek

(see detail)

Enterprise Dr.

Mtn. View Ct.

Bolces Lane

Landing Area

Former B058 Area

60" STORM

36" STORM

27" STORM

42" STORM

B001 B002 B003 B004 B005 B005N B021 B022 B023 B024 B025 B029 B031 B032 B033 B034 B035 B036 B038 B042 B043 B051 B052 B056 B064 B201 B202 B203

LEGEND

- ▲ - Monitoring Well Location (installed in soil)
- △ - Temporary Monitoring Point
- ○ - North Parking Lot Area Pump Station
- Property Line
- Site Control Perimeter
- 179 - Groundwater Elevation Contour
- Supplemental Groundwater Elevation Contour
- 178.96 - Groundwater Elevation
- NM - Not Measured
- Groundwater Divide
- Inferred Direction of Groundwater Flow
- Groundwater Collection System (GWCS)
- GWCS Trench Extension
- 162.64 - GWCS Invert Elevation
- Subsurface Utility Trench Barrier Wall
- Perennially Saturated Shallow Sand Absent

Scale 0 300' 400'

Figure 4-2

IBM Kingston, New York

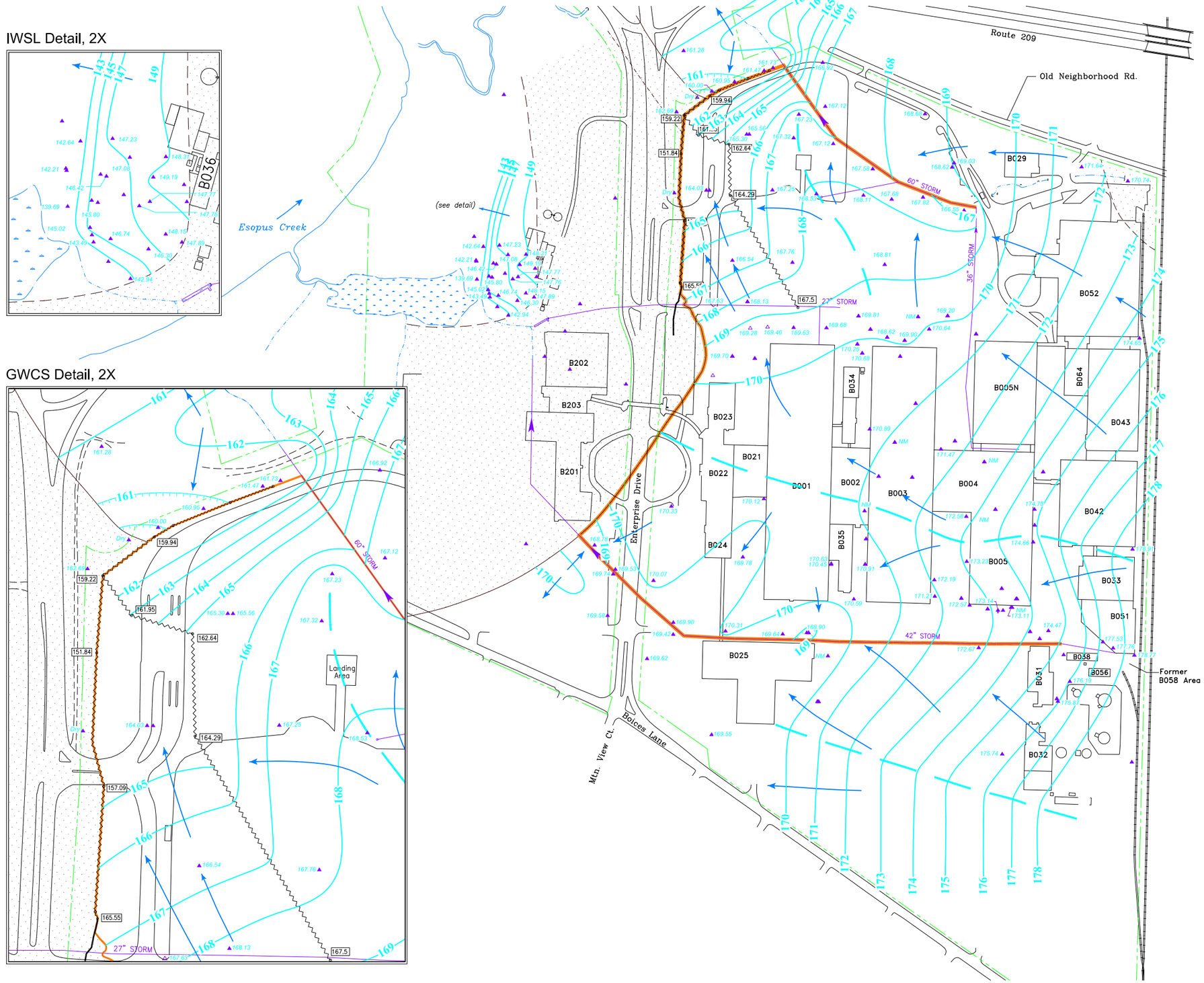
Surficial Sand Aquifer Groundwater Elevation Contour Map July 9, 2015 (Third Quarter 2015)

DRAWN BY: MHM	DATE: 3/14/16	DRAWING NO. 93002-118-R1
CHECKED & APPROVED BY: CES		

GROUNDWATER SCIENCES CORPORATION

IWSL Detail, 2X

GWCS Detail, 2X



LEGEND

- ▲ - Monitoring Well Location (installed in soil)
- △ - Temporary Monitoring Point
- ○ - North Parking Lot Area Pump Station
- Property Line
- Site Control Perimeter
- 179 - Groundwater Elevation Contour
- Supplemental Groundwater Elevation Contour
- 178.96 - Groundwater Elevation
- NM - Not Measured
- Groundwater Divide
- Inferred Direction of Groundwater Flow
- Groundwater Collection System (GWCS)
- GWCS Trench Extension
- 162.64 - GWCS Invert Elevation
- Subsurface Utility Trench Barrier Wall
- Perennially Saturated Shallow Sand Absent

Scale 0 300' 400'

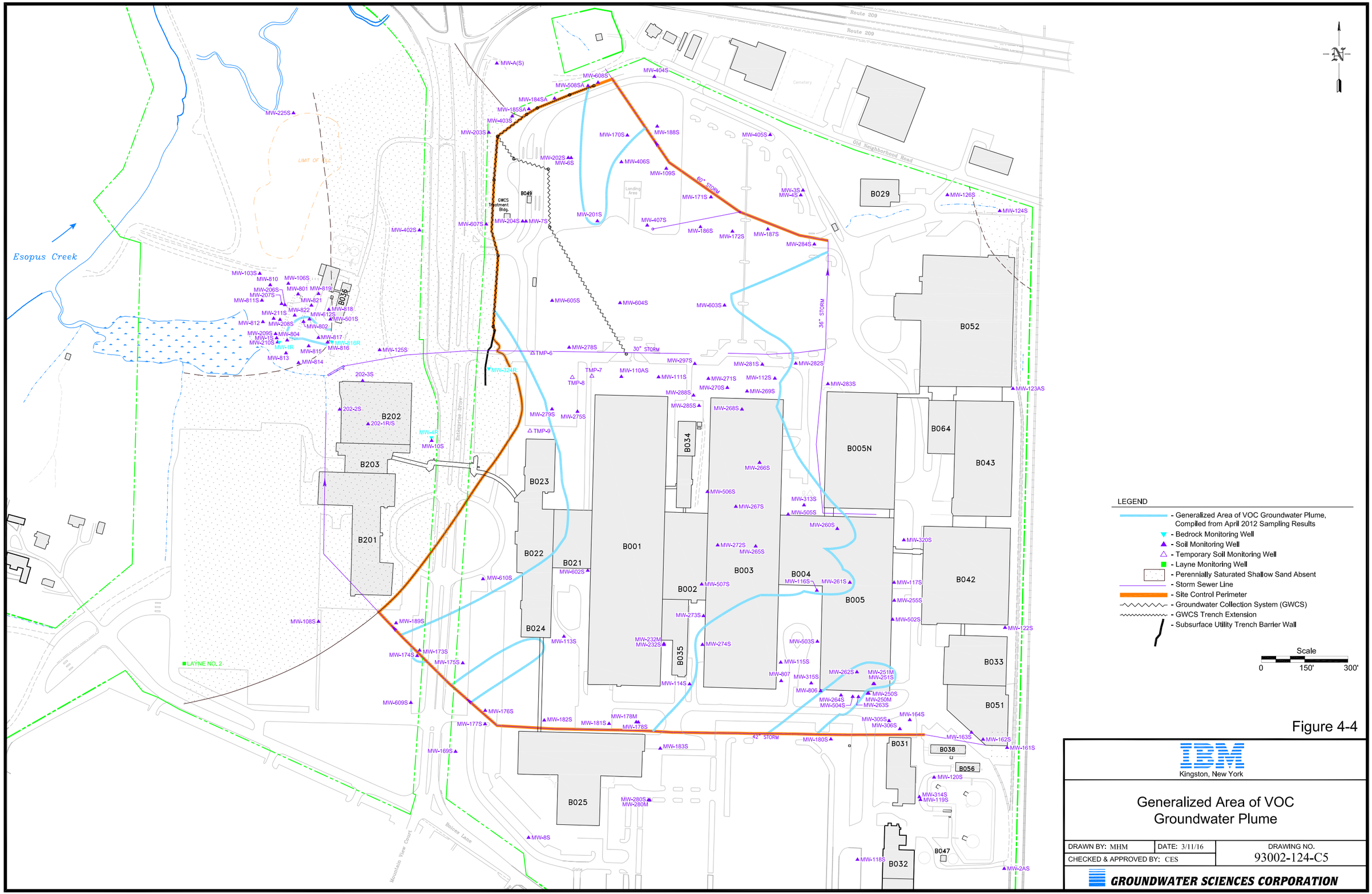
Figure 4-3

IBM
Kingston, New York

Surficial Sand Aquifer
Groundwater Elevation Contour Map
October 8, 2015 (Fourth Quarter 2015)

DRAWN BY: MHM	DATE: 3/15/16	DRAWING NO. 93002-118-S1
CHECKED & APPROVED BY: CES		

GROUNDWATER SCIENCES CORPORATION



LEGEND

- Generalized Area of VOC Groundwater Plume, Compiled from April 2012 Sampling Results
- Bedrock Monitoring Well
- Soil Monitoring Well
- Temporary Soil Monitoring Well
- Layne Monitoring Well
- Perennially Saturated Shallow Sand Absent
- Storm Sewer Line
- Site Control Perimeter
- Groundwater Collection System (GWCS)
- GWCS Trench Extension
- Subsurface Utility Trench Barrier Wall

Scale
0 150' 300'

Figure 4-4

IBM
Kingston, New York

Generalized Area of VOC Groundwater Plume

DRAWN BY: MHM	DATE: 3/11/16	DRAWING NO. 93002-124-C5
CHECKED & APPROVED BY: CES		

GROUNDWATER SCIENCES CORPORATION

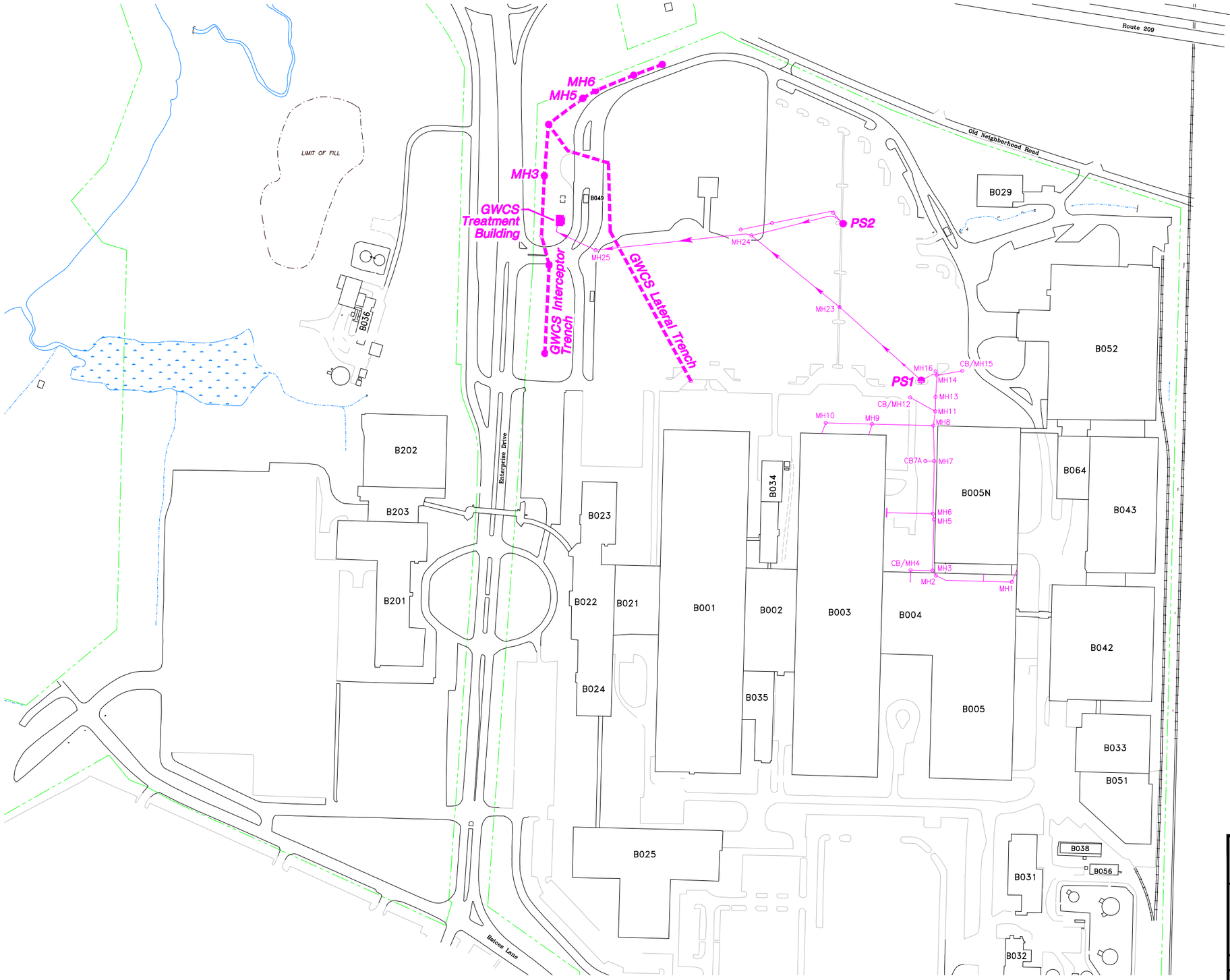


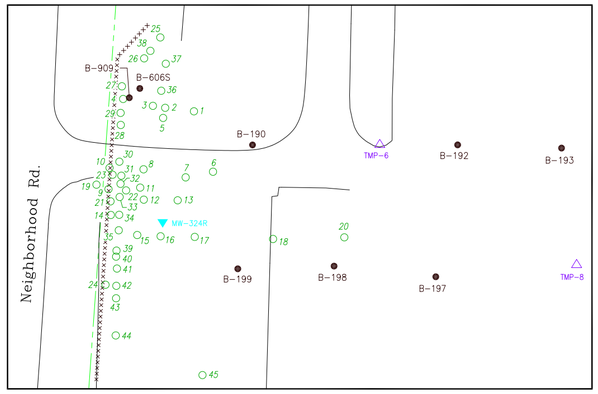
Figure 5-1

IBM
Kingston, New York

Groundwater Collection System Trench Extension Location Map

DRAWN BY: M/J/MHM	DATE: 10/19/11	DRAWING NO. 93002-089-D3
CHECKED & APPROVED BY: MTL/DAB		

GROUNDWATER SCIENCES CORPORATION



Detail (4X)

Permanent Easement Parcel No. 123 & 129 Kingston Bypass

Permanent Easement Parcel No. 107 Kingston Bypass

Permanent Easement Map No. 63, Parcel No. 161 & 162 Kingston Bypass

Town of Ulster Sanitary Sewer Easement, Liber 1293 Page 658

LIMIT OF FILL

LAYNE NO. 1

LAYNE NO. 2

Route 209

Old Neighborhood Road

Enterprise Drive

BARRIER WALL (not to scale, see enlargement)

Esopus Creek

30' Wide Town of Ulster Sanitary Sewer Easement, Liber 1293 Page 649

C.H.G.& E. Corp. Liber 902 Page 485 100'-Wide Right-of-Way

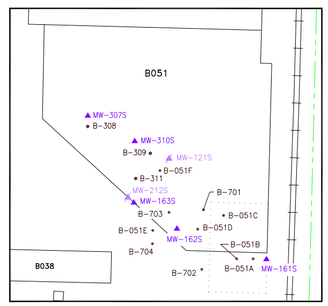
Boices Lane

Mountain View Court

Oak View Drive

LIMIT OF FILL

Former B058 Area



Former B058 Detail (Scale 3X)

– Monitoring Well Location (installed in soil)
– Temporary Monitoring Point
– Monitoring Well Location (installed in bedrock)
– Production Well Location (Layne)
– Railroad
– Property Line
– Former Structure
– Abandoned Monitoring Well Location (installed in soil)
– Abandoned Temporary Monitoring Point
– Abandoned Monitoring Well Location (installed in bedrock)
– Abandoned Production Well Location (Layne)
– Soil Boring or Test Pit Location
– Groundwater Collection System (GWCS)
– GWCS Trench Extension

Scale 0 150' 300'

Plate 1

IBM Kingston, New York

Soil Boring, Test Pit and Well Location Map

DRAWN BY: MHM	DATE: 3/11/16	DRAWING NO. 93002-055-M2
CHECKED & APPROVED BY: DAB		

GROUNDWATER SCIENCES CORPORATION

Appendix A

Groundwater Elevation Table

Kingston Site
2015 Water Level Data

Well	Elevation	03/17/15		PWI		07/09/15		10/08/15	
	TOC	DTW	GWE	DTW	GWE	DTW	GWE	DTW	GWE
MW-001-R	150.93	8.47	142.46	7.62	143.31	7.74	143.19	8.40	142.53
MW-001-S	151.17	NM		7.13	144.04	7.28	143.89	NM	
MW-002-SA	187.32	NM		7.89	179.43	NM		NM	
MW-003-S	173.03	4.33	168.70	4.00	169.03	4.01	169.02	4.00	169.03
MW-004-R	176.08	8.66	167.42	8.38	167.70	8.38	167.70	8.10	167.98
MW-004-S	172.74	3.85	168.89	3.57	169.17	3.57	169.17	4.12	168.62
MW-006-S	172.69	7.75	164.94	7.63	165.06	7.63	165.06	7.13	165.56
MW-007-S	174.61	NM		10.45	164.16	NM		NM	
MW-008-S	178.17	8.83	169.34	8.00	170.17	8.00	170.17	8.62	169.55
MW-010-S	176.94	1.82	175.12	Dry		Dry		Dry	
MW-103-S	146.26	NM		12.58	133.68	NM		NM	
MW-106-S	152.00	4.74	147.26	4.14	147.86	4.27	147.73	4.77	147.23
MW-108-S	177.26	3.80	173.46	6.30	170.96	6.32	170.94	7.15	170.11
MW-109-S	174.53	8.27	166.26	7.99	166.54	7.99	166.54	7.41	167.12
MW-110-SA	180.15	11.07	169.08	10.73	169.42	10.73	169.42	10.52	169.63
MW-111-S	179.39	10.25	169.14	9.88	169.51	9.90	169.49	9.71	169.68
MW-112-S	180.16	10.07	170.09	9.68	170.48	9.68	170.48	9.52	170.64
MW-113-S	177.03	7.60	169.43	7.00	170.03	7.00	170.03	7.25	169.78
MW-114-S	176.92	7.01	169.91	6.38	170.54	6.38	170.54	6.33	170.59
MW-115-S	181.20	9.58	171.62	8.98	172.22	9.00	172.20	9.01	172.19
MW-116-S	181.28	8.62	172.66	7.86	173.42	7.86	173.42	8.70	172.58
MW-117-S	180.75	6.24	174.51	5.72	175.03	5.72	175.03	5.97	174.78
MW-118-S	182.96	7.30	175.66	6.92	176.04	6.92	176.04	7.22	175.74
MW-119-S	183.87	8.01	175.86	7.58	176.29	7.60	176.27	8.00	175.87
MW-120-S	185.20	9.37	175.83	8.81	176.39	8.83	176.37	9.01	176.19
MW-122-S	183.62	4.74	178.88	4.65	178.97	4.66	178.96	4.71	178.91
MW-123-SA	178.21	3.40	174.81	3.81	174.40	3.81	174.40	3.56	174.65
MW-124-S	179.14	7.00	172.14	7.56	171.58	7.56	171.58	8.40	170.74
MW-125-S	173.88	10.61	163.27	11.92	161.96	11.92	161.96	12.72	161.16
MW-126-S	180.64	8.76	171.88	8.91	171.73	8.92	171.72	9.00	171.64
MW-161-S	183.36	4.72	178.64	4.16	179.20	4.17	179.19	4.59	178.77
MW-162-S	184.36	6.62	177.74	5.78	178.58	5.77	178.59	6.60	177.76
MW-163-S	185.65	8.30	177.35	7.81	177.84	7.82	177.83	8.12	177.53
MW-164-S	182.31	7.61	174.70	7.25	175.06	7.25	175.06	7.84	174.47
MW-169-S	178.07	8.80	169.27	8.13	169.94	8.16	169.91	8.45	169.62
MW-170-S	174.36	7.68	166.68	7.72	166.64	7.73	166.63	7.13	167.23
MW-171-S	172.51	4.64	167.87	4.00	168.51	4.00	168.51	4.93	167.58
MW-172-S	171.68	2.84	168.84	3.23	168.45	3.24	168.44	4.00	167.68
MW-173-S	179.83	11.17	168.66	9.91	169.92	9.91	169.92	10.30	169.53
MW-174-S	179.89	12.67	167.22	9.92	169.97	9.93	169.96	10.15	169.74
MW-175-S	177.99	8.55	169.44	7.66	170.33	7.68	170.31	7.92	170.07
MW-176-S	177.55	8.17	169.38	7.15	170.40	7.16	170.39	7.65	169.90
MW-177-S	177.94	8.58	169.36	7.45	170.49	7.45	170.49	8.52	169.42
MW-178-M	180.17	NM		10.63	169.54	NM		NM	
MW-178-S	179.29	10.74	168.55	9.75	169.54	9.76	169.53	10.39	168.90
MW-180-S	179.45	6.60	172.85	6.24	173.21	6.26	173.19	6.78	172.67
MW-181-S	177.38	8.20	169.18	7.35	170.03	7.53	169.85	7.74	169.64
MW-182-S	180.09	10.61	169.48	9.83	170.26	9.83	170.26	9.78	170.31
MW-183-S	174.38	4.90	169.48	4.16	170.22	4.15	170.23	Demoliti	
MW-184-SA	171.30	10.42	160.88	10.10	161.20	10.10	161.20	10.35	160.95
MW-185-SA	176.88	17.02	159.86	16.95	159.93	16.95	159.93	16.88	160.00
MW-186-S	172.60	3.96	168.64	3.33	169.27	3.33	169.27	4.49	168.11
MW-187-S	170.82	2.81	168.01	2.68	168.14	2.68	168.14	3.00	167.82
MW-188-S	174.59	6.77	167.82	7.22	167.37	7.24	167.35	7.47	167.12
MW-189-S	175.52	8.64	166.88	5.62	169.90	5.63	169.89	6.74	168.78
MW-201-S	177.00	9.22	167.78	9.00	168.00	9.00	168.00	9.75	167.25
MW-202-S	173.29	8.39	164.90	8.42	164.87	8.42	164.87	7.99	165.30
MW-203-S	175.16	12.84	162.32	12.78	162.38	12.79	162.37	12.47	162.69
MW-204-S	173.93	9.57	164.36	9.62	164.31	9.62	164.31	9.90	164.03
MW-206-S	152.42	6.02	146.40	5.64	146.78	5.71	146.71	6.00	146.42
MW-207-S	151.97	NM		5.23	146.74	NM		NM	
MW-208-S	152.31	6.57	145.74	6.17	146.14	6.29	146.02	6.51	145.80
MW-209-S	152.02	7.32	144.70	6.77	145.25	6.90	145.12	7.00	145.02
MW-210-S	151.99	8.38	143.61	8.02	143.97	8.18	143.81	8.50	143.49
MW-211-S	152.11	NM		6.61	145.50	NM		NM	
MW-225-S	143.89	NM		7.03	136.86	NM		NM	
MW-232-M	180.94	10.90	170.04	10.20	170.74	10.21	170.73	10.31	170.63
MW-232-S	181.03	10.99	170.04	10.25	170.78	10.27	170.76	10.58	170.45
MW-250-M	178.09	4.70	173.39	4.33	173.76	4.35	173.74	4.98	173.11
MW-250-S	178.60	5.52	173.08	4.82	173.78	NM		NM	
MW-255-S	178.62	NM		6.10	172.52	NM		NM	
MW-260-S	178.85	6.07	172.78	5.82	173.03	NM		NM	

Kingston Site
2015 Water Level Data

Well	Elevation	03/17/15		PWI		07/09/15		10/08/15	
	TOC	DTW	GWE	DTW	GWE	DTW	GWE	DTW	GWE
MW-261-S	178.85	NM		NM		NM		NM	
MW-262-S	178.81	NM		4.94	173.87	NM		NM	
MW-263-S	177.82	NM		4.45	173.37	NM		NM	
MW-264-S	177.91	NM		4.50	173.41	NM		NM	
MW-265-S	178.77	NM		NM		NM		NM	
MW-266-S	178.73	NM		NM		NM		NM	
MW-267-S	178.77	NM		NM		NM		NM	
MW-268-S	178.65	NM		NM		NM		NM	
MW-269-S	180.89	10.98	169.91	10.44	170.45	10.45	170.44	10.99	169.90
MW-270-S	180.48	11.78	168.70	10.80	169.68	10.41	170.07	11.86	168.62
MW-271-S	180.17	NM		10.12	170.05	NM		NM	
MW-272-S	178.71	NM		NM		NM		NM	
MW-273-S	177.91	NM		8.00	169.91	NM		NM	
MW-274-S	177.71	7.43	170.28	6.65	171.06	6.68	171.03	6.80	170.91
MW-275-S	180.97	NM		NM		NM		NM	
MW-278-S	180.48	12.62	167.86	12.39	168.09	12.40	168.08	12.35	168.13
MW-279-S	180.23	10.99	169.24	10.88	169.35	10.89	169.34	10.53	169.70
MW-280-M	180.57	NM		9.95	170.62	NM		NM	
MW-280-S	180.78	NM		10.18	170.60	NM		NM	
MW-281-S	179.96	9.81	170.15	9.62	170.34	NM		NM	
MW-282-S	176.63	6.76	169.87	6.88	169.75	6.88	169.75	7.43	169.20
MW-283-S	177.57	NM		5.00	172.57	NM		NM	
MW-284-S	174.77	7.07	167.70	7.76	167.01	7.77	167.00	8.22	166.55
MW-285-S	180.46	10.58	169.88	9.95	170.51	9.95	170.51	9.78	170.68
MW-288-S	180.22	10.50	169.72	9.91	170.31	9.91	170.31	9.97	170.25
MW-297-S	180.07	10.80	169.27	10.32	169.75	10.33	169.74	10.26	169.81
MW-305-S	181.62	NM		7.20	174.42	NM		NM	
MW-306-S	182.79	NM		8.10	174.69	NM		NM	
MW-313-S	180.05	NM		7.72	172.33	NM		NM	
MW-314-S	183.52	NM		7.30	176.22	NM		NM	
MW-315-S	179.22	NM		5.91	173.31	NM		NM	
MW-320-S	181.62	NM		6.83	174.79	NM		NM	
MW-324-R		14.07	-14.07	14.51	-14.51	14.51	-14.51	14.56	-14.56
MW-402-S	173.94	Dry		15.50	158.44	15.52	158.42	15.58	158.36
MW-403-S	176.89	Dry		Dry		Dry		Dry	
MW-404-S	171.17	3.85	167.32	3.46	167.71	4.36	166.81	4.25	166.92
MW-405-S	174.93	6.46	168.47	5.45	169.48	5.45	169.48	6.25	168.68
MW-406-S	175.85	9.18	166.67	8.83	167.02	8.85	167.00	8.53	167.32
MW-407-S	176.66	8.22	168.44	7.99	168.67	8.00	168.66	8.13	168.53
MW-501-S	162.60	NM		11.49	151.11	NM		NM	
MW-502-S	180.90	6.21	174.69	5.73	175.17	5.74	175.16	6.24	174.66
MW-503-S	180.71	7.88	172.83	7.25	173.46	7.27	173.44	7.48	173.23
MW-504-S	177.11	3.90	173.21	4.28	172.83	4.28	172.83	3.97	173.14
MW-505-S	179.08	7.66	171.42	6.34	172.74	6.36	172.72	7.61	171.47
MW-506-S	180.14	9.97	170.17	9.48	170.66	9.49	170.65	9.25	170.89
MW-507-S	178.61	7.54	171.07	7.50	171.11	7.50	171.11	NM	
MW-508-SA	169.89	5.73	164.16	5.72	164.17	5.74	164.15	8.42	161.47
MW-602-S	178.37	8.33	170.04	7.75	170.62	7.75	170.62	8.25	170.12
MW-603-S	174.74	5.60	169.14	5.00	169.74	5.03	169.71	5.93	168.81
MW-604-S	175.93	8.13	167.80	7.68	168.25	7.68	168.25	8.17	167.76
MW-605-S	176.06	9.24	166.82	9.28	166.78	9.27	166.79	9.52	166.54
MW-607-S	174.01	Dry		Dry		Dry		Dry	
MW-608-S	170.23	7.20	163.03	7.33	162.90	7.33	162.90	8.50	161.73
MW-609-S	178.58	9.15	169.43	8.75	169.83	8.76	169.82	9.00	169.58
MW-610-S	178.05	8.21	169.84	7.55	170.50	7.55	170.50	7.72	170.33
MW-612-S	156.22	9.27	146.95	8.34	147.88	8.42	147.80	8.45	147.77
MW-801-S	152.27	5.23	147.04	4.71	147.56	4.80	147.47	5.19	147.08
MW-802-S	153.42	6.33	147.09	5.49	147.93	5.60	147.82	5.66	147.76
MW-804-S	152.74	6.35	146.39	5.60	147.14	5.72	147.02	6.00	146.74
MW-806-S	176.49	3.00	173.49	3.11	173.38	3.12	173.37	3.92	172.57
MW-807-S	177.63	6.84	170.79	6.45	171.18	6.45	171.18	6.42	171.21
MW-810	145.03	2.37	142.66	2.35	142.68	2.52	142.51	2.39	142.64
MW-811D	145.03	NM		13.39	131.64	13.51	131.52	NM	
MW-811S	144.93	2.70	142.23	2.47	142.46	2.61	142.32	2.72	142.21
MW-812	146.73	7.07	139.66	6.81	139.92	6.92	139.81	7.04	139.69
MW-813	149.40	NM		6.62	142.78	NM		NM	
MW-814	151.70	7.24	144.46	7.88	143.82	8.00	143.70	8.76	142.94
MW-815	156.30	9.11	147.19	8.87	147.43	8.95	147.35	10.00	146.30
MW-816	161.40	13.80	147.60	11.79	149.61	11.90	149.50	13.51	147.89
MW-816 R		14.77	-14.77	14.91	-14.91	14.97	-14.97	15.00	-15.00
MW-817	160.53	15.02	145.51	11.40	149.13	11.40	149.13	12.38	148.15
MW-818	161.31	NM		Dry		NM		NM	

Kingston Site
2015 Water Level Data

Well	Elevation	03/17/15		PWI		07/09/15		10/08/15	
	TOC	DTW	GWE	DTW	GWE	DTW	GWE	DTW	GWE
MW-819	**154.79**	5.53	149.26	5.47	149.32	5.61	149.18	6.48	148.31
MW-820	**151.70**								
MW-821	**154.70**	6.45	148.25	6.46	148.24	6.57	148.13	5.51	149.19
MW-822	**152.50**	NM		7.21	145.29	NM		NM	
MW-A	**172.34**	11.09	161.25	11.16	161.18	11.18	161.16	11.06	161.28
TMP-6	**177.51**	9.71	167.80	9.82	167.69	9.83	167.68	9.88	167.63
TMP-7	**180.08**	11.08	169.00	10.92	169.16	10.92	169.16	10.62	169.46
TMP-8	**177.50**	8.52	168.98	8.22	169.28	8.22	169.28	8.22	169.28
TMP-9	**181.20**	NM		11.62	169.58	NM		NM	
MW-202-2	**175.47**	NM		20.51	154.96	NM		NM	
MW-202-3S	**175.38**	NM		14.44	160.94	NM		NM	

NM = Not Measured

Appendix B

Groundwater Withdrawal Data Tables
(GWCS and NPLA)

Former IBM Kingston Site (TechCity Facility)
Groundwater Collection System and North Parking Lot Area Extraction Data
Last Updated: *03/01/16*

Date	NPLA PS1 & PS2 Daily Flow (gal)	Average Pumping Rate (NPLA) (gpm)	Total GWCS Daily Flow (gal)	Average Pumping Rate (GWCS) (gpm)	Average Daily Flow Treatment System (gal)	Average Pumping Rate Treatment Sys (gpm)	Cumulative Gallons Pumped (NPLA only)	Cumulative Gallons Pumped (GWCS only)	Cumulative Gallons Pumped (Overall)
1-Jan-15	5,684	3.9	56,984	39.6	62,668	43.5	32,863,474	467,245,747	500,109,221
2-Jan-15	5,214	3.6	57,106	39.7	62,320	43.3	32,868,688	467,302,853	500,171,541
3-Jan-15	5,260	3.7	55,146	38.3	60,406	41.9	32,873,948	467,357,999	500,231,947
4-Jan-15	5,137	3.6	55,340	38.4	60,477	42.0	32,879,085	467,413,339	500,292,424
5-Jan-15	5,040	3.5	61,462	42.7	66,502	46.2	32,884,125	467,474,801	500,358,926
6-Jan-15	4,952	3.4	60,964	42.3	65,916	45.8	32,889,077	467,535,765	500,424,842
7-Jan-15	4,747	3.3	61,958	43.0	66,705	46.3	32,893,824	467,597,723	500,491,547
8-Jan-15	4,578	3.2	60,848	42.3	65,426	45.4	32,898,402	467,658,571	500,556,973
9-Jan-15	4,612	3.2	60,473	42.0	65,085	45.2	32,903,014	467,719,044	500,622,058
10-Jan-15	4,309	3.0	59,822	41.5	64,131	44.5	32,907,323	467,778,866	500,686,189
11-Jan-15	4,206	2.9	58,254	40.5	62,460	43.4	32,911,529	467,837,120	500,748,649
12-Jan-15	7,893	5.5	58,474	40.6	66,367	46.1	32,919,422	467,895,594	500,815,016
13-Jan-15	15,038	10.4	56,057	38.9	71,095	49.4	32,934,460	467,951,651	500,886,111
14-Jan-15	7,850	5.5	54,051	37.5	61,901	43.0	32,942,310	468,005,702	500,948,012
15-Jan-15	7,433	5.2	54,319	37.7	61,752	42.9	32,949,743	468,060,021	501,009,764
16-Jan-15	6,773	4.7	53,608	37.2	60,381	41.9	32,956,516	468,113,629	501,070,145
17-Jan-15	6,719	4.7	53,424	37.1	60,143	41.8	32,963,235	468,167,053	501,130,288
18-Jan-15	11,458	8.0	53,637	37.2	65,095	45.2	32,974,693	468,220,690	501,195,383
19-Jan-15	16,476	11.4	56,447	39.2	72,923	50.6	32,991,169	468,277,137	501,268,306
20-Jan-15	12,536	8.7	50,513	35.1	63,049	43.8	33,003,705	468,327,650	501,331,355
21-Jan-15	7,582	5.3	54,043	37.5	61,625	42.8	33,011,287	468,381,693	501,392,980
22-Jan-15	7,314	5.1	54,488	37.8	61,802	42.9	33,018,601	468,436,181	501,454,782
23-Jan-15	6,215	4.3	53,017	36.8	59,232	41.1	33,024,816	468,489,198	501,514,014
24-Jan-15	7,405	5.1	52,207	36.3	59,612	41.4	33,032,221	468,541,405	501,573,626
25-Jan-15	5,628	3.9	51,799	36.0	57,427	39.9	33,037,849	468,593,204	501,631,053
26-Jan-15	6,490	4.5	50,254	34.9	56,744	39.4	33,044,339	468,643,458	501,687,797
27-Jan-15	6,059	4.2	49,779	34.6	55,838	38.8	33,050,398	468,693,237	501,743,635
28-Jan-15	5,534	3.8	49,681	34.5	55,215	38.3	33,055,932	468,742,918	501,798,850
29-Jan-15	5,691	4.0	47,589	33.0	53,280	37.0	33,061,623	468,790,507	501,852,130
30-Jan-15	5,423	3.8	47,293	32.8	52,716	36.6	33,067,046	468,837,800	501,904,846
31-Jan-15	5,283	3.7	46,711	32.4	51,994	36.1	33,072,329	468,884,511	501,956,840
1-Feb-15	5,134	3.6	44,929	31.2	50,063	34.8	33,077,463	468,929,440	502,006,903
2-Feb-15	5,262	3.7	44,861	31.2	50,123	34.8	33,082,725	468,974,301	502,057,026
3-Feb-15	5,069	3.5	44,966	31.2	50,035	34.7	33,087,794	469,019,267	502,107,061
4-Feb-15	4,984	3.5	43,116	29.9	48,100	33.4	33,092,778	469,062,383	502,155,161
5-Feb-15	4,772	3.3	43,331	30.1	48,103	33.4	33,097,550	469,105,714	502,203,264
6-Feb-15	4,875	3.4	42,691	29.6	47,566	33.0	33,102,425	469,148,405	502,250,830
7-Feb-15	4,798	3.3	41,677	28.9	46,475	32.3	33,107,223	469,190,082	502,297,305

Former IBM Kingston Site (TechCity Facility)
Groundwater Collection System and North Parking Lot Area Extraction Data
Last Updated: *03/01/16*

Date	NPLA PS1 & PS2 Daily Flow (gal)	Average Pumping Rate (NPLA) (gpm)	Total GWCS Daily Flow (gal)	Average Pumping Rate (GWCS) (gpm)	Average Daily Flow Treatment System (gal)	Average Pumping Rate Treatment Sys (gpm)	Cumulative Gallons Pumped (NPLA only)	Cumulative Gallons Pumped (GWCS only)	Cumulative Gallons Pumped (Overall)
8-Feb-15	4,661	3.2	40,934	28.4	45,595	31.7	33,111,884	469,231,016	502,342,900
9-Feb-15	4,418	3.1	41,203	28.6	45,621	31.7	33,116,302	469,272,219	502,388,521
10-Feb-15	4,696	3.3	40,122	27.9	44,818	31.1	33,120,998	469,312,341	502,433,339
11-Feb-15	6,702	4.7	56,521	39.3	63,223	43.9	33,127,700	469,368,862	502,496,562
12-Feb-15	4,202	2.9	40,588	28.2	44,790	31.1	33,131,902	469,409,450	502,541,352
13-Feb-15	4,320	3.0	38,690	26.9	43,010	29.9	33,136,222	469,448,140	502,584,362
14-Feb-15	4,265	3.0	36,947	25.7	41,212	28.6	33,140,487	469,485,087	502,625,574
15-Feb-15	4,160	2.9	38,410	26.7	42,570	29.6	33,144,647	469,523,497	502,668,144
16-Feb-15	4,003	2.8	37,020	25.7	41,023	28.5	33,148,650	469,560,517	502,709,167
17-Feb-15	3,939	2.7	36,314	25.2	40,253	28.0	33,152,589	469,596,831	502,749,420
18-Feb-15	4,042	2.8	36,365	25.3	40,407	28.1	33,156,631	469,633,196	502,789,827
19-Feb-15	3,933	2.7	36,759	25.5	40,692	28.3	33,160,564	469,669,955	502,830,519
20-Feb-15	3,717	2.6	35,779	24.8	39,496	27.4	33,164,281	469,705,734	502,870,015
21-Feb-15	3,820	2.7	35,271	24.5	39,091	27.1	33,168,101	469,741,005	502,909,106
22-Feb-15	3,818	2.7	34,820	24.2	38,638	26.8	33,171,919	469,775,825	502,947,744
23-Feb-15	3,692	2.6	34,387	23.9	38,079	26.4	33,175,611	469,810,212	502,985,823
24-Feb-15	3,643	2.5	32,051	22.3	35,694	24.8	33,179,254	469,842,263	503,021,517
25-Feb-15	3,513	2.4	34,700	24.1	38,213	26.5	33,182,767	469,876,963	503,059,730
26-Feb-15	3,399	2.4	33,256	23.1	36,655	25.5	33,186,166	469,910,219	503,096,385
27-Feb-15	3,281	2.3	33,829	23.5	37,110	25.8	33,189,447	469,944,048	503,133,495
28-Feb-15	3,303	2.3	32,751	22.7	36,054	25.0	33,192,750	469,976,799	503,169,549
1-Mar-15	3,136	2.2	31,598	21.9	34,734	24.1	33,195,886	470,008,397	503,204,283
2-Mar-15	3,316	2.3	32,223	22.4	35,539	24.7	33,199,202	470,040,620	503,239,822
3-Mar-15	3,235	2.2	31,272	21.7	34,507	24.0	33,202,437	470,071,892	503,274,329
4-Mar-15	3,202	2.2	31,425	21.8	34,627	24.0	33,205,639	470,103,317	503,308,956
5-Mar-15	2,960	2.1	31,964	22.2	34,924	24.3	33,208,599	470,135,281	503,343,880
6-Mar-15	3,082	2.1	30,283	21.0	33,365	23.2	33,211,681	470,165,564	503,377,245
7-Mar-15	3,081	2.1	30,783	21.4	33,864	23.5	33,214,762	470,196,347	503,411,109
8-Mar-15	3,368	2.3	30,195	21.0	33,563	23.3	33,218,130	470,226,542	503,444,672
9-Mar-15	4,487	3.1	30,689	21.3	35,176	24.4	33,222,617	470,257,231	503,479,848
10-Mar-15	5,562	3.9	29,803	20.7	35,365	24.6	33,228,179	470,287,034	503,515,213
11-Mar-15	10,716	7.4	38,524	26.8	49,240	34.2	33,238,895	470,325,558	503,564,453
12-Mar-15	10,414	7.2	41,825	29.0	52,239	36.3	33,249,309	470,367,383	503,616,692
13-Mar-15	6,275	4.4	43,375	30.1	49,650	34.5	33,255,584	470,410,758	503,666,342
14-Mar-15	6,870	4.8	43,346	30.1	50,216	34.9	33,262,454	470,454,104	503,716,558
15-Mar-15	6,696	4.7	48,164	33.4	54,860	38.1	33,269,150	470,502,268	503,771,418
16-Mar-15	6,890	4.8	49,596	34.4	56,486	39.2	33,276,040	470,551,864	503,827,904
17-Mar-15	6,697	4.7	51,175	35.5	57,872	40.2	33,282,737	470,603,039	503,885,776

Former IBM Kingston Site (TechCity Facility)
Groundwater Collection System and North Parking Lot Area Extraction Data
Last Updated: *03/01/16*

Date	NPLA PS1 & PS2 Daily Flow (gal)	Average Pumping Rate (NPLA) (gpm)	Total GWCS Daily Flow (gal)	Average Pumping Rate (GWCS) (gpm)	Average Daily Flow Treatment System (gal)	Average Pumping Rate Treatment Sys (gpm)	Cumulative Gallons Pumped (NPLA only)	Cumulative Gallons Pumped (GWCS only)	Cumulative Gallons Pumped (Overall)
18-Mar-15	6,789	4.7	53,248	37.0	60,037	41.7	33,289,526	470,656,287	503,945,813
19-Mar-15	6,628	4.6	52,643	36.6	59,271	41.2	33,296,154	470,708,930	504,005,084
20-Mar-15	6,589	4.6	51,408	35.7	57,997	40.3	33,302,743	470,760,338	504,063,081
21-Mar-15	6,552	4.6	50,905	35.4	57,457	39.9	33,309,295	470,811,243	504,120,538
22-Mar-15	6,338	4.4	51,131	35.5	57,469	39.9	33,315,633	470,862,374	504,178,007
23-Mar-15	6,460	4.5	50,547	35.1	57,007	39.6	33,322,093	470,912,921	504,235,014
24-Mar-15	6,245	4.3	50,966	35.4	57,211	39.7	33,328,338	470,963,887	504,292,225
25-Mar-15	6,144	4.3	49,797	34.6	55,941	38.8	33,334,482	471,013,684	504,348,166
26-Mar-15	6,036	4.2	49,025	34.0	55,061	38.2	33,340,518	471,062,709	504,403,227
27-Mar-15	5,995	4.2	49,875	34.6	55,870	38.8	33,346,513	471,112,584	504,459,097
28-Mar-15	6,008	4.2	51,714	35.9	57,722	40.1	33,352,521	471,164,298	504,516,819
29-Mar-15	5,730	4.0	51,496	35.8	57,226	39.7	33,358,251	471,215,794	504,574,045
30-Mar-15	5,617	3.9	51,765	35.9	57,382	39.8	33,363,868	471,267,559	504,631,427
31-Mar-15	5,440	3.8	53,026	36.8	58,466	40.6	33,369,308	471,320,585	504,689,893
1-Apr-15	5,262	3.7	54,134	37.6	59,396	41.2	33,374,570	471,374,719	504,749,289
2-Apr-15	5,109	3.5	52,019	36.1	57,128	39.7	33,379,679	471,426,738	504,806,417
3-Apr-15	4,978	3.5	51,418	35.7	56,396	39.2	33,384,657	471,478,156	504,862,813
4-Apr-15	5,023	3.5	52,222	36.3	57,245	39.8	33,389,680	471,530,378	504,920,058
5-Apr-15	4,727	3.3	52,932	36.8	57,659	40.0	33,394,407	471,583,310	504,977,717
6-Apr-15	4,625	3.2	52,448	36.4	57,073	39.6	33,399,032	471,635,758	505,034,790
7-Apr-15	4,521	3.1	52,739	36.6	57,260	39.8	33,403,553	471,688,497	505,092,050
8-Apr-15	4,419	3.1	54,090	37.6	58,509	40.6	33,407,972	471,742,587	505,150,559
9-Apr-15	4,720	3.3	53,644	37.3	58,364	40.5	33,412,692	471,796,231	505,208,923
10-Apr-15	4,662	3.2	55,874	38.8	60,536	42.0	33,417,354	471,852,105	505,269,459
11-Apr-15	4,407	3.1	58,174	40.4	62,581	43.5	33,421,761	471,910,279	505,332,040
12-Apr-15	4,575	3.2	59,212	41.1	63,787	44.3	33,426,336	471,969,491	505,395,827
13-Apr-15	4,376	3.0	60,159	41.8	64,535	44.8	33,430,712	472,029,650	505,460,362
14-Apr-15	4,448	3.1	61,173	42.5	65,621	45.6	33,435,160	472,090,823	505,525,983
15-Apr-15	4,157	2.9	62,756	43.6	66,913	46.5	33,439,317	472,153,579	505,592,896
16-Apr-15	4,297	3.0	58,660	40.7	62,957	43.7	33,443,614	472,212,239	505,655,853
17-Apr-15	3,991	2.8	60,981	42.3	64,972	45.1	33,447,605	472,273,220	505,720,825
18-Apr-15	2,691	1.9	60,518	42.0	63,209	43.9	33,450,296	472,333,738	505,784,034
19-Apr-15	1,117	0.8	59,303	41.2	60,420	42.0	33,451,413	472,393,041	505,844,454
20-Apr-15	7,086	4.9	61,071	42.4	68,157	47.3	33,458,499	472,454,112	505,912,611
21-Apr-15	14,976	10.4	63,863	44.3	78,839	54.7	33,473,475	472,517,975	505,991,450
22-Apr-15	15,010	10.4	66,834	46.4	81,844	56.8	33,488,485	472,584,809	506,073,294
23-Apr-15	14,658	10.2	67,599	46.9	82,257	57.1	33,503,143	472,652,408	506,155,551
24-Apr-15	14,525	10.1	68,590	47.6	83,115	57.7	33,517,668	472,720,998	506,238,666

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25-Apr-15	14,334	10.0	68,546	47.6	82,880	57.6	33,532,002	472,789,544	506,321,546
26-Apr-15	14,109	9.8	68,728	47.7	82,837	57.5	33,546,111	472,858,272	506,404,383
27-Apr-15	13,803	9.6	68,443	47.5	82,246	57.1	33,559,914	472,926,715	506,486,629
28-Apr-15	5,642	3.9	69,629	48.4	75,271	52.3	33,565,556	472,996,344	506,561,900
29-Apr-15	818	0.6	67,696	47.0	68,514	47.6	33,566,374	473,064,040	506,630,414
30-Apr-15	4,192	2.9	67,504	46.9	71,696	49.8	33,570,566	473,131,544	506,702,110
1-May-15	13,150	9.1	66,307	46.0	79,457	55.2	33,583,716	473,197,851	506,781,567
2-May-15	13,267	9.2	64,968	45.1	78,235	54.3	33,596,983	473,262,819	506,859,802
3-May-15	11,305	7.9	60,896	42.3	72,201	50.1	33,608,288	473,323,715	506,932,003
4-May-15	8,697	6.0	66,332	46.1	75,029	52.1	33,616,985	473,390,047	507,007,032
5-May-15	8,834	6.1	69,788	48.5	78,622	54.6	33,625,819	473,459,835	507,085,654
6-May-15	8,333	5.8	69,677	48.4	78,010	54.2	33,634,152	473,529,512	507,163,664
7-May-15	8,139	5.7	66,273	46.0	74,412	51.7	33,642,291	473,595,785	507,238,076
8-May-15	6,352	4.4	65,790	45.7	72,142	50.1	33,648,643	473,661,575	507,310,218
9-May-15	5,255	3.6	64,679	44.9	69,934	48.6	33,653,898	473,726,254	507,380,152
10-May-15	5,369	3.7	64,694	44.9	70,063	48.7	33,659,267	473,790,948	507,450,215
11-May-15	4,892	3.4	67,999	47.2	72,891	50.6	33,664,159	473,858,947	507,523,106
12-May-15	4,840	3.4	60,675	42.1	65,515	45.5	33,668,999	473,919,622	507,588,621
13-May-15	4,869	3.4	62,310	43.3	67,179	46.7	33,673,868	473,981,932	507,655,800
14-May-15	4,634	3.2	64,037	44.5	68,671	47.7	33,678,502	474,045,969	507,724,471
15-May-15	4,483	3.1	59,880	41.6	64,363	44.7	33,682,985	474,105,849	507,788,834
16-May-15	4,325	3.0	57,743	40.1	62,068	43.1	33,687,310	474,163,592	507,850,902
17-May-15	4,391	3.0	56,332	39.1	60,723	42.2	33,691,701	474,219,924	507,911,625
18-May-15	4,429	3.1	56,848	39.5	61,277	42.6	33,696,130	474,276,772	507,972,902
19-May-15	4,147	2.9	54,658	38.0	58,805	40.8	33,700,277	474,331,430	508,031,707
20-May-15	4,361	3.0	57,296	39.8	61,657	42.8	33,704,638	474,388,726	508,093,364
21-May-15	4,364	3.0	55,798	38.7	60,162	41.8	33,709,002	474,444,524	508,153,526
22-May-15	4,401	3.1	54,055	37.5	58,456	40.6	33,713,403	474,498,579	508,211,982
23-May-15	4,373	3.0	52,392	36.4	56,765	39.4	33,717,776	474,550,971	508,268,747
24-May-15	4,196	2.9	51,345	35.7	55,541	38.6	33,721,972	474,602,316	508,324,288
25-May-15	4,313	3.0	50,003	34.7	54,316	37.7	33,726,285	474,652,319	508,378,604
26-May-15	4,092	2.8	50,350	35.0	54,442	37.8	33,730,377	474,702,669	508,433,046
27-May-15	4,020	2.8	49,760	34.6	53,780	37.3	33,734,397	474,752,429	508,486,826
28-May-15	4,194	2.9	51,140	35.5	55,334	38.4	33,738,591	474,803,569	508,542,160
29-May-15	3,978	2.8	51,721	35.9	55,699	38.7	33,742,569	474,855,290	508,597,859
30-May-15	3,998	2.8	52,476	36.4	56,474	39.2	33,746,567	474,907,766	508,654,333
31-May-15	3,981	2.8	53,097	36.9	57,078	39.6	33,750,548	474,960,863	508,711,411
1-Jun-15	6,495	4.5	54,753	38.0	61,248	42.5	33,757,043	475,015,616	508,772,659

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2-Jun-15	12,521	8.7	57,156	39.7	69,677	48.4	33,769,564	475,072,772	508,842,336
3-Jun-15	12,509	8.7	59,661	41.4	72,170	50.1	33,782,073	475,132,433	508,914,506
4-Jun-15	8,333	5.8	62,229	43.2	70,562	49.0	33,790,406	475,194,662	508,985,068
5-Jun-15	5,431	3.8	61,518	42.7	66,949	46.5	33,795,837	475,256,180	509,052,017
6-Jun-15	3,773	2.6	61,100	42.4	64,873	45.1	33,799,610	475,317,280	509,116,890
7-Jun-15	3,256	2.3	57,533	40.0	60,789	42.2	33,802,866	475,374,813	509,177,679
8-Jun-15	3,879	2.7	59,605	41.4	63,484	44.1	33,806,745	475,434,418	509,241,163
9-Jun-15	3,728	2.6	63,085	43.8	66,813	46.4	33,810,473	475,497,503	509,307,976
10-Jun-15	3,539	2.5	62,229	43.2	65,768	45.7	33,814,012	475,559,732	509,373,744
11-Jun-15	3,605	2.5	44,170	30.7	47,775	33.2	33,817,617	475,603,902	509,421,519
12-Jun-15	3,667	2.5	48,021	33.3	51,688	35.9	33,821,284	475,651,923	509,473,207
13-Jun-15	3,688	2.6	49,161	34.1	52,849	36.7	33,824,972	475,701,084	509,526,056
14-Jun-15	3,698	2.6	49,121	34.1	52,819	36.7	33,828,670	475,750,205	509,578,875
15-Jun-15	6,689	4.6	63,587	44.2	70,276	48.8	33,835,359	475,813,792	509,649,151
16-Jun-15	12,017	8.3	66,646	46.3	78,663	54.6	33,847,376	475,880,438	509,727,814
17-Jun-15	11,910	8.3	67,409	46.8	79,319	55.1	33,859,286	475,947,847	509,807,133
18-Jun-15	7,907	5.5	64,598	44.9	72,505	50.4	33,867,193	476,012,445	509,879,638
19-Jun-15	3,738	2.6	64,347	44.7	68,085	47.3	33,870,931	476,076,792	509,947,723
20-Jun-15	3,596	2.5	63,887	44.4	67,483	46.9	33,874,527	476,140,679	510,015,206
21-Jun-15	5,509	3.8	68,176	47.3	73,685	51.2	33,880,036	476,208,855	510,088,891
22-Jun-15	11,301	7.8	78,265	54.4	89,566	62.2	33,891,337	476,287,120	510,178,457
23-Jun-15	6,238	4.3	84,928	59.0	91,166	63.3	33,897,575	476,372,048	510,269,623
24-Jun-15	5,149	3.6	81,491	56.6	86,640	60.2	33,902,724	476,453,539	510,356,263
25-Jun-15	2,722	1.9	74,987	52.1	77,709	54.0	33,905,446	476,528,526	510,433,972
26-Jun-15	6,284	4.4	70,981	49.3	77,265	53.7	33,911,730	476,599,507	510,511,237
27-Jun-15	12,468	8.7	66,902	46.5	79,370	55.1	33,924,198	476,666,409	510,590,607
28-Jun-15	11,320	7.9	75,436	52.4	86,756	60.2	33,935,518	476,741,845	510,677,363
29-Jun-15	11,369	7.9	66,616	46.3	77,985	54.2	33,946,887	476,808,461	510,755,348
30-Jun-15	10,435	7.2	75,284	52.3	85,719	59.5	33,957,322	476,883,745	510,841,067
1-Jul-15	11,076	7.7	78,246	54.3	89,322	62.0	33,968,398	476,961,991	510,930,389
2-Jul-15	11,253	7.8	81,285	56.4	92,538	64.3	33,979,651	477,043,276	511,022,927
3-Jul-15	10,681	7.4	82,056	57.0	92,737	64.4	33,990,332	477,125,332	511,115,664
4-Jul-15	10,650	7.4	82,268	57.1	92,918	64.5	34,000,982	477,207,600	511,208,582
5-Jul-15	10,598	7.4	82,089	57.0	92,687	64.4	34,011,580	477,289,689	511,301,269
6-Jul-15	10,521	7.3	81,885	56.9	92,406	64.2	34,022,101	477,371,574	511,393,675
7-Jul-15	10,422	7.2	79,429	55.2	89,851	62.4	34,032,523	477,451,003	511,483,526
8-Jul-15	10,495	7.3	82,350	57.2	92,845	64.5	34,043,018	477,533,353	511,576,371
9-Jul-15	10,321	7.2	82,000	56.9	92,321	64.1	34,053,339	477,615,353	511,668,692

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10-Jul-15	10,205	7.1	78,261	54.3	88,466	61.4	34,063,544	477,693,614	511,757,158
11-Jul-15	16,678	11.6	76,087	52.8	92,765	64.4	34,080,222	477,769,701	511,849,923
12-Jul-15	19,089	13.3	76,965	53.4	96,054	66.7	34,099,311	477,846,666	511,945,977
13-Jul-15	7,971	5.5	68,193	47.4	76,164	52.9	34,107,282	477,914,859	512,022,141
14-Jul-15	9,762	6.8	78,793	54.7	88,555	61.5	34,117,044	477,993,652	512,110,696
15-Jul-15	9,914	6.9	71,810	49.9	81,724	56.8	34,126,958	478,065,462	512,192,420
16-Jul-15	9,684	6.7	69,471	48.2	79,155	55.0	34,136,642	478,134,933	512,271,575
17-Jul-15	9,557	6.6	67,597	46.9	77,154	53.6	34,146,199	478,202,530	512,348,729
18-Jul-15	9,560	6.6	65,937	45.8	75,497	52.4	34,155,759	478,268,467	512,424,226
19-Jul-15	9,236	6.4	65,767	45.7	75,003	52.1	34,164,995	478,334,234	512,499,229
20-Jul-15	9,193	6.4	65,800	45.7	74,993	52.1	34,174,188	478,400,034	512,574,222
21-Jul-15	9,270	6.4	63,757	44.3	73,027	50.7	34,183,458	478,463,791	512,647,249
22-Jul-15	8,761	6.1	62,955	43.7	71,716	49.8	34,192,219	478,526,746	512,718,965
23-Jul-15	7,070	4.9	61,429	42.7	68,499	47.6	34,199,289	478,588,175	512,787,464
24-Jul-15	3,937	2.7	60,744	42.2	64,681	44.9	34,203,226	478,648,919	512,852,145
25-Jul-15	4,121	2.9	59,616	41.4	63,737	44.3	34,207,347	478,708,535	512,915,882
26-Jul-15	4,352	3.0	58,897	40.9	63,249	43.9	34,211,699	478,767,432	512,979,131
27-Jul-15	4,181	2.9	59,341	41.2	63,522	44.1	34,215,880	478,826,773	513,042,653
28-Jul-15	4,201	2.9	58,369	40.5	62,570	43.5	34,220,081	478,885,142	513,105,223
29-Jul-15	4,857	3.4	55,167	38.3	60,024	41.7	34,224,938	478,940,309	513,165,247
30-Jul-15	8,528	5.9	59,026	41.0	67,554	46.9	34,233,466	478,999,335	513,232,801
31-Jul-15	8,695	6.0	56,707	39.4	65,402	45.4	34,242,161	479,056,042	513,298,203
1-Aug-15	7,874	5.5	55,958	38.9	63,832	44.3	34,250,035	479,112,000	513,362,035
2-Aug-15	5,525	3.8	55,144	38.3	60,669	42.1	34,255,560	479,167,144	513,422,704
3-Aug-15	4,130	2.9	54,263	37.7	58,393	40.6	34,259,690	479,221,407	513,481,097
4-Aug-15	4,132	2.9	53,354	37.1	57,486	39.9	34,263,822	479,274,761	513,538,583
5-Aug-15	4,099	2.8	52,789	36.7	56,888	39.5	34,267,921	479,327,550	513,595,471
6-Aug-15	4,071	2.8	52,013	36.1	56,084	38.9	34,271,992	479,379,563	513,651,555
7-Aug-15	4,080	2.8	51,489	35.8	55,569	38.6	34,276,072	479,431,052	513,707,124
8-Aug-15	3,862	2.7	50,288	34.9	54,150	37.6	34,279,934	479,481,340	513,761,274
9-Aug-15	4,069	2.8	49,886	34.6	53,955	37.5	34,284,003	479,531,226	513,815,229
10-Aug-15	3,854	2.7	49,285	34.2	53,139	36.9	34,287,857	479,580,511	513,868,368
11-Aug-15	4,098	2.8	50,368	35.0	54,466	37.8	34,291,955	479,630,879	513,922,834
12-Aug-15	3,838	2.7	54,044	37.5	57,882	40.2	34,295,793	479,684,923	513,980,716
13-Aug-15	3,893	2.7	53,378	37.1	57,271	39.8	34,299,686	479,738,301	514,037,987
14-Aug-15	3,934	2.7	52,192	36.2	56,126	39.0	34,303,620	479,790,493	514,094,113
15-Aug-15	3,844	2.7	50,774	35.3	54,618	37.9	34,307,464	479,841,267	514,148,731
16-Aug-15	3,834	2.7	49,701	34.5	53,535	37.2	34,311,298	479,890,968	514,202,266

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17-Aug-15	3,671	2.5	48,806	33.9	52,477	36.4	34,314,969	479,939,774	514,254,743
18-Aug-15	4,761	3.3	48,509	33.7	53,270	37.0	34,319,730	479,988,283	514,308,013
19-Aug-15	7,665	5.3	47,309	32.9	54,974	38.2	34,327,395	480,035,592	514,362,987
20-Aug-15	4,401	3.1	46,572	32.3	50,973	35.4	34,331,796	480,082,164	514,413,960
21-Aug-15	4,985	3.5	48,085	33.4	53,070	36.9	34,336,781	480,130,249	514,467,030
22-Aug-15	8,466	5.9	51,235	35.6	59,701	41.5	34,345,247	480,181,484	514,526,731
23-Aug-15	5,269	3.7	51,040	35.4	56,309	39.1	34,350,516	480,232,524	514,583,040
24-Aug-15	1,388	1.0	50,220	34.9	51,608	35.8	34,351,904	480,282,744	514,634,648
25-Aug-15	4	0.0	49,149	34.1	49,153	34.1	34,351,908	480,331,893	514,683,801
26-Aug-15	3	0.0	48,354	33.6	48,357	33.6	34,351,911	480,380,247	514,732,158
27-Aug-15	5,612	3.9	47,377	32.9	52,989	36.8	34,357,523	480,427,624	514,785,147
28-Aug-15	7,360	5.1	46,031	32.0	53,391	37.1	34,364,883	480,473,655	514,838,538
29-Aug-15	3,961	2.8	46,012	32.0	49,973	34.7	34,368,844	480,519,667	514,888,511
30-Aug-15	2,756	1.9	44,829	31.1	47,585	33.0	34,371,600	480,564,496	514,936,096
31-Aug-15	3,287	2.3	44,441	30.9	47,728	33.1	34,374,887	480,608,937	514,983,824
1-Sep-15	2,842	2.0	44,037	30.6	46,879	32.6	34,377,729	480,652,974	515,030,703
2-Sep-15	2,868	2.0	43,219	30.0	46,087	32.0	34,380,597	480,696,193	515,076,790
3-Sep-15	2,924	2.0	42,991	29.9	45,915	31.9	34,383,521	480,739,184	515,122,705
4-Sep-15	3,014	2.1	42,530	29.5	45,544	31.6	34,386,535	480,781,714	515,168,249
5-Sep-15	2,700	1.9	41,761	29.0	44,461	30.9	34,389,235	480,823,475	515,212,710
6-Sep-15	2,536	1.8	41,394	28.7	43,930	30.5	34,391,771	480,864,869	515,256,640
7-Sep-15	3,030	2.1	40,612	28.2	43,642	30.3	34,394,801	480,905,481	515,300,282
8-Sep-15	2,501	1.7	39,930	27.7	42,431	29.5	34,397,302	480,945,411	515,342,713
9-Sep-15	3,305	2.3	39,636	27.5	42,941	29.8	34,400,607	480,985,047	515,385,654
10-Sep-15	6,011	4.2	40,513	28.1	46,524	32.3	34,406,618	481,025,560	515,432,178
11-Sep-15	6,943	4.8	43,630	30.3	50,573	35.1	34,413,561	481,069,190	515,482,751
12-Sep-15	4,831	3.4	45,826	31.8	50,657	35.2	34,418,392	481,115,016	515,533,408
13-Sep-15	7,910	5.5	63,609	44.2	71,519	49.7	34,426,302	481,178,625	515,604,927
14-Sep-15	14,628	10.2	67,866	47.1	82,494	57.3	34,440,930	481,246,491	515,687,421
15-Sep-15	8,287	5.8	66,643	46.3	74,930	52.0	34,449,217	481,313,134	515,762,351
16-Sep-15	8,141	5.7	65,232	45.3	73,373	51.0	34,457,358	481,378,366	515,835,724
17-Sep-15	8,046	5.6	63,491	44.1	71,537	49.7	34,465,404	481,441,857	515,907,261
18-Sep-15	8,001	5.6	62,109	43.1	70,110	48.7	34,473,405	481,503,966	515,977,371
19-Sep-15	7,831	5.4	60,533	42.0	68,364	47.5	34,481,236	481,564,499	516,045,735
20-Sep-15	7,789	5.4	59,619	41.4	67,408	46.8	34,489,025	481,624,118	516,113,143
21-Sep-15	7,838	5.4	58,246	40.4	66,084	45.9	34,496,863	481,682,364	516,179,227
22-Sep-15	7,787	5.4	57,021	39.6	64,808	45.0	34,504,650	481,739,385	516,244,035
23-Sep-15	7,056	4.9	56,011	38.9	63,067	43.8	34,511,706	481,795,396	516,307,102

Former IBM Kingston Site (TechCity Facility)
Groundwater Collection System and North Parking Lot Area Extraction Data
Last Updated: *03/01/16*

Date	NPLA PS1 & PS2 Daily Flow (gal)	Average Pumping Rate (NPLA) (gpm)	Total GWCS Daily Flow (gal)	Average Pumping Rate (GWCS) (gpm)	Average Daily Flow Treatment System (gal)	Average Pumping Rate Treatment Sys (gpm)	Cumulative Gallons Pumped (NPLA only)	Cumulative Gallons Pumped (GWCS only)	Cumulative Gallons Pumped (Overall)
24-Sep-15	5,766	4.0	54,525	37.9	60,291	41.9	34,517,472	481,849,921	516,367,393
25-Sep-15	5,225	3.6	53,734	37.3	58,959	40.9	34,522,697	481,903,655	516,426,352
26-Sep-15	5,247	3.6	52,599	36.5	57,846	40.2	34,527,944	481,956,254	516,484,198
27-Sep-15	4,432	3.1	51,271	35.6	55,703	38.7	34,532,376	482,007,525	516,539,901
28-Sep-15	5,478	3.8	51,354	35.7	56,832	39.5	34,537,854	482,058,879	516,596,733
29-Sep-15	5,822	4.0	48,647	33.8	54,469	37.8	34,543,676	482,107,526	516,651,202
30-Sep-15	9,707	6.7	62,959	43.7	72,666	50.5	34,553,383	482,170,485	516,723,868
1-Oct-15	7,623	5.3	76,902	53.4	84,525	58.7	34,561,006	482,247,387	516,808,393
2-Oct-15	7,441	5.2	78,794	54.7	86,235	59.9	34,568,447	482,326,181	516,894,628
3-Oct-15	7,403	5.1	79,371	55.1	86,774	60.3	34,575,850	482,405,552	516,981,402
4-Oct-15	7,357	5.1	78,812	54.7	86,169	59.8	34,583,207	482,484,364	517,067,571
5-Oct-15	7,205	5.0	77,271	53.7	84,476	58.7	34,590,412	482,561,635	517,152,047
6-Oct-15	7,355	5.1	75,375	52.3	82,730	57.5	34,597,767	482,637,010	517,234,777
7-Oct-15	7,128	5.0	74,230	51.5	81,358	56.5	34,604,895	482,711,240	517,316,135
8-Oct-15	7,101	4.9	72,300	50.2	79,401	55.1	34,611,996	482,783,540	517,395,536
9-Oct-15	7,184	5.0	70,850	49.2	78,034	54.2	34,619,180	482,854,390	517,473,570
10-Oct-15	6,903	4.8	69,455	48.2	76,358	53.0	34,626,083	482,923,845	517,549,928
11-Oct-15	7,090	4.9	67,462	46.8	74,552	51.8	34,633,173	482,991,307	517,624,480
12-Oct-15	6,919	4.8	66,250	46.0	73,169	50.8	34,640,092	483,057,557	517,697,649
13-Oct-15	6,876	4.8	64,576	44.8	71,452	49.6	34,646,968	483,122,133	517,769,101
14-Oct-15	6,844	4.8	63,487	44.1	70,331	48.8	34,653,812	483,185,620	517,839,432
15-Oct-15	6,777	4.7	62,085	43.1	68,862	47.8	34,660,589	483,247,705	517,908,294
16-Oct-15	6,748	4.7	61,003	42.4	67,751	47.0	34,667,337	483,308,708	517,976,045
17-Oct-15	6,688	4.6	59,896	41.6	66,584	46.2	34,674,025	483,368,604	518,042,629
18-Oct-15	6,665	4.6	58,612	40.7	65,277	45.3	34,680,690	483,427,216	518,107,906
19-Oct-15	6,442	4.5	57,477	39.9	63,919	44.4	34,687,132	483,484,693	518,171,825
20-Oct-15	6,488	4.5	56,569	39.3	63,057	43.8	34,693,620	483,541,262	518,234,882
21-Oct-15	5,661	3.9	55,460	38.5	61,121	42.4	34,699,281	483,596,722	518,296,003
22-Oct-15	5,247	3.6	54,692	38.0	59,939	41.6	34,704,528	483,651,414	518,355,942
23-Oct-15	5,050	3.5	53,891	37.4	58,941	40.9	34,709,578	483,705,305	518,414,883
24-Oct-15	4,903	3.4	52,650	36.6	57,553	40.0	34,714,481	483,757,955	518,472,436
25-Oct-15	5,844	4.1	52,275	36.3	58,119	40.4	34,720,325	483,810,230	518,530,555
26-Oct-15	4,652	3.2	52,115	36.2	56,767	39.4	34,724,977	483,862,345	518,587,322
27-Oct-15	4,333	3.0	50,810	35.3	55,143	38.3	34,729,310	483,913,155	518,642,465
28-Oct-15	5,259	3.7	49,408	34.3	54,667	38.0	34,734,569	483,962,563	518,697,132
29-Oct-15	5,773	4.0	57,099	39.7	62,872	43.7	34,740,342	484,019,662	518,760,004
30-Oct-15	5,653	3.9	63,327	44.0	68,980	47.9	34,745,995	484,082,989	518,828,984
31-Oct-15	5,491	3.8	62,767	43.6	68,258	47.4	34,751,486	484,145,756	518,897,242

Former IBM Kingston Site (TechCity Facility)
Groundwater Collection System and North Parking Lot Area Extraction Data
Last Updated: *03/01/16*

Date	NPLA PS1 & PS2 Daily Flow (gal)	Average Pumping Rate (NPLA) (gpm)	Total GWCS Daily Flow (gal)	Average Pumping Rate (GWCS) (gpm)	Average Daily Flow Treatment System (gal)	Average Pumping Rate Treatment Sys (gpm)	Cumulative Gallons Pumped (NPLA only)	Cumulative Gallons Pumped (GWCS only)	Cumulative Gallons Pumped (Overall)
1-Nov-15	5,505	3.8	61,554	42.7	67,059	46.6	34,756,991	484,207,310	518,964,301
2-Nov-15	5,526	3.8	60,785	42.2	66,311	46.0	34,762,517	484,268,095	519,030,612
3-Nov-15	5,525	3.8	59,125	41.1	64,650	44.9	34,768,042	484,327,220	519,095,262
4-Nov-15	5,508	3.8	58,030	40.3	63,538	44.1	34,773,550	484,385,250	519,158,800
5-Nov-15	5,300	3.7	56,638	39.3	61,938	43.0	34,778,850	484,441,888	519,220,738
6-Nov-15	5,415	3.8	55,233	38.4	60,648	42.1	34,784,265	484,497,121	519,281,386
7-Nov-15	5,395	3.7	55,012	38.2	60,407	41.9	34,789,660	484,552,133	519,341,793
8-Nov-15	5,168	3.6	54,077	37.6	59,245	41.1	34,794,828	484,606,210	519,401,038
9-Nov-15	5,308	3.7	52,930	36.8	58,238	40.4	34,800,136	484,659,140	519,459,276
10-Nov-15	5,179	3.6	51,815	36.0	56,994	39.6	34,805,315	484,710,955	519,516,270
11-Nov-15	5,091	3.5	54,096	37.6	59,187	41.1	34,810,406	484,765,051	519,575,457
12-Nov-15	5,094	3.5	56,990	39.6	62,084	43.1	34,815,500	484,822,041	519,637,541
13-Nov-15	5,043	3.5	58,974	41.0	64,017	44.5	34,820,543	484,881,015	519,701,558
14-Nov-15	5,039	3.5	58,972	41.0	64,011	44.5	34,825,582	484,939,987	519,765,569
15-Nov-15	5,078	3.5	58,056	40.3	63,134	43.8	34,830,660	484,998,043	519,828,703
16-Nov-15	5,031	3.5	57,783	40.1	62,814	43.6	34,835,691	485,055,826	519,891,517
17-Nov-15	5,974	4.1	56,322	39.1	62,296	43.3	34,841,665	485,112,148	519,953,813
18-Nov-15	5,761	4.0	55,760	38.7	61,521	42.7	34,847,426	485,167,908	520,015,334
19-Nov-15	5,750	4.0	54,396	37.8	60,146	41.8	34,853,176	485,222,304	520,075,480
20-Nov-15	5,685	3.9	57,080	39.6	62,765	43.6	34,858,861	485,279,384	520,138,245
21-Nov-15	5,728	4.0	58,291	40.5	64,019	44.5	34,864,589	485,337,675	520,202,264
22-Nov-15	5,561	3.9	58,104	40.4	63,665	44.2	34,870,150	485,395,779	520,265,929
23-Nov-15	5,697	4.0	57,920	40.2	63,617	44.2	34,875,847	485,453,699	520,329,546
24-Nov-15	5,400	3.8	57,365	39.8	62,765	43.6	34,881,247	485,511,064	520,392,311
25-Nov-15	5,556	3.9	56,622	39.3	62,178	43.2	34,886,803	485,567,686	520,454,489
26-Nov-15	5,583	3.9	56,105	39.0	61,688	42.8	34,892,386	485,623,791	520,516,177
27-Nov-15	5,515	3.8	54,650	38.0	60,165	41.8	34,897,901	485,678,441	520,576,342
28-Nov-15	5,467	3.8	54,777	38.0	60,244	41.8	34,903,368	485,733,218	520,636,586
29-Nov-15	5,353	3.7	53,905	37.4	59,258	41.2	34,908,721	485,787,123	520,695,844
30-Nov-15	5,370	3.7	53,007	36.8	58,377	40.5	34,914,091	485,840,130	520,754,221
1-Dec-15	5,338	3.7	52,445	36.4	57,783	40.1	34,919,429	485,892,575	520,812,004
2-Dec-15	5,258	3.7	51,763	35.9	57,021	39.6	34,924,687	485,944,338	520,869,025
3-Dec-15	5,357	3.7	53,753	37.3	59,110	41.0	34,930,044	485,998,091	520,928,135
4-Dec-15	5,117	3.6	53,528	37.2	58,645	40.7	34,935,161	486,051,619	520,986,780
5-Dec-15	5,083	3.5	53,148	36.9	58,231	40.4	34,940,244	486,104,767	521,045,011
6-Dec-15	4,998	3.5	52,435	36.4	57,433	39.9	34,945,242	486,157,202	521,102,444
7-Dec-15	4,912	3.4	52,165	36.2	57,077	39.6	34,950,154	486,209,367	521,159,521
8-Dec-15	4,790	3.3	51,634	35.9	56,424	39.2	34,954,944	486,261,001	521,215,945

Former IBM Kingston Site (TechCity Facility)
Groundwater Collection System and North Parking Lot Area Extraction Data
Last Updated: *03/01/16*

Date	NPLA PS1 & PS2 Daily Flow (gal)	Average Pumping Rate (NPLA) (gpm)	Total GWCS Daily Flow (gal)	Average Pumping Rate (GWCS) (gpm)	Average Daily Flow Treatment System (gal)	Average Pumping Rate Treatment Sys (gpm)	Cumulative Gallons Pumped (NPLA only)	Cumulative Gallons Pumped (GWCS only)	Cumulative Gallons Pumped (Overall)
9-Dec-15	4,725	3.3	50,934	35.4	55,659	38.7	34,959,669	486,311,935	521,271,604
10-Dec-15	4,670	3.2	50,551	35.1	55,221	38.3	34,964,339	486,362,486	521,326,825
11-Dec-15	4,497	3.1	49,914	34.7	54,411	37.8	34,968,836	486,412,400	521,381,236
12-Dec-15	4,479	3.1	49,298	34.2	53,777	37.3	34,973,315	486,461,698	521,435,013
13-Dec-15	3,638	2.5	48,970	34.0	52,608	36.5	34,976,953	486,510,668	521,487,621
14-Dec-15	3,185	2.2	47,333	32.9	50,518	35.1	34,980,138	486,558,001	521,538,139
15-Dec-15	3,197	2.2	49,822	34.6	53,019	36.8	34,983,335	486,607,823	521,591,158
16-Dec-15	3,160	2.2	48,929	34.0	52,089	36.2	34,986,495	486,656,752	521,643,247
17-Dec-15	3,103	2.2	49,087	34.1	52,190	36.2	34,989,598	486,705,839	521,695,437
18-Dec-15	3,092	2.1	51,986	36.1	55,078	38.2	34,992,690	486,757,825	521,750,515
19-Dec-15	3,226	2.2	53,689	37.3	56,915	39.5	34,995,916	486,811,514	521,807,430
20-Dec-15	2,939	2.0	53,303	37.0	56,242	39.1	34,998,855	486,864,817	521,863,672
21-Dec-15	2,820	2.0	52,761	36.6	55,581	38.6	35,001,675	486,917,578	521,919,253
22-Dec-15	2,688	1.9	52,422	36.4	55,110	38.3	35,004,363	486,970,000	521,974,363
23-Dec-15	2,528	1.8	53,206	36.9	55,734	38.7	35,006,891	487,023,206	522,030,097
24-Dec-15	2,516	1.7	58,948	40.9	61,464	42.7	35,009,407	487,082,154	522,091,561
25-Dec-15	2,652	1.8	63,172	43.9	65,824	45.7	35,012,059	487,145,326	522,157,385
26-Dec-15	2,428	1.7	65,062	45.2	67,490	46.9	35,014,487	487,210,388	522,224,875
27-Dec-15	2,603	1.8	66,795	46.4	69,398	48.2	35,017,090	487,277,183	522,294,273
28-Dec-15	2,415	1.7	68,030	47.2	70,445	48.9	35,019,505	487,345,213	522,364,718
29-Dec-15	2,394	1.7	67,864	47.1	70,258	48.8	35,021,899	487,413,077	522,434,976
30-Dec-15	3,123	2.2	67,850	47.1	70,973	49.3	35,025,022	487,480,927	522,505,949
31-Dec-15	3,970	2.8	70,011	48.6	73,981	51.4	35,028,992	487,550,938	522,579,930

Appendix C

Groundwater Extraction and Treatment System Data Report including Flux Calculations

Former IBM Kingston Facility
Groundwater Treatment System Effectiveness Data
January 1, 2015 - December 31, 2015

SAMPLE LOCATION		GWCS UP AS	GWCS UP AS	GWCS UP AS	GWCS UP AS	GWCS UP AS	GWCS UP AS
SAMPLE DESCRIPTION		GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER
SAMPLE DATE		01/08/15	01/16/15	02/05/15	02/13/15	03/05/15	03/12/15
LABORATORY SAMPLE I.D.		420-86310-3	420-86549-2	420-87066-3	420-87310-2	420-87881-3	420-88163-2
SAMPLE RUN NUMBER		01	01	01	01	01	01
SAMPLE COMMENT CODES							
PARAMETER	UNITS						
BASE/NEUTRAL EXTRACTABLES							
1,2-DICHLOROBENZENE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
1,3-DICHLOROBENZENE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
1,4-DICHLOROBENZENE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
2-CHLOROETHYLVINYL ETHER	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
INDICATOR PARAMETERS							
PH	pH	NA	NA	NA	NA	NA	NA
TEMPERATURE	C	NA	NA	NA	NA	NA	NA
TOTAL DISSOLVED SOLIDS	mg/l	NA	NA	NA	NA	NA	NA
TOTAL SUSPENDED SOLIDS	mg/l	NA	NA	NA	NA	NA	NA
METALS							
LEAD, TOTAL	mg/l	NA	NA	NA	NA	NA	NA
VOLATILE ORGANICS							
1,1,1,2-TETRACHLOROETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
1,1,1-TRICHLOROETHANE	ug/l	73	62	70	70	64	65
1,1,2,2-TETRACHLOROETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
1,1,2-TRICHLOROETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
1,1-DICHLOROETHANE	ug/l	20	17	20	18	17	17
1,1-DICHLOROETHYLENE	ug/l	12	10	9.1	9.1	7.4	7.8
1,2,3-TRICHLOROPROPANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
1,2-DICHLOROETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
1,2-DICHLOROETHYLENE, TOTAL	ug/l	50	41	63	52	47	50
1,2-DICHLOROPROPANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
4-CHLOROTOLUENE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
ACROLEIN	ug/l	ND@5	ND@5	ND@5	ND@5	ND@5	ND@5
ACRYLONITRILE	ug/l	ND@5	ND@5	ND@5	ND@5	ND@5	ND@5
BENZENE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
BENZYL CHLORIDE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
BROMOBENZENE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
BROMODICHLOROMETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1

Former IBM Kingston Facility
Groundwater Treatment System Effectiveness Data
January 1, 2015 - December 31, 2015

SAMPLE LOCATION		GWCS UP AS	GWCS UP AS	GWCS UP AS	GWCS UP AS	GWCS UP AS	GWCS UP AS
SAMPLE DESCRIPTION		GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER
SAMPLE DATE		01/08/15	01/16/15	02/05/15	02/13/15	03/05/15	03/12/15
LABORATORY SAMPLE I.D.		420-86310-3	420-86549-2	420-87066-3	420-87310-2	420-87881-3	420-88163-2
SAMPLE RUN NUMBER		01	01	01	01	01	01
SAMPLE COMMENT CODES							
PARAMETER	UNITS						
VOLATILE ORGANICS (Continued)							
BROMOFORM	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
BROMOMETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
CARBON TETRACHLORIDE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
CHLOROBENZENE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
CHLORODIBROMOMETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
CHLOROETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
CHLOROFORM	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
CHLOROMETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
CIS-1,3-DICHLOROPROPYLENE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
DIBROMOMETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
DICHLORODIFLUOROMETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
ETHYLBENZENE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
METHYLENE CHLORIDE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
TETRACHLOROETHYLENE	ug/l	2.7	1.9	2.1	2.3	1.8	2.0
TOLUENE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
TRANS-1,3-DICHLOROPROPENE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
TRICHLOROETHYLENE	ug/l	96D	84	94D	90	79	84
TRICHLOROFLUOROMETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
VINYL CHLORIDE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
XYLENE, TOTAL	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1

Former IBM Kingston Facility
Groundwater Treatment System Effectiveness Data
January 1, 2015 - December 31, 2015

SAMPLE LOCATION		GWCS UP AS	GWCS UP AS	GWCS UP AS	GWCS UP AS	GWCS UP AS	GWCS UP AS
SAMPLE DESCRIPTION		GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER
SAMPLE DATE		04/02/15	04/09/15	05/07/15	05/14/15	06/04/15	06/11/15
LABORATORY SAMPLE I.D.		420-88820-3	420-89074-2	420-90033-3	420-90293-2	420-91081-3	420-91413-2
SAMPLE RUN NUMBER		01	01	01	01	01	01
SAMPLE COMMENT CODES							
PARAMETER	UNITS						
BASE/NEUTRAL EXTRACTABLES							
1,2-DICHLOROBENZENE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
1,3-DICHLOROBENZENE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
1,4-DICHLOROBENZENE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
2-CHLOROETHYLVINYL ETHER	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
INDICATOR PARAMETERS							
PH	pH	NA	NA	NA	NA	NA	NA
TEMPERATURE	C	NA	NA	NA	NA	NA	NA
TOTAL DISSOLVED SOLIDS	mg/l	NA	NA	NA	NA	NA	NA
TOTAL SUSPENDED SOLIDS	mg/l	NA	NA	NA	NA	NA	NA
METALS							
LEAD, TOTAL	mg/l	NA	NA	NA	NA	NA	NA
VOLATILE ORGANICS							
1,1,1,2-TETRACHLOROETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
1,1,1-TRICHLOROETHANE	ug/l	59	80	86	59	92	90
1,1,2,2-TETRACHLOROETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
1,1,2-TRICHLOROETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
1,1-DICHLOROETHANE	ug/l	16	24	24	15	23	24
1,1-DICHLOROETHYLENE	ug/l	9.4	8.9	15	9.0	14	7.5
1,2,3-TRICHLOROPROPANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
1,2-DICHLOROETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	1.3	ND@1
1,2-DICHLOROETHYLENE, TOTAL	ug/l	45	64	61	41	66	59
1,2-DICHLOROPROPANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
4-CHLOROTOLUENE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
ACROLEIN	ug/l	ND@5	ND@5	ND@5	ND@5	ND@5	ND@5
ACRYLONITRILE	ug/l	ND@5	ND@5	ND@5	ND@5	ND@5	ND@5
BENZENE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
BENZYL CHLORIDE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
BROMOBENZENE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
BROMODICHLOROMETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1

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SAMPLE LOCATION		GWCS UP AS	GWCS UP AS	GWCS UP AS	GWCS UP AS	GWCS UP AS	GWCS UP AS
SAMPLE DESCRIPTION		GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER
SAMPLE DATE		04/02/15	04/09/15	05/07/15	05/14/15	06/04/15	06/11/15
LABORATORY SAMPLE I.D.		420-88820-3	420-89074-2	420-90033-3	420-90293-2	420-91081-3	420-91413-2
SAMPLE RUN NUMBER		01	01	01	01	01	01
SAMPLE COMMENT CODES							
PARAMETER	UNITS						
VOLATILE ORGANICS (Continued)							
BROMOFORM	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
BROMOMETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
CARBON TETRACHLORIDE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
CHLOROBENZENE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
CHLORODIBROMOMETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
CHLOROETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
CHLOROFORM	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
CHLOROMETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
CIS-1,3-DICHLOROPROPYLENE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
DIBROMOMETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
DICHLORODIFLUOROMETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
ETHYLBENZENE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
METHYLENE CHLORIDE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
TETRACHLOROETHYLENE	ug/l	1.9	2.8	3.0	2.0	3.0	2.6
TOLUENE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
TRANS-1,3-DICHLOROPROPENE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
TRICHLOROETHYLENE	ug/l	81	110d	98d	82	110D	99D
TRICHLOROFLUOROMETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
VINYL CHLORIDE	ug/l	ND@1	1.6	ND@1	ND@1	1.3	ND@1
XYLENE, TOTAL	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1

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SAMPLE LOCATION		GWCS UP AS	GWCS UP AS	GWCS UP AS	GWCS UP AS	GWCS UP AS	GWCS UP AS
SAMPLE DESCRIPTION		GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER
SAMPLE DATE		07/02/15	07/09/15	08/06/15	08/13/15	09/03/15	09/10/15
LABORATORY SAMPLE I.D.		420-92232-3	420-92482-4	420-93610-3	420-93925-2	420-94716-3	420-94920-2
SAMPLE RUN NUMBER		01	01	01	01	01	01
SAMPLE COMMENT CODES							
PARAMETER	UNITS						
BASE/NEUTRAL EXTRACTABLES							
1,2-DICHLOROBENZENE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
1,3-DICHLOROBENZENE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
1,4-DICHLOROBENZENE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
2-CHLOROETHYLVINYL ETHER	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
INDICATOR PARAMETERS							
PH	pH	NA	NA	NA	NA	NA	NA
TEMPERATURE	C	NA	NA	NA	NA	NA	NA
TOTAL DISSOLVED SOLIDS	mg/l	NA	NA	NA	NA	NA	NA
TOTAL SUSPENDED SOLIDS	mg/l	NA	NA	NA	NA	NA	NA
METALS							
LEAD, TOTAL	mg/l	NA	NA	NA	NA	NA	NA
VOLATILE ORGANICS							
1,1,1,2-TETRACHLOROETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
1,1,1-TRICHLOROETHANE	ug/l	88	81	87	66	80	81
1,1,2,2-TETRACHLOROETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
1,1,2-TRICHLOROETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
1,1-DICHLOROETHANE	ug/l	19	20	22	21	23	23
1,1-DICHLOROETHYLENE	ug/l	15	5.3	13	14	13	13
1,2,3-TRICHLOROPROPANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
1,2-DICHLOROETHANE	ug/l	1.1	ND@1	1.3	1.0	1.3	1.4
1,2-DICHLOROETHYLENE, TOTAL	ug/l	59	52	71	49	65	66
1,2-DICHLOROPROPANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
4-CHLOROTOLUENE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
ACROLEIN	ug/l	ND@5	ND@5	ND@5	ND@5	ND@5	ND@5
ACRYLONITRILE	ug/l	ND@5	ND@5	ND@5	ND@5	ND@5	ND@5
BENZENE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
BENZYL CHLORIDE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
BROMOBENZENE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
BROMODICHLOROMETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1

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SAMPLE LOCATION		GWCS UP AS	GWCS UP AS	GWCS UP AS	GWCS UP AS	GWCS UP AS	GWCS UP AS
SAMPLE DESCRIPTION		GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER
SAMPLE DATE		07/02/15	07/09/15	08/06/15	08/13/15	09/03/15	09/10/15
LABORATORY SAMPLE I.D.		420-92232-3	420-92482-4	420-93610-3	420-93925-2	420-94716-3	420-94920-2
SAMPLE RUN NUMBER		01	01	01	01	01	01
SAMPLE COMMENT CODES							
PARAMETER	UNITS						
VOLATILE ORGANICS (Continued)							
BROMOFORM	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
BROMOMETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
CARBON TETRACHLORIDE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
CHLOROBENZENE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
CHLORODIBROMOMETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
CHLOROETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
CHLOROFORM	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
CHLOROMETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
CIS-1,3-DICHLOROPROPYLENE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
DIBROMOMETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
DICHLORODIFLUOROMETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
ETHYLBENZENE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
METHYLENE CHLORIDE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
TETRACHLOROETHYLENE	ug/l	3.0	2.6	3.3	2.8	2.9	2.7
TOLUENE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
TRANS-1,3-DICHLOROPROPENE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
TRICHLOROETHYLENE	ug/l	95D	97D	110D	92	96D	96D
TRICHLOROFLUOROMETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
VINYL CHLORIDE	ug/l	2.2	ND@1	1.2	ND@1	1.2	ND@1
XYLENE, TOTAL	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1

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SAMPLE LOCATION		GWCS UP AS	GWCS UP AS	GWCS UP AS	GWCS UP AS	GWCS UP AS	GWCS UP AS
SAMPLE DESCRIPTION		GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER
SAMPLE DATE		10/01/15	10/08/15	11/05/15	11/12/15	12/03/15	12/10/15
LABORATORY SAMPLE I.D.		420-95832-3	420-96100-2	420-97145-3	420-97384-2	420-98189-3	420-98477-2
SAMPLE RUN NUMBER		01	01	01	01	01	01
SAMPLE COMMENT CODES							
PARAMETER	UNITS						
BASE/NEUTRAL EXTRACTABLES							
1,2-DICHLOROBENZENE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
1,3-DICHLOROBENZENE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
1,4-DICHLOROBENZENE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
2-CHLOROETHYLVINYL ETHER	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
INDICATOR PARAMETERS							
PH	pH	NA	NA	NA	NA	NA	NA
TEMPERATURE	C	NA	NA	NA	NA	NA	NA
TOTAL DISSOLVED SOLIDS	mg/l	NA	NA	NA	NA	NA	NA
TOTAL SUSPENDED SOLIDS	mg/l	NA	NA	NA	NA	NA	NA
METALS							
LEAD, TOTAL	mg/l	NA	NA	NA	NA	NA	NA
VOLATILE ORGANICS							
1,1,1,2-TETRACHLOROETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
1,1,1-TRICHLOROETHANE	ug/l	66	75	77	79	68	77
1,1,2,2-TETRACHLOROETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
1,1,2-TRICHLOROETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
1,1-DICHLOROETHANE	ug/l	20	21	22	22	18	20
1,1-DICHLOROETHYLENE	ug/l	11	12	12	14	11	11
1,2,3-TRICHLOROPROPANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
1,2-DICHLOROETHANE	ug/l	1.2	1.3	1.4	1.1	1.0	1.2
1,2-DICHLOROETHYLENE, TOTAL	ug/l	61	68	67	58	41	50
1,2-DICHLOROPROPANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
4-CHLOROTOLUENE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
ACROLEIN	ug/l	ND@5	ND@5	ND@5	ND@5	ND@5	ND@5
ACRYLONITRILE	ug/l	ND@5	ND@5	ND@5	ND@5	ND@5	ND@5
BENZENE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
BENZYL CHLORIDE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
BROMOBENZENE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
BROMODICHLOROMETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1

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SAMPLE LOCATION		GWCS UP AS	GWCS UP AS	GWCS UP AS	GWCS UP AS	GWCS UP AS	GWCS UP AS
SAMPLE DESCRIPTION		GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER
SAMPLE DATE		10/01/15	10/08/15	11/05/15	11/12/15	12/03/15	12/10/15
LABORATORY SAMPLE I.D.		420-95832-3	420-96100-2	420-97145-3	420-97384-2	420-98189-3	420-98477-2
SAMPLE RUN NUMBER		01	01	01	01	01	01
SAMPLE COMMENT CODES							
PARAMETER	UNITS						
VOLATILE ORGANICS (Continued)							
BROMOFORM	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
BROMOMETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
CARBON TETRACHLORIDE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
CHLOROBENZENE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
CHLORODIBROMOMETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
CHLOROETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
CHLOROFORM	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
CHLOROMETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
CIS-1,3-DICHLOROPROPYLENE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
DIBROMOMETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
DICHLORODIFLUOROMETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
ETHYLBENZENE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
METHYLENE CHLORIDE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
TETRACHLOROETHYLENE	ug/l	2.6	3.0	3.2	3.2	2.4	3.0
TOLUENE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
TRANS-1,3-DICHLOROPROPENE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
TRICHLOROETHYLENE	ug/l	87D	100D	100D	120	90	88D
TRICHLOROFLUOROMETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
VINYL CHLORIDE	ug/l	1.2	1.1	ND@1	ND@1	ND@1	ND@1
XYLENE, TOTAL	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1

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SAMPLE LOCATION		NPLA INFL	NPLA INFL	NPLA INFL	NPLA INFL	NPLA INFL	NPLA INFL
SAMPLE DESCRIPTION		GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER
SAMPLE DATE		01/08/15	02/05/15	03/05/15	04/02/15	05/07/15	06/04/15
LABORATORY SAMPLE I.D.		420-86310-2	420-87066-2	420-87881-2	420-88820-2	420-90033-2	420-91081-2
SAMPLE RUN NUMBER		01	01	01	01	01	01
SAMPLE COMMENT CODES							
PARAMETER	UNITS						
BASE/NEUTRAL EXTRACTABLES							
1,2-DICHLOROBENZENE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
1,3-DICHLOROBENZENE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
1,4-DICHLOROBENZENE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
2-CHLOROETHYLVINYL ETHER	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
INDICATOR PARAMETERS							
PH	pH	NA	NA	NA	NA	NA	NA
TEMPERATURE	C	NA	NA	NA	NA	NA	NA
TOTAL DISSOLVED SOLIDS	mg/l	NA	NA	NA	NA	NA	NA
TOTAL SUSPENDED SOLIDS	mg/l	NA	NA	NA	NA	NA	NA
METALS							
LEAD, TOTAL	mg/l	NA	NA	NA	NA	NA	NA
VOLATILE ORGANICS							
1,1,1,2-TETRACHLOROETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
1,1,1-TRICHLOROETHANE	ug/l	ND@1	31	2.5	1.1	ND@1	ND@1
1,1,2,2-TETRACHLOROETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
1,1,2-TRICHLOROETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
1,1-DICHLOROETHANE	ug/l	ND@1	11	ND@1	ND@1	ND@1	ND@1
1,1-DICHLOROETHYLENE	ug/l	ND@1	1.8	ND@1	ND@1	ND@1	ND@1
1,2,3-TRICHLOROPROPANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
1,2-DICHLOROETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
1,2-DICHLOROETHYLENE, TOTAL	ug/l	ND@1	60	1.5	1.7	ND@1	1.9
1,2-DICHLOROPROPANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
4-CHLOROTOLUENE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
ACROLEIN	ug/l	ND@5	ND@5	ND@5	ND@5	ND@5	ND@5
ACRYLONITRILE	ug/l	ND@5	ND@5	ND@5	ND@5	ND@5	ND@5
BENZENE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
BENZYL CHLORIDE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
BROMOBENZENE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
BROMODICHLOROMETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1

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SAMPLE LOCATION		NPLA INFL	NPLA INFL	NPLA INFL	NPLA INFL	NPLA INFL	NPLA INFL
SAMPLE DESCRIPTION		GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER
SAMPLE DATE		01/08/15	02/05/15	03/05/15	04/02/15	05/07/15	06/04/15
LABORATORY SAMPLE I.D.		420-86310-2	420-87066-2	420-87881-2	420-88820-2	420-90033-2	420-91081-2
SAMPLE RUN NUMBER		01	01	01	01	01	01
SAMPLE COMMENT CODES							
PARAMETER	UNITS						
VOLATILE ORGANICS (Continued)							
BROMOFORM	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
BROMOMETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
CARBON TETRACHLORIDE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
CHLOROBENZENE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
CHLORODIBROMOMETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
CHLOROETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
CHLOROFORM	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
CHLOROMETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
CIS-1,3-DICHLOROPROPYLENE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
DIBROMOMETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
DICHLORODIFLUOROMETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
ETHYLBENZENE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
METHYLENE CHLORIDE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
TETRACHLOROETHYLENE	ug/l	1.2	1.8	ND@1	ND@1	1.0	ND@1
TOLUENE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
TRANS-1,3-DICHLOROPROPENE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
TRICHLOROETHYLENE	ug/l	1.6	34	3.2	2.2	4.1	2.2
TRICHLOROFLUOROMETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
VINYL CHLORIDE	ug/l	ND@1	1.1	ND@1	ND@1	ND@1	ND@1
XYLENE, TOTAL	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1

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SAMPLE LOCATION		NPLA INFL	NPLA INFL	NPLA INFL	NPLA INFL	NPLA INFL	NPLA INFL
SAMPLE DESCRIPTION		GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER
SAMPLE DATE		07/02/15	07/09/15	08/06/15	09/03/15	10/01/15	11/05/15
LABORATORY SAMPLE I.D.		420-92232-2	420-92482-3	420-93610-2	420-94716-2	420-95832-2	420-97145-2
SAMPLE RUN NUMBER		01	01	01	01	01	01
SAMPLE COMMENT CODES							
PARAMETER	UNITS						
BASE/NEUTRAL EXTRACTABLES							
1,2-DICHLOROBENZENE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
1,3-DICHLOROBENZENE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
1,4-DICHLOROBENZENE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
2-CHLOROETHYLVINYL ETHER	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
INDICATOR PARAMETERS							
PH	pH	NA	NA	NA	NA	NA	NA
TEMPERATURE	C	NA	NA	NA	NA	NA	NA
TOTAL DISSOLVED SOLIDS	mg/l	NA	NA	NA	NA	NA	NA
TOTAL SUSPENDED SOLIDS	mg/l	NA	NA	NA	NA	NA	NA
METALS							
LEAD, TOTAL	mg/l	NA	NA	NA	NA	NA	NA
VOLATILE ORGANICS							
1,1,1,2-TETRACHLOROETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
1,1,1-TRICHLOROETHANE	ug/l	ND@1	ND@1	10	ND@1	ND@1	ND@1
1,1,2,2-TETRACHLOROETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
1,1,2-TRICHLOROETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
1,1-DICHLOROETHANE	ug/l	ND@1	ND@1	9.0	ND@1	ND@1	ND@1
1,1-DICHLOROETHYLENE	ug/l	ND@1	ND@1	1.1	ND@1	ND@1	ND@1
1,2,3-TRICHLOROPROPANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
1,2-DICHLOROETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
1,2-DICHLOROETHYLENE, TOTAL	ug/l	ND@1	ND@1	35	ND@1	ND@1	ND@1
1,2-DICHLOROPROPANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
4-CHLOROTOLUENE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
ACROLEIN	ug/l	ND@5	ND@5	ND@5	ND@5	ND@5	ND@5
ACRYLONITRILE	ug/l	ND@5	ND@5	ND@5	ND@5	ND@5	ND@5
BENZENE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
BENZYL CHLORIDE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
BROMOBENZENE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
BROMODICHLOROMETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1

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SAMPLE LOCATION		NPLA INFL	NPLA INFL	NPLA INFL	NPLA INFL	NPLA INFL	NPLA INFL
SAMPLE DESCRIPTION		GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER
SAMPLE DATE		07/02/15	07/09/15	08/06/15	09/03/15	10/01/15	11/05/15
LABORATORY SAMPLE I.D.		420-92232-2	420-92482-3	420-93610-2	420-94716-2	420-95832-2	420-97145-2
SAMPLE RUN NUMBER		01	01	01	01	01	01
SAMPLE COMMENT CODES							
PARAMETER	UNITS						
VOLATILE ORGANICS (Continued)							
BROMOFORM	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
BROMOMETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
CARBON TETRACHLORIDE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
CHLOROBENZENE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
CHLORODIBROMOMETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
CHLOROETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
CHLOROFORM	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
CHLOROMETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
CIS-1,3-DICHLOROPROPYLENE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
DIBROMOMETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
DICHLORODIFLUOROMETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
ETHYLBENZENE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
METHYLENE CHLORIDE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
TETRACHLOROETHYLENE	ug/l	ND@1	1.0	ND@1	1.3	1.0	1.4
TOLUENE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
TRANS-1,3-DICHLOROPROPENE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
TRICHLOROETHYLENE	ug/l	ND@1	ND@1	18	1.7	ND@1	1.6
TRICHLOROFLUOROMETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
VINYL CHLORIDE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
XYLENE, TOTAL	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1

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SAMPLE LOCATION		NPLA INFL	SPDES OF 01A	SPDES OF 01A	SPDES OF 01A	SPDES OF 01A
SAMPLE DESCRIPTION		GROUNDWATER	SPDES OUTFL	SPDES OUTFL	SPDES OUTFL	SPDES OUTFL
SAMPLE DATE		12/03/15	01/08/15	01/08/15	01/16/15	02/05/15
LABORATORY SAMPLE I.D.		420-98189-2	420-86310-1	420-86311-1	420-86549-1	420-87066-1
SAMPLE RUN NUMBER		01	01	01	01	01
SAMPLE COMMENT CODES						
PARAMETER	UNITS					
BASE/NEUTRAL EXTRACTABLES						
1,2-DICHLOROBENZENE	ug/l	ND@1	ND@1	NA	ND@1	ND@1
1,3-DICHLOROBENZENE	ug/l	ND@1	ND@1	NA	ND@1	ND@1
1,4-DICHLOROBENZENE	ug/l	ND@1	ND@1	NA	ND@1	ND@1
2-CHLOROETHYLVINYL ETHER	ug/l	ND@1	ND@1	NA	ND@1	ND@1
INDICATOR PARAMETERS						
PH	pH	NA	7.28	NA	7.09	8.08
TEMPERATURE	C	NA	9.5	NA	11.4	8.9
TOTAL DISSOLVED SOLIDS	mg/l	NA	330	NA	NA	280
TOTAL SUSPENDED SOLIDS	mg/l	NA	ND@1.0	NA	NA	ND@1.0
METALS						
LEAD, TOTAL	mg/l	NA	NA	ND@0.0050	NA	NA
VOLATILE ORGANICS						
1,1,1,2-TETRACHLOROETHANE	ug/l	ND@1	ND@1	NA	ND@1	ND@1
1,1,1-TRICHLOROETHANE	ug/l	ND@1	ND@1	NA	ND@1	ND@1
1,1,2,2-TETRACHLOROETHANE	ug/l	ND@1	ND@1	NA	ND@1	ND@1
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@1	ND@1	NA	ND@1	ND@1
1,1,2-TRICHLOROETHANE	ug/l	ND@1	ND@1	NA	ND@1	ND@1
1,1-DICHLOROETHANE	ug/l	ND@1	ND@1	NA	ND@1	ND@1
1,1-DICHLOROETHYLENE	ug/l	ND@1	ND@1	NA	ND@1	ND@1
1,2,3-TRICHLOROPROPANE	ug/l	ND@1	ND@1	NA	ND@1	ND@1
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@1	ND@1	NA	ND@1	ND@1
1,2-DICHLOROETHANE	ug/l	ND@1	ND@1	NA	ND@1	ND@1
1,2-DICHLOROETHYLENE, TOTAL	ug/l	ND@1	ND@1	NA	ND@1	ND@1
1,2-DICHLOROPROPANE	ug/l	ND@1	ND@1	NA	ND@1	ND@1
4-CHLOROTOLUENE	ug/l	ND@1	ND@1	NA	ND@1	ND@1
ACROLEIN	ug/l	ND@5	ND@5	NA	ND@5	ND@5
ACRYLONITRILE	ug/l	ND@5	ND@5	NA	ND@5	ND@5
BENZENE	ug/l	ND@1	ND@1	NA	ND@1	ND@1
BENZYL CHLORIDE	ug/l	ND@1	ND@1	NA	ND@1	ND@1
BROMOBENZENE	ug/l	ND@1	ND@1	NA	ND@1	ND@1
BROMODICHLOROMETHANE	ug/l	ND@1	ND@1	NA	ND@1	ND@1

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SAMPLE LOCATION		NPLA INFL	SPDES OF 01A	SPDES OF 01A	SPDES OF 01A	SPDES OF 01A
SAMPLE DESCRIPTION		GROUNDWATER	SPDES OUTFL	SPDES OUTFL	SPDES OUTFL	SPDES OUTFL
SAMPLE DATE		12/03/15	01/08/15	01/08/15	01/16/15	02/05/15
LABORATORY SAMPLE I.D.		420-98189-2	420-86310-1	420-86311-1	420-86549-1	420-87066-1
SAMPLE RUN NUMBER		01	01	01	01	01
SAMPLE COMMENT CODES						
PARAMETER	UNITS					
VOLATILE ORGANICS (Continued)						
BROMOFORM	ug/l	ND@1	ND@1	NA	ND@1	ND@1
BROMOMETHANE	ug/l	ND@1	ND@1	NA	ND@1	ND@1
CARBON TETRACHLORIDE	ug/l	ND@1	ND@1	NA	ND@1	ND@1
CHLOROBENZENE	ug/l	ND@1	ND@1	NA	ND@1	ND@1
CHLORODIBROMOMETHANE	ug/l	ND@1	ND@1	NA	ND@1	ND@1
CHLOROETHANE	ug/l	ND@1	ND@1	NA	ND@1	ND@1
CHLOROFORM	ug/l	1.3	ND@1	NA	ND@1	ND@1
CHLOROMETHANE	ug/l	ND@1	ND@1	NA	ND@1	ND@1
CIS-1,3-DICHLOROPROPYLENE	ug/l	ND@1	ND@1	NA	ND@1	ND@1
DIBROMOMETHANE	ug/l	ND@1	ND@1	NA	ND@1	ND@1
DICHLORODIFLUOROMETHANE	ug/l	ND@1	ND@1	NA	ND@1	ND@1
ETHYLBENZENE	ug/l	ND@1	ND@1	NA	ND@1	ND@1
METHYLENE CHLORIDE	ug/l	ND@1	ND@1	NA	ND@1	ND@1
TETRACHLOROETHYLENE	ug/l	ND@1	ND@1	NA	ND@1	ND@1
TOLUENE	ug/l	ND@1	ND@1	NA	ND@1	ND@1
TRANS-1,3-DICHLOROPROPENE	ug/l	ND@1	ND@1	NA	ND@1	ND@1
TRICHLOROETHYLENE	ug/l	ND@1	ND@1	NA	ND@1	ND@1
TRICHLOROFLUOROMETHANE	ug/l	ND@1	ND@1	NA	ND@1	ND@1
VINYL CHLORIDE	ug/l	ND@1	ND@1	NA	ND@1	ND@1
XYLENE, TOTAL	ug/l	ND@1	ND@1	NA	ND@1	ND@1

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SAMPLE LOCATION		SPDES OF 01A	SPDES OF 01A	SPDES OF 01A	SPDES OF 01A	SPDES OF 01A	SPDES OF 01A
SAMPLE DESCRIPTION		SPDES OUTFL	SPDES OUTFL	SPDES OUTFL	SPDES OUTFL	SPDES OUTFL	SPDES OUTFL
SAMPLE DATE		02/13/15	03/05/15	03/12/15	04/02/15	04/02/15	04/09/15
LABORATORY SAMPLE I.D.		420-87310-1	420-87881-1	420-88163-1	420-88819-1	420-88820-1	420-89074-1
SAMPLE RUN NUMBER		01	01	01	01	01	01
SAMPLE COMMENT CODES							
PARAMETER	UNITS						
BASE/NEUTRAL EXTRACTABLES							
1,2-DICHLOROBENZENE	ug/l	ND@1	ND@1	ND@1	NA	ND@1	ND@1
1,3-DICHLOROBENZENE	ug/l	ND@1	ND@1	ND@1	NA	ND@1	ND@1
1,4-DICHLOROBENZENE	ug/l	ND@1	ND@1	ND@1	NA	ND@1	ND@1
2-CHLOROETHYLVINYL ETHER	ug/l	ND@1	ND@1	ND@1	NA	ND@1	ND@1
INDICATOR PARAMETERS							
PH	pH	8.25	8.23	7.68	NA	7.95	8.0
TEMPERATURE	C	5.9	10.3	10.0	NA	10.40	10.8
TOTAL DISSOLVED SOLIDS	mg/l	NA	360	NA	NA	410	NA
TOTAL SUSPENDED SOLIDS	mg/l	NA	ND@1.0	NA	NA	ND@1.0	NA
METALS							
LEAD, TOTAL	mg/l	NA	NA	NA	ND@0.0050	NA	NA
VOLATILE ORGANICS							
1,1,1,2-TETRACHLOROETHANE	ug/l	ND@1	ND@1	ND@1	NA	ND@1	ND@1
1,1,1-TRICHLOROETHANE	ug/l	ND@1	ND@1	ND@1	NA	ND@1	ND@1
1,1,2,2-TETRACHLOROETHANE	ug/l	ND@1	ND@1	ND@1	NA	ND@1	ND@1
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@1	ND@1	ND@1	NA	ND@1	ND@1
1,1,2-TRICHLOROETHANE	ug/l	ND@1	ND@1	ND@1	NA	ND@1	ND@1
1,1-DICHLOROETHANE	ug/l	ND@1	ND@1	ND@1	NA	ND@1	ND@1
1,1-DICHLOROETHYLENE	ug/l	ND@1	ND@1	ND@1	NA	ND@1	ND@1
1,2,3-TRICHLOROPROPANE	ug/l	ND@1	ND@1	ND@1	NA	ND@1	ND@1
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@1	ND@1	ND@1	NA	ND@1	ND@1
1,2-DICHLOROETHANE	ug/l	ND@1	ND@1	ND@1	NA	ND@1	ND@1
1,2-DICHLOROETHYLENE, TOTAL	ug/l	ND@1	ND@1	ND@1	NA	ND@1	ND@1
1,2-DICHLOROPROPANE	ug/l	ND@1	ND@1	ND@1	NA	ND@1	ND@1
4-CHLOROTOLUENE	ug/l	ND@1	ND@1	ND@1	NA	ND@1	ND@1
ACROLEIN	ug/l	ND@5	ND@5	ND@5	NA	ND@5	ND@5
ACRYLONITRILE	ug/l	ND@5	ND@5	ND@5	NA	ND@5	ND@5
BENZENE	ug/l	ND@1	ND@1	ND@1	NA	ND@1	ND@1
BENZYL CHLORIDE	ug/l	ND@1	ND@1	ND@1	NA	ND@1	ND@1
BROMOBENZENE	ug/l	ND@1	ND@1	ND@1	NA	ND@1	ND@1
BROMODICHLOROMETHANE	ug/l	ND@1	ND@1	ND@1	NA	ND@1	ND@1

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SAMPLE LOCATION		SPDES OF 01A	SPDES OF 01A	SPDES OF 01A	SPDES OF 01A	SPDES OF 01A	SPDES OF 01A
SAMPLE DESCRIPTION		SPDES OUTFL	SPDES OUTFL	SPDES OUTFL	SPDES OUTFL	SPDES OUTFL	SPDES OUTFL
SAMPLE DATE		02/13/15	03/05/15	03/12/15	04/02/15	04/02/15	04/09/15
LABORATORY SAMPLE I.D.		420-87310-1	420-87881-1	420-88163-1	420-88819-1	420-88820-1	420-89074-1
SAMPLE RUN NUMBER		01	01	01	01	01	01
SAMPLE COMMENT CODES							
PARAMETER	UNITS						
VOLATILE ORGANICS (Continued)							
BROMOFORM	ug/l	ND@1	ND@1	ND@1	NA	ND@1	ND@1
BROMOMETHANE	ug/l	ND@1	ND@1	ND@1	NA	ND@1	ND@1
CARBON TETRACHLORIDE	ug/l	ND@1	ND@1	ND@1	NA	ND@1	ND@1
CHLOROBENZENE	ug/l	ND@1	ND@1	ND@1	NA	ND@1	ND@1
CHLORODIBROMOMETHANE	ug/l	ND@1	ND@1	ND@1	NA	ND@1	ND@1
CHLOROETHANE	ug/l	ND@1	ND@1	ND@1	NA	ND@1	ND@1
CHLOROFORM	ug/l	ND@1	ND@1	ND@1	NA	ND@1	ND@1
CHLOROMETHANE	ug/l	ND@1	ND@1	ND@1	NA	ND@1	ND@1
CIS-1,3-DICHLOROPROPYLENE	ug/l	ND@1	ND@1	ND@1	NA	ND@1	ND@1
DIBROMOMETHANE	ug/l	ND@1	ND@1	ND@1	NA	ND@1	ND@1
DICHLORODIFLUOROMETHANE	ug/l	ND@1	ND@1	ND@1	NA	ND@1	ND@1
ETHYLBENZENE	ug/l	ND@1	ND@1	ND@1	NA	ND@1	ND@1
METHYLENE CHLORIDE	ug/l	ND@1	ND@1	ND@1	NA	ND@1	ND@1
TETRACHLOROETHYLENE	ug/l	ND@1	ND@1	ND@1	NA	ND@1	ND@1
TOLUENE	ug/l	ND@1	ND@1	ND@1	NA	ND@1	ND@1
TRANS-1,3-DICHLOROPROPENE	ug/l	ND@1	ND@1	ND@1	NA	ND@1	ND@1
TRICHLOROETHYLENE	ug/l	ND@1	ND@1	ND@1	NA	ND@1	ND@1
TRICHLOROFLUOROMETHANE	ug/l	ND@1	ND@1	ND@1	NA	ND@1	ND@1
VINYL CHLORIDE	ug/l	ND@1	ND@1	ND@1	NA	ND@1	ND@1
XYLENE, TOTAL	ug/l	ND@1	ND@1	ND@1	NA	ND@1	ND@1

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SAMPLE LOCATION		SPDES OF 01A	SPDES OF 01A	SPDES OF 01A	SPDES OF 01A	SPDES OF 01A	SPDES OF 01A
SAMPLE DESCRIPTION		SPDES OUTFL	SPDES OUTFL	SPDES OUTFL	SPDES OUTFL	SPDES OUTFL	SPDES OUTFL
SAMPLE DATE		05/07/15	05/14/15	06/04/15	06/11/15	07/02/15	07/09/15
LABORATORY SAMPLE I.D.		420-90033-1	420-90293-1	420-91081-1	420-91413-1	420-92232-1	420-92482-1
SAMPLE RUN NUMBER		01	01	01	01	01	01
SAMPLE COMMENT CODES							
PARAMETER	UNITS						
BASE/NEUTRAL EXTRACTABLES							
1,2-DICHLOROBENZENE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	NA
1,3-DICHLOROBENZENE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	NA
1,4-DICHLOROBENZENE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	NA
2-CHLOROETHYLVINYL ETHER	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	NA
INDICATOR PARAMETERS							
PH	pH	6.95	7.56	6.99	6.45	8.53	NA
TEMPERATURE	C	15.0	14.9	15.2	21.8	20.8	NA
TOTAL DISSOLVED SOLIDS	mg/l	390	NA	400	NA	NA	NA
TOTAL SUSPENDED SOLIDS	mg/l	ND@1.1	NA	1.6	NA	NA	NA
METALS							
LEAD, TOTAL	mg/l	NA	NA	NA	NA	NA	ND@0.0050
VOLATILE ORGANICS							
1,1,1,2-TETRACHLOROETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	NA
1,1,1-TRICHLOROETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	NA
1,1,2,2-TETRACHLOROETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	NA
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	NA
1,1,2-TRICHLOROETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	NA
1,1-DICHLOROETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	NA
1,1-DICHLOROETHYLENE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	NA
1,2,3-TRICHLOROPROPANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	NA
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	NA
1,2-DICHLOROETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	NA
1,2-DICHLOROETHYLENE, TOTAL	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	NA
1,2-DICHLOROPROPANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	NA
4-CHLOROTOLUENE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	NA
ACROLEIN	ug/l	ND@5	ND@5	ND@5	ND@5	ND@5	NA
ACRYLONITRILE	ug/l	ND@5	ND@5	ND@5	ND@5	ND@5	NA
BENZENE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	NA
BENZYL CHLORIDE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	NA
BROMOBENZENE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	NA
BROMODICHLOROMETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	NA

Former IBM Kingston Facility
Groundwater Treatment System Effectiveness Data
January 1, 2015 - December 31, 2015

SAMPLE LOCATION		SPDES OF 01A	SPDES OF 01A	SPDES OF 01A	SPDES OF 01A	SPDES OF 01A	SPDES OF 01A
SAMPLE DESCRIPTION		SPDES OUTFL	SPDES OUTFL	SPDES OUTFL	SPDES OUTFL	SPDES OUTFL	SPDES OUTFL
SAMPLE DATE		05/07/15	05/14/15	06/04/15	06/11/15	07/02/15	07/09/15
LABORATORY SAMPLE I.D.		420-90033-1	420-90293-1	420-91081-1	420-91413-1	420-92232-1	420-92482-1
SAMPLE RUN NUMBER		01	01	01	01	01	01
SAMPLE COMMENT CODES							
PARAMETER	UNITS						
VOLATILE ORGANICS (Continued)							
BROMOFORM	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	NA
BROMOMETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	NA
CARBON TETRACHLORIDE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	NA
CHLOROBENZENE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	NA
CHLORODIBROMOMETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	NA
CHLOROETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	NA
CHLOROFORM	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	NA
CHLOROMETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	NA
CIS-1,3-DICHLOROPROPYLENE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	NA
DIBROMOMETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	NA
DICHLORODIFLUOROMETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	NA
ETHYLBENZENE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	NA
METHYLENE CHLORIDE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	NA
TETRACHLOROETHYLENE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	NA
TOLUENE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	NA
TRANS-1,3-DICHLOROPROPENE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	NA
TRICHLOROETHYLENE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	NA
TRICHLOROFLUOROMETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	NA
VINYL CHLORIDE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	NA
XYLENE, TOTAL	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	NA

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Groundwater Treatment System Effectiveness Data
January 1, 2015 - December 31, 2015

SAMPLE LOCATION		SPDES OF 01A	SPDES OF 01A	SPDES OF 01A	SPDES OF 01A	SPDES OF 01A	SPDES OF 01A
SAMPLE DESCRIPTION		SPDES OUTFL	SPDES OUTFL	SPDES OUTFL	SPDES OUTFL	SPDES OUTFL	SPDES OUTFL
SAMPLE DATE		07/09/15	08/06/15	08/13/15	09/03/15	09/10/15	10/01/15
LABORATORY SAMPLE I.D.		420-92482-2	420-93610-1	420-93925-1	420-94716-1	420-94920-1	420-95832-1
SAMPLE RUN NUMBER		01	01	01	01	01	01
SAMPLE COMMENT CODES							
PARAMETER	UNITS						
BASE/NEUTRAL EXTRACTABLES							
1,2-DICHLOROBENZENE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
1,3-DICHLOROBENZENE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
1,4-DICHLOROBENZENE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
2-CHLOROETHYLVINYL ETHER	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
INDICATOR PARAMETERS							
PH	pH	8.6	8.2	7.94	7.9	7.71	6.91
TEMPERATURE	C	20.0	21.1	20.0	22	21.1	19.8
TOTAL DISSOLVED SOLIDS	mg/l	420	430	NA	360	NA	340
TOTAL SUSPENDED SOLIDS	mg/l	ND@1.0	ND@1.0	NA	ND@1.0	NA	ND@1.0
METALS							
LEAD, TOTAL	mg/l	NA	NA	NA	NA	NA	NA
VOLATILE ORGANICS							
1,1,1,2-TETRACHLOROETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
1,1,1-TRICHLOROETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
1,1,2,2-TETRACHLOROETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
1,1,2-TRICHLOROETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
1,1-DICHLOROETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
1,1-DICHLOROETHYLENE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
1,2,3-TRICHLOROPROPANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
1,2-DICHLOROETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
1,2-DICHLOROETHYLENE, TOTAL	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
1,2-DICHLOROPROPANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
4-CHLOROTOLUENE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
ACROLEIN	ug/l	ND@5	ND@5	ND@5	ND@5	ND@5	ND@5
ACRYLONITRILE	ug/l	ND@5	ND@5	ND@5	ND@5	ND@5	ND@5
BENZENE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
BENZYL CHLORIDE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
BROMOBENZENE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
BROMODICHLOROMETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1

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Groundwater Treatment System Effectiveness Data
January 1, 2015 - December 31, 2015

SAMPLE LOCATION		SPDES OF 01A	SPDES OF 01A	SPDES OF 01A	SPDES OF 01A	SPDES OF 01A	SPDES OF 01A
SAMPLE DESCRIPTION		SPDES OUTFL	SPDES OUTFL	SPDES OUTFL	SPDES OUTFL	SPDES OUTFL	SPDES OUTFL
SAMPLE DATE		07/09/15	08/06/15	08/13/15	09/03/15	09/10/15	10/01/15
LABORATORY SAMPLE I.D.		420-92482-2	420-93610-1	420-93925-1	420-94716-1	420-94920-1	420-95832-1
SAMPLE RUN NUMBER		01	01	01	01	01	01
SAMPLE COMMENT CODES							
PARAMETER	UNITS						
VOLATILE ORGANICS (Continued)							
BROMOFORM	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
BROMOMETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
CARBON TETRACHLORIDE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
CHLOROBENZENE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
CHLORODIBROMOMETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
CHLOROETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
CHLOROFORM	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
CHLOROMETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
CIS-1,3-DICHLOROPROPYLENE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
DIBROMOMETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
DICHLORODIFLUOROMETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
ETHYLBENZENE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
METHYLENE CHLORIDE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
TETRACHLOROETHYLENE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
TOLUENE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
TRANS-1,3-DICHLOROPROPENE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
TRICHLOROETHYLENE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
TRICHLOROFLUOROMETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
VINYL CHLORIDE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
XYLENE, TOTAL	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1

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January 1, 2015 - December 31, 2015

SAMPLE LOCATION		SPDES OF 01A	SPDES OF 01A	SPDES OF 01A	SPDES OF 01A	SPDES OF 01A	SPDES OF 01A
SAMPLE DESCRIPTION		SPDES OUTFL	SPDES OUTFL	SPDES OUTFL	SPDES OUTFL	SPDES OUTFL	SPDES OUTFL
SAMPLE DATE		10/01/15	10/08/15	11/05/15	11/12/15	12/03/15	12/10/15
LABORATORY SAMPLE I.D.		420-95833-1	420-96100-1	420-97145-1	420-97384-1	420-98189-1	420-98477-1
SAMPLE RUN NUMBER		01	01	01	01	01	01
SAMPLE COMMENT CODES							
PARAMETER	UNITS						
BASE/NEUTRAL EXTRACTABLES							
1,2-DICHLOROBENZENE	ug/l	NA	ND@1	ND@1	ND@1	ND@1	ND@1
1,3-DICHLOROBENZENE	ug/l	NA	ND@1	ND@1	ND@1	ND@1	ND@1
1,4-DICHLOROBENZENE	ug/l	NA	ND@1	ND@1	ND@1	ND@1	ND@1
2-CHLOROETHYLVINYL ETHER	ug/l	NA	ND@1	ND@1	ND@1	ND@1	ND@1
INDICATOR PARAMETERS							
PH	pH	NA	7.94	6.98	6.90	6.87	6.87
TEMPERATURE	C	NA	18.9	18.4	20.1	17.2	17.2
TOTAL DISSOLVED SOLIDS	mg/l	NA	NA	290	NA	380	NA
TOTAL SUSPENDED SOLIDS	mg/l	NA	NA	ND@1.0	NA	ND@1.0	NA
METALS							
LEAD, TOTAL	mg/l	ND@0.0050	NA	NA	NA	NA	NA
VOLATILE ORGANICS							
1,1,1,2-TETRACHLOROETHANE	ug/l	NA	ND@1	ND@1	ND@1	ND@1	ND@1
1,1,1-TRICHLOROETHANE	ug/l	NA	ND@1	ND@1	ND@1	ND@1	ND@1
1,1,2,2-TETRACHLOROETHANE	ug/l	NA	ND@1	ND@1	ND@1	ND@1	ND@1
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	NA	ND@1	ND@1	ND@1	ND@1	ND@1
1,1,2-TRICHLOROETHANE	ug/l	NA	ND@1	ND@1	ND@1	ND@1	ND@1
1,1-DICHLOROETHANE	ug/l	NA	ND@1	ND@1	ND@1	ND@1	ND@1
1,1-DICHLOROETHYLENE	ug/l	NA	ND@1	ND@1	ND@1	ND@1	ND@1
1,2,3-TRICHLOROPROPANE	ug/l	NA	ND@1	ND@1	ND@1	ND@1	ND@1
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	NA	ND@1	ND@1	ND@1	ND@1	ND@1
1,2-DICHLOROETHANE	ug/l	NA	ND@1	ND@1	ND@1	ND@1	ND@1
1,2-DICHLOROETHYLENE, TOTAL	ug/l	NA	ND@1	ND@1	ND@1	ND@1	ND@1
1,2-DICHLOROPROPANE	ug/l	NA	ND@1	ND@1	ND@1	ND@1	ND@1
4-CHLOROTOLUENE	ug/l	NA	ND@1	ND@1	ND@1	ND@1	ND@1
ACROLEIN	ug/l	NA	ND@5	ND@5	ND@5	ND@5	ND@5
ACRYLONITRILE	ug/l	NA	ND@5	ND@5	ND@5	ND@5	ND@5
BENZENE	ug/l	NA	ND@1	ND@1	ND@1	ND@1	ND@1
BENZYL CHLORIDE	ug/l	NA	ND@1	ND@1	ND@1	ND@1	ND@1
BROMOBENZENE	ug/l	NA	ND@1	ND@1	ND@1	ND@1	ND@1
BROMODICHLOROMETHANE	ug/l	NA	ND@1	ND@1	ND@1	ND@1	ND@1

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SAMPLE LOCATION		SPDES OF 01A	SPDES OF 01A	SPDES OF 01A	SPDES OF 01A	SPDES OF 01A	SPDES OF 01A
SAMPLE DESCRIPTION		SPDES OUTFL	SPDES OUTFL	SPDES OUTFL	SPDES OUTFL	SPDES OUTFL	SPDES OUTFL
SAMPLE DATE		10/01/15	10/08/15	11/05/15	11/12/15	12/03/15	12/10/15
LABORATORY SAMPLE I.D.		420-95833-1	420-96100-1	420-97145-1	420-97384-1	420-98189-1	420-98477-1
SAMPLE RUN NUMBER		01	01	01	01	01	01
SAMPLE COMMENT CODES							
PARAMETER	UNITS						
VOLATILE ORGANICS (Continued)							
BROMOFORM	ug/l	NA	ND@1	ND@1	ND@1	ND@1	ND@1
BROMOMETHANE	ug/l	NA	ND@1	ND@1	ND@1	ND@1	ND@1
CARBON TETRACHLORIDE	ug/l	NA	ND@1	ND@1	ND@1	ND@1	ND@1
CHLOROBENZENE	ug/l	NA	ND@1	ND@1	ND@1	ND@1	ND@1
CHLORODIBROMOMETHANE	ug/l	NA	ND@1	ND@1	ND@1	ND@1	ND@1
CHLOROETHANE	ug/l	NA	ND@1	ND@1	ND@1	ND@1	ND@1
CHLOROFORM	ug/l	NA	ND@1	ND@1	ND@1	ND@1	ND@1
CHLOROMETHANE	ug/l	NA	ND@1	ND@1	ND@1	ND@1	ND@1
CIS-1,3-DICHLOROPROPYLENE	ug/l	NA	ND@1	ND@1	ND@1	ND@1	ND@1
DIBROMOMETHANE	ug/l	NA	ND@1	ND@1	ND@1	ND@1	ND@1
DICHLORODIFLUOROMETHANE	ug/l	NA	ND@1	ND@1	ND@1	ND@1	ND@1
ETHYLBENZENE	ug/l	NA	ND@1	ND@1	ND@1	ND@1	ND@1
METHYLENE CHLORIDE	ug/l	NA	ND@1	ND@1	ND@1	ND@1	ND@1
TETRACHLOROETHYLENE	ug/l	NA	ND@1	ND@1	ND@1	ND@1	ND@1
TOLUENE	ug/l	NA	ND@1	ND@1	ND@1	ND@1	ND@1
TRANS-1,3-DICHLOROPROPENE	ug/l	NA	ND@1	ND@1	ND@1	ND@1	ND@1
TRICHLOROETHYLENE	ug/l	NA	ND@1	ND@1	ND@1	ND@1	ND@1
TRICHLOROFLUOROMETHANE	ug/l	NA	ND@1	ND@1	ND@1	ND@1	ND@1
VINYL CHLORIDE	ug/l	NA	ND@1	ND@1	ND@1	ND@1	ND@1
XYLENE, TOTAL	ug/l	NA	ND@1	ND@1	ND@1	ND@1	ND@1

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EXPLANATION OF REPORTING CONVENTIONS AND KEY TO COMMENT CODES

REPORTING CONVENTIONS

NA	Not Analyzed
ND@X	Not Detected at Detection Limit X
BMRL@X	Below Minimum Reporting Limit of X

CODE	EXPLANATION
^	Non-Standard Measurement Unit
c	Sample contained sediment which may have contributed to reported results
d	24 Hour Composite Sample
B	Organic analyte detected in both the sample and the laboratory blank
D	Compounds identifed at a secondary dilution factor
E	Concentration exceeds the calibration range of the GC/MS instrument
J	Estimated Value
N	Spiked sample recovery not within control limits
P	Lower of 2 GC column concentrations that have more than 25% difference
R	Reported value is less than the CRDL but greater than the IDL
S	Surrogate recoveries exceed acceptable control limits
W	Post digestion spike FAA out of control limits; sample absorbance < 50%
*	Manhole flooded when sediment sample collected
B	The reported value is less than the Contract Required Detection Limit (CRDL), but greater than the Instrument Detection Limit (IDL) (Inorganics)
H	Sample was prepped or run beyond the specified method holding time
^	Value estimated. Possible meter malfunction.

Former IBM Kingston Facility Flux Calculations

Groundwater Collection System and
North Parking Lot Area Passive Groundwater Collection System

Groundwater Collection System

Total Gallons Extracted January 1, 2015 - December 31, 2015: 20,362,175

Average Flow Rate 55,787 gal/day

	avg. ug/l	Flux lbs/day
Tetrachloroethene	2.6	0.00122
Trichloroethene	94.9	0.04415
12-Dichloroethene(tot)	56.1	0.02609
Vinyl Chloride	0.4	0.00019
111-Trichloroethane	74.8	0.03479
11-Dichloroethane	20.3	0.00942
12-Dichloroethane	0.6	0.00028
11-Dichloroethene	11.0	0.00511
Freon 113	0.0	0.00000
Freon 123a	0.0	0.00000

Total flux contributed by GWCS: 0.12124 lbs/day
Annual Flux for GWCS: 44.25 lbs

North Parking Lot Area Passive Groundwater Collection System

Total Gallons Extracted January 1, 2015 - December 31, 2015: 2,171,202

Average Flow Rate 5,948 gal/day

	avg. ug/l	Flux lbs/day
Tetrachloroethene	0.7	0.00003
Trichloroethene	5.3	0.00026
12-Dichloroethene(tot)	7.7	0.00038
Vinyl Chloride	0.1	0.00000
111-Trichloroethane	3.4	0.00017
11-Dichloroethane	1.5	0.00008
12-Dichloroethane	0.0	0.00000
11-Dichloroethene	0.2	0.00001
Freon 113	0.0	0.00000
Freon 123a	0.0	0.00000

Total flux contributed by NPLA pump stations: 0.00094 lbs/day
Annual Flux for NPLA pump stations: 0.34 lbs

overall flux: ***44.5964***