



8976 Wellington Road
Manassas, VA 20109

March 29, 2018

Amen Omorogbe
Division of Environmental Remediation
New York State Dept. of Environmental Conservation
625 Broadway, 11th Floor
Albany, NY 12233-7017

Re: Former IBM Kingston Facility (TechCity Site)
Site Number: 356002
Order on Consent Index: D3-10023-6-11
2017 Annual Groundwater Monitoring Report

Dear Mr. Omorogbe:

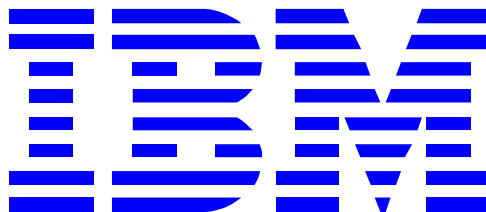
Enclosed please find the 2017 Annual Groundwater Monitoring Report for the former IBM Kingston Facility (TechCity Site). In July 2011, the Part 373 RCRA for the Site was superseded by a Part 375 Order on Consent (Order). This groundwater monitoring report is being submitted per NYSDEC's request. Future 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 Linda Daubert at (703) 257-2585.

Sincerely yours,

M. E. Meyers
Manager, Environmental Remediation
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Former IBM Kingston Facility (TechCity)
Site Number: 356002
Order on Consent Index: D3-10023-6-11

**2017 ANNUAL GROUNDWATER
MONITORING REPORT**

Prepared for:

IBM Corporate Environmental Affairs
8976 Wellington Road
Manassas, VA 20109

March 29, 2018

Prepared by:

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**Professional Geologist Certification
Former IBM Kingston Facility (TechCity)
Town of Ulster
Ulster County, New York**

**2017 Annual Groundwater Monitoring Report
Order on Consent Index # D3-10023-6-11
Site # 356002**

March 29, 2018

As the person with primary responsibility for the performance of the geological services and activities associated with the captioned report, I certify that I have reviewed the document titled "*Former IBM Kingston Facility (TechCity), Site Number 356002, Order on Consent Index D3-10023-6-11, 2017 Annual Groundwater Monitoring Report*". This report is dated March 29, 2018 and was prepared by Groundwater Sciences, P.C. (GSPC) and Groundwater Sciences Corporation (GSC) for IBM Corporation.

I certify that the associated geological services and this report have been prepared under my direct supervision. To the best of my knowledge; all such information contained in this report is complete and accurate.

This report bears the seal of a professional geologist; no alterations may be made to the information contained in this report unless made in accordance with Title 8, Article 145, Section 7209 of New York State Education Law.



Signature: _____

Date: _____

3/29/2018

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Table A: Summary of Abbreviations Used in this Report	
GMP	Groundwater Monitoring Plan
GSC	Groundwater Sciences Corporation
GSPC	Groundwater Sciences, P.C.
GTF	Groundwater Treatment Facility
GWCS	Groundwater Collection System
IBM	International Business Machines Corporation
IWSL	Industrial Waste Sludge Lagoon
IWTP	Industrial Waste Treatment Plant
NPLA	North Parking Lot Area
NYSDEC	New York State Department of Environmental Conservation
OU	Operable Unit
QA/QC	Quality Assurance/Quality Control
SPDES	State Pollutant Discharge Elimination System
VOCs	Volatile Organic Compounds
<i>Monitoring Parameters</i>	
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 (Dichloromethane)
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, P.C. (GSPC) and 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 2017 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, 2017 through December 31, 2017). Section 5.0 presents the results of the groundwater remediation system operations. Section 6.0 presents the progress of remediation at the Site and includes a report on the contaminant recovery levels and treatment efficiency data for the previous annual period. Section 7.0 provides a summary listing of reports on other activities completed. Section 8.0 provides reference listing of historical documents used in the preparation of this report.

2.0 SITE OVERVIEW

The following sections provide details on the 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. In March 2017, three parcels were set for auction by the Town of Ulster due to nonpayment of taxes. Currently, these three parcels are owned by the Town of Ulster and include: Building B001 and the 5.84 acres on which it sits; the 1-acre site where building B002 used to stand; and; the 0.38-acre site where Building B034 used to stand. 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 storm water 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. Corrective Action activities at the Site were conducted with oversight of NYSDEC under the RCRA Permit and from July 2011 to present under the Order.

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	

The Statement of Basis (February 2013) provides an update on the Corrective Action activities at the Site and describes the closure conditions identified by various site investigations from the late 1970s to 2012.

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 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 (OU-5)

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 placed 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 2017. Routine maintenance activities were conducted to preserve the integrity and functionality of the soil cover system and included mowing and reseeded 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

It should be noted that due to ongoing asbestos abatement work and building demolition activities during 2017 many monitoring wells were inaccessible for monitoring. Therefore, only accessible wells and piezometers were inspected and sampled during the monitoring period.

4.1.1 Groundwater Monitoring Well Sampling

Routine groundwater samples were collected during the second quarter of 2017. Sampling and analysis of groundwater was performed at the Site in accordance with protocols contained in the currently approved Groundwater Monitoring Plan (GMP). The results of the routine groundwater sampling and the associated Quality Assurance/Quality Control (QA/QC) data are contained in Appendix A. The next routine sampling per the GMP will be conducted in the third quarter of 2018.

4.1.2 Physical Well Inventory and Maintenance

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 that monitor the hydraulic effectiveness of the remedies during the first, second, third and fourth quarters. The results of each of these water level surveys were converted to groundwater elevations and are presented in Appendix B, and are discussed further in Section 4.2.

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. Four groundwater elevation contour maps were prepared, one for each quarter of 2017, included as Figures 4-1 through Figure 4-4. 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 and Building 005 (B005) (see Figures 4-1 through Figure 4-4). 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 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 4-4), 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 passes under Enterprise Drive to the south of B201.
- A naturally occurring 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 runs parallel to the north property line 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 westward groundwater migration along the underground utility pipes which ultimately terminate at the former Industrial Waste Treatment Facility (IWTF).

4.3 Chemical Constituents in Groundwater

Identified constituents of concern in the surficial sand aquifer include the following chlorinated VOCs: 1,1,1-trichloroethane [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. PCE, TCE, and 111-TCA in the NPLA Plume appear to originate in the central and western portions of the eastern campus, and is moving north-northwest toward the GWCS.
- 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 B036 Area Plume, located on the West Campus near Building 036 (B036), is primarily composed of TCE and 111-TCA. The plume in this area is not likely to have originated from the former IWSL or from activities associated with 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.

Figures 4-5 and 4-6 present 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-dichlorobenzene (DCBZ), 13-DCBZ, 14-DCBZ, chlorobenzene (CBZ), and chloroethane (CEA).

Figures 4-5 and 4-6 include postings of the results from the second quarter 2017 sampling event for each of the major constituent(s) and their associated degradation products. The maximum concentrations for the constituents present in these plumes were observed during the 1980s and the concentrations observed on the Site have declined since that time.

Lastly, Figures 4-5 and 4-6 show 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 the B036 Area plume which 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.

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

The Groundwater Remediation System consists of the GWCS and NPLA system 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 GWCS 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 (MH1 through 5) which are connected by 6-inch diameter perforated pipe. Water recovered from these trenches was conveyed to the on-site 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 new treatment building, subjected to tray aeration and discharged to sanitary sewer. Additionally, in May 1995, the northwest leg of the GWCS trench was extended approximately 240 feet with three additional trench manholes (MH6 through 8) with one pump was installed at MH6 (see Figure 5-1). On July 10, 1996 the discharge from the tray-aerators was connected to the storm sewer system under the New York State Department of Environmental Conservation (NYSDEC) State Pollutant Discharge Elimination System (SPDES) Permit NY0108138.

5.1.2 North Parking Lot Area System (Passive Groundwater Collection)

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 into the storm water 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. Any 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 facility (GTF) operating at the Site which treats groundwater extracted by the GWCS and the NPLA system. The GTF consists of a 1,200 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 daily discharge limit is 120,000 gallons.

5.2 **Summary of Operations**

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

Appendix D 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 SPDES Permit NY0108138, including the final effluent from the treatment system, Outfall 01A.

6.0 PROGRESS OF REMEDIATION

Historical activities combined with the satisfaction of the RCRA Permit requirements from 1988 through 2011 and from July 2011 to present under the Order have resulted in extensive remediation of contaminated media on Site.

The Groundwater Remediation System, including the GWCS, NPLA system, and the on-site treatment system, operated as designed during the reporting period.

The effluent concentrations from the on-site treatment system were within the SPDES permit effluent limits.

The 2017 mass removal calculations for the Groundwater Remediation System are presented in Appendix D.

Long-term operations began at the GWCS in 1986 and continued operations since that time has produced 527 million gallons. Total mass removed as of year-end 2017 is approximately 2,800 pounds. Approximately 19.0 million gallons of groundwater was collected and treated from the GWCS or, on average, 52,061 gallons per day over the 2017 calendar year. The average flowrate was approximately 36.2 gpm. For this annual period, approximately 38.74 pounds of VOCs were removed by the GWCS.

Operation of the NPLA pump stations began in December 1997. Continued operations since that time has produced 39 million gallons of water. Total mass removed by the NPLA as of year-end 2017 is approximately 28.5 pounds. Approximately 2.4 million gallons of groundwater was collected from the NPLA pump stations or, on average, 6,545 gallons per day over the 2017 calendar year. For this annual period, approximately 0.66 pounds of VOCs were removed by the NPLA system.

The ongoing remedial program continues to be effective in reducing and containing the dissolved groundwater plume and in removing contaminant mass from Site groundwater.

7.0 OTHER ACTIVITIES AND REPORTING

Several activities were conducted at the Site in 2017 under the oversight of NYSDEC. These investigations included implementation of the NYSDEC approved work plans under the current Consent Order. The investigation results will be reported and submitted to NYSDEC in separate reports and are not included herein. Following is a summary of activities and submittals for the 2017 Calendar Year:

Conducted the annual Vapor Intrusion sampling (April 2017), Golder Associates;

Completed the SWMU M / B003 investigation (October 2017), Golder Associates.

8.0 REFERENCES

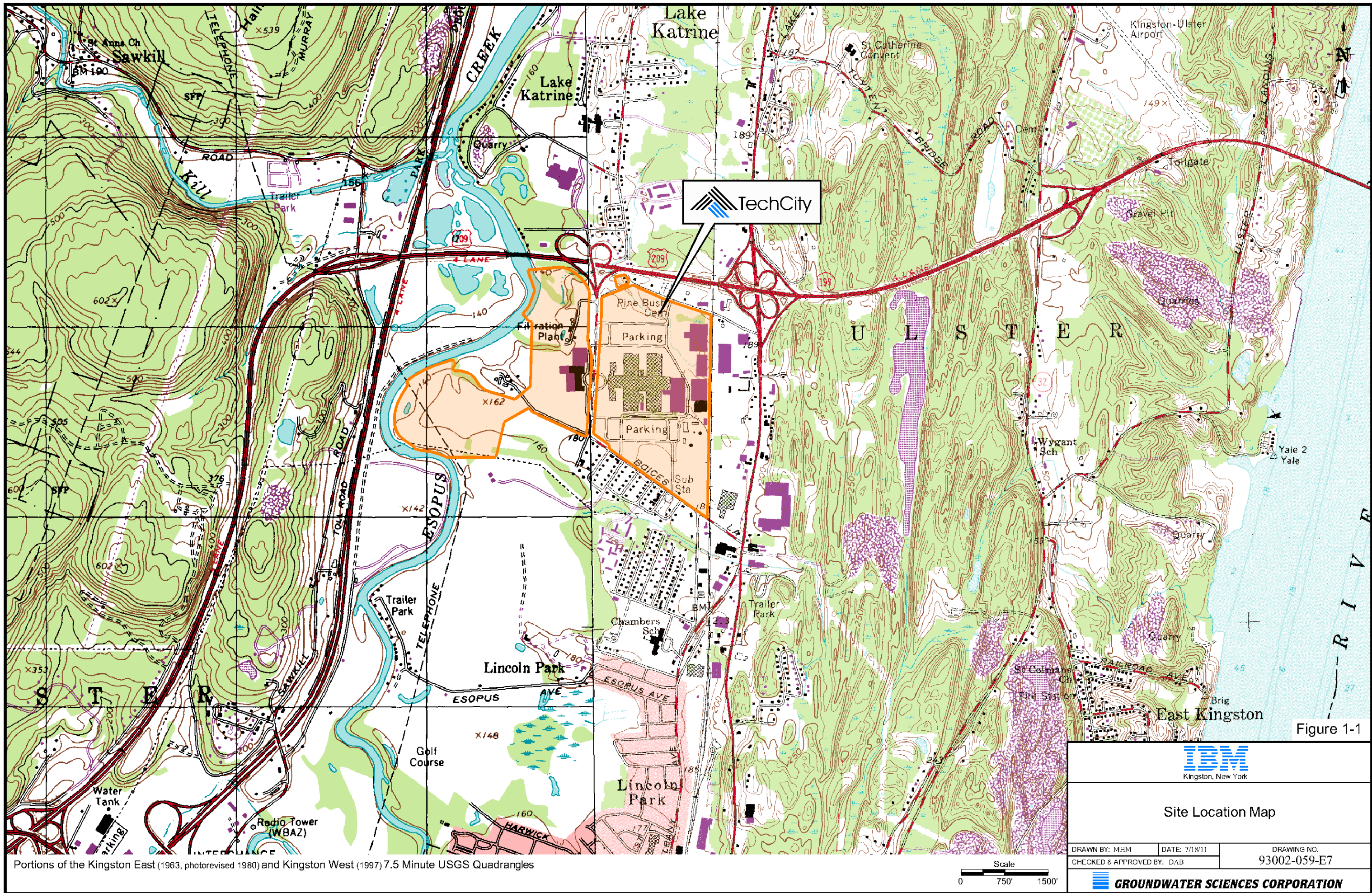
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SOLID WASTE MANAGEMENT UNITS (SWMUs)

- 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

Figure 2-1



Site Layout and Area Map

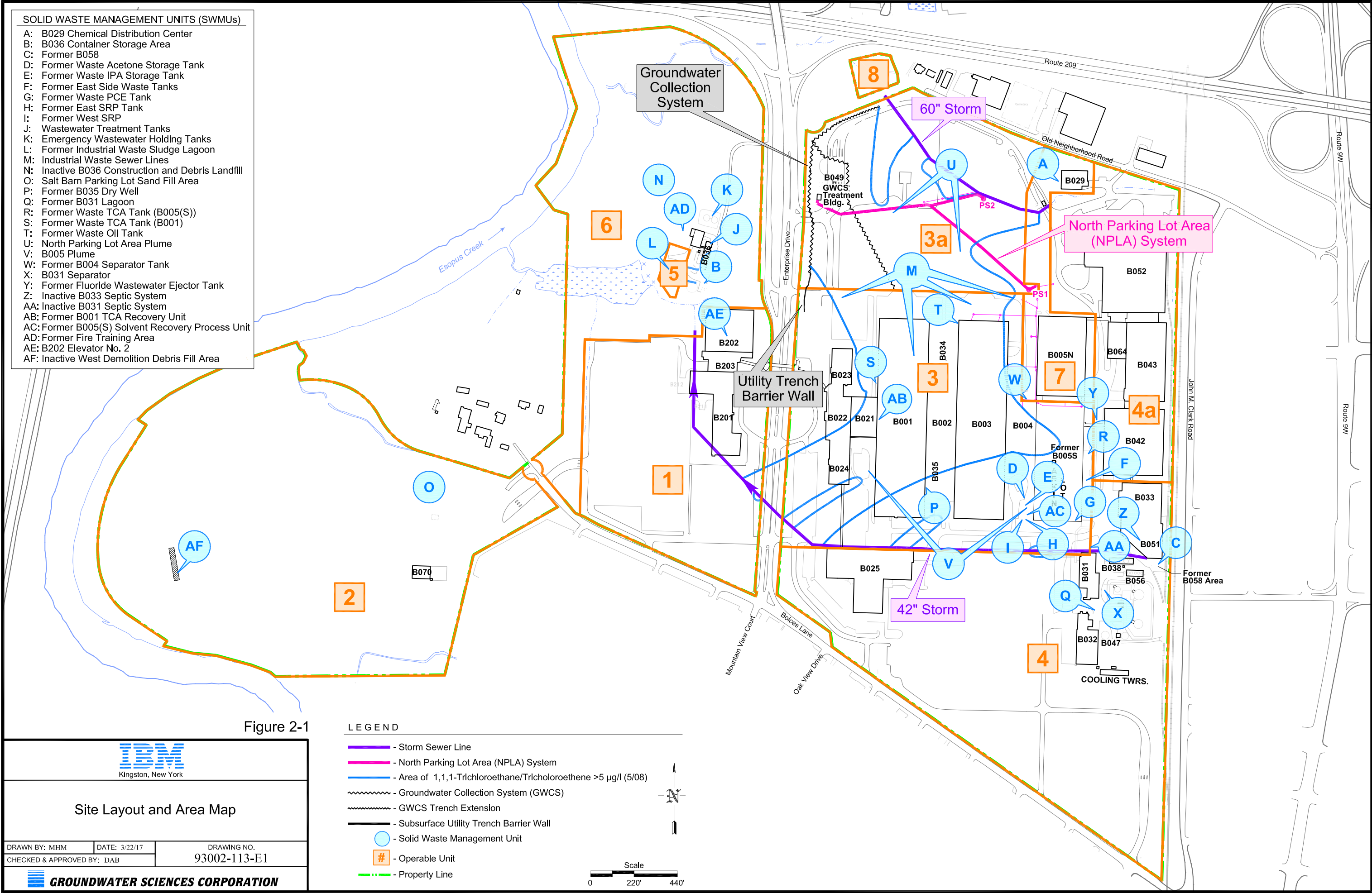
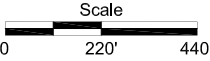
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CHECKED & APPROVED BY: DAB

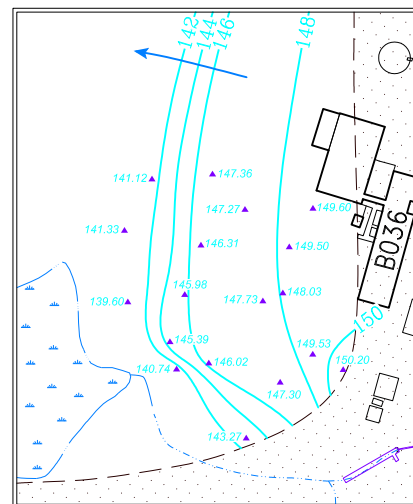
GROUNDWATER SCIENCES CORPORATION

LEGEND

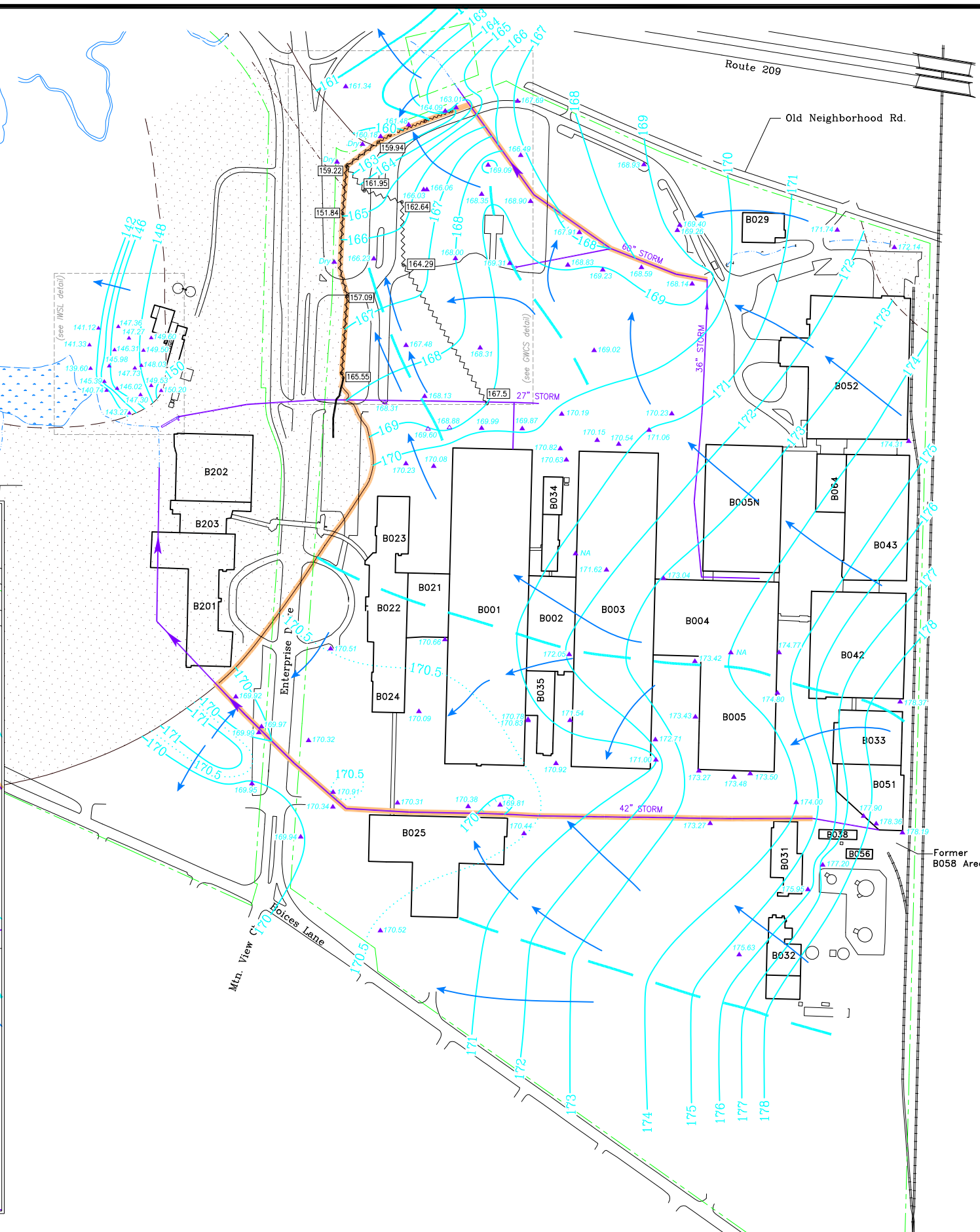
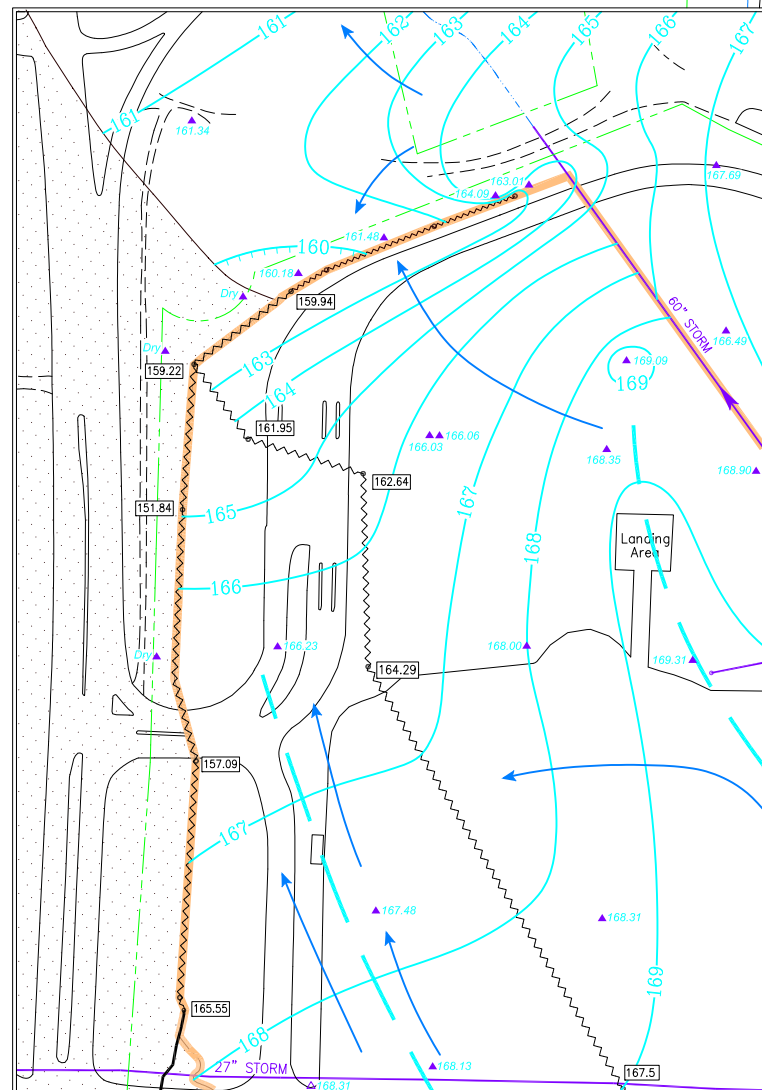
- Storm Sewer Line
- North Parking Lot Area (NPLA) System
- Area of 1,1,1-Trichloroethane/Trichloroethene >5 µg/l (5/08)
- Groundwater Collection System (GWCS)
- GWCS Trench Extension
- Subsurface Utility Trench Barrier Wall
- Solid Waste Management Unit
- Operable Unit
- Property Line



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
 - 178 - Groundwater Elevation Contour
 - - - Supplemental Groundwater Elevation Contour
 - 178.37 - Groundwater Elevation
 - NA - Not Accessible
 - - - Groundwater Divide
 - - Inferred Direction of Groundwater Flow
 - - - Groundwater Collection System (GWCS)
 - - - GWCS Trench Extension
 - 162.64 - GWCS Invert Elevation
 - - - Subsurface Utility Trench Barrier Wall
 - - - Unsaturated Surficial Sand Unit
(Perennially Saturated Shallow Sand Absent)


Figure 4-1

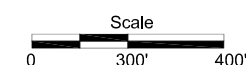


Kingston, New York

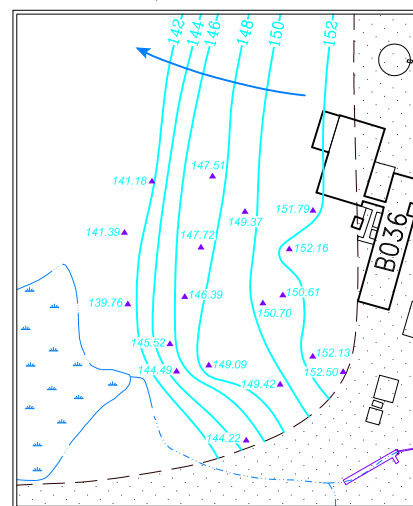
**Surficial Sand Aquifer
Groundwater Elevation Contour Map
February 16, 2017 (First Quarter 2017)**

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CHECKED & APPROVED BY: CES		93002-118-Z1

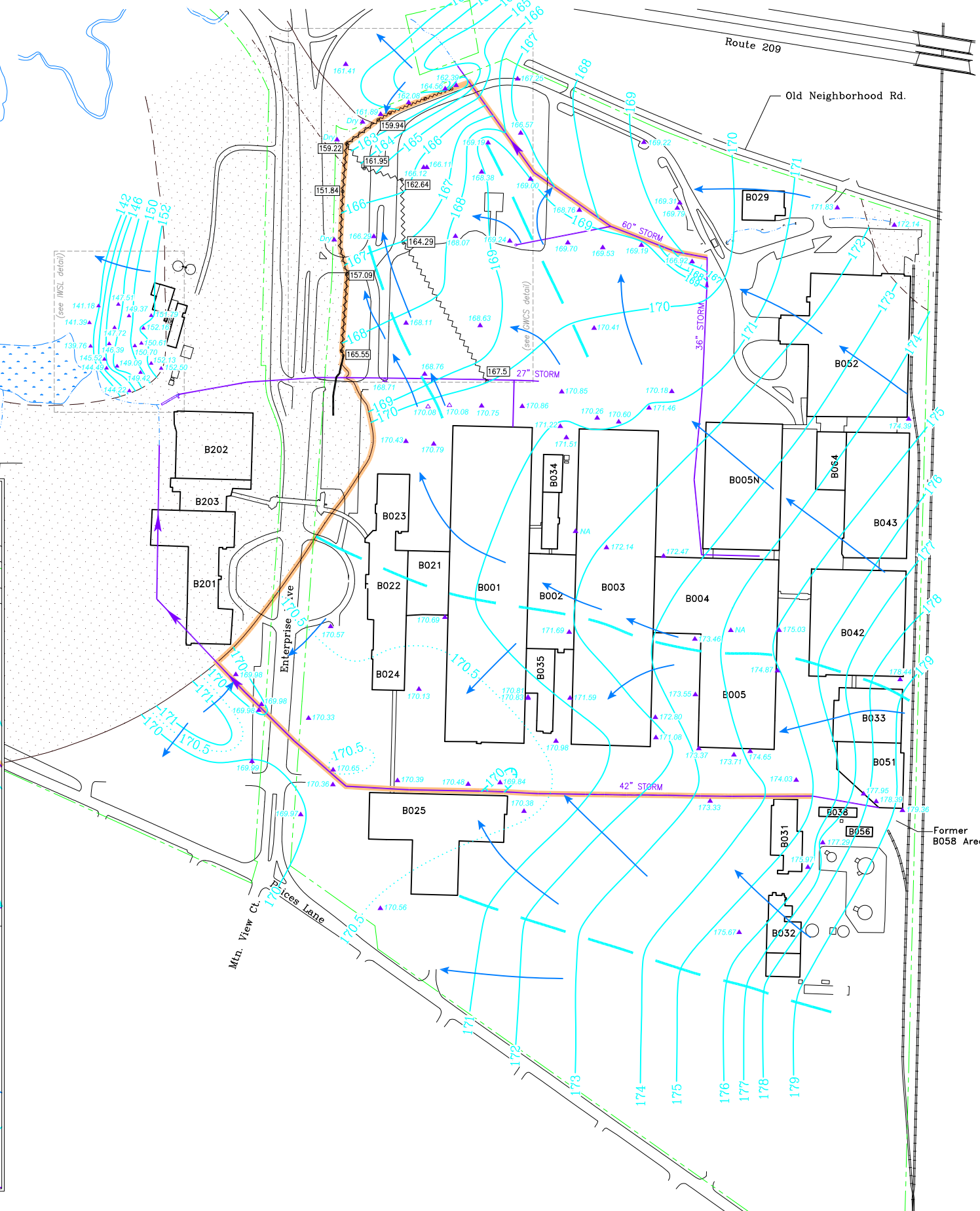
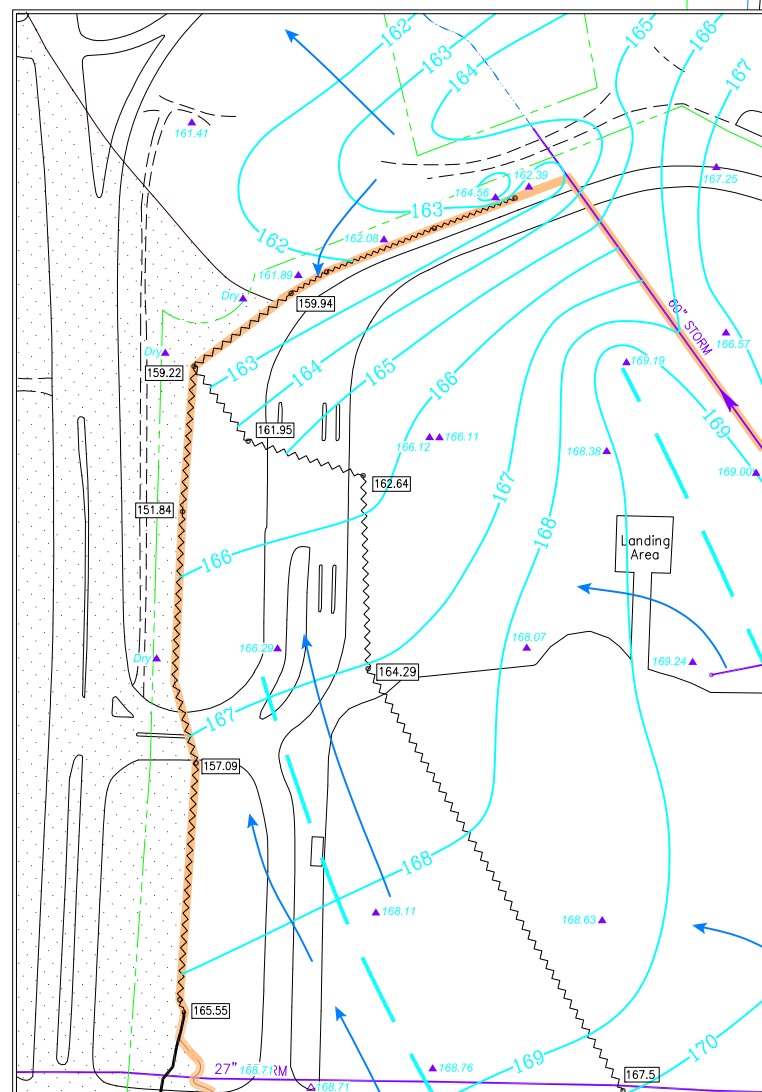
 **GROUNDWATER SCIENCES CORPORATION**



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
- 178 - Groundwater Elevation Contour
- - - Supplemental Groundwater Elevation Contour
- 178.44 - Groundwater Elevation
- NA - Not Accessible
- - - Groundwater Divide
- - Inferred Direction of Groundwater Flow
- - - Groundwater Collection System (GWCS)
- - - GWCS Trench Extension
- 162.64 - GWCS Invert Elevation
- - - Subsurface Utility Trench Barrier Wall
- - - Unsaturated Surficial Sand Unit
(Perennially Saturated Shallow Sand Absent)

Figure 4-2



Surficial Sand Aquifer
Groundwater Elevation Contour Map
April 27, 2017 (Second Quarter 2017)

DRAWN BY: MHM

DATE: 3/12/18

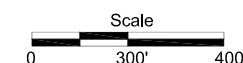
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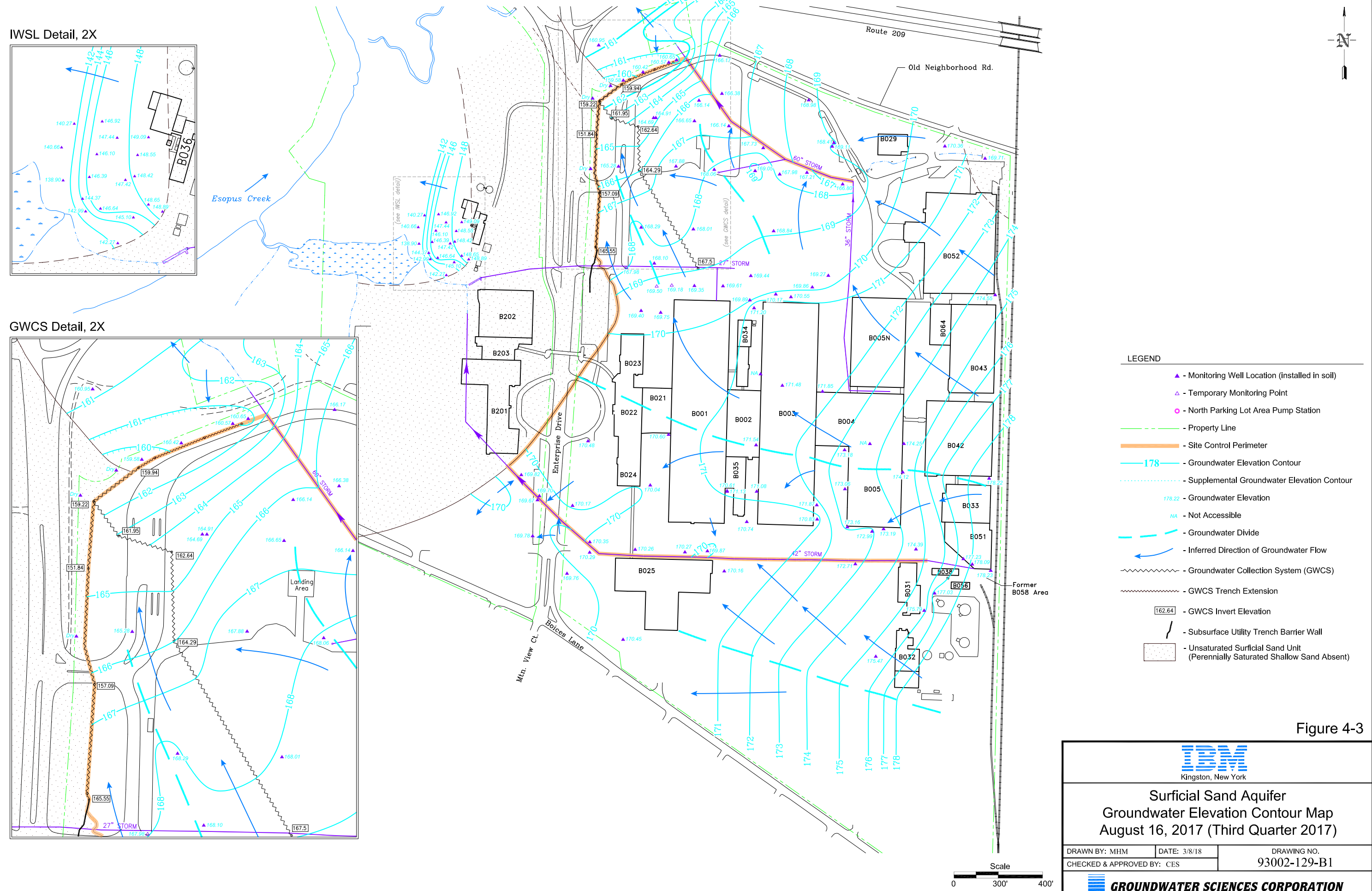
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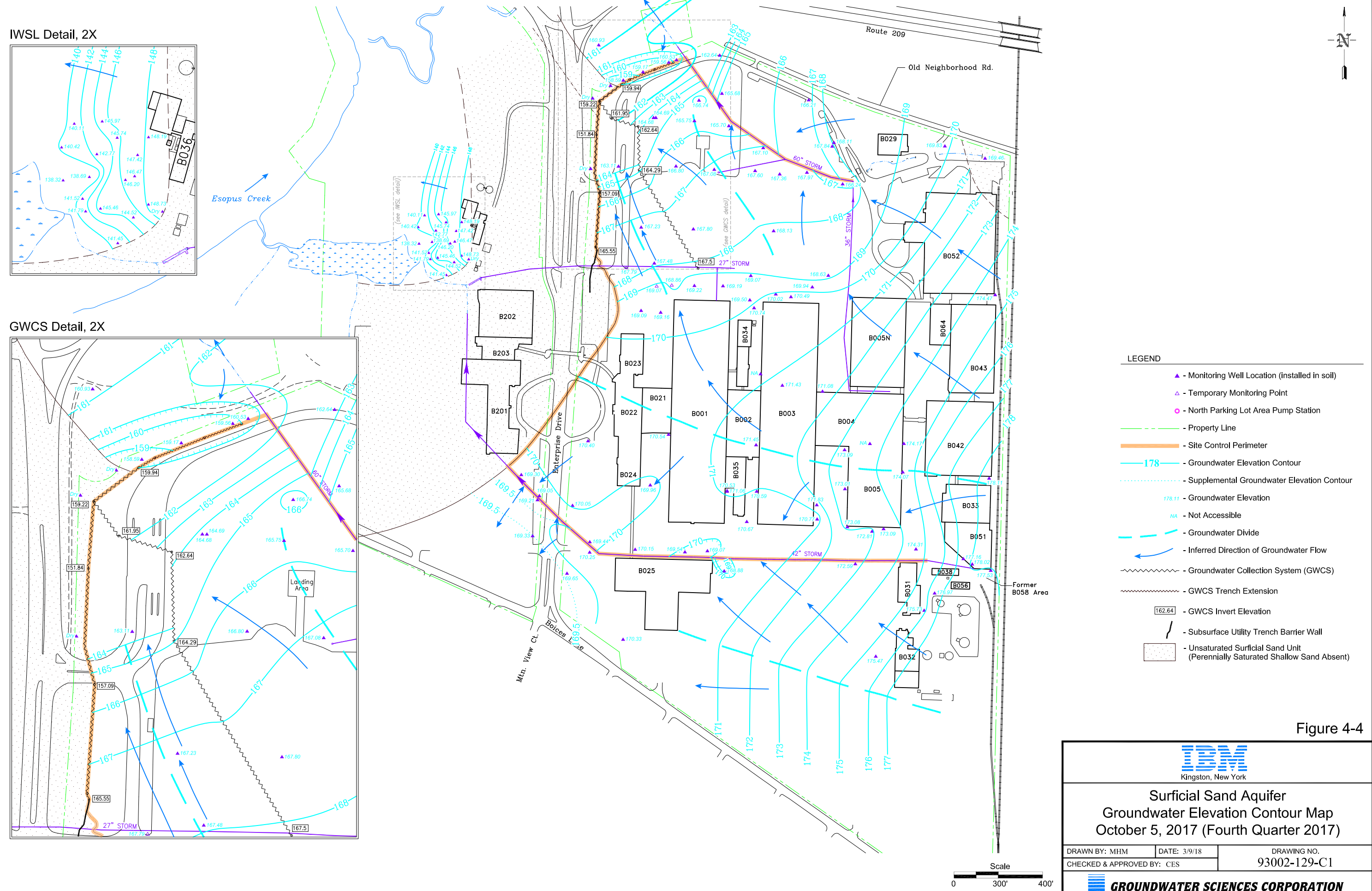
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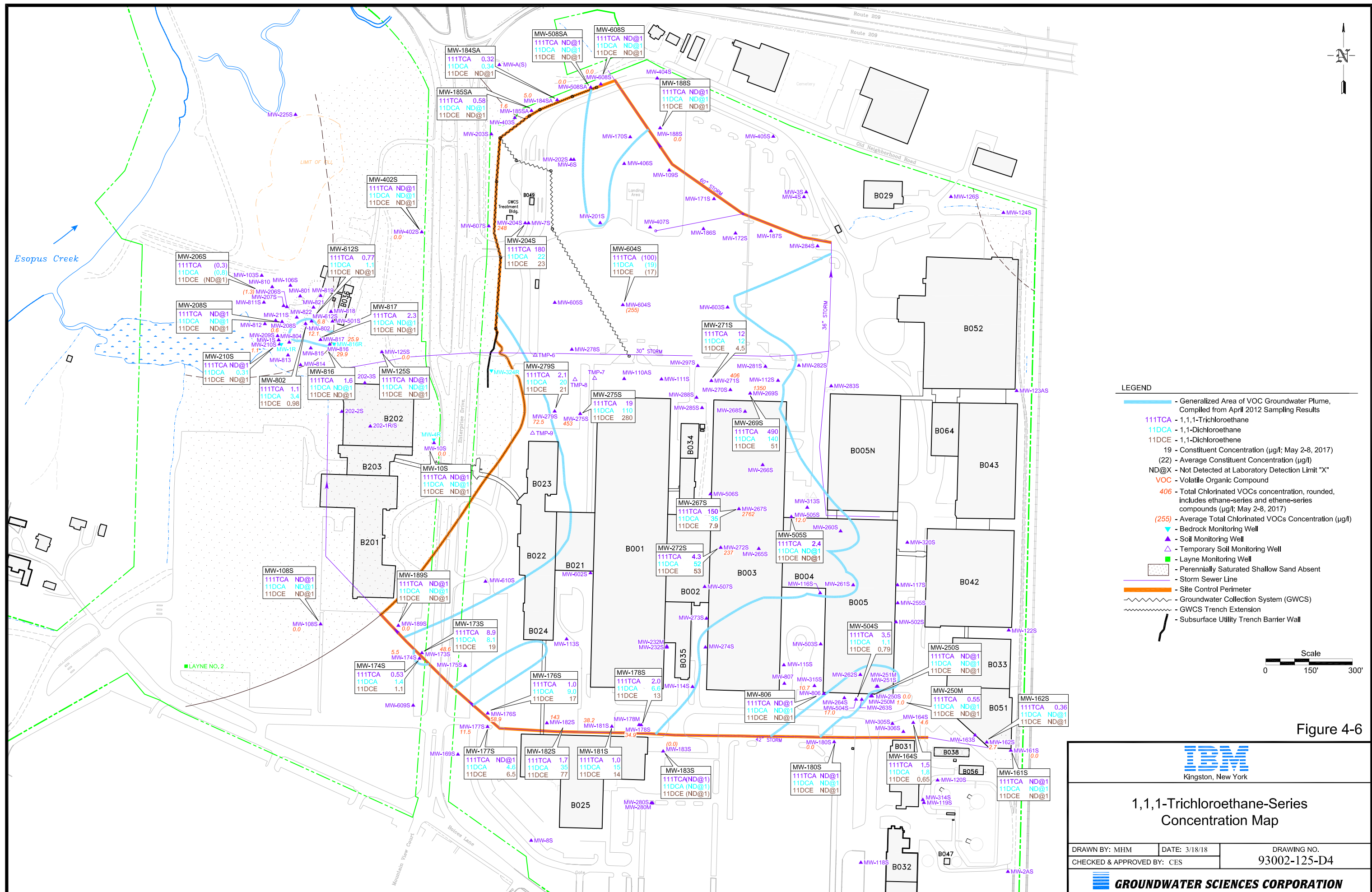


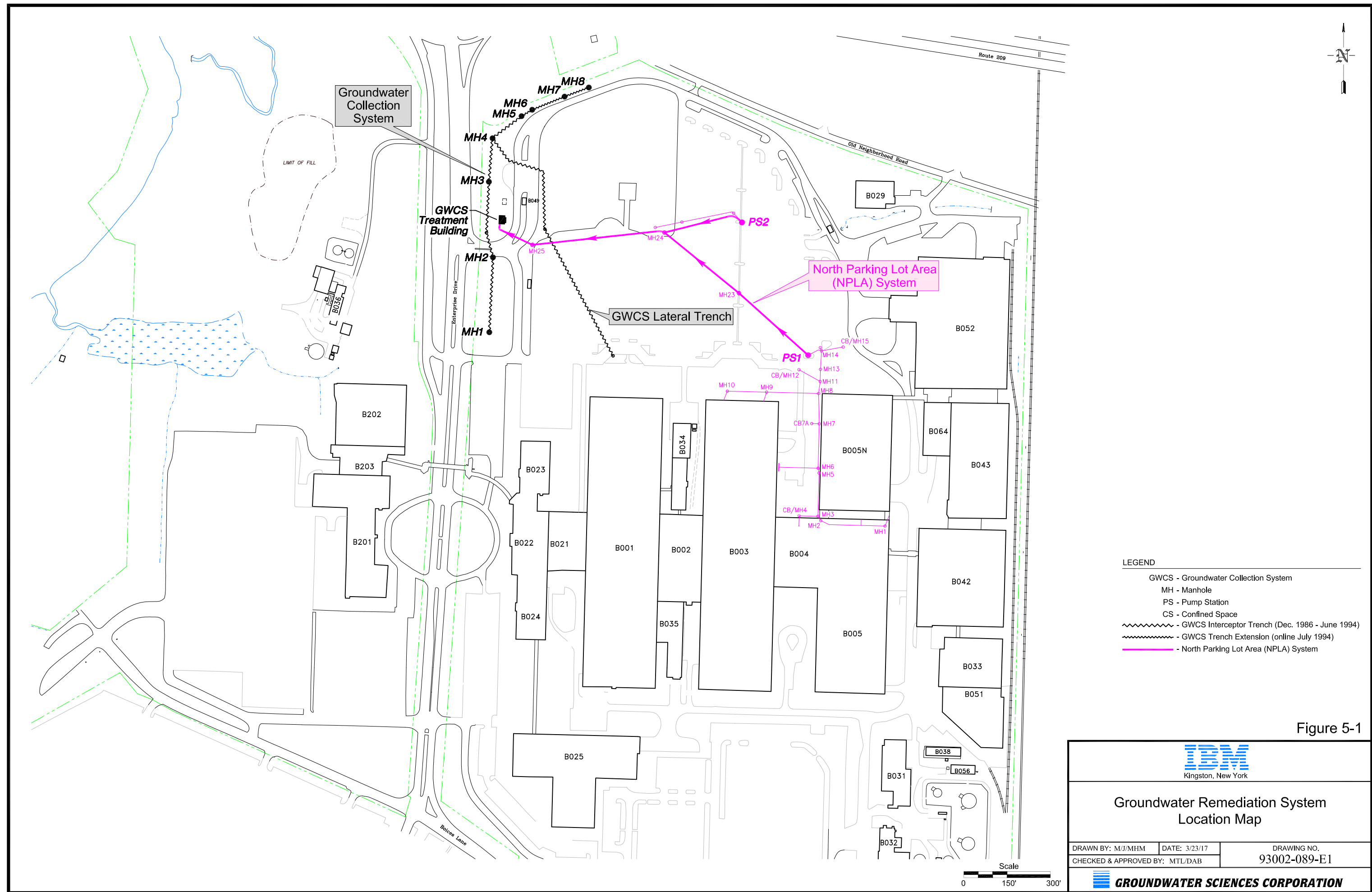
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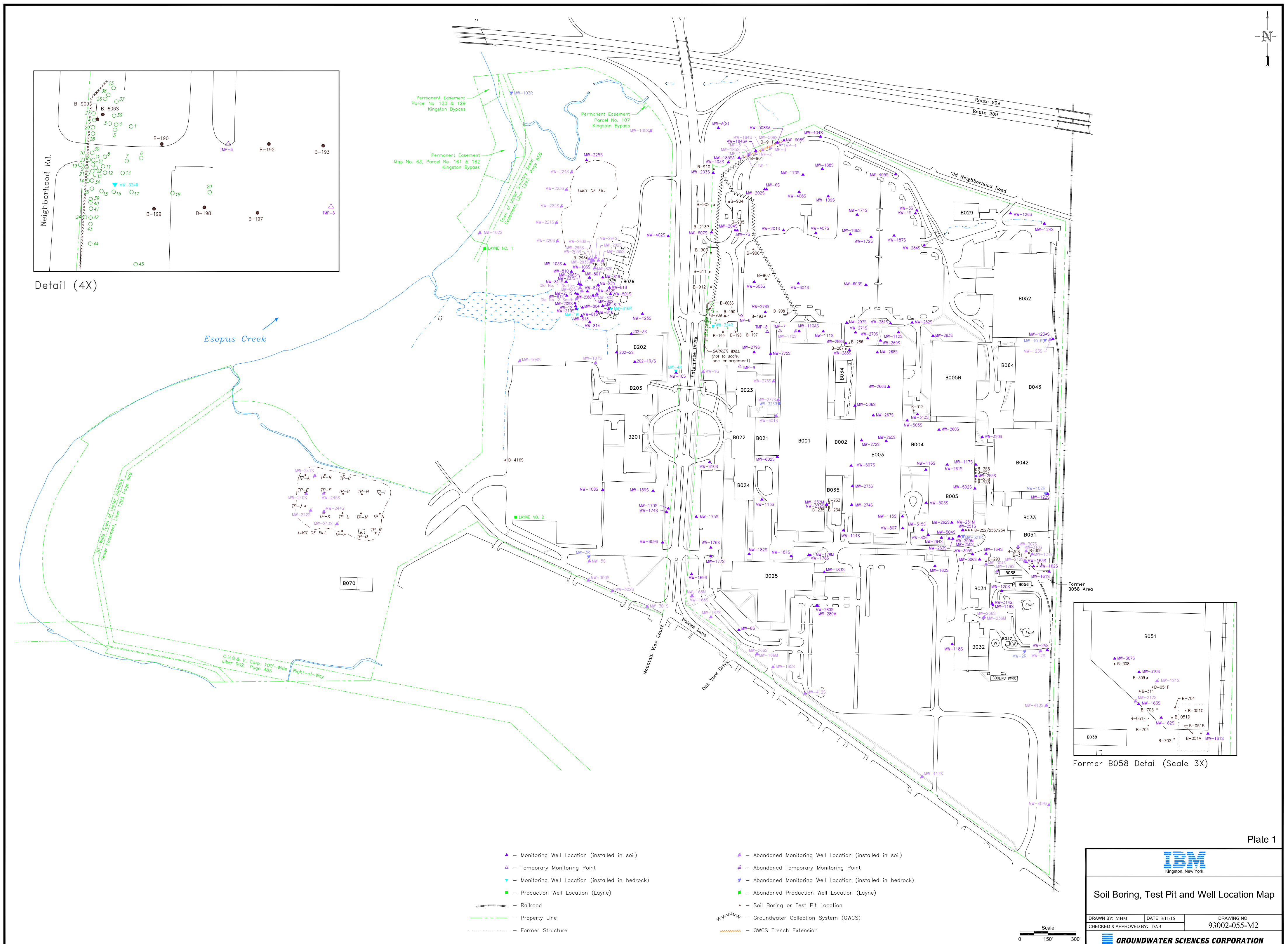












Appendix A

Groundwater and Field QA/QC Data Report

Former IBM Kingston Facility
Groundwater Monitoring Data Report
January 1, 2017 - December 31, 2017

MW-010-S

SAMPLE LOCATION	MW-010-S	MW-108-S	MW-125-S
SAMPLE DESCRIPTION	GROUNDWATER	GROUNDWATER	GROUNDWATER
SAMPLE DATE	05/04/17	05/03/17	05/05/17
LABORATORY SAMPLE I.D.	420120449-16	420120303-16	420120449-19
SAMPLE RUN NUMBER	01	01	01
SAMPLE COMMENT CODES			

PARAMETER	UNITS
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ACID EXTRACTABLES

PHENOLS, TOTAL	ug/l	NA	NA	NA
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BASE/NEUTRAL EXTRACTABLES

1,2-DICHLOROBENZENE	ug/l	ND@1	ND@1	ND@1
1,3-DICHLOROBENZENE	ug/l	ND@1	ND@1	ND@1
1,4-DICHLOROBENZENE	ug/l	ND@1	ND@1	ND@1
2-CHLOROETHYL VINYL ETHER	ug/l	ND@1	ND@1	ND@1

INDICATOR PARAMETERS

PH	pH	7.36	7.53	7.16
SPECIFIC CONDUCTANCE	umhos/cm	681	468	588
TEMPERATURE	C	11.7	13.6	9.5

METALS

ARSENIC, DISSOLVED	mg/l	NA	NA	NA
CADMIUM, DISSOLVED	mg/l	NA	NA	NA
LEAD, DISSOLVED	mg/l	NA	NA	NA
SILVER, DISSOLVED	mg/l	NA	NA	NA

VOLATILE ORGANICS

1,1,1,2-TETRACHLOROETHANE	ug/l	ND@1	ND@1	ND@1
1,1,1-TRICHLOROETHANE	ug/l	ND@1	ND@1	ND@1
1,1,2,2-TETRACHLOROETHANE	ug/l	ND@1	ND@1	ND@1
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@1	ND@1	ND@1
1,1,2-TRICHLOROETHANE	ug/l	ND@1	ND@1	ND@1
1,1-DICHLOROETHANE	ug/l	ND@1	ND@1	ND@1
1,1-DICHLOROETHYLENE	ug/l	ND@1	ND@1	ND@1
1,2,3-TRICHLOROPROPANE	ug/l	ND@1	ND@1	ND@1
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@1	ND@1	ND@1
1,2-DICHLOROETHANE	ug/l	ND@1	ND@1	ND@1
1,2-DICHLOROETHYLENE, TOTAL	ug/l	ND@1	ND@1	ND@1

Former IBM Kingston Facility
Groundwater Monitoring Data Report
January 1, 2017 - December 31, 2017

MW-010-S

SAMPLE LOCATION	MW-010-S	MW-108-S	MW-125-S
SAMPLE DESCRIPTION	GROUNDWATER	GROUNDWATER	GROUNDWATER
SAMPLE DATE	05/04/17	05/03/17	05/05/17
LABORATORY SAMPLE I.D.	420120449-16	420120303-16	420120449-19
SAMPLE RUN NUMBER	01	01	01
SAMPLE COMMENT CODES			

PARAMETER	UNITS
-----------	-------

VOLATILE ORGANICS (Continued)

1,2-DICHLOROPROPANE	ug/l	ND@1	ND@1	ND@1
2-CHLOROTOLUENE	ug/l	NA	NA	NA
4-CHLOROTOLUENE	ug/l	ND@1	ND@1	ND@1
BENZENE	ug/l	NA	NA	NA
BROMOBENZENE	ug/l	ND@1	ND@1	ND@1
BROMODICHLOROMETHANE	ug/l	ND@1	ND@1	ND@1
BROMOFORM	ug/l	ND@1	ND@1	ND@1
BROMOMETHANE	ug/l	ND@1	ND@1	ND@1
CARBON TETRACHLORIDE	ug/l	ND@1	ND@1	ND@1
CHLOROBENZENE	ug/l	ND@1	ND@1	ND@1
CHLORODIBROMOMETHANE	ug/l	ND@1	ND@1	ND@1
CHLOROETHANE	ug/l	ND@1	ND@1	ND@1
CHLOROFORM	ug/l	ND@1	ND@1	ND@1
CHLOROMETHANE	ug/l	ND@1	ND@1	ND@1
CIS-1,3-DICHLOROPROPYLENE	ug/l	ND@1	ND@1	ND@1
DIBROMOMETHANE	ug/l	ND@1	ND@1	ND@1
DICHLORODIFLUOROMETHANE	ug/l	ND@1	ND@1	ND@1
ETHYLBENZENE	ug/l	NA	NA	NA
METHYLENE CHLORIDE	ug/l	ND@1	ND@1	ND@1
TETRACHLOROETHYLENE	ug/l	ND@1	ND@1	ND@1
TOLUENE	ug/l	NA	NA	NA
TRANS-1,3-DICHLOROPROPENE	ug/l	ND@1	ND@1	ND@1
TRICHLOROETHYLENE	ug/l	ND@1	ND@1	ND@1
TRICHLOROFLUOROMETHANE	ug/l	ND@1	ND@1	ND@1
VINYL CHLORIDE	ug/l	ND@1	ND@1	ND@1
XYLENE, TOTAL	ug/l	NA	NA	NA

Former IBM Kingston Facility
Groundwater Monitoring Data Report
January 1, 2017 - December 31, 2017

MW-161-S

SAMPLE LOCATION	MW-161-S	MW-162-S	MW-164-S
SAMPLE DESCRIPTION	GROUNDWATER	GROUNDWATER	GROUNDWATER
SAMPLE DATE	05/04/17	05/04/17	05/04/17
LABORATORY SAMPLE I.D.	420120449-11	420120449-12	420120449-10
SAMPLE RUN NUMBER	01	01	01
SAMPLE COMMENT CODES			

PARAMETER	UNITS
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ACID EXTRACTABLES

PHENOLS, TOTAL	ug/l	NA	NA	NA
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BASE/NEUTRAL EXTRACTABLES

1,2-DICHLOROBENZENE	ug/l	ND@1	ND@1	ND@1
1,3-DICHLOROBENZENE	ug/l	ND@1	ND@1	ND@1
1,4-DICHLOROBENZENE	ug/l	ND@1	ND@1	ND@1
2-CHLOROETHYL VINYL ETHER	ug/l	ND@1	ND@1	ND@1

INDICATOR PARAMETERS

PH	pH	6.45	6.82	6.57
SPECIFIC CONDUCTANCE	umhos/cm	2604	2011	2321
TEMPERATURE	C	13.1	10.3	10.4

METALS

ARSENIC, DISSOLVED	mg/l	NA	NA	NA
CADMIUM, DISSOLVED	mg/l	NA	NA	NA
LEAD, DISSOLVED	mg/l	NA	NA	NA
SILVER, DISSOLVED	mg/l	NA	NA	NA

VOLATILE ORGANICS

1,1,1,2-TETRACHLOROETHANE	ug/l	ND@1	ND@1	ND@1
1,1,1-TRICHLOROETHANE	ug/l	ND@1	0.36J	1.5
1,1,2,2-TETRACHLOROETHANE	ug/l	ND@1	ND@1	ND@1
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@1	ND@1	ND@1
1,1,2-TRICHLOROETHANE	ug/l	ND@1	ND@1	ND@1
1,1-DICHLOROETHANE	ug/l	ND@1	ND@1	1.8
1,1-DICHLOROETHYLENE	ug/l	ND@1	ND@1	0.65J
1,2,3-TRICHLOROPROPANE	ug/l	ND@1	ND@1	ND@1
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@1	ND@1	ND@1
1,2-DICHLOROETHANE	ug/l	ND@1	ND@1	ND@1
1,2-DICHLOROETHYLENE, TOTAL	ug/l	ND@1	ND@1	ND@1

Former IBM Kingston Facility
Groundwater Monitoring Data Report
January 1, 2017 - December 31, 2017

MW-161-S

SAMPLE LOCATION	MW-161-S	MW-162-S	MW-164-S
SAMPLE DESCRIPTION	GROUNDWATER	GROUNDWATER	GROUNDWATER
SAMPLE DATE	05/04/17	05/04/17	05/04/17
LABORATORY SAMPLE I.D.	420120449-11	420120449-12	420120449-10
SAMPLE RUN NUMBER	01	01	01
SAMPLE COMMENT CODES			

PARAMETER	UNITS
-----------	-------

VOLATILE ORGANICS (Continued)

1,2-DICHLOROPROPANE	ug/l	ND@1	ND@1	ND@1
2-CHLOROTOLUENE	ug/l	NA	NA	NA
4-CHLOROTOLUENE	ug/l	ND@1	ND@1	ND@1
BENZENE	ug/l	NA	NA	NA
BROMOBENZENE	ug/l	ND@1	ND@1	ND@1
BROMODICHLOROMETHANE	ug/l	ND@1	ND@1	ND@1
BROMOFORM	ug/l	ND@1	ND@1	ND@1
BROMOMETHANE	ug/l	ND@1	ND@1	ND@1
CARBON TETRACHLORIDE	ug/l	ND@1	ND@1	ND@1
CHLOROBENZENE	ug/l	ND@1	ND@1	ND@1
CHLORODIBROMOMETHANE	ug/l	ND@1	ND@1	ND@1
CHLOROETHANE	ug/l	ND@1	ND@1	ND@1
CHLOROFORM	ug/l	ND@1	1.2	ND@1
CHLOROMETHANE	ug/l	ND@1	ND@1	ND@1
CIS-1,3-DICHLOROPROPYLENE	ug/l	ND@1	ND@1	ND@1
DIBROMOMETHANE	ug/l	ND@1	ND@1	ND@1
DICHLORODIFLUOROMETHANE	ug/l	ND@1	ND@1	ND@1
ETHYLBENZENE	ug/l	NA	NA	NA
METHYLENE CHLORIDE	ug/l	ND@1	0.34J	ND@1
TETRACHLOROETHYLENE	ug/l	ND@1	ND@1	ND@1
TOLUENE	ug/l	NA	NA	NA
TRANS-1,3-DICHLOROPROPENE	ug/l	ND@1	ND@1	ND@1
TRICHLOROETHYLENE	ug/l	ND@1	0.79J	0.68J
TRICHLOROFLUOROMETHANE	ug/l	ND@1	ND@1	ND@1
VINYL CHLORIDE	ug/l	ND@1	ND@1	ND@1
XYLENE, TOTAL	ug/l	NA	NA	NA

Former IBM Kingston Facility
Groundwater Monitoring Data Report
January 1, 2017 - December 31, 2017

MW-173-S

SAMPLE LOCATION	MW-173-S	MW-174-S	MW-176-S
SAMPLE DESCRIPTION	GROUNDWATER	GROUNDWATER	GROUNDWATER
SAMPLE DATE	05/03/17	05/03/17	05/03/17
LABORATORY SAMPLE I.D.	420120303-17	420120303-18	420120303-19
SAMPLE RUN NUMBER	01	01	01
SAMPLE COMMENT CODES			

PARAMETER	UNITS
-----------	-------

ACID EXTRACTABLES

PHENOLS, TOTAL	ug/l	NA	NA	NA
----------------	------	----	----	----

BASE/NEUTRAL EXTRACTABLES

1,2-DICHLOROBENZENE	ug/l	ND@1	ND@1	ND@1
1,3-DICHLOROBENZENE	ug/l	ND@1	ND@1	ND@1
1,4-DICHLOROBENZENE	ug/l	ND@1	ND@1	ND@1
2-CHLOROETHYL VINYL ETHER	ug/l	ND@1	ND@1	ND@1

INDICATOR PARAMETERS

PH	pH	6.97	7.27	6.80
SPECIFIC CONDUCTANCE	umhos/cm	1143	573	1298
TEMPERATURE	C	12.5	10.0	13.0

METALS

ARSENIC, DISSOLVED	mg/l	NA	NA	NA
CADMIUM, DISSOLVED	mg/l	NA	NA	NA
LEAD, DISSOLVED	mg/l	NA	NA	NA
SILVER, DISSOLVED	mg/l	NA	NA	NA

VOLATILE ORGANICS

1,1,1,2-TETRACHLOROETHANE	ug/l	ND@1	ND@1	ND@1
1,1,1-TRICHLOROETHANE	ug/l	8.9	0.53J	1.0
1,1,2,2-TETRACHLOROETHANE	ug/l	ND@1	ND@1	ND@1
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@1	ND@1	ND@1
1,1,2-TRICHLOROETHANE	ug/l	0.30J	ND@1	ND@1
1,1-DICHLOROETHANE	ug/l	8.1	1.4	9.0
1,1-DICHLOROETHYLENE	ug/l	19	1.1	17
1,2,3-TRICHLOROPROPANE	ug/l	ND@1	ND@1	ND@1
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@1	ND@1	ND@1
1,2-DICHLOROETHANE	ug/l	0.80J	ND@1	0.33J
1,2-DICHLOROETHYLENE, TOTAL	ug/l	1.2	0.32J	2.6

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MW-173-S

SAMPLE LOCATION	MW-173-S	MW-174-S	MW-176-S
SAMPLE DESCRIPTION	GROUNDWATER	GROUNDWATER	GROUNDWATER
SAMPLE DATE	05/03/17	05/03/17	05/03/17
LABORATORY SAMPLE I.D.	420120303-17	420120303-18	420120303-19
SAMPLE RUN NUMBER	01	01	01
SAMPLE COMMENT CODES			

PARAMETER	UNITS
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VOLATILE ORGANICS (Continued)

1,2-DICHLOROPROPANE	ug/l	ND@1	ND@1	ND@1
2-CHLOROTOLUENE	ug/l	NA	NA	NA
4-CHLOROTOLUENE	ug/l	ND@1	ND@1	ND@1
BENZENE	ug/l	NA	NA	NA
BROMOBENZENE	ug/l	ND@1	ND@1	ND@1
BROMODICHLOROMETHANE	ug/l	ND@1	ND@1	ND@1
BROMOFORM	ug/l	ND@1	ND@1	ND@1
BROMOMETHANE	ug/l	ND@1	ND@1	ND@1
CARBON TETRACHLORIDE	ug/l	ND@1	ND@1	ND@1
CHLOROBENZENE	ug/l	ND@1	ND@1	ND@1
CHLORODIBROMOMETHANE	ug/l	ND@1	ND@1	ND@1
CHLOROETHANE	ug/l	ND@1	ND@1	ND@1
CHLOROFORM	ug/l	0.21J	ND@1	ND@1
CHLOROMETHANE	ug/l	ND@1	ND@1	ND@1
CIS-1,3-DICHLOROPROPYLENE	ug/l	ND@1	ND@1	ND@1
DIBROMOMETHANE	ug/l	ND@1	ND@1	ND@1
DICHLORODIFLUOROMETHANE	ug/l	ND@1	ND@1	ND@1
ETHYLBENZENE	ug/l	NA	NA	NA
METHYLENE CHLORIDE	ug/l	ND@1	ND@1	ND@1
TETRACHLOROETHYLENE	ug/l	0.45J	ND@1	ND@1
TOLUENE	ug/l	NA	NA	NA
TRANS-1,3-DICHLOROPROPENE	ug/l	ND@1	ND@1	ND@1
TRICHLOROETHYLENE	ug/l	9.6	2.1	29
TRICHLOROFLUOROMETHANE	ug/l	ND@1	ND@1	ND@1
VINYL CHLORIDE	ug/l	ND@1	ND@1	ND@1
XYLENE, TOTAL	ug/l	NA	NA	NA

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MW-177-S

SAMPLE LOCATION	MW-177-S	MW-178-S	MW-180-S
SAMPLE DESCRIPTION	GROUNDWATER	GROUNDWATER	GROUNDWATER
SAMPLE DATE	05/03/17	05/03/17	05/04/17
LABORATORY SAMPLE I.D.	420120324-2	420120324-3	420120449-5
SAMPLE RUN NUMBER	01	01	01
SAMPLE COMMENT CODES			

PARAMETER	UNITS
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ACID EXTRACTABLES

PHENOLS, TOTAL	ug/l	NA	NA	NA
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BASE/NEUTRAL EXTRACTABLES

1,2-DICHLOROBENZENE	ug/l	ND@1	ND@1	ND@1
1,3-DICHLOROBENZENE	ug/l	ND@1	ND@1	ND@1
1,4-DICHLOROBENZENE	ug/l	ND@1	ND@1	ND@1
2-CHLOROETHYL VINYL ETHER	ug/l	ND@1	ND@1	ND@1

INDICATOR PARAMETERS

PH	pH	7.35	5.99	6.81
SPECIFIC CONDUCTANCE	umhos/cm	1124	471	1154
TEMPERATURE	C	11.9	11.5	10.5

METALS

ARSENIC, DISSOLVED	mg/l	NA	NA	NA
CADMIUM, DISSOLVED	mg/l	NA	NA	NA
LEAD, DISSOLVED	mg/l	NA	NA	NA
SILVER, DISSOLVED	mg/l	NA	NA	NA

VOLATILE ORGANICS

1,1,1,2-TETRACHLOROETHANE	ug/l	ND@1	ND@1	ND@1
1,1,1-TRICHLOROETHANE	ug/l	ND@1	2.0	ND@1
1,1,2,2-TETRACHLOROETHANE	ug/l	ND@1	ND@1	ND@1
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@1	ND@1	ND@1
1,1,2-TRICHLOROETHANE	ug/l	ND@1	ND@1	ND@1
1,1-DICHLOROETHANE	ug/l	4.6	6.6	ND@1
1,1-DICHLOROETHYLENE	ug/l	6.5	13	ND@1
1,2,3-TRICHLOROPROPANE	ug/l	ND@1	ND@1	ND@1
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@1	ND@1	ND@1
1,2-DICHLOROETHANE	ug/l	ND@1	ND@1	ND@1
1,2-DICHLOROETHYLENE, TOTAL	ug/l	0.41J	0.98J	ND@1

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MW-177-S

SAMPLE LOCATION	MW-177-S	MW-178-S	MW-180-S
SAMPLE DESCRIPTION	GROUNDWATER	GROUNDWATER	GROUNDWATER
SAMPLE DATE	05/03/17	05/03/17	05/04/17
LABORATORY SAMPLE I.D.	420120324-2	420120324-3	420120449-5
SAMPLE RUN NUMBER	01	01	01
SAMPLE COMMENT CODES			

PARAMETER	UNITS
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VOLATILE ORGANICS (Continued)

1,2-DICHLOROPROPANE	ug/l	ND@1	ND@1	ND@1
2-CHLOROTOLUENE	ug/l	NA	NA	NA
4-CHLOROTOLUENE	ug/l	ND@1	ND@1	ND@1
BENZENE	ug/l	NA	NA	NA
BROMOBENZENE	ug/l	ND@1	ND@1	ND@1
BROMODICHLOROMETHANE	ug/l	ND@1	ND@1	ND@1
BROMOFORM	ug/l	ND@1	ND@1	ND@1
BROMOMETHANE	ug/l	ND@1	ND@1	ND@1
CARBON TETRACHLORIDE	ug/l	ND@1	ND@1	ND@1
CHLOROBENZENE	ug/l	ND@1	ND@1	ND@1
CHLORODIBROMOMETHANE	ug/l	ND@1	ND@1	ND@1
CHLOROETHANE	ug/l	ND@1	ND@1	ND@1
CHLOROFORM	ug/l	ND@1	1.3	ND@1
CHLOROMETHANE	ug/l	ND@1	ND@1	ND@1
CIS-1,3-DICHLOROPROPYLENE	ug/l	ND@1	ND@1	ND@1
DIBROMOMETHANE	ug/l	ND@1	ND@1	ND@1
DICHLORODIFLUOROMETHANE	ug/l	ND@1	ND@1	ND@1
ETHYLBENZENE	ug/l	NA	NA	NA
METHYLENE CHLORIDE	ug/l	ND@1	ND@1	ND@1
TETRACHLOROETHYLENE	ug/l	ND@1	ND@1	ND@1
TOLUENE	ug/l	NA	NA	NA
TRANS-1,3-DICHLOROPROPENE	ug/l	ND@1	ND@1	ND@1
TRICHLOROETHYLENE	ug/l	ND@1	11	ND@1
TRICHLOROFLUOROMETHANE	ug/l	ND@1	ND@1	ND@1
VINYL CHLORIDE	ug/l	ND@1	ND@1	ND@1
XYLENE, TOTAL	ug/l	NA	NA	NA

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MW-181-S

SAMPLE LOCATION	MW-181-S	MW-182-S	MW-183-S	MW-183-S
SAMPLE DESCRIPTION	GROUNDWATER	GROUNDWATER	GROUNDWATER	DUPLICATE
SAMPLE DATE	05/03/17	05/04/17	05/04/17	05/04/17
LABORATORY SAMPLE I.D.	420120324-4	420120449-4	420120449-2	420120449-3
SAMPLE RUN NUMBER	01	01	01	01
SAMPLE COMMENT CODES				

PARAMETER	UNITS
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ACID EXTRACTABLES

PHENOLS, TOTAL	ug/l	NA	NA	NA	NA
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BASE/NEUTRAL EXTRACTABLES

1,2-DICHLOROBENZENE	ug/l	ND@1	ND@1	ND@1	ND@1
1,3-DICHLOROBENZENE	ug/l	ND@1	ND@1	ND@1	ND@1
1,4-DICHLOROBENZENE	ug/l	ND@1	ND@1	ND@1	ND@1
2-CHLOROETHYL VINYL ETHER	ug/l	ND@1	ND@1	ND@1	ND@1

INDICATOR PARAMETERS

PH	pH	6.86	6.57	6.01	6.01
SPECIFIC CONDUCTANCE	umhos/cm	678	507	278	278
TEMPERATURE	C	12.6	10.8	12.5	12.5

METALS

ARSENIC, DISSOLVED	mg/l	NA	NA	NA	NA
CADMIUM, DISSOLVED	mg/l	NA	NA	NA	NA
LEAD, DISSOLVED	mg/l	NA	NA	NA	NA
SILVER, DISSOLVED	mg/l	NA	NA	NA	NA

VOLATILE ORGANICS

1,1,1,2-TETRACHLOROETHANE	ug/l	ND@1	ND@1	ND@1	ND@1
1,1,1-TRICHLOROETHANE	ug/l	1.0J	1.7	ND@1	ND@1
1,1,2,2-TETRACHLOROETHANE	ug/l	ND@1	ND@1	ND@1	ND@1
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	0.33J	0.86J	ND@1	ND@1
1,1,2-TRICHLOROETHANE	ug/l	ND@1	0.31J	ND@1	ND@1
1,1-DICHLOROETHANE	ug/l	15	35	ND@1	ND@1
1,1-DICHLOROETHYLENE	ug/l	14	77D	ND@1	ND@1
1,2,3-TRICHLOROPROPANE	ug/l	ND@1	ND@1	ND@1	ND@1
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@1	0.90J	ND@1	ND@1
1,2-DICHLOROETHANE	ug/l	ND@1	0.63J	ND@1	ND@1
1,2-DICHLOROETHYLENE, TOTAL	ug/l	0.52J	3.0	ND@1	ND@1

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MW-181-S

SAMPLE LOCATION	MW-181-S	MW-182-S	MW-183-S	MW-183-S
SAMPLE DESCRIPTION	GROUNDWATER	GROUNDWATER	GROUNDWATER	DUPLICATE
SAMPLE DATE	05/03/17	05/04/17	05/04/17	05/04/17
LABORATORY SAMPLE I.D.	420120324-4	420120449-4	420120449-2	420120449-3
SAMPLE RUN NUMBER	01	01	01	01
SAMPLE COMMENT CODES				

PARAMETER	UNITS
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VOLATILE ORGANICS (Continued)

1,2-DICHLOROPROPANE	ug/l	ND@1	ND@1	ND@1	ND@1
2-CHLOROTOLUENE	ug/l	NA	NA	NA	NA
4-CHLOROTOLUENE	ug/l	ND@1	ND@1	ND@1	ND@1
BENZENE	ug/l	NA	NA	NA	NA
BROMOBENZENE	ug/l	ND@1	ND@1	ND@1	ND@1
BROMODICHLOROMETHANE	ug/l	ND@1	ND@1	ND@1	ND@1
BROMOFORM	ug/l	ND@1	ND@1	ND@1	ND@1
BROMOMETHANE	ug/l	ND@1	ND@1	ND@1	ND@1
CARBON TETRACHLORIDE	ug/l	ND@1	ND@1	ND@1	ND@1
CHLOROBENZENE	ug/l	ND@1	ND@1	ND@1	ND@1
CHLORODIBROMOMETHANE	ug/l	ND@1	ND@1	ND@1	ND@1
CHLOROETHANE	ug/l	ND@1	ND@1	ND@1	ND@1
CHLOROFORM	ug/l	ND@1	0.21J	ND@1	ND@1
CHLOROMETHANE	ug/l	ND@1	ND@1	ND@1	ND@1
CIS-1,3-DICHLOROPROPYLENE	ug/l	ND@1	ND@1	ND@1	ND@1
DIBROMOMETHANE	ug/l	ND@1	ND@1	ND@1	ND@1
DICHLORODIFLUOROMETHANE	ug/l	ND@1	ND@1	ND@1	ND@1
ETHYLBENZENE	ug/l	NA	NA	NA	NA
METHYLENE CHLORIDE	ug/l	ND@1	0.57J	ND@1	ND@1
TETRACHLOROETHYLENE	ug/l	ND@1	ND@1	ND@1	ND@1
TOLUENE	ug/l	NA	NA	NA	NA
TRANS-1,3-DICHLOROPROPENE	ug/l	ND@1	ND@1	ND@1	ND@1
TRICHLOROETHYLENE	ug/l	7.3	22	ND@1	ND@1
TRICHLOROFLUOROMETHANE	ug/l	ND@1	ND@1	ND@1	ND@1
VINYL CHLORIDE	ug/l	ND@1	0.59J	ND@1	ND@1
XYLENE, TOTAL	ug/l	NA	NA	NA	NA

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MW-184-SA

SAMPLE LOCATION	MW-184-SA	MW-185-SA	MW-188-S
SAMPLE DESCRIPTION	GROUNDWATER	GROUNDWATER	GROUNDWATER
SAMPLE DATE	05/02/17	05/02/17	05/03/17
LABORATORY SAMPLE I.D.	420120303-10	420120303-9	420120303-14
SAMPLE RUN NUMBER	01	01	01
SAMPLE COMMENT CODES			

PARAMETER	UNITS
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ACID EXTRACTABLES

PHENOLS, TOTAL	ug/l	NA	NA	NA
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BASE/NEUTRAL EXTRACTABLES

1,2-DICHLOROBENZENE	ug/l	ND@1	ND@1	ND@1
1,3-DICHLOROBENZENE	ug/l	ND@1	ND@1	ND@1
1,4-DICHLOROBENZENE	ug/l	ND@1	ND@1	ND@1
2-CHLOROETHYL VINYL ETHER	ug/l	ND@1	ND@1	ND@1

INDICATOR PARAMETERS

PH	pH	7.20	7.18	6.09
SPECIFIC CONDUCTANCE	umhos/cm	952	1370	348
TEMPERATURE	C	10.0	9.9	10.4

METALS

ARSENIC, DISSOLVED	mg/l	NA	NA	NA
CADMIUM, DISSOLVED	mg/l	NA	NA	NA
LEAD, DISSOLVED	mg/l	NA	NA	NA
SILVER, DISSOLVED	mg/l	NA	NA	NA

VOLATILE ORGANICS

1,1,1,2-TETRACHLOROETHANE	ug/l	ND@1	ND@1	ND@1
1,1,1-TRICHLOROETHANE	ug/l	0.32J	0.58J	ND@1
1,1,2,2-TETRACHLOROETHANE	ug/l	ND@1	ND@1	ND@1
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@1	ND@1	ND@1
1,1,2-TRICHLOROETHANE	ug/l	ND@1	ND@1	ND@1
1,1-DICHLOROETHANE	ug/l	0.34J	ND@1	ND@1
1,1-DICHLOROETHYLENE	ug/l	ND@1	ND@1	ND@1
1,2,3-TRICHLOROPROPANE	ug/l	ND@1	ND@1	ND@1
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@1	ND@1	ND@1
1,2-DICHLOROETHANE	ug/l	ND@1	ND@1	ND@1
1,2-DICHLOROETHYLENE, TOTAL	ug/l	1.8	ND@1	ND@1

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MW-184-SA

SAMPLE LOCATION	MW-184-SA	MW-185-SA	MW-188-S
SAMPLE DESCRIPTION	GROUNDWATER	GROUNDWATER	GROUNDWATER
SAMPLE DATE	05/02/17	05/02/17	05/03/17
LABORATORY SAMPLE I.D.	420120303-10	420120303-9	420120303-14
SAMPLE RUN NUMBER	01	01	01
SAMPLE COMMENT CODES			

PARAMETER	UNITS
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VOLATILE ORGANICS (Continued)

1,2-DICHLOROPROPANE	ug/l	ND@1	ND@1	ND@1
2-CHLOROTOLUENE	ug/l	NA	NA	NA
4-CHLOROTOLUENE	ug/l	ND@1	ND@1	ND@1
BENZENE	ug/l	NA	NA	NA
BROMOBENZENE	ug/l	ND@1	ND@1	ND@1
BROMODICHLOROMETHANE	ug/l	ND@1	ND@1	ND@1
BROMOFORM	ug/l	ND@1	ND@1	ND@1
BROMOMETHANE	ug/l	ND@1	ND@1	ND@1
CARBON TETRACHLORIDE	ug/l	ND@1	ND@1	ND@1
CHLOROBENZENE	ug/l	ND@1	ND@1	ND@1
CHLORODIBROMOMETHANE	ug/l	ND@1	ND@1	ND@1
CHLOROETHANE	ug/l	ND@1	ND@1	ND@1
CHLOROFORM	ug/l	ND@1	ND@1	ND@1
CHLOROMETHANE	ug/l	ND@1	ND@1	ND@1
CIS-1,3-DICHLOROPROPYLENE	ug/l	ND@1	ND@1	ND@1
DIBROMOMETHANE	ug/l	ND@1	ND@1	ND@1
DICHLORODIFLUOROMETHANE	ug/l	ND@1	ND@1	ND@1
ETHYLBENZENE	ug/l	NA	NA	NA
METHYLENE CHLORIDE	ug/l	ND@1	ND@1	ND@1
TETRACHLOROETHYLENE	ug/l	ND@1	ND@1	ND@1
TOLUENE	ug/l	NA	NA	NA
TRANS-1,3-DICHLOROPROPENE	ug/l	ND@1	ND@1	ND@1
TRICHLOROETHYLENE	ug/l	2.5	1.0	ND@1
TRICHLOROFLUOROMETHANE	ug/l	ND@1	ND@1	ND@1
VINYL CHLORIDE	ug/l	ND@1	ND@1	ND@1
XYLENE, TOTAL	ug/l	NA	NA	NA

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MW-189-S

SAMPLE LOCATION	MW-189-S	MW-204-S	MW-206-S	MW-206-S
SAMPLE DESCRIPTION	GROUNDWATER	GROUNDWATER	GROUNDWATER	DUPLICATE
SAMPLE DATE	05/03/17	05/05/17	05/08/17	05/08/17
LABORATORY SAMPLE I.D.	420120303-15	420120449-18	420120519-8	420120519-9
SAMPLE RUN NUMBER	01	01	01	01
SAMPLE COMMENT CODES				

PARAMETER	UNITS
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ACID EXTRACTABLES

PHENOLS, TOTAL	ug/l	NA	NA	ND@10	ND@10
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BASE/NEUTRAL EXTRACTABLES

1,2-DICHLOROBENZENE	ug/l	ND@1	ND@1	ND@1	ND@1
1,3-DICHLOROBENZENE	ug/l	ND@1	ND@1	ND@1	ND@1
1,4-DICHLOROBENZENE	ug/l	ND@1	ND@1	ND@1	ND@1
2-CHLOROETHYL VINYL ETHER	ug/l	ND@1	ND@1	ND@1	ND@1

INDICATOR PARAMETERS

PH	pH	7.24	7.66	7.31	7.31
SPECIFIC CONDUCTANCE	umhos/cm	1187	454	881	881
TEMPERATURE	C	12.8	12.0	9.8	9.8

METALS

ARSENIC, DISSOLVED	mg/l	NA	NA	0.0028	0.0029
CADMIUM, DISSOLVED	mg/l	NA	NA	ND@0.0010	ND@0.0010
LEAD, DISSOLVED	mg/l	NA	NA	ND@0.0010	ND@0.0010
SILVER, DISSOLVED	mg/l	NA	NA	ND@0.0010	ND@0.0010

VOLATILE ORGANICS

1,1,1,2-TETRACHLOROETHANE	ug/l	ND@1	ND@1	ND@1	ND@1
1,1,1-TRICHLOROETHANE	ug/l	ND@1	180D	0.25J	0.28J
1,1,2,2-TETRACHLOROETHANE	ug/l	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
1,1,2-TRICHLOROETHANE	ug/l	ND@1	0.20J	ND@1	ND@1
1,1-DICHLOROETHANE	ug/l	ND@1	22	0.80J	0.89J
1,1-DICHLOROETHYLENE	ug/l	ND@1	23	ND@1	ND@1
1,2,3-TRICHLOROPROPANE	ug/l	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
1,2-DICHLOROETHANE	ug/l	ND@1	2.0	ND@1	ND@1
1,2-DICHLOROETHYLENE, TOTAL	ug/l	ND@1	2.4	ND@1	ND@1

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MW-189-S

SAMPLE LOCATION	MW-189-S	MW-204-S	MW-206-S	MW-206-S
SAMPLE DESCRIPTION	GROUNDWATER	GROUNDWATER	GROUNDWATER	DUPLICATE
SAMPLE DATE	05/03/17	05/05/17	05/08/17	05/08/17
LABORATORY SAMPLE I.D.	420120303-15	420120449-18	420120519-8	420120519-9
SAMPLE RUN NUMBER	01	01	01	01
SAMPLE COMMENT CODES				

PARAMETER	UNITS
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VOLATILE ORGANICS (Continued)

1,2-DICHLOROPROPANE	ug/l	ND@1	ND@1	ND@1	ND@1
2-CHLOROTOLUENE	ug/l	NA	NA	NA	NA
4-CHLOROTOLUENE	ug/l	ND@1	ND@1	ND@1	ND@1
BENZENE	ug/l	NA	NA	NA	NA
BROMOBENZENE	ug/l	ND@1	ND@1	ND@1	ND@1
BROMODICHLOROMETHANE	ug/l	ND@1	ND@1	ND@1	ND@1
BROMOFORM	ug/l	ND@1	ND@1	ND@1	ND@1
BROMOMETHANE	ug/l	ND@1	ND@1	ND@1	ND@1
CARBON TETRACHLORIDE	ug/l	ND@1	ND@1	ND@1	ND@1
CHLOROBENZENE	ug/l	ND@1	ND@1	ND@1	ND@1
CHLORODIBROMOMETHANE	ug/l	ND@1	ND@1	ND@1	ND@1
CHLOROETHANE	ug/l	ND@1	ND@1	ND@1	ND@1
CHLOROFORM	ug/l	ND@1	0.50J	ND@1	ND@1
CHLOROMETHANE	ug/l	ND@1	ND@1	ND@1	ND@1
CIS-1,3-DICHLOROPROPYLENE	ug/l	ND@1	ND@1	ND@1	ND@1
DIBROMOMETHANE	ug/l	ND@1	ND@1	ND@1	ND@1
DICHLORODIFLUOROMETHANE	ug/l	ND@1	ND@1	ND@1	ND@1
ETHYLBENZENE	ug/l	NA	NA	NA	NA
METHYLENE CHLORIDE	ug/l	ND@1	ND@1	ND@1	0.28J
TETRACHLOROETHYLENE	ug/l	ND@1	0.32J	ND@1	ND@1
TOLUENE	ug/l	NA	NA	NA	NA
TRANS-1,3-DICHLOROPROPENE	ug/l	ND@1	ND@1	ND@1	ND@1
TRICHLOROETHYLENE	ug/l	ND@1	18	ND@1	ND@1
TRICHLOROFLUOROMETHANE	ug/l	ND@1	ND@1	ND@1	ND@1
VINYL CHLORIDE	ug/l	ND@1	ND@1	ND@1	ND@1
XYLENE, TOTAL	ug/l	NA	NA	NA	NA

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MW-208-S

SAMPLE LOCATION	MW-208-S	MW-210-S	MW-250-M
SAMPLE DESCRIPTION	GROUNDWATER	GROUNDWATER	GROUNDWATER
SAMPLE DATE	05/08/17	05/08/17	05/04/17
LABORATORY SAMPLE I.D.	420120519-7	420120519-6	420120449-8
SAMPLE RUN NUMBER	01	01	01
SAMPLE COMMENT CODES			

PARAMETER	UNITS
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ACID EXTRACTABLES

PHENOLS, TOTAL	ug/l	ND@10	ND@10	NA
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BASE/NEUTRAL EXTRACTABLES

1,2-DICHLOROBENZENE	ug/l	ND@1	ND@1	ND@1
1,3-DICHLOROBENZENE	ug/l	ND@1	ND@1	ND@1
1,4-DICHLOROBENZENE	ug/l	ND@1	ND@1	ND@1
2-CHLOROETHYL VINYL ETHER	ug/l	ND@1	ND@1	ND@1

INDICATOR PARAMETERS

PH	pH	7.02	7.11	6.53
SPECIFIC CONDUCTANCE	umhos/cm	325	845	817
TEMPERATURE	C	9.6	9.5	11.7

METALS

ARSENIC, DISSOLVED	mg/l	0.014	0.089	NA
CADMIUM, DISSOLVED	mg/l	ND@0.0010	ND@0.0010	NA
LEAD, DISSOLVED	mg/l	ND@0.0010	ND@0.0010	NA
SILVER, DISSOLVED	mg/l	ND@0.0010	ND@0.0010	NA

VOLATILE ORGANICS

1,1,1,2-TETRACHLOROETHANE	ug/l	ND@1	ND@1	ND@1
1,1,1-TRICHLOROETHANE	ug/l	ND@1	ND@1	0.55J
1,1,2,2-TETRACHLOROETHANE	ug/l	ND@1	ND@1	ND@1
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@1	ND@1	ND@1
1,1,2-TRICHLOROETHANE	ug/l	ND@1	ND@1	ND@1
1,1-DICHLOROETHANE	ug/l	ND@1	0.31J	ND@1
1,1-DICHLOROETHYLENE	ug/l	ND@1	ND@1	ND@1
1,2,3-TRICHLOROPROPANE	ug/l	ND@1	ND@1	ND@1
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@1	ND@1	ND@1
1,2-DICHLOROETHANE	ug/l	ND@1	ND@1	ND@1
1,2-DICHLOROETHYLENE, TOTAL	ug/l	0.59J	ND@1	ND@1

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MW-208-S

SAMPLE LOCATION	MW-208-S	MW-210-S	MW-250-M
SAMPLE DESCRIPTION	GROUNDWATER	GROUNDWATER	GROUNDWATER
SAMPLE DATE	05/08/17	05/08/17	05/04/17
LABORATORY SAMPLE I.D.	420120519-7	420120519-6	420120449-8
SAMPLE RUN NUMBER	01	01	01
SAMPLE COMMENT CODES			

PARAMETER	UNITS
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VOLATILE ORGANICS (Continued)

1,2-DICHLOROPROPANE	ug/l	ND@1	ND@1	ND@1
2-CHLOROTOLUENE	ug/l	NA	NA	NA
4-CHLOROTOLUENE	ug/l	ND@1	ND@1	ND@1
BENZENE	ug/l	NA	NA	NA
BROMOBENZENE	ug/l	ND@1	ND@1	ND@1
BROMODICHLOROMETHANE	ug/l	ND@1	ND@1	ND@1
BROMOFORM	ug/l	ND@1	ND@1	ND@1
BROMOMETHANE	ug/l	ND@1	ND@1	ND@1
CARBON TETRACHLORIDE	ug/l	ND@1	ND@1	ND@1
CHLOROBENZENE	ug/l	ND@1	0.76J	ND@1
CHLORODIBROMOMETHANE	ug/l	ND@1	ND@1	ND@1
CHLOROETHANE	ug/l	ND@1	ND@1	ND@1
CHLOROFORM	ug/l	ND@1	ND@1	ND@1
CHLOROMETHANE	ug/l	ND@1	ND@1	ND@1
CIS-1,3-DICHLOROPROPYLENE	ug/l	ND@1	ND@1	ND@1
DIBROMOMETHANE	ug/l	ND@1	ND@1	ND@1
DICHLORODIFLUOROMETHANE	ug/l	ND@1	ND@1	ND@1
ETHYLBENZENE	ug/l	NA	NA	NA
METHYLENE CHLORIDE	ug/l	ND@1	ND@1	ND@1
TETRACHLOROETHYLENE	ug/l	ND@1	ND@1	0.42J
TOLUENE	ug/l	NA	NA	NA
TRANS-1,3-DICHLOROPROPENE	ug/l	ND@1	ND@1	ND@1
TRICHLOROETHYLENE	ug/l	ND@1	ND@1	ND@1
TRICHLOROFLUOROMETHANE	ug/l	ND@1	ND@1	ND@1
VINYL CHLORIDE	ug/l	ND@1	ND@1	ND@1
XYLENE, TOTAL	ug/l	NA	NA	NA

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MW-250-S

SAMPLE LOCATION	MW-250-S	MW-267-S	MW-269-S
SAMPLE DESCRIPTION	GROUNDWATER	GROUNDWATER	GROUNDWATER
SAMPLE DATE	05/04/17	05/04/17	05/02/17
LABORATORY SAMPLE I.D.	420120449-9	420120449-13	420120303-7
SAMPLE RUN NUMBER	01	01	01
SAMPLE COMMENT CODES			

PARAMETER	UNITS
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ACID EXTRACTABLES

PHENOLS, TOTAL	ug/l	NA	NA	NA
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BASE/NEUTRAL EXTRACTABLES

1,2-DICHLOROBENZENE	ug/l	ND@1	ND@1	ND@1
1,3-DICHLOROBENZENE	ug/l	ND@1	ND@1	ND@1
1,4-DICHLOROBENZENE	ug/l	ND@1	ND@1	ND@1
2-CHLOROETHYL VINYL ETHER	ug/l	ND@1	ND@1	ND@1

INDICATOR PARAMETERS

PH	pH	6.61	6.10	NA
SPECIFIC CONDUCTANCE	umhos/cm	1307	1116	NA
TEMPERATURE	C	12.3	12.1	NA

METALS

ARSENIC, DISSOLVED	mg/l	NA	NA	NA
CADMIUM, DISSOLVED	mg/l	NA	NA	NA
LEAD, DISSOLVED	mg/l	NA	NA	NA
SILVER, DISSOLVED	mg/l	NA	NA	NA

VOLATILE ORGANICS

1,1,1,2-TETRACHLOROETHANE	ug/l	ND@1	ND@1	ND@1
1,1,1-TRICHLOROETHANE	ug/l	ND@1	150D	490D
1,1,2,2-TETRACHLOROETHANE	ug/l	ND@1	ND@1	ND@1
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@1	ND@1	ND@1
1,1,2-TRICHLOROETHANE	ug/l	ND@1	ND@1	ND@1
1,1-DICHLOROETHANE	ug/l	ND@1	35	140D
1,1-DICHLOROETHYLENE	ug/l	ND@1	7.9	51D
1,2,3-TRICHLOROPROPANE	ug/l	ND@1	ND@1	ND@1
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@1	ND@1	ND@1
1,2-DICHLOROETHANE	ug/l	ND@1	ND@1	10
1,2-DICHLOROETHYLENE, TOTAL	ug/l	ND@1	750D	380D

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MW-250-S

SAMPLE LOCATION	MW-250-S	MW-267-S	MW-269-S
SAMPLE DESCRIPTION	GROUNDWATER	GROUNDWATER	GROUNDWATER
SAMPLE DATE	05/04/17	05/04/17	05/02/17
LABORATORY SAMPLE I.D.	420120449-9	420120449-13	420120303-7
SAMPLE RUN NUMBER	01	01	01
SAMPLE COMMENT CODES			

PARAMETER	UNITS
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VOLATILE ORGANICS (Continued)

1,2-DICHLOROPROPANE	ug/l	ND@1	ND@1	ND@1
2-CHLOROTOLUENE	ug/l	NA	NA	ND@1
4-CHLOROTOLUENE	ug/l	ND@1	ND@1	ND@1
BENZENE	ug/l	NA	NA	ND@1
BROMOBENZENE	ug/l	ND@1	ND@1	ND@1
BROMODICHLOROMETHANE	ug/l	ND@1	ND@1	ND@1
BROMOFORM	ug/l	ND@1	ND@1	ND@1
BROMOMETHANE	ug/l	ND@1	ND@1	ND@1
CARBON TETRACHLORIDE	ug/l	ND@1	ND@1	ND@1
CHLOROBENZENE	ug/l	ND@1	ND@1	ND@1
CHLORODIBROMOMETHANE	ug/l	ND@1	ND@1	ND@1
CHLOROETHANE	ug/l	ND@1	ND@1	ND@1
CHLOROFORM	ug/l	ND@1	11	ND@1
CHLOROMETHANE	ug/l	ND@1	ND@1	ND@1
CIS-1,3-DICHLOROPROPYLENE	ug/l	ND@1	ND@1	ND@1
DIBROMOMETHANE	ug/l	ND@1	ND@1	ND@1
DICHLORODIFLUOROMETHANE	ug/l	ND@1	ND@1	ND@1
ETHYLBENZENE	ug/l	NA	NA	ND@1
METHYLENE CHLORIDE	ug/l	ND@1	ND@1	ND@1
TETRACHLOROETHYLENE	ug/l	ND@1	7.7	13
TOLUENE	ug/l	NA	NA	ND@1
TRANS-1,3-DICHLOROPROPENE	ug/l	ND@1	ND@1	ND@1
TRICHLOROETHYLENE	ug/l	ND@1	1800D	260D
TRICHLOROFLUOROMETHANE	ug/l	ND@1	ND@1	ND@1
VINYL CHLORIDE	ug/l	ND@1	ND@1	5.7
XYLENE, TOTAL	ug/l	NA	NA	ND@1

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MW-271-S

SAMPLE LOCATION	MW-271-S	MW-272-S	MW-275-S
SAMPLE DESCRIPTION	GROUNDWATER	GROUNDWATER	GROUNDWATER
SAMPLE DATE	05/02/17	05/04/17	05/02/17
LABORATORY SAMPLE I.D.	420120303-6	420120449-14	420120303-2
SAMPLE RUN NUMBER	01	01	01
SAMPLE COMMENT CODES			

PARAMETER	UNITS
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ACID EXTRACTABLES

PHENOLS, TOTAL	ug/l	NA	NA	NA
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BASE/NEUTRAL EXTRACTABLES

1,2-DICHLOROBENZENE	ug/l	ND@1	ND@1	ND@1
1,3-DICHLOROBENZENE	ug/l	ND@1	ND@1	ND@1
1,4-DICHLOROBENZENE	ug/l	ND@1	ND@1	ND@1
2-CHLOROETHYL VINYL ETHER	ug/l	ND@1	ND@1	ND@1

INDICATOR PARAMETERS

PH	pH	6.48	6.40	6.31
SPECIFIC CONDUCTANCE	umhos/cm	494	998	1059
TEMPERATURE	C	10.2	12.9	11.1

METALS

ARSENIC, DISSOLVED	mg/l	NA	NA	NA
CADMIUM, DISSOLVED	mg/l	NA	NA	NA
LEAD, DISSOLVED	mg/l	NA	NA	NA
SILVER, DISSOLVED	mg/l	NA	NA	NA

VOLATILE ORGANICS

1,1,1,2-TETRACHLOROETHANE	ug/l	ND@1	ND@1	ND@1
1,1,1-TRICHLOROETHANE	ug/l	12	4.3	19
1,1,2,2-TETRACHLOROETHANE	ug/l	ND@1	ND@1	ND@1
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	3.0	0.52J	ND@1
1,1,2-TRICHLOROETHANE	ug/l	ND@1	0.91J	4.6
1,1-DICHLOROETHANE	ug/l	12	52	110D
1,1-DICHLOROETHYLENE	ug/l	4.5	53	280D
1,2,3-TRICHLOROPROPANE	ug/l	ND@1	ND@1	ND@1
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	2.5	0.84J	4.0
1,2-DICHLOROETHANE	ug/l	0.86J	ND@1	1.4
1,2-DICHLOROETHYLENE, TOTAL	ug/l	52	4.7	5.6

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MW-271-S

SAMPLE LOCATION	MW-271-S	MW-272-S	MW-275-S
SAMPLE DESCRIPTION	GROUNDWATER	GROUNDWATER	GROUNDWATER
SAMPLE DATE	05/02/17	05/04/17	05/02/17
LABORATORY SAMPLE I.D.	420120303-6	420120449-14	420120303-2
SAMPLE RUN NUMBER	01	01	01
SAMPLE COMMENT CODES			

PARAMETER	UNITS
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VOLATILE ORGANICS (Continued)

1,2-DICHLOROPROPANE	ug/l	ND@1	ND@1	ND@1
2-CHLOROTOLUENE	ug/l	ND@1	NA	NA
4-CHLOROTOLUENE	ug/l	ND@1	ND@1	ND@1
BENZENE	ug/l	ND@1	NA	NA
BROMOBENZENE	ug/l	ND@1	ND@1	ND@1
BROMODICHLOROMETHANE	ug/l	ND@1	ND@1	ND@1
BROMOFORM	ug/l	ND@1	ND@1	ND@1
BROMOMETHANE	ug/l	ND@1	ND@1	ND@1
CARBON TETRACHLORIDE	ug/l	ND@1	ND@1	ND@1
CHLOROBENZENE	ug/l	ND@1	ND@1	ND@1
CHLORODIBROMOMETHANE	ug/l	ND@1	ND@1	ND@1
CHLOROETHANE	ug/l	ND@1	ND@1	ND@1
CHLOROFORM	ug/l	ND@1	ND@1	0.57J
CHLOROMETHANE	ug/l	ND@1	ND@1	ND@1
CIS-1,3-DICHLOROPROPYLENE	ug/l	ND@1	ND@1	ND@1
DIBROMOMETHANE	ug/l	ND@1	ND@1	ND@1
DICHLORODIFLUOROMETHANE	ug/l	ND@1	ND@1	ND@1
ETHYLBENZENE	ug/l	ND@1	NA	NA
METHYLENE CHLORIDE	ug/l	ND@1	ND@1	0.79J
TETRACHLOROETHYLENE	ug/l	14	ND@1	ND@1
TOLUENE	ug/l	ND@1	NA	NA
TRANS-1,3-DICHLOROPROPENE	ug/l	ND@1	ND@1	ND@1
TRICHLOROETHYLENE	ug/l	290D	120D	24
TRICHLOROFLUOROMETHANE	ug/l	ND@1	ND@1	ND@1
VINYL CHLORIDE	ug/l	15	0.59J	3.4
XYLENE, TOTAL	ug/l	ND@1	NA	NA

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MW-279-S

SAMPLE LOCATION	MW-279-S	MW-402-S	MW-504-S
SAMPLE DESCRIPTION	GROUNDWATER	GROUNDWATER	GROUNDWATER
SAMPLE DATE	05/02/17	05/04/17	05/04/17
LABORATORY SAMPLE I.D.	420120303-3	420120449-15	420120449-7
SAMPLE RUN NUMBER	01	01	01
SAMPLE COMMENT CODES			

PARAMETER	UNITS
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ACID EXTRACTABLES

PHENOLS, TOTAL	ug/l	NA	NA	NA
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BASE/NEUTRAL EXTRACTABLES

1,2-DICHLOROBENZENE	ug/l	ND@1	ND@1	ND@1
1,3-DICHLOROBENZENE	ug/l	ND@1	ND@1	ND@1
1,4-DICHLOROBENZENE	ug/l	ND@1	ND@1	ND@1
2-CHLOROETHYL VINYL ETHER	ug/l	ND@1	ND@1	ND@1

INDICATOR PARAMETERS

PH	pH	6.12	6.98	6.37
SPECIFIC CONDUCTANCE	umhos/cm	568	1732	1333
TEMPERATURE	C	12.4	11.5	11.5

METALS

ARSENIC, DISSOLVED	mg/l	NA	NA	NA
CADMIUM, DISSOLVED	mg/l	NA	NA	NA
LEAD, DISSOLVED	mg/l	NA	NA	NA
SILVER, DISSOLVED	mg/l	NA	NA	NA

VOLATILE ORGANICS

1,1,1,2-TETRACHLOROETHANE	ug/l	ND@1	ND@1	ND@1
1,1,1-TRICHLOROETHANE	ug/l	2.1	ND@1	3.5
1,1,2,2-TETRACHLOROETHANE	ug/l	ND@1	ND@1	ND@1
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@1	ND@1	ND@1
1,1,2-TRICHLOROETHANE	ug/l	0.35J	ND@1	ND@1
1,1-DICHLOROETHANE	ug/l	20	ND@1	1.1
1,1-DICHLOROETHYLENE	ug/l	21	ND@1	0.79J
1,2,3-TRICHLOROPROPANE	ug/l	ND@1	ND@1	ND@1
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	0.34J	ND@1	ND@1
1,2-DICHLOROETHANE	ug/l	0.43J	ND@1	ND@1
1,2-DICHLOROETHYLENE, TOTAL	ug/l	2.0	ND@1	0.41J

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MW-279-S

SAMPLE LOCATION	MW-279-S	MW-402-S	MW-504-S
SAMPLE DESCRIPTION	GROUNDWATER	GROUNDWATER	GROUNDWATER
SAMPLE DATE	05/02/17	05/04/17	05/04/17
LABORATORY SAMPLE I.D.	420120303-3	420120449-15	420120449-7
SAMPLE RUN NUMBER	01	01	01
SAMPLE COMMENT CODES			

PARAMETER	UNITS
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VOLATILE ORGANICS (Continued)

1,2-DICHLOROPROPANE	ug/l	ND@1	ND@1	ND@1
2-CHLOROTOLUENE	ug/l	NA	NA	NA
4-CHLOROTOLUENE	ug/l	ND@1	ND@1	ND@1
BENZENE	ug/l	NA	NA	NA
BROMOBENZENE	ug/l	ND@1	ND@1	ND@1
BROMODICHLOROMETHANE	ug/l	ND@1	ND@1	ND@1
BROMOFORM	ug/l	ND@1	ND@1	ND@1
BROMOMETHANE	ug/l	ND@1	ND@1	ND@1
CARBON TETRACHLORIDE	ug/l	ND@1	ND@1	ND@1
CHLOROBENZENE	ug/l	ND@1	ND@1	ND@1
CHLORODIBROMOMETHANE	ug/l	ND@1	ND@1	ND@1
CHLOROETHANE	ug/l	ND@1	ND@1	ND@1
CHLOROFORM	ug/l	0.63U	ND@1	ND@1
CHLOROMETHANE	ug/l	ND@1	ND@1	ND@1
CIS-1,3-DICHLOROPROPYLENE	ug/l	ND@1	ND@1	ND@1
DIBROMOMETHANE	ug/l	ND@1	ND@1	ND@1
DICHLORODIFLUOROMETHANE	ug/l	ND@1	ND@1	ND@1
ETHYLBENZENE	ug/l	NA	NA	NA
METHYLENE CHLORIDE	ug/l	ND@1	ND@1	ND@1
TETRACHLOROETHYLENE	ug/l	ND@1	ND@1	8.9
TOLUENE	ug/l	NA	NA	NA
TRANS-1,3-DICHLOROPROPENE	ug/l	ND@1	ND@1	ND@1
TRICHLOROETHYLENE	ug/l	24	ND@1	2.3
TRICHLOROFLUOROMETHANE	ug/l	ND@1	ND@1	ND@1
VINYL CHLORIDE	ug/l	1.6	ND@1	ND@1
XYLENE, TOTAL	ug/l	NA	NA	NA

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MW-505-S

SAMPLE LOCATION	MW-505-S	MW-508-SA	MW-604-S	MW-604-S
SAMPLE DESCRIPTION	GROUNDWATER	GROUNDWATER	GROUNDWATER	DUPLICATE
SAMPLE DATE	05/02/17	05/03/17	05/02/17	05/02/17
LABORATORY SAMPLE I.D.	420120303-8	420120303-12	420120303-4	420120303-5
SAMPLE RUN NUMBER	01	01	01	01
SAMPLE COMMENT CODES				

PARAMETER	UNITS
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ACID EXTRACTABLES

PHENOLS, TOTAL	ug/l	NA	NA	NA	NA
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BASE/NEUTRAL EXTRACTABLES

1,2-DICHLOROBENZENE	ug/l	ND@1	ND@1	ND@1	ND@1
1,3-DICHLOROBENZENE	ug/l	ND@1	ND@1	ND@1	ND@1
1,4-DICHLOROBENZENE	ug/l	ND@1	ND@1	ND@1	ND@1
2-CHLOROETHYL VINYL ETHER	ug/l	ND@1	ND@1	ND@1	ND@1

INDICATOR PARAMETERS

PH	pH	7.60	6.98	6.43	6.43
SPECIFIC CONDUCTANCE	umhos/cm	410	547	381	381
TEMPERATURE	C	11.0	9.7	12.8	12.8

METALS

ARSENIC, DISSOLVED	mg/l	NA	NA	NA	NA
CADMIUM, DISSOLVED	mg/l	NA	NA	NA	NA
LEAD, DISSOLVED	mg/l	NA	NA	NA	NA
SILVER, DISSOLVED	mg/l	NA	NA	NA	NA

VOLATILE ORGANICS

1,1,1,2-TETRACHLOROETHANE	ug/l	ND@1	ND@1	ND@1	ND@1
1,1,1-TRICHLOROETHANE	ug/l	2.4	ND@1	110D	89D
1,1,2,2-TETRACHLOROETHANE	ug/l	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
1,1,2-TRICHLOROETHANE	ug/l	ND@1	ND@1	ND@1	ND@1
1,1-DICHLOROETHANE	ug/l	ND@1	ND@1	23	15
1,1-DICHLOROETHYLENE	ug/l	ND@1	ND@1	21	13
1,2,3-TRICHLOROPROPANE	ug/l	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
1,2-DICHLOROETHANE	ug/l	ND@1	ND@1	2.2	1.3
1,2-DICHLOROETHYLENE, TOTAL	ug/l	ND@1	ND@1	70D	41

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MW-505-S

SAMPLE LOCATION	MW-505-S	MW-508-SA	MW-604-S	MW-604-S
SAMPLE DESCRIPTION	GROUNDWATER	GROUNDWATER	GROUNDWATER	DUPLICATE
SAMPLE DATE	05/02/17	05/03/17	05/02/17	05/02/17
LABORATORY SAMPLE I.D.	420120303-8	420120303-12	420120303-4	420120303-5
SAMPLE RUN NUMBER	01	01	01	01
SAMPLE COMMENT CODES				

PARAMETER	UNITS
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VOLATILE ORGANICS (Continued)

1,2-DICHLOROPROPANE	ug/l	ND@1	ND@1	ND@1	ND@1
2-CHLOROTOLUENE	ug/l	NA	NA	NA	NA
4-CHLOROTOLUENE	ug/l	ND@1	ND@1	ND@1	ND@1
BENZENE	ug/l	NA	NA	NA	NA
BROMOBENZENE	ug/l	ND@1	ND@1	ND@1	ND@1
BROMODICHLOROMETHANE	ug/l	ND@1	ND@1	ND@1	ND@1
BROMOFORM	ug/l	ND@1	ND@1	ND@1	ND@1
BROMOMETHANE	ug/l	ND@1	ND@1	ND@1	ND@1
CARBON TETRACHLORIDE	ug/l	ND@1	ND@1	ND@1	ND@1
CHLOROBENZENE	ug/l	ND@1	ND@1	ND@1	ND@1
CHLORODIBROMOMETHANE	ug/l	ND@1	ND@1	ND@1	ND@1
CHLOROETHANE	ug/l	ND@1	ND@1	ND@1	ND@1
CHLOROFORM	ug/l	ND@1	ND@1	ND@1	ND@1
CHLOROMETHANE	ug/l	ND@1	ND@1	ND@1	ND@1
CIS-1,3-DICHLOROPROPYLENE	ug/l	ND@1	ND@1	ND@1	ND@1
DIBROMOMETHANE	ug/l	ND@1	ND@1	ND@1	ND@1
DICHLORODIFLUOROMETHANE	ug/l	ND@1	ND@1	ND@1	ND@1
ETHYLBENZENE	ug/l	NA	NA	NA	NA
METHYLENE CHLORIDE	ug/l	ND@1	ND@1	ND@1	ND@1
TETRACHLOROETHYLENE	ug/l	5.8	ND@1	3.2	2.0
TOLUENE	ug/l	NA	NA	NA	NA
TRANS-1,3-DICHLOROPROPENE	ug/l	ND@1	ND@1	ND@1	ND@1
TRICHLOROETHYLENE	ug/l	3.8	ND@1	73D	42
TRICHLOROFLUOROMETHANE	ug/l	ND@1	ND@1	ND@1	ND@1
VINYL CHLORIDE	ug/l	ND@1	ND@1	3.2	1.7
XYLENE, TOTAL	ug/l	NA	NA	NA	NA

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MW-608-S

SAMPLE LOCATION	MW-608-S	MW-612-S	MW-802
SAMPLE DESCRIPTION	GROUNDWATER	GROUNDWATER	GROUNDWATER
SAMPLE DATE	05/03/17	05/08/17	05/08/17
LABORATORY SAMPLE I.D.	420120303-13	420120519-4	420120519-5
SAMPLE RUN NUMBER	01	01	01
SAMPLE COMMENT CODES			

PARAMETER	UNITS
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ACID EXTRACTABLES

PHENOLS, TOTAL	ug/l	NA	ND@10	ND@10
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BASE/NEUTRAL EXTRACTABLES

1,2-DICHLOROBENZENE	ug/l	ND@1	ND@1	ND@1
1,3-DICHLOROBENZENE	ug/l	ND@1	ND@1	ND@1
1,4-DICHLOROBENZENE	ug/l	ND@1	ND@1	ND@1
2-CHLOROETHYL VINYL ETHER	ug/l	ND@1	ND@1	ND@1

INDICATOR PARAMETERS

PH	pH	7.25	6.97	7.09
SPECIFIC CONDUCTANCE	umhos/cm	1014	860	989
TEMPERATURE	C	9.5	10.8	11.0

METALS

ARSENIC, DISSOLVED	mg/l	NA	ND@0.0014	ND@0.0014
CADMIUM, DISSOLVED	mg/l	NA	ND@0.0010	ND@0.0010
LEAD, DISSOLVED	mg/l	NA	ND@0.0010	ND@0.0010
SILVER, DISSOLVED	mg/l	NA	ND@0.0010	ND@0.0010

VOLATILE ORGANICS

1,1,1,2-TETRACHLOROETHANE	ug/l	ND@1	ND@1	ND@1
1,1,1-TRICHLOROETHANE	ug/l	ND@1	0.77J	1.1
1,1,2,2-TETRACHLOROETHANE	ug/l	ND@1	ND@1	ND@1
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@1	ND@1	ND@1
1,1,2-TRICHLOROETHANE	ug/l	ND@1	ND@1	ND@1
1,1-DICHLOROETHANE	ug/l	ND@1	1.1	3.4
1,1-DICHLOROETHYLENE	ug/l	ND@1	ND@1	0.98J
1,2,3-TRICHLOROPROPANE	ug/l	ND@1	ND@1	ND@1
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@1	ND@1	ND@1
1,2-DICHLOROETHANE	ug/l	ND@1	ND@1	ND@1
1,2-DICHLOROETHYLENE, TOTAL	ug/l	ND@1	ND@1	0.34J

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MW-608-S

SAMPLE LOCATION	MW-608-S	MW-612-S	MW-802
SAMPLE DESCRIPTION	GROUNDWATER	GROUNDWATER	GROUNDWATER
SAMPLE DATE	05/03/17	05/08/17	05/08/17
LABORATORY SAMPLE I.D.	420120303-13	420120519-4	420120519-5
SAMPLE RUN NUMBER	01	01	01
SAMPLE COMMENT CODES			

PARAMETER	UNITS
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VOLATILE ORGANICS (Continued)

1,2-DICHLOROPROPANE	ug/l	ND@1	ND@1	ND@1
2-CHLOROTOLUENE	ug/l	NA	NA	NA
4-CHLOROTOLUENE	ug/l	ND@1	ND@1	ND@1
BENZENE	ug/l	NA	NA	NA
BROMOBENZENE	ug/l	ND@1	ND@1	ND@1
BROMODICHLOROMETHANE	ug/l	ND@1	ND@1	ND@1
BROMOFORM	ug/l	ND@1	ND@1	ND@1
BROMOMETHANE	ug/l	ND@1	ND@1	ND@1
CARBON TETRACHLORIDE	ug/l	ND@1	ND@1	ND@1
CHLOROBENZENE	ug/l	ND@1	ND@1	ND@1
CHLORODIBROMOMETHANE	ug/l	ND@1	ND@1	ND@1
CHLOROETHANE	ug/l	ND@1	ND@1	ND@1
CHLOROFORM	ug/l	ND@1	ND@1	ND@1
CHLOROMETHANE	ug/l	ND@1	ND@1	ND@1
CIS-1,3-DICHLOROPROPYLENE	ug/l	ND@1	ND@1	ND@1
DIBROMOMETHANE	ug/l	ND@1	ND@1	ND@1
DICHLORODIFLUOROMETHANE	ug/l	ND@1	ND@1	ND@1
ETHYLBENZENE	ug/l	NA	NA	NA
METHYLENE CHLORIDE	ug/l	ND@1	ND@1	ND@1
TETRACHLOROETHYLENE	ug/l	ND@1	0.59J	0.41J
TOLUENE	ug/l	NA	NA	NA
TRANS-1,3-DICHLOROPROPENE	ug/l	ND@1	ND@1	ND@1
TRICHLOROETHYLENE	ug/l	ND@1	4.3	5.9
TRICHLOROFLUOROMETHANE	ug/l	ND@1	ND@1	ND@1
VINYL CHLORIDE	ug/l	ND@1	ND@1	ND@1
XYLENE, TOTAL	ug/l	NA	NA	NA

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MW-806-S

SAMPLE LOCATION	MW-806-S	MW-816	MW-817
SAMPLE DESCRIPTION	GROUNDWATER	GROUNDWATER	GROUNDWATER
SAMPLE DATE	05/04/17	05/08/17	05/08/17
LABORATORY SAMPLE I.D.	420120449-6	420120519-2	420120519-3
SAMPLE RUN NUMBER	01	01	01
SAMPLE COMMENT CODES			

PARAMETER	UNITS
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ACID EXTRACTABLES

PHENOLS, TOTAL	ug/l	NA	ND@10	ND@10
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BASE/NEUTRAL EXTRACTABLES

1,2-DICHLOROBENZENE	ug/l	ND@1	ND@1	ND@1
1,3-DICHLOROBENZENE	ug/l	ND@1	ND@1	ND@1
1,4-DICHLOROBENZENE	ug/l	ND@1	ND@1	ND@1
2-CHLOROETHYL VINYL ETHER	ug/l	ND@1	ND@1	ND@1

INDICATOR PARAMETERS

PH	pH	6.21	7.01	7.23
SPECIFIC CONDUCTANCE	umhos/cm	621	751	495
TEMPERATURE	C	10.8	8.8	9.2

METALS

ARSENIC, DISSOLVED	mg/l	NA	ND@0.0014	ND@0.0014
CADMIUM, DISSOLVED	mg/l	NA	ND@0.0010	ND@0.0010
LEAD, DISSOLVED	mg/l	NA	ND@0.0010	ND@0.0010
SILVER, DISSOLVED	mg/l	NA	ND@0.0010	ND@0.0010

VOLATILE ORGANICS

1,1,1,2-TETRACHLOROETHANE	ug/l	ND@1	ND@1	ND@1
1,1,1-TRICHLOROETHANE	ug/l	ND@1	1.6	2.3
1,1,2,2-TETRACHLOROETHANE	ug/l	ND@1	ND@1	ND@1
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@1	ND@1	ND@1
1,1,2-TRICHLOROETHANE	ug/l	ND@1	ND@1	ND@1
1,1-DICHLOROETHANE	ug/l	ND@1	ND@1	ND@1
1,1-DICHLOROETHYLENE	ug/l	ND@1	ND@1	ND@1
1,2,3-TRICHLOROPROPANE	ug/l	ND@1	ND@1	ND@1
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@1	ND@1	ND@1
1,2-DICHLOROETHANE	ug/l	ND@1	ND@1	ND@1
1,2-DICHLOROETHYLENE, TOTAL	ug/l	ND@1	1.3	0.27J

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MW-806-S

SAMPLE LOCATION	MW-806-S	MW-816	MW-817
SAMPLE DESCRIPTION	GROUNDWATER	GROUNDWATER	GROUNDWATER
SAMPLE DATE	05/04/17	05/08/17	05/08/17
LABORATORY SAMPLE I.D.	420120449-6	420120519-2	420120519-3
SAMPLE RUN NUMBER	01	01	01
SAMPLE COMMENT CODES			

PARAMETER	UNITS
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VOLATILE ORGANICS (Continued)

1,2-DICHLOROPROPANE	ug/l	ND@1	ND@1	ND@1
2-CHLOROTOLUENE	ug/l	NA	NA	NA
4-CHLOROTOLUENE	ug/l	ND@1	ND@1	ND@1
BENZENE	ug/l	NA	NA	NA
BROMOBENZENE	ug/l	ND@1	ND@1	ND@1
BROMODICHLOROMETHANE	ug/l	ND@1	ND@1	ND@1
BROMOFORM	ug/l	ND@1	ND@1	ND@1
BROMOMETHANE	ug/l	ND@1	ND@1	ND@1
CARBON TETRACHLORIDE	ug/l	ND@1	ND@1	ND@1
CHLOROBENZENE	ug/l	ND@1	ND@1	ND@1
CHLORODIBROMOMETHANE	ug/l	ND@1	ND@1	ND@1
CHLOROETHANE	ug/l	ND@1	ND@1	ND@1
CHLOROFORM	ug/l	ND@1	ND@1	0.33J
CHLOROMETHANE	ug/l	ND@1	ND@1	ND@1
CIS-1,3-DICHLOROPROPYLENE	ug/l	ND@1	ND@1	ND@1
DIBROMOMETHANE	ug/l	ND@1	ND@1	ND@1
DICHLORODIFLUOROMETHANE	ug/l	ND@1	ND@1	ND@1
ETHYLBENZENE	ug/l	NA	NA	NA
METHYLENE CHLORIDE	ug/l	ND@1	ND@1	ND@1
TETRACHLOROETHYLENE	ug/l	6.7	ND@1	ND@1
TOLUENE	ug/l	NA	NA	NA
TRANS-1,3-DICHLOROPROPENE	ug/l	ND@1	ND@1	ND@1
TRICHLOROETHYLENE	ug/l	4.0	27	23
TRICHLOROFLUOROMETHANE	ug/l	ND@1	ND@1	ND@1
VINYL CHLORIDE	ug/l	ND@1	ND@1	ND@1
XYLENE, TOTAL	ug/l	NA	NA	NA

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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 identified 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.

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EQ RINSE BLK

SAMPLE LOCATION	EQ RINSE BLK	EQ RINSE BLK	EQ RINSE BLK	EQ RINSE BLK	EQ RINSE BLK
SAMPLE DESCRIPTION	WTR LVL IND	WTR LVL IND	WTR LVL IND	WTR LVL IND	WTR LVL IND
SAMPLE DATE	05/02/17	05/03/17	05/04/17	05/05/17	05/08/17
LABORATORY SAMPLE I.D.	420120303-11	420120303-20	420120449-17	420120449-20	420120519-10
SAMPLE RUN NUMBER	01	01	01	01	01
SAMPLE COMMENT CODES					

PARAMETER	UNITS
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BASE/NEUTRAL EXTRACTABLES

1,2-DICHLOROBENZENE	ug/l	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
1,4-DICHLOROBENZENE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1
2-CHLOROETHYL VINYL ETHER	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1

VOLATILE ORGANICS

1,1,1,2-TETRACHLOROETHANE	ug/l	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
1,1,2,2-TETRACHLOROETHANE	ug/l	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
1,1,2-TRICHLOROETHANE	ug/l	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
1,1-DICHLOROETHYLENE	ug/l	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
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	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
1,2-DICHLOROETHYLENE, TOTAL	ug/l	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
2-CHLOROTOLUENE	ug/l	NA	NA	NA	NA	NA
4-CHLOROTOLUENE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1
BENZENE	ug/l	NA	NA	NA	NA	NA
BROMOBENZENE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1
BROMODICHLOROMETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1
BROMOFORM	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1
BROMOMETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1
CARBON TETRACHLORIDE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1
CHLOROBENZENE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1
CHLORODIBROMOMETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1
CHLOROETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1
CHLOROFORM	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1
CHLOROMETHANE	ug/l	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
DIBROMOMETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1
DICHLORODIFLUOROMETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1
ETHYLBENZENE	ug/l	NA	NA	NA	NA	NA
METHYLENE CHLORIDE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1
TETRACHLOROETHYLENE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1
TOLUENE	ug/l	NA	NA	NA	NA	NA
TRANS-1,3-DICHLOROPROPENE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1
TRICHLOROETHYLENE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1

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EQ RINSE BLK

SAMPLE LOCATION	EQ RINSE BLK	EQ RINSE BLK	EQ RINSE BLK	EQ RINSE BLK	EQ RINSE BLK
SAMPLE DESCRIPTION	WTR LVL IND	WTR LVL IND	WTR LVL IND	WTR LVL IND	WTR LVL IND
SAMPLE DATE	05/02/17	05/03/17	05/04/17	05/05/17	05/08/17
LABORATORY SAMPLE I.D.	420120303-11	420120303-20	420120449-17	420120449-20	420120519-10
SAMPLE RUN NUMBER	01	01	01	01	01
SAMPLE COMMENT CODES					

PARAMETER UNITS

VOLATILE ORGANICS (Continued)

TRICHLOROFLUOROMETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1
VINYL CHLORIDE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1
XYLENE, TOTAL	ug/l	NA	NA	NA	NA	NA

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TRIP BLANK

SAMPLE LOCATION	TRIP BLANK	TRIP BLANK	TRIP BLANK	TRIP BLANK
SAMPLE DESCRIPTION	5/2-3/17	5/3/2017	5/4-5/17	5/8-9/17
SAMPLE DATE	05/02/17	05/03/17	05/04/17	05/08/17
LABORATORY SAMPLE I.D.	420120303-1	420120324-1	420120449-1	420120519-1
SAMPLE RUN NUMBER	01	01	01	01
SAMPLE COMMENT CODES				

PARAMETER	UNITS
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BASE/NEUTRAL EXTRACTABLES

1,2-DICHLOROBENZENE	ug/l	ND@1	ND@1	ND@1	ND@1
1,3-DICHLOROBENZENE	ug/l	ND@1	ND@1	ND@1	ND@1
1,4-DICHLOROBENZENE	ug/l	ND@1	ND@1	ND@1	ND@1
2-CHLOROETHYL VINYL ETHER	ug/l	ND@1	ND@1	ND@1	ND@1

VOLATILE ORGANICS

1,1,1,2-TETRACHLOROETHANE	ug/l	ND@1	ND@1	ND@1	ND@1
1,1,1-TRICHLOROETHANE	ug/l	ND@1	ND@1	ND@1	ND@1
1,1,2,2-TETRACHLOROETHANE	ug/l	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
1,1,2-TRICHLOROETHANE	ug/l	ND@1	ND@1	ND@1	ND@1
1,1-DICHLOROETHANE	ug/l	ND@1	ND@1	ND@1	ND@1
1,1-DICHLOROETHYLENE	ug/l	ND@1	ND@1	ND@1	ND@1
1,2,3-TRICHLOROPROPANE	ug/l	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
1,2-DICHLOROETHANE	ug/l	ND@1	ND@1	ND@1	ND@1
1,2-DICHLOROETHYLENE, TOTAL	ug/l	ND@1	ND@1	ND@1	ND@1
1,2-DICHLOROPROPANE	ug/l	ND@1	ND@1	ND@1	ND@1
2-CHLOROTOLUENE	ug/l	ND@1	NA	NA	NA
4-CHLOROTOLUENE	ug/l	ND@1	ND@1	ND@1	ND@1
BENZENE	ug/l	ND@1	NA	NA	NA
BROMOBENZENE	ug/l	ND@1	ND@1	ND@1	ND@1
BROMODICHLOROMETHANE	ug/l	ND@1	ND@1	ND@1	ND@1
BROMOFORM	ug/l	ND@1	ND@1	ND@1	ND@1
BROMOMETHANE	ug/l	ND@1	ND@1	ND@1	ND@1
CARBON TETRACHLORIDE	ug/l	ND@1	ND@1	ND@1	ND@1
CHLOROBENZENE	ug/l	ND@1	ND@1	ND@1	ND@1
CHLORODIBROMOMETHANE	ug/l	ND@1	ND@1	ND@1	ND@1
CHLOROETHANE	ug/l	ND@1	ND@1	ND@1	ND@1
CHLOROFORM	ug/l	ND@1	ND@1	ND@1	ND@1
CHLOROMETHANE	ug/l	ND@1	ND@1	ND@1	ND@1
CIS-1,3-DICHLOROPROPYLENE	ug/l	ND@1	ND@1	ND@1	ND@1
DIBROMOMETHANE	ug/l	ND@1	ND@1	ND@1	ND@1
DICHLORODIFLUOROMETHANE	ug/l	ND@1	ND@1	ND@1	ND@1
ETHYLBENZENE	ug/l	ND@1	NA	NA	NA
METHYLENE CHLORIDE	ug/l	ND@1	ND@1	ND@1	ND@1
TETRACHLOROETHYLENE	ug/l	ND@1	ND@1	ND@1	ND@1
TOLUENE	ug/l	ND@1	NA	NA	NA
TRANS-1,3-DICHLOROPROPENE	ug/l	ND@1	ND@1	ND@1	ND@1
TRICHLOROETHYLENE	ug/l	ND@1	ND@1	ND@1	ND@1

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TRIP BLANK

SAMPLE LOCATION	TRIP BLANK	TRIP BLANK	TRIP BLANK	TRIP BLANK
SAMPLE DESCRIPTION	5/2-3/17	5/3/2017	5/4-5/17	5/8-9/17
SAMPLE DATE	05/02/17	05/03/17	05/04/17	05/08/17
LABORATORY SAMPLE I.D.	420120303-1	420120324-1	420120449-1	420120519-1
SAMPLE RUN NUMBER	01	01	01	01
SAMPLE COMMENT CODES				

PARAMETER	UNITS
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VOLATILE ORGANICS (Continued)

TRICHLOROFLUOROMETHANE	ug/l	ND@1	ND@1	ND@1	ND@1
VINYL CHLORIDE	ug/l	ND@1	ND@1	ND@1	ND@1
XYLENE, TOTAL	ug/l	ND@1	NA	NA	NA

Former IBM Kingston Facility
Field Quality Assurance / Control Data
January 1, 2017 - December 31, 2017

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 identified 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.

Appendix B

Groundwater Elevation Table

Kingston Site
2017 Water Level Data

Well	Elevation TOC	02/16/17		04/27/17		08/16/17		10/05/17	
		DTW	GWE	DTW	GWE	DTW	GWE	DTW	GWE
MW-001-R	150.93	8.83	142.10	6.91	144.02	8.55	142.38	9.52	141.41
MW-003-S	173.03	3.63	169.40	3.72	169.31	4.62	168.41	4.92	168.11
MW-004-R	176.08	6.61	169.47	6.47	169.61	10.00	166.08	10.31	165.77
MW-004-S	172.74	3.48	169.26	2.95	169.79	3.63	169.11	4.90	167.84
MW-006-S	172.69	6.63	166.06	6.58	166.11	7.78	164.91	8.00	164.69
MW-008-S	178.17	7.65	170.52	7.61	170.56	7.72	170.45	7.84	170.33
MW-010-S	176.94	5.00	171.94	4.83	172.11	Dry		Dry	
MW-106-S	152.00	4.64	147.36	4.49	147.51	5.08	146.92	6.03	145.97
MW-108-S	177.26	6.22	171.04	4.90	172.36	7.20	170.06	7.73	169.53
MW-109-S	174.53	5.63	168.90	5.53	169.00	8.39	166.14	8.83	165.70
MW-110-SA	180.15	10.16	169.99	9.40	170.75	10.80	169.35	10.93	169.22
MW-111-S	179.39	9.52	169.87	8.53	170.86	9.78	169.61	10.20	169.19
MW-112-S	180.16	9.10	171.06	8.70	171.46	10.30	169.86	10.22	169.94
MW-113-S	177.03	6.94	170.09	6.90	170.13	6.99	170.04	7.07	169.96
MW-114-S	176.92	6.00	170.92	5.94	170.98	6.18	170.74	6.25	170.67
MW-115-S	181.20	8.49	172.71	8.40	172.80	9.33	171.87	9.37	171.83
MW-116-S	181.28	7.86	173.42	7.82	173.46	8.10	173.18	8.19	173.09
MW-117-S	180.75	5.98	174.77	5.72	175.03	6.50	174.25	6.58	174.17
MW-118-S	182.96	7.33	175.63	7.29	175.67	7.49	175.47	7.49	175.47
MW-119-S	183.87	7.92	175.95	7.90	175.97	8.08	175.79	8.14	175.73
MW-120-S	185.20	8.00	177.20	7.91	177.29	8.17	177.03	8.23	176.97
MW-122-S	183.62	5.25	178.37	5.18	178.44	5.40	178.22	5.51	178.11
MW-123-SA	178.21	3.90	174.31	3.82	174.39	3.66	174.55	3.74	174.47
MW-124-S	179.14	7.00	172.14	7.00	172.14	9.43	169.71	9.68	169.46
MW-125-S	173.88	12.02	161.86	10.88	163.00	13.11	160.77	13.33	160.55
MW-126-S	180.64	8.90	171.74	8.81	171.83	10.28	170.36	10.81	169.83
MW-161-S	183.36	5.17	178.19	4.00	179.36	5.13	178.23	5.83	177.53
MW-162-S	184.36	6.00	178.36	5.97	178.39	6.27	178.09	6.34	178.02
MW-163-S	185.65	7.75	177.90	7.70	177.95	8.42	177.23	8.49	177.16
MW-164-S	182.31	8.31	174.00	8.28	174.03	7.92	174.39	8.00	174.31
MW-169-S	178.07	8.13	169.94	8.10	169.97	8.31	169.76	8.42	169.65
MW-170-S	174.36	5.27	169.09	5.17	169.19	8.22	166.14	7.62	166.74
MW-171-S	172.51	4.60	167.91	3.75	168.76	4.78	167.73	5.41	167.10
MW-172-S	171.68	2.45	169.23	2.15	169.53	3.70	167.98	4.32	167.36
MW-173-S	179.83	9.86	169.97	9.85	169.98	10.13	169.70	10.78	169.05
MW-174-S	179.89	9.90	169.99	9.91	169.98	10.22	169.67	10.68	169.21
MW-175-S	177.99	7.67	170.32	7.66	170.33	7.82	170.17	7.94	170.05
MW-176-S	177.55	6.64	170.91	6.90	170.65	7.20	170.35	8.11	169.44
MW-177-S	177.94	7.60	170.34	7.58	170.36	7.65	170.29	7.69	170.25
MW-178-S	179.29	9.48	169.81	9.45	169.84	9.42	169.87	10.22	169.07
MW-180-S	179.45	6.18	173.27	6.12	173.33	6.74	172.71	6.86	172.59
MW-181-S	177.38	7.00	170.38	6.90	170.48	7.11	170.27	7.84	169.54
MW-182-S	180.09	9.78	170.31	9.70	170.39	9.83	170.26	9.94	170.15
MW-183-S	174.38	3.94	170.44	4.00	170.38	4.22	170.16	5.50	168.88
MW-184-SA	171.30	9.82	161.48	9.22	162.08	10.88	160.42	12.13	159.17
MW-185-SA	176.88	16.70	160.18	14.99	161.89	17.30	159.58	18.29	158.59
MW-186-S	172.60	3.77	168.83	2.90	169.70	3.55	169.05	5.00	167.60
MW-187-S	170.82	2.23	168.59	1.63	169.19	3.61	167.21	2.85	167.97
MW-188-S	174.59	8.10	166.49	8.02	166.57	8.21	166.38	8.91	165.68
MW-189-S	175.52	5.60	169.92	5.54	169.98	5.70	169.82	6.22	169.30
MW-201-S	177.00	9.00	168.00	8.93	168.07	9.12	167.88	10.20	166.80
MW-202-S	173.29	7.26	166.03	7.17	166.12	8.60	164.69	8.61	164.68
MW-203-S	175.16	Dry		Dry		Dry		Dry	
MW-204-S	173.93	7.70	166.23	7.64	166.29	8.65	165.28	10.82	163.11
MW-206-S	152.42	6.11	146.31	4.70	147.72	6.32	146.10	9.65	142.77
MW-208-S	152.31	6.33	145.98	5.92	146.39	6.99	145.32	13.62	138.69
MW-209-S	152.02	6.63	145.39	6.50	145.52	7.65	144.37	10.50	141.52
MW-210-S	151.99	11.25	140.74	7.50	144.49	9.00	142.99	10.20	141.79
MW-232-M	180.94	10.16	170.78	10.13	170.81	10.33	170.61	10.41	170.53
MW-232-S	181.03	10.20	170.83	10.20	170.83	9.90	171.13	9.97	171.06
MW-250-M	178.09	4.59	173.50	3.44	174.65	4.90	173.19	5.00	173.09
MW-261-S	178.85	NM		NM		NM		NM	
MW-267-S	178.77	7.15	171.62	6.63	172.14	7.29	171.48	7.34	171.43
MW-269-S	180.89	10.35	170.54	10.29	170.60	10.34	170.55	10.40	170.49
MW-270-S	180.48	10.33	170.15	10.22	170.26	10.31	170.17	10.46	170.02
MW-274-S	177.71	6.17	171.54	6.12	171.59	6.63	171.08	7.12	170.59
MW-275-S	180.97	10.89	170.08	10.18	170.79	11.22	169.75	11.81	169.16
MW-278-S	180.48	12.35	168.13	11.72	168.76	12.38	168.10	13.00	167.48
MW-279-S	180.23	10.00	170.23	9.80	170.43	10.83	169.40	11.14	169.09
MW-282-S	176.63	6.40	170.23	6.45	170.18	7.36	169.27	8.00	168.63
MW-284-S	174.77	6.63	168.14	7.85	166.92	7.97	166.80	8.53	166.24
MW-285-S	180.46	9.83	170.63	8.95	171.51	9.26	171.20	9.72	170.74

Kingston Site
2017 Water Level Data

Well	Elevation TOC	02/16/17		04/27/17		08/16/17		10/05/17	
		DTW	GWE	DTW	GWE	DTW	GWE	DTW	GWE
MW-288-S	180.22	9.40	170.82	9.00	171.22	10.33	169.89	10.72	169.50
MW-297-S	180.07	9.88	170.19	9.22	170.85	10.63	169.44	11.00	169.07
MW-402-S	173.94	16.68	157.26	14.00	159.94	Dry		Dry	
MW-403-S	176.89	Dry		Dry		Dry		Dry	
MW-404-S	171.17	3.48	167.69	3.92	167.25	5.00	166.17	8.53	162.64
MW-405-S	174.93	6.00	168.93	5.71	169.22	5.95	168.98	8.72	166.21
MW-406-S	175.85	7.50	168.35	7.47	168.38	9.20	166.65	10.10	165.75
MW-407-S	176.66	7.35	169.31	7.42	169.24	8.60	168.06	9.58	167.08
MW-502-S	180.90	6.10	174.80	6.03	174.87	6.78	174.12	6.83	174.07
MW-503-S	180.71	7.28	173.43	7.16	173.55	7.65	173.06	7.70	173.01
MW-504-S	177.11	3.63	173.48	3.40	173.71	4.12	172.99	4.30	172.81
MW-505-S	179.08	6.04	173.04	6.61	172.47	7.23	171.85	8.00	171.08
MW-506-S	180.14	NM		NM		NM		NM	
MW-507-S	178.61	6.56	172.05	6.92	171.69	7.07	171.54	7.16	171.45
MW-508-SA	169.89	5.80	164.09	5.33	164.56	9.32	160.57	10.33	159.56
MW-602-S	178.37	7.71	170.66	7.68	170.69	7.77	170.60	7.83	170.54
MW-603-S	174.74	5.72	169.02	4.33	170.41	5.90	168.84	6.61	168.13
MW-604-S	175.93	7.62	168.31	7.30	168.63	7.92	168.01	8.13	167.80
MW-605-S	176.06	8.58	167.48	7.95	168.11	8.93	168.29	8.83	167.23
MW-607-S	174.01	Dry		Dry		Dry		Dry	
MW-608-S	170.23	7.22	163.01	7.84	162.39	9.58	160.65	9.70	160.53
MW-609-S	178.58	8.63	169.95	8.59	169.99	8.80	169.78	9.25	169.33
MW-610-S	178.05	7.54	170.51	7.48	170.57	7.57	170.48	7.65	170.40
MW-612-S	156.22	8.19	148.03	5.61	150.61	7.80	148.42	9.75	146.47
MW-801-S	152.27	5.00	147.27	2.90	149.37	4.83	147.44	6.53	145.74
MW-802-S	153.42	5.69	147.73	2.72	150.70	6.00	147.42	7.22	146.20
MW-804-S	152.74	6.72	146.02	3.65	149.09	6.10	146.64	7.28	145.46
MW-806-S	176.49	3.22	173.27	3.12	173.37	3.33	173.16	3.41	173.08
MW-807-S	177.63	6.63	171.00	6.55	171.08	6.80	170.83	6.86	170.77
MW-810	145.03	3.91	141.12	3.85	141.18	4.76	140.27	4.92	140.11
MW-811S	144.93	3.60	141.33	3.54	141.39	4.27	140.66	4.51	140.42
MW-812	146.73	7.13	139.60	6.97	139.76	7.83	138.90	8.41	138.32
MW-814	151.70	8.43	143.27	7.48	144.22	9.43	142.27	10.25	141.45
MW-815	156.30	9.00	147.30	6.88	149.42	11.20	145.10	11.78	144.52
MW-816	161.40	11.20	150.20	8.90	152.50	12.51	148.89	Dry	
MW-817	160.53	11.00	149.53	8.40	152.13	11.88	148.65	11.80	148.73
MW-819	154.79	5.19	149.60	3.00	151.79	5.70	149.09	6.60	148.19
MW-821	154.70	5.20	149.50	2.54	152.16	6.15	148.55	7.28	147.42
MW-A	172.34	11.00	161.34	10.93	161.41	11.39	160.95	11.41	160.93
TMP-6	177.51	9.20	168.31	8.80	168.71	9.53	167.98	9.72	167.79
TMP-7	180.08	11.20	168.88	10.00	170.08	10.90	169.18	11.22	168.86
TMP-8	177.50	7.90	169.60	7.42	170.08	8.00	169.50	8.43	169.07

NM = Not Measured, Damaged or Inaccessible

Appendix C

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: 02/05/18

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-17	18,305	12.7	92,744	64.4	111,049	77.1	36,840,969	505,635,568	542,476,537
2-Jan-17	10,762	7.5	64,300	44.7	75,062	52.1	36,851,731	505,699,868	542,551,599
3-Jan-17	12,337	8.6	56,519	39.2	68,856	47.8	36,864,068	505,756,387	542,620,455
4-Jan-17	16,963	11.8	57,756	40.1	74,719	51.9	36,881,031	505,814,143	542,695,174
5-Jan-17	15,388	10.7	58,364	40.5	73,752	51.2	36,896,419	505,872,507	542,768,926
6-Jan-17	15,880	11.0	59,599	41.4	75,479	52.4	36,912,299	505,932,106	542,844,405
7-Jan-17	14,694	10.2	59,938	41.6	74,632	51.8	36,926,993	505,992,044	542,919,037
8-Jan-17	13,646	9.5	60,419	42.0	74,065	51.4	36,940,639	506,052,463	542,993,102
9-Jan-17	12,050	8.4	60,394	41.9	72,444	50.3	36,952,689	506,112,857	543,065,546
10-Jan-17	12,212	8.5	60,244	41.8	72,456	50.3	36,964,901	506,173,101	543,138,002
11-Jan-17	12,820	8.9	59,414	41.3	72,234	50.2	36,977,721	506,232,515	543,210,236
12-Jan-17	15,395	10.7	58,871	40.9	74,266	51.6	36,993,116	506,291,386	543,284,502
13-Jan-17	13,743	9.5	59,776	41.5	73,519	51.1	37,006,859	506,351,162	543,358,021
14-Jan-17	13,395	9.3	59,430	41.3	72,825	50.6	37,020,254	506,410,592	543,430,846
15-Jan-17	13,258	9.2	59,653	41.4	72,911	50.6	37,033,512	506,470,245	543,503,757
16-Jan-17	12,384	8.6	58,655	40.7	71,039	49.3	37,045,896	506,528,900	543,574,796
17-Jan-17	12,802	8.9	58,111	40.4	70,913	49.2	37,058,698	506,587,011	543,645,709
18-Jan-17	15,430	10.7	57,372	39.8	72,802	50.6	37,074,128	506,644,383	543,718,511
19-Jan-17	14,667	10.2	57,681	40.1	72,348	50.2	37,088,795	506,702,064	543,790,859
20-Jan-17	14,204	9.9	57,440	39.9	71,644	49.8	37,102,999	506,759,504	543,862,503
21-Jan-17	13,812	9.6	57,632	40.0	71,444	49.6	37,116,811	506,817,136	543,933,947
22-Jan-17	13,097	9.1	57,175	39.7	70,272	48.8	37,129,908	506,874,311	544,004,219
23-Jan-17	12,900	9.0	57,564	40.0	70,464	48.9	37,142,808	506,931,875	544,074,683
24-Jan-17	14,107	9.8	57,372	39.8	71,479	49.6	37,156,915	506,989,247	544,146,162
25-Jan-17	14,113	9.8	56,901	39.5	71,014	49.3	37,171,028	507,046,148	544,217,176
26-Jan-17	13,985	9.7	58,856	40.9	72,841	50.6	37,185,013	507,105,004	544,290,017
27-Jan-17	13,910	9.7	61,090	42.4	75,000	52.1	37,198,923	507,166,094	544,365,017
28-Jan-17	13,752	9.6	63,006	43.8	76,758	53.3	37,212,675	507,229,100	544,441,775
29-Jan-17	13,863	9.6	63,846	44.3	77,709	54.0	37,226,538	507,292,946	544,519,484
30-Jan-17	13,501	9.4	64,453	44.8	77,954	54.1	37,240,039	507,357,399	544,597,438
31-Jan-17	13,527	9.4	64,231	44.6	77,758	54.0	37,253,566	507,421,630	544,675,196
1-Feb-17	13,359	9.3	64,282	44.6	77,641	53.9	37,266,925	507,485,912	544,752,837
2-Feb-17	13,081	9.1	64,022	44.5	77,103	53.5	37,280,006	507,549,934	544,829,940
3-Feb-17	12,788	8.9	63,860	44.3	76,648	53.2	37,292,794	507,613,794	544,906,588
4-Feb-17	12,304	8.5	63,240	43.9	75,544	52.5	37,305,098	507,677,034	544,982,132
5-Feb-17	12,239	8.5	62,785	43.6	75,024	52.1	37,317,337	507,739,819	545,057,156
6-Feb-17	11,945	8.3	61,831	42.9	73,776	51.2	37,329,282	507,801,650	545,130,932
7-Feb-17	11,581	8.0	61,227	42.5	72,808	50.6	37,340,863	507,862,877	545,203,740
8-Feb-17	11,545	8.0	60,551	42.0	72,096	50.1	37,352,408	507,923,428	545,275,836
9-Feb-17	11,305	7.9	60,801	42.2	72,106	50.1	37,363,713	507,984,229	545,347,942

Former IBM Kingston Site (TechCity Facility)
Groundwater Collection System and North Parking Lot Area Extraction Data
Last Updated: 02/05/18

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)
10-Feb-17	10,896	7.6	59,983	41.7	70,879	49.2	37,374,609	508,044,212	545,418,821
11-Feb-17	10,780	7.5	59,246	41.1	70,026	48.6	37,385,389	508,103,458	545,488,847
12-Feb-17	10,410	7.2	58,392	40.6	68,802	47.8	37,395,799	508,161,850	545,557,649
13-Feb-17	10,217	7.1	58,472	40.6	68,689	47.7	37,406,016	508,220,322	545,626,338
14-Feb-17	9,877	6.9	57,693	40.1	67,570	46.9	37,415,893	508,278,015	545,693,908
15-Feb-17	9,650	6.7	57,101	39.7	66,751	46.4	37,425,543	508,335,116	545,760,659
16-Feb-17	9,504	6.6	57,139	39.7	66,643	46.3	37,435,047	508,392,255	545,827,302
17-Feb-17	9,174	6.4	56,768	39.4	65,942	45.8	37,444,221	508,449,023	545,893,244
18-Feb-17	8,916	6.2	55,905	38.8	64,821	45.0	37,453,137	508,504,928	545,958,065
19-Feb-17	8,704	6.0	56,508	39.2	65,212	45.3	37,461,841	508,561,436	546,023,277
20-Feb-17	8,680	6.0	56,835	39.5	65,515	45.5	37,470,521	508,618,271	546,088,792
21-Feb-17	8,597	6.0	57,870	40.2	66,467	46.2	37,479,118	508,676,141	546,155,259
22-Feb-17	8,556	5.9	58,167	40.4	66,723	46.3	37,487,674	508,734,308	546,221,982
23-Feb-17	8,475	5.9	59,152	41.1	67,627	47.0	37,496,149	508,793,460	546,289,609
24-Feb-17	8,417	5.8	59,597	41.4	68,014	47.2	37,504,566	508,853,057	546,357,623
25-Feb-17	8,374	5.8	60,209	41.8	68,583	47.6	37,512,940	508,913,266	546,426,206
26-Feb-17	8,110	5.6	62,205	43.2	70,315	48.8	37,521,050	508,975,471	546,496,521
27-Feb-17	8,039	5.6	62,211	43.2	70,250	48.8	37,529,089	509,037,682	546,566,771
28-Feb-17	7,823	5.4	61,787	42.9	69,610	48.3	37,536,912	509,099,469	546,636,381
1-Mar-17	7,636	5.3	60,915	42.3	68,551	47.6	37,544,548	509,160,384	546,704,932
2-Mar-17	7,473	5.2	62,517	43.4	69,990	48.6	37,552,021	509,222,901	546,774,922
3-Mar-17	7,623	5.3	61,781	42.9	69,404	48.2	37,559,644	509,284,682	546,844,326
4-Mar-17	7,617	5.3	61,361	42.6	68,978	47.9	37,567,261	509,346,043	546,913,304
5-Mar-17	7,544	5.2	61,616	42.8	69,160	48.0	37,574,805	509,407,659	546,982,464
6-Mar-17	7,441	5.2	60,398	41.9	67,839	47.1	37,582,246	509,468,057	547,050,303
7-Mar-17	7,282	5.1	59,707	41.5	66,989	46.5	37,589,528	509,527,764	547,117,292
8-Mar-17	7,322	5.1	58,898	40.9	66,220	46.0	37,596,850	509,586,662	547,183,512
9-Mar-17	8,589	6.0	56,835	39.5	65,424	45.4	37,605,439	509,643,497	547,248,936
10-Mar-17	11,293	7.8	59,984	41.7	71,277	49.5	37,616,732	509,703,481	547,320,213
11-Mar-17	11,344	7.9	59,275	41.2	70,619	49.0	37,628,076	509,762,756	547,390,832
12-Mar-17	11,238	7.8	57,632	40.0	68,870	47.8	37,639,314	509,820,388	547,459,702
13-Mar-17	11,191	7.8	56,685	39.4	67,876	47.1	37,650,505	509,877,073	547,527,578
14-Mar-17	10,856	7.5	55,796	38.7	66,652	46.3	37,661,361	509,932,869	547,594,230
15-Mar-17	10,654	7.4	56,372	39.1	67,026	46.5	37,672,015	509,989,241	547,661,256
16-Mar-17	9,748	6.8	55,114	38.3	64,862	45.0	37,681,763	510,044,355	547,726,118
17-Mar-17	9,380	6.5	54,347	37.7	63,727	44.3	37,691,143	510,098,702	547,789,845
18-Mar-17	9,594	6.7	53,593	37.2	63,187	43.9	37,700,737	510,152,295	547,853,032
19-Mar-17	9,748	6.8	53,441	37.1	63,189	43.9	37,710,485	510,205,736	547,916,221
20-Mar-17	9,484	6.6	52,826	36.7	62,310	43.3	37,719,969	510,258,562	547,978,531
21-Mar-17	9,371	6.5	52,651	36.6	62,022	43.1	37,729,340	510,311,213	548,040,553

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22-Mar-17	9,221	6.4	54,688	38.0	63,909	44.4	37,738,561	510,365,901	548,104,462
23-Mar-17	9,319	6.5	55,224	38.4	64,543	44.8	37,747,880	510,421,125	548,169,005
24-Mar-17	9,334	6.5	55,364	38.4	64,698	44.9	37,757,214	510,476,489	548,233,703
25-Mar-17	9,313	6.5	56,012	38.9	65,325	45.4	37,766,527	510,532,501	548,299,028
26-Mar-17	9,191	6.4	56,150	39.0	65,341	45.4	37,775,718	510,588,651	548,364,369
27-Mar-17	8,984	6.2	57,119	39.7	66,103	45.9	37,784,702	510,645,770	548,430,472
28-Mar-17	8,844	6.1	59,427	41.3	68,271	47.4	37,793,546	510,705,197	548,498,743
29-Mar-17	8,885	6.2	60,877	42.3	69,762	48.4	37,802,431	510,766,074	548,568,505
30-Mar-17	8,755	6.1	62,185	43.2	70,940	49.3	37,811,186	510,828,259	548,639,445
31-Mar-17	8,795	6.1	62,367	43.3	71,162	49.4	37,819,981	510,890,626	548,710,607
1-Apr-17	8,690	6.0	63,801	44.3	72,491	50.3	37,828,671	510,954,427	548,783,098
2-Apr-17	8,562	5.9	65,009	45.1	73,571	51.1	37,837,233	511,019,436	548,856,669
3-Apr-17	8,454	5.9	66,928	46.5	75,382	52.3	37,845,687	511,086,364	548,932,051
4-Apr-17	9,498	6.6	69,888	48.5	79,386	55.1	37,855,185	511,156,252	549,011,437
5-Apr-17	8,365	5.8	73,272	50.9	81,637	56.7	37,863,550	511,229,524	549,093,074
6-Apr-17	8,643	6.0	76,148	52.9	84,791	58.9	37,872,193	511,305,672	549,177,865
7-Apr-17	8,112	5.6	80,168	55.7	88,280	61.3	37,880,305	511,385,840	549,266,145
8-Apr-17	7,525	5.2	82,709	57.4	90,234	62.7	37,887,830	511,468,549	549,356,379
9-Apr-17	7,311	5.1	82,987	57.6	90,298	62.7	37,895,141	511,551,536	549,446,677
10-Apr-17	7,178	5.0	82,493	57.3	89,671	62.3	37,902,319	511,634,029	549,536,348
11-Apr-17	7,092	4.9	82,176	57.1	89,268	62.0	37,909,411	511,716,205	549,625,616
12-Apr-17	7,123	4.9	80,976	56.2	88,099	61.2	37,916,534	511,797,181	549,713,715
13-Apr-17	7,053	4.9	79,901	55.5	86,954	60.4	37,923,587	511,877,082	549,800,669
14-Apr-17	7,001	4.9	78,542	54.5	85,543	59.4	37,930,588	511,955,624	549,886,212
15-Apr-17	7,066	4.9	77,354	53.7	84,420	58.6	37,937,654	512,032,978	549,970,632
16-Apr-17	7,055	4.9	76,246	52.9	83,301	57.8	37,944,709	512,109,224	550,053,933
17-Apr-17	6,970	4.8	76,244	52.9	83,214	57.8	37,951,679	512,185,468	550,137,147
18-Apr-17	6,984	4.9	74,934	52.0	81,918	56.9	37,958,663	512,260,402	550,219,065
19-Apr-17	7,008	4.9	73,751	51.2	80,759	56.1	37,965,671	512,334,153	550,299,824
20-Apr-17	7,015	4.9	72,576	50.4	79,591	55.3	37,972,686	512,406,729	550,379,415
21-Apr-17	6,943	4.8	79,717	55.4	86,660	60.2	37,979,629	512,486,446	550,466,075
22-Apr-17	6,893	4.8	78,075	54.2	84,968	59.0	37,986,522	512,564,521	550,551,043
23-Apr-17	6,924	4.8	74,955	52.1	81,879	56.9	37,993,446	512,639,476	550,632,922
24-Apr-17	6,945	4.8	73,564	51.1	80,509	55.9	38,000,391	512,713,040	550,713,431
25-Apr-17	6,953	4.8	72,582	50.4	79,535	55.2	38,007,344	512,785,622	550,792,966
26-Apr-17	6,935	4.8	71,704	49.8	78,639	54.6	38,014,279	512,857,326	550,871,605
27-Apr-17	6,931	4.8	71,435	49.6	78,366	54.4	38,021,210	512,928,761	550,949,971
28-Apr-17	6,927	4.8	70,409	48.9	77,336	53.7	38,028,137	512,999,170	551,027,307
29-Apr-17	6,921	4.8	69,633	48.4	76,554	53.2	38,035,058	513,068,803	551,103,861
30-Apr-17	6,871	4.8	69,119	48.0	75,990	52.8	38,041,929	513,137,922	551,179,851

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1-May-17	6,924	4.8	68,269	47.4	75,193	52.2	38,048,853	513,206,191	551,255,044
2-May-17	6,832	4.7	67,827	47.1	74,659	51.8	38,055,685	513,274,018	551,329,703
3-May-17	6,878	4.8	67,799	47.1	74,677	51.9	38,062,563	513,341,817	551,404,380
4-May-17	6,721	4.7	67,179	46.7	73,900	51.3	38,069,284	513,408,996	551,478,280
5-May-17	6,746	4.7	66,683	46.3	73,429	51.0	38,076,030	513,475,679	551,551,709
6-May-17	7,149	5.0	68,280	47.4	75,429	52.4	38,083,179	513,543,959	551,627,138
7-May-17	7,414	5.1	71,614	49.7	79,028	54.9	38,090,593	513,615,573	551,706,166
8-May-17	6,546	4.5	73,633	51.1	80,179	55.7	38,097,139	513,689,206	551,786,345
9-May-17	6,403	4.4	74,474	51.7	80,877	56.2	38,103,542	513,763,680	551,867,222
10-May-17	6,342	4.4	75,163	52.2	81,505	56.6	38,109,884	513,838,843	551,948,727
11-May-17	6,239	4.3	74,635	51.8	80,874	56.2	38,116,123	513,913,478	552,029,601
12-May-17	6,247	4.3	73,858	51.3	80,105	55.6	38,122,370	513,987,336	552,109,706
13-May-17	6,141	4.3	73,345	50.9	79,486	55.2	38,128,511	514,060,681	552,189,192
14-May-17	6,225	4.3	74,237	51.6	80,462	55.9	38,134,736	514,134,918	552,269,654
15-May-17	5,957	4.1	74,901	52.0	80,858	56.2	38,140,693	514,209,819	552,350,512
16-May-17	6,041	4.2	74,429	51.7	80,470	55.9	38,146,734	514,284,248	552,430,982
17-May-17	5,817	4.0	73,950	51.4	79,767	55.4	38,152,551	514,358,198	552,510,749
18-May-17	5,758	4.0	72,787	50.5	78,545	54.5	38,158,309	514,430,985	552,589,294
19-May-17	5,719	4.0	72,509	50.4	78,228	54.3	38,164,028	514,503,494	552,667,522
20-May-17	5,799	4.0	71,767	49.8	77,566	53.9	38,169,827	514,575,261	552,745,088
21-May-17	5,772	4.0	70,906	49.2	76,678	53.2	38,175,599	514,646,167	552,821,766
22-May-17	5,807	4.0	70,306	48.8	76,113	52.9	38,181,406	514,716,473	552,897,879
23-May-17	5,927	4.1	69,496	48.3	75,423	52.4	38,187,333	514,785,969	552,973,302
24-May-17	5,663	3.9	68,810	47.8	74,473	51.7	38,192,996	514,854,779	553,047,775
25-May-17	5,688	4.0	68,432	47.5	74,120	51.5	38,198,684	514,923,211	553,121,895
26-May-17	5,629	3.9	68,736	47.7	74,365	51.6	38,204,313	514,991,947	553,196,260
27-May-17	5,664	3.9	68,676	47.7	74,340	51.6	38,209,977	515,060,623	553,270,600
28-May-17	5,639	3.9	68,166	47.3	73,805	51.3	38,215,616	515,128,789	553,344,405
29-May-17	5,569	3.9	67,548	46.9	73,117	50.8	38,221,185	515,196,337	553,417,522
30-May-17	5,545	3.9	67,552	46.9	73,097	50.8	38,226,730	515,263,889	553,490,619
31-May-17	5,647	3.9	66,677	46.3	72,324	50.2	38,232,377	515,330,566	553,562,943
1-Jun-17	5,447	3.8	66,265	46.0	71,712	49.8	38,237,824	515,396,831	553,634,655
2-Jun-17	5,559	3.9	65,590	45.5	71,149	49.4	38,243,383	515,462,421	553,705,804
3-Jun-17	5,464	3.8	65,256	45.3	70,720	49.1	38,248,847	515,527,677	553,776,524
4-Jun-17	5,448	3.8	64,489	44.8	69,937	48.6	38,254,295	515,592,166	553,846,461
5-Jun-17	6,038	4.2	64,256	44.6	70,294	48.8	38,260,333	515,656,422	553,916,755
6-Jun-17	6,032	4.2	66,487	46.2	72,519	50.4	38,266,365	515,722,909	553,989,274
7-Jun-17	5,643	3.9	69,058	48.0	74,701	51.9	38,272,008	515,791,967	554,063,975
8-Jun-17	5,198	3.6	69,327	48.1	74,525	51.8	38,277,206	515,861,294	554,138,500
9-Jun-17	5,463	3.8	69,549	48.3	75,012	52.1	38,282,669	515,930,843	554,213,512

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10-Jun-17	5,156	3.6	69,154	48.0	74,310	51.6	38,287,825	515,999,997	554,287,822
11-Jun-17	5,388	3.7	68,155	47.3	73,543	51.1	38,293,213	516,068,152	554,361,365
12-Jun-17	5,284	3.7	67,549	46.9	72,833	50.6	38,298,497	516,135,701	554,434,198
13-Jun-17	5,276	3.7	66,654	46.3	71,930	50.0	38,303,773	516,202,355	554,506,128
14-Jun-17	5,432	3.8	65,977	45.8	71,409	49.6	38,309,205	516,268,332	554,577,537
15-Jun-17	5,815	4.0	66,427	46.1	72,242	50.2	38,315,020	516,334,759	554,649,779
16-Jun-17	9,043	6.3	64,964	45.1	74,007	51.4	38,324,063	516,399,723	554,723,786
17-Jun-17	8,814	6.1	64,295	44.6	73,109	50.8	38,332,877	516,464,018	554,796,895
18-Jun-17	8,919	6.2	63,576	44.2	72,495	50.3	38,341,796	516,527,594	554,869,390
19-Jun-17	9,003	6.3	62,665	43.5	71,668	49.8	38,350,799	516,590,259	554,941,058
20-Jun-17	8,981	6.2	62,828	43.6	71,809	49.9	38,359,780	516,653,087	555,012,867
21-Jun-17	8,979	6.2	62,577	43.5	71,556	49.7	38,368,759	516,715,664	555,084,423
22-Jun-17	8,960	6.2	61,942	43.0	70,902	49.2	38,377,719	516,777,606	555,155,325
23-Jun-17	8,979	6.2	60,968	42.3	69,947	48.6	38,386,698	516,838,574	555,225,272
24-Jun-17	8,923	6.2	61,055	42.4	69,978	48.6	38,395,621	516,899,629	555,295,250
25-Jun-17	8,924	6.2	60,609	42.1	69,533	48.3	38,404,545	516,960,238	555,364,783
26-Jun-17	8,905	6.2	60,048	41.7	68,953	47.9	38,413,450	517,020,286	555,433,736
27-Jun-17	8,855	6.1	59,787	41.5	68,642	47.7	38,422,305	517,080,073	555,502,378
28-Jun-17	8,769	6.1	59,460	41.3	68,229	47.4	38,431,074	517,139,533	555,570,607
29-Jun-17	8,738	6.1	58,708	40.8	67,446	46.8	38,439,812	517,198,241	555,638,053
30-Jun-17	9,011	6.3	58,396	40.6	67,407	46.8	38,448,823	517,256,637	555,705,460
1-Jul-17	8,601	6.0	59,409	41.3	68,010	47.2	38,457,424	517,316,046	555,773,470
2-Jul-17	8,449	5.9	60,288	41.9	68,737	47.7	38,465,873	517,376,334	555,842,207
3-Jul-17	5,337	3.7	38,463	26.7	43,800	30.4	38,471,210	517,414,797	555,886,007
4-Jul-17	5,428	3.8	67,348	46.8	72,776	50.5	38,476,638	517,482,145	555,958,783
5-Jul-17	8,050	5.6	62,495	43.4	70,545	49.0	38,484,688	517,544,640	556,029,328
6-Jul-17	8,317	5.8	59,348	41.2	67,665	47.0	38,493,005	517,603,988	556,096,993
7-Jul-17	8,249	5.7	58,078	40.3	66,327	46.1	38,501,254	517,662,066	556,163,320
8-Jul-17	7,940	5.5	57,318	39.8	65,258	45.3	38,509,194	517,719,384	556,228,578
9-Jul-17	8,176	5.7	56,729	39.4	64,905	45.1	38,517,370	517,776,113	556,293,483
10-Jul-17	8,137	5.7	55,782	38.7	63,919	44.4	38,525,507	517,831,895	556,357,402
11-Jul-17	7,787	5.4	55,360	38.4	63,147	43.9	38,533,294	517,887,255	556,420,549
12-Jul-17	7,953	5.5	54,748	38.0	62,701	43.5	38,541,247	517,942,003	556,483,250
13-Jul-17	7,804	5.4	54,262	37.7	62,066	43.1	38,549,051	517,996,265	556,545,316
14-Jul-17	7,391	5.1	54,293	37.7	61,684	42.8	38,556,442	518,050,558	556,607,000
15-Jul-17	7,519	5.2	53,809	37.4	61,328	42.6	38,563,961	518,104,367	556,668,328
16-Jul-17	7,441	5.2	53,495	37.1	60,936	42.3	38,571,402	518,157,862	556,729,264
17-Jul-17	7,108	4.9	52,690	36.6	59,798	41.5	38,578,510	518,210,552	556,789,062
18-Jul-17	7,673	5.3	42,255	29.3	49,928	34.7	38,586,183	518,252,807	556,838,990
19-Jul-17	7,842	5.4	43,802	30.4	51,644	35.9	38,594,025	518,296,609	556,890,634

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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)
20-Jul-17	7,617	5.3	46,418	32.2	54,035	37.5	38,601,642	518,343,027	556,944,669
21-Jul-17	7,737	5.4	46,456	32.3	54,193	37.6	38,609,379	518,389,483	556,998,862
22-Jul-17	7,339	5.1	46,249	32.1	53,588	37.2	38,616,718	518,435,732	557,052,450
23-Jul-17	7,427	5.2	45,703	31.7	53,130	36.9	38,624,145	518,481,435	557,105,580
24-Jul-17	7,297	5.1	46,143	32.0	53,440	37.1	38,631,442	518,527,578	557,159,020
25-Jul-17	7,223	5.0	46,413	32.2	53,636	37.2	38,638,665	518,573,991	557,212,656
26-Jul-17	7,134	5.0	46,212	32.1	53,346	37.0	38,645,799	518,620,203	557,266,002
27-Jul-17	6,641	4.6	59,232	41.1	65,873	45.7	38,652,440	518,679,435	557,331,875
28-Jul-17	6,868	4.8	51,973	36.1	58,841	40.9	38,659,308	518,731,408	557,390,716
29-Jul-17	6,773	4.7	50,124	34.8	56,897	39.5	38,666,081	518,781,532	557,447,613
30-Jul-17	6,419	4.5	49,524	34.4	55,943	38.8	38,672,500	518,831,056	557,503,556
31-Jul-17	6,503	4.5	48,364	33.6	54,867	38.1	38,679,003	518,879,420	557,558,423
1-Aug-17	6,379	4.4	48,135	33.4	54,514	37.9	38,685,382	518,927,555	557,612,937
2-Aug-17	6,209	4.3	39,979	27.8	46,188	32.1	38,691,591	518,967,534	557,659,125
3-Aug-17	5,500	3.8	38,156	26.5	43,656	30.3	38,697,091	519,005,690	557,702,781
4-Aug-17	5,305	3.7	42,237	29.3	47,542	33.0	38,702,396	519,047,927	557,750,323
5-Aug-17	4,853	3.4	52,663	36.6	57,516	39.9	38,707,249	519,100,590	557,807,839
6-Aug-17	5,860	4.1	47,718	33.1	53,578	37.2	38,713,109	519,148,308	557,861,417
7-Aug-17	5,710	4.0	44,225	30.7	49,935	34.7	38,718,819	519,192,533	557,911,352
8-Aug-17	5,641	3.9	44,840	31.1	50,481	35.1	38,724,460	519,237,373	557,961,833
9-Aug-17	5,127	3.6	45,108	31.3	50,235	34.9	38,729,587	519,282,481	558,012,068
10-Aug-17	5,188	3.6	43,951	30.5	49,139	34.1	38,734,775	519,326,432	558,061,207
11-Aug-17	5,109	3.5	43,135	30.0	48,244	33.5	38,739,884	519,369,567	558,109,451
12-Aug-17	4,945	3.4	45,147	31.4	50,092	34.8	38,744,829	519,414,714	558,159,543
13-Aug-17	4,951	3.4	44,543	30.9	49,494	34.4	38,749,780	519,459,257	558,209,037
14-Aug-17	4,695	3.3	46,013	32.0	50,708	35.2	38,754,475	519,505,270	558,259,745
15-Aug-17	4,916	3.4	45,140	31.3	50,056	34.8	38,759,391	519,550,410	558,309,801
16-Aug-17	4,878	3.4	44,154	30.7	49,032	34.1	38,764,269	519,594,564	558,358,833
17-Aug-17	4,853	3.4	43,638	30.3	48,491	33.7	38,769,122	519,638,202	558,407,324
18-Aug-17	4,568	3.2	43,662	30.3	48,230	33.5	38,773,690	519,681,864	558,455,554
19-Aug-17	4,737	3.3	42,987	29.9	47,724	33.1	38,778,427	519,724,851	558,503,278
20-Aug-17	4,708	3.3	42,613	29.6	47,321	32.9	38,783,135	519,767,464	558,550,599
21-Aug-17	4,434	3.1	43,253	30.0	47,687	33.1	38,787,569	519,810,717	558,598,286
22-Aug-17	4,588	3.2	41,658	28.9	46,246	32.1	38,792,157	519,852,375	558,644,532
23-Aug-17	4,538	3.2	42,543	29.5	47,081	32.7	38,796,695	519,894,918	558,691,613
24-Aug-17	4,260	3.0	42,613	29.6	46,873	32.6	38,800,955	519,937,531	558,738,486
25-Aug-17	4,347	3.0	51,786	36.0	56,133	39.0	38,805,302	519,989,317	558,794,619
26-Aug-17	4,428	3.1	40,854	28.4	45,282	31.4	38,809,730	520,030,171	558,839,901
27-Aug-17	4,150	2.9	39,962	27.8	44,112	30.6	38,813,880	520,070,133	558,884,013
28-Aug-17	4,224	2.9	39,459	27.4	43,683	30.3	38,818,104	520,109,592	558,927,696

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29-Aug-17	4,296	3.0	39,290	27.3	43,586	30.3	38,822,400	520,148,882	558,971,282
30-Aug-17	4,032	2.8	38,609	26.8	42,641	29.6	38,826,432	520,187,491	559,013,923
31-Aug-17	4,091	2.8	38,401	26.7	42,492	29.5	38,830,523	520,225,892	559,056,415
1-Sep-17	4,022	2.8	39,161	27.2	43,183	30.0	38,834,545	520,265,053	559,099,598
2-Sep-17	3,967	2.8	38,270	26.6	42,237	29.3	38,838,512	520,303,323	559,141,835
3-Sep-17	3,908	2.7	37,136	25.8	41,044	28.5	38,842,420	520,340,459	559,182,879
4-Sep-17	3,895	2.7	38,948	27.0	42,843	29.8	38,846,315	520,379,407	559,225,722
5-Sep-17	3,895	2.7	37,567	26.1	41,462	28.8	38,850,210	520,416,974	559,267,184
6-Sep-17	3,855	2.7	37,930	26.3	41,785	29.0	38,854,065	520,454,904	559,308,969
7-Sep-17	3,927	2.7	39,291	27.3	43,218	30.0	38,857,992	520,494,195	559,352,187
8-Sep-17	3,775	2.6	40,329	28.0	44,104	30.6	38,861,767	520,534,524	559,396,291
9-Sep-17	3,744	2.6	40,404	28.1	44,148	30.7	38,865,511	520,574,928	559,440,439
10-Sep-17	3,858	2.7	40,680	28.3	44,538	30.9	38,869,369	520,615,608	559,484,977
11-Sep-17	3,783	2.6	38,990	27.1	42,773	29.7	38,873,152	520,654,598	559,527,750
12-Sep-17	3,694	2.6	38,772	26.9	42,466	29.5	38,876,846	520,693,370	559,570,216
13-Sep-17	3,527	2.4	39,632	27.5	43,159	30.0	38,880,373	520,733,002	559,613,375
14-Sep-17	3,596	2.5	37,935	26.3	41,531	28.8	38,883,969	520,770,937	559,654,906
15-Sep-17	3,572	2.5	39,771	27.6	43,343	30.1	38,887,541	520,810,708	559,698,249
16-Sep-17	3,523	2.4	37,674	26.2	41,197	28.6	38,891,064	520,848,382	559,739,446
17-Sep-17	3,360	2.3	38,619	26.8	41,979	29.2	38,894,424	520,887,001	559,781,425
18-Sep-17	3,502	2.4	36,813	25.6	40,315	28.0	38,897,926	520,923,814	559,821,740
19-Sep-17	3,484	2.4	37,679	26.2	41,163	28.6	38,901,410	520,961,493	559,862,903
20-Sep-17	3,274	2.3	36,528	25.4	39,802	27.6	38,904,684	520,998,021	559,902,705
21-Sep-17	3,447	2.4	37,100	25.8	40,547	28.2	38,908,131	521,035,121	559,943,252
22-Sep-17	3,480	2.4	36,659	25.5	40,139	27.9	38,911,611	521,071,780	559,983,391
23-Sep-17	3,437	2.4	35,754	24.8	39,191	27.2	38,915,048	521,107,534	560,022,582
24-Sep-17	3,398	2.4	36,010	25.0	39,408	27.4	38,918,446	521,143,544	560,061,990
25-Sep-17	3,374	2.3	35,696	24.8	39,070	27.1	38,921,820	521,179,240	560,101,060
26-Sep-17	3,369	2.3	35,694	24.8	39,063	27.1	38,925,189	521,214,934	560,140,123
27-Sep-17	3,370	2.3	34,202	23.8	37,572	26.1	38,928,559	521,249,136	560,177,695
28-Sep-17	3,338	2.3	36,394	25.3	39,732	27.6	38,931,897	521,285,530	560,217,427
29-Sep-17	3,324	2.3	34,614	24.0	37,938	26.3	38,935,221	521,320,144	560,255,365
30-Sep-17	3,382	2.3	35,422	24.6	38,804	26.9	38,938,603	521,355,566	560,294,169
1-Oct-17	3,248	2.3	34,922	24.3	38,170	26.5	38,941,851	521,390,488	560,332,339
2-Oct-17	3,203	2.2	35,449	24.6	38,652	26.8	38,945,054	521,425,937	560,370,991
3-Oct-17	3,252	2.3	34,108	23.7	37,360	25.9	38,948,306	521,460,045	560,408,351
4-Oct-17	3,130	2.2	33,416	23.2	36,546	25.4	38,951,436	521,493,461	560,444,897
5-Oct-17	3,187	2.2	33,798	23.5	36,985	25.7	38,954,623	521,527,259	560,481,882
6-Oct-17	3,077	2.1	33,166	23.0	36,243	25.2	38,957,700	521,560,425	560,518,125
7-Oct-17	3,122	2.2	32,718	22.7	35,840	24.9	38,960,822	521,593,143	560,553,965

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8-Oct-17	2,704	1.9	34,242	23.8	36,946	25.7	38,963,526	521,627,385	560,590,911
9-Oct-17	3,100	2.2	32,788	22.8	35,888	24.9	38,966,626	521,660,173	560,626,799
10-Oct-17	3,008	2.1	34,994	24.3	38,002	26.4	38,969,634	521,695,167	560,664,801
11-Oct-17	2,995	2.1	34,338	23.8	37,333	25.9	38,972,629	521,729,505	560,702,134
12-Oct-17	2,990	2.1	35,517	24.7	38,507	26.7	38,975,619	521,765,022	560,740,641
13-Oct-17	3,008	2.1	34,446	23.9	37,454	26.0	38,978,627	521,799,468	560,778,095
14-Oct-17	2,999	2.1	33,044	22.9	36,043	25.0	38,981,626	521,832,512	560,814,138
15-Oct-17	2,901	2.0	33,337	23.2	36,238	25.2	38,984,527	521,865,849	560,850,376
16-Oct-17	2,984	2.1	33,848	23.5	36,832	25.6	38,987,511	521,899,697	560,887,208
17-Oct-17	2,955	2.1	33,851	23.5	36,806	25.6	38,990,466	521,933,548	560,924,014
18-Oct-17	2,938	2.0	32,939	22.9	35,877	24.9	38,993,404	521,966,487	560,959,891
19-Oct-17	2,835	2.0	32,146	22.3	34,981	24.3	38,996,239	521,998,633	560,994,872
20-Oct-17	2,908	2.0	32,601	22.6	35,509	24.7	38,999,147	522,031,234	561,030,381
21-Oct-17	2,883	2.0	33,292	23.1	36,175	25.1	39,002,030	522,064,526	561,066,556
22-Oct-17	2,773	1.9	31,553	21.9	34,326	23.8	39,004,803	522,096,079	561,100,882
23-Oct-17	2,853	2.0	31,077	21.6	33,930	23.6	39,007,656	522,127,156	561,134,812
24-Oct-17	2,739	1.9	31,154	21.6	33,893	23.5	39,010,395	522,158,310	561,168,705
25-Oct-17	2,717	1.9	31,730	22.0	34,447	23.9	39,013,112	522,190,040	561,203,152
26-Oct-17	2,779	1.9	32,918	22.9	35,697	24.8	39,015,891	522,222,958	561,238,849
27-Oct-17	2,640	1.8	31,057	21.6	33,697	23.4	39,018,531	522,254,015	561,272,546
28-Oct-17	2,600	1.8	31,692	22.0	34,292	23.8	39,021,131	522,285,707	561,306,838
29-Oct-17	4,260	3.0	28,103	19.5	32,363	22.5	39,025,391	522,313,810	561,339,201
30-Oct-17	3,322	2.3	37,683	26.2	41,005	28.5	39,028,713	522,351,493	561,380,206
31-Oct-17	2,540	1.8	38,271	26.6	40,811	28.3	39,031,253	522,389,764	561,421,017
1-Nov-17	2,516	1.7	37,620	26.1	40,136	27.9	39,033,769	522,427,384	561,461,153
2-Nov-17	2,490	1.7	37,012	25.7	39,502	27.4	39,036,259	522,464,396	561,500,655
3-Nov-17	2,445	1.7	37,105	25.8	39,550	27.5	39,038,704	522,501,501	561,540,205
4-Nov-17	2,405	1.7	37,249	25.9	39,654	27.5	39,041,109	522,538,750	561,579,859
5-Nov-17	2,374	1.6	35,614	24.7	37,988	26.4	39,043,483	522,574,364	561,617,847
6-Nov-17	2,123	1.5	36,519	25.4	38,642	26.8	39,045,606	522,610,883	561,656,489
7-Nov-17	2,248	1.6	37,077	25.7	39,325	27.3	39,047,854	522,647,960	561,695,814
8-Nov-17	2,169	1.5	35,619	24.7	37,788	26.2	39,050,023	522,683,579	561,733,602
9-Nov-17	1,969	1.4	34,715	24.1	36,684	25.5	39,051,992	522,718,294	561,770,286
10-Nov-17	1,936	1.3	36,159	25.1	38,095	26.5	39,053,928	522,754,453	561,808,381
11-Nov-17	2,719	1.9	35,339	24.5	38,058	26.4	39,056,647	522,789,792	561,846,439
12-Nov-17	3,761	2.6	34,610	24.0	38,371	26.6	39,060,408	522,824,402	561,884,810
13-Nov-17	3,781	2.6	34,461	23.9	38,242	26.6	39,064,189	522,858,863	561,923,052
14-Nov-17	3,686	2.6	33,527	23.3	37,213	25.8	39,067,875	522,892,390	561,960,265
15-Nov-17	3,779	2.6	33,658	23.4	37,437	26.0	39,071,654	522,926,048	561,997,702
16-Nov-17	3,812	2.6	33,189	23.0	37,001	25.7	39,075,466	522,959,237	562,034,703

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17-Nov-17	3,745	2.6	33,629	23.4	37,374	26.0	39,079,211	522,992,866	562,072,077
18-Nov-17	3,688	2.6	30,764	21.4	34,452	23.9	39,082,899	523,023,630	562,106,529
19-Nov-17	3,509	2.4	33,608	23.3	37,117	25.8	39,086,408	523,057,238	562,143,646
20-Nov-17	3,534	2.5	33,006	22.9	36,540	25.4	39,089,942	523,090,244	562,180,186
21-Nov-17	3,462	2.4	33,245	23.1	36,707	25.5	39,093,404	523,123,489	562,216,893
22-Nov-17	3,452	2.4	31,337	21.8	34,789	24.2	39,096,856	523,154,826	562,251,682
23-Nov-17	3,270	2.3	32,820	22.8	36,090	25.1	39,100,126	523,187,646	562,287,772
24-Nov-17	3,323	2.3	31,267	21.7	34,590	24.0	39,103,449	523,218,913	562,322,362
25-Nov-17	3,260	2.3	31,139	21.6	34,399	23.9	39,106,709	523,250,052	562,356,761
26-Nov-17	3,208	2.2	31,660	22.0	34,868	24.2	39,109,917	523,281,712	562,391,629
27-Nov-17	3,191	2.2	32,872	22.8	36,063	25.0	39,113,108	523,314,584	562,427,692
28-Nov-17	3,078	2.1	31,023	21.5	34,101	23.7	39,116,186	523,345,607	562,461,793
29-Nov-17	3,153	2.2	31,319	21.7	34,472	23.9	39,119,339	523,376,926	562,496,265
30-Nov-17	3,150	2.2	29,970	20.8	33,120	23.0	39,122,489	523,406,896	562,529,385
1-Dec-17	3,175	2.2	30,866	21.4	34,041	23.6	39,125,664	523,437,762	562,563,426
2-Dec-17	3,183	2.2	30,374	21.1	33,557	23.3	39,128,847	523,468,136	562,596,983
3-Dec-17	3,170	2.2	31,396	21.8	34,566	24.0	39,132,017	523,499,532	562,631,549
4-Dec-17	3,119	2.2	19,396	13.5	22,515	15.6	39,135,136	523,518,928	562,654,064
5-Dec-17	3,289	2.3	34,087	23.7	37,376	26.0	39,138,425	523,553,015	562,691,440
6-Dec-17	3,126	2.2	32,009	22.2	35,135	24.4	39,141,551	523,585,024	562,726,575
7-Dec-17	3,106	2.2	29,828	20.7	32,934	22.9	39,144,657	523,614,852	562,759,509
8-Dec-17	3,074	2.1	30,521	21.2	33,595	23.3	39,147,731	523,645,373	562,793,104
9-Dec-17	3,157	2.2	28,808	20.0	31,965	22.2	39,150,888	523,674,181	562,825,069
10-Dec-17	3,056	2.1	31,339	21.8	34,395	23.9	39,153,944	523,705,520	562,859,464
11-Dec-17	3,049	2.1	29,382	20.4	32,431	22.5	39,156,993	523,734,902	562,891,895
12-Dec-17	3,092	2.1	26,991	18.7	30,083	20.9	39,160,085	523,761,893	562,921,978
13-Dec-17	3,132	2.2	29,751	20.7	32,883	22.8	39,163,217	523,791,644	562,954,861
14-Dec-17	3,046	2.1	30,590	21.2	33,636	23.4	39,166,263	523,822,234	562,988,497
15-Dec-17	3,049	2.1	29,259	20.3	32,308	22.4	39,169,312	523,851,493	563,020,805
16-Dec-17	3,163	2.2	29,895	20.8	33,058	23.0	39,172,475	523,881,388	563,053,863
17-Dec-17	3,087	2.1	29,323	20.4	32,410	22.5	39,175,562	523,910,711	563,086,273
18-Dec-17	3,109	2.2	27,701	19.2	30,810	21.4	39,178,671	523,938,412	563,117,083
19-Dec-17	3,180	2.2	28,560	19.8	31,740	22.0	39,181,851	523,966,972	563,148,823
20-Dec-17	3,071	2.1	29,026	20.2	32,097	22.3	39,184,922	523,995,998	563,180,920
21-Dec-17	3,128	2.2	29,643	20.6	32,771	22.8	39,188,050	524,025,641	563,213,691
22-Dec-17	3,094	2.1	27,678	19.2	30,772	21.4	39,191,144	524,053,319	563,244,463
23-Dec-17	3,010	2.1	28,062	19.5	31,072	21.6	39,194,154	524,081,381	563,275,535
24-Dec-17	3,023	2.1	29,370	20.4	32,393	22.5	39,197,177	524,110,751	563,307,928
25-Dec-17	3,004	2.1	29,994	20.8	32,998	22.9	39,200,181	524,140,745	563,340,926
26-Dec-17	3,064	2.1	29,873	20.7	32,937	22.9	39,203,245	524,170,618	563,373,863

Former IBM Kingston Site (TechCity Facility)
Groundwater Collection System and North Parking Lot Area Extraction Data
 Last Updated: 02/05/18

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)
27-Dec-17	3,058	2.1	29,982	20.8	33,040	22.9	39,206,303	524,200,600	563,406,903
28-Dec-17	2,969	2.1	29,240	20.3	32,209	22.4	39,209,272	524,229,840	563,439,112
29-Dec-17	2,960	2.1	29,495	20.5	32,455	22.5	39,212,232	524,259,335	563,471,567
30-Dec-17	3,024	2.1	28,130	19.5	31,154	21.6	39,215,256	524,287,465	563,502,721
31-Dec-17	3,015	2.1	30,116	20.9	33,131	23.0	39,218,271	524,317,581	563,535,852

Appendix D

Groundwater Extraction and Treatment System Data Report including Flux Calculations

Former IBM Kingston Facility
Groundwater Treatment System Effectiveness Data
January 1, 2017 - December 31, 2017

GWCS UP AS

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	01/06/17	01/12/17	02/02/17	02/14/17	03/02/17	03/12/17
LABORATORY SAMPLE I.D.	420115335-3	420115557-2	420116386-3	420116806-2	420117591-3	420117999-2
SAMPLE RUN NUMBER	01	01	01	01	01	01
SAMPLE COMMENT CODES						

PARAMETER	UNITS
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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
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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	49	58	70	99	72	91D
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	18	20	23	25	23	22
1,1-DICHLOROETHYLENE	ug/l	10	10	13	15	14	15
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	58	62	65	46	64	41
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@2	ND@2	ND@2	ND@2	ND@2	ND@2
ACRYLONITRILE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
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, 2017 - December 31, 2017

GWCS UP AS

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	01/06/17	01/12/17	02/02/17	02/14/17	03/02/17	03/12/17
LABORATORY SAMPLE I.D.	420115335-3	420115557-2	420116386-3	420116806-2	420117591-3	420117999-2
SAMPLE RUN NUMBER	01	01	01	01	01	01
SAMPLE COMMENT CODES						

PARAMETER	UNITS
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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	3.4	3.3	2.5	3.0	2.4
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	100D	100D	110D	92	100D	86
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, 2017 - December 31, 2017

GWCS UP AS

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	04/06/17	04/13/17	05/04/17	05/12/17	06/01/17	06/08/17
LABORATORY SAMPLE I.D.	420119059-3	420119400-2	420120339-3	420120789-2	420121542-3	420121923-2
SAMPLE RUN NUMBER	01	01	01	01	01	01
SAMPLE COMMENT CODES						

PARAMETER	UNITS
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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-CHLOROETHYL VINYL 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
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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	74	89	62	68	50	52
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	20	18	17	16
1,1-DICHLOROETHYLENE	ug/l	14	14	11	12	9.0	8.8
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	1.1	1.1
1,2-DICHLOROETHYLENE, TOTAL	ug/l	55	43	59	43	57	53
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@2	ND@2	ND@2	ND@2	ND@2	ND@2
ACRYLONITRILE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
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, 2017 - December 31, 2017

GWCS UP AS

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	04/06/17	04/13/17	05/04/17	05/12/17	06/01/17	06/08/17
LABORATORY SAMPLE I.D.	420119059-3	420119400-2	420120339-3	420120789-2	420121542-3	420121923-2
SAMPLE RUN NUMBER	01	01	01	01	01	01
SAMPLE COMMENT CODES						

PARAMETER	UNITS
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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	4.0	2.9	3.0	2.1	2.6	2.9
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	97D	96	93D	81	94D	93D
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, 2017 - December 31, 2017

GWCS UP AS

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	07/06/17	07/13/17	08/03/17	08/10/17	09/07/17	09/14/17
LABORATORY SAMPLE I.D.	420123217-3	420123602-2	420124565-3	420124977-2	420126133-3	420126422-2
SAMPLE RUN NUMBER	01	01	01	01	01	01
SAMPLE COMMENT CODES						

PARAMETER	UNITS
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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-CHLOROETHYL VINYL 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
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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	92	63	54	65	66	66
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	17	20	15	19	20	20
1,1-DICHLOROETHYLENE	ug/l	13	9.6	8.4	9.5	11	9.8
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	1.1	1.2	1.3	1.1
1,2-DICHLOROETHYLENE, TOTAL	ug/l	41	58	46	60	64	62
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@2	ND@2	ND@2	ND@2	ND@2	ND@2
ACRYLONITRILE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
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, 2017 - December 31, 2017

GWCS UP AS

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	07/06/17	07/13/17	08/03/17	08/10/17	09/07/17	09/14/17
LABORATORY SAMPLE I.D.	420123217-3	420123602-2	420124565-3	420124977-2	420126133-3	420126422-2
SAMPLE RUN NUMBER	01	01	01	01	01	01
SAMPLE COMMENT CODES						

PARAMETER	UNITS
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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	1.8	3.2	2.7	2.8	2.9	2.8
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	78	97D	88	98D	100D	96D
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, 2017 - December 31, 2017

GWCS UP AS

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	10/05/17	10/12/17	11/03/17	11/09/17	12/07/17	12/14/17
LABORATORY SAMPLE I.D.	420127397-3	420127739-2	420128715-3	420129015-2	420130284-3	420130611-2
SAMPLE RUN NUMBER	01	01	01	01	01	01
SAMPLE COMMENT CODES						

PARAMETER	UNITS
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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-CHLOROETHYL VINYL 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
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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	80	59	75	77	42	46
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	18	21	22	15	16
1,1-DICHLOROETHYLENE	ug/l	13	9.2	12	13	7.5	7.9
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	1.1	ND@1	1.0	1.0	1.1
1,2-DICHLOROETHYLENE, TOTAL	ug/l	38	54	37	36	48	51
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@2	ND@2	ND@2	ND@2	ND@2	ND@2
ACRYLONITRILE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
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

GWCS UP AS

PARAMETER	UNITS
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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	2.2	2.7	1.9	1.8	2.5	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	78	96D	72	71	94	89D
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

NPLA INFL.

PARAMETER	UNITS
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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

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

LEAD, TOTAL	mq/l	NA	NA	NA	NA	NA	NA
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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	6.6	8.6	ND@1	4.5	ND@1	85
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	2.5	3.2	ND@1	1.6	ND@1	29
1,1-DICHLOROETHYLENE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	6.9
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	6.9	12	1.1	3.9	ND@1	140D
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@2	ND@2	ND@2	ND@2	ND@2	ND@2
ACRYLONITRILE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
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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NPLA INFL

SAMPLE LOCATION	NPLA INFL	NPLA INFL	NPLA INFL	NPLA INFL	NPLA INFL	NPLA INFL
SAMPLE DESCRIPTION	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER
SAMPLE DATE	01/06/17	02/02/17	03/02/17	04/06/17	05/04/17	06/01/17
LABORATORY SAMPLE I.D.	420115335-2	420116386-2	420117591-2	420119059-2	420120339-2	420121542-2
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	1.4	1.4	1.2	1.5	2.5
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	11	22	2.8	7.9	2.0	63
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	1.8
XYLENE, TOTAL	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1

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NPLA INFL

SAMPLE LOCATION	NPLA INFL	NPLA INFL	NPLA INFL	NPLA INFL	NPLA INFL	NPLA INFL
SAMPLE DESCRIPTION	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER
SAMPLE DATE	07/06/17	08/03/17	09/07/17	10/05/17	11/03/17	12/07/17
LABORATORY SAMPLE I.D.	420123217-2	420124565-2	420126133-2	420127397-2	420128715-2	420130284-2
SAMPLE RUN NUMBER	01	01	01	01	01	01
SAMPLE COMMENT CODES						

PARAMETER	UNITS
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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-CHLOROETHYL VINYL 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
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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	1.5	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	2.4	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@2	ND@2	ND@2	ND@2	ND@2	ND@2
ACRYLONITRILE	ug/l	ND@1	ND@1	ND@1	ND@1	ND@1	ND@1
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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NPLA INFL

SAMPLE LOCATION	NPLA INFL	NPLA INFL	NPLA INFL	NPLA INFL	NPLA INFL	NPLA INFL
SAMPLE DESCRIPTION	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER
SAMPLE DATE	07/06/17	08/03/17	09/07/17	10/05/17	11/03/17	12/07/17
LABORATORY SAMPLE I.D.	420123217-2	420124565-2	420126133-2	420127397-2	420128715-2	420130284-2
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
CHLORO BENZENE	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
ETHYLENE	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	1.3	1.4	1.2	1.3	1.3	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	1.5	2.8	2.0	2.9	1.9	1.7
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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SPDES OF 01A

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	01/06/17	01/06/17	01/12/17	02/02/17	02/14/17	03/02/17
LABORATORY SAMPLE I.D.	420115335-1	420115336-1	420115557-1	420116386-1	420116806-1	420117591-1
SAMPLE RUN NUMBER	01	01	01	01	01	01
SAMPLE COMMENT CODES						

PARAMETER UNITS

BASE/NEUTRAL EXTRACTABLES

	ug/l	ND@1	NA	ND@1	ND@1	ND@1	ND@1
1,2-DICHLOROBENZENE	ug/l	ND@1	NA	ND@1	ND@1	ND@1	ND@1
1,3-DICHLOROBENZENE	ug/l	ND@1	NA	ND@1	ND@1	ND@1	ND@1
1,4-DICHLOROBENZENE	ug/l	ND@1	NA	ND@1	ND@1	ND@1	ND@1
2-CHLOROETHYL VINYL ETHER	ug/l	ND@1	NA	ND@1	ND@1	ND@1	ND@1

INDICATOR PARAMETERS

	pH	6.8	NA	6.5	6.5	6.6	7.2
PH	pH	6.8	NA	6.5	6.5	6.6	7.2
TEMPERATURE	C	11.5	NA	13.5	12.0	12.0	15.0
TOTAL DISSOLVED SOLIDS	mg/l	380	NA	NA	390	NA	NA
TOTAL SUSPENDED SOLIDS	mg/l	ND@1.3	NA	NA	ND@1.2	NA	NA

METALS

	mg/l	NA	ND@0.0050	NA	NA	NA	NA
LEAD, TOTAL	mg/l	NA	ND@0.0050	NA	NA	NA	NA

VOLATILE ORGANICS

	ug/l	ND@1	NA	ND@1	ND@1	ND@1	ND@1
1,1,1,2-TETRACHLOROETHANE	ug/l	ND@1	NA	ND@1	ND@1	ND@1	ND@1
1,1,1-TRICHLOROETHANE	ug/l	ND@1	NA	ND@1	ND@1	ND@1	ND@1
1,1,2,2-TETRACHLOROETHANE	ug/l	ND@1	NA	ND@1	ND@1	ND@1	ND@1
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@1	NA	ND@1	ND@1	ND@1	ND@1
1,1,2-TRICHLOROETHANE	ug/l	ND@1	NA	ND@1	ND@1	ND@1	ND@1
1,1-DICHLOROETHANE	ug/l	ND@1	NA	ND@1	ND@1	ND@1	ND@1
1,1-DICHLOROETHYLENE	ug/l	ND@1	NA	ND@1	ND@1	ND@1	ND@1
1,2,3-TRICHLOROPROPANE	ug/l	ND@1	NA	ND@1	ND@1	ND@1	ND@1
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@1	NA	ND@1	ND@1	ND@1	ND@1
1,2-DICHLOROETHANE	ug/l	ND@1	NA	ND@1	ND@1	ND@1	ND@1
1,2-DICHLOROETHYLENE, TOTAL	ug/l	ND@1	NA	ND@1	ND@1	ND@1	ND@1
1,2-DICHLOROPROPANE	ug/l	ND@1	NA	ND@1	ND@1	ND@1	ND@1
4-CHLOROTOLUENE	ug/l	ND@1	NA	ND@1	ND@1	ND@1	ND@1
ACROLEIN	ug/l	ND@2	NA	ND@2	ND@2	ND@2	ND@2
ACRYLONITRILE	ug/l	ND@1	NA	ND@1	ND@1	ND@1	ND@1
BENZENE	ug/l	ND@1	NA	ND@1	ND@1	ND@1	ND@1
BENZYL CHLORIDE	ug/l	ND@1	NA	ND@1	ND@1	ND@1	ND@1
BROMOBENZENE	ug/l	ND@1	NA	ND@1	ND@1	ND@1	ND@1
BROMODICHLOROMETHANE	ug/l	ND@1	NA	ND@1	ND@1	ND@1	ND@1

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SPDES OF 01A

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	01/06/17	01/06/17	01/12/17	02/02/17	02/14/17	03/02/17
LABORATORY SAMPLE I.D.	420115335-1	420115336-1	420115557-1	420116386-1	420116806-1	420117591-1
SAMPLE RUN NUMBER	01	01	01	01	01	01
SAMPLE COMMENT CODES						

PARAMETER UNITS

VOLATILE ORGANICS (Continued)

BROMOFORM	ug/l	ND@1	NA	ND@1	ND@1	ND@1	ND@1
BROMOMETHANE	ug/l	ND@1	NA	ND@1	ND@1	ND@1	ND@1
CARBON TETRACHLORIDE	ug/l	ND@1	NA	ND@1	ND@1	ND@1	ND@1
CHLOROBENZENE	ug/l	ND@1	NA	ND@1	ND@1	ND@1	ND@1
CHLORODIBROMOMETHANE	ug/l	ND@1	NA	ND@1	ND@1	ND@1	ND@1
CHLOROETHANE	ug/l	ND@1	NA	ND@1	ND@1	ND@1	ND@1
CHLOROFORM	ug/l	ND@1	NA	ND@1	ND@1	ND@1	ND@1
CHLOROMETHANE	ug/l	ND@1	NA	ND@1	ND@1	ND@1	ND@1
CIS-1,3-DICHLOROPROPYLENE	ug/l	ND@1	NA	ND@1	ND@1	ND@1	ND@1
DIBROMOMETHANE	ug/l	ND@1	NA	ND@1	ND@1	ND@1	ND@1
DICHLORODIFLUOROMETHANE	ug/l	ND@1	NA	ND@1	ND@1	ND@1	ND@1
ETHYLBENZENE	ug/l	ND@1	NA	ND@1	ND@1	ND@1	ND@1
METHYLENE CHLORIDE	ug/l	ND@1	NA	ND@1	ND@1	ND@1	ND@1
TETRACHLOROETHYLENE	ug/l	ND@1	NA	ND@1	ND@1	ND@1	ND@1
TOLUENE	ug/l	ND@1	NA	ND@1	ND@1	ND@1	ND@1
TRANS-1,3-DICHLOROPROPENE	ug/l	ND@1	NA	ND@1	ND@1	ND@1	ND@1
TRICHLOROETHYLENE	ug/l	ND@1	NA	ND@1	ND@1	ND@1	ND@1
TRICHLOROFLUOROMETHANE	ug/l	ND@1	NA	ND@1	ND@1	ND@1	ND@1
VINYL CHLORIDE	ug/l	ND@1	NA	ND@1	ND@1	ND@1	ND@1
XYLENE, TOTAL	ug/l	ND@1	NA	ND@1	ND@1	ND@1	ND@1

SPDES OF 01A

PARAMETER	UNITS
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1,2-DICHLOROENZENE	ug/l	ND@1	NA	ND@1	ND@1	ND@1	ND@1
1,3-DICHLOROENZENE	ug/l	ND@1	NA	ND@1	ND@1	ND@1	ND@1
1,4-DICHLOROENZENE	ug/l	ND@1	NA	ND@1	ND@1	ND@1	ND@1
2-CHLOROETHYL VINYL ETHER	ug/l	ND@1	NA	ND@1	ND@1	ND@1	ND@1

PH	pH	7.6	NA	6.5	6.5	6.6	7.0
TEMPERATURE	C	11.0	NA	12.0	11.0	12.5	12.5
TOTAL DISSOLVED SOLIDS	mg/l	400	NA	420	NA	210	NA
TOTAL SUSPENDED SOLIDS	mg/l	ND@1.0	NA	ND@1.0	NA	2.5	NA

LEAD, TOTAL	mq/l	NA	ND@0.0050	NA	NA	NA	NA
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1,1,1,2-TETRACHLOROETHANE	ug/l	ND@1	NA	ND@1	ND@1	ND@1	ND@1
1,1,1-TRICHLOROETHANE	ug/l	ND@1	NA	ND@1	ND@1	ND@1	ND@1
1,1,2,2-TETRACHLOROETHANE	ug/l	ND@1	NA	ND@1	ND@1	ND@1	ND@1
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@1	NA	ND@1	ND@1	ND@1	ND@1
1,1,2-TRICHLOROETHANE	ug/l	ND@1	NA	ND@1	ND@1	ND@1	ND@1
1,1-DICHLOROETHANE	ug/l	ND@1	NA	ND@1	ND@1	ND@1	ND@1
1,1-DICHLOROETHYLENE	ug/l	ND@1	NA	ND@1	ND@1	ND@1	ND@1
1,2,3-TRICHLOROPROPANE	ug/l	ND@1	NA	ND@1	ND@1	ND@1	ND@1
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@1	NA	ND@1	ND@1	ND@1	ND@1
1,2-DICHLOROETHANE	ug/l	ND@1	NA	ND@1	ND@1	ND@1	ND@1
1,2-DICHLOROETHYLENE, TOTAL	ug/l	ND@1	NA	ND@1	ND@1	ND@1	ND@1
1,2-DICHLOROPROPANE	ug/l	ND@1	NA	ND@1	ND@1	ND@1	ND@1
4-CHLOROTOLUENE	ug/l	ND@1	NA	ND@1	ND@1	ND@1	ND@1
ACROLEIN	ug/l	ND@2	NA	ND@2	ND@2	ND@2	ND@2
ACRYLONITRILE	ug/l	ND@1	NA	ND@1	ND@1	ND@1	ND@1
BENZENE	ug/l	ND@1	NA	ND@1	ND@1	ND@1	ND@1
BENZYL CHLORIDE	ug/l	ND@1	NA	ND@1	ND@1	ND@1	ND@1
BROMOBENZENE	ug/l	ND@1	NA	ND@1	ND@1	ND@1	ND@1
BROMODICHLOROMETHANE	ug/l	ND@1	NA	ND@1	ND@1	ND@1	ND@1

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SPDES OF 01A

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	03/12/17	04/06/17	04/06/17	04/13/17	05/04/17	05/12/17
LABORATORY SAMPLE I.D.	420117999-1	420119058-1	420119059-1	420119400-1	420120339-1	420120789-1
SAMPLE RUN NUMBER	01	01	01	01	01	01
SAMPLE COMMENT CODES						

PARAMETER UNITS

VOLATILE ORGANICS (Continued)

BROMOFORM	ug/l	ND@1	NA	ND@1	ND@1	ND@1	ND@1
BROMOMETHANE	ug/l	ND@1	NA	ND@1	ND@1	ND@1	ND@1
CARBON TETRACHLORIDE	ug/l	ND@1	NA	ND@1	ND@1	ND@1	ND@1
CHLOROBNZENE	ug/l	ND@1	NA	ND@1	ND@1	ND@1	ND@1
CHLORODIBROMOMETHANE	ug/l	ND@1	NA	ND@1	ND@1	ND@1	ND@1
CHLOROETHANE	ug/l	ND@1	NA	ND@1	ND@1	ND@1	ND@1
CHLOROFORM	ug/l	ND@1	NA	ND@1	ND@1	ND@1	ND@1
CHLOROMETHANE	ug/l	ND@1	NA	ND@1	ND@1	ND@1	ND@1
CIS-1,3-DICHLOROPROPYLENE	ug/l	ND@1	NA	ND@1	ND@1	ND@1	ND@1
DIBROMOMETHANE	ug/l	ND@1	NA	ND@1	ND@1	ND@1	ND@1
DICHLORODIFLUOROMETHANE	ug/l	ND@1	NA	ND@1	ND@1	ND@1	ND@1
ETHYLBENZENE	ug/l	ND@1	NA	ND@1	ND@1	ND@1	ND@1
METHYLENE CHLORIDE	ug/l	ND@1	NA	ND@1	ND@1	ND@1	ND@1
TETRACHLOROETHYLENE	ug/l	ND@1	NA	ND@1	ND@1	ND@1	ND@1
TOLUENE	ug/l	ND@1	NA	ND@1	ND@1	ND@1	ND@1
TRANS-1,3-DICHLOROPROPENE	ug/l	ND@1	NA	ND@1	ND@1	ND@1	ND@1
TRICHLOROETHYLENE	ug/l	ND@1	NA	ND@1	ND@1	ND@1	ND@1
TRICHLOROFLUOROMETHANE	ug/l	ND@1	NA	ND@1	ND@1	ND@1	ND@1
VINYL CHLORIDE	ug/l	ND@1	NA	ND@1	ND@1	ND@1	ND@1
XYLENE, TOTAL	ug/l	ND@1	NA	ND@1	ND@1	ND@1	ND@1

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SPDES OF 01A

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	06/01/17	06/08/17	07/06/17	07/06/17	07/13/17	08/03/17
LABORATORY SAMPLE I.D.	420121542-1	420121923-1	420123216-1	420123217-1	420123602-1	420124565-1
SAMPLE RUN NUMBER	01	01	01	01	01	01
SAMPLE COMMENT CODES						

PARAMETER	UNITS
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BASE/NEUTRAL EXTRACTABLES

1,2-DICHLOROBENZENE	ug/l	ND@1	ND@1	NA	ND@1	ND@1	ND@1
1,3-DICHLOROBENZENE	ug/l	ND@1	ND@1	NA	ND@1	ND@1	ND@1
1,4-DICHLOROBENZENE	ug/l	ND@1	ND@1	NA	ND@1	ND@1	ND@1
2-CHLOROETHYL VINYL ETHER	ug/l	ND@1	ND@1	NA	ND@1	ND@1	ND@1

INDICATOR PARAMETERS

PH	pH	6.7	7.2	NA	7.6	7.6	7.4
TEMPERATURE	C	15.0	15.0	NA	19.5	19.0	19.5
TOTAL DISSOLVED SOLIDS	mg/l	440	NA	NA	420	NA	460
TOTAL SUSPENDED SOLIDS	mg/l	ND@1.0	NA	NA	1.6	NA	ND@1.0

METALS

LEAD, TOTAL	mg/l	NA	NA	ND@0.0050	NA	NA	NA
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VOLATILE ORGANICS

1,1,1,2-TETRACHLOROETHANE	ug/l	ND@1	ND@1	NA	ND@1	ND@1	ND@1
1,1,1-TRICHLOROETHANE	ug/l	ND@1	ND@1	NA	ND@1	ND@1	ND@1
1,1,2,2-TETRACHLOROETHANE	ug/l	ND@1	ND@1	NA	ND@1	ND@1	ND@1
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@1	ND@1	NA	ND@1	ND@1	ND@1
1,1,2-TRICHLOROETHANE	ug/l	ND@1	ND@1	NA	ND@1	ND@1	ND@1
1,1-DICHLOROETHANE	ug/l	ND@1	ND@1	NA	ND@1	ND@1	ND@1
1,1-DICHLOROETHYLENE	ug/l	ND@1	ND@1	NA	ND@1	ND@1	ND@1
1,2,3-TRICHLOROPROPANE	ug/l	ND@1	ND@1	NA	ND@1	ND@1	ND@1
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@1	ND@1	NA	ND@1	ND@1	ND@1
1,2-DICHLOROETHANE	ug/l	ND@1	ND@1	NA	ND@1	ND@1	ND@1
1,2-DICHLOROETHYLENE, TOTAL	ug/l	ND@1	ND@1	NA	ND@1	ND@1	ND@1
1,2-DICHLOROPROPANE	ug/l	ND@1	ND@1	NA	ND@1	ND@1	ND@1
4-CHLOROTOLUENE	ug/l	ND@1	ND@1	NA	ND@1	ND@1	ND@1
ACROLEIN	ug/l	ND@2	ND@2	NA	ND@2	ND@2	ND@2
ACRYLONITRILE	ug/l	ND@1	ND@1	NA	ND@1	ND@1	ND@1
BENZENE	ug/l	ND@1	ND@1	NA	ND@1	ND@1	ND@1
BENZYL CHLORIDE	ug/l	ND@1	ND@1	NA	ND@1	ND@1	ND@1
BROMOBENZENE	ug/l	ND@1	ND@1	NA	ND@1	ND@1	ND@1
BROMODICHLOROMETHANE	ug/l	ND@1	ND@1	NA	ND@1	ND@1	ND@1

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SPDES OF 01A

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	06/01/17	06/08/17	07/06/17	07/06/17	07/13/17	08/03/17
LABORATORY SAMPLE I.D.	420121542-1	420121923-1	420123216-1	420123217-1	420123602-1	420124565-1
SAMPLE RUN NUMBER	01	01	01	01	01	01
SAMPLE COMMENT CODES						

PARAMETER UNITS

VOLATILE ORGANICS (Continued)

BROMOFORM	ug/l	ND@1	ND@1	NA	ND@1	ND@1	ND@1
BROMOMETHANE	ug/l	ND@1	ND@1	NA	ND@1	ND@1	ND@1
CARBON TETRACHLORIDE	ug/l	ND@1	ND@1	NA	ND@1	ND@1	ND@1
CHLOROBENZENE	ug/l	ND@1	ND@1	NA	ND@1	ND@1	ND@1
CHLORODIBROMOMETHANE	ug/l	ND@1	ND@1	NA	ND@1	ND@1	ND@1
CHLOROETHANE	ug/l	ND@1	ND@1	NA	ND@1	ND@1	ND@1
CHLOROFORM	ug/l	ND@1	ND@1	NA	ND@1	ND@1	ND@1
CHLOROMETHANE	ug/l	ND@1	ND@1	NA	ND@1	ND@1	ND@1
CIS-1,3-DICHLOROPROPYLENE	ug/l	ND@1	ND@1	NA	ND@1	ND@1	ND@1
DIBROMOMETHANE	ug/l	ND@1	ND@1	NA	ND@1	ND@1	ND@1
DICHLORODIFLUOROMETHANE	ug/l	ND@1	ND@1	NA	ND@1	ND@1	ND@1
ETHYLBENZENE	ug/l	ND@1	ND@1	NA	ND@1	ND@1	ND@1
METHYLENE CHLORIDE	ug/l	ND@1	ND@1	NA	ND@1	ND@1	ND@1
TETRACHLOROETHYLENE	ug/l	ND@1	ND@1	NA	ND@1	ND@1	ND@1
TOLUENE	ug/l	ND@1	ND@1	NA	ND@1	ND@1	ND@1
TRANS-1,3-DICHLOROPROPENE	ug/l	ND@1	ND@1	NA	ND@1	ND@1	ND@1
TRICHLOROETHYLENE	ug/l	ND@1	ND@1	NA	ND@1	ND@1	ND@1
TRICHLOROFLUOROMETHANE	ug/l	ND@1	ND@1	NA	ND@1	ND@1	ND@1
VINYL CHLORIDE	ug/l	ND@1	ND@1	NA	ND@1	ND@1	ND@1
XYLENE, TOTAL	ug/l	ND@1	ND@1	NA	ND@1	ND@1	ND@1

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SPDES OF 01A

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	08/10/17	09/07/17	09/14/17	10/05/17	10/05/17	10/12/17
LABORATORY SAMPLE I.D.	420124977-1	420126133-1	420126422-1	420127397-1	420127399-1	420127739-1
SAMPLE RUN NUMBER	01	01	01	01	01	01
SAMPLE COMMENT CODES						

PARAMETER	UNITS
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BASE/NEUTRAL EXTRACTABLES

1,2-DICHLOROBENZENE	ug/l	ND@1	ND@1	ND@1	ND@1	NA	ND@1
1,3-DICHLOROBENZENE	ug/l	ND@1	ND@1	ND@1	ND@1	NA	ND@1
1,4-DICHLOROBENZENE	ug/l	ND@1	ND@1	ND@1	ND@1	NA	ND@1
2-CHLOROETHYL VINYL ETHER	ug/l	ND@1	ND@1	ND@1	ND@1	NA	ND@1

INDICATOR PARAMETERS

PH	pH	6.3	6.9	7.0	7.72	NA	7.65
TEMPERATURE	C	21.5	19.0	22.0	19.4	NA	18.4
TOTAL DISSOLVED SOLIDS	mg/l	NA	370	NA	370	NA	NA
TOTAL SUSPENDED SOLIDS	mg/l	NA	2.7	NA	ND@1.0	NA	NA

METALS

LEAD, TOTAL	mg/l	NA	NA	NA	NA	ND@0.0050	NA
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VOLATILE ORGANICS

1,1,1,2-TETRACHLOROETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	NA	ND@1
1,1,1-TRICHLOROETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	NA	ND@1
1,1,2,2-TETRACHLOROETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	NA	ND@1
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	NA	ND@1
1,1,2-TRICHLOROETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	NA	ND@1
1,1-DICHLOROETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	NA	ND@1
1,1-DICHLOROETHYLENE	ug/l	ND@1	ND@1	ND@1	ND@1	NA	ND@1
1,2,3-TRICHLOROPROPANE	ug/l	ND@1	ND@1	ND@1	ND@1	NA	ND@1
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	NA	ND@1
1,2-DICHLOROETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	NA	ND@1
1,2-DICHLOROETHYLENE, TOTAL	ug/l	ND@1	ND@1	ND@1	ND@1	NA	ND@1
1,2-DICHLOROPROPANE	ug/l	ND@1	ND@1	ND@1	ND@1	NA	ND@1
4-CHLOROTOLUENE	ug/l	ND@1	ND@1	ND@1	ND@1	NA	ND@1
ACROLEIN	ug/l	ND@2	ND@2	ND@2	ND@2	NA	ND@2
ACRYLONITRILE	ug/l	ND@1	ND@1	ND@1	ND@1	NA	ND@1
BENZENE	ug/l	ND@1	ND@1	ND@1	ND@1	NA	ND@1
BENZYL CHLORIDE	ug/l	ND@1	ND@1	ND@1	ND@1	NA	ND@1
BROMOBENZENE	ug/l	ND@1	ND@1	ND@1	ND@1	NA	ND@1
BROMODICHLOROMETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	NA	ND@1

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SPDES OF 01A

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	08/10/17	09/07/17	09/14/17	10/05/17	10/05/17	10/12/17
LABORATORY SAMPLE I.D.	420124977-1	420126133-1	420126422-1	420127397-1	420127399-1	420127739-1
SAMPLE RUN NUMBER	01	01	01	01	01	01
SAMPLE COMMENT CODES						

PARAMETER	UNITS
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VOLATILE ORGANICS (Continued)

BROMOFORM	ug/l	ND@1	ND@1	ND@1	ND@1	NA	ND@1
BROMOMETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	NA	ND@1
CARBON TETRACHLORIDE	ug/l	ND@1	ND@1	ND@1	ND@1	NA	ND@1
CHLOROBENZENE	ug/l	ND@1	ND@1	ND@1	ND@1	NA	ND@1
CHLORODIBROMOMETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	NA	ND@1
CHLOROETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	NA	ND@1
CHLOROFORM	ug/l	ND@1	ND@1	ND@1	ND@1	NA	ND@1
CHLOROMETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	NA	ND@1
CIS-1,3-DICHLOROPROPYLENE	ug/l	ND@1	ND@1	ND@1	ND@1	NA	ND@1
DIBROMOMETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	NA	ND@1
DICHLORODIFLUOROMETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	NA	ND@1
ETHYLBENZENE	ug/l	ND@1	ND@1	ND@1	ND@1	NA	ND@1
METHYLENE CHLORIDE	ug/l	ND@1	ND@1	ND@1	ND@1	NA	ND@1
TETRACHLOROETHYLENE	ug/l	ND@1	ND@1	ND@1	ND@1	NA	ND@1
TOLUENE	ug/l	ND@1	ND@1	ND@1	ND@1	NA	ND@1
TRANS-1,3-DICHLOROPROPENE	ug/l	ND@1	ND@1	ND@1	ND@1	NA	ND@1
TRICHLOROETHYLENE	ug/l	ND@1	ND@1	ND@1	ND@1	NA	ND@1
TRICHLOROFLUOROMETHANE	ug/l	ND@1	ND@1	ND@1	ND@1	NA	ND@1
VINYL CHLORIDE	ug/l	ND@1	ND@1	ND@1	ND@1	NA	ND@1
XYLENE, TOTAL	ug/l	ND@1	ND@1	ND@1	ND@1	NA	ND@1

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SPDES OF 01A

SAMPLE LOCATION	SPDES OF 01A	SPDES OF 01A	SPDES OF 01A	SPDES OF 01A
SAMPLE DESCRIPTION	SPDES OUTFL	SPDES OUTFL	SPDES OUTFL	SPDES OUTFL
SAMPLE DATE	11/03/17	11/09/17	12/07/17	12/14/17
LABORATORY SAMPLE I.D.	420128715-1	420129015-1	420130284-1	420130611-1
SAMPLE RUN NUMBER	01	01	01	01
SAMPLE COMMENT CODES				

PARAMETER	UNITS
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BASE/NEUTRAL EXTRACTABLES

1,2-DICHLOROBENZENE	ug/l	ND@1	ND@1	ND@1	ND@1
1,3-DICHLOROBENZENE	ug/l	ND@1	ND@1	ND@1	ND@1
1,4-DICHLOROBENZENE	ug/l	ND@1	ND@1	ND@1	ND@1
2-CHLOROETHYL VINYL ETHER	ug/l	ND@1	ND@1	ND@1	ND@1

INDICATOR PARAMETERS

PH	pH	8.40	8.46	8.48	8.28
TEMPERATURE	C	19.0	16.8	14.3	13.8
TOTAL DISSOLVED SOLIDS	mg/l	330	NA	390	NA
TOTAL SUSPENDED SOLIDS	mg/l	ND@1.0	NA	1.5	NA

METALS

LEAD, TOTAL	mg/l	NA	NA	NA	NA
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VOLATILE ORGANICS

1,1,1,2-TETRACHLOROETHANE	ug/l	ND@1	ND@1	ND@1	ND@1
1,1,1-TRICHLOROETHANE	ug/l	ND@1	ND@1	ND@1	ND@1
1,1,2,2-TETRACHLOROETHANE	ug/l	NA	ND@1	ND@1	ND@1
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@1	ND@1	ND@1	ND@1
1,1,2-TRICHLOROETHANE	ug/l	ND@1	ND@1	ND@1	ND@1
1,1-DICHLOROETHANE	ug/l	ND@1	ND@1	ND@1	ND@1
1,1-DICHLOROETHYLENE	ug/l	ND@1	ND@1	ND@1	ND@1
1,2,3-TRICHLOROPROPANE	ug/l	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
1,2-DICHLOROETHANE	ug/l	ND@1	ND@1	ND@1	ND@1
1,2-DICHLOROETHYLENE, TOTAL	ug/l	ND@1	ND@1	ND@1	ND@1
1,2-DICHLOROPROPANE	ug/l	ND@1	ND@1	ND@1	ND@1
4-CHLOROTOLUENE	ug/l	ND@1	ND@1	ND@1	ND@1
ACROLEIN	ug/l	ND@2	ND@2	ND@2	ND@2
ACRYLONITRILE	ug/l	ND@1	ND@1	ND@1	ND@1
BENZENE	ug/l	ND@1	ND@1	ND@1	ND@1
BENZYL CHLORIDE	ug/l	ND@1	ND@1	ND@1	ND@1
BROMOBENZENE	ug/l	ND@1	ND@1	ND@1	ND@1
BROMODICHLOROMETHANE	ug/l	ND@1	ND@1	ND@1	ND@1

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January 1, 2017 - December 31, 2017

SPDES OF 01A

SAMPLE LOCATION	SPDES OF 01A	SPDES OF 01A	SPDES OF 01A	SPDES OF 01A
SAMPLE DESCRIPTION	SPDES OUTFL	SPDES OUTFL	SPDES OUTFL	SPDES OUTFL
SAMPLE DATE	11/03/17	11/09/17	12/07/17	12/14/17
LABORATORY SAMPLE I.D.	420128715-1	420129015-1	420130284-1	420130611-1
SAMPLE RUN NUMBER	01	01	01	01
SAMPLE COMMENT CODES				

PARAMETER	UNITS
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VOLATILE ORGANICS (Continued)

BROMOFORM	ug/l	ND@1	ND@1	ND@1	ND@1
BROMOMETHANE	ug/l	ND@1	ND@1	ND@1	ND@1
CARBON TETRACHLORIDE	ug/l	ND@1	ND@1	ND@1	ND@1
CHLOROBENZENE	ug/l	ND@1	ND@1	ND@1	ND@1
CHLORODIBROMOMETHANE	ug/l	ND@1	ND@1	ND@1	ND@1
CHLOROETHANE	ug/l	ND@1	ND@1	ND@1	ND@1
CHLOROFORM	ug/l	ND@1	ND@1	ND@1	ND@1
CHLOROMETHANE	ug/l	ND@1	ND@1	ND@1	ND@1
CIS-1,3-DICHLOROPROPYLENE	ug/l	ND@1	ND@1	ND@1	ND@1
DIBROMOMETHANE	ug/l	ND@1	ND@1	ND@1	ND@1
DICHLORODIFLUOROMETHANE	ug/l	ND@1	ND@1	ND@1	ND@1
ETHYLBENZENE	ug/l	ND@1	ND@1	ND@1	ND@1
METHYLENE CHLORIDE	ug/l	ND@1	ND@1	ND@1	ND@1
TETRACHLOROETHYLENE	ug/l	ND@1	ND@1	ND@1	ND@1
TOLUENE	ug/l	ND@1	ND@1	ND@1	ND@1
TRANS-1,3-DICHLOROPROPENE	ug/l	ND@1	ND@1	ND@1	ND@1
TRICHLOROETHYLENE	ug/l	ND@1	ND@1	ND@1	ND@1
TRICHLOROFLUOROMETHANE	ug/l	ND@1	ND@1	ND@1	ND@1
VINYL CHLORIDE	ug/l	ND@1	ND@1	ND@1	ND@1
XYLENE, TOTAL	ug/l	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 identified 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, 2017 - December 31, 2017:

19,054,425

Average Flow Rate

52,061 gal/day

	avg. ug/l	Flux lbs/day
Tetrachloroethene	2.7	0.00118
Trichloroethene	91.6	0.03977
12-Dichloroethene(tot)	51.7	0.02245
Vinyl Chloride	0.0	0.00000
111-Trichloroethane	67.5	0.02928
11-Dichloroethane	19.3	0.00839
12-Dichloroethane	0.5	0.00020
11-Dichloroethene	11.2	0.00488
Freon 113	0.0	0.00000
Freon 123a	0.0	0.00000

Total flux contributed by GWCS:

0.10615 lbs/day

Annual Flux for GWCS:

38.74 lbs

North Parking Lot Area Passive Groundwater Collection System

Total Gallons Extracted January 1, 2017 - December 31, 2017:

2,395,607

Average Flow Rate

6,545 gal/day

	avg. ug/l	Flux lbs/day
Tetrachloroethene	1.3	0.00007
Trichloroethene	5.4	0.00029
12-Dichloroethene(tot)	13.9	0.00076
Vinyl Chloride	0.2	0.00001
111-Trichloroethane	8.9	0.00048
11-Dichloroethane	3.0	0.00017
12-Dichloroethane	0.0	0.00000
11-Dichloroethene	0.6	0.00003
Freon 113	0.0	0.00000
Freon 123a	0.0	0.00000

Total flux contributed by NPLA pump stations:

0.00181 lbs/day

Annual Flux for NPLA pump stations:

0.66 lbs

overall flux:

39.4056