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Dear Madam and Sir:

2008 GROUNDWATER MONITORING REPORT FOR THE PORTSMOUTH GASEOUS DIFFUSION PLANT (DOE/PPPO/03-0062&D1)

Enclosed is the U.S. Department of Energy's Groundwater Monitoring Report for the Portsmouth Gaseous Diffusion Plant groundwater monitoring activities during the calendar year 2008. The report is submitted in accordance with the Integrated Groundwater Monitoring Plan (DOE/PPPO03-0032&D1) approved by the Ohio Environmental Protection Agency, issued August 2007.

If you have any questions or require additional information, please contact Melda Rafferty of my staff at (740) 897-5521.

Sincerely,

for William E. Murphie
Manager
Portsmouth/Paducah Project Office

Enclosures:
2008 Groundwater Monitoring Report for PORTS

cc w/enclosures:
PPPO Records/LEX
Administrative Records

cc w/o enclosures:
W. Franz, LPP/PORTS

DOE/PPPO/03-0083&D1

2008 Groundwater Monitoring Report for the Portsmouth Gaseous Diffusion Plant, Piketon, Ohio

This document is approved for public release
per review by:
Henry H. Thomas 2/19/09
PORTS Classification/Information Office Date

DOE/PPPO/03-0083&D1

2008 Groundwater Monitoring Report for the Portsmouth Gaseous Diffusion Plant, Piketon, Ohio

Date Issued—March 2009

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Portsmouth/Paducah Project Office

LATA/PARALLAX PORTSMOUTH, LLC
managing the
Environmental Remediation Activities at the
Portsmouth Gaseous Diffusion Plant
under contract DE-AC24-05OH20192
for the
U.S. DEPARTMENT OF ENERGY

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ACRONYMS

BRC	Big Run Creek
CY	calendar year
DOE	U.S. Department of Energy
EDD	East Drainage Ditch
HRC-X	Hydrogen Release Compound®-extended release formula
IGWMP	*Integrated Groundwater Monitoring Plan* (DOE 2007c)
LBC	Little Beaver Creek
LPP	LATA/Parallax Portsmouth LLC
NGVD	national geodetic vertical datum
NHP	North Holding Pond
NPDES	National Pollutant Discharge Elimination System
NTU	nephelometric turbidity unit
OAC	Ohio Administrative Code
Ohio EPA	Ohio Environmental Protection Agency
PK	Peter Kiewit
PORTS	Portsmouth Gaseous Diffusion Plant
PRG	preliminary remediation goal
RCRA	Resource Conservation and Recovery Act
RFI	RCRA Facility Investigation
SVOC	semivolatile organic compound
UND	Southwestern Drainage Ditch
USEC	United States Enrichment Corporation
U.S. EPA	U.S. Environmental Protection Agency
VOC	volatile organic compound
WDD	Western Drainage Ditch

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EXECUTIVE SUMMARY

This annual report provides the results of routine groundwater monitoring conducted during calendar year (CY) 2008 at the U.S. Department of Energy (DOE) Portsmouth Gaseous Diffusion Plant (PORTS). The report is submitted in accordance with the *Integrated Groundwater Monitoring Plan* (IGWMP), which was developed to establish groundwater monitoring requirements for PORTS. The Ohio Environmental Protection Agency (Ohio EPA) approved the initial IGWMP, dated November 1998, and it was implemented at PORTS on April 1, 1999. Groundwater monitoring at PORTS in 2008 was performed in accordance with a revised IGWMP dated August 2007.

As documented in the Ohio EPA-approved IGWMP, radiological data are collected in accordance with DOE Order 5400.5, *Radiation Protection of the Public and the Environment*, and are included in the IGWMP so that groundwater and surface water monitoring requirements [with the exception of the National Pollutant Discharge Elimination System (NPDES) permit data] are captured in a single plan. Radiological data are included in this report as information only as the 1999 Director's Final Findings and Orders on Integration state that tasks specific to radiological contamination are not specifically enforceable under that Order.

A brief history, groundwater flow velocities, potentiometric maps, analytical results, and plume diagrams are provided (as applicable) for the following groundwater monitoring areas:

- X-749 Contaminated Materials Disposal Facility/X-120 Old Training Facility/Peter Kiewit (PK) Landfill,
- Quadrant I Groundwater Investigative Area/X-749A Classified Materials Disposal Facility,
- Quadrant II Groundwater Investigative Area,
- X-701B Holding Pond,
- X-633 Pumphouse/Cooling Towers Area,
- X-616 Chromium Sludge Surface Impoundments,
- X-740 Waste Oil Handling Facility,
- X-611A Former Lime Sludge Lagoons,
- X-735 Landfills,
- X-734 Landfills, and
- X-533 Switchyard Area.

To monitor groundwater contaminants, samples are collected from wells at each of the areas listed above. The samples are typically analyzed for selected metals, volatile organic compounds (VOCs), and/or radiological constituents. Detections of these constituents are compared to the PORTS preliminary remediation goals (PRGs) developed as part of the Corrective Action Program.

Additional information in this report includes 1) a short description of the geology and hydrogeology at PORTS, 2) results for surface water and water supply sampling required by the IGWMP, and 3) operating data for the DOE PORTS groundwater treatment facilities.

Water levels are measured semiannually in groundwater wells at each monitoring area. The water level measurements are used to determine the groundwater flow velocity and flow direction. In 2008, groundwater flow directions and velocities in the Gallia and Berea groundwater formations were consistent with results from 2007.

Samples are collected at intervals ranging from quarterly to every four years, as specified in the IGWMP. In addition, data for the X-749A Classified Materials Disposal Facility (part of the Quadrant I Groundwater Investigative Area) and the X-735 Landfills are statistically evaluated to determine whether the areas have impacted groundwater.

Groundwater plumes that consist of VOCs, primarily trichloroethene, are found at five of the PORTS monitoring areas: X-749 Contaminated Materials Disposal Facility/X-120 Old Training Facility/PK Landfill, Quadrant I Groundwater Investigative Area, Quadrant II Groundwater Investigative Area, X-701B Holding Pond, and X-740 Waste Oil Handling Facility. A summary of the groundwater monitoring data collected at each of these plumes in 2008 follows:

X-749 Contaminated Materials Disposal Facility/X-120 Old Training Facility plume. In 2008, concentrations of VOCs, including trichloroethene, decreased in on-site and off-site monitoring wells that monitor the southern portion of the plume, called the X-749 South Barrier Wall Area. These decreases are due to the four new groundwater extraction wells installed in this area in 2007. By the fourth quarter of 2008, VOCs detected in off-site monitoring wells (WP-01G, WP-03G, and WP-07G) had decreased to less than 1 μg/L. VOCs were not detected in well WP-01G after the first quarter of 2008.

Concentrations of trichloroethene are decreasing in two of the northwestern plume wells (X120-08G and X749-42G). However, trichloroethene is increasing in two wells (X749-PZ06G and X749-109G) south of this area in the southwestern portion of the plume, north of Perimeter Road. In the eastern portion of the plume, directly east of the X-749 Contaminated Materials Disposal Facility, concentrations of trichloroethene are decreasing in wells X749-09GA, X749-20G, X749-21G, X749-35G, and X749-BG9G. The concentration of trichloroethene is also decreasing in well X749-13G, which is south of the landfill. The decreases in trichloroethene in groundwater on the southern and eastern sides of the landfill may be due to construction of the barrier wall on the south and east sides of the landfill completed in 2002.

Quadrant I Groundwater Investigative Area. The eastern edge of the Quadrant I Groundwater Investigative Area plume is further east than previously known based on trichloroethene detections in two new wells (X749A-18G and X749A-19G) installed in 2008 west of the X-749A Landfill, which is also the eastern edge of the Quadrant I Groundwater Investigative Area plume. The concentration of trichloroethene detected in well X326-09G (on the western edge of the plume at the southwest corner of the X-326 Process Building) increased to 14,000 μg/L in the third quarter (trichloroethene was detected at 8300 μg/L in the sample collected in the first quarter of 2008). Activities are underway to install an additional extraction well near well X326-09G.

Quadrant II Groundwater Investigative Area. Four wells were sampled in the Quadrant II Groundwater Investigative Area in 2008. Concentrations of trichloroethene detected in the southern arm of the plume (wells X720-01G and X720-08G) have been increasing over the past several years; however, the concentration of trichloroethene detected in well X720-01G in 2008 decreased to 64,000 μg/L from 92,000 μg/L in 2007. This is the second year that trichloroethene concentrations have decreased in well X720-01G. Trichloroethene continues to increase in well X720-08G (6200 μg/L in 2008; 5600 μg/L in 2007).

Well X333-01G, which is north of the Quadrant II Groundwater Investigative Area, was sampled for trichloroethene in 2008 for a special study requested by Ohio EPA. Trichloroethene was not detected in the sample.

X-701B Holding Pond. The oxidant injections that are part of the groundwater remediation for the X-701B Holding Pond are affecting levels of VOCs and metals in the western portion of the groundwater plume.

Concentrations of trichloroethene continue to vary in the western portion of the monitoring area near the former X-701B Holding Pond and X-701B extraction wells due to the oxidant injections in this area. The concentration of trichloroethene increased in the third quarter sample collected from well X701-05G. In addition, concentrations of trichloroethene are increasing in two of the wells that monitor the plume in the X-744G area (X701-01G and X744G-03G). This area is south of the oxidant injection area.

Concentrations of trichloroethene have returned to typical levels (low concentrations or undetected) in wells in the eastern portion of the monitoring area downgradient of the X-237 Groundwater Collection System (X701-15G and X701-16G). Trichloroethene concentrations were elevated in samples collected from wells X701-15G and X701-16G in the third quarter of 2007. Based on data collected in the first and third quarters of 2008, these elevated detections were anomalies possibly caused by the dry weather during 2007. The elevated detections of trichloroethene in the third quarter of 2007 do not appear to indicate any problems with the X-237 Groundwater Collection System.

Elevated levels of metals were detected in several of the X-701B monitoring wells in 2008. These detections are related to the oxidant injections associated with the X-701B groundwater remedy. The oxidant, which affects the oxidation/reduction potential and pH of the soil and/or groundwater, temporarily causes metals in soil to be mobilized into the groundwater. It is expected that the metals will move downgradient with groundwater flow for a short distance and then be re-adsorbed into the soil matrix as the geochemistry of the soil and groundwater returns to ambient conditions.

X-740 Waste Oil Handling Facility. No significant changes were noted in the groundwater plume near the X-740 Waste Oil Handling Facility during 2008. The oxidant that was injected into the X-740 groundwater plume during 2008 briefly reduced trichloroethene concentrations detected in some of the wells, but concentrations returned to typical levels by the end of 2008.

Groundwater monitoring data collected in 2008 at the following areas that do not have trichloroethene groundwater plumes are consistent with data collected at these areas in previous years:

- PK Landfill
- X-633 Pumphouse/Cooling Towers Area
- X-616 Chromium Sludge Surface Impoundments
- X-611A Former Lime Sludge Lagoons
- X-734 Landfills
- X-533 Switchyard Area

X-735 Landfills. The statistical evaluation program at the X-735 Landfills identified exceedences in statistical monitoring parameters, which triggered assessment monitoring at the Gallia wells in this area from 2004 through 2007. Corrective Measures Monitoring for the X-735 Gallia monitoring wells began in 2008. None of the concentration limits applicable to specified parameters in the X-735 Gallia wells was exceeded in 2008. The detection monitoring program for X-735 Berea wells continued in 2008. None of the control limits used to determine a statistically significant change in the indicator parameters was exceeded in the X-735 Berea wells in 2008.

X-749A Classified Materials Disposal Facility. The statistical evaluation program at the X-749A Classified Materials Disposal Facility identified exceedences in the statistical control limits for alkalinity in the sample collected from well X749A-01G in the fourth quarter of 2006. Because of these

exceedences, assessment monitoring began at the X-749A Classified Materials Disposal Facility in 2007 and continued throughout 2008.

Surface water. Trichloroethene was detected at concentrations ranging from 1.6 to 6.7 μg/L in the four samples collected from the Southwestern Drainage Ditch at UND-SW01. Trichloroethene is routinely detected at low concentrations at this sampling point. Other VOCs detected in one or more samples collected at UND-SW01 include 1,1-dichloroethane, 1,1-dichloroethene, and *cis*-1,2-dichloroethene,. Each of these detections were estimated concentrations less than 1 μg/L. No VOCs were detected at UND-SW02, which is downstream from UND-SW01, with the exception of the sample contaminant 2-butanone. 2-Butanone was detected at an estimated concentration of 5.6 μg/L in the fourth quarter sample collected from UND-SW02.

Trichloroethene and/or *cis*-1,2-dichloroethene were routinely detected at estimated concentrations less than 1 μg/L in the samples collected from East Drainage Ditch sampling location EDD-SW01 and Little Beaver Creek sampling locations LBC-SW01 and LBC-SW02. Neither of these VOCs were detected in samples collected from downstream Little Beaver Creek sampling locations LBC-SW03 and LBC-SW04.

No transuranic radionuclides (americium-241, neptunium-237, plutonium-238, and plutonium-239/240) were detected in the surface water samples collected during 2008. In the fourth quarter of 2008, technetium-99 was detected at 12.2 and 9.59 pCi/L in the samples collected from Little Beaver Creek sampling locations LBC-SW03 and LBC-SW04, respectively. Technetium-99 is occasionally detected at the Little Beaver Creek sampling locations. These detections are well below the Ohio EPA drinking water standard for technetium-99 (900 pCi/L, based on a 4 mrem/year dose from beta emitters).

Water supply. No VOCs other than the common sample and glassware contaminants acetone and methylene chloride were detected in the water supply samples collected during 2008. Detections of these contaminants do not indicate any problem with the quality of the water supply.

No transuranics or technetium-99 were detected in any of the water supply samples collected in 2008.

1. INTRODUCTION

1.1 SITE DESCRIPTION

The Portsmouth Gaseous Diffusion Plant (PORTS), which began operation in 1954, is one of two uranium enrichment facilities in the United States. In 1993, the U.S. Department of Energy (DOE) began leasing the uranium enrichment production and operations facilities at PORTS to the United States Enrichment Corporation (USEC). USEC enriched uranium via the gaseous diffusion process for use in commercial nuclear power reactors until May 2001. At that time, USEC placed the uranium enrichment production facilities at PORTS into a cold standby mode under a contract with DOE. DOE terminated the cold standby program as of September 30, 2005, and replaced it with the cold-shutdown program. USEC continues to lease uranium enrichment facilities at PORTS.

USEC, Inc. (the parent company of USEC) is currently developing gaseous centrifuge uranium enrichment technology at PORTS including construction of both a small scale demonstration facility (the Lead Cascade Test Facility) and a commercial scale uranium enrichment facility (the American Centrifuge Facility). Other current USEC operations include 1) removal of deposited uranium compounds from the former gaseous diffusion production equipment; 2) removal of technetium-99 from contaminated uranium hexafluoride feed material; and 3) other operations to support ongoing and future missions.

Additionally, a Depleted Uranium Hexafluoride Conversion Facility is being built at PORTS to process depleted uranium hexafluoride produced by the gaseous diffusion process. The depleted uranium hexafluoride, which is stored in cylinders, will be removed from the cylinders and converted to uranium oxide, which will be shipped off site. The facility is being constructed by Uranium Disposition Services LLC.

LATA/Parallax Portsmouth LLC (LPP) is the DOE remediation contractor for environmental restoration, including the environmental monitoring discussed in this report.

PORTS is located in a rural area of Pike County, Ohio, on a 5.8-square-mile site. The site is 2 miles east of the Scioto River in a small valley running parallel to and approximately 130 ft above the Scioto River floodplain. Pike County has approximately 27,700 residents.

1.2 GROUNDWATER MONITORING PROGRAM

DOE initiated groundwater and surface water monitoring at PORTS in the 1980s. Groundwater monitoring has been conducted in response to regulatory requirements of the Ohio Administrative Code (OAC), Resource Conservation and Recovery Act (RCRA) hazardous waste and solid waste post-closure documents, an Administrative Consent Order between DOE and U.S. Environmental Protection Agency (U.S. EPA), a Consent Decree between the DOE and the State of Ohio, and DOE Orders.

Because of the numerous regulatory programs, DOE developed an *Integrated Groundwater Monitoring Plan* (IGWMP) to minimize the potential for confusion in interpreting requirements to maximize resources for collecting the data needed for sound decision making. The IGWMP has been developed to establish groundwater monitoring requirements for PORTS. As documented in the Ohio Environmental Protection Agency (Ohio EPA)-approved IGWMP, radiological data are collected in accordance with DOE Order 5400.5, *Radiation Protection of the Public and the Environment*, and are

included in the IGWMP so that all groundwater and surface water monitoring requirements [with the exception of the National Pollutant Discharge Elimination System (NPDES) permit data] are captured in a single plan. Radiological data are included in this report as information only as the 1999 Director's Final Findings and Orders on Integration state that tasks specific to radiological contamination are not specifically enforceable under that Order. Groundwater monitoring in 2008 was completed in accordance with the IGWMP dated August 2007.

The IGWMP requires groundwater monitoring of 11 areas within the quadrants designated by the RCRA Corrective Action Program. Figure 1 shows the location of each IGWMP area. The monitoring areas within each quadrant are listed as follows:

- Quadrant I
  - X-749 Contaminated Materials Disposal Facility/X-120 Old Training Facility/Peter Kiewit Landfill
  - Quadrant I Groundwater Investigative Area/X-749A Classified Materials Disposal Facility
- Quadrant II
  - Quadrant II Groundwater Investigative Area
  - X-701B Holding Pond
  - X-633 Pumphouse/Cooling Towers Area
- Quadrant III
  - X-616 Chromium Sludge Surface Impoundments
  - X-740 Waste Oil Handling Facility
- Quadrant IV
  - X-611A Former Lime Sludge Lagoons
  - X-735 Landfills
  - X-734 Landfills
  - X-533 Switchyard Area

Figures 2 through 12 show the monitoring wells for each of the monitoring areas listed above. In addition, the IGWMP includes surface water and water supply monitoring. Figures 13 and 14 show the surface water and water supply monitoring locations, respectively. Tables 1 through 5 provide the monitoring schedules and analytical parameter suites for each quadrant and the other monitoring programs required by the IGWMP (surface water and water supply). Table 6 lists the analytical parameter suites.

This Annual Groundwater Report is organized as follows. Section 1 provides an introduction to PORTS and the groundwater monitoring program, including a description of each IGWMP monitoring area or program. Sections 2 and 3 provide descriptions of the local geology and groundwater elevations measured at PORTS in 2008, respectively. These groundwater elevations are used to create potentiometric maps to monitor groundwater flow and to calculate flow velocities for each IGWMP monitoring area. Section 4 discusses the analytical results for each monitoring area or program. In general, analytical results are compared to preliminary remediation goals (PRGs) developed as part of the PORTS RCRA Corrective Action Program. Table 7 lists the PORTS groundwater PRGs. Concentrations or activities of radionuclides may also be compared to drinking water standards developed by the U.S. EPA.

Contaminated groundwater collected from several of the monitoring areas is treated on site at four groundwater treatment facilities. Treated water from these facilities is released through NPDES outfalls. Section 5 provides operating data for the groundwater treatment facilities and discusses NPDES monitoring results for 2008.

1.3 GROUNDWATER MONITORING AREAS

1.3.1 X-749/X-120/Peter Kiewit Landfill

In the southern portion of Quadrant I, groundwater concerns focus on three contaminant sources: the X-749 Contaminated Materials Disposal Facility (both north and south portions), X-120 Old (Goodyear) Training Facility, and PK Landfill.

1.3.1.1 X-749 Contaminated Materials Disposal Facility

The X-749 Contaminated Materials Disposal Facility (see Figure 2) is a landfill located in the south-central section of the PORTS facility. The landfill covers approximately 7.5 acres and was built in an area of highest elevation within the southern half of PORTS. The landfill operated from 1955 to 1990, during which time buried wastes were generally contained in metal drums or other containers that were compatible with the waste.

The northern portion (approximately 200,000 square ft) contains waste contaminated with industrial solvents, waste oils from plant compressors and pumps, sludges that were classified as hazardous, and low-level radioactive materials. The southern portion (approximately 130,000 square ft) contains non-hazardous, low-level radioactive scrap materials.

The initial closure of the X-749 Contaminated Materials Disposal Facility included installation of (1) a multimedia surface cap, (2) a barrier wall along the north side and northwest corner, and (3) subsurface groundwater collection systems on the northern half of the east side and the southwest corner, including one sump to remove groundwater within each of the groundwater collection systems. The barrier wall and subsurface collection systems extend down to bedrock. Groundwater from the collection systems is treated at the X-622 Groundwater Treatment Facility and then discharged in accordance with the LPP PORTS NPDES permit.

Remedial actions selected by Ohio EPA in 2000 for the X-749 Contaminated Materials Disposal Facility/X-120 Old Training Facility groundwater plume included construction of a barrier wall on the south and east sides of the X-749 Contaminated Materials Disposal Facility and phytoremediation. Construction of the barrier wall, begun in 2001 and completed in 2002, required removal of the groundwater collection system and associated sump on the northern half of the east side of the landfill. The groundwater collection system and sump on the southwest corner of the landfill remain in place.

The *Comprehensive Monitoring Program for the X-749 and Peter Kiewit Landfill Areas* (DOE 2003b) was developed in 2003 to monitor the effect of the new X-749 barrier wall on groundwater quality and migration in the northern area of the X-749 Contaminated Materials Disposal Facility plume and at the PK Landfill. Section 1.3.1.3 provides additional information about objectives for the PK Landfill. Groundwater quality monitoring required by the *Comprehensive Monitoring Program for the X-749 and Peter Kiewit Landfill Areas* (DOE 2003b) began in the fourth quarter of 2003 and was completed in the first quarter of 2005. The *Annual (2004) Summary Report of the Comprehensive Monitoring Plan Data for the X-749/Peter Kiewit Landfill Areas* (DOE 2005b) found that the barrier wall on the south and east sides of the landfill, installed in 2001-2002, was impeding additional contamination from flowing out of

the landfill, and that the groundwater collection system and sump pump in the southwestern corner of the landfill were removing water from the landfill.

Planting poplar trees for phytoremediation of the X-749 Contaminated Materials Disposal Facility/X-120 Old Training Facility groundwater plume began in 2002 and was completed in 2003. Approximately 2640 trees were planted over 22 acres of the X-749 Contaminated Materials Disposal Facility/X-120 Old Training Facility plume. Nine new wells were installed to monitor the phytoremediation area.

The *Preliminary Evaluation Report for the X-749/X-120 Phytoremediation System* (DOE 2008d) provides a preliminary evaluation of the phytoremediation system. The trees selected for the phytoremediation system have just begun to develop sufficient leaf area (approximately equal to root volume) so that groundwater is transpired through the trees; therefore, a complete system evaluation could not be completed. Water level data and tree core sampling results indicated that contaminated groundwater is being transpired by the trees; however, the current volume of contaminated groundwater uptake by the trees is uncertain. Continued operation of the phytoremediation system is recommended in order for the trees to grow and develop a more extensive root system.

In 2007, the *Work Plan for the X-749/X-120 Area Groundwater Optimization Project* (DOE 2007f) was developed to enhance groundwater monitoring and remedial activities in the X-749/X-120 plume. Two additional extraction wells installed in the groundwater collection trench on the southwest side of the X-749 Contaminated Materials Disposal began operating in January 2008. The new extraction wells, combined with the existing sump (X749-WPW), more effectively remove groundwater from the trench. Seven additional monitoring wells were installed within and around the X-749 Landfill during 2008 and were sampled for the first time in the fourth quarter of 2008. The wells are intended to monitor contaminant concentrations within the landfill and the performance of the barrier walls around the landfill.

The leading edge of the contaminated groundwater plume emanating from the X-749 Contaminated Materials Disposal Facility has been approaching the southern boundary of the PORTS reservation. In 1994, a subsurface barrier wall was constructed across a portion of this southern boundary. The X-749 South Barrier Wall was designed to inhibit migration of the plume off plant property; however, volatile organic compounds (VOCs), including trichloroethene, have been detected in wells downgradient from this barrier wall and beyond the plant boundary.

In 2007, activities proposed in the *Work Plan for the X-749/X-120 Area Groundwater Optimization Project* (DOE 2007f) were initiated to address the groundwater plume in the X-749 South Barrier Wall area. Four new groundwater extraction wells (X749-EW01G, X749-EW02G, X749-EW03G, and X749-EW04G) were installed in the X-749 South Barrier Wall area (see Figure 2) and began operation in June 2007. Additional off-site sampling was also completed and three new off-site groundwater monitoring wells (WP-05G, WP-06G, and WP-07G) were installed during 2007 to monitor the portion of the X-749 plume that had moved off site. Monitoring of these three new wells continued in 2008.

Eighty-four wells and one sump/extraction well were sampled during 2008 to monitor the X-749 Contaminated Materials Disposal Facility/X-120 Old Training Facility area. Table 1 provides the sampling schedule and monitoring parameters for the wells that were sampled in 2008. Figure 2 shows the wells that are part of the routine monitoring program for this area or that were sampled during 2008. The IGWMP provides details on the routine monitoring program for this area. The *Work Plan for the X-749/X-120 Area Groundwater Optimization Project* (DOE 2007f) provides additional information about the monitoring completed in 2008 as part of the optimization tasks that are part of this plan (see Section 4.7.1).

1.3.1.2 X-120 Old Training Facility

The X-120 Old (Goodyear) Training Facility covered an area of approximately 11.5 acres west of the present-day XT-847 building (see Figure 2). The X-120 facility, which no longer exists, included a machine shop, metal shop, paint shop, and several warehouses used during the construction of PORTS in the 1950s. The shops may have used solvents and various other materials; disposal practices of these solvents are unknown.

Groundwater contamination in the vicinity of this facility is primarily trichloroethene. The eastern portion of the X-120 Old Training Facility plume co-mingles with the western portion of the X-749 Contaminated Materials Disposal Facility plume; however, the X-120 Old Training Facility plume migrates towards the Southwestern Drainage Ditch. In 1996, a horizontal well was installed along the approximate axis of the X-120 Old Training Facility plume. This well passively collected and transferred contaminated groundwater by gravity drainage to the X-625 Groundwater Treatment Facility. With the concurrence of Ohio EPA, operation of the X-625 Groundwater Treatment Facility ceased in July 2003 and the horizontal well discharge was capped because of the small volume of groundwater that was being treated at the facility.

1.3.1.3 PK Landfill

The PK Landfill is located west of Big Run Creek just south of the X-230K Holding Pond (see Figure 2). The landfill, which began operation in 1952, was used as a salvage yard, burn pit, and trash area during the construction of PORTS. After the initial construction, the disposal site was operated as a sanitary landfill until 1968, when soil was graded over the site and the area was seeded with native grasses. No manifests or records exist that characterize the wastes in the landfill.

During site investigations, intermittent seeps were observed emanating from the PK Landfill into Big Run Creek. In 1993, sampling was conducted at three of the seeps and at Big Run Creek approximately 40 ft downstream of the seeps. Sample results indicated that the seeps contained vinyl chloride; however, no vinyl chloride was detected in Big Run Creek.

In 1994, a portion of Big Run Creek was relocated approximately 50 ft to the east. A groundwater collection system was installed in the old creek channel to capture the seeps emanating from the landfill. A second collection system was constructed in 1997 on the southeastern landfill boundary to contain the groundwater plume migrating toward Big Run Creek from the X-749 Contaminated Materials Disposal Facility and the southern portion of the PK Landfill. A RCRA Subtitle D cap was constructed over the landfill in 1998.

In 2002, a five-year review was completed for the PK Landfill to evaluate the effectiveness of the corrective measures implemented at this area [see the report entitled *X-611A Prairie and the X-749B Peter Kiewit Landfill Five-Year Evaluation* (DOE 2002b)]. In response to the findings of the five-year review, the *Comprehensive Monitoring Program for the X-749 and Peter Kiewit Landfill Areas* (DOE 2003b) was developed to provide additional data to evaluate the effectiveness of the landfill cap and groundwater collection systems, and to determine whether a barrier wall was needed on the north and west sides of the PK Landfill.

The *Annual (2004) Summary Report of the Comprehensive Monitoring Plan Data for the X-749/Peter Kiewit Landfill Areas* (DOE 2005b) presented the findings of the *Comprehensive Monitoring Plan for the X-749 and Peter Kiewit Landfill Areas* (DOE 2003b). The landfill cap was performing adequately to impede surface water from percolating through landfill waste and potentially contaminating groundwater. The groundwater collection systems were, for the most part, preventing groundwater

beneath the landfill from reaching Big Run Creek, although low concentrations of VOCs have been detected in wells between the collection systems and Big Run Creek. Construction of a barrier wall on the upgradient (west and north) sides of the PK Landfill did not appear to be necessary based on evaluation of the PK Landfill cap, construction of the X-749 barrier walls, and evaluation of monitoring data.

The second five-year review for the PK Landfill was completed in 2008. This report, the *Second Five-Year Review for the X-749B Peter Kiewit Landfill* (DOE 2008f), found that the remedial actions implemented at the PK Landfill (the groundwater collection systems, landfill cap, and institutional controls) are achieving remedial action objectives by eliminating exposure pathways and reducing the potential for contaminant transport. Construction of a barrier wall on the upgradient sides of the PK Landfill does not appear to be necessary. Concentrations of many of the VOCs detected in the PK Landfill wells, sumps, and manholes have decreased significantly. VOCs detected in the PK Landfill wells, sumps, and manholes have not been detected in surface water samples collected from Big Run Creek adjacent to or downstream from PK Landfill.

In 2008, nine wells and two sumps were sampled to monitor this area. Table 1 provides the sampling schedule and monitoring parameters for the PK Landfill wells and sumps that were sampled in 2008. Figure 2 shows all the wells that are part of the monitoring program for the X-749/X-120/PK Landfill.

1.3.2 Quadrant I Groundwater Investigative Area/X-749A Classified Materials Disposal Facility

In the northern portion of Quadrant I, groundwater concerns focus on two areas: the Quadrant I Groundwater Investigative Area (also called the Five-Unit Groundwater Investigative Area) and the X-749A Classified Materials Disposal Facility. The X-231B Southwest Oil Biodegradation Plot is a part of the Quadrant I Groundwater Investigative Area.

During the RCRA Facility Investigation (RFI) of Quadrant I, VOCs (primarily trichloroethene) were detected in the Quadrant I Groundwater Investigative Area. A number of potential sources for groundwater contamination in this area were investigated during the RFI including X-231A Southeast Oil Biodegradation Plot, X-231B Southwest Oil Biodegradation Plot, X-600 Steam Plant, X-600A Coal Storage Yard, X-621 Coal Pile Runoff Treatment Facility, X-626 Recirculating Cooling Water Pump House and Cooling Tower, X-710 Technical Services Building (including X-710A Neutralization Pit and X-710 Radioactive Wastewater Tank), X-749A Classified Materials Disposal Facility, and the X-760 Pilot Investigation Building. Figure 3 shows the location of these potential sources and the *Quadrant I RFI Final Report* (Geraghty & Miller 1996) provides the history of the units in this area.

1.3.2.1 Quadrant I Groundwater Investigative Area/X-231B Southwest Oil Biodegradation Plot

The X-231B Southwest Oil Biodegradation Plot was used from 1976 to 1983 for land application of contaminated oil/solvent mixtures generated from the enrichment process and maintenance activities. The X-231B area is located west of the X-600 Steam Plant, and consisted of two disposal plots, each surrounded by an elevated soil berm, that were periodically fertilized and tilled to enhance aeration and promote biological degradation of waste oil. The X-231B area was not permitted as a RCRA-regulated land treatment unit. The X-231A Southeast Oil Biodegradation Plot is east of the X-231B and consisted of four smaller plots used similarly to the X-231B for land application of oil/solvent mixtures. A groundwater plume emanates from both of these units.

Three groundwater extraction wells (X231B-B10G, X231B-B11G, and X231B-B12G) were installed in 1991 south of the X-231B Southwest Oil Biodegradation Plot and west of the X-744K building. Eleven additional extraction wells (X622-EW01G through X622-EW11G) were installed in 2001-2002 as one of the remedial actions selected for this area and began operation in April 2002. Figure 3 shows the locations of the 14 extraction wells. Water from these wells is treated at the X-622 Groundwater Treatment Facility.

As part of the remedial actions required for this area, a multi-layered cap was installed on the X-231A and X-231B Oil Biodegradation Plots in 2000 to minimize groundwater infiltration and control the spread of contamination.

A five–year review of both the groundwater extraction system for the Quadrant I Groundwater Investigative Area (called the Five-Unit Groundwater Investigative Area in the Quadrant I Decision Document) and the multi-layered caps for the X-231A and X-231B Oil Biodegradation Plots was completed in 2008. This report, the *First Five-Year Review for the Five-Unit Groundwater Investigative Area and X-231A/X-231B Oil Biodegradation Plots* (DOE 2008b), found that the remedial actions have eliminated potential exposure pathways to contaminants and reduced concentrations of trichloroethene in the groundwater, although the remedial actions are not removing VOCs from the groundwater beneath the area as effectively as originally predicted by the groundwater model used to develop the Decision Document. An additional extraction well south of the X-326 Process Building will begin operation during 2009 to control and remediate a probable source of VOCs beneath the X-326 Process Building.

Three wells are sampled semiannually, 17 wells are sampled annually, 6 wells are sampled biennially, and one well is sampled every four years as part of the monitoring program for the Quadrant I Groundwater Investigative Area. Table 1 provides the sampling schedule and monitoring parameters for the wells that were sampled in 2008. Figure 3 shows the wells that are part of the monitoring program for the Quadrant I Groundwater Investigative Area. The IGWMP provides details on the monitoring program for this area.

1.3.2.2 X-749A Classified Materials Disposal Facility

The 6-acre X-749A Classified Materials Disposal Facility operated from 1953 through 1988 for the disposal of wastes classified under the Atomic Energy Act (see Figure 3). Potential contaminants include PCBs, asbestos, radionuclides, and industrial waste. Closure of the landfill, completed in 1994, included the construction of a multilayer cap and the installation of a drainage system to collect surface water runoff. The drainage system discharges via a USEC NPDES-permitted outfall.

Nine wells (see Figure 3 and Table 1) are sampled semiannually as part of the routine monitoring program for the X-749A Classified Materials Disposal Facility. Four additional wells are sampled semiannually as part of the assessment monitoring program at the X-749A Landfill, which began in 2007 due to exceedences of statistical control limits in one of the X-749A wells in the fourth quarter of 2006. Additional information and data evaluation are provided in the following letter reports: *Fourth Quarter 2007 Semiannual Rate and Extent Report for the X-749A Landfill* (Murphie March 24, 2008) and the *Second Quarter 2008 Semiannual Rate and Extent Report for the X-749A Landfill* (Murphie September 30, 2008).

Based on data collected during assessment monitoring in 2007 and 2008, three new wells were installed west of the X-749A Landfill and sampled for the first time in December 2008. These wells will be monitored in 2009 as required by the assessment monitoring program.

1.3.3 Quadrant II Groundwater Investigative Area

The Quadrant II Groundwater Investigative Area (also called the Seven-Unit Area) consists of an area of groundwater contamination with several potential sources (see Figure 4). One of these sources, the X-701C Neutralization Pit, was monitored prior to implementation of the IGWMP. The X-701C Neutralization Pit was an open-topped neutralization pit that received process effluents and basement sump wastewater such as acid and alkali solutions and rinse water contaminated with trichloroethene and/or trichloroethane from metal cleaning operations. The X-701C Neutralization Pit was located within a trichloroethene plume that is centered around the X-700 and X-705 buildings. In 2001, the X-701C Neutralization Pit was closed and removed in accordance with Ohio EPA regulations.

The natural groundwater flow direction in this area is to the east toward Little Beaver Creek. However, the groundwater flow pattern has been changed in this area by using sump pumps in the basements of the X-700 and X-705 buildings. The sump pumps minimize the spread of the groundwater plume in this area. The sumps collect the groundwater, which is treated at the X-627 Groundwater Treatment Facility.

In 2008, the *Work Plan for Additional Investigation of the 7-Unit Groundwater Plume Area* (DOE 2008g) was developed to identify potential source areas that may be contributing to the plume. DOE and Ohio EPA continue to work together to finalize this work plan.

Four wells are sampled annually and 14 wells sampled biennially as part of the monitoring program for this area. Table 2 provides the sampling schedule and monitoring parameters for the wells that were sampled in the Quadrant II Groundwater Investigative Area in 2008. Figure 4 shows all the wells that are part of the monitoring program. The IGWMP provides details on the monitoring program for this area.

1.3.4 X-701B Holding Pond

In the eastern portion of Quadrant II, groundwater concerns focus on three areas: the X-701B Holding Pond, the X-230J7 Holding Pond, and the X-744Y Waste Storage Yard (see Figure 5).

The X-701B Holding Pond was used from the beginning of plant operations in 1954 until November 1988. The pond was designed for neutralization and settlement of acid waste from several sources. Trichloroethane and trichloroethene were also discharged to the pond. Two sludge retention basins were located west of the holding pond and were used to hold sludge periodically dredged from the X-701B Holding Pond. The X-230J7 Holding Pond received overflow effluent from the X-701B Holding Pond. The X-744Y Waste Storage Yard is south of the X-701B Holding Pond. The yard is approximately 15 acres and surrounds the X-744G Bulk Storage Building. RCRA hazardous waste was managed in this area.

A contaminated groundwater plume extends from the X-701B Holding Pond to Little Beaver Creek. Three groundwater extraction wells (see Figure 5) were installed east of X-701B as part of the ongoing RCRA closure of the unit. These wells were designed to intercept contaminated groundwater emanating from the holding pond area before it could join the existing groundwater contaminant plume. Extracted groundwater is processed at the X-623 Groundwater Treatment Facility. This facility also processes water recovered from a shallow sump in the bottom of the X-701B Holding Pond. Two groundwater interceptor trenches (French drains) are used to intercept the groundwater plume prior to discharge to the East Drainage Ditch and Little Beaver Creek. These trenches, called the X-237 Groundwater Collection System (see Figure 5), consist of a 660-foot-long primary trench with two extraction wells, and a 440-foot-long secondary trench that intersects the primary trench. The extracted groundwater is treated at the X-624 Groundwater Treatment Facility.

Several treatment technologies for the removal of VOCs from soil and/or groundwater have been tested in the X-701B Holding Pond area. One of these projects, conducted between 1998 and 2000, used *in situ* injection of chemical oxidants (potassium permanganate or sodium permanganate) into soil and groundwater via horizontal wells (see Figure 5) or vertical injection wells. A number of wells in the area of these projects are monitored for manganese due to concerns about levels of residual manganese remaining in the groundwater.

In December 2003, Ohio EPA issued the X-701B Decision Document. Remedial actions required for soil in the X-701B Holding Pond area include removal of contaminated soil in the western portion of the area and consolidation of the soil under two landfill caps to be constructed over the X-701B Holding Pond/East Retention Basin and the West Retention Basin. Two landfill caps will be constructed so that an existing storm water drainage pipe will not be covered. Groundwater remediation is being accomplished by injection of a chemical oxidant.

The test phase of oxidant injections was completed in 2005 (Phase I). Full scale oxidant injections (Phase II) were completed in October 2006, April 2007, July/August 2007, April 2008, June/July 2008, and October 2008. The *Work Plan for the Groundwater Remediation of the X-701B Solid Waste Management Unit* (DOE 2006b) and the *Phase IIc Report for the Groundwater Remediation of the X-701B Solid Waste Management Unit* (DOE 2007d) provide additional information about this project. An assessment of the remediation to date is underway.

Thirty-four wells are sampled semiannually, 10 wells are sampled annually, and 1 well is sampled biennially as part of the monitoring program for this area. Table 2 provides the sampling schedule and analytical parameters for the wells that were sampled in 2008. Figure 5 shows the wells that are part of the monitoring program for the X-701B Holding Pond. The IGWMP provides details on the monitoring program for this area.

1.3.5 X-633 Pumphouse/Cooling Towers Area

The X-633 Pumphouse/Cooling Towers Area consists of a recirculating water pumphouse and four cooling towers with associated basins (see Figure 6). A piping system transported cooling water used in the gaseous diffusion process and some auxiliary processes to the cooling towers. The heated water from the process buildings was pumped into the cooling towers and cooled by a forced air draft through the cooling tower. The cooled water collected in a basin below the tower.

Chromium-based corrosion inhibitors were added to the cooling water until the early 1990s, when the system was converted to a phosphate-based inhibitor. Other chemicals added to the cooling water include zinc sulfate, sulfuric acid, and chlorine.

In December 1996, the X-633 Pumphouse/Cooling Towers Area was identified as an area of concern for potential metals contamination based on historical analytical data for groundwater wells in this area. Samples from wells in this area were collected in 1998 and 1999 to assess the area for metals contamination. The results of this sampling are described in the *Special Study for Metals and Radiological Parameters in Groundwater* (DOE 2000b). Based on the results of this study, which detected elevated concentrations of metals in groundwater in the area, the X-633 Pumphouse/Cooling Towers Area was added to the PORTS groundwater monitoring program in April 2001.

Two wells (see Table 2 and Figure 6) are sampled semiannually for chromium as part of the monitoring program for this area.

1.3.6 X-616 Chromium Sludge Surface Impoundments

The X-616 Chromium Sludge Surface Impoundments (see Figure 7) were two unlined surface impoundments used from 1976 to 1985 for storage of sludge generated by the treatment of water from the PORTS process cooling system. A corrosion inhibitor containing chromium was used in the cooling water system. Sludge containing chromium was produced by the water treatment system and was pumped into and stored in the X-616 impoundments. The sludge was removed from the impoundments and remediated as an interim action in 1990 and 1991. The unit was certified closed in 1993.

Seven wells are sampled annually and 9 wells are sampled biennially as part of the monitoring program for this area. Table 3 lists the wells that were sampled in 2008. Figure 7 shows all the wells that are part of the monitoring program for the X-616 Chromium Sludge Surface Impoundments. The IGWMP provides details on the monitoring program for this area.

1.3.7 X-740 Waste Oil Handling Facility

The X-740 Waste Oil Handling Facility (see Figure 8), which was located on the western half of PORTS south of the X-530A Switchyard, consisted of two hazardous waste management units, the X-740 Waste Storage Facility, and the X-740 Hazardous Waste Storage Tank (sump) located within the building. The X-740 Waste Storage Facility, which operated from 1983 until 1991, was used as an inventory and staging facility for waste oil and waste solvents that were generated from various plant operational and maintenance activities. The tank/sump, which was operated until 1990, was used to collect residual waste oil and waste solvents from containers crushed in a hydraulic drum crusher at the facility. The facility and sump initially were identified as hazardous waste management units in 1991. The X-740 Waste Oil Handling Facility (both the facility and sump identified as hazardous waste management units) underwent closure. Ohio EPA approved the closure certification in 1998. The X-740 Waste Oil Handling Facility was removed in 2006.

In 1999, DOE planted approximately 760 poplar trees in a 2.6-acre area above the groundwater plume near the X-740 Waste Oil Handling Facility (see Figure 8) in accordance with the Ohio EPA selected remedy for the facility. This remediation technique, phytoremediation, uses plants to remove or degrade contaminants in soil and groundwater.

A five-year review of this remedial action was completed in 2003. The report, entitled *Five-Year Evaluation Report for the X-740 Phytoremediation Project* (DOE 2003c), indicated that the trees were affecting groundwater in the X-740 Waste Oil Handling Facility area, although concentrations of VOCs detected in groundwater had not decreased. An additional review of this remedial action, the *Supplemental Evaluation to the 2003 Five Year Evaluation Report for the X-740 Phytoremediation Area* (DOE 2007e), found that the phytoremediation system has not performed as predicted by groundwater modeling. In response to Ohio EPA comments on this report, DOE submitted a work plan for additional remedial activities for the X-740 area. Three rounds of oxidant injections were completed in May, June/July, and September of 2008. Section 4.7.5 provides additional information about this project.

Ten wells are sampled semiannually, 4 wells are sampled annually, and 3 wells are sampled biennially as part of the monitoring program for this area. Table 3 lists the wells that were sampled in 2008. Figure 8 shows all the wells that are part of the monitoring program for the X-740 Waste Oil Handling Facility. The IGWMP provides details on the monitoring program for this area.

1.3.8 X-611A Former Lime Sludge Lagoons

The X-611A Former Lime Sludge Lagoons (see Figure 9) were three adjacent unlined sludge retention lagoons constructed in 1954 and used for disposal of lime sludge waste from the site water treatment plant from 1954 to 1960. The lagoons, which had a capacity of approximately 295,000 cubic yards, cover a surface area of approximately 18 acres. The lagoons were constructed in a low-lying area that included Little Beaver Creek. As a result, approximately 1500 feet of Little Beaver Creek was relocated to a channel just east of the lagoons.

As part of the RCRA Corrective Action Program, DOE developed a prairie habitat at this area by placing a soil cover over the north, middle, and south lagoons. A soil berm was constructed outside the northern boundary of the north lagoon to facilitate shallow accumulation of water in this low-lying area. In 2002, a five-year review was completed for the X-611A Former Lime Sludge Lagoons to evaluate the effectiveness of the corrective measures implemented at this area [see the report entitled *X-611A Prairie and the X-749B Peter Kiewit Landfill Five-Year Evaluation Report for the Portsmouth Gaseous Diffusion Plant, Piketon, Ohio,* (DOE 2002b)]. The report found that the soil cover and prairie habitat constructed at the X-611A Former Lime Sludge Lagoons were meeting the remedial action objectives for this unit by eliminating exposure pathways to the contaminants in the sludge at this area.

The *Second Five-Year Review for the X-611A Prairie* (DOE 2008e) was submitted to Ohio EPA in 2008. The report found that the soil cover and prairie habitat continued to meet the remedial action objectives for this unit by eliminating exposure pathways to the contaminants in the sludge at this area. Based on Ohio EPA comments on the report, three wells were sampled for PCBs in December 2008. PCBs were not detected in the samples. Section 4.7.6 provides more information about this sampling event.

Six wells (see Figure 9 and Table 4) are sampled semiannually as part of the monitoring program for this area. The IGWMP provides details on the monitoring program for this area.

1.3.9 X-735 Landfills

Several distinct waste management units are contained within the X-735 Landfills area (see Figure 10). The main units consist of the hazardous waste landfill, referred to as the X-735 RCRA Landfill (Northern Portion), and the X-735 Industrial Solid Waste Landfill (Southern Portion). The X-735 Industrial Solid Waste Landfill includes the industrial solid waste cells, asbestos disposal cells, and the closed chromium sludge monocells A and B. The chromium sludge monocells contain a portion of the chromium sludge generated during the closure of the X-616 Chromium Sludge Surface Impoundments.

Initially, the Ohio EPA and Pike County Department of Health approved a total of 17.9 acres for landfill disposal of conventional solid wastes. The landfill began operation in 1981. During operation of the landfill, DOE investigations indicated that approximately 12,000 pounds of wipe rags contaminated with solvents had been disposed inadvertently in the northern portion of the landfill. Historical data indicated that the wipe rags contaminated with solvents most likely contained methyl ethyl ketone, which was considered a hazardous waste. The contaminated rags were removed immediately from the solid waste stream by instituting new management controls to isolate contaminated rags as hazardous waste.

Waste disposal in the northern area ended in December 1991 and Ohio EPA determined that the area required closure as a RCRA hazardous waste landfill. Consequently, this unit of the sanitary landfill was identified as the X-735 Landfill (Northern Portion). A buffer zone was left unexcavated to provide space for groundwater monitoring wells and a space between the RCRA landfill unit and the remaining southern

portion, the X-735 Industrial Solid Waste Landfill. DOE has conducted routine groundwater monitoring at the X-735 Landfills since 1991.

The industrial solid waste portion of the X-735 Landfills includes a solid waste section and an asbestos waste section. The X-735 Industrial Solid Waste Landfill, not including the chromium sludge monocells, encompasses a total area of approximately 4.1 acres. Operation of the X-735 Industrial Solid Waste Landfill ceased in 1997, and this portion of the landfill was capped in 1998.

A Groundwater Quality Assessment of the X-735 Landfills was initiated in 2005. Assessment monitoring continued through 2007. Ohio EPA approved the *Corrective Measures Plan for the X-735 Landfill* (DOE 2007b) in April 2008.

Twenty-three wells (see Figure 10 and Table 4) are sampled semiannually as part of the routine monitoring program for this area. The X-735 Landfills area was also monitored in 2008 as required by the Corrective Measures Plan. Appendix D includes the X-735 monitoring data and statistical evaluations required under the Corrective Measures Plan.

1.3.10 X-734 Landfills

The X-734 Landfills (see Figure 11) consist of three landfill units: the X-734 Sanitary Landfill (approximately 3.4 acres), the X-734A Construction Spoils Landfill (approximately 7.6 acres), and the X-734B Construction Spoils Landfill (approximately 2.6 acres). Waste disposal at the X-734 Sanitary Landfill was discontinued in 1981 when the X-735 Landfill began operations. Waste disposal at the X-734A Construction Spoils Landfill was discontinued in 1985.

Detailed records of materials disposed in the landfill were not kept. However, wastes known to be disposed at the X-734 Sanitary Landfill include trash and garbage, construction spoils, organic solvents, and waste containing unspecified levels of heavy metals. Empty drums were also disposed in the X-734A Construction Spoils Landfill.

Waste disposed in the X-734B included construction spoils, fly ash, trees, railroad ties, broken concrete, stumps, roots, brush, rotten wood, and other wastes from clearing and grubbing operations. Other materials reportedly disposed of at X-734B may have included sanitary waste, empty paint cans, empty 55-gal drums, and uranium-contaminated soil from the X-342 area.

The X-734 Sanitary Landfill was closed in accordance with the solid waste regulations in effect at that time, and no groundwater monitoring of the unit was required. However, the X-734 Landfills were capped in 1999-2000 as part of the remedial actions required for Quadrant IV. A multimedia cap was installed on the X-734/X-734A Landfills and a soil cap was installed on the X-734B Landfill. Routine groundwater monitoring of this area began in April 2001.

The *First Five-Year Review for the X-734 Landfill Area* (DOE 2008c) was submitted to Ohio EPA in 2008. The report found that construction of the caps on the landfills has achieved remedial action objectives by isolating contaminants in soil and sediment from potential receptors. The caps are also preventing contaminants from migrating from soil to groundwater and from groundwater to surface water.

Fifteen wells (see Figure 11 and Table 4) are sampled semiannually under the monitoring program for this area.

1.3.11 X-533 Switchyard Area

The X-533 Switchyard Area (see Figure 11) consists of a switchyard containing electrical transformers and circuit breakers, associated support buildings, and a transformer cleaning pad. The groundwater area of concern is located north of the switchyard and associated support buildings near the transformer cleaning pad.

In December 1996, the X-533 Switchyard Area was identified as an area of concern for potential metals contamination based on historical analytical data for groundwater wells in this area. Samples from wells in this area were collected in 1998 and 1999 to assess the area for metals contamination. The results of this sampling are described in the *Special Study for Metals and Radiological Parameters in Groundwater* (DOE 2000b). Based on the results of this study, which detected elevated concentrations of metals in groundwater in the area, the X-533 Switchyard Area was added to the PORTS groundwater monitoring program in April 2001.

Three wells (see Figure 12 and Table 4) are sampled semiannually for cadmium, cobalt, and nickel under the monitoring program for this area.

1.4 SURFACE WATER MONITORING

Surface water monitoring is conducted in conjunction with groundwater monitoring to determine if contaminants present in groundwater are detected in surface water samples. In 2008, surface water samples were collected quarterly from 13 locations (see Table 5 and Figure 13). The purpose of each surface water monitoring location is listed below:

- Little Beaver Creek and East Drainage Ditch sample locations LBC-SW01, LBC-SW02, and EDD-SW01 assess potential groundwater discharges from the X-701B area;

- Little Beaver Creek sample location LBC-SW03 assesses potential contamination from the X-611A Former Lime Sludge Lagoons;

- Big Run Creek sample locations BRC-SW01 and BRC-SW02 monitor for potential groundwater discharges from the X-231B Southwest Oil Biodegradation Plot, Quadrant I Groundwater Investigative Area, and the X-749/X-120/PK Landfill area, all of which discharge into the X-230K Holding Pond and/or Big Run Creek;

- The Southwestern Drainage Ditch is sampled at two locations, UND-SW01 and UND-SW02, to assess potential groundwater discharges to this ditch and the X-2230M Holding Pond from the X-749/X-120/PK Landfill area;

- The North Holding Pond sample locations NHP-SW01 and LBC-SW04 assess potential groundwater discharges from any unknown Quadrant IV sources; and

- The West Drainage Ditch sample locations WDD-SW01, WDD-SW02, and WDD-SW03 assess potential groundwater discharges from the X-616 and X-740 areas to the West Drainage Ditch and the X-2230N Holding Pond.

1.5 WATER SUPPLY MONITORING

Residential drinking water sources near PORTS are monitored routinely in accordance with the requirements of Section VIII of the September 1989 Consent Decree between the State of Ohio and DOE and the water supply monitoring requirements contained in the IGWMP.

The purpose of the program is to sample groundwater drinking water sources from area residents who request the sampling to assure that their wells have not been adversely affected by plant operations. Although this program may provide an indication of contaminant transport off site, it should not be interpreted as an extension of the on-site groundwater monitoring program. Participation in the program is voluntary, and results are not used in hydrogeologic or geochemical investigations due to the lack of knowledge of how residential wells were constructed and due to the presence of various types of pumps that may not be ideal equipment for sampling.

Five residential drinking water sources participated in the program in 2008 (see Table 5 and Figure 14). Residential wells are sampled semiannually. The PORTS water supply is also sampled as part of this program. Sampling locations may be added or deleted if requested by a resident and as program requirements dictate. Typically, sampling locations are deleted when a resident obtains a public water supply. Sampling locations are added upon request if there is a probable hydrogeologic connection between PORTS and the resident's water supply.

2. GEOLOGY AT PORTS

This section provides a brief discussion of the geologic setting at PORTS including topography, geologic history, geologic structure, stratigraphy, and hydrogeology.

2.1 TOPOGRAPHY

PORTS occupies an upland area of southern Ohio with an average land surface elevation of 670 ft above mean sea level. The plant site sits in a mile-wide abandoned river valley situated approximately 130 ft above the Scioto River floodplain to the west. In much of the industrialized area of PORTS, the original topography has been modified and graded for construction of buildings and other facility components. Much of the industrialized area of PORTS is located on fill that was removed from the higher elevations of the plant site and placed in existing drainage valleys and depressions.

Local topography is dominated by ancient and recent streams at PORTS. The predominant landform in the site area is an undulating, broad, filled, ancient river valley. The valley is oriented north to south and is bounded on the east and west by deeply dissected ridges or low-lying hills. The surface of the river valley is modified by recent streams. A small valley is formed by Little Beaver Creek; this creek flows in a northwesterly direction across the middle of the site, just north and east of the main industrialized area. Other small valleys formed by streams have cut into the flat-lying unconsolidated deposits on which PORTS is sited. One of these valleys is that of a westward-flowing stream, the West Drainage Ditch, which is near the west-central area of the plant site. Two more streams are located in the southern portion of the industrialized area. In the southeast portion of the site, the southerly flowing stream, Big Run Creek, is situated in a relatively broad, gently sloping valley. An unnamed southerly and westerly flowing stream in the southwest portion of the site (the Southwestern Drainage Ditch) has formed a narrow, steep-walled valley.

2.2 GEOLOGIC HISTORY

The bedrock beneath PORTS is comprised of sandstone and shale deposited in an inland sea during the Mississippian Period (approximately 230 million years ago). The area was subsequently uplifted and gently folded. Erosion produced the deeply dissected, knobby terrain that characterizes southern Ohio.

Glaciation occurring 25,000 to 2 million years ago changed the direction of flow of streams, caused lakes to form, and filled in valleys with lake and river sediments. Prior to glaciation, the major drainage system in southern Ohio was the Teays River System. The river flowed northwest and passed about 3 miles north of PORTS.

The Portsmouth River, a north flowing tributary of the Teays, flowed across the area that is now occupied by PORTS. The Portsmouth River eroded a valley into bedrock (from shallowest to deepest: Cuyahoga shale, Sunbury shale, and in localized areas the Berea sandstone). The Sunbury was eroded into a wedge that diminishes to the west and exposed the Berea bedrock on the western third of the site. As the Portsmouth River meandered across the valley, silt, sand, and gravel were deposited; these unconsolidated fluvial deposits form the Gallia member (Gallia) of the Teays Formation. Subsequently, an advancing glacier north of PORTS blocked the northwestward flow of the Teays River, and a glacial lake, Lake Tight, filled the valleys of the Teays River and its tributary, the Portsmouth River. The Minford member (Minford) of the Teays Formation consists of the lacustrine silts and clays accumulated

in the lake. The Minford generally is composed of a lower portion of clayey silts, indicative of shallow lake levels or over-bank deposits, that grade into the upper portion of a series of laminated silty clays that probably were deposited as Lake Tight increased in size and depth.

Lake Tight overflowed its banks and initiated the "deep stage drainage"; the most significant "deep stage" stream in southern Ohio was the south-flowing Newark River. This river occupied the course of the present day Scioto River from Chillicothe to Portsmouth. As the glacier retreated, meltwater moved through the Newark River Valley and partially backfilled it with outwash. The Scioto River is situated on a thick layer of outwash in the valley formed by the Newark River.

2.3 GEOLOGIC STRUCTURE

The geologic structure of the area is comprised of rock strata dipping gently to the east-southeast at approximately 30 ft/mile (0.3 degree). No known major or minor faults are in the area; however, two distinct joint sets (i.e., fractures) are present in outcrops of thin (2- to 8-in. thick) sandstone laminations in the Cuyahoga Formation and the lower Berea/upper Bedford Formations. Azimuths for joint sets are N65^{o}E and N25^{o}W. Bedding plane fractures also have been identified.

2.4 STRATIGRAPHY

The unconsolidated Gallia and Minford members of the Teays Formation beneath PORTS are not continuous with the unconsolidated deposits in the Scioto River Valley to the west. A bedrock ridge forms the western valley wall that separates the two groups of unconsolidated deposits. In the vicinity of PORTS, the Cuyahoga, Sunbury, and Bedford Formations are predominantly shales, while the Berea Formation is predominantly sandstone. Figure 15 is a diagram of the general stratigraphy at PORTS.

2.4.1 Minford Member

The Minford is a lacustrine deposit consisting of two units with a gradational contact: the upper unit is predominantly silty clay with some very fine-grained sand and the lower silt unit is composed of clayey silt and very fine to fine-grained sand. Both units are continuous beneath PORTS.

2.4.2 Gallia Member

The Gallia, commonly referred to as the Gallia sand and gravel, is a fluvial deposit underlying the Minford member at a depth of approximately 25 ft below ground surface. The Gallia is discontinuous across the site and typically consists of a red-brown, clayey, medium to coarse sand and gravel. It overlies bedrock and has a mean thickness of slightly greater than 3 ft. The Gallia is usually poorly-sorted, often containing silt and clay as well as numerous pebble to cobble-sized rock fragments. The Gallia is commonly absent near bedrock highs, such as the bedrock valley walls. The coarser sands and gravels usually occur near the base of the unit and were deposited as point bar and/or channel lag deposits. The contact between the Minford and Gallia members varies from gradational to sharp.

2.4.3 Cuyahoga Shale

The Cuyahoga Formation, commonly referred to as the Cuyahoga shale, is the uppermost bedrock formation in the geographic area. It is a moderately-hard, thinly-laminated shale with numerous sandstone laminations. It forms hills surrounding the facility but is not found beneath the industrial portion of PORTS.

2.4.4 Sunbury Shale

The Sunbury shale is typically the uppermost bedrock unit beneath the PORTS facility. It is a competent black shale that averages about 10 to 15 ft in thickness beneath the eastern portion of the site, except where it is dissected by Little Beaver Creek or Big Run Creek. Beneath the western portion of the site, the ancient Portsmouth River eroded through the Sunbury shale and exposed the Berea sandstone. In this area, the Berea sandstone is the uppermost bedrock unit.

2.4.5 Berea Sandstone

The Berea Formation, commonly referred to as the Berea sandstone, is continuous beneath the industrial portion of PORTS. The Berea sandstone underlies the Sunbury shale on the eastern portion of the facility, and underlies the unconsolidated Minford and Gallia members of the Teays Formation on the western portion of the facility. A thin (1- to 3-in) zone of sulfide mineralization occurs at the interface between the Sunbury shale and the Berea sandstone. The Berea sandstone is approximately 30 ft thick. The upper portion of the Berea Formation, approximately 10 to 15 ft thick, is composed of a light-gray, hard, thickly bedded, fine-grained sandstone; the lower portion, approximately 5 to 20 ft thick, has numerous interlayered shale laminations and is very similar to the underlying Bedford Formation

2.4.6 Bedford Shale

The Bedford Formation, commonly referred to as the Bedford shale, is continuous beneath PORTS. It averages 100 ft in thickness, and consists of shale with thin interbeds and laminations of hard, gray, fine-grained sandstone and siltstone. In three local boreholes that penetrated the Bedford, the sandstone interbeds at 570 ft elevation above the national geodetic vertical datum (NGVD) of 1929 were saturated with petroleum.

2.4.7 Soils and Fill

Surface soils at PORTS are composed of loess, colluvium, and more recently deposited alluvium. During construction of the PORTS facility, up to 20 ft of fill was emplaced in some areas. The fill consists predominantly of Minford silt and clay removed from high areas at PORTS and relocated to low areas; this fill is nearly indistinguishable from undisturbed Minford deposits.

2.5 HYDROGEOLOGY

The Gallia has the highest hydraulic conductivity of any of the PORTS geologic units and is the primary groundwater flow and contaminant migration pathway. The hydraulic conductivity of the Minford silt member is somewhat lower than that of the Gallia, but is higher than that of the overlying Minford clay member.

The Berea sandstone is the uppermost bedrock water-bearing unit and a regional groundwater system. The Berea hydraulic conductivity is greater than the hydraulic conductivities of the shales lying above and below it.

The Minford clay member, Sunbury shale, and Bedford shale exhibit lower hydraulic conductivities than the Gallia and Berea units. The Minford clay member forms a semi-confining layer above the Gallia. The Sunbury shale, when greater than 4 ft thick, forms a confining layer above the Berea sandstone that also restricts the downward migration of groundwater and contaminants from the Gallia to

the Berea. The Bedford shale below the Berea is the lowest confining layer in the groundwater flow system due to its great thickness and shale composition.

2.5.1 Hydraulic Conductivities of the Unconsolidated Units

The average hydraulic conductivity for the Minford clay is 2.3×10^{-4} ft/day, and the average hydraulic conductivity for the Minford silt is 4.3×10^{-3} ft/day. These values are based on numerous laboratory tests (Law Engineering Testing Company 1982). The vertical hydraulic conductivities of Minford clay and Minford silt are approximately an order of magnitude lower than their horizontal hydraulic conductivities.

The hydraulic conductivity determined by single-well aquifer tests of the Gallia ranged from 0.11 to 150 ft/day with a mean value of 3.4 ft/day (Geraghty & Miller 1996). Use of area-specific hydraulic conductivity values, however, is recommended for groundwater velocity calculations. The area-specific hydraulic conductivities are obtained from the RCRA Facility Investigations and other technical reports.

2.5.2 Hydraulic Conductivities of the Bedrock Units

The estimated hydraulic conductivity of the Sunbury shale, based on numerical groundwater modeling, ranges from 1.6×10^{-4} ft/day to 9.6×10^{-4} ft/day (Geraghty & Miller 1996). The vertical hydraulic conductivity of the Sunbury shale is an order of magnitude lower than its horizontal hydraulic conductivity.

The hydraulic conductivity determined by single-well aquifer tests of the Berea sandstone ranges from 4.5×10^{-3} to 15 ft/day with a mean value of 0.16 ft/day. The higher hydraulic conductivity tends to occur in areas where the Sunbury shale is absent.

2.5.3 Groundwater Flow

The site-wide median depth to water in the Gallia was approximately 15 ft in 2008. Many factors can affect water table depth at a particular location, including seasonal variations due to increased or decreased precipitation, surface coverings such as buildings and parking lots, topography at the location, land use, thickness of the upper clay portion of the Minford Member, presence of storm drains, and operation of groundwater remediation processes (phytoremediation, extraction wells, sumps, and French drains).

Four creeks or drainage channels drain the facility: Little Beaver Creek drains the eastern and northern portion; Big Run Creek and the Southwestern Drainage Ditch drain the southeastern and southwestern portions; and the West Drainage Ditch drains the western portion. All four creeks and drainage ditches dissect the unconsolidated Minford and Gallia, the bedrock-forming Sunbury shale (where present), and Berea sandstone; therefore, groundwater discharges to them.

Groundwater flow beneath PORTS is generally toward one or another of these discharge locations, and groundwater divides form between the discharge locations along areas of highest groundwater elevation. The groundwater table is usually nearly flat around the divides making delineation of the divides imprecise. Figures 16 and 17 are diagrams of groundwater flow and divides at PORTS for the Gallia and Berea, respectively.

3. GROUNDWATER ELEVATIONS

Groundwater elevations are routinely measured at PORTS to track the direction and velocity of groundwater flow. At a minimum, groundwater elevations are measured semiannually at the IGWMP monitoring areas. Potentiometric maps and groundwater velocity calculations are developed based on these groundwater elevations. Section 3.1 summarizes the results of these semiannual measurements. Additional groundwater elevations were collected near the former X-740 Waste Oil Handling Facility to monitor the phytoremediation system at this area. These additional measurements are discussed in Section 3.2.

3.1 QUARTERLY POTENTIOMETRIC MAPS AND FLOW VELOCITIES

Figures 18a and 18b are the 2008 semiannual Gallia potentiometric maps. Figures 19a and 19b show the semiannual Berea potentiometric maps for 2008. The maps are based on the groundwater elevations measured during each quarter at the monitoring wells listed in Table 8. The maps are prepared by using a groundwater contouring program (Surfer, version 7.00) in addition to hand contouring in accordance with common technical practice.

The groundwater elevations and potentiometric maps are used to calculate representative groundwater flow velocities for each IGWMP monitoring area. The linear velocity of groundwater through porous media is calculated using the Darcy equation: $v = (K)(i)/n_e$ where:

v = linear velocity (ft/day)
K = hydraulic conductivity (ft/day)
i = hydraulic gradient (ft/ft)
n_e = effective porosity (fraction).

The hydraulic gradient for each area has been calculated from the potentiometric maps (see Figures 18a, 18b, 19a, and 19b). For each of the IGWMP monitoring areas, the hydraulic conductivity (K) and effective porosity (n_e) of the water-bearing zones have been determined by previous studies.

Groundwater flow directions and velocities in the Gallia and Berea in 2008 were consistent with results from 2007. The extraction wells that are one of the remedial actions selected for the Quadrant I Groundwater Investigative Area continue to create cones of depression around a number of the wells in the Gallia, as seen in the potentiometric maps for the Gallia in 2008 (see Figures 18a and 18b). The following table summarizes the semiannual hydraulic gradients and linear velocities for the Gallia and/or Berea water-bearing units at each IGWMP monitoring area in 2008.

Hydraulic gradients (i) and linear velocities (v) (ft/day) calculated for IGWMP monitoring areas
CY 2008

Monitoring area	Gallia[a]						Berea[a]			
X749/X-120/PKL	Eastern zone		Southern zone		Western zone		Eastern zone		Southern zone	
	K = 5.0		K = 6.0		K = 4.13		K = 1.0		K = 1.0	
	n_e = 0.30		n_e = 0.30		n_e = 0.30		n_e = 0.10		n_e = 0.10	
Quarter	i	v	i	v	i	v	i	v	i	v
1Q	0.030	0.6	0.007	0.14	0.006	0.1	0.025	0.3	0.009	0.1
3Q	0.031	0.6	0.003	0.06	0.005	0.1	0.026	0.3	0.008	0.1
Quad I/X-749A	Northern zone		Southern zone							
	K = 62		K = 62				K = 1.4			
	n_e = 0.25		n_e = 0.25				n_e = 0.10			
Quarter	i	v	i	v			i	v		
1Q	0.003	0.8	0.001	0.2			0.009	0.1		
3Q	0.004	1.0	0.001	0.2			0.009	0.1		
Quadrant II	K = 36.8									
	n_e = 0.25									
Quarter	i	v								
1Q	0.003	0.4					None[b]			
3Q	0.003	0.5								
X-701B	Western zone		Eastern zone							
	K = 57.5		K = 0.5				K = 2.5			
	n_e = 0.25		n_e = 0.25				n_e = 0.10			
Quarter	i	v	i	v			i	v		
1Q	0.002	0.5	0.035	0.1			0.007	0.2		
3Q	0.002	0.5	0.035	0.1			0.009	0.2		
X-633/X-533[c]	K = 0.75									
	n_e = 0.25									
Quarter	i	v								
1Q	0.019	0.06					None[b]			
3Q	0.016	0.05								
X-616	Western zone		Northwestern zone				Western zone		Northwestern zone	
	K = 36.7		K = 36.7				K = 7.5		K = 7.5	
	n_e = 0.25		n_e = 0.25				n_e = 0.10		n_e = 0.10	
Quarter	i	v	i	v			i	v	i	v
1Q	0.010	1.5	0.014	2.0			0.011	0.8	0.016	1.2
3Q	0.011	1.6	0.014	2.1			0.007	0.5	0.019	1.4
X-740	K = 4.25						K = 2.0			
	n_e = 0.20						n_e = 0.10			
Quarter	i	v					i	v		
1Q	0.010	0.2					0.009	0.2		
3Q	0.009	0.2					0.007	0.1		

Hydraulic gradients (i) and linear velocities (v) (ft/day) calculated for IGWMP monitoring areas CY 2008 (continued)

Monitoring area	Gallia[a]				Berea[a]	
X-611A					K = 2.5	
					n_e = 0.10	
Quarter					i	v
1Q	None[b]				0.015	0.4
3Q					0.015	0.4
X-735	Northern zone		Southern zone			
	K = 430		K = 430		K = 2.5	
	n_e = 0.25		n_e = 0.25		n_e = 0.10	
Quarter	i	v	i	v	i	v
1Q	0.002	3.0	0.003	5.0	0.001	0.03
3Q	0.002	2.9	0.004	7.6	0.001	0.03
X-734	K = 0.75				K = 0.06	
	n_e = 0.25				n_e = 0.10	
Quarter	i	v			i	v
1Q	0.021	0.1			0.038	0.02
3Q	0.021	0.1			0.038	0.02

[a]Some of the IGWMP monitoring areas are divided into more than one zone to determine the flow velocity and hydraulic gradient because of different directions of groundwater flow, variations in hydraulic gradient, or the absence of the water-bearing zone in parts of the monitoring area.

[b]Hydraulic gradients and linear velocities are not provided for the Berea aquifer at Quadrant II and X-633/X-533 because insufficient data are available for the Berea in these areas. Hydraulic gradients and linear velocities are not provided for the Gallia aquifer at X-611A because the Gallia is expected to be absent in this area and Gallia wells are installed only on the western and southern edges of the area.

[c]The X-633 Pumphouse/Cooling Towers Area has been combined with the X-533 Switchyard Area to determine hydraulic gradient and groundwater velocity because these areas are small and adjacent to each other.

K = hydraulic conductivity (ft/day). n_e = effective porosity (fraction). i = hydraulic gradient (ft/ft). v = linear velocity (ft/day).

3.2 GROUNDWATER ELEVATIONS NEAR THE FORMER X-740 WASTE OIL HANDLING FACILITY

As required by the IGWMP, groundwater elevations are measured in the wells or piezometers constructed in the Gallia, Berea, and Minford geologic units near the former X-740 Waste Oil Handling Facility to monitor the performance of the phytoremediation system. Groundwater elevations are collected as follows:

- For Minford wells, in the first and third quarters and on a monthly basis during the growing season (April through September)
- For Gallia and Berea wells, on a monthly basis during the growing season (April through September)
- For selected Gallia and Minford wells (X740-03G, X740-PZ03M, X740-PZ16M, and X740-PZ17G), hourly for 30 days during the growing season

Monthly groundwater elevations were measured at the X-740 Minford, Gallia, and Berea wells each month from April through September. Table 9 provides the monthly groundwater elevations for these wells from April through September 2008.

Because of the oxidant injections taking place in the X-740 monitoring area during 2008, hourly groundwater elevation measurements were not collected. The oxidant injections alter the static water levels in the monitoring wells. Ohio EPA granted an exemption to this requirement via an email dated June 25, 2008.

4. ANALYTICAL RESULTS

Sampling periods for the PORTS IGWMP are first quarter (January-March 2008), second quarter (April-June 2008), third quarter (July-September 2008), and fourth quarter (October-December 2008).

The IGWMP lists the parameters, analytical method numbers, well numbers or sample locations, and sampling frequencies for routine groundwater and related surface water monitoring at PORTS. Groundwater monitoring performed at PORTS in 2008 was completed in accordance with the IGWMP dated August 2007 and approved by Ohio EPA on November 21, 2007.

Monitoring requirements vary from area to area, although analyses are commonly completed for VOCs, metals, and radionuclides. Field parameters commonly measured include depth to water, dissolved oxygen, temperature, pH, conductivity, and turbidity. Tables 1 through 6 provide the sampling schedule and analytical parameters for the IGWMP monitoring wells and other IGWMP monitoring at PORTS in 2008.

Two VOCs, acetone and methylene chloride, were frequently detected in both environmental and blank samples (field and trip blanks) collected in 2008. Methylene chloride and acetone are common laboratory contaminants that are not typically detected in the PORTS groundwater plumes. Detections of methylene chloride and acetone are often qualified by the laboratory with a "B," which indicates that the analyte was also detected in the laboratory blank associated with the environmental sample and may be present due to laboratory contamination. Detections of these analytes in groundwater or surface water are not usually discussed in this report because data from the laboratory, trip, and field blanks appear to indicate that detections of these analytes are due to sample contamination.

Other VOCs, including trichloroethene, 2-butanone (methyl ethyl ketone), tetrachloroethene, carbon disulfide, chloroform, and toluene were detected in trip and/or field blanks during 2008. These detections indicate that samples (both environmental samples and blank samples) may become contaminated with low concentrations of VOCs during other portions of the sampling process, although contamination can still occur in the laboratory. Other sources of contamination may include storage areas for sampling equipment (such as bottles and blank water), areas in which samples are collected or prepared, sample containers (such as vials for volatile organics), and storage areas after samples are collected (such as refrigerators or sample shipping containers).

Detections of low concentrations of VOCs in blank samples do not indicate that data are not usable; these detections merely indicate that a positive bias for these constituents may be present in environmental samples. Data collected to meet IGWMP requirements are validated and qualified (as appropriate) in accordance with the data validation requirements in the IGWMP.

The analytical results and field measurements for monitoring performed in 2008 are provided in Appendices A through E as listed below:

- Appendix A – Groundwater monitoring required at Quadrant I (X-749 Contaminated Materials Disposal Facility/X-120 Old Training Facility/PK Landfill and Quadrant I Groundwater Investigative Area/X-749A Classified Materials Disposal Area)

- Appendix B – Groundwater monitoring required at Quadrant II (Quadrant II Groundwater Investigative Area, X-701B Holding Pond, and X-633 Pumphouse/Cooling Towers Area)

- Appendix C – Groundwater monitoring required at Quadrant III (X-616 Chromium Sludge Surface Impoundments and X-740 Waste Oil Handling Facility)

- Appendix D – Groundwater monitoring required at Quadrant IV (X-611A Former Lime Sludge Lagoons, X-735 Landfills, X-734 Landfills, and X-533 Switchyard Area)

- Appendix E – Other IGWMP monitoring (surface water and water supply monitoring)

Sections 4.1 through 4.4 discuss the analytical results for 2008 for the PORTS quadrants. Section 4.5 discusses surface water monitoring and Section 4.6 provides analytical results for water supply monitoring completed in 2008 in accordance with the IGWMP. Section 4.7 provides a summary of special studies associated with the IGWMP monitoring areas during 2008.

4.1 QUADRANT I

In Quadrant I, groundwater is monitored at two areas: X-749 Contaminated Materials Disposal Facility/X-120 Old Training Facility/PK Landfill and the Quadrant I Groundwater Investigative Area/X-749A Classified Materials Disposal Facility.

4.1.1 X-749 Contaminated Materials Disposal Facility/X-120 Old Training Facility/PK Landfill

This Area of Concern includes the X-749 Contaminated Materials Disposal Facility, X-120 Old Training Facility, and PK Landfill. These areas are discussed separately because of the different monitoring requirements for the X-749 Contaminated Materials Disposal Facility/X-120 Old Training Facility plume and the PK Landfill. Analytical results are summarized below. Appendix A provides the analytical data tables for this area. Figure 2 shows the groundwater monitoring wells at this area.

4.1.1.1 X-749 Contaminated Materials Disposal Facility/X-120 Old Training Facility plume

Eighty-four wells and one sump monitored the X-749 Contaminated Materials Disposal Facility/ X-120 Old Training Facility groundwater plume during CY 2008. This monitoring includes the additional sampling completed in accordance with the *Work Plan for the X-749/X-120 Area Groundwater Optimization Project* (DOE 2007f), which is discussed in Section 4.7.1. Tables 1 and 6 provide the sampling schedule and analytical parameters for the X-749/X-120 wells.

VOCs, including trichloroethene, are detected in many of the X-749 Contaminated Materials Disposal Facility/X-120 Old Training Facility wells. Figure 20 provides a map of the trichloroethene groundwater plume in the Gallia wells for this area.

The following table lists the concentrations of trichloroethene detected in selected X-749 Contaminated Materials Disposal Facility/X-120 Old Training Facility wells between the second quarter of 2000 through the fourth quarter of 2008. Data for wells that are within the phytoremediation areas (planted in 2002 and 2003) are shaded in gray.

Trichloroethene concentrations (in μg/L) in X-749/X-120 plume wells second quarter CY 2000 – fourth quarter CY 2008

Sampling event[a]	PK-09G	X120-05G	X120-11G	X749-04G	X749-41G	X749-42G
Northern and northwestern plume wells						
3Q/4Q-2008	150	6.4	ns	980	ns	16
2Q-2008	160 [b]	ns	ns	470 [b]	ns	ns
4Q-2007	130	ns	ns	320	ns	28
2Q-2007	150[b]	7.4	350	1600	340	ns
4Q-2006	ns	ns	ns	ns	ns	31
2Q-2006	120[b]	8.1	ns	ns	ns	ns
4Q-2005	ns	ns	ns	ns	ns	ns
2Q-2005	ns	7.1	610	ns	530	70
1Q-2005	140	ns	ns	1600	ns	ns
4Q-2004	140	6.1	370	640	390	93
3Q-2004	140	ns	ns	1500	ns	ns
2Q-2004	110	6.9	530	1500	450	77
1Q-2004	140	ns	ns	1900	ns	ns
4Q-2003	98	6.1	440[c]	1500	450	86
2Q-2003	69	5.7	600	ns	380	88
4Q-2002	ns	7	570	880	400	110
2Q-2002	ns	7	610	ns	350	81
4Q-2001	ns	8	590	620	360	120
2Q-2001	9	9	570	ns	340	97
4Q-2000	ns	12	580	480	370	110
2Q-2000	ns	14	670	ns	330	88

Sampling event[a]	X120-08G	X120-09G	X749-106G	X749-107G	X749-108G	X749-109G	X749-PZ06G
Western plume wells							
3Q/4Q-2008	ns	ns	130	140	150	11	26
2Q-2008	7.6	ns	140	150	160	19	ns
4Q-2007	7.2	ns	110	130	120	11	22
2Q-2007	7.6	45	160	150	150	16	21
4Q-2006	8.2	ns	160	180	190	13	13
2Q-2006	9.5	ns	150	150	140	12	19
4Q-2005	10	ns	200	170	190	2U	12
2Q-2005	11	96	180	160	180	0.46J	2.5
1Q-2005	ns	ns	ns	ns	ns	ns	9.9
4Q-2004	10	ns	ni	ni	ni	ni	2.2
3Q-2004	ns	ns	ni	ni	ni	ni	ns
2Q-2004	14	ns	ni	ni	ni	ni	ns
1Q-2004	ns	ns	ni	ni	ni	ni	ns
4Q-2003	13	ns	ni	ni	ni	ni	2U
2Q-2003	15	39	ni	ni	ni	ni	ns
4Q-2002	16	ns	ni	ni	ni	ni	ns
2Q-2002	17	ns	ni	ni	ni	ni	ns
4Q-2001	20U	ns	ni	ni	ni	ni	ns
2Q-2001	20U	84	ni	ni	ni	ni	ns
4Q-2000	21	ns	ni	ni	ni	ni	ns
2Q-2000	22	ns	ni	ni	ni	ni	ns

Trichloroethene concentrations (in μg/L) in X-749/X-120 plume wells second quarter CY 2000 – fourth quarter CY 2008 (continued)

Sampling event[a]	X749-06G	X749-07G	X749-08G	X749-13G	X749-27G
			Mid-plume wells		
3Q/4Q-2008	4300	940	110	81	100
2Q-2008	3900	390	130	ns	190
4Q-2007	5300	780	140	ns	110
2Q-2007	4600	460	160	85	ns
4Q-2006	4400	220	140	ns	ns
2Q-2006	3500	300	76	ns	ns
4Q-2005	4200	350	140	ns	ns
2Q-2005	3200	560	180	94	ns
1Q-2005	ns	500	230	ns	ns
4Q-2004	5600	420	190	110	ns
3Q-2004	ns	650	120	ns	ns
2Q-2004	7700	780	250	84	ns
1Q-2004	ns	990	300	ns	ns
4Q-2003	7700	690	490	140	ns
2Q-2003	7600	660	500	130	ns
4Q-2002	6400	690	700	160J	ns
2Q-2002	5500	780	800	130	ns
4Q-2001	5300	840	500	160	ns
2Q-2001	5500	1000D	190	120	ns
4Q-2000	5000	890	460	170	ns
2Q-2000	5600	760	350	160	ns

Sampling event[a]	X749-37G	X749-110G	X749-113G	STSW-101G	STSW-102G	X749-WPW[d]
			Mid-plume wells			
3Q/4Q-2008	130	460	ns	150	830	1100
2Q-2008	67	290	160	140	850	1000
4Q-2007	ns	470	260	ns	ns	1100
2Q-2007	110	320	180	ns	550	790
4Q-2006	ns	320	150	ns	ns	970
2Q-2006	ns	310	160	ns	550	520
4Q-2005	ns	380	180	ns	ns	1200
2Q-2005	130	250	180	140	580	950
1Q-2005	ns	ns	ns	ns	ns	ns
4Q-2004	180	ni	ni	140	640	ns
3Q-2004	ns	ni	ni	ns	ns	1500
2Q-2004	180	ni	ni	170	830	ns
1Q-2004	ns	ni	ni	ns	ns	2100
4Q-2003	230	ni	ni	ns	ns	750
2Q-2003	340	ni	ni	ns	ns	1000
4Q-2002	470	ni	ni	ns	ns	690
2Q-2002	360	ni	ni	ns	ns	590
4Q-2001	880	ni	ni	ns	ns	1500
2Q-2001	390	ni	ni	ns	ns	2000
4Q-2000	400	ni	ni	ns	ns	1800
2Q-2000	380	ni	ni	ns	ns	1900

Trichloroethene concentrations (in μg/L) in X-749/X-120 plume wells second quarter CY 2000 – fourth quarter CY 2008 (continued)

Sampling event[a]	X749-09GA[e]	X749-10GA[e]	X749-20G	X749-21G	X749-35G
			Eastern plume wells		
3Q/4Q-2008	33	0.55J	70	2.2	120
2Q-2008	52	0.58J	ns	2.4	ns
4Q-2007	57	0.52J	76	3.2	130
2Q-2007	67	0.48J	ns	2.7	ns
4Q-2006	45	0.54J	65	7.1	140
2Q-2006	61	0.68J	ns	2.8	ns
4Q-2005	61	0.91J	ns	3.4	ns
2Q-2005	ns	0.69J	ns	ns	ns
1Q-2005	130	0.75J	120	1.6J	200
4Q-2004	63	0.95J	91	4.4	190
3Q-2004	190	1.1J	88	1.9J	250
2Q-2004	160	0.93J	100	2.5	240
1Q-2004	160	0.92J	140	2	250
4Q-2003	140	1J	120	2.3	170
2Q-2003	120	0.98J	ns	8.8	ns
4Q-2002	37.1	10U	180	10	310
2Q-2002	ns	ns	ns	10	ns
4Q-2001	ns	ns	220	9	360
2Q-2001	2U	58	ns	5	ns
4Q-2000	2U	100	330	9	370
2Q-2000	2U	200	ns	7	ns

Trichloroethene concentrations (in μg/L) in X-749/X-120 plume wells second quarter CY 2000 – fourth quarter CY 2008 (continued)

Sampling event[a]	X749-54B	X749-BG9G	X749-PZ02G	X749-PZ10G	X749-PZ11G
			Eastern plume wells		
3Q/4Q-2008	11	0.69J	0.99J	910	140
2Q-2008	9.3	0.68J	0.99J	770	150
4Q-2007	10	3.6	0.67J	790	160
2Q-2007	4.4	0.33J	0.86J	770	160
4Q-2006	1.8J	0.64	1.3J	560	ns
2Q-2006	4.2	0.37J	1.2J	610	ns
4Q-2005	8.9	ns	1.2J	1000	ns
2Q-2005	ns	ns	1.3	ns	ns
1Q-2005	8.2	0.83J	ns	750	170
4Q-2004	41	0.45J	3	830	140
3Q-2004	31	0.9J	ns	750	170
2Q-2004	6.3	2U	1.9J	710	86
1Q-2004	7	5.6	ns	650	63
4Q-2003	27	8.4	2.4	1000	73
2Q-2003	23	ns	2.8	ns	ns
4Q-2002	27J	ns	2J	ns	ns
2Q-2002	29	ns	2	ns	ns
4Q-2001	2U	ns	2U	ns	ns
2Q-2001	24	ns	2U	ns	ns
4Q-2000	28	ns	2U	ns	ns
2Q-2000	17	ns	2U	ns	ns

[a]Sampling events are denoted by quarter and calendar year; i.e., 1Q-2008 is the first quarter CY 2008.

[b]The reported value is from a sample collected in the first quarter of the respective year.

[c]The reported value is from the sample collected from well X749-51B. Samples collected from wells X120-11G and X749-51B in the fourth quarter CY 2003 appear to have been switched.

[d]Samples were collected from this sump in the first and third quarters of 2000-2003 instead of the second and fourth quarters.

[e]Data from wells X749-09G and X749-10G (data from 2000 through the second quarter CY 2001) are also included.

U – undetected. D – The reported value was obtained from a secondary dilution. E – The result exceeds the calibration range. J – estimated. ni – not installed. ns – not sampled.

Gray shading indicates wells within phytoremediation areas.

Concentrations of trichloroethene are decreasing in two of the northwestern plume wells (X120-08G and X749-42G). However, trichloroethene is increasing in two wells (X749-PZ06G and X749-109G) south of this area in the southwestern portion of the plume, north of Perimeter Road. In the eastern portion of the plume, directly east of the X-749 Landfill, concentrations of trichloroethene are decreasing in wells X749-09GA, X749-20G, X749-21G, X749-35G, and X749-BG9G. The concentration of trichloroethene is also decreasing in well X749-13G, which is south of the landfill. The decreases in trichloroethene in groundwater on the southern and eastern sides of the landfill may be due to construction of the barrier walls on the south and east sides of the landfill completed in 2002.

Wells that monitor the X-749 South Barrier Wall area (in general, the area south of Perimeter Road) are of special interest because this area of the plume had migrated beyond the plant boundary. The following table lists concentrations of trichloroethene in the on-site X-749 South Barrier Wall monitoring wells in which trichloroethene is routinely detected.

Trichloroethene (in μg/L) detected in on-site X-749 South Barrier Wall wells second quarter CY 2002 – fourth quarter CY 2008

Sampling event[a]	X749-44G[b]	X749-45G[c]	X749-67G[b]	X749-97G[c]	X749-102G[d]	X749-PZ04G[d]
4Q-2008	16	3.5	520	1.1J	1.6J	24
3Q-2008	13	6.4	590	6.1	3.4	40
2Q-2008	14	12	540	18	6.2	110
1Q-2008	23	11	510	20	6.4	180
4Q-2007	33	17	490	13	7.6	320
3Q-2007	ns	ns	ns	63	8.8	470
New groundwater extraction wells begin operating June 29, 2007						
2Q-2007	34	80	570	110	8.1	380
1Q-2007	ns	ns	ns	64	8	460
4Q-2006	32	22	420	40	7.4	430
3Q-2006	ns	ns	ns	32	11	490
2Q-2006	31	57	550	46	8.9	430
1Q-2006	ns	ns	ns	8.6	2U	320
4Q-2005	26	9.6	580	2.6	6.3	270
Jun 2005	31	48	450	6.3	6.3	480
Apr 2005	30	59	550	5.1	6	540
Feb 2005	31	51	520	4.4	4.5	370
Dec 2004	25	36	590	2	5	260
Oct 2004	23	24	430	2.4	4.9	200
Aug 2004	26	50	550	4.6	4.6	300
2Q-2004	20	9.9	460	3.1	3	280
Hydrogen Release Compound®–extended release formula (HRC-X) injection April 2004						
1Q-2004	ns	ns	ns	8.8	3.6	470
4Q-2003	21	19	ns	5.5	4	410
2Q-2003	20	12	ns	5.8	ns	330
4Q-2002	11	7	ns	3J	ns	160
2Q-2002	10	6	ns	3	ns	120

[a]Sampling events are denoted by quarter and calendar year (1Q-2008 is the first quarter CY 2008) or month and calendar year.
[a]Upgradient from the HRC-X injection zone.
[b]Within the HRC-X injection zone.
[c]Downgradient from the HRC-X injection zone.
J – estimated. ns – not sampled.

The concentrations of trichloroethene detected in these on-site monitoring wells have decreased since the second quarter of 2007 with the exception of well X749-67G, which is upgradient from the extraction wells. The decreases appear to be due to the operation of the new groundwater extraction wells in this area.

VOCs were not detected in the other on-site X-749 South Barrier Wall area wells sampled in 2008 (X749-64B, X749-68G, X749-96G, X749-98G, X749-99M, X749-100M, X749-101M, X749-103G, X749-104G, X749-105G, X749-PZ03G, and X749-PZ05G).

Off-site monitoring wells WP-01G through WP-07G were sampled quarterly with the exception of wells WP-02G and WP-04G, which were sampled semiannually. In the first quarter, trichloroethene was detected at an estimated concentration of 0.33 μg/L in well WP-01G, which is directly south of well X749-97G. VOCs were not detected in the second, third, or fourth quarter samples collected from this well. No VOCs (except the common laboratory contaminant acetone) were detected in samples from wells WP-02G, WP-04G, WP-05G, and WP-06G.

VOCs have been detected in well WP-03G since the well was first sampled in the second quarter of 2004. The following table summarizes the VOCs detected in this well since sampling began in the second quarter of 2004. None of the detected VOCs were above the respective PRGs.

VOCs (in μg/L) detected in off-site monitoring well WP-03G
second quarter CY 2004 – fourth quarter CY 2008

Sampling event[a]	1,1,1-TCA (200)[b]	1,1-DCA (5860)	1,1-DCE (7)	1,2-DCA (5)	cis-1,2-DCE (70)	TCE (5)
4Q-2008	2U	0.62J	0.24J	2U	2U	0.88J
3Q-2008	2U	0.46J	0.23J	2U	2U	0.82J
2Q-2008	2U	0.67J	0.43J	2U	2U	1.3J
1Q-2008	0.3J	1.8J	0.88J	2U	0.2J	3
4Q-2007	0.35J	2.4	1.2J	0.56J	0.28J	3.6
3Q-2007	0.29J	1.9J	0.98J	0.36J	0.21J	2.9
New groundwater extraction wells begin operating June 29, 2007						
2Q-2007	2U	2	1.1J	0.54J	0.23J	3.1
1Q-2007	0.49J	2.5	1.4J	0.5J	0.24J	3.7
4Q-2006	0.46J	2.8	1.4J	0.64J	0.32J	3.3
3Q-2006	0.43J	1.9J	1.1J	0.49J	0.25J	3.3
2Q-2006	0.38J	1.8J	1.2J	0.49J	0.24J	3.2
1Q-2006[c]	0.59J/0.5J	2.8/2	1.5J/1J	0.74J/0.7J	0.26J/0.3J	3.3/4
4Q-2005	0.52J	2	1.1J	0.59J	0.25J	2.9
3Q-2005	0.46J	1.8J	0.95J	0.62J	0.2J	2.3
2Q-2005	0.17J	0.58J	0.4J	2U	2U	1J
1Q-2005	0.2J	0.71J	0.43J	0.22J	2U	1.1J
2Q-2004	2U	0.43J	0.27J	2U	2U	0.64J

[a]Sampling events are denoted by quarter and calendar year; i.e., 1Q-2008 is the first quarter CY 2008.
[b]The PRG for each parameter is provided in parentheses.
[c]Samples were analyzed by two laboratories. The first result is from STL Colorado; the second from Lionville Laboratory.
1,1,1-TCA – 1,1,1-trichloroethane. 1,1-DCA – 1,1-dichloroethane. 1,1-DCE – 1,1-dichloroethene. 1,2-DCA – 1,2-dichloroethane. cis-1,2-DCE – cis-1,2-dichlorethene. TCE – trichloroethene. U – undetected. J – estimated.

The concentrations of VOCs detected in well WP-03G are decreasing due to the operation of four new groundwater extraction wells.

In the fourth quarter of 2007, additional sampling was completed off-site in the area of well WP-03G to determine the rate and extent of plume migration in the area as described in the *Work Plan for the X-749/X-120 Area Groundwater Optimization Project*. Six temporary groundwater monitoring points were sampled to determine the locations of three new permanent groundwater monitoring wells (wells WP-05G, WP-06G, and WP-07G). Sampling of these new wells began in the fourth quarter of 2007 and continued on a quarterly basis in 2008.

Low concentrations of trichloroethene and trichloroethene degradation products have been detected in the samples collected from well WP-07G. The following table summarizes the VOCs detected in well WP-07G. None of the detected VOCs was above the respective PRG.

VOCs (in μg/L) detected
in off-site monitoring well WP-07G
fourth quarter CY 2007 – fourth quarter CY 2008

Sampling event[a]	1,1-DCA (5860)[b]	1,1-DCE (7)	TCE (5)
4Q-2008	0.22J	2U	2U
3Q-2008	0.24J	2U	0.19J
2Q-2008	0.39J	0.23J	0.35J
1Q-2008	0.61J	0.25J	0.76J
4Q-2007	0.55J	0.16J	0.58J

[a]Sampling events are denoted by quarter and calendar year; i.e., 1Q-2008 is the first quarter CY 2008.
[b]The PRG for each parameter is provided in parentheses.
1,1-DCA – 1,1-dichloroethane. 1,1-DCE – 1,1-dichloroethene. TCE – trichloroethene. J – estimated. U – undetected.

As also noted for off-site monitoring well WP-03G, VOCs are decreasing in well WP-07G due to the operation of four new groundwater extraction wells, which began operating on June 29, 2007.

Other VOCs detected at or above their respective PRGs in X-749/X-120 wells sampled in 2008 include:

- 1,1,1-trichloroethane (detected in three wells at concentrations ranging from 200 to 900 μg/L, which equal or exceed the PRG of 200 μg/L)

- 1,1,2-trichloroethane (detected in two wells at concentrations ranging from 34 to 83 μg/L, which exceed the PRG of 5 μg/L)

- 1,1-dichloroethene (detected in 34 wells at concentrations ranging from 7.8 to 1800 μg/L, which exceed the PRG of 7 μg/L)

- 1,2-dichloroethane (detected in 17 wells at concentrations ranging from 5.9 to 110 μg/L, which exceed the PRG of 5 μg/L)

- chloroform (detected in two wells at concentrations ranging from 100 and 460 μg/L, which equal or exceed the PRG of 100 μg/L)

- *cis*-1,2-dichloroethene (detected in six wells at concentrations of 84 to 1700 μg/L, which exceed the PRG of 70 μg/L).

- tetrachloroethene (detected in five wells at concentrations ranging from 5.9 to 300 μg/L, which exceed the PRG of 5 μg/L)

- vinyl chloride (detected in ten wells at concentrations ranging from 2 to 51 μg/L, which equal or exceed the PRG of 2 μg/L)

Samples collected from nine of the X-749/X-120 wells sampled during 2008 were analyzed for selected metals (arsenic, cadmium, chromium, cobalt, copper, lead, nickel, selenium, vanadium, and zinc). None of these metals were detected at concentrations above the respective PRGs.

Samples from two wells (PK-09G and X749-20G) and one sump (X749-WPW) were analyzed for transuranics, technetium-99, total uranium, and isotopic uranium. No transuranics were detected in the samples. Technetium-99 was detected at 296 pCi/L in well X749-20G, which is below the EPA drinking water standard (900 pCi/L, based on a 4 mrem/year dose from beta emitters). This level of technetium-99 (296 pCi/L) has decreased from the levels last detected in this well between 2003 and 2005, which ranged from 374 to 579 pCi/L. Technetium-99 was also detected at 6610 pCi/L in the sample collected from sump X749-WPW, which collects groundwater from the collection trench on the southwest side of the X-749 Landfill. This level of technetium-99 is typical for the sump. Uranium and uranium isotopes, if detected, were detected at concentrations or activities typical for the wells and sumps.

Technetium-99 was also analyzed in 27 additional wells in accordance with the *Work Plan for the X-749/X-120 Area Groundwater Optimization Project* (DOE 2007f). Section 4.7.1.3 provides more information about this project.

4.1.1.2 PK Landfill

Nine wells and two sumps (PK-PL6 and PK-PL6A) that monitor the PK Landfill were sampled during CY 2008. Samples were analyzed for the parameters listed in Tables 1 and 6.

VOCs are routinely detected in samples collected from wells PK-17B and PK-21B. The following table summarizes VOCs most commonly detected in wells PK-17B and PK-21B from the first quarter of 1999 through the fourth quarter of 2008.

VOCs (in μg/L) detected in wells PK-17B and PK-21B
first quarter CY 1999 - fourth quarter CY 2008

Sampling event[a]	PK-17B				PK-21B				
	1,1-DCA (5860)[b]	*cis*-1,2-DCE (70)	TCE (5)	VC (2)	1,1-DCA (5860)	1,1-DCE (7)	*cis*-1,2-DCE (70)	TCE (5)	VC (2)
4Q-2008	3.9	57	1.8J	**41**	150	1.6J	13	0.52J	**27**
3Q-2008	3.7	50	1.6J	**20**	160	2.1	13	0.59J	**20**
2Q-2008	1.7J	26	0.75J	**10**	170	1.7J	12	0.46J	**20**
1Q-2008	1.3J	21	0.56J	**11**	150	2.3	13	0.57J	**25**
4Q-2007	3.4	48	1.3J	**28**	160	2	14	0.58J	**22**
3Q-2007	3	42	1.2J	**32**	160	1.9J	14	0.57J	**17**
2Q-2007	4.8	54	2U	**34**	160	2.8	15	2U	**26**
1Q-2007	2.4	35	0.95J	**16**	170	2.1	14	0.53	**21**
4Q-2006	1.5J	21	0.58J	**10**	170	2.1	14	0.63J	**23**
3Q-2006	3.5	57	2	**24**	160	2.1J	15	10U	**17**
2Q-2006	3.7	53	2.5	**24**	150	2.5	13	0.6J	**29**
1Q-2006	1.1J	15	0.53J	**7.6**	180	2.4	14	0.7J	**23**
4Q-2005	2.9	49	2.7	**18**	160	2	15	0.71J	**20**
3Q-2005	3.8	53	1.7J	**25**	220	2.6	14	0.75J	**26**
1Q-2005	1.4J	19	0.8J	**11**	190	2.5J	15	10U	**27**
4Q-2004	3.9J	57	1.7J	**30**	180	20U	15J	20U	**20**
3Q-2004	3J	47	2.2J	**20**	180	3J	15	0.81J	**22**
2Q-2004	1.2J	18	0.51J	**7**	160	2.3J	13	0.59J	**23**
1Q-2004	1.4J	17	0.6J	**12**	180	2.7J	15	10U	**19**
4Q-2003	2	27	1.2J	**11**	200	2.9	16	0.69J	**25**
3Q-2003	3.8	50	2.6	**28**	240	3.1	16	2U	**26**
1Q-2003	2U	6.2	2U	**4.5**	220	10U	14	10U	**35**
3Q-2002	5	51	4	**36**	240	10U	15	10U	**34**
1Q-2002	2	27	2	**15**	220	10U	13	10U	**44**
3Q-2001	3	48	4	**17**	220E	4	20	2U	**32**
1Q-2001	2U	23	2	**14**	200	4	18	2U	**34**
3Q-2000	3	45	4	**21**	270	5	22	2U	**37**
1Q-2000	3	36	3	**20**	280D	5	21	2U	**40**
3Q-1999	6J	49	2	**28**	250D	5	23	2U	**47**
2Q-1999	3	48	**7**	**28**	240	5	24	2U	**45**
1Q-1999	2U	33	4	**14**	240	10U	26	10U	**43**

[a]Sampling events are denoted by quarter and calendar year; i.e., 1Q-2008 is the first quarter CY 2008.
[b]The PRG for each parameter is provided in parentheses. Results in bold type are at or above the PRG.
1,1-DCA – 1,1-dichloroethane. 1,1-DCE – 1,1-dichloroethene. *cis*-1,2-DCE – *cis*-1,2-dichloroethene. TCE – trichloroethene. VC – vinyl chloride. U – undetected. J – estimated. D – The reported value was obtained from a secondary dilution. E – The result exceeds the calibration range.

VOCs detected in the PK Landfill wells and sumps include 1,1,1-trichloroethane, 1,1-dichloroethane, 1,1-dichloroethene, 1,2-dichloroethane, benzene, carbon disulfide, chlorobenzene, chloroethane, *cis*-1,2-dichloroethene, *trans*-1,2-dichloroethene, trichloroethene, and vinyl chloride. One or more of these VOCs were detected in three of the seven remaining PK Landfill wells (PK-15B, PK-16G, and PK-19B). Most of these detections were estimated concentrations less than 1 μg/L and all of the detections were below the respective PRGs with one exception. Vinyl chloride was detected at 2.2 μg/L in the fourth quarter sample collected from well PK-16G, which exceeds the PRG of 2 μg/L. Vinyl chloride is occasionally detected in this well at concentrations just above the PRG.

VOCs are routinely detected at low concentrations in the PK Landfill sumps (PK-PL6 and PK-PL6A). Only 1,1-dichloroethene (PRG of 7 μg/L), trichloroethene (PRG of 5 μg/L), and vinyl chloride (PRG of 2 μg/L) were detected at concentrations above the PRGs in 2008. Trichloroethene was detected at a maximum concentration of 6 μg/L in PK-PL6A; 1,1-dichloroethene was detected at maximum concentrations of 8.8 μg/L in PK-PL6 and 11 μg/L in PK-PL6A; and vinyl chloride was detected at a maximum concentration of 2.6 μg/L in PK-PL6A.

Four wells (PK-11G, PK-14G, PK-17B, and PK-19B) were analyzed for RCRA metals (arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver). None of these metals were detected at concentrations exceeding the applicable PRG.

4.1.2 Quadrant I Groundwater Investigative Area/X-749A Classified Materials Disposal Facility

The areas with routine groundwater monitoring activities in the Quadrant I Groundwater Investigative Area (5-Unit Area) are the Quadrant I Groundwater Investigative Area VOC plume and the X-749A Classified Materials Disposal Facility. The X-749A Classified Materials Disposal Facility is considered an industrial solid waste landfill and is monitored as specified in the IGWMP. Analytical results are summarized below. Appendix A provides the analytical data tables for this area. Figure 3 shows the groundwater monitoring wells at this area.

4.1.2.1 Quadrant I Groundwater Investigative Area VOC plume

Twenty-one wells that monitor the Quadrant I Groundwater Investigative Area VOC plume were sampled during the first quarter and/or third quarters of CY 2008. Samples were analyzed for VOCs, metals, and/or radionuclides as detailed in Tables 1 and 6.

Trichloroethene was detected in each of the 21 wells sampled in 2008. Figure 21 shows the Gallia groundwater trichloroethene plume in this area and the locations of the extraction wells. The concentration of trichloroethene detected in well X326-09G (on the western edge of the plume at the southwest corner of the X-326 Process Building) increased to 14,000 μg/L in the third quarter (trichloroethene was detected at 8300 μg/L in the sample collected in the first quarter of 2008). Activities are underway to install an additional extraction well near well X326-09G.

Trichloroethene was also detected in two new wells (X749A-18G and X749A-19G) installed west of the X-749A Landfill. Based on these detections, the eastern edge of the Quadrant I Groundwater Investigative Area plume is further east than previously known. Section 4.1.2.2 provides more information about the monitoring results for wells associated with the X-749A Landfill.

The following table provides the concentrations of trichloroethene detected in the plume wells between the first quarter of 2000 and the third quarter of 2008. Wells in which trichloroethene has never been detected or has not been recently detected at concentrations above the PRG (5 μg/L) may not be included in the table.

Trichloroethene concentrations (in μg/L) in Quadrant I Groundwater Investigative Area plume wells first quarter CY 2000 - third quarter CY 2008

Sampling event[a]	X230K-14G	X230K-15G	X231A-01G	X231A-04G	X231B-02G	X231B-03G	X231B-04G
3Q-2008	5.4	2.6	24[b]	15	580	260	ns
3Q-2007	ns	1.7J	26[b]	21	400	480	350
1Q-2007	5.2	ns	95[b]	ns	480	690	330
3Q-2006	ns	4.5	37	20	920	1300E	720
1Q-2006	ns	ns	ns	ns	690	1300	750
3Q-2005	7.6	2	58	41	230	390	260
1Q-2005	ns	ns	ns	ns	650	690	290
3Q-2004	ns	4.3	47	75	820	2100	340
1Q-2004	ns	ns	ns	ns	660	1100	430
3Q-2003	7.7	5.7	30	100	600	1200	510
1Q-2003	ns	ns	ns	ns	300	1200	410
3Q-2002	ns	6	17	95	300	570	220
Extraction wells begin operating in April 2002							
1Q-2002	ns	ns	ns	ns	3300	320	160
3Q-2001	12	2	12	180	3800	300D	190
1Q-2001	ns	ns	ns	ns	4700	260	190
3Q-2000	ns	3	17	240	3800	280	220
1Q-2000	ns	ns	ns	ns	5200	180	260

Sampling event[a]	X231B-06G	X231B-07G	X231B-08G	X231B-12G	X231B-14G	X231B-15G	X231B-20G
3Q-2008	230	ns	ns	ns	180	1.2J/1.4J[c]	61
3Q-2007	150	ns	22	8.2	160	1.2J	59
1Q-2007	53	100	11	7.7	180	0.95J	68
3Q-2006	870	ns	39	11	210	0.89J	58
1Q-2006	370	ns	22	13	230	0.81J	80
3Q-2005	280	96	27	12	200	1.7J	110
1Q-2005	58	ns	32	13	210	1.6J	73
3Q-2004	270	ns	75	15	230	1.8J	120
1Q-2004	30J	ns	95	17	200	2.1	140
3Q-2003	270	ns	160	22	220	1.7J	270
1Q-2003	14	180	170	28	230	2U	420
3Q-2002	250	ns	85	44	220	2U	580
Extraction wells begin operating in April 2002							
1Q-2002	260	ns	140	140	250	2	990
3Q-2001	240D	ns	210E	260	230	45	440
1Q-2001	120E	ns	120	160	250	2U	820
3Q-2000	33	ns	240	130	240	3	740
1Q-2000	19	ns	120	96	230	2U	470

Trichloroethene concentrations (in μg/L) in Quadrant I Groundwater Investigative Area plume wells first quarter CY 2000 - third quarter CY 2008 (continued)

Sampling event[a]	X231B-23G	X231B-28G	X231B-29G	X231B-32B	X231B-36G	X231B-37G	X326-09G
3Q-2008	3.5	ns	ns	0.59J	71	23	8300/14,000[c]
3Q-2007	5.6	3.9	ns	0.54J	ns	31	11,000
1Q-2007	3.1	2.5	19	ns	77	27	8800
3Q-2006	5	1.7J	ns	2U	ns	35	9000
1Q-2006	12	1.2J	ns	ns	ns	32	4700
3Q-2005	2.1	1.2J	84	0.22J	86	31	7500
1Q-2005	2	0.91J	ns	ns	ns	29	7300
3Q-2004	4.8	0.95J	ns	0.28J	ns	29	4500
1Q-2004	4.8	1.5J	ns	ns	ns	29	4000
3Q-2003	7.4	2.4	110	0.3J	ns	40	4200
1Q-2003	8.4	3.3	ns	ns	150	47	3000
3Q-2002	16	2U	ns	2U	ns	45	3400
Extraction wells begin operating in April 2002							
1Q-2002	120	2U	ns	ns	ns	68	2800
3Q-2001	230	2U	540	4	ns	61	ni
1Q-2001	120	2U	ns	ns	ns	70	ni
3Q-2000	260	2U	ns	2U	ns	66	ni
1Q-2000	33	2U	ns	ns	ns	75	ni
3Q4Q-1999	40	2U	430	ns	270	79	ni
1Q2Q-1999	99	2U	ns	2U	ns	80	ni

Sampling event[a]	X326-10G	X626-07G	X710-01G	X760-02G	X760-03G	X760-07G	X770-MW17G
3Q-2008	9.2/12[c]	120	ns	ns	400	430	5100
3Q-2007	13	350	ns	ns	ns	ns	3800
1Q-2007	11	290	27	0.82J	340	480	7300
3Q-2006	14	430	ns	ns	ns	ns	5400
1Q-2006	14	300	ns	ns	ns	ns	8700
3Q-2005	11	280	14	0.96J	470	500	6600
1Q-2005	15	380	ns	ns	ns	ns	5900
3Q-2004	11	480	ns	ns	ns	ns	7900
1Q-2004	24	690	ns	ns	ns	ns	6200
3Q-2003	9	560	23	1.9J	ns	ns	740
1Q-2003	12	760	ns	ns	190	440	6700
3Q-2002	3	1600	ns	ns	ns	ns	6200
Extraction wells begin operating in April 2002							
1Q-2002	4	2900	ns	ns	ns	ns	6900
3Q-2001	ni	3600	24	5	ns	ns	ns
1Q-2001	ni	2600	ns	ns	ns	ns	ns
3Q-2000	ni	2400	ns	ns	ns	ns	ns
1Q-2000	ni	1800	ns	ns	ns	ns	ns
3Q4Q-1999	ni	1900	13	6	25	140	ns
1Q2Q-1999	ni	1200	ns	ns	ns	ns	ns

[a]Sampling events are denoted by quarter and calendar year; i.e., 1Q-2008 is the first quarter CY 2008.
[b]Well sampled in the second and fourth quarters of 2007 and second quarter of 2008.
[c]Also sampled in the first quarter of 2008. First quarter result is followed by third quarter result.
U – undetected. D – The reported value was obtained from a secondary dilution. E – the result exceeds the calibration range. J – estimated. ni – not installed. ns – not sampled.

Other VOCs detected at or above their respective PRGs include:

- 1,1-dichloroethene (detected in five wells at concentrations ranging from 22 to 73 μg/L, which exceed the PRG of 7 μg/L)

- chloroform (detected at 390 and 400 μg/L in well X326-09G, which exceed the PRG of 100 μg/L)

- *cis*-1,2-dichloroethene (detected at 340 μg/L in well X770-MW17G, which exceeds the PRG of 70 μg/L)

The detection limits for VOCs analyzed in some of the samples are high (in some cases higher than the PRGs) because the high concentration of trichloroethene in the samples required dilution of the samples.

Four wells (X231B-06G, X231B-36G, X231B-37G, and X626-07G) were analyzed for RCRA metals (arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver). None of these metals were detected at concentrations exceeding the applicable PRG. Samples from these wells were also analyzed for radionuclides (transuranics, technetium-99, total uranium, and isotopic uranium). No transuranics were detected in the wells. Technetium-99, uranium, and uranium isotopes, if detected, were present at concentrations or activities typical for these wells.

4.1.2.2 X-749A Classified Materials Disposal Facility

Wells that are part of the IGWMP monitoring program for the X-749A Classified Materials Disposal Facility were sampled during the second and fourth quarters of CY 2008. Figure 3 shows the groundwater monitoring wells for this area, and Appendix A provides the analytical data. Samples were analyzed for the parameters listed in Tables 1 and 6.

During 2008, samples were also collected from the X-749A monitoring wells for the assessment monitoring program that began in 2007. As a result of the assessment monitoring program, three new wells (X749A-17G, X749A-18G, and X749A-19G) were installed in the area during 2008 and sampled for the first time during the fourth quarter. Samples from these new wells were analyzed for the parameters listed in Appendix I to OAC 3745-29-10 (effective June 1, 1994), which includes metals and VOCs. Appendix A includes the assessment monitoring data collected during 2008. Additional information about the assessment monitoring data collected in 2008 is provided in the letter report entitled *Second Quarter 2008 Semiannual Rate and Extent Determination for the X-749A Landfill* (Murphie September 30, 2008).

In 2008, VOCs were detected in several of the X-749A wells on the west side of the X-749A Landfill and the eastern edge of the Quadrant I Groundwater Investigative Area VOC plume. Trichloroethene and other VOCs were detected above the applicable PRGs in well X231A-01G; this well is part of the plume in the Quadrant I Groundwater Investigative Area (see Section 4.1.2.1). Trichloroethene and/or *cis*-1,2-dichloroethene were also detected in wells X749A-01G, X749A-11G, X749A-12G, X749A-18G, and X749A-19G, with trichloroethene above the PRG (5 μg/L) in samples collected from newly installed wells X749A-18G (14 μg/L) and X749A-19G (27 μg/L).

Samples collected from X-749A wells in the second quarter of 2008 were analyzed for the parameters listed in Appendix II to OAC 3745-29-10 (effective June 1, 1994), which includes additional metals, semivolatile organic compounds (SVOCs), herbicides, pesticides, and PCBs. No herbicides or PCBs were detected in the samples. One SVOC, fluorine, was detected at 10 μg/L in the sample collected from well X231A-01G. There is no PRG for fluorine.

Several pesticides (dieldrin, methoxychlor, delta-BHC, lindane, and heptachlor) were detected at concentrations of 0.15 μg/L or less in the sample collected from well X231A-01G. However, three of the five detections were qualified by the laboratory because when the samples were analyzed, there was greater than 25% difference for detected concentrations between two gas chromatograph columns. These data qualifiers indicate that there is uncertainty associated with these results. These detections are less than the PRGs (if available).

Samples from X-749A Classified Materials Disposal Facility wells were analyzed for metals in the second quarter or fourth quarter of 2008. Chromium (190 μg/L) and nickel (150 μg/L) were detected above the PRG (100 μg/L for both metals) in the second quarter sample collected from well X749A-07G. These metals have been detected near or above the PRG in this well since 2005, which may be due at least in part to turbidity in this well. Turbidity measured in this well for samples collected between 2001 and 2004 ranged from 11 to 45 nephelometric turbidity units (NTU), but was 198 NTU in the second quarter of 2008. Well X749A-07G is upgradient from the X-749A Classified Materials Disposal Facility; therefore, these detections cannot result from a release from the landfill. Cobalt also exceeded the PRG in the second quarter sample collected from well X749A-01G (17 μg/L – PRG 13 μg/L).

Concentrations of several additional metals exceeded the respective PRGs in the second quarter sample collected from well X231A-01G. Beryllium (5 μg/L – PRG 6.5 μg/L), cadmium (33 μg/L – PRG 6.5 μg/L), cobalt (700 μg/L – PRG 13 μg/L), manganese (18,000 μg/L – PRG 14,300 μg/L), and nickel (540 μg/L – PRG 100 μg/L) all exceeded PRGs. The elevated metal concentrations detected in X231A-01G may be due to previous treatability studies conducted at the eastern end of the X-231A Oil Biodegradation Plot in 1996-1997 that may have increased the solubility of some metals in the soil.

In addition, concentrations of copper, cobalt, and nickel exceeded PRGs in at least one of the samples collected from the new X-749A wells sampled in the fourth quarter. Some of these detections may be due to turbidity, which was measured at 976 NTU in well X749A-18G and 85 NTU in well X749A-19G. Concentrations of metals detected in these wells will be evaluated in 2009 as part of the assessment monitoring program for the X-749A Landfill.

Assessment monitoring began at X-749A in 2007 due to exceedences of both control limits for alkalinity in the sample collected from well X749A-01G in the fourth quarter of 2006. Although assessment monitoring was taking place at the landfill throughout 2008, concentrations of alkalinity, chloride, sodium, sulfate, and total dissolved solids in downgradient Gallia wells (X231A-01G, X749A-01G, X749A-03G, and X749A-12G) continue to be statistically evaluated to monitor potential impacts to groundwater and trends in concentrations of the statistical monitoring parameters. Intra-well Shewart and cumulative summation (CUSUM) control limits are calculated using historical baseline data for each well. If either of these control limits is exceeded, an impact is tentatively identified. The Shewart control limit is sensitive to rapid increases in the concentrations of indicator parameters; whereas the CUSUM control chart limit is sensitive to gradual increases in indicator parameters.

In 2008, the Shewart control limit and/or CUSUM control limit were exceeded for alkalinity in the second quarter and fourth quarter samples collected from well X749A-01G. The CUSUM control limit for sodium in well X749A-01G was also exceeded in the fourth quarter. None of the control limits for the statistical monitoring parameters were exceeded in the other downgradient wells that monitored the X-749A Classified Materials Disposal Facility wells during 2008. Appendix A includes a summary of the statistics calculated for the X-749A Classified Materials Disposal Facility compliance wells in 2008.

Samples from the X-749A wells were not analyzed for radionuclides in 2008.

4.2 QUADRANT II

In Quadrant II, groundwater is monitored at three areas: Quadrant II Groundwater Investigative Area, X-701B Holding Pond, and X-633 Pumphouse/Cooling Towers Area.

4.2.1 Quadrant II Groundwater Investigative Area

Four wells that monitor the Quadrant II Groundwater Investigative Area were sampled in the first quarter of CY 2008. Samples were analyzed for VOCs as detailed in Tables 2 and 6. Figure 4 shows the monitoring wells at this area, and Appendix B provides the analytical data for this area.

Figure 22 shows the trichloroethene Gallia groundwater plume for this area. Concentrations of trichloroethene detected in the southern arm of the plume (wells X720-01G and X720-08G) have been increasing over the past several years; however, the concentration of trichloroethene detected in well X720-01G in 2008 decreased to 64,000 μg/L from 92,000 μg/L in 2007. This is the second consecutive year that trichloroethene concentrations have decreased in this well. Trichloroethene continues to increase in well X720-08G (6200 μg/L in 2008; 5600 μg/L in 2007).

Well X333-01G, which is north of the Quadrant II Groundwater Investigative Area, was sampled for trichloroethene in 2008 as requested by Ohio EPA. Trichloroethene was not detected in the sample.

The following table provides the concentrations of trichloroethene detected in the plume wells between the first/third quarter of 1999 and the first quarter of 2008. Wells in which trichloroethene has never been detected or has been detected only at concentrations below the PRG are not included in the table.

Trichloroethene concentrations (in μg/L) in Quadrant II Groundwater Investigative Area plume wells first/third quarter CY 1999 - first quarter CY 2008

Sampling event[a]	X700-02G	X701-26G	X701-28GA[b]	X701-68G	X701-69G	X701-70G
1Q-2008	7200	ns	ns	ns	ns	ns
3Q-2007	7200	5.1	2U	43	1500	1500
3Q-2006	7200	ns	ns	35	1900	1700
3Q-2005	2900	3.9	0.23J	64	1700	1100
3Q-2004	7600	ns	ns	210	2800	730
3Q-2003	9400	3	1.4J	290	2100	370
3Q-2002	7200	ns	ns	200	2000	460
3Q-2001	8500	4	3	51	2100	490
3Q-2000	9800	ns	ns	50	2200	480
1Q3Q-1999	9500	9	11	50	2300	330

Trichloroethene concentrations (in μg/L) in Quadrant II Groundwater Investigative Area plume wells first/third quarter CY 1999 - first quarter CY 2008 (continued)

Sampling event[a]	X701-117GA	X705-01GA[b]	X705-02G	X705-03G	X705-04G	X705-06G
1Q-2008	ns	ns	ns	ns	91	ns
3Q-2007	310	120	43	47	150	56
3Q-2006	220	160	ns	ns	210	ns
3Q-2005	230	130	28B	29	200	66
3Q-2004	180	140	ns	ns	380	ns
3Q-2003	140B	130	11	19	200	85
3Q-2002	120	160	ns	ns	ns	ns
3Q-2001	59	140	40U	16	4U	99
3Q-2000	ni	190	ns	ns	ns	ns
1Q3Q-1999	ni	250	8	9	2U	140

Sampling event[a]	X705-07G	X720-01G	X720-08G
1Q-2008	ns	64,000	6200
3Q-2007	11	92,000	5600
3Q-2006	13	130,000	4700
3Q-2005	14	120,000B	3400B
3Q-2004	20	110,000	2800
3Q-2003	23	54,000	2100
3Q-2002	26	73,000	1800
3Q-2001	33	89,000	ni
3Q-2000	43	67,000	ni
1Q3Q-1999	65	84,000	ni

[a]Sampling events are denoted by quarter and calendar year; i.e., 1Q-2008 is the first quarter CY 2008.
[b]Data from 1999 and 2000 are from wells X701-28G and X705-01G, which were replaced by the wells listed in the table.
B – detected in the laboratory blank sample. J – estimated. U – undetected. ni – not installed. ns – not sampled.

Other VOCs detected above their respective PRGs include:

- 1,1,1-trichloroethane (detected in well X720-01G at 500 μg/L, which exceeds the PRG of 200 μg/L)
- 1,1-dichloroethene (detected in three wells at concentrations ranging from 100 to 660 μg/L, which exceed the PRG of 7 μg/L)
- carbon tetrachloride (detected in well X705-04G at 11 μg/L, which exceeds the PRG of 5 μg/L)
- chloroform (detected in well X705-04G at 410 μg/L, which exceeds the PRG of 100 μg/L)

The detection limits for VOCs analyzed in some of the samples are high (in some cases higher than the PRGs) because the high concentration of trichloroethene in the samples required dilution of the samples.

Only VOCs were analyzed in the samples collected from the Quadrant II Groundwater Investigative Area wells during 2008.

4.2.2 X-701B Holding Pond

Forty-four wells that monitor the X-701B Holding Pond area were sampled in the first and/or third quarters of CY 2008. Samples were analyzed for VOCs, metals, radionuclides, and/or other parameters as detailed in Tables 2 and 6. Figure 5 shows the monitoring wells at this area, and Appendix B provides the analytical data for this area.

Samples from 40 wells were analyzed for VOCs. Figure 23 shows the Gallia groundwater trichloroethene plume in this area. Concentrations of trichloroethene continue to vary in the western portion of the monitoring area near the former X-701B Holding Pond and X-701B extraction wells due to the oxidant injections in this area, which have taken place in October 2006, April 2007, July/August 2007, April 2008, June/July 2008, and October 2008. The concentration of trichloroethene increased by a factor of ten between first and third quarter samples collected from well X701-05G (4.1 and 42 μg/L, respectively). In addition, concentrations of trichloroethene are increasing in two of the wells that monitor the plume in the X-744G area (X701-01G and X744G-03G).

Concentrations of trichloroethene have returned to typical levels (low concentrations or undetected) in wells in the eastern portion of the monitoring area downgradient of the X-237 Groundwater Collection System (X701-15G and X701-16G). Trichloroethene concentrations were elevated in samples collected from wells X701-15G and X701-16G in the third quarter of 2007. Based on data collected in the first and third quarters of 2008, these elevated detections were anomalies possibly caused by the dry weather during 2007. The elevated detections of trichloroethene in the third quarter of 2007 do not appear to indicate any problems with the X-237 Groundwater Collection System.

The following table provides the concentrations of trichloroethene detected in the X-701B Holding Pond plume wells between the first quarter of 1999 and the third quarter of 2008. Wells in which trichloroethene has never been detected or has been detected only at estimated concentrations less than the PRG (5 μg/L) are not included in the table.

Trichloroethene concentrations (in μg/L) in X-701B Holding Pond Area plume wells first quarter CY 1999 - third quarter CY 2008

Sampling event[a]	LBC-PZ03	X230J7-01GA[b]	X230J7-02GA[b]	X230J7-03GA[b]	X701-01G	X701-02G	X701-05G
3Q-2008	66	na	na	na	51	8.1	42
1Q-2008	36	220	750	1800	30	8	4.1
3Q-2007	64	na	na	na	23	9.2	15
1Q-2007	24	230	960	1900	8	8.9	1J
Phase II oxidant injections begin in October 2006							
3Q-2006	45	na	na	na	6.8	13	4.8
1Q-2006	32	220	1200	1700	4	18	3.4
3Q-2005	150	na	na	na	6.1	2U	58
1Q-2005	34	190	1000	2600	6.5	8.7	2.7
3Q-2004	180	na	na	na	11	8.1	160
1Q-2004	41	190	1300	3700	16	3.5	19
3Q-2003	140	na	na	na	34	8	32
1Q-2003	48	140	1300	3800	15	8.6	3.1
3Q-2002	220	na	na	na	27	8	51
1Q-2002	89	120	1300	3000	12	7	12
3Q-2001	200	110	1200	6300	26	10	64
1Q-2001	240	ns	ns	ns	ns	12	13
3Q-2000	130	80	1200	8800	ns	12	29
1Q-2000	77	ns	ns	ns	ns	11	25
3Q4Q-1999	170	150	970	1700	21	14	ns
1Q-1999	140	ns	ns	ns	ns	6	ns

Sampling event[a]	X701-06G	X701-08G	X701-09G	X701-10G	X701-12G	X701-13G	X701-14G
3Q-2008	46	340,000	na	2400	40	2600	na
1Q-2008	63	ns	210,000	1300	94	3800	37,000
3Q-2007	82	180,000	ns	1700	290	5000	20,000
1Q-2007	72	ns	200,000	1900	73	2700	49,000
Phase II oxidant injections begin in October 2006							
3Q-2006	92	240,000	na	1200	44	5600	na
1Q-2006	120	ns	510,000	1800	47	7400	44,000
3Q-2005	70	410,000	na	1900	21	760	93,000
1Q-2005	150	ns	630,000	2800	27	1100	180,000
3Q-2004	110	76,000	na	3400	29	1400	na
1Q-2004	130	ns	600,000	3000	17	2100	80,000
3Q-2003	110	210,000	na	960	48	5100	38,000
1Q-2003	140	ns	450,000	1100	79	9200	50,000
3Q-2002	120	270,000	na	1300	97	10,000	ns
1Q-2002	92	ns	490,000	1300	52	7300	62,000
3Q-2001	110	370,000	na	1400	63	5300	95,000D
1Q-2001	110	ns	ns	1400	55	11,000	ns
3Q-2000	88	390,000	160,000	1500	100	26,000	150,000
1Q-2000	62	ns	ns	1100	100	37,000	ns
3Q4Q-1999	ns	670,000	200U	1300	38	18,000	200,000
1Q-1999	ns	300,000	730	1000	130	160,000	240,000

Trichloroethene concentrations (in μg/L) in X-701B Holding Pond Area plume wells first quarter CY 1999 - third quarter CY 2008 (continued)

Sampling event[a]	X701-15G	X701-16G	X701-20G	X701-21G	X701-23G	X701-24G	X701-30G
3Q-2008	9	2U	na	32	2.2	13,000	4.3
1Q-2008	5.1	1.2J	140,000	16	ns	13,000	4.7
3Q-2007	250	8.9	na	24	1.7J	11,000	5.3
1Q-2007	6.4	2U	180,000	30	ns	10,000	4.4
Phase II oxidant injections begin in October 2006							
3Q-2006	6.8	2U	na	30	1.5J	15,000	9
1Q-2006	1.5J	2U	140,000	55	ns	7900	7.7
3Q-2005	5.4	0.36J	na	70	1.1J	14,000	6.6
1Q-2005	1.5J	0.19J	170,000	33	ns	4500	8.7
3Q-2004	5.9	0.16J	na	99	2.5	7700	12
1Q-2004	2.5	2U	210	39	ns	16,000	14
3Q-2003	6.9	2U	na	46	2.1	5500	8.5
1Q-2003	8.3	2U	140,000	35	ns	9800	9.2
3Q-2002	7	2U	na	48	2U	18,000	28
1Q-2002	2	2U	140,000	50	ns	6400	18
3Q-2001	7	2U	190,000	85	2U	19,000	8
1Q-2001	9	2U	ns	82	ns	14,000	8
3Q-2000	15	2U	280,000	170	2U	24,000	ns
1Q-2000	6	2U	ns	180	ns	9900	ns
3Q4Q-1999	12	2U	390,000	510	2U	27,000	13
1Q-1999	15	2U	ns	650	2U	27,000	13

Sampling event[a]	X701-127G	X701-128G	X701-BW2G	X744G-02G	X744G-03G
3Q-2008	56,000	16,000	na	32	1.6J
1Q-2008	100,000	23,000	1100	14	1.4J
3Q-2007	85,000	20,000	na	37	1.5J
1Q-2007	56,000	20,000	770	17	0.9J
Phase II oxidant injections begin in October 2006					
3Q-2006	50,000	10,000	na	14	0.91J
1Q-2006	60,000	16,000	750	11	0.47J
3Q-2005	63,000	13,000	na	16	2U
1Q-2005	85,000	16,000	670	13	0.26J
3Q-2004	97,000	19,000	na	16	0.2J
1Q-2004	130,000	24	750	30	0.29J
3Q-2003	96,000	22,000	na	30	2U
1Q-2003	100,000	38,000	1200	26	2U
3Q-2002	ni	ni	1100	31	2U
1Q-2002	ni	ni	ns	29	2U
3Q-2001	ni	ni	ns	26	2U
1Q-2001	ni	ni	ns	ns	ns
3Q-2000	ni	ni	ns	ns	ns
1Q-2000	ni	ni	ns	ns	ns
3Q4Q-1999	ni	ni	ns	ns	ns
1Q-1999	ni	ni	ns	ns	ns

[a]Sampling events are denoted by quarter and calendar year; i.e., 1Q-2008 is the first quarter CY 2008.
[b]Data from 1999 is from wells X230J7-01G, 02G, and 03G, which were replaced by wells X230J7-01GA, 02GA, and 03GA.
U – undetected. D – The reported value was obtained from a secondary dilution. J – estimated. na – not analyzed. ns – not sampled. ni – not installed.

Other VOCs detected at or above their respective PRGs include:

- 1,1,1-trichloroethane (detected in well X701-08G at an estimated concentration of 340 μg/L, which exceeds the PRG of 200 μg/L)

- 1,1-dichloroethene (detected in five wells at concentrations ranging from 7.3 to 32 μg/L, which exceed the PRG of 7 μg/L)

- 1,1,2-trichloroethane (detected in well X701-127G at an estimated concentration of 100 μg/L, which exceeds the PRG of 5 μg/L)

- *cis*-1,2-dichloroethene (detected in nine wells at concentrations ranging from 76 to 4900 μg/L, which exceed the PRG of 70 μg/L)

- tetrachloroethene (detected in five wells at concentrations ranging from 6.5 to 1000 μg/L, which exceed the PRG of 5 μg/L)

- vinyl chloride (detected in three wells at concentrations ranging from 2.3 to 52 μg/L, which exceed the PRG of 2 μg/L)

The detection limits for VOCs analyzed in a number of samples are high (in many cases higher than the PRGs) because the high concentration of trichloroethene in the sample required dilution of the sample.

Samples from selected wells (see Tables 2 and 6) were analyzed for calcium, iron, magnesium, potassium, and sodium. Each of these metals is commonly detected in groundwater and is usually detected in each of the samples. PRGs are not provided as a basis for evaluation of the concentrations of these metals in groundwater.

Samples from 35 wells were analyzed for selected transuranics (americium-241, neptunium-237, plutonium-238, and plutonium-239/240), technetium-99, total uranium, and isotopic uranium (uranium-233/234, uranium-235, uranium-236, and uranium-238). No transuranics were detected in the X-701B Holding Pond samples collected during 2008.

In 2008, technetium-99 was detected in 15 of the 35 wells sampled for radionuclides. The highest activity of technetium-99 was detected in well X701-14G (710 pCi/L), which is the highest detection of technetium-99 in this well from 1999 to the present. All of the detections were less than the Ohio EPA drinking water standard for technetium-99 (900 pCi/L, based on a 4 mrem/year dose from beta emitters).

The following table summarizes the detections of technetium-99 in X-701B Holding Pond wells that routinely contain technetium-99. Wells in which technetium-99 was detected only once or twice between 1999 and 2008 at activities less than 45 pCi/L are not included in the table.

Technetium-99 activities (in pCi/L) in X-701B Holding Pond Area wells
first quarter CY 1999 - third quarter CY 2008

Sampling event[a]	X230J7-02GA[b]	X230J7-03GA[b]	X701-05G	X701-06G	X701-08G	X701-09G	X701-12G
3Q-2008	na	na	455	7.06U	ns	na	204
1Q-2008	31.9	23.6	471	13.2	222	199	181
3Q-2007	na	na	515	6.02U	944	na	198
1Q-2007	21.3	11.7	625	7.52U	ns	727	216
Phase II oxidant injections begin in October 2006							
3Q-2006	na	na	60.7	5.72U	6.74U	na	176
1Q-2006	43.1	19.3	451	8.23U	ns	111	436
3Q-2005	na	na	40.6	4.3	297	na	309
1Q-2005	28.4	31.4	291	6.59U	ns	96.3	758
3Q-2004	na	na	47.3	5.46U	504	na	579
1Q-2004	21.5	28.2	345	14.9	ns	70.8	537
3Q-2003	na	na	134	11.7	17.5	na	402
1Q-2003	15.8	19.1	245	24.3	ns	56.4	215
3Q-2002	na	na	61.8	27.2	26.7	na	236
1Q-2002	18	9.52	787	26.7	ns	67.7	265
3Q-2001	14	17	66	25	18.67	ns	287.05
1Q-2001	ns	ns	1145	12	ns	ns	188
3Q-2000	5U	7U	314	8U	20	72	193
1Q-2000	ns	ns	864	26	ns	ns	241
3Q-1999	38	85	ns	ns	60	1912	231
1Q-1999	ns	ns	ns	ns	41	2476	181

Sampling event[a]	X701-13G	X701-14G	X701-20G	X701-21G	X701-127G	X701-BW2G	X701-BW4G
3Q-2008	181	na	na	90.8	8.67U	na	190
1Q-2008	138	710	97.8	41.9	16.4	50.6	298
3Q-2007	170	235	na	33.3	11.6	na	301
1Q-2007	168	209	110	40.8	16.1	409	335
Phase II oxidant injections begin in October 2006							
3Q-2006	113	na	na	75.4	-0.127U	na	291
1Q-2006	107	103	85.3	111	10.7	482	315
3Q-2005	491	81.5	na	141	10.1	na	267
1Q-2005	475	84.4	101	145	4.7U	729	217
3Q-2004	641	na	na	236	12.1	na	212
1Q-2004	238	131	118	211	-0.694U	382	184
3Q-2003	213	437	na	241	10.8	ns	121
1Q-2003	133	252	133	190	37.1	0.422U	119
3Q-2002	146	ns	na	197	ni	ns	143
1Q-2002	195	131	147	152	ni	65	117
3Q-2001	214	261	191	150	ni	na	95
1Q-2001	155	ns	ns	104	ni	ns	82
3Q-2000	127	131	163	79	ni	ns	72
1Q-2000	106	ns	ns	76	ni	ns	83
3Q-1999	302	190	209	72	ni	ns	59
1Q-1999	263	504	ns	78	ni	ns	66

[a]Sampling events are denoted by quarter and calendar year; i.e., 1Q-2008 is the first quarter CY 2008.
[b]Data from 1999 is from wells X230J7-02G and 03G, which were replaced by wells X230J7-02GA and 03GA.
U – undetected. na – not analyzed. ni – not installed. ns – not sampled.

Well X701-05G historically contains the highest levels of uranium and uranium isotopes detected in the X-701B Holding Pond monitoring area. The following table provides the concentrations of uranium and activities of uranium isotopes detected in this well between the first quarter of 2000 and the third quarter of 2008.

Uranium (in μg/L) and uranium isotopes (in pCi/L) detected in well X701-05G first quarter CY 2000 - third quarter CY 2008

Sampling event[a]	U (total) (1000)[b]	U-233/234 (124,000)	U-235 (43)	U-236	U-238 (6.7)
3Q-2008	54.48	101.7	4.778	0.6373	**17.87**
1Q-2008	84.43	166.4	7.19	1.133	**27.72**
3Q-2007	55.48	109.1	5.141	0.7394	**18.18**
1Q-2007	107.7	200.2	8.274	1.582	**35.43**
3Q-2006	30.69	62.02	2.759	0.4431	**10.06**
1Q-2006	140.1	282.3	12.87	1.799	**45.92**
1Q-2005	82.35	156.9	7.044	1.131	**27.03**
3Q-2004	14.63	28.29	1.121	0.1936	4.814
1Q-2004	93.56	174.5	8.275	1.013	**30.69**
3Q-2003	50.72	99.35	4.999	0.6207	**16.59**
1Q-2003	26.97	51.73	1.903	0.2962	**8.889**
3Q-2002	21.89	46.08	2.201	0.1317U	**7.01**
1Q-2002	82	157.6	7.208	1.23	**26.42**
3Q-2001	25.58	41.21	1.876	0.3158	**8.301**
1Q-2001	42	76	3.4	0.38	**14**
3Q-2000	na	68.7	2.97	0.53	**11.7**
1Q-2000	77.6	na	na	na	na

[a]Sampling events are denoted by quarter and calendar year; i.e., 1Q-2008 is the first quarter CY 2008.
[b]The PRG is provided in parentheses. There is no PRG for uranium-236. Results in bold type are above the PRG.
U – undetected. na – not analyzed.

Uranium-238 was detected above the PRG in each sample collected from well X701-05G between the third quarter of 2000 and the third quarter of 2008, with the exception of the third quarter of 2004. Concentrations of total uranium, while below the PRG, have been above the Ohio EPA drinking water standard for total uranium (30 μg/L) in numerous samples. There are no drinking water standards for isotopic uranium.

Detections of uranium, uranium-233/234, uranium-235, and uranium-238 in the other X-701B wells did not exceed 2 μg/L (uranium) and 1 pCi/L (uranium isotopes). Concentrations or activities of uranium and uranium isotopes did not exceed the PRGs and/or Ohio EPA drinking water standards in any X-701B Holding Pond wells sampled in 2008 except well X701-05G.

Samples from a number of wells in the western and middle portion of the X-701B monitoring area are analyzed for metals based on previous remedial activities and/or monitoring data. Elevated concentrations of metals were detected in several of these monitoring wells in 2008. These detections are related to the oxidant injections associated with the X-701B groundwater remedy. The oxidant, which affects the oxidation/reduction potential and pH of the soil and/or groundwater, temporarily causes metals in soil to be mobilized into the groundwater. It is expected that the metals will move downgradient with groundwater flow for a short distance and then be re-adsorbed into the soil matrix as the geochemistry of the soil and groundwater returns to ambient conditions.

Samples were collected from three wells (X701-74G, X701-78G, and X701-80G) near the X-747G building in the western portion of the X-701B Holding Pond monitoring area and analyzed for manganese and other constituents as listed in Tables 2 and 6. Manganese is of special interest in this area because of the use of permanganate compounds in pilot tests of oxidant injection into groundwater to remediate VOCs (conducted from 1998 through 2000). Figure 24 shows the well locations and manganese concentrations in these three wells in the first and third quarters of 2008. The following table summarizes manganese concentrations in the samples collected from each well from the third quarter of 2001 through the third quarter of 2008. The PRG for manganese is 14,300 μg/L. Results in bold type are above the PRG.

Manganese concentrations (in μg/L) detected at selected X-701B wells (near X-747G) third quarter CY 2001 – third quarter CY 2008

Sampling event[a]	X701-74G	X701-78G	X701-80G
3Q-2008	200	530	500
1Q-2008	160	330	1500
3Q-2007	14,000	160	8500
1Q-2007	880	340	14,000
3Q-2006	550	120	**40,000**
1Q-2006	1100	100	**25,000**
3Q-2005	580	120	**40,000**
1Q-2005	1700	130	**22,000**
3Q-2004	1700	140	**49,000**
1Q-2004	1600	120	**25,000**
3Q-2003	3500	100	2900
1Q-2003	1770	87.3	3870
3Q-2002	1540	106	11,000
1Q-2002	1560	131	**29,200**
3Q-2001	786	138B	**43,200**

[a]Sampling events are denoted by quarter and calendar year; i.e., 1Q-2008 is the first quarter CY 2008.

B – The reported value is less than the practical quantitation limit but greater than the instrument detection limit.

Beginning in the first quarter of 2002, monitoring for manganese was added to five of the existing X-701B Holding Pond monitoring wells (X230J7-01GA, X230J7-02GA, X230J7-03GA, X701-20G, and X701-21G) because they are downgradient of the horizontal wells that were used to inject permanganate compounds during pilot tests conducted from 1998 through 2000. Figure 24 shows the well locations and manganese concentrations in these five wells in the first and third quarters of 2008. The PRG for manganese is 14,300 μg/L. Manganese was not detected at concentrations exceeding the PRG in any of these wells (X230J7-01GA, X230J7-02GA, X230J7-03GA, X701-20G, and X701-21G) sampled in 2008. Manganese concentrations in the samples collected from each well from the first quarter of 2002 through the third quarter of 2008 are summarized as follows.

Manganese concentrations (in μg/L) detected at downgradient X-701B wells first quarter CY 2002 – third quarter CY 2008

Sampling event[a]	X230J7-01GA	X230J7-02GA	X230J7-03GA	X701-20G	X701-21G
3Q-2008	350	610	3900	390	98
1Q-2008	310	620	3500	460	100
3Q-2007	310E	560E	3400E	410	110
1Q-2007	330	620	3500	380E	110
3Q-2006	340	570	3000	420	100
1Q-2006	330	650	1800	400	110
3Q-2005	310	620	2600	370	110
1Q-2005	330	650	2300	370	100
3Q-2004	330	620	2600	470	110
1Q-2004	330	720	2400	420	100
3Q-2003	330	640	2600	470	98
1Q-2003	331	666	2510	474	97.6
3Q-2002	335	688	2880	471	91.6
1Q-2002	354	814	2730	512	107

[a]Sampling events are denoted by quarter and calendar year; i.e., 1Q-2008 is the first quarter CY 2008.
E – estimated due to matrix interference.

Samples were collected from five wells (X700-03G, X701-09G, X701-14G, X701-66G, and X701-BW2G) in the western portion of the X-701B Holding Pond monitoring area and analyzed for seven metals (cadmium, chromium, cobalt, lead, manganese, nickel, and thallium) and other parameters as listed in Tables 2 and 6. These metals were selected because elevated concentrations of the metals were detected in some of the wells in this area during the *Special Study for Metals and Radiological Parameters in Groundwater* (DOE 2000b) and to define the western perimeter of the potential metals contamination (well X700-03G). Concentrations of metals detected in each of these wells, with the exception of well X700-03G (an upgradient well), appear to be affected by the oxidant injections in this area.

Cadmium, cobalt, and/or nickel were detected at concentrations above the respective PRGs in the first and/or third quarter samples collected from wells X701-66G, X701-BW2G and X701-14G. Chromium, cobalt, and nickel were detected above the respective PRGs in the samples collected from well X701-09G. Figure 24 shows the well locations and metal concentrations in these wells in the first and third quarters of 2008. Analytical results are summarized as follows.

Concentrations of metals (in μg/L) at selected X-701B wells
first quarter CY 2003 – third quarter CY 2008

Sampling event[a]	X700-03G[c]						
	Cd (6.5)[b]	Cr (100)	Co (13)	Pb (50)	Mn (14,300)	Ni (100)	Tl (10.5)
3Q-2008	1U	0.5B	5.7E	1U	11,000E	20U	1U
1Q-2008	1U	1.4B	5.6E	0.21B	10,000E	4.3	1U
3Q-2007	0.06B	1.1B	6.8	0.31B	11,000	11	1U
1Q-2007	1U	0.74B	6.1E	1U	10,000E	12E	1U
Phase II oxidant injections begin in October 2006							
3Q-2006	0.04B	0.99B	5.8	0.43B	9800	7.1	1U
1Q-2006	1U	0.72B	5.3	1U	11,000	0.25B	1U
3Q-2005	1U	1.4B	6.2	1U	13,000	4.4	1U
1Q-2005	1U	0.81B	6.1	3U	10,000	3.3	1U
3Q-2004	1U	1.5B	6.3	3U	12,000	2U	1U
1Q-2004	1U	1.7B	7.4	3U	12,000	8.3	0.017B
3Q-2003	1U	2	6.9	3U	11,000	1.7B	1U

Sampling event[a]	X701-09G						
	Cd (6.5)[b]	Cr (100)	Co (13)	Pb (50)	Mn (14,300)	Ni (100)	Tl (10.5)
3Q-2008	4.3	**140**	**26**	18	1400	**160**	4.1
1Q-2008	4.4	**280**	**13**	6.7	5600	**150**	3
3Q-2007	2	**130**	**16**	5.3	3400	**160**	1.7
1Q-2007	1.7	47	2	0.67B	7900	70	0.84B
Phase II oxidant injections begin in October 2006							
3Q-2006	0.66B	**350**	7.1	3.7	**18,000**	**140**	0.52B
1Q-2006	0.37B	70	0.88B	0.28B	2100	40	0.18B
3Q-2005	0.39B	96	1.6	0.48B	3200	60	0.19B
1Q-2005	0.23B	76	0.95B	3U	2400	56	0.14B
3Q-2004	0.39B	**220**	2.7	1.5B	5900	83	0.15B
1Q-2004	0.41B	**280**	5.2	4.1	9000	99	0.43B
3Q-2003	0.27B	**300**	4.4	3	4700	66	0.27B
1Q-2003	2.21JU	85	2.86B	20.5U	1400	50.5B	13.2U

Sampling event[a]	X701-14G						
	Cd (6.5)[b]	Cr (100)	Co (13)	Pb (50)	Mn (14,300)	Ni (100)	Tl (10.5)
3Q-2008	5.2	3.2	**130**	16	1200	75	0.28B
1Q-2008	**8.3**	1.8B	**600E**	12	2400E	**370**	0.46B
3Q-2007	**9**	2.7	**450**	7.6	4200	**350**	0.42B
1Q-2007	0.22B	1.3B	6.2	1.5	66	7.3	0.057B
Phase II oxidant injections begin in October 2006							
3Q-2006	0.18B	1.9B	1.1	1U	120	3.9	0.048B
1Q-2006	0.25B	2.4	0.88B	1U	120	5.6	0.054B
3Q-2005	5U	3.2B	10U	9U	120	15U	15U
1Q-2005	0.31B	0.96B	1.6	3U	180	5	0.073B
3Q-2004	0.33B	0.85B	1.2	3U	120	4.8	0.053B
1Q-2004	0.36B	2.1	2.1	2.5B	150	7.9	0.064B
3Q-2003	1	22	**22**	17	1600	46	0.28B
1Q-2003	2.21U	3.52U	2.53U	18.3U	187	4.95U	13.2U

Concentrations of metals (in μg/L) at selected X-701B wells first quarter CY 2003 – third quarter CY 2008 (continued)

Sampling event[a]	X701-66G						
	Cd (6.5)[b]	Cr (100)	Co (13)	Pb (50)	Mn (14,300)	Ni (100)	Tl (10.5)
3Q-2008	**13**	1.4B	**320**	22	550	**210**	0.24B
1Q-2008	3.5	0.92B	7.3E	0.79B	830E	34	0.16B
3Q-2007	1.8	1B	12	1.1	290	69	0.19B
1Q-2007	4	0.67B	5.5	0.58B	1900	25	0.23B
Phase II oxidant injections begin in October 2006							
3Q-2006	**6.8E**	1.5B	6.8	1.3	2700	43	0.22B
1Q-2006	2.7	0.95B	4.3	0.91B	570	19	0.25B
3Q-2005	4.1	2.1	10	1.3	660E	27	0.2B
1Q-2005	4	3	20	5.6	850	35	0.28B
3Q-2004	3.7	0.83B	10	3U	980	31	0.23B
1Q-2004	3.3	0.78B	12	3U	900	33	0.36B
3Q-2003	**7.4**	0.68B	**32**	3U	880	34	0.74B
1Q-2003	2.21U	3.52U	**25.3B**	18.3U	1350	19.2B	**14B**

Sampling event[a]	X701-BW2G						
	Cd (6.5)[b]	Cr (100)	Co (13)	Pb (50)	Mn (14,300)	Ni (100)	Tl (10.5)
3Q-2008	0.51B	2U	**37**	0.7B	10	73	0.2B
1Q-2008	0.49B	2U	**24**	0.58B	32	37	0.32B
3Q-2007	**9.5**	1.2B	**110**	8.4	160	**160**	0.23B
1Q-2007	0.17B	0.51B	0.78B	1U	16	7.7	0.18B
Phase II oxidant injections begin in October 2006							
3Q-2006	0.45BE	0.94B	0.57B	0.2B	130	22	0.22B
1Q-2006	0.39B	0.48B	0.27B	1U	98	4.1	0.22B
3Q-2005	0.31B	1.1B	0.35B	0.19B	57E	11	0.18B
1Q-2005	0.3B	1B	0.53B	3U	110	15	0.19B
3Q-2004	0.25B	0.77B	0.23B	3U	56	2.2	0.2B
1Q-2004	0.31B	0.8B	0.3B	3U	85	3.9	0.24B
3Q-2003	0.69B	1.4B	0.53B	3U	440	4.7	0.32B
1Q-2003	2.21JU	4.65B	2.53U	18.3U	516	24.1B	13.2U

[a]Sampling events are denoted by quarter and calendar year; i.e., 1Q-2008 is the first quarter CY 2008.
[b]The PRG for each parameter is provided in parentheses. Results in bold type are above the PRG.
[c]Well X700-03G was installed in 2003 and added to the IGWMP in 2004.
B – The reported value is less than the practical quantitation limit but greater than the instrument detection limit. E – Estimated due to matrix interference. J – estimated. U – undetected.

Five wells that monitor the area near the X-744G Bulk Storage Building (part of the X-701B Holding Pond monitoring area) were sampled for cadmium and nickel. These metals were selected because elevated concentrations of the metals were detected in some of the wells in this area during the *Special Study for Metals and Radiological Parameters in Groundwater* (DOE 2000b). Concentrations of cadmium and nickel decreased in the samples collected from well X701-01G in 2008 as compared to recent data. Figure 24 shows the well locations and metal concentrations in these five wells in the first and third quarters of 2008. Analytical results are summarized as follows.

Concentrations of cadmium and nickel (in μg/L) at X-744G wells (part of the X-701B monitoring area) third quarter CY 2001 – third quarter CY 2008

Sampling event[a]	X701-01G		X701-30G		X744G-01G	
	Cd (6.5)[b]	Ni (100)	Cd (6.5)	Ni (100)	Cd (6.5)	Ni (100)
3Q-2008	**17**	**370**	0.56B	2U	**67**	**250**
1Q-2008	**49E**	**540**	0.45B	3.4	**52E**	**240**
3Q-2007	**66**	**740**	0.43B	7.1	**61**	**270**
1Q-2007	**110**	**1200E**	0.45B	3.8	**56**	**270E**
3Q-2006	**110E**	**1100**	0.32BE	3.1	**54E**	**220**
1Q-2006	**150**	**1500**	0.36B	4.2	**53**	**210**
3Q-2005	**96**	**970**	0.41B	2.9	**62**	**250**
1Q-2005	**71**	**670**	0.47B	2.8	**58**	**230**
3Q-2004	**53**	**510**	0.42B	2.9	**60**	**230**
1Q-2004	**47**	**470**	0.53B	5	**59**	**250**
3Q-2003	**31**	**390E**	0.44B	2.8E	**62**	**250**
1Q-2003	**52J**	**493**	2.21U	4.95U	**77.6B**	**249B**
3Q-2002	**45.1**	**445**	2.21U	4.95U	**53.8B**	**263B**
1Q-2002	**58.6**	**530**	3.44B	9.66U	**82.5B**	**313B**
3Q-2001	**41.6B**	**416**	1.39B	13.5B	**77.3B**	**275**

Sampling event[a]	X744G-02G		X744G-03G	
	Cd (6.5)[b]	Ni (100)	Cd (6.5)	Ni (100)
3Q-2008	**91**	**1100**	1.2	14
1Q-2008	**110**	**1300**	2.2	40
3Q-2007	**72**	**840**	1.2	30
1Q-2007	**99**	**1400E**	2	51E
3Q-2006	**97E**	**1300**	1.6E	34
1Q-2006	**120**	**1600**	1.3	30
3Q-2005	**120**	**1400**	1	23
1Q-2005	**120**	**1600**	1.6	34
3Q-2004	**120**	**1700**	0.81B	17
1Q-2004	**93**	**1200**	0.59B	15
3Q-2003	**96**	**900E**	0.69B	16
1Q-2003	**114**	**1220**	2.66B	35.1B
3Q-2002	**92.1**	**915**	2.21U	16.8B
1Q-2002	**124**	**1310**	2.22U	26.9B
3Q-2001	**96.8B**	**1030**	1.33B	21.6B

[a]Sampling events are denoted by quarter and calendar year; i.e., 1Q-2008 is the first quarter CY 2008.

[b]The PRG for each parameter is provided in parentheses. Results in bold type are above the PRG.

B – The reported value is less than the practical quantitation limit but greater than the instrument detection limit. E – estimated due to matrix interference. J – estimated. U – undetected.

4.2.3 X-633 Pumphouse/Cooling Towers Area

Samples were collected from two wells at the X-633 Pumphouse/Cooling Towers Area during the second and fourth quarters of CY 2008 and analyzed for chromium. Figure 25 shows the well locations and chromium concentrations detected at the X-633 Pumphouse/Cooling Towers Area wells in the second and fourth quarters of 2008. Appendix B provides a data summary table for the X-633 Pumphouse/Cooling Towers Area wells.

The following table summarizes chromium concentrations in the samples collected from each well from the second quarter of 2001 through the fourth quarter of 2008. The PRG for chromium is 100 μg/L. Results in bold type are above the PRG.

Chromium concentrations (in μg/L) detected at X-633 monitoring wells in 2001-2008

Sampling event[a]	X633-07G	X633-PZ04G
4Q-2008	**510**	26
2Q-2008	**260**	20
4Q-2007	**500**	31
2Q-2007	**690**	16
4Q-2006	**790**	16
2Q-2006	**510**	15
4Q-2005	**270**	18
2Q-2005	79	8.8B
4Q-2004	**140**	13
2Q-2004	91	9.2B
4Q-2003	**200**	8B
2Q-2003	94	12
4Q-2002	**303**	19.7B
2Q-2002	**248**	8.8B
4Q-2001	**503**	11.8B
2Q-2001	**1730**	11.5B

[a]Sampling events are denoted by quarter and calendar year; i.e., 2Q-2008 is the second quarter CY 2008.

B – The reported value is less than the practical quantitation limit but greater than the instrument detection limit.

Although the concentrations of chromium detected in samples from well X633-PZ04G are increasing, the concentrations of chromium detected in 2008 (20 and 26 μg/L) remain well below the PRG (100 μg/L).

4.3 QUADRANT III

In Quadrant III, groundwater is monitored at two areas: X-616 Chromium Sludge Surface Impoundments and X-740 Waste Oil Handling Facility.

4.3.1 X-616 Chromium Sludge Surface Impoundments

Seven wells that monitor the X-616 Chromium Sludge Surface Impoundments were sampled during the first quarter of CY 2008. Samples from the wells are analyzed for VOCs, metals, and radionuclides (see Tables 3 and 6). Appendix C provides analytical data tables for this area. Figure 7 shows the groundwater monitoring wells at this area.

VOCs are routinely detected at low concentrations in wells X616-09G, X616-16G, and X616-20B. Results for selected VOCs detected in these wells from 1999 through 2008 are summarized below. Figure 26 shows the concentrations of trichloroethene detected in the X-616 wells.

VOCs detected at X-616 monitoring wells 1999-2008

Sampling event	X616-09G			X616-16G		X616-20B
	TCE (5)[a]	1,1-DCE (7)	1,1,1,TCA (200)	TCE (5)	*cis*-1,2-DCE (70)	TCE (5)
2008	**13**	**18**	3.5	2	2.5	**13**
2007	**13**	**20**	4.3	2.3	2.6	**9.6**
2006	**9.8**	**13**	3.5	2.1	1.8J	**10**
2005	**10**	**16**	4.3	2.6	2.4	**12**
2004	**6.6**	**12**	3.4	3.2	1.9J	**11**
2003	3.2	4.5	2U	3.4	3.5	**11**
2002	2	4	2U	3	2U	**10**
2001	3	2U	2U	3	2	**9**
2000	2U	3	2U	3	2	**10**
1999	4	2U	2U	3	2	**10**

[a]The PRG for each parameter is provided in parentheses. Results in bold type are above the PRG.
TCE – trichloroethene. 1,1-DCE – 1,1-dichloroethene. 1,1,1-TCA – 1,1,1-trichloroethane. *cis*-1,2-DCE – *cis*-1,2-dichloroethene. U – undetected. J – estimated.

Several other VOCs were detected in the X-616 wells sampled in the first quarter at concentrations less than PRGs and less than 2 μg/L. These VOCs include 1,1,1-trichloroethane, 1,1-dichloroethene, 1,1-dichloroethane, *cis*-1,2-dichloroethene, carbon disulfide, and trichloroethene.

Samples were analyzed for calcium, iron, magnesium, potassium, and sodium. Each of these metals is commonly detected in groundwater and was usually detected in each of the samples. Samples were also analyzed for antimony, barium, cadmium, chromium, lead, manganese, nickel, and thallium. Each of these metals was also detected in at least one of the well samples.

Chromium is routinely detected above the PRG (100 μg/L) in samples collected from well X616-05G and was detected at 1300 μg/L in the sample collected in the first quarter of 2008. Chromium was not detected at concentrations above the PRG in any other X-616 Chromium Sludge Surface Impoundments well. Nickel was also detected above the PRG (100 μg/L for Gallia wells) in two wells (X616-05G and X616-25G). No other metals were detected above the applicable PRG. Figure 26 shows the concentrations of chromium and nickel detected in the samples collected from each well. The

following table lists the concentrations of chromium and/or nickel detected in wells X616-05G and X616-25G from 1999 through 2008.

Chromium and nickel concentrations (in μg/L) detected above the PRGs 1999-2008

Sampling event	X616-05G		X616-25G
	Cr	Ni	Ni
2008	1300	250	340
2007	820	270	360
2006	580	200	310
2005	380	120	310
2004	150	150	320
2003	168	138	311
2002	246	183	ns
2001	899	305	292
2000	3360	683	ns
1999	377	379	285

ns – not sampled.

Each sample was analyzed for selected transuranics (americium-241, neptunium-237, plutonium-238, and plutonium-239/240), technetium-99, total uranium, and uranium isotopes (uranium-233/234, uranium-235, uranium-236, and uranium-238). No transuranics or technetium-99 were detected in the X-616 Chromium Sludge Surface Impoundments wells sampled during the first quarter of 2008.

Uranium-236 was not detected in any of the X-616 samples collected during 2008. Total uranium, uranium-233/234, uranium-235, and uranium-238 were detected in at least one of the well samples. The maximum detection of each analyte is summarized below:

- Total uranium: 2.497 μg/L (X616-02G)
- Uranium-233/234: 1.278 pCi/L (X616-09G)
- Uranium-235: 0.04107 pCi/L (X616-09G)
- Uranium-238: 0.8383 pCi/L (X616-02G)

These results are consistent with concentrations of uranium and uranium isotopes detected in these wells in 2003 through 2007 (DOE 2004, DOE 2005a, DOE 2006a, DOE 2007a, and DOE 2008a). None of the uranium detections were above the available PRGs, which are 1000 μg/L for uranium, 124,000 pCi/L for uranium-233/234, 43 pCi/L for uranium-235, and 6.7 pCi/L for uranium-238. The Ohio EPA drinking water standard for total uranium is 30 μg/L. There are no drinking water standards for isotopic uranium.

4.3.2 X-740 Waste Oil Handling Facility

Fourteen wells that monitor the X-740 Waste Oil Handling Facility were sampled during the second, third, and/or fourth quarters of CY 2008. Samples were analyzed for the parameters listed in Tables 3 and 6. Figure 8 shows the groundwater monitoring wells at this area, and Appendix C provides the analytical data.

During 2008, additional sampling was conducted at eight wells that are part of the routine monitoring program for the X-740 Area as part of the X-740 Groundwater Plume Remedy Optimization Project. Three rounds of oxidant injections were completed during May, June/July, and September of 2008 as part of this project. Section 4.7.5 provides additional information about this special project.

Trichloroethene has been detected in both Gallia and Berea wells in this area. Figure 27 provides a map of the trichloroethene groundwater plume for the Gallia wells in this area. The following table provides the concentrations of trichloroethene detected in the plume wells between the second quarter of 2000 and the fourth quarter of 2008.

Detections of trichloroethene in some of the X-740 wells (most notably X740-03G, X740-09B, and X740-14B) decreased in the samples collected in July 2008 after the second round of oxidant injections, but generally increased to typical concentrations in samples collected in the fourth quarter of 2008, with the exception of well X740-14B. The concentration of trichloroethene remained lower in fourth quarter sample collected from well X740-14B. These data may indicate that the oxidant injections are briefly effective in removing trichloroethene from the groundwater.

Trichloroethene concentrations (in μg/L) in X-740 Waste Oil Handling Facility wells second quarter CY 2000 - fourth quarter CY 2008

Sampling event[a]	X740-02G	X740-03G	X740-04G	X740-08G	X740-09B	X740-10G
4Q-2008	ns	7700	ns	8.4	1200	410
Oxidant injections September 16 - 23, 2008						
Jul 2008	ns	400	ns	ns	940	260
Oxidant injections June 25 –July 14, 2008						
May 2008	ns	2700	ns	ns	1700	130
Oxidant injections May 6-14, 2008						
Apr 2008	8.1	3700	8.3	16	1200	170
4Q-2007	6.3	7600	ns	ns	1300	340
2Q-2007	ns	6300	5.6	13	2000	240
4Q-2006	ns	7400	ns	ns	700	120
2Q-2006	ns	4500	5.3	14	1200	300
4Q-2005	ns	5500	ns	ns	2900	380
2Q-2005	4.8	3500	6.2	20	4800	200
4Q-2004	ns	4500	ns	ns	1100	580
2Q-2004	ns	3100	7.2	16	3000	210
4Q-2003	ns	3600	ns	ns	1100	480
2Q-2003	4.5	2700	16	21	5400	150
4Q-2002	ns	3800	ns	ns	1400	570
2Q-2002	ns	1900	30	25	3800	150
4Q-2001	ns	2700	ns	ns	2300	560
2Q-2001	3	2200D	27	29	5100E	200
4Q-2000	3	3000	18	24	1700	520
2Q-2000	2	1500	36	34	4000	140

Trichloroethene concentrations (in μg/L) in X-740 Waste Oil Handling Facility wells second quarter CY 2000 - fourth quarter CY 2008 (continued)

Sampling event[a]	X740-11G	X740-14B	X740-PZ10G	X740-PZ12G	X740-PZ14G	X740-PZ17G
4Q-2008	ns	1.6J	30	130	92	41
Oxidant injections September 16 - 23, 2008						
Jul 2008	ns	2.9	28	94	160	36
Oxidant injections June 25 –July 14, 2008						
May 2008	ns	17	28	120	180	32
Oxidant injections May 6-14, 2008						
Apr 2008	14	33	44	120	140	30
4Q-2007	4.1	0.52J	56	130	55	39
2Q-2007	16	0.74J	56	140	170	39
4Q-2006	7.7	1.6J	61	130	75	32
2Q-2006	15	2.4	57	150	130	46
4Q-2005	17	6	50	170	67	45
2Q-2005	16	40	39	150	110	38
4Q-2004	21	ni	62	170	98	18
2Q-2004	17	ni	37	190	82	52
4Q-2003	16	ni	65	180	53	460
2Q-2003	22	ni	17	180	83	29
4Q-2002	20	ni	73	280	80	56
2Q-2002	19	ni	52	200	65	54
4Q-2001	23	ni	70	230	87	48
2Q-2001	20	ni	61	220	80	16
4Q-2000	18	ni	9	25	7	2U
2Q-2000	19	ni	ns	ns	ns	ns

[a]Sampling events are denoted by quarter and calendar year; i.e., 2Q-2008 is the second quarter CY 2008.
U – undetected. D – The reported value was obtained from a secondary dilution. E – The result exceeds the calibration range. J – estimated. ni – not installed. ns – not sampled.

Other VOCs detected above their respective PRGs include:

- 1,1,1-trichloroethane (detected at 210 μg/L in well X740-03G, which exceeds the PRG of 200 μg/L)
- 1,1-dichloroethene (detected in eight wells at concentrations ranging from 8.6 to 1400 μg/L, which exceed the PRG of 7 μg/L)
- 1,2-dichloroethane (detected in five wells at concentrations ranging from 6.4 to 280 μg/L, which exceed the PRG of 5 μg/L)
- carbon tetrachloride (detected at 10 μg/L in well X740-03G, which exceeds the PRG of 5 μg/L)
- tetrachloroethene (detected in three wells at concentrations ranging from 7.2 to 230 μg/L, which exceed the PRG of 5 μg/L)

Only VOCs were analyzed in the samples collected from the X-740 wells during 2008.

4.4 QUADRANT IV

In Quadrant IV, groundwater is monitored at four areas: X-611A Former Lime Sludge Lagoons, X-735 Landfills, X-734 Landfills, and X-533 Switchyard Area.

4.4.1 X-611A Former Lime Sludge Lagoons

Six wells at the X-611A Former Lime Sludge Lagoons were sampled during the first and third quarters of CY 2008. Samples were analyzed for beryllium and chromium (see Tables 4 and 6). In the fourth quarter, three X-611A wells were sampled for PCBs in response to Ohio EPA comments on the *Second Five-Year Review for the X-611A Prairie* (DOE 2008e). Section 4.7.6 provides the results of this additional sampling. Appendix D provides the analytical data tables for this area, and Figure 28 shows the results for beryllium and chromium in the X-611A wells in 2008.

Chromium was detected in the samples collected from four of the six wells in this area at concentrations between 0.9 and 5.6 μg/L. These results are below the PRG (100 μg/L).

Beryllium was detected in both samples collected from well F-07G at 6.6 μg/L (first quarter) and 5.8 μg/L (third quarter). The first quarter detection of 6.6 μg/L is above the PRG (6.5 μg/L for Gallia wells). Beryllium is typically detected in samples collected from this well at concentrations just above or below the PRG. Beryllium was not detected at concentrations above the PRG in any of the other well samples collected during 2008.

4.4.2 X-735 Landfills

Sampling was conducted at 23 wells that monitor the X-735 Landfills during the second and fourth quarters of CY 2008. Figure 10 shows the groundwater monitoring wells at this area. Tables 4 and 6 show the monitoring frequency and analytical parameters for the X-735 wells. Appendix D provides the analytical data tables for this area.

In 2008, monitoring at the X-735 Landfills was also completed in accordance with the *Corrective Measures Plan for the X-735 Landfill* (DOE 2007b), which was approved by Ohio EPA on March 4, 2008.

Samples collected from the X-735 Landfills wells during the second quarter were analyzed for VOCs. A number of VOCs were detected in the sample collected from well X735-03G, which is a former assessment monitoring well located west and downgradient of the X-735 Landfills and the X-736 Spoils Area. These VOCs (1,1,1-trichloroethane, 1,1-dichloroethane, benzene, chloroethane, *cis*-1,2-dichloroethene, and trichloroethene) were all detected at estimated concentrations of 1 μg/L or less. VOCs were detected at estimated concentrations in three other X-735 wells: X735-18B (trichloroethene at 0.22 μg/L), X735-01G (1,1-dichloroethane at 0.33 μg/L), and X735-21G (*cis*-1,2-dichloroethene at 0.4 μg/L). Each of these detections is less than the applicable PRG.

Samples collected from X-735 Gallia wells in the second quarter of 2008 were analyzed for the parameters listed in Appendix II to OAC 3745-29-10 (effective June 1, 1994), which includes additional metals, SVOCs, herbicides, pesticides, and PCBs. No herbicides or PCBs were detected in the samples. One SVOC, naphthalene, was detected at an estimated concentration of 1.4 μg/L in the sample collected from well X735-03G. This detection is less than the PRG (3210 μg/L).

Two pesticides, beta-BHC and heptachlor, were detected at estimated concentrations of 0.011 and 0.012 μg/L, respectively, in the sample collected from well X735-21G. However, these results were

qualified by the laboratory because when the samples were analyzed, there was greater than 25% difference for detected concentrations between two gas chromatograph columns. These data qualifiers indicate that there is uncertainty associated with these results. There is no PRG available for beta-BHC. The concentration of heptachlor detected in the sample (0.012 μg/L) is less than the PRG (0.4 μg/L).

In the second quarter, samples from X-735 Landfills wells were analyzed for antimony, arsenic, barium, beryllium, cadmium, calcium, chromium, cobalt, copper, iron, lead, manganese, magnesium, nickel, potassium, selenium, silver, sodium, thallium, vanadium, and zinc. Arsenic was detected at 300 μg/L in the upgradient well X737-08B, which is above the PRG of 50 μg/L. Concentrations of arsenic detected in this well routinely exceed the PRG.

Under the *Corrective Measures Plan for the X-735 Landfill* (DOE 2007b), concentrations of three metals (cobalt, mercury, and nickel) detected in downgradient Gallia wells (X735-02GA, X735-03G, X735-03GA, X735-04G, X735-04GA, X735-05G, X735-05GA, X735-06GAA, X735-12G, and X735-21G) are compared to concentration limits based on drinking water standards or site background concentrations. These concentrations limits are: cobalt – 153 μg/L, mercury – 2 μg/L, and nickel – 100 μg/L. Concentrations of cobalt, mercury, and nickel detected in the X-735 Landfills downgradient Gallia wells sampled during 2008 did not exceed these limits.

Concentrations of alkalinity, chloride, sodium, sulfate, and total dissolved solids in downgradient Gallia wells for this area are also compared to concentration limits provided in the *Corrective Measures Plan for the X-735 Landfill* (DOE 2007b). These concentrations limits are: alkalinity – 434 mg/L, chloride – 250 mg/L, sodium – 250 mg/L, sulfate – 500 mg/L, and total dissolved solids – 500 mg/L. Concentrations of alkalinity, chloride, sodium, sulfate, and total dissolved solids detected in the downgradient Gallia wells sampled during 2008 did not exceed these limits.

Concentrations of alkalinity, chloride, sodium, sulfate, and total dissolved solids in downgradient Gallia and Berea wells continue to be statistically evaluated to monitor potential impacts to groundwater and trends in concentrations of the statistical monitoring parameters. The concentrations of cobalt, mercury, and nickel in downgradient Gallia wells are also statistically evaluated. Intra-well Shewart and CUSUM control limits are calculated using historical baseline data for each well. If either of these control limits is exceeded, an impact is tentatively identified. The Shewart control limit is sensitive to rapid increases in the concentrations of indicator parameters; whereas the CUSUM control chart limit is sensitive to gradual increases in indicator parameters.

One control limit was exceeded in samples collected during 2008 from the downgradient Berea wells. The CUSUM limit for sodium in well X735-18B was exceeded in the fourth quarter of 2008. The CUSUM limit is sensitive to gradual increases in indicator parameters and is used for the early detection of gradual concentration increases at a well, but is not used to determine a statistically significant change requiring notification of Ohio EPA.

In downgradient Gallia wells, the Shewart control limit and/or CUSUM control limit was exceeded in two wells in 2008. Both Shewart and CUSUM limits were exceeded for alkalinity in the second quarter sample collected from well X735-02GA; however, the limits were not exceeded in the fourth quarter. The concentration of alkalinity detected in well X735-02GA in the second quarter (48 mg/L) was well below the applicable concentration limit (434 mg/L). The CUSUM control limit for sulfate in well X735-04GA was exceeded in the fourth quarter; however, the concentration of sulfate detected in the well (11 mg/L) was well below the applicable concentration limit (500 mg/L). Appendix D provides a summary of the results of the statistical evaluations completed for the X-735 Landfills during 2008 as required by the IGWMP and Corrective Measures Plan.

Samples collected from the X-735 wells were analyzed for selected transuranics (americium-241, neptunium-237, plutonium-238, and plutonium-239/240), technetium-99, total uranium, and uranium isotopes (uranium-233/234, uranium-235, uranium-236, and uranium-238). Transuranics were not detected in any of the X-735 well samples collected during 2008. Technetium-99 was detected at 11 pCi/L in the second quarter sample collected from well X735-18B. This detection is less than the Ohio EPA drinking water standard for technetium-99 (900 pCi/L, based on a 4 mrem/year dose from beta emitters).

Total uranium, uranium-233/234, and/or uranium-238 were detected in the samples collected from a number of wells at concentrations less than 1 μg/L (total uranium) and activities less than 1 pCi/L (uranium isotopes). These detections are below the applicable PRGs (124,000 pCi/L for uranium-233/234 and 6.7 pCi/L for uranium-238) and the Ohio EPA drinking water standard for total uranium (30 μg/L). Uranium-235 and uranium-236 were not detected in any of the X-735 samples collected in 2008.

4.4.3 X-734 Landfills

The 15 wells that monitor the X-734 Landfills were sampled in the second and/or fourth quarters of CY 2008. In the fourth quarter, well X734-16G was dry and could not be sampled. Figure 11 shows the groundwater monitoring wells at this area. Tables 4 and 6 show the monitoring frequency and analytical parameters for the X-734 wells. Appendix D provides the analytical data tables for this area.

VOCs are routinely detected in well X734-23G, which monitors the former X-734B Construction Spoils Landfill in the southern portion of the area. The following table summarizes the VOCs most frequently detected in well X734-23G.

VOCs (in μg/L) routinely detected in well X734-23G
second quarter CY 2005 – fourth quarter CY 2008

Sampling event[a]	*cis*-1,2-DCE (70)	*trans*-1,2-DCE (100)	TCE (5)	VC (2)
4Q-2008	9.5	0.43J	0.17J	**5.4**
2Q-2008	12	0.57J	0.29J	**4.2**
4Q-2007	10	0.43J	0.21J	**2**
2Q-2007	12	0.59J	2U	**4.2**
4Q-2006	10	0.53J	2U	**3.7**
2Q-2006	11	0.55	1U	**4.2**
4Q-2005	13	0.62J	0.21J	**3.5**
2Q-2005	18	0.86	2U	**6.1**

[a]Sampling events are denoted by quarter and calendar year; i.e., 2Q-2008 is the second quarter CY 2008.

[b]The PRG for each parameter is provided in parentheses. Results at or above the PRG are in bold type.

cis-1,2-DCE – *cis*-1,2-dichloroethene. *trans*-1,2-DCE – *trans*-1,2-dichloroethene. TCE – trichloroethene. VC – vinyl chloride. J – estimated. U – undetected.

The presence of *cis*-1,2-dichloroethene, *trans*-1,2-dichloroethene, and vinyl chloride along with the low concentrations or absence of trichloroethene in well X734-23G may indicate that natural reductive dechlorination of the trichloroethene is occurring beneath the X-734B Construction Spoils Landfill.

Low concentrations of VOCs commonly associated with natural gas (1,2-dimethylbenzene, benzene, chlorobenzene, ethylbenzene, and/or toluene) are routinely detected at concentrations below PRGs in groundwater samples collected from well X734-05B and were detected in the samples collected from this well in 2008. Well X734-05B is screened in the Bedford Shale formation (the Berea is not present in the northern portion of the X-734 Landfills area where well X734-05B is installed). The Bedford Shale has produced some oil and natural gas regionally.

Several other VOCs were detected at estimated concentrations less than 1 μg/L in wells X734-06G, X734-15G, and X734-20G. These VOCs include 1,1-dichloroethane, trichloroethene, bromodichloromethane, chloroform, and dibromochloromethane.

Samples were also analyzed for 21 metals (antimony, arsenic, barium, beryllium, cadmium, calcium, chromium, cobalt, copper, iron, lead, magnesium, manganese, nickel, potassium, selenium, silver, sodium, thallium, vanadium, and zinc). If detected, each metal was present at concentrations below the PRG, except cobalt (as discussed below).

Cobalt is of special interest at this monitoring area because elevated concentrations of cobalt were identified in some of the monitoring wells in this area during the *Special Study for Metals and Radiological Parameters in Groundwater* (DOE 2000b). Figure 29 shows the cobalt concentrations detected in the X-734 Landfills well samples collected in the second quarter and fourth quarters of 2008. The table below lists the results for cobalt in the X-734 Landfills monitoring wells between the second quarter of 2001 and fourth quarter of 2008. Results equal to or above the PRG (13 μg/L for Gallia wells and 91 μg/L for Berea wells) are in bold type.

Concentrations of cobalt (in μg/L) in X-734 wells
second quarter CY 2001 – fourth quarter CY 2008

Sampling event[a]	RSY-02B	X734-01G	X734-02B	X734-03G	X734-04G
4Q-2008	0.35B	11	0.48B	2.7	3.7
2Q-2008	0.29B	11	0.95B	4	5.2
4Q-2007	0.62B	12	0.41B	3.2	2.5
2Q-2007	1.3	**14**	1	4.3	3.1
4Q-2006	0.39B	**13**	0.41B	8.4	2
2Q-2006	0.56B	12	1.1	6.8	2.8
4Q-2005	0.41B	11	0.49B	12	1.7
2Q-2005	0.54B[b]	12	1.5	12	2.6
4Q-2004	0.53B	11	1.2	7.4	2.9
2Q-2004	0.62B	**14**	3.1	**13**	2.2
4Q-2003	0.54B	12	0.76B	**15**	2.6
2Q-2003	0.44B	12	1.2	**22**	2.4
4Q-2002	2.53U	10.7B	5.06U	**20.5B**	2.53U
2Q-2002	4.09U	11.9B	8.18U	**16.5B**	4.45B
4Q-2001	4.09U	12B	4.09U	**20.7B**	4.09U
2Q-2001	4.67U	**15.7B**	4.67U	**22B**	5.99B

Concentrations of cobalt (in μg/L) in X-734 wells
second quarter CY 2001 – fourth quarter CY 2008 (continued)

Sampling event	X734-05B	X734-06G	X734-10G	X734-14G	X734-15G
4Q-2008	0.22B	7.1	0.37B	2.5	**42**
2Q-2008	0.5B	9	0.28B	1.5	**54**
4Q-2007	0.76B	7	0.39B	1.5	**28**
2Q-2007	1.8	**36**	0.84B	4.4	**36**
4Q-2006	3.3	**28**	0.39B	7.6	**58**
2Q-2006	0.53B	**79**	0.5B	3.1	**32**
4Q-2005	2.9	**36**	0.51B	4.1	**31**
2Q-2005	0.41B	**91**	0.54B	1.7	**35**
4Q-2004	0.31B	**21**	0.44B	1.7	**27**
2Q-2004	0.59B	**27**	0.53B	2	**33**
4Q-2003	0.98B	**22**	0.47B	3.6	**53**
2Q-2003	0.49B	**64**	0.46B	2.4	**32**
4Q-2002	2.53U	**20.7B**	2.53U	2.53U	**30.5**
2Q-2002	4.09U	**76**	4.09U	4.58B	**36.9B**
4Q-2001	5.27B	**53.1**	4.09U	4.09U	5.58B
2Q-2001	4.67U	**69.8B**	4.67U	7.17B	**16.7B**

Sampling event	X734-16G	X734-18G	X734-20G	X734-22G	X734-23G
4Q-2008	ns (dry)	3	0.56B	2.8	**110**
2Q-2008	11	0.98B	**32**	0.84B	**110**
4Q-2007	**14**	3.3	0.73B	1.2	**100**
2Q-2007	ns (dry)	2.1	ns (dry)	2.1	**96**
4Q-2006	**14**	4.6	7.1	0.96B	**100**
2Q-2006	**25**	0.86B	ns (dry)	0.45B	**110**
4Q-2005	ns (dry)	1.5	0.17B	0.42B	**97**
2Q-2005	ns (dry)[b]	7.8[b]	0.22B	0.72B	**87**
4Q-2004	8.4	2.8	ns	0.52B	ni
2Q-2004	**14**	1.3	0.53B	0.59B	ni
4Q-2003	ns	2.2	0.25B	0.78B	ni
2Q-2003	11	0.79B	0.7B	0.4B	ni
4Q-2002	ns	3.83B	2.53U	2.53U	ni
2Q-2002	12.3B	4.36B	4.09U	4.09U	ni
4Q-2001	ns	4.67U	4.09U	4.09U	ni
2Q-2001	**28.1B**	5.6B	4.67U	4.67U	ni

[a]Sampling events are denoted by quarter and calendar year; i.e., 2Q-2008 is the second quarter CY 2008.
[b]Sampled in the third quarter of 2005 because second quarter samples exceeded the required storage temperature.
B – The reported value is less than the practical quantitation limit but greater than the instrument detection limit. U – Undetected. ni – not installed. ns – not sampled.

Cobalt was detected at concentrations above the PRG (13 μg/L for Gallia wells) in samples collected from wells X734-15G, X734-20G, and X734-23G. The concentration of cobalt detected in well X734-20G in the second quarter (32 μg/L) is higher than typical for this well (the highest previous detection was 7.1 μg/L in the fourth quarter of 2006). In the fourth quarter, the concentration of cobalt detected in this well (0.56 μg/L) returned to a typical level below the PRG (13 μg/L). Well X734-20G, which is downgradient from the X-734B Construction Spoils Landfill, will continue to be sampled for cobalt with all other X-734 IGWMP wells. Concentrations of cobalt detected in wells X734-15G and X734-23G are typical for these wells.

Samples were also analyzed for selected transuranics (americium-241, neptunium-237, plutonium-238, and plutonium-239/240), technetium-99, total uranium, and isotopic uranium (uranium-233/234, uranium-235, uranium-236, and uranium-238). No transuranics or technetium-99 were detected in any of the X-734 Landfills well samples collected in 2008.

Uranium-235 and uranium-236 were not detected in any of the X-734 Landfills well samples collected in 2008. Total uranium, uranium-233/234, and/or uranium-238 were detected in the samples collected from a number of wells at concentrations less than 2 μg/L (total uranium) and activities less than 1 pCi/L (uranium isotopes). These detections are below the applicable PRGs (1000 μg/L for total uranium, 124,000 pCi/L for uranium-233/234, and 6.7 pCi/L for uranium-238) and the Ohio EPA drinking water standard for total uranium (30 μg/L). Detections of uranium and uranium isotopes in the samples collected from X-734 Landfills wells in 2008 are consistent with previous data collected for this area (DOE 2002a, DOE 2003a, DOE 2004, DOE 2005a, and DOE 2006a, DOE 2007a, and DOE 2008a).

4.4.4 X-533 Switchyard Area

Samples were collected from three wells (F-03G, X533-03G, and TCP-01G) at the X-533 Switchyard Area during the second and fourth quarters of CY 2008 and analyzed for cadmium, cobalt, and nickel. Figure 25 shows the well locations and metal concentrations detected in each well sample. Appendix D provides a data summary table for the X-533 Switchyard Area wells. Concentrations of each metal detected in the sample collected from each well exceed the respective PRG as summarized below.

Analytical results for metals (in μg/L) at the X-533 Switchyard Area second quarter CY 2001 – fourth quarter CY 2008

Sampling event[a]	F-03G			X533-03G			TCP-01G		
	Cd (6.5)[b]	Co (13)	Ni (100)	Cd (6.5)	Co (13)	Ni (100)	Cd (6.5)	Co (13)	Ni (100)
4Q-2008	50	200	1200	17	48	260	16	46	190
2Q-2008	46	82	480	11	35	190	20	53	220
4Q-2007	54	200	1200	16	48	260	19	58	220
2Q-2007	30	67	380	8.9	31	180	19	61	260
4Q-2006	38	70	430	13	38	210	19	52	220
2Q-2006	29	62	310	15	50	210	10	32	170
4Q-2005	42	93	560	13	41	220	12	47	160
2Q-2005	26	52	310	8	25	150	17	55	250
4Q-2004	28	52	290	8.6	27	160	17	50	210
2Q-2004	28	51	290	7	21	120	26	61	270
4Q-2003	25	43	250	11	32	180	22	59	240
2Q-2003	26	46	300	7.6	23	130	26	62	270
4Q-2002	49	147	921	9.98B	36.2B	190	29.9	72.5	296
2Q-2002	21.7B	37.8B	255	7.06B	23.5B	138	27.2	61.7	275
4Q-2001	48.6B	118B	722	12.8B	38.8B	203B	17B	47.7B	177B
2Q-2001	27.3B	44.6B	286	8.82B	30.4B	161B	29.2B	66.3B	294

[a]Sampling events are denoted by quarter and calendar year; i.e., 2Q-2008 is the second quarter CY 2008.
[b]The PRG for each parameter is provided in parentheses.
Cd – cadmium. Co – cobalt. Ni – nickel.
B – The reported value is less than the practical quantitation limit but greater than the instrument detection limit.

The concentrations of metals detected in well F-03G in the fourth quarter sample are among the highest detected in this well since sampling began in 2001. However, the groundwater elevation measured during the fourth quarter of 2008 was the lowest recorded since sampling began in 2001 due to low groundwater recharge rates resulting from dry conditions in 2008. The high concentrations of metals detected in well F-03G in the fourth quarter sample may be due to low groundwater recharge rates.

4.5 SURFACE WATER MONITORING RESULTS

The integrated surface water monitoring program includes monitoring locations on Big Run Creek (BRC), East Drainage Ditch (EDD), Little Beaver Creek (LBC), North Holding Pond (NHP), Southwestern Drainage Ditch (UND), and Western Drainage Ditch (WDD). Thirteen locations were sampled quarterly in CY 2008. Samples were analyzed for the parameters listed in Tables 5 and 6. The analytical data tables for surface water monitoring are provided in Appendix E. Figure 13 shows the surface water sampling locations.

Trihalomethanes (bromodichloromethane, bromoform, dibromochloromethane, and/or chloroform) were detected at sampling points on Big Run Creek, East Drainage Ditch, Little Beaver Creek, North Holding Pond, and Western Drainage Ditch. Trihalomethanes are common residuals in treated drinking water. These sampling points receive such water from the permitted NPDES outfalls at PORTS.

Trichloroethene was detected at concentrations ranging from 1.6 to 6.7 μg/L in the four samples collected from the Southwestern Drainage Ditch at UND-SW01. Trichloroethene is routinely detected at low concentrations at this sampling point. Other VOCs detected in one or more samples collected at UND-SW01 include 1,1-dichloroethane, 1,1-dichloroethene, and *cis*-1,2-dichloroethene. Each of these detections were estimated concentrations less than 1 μg/L. No VOCs were detected at UND-SW02, which is downstream from UND-SW01, with the exception of the sample contaminant 2-butanone. 2-Butanone was detected at an estimated concentration of 5.6 μg/L in the fourth quarter sample collected from UND-SW02.

Trichloroethene and/or *cis*-1,2-dichloroethene were routinely detected at estimated concentrations less than 1 μg/L in the samples collected from East Drainage Ditch sampling location EDD-SW01 and Little Beaver Creek sampling locations LBC-SW01 and LBC-SW02. Neither of these VOCs were detected in samples collected from downstream Little Beaver Creek sampling locations LBC-SW03 and LBC-SW04.

Each sample was also analyzed for calcium, iron, magnesium, potassium, and sodium. Each of these metals is commonly detected in water and is usually detected in the samples from these locations.

Each sample was analyzed for selected transuranics (americium-241, neptunium-237, plutonium-238, and plutonium-239/240), technetium-99, total uranium, and uranium isotopes (uranium-233/234, uranium-235, uranium-236, and uranium-238). No transuranics were detected in the surface water samples collected during 2008.

In the fourth quarter of 2008, technetium-99 was detected at 12.2 and 9.59 pCi/L in the samples collected from Little Beaver Creek sampling locations LBC-SW03 and LBC-SW04, respectively. Technetium-99 is occasionally detected at the Little Beaver Creek sampling locations. These detections are well below the Ohio EPA drinking water standard for technetium-99 (900 pCi/L, based on a 4 mrem/year dose from beta emitters). Technetium-99 was not detected in any of the other surface water samples collected during 2008.

Total uranium, uranium-233/234, uranium-235, uranium-236, and uranium-238 were detected in at least one surface water sample collected during 2008. The maximum detection of uranium and uranium isotopes with the monitoring location are summarized below:

- Total uranium was detected at 13 locations at a maximum concentration of 6.274 μg/L (WDD-SW01, fourth quarter).

- Uranium-233/234 was detected at 13 locations at a maximum activity of 3.564 pCi/L (LBC-SW03, fourth quarter).

- Uranium-235 was detected at 10 locations at a maximum activity of 0.2003 pCi/L (LBC-SW03, fourth quarter).

- Uranium-236 was detected at 2 locations at a maximum activity of 0.05831 pCi/L (LBC-SW04, fourth quarter).

- Uranium-238 was detected at 13 locations at a maximum activity of 2.099 pCi/L (WDD-SW01, fourth quarter).

These results are consistent with sampling conducted in 2006 and 2007 (DOE 2007a and DOE 2008a). The Ohio EPA drinking water standard for total uranium is 30 μg/L; all surface water analyses for uranium in 2008 were well below 30 μg/L. There are no drinking water standards for isotopic uranium.

4.6 WATER SUPPLY MONITORING RESULTS

Residential drinking water sources are routinely monitored by DOE PORTS in accordance with the requirements of Section VIII of the September 1989 Consent Decree between the State of Ohio and the Department of Energy. The purpose of this program is to determine whether residential drinking water sources have been adversely affected by plant operations. Although this program may provide an indication of contaminant transport off site, it should not be interpreted as an extension of the on-site groundwater monitoring program. Five residential water wells and the PORTS water supply (RES-012) are sampled as part of this program. Figure 14 shows the water supply monitoring locations.

These water sources were sampled during the first and third quarters of CY 2008. Two samples were collected from each location (a regular sample and a duplicate sample), and both samples were analyzed for the parameters listed in Tables 5 and 6. Appendix E provides a data table for both regular and duplicate water supply samples collected during 2008.

No VOCs (other than the common sample and glassware contaminants acetone and methylene chloride) were detected in the water supply samples collected during 2008.

Each sample was also analyzed for calcium, iron, magnesium, potassium, and sodium. Each of these metals is commonly detected in groundwater and is usually detected in each of the water supply samples.

Each sample was analyzed for transuranics (americium-241, neptunium-237, plutonium-238, and plutonium-239/240), technetium-99, total uranium, and uranium isotopes (uranium-233/234, uranium-235, uranium-236, and uranium-238). No transuranics or technetium-99 were detected in any of the water supply samples collected in 2008.

Uranium-236 was not detected in any of the water supply samples collected in 2008. Uranium-235 was detected only in water supply RES-016 on Wakefield Mound Road (0.04152 pCi/L). Total uranium, uranium-233/234, and uranium-238 were detected in most of the water supply samples with the maximum detection of each parameter detected in the PORTS water supply (RES-012). Analytical results are summarized below:

- Total uranium was detected in five water supplies at a maximum concentration of 1.379 μg/L.
- Uranium-233/234 was detected in five water supplies at a maximum activity of 0.6443 pCi/L.
- Uranium-238 was detected in five water supplies at a maximum activity of 0.4635 pCi/L.

Results for total uranium and uranium isotopes are consistent with results from 2007 (DOE 2008a). The Ohio EPA drinking water standard for total uranium is 30 μg/L. There are no drinking water standards for isotopic uranium.

4.7 SPECIAL STUDIES

In 2008, special studies were conducted in the following IGWMP monitoring areas: X-749/ X-120/PK Landfill, X-701B Holding Pond, X-740 Waste Oil Handling Facility, and X-611A Former Lime Sludge Lagoons.

4.7.1 X-749/X-120 Area Groundwater Optimization Project

In 2007, DOE developed the *Work Plan for the X-749/X-120 Area Groundwater Optimization Project* (DOE 2007f). This work plan contains projects designed to mitigate the off-site migration of the groundwater plume in this area and to augment previously implemented actions. Several of these projects were in progress or completed during 2008 and are discussed below.

4.7.1.1 Extraction trench upgrade

Work to upgrade the groundwater collection system on the southwestern side of the X-749 Contaminated Materials Disposal Facility was completed in 2008. Two additional extraction wells (X749-EW05G and X749-EW06G) were installed within the groundwater collection trench to augment the existing extraction well/sump (X749-WPW) installed near the center of the collection trench system. Operation of the new extraction wells began in January 2008.

4.7.1.2 Rate and extent of southern portion of groundwater plume

Wells WP-05G, WP-06G, and WP-07G were installed on private property south of the DOE property boundary in 2007 to monitor the rate and extent of the X-749 plume migration in this area. In 2008, the wells were sampled for selected VOCs on a quarterly basis. Data collected for these wells in 2008 are discussed in Section 4.1.1.1.

4.7.1.3 Additional groundwater sampling

In several areas of the X-749/X-120 plume, several wells were previously installed for investigation and sampling but have not been sampled recently (or have not been sampled recently for radionuclides). The wells identified in the following table were sampled semiannually for three sampling events

(beginning in the fourth quarter of 2007 and ending in the fourth quarter of 2008) to facilitate tracking of plume contaminants, specifically VOCs and technetium-99.

X-749 special study wells

PK-09G	WP-01G	WP-03G	X749-04G	X749-05G	X749-09GA
X749-22G	X749-27G	X749-28G	X749-29G	X749-30G	X749-43G
X749-44G	X749-66G	X749-97G	X749-102G	X749-PZ04G	X749-PZ09G
X749-PZ11G	X749-PZ12G	X749-PZ13G			

Technetium-99 was detected in two of the wells listed above. Technetium-99 was detected at 1250 and 1190 pCi/L in the samples collected from well X749-PZ09G, which is within the northeastern portion of the X-749 Contaminated Materials Disposal Facility. Technetium-99 is known to be present within the X-749 Contaminated Materials Disposal Facility.

Samples from well X749-27G (approximately 330 feet west of the groundwater collection trench on the southwestern side of the X-749 Contaminated Materials Disposal Facility) also contained technetium-99 at low levels (48.9 and 20 pCi/L). Technetium-99 is known to be present in this portion of the X-749 monitoring area.

VOCs, including trichloroethene, were detected in most of the special study wells at concentrations similar to those detected in the first sampling event for this special study (the fourth quarter of 2007). No changes to the plume were noted based on data collected during 2008.

Samples were also collected from four wells within the X-749 Contaminated Materials Disposal Facility (X749-PZ09G, X749-PZ11G, X749-PZ12G, and X749-PZ13G). Trichloroethene was detected at concentrations ranging from 20 to 170 μg/L in samples collected from these wells. These results are similar to the concentrations of trichloroethene detected in these wells in 2007. Data for this special study are included with the IGWMP data for the X-749/X-120/PK Landfill monitoring area in Appendix A.

This portion of the X-749/X-120 Area Groundwater Optimization Project is now complete. Revisions to the sampling program for the X-749/X-120 area based on the results of this special study will be included in the next revision to the IGWMP.

4.7.1.4 Installation of new groundwater monitoring wells

In 2008, seven new groundwater monitoring wells (X749-115G, X749-117G, X749-118G, X749-119G, X749-120G, X749-121G, and X749-122G) were installed in and around the X-749 Contaminated Materials Disposal Facility to provide data to evaluate the performance of the northern and northwestern barrier walls around the landfill and to monitor conditions within the landfill. Installation of eight wells was proposed in the *Work Plan for the X-749/X-120 Area Groundwater Optimization Project* (DOE 2007f); however, a well could not be installed in one of the proposed locations due to accessibility issues for the drill rig. An existing groundwater monitoring well fulfills the purpose of this proposed well. Samples were collected from the newly installed wells in the fourth quarter of 2008 and analyzed for VOCs and technetium-99. Figure 2 shows the locations of the wells.

One well (X749-115G) was installed outside the landfill approximately 425 ft north of the northern barrier wall. Technetium-99 was not detected in sample collected from well X749-115G. Trichloroethene was detected in the well sample at 140 μg/L, which is consistent with trichloroethene concentrations detected in other wells in this area.

Six wells (X749-117G, X749-118G, X749-119G, X749-120G, X749-121G, and X749-122G) were installed within the landfill. Technetium-99 was detected in three of the six wells within the landfill: X749-119G at 14.2 pCi/L, X749-120G at 2290 pCi/L, and X749-121G at 771 pCi/L.

Trichloroethene was detected in each of the wells installed within the landfill. In four wells (X749-117G, X749-118G, X749-119G, and X749-121G), trichloroethene concentrations were 100 μg/L or less. Trichloroethene was detected at 22,000 μg/L in well X749-120G, which is on the northeastern barrier wall of the landfill approximately 125 ft north of the beginning of the groundwater collection trench. Trichloroethene was detected at 790 μg/L in well X749-122G, which is in the middle of the southern portion of the landfill approximately 125 ft east of the groundwater collection trench.

Data for this special study are included with the IGWMP data for the X-749/X-120/PK Landfill monitoring area in Appendix A. The semiannual sampling required for this special study will continue in 2009.

4.7.2 Evaluation of Extraction Wells in the Quadrant I Groundwater Investigative Area

The *First Five-Year Review for the Five-Unit Groundwater Investigative Area and X-231A/X-231B Oil Biodegradation Plots* (DOE 2008b), requires an annual evaluation of the performance of the groundwater extraction wells in the area to determine if any of the wells can be shut down. Based on the concentrations of trichloroethene detected in the wells in 2008 (see Section 4.1.2.1), continued operation of all of the extraction wells in the Quadrant I Groundwater Investigative Area (Five-Unit Groundwater Investigative Area) is recommended.

4.7.3 Additional Sampling in the Quadrant II Groundwater Investigative Area

As required in the IGWMP, well X333-01G, which is north of the Quadrant II Groundwater Investigative Area, was sampled for trichloroethene in the first quarter of 2008. Trichloroethene was not detected in the well. This sample result confirms that the trichloroethene groundwater plume in the Quadrant I Groundwater Investigative Area has not migrated north to this well.

4.7.4 Chemical Oxidation at the X-701B Holding Pond

In situ chemical oxidation was initiated as part of the selected remedy for the X-701B Holding Pond groundwater plume in 2006. Oxidant (modified Fenton's reagent), which affects the oxidation/reduction potential and pH of the soil and/or groundwater, is injected directly into the Gallia water bearing unit. The oxidant reacts with the organic contaminants, producing innocuous substances such as carbon dioxide, water, and in the case of chlorinated organic compounds, inorganic chloride. The oxidant also temporarily causes metals in soil to be mobilized into the groundwater. It is expected that the metals will move downgradient with groundwater flow for a short distance and then be re-adsorbed into the soil matrix as the geochemistry of the soil and groundwater returns to ambient conditions.

The test phase of oxidant injections was completed in 2005 (Phase I). Full scale oxidant injections (Phase II) were completed in October 2006, April 2007, July/August 2007, April 2008, June/July 2008, and October 2008. The *Work Plan for the Groundwater Remediation of the X-701B Solid Waste Management Unit* (DOE 2006b) and the *Phase IIc Report for the Groundwater Remediation of the X-701B Solid Waste Management Unit* (DOE 2007d) provide additional information, including sampling results associated with the injections.

4.7.5 Chemical Oxidation at the X-740 Waste Oil Handling Facility

The most recent evaluation of the X-740 phytoremediation system, the *Supplemental Evaluation to the 2003 Five Year Evaluation Report for the X-740 Phytoremediation Area* (DOE 2007e), found that the phytoremediation system has not performed as predicted by groundwater modeling. Ohio EPA required DOE to evaluate other remedial alternatives for this area and also recommended aquifer pumping tests and additional groundwater modeling.

In response to Ohio EPA, DOE developed the *Work Plan for the X-740 Groundwater Plume Optimization* (DOE 2008h). The work plan included aquifer performance tests and *in situ* chemical oxidation for selected areas of the X-740 groundwater plume. The aquifer performance testing was completed in June 2008. Appendix C provides a report on the results of this testing following the IGWMP data for the X-740 area.

Three rounds of oxidant injections were completed in May, June/July, and September of 2008. Monitoring was completed as required by the work plan. Monitoring results for wells that are part of the IGWMP are included in Section 4.3.2. Complete results for all monitoring locations (groundwater monitoring wells, temporary groundwater monitoring locations, and soil sampling locations) are provided in the report included in Appendix C. The oxidant that was injected into the X-740 groundwater plume during 2008 briefly reduced trichloroethene concentrations detected in some of the wells, but concentrations returned to typical levels by the end of 2008.

4.7.6 PCB sampling at the X-611A Former Lime Sludge Lagoons

The *Second Five-Year Review for the X-611A Prairie* (DOE 2008e) was submitted to Ohio EPA in 2008. Ohio EPA comments on the report requested sampling for PCBs to ensure that PCBs present in the buried sludge at this unit have not migrated to groundwater. Three wells (X611-02BA, X611-03G, and X611-04BA) were sampled for PCBs in December 2008. PCBs were not detected in the samples. Samples from these three wells will be analyzed for PCBs once every five years beginning in calendar year 2012 to support future five-year reviews.

5. GROUNDWATER TREATMENT FACILITIES AND DOE NPDES MONITORING RESULTS

Reporting groundwater treatment facility and NPDES monitoring results is not required by the IGWMP, however, this information has been included at the request of Ohio EPA. During CY 2008, approximately 33 million gallons of water were treated at the X-622, X-623, X-624, and X-627 Groundwater Treatment Facilities. Approximately 98 gallons (1249 pounds) of trichloroethene were removed from the water. Facility information is summarized below:

Summary of groundwater treatment facility information for 2008

Facility	Gallons of water treated	Gallons of TCE removed	Pounds of TCE removed
X-622	18,819,490	3	37
X-623	2,822,500	49	626
X-624	3,503,400	20	260
X-627	7,930,400	26	326

All processed water is discharged through NPDES outfalls before exiting PORTS. Monitoring results for each DOE NPDES outfall in 2008 are discussed with the operations information for the groundwater treatment facility associated with the outfall. Appendix F provides the monitoring data for each outfall for CY 2008. The DOE groundwater treatment facilities, remedial systems, and DOE NPDES outfall associated with each groundwater treatment facility are listed below.

Summary of DOE groundwater treatment facilities, associated remedial systems, and associated NPDES outfalls

Facility	Remedial system(s) associated with treatment facility	DOE NPDES outfall
X-622	Groundwater collection systems and extraction wells in the X-749/X-120/PK Landfill area and extraction wells in the Quadrant I Groundwater Investigative Area	Outfall 608
X-623	Sump in the X-701B Holding Pond and extraction wells immediately east of the X-701B Holding Pond	Outfall 610
X-624	X-237 Groundwater Collection System at the eastern end of the X-701B groundwater plume	Outfall 015
X-627	Sumps in the X-700 and X-705 buildings in the Quadrant II Groundwater Investigative Area	Outfall 611

The X-625 Groundwater Treatment Facility and associated NPDES outfall (Outfall 612) ceased operation in July 2003 with approval from Ohio EPA and therefore did not operate during 2008. A renewal NPDES permit application was submitted to Ohio EPA during 2007 that requested removal of Outfall 612 from the NPDES permit. The new NPDES permit was issued by Ohio EPA on April 15, 2008, and became effective on May 1, 2008.

From January 2008 through April 2008, DOE was also responsible for two outfalls that discharge water from on-site holding ponds. Outfall 012 discharges water from the X-2230M Holding Pond and Outfall 013 discharges water from the X-2230N Holding Pond. These outfalls were transferred to USEC when the new NPDES permit became effective on May 1, 2008. Outfall 613 discharges treated water from the X-6002 Particle Separator that is part of the X-6002 Recirculating Hot Water Plant. This outfall was also transferred to USEC beginning on May 1, 2008. Monitoring results for these outfalls from January through April are discussed in the sections following the groundwater treatment facilities and the data are provided in Appendix F. Figure 13 shows the locations of the NPDES outfalls discussed in this section.

5.1 X-622 GROUNDWATER TREATMENT FACILITY/DOE NPDES OUTFALL 608

The X-622 Groundwater Treatment Facility consists of an air stripper with aqueous phase activated carbon filtration. This facility processes groundwater from the following systems in Quadrant I:

- Groundwater collection trench with associated sump (X749-WPW) and extraction wells (X749-EW05G and X749-EW06G) on the southwest boundary of the X-749 Contaminated Materials Disposal Facility (see Figure 2)

- Groundwater extraction wells (X749-EW01G, X749-EW02G, X749-EW03G, and X749-EW04G) installed in 2007 in the X-749 South Barrier Wall area (see Figure 2)

- Groundwater collection systems and associated sumps (PK-PL6 and PK-PL6A) on the eastern boundary of the PK Landfill (see Figure 2)

- Fourteen extraction wells located in the Quadrant I Groundwater Investigative Area (see Figure 3)

In 2008, the facility processed approximately 18.8 million gallons of groundwater with an average trichloroethene concentration of 238 μg/L, thereby removing approximately 3 gallons of trichloroethene from the water.

No NPDES permit limitations were exceeded at Outfall 608 in 2008. Trichloroethene was detected in all of the samples collected from the outfall at concentrations ranging from 0.63 to 3 μg/L. These detections are less than the daily discharge limitation of 10 μg/L.

No transuranics were detected at this outfall in 2008. Technetium-99 was detected at activities ranging from 172 to 1140 pCi/L in the samples collected from Outfall 608 in 2008. These detections were due to the technetium-99 present in groundwater removed from the groundwater collection trench on the west side of the X-749 Contaminated Materials Disposal Facility.

Uranium-235 and uranium-236 were not detected in any of the samples collected from Outfall 608 in 2008. Total uranium, uranium-233/234, and uranium-238 were detected in the samples as summarized below:

- Uranium (total) was detected in 12 of 12 samples at a maximum concentration of 1.082 μg/L.
- Uranium-233/234 was detected in 12 of 12 samples at a maximum activity of 0.6693 pCi/L.
- Uranium-238 was detected in 12 of 12 samples at a maximum activity of 0.3619 pCi/L.

Appendix F provides the monitoring results for this outfall for 2008.

5.2 X-623 GROUNDWATER TREATMENT FACILITY/DOE NPDES OUTFALL 610

The X-623 Groundwater Treatment Facility consists of an air stripper with offgas activated carbon filtration and aqueous-phase activated carbon filtration. The X-623 Groundwater Treatment Facility treats trichloroethene-contaminated groundwater from a sump in the bottom of the X-701B Holding Pond and three groundwater extraction wells (X623-EW01G, X623-EW02G, and X623-EW03G) east of the holding pond (see Figure 5). Two horizontal wells located in the X-701B area (see Figure 5) are not currently operational.

In 2008, the facility treated approximately 2.8 million gallons of water with an average trichloroethene concentration of 18,837 μg/L, thereby removing approximately 49 gallons of trichloroethene from the water.

No NPDES permit limitations were exceeded at Outfall 610 in 2008. Trichloroethene was detected in six samples collected during 2008 at a maximum concentration of 2.1 μg/L. These detections are less than the daily discharge limitation of 10 μg/L.

No transuranics were detected at this outfall in 2008. Technetium-99 was detected in 11 of 12 samples collected from Outfall 610 in 2008 at activities ranging from 43.6 to 829 pCi/L. Total uranium, uranium-233/234, uranium-235, uranium-236, and uranium-238 were detected in some or all of the samples as summarized below:

- Uranium (total) was detected in 12 of 12 samples at a maximum concentration of 287.9 μg/L.
- Uranium-233/234 was detected in 12 of 12 samples at a maximum activity of 349.8 pCi/L.
- Uranium-235 was detected in 12 of 12 samples at a maximum activity of 15.7 pCi/L.
- Uranium-236 was detected in 9 of 12 samples at a maximum activity of 2.985 pCi/L.
- Uranium-238 was detected in 12 of 12 samples at a maximum activity of 95.33 pCi/L.

Appendix F provides the monitoring results for this outfall for 2008.

5.3 X-624 GROUNDWATER TREATMENT FACILITY/DOE NPDES OUTFALL 015

At the X-624 Groundwater Treatment Facility, groundwater is treated via an air stripper with offgas activated carbon filtration and aqueous-phase activated carbon filtration. This facility processes trichloroethene-contaminated groundwater from X-701B groundwater plume, specifically the X-237 Groundwater Collection System, which consists of north-south and east-west collection trenches and sumps #1 and #2 (see Figure 5).

In 2008, the X-624 Groundwater Treatment Facility treated approximately 3.5 million gallons of water with an average trichloroethene concentration of 7042 μg/L, thereby removing approximately 20 gallons of trichloroethene from the water.

No NPDES permit limitations were exceeded at Outfall 015 in 2008. Trichloroethene was detected in most of the samples collected from the outfall at a maximum concentration of 5.1 μg/L. These detections are less than the daily discharge limitation of 10 μg/L.

No transuranics or technetium-99 were detected at this outfall in 2008. Uranium-236 was not detected in any of the samples collected from Outfall 015 in 2008. Total uranium, uranium-233/234, uranium-235, and uranium-238 were detected in some or all of the samples as summarized below:

- Uranium (total) was detected in 12 of 12 samples at a maximum concentration of 1.631 μg/L.
- Uranium-233/234 was detected in 12 of 12 samples at a maximum activity of 1.981 pCi/L.
- Uranium-235 was detected in 4 of 12 samples at a maximum activity of 0.06957 pCi/L.
- Uranium-238 was detected in 12 of 12 samples at a maximum activity of 0.5417 pCi/L.

Appendix F provides the monitoring results for this outfall for 2008.

5.4 X-627 GROUNDWATER TREATMENT FACILITY/DOE NPDES OUTFALL 611

The X-627 Groundwater Treatment Facility consists of an air stripper with offgas activated carbon filtration and aqueous phase activated carbon filtration. The X-700 and X-705 buildings are located above the Quadrant II Groundwater Investigative Area plume, and contaminated groundwater is extracted from sumps located in the basement of each building (see Figure 4).

In 2008, the X-627 Groundwater Treatment Facility treated approximately 7.9 million gallons of groundwater with an average trichloroethene concentration of 5058 μg/L, thereby removing 26 gallons of trichloroethene from the water.

No NPDES permit limitations were exceeded at Outfall 611 in 2008. Trichloroethene was detected in most of the samples collected in 2008 at a maximum concentration of 4.3 μg/L. These detections are less than the daily discharge limitation of 10 μg/L.

No transuranics were detected at this outfall in 2008. Technetium-99 was detected in 9 of 12 samples collected at Outfall 611 in 2008 at activities ranging from 17.1 to 1310 pCi/L. Total uranium, uranium-233/234, uranium-235, uranium-236, and uranium-238 were detected in some or all of the samples as summarized below:

- Uranium (total) was detected in 12 of 12 samples at a maximum concentration of 7.188 μg/L.
- Uranium-233/234 was detected in 12 of 12 samples at a maximum activity of 9.535 pCi/L.
- Uranium-235 was detected in 12 of 12 samples at a maximum activity of 0.4387 pCi/L.
- Uranium-236 was detected in 4 of 12 samples at a maximum activity of 0.0602 pCi/L.
- Uranium-238 was detected in 12 of 12 samples at a maximum activity of 2.375 pCi/L.

Appendix F provides the monitoring results for this outfall for 2008.

5.5 DOE NPDES OUTFALL 012

Outfall 012 discharges water from the X-2230M Holding Pond, which collects precipitation runoff from the southern portion of the site. Other water discharges collected in the pond include non-contact cooling water, foundation drainage, steam condensate, and groundwater infiltration. This outfall was transferred to USEC beginning on May 1, 2008.

No NPDES permit limitations were exceeded at Outfall 012 from January through April of 2008. Trichloroethene was detected in four samples collected from January through April of 2008 at a maximum concentration of 0.29 μg/L. These detections are less than the daily discharge limitation of 10 μg/L.

No transuranics, technetium-99, uranium-235, or uranium-236 were detected at this outfall from January through April of 2008. Total uranium, uranium-233/234, and uranium-238 were detected in each of the samples as summarized below:

- Uranium (total) was detected in 4 of 4 samples at a maximum concentration of 1.428 μg/L.
- Uranium-233/234 was detected in 4 of 4 samples at a maximum activity of 0.704 pCi/L.
- Uranium-238 was detected in 4 of 4 samples at a maximum activity of 0.4775 pCi/L.

Appendix F provides the monitoring results for this outfall from January through April of 2008.

5.6 DOE NPDES OUTFALL 013

Outfall 013 discharges water from the X-2230N Holding Pond, which collects precipitation runoff from the western portion of the site. Other water discharges collected in the pond include non-contact cooling water, foundation drainage, steam condensate, and groundwater infiltration. This outfall was transferred to USEC beginning on May 1, 2008.

No NPDES permit limitations were exceeded at Outfall 013 January through April of 2008.

No transuranics, technetium-99, or uranium-236 were detected at this outfall from January through April of 2008. Total uranium, uranium-233/234, uranium-235, and uranium-238 were detected in the samples as summarized below:

- Uranium (total) was detected in 4 of 4samples at a maximum concentration of 1.608 μg/L.
- Uranium-233/234 was detected in 4 of 4 samples at a maximum activity of 1 pCi/L.
- Uranium-235 was detected in 1 of 4 samples at 0.05227 pCi/L.
- Uranium-238 was detected in 4 of 4 samples at a maximum activity of 0.5356 pCi/L.

Appendix F provides the monitoring results for this outfall from January through April of 2008.

5.7 DOE NPDES OUTFALL 613

Outfall 613 discharges water from the X-6002 Particle Separator that is part of the X-6002 Recirculating Hot Water Plant. This outfall was transferred to USEC beginning on May 1, 2008.

Discharges from this outfall are monitored only for suspended solids. The NPDES permit limitation for suspended solids was not exceeded from January through April of 2008. Appendix F provides the monitoring results for this outfall from January through April of 2008.

This outfall is not monitored for radionuclides because there is no source for contamination of this water by radionuclides.

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6. SUMMARY

This section summarizes monitoring results for each IGWMP monitoring area in 2008.

Monitoring completed in accordance with the IGWMP during 2008 (groundwater, surface water, and water supply) indicates that contaminants from PORTS are contained on site with the exception of the X-749/X-120 groundwater plume, in which trichloroethene and other VOCs (at concentrations below PRGs) have been detected in three off-site wells (WP-01G, WP-03G, and WP-07G) south of the southern PORTS boundary. The concentrations of VOCs detected in these off-site wells decreased in 2008 due to the operation of the four new groundwater extraction wells installed in the southern portion of the X-749/X-120 plume, which began operating in June 2007.

In other areas of groundwater contamination at PORTS, the concentration of contaminants and the lateral extent of plume boundaries did not change significantly in 2008. This section includes a summary for the following areas or programs:

- X-749 Contaminated Materials Disposal Facility/X-120 Old Training Facility/PK Landfill
- Quadrant I Groundwater Investigative Area/X-749A Classified Materials Disposal Facility
- Quadrant II Groundwater Investigative Area
- X-701B Holding Pond
- X-633 Pumphouse/Cooling Towers Area
- X-616 Chromium Sludge Surface Impoundments
- X-740 Waste Oil Handling Facility
- X-611A Former Lime Sludge Lagoons
- X-735 Landfills
- X-734 Landfills
- X-533 Switchyard Area
- Surface water
- Water supply

6.1 X-749 CONTAMINATED MATERIALS DISPOSAL FACILITY/X-120 OLD TRAINING FACILITY/PK LANDFILL

In 2008, concentrations of VOCs, including trichloroethene, decreased in on-site and off-site monitoring wells that monitor the X-749 South Barrier Wall Area. These decreases are due to the four new groundwater extraction wells installed in the area in 2007. By the fourth quarter of 2008, VOCs detected in off-site monitoring wells WP-01G, WP-03G, and WP-07G had decreased to less than 1 μg/L. VOCs were not detected in well WP-01G after the first quarter of 2008.

Concentrations of trichloroethene are decreasing in two of the northwestern plume wells (X120-08G and X749-42G). However, trichloroethene is increasing in two wells (X749-PZ06G and X749-109G) south of this area in the southwestern portion of the plume, north of Perimeter Road. In the eastern portion of the plume, directly east of the X-749 Landfill, concentrations of trichloroethene are decreasing in wells X749-09GA, X749-20G, X749-21G, X749-35G, and X749-BG9G. The concentration of trichloroethene is also decreasing in well X749-13G, which is south of the landfill. The decreases in trichloroethene in groundwater on the southern and eastern sides of the landfill may be due to construction of the barrier wall on the south and east sides of the landfill completed in 2002.

Data collected during 2008 at PK Landfill monitoring wells, which are in the northeastern portion of this monitoring area, were consistent with data collected from 1999 through 2007 (DOE 2000a, DOE 2001, DOE 2002a, DOE 2003a, DOE 2004, DOE 2005a, DOE 2006a, DOE 2007a, and DOE 2008a).

6.2 QUADRANT I GROUNDWATER INVESTIGATIVE AREA/X-749A

The eastern edge of the Quadrant I Groundwater Investigative Area plume is further east than previously known based on trichloroethene detections in two new wells (X749A-18G and X749A-19G) installed in 2008 west of the X-749A Landfill, which is also the eastern edge of the Quadrant I Groundwater Investigative Area plume. The concentration of trichloroethene detected in well X326-09G (on the western edge of the plume at the southwest corner of the X-326 Process Building) increased to 14,000 μg/L in the third quarter (trichloroethene was detected at 8300 μg/L in the sample collected in the first quarter of 2008). Activities are underway to install an additional extraction well near well X326-09G.

Assessment monitoring took place at the X-749A Classified Materials Disposal Facility throughout 2008 based on exceedences of both control limits for alkalinity in the sample collected from well X749A-01G during the fourth quarter of 2006.

6.3 QUADRANT II GROUNDWATER INVESTIGATIVE AREA

Concentrations of trichloroethene detected in the southern arm of the plume (wells X720-01G and X720-08G) have been increasing over the past several years; however, the concentration of trichloroethene detected in well X720-01G in 2008 decreased to 64,000 μg/L from 92,000 μg/L in 2007. This is the second year that trichloroethene concentrations have decreased in well X720-01G. Trichloroethene continues to increase in well X720-08G (6200 μg/L in 2008; 5600 μg/L in 2007).

Well X333-01G, which is north of the Quadrant II Groundwater Investigative Area, was sampled for trichloroethene in 2008 for a special study requested by Ohio EPA. Trichloroethene was not detected in the sample.

6.4 X-701B HOLDING POND

The oxidant injections that are part of the groundwater remediation for the X-701B Holding Pond are affecting levels of VOCs and metals in the western portion of the groundwater plume.

Concentrations of trichloroethene continue to vary in the western portion of the monitoring area near the former X-701B Holding Pond and X-701B extraction wells due to the oxidant injections in this area. The concentration of trichloroethene increased in the third quarter samples collected from well X701-05G. In addition, concentrations of trichloroethene are increasing in two of the wells that monitor the plume in the X-744G area (X701-01G and X744G-03G). This area is south of the oxidant injection area.

Concentrations of trichloroethene have returned to typical levels (low concentrations or undetected) in wells in the eastern portion of the monitoring area downgradient of the X-237 Groundwater Collection System (X701-15G and X701-16G). Trichloroethene concentrations were elevated in samples collected from wells X701-15G and X701-16G in the third quarter of 2007. Based on data collected in the first and third quarters of 2008, these elevated detections were anomalies possibly caused by the dry weather

during 2007. The elevated detections of trichloroethene in the third quarter of 2007 do not appear to indicate any problems with the X-237 Groundwater Collection System.

Elevated levels of metals were detected in several of the X-701B monitoring wells in 2008. These detections are related to the oxidant injections associated with the X-701B groundwater remedy. The oxidant, which affects the oxidation/reduction potential and pH of the soil and/or groundwater, temporarily causes metals in soil to be mobilized into the groundwater. It is expected that the metals will move downgradient with groundwater flow for a short distance and then be re-adsorbed into the soil matrix as the geochemistry of the soil and groundwater returns to ambient conditions.

6.5 X-633 PUMPHOUSE/COOLING TOWERS AREA

Concentrations of chromium are increasing in one of the wells that monitor the X-633 Pumphouse/Cooling Towers Area (well X633-PZ04G); however, the concentrations of chromium detected in 2008 (20 and 26 μg/L) are well below the PRG (100 μg/L).

6.6 X-616 CHROMIUM SLUDGE SURFACE IMPOUNDMENTS

No significant changes were noted in concentrations of metals or VOCs detected in wells at the X-616 Chromium Sludge Surface Impoundments during 2008.

6.7 X-740 WASTE OIL HANDLING FACILITY

No significant changes were noted in the groundwater plume near the X-740 Waste Oil Handling Facility during 2008. The oxidant that was injected into the X-740 groundwater plume during 2008 briefly reduced trichloroethene concentrations detected in some of the wells, but concentrations returned to typical levels by the end of 2008.

6.8 X-611A FORMER LIME SLUDGE LAGOONS

No significant changes were noted in concentrations of chromium or beryllium detected in wells at the X-611A Former Lime Sludge Lagoons during 2008.

6.9 X-735 LANDFILLS

Corrective Measures Monitoring for the X-735 Gallia monitoring wells began in 2008. None of the concentration limits applicable to specified parameters in the X-735 Gallia wells was exceeded in 2008. The detection monitoring program for X-735 Berea wells continued in 2008. None of the control limits used to determine a statistically significant change in the indicator parameters was exceeded in the X-735 Berea wells in 2008.

6.10 X-734 LANDFILLS

No significant changes were noted in concentrations of metals or VOCs detected in wells at the X-734 Landfills during 2008.

6.11 X-533 SWITCHYARD AREA

No significant changes were noted in concentrations of cadmium, cobalt, or nickel detected in wells at the X-533 Switchyard Area during 2008.

6.12 SURFACE WATER

Trichloroethene was detected at concentrations ranging from 1.6 to 6.7 μg/L in the four samples collected from the Southwestern Drainage Ditch at UND-SW01. Trichloroethene is routinely detected at low concentrations at this sampling point. Other VOCs detected in one or more samples collected at UND-SW01 include 1,1-dichloroethane, 1,1-dichloroethene, and *cis*-1,2-dichloroethene,. Each of these detections were estimated concentrations less than 1 μg/L. No VOCs were detected at UND-SW02, which is downstream from UND-SW01, with the exception of the sample contaminant 2-butanone. 2-Butanone was detected at an estimated concentration of 5.6 μg/L in the fourth quarter sample collected from UND-SW02.

Trichloroethene and/or *cis*-1,2-dichloroethene were routinely detected at estimated concentrations less than 1 μg/L in the samples collected from East Drainage Ditch sampling location EDD-SW01 and Little Beaver Creek sampling locations LBC-SW01 and LBC-SW02. Neither of these VOCs were detected in samples collected from downstream Little Beaver Creek sampling locations LBC-SW03 and LBC-SW04.

No transuranic radionuclides (americium-241, neptunium-237, plutonium-238, and plutonium-239/240) were detected in the surface water samples collected during 2008. In the fourth quarter of 2008, technetium-99 was detected at 12.2 and 9.59 pCi/L in the samples collected from Little Beaver Creek sampling locations LBC-SW03 and LBC-SW04, respectively. Technetium-99 is occasionally detected at the Little Beaver Creek sampling locations. These detections are well below the Ohio EPA drinking water standard for technetium-99 (900 pCi/L, based on a 4 mrem/year dose from beta emitters).

6.13 WATER SUPPLY

No VOCs other than the common sample and glassware contaminants acetone and methylene chloride were detected in the water supply samples collected during 2008.

No transuranics or technetium-99 were detected in any of the water supply samples collected in 2008.

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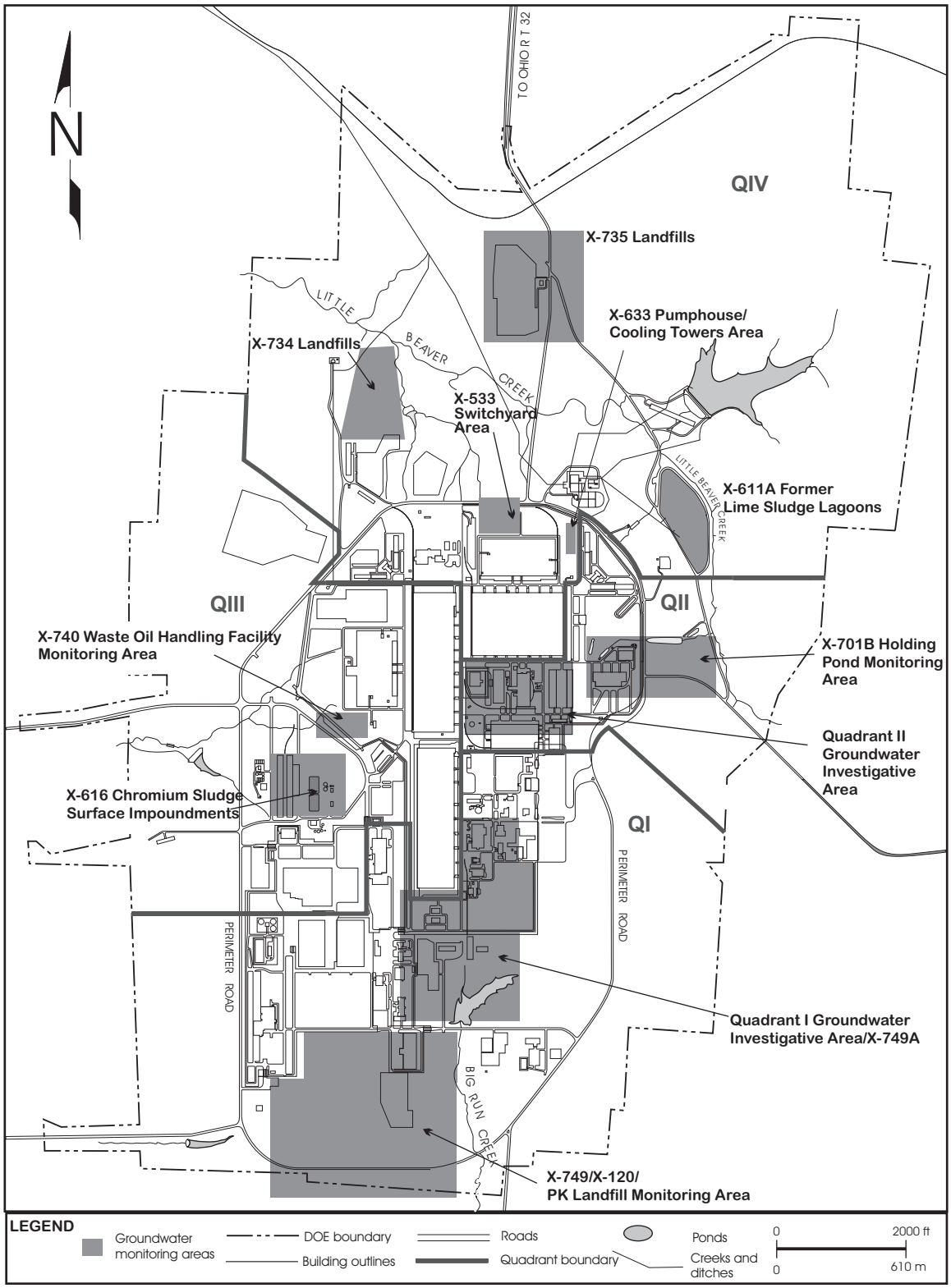


Figure 1. PORTS groundwater monitoring areas.

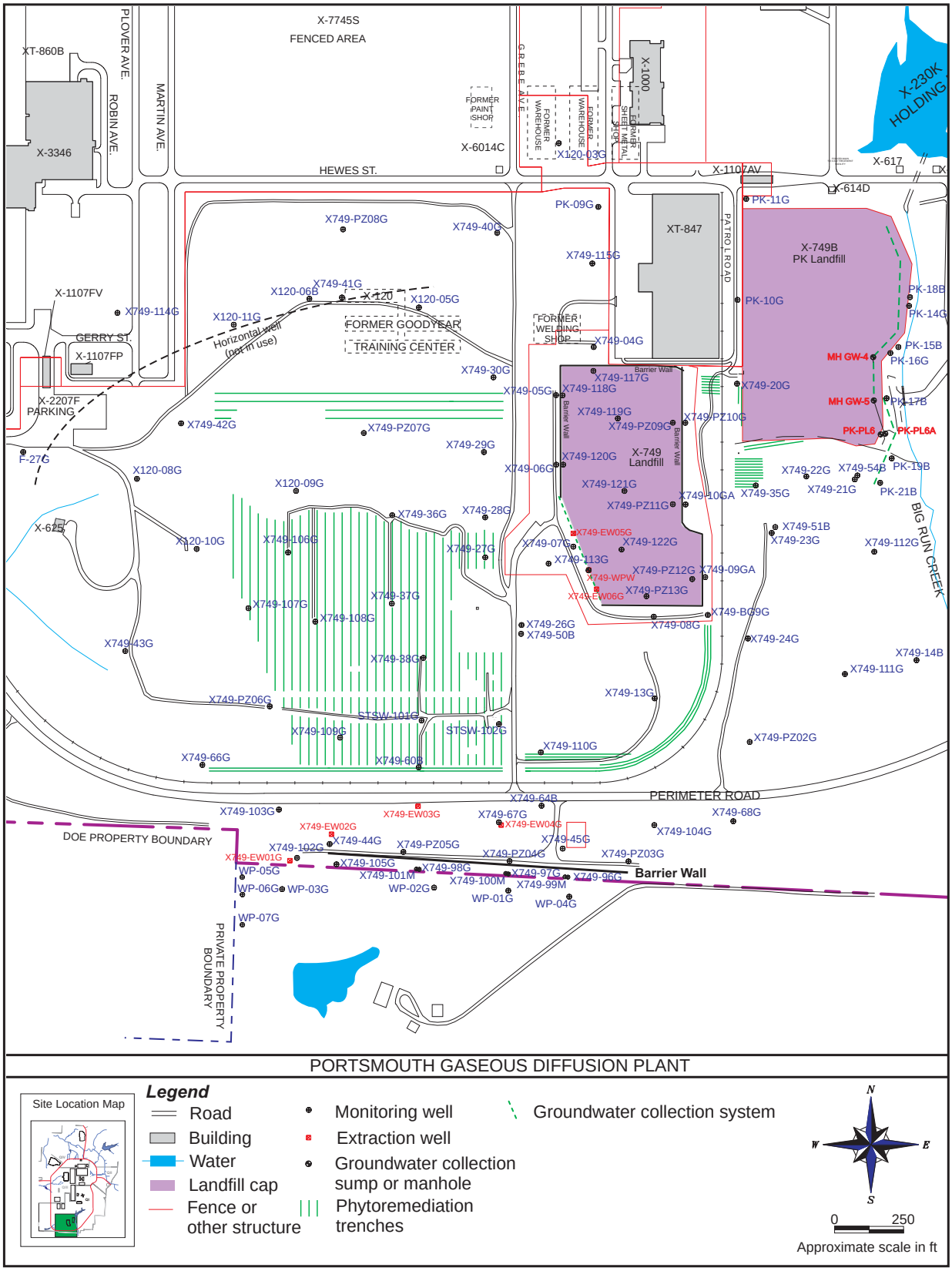


Figure 2. Monitoring wells X-749/X-120/PK Landfill.

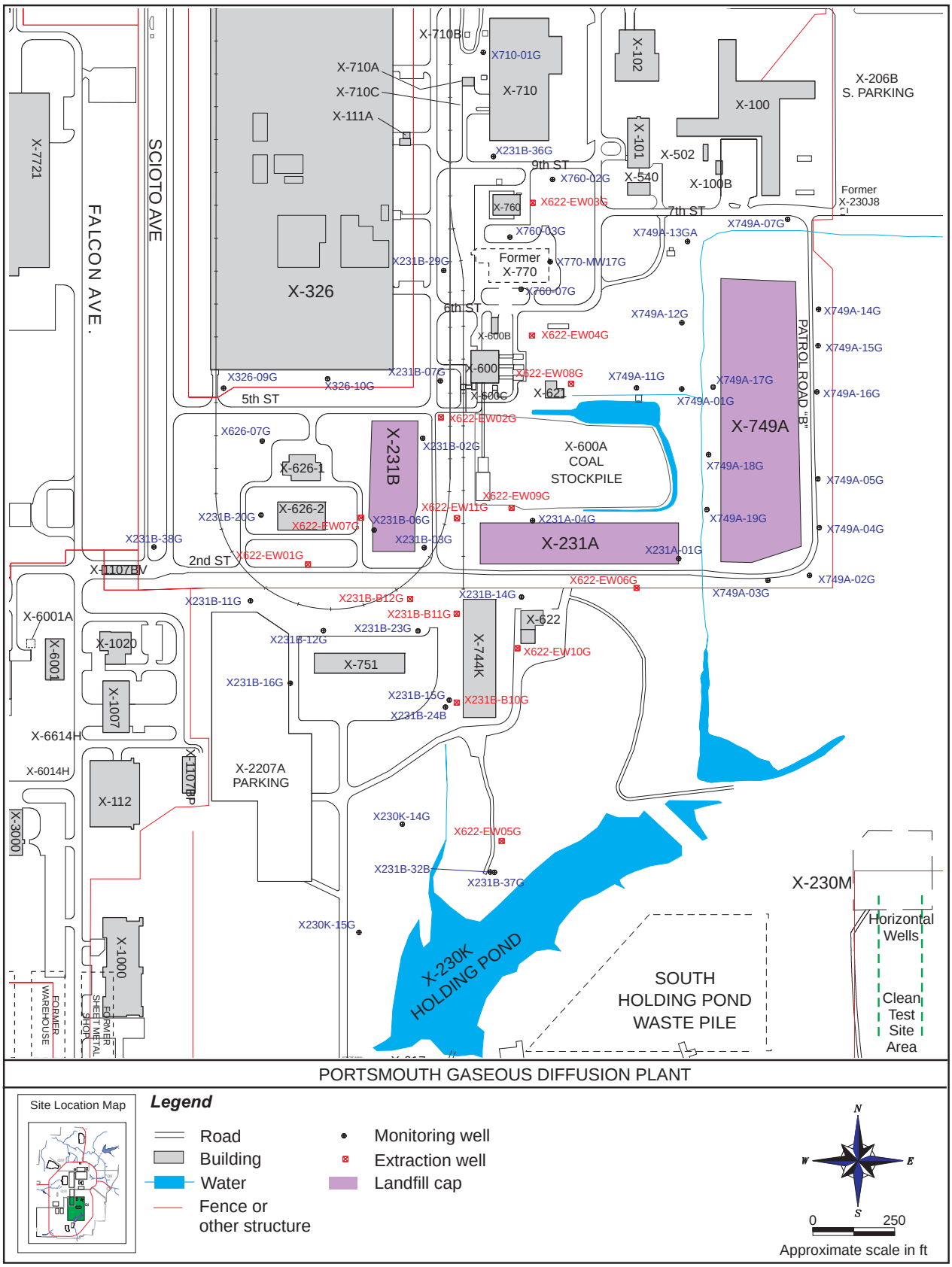


Figure 3. Monitoring wells Quadrant I Groundwater Investigative Area/ X-749A Classified Materials Disposal Facility.

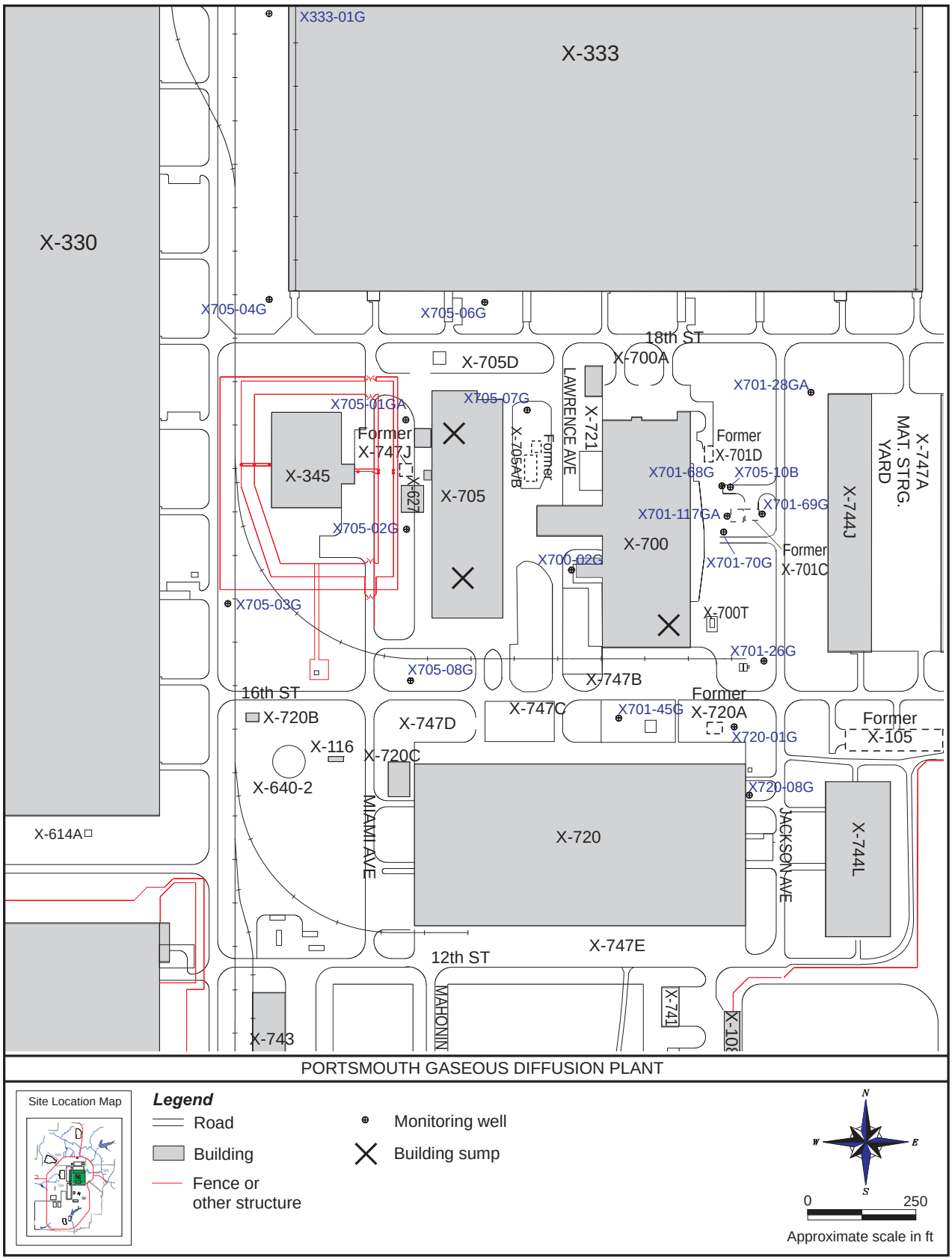


Figure 4. Monitoring wells Quadrant II Groundwater Investigative Area.

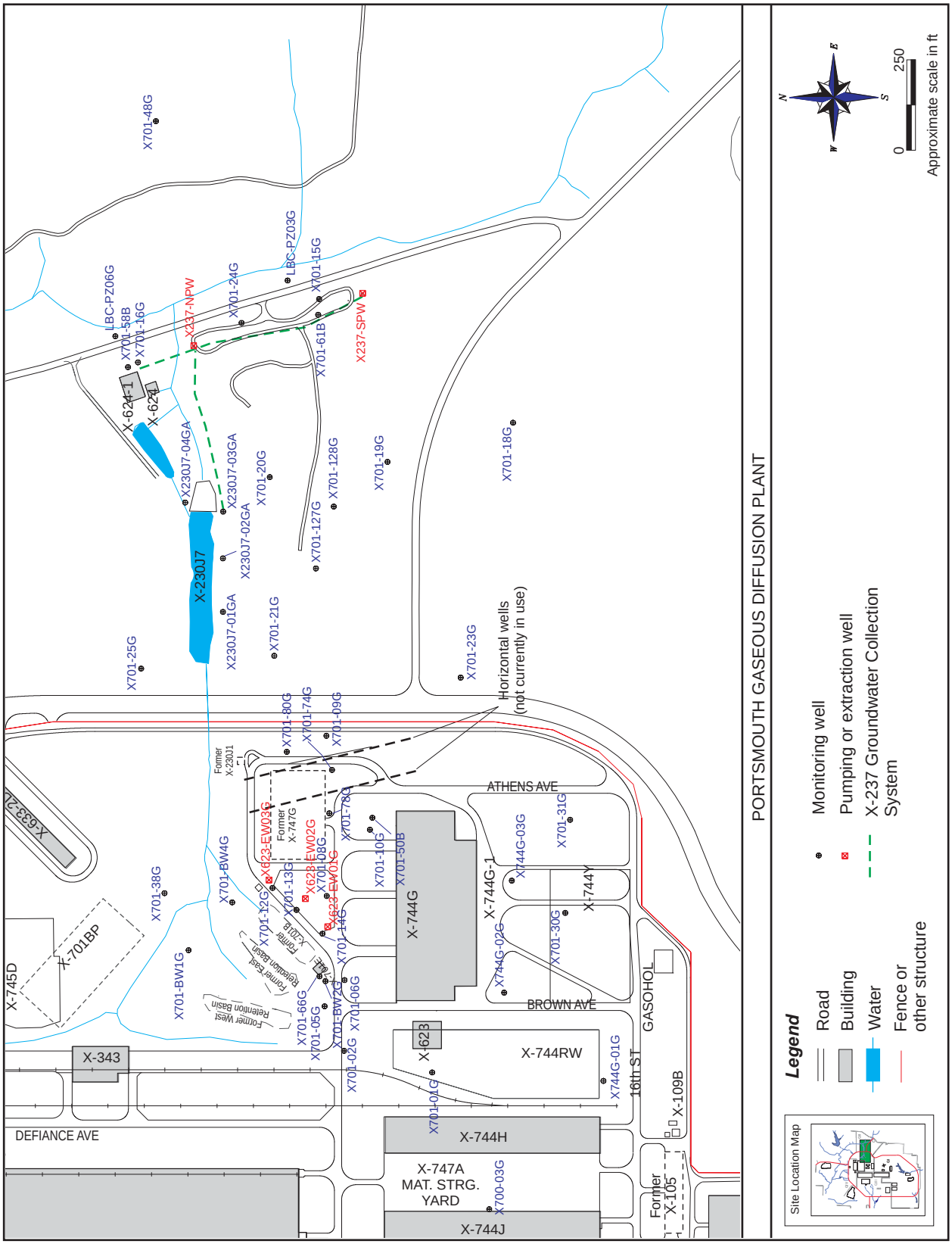


Figure 5. Monitoring wells X-701B Holding Pond.

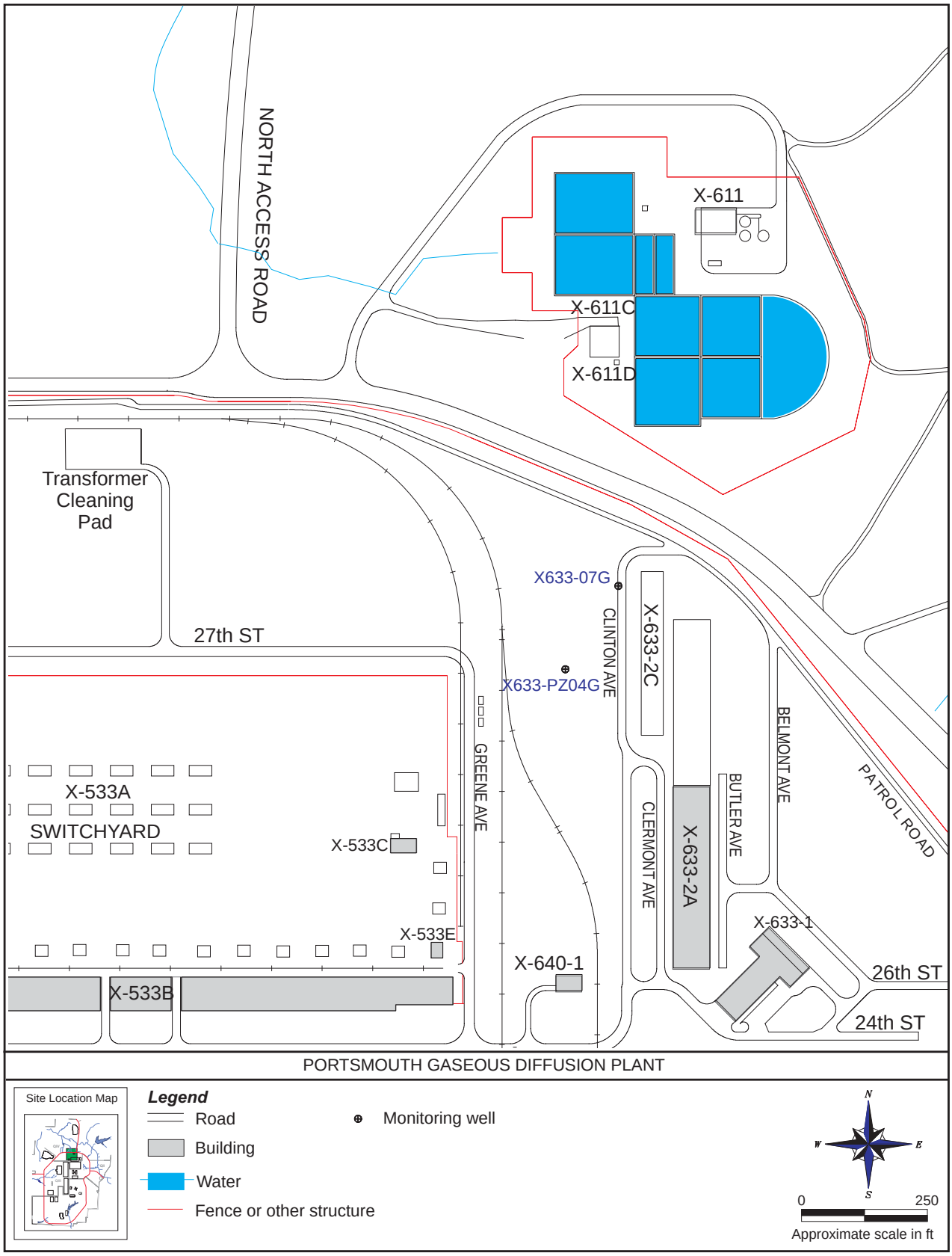


Figure 6. Monitoring wells X-633 Cooling Towers Area.

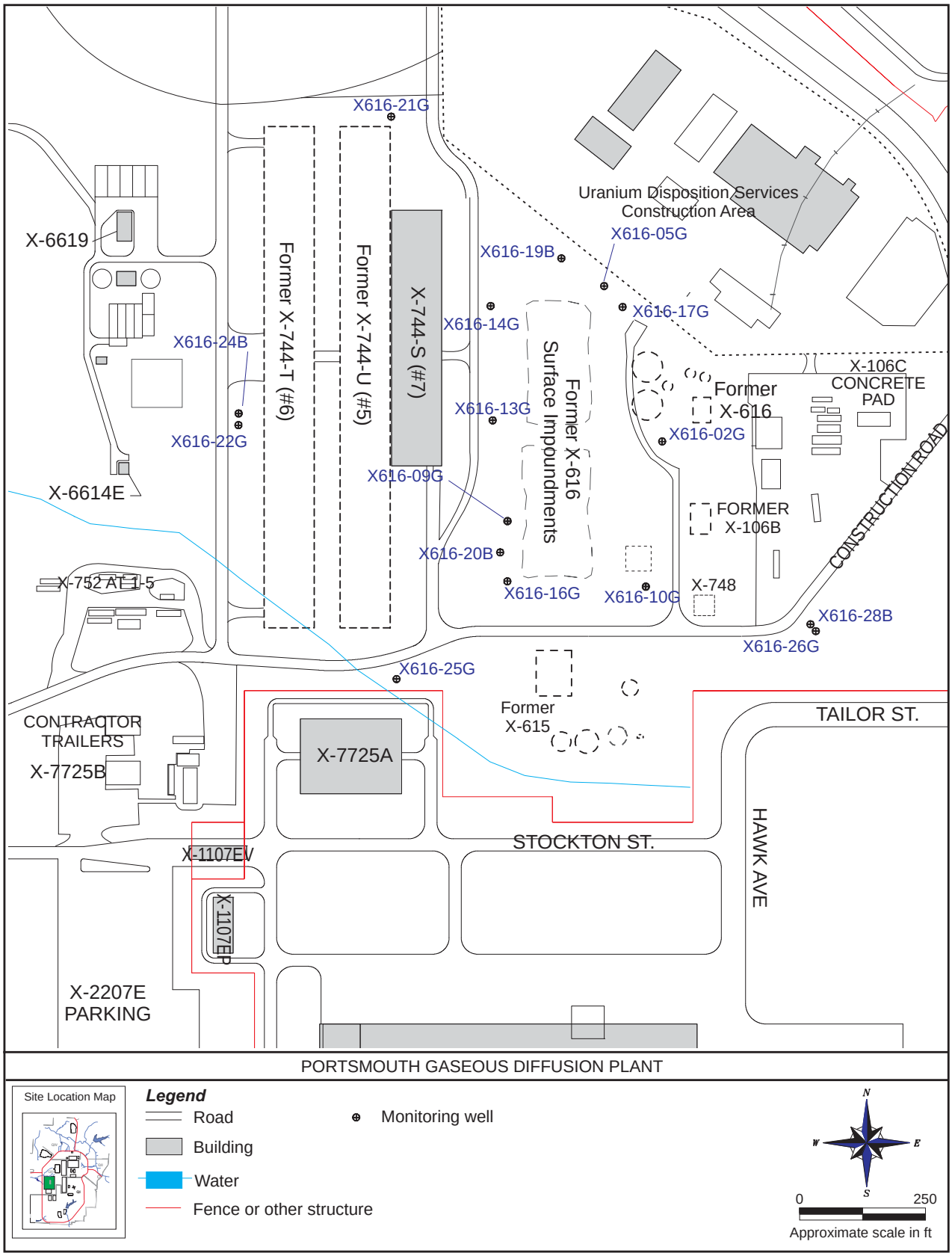


Figure 7. Monitoring wells X-616 Chromium Sludge Surface Impoundments.

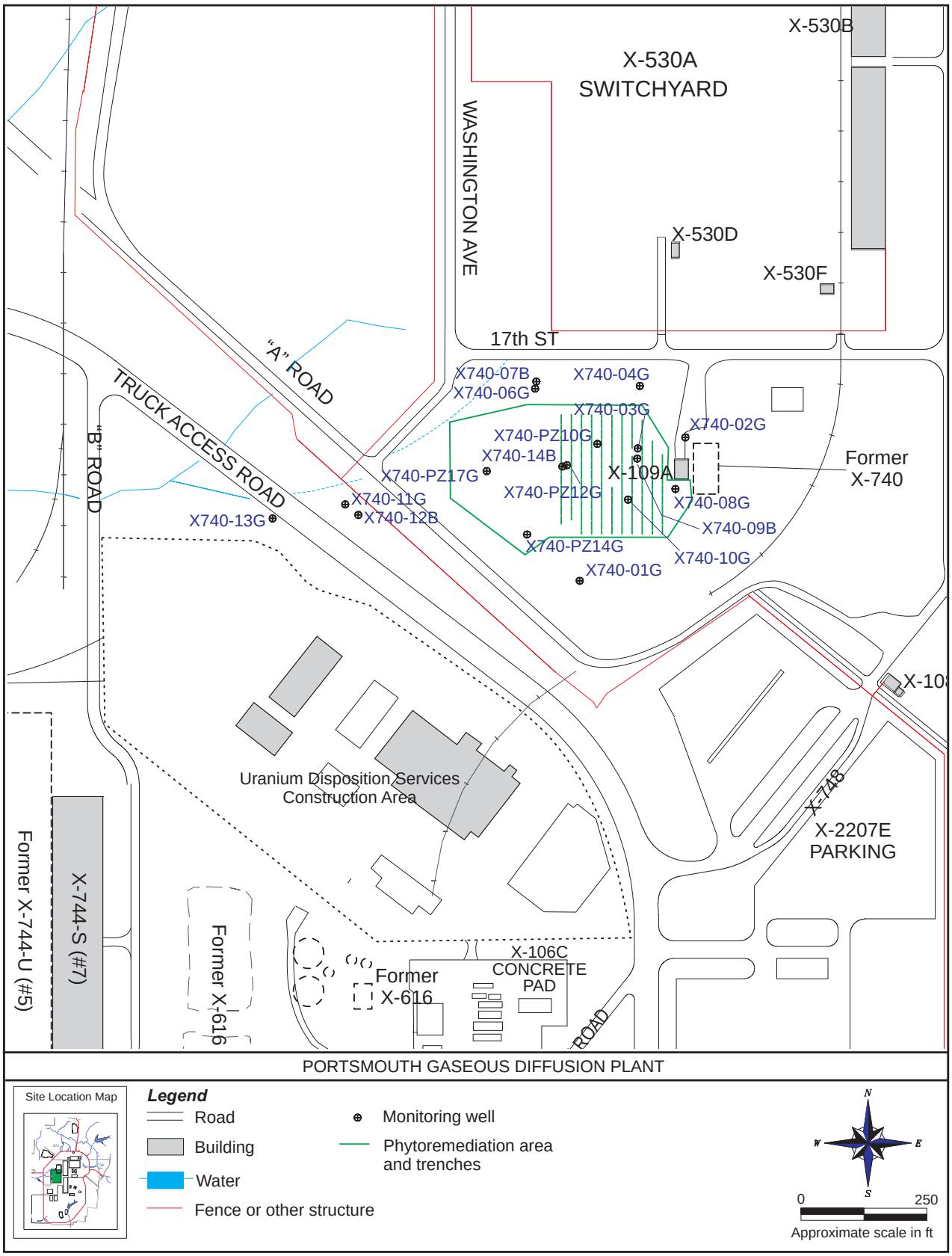


Figure 8. Monitoring wells X-740 Waste Oil Handling Facility.

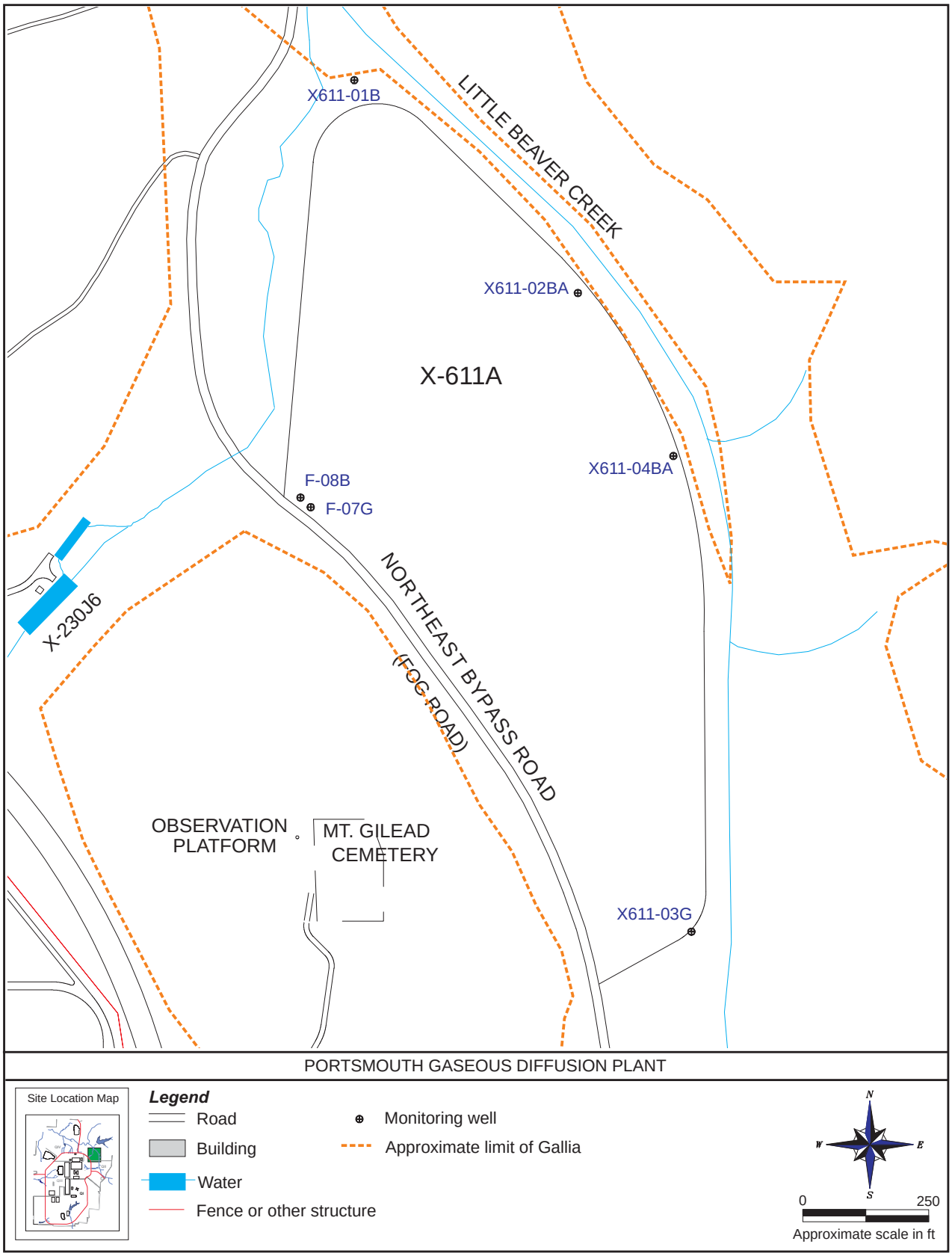


Figure 9. Monitoring wells X-611A Former Lime Sludge Lagoons.

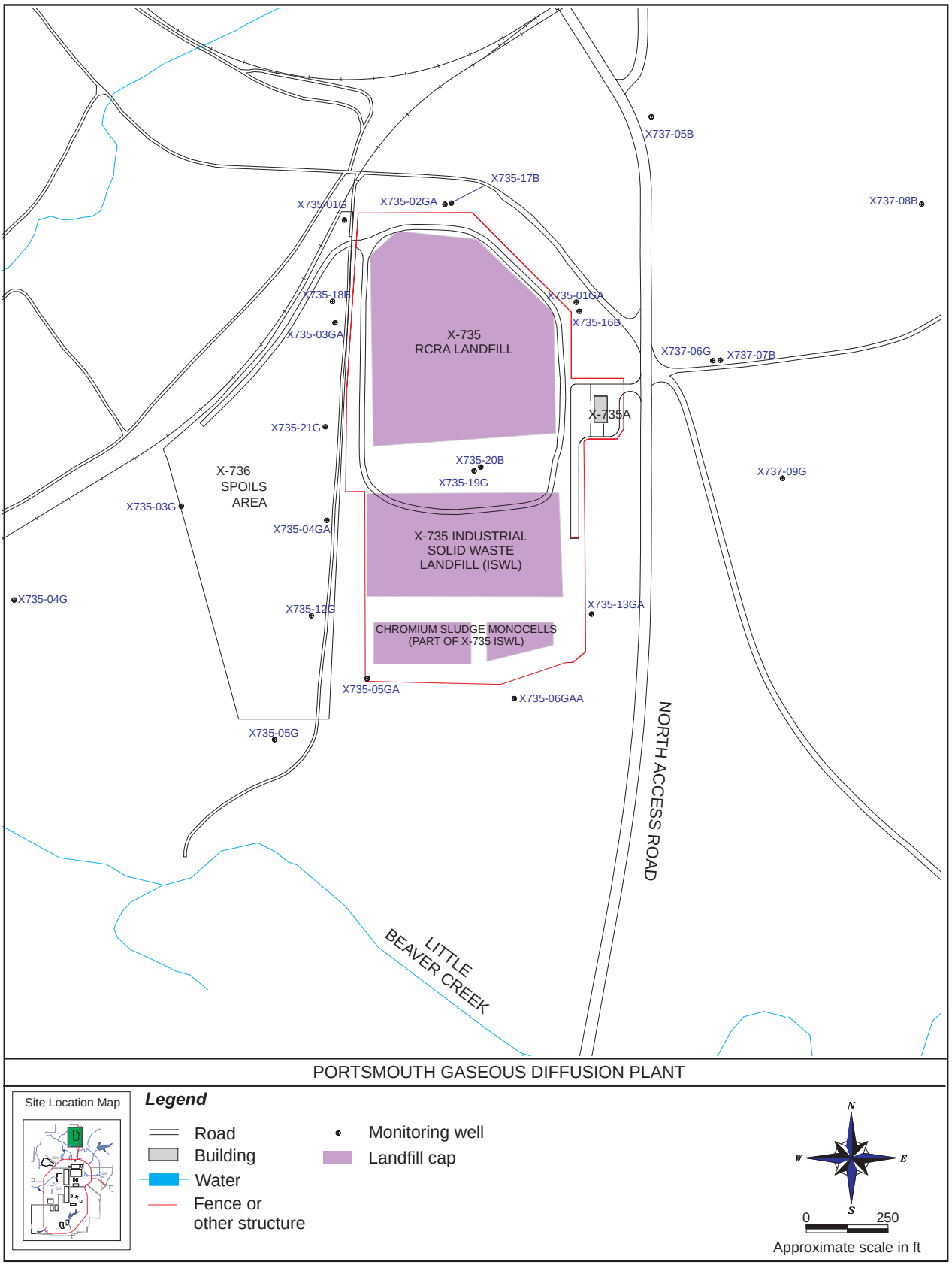


Figure 10. Monitoring wells X-735 Landfills.

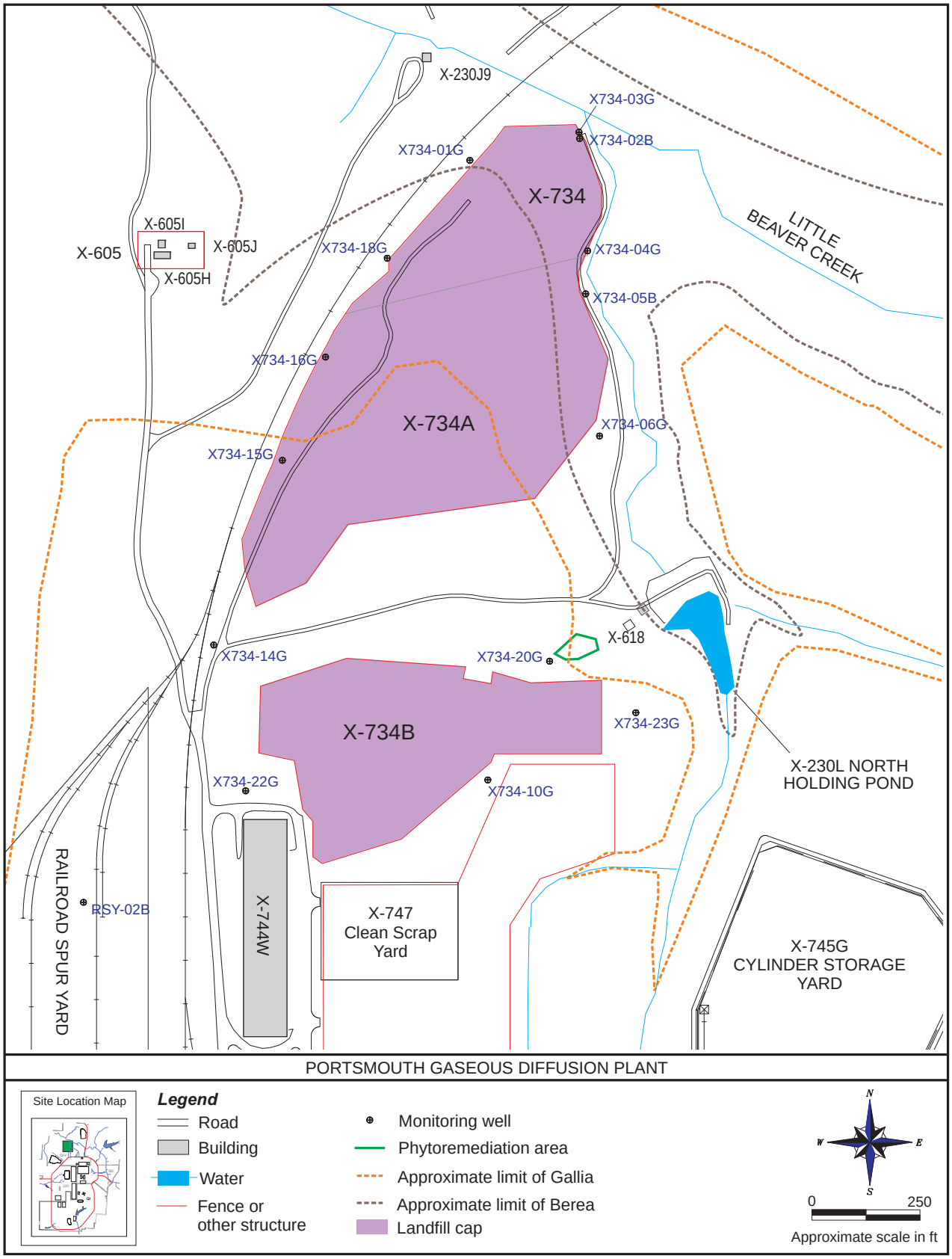


Figure 11. Monitoring wells X-734 Landfills.

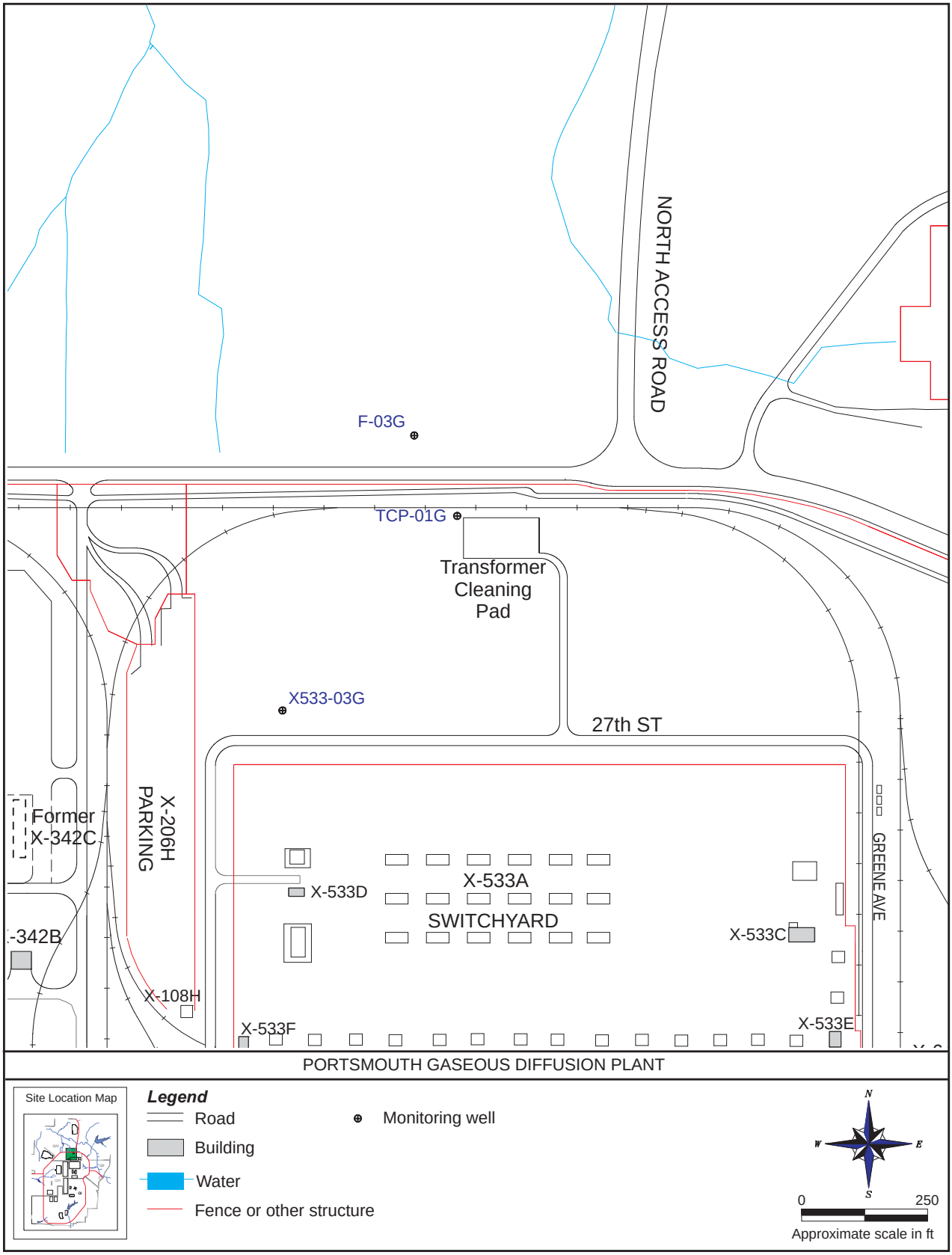


Figure 12. Monitoring wells X-533 Switchyard Area.

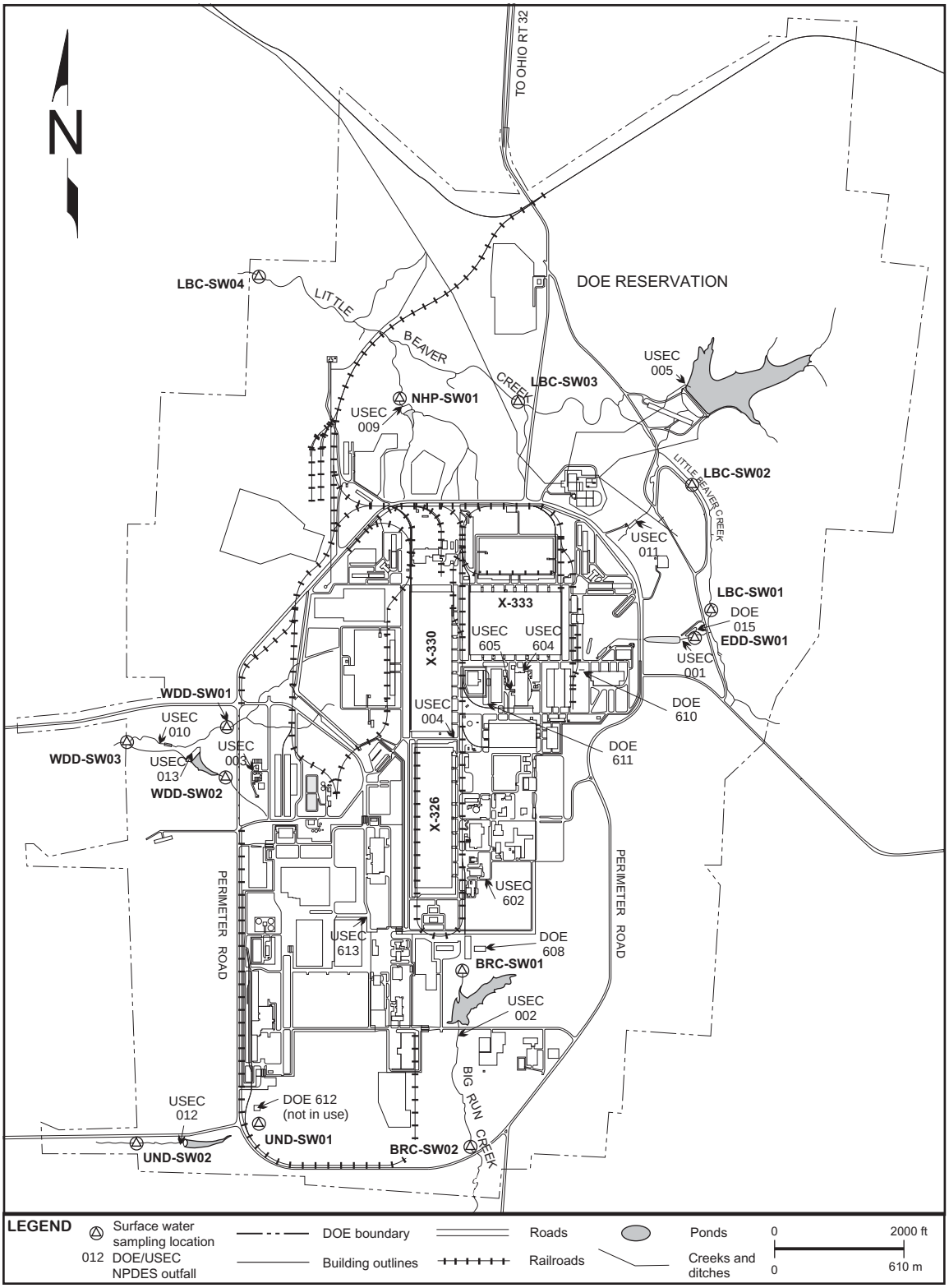


Figure 13. Surface water sampling points.

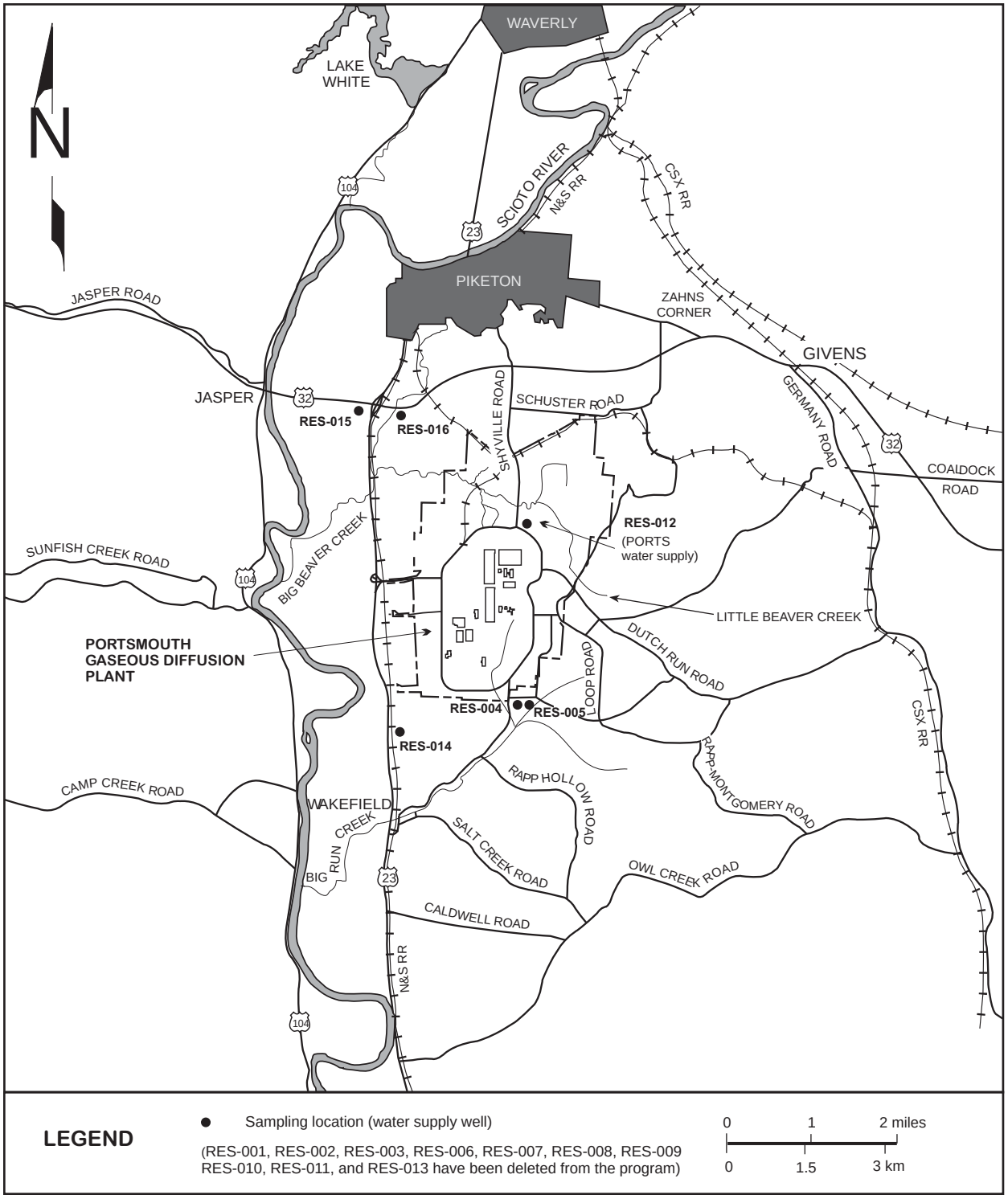


Figure 14. Water supply monitoring locations.

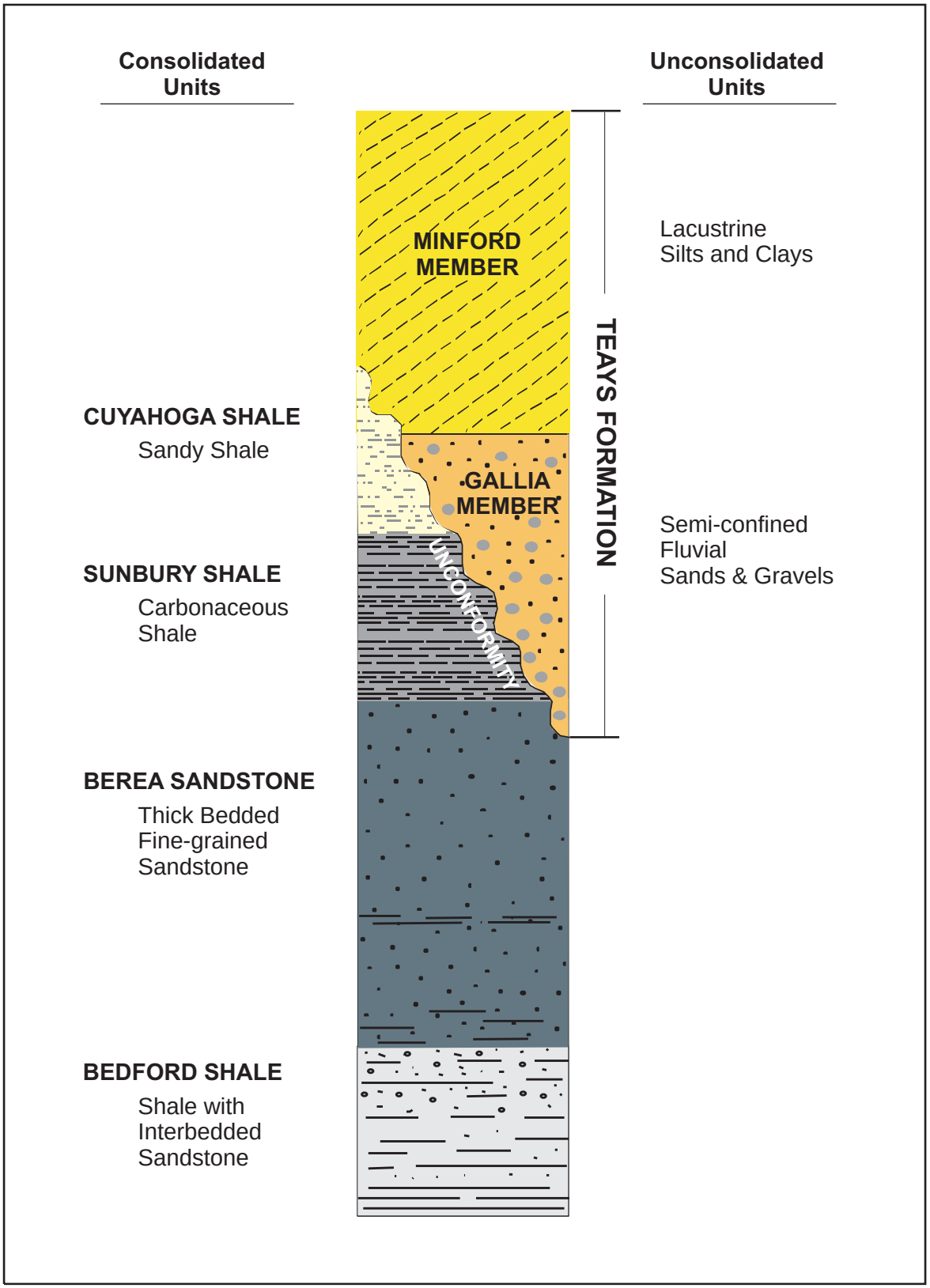


Figure 15. Generalized stratigraphy at PORTS.

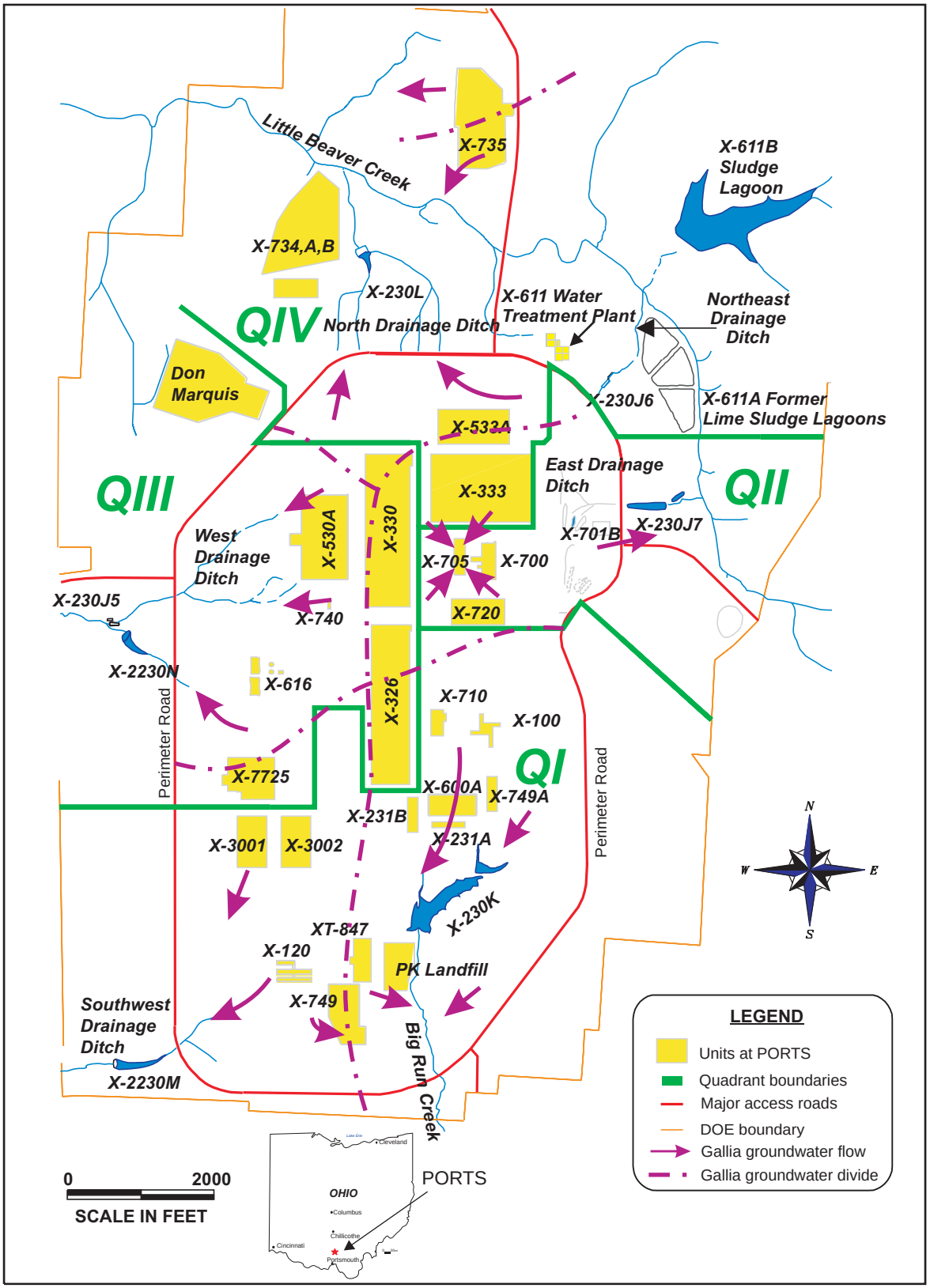


Figure 16. Generalized Gallia groundwater flow and divides at PORTS.

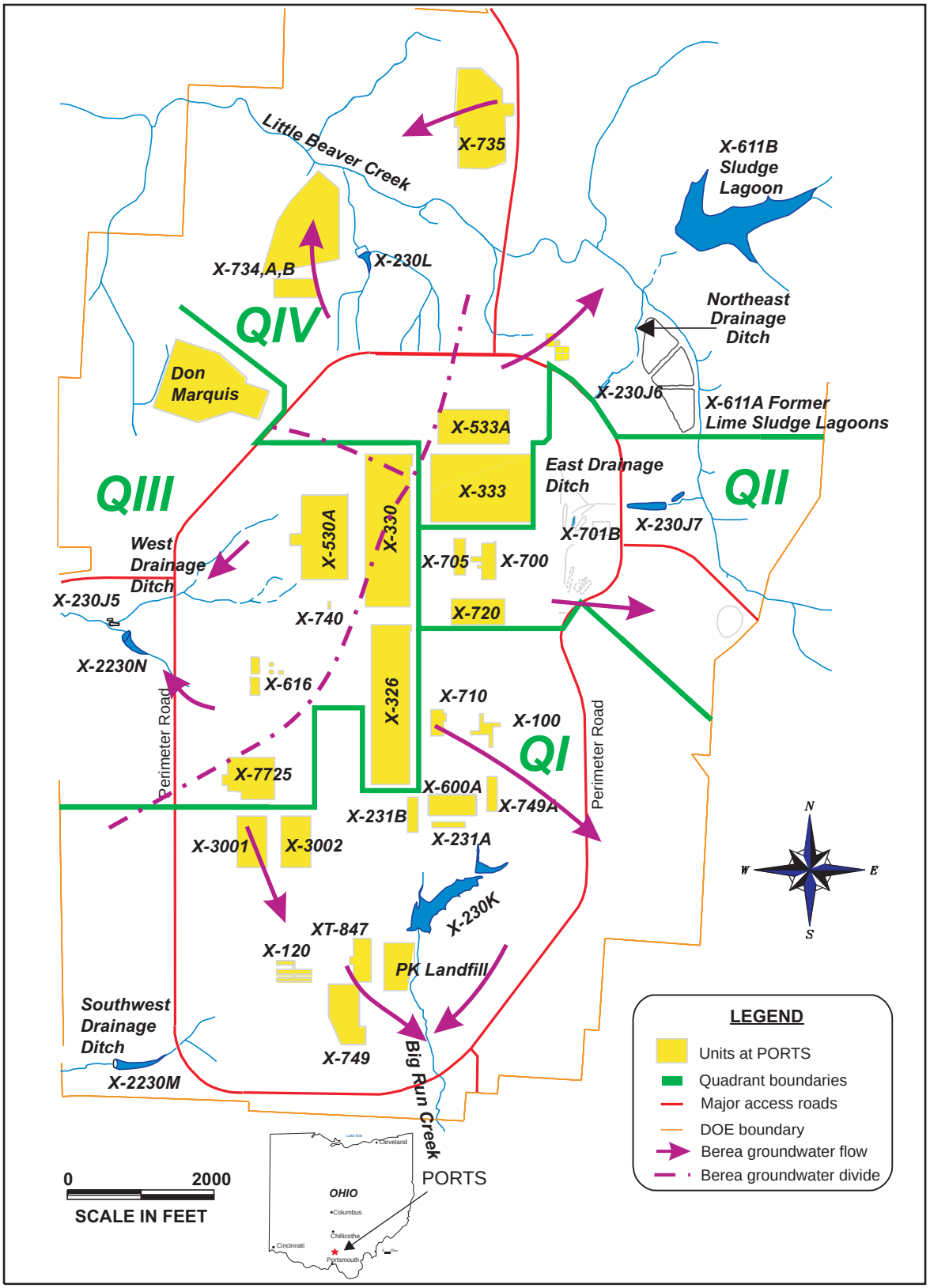
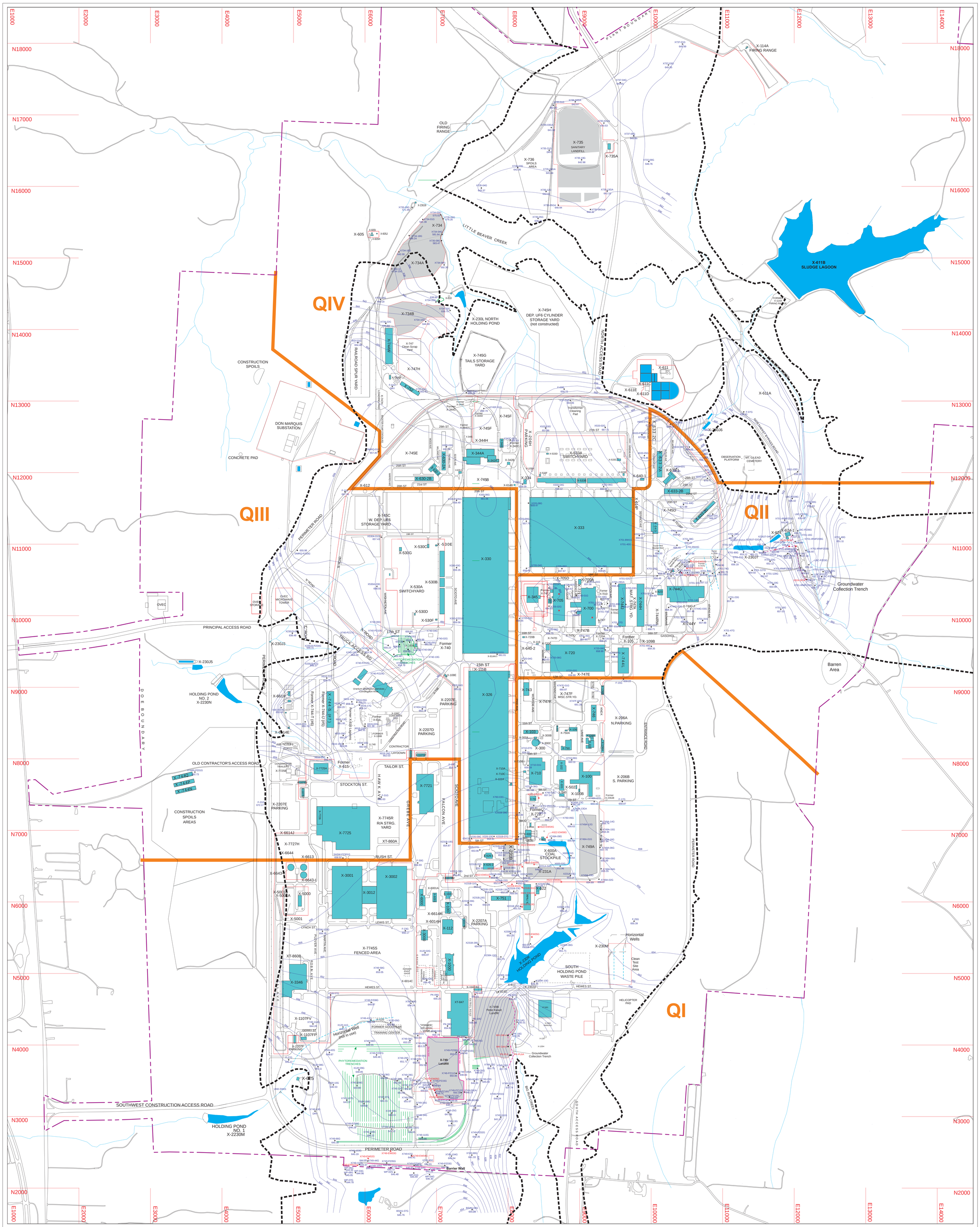


Figure 17. Generalized Berea groundwater flow and divides at PORTS.



LEGEND

- Monitoring well used for potentiometric delineation (water elevation units = ft above mean sea level)
- Road
- Pond
- Railroad
- 1st Quarter 2008 Gallia potentiometric surface elevations, Contour Interval = 2 ft.
- Department of Energy property boundary
- Quadrant Boundary
- Building
- Extraction well/Building Sump
- Approximate limit of Gallia/Minford
- Phytoremediation Trench
- Other structure or area
- Barrier wall
- Creek / Stream
- Landfill
- Manhole
- Groundwater collection system
- Plant coordinates

U.S. DEPARTMENT OF ENERGY
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ENVIRONMENTAL REMEDIATION ACTIVITIES

LATA/Parallax Portsmouth, LLC

CDM

Portsmouth Gaseous Diffusion Plant

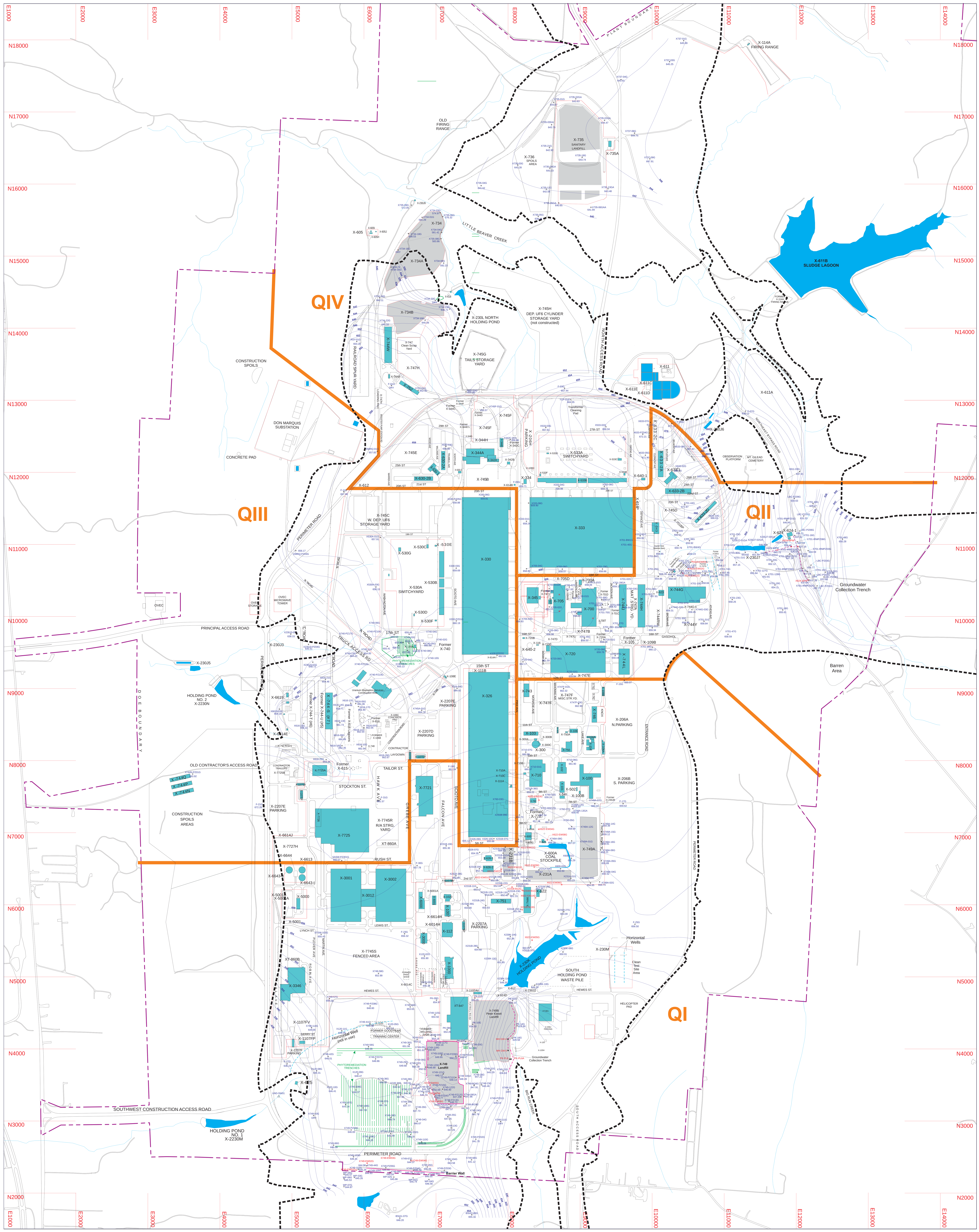
Fig. 18a. First quarter 2008 Gallia groundwater potentiometric map

DRAWING DATE	DOE CONTRACT NO.	FILENAME
February 24, 2009	DE-AC24-05OH20192	Gallia Potent 1st 2008.cdr
CLASS NO.	BLDG. NO.	PLANT NO.
NA	NA	PORTS

SCALE: 1 inch = 400 feet

LATA Parallax

DWG NO	REV
NA	0



LEGEND

- Monitoring well used for potentiometric delineation (water elevation units = ft above mean sea level)
- Road
- Pond
- Railroad
- 3rd Quarter 2008 Gallia potentiometric surface elevations, Contour Interval = 2 ft.
- Department of Energy property boundary
- Quadrant Boundary
- Building
- Extraction well/Building Sump
- Approximate limit of Gallia/Minford
- Phytoremediation Trench
- Other structure or area
- Barrier wall
- Creek / Stream
- Landfill
- Manhole
- Groundwater collection system
- N3000 Plant coordinates

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Portsmouth Gaseous Diffusion Plant

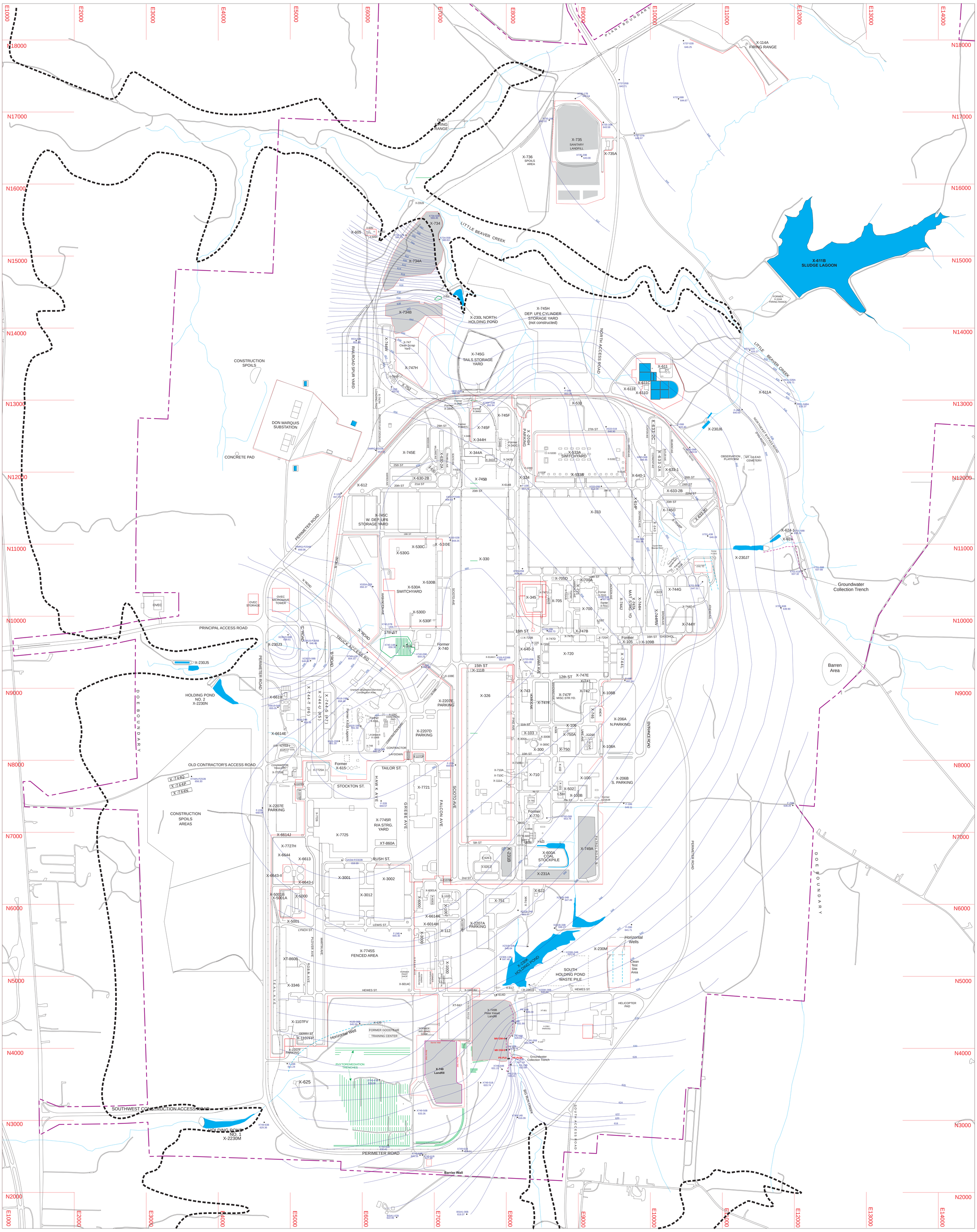
Fig. 18b. Third quarter 2008 Gallia groundwater potentiometric map

DRAWING DATE	DOE CONTRACT NO.	FILENAME
February 23, 2009	DE-AC24-05OH20192	Gallia Potent 3rd 2008.cdr

CLASS NO.	BLDG. NO.	PLANT NO.
NA	NA	PORTS

SCALE: 1 inch = 400 feet

DWG NO	REV
NA	0



PLANTSITE EAST COORDINATES IN FEET

250 0 250 500 750

Approximate Scale In Feet

LEGEND

- Berea well used for potentiometric delineation
- Road
- Pond
- Railroad
- Potentiometric surface contour, elevation in feet above MSL, contour interval 2 feet
- Department of Energy property boundary
- Building sump
- Building
- Extraction well
- Approximate limit of Berea
- Phytoremediation boundary
- Other structure or area
- Barrier wall
- Creek / Stream
- Landfill
- Manhole
- Groundwater collection system
- N3000 E10000 — Plant coordinates
- Dry — No water in well
- NM — No measurement

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ENVIRONMENTAL REMEDIATION ACTIVITIES

LATA/Parallax Portsmouth, LLC — CDM

Portsmouth Gaseous Diffusion Plant

Fig. 19a. First quarter 2008 Berea groundwater potentiometric map

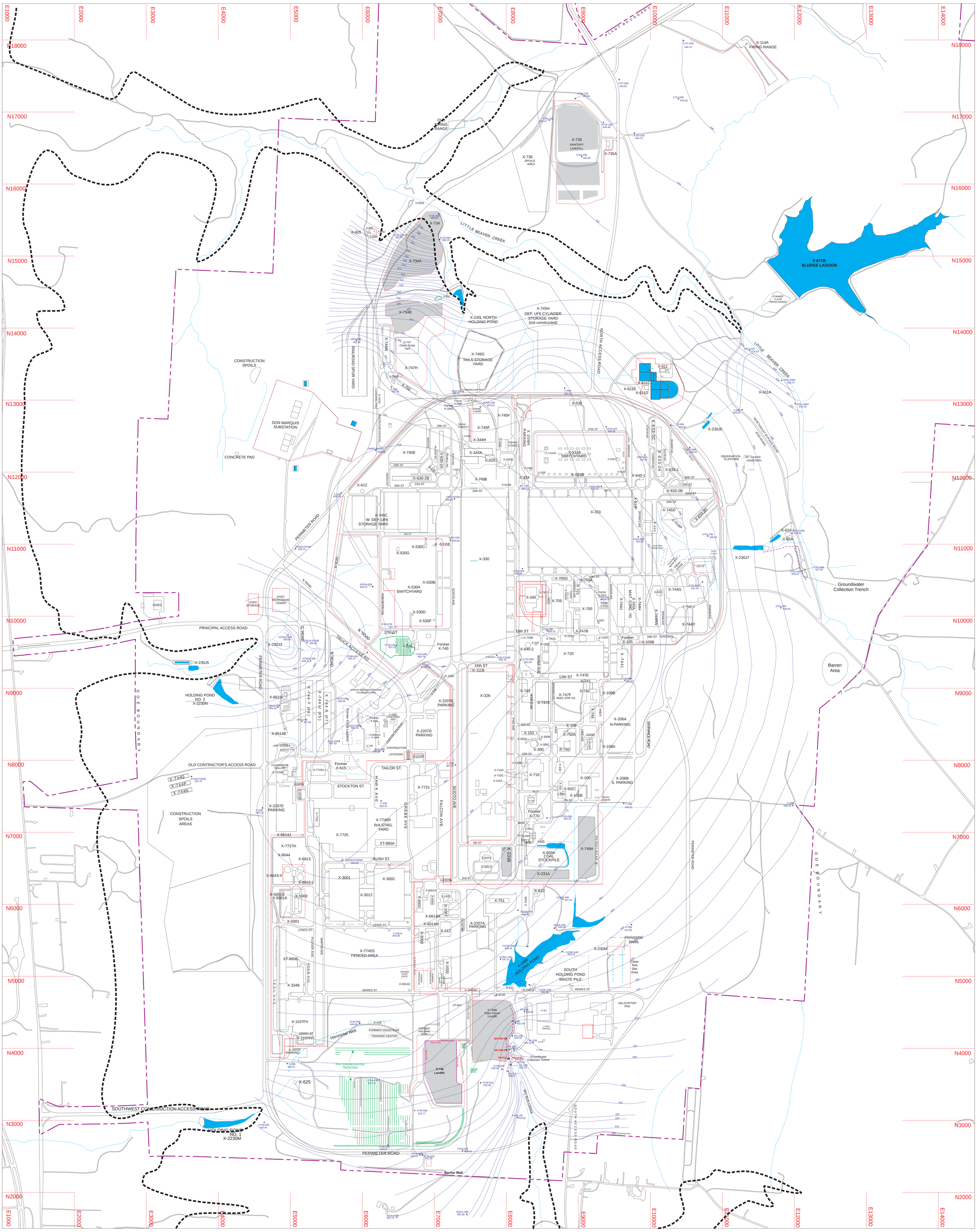
DRAWING DATE	DOE CONTRACT NO.	FILENAME
February 26, 2009	DE-AC24-05OH20192	Berea Potent 1st 08.cdr

CLASS NO.	BLDG. NO.	PLANT NO.
--		PORTS

SCALE: 1 inch = 400 feet

LATA Parallax

DWG NO	REV
	0



LEGEND

- Berea well used for potentiometric delineation
- Road
- Pond
- Railroad
- Potentiometric surface contour, elevation in feet above MSL, contour interval 2 feet
- Department of Energy property boundary
- Building sump
- Building
- Extraction well
- Approximate limit of Berea
- Phytoremediation boundary
- Other structure or area
- Barrier wall
- Creek / Stream
- Landfill
- Manhole
- Groundwater collection system
- N3000 E10000 — Plant coordinates
- Dry — No water in well
- NM — No measurement

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ENVIRONMENTAL REMEDIATION ACTIVITIES

LATA/Parallax Portsmouth, LLC | CDM

Portsmouth Gaseous Diffusion Plant

Fig. 19b. Third quarter 2008 Berea groundwater potentiometric map

DRAWING DATE	DOE CONTRACT NO.	FILENAME
February 26, 2009	DE-AC24-05OH20192	Berea Potent 3rd 08.cdr
CLASS NO.	BLDG. NO.	PLANT NO.
--		PORTS

SCALE: 1 inch = 400 feet

LATA Parallax | DWG NO | REV 0

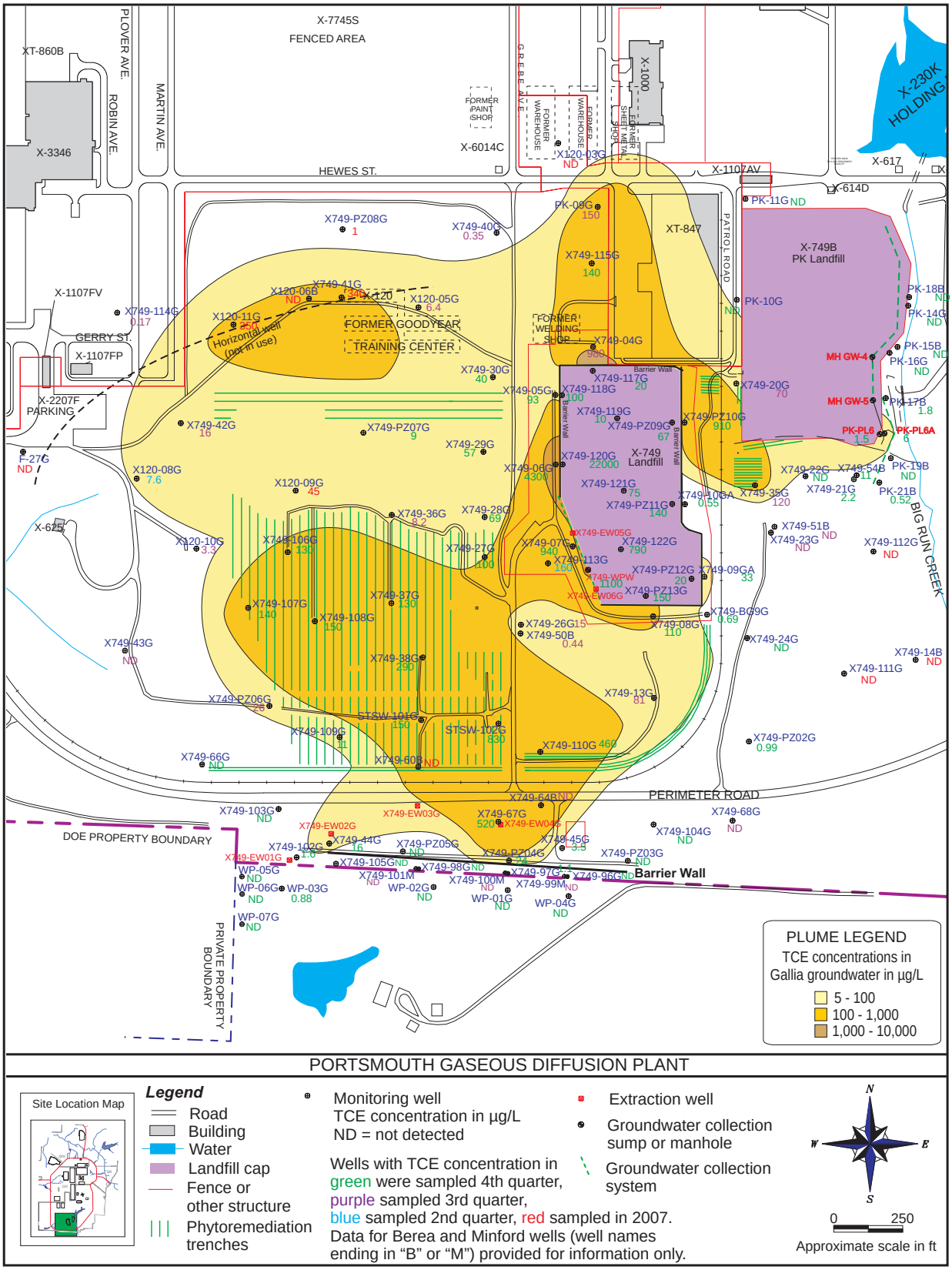

Figure 20. X-749/X-120/PK Landfill Gallia groundwater trichloroethene plume fourth quarter 2008.

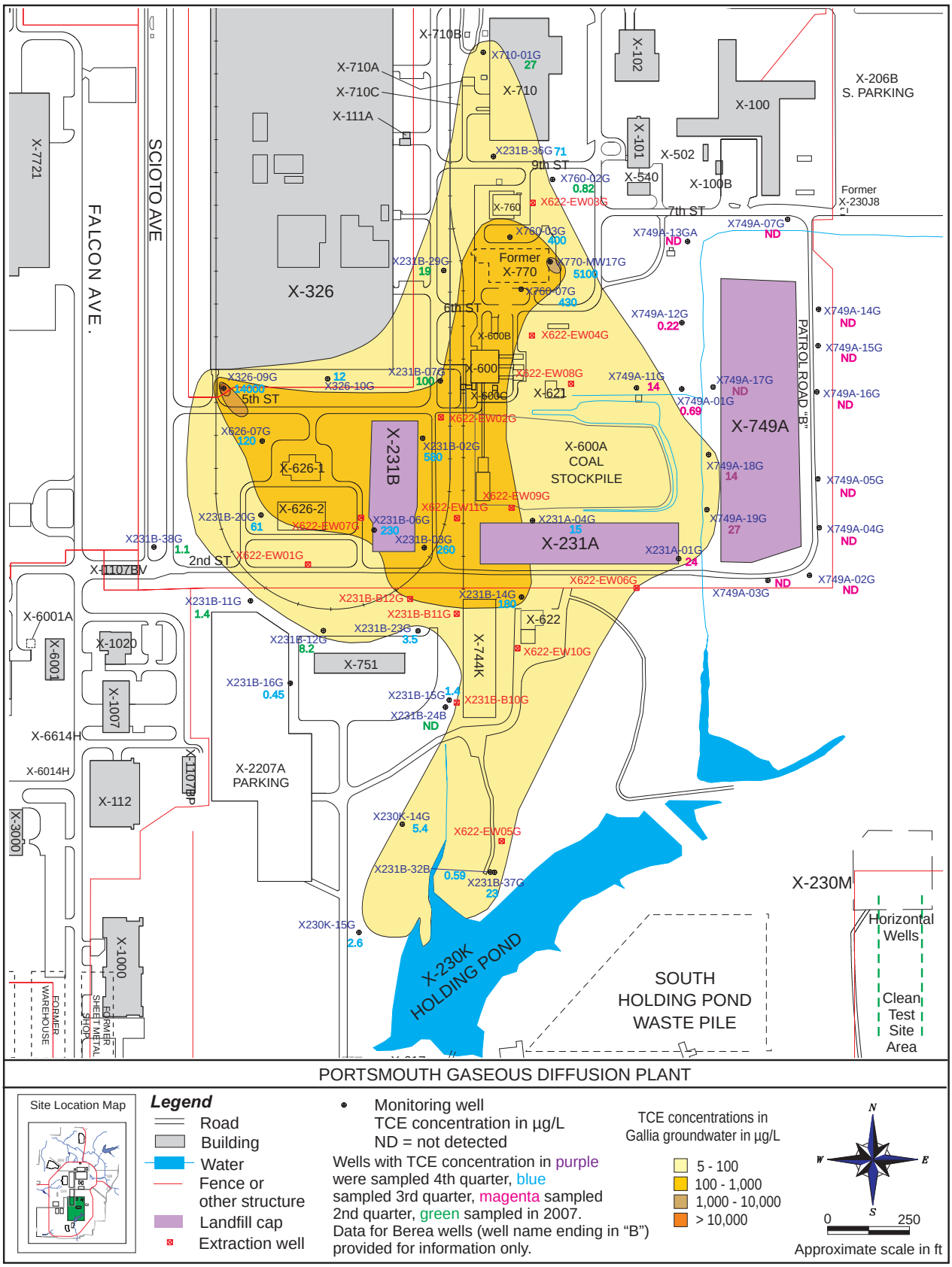

Figure 21. Quadrant I Groundwater Investigative Area Gallia groundwater trichloroethene plume fourth quarter 2008.

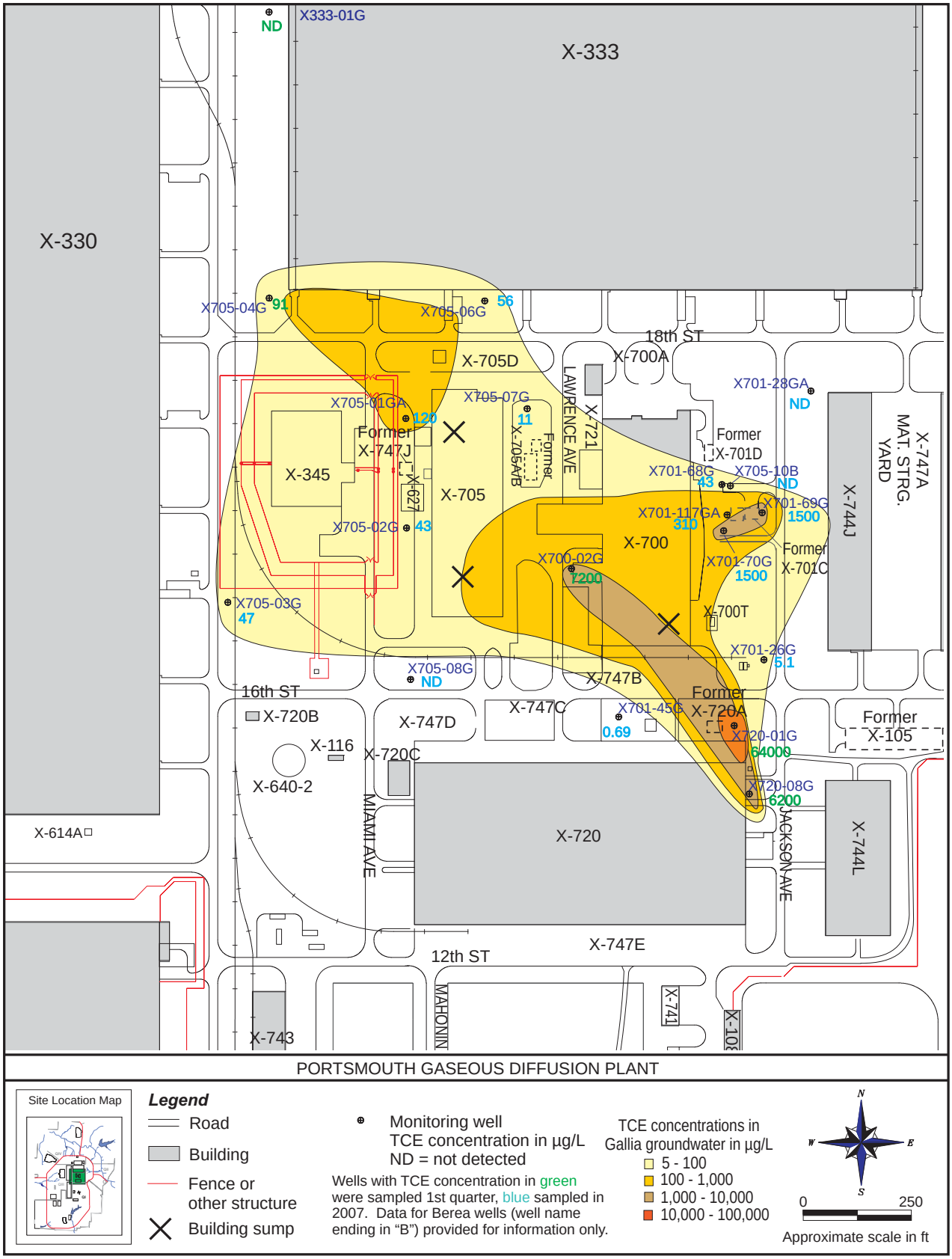

Figure 22. Quadrant II Groundwater Investigative Area Gallia groundwater trichloroethene plume first quarter 2008.

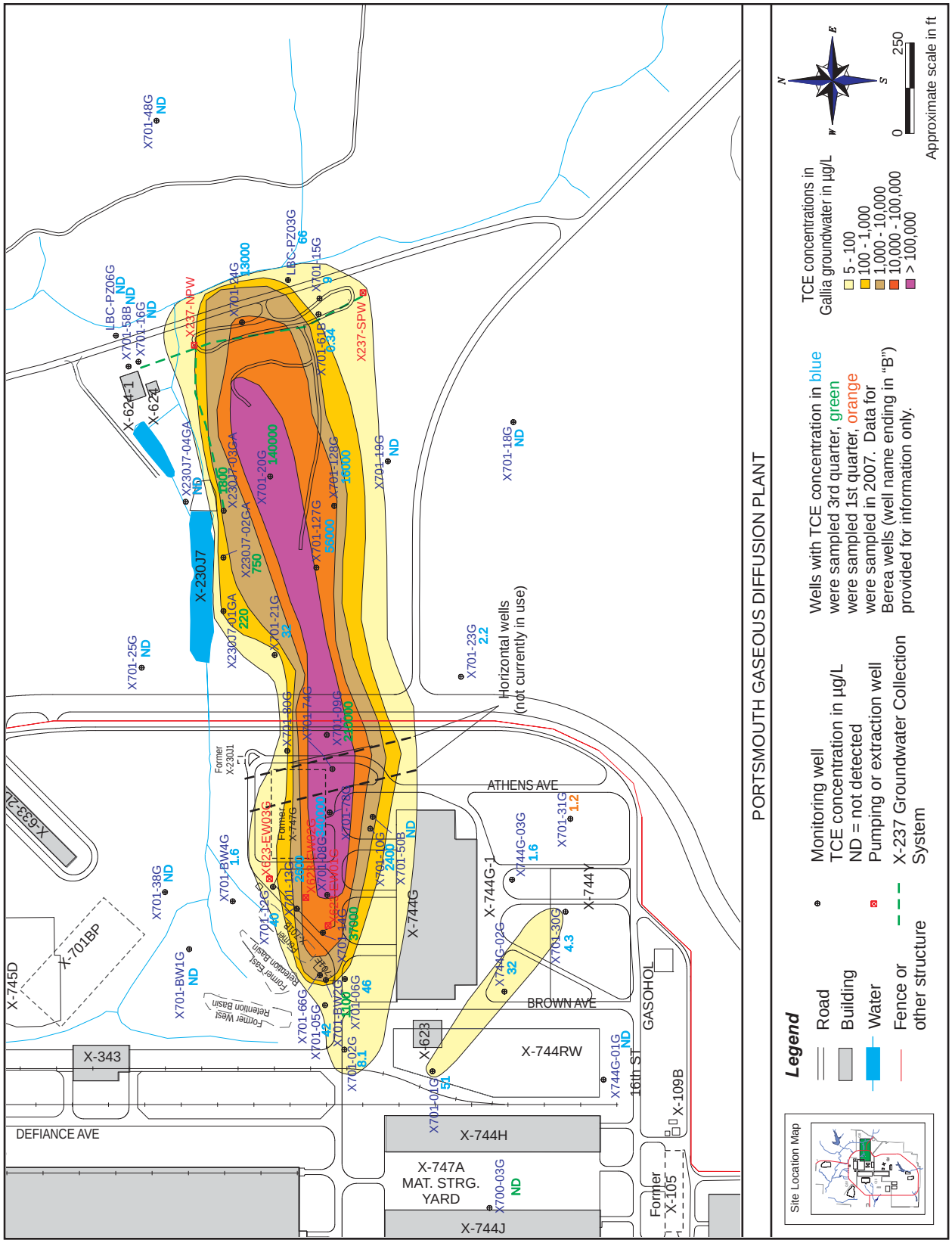

Figure 23. X-701B Holding Pond Gallia groundwater trichloroethene plume third quarter 2008.

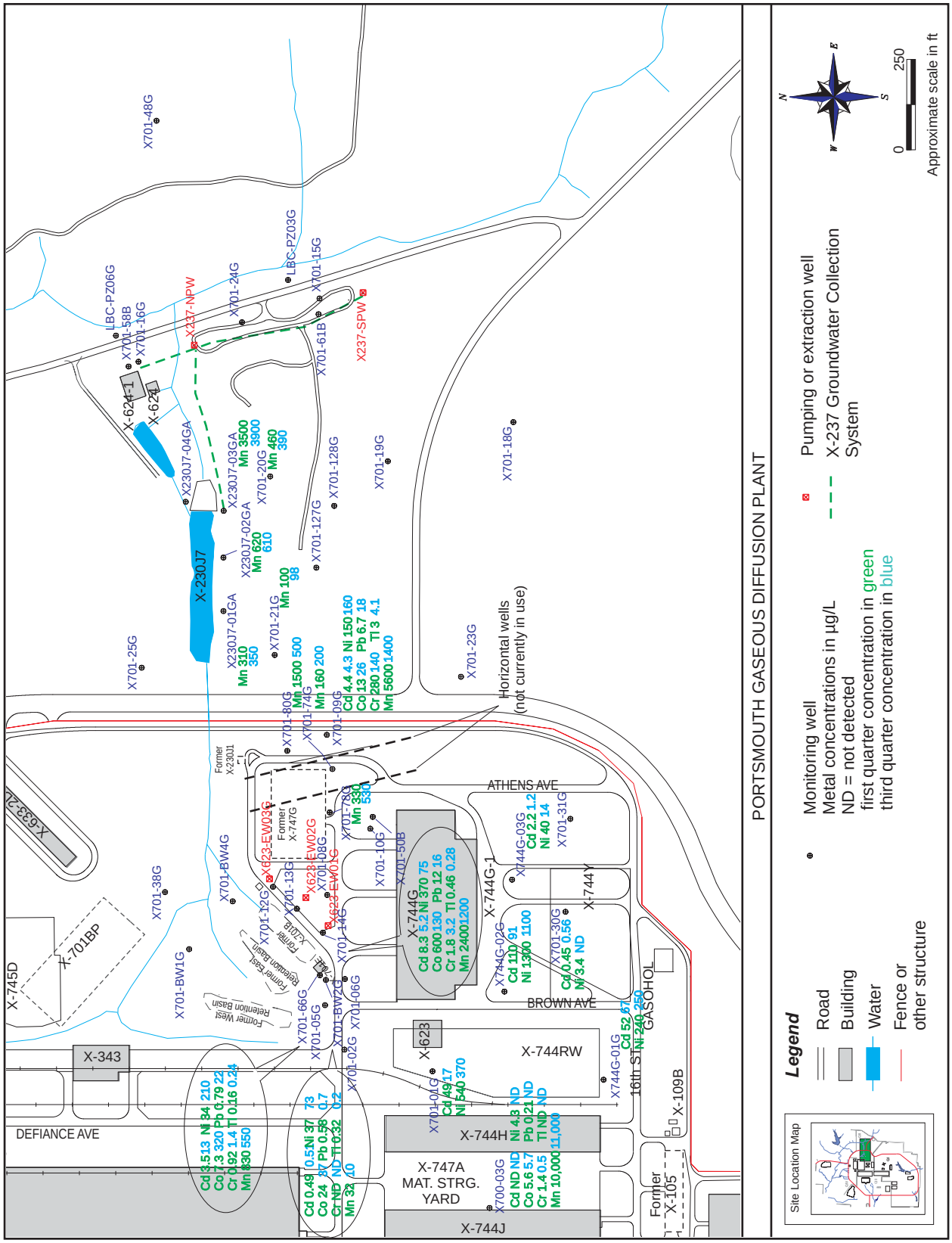

Figure 24. X-701B Holding Pond and X-744G Bulk Storage Building metal concentrations at selected wells first and third quarters 2008.

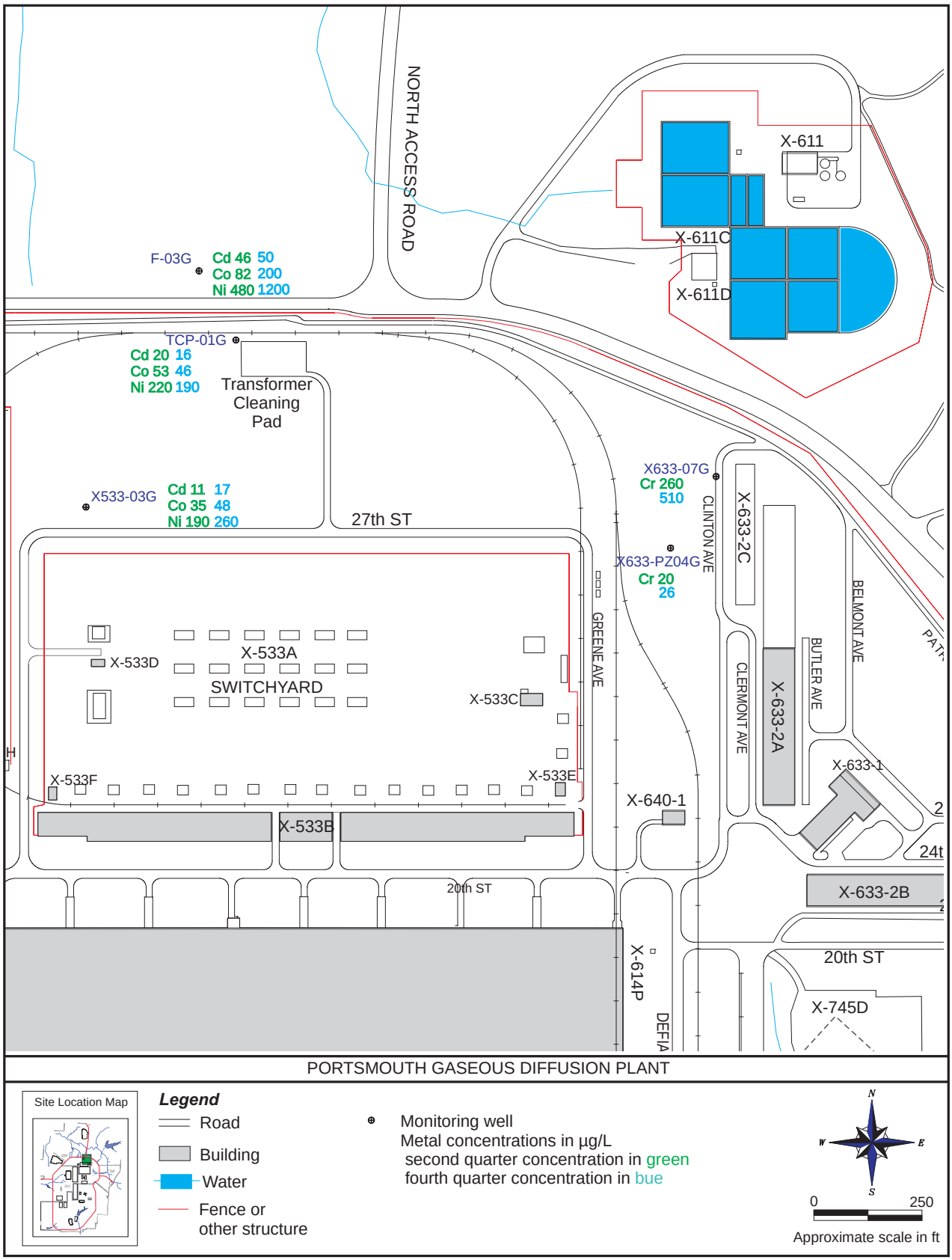

Figure 25. X-633 Pumphouse/Cooling Towers Area and X-533 Switchyard Area metal concentrations second and fourth quarters 2008.

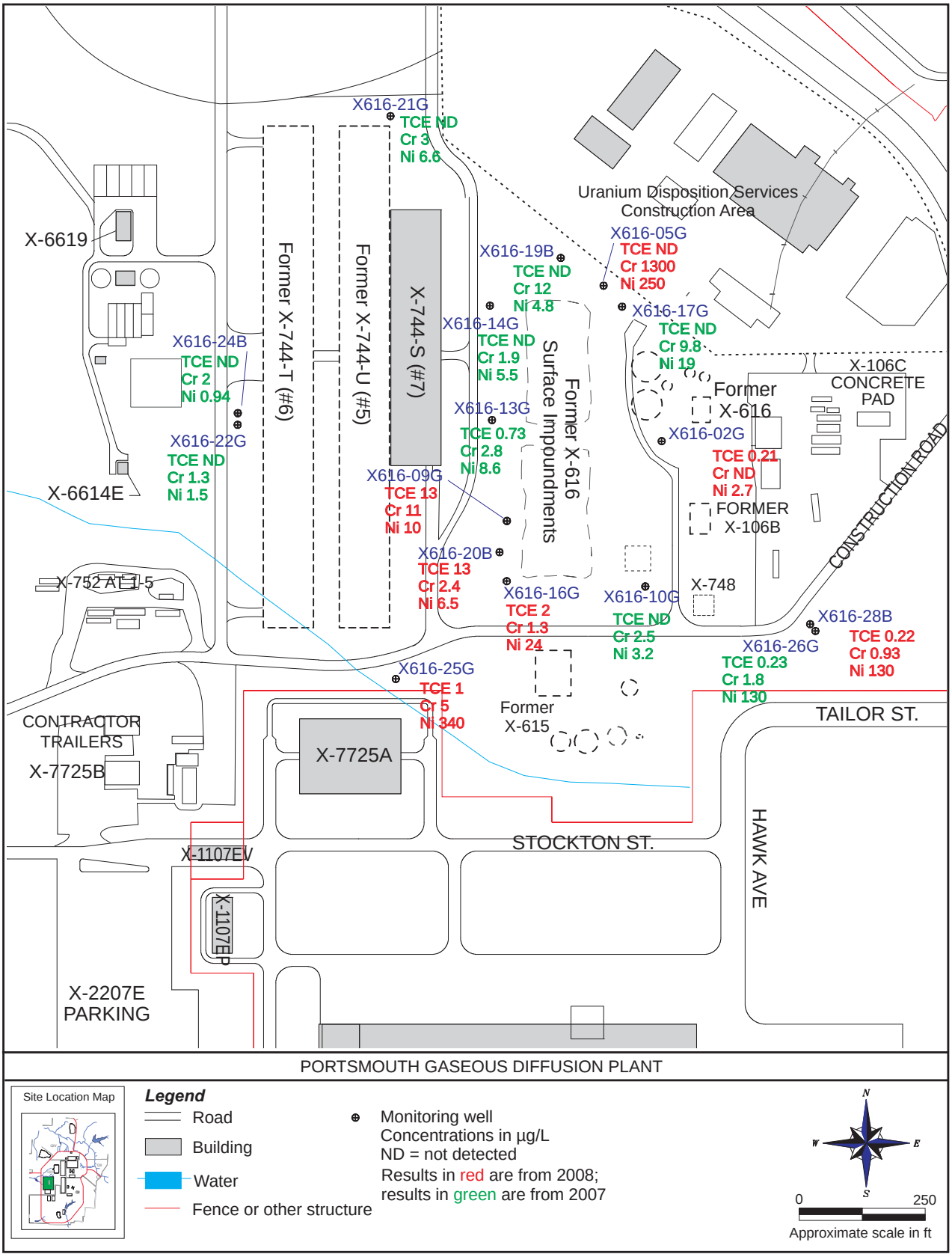

Figure 26. X-616 Chromium Sludge Surface Impoundments trichloroethene and metal concentrations first quarter 2008.

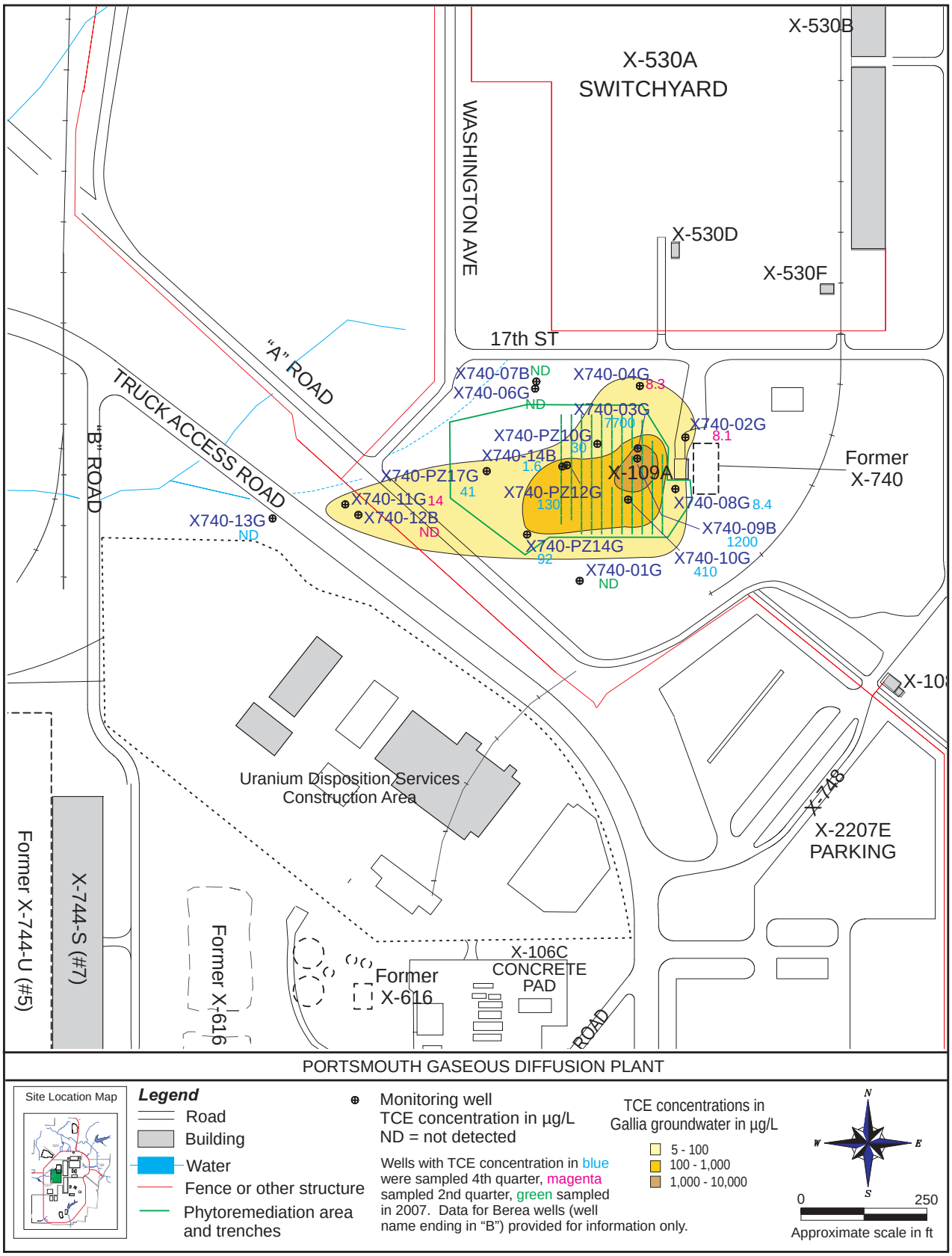

Figure 27. X-740 Waste Oil Handling Facility Gallia groundwater trichloroethene plume fourth quarter 2008.

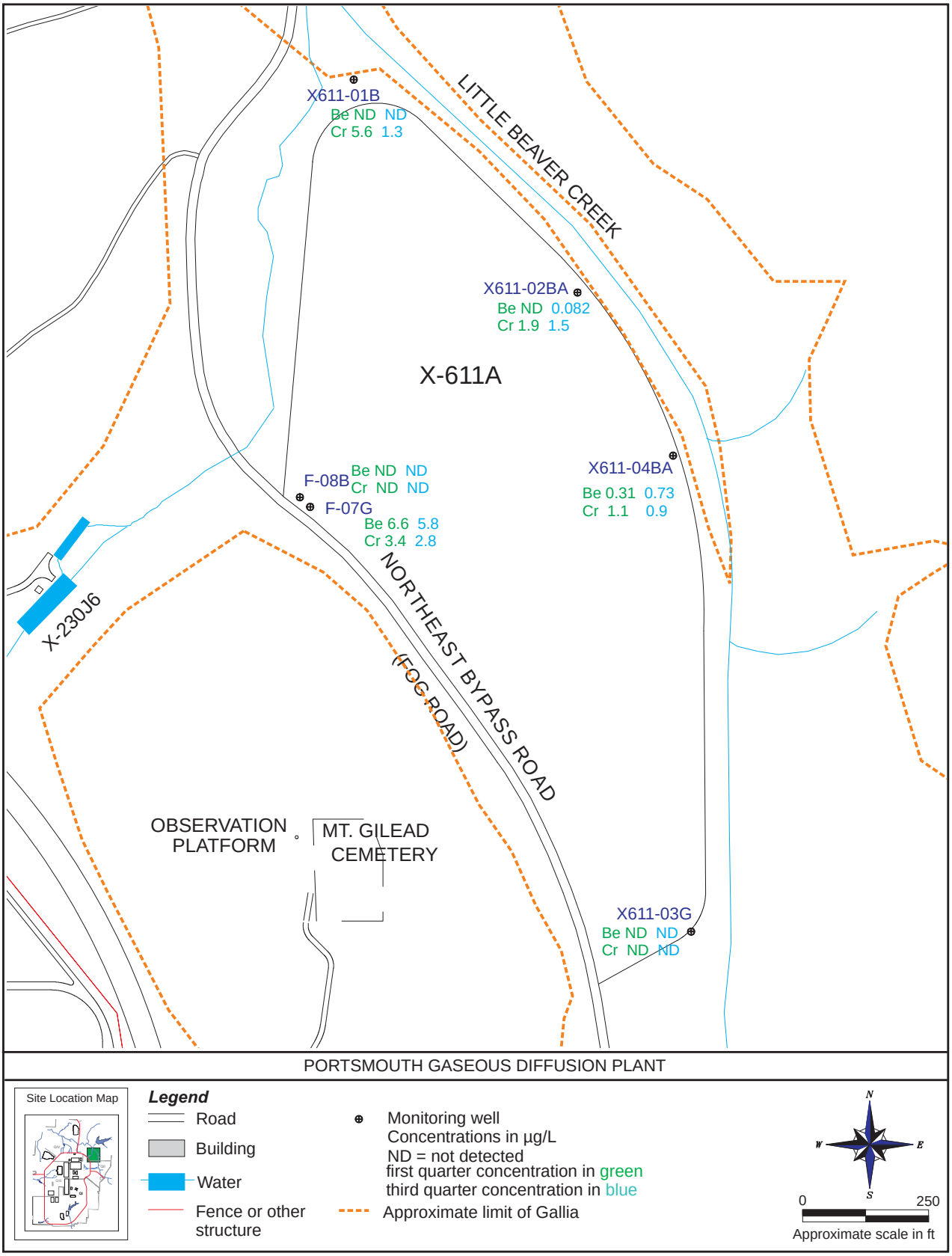

Figure 28. X-611A Former Lime Sludge Lagoons beryllium and chromium concentrations first and third quarters 2008.

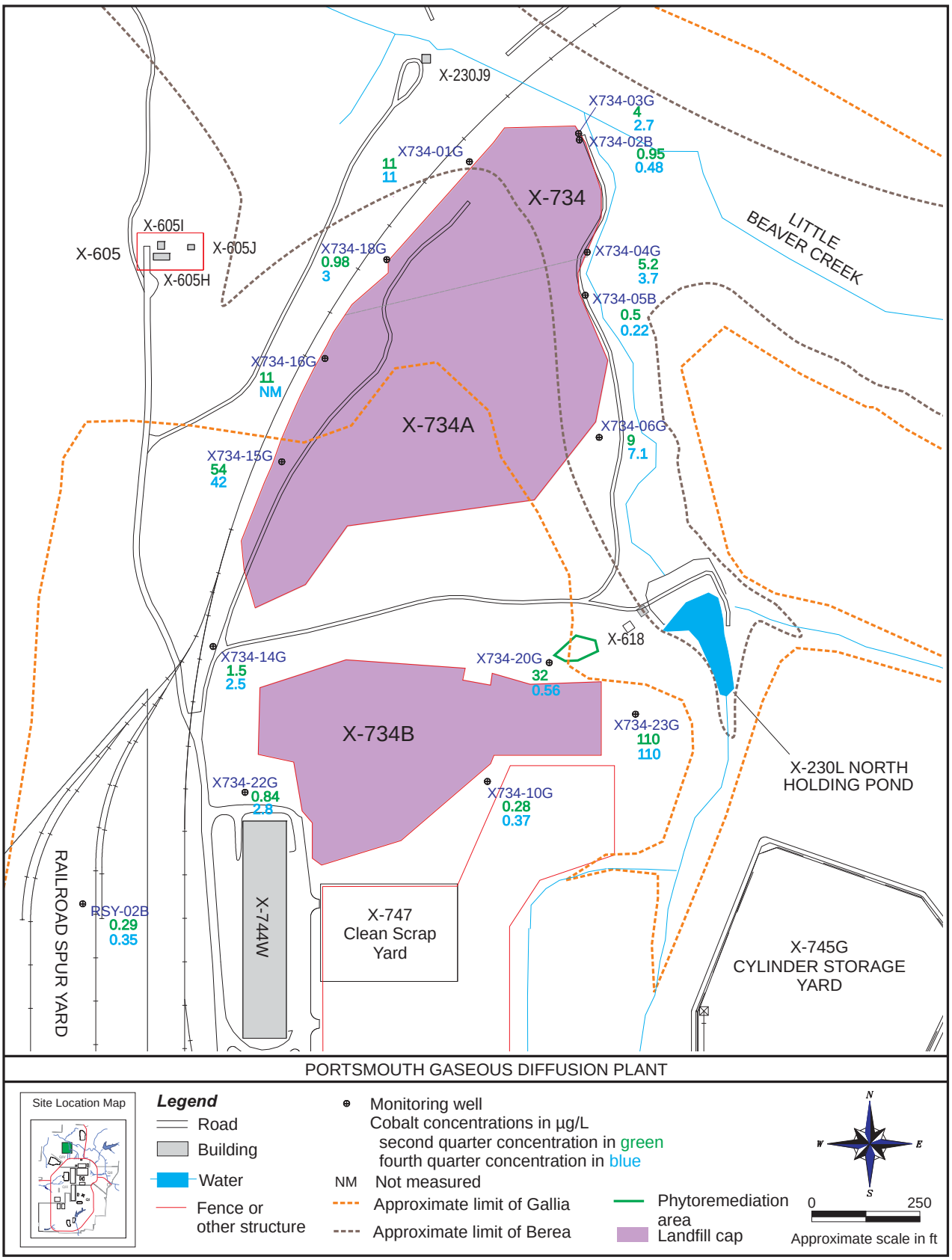

Figure 29. X-734 Landfills cobalt concentrations second and fourth quarters 2008.

Table 1. Sampling schedule and analytical parameter suites[a] - 2008
RCRA Corrective Action Program Quadrant I

Well number	First quarter	Second quarter	Third quarter	Fourth quarter
X-749/X-120/PK Landfill				
PK-10G		V1		V1
PK-11G		V1		V1, M1, WQ1
PK-14G	V1	V1	V1	V1, M1, WQ1
PK-15B		V1		V1
PK-16G	V1	V1	V1	V1
PK-17B	V1	V1	V1	V1, M1, WQ1
PK-18B		V1		V1
PK-19B		V1		V1, M1, WQ1
PK-21B	V1	V1	V1	V1
PK-PL6	V1	V1	V1	V1
PK-PL6A	V1	V1	V1	V1
PK-09G	V1, Tc-99[c]		V1, R1	
STSW-101G		V1		V1
STSW-102G		V1		V1
WP-01G	V1	V1, Tc-99[c]	V1	V1, Tc-99[c]
WP-02G		V1		V1
WP-03G	V1	V1, Tc-99[c]	V1	V1, Tc-99[c]
WP-04G		V1		V1
WP-05G	VOCs[d]	V1	V1	V1
WP-06G	VOCs[d]	V1	V1	V1
WP-07G	VOCs[d]	V1	V1	V1
X120-03G			M1, WQ1	
X120-05G			V1	
X120-08G		V1		V1
X120-10G			V1	
X749-04G	V1, Tc-99[b]		V1, Tc-99[b]	
X749-05G		V1, Tc-99[b]		V1, Tc-99[b]
X749-06G		V1		V1
X749-07G		V1		V1, M1, WQ1
X749-08G		V1		V1, M1, WQ1
X749-09GA		V1, Tc-99[b]		V1, M1, WQ1, Tc-99[c]
X749-10GA		V1		V1, M1, WQ1
X749-13G			V1	
X749-20G			V1, R1	
X749-21G		V1		V1, M1, WQ1
X749-22G		V1, Tc-99[b]		V1, Tc-99[b]
X749-23G			V1	
X749-24G		V1		V1
X749-26G			V1	
X749-27G		V1, Tc-99[b]		V1, Tc-99[b]
X749-28G		V1, Tc-99[b]		V1, Tc-99[b]
X749-29G		V1, Tc-99[b]		V1, Tc-99[b]
X749-30G		V1, Tc-99[b]		V1, Tc-99[b]
X749-35G			V1	
X749-36G			V1	
X749-37G		V1		V1
X749-38G		V1		V1
X749-40G			V1	

Table 1. Sampling schedule and analytical parameter suites[a] - 2008
RCRA Corrective Action Program Quadrant I (continued)

Well number	First quarter	Second quarter	Third quarter	Fourth quarter
X749-42G			V1	
X749-43G	V1, Tc-99[b]		V1, Tc-99[b]	
X749-44G	V1	V1, Tc-99[c]	V1	V1, M1, WQ1, Tc-99[c]
X749-45G	V1	V1	V1	V1
X749-50B			V1	
X749-51B			V1	
X749-54B		V1		V1
X749-64B			V1	
X749-66G		V1, Tc-99[c]		V1, Tc-99[c]
X749-67G	V1	V1	V1	V1
X749-68G			V1	
X749-96G	V1	V1	V1	V1
X749-97G	V1	V1, Tc-99[c]	V1	V1, Tc-99[c]
X749-98G	V1	V1	V1	V1
X749-99M			V1	
X749-100M			V1	
X749-101M			V1	
X749-102G	V1	V1, Tc-99[c]	V1	V1, Tc-99[c]
X749-103G	V1	V1	V1	V1
X749-104G	V1	V1	V1	V1
X749-105G	V1	V1	V1	V1
X749-106G		V1		V1
X749-107G		V1		V1
X749-108G		V1		V1
X749-109G		V1		V1
X749-110G		V1		V1
X749-113G		V1		V1
X749-114G			V1	
X749-115G				V1, Tc-99[b]
X749-117G				V1, Tc-99[b]
X749-118G				V1, Tc-99[b]
X749-119G				V1, Tc-99[b]
X749-120G				V1, Tc-99[b]
X749-121G				V1, Tc-99[b]
X749-122G				V1, Tc-99[b]
X749-BG9G		V1		V1
X749-PZ02G		V1		V1
X749-PZ03G	V1	V1	V1	V1, M1, WQ1
X749-PZ04G	V1	V1, Tc-99[c]	V1	V1, M1, WQ1, Tc-99[c]
X749-PZ05G	V1	V1	V1	V1
X749-PZ06G				
X749-PZ07G		V1		V1
X749-PZ09G		V1, Tc-99[b]		V1, Tc-99[b]
X749-PZ10G		V1		V1
X749-PZ11G		V1, Tc-99[b]		V1, Tc-99[b]
X749-PZ12G		V1, Tc-99[b]		V1, Tc-99[b]
X749-PZ13G		V1, Tc-99[b]		V1, Tc-99[b]
X749-WPW		V1		V1, R1

Table 1. Sampling schedule and analytical parameter suites[a] - 2008
RCRA Corrective Action Program Quadrant I (continued)

Well number	First quarter	Second quarter	Third quarter	Fourth quarter
Quadrant I Groundwater Investigative Area (5-Unit Area)/X-749A				
X230K-14G			V1	
X230K-15G			V1	
X231A-04G			V1	
X231B-02G			V1	
X231B-03G			V1	
X231B-06G			V1, M1, R1, WQ1	
X231B-14G			V1	
X231B-15G	V1		V1	
X231B-16G			V1	
X231B-20G			V1	
X231B-23G			V1	
X231B-32B			V1	
X231B-36G			V1, M1, R1, WQ1	
X231B-37G			V1, M1, R1, WQ1	
X326-09G	V1		V1	
X326-10G	V1		V1	
X626-07G			V1, M1, R1, WQ1	
X760-03G			V1	
X760-07G			V1	
X770-MW17G			V1	
X231A-01G		LF1, LF2, II		LF1
X749A-01G		LF1, LF2, II		LF1
X749A-02G		LF1, LF2, II		LF1
X749A-03G		LF1, LF2, II		LF1
X749A-04G		LF1, LF2, II		LF1
X749A-05G		LF1, LF2, II		LF1
X749A-07G		LF1, LF2, II		LF1
X749A-11G		LF1, LF2, II		LF1
X749A-12G		LF1, LF2, II		LF1
X749A-13GA		LF1, LF2, II		LF1
X749A-14G		LF1, LF2, II		LF1
X749A-15G		LF1, LF2, II		LF1
X749A-16G		LF1, LF2, II		LF1
X749A-17G				Ap I[e]
X749A-18G				Ap I[e]
X749A-19G				Ap I[e]

[a]Table 6 provides the specific parameters for each analytical group (V1, M1, LF1, etc.).
[b]VOCs and Tc-99 added by the *Work Plan for the X-749/X-120 Area Groundwater Optimization Project* (DOE 2007f).
[c]Technetium-99 (Tc-99) added by the *Work Plan for the X-749/X-120 Area Groundwater Optimization Project* (DOE 2007f).
[d]Trichloroethene (TCE) and other selected VOCs added by the *Work Plan for the X-749/X-120 Area Groundwater Optimization Project* (DOE 2007f).
[e]Appendix I parameters as listed in OAC 3745-29-10 (effective June 1, 1994).

Table 2. Sampling schedule and analytical parameter suites[a] - 2008
RCRA Corrective Action Program Quadrant II

Well number	First quarter	Second quarter	Third quarter	Fourth quarter
Quadrant II Groundwater Investigative Area (7-Unit Area)				
X333-01G	TCE[b]			
X700-02G	V1			
X705-04G	V1			
X720-01G	V1			
X720-08G	V1			
X-701B Holding Pond				
LBC-PZ03	B-98		A-98	
LBC-PZ06	B-98		A-98	
X230J7-01GA	B-98, O-01		O-01	
X230J7-02GA	B-98, O-01		O-01	
X230J7-03GA	B-98, O-01		O-01	
X230J7-04GA			B-98	
X700-03G	B-98, N-00		N-00	
X701-01G	F-00		F-00	
X701-02G	B-98		A-98	
X701-05G	B-98		A-98	
X701-06G	B-98		A-98	
X701-08G			B-98	
X701-09G	B-98, N-00		N-00	
X701-10G	B-98		A-98	
X701-12G	B-98		A-98	
X701-13G	B-98		A-98	
X701-14G	B-98, J-00		J-00	
X701-15G	B-98		A-98	
X701-16G	B-98		A-98	
X701-18G			B-98	
X701-19G	B-98		A-98	
X701-20G	B-98, O-01		O-01	
X701-21G	B-98, O-01		A-98, O-01	
X701-23G			B-98	
X701-24G	B-98		A-98	
X701-25G	B-98		A-98	
X701-30G	F-00		F-00	
X701-38G			B-98	
X701-48G			B-98	
X701-50B			B-98	
X701-58B			B-98	
X701-61B			B-98	
X701-66G	J-00		J-00	
X701-74G	K-00		K-00	
X701-78G	K-00		K-00	
X701-80G	K-00		K-00	
X701-127G	B-98		A-98	
X701-128G	B-98		A-98	
X701-BW1G			B-98	
X701-BW2G	B-98, N-00		N-00	
X701-BW4G	B-98		A-98	
X744G-01G	F-00		F-00	
X744G-02G	F-00		F-00	
X744G-03G	F-00		F-00	

Table 2. Sampling schedule and analytical parameter suites[a] - 2008
RCRA Corrective Action Program Quadrant II (continued)

Well number	First quarter	Second quarter	Third quarter	Fourth quarter
X-633 Pumphouse/Cooling Towers Area				
X633-07G		M-00		M-00
X633-PZ04G		M-00		M-00

[a]Table 6 provides the specific parameters for each analytical group (A-98, B-98, etc.).
[b]Analyzed for trichloroethene (TCE) as required by a special study included in the IGWMP.

Table 3. Sampling schedule and analytical parameter suites[a] - 2008
RCRA Corrective Action Program Quadrant III

Well number	First quarter	Second quarter	Third quarter	Fourth quarter
X-616 Chromium Sludge Surface Impoundments				
X616-02G	C-98			
X616-05G	C-98			
X616-09G	C-98			
X616-16G	C-98			
X616-20B	C-98			
X616-25G	C-98			
X616-28B	C-98			
X-740 Waste Oil Handling Facility				
X740-02G		V1		
X740-03G		V1	TCE[b]	V1
X740-04G		V1		
X740-08G		V1		V1
X740-09B		V1	TCE[b]	V1
X740-10G		V1	TCE[b]	V1
X740-11G		V1		
X740-12B		V1		
X740-13G		V1		V1
X740-14B		V1	TCE[b]	V1
X740-PZ10G		V1	TCE[b]	V1
X740-PZ12G		V1	TCE[b]	V1
X740-PZ14G		V1	TCE[b]	V1
X740-PZ17G		V1	TCE[b]	V1

[a]Table 6 provides the specific parameters for each analytical group (V1, C-98, etc.).
[b]Analyzed for trichloroethene (TCE) in accordance with the *Work Plan for the X-740 Groundwater Plume Optimization* (DOE 2008h).

Table 4. Sampling schedule and analytical parameter suites[a] - 2008
RCRA Corrective Action Program Quadrant IV

Well number	First quarter	Second quarter	Third quarter	Fourth quarter
X-611A Former Lime Sludge Lagoons				
F-07G	G-98		G-98	
F-08B	G-98		G-98	
X611-01B	G-98		G-98	
X611-02BA	G-98		G-98	PCBs[b]
X611-03G	G-98		G-98	PCBs[b]
X611-04BA	G-98		G-98	PCBs[b]
X-735 Landfills				
X735-01G		H-98, Q-04, II		E-98, Q-04
X735-01GA		H-98, Q-04, II		E-98, Q-04
X735-02GA		H-98, Q-04, II		E-98, Q-04
X735-03G		H-98, Q-04, II		E-98, Q-04
X735-03GA		H-98, Q-04, II		E-98, Q-04
X735-04G		H-98, Q-04, II		E-98, Q-04
X735-04GA		H-98, Q-04, II		E-98, Q-04
X735-05G		H-98, Q-04, II		E-98, Q-04
X735-05GA		H-98, Q-04, II		E-98, Q-04
X735-06GAA		H-98, Q-04, II		E-98, Q-04
X735-12G		H-98, Q-04, II		E-98, Q-04
X735-13GA		H-98, Q-04, II		E-98, Q-04
X735-16B		H-98, Q-04		E-98, Q-04
X735-17B		H-98, Q-04		E-98, Q-04
X735-18B		H-98, Q-04		E-98, Q-04
X735-19G		H-98, Q-04		E-98, Q-04
X735-20B		H-98, Q-04		E-98, Q-04
X735-21G		H-98, Q-04, II		E-98, Q-04
X737-05B		H-98, Q-04		E-98, Q-04
X737-06G		H-98, Q-04, II		E-98, Q-04
X737-07B		H-98, Q-04		E-98, Q-04
X737-08B		H-98, Q-04		E-98, Q-04
X737-09G		H-98, Q-04, II		E-98, Q-04
X-734 Landfills				
RSY-02B		H-98		H-98
X734-01G		H-98		H-98
X734-02B		H-98		H-98
X734-03G		H-98		H-98
X734-04G		H-98		H-98
X734-05B		H-98		H-98
X734-06G		H-98		H-98
X734-10G		H-98		H-98
X734-14G		H-98		H-98
X734-15G		H-98		H-98
X734-16G		H-98		dry
X734-18G		H-98		H-98
X734-20G		H-98		H-98
X734-22G		H-98		H-98
X734-23G		H-98		H-98

Table 4. Sampling schedule and analytical parameter suites[a] - 2008
RCRA Corrective Action Program Quadrant IV (continued)

Well number	First quarter	Second quarter	Third quarter	Fourth quarter
X-533 Switchyard Area				
F-03G		L-00		L-00
X533-03G		L-00		L-00
TCP-01G		L-00		L-00

[a]Table 6 provides the specific parameters for each analytical group (G-98, H-98, etc.).
[b]Sampled for PCBs as requested by Ohio EPA comments on the *Second Five-Year Review for the X-611A Prairie* (DOE 2008e).

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Table 5. Sampling schedule and analytical parameter suites[a] - 2008
other IGWMP monitoring

Sampling point	First quarter	Second quarter	Third quarter	Fourth quarter
Surface Water Monitoring				
BRC-SW01	B-98	B-98	B-98	B-98
BRC-SW02	B-98	B-98	B-98	B-98
EDD-SW01	B-98	B-98	B-98	B-98
LBC-SW01	B-98	B-98	B-98	B-98
LBC-SW02	B-98	B-98	B-98	B-98
LBC-SW03	B-98	B-98	B-98	B-98
LBC-SW04	B-98	B-98	B-98	B-98
NHP-SW01	B-98	B-98	B-98	B-98
UND-SW01	B-98	B-98	B-98	B-98
UND-SW02	B-98	B-98	B-98	B-98
WDD-SW01	B-98	B-98	B-98	B-98
WDD-SW02	B-98	B-98	B-98	B-98
WDD-SW03	B-98	B-98	B-98	B-98
Water Supply Monitoring				
RES-004	B-98		B-98	
RES-005	B-98		B-98	
RES-012	B-98		B-98	
RES-014	B-98		B-98	
RES-015	B-98		B-98	
RES-016	B-98		B-98	

[a]Table 6 provides the specific parameters for each analytical group (B-98, etc.).

Table 6. Analytical parameter suites

Parameter suite	Analyte	Method number[a]
A-98	Volatile organic compounds[b] Technetium-99 Total uranium Isotopic uranium Transuranic isotopes[c]	8260
B-98	Volatile organic compounds[b] Technetium-99 Total uranium Isotopic uranium Transuranic isotopes[c] Alkalinity Chloride Sulfate Metals: Ca, Fe, Mg, K, Na	8260 310.1 or 2320B 300 300 6010 or 6020
C-98	Volatile organic compounds[b] Technetium-99 Total uranium Isotopic uranium Transuranic isotopes[c] Alkalinity Chloride Sulfate Metals: Sb, Ba, Ca, Cd, Cr, Fe, Pb, Mg, Mn, Ni, K, Na, Tl	8260 310.1 or 2320B 300 300 6010 or 6020
E-98	Chloride Sulfate Alkalinity Total dissolved solids Metals: Na Technetium-99 Total uranium Isotopic uranium Transuranic isotopes[c]	300 300 310.1 or 2320B 160.1 6010 or 6020
F-00	Volatile organic compounds[b] Metals: Cd, Ni	8260 6010 or 6020
G-98	Metals: Be, Cr	6010 or 6020
H-98	Volatile organic compounds[d] Technetium-99 Total uranium Isotopic uranium Transuranic isotopes[c] Alkalinity Chloride Sulfate Metals: Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Ni, K, Se, Ag, Na, Tl, V, Zn Ammonia Chemical oxygen demand Total dissolved solids Nitrite/nitrate	8260 310.1 or 2320B 300 300 6010 or 6020 350.2 410.1 160.1 353.2

Table 6. Analytical parameter suites (continued)

Parameter suite	Analyte	Method number[a]
J-00	Alkalinity Chloride Sulfate Metals: Cd, Cr, Co, Pb, Mn, Ni, Tl	310.1 or 2320B 300 300 6010 or 6020
K-00	Alkalinity Chloride Sulfate Metals: Fe, K, Mg, Mn, Na	310.1 or 2320B 300 300 6010 or 6020
L-00	Metals: Cd, Co, Ni	6010 or 6020
M-00	Metals: Cr	6010 or 6020
N-00	Alkalinity Chloride Sulfate Metals: Cd, Co, Cr, Fe, K, Mg, Mn, Na, Ni, Pb, Tl	310.1 or 2320B 300 300 6010 or 6020
O-01	Manganese	6010 or 6020
Q-04	Total metals: Co, Ni Mercury	6010 or 6020 7470
LF1	Landfill parameters #1: Alkalinity Chloride Sulfate Total dissolved solids Total metals: Na	 310.1 or 2320B 300 300 SM 2540 C 6010 or 6020
LF2	Landfill parameters #2: Volatile organic compounds[c]: Total metals: Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Ni, K, Se, Ag, Tl, V, Zn Ammonia Chemical oxygen demand Nitrite/nitrate	 8260 6010 or 6020 350.2 410.1 353.2
M1	Total metals: As, Ba, Cd, Cr, Pb, Hg, Se, Ag	6010 or 6020 and 7470 (Hg)
R1	Radionuclides #1: Technetium-99 Total uranium Isotopic uranium Transuranic isotopes[c]	
V1	Volatile organic compounds #1[b]	8260
WQ1	Water quality parameters #1: Alkalinity Chloride Sulfate	 310.1 or 2320B 300 300

Table 6. Analytical parameter suites (continued)

Parameter suite	Analyte	Method number[a]
II	OAC Rule 3745-29-10 Appendix II (as promulgated on June 1, 1994)	Various
IX	Appendix to OAC Rule 3745-54-98 (Appendix IX)	Various

Field measurements taken at each well: water level, temperature, pH, dissolved oxygen, specific conductance, and turbidity.

[a]Samples are analyzed for the listed analyte(s) in accordance with the referenced method number or equivalent. Standard approved methods do not exist for radiological parameters; therefore, method numbers are not listed for these analytes.

[b]Acetone, benzene, bromodichloromethane, bromoform (tribromomethane), carbon disulfide, carbon tetrachloride, chlorobenzene, chloroethane (ethyl chloride), chloroform (trichloromethane), dibromochloromethane (chlorodibromomethane), o-dichlorobenzene (1,2-dichlorobenzene), p-dichlorobenzene (1,4-dichlorobenzene), 1,1-dichloroethane (ethylidene chloride), 1,2-dichloroethane (ethylidene dichloride), 1,1-dichloroethylene (1,1-dichloroethene, vinylidene chloride), cis-1,2-dichloroethylene (cis-1,2-dichlorothene), trans-1,2-dichloroethylene (trans-1,2-dichloroethene), ethylbenzene, methyl bromide (bromomethane), methyl chloride (chloromethane), methylene chloride (dichloromethane), methyl ethyl ketone (MEK, 2-butanone), 4-methyl-2-pentanone (methyl isobutyl ketone), 1,1,2,2-tetrachloroethane, tetrachloroethylene (tetrachloroethene, perchloroethylene), toluene, 1,1,1-trichloroethane (methylchloroform), 1,1,2-trichloroethane, trichlorethylene (trichloroethene), trichlorofluoromethane (CFC-11), vinyl chloride, and xylenes.

[c]Americium-241, neptunium-237, plutonium-238, and plutonium-239/240.

[d]VOCs listed under footnote b above plus the following: acrylonitrile, bromochloromethane, 1,2-dibromo-3-chloropropane (DBCP), 1,2-dibromoethane (ethylene dibromide, EDB), trans-1,4-dichloro-2-butene, 1,2-dichloropropane (propylene dichloride), cis-1,3-dichloropropene, trans-1,3-dichloropropene, 2-hexanone (methyl butyl ketone), methylene bromide (dibromomethane), methyl iodide (iodomethane), styrene, 1,1,1,2-tetrachloroethane, 1,2,3-trichloropropane, and vinyl acetate.

[e]cis-1,2-dichloroethene, trans-1,2-dichloroethene, trichloroethene, and vinyl chloride.

Table 7. PORTS preliminary remediation goals (PRGs)

Chemical	Gallia PRG (μg/L)[a]	Berea PRG (μg/L)[a]
Acetone	10,200	10,200
Acetonitrile	564	564
Acrolein	1.03	1.03
Acrylonitrile	0.431	0.431
Aroclor-1260	0.5	0.5
Benzene	5	10.5
Benzoic acid	406,000	406,000
gamma-BHC (Lindane)	0.2	0.2
bis (2-ethylhexyl) phthalate	6	6
Bromodichloromethane	100	100
Bromoform	100	100
Bromomethane	140	140
2-Butanone (MEK)	53,800	53,800
Butyl benzyl phthalate	14,900	14,900
Carbon disulfide	6270	6270
Carbon tetrachloride	5	5
alpha-Chlordane	2	2
gamma-Chlordane	2	2
Chlorobenzene	100	100
Chloroethane	246,000	246,000
Chloroform	100	100
Chloromethane	13.4	13.4
2-Chlorophenol	465	465
2,4-D	70	70
4,4'-DDD	0.859	0.859
4,4'-DDT	0.46	0.46
1,2-Dibromo-3-chloropropane	0.2	0.2
Dibromochloromethane	3.12	3.12
Dibromomethane	999	999
Dichlorobenzene	75	75
1,2-Dichlorobenzene	600	600
1,4-Dichlorobenzene	75	75
Dichlorodifluoromethane	4560	4560
1,1-Dichloroethane	5860	5860
1,2-Dichloroethane	5	5
1,1-Dichloroethene	7	7
1,2-Dichloroethene	900	900
cis-1,2-Dichloroethene	70	70
trans-1,2-Dichloroethene	100	100

Table 7. PORTS preliminary remediation goals (PRGs) (continued)

Chemical	Gallia PRG (μg/L)[a]	Berea PRG (μg/L)[a]
1,2-Dichloropropane	5	5
Diethyl phthalate	71,300	71,300
Di-n-butyl phthalate	7450	7450
Di-n-octyl phthalate	1470	1470
2,4-Dinitrotoluene	0.397	0.397
1,4-Dioxane	25.9	25.9
Ethylbenzene	700	700
Ethyl methacrylate	8570	8570
Heptachlor	0.4	0.4
Heptachlor epoxide	0.2	0.2
Hexachlorobenzene	1	1
Hexachlorobutadiene	3.7	3.7
Hexachloroethane	20	20
Hexane	6100	6100
Isobutyl alcohol	30,300	30,300
4-Methyl-2-pentanone	6360	6360
Methyl methacrylate	7930	7930
Methylene chloride	5	5
2-Methylphenol	4760	4760
3-Methylphenol	4760	4760
4-Methylphenol	476	476
Naphthalene	3210	3210
Nitrobenzene	47.9	47.9
Pentachlorophenol	1	1
Phenol	59,300	59,300
Pyridine	100	100
Styrene	100	100
2,4,5-T	1000	1000
1,1,1,2-Tetrachloroethane	11	11
1,1,2,2-Tetrachloroethane	0.83	0.83
Tetrachloroethene	5	5
Toluene	1000	1000
2,4,5-TP (Silvex)	50	50
1,2,4-Trichlorobenzene	70	70
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	786,000	786,000
1,1,1-Trichloroethane	200	200
1,1,2-Trichloroethane	5	5
Trichloroethene	5	5
Trichlorofluoromethane	12,100	12,100

Table 7. PORTS preliminary remediation goals (PRGs) (continued)

Chemical	Gallia PRG (μg/L)[a]	Berea PRG (μg/L)[a]
2,4,5-Trichlorophenol	10,000	10,000
2,4,6-Trichlorophenol	26	26
1,2,3-Trichloropropane	0.0379	0.0379
Vinyl acetate	6840	6840
Vinyl chloride	2	2
Xylenes	10,000	10,000
Antimony	36.5	39.5
Arsenic	92	50
Barium	2000	4011
Beryllium	6.5	7
Boron	9200	9200
Cadmium	6.5	7
Chromium	100	100
Cobalt	13	91
Copper	21	22.5
Cyanide, total	200	200
Fluoride	4000	4212
Lead	50	50
Manganese	14,300	14,300
Mercury	2	2
Nickel	100	840
Selenium	50	50
Silver	50	50
Thallium	10.5	21.5
Tin	61,100	61,100
Vanadium	713	713
Zinc	30,500	30,500
Americium-241 (pCi/L)	0.49	0.49
Neptunium-237 (pCi/L)	0.54	0.54
Plutonium-239/240 (pCi/L)	0.51	0.51
Technetium (pCi/L)	3790	3790
Uranium-233/234 (pCi/L)	124,000	124,000
Uranium-234 (pCi/L)	124,000	124,000
Uranium-235 (pCi/L)	43	43
Uranium-238 (pCi/L)	6.7	6.7
Uranium, total	1000	1000

[a]In μg/L unless otherwise indicated.

Table 8. Groundwater elevations 2008

Well number	Quadrant	Easting	Northing	First quarter elevation (ft above MSL)	Third quarter elevation (ft above MSL)
F-15G	1	9611.094	9110.207	659.22	660.07
F-16B	1	9644.989	9107.912	657.94	658.80
F-17G	1	9593.960	7401.250	658.87	659.62
F-18B	1	9629.040	7400.380	649.11	649.31
F-19G	1	7289.840	7896.800	659.74	661.24
F-20B	1	7291.790	7932.830	659.63	661.19
F-23G	1	6562.040	5596.040	656.17	656.32
F-24B	1	6538.820	5594.450	655.30	655.84
F-25G	1	9758.410	5728.880	655.39	656.50
F-26B	1	9736.570	5716.710	641.71	641.80
F-27G	1	4931.450	3793.040	641.77	636.23
F-28B	1	4957.200	3787.860	641.24	641.61
F-29B	1	11975.530	7370.940	636.20	636.29
F-30G	1	6735.436	6544.868	656.93	657.78
PK-01G	1	8061.206	4669.805	633.01	633.10
PK-03B	1	8250.414	4512.938	635.04	634.97
PK-05B	1	8368.940	4083.502	630.40	630.11
PK-07G	1	7409.384	4102.463	654.62	653.88
PK-08G	1	7151.878	4264.708	654.82	654.26
PK-09G	1	7004.842	4676.043	655.26	654.97
PK-10G	1	7506.669	4341.496	655.08	654.50
PK-11G	1	7537.868	4705.432	655.51	655.01
PK-14G	1	8125.500	4319.200	630.31	629.90
PK-15B	1	8085.900	4171.500	629.63	629.55
PK-16G	1	8058.100	4149.000	630.05	629.58
PK-17B	1	8044.100	3986.770	627.79	626.53
PK-18B	1	8128.500	4351.300	631.90	631.80
PK-19B	1	8062.420	3770.040	623.88	622.02
PK-20B	1	8062.470	3775.110	627.16	625.29
PK-21B	1	8020.790	3681.430	630.41	628.67
STSW-101G	1	6367.953	2824.192	647.12	645.49
STSW-102G	1	6647.115	2811.269	646.65	646.20
STSW-103G	1	5404.553	5588.917	656.35	655.43
WP-01G	1	6680.300	2210.800	645.44	645.74
WP-02G	1	6411.900	2221.300	645.58	645.86
WP-03G	1	5865.900	2216.400	644.96	645.26
WP-04G	1	6900.000	2189.300	646.30	646.56
WP-05G	1	5719.12	2257.50	644.94	645.57
WP-06G	1	5719.74	2194.20	645.05	645.53
WP-07G	1	5719.23	2086.04	644.78	644.87
X120-02G	1	6838.260	5287.932	655.87	655.90
X120-03G	1	6862.326	4905.526	655.48	655.34
X120-05G	1	6357.992	4313.254	651.87	651.17
X120-06B	1	5962.959	4344.863	645.59	644.66
X120-08G	1	5341.590	3696.497	644.11	644.31
X120-09G	1	5915.060	3652.686	648.85	648.47
X120-10G	1	5557.088	3442.703	646.53	646.41
X120-11G	1	5690.635	4251.886	649.17	648.95
X230K-04B	1	8776.259	5341.649	643.56	643.19

Table 8. Groundwater elevations 2008 (continued)

Well number	Quadrant	Easting	Northing	First quarter elevation (ft above MSL)	Third quarter elevation (ft above MSL)
X230K-06G	1	8760.516	5343.876	651.71	650.91
X230K-08B	1	8316.496	4883.444	640.64	640.39
X230K-10G	1	8367.493	4883.518	649.75	649.24
X230K-11G	1	7935.674	4949.857	648.77	649.30
X230K-13B	1	7918.304	5238.661	647.48	647.51
X230K-14G	1	8028.856	5559.281	652.25	652.38
X230K-15G	1	7897.663	5230.435	652.75	652.85
X231A-01G	1	8869.764	6367.949	653.14	653.23
X231A-02G	1	8256.915	6362.766	649.55	650.04
X231A-04G	1	8425.390	6483.398	649.96	650.57
X231B-01GA	1	7928.810	6715.400	652.92	653.39
X231B-02G	1	8091.000	6733.500	652.44	653.09
X231B-03G	1	8096.000	6400.500	650.42	650.64
X231B-04G	1	7959.500	6798.000	653.81	654.53
X231B-05G	1	7937.359	6599.443	652.37	652.37
X231B-06G	1	7943.357	6454.836	650.26	650.28
X231B-07G	1	8144.710	6908.150	654.55	655.71
X231B-08G	1	7805.990	6367.430	651.95	652.09
X231B-10G	1	8120.950	6258.880	650.49	650.64
X231B-11G	1	7568.100	6238.960	653.24	653.47
X231B-12G	1	7789.700	6148.340	652.84	653.03
X231B-13G	1	8001.150	6148.570	652.20	652.42
X231B-14G	1	8391.900	6250.520	651.05	651.44
X231B-15G	1	8172.450	5937.270	651.52	651.90
X231B-16G	1	7689.290	5988.610	653.24	653.43
X231B-19G	1	7138.980	6815.860	654.87	655.30
X231B-20G	1	7600.000	6500.000	652.55	652.78
X231B-22G	1	7937.080	6274.540	652.07	652.04
X231B-23G	1	8077.410	6147.570	650.95	651.15
X231B-24B	1	8160.910	5915.730	651.27	651.45
X231B-27G	1	8771.790	5902.310	654.16	653.00
X231B-28G	1	7579.320	5405.870	654.54	654.60
X231B-29G	1	8155.420	7244.430	654.99	656.73
X231B-32B	1	8297.220	5414.040	646.64	646.45
X231B-33B	1	8667.010	5667.830	646.27	646.04
X231B-34B	1	8783.570	6068.900	647.49	647.42
X231B-36G	1	8306.530	7591.210	657.68	659.22
X231B-37G	1	8310.085	5413.276	650.83	650.89
X231B-38G	1	7274.483	6402.920	653.35	653.80
X231B-39G	1	7438.872	5986.085	652.79	654.00
X326-09G	1	7486.192	6885.983	654.51	655.12
X326-10G	1	7801.913	6914.256	654.81	655.68
X600-01G	1	8876.798	6644.279	654.54	655.29
X600-02G	1	8726.542	6497.544	652.96	653.50
X626-07G	1	7603.627	6725.165	653.90	654.35
X710-01G	1	8275.917	7907.478	658.69	660.47
X710-06G	1	8888.477	7984.835	660.11	661.90
X710-07G	1	8244.091	8116.349	659.22	660.98
X747F-01G	1	8768.756	8997.516	660.87	662.32

Table 8. Groundwater elevations 2008 (continued)

Well number	Quadrant	Easting	Northing	First quarter elevation (ft above MSL)	Third quarter elevation (ft above MSL)
X747F-03G	1	8976.306	8786.584	661.28	662.90
X749-01G	1	6736.305	4130.798	653.50	652.11
X749-02G	1	6733.822	3779.267	652.81	650.39
X749-03G	1	6721.690	3486.260	652.19	649.01
X749-04G	1	6988.113	4171.373	654.79	654.18
X749-05G	1	6852.674	3997.371	653.25	651.62
X749-06G	1	6852.954	3747.548	652.82	650.52
X749-07G	1	6914.481	3450.821	649.62	644.74
X749-08G	1	7204.853	3198.736	648.24	647.57
X749-09GA	1	7389.720	3342.631	648.29	647.96
X749-100M	1	6671.410	2273.210	652.02	650.84
X749-101M	1	6349.170	2288.630	645.75	645.96
X749-102G	1	5919.000	2329.000	644.97	645.26
X749-103G	1	5853.200	2503.100	645.19	646.41
X749-104G	1	7207.100	2446.600	643.64	643.58
X749-105G	1	6061.000	2305.100	644.60	644.93
X749-106G	1	5886.100	3429.700	648.80	648.37
X749-107G	1	5743.500	3229.500	647.37	647.14
X749-108G	1	5984.300	3180.300	648.06	647.53
X749-109G	1	6073.800	2763.300	646.22	646.21
X749-10GA	1	7318.266	3602.570	648.83	648.28
X749-110G	1	6806.600	2717.100	646.66	646.09
X749-111G	1	7894.200	2991.400	641.07	NM
X749-112G	1	8000.400	3433.100	637.74	NM
X749-113G	1	6825.800	3390.000	650.62	646.74
X749-114G	1	5271.300	4293.600	644.26	644.00
X749-13G	1	7207.847	2904.146	647.77	647.25
X749-14B	1	8152.146	3041.336	616.06	614.62
X749-20G	1	7504.860	4039.290	649.00	647.89
X749-21G	1	7928.830	3693.300	637.76	636.63
X749-22G	1	7754.950	3704.090	643.75	643.29
X749-23G	1	7630.380	3501.430	645.60	645.46
X749-24G	1	7544.030	3121.050	643.07	642.78
X749-25G	1	7160.490	3058.710	647.86	647.25
X749-26G	1	6727.380	3168.580	651.24	647.73
X749-27G	1	6597.390	3412.300	652.07	648.30
X749-28G	1	6597.110	3556.710	652.37	648.91
X749-29G	1	6592.820	3792.000	651.71	649.68
X749-30G	1	6626.920	4061.470	653.20	651.06
X749-31G	1	6447.350	3500.660	652.69	648.52
X749-32G	1	6503.940	3362.610	651.65	647.85
X749-33G	1	6590.130	3240.390	651.67	647.77
X749-34G	1	6736.780	2994.840	647.72	646.67
X749-35G	1	7586.270	3684.740	648.00	647.22
X749-36G	1	6262.100	3564.580	649.96	648.60
X749-37G	1	6260.030	3246.970	649.31	647.74
X749-38G	1	6374.460	3050.050	649.15	646.74
X749-40G	1	6640.400	4582.320	654.24	653.63
X749-41G	1	6080.470	4349.490	650.26	649.96

Table 8. Groundwater elevations 2008 (continued)

Well number	Quadrant	Easting	Northing	First quarter elevation (ft above MSL)	Third quarter elevation (ft above MSL)
X749-42G	1	5500.600	3895.890	648.67	648.01
X749-43G	1	5299.560	3074.670	NM	NM
X749-44G	1	6036.227	2379.475	644.85	644.96
X749-45G	1	6876.380	2362.831	644.91	645.05
X749-47B	1	6238.540	3563.450	639.08	637.73
X749-49M	1	6713.690	3164.090	651.52	647.98
X749-50B	1	6726.040	3136.600	633.26	632.77
X749-51B	1	7642.540	3522.670	633.74	632.96
X749-52M	1	7618.620	3520.910	647.71	651.20
X749-53M	1	7980.830	3724.920	634.15	631.13
X749-54B	1	7938.990	3708.590	631.15	630.06
X749-56M	1	6607.880	3565.500	652.41	648.90
X749-57G	1	5519.020	4697.680	650.73	650.29
X749-58G	1	6200.187	5047.397	653.05	652.99
X749-59G	1	6061.550	4029.880	649.55	649.28
X749-60B	1	6356.910	2655.770	630.41	630.23
X749-61B	1	6833.380	2518.340	627.68	627.94
X749-62B	1	7390.750	2578.920	626.51	626.43
X749-63B	1	4637.430	2973.140	629.36	628.40
X749-64B	1	6800.300	2517.950	626.16	626.57
X749-66G	1	5577.536	2664.246	645.32	646.09
X749-67G	1	6647.399	2457.622	645.41	644.37
X749-68G	1	7491.218	2462.144	641.33	641.12
X749-96G	1	6895.200	2260.570	645.29	645.55
X749-97G	1	6680.800	2271.980	645.50	645.78
X749-98G	1	6359.060	2288.530	645.72	645.93
X749-99M	1	6885.010	2260.610	656.33	652.15
X749A-01G	1	8879.500	6883.500	655.59	657.07
X749A-02G	1	9268.000	6316.500	655.07	654.73
X749A-03G	1	9141.500	6301.000	654.89	654.65
X749A-04G	1	9297.500	6461.500	655.55	655.52
X749A-05G	1	9293.500	6610.000	655.89	655.89
X749A-06G	1	9289.28	6754.79	657.79	658.21
X749A-07G	1	9201.500	7399.500	659.43	660.34
X749A-09G	1	8604.500	6890.000	655.05	656.28
X749A-12G	1	8880.000	7085.000	656.63	658.09
X749A-13G	1	8885.500	7362.000	657.93	659.53
X749A-13GA	1	8897.504	7332.059	657.48	658.40
X749A-14G	1	9295.812	7126.027	658.74	659.39
X749A-15G	1	9294.120	7015.210	658.44	659.12
X749A-16G	1	9290.250	6874.710	657.94	658.61
X749-BG6G	1	7526.875	3495.630	648.33	647.91
X749-BG9G	1	7399.489	3205.868	648.29	647.92
X749-PZ01G	1	7846.852	3280.050	640.34	639.14
X749-PZ02G	1	7550.559	2747.217	642.35	641.70
X749-PZ03G	1	7113.433	2317.467	644.56	644.64
X749-PZ04G	1	6684.826	2317.649	645.33	645.38
X749-PZ05G	1	6301.879	2350.829	644.99	644.55
X749-PZ06G	1	5820.374	2875.443	646.28	646.65

Table 8. Groundwater elevations 2008 (continued)

Well number	Quadrant	Easting	Northing	First quarter elevation (ft above MSL)	Third quarter elevation (ft above MSL)
X749-PZ07G	1	6159.775	3860.803	649.46	648.86
X749-PZ08G	1	6084.699	4594.637	649.87	648.60
X749-PZ09G	1	7273.705	3897.815	652.01	650.23
X749-PZ10G	1	7318.363	3897.150	649.46	648.47
X749-PZ11G	1	7273.123	3603.677	650.85	648.13
X749-PZ12G	1	7343.699	3334.171	650.30	647.25
X749-PZ13G	1	7178.740	3272.261	650.03	646.73
X749-PZ14G	1	7177.605	3227.781	648.05	647.27
X749-PZ15G	1	6941.91	3431.85	648.64	642.06
X749PZ16G	1	6982.67	3332.79	648.77	641.77
X749-TW01	1	6051.100	4001.400	649.45	649.17
X749-TW02	1	6264.400	3521.600	650.04	648.44
X749-TW03	1	5873.900	3416.100	647.88	647.44
X749-TW04	1	7572.300	3672.600	654.27	654.27
X749-TW05	1	6624.200	3407.700	652.23	NM
X749-TW06	1	6233.600	3243.300	649.13	NM
X749-TW07	1	5753.900	3219.600	647.38	647.16
X749-TW08	1	5993.800	3165.500	647.94	647.41
X749-TW09	1	6371.800	2660.600	649.57	649.54
X749-TW10	1	6383.700	3037.800	649.28	646.85
X749-TW11	1	6594.000	2994.000	650.22	646.67
X749-TW12	1	6083.400	2754.600	646.26	646.22
X749-TW13	1	6353.700	2781.300	646.74	645.28
X749-TW14	1	7382.900	2974.600	649.90	NM
X749-TW15	1	6623.700	2795.700	646.14	646.05
X749-TW16	1	6798.000	2710.100	646.68	646.16
X760-02G	1	8486.085	7520.381	657.54	659.24
X760-03G	1	8356.573	7345.191	655.87	657.71
X760-05G	1	8563.941	7173.424	655.27	657.29
X760-06B	1	8561.332	7196.815	653.78	654.25
X760-07G	1	8390.365	7187.623	654.37	657.18
X770-MW17G	1	8478.000	7272.000	655.61	657.54
F-05G	2	10266.810	12671.030	676.56	677.12
F-06B	2	10283.150	12648.890	643.40	643.82
LBC-PZ01	2	12287.196	10421.993	639.72	637.75
LBC-PZ02	2	12245.010	10571.508	637.12	NM
LBC-PZ03	2	12200.367	10708.778	636.14	635.77
LBC-PZ04	2	12381.355	10545.111	642.36	637.68
LBC-PZ06	2	12047.143	11182.748	635.71	635.21
LBC-PZ07	2	12099.834	11391.378	633.69	633.33
LBC-PZ09	2	11970.276	11635.340	635.42	633.63
PRCL-01G	2	9111.255	10468.652	657.56	658.06
X230J7-01GA	2	11288.877	10886.668	653.12	653.92
X230J7-02GA	2	11436.121	10886.769	651.21	651.64
X230J7-03GA	2	11564.744	10886.184	648.04	648.46
X230J7-04GA	2	11589.761	10990.639	646.73	646.85
X237-EPW	2	11926.615	10966.274	639.47	639.46
X237-WPW	2	11733.207	10919.627	641.65	641.72
X633-01G	2	10785.069	11917.490	675.77	675.88

Table 8. Groundwater elevations 2008 (continued)

Well number	Quadrant	Easting	Northing	First quarter elevation (ft above MSL)	Third quarter elevation (ft above MSL)
X633-02G	2	10354.074	12050.274	668.65	668.72
X633-08G	2	10532.796	12353.992	656.69	657.97
X633-09B	2	10543.857	12340.010	643.04	643.54
X633-10G	2	10858.603	11417.863	666.37	666.63
X700-01G	2	8951.940	10282.917	656.82	657.23
X700-02G	2	8949.490	10037.271	655.85	656.35
X700-03G	2	9645.830	10153.720	658.27	658.64
X701-01G	2	10022.01	10310.47	658.83	657.81
X701-02G	2	10085.00	10552.92	658.49	659.86
X701-05G	2	10203.91	10606.43	659.58	659.70
X701-06G	2	10277.00	10551.60	657.70	659.59
X701-07G	2	10388.02	10598.69	657.15	659.25
X701-08G	2	10507.78	10600.57	656.97	659.27
X701-09G	2	10948.28	10601.53	656.70	657.85
X701-10G	2	10722.44	10474.97	657.12	658.84
X701-117GA	2	9307.575	10161.081	657.80	658.40
X701-11G	2	10351.790	11161.860	659.06	660.31
X701-127G	2	11408.480	10630.923	654.92	655.84
X701-128G	2	11578.607	10581.650	652.87	652.81
X701-12G	2	10529.560	10750.270	656.57	659.71
X701-13G	2	10469.320	10684.690	656.64	659.45
X701-14G	2	10403.520	10612.870	657.43	659.57
X701-15G	2	12149.520	10622.110	638.43	637.19
X701-16G	2	11975.360	11120.560	637.31	637.62
X701-18G	2	11809.160	10088.380	657.03	655.61
X701-19G	2	11701.460	10433.790	654.99	654.11
X701-20G	2	11659.660	10757.790	652.19	652.12
X701-21G	2	11168.070	10745.490	656.18	657.15
X701-23G	2	11108.120	10232.490	657.84	658.26
X701-24G	2	12083.970	10835.600	637.16	637.08
X701-25G	2	11132.940	11111.920	657.19	657.57
X701-26G	2	9392.260	9827.700	658.56	659.18
X701-27G	2	9526.780	9879.430	658.61	659.00
X701-28GA	2	9500.402	10446.025	658.46	659.12
X701-30G	2	10460.915	9944.695	657.93	658.90
X701-31G	2	10716.950	9931.220	657.88	658.84
X701-32G	2	12401.170	10612.460	643.35	639.85
X701-38G	2	10515.290	11047.570	658.43	659.92
X701-40G	2	10101.760	10898.920	658.50	659.85
X701-42G	2	10926.440	10810.920	656.88	658.04
X701-43B	2	10794.450	11110.670	646.29	646.63
X701-44G	2	10450.000	11550.000	671.88	672.87
X701-45G	2	9058.000	9696.300	657.81	658.55
X701-46G	2	9999.770	9570.000	659.35	660.12
X701-47G	2	11050.000	9750.000	657.29	658.59
X701-48G	2	12638.790	11071.140	651.11	650.28
X701-49G	2	12230.430	11563.140	636.63	629.47
X701-50B	2	10689.770	10482.420	647.51	647.93
X701-58B	2	11962.220	11147.910	638.24	638.07

Table 8. Groundwater elevations 2008 (continued)

Well number	Quadrant	Easting	Northing	First quarter elevation (ft above MSL)	Third quarter elevation (ft above MSL)
X701-59B	2	12145.520	10645.850	637.88	637.83
X701-60B	2	11811.130	10113.230	639.90	640.09
X701-61B	2	12106.090	10624.720	637.32	635.13
X701-66G	2	10286.440	10620.980	657.25	659.08
X701-68G	2	9295.570	10230.700	657.59	658.17
X701-69G	2	9388.285	10165.948	657.81	658.42
X701-70G	2	9299.70	10124.65	657.75	658.37
X701-74G	2	10854.140	10586.700	657.16	658.64
X701-78G	2	10734.720	10593.930	657.09	658.76
X701-80G	2	10903.960	10711.020	656.96	658.17
X701-BW1G	2	10358.360	10981.150	658.41	659.79
X701-BW2G	2	10273.220	10604.600	654.53	656.38
X701-BW4G	2	10489.950	10861.300	657.66	659.23
X701-IRMPZ01	2	11864.460	11332.560	642.40	640.45
X701-IRMPZ02	2	12174.950	10503.140	638.03	637.38
X701-IRMPZ03	2	12161.800	10910.870	635.60	634.59
X701-IRMPZ05	2	12047.400	10918.620	636.37	636.55
X701-IRMPZ06	2	12088.720	10664.470	637.69	637.32
X701-IRMPZ07	2	11906.020	10865.010	647.44	647.14
X701-IRMPZ08	2	12010.382	11034.020	636.89	637.04
X705-01GA	2	8568.140	10382.790	653.96	654.20
X705-02G	2	8569.786	10130.832	654.83	655.15
X705-03G	2	8158.405	9959.725	658.55	658.93
X705-04G	2	8253.669	10659.737	658.44	658.80
X705-05B	2	8222.720	10657.119	658.49	658.90
X705-06G	2	8749.772	10653.421	657.67	658.07
X705-07G	2	8847.328	10405.285	656.62	657.00
X705-08G	2	8579.084	9782.440	658.75	658.98
X705-09B	2	8566.190	9795.136	658.73	659.16
X705-10B	2	9315.141	10227.876	657.60	658.05
X720-01G	2	9323.973	9676.189	658.35	659.08
X720-02G	2	8888.692	9197.393	658.88	659.84
X720-04G	2	8205.270	9369.246	661.06	662.17
X720-05B	2	8196.364	9391.308	661.00	662.03
X720-06G	2	8521.371	9418.317	660.63	661.59
X720-07G	2	9484.252	9455.243	658.60	659.44
X720-08G	2	9358.587	9518.915	658.99	659.78
X744G-01G	2	9998.743	9839.553	658.71	659.34
X744G-02G	2	10241.500	10112.703	658.34	659.31
X744G-03G	2	10549.601	10091.672	657.46	658.45
DMRQ-01G	3	6183.496	12288.446	657.40	657.83
DMRQ-PZ02B	3	6185.218	12300.151	657.91	658.09
DMRQ-PZ03G	3	5052.869	10910.730	655.98	656.17
DMRQ-PZ04B	3	5073.977	10932.077	656.08	656.24
F-11G	3	5719.420	11727.220	657.26	657.86
F-12B	3	5705.490	11706.050	657.78	658.35
F-14B	3	6824.220	9294.240	659.20	660.23
F-21G	3	4613.520	7367.280	672.17	672.28
F-22B	3	4612.430	7336.340	658.68	659.13

Table 8. Groundwater elevations 2008 (continued)

Well number	Quadrant	Easting	Northing	First quarter elevation (ft above MSL)	Third quarter elevation (ft above MSL)
F-31G	3	6227.322	7463.116	660.63	661.57
F-32B	3	6260.144	7433.372	659.57	660.44
SASW-PZ301G	3	5690.179	6612.869	658.92	660.07
SASW-PZ302B	3	5716.552	6612.230	658.89	660.09
X230J3-05G	3	4983.159	9753.125	638.48	638.15
X230J3-06B	3	4968.174	9739.633	638.61	638.04
X230J3-07G	3	5288.789	9364.184	648.37	648.72
X230J3-08B	3	5280.559	9379.447	646.60	646.21
X230J3-PZ04G	3	5228.942	9610.655	646.31	645.51
X230J3-PZ05B	3	5232.763	9630.014	646.49	646.45
X326-04G	3	7290.651	9001.270	663.61	664.42
X326-PZ07G	3	7845.132	9458.337	661.01	662.09
X326-PZ08B	3	7866.122	9454.602	660.97	662.16
X330-02B	3	7220.871	11053.483	659.25	659.68
X330-03G	3	7278.402	10667.862	659.26	659.69
X330-06G	3	7666.134	11664.613	661.06	659.81
X330-PZ01G	3	7279.434	9936.384	659.56	660.19
X330-PZ04B	3	7278.381	11626.617	658.53	658.90
X330-PZ05G	3	7277.747	11609.747	658.49	658.88
X530A-01G	3	6226.708	11094.960	657.43	657.91
X530A-02B	3	6145.144	10408.347	656.37	656.23
X530A-03G	3	6165.201	10407.428	656.55	656.15
X616-02G	3	5999.150	8483.017	661.38	662.05
X616-05G	3	5884.94	8789.21	659.21	661.06
X616-09G	3	5693.500	8325.500	660.27	660.69
X616-10G	3	5966.910	8196.180	662.56	662.94
X616-11G	3	5997.960	8453.850	661.91	662.54
X616-12G	3	5814.390	8794.920	659.16	659.69
X616-13G	3	5664.110	8524.600	661.00	661.73
X616-14G	3	5660.020	8750.480	658.20	659.71
X616-16G	3	5693.180	8206.630	662.06	662.35
X616-17G	3	5920.940	8748.600	660.14	661.80
X616-18B	3	5978.830	8472.660	661.58	662.24
X616-19B	3	5800.080	8844.800	658.49	659.95
X616-20B	3	5679.030	8263.750	661.20	661.52
X616-21G	3	5463.490	9124.690	653.79	654.46
X616-22G	3	5161.660	8515.230	655.78	656.22
X616-24B	3	5161.950	8538.260	655.36	657.82
X616-25G	3	5474.150	8013.600	652.77	653.34
X616-26G	3	6302.900	8108.220	662.03	662.67
X616-28B	3	6292.350	8121.670	662.13	662.86
X6619-03G	3	4827.046	8712.431	655.43	654.18
X6619-04B	3	4827.998	8733.277	655.05	654.36
X740-01G	3	6505.995	9366.108	654.78	655.13
X740-02G	3	6714.933	9649.280	659.99	659.72
X740-03G	3	6620.933	9622.799	659.62	659.02
X740-04G	3	6624.918	9751.042	659.60	659.48
X740-05G	3	6829.248	9624.777	661.06	660.99
X740-06G	3	6418.056	9745.603	656.54	656.53

Table 8. Groundwater elevations 2008 (continued)

Well number	Quadrant	Easting	Northing	First quarter elevation (ft above MSL)	Third quarter elevation (ft above MSL)
X740-07B	3	6420.313	9759.684	656.77	657.10
X740-08G	3	6695.300	9547.462	659.54	659.02
X740-09B	3	6619.785	9607.602	659.29	658.78
X740-10G	3	6601.174	9525.984	658.06	657.68
X740-11G	3	6042.437	9516.948	653.34	654.00
X740-12B	3	6068.495	9496.189	654.33	655.11
X740-13G	3	5898.900	9489.200	653.39	654.24
X740-14B	3	6441.800	9585.900	656.30	657.22
X740-PW01M	3	6620.701	9628.119	661.19	661.16
X740-PW02M	3	6620.735	9617.872	660.00	659.32
X740-PZ03M	3	6626.002	9623.492	662.11	659.94
X740-PZ04M	3	6610.890	9620.484	659.75	659.76
X740-PZ05M	3	6629.680	9766.260	659.69	662.23
X740-PZ06M	3	6543.100	9422.620	656.01	655.18
X740-PZ07M	3	6610.930	9637.060	664.27	NM
X740-PZ08M	3	6590.930	9494.210	658.05	NM
X740-PZ09M	3	6551.970	9636.860	NM	NM
X740-PZ10G	3	6541.000	9636.520	659.12	658.46
X740-PZ11M	3	6471.720	9591.780	NM	NM
X740-PZ12G	3	6480.790	9594.360	656.80	656.52
X740-PZ13M	3	6410.680	9499.870	655.02	NM
X740-PZ14G	3	6401.990	9457.380	655.48	655.41
X740-PZ15M	3	6369.880	9670.340	665.98	659.75
X740-PZ16M	3	6330.310	9569.070	662.51	654.69
X740-PZ17G	3	6322.270	9582.710	655.23	655.41
X744N-PZ01G	3	3621.418	7812.191	692.73	693.92
X744N-PZ02B	3	3628.193	7773.468	656.30	657.47
X745A-01G	3	6798.540	8700.331	663.76	664.70
F-01G	4	6379.690	13199.790	NM	NM
F-02B	4	6403.860	13179.530	655.25	655.29
F-03G	4	8781.795	13162.519	658.72	657.44
F-04B	4	8808.260	13163.350	653.26	654.04
F-07G	4	11291.999	12845.759	638.41	638.13
F-08B	4	11271.962	12864.763	640.00	639.05
F-09G	4	8201.320	11835.838	658.09	659.71
F-10B	4	8199.740	11806.820	657.09	657.44
NDD-03G	4	7414.435	13112.853	650.29	650.98
NDD-04B	4	7398.605	13113.001	646.34	646.41
RSY-01G	4	5898.573	13811.700	654.40	654.20
RSY-02B	4	5915.554	13824.540	651.83	652.27
TCP-01G	4	8866.697	13003.538	664.46	664.35
X333-01G	4	8253.316	11317.970	657.75	658.24
X333-02G	4	9832.002	11116.688	659.02	659.95
X333-03B	4	9831.821	11098.435	652.46	652.88
X333-04G	4	8706.264	11802.390	659.12	658.98
X333-05B	4	9318.103	11800.619	653.34	653.71
X333-06G	4	9333.968	11800.833	660.95	659.75
X333-08G	4	8282.858	11570.674	659.47	659.90
X342C-01G	4	8028.886	12451.113	655.63	656.86

Table 8. Groundwater elevations 2008 (continued)

Well number	Quadrant	Easting	Northing	First quarter elevation (ft above MSL)	Third quarter elevation (ft above MSL)
X533-01B	4	9383.093	12626.436	648.90	649.36
X533-02G	4	9356.132	12628.614	667.71	668.04
X533-03G	4	8521.550	12619.333	657.86	657.61
X611-01B	4	11378.192	13689.440	625.27	624.53
X611-02BA	4	11863.400	13302.100	629.71	628.79
X611-03G	4	12044.566	12007.148	639.16	637.91
X611-04BA	4	12008.9	12946.900	635.37	634.20
X630-03G	4	7136.462	12356.962	657.76	658.46
X633-05G	4	9903.707	12234.207	673.46	671.90
X633-06B	4	9922.314	12234.733	646.95	647.39
X633-07G	4	9971.842	12689.635	673.76	672.32
X633-PZ04G	4	9867.084	12524.896	673.98	672.21
X701-29G	4	9307.630	10656.160	658.05	658.66
X734-01G	4	6805.479	15532.897	581.39	581.29
X734-02B	4	7058.473	15582.959	569.45	569.00
X734-03G	4	7056.781	15597.796	575.02	574.97
X734-04G	4	7076.588	15324.488	581.64	581.42
X734-05B	4	7072.158	15225.550	580.63	580.28
X734-06G	4	7104.192	14898.258	592.30	592.23
X734-10G	4	6846.842	14106.373	644.69	645.06
X734-14G	4	6215.448	14417.082	640.18	640.11
X734-15G	4	6373.540	14842.229	640.11	639.79
X734-16G	4	6472.962	15080.048	642.00	NM
X734-17B	4	6605.225	15286.307	590.72	590.97
X734-18G	4	6615.136	15307.655	608.24	608.53
X734-20G	4	6989.138	14379.700	638.89	NM
X734-22G	4	6289.050	14081.320	644.64	645.10
X734-23G	4	7187.700	14261.200	636.70	636.72
X735-01G	4	8630.500	17129.400	642.40	643.57
X735-01GA	4	9336.700	16879.510	643.53	644.47
X735-02GA	4	8936.590	17177.460	642.67	643.63
X735-03G	4	8133.500	16259.000	642.06	643.28
X735-03GA	4	8601.760	16816.690	641.69	643.76
X735-04G	4	7624.500	15973.000	643.37	641.62
X735-04GA	4	8576.620	16215.580	641.64	643.23
X735-05G	4	8417.500	15547.500	638.72	638.45
X735-05GA	4	8699.940	15733.050	640.94	640.65
X735-06G	4	7092.000	15543.000	576.26	576.32
X735-06GAA	4	9147.710	15672.660	642.31	641.94
X735-08G	4	7068.500	15238.000	583.47	583.86
X735-09G	4	6657.000	15703.500	571.99	572.05
X735-12G	4	8529.500	15925.000	642.03	642.08
X735-13GA	4	9383.280	15929.880	642.10	643.48
X735-16B	4	9345.950	16851.950	643.58	644.48
X735-17B	4	8956.300	17181.490	642.54	643.56
X735-18B	4	8594.200	16881.970	642.02	643.47
X735-19G	4	9025.540	16366.480	642.98	643.74
X735-20B	4	9045.950	16377.790	643.00	643.85
X735-21G	4	8572.440	16500.070	NM	642.90

Table 8. Groundwater elevations 2008 (continued)

Well number	Quadrant	Easting	Northing	First quarter elevation (ft above MSL)	Third quarter elevation (ft above MSL)
X737-01G	4	10435.496	17984.490	645.99	645.99
X737-02B	4	10457.734	17984.942	646.25	646.10
X737-03G	4	10239.258	17692.491	645.55	645.25
X737-04G	4	9563.204	17463.816	643.81	643.91
X737-05B	4	9565.292	17443.862	643.71	643.92
X737-06G	4	9752.639	16701.946	643.95	644.75
X737-07B	4	9775.810	16703.028	643.97	644.79
X737-08B	4	10389.007	17177.618	644.67	645.68
X737-09G	4	9965.077	16343.783	646.76	647.91
X737-10M	4	10226.441	17670.691	644.55	644.02
X737-11M	4	9581.147	17455.506	644.02	644.07
X745F-01G	4	7659.284	12892.079	652.70	653.57
X745F-02B	4	7637.074	12901.882	652.84	653.34
X752-01G	4	6774.359	13125.188	652.62	652.90
BSIA1-06B	BG	7449.542	1698.208	619.37	620.38
BSIA1-06G	BG	7495.109	1698.413	655.98	655.11
BSIA1-07B	BG	6475.937	1653.948	622.95	623.79
BSIA1-07G	BG	6496.402	1653.269	645.76	646.20

NM - not measured.

Table 9. X-740 groundwater elevations (ft above MSL)
April through September 2008

Well number	April	May	June	July	August	September
F-14B	660.75	660.83	660.62	660.23	660.03	659.45
X740-01G	656.56	656.04	655.41	655.13	654.69	654.05
X740-02G	663.34	661.91	660.54	659.72	658.70	657.53
X740-03G	664.04	662.19	660.09	659.02	657.55	656.26
X740-04G	662.72	661.42	660.24	659.48	658.37	657.18
X740-05G	663.67	662.55	661.62	660.99	660.25	659.28
X740-06G	659.35	658.70	657.19	656.53	655.37	654.32
X740-07B	659.09	658.71	657.70	657.10	656.25	655.34
X740-08G	663.10	661.51	660.04	659.02	657.97	655.88
X740-09B	663.16	661.48	659.77	658.78	657.56	656.23
X740-10G	662.37	660.41	658.84	657.68	656.41	655.20
X740-11G	654.84	654.65	654.22	654.00	653.49	652.60
X740-12B	655.23	655.20	655.20	655.11	654.91	654.33
X740-13G	654.70	654.56	654.33	654.24	653.87	653.09
X740-14B	659.38	658.87	657.84	657.22	655.75	654.81
X740-PW01M	668.90	667.06	663.99	661.16	659.64	657.67
X740-PW02M	664.45	662.98	660.48	659.32	657.80	656.43
X740-PZ03M	668.55	665.16	662.53	659.94	658.52	656.65
X740-PZ04M	665.62	663.45	661.13	659.76	657.88	656.34
X740-PZ05M	665.56	664.64	663.15	662.23	660.89	659.45
X740-PZ06M	658.75	657.84	656.42	655.18	654.12	653.28
X740-PZ07M	670.52	666.90	Dry	Dry	Dry	Dry
X740-PZ08M	666.08	663.09	659.84	Dry	Dry	Dry
X740-PZ09M	669.66	663.45	Dry	Dry	Dry	Dry
X740-PZ10G	663.32	661.81	659.45	658.46	657.12	656.19
X740-PZ11M	666.65	661.71	Dry	Dry	Dry	Dry
X740-PZ12G	661.54	659.79	657.59	656.52	655.05	653.67
X740-PZ13M	664.08	658.17	Dry	Dry	Dry	Dry
X740-PZ14G	658.37	657.56	656.08	655.41	654.50	653.80
X740-PZ15M	666.13	665.83	661.66	659.75	658.44	656.83
X740-PZ16M	663.90	663.16	656.30	654.69	653.90	Dry
X740-PZ17G	658.04	657.24	655.99	655.41	654.34	653.33
X745A-01G	664.82	664.75	664.62	664.70	664.34	663.54

APPENDIX A

QUADRANT I SAMPLING RESULTS

ANALYTICAL DATA TABLES
X-749 CONTAMINATED MATERIALS DISPOSAL FACILITY/X-120 OLD TRAINING FACILITY/PETER KIEWIT LANDFILL

Laboratory Data Qualifiers and Other Abbreviations

B	Inorganics: the reported value was obtained from a reading that was less than practical quantitation limit but greater than or equal to the instrument detection limit. Organics: the analyte was detected in the laboratory blank sample.
E	Inorganics: the reported value is estimated because of the presence of interferences. Organics: the result exceeds the calibration range.
J	Organics: the reported value is an estimated concentration greater than the method detection limit but less than the practical quantitation limit. All others: the reported value is qualified as estimated.
P	Pesticide/Aroclor: there is greater than 25% difference for detected concentrations between the two gas chromatograph columns.
U	Undetected
nm	For field measurements: not measured due to insufficient water remaining in the well after sampling.

X-749/X-120/PK Landfill

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
PK-09G						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200	2U		2U	
1,1,2,2-Tetrachloroethane	µg/L	0.83	1U		1U	
1,1,2-Trichloroethane	µg/L	5	2U		2U	
1,1-Dichloroethane	µg/L	5860	2U		2U	
1,1-Dichloroethene	µg/L	7	2U		2U	
1,2-Dichlorobenzene	µg/L	600	2U		2U	
1,2-Dichloroethane	µg/L	5	2U		2U	
1,2-Dimethylbenzene	µg/L	10,000	2U		2U	
1,4-Dichlorobenzene	µg/L	75	2U		2U	
2-Butanone	µg/L	53,800	6U		6U	
4-Methyl-2-pentanone	µg/L	6360	5U		5U	
Acetone	µg/L	10,200	2.3J		10U	
Benzene	µg/L	5	2U		2U	
Bromodichloromethane	µg/L	100	2U		2U	
Bromoform	µg/L	100	2U		2U	
Bromomethane	µg/L	140	2U		2U	
Carbon disulfide	µg/L	6270	2U		2U	
Carbon tetrachloride	µg/L	5	2U		2U	
Chlorobenzene	µg/L	100	2U		2U	
Chloroethane	µg/L	246,000	2U		2U	
Chloroform	µg/L	100	0.83J		0.69J	
Chloromethane	µg/L	13.4	2U		2U	
cis-1,2-Dichloroethene	µg/L	70	2.1		2.1	
Dibromochloromethane	µg/L	3.12	2U		2U	
Ethylbenzene	µg/L	700	2U		2U	
M + P Xylene	µg/L	10,000	2U		2U	
Methylene chloride	µg/L	5	5U		5U	
Tetrachloroethene	µg/L	5	2U		2U	
Toluene	µg/L	1000	2U		2U	
trans-1,2-Dichloroethene	µg/L	100	1U		1U	
Trichloroethene	µg/L	5	160		150	
Trichlorofluoromethane	µg/L	12,100	2U		2U	
Vinyl chloride	µg/L	2	1U		1U	
Radionuclides						
Americium-241	pCi/L	0.49			0.00001355U	
Neptunium-237	pCi/L	0.54			-0.007198U	
Plutonium-238	pCi/L				0.007207U	
Plutonium-239/240	pCi/L	0.51			-0.007185U	

X-749/X-120/PK Landfill

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
PK-09G						
Technetium-99	pCi/L	3790	-0.154U		0.856U	
Uranium	µg/L	1000			0.03883U	
Uranium-233/234	pCi/L	124,000			0.0719	
Uranium-235	pCi/L	43			0U	
Uranium-236	pCi/L				0U	
Uranium-238	pCi/L	6.7			0.01305U	
Field Measurements						
Conductivity	µS/cm		1321		1390	
Depth to Water	ft		13.63		15.16	
Dissolved Oxygen	mg/L		1		1.08	
pH	Std Unit		6.03		5.35	
Temperature	deg C		15.2		16.3	
Turbidity	NTU		7		3	
PK-10G						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200		2U		2U
1,1,2,2-Tetrachloroethane	µg/L	0.83		1U		1U
1,1,2-Trichloroethane	µg/L	5		2U		2U
1,1-Dichloroethane	µg/L	5860		2U		2U
1,1-Dichloroethene	µg/L	7		2U		2U
1,2-Dichlorobenzene	µg/L	600		2U		2U
1,2-Dichloroethane	µg/L	5		2U		2U
1,2-Dimethylbenzene	µg/L	10,000		2U		2U
1,4-Dichlorobenzene	µg/L	75		2U		2U
2-Butanone	µg/L	53,800		6U		6U
4-Methyl-2-pentanone	µg/L	6360		5U		5U
Acetone	µg/L	10,200		10U		10U
Benzene	µg/L	5		2U		2U
Bromodichloromethane	µg/L	100		2U		2U
Bromoform	µg/L	100		2U		2U
Bromomethane	µg/L	140		2U		2U
Carbon disulfide	µg/L	6270		2U		2U
Carbon tetrachloride	µg/L	5		2U		2U
Chlorobenzene	µg/L	100		2U		2U
Chloroethane	µg/L	246,000		2U		2U
Chloroform	µg/L	100		2U		2U
Chloromethane	µg/L	13.4		2U		2U
cis-1,2-Dichloroethene	µg/L	70		2U		2U
Dibromochloromethane	µg/L	3.12		2U		2U
Ethylbenzene	µg/L	700		2U		2U

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
PK-10G						
M + P Xylene	µg/L	10,000		2U		2U
Methylene chloride	µg/L	5		5U		5U
Tetrachloroethene	µg/L	5		2U		2U
Toluene	µg/L	1000		2U		2U
trans-1,2-Dichloroethene	µg/L	100		1U		1U
Trichloroethene	µg/L	5		2U		2U
Trichlorofluoromethane	µg/L	12,100		2U		2U
Vinyl chloride	µg/L	2		1U		1U
Field Measurements						
Conductivity	µS/cm			528		521
Depth to Water	ft			7.72		11.39
Dissolved Oxygen	mg/L			1		2.1
pH	Std Unit			5.67		5.58
Temperature	deg C			13.2		16.6
Turbidity	NTU			1		6
PK-11G						
Metals						
Arsenic	µg/L	92				3B
Barium	µg/L	2000				16
Cadmium	µg/L	6.5				0.82B
Chromium	µg/L	100				4.6
Lead	µg/L	50				1.3
Mercury	µg/L	2				0.2U
Selenium	µg/L	50				1.1B
Silver	µg/L	50				5U
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200		2U		2U
1,1,2,2-Tetrachloroethane	µg/L	0.83		1U		1U
1,1,2-Trichloroethane	µg/L	5		2U		2U
1,1-Dichloroethane	µg/L	5860		2U		2U
1,1-Dichloroethene	µg/L	7		2U		2U
1,2-Dichlorobenzene	µg/L	600		2U		2U
1,2-Dichloroethane	µg/L	5		2U		2U
1,2-Dimethylbenzene	µg/L	10,000		2U		2U
1,4-Dichlorobenzene	µg/L	75		2U		2U
2-Butanone	µg/L	53,800		6U		6U
4-Methyl-2-pentanone	µg/L	6360		5U		5U
Acetone	µg/L	10,200		10U		2.8J
Benzene	µg/L	5		2U		2U
Bromodichloromethane	µg/L	100		2U		2U

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
PK-11G						
Bromoform	µg/L	100		2U		2U
Bromomethane	µg/L	140		2U		2U
Carbon disulfide	µg/L	6270		2U		2U
Carbon tetrachloride	µg/L	5		2U		2U
Chlorobenzene	µg/L	100		2U		2U
Chloroethane	µg/L	246,000		2U		2U
Chloroform	µg/L	100		2U		2U
Chloromethane	µg/L	13.4		2U		2U
cis-1,2-Dichloroethene	µg/L	70		2U		2U
Dibromochloromethane	µg/L	3.12		2U		2U
Ethylbenzene	µg/L	700		2U		2U
M + P Xylene	µg/L	10,000		2U		2U
Methylene chloride	µg/L	5		5U		5U
Tetrachloroethene	µg/L	5		2U		2U
Toluene	µg/L	1000		2U		2U
trans-1,2-Dichloroethene	µg/L	100		1U		1U
Trichloroethene	µg/L	5		2U		2U
Trichlorofluoromethane	µg/L	12,100		2U		2U
Vinyl chloride	µg/L	2		1U		1U
Other Parameters						
Alkalinity	mg/L					27
Chloride	mg/L					85
Sulfate	mg/L					350
Field Measurements						
Conductivity	µS/cm			896		1037
Depth to Water	ft			8.72		12.1
Dissolved Oxygen	mg/L			1		2.3
pH	Std Unit			5.38		5.2
Temperature	deg C			13.6		16.1
Turbidity	NTU			99		75
PK-14G						
Metals						
Arsenic	µg/L	92				5.4
Barium	µg/L	2000				47
Cadmium	µg/L	6.5				0.2B
Chromium	µg/L	100				2.7
Lead	µg/L	50				3.1
Mercury	µg/L	2				0.2U
Selenium	µg/L	50				1B
Silver	µg/L	50				5U

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
PK-14G						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200	2U	2U	2U	2U
1,1,2,2-Tetrachloroethane	µg/L	0.83	1U	1U	1U	1U
1,1,2-Trichloroethane	µg/L	5	2U	2U	2U	2U
1,1-Dichloroethane	µg/L	5860	2U	2U	2U	2U
1,1-Dichloroethene	µg/L	7	2U	2U	2U	2U
1,2-Dichlorobenzene	µg/L	600	2U	2U	2U	2U
1,2-Dichloroethane	µg/L	5	2U	2U	2U	2U
1,2-Dimethylbenzene	µg/L	10,000	2U	2U	2U	2U
1,4-Dichlorobenzene	µg/L	75	2U	2U	2U	2U
2-Butanone	µg/L	53,800	6U	6U	6U	6U
4-Methyl-2-pentanone	µg/L	6360	5U	5U	5U	5U
Acetone	µg/L	10,200	2J	2.7BJ	10U	10U
Benzene	µg/L	5	2U	2U	2U	2U
Bromodichloromethane	µg/L	100	2U	2U	2U	2U
Bromoform	µg/L	100	2U	2U	2U	2U
Bromomethane	µg/L	140	2U	2U	2U	2U
Carbon disulfide	µg/L	6270	2U	2U	2U	2U
Carbon tetrachloride	µg/L	5	2U	2U	2U	2U
Chlorobenzene	µg/L	100	2U	2U	2U	2U
Chloroethane	µg/L	246,000	2U	2U	2U	2U
Chloroform	µg/L	100	2U	2U	2U	2U
Chloromethane	µg/L	13.4	2U	2U	2U	2U
cis-1,2-Dichloroethene	µg/L	70	2U	2U	2U	2U
Dibromochloromethane	µg/L	3.12	2U	2U	2U	2U
Ethylbenzene	µg/L	700	2U	2U	2U	2U
M + P Xylene	µg/L	10,000	2U	2U	2U	2U
Methylene chloride	µg/L	5	5U	5U	5U	5U
Tetrachloroethene	µg/L	5	2U	2U	2U	2U
Toluene	µg/L	1000	2U	2U	2U	2U
trans-1,2-Dichloroethene	µg/L	100	1U	1U	1U	1U
Trichloroethene	µg/L	5	2U	2U	2U	2U
Trichlorofluoromethane	µg/L	12,100	2U	2U	2U	2U
Vinyl chloride	µg/L	2	1U	1U	1U	1U
Other Parameters						
Alkalinity	mg/L					140
Chloride	mg/L					70
Sulfate	mg/L					200
Field Measurements						
Conductivity	µS/cm		1091	970	940	904

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
PK-14G						
Depth to Water	ft		5.65	4.51	6.85	6.57
Dissolved Oxygen	mg/L		4	5	2	3.7
pH	Std Unit		6.2	6.26	6.22	6.28
Temperature	deg C		6.7	12.7	18.8	15.5
Turbidity	NTU		113	62	28	86
PK-15B						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200		2U		2U
1,1,2,2-Tetrachloroethane	µg/L	0.83		1U		1U
1,1,2-Trichloroethane	µg/L	5		2U		2U
1,1-Dichloroethane	µg/L	5860		2U		2U
1,1-Dichloroethene	µg/L	7		2U		2U
1,2-Dichlorobenzene	µg/L	600		2U		2U
1,2-Dichloroethane	µg/L	5		2U		2U
1,2-Dimethylbenzene	µg/L	10,000		2U		2U
1,4-Dichlorobenzene	µg/L	75		2U		2U
2-Butanone	µg/L	53,800		6U		6U
4-Methyl-2-pentanone	µg/L	6360		5U		5U
Acetone	µg/L	10,200		10U		10U
Benzene	µg/L	10.5		2U		2U
Bromodichloromethane	µg/L	100		2U		2U
Bromoform	µg/L	100		2U		2U
Bromomethane	µg/L	140		2U		2U
Carbon disulfide	µg/L	6270		2U		2U
Carbon tetrachloride	µg/L	5		2U		2U
Chlorobenzene	µg/L	100		2U		2U
Chloroethane	µg/L	246,000		2U		2U
Chloroform	µg/L	100		2U		2U
Chloromethane	µg/L	13.4		2U		2U
cis-1,2-Dichloroethene	µg/L	70		0.39J		0.22J
Dibromochloromethane	µg/L	3.12		2U		2U
Ethylbenzene	µg/L	700		2U		2U
M + P Xylene	µg/L	10,000		2U		2U
Methylene chloride	µg/L	5		0.42BJ		5U
Tetrachloroethene	µg/L	5		2U		2U
Toluene	µg/L	1000		2U		2U
trans-1,2-Dichloroethene	µg/L	100		1U		1U
Trichloroethene	µg/L	5		2U		2U
Trichlorofluoromethane	µg/L	12,100		2U		2U
Vinyl chloride	µg/L	2		1U		1U

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
PK-15B						
Field Measurements						
Conductivity	µS/cm			890		926
Depth to Water	ft			6.08		5.61
Dissolved Oxygen	mg/L			1		2.1
pH	Std Unit			6.66		6.67
Temperature	deg C			12.1		15.6
Turbidity	NTU			271		78
PK-16G						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200	2U	2U	2U	2U
1,1,2,2-Tetrachloroethane	µg/L	0.83	1U	1U	1U	1U
1,1,2-Trichloroethane	µg/L	5	2U	2U	2U	2U
1,1-Dichloroethane	µg/L	5860	2U	2U	0.37J	0.33J
1,1-Dichloroethene	µg/L	7	2U	2U	2U	2U
1,2-Dichlorobenzene	µg/L	600	2U	2U	2U	2U
1,2-Dichloroethane	µg/L	5	2U	2U	2U	2U
1,2-Dimethylbenzene	µg/L	10,000	2U	2U	2U	2U
1,4-Dichlorobenzene	µg/L	75	2U	2U	2U	2U
2-Butanone	µg/L	53,800	6U	6U	6U	6U
4-Methyl-2-pentanone	µg/L	6360	5U	5U	5U	5U
Acetone	µg/L	10,200	10U	10U	10U	10U
Benzene	µg/L	5	2U	2U	2U	2U
Bromodichloromethane	µg/L	100	2U	2U	2U	2U
Bromoform	µg/L	100	2U	2U	2U	2U
Bromomethane	µg/L	140	2U	2U	2U	2U
Carbon disulfide	µg/L	6270	2U	2U	2U	2U
Carbon tetrachloride	µg/L	5	2U	2U	2U	2U
Chlorobenzene	µg/L	100	2U	2U	2U	2U
Chloroethane	µg/L	246,000	2U	2U	2U	2U
Chloroform	µg/L	100	2U	2U	2U	2U
Chloromethane	µg/L	13.4	2U	2U	2U	2U
cis-1,2-Dichloroethene	µg/L	70	2U	0.61J	5.3	5.3
Dibromochloromethane	µg/L	3.12	2U	2U	2U	2U
Ethylbenzene	µg/L	700	2U	2U	2U	2U
M + P Xylene	µg/L	10,000	2U	2U	2U	2U
Methylene chloride	µg/L	5	5U	5U	5U	5U
Tetrachloroethene	µg/L	5	2U	2U	2U	2U
Toluene	µg/L	1000	2U	2U	2U	2U
trans-1,2-Dichloroethene	µg/L	100	1U	1U	0.29J	0.22J
Trichloroethene	µg/L	5	2U	2U	2U	2U

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
PK-16G						
Trichlorofluoromethane	µg/L	12,100	2U	2U	2U	2U
Vinyl chloride	µg/L	2	1U	1U	1.4	2.2
Field Measurements						
Conductivity	µS/cm		530	507	999	1030
Depth to Water	ft		4.57	3.96	6.32	6.1
Dissolved Oxygen	mg/L		5	5	2	3.9
pH	Std Unit		7	7.01	6.58	6.75
Temperature	deg C		6.1	13.9	20.4	15.4
Turbidity	NTU		87	43	16	34
PK-17B						
Metals						
Arsenic	µg/L	50				1.6B
Barium	µg/L	4011				52
Cadmium	µg/L	7				1U
Chromium	µg/L	100				2U
Lead	µg/L	50				1U
Mercury	µg/L	2				0.2U
Selenium	µg/L	50				0.84B
Silver	µg/L	50				5U
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200	2U	2U	2U	2U
1,1,2,2-Tetrachloroethane	µg/L	0.83	1U	1U	1U	1U
1,1,2-Trichloroethane	µg/L	5	2U	2U	2U	2U
1,1-Dichloroethane	µg/L	5860	1.3J	1.7J	3.7	3.9
1,1-Dichloroethene	µg/L	7	0.17J	0.17J	0.37J	0.37J
1,2-Dichlorobenzene	µg/L	600	2U	2U	2U	2U
1,2-Dichloroethane	µg/L	5	2U	2U	2U	2U
1,2-Dimethylbenzene	µg/L	10,000	2U	2U	2U	2U
1,4-Dichlorobenzene	µg/L	75	2U	2U	2U	2U
2-Butanone	µg/L	53,800	6U	6U	6U	6U
4-Methyl-2-pentanone	µg/L	6360	5U	5U	5U	5U
Acetone	µg/L	10,200	10U	4.2J	10U	10U
Benzene	µg/L	10.5	2U	2U	0.26J	0.27J
Bromodichloromethane	µg/L	100	2U	2U	2U	2U
Bromoform	µg/L	100	2U	2U	2U	2U
Bromomethane	µg/L	140	2U	2U	2U	2U
Carbon disulfide	µg/L	6270	2U	2U	2U	2U
Carbon tetrachloride	µg/L	5	2U	2U	2U	2U
Chlorobenzene	µg/L	100	0.96J	0.56J	0.4J	0.85J
Chloroethane	µg/L	246,000	2U	2U	2U	2U

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
PK-17B						
Chloroform	µg/L	100	2U	2U	2U	2U
Chloromethane	µg/L	13.4	2U	2U	2U	2U
cis-1,2-Dichloroethene	µg/L	70	21	26	50	57
Dibromochloromethane	µg/L	3.12	2U	2U	2U	2U
Ethylbenzene	µg/L	700	2U	2U	2U	2U
M + P Xylene	µg/L	10,000	2U	2U	2U	2U
Methylene chloride	µg/L	5	5U	0.36BJ	5U	5U
Tetrachloroethene	µg/L	5	2U	2U	2U	2U
Toluene	µg/L	1000	2U	2U	2U	2U
trans-1,2-Dichloroethene	µg/L	100	0.73J	0.85J	1.7	1.8
Trichloroethene	µg/L	5	0.56J	0.75J	1.6J	1.8J
Trichlorofluoromethane	µg/L	12,100	2U	2U	2U	2U
Vinyl chloride	µg/L	2	11	10	20	41
Other Parameters						
Alkalinity	mg/L					170
Chloride	mg/L					82
Sulfate	mg/L					190
Field Measurements						
Conductivity	µS/cm		1034	904	993	958
Depth to Water	ft		6.08	7.06	7.71	7.52
Dissolved Oxygen	mg/L		nm	nm	nm	nm
pH	Std Unit		5.88	6.31	6.16	6.17
Temperature	deg C		10.7	13.3	17.5	16.71
Turbidity	NTU		56	32	17	21
PK-18B						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200		2U		2U
1,1,2,2-Tetrachloroethane	µg/L	0.83		1U		1U
1,1,2-Trichloroethane	µg/L	5		2U		2U
1,1-Dichloroethane	µg/L	5860		2U		2U
1,1-Dichloroethene	µg/L	7		2U		2U
1,2-Dichlorobenzene	µg/L	600		2U		2U
1,2-Dichloroethane	µg/L	5		2U		2U
1,2-Dimethylbenzene	µg/L	10,000		2U		2U
1,4-Dichlorobenzene	µg/L	75		2U		2U
2-Butanone	µg/L	53,800		6U		6U
4-Methyl-2-pentanone	µg/L	6360		5U		5U
Acetone	µg/L	10,200		3.1BJ		10U
Benzene	µg/L	10.5		2U		2U
Bromodichloromethane	µg/L	100		2U		2U

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
PK-18B						
Bromoform	µg/L	100		2U		2U
Bromomethane	µg/L	140		2U		2U
Carbon disulfide	µg/L	6270		2U		2U
Carbon tetrachloride	µg/L	5		2U		2U
Chlorobenzene	µg/L	100		2U		2U
Chloroethane	µg/L	246,000		2U		2U
Chloroform	µg/L	100		2U		2U
Chloromethane	µg/L	13.4		2U		2U
cis-1,2-Dichloroethene	µg/L	70		2U		2U
Dibromochloromethane	µg/L	3.12		2U		2U
Ethylbenzene	µg/L	700		2U		2U
M + P Xylene	µg/L	10,000		2U		2U
Methylene chloride	µg/L	5		5U		5U
Tetrachloroethene	µg/L	5		2U		2U
Toluene	µg/L	1000		2U		2U
trans-1,2-Dichloroethene	µg/L	100		1U		1U
Trichloroethene	µg/L	5		2.7		2U
Trichlorofluoromethane	µg/L	12,100		2U		2U
Vinyl chloride	µg/L	2		1U		1U
Field Measurements						
Conductivity	µS/cm			864		935
Depth to Water	ft			3.92		4.79
Dissolved Oxygen	mg/L			nm		nm
pH	Std Unit			6.97		7.1
Temperature	deg C			11.8		17.23
Turbidity	NTU			31		13
PK-19B						
Metals						
Arsenic	µg/L	50				1.4B
Barium	µg/L	4011				260
Cadmium	µg/L	7				1U
Chromium	µg/L	100				2U
Lead	µg/L	50				1U
Mercury	µg/L	2				0.2U
Selenium	µg/L	50				0.73B
Silver	µg/L	50				5U
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200		2U		2U
1,1,2,2-Tetrachloroethane	µg/L	0.83		1U		1U
1,1,2-Trichloroethane	µg/L	5		2U		2U

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
PK-19B						
1,1-Dichloroethane	µg/L	5860		2U		2U
1,1-Dichloroethene	µg/L	7		2U		2U
1,2-Dichlorobenzene	µg/L	600		2U		2U
1,2-Dichloroethane	µg/L	5		2U		2U
1,2-Dimethylbenzene	µg/L	10,000		2U		2U
1,4-Dichlorobenzene	µg/L	75		2U		2U
2-Butanone	µg/L	53,800		6U		6U
4-Methyl-2-pentanone	µg/L	6360		5U		5U
Acetone	µg/L	10,200		10U		10U
Benzene	µg/L	10.5		2U		2U
Bromodichloromethane	µg/L	100		2U		2U
Bromoform	µg/L	100		2U		2U
Bromomethane	µg/L	140		2U		2U
Carbon disulfide	µg/L	6270		2U		2U
Carbon tetrachloride	µg/L	5		2U		2U
Chlorobenzene	µg/L	100		2U		2U
Chloroethane	µg/L	246,000		0.65J		1.2J
Chloroform	µg/L	100		2U		2U
Chloromethane	µg/L	13.4		2U		2U
cis-1,2-Dichloroethene	µg/L	70		2U		2U
Dibromochloromethane	µg/L	3.12		2U		2U
Ethylbenzene	µg/L	700		2U		2U
M + P Xylene	µg/L	10,000		2U		2U
Methylene chloride	µg/L	5		0.34BJ		5U
Tetrachloroethene	µg/L	5		2U		2U
Toluene	µg/L	1000		2U		2U
trans-1,2-Dichloroethene	µg/L	100		1U		1U
Trichloroethene	µg/L	5		2U		2U
Trichlorofluoromethane	µg/L	12,100		2U		2U
Vinyl chloride	µg/L	2		1U		1U
Other Parameters						
Alkalinity	mg/L					330
Chloride	mg/L					230
Sulfate	mg/L					5U
Field Measurements						
Conductivity	µS/cm			1239		1335
Depth to Water	ft			10.22		9.87
Dissolved Oxygen	mg/L			1		1.3
pH	Std Unit			6.94		6.97
Temperature	deg C			11.6		13.63

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
PK-19B						
Turbidity	NTU			13		8
PK-21B						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200	2U	2U	2U	2U
1,1,2,2-Tetrachloroethane	µg/L	0.83	1U	1U	1U	1U
1,1,2-Trichloroethane	µg/L	5	2U	2U	2U	2U
1,1-Dichloroethane	µg/L	5860	150	170	160	150
1,1-Dichloroethene	µg/L	7	2.3	1.7J	2.1	1.6J
1,2-Dichlorobenzene	µg/L	600	2U	2U	2U	2U
1,2-Dichloroethane	µg/L	5	0.63J	0.78J	0.87J	0.85J
1,2-Dimethylbenzene	µg/L	10,000	2U	2U	2U	2U
1,4-Dichlorobenzene	µg/L	75	2U	2U	2U	2U
2-Butanone	µg/L	53,800	6U	6U	6U	6U
4-Methyl-2-pentanone	µg/L	6360	5U	5U	5U	5U
Acetone	µg/L	10,200	4.9J	10U	10U	10U
Benzene	µg/L	10.5	0.8J	2U	0.81J	0.79J
Bromodichloromethane	µg/L	100	2U	2U	2U	2U
Bromoform	µg/L	100	2U	2U	2U	2U
Bromomethane	µg/L	140	2U	2U	2U	2U
Carbon disulfide	µg/L	6270	2U	2U	2U	2U
Carbon tetrachloride	µg/L	5	2U	2U	2U	2U
Chlorobenzene	µg/L	100	2U	2U	2U	2U
Chloroethane	µg/L	246,000	2U	2U	1.2J	2U
Chloroform	µg/L	100	2U	2U	2U	2U
Chloromethane	µg/L	13.4	2U	2U	2U	2U
cis-1,2-Dichloroethene	µg/L	70	13	12	13	13
Dibromochloromethane	µg/L	3.12	2U	2U	2U	2U
Ethylbenzene	µg/L	700	2U	2U	2U	2U
M + P Xylene	µg/L	10,000	2U	2U	2U	2U
Methylene chloride	µg/L	5	5U	5U	5U	5U
Tetrachloroethene	µg/L	5	2U	2U	2U	2U
Toluene	µg/L	1000	2U	2U	2U	2U
trans-1,2-Dichloroethene	µg/L	100	1U	1U	1U	1U
Trichloroethene	µg/L	5	0.57J	0.46J	0.59J	0.52J
Trichlorofluoromethane	µg/L	12,100	2U	2U	2U	2U
Vinyl chloride	µg/L	2	25	20	20	27
Field Measurements						
Conductivity	µS/cm		545	498	544	532
Depth to Water	ft		6.61	7.43	9.86	10.41
Dissolved Oxygen	mg/L		6	nm	0.68	1.6

X-749/X-120/PK Landfill

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
PK-21B						
pH	Std Unit		6.76	6.95	6.55	6.92
Temperature	deg C		11.2	10.9	16.2	15.1
Turbidity	NTU		14	8	13	19
PK-PL6						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200	5.1	10	7.1	2.5
1,1,2,2-Tetrachloroethane	µg/L	0.83	1U	1U	1U	1U
1,1,2-Trichloroethane	µg/L	5	2U	2U	2U	2U
1,1-Dichloroethane	µg/L	5860	8.8	16	11	4.9
1,1-Dichloroethene	µg/L	7	5.1	8.8	7.2	2.6
1,2-Dichlorobenzene	µg/L	600	2U	2U	2U	2U
1,2-Dichloroethane	µg/L	5	2U	2U	2U	2U
1,2-Dimethylbenzene	µg/L	10,000	2U	2U	2U	2U
1,4-Dichlorobenzene	µg/L	75	2U	2U	2U	2U
2-Butanone	µg/L	53,800	6U	6U	6U	6U
4-Methyl-2-pentanone	µg/L	6360	5U	5U	5U	5U
Acetone	µg/L	10,200	10U	10U	2J	10U
Benzene	µg/L	5	2U	2U	2U	2U
Bromodichloromethane	µg/L	100	2U	2U	2U	2U
Bromoform	µg/L	100	2U	2U	2U	2U
Bromomethane	µg/L	140	2U	2U	2U	2U
Carbon disulfide	µg/L	6270	2U	2U	2U	2U
Carbon tetrachloride	µg/L	5	2U	2U	2U	2U
Chlorobenzene	µg/L	100	2U	2U	2U	2U
Chloroethane	µg/L	246,000	2U	2U	2U	2U
Chloroform	µg/L	100	2U	2U	2U	2U
Chloromethane	µg/L	13.4	2U	2U	2U	2U
cis-1,2-Dichloroethene	µg/L	70	2	2.9	2.7	1.5J
Dibromochloromethane	µg/L	3.12	2U	2U	2U	2U
Ethylbenzene	µg/L	700	2U	2U	2U	2U
M + P Xylene	µg/L	10,000	2U	2U	2U	2U
Methylene chloride	µg/L	5	5U	5U	5U	0.51BJ
Tetrachloroethene	µg/L	5	2U	2U	2U	2U
Toluene	µg/L	1000	2U	2U	2U	2U
trans-1,2-Dichloroethene	µg/L	100	1U	1U	1U	1U
Trichloroethene	µg/L	5	2.9	4	4	1.5J
Trichlorofluoromethane	µg/L	12,100	2U	2U	2U	2U
Vinyl chloride	µg/L	2	0.38J	1.1	1.3	0.54J
Field Measurements						
Conductivity	µS/cm		774	843	931	1109

X-749/X-120/PK Landfill

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
PK-PL6						
pH	Std Unit		6.78	7.04	7.01	7.21
Temperature	deg C		9.2	15.75	19	13.7
Turbidity	NTU		39	2	5	2
PK-PL6A						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200	7.6	14	10	9.7
1,1,2,2-Tetrachloroethane	µg/L	0.83	1U	1U	1U	1U
1,1,2-Trichloroethane	µg/L	5	2U	2U	2U	2U
1,1-Dichloroethane	µg/L	5860	13	22	18	18
1,1-Dichloroethene	µg/L	7	8.1	11	10	11
1,2-Dichlorobenzene	µg/L	600	2U	2U	2U	2U
1,2-Dichloroethane	µg/L	5	2U	2U	2U	2U
1,2-Dimethylbenzene	µg/L	10,000	2U	2U	2U	2U
1,4-Dichlorobenzene	µg/L	75	2U	2U	2U	2U
2-Butanone	µg/L	53,800	6U	6U	6U	6U
4-Methyl-2-pentanone	µg/L	6360	5U	5U	5U	5U
Acetone	µg/L	10,200	7.3J	10U	2.5J	10U
Benzene	µg/L	5	2U	2U	2U	2U
Bromodichloromethane	µg/L	100	2U	2U	2U	2U
Bromoform	µg/L	100	2U	2U	2U	2U
Bromomethane	µg/L	140	2U	2U	2U	2U
Carbon disulfide	µg/L	6270	0.52J	2U	2U	2U
Carbon tetrachloride	µg/L	5	2U	2U	2U	2U
Chlorobenzene	µg/L	100	2U	2U	2U	2U
Chloroethane	µg/L	246,000	2U	2U	2U	2U
Chloroform	µg/L	100	2U	2U	2U	2U
Chloromethane	µg/L	13.4	2U	2U	2U	2U
cis-1,2-Dichloroethene	µg/L	70	2.6	3.1	3.2	3.4
Dibromochloromethane	µg/L	3.12	2U	2U	2U	2U
Ethylbenzene	µg/L	700	2U	2U	2U	2U
M + P Xylene	µg/L	10,000	2U	2U	2U	2U
Methylene chloride	µg/L	5	5U	5U	5U	0.35BJ
Tetrachloroethene	µg/L	5	2U	2U	2U	2U
Toluene	µg/L	1000	2U	2U	2U	2U
trans-1,2-Dichloroethene	µg/L	100	1U	1U	1U	1U
Trichloroethene	µg/L	5	4.1	5.3	5.6	6
Trichlorofluoromethane	µg/L	12,100	2U	2U	2U	2U
Vinyl chloride	µg/L	2	0.62J	1.6	2.1	2.6
Field Measurements						
Conductivity	µS/cm		839	744	784	1006

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
PK-PL6A						
pH	Std Unit		6.24	6.82	6.78	6.61
Temperature	deg C		9.9	16.2	19.73	14.6
Turbidity	NTU		15	2	9	7
STSW-101G						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200		36		46
1,1,2,2-Tetrachloroethane	µg/L	0.83		1U		1U
1,1,2-Trichloroethane	µg/L	5		1.3J		1.7J
1,1-Dichloroethane	µg/L	5860		52		63
1,1-Dichloroethene	µg/L	7		160		120
1,2-Dichlorobenzene	µg/L	600		2U		2U
1,2-Dichloroethane	µg/L	5		15		22
1,2-Dimethylbenzene	µg/L	10,000		2U		2U
1,4-Dichlorobenzene	µg/L	75		2U		2U
2-Butanone	µg/L	53,800		6U		6U
4-Methyl-2-pentanone	µg/L	6360		5U		5U
Acetone	µg/L	10,200		2.8J		10U
Benzene	µg/L	5		2U		2U
Bromodichloromethane	µg/L	100		2U		2U
Bromoform	µg/L	100		2U		2U
Bromomethane	µg/L	140		2U		2U
Carbon disulfide	µg/L	6270		2U		2U
Carbon tetrachloride	µg/L	5		2U		2U
Chlorobenzene	µg/L	100		2U		2U
Chloroethane	µg/L	246,000		2U		1.6J
Chloroform	µg/L	100		4.3		6
Chloromethane	µg/L	13.4		2U		2U
cis-1,2-Dichloroethene	µg/L	70		26		31
Dibromochloromethane	µg/L	3.12		2U		2U
Ethylbenzene	µg/L	700		2U		2U
M + P Xylene	µg/L	10,000		2U		2U
Methylene chloride	µg/L	5		5U		0.79BJ
Tetrachloroethene	µg/L	5		1.8J		1.8J
Toluene	µg/L	1000		2U		2U
trans-1,2-Dichloroethene	µg/L	100		1U		1U
Trichloroethene	µg/L	5		140		150
Trichlorofluoromethane	µg/L	12,100		2U		2U
Vinyl chloride	µg/L	2		1U		1U
Field Measurements						
Conductivity	µS/cm			282		327

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
STSW-101G						
Depth to Water	ft			10.98		17.3
Dissolved Oxygen	mg/L			0.88		1.15
pH	Std Unit			6.13		6.2
Temperature	deg C			11.7		16.35
Turbidity	NTU			14.4		12
STSW-102G						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200		48		70
1,1,2,2-Tetrachloroethane	µg/L	0.83		2U		2U
1,1,2-Trichloroethane	µg/L	5		1.2J		1.5J
1,1-Dichloroethane	µg/L	5860		190		320
1,1-Dichloroethene	µg/L	7		250		220
1,2-Dichlorobenzene	µg/L	600		4U		4U
1,2-Dichloroethane	µg/L	5		50		110
1,2-Dimethylbenzene	µg/L	10,000		4U		4U
1,4-Dichlorobenzene	µg/L	75		4U		4U
2-Butanone	µg/L	53,800		12U		12U
4-Methyl-2-pentanone	µg/L	6360		10U		10U
Acetone	µg/L	10,200		20U		20U
Benzene	µg/L	5		0.87J		0.86J
Bromodichloromethane	µg/L	100		4U		4U
Bromoform	µg/L	100		4U		4U
Bromomethane	µg/L	140		4U		4U
Carbon disulfide	µg/L	6270		4U		4U
Carbon tetrachloride	µg/L	5		4U		4U
Chlorobenzene	µg/L	100		4U		4U
Chloroethane	µg/L	246,000		6.9		3.2J
Chloroform	µg/L	100		7		11
Chloromethane	µg/L	13.4		4U		4U
cis-1,2-Dichloroethene	µg/L	70		94		84
Dibromochloromethane	µg/L	3.12		4U		4U
Ethylbenzene	µg/L	700		4U		4U
M + P Xylene	µg/L	10,000		4U		4U
Methylene chloride	µg/L	5		10U		10U
Tetrachloroethene	µg/L	5		0.83J		0.73J
Toluene	µg/L	1000		4U		4U
trans-1,2-Dichloroethene	µg/L	100		0.85J		0.86J
Trichloroethene	µg/L	5		850		830
Trichlorofluoromethane	µg/L	12,100		4U		4U
Vinyl chloride	µg/L	2		2U		1.2J

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
STSW-102G						
Field Measurements						
Conductivity	µS/cm			603		554
Depth to Water	ft			10.1		16.8
Dissolved Oxygen	mg/L			0.78		0.56
pH	Std Unit			6.2		6.17
Temperature	deg C			13.4		14.3
Turbidity	NTU			10.1		10
WP-01G						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200	2U	2U	2U	2U
1,1,2,2-Tetrachloroethane	µg/L	0.83	1U	1U	1U	1U
1,1,2-Trichloroethane	µg/L	5	2U	2U	2U	2U
1,1-Dichloroethane	µg/L	5860	2U	2U	2U	2U
1,1-Dichloroethene	µg/L	7	2U	2U	2U	2U
1,2-Dichlorobenzene	µg/L	600	2U	2U	2U	2U
1,2-Dichloroethane	µg/L	5	2U	2U	2U	2U
1,2-Dimethylbenzene	µg/L	10,000	2U	2U	2U	2U
1,4-Dichlorobenzene	µg/L	75	2U	2U	2U	2U
2-Butanone	µg/L	53,800	6U	6U	6U	6U
4-Methyl-2-pentanone	µg/L	6360	5U	5U	5U	5U
Acetone	µg/L	10,200	10U	10U	10U	10U
Benzene	µg/L	5	2U	2U	2U	2U
Bromodichloromethane	µg/L	100	2U	2U	2U	2U
Bromoform	µg/L	100	2U	2U	2U	2U
Bromomethane	µg/L	140	2U	2U	2U	2U
Carbon disulfide	µg/L	6270	2U	2U	2U	2U
Carbon tetrachloride	µg/L	5	2U	2U	2U	2U
Chlorobenzene	µg/L	100	2U	2U	2U	2U
Chloroethane	µg/L	246,000	2U	2U	2U	2U
Chloroform	µg/L	100	2U	2U	2U	2U
Chloromethane	µg/L	13.4	2U	2U	2U	2U
cis-1,2-Dichloroethene	µg/L	70	2U	2U	2U	2U
Dibromochloromethane	µg/L	3.12	2U	2U	2U	2U
Ethylbenzene	µg/L	700	2U	2U	2U	2U
M + P Xylene	µg/L	10,000	2U	2U	2U	2U
Methylene chloride	µg/L	5	5U	5U	5U	5U
Tetrachloroethene	µg/L	5	2U	2U	2U	2U
Toluene	µg/L	1000	2U	2U	2U	2U
trans-1,2-Dichloroethene	µg/L	100	1U	1U	1U	1U
Trichloroethene	µg/L	5	0.33J	2U	2U	2U

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
WP-01G						
Trichlorofluoromethane	µg/L	12,100	2U	2U	2U	2U
Vinyl chloride	µg/L	2	1U	1U	1U	1U
Radionuclides						
Technetium-99	pCi/L	3790		-4.82U		-5.78U
Field Measurements						
Conductivity	µS/cm		456	445	407	372
Depth to Water	ft		19.04	17.2	20.06	21.34
Dissolved Oxygen	mg/L		1	1	1	0.98
pH	Std Unit		5.72	6.22	6.44	6.15
Temperature	deg C		12.4	13	13.3	14.19
Turbidity	NTU		6	5	4	8
WP-02G						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200		2U		2U
1,1,2,2-Tetrachloroethane	µg/L	0.83		1U		1U
1,1,2-Trichloroethane	µg/L	5		2U		2U
1,1-Dichloroethane	µg/L	5860		2U		2U
1,1-Dichloroethene	µg/L	7		2U		2U
1,2-Dichlorobenzene	µg/L	600		2U		2U
1,2-Dichloroethane	µg/L	5		2U		2U
1,2-Dimethylbenzene	µg/L	10,000		2U		2U
1,4-Dichlorobenzene	µg/L	75		2U		2U
2-Butanone	µg/L	53,800		6U		6U
4-Methyl-2-pentanone	µg/L	6360		5U		5U
Acetone	µg/L	10,200		10U		10U
Benzene	µg/L	5		2U		2U
Bromodichloromethane	µg/L	100		2U		2U
Bromoform	µg/L	100		2U		2U
Bromomethane	µg/L	140		2U		2U
Carbon disulfide	µg/L	6270		2U		2U
Carbon tetrachloride	µg/L	5		2U		2U
Chlorobenzene	µg/L	100		2U		2U
Chloroethane	µg/L	246,000		2U		2U
Chloroform	µg/L	100		2U		2U
Chloromethane	µg/L	13.4		2U		2U
cis-1,2-Dichloroethene	µg/L	70		2U		2U
Dibromochloromethane	µg/L	3.12		2U		2U
Ethylbenzene	µg/L	700		2U		2U
M + P Xylene	µg/L	10,000		2U		2U
Methylene chloride	µg/L	5		5U		5U

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
WP-02G						
Tetrachloroethene	µg/L	5		2U		2U
Toluene	µg/L	1000		2U		2U
trans-1,2-Dichloroethene	µg/L	100		1U		1U
Trichloroethene	µg/L	5		2U		2U
Trichlorofluoromethane	µg/L	12,100		2U		2U
Vinyl chloride	µg/L	2		1U		1U
Field Measurements						
Conductivity	µS/cm			493		516
Depth to Water	ft			14.92		19.22
Dissolved Oxygen	mg/L			1		2.71
pH	Std Unit			6.52		6.18
Temperature	deg C			12.7		14.05
Turbidity	NTU			2		5
WP-03G						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200	0.3J	2U	2U	2U
1,1,2,2-Tetrachloroethane	µg/L	0.83	1U	1U	1U	1U
1,1,2-Trichloroethane	µg/L	5	2U	2U	2U	2U
1,1-Dichloroethane	µg/L	5860	1.8J	0.67J	0.46J	0.62J
1,1-Dichloroethene	µg/L	7	0.88J	0.43J	0.23J	0.24J
1,2-Dichlorobenzene	µg/L	600	2U	2U	2U	2U
1,2-Dichloroethane	µg/L	5	2U	2U	2U	2U
1,2-Dimethylbenzene	µg/L	10,000	2U	2U	2U	2U
1,4-Dichlorobenzene	µg/L	75	2U	2U	2U	2U
2-Butanone	µg/L	53,800	6U	6U	6U	6U
4-Methyl-2-pentanone	µg/L	6360	5U	5U	5U	5U
Acetone	µg/L	10,200	10U	10U	10U	10U
Benzene	µg/L	5	2U	2U	2U	2U
Bromodichloromethane	µg/L	100	2U	2U	2U	2U
Bromoform	µg/L	100	2U	2U	2U	2U
Bromomethane	µg/L	140	2U	2U	2U	2U
Carbon disulfide	µg/L	6270	2U	2U	2U	2U
Carbon tetrachloride	µg/L	5	2U	2U	2U	2U
Chlorobenzene	µg/L	100	2U	2U	2U	2U
Chloroethane	µg/L	246,000	2U	2U	2U	2U
Chloroform	µg/L	100	2U	2U	2U	2U
Chloromethane	µg/L	13.4	2U	2U	2U	2U
cis-1,2-Dichloroethene	µg/L	70	0.2J	2U	2U	2U
Dibromochloromethane	µg/L	3.12	2U	2U	2U	2U
Ethylbenzene	µg/L	700	2U	2U	2U	2U

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
WP-03G						
M + P Xylene	µg/L	10,000	2U	2U	2U	2U
Methylene chloride	µg/L	5	5U	5U	5U	5U
Tetrachloroethene	µg/L	5	2U	2U	2U	2U
Toluene	µg/L	1000	2U	2U	2U	2U
trans-1,2-Dichloroethene	µg/L	100	1U	1U	1U	1U
Trichloroethene	µg/L	5	3	1.3J	0.82J	0.88J
Trichlorofluoromethane	µg/L	12,100	2U	2U	2U	2U
Vinyl chloride	µg/L	2	1U	1U	1U	1U
Radionuclides						
Technetium-99	pCi/L	3790		-1.82U		-0.593U
Field Measurements						
Conductivity	µS/cm		194	163	157	152
Depth to Water	ft		18.33	15.5	19.08	20.33
Dissolved Oxygen	mg/L		3	5	6	5
pH	Std Unit		5.29	6.19	6.32	5.74
Temperature	deg C		11.3	10.9	11.2	12.4
Turbidity	NTU		6	6	3	6
WP-04G						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200		2U		2U
1,1,2,2-Tetrachloroethane	µg/L	0.83		1U		1U
1,1,2-Trichloroethane	µg/L	5		2U		2U
1,1-Dichloroethane	µg/L	5860		2U		2U
1,1-Dichloroethene	µg/L	7		2U		2U
1,2-Dichlorobenzene	µg/L	600		2U		2U
1,2-Dichloroethane	µg/L	5		2U		2U
1,2-Dimethylbenzene	µg/L	10,000		2U		2U
1,4-Dichlorobenzene	µg/L	75		2U		2U
2-Butanone	µg/L	53,800		6U		6U
4-Methyl-2-pentanone	µg/L	6360		5U		5U
Acetone	µg/L	10,200		10U		10U
Benzene	µg/L	5		2U		2U
Bromodichloromethane	µg/L	100		2U		2U
Bromoform	µg/L	100		2U		2U
Bromomethane	µg/L	140		2U		2U
Carbon disulfide	µg/L	6270		2U		2U
Carbon tetrachloride	µg/L	5		2U		2U
Chlorobenzene	µg/L	100		2U		2U
Chloroethane	µg/L	246,000		2U		2U
Chloroform	µg/L	100		2U		2U

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
WP-04G						
Chloromethane	µg/L	13.4		2U		2U
cis-1,2-Dichloroethene	µg/L	70		2U		2U
Dibromochloromethane	µg/L	3.12		2U		2U
Ethylbenzene	µg/L	700		2U		2U
M + P Xylene	µg/L	10,000		2U		2U
Methylene chloride	µg/L	5		5U		5U
Tetrachloroethene	µg/L	5		2U		2U
Toluene	µg/L	1000		2U		2U
trans-1,2-Dichloroethene	µg/L	100		1U		1U
Trichloroethene	µg/L	5		2U		2U
Trichlorofluoromethane	µg/L	12,100		2U		2U
Vinyl chloride	µg/L	2		1U		1U
Field Measurements						
Conductivity	µS/cm			301		292
Depth to Water	ft			15.59		19.71
Dissolved Oxygen	mg/L			1		1.77
pH	Std Unit			6.05		6.34
Temperature	deg C			13.1		14.7
Turbidity	NTU			5		4
WP-05G						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200		2U	2U	2U
1,1,2,2-Tetrachloroethane	µg/L	0.83		1U	1U	1U
1,1,2-Trichloroethane	µg/L	5		2U	2U	2U
1,1-Dichloroethane	µg/L	5860	1U	2U	2U	2U
1,1-Dichloroethene	µg/L	7	1U	2U	2U	2U
1,2-Dichlorobenzene	µg/L	600		2U	2U	2U
1,2-Dichloroethane	µg/L	5	1U	2U	2U	2U
1,2-Dimethylbenzene	µg/L	10,000		2U	2U	2U
1,4-Dichlorobenzene	µg/L	75		2U	2U	2U
2-Butanone	µg/L	53,800		6U	6U	6U
4-Methyl-2-pentanone	µg/L	6360		5U	5U	5U
Acetone	µg/L	10,200		3.5BJ	10U	3.2BJ
Benzene	µg/L	5		2U	2U	2U
Bromodichloromethane	µg/L	100		2U	2U	2U
Bromoform	µg/L	100		2U	2U	2U
Bromomethane	µg/L	140		2U	2U	2U
Carbon disulfide	µg/L	6270		2U	2U	2U
Carbon tetrachloride	µg/L	5		2U	2U	2U
Chlorobenzene	µg/L	100		2U	2U	2U

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
WP-05G						
Chloroethane	µg/L	246,000		2U	2U	2U
Chloroform	µg/L	100		2U	2U	2U
Chloromethane	µg/L	13.4		2U	2U	2U
cis-1,2-Dichloroethene	µg/L	70	2U	2U	2U	2U
Dibromochloromethane	µg/L	3.12		2U	2U	2U
Ethylbenzene	µg/L	700		2U	2U	2U
M + P Xylene	µg/L	10,000		2U	2U	2U
Methylene chloride	µg/L	5		5U	5U	5U
Tetrachloroethene	µg/L	5		2U	2U	2U
Toluene	µg/L	1000		2U	2U	2U
trans-1,2-Dichloroethene	µg/L	100	1U	1U	1U	1U
Trichloroethene	µg/L	5	2U	2U	2U	2U
Trichlorofluoromethane	µg/L	12,100		2U	2U	2U
Vinyl chloride	µg/L	2	1U	1U	1U	1U
Field Measurements						
Conductivity	µS/cm		202	186	196	188
Depth to Water	ft		21.76	21.1	22.32	23.55
Dissolved Oxygen	mg/L		3	5	5	5
pH	Std Unit		6.04	5.86	6.45	5.69
Temperature	deg C		10.5	12.2	12.1	12.8
Turbidity	NTU		15	22	11	14
WP-06G						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200		2U	2U	2U
1,1,2,2-Tetrachloroethane	µg/L	0.83		1U	1U	1U
1,1,2-Trichloroethane	µg/L	5		2U	2U	2U
1,1-Dichloroethane	µg/L	5860	1U	2U	2U	2U
1,1-Dichloroethene	µg/L	7	1U	2U	2U	2U
1,2-Dichlorobenzene	µg/L	600		2U	2U	2U
1,2-Dichloroethane	µg/L	5	1U	2U	2U	2U
1,2-Dimethylbenzene	µg/L	10,000		2U	2U	2U
1,4-Dichlorobenzene	µg/L	75		2U	2U	2U
2-Butanone	µg/L	53,800		6U	6U	6U
4-Methyl-2-pentanone	µg/L	6360		5U	5U	5U
Acetone	µg/L	10,200		2.4BJ	10U	10U
Benzene	µg/L	5		2U	2U	2U
Bromodichloromethane	µg/L	100		2U	2U	2U
Bromoform	µg/L	100		2U	2U	2U
Bromomethane	µg/L	140		2U	2U	2U
Carbon disulfide	µg/L	6270		2U	2U	2U

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
WP-06G						
Carbon tetrachloride	µg/L	5		2U	2U	2U
Chlorobenzene	µg/L	100		2U	2U	2U
Chloroethane	µg/L	246,000		2U	2U	2U
Chloroform	µg/L	100		2U	2U	2U
Chloromethane	µg/L	13.4		2U	2U	2U
cis-1,2-Dichloroethene	µg/L	70	2U	2U	2U	2U
Dibromochloromethane	µg/L	3.12		2U	2U	2U
Ethylbenzene	µg/L	700		2U	2U	2U
M + P Xylene	µg/L	10,000		2U	2U	2U
Methylene chloride	µg/L	5		5U	5U	5U
Tetrachloroethene	µg/L	5		2U	2U	2U
Toluene	µg/L	1000		2U	2U	2U
trans-1,2-Dichloroethene	µg/L	100	1U	1U	1U	1U
Trichloroethene	µg/L	5	2U	2U	2U	2U
Trichlorofluoromethane	µg/L	12,100		2U	2U	2U
Vinyl chloride	µg/L	2	1U	1U	1U	1U
Field Measurements						
Conductivity	µS/cm		198	187	192	177
Depth to Water	ft		17.48	16.96	18.15	19.38
Dissolved Oxygen	mg/L		2	4	4	3
pH	Std Unit		5.94	5.82	6.36	5.19
Temperature	deg C		11.6	11.3	11.9	13
Turbidity	NTU		789	526	1000	317
WP-07G						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200		2U	2U	2U
1,1,2,2-Tetrachloroethane	µg/L	0.83		1U	1U	1U
1,1,2-Trichloroethane	µg/L	5		2U	2U	2U
1,1-Dichloroethane	µg/L	5860	0.61J	0.39J	0.24J	0.22J
1,1-Dichloroethene	µg/L	7	0.25J	0.23J	2U	2U
1,2-Dichlorobenzene	µg/L	600		2U	2U	2U
1,2-Dichloroethane	µg/L	5	1U	2U	2U	2U
1,2-Dimethylbenzene	µg/L	10,000		2U	2U	2U
1,4-Dichlorobenzene	µg/L	75		2U	2U	2U
2-Butanone	µg/L	53,800		6U	6U	6U
4-Methyl-2-pentanone	µg/L	6360		5U	5U	5U
Acetone	µg/L	10,200		2.5BJ	10U	2.4BJ
Benzene	µg/L	5		2U	2U	2U
Bromodichloromethane	µg/L	100		2U	2U	2U
Bromoform	µg/L	100		2U	2U	2U

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
WP-07G						
Bromomethane	µg/L	140		2U	2U	2U
Carbon disulfide	µg/L	6270		2U	2U	2U
Carbon tetrachloride	µg/L	5		2U	2U	2U
Chlorobenzene	µg/L	100		2U	2U	2U
Chloroethane	µg/L	246,000		2U	2U	2U
Chloroform	µg/L	100		2U	2U	2U
Chloromethane	µg/L	13.4		2U	2U	2U
cis-1,2-Dichloroethene	µg/L	70	2U	2U	2U	2U
Dibromochloromethane	µg/L	3.12		2U	2U	2U
Ethylbenzene	µg/L	700		2U	2U	2U
M + P Xylene	µg/L	10,000		2U	2U	2U
Methylene chloride	µg/L	5		5U	5U	5U
Tetrachloroethene	µg/L	5		2U	2U	2U
Toluene	µg/L	1000		2U	2U	2U
trans-1,2-Dichloroethene	µg/L	100	1U	1U	1U	1U
Trichloroethene	µg/L	5	0.76J	0.35J	0.19J	2U
Trichlorofluoromethane	µg/L	12,100		2U	2U	2U
Vinyl chloride	µg/L	2	1U	1U	1U	1U
Field Measurements						
Conductivity	µS/cm		164	144	146	138
Depth to Water	ft		11.47	11.27	12.4	13.54
Dissolved Oxygen	mg/L		3	3	3	2
pH	Std Unit		5.55	5.41	6.08	5.12
Temperature	deg C		10.4	11.7	13.3	14.4
Turbidity	NTU		6	10	4	20
X120-03G						
Metals						
Arsenic	µg/L	92			0.3B	
Barium	µg/L	2000			14	
Cadmium	µg/L	6.5			0.12B	
Chromium	µg/L	100			4.7	
Lead	µg/L	50			1U	
Mercury	µg/L	2			0.2U	
Selenium	µg/L	50			2B	
Silver	µg/L	50			5U	
Other Parameters						
Alkalinity	mg/L				95	
Chloride	mg/L				66	
Sulfate	mg/L				360	
Field Measurements						

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X120-03G						
Conductivity	µS/cm				1153	
Depth to Water	ft				15.02	
Dissolved Oxygen	mg/L				1	
pH	Std Unit				6.2	
Temperature	deg C				14.8	
Turbidity	NTU				10	
X120-05G						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200			2U	
1,1,2,2-Tetrachloroethane	µg/L	0.83			1U	
1,1,2-Trichloroethane	µg/L	5			2U	
1,1-Dichloroethane	µg/L	5860			2U	
1,1-Dichloroethene	µg/L	7			2U	
1,2-Dichlorobenzene	µg/L	600			2U	
1,2-Dichloroethane	µg/L	5			2U	
1,2-Dimethylbenzene	µg/L	10,000			2U	
1,4-Dichlorobenzene	µg/L	75			2U	
2-Butanone	µg/L	53,800			6U	
4-Methyl-2-pentanone	µg/L	6360			5U	
Acetone	µg/L	10,200			10U	
Benzene	µg/L	5			2U	
Bromodichloromethane	µg/L	100			2U	
Bromoform	µg/L	100			2U	
Bromomethane	µg/L	140			2U	
Carbon disulfide	µg/L	6270			2U	
Carbon tetrachloride	µg/L	5			2U	
Chlorobenzene	µg/L	100			2U	
Chloroethane	µg/L	246,000			2U	
Chloroform	µg/L	100			2U	
Chloromethane	µg/L	13.4			2U	
cis-1,2-Dichloroethene	µg/L	70			2U	
Dibromochloromethane	µg/L	3.12			2U	
Ethylbenzene	µg/L	700			2U	
M + P Xylene	µg/L	10,000			2U	
Methylene chloride	µg/L	5			5U	
Tetrachloroethene	µg/L	5			2U	
Toluene	µg/L	1000			2U	
trans-1,2-Dichloroethene	µg/L	100			1U	
Trichloroethene	µg/L	5			6.4	
Trichlorofluoromethane	µg/L	12,100			2U	

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X120-05G						
Vinyl chloride	µg/L	2			1U	
Field Measurements						
Conductivity	µS/cm				879	
Depth to Water	ft				14.53	
Dissolved Oxygen	mg/L				1	
pH	Std Unit				6.17	
Temperature	deg C				13.9	
Turbidity	NTU				5	
X120-08G						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200		2.5		2
1,1,2,2-Tetrachloroethane	µg/L	0.83		1U		1U
1,1,2-Trichloroethane	µg/L	5		2U		2U
1,1-Dichloroethane	µg/L	5860		2		1.8J
1,1-Dichloroethene	µg/L	7		6.8		6.4
1,2-Dichlorobenzene	µg/L	600		2U		2U
1,2-Dichloroethane	µg/L	5		2U		2U
1,2-Dimethylbenzene	µg/L	10,000		2U		2U
1,4-Dichlorobenzene	µg/L	75		2U		2U
2-Butanone	µg/L	53,800		6U		6U
4-Methyl-2-pentanone	µg/L	6360		5U		5U
Acetone	µg/L	10,200		10U		10U
Benzene	µg/L	5		2U		2U
Bromodichloromethane	µg/L	100		2U		2U
Bromoform	µg/L	100		2U		2U
Bromomethane	µg/L	140		2U		2U
Carbon disulfide	µg/L	6270		2U		2U
Carbon tetrachloride	µg/L	5		2U		2U
Chlorobenzene	µg/L	100		2U		2U
Chloroethane	µg/L	246,000		2U		2U
Chloroform	µg/L	100		0.36J		0.28J
Chloromethane	µg/L	13.4		2U		2U
cis-1,2-Dichloroethene	µg/L	70		0.15J		2U
Dibromochloromethane	µg/L	3.12		2U		2U
Ethylbenzene	µg/L	700		2U		2U
M + P Xylene	µg/L	10,000		2U		2U
Methylene chloride	µg/L	5		5U		0.54BJ
Tetrachloroethene	µg/L	5		2U		2U
Toluene	µg/L	1000		2U		2U
trans-1,2-Dichloroethene	µg/L	100		1U		1U

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X120-08G						
Trichloroethene	µg/L	5		7.6		7.2
Trichlorofluoromethane	µg/L	12,100		2U		2U
Vinyl chloride	µg/L	2		1U		1U
Field Measurements						
Conductivity	µS/cm			156		153
Depth to Water	ft			17.71		19.55
Dissolved Oxygen	mg/L			1		6
pH	Std Unit			5.12		4.26
Temperature	deg C			12.3		15.4
Turbidity	NTU			28		11
X120-10G						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200			5.3	
1,1,2,2-Tetrachloroethane	µg/L	0.83			1U	
1,1,2-Trichloroethane	µg/L	5			0.45J	
1,1-Dichloroethane	µg/L	5860			5.2	
1,1-Dichloroethene	µg/L	7			25	
1,2-Dichlorobenzene	µg/L	600			2U	
1,2-Dichloroethane	µg/L	5			2U	
1,2-Dimethylbenzene	µg/L	10,000			2U	
1,4-Dichlorobenzene	µg/L	75			2U	
2-Butanone	µg/L	53,800			6U	
4-Methyl-2-pentanone	µg/L	6360			5U	
Acetone	µg/L	10,200			10U	
Benzene	µg/L	5			2U	
Bromodichloromethane	µg/L	100			2U	
Bromoform	µg/L	100			2U	
Bromomethane	µg/L	140			2U	
Carbon disulfide	µg/L	6270			2U	
Carbon tetrachloride	µg/L	5			2U	
Chlorobenzene	µg/L	100			2U	
Chloroethane	µg/L	246,000			2U	
Chloroform	µg/L	100			0.61J	
Chloromethane	µg/L	13.4			2U	
cis-1,2-Dichloroethene	µg/L	70			2U	
Dibromochloromethane	µg/L	3.12			2U	
Ethylbenzene	µg/L	700			2U	
M + P Xylene	µg/L	10,000			2U	
Methylene chloride	µg/L	5			5U	
Tetrachloroethene	µg/L	5			2U	

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X120-10G						
Toluene	µg/L	1000			2U	
trans-1,2-Dichloroethene	µg/L	100			1U	
Trichloroethene	µg/L	5			3.3	
Trichlorofluoromethane	µg/L	12,100			2U	
Vinyl chloride	µg/L	2			1U	
Field Measurements						
Conductivity	µS/cm				155	
Depth to Water	ft				15.5	
Dissolved Oxygen	mg/L				2	
pH	Std Unit				5.33	
Temperature	deg C				15.1	
Turbidity	NTU				219	
X749-04G						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200	4U		4U	
1,1,2,2-Tetrachloroethane	µg/L	0.83	2U		2U	
1,1,2-Trichloroethane	µg/L	5	4U		4U	
1,1-Dichloroethane	µg/L	5860	4U		4U	
1,1-Dichloroethene	µg/L	7	4U		4U	
1,2-Dichlorobenzene	µg/L	600	4U		4U	
1,2-Dichloroethane	µg/L	5	4U		4U	
1,2-Dimethylbenzene	µg/L	10,000	4U		4U	
1,4-Dichlorobenzene	µg/L	75	4U		4U	
2-Butanone	µg/L	53,800	12U		12U	
4-Methyl-2-pentanone	µg/L	6360	10U		10U	
Acetone	µg/L	10,200	20U		20U	
Benzene	µg/L	5	4U		4U	
Bromodichloromethane	µg/L	100	4U		4U	
Bromoform	µg/L	100	4U		4U	
Bromomethane	µg/L	140	4U		4U	
Carbon disulfide	µg/L	6270	4U		4U	
Carbon tetrachloride	µg/L	5	4U		4U	
Chlorobenzene	µg/L	100	4U		4U	
Chloroethane	µg/L	246,000	4U		4U	
Chloroform	µg/L	100	0.48J		0.38J	
Chloromethane	µg/L	13.4	4U		4U	
cis-1,2-Dichloroethene	µg/L	70	4U		0.45J	
Dibromochloromethane	µg/L	3.12	4U		4U	
Ethylbenzene	µg/L	700	4U		4U	
M + P Xylene	µg/L	10,000	4U		4U	

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749-04G						
Methylene chloride	µg/L	5	10U		10U	
Tetrachloroethene	µg/L	5	4U		4U	
Toluene	µg/L	1000	4U		4U	
trans-1,2-Dichloroethene	µg/L	100	2U		2U	
Trichloroethene	µg/L	5	470		980	
Trichlorofluoromethane	µg/L	12,100	4U		4U	
Vinyl chloride	µg/L	2	2U		2U	
Radionuclides						
Technetium-99	pCi/L	3790	-0.739U		0.819U	
Field Measurements						
Conductivity	µS/cm		682		904	
Depth to Water	ft		13.64		14.99	
Dissolved Oxygen	mg/L		1		1	
pH	Std Unit		5.71		5.79	
Temperature	deg C		13		14.6	
Turbidity	NTU		435		50	
X749-05G						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200		2U		2U
1,1,2,2-Tetrachloroethane	µg/L	0.83		1U		1U
1,1,2-Trichloroethane	µg/L	5		2U		2U
1,1-Dichloroethane	µg/L	5860		0.41J		0.41J
1,1-Dichloroethene	µg/L	7		0.3J		0.32J
1,2-Dichlorobenzene	µg/L	600		2U		2U
1,2-Dichloroethane	µg/L	5		2U		2U
1,2-Dimethylbenzene	µg/L	10,000		2U		2U
1,4-Dichlorobenzene	µg/L	75		2U		2U
2-Butanone	µg/L	53,800		6U		6U
4-Methyl-2-pentanone	µg/L	6360		5U		5U
Acetone	µg/L	10,200		10U		15
Benzene	µg/L	5		2U		2U
Bromodichloromethane	µg/L	100		2U		2U
Bromoform	µg/L	100		2U		2U
Bromomethane	µg/L	140		2U		2U
Carbon disulfide	µg/L	6270		2U		2U
Carbon tetrachloride	µg/L	5		2U		2U
Chlorobenzene	µg/L	100		2U		2U
Chloroethane	µg/L	246,000		2U		2U
Chloroform	µg/L	100		0.86J		1J
Chloromethane	µg/L	13.4		2U		2U

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749-05G						
cis-1,2-Dichloroethene	µg/L	70		0.7J		0.52J
Dibromochloromethane	µg/L	3.12		2U		2U
Ethylbenzene	µg/L	700		2U		2U
M + P Xylene	µg/L	10,000		2U		2U
Methylene chloride	µg/L	5		5U		5U
Tetrachloroethene	µg/L	5		6.2		8.3
Toluene	µg/L	1000		2U		2U
trans-1,2-Dichloroethene	µg/L	100		1U		1U
Trichloroethene	µg/L	5		110		93
Trichlorofluoromethane	µg/L	12,100		2U		2U
Vinyl chloride	µg/L	2		1U		1U
Radionuclides						
Technetium-99	pCi/L	3790		-0.231U		4.16U
Field Measurements						
Conductivity	µS/cm			845		917
Depth to Water	ft			24.8		31.08
Dissolved Oxygen	mg/L			1		2.55
pH	Std Unit			6.06		5.79
Temperature	deg C			14.4		14.23
Turbidity	NTU			52		306
X749-06G						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200		610		580
1,1,2,2-Tetrachloroethane	µg/L	0.83		20U		20U
1,1,2-Trichloroethane	µg/L	5		34J		36J
1,1-Dichloroethane	µg/L	5860		1400		1700
1,1-Dichloroethene	µg/L	7		1800		1300
1,2-Dichlorobenzene	µg/L	600		40U		40U
1,2-Dichloroethane	µg/L	5		28J		37J
1,2-Dimethylbenzene	µg/L	10,000		40U		40U
1,4-Dichlorobenzene	µg/L	75		40U		40U
2-Butanone	µg/L	53,800		120U		120U
4-Methyl-2-pentanone	µg/L	6360		100U		100U
Acetone	µg/L	10,200		200U		200U
Benzene	µg/L	5		40U		40U
Bromodichloromethane	µg/L	100		40U		40U
Bromoform	µg/L	100		40U		40U
Bromomethane	µg/L	140		40U		40U
Carbon disulfide	µg/L	6270		40U		40U
Carbon tetrachloride	µg/L	5		40U		40U

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749-06G						
Chlorobenzene	µg/L	100		40U		40U
Chloroethane	µg/L	246,000		40U		40U
Chloroform	µg/L	100		100		120
Chloromethane	µg/L	13.4		40U		40U
cis-1,2-Dichloroethene	µg/L	70		310		290
Dibromochloromethane	µg/L	3.12		40U		40U
Ethylbenzene	µg/L	700		40U		40U
M + P Xylene	µg/L	10,000		40U		40U
Methylene chloride	µg/L	5		28J		25J
Tetrachloroethene	µg/L	5		110		110
Toluene	µg/L	1000		40U		40U
trans-1,2-Dichloroethene	µg/L	100		20U		20U
Trichloroethene	µg/L	5		3900		4300
Trichlorofluoromethane	µg/L	12,100		40U		40U
Vinyl chloride	µg/L	2		12J		20
Field Measurements						
Conductivity	µS/cm			814		797
Depth to Water	ft			26.92		33.74
Dissolved Oxygen	mg/L			0.31		3.66
pH	Std Unit			6.12		6.02
Temperature	deg C			14.2		14.12
Turbidity	NTU			34		103
X749-07G						
Metals						
Arsenic	µg/L	92				10
Barium	µg/L	2000				96
Cadmium	µg/L	6.5				0.4B
Chromium	µg/L	100				4.4
Lead	µg/L	50				1U
Mercury	µg/L	2				0.2U
Selenium	µg/L	50				1.9B
Silver	µg/L	50				5U
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200		100		120
1,1,2,2-Tetrachloroethane	µg/L	0.83		1U		4U
1,1,2-Trichloroethane	µg/L	5		1.3J		2.5J
1,1-Dichloroethane	µg/L	5860		150		1100
1,1-Dichloroethene	µg/L	7		160		270
1,2-Dichlorobenzene	µg/L	600		2U		8U
1,2-Dichloroethane	µg/L	5		56		

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749-07G						
1,2-Dimethylbenzene	µg/L	10,000		2U		8U
1,4-Dichlorobenzene	µg/L	75		2U		8U
2-Butanone	µg/L	53,800		6U		24U
4-Methyl-2-pentanone	µg/L	6360		5U		20U
Acetone	µg/L	10,200		10U		40U
Benzene	µg/L	5		2U		8U
Bromodichloromethane	µg/L	100		2U		8U
Bromoform	µg/L	100		2U		8U
Bromomethane	µg/L	140		2U		8U
Carbon disulfide	µg/L	6270		2U		8U
Carbon tetrachloride	µg/L	5		2U		8U
Chlorobenzene	µg/L	100		2U		8U
Chloroethane	µg/L	246,000		1.8J		2.4J
Chloroform	µg/L	100		8.6		18
Chloromethane	µg/L	13.4		2U		8U
cis-1,2-Dichloroethene	µg/L	70		31		120
Dibromochloromethane	µg/L	3.12		2U		8U
Ethylbenzene	µg/L	700		2U		8U
M + P Xylene	µg/L	10,000		2U		8U
Methylene chloride	µg/L	5		0.57J		1.6J
Tetrachloroethene	µg/L	5		2.9		2.8J
Toluene	µg/L	1000		2U		8U
trans-1,2-Dichloroethene	µg/L	100		0.3J		4U
Trichloroethene	µg/L	5		390		940
Trichlorofluoromethane	µg/L	12,100		2U		8U
Vinyl chloride	µg/L	2		2.8		4.2
Other Parameters						
Alkalinity	mg/L					100
Chloride	mg/L					78
Sulfate	mg/L					68
Field Measurements						
Conductivity	µS/cm			708		600
Depth to Water	ft			31.1		37.89
Dissolved Oxygen	mg/L			0.48		0.81
pH	Std Unit			6.22		6.15
Temperature	deg C			14.3		14.55
Turbidity	NTU			3.79		5
X749-08G						
Metals						
Arsenic	µg/L	92				1.4B

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749-08G						
Barium	µg/L	2000				61
Cadmium	µg/L	6.5				1U
Chromium	µg/L	100				3.4
Lead	µg/L	50				1U
Mercury	µg/L	2				0.2U
Selenium	µg/L	50				1B
Silver	µg/L	50				5U
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200		50		54
1,1,2,2-Tetrachloroethane	µg/L	0.83		1U		1U
1,1,2-Trichloroethane	µg/L	5		0.54J		0.55J
1,1-Dichloroethane	µg/L	5860		28		28
1,1-Dichloroethene	µg/L	7		110		83
1,2-Dichlorobenzene	µg/L	600		2U		2U
1,2-Dichloroethane	µg/L	5		4.7		5.9
1,2-Dimethylbenzene	µg/L	10,000		2U		2U
1,4-Dichlorobenzene	µg/L	75		2U		2U
2-Butanone	µg/L	53,800		6U		6U
4-Methyl-2-pentanone	µg/L	6360		5U		5U
Acetone	µg/L	10,200		10U		10U
Benzene	µg/L	5		0.17J		2U
Bromodichloromethane	µg/L	100		2U		2U
Bromoform	µg/L	100		2U		2U
Bromomethane	µg/L	140		2U		2U
Carbon disulfide	µg/L	6270		2U		2U
Carbon tetrachloride	µg/L	5		2U		2U
Chlorobenzene	µg/L	100		2U		2U
Chloroethane	µg/L	246,000		2U		0.74J
Chloroform	µg/L	100		1.4J		1.6J
Chloromethane	µg/L	13.4		2U		2U
cis-1,2-Dichloroethene	µg/L	70		32		25
Dibromochloromethane	µg/L	3.12		2U		2U
Ethylbenzene	µg/L	700		2U		2U
M + P Xylene	µg/L	10,000		2U		2U
Methylene chloride	µg/L	5		5U		5U
Tetrachloroethene	µg/L	5		2U		2U
Toluene	µg/L	1000		2U		2U
trans-1,2-Dichloroethene	µg/L	100		0.37J		0.32J
Trichloroethene	µg/L	5		130		110
Trichlorofluoromethane	µg/L	12,100		2U		2U

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749-08G						
Vinyl chloride	µg/L	2		1.1		1.3
Other Parameters						
Alkalinity	mg/L					150
Chloride	mg/L					21
Sulfate	mg/L					66
Field Measurements						
Conductivity	µS/cm			457		473
Depth to Water	ft			19.74		27.29
Dissolved Oxygen	mg/L			2.44		3.39
pH	Std Unit			6.4		6.21
Temperature	deg C			14.1		14.11
Turbidity	NTU			9.86		25
X749-09GA						
Metals						
Arsenic	µg/L	92				1.8B
Barium	µg/L	2000				68
Cadmium	µg/L	6.5				0.28B
Chromium	µg/L	100				1.5B
Lead	µg/L	50				0.43B
Mercury	µg/L	2				0.2U
Selenium	µg/L	50				5.5
Silver	µg/L	50				5U
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200		39		36
1,1,2,2-Tetrachloroethane	µg/L	0.83		1U		1U
1,1,2-Trichloroethane	µg/L	5		0.33J		2U
1,1-Dichloroethane	µg/L	5860		18		15
1,1-Dichloroethene	µg/L	7		66		38
1,2-Dichlorobenzene	µg/L	600		2U		2U
1,2-Dichloroethane	µg/L	5		2.8		2.9
1,2-Dimethylbenzene	µg/L	10,000		2U		2U
1,4-Dichlorobenzene	µg/L	75		2U		2U
2-Butanone	µg/L	53,800		6U		6U
4-Methyl-2-pentanone	µg/L	6360		5U		5U
Acetone	µg/L	10,200		10U		10U
Benzene	µg/L	5		2U		2U
Bromodichloromethane	µg/L	100		2U		2U
Bromoform	µg/L	100		2U		2U
Bromomethane	µg/L	140		2U		2U
Carbon disulfide	µg/L	6270		2U		2U

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749-09GA						
Carbon tetrachloride	µg/L	5		2U		2U
Chlorobenzene	µg/L	100		2U		2U
Chloroethane	µg/L	246,000		2U		0.52J
Chloroform	µg/L	100		1.1J		0.88J
Chloromethane	µg/L	13.4		2U		2U
cis-1,2-Dichloroethene	µg/L	70		18		10
Dibromochloromethane	µg/L	3.12		2U		2U
Ethylbenzene	µg/L	700		2U		2U
M + P Xylene	µg/L	10,000		2U		2U
Methylene chloride	µg/L	5		5U		5U
Tetrachloroethene	µg/L	5		2U		2U
Toluene	µg/L	1000		2U		2U
trans-1,2-Dichloroethene	µg/L	100		0.19J		0.19J
Trichloroethene	µg/L	5		52		33
Trichlorofluoromethane	µg/L	12,100		2U		2U
Vinyl chloride	µg/L	2		0.44J		0.75J
Radionuclides						
Technetium-99	pCi/L	3790		0.397U		0.643U
Other Parameters						
Alkalinity	mg/L					80
Chloride	mg/L					45
Sulfate	mg/L					78
Field Measurements						
Conductivity	µS/cm			460		462
Depth to Water	ft			23.32		30.35
Dissolved Oxygen	mg/L			0.5		0.32
pH	Std Unit			6.08		6.07
Temperature	deg C			14		14.85
Turbidity	NTU			5		44
X749-10GA						
Metals						
Arsenic	µg/L	92				2.9B
Barium	µg/L	2000				40
Cadmium	µg/L	6.5				0.4B
Chromium	µg/L	100				0.66B
Lead	µg/L	50				1U
Mercury	µg/L	2				0.2U
Selenium	µg/L	50				5U
Silver	µg/L	50				5U
Volatile Organic Compounds						

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749-10GA						
1,1,1-Trichloroethane	µg/L	200		2U		2U
1,1,2,2-Tetrachloroethane	µg/L	0.83		1U		1U
1,1,2-Trichloroethane	µg/L	5		2U		2U
1,1-Dichloroethane	µg/L	5860		6.2		7.9
1,1-Dichloroethene	µg/L	7		17		15
1,2-Dichlorobenzene	µg/L	600		2U		2U
1,2-Dichloroethane	µg/L	5		2U		2U
1,2-Dimethylbenzene	µg/L	10,000		2U		2U
1,4-Dichlorobenzene	µg/L	75		2U		2U
2-Butanone	µg/L	53,800		6U		6U
4-Methyl-2-pentanone	µg/L	6360		5U		5U
Acetone	µg/L	10,200		2.4J		10U
Benzene	µg/L	5		2U		2U
Bromodichloromethane	µg/L	100		2U		2U
Bromoform	µg/L	100		2U		2U
Bromomethane	µg/L	140		2U		2U
Carbon disulfide	µg/L	6270		2U		2U
Carbon tetrachloride	µg/L	5		2U		2U
Chlorobenzene	µg/L	100		2U		2U
Chloroethane	µg/L	246,000		2U		1.1J
Chloroform	µg/L	100		2U		2U
Chloromethane	µg/L	13.4		2U		2U
cis-1,2-Dichloroethene	µg/L	70		3.8		3.4
Dibromochloromethane	µg/L	3.12		2U		2U
Ethylbenzene	µg/L	700		2U		2U
M + P Xylene	µg/L	10,000		2U		2U
Methylene chloride	µg/L	5		5U		5U
Tetrachloroethene	µg/L	5		2U		2U
Toluene	µg/L	1000		2U		2U
trans-1,2-Dichloroethene	µg/L	100		1U		1U
Trichloroethene	µg/L	5		0.58J		0.55J
Trichlorofluoromethane	µg/L	12,100		2U		2U
Vinyl chloride	µg/L	2		1U		1.1
Other Parameters						
Alkalinity	mg/L					69
Chloride	mg/L					23
Sulfate	mg/L					220
Field Measurements						
Conductivity	µS/cm			551		612
Depth to Water	ft			22.89		29.56

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749-10GA						
Dissolved Oxygen	mg/L			1		0.49
pH	Std Unit			5.88		5.84
Temperature	deg C			14.7		14.58
Turbidity	NTU			10		18
X749-13G						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200			42	
1,1,2,2-Tetrachloroethane	µg/L	0.83			1U	
1,1,2-Trichloroethane	µg/L	5			0.34J	
1,1-Dichloroethane	µg/L	5860			12	
1,1-Dichloroethene	µg/L	7			78	
1,2-Dichlorobenzene	µg/L	600			2U	
1,2-Dichloroethane	µg/L	5			1.7J	
1,2-Dimethylbenzene	µg/L	10,000			2U	
1,4-Dichlorobenzene	µg/L	75			2U	
2-Butanone	µg/L	53,800			6U	
4-Methyl-2-pentanone	µg/L	6360			5U	
Acetone	µg/L	10,200			10U	
Benzene	µg/L	5			2U	
Bromodichloromethane	µg/L	100			2U	
Bromoform	µg/L	100			2U	
Bromomethane	µg/L	140			2U	
Carbon disulfide	µg/L	6270			2U	
Carbon tetrachloride	µg/L	5			2U	
Chlorobenzene	µg/L	100			2U	
Chloroethane	µg/L	246,000			0.48J	
Chloroform	µg/L	100			1.8J	
Chloromethane	µg/L	13.4			2U	
cis-1,2-Dichloroethene	µg/L	70			12	
Dibromochloromethane	µg/L	3.12			2U	
Ethylbenzene	µg/L	700			2U	
M + P Xylene	µg/L	10,000			2U	
Methylene chloride	µg/L	5			5U	
Tetrachloroethene	µg/L	5			2U	
Toluene	µg/L	1000			2U	
trans-1,2-Dichloroethene	µg/L	100			1U	
Trichloroethene	µg/L	5			81	
Trichlorofluoromethane	µg/L	12,100			2U	
Vinyl chloride	µg/L	2			0.97J	
Field Measurements						

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749-13G						
Conductivity	µS/cm				392	
Depth to Water	ft				15.87	
Dissolved Oxygen	mg/L				2	
pH	Std Unit				6.02	
Temperature	deg C				13.9	
Turbidity	NTU				1	
X749-20G						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200			6.2	
1,1,2,2-Tetrachloroethane	µg/L	0.83			1U	
1,1,2-Trichloroethane	µg/L	5			2U	
1,1-Dichloroethane	µg/L	5860			9.9	
1,1-Dichloroethene	µg/L	7			11	
1,2-Dichlorobenzene	µg/L	600			2U	
1,2-Dichloroethane	µg/L	5			2.3	
1,2-Dimethylbenzene	µg/L	10,000			2U	
1,4-Dichlorobenzene	µg/L	75			2U	
2-Butanone	µg/L	53,800			6U	
4-Methyl-2-pentanone	µg/L	6360			5U	
Acetone	µg/L	10,200			10U	
Benzene	µg/L	5			2U	
Bromodichloromethane	µg/L	100			2U	
Bromoform	µg/L	100			2U	
Bromomethane	µg/L	140			2U	
Carbon disulfide	µg/L	6270			2U	
Carbon tetrachloride	µg/L	5			2U	
Chlorobenzene	µg/L	100			2U	
Chloroethane	µg/L	246,000			2U	
Chloroform	µg/L	100			0.86J	
Chloromethane	µg/L	13.4			2U	
cis-1,2-Dichloroethene	µg/L	70			5.6	
Dibromochloromethane	µg/L	3.12			2U	
Ethylbenzene	µg/L	700			2U	
M + P Xylene	µg/L	10,000			2U	
Methylene chloride	µg/L	5			0.37J	
Tetrachloroethene	µg/L	5			2U	
Toluene	µg/L	1000			2U	
trans-1,2-Dichloroethene	µg/L	100			1U	
Trichloroethene	µg/L	5			70	
Trichlorofluoromethane	µg/L	12,100			2U	

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749-20G						
Vinyl chloride	µg/L	2			0.53J	
Radionuclides						
Americium-241	pCi/L	0.49			0.01006U	
Neptunium-237	pCi/L	0.54			-0.06842U	
Plutonium-238	pCi/L				0.01518U	
Plutonium-239/240	pCi/L	0.51			0.007607U	
Technetium-99	pCi/L	3790			296	
Uranium	µg/L	1000			0.4196	
Uranium-233/234	pCi/L	124,000			0.1664	
Uranium-235	pCi/L	43			0.01641U	
Uranium-236	pCi/L				0.01474U	
Uranium-238	pCi/L	6.7			0.1394	
Field Measurements						
Conductivity	µS/cm				584	
Depth to Water	ft				21.25	
Dissolved Oxygen	mg/L				1	
pH	Std Unit				5.74	
Temperature	deg C				14.5	
Turbidity	NTU				3	
X749-21G						
Metals						
Arsenic	µg/L	92				9.5
Barium	µg/L	2000				63
Cadmium	µg/L	6.5				0.63B
Chromium	µg/L	100				13
Lead	µg/L	50				7.7
Mercury	µg/L	2				0.069B
Selenium	µg/L	50				1.3B
Silver	µg/L	50				5U
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200		0.33J		0.8J
1,1,2,2-Tetrachloroethane	µg/L	0.83		1U		1U
1,1,2-Trichloroethane	µg/L	5		2U		2U
1,1-Dichloroethane	µg/L	5860		2U		2U
1,1-Dichloroethene	µg/L	7		0.17J		0.28J
1,2-Dichlorobenzene	µg/L	600		2U		2U
1,2-Dichloroethane	µg/L	5		2U		2U
1,2-Dimethylbenzene	µg/L	10,000		2U		2U
1,4-Dichlorobenzene	µg/L	75		2U		2U
2-Butanone	µg/L	53,800		6U		6U

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749-21G						
4-Methyl-2-pentanone	µg/L	6360		5U		5U
Acetone	µg/L	10,200		10U		10U
Benzene	µg/L	5		2U		2U
Bromodichloromethane	µg/L	100		2U		2U
Bromoform	µg/L	100		2U		2U
Bromomethane	µg/L	140		2U		2U
Carbon disulfide	µg/L	6270		2U		2U
Carbon tetrachloride	µg/L	5		2U		2U
Chlorobenzene	µg/L	100		2U		2U
Chloroethane	µg/L	246,000		2U		2U
Chloroform	µg/L	100		2U		2U
Chloromethane	µg/L	13.4		2U		2U
cis-1,2-Dichloroethene	µg/L	70		2U		2U
Dibromochloromethane	µg/L	3.12		2U		2U
Ethylbenzene	µg/L	700		2U		2U
M + P Xylene	µg/L	10,000		2U		2U
Methylene chloride	µg/L	5		5U		5U
Tetrachloroethene	µg/L	5		2U		2U
Toluene	µg/L	1000		2U		2U
trans-1,2-Dichloroethene	µg/L	100		1U		1U
Trichloroethene	µg/L	5		2.4		2.2
Trichlorofluoromethane	µg/L	12,100		2U		2U
Vinyl chloride	µg/L	2		1U		1U
Other Parameters						
Alkalinity	mg/L					22
Chloride	mg/L					7.6
Sulfate	mg/L					32
Field Measurements						
Conductivity	µS/cm			108		111
Depth to Water	ft			6.97		9.71
Dissolved Oxygen	mg/L			4		1.91
pH	Std Unit			5.08		4.96
Temperature	deg C			13.7		16.61
Turbidity	NTU			9		591
X749-22G						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200		2U		2U
1,1,2,2-Tetrachloroethane	µg/L	0.83		1U		1U
1,1,2-Trichloroethane	µg/L	5		2U		2U
1,1-Dichloroethane	µg/L	5860		2U		2U

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749-22G						
1,1-Dichloroethene	µg/L	7		2U		2U
1,2-Dichlorobenzene	µg/L	600		2U		2U
1,2-Dichloroethane	µg/L	5		2U		2U
1,2-Dimethylbenzene	µg/L	10,000		2U		2U
1,4-Dichlorobenzene	µg/L	75		2U		2U
2-Butanone	µg/L	53,800		6U		6U
4-Methyl-2-pentanone	µg/L	6360		5U		5U
Acetone	µg/L	10,200		10U		10U
Benzene	µg/L	5		2U		2U
Bromodichloromethane	µg/L	100		2U		2U
Bromoform	µg/L	100		2U		2U
Bromomethane	µg/L	140		2U		2U
Carbon disulfide	µg/L	6270		2U		2U
Carbon tetrachloride	µg/L	5		2U		2U
Chlorobenzene	µg/L	100		2U		2U
Chloroethane	µg/L	246,000		2U		2U
Chloroform	µg/L	100		2U		2U
Chloromethane	µg/L	13.4		2U		2U
cis-1,2-Dichloroethene	µg/L	70		2U		2U
Dibromochloromethane	µg/L	3.12		2U		2U
Ethylbenzene	µg/L	700		2U		2U
M + P Xylene	µg/L	10,000		2U		2U
Methylene chloride	µg/L	5		5U		0.36BJ
Tetrachloroethene	µg/L	5		2U		2U
Toluene	µg/L	1000		2U		2U
trans-1,2-Dichloroethene	µg/L	100		1U		1U
Trichloroethene	µg/L	5		2U		2U
Trichlorofluoromethane	µg/L	12,100		2U		2U
Vinyl chloride	µg/L	2		1U		1U
Radionuclides						
Technetium-99	pCi/L	3790		-7.01U		1.55U
Field Measurements						
Conductivity	µS/cm			475		484
Depth to Water	ft			20.11		24.54
Dissolved Oxygen	mg/L			2		2.1
pH	Std Unit			5.84		5.41
Temperature	deg C			14		11.19
Turbidity	NTU			8		11
X749-23G						
Volatile Organic Compounds						

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749-23G						
1,1,1-Trichloroethane	µg/L	200			2U	
1,1,2,2-Tetrachloroethane	µg/L	0.83			1U	
1,1,2-Trichloroethane	µg/L	5			2U	
1,1-Dichloroethane	µg/L	5860			2U	
1,1-Dichloroethene	µg/L	7			2U	
1,2-Dichlorobenzene	µg/L	600			2U	
1,2-Dichloroethane	µg/L	5			2U	
1,2-Dimethylbenzene	µg/L	10,000			2U	
1,4-Dichlorobenzene	µg/L	75			2U	
2-Butanone	µg/L	53,800			6U	
4-Methyl-2-pentanone	µg/L	6360			5U	
Acetone	µg/L	10,200			10U	
Benzene	µg/L	5			2U	
Bromodichloromethane	µg/L	100			2U	
Bromoform	µg/L	100			2U	
Bromomethane	µg/L	140			2U	
Carbon disulfide	µg/L	6270			2U	
Carbon tetrachloride	µg/L	5			2U	
Chlorobenzene	µg/L	100			2U	
Chloroethane	µg/L	246,000			2U	
Chloroform	µg/L	100			2U	
Chloromethane	µg/L	13.4			2U	
cis-1,2-Dichloroethene	µg/L	70			2U	
Dibromochloromethane	µg/L	3.12			2U	
Ethylbenzene	µg/L	700			2U	
M + P Xylene	µg/L	10,000			2U	
Methylene chloride	µg/L	5			5U	
Tetrachloroethene	µg/L	5			2U	
Toluene	µg/L	1000			2U	
trans-1,2-Dichloroethene	µg/L	100			1U	
Trichloroethene	µg/L	5			2U	
Trichlorofluoromethane	µg/L	12,100			2U	
Vinyl chloride	µg/L	2			1U	
Field Measurements						
Conductivity	µS/cm				395	
Depth to Water	ft				27.21	
Dissolved Oxygen	mg/L				2	
pH	Std Unit				5.92	
Temperature	deg C				13.7	
Turbidity	NTU				20	

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749-24G						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200		2U		2U
1,1,2,2-Tetrachloroethane	µg/L	0.83		1U		1U
1,1,2-Trichloroethane	µg/L	5		2U		2U
1,1-Dichloroethane	µg/L	5860		2U		2U
1,1-Dichloroethene	µg/L	7		2U		2U
1,2-Dichlorobenzene	µg/L	600		2U		2U
1,2-Dichloroethane	µg/L	5		2U		2U
1,2-Dimethylbenzene	µg/L	10,000		2U		2U
1,4-Dichlorobenzene	µg/L	75		2U		2U
2-Butanone	µg/L	53,800		6U		6U
4-Methyl-2-pentanone	µg/L	6360		5U		5U
Acetone	µg/L	10,200		10U		10U
Benzene	µg/L	5		2U		2U
Bromodichloromethane	µg/L	100		2U		2U
Bromoform	µg/L	100		2U		2U
Bromomethane	µg/L	140		2U		2U
Carbon disulfide	µg/L	6270		2U		2U
Carbon tetrachloride	µg/L	5		2U		2U
Chlorobenzene	µg/L	100		2U		2U
Chloroethane	µg/L	246,000		2U		2U
Chloroform	µg/L	100		2U		2U
Chloromethane	µg/L	13.4		2U		2U
cis-1,2-Dichloroethene	µg/L	70		2U		2U
Dibromochloromethane	µg/L	3.12		2U		2U
Ethylbenzene	µg/L	700		2U		2U
M + P Xylene	µg/L	10,000		2U		2U
Methylene chloride	µg/L	5		5U		0.47BJ
Tetrachloroethene	µg/L	5		2U		2U
Toluene	µg/L	1000		2U		2U
trans-1,2-Dichloroethene	µg/L	100		1U		1U
Trichloroethene	µg/L	5		2U		2U
Trichlorofluoromethane	µg/L	12,100		2U		2U
Vinyl chloride	µg/L	2		1U		1U
Field Measurements						
Conductivity	µS/cm			331		338
Depth to Water	ft			18.97		23.42
Dissolved Oxygen	mg/L			2		1.5
pH	Std Unit			6.18		6.1
Temperature	deg C			14.1		13.41

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749-24G						
Turbidity	NTU			15		32
X749-26G						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200			3.6	
1,1,2,2-Tetrachloroethane	µg/L	0.83			1U	
1,1,2-Trichloroethane	µg/L	5			2U	
1,1-Dichloroethane	µg/L	5860			6.5	
1,1-Dichloroethene	µg/L	7			4.3	
1,2-Dichlorobenzene	µg/L	600			2U	
1,2-Dichloroethane	µg/L	5			2.6	
1,2-Dimethylbenzene	µg/L	10,000			2U	
1,4-Dichlorobenzene	µg/L	75			2U	
2-Butanone	µg/L	53,800			6U	
4-Methyl-2-pentanone	µg/L	6360			5U	
Acetone	µg/L	10,200			10U	
Benzene	µg/L	5			2U	
Bromodichloromethane	µg/L	100			2U	
Bromoform	µg/L	100			2U	
Bromomethane	µg/L	140			2U	
Carbon disulfide	µg/L	6270			2U	
Carbon tetrachloride	µg/L	5			2U	
Chlorobenzene	µg/L	100			2U	
Chloroethane	µg/L	246,000			2U	
Chloroform	µg/L	100			0.28J	
Chloromethane	µg/L	13.4			2U	
cis-1,2-Dichloroethene	µg/L	70			0.79J	
Dibromochloromethane	µg/L	3.12			2U	
Ethylbenzene	µg/L	700			2U	
M + P Xylene	µg/L	10,000			2U	
Methylene chloride	µg/L	5			5U	
Tetrachloroethene	µg/L	5			2U	
Toluene	µg/L	1000			2U	
trans-1,2-Dichloroethene	µg/L	100			1U	
Trichloroethene	µg/L	5			15	
Trichlorofluoromethane	µg/L	12,100			2U	
Vinyl chloride	µg/L	2			1U	
Field Measurements						
Conductivity	µS/cm				581	
Depth to Water	ft				15.52	
Dissolved Oxygen	mg/L				5	

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749-26G						
pH	Std Unit				6.02	
Temperature	deg C				14.6	
Turbidity	NTU				5	
X749-27G						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200		52		29
1,1,2,2-Tetrachloroethane	µg/L	0.83		1U		1U
1,1,2-Trichloroethane	µg/L	5		1.4J		0.87J
1,1-Dichloroethane	µg/L	5860		70		28
1,1-Dichloroethene	µg/L	7		150		56
1,2-Dichlorobenzene	µg/L	600		2U		2U
1,2-Dichloroethane	µg/L	5		29		7.5
1,2-Dimethylbenzene	µg/L	10,000		2U		2U
1,4-Dichlorobenzene	µg/L	75		2U		2U
2-Butanone	µg/L	53,800		6U		6U
4-Methyl-2-pentanone	µg/L	6360		5U		5U
Acetone	µg/L	10,200		10U		10U
Benzene	µg/L	5		2U		2U
Bromodichloromethane	µg/L	100		2U		2U
Bromoform	µg/L	100		2U		2U
Bromomethane	µg/L	140		2U		2U
Carbon disulfide	µg/L	6270		2U		2U
Carbon tetrachloride	µg/L	5		2U		2U
Chlorobenzene	µg/L	100		2U		2U
Chloroethane	µg/L	246,000		2.4		0.96J
Chloroform	µg/L	100		7		3.4
Chloromethane	µg/L	13.4		2U		2U
cis-1,2-Dichloroethene	µg/L	70		24		9.9
Dibromochloromethane	µg/L	3.12		2U		2U
Ethylbenzene	µg/L	700		2U		2U
M + P Xylene	µg/L	10,000		2U		2U
Methylene chloride	µg/L	5		0.51J		0.41BJ
Tetrachloroethene	µg/L	5		2.4		1.7J
Toluene	µg/L	1000		2U		2U
trans-1,2-Dichloroethene	µg/L	100		0.18J		1U
Trichloroethene	µg/L	5		190		100
Trichlorofluoromethane	µg/L	12,100		2U		2U
Vinyl chloride	µg/L	2		0.97J		0.41J
Radionuclides						
Technetium-99	pCi/L	3790		48.9		20

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749-27G						
Field Measurements						
Conductivity	µS/cm			542		690
Depth to Water	ft			11.03		17.75
Dissolved Oxygen	mg/L			2		1.56
pH	Std Unit			6.14		6.11
Temperature	deg C			13.7		14.45
Turbidity	NTU			21		48
X749-28G						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200		27		17
1,1,2,2-Tetrachloroethane	µg/L	0.83		1U		1U
1,1,2-Trichloroethane	µg/L	5		1.2J		0.51J
1,1-Dichloroethane	µg/L	5860		22		9.6
1,1-Dichloroethene	µg/L	7		74		32
1,2-Dichlorobenzene	µg/L	600		2U		2U
1,2-Dichloroethane	µg/L	5		2.1		0.86J
1,2-Dimethylbenzene	µg/L	10,000		2U		2U
1,4-Dichlorobenzene	µg/L	75		2U		2U
2-Butanone	µg/L	53,800		6U		6U
4-Methyl-2-pentanone	µg/L	6360		5U		5U
Acetone	µg/L	10,200		4.5J		10U
Benzene	µg/L	5		2U		2U
Bromodichloromethane	µg/L	100		2U		2U
Bromoform	µg/L	100		2U		2U
Bromomethane	µg/L	140		2U		2U
Carbon disulfide	µg/L	6270		2U		2U
Carbon tetrachloride	µg/L	5		2U		0.2J
Chlorobenzene	µg/L	100		2U		2U
Chloroethane	µg/L	246,000		2U		2U
Chloroform	µg/L	100		3		1.8J
Chloromethane	µg/L	13.4		2U		2U
cis-1,2-Dichloroethene	µg/L	70		3.5		1.4J
Dibromochloromethane	µg/L	3.12		2U		2U
Ethylbenzene	µg/L	700		2U		2U
M + P Xylene	µg/L	10,000		2U		2U
Methylene chloride	µg/L	5		5U		0.34BJ
Tetrachloroethene	µg/L	5		2.5		1.1J
Toluene	µg/L	1000		2U		2U
trans-1,2-Dichloroethene	µg/L	100		1U		1U
Trichloroethene	µg/L	5		120		69

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749-28G						
Trichlorofluoromethane	µg/L	12,100		2U		2U
Vinyl chloride	µg/L	2		0.44J		1U
Radionuclides						
Technetium-99	pCi/L	3790		3.25U		2.28U
Field Measurements						
Conductivity	µS/cm			847		898
Depth to Water	ft			9.59		15.79
Dissolved Oxygen	mg/L			4		2.45
pH	Std Unit			6.01		5.65
Temperature	deg C			12.6		14.88
Turbidity	NTU			11		3.8
X749-29G						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200		0.59J		0.53J
1,1,2,2-Tetrachloroethane	µg/L	0.83		1U		1U
1,1,2-Trichloroethane	µg/L	5		2U		2U
1,1-Dichloroethane	µg/L	5860		0.28J		2U
1,1-Dichloroethene	µg/L	7		0.96J		0.34J
1,2-Dichlorobenzene	µg/L	600		2U		2U
1,2-Dichloroethane	µg/L	5		2U		2U
1,2-Dimethylbenzene	µg/L	10,000		2U		2U
1,4-Dichlorobenzene	µg/L	75		2U		2U
2-Butanone	µg/L	53,800		6U		6U
4-Methyl-2-pentanone	µg/L	6360		5U		5U
Acetone	µg/L	10,200		2J		10U
Benzene	µg/L	5		2U		2U
Bromodichloromethane	µg/L	100		2U		2U
Bromoform	µg/L	100		2U		2U
Bromomethane	µg/L	140		2U		2U
Carbon disulfide	µg/L	6270		2U		2U
Carbon tetrachloride	µg/L	5		2U		2U
Chlorobenzene	µg/L	100		2U		2U
Chloroethane	µg/L	246,000		2U		2U
Chloroform	µg/L	100		0.28J		1.7J
Chloromethane	µg/L	13.4		2U		2U
cis-1,2-Dichloroethene	µg/L	70		0.19J		0.68J
Dibromochloromethane	µg/L	3.12		2U		2U
Ethylbenzene	µg/L	700		2U		2U
M + P Xylene	µg/L	10,000		2U		2U
Methylene chloride	µg/L	5		5U		5U

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749-29G						
Tetrachloroethene	µg/L	5		2U		2U
Toluene	µg/L	1000		2U		2U
trans-1,2-Dichloroethene	µg/L	100		1U		1U
Trichloroethene	µg/L	5		12		57
Trichlorofluoromethane	µg/L	12,100		2U		2U
Vinyl chloride	µg/L	2		1U		1U
Radionuclides						
Technetium-99	pCi/L	3790		-4.86U		-0.304U
Field Measurements						
Conductivity	µS/cm			398		1092
Depth to Water	ft			6.65		12.45
Dissolved Oxygen	mg/L			2		1.43
pH	Std Unit			6.17		6.29
Temperature	deg C			13.3		16.9
Turbidity	NTU			4		5
X749-30G						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200		2U		2U
1,1,2,2-Tetrachloroethane	µg/L	0.83		1U		1U
1,1,2-Trichloroethane	µg/L	5		2U		2U
1,1-Dichloroethane	µg/L	5860		2U		2U
1,1-Dichloroethene	µg/L	7		0.6J		0.89J
1,2-Dichlorobenzene	µg/L	600		2U		2U
1,2-Dichloroethane	µg/L	5		2U		2U
1,2-Dimethylbenzene	µg/L	10,000		2U		2U
1,4-Dichlorobenzene	µg/L	75		2U		2U
2-Butanone	µg/L	53,800		6U		6U
4-Methyl-2-pentanone	µg/L	6360		5U		5U
Acetone	µg/L	10,200		2.6J		10U
Benzene	µg/L	5		2U		2U
Bromodichloromethane	µg/L	100		2U		2U
Bromoform	µg/L	100		2U		2U
Bromomethane	µg/L	140		2U		2U
Carbon disulfide	µg/L	6270		2U		2U
Carbon tetrachloride	µg/L	5		2U		2U
Chlorobenzene	µg/L	100		2U		2U
Chloroethane	µg/L	246,000		2U		2U
Chloroform	µg/L	100		0.77J		0.8J
Chloromethane	µg/L	13.4		2U		2U
cis-1,2-Dichloroethene	µg/L	70		0.75J		0.65J

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749-30G						
Dibromochloromethane	µg/L	3.12		2U		2U
Ethylbenzene	µg/L	700		2U		2U
M + P Xylene	µg/L	10,000		2U		2U
Methylene chloride	µg/L	5		5U		5U
Tetrachloroethene	µg/L	5		2U		2U
Toluene	µg/L	1000		2U		2U
trans-1,2-Dichloroethene	µg/L	100		1U		1U
Trichloroethene	µg/L	5		44		40
Trichlorofluoromethane	µg/L	12,100		2U		2U
Vinyl chloride	µg/L	2		1U		1U
Radionuclides						
Technetium-99	pCi/L	3790		-4.7U		-4.14U
Field Measurements						
Conductivity	µS/cm			1183		1194
Depth to Water	ft			11.35		16.71
Dissolved Oxygen	mg/L			1		1
pH	Std Unit			5.69		5.7
Temperature	deg C			13.7		16.57
Turbidity	NTU			3		5
X749-35G						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200			93	
1,1,2,2-Tetrachloroethane	µg/L	0.83			1U	
1,1,2-Trichloroethane	µg/L	5			0.55J	
1,1-Dichloroethane	µg/L	5860			9.4	
1,1-Dichloroethene	µg/L	7			60	
1,2-Dichlorobenzene	µg/L	600			2U	
1,2-Dichloroethane	µg/L	5			0.24J	
1,2-Dimethylbenzene	µg/L	10,000			2U	
1,4-Dichlorobenzene	µg/L	75			2U	
2-Butanone	µg/L	53,800			6U	
4-Methyl-2-pentanone	µg/L	6360			5U	
Acetone	µg/L	10,200			10U	
Benzene	µg/L	5			2U	
Bromodichloromethane	µg/L	100			2U	
Bromoform	µg/L	100			2U	
Bromomethane	µg/L	140			2U	
Carbon disulfide	µg/L	6270			2U	
Carbon tetrachloride	µg/L	5			2U	
Chlorobenzene	µg/L	100			2U	

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749-35G						
Chloroethane	µg/L	246,000			2U	
Chloroform	µg/L	100			0.62J	
Chloromethane	µg/L	13.4			2U	
cis-1,2-Dichloroethene	µg/L	70			7	
Dibromochloromethane	µg/L	3.12			2U	
Ethylbenzene	µg/L	700			2U	
M + P Xylene	µg/L	10,000			2U	
Methylene chloride	µg/L	5			5U	
Tetrachloroethene	µg/L	5			0.39J	
Toluene	µg/L	1000			2U	
trans-1,2-Dichloroethene	µg/L	100			1U	
Trichloroethene	µg/L	5			120	
Trichlorofluoromethane	µg/L	12,100			2U	
Vinyl chloride	µg/L	2			1	
Field Measurements						
Conductivity	µS/cm				451	
Depth to Water	ft				19.38	
Dissolved Oxygen	mg/L				1	
pH	Std Unit				5.86	
Temperature	deg C				13.4	
Turbidity	NTU				2	
X749-36G						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200			4.4	
1,1,2,2-Tetrachloroethane	µg/L	0.83			1U	
1,1,2-Trichloroethane	µg/L	5			2U	
1,1-Dichloroethane	µg/L	5860			4.1	
1,1-Dichloroethene	µg/L	7			15	
1,2-Dichlorobenzene	µg/L	600			2U	
1,2-Dichloroethane	µg/L	5			2U	
1,2-Dimethylbenzene	µg/L	10,000			2U	
1,4-Dichlorobenzene	µg/L	75			2U	
2-Butanone	µg/L	53,800			6U	
4-Methyl-2-pentanone	µg/L	6360			5U	
Acetone	µg/L	10,200			10U	
Benzene	µg/L	5			2U	
Bromodichloromethane	µg/L	100			2U	
Bromoform	µg/L	100			2U	
Bromomethane	µg/L	140			2U	
Carbon disulfide	µg/L	6270			2U	

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749-36G						
Carbon tetrachloride	µg/L	5			2U	
Chlorobenzene	µg/L	100			2U	
Chloroethane	µg/L	246,000			2U	
Chloroform	µg/L	100			0.42J	
Chloromethane	µg/L	13.4			2U	
cis-1,2-Dichloroethene	µg/L	70			0.64J	
Dibromochloromethane	µg/L	3.12			2U	
Ethylbenzene	µg/L	700			2U	
M + P Xylene	µg/L	10,000			2U	
Methylene chloride	µg/L	5			5U	
Tetrachloroethene	µg/L	5			2U	
Toluene	µg/L	1000			2U	
trans-1,2-Dichloroethene	µg/L	100			1U	
Trichloroethene	µg/L	5			8.2	
Trichlorofluoromethane	µg/L	12,100			2U	
Vinyl chloride	µg/L	2			1U	
Field Measurements						
Conductivity	µS/cm				411	
Depth to Water	ft				12.25	
Dissolved Oxygen	mg/L				2	
pH	Std Unit				6.61	
Temperature	deg C				15.6	
Turbidity	NTU				2	
X749-37G						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200		25		55
1,1,2,2-Tetrachloroethane	µg/L	0.83		1U		1U
1,1,2-Trichloroethane	µg/L	5		0.99J		2.2
1,1-Dichloroethane	µg/L	5860		21		45
1,1-Dichloroethene	µg/L	7		81		120
1,2-Dichlorobenzene	µg/L	600		2U		2U
1,2-Dichloroethane	µg/L	5		1.3J		3.9
1,2-Dimethylbenzene	µg/L	10,000		2U		2U
1,4-Dichlorobenzene	µg/L	75		2U		2U
2-Butanone	µg/L	53,800		6U		6U
4-Methyl-2-pentanone	µg/L	6360		5U		5U
Acetone	µg/L	10,200		10U		10U
Benzene	µg/L	5		2U		2U
Bromodichloromethane	µg/L	100		2U		2U
Bromoform	µg/L	100		2U		2U

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749-37G						
Bromomethane	µg/L	140		2U		2U
Carbon disulfide	µg/L	6270		2U		2U
Carbon tetrachloride	µg/L	5		2U		2U
Chlorobenzene	µg/L	100		2U		2U
Chloroethane	µg/L	246,000		2U		0.52J
Chloroform	µg/L	100		1.9J		4.7
Chloromethane	µg/L	13.4		2U		2U
cis-1,2-Dichloroethene	µg/L	70		8.4		8.8
Dibromochloromethane	µg/L	3.12		2U		2U
Ethylbenzene	µg/L	700		2U		2U
M + P Xylene	µg/L	10,000		2U		2U
Methylene chloride	µg/L	5		5U		0.52BJ
Tetrachloroethene	µg/L	5		1.5J		2.6
Toluene	µg/L	1000		2U		2U
trans-1,2-Dichloroethene	µg/L	100		1U		0.24J
Trichloroethene	µg/L	5		67		130
Trichlorofluoromethane	µg/L	12,100		2U		2U
Vinyl chloride	µg/L	2		1U		1U
Field Measurements						
Conductivity	µS/cm			387		404
Depth to Water	ft			8.45		16.31
Dissolved Oxygen	mg/L			1.39		3.4
pH	Std Unit			5.85		5.67
Temperature	deg C			12.4		15.04
Turbidity	NTU			12.7		161
X749-38G						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200		50		85
1,1,2,2-Tetrachloroethane	µg/L	0.83		1U		1U
1,1,2-Trichloroethane	µg/L	5		2.2		4
1,1-Dichloroethane	µg/L	5860		53		95
1,1-Dichloroethene	µg/L	7		160		230
1,2-Dichlorobenzene	µg/L	600		2U		2U
1,2-Dichloroethane	µg/L	5		5.9		14
1,2-Dimethylbenzene	µg/L	10,000		2U		2U
1,4-Dichlorobenzene	µg/L	75		2U		2U
2-Butanone	µg/L	53,800		6U		6U
4-Methyl-2-pentanone	µg/L	6360		5U		5U
Acetone	µg/L	10,200		2.4J		6J
Benzene	µg/L	5		2U		2U

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749-38G						
Bromodichloromethane	µg/L	100		2U		2U
Bromoform	µg/L	100		2U		2U
Bromomethane	µg/L	140		2U		2U
Carbon disulfide	µg/L	6270		2U		2U
Carbon tetrachloride	µg/L	5		2U		2U
Chlorobenzene	µg/L	100		2U		2U
Chloroethane	µg/L	246,000		2U		1.1J
Chloroform	µg/L	100		5.3		10
Chloromethane	µg/L	13.4		2U		2U
cis-1,2-Dichloroethene	µg/L	70		41		38
Dibromochloromethane	µg/L	3.12		2U		2U
Ethylbenzene	µg/L	700		2U		2U
M + P Xylene	µg/L	10,000		2U		2U
Methylene chloride	µg/L	5		5U		0.7BJ
Tetrachloroethene	µg/L	5		3.3		4.2
Toluene	µg/L	1000		2U		2U
trans-1,2-Dichloroethene	µg/L	100		1U		0.73J
Trichloroethene	µg/L	5		170		290
Trichlorofluoromethane	µg/L	12,100		2U		2U
Vinyl chloride	µg/L	2		1U		0.54J
Field Measurements						
Conductivity	µS/cm			476		302
Depth to Water	ft			8.53		16
Dissolved Oxygen	mg/L			0.89		1.24
pH	Std Unit			6.18		5.94
Temperature	deg C			11.3		15.54
Turbidity	NTU			13.5		123
X749-40G						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200			2U	
1,1,2,2-Tetrachloroethane	µg/L	0.83			1U	
1,1,2-Trichloroethane	µg/L	5			2U	
1,1-Dichloroethane	µg/L	5860			2U	
1,1-Dichloroethene	µg/L	7			2U	
1,2-Dichlorobenzene	µg/L	600			2U	
1,2-Dichloroethane	µg/L	5			2U	
1,2-Dimethylbenzene	µg/L	10,000			2U	
1,4-Dichlorobenzene	µg/L	75			2U	
2-Butanone	µg/L	53,800			6U	
4-Methyl-2-pentanone	µg/L	6360			5U	

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749-40G						
Acetone	µg/L	10,200			10U	
Benzene	µg/L	5			2U	
Bromodichloromethane	µg/L	100			2U	
Bromoform	µg/L	100			2U	
Bromomethane	µg/L	140			2U	
Carbon disulfide	µg/L	6270			2U	
Carbon tetrachloride	µg/L	5			2U	
Chlorobenzene	µg/L	100			2U	
Chloroethane	µg/L	246,000			2U	
Chloroform	µg/L	100			0.18J	
Chloromethane	µg/L	13.4			2U	
cis-1,2-Dichloroethene	µg/L	70			2U	
Dibromochloromethane	µg/L	3.12			2U	
Ethylbenzene	µg/L	700			2U	
M + P Xylene	µg/L	10,000			2U	
Methylene chloride	µg/L	5			5U	
Tetrachloroethene	µg/L	5			2U	
Toluene	µg/L	1000			2U	
trans-1,2-Dichloroethene	µg/L	100			1U	
Trichloroethene	µg/L	5			0.35J	
Trichlorofluoromethane	µg/L	12,100			2U	
Vinyl chloride	µg/L	2			1U	
Field Measurements						
Conductivity	µS/cm				1042	
Depth to Water	ft				13.15	
Dissolved Oxygen	mg/L				nm	
pH	Std Unit				6.02	
Temperature	deg C				15.8	
Turbidity	NTU				4	
X749-42G						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200			2U	
1,1,2,2-Tetrachloroethane	µg/L	0.83			1U	
1,1,2-Trichloroethane	µg/L	5			2U	
1,1-Dichloroethane	µg/L	5860			2U	
1,1-Dichloroethene	µg/L	7			2U	
1,2-Dichlorobenzene	µg/L	600			2U	
1,2-Dichloroethane	µg/L	5			2U	
1,2-Dimethylbenzene	µg/L	10,000			2U	
1,4-Dichlorobenzene	µg/L	75			2U	

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749-42G						
2-Butanone	µg/L	53,800			6U	
4-Methyl-2-pentanone	µg/L	6360			5U	
Acetone	µg/L	10,200			10U	
Benzene	µg/L	5			2U	
Bromodichloromethane	µg/L	100			2U	
Bromoform	µg/L	100			2U	
Bromomethane	µg/L	140			2U	
Carbon disulfide	µg/L	6270			2U	
Carbon tetrachloride	µg/L	5			2U	
Chlorobenzene	µg/L	100			2U	
Chloroethane	µg/L	246,000			2U	
Chloroform	µg/L	100			2U	
Chloromethane	µg/L	13.4			2U	
cis-1,2-Dichloroethene	µg/L	70			2U	
Dibromochloromethane	µg/L	3.12			2U	
Ethylbenzene	µg/L	700			2U	
M + P Xylene	µg/L	10,000			2U	
Methylene chloride	µg/L	5			5U	
Tetrachloroethene	µg/L	5			2U	
Toluene	µg/L	1000			2U	
trans-1,2-Dichloroethene	µg/L	100			1U	
Trichloroethene	µg/L	5			16	
Trichlorofluoromethane	µg/L	12,100			2U	
Vinyl chloride	µg/L	2			1U	
Field Measurements						
Conductivity	µS/cm				139	
Depth to Water	ft				14.52	
Dissolved Oxygen	mg/L				1	
pH	Std Unit				5.32	
Temperature	deg C				14	
Turbidity	NTU				nm	
X749-43G						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200	2U		2U	
1,1,2,2-Tetrachloroethane	µg/L	0.83	1U		1U	
1,1,2-Trichloroethane	µg/L	5	2U		2U	
1,1-Dichloroethane	µg/L	5860	2U		2U	
1,1-Dichloroethene	µg/L	7	2U		2U	
1,2-Dichlorobenzene	µg/L	600	2U		2U	
1,2-Dichloroethane	µg/L	5	2U		2U	

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749-43G						
1,2-Dimethylbenzene	µg/L	10,000	2U		2U	
1,4-Dichlorobenzene	µg/L	75	2U		2U	
2-Butanone	µg/L	53,800	6U		6U	
4-Methyl-2-pentanone	µg/L	6360	5U		5U	
Acetone	µg/L	10,200	10U		10U	
Benzene	µg/L	5	2U		2U	
Bromodichloromethane	µg/L	100	2U		2U	
Bromoform	µg/L	100	2U		2U	
Bromomethane	µg/L	140	2U		2U	
Carbon disulfide	µg/L	6270	2U		2U	
Carbon tetrachloride	µg/L	5	2U		2U	
Chlorobenzene	µg/L	100	2U		2U	
Chloroethane	µg/L	246,000	2U		2U	
Chloroform	µg/L	100	2U		2U	
Chloromethane	µg/L	13.4	2U		2U	
cis-1,2-Dichloroethene	µg/L	70	2U		2U	
Dibromochloromethane	µg/L	3.12	2U		2U	
Ethylbenzene	µg/L	700	2U		2U	
M + P Xylene	µg/L	10,000	2U		2U	
Methylene chloride	µg/L	5	5U		5U	
Tetrachloroethene	µg/L	5	2U		2U	
Toluene	µg/L	1000	2U		2U	
trans-1,2-Dichloroethene	µg/L	100	1U		1U	
Trichloroethene	µg/L	5	2U		2U	
Trichlorofluoromethane	µg/L	12,100	2U		2U	
Vinyl chloride	µg/L	2	1U		1U	
Radionuclides						
Technetium-99	pCi/L	3790	-0.783U		-3.46U	
Field Measurements						
Conductivity	µS/cm		236		267	
Depth to Water	ft		17.48		17.55	
Dissolved Oxygen	mg/L		7		5	
pH	Std Unit		5.38		5.23	
Temperature	deg C		13.1		14.7	
Turbidity	NTU		134		25	
X749-44G						
Metals						
Arsenic	µg/L	92				0.98B
Barium	µg/L	2000				59
Cadmium	µg/L	6.5				0.082B

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749-44G						
Chromium	µg/L	100				0.56B
Lead	µg/L	50				1U
Mercury	µg/L	2				0.2U
Selenium	µg/L	50				2.8B
Silver	µg/L	50				5U
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200	2.3	1.7J	1.3J	1.7J
1,1,2,2-Tetrachloroethane	µg/L	0.83	1U	1U	1U	1U
1,1,2-Trichloroethane	µg/L	5	2U	2U	2U	2U
1,1-Dichloroethane	µg/L	5860	12	9.1	7.1	9.5
1,1-Dichloroethene	µg/L	7	6	5.4	4.1	4.9
1,2-Dichlorobenzene	µg/L	600	2U	2U	2U	2U
1,2-Dichloroethane	µg/L	5	4	3.1	1.9J	2.8
1,2-Dimethylbenzene	µg/L	10,000	2U	2U	2U	2U
1,4-Dichlorobenzene	µg/L	75	2U	2U	2U	2U
2-Butanone	µg/L	53,800	6U	6U	6U	6U
4-Methyl-2-pentanone	µg/L	6360	5U	5U	5U	5U
Acetone	µg/L	10,200	2.4J	10U	10U	10U
Benzene	µg/L	5	2U	2U	2U	2U
Bromodichloromethane	µg/L	100	2U	2U	2U	2U
Bromoform	µg/L	100	2U	2U	2U	2U
Bromomethane	µg/L	140	2U	2U	2U	2U
Carbon disulfide	µg/L	6270	2U	2U	2U	2U
Carbon tetrachloride	µg/L	5	2U	2U	2U	2U
Chlorobenzene	µg/L	100	2U	2U	2U	2U
Chloroethane	µg/L	246,000	2U	2U	2U	2U
Chloroform	µg/L	100	0.62J	0.48J	0.35J	0.57J
Chloromethane	µg/L	13.4	2U	2U	2U	2U
cis-1,2-Dichloroethene	µg/L	70	1.8J	1.2J	0.94J	1.1J
Dibromochloromethane	µg/L	3.12	2U	2U	2U	2U
Ethylbenzene	µg/L	700	2U	2U	2U	2U
M + P Xylene	µg/L	10,000	2U	2U	2U	2U
Methylene chloride	µg/L	5	5U	5U	5U	0.53BJ
Tetrachloroethene	µg/L	5	2U	2U	2U	2U
Toluene	µg/L	1000	2U	2U	2U	2U
trans-1,2-Dichloroethene	µg/L	100	1U	1U	1U	1U
Trichloroethene	µg/L	5	23	14	13	16
Trichlorofluoromethane	µg/L	12,100	2U	2U	2U	2U
Vinyl chloride	µg/L	2	1U	1U	1U	1U
Radionuclides						

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749-44G						
Technetium-99	pCi/L	3790		4.79U		7.41U
Other Parameters						
Alkalinity	mg/L					70
Chloride	mg/L					36
Sulfate	mg/L					29
Field Measurements						
Conductivity	µS/cm		331	349	364	336
Depth to Water	ft		28.35	26.62	28.77	29.88
Dissolved Oxygen	mg/L		2	1	nm	2
pH	Std Unit		6.25	6.4	6.35	6.05
Temperature	deg C		13.6	13.1	15.3	14.8
Turbidity	NTU		8	2	2	4
X749-45G						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200	0.37J	0.54J	2U	2U
1,1,2,2-Tetrachloroethane	µg/L	0.83	1U	1U	1U	1U
1,1,2-Trichloroethane	µg/L	5	2U	2U	2U	2U
1,1-Dichloroethane	µg/L	5860	4.3	5.5	2.7	1.6J
1,1-Dichloroethene	µg/L	7	2.8	3.5	1.5J	0.72J
1,2-Dichlorobenzene	µg/L	600	2U	2U	2U	2U
1,2-Dichloroethane	µg/L	5	1.1J	1.4J	0.65J	2U
1,2-Dimethylbenzene	µg/L	10,000	2U	2U	2U	2U
1,4-Dichlorobenzene	µg/L	75	2U	2U	2U	2U
2-Butanone	µg/L	53,800	6U	6U	6U	6U
4-Methyl-2-pentanone	µg/L	6360	5U	5U	5U	5U
Acetone	µg/L	10,200	10U	10U	10U	10U
Benzene	µg/L	5	2U	2U	2U	2U
Bromodichloromethane	µg/L	100	2U	2U	2U	2U
Bromoform	µg/L	100	2U	2U	2U	2U
Bromomethane	µg/L	140	2U	2U	2U	2U
Carbon disulfide	µg/L	6270	2U	2U	2U	2U
Carbon tetrachloride	µg/L	5	2U	2U	2U	2U
Chlorobenzene	µg/L	100	2U	2U	2U	2U
Chloroethane	µg/L	246,000	0.65J	0.65J	2U	2U
Chloroform	µg/L	100	2U	2U	2U	2U
Chloromethane	µg/L	13.4	2U	2U	2U	2U
cis-1,2-Dichloroethene	µg/L	70	3.7	3.9	2	0.95J
Dibromochloromethane	µg/L	3.12	2U	2U	2U	2U
Ethylbenzene	µg/L	700	2U	2U	2U	2U
M + P Xylene	µg/L	10,000	2U	2U	2U	2U

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749-45G						
Methylene chloride	µg/L	5	5U	0.35J	5U	5U
Tetrachloroethene	µg/L	5	2U	2U	2U	2U
Toluene	µg/L	1000	2U	2U	2U	2U
trans-1,2-Dichloroethene	µg/L	100	1U	1U	1U	1U
Trichloroethene	µg/L	5	11	12	6.4	3.5
Trichlorofluoromethane	µg/L	12,100	2U	2U	2U	2U
Vinyl chloride	µg/L	2	1U	1U	1U	1U
Field Measurements						
Conductivity	µS/cm		466	480	481	466
Depth to Water	ft		16.95	15.02	17.64	19.22
Dissolved Oxygen	mg/L		nm	0.24	1	0.7
pH	Std Unit		6.44	6.6	6.56	6.46
Temperature	deg C		13.4	13.6	15.2	14.56
Turbidity	NTU		11	32.7	7	8
X749-50B						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200			2U	
1,1,2,2-Tetrachloroethane	µg/L	0.83			1U	
1,1,2-Trichloroethane	µg/L	5			2U	
1,1-Dichloroethane	µg/L	5860			6.9	
1,1-Dichloroethene	µg/L	7			0.21J	
1,2-Dichlorobenzene	µg/L	600			2U	
1,2-Dichloroethane	µg/L	5			3.8	
1,2-Dimethylbenzene	µg/L	10,000			2U	
1,4-Dichlorobenzene	µg/L	75			2U	
2-Butanone	µg/L	53,800			6U	
4-Methyl-2-pentanone	µg/L	6360			5U	
Acetone	µg/L	10,200			10U	
Benzene	µg/L	10.5			2U	
Bromodichloromethane	µg/L	100			2U	
Bromoform	µg/L	100			2U	
Bromomethane	µg/L	140			2U	
Carbon disulfide	µg/L	6270			2U	
Carbon tetrachloride	µg/L	5			2U	
Chlorobenzene	µg/L	100			2U	
Chloroethane	µg/L	246,000			0.61J	
Chloroform	µg/L	100			2U	
Chloromethane	µg/L	13.4			2U	
cis-1,2-Dichloroethene	µg/L	70			1.3J	
Dibromochloromethane	µg/L	3.12			2U	

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749-50B						
Ethylbenzene	µg/L	700			2U	
M + P Xylene	µg/L	10,000			2U	
Methylene chloride	µg/L	5			5U	
Tetrachloroethene	µg/L	5			2U	
Toluene	µg/L	1000			2U	
trans-1,2-Dichloroethene	µg/L	100			1U	
Trichloroethene	µg/L	5			0.44J	
Trichlorofluoromethane	µg/L	12,100			2U	
Vinyl chloride	µg/L	2			1U	
Field Measurements						
Conductivity	µS/cm				707	
Depth to Water	ft				28.68	
Dissolved Oxygen	mg/L				nm	
pH	Std Unit				7.36	
Temperature	deg C				17.8	
Turbidity	NTU				2	
X749-51B						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200			2U	
1,1,2,2-Tetrachloroethane	µg/L	0.83			1U	
1,1,2-Trichloroethane	µg/L	5			2U	
1,1-Dichloroethane	µg/L	5860			2U	
1,1-Dichloroethene	µg/L	7			2U	
1,2-Dichlorobenzene	µg/L	600			2U	
1,2-Dichloroethane	µg/L	5			2U	
1,2-Dimethylbenzene	µg/L	10,000			2U	
1,4-Dichlorobenzene	µg/L	75			2U	
2-Butanone	µg/L	53,800			6U	
4-Methyl-2-pentanone	µg/L	6360			5U	
Acetone	µg/L	10,200			10U	
Benzene	µg/L	10.5			2U	
Bromodichloromethane	µg/L	100			2U	
Bromoform	µg/L	100			2U	
Bromomethane	µg/L	140			2U	
Carbon disulfide	µg/L	6270			2U	
Carbon tetrachloride	µg/L	5			2U	
Chlorobenzene	µg/L	100			2U	
Chloroethane	µg/L	246,000			2U	
Chloroform	µg/L	100			2U	
Chloromethane	µg/L	13.4			2U	

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749-51B						
cis-1,2-Dichloroethene	µg/L	70			2U	
Dibromochloromethane	µg/L	3.12			2U	
Ethylbenzene	µg/L	700			2U	
M + P Xylene	µg/L	10,000			2U	
Methylene chloride	µg/L	5			5U	
Tetrachloroethene	µg/L	5			2U	
Toluene	µg/L	1000			2U	
trans-1,2-Dichloroethene	µg/L	100			1U	
Trichloroethene	µg/L	5			2U	
Trichlorofluoromethane	µg/L	12,100			2U	
Vinyl chloride	µg/L	2			1U	
Field Measurements						
Conductivity	µS/cm				522	
Depth to Water	ft				38.61	
Dissolved Oxygen	mg/L				nm	
pH	Std Unit				6.83	
Temperature	deg C				15.4	
Turbidity	NTU				11	
X749-54B						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200		2U		2U
1,1,2,2-Tetrachloroethane	µg/L	0.83		1U		1U
1,1,2-Trichloroethane	µg/L	5		2U		2U
1,1-Dichloroethane	µg/L	5860		1.5J		1.1J
1,1-Dichloroethene	µg/L	7		2U		2U
1,2-Dichlorobenzene	µg/L	600		2U		2U
1,2-Dichloroethane	µg/L	5		2U		2U
1,2-Dimethylbenzene	µg/L	10,000		2U		2U
1,4-Dichlorobenzene	µg/L	75		2U		2U
2-Butanone	µg/L	53,800		6U		6U
4-Methyl-2-pentanone	µg/L	6360		5U		5U
Acetone	µg/L	10,200		2.7J		10U
Benzene	µg/L	10.5		2U		2U
Bromodichloromethane	µg/L	100		2U		2U
Bromoform	µg/L	100		2U		2U
Bromomethane	µg/L	140		2U		2U
Carbon disulfide	µg/L	6270		2U		2U
Carbon tetrachloride	µg/L	5		2U		2U
Chlorobenzene	µg/L	100		2U		2U
Chloroethane	µg/L	246,000		2U		2U

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749-54B						
Chloroform	µg/L	100		2U		2U
Chloromethane	µg/L	13.4		2U		2U
cis-1,2-Dichloroethene	µg/L	70		2U		2U
Dibromochloromethane	µg/L	3.12		2U		2U
Ethylbenzene	µg/L	700		2U		2U
M + P Xylene	µg/L	10,000		2U		2U
Methylene chloride	µg/L	5		5U		5U
Tetrachloroethene	µg/L	5		2U		2U
Toluene	µg/L	1000		2U		2U
trans-1,2-Dichloroethene	µg/L	100		1U		1U
Trichloroethene	µg/L	5		9.3		11
Trichlorofluoromethane	µg/L	12,100		2U		2U
Vinyl chloride	µg/L	2		0.86J		1U
Field Measurements						
Conductivity	µS/cm			444		437
Depth to Water	ft			11.67		13.63
Dissolved Oxygen	mg/L			nm		nm
pH	Std Unit			6.88		6.67
Temperature	deg C			14		13.48
Turbidity	NTU			36		72
X749-64B						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200			2U	
1,1,2,2-Tetrachloroethane	µg/L	0.83			1U	
1,1,2-Trichloroethane	µg/L	5			2U	
1,1-Dichloroethane	µg/L	5860			2U	
1,1-Dichloroethene	µg/L	7			2U	
1,2-Dichlorobenzene	µg/L	600			2U	
1,2-Dichloroethane	µg/L	5			2U	
1,2-Dimethylbenzene	µg/L	10,000			2U	
1,4-Dichlorobenzene	µg/L	75			2U	
2-Butanone	µg/L	53,800			6U	
4-Methyl-2-pentanone	µg/L	6360			5U	
Acetone	µg/L	10,200			10U	
Benzene	µg/L	10.5			2U	
Bromodichloromethane	µg/L	100			2U	
Bromoform	µg/L	100			2U	
Bromomethane	µg/L	140			2U	
Carbon disulfide	µg/L	6270			2U	
Carbon tetrachloride	µg/L	5			2U	

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749-64B						
Chlorobenzene	µg/L	100			2U	
Chloroethane	µg/L	246,000			2U	
Chloroform	µg/L	100			2U	
Chloromethane	µg/L	13.4			2U	
cis-1,2-Dichloroethene	µg/L	70			2U	
Dibromochloromethane	µg/L	3.12			2U	
Ethylbenzene	µg/L	700			2U	
M + P Xylene	µg/L	10,000			2U	
Methylene chloride	µg/L	5			5U	
Tetrachloroethene	µg/L	5			2U	
Toluene	µg/L	1000			2U	
trans-1,2-Dichloroethene	µg/L	100			1U	
Trichloroethene	µg/L	5			2U	
Trichlorofluoromethane	µg/L	12,100			2U	
Vinyl chloride	µg/L	2			1U	
Field Measurements						
Conductivity	µS/cm				2245	
Depth to Water	ft				32.04	
Dissolved Oxygen	mg/L				nm	
pH	Std Unit				7.3	
Temperature	deg C				17.3	
Turbidity	NTU				2	
X749-66G						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200		2U		2U
1,1,2,2-Tetrachloroethane	µg/L	0.83		1U		1U
1,1,2-Trichloroethane	µg/L	5		2U		2U
1,1-Dichloroethane	µg/L	5860		2U		2U
1,1-Dichloroethene	µg/L	7		2U		2U
1,2-Dichlorobenzene	µg/L	600		2U		2U
1,2-Dichloroethane	µg/L	5		2U		2U
1,2-Dimethylbenzene	µg/L	10,000		2U		2U
1,4-Dichlorobenzene	µg/L	75		2U		2U
2-Butanone	µg/L	53,800		6U		6U
4-Methyl-2-pentanone	µg/L	6360		5U		5U
Acetone	µg/L	10,200		10U		10U
Benzene	µg/L	5		2U		2U
Bromodichloromethane	µg/L	100		2U		2U
Bromoform	µg/L	100		2U		2U
Bromomethane	µg/L	140		2U		2U

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749-66G						
Carbon disulfide	µg/L	6270		2U		2U
Carbon tetrachloride	µg/L	5		2U		2U
Chlorobenzene	µg/L	100		2U		2U
Chloroethane	µg/L	246,000		2U		2U
Chloroform	µg/L	100		2U		2U
Chloromethane	µg/L	13.4		2U		2U
cis-1,2-Dichloroethene	µg/L	70		2U		2U
Dibromochloromethane	µg/L	3.12		2U		2U
Ethylbenzene	µg/L	700		2U		2U
M + P Xylene	µg/L	10,000		2U		2U
Methylene chloride	µg/L	5		5U		0.32BJ
Tetrachloroethene	µg/L	5		2U		2U
Toluene	µg/L	1000		2U		2U
trans-1,2-Dichloroethene	µg/L	100		1U		1U
Trichloroethene	µg/L	5		2U		2U
Trichlorofluoromethane	µg/L	12,100		2U		2U
Vinyl chloride	µg/L	2		1U		1U
Radionuclides						
Technetium-99	pCi/L	3790		4.01U		3.06U
Field Measurements						
Conductivity	µS/cm			739		919
Depth to Water	ft			14.11		18.31
Dissolved Oxygen	mg/L			3		4.65
pH	Std Unit			6.39		5.96
Temperature	deg C			12.6		14.7
Turbidity	NTU			58		128
X749-67G						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200	24	22	26	42
1,1,2,2-Tetrachloroethane	µg/L	0.83	2U	2U	1U	1U
1,1,2-Trichloroethane	µg/L	5	1J	1.2J	1.2J	1.2J
1,1-Dichloroethane	µg/L	5860	170	170	200	2U
1,1-Dichloroethane	µg/L	5860	170	170	200	210
1,1-Dichloroethene	µg/L	7	140	160	140	130
1,2-Dichlorobenzene	µg/L	600	4U	4U	2U	2U
1,2-Dichloroethane	µg/L	5	45	49	54	68
1,2-Dimethylbenzene	µg/L	10,000	4U	4U	2U	2U
1,4-Dichlorobenzene	µg/L	75	4U	4U	2U	2U
2-Butanone	µg/L	53,800	12U	12U	6U	6U
4-Methyl-2-pentanone	µg/L	6360	10U	10U	5U	5U

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749-67G						
Acetone	µg/L	10,200	20U	20U	10U	10U
Acetone	µg/L	10,200	20U	20U	10U	79J
Benzene	µg/L	5	0.61J	4U	2U	0.66J
Bromodichloromethane	µg/L	100	4U	4U	2U	2U
Bromoform	µg/L	100	4U	4U	2U	2U
Bromomethane	µg/L	140	4U	4U	2U	2U
Carbon disulfide	µg/L	6270	4U	4U	2U	2U
Carbon tetrachloride	µg/L	5	4U	4U	2U	2U
Chlorobenzene	µg/L	100	4U	4U	2U	2U
Chloroethane	µg/L	246,000	6.1	8.7	6.4	4.5
Chloroform	µg/L	100	6.8	7.6	7.8	10
Chloromethane	µg/L	13.4	4U	4U	2U	2U
cis-1,2-Dichloroethene	µg/L	70	120	160	120	95
Dibromochloromethane	µg/L	3.12	4U	4U	2U	2U
Ethylbenzene	µg/L	700	4U	4U	2U	2U
M + P Xylene	µg/L	10,000	4U	4U	2U	2U
Methylene chloride	µg/L	5	0.95J	2.1J	1.2J	0.72J
Tetrachloroethene	µg/L	5	4U	0.54J	0.5J	0.39J
Toluene	µg/L	1000	4U	4U	2U	2U
trans-1,2-Dichloroethene	µg/L	100	0.53J	0.61J	2.4	0.67J
Trichloroethene	µg/L	5	510	540	590	520
Trichlorofluoromethane	µg/L	12,100	4U	4U	2U	2U
Vinyl chloride	µg/L	2	1.1J	2.2	2	1.5
Field Measurements						
Conductivity	µS/cm		603	616	564	600
Depth to Water	ft		24.2	21.18	25.02	26.73
Dissolved Oxygen	mg/L		1	0.32	1	0.87
pH	Std Unit		5.79	6	5.95	5.9
Temperature	deg C		11.6	13	14.3	13.18
Turbidity	NTU		10	15.1	3	6
X749-68G						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200			2U	
1,1,2,2-Tetrachloroethane	µg/L	0.83			1U	
1,1,2-Trichloroethane	µg/L	5			2U	
1,1-Dichloroethane	µg/L	5860			2U	
1,1-Dichloroethene	µg/L	7			2U	
1,2-Dichlorobenzene	µg/L	600			2U	
1,2-Dichloroethane	µg/L	5			2U	
1,2-Dimethylbenzene	µg/L	10,000			2U	

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749-68G						
1,4-Dichlorobenzene	µg/L	75			2U	
2-Butanone	µg/L	53,800			6U	
4-Methyl-2-pentanone	µg/L	6360			5U	
Acetone	µg/L	10,200			10U	
Benzene	µg/L	5			2U	
Bromodichloromethane	µg/L	100			2U	
Bromoform	µg/L	100			2U	
Bromomethane	µg/L	140			2U	
Carbon disulfide	µg/L	6270			2U	
Carbon tetrachloride	µg/L	5			2U	
Chlorobenzene	µg/L	100			2U	
Chloroethane	µg/L	246,000			2U	
Chloroform	µg/L	100			2U	
Chloromethane	µg/L	13.4			2U	
cis-1,2-Dichloroethene	µg/L	70			2U	
Dibromochloromethane	µg/L	3.12			2U	
Ethylbenzene	µg/L	700			2U	
M + P Xylene	µg/L	10,000			2U	
Methylene chloride	µg/L	5			5U	
Tetrachloroethene	µg/L	5			2U	
Toluene	µg/L	1000			2U	
trans-1,2-Dichloroethene	µg/L	100			1U	
Trichloroethene	µg/L	5			2U	
Trichlorofluoromethane	µg/L	12,100			2U	
Vinyl chloride	µg/L	2			1U	
Field Measurements						
Conductivity	µS/cm				424	
Depth to Water	ft				5.59	
Dissolved Oxygen	mg/L				1	
pH	Std Unit				5.97	
Temperature	deg C				14.6	
Turbidity	NTU				42	
X749-96G						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200	2U	2U	2U	2U
1,1,2,2-Tetrachloroethane	µg/L	0.83	1U	1U	1U	1U
1,1,2-Trichloroethane	µg/L	5	2U	2U	2U	2U
1,1-Dichloroethane	µg/L	5860	2U	2U	2U	2U
1,1-Dichloroethene	µg/L	7	2U	2U	2U	2U
1,2-Dichlorobenzene	µg/L	600	2U	2U	2U	2U

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749-96G						
1,2-Dichloroethane	µg/L	5	2U	2U	2U	2U
1,2-Dimethylbenzene	µg/L	10,000	2U	2U	2U	2U
1,4-Dichlorobenzene	µg/L	75	2U	2U	2U	2U
2-Butanone	µg/L	53,800	6U	6U	6U	6U
4-Methyl-2-pentanone	µg/L	6360	5U	5U	5U	5U
Acetone	µg/L	10,200	10U	10U	10U	10U
Benzene	µg/L	5	2U	2U	2U	2U
Bromodichloromethane	µg/L	100	2U	2U	2U	2U
Bromoform	µg/L	100	2U	2U	2U	2U
Bromomethane	µg/L	140	2U	2U	2U	2U
Carbon disulfide	µg/L	6270	2U	2U	2U	2U
Carbon tetrachloride	µg/L	5	2U	2U	2U	2U
Chlorobenzene	µg/L	100	2U	2U	2U	2U
Chloroethane	µg/L	246,000	2U	2U	2U	2U
Chloroform	µg/L	100	2U	2U	2U	2U
Chloromethane	µg/L	13.4	2U	2U	2U	2U
cis-1,2-Dichloroethene	µg/L	70	2U	2U	2U	2U
Dibromochloromethane	µg/L	3.12	2U	2U	2U	2U
Ethylbenzene	µg/L	700	2U	2U	2U	2U
M + P Xylene	µg/L	10,000	2U	2U	2U	2U
Methylene chloride	µg/L	5	5U	5U	5U	0.37BJ
Tetrachloroethene	µg/L	5	2U	2U	2U	2U
Toluene	µg/L	1000	2U	2U	2U	2U
trans-1,2-Dichloroethene	µg/L	100	1U	1U	1U	1U
Trichloroethene	µg/L	5	2U	2U	2U	2U
Trichlorofluoromethane	µg/L	12,100	2U	2U	2U	2U
Vinyl chloride	µg/L	2	1U	1U	1U	1U
Field Measurements						
Conductivity	µS/cm		292	296	294	284
Depth to Water	ft		16.7	14.84	17.48	19.41
Dissolved Oxygen	mg/L		1	0.96	2	2.2
pH	Std Unit		6.11	6.21	5.93	6.07
Temperature	deg C		12.5	12.2	13.6	12.94
Turbidity	NTU		34	25.8	44	8
X749-97G						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200	0.68J	0.66J	0.18J	2U
1,1,2,2-Tetrachloroethane	µg/L	0.83	1U	1U	1U	1U
1,1,2-Trichloroethane	µg/L	5	2U	2U	2U	2U
1,1-Dichloroethane	µg/L	5860	8.4	7.2	2	0.49J

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749-97G						
1,1-Dichloroethene	µg/L	7	4.6	3.3	0.87J	0.14J
1,2-Dichlorobenzene	µg/L	600	2U	2U	2U	2U
1,2-Dichloroethane	µg/L	5	1.8J	1.8J	2U	2U
1,2-Dimethylbenzene	µg/L	10,000	2U	2U	2U	2U
1,4-Dichlorobenzene	µg/L	75	2U	2U	2U	2U
2-Butanone	µg/L	53,800	6U	6U	6U	6U
4-Methyl-2-pentanone	µg/L	6360	5U	5U	5U	5U
Acetone	µg/L	10,200	10U	10U	10U	10U
Benzene	µg/L	5	2U	2U	2U	2U
Bromodichloromethane	µg/L	100	2U	2U	2U	2U
Bromoform	µg/L	100	2U	2U	2U	2U
Bromomethane	µg/L	140	2U	2U	2U	2U
Carbon disulfide	µg/L	6270	2U	2U	2U	2U
Carbon tetrachloride	µg/L	5	2U	2U	2U	2U
Chlorobenzene	µg/L	100	2U	2U	2U	2U
Chloroethane	µg/L	246,000	2U	2U	2U	2U
Chloroform	µg/L	100	2U	2U	2U	2U
Chloromethane	µg/L	13.4	2U	2U	2U	2U
cis-1,2-Dichloroethene	µg/L	70	2.6	1.9J	0.53J	2U
Dibromochloromethane	µg/L	3.12	2U	2U	2U	2U
Ethylbenzene	µg/L	700	2U	2U	2U	2U
M + P Xylene	µg/L	10,000	2U	2U	2U	2U
Methylene chloride	µg/L	5	0.53J	5U	5U	5U
Tetrachloroethene	µg/L	5	2U	2U	2U	2U
Toluene	µg/L	1000	2U	2U	2U	2U
trans-1,2-Dichloroethene	µg/L	100	1U	1U	1U	1U
Trichloroethene	µg/L	5	20	18	6.1	1.1J
Trichlorofluoromethane	µg/L	12,100	2U	2U	2U	2U
Vinyl chloride	µg/L	2	1U	1U	1U	1U
Radionuclides						
Technetium-99	pCi/L	3790		-3.23U		4.75U
Field Measurements						
Conductivity	µS/cm		630	514	454	510
Depth to Water	ft		20.37	18.3	21.18	23.18
Dissolved Oxygen	mg/L		nm	1	1	0.88
pH	Std Unit		6.71	6.9	6.63	6.56
Temperature	deg C		12.6	12.8	13.8	13.12
Turbidity	NTU		5	5	8	3
X749-98G						
Volatile Organic Compounds						

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749-98G						
1,1,1-Trichloroethane	µg/L	200	2U	2U	2U	2U
1,1,2,2-Tetrachloroethane	µg/L	0.83	1U	1U	1U	1U
1,1,2-Trichloroethane	µg/L	5	2U	2U	2U	2U
1,1-Dichloroethane	µg/L	5860	2U	2U	2U	2U
1,1-Dichloroethene	µg/L	7	2U	2U	2U	2U
1,2-Dichlorobenzene	µg/L	600	2U	2U	2U	2U
1,2-Dichloroethane	µg/L	5	2U	2U	2U	2U
1,2-Dimethylbenzene	µg/L	10,000	2U	2U	2U	2U
1,4-Dichlorobenzene	µg/L	75	2U	2U	2U	2U
2-Butanone	µg/L	53,800	6U	6U	6U	6U
4-Methyl-2-pentanone	µg/L	6360	5U	5U	5U	5U
Acetone	µg/L	10,200	10U	10U	10U	10U
Benzene	µg/L	5	2U	2U	2U	2U
Bromodichloromethane	µg/L	100	2U	2U	2U	2U
Bromoform	µg/L	100	2U	2U	2U	2U
Bromomethane	µg/L	140	2U	2U	2U	2U
Carbon disulfide	µg/L	6270	2U	2U	2U	2U
Carbon tetrachloride	µg/L	5	2U	2U	2U	2U
Chlorobenzene	µg/L	100	2U	2U	2U	2U
Chloroethane	µg/L	246,000	2U	2U	2U	2U
Chloroform	µg/L	100	2U	2U	2U	2U
Chloromethane	µg/L	13.4	2U	2U	2U	2U
cis-1,2-Dichloroethene	µg/L	70	2U	2U	2U	2U
Dibromochloromethane	µg/L	3.12	2U	2U	2U	2U
Ethylbenzene	µg/L	700	2U	2U	2U	2U
M + P Xylene	µg/L	10,000	2U	2U	2U	2U
Methylene chloride	µg/L	5	0.38J	5U	5U	5U
Tetrachloroethene	µg/L	5	2U	2U	2U	2U
Toluene	µg/L	1000	2U	2U	2U	2U
trans-1,2-Dichloroethene	µg/L	100	1U	1U	1U	1U
Trichloroethene	µg/L	5	2U	2U	2U	2U
Trichlorofluoromethane	µg/L	12,100	2U	2U	2U	2U
Vinyl chloride	µg/L	2	1U	1U	1U	1U
Field Measurements						
Conductivity	µS/cm		396	408	410	427
Depth to Water	ft		21.94	19.87	22.92	25.06
Dissolved Oxygen	mg/L		1	1	3	2.7
pH	Std Unit		6.42	6.67	6.47	6.4
Temperature	deg C		12.1	12.3	14.2	12.68
Turbidity	NTU		3	2	3	3

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749-99M						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200			2U	
1,1,2,2-Tetrachloroethane	µg/L	0.83			1U	
1,1,2-Trichloroethane	µg/L	5			2U	
1,1-Dichloroethane	µg/L	5860			2U	
1,1-Dichloroethene	µg/L	7			2U	
1,2-Dichlorobenzene	µg/L	600			2U	
1,2-Dichloroethane	µg/L	5			2U	
1,2-Dimethylbenzene	µg/L	10,000			2U	
1,4-Dichlorobenzene	µg/L	75			2U	
2-Butanone	µg/L	53,800			6U	
4-Methyl-2-pentanone	µg/L	6360			5U	
Acetone	µg/L	10,200			10U	
Benzene	µg/L	5			2U	
Bromodichloromethane	µg/L	100			2U	
Bromoform	µg/L	100			2U	
Bromomethane	µg/L	140			2U	
Carbon disulfide	µg/L	6270			2U	
Carbon tetrachloride	µg/L	5			2U	
Chlorobenzene	µg/L	100			2U	
Chloroethane	µg/L	246,000			2U	
Chloroform	µg/L	100			2U	
Chloromethane	µg/L	13.4			2U	
cis-1,2-Dichloroethene	µg/L	70			2U	
Dibromochloromethane	µg/L	3.12			2U	
Ethylbenzene	µg/L	700			2U	
M + P Xylene	µg/L	10,000			2U	
Methylene chloride	µg/L	5			5U	
Tetrachloroethene	µg/L	5			2U	
Toluene	µg/L	1000			2U	
trans-1,2-Dichloroethene	µg/L	100			1U	
Trichloroethene	µg/L	5			2U	
Trichlorofluoromethane	µg/L	12,100			2U	
Vinyl chloride	µg/L	2			1U	
Field Measurements						
Conductivity	µS/cm				175	
Depth to Water	ft				13.8	
Dissolved Oxygen	mg/L				2	
pH	Std Unit				6.41	
Temperature	deg C				13.7	

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749-99M						
Turbidity	NTU				5	
X749-100M						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200			2U	
1,1,2,2-Tetrachloroethane	µg/L	0.83			1U	
1,1,2-Trichloroethane	µg/L	5			2U	
1,1-Dichloroethane	µg/L	5860			2U	
1,1-Dichloroethene	µg/L	7			2U	
1,2-Dichlorobenzene	µg/L	600			2U	
1,2-Dichloroethane	µg/L	5			2U	
1,2-Dimethylbenzene	µg/L	10,000			2U	
1,4-Dichlorobenzene	µg/L	75			2U	
2-Butanone	µg/L	53,800			6U	
4-Methyl-2-pentanone	µg/L	6360			5U	
Acetone	µg/L	10,200			10U	
Benzene	µg/L	5			2U	
Bromodichloromethane	µg/L	100			2U	
Bromoform	µg/L	100			2U	
Bromomethane	µg/L	140			2U	
Carbon disulfide	µg/L	6270			2U	
Carbon tetrachloride	µg/L	5			2U	
Chlorobenzene	µg/L	100			2U	
Chloroethane	µg/L	246,000			2U	
Chloroform	µg/L	100			2U	
Chloromethane	µg/L	13.4			2U	
cis-1,2-Dichloroethene	µg/L	70			2U	
Dibromochloromethane	µg/L	3.12			2U	
Ethylbenzene	µg/L	700			2U	
M + P Xylene	µg/L	10,000			2U	
Methylene chloride	µg/L	5			5U	
Tetrachloroethene	µg/L	5			2U	
Toluene	µg/L	1000			2U	
trans-1,2-Dichloroethene	µg/L	100			1U	
Trichloroethene	µg/L	5			2U	
Trichlorofluoromethane	µg/L	12,100			2U	
Vinyl chloride	µg/L	2			1U	
Field Measurements						
Conductivity	µS/cm				328	
Depth to Water	ft				17.51	
Dissolved Oxygen	mg/L				2	

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749-100M						
pH	Std Unit				6.68	
Temperature	deg C				14.6	
Turbidity	NTU				64	
X749-101M						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200			2U	
1,1,2,2-Tetrachloroethane	µg/L	0.83			1U	
1,1,2-Trichloroethane	µg/L	5			2U	
1,1-Dichloroethane	µg/L	5860			2U	
1,1-Dichloroethene	µg/L	7			2U	
1,2-Dichlorobenzene	µg/L	600			2U	
1,2-Dichloroethane	µg/L	5			2U	
1,2-Dimethylbenzene	µg/L	10,000			2U	
1,4-Dichlorobenzene	µg/L	75			2U	
2-Butanone	µg/L	53,800			6U	
4-Methyl-2-pentanone	µg/L	6360			5U	
Acetone	µg/L	10,200			10U	
Benzene	µg/L	5			2U	
Bromodichloromethane	µg/L	100			2U	
Bromoform	µg/L	100			2U	
Bromomethane	µg/L	140			2U	
Carbon disulfide	µg/L	6270			2U	
Carbon tetrachloride	µg/L	5			2U	
Chlorobenzene	µg/L	100			2U	
Chloroethane	µg/L	246,000			2U	
Chloroform	µg/L	100			2U	
Chloromethane	µg/L	13.4			2U	
cis-1,2-Dichloroethene	µg/L	70			2U	
Dibromochloromethane	µg/L	3.12			2U	
Ethylbenzene	µg/L	700			2U	
M + P Xylene	µg/L	10,000			2U	
Methylene chloride	µg/L	5			5U	
Tetrachloroethene	µg/L	5			2U	
Toluene	µg/L	1000			2U	
trans-1,2-Dichloroethene	µg/L	100			1U	
Trichloroethene	µg/L	5			2U	
Trichlorofluoromethane	µg/L	12,100			2U	
Vinyl chloride	µg/L	2			1U	
Field Measurements						
Conductivity	µS/cm				399	

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749-101M						
Depth to Water	ft				23.06	
Dissolved Oxygen	mg/L				3	
pH	Std Unit				6.52	
Temperature	deg C				13.7	
Turbidity	NTU				12	
X749-102G						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200	0.44J	0.56J	0.29J	2U
1,1,2,2-Tetrachloroethane	µg/L	0.83	1U	1U	1U	1U
1,1,2-Trichloroethane	µg/L	5	2U	2U	2U	2U
1,1-Dichloroethane	µg/L	5860	3.6	4	2.1	1J
1,1-Dichloroethene	µg/L	7	2.3	2.3	1.2J	0.41J
1,2-Dichlorobenzene	µg/L	600	2U	2U	2U	2U
1,2-Dichloroethane	µg/L	5	0.92J	0.92J	0.44J	0.23J
1,2-Dimethylbenzene	µg/L	10,000	2U	2U	2U	2U
1,4-Dichlorobenzene	µg/L	75	2U	2U	2U	2U
2-Butanone	µg/L	53,800	6U	6U	6U	6U
4-Methyl-2-pentanone	µg/L	6360	5U	5U	5U	5U
Acetone	µg/L	10,200	10U	10U	10U	10U
Benzene	µg/L	5	2U	2U	2U	2U
Bromodichloromethane	µg/L	100	2U	2U	2U	2U
Bromoform	µg/L	100	2U	2U	2U	2U
Bromomethane	µg/L	140	2U	2U	2U	2U
Carbon disulfide	µg/L	6270	2U	2U	2U	2U
Carbon tetrachloride	µg/L	5	2U	2U	2U	2U
Chlorobenzene	µg/L	100	2U	2U	2U	2U
Chloroethane	µg/L	246,000	2U	2U	2U	2U
Chloroform	µg/L	100	2U	0.19J	2U	2U
Chloromethane	µg/L	13.4	2U	2U	2U	2U
cis-1,2-Dichloroethene	µg/L	70	0.5J	0.42J	0.26J	2U
Dibromochloromethane	µg/L	3.12	2U	2U	2U	2U
Ethylbenzene	µg/L	700	2U	2U	2U	2U
M + P Xylene	µg/L	10,000	2U	2U	2U	2U
Methylene chloride	µg/L	5	5U	5U	5U	0.51BJ
Tetrachloroethene	µg/L	5	2U	2U	2U	2U
Toluene	µg/L	1000	2U	2U	2U	2U
trans-1,2-Dichloroethene	µg/L	100	1U	1U	1U	1U
Trichloroethene	µg/L	5	6.4	6.2	3.4	1.6J
Trichlorofluoromethane	µg/L	12,100	2U	2U	2U	2U
Vinyl chloride	µg/L	2	1U	1U	1U	1U

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749-102G						
Radionuclides						
Technetium-99	pCi/L	3790		-1.5U		5.24U
Field Measurements						
Conductivity	µS/cm		296	278	301	315
Depth to Water	ft		25.38	23.32	25.74	27.2
Dissolved Oxygen	mg/L		1	nm	nm	1
pH	Std Unit		6.32	6.27	6.02	6
Temperature	deg C		12.9	12.9	14.2	13.8
Turbidity	NTU		19	1	1	2
X749-103G						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200	2U	2U	2U	2U
1,1,2,2-Tetrachloroethane	µg/L	0.83	1U	1U	1U	1U
1,1,2-Trichloroethane	µg/L	5	2U	2U	2U	2U
1,1-Dichloroethane	µg/L	5860	2U	2U	2U	2U
1,1-Dichloroethene	µg/L	7	2U	2U	2U	2U
1,2-Dichlorobenzene	µg/L	600	2U	2U	2U	2U
1,2-Dichloroethane	µg/L	5	2U	2U	2U	2U
1,2-Dimethylbenzene	µg/L	10,000	2U	2U	2U	2U
1,4-Dichlorobenzene	µg/L	75	2U	2U	2U	2U
2-Butanone	µg/L	53,800	6U	6U	6U	6U
4-Methyl-2-pentanone	µg/L	6360	5U	5U	5U	5U
Acetone	µg/L	10,200	10U	10U	10U	10U
Benzene	µg/L	5	2U	2U	2U	2U
Bromodichloromethane	µg/L	100	2U	2U	2U	2U
Bromoform	µg/L	100	2U	2U	2U	2U
Bromomethane	µg/L	140	2U	2U	2U	2U
Carbon disulfide	µg/L	6270	2U	2U	2U	2U
Carbon tetrachloride	µg/L	5	2U	2U	2U	2U
Chlorobenzene	µg/L	100	2U	2U	2U	2U
Chloroethane	µg/L	246,000	2U	2U	2U	2U
Chloroform	µg/L	100	2U	2U	2U	2U
Chloromethane	µg/L	13.4	2U	2U	2U	2U
cis-1,2-Dichloroethene	µg/L	70	2U	2U	2U	2U
Dibromochloromethane	µg/L	3.12	2U	2U	2U	2U
Ethylbenzene	µg/L	700	2U	2U	2U	2U
M + P Xylene	µg/L	10,000	2U	2U	2U	2U
Methylene chloride	µg/L	5	5U	5U	5U	5U
Tetrachloroethene	µg/L	5	2U	2U	2U	2U
Toluene	µg/L	1000	2U	2U	2U	2U

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749-103G						
trans-1,2-Dichloroethene	µg/L	100	1U	1U	1U	1U
Trichloroethene	µg/L	5	2U	2U	2U	2U
Trichlorofluoromethane	µg/L	12,100	2U	2U	2U	2U
Vinyl chloride	µg/L	2	1U	1U	1U	1U
Field Measurements						
Conductivity	µS/cm		1238	1114	1601	1696
Depth to Water	ft		17.56	14.73	17.27	19.2
Dissolved Oxygen	mg/L		4	4.21	5	5.13
pH	Std Unit		5.67	5.7	5.54	5.66
Temperature	deg C		13.5	13.5	15.9	15.93
Turbidity	NTU		2	3	2	4
X749-104G						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200	2U	2U	2U	2U
1,1,2,2-Tetrachloroethane	µg/L	0.83	1U	1U	1U	1U
1,1,2-Trichloroethane	µg/L	5	2U	2U	2U	2U
1,1-Dichloroethane	µg/L	5860	2U	2U	2U	2U
1,1-Dichloroethene	µg/L	7	2U	2U	2U	2U
1,2-Dichlorobenzene	µg/L	600	2U	2U	2U	2U
1,2-Dichloroethane	µg/L	5	2U	2U	2U	2U
1,2-Dimethylbenzene	µg/L	10,000	2U	2U	2U	2U
1,4-Dichlorobenzene	µg/L	75	2U	2U	2U	2U
2-Butanone	µg/L	53,800	6U	6U	6U	6U
4-Methyl-2-pentanone	µg/L	6360	5U	5U	5U	5U
Acetone	µg/L	10,200	10U	10U	10U	10U
Benzene	µg/L	5	2U	2U	2U	2U
Bromodichloromethane	µg/L	100	2U	2U	2U	2U
Bromoform	µg/L	100	2U	2U	2U	2U
Bromomethane	µg/L	140	2U	2U	2U	2U
Carbon disulfide	µg/L	6270	2U	2U	2U	2U
Carbon tetrachloride	µg/L	5	2U	2U	2U	2U
Chlorobenzene	µg/L	100	2U	2U	2U	2U
Chloroethane	µg/L	246,000	2U	2U	2U	2U
Chloroform	µg/L	100	2U	2U	2U	2U
Chloromethane	µg/L	13.4	2U	2U	2U	2U
cis-1,2-Dichloroethene	µg/L	70	2U	2U	2U	2U
Dibromochloromethane	µg/L	3.12	2U	2U	2U	2U
Ethylbenzene	µg/L	700	2U	2U	2U	2U
M + P Xylene	µg/L	10,000	2U	2U	2U	2U
Methylene chloride	µg/L	5	5U	5U	5U	0.32BJ

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749-104G						
Tetrachloroethene	µg/L	5	2U	2U	2U	2U
Toluene	µg/L	1000	2U	2U	2U	2U
trans-1,2-Dichloroethene	µg/L	100	1U	1U	1U	1U
Trichloroethene	µg/L	5	2U	2U	2U	2U
Trichlorofluoromethane	µg/L	12,100	2U	2U	2U	2U
Vinyl chloride	µg/L	2	1U	1U	1U	1U
Field Measurements						
Conductivity	µS/cm		212	223	208	229
Depth to Water	ft		11.59	9.95	12.18	13.55
Dissolved Oxygen	mg/L		nm	0.57	nm	1.41
pH	Std Unit		5.83	6.27	6	6.05
Temperature	deg C		12.8	12.7	14.2	14.62
Turbidity	NTU		11	17.6	10	24
X749-105G						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200	2U	2U	2U	2U
1,1,2,2-Tetrachloroethane	µg/L	0.83	1U	1U	1U	1U
1,1,2-Trichloroethane	µg/L	5	2U	2U	2U	2U
1,1-Dichloroethane	µg/L	5860	2U	2U	2U	2U
1,1-Dichloroethene	µg/L	7	2U	2U	2U	2U
1,2-Dichlorobenzene	µg/L	600	2U	2U	2U	2U
1,2-Dichloroethane	µg/L	5	2U	2U	2U	2U
1,2-Dimethylbenzene	µg/L	10,000	2U	2U	2U	2U
1,4-Dichlorobenzene	µg/L	75	2U	2U	2U	2U
2-Butanone	µg/L	53,800	6U	6U	6U	6U
4-Methyl-2-pentanone	µg/L	6360	5U	5U	5U	5U
Acetone	µg/L	10,200	10U	10U	10U	10U
Benzene	µg/L	5	2U	2U	2U	2U
Bromodichloromethane	µg/L	100	2U	2U	2U	2U
Bromoform	µg/L	100	2U	2U	2U	2U
Bromomethane	µg/L	140	2U	2U	2U	2U
Carbon disulfide	µg/L	6270	2U	2U	2U	2U
Carbon tetrachloride	µg/L	5	2U	2U	2U	2U
Chlorobenzene	µg/L	100	2U	2U	2U	2U
Chloroethane	µg/L	246,000	2U	2U	2U	2U
Chloroform	µg/L	100	2U	2U	2U	2U
Chloromethane	µg/L	13.4	2U	2U	2U	2U
cis-1,2-Dichloroethene	µg/L	70	2U	2U	2U	2U
Dibromochloromethane	µg/L	3.12	2U	2U	2U	2U
Ethylbenzene	µg/L	700	2U	2U	2U	2U

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749-105G						
M + P Xylene	µg/L	10,000	2U	2U	2U	2U
Methylene chloride	µg/L	5	5U	5U	5U	5U
Tetrachloroethene	µg/L	5	2U	2U	2U	2U
Toluene	µg/L	1000	2U	2U	2U	2U
trans-1,2-Dichloroethene	µg/L	100	1U	1U	1U	1U
Trichloroethene	µg/L	5	2U	2U	2U	2U
Trichlorofluoromethane	µg/L	12,100	2U	2U	2U	2U
Vinyl chloride	µg/L	2	1U	1U	1U	1U
Field Measurements						
Conductivity	µS/cm		363	302	327	337
Depth to Water	ft		25.4	22.84	25.95	27.52
Dissolved Oxygen	mg/L		nm	1	1	0.63
pH	Std Unit		6.12	6.34	6.24	6.06
Temperature	deg C		12.3	12.5	13.8	12.37
Turbidity	NTU		1	3	3	3
X749-106G						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200		54		72
1,1,2,2-Tetrachloroethane	µg/L	0.83		1U		1U
1,1,2-Trichloroethane	µg/L	5		2.8		4
1,1-Dichloroethane	µg/L	5860		41		65
1,1-Dichloroethene	µg/L	7		260		230
1,2-Dichlorobenzene	µg/L	600		2U		2U
1,2-Dichloroethane	µg/L	5		3.4		6.6
1,2-Dimethylbenzene	µg/L	10,000		2U		2U
1,4-Dichlorobenzene	µg/L	75		2U		2U
2-Butanone	µg/L	53,800		6U		6U
4-Methyl-2-pentanone	µg/L	6360		5U		5U
Acetone	µg/L	10,200		2.1J		10U
Benzene	µg/L	5		2U		2U
Bromodichloromethane	µg/L	100		2U		2U
Bromoform	µg/L	100		2U		2U
Bromomethane	µg/L	140		2U		2U
Carbon disulfide	µg/L	6270		2U		2U
Carbon tetrachloride	µg/L	5		2U		2U
Chlorobenzene	µg/L	100		2U		2U
Chloroethane	µg/L	246,000		2U		2U
Chloroform	µg/L	100		4.7		6.7
Chloromethane	µg/L	13.4		2U		2U
cis-1,2-Dichloroethene	µg/L	70		3.8		3.7

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749-106G						
Dibromochloromethane	µg/L	3.12		2U		2U
Ethylbenzene	µg/L	700		2U		2U
M + P Xylene	µg/L	10,000		2U		2U
Methylene chloride	µg/L	5		5U		5U
Tetrachloroethene	µg/L	5		1.5J		1.5J
Toluene	µg/L	1000		2U		2U
trans-1,2-Dichloroethene	µg/L	100		1U		0.2J
Trichloroethene	µg/L	5		140		130
Trichlorofluoromethane	µg/L	12,100		2U		2U
Vinyl chloride	µg/L	2		1U		0.61J
Field Measurements						
Conductivity	µS/cm			239		239
Depth to Water	ft			9.64		15.11
Dissolved Oxygen	mg/L			1.65		2.19
pH	Std Unit			5.83		5.77
Temperature	deg C			13.5		15.68
Turbidity	NTU			15.2		2
X749-107G						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200		67		77
1,1,2,2-Tetrachloroethane	µg/L	0.83		1U		1U
1,1,2-Trichloroethane	µg/L	5		3.4		4.9
1,1-Dichloroethane	µg/L	5860		51		71
1,1-Dichloroethene	µg/L	7		310		260
1,2-Dichlorobenzene	µg/L	600		2U		2U
1,2-Dichloroethane	µg/L	5		3.8		7.5
1,2-Dimethylbenzene	µg/L	10,000		2U		2U
1,4-Dichlorobenzene	µg/L	75		2U		2U
2-Butanone	µg/L	53,800		6U		6U
4-Methyl-2-pentanone	µg/L	6360		5U		5U
Acetone	µg/L	10,200		1.9J		10U
Benzene	µg/L	5		2U		2U
Bromodichloromethane	µg/L	100		2U		2U
Bromoform	µg/L	100		2U		2U
Bromomethane	µg/L	140		2U		2U
Carbon disulfide	µg/L	6270		2U		2U
Carbon tetrachloride	µg/L	5		2U		2U
Chlorobenzene	µg/L	100		2U		2U
Chloroethane	µg/L	246,000		2U		0.48J
Chloroform	µg/L	100		5.9		8.4

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749-107G						
Chloromethane	µg/L	13.4		2U		2U
cis-1,2-Dichloroethene	µg/L	70		5.5		5.2
Dibromochloromethane	µg/L	3.12		2U		2U
Ethylbenzene	µg/L	700		2U		2U
M + P Xylene	µg/L	10,000		2U		2U
Methylene chloride	µg/L	5		5U		5U
Tetrachloroethene	µg/L	5		1.5J		1.5J
Toluene	µg/L	1000		2U		2U
trans-1,2-Dichloroethene	µg/L	100		1U		0.18J
Trichloroethene	µg/L	5		150		140
Trichlorofluoromethane	µg/L	12,100		2U		2U
Vinyl chloride	µg/L	2		1U		1U
Field Measurements						
Conductivity	µS/cm			333		322
Depth to Water	ft			10.3		14.87
Dissolved Oxygen	mg/L			1.07		3.08
pH	Std Unit			5.93		5.85
Temperature	deg C			12.2		16.21
Turbidity	NTU			8.4		2
X749-108G						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200		65		81
1,1,2,2-Tetrachloroethane	µg/L	0.83		1U		1U
1,1,2-Trichloroethane	µg/L	5		2.8		4
1,1-Dichloroethane	µg/L	5860		52		67
1,1-Dichloroethene	µg/L	7		230		200
1,2-Dichlorobenzene	µg/L	600		2U		2U
1,2-Dichloroethane	µg/L	5		3.5		6.7
1,2-Dimethylbenzene	µg/L	10,000		2U		2U
1,4-Dichlorobenzene	µg/L	75		2U		2U
2-Butanone	µg/L	53,800		6U		6U
4-Methyl-2-pentanone	µg/L	6360		5U		5U
Acetone	µg/L	10,200		10U		10U
Benzene	µg/L	5		2U		2U
Bromodichloromethane	µg/L	100		2U		2U
Bromoform	µg/L	100		2U		2U
Bromomethane	µg/L	140		2U		2U
Carbon disulfide	µg/L	6270		2U		2U
Carbon tetrachloride	µg/L	5		2U		2U
Chlorobenzene	µg/L	100		2U		2U

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749-108G						
Chloroethane	µg/L	246,000		2U		2U
Chloroform	µg/L	100		6.2		8.3
Chloromethane	µg/L	13.4		2U		2U
cis-1,2-Dichloroethene	µg/L	70		4.8		3.9
Dibromochloromethane	µg/L	3.12		2U		2U
Ethylbenzene	µg/L	700		2U		2U
M + P Xylene	µg/L	10,000		2U		2U
Methylene chloride	µg/L	5		5U		5U
Tetrachloroethene	µg/L	5		1.7J		1.4J
Toluene	µg/L	1000		2U		2U
trans-1,2-Dichloroethene	µg/L	100		1U		0.28J
Trichloroethene	µg/L	5		160		150
Trichlorofluoromethane	µg/L	12,100		2U		2U
Vinyl chloride	µg/L	2		1U		0.71J
Field Measurements						
Conductivity	µS/cm			165		163
Depth to Water	ft			9.62		15.18
Dissolved Oxygen	mg/L			2.79		2.25
pH	Std Unit			5.5		5.45
Temperature	deg C			13.1		15.51
Turbidity	NTU			11		4
X749-109G						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200		2		1.7J
1,1,2,2-Tetrachloroethane	µg/L	0.83		1U		1U
1,1,2-Trichloroethane	µg/L	5		2U		2U
1,1-Dichloroethane	µg/L	5860		9.2		8.5
1,1-Dichloroethene	µg/L	7		7.8		3.7
1,2-Dichlorobenzene	µg/L	600		2U		2U
1,2-Dichloroethane	µg/L	5		2.5		2.9
1,2-Dimethylbenzene	µg/L	10,000		2U		2U
1,4-Dichlorobenzene	µg/L	75		2U		2U
2-Butanone	µg/L	53,800		6U		6U
4-Methyl-2-pentanone	µg/L	6360		5U		5U
Acetone	µg/L	10,200		10U		10U
Benzene	µg/L	5		2U		2U
Bromodichloromethane	µg/L	100		2U		2U
Bromoform	µg/L	100		2U		2U
Bromomethane	µg/L	140		2U		2U
Carbon disulfide	µg/L	6270		2U		2U

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749-109G						
Carbon tetrachloride	µg/L	5		2U		2U
Chlorobenzene	µg/L	100		2U		2U
Chloroethane	µg/L	246,000		2U		2U
Chloroform	µg/L	100		0.46J		0.42J
Chloromethane	µg/L	13.4		2U		2U
cis-1,2-Dichloroethene	µg/L	70		1.6J		0.74J
Dibromochloromethane	µg/L	3.12		2U		2U
Ethylbenzene	µg/L	700		2U		2U
M + P Xylene	µg/L	10,000		2U		2U
Methylene chloride	µg/L	5		5U		5U
Tetrachloroethene	µg/L	5		2U		2U
Toluene	µg/L	1000		2U		2U
trans-1,2-Dichloroethene	µg/L	100		1U		1U
Trichloroethene	µg/L	5		19		11
Trichlorofluoromethane	µg/L	12,100		2U		2U
Vinyl chloride	µg/L	2		1U		1U
Field Measurements						
Conductivity	µS/cm			291		244
Depth to Water	ft			11.86		17.21
Dissolved Oxygen	mg/L			2.78		3.07
pH	Std Unit			6.13		5.99
Temperature	deg C			12.3		14.66
Turbidity	NTU			14		3
X749-110G						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200		25		37
1,1,2,2-Tetrachloroethane	µg/L	0.83		1U		1U
1,1,2-Trichloroethane	µg/L	5		0.82J		1.1J
1,1-Dichloroethane	µg/L	5860		100		150
1,1-Dichloroethene	µg/L	7		120		180
1,2-Dichlorobenzene	µg/L	600		2U		2U
1,2-Dichloroethane	µg/L	5		29		40
1,2-Dimethylbenzene	µg/L	10,000		2U		2U
1,4-Dichlorobenzene	µg/L	75		2U		2U
2-Butanone	µg/L	53,800		6U		6U
4-Methyl-2-pentanone	µg/L	6360		5U		5U
Acetone	µg/L	10,200		10U		10U
Benzene	µg/L	5		2U		0.64J
Bromodichloromethane	µg/L	100		2U		2U
Bromoform	µg/L	100		2U		2U

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749-110G						
Bromomethane	µg/L	140		2U		2U
Carbon disulfide	µg/L	6270		2U		2U
Carbon tetrachloride	µg/L	5		2U		2U
Chlorobenzene	µg/L	100		2U		2U
Chloroethane	µg/L	246,000		8.1		11
Chloroform	µg/L	100		5.5		7.4
Chloromethane	µg/L	13.4		2U		2U
cis-1,2-Dichloroethene	µg/L	70		120		150
Dibromochloromethane	µg/L	3.12		2U		2U
Ethylbenzene	µg/L	700		2U		2U
M + P Xylene	µg/L	10,000		2U		2U
Methylene chloride	µg/L	5		0.66J		0.94BJ
Tetrachloroethene	µg/L	5		0.3J		0.29J
Toluene	µg/L	1000		2U		2U
trans-1,2-Dichloroethene	µg/L	100		0.69J		0.81J
Trichloroethene	µg/L	5		290		460
Trichlorofluoromethane	µg/L	12,100		2U		2U
Vinyl chloride	µg/L	2		4		8.5
Field Measurements						
Conductivity	µS/cm			483		534
Depth to Water	ft			13.15		20.48
Dissolved Oxygen	mg/L			0.95		1.48
pH	Std Unit			6.35		6.09
Temperature	deg C			13.4		13.6
Turbidity	NTU			16		13
X749-113G						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200		69		
1,1,2,2-Tetrachloroethane	µg/L	0.83		1U		1U
1,1,2-Trichloroethane	µg/L	5		1J		0.91J
1,1-Dichloroethane	µg/L	5860		66		63
1,1-Dichloroethene	µg/L	7		110		96
1,2-Dichlorobenzene	µg/L	600		2U		2U
1,2-Dichloroethane	µg/L	5		31		33
1,2-Dimethylbenzene	µg/L	10,000		2U		2U
1,4-Dichlorobenzene	µg/L	75		2U		2U
2-Butanone	µg/L	53,800		6U		6U
4-Methyl-2-pentanone	µg/L	6360		5U		5U
Acetone	µg/L	10,200		10U		10U
Benzene	µg/L	5		2U		2U

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749-113G						
Bromodichloromethane	µg/L	100		2U		2U
Bromoform	µg/L	100		2U		2U
Bromomethane	µg/L	140		2U		2U
Carbon disulfide	µg/L	6270		2U		2U
Carbon tetrachloride	µg/L	5		2U		2U
Chlorobenzene	µg/L	100		2U		2U
Chloroethane	µg/L	246,000		2U		2U
Chloroform	µg/L	100		5.2		5.2
Chloromethane	µg/L	13.4		2U		2U
cis-1,2-Dichloroethene	µg/L	70		8.5		6.4
Dibromochloromethane	µg/L	3.12		2U		2U
Ethylbenzene	µg/L	700		2U		2U
M + P Xylene	µg/L	10,000		2U		2U
Methylene chloride	µg/L	5		0.5J		5U
Tetrachloroethene	µg/L	5		1.7J		1.3J
Toluene	µg/L	1000		2U		2U
trans-1,2-Dichloroethene	µg/L	100		0.21J		0.27J
Trichloroethene	µg/L	5		160		
Trichlorofluoromethane	µg/L	12,100		2U		2U
Vinyl chloride	µg/L	2		0.47J		0.48J
Field Measurements						
Conductivity	µS/cm			617		644
Depth to Water	ft			30.93		38.32
Dissolved Oxygen	mg/L			1.83		3.8
pH	Std Unit			6.29		5.8
Temperature	deg C			13.6		12.31
Turbidity	NTU			12		14
X749-114G						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200			0.36J	
1,1,2,2-Tetrachloroethane	µg/L	0.83			1U	
1,1,2-Trichloroethane	µg/L	5			2U	
1,1-Dichloroethane	µg/L	5860			0.54J	
1,1-Dichloroethene	µg/L	7			0.18J	
1,2-Dichlorobenzene	µg/L	600			2U	
1,2-Dichloroethane	µg/L	5			2U	
1,2-Dimethylbenzene	µg/L	10,000			2U	
1,4-Dichlorobenzene	µg/L	75			2U	
2-Butanone	µg/L	53,800			6U	
4-Methyl-2-pentanone	µg/L	6360			5U	

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749-114G						
Acetone	µg/L	10,200			10U	
Benzene	µg/L	5			2U	
Bromodichloromethane	µg/L	100			2U	
Bromoform	µg/L	100			2U	
Bromomethane	µg/L	140			2U	
Carbon disulfide	µg/L	6270			2U	
Carbon tetrachloride	µg/L	5			2U	
Chlorobenzene	µg/L	100			2U	
Chloroethane	µg/L	246,000			2U	
Chloroform	µg/L	100			2U	
Chloromethane	µg/L	13.4			2U	
cis-1,2-Dichloroethene	µg/L	70			0.34J	
Dibromochloromethane	µg/L	3.12			2U	
Ethylbenzene	µg/L	700			2U	
M + P Xylene	µg/L	10,000			2U	
Methylene chloride	µg/L	5			5U	
Tetrachloroethene	µg/L	5			2U	
Toluene	µg/L	1000			2U	
trans-1,2-Dichloroethene	µg/L	100			1U	
Trichloroethene	µg/L	5			0.17J	
Trichlorofluoromethane	µg/L	12,100			2U	
Vinyl chloride	µg/L	2			1U	
Field Measurements						
Conductivity	µS/cm				1455	
Depth to Water	ft				22.31	
Dissolved Oxygen	mg/L				1	
pH	Std Unit				6.41	
Temperature	deg C				15.1	
Turbidity	NTU				76	
X749-115G						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200				2U
1,1,2,2-Tetrachloroethane	µg/L	0.83				1U
1,1,2-Trichloroethane	µg/L	5				2U
1,1-Dichloroethane	µg/L	5860				2U
1,1-Dichloroethene	µg/L	7				2U
1,2-Dichlorobenzene	µg/L	600				2U
1,2-Dichloroethane	µg/L	5				2U
1,2-Dimethylbenzene	µg/L	10,000				2U
1,4-Dichlorobenzene	µg/L	75				2U

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749-115G						
2-Butanone	µg/L	53,800				6U
4-Methyl-2-pentanone	µg/L	6360				5U
Acetone	µg/L	10,200				10U
Benzene	µg/L	5				2U
Bromodichloromethane	µg/L	100				2U
Bromoform	µg/L	100				2U
Bromomethane	µg/L	140				2U
Carbon disulfide	µg/L	6270				2U
Carbon tetrachloride	µg/L	5				2U
Chlorobenzene	µg/L	100				2U
Chloroethane	µg/L	246,000				2U
Chloroform	µg/L	100				1.7J
Chloromethane	µg/L	13.4				2U
cis-1,2-Dichloroethene	µg/L	70				3.1
Dibromochloromethane	µg/L	3.12				2U
Ethylbenzene	µg/L	700				2U
M + P Xylene	µg/L	10,000				2U
Methylene chloride	µg/L	5				5U
Tetrachloroethene	µg/L	5				2U
Toluene	µg/L	1000				2U
trans-1,2-Dichloroethene	µg/L	100				1U
Trichloroethene	µg/L	5				140
Trichlorofluoromethane	µg/L	12,100				2U
Vinyl chloride	µg/L	2				1U
Radionuclides						
Technetium-99	pCi/L	3790				-5.7U
Field Measurements						
Conductivity	µS/cm					1215
Depth to Water	ft					17.15
Dissolved Oxygen	mg/L					nm
pH	Std Unit					5.85
Temperature	deg C					14.98
Turbidity	NTU					217
X749-117G						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200				2U
1,1,2,2-Tetrachloroethane	µg/L	0.83				1U
1,1,2-Trichloroethane	µg/L	5				2U
1,1-Dichloroethane	µg/L	5860				0.39J
1,1-Dichloroethene	µg/L	7				2U

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749-117G						
1,2-Dichlorobenzene	µg/L	600				2U
1,2-Dichloroethane	µg/L	5				2U
1,2-Dimethylbenzene	µg/L	10,000				2U
1,4-Dichlorobenzene	µg/L	75				2U
2-Butanone	µg/L	53,800				6U
4-Methyl-2-pentanone	µg/L	6360				5U
Acetone	µg/L	10,200				10U
Benzene	µg/L	5				2U
Bromodichloromethane	µg/L	100				2U
Bromoform	µg/L	100				2U
Bromomethane	µg/L	140				2U
Carbon disulfide	µg/L	6270				2U
Carbon tetrachloride	µg/L	5				2U
Chlorobenzene	µg/L	100				2U
Chloroethane	µg/L	246,000				2U
Chloroform	µg/L	100				2.8
Chloromethane	µg/L	13.4				2U
cis-1,2-Dichloroethene	µg/L	70				0.18J
Dibromochloromethane	µg/L	3.12				2U
Ethylbenzene	µg/L	700				2U
M + P Xylene	µg/L	10,000				2U
Methylene chloride	µg/L	5				5U
Tetrachloroethene	µg/L	5				0.52J
Toluene	µg/L	1000				2U
trans-1,2-Dichloroethene	µg/L	100				1U
Trichloroethene	µg/L	5				20
Trichlorofluoromethane	µg/L	12,100				2U
Vinyl chloride	µg/L	2				1U
Radionuclides						
Technetium-99	pCi/L	3790				-2.64U
Field Measurements						
Conductivity	µS/cm					541
Depth to Water	ft					34.15
Dissolved Oxygen	mg/L					1.26
pH	Std Unit					5.84
Temperature	deg C					13.56
Turbidity	NTU					45
X749-118G						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200				0.31J

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749-118G						
1,1,2,2-Tetrachloroethane	µg/L	0.83				1U
1,1,2-Trichloroethane	µg/L	5				2U
1,1-Dichloroethane	µg/L	5860				7.5
1,1-Dichloroethene	µg/L	7				1.4J
1,2-Dichlorobenzene	µg/L	600				2U
1,2-Dichloroethane	µg/L	5				2U
1,2-Dimethylbenzene	µg/L	10,000				2U
1,4-Dichlorobenzene	µg/L	75				2U
2-Butanone	µg/L	53,800				6U
4-Methyl-2-pentanone	µg/L	6360				5U
Acetone	µg/L	10,200				10U
Benzene	µg/L	5				2U
Bromodichloromethane	µg/L	100				2U
Bromoform	µg/L	100				2U
Bromomethane	µg/L	140				2U
Carbon disulfide	µg/L	6270				0.76J
Carbon tetrachloride	µg/L	5				2U
Chlorobenzene	µg/L	100				2U
Chloroethane	µg/L	246,000				2U
Chloroform	µg/L	100				0.8J
Chloromethane	µg/L	13.4				2U
cis-1,2-Dichloroethene	µg/L	70				1.8J
Dibromochloromethane	µg/L	3.12				2U
Ethylbenzene	µg/L	700				2U
M + P Xylene	µg/L	10,000				2U
Methylene chloride	µg/L	5				5U
Tetrachloroethene	µg/L	5				6.7
Toluene	µg/L	1000				2U
trans-1,2-Dichloroethene	µg/L	100				1U
Trichloroethene	µg/L	5				100
Trichlorofluoromethane	µg/L	12,100				2U
Vinyl chloride	µg/L	2				1U
Radionuclides						
Technetium-99	pCi/L	3790				-1.41U
Field Measurements						
Conductivity	µS/cm					991
Depth to Water	ft					35.28
Dissolved Oxygen	mg/L					0.43
pH	Std Unit					5.92
Temperature	deg C					15

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749-118G						
Turbidity	NTU					346
X749-119G						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200				2U
1,1,2,2-Tetrachloroethane	µg/L	0.83				1U
1,1,2-Trichloroethane	µg/L	5				2U
1,1-Dichloroethane	µg/L	5860				0.35J
1,1-Dichloroethene	µg/L	7				0.2J
1,2-Dichlorobenzene	µg/L	600				2U
1,2-Dichloroethane	µg/L	5				2U
1,2-Dimethylbenzene	µg/L	10,000				2U
1,4-Dichlorobenzene	µg/L	75				2U
2-Butanone	µg/L	53,800				6U
4-Methyl-2-pentanone	µg/L	6360				5U
Acetone	µg/L	10,200				10U
Benzene	µg/L	5				2U
Bromodichloromethane	µg/L	100				2U
Bromoform	µg/L	100				2U
Bromomethane	µg/L	140				2U
Carbon disulfide	µg/L	6270				2U
Carbon tetrachloride	µg/L	5				2U
Chlorobenzene	µg/L	100				2U
Chloroethane	µg/L	246,000				2U
Chloroform	µg/L	100				1J
Chloromethane	µg/L	13.4				2U
cis-1,2-Dichloroethene	µg/L	70				1.1J
Dibromochloromethane	µg/L	3.12				2U
Ethylbenzene	µg/L	700				2U
M + P Xylene	µg/L	10,000				2U
Methylene chloride	µg/L	5				5U
Tetrachloroethene	µg/L	5				0.27J
Toluene	µg/L	1000				2U
trans-1,2-Dichloroethene	µg/L	100				1U
Trichloroethene	µg/L	5				10
Trichlorofluoromethane	µg/L	12,100				2U
Vinyl chloride	µg/L	2				1U
Radionuclides						
Technetium-99	pCi/L	3790				14.2
Field Measurements						
Conductivity	µS/cm					466

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749-119G						
Depth to Water	ft					34.08
Dissolved Oxygen	mg/L					1.55
pH	Std Unit					5.85
Temperature	deg C					15.18
Turbidity	NTU					20
X749-120G						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200				900
1,1,2,2-Tetrachloroethane	µg/L	0.83				67U
1,1,2-Trichloroethane	µg/L	5				83J
1,1-Dichloroethane	µg/L	5860				4500
1,1-Dichloroethene	µg/L	7				1700
1,2-Dichlorobenzene	µg/L	600				130U
1,2-Dichloroethane	µg/L	5				69J
1,2-Dimethylbenzene	µg/L	10,000				130U
1,4-Dichlorobenzene	µg/L	75				130U
2-Butanone	µg/L	53,800				400U
4-Methyl-2-pentanone	µg/L	6360				330U
Acetone	µg/L	10,200				180J
Benzene	µg/L	5				130U
Bromodichloromethane	µg/L	100				130U
Bromoform	µg/L	100				130U
Bromomethane	µg/L	140				130U
Carbon disulfide	µg/L	6270				130U
Carbon tetrachloride	µg/L	5				130U
Chlorobenzene	µg/L	100				130U
Chloroethane	µg/L	246,000				130U
Chloroform	µg/L	100				460
Chloromethane	µg/L	13.4				130U
cis-1,2-Dichloroethene	µg/L	70				1700
Dibromochloromethane	µg/L	3.12				130U
Ethylbenzene	µg/L	700				130U
M + P Xylene	µg/L	10,000				130U
Methylene chloride	µg/L	5				140J
Tetrachloroethene	µg/L	5				300
Toluene	µg/L	1000				26J
trans-1,2-Dichloroethene	µg/L	100				67U
Trichloroethene	µg/L	5				22000
Trichlorofluoromethane	µg/L	12,100				130U
Vinyl chloride	µg/L	2				51J

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749-120G						
Radionuclides						
Technetium-99	pCi/L	3790				2290
Field Measurements						
Conductivity	µS/cm					864
Depth to Water	ft					38.27
Dissolved Oxygen	mg/L					nm
pH	Std Unit					5.6
Temperature	deg C					12.43
Turbidity	NTU					80
X749-121G						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200				98
1,1,2,2-Tetrachloroethane	µg/L	0.83				1U
1,1,2-Trichloroethane	µg/L	5				1.2J
1,1-Dichloroethane	µg/L	5860				56
1,1-Dichloroethene	µg/L	7				220
1,2-Dichlorobenzene	µg/L	600				2U
1,2-Dichloroethane	µg/L	5				1.4J
1,2-Dimethylbenzene	µg/L	10,000				2U
1,4-Dichlorobenzene	µg/L	75				2U
2-Butanone	µg/L	53,800				6U
4-Methyl-2-pentanone	µg/L	6360				5U
Acetone	µg/L	10,200				10U
Benzene	µg/L	5				2U
Bromodichloromethane	µg/L	100				2U
Bromoform	µg/L	100				2U
Bromomethane	µg/L	140				2U
Carbon disulfide	µg/L	6270				2U
Carbon tetrachloride	µg/L	5				2U
Chlorobenzene	µg/L	100				2U
Chloroethane	µg/L	246,000				15
Chloroform	µg/L	100				1.1J
Chloromethane	µg/L	13.4				2U
cis-1,2-Dichloroethene	µg/L	70				15
Dibromochloromethane	µg/L	3.12				2U
Ethylbenzene	µg/L	700				2U
M + P Xylene	µg/L	10,000				2U
Methylene chloride	µg/L	5				5U
Tetrachloroethene	µg/L	5				0.66J
Toluene	µg/L	1000				2U

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749-121G						
trans-1,2-Dichloroethene	µg/L	100				0.33J
Trichloroethene	µg/L	5				75
Trichlorofluoromethane	µg/L	12,100				2U
Vinyl chloride	µg/L	2				1.8
Radionuclides						
Technetium-99	pCi/L	3790				771
Field Measurements						
Conductivity	µS/cm					1080
Depth to Water	ft					33.78
Dissolved Oxygen	mg/L					0.45
pH	Std Unit					5.93
Temperature	deg C					14.8
Turbidity	NTU					60
X749-122G						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200				4U
1,1,2,2-Tetrachloroethane	µg/L	0.83				2U
1,1,2-Trichloroethane	µg/L	5				3.5J
1,1-Dichloroethane	µg/L	5860				77
1,1-Dichloroethene	µg/L	7				370
1,2-Dichlorobenzene	µg/L	600				4U
1,2-Dichloroethane	µg/L	5				6.6
1,2-Dimethylbenzene	µg/L	10,000				4U
1,4-Dichlorobenzene	µg/L	75				4U
2-Butanone	µg/L	53,800				12U
4-Methyl-2-pentanone	µg/L	6360				10U
Acetone	µg/L	10,200				20U
Benzene	µg/L	5				0.75J
Bromodichloromethane	µg/L	100				4U
Bromoform	µg/L	100				4U
Bromomethane	µg/L	140				4U
Carbon disulfide	µg/L	6270				4U
Carbon tetrachloride	µg/L	5				4U
Chlorobenzene	µg/L	100				4U
Chloroethane	µg/L	246,000				2.4J
Chloroform	µg/L	100				4.5
Chloromethane	µg/L	13.4				4U
cis-1,2-Dichloroethene	µg/L	70				56
Dibromochloromethane	µg/L	3.12				4U
Ethylbenzene	µg/L	700				4U

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749-122G						
M + P Xylene	µg/L	10,000				4U
Methylene chloride	µg/L	5				1.6J
Tetrachloroethene	µg/L	5				4U
Toluene	µg/L	1000				4U
trans-1,2-Dichloroethene	µg/L	100				1.2J
Trichloroethene	µg/L	5				790
Trichlorofluoromethane	µg/L	12,100				4U
Vinyl chloride	µg/L	2				4.4
Radionuclides						
Technetium-99	pCi/L	3790				7U
Field Measurements						
Conductivity	µS/cm					nm
Depth to Water	ft					39.98
Dissolved Oxygen	mg/L					nm
pH	Std Unit					nm
Temperature	deg C					nm
Turbidity	NTU					nm
X749-BG9G						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200		0.27J		0.41J
1,1,2,2-Tetrachloroethane	µg/L	0.83		1U		1U
1,1,2-Trichloroethane	µg/L	5		2U		2U
1,1-Dichloroethane	µg/L	5860		0.34J		0.7J
1,1-Dichloroethene	µg/L	7		0.43J		0.47J
1,2-Dichlorobenzene	µg/L	600		2U		2U
1,2-Dichloroethane	µg/L	5		2U		2U
1,2-Dimethylbenzene	µg/L	10,000		2U		2U
1,4-Dichlorobenzene	µg/L	75		2U		2U
2-Butanone	µg/L	53,800		6U		6U
4-Methyl-2-pentanone	µg/L	6360		5U		5U
Acetone	µg/L	10,200		10U		10U
Benzene	µg/L	5		2U		2U
Bromodichloromethane	µg/L	100		2U		2U
Bromoform	µg/L	100		2U		2U
Bromomethane	µg/L	140		2U		2U
Carbon disulfide	µg/L	6270		2U		2U
Carbon tetrachloride	µg/L	5		2U		2U
Chlorobenzene	µg/L	100		2U		2U
Chloroethane	µg/L	246,000		2U		2U
Chloroform	µg/L	100		2U		2U

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749-BG9G						
Chloromethane	µg/L	13.4		2U		2U
cis-1,2-Dichloroethene	µg/L	70		2U		2U
Dibromochloromethane	µg/L	3.12		2U		2U
Ethylbenzene	µg/L	700		2U		2U
M + P Xylene	µg/L	10,000		2U		2U
Methylene chloride	µg/L	5		5U		5U
Tetrachloroethene	µg/L	5		2U		2U
Toluene	µg/L	1000		2U		2U
trans-1,2-Dichloroethene	µg/L	100		1U		1U
Trichloroethene	µg/L	5		0.68J		0.69J
Trichlorofluoromethane	µg/L	12,100		2U		2U
Vinyl chloride	µg/L	2		1U		1U
Field Measurements						
Conductivity	µS/cm			516		637
Depth to Water	ft			17.56		25.02
Dissolved Oxygen	mg/L			2		0.44
pH	Std Unit			6.44		6.25
Temperature	deg C			13.9		15.48
Turbidity	NTU			8		5
X749-PZ02G						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200		2U		2U
1,1,2,2-Tetrachloroethane	µg/L	0.83		1U		1U
1,1,2-Trichloroethane	µg/L	5		2U		2U
1,1-Dichloroethane	µg/L	5860		2U		2U
1,1-Dichloroethene	µg/L	7		0.52J		0.23J
1,2-Dichlorobenzene	µg/L	600		2U		2U
1,2-Dichloroethane	µg/L	5		2U		2U
1,2-Dimethylbenzene	µg/L	10,000		2U		2U
1,4-Dichlorobenzene	µg/L	75		2U		2U
2-Butanone	µg/L	53,800		6U		6U
4-Methyl-2-pentanone	µg/L	6360		5U		5U
Acetone	µg/L	10,200		10U		10U
Benzene	µg/L	5		2U		2U
Bromodichloromethane	µg/L	100		2U		2U
Bromoform	µg/L	100		2U		2U
Bromomethane	µg/L	140		2U		2U
Carbon disulfide	µg/L	6270		2U		2U
Carbon tetrachloride	µg/L	5		2U		2U
Chlorobenzene	µg/L	100		2U		2U

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749-PZ02G						
Chloroethane	µg/L	246,000		2U		2U
Chloroform	µg/L	100		2U		2U
Chloromethane	µg/L	13.4		2U		2U
cis-1,2-Dichloroethene	µg/L	70		2U		2U
Dibromochloromethane	µg/L	3.12		2U		2U
Ethylbenzene	µg/L	700		2U		2U
M + P Xylene	µg/L	10,000		2U		2U
Methylene chloride	µg/L	5		5U		0.52BJ
Tetrachloroethene	µg/L	5		2U		2U
Toluene	µg/L	1000		2U		2U
trans-1,2-Dichloroethene	µg/L	100		1U		1U
Trichloroethene	µg/L	5		0.99J		0.99J
Trichlorofluoromethane	µg/L	12,100		2U		2U
Vinyl chloride	µg/L	2		1U		1U
Field Measurements						
Conductivity	µS/cm			242		302
Depth to Water	ft			6.75		10
Dissolved Oxygen	mg/L			1		2.06
pH	Std Unit			6.01		5.93
Temperature	deg C			10.9		15.94
Turbidity	NTU			28		24
X749-PZ03G						
Metals						
Arsenic	µg/L	92				2.2B
Barium	µg/L	2000				25
Cadmium	µg/L	6.5				1U
Chromium	µg/L	100				0.58B
Lead	µg/L	50				1U
Mercury	µg/L	2				0.2U
Selenium	µg/L	50				1.2B
Silver	µg/L	50				5U
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200	2U	2U	2U	2U
1,1,2,2-Tetrachloroethane	µg/L	0.83	1U	1U	1U	1U
1,1,2-Trichloroethane	µg/L	5	2U	2U	2U	2U
1,1-Dichloroethane	µg/L	5860	2U	2U	2U	2U
1,1-Dichloroethene	µg/L	7	2U	2U	2U	2U
1,2-Dichlorobenzene	µg/L	600	2U	2U	2U	2U
1,2-Dichloroethane	µg/L	5	2U	2U	2U	2U
1,2-Dimethylbenzene	µg/L	10,000	2U	2U	2U	2U

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749-PZ03G						
1,4-Dichlorobenzene	µg/L	75	2U	2U	2U	2U
2-Butanone	µg/L	53,800	6U	6U	6U	6U
4-Methyl-2-pentanone	µg/L	6360	5U	5U	5U	5U
Acetone	µg/L	10,200	10U	10U	10U	10U
Benzene	µg/L	5	2U	2U	2U	2U
Bromodichloromethane	µg/L	100	2U	2U	2U	2U
Bromoform	µg/L	100	2U	2U	2U	2U
Bromomethane	µg/L	140	2U	2U	2U	2U
Carbon disulfide	µg/L	6270	2U	2U	2U	2U
Carbon tetrachloride	µg/L	5	2U	2U	2U	2U
Chlorobenzene	µg/L	100	2U	2U	2U	2U
Chloroethane	µg/L	246,000	2U	2U	2U	2U
Chloroform	µg/L	100	2U	2U	2U	2U
Chloromethane	µg/L	13.4	2U	2U	2U	2U
cis-1,2-Dichloroethene	µg/L	70	2U	2U	2U	2U
Dibromochloromethane	µg/L	3.12	2U	2U	2U	2U
Ethylbenzene	µg/L	700	2U	2U	2U	2U
M + P Xylene	µg/L	10,000	2U	2U	2U	2U
Methylene chloride	µg/L	5	5U	5U	5U	0.52BJ
Tetrachloroethene	µg/L	5	2U	2U	2U	2U
Toluene	µg/L	1000	2U	2U	2U	2U
trans-1,2-Dichloroethene	µg/L	100	1U	1U	1U	1U
Trichloroethene	µg/L	5	2U	2U	2U	2U
Trichlorofluoromethane	µg/L	12,100	2U	2U	2U	2U
Vinyl chloride	µg/L	2	1U	1U	1U	1U
Other Parameters						
Alkalinity	mg/L					41
Chloride	mg/L					8
Sulfate	mg/L					66
Field Measurements						
Conductivity	µS/cm		278	270	264	275
Depth to Water	ft		10	8	10.7	12.21
Dissolved Oxygen	mg/L		1	nm	nm	1
pH	Std Unit		5.63	5.85	5.76	5.87
Temperature	deg C		11.6	11.3	13.9	14.2
Turbidity	NTU		7	12	12	8
X749-PZ04G						
Metals						
Arsenic	µg/L	92				0.7B
Barium	µg/L	2000				47

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749-PZ04G						
Cadmium	µg/L	6.5				0.04B
Chromium	µg/L	100				2U
Lead	µg/L	50				1U
Mercury	µg/L	2				0.2U
Selenium	µg/L	50				5U
Silver	µg/L	50				5U
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200	10	8.1	1.9J	1.1J
1,1,2,2-Tetrachloroethane	µg/L	0.83	1U	1U	1U	1U
1,1,2-Trichloroethane	µg/L	5	0.39J	2U	2U	2U
1,1-Dichloroethane	µg/L	5860	75	57	17	11
1,1-Dichloroethene	µg/L	7	47	30	8.5	5.1
1,2-Dichlorobenzene	µg/L	600	2U	2U	2U	2U
1,2-Dichloroethane	µg/L	5	22	19	4.8	3.4
1,2-Dimethylbenzene	µg/L	10,000	2U	2U	2U	2U
1,4-Dichlorobenzene	µg/L	75	2U	2U	2U	2U
2-Butanone	µg/L	53,800	6U	6U	6U	6U
4-Methyl-2-pentanone	µg/L	6360	5U	5U	5U	5U
Acetone	µg/L	10,200	10U	10U	10U	10U
Benzene	µg/L	5	0.18J	2U	2U	2U
Bromodichloromethane	µg/L	100	2U	2U	2U	2U
Bromoform	µg/L	100	2U	2U	2U	2U
Bromomethane	µg/L	140	2U	2U	2U	2U
Carbon disulfide	µg/L	6270	2U	2U	2U	2U
Carbon tetrachloride	µg/L	5	2U	2U	2U	2U
Chlorobenzene	µg/L	100	2U	2U	2U	2U
Chloroethane	µg/L	246,000	1.2J	1.1J	2U	2U
Chloroform	µg/L	100	2.4	2	0.49J	0.31J
Chloromethane	µg/L	13.4	2U	2U	2U	2U
cis-1,2-Dichloroethene	µg/L	70	33	21	7.5	4.7
Dibromochloromethane	µg/L	3.12	2U	2U	2U	2U
Ethylbenzene	µg/L	700	2U	2U	2U	2U
M + P Xylene	µg/L	10,000	2U	2U	2U	2U
Methylene chloride	µg/L	5	0.53J	0.44J	0.35J	0.41BJ
Tetrachloroethene	µg/L	5	2U	2U	2U	2U
Toluene	µg/L	1000	2U	2U	2U	2U
trans-1,2-Dichloroethene	µg/L	100	0.62J	0.15J	1U	1U
Trichloroethene	µg/L	5	180	110	40	24
Trichlorofluoromethane	µg/L	12,100	2U	2U	2U	2U
Vinyl chloride	µg/L	2	1U	0.46J	1U	1U

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749-PZ04G						
Radionuclides						
Technetium-99	pCi/L	3790		5.04U		6.05U
Other Parameters						
Alkalinity	mg/L					90
Chloride	mg/L					17
Sulfate	mg/L					140
Field Measurements						
Conductivity	µS/cm		563	528	519	512
Depth to Water	ft		19.5	17.25	20.27	21.92
Dissolved Oxygen	mg/L		1	nm	nm	0.61
pH	Std Unit		5.94	6.13	6.09	6.11
Temperature	deg C		12.6	12.7	15.1	13.95
Turbidity	NTU		2	1	2	3
X749-PZ05G						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200	2U	2U	2U	2U
1,1,2,2-Tetrachloroethane	µg/L	0.83	1U	1U	1U	1U
1,1,2-Trichloroethane	µg/L	5	2U	2U	2U	2U
1,1-Dichloroethane	µg/L	5860	2U	2U	2U	2U
1,1-Dichloroethene	µg/L	7	2U	2U	2U	2U
1,2-Dichlorobenzene	µg/L	600	2U	2U	2U	2U
1,2-Dichloroethane	µg/L	5	2U	2U	2U	2U
1,2-Dimethylbenzene	µg/L	10,000	2U	2U	2U	2U
1,4-Dichlorobenzene	µg/L	75	2U	2U	2U	2U
2-Butanone	µg/L	53,800	6U	6U	6U	6U
4-Methyl-2-pentanone	µg/L	6360	5U	5U	5U	5U
Acetone	µg/L	10,200	10U	10U	10U	10U
Benzene	µg/L	5	2U	2U	2U	2U
Bromodichloromethane	µg/L	100	2U	2U	2U	2U
Bromoform	µg/L	100	2U	2U	2U	2U
Bromomethane	µg/L	140	2U	2U	2U	2U
Carbon disulfide	µg/L	6270	2U	2U	2U	2U
Carbon tetrachloride	µg/L	5	2U	2U	2U	2U
Chlorobenzene	µg/L	100	2U	2U	2U	2U
Chloroethane	µg/L	246,000	2U	2U	2U	2U
Chloroform	µg/L	100	2U	2U	2U	2U
Chloromethane	µg/L	13.4	2U	2U	2U	2U
cis-1,2-Dichloroethene	µg/L	70	2U	2U	2U	2U
Dibromochloromethane	µg/L	3.12	2U	2U	2U	2U
Ethylbenzene	µg/L	700	2U	2U	2U	2U

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749-PZ05G						
M + P Xylene	µg/L	10,000	2U	2U	2U	2U
Methylene chloride	µg/L	5	5U	5U	5U	5U
Tetrachloroethene	µg/L	5	2U	2U	2U	2U
Toluene	µg/L	1000	2U	2U	2U	2U
trans-1,2-Dichloroethene	µg/L	100	1U	1U	1U	1U
Trichloroethene	µg/L	5	2U	2U	2U	2U
Trichlorofluoromethane	µg/L	12,100	2U	2U	2U	2U
Vinyl chloride	µg/L	2	1U	1U	1U	1U
Field Measurements						
Conductivity	µS/cm		363	330	334	302
Depth to Water	ft		22.61	21.1	23.2	23.81
Dissolved Oxygen	mg/L		nm	nm	nm	nm
pH	Std Unit		6.21	6.54	6.79	6.92
Temperature	deg C		3.2	10.9	16.1	13.75
Turbidity	NTU		96	35	41	33
X749-PZ06G						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200			18	
1,1,2,2-Tetrachloroethane	µg/L	0.83			1U	
1,1,2-Trichloroethane	µg/L	5			1.1J	
1,1-Dichloroethane	µg/L	5860			20	
1,1-Dichloroethene	µg/L	7			63	
1,2-Dichlorobenzene	µg/L	600			2U	
1,2-Dichloroethane	µg/L	5			2	
1,2-Dimethylbenzene	µg/L	10,000			2U	
1,4-Dichlorobenzene	µg/L	75			2U	
2-Butanone	µg/L	53,800			6U	
4-Methyl-2-pentanone	µg/L	6360			5U	
Acetone	µg/L	10,200			10U	
Benzene	µg/L	5			2U	
Bromodichloromethane	µg/L	100			2U	
Bromoform	µg/L	100			2U	
Bromomethane	µg/L	140			2U	
Carbon disulfide	µg/L	6270			2U	
Carbon tetrachloride	µg/L	5			2U	
Chlorobenzene	µg/L	100			2U	
Chloroethane	µg/L	246,000			2U	
Chloroform	µg/L	100			2.4	
Chloromethane	µg/L	13.4			2U	
cis-1,2-Dichloroethene	µg/L	70			1.6J	

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749-PZ06G						
Dibromochloromethane	µg/L	3.12			2U	
Ethylbenzene	µg/L	700			2U	
M + P Xylene	µg/L	10,000			2U	
Methylene chloride	µg/L	5			0.56J	
Tetrachloroethene	µg/L	5			2U	
Toluene	µg/L	1000			2U	
trans-1,2-Dichloroethene	µg/L	100			1U	
Trichloroethene	µg/L	5			26	
Trichlorofluoromethane	µg/L	12,100			2U	
Vinyl chloride	µg/L	2			1U	
Field Measurements						
Conductivity	µS/cm				213	
Depth to Water	ft				13.63	
Dissolved Oxygen	mg/L				nm	
pH	Std Unit				5.88	
Temperature	deg C				14.9	
Turbidity	NTU				1	
X749-PZ07G						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200		1.4J		1.8J
1,1,2,2-Tetrachloroethane	µg/L	0.83		1U		1U
1,1,2-Trichloroethane	µg/L	5		2U		2U
1,1-Dichloroethane	µg/L	5860		0.86J		1.4J
1,1-Dichloroethene	µg/L	7		3.8		3.2
1,2-Dichlorobenzene	µg/L	600		2U		2U
1,2-Dichloroethane	µg/L	5		2U		2U
1,2-Dimethylbenzene	µg/L	10,000		2U		2U
1,4-Dichlorobenzene	µg/L	75		2U		2U
2-Butanone	µg/L	53,800		6U		6U
4-Methyl-2-pentanone	µg/L	6360		5U		5U
Acetone	µg/L	10,200		10U		10U
Benzene	µg/L	5		2U		2U
Bromodichloromethane	µg/L	100		2U		2U
Bromoform	µg/L	100		2U		2U
Bromomethane	µg/L	140		2U		2U
Carbon disulfide	µg/L	6270		2U		2U
Carbon tetrachloride	µg/L	5		2U		2U
Chlorobenzene	µg/L	100		2U		2U
Chloroethane	µg/L	246,000		2U		2U
Chloroform	µg/L	100		0.17J		0.26J

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749-PZ07G						
Chloromethane	µg/L	13.4		2U		2U
cis-1,2-Dichloroethene	µg/L	70		0.2J		0.31J
Dibromochloromethane	µg/L	3.12		2U		2U
Ethylbenzene	µg/L	700		2U		2U
M + P Xylene	µg/L	10,000		2U		2U
Methylene chloride	µg/L	5		5U		5U
Tetrachloroethene	µg/L	5		2U		2U
Toluene	µg/L	1000		2U		2U
trans-1,2-Dichloroethene	µg/L	100		1U		1U
Trichloroethene	µg/L	5		6.1		9
Trichlorofluoromethane	µg/L	12,100		2U		2U
Vinyl chloride	µg/L	2		1U		1U
Field Measurements						
Conductivity	µS/cm			289		375
Depth to Water	ft			10.11		15.78
Dissolved Oxygen	mg/L			3.32		3.98
pH	Std Unit			5.88		5.61
Temperature	deg C			11.8		15.64
Turbidity	NTU			19		2
X749-PZ09G						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200		2.8		2.2
1,1,2,2-Tetrachloroethane	µg/L	0.83		1U		1U
1,1,2-Trichloroethane	µg/L	5		2U		2U
1,1-Dichloroethane	µg/L	5860		3		2.7
1,1-Dichloroethene	µg/L	7		9.1		5.6
1,2-Dichlorobenzene	µg/L	600		2U		2U
1,2-Dichloroethane	µg/L	5		2U		2U
1,2-Dimethylbenzene	µg/L	10,000		2U		2U
1,4-Dichlorobenzene	µg/L	75		2U		2U
2-Butanone	µg/L	53,800		6U		6U
4-Methyl-2-pentanone	µg/L	6360		5U		5U
Acetone	µg/L	10,200		10U		10U
Benzene	µg/L	5		2U		2U
Bromodichloromethane	µg/L	100		2U		2U
Bromoform	µg/L	100		2U		2U
Bromomethane	µg/L	140		2U		2U
Carbon disulfide	µg/L	6270		2U		2U
Carbon tetrachloride	µg/L	5		2U		2U
Chlorobenzene	µg/L	100		2U		2U

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749-PZ09G						
Chloroethane	µg/L	246,000		2U		2U
Chloroform	µg/L	100		0.38J		0.52J
Chloromethane	µg/L	13.4		2U		2U
cis-1,2-Dichloroethene	µg/L	70		5.7		6.2
Dibromochloromethane	µg/L	3.12		2U		2U
Ethylbenzene	µg/L	700		2U		2U
M + P Xylene	µg/L	10,000		2U		2U
Methylene chloride	µg/L	5		5U		5U
Tetrachloroethene	µg/L	5		2U		0.21J
Toluene	µg/L	1000		2U		2U
trans-1,2-Dichloroethene	µg/L	100		1U		1U
Trichloroethene	µg/L	5		55		67
Trichlorofluoromethane	µg/L	12,100		2U		2U
Vinyl chloride	µg/L	2		0.4J		1.1
Radionuclides						
Technetium-99	pCi/L	3790		1250		1190
Field Measurements						
Conductivity	µS/cm			1129		1188
Depth to Water	ft			23.13		27.83
Dissolved Oxygen	mg/L			nm		0.33
pH	Std Unit			6.02		5.65
Temperature	deg C			15.3		13.68
Turbidity	NTU			116		12
X749-PZ10G						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200		20		25
1,1,2,2-Tetrachloroethane	µg/L	0.83		4U		4U
1,1,2-Trichloroethane	µg/L	5		8U		8U
1,1-Dichloroethane	µg/L	5860		8U		0.87J
1,1-Dichloroethene	µg/L	7		140		140
1,2-Dichlorobenzene	µg/L	600		8U		8U
1,2-Dichloroethane	µg/L	5		8U		0.6J
1,2-Dimethylbenzene	µg/L	10,000		8U		8U
1,4-Dichlorobenzene	µg/L	75		8U		8U
2-Butanone	µg/L	53,800		24U		24U
4-Methyl-2-pentanone	µg/L	6360		20U		20U
Acetone	µg/L	10,200		40U		40U
Benzene	µg/L	5		8U		8U
Bromodichloromethane	µg/L	100		8U		8U
Bromoform	µg/L	100		8U		8U

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749-PZ10G						
Bromomethane	µg/L	140		8U		8U
Carbon disulfide	µg/L	6270		8U		8U
Carbon tetrachloride	µg/L	5		8U		8U
Chlorobenzene	µg/L	100		8U		8U
Chloroethane	µg/L	246,000		8U		8U
Chloroform	µg/L	100		25		35
Chloromethane	µg/L	13.4		8U		8U
cis-1,2-Dichloroethene	µg/L	70		0.74J		0.63J
Dibromochloromethane	µg/L	3.12		8U		8U
Ethylbenzene	µg/L	700		8U		8U
M + P Xylene	µg/L	10,000		8U		8U
Methylene chloride	µg/L	5		20U		20U
Tetrachloroethene	µg/L	5		8U		8U
Toluene	µg/L	1000		8U		8U
trans-1,2-Dichloroethene	µg/L	100		4U		4U
Trichloroethene	µg/L	5		770		910
Trichlorofluoromethane	µg/L	12,100		8U		8U
Vinyl chloride	µg/L	2		4U		4U
Field Measurements						
Conductivity	µS/cm			432		465
Depth to Water	ft			19.6		25.63
Dissolved Oxygen	mg/L			1		0.43
pH	Std Unit			6.26		6.06
Temperature	deg C			17.1		14.76
Turbidity	NTU			45		546
X749-PZ11G						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200		74		72
1,1,2,2-Tetrachloroethane	µg/L	0.83		1U		1U
1,1,2-Trichloroethane	µg/L	5		0.48J		0.4J
1,1-Dichloroethane	µg/L	5860		25		23
1,1-Dichloroethene	µg/L	7		39		30
1,2-Dichlorobenzene	µg/L	600		2U		2U
1,2-Dichloroethane	µg/L	5		2U		0.19J
1,2-Dimethylbenzene	µg/L	10,000		2U		2U
1,4-Dichlorobenzene	µg/L	75		2U		2U
2-Butanone	µg/L	53,800		6U		6U
4-Methyl-2-pentanone	µg/L	6360		5U		5U
Acetone	µg/L	10,200		10U		10U
Benzene	µg/L	5		0.65J		0.54J

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749-PZ11G						
Bromodichloromethane	µg/L	100		2U		2U
Bromoform	µg/L	100		2U		2U
Bromomethane	µg/L	140		2U		2U
Carbon disulfide	µg/L	6270		2U		2U
Carbon tetrachloride	µg/L	5		2U		2U
Chlorobenzene	µg/L	100		2U		2U
Chloroethane	µg/L	246,000		2U		0.57J
Chloroform	µg/L	100		0.59J		0.52J
Chloromethane	µg/L	13.4		2U		2U
cis-1,2-Dichloroethene	µg/L	70		16		16
Dibromochloromethane	µg/L	3.12		2U		2U
Ethylbenzene	µg/L	700		2U		2U
M + P Xylene	µg/L	10,000		2U		2U
Methylene chloride	µg/L	5		5U		5U
Tetrachloroethene	µg/L	5		2U		2U
Toluene	µg/L	1000		2U		2U
trans-1,2-Dichloroethene	µg/L	100		0.71J		0.65J
Trichloroethene	µg/L	5		150		140
Trichlorofluoromethane	µg/L	12,100		2U		2U
Vinyl chloride	µg/L	2		4.3		5.7
Radionuclides						
Technetium-99	pCi/L	3790		-3U		3.06U
Field Measurements						
Conductivity	µS/cm			850		847
Depth to Water	ft			25.37		30.69
Dissolved Oxygen	mg/L			nm		0.31
pH	Std Unit			5.75		5.5
Temperature	deg C			14.7		14.1
Turbidity	NTU			423		431
X749-PZ12G						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200		18		20
1,1,2,2-Tetrachloroethane	µg/L	0.83		1U		1U
1,1,2-Trichloroethane	µg/L	5		2U		2U
1,1-Dichloroethane	µg/L	5860		59		71
1,1-Dichloroethene	µg/L	7		60		56
1,2-Dichlorobenzene	µg/L	600		2U		2U
1,2-Dichloroethane	µg/L	5		0.74J		0.92J
1,2-Dimethylbenzene	µg/L	10,000		2U		2U
1,4-Dichlorobenzene	µg/L	75		2U		2U

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749-PZ12G						
2-Butanone	µg/L	53,800		6U		6U
4-Methyl-2-pentanone	µg/L	6360		5U		5U
Acetone	µg/L	10,200		10U		10U
Benzene	µg/L	5		2.7		3
Bromodichloromethane	µg/L	100		2U		2U
Bromoform	µg/L	100		2U		2U
Bromomethane	µg/L	140		2U		2U
Carbon disulfide	µg/L	6270		2U		2U
Carbon tetrachloride	µg/L	5		2U		2U
Chlorobenzene	µg/L	100		2U		2U
Chloroethane	µg/L	246,000		3		3.6
Chloroform	µg/L	100		0.16J		0.19J
Chloromethane	µg/L	13.4		2U		2U
cis-1,2-Dichloroethene	µg/L	70		12		11
Dibromochloromethane	µg/L	3.12		2U		2U
Ethylbenzene	µg/L	700		2U		2U
M + P Xylene	µg/L	10,000		2U		2U
Methylene chloride	µg/L	5		5U		5U
Tetrachloroethene	µg/L	5		2U		2U
Toluene	µg/L	1000		2U		2U
trans-1,2-Dichloroethene	µg/L	100		0.5J		0.45J
Trichloroethene	µg/L	5		22		20
Trichlorofluoromethane	µg/L	12,100		2U		2U
Vinyl chloride	µg/L	2		3.3		4.2
Radionuclides						
Technetium-99	pCi/L	3790		-6.14U		-0.131U
Field Measurements						
Conductivity	µS/cm			787		801
Depth to Water	ft			29.86		34.81
Dissolved Oxygen	mg/L			0.45		0.22
pH	Std Unit			5.86		5.67
Temperature	deg C			14.8		14.9
Turbidity	NTU			82		1000
X749-PZ13G						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200		93		110
1,1,2,2-Tetrachloroethane	µg/L	0.83		1U		1U
1,1,2-Trichloroethane	µg/L	5		0.87J		0.8J
1,1-Dichloroethane	µg/L	5860		60		64
1,1-Dichloroethene	µg/L	7		190		160

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749-PZ13G						
1,2-Dichlorobenzene	µg/L	600		2U		2U
1,2-Dichloroethane	µg/L	5		4.5		4.5
1,2-Dimethylbenzene	µg/L	10,000		2U		2U
1,4-Dichlorobenzene	µg/L	75		2U		2U
2-Butanone	µg/L	53,800		6U		6U
4-Methyl-2-pentanone	µg/L	6360		5U		5U
Acetone	µg/L	10,200		10U		10U
Benzene	µg/L	5		0.62J		1.1J
Bromodichloromethane	µg/L	100		2U		2U
Bromoform	µg/L	100		2U		2U
Bromomethane	µg/L	140		2U		2U
Carbon disulfide	µg/L	6270		2U		2U
Carbon tetrachloride	µg/L	5		2U		2U
Chlorobenzene	µg/L	100		2U		2U
Chloroethane	µg/L	246,000		2.7		3.5
Chloroform	µg/L	100		2		1.9J
Chloromethane	µg/L	13.4		2U		2U
cis-1,2-Dichloroethene	µg/L	70		41		33
Dibromochloromethane	µg/L	3.12		2U		2U
Ethylbenzene	µg/L	700		2U		2U
M + P Xylene	µg/L	10,000		2U		2U
Methylene chloride	µg/L	5		5U		5U
Tetrachloroethene	µg/L	5		2U		2U
Toluene	µg/L	1000		2U		2U
trans-1,2-Dichloroethene	µg/L	100		0.63J		0.79J
Trichloroethene	µg/L	5		170		150
Trichlorofluoromethane	µg/L	12,100		2U		2U
Vinyl chloride	µg/L	2		2.6		3.5
Radionuclides						
Technetium-99	pCi/L	3790		2.99U		4.82U
Field Measurements						
Conductivity	µS/cm			615		667
Depth to Water	ft			36.92		41.65
Dissolved Oxygen	mg/L			0.49		0.35
pH	Std Unit			6.01		5.96
Temperature	deg C			14.9		14.87
Turbidity	NTU			1000		1000
X749-WPW						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200		190		200

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749-WPW						
1,1,2,2-Tetrachloroethane	µg/L	0.83		1U		4U
1,1,2-Trichloroethane	µg/L	5		2.9		2.6J
1,1-Dichloroethane	µg/L	5860		170		180
1,1-Dichloroethene	µg/L	7		390		300
1,2-Dichlorobenzene	µg/L	600		2U		8U
1,2-Dichloroethane	µg/L	5		52		56
1,2-Dimethylbenzene	µg/L	10,000		2U		8U
1,4-Dichlorobenzene	µg/L	75		2U		8U
2-Butanone	µg/L	53,800		6U		24U
4-Methyl-2-pentanone	µg/L	6360		5U		20U
Acetone	µg/L	10,200		10U		14J
Benzene	µg/L	5		1.7J		2.7J
Bromodichloromethane	µg/L	100		2U		8U
Bromoform	µg/L	100		2U		8U
Bromomethane	µg/L	140		2U		8U
Carbon disulfide	µg/L	6270		2U		8U
Carbon tetrachloride	µg/L	5		2U		8U
Chlorobenzene	µg/L	100		2U		8U
Chloroethane	µg/L	246,000		3.4		2.1J
Chloroform	µg/L	100		24		28
Chloromethane	µg/L	13.4		2U		8U
cis-1,2-Dichloroethene	µg/L	70				69
Dibromochloromethane	µg/L	3.12		2U		8U
Ethylbenzene	µg/L	700		2U		8U
M + P Xylene	µg/L	10,000		2U		8U
Methylene chloride	µg/L	5		0.82BJ		2.7BJ
Tetrachloroethene	µg/L	5		5.9		4.7J
Toluene	µg/L	1000		2U		8U
trans-1,2-Dichloroethene	µg/L	100		0.43J		4U
Trichloroethene	µg/L	5		1000		1100
Trichlorofluoromethane	µg/L	12,100		2U		8U
Vinyl chloride	µg/L	2		30		20
Radionuclides						
Americium-241	pCi/L					0.04422U
Neptunium-237	pCi/L					-0.03893U
Plutonium-238	pCi/L					0.03241U
Plutonium-239/240	pCi/L					-0.0194U
Technetium-99	pCi/L	3790				6610
Uranium	µg/L	1000				0.7833
Uranium-233/234	pCi/L	124,000				0.2499

X-749/X-120/PK Landfill

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749-WPW						
Uranium-235	pCi/L	43				0.01541U
Uranium-236	pCi/L					0U
Uranium-238	pCi/L	6.7				0.2618
Field Measurements						
Conductivity	µS/cm			1061		1212
pH	Std Unit			6.84		6.94
Temperature	deg C			17.85		12.9
Turbidity	NTU			1		115

ANALYTICAL DATA TABLES
QUADRANT I GROUNDWATER INVESTIGATIVE AREA/
X-749A CLASSIFIED MATERIALS DISPOSAL FACILITY

Laboratory Data Qualifiers and Other Abbreviations

B	Inorganics: the reported value was obtained from a reading that was less than practical quantitation limit but greater than or equal to the instrument detection limit. Organics: the analyte was detected in the laboratory blank sample.
E	Inorganics: the reported value is estimated because of the presence of interferences. Organics: the result exceeds the calibration range.
J	Organics: the reported value is an estimated concentration greater than the method detection limit but less than the practical quantitation limit. All others: the reported value is qualified as estimated.
P	Pesticide/Aroclor: there is greater than 25% difference for detected concentrations between the two gas chromatograph columns.
U	Undetected
nm	For field measurements: not measured due to insufficient water remaining in the well after sampling or equipment malfunction (wells X231A-01G, X749A-07G, X749A-12G, and X749A-16G in the fourth quarter of 2007).

Quadrant I Groundwater Investigative Area/X-749A

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X230K-14G						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200			2U	
1,1,2,2-Tetrachloroethane	µg/L	0.83			1U	
1,1,2-Trichloroethane	µg/L	5			2U	
1,1-Dichloroethane	µg/L	5860			2U	
1,1-Dichloroethene	µg/L	7			2U	
1,2-Dichlorobenzene	µg/L	600			2U	
1,2-Dichloroethane	µg/L	5			2U	
1,2-Dimethylbenzene	µg/L	10,000			2U	
1,4-Dichlorobenzene	µg/L	75			2U	
2-Butanone	µg/L	53,800			6U	
4-Methyl-2-pentanone	µg/L	6360			5U	
Acetone	µg/L	10,200			10U	
Benzene	µg/L	5			2U	
Bromodichloromethane	µg/L	100			2U	
Bromoform	µg/L	100			2U	
Bromomethane	µg/L	140			2U	
Carbon disulfide	µg/L	6270			2U	
Carbon tetrachloride	µg/L	5			2U	
Chlorobenzene	µg/L	100			2U	
Chloroethane	µg/L	246,000			2U	
Chloroform	µg/L	100			2U	
Chloromethane	µg/L	13.4			2U	
cis-1,2-Dichloroethene	µg/L	70			0.29J	
Dibromochloromethane	µg/L	3.12			2U	
Ethylbenzene	µg/L	700			2U	
M + P Xylene	µg/L	10,000			2U	
Methylene chloride	µg/L	5			5U	
Tetrachloroethene	µg/L	5			2U	
Toluene	µg/L	1000			2U	
trans-1,2-Dichloroethene	µg/L	100			1U	
Trichloroethene	µg/L	5			5.4	
Trichlorofluoromethane	µg/L	12,100			2U	
Vinyl chloride	µg/L	2			1U	
Field Measurements						
Conductivity	µS/cm				1327	
Depth to Water	ft				14.28	
Dissolved Oxygen	mg/L				1.33	
pH	Std Unit				5.15	

Quadrant I Groundwater Investigative Area/X-749A

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X230K-14G						
Temperature	deg C				14	
Turbidity	NTU				6	
X230K-15G						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200			2U	
1,1,2,2-Tetrachloroethane	µg/L	0.83			1U	
1,1,2-Trichloroethane	µg/L	5			2U	
1,1-Dichloroethane	µg/L	5860			2U	
1,1-Dichloroethene	µg/L	7			2U	
1,2-Dichlorobenzene	µg/L	600			2U	
1,2-Dichloroethane	µg/L	5			2U	
1,2-Dimethylbenzene	µg/L	10,000			2U	
1,4-Dichlorobenzene	µg/L	75			2U	
2-Butanone	µg/L	53,800			6U	
4-Methyl-2-pentanone	µg/L	6360			5U	
Acetone	µg/L	10,200			10U	
Benzene	µg/L	5			2U	
Bromodichloromethane	µg/L	100			2U	
Bromoform	µg/L	100			2U	
Bromomethane	µg/L	140			2U	
Carbon disulfide	µg/L	6270			2U	
Carbon tetrachloride	µg/L	5			2U	
Chlorobenzene	µg/L	100			2U	
Chloroethane	µg/L	246,000			2U	
Chloroform	µg/L	100			2U	
Chloromethane	µg/L	13.4			2U	
cis-1,2-Dichloroethene	µg/L	70			0.18J	
Dibromochloromethane	µg/L	3.12			2U	
Ethylbenzene	µg/L	700			2U	
M + P Xylene	µg/L	10,000			2U	
Methylene chloride	µg/L	5			5U	
Tetrachloroethene	µg/L	5			2U	
Toluene	µg/L	1000			2U	
trans-1,2-Dichloroethene	µg/L	100			1U	
Trichloroethene	µg/L	5			2.6	
Trichlorofluoromethane	µg/L	12,100			2U	
Vinyl chloride	µg/L	2			1U	
Field Measurements						
Conductivity	µS/cm				1457	
Depth to Water	ft				13.71	

Quadrant I Groundwater Investigative Area/X-749A

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X230K-15G						
Dissolved Oxygen	mg/L				0.46	
pH	Std Unit				4.56	
Temperature	deg C				14	
Turbidity	NTU				1	
X231A-01G						
Metals						
Antimony	µg/L	36.5		2U		
Arsenic	µg/L	92		4.9B		
Barium	µg/L	2000		13		
Beryllium	µg/L	6.5		15		
Cadmium	µg/L	6.5		33		
Calcium	µg/L			130000E		
Chromium	µg/L	100		1.1B		
Cobalt	µg/L	13		700		
Copper	µg/L	21		2.1		
Iron	µg/L			100U		
Lead	µg/L	50		1U		
Magnesium	µg/L			130000E		
Manganese	µg/L	14,300		18000		
Mercury	µg/L	2		0.48		
Nickel	µg/L	100		540		
Potassium	µg/L			2500B		
Selenium	µg/L	50		12		
Silver	µg/L	50		5U		
Sodium	µg/L			140000E		240000
Thallium	µg/L	10.5		0.13B		
Tin	µg/L	61,100		10U		
Vanadium	µg/L	713		5U		
Zinc	µg/L	30,500		810		
Volatile Organic Compounds						
1,1,1,2-Tetrachloroethane	µg/L	11		1U		
1,1,1-Trichloroethane	µg/L	200		0.2J		
1,1,2,2-Tetrachloroethane	µg/L	0.83		1U		
1,1,2-Trichloroethane	µg/L	5		1U		
1,1-Dichloroethane	µg/L	5860		30		
1,1-Dichloroethene	µg/L	7		1.8		
1,2,3-Trichloropropane	µg/L	0.0379		1U		
1,2,4-Trichlorobenzene	µg/L	70		1U		
1,2-Dibromoethane	µg/L			1U		
1,2-Dichlorobenzene	µg/L	600		1U		

Quadrant I Groundwater Investigative Area/X-749A

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X231A-01G						
1,2-Dichloroethane	µg/L	5		1U		
1,2-Dichloropropane	µg/L	5		1U		
1,2-Dimethylbenzene	µg/L	10,000		0.21J		
1,3-Dichlorobenzene	µg/L			1U		
1,4-Dichlorobenzene	µg/L	75		1U		
2-Butanone	µg/L	53,800		6U		
2-Hexanone	µg/L			5U		
4-Methyl-2-pentanone	µg/L	6360		5U		
Acetone	µg/L	10,200		4.5BJ		
Acrylonitrile	µg/L	0.431		20U		
Benzene	µg/L	5		1		
Bromochloromethane	µg/L			1U		
Bromodichloromethane	µg/L	100		1U		
Bromoform	µg/L	100		1U		
Bromomethane	µg/L	140		2U		
Carbon disulfide	µg/L	6270		2U		
Carbon tetrachloride	µg/L	5		1U		
Chlorobenzene	µg/L	100		1U		
Chloroethane	µg/L	246,000		5.6		
Chloroform	µg/L	100		0.34J		
Chloromethane	µg/L	13.4		2U		
cis-1,2-Dichloroethene	µg/L	70		2.9		
cis-1,3-Dichloropropene	µg/L			1U		
Dibromochloromethane	µg/L	3.12		1U		
Dibromomethane	µg/L	999		1U		
Dichlorodifluoromethane	µg/L	4560		2U		
Ethylbenzene	µg/L	700		1U		
Hexachlorobutadiene	µg/L	3.7		10U		
Iodomethane	µg/L			1U		
M + P Xylene	µg/L	10,000		2U		
Methylene chloride	µg/L	5		0.34BJ		
Styrene	µg/L	100		1U		
Tetrachloroethene	µg/L	5		1U		
Toluene	µg/L	1000		1U		
trans-1,2-Dichloroethene	µg/L	100		1U		
trans-1,3-Dichloropropene	µg/L			1U		
Trans-1,4-Dichloro-2-butene	µg/L			3U		
Trichloroethene	µg/L	5		24		
Trichlorofluoromethane	µg/L	12,100		2U		
Vinyl acetate	µg/L	6840		3U		

Quadrant I Groundwater Investigative Area/X-749A

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X231A-01G						
Vinyl chloride	µg/L	2		1.1		
Semivolatile Organic Compounds						
2,4,6-Trichlorophenol	µg/L	26		20U		
2,4-Dichlorophenol	µg/L			10U		
2,4-Dimethylphenol	µg/L			10U		
2-Chlorophenol	µg/L	465		10U		
2-Methyl-4,6-dinitrophenol	µg/L			60U		
2-Methylphenol	µg/L	4760		10U		
2-Nitrophenol	µg/L			20U		
3-Methylphenol	µg/L			20U		
4-Chloro-3-methylphenol	µg/L			20U		
4-Methylphenol	µg/L	476		20U		
4-Nitrophenol	µg/L			50U		
Acenaphthene	µg/L			10U		
Acenaphthylene	µg/L			10U		
Anthracene	µg/L			10U		
Benzo(a)pyrene	µg/L			10U		
Bis(2-chloroethyl) ether	µg/L			10U		
Bis(2-chloroisopropyl) ether	µg/L			10U		
Bis(2-ethylhexyl)phthalate	µg/L	6		2.8BJ		
Butyl benzyl phthalate	µg/L	14,900		20U		
Chrysene	µg/L			10U		
Diethyl phthalate	µg/L	71,300		20U		
Dimethyl phthalate	µg/L			20U		
Di-n-octylphthalate	µg/L	7450		20U		
Fluoranthene	µg/L			20U		
Fluorene	µg/L			10		
Hexachlorobenzene	µg/L	1		10U		
Hexachlorocyclopentadiene	µg/L			10U		
Hexachloroethane	µg/L	20		10U		
Naphthalene	µg/L	3210		10U		
Nitrobenzene	µg/L	47.9		20U		
N-Nitrosodiphenylamine	µg/L			10U		
Pentachlorophenol	µg/L	1		60U		
Phenanthrene	µg/L			10U		
Phenol	µg/L	59,300		10U		
Pyrene	µg/L			10U		
Polychlorinated Biphenyls						
PCB-1016	µg/L			1U		
PCB-1221	µg/L			1U		

Quadrant I Groundwater Investigative Area/X-749A

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X231A-01G						
PCB-1232	µg/L			1U		
PCB-1242	µg/L			1U		
PCB-1248	µg/L			1U		
PCB-1254	µg/L			1U		
PCB-1260	µg/L	0.5		1U		
Other Parameters						
Alkalinity	mg/L			5U		5U
Ammonia as Nitrogen	mg/L			0.045B		
Chemical Oxygen Demand (COD)	mg/L			23		
Chloride	mg/L			47		55
Cyanide	mg/L	200,000		0.01U		
Dissolved Solids	mg/L			2300		6000
Nitrate/Nitrite as Nitrogen	mg/L			0.071B		
Sulfate	mg/L			1500		6600
Sulfide	mg/L			4U		
Herbicides and Pesticides						
2,4-D	µg/L	70		4U		
4,4'-DDD	µg/L	0.859		0.05U		
4,4'-DDE	µg/L			0.05U		
4,4'-DDT	µg/L	0.46		0.05U		
alpha-BHC	µg/L			0.05U		
beta-BHC	µg/L			0.05U		
Chlordane	µg/L			0.5U		
delta-BHC	µg/L			0.087P		
Dieldrin	µg/L			0.057		
Endosulfan I	µg/L			0.05U		
Endosulfan II	µg/L			0.05U		
Endrin	µg/L			0.05U		
Heptachlor	µg/L	0.4		0.06P		
Heptachlor epoxide	µg/L	0.2		0.05U		
Lindane	µg/L	0.2		0.066P		
Methoxychlor	µg/L			0.15		
Silvex	µg/L	50		1U		
Toxaphene	µg/L			5U		
Field Measurements						
Conductivity	µS/cm			2374		5377
Depth to Water	ft			17.59		18.96
Dissolved Oxygen	mg/L			1		0.53
pH	Std Unit			3.92		3.93
Temperature	deg C			13.6		14.36

Quadrant I Groundwater Investigative Area/X-749A

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X231A-01G						
Turbidity	NTU			2		1
X231A-04G						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200			0.36J	
1,1,2,2-Tetrachloroethane	µg/L	0.83			1U	
1,1,2-Trichloroethane	µg/L	5			2U	
1,1-Dichloroethane	µg/L	5860			2U	
1,1-Dichloroethene	µg/L	7			1.3J	
1,2-Dichlorobenzene	µg/L	600			2U	
1,2-Dichloroethane	µg/L	5			2U	
1,2-Dimethylbenzene	µg/L	10,000			2U	
1,4-Dichlorobenzene	µg/L	75			2U	
2-Butanone	µg/L	53,800			6U	
4-Methyl-2-pentanone	µg/L	6360			5U	
Acetone	µg/L	10,200			10U	
Benzene	µg/L	5			2U	
Bromodichloromethane	µg/L	100			2U	
Bromoform	µg/L	100			2U	
Bromomethane	µg/L	140			2U	
Carbon disulfide	µg/L	6270			2U	
Carbon tetrachloride	µg/L	5			2U	
Chlorobenzene	µg/L	100			2U	
Chloroethane	µg/L	246,000			2U	
Chloroform	µg/L	100			0.41J	
Chloromethane	µg/L	13.4			2U	
cis-1,2-Dichloroethene	µg/L	70			1J	
Dibromochloromethane	µg/L	3.12			2U	
Ethylbenzene	µg/L	700			2U	
M + P Xylene	µg/L	10,000			2U	
Methylene chloride	µg/L	5			0.41BJ	
Tetrachloroethene	µg/L	5			2U	
Toluene	µg/L	1000			2U	
trans-1,2-Dichloroethene	µg/L	100			1U	
Trichloroethene	µg/L	5			15	
Trichlorofluoromethane	µg/L	12,100			2U	
Vinyl chloride	µg/L	2			1U	
Field Measurements						
Conductivity	µS/cm				2087	
Depth to Water	ft				28.18	
Dissolved Oxygen	mg/L				nm	

Quadrant I Groundwater Investigative Area/X-749A

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X231A-04G						
pH	Std Unit				5.4	
Temperature	deg C				14.6	
Turbidity	NTU				3	
X231B-02G						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200			4U	
1,1,2,2-Tetrachloroethane	µg/L	0.83			2U	
1,1,2-Trichloroethane	µg/L	5			4U	
1,1-Dichloroethane	µg/L	5860			4U	
1,1-Dichloroethene	µg/L	7			0.4J	
1,2-Dichlorobenzene	µg/L	600			4U	
1,2-Dichloroethane	µg/L	5			4U	
1,2-Dimethylbenzene	µg/L	10,000			4U	
1,4-Dichlorobenzene	µg/L	75			4U	
2-Butanone	µg/L	53,800			12U	
4-Methyl-2-pentanone	µg/L	6360			10U	
Acetone	µg/L	10,200			20U	
Benzene	µg/L	5			4U	
Bromodichloromethane	µg/L	100			4U	
Bromoform	µg/L	100			4U	
Bromomethane	µg/L	140			4U	
Carbon disulfide	µg/L	6270			4U	
Carbon tetrachloride	µg/L	5			4U	
Chlorobenzene	µg/L	100			4U	
Chloroethane	µg/L	246,000			4U	
Chloroform	µg/L	100			16	
Chloromethane	µg/L	13.4			4U	
cis-1,2-Dichloroethene	µg/L	70			26	
Dibromochloromethane	µg/L	3.12			4U	
Ethylbenzene	µg/L	700			4U	
M + P Xylene	µg/L	10,000			4U	
Methylene chloride	µg/L	5			1.2BJ	
Tetrachloroethene	µg/L	5			4U	
Toluene	µg/L	1000			4U	
trans-1,2-Dichloroethene	µg/L	100			2U	
Trichloroethene	µg/L	5			580	
Trichlorofluoromethane	µg/L	12,100			4U	
Vinyl chloride	µg/L	2			2U	
Field Measurements						
Conductivity	µS/cm				692	

Quadrant I Groundwater Investigative Area/X-749A

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X231B-02G						
Depth to Water	ft				21.4	
Dissolved Oxygen	mg/L				1	
pH	Std Unit				5.69	
Temperature	deg C				16.1	
Turbidity	NTU				4	
X231B-03G						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200			3.6	
1,1,2,2-Tetrachloroethane	µg/L	0.83			1U	
1,1,2-Trichloroethane	µg/L	5			2U	
1,1-Dichloroethane	µg/L	5860			2.6	
1,1-Dichloroethene	µg/L	7			22	
1,2-Dichlorobenzene	µg/L	600			2U	
1,2-Dichloroethane	µg/L	5			2U	
1,2-Dimethylbenzene	µg/L	10,000			2U	
1,4-Dichlorobenzene	µg/L	75			2U	
2-Butanone	µg/L	53,800			6U	
4-Methyl-2-pentanone	µg/L	6360			5U	
Acetone	µg/L	10,200			10U	
Benzene	µg/L	5			2U	
Bromodichloromethane	µg/L	100			2U	
Bromoform	µg/L	100			2U	
Bromomethane	µg/L	140			2U	
Carbon disulfide	µg/L	6270			2U	
Carbon tetrachloride	µg/L	5			2U	
Chlorobenzene	µg/L	100			2U	
Chloroethane	µg/L	246,000			2U	
Chloroform	µg/L	100			0.63J	
Chloromethane	µg/L	13.4			2U	
cis-1,2-Dichloroethene	µg/L	70			18	
Dibromochloromethane	µg/L	3.12			2U	
Ethylbenzene	µg/L	700			2U	
M + P Xylene	µg/L	10,000			2U	
Methylene chloride	µg/L	5			0.39BJ	
Tetrachloroethene	µg/L	5			0.46J	
Toluene	µg/L	1000			2U	
trans-1,2-Dichloroethene	µg/L	100			0.3J	
Trichloroethene	µg/L	5			260	
Trichlorofluoromethane	µg/L	12,100			2U	
Vinyl chloride	µg/L	2			1U	

Quadrant I Groundwater Investigative Area/X-749A

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X231B-03G						
Field Measurements						
Conductivity	µS/cm				650	
Depth to Water	ft				22.52	
Dissolved Oxygen	mg/L				nm	
pH	Std Unit				5.14	
Temperature	deg C				15.2	
Turbidity	NTU				14	
X231B-06G						
Metals						
Arsenic	µg/L	92			1.1B	
Barium	µg/L	2000			32	
Cadmium	µg/L	6.5			0.23B	
Chromium	µg/L	100			2.5	
Lead	µg/L	50			0.38B	
Mercury	µg/L	2			0.2U	
Selenium	µg/L	50			1.2B	
Silver	µg/L	50			5U	
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200			49	
1,1,2,2-Tetrachloroethane	µg/L	0.83			1U	
1,1,2-Trichloroethane	µg/L	5			0.57J	
1,1-Dichloroethane	µg/L	5860			34	
1,1-Dichloroethene	µg/L	7			67	
1,2-Dichlorobenzene	µg/L	600			2U	
1,2-Dichloroethane	µg/L	5			0.87J	
1,2-Dimethylbenzene	µg/L	10,000			2U	
1,4-Dichlorobenzene	µg/L	75			2U	
2-Butanone	µg/L	53,800			6U	
4-Methyl-2-pentanone	µg/L	6360			5U	
Acetone	µg/L	10,200			4.7BJ	
Benzene	µg/L	5			2U	
Bromodichloromethane	µg/L	100			2U	
Bromoform	µg/L	100			2U	
Bromomethane	µg/L	140			2U	
Carbon disulfide	µg/L	6270			2U	
Carbon tetrachloride	µg/L	5			2U	
Chlorobenzene	µg/L	100			2U	
Chloroethane	µg/L	246,000			2U	
Chloroform	µg/L	100			0.6J	
Chloromethane	µg/L	13.4			2U	

Quadrant I Groundwater Investigative Area/X-749A

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X231B-06G						
cis-1,2-Dichloroethene	µg/L	70			4.2	
Dibromochloromethane	µg/L	3.12			2U	
Ethylbenzene	µg/L	700			2U	
M + P Xylene	µg/L	10,000			2U	
Methylene chloride	µg/L	5			0.41BJ	
Tetrachloroethene	µg/L	5			0.86J	
Toluene	µg/L	1000			2U	
trans-1,2-Dichloroethene	µg/L	100			1U	
Trichloroethene	µg/L	5			230	
Trichlorofluoromethane	µg/L	12,100			2U	
Vinyl chloride	µg/L	2			0.66J	
Radionuclides						
Americium-241	pCi/L	0.49			0.01997U	
Neptunium-237	pCi/L	0.54			-0.02155U	
Plutonium-238	pCi/L				0.01436U	
Plutonium-239/240	pCi/L	0.51			0.00001434U	
Technetium-99	pCi/L	3790			13.5	
Uranium	µg/L	1000			0.9496	
Uranium-233/234	pCi/L	124,000			1.339	
Uranium-235	pCi/L	43			0.04235	
Uranium-236	pCi/L				0.00762U	
Uranium-238	pCi/L	6.7			0.3152	
Other Parameters						
Alkalinity	mg/L				130	
Chloride	mg/L				49	
Sulfate	mg/L				170	
Field Measurements						
Conductivity	µS/cm				770	
Depth to Water	ft				25.96	
Dissolved Oxygen	mg/L				1	
pH	Std Unit				6.08	
Temperature	deg C				16.5	
Turbidity	NTU				29	
X231B-14G						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200			4.7	
1,1,2,2-Tetrachloroethane	µg/L	0.83			1U	
1,1,2-Trichloroethane	µg/L	5			2U	
1,1-Dichloroethane	µg/L	5860			1.5J	
1,1-Dichloroethene	µg/L	7			38	

Quadrant I Groundwater Investigative Area/X-749A

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X231B-14G						
1,2-Dichlorobenzene	µg/L	600			2U	
1,2-Dichloroethane	µg/L	5			2U	
1,2-Dimethylbenzene	µg/L	10,000			2U	
1,4-Dichlorobenzene	µg/L	75			2U	
2-Butanone	µg/L	53,800			6U	
4-Methyl-2-pentanone	µg/L	6360			5U	
Acetone	µg/L	10,200			10U	
Benzene	µg/L	5			2U	
Bromodichloromethane	µg/L	100			2U	
Bromoform	µg/L	100			2U	
Bromomethane	µg/L	140			2U	
Carbon disulfide	µg/L	6270			2U	
Carbon tetrachloride	µg/L	5			2U	
Chlorobenzene	µg/L	100			2U	
Chloroethane	µg/L	246,000			2U	
Chloroform	µg/L	100			1.5J	
Chloromethane	µg/L	13.4			2U	
cis-1,2-Dichloroethene	µg/L	70			8.5	
Dibromochloromethane	µg/L	3.12			2U	
Ethylbenzene	µg/L	700			2U	
M + P Xylene	µg/L	10,000			2U	
Methylene chloride	µg/L	5			5U	
Tetrachloroethene	µg/L	5			2U	
Toluene	µg/L	1000			2U	
trans-1,2-Dichloroethene	µg/L	100			1U	
Trichloroethene	µg/L	5			180	
Trichlorofluoromethane	µg/L	12,100			2U	
Vinyl chloride	µg/L	2			1U	
Field Measurements						
Conductivity	µS/cm				246	
Depth to Water	ft				23.08	
Dissolved Oxygen	mg/L				0.79	
pH	Std Unit				4.96	
Temperature	deg C				15.6	
Turbidity	NTU				2	
X231B-15G						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200	2U		2U	
1,1,2,2-Tetrachloroethane	µg/L	0.83	1U		1U	
1,1,2-Trichloroethane	µg/L	5	2U		2U	

Quadrant I Groundwater Investigative Area/X-749A

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X231B-15G						
1,1-Dichloroethane	µg/L	5860	2U		2U	
1,1-Dichloroethene	µg/L	7	2U		2U	
1,2-Dichlorobenzene	µg/L	600	2U		2U	
1,2-Dichloroethane	µg/L	5	2U		2U	
1,2-Dimethylbenzene	µg/L	10,000	2U		2U	
1,4-Dichlorobenzene	µg/L	75	2U		2U	
2-Butanone	µg/L	53,800	6U		6U	
4-Methyl-2-pentanone	µg/L	6360	5U		5U	
Acetone	µg/L	10,200	10U		10U	
Benzene	µg/L	5	2U		2U	
Bromodichloromethane	µg/L	100	2U		2U	
Bromoform	µg/L	100	2U		2U	
Bromomethane	µg/L	140	2U		2U	
Carbon disulfide	µg/L	6270	0.98J		2U	
Carbon tetrachloride	µg/L	5	2U		2U	
Chlorobenzene	µg/L	100	2U		2U	
Chloroethane	µg/L	246,000	2U		2U	
Chloroform	µg/L	100	2U		2U	
Chloromethane	µg/L	13.4	2U		2U	
cis-1,2-Dichloroethene	µg/L	70	0.91J		0.92J	
Dibromochloromethane	µg/L	3.12	2U		2U	
Ethylbenzene	µg/L	700	2U		2U	
M + P Xylene	µg/L	10,000	2U		2U	
Methylene chloride	µg/L	5	5U		5U	
Tetrachloroethene	µg/L	5	2U		2U	
Toluene	µg/L	1000	2U		2U	
trans-1,2-Dichloroethene	µg/L	100	0.2J		0.23J	
Trichloroethene	µg/L	5	1.2J		1.4J	
Trichlorofluoromethane	µg/L	12,100	2U		2U	
Vinyl chloride	µg/L	2	1U		1U	
Field Measurements						
Conductivity	µS/cm		975		985	
Depth to Water	ft		18.02		19.16	
Dissolved Oxygen	mg/L		1		0.84	
pH	Std Unit		5.73		5.39	
Temperature	deg C		15.2		16.4	
Turbidity	NTU		4		1	
X231B-16G						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200			1.3J	

Quadrant I Groundwater Investigative Area/X-749A

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X231B-16G						
1,1,2,2-Tetrachloroethane	µg/L	0.83			1U	
1,1,2-Trichloroethane	µg/L	5			2U	
1,1-Dichloroethane	µg/L	5860			0.21J	
1,1-Dichloroethene	µg/L	7			5.3	
1,2-Dichlorobenzene	µg/L	600			2U	
1,2-Dichloroethane	µg/L	5			2U	
1,2-Dimethylbenzene	µg/L	10,000			2U	
1,4-Dichlorobenzene	µg/L	75			2U	
2-Butanone	µg/L	53,800			6U	
4-Methyl-2-pentanone	µg/L	6360			5U	
Acetone	µg/L	10,200			10U	
Benzene	µg/L	5			2U	
Bromodichloromethane	µg/L	100			2U	
Bromoform	µg/L	100			2U	
Bromomethane	µg/L	140			2U	
Carbon disulfide	µg/L	6270			2U	
Carbon tetrachloride	µg/L	5			2U	
Chlorobenzene	µg/L	100			2U	
Chloroethane	µg/L	246,000			2U	
Chloroform	µg/L	100			0.98J	
Chloromethane	µg/L	13.4			2U	
cis-1,2-Dichloroethene	µg/L	70			2U	
Dibromochloromethane	µg/L	3.12			2U	
Ethylbenzene	µg/L	700			2U	
M + P Xylene	µg/L	10,000			2U	
Methylene chloride	µg/L	5			5U	
Tetrachloroethene	µg/L	5			2U	
Toluene	µg/L	1000			2U	
trans-1,2-Dichloroethene	µg/L	100			1U	
Trichloroethene	µg/L	5			0.45J	
Trichlorofluoromethane	µg/L	12,100			2U	
Vinyl chloride	µg/L	2			1U	
Field Measurements						
Conductivity	µS/cm				1965	
Depth to Water	ft				19.42	
Dissolved Oxygen	mg/L				0.65	
pH	Std Unit				5.63	
Temperature	deg C				18.2	
Turbidity	NTU				1	
X231B-20G						

Quadrant I Groundwater Investigative Area/X-749A

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X231B-20G						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200			0.16J	
1,1,2,2-Tetrachloroethane	µg/L	0.83			1U	
1,1,2-Trichloroethane	µg/L	5			2U	
1,1-Dichloroethane	µg/L	5860			2U	
1,1-Dichloroethene	µg/L	7			4.9	
1,2-Dichlorobenzene	µg/L	600			2U	
1,2-Dichloroethane	µg/L	5			2U	
1,2-Dimethylbenzene	µg/L	10,000			2U	
1,4-Dichlorobenzene	µg/L	75			2U	
2-Butanone	µg/L	53,800			6U	
4-Methyl-2-pentanone	µg/L	6360			5U	
Acetone	µg/L	10,200			10U	
Benzene	µg/L	5			2U	
Bromodichloromethane	µg/L	100			2U	
Bromoform	µg/L	100			2U	
Bromomethane	µg/L	140			2U	
Carbon disulfide	µg/L	6270			2U	
Carbon tetrachloride	µg/L	5			2U	
Chlorobenzene	µg/L	100			2U	
Chloroethane	µg/L	246,000			2U	
Chloroform	µg/L	100			0.58J	
Chloromethane	µg/L	13.4			2U	
cis-1,2-Dichloroethene	µg/L	70			0.48J	
Dibromochloromethane	µg/L	3.12			2U	
Ethylbenzene	µg/L	700			2U	
M + P Xylene	µg/L	10,000			2U	
Methylene chloride	µg/L	5			5U	
Tetrachloroethene	µg/L	5			2U	
Toluene	µg/L	1000			2U	
trans-1,2-Dichloroethene	µg/L	100			1U	
Trichloroethene	µg/L	5			61	
Trichlorofluoromethane	µg/L	12,100			2U	
Vinyl chloride	µg/L	2			1U	
Field Measurements						
Conductivity	µS/cm				858	
Depth to Water	ft				18.6	
Dissolved Oxygen	mg/L				1	
pH	Std Unit				5.72	
Temperature	deg C				16.6	

Quadrant I Groundwater Investigative Area/X-749A

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X231B-20G						
Turbidity	NTU				11	
X231B-23G						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200			1.1J	
1,1,2,2-Tetrachloroethane	µg/L	0.83			1U	
1,1,2-Trichloroethane	µg/L	5			2U	
1,1-Dichloroethane	µg/L	5860			0.21J	
1,1-Dichloroethene	µg/L	7			4.3	
1,2-Dichlorobenzene	µg/L	600			2U	
1,2-Dichloroethane	µg/L	5			2U	
1,2-Dimethylbenzene	µg/L	10,000			2U	
1,4-Dichlorobenzene	µg/L	75			2U	
2-Butanone	µg/L	53,800			6U	
4-Methyl-2-pentanone	µg/L	6360			5U	
Acetone	µg/L	10,200			10U	
Benzene	µg/L	5			2U	
Bromodichloromethane	µg/L	100			2U	
Bromoform	µg/L	100			2U	
Bromomethane	µg/L	140			2U	
Carbon disulfide	µg/L	6270			2U	
Carbon tetrachloride	µg/L	5			2U	
Chlorobenzene	µg/L	100			2U	
Chloroethane	µg/L	246,000			2U	
Chloroform	µg/L	100			0.18J	
Chloromethane	µg/L	13.4			2U	
cis-1,2-Dichloroethene	µg/L	70			0.24J	
Dibromochloromethane	µg/L	3.12			2U	
Ethylbenzene	µg/L	700			2U	
M + P Xylene	µg/L	10,000			2U	
Methylene chloride	µg/L	5			5U	
Tetrachloroethene	µg/L	5			2U	
Toluene	µg/L	1000			2U	
trans-1,2-Dichloroethene	µg/L	100			1U	
Trichloroethene	µg/L	5			3.5	
Trichlorofluoromethane	µg/L	12,100			2U	
Vinyl chloride	µg/L	2			1U	
Field Measurements						
Conductivity	µS/cm				1785	
Depth to Water	ft				21.26	
Dissolved Oxygen	mg/L				0.96	

Quadrant I Groundwater Investigative Area/X-749A

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X231B-23G						
pH	Std Unit				5.62	
Temperature	deg C				17	
Turbidity	NTU				56	
X231B-32B						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200			2U	
1,1,2,2-Tetrachloroethane	µg/L	0.83			1U	
1,1,2-Trichloroethane	µg/L	5			2U	
1,1-Dichloroethane	µg/L	5860			2U	
1,1-Dichloroethene	µg/L	7			2U	
1,2-Dichlorobenzene	µg/L	600			2U	
1,2-Dichloroethane	µg/L	5			2U	
1,2-Dimethylbenzene	µg/L	10,000			2U	
1,4-Dichlorobenzene	µg/L	75			2U	
2-Butanone	µg/L	53,800			6U	
4-Methyl-2-pentanone	µg/L	6360			5U	
Acetone	µg/L	10,200			10U	
Benzene	µg/L	10.5			2U	
Bromodichloromethane	µg/L	100			2U	
Bromoform	µg/L	100			2U	
Bromomethane	µg/L	140			2U	
Carbon disulfide	µg/L	6270			2U	
Carbon tetrachloride	µg/L	5			2U	
Chlorobenzene	µg/L	100			2U	
Chloroethane	µg/L	246,000			2U	
Chloroform	µg/L	100			2U	
Chloromethane	µg/L	13.4			2U	
cis-1,2-Dichloroethene	µg/L	70			2U	
Dibromochloromethane	µg/L	3.12			2U	
Ethylbenzene	µg/L	700			2U	
M + P Xylene	µg/L	10,000			2U	
Methylene chloride	µg/L	5			5U	
Tetrachloroethene	µg/L	5			2U	
Toluene	µg/L	1000			2U	
trans-1,2-Dichloroethene	µg/L	100			1U	
Trichloroethene	µg/L	5			0.59J	
Trichlorofluoromethane	µg/L	12,100			2U	
Vinyl chloride	µg/L	2			1U	
Field Measurements						
Conductivity	µS/cm				1843	

Quadrant I Groundwater Investigative Area/X-749A

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X231B-32B						
Depth to Water	ft				21.7	
Dissolved Oxygen	mg/L				nm	
pH	Std Unit				7.15	
Temperature	deg C				17.4	
Turbidity	NTU				1	
X231B-36G						
Metals						
Arsenic	µg/L	92			10	
Barium	µg/L	2000			16	
Cadmium	µg/L	6.5			0.48B	
Chromium	µg/L	100			8.9	
Lead	µg/L	50			2.9	
Mercury	µg/L	2			0.2U	
Selenium	µg/L	50			5U	
Silver	µg/L	50			5U	
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200			2U	
1,1,2,2-Tetrachloroethane	µg/L	0.83			1U	
1,1,2-Trichloroethane	µg/L	5			2U	
1,1-Dichloroethane	µg/L	5860			2U	
1,1-Dichloroethene	µg/L	7			0.19J	
1,2-Dichlorobenzene	µg/L	600			2U	
1,2-Dichloroethane	µg/L	5			2U	
1,2-Dimethylbenzene	µg/L	10,000			2U	
1,4-Dichlorobenzene	µg/L	75			2U	
2-Butanone	µg/L	53,800			6U	
4-Methyl-2-pentanone	µg/L	6360			5U	
Acetone	µg/L	10,200			10U	
Benzene	µg/L	5			2U	
Bromodichloromethane	µg/L	100			2U	
Bromoform	µg/L	100			2U	
Bromomethane	µg/L	140			2U	
Carbon disulfide	µg/L	6270			2U	
Carbon tetrachloride	µg/L	5			2U	
Chlorobenzene	µg/L	100			2U	
Chloroethane	µg/L	246,000			2U	
Chloroform	µg/L	100			0.33J	
Chloromethane	µg/L	13.4			2U	
cis-1,2-Dichloroethene	µg/L	70			1.2J	
Dibromochloromethane	µg/L	3.12			2U	

Quadrant I Groundwater Investigative Area/X-749A

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X231B-36G						
Ethylbenzene	µg/L	700			2U	
M + P Xylene	µg/L	10,000			2U	
Methylene chloride	µg/L	5			0.37J	
Tetrachloroethene	µg/L	5			2U	
Toluene	µg/L	1000			2U	
trans-1,2-Dichloroethene	µg/L	100			1U	
Trichloroethene	µg/L	5			71	
Trichlorofluoromethane	µg/L	12,100			2U	
Vinyl chloride	µg/L	2			1U	
Radionuclides						
Americium-241	pCi/L	0.49			0.00953U	
Neptunium-237	pCi/L	0.54			-0.01599U	
Plutonium-238	pCi/L				0.008014U	
Plutonium-239/240	pCi/L	0.51			0.007998U	
Technetium-99	pCi/L	3790			0.811U	
Uranium	µg/L	1000			1.06	
Uranium-233/234	pCi/L	124,000			0.2595	
Uranium-235	pCi/L	43			-0.008644U	
Uranium-236	pCi/L				0U	
Uranium-238	pCi/L	6.7			0.357	
Other Parameters						
Alkalinity	mg/L				130	
Chloride	mg/L				220	
Sulfate	mg/L				940	
Field Measurements						
Conductivity	µS/cm				2310	
Depth to Water	ft				15.08	
Dissolved Oxygen	mg/L				1	
pH	Std Unit				5.96	
Temperature	deg C				18	
Turbidity	NTU				226	
X231B-37G						
Metals						
Arsenic	µg/L	92			2.8B	
Barium	µg/L	2000			36	
Cadmium	µg/L	6.5			0.18B	
Chromium	µg/L	100			0.6B	
Lead	µg/L	50			0.22B	
Mercury	µg/L	2			0.2U	
Selenium	µg/L	50			1.1B	

Quadrant I Groundwater Investigative Area/X-749A

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X231B-37G						
Silver	µg/L	50			5U	
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200			2U	
1,1,2,2-Tetrachloroethane	µg/L	0.83			1U	
1,1,2-Trichloroethane	µg/L	5			2U	
1,1-Dichloroethane	µg/L	5860			3	
1,1-Dichloroethene	µg/L	7			3.1	
1,2-Dichlorobenzene	µg/L	600			2U	
1,2-Dichloroethane	µg/L	5			2U	
1,2-Dimethylbenzene	µg/L	10,000			2U	
1,4-Dichlorobenzene	µg/L	75			2U	
2-Butanone	µg/L	53,800			6U	
4-Methyl-2-pentanone	µg/L	6360			5U	
Acetone	µg/L	10,200			2BJ	
Benzene	µg/L	5			2U	
Bromodichloromethane	µg/L	100			2U	
Bromoform	µg/L	100			2U	
Bromomethane	µg/L	140			2U	
Carbon disulfide	µg/L	6270			2U	
Carbon tetrachloride	µg/L	5			2U	
Chlorobenzene	µg/L	100			2U	
Chloroethane	µg/L	246,000			0.48J	
Chloroform	µg/L	100			2U	
Chloromethane	µg/L	13.4			2U	
cis-1,2-Dichloroethene	µg/L	70			8.3	
Dibromochloromethane	µg/L	3.12			2U	
Ethylbenzene	µg/L	700			2U	
M + P Xylene	µg/L	10,000			2U	
Methylene chloride	µg/L	5			5U	
Tetrachloroethene	µg/L	5			2U	
Toluene	µg/L	1000			2U	
trans-1,2-Dichloroethene	µg/L	100			1.4	
Trichloroethene	µg/L	5			23	
Trichlorofluoromethane	µg/L	12,100			2U	
Vinyl chloride	µg/L	2			0.65J	
Radionuclides						
Americium-241	pCi/L	0.49			0.00001027U	
Neptunium-237	pCi/L	0.54			0.000008236U	
Plutonium-238	pCi/L				0.00001643U	
Plutonium-239/240	pCi/L	0.51			0.01645U	

Quadrant I Groundwater Investigative Area/X-749A

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X231B-37G						
Technetium-99	pCi/L	3790			1.98U	
Uranium	µg/L	1000			0.5777	
Uranium-233/234	pCi/L	124,000			0.1336	
Uranium-235	pCi/L	43			0.008242U	
Uranium-236	pCi/L				0U	
Uranium-238	pCi/L	6.7			0.1934	
Other Parameters						
Alkalinity	mg/L				21	
Chloride	mg/L				100	
Sulfate	mg/L				230	
Field Measurements						
Conductivity	µS/cm				836	
Depth to Water	ft				17.19	
Dissolved Oxygen	mg/L				1	
pH	Std Unit				5.46	
Temperature	deg C				15.8	
Turbidity	NTU				2	
X326-09G						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200	40U		200U	
1,1,2,2-Tetrachloroethane	µg/L	0.83	20U		100U	
1,1,2-Trichloroethane	µg/L	5	40U		200U	
1,1-Dichloroethane	µg/L	5860	40U		200U	
1,1-Dichloroethene	µg/L	7	61		73J	
1,2-Dichlorobenzene	µg/L	600	40U		200U	
1,2-Dichloroethane	µg/L	5	40U		200U	
1,2-Dimethylbenzene	µg/L	10,000	40U		200U	
1,4-Dichlorobenzene	µg/L	75	40U		200U	
2-Butanone	µg/L	53,800	120U		600U	
4-Methyl-2-pentanone	µg/L	6360	100U		500U	
Acetone	µg/L	10,200	59J		1000U	
Benzene	µg/L	5	40U		200U	
Bromodichloromethane	µg/L	100	12J		200U	
Bromoform	µg/L	100	40U		200U	
Bromomethane	µg/L	140	40U		200U	
Carbon disulfide	µg/L	6270	40U		200U	
Carbon tetrachloride	µg/L	5	40U		200U	
Chlorobenzene	µg/L	100	40U		200U	
Chloroethane	µg/L	246,000	40U		200U	
Chloroform	µg/L	100	390		400	

Quadrant I Groundwater Investigative Area/X-749A

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X326-09G						
Chloromethane	µg/L	13.4	40U		200U	
cis-1,2-Dichloroethene	µg/L	70	47		67J	
Dibromochloromethane	µg/L	3.12	40U		200U	
Ethylbenzene	µg/L	700	40U		200U	
M + P Xylene	µg/L	10,000	40U		200U	
Methylene chloride	µg/L	5	12J		500U	
Tetrachloroethene	µg/L	5	40U		200U	
Toluene	µg/L	1000	40U		200U	
trans-1,2-Dichloroethene	µg/L	100	20U		100U	
Trichloroethene	µg/L	5	8300		14000	
Trichlorofluoromethane	µg/L	12,100	40U		200U	
Vinyl chloride	µg/L	2	20U		100U	
Field Parameters						
Conductivity	µS/cm		914		970	
Depth to Water	ft		17.84		18.43	
Dissolved Oxygen	mg/L		nm		1	
pH	Std Unit		5.68		5.88	
Temperature	deg C		18.1		19.3	
Turbidity	NTU		27		13	
X326-10G						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200	2U		2U	
1,1,2,2-Tetrachloroethane	µg/L	0.83	1U		1U	
1,1,2-Trichloroethane	µg/L	5	2U		2U	
1,1-Dichloroethane	µg/L	5860	2U		2U	
1,1-Dichloroethene	µg/L	7	2U		2U	
1,2-Dichlorobenzene	µg/L	600	2U		2U	
1,2-Dichloroethane	µg/L	5	2U		2U	
1,2-Dimethylbenzene	µg/L	10,000	2U		2U	
1,4-Dichlorobenzene	µg/L	75	2U		2U	
2-Butanone	µg/L	53,800	6U		6U	
4-Methyl-2-pentanone	µg/L	6360	5U		5U	
Acetone	µg/L	10,200	1.9J		10U	
Benzene	µg/L	5	2U		2U	
Bromodichloromethane	µg/L	100	2U		2U	
Bromoform	µg/L	100	2U		2U	
Bromomethane	µg/L	140	2U		2U	
Carbon disulfide	µg/L	6270	2U		2U	
Carbon tetrachloride	µg/L	5	2U		2U	
Chlorobenzene	µg/L	100	2U		2U	

Quadrant I Groundwater Investigative Area/X-749A

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X326-10G						
Chloroethane	µg/L	246,000	2U		2U	
Chloroform	µg/L	100	0.17J		2U	
Chloromethane	µg/L	13.4	2U		2U	
cis-1,2-Dichloroethene	µg/L	70	1.2J		1.3J	
Dibromochloromethane	µg/L	3.12	2U		2U	
Ethylbenzene	µg/L	700	2U		2U	
M + P Xylene	µg/L	10,000	2U		2U	
Methylene chloride	µg/L	5	5U		5U	
Tetrachloroethene	µg/L	5	2U		2U	
Toluene	µg/L	1000	2U		2U	
trans-1,2-Dichloroethene	µg/L	100	1U		1U	
Trichloroethene	µg/L	5	9.2		12	
Trichlorofluoromethane	µg/L	12,100	2U		2U	
Vinyl chloride	µg/L	2	1U		1U	
Field Parameters						
Conductivity	µS/cm		867		966	
Depth to Water	ft		20.35		21.38	
Dissolved Oxygen	mg/L		nm		nm	
pH	Std Unit		7.12		7.12	
Temperature	deg C		17.7		24.5	
Turbidity	NTU		202		81	
X626-07G						
Metals						
Arsenic	µg/L	92			0.25B	
Barium	µg/L	2000			25	
Cadmium	µg/L	6.5			0.36B	
Chromium	µg/L	100			31	
Lead	µg/L	50			1U	
Mercury	µg/L	2			0.2U	
Selenium	µg/L	50			1B	
Silver	µg/L	50			5U	
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200			1.3J	
1,1,2,2-Tetrachloroethane	µg/L	0.83			1U	
1,1,2-Trichloroethane	µg/L	5			2U	
1,1-Dichloroethane	µg/L	5860			0.52J	
1,1-Dichloroethene	µg/L	7			49	
1,2-Dichlorobenzene	µg/L	600			2U	
1,2-Dichloroethane	µg/L	5			2U	
1,2-Dimethylbenzene	µg/L	10,000			2U	

Quadrant I Groundwater Investigative Area/X-749A

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X626-07G						
1,4-Dichlorobenzene	µg/L	75			2U	
2-Butanone	µg/L	53,800			6U	
4-Methyl-2-pentanone	µg/L	6360			5U	
Acetone	µg/L	10,200			10U	
Benzene	µg/L	5			2U	
Bromodichloromethane	µg/L	100			2U	
Bromoform	µg/L	100			2U	
Bromomethane	µg/L	140			2U	
Carbon disulfide	µg/L	6270			2U	
Carbon tetrachloride	µg/L	5			2U	
Chlorobenzene	µg/L	100			2U	
Chloroethane	µg/L	246,000			2U	
Chloroform	µg/L	100			0.96J	
Chloromethane	µg/L	13.4			2U	
cis-1,2-Dichloroethene	µg/L	70			0.51J	
Dibromochloromethane	µg/L	3.12			2U	
Ethylbenzene	µg/L	700			2U	
M + P Xylene	µg/L	10,000			2U	
Methylene chloride	µg/L	5			5U	
Tetrachloroethene	µg/L	5			2U	
Toluene	µg/L	1000			2U	
trans-1,2-Dichloroethene	µg/L	100			1U	
Trichloroethene	µg/L	5			120	
Trichlorofluoromethane	µg/L	12,100			2U	
Vinyl chloride	µg/L	2			1U	
Radionuclides						
Americium-241	pCi/L	0.49			0.04078U	
Neptunium-237	pCi/L	0.54			-0.02823U	
Plutonium-238	pCi/L				0.02818U	
Plutonium-239/240	pCi/L	0.51			-0.007032U	
Technetium-99	pCi/L	3790			-1.51U	
Uranium	µg/L	1000			0.3945	
Uranium-233/234	pCi/L	124,000			0.2048	
Uranium-235	pCi/L	43			0.008155U	
Uranium-236	pCi/L				-0.007308U	
Uranium-238	pCi/L	6.7			0.1319	
Other Parameters						
Alkalinity	mg/L				60	
Chloride	mg/L				52	
Sulfate	mg/L				200	

Quadrant I Groundwater Investigative Area/X-749A

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X626-07G						
Field Measurements						
Conductivity	µS/cm				743	
Depth to Water	ft				19.36	
Dissolved Oxygen	mg/L				2	
pH	Std Unit				6.06	
Temperature	deg C				16.7	
Turbidity	NTU				10	
X749A-01G						
Metals						
Antimony	µg/L	36.5		10U		
Arsenic	µg/L	92		7.9B		
Barium	µg/L	2000		200		
Beryllium	µg/L	6.5		5U		
Cadmium	µg/L	6.5		1.1B		
Calcium	µg/L			52000E		
Chromium	µg/L	100		11		
Cobalt	µg/L	13		17		
Copper	µg/L	21		3.3B		
Iron	µg/L			1500		
Lead	µg/L	50		2.9B		
Magnesium	µg/L			32000E		
Manganese	µg/L	14,300		340		
Mercury	µg/L	2		0.05B		
Nickel	µg/L	100		34		
Potassium	µg/L			2300B		
Selenium	µg/L	50		25U		
Silver	µg/L	50		25U		
Sodium	µg/L			78000E		88000
Thallium	µg/L	10.5		0.45B		
Tin	µg/L	61,100		50U		
Vanadium	µg/L	713		11B		
Zinc	µg/L	30,500		25B		
Volatile Organic Compounds						
1,1,1,2-Tetrachloroethane	µg/L	11		1U		
1,1,1-Trichloroethane	µg/L	200		1U		
1,1,2,2-Tetrachloroethane	µg/L	0.83		1U		
1,1,2-Trichloroethane	µg/L	5		1U		
1,1-Dichloroethane	µg/L	5860		1U		
1,1-Dichloroethene	µg/L	7		1U		
1,2,3-Trichloropropane	µg/L	0.0379		1U		

Quadrant I Groundwater Investigative Area/X-749A

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749A-01G						
1,2,4-Trichlorobenzene	µg/L	70		1U		
1,2-Dibromoethane	µg/L			1U		
1,2-Dichlorobenzene	µg/L	600		1U		
1,2-Dichloroethane	µg/L	5		1U		
1,2-Dichloropropane	µg/L	5		1U		
1,2-Dimethylbenzene	µg/L	10,000		1U		
1,3-Dichlorobenzene	µg/L			1U		
1,4-Dichlorobenzene	µg/L	75		1U		
2-Butanone	µg/L	53,800		6U		
2-Hexanone	µg/L			5U		
4-Methyl-2-pentanone	µg/L	6360		5U		
Acetone	µg/L	10,200		2.9BJ		
Acrylonitrile	µg/L	0.431		20U		
Benzene	µg/L	5		1U		
Bromochloromethane	µg/L			1U		
Bromodichloromethane	µg/L	100		1U		
Bromoform	µg/L	100		1U		
Bromomethane	µg/L	140		2U		
Carbon disulfide	µg/L	6270		2U		
Carbon tetrachloride	µg/L	5		1U		
Chlorobenzene	µg/L	100		1U		
Chloroethane	µg/L	246,000		2U		
Chloroform	µg/L	100		1U		
Chloromethane	µg/L	13.4		2U		
cis-1,2-Dichloroethene	µg/L	70		1U		
cis-1,3-Dichloropropene	µg/L			1U		
Dibromochloromethane	µg/L	3.12		1U		
Dibromomethane	µg/L	999		1U		
Dichlorodifluoromethane	µg/L	4560		2U		
Ethylbenzene	µg/L	700		1U		
Hexachlorobutadiene	µg/L	3.7		10U		
Iodomethane	µg/L			1U		
M + P Xylene	µg/L	10,000		2U		
Methylene chloride	µg/L	5		5U		
Styrene	µg/L	100		1U		
Tetrachloroethene	µg/L	5		1U		
Toluene	µg/L	1000		1U		
trans-1,2-Dichloroethene	µg/L	100		1U		
trans-1,3-Dichloropropene	µg/L			1U		
trans-1,4-Dichloro-2-butene	µg/L			3U		

Quadrant I Groundwater Investigative Area/X-749A

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749A-01G						
Trichloroethene	µg/L	5		0.69J		
Trichlorofluoromethane	µg/L	12,100		2U		
Vinyl acetate	µg/L	6840		3U		
Vinyl chloride	µg/L	2		1U		
Semivolatile Organic Compounds						
2,4,6-Trichlorophenol	µg/L	26		20U		
2,4-Dichlorophenol	µg/L			10U		
2,4-Dimethylphenol	µg/L			10U		
2-Chlorophenol	µg/L	465		10U		
2-Methyl-4,6-dinitrophenol	µg/L			60U		
2-Methylphenol	µg/L	4760		10U		
2-Nitrophenol	µg/L			20U		
3-Methylphenol	µg/L			20U		
4-Chloro-3-methylphenol	µg/L			20U		
4-Methylphenol	µg/L	476		20U		
4-Nitrophenol	µg/L			50U		
Acenaphthene	µg/L			10U		
Acenaphthylene	µg/L			10U		
Anthracene	µg/L			10U		
Benzo(a)pyrene	µg/L			10U		
Bis(2-chloroethyl) ether	µg/L			10U		
Bis(2-chloroisopropyl) ether	µg/L			10U		
Bis(2-ethylhexyl)phthalate	µg/L	6		2.7BJ		
Butyl benzyl phthalate	µg/L	14,900		20U		
Chrysene	µg/L			10U		
Diethyl phthalate	µg/L	71,300		20U		
Dimethyl phthalate	µg/L			20U		
Di-n-butyl phthalate	µg/L	7450		20U		
Di-n-octylphthalate	µg/L	1470		20U		
Fluoranthene	µg/L			20U		
Fluorene	µg/L			10U		
Hexachlorobenzene	µg/L	1		10U		
Hexachlorocyclopentadiene	µg/L			10U		
Hexachloroethane	µg/L	20		10U		
Naphthalene	µg/L	3210		10U		
Nitrobenzene	µg/L	47.9		20U		
N-Nitrosodiphenylamine	µg/L			10U		
Pentachlorophenol	µg/L	1		60U		
Phenanthrene	µg/L			10U		
Phenol	µg/L	59,300		10U		

Quadrant I Groundwater Investigative Area/X-749A

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749A-01G						
Pyrene	µg/L			10U		
Polychlorinated Biphenyls						
PCB-1016	µg/L			1U		
PCB-1221	µg/L			1U		
PCB-1232	µg/L			1U		
PCB-1242	µg/L			1U		
PCB-1248	µg/L			1U		
PCB-1254	µg/L			1U		
PCB-1260	µg/L	0.5		1U		
Other Parameters						
Alkalinity	mg/L			130		46
Ammonia as Nitrogen	mg/L			0.035B		
Chemical Oxygen Demand (COD)	mg/L			9.2B		
Chloride	mg/L			49		75
Cyanide	mg/L	200,000		0.01U		
Dissolved Solids	mg/L			540		670
Nitrate/Nitrite as Nitrogen	mg/L			0.33		
Sulfate	mg/L			220		320
Sulfide	mg/L			4U		
Herbicides and Pesticides						
2,4-D	µg/L	70		4U		
4,4'-DDD	µg/L	0.859		0.05U		
4,4'-DDE	µg/L			0.05U		
4,4'-DDT	µg/L	0.46		0.05U		
alpha-BHC	µg/L			0.05U		
beta-BHC	µg/L			0.05U		
Chlordane	µg/L			0.5U		
delta-BHC	µg/L			0.05U		
Dieldrin	µg/L			0.05U		
Endosulfan I	µg/L			0.05U		
Endosulfan II	µg/L			0.05U		
Endrin	µg/L			0.05U		
Heptachlor	µg/L	0.4		0.05U		
Heptachlor epoxide	µg/L	0.2		0.05U		
Lindane	µg/L	0.2		0.05U		
Methoxychlor	µg/L			0.1U		
Silvex	µg/L	50		1U		
Toxaphene	µg/L			5U		
Field Measurements						
Conductivity	µS/cm			760		969

Quadrant I Groundwater Investigative Area/X-749A

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749A-01G						
Depth to Water	ft			16.26		18.3
Dissolved Oxygen	mg/L			1		1.64
pH	Std Unit			6.02		5.66
Temperature	deg C			15.4		13.6
Turbidity	NTU			80		150
X749A-02G						
Metals						
Antimony	µg/L	36.5		0.11B		
Arsenic	µg/L	92		1.5B		
Barium	µg/L	2000		88		
Beryllium	µg/L	6.5		0.51B		
Cadmium	µg/L	6.5		0.15B		
Calcium	µg/L			7600		
Chromium	µg/L	100		2.7		
Cobalt	µg/L	13		8.6		
Copper	µg/L	21		1.9B		
Iron	µg/L			2800		
Lead	µg/L	50		1.5		
Magnesium	µg/L			8200		
Manganese	µg/L	14,300		76		
Mercury	µg/L	2		0.2U		
Nickel	µg/L	100		18		
Potassium	µg/L			980B		
Selenium	µg/L	50		5U		
Silver	µg/L	50		5U		
Sodium	µg/L			10000		13000
Thallium	µg/L	10.5		0.048B		
Tin	µg/L	61,100		10U		
Vanadium	µg/L	713		4.8B		
Zinc	µg/L	30,500		20		
Volatile Organic Compounds						
1,1,1,2-Tetrachloroethane	µg/L	11		1U		
1,1,1-Trichloroethane	µg/L	200		1U		
1,1,2,2-Tetrachloroethane	µg/L	0.83		1U		
1,1,2-Trichloroethane	µg/L	5		1U		
1,1-Dichloroethane	µg/L	5860		1U		
1,1-Dichloroethene	µg/L	7		1U		
1,2,3-Trichloropropane	µg/L	0.0379		1U		
1,2,4-Trichlorobenzene	µg/L	70		1U		
1,2-Dibromo-3-chloropropane	µg/L	0.2		5U		

Quadrant I Groundwater Investigative Area/X-749A

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749A-02G						
1,2-Dibromoethane	µg/L			1U		
1,2-Dichlorobenzene	µg/L	600		1U		
1,2-Dichloroethane	µg/L	5		1U		
1,2-Dichloropropane	µg/L	5		1U		
1,2-Dimethylbenzene	µg/L	10,000		1U		
1,3-Dichlorobenzene	µg/L			1U		
1,4-Dichlorobenzene	µg/L	75		1U		
2-Butanone	µg/L	53,800		6U		
2-Hexanone	µg/L			5U		
4-Methyl-2-pentanone	µg/L	6360		5U		
Acetone	µg/L	10,200		10U		
Acrylonitrile	µg/L	0.431		20U		
Benzene	µg/L	5		1U		
Bromochloromethane	µg/L			1U		
Bromodichloromethane	µg/L	100		1U		
Bromoform	µg/L	100		1U		
Bromomethane	µg/L	140		2U		
Carbon disulfide	µg/L	6270		2U		
Carbon tetrachloride	µg/L	5		1U		
Chlorobenzene	µg/L	100		1U		
Chloroethane	µg/L	246,000		2U		
Chloroform	µg/L	100		1U		
Chloromethane	µg/L	13.4		2U		
cis-1,2-Dichloroethene	µg/L	70		1U		
cis-1,3-Dichloropropene	µg/L			1U		
Dibromochloromethane	µg/L	3.12		1U		
Dibromomethane	µg/L	999		1U		
Dichlorodifluoromethane	µg/L	4560		2U		
Ethylbenzene	µg/L	700		1U		
Hexachlorobutadiene	µg/L	3.7		10U		
Iodomethane	µg/L			1U		
M + P Xylene	µg/L	10,000		2U		
Methylene chloride	µg/L	5		0.34J		
Styrene	µg/L	100		1U		
Tetrachloroethene	µg/L	5		1U		
Toluene	µg/L	1000		1U		
trans-1,2-Dichloroethene	µg/L	100		1U		
trans-1,3-Dichloropropene	µg/L			1U		
trans-1,4-Dichloro-2-butene	µg/L			3U		
Trichloroethene	µg/L	5		1U		

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749A-02G						
Trichlorofluoromethane	µg/L	12,100		2U		
Vinyl acetate	µg/L	6840		3U		
Vinyl chloride	µg/L	2		1U		
Semivolatile Organic Compounds						
2,4,6-Trichlorophenol	µg/L	26		20U		
2,4-Dichlorophenol	µg/L			10U		
2,4-Dimethylphenol	µg/L			10U		
2-Chlorophenol	µg/L	465		10U		
2-Methyl-4,6-dinitrophenol	µg/L			60U		
2-Methylphenol	µg/L	4760		10U		
2-Nitrophenol	µg/L			20U		
3-Methylphenol	µg/L			20U		
4-Chloro-3-methylphenol	µg/L			20U		
4-Methylphenol	µg/L	476		20U		
4-Nitrophenol	µg/L			50U		
Acenaphthene	µg/L			10U		
Acenaphthylene	µg/L			10U		
Anthracene	µg/L			10U		
Benzo(a)pyrene	µg/L			10U		
Bis(2-chloroethyl) ether	µg/L			10U		
Bis(2-chloroisopropyl) ether	µg/L			10U		
Bis(2-ethylhexyl)phthalate	µg/L	6		10U		
Butyl benzyl phthalate	µg/L	14,900		20U		
Chrysene	µg/L			10U		
Diethyl phthalate	µg/L	71,300		20U		
Dimethyl phthalate	µg/L			20U		
Di-n-butyl phthalate	µg/L	7450		20U		
Di-n-octylphthalate	µg/L	1470		20U		
Fluoranthene	µg/L			20U		
Fluorene	µg/L			10U		
Hexachlorobenzene	µg/L	1		10U		
Hexachlorocyclopentadiene	µg/L			10U		
Hexachloroethane	µg/L	20		10U		
Naphthalene	µg/L	3210		10U		
Nitrobenzene	µg/L	47.9		20U		
N-Nitrosodiphenylamine	µg/L			10U		
Pentachlorophenol	µg/L	1		60U		
Phenanthrene	µg/L			10U		
Phenol	µg/L	59,300		10U		
Pyrene	µg/L			10U		

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749A-02G						
Polychlorinated Biphenyls						
PCB-1016	µg/L			1U		
PCB-1221	µg/L			1U		
PCB-1232	µg/L			1U		
PCB-1242	µg/L			1U		
PCB-1248	µg/L			1U		
PCB-1254	µg/L			1U		
PCB-1260	µg/L	0.5		1U		
Other Parameters						
Alkalinity	mg/L			13		11
Ammonia as Nitrogen	mg/L			0.027B		
Chemical Oxygen Demand (COD)	mg/L			7.3B		
Chloride	mg/L			7.4		13
Cyanide	mg/L	200,000		0.01U		
Dissolved Solids	mg/L			120		150
Nitrate/Nitrite as Nitrogen	mg/L			0.28		
Sulfate	mg/L			58		75
Sulfide	mg/L			4U		
Herbicides and Pesticides						
2,4-D	µg/L	70		4U		
4,4'-DDD	µg/L	0.859		0.05U		
4,4'-DDE	µg/L			0.05U		
4,4'-DDT	µg/L	0.46		0.05U		
alpha-BHC	µg/L			0.05U		
beta-BHC	µg/L			0.05U		
Chlordane	µg/L			0.5U		
delta-BHC	µg/L			0.05U		
Dieldrin	µg/L			0.05U		
Endosulfan I	µg/L			0.05U		
Endosulfan II	µg/L			0.05U		
Endrin	µg/L			0.05U		
Heptachlor	µg/L	0.4		0.05U		
Heptachlor epoxide	µg/L	0.2		0.05U		
Lindane	µg/L	0.2		0.05U		
Methoxychlor	µg/L			0.1U		
Silvex	µg/L	50		1U		
Toxaphene	µg/L			5U		
Field Measurements						
Conductivity	µS/cm			160		220
Depth to Water	ft			10.87		13.56

Quadrant I Groundwater Investigative Area/X-749A

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749A-02G						
Dissolved Oxygen	mg/L			5.77		3.99
pH	Std Unit			4.51		4.85
Temperature	deg C			14.1		13.93
Turbidity	NTU			67		110
X749A-03G						
Metals						
Antimony	µg/L	36.5		0.46B		
Arsenic	µg/L	92		9.5		
Barium	µg/L	2000		83		
Beryllium	µg/L	6.5		0.83B		
Cadmium	µg/L	6.5		0.4B		
Calcium	µg/L			8700		
Chromium	µg/L	100		37		
Cobalt	µg/L	13		9		
Copper	µg/L	21		16		
Iron	µg/L			34000		
Lead	µg/L	50		11		
Magnesium	µg/L			5700		
Manganese	µg/L	14,300		240		
Mercury	µg/L	2		0.2U		
Nickel	µg/L	100		33		
Potassium	µg/L			2700B		
Selenium	µg/L	50		1.4B		
Silver	µg/L	50		5U		
Sodium	µg/L			11000		13000
Thallium	µg/L	10.5		0.45B		
Tin	µg/L	61,100		10U		
Vanadium	µg/L	713		41		
Zinc	µg/L	30,500		68		
Volatile Organic Compounds						
1,1,1,2-Tetrachloroethane	µg/L	11		1U		
1,1,1-Trichloroethane	µg/L	200		1U		
1,1,2,2-Tetrachloroethane	µg/L	0.83		1U		
1,1,2-Trichloroethane	µg/L	5		1U		
1,1-Dichloroethane	µg/L	5860		1U		
1,1-Dichloroethene	µg/L	7		1U		
1,2,3-Trichloropropane	µg/L	0.0379		1U		
1,2,4-Trichlorobenzene	µg/L	70		1U		
1,2-Dibromo-3-chloropropane	µg/L	0.2		5U		
1,2-Dibromoethane	µg/L			1U		

Quadrant I Groundwater Investigative Area/X-749A

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749A-03G						
1,2-Dichlorobenzene	µg/L	600		1U		
1,2-Dichloroethane	µg/L	5		1U		
1,2-Dichloropropane	µg/L	5		1U		
1,2-Dimethylbenzene	µg/L	10,000		1U		
1,3-Dichlorobenzene	µg/L			1U		
1,4-Dichlorobenzene	µg/L	75		1U		
2-Butanone	µg/L	53,800		6U		
2-Hexanone	µg/L			5U		
4-Methyl-2-pentanone	µg/L	6360		5U		
Acetone	µg/L	10,200		10U		
Acrylonitrile	µg/L	0.431		20U		
Benzene	µg/L	5		1U		
Bromochloromethane	µg/L			1U		
Bromodichloromethane	µg/L	100		1U		
Bromoform	µg/L	100		1U		
Bromomethane	µg/L	140		2U		
Carbon disulfide	µg/L	6270		2U		
Carbon tetrachloride	µg/L	5		1U		
Chlorobenzene	µg/L	100		1U		
Chloroethane	µg/L	246,000		2U		
Chloroform	µg/L	100		1U		
Chloromethane	µg/L	13.4		2U		
cis-1,2-Dichloroethene	µg/L	70		1U		
cis-1,3-Dichloropropene	µg/L			1U		
Dibromochloromethane	µg/L	3.12		1U		
Dibromomethane	µg/L	999		1U		
Dichlorodifluoromethane	µg/L	4560		2U		
Ethylbenzene	µg/L	700		1U		
Hexachlorobutadiene	µg/L	3.7		10U		
Iodomethane	µg/L			1U		
M + P Xylene	µg/L	10,000		2U		
Methylene chloride	µg/L	5		5U		
Styrene	µg/L	100		1U		
Tetrachloroethene	µg/L	5		1U		
Toluene	µg/L	1000		1U		
trans-1,2-Dichloroethene	µg/L	100		1U		
trans-1,3-Dichloropropene	µg/L			1U		
trans-1,4-Dichloro-2-butene	µg/L			3U		
Trichloroethene	µg/L	5		1U		
Trichlorofluoromethane	µg/L	12,100		2U		

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749A-03G						
Vinyl acetate	µg/L	6840		3U		
Vinyl chloride	µg/L	2		1U		
Semivolatile Organic Compounds						
2,4,6-Trichlorophenol	µg/L	26		20U		
2,4-Dichlorophenol	µg/L			10U		
2,4-Dimethylphenol	µg/L			10U		
2-Chlorophenol	µg/L	465		10U		
2-Methyl-4,6-dinitrophenol	µg/L			60U		
2-Methylphenol	µg/L	4760		10U		
2-Nitrophenol	µg/L			20U		
3-Methylphenol	µg/L			20U		
4-Chloro-3-methylphenol	µg/L			20U		
4-Methylphenol	µg/L	476		20U		
4-Nitrophenol	µg/L			50U		
Acenaphthene	µg/L			10U		
Acenaphthylene	µg/L			10U		
Anthracene	µg/L			10U		
Benzo(a)pyrene	µg/L			10U		
Bis(2-chloroethyl) ether	µg/L			10U		
Bis(2-chloroisopropyl) ether	µg/L			10U		
Bis(2-ethylhexyl)phthalate	µg/L	6		10U		
Butyl benzyl phthalate	µg/L	14,900		20U		
Chrysene	µg/L			10U		
Diethyl phthalate	µg/L	71,300		20U		
Dimethyl phthalate	µg/L			20U		
Di-n-butyl phthalate	µg/L	7450		20U		
Di-n-octylphthalate	µg/L	1470		20U		
Fluoranthene	µg/L			20U		
Fluorene	µg/L			10U		
Hexachlorobenzene	µg/L	1		10U		
Hexachlorocyclopentadiene	µg/L			10U		
Hexachloroethane	µg/L	20		10U		
Naphthalene	µg/L	3210		10U		
Nitrobenzene	µg/L	47.9		20U		
N-Nitrosodiphenylamine	µg/L			10U		
Pentachlorophenol	µg/L	1		60U		
Phenanthrene	µg/L			10U		
Phenol	µg/L	59,300		10U		
Pyrene	µg/L			10U		
Polychlorinated Biphenyls						

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749A-03G						
PCB-1016	µg/L			1U		
PCB-1221	µg/L			1U		
PCB-1232	µg/L			1U		
PCB-1242	µg/L			1U		
PCB-1248	µg/L			1U		
PCB-1254	µg/L			1U		
PCB-1260	µg/L	0.5		1U		
Other Parameters						
Alkalinity	mg/L			16		24
Ammonia as Nitrogen	mg/L			0.073B		
Chemical Oxygen Demand (COD)	mg/L			4.7B		
Chloride	mg/L			6.1		24
Cyanide	mg/L	200,000		0.01U		
Dissolved Solids	mg/L			240		140
Nitrate/Nitrite as Nitrogen	mg/L			0.62		
Sulfate	mg/L			25		25
Sulfide	mg/L			4U		
Herbicides and Pesticides						
2,4-D	µg/L	70		4U		
4,4'-DDD	µg/L	0.859		0.063U		
4,4'-DDE	µg/L			0.063U		
4,4'-DDT	µg/L	0.46		0.063U		
alpha-BHC	µg/L			0.063U		
beta-BHC	µg/L			0.063U		
Chlordane	µg/L			0.63U		
delta-BHC	µg/L			0.063U		
Dieldrin	µg/L			0.063U		
Endosulfan I	µg/L			0.063U		
Endosulfan II	µg/L			0.063U		
Endrin	µg/L			0.063U		
Heptachlor	µg/L	0.4		0.063U		
Heptachlor epoxide	µg/L	0.2		0.063U		
Lindane	µg/L	0.2		0.063U		
Methoxychlor	µg/L			0.13U		
Silvex	µg/L	50		1U		
Toxaphene	µg/L			6.3U		
Field Measurements						
Conductivity	µS/cm			124		193
Depth to Water	ft			16.5		19.72
Dissolved Oxygen	mg/L			4		2.75

Quadrant I Groundwater Investigative Area/X-749A

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749A-03G						
pH	Std Unit			5.59		5.41
Temperature	deg C			15.4		13.64
Turbidity	NTU			814		177
X749A-04G						
Metals						
Antimony	µg/L	36.5		0.19B		
Arsenic	µg/L	92		3.4B		
Barium	µg/L	2000		66		
Beryllium	µg/L	6.5		0.15B		
Cadmium	µg/L	6.5		0.25B		
Calcium	µg/L			65000		
Chromium	µg/L	100		4.5		
Cobalt	µg/L	13		2.3		
Copper	µg/L	21		2.2		
Iron	µg/L			5400		
Lead	µg/L	50		2.3		
Magnesium	µg/L			39000		
Manganese	µg/L	14,300		92		
Mercury	µg/L	2		0.2U		
Nickel	µg/L	100		11		
Potassium	µg/L			2100B		
Selenium	µg/L	50		1.4B		
Silver	µg/L	50		5U		
Sodium	µg/L			35000		34000
Thallium	µg/L	10.5		0.069B		
Tin	µg/L	61,100		10U		
Vanadium	µg/L	713		7.8		
Zinc	µg/L	30,500		18		
Volatile Organic Compounds						
1,1,1,2-Tetrachloroethane	µg/L	11		1U		
1,1,1-Trichloroethane	µg/L	200		1U		
1,1,2,2-Tetrachloroethane	µg/L	0.83		1U		
1,1,2-Trichloroethane	µg/L	5		1U		
1,1-Dichloroethane	µg/L	5860		1U		
1,1-Dichloroethene	µg/L	7		1U		
1,2,3-Trichloropropane	µg/L	0.0379		1U		
1,2,4-Trichlorobenzene	µg/L	70		1U		
1,2-Dibromo-3-chloropropane	µg/L	0.2		5U		
1,2-Dibromoethane	µg/L			1U		
1,2-Dichlorobenzene	µg/L	600		1U		

Quadrant I Groundwater Investigative Area/X-749A

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749A-04G						
1,2-Dichloroethane	µg/L	5		1U		
1,2-Dichloropropane	µg/L	5		1U		
1,2-Dimethylbenzene	µg/L	10,000		1U		
1,3-Dichlorobenzene	µg/L			1U		
1,4-Dichlorobenzene	µg/L	75		1U		
2-Butanone	µg/L	53,800		6U		
2-Hexanone	µg/L			5U		
4-Methyl-2-pentanone	µg/L	6360		5U		
Acetone	µg/L	10,200		10U		
Acrylonitrile	µg/L	0.431		20U		
Benzene	µg/L	5		1U		
Bromochloromethane	µg/L			1U		
Bromodichloromethane	µg/L	100		1U		
Bromoform	µg/L	100		1U		
Bromomethane	µg/L	140		2U		
Carbon disulfide	µg/L	6270		2U		
Carbon tetrachloride	µg/L	5		1U		
Chlorobenzene	µg/L	100		1U		
Chloroethane	µg/L	246,000		2U		
Chloroform	µg/L	100		1U		
Chloromethane	µg/L	13.4		2U		
cis-1,2-Dichloroethene	µg/L	70		1U		
cis-1,3-Dichloropropene	µg/L			1U		
Dibromochloromethane	µg/L	3.12		1U		
Dibromomethane	µg/L	999		1U		
Dichlorodifluoromethane	µg/L	4560		2U		
Ethylbenzene	µg/L	700		1U		
Hexachlorobutadiene	µg/L	3.7		10U		
Iodomethane	µg/L			1U		
M + P Xylene	µg/L	10,000		2U		
Methylene chloride	µg/L	5		5U		
Styrene	µg/L	100		1U		
Tetrachloroethene	µg/L	5		1U		
Toluene	µg/L	1000		1U		
trans-1,2-Dichloroethene	µg/L	100		1U		
trans-1,3-Dichloropropene	µg/L			1U		
trans-1,4-Dichloro-2-butene	µg/L			3U		
Trichloroethene	µg/L	5		1U		
Trichlorofluoromethane	µg/L	12,100		2U		
Vinyl acetate	µg/L	6840		3U		

Quadrant I Groundwater Investigative Area/X-749A

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749A-04G						
Vinyl chloride	µg/L	2		1U		
Semivolatile Organic Compounds						
2,4,6-Trichlorophenol	µg/L	26		20U		
2,4-Dichlorophenol	µg/L			10U		
2,4-Dimethylphenol	µg/L			10U		
2-Chlorophenol	µg/L	465		10U		
2-Methyl-4,6-dinitrophenol	µg/L			60U		
2-Methylphenol	µg/L	4760		10U		
2-Nitrophenol	µg/L			20U		
3-Methylphenol	µg/L			20U		
4-Chloro-3-methylphenol	µg/L			20U		
4-Methylphenol	µg/L	476		20U		
4-Nitrophenol	µg/L			50U		
Acenaphthene	µg/L			10U		
Acenaphthylene	µg/L			10U		
Anthracene	µg/L			10U		
Benzo(a)pyrene	µg/L			10U		
Bis(2-chloroethyl) ether	µg/L			10U		
Bis(2-chloroisopropyl) ether	µg/L			10U		
Bis(2-ethylhexyl)phthalate	µg/L	6		10U		
Butyl benzyl phthalate	µg/L	14,900		20U		
Chrysene	µg/L			10U		
Diethyl phthalate	µg/L	71,300		20U		
Dimethyl phthalate	µg/L			20U		
Di-n-butyl phthalate	µg/L	7450		20U		
Di-n-octylphthalate	µg/L	1470		20U		
Fluoranthene	µg/L			20U		
Fluorene	µg/L			10U		
Hexachlorobenzene	µg/L	1		10U		
Hexachlorocyclopentadiene	µg/L			10U		
Hexachloroethane	µg/L	20		10U		
Naphthalene	µg/L	3210		10U		
Nitrobenzene	µg/L	47.9		20U		
N-Nitrosodiphenylamine	µg/L			10U		
Pentachlorophenol	µg/L	1		60U		
Phenanthrene	µg/L			10U		
Phenol	µg/L	59,300		10U		
Pyrene	µg/L			10U		
Polychlorinated Biphenyls						
PCB-1016	µg/L			1U		

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749A-04G						
PCB-1221	µg/L			1U		
PCB-1232	µg/L			1U		
PCB-1242	µg/L			1U		
PCB-1248	µg/L			1U		
PCB-1254	µg/L			1U		
PCB-1260	µg/L	0.5		1U		
Other Parameters						
Alkalinity	mg/L			37		32
Ammonia as Nitrogen	mg/L			0.058B		
Chemical Oxygen Demand (COD)	mg/L			20U		
Chloride	mg/L			36		39
Cyanide	mg/L	200,000		0.01U		
Dissolved Solids	mg/L			540		580
Nitrate/Nitrite as Nitrogen	mg/L			0.18		
Sulfate	mg/L			300		330
Sulfide	mg/L			4U		
Herbicides and Pesticides						
2,4-D	µg/L	70		4U		
4,4'-DDD	µg/L	0.859		0.05U		
4,4'-DDE	µg/L			0.05U		
4,4'-DDT	µg/L	0.46		0.05U		
alpha-BHC	µg/L			0.05U		
beta-BHC	µg/L			0.05U		
Chlordane	µg/L			0.5U		
delta-BHC	µg/L			0.05U		
Dieldrin	µg/L			0.05U		
Endosulfan I	µg/L			0.05U		
Endosulfan II	µg/L			0.05U		
Endrin	µg/L			0.05U		
Heptachlor	µg/L	0.4		0.05U		
Heptachlor epoxide	µg/L	0.2		0.05U		
Lindane	µg/L	0.2		0.05U		
Methoxychlor	µg/L			0.1U		
Silvex	µg/L	50		1U		
Toxaphene	µg/L			5U		
Field Measurements						
Conductivity	µS/cm			738		822
Depth to Water	ft			14.31		17
Dissolved Oxygen	mg/L			2		1.57
pH	Std Unit			5.4		5.47

Quadrant I Groundwater Investigative Area/X-749A

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749A-04G						
Temperature	deg C			15.2		13.8
Turbidity	NTU			71		51
X749A-05G						
Metals						
Antimony	µg/L	36.5		2U		
Arsenic	µg/L	92		1.1B		
Barium	µg/L	2000		24		
Beryllium	µg/L	6.5		1U		
Cadmium	µg/L	6.5		0.11B		
Calcium	µg/L			11000		
Chromium	µg/L	100		35		
Cobalt	µg/L	13		0.87B		
Copper	µg/L	21		1.6B		
Iron	µg/L			2700		
Lead	µg/L	50		0.91B		
Magnesium	µg/L			7100		
Manganese	µg/L	14,300		20		
Mercury	µg/L	2		0.2U		
Nickel	µg/L	100		10		
Potassium	µg/L			1600B		
Selenium	µg/L	50		1.6B		
Silver	µg/L	50		5U		
Sodium	µg/L			16000		15000
Thallium	µg/L	10.5		0.056B		
Tin	µg/L	61,100		10U		
Vanadium	µg/L	713		3.9B		
Zinc	µg/L	30,500		6.9B		
Volatile Organic Compounds						
1,1,1,2-Tetrachloroethane	µg/L	11		1U		
1,1,1-Trichloroethane	µg/L	200		1U		
1,1,2,2-Tetrachloroethane	µg/L	0.83		1U		
1,1,2-Trichloroethane	µg/L	5		1U		
1,1-Dichloroethane	µg/L	5860		1U		
1,1-Dichloroethene	µg/L	7		1U		
1,2,3-Trichloropropane	µg/L	0.0379		1U		
1,2,4-Trichlorobenzene	µg/L	70		1U		
1,2-Dibromo-3-chloropropane	µg/L	0.2		5U		
1,2-Dibromoethane	µg/L			1U		
1,2-Dichlorobenzene	µg/L	600		1U		
1,2-Dichloroethane	µg/L	5		1U		

Quadrant I Groundwater Investigative Area/X-749A

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749A-05G						
1,2-Dichloropropane	µg/L	5		1U		
1,2-Dimethylbenzene	µg/L	10,000		1U		
1,3-Dichlorobenzene	µg/L			1U		
1,4-Dichlorobenzene	µg/L	75		1U		
2-Butanone	µg/L	53,800		6U		
2-Hexanone	µg/L			5U		
4-Methyl-2-pentanone	µg/L	6360		5U		
Acetone	µg/L	10,200		1.9J		
Acrylonitrile	µg/L	0.431		20U		
Benzene	µg/L	5		1U		
Bromochloromethane	µg/L			1U		
Bromodichloromethane	µg/L	100		1U		
Bromoform	µg/L	100		1U		
Bromomethane	µg/L	140		2U		
Carbon disulfide	µg/L	6270		2U		
Carbon tetrachloride	µg/L	5		1U		
Chlorobenzene	µg/L	100		1U		
Chloroethane	µg/L	246,000		2U		
Chloroform	µg/L	100		1U		
Chloromethane	µg/L	13.4		2U		
cis-1,2-Dichloroethene	µg/L	70		1U		
cis-1,3-Dichloropropene	µg/L			1U		
Dibromochloromethane	µg/L	3.12		1U		
Dibromomethane	µg/L	999		1U		
Dichlorodifluoromethane	µg/L	4560		2U		
Ethylbenzene	µg/L	700		1U		
Hexachlorobutadiene	µg/L	3.7		10U		
Iodomethane	µg/L			1U		
M + P Xylene	µg/L	10,000		2U		
Methylene chloride	µg/L	5		0.32J		
Styrene	µg/L	100		1U		
Tetrachloroethene	µg/L	5		1U		
Toluene	µg/L	1000		1U		
trans-1,2-Dichloroethene	µg/L	100		1U		
trans-1,3-Dichloropropene	µg/L			1U		
trans-1,4-Dichloro-2-butene	µg/L			3U		
Trichloroethene	µg/L	5		1U		
Trichlorofluoromethane	µg/L	12,100		2U		
Vinyl acetate	µg/L	6840		3U		
Vinyl chloride	µg/L	2		1U		

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749A-05G						
Semivolatile Organic Compounds						
2,4,6-Trichlorophenol	µg/L	26		20U		
2,4-Dichlorophenol	µg/L			10U		
2,4-Dimethylphenol	µg/L			10U		
2-Chlorophenol	µg/L	465		10U		
2-Methyl-4,6-dinitrophenol	µg/L			60U		
2-Methylphenol	µg/L	4760		10U		
2-Nitrophenol	µg/L			20U		
3-Methylphenol	µg/L			20U		
4-Chloro-3-methylphenol	µg/L			20U		
4-Methylphenol	µg/L	476		20U		
4-Nitrophenol	µg/L			50U		
Acenaphthene	µg/L			10U		
Acenaphthylene	µg/L			10U		
Anthracene	µg/L			10U		
Benzo(a)pyrene	µg/L			10U		
Bis(2-chloroethyl) ether	µg/L			10U		
Bis(2-chloroisopropyl) ether	µg/L			10U		
Bis(2-ethylhexyl)phthalate	µg/L	6		10U		
Butyl benzyl phthalate	µg/L	14,900		20U		
Chrysene	µg/L			10U		
Diethyl phthalate	µg/L	71,300		20U		
Dimethyl phthalate	µg/L			20U		
Di-n-butyl phthalate	µg/L	7450		20U		
Di-n-octylphthalate	µg/L	1470		20U		
Fluoranthene	µg/L			20U		
Fluorene	µg/L			10U		
Hexachlorobenzene	µg/L	1		10U		
Hexachlorocyclopentadiene	µg/L			10U		
Hexachloroethane	µg/L	20		10U		
Naphthalene	µg/L	3210		10U		
Nitrobenzene	µg/L	47.9		20U		
N-Nitrosodiphenylamine	µg/L			10U		
Pentachlorophenol	µg/L	1		60U		
Phenanthrene	µg/L			10U		
Phenol	µg/L	59,300		10U		
Pyrene	µg/L			10U		
Polychlorinated Biphenyls						
PCB-1016	µg/L			1U		
PCB-1221	µg/L			1U		

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749A-05G						
PCB-1232	µg/L			1U		
PCB-1242	µg/L			1U		
PCB-1248	µg/L			1U		
PCB-1254	µg/L			1U		
PCB-1260	µg/L	0.5		1U		
Other Parameters						
Alkalinity	mg/L			26		23
Ammonia as Nitrogen	mg/L			0.1U		
Chemical Oxygen Demand (COD)	mg/L			20U		
Chloride	mg/L			27		23
Cyanide	mg/L	200,000		0.01U		
Dissolved Solids	mg/L			150		140
Nitrate/Nitrite as Nitrogen	mg/L			0.67		
Sulfate	mg/L			28		28
Sulfide	mg/L			4U		
Herbicides and Pesticides						
2,4-D	µg/L	70		4U		
4,4'-DDD	µg/L	0.859		0.05U		
4,4'-DDE	µg/L			0.05U		
4,4'-DDT	µg/L	0.46		0.05U		
alpha-BHC	µg/L			0.05U		
beta-BHC	µg/L			0.05U		
Chlordane	µg/L			0.5U		
delta-BHC	µg/L			0.05U		
Dieldrin	µg/L			0.05U		
Endosulfan I	µg/L			0.05U		
Endosulfan II	µg/L			0.05U		
Endrin	µg/L			0.05U		
Heptachlor	µg/L	0.4		0.05U		
Heptachlor epoxide	µg/L	0.2		0.05U		
Lindane	µg/L	0.2		0.05U		
Methoxychlor	µg/L			0.1U		
Silvex	µg/L	50		1U		
Toxaphene	µg/L			5U		
Field Measurements						
Conductivity	µS/cm			198		190
Depth to Water	ft			15.28		17.5
Dissolved Oxygen	mg/L			2.24		2.15
pH	Std Unit			5.68		5.55
Temperature	deg C			14.6		13.58

Quadrant I Groundwater Investigative Area/X-749A

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749A-05G						
Turbidity	NTU			84		69
X749A-07G						
Metals						
Antimony	µg/L	36.5		0.34B		
Arsenic	µg/L	92		5.3		
Barium	µg/L	2000		150E		
Beryllium	µg/L	6.5		0.2B		
Cadmium	µg/L	6.5		0.3B		
Calcium	µg/L			150000		
Chromium	µg/L	100		190E		
Cobalt	µg/L	13		5.3E		
Copper	µg/L	21		4.7		
Iron	µg/L			8500		
Lead	µg/L	50		2.5		
Magnesium	µg/L			53000		
Manganese	µg/L	14,300		84E		
Mercury	µg/L	2		0.052B		
Nickel	µg/L	100		150E		
Potassium	µg/L			1800B		
Selenium	µg/L	50		5U		
Silver	µg/L	50		5U		
Sodium	µg/L			240000		550000
Thallium	µg/L	10.5		0.21B		
Tin	µg/L	61,100		10U		
Vanadium	µg/L	713		9		
Zinc	µg/L	30,500		81		
Volatile Organic Compounds						
1,1,1,2-Tetrachloroethane	µg/L	11		1U		
1,1,1-Trichloroethane	µg/L	200		1U		
1,1,2,2-Tetrachloroethane	µg/L	0.83		1U		
1,1,2-Trichloroethane	µg/L	5		1U		
1,1-Dichloroethane	µg/L	5860		1U		
1,1-Dichloroethene	µg/L	7		1U		
1,2,3-Trichloropropane	µg/L	0.0379		1U		
1,2,4-Trichlorobenzene	µg/L	70		1U		
1,2-Dibromoethane	µg/L			1U		
1,2-Dichlorobenzene	µg/L	600		1U		
1,2-Dichloroethane	µg/L	5		1U		
1,2-Dichloropropane	µg/L	5		1U		
1,2-Dimethylbenzene	µg/L	10,000		1U		

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749A-07G						
1,3-Dichlorobenzene	µg/L			1U		
1,4-Dichlorobenzene	µg/L	75		1U		
2-Butanone	µg/L	53,800		6U		
2-Hexanone	µg/L			5U		
4-Methyl-2-pentanone	µg/L	6360		5U		
Acetone	µg/L	10,200		5.8BJ		
Acrylonitrile	µg/L	0.431		20U		
Benzene	µg/L	5		1U		
Bromochloromethane	µg/L			1U		
Bromodichloromethane	µg/L	100		1U		
Bromoform	µg/L	100		1U		
Bromomethane	µg/L	140		2U		
Carbon disulfide	µg/L	6270		2U		
Carbon tetrachloride	µg/L	5		1U		
Chlorobenzene	µg/L	100		1U		
Chloroethane	µg/L	246,000		2U		
Chloroform	µg/L	100		1U		
Chloromethane	µg/L	13.4		2U		
cis-1,2-Dichloroethene	µg/L	70		1U		
cis-1,3-Dichloropropene	µg/L			1U		
Dibromochloromethane	µg/L	3.12		1U		
Dibromomethane	µg/L	999		1U		
Dichlorodifluoromethane	µg/L	4560		2U		
Ethylbenzene	µg/L	700		1U		
Hexachlorobutadiene	µg/L	3.7		12U		
Iodomethane	µg/L			1U		
M + P Xylene	µg/L	10,000		2U		
Methylene chloride	µg/L	5		5U		
Styrene	µg/L	100		1U		
Tetrachloroethene	µg/L	5		1U		
Toluene	µg/L	1000		1U		
trans-1,2-Dichloroethene	µg/L	100		1U		
trans-1,3-Dichloropropene	µg/L			1U		
Trans-1,4-Dichloro-2-butene	µg/L			3U		
Trichloroethene	µg/L	5		1U		
Trichlorofluoromethane	µg/L	12,100		2U		
Vinyl acetate	µg/L	6840		3U		
Vinyl chloride	µg/L	2		1U		
Semivolatile Organic Compounds						
2,4,6-Trichlorophenol	µg/L	26		25U		

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749A-07G						
2,4-Dichlorophenol	µg/L			12U		
2,4-Dimethylphenol	µg/L			12U		
2-Chlorophenol	µg/L	465		12U		
2-Methyl-4,6-dinitrophenol	µg/L			74U		
2-Methylphenol	µg/L	4760		12U		
2-Nitrophenol	µg/L			25U		
3-Methylphenol	µg/L			25U		
4-Chloro-3-methylphenol	µg/L			25U		
4-Methylphenol	µg/L	476		25U		
4-Nitrophenol	µg/L			62U		
Acenaphthene	µg/L			12U		
Acenaphthylene	µg/L			12U		
Anthracene	µg/L			12U		
Benzo(a)pyrene	µg/L			12U		
Bis(2-chloroethyl) ether	µg/L			12U		
Bis(2-chloroisopropyl) ether	µg/L			12U		
Bis(2-ethylhexyl)phthalate	µg/L	6		3BJ		
Butyl benzyl phthalate	µg/L	14,900		25U		
Chrysene	µg/L			12U		
Diethyl phthalate	µg/L	71,300		25U		
Dimethyl phthalate	µg/L			25U		
Di-n-butyl phthalate	µg/L	7450		25U		
Di-n-octylphthalate	µg/L	1470		25U		
Fluoranthene	µg/L			25U		
Fluorene	µg/L			12U		
Hexachlorobenzene	µg/L	1		12U		
Hexachlorocyclopentadiene	µg/L			12U		
Hexachloroethane	µg/L	20		12U		
Naphthalene	µg/L	3210		12U		
Nitrobenzene	µg/L	47.9		25U		
N-Nitrosodiphenylamine	µg/L			12U		
Pentachlorophenol	µg/L	1		74U		
Phenanthrene	µg/L			12U		
Phenol	µg/L	59,300		12U		
Pyrene	µg/L			12U		
Polychlorinated Biphenyls						
PCB-1016	µg/L			1U		
PCB-1221	µg/L			1U		
PCB-1232	µg/L			1U		
PCB-1242	µg/L			1U		

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749A-07G						
PCB-1248	µg/L			1U		
PCB-1254	µg/L			1U		
PCB-1260	µg/L	0.5		1U		
Other Parameters						
Alkalinity	mg/L			260		120
Ammonia as Nitrogen	mg/L			0.03B		
Chemical Oxygen Demand (COD)	mg/L			13B		
Chloride	mg/L			540		1400
Cyanide	mg/L	200,000		0.01U		
Dissolved Solids	mg/L			1400		2600
Nitrate/Nitrite as Nitrogen	mg/L			0.05B		
Sulfate	mg/L			74		180
Sulfide	mg/L			4U		
Herbicides and Pesticides						
2,4-D	µg/L	70		4U		
4,4'-DDD	µg/L	0.859		0.05U		
4,4'-DDE	µg/L			0.05U		
4,4'-DDT	µg/L	0.46		0.05U		
alpha-BHC	µg/L			0.05U		
beta-BHC	µg/L			0.05U		
Chlordane	µg/L			0.5U		
delta-BHC	µg/L			0.05U		
Dieldrin	µg/L			0.05U		
Endosulfan I	µg/L			0.05U		
Endosulfan II	µg/L			0.05U		
Endrin	µg/L			0.05U		
Heptachlor	µg/L	0.4		0.05U		
Heptachlor epoxide	µg/L	0.2		0.05U		
Lindane	µg/L	0.2		0.05U		
Methoxychlor	µg/L			0.1U		
Silvex	µg/L	50		1U		
Toxaphene	µg/L			5U		
Field Measurements						
Conductivity	µS/cm			2117		4571
Depth to Water	ft			13.6		16.2
Dissolved Oxygen	mg/L			2		6.01
pH	Std Unit			6.27		7.08
Temperature	deg C			15.8		13.57
Turbidity	NTU			198		463
X749A-11G						

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749A-11G						
Metals						
Antimony	µg/L	36.5		0.24B		
Arsenic	µg/L	92		0.76B		
Barium	µg/L	2000		64		
Beryllium	µg/L	6.5		1U		
Cadmium	µg/L	6.5		0.15B		
Calcium	µg/L			65000		
Chromium	µg/L	100		21		
Cobalt	µg/L	13		2		
Copper	µg/L	21		2.7		
Iron	µg/L			1300		
Lead	µg/L	50		0.66B		
Magnesium	µg/L			30000		
Manganese	µg/L	14,300		74		
Mercury	µg/L	2		0.2U		
Nickel	µg/L	100		10		
Potassium	µg/L			1700B		
Selenium	µg/L	50		5U		
Silver	µg/L	50		5U		
Sodium	µg/L			8000		15000
Thallium	µg/L	10.5		0.074B		
Tin	µg/L	61,100		10U		
Vanadium	µg/L	713		1.1B		
Zinc	µg/L	30,500		37		
Volatile Organic Compounds						
1,1,1,2-Tetrachloroethane	µg/L	11		1U		
1,1,1-Trichloroethane	µg/L	200		1U		
1,1,2,2-Tetrachloroethane	µg/L	0.83		1U		
1,1,2-Trichloroethane	µg/L	5		1U		
1,1-Dichloroethane	µg/L	5860		1U		
1,1-Dichloroethene	µg/L	7		1U		
1,2,3-Trichloropropane	µg/L	0.0379		1U		
1,2-Dibromo-3-chloropropane	µg/L	0.2		5U		
1,2-Dibromoethane	µg/L			1U		
1,2-Dichlorobenzene	µg/L	600		1U		
1,2-Dichloroethane	µg/L	5		1U		
1,2-Dichloropropane	µg/L	5		1U		
1,2-Dimethylbenzene	µg/L	10,000		1U		
1,4-Dichlorobenzene	µg/L	75		1U		
2-Butanone	µg/L	53,800		6U		

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749A-11G						
2-Hexanone	µg/L			5U		
4-Methyl-2-pentanone	µg/L	6360		5U		
Acetone	µg/L	10,200		10U		
Acrylonitrile	µg/L	0.431		20U		
Benzene	µg/L	5		1U		
Bromochloromethane	µg/L			1U		
Bromodichloromethane	µg/L	100		1U		
Bromoform	µg/L	100		1U		
Bromomethane	µg/L	140		2U		
Carbon disulfide	µg/L	6270		2U		
Carbon tetrachloride	µg/L	5		1U		
Chlorobenzene	µg/L	100		1U		
Chloroethane	µg/L	246,000		2U		
Chloroform	µg/L	100		1U		
Chloromethane	µg/L	13.4		2U		
cis-1,2-Dichloroethene	µg/L	70		0.46J		
cis-1,3-Dichloropropene	µg/L			1U		
Dibromochloromethane	µg/L	3.12		1U		
Dibromomethane	µg/L	999		1U		
Ethylbenzene	µg/L	700		1U		
Hexachlorobutadiene	µg/L	3.7		13U		
Iodomethane	µg/L			1U		
M + P Xylene	µg/L	10,000		2U		
Methylene chloride	µg/L	5		0.32J		
Styrene	µg/L	100		1U		
Tetrachloroethene	µg/L	5		1U		
Toluene	µg/L	1000		1U		
trans-1,2-Dichloroethene	µg/L	100		1U		
trans-1,3-Dichloropropene	µg/L			1U		
trans-1,4-Dichloro-2-butene	µg/L			3U		
Trichloroethene	µg/L	5		14		
Trichlorofluoromethane	µg/L	12,100		2U		
Vinyl acetate	µg/L	6840		3U		
Vinyl chloride	µg/L	2		1U		
Semivolatile Organic Compounds						
2,4,6-Trichlorophenol	µg/L	26		27U		
2,4-Dichlorophenol	µg/L			13U		
2,4-Dimethylphenol	µg/L			13U		
2-Chlorophenol	µg/L	465		13U		
2-Methyl-4,6-dinitrophenol	µg/L			80U		

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749A-11G						
2-Methylphenol	µg/L	4760		13U		
2-Nitrophenol	µg/L			27U		
3-Methylphenol	µg/L			27U		
4-Chloro-3-methylphenol	µg/L			27U		
4-Methylphenol	µg/L	476		27U		
4-Nitrophenol	µg/L			66U		
Acenaphthene	µg/L			13U		
Acenaphthylene	µg/L			13U		
Anthracene	µg/L			13U		
Benzo(a)pyrene	µg/L			13U		
Bis(2-chloroethyl) ether	µg/L			13U		
Bis(2-chloroisopropyl) ether	µg/L			13U		
Bis(2-ethylhexyl)phthalate	µg/L	6		13U		
Butyl benzyl phthalate	µg/L	14,900		27U		
Chrysene	µg/L			13U		
Diethyl phthalate	µg/L	71,300		27U		
Dimethyl phthalate	µg/L			27U		
Di-n-butyl phthalate	µg/L	7450		27U		
Di-n-octylphthalate	µg/L	1470		27U		
Fluoranthene	µg/L			27U		
Fluorene	µg/L			13U		
Hexachlorobenzene	µg/L	1		13U		
Hexachlorocyclopentadiene	µg/L			13U		
Hexachloroethane	µg/L	20		13U		
Naphthalene	µg/L	3210		13U		
Nitrobenzene	µg/L	47.9		27U		
N-Nitrosodiphenylamine	µg/L			13U		
Pentachlorophenol	µg/L	1		80U		
Phenanthrene	µg/L			13U		
Phenol	µg/L	59,300		13U		
Pyrene	µg/L			13U		
Polychlorinated Biphenyls						
PCB-1016	µg/L			1U		
PCB-1221	µg/L			1U		
PCB-1232	µg/L			1U		
PCB-1242	µg/L			1U		
PCB-1248	µg/L			1U		
PCB-1254	µg/L			1U		
PCB-1260	µg/L	0.5		1U		
Other Parameters						

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749A-11G						
Alkalinity	mg/L			270		220
Ammonia as Nitrogen	mg/L			0.024B		
Chemical Oxygen Demand (COD)	mg/L			8B		
Chloride	mg/L			5.9		36
Cyanide	mg/L	200,000		0.01U		
Dissolved Solids	mg/L			470		1500
Nitrate/Nitrite as Nitrogen	mg/L			0.081B		
Sulfate	mg/L			130		1200
Sulfide	mg/L			4U		
Herbicides and Pesticides						
2,4-D	µg/L	70		4U		
4,4'-DDD	µg/L	0.859		0.05U		
4,4'-DDE	µg/L			0.05U		
4,4'-DDT	µg/L	0.46		0.05U		
alpha-BHC	µg/L			0.05U		
beta-BHC	µg/L			0.05U		
Chlordane	µg/L			0.5U		
delta-BHC	µg/L			0.05U		
Dieldrin	µg/L			0.05U		
Endosulfan I	µg/L			0.05U		
Endosulfan II	µg/L			0.05U		
Endrin	µg/L			0.05U		
Heptachlor	µg/L	0.4		0.05U		
Heptachlor epoxide	µg/L	0.2		0.05U		
Lindane	µg/L	0.2		0.05U		
Methoxychlor	µg/L			0.1U		
Silvex	µg/L	50		1U		
Toxaphene	µg/L			5U		
Field Measurements						
Conductivity	µS/cm			775		2105
Depth to Water	ft			18.41		20.49
Dissolved Oxygen	mg/L			nm		nm
pH	Std Unit			6.6		6.23
Temperature	deg C			18.5		13.26
Turbidity	NTU			17		31
X749A-12G						
Metals						
Antimony	µg/L	36.5		2U		
Arsenic	µg/L	92		1B		
Barium	µg/L	2000		29		

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749A-12G						
Beryllium	µg/L	6.5		1U		
Cadmium	µg/L	6.5		0.087B		
Calcium	µg/L			50000E		
Chromium	µg/L	100		1.1B		
Cobalt	µg/L	13		0.35B		
Copper	µg/L	21		0.58B		
Iron	µg/L			1100		
Lead	µg/L	50		0.46B		
Magnesium	µg/L			41000E		
Manganese	µg/L	14,300		24		
Mercury	µg/L	2		0.052B		
Nickel	µg/L	100		4.9		
Potassium	µg/L			2500B		
Selenium	µg/L	50		5.4		
Silver	µg/L	50		5U		
Sodium	µg/L			65000E		66000
Thallium	µg/L	10.5		0.1B		
Tin	µg/L	61,100		0.17B		
Vanadium	µg/L	713		4.3B		
Zinc	µg/L	30,500		4B		
Volatile Organic Compounds						
1,1,1,2-Tetrachloroethane	µg/L	11		1U		
1,1,1-Trichloroethane	µg/L	200		1U		
1,1,2,2-Tetrachloroethane	µg/L	0.83		1U		
1,1,2-Trichloroethane	µg/L	5		1U		
1,1-Dichloroethane	µg/L	5860		1U		
1,1-Dichloroethene	µg/L	7		1U		
1,2,3-Trichloropropane	µg/L	0.0379		1U		
1,2,4-Trichlorobenzene	µg/L	70		1U		
1,2-Dibromoethane	µg/L			1U		
1,2-Dichlorobenzene	µg/L	600		1U		
1,2-Dichloroethane	µg/L	5		1U		
1,2-Dichloropropane	µg/L	5		1U		
1,2-Dimethylbenzene	µg/L	10,000		1U		
1,3-Dichlorobenzene	µg/L			1U		
1,4-Dichlorobenzene	µg/L	75		1U		
2-Butanone	µg/L	53,800		6U		
2-Hexanone	µg/L			5U		
4-Methyl-2-pentanone	µg/L	6360		5U		
Acetone	µg/L	10,200		2BJ		

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749A-12G						
Acrylonitrile	µg/L	0.431		20U		
Benzene	µg/L	5		1U		
Bromochloromethane	µg/L			1U		
Bromodichloromethane	µg/L	100		1U		
Bromoform	µg/L	100		1U		
Bromomethane	µg/L	140		2U		
Carbon disulfide	µg/L	6270		2U		
Carbon tetrachloride	µg/L	5		1U		
Chlorobenzene	µg/L	100		1U		
Chloroethane	µg/L	246,000		2U		
Chloroform	µg/L	100		1U		
Chloromethane	µg/L	13.4		2U		
cis-1,2-Dichloroethene	µg/L	70		1.3		
cis-1,3-Dichloropropene	µg/L			1U		
Dibromochloromethane	µg/L	3.12		1U		
Dibromomethane	µg/L	999		1U		
Dichlorodifluoromethane	µg/L	4560		2U		
Ethylbenzene	µg/L	700		1U		
Hexachlorobutadiene	µg/L	3.7		12U		
Iodomethane	µg/L			1U		
M + P Xylene	µg/L	10,000		2U		
Methylene chloride	µg/L	5		5U		
Styrene	µg/L	100		1U		
Tetrachloroethene	µg/L	5		1U		
Toluene	µg/L	1000		1U		
trans-1,2-Dichloroethene	µg/L	100		1U		
trans-1,3-Dichloropropene	µg/L			1U		
trans-1,4-Dichloro-2-butene	µg/L			3U		
Trichloroethene	µg/L	5		0.22J		
Trichlorofluoromethane	µg/L	12,100		2U		
Vinyl acetate	µg/L	6840		3U		
Vinyl chloride	µg/L	2		1U		
Semivolatile Organic Compounds						
2,4,6-Trichlorophenol	µg/L	26		25U		
2,4-Dichlorophenol	µg/L			12U		
2,4-Dimethylphenol	µg/L			12U		
2-Chlorophenol	µg/L	465		12U		
2-Methyl-4,6-dinitrophenol	µg/L			75U		
2-Methylphenol	µg/L	4760		12U		
2-Nitrophenol	µg/L			25U		

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749A-12G						
3-Methylphenol	µg/L			25U		
4-Chloro-3-methylphenol	µg/L			25U		
4-Methylphenol	µg/L	476		25U		
4-Nitrophenol	µg/L			62U		
Acenaphthene	µg/L			12U		
Acenaphthylene	µg/L			12U		
Anthracene	µg/L			12U		
Benzo(a)pyrene	µg/L			12U		
Bis(2-chloroethyl) ether	µg/L			12U		
Bis(2-chloroisopropyl) ether	µg/L			12U		
Bis(2-ethylhexyl)phthalate	µg/L	6		3BJ		
Butyl benzyl phthalate	µg/L	14,900		25U		
Chrysene	µg/L			12U		
Diethyl phthalate	µg/L	71,300		25U		
Dimethyl phthalate	µg/L			25U		
Di-n-butyl phthalate	µg/L	7450		25U		
Di-n-octylphthalate	µg/L	1470		25U		
Fluoranthene	µg/L			25U		
Fluorene	µg/L			12U		
Hexachlorobenzene	µg/L	1		12U		
Hexachlorocyclopentadiene	µg/L			12U		
Hexachloroethane	µg/L	20		12U		
Naphthalene	µg/L	3210		12U		
Nitrobenzene	µg/L	47.9		25U		
N-Nitrosodiphenylamine	µg/L			12U		
Pentachlorophenol	µg/L	1		75U		
Phenanthrene	µg/L			12U		
Phenol	µg/L	59,300		12U		
Pyrene	µg/L			12U		
Polychlorinated Biphenyls						
PCB-1016	µg/L			1U		
PCB-1221	µg/L			1U		
PCB-1232	µg/L			1U		
PCB-1242	µg/L			1U		
PCB-1248	µg/L			1U		
PCB-1254	µg/L			1U		
PCB-1260	µg/L	0.5		1U		
Other Parameters						
Alkalinity	mg/L			68		55
Ammonia as Nitrogen	mg/L			0.044B		

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749A-12G						
Chemical Oxygen Demand (COD)	mg/L			7.7B		
Chloride	mg/L			95		120
Cyanide	mg/L	200,000		0.01U		
Dissolved Solids	mg/L			590		590
Nitrate/Nitrite as Nitrogen	mg/L			0.14		
Sulfate	mg/L			210		230
Sulfide	mg/L			4U		
Herbicides and Pesticides						
2,4-D	µg/L	70		4U		
4,4'-DDD	µg/L	0.859		0.05U		
4,4'-DDE	µg/L			0.05U		
4,4'-DDT	µg/L	0.46		0.05U		
alpha-BHC	µg/L			0.05U		
beta-BHC	µg/L			0.05U		
Chlordane	µg/L			0.5U		
delta-BHC	µg/L			0.05U		
Dieldrin	µg/L			0.05U		
Endosulfan I	µg/L			0.05U		
Endosulfan II	µg/L			0.05U		
Endrin	µg/L			0.05U		
Heptachlor	µg/L	0.4		0.05U		
Heptachlor epoxide	µg/L	0.2		0.05U		
Lindane	µg/L	0.2		0.05U		
Methoxychlor	µg/L			0.1U		
Silvex	µg/L	50		1U		
Toxaphene	µg/L			5U		
Field Measurements						
Conductivity	µS/cm			815		917
Depth to Water	ft			16.98		19.1
Dissolved Oxygen	mg/L			3		0.45
pH	Std Unit			5.75		5.62
Temperature	deg C			14		12.44
Turbidity	NTU			38		64
X749A-13GA						
Metals						
Antimony	µg/L	36.5		0.36B		
Arsenic	µg/L	92		3B		
Barium	µg/L	2000		76		
Beryllium	µg/L	6.5		1U		
Cadmium	µg/L	6.5		0.078B		

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749A-13GA						
Calcium	µg/L			26000		
Chromium	µg/L	100		3.6		
Cobalt	µg/L	13		0.48B		
Copper	µg/L	21		2		
Iron	µg/L			880		
Lead	µg/L	50		0.32B		
Magnesium	µg/L			22000		
Manganese	µg/L	14,300		120		
Mercury	µg/L	2		0.2U		
Nickel	µg/L	100		6.7		
Potassium	µg/L			3800		
Selenium	µg/L	50		5U		
Silver	µg/L	50		5U		
Sodium	µg/L			46000		45000
Thallium	µg/L	10.5		0.09B		
Tin	µg/L	61,100		10U		
Vanadium	µg/L	713		2.3B		
Zinc	µg/L	30,500		6.4B		
Volatile Organic Compounds						
1,1,1,2-Tetrachloroethane	µg/L	11		1U		
1,1,1-Trichloroethane	µg/L	200		1U		
1,1,2,2-Tetrachloroethane	µg/L	0.83		1U		
1,1,2-Trichloroethane	µg/L	5		1U		
1,1-Dichloroethane	µg/L	5860		1U		
1,1-Dichloroethene	µg/L	7		1U		
1,2,3-Trichloropropane	µg/L	0.0379		1U		
1,2-Dibromo-3-chloropropane	µg/L	0.2		5U		
1,2-Dibromoethane	µg/L			1U		
1,2-Dichlorobenzene	µg/L	600		1U		
1,2-Dichloroethane	µg/L	5		1U		
1,2-Dichloropropane	µg/L	5		1U		
1,2-Dimethylbenzene	µg/L	10,000		1U		
1,4-Dichlorobenzene	µg/L	75		1U		
2-Butanone	µg/L	53,800		6U		
2-Hexanone	µg/L			5U		
4-Methyl-2-pentanone	µg/L	6360		5U		
Acetone	µg/L	10,200		2.9J		
Acrylonitrile	µg/L	0.431		20U		
Benzene	µg/L	5		1U		
Bromochloromethane	µg/L			1U		

Quadrant I Groundwater Investigative Area/X-749A

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749A-13GA						
Bromodichloromethane	µg/L	100		1U		
Bromoform	µg/L	100		1U		
Bromomethane	µg/L	140		2U		
Carbon disulfide	µg/L	6270		2U		
Carbon tetrachloride	µg/L	5		1U		
Chlorobenzene	µg/L	100		1U		
Chloroethane	µg/L	246,000		2U		
Chloroform	µg/L	100		1U		
Chloromethane	µg/L	13.4		2U		
cis-1,2-Dichloroethene	µg/L	70		1U		
cis-1,3-Dichloropropene	µg/L			1U		
Dibromochloromethane	µg/L	3.12		1U		
Dibromomethane	µg/L	999		1U		
Ethylbenzene	µg/L	700		1U		
Hexachlorobutadiene	µg/L	3.7		10U		
Iodomethane	µg/L			1U		
M + P Xylene	µg/L	10,000		2U		
Methylene chloride	µg/L	5		0.35J		
Styrene	µg/L	100		1U		
Tetrachloroethene	µg/L	5		1U		
Toluene	µg/L	1000		1U		
trans-1,2-Dichloroethene	µg/L	100		1U		
trans-1,3-Dichloropropene	µg/L			1U		
Trans-1,4-Dichloro-2-butene	µg/L			3U		
Trichloroethene	µg/L	5		1U		
Trichlorofluoromethane	µg/L	12,100		2U		
Vinyl acetate	µg/L	6840		3U		
Vinyl chloride	µg/L	2		1U		
Semivolatile Organic Compounds						
2,4,6-Trichlorophenol	µg/L	26		20U		
2,4-Dichlorophenol	µg/L			10U		
2,4-Dimethylphenol	µg/L			10U		
2-Chlorophenol	µg/L	465		10U		
2-Methyl-4,6-dinitrophenol	µg/L			60U		
2-Methylphenol	µg/L	4760		10U		
2-Nitrophenol	µg/L			20U		
3-Methylphenol	µg/L			20U		
4-Chloro-3-methylphenol	µg/L			20U		
4-Methylphenol	µg/L	476		20U		
4-Nitrophenol	µg/L			50U		

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749A-13GA						
Acenaphthene	µg/L			10U		
Acenaphthylene	µg/L			10U		
Anthracene	µg/L			10U		
Benzo(a)pyrene	µg/L			10U		
Bis(2-chloroethyl) ether	µg/L			10U		
Bis(2-chloroisopropyl) ether	µg/L			10U		
Bis(2-ethylhexyl)phthalate	µg/L	6		2.4BJ		
Butyl benzyl phthalate	µg/L	14,900		20U		
Chrysene	µg/L			10U		
Diethyl phthalate	µg/L	71,300		20U		
Dimethyl phthalate	µg/L			20U		
Di-n-butyl phthalate	µg/L	7450		20U		
Di-n-octylphthalate	µg/L	1470		20U		
Fluoranthene	µg/L			20U		
Fluorene	µg/L			10U		
Hexachlorobenzene	µg/L	1		10U		
Hexachlorocyclopentadiene	µg/L			10U		
Hexachloroethane	µg/L	20		10U		
Naphthalene	µg/L	3210		10U		
Nitrobenzene	µg/L	47.9		20U		
N-Nitrosodiphenylamine	µg/L			10U		
Pentachlorophenol	µg/L	1		60U		
Phenanthrene	µg/L			10U		
Phenol	µg/L	59,300		10U		
Pyrene	µg/L			10U		
Polychlorinated Biphenyls						
PCB-1016	µg/L			1.5U		
PCB-1221	µg/L			1.5U		
PCB-1232	µg/L			1.5U		
PCB-1242	µg/L			1.5U		
PCB-1248	µg/L			1.5U		
PCB-1254	µg/L			1.5U		
PCB-1260	µg/L	0.5		1.5U		
Other Parameters						
Alkalinity	mg/L			200		190
Ammonia as Nitrogen	mg/L			0.059B		
Chemical Oxygen Demand (COD)	mg/L			10B		
Chloride	mg/L			32		35
Cyanide	mg/L	200,000		0.01U		
Dissolved Solids	mg/L			290		270

Quadrant I Groundwater Investigative Area/X-749A

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749A-13GA						
Nitrate/Nitrite as Nitrogen	mg/L			0.044B		
Sulfate	mg/L			20		23
Sulfide	mg/L			4U		
Field Measurements						
Conductivity	µS/cm			nm		833
Depth to Water	ft			18.44		14.98
Dissolved Oxygen	mg/L			nm		nm
pH	Std Unit			nm		6.31
Temperature	deg C			nm		13.07
Turbidity	NTU			nm		9
X749A-14G						
Metals						
Antimony	µg/L	36.5		0.13B		
Arsenic	µg/L	92		2.2B		
Barium	µg/L	2000		64E		
Beryllium	µg/L	6.5		0.1B		
Cadmium	µg/L	6.5		0.19B		
Calcium	µg/L			18000		
Chromium	µg/L	100		2.9E		
Cobalt	µg/L	13		0.97BE		
Copper	µg/L	21		2.4		
Iron	µg/L			2600		
Lead	µg/L	50		0.85B		
Magnesium	µg/L			15000		
Manganese	µg/L	14,300		43E		
Mercury	µg/L	2		0.048B		
Nickel	µg/L	100		4.5E		
Potassium	µg/L			2000B		
Selenium	µg/L	50		4.6B		
Silver	µg/L	50		5U		
Sodium	µg/L			27000		26000
Thallium	µg/L	10.5		0.097B		
Tin	µg/L	61,100		10U		
Vanadium	µg/L	713		6		
Zinc	µg/L	30,500		7.6B		
Volatile Organic Compounds						
1,1,1,2-Tetrachloroethane	µg/L	11		1U		
1,1,1-Trichloroethane	µg/L	200		1U		
1,1,2,2-Tetrachloroethane	µg/L	0.83		1U		
1,1,2-Trichloroethane	µg/L	5		1U		

Quadrant I Groundwater Investigative Area/X-749A

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749A-14G						
1,1-Dichloroethane	µg/L	5860		1U		
1,1-Dichloroethene	µg/L	7		1U		
1,2,3-Trichloropropane	µg/L	0.0379		1U		
1,2,4-Trichlorobenzene	µg/L	70		1U		
1,2-Dibromoethane	µg/L			1U		
1,2-Dichlorobenzene	µg/L	600		1U		
1,2-Dichloroethane	µg/L	5		1U		
1,2-Dichloropropane	µg/L	5		1U		
1,2-Dimethylbenzene	µg/L	10,000		1U		
1,3-Dichlorobenzene	µg/L			1U		
1,4-Dichlorobenzene	µg/L	75		1U		
2-Butanone	µg/L	53,800		6U		
2-Hexanone	µg/L			5U		
4-Methyl-2-pentanone	µg/L	6360		5U		
Acetone	µg/L	10,200		3.4BJ		
Acrylonitrile	µg/L	0.431		20U		
Benzene	µg/L	5		1U		
Bromochloromethane	µg/L			1U		
Bromodichloromethane	µg/L	100		1U		
Bromoform	µg/L	100		1U		
Bromomethane	µg/L	140		2U		
Carbon disulfide	µg/L	6270		2U		
Carbon tetrachloride	µg/L	5		1U		
Chlorobenzene	µg/L	100		1U		
Chloroethane	µg/L	246,000		2U		
Chloroform	µg/L	100		1U		
Chloromethane	µg/L	13.4		2U		
cis-1,2-Dichloroethene	µg/L	70		1U		
cis-1,3-Dichloropropene	µg/L			1U		
Dibromochloromethane	µg/L	3.12		1U		
Dibromomethane	µg/L	999		1U		
Dichlorodifluoromethane	µg/L	4560		2U		
Ethylbenzene	µg/L	700		1U		
Hexachlorobutadiene	µg/L	3.7		12U		
Iodomethane	µg/L			1U		
M + P Xylene	µg/L	10,000		2U		
Methylene chloride	µg/L	5		5U		
Styrene	µg/L	100		1U		
Tetrachloroethene	µg/L	5		1U		
Toluene	µg/L	1000		1U		

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749A-14G						
trans-1,2-Dichloroethene	µg/L	100		1U		
trans-1,3-Dichloropropene	µg/L			1U		
trans-1,4-Dichloro-2-butene	µg/L			3U		
Trichloroethene	µg/L	5		1U		
Trichlorofluoromethane	µg/L	12,100		2U		
Vinyl acetate	µg/L	6840		3U		
Vinyl chloride	µg/L	2		1U		
Semivolatile Organic Compounds						
2,4,6-Trichlorophenol	µg/L	26		24U		
2,4-Dichlorophenol	µg/L			12U		
2,4-Dimethylphenol	µg/L			12U		
2-Chlorophenol	µg/L	465		12U		
2-Methyl-4,6-dinitrophenol	µg/L			73U		
2-Methylphenol	µg/L	4760		12U		
2-Nitrophenol	µg/L			24U		
3-Methylphenol	µg/L			24U		
4-Chloro-3-methylphenol	µg/L			24U		
4-Methylphenol	µg/L	476		24U		
4-Nitrophenol	µg/L			60U		
Acenaphthene	µg/L			12U		
Acenaphthylene	µg/L			12U		
Anthracene	µg/L			12U		
Benzo(a)pyrene	µg/L			12U		
Bis(2-chloroethyl) ether	µg/L			12U		
Bis(2-chloroisopropyl) ether	µg/L			12U		
Bis(2-ethylhexyl)phthalate	µg/L	6		2.9BJ		
Butyl benzyl phthalate	µg/L	14,900		24U		
Chrysene	µg/L			12U		
Diethyl phthalate	µg/L	71,300		24U		
Dimethyl phthalate	µg/L			24U		
Di-n-butyl phthalate	µg/L	7450		24U		
Di-n-octylphthalate	µg/L	1470		24U		
Fluoranthene	µg/L			24U		
Fluorene	µg/L			12U		
Hexachlorobenzene	µg/L	1		12U		
Hexachlorocyclopentadiene	µg/L			12U		
Hexachloroethane	µg/L	20		12U		
Naphthalene	µg/L	3210		12U		
Nitrobenzene	µg/L	47.9		24U		
N-Nitrosodiphenylamine	µg/L			12U		

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749A-14G						
Pentachlorophenol	µg/L	1		73U		
Phenanthrene	µg/L			12U		
Phenol	µg/L	59,300		12U		
Pyrene	µg/L			12U		
Polychlorinated Biphenyls						
PCB-1016	µg/L			1U		
PCB-1221	µg/L			1U		
PCB-1232	µg/L			1U		
PCB-1242	µg/L			1U		
PCB-1248	µg/L			1U		
PCB-1254	µg/L			1U		
PCB-1260	µg/L	0.5		1U		
Other Parameters						
Alkalinity	mg/L			79		74
Ammonia as Nitrogen	mg/L			0.056B		
Chemical Oxygen Demand (COD)	mg/L			6.6B		
Chloride	mg/L			9.8		12
Cyanide	mg/L	200,000		0.01U		
Dissolved Solids	mg/L			240		220
Nitrate/Nitrite as Nitrogen	mg/L			0.92		
Sulfate	mg/L			66		69
Sulfide	mg/L			4U		
Herbicides and Pesticides						
2,4-D	µg/L	70		4U		
4,4'-DDD	µg/L	0.859		0.05U		
4,4'-DDE	µg/L			0.05U		
4,4'-DDT	µg/L	0.46		0.05U		
alpha-BHC	µg/L			0.05U		
beta-BHC	µg/L			0.05U		
Chlordane	µg/L			0.5U		
delta-BHC	µg/L			0.05U		
Dieldrin	µg/L			0.05U		
Endosulfan I	µg/L			0.05U		
Endosulfan II	µg/L			0.05U		
Endrin	µg/L			0.05U		
Heptachlor	µg/L	0.4		0.05U		
Heptachlor epoxide	µg/L	0.2		0.05U		
Lindane	µg/L	0.2		0.05U		
Methoxychlor	µg/L			0.1U		
Silvex	µg/L	50		1U		

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749A-14G						
Toxaphene	µg/L			5U		
Field Measurements						
Conductivity	µS/cm			334		339
Depth to Water	ft			17.32		20.35
Dissolved Oxygen	mg/L			2.2		2.12
pH	Std Unit			5.9		5.94
Temperature	deg C			16		12.35
Turbidity	NTU			43		28
X749A-15G						
Metals						
Antimony	µg/L	36.5		0.07B		
Arsenic	µg/L	92		0.72B		
Barium	µg/L	2000		52		
Beryllium	µg/L	6.5		1U		
Cadmium	µg/L	6.5		0.19B		
Calcium	µg/L			15000		
Chromium	µg/L	100		9.5		
Cobalt	µg/L	13		0.61B		
Copper	µg/L	21		1.1B		
Iron	µg/L			1200		
Lead	µg/L	50		0.37B		
Magnesium	µg/L			11000		
Manganese	µg/L	14,300		80		
Mercury	µg/L	2		0.2U		
Nickel	µg/L	100		4.6		
Potassium	µg/L			1900B		
Selenium	µg/L	50		1B		
Silver	µg/L	50		5U		
Sodium	µg/L			19000		19000
Thallium	µg/L	10.5		0.091B		
Tin	µg/L	61,100		10U		
Vanadium	µg/L	713		2.8B		
Zinc	µg/L	30,500		7.6B		
Volatile Organic Compounds						
1,1,1,2-Tetrachloroethane	µg/L	11		1U		
1,1,1-Trichloroethane	µg/L	200		1U		
1,1,2,2-Tetrachloroethane	µg/L	0.83		1U		
1,1,2-Trichloroethane	µg/L	5		1U		
1,1-Dichloroethane	µg/L	5860		1U		
1,1-Dichloroethene	µg/L	7		1U		

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749A-15G						
1,2,3-Trichloropropane	µg/L	0.0379		1U		
1,2,4-Trichlorobenzene	µg/L	70		1U		
1,2-Dibromo-3-chloropropane	µg/L	0.2		5U		
1,2-Dibromoethane	µg/L			1U		
1,2-Dichlorobenzene	µg/L	600		1U		
1,2-Dichloroethane	µg/L	5		1U		
1,2-Dichloropropane	µg/L	5		1U		
1,2-Dimethylbenzene	µg/L	10,000		1U		
1,3-Dichlorobenzene	µg/L			1U		
1,4-Dichlorobenzene	µg/L	75		1U		
2-Butanone	µg/L	53,800		6U		
2-Hexanone	µg/L			5U		
4-Methyl-2-pentanone	µg/L	6360		5U		
Acetone	µg/L	10,200		1.9J		
Acrylonitrile	µg/L	0.431		20U		
Benzene	µg/L	5		1U		
Bromochloromethane	µg/L			1U		
Bromodichloromethane	µg/L	100		1U		
Bromoform	µg/L	100		1U		
Bromomethane	µg/L	140		2U		
Carbon disulfide	µg/L	6270		2U		
Carbon tetrachloride	µg/L	5		1U		
Chlorobenzene	µg/L	100		1U		
Chloroethane	µg/L	246,000		2U		
Chloroform	µg/L	100		1U		
Chloromethane	µg/L	13.4		2U		
cis-1,2-Dichloroethene	µg/L	70		1U		
cis-1,3-Dichloropropene	µg/L			1U		
Dibromochloromethane	µg/L	3.12		1U		
Dibromomethane	µg/L	999		1U		
Dichlorodifluoromethane	µg/L	4560		2U		
Ethylbenzene	µg/L	700		1U		
Hexachlorobutadiene	µg/L	3.7		10U		
Iodomethane	µg/L			1U		
M + P Xylene	µg/L	10,000		2U		
Methylene chloride	µg/L	5		0.34J		
Styrene	µg/L	100		1U		
Tetrachloroethene	µg/L	5		1U		
Toluene	µg/L	1000		1U		
trans-1,2-Dichloroethene	µg/L	100		1U		

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749A-15G						
trans-1,3-Dichloropropene	µg/L			1U		
trans-1,4-Dichloro-2-butene	µg/L			3U		
Trichloroethene	µg/L	5		1U		
Trichlorofluoromethane	µg/L	12,100		2U		
Vinyl acetate	µg/L	6840		3U		
Vinyl chloride	µg/L	2		1U		
Semivolatile Organic Compounds						
2,4,6-Trichlorophenol	µg/L	26		20U		
2,4-Dichlorophenol	µg/L			10U		
2,4-Dimethylphenol	µg/L			10U		
2-Chlorophenol	µg/L	465		10U		
2-Methyl-4,6-dinitrophenol	µg/L			60U		
2-Methylphenol	µg/L	4760		10U		
2-Nitrophenol	µg/L			20U		
3-Methylphenol	µg/L			20U		
4-Chloro-3-methylphenol	µg/L			20U		
4-Methylphenol	µg/L	476		20U		
4-Nitrophenol	µg/L			50U		
Acenaphthene	µg/L			10U		
Acenaphthylene	µg/L			10U		
Anthracene	µg/L			10U		
Benzo(a)pyrene	µg/L			10U		
Bis(2-chloroethyl) ether	µg/L			10U		
Bis(2-chloroisopropyl) ether	µg/L			10U		
Bis(2-ethylhexyl)phthalate	µg/L	6		10U		
Butyl benzyl phthalate	µg/L	14,900		20U		
Chrysene	µg/L			10U		
Diethyl phthalate	µg/L	71,300		20U		
Dimethyl phthalate	µg/L			20U		
Di-n-butyl phthalate	µg/L	7450		20U		
Di-n-octylphthalate	µg/L	1470		20U		
Fluoranthene	µg/L			20U		
Fluorene	µg/L			10U		
Hexachlorobenzene	µg/L	1		10U		
Hexachlorocyclopentadiene	µg/L			10U		
Hexachloroethane	µg/L	20		10U		
Naphthalene	µg/L	3210		10U		
Nitrobenzene	µg/L	47.9		20U		
N-Nitrosodiphenylamine	µg/L			10U		
Pentachlorophenol	µg/L	1		60U		

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749A-15G						
Phenanthrene	µg/L			10U		
Phenol	µg/L	59,300		10U		
Pyrene	µg/L			10U		
Polychlorinated Biphenyls						
PCB-1016	µg/L			1U		
PCB-1221	µg/L			1U		
PCB-1232	µg/L			1U		
PCB-1242	µg/L			1U		
PCB-1248	µg/L			1U		
PCB-1254	µg/L			1U		
PCB-1260	µg/L	0.5		1U		
Other Parameters						
Alkalinity	mg/L			62		57
Ammonia as Nitrogen	mg/L			0.1U		
Chemical Oxygen Demand (COD)	mg/L			20U		
Chloride	mg/L			7.4		8.3
Cyanide	mg/L	200,000		0.01U		
Dissolved Solids	mg/L			180		170
Nitrate/Nitrite as Nitrogen	mg/L			0.45		
Sulfate	mg/L			45		55
Sulfide	mg/L			4U		
Herbicides and Pesticides						
2,4-D	µg/L	70		4U		
4,4'-DDD	µg/L	0.859		0.05U		
4,4'-DDE	µg/L			0.05U		
4,4'-DDT	µg/L	0.46		0.05U		
alpha-BHC	µg/L			0.05U		
beta-BHC	µg/L			0.05U		
Chlordane	µg/L			0.5U		
delta-BHC	µg/L			0.05U		
Dieldrin	µg/L			0.05U		
Endosulfan I	µg/L			0.05U		
Endosulfan II	µg/L			0.05U		
Endrin	µg/L			0.05U		
Heptachlor	µg/L	0.4		0.05U		
Heptachlor epoxide	µg/L	0.2		0.05U		
Lindane	µg/L	0.2		0.05U		
Methoxychlor	µg/L			0.1U		
Silvex	µg/L	50		1U		
Toxaphene	µg/L			5U		

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749A-15G						
Field Measurements						
Conductivity	µS/cm			233		264
Depth to Water	ft			16.98		20
Dissolved Oxygen	mg/L			1.51		0.54
pH	Std Unit			5.62		5.66
Temperature	deg C			14.6		13.57
Turbidity	NTU			28		14
X749A-16G						
Metals						
Antimony	µg/L	36.5		0.79B		
Arsenic	µg/L	92		8.6B		
Barium	µg/L	2000		130E		
Beryllium	µg/L	6.5		5U		
Cadmium	µg/L	6.5		1.1B		
Calcium	µg/L			9100		
Chromium	µg/L	100		59E		
Cobalt	µg/L	13		2.7BE		
Copper	µg/L	21		9.7B		
Iron	µg/L			1800		
Lead	µg/L	50		5.6		
Magnesium	µg/L			8000		
Manganese	µg/L	14,300		79E		
Mercury	µg/L	2		0.051B		
Nickel	µg/L	100		38E		
Potassium	µg/L			1500B		
Selenium	µg/L	50		8.3B		
Silver	µg/L	50		25U		
Sodium	µg/L			23000		21000
Thallium	µg/L	10.5		0.57B		
Tin	µg/L	61,100		50U		
Vanadium	µg/L	713		34		
Zinc	µg/L	30,500		27B		
Volatile Organic Compounds						
1,1,1,2-Tetrachloroethane	µg/L	11		1U		
1,1,1-Trichloroethane	µg/L	200		1U		
1,1,2,2-Tetrachloroethane	µg/L	0.83		1U		
1,1,2-Trichloroethane	µg/L	5		1U		
1,1-Dichloroethane	µg/L	5860		1U		
1,1-Dichloroethene	µg/L	7		1U		
1,2,3-Trichloropropane	µg/L	0.0379		1U		

Quadrant I Groundwater Investigative Area/X-749A

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749A-16G						
1,2,4-Trichlorobenzene	µg/L	70		1U		
1,2-Dibromoethane	µg/L			1U		
1,2-Dichlorobenzene	µg/L	600		1U		
1,2-Dichloroethane	µg/L	5		1U		
1,2-Dichloropropane	µg/L	5		1U		
1,2-Dimethylbenzene	µg/L	10,000		1U		
1,3-Dichlorobenzene	µg/L			1U		
1,4-Dichlorobenzene	µg/L	75		1U		
2-Butanone	µg/L	53,800		6U		
2-Hexanone	µg/L			5U		
4-Methyl-2-pentanone	µg/L	6360		5U		
Acetone	µg/L	10,200		3.6BJ		
Acrylonitrile	µg/L	0.431		20U		
Benzene	µg/L	5		1U		
Bromochloromethane	µg/L			1U		
Bromodichloromethane	µg/L	100		1U		
Bromoform	µg/L	100		1U		
Bromomethane	µg/L	140		2U		
Carbon disulfide	µg/L	6270		2U		
Carbon tetrachloride	µg/L	5		1U		
Chlorobenzene	µg/L	100		1U		
Chloroethane	µg/L	246,000		2U		
Chloroform	µg/L	100		1U		
Chloromethane	µg/L	13.4		2U		
cis-1,2-Dichloroethene	µg/L	70		1U		
cis-1,3-Dichloropropene	µg/L			1U		
Dibromochloromethane	µg/L	3.12		1U		
Dibromomethane	µg/L	999		1U		
Dichlorodifluoromethane	µg/L	4560		2U		
Ethylbenzene	µg/L	700		1U		
Hexachlorobutadiene	µg/L	3.7		10U		
Iodomethane	µg/L			1U		
M + P Xylene	µg/L	10,000		2U		
Methylene chloride	µg/L	5		5U		
Styrene	µg/L	100		1U		
Tetrachloroethene	µg/L	5		1U		
Toluene	µg/L	1000		1U		
trans-1,2-Dichloroethene	µg/L	100		1U		
trans-1,3-Dichloropropene	µg/L			1U		
trans-1,4-Dichloro-2-butene	µg/L			3U		

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749A-16G						
Trichloroethene	µg/L	5		1U		
Trichlorofluoromethane	µg/L	12,100		2U		
Vinyl acetate	µg/L	6840		3U		
Vinyl chloride	µg/L	2		1U		
Semivolatile Organic Compounds						
2,4,6-Trichlorophenol	µg/L	26		20U		
2,4-Dichlorophenol	µg/L			10U		
2,4-Dimethylphenol	µg/L			10U		
2-Chlorophenol	µg/L	465		10U		
2-Methyl-4,6-dinitrophenol	µg/L			60U		
2-Methylphenol	µg/L	4760		10U		
2-Nitrophenol	µg/L			20U		
3-Methylphenol	µg/L			20U		
4-Chloro-3-methylphenol	µg/L			20U		
4-Methylphenol	µg/L	476		20U		
4-Nitrophenol	µg/L			50U		
Acenaphthene	µg/L			10U		
Acenaphthylene	µg/L			10U		
Anthracene	µg/L			10U		
Benzo(a)pyrene	µg/L			10U		
Bis(2-chloroethyl) ether	µg/L			10U		
Bis(2-chloroisopropyl) ether	µg/L			10U		
Bis(2-ethylhexyl)phthalate	µg/L	6		10U		
Butyl benzyl phthalate	µg/L	14,900		20U		
Chrysene	µg/L			10U		
Diethyl phthalate	µg/L	71,300		20U		
Dimethyl phthalate	µg/L			20U		
Di-n-butyl phthalate	µg/L	7450		20U		
Di-n-octylphthalate	µg/L	1470		20U		
Fluoranthene	µg/L			20U		
Fluorene	µg/L			10U		
Hexachlorobenzene	µg/L	1		10U		
Hexachlorocyclopentadiene	µg/L			10U		
Hexachloroethane	µg/L	20		10U		
Naphthalene	µg/L	3210		10U		
Nitrobenzene	µg/L	47.9		20U		
N-Nitrosodiphenylamine	µg/L			10U		
Pentachlorophenol	µg/L	1		60U		
Phenanthrene	µg/L			10U		
Phenol	µg/L	59,300		10U		

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749A-16G						
Pyrene	µg/L			10U		
Polychlorinated Biphenyls						
PCB-1016	µg/L			1U		
PCB-1221	µg/L			1U		
PCB-1232	µg/L			1U		
PCB-1242	µg/L			1U		
PCB-1248	µg/L			1U		
PCB-1254	µg/L			1U		
PCB-1260	µg/L	0.5		1U		
Other Parameters						
Alkalinity	mg/L			37		32
Ammonia as Nitrogen	mg/L			0.036B		
Chemical Oxygen Demand (COD)	mg/L			20U		
Chloride	mg/L			49		45
Cyanide	mg/L	200,000		0.0047B		
Dissolved Solids	mg/L			160		160
Nitrate/Nitrite as Nitrogen	mg/L			1.1		
Sulfate	mg/L			2.9B		4.1B
Sulfide	mg/L			4U		
Herbicides and Pesticides						
2,4-D	µg/L	70		4U		
4,4'-DDD	µg/L	0.859		0.05U		
4,4'-DDE	µg/L			0.05U		
4,4'-DDT	µg/L	0.46		0.05U		
alpha-BHC	µg/L			0.05U		
beta-BHC	µg/L			0.05U		
Chlordane	µg/L			0.5U		
delta-BHC	µg/L			0.05U		
Dieldrin	µg/L			0.05U		
Endosulfan I	µg/L			0.05U		
Endosulfan II	µg/L			0.05U		
Endrin	µg/L			0.05U		
Heptachlor	µg/L	0.4		0.05U		
Heptachlor epoxide	µg/L	0.2		0.05U		
Lindane	µg/L	0.2		0.05U		
Methoxychlor	µg/L			0.1U		
Silvex	µg/L	50		1U		
Toxaphene	µg/L			5U		
Field Measurements						
Conductivity	µS/cm			237		237

Quadrant I Groundwater Investigative Area/X-749A

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749A-16G						
Depth to Water	ft			14.36		17.3
Dissolved Oxygen	mg/L			3		2.2
pH	Std Unit			5.53		5.63
Temperature	deg C			14.3		13.65
Turbidity	NTU			70		23
X749A-17G						
Metals						
Antimony	µg/L	36.5				2U
Arsenic	µg/L	92				0.47B
Barium	µg/L	2000				53
Beryllium	µg/L	6.5				1U
Cadmium	µg/L	6.5				0.86B
Calcium	µg/L					35000
Chromium	µg/L	100				0.61B
Cobalt	µg/L	13				9.4
Copper	µg/L	21				26
Iron	µg/L					220
Lead	µg/L	50				1U
Magnesium	µg/L					27000
Manganese	µg/L	14,300				420
Nickel	µg/L	100				24
Potassium	µg/L					3200
Selenium	µg/L	50				4B
Silver	µg/L	50				5U
Sodium	µg/L					75000
Thallium	µg/L	10.5				0.11B
Vanadium	µg/L	713				0.83B
Zinc	µg/L	30,500				15
Volatile Organic Compounds						
1,1,1,2-Tetrachloroethane	µg/L	11				1U
1,1,1-Trichloroethane	µg/L	200				1U
1,1,2,2-Tetrachloroethane	µg/L	0.83				1U
1,1,2-Trichloroethane	µg/L	5				1U
1,1-Dichloroethane	µg/L	5860				1U
1,1-Dichloroethene	µg/L	7				1U
1,2,3-Trichloropropane	µg/L	0.0379				1U
1,2-Dibromo-3-chloropropane	µg/L	0.2				5U
1,2-Dibromoethane	µg/L					1U
1,2-Dichlorobenzene	µg/L	600				1U
1,2-Dichloroethane	µg/L	5				1U

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749A-17G						
1,2-Dichloropropane	µg/L	5				1U
1,2-Dimethylbenzene	µg/L	10,000				1U
1,3-Dichlorobenzene	µg/L					1U
1,4-Dichlorobenzene	µg/L	75				1U
2-Butanone	µg/L	53,800				6U
2-Hexanone	µg/L					5U
4-Methyl-2-pentanone	µg/L	6360				5U
Acetone	µg/L	10,200				5.2J
Acrylonitrile	µg/L	0.431				20U
Benzene	µg/L	5				1U
Bromochloromethane	µg/L					1U
Bromodichloromethane	µg/L	100				1U
Bromoform	µg/L	100				1U
Bromomethane	µg/L	140				2U
Carbon disulfide	µg/L	6270				2U
Carbon tetrachloride	µg/L	5				1U
Chlorobenzene	µg/L	100				1U
Chloroethane	µg/L	246,000				2U
Chloroform	µg/L	100				1U
Chloromethane	µg/L	13.4				2U
cis-1,2-Dichloroethene	µg/L	70				1U
cis-1,3-Dichloropropene	µg/L					1U
Dibromochloromethane	µg/L	3.12				1U
Dibromomethane	µg/L	999				1U
Ethylbenzene	µg/L	700				1U
Iodomethane	µg/L					1U
M + P Xylene	µg/L	10,000				2U
Methylene chloride	µg/L	5				1.2BJ
Styrene	µg/L	100				1U
Tetrachloroethene	µg/L	5				1U
Toluene	µg/L	1000				1U
trans-1,2-Dichloroethene	µg/L	100				1U
trans-1,3-Dichloropropene	µg/L					1U
trans-1,4-Dichloro-2-butene	µg/L					3U
Trichloroethene	µg/L	5				1U
Trichlorofluoromethane	µg/L	12,100				2U
Vinyl acetate	µg/L	6840				3U
Vinyl chloride	µg/L	2				1U
Other Parameters						
Alkalinity	mg/L					48

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749A-17G						
Ammonia as Nitrogen	mg/L					0.13
Chemical Oxygen Demand (COD)	mg/L					9.4B
Chloride	mg/L					74
Dissolved Solids	mg/L					520
Nitrate/Nitrite as Nitrogen	mg/L					0.25
Sulfate	mg/L					210
Field Measurements						
Conductivity	µS/cm					784
Depth to Water	ft					14.78
Dissolved Oxygen	mg/L					0.89
pH	Std Unit					5.72
Temperature	deg C					13.59
Turbidity	NTU					15
X749A-18G						
Metals						
Antimony	µg/L	36.5				3.3
Arsenic	µg/L	92				69
Barium	µg/L	2000				120
Beryllium	µg/L	6.5				0.68B
Cadmium	µg/L	6.5				1.1
Calcium	µg/L					59000
Chromium	µg/L	100				29
Cobalt	µg/L	13				25
Copper	µg/L	21				19
Iron	µg/L					69000
Lead	µg/L	50				20
Magnesium	µg/L					33000
Manganese	µg/L	14,300				1100
Nickel	µg/L	100				130
Potassium	µg/L					5800
Selenium	µg/L	50				1.4B
Silver	µg/L	50				5U
Sodium	µg/L					69000
Thallium	µg/L	10.5				1.2
Vanadium	µg/L	713				49
Zinc	µg/L	30,500				150
Volatile Organic Compounds						
1,1,1,2-Tetrachloroethane	µg/L	11				1U
1,1,1-Trichloroethane	µg/L	200				1U
1,1,2,2-Tetrachloroethane	µg/L	0.83				1U

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749A-18G						
1,1,2-Trichloroethane	µg/L	5				1U
1,1-Dichloroethane	µg/L	5860				1U
1,1-Dichloroethene	µg/L	7				1U
1,2,3-Trichloropropane	µg/L	0.0379				1U
1,2-Dibromo-3-chloropropane	µg/L	0.2				5U
1,2-Dibromoethane	µg/L					1U
1,2-Dichlorobenzene	µg/L	600				1U
1,2-Dichloroethane	µg/L	5				1U
1,2-Dichloropropane	µg/L	5				1U
1,2-Dimethylbenzene	µg/L	10,000				1U
1,3-Dichlorobenzene	µg/L					1U
1,4-Dichlorobenzene	µg/L	75				1U
2-Butanone	µg/L	53,800				6U
2-Hexanone	µg/L					5U
4-Methyl-2-pentanone	µg/L	6360				5U
Acetone	µg/L	10,200				10U
Acrylonitrile	µg/L	0.431				20U
Benzene	µg/L	5				1U
Bromochloromethane	µg/L					1U
Bromodichloromethane	µg/L	100				1U
Bromoform	µg/L	100				1U
Bromomethane	µg/L	140				2U
Carbon disulfide	µg/L	6270				2U
Carbon tetrachloride	µg/L	5				1U
Chlorobenzene	µg/L	100				1U
Chloroethane	µg/L	246,000				2U
Chloroform	µg/L	100				1U
Chloromethane	µg/L	13.4				2U
cis-1,2-Dichloroethene	µg/L	70				1.1
cis-1,3-Dichloropropene	µg/L					1U
Dibromochloromethane	µg/L	3.12				1U
Dibromomethane	µg/L	999				1U
Ethylbenzene	µg/L	700				1U
Iodomethane	µg/L					1U
M + P Xylene	µg/L	10,000				2U
Methylene chloride	µg/L	5				0.43BJ
Styrene	µg/L	100				1U
Tetrachloroethene	µg/L	5				1U
Toluene	µg/L	1000				1U
trans-1,2-Dichloroethene	µg/L	100				1U

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749A-18G						
trans-1,3-Dichloropropene	µg/L					1U
trans-1,4-Dichloro-2-butene	µg/L					3U
Trichloroethene	µg/L	5				14
Trichlorofluoromethane	µg/L	12,100				2U
Vinyl acetate	µg/L	6840				3U
Vinyl chloride	µg/L	2				1U
Other Parameters						
Alkalinity	mg/L					120
Ammonia as Nitrogen	mg/L					0.14
Chemical Oxygen Demand (COD)	mg/L					8.4B
Chloride	mg/L					94
Dissolved Solids	mg/L					540
Nitrate/Nitrite as Nitrogen	mg/L					0.023B
Sulfate	mg/L					150
Field Measurements						
Conductivity	µS/cm					781
Depth to Water	ft					14.6
Dissolved Oxygen	mg/L					nm
pH	Std Unit					6.03
Temperature	deg C					6.31
Turbidity	NTU					976
X749A-19G						
Metals						
Antimony	µg/L	36.5				0.24B
Arsenic	µg/L	92				3.6B
Barium	µg/L	2000				47
Beryllium	µg/L	6.5				1U
Cadmium	µg/L	6.5				0.34B
Calcium	µg/L					45000
Chromium	µg/L	100				3.1
Cobalt	µg/L	13				3.6
Copper	µg/L	21				26
Iron	µg/L					3200
Lead	µg/L	50				1.3
Magnesium	µg/L					35000
Manganese	µg/L	14,300				73
Nickel	µg/L	100				13
Potassium	µg/L					4700
Selenium	µg/L	50				2.4B
Silver	µg/L	50				5U

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749A-19G						
Sodium	µg/L					53000
Thallium	µg/L	10.5				0.17B
Vanadium	µg/L	713				14
Zinc	µg/L	30,500				11
Volatile Organic Compounds						
1,1,1,2-Tetrachloroethane	µg/L	11				1U
1,1,1-Trichloroethane	µg/L	200				1U
1,1,2,2-Tetrachloroethane	µg/L	0.83				1U
1,1,2-Trichloroethane	µg/L	5				1U
1,1-Dichloroethane	µg/L	5860				1U
1,1-Dichloroethene	µg/L	7				1U
1,2,3-Trichloropropane	µg/L	0.0379				1U
1,2-Dibromo-3-chloropropane	µg/L	0.2				5U
1,2-Dibromoethane	µg/L					1U
1,2-Dichlorobenzene	µg/L	600				1U
1,2-Dichloroethane	µg/L	5				1U
1,2-Dichloropropane	µg/L	5				1U
1,2-Dimethylbenzene	µg/L	10,000				1U
1,3-Dichlorobenzene	µg/L					1U
1,4-Dichlorobenzene	µg/L	75				1U
2-Butanone	µg/L	53,800				6U
2-Hexanone	µg/L					5U
4-Methyl-2-pentanone	µg/L	6360				5U
Acetone	µg/L	10,200				10U
Acrylonitrile	µg/L	0.431				20U
Benzene	µg/L	5				1U
Bromochloromethane	µg/L					1U
Bromodichloromethane	µg/L	100				1U
Bromoform	µg/L	100				1U
Bromomethane	µg/L	140				2U
Carbon disulfide	µg/L	6270				2U
Carbon tetrachloride	µg/L	5				1U
Chlorobenzene	µg/L	100				1U
Chloroethane	µg/L	246,000				2U
Chloroform	µg/L	100				0.2J
Chloromethane	µg/L	13.4				2U
cis-1,2-Dichloroethene	µg/L	70				5.8
cis-1,3-Dichloropropene	µg/L					1U
Dibromochloromethane	µg/L	3.12				1U
Dibromomethane	µg/L	999				1U

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X749A-19G						
Ethylbenzene	µg/L	700				1U
Iodomethane	µg/L					1U
M + P Xylene	µg/L	10,000				2U
Methylene chloride	µg/L	5				0.44BJ
Styrene	µg/L	100				1U
Tetrachloroethene	µg/L	5				1U
Toluene	µg/L	1000				1U
trans-1,2-Dichloroethene	µg/L	100				1U
trans-1,3-Dichloropropene	µg/L					1U
trans-1,4-Dichloro-2-butene	µg/L					3U
Trichloroethene	µg/L	5				27
Trichlorofluoromethane	µg/L	12,100				2U
Vinyl acetate	µg/L	6840				3U
Vinyl chloride	µg/L	2				1U
Other Parameters						
Alkalinity	mg/L					51
Ammonia as Nitrogen	mg/L					0.14
Chemical Oxygen Demand (COD)	mg/L					11B
Chloride	mg/L					120
Dissolved Solids	mg/L					500
Nitrate/Nitrite as Nitrogen	mg/L					0.15
Sulfate	mg/L					150
Field Measurements						
Conductivity	µS/cm					776
Depth to Water	ft					14.3
Dissolved Oxygen	mg/L					3.09
pH	Std Unit					5.71
Temperature	deg C					14.88
Turbidity	NTU					85
X760-03G						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200			4U	
1,1,2,2-Tetrachloroethane	µg/L	0.83			2U	
1,1,2-Trichloroethane	µg/L	5			4U	
1,1-Dichloroethane	µg/L	5860			4U	
1,1-Dichloroethene	µg/L	7			0.43J	
1,2-Dichlorobenzene	µg/L	600			4U	
1,2-Dichloroethane	µg/L	5			4U	
1,2-Dimethylbenzene	µg/L	10,000			4U	
1,4-Dichlorobenzene	µg/L	75			4U	

Quadrant I Groundwater Investigative Area/X-749A

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X760-03G						
2-Butanone	µg/L	53,800			12U	
4-Methyl-2-pentanone	µg/L	6360			10U	
Acetone	µg/L	10,200			20U	
Benzene	µg/L	5			4U	
Bromodichloromethane	µg/L	100			4U	
Bromoform	µg/L	100			4U	
Bromomethane	µg/L	140			4U	
Carbon disulfide	µg/L	6270			4U	
Carbon tetrachloride	µg/L	5			4U	
Chlorobenzene	µg/L	100			4U	
Chloroethane	µg/L	246,000			4U	
Chloroform	µg/L	100			4U	
Chloromethane	µg/L	13.4			4U	
cis-1,2-Dichloroethene	µg/L	70			5.9	
Dibromochloromethane	µg/L	3.12			4U	
Ethylbenzene	µg/L	700			4U	
M + P Xylene	µg/L	10,000			4U	
Methylene chloride	µg/L	5			10U	
Tetrachloroethene	µg/L	5			4U	
Toluene	µg/L	1000			4U	
trans-1,2-Dichloroethene	µg/L	100			2U	
Trichloroethene	µg/L	5			400	
Trichlorofluoromethane	µg/L	12,100			4U	
Vinyl chloride	µg/L	2			2U	
Field Measurements						
Conductivity	µS/cm				1785	
Depth to Water	ft				17.78	
Dissolved Oxygen	mg/L				1	
pH	Std Unit				6.09	
Temperature	deg C				16.2	
Turbidity	NTU				1	
X760-07G						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200			2U	
1,1,2,2-Tetrachloroethane	µg/L	0.83			1U	
1,1,2-Trichloroethane	µg/L	5			2U	
1,1-Dichloroethane	µg/L	5860			2U	
1,1-Dichloroethene	µg/L	7			0.58J	
1,2-Dichlorobenzene	µg/L	600			2U	
1,2-Dichloroethane	µg/L	5			2U	

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X760-07G						
1,2-Dimethylbenzene	µg/L	10,000			2U	
1,4-Dichlorobenzene	µg/L	75			2U	
2-Butanone	µg/L	53,800			6U	
4-Methyl-2-pentanone	µg/L	6360			5U	
Acetone	µg/L	10,200			10U	
Benzene	µg/L	5			2U	
Bromodichloromethane	µg/L	100			2U	
Bromoform	µg/L	100			2U	
Bromomethane	µg/L	140			2U	
Carbon disulfide	µg/L	6270			2U	
Carbon tetrachloride	µg/L	5			2U	
Chlorobenzene	µg/L	100			2U	
Chloroethane	µg/L	246,000			2U	
Chloroform	µg/L	100			0.95J	
Chloromethane	µg/L	13.4			2U	
cis-1,2-Dichloroethene	µg/L	70			8.1	
Dibromochloromethane	µg/L	3.12			2U	
Ethylbenzene	µg/L	700			2U	
M + P Xylene	µg/L	10,000			2U	
Methylene chloride	µg/L	5			5U	
Tetrachloroethene	µg/L	5			2U	
Toluene	µg/L	1000			2U	
trans-1,2-Dichloroethene	µg/L	100			0.32J	
Trichloroethene	µg/L	5			430	
Trichlorofluoromethane	µg/L	12,100			2U	
Vinyl chloride	µg/L	2			1U	
Field Measurements						
Conductivity	µS/cm				1840	
Depth to Water	ft				19.97	
Dissolved Oxygen	mg/L				1	
pH	Std Unit				6.12	
Temperature	deg C				16.5	
Turbidity	NTU				4	
X770-MW17G						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200			40U	
1,1,2,2-Tetrachloroethane	µg/L	0.83			20U	
1,1,2-Trichloroethane	µg/L	5			40U	
1,1-Dichloroethane	µg/L	5860			40U	
1,1-Dichloroethene	µg/L	7			40U	

Quadrant I Groundwater Investigative Area/X-749A

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X770-MW17G						
1,2-Dichlorobenzene	µg/L	600			40U	
1,2-Dichloroethane	µg/L	5			40U	
1,2-Dimethylbenzene	µg/L	10,000			40U	
1,4-Dichlorobenzene	µg/L	75			40U	
2-Butanone	µg/L	53,800			120U	
4-Methyl-2-pentanone	µg/L	6360			100U	
Acetone	µg/L	10,200			200U	
Benzene	µg/L	5			40U	
Bromodichloromethane	µg/L	100			40U	
Bromoform	µg/L	100			40U	
Bromomethane	µg/L	140			40U	
Carbon disulfide	µg/L	6270			40U	
Carbon tetrachloride	µg/L	5			40U	
Chlorobenzene	µg/L	100			40U	
Chloroethane	µg/L	246,000			40U	
Chloroform	µg/L	100			40U	
Chloromethane	µg/L	13.4			40U	
cis-1,2-Dichloroethene	µg/L	70			340	
Dibromochloromethane	µg/L	3.12			40U	
Ethylbenzene	µg/L	700			40U	
M + P Xylene	µg/L	10,000			40U	
Methylene chloride	µg/L	5			100U	
Tetrachloroethene	µg/L	5			40U	
Toluene	µg/L	1000			40U	
trans-1,2-Dichloroethene	µg/L	100			20U	
Trichloroethene	µg/L	5			5100	
Trichlorofluoromethane	µg/L	12,100			40U	
Vinyl chloride	µg/L	2			20U	
Field Parameters						
Conductivity	µS/cm				467	
Depth to Water	ft				18.77	
Dissolved Oxygen	mg/L				2	
pH	Std Unit				7.43	
Temperature	deg C				18.9	
Turbidity	NTU				483	

STATISTICAL EVALUATION

X-749A CLASSIFIED MATERIALS DISPOSAL FACILITY

STATISTICAL EVALUATION OF X-749A COMPLIANCE WELLS - 2008

STATISTICAL METHODOLOGY

Intra-well Shewart-CUSUM (cumulative summation) control charts are constructed using historical baseline data for each compliance well. Eight samples representing the previous eight sampling rounds are initially used to represent the baseline. Control charts are constructed showing two control limits calculated using the baseline compliance well data. If either or both of these limits are exceeded by subsequent compliance well samples, an out-of-control condition (i.e., release or impact) is indicated. The Shewart control limit (SCL) is sensitive to rapid increases in compliance well concentrations, while the decision internal value (h) threshold, or limit, is sensitive to gradual concentration increases.

The SCL and h limits used for the control charts are based on the goal of attaining a site-wide 5% false positive rate while maintaining at least a 20% false negative rate (or 80% statistical power). Gibbons (1999) provides tables used to establish appropriate thresholds. In addition, verification resampling is incorporated into the control chart scheme if necessary to achieve the 5%/20% goal. An additional parameter (k) is used in calculating the CUSUM for future compliance well data, which are then compared to the h threshold. Selection of the k value (commonly selected to be approximately one-half the size of an important displacement, D) in conjunction with the h threshold is such that together they allow a displacement of two standard deviations (above baseline) to be detected quickly (i.e., between sampling rounds).

Nonparametric or Poisson prediction limits are calculated in cases where the percentage of nondetects exceeds 50%. In these cases, the pooled historical compliance well data (and possibly background well data) is used to calculate the prediction limits. Pooling of the historical compliance well data is necessary to obtain sufficient numbers of baseline/background data to attain a site-wide false positive rate of approximately 5% ($\alpha^* \sim 0.05$) using an individual test false positive rate of approximately 1% ($\alpha \sim 0.01$). These performance standards are consistent with OAC 3745-29-10(C)(7)(a-f) (effective June 1, 1994) and Federal regulations promulgated by U.S. EPA and codified in Title 40 of the Code of Federal Regulations Part 264, Subpart F, which are designed to provide an adequate balance between the site-wide and individual test false positive rates. To achieve these performance standards using the prediction limit approach, it is necessary to incorporate verification resampling into the sampling strategy. Without verification resampling, an impracticably large number of baseline/background samples are necessary to achieve these same performance standards.

In 2008, statistical evaluations were completed the following wells that were downgradient from the X-749A Landfill in 2008: X231A-01G, X749A-01G, X749A-03G, and X749A-12G.

Shewart-CUSUM control chart statistics for well X231A-01G – 2008

Indicator parameter	Shewart Control Limit (SCL)	(Shewart)[a] Sample results		Decision Internal Limit (h)	(CUSUM)[b] Sample results	
		2rd Qtr.	4th Qtr.		2rd Qtr.	4th Qtr.
Alkalinity, Total (mg/L)	*c*	*c*	*c*	*c*	*c*	*c*
Chloride (mg/L)	175	47	55	187	64.9	64.9
Dissolved solids, Total (mg/L)	*c*	*c*	*c*	*c*	*c*	*c*
Sodium (μg/L)	617584	140000	240000	670791	138714	138714
Sulfate (mg/L)	7811	1500	6600	8521	3301	7056

[a]These results must not exceed the Shewart Control Limit (SCL).
[b]These results must not exceed the Decision Internal Limit (h).
[c]Insufficient previous sampling data are available to develop a baseline for this parameter (minimum of eight measurements); therefore, the parameter cannot be evaluated.

Shewart-CUSUM control chart statistics for well X749A-01G – 2008

Indicator parameter	Shewart Control Limit (SCL)	(Shewart)[a] Sample results		Decision Internal Limit (h)	(CUSUM)[b] Sample results	
		2nd Qtr.	4th Qtr.		2nd Qtr.	4th Qtr.
Alkalinity, Total (mg/L)	123	130	46	127	201	153
Chloride (mg/L)	149	49	75	155	102	102
Dissolved solids, Total (mg/L)	1074	540	670	1116	688	688
Sodium (μg/L)	90994	78000	88000	92994	89003	100004
Sulfate (mg/L)	466	220	320	486	306	306

[a]These results must not exceed the Shewart Control Limit (SCL).
[b]These results must not exceed the Decision Internal Limit (h).

Shewart-CUSUM control chart statistics for well X749A-03G – 2008

Indicator parameter	Shewart Control Limit (SCL)	(Shewart)[a] Sample results		Decision Internal Limit (h)	(CUSUM)[b] Sample results	
		2nd Qtr.	4th Qtr.		2nd Qtr.	4th Qtr.
Alkalinity, Total (mg/L)	59.6	16	24	62.7	31.3	31.3
Chloride (mg/L)	28.3	6.1	24	29.6	17.1	21.5
Dissolved solids, Total (mg/L)	297	240	140	317	200	182
Sodium (μg/L)	19146	11000	13000	20138	10213	11015
Sulfate (mg/L)	60.6	25	25	65.3	18	18

[a]These results must not exceed the Shewart Control Limit (SCL).
[b]These results must not exceed the Decision Internal Limit (h).

Shewart-CUSUM control chart statistics for well X749A-12G – 2008

Indicator parameter	Shewart Control Limit (SCL)	(Shewart)[a] Sample results		Decision Internal Limit (h)	(CUSUM)[b] Sample results	
		2nd Qtr.	4th Qtr.		2nd Qtr.	4th Qtr.
Alkalinity, Total (mg/L)	78.6	68	55	79.8	68.7	68.7
Chloride (mg/L)	134	95	120	139	89.5	112
Dissolved solids, Total (mg/L)	1116	590	590	1164	690	690
Sodium (μg/L)	84185	65000	66000	85715	70413	70413
Sulfate (mg/L)	544	210	230	571	329	329

[a]These results must not exceed the Shewart Control Limit (SCL).
[b]These results must not exceed the Decision Internal Limit (h).

APPENDIX B

QUADRANT II SAMPLING RESULTS

ANALYTICAL DATA TABLES
QUADRANT II GROUNDWATER INVESTIGATIVE AREA

Laboratory Data Qualifiers and Other Abbreviations

B	Inorganics: the reported value was obtained from a reading that was less than practical quantitation limit but greater than or equal to the instrument detection limit. Organics: the analyte was detected in the laboratory blank sample.
E	Inorganics: the reported value is estimated because of the presence of interferences. Organics: the result exceeds the calibration range.
J	Organics: the reported value is an estimated concentration greater than the method detection limit but less than the practical quantitation limit. All others: the reported value is qualified as estimated.
P	Pesticide/Aroclor: there is greater than 25% difference for detected concentrations between the two gas chromatograph columns.
U	Undetected
nm	For field measurements: not measured due to insufficient water remaining in the well after sampling.

Quadrant II Groundwater Investigative Area

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X333-01G						
Volatile Organic Compounds						
Trichloroethene	µg/L	5	1U			
Field Measurements						
Conductivity	µS/cm		193			
Depth to Water	ft		14.82			
Dissolved Oxygen	mg/L		nm			
pH	Std Unit		5.94			
Temperature	deg C		18.7			
Turbidity	NTU		37			
X700-02G						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200	12J			
1,1,2,2-Tetrachloroethane	µg/L	0.83	20U			
1,1,2-Trichloroethane	µg/L	5	40U			
1,1-Dichloroethane	µg/L	5860	12J			
1,1-Dichloroethene	µg/L	7	140			
1,2-Dichlorobenzene	µg/L	600	40U			
1,2-Dichloroethane	µg/L	5	40U			
1,2-Dimethylbenzene	µg/L	10,000	40U			
1,4-Dichlorobenzene	µg/L	75	40U			
2-Butanone	µg/L	53,800	120U			
4-Methyl-2-pentanone	µg/L	6360	100U			
Acetone	µg/L	10,200	71J			
Benzene	µg/L	5	40U			
Bromodichloromethane	µg/L	100	40U			
Bromoform	µg/L	100	40U			
Bromomethane	µg/L	140	40U			
Carbon disulfide	µg/L	6270	40U			
Carbon tetrachloride	µg/L	5	40U			
Chlorobenzene	µg/L	100	40U			
Chloroethane	µg/L	246,000	40U			
Chloroform	µg/L	100	40U			
Chloromethane	µg/L	13.4	40U			
cis-1,2-Dichloroethene	µg/L	70	66			
Dibromochloromethane	µg/L	3.12	40U			
Ethylbenzene	µg/L	700	40U			
M + P Xylene	µg/L	10,000	40U			
Methylene chloride	µg/L	5	10J			
Tetrachloroethene	µg/L	5	40U			
Toluene	µg/L	1000	40U			

Quadrant II Groundwater Investigative Area

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X700-02G						
trans-1,2-Dichloroethene	µg/L	100	20U			
Trichloroethene	µg/L	5	7200			
Trichlorofluoromethane	µg/L	12,100	40U			
Vinyl chloride	µg/L	2	20U			
Field Measurements						
Conductivity	µS/cm		1799			
Depth to Water	ft		19.45			
Dissolved Oxygen	mg/L		nm			
pH	Std Unit		6.05			
Temperature	deg C		19.2			
Turbidity	NTU		5			
X705-04G						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200	2U			
1,1,2,2-Tetrachloroethane	µg/L	0.83	1U			
1,1,2-Trichloroethane	µg/L	5	2U			
1,1-Dichloroethane	µg/L	5860	0.2J			
1,1-Dichloroethene	µg/L	7	1.3J			
1,2-Dichlorobenzene	µg/L	600	2U			
1,2-Dichloroethane	µg/L	5	2U			
1,2-Dimethylbenzene	µg/L	10,000	2U			
1,4-Dichlorobenzene	µg/L	75	2U			
2-Butanone	µg/L	53,800	6U			
4-Methyl-2-pentanone	µg/L	6360	5U			
Acetone	µg/L	10,200	10U			
Benzene	µg/L	5	2U			
Bromodichloromethane	µg/L	100	1.1J			
Bromoform	µg/L	100	2U			
Bromomethane	µg/L	140	2U			
Carbon disulfide	µg/L	6270	2U			
Carbon tetrachloride	µg/L	5	11			
Chlorobenzene	µg/L	100	2U			
Chloroethane	µg/L	246,000	2U			
Chloroform	µg/L	100	410			
Chloromethane	µg/L	13.4	2U			
cis-1,2-Dichloroethene	µg/L	70	2U			
Dibromochloromethane	µg/L	3.12	2U			
Ethylbenzene	µg/L	700	2U			
M + P Xylene	µg/L	10,000	2U			
Methylene chloride	µg/L	5	0.81J			

Quadrant II Groundwater Investigative Area

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X705-04G						
Tetrachloroethene	µg/L	5	1.4J			
Toluene	µg/L	1000	2U			
trans-1,2-Dichloroethene	µg/L	100	1U			
Trichloroethene	µg/L	5	91			
Trichlorofluoromethane	µg/L	12,100	2U			
Vinyl chloride	µg/L	2	1U			
Field Measurements						
Conductivity	µS/cm		781			
Depth to Water	ft		12.39			
Dissolved Oxygen	mg/L		3			
pH	Std Unit		6.6			
Temperature	deg C		16.4			
Turbidity	NTU		6			
X720-01G						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200	500			
1,1,2,2-Tetrachloroethane	µg/L	0.83	200U			
1,1,2-Trichloroethane	µg/L	5	400U			
1,1-Dichloroethane	µg/L	5860	400U			
1,1-Dichloroethene	µg/L	7	660			
1,2-Dichlorobenzene	µg/L	600	400U			
1,2-Dichloroethane	µg/L	5	400U			
1,2-Dimethylbenzene	µg/L	10,000	400U			
1,4-Dichlorobenzene	µg/L	75	400U			
2-Butanone	µg/L	53,800	1200U			
4-Methyl-2-pentanone	µg/L	6360	1000U			
Acetone	µg/L	10,200	2000U			
Benzene	µg/L	5	400U			
Bromodichloromethane	µg/L	100	400U			
Bromoform	µg/L	100	400U			
Bromomethane	µg/L	140	400U			
Carbon disulfide	µg/L	6270	400U			
Carbon tetrachloride	µg/L	5	400U			
Chlorobenzene	µg/L	100	400U			
Chloroethane	µg/L	246,000	400U			
Chloroform	µg/L	100	400U			
Chloromethane	µg/L	13.4	400U			
cis-1,2-Dichloroethene	µg/L	70	42J			
Dibromochloromethane	µg/L	3.12	400U			
Ethylbenzene	µg/L	700	400U			

Quadrant II Groundwater Investigative Area

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X720-01G						
M + P Xylene	µg/L	10,000	400U			
Methylene chloride	µg/L	5	120J			
Tetrachloroethene	µg/L	5	400U			
Toluene	µg/L	1000	400U			
trans-1,2-Dichloroethene	µg/L	100	200U			
Trichloroethene	µg/L	5	64000			
Trichlorofluoromethane	µg/L	12,100	400U			
Vinyl chloride	µg/L	2	200U			
Field Measurements						
Conductivity	µS/cm		1921			
Depth to Water	ft		15.39			
Dissolved Oxygen	mg/L		nm			
pH	Std Unit		6.27			
Temperature	deg C		15.9			
Turbidity	NTU		3			
X720-08G						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200	40U			
1,1,2,2-Tetrachloroethane	µg/L	0.83	20U			
1,1,2-Trichloroethane	µg/L	5	40U			
1,1-Dichloroethane	µg/L	5860	40U			
1,1-Dichloroethene	µg/L	7	100			
1,2-Dichlorobenzene	µg/L	600	40U			
1,2-Dichloroethane	µg/L	5	40U			
1,2-Dimethylbenzene	µg/L	10,000	40U			
1,4-Dichlorobenzene	µg/L	75	40U			
2-Butanone	µg/L	53,800	120U			
4-Methyl-2-pentanone	µg/L	6360	100U			
Acetone	µg/L	10,200	200U			
Benzene	µg/L	5	40U			
Bromodichloromethane	µg/L	100	40U			
Bromoform	µg/L	100	40U			
Bromomethane	µg/L	140	40U			
Carbon disulfide	µg/L	6270	40U			
Carbon tetrachloride	µg/L	5	40U			
Chlorobenzene	µg/L	100	40U			
Chloroethane	µg/L	246,000	40U			
Chloroform	µg/L	100	40U			
Chloromethane	µg/L	13.4	40U			
cis-1,2-Dichloroethene	µg/L	70	6J			

Quadrant II Groundwater Investigative Area

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X720-08G						
Dibromochloromethane	µg/L	3.12	40U			
Ethylbenzene	µg/L	700	40U			
M + P Xylene	µg/L	10,000	40U			
Methylene chloride	µg/L	5	9.8J			
Tetrachloroethene	µg/L	5	40U			
Toluene	µg/L	1000	40U			
trans-1,2-Dichloroethene	µg/L	100	20U			
Trichloroethene	µg/L	5	6200			
Trichlorofluoromethane	µg/L	12,100	40U			
Vinyl chloride	µg/L	2	20U			
Field Measurements						
Conductivity	µS/cm		1590			
Depth to Water	ft		16.41			
Dissolved Oxygen	mg/L		1			
pH	Std Unit		6.38			
Temperature	deg C		20.4			
Turbidity	NTU		46			

ANALYTICAL DATA TABLES
X-701B HOLDING POND

Laboratory Data Qualifiers and Other Abbreviations

B	Inorganics: the reported value was obtained from a reading that was less than practical quantitation limit but greater than or equal to the instrument detection limit. Organics: the analyte was detected in the laboratory blank sample.
E	Inorganics: the reported value is estimated because of the presence of interferences. Organics: the result exceeds the calibration range.
J	Organics: the reported value is an estimated concentration greater than the method detection limit but less than the practical quantitation limit. All others: the reported value is qualified as estimated.
P	Pesticide/Aroclor: there is greater than 25% difference for detected concentrations between the two gas chromatograph columns.
U	Undetected
nm	For field measurements: not measured due to insufficient water remaining in the well after sampling.

X-701B Holding Pond

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
LBC-PZ03						
Metals						
Calcium	µg/L		45000			
Iron	µg/L		100U			
Magnesium	µg/L		23000			
Potassium	µg/L		1600B			
Sodium	µg/L		39000			
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200	2U		2U	
1,1,2,2-Tetrachloroethane	µg/L	0.83	1U		1U	
1,1,2-Trichloroethane	µg/L	5	2U		2U	
1,1-Dichloroethane	µg/L	5860	2U		2U	
1,1-Dichloroethene	µg/L	7	2U		0.18J	
1,2-Dichlorobenzene	µg/L	600	2U		2U	
1,2-Dichloroethane	µg/L	5	2U		2U	
1,2-Dimethylbenzene	µg/L	10,000	2U		2U	
1,4-Dichlorobenzene	µg/L	75	2U		2U	
2-Butanone	µg/L	53,800	6U		6U	
4-Methyl-2-pentanone	µg/L	6360	5U		5U	
Acetone	µg/L	10,200	10U		3.5J	
Benzene	µg/L	5	2U		2U	
Bromodichloromethane	µg/L	100	2U		2U	
Bromoform	µg/L	100	2U		2U	
Bromomethane	µg/L	140	2U		2U	
Carbon disulfide	µg/L	6270	2U		2U	
Carbon tetrachloride	µg/L	5	2U		2U	
Chlorobenzene	µg/L	100	2U		2U	
Chloroethane	µg/L	246,000	2U		2U	
Chloroform	µg/L	100	2U		2U	
Chloromethane	µg/L	13.4	2U		2U	
cis-1,2-Dichloroethene	µg/L	70	21		62	
Dibromochloromethane	µg/L	3.12	2U		2U	
Ethylbenzene	µg/L	700	2U		2U	
M + P Xylene	µg/L	10,000	2U		2U	
Methylene chloride	µg/L	5	5U		5U	
Tetrachloroethene	µg/L	5	2U		2U	
Toluene	µg/L	1000	2U		0.17J	
trans-1,2-Dichloroethene	µg/L	100	0.33J		0.91J	
Trichloroethene	µg/L	5	36		66	
Trichlorofluoromethane	µg/L	12,100	2U		2U	

X-701B Holding Pond

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
LBC-PZ03						
Vinyl chloride	µg/L	2	1U		0.54J	
Radionuclides						
Americium-241	pCi/L	0.49	-0.01083U		-0.009913U	
Neptunium-237	pCi/L	0.54	0.000007317U		-0.007367U	
Plutonium-238	pCi/L		0.00731U		0U	
Plutonium-239/240	pCi/L	0.51	0.01461U		-0.01472U	
Technetium-99	pCi/L	3790	-2.06U		-0.12U	
Uranium	µg/L	1000	0.03978U		0.02306U	
Uranium-233/234	pCi/L	124,000	0.1004		0.03468U	
Uranium-235	pCi/L	43	0U		0.008543U	
Uranium-236	pCi/L		0U		0.007671U	
Uranium-238	pCi/L	6.7	0.01336U		0.006946U	
Other Parameters						
Alkalinity	mg/L		110			
Chloride	mg/L		74			
Sulfate	mg/L		59			
Field Measurements						
Conductivity	µS/cm		581		1096	
Depth to Water	ft		8.37		8.66	
Dissolved Oxygen	mg/L		5		4	
pH	Std Unit		5.84		6.01	
Temperature	deg C		5.35		17.8	
Turbidity	NTU		4		1	
LBC-PZ06						
Metals						
Calcium	µg/L		51000			
Iron	µg/L		39B			
Magnesium	µg/L		28000			
Potassium	µg/L		1400B			
Sodium	µg/L		91000			
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200	2U		2U	
1,1,2,2-Tetrachloroethane	µg/L	0.83	1U		1U	
1,1,2-Trichloroethane	µg/L	5	2U		2U	
1,1-Dichloroethane	µg/L	5860	2U		2U	
1,1-Dichloroethene	µg/L	7	2U		2U	
1,2-Dichlorobenzene	µg/L	600	2U		2U	
1,2-Dichloroethane	µg/L	5	2U		2U	
1,2-Dimethylbenzene	µg/L	10,000	2U		2U	
1,4-Dichlorobenzene	µg/L	75	2U		2U	

X-701B Holding Pond

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
LBC-PZ06						
2-Butanone	µg/L	53,800	6U		6U	
4-Methyl-2-pentanone	µg/L	6360	5U		5U	
Acetone	µg/L	10,200	10U		2.3J	
Benzene	µg/L	5	2U		2U	
Bromodichloromethane	µg/L	100	2U		2U	
Bromoform	µg/L	100	2U		2U	
Bromomethane	µg/L	140	2U		2U	
Carbon disulfide	µg/L	6270	2U		2U	
Carbon tetrachloride	µg/L	5	2U		2U	
Chlorobenzene	µg/L	100	2U		2U	
Chloroethane	µg/L	246,000	2U		2U	
Chloroform	µg/L	100	2U		2U	
Chloromethane	µg/L	13.4	2U		2U	
cis-1,2-Dichloroethene	µg/L	70	2U		2U	
Dibromochloromethane	µg/L	3.12	2U		2U	
Ethylbenzene	µg/L	700	2U		2U	
M + P Xylene	µg/L	10,000	2U		2U	
Methylene chloride	µg/L	5	5U		5U	
Tetrachloroethene	µg/L	5	2U		2U	
Toluene	µg/L	1000	2U		2U	
trans-1,2-Dichloroethene	µg/L	100	1U		1U	
Trichloroethene	µg/L	5	2U		2U	
Trichlorofluoromethane	µg/L	12,100	2U		2U	
Vinyl chloride	µg/L	2	1U		1U	
Radionuclides						
Americium-241	pCi/L	0.49	0.01782U		0.00001101U	
Neptunium-237	pCi/L	0.54	0.02431U		0.000007895U	
Plutonium-238	pCi/L		0.01817U		0.007896U	
Plutonium-239/240	pCi/L	0.51	0.006056U		-0.03149U	
Technetium-99	pCi/L	3790	-0.206U		-1.78U	
Uranium	µg/L	1000	0.1759		0.08574U	
Uranium-233/234	pCi/L	124,000	0.07402		0.1036	
Uranium-235	pCi/L	43	0U		-0.009113U	
Uranium-236	pCi/L		0U		0.008199U	
Uranium-238	pCi/L	6.7	0.0591		0.02958U	
Other Parameters						
Alkalinity	mg/L		37			
Chloride	mg/L		200			
Sulfate	mg/L		100			
Field Measurements						

X-701B Holding Pond

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
LBC-PZ06						
Conductivity	µS/cm		926		1676	
Depth to Water	ft		6.34		6.5	
Dissolved Oxygen	mg/L		2		2	
pH	Std Unit		5.38		5.43	
Temperature	deg C		8.31		19.4	
Turbidity	NTU		2		1	
X230J7-01GA						
Metals						
Calcium	µg/L		15000			
Iron	µg/L		360			
Magnesium	µg/L		12000			
Manganese	µg/L	14,300	310		350	
Potassium	µg/L		2800B			
Sodium	µg/L		66000			
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200	2U			
1,1,2,2-Tetrachloroethane	µg/L	0.83	1U			
1,1,2-Trichloroethane	µg/L	5	2U			
1,1-Dichloroethane	µg/L	5860	2U			
1,1-Dichloroethene	µg/L	7	0.16J			
1,2-Dichlorobenzene	µg/L	600	2U			
1,2-Dichloroethane	µg/L	5	2U			
1,2-Dimethylbenzene	µg/L	10,000	2U			
1,4-Dichlorobenzene	µg/L	75	2U			
2-Butanone	µg/L	53,800	6U			
4-Methyl-2-pentanone	µg/L	6360	5U			
Acetone	µg/L	10,200	10U			
Benzene	µg/L	5	2U			
Bromodichloromethane	µg/L	100	2U			
Bromoform	µg/L	100	2U			
Bromomethane	µg/L	140	2U			
Carbon disulfide	µg/L	6270	2U			
Carbon tetrachloride	µg/L	5	2U			
Chlorobenzene	µg/L	100	2U			
Chloroethane	µg/L	246,000	2U			
Chloroform	µg/L	100	2U			
Chloromethane	µg/L	13.4	2U			
cis-1,2-Dichloroethene	µg/L	70	0.73J			
Dibromochloromethane	µg/L	3.12	2U			
Ethylbenzene	µg/L	700	2U			

X-701B Holding Pond

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X230J7-01GA						
M + P Xylene	µg/L	10,000	2U			
Methylene chloride	µg/L	5	5U			
Tetrachloroethene	µg/L	5	2U			
Toluene	µg/L	1000	2U			
trans-1,2-Dichloroethene	µg/L	100	1U			
Trichloroethene	µg/L	5	220			
Trichlorofluoromethane	µg/L	12,100	2U			
Vinyl chloride	µg/L	2	1U			
Radionuclides						
Americium-241	pCi/L	0.49	0.000007356U			
Neptunium-237	pCi/L	0.54	0.01419U			
Plutonium-238	pCi/L		0.01415U			
Plutonium-239/240	pCi/L	0.51	-0.01413U			
Technetium-99	pCi/L	3790	0.795U			
Uranium	µg/L	1000	0.3411			
Uranium-233/234	pCi/L	124,000	0.08668			
Uranium-235	pCi/L	43	-0.008902U			
Uranium-236	pCi/L		0.008001U			
Uranium-238	pCi/L	6.7	0.1154			
Other Parameters						
Alkalinity	mg/L		5.9			
Chloride	mg/L		42			
Sulfate	mg/L		160			
Field Measurements						
Conductivity	µS/cm		486		526	
Depth to Water	ft		2.95		2.05	
Dissolved Oxygen	mg/L		2		1	
pH	Std Unit		4.58		4.65	
Temperature	deg C		11.3		16.7	
Turbidity	NTU		30		8	
X230J7-02GA						
Metals						
Calcium	µg/L		36000			
Iron	µg/L		330			
Magnesium	µg/L		28000			
Manganese	µg/L	14,300	620		610	
Potassium	µg/L		2900B			
Sodium	µg/L		63000			
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200	4U			

X-701B Holding Pond

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X230J7-02GA						
1,1,2,2-Tetrachloroethane	µg/L	0.83	2U			
1,1,2-Trichloroethane	µg/L	5	4U			
1,1-Dichloroethane	µg/L	5860	4U			
1,1-Dichloroethene	µg/L	7	4U			
1,2-Dichlorobenzene	µg/L	600	4U			
1,2-Dichloroethane	µg/L	5	4U			
1,2-Dimethylbenzene	µg/L	10,000	4U			
1,4-Dichlorobenzene	µg/L	75	4U			
2-Butanone	µg/L	53,800	12U			
4-Methyl-2-pentanone	µg/L	6360	10U			
Acetone	µg/L	10,200	20U			
Benzene	µg/L	5	4U			
Bromodichloromethane	µg/L	100	4U			
Bromoform	µg/L	100	4U			
Bromomethane	µg/L	140	4U			
Carbon disulfide	µg/L	6270	4U			
Carbon tetrachloride	µg/L	5	4U			
Chlorobenzene	µg/L	100	4U			
Chloroethane	µg/L	246,000	4U			
Chloroform	µg/L	100	0.38J			
Chloromethane	µg/L	13.4	4U			
cis-1,2-Dichloroethene	µg/L	70	2.3J			
Dibromochloromethane	µg/L	3.12	4U			
Ethylbenzene	µg/L	700	4U			
M + P Xylene	µg/L	10,000	4U			
Methylene chloride	µg/L	5	10U			
Tetrachloroethene	µg/L	5	0.56J			
Toluene	µg/L	1000	4U			
trans-1,2-Dichloroethene	µg/L	100	2U			
Trichloroethene	µg/L	5	750			
Trichlorofluoromethane	µg/L	12,100	4U			
Vinyl chloride	µg/L	2	2U			
Radionuclides						
Americium-241	pCi/L	0.49	0.009947U			
Neptunium-237	pCi/L	0.54	-0.02778U			
Plutonium-238	pCi/L		0.00001385U			
Plutonium-239/240	pCi/L	0.51	0.01388U			
Technetium-99	pCi/L	3790	31.9			
Uranium	µg/L	1000	0.1476			
Uranium-233/234	pCi/L	124,000	0.1048			

X-701B Holding Pond

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X230J7-02GA						
Uranium-235	pCi/L	43	0.008623U			
Uranium-236	pCi/L		0U			
Uranium-238	pCi/L	6.7	0.04883			
Other Parameters						
Alkalinity	mg/L		5.6			
Chloride	mg/L		50			
Sulfate	mg/L		250			
Field Measurements						
Conductivity	µS/cm		678		692	
Depth to Water	ft		4.58		4.13	
Dissolved Oxygen	mg/L		3		1	
pH	Std Unit		4.75		4.69	
Temperature	deg C		10.4		17.3	
Turbidity	NTU		8		9	
X230J7-03GA						
Metals						
Calcium	µg/L		23000			
Iron	µg/L		4400			
Magnesium	µg/L		26000			
Manganese	µg/L	14,300	3500		3900	
Potassium	µg/L		2600B			
Sodium	µg/L		58000			
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200	10U			
1,1,2,2-Tetrachloroethane	µg/L	0.83	5U			
1,1,2-Trichloroethane	µg/L	5	10U			
1,1-Dichloroethane	µg/L	5860	10U			
1,1-Dichloroethene	µg/L	7	10U			
1,2-Dichlorobenzene	µg/L	600	10U			
1,2-Dichloroethane	µg/L	5	10U			
1,2-Dimethylbenzene	µg/L	10,000	10U			
1,4-Dichlorobenzene	µg/L	75	10U			
2-Butanone	µg/L	53,800	30U			
4-Methyl-2-pentanone	µg/L	6360	25U			
Acetone	µg/L	10,200	50U			
Benzene	µg/L	5	10U			
Bromodichloromethane	µg/L	100	10U			
Bromoform	µg/L	100	10U			
Bromomethane	µg/L	140	10U			
Carbon disulfide	µg/L	6270	10U			

X-701B Holding Pond

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X230J7-03GA						
Carbon tetrachloride	µg/L	5	10U			
Chlorobenzene	µg/L	100	10U			
Chloroethane	µg/L	246,000	10U			
Chloroform	µg/L	100	10U			
Chloromethane	µg/L	13.4	10U			
cis-1,2-Dichloroethene	µg/L	70	320			
Dibromochloromethane	µg/L	3.12	10U			
Ethylbenzene	µg/L	700	10U			
M + P Xylene	µg/L	10,000	10U			
Methylene chloride	µg/L	5	25U			
Tetrachloroethene	µg/L	5	1.4J			
Toluene	µg/L	1000	10U			
trans-1,2-Dichloroethene	µg/L	100	12			
Trichloroethene	µg/L	5	1800			
Trichlorofluoromethane	µg/L	12,100	10U			
Vinyl chloride	µg/L	2	17			
Radionuclides						
Americium-241	pCi/L	0.49	0.000009421U			
Neptunium-237	pCi/L	0.54	-0.007384U			
Plutonium-238	pCi/L		0.01475U			
Plutonium-239/240	pCi/L	0.51	0.000007364U			
Technetium-99	pCi/L	3790	23.6			
Uranium	µg/L	1000	0.2501U			
Uranium-233/234	pCi/L	124,000	0.1818			
Uranium-235	pCi/L	43	0.009343U			
Uranium-236	pCi/L		0.008389U			
Uranium-238	pCi/L	6.7	0.08316			
Other Parameters						
Alkalinity	mg/L		5.6			
Chloride	mg/L		53			
Sulfate	mg/L		230			
Field Measurements						
Conductivity	µS/cm		623		704	
Depth to Water	ft		8.03		7.63	
Dissolved Oxygen	mg/L		nm		nm	
pH	Std Unit		4.72		4.71	
Temperature	deg C		10.9		18.4	
Turbidity	NTU		31		2	
X230J7-04GA						
Metals						

X-701B Holding Pond

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X230J7-04GA						
Calcium	µg/L				32000	
Iron	µg/L				38000	
Magnesium	µg/L				27000	
Potassium	µg/L				1500B	
Sodium	µg/L				46000	
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200			2U	
1,1,2,2-Tetrachloroethane	µg/L	0.83			1U	
1,1,2-Trichloroethane	µg/L	5			2U	
1,1-Dichloroethane	µg/L	5860			2U	
1,1-Dichloroethene	µg/L	7			2U	
1,2-Dichlorobenzene	µg/L	600			2U	
1,2-Dichloroethane	µg/L	5			2U	
1,2-Dimethylbenzene	µg/L	10,000			2U	
1,4-Dichlorobenzene	µg/L	75			2U	
2-Butanone	µg/L	53,800			6U	
4-Methyl-2-pentanone	µg/L	6360			5U	
Acetone	µg/L	10,200			10U	
Benzene	µg/L	5			2U	
Bromodichloromethane	µg/L	100			2U	
Bromoform	µg/L	100			2U	
Bromomethane	µg/L	140			2U	
Carbon disulfide	µg/L	6270			2U	
Carbon tetrachloride	µg/L	5			2U	
Chlorobenzene	µg/L	100			2U	
Chloroethane	µg/L	246,000			2U	
Chloroform	µg/L	100			2U	
Chloromethane	µg/L	13.4			2U	
cis-1,2-Dichloroethene	µg/L	70			2U	
Dibromochloromethane	µg/L	3.12			2U	
Ethylbenzene	µg/L	700			2U	
M + P Xylene	µg/L	10,000			2U	
Methylene chloride	µg/L	5			5U	
Tetrachloroethene	µg/L	5			2U	
Toluene	µg/L	1000			2U	
trans-1,2-Dichloroethene	µg/L	100			1U	
Trichloroethene	µg/L	5			2U	
Trichlorofluoromethane	µg/L	12,100			2U	
Vinyl chloride	µg/L	2			1U	
Radionuclides						

X-701B Holding Pond

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X230J7-04GA						
Americium-241	pCi/L	0.49			0.01902U	
Neptunium-237	pCi/L	0.54			-0.006824U	
Plutonium-238	pCi/L				0.01375U	
Plutonium-239/240	pCi/L	0.51			0.0000206U	
Technetium-99	pCi/L	3790			-3.13U	
Uranium	µg/L	1000			0.105	
Uranium-233/234	pCi/L	124,000			0.08467	
Uranium-235	pCi/L	43			0.000008695U	
Uranium-236	pCi/L				0.01563U	
Uranium-238	pCi/L	6.7			0.0352	
Other Parameters						
Alkalinity	mg/L				200	
Chloride	mg/L				35	
Sulfate	mg/L				74	
Field Measurements						
Conductivity	µS/cm				719	
Depth to Water	ft				9.25	
Dissolved Oxygen	mg/L				1	
pH	Std Unit				6.47	
Temperature	deg C				20.6	
Turbidity	NTU				12	
X700-03G						
Metals						
Cadmium	µg/L	6.5	1U		1U	
Calcium	µg/L		380000			
Chromium	µg/L	100	1.4B		0.5B	
Cobalt	µg/L	13	5.6E		5.7E	
Iron	µg/L		240000		200000	
Lead	µg/L	50	0.21B		1U	
Magnesium	µg/L		190000		190000	
Manganese	µg/L	14,300	10000E		11000E	
Nickel	µg/L	100	4.3		20U	
Potassium	µg/L		5900		5800	
Sodium	µg/L		49000		43000	
Thallium	µg/L	10.5	1U		1U	
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200	2U			
1,1,2,2-Tetrachloroethane	µg/L	0.83	1U			
1,1,2-Trichloroethane	µg/L	5	2U			
1,1-Dichloroethane	µg/L	5860	2U			

X-701B Holding Pond

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X700-03G						
1,1-Dichloroethene	µg/L	7	2U			
1,2-Dichlorobenzene	µg/L	600	2U			
1,2-Dichloroethane	µg/L	5	2U			
1,2-Dimethylbenzene	µg/L	10,000	2U			
1,4-Dichlorobenzene	µg/L	75	2U			
2-Butanone	µg/L	53,800	6U			
4-Methyl-2-pentanone	µg/L	6360	5U			
Acetone	µg/L	10,200	10U			
Benzene	µg/L	5	2U			
Bromodichloromethane	µg/L	100	2U			
Bromoform	µg/L	100	2U			
Bromomethane	µg/L	140	2U			
Carbon disulfide	µg/L	6270	2U			
Carbon tetrachloride	µg/L	5	2U			
Chlorobenzene	µg/L	100	2U			
Chloroethane	µg/L	246,000	2U			
Chloroform	µg/L	100	2U			
Chloromethane	µg/L	13.4	2U			
cis-1,2-Dichloroethene	µg/L	70	0.37J			
Dibromochloromethane	µg/L	3.12	2U			
Ethylbenzene	µg/L	700	2U			
M + P Xylene	µg/L	10,000	2U			
Methylene chloride	µg/L	5	5U			
Tetrachloroethene	µg/L	5	2U			
Toluene	µg/L	1000	2U			
trans-1,2-Dichloroethene	µg/L	100	1U			
Trichloroethene	µg/L	5	2U			
Trichlorofluoromethane	µg/L	12,100	2U			
Vinyl chloride	µg/L	2	1U			
Radionuclides						
Americium-241	pCi/L	0.49	0.00007262U			
Neptunium-237	pCi/L	0.54	0.00001848U			
Plutonium-238	pCi/L		0.02766U			
Plutonium-239/240	pCi/L	0.51	-0.01839U			
Technetium-99	pCi/L	3790	0.245U			
Uranium	µg/L	1000	0.3451			
Uranium-233/234	pCi/L	124,000	0.14			
Uranium-235	pCi/L	43	0.01016U			
Uranium-236	pCi/L		0U			
Uranium-238	pCi/L	6.7	0.1151			

X-701B Holding Pond

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X700-03G						
Other Parameters						
Alkalinity	mg/L		140		120	
Chloride	mg/L		21		20	
Sulfate	mg/L		2000		2100	
Field Measurements						
Conductivity	µS/cm		2944		3060	
Depth to Water	ft		18.7		18.33	
Dissolved Oxygen	mg/L		nm		nm	
pH	Std Unit		5.65		5.65	
Temperature	deg C		13.7		16.1	
Turbidity	NTU		348		159	
X701-01G						
Metals						
Cadmium	µg/L	6.5	49E		17	
Nickel	µg/L	100	540		370	
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200	2U		2U	
1,1,2,2-Tetrachloroethane	µg/L	0.83	1U		1U	
1,1,2-Trichloroethane	µg/L	5	2U		2U	
1,1-Dichloroethane	µg/L	5860	2U		2U	
1,1-Dichloroethene	µg/L	7	0.47J		0.56J	
1,2-Dichlorobenzene	µg/L	600	2U		2U	
1,2-Dichloroethane	µg/L	5	2U		2U	
1,2-Dimethylbenzene	µg/L	10,000	2U		2U	
1,4-Dichlorobenzene	µg/L	75	2U		2U	
2-Butanone	µg/L	53,800	6U		6U	
4-Methyl-2-pentanone	µg/L	6360	5U		5U	
Acetone	µg/L	10,200	10U		10U	
Benzene	µg/L	5	2U		2U	
Bromodichloromethane	µg/L	100	2U		2U	
Bromoform	µg/L	100	2U		2U	
Bromomethane	µg/L	140	2U		2U	
Carbon disulfide	µg/L	6270	2U		2U	
Carbon tetrachloride	µg/L	5	2U		2U	
Chlorobenzene	µg/L	100	2U		2U	
Chloroethane	µg/L	246,000	2U		2U	
Chloroform	µg/L	100	2U		2U	
Chloromethane	µg/L	13.4	2U		2U	
cis-1,2-Dichloroethene	µg/L	70	5.6		9.3	
Dibromochloromethane	µg/L	3.12	2U		2U	

X-701B Holding Pond

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X701-01G						
Ethylbenzene	µg/L	700	2U		2U	
M + P Xylene	µg/L	10,000	2U		2U	
Methylene chloride	µg/L	5	5U		5U	
Tetrachloroethene	µg/L	5	2U		2U	
Toluene	µg/L	1000	2U		2U	
trans-1,2-Dichloroethene	µg/L	100	1U		0.26J	
Trichloroethene	µg/L	5	30		51	
Trichlorofluoromethane	µg/L	12,100	2U		2U	
Vinyl chloride	µg/L	2	1U		1U	
Field Measurements						
Conductivity	µS/cm		4135		4850	
Depth to Water	ft		18.18		18.25	
Dissolved Oxygen	mg/L		1		0.5	
pH	Std Unit		5.86		5.99	
Temperature	deg C		11.2		15.48	
Turbidity	NTU		10		7	
X701-02G						
Metals						
Calcium	µg/L		59000			
Iron	µg/L		290			
Magnesium	µg/L		34000			
Potassium	µg/L		2600B			
Sodium	µg/L		63000			
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200	2U		2U	
1,1,2,2-Tetrachloroethane	µg/L	0.83	1U		1U	
1,1,2-Trichloroethane	µg/L	5	2U		2U	
1,1-Dichloroethane	µg/L	5860	2U		2U	
1,1-Dichloroethene	µg/L	7	2U		2U	
1,2-Dichlorobenzene	µg/L	600	2U		2U	
1,2-Dichloroethane	µg/L	5	2U		2U	
1,2-Dimethylbenzene	µg/L	10,000	2U		2U	
1,4-Dichlorobenzene	µg/L	75	2U		2U	
2-Butanone	µg/L	53,800	6U		6U	
4-Methyl-2-pentanone	µg/L	6360	5U		5U	
Acetone	µg/L	10,200	5.6J		10U	
Benzene	µg/L	5	2U		2U	
Bromodichloromethane	µg/L	100	2U		2U	
Bromoform	µg/L	100	2U		2U	
Bromomethane	µg/L	140	2U		2U	

X-701B Holding Pond

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X701-02G						
Carbon disulfide	µg/L	6270	2U		2U	
Carbon tetrachloride	µg/L	5	2U		2U	
Chlorobenzene	µg/L	100	2U		2U	
Chloroethane	µg/L	246,000	2U		2U	
Chloroform	µg/L	100	2U		2U	
Chloromethane	µg/L	13.4	2U		2U	
cis-1,2-Dichloroethene	µg/L	70	4.1		3.9	
Dibromochloromethane	µg/L	3.12	2U		2U	
Ethylbenzene	µg/L	700	2U		2U	
M + P Xylene	µg/L	10,000	2U		2U	
Methylene chloride	µg/L	5	5U		5U	
Tetrachloroethene	µg/L	5	2U		2U	
Toluene	µg/L	1000	2U		2U	
trans-1,2-Dichloroethene	µg/L	100	1U		1U	
Trichloroethene	µg/L	5	8		8.1	
Trichlorofluoromethane	µg/L	12,100	2U		2U	
Vinyl chloride	µg/L	2	1U		1U	
Radionuclides						
Americium-241	pCi/L	0.49	0.00001037U		0.00001071U	
Neptunium-237	pCi/L	0.54	-0.01454U		-0.0276U	
Plutonium-238	pCi/L		0.007266U		-0.006877U	
Plutonium-239/240	pCi/L	0.51	-0.007251U		-0.00687U	
Technetium-99	pCi/L	3790	-2.97U		-2.2U	
Uranium	µg/L	1000	0.2995		0.5392	
Uranium-233/234	pCi/L	124,000	0.2187		0.3267	
Uranium-235	pCi/L	43	0.01634U		0.01645U	
Uranium-236	pCi/L		0.000007331U		0.007385U	
Uranium-238	pCi/L	6.7	0.09917		0.1797	
Other Parameters						
Alkalinity	mg/L		140			
Chloride	mg/L		110			
Sulfate	mg/L		140			
Field Measurements						
Conductivity	µS/cm		842		934	
Depth to Water	ft		15.19		13.52	
Dissolved Oxygen	mg/L		1		nm	
pH	Std Unit		5.89		5.91	
Temperature	deg C		15.1		16.1	
Turbidity	NTU		5		10	
X701-05G						

X-701B Holding Pond

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X701-05G						
Metals						
Calcium	µg/L		110000			
Iron	µg/L		5500			
Magnesium	µg/L		35000			
Potassium	µg/L		3500			
Sodium	µg/L		11000			
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200	2U		2U	
1,1,2,2-Tetrachloroethane	µg/L	0.83	1U		1U	
1,1,2-Trichloroethane	µg/L	5	2U		2U	
1,1-Dichloroethane	µg/L	5860	2U		2U	
1,1-Dichloroethene	µg/L	7	2U		1.2J	
1,2-Dichlorobenzene	µg/L	600	2U		2U	
1,2-Dichloroethane	µg/L	5	2U		2U	
1,2-Dimethylbenzene	µg/L	10,000	2U		2U	
1,4-Dichlorobenzene	µg/L	75	2U		2U	
2-Butanone	µg/L	53,800	6U		6U	
4-Methyl-2-pentanone	µg/L	6360	5U		5U	
Acetone	µg/L	10,200	10U		10U	
Benzene	µg/L	5	2U		2U	
Bromodichloromethane	µg/L	100	2U		2U	
Bromoform	µg/L	100	2U		2U	
Bromomethane	µg/L	140	2U		2U	
Carbon disulfide	µg/L	6270	2U		2U	
Carbon tetrachloride	µg/L	5	2U		2U	
Chlorobenzene	µg/L	100	2U		2U	
Chloroethane	µg/L	246,000	2U		2U	
Chloroform	µg/L	100	2U		2U	
Chloromethane	µg/L	13.4	2U		2U	
cis-1,2-Dichloroethene	µg/L	70	2U		0.31J	
Dibromochloromethane	µg/L	3.12	2U		2U	
Ethylbenzene	µg/L	700	2U		2U	
M + P Xylene	µg/L	10,000	2U		2U	
Methylene chloride	µg/L	5	5U		5U	
Tetrachloroethene	µg/L	5	2U		2U	
Toluene	µg/L	1000	2U		2U	
trans-1,2-Dichloroethene	µg/L	100	1U		1U	
Trichloroethene	µg/L	5	4.1		42	
Trichlorofluoromethane	µg/L	12,100	2U		2U	
Vinyl chloride	µg/L	2	1U		1U	

X-701B Holding Pond

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X701-05G						
Radionuclides						
Americium-241	pCi/L	0.49	0.00002878U		0U	
Neptunium-237	pCi/L	0.54	0.01978U		-0.05591U	
Plutonium-238	pCi/L		0.00001313U		0.00002791U	
Plutonium-239/240	pCi/L	0.51	-0.01968U		0.006997U	
Technetium-99	pCi/L	3790	471		455	
Uranium	µg/L	1000	84.43		54.48	
Uranium-233/234	pCi/L	124,000	166.4		101.7	
Uranium-235	pCi/L	43	7.19		4.778	
Uranium-236	pCi/L		1.133		0.6373	
Uranium-238	pCi/L	6.7	27.72		17.87	
Other Parameters						
Alkalinity	mg/L		270			
Chloride	mg/L		10			
Sulfate	mg/L		140			
Field Measurements						
Conductivity	µS/cm		751		682	
Depth to Water	ft		17.08		16.39	
Dissolved Oxygen	mg/L		6		22	
pH	Std Unit		7.14		6.58	
Temperature	deg C		15		16.2	
Turbidity	NTU		243		1000	
X701-06G						
Metals						
Calcium	µg/L		63000			
Iron	µg/L		5500			
Magnesium	µg/L		36000			
Potassium	µg/L		3800			
Sodium	µg/L		79000			
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200	2U		2U	
1,1,2,2-Tetrachloroethane	µg/L	0.83	1U		1U	
1,1,2-Trichloroethane	µg/L	5	2U		2U	
1,1-Dichloroethane	µg/L	5860	0.18J		0.2J	
1,1-Dichloroethene	µg/L	7	1.2J		0.59J	
1,2-Dichlorobenzene	µg/L	600	2U		2U	
1,2-Dichloroethane	µg/L	5	2U		2U	
1,2-Dimethylbenzene	µg/L	10,000	2U		2U	
1,4-Dichlorobenzene	µg/L	75	2U		2U	
2-Butanone	µg/L	53,800	6U		6U	

X-701B Holding Pond

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X701-06G						
4-Methyl-2-pentanone	µg/L	6360	5U		5U	
Acetone	µg/L	10,200	10U		10U	
Benzene	µg/L	5	2U		2U	
Bromodichloromethane	µg/L	100	2U		0.18J	
Bromoform	µg/L	100	2U		2U	
Bromomethane	µg/L	140	2U		2U	
Carbon disulfide	µg/L	6270	2U		2U	
Carbon tetrachloride	µg/L	5	2U		2U	
Chlorobenzene	µg/L	100	2U		2U	
Chloroethane	µg/L	246,000	2U		2U	
Chloroform	µg/L	100	2U		0.43J	
Chloromethane	µg/L	13.4	2U		2U	
cis-1,2-Dichloroethene	µg/L	70	41		39	
Dibromochloromethane	µg/L	3.12	2U		2U	
Ethylbenzene	µg/L	700	2U		2U	
M + P Xylene	µg/L	10,000	2U		2U	
Methylene chloride	µg/L	5	5U		0.33J	
Tetrachloroethene	µg/L	5	2U		2U	
Toluene	µg/L	1000	2U		2U	
trans-1,2-Dichloroethene	µg/L	100	1.2		0.9J	
Trichloroethene	µg/L	5	63		46	
Trichlorofluoromethane	µg/L	12,100	2U		2U	
Vinyl chloride	µg/L	2	0.41J		0.44J	
Radionuclides						
Americium-241	pCi/L	0.49	0.0229U		0.01858U	
Neptunium-237	pCi/L	0.54	-0.007097U		-0.01564U	
Plutonium-238	pCi/L		-0.007077U		0.02345U	
Plutonium-239/240	pCi/L	0.51	0.00001416U		0.02347U	
Technetium-99	pCi/L	3790	13.2		7.06U	
Uranium	µg/L	1000	1.264		1.27	
Uranium-233/234	pCi/L	124,000	0.4975		0.6205	
Uranium-235	pCi/L	43	0.03719U		0.009567U	
Uranium-236	pCi/L		0U		0.03436U	
Uranium-238	pCi/L	6.7	0.4213		0.4257	
Other Parameters						
Alkalinity	mg/L		93			
Chloride	mg/L		140			
Sulfate	mg/L		180			
Field Measurements						
Conductivity	µS/cm		943		1116	

X-701B Holding Pond

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X701-06G						
Depth to Water	ft		17.61		15.83	
Dissolved Oxygen	mg/L		8		53	
pH	Std Unit		5.79		5.68	
Temperature	deg C		15.3		16.3	
Turbidity	NTU		211		519	
X701-08G						
Metals						
Calcium	µg/L				61000	
Iron	µg/L				12000	
Magnesium	µg/L				37000	
Potassium	µg/L				3200	
Sodium	µg/L				76000	
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200			340J	
1,1,2,2-Tetrachloroethane	µg/L	0.83			1300U	
1,1,2-Trichloroethane	µg/L	5			2700U	
1,1-Dichloroethane	µg/L	5860			2700U	
1,1-Dichloroethene	µg/L	7			2700U	
1,2-Dichlorobenzene	µg/L	600			2700U	
1,2-Dichloroethane	µg/L	5			2700U	
1,2-Dimethylbenzene	µg/L	10,000			2700U	
1,4-Dichlorobenzene	µg/L	75			2700U	
2-Butanone	µg/L	53,800			8000U	
4-Methyl-2-pentanone	µg/L	6360			6700U	
Acetone	µg/L	10,200			13000U	
Benzene	µg/L	5			2700U	
Bromodichloromethane	µg/L	100			2700U	
Bromoform	µg/L	100			2700U	
Bromomethane	µg/L	140			2700U	
Carbon disulfide	µg/L	6270			2700U	
Carbon tetrachloride	µg/L	5			2700U	
Chlorobenzene	µg/L	100			2700U	
Chloroethane	µg/L	246,000			2700U	
Chloroform	µg/L	100			2700U	
Chloromethane	µg/L	13.4			2700U	
cis-1,2-Dichloroethene	µg/L	70			410J	
Dibromochloromethane	µg/L	3.12			2700U	
Ethylbenzene	µg/L	700			2700U	
M + P Xylene	µg/L	10,000			2700U	
Methylene chloride	µg/L	5			530J	

X-701B Holding Pond

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X701-08G						
Tetrachloroethene	µg/L	5			1000J	
Toluene	µg/L	1000			2700U	
trans-1,2-Dichloroethene	µg/L	100			1300U	
Trichloroethene	µg/L	5			340000	
Trichlorofluoromethane	µg/L	12,100			2700U	
Vinyl chloride	µg/L	2			1300U	
Radionuclides						
Americium-241	pCi/L	0.49			0.02439U	
Neptunium-237	pCi/L	0.54			-0.05996U	
Plutonium-238	pCi/L				0.01997U	
Plutonium-239/240	pCi/L	0.51			-0.02658U	
Technetium-99	pCi/L	3790			222	
Uranium	µg/L	1000			0.2494	
Uranium-233/234	pCi/L	124,000			0.06349U	
Uranium-235	pCi/L	43			-0.008683U	
Uranium-236	pCi/L				0.02344U	
Uranium-238	pCi/L	6.7			0.08447	
Other Parameters						
Alkalinity	mg/L				42	
Chloride	mg/L				85	
Sulfate	mg/L				290	
Field Measurements						
Conductivity	µS/cm				878	
Depth to Water	ft				17.44	
Dissolved Oxygen	mg/L				54	
pH	Std Unit				5.43	
Temperature	deg C				16.5	
Turbidity	NTU				75	
X701-09G						
Metals						
Cadmium	µg/L	6.5	4.4		4.3	
Calcium	µg/L		44000			
Chromium	µg/L	100	280		140	
Cobalt	µg/L	13	13		26	
Iron	µg/L		26000		59000	
Lead	µg/L	50	6.7		18	
Magnesium	µg/L		27000		29000	
Manganese	µg/L	14,300	5600		1400	
Nickel	µg/L	100	150		160	
Potassium	µg/L		150000		170000	

X-701B Holding Pond

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X701-09G						
Sodium	µg/L		69000		74000	
Thallium	µg/L	10.5	3		4.1	
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200	1000U			
1,1,2,2-Tetrachloroethane	µg/L	0.83	500U			
1,1,2-Trichloroethane	µg/L	5	1000U			
1,1-Dichloroethane	µg/L	5860	1000U			
1,1-Dichloroethene	µg/L	7	1000U			
1,2-Dichlorobenzene	µg/L	600	1000U			
1,2-Dichloroethane	µg/L	5	1000U			
1,2-Dimethylbenzene	µg/L	10,000	1000U			
1,4-Dichlorobenzene	µg/L	75	1000U			
2-Butanone	µg/L	53,800	3000U			
4-Methyl-2-pentanone	µg/L	6360	2500U			
Acetone	µg/L	10,200	1700J			
Benzene	µg/L	5	1000U			
Bromodichloromethane	µg/L	100	1000U			
Bromoform	µg/L	100	1000U			
Bromomethane	µg/L	140	1000U			
Carbon disulfide	µg/L	6270	1000U			
Carbon tetrachloride	µg/L	5	1000U			
Chlorobenzene	µg/L	100	1000U			
Chloroethane	µg/L	246,000	1000U			
Chloroform	µg/L	100	1000U			
Chloromethane	µg/L	13.4	1000U			
cis-1,2-Dichloroethene	µg/L	70	4900			
Dibromochloromethane	µg/L	3.12	1000U			
Ethylbenzene	µg/L	700	1000U			
M + P Xylene	µg/L	10,000	1000U			
Methylene chloride	µg/L	5	2500U			
Tetrachloroethene	µg/L	5	340J			
Toluene	µg/L	1000	1000U			
trans-1,2-Dichloroethene	µg/L	100	500U			
Trichloroethene	µg/L	5	210000			
Trichlorofluoromethane	µg/L	12,100	1000U			
Vinyl chloride	µg/L	2	500U			
Radionuclides						
Americium-241	pCi/L	0.49	0.02981U			
Neptunium-237	pCi/L	0.54	-0.02648U			
Plutonium-238	pCi/L		0.01984U			

X-701B Holding Pond

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X701-09G						
Plutonium-239/240	pCi/L	0.51	-0.006606U			
Technetium-99	pCi/L	3790	199			
Uranium	µg/L	1000	1.917			
Uranium-233/234	pCi/L	124,000	0.5802			
Uranium-235	pCi/L	43	0.03408U			
Uranium-236	pCi/L		-0.007643U			
Uranium-238	pCi/L	6.7	0.6411			
Other Parameters						
Alkalinity	mg/L		210		210	
Chloride	mg/L		78		79	
Sulfate	mg/L		240		260	
Field Measurements						
Conductivity	µS/cm		1173		1194	
Depth to Water	ft		15.47		14.19	
Dissolved Oxygen	mg/L		21		53	
pH	Std Unit		6.06		6.19	
Temperature	deg C		13		16	
Turbidity	NTU		695		1000	
X701-10G						
Metals						
Calcium	µg/L		32000			
Iron	µg/L		66B			
Magnesium	µg/L		20000			
Potassium	µg/L		2900B			
Sodium	µg/L		60000			
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200	8U		10U	
1,1,2,2-Tetrachloroethane	µg/L	0.83	4U		5U	
1,1,2-Trichloroethane	µg/L	5	1.7J		2.8J	
1,1-Dichloroethane	µg/L	5860	8U		10U	
1,1-Dichloroethene	µg/L	7	0.58J		1.6J	
1,2-Dichlorobenzene	µg/L	600	8U		10U	
1,2-Dichloroethane	µg/L	5	8U		10U	
1,2-Dimethylbenzene	µg/L	10,000	8U		10U	
1,4-Dichlorobenzene	µg/L	75	8U		10U	
2-Butanone	µg/L	53,800	24U		30U	
4-Methyl-2-pentanone	µg/L	6360	20U		25U	
Acetone	µg/L	10,200	40U		50U	
Benzene	µg/L	5	8U		10U	
Bromodichloromethane	µg/L	100	8U		10U	

X-701B Holding Pond

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X701-10G						
Bromoform	µg/L	100	8U		10U	
Bromomethane	µg/L	140	8U		10U	
Carbon disulfide	µg/L	6270	8U		10U	
Carbon tetrachloride	µg/L	5	8U		10U	
Chlorobenzene	µg/L	100	8U		10U	
Chloroethane	µg/L	246,000	8U		10U	
Chloroform	µg/L	100	8U		10U	
Chloromethane	µg/L	13.4	8U		10U	
cis-1,2-Dichloroethene	µg/L	70	25		61	
Dibromochloromethane	µg/L	3.12	8U		10U	
Ethylbenzene	µg/L	700	8U		10U	
M + P Xylene	µg/L	10,000	8U		10U	
Methylene chloride	µg/L	5	20U		25U	
Tetrachloroethene	µg/L	5	1.4J		2.6J	
Toluene	µg/L	1000	8U		10U	
trans-1,2-Dichloroethene	µg/L	100	4U		5U	
Trichloroethene	µg/L	5	1300		2400	
Trichlorofluoromethane	µg/L	12,100	8U		10U	
Vinyl chloride	µg/L	2	4U		5U	
Radionuclides						
Americium-241	pCi/L	0.49	0.02023U		0.01923U	
Neptunium-237	pCi/L	0.54	-0.02624U		-0.1819U	
Plutonium-238	pCi/L		-0.00653U		0.01398U	
Plutonium-239/240	pCi/L	0.51	-0.05234U		0.006996U	
Technetium-99	pCi/L	3790	-1.23U		0.65U	
Uranium	µg/L	1000	0.1397U		0.136U	
Uranium-233/234	pCi/L	124,000	0.0739		0.07728U	
Uranium-235	pCi/L	43	0U		0.007941U	
Uranium-236	pCi/L		0U		0U	
Uranium-238	pCi/L	6.7	0.04694U		0.04498U	
Other Parameters						
Alkalinity	mg/L		47			
Chloride	mg/L		24			
Sulfate	mg/L		180			
Field Measurements						
Conductivity	µS/cm		536		560	
Depth to Water	ft		19.45		16.24	
Dissolved Oxygen	mg/L		nm		1	
pH	Std Unit		5.92		5.66	
Temperature	deg C		14.3		14.6	

X-701B Holding Pond

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X701-10G						
Turbidity	NTU		5		4	
X701-12G						
Metals						
Calcium	µg/L		65000			
Iron	µg/L		76B			
Magnesium	µg/L		44000			
Potassium	µg/L		3600			
Sodium	µg/L		85000			
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200	2U		2U	
1,1,2,2-Tetrachloroethane	µg/L	0.83	1U		1U	
1,1,2-Trichloroethane	µg/L	5	2U		2U	
1,1-Dichloroethane	µg/L	5860	0.18J		2U	
1,1-Dichloroethene	µg/L	7	0.21J		2U	
1,2-Dichlorobenzene	µg/L	600	0.17J		0.17J	
1,2-Dichloroethane	µg/L	5	2U		2U	
1,2-Dimethylbenzene	µg/L	10,000	2U		2U	
1,4-Dichlorobenzene	µg/L	75	2U		2U	
2-Butanone	µg/L	53,800	6U		6U	
4-Methyl-2-pentanone	µg/L	6360	5U		5U	
Acetone	µg/L	10,200	2.1J		10U	
Benzene	µg/L	5	2U		2U	
Bromodichloromethane	µg/L	100	2U		2U	
Bromoform	µg/L	100	2U		2U	
Bromomethane	µg/L	140	2U		2U	
Carbon disulfide	µg/L	6270	2U		2U	
Carbon tetrachloride	µg/L	5	2U		2U	
Chlorobenzene	µg/L	100	2U		2U	
Chloroethane	µg/L	246,000	2U		2U	
Chloroform	µg/L	100	0.26J		0.29J	
Chloromethane	µg/L	13.4	2U		2U	
cis-1,2-Dichloroethene	µg/L	70	54		49	
Dibromochloromethane	µg/L	3.12	2U		2U	
Ethylbenzene	µg/L	700	2U		2U	
M + P Xylene	µg/L	10,000	2U		2U	
Methylene chloride	µg/L	5	5U		5U	
Tetrachloroethene	µg/L	5	0.41J		0.41J	
Toluene	µg/L	1000	2U		2U	
trans-1,2-Dichloroethene	µg/L	100	0.16J		0.61J	
Trichloroethene	µg/L	5	94		40	

X-701B Holding Pond

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X701-12G						
Trichlorofluoromethane	µg/L	12,100	2U		2U	
Vinyl chloride	µg/L	2	3.2		2.3	
Radionuclides						
Americium-241	pCi/L	0.49	0.0306U		-0.01152U	
Neptunium-237	pCi/L	0.54	-0.006556U		-0.06175U	
Plutonium-238	pCi/L		0.00655U		0.02741U	
Plutonium-239/240	pCi/L	0.51	-0.01307U		0.00001369U	
Technetium-99	pCi/L	3790	181		204	
Uranium	µg/L	1000	0.08501U		0.1021	
Uranium-233/234	pCi/L	124,000	0.05035U		0.02697U	
Uranium-235	pCi/L	43	0U		0.008311U	
Uranium-236	pCi/L		-0.03183U		-0.007455U	
Uranium-238	pCi/L	6.7	0.02873U		0.03362	
Other Parameters						
Alkalinity	mg/L		42			
Chloride	mg/L		95			
Sulfate	mg/L		340			
Field Measurements						
Conductivity	µS/cm		1010		1067	
Depth to Water	ft		17.73		15.21	
Dissolved Oxygen	mg/L		1		1	
pH	Std Unit		5.58		5.56	
Temperature	deg C		12.9		14.7	
Turbidity	NTU		3		7	
X701-13G						
Metals						
Calcium	µg/L		62000			
Iron	µg/L		90B			
Magnesium	µg/L		42000			
Potassium	µg/L		3400			
Sodium	µg/L		74000			
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200	1.2J		13U	
1,1,2,2-Tetrachloroethane	µg/L	0.83	6.7U		6.7U	
1,1,2-Trichloroethane	µg/L	5	4.1J		2.7J	
1,1-Dichloroethane	µg/L	5860	13U		13U	
1,1-Dichloroethene	µg/L	7	1.4J		1.2J	
1,2-Dichlorobenzene	µg/L	600	13U		13U	
1,2-Dichloroethane	µg/L	5	13U		13U	
1,2-Dimethylbenzene	µg/L	10,000	13U		13U	

X-701B Holding Pond

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X701-13G						
1,4-Dichlorobenzene	µg/L	75	13U		13U	
2-Butanone	µg/L	53,800	40U		40U	
4-Methyl-2-pentanone	µg/L	6360	33U		33U	
Acetone	µg/L	10,200	67U		67U	
Benzene	µg/L	5	13U		13U	
Bromodichloromethane	µg/L	100	13U		13U	
Bromoform	µg/L	100	13U		13U	
Bromomethane	µg/L	140	13U		13U	
Carbon disulfide	µg/L	6270	13U		13U	
Carbon tetrachloride	µg/L	5	13U		13U	
Chlorobenzene	µg/L	100	13U		13U	
Chloroethane	µg/L	246,000	13U		13U	
Chloroform	µg/L	100	13U		13U	
Chloromethane	µg/L	13.4	13U		13U	
cis-1,2-Dichloroethene	µg/L	70	100		94	
Dibromochloromethane	µg/L	3.12	13U		13U	
Ethylbenzene	µg/L	700	13U		13U	
M + P Xylene	µg/L	10,000	13U		13U	
Methylene chloride	µg/L	5	33U		3.9J	
Tetrachloroethene	µg/L	5	10J		6.5J	
Toluene	µg/L	1000	13U		13U	
trans-1,2-Dichloroethene	µg/L	100	6.7U		6.7U	
Trichloroethene	µg/L	5	3800		2600	
Trichlorofluoromethane	µg/L	12,100	13U		13U	
Vinyl chloride	µg/L	2	6.7U		6.7U	
Radionuclides						
Americium-241	pCi/L	0.49	0.01041U		0.0167U	
Neptunium-237	pCi/L	0.54	-0.007739U		-0.05312U	
Plutonium-238	pCi/L		-0.03089U		0.01327U	
Plutonium-239/240	pCi/L	0.51	0.007749U		-0.02647U	
Technetium-99	pCi/L	3790	138		181	
Uranium	µg/L	1000	0.1793		0.195U	
Uranium-233/234	pCi/L	124,000	0.0403U		0.1115	
Uranium-235	pCi/L	43	0U		0U	
Uranium-236	pCi/L		-0.007428U		0.007267U	
Uranium-238	pCi/L	6.7	0.06029		0.06549U	
Other Parameters						
Alkalinity	mg/L		43			
Chloride	mg/L		75			
Sulfate	mg/L		330			

X-701B Holding Pond

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X701-13G						
Field Measurements						
Conductivity	µS/cm		933		1013	
Depth to Water	ft		19.68		16.69	
Dissolved Oxygen	mg/L		2		12	
pH	Std Unit		5.46		5.62	
Temperature	deg C		12.7		14.7	
Turbidity	NTU		5		19	
X701-14G						
Metals						
Cadmium	µg/L	6.5	8.3		5.2	
Calcium	µg/L		44000			
Chromium	µg/L	100	1.8B		3.2	
Cobalt	µg/L	13	600E		130	
Iron	µg/L		2800			
Lead	µg/L	50	12		16	
Magnesium	µg/L		27000			
Manganese	µg/L	14,300	2400E		1200	
Nickel	µg/L	100	370		75	
Potassium	µg/L		46000			
Sodium	µg/L		120000			
Thallium	µg/L	10.5	0.46B		0.28B	
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200	60J			
1,1,2,2-Tetrachloroethane	µg/L	0.83	100U			
1,1,2-Trichloroethane	µg/L	5	200U			
1,1-Dichloroethane	µg/L	5860	32J			
1,1-Dichloroethene	µg/L	7	30J			
1,2-Dichlorobenzene	µg/L	600	200U			
1,2-Dichloroethane	µg/L	5	200U			
1,2-Dimethylbenzene	µg/L	10,000	200U			
1,4-Dichlorobenzene	µg/L	75	200U			
2-Butanone	µg/L	53,800	600U			
4-Methyl-2-pentanone	µg/L	6360	500U			
Acetone	µg/L	10,200	1000U			
Benzene	µg/L	5	200U			
Bromodichloromethane	µg/L	100	200U			
Bromoform	µg/L	100	200U			
Bromomethane	µg/L	140	200U			
Carbon disulfide	µg/L	6270	200U			
Carbon tetrachloride	µg/L	5	200U			

X-701B Holding Pond

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X701-14G						
Chlorobenzene	µg/L	100	200U			
Chloroethane	µg/L	246,000	200U			
Chloroform	µg/L	100	200U			
Chloromethane	µg/L	13.4	200U			
cis-1,2-Dichloroethene	µg/L	70	1700			
Dibromochloromethane	µg/L	3.12	200U			
Ethylbenzene	µg/L	700	200U			
M + P Xylene	µg/L	10,000	200U			
Methylene chloride	µg/L	5	500U			
Tetrachloroethene	µg/L	5	67J			
Toluene	µg/L	1000	200U			
trans-1,2-Dichloroethene	µg/L	100	100U			
Trichloroethene	µg/L	5	37000			
Trichlorofluoromethane	µg/L	12,100	200U			
Vinyl chloride	µg/L	2	100U			
Radionuclides						
Americium-241	pCi/L	0.49	0.03145U			
Neptunium-237	pCi/L	0.54	-0.006362U			
Plutonium-238	pCi/L		0.0000254U			
Plutonium-239/240	pCi/L	0.51	0.00637U			
Technetium-99	pCi/L	3790	710			
Uranium	µg/L	1000	0.08307U			
Uranium-233/234	pCi/L	124,000	0.03498U			
Uranium-235	pCi/L	43	0U			
Uranium-236	pCi/L		0U			
Uranium-238	pCi/L	6.7	0.02791U			
Other Parameters						
Alkalinity	mg/L		140		190	
Chloride	mg/L		61		72	
Sulfate	mg/L		290		230	
Field Measurements						
Conductivity	µS/cm		1067		931	
Depth to Water	ft		19.13		16.58	
Dissolved Oxygen	mg/L		29		41	
pH	Std Unit		5.96		6.15	
Temperature	deg C		13.4		14.7	
Turbidity	NTU		12		169	
X701-15G						
Metals						
Calcium	µg/L		35000			

X-701B Holding Pond

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X701-15G						
Iron	µg/L		290			
Magnesium	µg/L		19000			
Potassium	µg/L		1200B			
Sodium	µg/L		31000			
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200	2U		2U	
1,1,2,2-Tetrachloroethane	µg/L	0.83	1U		1U	
1,1,2-Trichloroethane	µg/L	5	2U		2U	
1,1-Dichloroethane	µg/L	5860	2U		2U	
1,1-Dichloroethene	µg/L	7	2U		2U	
1,2-Dichlorobenzene	µg/L	600	2U		2U	
1,2-Dichloroethane	µg/L	5	2U		2U	
1,2-Dimethylbenzene	µg/L	10,000	2U		2U	
1,4-Dichlorobenzene	µg/L	75	2U		2U	
2-Butanone	µg/L	53,800	6U		6U	
4-Methyl-2-pentanone	µg/L	6360	5U		5U	
Acetone	µg/L	10,200	10U		10U	
Benzene	µg/L	5	2U		2U	
Bromodichloromethane	µg/L	100	2U		2U	
Bromoform	µg/L	100	2U		2U	
Bromomethane	µg/L	140	2U		2U	
Carbon disulfide	µg/L	6270	2U		2U	
Carbon tetrachloride	µg/L	5	2U		2U	
Chlorobenzene	µg/L	100	2U		2U	
Chloroethane	µg/L	246,000	2U		2U	
Chloroform	µg/L	100	2U		2U	
Chloromethane	µg/L	13.4	2U		2U	
cis-1,2-Dichloroethene	µg/L	70	17		29	
Dibromochloromethane	µg/L	3.12	2U		2U	
Ethylbenzene	µg/L	700	2U		2U	
M + P Xylene	µg/L	10,000	2U		2U	
Methylene chloride	µg/L	5	5U		5U	
Tetrachloroethene	µg/L	5	2U		2U	
Toluene	µg/L	1000	2U		2U	
trans-1,2-Dichloroethene	µg/L	100	1.2		1.1	
Trichloroethene	µg/L	5	5.1		9	
Trichlorofluoromethane	µg/L	12,100	2U		2U	
Vinyl chloride	µg/L	2	1U		1U	
Radionuclides						
Americium-241	pCi/L	0.49	-0.009876U		-0.01776U	

X-701B Holding Pond

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X701-15G						
Neptunium-237	pCi/L	0.54	-0.01481U		-0.00681U	
Plutonium-238	pCi/L		-0.0148U		0.02719U	
Plutonium-239/240	pCi/L	0.51	-0.03697U		0.006798U	
Technetium-99	pCi/L	3790	-5.99U		-1.24U	
Uranium	µg/L	1000	0.2474		0.2941	
Uranium-233/234	pCi/L	124,000	0.03032U		0.1386	
Uranium-235	pCi/L	43	0U		0U	
Uranium-236	pCi/L		0U		0U	
Uranium-238	pCi/L	6.7	0.08315		0.09882	
Other Parameters						
Alkalinity	mg/L		78			
Chloride	mg/L		60			
Sulfate	mg/L		56			
Field Measurements						
Conductivity	µS/cm				614	
Depth to Water	ft				8.8	
Dissolved Oxygen	mg/L				1	
pH	Std Unit				5.85	
Temperature	deg C				16.8	
Turbidity	NTU				2	
X701-16G						
Metals						
Calcium	µg/L		19000			
Iron	µg/L		2800			
Magnesium	µg/L		19000			
Potassium	µg/L		1900B			
Sodium	µg/L		30000			
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200	2U		2U	
1,1,2,2-Tetrachloroethane	µg/L	0.83	1U		1U	
1,1,2-Trichloroethane	µg/L	5	2U		2U	
1,1-Dichloroethane	µg/L	5860	2U		2U	
1,1-Dichloroethene	µg/L	7	2U		2U	
1,2-Dichlorobenzene	µg/L	600	2U		2U	
1,2-Dichloroethane	µg/L	5	2U		2U	
1,2-Dimethylbenzene	µg/L	10,000	2U		2U	
1,4-Dichlorobenzene	µg/L	75	2U		2U	
2-Butanone	µg/L	53,800	6U		6U	
4-Methyl-2-pentanone	µg/L	6360	5U		5U	
Acetone	µg/L	10,200	10U		10U	

X-701B Holding Pond

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X701-16G						
Benzene	µg/L	5	2U		2U	
Bromodichloromethane	µg/L	100	2U		2U	
Bromoform	µg/L	100	2U		2U	
Bromomethane	µg/L	140	2U		2U	
Carbon disulfide	µg/L	6270	2U		2U	
Carbon tetrachloride	µg/L	5	2U		2U	
Chlorobenzene	µg/L	100	2U		2U	
Chloroethane	µg/L	246,000	2U		2U	
Chloroform	µg/L	100	2U		2U	
Chloromethane	µg/L	13.4	2U		2U	
cis-1,2-Dichloroethene	µg/L	70	2U		2U	
Dibromochloromethane	µg/L	3.12	2U		2U	
Ethylbenzene	µg/L	700	2U		2U	
M + P Xylene	µg/L	10,000	2U		2U	
Methylene chloride	µg/L	5	5U		5U	
Tetrachloroethene	µg/L	5	2U		2U	
Toluene	µg/L	1000	2U		2U	
trans-1,2-Dichloroethene	µg/L	100	1U		1U	
Trichloroethene	µg/L	5	1.2J		2U	
Trichlorofluoromethane	µg/L	12,100	2U		2U	
Vinyl chloride	µg/L	2	1U		1U	
Radionuclides						
Americium-241	pCi/L	0.49	-0.01826U		0.008255U	
Neptunium-237	pCi/L	0.54	-0.006392U		0.00002092U	
Plutonium-238	pCi/L		0.01281U		0.00003477U	
Plutonium-239/240	pCi/L	0.51	-0.006393U		0.02089U	
Technetium-99	pCi/L	3790	-1.45U		-1.58U	
Uranium	µg/L	1000	0.3824		0.3005	
Uranium-233/234	pCi/L	124,000	0.08537U		0.121	
Uranium-235	pCi/L	43	0.008771U		-0.007848U	
Uranium-236	pCi/L		0U		-0.007047U	
Uranium-238	pCi/L	6.7	0.1277		0.1017	
Other Parameters						
Alkalinity	mg/L		1.4B			
Chloride	mg/L		45			
Sulfate	mg/L		150			
Field Measurements						
Conductivity	µS/cm		433		383	
Depth to Water	ft		8.79		8.44	
Dissolved Oxygen	mg/L		1		1	

X-701B Holding Pond

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X701-16G						
pH	Std Unit		4.16		4.62	
Temperature	deg C		9.36		18.7	
Turbidity	NTU		1		5	
X701-18G						
Metals						
Calcium	µg/L				10000	
Iron	µg/L				32B	
Magnesium	µg/L				6000	
Potassium	µg/L				710B	
Sodium	µg/L				34000	
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200			2U	
1,1,2,2-Tetrachloroethane	µg/L	0.83			1U	
1,1,2-Trichloroethane	µg/L	5			2U	
1,1-Dichloroethane	µg/L	5860			2U	
1,1-Dichloroethene	µg/L	7			2U	
1,2-Dichlorobenzene	µg/L	600			2U	
1,2-Dichloroethane	µg/L	5			2U	
1,2-Dimethylbenzene	µg/L	10,000			2U	
1,4-Dichlorobenzene	µg/L	75			2U	
2-Butanone	µg/L	53,800			6U	
4-Methyl-2-pentanone	µg/L	6360			5U	
Acetone	µg/L	10,200			10U	
Benzene	µg/L	5			2U	
Bromodichloromethane	µg/L	100			2U	
Bromoform	µg/L	100			2U	
Bromomethane	µg/L	140			2U	
Carbon disulfide	µg/L	6270			2U	
Carbon tetrachloride	µg/L	5			2U	
Chlorobenzene	µg/L	100			2U	
Chloroethane	µg/L	246,000			2U	
Chloroform	µg/L	100			2U	
Chloromethane	µg/L	13.4			2U	
cis-1,2-Dichloroethene	µg/L	70			2U	
Dibromochloromethane	µg/L	3.12			2U	
Ethylbenzene	µg/L	700			2U	
M + P Xylene	µg/L	10,000			2U	
Methylene chloride	µg/L	5			0.32J	
Tetrachloroethene	µg/L	5			2U	
Toluene	µg/L	1000			2U	

X-701B Holding Pond

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X701-18G						
trans-1,2-Dichloroethene	µg/L	100			1U	
Trichloroethene	µg/L	5			2U	
Trichlorofluoromethane	µg/L	12,100			2U	
Vinyl chloride	µg/L	2			1U	
Radionuclides						
Americium-241	pCi/L	0.49			0.000007699U	
Neptunium-237	pCi/L	0.54			-0.01363U	
Plutonium-238	pCi/L				-0.006798U	
Plutonium-239/240	pCi/L	0.51			-0.01358U	
Technetium-99	pCi/L	3790			-0.0898U	
Uranium	µg/L	1000			-0.1195U	
Uranium-233/234	pCi/L	124,000			0.0198U	
Uranium-235	pCi/L	43			-0.008107U	
Uranium-236	pCi/L				-0.02184U	
Uranium-238	pCi/L	6.7			-0.03933U	
Other Parameters						
Alkalinity	mg/L				69	
Chloride	mg/L				1.1B	
Sulfate	mg/L				49	
Field Measurements						
Conductivity	µS/cm				242	
Depth to Water	ft				14.53	
Dissolved Oxygen	mg/L				3	
pH	Std Unit				5.92	
Temperature	deg C				15.3	
Turbidity	NTU				2	
X701-19G						
Metals						
Calcium	µg/L		14000			
Iron	µg/L		74B			
Magnesium	µg/L		8100			
Potassium	µg/L		1400B			
Sodium	µg/L		25000			
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200	2U		2U	
1,1,2,2-Tetrachloroethane	µg/L	0.83	1U		1U	
1,1,2-Trichloroethane	µg/L	5	2U		2U	
1,1-Dichloroethane	µg/L	5860	2U		2U	
1,1-Dichloroethene	µg/L	7	2U		2U	
1,2-Dichlorobenzene	µg/L	600	2U		2U	

X-701B Holding Pond

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X701-19G						
1,2-Dichloroethane	µg/L	5	2U		2U	
1,2-Dimethylbenzene	µg/L	10,000	2U		2U	
1,4-Dichlorobenzene	µg/L	75	2U		2U	
2-Butanone	µg/L	53,800	6U		6U	
4-Methyl-2-pentanone	µg/L	6360	5U		5U	
Acetone	µg/L	10,200	10U		10U	
Benzene	µg/L	5	2U		2U	
Bromodichloromethane	µg/L	100	2U		2U	
Bromoform	µg/L	100	2U		2U	
Bromomethane	µg/L	140	2U		2U	
Carbon disulfide	µg/L	6270	2U		2U	
Carbon tetrachloride	µg/L	5	2U		2U	
Chlorobenzene	µg/L	100	2U		2U	
Chloroethane	µg/L	246,000	2U		2U	
Chloroform	µg/L	100	2U		2U	
Chloromethane	µg/L	13.4	2U		2U	
cis-1,2-Dichloroethene	µg/L	70	2U		2U	
Dibromochloromethane	µg/L	3.12	2U		2U	
Ethylbenzene	µg/L	700	2U		2U	
M + P Xylene	µg/L	10,000	2U		2U	
Methylene chloride	µg/L	5	5U		5U	
Tetrachloroethene	µg/L	5	2U		2U	
Toluene	µg/L	1000	2U		2U	
trans-1,2-Dichloroethene	µg/L	100	1U		1U	
Trichloroethene	µg/L	5	2U		2U	
Trichlorofluoromethane	µg/L	12,100	2U		2U	
Vinyl chloride	µg/L	2	1U		1U	
Radionuclides						
Americium-241	pCi/L	0.49	-0.008148U		0.01052U	
Neptunium-237	pCi/L	0.54	0.02831U		-0.02371U	
Plutonium-238	pCi/L		0.01413U		0.0237U	
Plutonium-239/240	pCi/L	0.51	0.007063U		-0.01576U	
Technetium-99	pCi/L	3790	-4.33U		-2.46U	
Uranium	µg/L	1000	0.04151U		0.07726U	
Uranium-233/234	pCi/L	124,000	0.02793U		0.02007U	
Uranium-235	pCi/L	43	0U		-0.00823U	
Uranium-236	pCi/L		0U		0.007397U	
Uranium-238	pCi/L	6.7	0.01395U		0.02666U	
Other Parameters						
Alkalinity	mg/L		22			

X-701B Holding Pond

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X701-19G						
Chloride	mg/L		46			
Sulfate	mg/L		30			
Field Measurements						
Conductivity	µS/cm		265		241	
Depth to Water	ft		8.46		10.08	
Dissolved Oxygen	mg/L		2		3	
pH	Std Unit		5.16		5.11	
Temperature	deg C		11.5		14.6	
Turbidity	NTU		5		2	
X701-20G						
Metals						
Calcium	µg/L		28000			
Iron	µg/L		190			
Magnesium	µg/L		20000			
Manganese	µg/L	14,300	460		390	
Potassium	µg/L		1800B			
Sodium	µg/L		89000			
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200	1000U			
1,1,2,2-Tetrachloroethane	µg/L	0.83	500U			
1,1,2-Trichloroethane	µg/L	5	1000U			
1,1-Dichloroethane	µg/L	5860	1000U			
1,1-Dichloroethene	µg/L	7	1000U			
1,2-Dichlorobenzene	µg/L	600	1000U			
1,2-Dichloroethane	µg/L	5	1000U			
1,2-Dimethylbenzene	µg/L	10,000	1000U			
1,4-Dichlorobenzene	µg/L	75	1000U			
2-Butanone	µg/L	53,800	3000U			
4-Methyl-2-pentanone	µg/L	6360	2500U			
Acetone	µg/L	10,200	5000U			
Benzene	µg/L	5	1000U			
Bromodichloromethane	µg/L	100	1000U			
Bromoform	µg/L	100	1000U			
Bromomethane	µg/L	140	1000U			
Carbon disulfide	µg/L	6270	1000U			
Carbon tetrachloride	µg/L	5	1000U			
Chlorobenzene	µg/L	100	1000U			
Chloroethane	µg/L	246,000	1000U			
Chloroform	µg/L	100	1000U			
Chloromethane	µg/L	13.4	1000U			

X-701B Holding Pond

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X701-20G						
cis-1,2-Dichloroethene	µg/L	70	2800			
Dibromochloromethane	µg/L	3.12	1000U			
Ethylbenzene	µg/L	700	1000U			
M + P Xylene	µg/L	10,000	1000U			
Methylene chloride	µg/L	5	170J			
Tetrachloroethene	µg/L	5	120J			
Toluene	µg/L	1000	1000U			
trans-1,2-Dichloroethene	µg/L	100	500U			
Trichloroethene	µg/L	5	140000			
Trichlorofluoromethane	µg/L	12,100	1000U			
Vinyl chloride	µg/L	2	500U			
Radionuclides						
Americium-241	pCi/L	0.49	0.00004988U			
Neptunium-237	pCi/L	0.54	0.00001477U			
Plutonium-238	pCi/L		0.01474U			
Plutonium-239/240	pCi/L	0.51	0.007369U			
Technetium-99	pCi/L	3790	97.8			
Uranium	µg/L	1000	0.1129U			
Uranium-233/234	pCi/L	124,000	0.07439			
Uranium-235	pCi/L	43	0.009175U			
Uranium-236	pCi/L		0U			
Uranium-238	pCi/L	6.7	0.03712U			
Other Parameters						
Alkalinity	mg/L		12			
Chloride	mg/L		81			
Sulfate	mg/L		200			
Field Measurements						
Conductivity	µS/cm		718		691	
Depth to Water	ft		28.18		28.81	
Dissolved Oxygen	mg/L		1		2	
pH	Std Unit		4.77		4.84	
Temperature	deg C		12.6		14.5	
Turbidity	NTU		13		5	
X701-21G						
Metals						
Calcium	µg/L		34000			
Iron	µg/L		100U			
Magnesium	µg/L		25000			
Manganese	µg/L	14,300	100		98	
Potassium	µg/L		2600B			

X-701B Holding Pond

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X701-21G						
Sodium	µg/L		77000			
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200	2U		2U	
1,1,2,2-Tetrachloroethane	µg/L	0.83	1U		1U	
1,1,2-Trichloroethane	µg/L	5	2U		2U	
1,1-Dichloroethane	µg/L	5860	2U		2U	
1,1-Dichloroethene	µg/L	7	2U		2U	
1,2-Dichlorobenzene	µg/L	600	0.22J		0.22J	
1,2-Dichloroethane	µg/L	5	2U		2U	
1,2-Dimethylbenzene	µg/L	10,000	2U		2U	
1,4-Dichlorobenzene	µg/L	75	2U		2U	
2-Butanone	µg/L	53,800	6U		6U	
4-Methyl-2-pentanone	µg/L	6360	5U		5U	
Acetone	µg/L	10,200	10U		10U	
Benzene	µg/L	5	2U		2U	
Bromodichloromethane	µg/L	100	2U		2U	
Bromoform	µg/L	100	2U		2U	
Bromomethane	µg/L	140	2U		2U	
Carbon disulfide	µg/L	6270	2U		2U	
Carbon tetrachloride	µg/L	5	2U		2U	
Chlorobenzene	µg/L	100	2U		2U	
Chloroethane	µg/L	246,000	2U		2U	
Chloroform	µg/L	100	0.39J		0.46J	
Chloromethane	µg/L	13.4	2U		2U	
cis-1,2-Dichloroethene	µg/L	70	0.17J		0.54J	
Dibromochloromethane	µg/L	3.12	2U		2U	
Ethylbenzene	µg/L	700	2U		2U	
M + P Xylene	µg/L	10,000	2U		2U	
Methylene chloride	µg/L	5	5U		0.34BJ	
Tetrachloroethene	µg/L	5	2U		2U	
Toluene	µg/L	1000	2U		2U	
trans-1,2-Dichloroethene	µg/L	100	1U		1U	
Trichloroethene	µg/L	5	16		32	
Trichlorofluoromethane	µg/L	12,100	2U		2U	
Vinyl chloride	µg/L	2	1U		1U	
Radionuclides						
Americium-241	pCi/L	0.49	0.01055U		0.02863U	
Neptunium-237	pCi/L	0.54	-0.01372U		-0.01543U	
Plutonium-238	pCi/L		0.006857U		0.03089U	
Plutonium-239/240	pCi/L	0.51	-0.02054U		0.00002315U	

X-701B Holding Pond

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X701-21G						
Technetium-99	pCi/L	3790	41.9		90.8	
Uranium	µg/L	1000	0.3043		0.1551U	
Uranium-233/234	pCi/L	124,000	0.06587U		0.04479U	
Uranium-235	pCi/L	43	0U		0U	
Uranium-236	pCi/L		0U		0U	
Uranium-238	pCi/L	6.7	0.1022		0.05213U	
Other Parameters						
Alkalinity	mg/L		9			
Chloride	mg/L		68			
Sulfate	mg/L		230			
Field Measurements						
Conductivity	µS/cm		709		704	
Depth to Water	ft		21.45		20.67	
Dissolved Oxygen	mg/L		2		1	
pH	Std Unit		4.95		4.94	
Temperature	deg C		12.9		14.4	
Turbidity	NTU		1		1	
X701-23G						
Metals						
Calcium	µg/L				15000	
Iron	µg/L				100U	
Magnesium	µg/L				9000	
Potassium	µg/L				1600B	
Sodium	µg/L				28000	
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200			2U	
1,1,2,2-Tetrachloroethane	µg/L	0.83			1U	
1,1,2-Trichloroethane	µg/L	5			2U	
1,1-Dichloroethane	µg/L	5860			2U	
1,1-Dichloroethene	µg/L	7			2U	
1,2-Dichlorobenzene	µg/L	600			2U	
1,2-Dichloroethane	µg/L	5			2U	
1,2-Dimethylbenzene	µg/L	10,000			2U	
1,4-Dichlorobenzene	µg/L	75			2U	
2-Butanone	µg/L	53,800			6U	
4-Methyl-2-pentanone	µg/L	6360			5U	
Acetone	µg/L	10,200			10U	
Benzene	µg/L	5			2U	
Bromodichloromethane	µg/L	100			2U	
Bromoform	µg/L	100			2U	

X-701B Holding Pond

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X701-23G						
Bromomethane	µg/L	140			2U	
Carbon disulfide	µg/L	6270			2U	
Carbon tetrachloride	µg/L	5			2U	
Chlorobenzene	µg/L	100			2U	
Chloroethane	µg/L	246,000			2U	
Chloroform	µg/L	100			2U	
Chloromethane	µg/L	13.4			2U	
cis-1,2-Dichloroethene	µg/L	70			2U	
Dibromochloromethane	µg/L	3.12			2U	
Ethylbenzene	µg/L	700			2U	
M + P Xylene	µg/L	10,000			2U	
Methylene chloride	µg/L	5			0.48BJ	
Tetrachloroethene	µg/L	5			2U	
Toluene	µg/L	1000			2U	
trans-1,2-Dichloroethene	µg/L	100			1U	
Trichloroethene	µg/L	5			2.2	
Trichlorofluoromethane	µg/L	12,100			2U	
Vinyl chloride	µg/L	2			1U	
Radionuclides						
Americium-241	pCi/L	0.49			0.000008925U	
Neptunium-237	pCi/L	0.54			-0.02341U	
Plutonium-238	pCi/L				0.01563U	
Plutonium-239/240	pCi/L	0.51			-0.02339U	
Technetium-99	pCi/L	3790			-6.09U	
Uranium	µg/L	1000			-0.02375U	
Uranium-233/234	pCi/L	124,000			0.007247U	
Uranium-235	pCi/L	43			-0.008887U	
Uranium-236	pCi/L				0U	
Uranium-238	pCi/L	6.7			-0.007189U	
Other Parameters						
Alkalinity	mg/L				37	
Chloride	mg/L				24	
Sulfate	mg/L				50	
Field Measurements						
Conductivity	µS/cm				287	
Depth to Water	ft				13.09	
Dissolved Oxygen	mg/L				1	
pH	Std Unit				5.63	
Temperature	deg C				14.4	
Turbidity	NTU				1	

X-701B Holding Pond

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X701-24G						
Metals						
Calcium	µg/L		12000			
Iron	µg/L		13000			
Magnesium	µg/L		8100			
Potassium	µg/L		3600			
Sodium	µg/L		20000			
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200	100U		100U	
1,1,2,2-Tetrachloroethane	µg/L	0.83	50U		50U	
1,1,2-Trichloroethane	µg/L	5	100U		100U	
1,1-Dichloroethane	µg/L	5860	100U		100U	
1,1-Dichloroethene	µg/L	7	100U		8J	
1,2-Dichlorobenzene	µg/L	600	100U		100U	
1,2-Dichloroethane	µg/L	5	100U		100U	
1,2-Dimethylbenzene	µg/L	10,000	100U		100U	
1,4-Dichlorobenzene	µg/L	75	100U		100U	
2-Butanone	µg/L	53,800	300U		300U	
4-Methyl-2-pentanone	µg/L	6360	250U		250U	
Acetone	µg/L	10,200	500U		240J	
Benzene	µg/L	5	100U		100U	
Bromodichloromethane	µg/L	100	100U		100U	
Bromoform	µg/L	100	100U		100U	
Bromomethane	µg/L	140	100U		100U	
Carbon disulfide	µg/L	6270	100U		100U	
Carbon tetrachloride	µg/L	5	100U		100U	
Chlorobenzene	µg/L	100	100U		100U	
Chloroethane	µg/L	246,000	100U		100U	
Chloroform	µg/L	100	100U		100U	
Chloromethane	µg/L	13.4	100U		100U	
cis-1,2-Dichloroethene	µg/L	70	810		880	
Dibromochloromethane	µg/L	3.12	100U		100U	
Ethylbenzene	µg/L	700	100U		100U	
M + P Xylene	µg/L	10,000	100U		100U	
Methylene chloride	µg/L	5	250U		250U	
Tetrachloroethene	µg/L	5	100U		100U	
Toluene	µg/L	1000	100U		100U	
trans-1,2-Dichloroethene	µg/L	100	9.8J		17J	
Trichloroethene	µg/L	5	13000		13000	
Trichlorofluoromethane	µg/L	12,100	100U		100U	
Vinyl chloride	µg/L	2	50U		52	

X-701B Holding Pond

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X701-24G						
Radionuclides						
Americium-241	pCi/L	0.49	0.01009U		0.02379U	
Neptunium-237	pCi/L	0.54	-0.007489U		0.02081U	
Plutonium-238	pCi/L		0.02244U		0.02076U	
Plutonium-239/240	pCi/L	0.51	0.007483U		0.02076U	
Technetium-99	pCi/L	3790	20.5		3.83U	
Uranium	µg/L	1000	0.2321		0.1849U	
Uranium-233/234	pCi/L	124,000	0.05477U		0.123	
Uranium-235	pCi/L	43	0U		0.008426U	
Uranium-236	pCi/L		-0.01731U		0U	
Uranium-238	pCi/L	6.7	0.07807		0.06137U	
Other Parameters						
Alkalinity	mg/L		1.8B			
Chloride	mg/L		14			
Sulfate	mg/L		84			
Field Measurements						
Conductivity	µS/cm		233		220	
Depth to Water	ft		8.83		8.55	
Dissolved Oxygen	mg/L		nm		nm	
pH	Std Unit		4.81		4.95	
Temperature	deg C		9.17		20.8	
Turbidity	NTU		5		3	
X701-25G						
Metals						
Calcium	µg/L		76000			
Iron	µg/L		2500			
Magnesium	µg/L		42000			
Potassium	µg/L		2900B			
Sodium	µg/L		83000			
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200	2U		2U	
1,1,2,2-Tetrachloroethane	µg/L	0.83	1U		1U	
1,1,2-Trichloroethane	µg/L	5	2U		2U	
1,1-Dichloroethane	µg/L	5860	2U		2U	
1,1-Dichloroethene	µg/L	7	2U		2U	
1,2-Dichlorobenzene	µg/L	600	2U		2U	
1,2-Dichloroethane	µg/L	5	2U		2U	
1,2-Dimethylbenzene	µg/L	10,000	2U		2U	
1,4-Dichlorobenzene	µg/L	75	2U		2U	
2-Butanone	µg/L	53,800	6U		6U	

X-701B Holding Pond

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X701-25G						
4-Methyl-2-pentanone	µg/L	6360	5U		5U	
Acetone	µg/L	10,200	10U		10U	
Benzene	µg/L	5	2U		2U	
Bromodichloromethane	µg/L	100	2U		2U	
Bromoform	µg/L	100	2U		2U	
Bromomethane	µg/L	140	2U		2U	
Carbon disulfide	µg/L	6270	2U		2U	
Carbon tetrachloride	µg/L	5	2U		2U	
Chlorobenzene	µg/L	100	2U		2U	
Chloroethane	µg/L	246,000	2U		2U	
Chloroform	µg/L	100	2U		2U	
Chloromethane	µg/L	13.4	2U		2U	
cis-1,2-Dichloroethene	µg/L	70	2U		2U	
Dibromochloromethane	µg/L	3.12	2U		2U	
Ethylbenzene	µg/L	700	2U		2U	
M + P Xylene	µg/L	10,000	2U		2U	
Methylene chloride	µg/L	5	5U		5U	
Tetrachloroethene	µg/L	5	2U		2U	
Toluene	µg/L	1000	2U		2U	
trans-1,2-Dichloroethene	µg/L	100	1U		1U	
Trichloroethene	µg/L	5	0.16J		2U	
Trichlorofluoromethane	µg/L	12,100	2U		2U	
Vinyl chloride	µg/L	2	1U		1U	
Radionuclides						
Americium-241	pCi/L	0.49	-0.01352U		0.02379U	
Neptunium-237	pCi/L	0.54	-0.007141U		-0.06145U	
Plutonium-238	pCi/L		0.01429U		0.02728U	
Plutonium-239/240	pCi/L	0.51	0.007143U		-0.006792U	
Technetium-99	pCi/L	3790	-5.89U		2.23U	
Uranium	µg/L	1000	0.02025U		0.04115U	
Uranium-233/234	pCi/L	124,000	0.00004764U		0.03465U	
Uranium-235	pCi/L	43	0U		0.000008533U	
Uranium-236	pCi/L		0U		0.000007662U	
Uranium-238	pCi/L	6.7	0.006805U		0.01383U	
Other Parameters						
Alkalinity	mg/L		60			
Chloride	mg/L		200			
Sulfate	mg/L		210			
Field Measurements						
Conductivity	µS/cm		1109		1169	

X-701B Holding Pond

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X701-25G						
Depth to Water	ft		10.48		10.42	
Dissolved Oxygen	mg/L		1		1	
pH	Std Unit		5.64		5.55	
Temperature	deg C		13.2		13.6	
Turbidity	NTU		17		50	
X701-30G						
Metals						
Cadmium	µg/L	6.5	0.45B		0.56B	
Nickel	µg/L	100	3.4		2U	
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200	2U		2U	
1,1,2,2-Tetrachloroethane	µg/L	0.83	1U		1U	
1,1,2-Trichloroethane	µg/L	5	2U		2U	
1,1-Dichloroethane	µg/L	5860	2U		2U	
1,1-Dichloroethene	µg/L	7	2U		2U	
1,2-Dichlorobenzene	µg/L	600	2U		2U	
1,2-Dichloroethane	µg/L	5	2U		2U	
1,2-Dimethylbenzene	µg/L	10,000	2U		2U	
1,4-Dichlorobenzene	µg/L	75	2U		2U	
2-Butanone	µg/L	53,800	6U		6U	
4-Methyl-2-pentanone	µg/L	6360	5U		5U	
Acetone	µg/L	10,200	10U		10U	
Benzene	µg/L	5	2U		2U	
Bromodichloromethane	µg/L	100	2U		2U	
Bromoform	µg/L	100	2U		2U	
Bromomethane	µg/L	140	2U		2U	
Carbon disulfide	µg/L	6270	2U		2U	
Carbon tetrachloride	µg/L	5	2U		2U	
Chlorobenzene	µg/L	100	2U		2U	
Chloroethane	µg/L	246,000	2U		2U	
Chloroform	µg/L	100	2U		2U	
Chloromethane	µg/L	13.4	2U		2U	
cis-1,2-Dichloroethene	µg/L	70	0.19J		0.17J	
Dibromochloromethane	µg/L	3.12	2U		2U	
Ethylbenzene	µg/L	700	2U		2U	
M + P Xylene	µg/L	10,000	2U		2U	
Methylene chloride	µg/L	5	5U		5U	
Tetrachloroethene	µg/L	5	2U		2U	
Toluene	µg/L	1000	2U		2U	
trans-1,2-Dichloroethene	µg/L	100	1U		1U	

X-701B Holding Pond

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X701-30G						
Trichloroethene	µg/L	5	4.7		4.3	
Trichlorofluoromethane	µg/L	12,100	0.81J		1J	
Vinyl chloride	µg/L	2	1U		1U	
Field Measurements						
Conductivity	µS/cm		798		897	
Depth to Water	ft		22.9		21.54	
Dissolved Oxygen	mg/L		nm		1	
pH	Std Unit		6.1		6.1	
Temperature	deg C		13.5		14.7	
Turbidity	NTU		1		4	
X701-38G						
Metals						
Calcium	µg/L				43000	
Iron	µg/L				23B	
Magnesium	µg/L				28000	
Potassium	µg/L				2900B	
Sodium	µg/L				82000	
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200			2U	
1,1,2,2-Tetrachloroethane	µg/L	0.83			1U	
1,1,2-Trichloroethane	µg/L	5			2U	
1,1-Dichloroethane	µg/L	5860			2U	
1,1-Dichloroethene	µg/L	7			2U	
1,2-Dichlorobenzene	µg/L	600			0.45J	
1,2-Dichloroethane	µg/L	5			2U	
1,2-Dimethylbenzene	µg/L	10,000			2U	
1,4-Dichlorobenzene	µg/L	75			2U	
2-Butanone	µg/L	53,800			6U	
4-Methyl-2-pentanone	µg/L	6360			5U	
Acetone	µg/L	10,200			10U	
Benzene	µg/L	5			2U	
Bromodichloromethane	µg/L	100			2U	
Bromoform	µg/L	100			2U	
Bromomethane	µg/L	140			2U	
Carbon disulfide	µg/L	6270			2U	
Carbon tetrachloride	µg/L	5			2U	
Chlorobenzene	µg/L	100			2U	
Chloroethane	µg/L	246,000			2U	
Chloroform	µg/L	100			1.8J	
Chloromethane	µg/L	13.4			2U	

X-701B Holding Pond

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X701-38G						
cis-1,2-Dichloroethene	µg/L	70			2U	
Dibromochloromethane	µg/L	3.12			2U	
Ethylbenzene	µg/L	700			2U	
M + P Xylene	µg/L	10,000			2U	
Methylene chloride	µg/L	5			5U	
Tetrachloroethene	µg/L	5			2U	
Toluene	µg/L	1000			2U	
trans-1,2-Dichloroethene	µg/L	100			1U	
Trichloroethene	µg/L	5			2U	
Trichlorofluoromethane	µg/L	12,100			2U	
Vinyl chloride	µg/L	2			1U	
Radionuclides						
Americium-241	pCi/L	0.49			0.01677U	
Neptunium-237	pCi/L	0.54			0.000006345U	
Plutonium-238	pCi/L				0.03801U	
Plutonium-239/240	pCi/L	0.51			0.006345U	
Technetium-99	pCi/L	3790			-2.29U	
Uranium	µg/L	1000			0.07519U	
Uranium-233/234	pCi/L	124,000			0.03171U	
Uranium-235	pCi/L	43			0U	
Uranium-236	pCi/L				-0.007013U	
Uranium-238	pCi/L	6.7			0.0253U	
Other Parameters						
Alkalinity	mg/L				56	
Chloride	mg/L				85	
Sulfate	mg/L				210	
Field Measurements						
Conductivity	µS/cm				803	
Depth to Water	ft				17.28	
Dissolved Oxygen	mg/L				1	
pH	Std Unit				5.77	
Temperature	deg C				15.2	
Turbidity	NTU				3	
X701-48G						
Metals						
Calcium	µg/L				8200	
Iron	µg/L				1300	
Magnesium	µg/L				7300	
Potassium	µg/L				3100	
Sodium	µg/L				15000	

X-701B Holding Pond

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X701-48G						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200			2U	
1,1,2,2-Tetrachloroethane	µg/L	0.83			1U	
1,1,2-Trichloroethane	µg/L	5			2U	
1,1-Dichloroethane	µg/L	5860			2U	
1,1-Dichloroethene	µg/L	7			2U	
1,2-Dichlorobenzene	µg/L	600			2U	
1,2-Dichloroethane	µg/L	5			2U	
1,2-Dimethylbenzene	µg/L	10,000			2U	
1,4-Dichlorobenzene	µg/L	75			2U	
2-Butanone	µg/L	53,800			6U	
4-Methyl-2-pentanone	µg/L	6360			5U	
Acetone	µg/L	10,200			10U	
Benzene	µg/L	5			2U	
Bromodichloromethane	µg/L	100			2U	
Bromoform	µg/L	100			2U	
Bromomethane	µg/L	140			2U	
Carbon disulfide	µg/L	6270			2U	
Carbon tetrachloride	µg/L	5			2U	
Chlorobenzene	µg/L	100			2U	
Chloroethane	µg/L	246,000			2U	
Chloroform	µg/L	100			2U	
Chloromethane	µg/L	13.4			2U	
cis-1,2-Dichloroethene	µg/L	70			2U	
Dibromochloromethane	µg/L	3.12			2U	
Ethylbenzene	µg/L	700			2U	
M + P Xylene	µg/L	10,000			2U	
Methylene chloride	µg/L	5			0.47BJ	
Tetrachloroethene	µg/L	5			2U	
Toluene	µg/L	1000			2U	
trans-1,2-Dichloroethene	µg/L	100			1U	
Trichloroethene	µg/L	5			2U	
Trichlorofluoromethane	µg/L	12,100			2U	
Vinyl chloride	µg/L	2			1U	
Radionuclides						
Americium-241	pCi/L	0.49			0.02522U	
Neptunium-237	pCi/L	0.54			-0.05547U	
Plutonium-238	pCi/L				-0.007907U	
Plutonium-239/240	pCi/L	0.51			-0.007891U	
Technetium-99	pCi/L	3790			-2.57U	

X-701B Holding Pond

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X701-48G						
Uranium	µg/L	1000			0.112U	
Uranium-233/234	pCi/L	124,000			0.07377	
Uranium-235	pCi/L	43			0.009099U	
Uranium-236	pCi/L				0U	
Uranium-238	pCi/L	6.7			0.03681U	
Other Parameters						
Alkalinity	mg/L				27	
Chloride	mg/L				3.8	
Sulfate	mg/L				41	
Field Measurements						
Conductivity	µS/cm				178	
Depth to Water	ft				6.3	
Dissolved Oxygen	mg/L				3	
pH	Std Unit				5.52	
Temperature	deg C				14.6	
Turbidity	NTU				38	
X701-50B						
Metals						
Calcium	µg/L				71000	
Iron	µg/L				620	
Magnesium	µg/L				36000	
Potassium	µg/L				7300	
Sodium	µg/L				170000	
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200			2U	
1,1,2,2-Tetrachloroethane	µg/L	0.83			1U	
1,1,2-Trichloroethane	µg/L	5			2U	
1,1-Dichloroethane	µg/L	5860			2U	
1,1-Dichloroethene	µg/L	7			2U	
1,2-Dichlorobenzene	µg/L	600			2U	
1,2-Dichloroethane	µg/L	5			2U	
1,2-Dimethylbenzene	µg/L	10,000			2U	
1,4-Dichlorobenzene	µg/L	75			2U	
2-Butanone	µg/L	53,800			6U	
4-Methyl-2-pentanone	µg/L	6360			5U	
Acetone	µg/L	10,200			10U	
Benzene	µg/L	10.5			2U	
Bromodichloromethane	µg/L	100			2U	
Bromoform	µg/L	100			2U	
Bromomethane	µg/L	140			2U	

X-701B Holding Pond

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X701-50B						
Carbon disulfide	µg/L	6270			2U	
Carbon tetrachloride	µg/L	5			2U	
Chlorobenzene	µg/L	100			2U	
Chloroethane	µg/L	246,000			2U	
Chloroform	µg/L	100			2U	
Chloromethane	µg/L	13.4			2U	
cis-1,2-Dichloroethene	µg/L	70			2U	
Dibromochloromethane	µg/L	3.12			2U	
Ethylbenzene	µg/L	700			2U	
M + P Xylene	µg/L	10,000			2U	
Methylene chloride	µg/L	5			5U	
Tetrachloroethene	µg/L	5			2U	
Toluene	µg/L	1000			2U	
trans-1,2-Dichloroethene	µg/L	100			1U	
Trichloroethene	µg/L	5			2U	
Trichlorofluoromethane	µg/L	12,100			2U	
Vinyl chloride	µg/L	2			1U	
Radionuclides						
Americium-241	pCi/L	0.49			-0.02088U	
Neptunium-237	pCi/L	0.54			-0.01889U	
Plutonium-238	pCi/L				0.01887U	
Plutonium-239/240	pCi/L	0.51			-0.04395U	
Technetium-99	pCi/L	3790			0.0356U	
Uranium	µg/L	1000			0.09997	
Uranium-233/234	pCi/L	124,000			0.1053	
Uranium-235	pCi/L	43			0.008115U	
Uranium-236	pCi/L				0.007287U	
Uranium-238	pCi/L	6.7			0.03283	
Other Parameters						
Alkalinity	mg/L				400	
Chloride	mg/L				200	
Sulfate	mg/L				5U	
Field Measurements						
Conductivity	µS/cm				1356	
Depth to Water	ft				27.87	
Dissolved Oxygen	mg/L				nm	
pH	Std Unit				7.3	
Temperature	deg C				16.8	
Turbidity	NTU				7	
X701-58B						

X-701B Holding Pond

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X701-58B						
Metals						
Calcium	µg/L				64000	
Iron	µg/L				970	
Magnesium	µg/L				33000	
Potassium	µg/L				10000	
Sodium	µg/L				140000	
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200			2U	
1,1,2,2-Tetrachloroethane	µg/L	0.83			1U	
1,1,2-Trichloroethane	µg/L	5			2U	
1,1-Dichloroethane	µg/L	5860			2U	
1,1-Dichloroethene	µg/L	7			2U	
1,2-Dichlorobenzene	µg/L	600			2U	
1,2-Dichloroethane	µg/L	5			2U	
1,2-Dimethylbenzene	µg/L	10,000			2U	
1,4-Dichlorobenzene	µg/L	75			2U	
2-Butanone	µg/L	53,800			6U	
4-Methyl-2-pentanone	µg/L	6360			5U	
Acetone	µg/L	10,200			10U	
Benzene	µg/L	10.5			2U	
Bromodichloromethane	µg/L	100			2U	
Bromoform	µg/L	100			2U	
Bromomethane	µg/L	140			2U	
Carbon disulfide	µg/L	6270			2U	
Carbon tetrachloride	µg/L	5			2U	
Chlorobenzene	µg/L	100			2U	
Chloroethane	µg/L	246,000			2U	
Chloroform	µg/L	100			2U	
Chloromethane	µg/L	13.4			2U	
cis-1,2-Dichloroethene	µg/L	70			2U	
Dibromochloromethane	µg/L	3.12			2U	
Ethylbenzene	µg/L	700			2U	
M + P Xylene	µg/L	10,000			2U	
Methylene chloride	µg/L	5			5U	
Tetrachloroethene	µg/L	5			2U	
Toluene	µg/L	1000			2U	
trans-1,2-Dichloroethene	µg/L	100			1U	
Trichloroethene	µg/L	5			2U	
Trichlorofluoromethane	µg/L	12,100			2U	
Vinyl chloride	µg/L	2			1U	

X-701B Holding Pond

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X701-58B						
Radionuclides						
Americium-241	pCi/L	0.49			0.009345U	
Neptunium-237	pCi/L	0.54			-0.06347U	
Plutonium-238	pCi/L				0.01409U	
Plutonium-239/240	pCi/L	0.51			0.00705U	
Technetium-99	pCi/L	3790			-2.67U	
Uranium	µg/L	1000			0.08254U	
Uranium-233/234	pCi/L	124,000			0.09729U	
Uranium-235	pCi/L	43			0U	
Uranium-236	pCi/L				-0.007686U	
Uranium-238	pCi/L	6.7			0.02777U	
Other Parameters						
Alkalinity	mg/L				320	
Chloride	mg/L				190	
Sulfate	mg/L				5U	
Field Measurements						
Conductivity	µS/cm				1239	
Depth to Water	ft				6.81	
Dissolved Oxygen	mg/L				nm	
pH	Std Unit				7.27	
Temperature	deg C				16.9	
Turbidity	NTU				3	
X701-61B						
Metals						
Calcium	µg/L				99000	
Iron	µg/L				1900	
Magnesium	µg/L				36000	
Potassium	µg/L				13000	
Sodium	µg/L				320000	
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200			2U	
1,1,2,2-Tetrachloroethane	µg/L	0.83			1U	
1,1,2-Trichloroethane	µg/L	5			2U	
1,1-Dichloroethane	µg/L	5860			2U	
1,1-Dichloroethene	µg/L	7			2U	
1,2-Dichlorobenzene	µg/L	600			2U	
1,2-Dichloroethane	µg/L	5			2U	
1,2-Dimethylbenzene	µg/L	10,000			0.2J	
1,4-Dichlorobenzene	µg/L	75			2U	
2-Butanone	µg/L	53,800			6U	

X-701B Holding Pond

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X701-61B						
4-Methyl-2-pentanone	µg/L	6360			5U	
Acetone	µg/L	10,200			10U	
Benzene	µg/L	10.5			2U	
Bromodichloromethane	µg/L	100			2U	
Bromoform	µg/L	100			2U	
Bromomethane	µg/L	140			2U	
Carbon disulfide	µg/L	6270			2U	
Carbon tetrachloride	µg/L	5			2U	
Chlorobenzene	µg/L	100			2U	
Chloroethane	µg/L	246,000			2U	
Chloroform	µg/L	100			2U	
Chloromethane	µg/L	13.4			2U	
cis-1,2-Dichloroethene	µg/L	70			0.28J	
Dibromochloromethane	µg/L	3.12			2U	
Ethylbenzene	µg/L	700			2U	
M + P Xylene	µg/L	10,000			2.4	
Methylene chloride	µg/L	5			5U	
Tetrachloroethene	µg/L	5			2U	
Toluene	µg/L	1000			2U	
trans-1,2-Dichloroethene	µg/L	100			1U	
Trichloroethene	µg/L	5			0.34J	
Trichlorofluoromethane	µg/L	12,100			2U	
Vinyl chloride	µg/L	2			1U	
Radionuclides						
Americium-241	pCi/L	0.49			0.014U	
Neptunium-237	pCi/L	0.54			-0.05039U	
Plutonium-238	pCi/L				0.007209U	
Plutonium-239/240	pCi/L	0.51			-0.02871U	
Technetium-99	pCi/L	3790			-2.05U	
Uranium	µg/L	1000			0.1028	
Uranium-233/234	pCi/L	124,000			0.09697	
Uranium-235	pCi/L	43			0U	
Uranium-236	pCi/L				0U	
Uranium-238	pCi/L	6.7			0.03456	
Other Parameters						
Alkalinity	mg/L				400	
Chloride	mg/L				470	
Sulfate	mg/L				1.5B	
Field Measurements						
Conductivity	µS/cm				2207	

X-701B Holding Pond

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X701-61B						
Depth to Water	ft				8.47	
Dissolved Oxygen	mg/L				nm	
pH	Std Unit				7.09	
Temperature	deg C				15.4	
Turbidity	NTU				5	
X701-66G						
Metals						
Cadmium	µg/L	6.5	3.5		13	
Chromium	µg/L	100	0.92B		1.4B	
Cobalt	µg/L	13	7.3E		320	
Lead	µg/L	50	0.79B		22	
Manganese	µg/L	14,300	830E		550	
Nickel	µg/L	100	34		210	
Thallium	µg/L	10.5	0.16B		0.24B	
Other Parameters						
Alkalinity	mg/L		68		96	
Chloride	mg/L		34		40	
Sulfate	mg/L		140		330	
Field Measurements						
Conductivity	µS/cm		528		900	
Depth to Water	ft		18.16		15.82	
Dissolved Oxygen	mg/L		18		25	
pH	Std Unit		5.71		5.74	
Temperature	deg C		15.1		16.8	
Turbidity	NTU		5		6	
X701-74G						
Metals						
Iron	µg/L		430		800	
Magnesium	µg/L		38000		42000	
Manganese	µg/L	14,300	160		200	
Potassium	µg/L		96000		85000	
Sodium	µg/L		87000		85000	
Other Parameters						
Alkalinity	mg/L		490		420	
Chloride	mg/L		94		83	
Sulfate	mg/L		150		170	
Field Measurements						
Conductivity	µS/cm		1408		1385	
Depth to Water	ft		17.15		15.58	
Dissolved Oxygen	mg/L		25		57	

X-701B Holding Pond

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X701-74G						
pH	Std Unit		6.55		6.8	
Temperature	deg C		14.3		15.1	
Turbidity	NTU		9		10	
X701-78G						
Metals						
Iron	µg/L		7200		28000	
Magnesium	µg/L		28000		44000	
Manganese	µg/L	14,300	330		530	
Potassium	µg/L		3200		4500	
Sodium	µg/L		84000		110000	
Other Parameters						
Alkalinity	mg/L		42		35	
Chloride	mg/L		59		82	
Sulfate	mg/L		280		400	
Field Measurements						
Conductivity	µS/cm		830		1124	
Depth to Water	ft		17.5		15.84	
Dissolved Oxygen	mg/L		28		62	
pH	Std Unit		5.45		5.46	
Temperature	deg C		14.3		16	
Turbidity	NTU		92		1000	
X701-80G						
Metals						
Iron	µg/L		240		480	
Magnesium	µg/L		24000		25000	
Manganese	µg/L	14,300	1500		500	
Potassium	µg/L		82000		63000	
Sodium	µg/L		77000		73000	
Other Parameters						
Alkalinity	mg/L		110		88	
Chloride	mg/L		54		53	
Sulfate	mg/L		240		230	
Field Measurements						
Conductivity	µS/cm		918		828	
Depth to Water	ft		15.53		14.46	
Dissolved Oxygen	mg/L		4		4	
pH	Std Unit		5.74		5.81	
Temperature	deg C		13.6		15.9	
Turbidity	NTU		18		21	
X701-127G						

X-701B Holding Pond

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X701-127G						
Metals						
Calcium	µg/L		25000			
Iron	µg/L		7400			
Magnesium	µg/L		17000			
Potassium	µg/L		2400B			
Sodium	µg/L		58000			
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200	530U		400U	
1,1,2,2-Tetrachloroethane	µg/L	0.83	270U		200U	
1,1,2-Trichloroethane	µg/L	5	530U		100J	
1,1-Dichloroethane	µg/L	5860	530U		400U	
1,1-Dichloroethene	µg/L	7	530U		32J	
1,2-Dichlorobenzene	µg/L	600	530U		400U	
1,2-Dichloroethane	µg/L	5	530U		400U	
1,2-Dimethylbenzene	µg/L	10,000	530U		400U	
1,4-Dichlorobenzene	µg/L	75	530U		400U	
2-Butanone	µg/L	53,800	1600U		1200U	
4-Methyl-2-pentanone	µg/L	6360	1300U		1000U	
Acetone	µg/L	10,200	2700U		2000U	
Benzene	µg/L	5	530U		400U	
Bromodichloromethane	µg/L	100	530U		400U	
Bromoform	µg/L	100	530U		400U	
Bromomethane	µg/L	140	530U		400U	
Carbon disulfide	µg/L	6270	530U		400U	
Carbon tetrachloride	µg/L	5	530U		400U	
Chlorobenzene	µg/L	100	530U		400U	
Chloroethane	µg/L	246,000	530U		400U	
Chloroform	µg/L	100	530U		400U	
Chloromethane	µg/L	13.4	530U		400U	
cis-1,2-Dichloroethene	µg/L	70	1500		1200	
Dibromochloromethane	µg/L	3.12	530U		400U	
Ethylbenzene	µg/L	700	530U		400U	
M + P Xylene	µg/L	10,000	530U		400U	
Methylene chloride	µg/L	5	1300U		1000U	
Tetrachloroethene	µg/L	5	530U		400U	
Toluene	µg/L	1000	530U		400U	
trans-1,2-Dichloroethene	µg/L	100	270U		200U	
Trichloroethene	µg/L	5	100000		56000	
Trichlorofluoromethane	µg/L	12,100	530U		400U	
Vinyl chloride	µg/L	2	270U		200U	

X-701B Holding Pond

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X701-127G						
Radionuclides						
Americium-241	pCi/L	0.49	0.03624U		0.02355U	
Neptunium-237	pCi/L	0.54	0.00001414U		-0.0256U	
Plutonium-238	pCi/L		0.01412U		0.006407U	
Plutonium-239/240	pCi/L	0.51	0U		0.02558U	
Technetium-99	pCi/L	3790	16.4		8.67U	
Uranium	µg/L	1000	0.3282		0.08214U	
Uranium-233/234	pCi/L	124,000	0.138		0.07119	
Uranium-235	pCi/L	43	0.01791U		-0.008772U	
Uranium-236	pCi/L		0.00804U		-0.007876U	
Uranium-238	pCi/L	6.7	0.1087		0.02842U	
Other Parameters						
Alkalinity	mg/L		41			
Chloride	mg/L		74			
Sulfate	mg/L		130			
Field Measurements						
Conductivity	µS/cm		678		638	
Depth to Water	ft		21.6		20.7	
Dissolved Oxygen	mg/L		nm		nm	
pH	Std Unit		5.03		5.35	
Temperature	deg C		10.3		14.6	
Turbidity	NTU		161		9	
X701-128G						
Metals						
Calcium	µg/L		20000			
Iron	µg/L		1900			
Magnesium	µg/L		12000			
Potassium	µg/L		2200B			
Sodium	µg/L		43000			
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200	200U		100U	
1,1,2,2-Tetrachloroethane	µg/L	0.83	100U		50U	
1,1,2-Trichloroethane	µg/L	5	200U		100U	
1,1-Dichloroethane	µg/L	5860	200U		100U	
1,1-Dichloroethene	µg/L	7	200U		7.3J	
1,2-Dichlorobenzene	µg/L	600	200U		100U	
1,2-Dichloroethane	µg/L	5	200U		100U	
1,2-Dimethylbenzene	µg/L	10,000	200U		100U	
1,4-Dichlorobenzene	µg/L	75	200U		100U	
2-Butanone	µg/L	53,800	600U		300U	

X-701B Holding Pond

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X701-128G						
4-Methyl-2-pentanone	µg/L	6360	500U		250U	
Acetone	µg/L	10,200	1000U		500U	
Benzene	µg/L	5	200U		100U	
Bromodichloromethane	µg/L	100	200U		100U	
Bromoform	µg/L	100	200U		100U	
Bromomethane	µg/L	140	200U		100U	
Carbon disulfide	µg/L	6270	200U		100U	
Carbon tetrachloride	µg/L	5	200U		100U	
Chlorobenzene	µg/L	100	200U		100U	
Chloroethane	µg/L	246,000	200U		100U	
Chloroform	µg/L	100	200U		100U	
Chloromethane	µg/L	13.4	200U		100U	
cis-1,2-Dichloroethene	µg/L	70	76J		45J	
Dibromochloromethane	µg/L	3.12	200U		100U	
Ethylbenzene	µg/L	700	200U		100U	
M + P Xylene	µg/L	10,000	200U		100U	
Methylene chloride	µg/L	5	500U		26BJ	
Tetrachloroethene	µg/L	5	200U		100U	
Toluene	µg/L	1000	200U		100U	
trans-1,2-Dichloroethene	µg/L	100	100U		50U	
Trichloroethene	µg/L	5	23000		16000	
Trichlorofluoromethane	µg/L	12,100	200U		100U	
Vinyl chloride	µg/L	2	100U		50U	
Radionuclides						
Americium-241	pCi/L	0.49	0.01915U		0U	
Neptunium-237	pCi/L	0.54	0.006832U		-0.05024U	
Plutonium-238	pCi/L		-0.02037U		0.007176U	
Plutonium-239/240	pCi/L	0.51	0.01361U		-0.01432U	
Technetium-99	pCi/L	3790	7.99U		4.21U	
Uranium	µg/L	1000	0.4297		0.5865	
Uranium-233/234	pCi/L	124,000	0.2396		0.2775	
Uranium-235	pCi/L	43	0.009852U		0.02776U	
Uranium-236	pCi/L		0.008846U		0U	
Uranium-238	pCi/L	6.7	0.1435		0.1946	
Other Parameters						
Alkalinity	mg/L		33			
Chloride	mg/L		50			
Sulfate	mg/L		75			
Field Measurements						
Conductivity	µS/cm		412		418	

X-701B Holding Pond

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X701-128G						
Depth to Water	ft		21.34		21.29	
Dissolved Oxygen	mg/L		1		1	
pH	Std Unit		5.34		5.43	
Temperature	deg C		12.1		14.5	
Turbidity	NTU		59		207	
X701-BW1G						
Metals						
Calcium	µg/L				22000	
Iron	µg/L				43B	
Magnesium	µg/L				14000	
Potassium	µg/L				2300B	
Sodium	µg/L				66000	
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200			2U	
1,1,2,2-Tetrachloroethane	µg/L	0.83			1U	
1,1,2-Trichloroethane	µg/L	5			2U	
1,1-Dichloroethane	µg/L	5860			2U	
1,1-Dichloroethene	µg/L	7			2U	
1,2-Dichlorobenzene	µg/L	600			2U	
1,2-Dichloroethane	µg/L	5			2U	
1,2-Dimethylbenzene	µg/L	10,000			2U	
1,4-Dichlorobenzene	µg/L	75			2U	
2-Butanone	µg/L	53,800			6U	
4-Methyl-2-pentanone	µg/L	6360			5U	
Acetone	µg/L	10,200			10U	
Benzene	µg/L	5			2U	
Bromodichloromethane	µg/L	100			2U	
Bromoform	µg/L	100			2U	
Bromomethane	µg/L	140			2U	
Carbon disulfide	µg/L	6270			2U	
Carbon tetrachloride	µg/L	5			2U	
Chlorobenzene	µg/L	100			2U	
Chloroethane	µg/L	246,000			2U	
Chloroform	µg/L	100			2U	
Chloromethane	µg/L	13.4			2U	
cis-1,2-Dichloroethene	µg/L	70			2U	
Dibromochloromethane	µg/L	3.12			2U	
Ethylbenzene	µg/L	700			2U	
M + P Xylene	µg/L	10,000			2U	
Methylene chloride	µg/L	5			5U	

X-701B Holding Pond

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X701-BW1G						
Tetrachloroethene	µg/L	5			2U	
Toluene	µg/L	1000			2U	
trans-1,2-Dichloroethene	µg/L	100			1U	
Trichloroethene	µg/L	5			2U	
Trichlorofluoromethane	µg/L	12,100			2U	
Vinyl chloride	µg/L	2			1U	
Radionuclides						
Americium-241	pCi/L	0.49			0.00001594U	
Neptunium-237	pCi/L	0.54			0.00005291U	
Plutonium-238	pCi/L				0.02263U	
Plutonium-239/240	pCi/L	0.51			0.02265U	
Technetium-99	pCi/L	3790			0.736U	
Uranium	µg/L	1000			0.07933U	
Uranium-233/234	pCi/L	124,000			0.00005351U	
Uranium-235	pCi/L	43			0U	
Uranium-236	pCi/L				-0.01482U	
Uranium-238	pCi/L	6.7			0.02673U	
Other Parameters						
Alkalinity	mg/L				78	
Chloride	mg/L				26	
Sulfate	mg/L				140	
Field Measurements						
Conductivity	µS/cm				500	
Depth to Water	ft				14.62	
Dissolved Oxygen	mg/L				1	
pH	Std Unit				6.08	
Temperature	deg C				15.1	
Turbidity	NTU				3	
X701-BW2G						
Metals						
Cadmium	µg/L	6.5	0.49B		0.51B	
Calcium	µg/L		64000			
Chromium	µg/L	100	2U		2U	
Cobalt	µg/L	13	24		37	
Iron	µg/L		320		2300	
Lead	µg/L	50	0.58B		0.7B	
Magnesium	µg/L		37000		46000	
Manganese	µg/L	14,300	32		10	
Nickel	µg/L	100	37		73	
Potassium	µg/L		11000		6000	

X-701B Holding Pond

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X701-BW2G						
Sodium	µg/L		54000		67000	
Thallium	µg/L	10.5	0.32B		0.2B	
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200	8U			
1,1,2,2-Tetrachloroethane	µg/L	0.83	4U			
1,1,2-Trichloroethane	µg/L	5	8U			
1,1-Dichloroethane	µg/L	5860	1.6J			
1,1-Dichloroethene	µg/L	7	14			
1,2-Dichlorobenzene	µg/L	600	8U			
1,2-Dichloroethane	µg/L	5	8U			
1,2-Dimethylbenzene	µg/L	10,000	8U			
1,4-Dichlorobenzene	µg/L	75	8U			
2-Butanone	µg/L	53,800	24U			
4-Methyl-2-pentanone	µg/L	6360	20U			
Acetone	µg/L	10,200	11J			
Benzene	µg/L	5	8U			
Bromodichloromethane	µg/L	100	8U			
Bromoform	µg/L	100	8U			
Bromomethane	µg/L	140	8U			
Carbon disulfide	µg/L	6270	8U			
Carbon tetrachloride	µg/L	5	8U			
Chlorobenzene	µg/L	100	8U			
Chloroethane	µg/L	246,000	8U			
Chloroform	µg/L	100	8U			
Chloromethane	µg/L	13.4	8U			
cis-1,2-Dichloroethene	µg/L	70	16			
Dibromochloromethane	µg/L	3.12	8U			
Ethylbenzene	µg/L	700	8U			
M + P Xylene	µg/L	10,000	8U			
Methylene chloride	µg/L	5	20U			
Tetrachloroethene	µg/L	5	8U			
Toluene	µg/L	1000	8U			
trans-1,2-Dichloroethene	µg/L	100	2.6J			
Trichloroethene	µg/L	5	1100			
Trichlorofluoromethane	µg/L	12,100	8U			
Vinyl chloride	µg/L	2	4U			
Radionuclides						
Americium-241	pCi/L	0.49	-0.01009U			
Neptunium-237	pCi/L	0.54	-0.006327U			
Plutonium-238	pCi/L		0.01264U			

X-701B Holding Pond

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X701-BW2G						
Plutonium-239/240	pCi/L	0.51	0.01897U			
Technetium-99	pCi/L	3790	50.6			
Uranium	µg/L	1000	0.1117			
Uranium-233/234	pCi/L	124,000	0.04926			
Uranium-235	pCi/L	43	0.007595U			
Uranium-236	pCi/L		0U			
Uranium-238	pCi/L	6.7	0.03687			
Other Parameters						
Alkalinity	mg/L		61		69	
Chloride	mg/L		45		46	
Sulfate	mg/L		310		370	
Field Measurements						
Conductivity	µS/cm		857		982	
Depth to Water	ft		19.22		17.26	
Dissolved Oxygen	mg/L		4		24	
pH	Std Unit		5.65		5.59	
Temperature	deg C		14.2		16.2	
Turbidity	NTU		2		4	
X701-BW4G						
Metals						
Calcium	µg/L		53000			
Iron	µg/L		56B			
Magnesium	µg/L		38000			
Potassium	µg/L		3900			
Sodium	µg/L		78000			
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200	2U		2U	
1,1,2,2-Tetrachloroethane	µg/L	0.83	1U		1U	
1,1,2-Trichloroethane	µg/L	5	2U		2U	
1,1-Dichloroethane	µg/L	5860	2U		2U	
1,1-Dichloroethene	µg/L	7	2U		2U	
1,2-Dichlorobenzene	µg/L	600	2U		0.14J	
1,2-Dichloroethane	µg/L	5	2U		2U	
1,2-Dimethylbenzene	µg/L	10,000	2U		2U	
1,4-Dichlorobenzene	µg/L	75	2U		2U	
2-Butanone	µg/L	53,800	6U		6U	
4-Methyl-2-pentanone	µg/L	6360	5U		5U	
Acetone	µg/L	10,200	2.6J		10U	
Benzene	µg/L	5	2U		2U	
Bromodichloromethane	µg/L	100	2U		2U	

X-701B Holding Pond

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X701-BW4G						
Bromoform	µg/L	100	2U		2U	
Bromomethane	µg/L	140	2U		2U	
Carbon disulfide	µg/L	6270	2U		2U	
Carbon tetrachloride	µg/L	5	2U		2U	
Chlorobenzene	µg/L	100	2U		2U	
Chloroethane	µg/L	246,000	2U		2U	
Chloroform	µg/L	100	2U		2U	
Chloromethane	µg/L	13.4	2U		2U	
cis-1,2-Dichloroethene	µg/L	70	1.9J		3.4	
Dibromochloromethane	µg/L	3.12	2U		2U	
Ethylbenzene	µg/L	700	2U		2U	
M + P Xylene	µg/L	10,000	2U		2U	
Methylene chloride	µg/L	5	5U		5U	
Tetrachloroethene	µg/L	5	2U		2U	
Toluene	µg/L	1000	2U		2U	
trans-1,2-Dichloroethene	µg/L	100	1U		0.15J	
Trichloroethene	µg/L	5	1.4J		1.6J	
Trichlorofluoromethane	µg/L	12,100	2U		2U	
Vinyl chloride	µg/L	2	1U		1U	
Radionuclides						
Americium-241	pCi/L	0.49	0.0178U		0.02695U	
Neptunium-237	pCi/L	0.54	-0.006807U		0.00003821U	
Plutonium-238	pCi/L		0.02047U		0.006362U	
Plutonium-239/240	pCi/L	0.51	-0.02726U		-0.01905U	
Technetium-99	pCi/L	3790	298		190	
Uranium	µg/L	1000	0.09882U		0.05632U	
Uranium-233/234	pCi/L	124,000	0.04668		0.006605U	
Uranium-235	pCi/L	43	0U		-0.008084U	
Uranium-236	pCi/L		-0.01476U		0U	
Uranium-238	pCi/L	6.7	0.03328U		0.01964U	
Other Parameters						
Alkalinity	mg/L		28			
Chloride	mg/L		72			
Sulfate	mg/L		310			
Field Measurements						
Conductivity	µS/cm		865		896	
Depth to Water	ft		15.02		12.88	
Dissolved Oxygen	mg/L		5		nm	
pH	Std Unit		5.96		5.62	
Temperature	deg C		12.6		14.3	

X-701B Holding Pond

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X701-BW4G						
Turbidity	NTU		5		2	
X744G-01G						
Metals						
Cadmium	µg/L	6.5	52E		67	
Nickel	µg/L	100	240		250	
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200	2U		2U	
1,1,2,2-Tetrachloroethane	µg/L	0.83	1U		1U	
1,1,2-Trichloroethane	µg/L	5	2U		2U	
1,1-Dichloroethane	µg/L	5860	2U		2U	
1,1-Dichloroethene	µg/L	7	2U		2U	
1,2-Dichlorobenzene	µg/L	600	2U		2U	
1,2-Dichloroethane	µg/L	5	2U		2U	
1,2-Dimethylbenzene	µg/L	10,000	2U		2U	
1,4-Dichlorobenzene	µg/L	75	2U		2U	
2-Butanone	µg/L	53,800	6U		6U	
4-Methyl-2-pentanone	µg/L	6360	5U		5U	
Acetone	µg/L	10,200	10U		10U	
Benzene	µg/L	5	2U		2U	
Bromodichloromethane	µg/L	100	2U		2U	
Bromoform	µg/L	100	2U		2U	
Bromomethane	µg/L	140	2U		2U	
Carbon disulfide	µg/L	6270	2U		2U	
Carbon tetrachloride	µg/L	5	2U		2U	
Chlorobenzene	µg/L	100	2U		2U	
Chloroethane	µg/L	246,000	2U		2U	
Chloroform	µg/L	100	2U		2U	
Chloromethane	µg/L	13.4	2U		2U	
cis-1,2-Dichloroethene	µg/L	70	2U		2U	
Dibromochloromethane	µg/L	3.12	2U		2U	
Ethylbenzene	µg/L	700	2U		2U	
M + P Xylene	µg/L	10,000	2U		2U	
Methylene chloride	µg/L	5	5U		5U	
Tetrachloroethene	µg/L	5	2U		2U	
Toluene	µg/L	1000	2U		2U	
trans-1,2-Dichloroethene	µg/L	100	1U		1U	
Trichloroethene	µg/L	5	2U		2U	
Trichlorofluoromethane	µg/L	12,100	2U		2U	
Vinyl chloride	µg/L	2	1U		1U	
Field Measurements						

X-701B Holding Pond

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X744G-01G						
Conductivity	µS/cm		2897		2978	
Depth to Water	ft		15.53		16.48	
Dissolved Oxygen	mg/L		nm		1.8	
pH	Std Unit		4.95		4.75	
Temperature	deg C		12.6		14.6	
Turbidity	NTU		108		462	
X744G-02G						
Metals						
Cadmium	µg/L	6.5	110		91	
Nickel	µg/L	100	1300		1100	
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200	2U		2U	
1,1,2,2-Tetrachloroethane	µg/L	0.83	1U		1U	
1,1,2-Trichloroethane	µg/L	5	2U		2U	
1,1-Dichloroethane	µg/L	5860	2U		2U	
1,1-Dichloroethene	µg/L	7	2U		2U	
1,2-Dichlorobenzene	µg/L	600	2U		2U	
1,2-Dichloroethane	µg/L	5	2U		2U	
1,2-Dimethylbenzene	µg/L	10,000	2U		2U	
1,4-Dichlorobenzene	µg/L	75	2U		2U	
2-Butanone	µg/L	53,800	6U		6U	
4-Methyl-2-pentanone	µg/L	6360	5U		5U	
Acetone	µg/L	10,200	10U		10U	
Benzene	µg/L	5	2U		2U	
Bromodichloromethane	µg/L	100	2U		2U	
Bromoform	µg/L	100	2U		2U	
Bromomethane	µg/L	140	2U		2U	
Carbon disulfide	µg/L	6270	2U		2U	
Carbon tetrachloride	µg/L	5	2U		2U	
Chlorobenzene	µg/L	100	2U		2U	
Chloroethane	µg/L	246,000	2U		2U	
Chloroform	µg/L	100	2U		2U	
Chloromethane	µg/L	13.4	2U		2U	
cis-1,2-Dichloroethene	µg/L	70	0.93J		1.8J	
Dibromochloromethane	µg/L	3.12	2U		2U	
Ethylbenzene	µg/L	700	2U		2U	
M + P Xylene	µg/L	10,000	2U		2U	
Methylene chloride	µg/L	5	5U		5U	
Tetrachloroethene	µg/L	5	2U		2U	
Toluene	µg/L	1000	2U		2U	

X-701B Holding Pond

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X744G-02G						
trans-1,2-Dichloroethene	µg/L	100	1U		1U	
Trichloroethene	µg/L	5	14		32	
Trichlorofluoromethane	µg/L	12,100	2.6		6.3	
Vinyl chloride	µg/L	2	1U		1U	
Field Measurements						
Conductivity	µS/cm		2836		2250	
Depth to Water	ft		17.54		16.19	
Dissolved Oxygen	mg/L		2		1	
pH	Std Unit		4.02		4.61	
Temperature	deg C		12.8		15.9	
Turbidity	NTU		102		45	
X744G-03G						
Metals						
Cadmium	µg/L	6.5	2.2		1.2	
Nickel	µg/L	100	40		14	
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200	2U		2U	
1,1,2,2-Tetrachloroethane	µg/L	0.83	1U		1U	
1,1,2-Trichloroethane	µg/L	5	2U		2U	
1,1-Dichloroethane	µg/L	5860	2U		2U	
1,1-Dichloroethene	µg/L	7	2U		2U	
1,2-Dichlorobenzene	µg/L	600	2U		2U	
1,2-Dichloroethane	µg/L	5	2U		2U	
1,2-Dimethylbenzene	µg/L	10,000	2U		2U	
1,4-Dichlorobenzene	µg/L	75	2U		2U	
2-Butanone	µg/L	53,800	6U		6U	
4-Methyl-2-pentanone	µg/L	6360	5U		5U	
Acetone	µg/L	10,200	10U		10U	
Benzene	µg/L	5	2U		2U	
Bromodichloromethane	µg/L	100	2U		2U	
Bromoform	µg/L	100	2U		2U	
Bromomethane	µg/L	140	2U		2U	
Carbon disulfide	µg/L	6270	2U		2U	
Carbon tetrachloride	µg/L	5	2U		2U	
Chlorobenzene	µg/L	100	2U		2U	
Chloroethane	µg/L	246,000	2U		2U	
Chloroform	µg/L	100	2U		2U	
Chloromethane	µg/L	13.4	2U		2U	
cis-1,2-Dichloroethene	µg/L	70	2U		2U	
Dibromochloromethane	µg/L	3.12	2U		2U	

X-701B Holding Pond

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X744G-03G						
Ethylbenzene	µg/L	700	2U		2U	
M + P Xylene	µg/L	10,000	2U		2U	
Methylene chloride	µg/L	5	5U		5U	
Tetrachloroethene	µg/L	5	2U		2U	
Toluene	µg/L	1000	2U		2U	
trans-1,2-Dichloroethene	µg/L	100	1U		1U	
Trichloroethene	µg/L	5	1.4J		1.6J	
Trichlorofluoromethane	µg/L	12,100	2U		2U	
Vinyl chloride	µg/L	2	1U		1U	
Field Measurements						
Conductivity	µS/cm		1056		1184	
Depth to Water	ft		20.11		18.77	
Dissolved Oxygen	mg/L		nm		nm	
pH	Std Unit		5.73		6.08	
Temperature	deg C		9.6		16.3	
Turbidity	NTU		87		150	

ANALYTICAL DATA TABLES
X-633 PUMPHOUSE/COOLING TOWERS AREA

Laboratory Data Qualifiers and Other Abbreviations

B	Inorganics: the reported value was obtained from a reading that was less than practical quantitation limit but greater than or equal to the instrument detection limit. Organics: the analyte was detected in the laboratory blank sample.
E	Inorganics: the reported value is estimated because of the presence of interferences. Organics: the result exceeds the calibration range.
J	Organics: the reported value is an estimated concentration greater than the method detection limit but less than the practical quantitation limit. All others: the reported value is qualified as estimated.
P	Pesticide/Aroclor: there is greater than 25% difference for detected concentrations between the two gas chromatograph columns.
U	Undetected
nm	For field measurements: not measured due to insufficient water remaining in the well after sampling.

X-633 Pumphouse/Cooling Towers Area

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X633-07G						
Metals						
Chromium	µg/L	100		260		510
Field Measurements						
Conductivity	µS/cm			333		425
Depth to Water	ft			10.6		12.42
Dissolved Oxygen	mg/L			5		4.26
pH	Std Unit			7.25		7.19
Temperature	deg C			12.5		15.9
Turbidity	NTU			26		30
X633-PZ04G						
Metals						
Chromium	µg/L	100		20		26
Field Measurements						
Conductivity	µS/cm			749		797
Depth to Water	ft			5.39		8.4
Dissolved Oxygen	mg/L			1		1.07
pH	Std Unit			6.19		6.22
Temperature	deg C			12.4		15.21
Turbidity	NTU			3		2

APPENDIX C

QUADRANT III SAMPLING RESULTS

ANALYTICAL DATA TABLES
X-616 CHROMIUM SLUDGE SURFACE IMPOUNDMENTS

Laboratory Data Qualifiers and Other Abbreviations

B	Inorganics: the reported value was obtained from a reading that was less than practical quantitation limit but greater than or equal to the instrument detection limit. Organics: the analyte was detected in the laboratory blank sample.
E	Inorganics: the reported value is estimated because of the presence of interferences. Organics: the result exceeds the calibration range.
J	Organics: the reported value is an estimated concentration greater than the method detection limit but less than the practical quantitation limit. All others: the reported value is qualified as estimated.
P	Pesticide/Aroclor: there is greater than 25% difference for detected concentrations between the two gas chromatograph columns.
U	Undetected
nm	For field measurements: not measured due to insufficient water remaining in the well after sampling.

X-616 Chromium Sludge Surface Impoundments

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X616-02G						
Metals						
Antimony	µg/L	36.5	0.15B			
Barium	µg/L	2000	41			
Cadmium	µg/L	6.5	1U			
Calcium	µg/L		64000			
Chromium	µg/L	100	2U			
Iron	µg/L		100U			
Lead	µg/L	50	1U			
Magnesium	µg/L		19000			
Manganese	µg/L	14,300	0.73B			
Nickel	µg/L	100	2.7			
Potassium	µg/L		1200B			
Sodium	µg/L		25000			
Thallium	µg/L	10.5	1U			
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200	2U			
1,1,2,2-Tetrachloroethane	µg/L	0.83	1U			
1,1,2-Trichloroethane	µg/L	5	2U			
1,1-Dichloroethane	µg/L	5860	2U			
1,1-Dichloroethene	µg/L	7	2U			
1,2-Dichlorobenzene	µg/L	600	2U			
1,2-Dichloroethane	µg/L	5	2U			
1,2-Dimethylbenzene	µg/L	10,000	2U			
1,4-Dichlorobenzene	µg/L	75	2U			
2-Butanone	µg/L	53,800	6U			
4-Methyl-2-pentanone	µg/L	6360	5U			
Acetone	µg/L	10,200	10U			
Benzene	µg/L	5	2U			
Bromodichloromethane	µg/L	100	2U			
Bromoform	µg/L	100	2U			
Bromomethane	µg/L	140	2U			
Carbon disulfide	µg/L	6270	2U			
Carbon tetrachloride	µg/L	5	2U			
Chlorobenzene	µg/L	100	2U			
Chloroethane	µg/L	246,000	2U			
Chloroform	µg/L	100	2U			
Chloromethane	µg/L	13.4	2U			
cis-1,2-Dichloroethene	µg/L	70	2U			
Dibromochloromethane	µg/L	3.12	2U			

X-616 Chromium Sludge Surface Impoundments

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X616-02G						
Ethylbenzene	µg/L	700	2U			
M + P Xylene	µg/L	10,000	2U			
Methylene chloride	µg/L	5	5U			
Tetrachloroethene	µg/L	5	2U			
Toluene	µg/L	1000	2U			
trans-1,2-Dichloroethene	µg/L	100	1U			
Trichloroethene	µg/L	5	0.21J			
Trichlorofluoromethane	µg/L	12,100	2U			
Vinyl chloride	µg/L	2	1U			
Radionuclides						
Americium-241	pCi/L	0.49	0.0543U			
Neptunium-237	pCi/L	0.54	0.006955U			
Plutonium-238	pCi/L		0.01386U			
Plutonium-239/240	pCi/L	0.51	-0.05537U			
Technetium-99	pCi/L	3790	-2.43U			
Uranium	µg/L	1000	2.497			
Uranium-233/234	pCi/L	124,000	1.26			
Uranium-235	pCi/L	43	0.00879U			
Uranium-236	pCi/L		-0.007877U			
Uranium-238	pCi/L	6.7	0.8383			
Other Parameters						
Alkalinity	mg/L		220			
Chloride	mg/L		17			
Sulfate	mg/L		39			
Field Measurements						
Conductivity	µS/cm		513			
Depth to Water	ft		10.75			
Dissolved Oxygen	mg/L		5			
pH	Std Unit		6.72			
Temperature	deg C		10.73			
Turbidity	NTU		5			
X616-05G						
Metals						
Antimony	µg/L	36.5	0.15B			
Barium	µg/L	2000	16			
Cadmium	µg/L	6.5	0.34B			
Calcium	µg/L		170000			
Chromium	µg/L	100	1300			
Iron	µg/L		2800			
Lead	µg/L	50	0.59B			

X-616 Chromium Sludge Surface Impoundments

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X616-05G						
Magnesium	µg/L		90000			
Manganese	µg/L	14,300	110			
Nickel	µg/L	100	250			
Potassium	µg/L		3600			
Sodium	µg/L		280000			
Thallium	µg/L	10.5	0.053B			
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200	2U			
1,1,2,2-Tetrachloroethane	µg/L	0.83	1U			
1,1,2-Trichloroethane	µg/L	5	2U			
1,1-Dichloroethane	µg/L	5860	2U			
1,1-Dichloroethene	µg/L	7	2U			
1,2-Dichlorobenzene	µg/L	600	2U			
1,2-Dichloroethane	µg/L	5	2U			
1,2-Dimethylbenzene	µg/L	10,000	2U			
1,4-Dichlorobenzene	µg/L	75	2U			
2-Butanone	µg/L	53,800	6U			
4-Methyl-2-pentanone	µg/L	6360	5U			
Acetone	µg/L	10,200	10U			
Benzene	µg/L	5	2U			
Bromodichloromethane	µg/L	100	2U			
Bromoform	µg/L	100	2U			
Bromomethane	µg/L	140	2U			
Carbon disulfide	µg/L	6270	0.47J			
Carbon tetrachloride	µg/L	5	2U			
Chlorobenzene	µg/L	100	2U			
Chloroethane	µg/L	246,000	2U			
Chloroform	µg/L	100	2U			
Chloromethane	µg/L	13.4	2U			
cis-1,2-Dichloroethene	µg/L	70	2U			
Dibromochloromethane	µg/L	3.12	2U			
Ethylbenzene	µg/L	700	2U			
M + P Xylene	µg/L	10,000	2U			
Methylene chloride	µg/L	5	5U			
Tetrachloroethene	µg/L	5	2U			
Toluene	µg/L	1000	2U			
trans-1,2-Dichloroethene	µg/L	100	1U			
Trichloroethene	µg/L	5	2U			
Trichlorofluoromethane	µg/L	12,100	2U			
Vinyl chloride	µg/L	2	1U			

X-616 Chromium Sludge Surface Impoundments

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X616-05G						
Radionuclides						
Americium-241	pCi/L	0.49	-0.01512U			
Neptunium-237	pCi/L	0.54	-0.02577U			
Plutonium-238	pCi/L		0U			
Plutonium-239/240	pCi/L	0.51	-0.03429U			
Technetium-99	pCi/L	3790	-1.57U			
Uranium	µg/L	1000	0.5103			
Uranium-233/234	pCi/L	124,000	0.1785			
Uranium-235	pCi/L	43	0U			
Uranium-236	pCi/L		-0.007314U			
Uranium-238	pCi/L	6.7	0.1715			
Other Parameters						
Alkalinity	mg/L		100			
Chloride	mg/L		510			
Sulfate	mg/L		790			
Field Measurements						
Conductivity	µS/cm		3168			
Depth to Water	ft		15			
Dissolved Oxygen	mg/L		nm			
pH	Std Unit		6.09			
Temperature	deg C		14.3			
Turbidity	NTU		22			
X616-09G						
Metals						
Antimony	µg/L	36.5	0.19B			
Barium	µg/L	2000	19			
Cadmium	µg/L	6.5	0.14B			
Calcium	µg/L		190000			
Chromium	µg/L	100	11			
Iron	µg/L		4600			
Lead	µg/L	50	1.7			
Magnesium	µg/L		99000			
Manganese	µg/L	14,300	39			
Nickel	µg/L	100	10			
Potassium	µg/L		4200			
Sodium	µg/L		210000			
Thallium	µg/L	10.5	0.1B			
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200	3.5			
1,1,2,2-Tetrachloroethane	µg/L	0.83	1U			

X-616 Chromium Sludge Surface Impoundments

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X616-09G						
1,1,2-Trichloroethane	µg/L	5	2U			
1,1-Dichloroethane	µg/L	5860	1.4J			
1,1-Dichloroethene	µg/L	7	18			
1,2-Dichlorobenzene	µg/L	600	2U			
1,2-Dichloroethane	µg/L	5	2U			
1,2-Dimethylbenzene	µg/L	10,000	2U			
1,4-Dichlorobenzene	µg/L	75	2U			
2-Butanone	µg/L	53,800	6U			
4-Methyl-2-pentanone	µg/L	6360	5U			
Acetone	µg/L	10,200	10U			
Benzene	µg/L	5	2U			
Bromodichloromethane	µg/L	100	2U			
Bromoform	µg/L	100	2U			
Bromomethane	µg/L	140	2U			
Carbon disulfide	µg/L	6270	0.54J			
Carbon tetrachloride	µg/L	5	2U			
Chlorobenzene	µg/L	100	2U			
Chloroethane	µg/L	246,000	2U			
Chloroform	µg/L	100	2U			
Chloromethane	µg/L	13.4	2U			
cis-1,2-Dichloroethene	µg/L	70	1.8J			
Dibromochloromethane	µg/L	3.12	2U			
Ethylbenzene	µg/L	700	2U			
M + P Xylene	µg/L	10,000	2U			
Methylene chloride	µg/L	5	5U			
Tetrachloroethene	µg/L	5	2U			
Toluene	µg/L	1000	2U			
trans-1,2-Dichloroethene	µg/L	100	1U			
Trichloroethene	µg/L	5	13			
Trichlorofluoromethane	µg/L	12,100	2U			
Vinyl chloride	µg/L	2	1U			
Radionuclides						
Americium-241	pCi/L	0.49	0.00001216U			
Neptunium-237	pCi/L	0.54	-0.008696U			
Plutonium-238	pCi/L		0.00001734U			
Plutonium-239/240	pCi/L	0.51	0.000008672U			
Technetium-99	pCi/L	3790	-5.23U			
Uranium	µg/L	1000	2.404			
Uranium-233/234	pCi/L	124,000	1.278			
Uranium-235	pCi/L	43	0.04107			

X-616 Chromium Sludge Surface Impoundments

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X616-09G						
Uranium-236	pCi/L		0.01475U			
Uranium-238	pCi/L	6.7	0.8041			
Other Parameters						
Alkalinity	mg/L		160			
Chloride	mg/L		180			
Sulfate	mg/L		960			
Field Measurements						
Conductivity	µS/cm		2355			
Depth to Water	ft		8.97			
Dissolved Oxygen	mg/L		1			
pH	Std Unit		6.27			
Temperature	deg C		13.2			
Turbidity	NTU		101			
X616-16G						
Metals						
Antimony	µg/L	36.5	2U			
Barium	µg/L	2000	11			
Cadmium	µg/L	6.5	1.2			
Calcium	µg/L		170000			
Chromium	µg/L	100	1.3B			
Iron	µg/L		100U			
Lead	µg/L	50	1U			
Magnesium	µg/L		110000			
Manganese	µg/L	14,300	460			
Nickel	µg/L	100	24			
Potassium	µg/L		1400B			
Sodium	µg/L		160000			
Thallium	µg/L	10.5	0.026B			
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200	2U			
1,1,2,2-Tetrachloroethane	µg/L	0.83	1U			
1,1,2-Trichloroethane	µg/L	5	2U			
1,1-Dichloroethane	µg/L	5860	2U			
1,1-Dichloroethene	µg/L	7	2U			
1,2-Dichlorobenzene	µg/L	600	2U			
1,2-Dichloroethane	µg/L	5	2U			
1,2-Dimethylbenzene	µg/L	10,000	2U			
1,4-Dichlorobenzene	µg/L	75	2U			
2-Butanone	µg/L	53,800	6U			
4-Methyl-2-pentanone	µg/L	6360	5U			

X-616 Chromium Sludge Surface Impoundments

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X616-16G						
Acetone	µg/L	10,200	10U			
Benzene	µg/L	5	2U			
Bromodichloromethane	µg/L	100	2U			
Bromoform	µg/L	100	2U			
Bromomethane	µg/L	140	2U			
Carbon disulfide	µg/L	6270	0.47J			
Carbon tetrachloride	µg/L	5	2U			
Chlorobenzene	µg/L	100	2U			
Chloroethane	µg/L	246,000	2U			
Chloroform	µg/L	100	2U			
Chloromethane	µg/L	13.4	2U			
cis-1,2-Dichloroethene	µg/L	70	2.5			
Dibromochloromethane	µg/L	3.12	2U			
Ethylbenzene	µg/L	700	2U			
M + P Xylene	µg/L	10,000	2U			
Methylene chloride	µg/L	5	5U			
Tetrachloroethene	µg/L	5	2U			
Toluene	µg/L	1000	2U			
trans-1,2-Dichloroethene	µg/L	100	1U			
Trichloroethene	µg/L	5	2			
Trichlorofluoromethane	µg/L	12,100	2U			
Vinyl chloride	µg/L	2	1U			
Radionuclides						
Americium-241	pCi/L	0.49	0.00002085U			
Neptunium-237	pCi/L	0.54	-0.008938U			
Plutonium-238	pCi/L		0.00894U			
Plutonium-239/240	pCi/L	0.51	-0.008931U			
Technetium-99	pCi/L	3790	-1.18U			
Uranium	µg/L	1000	0.3773			
Uranium-233/234	pCi/L	124,000	0.1341			
Uranium-235	pCi/L	43	-0.007871U			
Uranium-236	pCi/L		0.000007068U			
Uranium-238	pCi/L	6.7	0.1275			
Other Parameters						
Alkalinity	mg/L		78			
Chloride	mg/L		250			
Sulfate	mg/L		810			
Field Measurements						
Conductivity	µS/cm		2215			
Depth to Water	ft		7.41			

X-616 Chromium Sludge Surface Impoundments

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X616-16G						
Dissolved Oxygen	mg/L		2			
pH	Std Unit		5.71			
Temperature	deg C		13.1			
Turbidity	NTU		3			
X616-20B						
Metals						
Antimony	µg/L	39.5	0.1B			
Barium	µg/L	4011	22			
Cadmium	µg/L	7	0.045B			
Calcium	µg/L		160000			
Chromium	µg/L	100	2.4			
Iron	µg/L		1200			
Lead	µg/L	50	0.36B			
Magnesium	µg/L		75000			
Manganese	µg/L	14,300	110			
Nickel	µg/L	840	6.5			
Potassium	µg/L		4600			
Sodium	µg/L		190000			
Thallium	µg/L	21.5	0.041B			
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200	2U			
1,1,2,2-Tetrachloroethane	µg/L	0.83	1U			
1,1,2-Trichloroethane	µg/L	5	2U			
1,1-Dichloroethane	µg/L	5860	0.59J			
1,1-Dichloroethene	µg/L	7	0.49J			
1,2-Dichlorobenzene	µg/L	600	2U			
1,2-Dichloroethane	µg/L	5	2U			
1,2-Dimethylbenzene	µg/L	10,000	2U			
1,4-Dichlorobenzene	µg/L	75	2U			
2-Butanone	µg/L	53,800	6U			
4-Methyl-2-pentanone	µg/L	6360	5U			
Acetone	µg/L	10,200	10U			
Benzene	µg/L	10.5	2U			
Bromodichloromethane	µg/L	100	2U			
Bromoform	µg/L	100	2U			
Bromomethane	µg/L	140	2U			
Carbon disulfide	µg/L	6270	2U			
Carbon tetrachloride	µg/L	5	2U			
Chlorobenzene	µg/L	100	2U			
Chloroethane	µg/L	246,000	2U			

X-616 Chromium Sludge Surface Impoundments

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X616-20B						
Chloroform	µg/L	100	2U			
Chloromethane	µg/L	13.4	2U			
cis-1,2-Dichloroethene	µg/L	70	0.35J			
Dibromochloromethane	µg/L	3.12	2U			
Ethylbenzene	µg/L	700	2U			
M + P Xylene	µg/L	10,000	2U			
Methylene chloride	µg/L	5	5U			
Tetrachloroethene	µg/L	5	2U			
Toluene	µg/L	1000	2U			
trans-1,2-Dichloroethene	µg/L	100	1U			
Trichloroethene	µg/L	5	13			
Trichlorofluoromethane	µg/L	12,100	2U			
Vinyl chloride	µg/L	2	1U			
Radionuclides						
Americium-241	pCi/L	0.49	0.00003337U			
Neptunium-237	pCi/L	0.54	0.03284U			
Plutonium-238	pCi/L		0.00001636U			
Plutonium-239/240	pCi/L	0.51	0.01638U			
Technetium-99	pCi/L	3790	-4.64U			
Uranium	µg/L	1000	0.4603			
Uranium-233/234	pCi/L	124,000	0.1963			
Uranium-235	pCi/L	43	-0.008341U			
Uranium-236	pCi/L		0.007497U			
Uranium-238	pCi/L	6.7	0.1554			
Other Parameters						
Alkalinity	mg/L		120			
Chloride	mg/L		130			
Sulfate	mg/L		790			
Field Measurements						
Conductivity	µS/cm		1980			
Depth to Water	ft		7.92			
Dissolved Oxygen	mg/L		nm			
pH	Std Unit		6.25			
Temperature	deg C		13.9			
Turbidity	NTU		73			
X616-25G						
Metals						
Antimony	µg/L	36.5	2U			
Barium	µg/L	2000	15			
Cadmium	µg/L	6.5	2.6			

X-616 Chromium Sludge Surface Impoundments

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X616-25G						
Calcium	µg/L		110000			
Chromium	µg/L	100	5			
Iron	µg/L		1500			
Lead	µg/L	50	3.8			
Magnesium	µg/L		84000			
Manganese	µg/L	14,300	1200			
Nickel	µg/L	100	340			
Potassium	µg/L		1000B			
Sodium	µg/L		170000			
Thallium	µg/L	10.5	0.052B			
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200	2U			
1,1,2,2-Tetrachloroethane	µg/L	0.83	1U			
1,1,2-Trichloroethane	µg/L	5	2U			
1,1-Dichloroethane	µg/L	5860	2U			
1,1-Dichloroethene	µg/L	7	2U			
1,2-Dichlorobenzene	µg/L	600	2U			
1,2-Dichloroethane	µg/L	5	2U			
1,2-Dimethylbenzene	µg/L	10,000	2U			
1,4-Dichlorobenzene	µg/L	75	2U			
2-Butanone	µg/L	53,800	6U			
4-Methyl-2-pentanone	µg/L	6360	5U			
Acetone	µg/L	10,200	10U			
Benzene	µg/L	5	2U			
Bromodichloromethane	µg/L	100	2U			
Bromoform	µg/L	100	2U			
Bromomethane	µg/L	140	2U			
Carbon disulfide	µg/L	6270	0.49J			
Carbon tetrachloride	µg/L	5	2U			
Chlorobenzene	µg/L	100	2U			
Chloroethane	µg/L	246,000	2U			
Chloroform	µg/L	100	2U			
Chloromethane	µg/L	13.4	2U			
cis-1,2-Dichloroethene	µg/L	70	0.54J			
Dibromochloromethane	µg/L	3.12	2U			
Ethylbenzene	µg/L	700	2U			
M + P Xylene	µg/L	10,000	2U			
Methylene chloride	µg/L	5	5U			
Tetrachloroethene	µg/L	5	2U			
Toluene	µg/L	1000	2U			

X-616 Chromium Sludge Surface Impoundments

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X616-25G						
trans-1,2-Dichloroethene	µg/L	100	1U			
Trichloroethene	µg/L	5	1J			
Trichlorofluoromethane	µg/L	12,100	2U			
Vinyl chloride	µg/L	2	1U			
Radionuclides						
Americium-241	pCi/L	0.49	0.00001145U			
Neptunium-237	pCi/L	0.54	-0.007583U			
Plutonium-238	pCi/L		0.000007562U			
Plutonium-239/240	pCi/L	0.51	-0.007562U			
Technetium-99	pCi/L	3790	-2.71U			
Uranium	µg/L	1000	0.8882			
Uranium-233/234	pCi/L	124,000	0.305			
Uranium-235	pCi/L	43	0.008178U			
Uranium-236	pCi/L		0U			
Uranium-238	pCi/L	6.7	0.2977			
Other Parameters						
Alkalinity	mg/L		3.6B			
Chloride	mg/L		200			
Sulfate	mg/L		800			
Field Measurements						
Conductivity	µS/cm		1941			
Depth to Water	ft		19.05			
Dissolved Oxygen	mg/L		2			
pH	Std Unit		4.36			
Temperature	deg C		15.2			
Turbidity	NTU		29			
X616-28B						
Metals						
Antimony	µg/L	39.5	2U			
Barium	µg/L	4011	6.8			
Cadmium	µg/L	7	1.9			
Calcium	µg/L		230000			
Chromium	µg/L	100	0.93B			
Iron	µg/L		420			
Lead	µg/L	50	0.28B			
Magnesium	µg/L		120000			
Manganese	µg/L	14,300	2500			
Nickel	µg/L	840	130			
Potassium	µg/L		11000			
Sodium	µg/L		260000			

X-616 Chromium Sludge Surface Impoundments

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X616-28B						
Thallium	µg/L	21.5	0.1B			
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200	0.59J			
1,1,2,2-Tetrachloroethane	µg/L	0.83	1U			
1,1,2-Trichloroethane	µg/L	5	2U			
1,1-Dichloroethane	µg/L	5860	2U			
1,1-Dichloroethene	µg/L	7	0.47J			
1,2-Dichlorobenzene	µg/L	600	2U			
1,2-Dichloroethane	µg/L	5	2U			
1,2-Dimethylbenzene	µg/L	10,000	2U			
1,4-Dichlorobenzene	µg/L	75	2U			
2-Butanone	µg/L	53,800	6U			
4-Methyl-2-pentanone	µg/L	6360	5U			
Acetone	µg/L	10,200	10U			
Benzene	µg/L	10.5	2U			
Bromodichloromethane	µg/L	100	2U			
Bromoform	µg/L	100	2U			
Bromomethane	µg/L	140	2U			
Carbon disulfide	µg/L	6270	2U			
Carbon tetrachloride	µg/L	5	2U			
Chlorobenzene	µg/L	100	2U			
Chloroethane	µg/L	246,000	2U			
Chloroform	µg/L	100	2U			
Chloromethane	µg/L	13.4	2U			
cis-1,2-Dichloroethene	µg/L	70	2U			
Dibromochloromethane	µg/L	3.12	2U			
Ethylbenzene	µg/L	700	2U			
M + P Xylene	µg/L	10,000	2U			
Methylene chloride	µg/L	5	5U			
Tetrachloroethene	µg/L	5	2U			
Toluene	µg/L	1000	2U			
trans-1,2-Dichloroethene	µg/L	100	1U			
Trichloroethene	µg/L	5	0.22J			
Trichlorofluoromethane	µg/L	12,100	2U			
Vinyl chloride	µg/L	2	1U			
Radionuclides						
Americium-241	pCi/L	0.49	0.01716U			
Neptunium-237	pCi/L	0.54	-0.03043U			
Plutonium-238	pCi/L		0.00003037U			
Plutonium-239/240	pCi/L	0.51	-0.02024U			

X-616 Chromium Sludge Surface Impoundments

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X616-28B						
Technetium-99	pCi/L	3790	-2.39U			
Uranium	µg/L	1000	1.49			
Uranium-233/234	pCi/L	124,000	1.073			
Uranium-235	pCi/L	43	0.007931U			
Uranium-236	pCi/L		0U			
Uranium-238	pCi/L	6.7	0.5			
Other Parameters						
Alkalinity	mg/L		5U			
Chloride	mg/L		300			
Sulfate	mg/L		1400			
Field Measurements						
Conductivity	µS/cm		2970			
Depth to Water	ft		8.22			
Dissolved Oxygen	mg/L		nm			
pH	Std Unit		4.55			
Temperature	deg C		15			
Turbidity	NTU		9			

ANALYTICAL DATA TABLES
X-740 WASTE OIL HANDLING FACILITY

Laboratory Data Qualifiers and Other Abbreviations

B	Inorganics: the reported value was obtained from a reading that was less than practical quantitation limit but greater than or equal to the instrument detection limit. Organics: the analyte was detected in the laboratory blank sample.
E	Inorganics: the reported value is estimated because of the presence of interferences. Organics: the result exceeds the calibration range.
J	Organics: the reported value is an estimated concentration greater than the method detection limit but less than the practical quantitation limit. All others: the reported value is qualified as estimated.
P	Pesticide/Aroclor: there is greater than 25% difference for detected concentrations between the two gas chromatograph columns.
U	Undetected
nm	For field measurements: not measured due to insufficient water remaining in the well after sampling.

X-740 Waste Oil Handling Facility

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X740-02G						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200		11		
1,1,2,2-Tetrachloroethane	µg/L	0.83		1U		
1,1,2-Trichloroethane	µg/L	5		2U		
1,1-Dichloroethane	µg/L	5860		5.2		
1,1-Dichloroethene	µg/L	7		8.6		
1,2-Dichlorobenzene	µg/L	600		2U		
1,2-Dichloroethane	µg/L	5		2U		
1,2-Dimethylbenzene	µg/L	10,000		2U		
1,4-Dichlorobenzene	µg/L	75		2U		
2-Butanone	µg/L	53,800		6U		
4-Methyl-2-pentanone	µg/L	6360		5U		
Acetone	µg/L	10,200		10U		
Benzene	µg/L	5		2U		
Bromodichloromethane	µg/L	100		2U		
Bromoform	µg/L	100		2U		
Bromomethane	µg/L	140		2U		
Carbon disulfide	µg/L	6270		2U		
Carbon tetrachloride	µg/L	5		2U		
Chlorobenzene	µg/L	100		2U		
Chloroethane	µg/L	246,000		2U		
Chloroform	µg/L	100		2U		
Chloromethane	µg/L	13.4		2U		
cis-1,2-Dichloroethene	µg/L	70		2U		
Dibromochloromethane	µg/L	3.12		2U		
Ethylbenzene	µg/L	700		2U		
M + P Xylene	µg/L	10,000		2U		
Methylene chloride	µg/L	5		5U		
Tetrachloroethene	µg/L	5		2U		
Toluene	µg/L	1000		2U		
trans-1,2-Dichloroethene	µg/L	100		1U		
Trichloroethene	µg/L	5		8.1		
Trichlorofluoromethane	µg/L	12,100		2U		
Vinyl chloride	µg/L	2		1U		
Field Measurements						
Conductivity	µS/cm			674		
Depth to Water	ft			10.2		
Dissolved Oxygen	mg/L			1		
pH	Std Unit			7.15		

X-740 Waste Oil Handling Facility

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X740-02G						
Temperature	deg C			14.7		
Turbidity	NTU			83		
X740-03G						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200		120		210
1,1,2,2-Tetrachloroethane	µg/L	0.83		10U		20U
1,1,2-Trichloroethane	µg/L	5		20U		40U
1,1-Dichloroethane	µg/L	5860		34		55
1,1-Dichloroethene	µg/L	7		680		1400
1,2-Dichlorobenzene	µg/L	600		20U		40U
1,2-Dichloroethane	µg/L	5		150		280
1,2-Dimethylbenzene	µg/L	10,000		20U		40U
1,4-Dichlorobenzene	µg/L	75		20U		40U
2-Butanone	µg/L	53,800		60U		120U
4-Methyl-2-pentanone	µg/L	6360		50U		100U
Acetone	µg/L	10,200		100U		52J
Benzene	µg/L	5		20U		40U
Bromodichloromethane	µg/L	100		20U		40U
Bromoform	µg/L	100		20U		40U
Bromomethane	µg/L	140		20U		40U
Carbon disulfide	µg/L	6270		20U		40U
Carbon tetrachloride	µg/L	5		10J		40U
Chlorobenzene	µg/L	100		20U		40U
Chloroethane	µg/L	246,000		20U		40U
Chloroform	µg/L	100		12J		24J
Chloromethane	µg/L	13.4		20U		40U
cis-1,2-Dichloroethene	µg/L	70		9.7J		16J
Dibromochloromethane	µg/L	3.12		20U		40U
Ethylbenzene	µg/L	700		20U		40U
M + P Xylene	µg/L	10,000		20U		40U
Methylene chloride	µg/L	5		9.1J		15BJ
Tetrachloroethene	µg/L	5		170		230
Toluene	µg/L	1000		20U		40U
trans-1,2-Dichloroethene	µg/L	100		10U		20U
Trichloroethene	µg/L	5		3700	400	7700
Trichlorofluoromethane	µg/L	12,100		20U		40U
Vinyl chloride	µg/L	2		10U		20U
Field Measurements						
Conductivity	µS/cm			1025	1598	1501
Depth to Water	ft			9.96	15.38	18.25

X-740 Waste Oil Handling Facility

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X740-03G						
Dissolved Oxygen	mg/L			nm	nm	28.06
pH	Std Unit			7.22	6.52	6.61
Temperature	deg C			13.6	17.93	15.01
Turbidity	NTU			7	1000	298
X740-04G						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200		1.2J		
1,1,2,2-Tetrachloroethane	µg/L	0.83		1U		
1,1,2-Trichloroethane	µg/L	5		2U		
1,1-Dichloroethane	µg/L	5860		0.39J		
1,1-Dichloroethene	µg/L	7		1.4J		
1,2-Dichlorobenzene	µg/L	600		2U		
1,2-Dichloroethane	µg/L	5		0.52J		
1,2-Dimethylbenzene	µg/L	10,000		2U		
1,4-Dichlorobenzene	µg/L	75		2U		
2-Butanone	µg/L	53,800		6U		
4-Methyl-2-pentanone	µg/L	6360		5U		
Acetone	µg/L	10,200		10U		
Benzene	µg/L	5		2U		
Bromodichloromethane	µg/L	100		2U		
Bromoform	µg/L	100		2U		
Bromomethane	µg/L	140		2U		
Carbon disulfide	µg/L	6270		2U		
Carbon tetrachloride	µg/L	5		2U		
Chlorobenzene	µg/L	100		2U		
Chloroethane	µg/L	246,000		2U		
Chloroform	µg/L	100		2U		
Chloromethane	µg/L	13.4		2U		
cis-1,2-Dichloroethene	µg/L	70		2U		
Dibromochloromethane	µg/L	3.12		2U		
Ethylbenzene	µg/L	700		2U		
M + P Xylene	µg/L	10,000		2U		
Methylene chloride	µg/L	5		5U		
Tetrachloroethene	µg/L	5		2U		
Toluene	µg/L	1000		2U		
trans-1,2-Dichloroethene	µg/L	100		1U		
Trichloroethene	µg/L	5		8.3		
Trichlorofluoromethane	µg/L	12,100		2U		
Vinyl chloride	µg/L	2		1U		
Field Measurements						

X-740 Waste Oil Handling Facility

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X740-04G						
Conductivity	µS/cm			1754		
Depth to Water	ft			8.3		
Dissolved Oxygen	mg/L			nm		
pH	Std Unit			6.1		
Temperature	deg C			14.2		
Turbidity	NTU			754		
X740-08G						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200		1.4J		2.6
1,1,2,2-Tetrachloroethane	µg/L	0.83		1U		1U
1,1,2-Trichloroethane	µg/L	5		2U		2U
1,1-Dichloroethane	µg/L	5860		18		13
1,1-Dichloroethene	µg/L	7		1.6J		3.1
1,2-Dichlorobenzene	µg/L	600		2U		2U
1,2-Dichloroethane	µg/L	5		0.2J		2U
1,2-Dimethylbenzene	µg/L	10,000		2U		2U
1,4-Dichlorobenzene	µg/L	75		2U		2U
2-Butanone	µg/L	53,800		6U		6U
4-Methyl-2-pentanone	µg/L	6360		5U		5U
Acetone	µg/L	10,200		10U		10U
Benzene	µg/L	5		2U		2U
Bromodichloromethane	µg/L	100		2U		2U
Bromoform	µg/L	100		2U		2U
Bromomethane	µg/L	140		2U		2U
Carbon disulfide	µg/L	6270		2U		2U
Carbon tetrachloride	µg/L	5		2U		2U
Chlorobenzene	µg/L	100		2U		2U
Chloroethane	µg/L	246,000		2U		2U
Chloroform	µg/L	100		2U		2U
Chloromethane	µg/L	13.4		2U		2U
cis-1,2-Dichloroethene	µg/L	70		25		12
Dibromochloromethane	µg/L	3.12		2U		2U
Ethylbenzene	µg/L	700		2U		2U
M + P Xylene	µg/L	10,000		2U		2U
Methylene chloride	µg/L	5		5U		5U
Tetrachloroethene	µg/L	5		2U		2U
Toluene	µg/L	1000		2U		2U
trans-1,2-Dichloroethene	µg/L	100		7.6		3.4
Trichloroethene	µg/L	5		16		8.4
Trichlorofluoromethane	µg/L	12,100		2U		2U

X-740 Waste Oil Handling Facility

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X740-08G						
Vinyl chloride	µg/L	2		1U		1U
Field Measurements						
Conductivity	µS/cm			563		808
Depth to Water	ft			10.78		17.38
Dissolved Oxygen	mg/L			nm		1.11
pH	Std Unit			7.17		7.31
Temperature	deg C			14.3		15
Turbidity	NTU			14		16
X740-09B						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200		37		5.1
1,1,2,2-Tetrachloroethane	µg/L	0.83		4U		2U
1,1,2-Trichloroethane	µg/L	5		8U		4U
1,1-Dichloroethane	µg/L	5860		11		12
1,1-Dichloroethene	µg/L	7		190		250
1,2-Dichlorobenzene	µg/L	600		8U		4U
1,2-Dichloroethane	µg/L	5		59		51
1,2-Dimethylbenzene	µg/L	10,000		8U		4U
1,4-Dichlorobenzene	µg/L	75		8U		4U
2-Butanone	µg/L	53,800		24U		12U
4-Methyl-2-pentanone	µg/L	6360		20U		10U
Acetone	µg/L	10,200		40U		20U
Benzene	µg/L	10.5		8U		4U
Bromodichloromethane	µg/L	100		8U		4U
Bromoform	µg/L	100		8U		4U
Bromomethane	µg/L	140		8U		4U
Carbon disulfide	µg/L	6270		8U		4U
Carbon tetrachloride	µg/L	5		8U		4U
Chlorobenzene	µg/L	100		8U		4U
Chloroethane	µg/L	246,000		8U		4U
Chloroform	µg/L	100		5.1J		1.5J
Chloromethane	µg/L	13.4		8U		4U
cis-1,2-Dichloroethene	µg/L	70		2.4J		5.7
Dibromochloromethane	µg/L	3.12		8U		4U
Ethylbenzene	µg/L	700		8U		4U
M + P Xylene	µg/L	10,000		8U		4U
Methylene chloride	µg/L	5		4.1J		1.7BJ
Tetrachloroethene	µg/L	5		38		27
Toluene	µg/L	1000		8U		4U
trans-1,2-Dichloroethene	µg/L	100		4U		2U

X-740 Waste Oil Handling Facility

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X740-09B						
Trichloroethene	µg/L	5		1200	940	1200
Trichlorofluoromethane	µg/L	12,100		8U		4U
Vinyl chloride	µg/L	2		4U		2U
Field Measurements						
Conductivity	µS/cm			2055	1960	1984
Depth to Water	ft			10.43	14.97	17.49
Dissolved Oxygen	mg/L			2	2.07	1.78
pH	Std Unit			6.79	6.7	6.81
Temperature	deg C			13.1	19.3	16.62
Turbidity	NTU			2	43	58.2
X740-10G						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200		8.7		18
1,1,2,2-Tetrachloroethane	µg/L	0.83		1U		1U
1,1,2-Trichloroethane	µg/L	5		2U		2U
1,1-Dichloroethane	µg/L	5860		4.8		7.5
1,1-Dichloroethene	µg/L	7		34		81
1,2-Dichlorobenzene	µg/L	600		2U		2U
1,2-Dichloroethane	µg/L	5		8.3		19
1,2-Dimethylbenzene	µg/L	10,000		2U		2U
1,4-Dichlorobenzene	µg/L	75		2U		2U
2-Butanone	µg/L	53,800		6U		6U
4-Methyl-2-pentanone	µg/L	6360		5U		5U
Acetone	µg/L	10,200		10U		10U
Benzene	µg/L	5		2U		2U
Bromodichloromethane	µg/L	100		2U		2U
Bromoform	µg/L	100		2U		2U
Bromomethane	µg/L	140		2U		2U
Carbon disulfide	µg/L	6270		2U		2U
Carbon tetrachloride	µg/L	5		2U		2U
Chlorobenzene	µg/L	100		2U		2U
Chloroethane	µg/L	246,000		2U		2U
Chloroform	µg/L	100		0.71J		1.6J
Chloromethane	µg/L	13.4		2U		2U
cis-1,2-Dichloroethene	µg/L	70		1.6J		3.4
Dibromochloromethane	µg/L	3.12		2U		2U
Ethylbenzene	µg/L	700		2U		2U
M + P Xylene	µg/L	10,000		2U		2U
Methylene chloride	µg/L	5		0.42J		5U
Tetrachloroethene	µg/L	5		3.7		7.2

X-740 Waste Oil Handling Facility

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X740-10G						
Toluene	µg/L	1000		2U		2U
trans-1,2-Dichloroethene	µg/L	100		1U		1U
Trichloroethene	µg/L	5		170	260	410
Trichlorofluoromethane	µg/L	12,100		2U		2U
Vinyl chloride	µg/L	2		1U		1U
Field Measurements						
Conductivity	µS/cm			947	1048	1260
Depth to Water	ft			10.83	15.9	18.2
Dissolved Oxygen	mg/L			1	5.22	8.07
pH	Std Unit			6.94	6.7	6.64
Temperature	deg C			13.8	14.3	14.7
Turbidity	NTU			46	265	1000
X740-11G						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200		0.74J		
1,1,2,2-Tetrachloroethane	µg/L	0.83		1U		
1,1,2-Trichloroethane	µg/L	5		2U		
1,1-Dichloroethane	µg/L	5860		0.41J		
1,1-Dichloroethene	µg/L	7		5.4		
1,2-Dichlorobenzene	µg/L	600		2U		
1,2-Dichloroethane	µg/L	5		1.5J		
1,2-Dimethylbenzene	µg/L	10,000		2U		
1,4-Dichlorobenzene	µg/L	75		2U		
2-Butanone	µg/L	53,800		6U		
4-Methyl-2-pentanone	µg/L	6360		5U		
Acetone	µg/L	10,200		10U		
Benzene	µg/L	5		2U		
Bromodichloromethane	µg/L	100		2U		
Bromoform	µg/L	100		2U		
Bromomethane	µg/L	140		2U		
Carbon disulfide	µg/L	6270		2U		
Carbon tetrachloride	µg/L	5		2U		
Chlorobenzene	µg/L	100		2U		
Chloroethane	µg/L	246,000		2U		
Chloroform	µg/L	100		2U		
Chloromethane	µg/L	13.4		2U		
cis-1,2-Dichloroethene	µg/L	70		2U		
Dibromochloromethane	µg/L	3.12		2U		
Ethylbenzene	µg/L	700		2U		
M + P Xylene	µg/L	10,000		2U		

X-740 Waste Oil Handling Facility

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X740-11G						
Methylene chloride	µg/L	5		5U		
Tetrachloroethene	µg/L	5		2U		
Toluene	µg/L	1000		2U		
trans-1,2-Dichloroethene	µg/L	100		1U		
Trichloroethene	µg/L	5		14		
Trichlorofluoromethane	µg/L	12,100		2U		
Vinyl chloride	µg/L	2		1U		
Field Measurements						
Conductivity	µS/cm			1399		
Depth to Water	ft			4.1		
Dissolved Oxygen	mg/L			nm		
pH	Std Unit			6.24		
Temperature	deg C			12.7		
Turbidity	NTU			11		
X740-12B						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200		2U		
1,1,2,2-Tetrachloroethane	µg/L	0.83		1U		
1,1,2-Trichloroethane	µg/L	5		2U		
1,1-Dichloroethane	µg/L	5860		2U		
1,1-Dichloroethene	µg/L	7		2U		
1,2-Dichlorobenzene	µg/L	600		2U		
1,2-Dichloroethane	µg/L	5		2U		
1,2-Dimethylbenzene	µg/L	10,000		2U		
1,4-Dichlorobenzene	µg/L	75		2U		
2-Butanone	µg/L	53,800		6U		
4-Methyl-2-pentanone	µg/L	6360		5U		
Acetone	µg/L	10,200		10U		
Benzene	µg/L	10.5		2U		
Bromodichloromethane	µg/L	100		2U		
Bromoform	µg/L	100		2U		
Bromomethane	µg/L	140		2U		
Carbon disulfide	µg/L	6270		2U		
Carbon tetrachloride	µg/L	5		2U		
Chlorobenzene	µg/L	100		2U		
Chloroethane	µg/L	246,000		2U		
Chloroform	µg/L	100		2U		
Chloromethane	µg/L	13.4		2U		
cis-1,2-Dichloroethene	µg/L	70		2U		
Dibromochloromethane	µg/L	3.12		2U		

X-740 Waste Oil Handling Facility

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X740-12B						
Ethylbenzene	µg/L	700		2U		
M + P Xylene	µg/L	10,000		2U		
Methylene chloride	µg/L	5		5U		
Tetrachloroethene	µg/L	5		2U		
Toluene	µg/L	1000		2U		
trans-1,2-Dichloroethene	µg/L	100		1U		
Trichloroethene	µg/L	5		2U		
Trichlorofluoromethane	µg/L	12,100		2U		
Vinyl chloride	µg/L	2		1U		
Field Measurements						
Conductivity	µS/cm			590		
Depth to Water	ft			4.71		
Dissolved Oxygen	mg/L			nm		
pH	Std Unit			7.1		
Temperature	deg C			13.4		
Turbidity	NTU			20		
X740-13G						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200		2U		2U
1,1,2,2-Tetrachloroethane	µg/L	0.83		1U		1U
1,1,2-Trichloroethane	µg/L	5		2U		2U
1,1-Dichloroethane	µg/L	5860		2U		2U
1,1-Dichloroethene	µg/L	7		2U		2U
1,2-Dichlorobenzene	µg/L	600		2U		2U
1,2-Dichloroethane	µg/L	5		2U		2U
1,2-Dimethylbenzene	µg/L	10,000		2U		2U
1,4-Dichlorobenzene	µg/L	75		2U		2U
2-Butanone	µg/L	53,800		6U		6U
4-Methyl-2-pentanone	µg/L	6360		5U		5U
Acetone	µg/L	10,200		10U		10U
Benzene	µg/L	5		2U		2U
Bromodichloromethane	µg/L	100		2U		2U
Bromoform	µg/L	100		2U		2U
Bromomethane	µg/L	140		2U		2U
Carbon disulfide	µg/L	6270		2U		2U
Carbon tetrachloride	µg/L	5		2U		2U
Chlorobenzene	µg/L	100		2U		2U
Chloroethane	µg/L	246,000		2U		2U
Chloroform	µg/L	100		2U		2U
Chloromethane	µg/L	13.4		2U		2U

X-740 Waste Oil Handling Facility

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X740-13G						
cis-1,2-Dichloroethene	µg/L	70		2U		2U
Dibromochloromethane	µg/L	3.12		2U		2U
Ethylbenzene	µg/L	700		2U		2U
M + P Xylene	µg/L	10,000		2U		2U
Methylene chloride	µg/L	5		5U		5U
Tetrachloroethene	µg/L	5		2U		2U
Toluene	µg/L	1000		2U		2U
trans-1,2-Dichloroethene	µg/L	100		1U		1U
Trichloroethene	µg/L	5		2U		2U
Trichlorofluoromethane	µg/L	12,100		2U		2U
Vinyl chloride	µg/L	2		1U		1U
Field Measurements						
Conductivity	µS/cm			1669		1710
Depth to Water	ft			7.82		9.57
Dissolved Oxygen	mg/L			6		7.15
pH	Std Unit			5.53		5.28
Temperature	deg C			13.2		16.01
Turbidity	NTU			4		35.9
X740-14B						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200		1.1J		2U
1,1,2,2-Tetrachloroethane	µg/L	0.83		1U		1U
1,1,2-Trichloroethane	µg/L	5		2U		2U
1,1-Dichloroethane	µg/L	5860		1.1J		2U
1,1-Dichloroethene	µg/L	7		9.1		0.38J
1,2-Dichlorobenzene	µg/L	600		2U		2U
1,2-Dichloroethane	µg/L	5		2.9		2U
1,2-Dimethylbenzene	µg/L	10,000		2U		2U
1,4-Dichlorobenzene	µg/L	75		2U		2U
2-Butanone	µg/L	53,800		6U		6U
4-Methyl-2-pentanone	µg/L	6360		5U		5U
Acetone	µg/L	10,200		10U		9.2J
Benzene	µg/L	10.5		2U		2U
Bromodichloromethane	µg/L	100		2U		2U
Bromoform	µg/L	100		2U		2U
Bromomethane	µg/L	140		2U		2U
Carbon disulfide	µg/L	6270		2U		2U
Carbon tetrachloride	µg/L	5		2U		2U
Chlorobenzene	µg/L	100		2U		2U
Chloroethane	µg/L	246,000		2U		2U

X-740 Waste Oil Handling Facility

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X740-14B						
Chloroform	µg/L	100		2U		2U
Chloromethane	µg/L	13.4		2U		2U
cis-1,2-Dichloroethene	µg/L	70		0.18J		2U
Dibromochloromethane	µg/L	3.12		2U		2U
Ethylbenzene	µg/L	700		2U		2U
M + P Xylene	µg/L	10,000		2U		2U
Methylene chloride	µg/L	5		5U		5U
Tetrachloroethene	µg/L	5		2U		2U
Toluene	µg/L	1000		2U		2U
trans-1,2-Dichloroethene	µg/L	100		1U		1U
Trichloroethene	µg/L	5		33	2.9	1.6J
Trichlorofluoromethane	µg/L	12,100		2U		2U
Vinyl chloride	µg/L	2		1U		1U
Field Measurements						
Conductivity	µS/cm			949	712	697
Depth to Water	ft			9.33	11.7	13.75
Dissolved Oxygen	mg/L			nm	nm	nm
pH	Std Unit			7.19	6.76	6.8
Temperature	deg C			14.2	17.3	20.9
Turbidity	NTU			132	29	197
X740-PZ10G						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200		2.2		2.7
1,1,2,2-Tetrachloroethane	µg/L	0.83		1U		1U
1,1,2-Trichloroethane	µg/L	5		2U		2U
1,1-Dichloroethane	µg/L	5860		1.2J		0.36J
1,1-Dichloroethene	µg/L	7		6.1		3.1
1,2-Dichlorobenzene	µg/L	600		2U		2U
1,2-Dichloroethane	µg/L	5		1.8J		1.5J
1,2-Dimethylbenzene	µg/L	10,000		2U		2U
1,4-Dichlorobenzene	µg/L	75		2U		2U
2-Butanone	µg/L	53,800		6U		6U
4-Methyl-2-pentanone	µg/L	6360		5U		5U
Acetone	µg/L	10,200		10U		9.7J
Benzene	µg/L	5		2U		2U
Bromodichloromethane	µg/L	100		2U		0.25J
Bromoform	µg/L	100		2U		2U
Bromomethane	µg/L	140		2U		2U
Carbon disulfide	µg/L	6270		2U		2U
Carbon tetrachloride	µg/L	5		2U		2U

X-740 Waste Oil Handling Facility

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X740-PZ10G						
Chlorobenzene	µg/L	100		2U		2U
Chloroethane	µg/L	246,000		2U		2U
Chloroform	µg/L	100		2U		0.81J
Chloromethane	µg/L	13.4		2U		2U
cis-1,2-Dichloroethene	µg/L	70		0.26J		2U
Dibromochloromethane	µg/L	3.12		2U		2U
Ethylbenzene	µg/L	700		2U		2U
M + P Xylene	µg/L	10,000		2U		2U
Methylene chloride	µg/L	5		5U		5U
Tetrachloroethene	µg/L	5		0.92J		0.94J
Toluene	µg/L	1000		2U		2U
trans-1,2-Dichloroethene	µg/L	100		1U		1U
Trichloroethene	µg/L	5		44	28	30
Trichlorofluoromethane	µg/L	12,100		2U		2U
Vinyl chloride	µg/L	2		1U		1U
Field Measurements						
Conductivity	µS/cm			1477	1523	1729
Depth to Water	ft			10.78	15.86	18.68
Dissolved Oxygen	mg/L			nm	28.36	29.95
pH	Std Unit			6.48	6.39	6.16
Temperature	deg C			14.2	18.4	19.58
Turbidity	NTU			54	557	491
X740-PZ12G						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200		4.5		4
1,1,2,2-Tetrachloroethane	µg/L	0.83		1U		1U
1,1,2-Trichloroethane	µg/L	5		2U		2U
1,1-Dichloroethane	µg/L	5860		1.1J		1.1J
1,1-Dichloroethene	µg/L	7		21		20
1,2-Dichlorobenzene	µg/L	600		2U		2U
1,2-Dichloroethane	µg/L	5		7.4		6.4
1,2-Dimethylbenzene	µg/L	10,000		2U		2U
1,4-Dichlorobenzene	µg/L	75		2U		2U
2-Butanone	µg/L	53,800		6U		6U
4-Methyl-2-pentanone	µg/L	6360		5U		5U
Acetone	µg/L	10,200		10U		6.9J
Benzene	µg/L	5		2U		2U
Bromodichloromethane	µg/L	100		2U		2U
Bromoform	µg/L	100		2U		2U
Bromomethane	µg/L	140		2U		2U

X-740 Waste Oil Handling Facility

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X740-PZ12G						
Carbon disulfide	µg/L	6270		2U		2U
Carbon tetrachloride	µg/L	5		2U		2U
Chlorobenzene	µg/L	100		2U		2U
Chloroethane	µg/L	246,000		2U		2U
Chloroform	µg/L	100		0.67J		0.6J
Chloromethane	µg/L	13.4		2U		2U
cis-1,2-Dichloroethene	µg/L	70		0.23J		0.25J
Dibromochloromethane	µg/L	3.12		2U		2U
Ethylbenzene	µg/L	700		2U		2U
M + P Xylene	µg/L	10,000		2U		2U
Methylene chloride	µg/L	5		5U		5U
Tetrachloroethene	µg/L	5		1.3J		1.2J
Toluene	µg/L	1000		2U		2U
trans-1,2-Dichloroethene	µg/L	100		1U		1U
Trichloroethene	µg/L	5		120	94	130
Trichlorofluoromethane	µg/L	12,100		2U		2U
Vinyl chloride	µg/L	2		1U		1U
Field Measurements						
Conductivity	µS/cm			1011	1029	1047
Depth to Water	ft			10.04	15.68	18.5
Dissolved Oxygen	mg/L			0.5	4.84	9
pH	Std Unit			6.38	6.33	6.25
Temperature	deg C			13.3	16.7	17
Turbidity	NTU			26	56	89
X740-PZ14G						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200		5.2		3.1
1,1,2,2-Tetrachloroethane	µg/L	0.83		1U		1U
1,1,2-Trichloroethane	µg/L	5		2U		2U
1,1-Dichloroethane	µg/L	5860		1.7J		1.1J
1,1-Dichloroethene	µg/L	7		35		24
1,2-Dichlorobenzene	µg/L	600		2U		2U
1,2-Dichloroethane	µg/L	5		11		7.4
1,2-Dimethylbenzene	µg/L	10,000		2U		2U
1,4-Dichlorobenzene	µg/L	75		2U		2U
2-Butanone	µg/L	53,800		6U		6U
4-Methyl-2-pentanone	µg/L	6360		5U		5U
Acetone	µg/L	10,200		10U		10U
Benzene	µg/L	5		2U		2U
Bromodichloromethane	µg/L	100		2U		2U

X-740 Waste Oil Handling Facility

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X740-PZ14G						
Bromoform	µg/L	100		2U		2U
Bromomethane	µg/L	140		2U		2U
Carbon disulfide	µg/L	6270		2U		2U
Carbon tetrachloride	µg/L	5		2U		2U
Chlorobenzene	µg/L	100		2U		2U
Chloroethane	µg/L	246,000		2U		2U
Chloroform	µg/L	100		1J		0.68J
Chloromethane	µg/L	13.4		2U		2U
cis-1,2-Dichloroethene	µg/L	70		0.38J		0.27J
Dibromochloromethane	µg/L	3.12		2U		2U
Ethylbenzene	µg/L	700		2U		2U
M + P Xylene	µg/L	10,000		2U		2U
Methylene chloride	µg/L	5		5U		5U
Tetrachloroethene	µg/L	5		1.2J		0.48J
Toluene	µg/L	1000		2U		2U
trans-1,2-Dichloroethene	µg/L	100		1U		1U
Trichloroethene	µg/L	5		140	160	92
Trichlorofluoromethane	µg/L	12,100		2U		2U
Vinyl chloride	µg/L	2		1U		1U
Field Measurements						
Conductivity	µS/cm			1298	1320	1627
Depth to Water	ft			7.23	10.52	12.6
Dissolved Oxygen	mg/L			0.46	13.21	13
pH	Std Unit			6.32	6.43	6.37
Temperature	deg C			17.1	20.41	18.4
Turbidity	NTU			1000	1000	1000
X740-PZ17G						
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200		2		2.9
1,1,2,2-Tetrachloroethane	µg/L	0.83		1U		1U
1,1,2-Trichloroethane	µg/L	5		2U		2U
1,1-Dichloroethane	µg/L	5860		0.57J		0.71J
1,1-Dichloroethene	µg/L	7		8.9		12
1,2-Dichlorobenzene	µg/L	600		2U		2U
1,2-Dichloroethane	µg/L	5		3.4		4.4
1,2-Dimethylbenzene	µg/L	10,000		2U		2U
1,4-Dichlorobenzene	µg/L	75		2U		2U
2-Butanone	µg/L	53,800		6U		6U
4-Methyl-2-pentanone	µg/L	6360		5U		5U
Acetone	µg/L	10,200		10U		10U

X-740 Waste Oil Handling Facility

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X740-PZ17G						
Benzene	µg/L	5		2U		2U
Bromodichloromethane	µg/L	100		2U		2U
Bromoform	µg/L	100		2U		2U
Bromomethane	µg/L	140		2U		2U
Carbon disulfide	µg/L	6270		2U		2U
Carbon tetrachloride	µg/L	5		2U		2U
Chlorobenzene	µg/L	100		2U		2U
Chloroethane	µg/L	246,000		2U		2U
Chloroform	µg/L	100		0.32J		0.41J
Chloromethane	µg/L	13.4		2U		2U
cis-1,2-Dichloroethene	µg/L	70		2U		2U
Dibromochloromethane	µg/L	3.12		2U		2U
Ethylbenzene	µg/L	700		2U		2U
M + P Xylene	µg/L	10,000		2U		2U
Methylene chloride	µg/L	5		5U		5U
Tetrachloroethene	µg/L	5		2U		2U
Toluene	µg/L	1000		2U		0.2J
trans-1,2-Dichloroethene	µg/L	100		1U		1U
Trichloroethene	µg/L	5		30	36	41
Trichlorofluoromethane	µg/L	12,100		2U		2U
Vinyl chloride	µg/L	2		1U		1U
Field Measurements						
Conductivity	µS/cm			713	915	1035
Depth to Water	ft			8.18	11.41	13.67
Dissolved Oxygen	mg/L			0.9	3.17	2
pH	Std Unit			6.24	6.09	6.05
Temperature	deg C			13.8	15.6	17.9
Turbidity	NTU			666	409	138

X-740 AQUIFER PERFORMANCE TEST REPORT

Section 1
Overview and Test Objectives

CDM Federal Programs Corporation (CDM) conducted two long-term constant rate aquifer performance tests at the Portsmouth Gaseous Diffusion Plant, located in Piketon, Ohio for the US Department of Energy (DOE). The objectives of the aquifer tests were to:

- estimate aquifer hydraulic characteristics (transmissivity and storage coefficient) of the Gallia member of the Teays Formation (Gallia member) and Berea Formation.
- determine the interconnectedness between these two groundwater units.

The aquifer performance testing was conducted between the dates of June 9, 2008 and June 20, 2008. Aquifer testing of the Gallia and Berea Formations was performed separately. The Gallia member testing was based on pumping X740-03G, while Berea Formation testing was based on pumping X740-09B. Each aquifer performance test (APT) consisted of three components:

- A single, 10-day period of background water level monitoring that was incorporated into both the Gallia and Berea Formations tests
- 8-hour step test
- 48-hour constant rate test

Ten observation wells located near the pumping wells were included in the aquifer tests. Figure 1 shows the X-740 area, including the APT monitoring wells. The remainder of this report describes the methods used in conducting all phases of the aquifer performance tests and presents the results and conclusions of the tests.

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Section 2
Test Methods

The APTs were composed of three components: background monitoring, step test, and long-term constant rate test (CRT).

2.1 Background Monitoring

Continuous water level measurements were collected with electronic data recorders at each proposed pumping well and nine observation wells.

2.1.1 Rationale

Background monitoring was conducted to identify impacts to water levels from natural causes such as barometric pressure, precipitation, earth tides, and anthropogenic causes such as phytoremediation and groundwater withdrawal. These impacts were considered when analyzing the CRT data.

Background water levels were collected for a ten-day period from May 30, 2008 to June 9, 2008, prior to performing the eight-hour step test and long-term constant rate test on the Gallia member. Background monitoring of wells relevant to the Gallia and Berea Formations APTs was conducted concurrently.

Background water levels for the Gallia member test were monitored at well X740-03G (the proposed pumping well), and seven observation wells: X740-PZ10G, X740-PZ12G, X740-02G, X740-08G, X740-10G, X740-PW02M, and X740-09B. The locations of the wells are shown in Figure 2, and summarized in Table 1.

Background water levels for the Berea Formation test were monitored at well X740-09B (the proposed pumping well), and nine observation wells: F-14B, X740-07B, X740-14B, X740-PZ10G, X740-PZ12G, X740-03G, X740-10G, X740-PW02M, and X740-PZ09M. The locations of the wells are shown in Figure 3, and summarized in Table 2.

2.1.2 Methods

Electronic water level transducers/recorders were placed in each well. At each well, after the water level stabilized, an initial water level measurement was collected with the transducer/recorder and documented in the field logbook. Manual water levels were also collected at each well with an electronic water level meter. The transducer/recorder reading and manual water measurements were collected to convert the transducer recordings to groundwater elevations. The recorders were programmed to collect water level readings every 15 minutes.

2.2 Gallia Tests

An APT was conducted to estimate aquifer hydraulic characteristics (transmissivity and storage coefficient) of the Gallia member and determine the interconnectedness between the Gallia and Berea Formations.

2.2.1 Step Test

A step drawdown test was performed at well X740-03G on June 9, 2008 to determine the maximum sustainable pumping rate for the 48-hour CRT. In the X740 area, low-flow sampling rates of Gallia member wells have shown them to be poor producers of groundwater. As a result, it was not feasible to perform a conventional step test on pumping well X740-03G. The 48-hour CRT discharge rate was estimated by experimenting with three pump types and incrementally increasing discharge rates according to the following steps:

- A pressure transducer was deployed in the pumping well. An initial water level was collected using a hand meter and the transducer was referenced to this reading. The data collection interval was 0.5 second.
- During pumping, manual water level readings were collected from the pumping well at approximately 15-minute intervals.
- A 2-inch submersible pump was used at the beginning of the test. The minimum constant rate the submersible pump was able to maintain was 25.4 ft^3/day (500 milliliters/minute) (mL/min), which was found to be greater than the well yield (i.e., the water level dropped below the pump intake at the lowest achievable pumping rate). As a result, the submersible pump was considered inappropriate for the CRT.
- Next, a peristaltic pump was used. While the peristaltic pump was capable of providing discharge rates as low as 12.7 ft^3/day (250 mL/min), it could not lift water from greater than 20 feet below ground surface (ft bgs). At approximately 20 feet of drawdown, the discharge rate would diminish, and the drawdown would remain unchanged. Since a constant discharge rate could not be maintained, the peristaltic pump was considered inappropriate for this test.
- Lastly, a bladder pump was used. The bladder pump was found to provide a consistent, low discharge rate. Water level data from the Gallia member step test are included in Figure 4. At 15.3 ft^3/day (300 mL/min), the bladder pump was projected to maximize drawdown to the top of the well screen (34 ft bgs), by the end of the 48-hour CRT. Additionally, the bladder pump maintained a relatively constant discharge rate in response to progressive drawdown in the pumping well.
- The extracted water was discharged to a 10,000 gallon holding tank. The water was then treated at the plant water treatment system.

2.2.2 Long-Term Constant Rate Test

A long-term constant rate aquifer performance test was initiated on June 10, 2008 at 1630 hours, and concluded on June 12, 2008 at 1702 hours. Well X740-03G was pumped at a rate of 300 mL/min for the test. Observation wells X740-PZ10G, X740-PZ12G, X740-02G, X740-08G, X740-10G, X740-PW02M, and X740-09B were monitored during the constant rate test. The extracted water was discharged to a 10,000 gallon holding tank. The water was then treated at the plant water treatment system.

Because the Gallia member CRT was conducted at a very low discharge rate, the possibility existed that well bore storage effects could affect the analysis of the tests. Regarding the X740-03G pumping well curve included in Appendix A, an inflection point is evident at approximately 100 minutes into the CRT. This is the point at which the well bore storage effects become insignificant. At this point, drawdown reflects discharge from the aquifer, rather than release from well bore storage. When curve matching the drawdown data from the Gallia member CRT, the first 100 minutes of data were ignored so that the effect of borehole storage on the determination of hydraulic parameters was minimized.

Water levels collected during the CRT were collected using pressure transducers. Manual measurements were also collected. The manual readings were recorded every hour, for the entire test. In addition to monitoring water levels, barometric and precipitation data were collected from the Portsmouth facility's meteorologic station.

2.3 Berea Tests

An APT was conducted to estimate aquifer hydraulic characteristics (transmissivity and storage coefficient) of the Berea Formation and determine the interconnectedness between the Gallia and Berea Formations.

2.3.1 Step Test

An eight-hour, four-stage, step drawdown test was performed at well X740-09B on June 16, 2008 to determine the maximum sustainable pumping rate for the 48-hour CRT.

- A pressure transducer was deployed in the pumping well. An initial water level was collected using a hand meter and the transducer was referenced to this reading. The data collection interval was 0.5 second.
- During pumping, manual water level readings were collected from the pumping well at approximately 15-minute intervals.
- The configuration of the eight-hour step test equipment included a two-inch diameter submersible pump with a vertical check valve directly above the pump.
- The first step of the test was 92 minutes at a pumping rate of 40.7 ft^3/day (800 mL/min), with 4-feet of drawdown noted in X740-09B. The second step was conducted at 61 ft^3/day (1200mL/min) ran and for 71 minutes resulting in 7-feet of drawdown in X740-09B. The third step of the test was 83 minutes at a pumping rate of 101.7 ft^3/day (2000 mL/min), with 17-feet of drawdown observed in X740-09B. The last step ran for 119 minutes at a rate of 152.6 ft^3/day (3000mL/min), with 31-feet of drawdown.
- The maximum pumping rate for the long-term test, determined during the step test, was 101.7 ft^3/day (2000 mL/min). It was allowable to induce 34 feet of drawdown before de-watering the sand pack surrounding the pumping well screen. A graph of the drawdown at X740-09B during the step test is provided as Figure 5.

- The extracted water was discharged to a 10,000 gallon holding tank. The water was then treated at the plant water treatment system.

2.3.2 Long-Term Constant Rate Test

A long-term constant rate aquifer performance test was initiated on June 17, 2008 at 1202 hours, and concluded on June 19, 2008 at 1249 hours. Well X740-09B was pumped at a rate of 101.7 ft^3/day (2000 mL/min) for the duration of the test. Observation wells F-14B, X740-07B, X740-14B, X740-PZ10G, X740-PZ12G, X740-03G, X740-10G, X740-PW02M, and X740-PZ09M were monitored during the constant rate test. The extracted water was discharged to a 10,000 gallon holding tank. The water was then treated at the plant water treatment system.

Water levels collected during the constant rate test were collected using pressure transducers. Manual measurements were also collected. The manual readings were recorded every hour, for the entire test. In addition to monitoring water levels, barometric and precipitation data were collected from the Portsmouth facility's meteorologic station

Section 3
Data Analysis and Results

The continuous background monitoring data and the CRT data were evaluated to assist in determining the interconnectedness of the Gallia and Berea Formations and estimating aquifer hydraulic property values.

3.1 Evaluation of Background Data

Background water levels were collected from 11 monitoring wells and evaluated to determine causes for fluctuations (i.e. aquifer drainage, pumping, phytoremediation uptake, barometric response, and precipitation influences). This discussion is limited to factors directly affecting the CRT. Hydrographs for the background monitoring period showing fluctuations in groundwater elevation and barometric pressure are included as Appendix B. Precipitation data are included as Appendix C.

3.1.1 Gallia Member

Background water levels for the Gallia member test were monitored in the pumping well X740-03G, and the seven observation wells: X740-PZ10G, X740-PZ12G, X740-02G, X740-08G, X740-10G, X740-PW02M, and X740-09B. The eight wells exhibited decreasing water level elevations, suggesting that the Gallia member was draining during the course of the background monitoring period. Additionally, fluctuations in water level appear to correlate to changes in barometric pressure.

To properly analyze the Gallia member CRT, the magnitude of the draining response and influence of barometric pressure was quantified so that their effects could be removed from the drawdown data.

3.1.1.1 Draining Influence

The general decline in groundwater elevations during the 10-day background monitoring period suggests that the aquifer was draining. As seen in Figure 6, June 1 at 21:00 and June 10 at 3:00 were identified as two times with equal barometric pressure (32.7 feet water). By determining the groundwater elevation change between the isobaric times, it was possible to calculate each well's drainage rate. Groundwater elevations for the two isobaric periods as wells as drainage rates are shown in Table 3. Because no significant rain occurred between June 10 and the beginning of the CRTs, the rate of groundwater decline was assumed to continue during the CRTs. Therefore, drainage effects were removed from each well's drawdown data prior to analysis.

3.1.1.2 Barometric Influence

Barometric pressure data collected at Portsmouth meteorological station were used to estimate the barometric pressure influence on the groundwater levels. Monitoring wells completed in confined and semi-confined formations typically exhibit water level fluctuations that are inversely correlated to changes in barometric pressure. As barometric pressure increases, water levels decrease and as barometric pressure decreases, water levels increase.

To quantify the barometric influence on these wells, barometric efficiency was estimated for each monitoring well. Barometric efficiency (BE) is estimated by relating observed changes in barometric pressure (ΔB) to changes in hydraulic head (ΔW) over constant time increments according to the following equation:

$$BE = (\text{average } \Delta W \ / \ \text{average } \Delta B) \times 100$$

Drainage-corrected water level data were used to estimate the barometric influence. A short period of barometric decline between June 2 at 11:00 and June 3 at 22:00 was chosen for the barometric efficiency calculation. The data are presented in Table 4.

During the Gallia member CRT, a net barometric pressure increase of 0.17 ft of water was measured. The average barometric efficiency of wells monitored in the Gallia member was 0.32. Therefore, water levels in the Gallia member would be expected to decline approximately 0.05 feet during the CRT due to barometric influences. Because the barometric efficiencies measured in Gallia member wells varied over a wide range (i.e., from 0.24 to 0.41), the average barometric efficiency was used to correct the Gallia member data for barometric influences.

As shown in Table 5, after correcting for drainage, drawdown at the most distant monitoring well (143 ft) was 0.15 feet. A barometric-pressure induced water level decline of 0.05 feet is significant relative to drawdown induced at distant monitoring wells. For this reason, barometric pressure influences were filtered out of the Gallia member well data.

3.1.2 Berea Formation

Background water levels for the Berea Formation test were monitored in the pumping well X740-09B, and the nine observation wells: F-14B, X740-07B, X740-14B, X740-PZ10G, X740-PZ12G, X740-03G, X740-10G, X740-PW02M, and X740-PZ09M. The wells exhibited decreasing water level elevations, suggesting that the Berea Formation was draining during the course of the background monitoring period. Evaluation of the Berea Formation background data began by correcting drawdown data to remove the draining response and then determining the influence of barometric pressure on groundwater elevations.

3.1.2.1 Draining Influence

The consistent decline in groundwater elevations during the 10-day background period suggests that the Berea Formation was draining. As seen in Figure 7, June 1 at 21:00 and June 10 at 3:00 were identified as two times with equal barometric pressure (32.7 feet water). The previously presented technique was applied to calculate a drainage rate in the Berea Formation.

Groundwater elevations for the two isobaric periods as wells as drainage rates are shown in Table 3. It can be noted that Gallia member drainage rates tend to higher than Berea Formation drainage rates. Typically, the shallower unit tends to be more strongly influenced by variation in rainfall. In addition, phytoremediation uptake in

the X740 area and Gallia member pumping may contribute to the observed decline in Gallia member water levels during the background monitoring period.

3.1.2.2 Barometric Influence

Barometric pressure data collected at Portsmouth meteorological station were used to estimate the barometric pressure influence. All monitoring wells exhibited water level fluctuations that correlated with changes in barometric pressure. As seen in Table 4, the barometric efficiency of the Berea Formation was greater than that of the Gallia member. Inversely correlated barometric response is associated with confined aquifers, rather than water table aquifers. As the Berea Formation underlies the Gallia member, it is therefore more completely confined than the Gallia member and would be expected to be more strongly responsive to barometric effects. Also, discontinuous fractures in the Berea Formation may lead to more confined conditions.

During the Berea Formation CRT, barometric pressure decreased by 0.02 ft of water. Combining the average barometric efficiency with the small barometric pressure decrease during the CRT yielded a barometric influence of 0.009 feet. Corrected for drainage, total water level fluctuations during the Berea Formation test ranged from 0.11 to 1.8 feet. Because the barometric effects were small relative to the induced drawdown, the data were not corrected for barometric effects.

3.2 Long-Term Constant Rate Test

The water level data collected at the pumping and observation wells during the aquifer performance tests were corrected for drainage and barometric influences as determined during the background monitoring period and as discussed below. Raw and corrected hydrographs are included as Appendix A.

3.3 Conclusions

The purpose of the aquifer performance tests was to determine the connectedness of the Gallia and Berea Formations and to estimate their hydraulic properties.

3.3.1 Interconnectedness of Aquifer Units

The drawdown graphs indicate that Berea Formation wells respond to pumping in the Gallia member and vice versa. As can be seen in the hydrographs of Appendix A , the hydraulic connectedness of the two units is clearly evident in the pumping response of wells X740-03G and X740-09B, located 15 feet apart. X740-03G and X740-09B were the pumping wells for the Gallia and Berea Formation CRTs. Pumping at X740-03G induced a response at X740-09B of 0.39 ft. When X740-09B was pumped, the response at X740-03G was 1.86 ft.

Another indication of the connectedness of the Gallia and Berea Formations is the short time delay from initiation of pumping in the Gallia member to response in the Berea Formation, and vice versa. Twenty four minutes after the initiation of pumping X740-03G, a 0.01 ft response was measured in X740-09B. After 169 minutes, the response was 0.10 ft. During the Berea Formation CRT, a response of 0.01 ft was measured in X740-

03G after 13 minutes. After 49 minutes, the response was 0.10 ft.

3.3.2 Gallia Member Properties

Transmissivity and storage coefficients were estimated using a solution for confined aquifer conditions (Theis, 1935). The curve matching of the test data with the type curves is included as Appendix D. The Theis solution was chosen since it is commonly used for test evaluations when site conditions meet, to a reasonable extent, solution assumptions. Boring log data indicate that the Minford member exists in this X740 area. As the Minford member is a low hydraulic conductivity unit, it is expected to create confining conditions in the Gallia member. As with all field conditions, X740 conditions do not exactly match the Theis solution requirements (Kruseman, G.P. and N.A. de Ridder 1990). For example, one solution assumption is that the aquifer is homogeneous. Boring log data indicate that the aquifer contains varying lithologies and therefore the aquifer is not homogeneous.

A solution for pumping in a leaky confined aquifer (Hantush 1960) was applied to calculate hydraulic properties of X740-03G, because it provided a markedly better match of drawdown data than the Theis method. It is suspected that conditions at X740-03G better met Hantush solution requirements due to the proximity of X740–PW02M to X740-03G. X740–PW02M is located five feet from X740-03G and is constructed with a sand pack that extends from the top of the Minford member to the top of the Berea Formation. The sand pack may be responsible for creating conditions at X740-03G that mimic those of a leaky confined unit.

Table 6 summarizes the hydraulic properties determined for the Gallia member and the Berea Formation. Averaging all tested Gallia member wells tested during both the Gallia and Berea Formation CRTs, the aquifer transmissivity was found to be 13.66 ft^2/day, with a storage coefficient of 0.00094. The Gallia and Berea Formation CRTs arrived at slightly different hydraulic parameters for the Gallia member. The average hydraulic values for the Gallia member estimated during the Gallia member CRT were 14.86 ft^2/day, with a storage coefficient of 0.00058. Results from the Berea Formation CRT indicated an average aquifer transmissivity value of 12.17 ft^2/day and a storage coefficient of 0.0014. The difference results from an assumption within the analysis that all water is discharged from the tested aquifer, and that the tested aquifer includes the tested well. This condition is not met for Gallia member wells analyzed during the Berea Formation CRT. Because discharge water is released primarily from the Berea Formation, during the Berea Formation CRT, the analysis yields slightly higher values for transmissivity in the Gallia member.

In the X740 area, the saturated thickness of the Gallia member is typically eight feet. Dividing the average transmissivity determined during the CRTs by the aquifer thickness, the resulting hydraulic conductivity is 1.71 ft/day. Alternatively, the screen length of the Gallia member monitoring wells can be used to approximate the saturated thickness. Dividing the calculated transmissivity by the five foot screen length results in a hydraulic conductivity of 2.73 ft/day.

3.3.3 Berea Formation Aquifer Properties

Data from the aquifer performance test were used to calculate transmissivity values for the Berea Formation under confined aquifer conditions using the same method employed for the Gallia member (Theis 1935). Averaging the curve matching results from X740-09B and X740-07B, the aquifer transmissivity was found to be 14.07 ft^2/day, with a storage coefficient of 0.0041. Using data collected during the Gallia member CRT, the hydraulic value calculated for the aquifer was 10.58 ft^2/day, with a storage coefficient of 0.0063. Results from the Berea Formation CRT yielded an aquifer transmissivity of 17.55 ft^2/day and a storage coefficient of 0.0018. As explained below, the hydraulic values generated from the Berea Formation CRT are considered to be more accurate.

The drawdown data used to estimate the Berea Formation hydraulic properties were generated from one observation well during each CRT. Firstly, the X740-09B data were produced by pumping from the Gallia member. As discussed previously, the Theis analysis assumes that discharge water originates from the aquifer in which the tested well is completed. Because the test did not fulfill this assumption, the estimated storage coefficient may be biased high. Secondly, the proximity of X740–PW02M to X740-09B may have influenced the X740-09B drawdown data. X740–PW02M is located ten feet from X740-09B and is constructed with a sand pack that extends from the top of the Minford member to the top of the Berea Formation. The sand pack was designed to be a hydraulic connection between the Gallia member and the Berea Formation, and its effect may mimic that of aquifer storage. For this reason as well, it is suspected that the storage coefficient estimated using X740-09B drawdown data may be biased high.

It is notable that the storage coefficient estimated for the Berea Formation during the Berea CRT is 0.0018, while the storage coefficient for the Gallia member is estimated to be 0.00094. This would seem to indicate that the Berea Formation is less confined than the Gallia member, exactly the opposite of expectations based on lithology and measured response to barometric pressure. Because the Berea CRT value is based on measurements for one well only, it is recommended that expectations based on lithology and barometric response be considered. As a result, it is suspected that a representative storage coefficient for the Berea Formation may be somewhat lower than the value estimated based on X740-07B drawdown data.

In the X740 area, the thickness of the conductive portion of the Berea Formation is approximately 25 feet. Dividing the average transmissivity determined during the CRTs by the aquifer thickness, the resulting hydraulic conductivity is 0.56 ft/day.

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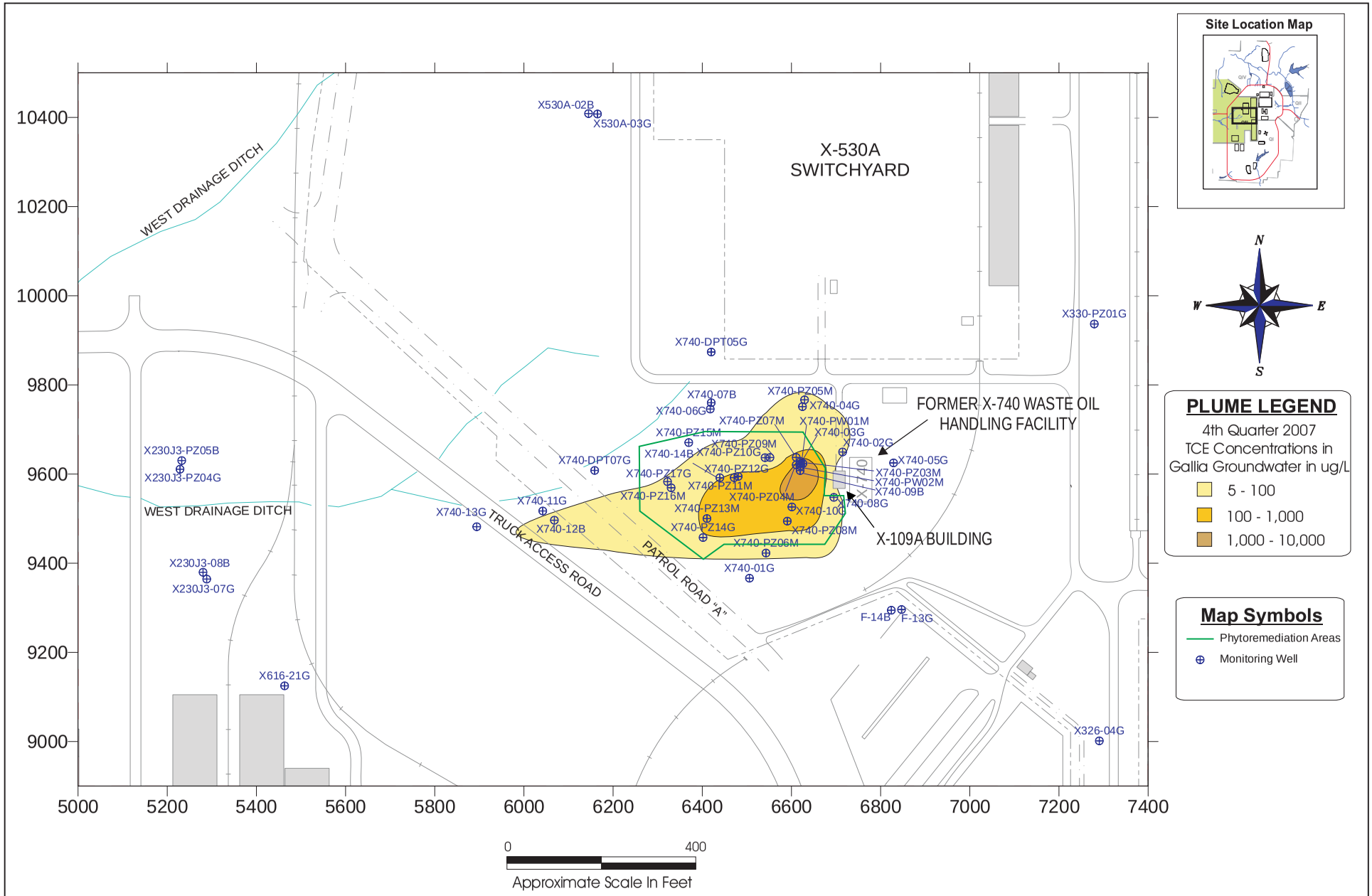
Theis, C.V. 1935. *The Relation Between the Lowering of the Piezometric Surface and Rate and Duration of Discharge of a Well Using Groundwater Storage*. Trans. Am. GeoPhys. Union, v. 16, pp. 519-524.

Figures



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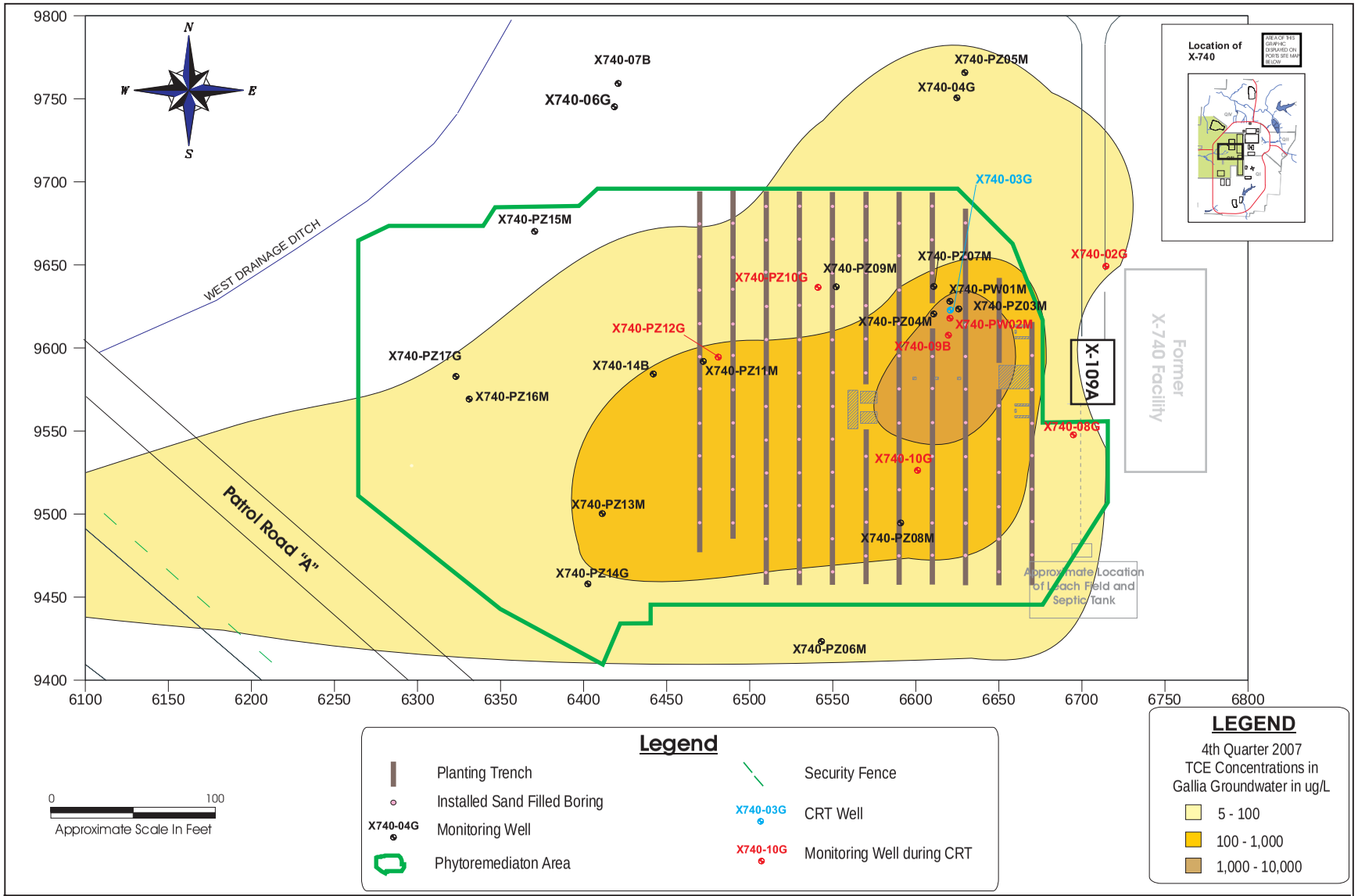

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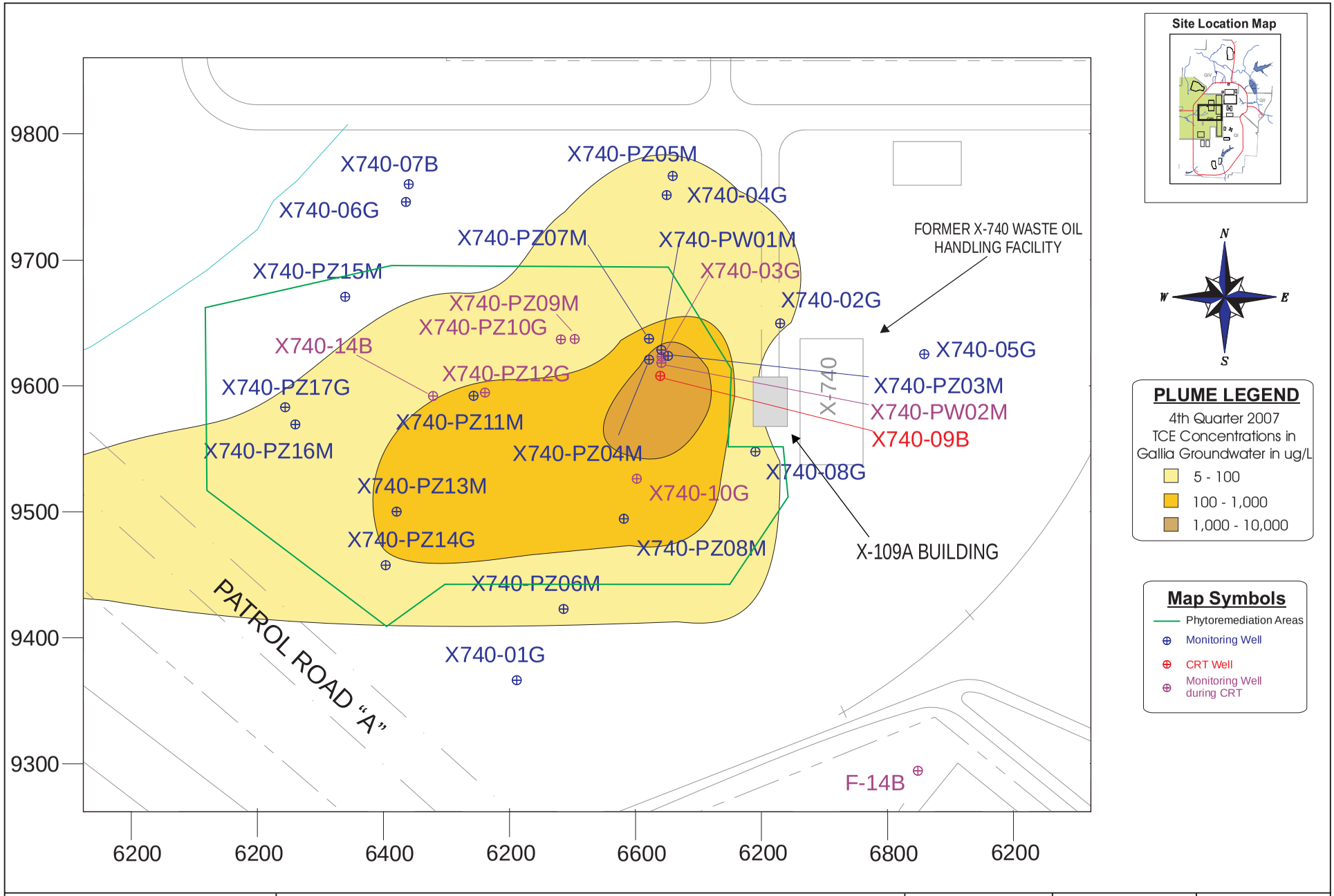

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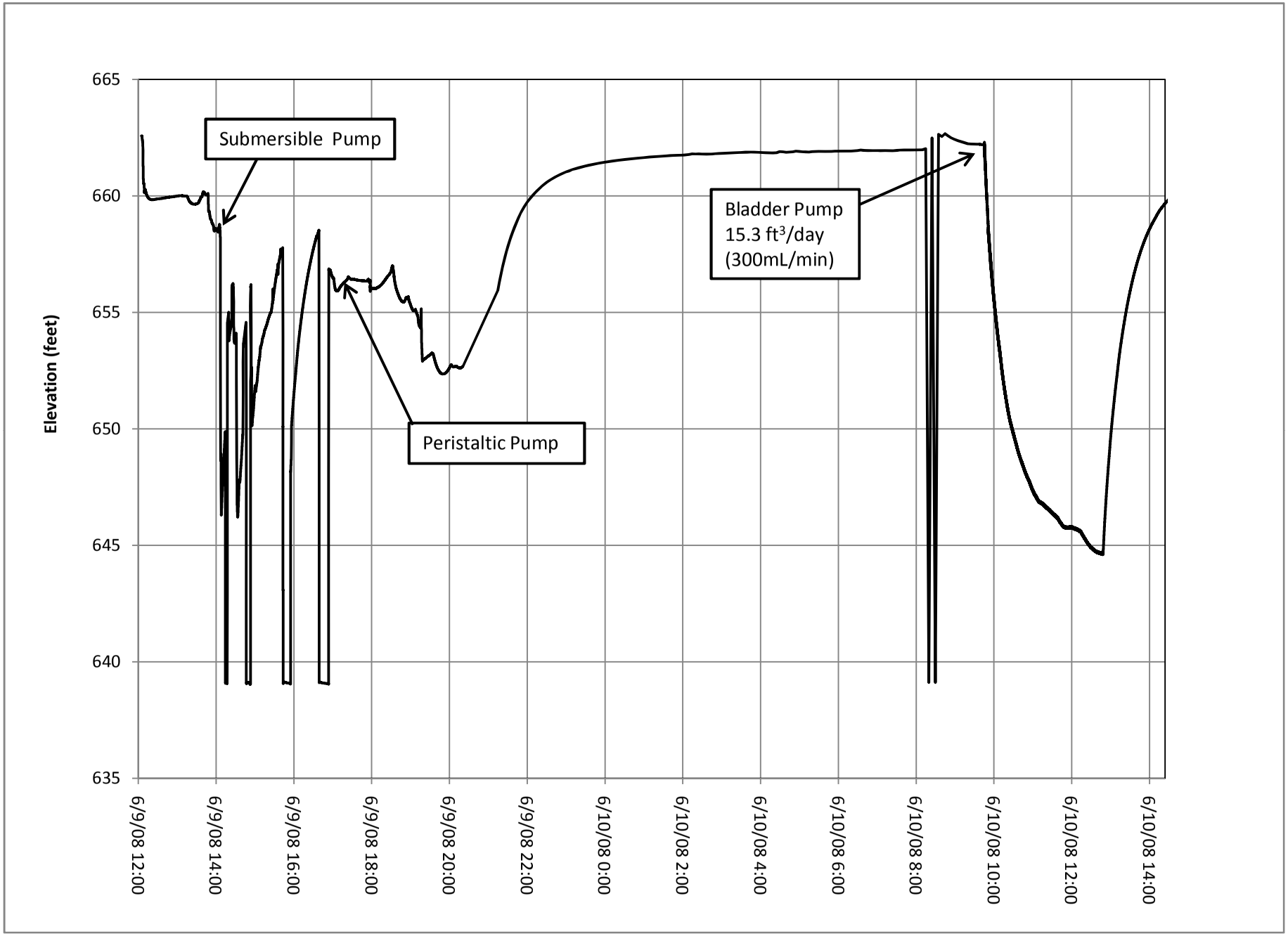

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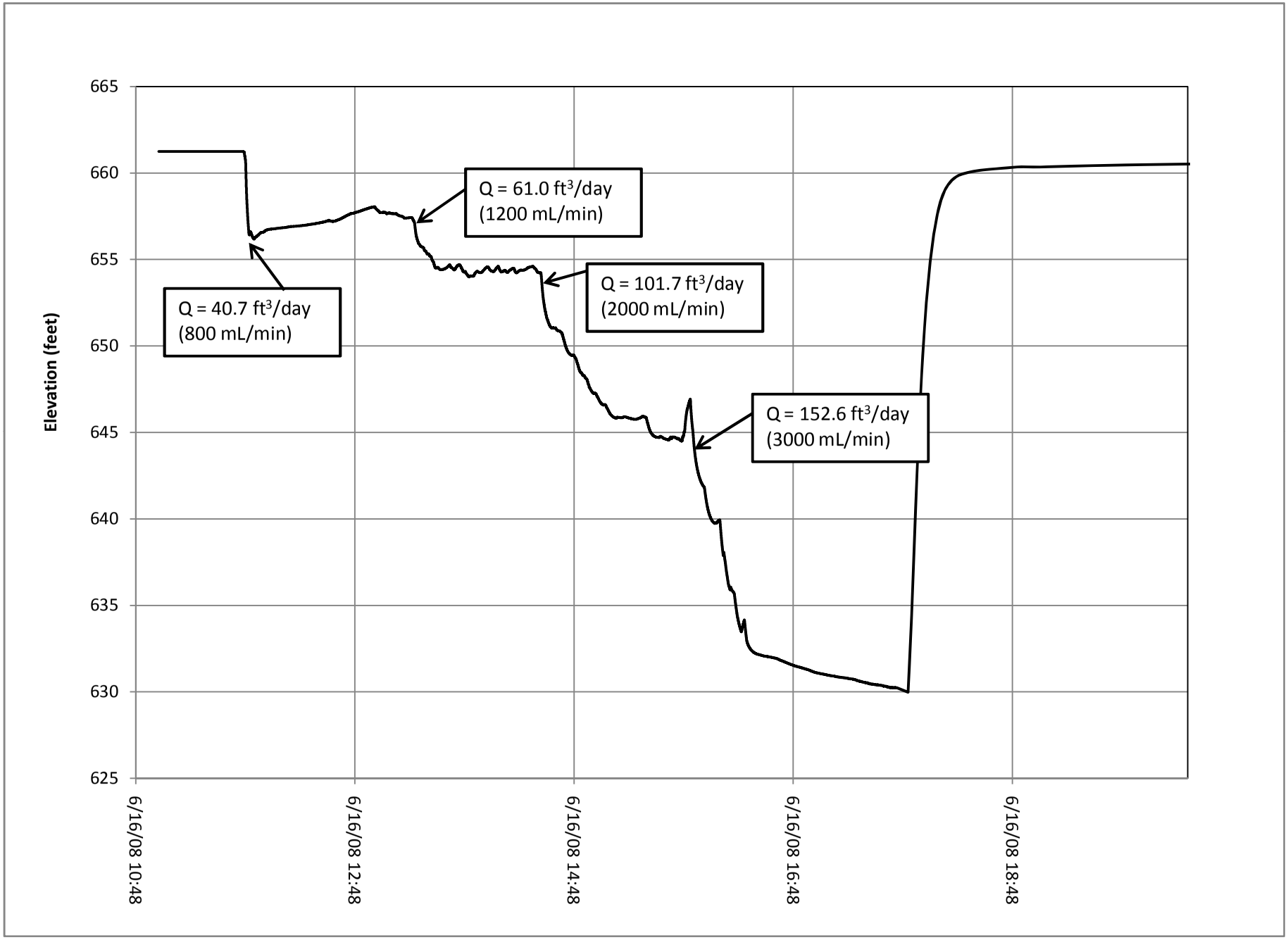
Portsmouth Gaseous Diffusion Plant
Portsmouth, Ohio

Figure 4
X740-03G Step Drawdown Test



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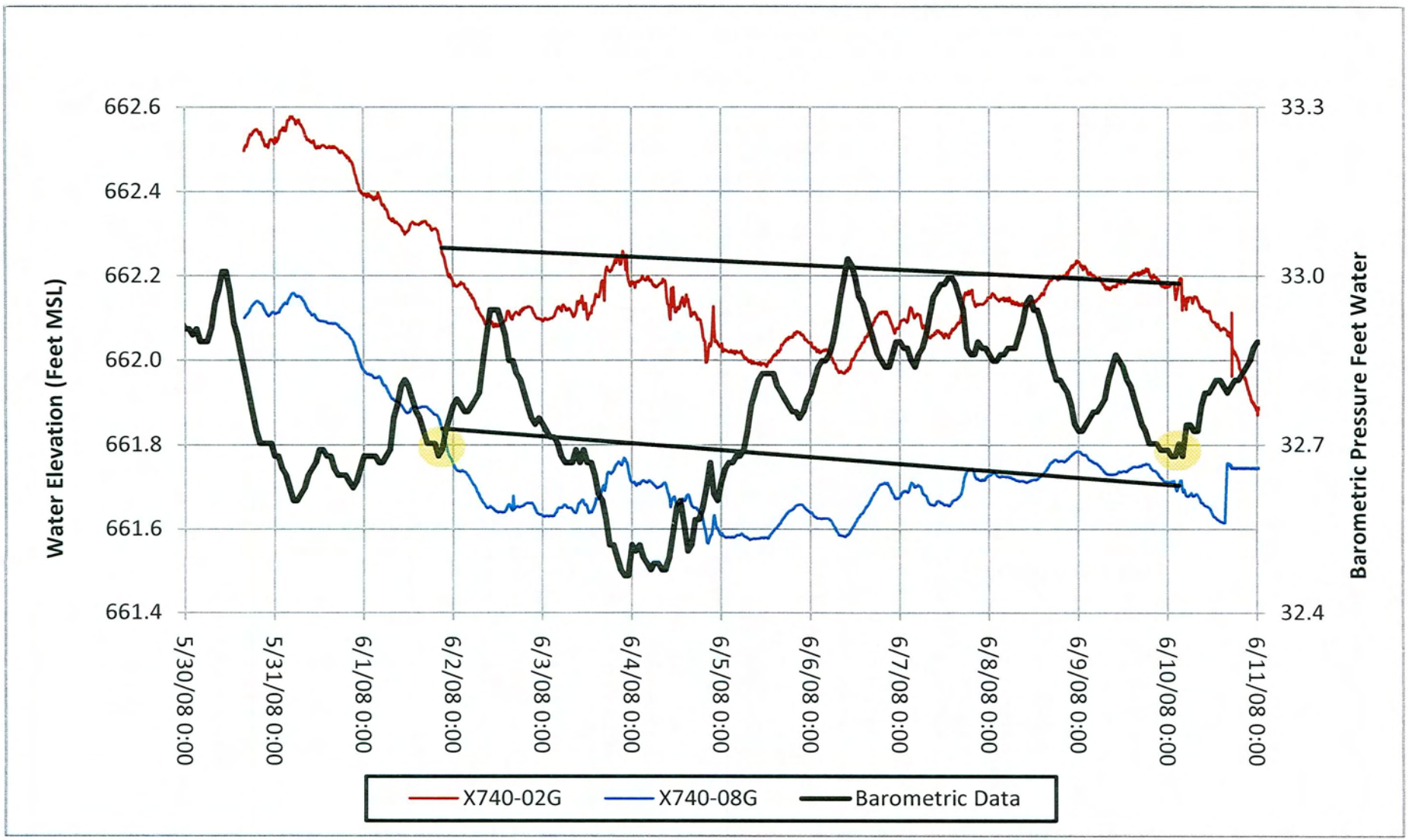
Portsmouth Gaseous Diffusion Plant
Portsmouth, Ohio

Figure 5
X740 09B Step Drawdown Test



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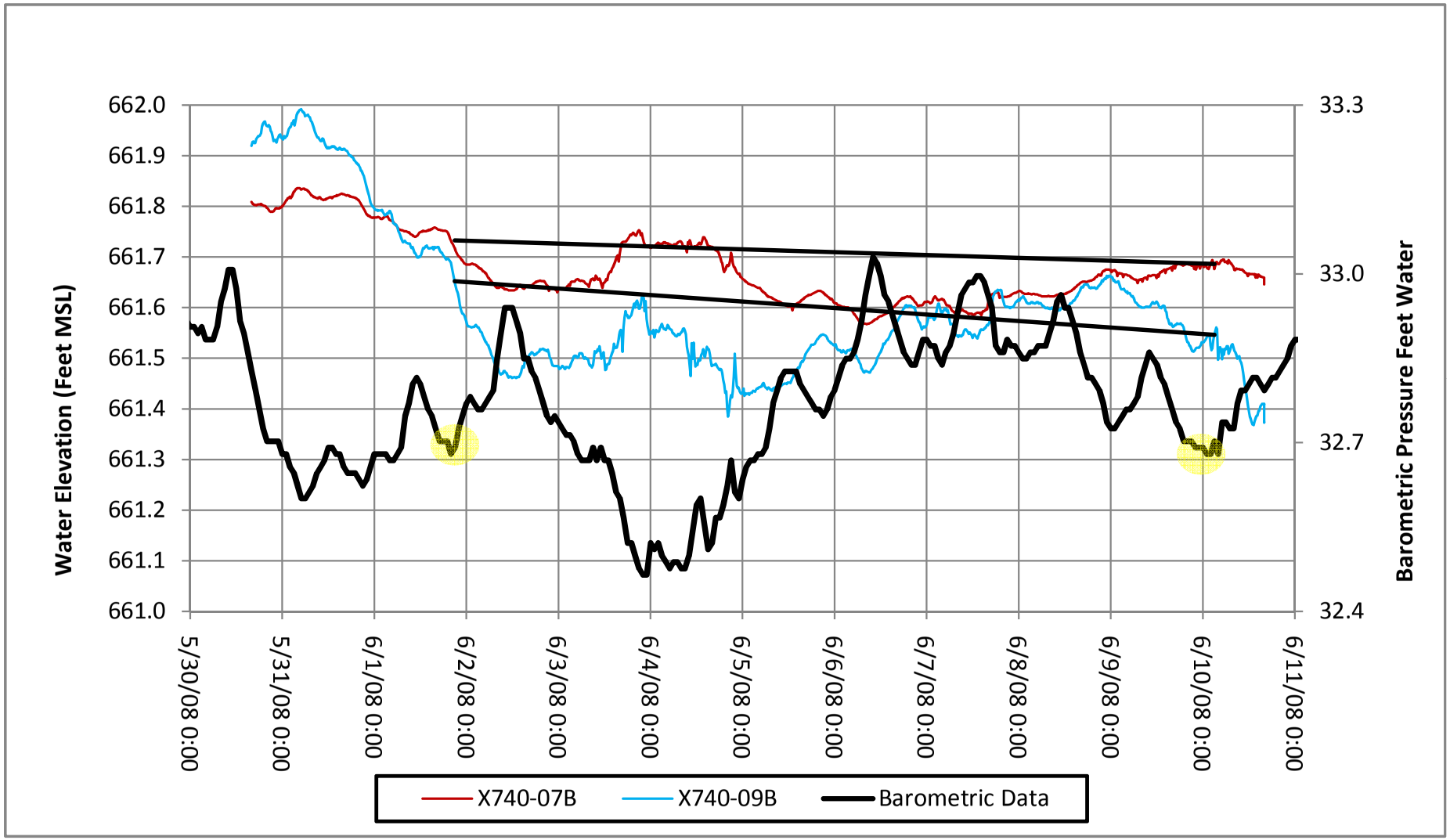
Portsmouth Gaseous Diffusion Plant
Portsmouth, Ohio

Figure 6
X740 Gallia Formation Isobaric Drainage



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Portsmouth Gaseous Diffusion Plant
Portsmouth, Ohio

Figure 7
X740 Berea Formation Isobaric Drainage

Tables

Table 1
Observation Wells for APT Pumping X740-03G
Portsmouth Gaseous Diffusion Plant
Portsmouth, Ohio

Observation Well	Approximate Distance from pumping well X740-03G (ft)	Monitored Aquifer
X740-PZ10G	81	Gallia
X740-PZ12G	143	Gallia
X740-02G	98	Gallia
X740-08G	106	Gallia
X740-10G	99	Gallia
X740-PW02M	5	Minford
X740-09B	15	Berea

Table 2
Observation Wells for APT Pumping X740-09B
Portsmouth Gaseous Diffusion Plant
Portsmouth, Ohio

Observation Well	Approximate Distance from pumping well X740-09B (ft)	Monitored Aquifer
F-14B	374	Berea
X740-07B	251	Berea
X740-14B	179	Berea
X740-PZ10G	84	Gallia
X740-PZ12G	140	Gallia
X740-03G	15	Gallia
X740-10G	84	Gallia
X740-PW02M	10	Minford
X740-PZ09M	74	Minford

Table 3
X740 Isobaric Drainage
Portsmouth Gaseous Diffusion Plant
Portsmouth, Ohio

Observation well	Monitored Unit	Water Elevation 6/1/2008 9:00:00 PM	Water Elevation 6/10/2008 3:00:00 AM	Water Elevation Change	Elapse Time Days	Drainage Over 48 Hours[1]
PZ-10G	Gallia	661.640	661.374	0.266	8.25	0.06
PZ-12G	Gallia	659.843	659.437	0.406	8.25	0.10
02G	Gallia	662.266	661.838	0.428	8.25	0.10
08G	Gallia	662.182	661.703	0.479	8.25	0.12
10G	Gallia	660.741	660.603	0.138	8.25	0.14
PW-02M	Minford	662.743	662.222	0.521	8.25	0.08
09B	Berea	661.652	661.546	0.106	8.25	0.07
07B	Berea	658.733	658.686	0.047	8.25	0.06
03G	Gallia	662.292	661.829	0.463	8.25	0.14
Average Gallia	Gallia				8.25	0.11
Average Berea	Berea				8.25	0.07
Minford	Minford				8.25	0.08

[1]Calculated aquifer drainage during 48-hour test is based on each X-740 well's drainage rate as determined from water levels collected 6/01/08 21:00 and 6/10/08 3:00 (periods of equal atmospheric pressure = 32.7 ft H_2O).

Table 4
X740 Barometric Efficiency
Portsmouth Gaseous Diffusion Plant
Portsmouth, Ohio

Well ID	6/2/08 11:00 Min GW Elev	Delay Until Minimum GW Elev (minutes)	6/3/08 22:00 Max GW Elev	Delay Until Maximum GW Elev (minutes)	Increase in GW Elevation (ft H_2O)	Drainage (ft H_2O)[1]	Delta H Corrected for Drainage (ft H_2O	Barometric change (ft H_2O)[2]	Barometric Efficiency
PZ10G	661.412	0	661.530	-15	0.118	0.047	0.165	0.48	0.34
PZ12G	659.592	150	659.666	0	0.074	0.072	0.146	0.48	0.30
02G	662.077	0	662.133	0	0.056	0.076	0.132	0.48	0.27
08G	661.640	60	661.670	-15	0.030	0.085	0.115	0.48	0.24
10G	662.600	60	662.694	0	0.094	0.102	0.196	0.48	0.41
PW02M	662.477	30	662.485	60	0.008	0.058	0.066	0.48	0.14
09B	661.461	60	661.623	0	0.162	0.051	0.213	0.48	0.44
07B	658.634	60	658.753	0	0.119	0.044	0.163	0.48	0.34
14B	658.851	120	658.983	15	0.132	0.047	0.179	0.48	0.37
03G	662.076	165	662.153	0	0.077	0.102	0.179	0.48	0.37
Average									0.32

[1] 35-hour period at each wells drainage rate
[2] Barometric pressure decreased 0.48 ft H_20 from 6/2/08 11:00 to 6/3/08 22:00.

Table 5
X740 Drainage Effects
Portsmouth Gaseous Diffusion Plant
Portsmouth, Ohio

			48-hour Gallia CRT			48-hour Berea CRT		
Observation well	Distance from Pumping Well	Drainage Over 48 Hours[1]	Delta S	Delta S_2 (Subtracting Drainage)	Delta S_3 (Subtracting Barometric Effect)[2]	Delta S	Delta S_2 (Subtracting Drainage)	Delta S_3 (Adding Barometric Effect)[3]
PZ-10G	81	0.064	0.476	0.412	0.351	1.601	1.537	1.549
PZ-12G	143	0.098	0.252	0.154	0.093	0.553	0.455	0.467
02G	98	0.104	0.345	0.241	0.180	0.285	0.181	0.194
08G	106	0.116	0.449	0.333	0.272	1.149	1.033	1.046
10G	99	0.140	1.367	1.227	1.166	1.384	1.244	1.257
PW-02M	5	0.080	3.008	2.928	2.867	1.646	1.566	1.579
09B	0 or 15	0.070	0.487	0.417	0.356	25.237	25.167	25.180
07B	~251	0.060	0.116	0.056	-0.005	0.170	0.110	0.123
14B	179	0.065	Transducer Failure			0.320	0.255	0.268
03G	0 or 15	0.140	24.910	24.770	24.709	1.964	1.824	1.837

[1]Aquifer drainage during 48-hour test was based on the average X-740 well drainage rate as determined from water levels collected 6/01/08

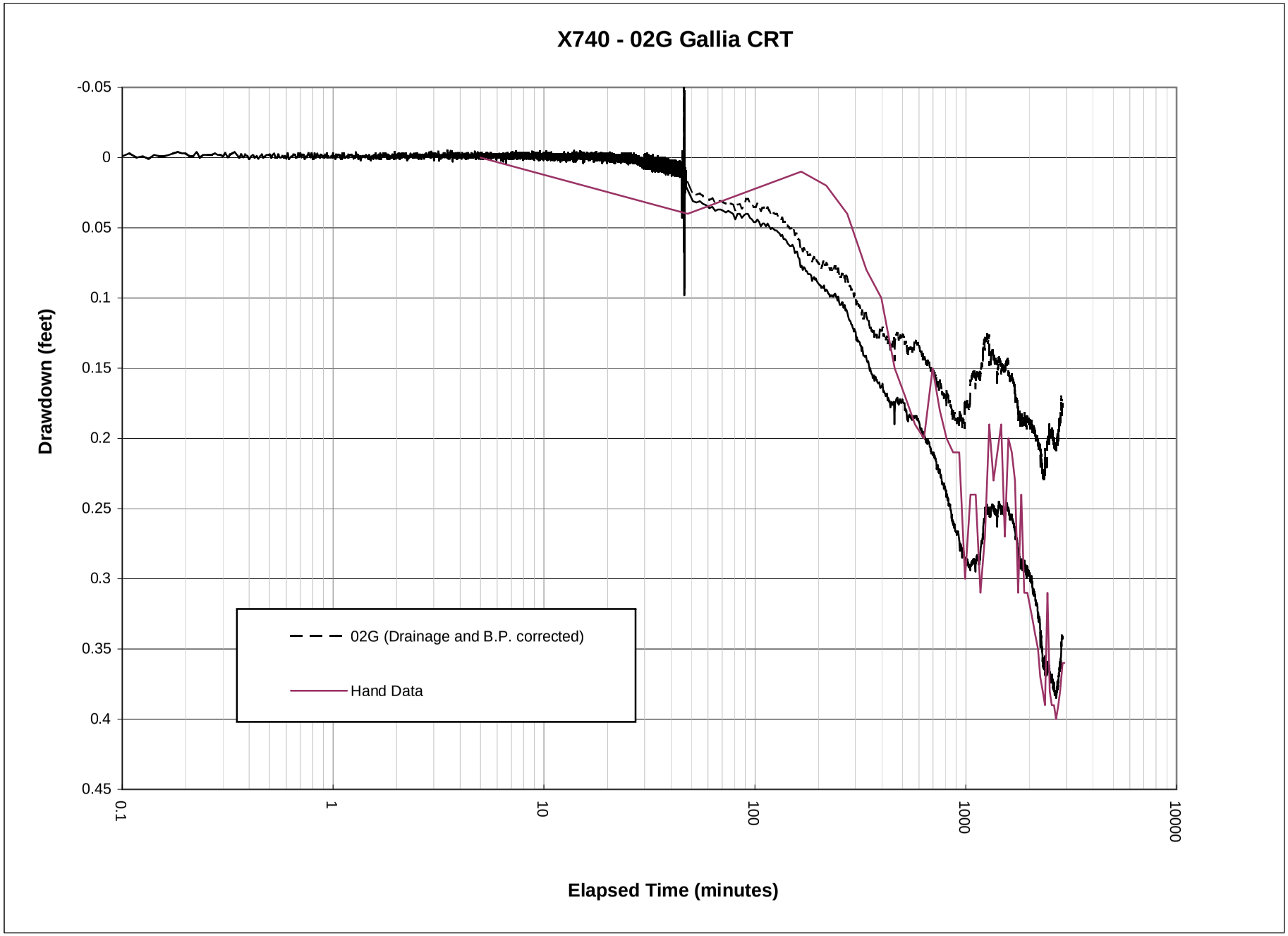
[2] Assuming a barometric efficiency of 0.32 and a measured barometric increase of 0.19 ft H_2O.

[3] Assuming a barometric efficiency of 0.32 and a measured barometric decrease of 0.04 ft H_2O.

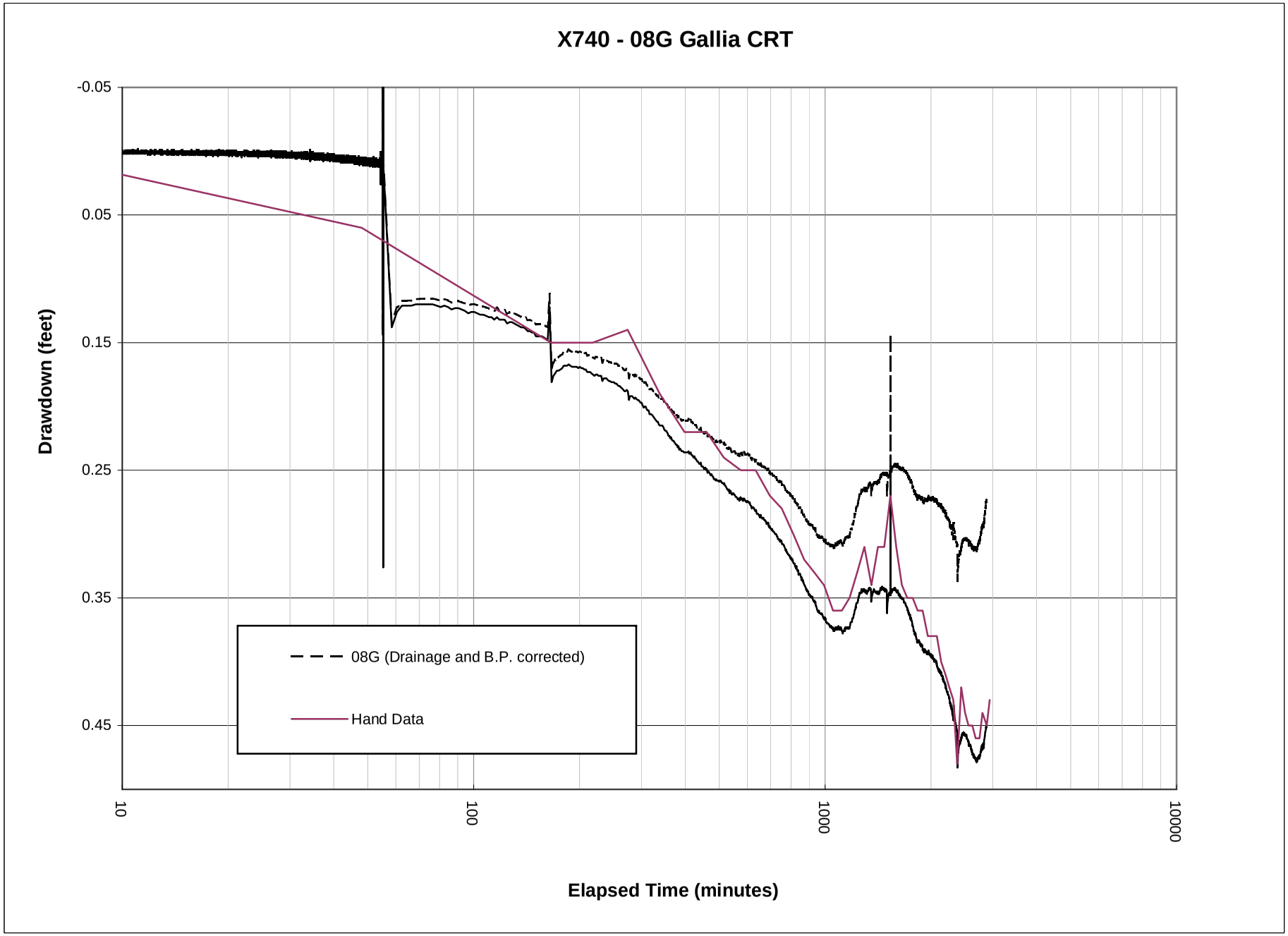
Table 6
X740 Gallia and Berea Formation Hydraulic Properties
Portsmouth Gaseous Diffusion Plant
Portsmouth, Ohio

	Pumping Well: X740-03G		Pumping Well: X740-09B		CRT Average	
Observation well	Transmissivity (ft^2/day)	Storage Coefficient	Transmissivity (ft^2/day)	Storage Coefficient	Transmissivity (ft^2/day)	Storage Coefficient
X740-02G	21.46	0.0022			NA	NA
X740-03G			4.79	0.0022	NA	NA
X740-08G	10.89	0.00011			NA	NA
X740-10G	13.70	0.00025	24.58	0.00037	19.14	0.00031
X740-PZ10G	10.31	0.00022	11.69	0.00086	11.00	0.00054
X740-PZ12G	17.95	0.00011	7.60	0.0021	12.78	0.0011
X740-PW02M	1.63	0.0052			NA	NA
X740-07B			17.55	0.0018	NA	NA
X740-09B	10.58	0.0063			NA	NA
Gallia Avg	14.86	0.00058	12.17	0.0014	13.66	0.00094
Berea Avg	10.58	0.0063	17.55	0.0018	14.07	0.0041

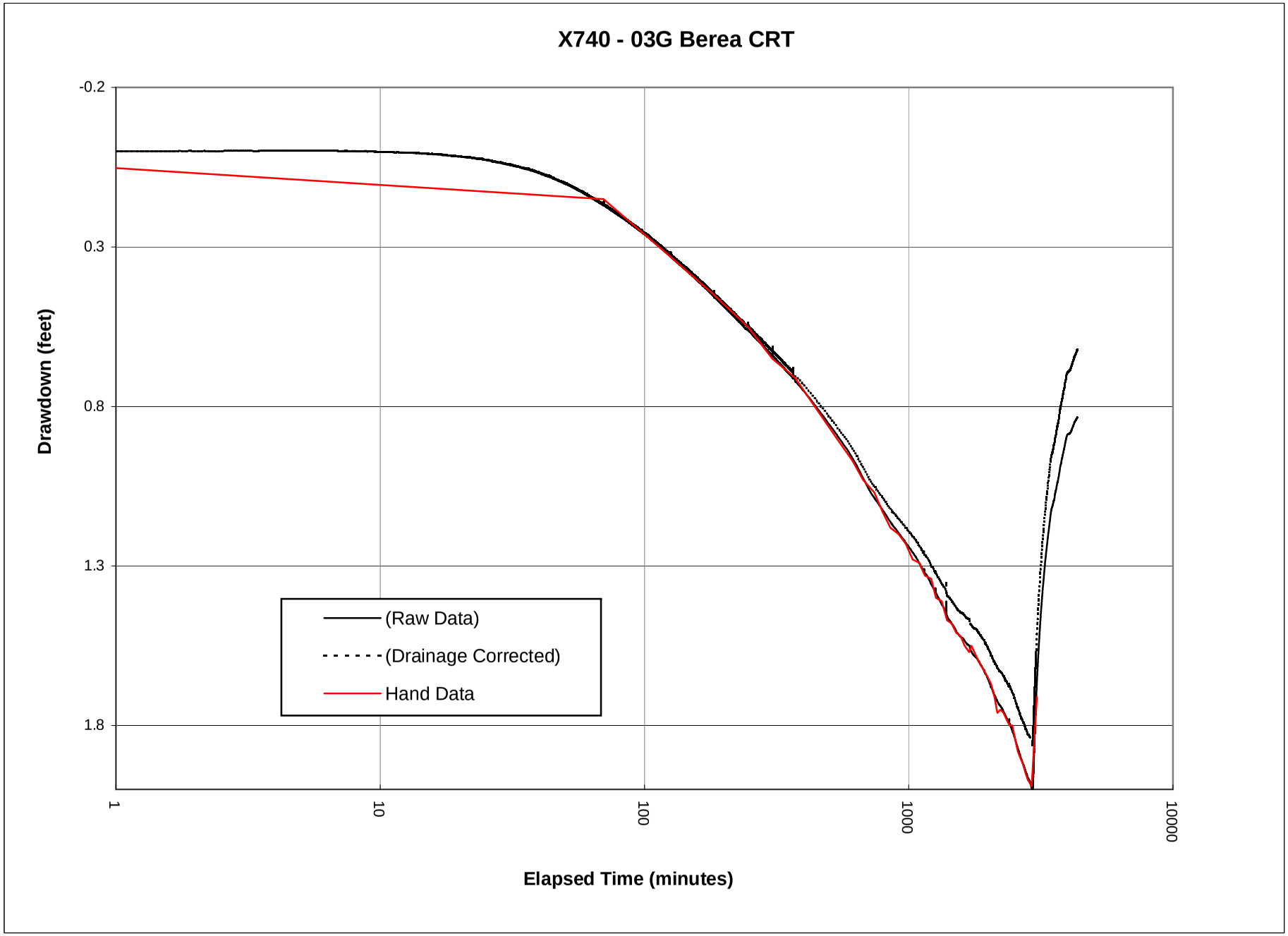
Appendix A


X740 - 02G Gallia CRT
Drawdown (feet)
-0.05
0
0.05
0.1
0.15
0.2
0.25
0.3
0.35
0.4
0.45
0.1
1
10
100
1000
10000
Elapsed Time (minutes)
02G (Drainage and B.P. corrected)
Hand Data

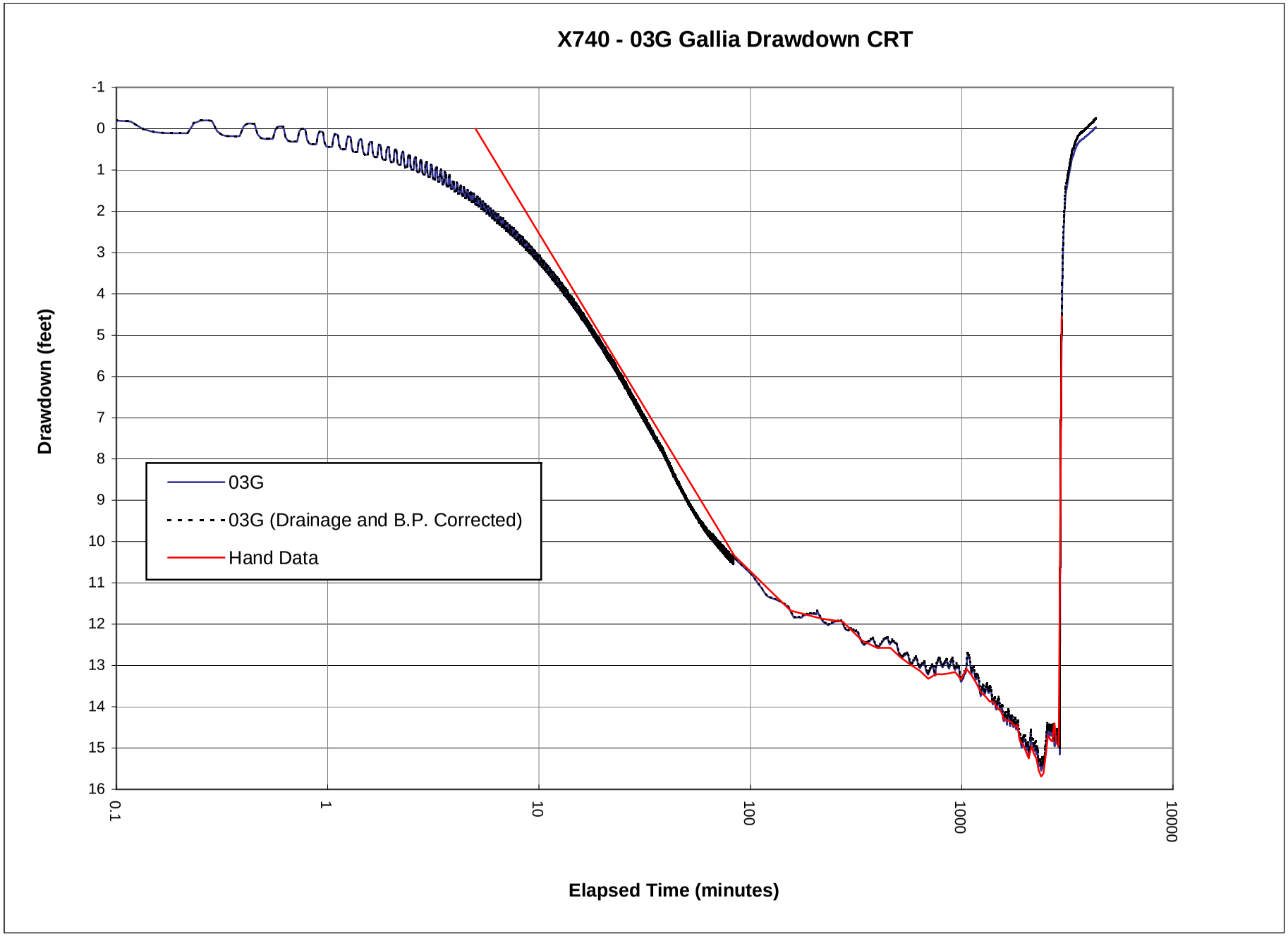
CDM


X740 - 08G Gallia CRT
Drawdown (feet)
-0.05
0.05
0.15
0.25
0.35
0.45
10
100
1000
10000
Elapsed Time (minutes)
08G (Drainage and B.P. corrected)
Hand Data

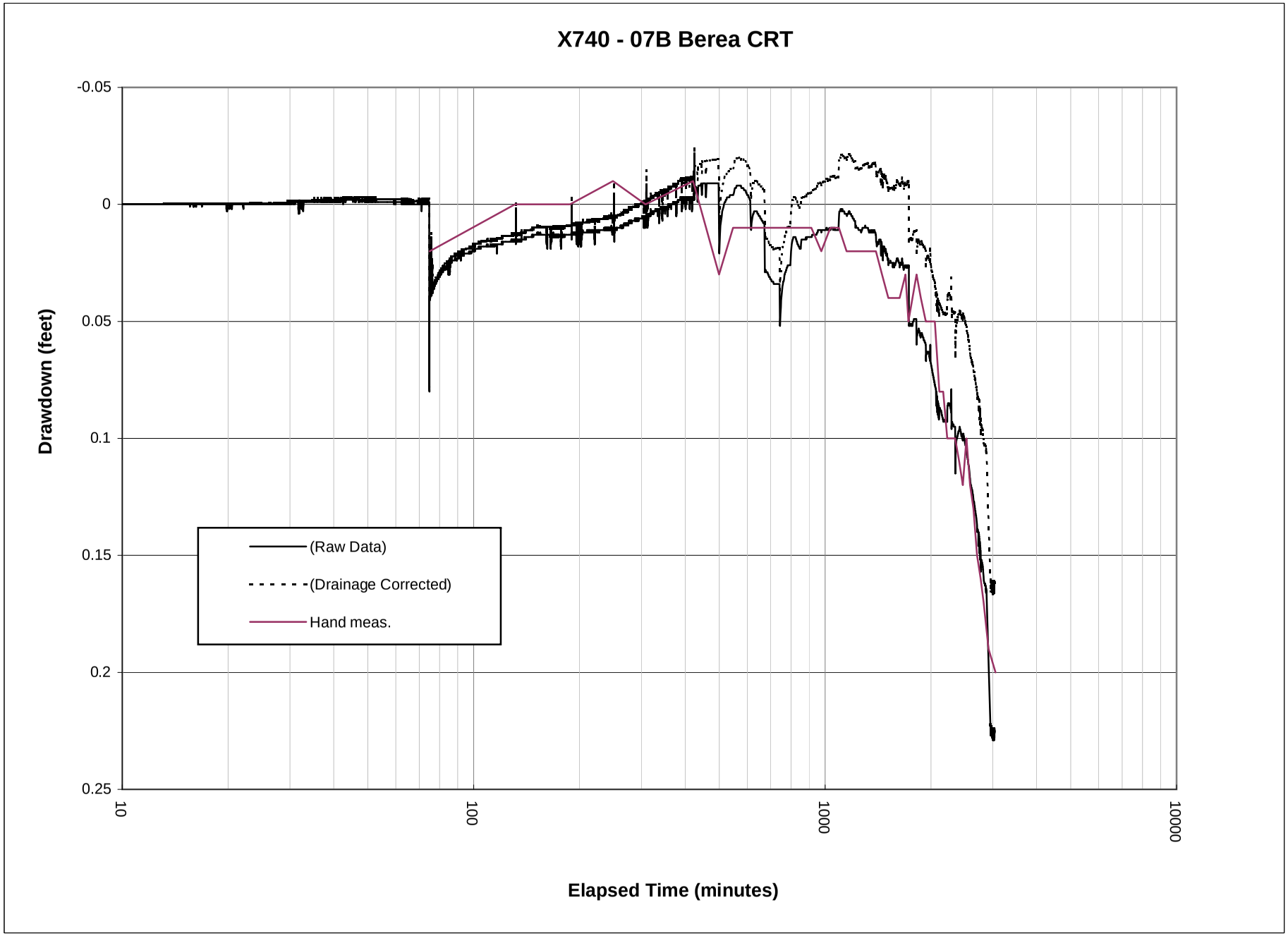
CDM


X740 - 03G Berea CRT
Drawdown (feet)
-0.2
0.3
0.8
1.3
1.8
1
10
100
1000
10000
Elapsed Time (minutes)
(Raw Data)
(Drainage Corrected)
Hand Data

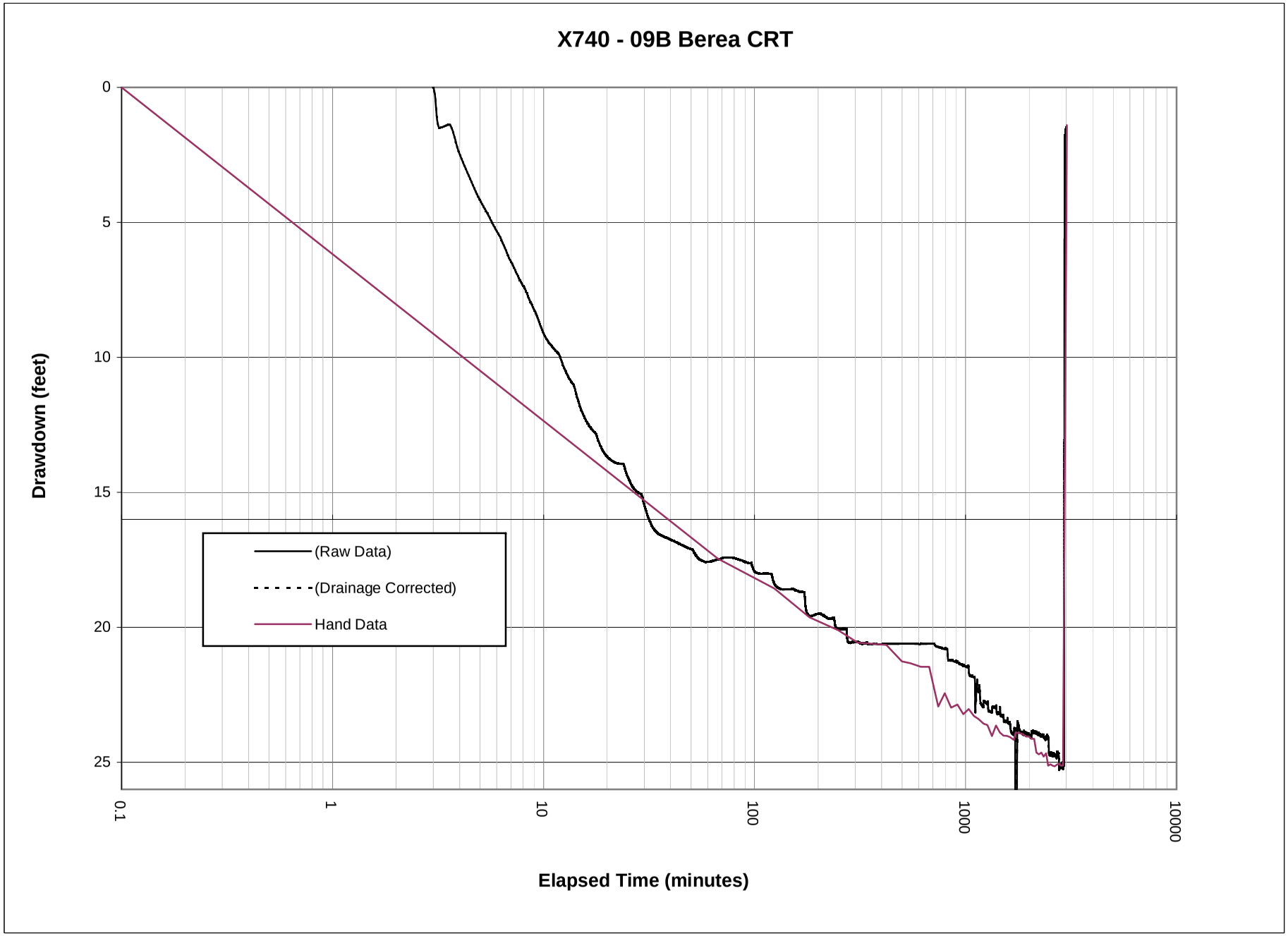
CDM


X740 - 03G Gallia Drawdown CRT
Drawdown (feet)
-1
0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
0.1
1
10
100
1000
10000
Elapsed Time (minutes)
03G
03G (Drainage and B.P. Corrected)
Hand Data

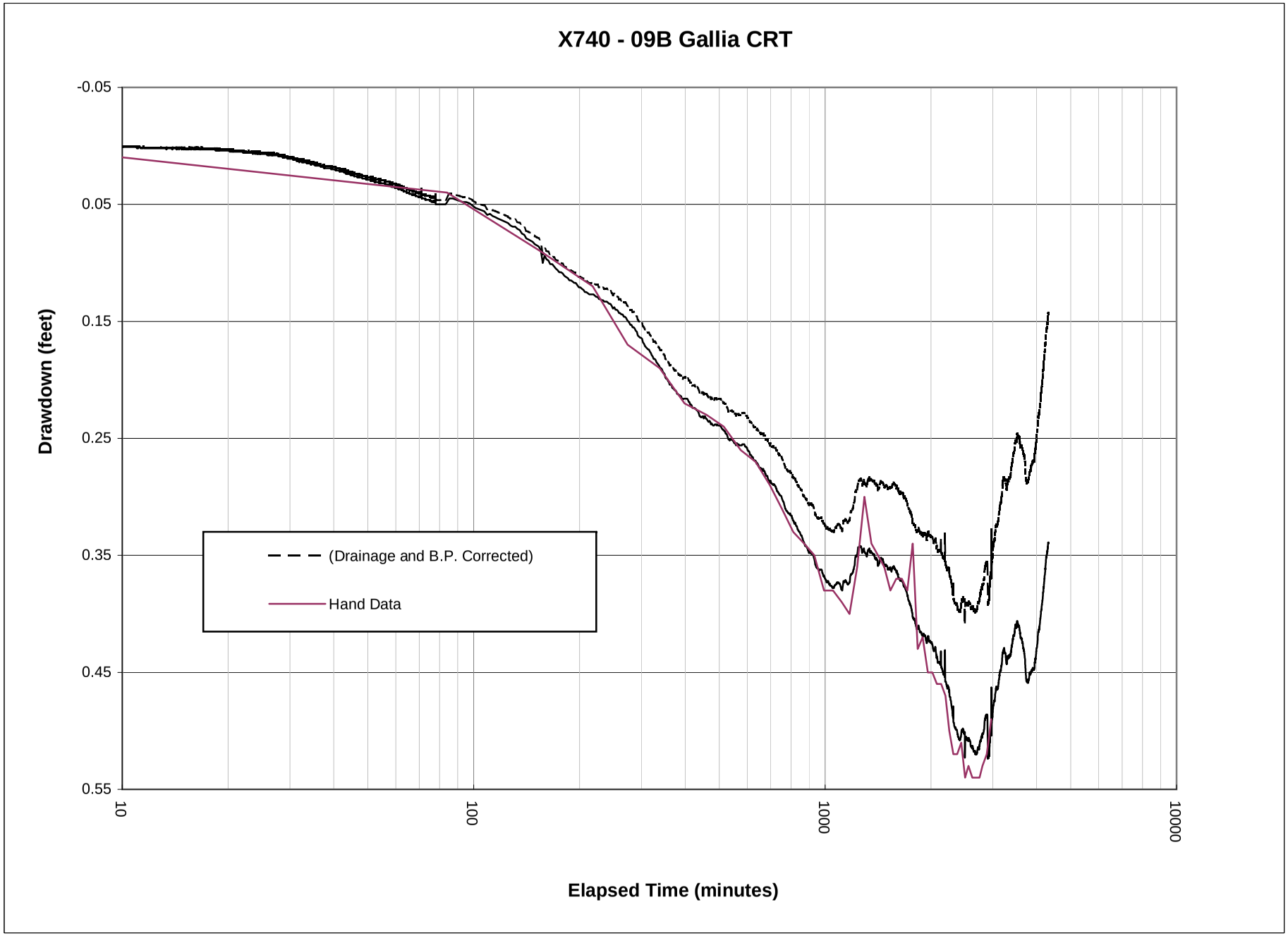
CDM


X740 - 07B Berea CRT
Drawdown (feet)
-0.05
0
0.05
0.1
0.15
0.2
0.25
10
100
1000
10000
Elapsed Time (minutes)
(Raw Data)
(Drainage Corrected)
Hand meas.

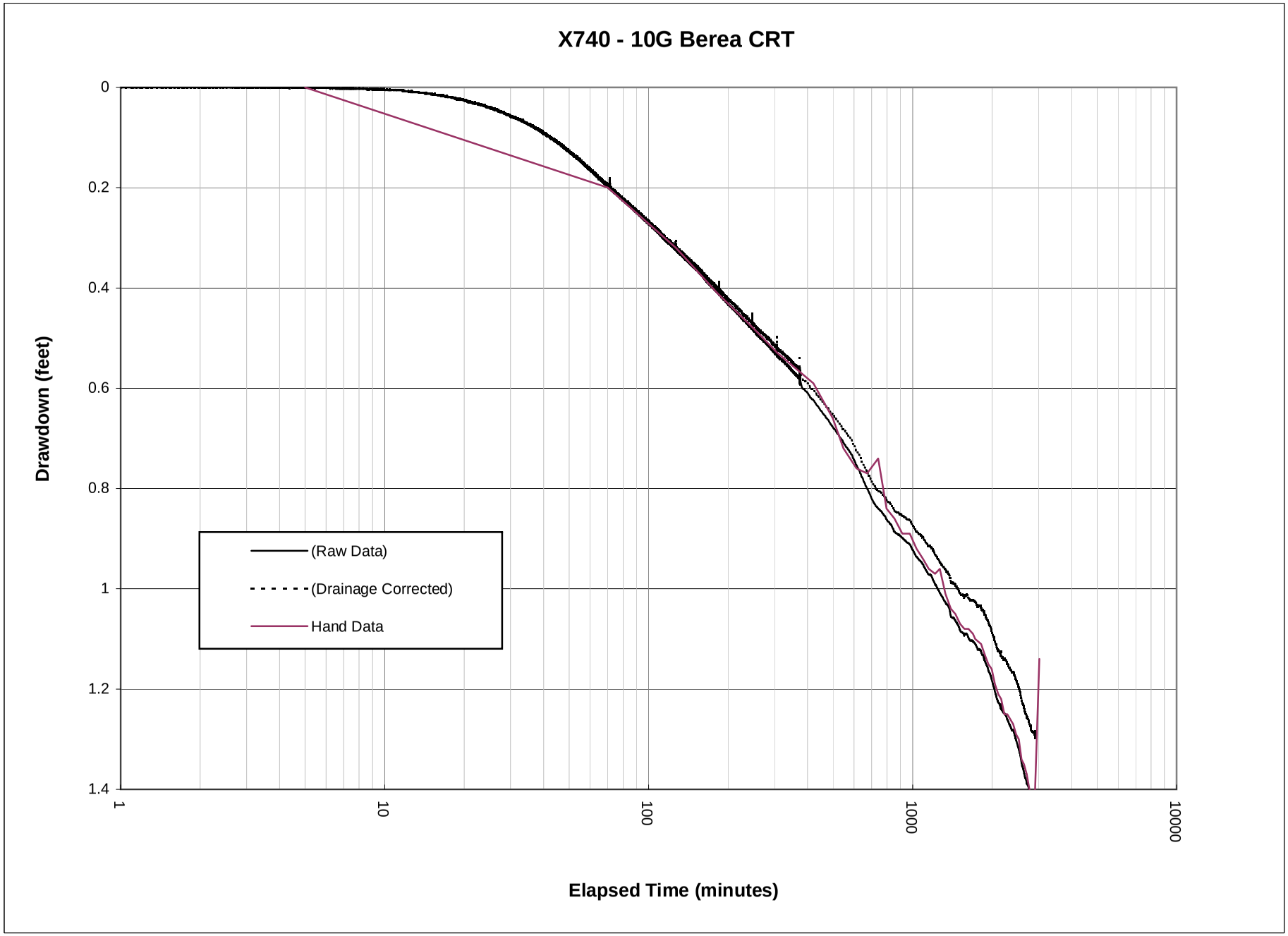
CDM


X740 - 09B Berea CRT
Drawdown (feet)
0
5
10
15
20
25
0.1
1
10
100
1000
10000
Elapsed Time (minutes)
(Raw Data)
(Drainage Corrected)
Hand Data

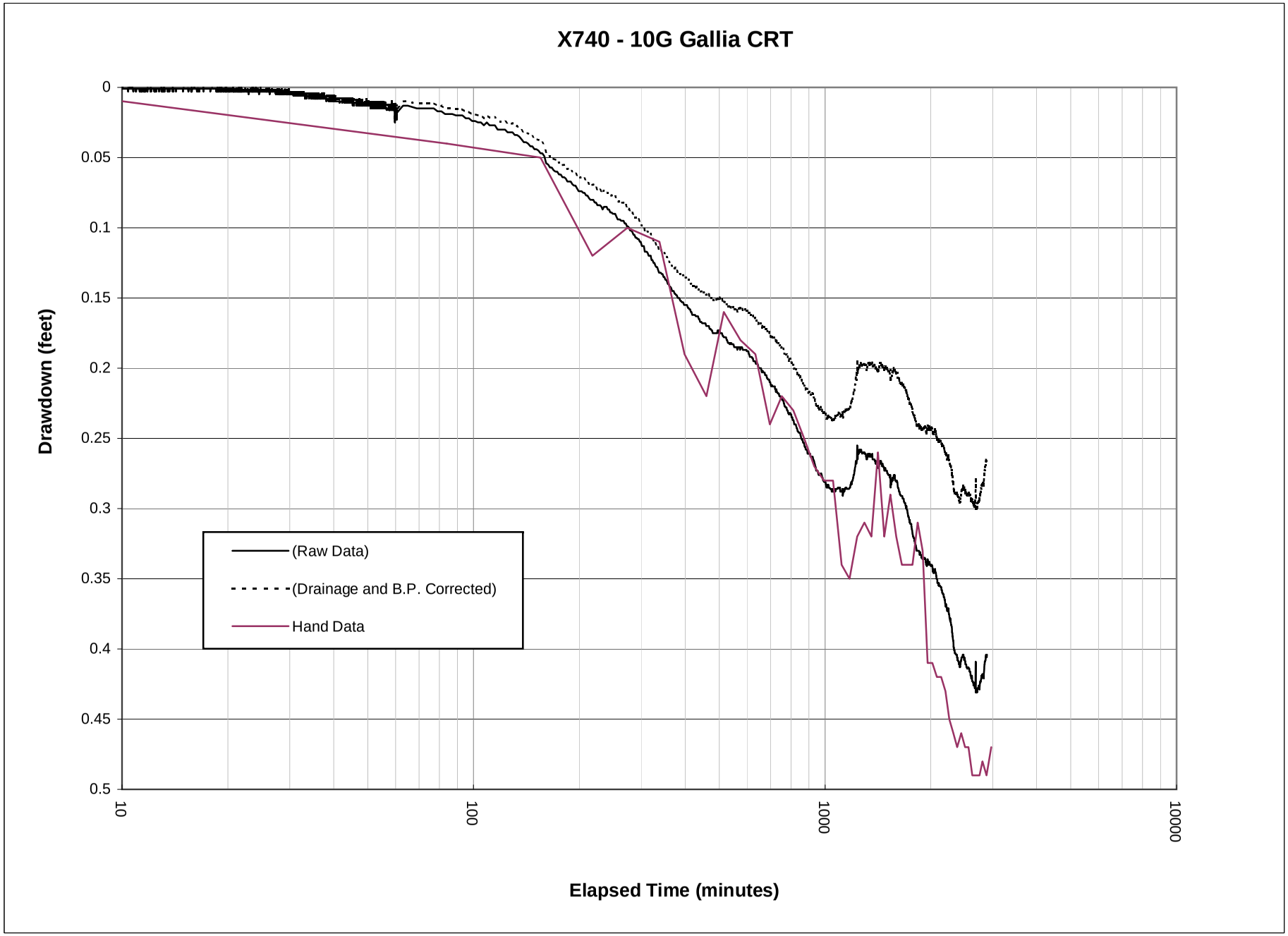
CDM


X740 - 09B Gallia CRT
Drawdown (feet)
-0.05
0.05
0.15
0.25
0.35
0.45
0.55
10
100
1000
10000
Elapsed Time (minutes)
(Drainage and B.P. Corrected)
Hand Data

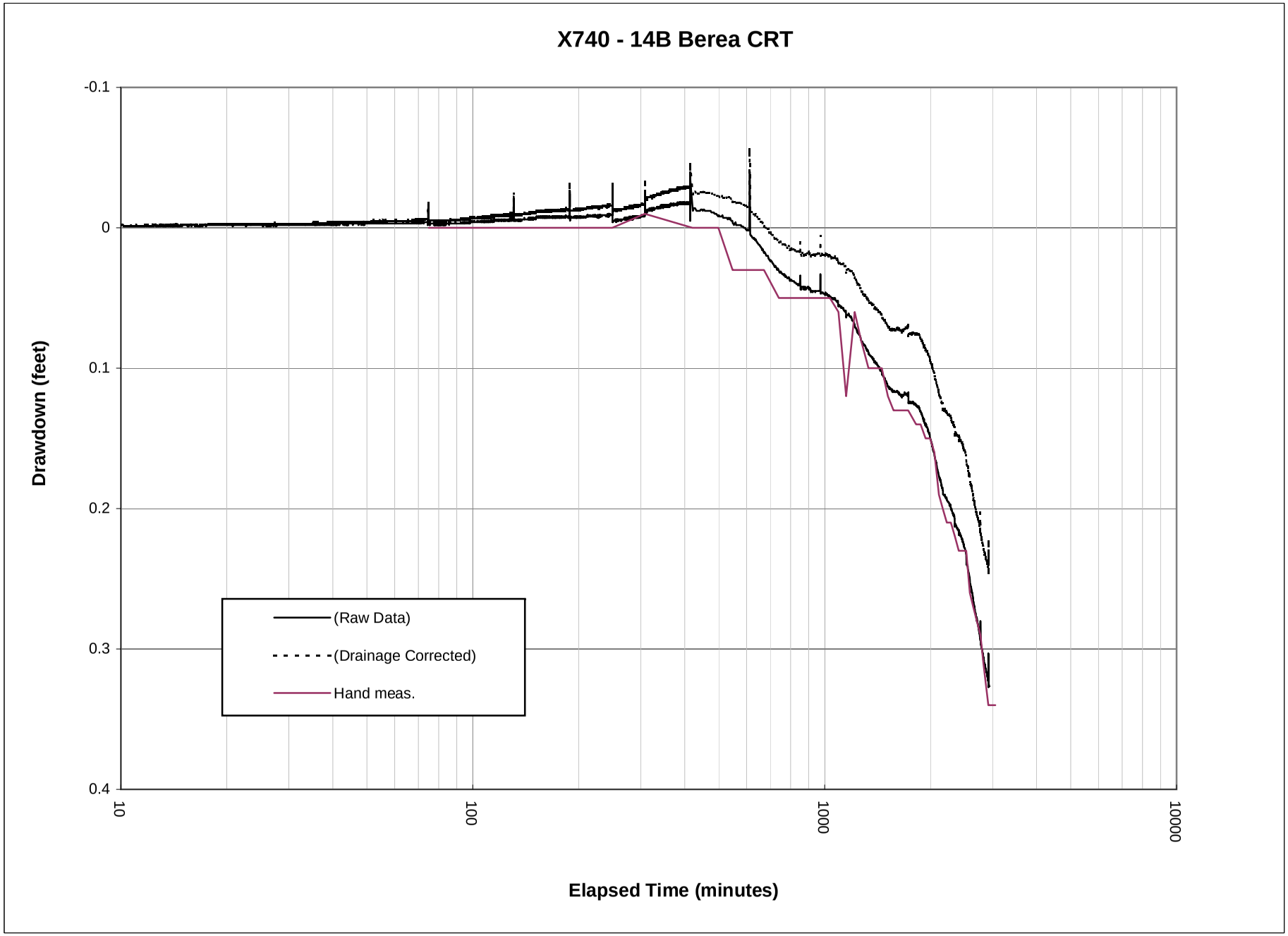
CDM


X740 - 10G Berea CRT
Drawdown (feet)
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1
10
100
1000
10000
Elapsed Time (minutes)
(Raw Data)
(Drainage Corrected)
Hand Data

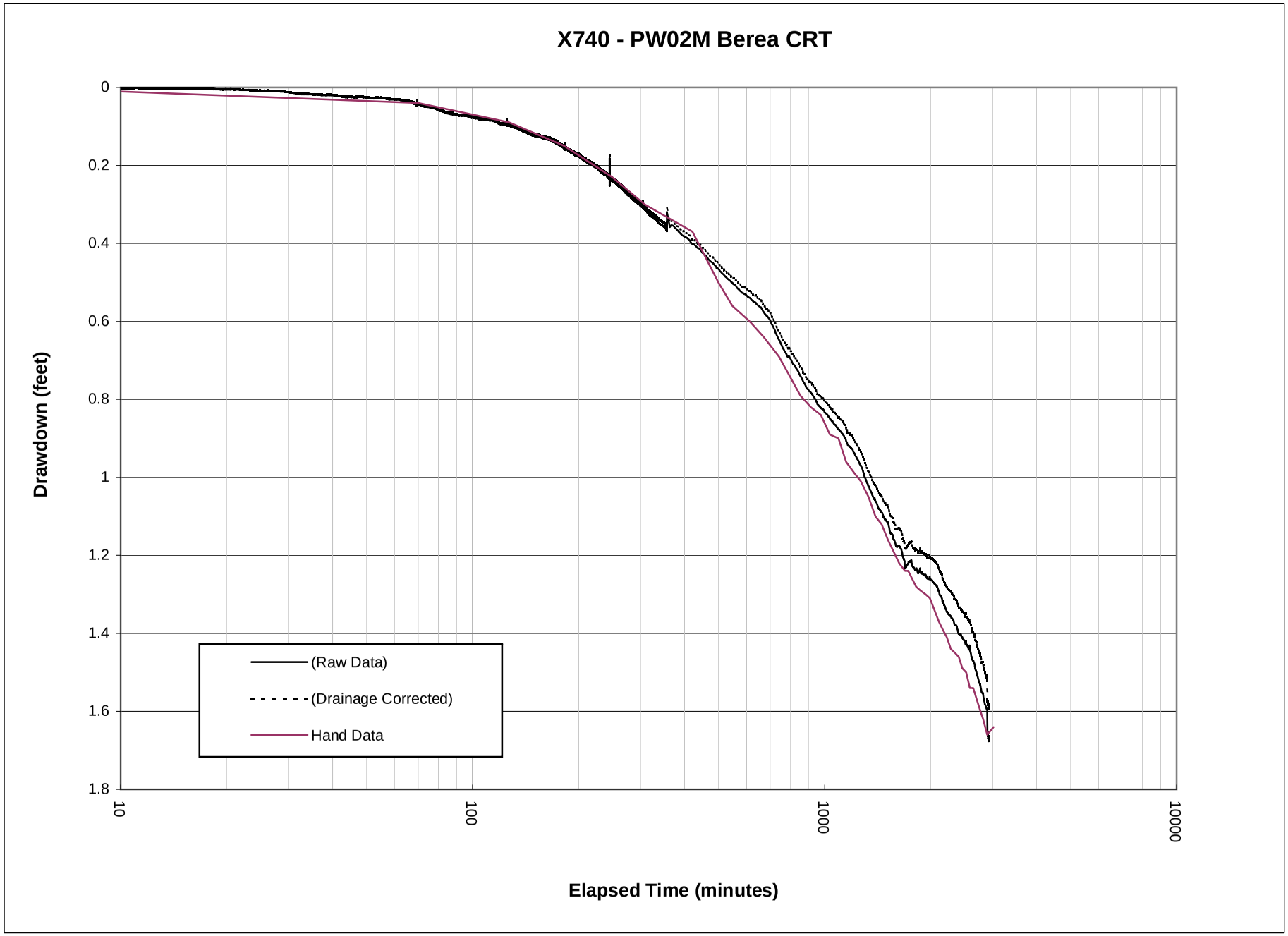
CDM


X740 - 10G Gallia CRT
Drawdown (feet)
0
0.05
0.1
0.15
0.2
0.25
0.3
0.35
0.4
0.45
0.5
10
100
1000
10000
Elapsed Time (minutes)
(Raw Data)
(Drainage and B.P. Corrected)
Hand Data

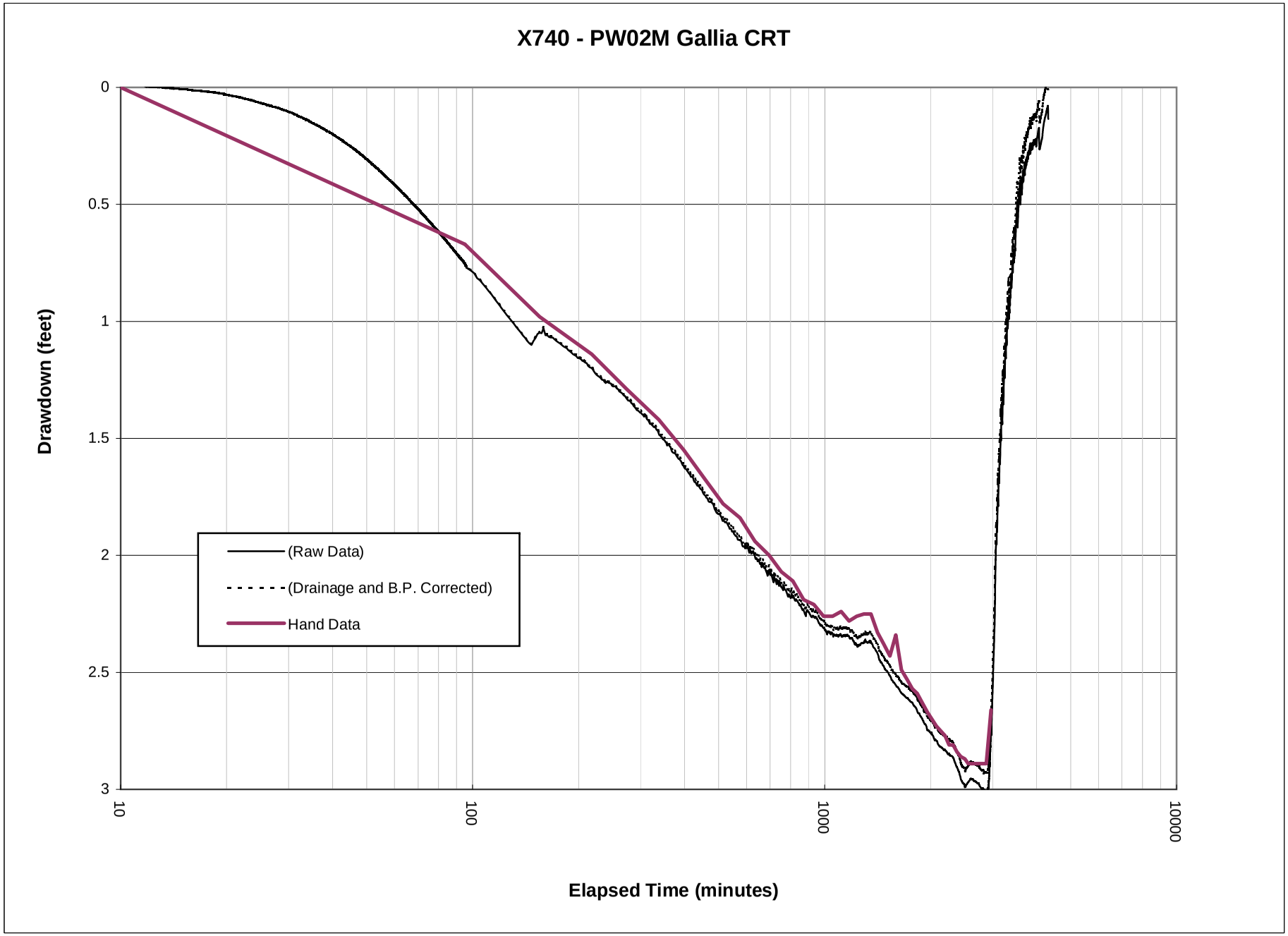
CDM


X740 - 14B Berea CRT
Drawdown (feet)
-0.1
0
0.1
0.2
0.3
0.4
10
100
1000
10000
Elapsed Time (minutes)
(Raw Data)
(Drainage Corrected)
Hand meas.

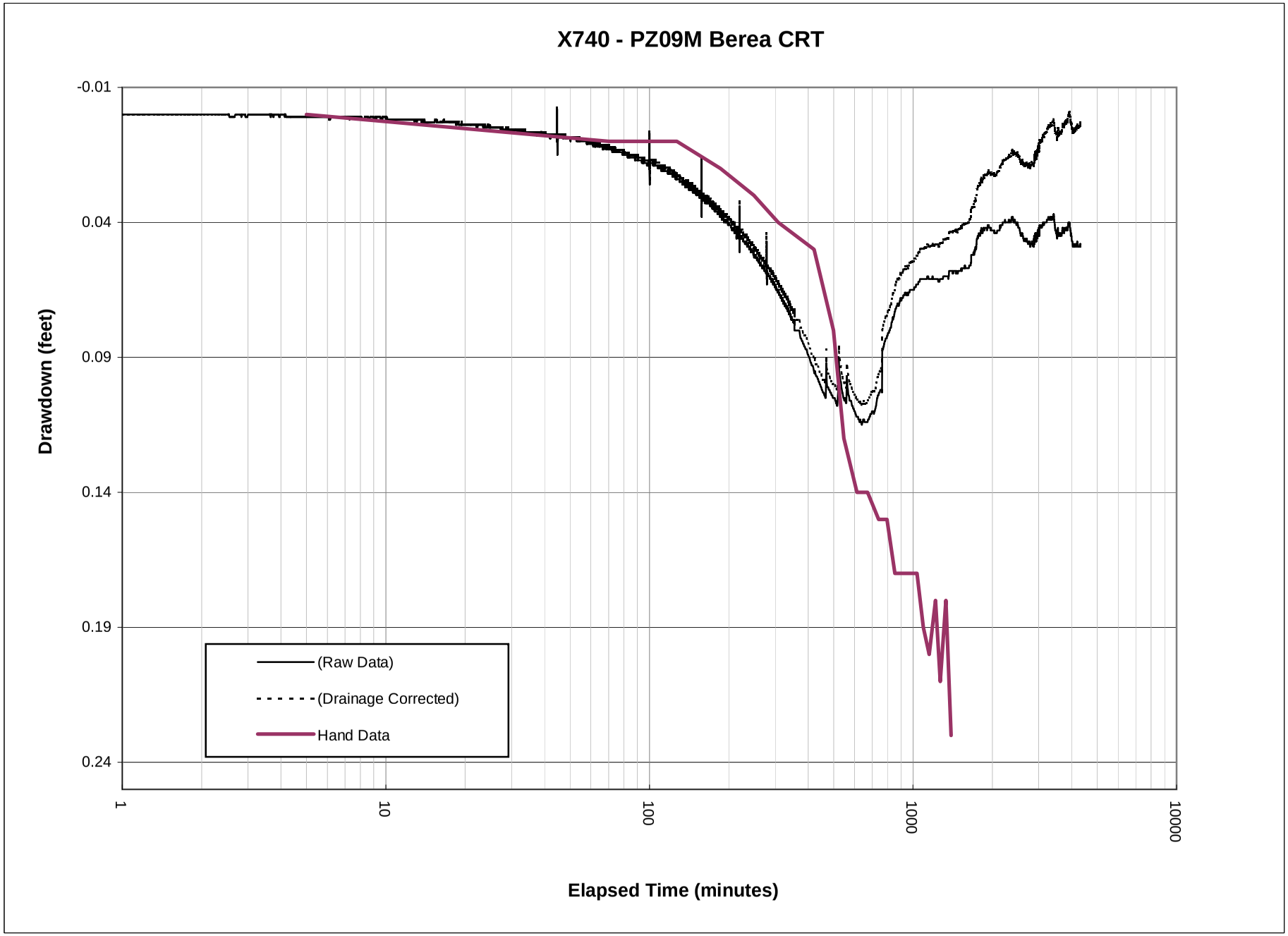
CDM


X740 - PW02M Berea CRT
Drawdown (feet)
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
10
100
1000
10000
Elapsed Time (minutes)
(Raw Data)
(Drainage Corrected)
Hand Data

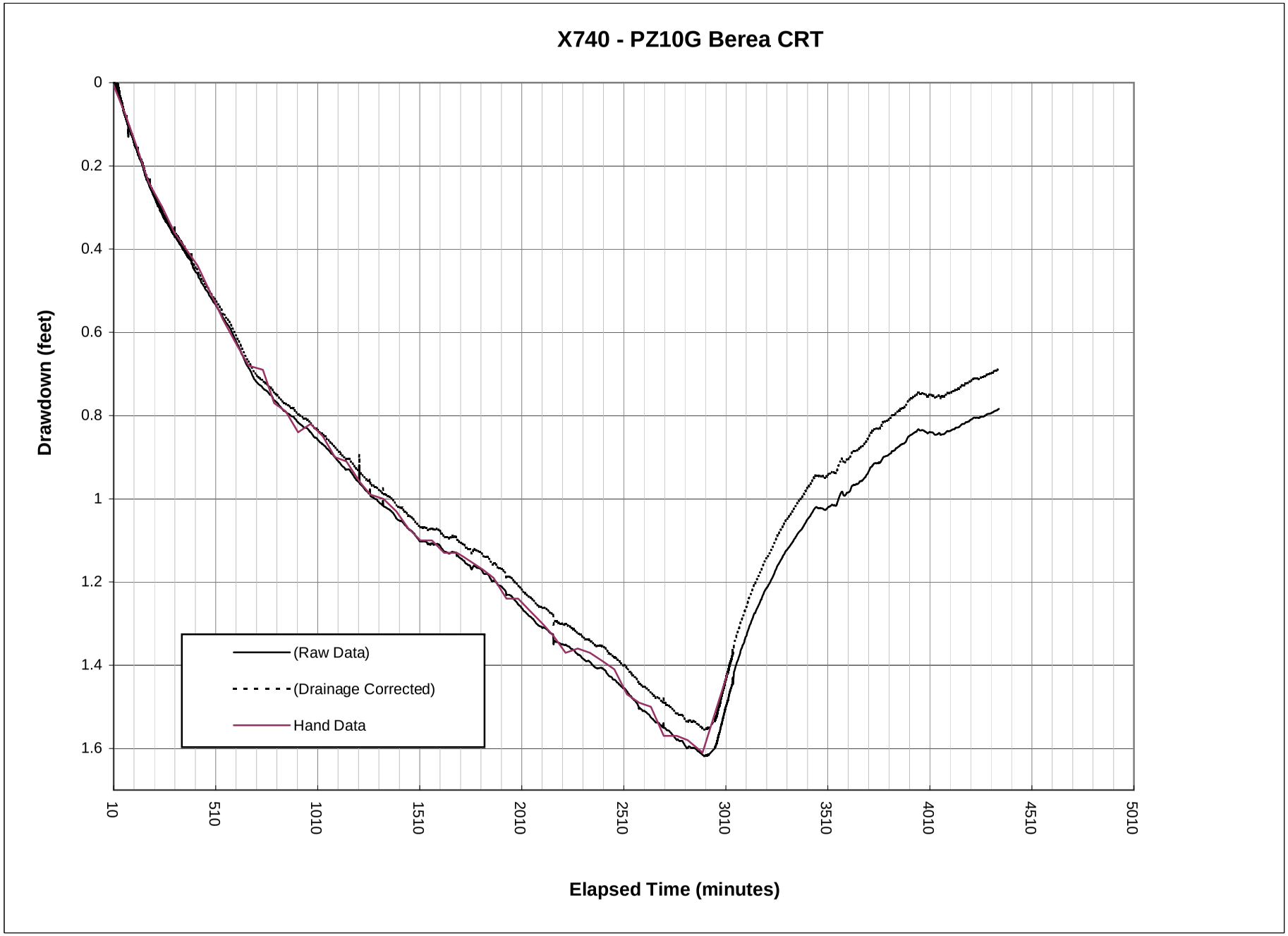
CDM


X740 - PW02M Gallia CRT
Drawdown (feet)
0
0.5
1
1.5
2
2.5
3
10
100
1000
10000
Elapsed Time (minutes)
(Raw Data)
(Drainage and B.P. Corrected)
Hand Data

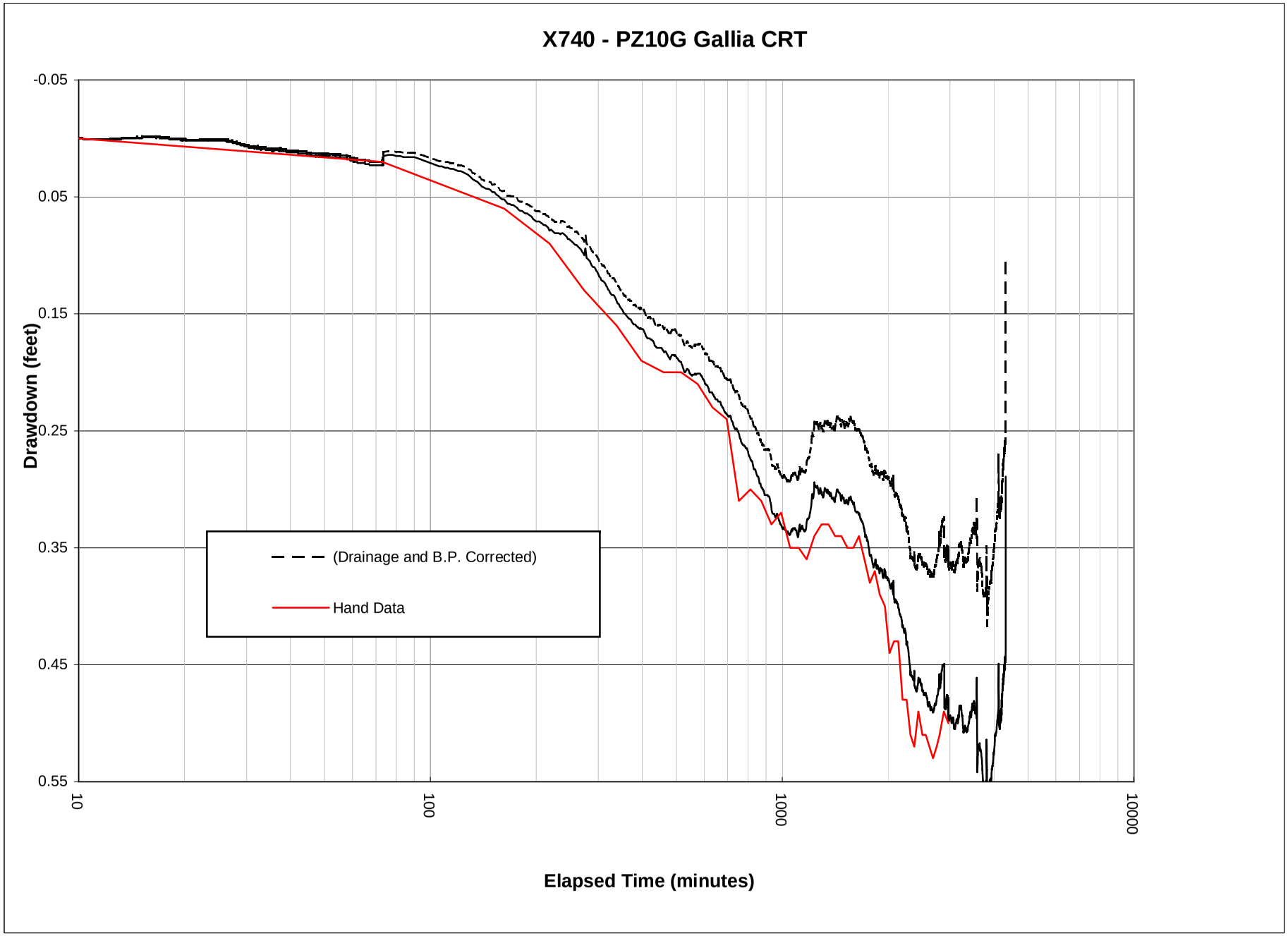
CDM


X740 - PZ09M Berea CRT
-0.01
0.04
0.09
0.14
0.19
0.24
Drawdown (feet)
1
10
100
1000
10000
Elapsed Time (minutes)
(Raw Data)
(Drainage Corrected)
Hand Data

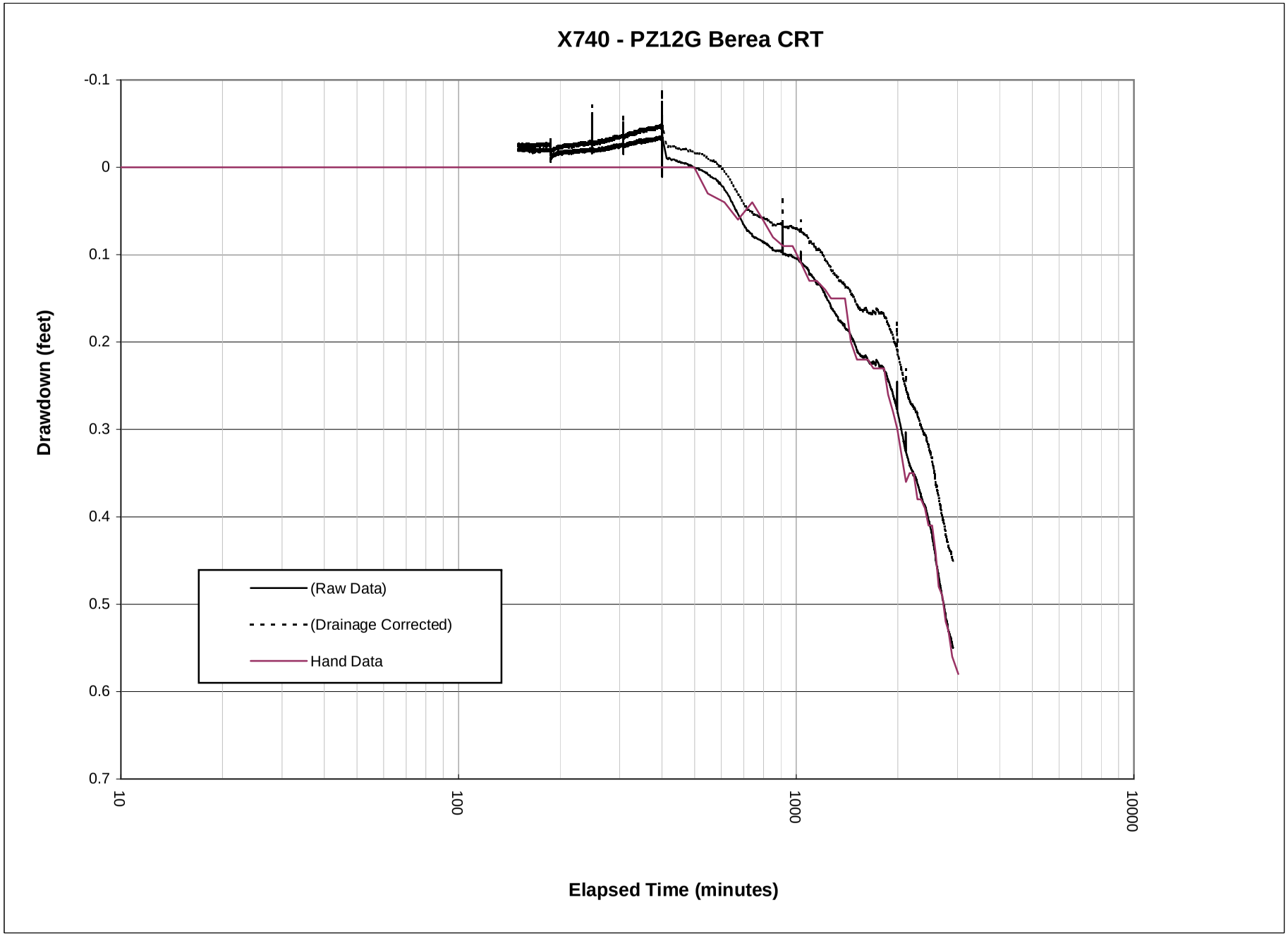
CDM


X740 - PZ10G Berea CRT
Drawdown (feet)
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
10
510
1010
1510
2010
2510
3010
3510
4010
4510
5010
Elapsed Time (minutes)
(Raw Data)
(Drainage Corrected)
Hand Data

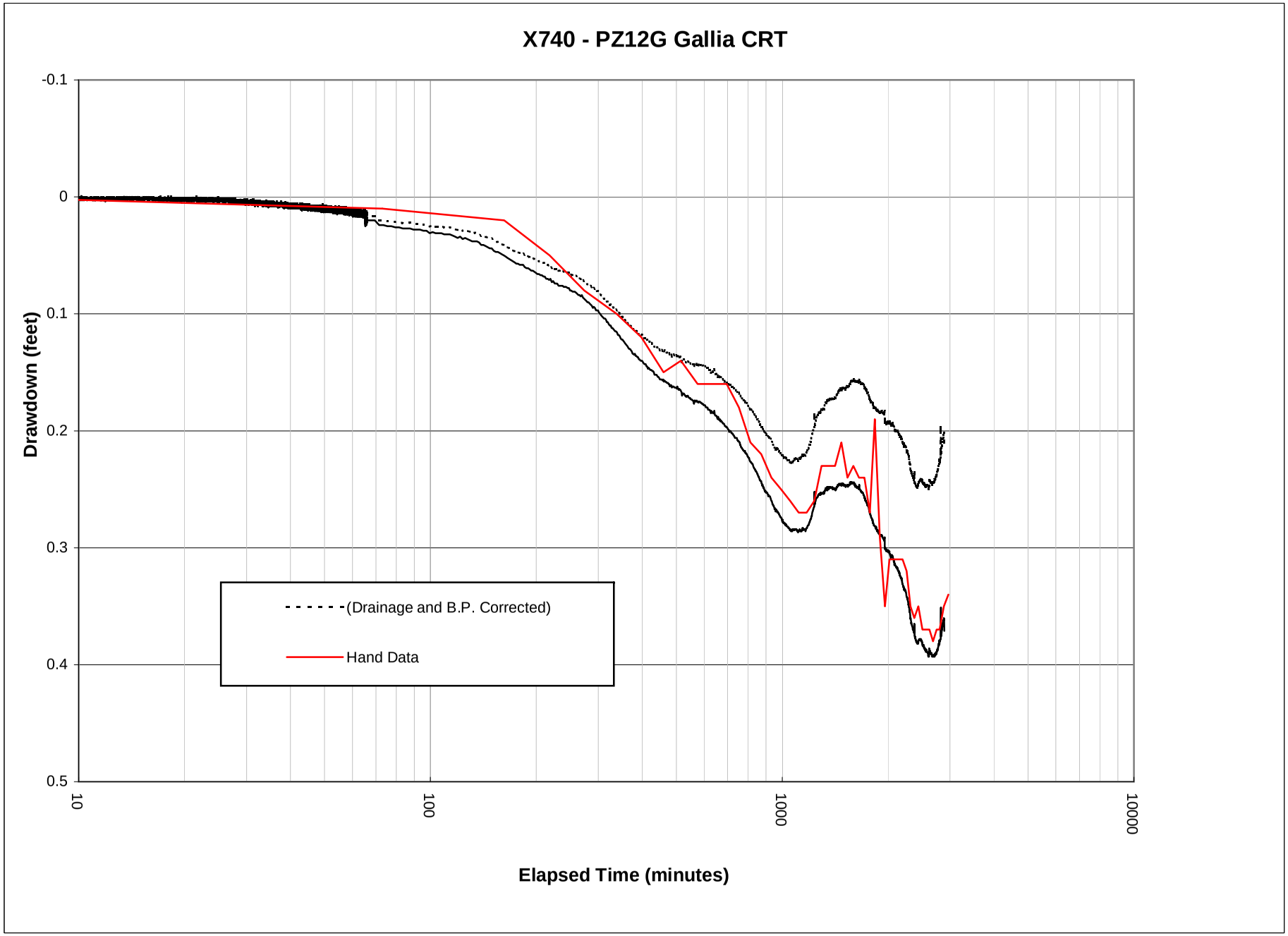
CDM


X740 - PZ10G Gallia CRT
-0.05
0.05
0.15
0.25
0.35
0.45
0.55
Drawdown (feet)
10
100
1000
10000
Elapsed Time (minutes)
(Drainage and B.P. Corrected)
Hand Data

CDM

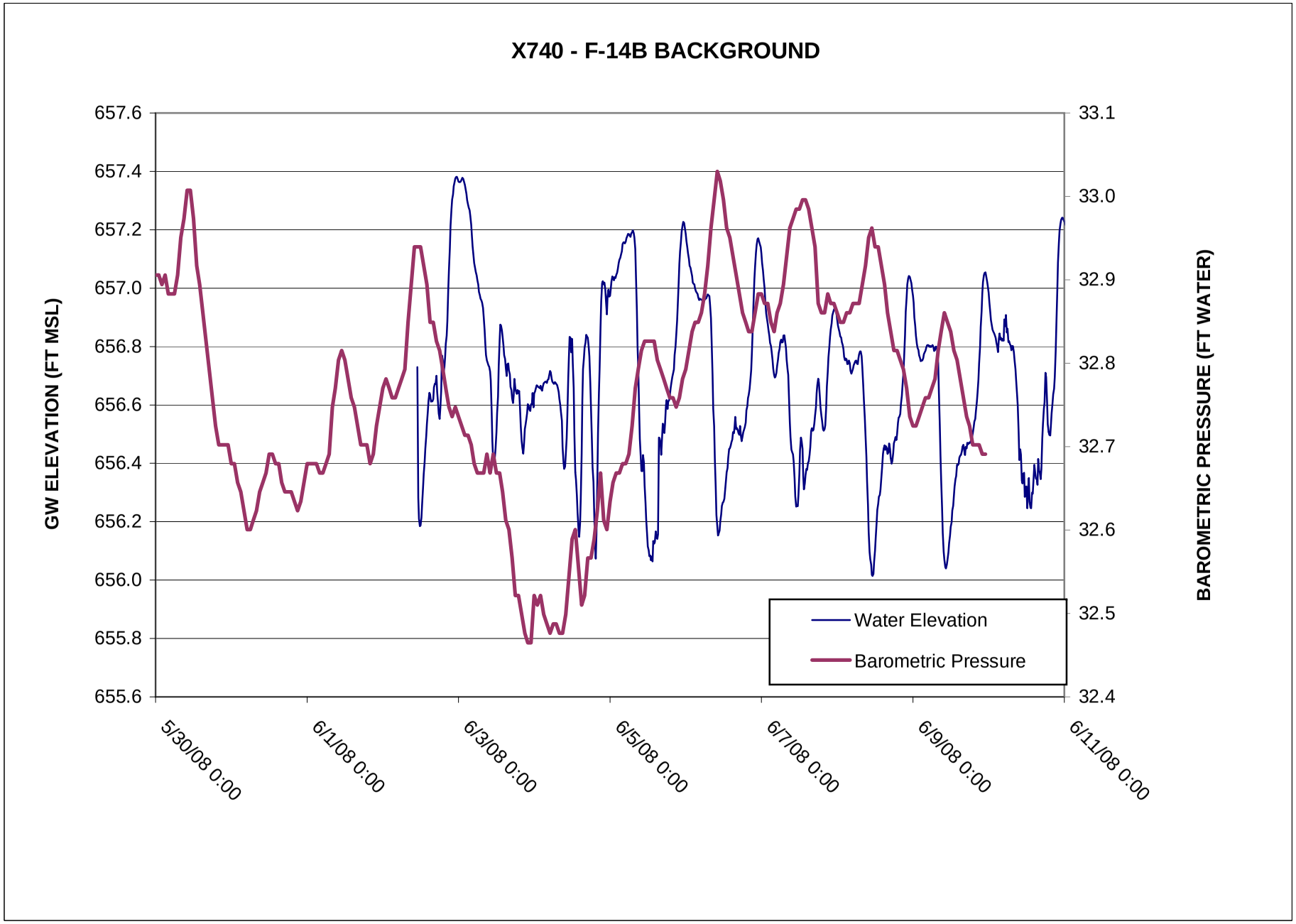

X740 - PZ12G Berea CRT
Drawdown (feet)
-0.1
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
10
100
1000
10000
Elapsed Time (minutes)
(Raw Data)
(Drainage Corrected)
Hand Data

CDM

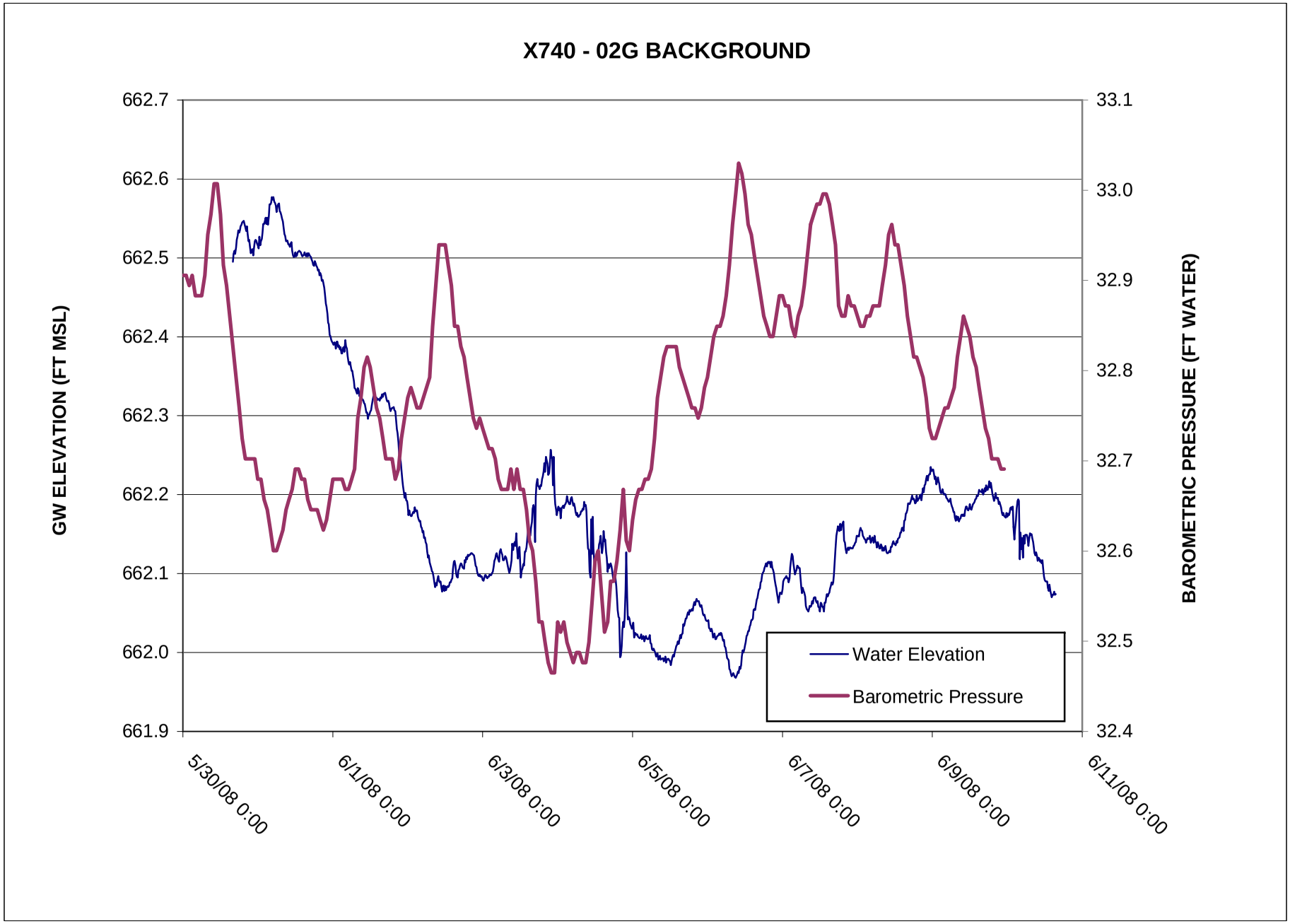

X740 - PZ12G Gallia CRT
-0.1
0
0.1
0.2
0.3
0.4
0.5
Drawdown (feet)
10
100
1000
10000
Elapsed Time (minutes)
(Drainage and B.P. Corrected)
Hand Data

CDM

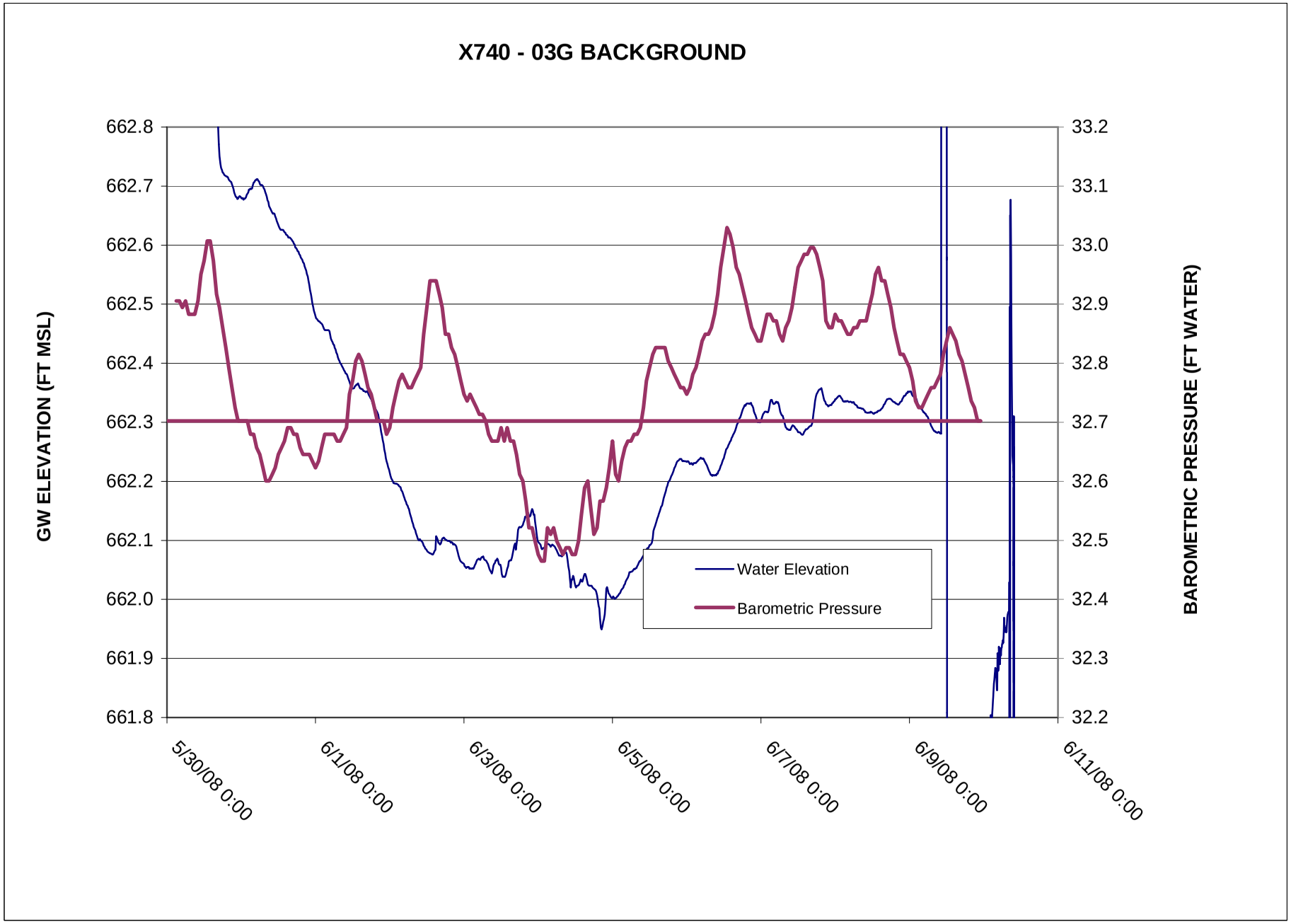
Appendix B


X740 - F-14B BACKGROUND
GW ELEVATION (FT MSL)
BAROMETRIC PRESSURE (FT WATER)
657.6
657.4
657.2
657.0
656.8
656.6
656.4
656.2
656.0
655.8
655.6
33.1
33.0
32.9
32.8
32.7
32.6
32.5
32.4
5/30/08 0:00
6/1/08 0:00
6/3/08 0:00
6/5/08 0:00
6/7/08 0:00
6/9/08 0:00
6/11/08 0:00
Water Elevation
Barometric Pressure

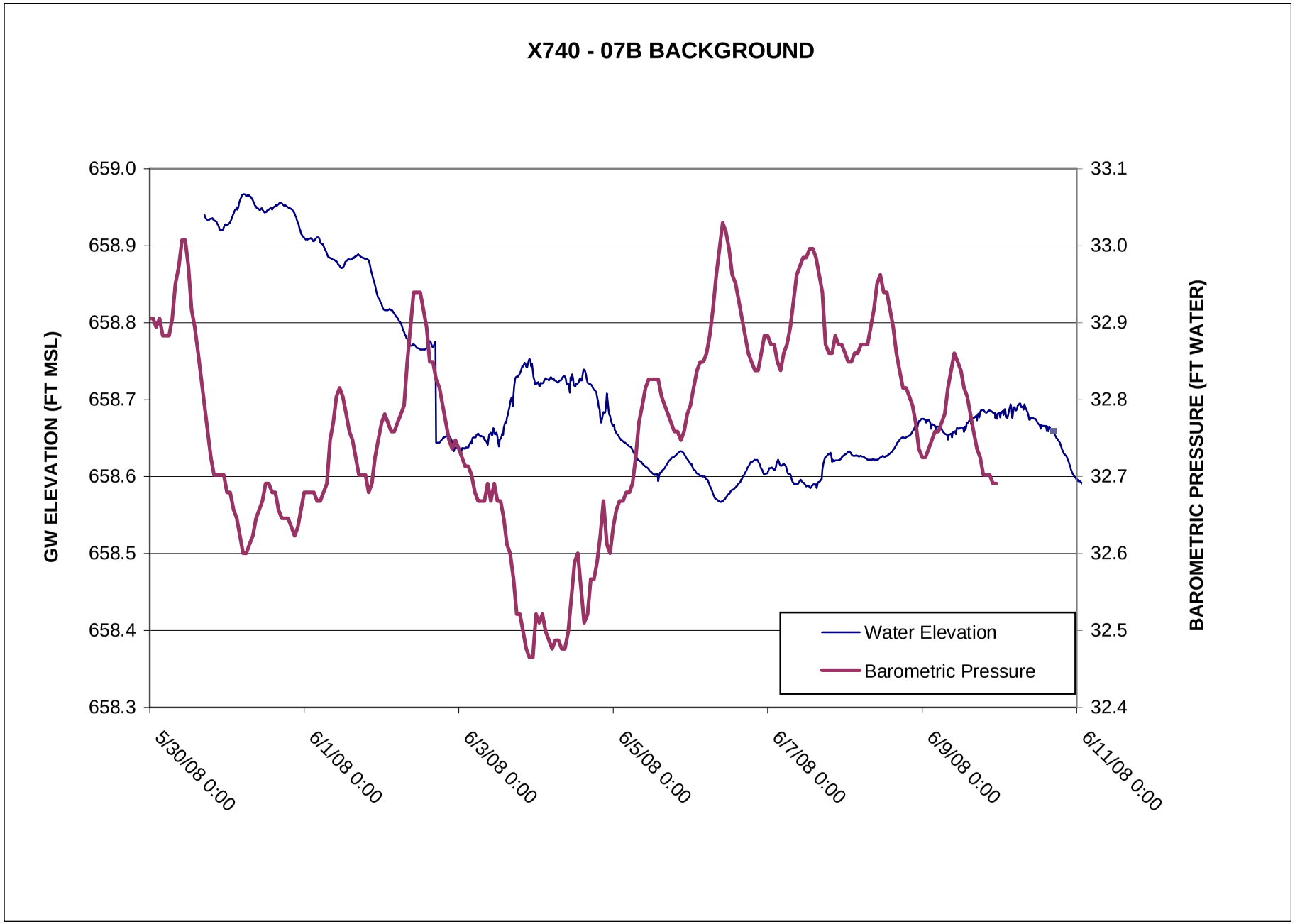
CDM


X740 - 02G BACKGROUND
GW ELEVATION (FT MSL)
BAROMETRIC PRESSURE (FT WATER)
662.7
662.6
662.5
662.4
662.3
662.2
662.1
662.0
661.9
33.1
33.0
32.9
32.8
32.7
32.6
32.5
32.4
5/30/08 0:00
6/1/08 0:00
6/3/08 0:00
6/5/08 0:00
6/7/08 0:00
6/9/08 0:00
6/11/08 0:00
Water Elevation
Barometric Pressure

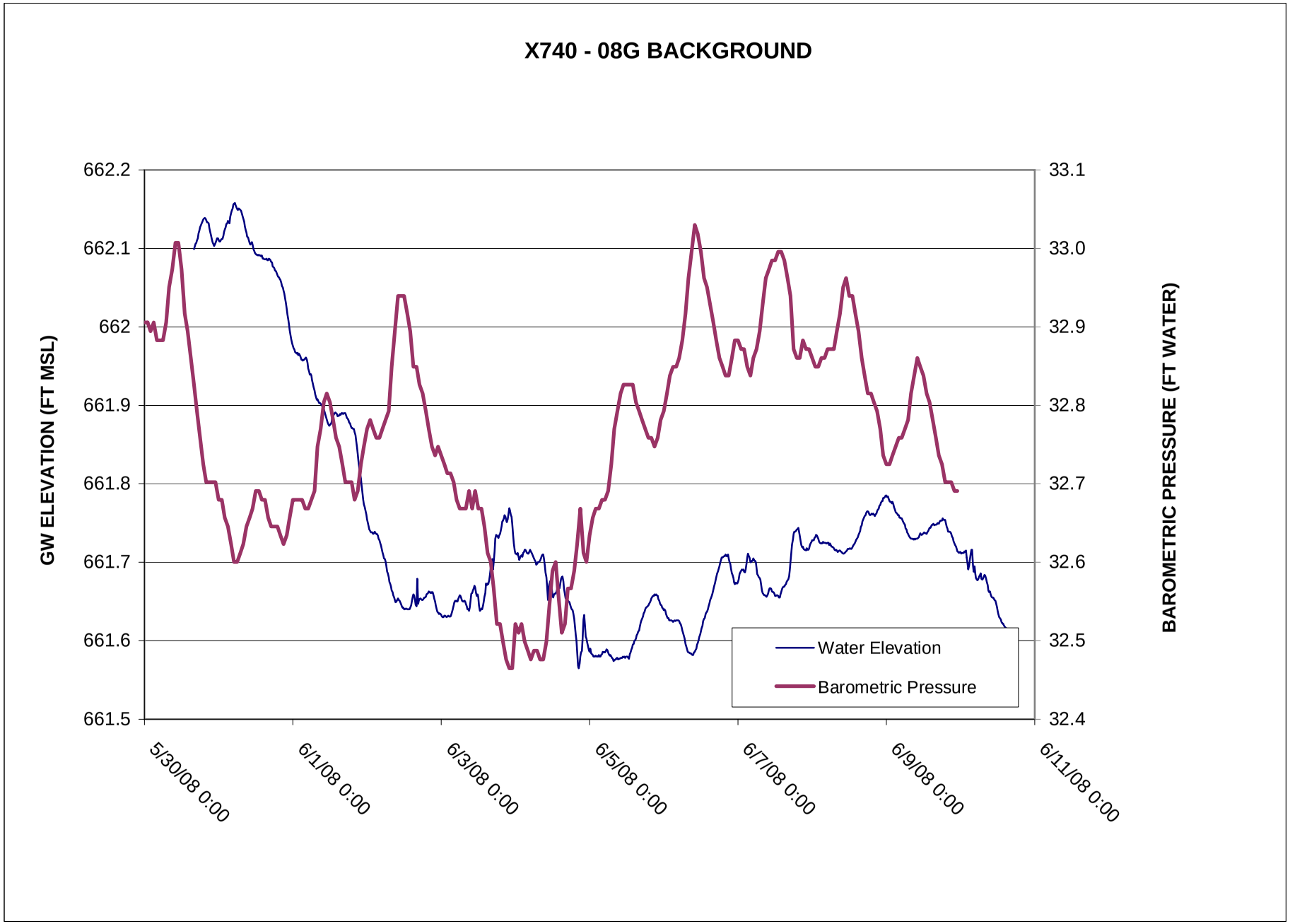
CDM


X740 - 03G BACKGROUND
GW ELEVATION (FT MSL)
BAROMETRIC PRESSURE (FT WATER)
662.8
662.7
662.6
662.5
662.4
662.3
662.2
662.1
662.0
661.9
661.8
33.2
33.1
33.0
32.9
32.8
32.7
32.6
32.5
32.4
32.3
32.2
5/30/08 0:00
6/1/08 0:00
6/3/08 0:00
6/5/08 0:00
6/7/08 0:00
6/9/08 0:00
6/11/08 0:00
Water Elevation
Barometric Pressure

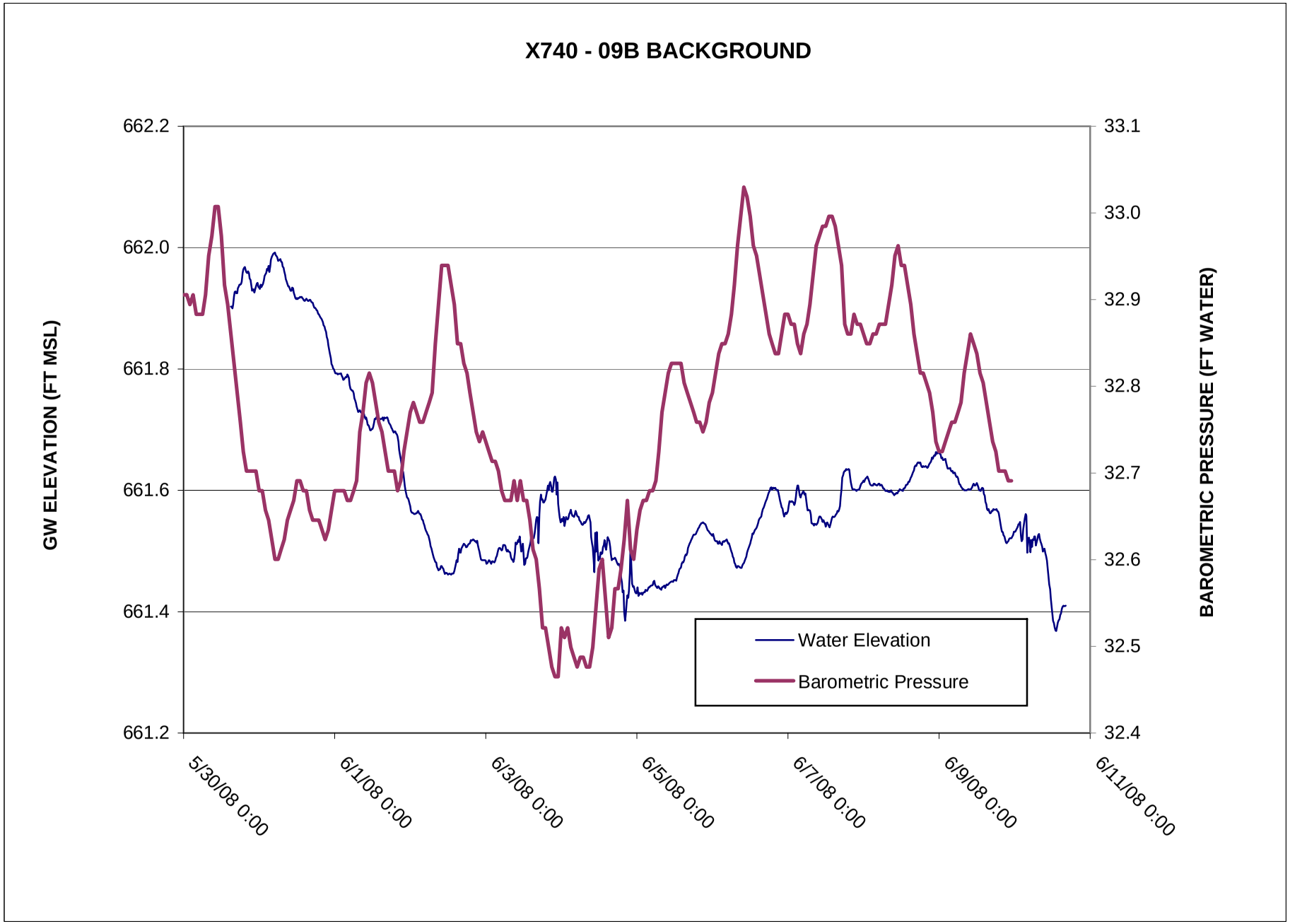
CDM


X740 - 07B BACKGROUND
GW ELEVATION (FT MSL)
BAROMETRIC PRESSURE (FT WATER)
659.0
658.9
658.8
658.7
658.6
658.5
658.4
658.3
33.1
33.0
32.9
32.8
32.7
32.6
32.5
32.4
5/30/08 0:00
6/1/08 0:00
6/3/08 0:00
6/5/08 0:00
6/7/08 0:00
6/9/08 0:00
6/11/08 0:00
Water Elevation
Barometric Pressure

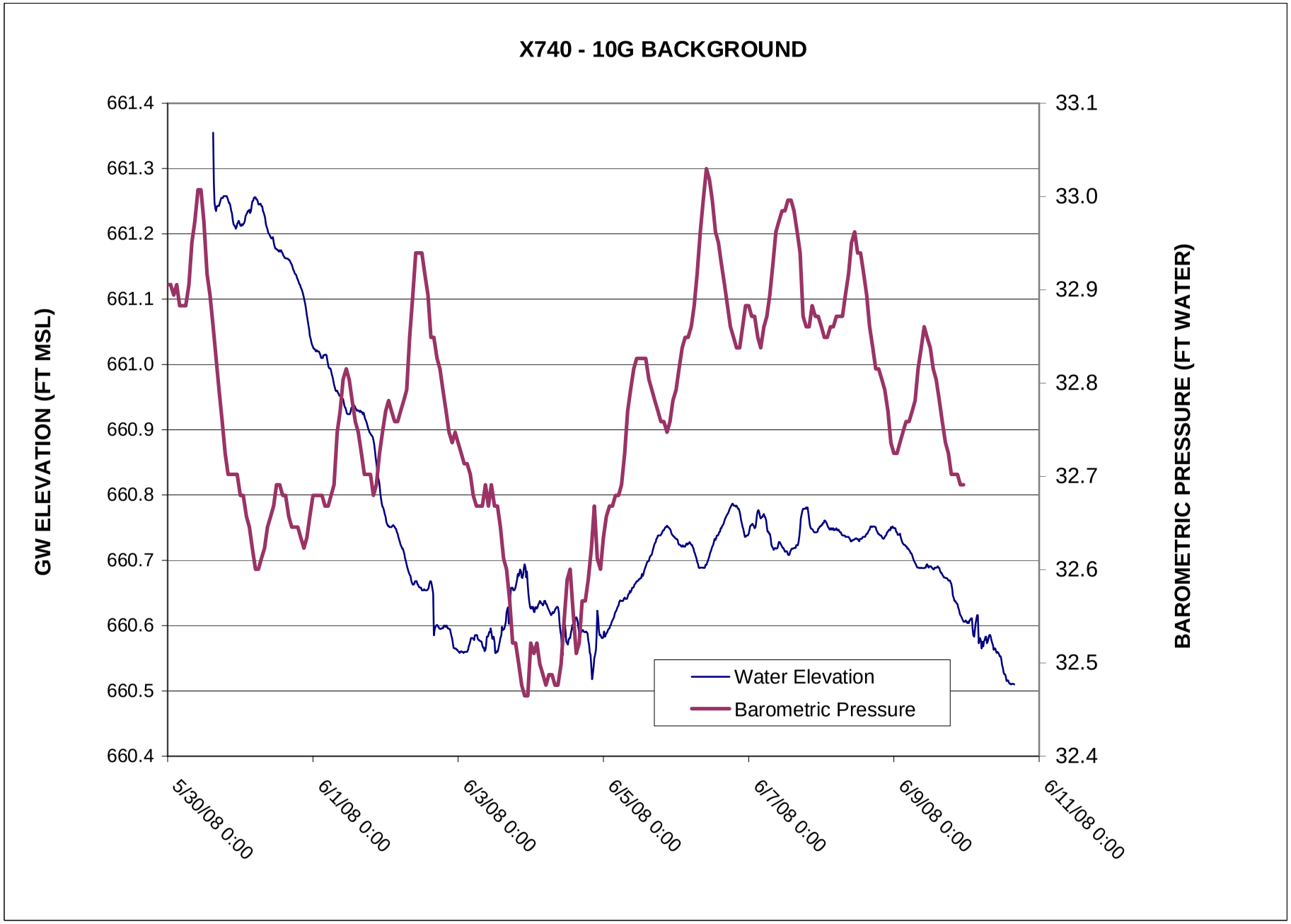
CDM


X740 - 08G BACKGROUND
GW ELEVATION (FT MSL)
BAROMETRIC PRESSURE (FT WATER)
662.2
662.1
662
661.9
661.8
661.7
661.6
661.5
33.1
33.0
32.9
32.8
32.7
32.6
32.5
32.4
5/30/08 0:00
6/1/08 0:00
6/3/08 0:00
6/5/08 0:00
6/7/08 0:00
6/9/08 0:00
6/11/08 0:00
Water Elevation
Barometric Pressure

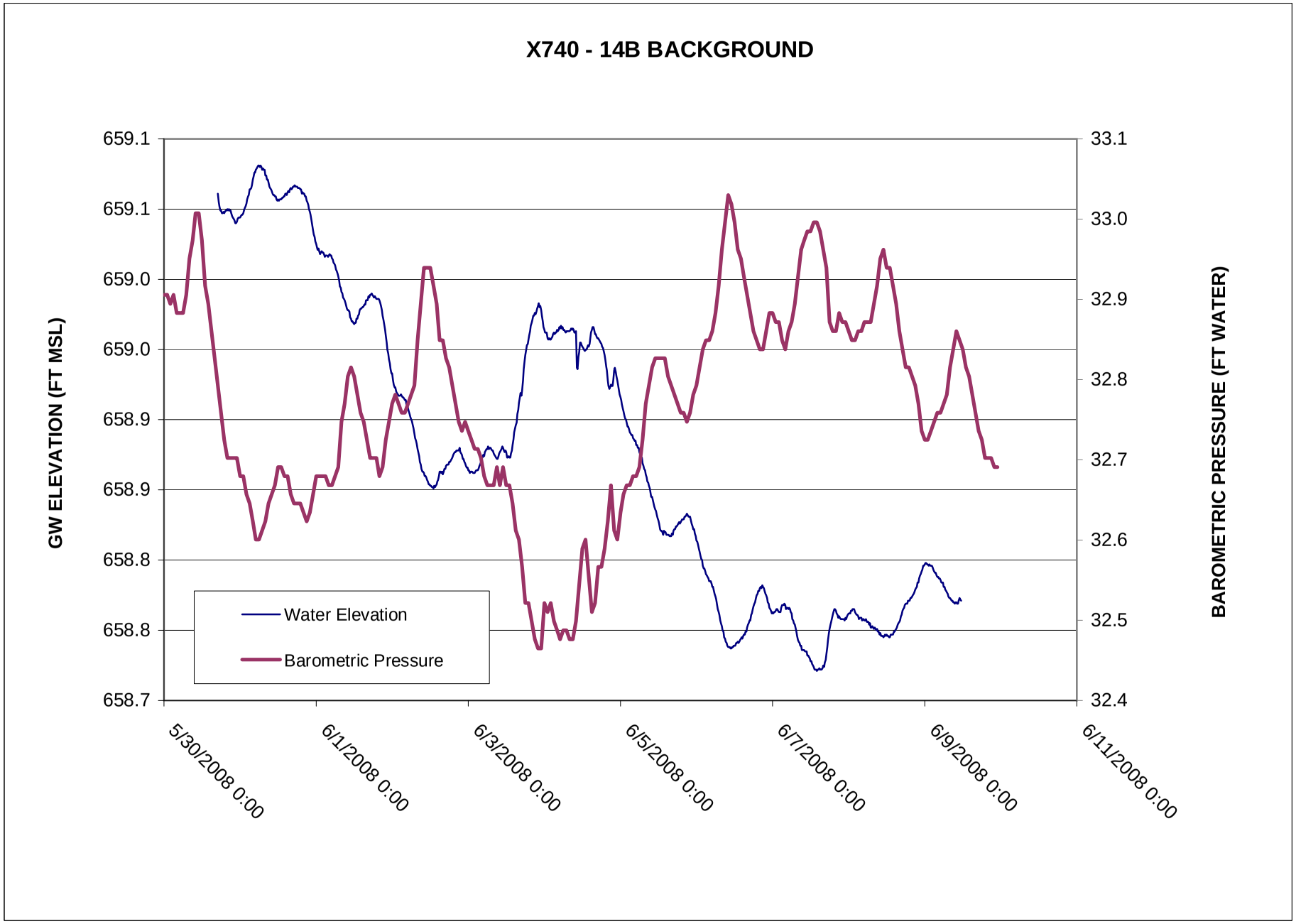
CDM


X740 - 09B BACKGROUND
GW ELEVATION (FT MSL)
BAROMETRIC PRESSURE (FT WATER)
662.2
662.0
661.8
661.6
661.4
661.2
33.1
33.0
32.9
32.8
32.7
32.6
32.5
32.4
5/30/08 0:00
6/1/08 0:00
6/3/08 0:00
6/5/08 0:00
6/7/08 0:00
6/9/08 0:00
6/11/08 0:00
Water Elevation
Barometric Pressure

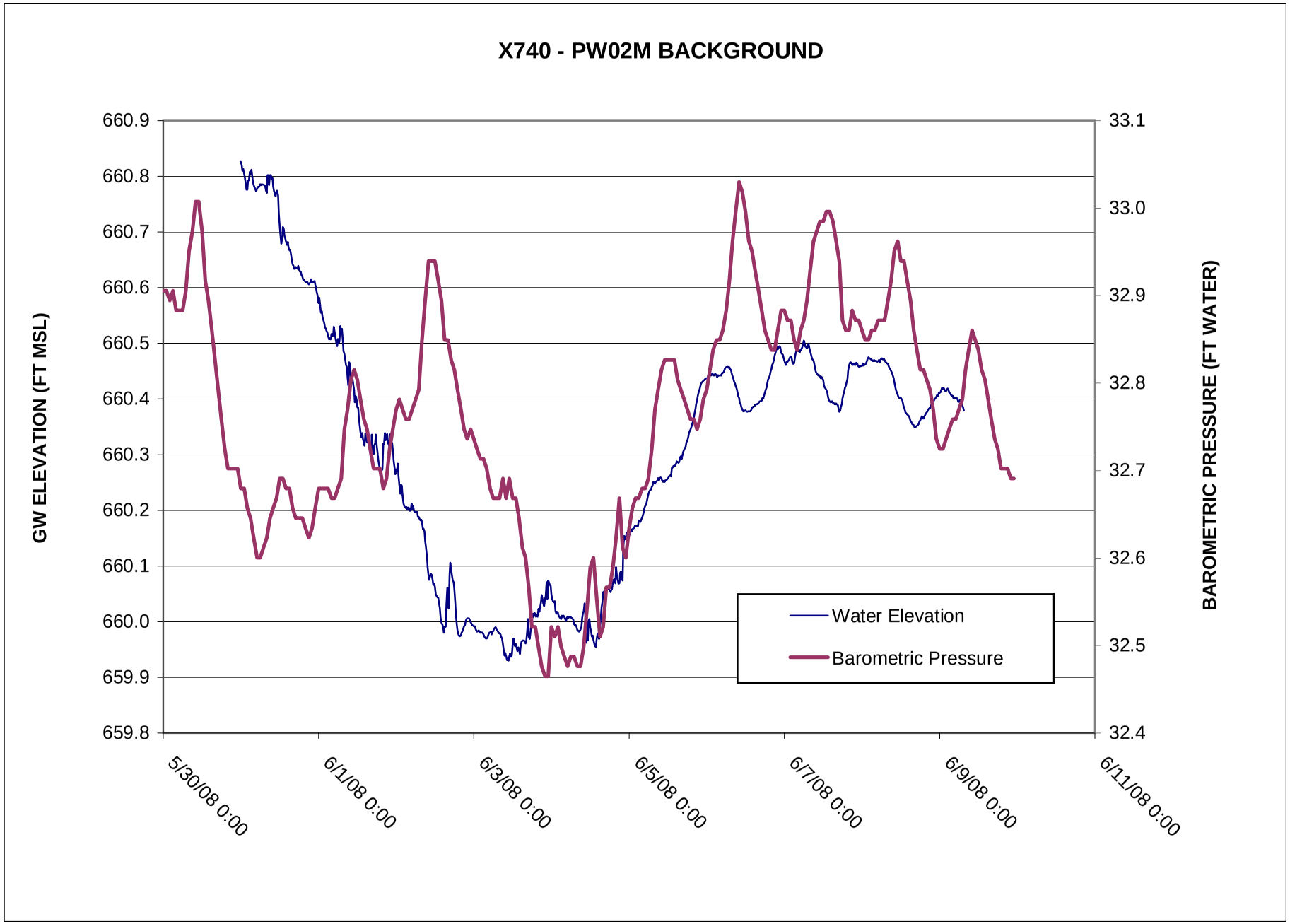
CDM


X740 - 10G BACKGROUND
GW ELEVATION (FT MSL)
BAROMETRIC PRESSURE (FT WATER)
661.4
661.3
661.2
661.1
661.0
660.9
660.8
660.7
660.6
660.5
660.4
33.1
33.0
32.9
32.8
32.7
32.6
32.5
32.4
5/30/08 0:00
6/1/08 0:00
6/3/08 0:00
6/5/08 0:00
6/7/08 0:00
6/9/08 0:00
6/11/08 0:00
Water Elevation
Barometric Pressure

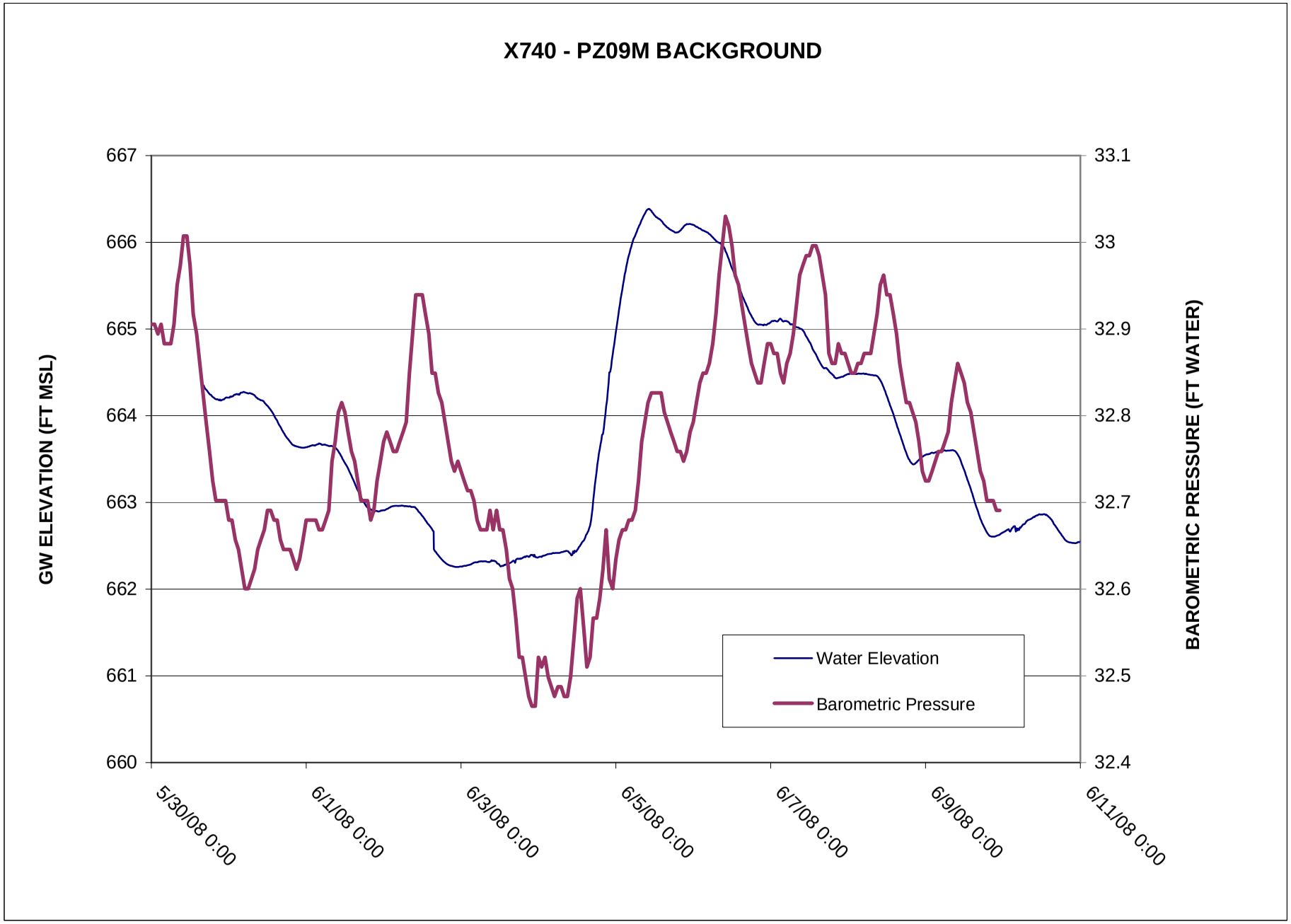
CDM


X740 - 14B BACKGROUND
GW ELEVATION (FT MSL)
BAROMETRIC PRESSURE (FT WATER)
659.1
659.1
659.0
659.0
658.9
658.9
658.8
658.8
658.7
33.1
33.0
32.9
32.8
32.7
32.6
32.5
32.4
Water Elevation
Barometric Pressure
5/30/2008 0:00
6/1/2008 0:00
6/3/2008 0:00
6/5/2008 0:00
6/7/2008 0:00
6/9/2008 0:00
6/11/2008 0:00

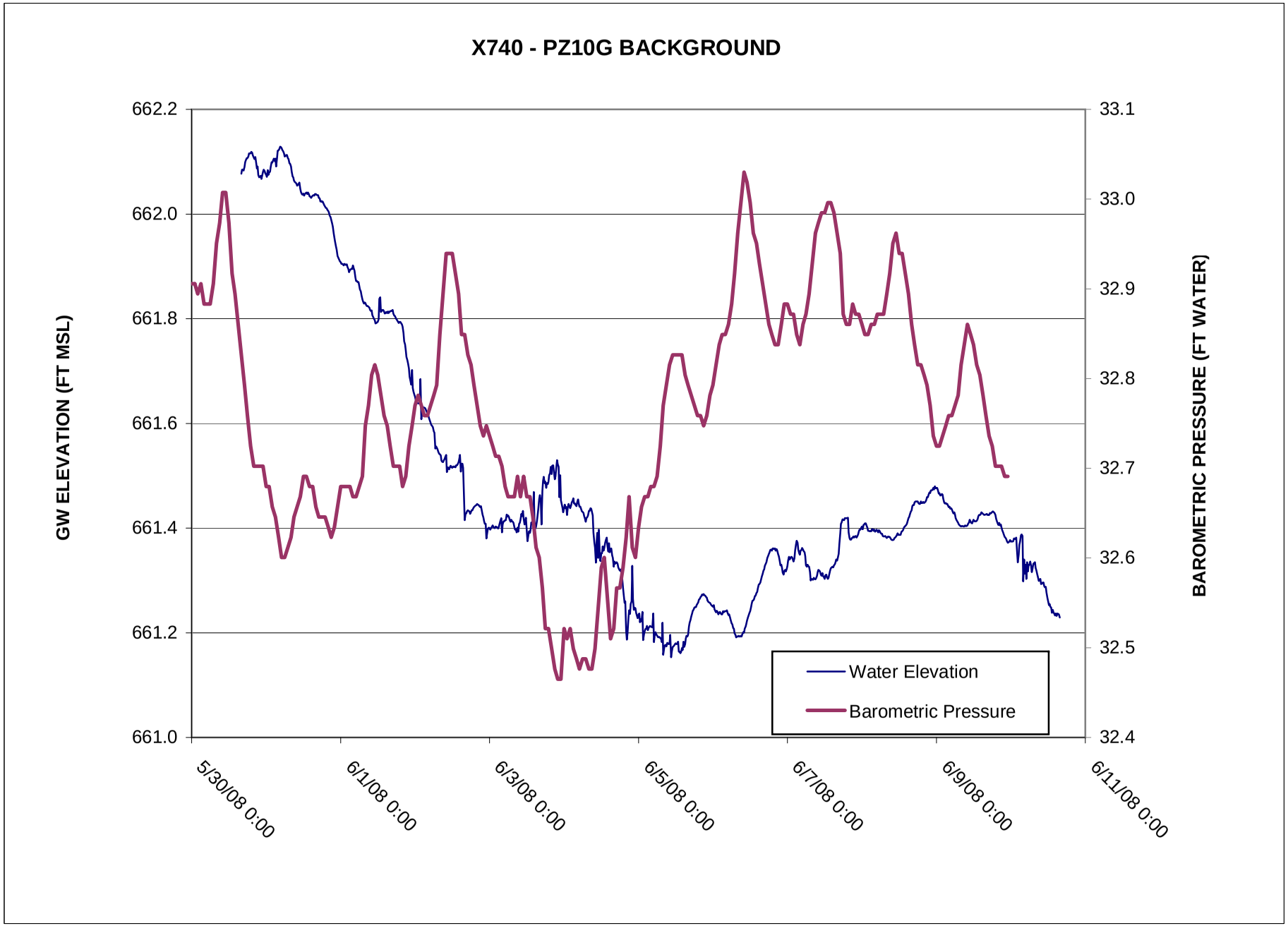
CDM


X740 - PW02M BACKGROUND
GW ELEVATION (FT MSL)
BAROMETRIC PRESSURE (FT WATER)
660.9
660.8
660.7
660.6
660.5
660.4
660.3
660.2
660.1
660.0
659.9
659.8
33.1
33.0
32.9
32.8
32.7
32.6
32.5
32.4
5/30/08 0:00
6/1/08 0:00
6/3/08 0:00
6/5/08 0:00
6/7/08 0:00
6/9/08 0:00
6/11/08 0:00
Water Elevation
Barometric Pressure

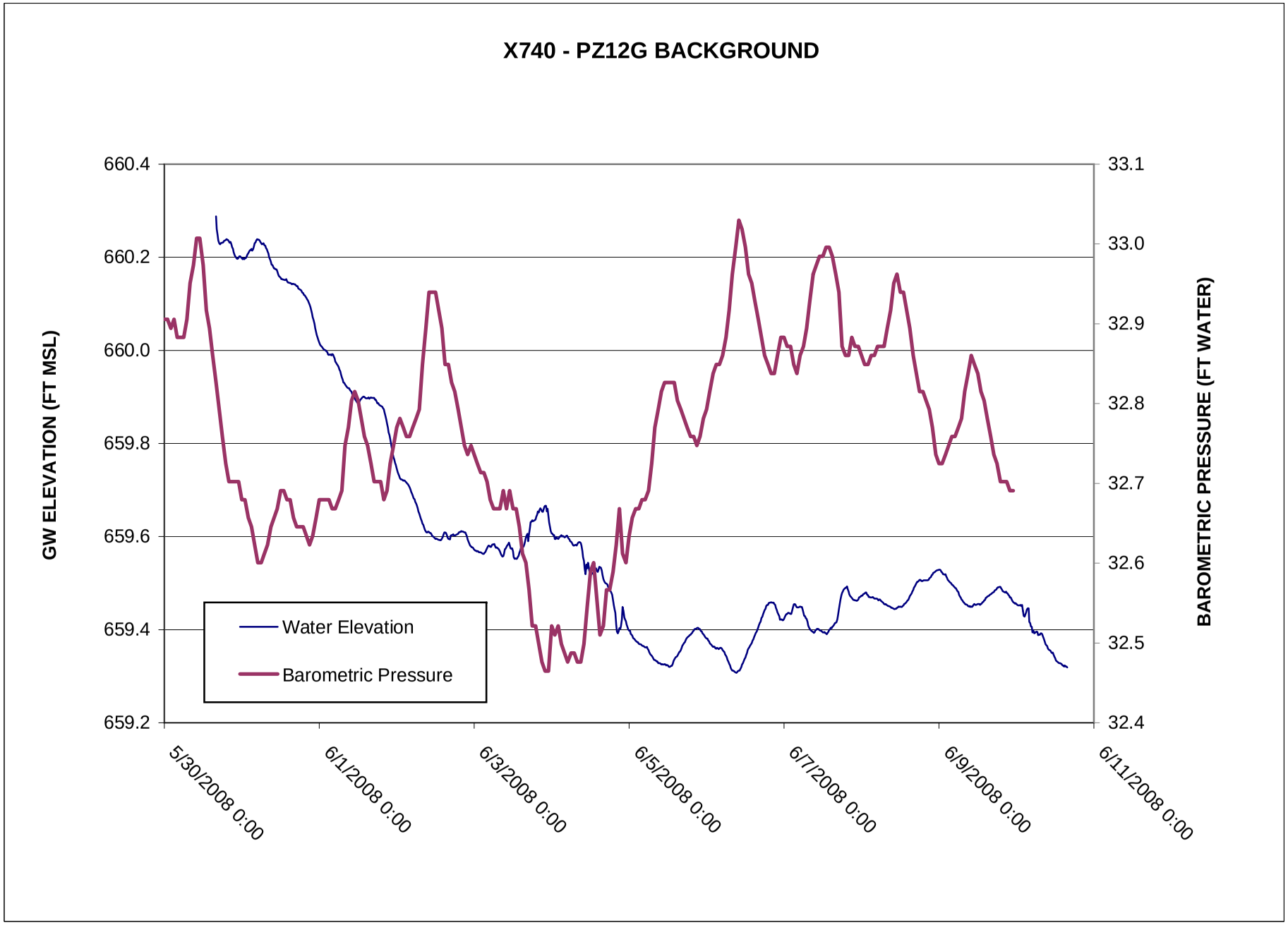
CDM


X740 - PZ09M BACKGROUND
GW ELEVATION (FT MSL)
BAROMETRIC PRESSURE (FT WATER)
667
666
665
664
663
662
661
660
33.1
33
32.9
32.8
32.7
32.6
32.5
32.4
5/30/08 0:00
6/1/08 0:00
6/3/08 0:00
6/5/08 0:00
6/7/08 0:00
6/9/08 0:00
6/11/08 0:00
Water Elevation
Barometric Pressure

CDM

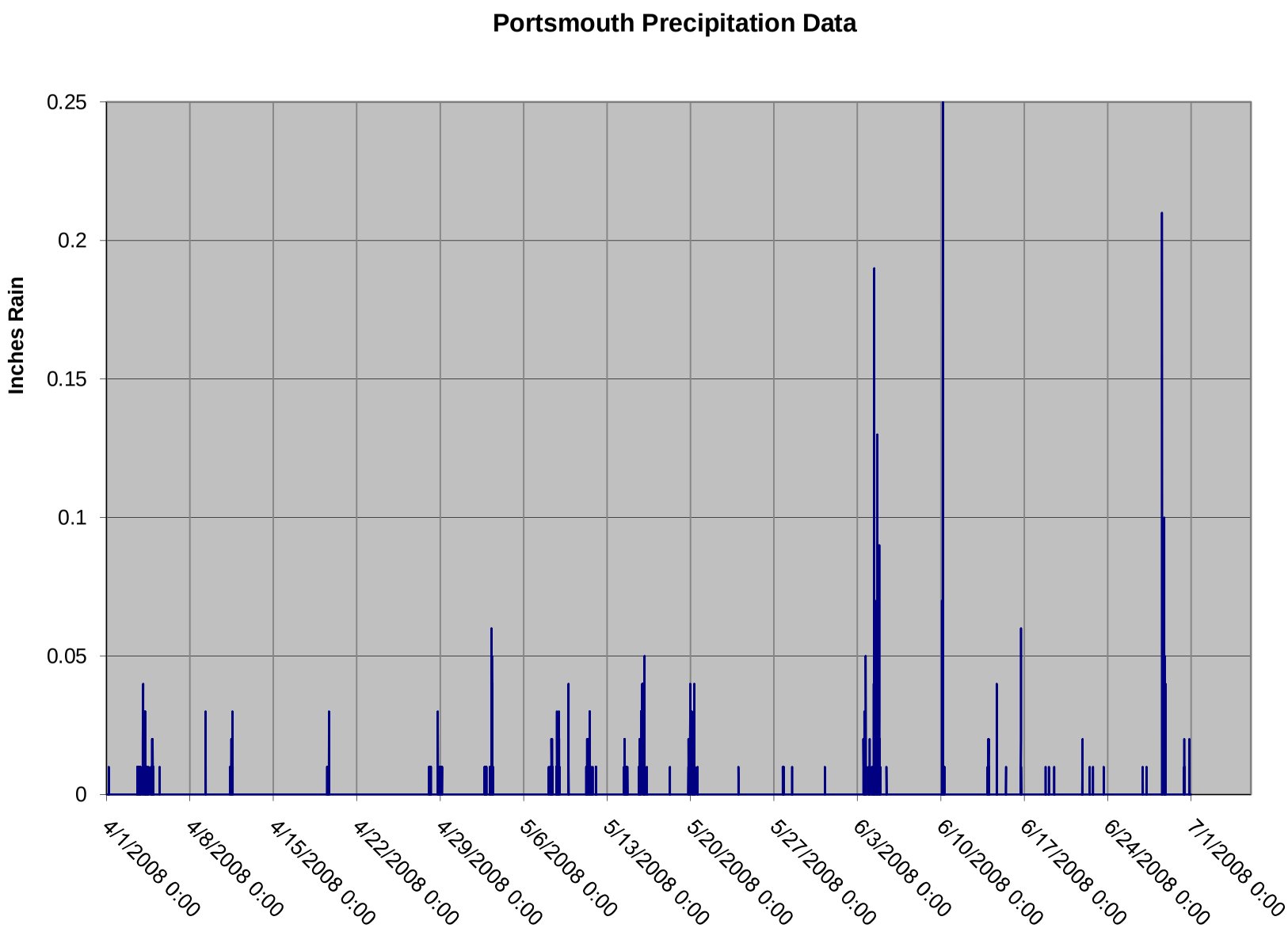

X740 - PZ10G BACKGROUND
GW ELEVATION (FT MSL)
BAROMETRIC PRESSURE (FT WATER)
662.2
662.0
661.8
661.6
661.4
661.2
661.0
33.1
33.0
32.9
32.8
32.7
32.6
32.5
32.4
5/30/08 0:00
6/1/08 0:00
6/3/08 0:00
6/5/08 0:00
6/7/08 0:00
6/9/08 0:00
6/11/08 0:00
Water Elevation
Barometric Pressure

CDM


X740 - PZ12G BACKGROUND
GW ELEVATION (FT MSL)
BAROMETRIC PRESSURE (FT WATER)
660.4
660.2
660.0
659.8
659.6
659.4
659.2
33.1
33.0
32.9
32.8
32.7
32.6
32.5
32.4
Water Elevation
Barometric Pressure
5/30/2008 0:00
6/1/2008 0:00
6/3/2008 0:00
6/5/2008 0:00
6/7/2008 0:00
6/9/2008 0:00
6/11/2008 0:00

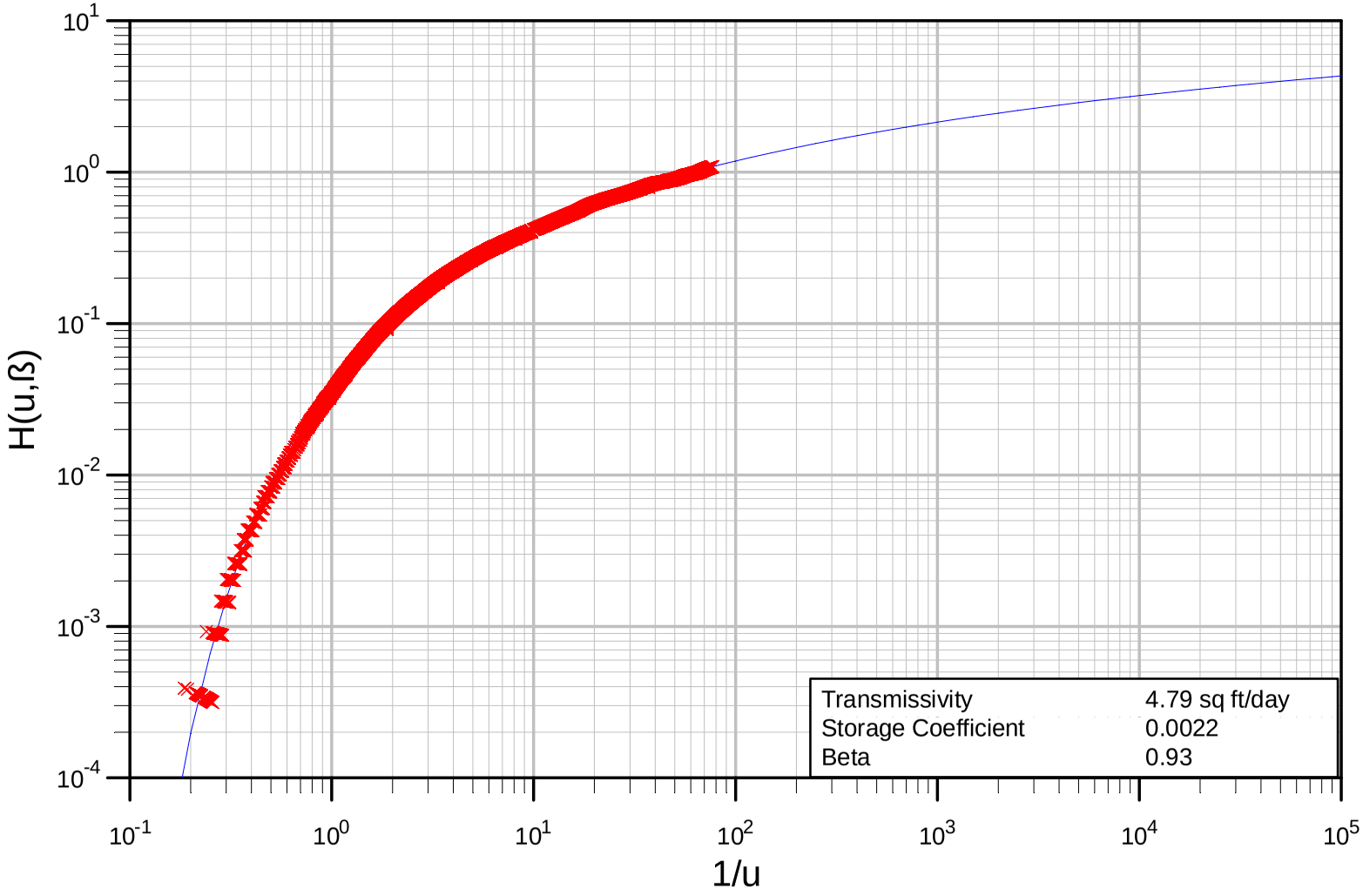
CDM

Appendix C


Portsmouth Precipitation Data
Inches Rain
0.25
0.2
0.15
0.1
0.05
0
4/1/2008 0:00
4/8/2008 0:00
4/15/2008 0:00
4/22/2008 0:00
4/29/2008 0:00
5/6/2008 0:00
5/13/2008 0:00
5/20/2008 0:00
5/27/2008 0:00
6/3/2008 0:00
6/10/2008 0:00
6/17/2008 0:00
6/24/2008 0:00
7/1/2008 0:00

CDM

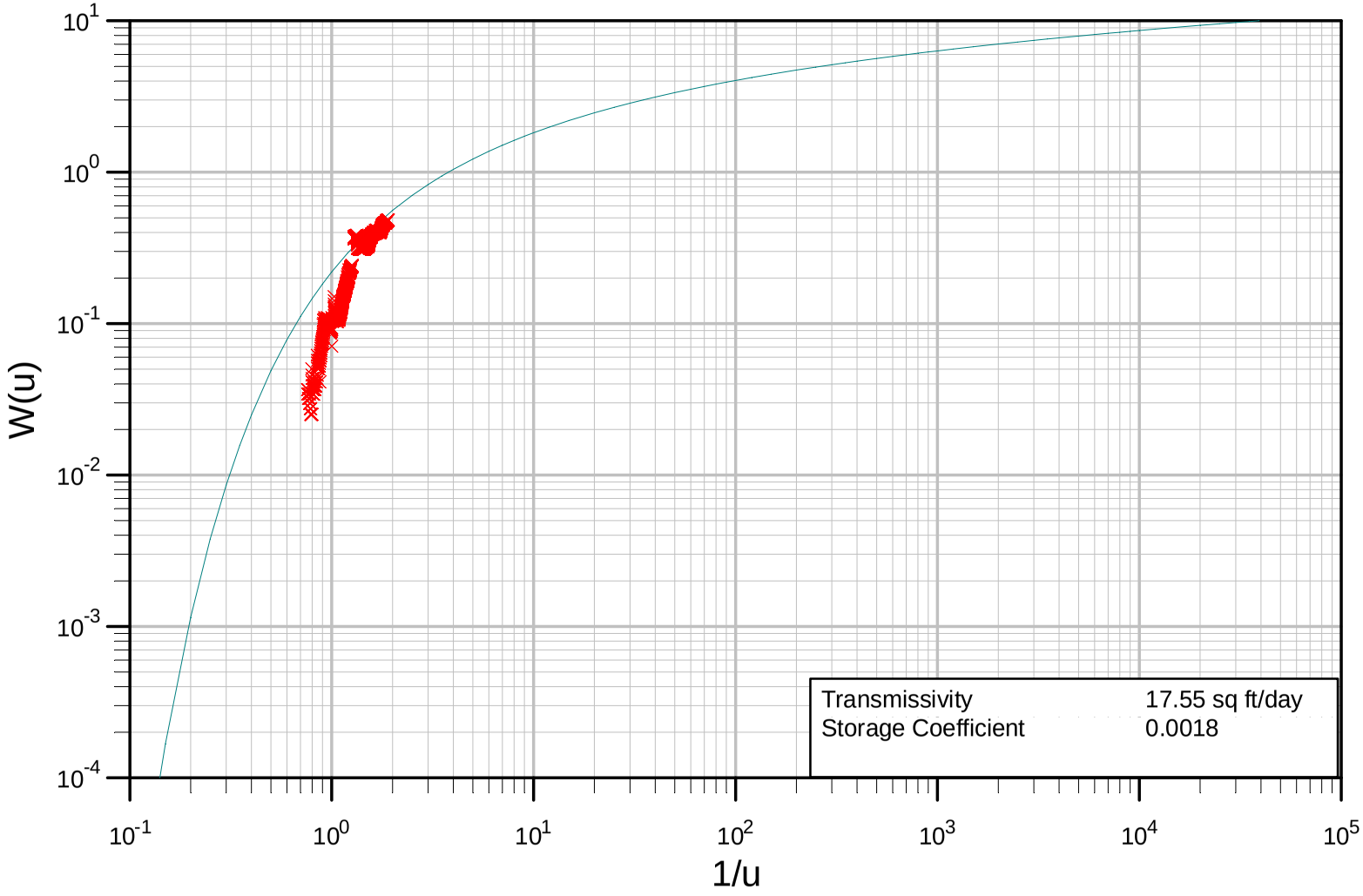
Appendix D



CDM

Portsmouth Gaseous Diffusion Plant
Portsmouth, Ohio

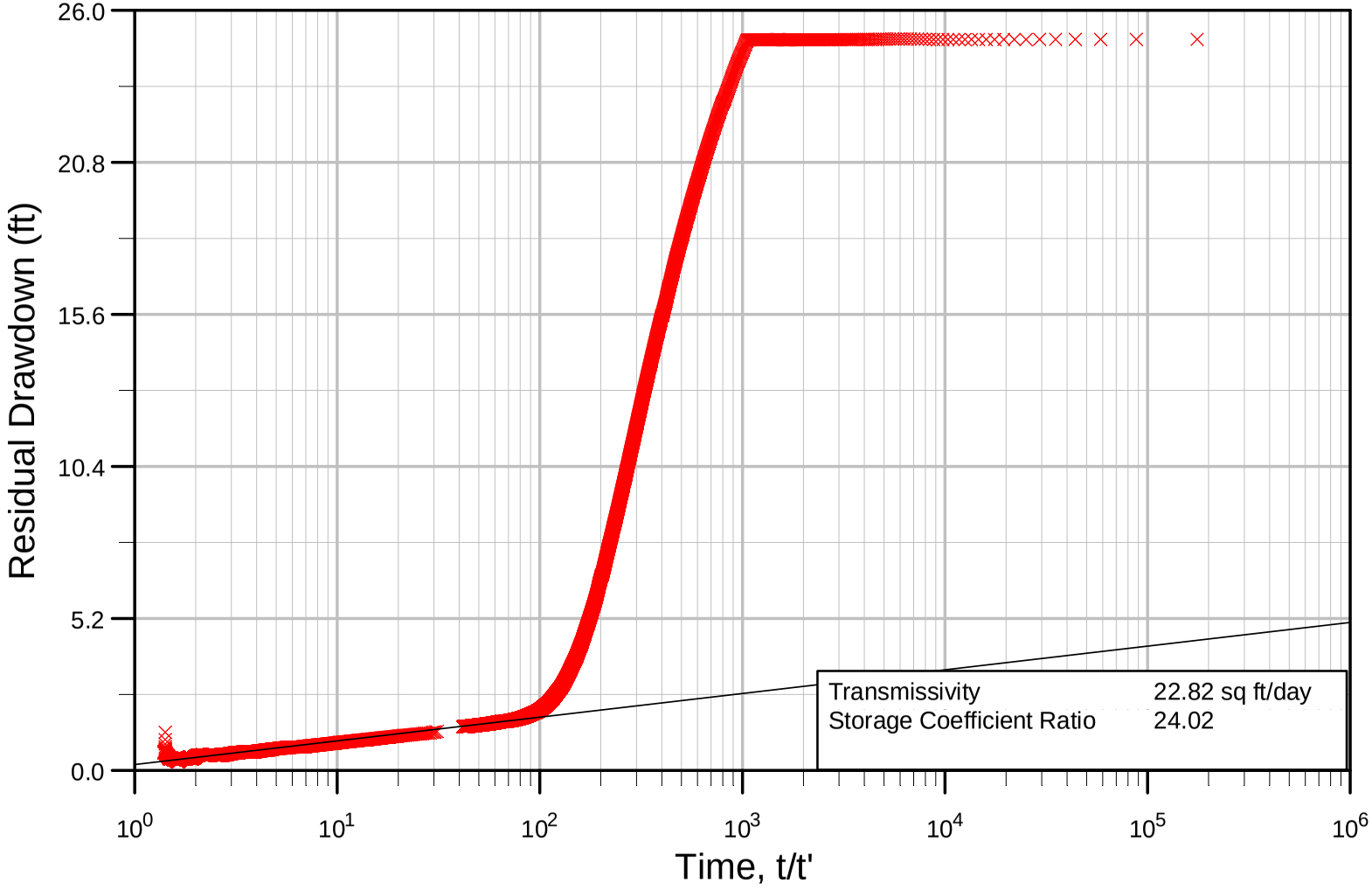
Pumping Well: X740-09B
Monitoring Well: X-740 03G Hantush, 1960



CDM

Portsmouth Gaseous Diffusion Plant
Portsmouth, Ohio

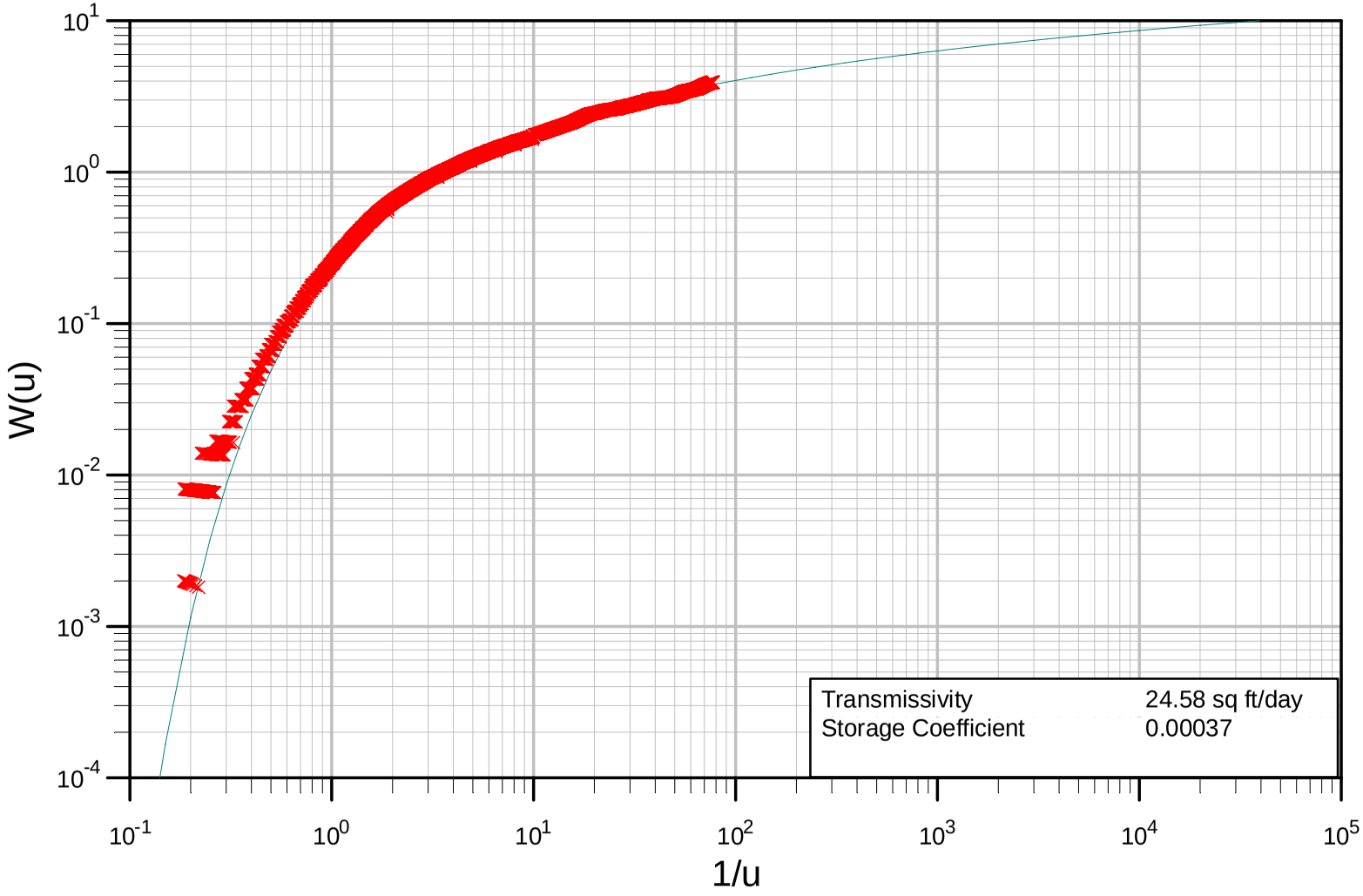
Pumping Well: X740-09B
Monitoring Well: X-740 07B Theis, 1935



CDM

Portsmouth Gaseous Diffusion Plant
Portsmouth, Ohio

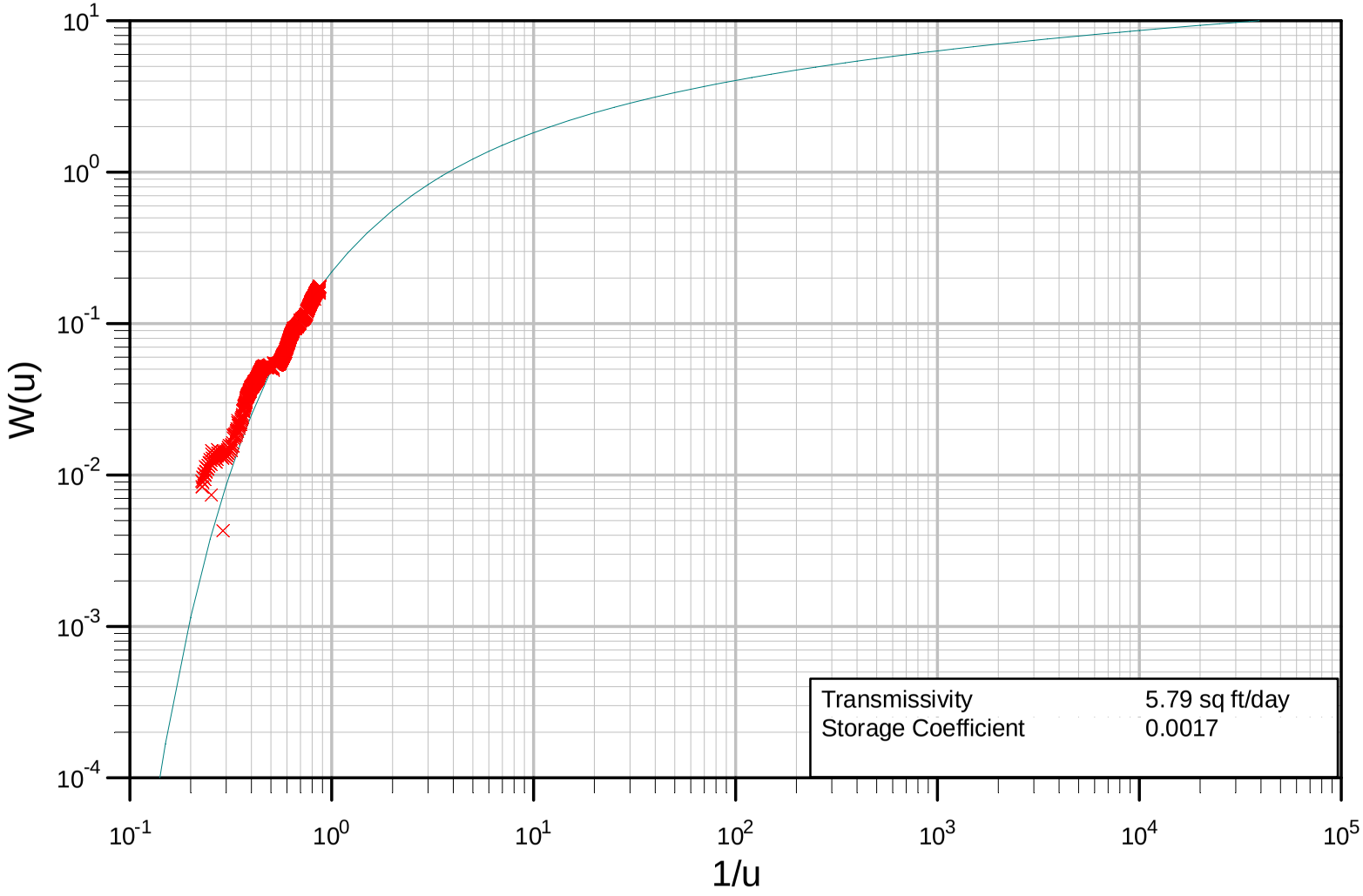
Pumping Well: X740-09B
Monitoring Well: X-740 09B Theis, 1946



CDM

Portsmouth Gaseous Diffusion Plant
Portsmouth, Ohio

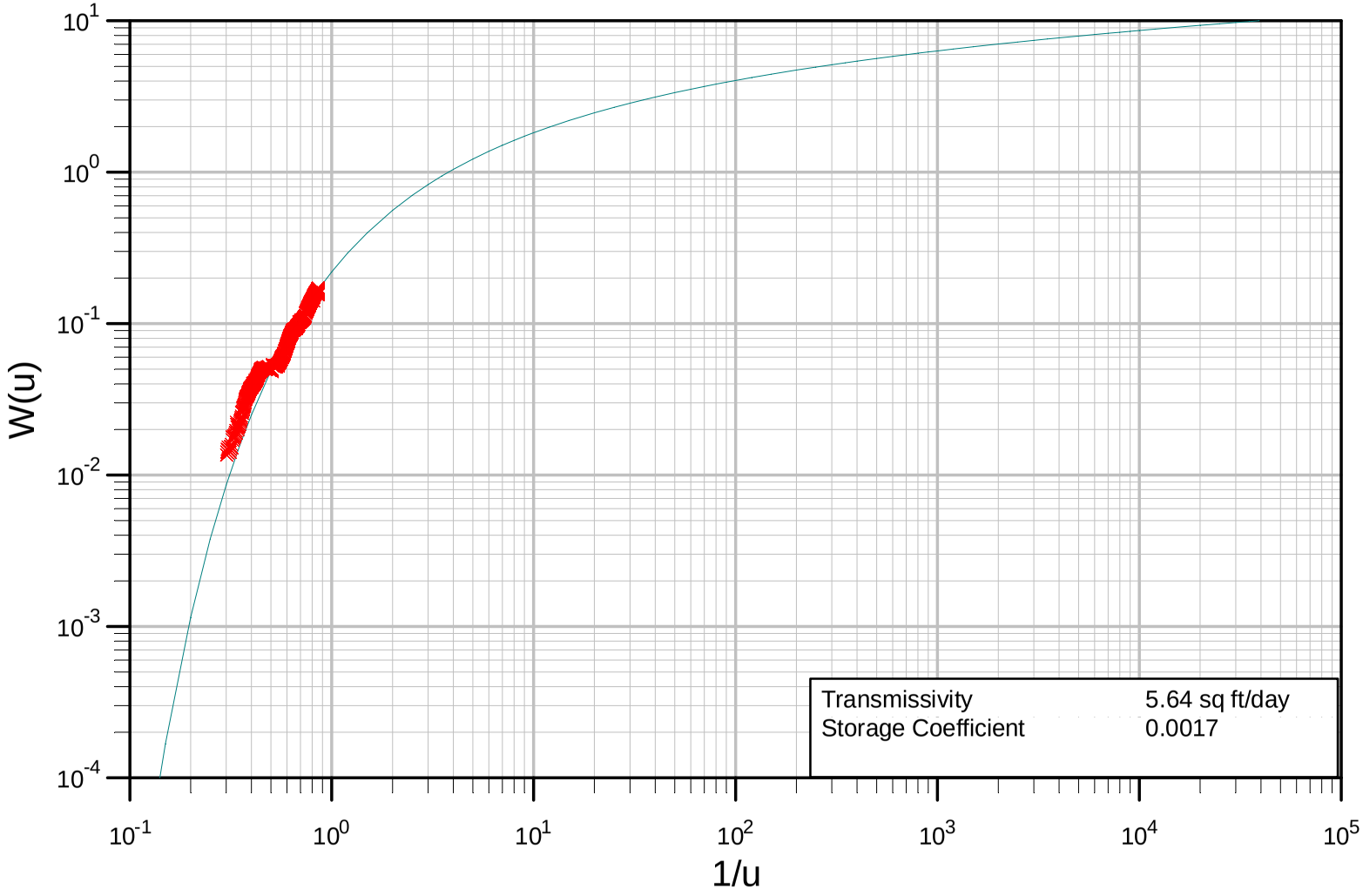
Pumping Well: X740-09B
Monitoring Well: X-740 10G Theis, 1935



CDM

Portsmouth Gaseous Diffusion Plant
Portsmouth, Ohio

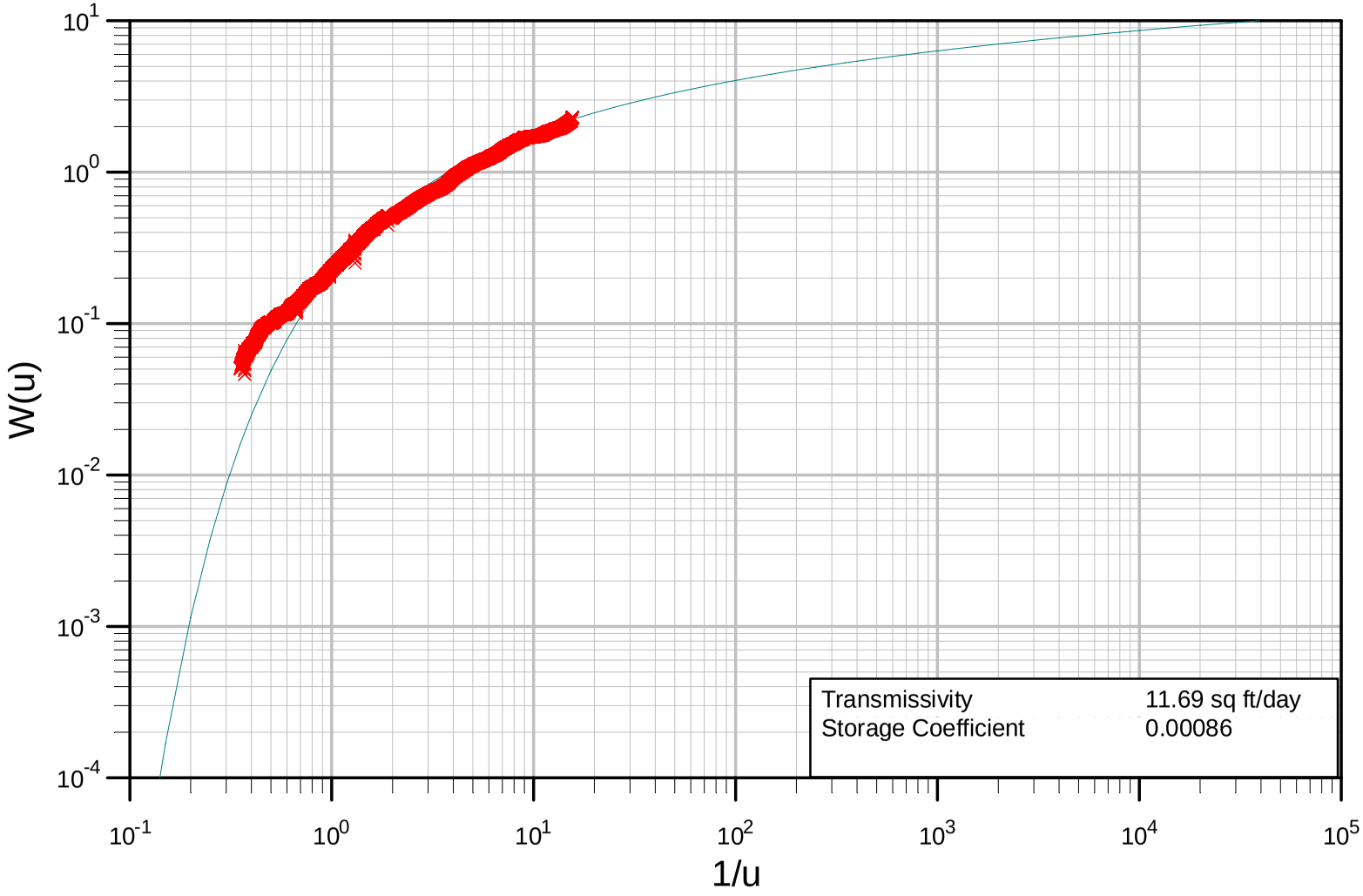
Pumping Well: X740-09B
Monitoring Well: X-740 14B Theis, 1935



CDM

Portsmouth Gaseous Diffusion Plant
Portsmouth, Ohio

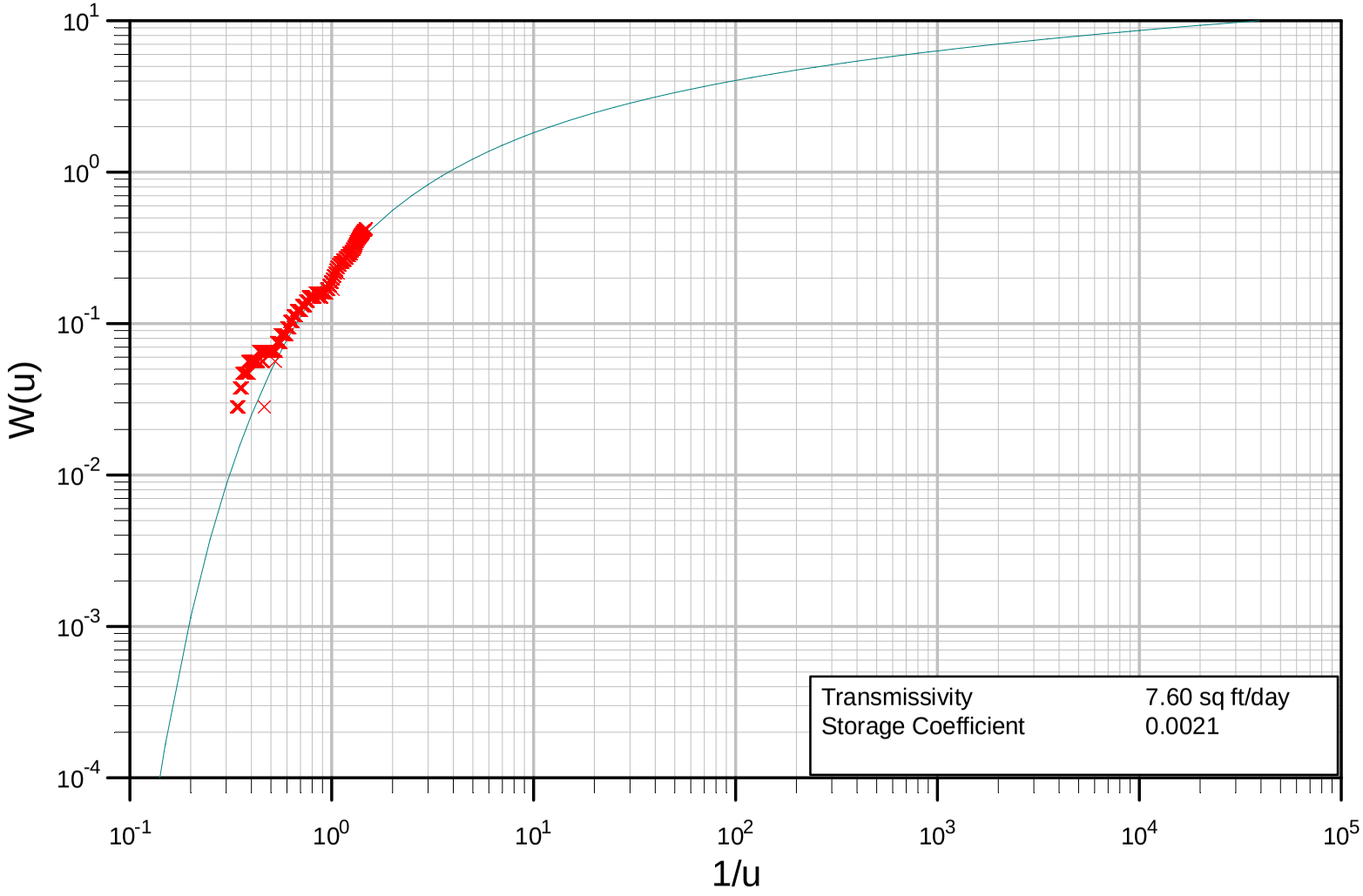
Pumping Well: X740-09B
Monitoring Well: X-740 PW02M Theis, 1935



CDM

Portsmouth Gaseous Diffusion Plant
Portsmouth, Ohio

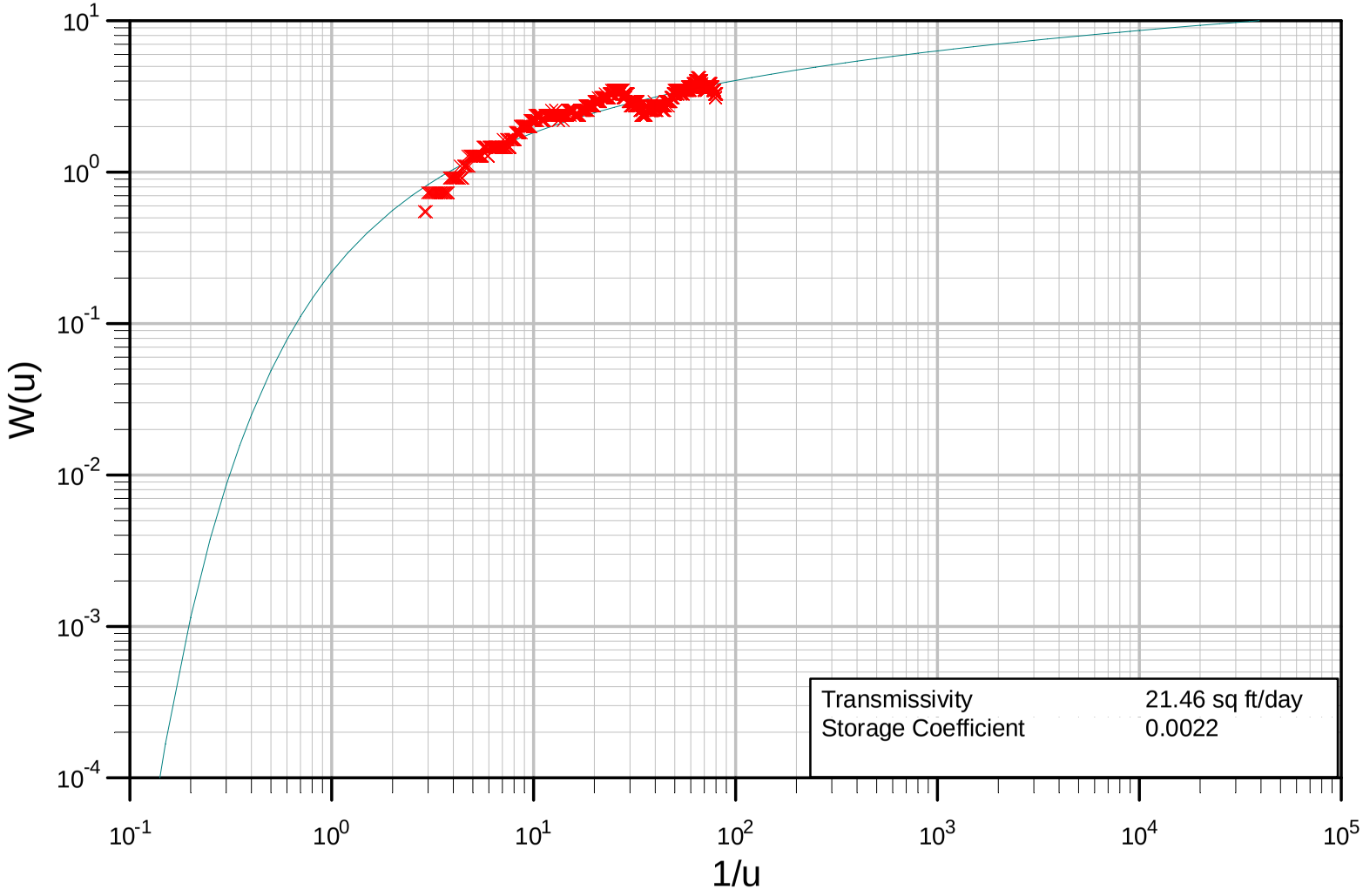
Pumping Well: X740-09B
Monitoring Well: X-740 PZ10G Theis, 1935



CDM

Portsmouth Gaseous Diffusion Plant
Portsmouth, Ohio

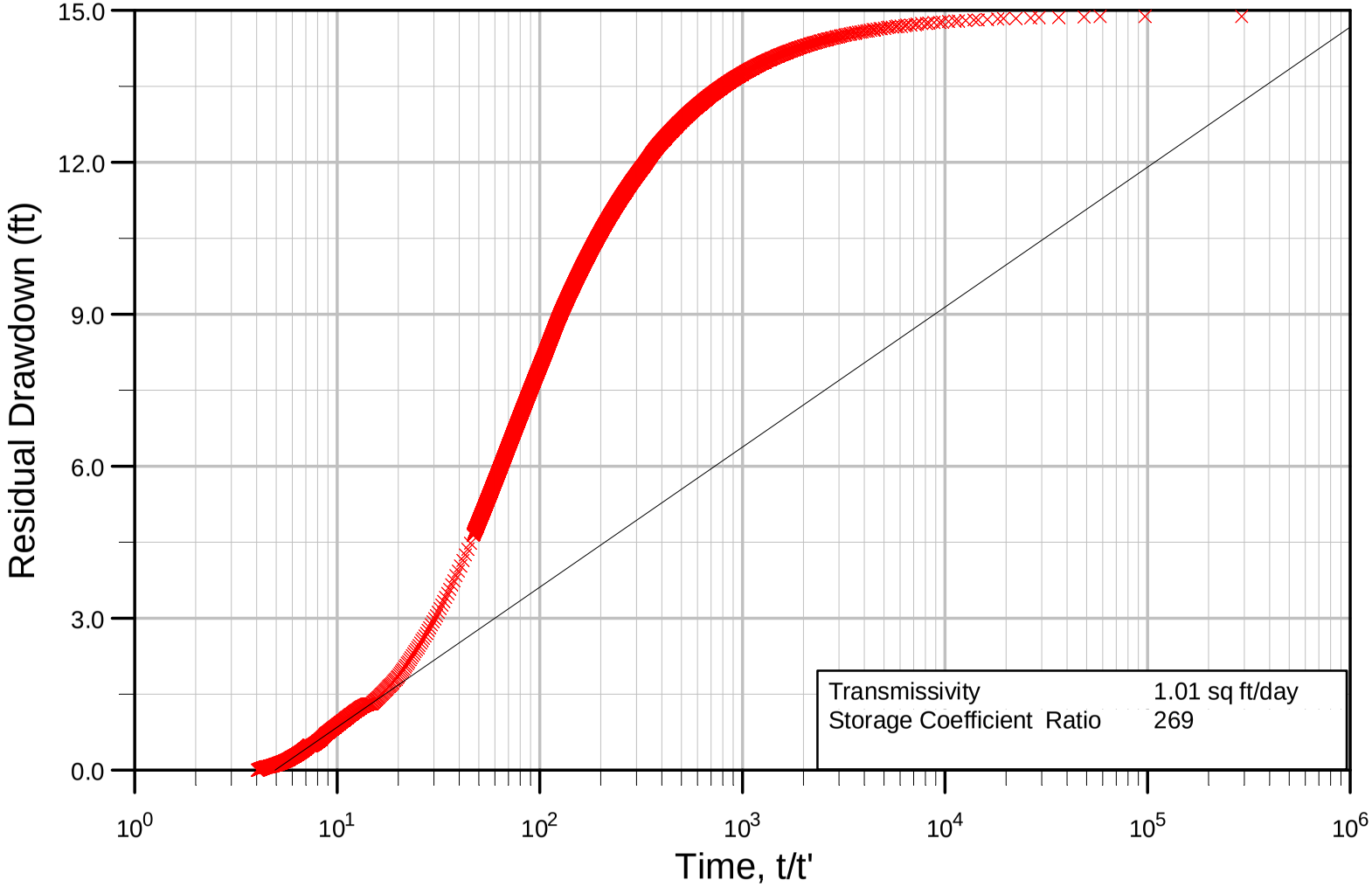
Pumping Well: X740-09B
Monitoring Well: X-740 PZ12G Theis, 1935



CDM

Portsmouth Gaseous Diffusion Plant
Portsmouth, Ohio

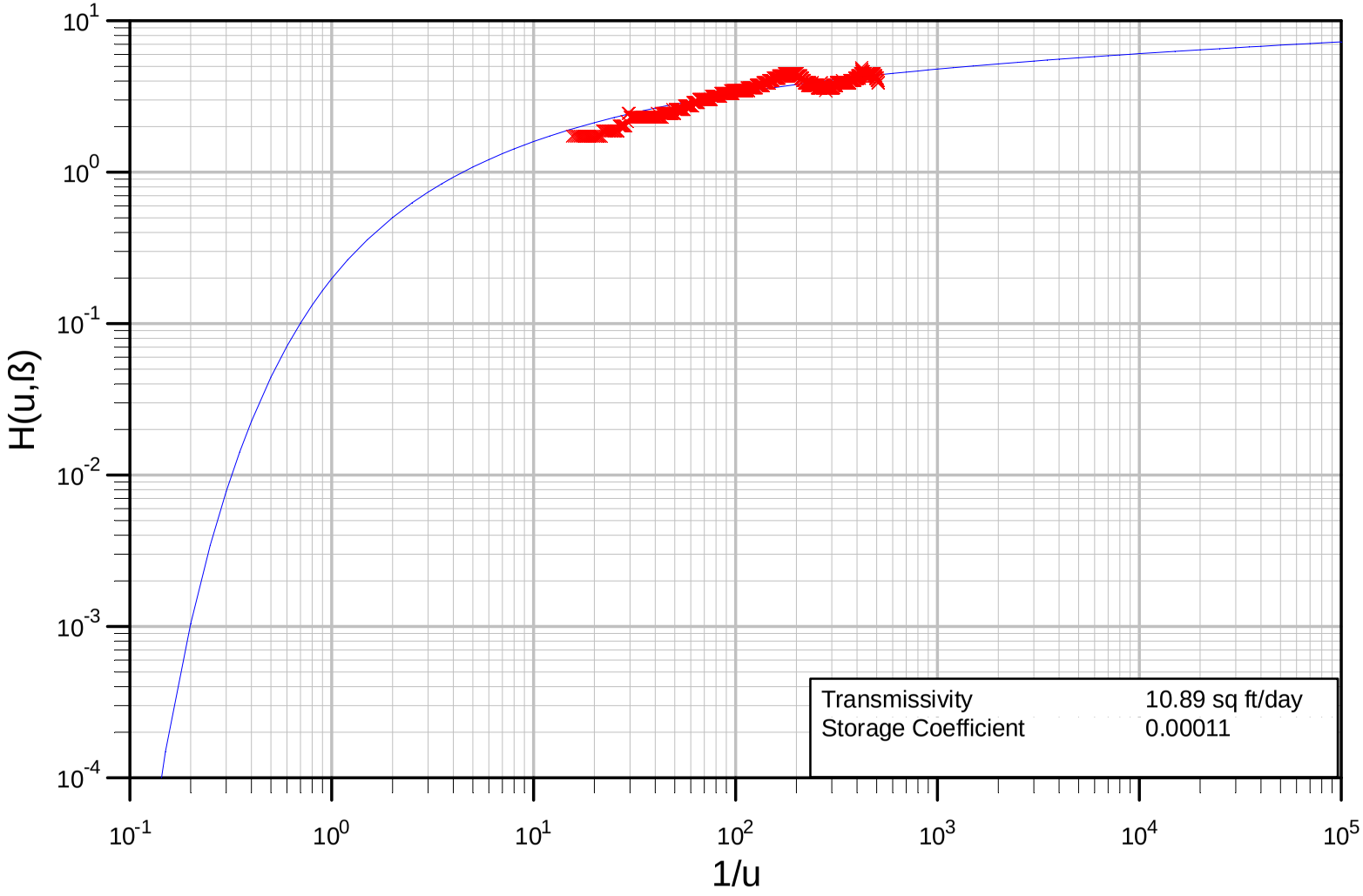
Pumping Well: X740-03G
Monitoring Well: X-740 02G Theis, 1935



CDM

Portsmouth Gaseous Diffusion Plant
Portsmouth, Ohio

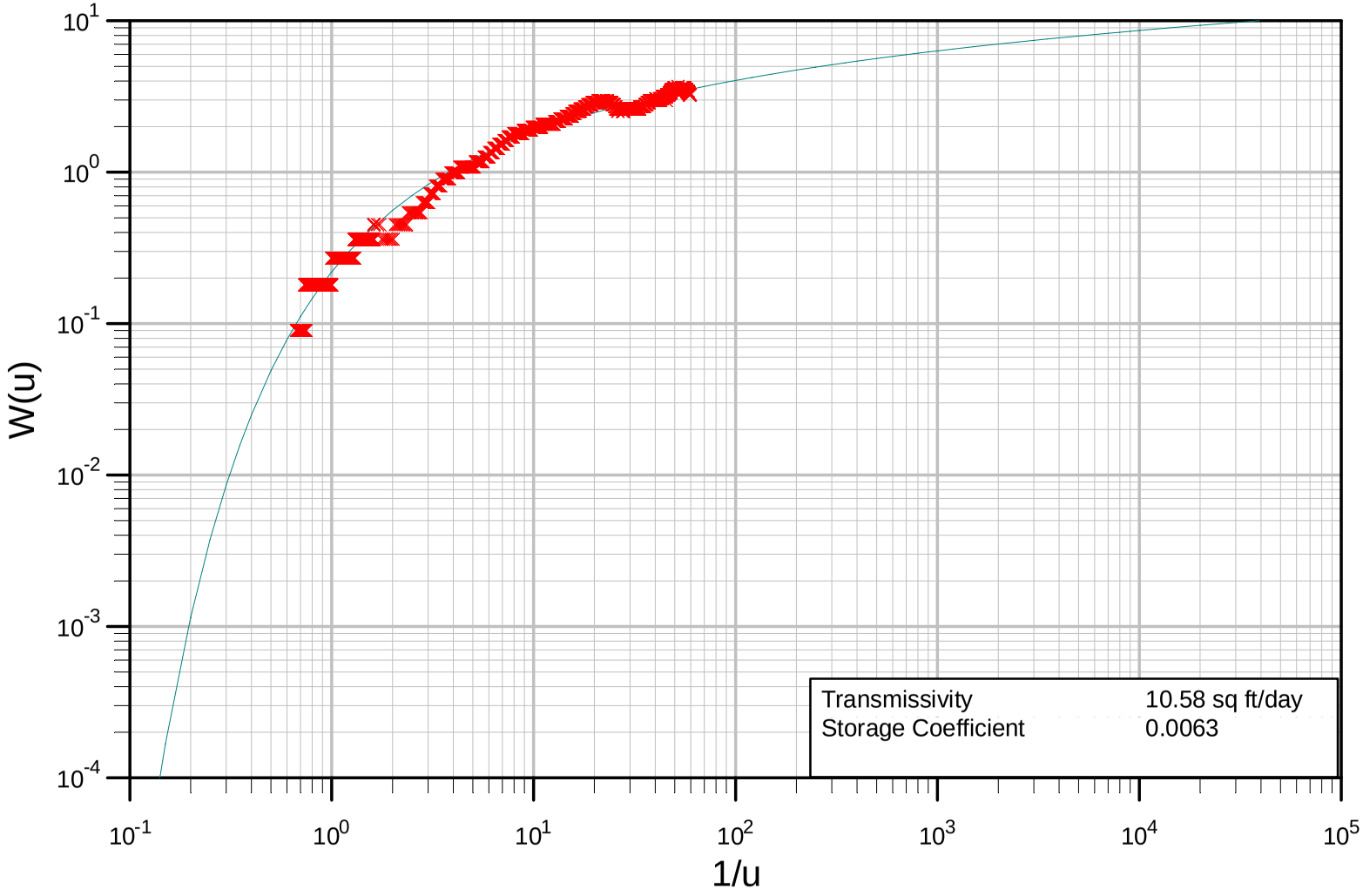
Pumping Well: X740-03G
Monitoring Well: X-740 03G Theis, 1946



CDM

Portsmouth Gaseous Diffusion Plant
Portsmouth, Ohio

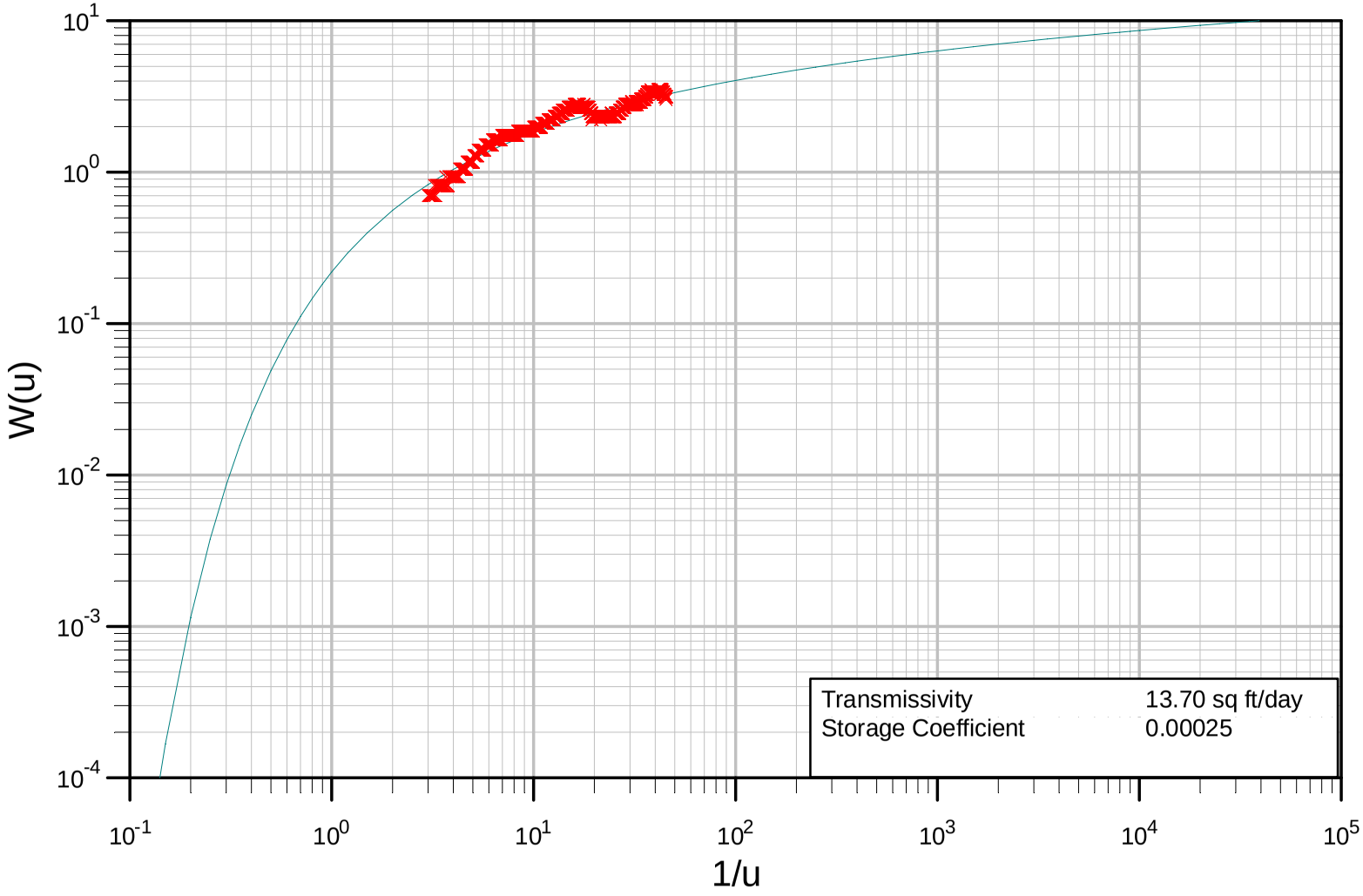
Pumping Well: X740-03G
Monitoring Well: X-740 08G Theis, 1935



CDM

Portsmouth Gaseous Diffusion Plant
Portsmouth, Ohio

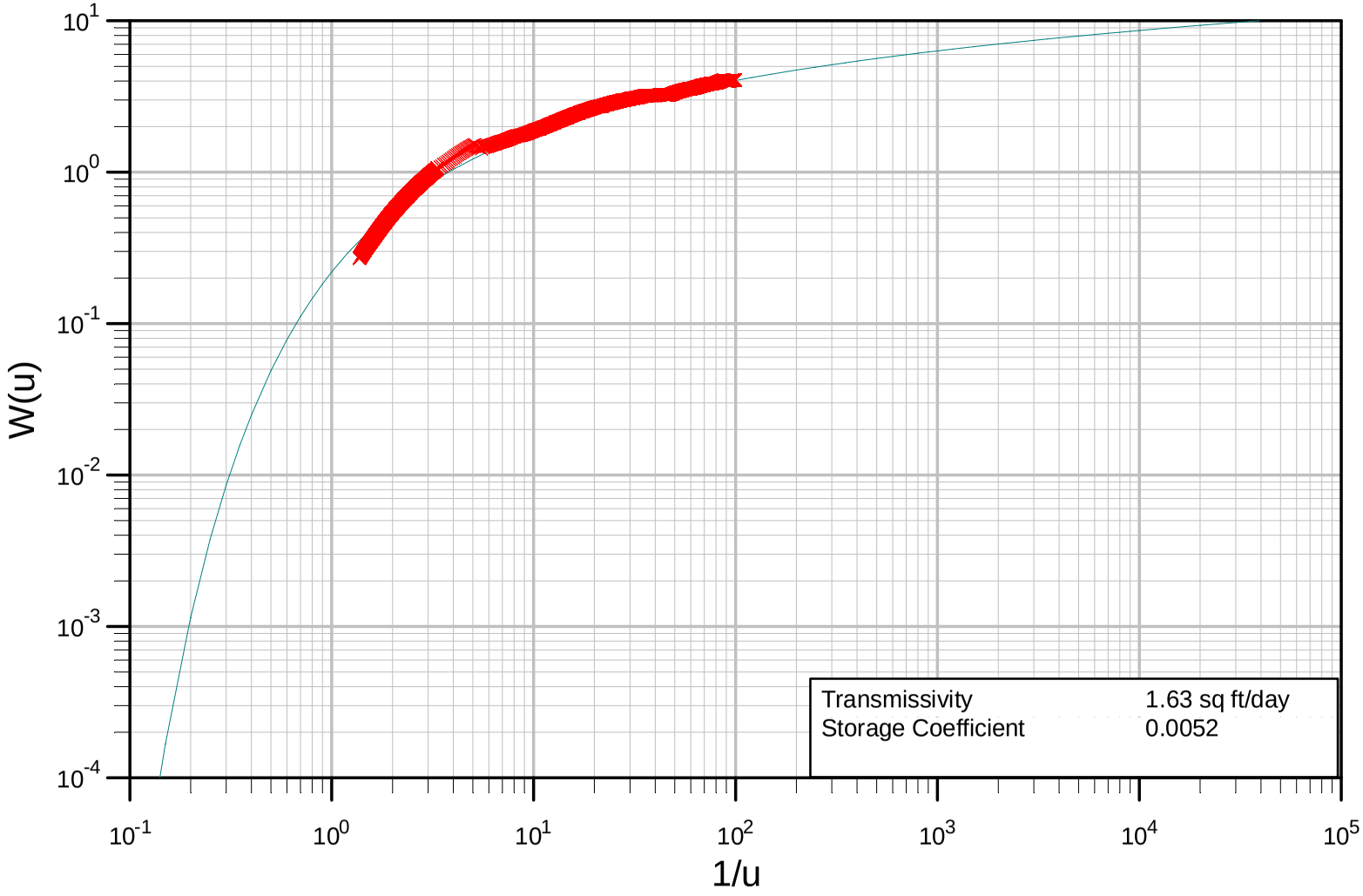
Pumping Well: X740-03G
Monitoring Well: X-740 09B Theis, 1935



CDM

Portsmouth Gaseous Diffusion Plant
Portsmouth, Ohio

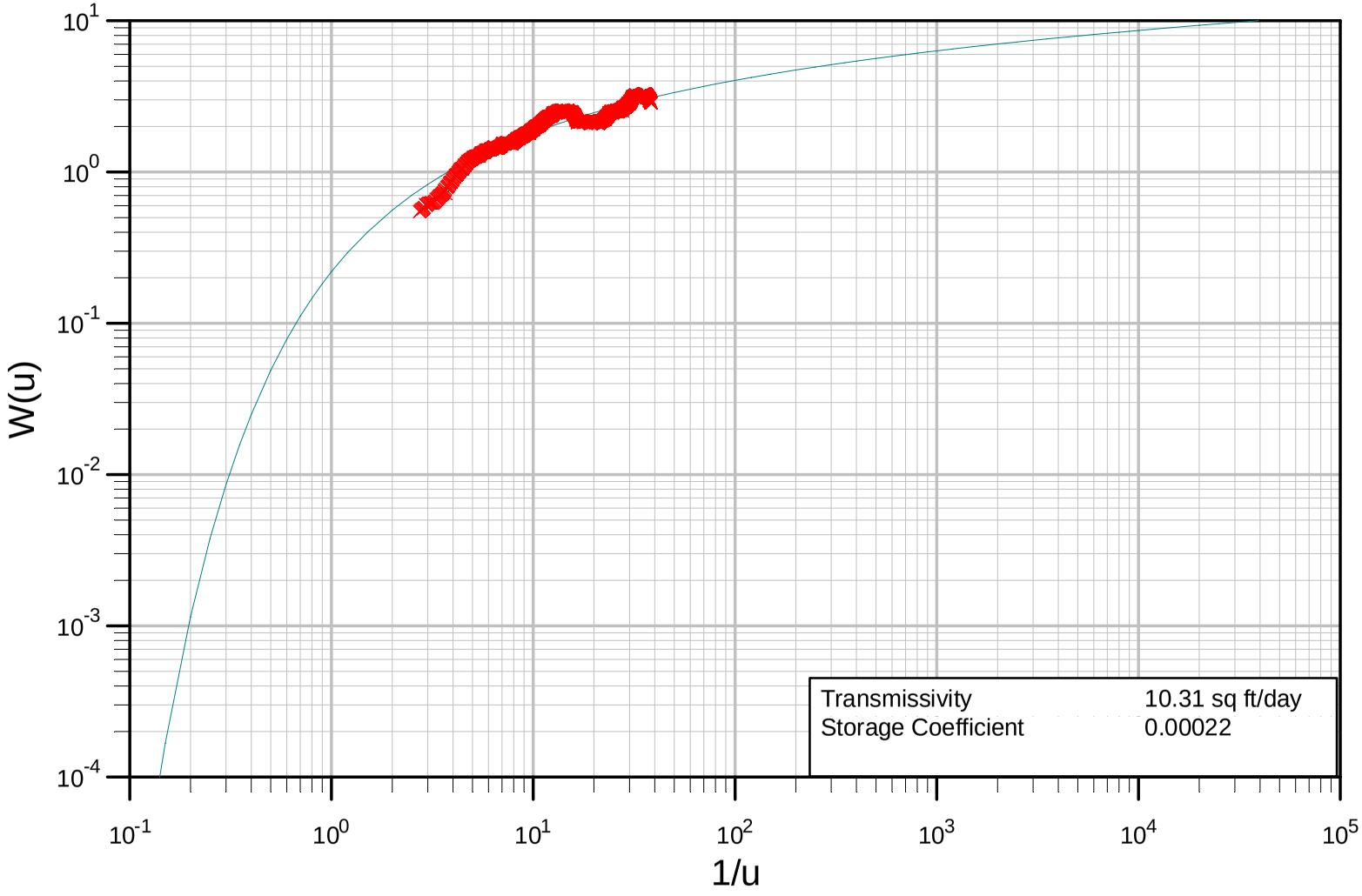
Pumping Well: X740-03G
Monitoring Well: X-740 10G Theis, 1935



CDM

Portsmouth Gaseous Diffusion Plant
Portsmouth, Ohio

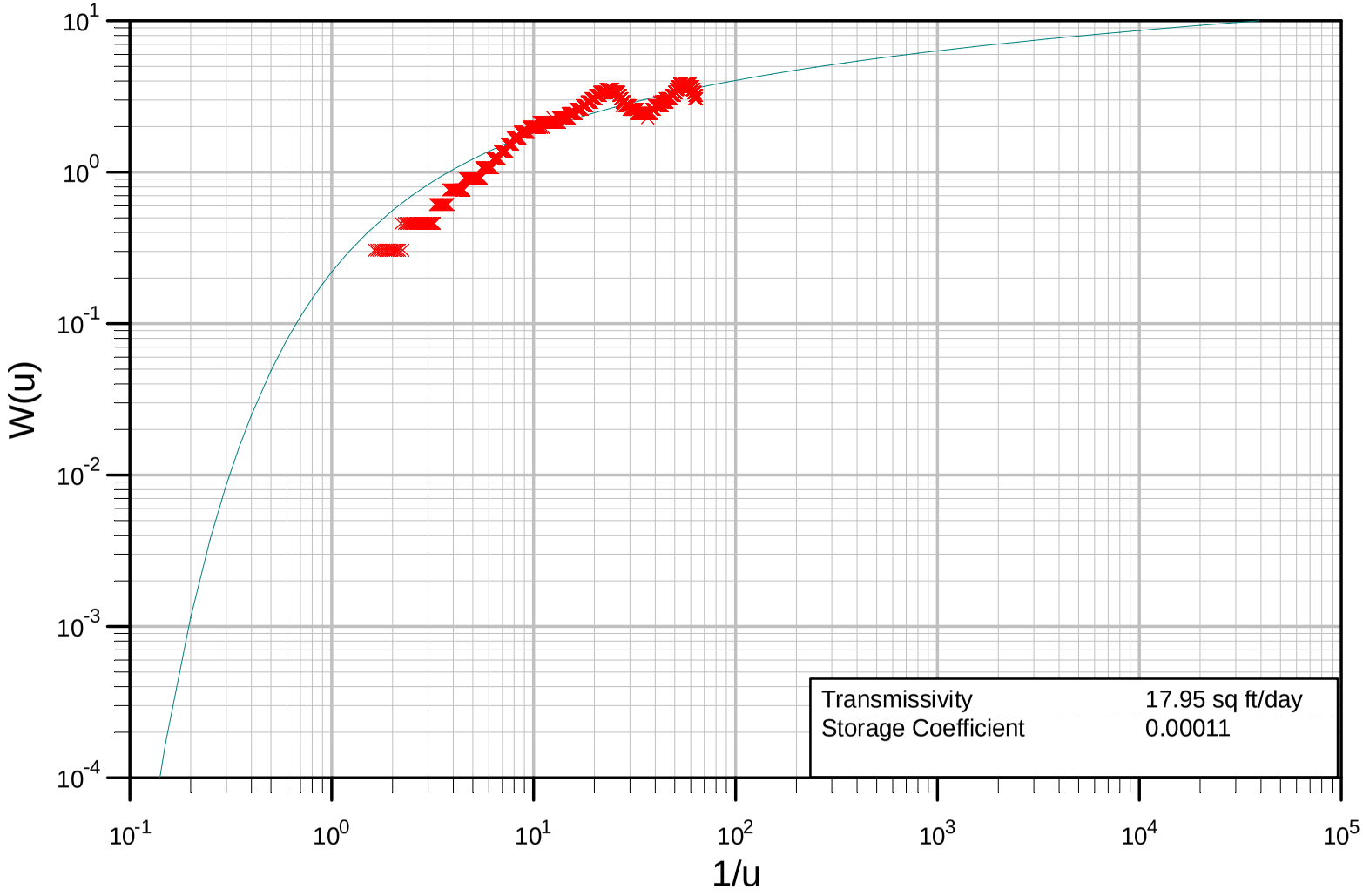
Pumping Well: X740-03G
Monitoring Well: X-740 PW02M Theis, 1935



CDM

Portsmouth Gaseous Diffusion Plant
Portsmouth, Ohio

Pumping Well: X740-03G
Monitoring Well: X-740 PZ10G Theis, 1935

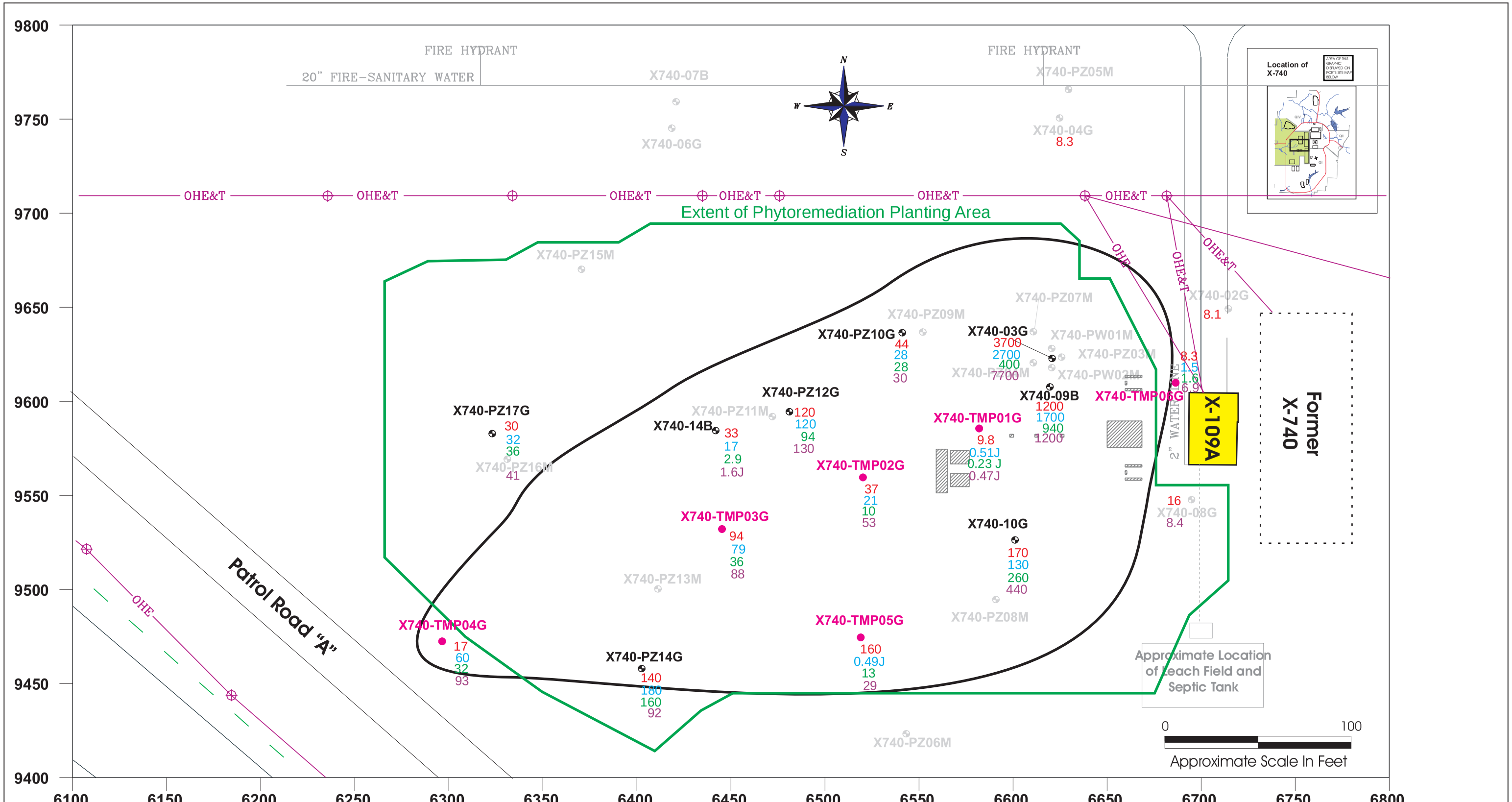


CDM

Portsmouth Gaseous Diffusion Plant
Portsmouth, Ohio

Pumping Well: X740-03G
Monitoring Well: X-740 PZ12G Theis, 1935

X-740 GROUNDWATER OPTIMIZATION RESULTS
BASELINE, PHASE I, PHASE II, PHASE III
NOVEMBER 2008



Legend

- Security Fence
- Planting Trench
- Installed Sand Filled Boring
- Overhead Powerlines with Locations of Poles

- 39 Baseline Result
- 79 Post Phase I Result
- 32 Post Phase II Result
- 92 Post Phase III Result

- X740-PZ17G — Monitoring Well for ISCO Soil Sample will be adjacent to well
- X740-TMP01G — Temporary Monitoring Point
- X740-08G — Monitoring Well

CDM

Fig.

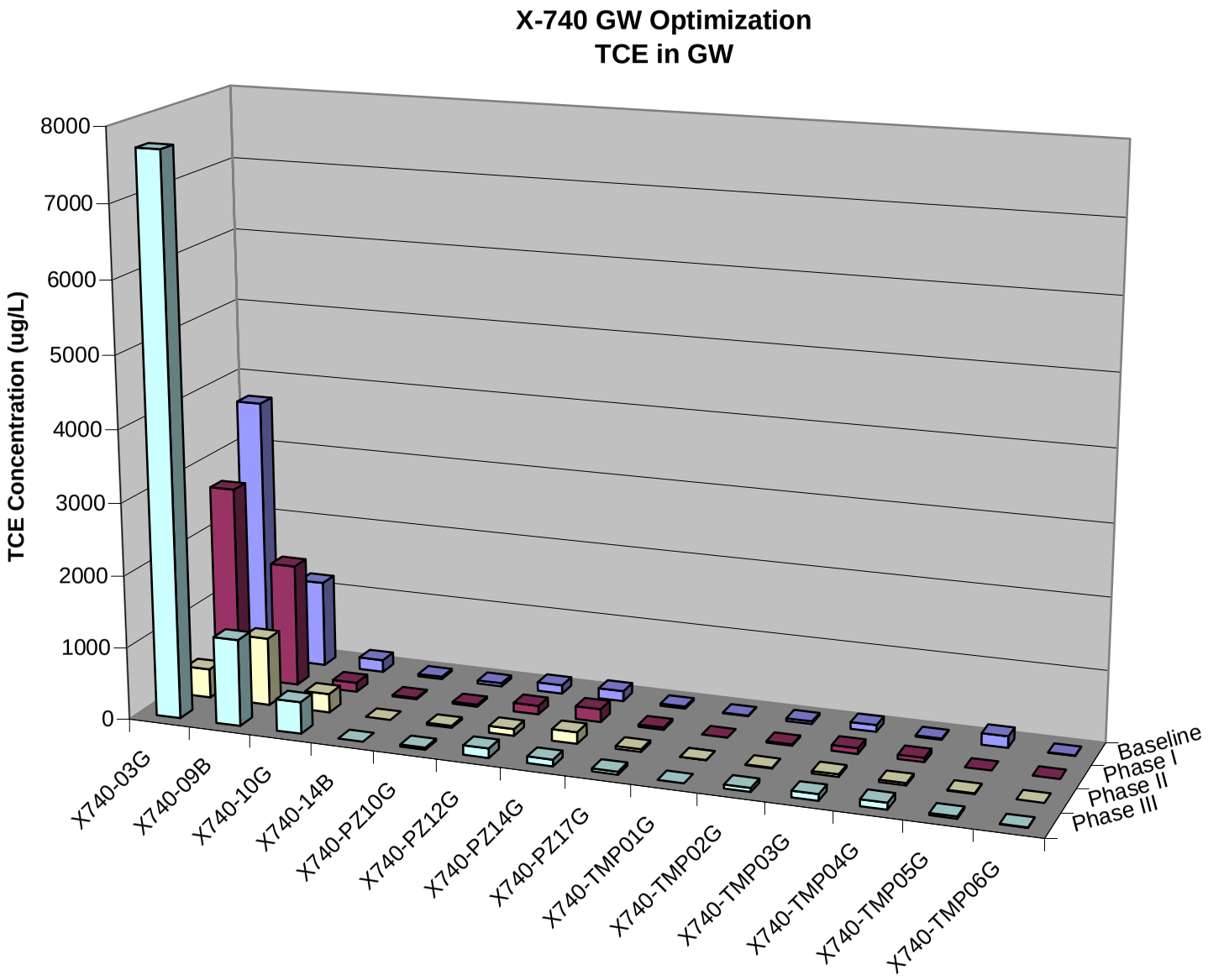
Monitoring well locations
Baseline and Post Phase I, II, & III Results
for the X-740 Phytoremediation Area

DOCUMENT ID:	DRAWING ID:	DRAWING DATE:
X-740 ISCO WP	X740 Monitoring locations.cdr	November 03, 2008

X-740 Groundwater Results
Max TCE results

GW Location	Units	Baseline	Phase I	Phase II	Phase III
X740-03G	ug/L	3700	2700	400	7700
X740-09B	ug/L	1200	1700	940	1200
X740-10G	ug/L	170	130	260	440
X740-14B	ug/L	33	17	2.9	1.6 J
X740-PZ10G	ug/L	44	28	28	30
X740-PZ12G	ug/L	120	120	94	130
X740-PZ14G	ug/L	140	180	160	92
X740-PZ17G	ug/L	30	32	36	41
X740-TMP01G	ug/L	9.8	0.51 J	0.23 J	0.47 J
X740-TMP02G	ug/L	37	21	10	53
X740-TMP03G	ug/L	94	79	36	88
X740-TMP04G	ug/L	17	60	32	93
X740-TMP05G	ug/L	160	0.49 J	13	29
X740-TMP06G	ug/L	8.3	1.5	1.6	6.9

Max	ug/L	3700	2700	940	7700
Mean	ug/L	412	362	144	707
Min	ug/L	8.3	0.49 J	0.23 J	0.47 J


X-740 GW Optimization
TCE in GW
TCE Concentration (ug/L)
8000
7000
6000
5000
4000
3000
2000
1000
0
X740-03G
X740-09B
X740-10G
X740-14B
X740-PZ10G
X740-PZ12G
X740-PZ14G
X740-PZ17G
X740-TMP01G
X740-TMP02G
X740-TMP03G
X740-TMP04G
X740-TMP05G
X740-TMP06G
Baseline
Phase I
Phase II
Phase III

X-740 GW Optimization
Summary of Baseline, Phase I, Phase II, and Phase III GW Results

Sta_Name	Phase ID	Chemical_Name	Units	Results	Rsltqual	D_Collected	Ana_Method	Lab_Code	Matrix	Med_Type	Smp_Type	Dilu_Fac	Detect_Limit	D_Analyzed
X740-02G	Baseline	Trichloroethene	ug/L	8.1		4/9/2008	SW846-8260B	STLCO	WATER	WG	REG	1	0.16	4/18/2008
X740-03G	Baseline	Trichloroethene	ug/L	3700		4/9/2008	SW846-8260B	STLCO	WATER	WG	REG	100	16	4/18/2008
X740-04G	Baseline	Trichloroethene	ug/L	8.3		4/9/2008	SW846-8260B	STLCO	WATER	WG	REG	1	0.16	4/18/2008
X740-04G	Baseline	Trichloroethene	ug/L	7		4/9/2008	SW846-8260B	STLCO	WATER	WG	FR	1	0.16	4/23/2008
X740-08G	Baseline	Trichloroethene	ug/L	16		4/9/2008	SW846-8260B	STLCO	WATER	WG	REG	1	0.16	4/18/2008
X740-08G	Baseline	Trichloroethene	ug/L	2	U	4/9/2008	SW846-8260B	STLCO	WATER	WQ	FB	1	0.16	4/18/2008
X740-09B	Baseline	Trichloroethene	ug/L	1200		4/9/2008	SW846-8260B	STLCO	WATER	WG	REG	40	6.4	4/18/2008
X740-10G	Baseline	Trichloroethene	ug/L	170		4/9/2008	SW846-8260B	STLCO	WATER	WG	REG	5	0.8	4/18/2008
X740-11G	Baseline	Trichloroethene	ug/L	14		4/10/2008	SW846-8260B	STLCO	WATER	WG	REG	1	0.16	4/18/2008
X740-12B	Baseline	Trichloroethene	ug/L	2	U	4/10/2008	SW846-8260B	STLCO	WATER	WG	REG	1	0.16	4/18/2008
X740-12B	Baseline	Trichloroethene	ug/L	2	U	4/10/2008	SW846-8260B	STLCO	WATER	WG	TB	1	0.16	4/18/2008
X740-13G	Baseline	Trichloroethene	ug/L	2	U	4/10/2008	SW846-8260B	STLCO	WATER	WG	REG	1	0.16	4/18/2008
X740-14B	Baseline	Trichloroethene	ug/L	33		4/8/2008	SW846-8260B	STLCO	WATER	WG	REG	1	0.16	4/18/2008
X740-PZ10G	Baseline	Trichloroethene	ug/L	2	U	4/9/2008	SW846-8260B	STLCO	WATER	WG	TB	1	0.16	4/18/2008
X740-PZ10G	Baseline	Trichloroethene	ug/L	44		4/9/2008	SW846-8260B	STLCO	WATER	WG	REG	1	0.16	4/18/2008
X740-PZ12G	Baseline	Trichloroethene	ug/L	2	U	4/8/2008	SW846-8260B	STLCO	WATER	WQ	FB	1	0.16	4/18/2008
X740-PZ12G	Baseline	Trichloroethene	ug/L	120		4/8/2008	SW846-8260B	STLCO	WATER	WG	REG	5	0.8	4/18/2008
X740-PZ14G	Baseline	Trichloroethene	ug/L	140		4/8/2008	SW846-8260B	STLCO	WATER	WG	REG	5	0.8	4/18/2008
X740-PZ17G	Baseline	Trichloroethene	ug/L	0.16	J	4/8/2008	SW846-8260B	STLCO	WATER	WG	TB	1	0.16	4/18/2008
X740-PZ17G	Baseline	Trichloroethene	ug/L	30		4/8/2008	SW846-8260B	STLCO	WATER	WG	REG	1	0.16	4/18/2008
X740-11G	Baseline	Trichloroethene	ug/L	14		4/10/2008	SW846-8260B	STLCO	WATER	WG	FR	1	0.16	4/18/2008
X740-TMP01G	Baseline	Trichloroethene	ug/L	9.8		4/7/2008	SW846-8260B	TACOL	WATER	WG	REG	1	0.16	4/10/2008
X740-TMP02G	Baseline	Trichloroethene	ug/L	37		4/7/2008	SW846-8260B	TACOL	WATER	WG	REG	1	0.16	4/10/2008
X740-TMP03G	Baseline	Trichloroethene	ug/L	94		4/7/2008	SW846-8260B	TACOL	WATER	WG	REG	4	0.64	4/10/2008
X740-TMP04G	Baseline	Trichloroethene	ug/L	17		4/7/2008	SW846-8260B	TACOL	WATER	WG	REG	1	0.16	4/10/2008
X740-TMP05G	Baseline	Trichloroethene	ug/L	160		4/7/2008	SW846-8260B	TACOL	WATER	WG	REG	6.66	1.1	4/10/2008
X740-TMP06G	Baseline	Trichloroethene	ug/L	8.3		4/7/2008	SW846-8260B	TACOL	WATER	WG	REG	1	0.16	4/10/2008
X740-03G	Phase I	Trichloroethene	ug/L	2700		5/27/2008	SW846-8260B	TACOL	WATER	WG	REG	66.67	11	6/2/2008
X740-03G	Phase I	Trichloroethene	ug/L	1	U	5/27/2008	SW846-8260B	TACOL	WATER	WG	TB	1	0.16	6/2/2008
X740-09B	Phase I	Trichloroethene	ug/L	1700		5/28/2008	SW846-8260B	TACOL	WATER	WG	REG	40	6.4	6/4/2008
X740-09B	Phase I	Trichloroethene	ug/L	1600		5/28/2008	SW846-8260B	TACOL	WATER	WG	FR	50	8	6/4/2008
X740-10G	Phase I	Trichloroethene	ug/L	130		5/28/2008	SW846-8260B	TACOL	WATER	WG	REG	5	0.8	6/4/2008
X740-14B	Phase I	Trichloroethene	ug/L	17		5/28/2008	SW846-8260B	TACOL	WATER	WG	REG	1	0.16	6/4/2008
X740-PZ10G	Phase I	Trichloroethene	ug/L	28		5/28/2008	SW846-8260B	TACOL	WATER	WG	REG	1	0.16	6/4/2008
X740-PZ10G	Phase I	Trichloroethene	ug/L	1	U	5/28/2008	SW846-8260B	TACOL	WATER	WG	TB	1	0.16	6/4/2008
X740-PZ12G	Phase I	Trichloroethene	ug/L	120		5/28/2008	SW846-8260B	TACOL	WATER	WG	REG	5	0.8	6/4/2008
X740-PZ14G	Phase I	Trichloroethene	ug/L	180		5/28/2008	SW846-8260B	TACOL	WATER	WG	REG	10	1.6	6/4/2008
X740-PZ14G	Phase I	Trichloroethene	ug/L	1	U	5/28/2008	SW846-8260B	TACOL	WATER	WQ	FB	1	0.16	6/4/2008
X740-PZ17G	Phase I	Trichloroethene	ug/L	32		5/28/2008	SW846-8260B	TACOL	WATER	WG	REG	1	0.16	6/4/2008
X740-TMP01G	Phase I	Trichloroethene	ug/L	0.51	J	5/27/2008	SW846-8260B	TACOL	WATER	WG	REG	1	0.16	6/2/2008
X740-TMP02G	Phase I	Trichloroethene	ug/L	21		5/27/2008	SW846-8260B	TACOL	WATER	WG	REG	1	0.16	6/2/2008
X740-TMP02G	Phase I	Trichloroethene	ug/L	1	U	5/27/2008	SW846-8260B	TACOL	WATER	WG	TB	1	0.16	6/2/2008
X740-TMP03G	Phase I	Trichloroethene	ug/L	79		5/27/2008	SW846-8260B	TACOL	WATER	WG	REG	2	0.32	6/2/2008
X740-TMP04G	Phase I	Trichloroethene	ug/L	60		5/27/2008	SW846-8260B	TACOL	WATER	WG	REG	1	0.16	6/2/2008
X740-TMP05G	Phase I	Trichloroethene	ug/L	0.49	J	5/27/2008	SW846-8260B	TACOL	WATER	WG	REG	1	0.16	6/2/2008
X740-TMP06G	Phase I	Trichloroethene	ug/L	1.5		5/27/2008	SW846-8260B	TACOL	WATER	WG	REG	1	0.16	6/2/2008
X740-03G	Phase II	Trichloroethene	ug/L	400		7/31/2008	SW846-8260B	TACOL	WATER	WG	REG	10	1.6	8/7/2008

X-740 GW Optimization
Summary of Baseline, Phase I, Phase II, and Phase III GW Results

Sta_Name	Phase ID	Chemical_Name	Units	Results	Rsltqual	D_Collected	Ana_Method	Lab_Code	Matrix	Med_Type	Smp_Type	Dilu_Fac	Detect_Limit	D_Analyzed
X740-03G	Phase II	Trichloroethene	ug/L	0.2	J	7/31/2008	SW846-8260B	TACOL	WATER	WQ	TB	1	0.16	8/7/2008
X740-09B	Phase II	Trichloroethene	ug/L	940		7/29/2008	SW846-8260B	TACOL	WATER	WG	REG	40	6.4	8/4/2008
X740-10G	Phase II	Trichloroethene	ug/L	260		7/31/2008	SW846-8260B	TACOL	WATER	WG	REG	5	0.8	8/7/2008
X740-10G	Phase II	Trichloroethene	ug/L	190		7/31/2008	SW846-8260B	TACOL	WATER	WG	FR	4	0.64	8/7/2008
X740-14B	Phase II	Trichloroethene	ug/L	2.9		7/29/2008	SW846-8260B	TACOL	WATER	WG	REG	1	0.16	8/4/2008
X740-PZ10G	Phase II	Trichloroethene	ug/L	28		7/29/2008	SW846-8260B	TACOL	WATER	WG	REG	1	0.16	8/4/2008
X740-PZ12G	Phase II	Trichloroethene	ug/L	94		7/29/2008	SW846-8260B	TACOL	WATER	WG	REG	4	0.64	8/4/2008
X740-PZ12G	Phase II	Trichloroethene	ug/L	1	U	7/29/2008	SW846-8260B	TACOL	WATER	WQ	FB	1	0.16	8/4/2008
X740-PZ14G	Phase II	Trichloroethene	ug/L	160		7/31/2008	SW846-8260B	TACOL	WATER	WG	REG	5	0.8	8/7/2008
X740-PZ17G	Phase II	Trichloroethene	ug/L	36		7/29/2008	SW846-8260B	TACOL	WATER	WG	REG	1	0.16	8/4/2008
X740-PZ17G	Phase II	Trichloroethene	ug/L	1	U	7/29/2008	SW846-8260B	TACOL	WATER	WQ	TB	1	0.16	8/4/2008
X740-TMP01G	Phase II	Trichloroethene	ug/L	0.23	J	7/28/2008	SW846-8260B	TACOL	WATER	WG	REG	1	0.16	7/31/2008
X740-TMP02G	Phase II	Trichloroethene	ug/L	10		7/28/2008	SW846-8260B	TACOL	WATER	WG	REG	1	0.16	7/31/2008
X740-TMP02G	Phase II	Trichloroethene	ug/L	1	U	7/28/2008	SW846-8260B	TACOL	WATER	WQ	TB	1	0.16	7/31/2008
X740-TMP03G	Phase II	Trichloroethene	ug/L	36		7/30/2008	SW846-8260B	TACOL	WATER	WG	REG	1	0.16	8/4/2008
X740-TMP03G	Phase II	Trichloroethene	ug/L	1	U	7/30/2008	SW846-8260B	TACOL	WATER	WQ	RIN	1	0.16	8/4/2008
X740-TMP04G	Phase II	Trichloroethene	ug/L	1	U	7/30/2008	SW846-8260B	TACOL	WATER	WQ	TB	1	0.16	8/4/2008
X740-TMP04G	Phase II	Trichloroethene	ug/L	32		7/30/2008	SW846-8260B	TACOL	WATER	WG	REG	1	0.16	8/4/2008
X740-TMP04G	Phase II	Trichloroethene	ug/L	1	U	7/30/2008	SW846-8260B	TACOL	WATER	WQ	FB	1	0.16	8/4/2008
X740-TMP05G	Phase II	Trichloroethene	ug/L	13		7/28/2008	SW846-8260B	TACOL	WATER	WG	REG	1	0.16	7/31/2008
X740-TMP06G	Phase II	Trichloroethene	ug/L	1.6		7/28/2008	SW846-8260B	TACOL	WATER	WG	REG	1	0.16	7/31/2008
X740-TMP06G	Phase II	Trichloroethene	ug/L	0.94	J	7/28/2008	SW846-8260B	TACOL	WATER	WG	FR	1	0.16	7/31/2008
X740-03G	Phase III	Trichloroethene	ug/L	7700		10/7/2008	SW846-8260B	TACOL	WATER	WG	REG	200	32	10/17/2008
X740-03G	Phase III	Trichloroethene	ug/L	2	U	10/7/2008	SW846-8260B	TACOL	WATER	WQ	TB	1	0.16	10/17/2008
X740-08G	Phase III	Trichloroethene	ug/L	8.4		10/7/2008	SW846-8260B	TACOL	WATER	WG	REG	1	0.16	10/17/2008
X740-09B	Phase III	Trichloroethene	ug/L	1200		10/7/2008	SW846-8260B	TACOL	WATER	WG	REG	20	3.2	10/17/2008
X740-10G	Phase III	Trichloroethene	ug/L	410		10/7/2008	SW846-8260B	TACOL	WATER	WG	REG	10	1.6	10/17/2008
X740-10G	Phase III	Trichloroethene	ug/L	440		10/7/2008	SW846-8260B	TACOL	WATER	WG	FR	10	1.6	10/17/2008
X740-13G	Phase III	Trichloroethene	ug/L	2	U	10/8/2008	SW846-8260B	TACOL	WATER	WG	REG	1	0.16	10/20/2008
X740-14B	Phase III	Trichloroethene	ug/L	1.6	J	10/6/2008	SW846-8260B	TACOL	WATER	WG	REG	1	0.16	10/17/2008
X740-PZ10G	Phase III	Trichloroethene	ug/L	30		10/7/2008	SW846-8260B	TACOL	WATER	WG	REG	1	0.16	10/17/2008
X740-PZ12G	Phase III	Trichloroethene	ug/L	2	U	10/6/2008	SW846-8260B	TACOL	WATER	WQ	FB	1	0.16	10/17/2008
X740-PZ12G	Phase III	Trichloroethene	ug/L	130		10/6/2008	SW846-8260B	TACOL	WATER	WG	REG	4	0.64	10/17/2008
X740-PZ12G	Phase III	Trichloroethene	ug/L	2	U	10/6/2008	SW846-8260B	TACOL	WATER	WQ	TB	1	0.16	10/17/2008
X740-PZ14G	Phase III	Trichloroethene	ug/L	92		10/6/2008	SW846-8260B	TACOL	WATER	WG	REG	4	0.64	10/17/2008
X740-PZ17G	Phase III	Trichloroethene	ug/L	41		10/6/2008	SW846-8260B	TACOL	WATER	WG	REG	1	0.16	10/17/2008
X740-TMP01G	Phase III	Trichloroethene	ug/L	0.47	J	10/8/2008	SW846-8260B	TACOL	WATER	WG	REG	1	0.16	10/17/2008
X740-TMP01G	Phase III	Trichloroethene	ug/L	1	U	10/8/2008	SW846-8260B	TACOL	WATER	WQ	RIN	1	0.16	10/17/2008
X740-TMP02G	Phase III	Trichloroethene	ug/L	53		10/8/2008	SW846-8260B	TACOL	WATER	WG	REG	4	0.64	10/17/2008
X740-TMP02G	Phase III	Trichloroethene	ug/L	1	U	10/8/2008	SW846-8260B	TACOL	WATER	WQ	TB	1	0.16	10/17/2008
X740-TMP03G	Phase III	Trichloroethene	ug/L	88		10/8/2008	SW846-8260B	TACOL	WATER	WG	REG	4	0.64	10/17/2008
X740-TMP04G	Phase III	Trichloroethene	ug/L	93		10/8/2008	SW846-8260B	TACOL	WATER	WG	REG	4	0.64	10/17/2008
X740-TMP04G	Phase III	Trichloroethene	ug/L	1	U	10/8/2008	SW846-8260B	TACOL	WATER	WQ	FB	1	0.16	10/17/2008
X740-TMP05G	Phase III	Trichloroethene	ug/L	29		10/8/2008	SW846-8260B	TACOL	WATER	WG	REG	1	0.16	10/20/2008
X740-TMP06G	Phase III	Trichloroethene	ug/L	6.7		10/8/2008	SW846-8260B	TACOL	WATER	WG	REG	1	0.16	10/20/2008
X740-TMP06G	Phase III	Trichloroethene	ug/L	6.9		10/8/2008	SW846-8260B	TACOL	WATER	WG	FR	1	0.16	10/20/2008

APPENDIX D

QUADRANT IV SAMPLING RESULTS

ANALYTICAL DATA TABLES
X-611A FORMER LIME SLUDGE LAGOONS

Laboratory Data Qualifiers and Other Abbreviations

B	Inorganics: the reported value was obtained from a reading that was less than practical quantitation limit but greater than or equal to the instrument detection limit. Organics: the analyte was detected in the laboratory blank sample.
E	Inorganics: the reported value is estimated because of the presence of interferences. Organics: the result exceeds the calibration range.
J	Organics: the reported value is an estimated concentration greater than the method detection limit but less than the practical quantitation limit. All others: the reported value is qualified as estimated.
P	Pesticide/Aroclor: there is greater than 25% difference for detected concentrations between the two gas chromatograph columns.
U	Undetected
nm	For field measurements: not measured due to insufficient water remaining in the well after sampling.

X-611A Former Lime Sludge Lagoons

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
F-07G						
Metals						
Beryllium	µg/L	6.5	6.6		5.8	
Chromium	µg/L	100	3.4		2.8	
Field Measurements						
Conductivity	µS/cm		2230		2264	
Depth to Water	ft		7.83		9.5	
Dissolved Oxygen	mg/L		nm		nm	
pH	Std Unit		3.47		3.64	
Temperature	deg C		10.4		17.27	
Turbidity	NTU		10		3	
F-08B						
Metals						
Beryllium	µg/L	7	1U		1U	
Chromium	µg/L	100	2U		2U	
Field Measurements						
Conductivity	µS/cm		1104		1026	
Depth to Water	ft		6.28		8.81	
Dissolved Oxygen	mg/L		3		3	
pH	Std Unit		7.61		8.45	
Temperature	deg C		9.6		17.08	
Turbidity	NTU		13		5	
X611-01B						
Metals						
Beryllium	µg/L	7	1U		1U	
Chromium	µg/L	100	5.6		1.3B	
Field Measurements						
Conductivity	µS/cm		1978		2191	
Depth to Water	ft		2.72		4.98	
Dissolved Oxygen	mg/L		nm		nm	
pH	Std Unit		6.63		6.71	
Temperature	deg C		10.2		18.17	
Turbidity	NTU		36		8	
X611-02BA						
Metals						
Beryllium	µg/L	7	1U		0.082B	
Chromium	µg/L	100	1.9B		1.5B	
Polychlorinated Biphenyls						
PCB-1016	µg/L					1U
PCB-1221	µg/L					1U
PCB-1232	µg/L					1U

X-611A Former Lime Sludge Lagoons

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X611-02BA						
PCB-1242	µg/L					1U
PCB-1248	µg/L					1U
PCB-1254	µg/L					1U
PCB-1260	µg/L	0.5				1U
PCB-1262	µg/L					1U
PCB-1268	µg/L					1U
Field Measurements						
Conductivity	µS/cm		889		971	906
Depth to Water	ft		15.18		16.73	16.42
Dissolved Oxygen	mg/L		nm		nm	nm
pH	Std Unit		6.31		6.77	6.38
Temperature	deg C		12.3		16.41	14.12
Turbidity	NTU		33		16	13
X611-03G						
Metals						
Beryllium	µg/L	6.5	1U		1U	
Chromium	µg/L	100	2U		2U	
Polychlorinated Biphenyls						
PCB-1016	µg/L					1U
PCB-1221	µg/L					1U
PCB-1232	µg/L					1U
PCB-1242	µg/L					1U
PCB-1248	µg/L					1U
PCB-1254	µg/L					1U
PCB-1260	µg/L					1U
PCB-1262	µg/L					1U
PCB-1268	µg/L					1U
Field Measurements						
Conductivity	µS/cm		626		648	635
Depth to Water	ft		1.58		4.47	3.05
Dissolved Oxygen	mg/L		2		2	3.24
pH	Std Unit		6.8		7.32	6.79
Temperature	deg C		8.5		19.68	11.81
Turbidity	NTU		29		3	17
X611-04BA						
Metals						
Beryllium	µg/L	7	0.31B		0.73B	
Chromium	µg/L	100	1.1B		0.9B	
Polychlorinated Biphenyls						
PCB-1016	µg/L					1U

X-611A Former Lime Sludge Lagoons

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X611-04BA						
PCB-1221	µg/L					1U
PCB-1232	µg/L					1U
PCB-1242	µg/L					1U
PCB-1248	µg/L					1U
PCB-1254	µg/L					1U
PCB-1260	µg/L					1U
PCB-1262	µg/L					1U
PCB-1268	µg/L					1U
Field Measurements						
Conductivity	µS/cm		773		801	941
Depth to Water	ft		11.63		14.07	13.48
Dissolved Oxygen	mg/L		nm		nm	nm
pH	Std Unit		5.71		6.44	5.87
Temperature	deg C		11.7		17.33	13.84
Turbidity	NTU		82		62	78

ANALYTICAL DATA TABLES
X-735 LANDFILLS

Laboratory Data Qualifiers and Other Abbreviations

B	Inorganics: the reported value was obtained from a reading that was less than practical quantitation limit but greater than or equal to the instrument detection limit. Organics: the analyte was detected in the laboratory blank sample.
E	Inorganics: the reported value is estimated because of the presence of interferences. Organics: the result exceeds the calibration range.
J	Organics: the reported value is an estimated concentration greater than the method detection limit but less than the practical quantitation limit. All others: the reported value is qualified as estimated.
P	Pesticide/Aroclor: there is greater than 25% difference for detected concentrations between the two gas chromatograph columns.
U	Undetected
nm	For field measurements: not measured due to insufficient water remaining in the well after sampling.

X-735 Landfills

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X735-01G						
Metals						
Antimony	µg/L	36.5		2U		
Arsenic	µg/L	92		0.28B		
Barium	µg/L	2000		11		
Beryllium	µg/L	6.5		1U		
Cadmium	µg/L	6.5		0.15B		
Calcium	µg/L			18000		
Chromium	µg/L	100		2U		
Cobalt	µg/L	13		0.13B		0.49B
Copper	µg/L	21		0.76B		
Iron	µg/L			410		
Lead	µg/L	50		1U		
Magnesium	µg/L			8800		
Manganese	µg/L	14,300		14		
Mercury	µg/L	2		0.2U		0.2U
Nickel	µg/L	100		1.7B		2.7
Potassium	µg/L			1200B		
Selenium	µg/L	50		5U		
Silver	µg/L	50		5U		
Sodium	µg/L			28000		26000
Thallium	µg/L	10.5		0.044B		
Vanadium	µg/L	713		5U		
Zinc	µg/L	30,500		3.7B		
Volatile Organic Compounds						
1,1,1,2-Tetrachloroethane	µg/L	11		1U		
1,1,1-Trichloroethane	µg/L	200		1U		
1,1,2,2-Tetrachloroethane	µg/L	0.83		1U		
1,1,2-Trichloroethane	µg/L	5		1U		
1,1-Dichloroethane	µg/L	5860		0.33J		
1,1-Dichloroethene	µg/L	7		1U		
1,2,3-Trichloropropane	µg/L	0.0379		1U		
1,2-Dibromo-3-chloropropane	µg/L	0.2		5U		
1,2-Dibromoethane	µg/L			1U		
1,2-Dichlorobenzene	µg/L	600		1U		
1,2-Dichloroethane	µg/L	5		1U		
1,2-Dichloropropane	µg/L	5		1U		
1,2-Dimethylbenzene	µg/L	10,000		1U		
1,4-Dichlorobenzene	µg/L	75		1U		
2-Butanone	µg/L	53,800		6U		

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X735-01G						
2-Hexanone	µg/L			5U		
4-Methyl-2-pentanone	µg/L	6360		5U		
Acetone	µg/L	10,200		10U		
Acrylonitrile	µg/L	0.431		20U		
Benzene	µg/L	5		1U		
Bromochloromethane	µg/L			1U		
Bromodichloromethane	µg/L	100		1U		
Bromoform	µg/L	100		1U		
Bromomethane	µg/L	140		2U		
Carbon disulfide	µg/L	6270		2U		
Carbon tetrachloride	µg/L	5		1U		
Chlorobenzene	µg/L	100		1U		
Chloroethane	µg/L	246,000		2U		
Chloroform	µg/L	100		1U		
Chloromethane	µg/L	13.4		2U		
cis-1,2-Dichloroethene	µg/L	70		1U		
cis-1,3-Dichloropropene	µg/L			1U		
Dibromochloromethane	µg/L	3.12		1U		
Dibromomethane	µg/L	999		1U		
Ethylbenzene	µg/L	700		1U		
Hexachlorobutadiene	µg/L	3.7		5U		
Iodomethane	µg/L			1U		
M + P Xylene	µg/L	10,000		2U		
Methylene chloride	µg/L	5		0.52J		
Styrene	µg/L	100		1U		
Tetrachloroethene	µg/L	5		1U		
Toluene	µg/L	1000		1U		
trans-1,2-Dichloroethene	µg/L	100		1U		
trans-1,3-Dichloropropene	µg/L			1U		
trans-1,4-Dichloro-2-butene	µg/L			3U		
Trichloroethene	µg/L	5		1U		
Trichlorofluoromethane	µg/L	12,100		2U		
Vinyl acetate	µg/L	6840		3U		
Vinyl chloride	µg/L	2		1U		
Semivolatile Organic Compounds						
2,4,6-trichlorophenol	µg/L	26		5U		
2,4-Dichlorophenol	µg/L			5U		
2,4-Dimethylphenol	µg/L			5U		
2-Chlorophenol	µg/L	465		5U		
2-Methyl-4,6-dinitrophenol	µg/L			5U		

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X735-01G						
2-Methylphenol	µg/L	4760		5U		
2-Nitrophenol	µg/L			5U		
4-Chloro-3-methylphenol	µg/L			5U		
4-Nitrophenol	µg/L			5U		
Acenaphthene	µg/L			5U		
Acenaphthylene	µg/L			5U		
Anthracene	µg/L			5U		
Benzo(a)pyrene	µg/L			5U		
Bis(2-chloroethyl) ether	µg/L			5U		
Bis(2-chloroisopropyl) ether	µg/L			5U		
Bis(2-ethylhexyl)phthalate	µg/L	6		5U		
Butyl benzyl phthalate	µg/L	14,900		5U		
Chrysene	µg/L			5U		
Diethyl phthalate	µg/L	71,300		5U		
Dimethyl phthalate	µg/L			5U		
Di-n-butyl phthalate	µg/L	7450		5U		
Di-n-octylphthalate	µg/L	1470		5U		
Diphenylamine	µg/L			5U		
Fluoranthene	µg/L			5U		
Fluorene	µg/L			5U		
Hexachlorobenzene	µg/L	1		5U		
Hexachlorocyclopentadiene	µg/L			5U		
Hexachloroethane	µg/L	20		5U		
m+p Methylphenol	µg/L			5U		
Naphthalene	µg/L	3210		5U		
Nitrobenzene	µg/L	47.9		5U		
Pentachlorophenol	µg/L	1		5U		
Phenanthrene	µg/L			5U		
Phenol	µg/L	59,300		5U		
Pyrene	µg/L			5U		
Radionuclides						
Americium-241	pCi/L	0.49		0.02878U		0.02461U
Neptunium-237	pCi/L	0.54		0.00001479U		-0.01461U
Plutonium-238	pCi/L			0.01477U		0U
Plutonium-239/240	pCi/L	0.51		0.05166U		0.00729U
Technetium-99	pCi/L	3790		1.12U		-3.9U
Uranium	µg/L	1000		0.05768U		0.01819U
Uranium-233/234	pCi/L	124,000		0.01351U		0.0413U
Uranium-235	pCi/L	43		-0.008282U		-0.008478U
Uranium-236	pCi/L			0U		0U

X-735 Landfills

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X735-01G						
Uranium-238	pCi/L	6.7		0.02012U		0.006866U
Polychlorinated Biphenyls						
PCB-1016	µg/L			1U		
PCB-1221	µg/L			1U		
PCB-1232	µg/L			1U		
PCB-1242	µg/L			1U		
PCB-1248	µg/L			1U		
PCB-1254	µg/L			1U		
PCB-1260	µg/L	0.5		1U		
Other Parameters						
Alkalinity	mg/L			37		36
Ammonia as Nitrogen	mg/L			0.12		
Chemical Oxygen Demand (COD)	mg/L			4.1B		
Chloride	mg/L			34		30
Cyanide	mg/L	200,000		0.0041B		
Dissolved Solids	mg/L			200		190
Nitrate/Nitrite as Nitrogen	mg/L			0.48		
Sulfate	mg/L			49		48
Sulfide	mg/L			4U		
Herbicides and Pesticides						
2,4-D	µg/L	70		4U		
4,4'-DDD	µg/L	0.859		0.05U		
4,4'-DDE	µg/L			0.05U		
4,4'-DDT	µg/L	0.46		0.05U		
alpha-BHC	µg/L			0.05U		
beta-BHC	µg/L			0.05U		
Chlordane	µg/L			0.5U		
delta-BHC	µg/L			0.05U		
Dieldrin	µg/L			0.05U		
Endosulfan I	µg/L			0.05U		
Endosulfan II	µg/L			0.05U		
Endrin	µg/L			0.05U		
Heptachlor	µg/L	0.4		0.05U		
Heptachlor epoxide	µg/L	0.2		0.05U		
Lindane	µg/L	0.2		0.05U		
Methoxychlor	µg/L			0.1U		
Silvex	µg/L	50		1U		
Toxaphene	µg/L			5U		
Field Measurements						
Conductivity	µS/cm			298		288

X-735 Landfills

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X735-01G						
Depth to Water	ft			21.93		24.38
Dissolved Oxygen	mg/L			2		4.13
pH	Std Unit			5.85		5.73
Temperature	deg C			13.7		13.48
Turbidity	NTU			2		5
X735-01GA						
Metals						
Antimony	µg/L	36.5		2U		
Arsenic	µg/L	92		0.29B		
Barium	µg/L	2000		18		
Beryllium	µg/L	6.5		1U		
Cadmium	µg/L	6.5		1U		
Calcium	µg/L			26000		
Chromium	µg/L	100		3.6		
Cobalt	µg/L	13		0.069B		0.42B
Copper	µg/L	21		2U		
Iron	µg/L			200		
Lead	µg/L	50		1U		
Magnesium	µg/L			13000		
Manganese	µg/L	14,300		2.8		
Mercury	µg/L	2		0.2U		0.2U
Nickel	µg/L	100		2.2		15
Potassium	µg/L			1500B		
Selenium	µg/L	50		1.1B		
Silver	µg/L	50		5U		
Sodium	µg/L			26000		24000
Thallium	µg/L	10.5		1U		
Vanadium	µg/L	713		0.3B		
Zinc	µg/L	30,500		10U		
Volatile Organic Compounds						
1,1,1,2-Tetrachloroethane	µg/L	11		1U		
1,1,1-Trichloroethane	µg/L	200		1U		
1,1,2,2-Tetrachloroethane	µg/L	0.83		1U		
1,1,2-Trichloroethane	µg/L	5		1U		
1,1-Dichloroethane	µg/L	5860		1U		
1,1-Dichloroethene	µg/L	7		1U		
1,2,3-Trichloropropane	µg/L	0.0379		1U		
1,2-Dibromo-3-chloropropane	µg/L	0.2		5U		
1,2-Dibromoethane	µg/L			1U		
1,2-Dichlorobenzene	µg/L	600		1U		

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X735-01GA						
1,2-Dichloroethane	µg/L	5		1U		
1,2-Dichloropropane	µg/L	5		1U		
1,2-Dimethylbenzene	µg/L	10,000		1U		
1,4-Dichlorobenzene	µg/L	75		1U		
2-Butanone	µg/L	53,800		6U		
2-Hexanone	µg/L			5U		
4-Methyl-2-pentanone	µg/L	6360		5U		
Acetone	µg/L	10,200		10U		
Acrylonitrile	µg/L	0.431		20U		
Benzene	µg/L	5		1U		
Bromochloromethane	µg/L			1U		
Bromodichloromethane	µg/L	100		1U		
Bromoform	µg/L	100		1U		
Bromomethane	µg/L	140		2U		
Carbon disulfide	µg/L	6270		2U		
Carbon tetrachloride	µg/L	5		1U		
Chlorobenzene	µg/L	100		1U		
Chloroethane	µg/L	246,000		2U		
Chloroform	µg/L	100		1U		
Chloromethane	µg/L	13.4		2U		
cis-1,2-Dichloroethene	µg/L	70		1U		
cis-1,3-Dichloropropene	µg/L			1U		
Dibromochloromethane	µg/L	3.12		1U		
Dibromomethane	µg/L	999		1U		
Ethylbenzene	µg/L	700		1U		
Hexachlorobutadiene	µg/L	3.7		5U		
Iodomethane	µg/L			1U		
M + P Xylene	µg/L	10,000		2U		
Methylene chloride	µg/L	5		0.54J		
Styrene	µg/L	100		1U		
Tetrachloroethene	µg/L	5		1U		
Toluene	µg/L	1000		1U		
trans-1,2-Dichloroethene	µg/L	100		1U		
trans-1,3-Dichloropropene	µg/L			1U		
trans-1,4-Dichloro-2-butene	µg/L			3U		
Trichloroethene	µg/L	5		1U		
Trichlorofluoromethane	µg/L	12,100		2U		
Vinyl acetate	µg/L	6840		3U		
Vinyl chloride	µg/L	2		1U		
Semivolatile Organic Compounds						

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X735-01GA						
2,4,6-trichlorophenol	µg/L	26		5U		
2,4-Dichlorophenol	µg/L			5U		
2,4-Dimethylphenol	µg/L			5U		
2-Chlorophenol	µg/L	465		5U		
2-Methyl-4,6-dinitrophenol	µg/L			5U		
2-Methylphenol	µg/L	4760		5U		
2-Nitrophenol	µg/L			5U		
4-Chloro-3-methylphenol	µg/L			5U		
4-Nitrophenol	µg/L			5U		
Acenaphthene	µg/L			5U		
Acenaphthylene	µg/L			5U		
Anthracene	µg/L			5U		
Benzo(a)pyrene	µg/L			5U		
Bis(2-chloroethyl) ether	µg/L			5U		
Bis(2-chloroisopropyl) ether	µg/L			5U		
Bis(2-ethylhexyl)phthalate	µg/L	6		5U		
Butyl benzyl phthalate	µg/L	14,900		5U		
Chrysene	µg/L			5U		
Diethyl phthalate	µg/L	71,300		5U		
Dimethyl phthalate	µg/L			5U		
Di-n-butyl phthalate	µg/L	7450		5U		
Di-n-octylphthalate	µg/L	1470		5U		
Diphenylamine	µg/L			5U		
Fluoranthene	µg/L			5U		
Fluorene	µg/L			5U		
Hexachlorobenzene	µg/L	1		5U		
Hexachlorocyclopentadiene	µg/L			5U		
Hexachloroethane	µg/L	20		5U		
m+p Methylphenol	µg/L			5U		
Naphthalene	µg/L	3210		5U		
Nitrobenzene	µg/L	47.9		5U		
Pentachlorophenol	µg/L	1		5U		
Phenanthrene	µg/L			5U		
Phenol	µg/L	59,300		5U		
Pyrene	µg/L			5U		
Radionuclides						
Americium-241	pCi/L	0.49		0.01506U		-0.008924U
Neptunium-237	pCi/L	0.54		0.00002153U		-0.0821U
Plutonium-238	pCi/L			-0.007149U		0.0164U
Plutonium-239/240	pCi/L	0.51		-0.0143U		0U

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X735-01GA						
Technetium-99	pCi/L	3790		-0.788U		-6.53U
Uranium	µg/L	1000		-0.01711U		0.06124U
Uranium-233/234	pCi/L	124,000		0.01951U		0.03976U
Uranium-235	pCi/L	43		0.008017U		0.008173U
Uranium-236	pCi/L			0U		0U
Uranium-238	pCi/L	6.7		-0.006466U		0.01985U
Polychlorinated Biphenyls						
PCB-1016	µg/L			1U		
PCB-1221	µg/L			1U		
PCB-1232	µg/L			1U		
PCB-1242	µg/L			1U		
PCB-1248	µg/L			1U		
PCB-1254	µg/L			1U		
PCB-1260	µg/L	0.5		1U		
Other Parameters						
Alkalinity	mg/L			53		56
Ammonia as Nitrogen	mg/L			0.1		
Chemical Oxygen Demand (COD)	mg/L			20U		
Chloride	mg/L			37		48
Cyanide	mg/L	200,000		0.0045B		
Dissolved Solids	mg/L			240		240
Nitrate/Nitrite as Nitrogen	mg/L			1.5		
Sulfate	mg/L			61		63
Sulfide	mg/L			4U		
Herbicides and Pesticides						
2,4-D	µg/L	70		4U		
4,4'-DDD	µg/L	0.859		0.05U		
4,4'-DDE	µg/L			0.05U		
4,4'-DDT	µg/L	0.46		0.05U		
alpha-BHC	µg/L			0.05U		
beta-BHC	µg/L			0.05U		
Chlordane	µg/L			0.5U		
delta-BHC	µg/L			0.05U		
Dieldrin	µg/L			0.05U		
Endosulfan I	µg/L			0.05U		
Endosulfan II	µg/L			0.05U		
Endrin	µg/L			0.05U		
Heptachlor	µg/L	0.4		0.05U		
Heptachlor epoxide	µg/L	0.2		0.05U		
Lindane	µg/L	0.2		0.05U		

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X735-01GA						
Methoxychlor	µg/L			0.1U		
Silvex	µg/L	50		1U		
Toxaphene	µg/L			5U		
Field Measurements						
Conductivity	µS/cm			355		401
Depth to Water	ft			25.41		27.81
Dissolved Oxygen	mg/L			1		1.21
pH	Std Unit			5.71		5.6
Temperature	deg C			13.6		12.19
Turbidity	NTU			11		18
X735-02GA						
Metals						
Antimony	µg/L	36.5		2U		
Arsenic	µg/L	92		5U		
Barium	µg/L	2000		11		
Beryllium	µg/L	6.5		1U		
Cadmium	µg/L	6.5		0.07B		
Calcium	µg/L			16000		
Chromium	µg/L	100		2U		
Cobalt	µg/L	13		0.056B		0.058B
Copper	µg/L	21		2U		
Iron	µg/L			100U		
Lead	µg/L	50		1U		
Magnesium	µg/L			7900		
Manganese	µg/L	14,300		8.2		
Mercury	µg/L	2		0.046B		0.2U
Nickel	µg/L	100		2.3		2.2
Potassium	µg/L			1100B		
Selenium	µg/L	50		0.86B		
Silver	µg/L	50		5U		
Sodium	µg/L			24000		24000
Thallium	µg/L	10.5		1U		
Tin	µg/L	61,100		10U		
Vanadium	µg/L	713		5U		
Zinc	µg/L	30,500		2.7B		
Volatile Organic Compounds						
1,1,1,2-Tetrachloroethane	µg/L	11		1U		
1,1,1-Trichloroethane	µg/L	200		1U		
1,1,2,2-Tetrachloroethane	µg/L	0.83		1U		
1,1,2-Trichloroethane	µg/L	5		1U		

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X735-02GA						
1,1-Dichloroethane	µg/L	5860		1U		
1,1-Dichloroethene	µg/L	7		1U		
1,2,3-Trichloropropane	µg/L	0.0379		1U		
1,2-Dibromo-3-chloropropane	µg/L	0.2		5U		
1,2-Dibromoethane	µg/L			1U		
1,2-Dichlorobenzene	µg/L	600		1U		
1,2-Dichloroethane	µg/L	5		1U		
1,2-Dichloropropane	µg/L	5		1U		
1,2-Dimethylbenzene	µg/L	10,000		1U		
1,4-Dichlorobenzene	µg/L	75		1U		
2-Butanone	µg/L	53,800		6U		
2-Hexanone	µg/L			5U		
4-Methyl-2-pentanone	µg/L	6360		5U		
Acetone	µg/L	10,200		10U		
Acrylonitrile	µg/L	0.431		20U		
Benzene	µg/L	5		1U		
Bromochloromethane	µg/L			1U		
Bromodichloromethane	µg/L	100		1U		
Bromoform	µg/L	100		1U		
Bromomethane	µg/L	140		2U		
Carbon disulfide	µg/L	6270		2U		
Carbon tetrachloride	µg/L	5		1U		
Chlorobenzene	µg/L	100		1U		
Chloroethane	µg/L	246,000		2U		
Chloroform	µg/L	100		1U		
Chloromethane	µg/L	13.4		2U		
cis-1,2-Dichloroethene	µg/L	70		1U		
cis-1,3-Dichloropropene	µg/L			1U		
Dibromochloromethane	µg/L	3.12		1U		
Dibromomethane	µg/L	999		1U		
Ethylbenzene	µg/L	700		1U		
Hexachlorobutadiene	µg/L	3.7		10U		
Iodomethane	µg/L			1U		
M + P Xylene	µg/L	10,000		2U		
Methylene chloride	µg/L	5		5U		
Styrene	µg/L	100		1U		
Tetrachloroethene	µg/L	5		1U		
Toluene	µg/L	1000		1U		
trans-1,2-Dichloroethene	µg/L	100		1U		
trans-1,3-Dichloropropene	µg/L			1U		

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X735-02GA						
trans-1,4-Dichloro-2-butene	µg/L			3U		
Trichloroethene	µg/L	5		1U		
Trichlorofluoromethane	µg/L	12,100		2U		
Vinyl acetate	µg/L	6840		3U		
Vinyl chloride	µg/L	2		1U		
Semivolatile Organic Compounds						
2,4,6-Trichlorophenol	µg/L	26		20U		
2,4-Dichlorophenol	µg/L			10U		
2,4-Dimethylphenol	µg/L			10U		
2-Chlorophenol	µg/L	465		10U		
2-Methyl-4,6-dinitrophenol	µg/L			60U		
2-Methylphenol	µg/L	4760		10U		
2-Nitrophenol	µg/L			20U		
3-Methylphenol	µg/L			20U		
4-Chloro-3-methylphenol	µg/L			20U		
4-Methylphenol	µg/L	476		20U		
4-Nitrophenol	µg/L			50U		
Acenaphthene	µg/L			10U		
Acenaphthylene	µg/L			10U		
Anthracene	µg/L			10U		
Benzo(a)pyrene	µg/L			10U		
Bis(2-chloroethyl) ether	µg/L			10U		
Bis(2-chloroisopropyl) ether	µg/L			10U		
Bis(2-ethylhexyl)phthalate	µg/L	6		10U		
Butyl benzyl phthalate	µg/L	14,900		20U		
Chrysene	µg/L			10U		
Diethyl phthalate	µg/L	71,300		20U		
Dimethyl phthalate	µg/L			20U		
Di-n-butyl phthalate	µg/L	7450		20U		
Di-n-octylphthalate	µg/L	1470		20U		
Fluoranthene	µg/L			20U		
Fluorene	µg/L			10U		
Hexachlorobenzene	µg/L	1		10U		
Hexachlorocyclopentadiene	µg/L			10U		
Hexachloroethane	µg/L	20		10U		
Naphthalene	µg/L	3210		10U		
Nitrobenzene	µg/L	47.9		20U		
N-Nitrosodiphenylamine	µg/L			10U		
Pentachlorophenol	µg/L	1		60U		
Phenanthrene	µg/L			10U		

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X735-02GA						
Phenol	µg/L	59,300		10U		
Pyrene	µg/L			10U		
Radionuclides						
Americium-241	pCi/L	0.49		0.008783U		0.008059U
Neptunium-237	pCi/L	0.54		-0.042U		0.000007631U
Plutonium-238	pCi/L			0.02098U		0U
Plutonium-239/240	pCi/L	0.51		0.00001397U		0.02286U
Technetium-99	pCi/L	3790		3.15U		-3.25U
Uranium	µg/L	1000		0.07961		0.06015U
Uranium-233/234	pCi/L	124,000		0.00003258U		0.02803U
Uranium-235	pCi/L	43		0.008045U		-0.008637U
Uranium-236	pCi/L			0U		0U
Uranium-238	pCi/L	6.7		0.02603U		0.02098U
Polychlorinated Biphenyls						
PCB-1016	µg/L			1U		
PCB-1221	µg/L			1U		
PCB-1232	µg/L			1U		
PCB-1242	µg/L			1U		
PCB-1248	µg/L			1U		
PCB-1254	µg/L			1U		
PCB-1260	µg/L	0.5		1U		
Other Parameters						
Alkalinity	mg/L			48		37
Ammonia as Nitrogen	mg/L			0.038B		
Chemical Oxygen Demand (COD)	mg/L			11B		
Chloride	mg/L			22		25
Cyanide	mg/L	200,000		0.01U		
Dissolved Solids	mg/L			180		180
Nitrate/Nitrite as Nitrogen	mg/L			0.33		
Sulfate	mg/L			46		47
Sulfide	mg/L			4U		
Herbicides and Pesticides						
2,4-D	µg/L	70		4U		
4,4'-DDD	µg/L	0.859		0.05U		
4,4'-DDE	µg/L			0.05U		
4,4'-DDT	µg/L	0.46		0.05U		
alpha-BHC	µg/L			0.05U		
beta-BHC	µg/L			0.05U		
Chlordane	µg/L			0.5U		
delta-BHC	µg/L			0.05U		

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X735-02GA						
Dieldrin	µg/L			0.05U		
Endosulfan I	µg/L			0.05U		
Endosulfan II	µg/L			0.05U		
Endrin	µg/L			0.05U		
Heptachlor	µg/L	0.4		0.05U		
Heptachlor epoxide	µg/L	0.2		0.05U		
Lindane	µg/L	0.2		0.05U		
Methoxychlor	µg/L			0.1U		
Silvex	µg/L	50		1U		
Toxaphene	µg/L			5U		
Field Measurements						
Conductivity	µS/cm			270		266
Depth to Water	ft			20.78		23.45
Dissolved Oxygen	mg/L			1		1.1
pH	Std Unit			5.66		5.45
Temperature	deg C			13.4		13.32
Turbidity	NTU			1		4
X735-03G						
Metals						
Antimony	µg/L	36.5		0.1B		
Arsenic	µg/L	92		5U		
Barium	µg/L	2000		63		
Beryllium	µg/L	6.5		0.082B		
Cadmium	µg/L	6.5		0.12B		
Calcium	µg/L			17000		
Chromium	µg/L	100		2U		
Cobalt	µg/L	13		2.5		10
Copper	µg/L	21		1.1B		
Iron	µg/L			53B		
Lead	µg/L	50		1U		
Magnesium	µg/L			5900		
Manganese	µg/L	14,300		110		
Mercury	µg/L	2		0.2U		0.2U
Nickel	µg/L	100		6.6		17
Potassium	µg/L			1200B		
Selenium	µg/L	50		1.3B		
Silver	µg/L	50		5U		
Sodium	µg/L			24000		27000
Thallium	µg/L	10.5		0.027B		
Tin	µg/L	61,100		10U		

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X735-03G						
Vanadium	µg/L	713		5U		
Zinc	µg/L	30,500		13		
Volatile Organic Compounds						
1,1,1,2-Tetrachloroethane	µg/L	11		1U		
1,1,1-Trichloroethane	µg/L	200		0.29J		
1,1,2,2-Tetrachloroethane	µg/L	0.83		1U		
1,1,2-Trichloroethane	µg/L	5		1U		
1,1-Dichloroethane	µg/L	5860		0.77J		
1,1-Dichloroethene	µg/L	7		1U		
1,2,3-Trichloropropane	µg/L	0.0379		1U		
1,2,4-Trichlorobenzene	µg/L	70		1U		
1,2-Dibromo-3-chloropropane	µg/L	0.2		5U		
1,2-Dibromoethane	µg/L			1U		
1,2-Dichlorobenzene	µg/L	600		1U		
1,2-Dichloroethane	µg/L	5		1U		
1,2-Dichloropropane	µg/L	5		1U		
1,2-Dimethylbenzene	µg/L	10,000		1U		
1,3-Dichlorobenzene	µg/L			1U		
1,4-Dichlorobenzene	µg/L	75		1U		
2-Butanone	µg/L	53,800		6U		
2-Hexanone	µg/L			5U		
4-Methyl-2-pentanone	µg/L	6360		5U		
Acetone	µg/L	10,200		10U		
Acrylonitrile	µg/L	0.431		20U		
Benzene	µg/L	5		0.22J		
Bromochloromethane	µg/L			1U		
Bromodichloromethane	µg/L	100		1U		
Bromoform	µg/L	100		1U		
Bromomethane	µg/L	140		2U		
Carbon disulfide	µg/L	6270		2U		
Carbon tetrachloride	µg/L	5		1U		
Chlorobenzene	µg/L	100		1U		
Chloroethane	µg/L	246,000		1J		
Chloroform	µg/L	100		1U		
Chloromethane	µg/L	13.4		2U		
cis-1,2-Dichloroethene	µg/L	70		0.21J		
cis-1,3-Dichloropropene	µg/L			1U		
Dibromochloromethane	µg/L	3.12		1U		
Dibromomethane	µg/L	999		1U		
Dichlorodifluoromethane	µg/L	4560		2U		

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X735-03G						
Ethylbenzene	µg/L	700		1U		
Hexachlorobutadiene	µg/L	3.7		10U		
Iodomethane	µg/L			1U		
M + P Xylene	µg/L	10,000		2U		
Methylene chloride	µg/L	5		0.43BJ		
Styrene	µg/L	100		1U		
Tetrachloroethene	µg/L	5		1U		
Toluene	µg/L	1000		1U		
trans-1,2-Dichloroethene	µg/L	100		1U		
trans-1,3-Dichloropropene	µg/L			1U		
trans-1,4-Dichloro-2-butene	µg/L			3U		
Trichloroethene	µg/L	5		0.19J		
Trichlorofluoromethane	µg/L	12,100		2U		
Vinyl acetate	µg/L	6840		3U		
Vinyl chloride	µg/L	2		1U		
Semivolatile Organic Compounds						
2,4,6-trichlorophenol	µg/L	26		20U		
2,4-Dichlorophenol	µg/L			10U		
2,4-Dimethylphenol	µg/L			10U		
2-Chlorophenol	µg/L	465		10U		
2-Methyl-4,6-dinitrophenol	µg/L			60U		
2-Methylphenol	µg/L	4760		10U		
2-Nitrophenol	µg/L			20U		
3-Methylphenol	µg/L			20U		
4-Chloro-3-methylphenol	µg/L			20U		
4-Methylphenol	µg/L	476		20U		
4-Nitrophenol	µg/L			50U		
Acenaphthene	µg/L			10U		
Acenaphthylene	µg/L			10U		
Anthracene	µg/L			10U		
Benzo(a)pyrene	µg/L			10U		
Bis(2-chloroethyl) ether	µg/L			10U		
Bis(2-chloroisopropyl) ether	µg/L			10U		
Bis(2-ethylhexyl)phthalate	µg/L	6		10U		
Butyl benzyl phthalate	µg/L	14,900		20U		
Chrysene	µg/L			10U		
Diethyl phthalate	µg/L	71,300		20U		
Dimethyl phthalate	µg/L			20U		
Di-n-butyl phthalate	µg/L	7450		20U		
Di-n-octylphthalate	µg/L	1470		20U		

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X735-03G						
Fluoranthene	µg/L			20U		
Fluorene	µg/L			10U		
Hexachlorobenzene	µg/L	1		10U		
Hexachlorocyclopentadiene	µg/L			10U		
Hexachloroethane	µg/L	20		10U		
Naphthalene	µg/L	3210		1.4J		
Nitrobenzene	µg/L	47.9		20U		
N-Nitrosodiphenylamine	µg/L			10U		
Pentachlorophenol	µg/L	1		60U		
Phenanthrene	µg/L			10U		
Phenol	µg/L	59,300		10U		
Pyrene	µg/L			10U		
Radionuclides						
Americium-241	pCi/L	0.49		0.008218U		0.008659U
Neptunium-237	pCi/L	0.54		-0.02838U		0.006979U
Plutonium-238	pCi/L			0.000007075U		0.02088U
Plutonium-239/240	pCi/L	0.51		0.00003537U		-0.02086U
Technetium-99	pCi/L	3790		0.776U		-0.11U
Uranium	µg/L	1000		0.1017U		0.1396
Uranium-233/234	pCi/L	124,000		0.09589		0.04701
Uranium-235	pCi/L	43		0.00000844U		0U
Uranium-236	pCi/L			0U		0U
Uranium-238	pCi/L	6.7		0.03418U		0.04691
Polychlorinated Biphenyls						
PCB-1016	µg/L			1U		
PCB-1221	µg/L			1U		
PCB-1232	µg/L			1U		
PCB-1242	µg/L			1U		
PCB-1248	µg/L			1U		
PCB-1254	µg/L			1U		
PCB-1260	µg/L	0.5		1U		
Other Parameters						
Alkalinity	mg/L			54		22
Ammonia as Nitrogen	mg/L			0.16		
Chemical Oxygen Demand (COD)	mg/L			20U		
Chloride	mg/L			20		19
Cyanide	mg/L	200,000		0.01U		
Dissolved Solids	mg/L			170		140
Nitrate/Nitrite as Nitrogen	mg/L			0.31		
Sulfate	mg/L			31		39

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X735-03G						
Sulfide	mg/L			4U		
Herbicides and Pesticides						
2,4-D	µg/L	70		4U		
4,4'-DDD	µg/L	0.859		0.05U		
4,4'-DDE	µg/L			0.05U		
4,4'-DDT	µg/L	0.46		0.05U		
alpha-BHC	µg/L			0.05U		
beta-BHC	µg/L			0.05U		
Chlordane	µg/L			0.5U		
delta-BHC	µg/L			0.05U		
Dieldrin	µg/L			0.05U		
Endosulfan I	µg/L			0.05U		
Endosulfan II	µg/L			0.05U		
Endrin	µg/L			0.05U		
Heptachlor	µg/L	0.4		0.05U		
Heptachlor epoxide	µg/L	0.2		0.05U		
Lindane	µg/L	0.2		0.05U		
Methoxychlor	µg/L			0.1U		
Silvex	µg/L	50		1U		
Toxaphene	µg/L			5U		
Field Measurements						
Conductivity	µS/cm			248		206
Depth to Water	ft			16.76		20.7
Dissolved Oxygen	mg/L			4		0.18
pH	Std Unit			5.46		5.12
Temperature	deg C			12.8		13.25
Turbidity	NTU			2		8
X735-03GA						
Metals						
Antimony	µg/L	36.5		2U		
Arsenic	µg/L	92		5U		
Barium	µg/L	2000		43		
Beryllium	µg/L	6.5		1U		
Cadmium	µg/L	6.5		1U		
Calcium	µg/L			19000		
Chromium	µg/L	100		0.59B		
Cobalt	µg/L	13		0.053B		0.075B
Copper	µg/L	21		2U		
Iron	µg/L			100U		
Lead	µg/L	50		1U		

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X735-03GA						
Magnesium	µg/L			9200		
Manganese	µg/L	14,300		2.7		
Mercury	µg/L	2		0.2U		0.2U
Nickel	µg/L	100		2.4		3
Potassium	µg/L			1200B		
Selenium	µg/L	50		3.3B		
Silver	µg/L	50		5U		
Sodium	µg/L			27000		27000
Thallium	µg/L	10.5		1U		
Tin	µg/L	61,100		10U		
Vanadium	µg/L	713		5U		
Zinc	µg/L	30,500		10U		
Volatile Organic Compounds						
1,1,1,2-Tetrachloroethane	µg/L	11		1U		
1,1,1-Trichloroethane	µg/L	200		1U		
1,1,2,2-Tetrachloroethane	µg/L	0.83		1U		
1,1,2-Trichloroethane	µg/L	5		1U		
1,1-Dichloroethane	µg/L	5860		1U		
1,1-Dichloroethene	µg/L	7		1U		
1,2,3-Trichloropropane	µg/L	0.0379		1U		
1,2,4-Trichlorobenzene	µg/L	70		1U		
1,2-Dibromo-3-chloropropane	µg/L	0.2		5U		
1,2-Dibromoethane	µg/L			1U		
1,2-Dichlorobenzene	µg/L	600		1U		
1,2-Dichloroethane	µg/L	5		1U		
1,2-Dichloropropane	µg/L	5		1U		
1,2-Dimethylbenzene	µg/L	10,000		1U		
1,3-Dichlorobenzene	µg/L			1U		
1,4-Dichlorobenzene	µg/L	75		1U		
2-Butanone	µg/L	53,800		6U		
2-Hexanone	µg/L			5U		
4-Methyl-2-pentanone	µg/L	6360		5U		
Acetone	µg/L	10,200		10U		
Acrylonitrile	µg/L	0.431		20U		
Benzene	µg/L	5		1U		
Bromochloromethane	µg/L			1U		
Bromodichloromethane	µg/L	100		1U		
Bromoform	µg/L	100		1U		
Bromomethane	µg/L	140		2U		
Carbon disulfide	µg/L	6270		2U		

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X735-03GA						
Carbon tetrachloride	µg/L	5		1U		
Chlorobenzene	µg/L	100		1U		
Chloroethane	µg/L	246,000		2U		
Chloroform	µg/L	100		1U		
Chloromethane	µg/L	13.4		2U		
cis-1,2-Dichloroethene	µg/L	70		1U		
cis-1,3-Dichloropropene	µg/L			1U		
Dibromochloromethane	µg/L	3.12		1U		
Dibromomethane	µg/L	999		1U		
Dichlorodifluoromethane	µg/L	4560		2U		
Ethylbenzene	µg/L	700		1U		
Hexachlorobutadiene	µg/L	3.7		10U		
Iodomethane	µg/L			1U		
M + P Xylene	µg/L	10,000		2U		
Methylene chloride	µg/L	5		5U		
Styrene	µg/L	100		1U		
Tetrachloroethene	µg/L	5		1U		
Toluene	µg/L	1000		1U		
trans-1,2-Dichloroethene	µg/L	100		1U		
trans-1,3-Dichloropropene	µg/L			1U		
trans-1,4-Dichloro-2-butene	µg/L			3U		
Trichloroethene	µg/L	5		1U		
Trichlorofluoromethane	µg/L	12,100		2U		
Vinyl acetate	µg/L	6840		3U		
Vinyl chloride	µg/L	2		1U		
Semivolatile Organic Compounds						
2,4,6-Trichlorophenol	µg/L	26		20U		
2,4-Dichlorophenol	µg/L			10U		
2,4-Dimethylphenol	µg/L			10U		
2-Chlorophenol	µg/L	465		10U		
2-Methyl-4,6-dinitrophenol	µg/L			60U		
2-Methylphenol	µg/L	4760		10U		
2-Nitrophenol	µg/L			20U		
3-Methylphenol	µg/L			20U		
4-Chloro-3-methylphenol	µg/L			20U		
4-Methylphenol	µg/L	476		20U		
4-Nitrophenol	µg/L			50U		
Acenaphthene	µg/L			10U		
Acenaphthylene	µg/L			10U		
Anthracene	µg/L			10U		

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X735-03GA						
Benzo(a)pyrene	µg/L			10U		
Bis(2-chloroethyl) ether	µg/L			10U		
Bis(2-chloroisopropyl) ether	µg/L			10U		
Bis(2-ethylhexyl)phthalate	µg/L	6		10U		
Butyl benzyl phthalate	µg/L	14,900		20U		
Chrysene	µg/L			10U		
Diethyl phthalate	µg/L	71,300		20U		
Dimethyl phthalate	µg/L			20U		
Di-n-butyl phthalate	µg/L	7450		20U		
Di-n-octylphthalate	µg/L	1470		20U		
Fluoranthene	µg/L			20U		
Fluorene	µg/L			10U		
Hexachlorobenzene	µg/L	1		10U		
Hexachlorocyclopentadiene	µg/L			10U		
Hexachloroethane	µg/L	20		10U		
Naphthalene	µg/L	3210		10U		
Nitrobenzene	µg/L	47.9		20U		
N-Nitrosodiphenylamine	µg/L			10U		
Pentachlorophenol	µg/L	1		60U		
Phenanthrene	µg/L			10U		
Phenol	µg/L	59,300		10U		
Pyrene	µg/L			10U		
Radionuclides						
Americium-241	pCi/L	0.49		0.01869U		0.009681U
Neptunium-237	pCi/L	0.54		0.00002147U		0.02939U
Plutonium-238	pCi/L			0.03573U		0.007323U
Plutonium-239/240	pCi/L	0.51		0.01429U		0U
Technetium-99	pCi/L	3790		2.53U		-3.73U
Uranium	µg/L	1000		0.03776U		0.000004762U
Uranium-233/234	pCi/L	124,000		0.006388U		0.02975U
Uranium-235	pCi/L	43		0U		0.000009166U
Uranium-236	pCi/L			0U		0U
Uranium-238	pCi/L	6.7		0.01269U		0U
Polychlorinated Biphenyls						
PCB-1016	µg/L			1U		
PCB-1221	µg/L			1U		
PCB-1232	µg/L			1U		
PCB-1242	µg/L			1U		
PCB-1248	µg/L			1U		
PCB-1254	µg/L			1U		

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X735-03GA						
PCB-1260	µg/L	0.5		1U		
Other Parameters						
Alkalinity	mg/L			30		28
Ammonia as Nitrogen	mg/L			0.054B		
Chemical Oxygen Demand (COD)	mg/L			20U		
Chloride	mg/L			24		21
Cyanide	mg/L	200,000		0.01U		
Dissolved Solids	mg/L			220		200
Nitrate/Nitrite as Nitrogen	mg/L			1.2		
Sulfate	mg/L			74		75
Sulfide	mg/L			4U		
Herbicides and Pesticides						
2,4-D	µg/L	70		4U		
4,4'-DDD	µg/L	0.859		0.05U		
4,4'-DDE	µg/L			0.05U		
4,4'-DDT	µg/L	0.46		0.05U		
alpha-BHC	µg/L			0.05U		
beta-BHC	µg/L			0.05U		
Chlordane	µg/L			0.5U		
delta-BHC	µg/L			0.05U		
Dieldrin	µg/L			0.05U		
Endosulfan I	µg/L			0.05U		
Endosulfan II	µg/L			0.05U		
Endrin	µg/L			0.05U		
Heptachlor	µg/L	0.4		0.05U		
Heptachlor epoxide	µg/L	0.2		0.05U		
Lindane	µg/L	0.2		0.05U		
Methoxychlor	µg/L			0.1U		
Silvex	µg/L	50		1U		
Toxaphene	µg/L			5U		
Field Measurements						
Conductivity	µS/cm			309		298
Depth to Water	ft			23.7		26.5
Dissolved Oxygen	mg/L			1		0.52
pH	Std Unit			5.45		5.51
Temperature	deg C			14.1		12.95
Turbidity	NTU			1		4
X735-04G						
Metals						
Antimony	µg/L	36.5		2U		

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X735-04G						
Arsenic	µg/L	92		0.56B		
Barium	µg/L	2000		68		
Beryllium	µg/L	6.5		1U		
Cadmium	µg/L	6.5		0.11B		
Calcium	µg/L			26000		
Chromium	µg/L	100		2U		
Cobalt	µg/L	13		2.3		0.43B
Copper	µg/L	21		0.83B		
Iron	µg/L			54B		
Lead	µg/L	50		1U		
Magnesium	µg/L			6300		
Manganese	µg/L	14,300		600		
Mercury	µg/L	2		0.2U		0.2U
Nickel	µg/L	100		3.2		3.5
Potassium	µg/L			1100B		
Selenium	µg/L	50		5U		
Silver	µg/L	50		5U		
Sodium	µg/L			3400B		3700B
Thallium	µg/L	10.5		0.033B		
Tin	µg/L	61,100		10U		
Vanadium	µg/L	713		5U		
Zinc	µg/L	30,500		7.8B		
Volatile Organic Compounds						
1,1,1,2-Tetrachloroethane	µg/L	11		1U		
1,1,1-Trichloroethane	µg/L	200		1U		
1,1,2,2-Tetrachloroethane	µg/L	0.83		1U		
1,1,2-Trichloroethane	µg/L	5		1U		
1,1-Dichloroethane	µg/L	5860		1U		
1,1-Dichloroethene	µg/L	7		1U		
1,2,3-Trichloropropane	µg/L	0.0379		1U		
1,2,4-Trichlorobenzene	µg/L	70		1U		
1,2-Dibromo-3-chloropropane	µg/L	0.2		5U		
1,2-Dibromoethane	µg/L			1U		
1,2-Dichlorobenzene	µg/L	600		1U		
1,2-Dichloroethane	µg/L	5		1U		
1,2-Dichloropropane	µg/L	5		1U		
1,2-Dimethylbenzene	µg/L	10,000		1U		
1,3-Dichlorobenzene	µg/L			1U		
1,4-Dichlorobenzene	µg/L	75		1U		
2-Butanone	µg/L	53,800		6U		

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X735-04G						
2-Hexanone	µg/L			5U		
4-Methyl-2-pentanone	µg/L	6360		5U		
Acetone	µg/L	10,200		10U		
Acrylonitrile	µg/L	0.431		20U		
Benzene	µg/L	5		1U		
Bromochloromethane	µg/L			1U		
Bromodichloromethane	µg/L	100		1U		
Bromoform	µg/L	100		1U		
Bromomethane	µg/L	140		2U		
Carbon disulfide	µg/L	6270		2U		
Carbon tetrachloride	µg/L	5		1U		
Chlorobenzene	µg/L	100		1U		
Chloroethane	µg/L	246,000		2U		
Chloroform	µg/L	100		1U		
Chloromethane	µg/L	13.4		2U		
cis-1,2-Dichloroethene	µg/L	70		1U		
cis-1,3-Dichloropropene	µg/L			1U		
Dibromochloromethane	µg/L	3.12		1U		
Dibromomethane	µg/L	999		1U		
Dichlorodifluoromethane	µg/L	4560		2U		
Ethylbenzene	µg/L	700		1U		
Hexachlorobutadiene	µg/L	3.7		5U		
Iodomethane	µg/L			1U		
M + P Xylene	µg/L	10,000		2U		
Methylene chloride	µg/L	5		5U		
Styrene	µg/L	100		1U		
Tetrachloroethene	µg/L	5		1U		
Toluene	µg/L	1000		1U		
trans-1,2-Dichloroethene	µg/L	100		1U		
trans-1,3-Dichloropropene	µg/L			1U		
trans-1,4-Dichloro-2-butene	µg/L			3U		
Trichloroethene	µg/L	5		1U		
Trichlorofluoromethane	µg/L	12,100		2U		
Vinyl acetate	µg/L	6840		3U		
Vinyl chloride	µg/L	2		1U		
Semivolatile Organic Compounds						
2,4,6-Trichlorophenol	µg/L	26		5U		
2,4-Dichlorophenol	µg/L			5U		
2,4-Dimethylphenol	µg/L			5U		
2-Chlorophenol	µg/L	465		5U		

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X735-04G						
2-Methyl-4,6-dinitrophenol	µg/L			5U		
2-Methylphenol	µg/L	4760		5U		
2-Nitrophenol	µg/L			5U		
4-Chloro-3-methylphenol	µg/L			5U		
4-Nitrophenol	µg/L			5U		
Acenaphthene	µg/L			5U		
Acenaphthylene	µg/L			5U		
Anthracene	µg/L			5U		
Benzo(a)pyrene	µg/L			5U		
Bis(2-chloroethyl) ether	µg/L			5U		
Bis(2-chloroisopropyl) ether	µg/L			5U		
Bis(2-ethylhexyl)phthalate	µg/L	6		5U		
Butyl benzyl phthalate	µg/L	14,900		5U		
Chrysene	µg/L			5U		
Diethyl phthalate	µg/L	71,300		5U		
Dimethyl phthalate	µg/L			5U		
Di-n-butyl phthalate	µg/L	7450		5U		
Di-n-octylphthalate	µg/L	1470		5U		
Diphenylamine	µg/L			5U		
Fluoranthene	µg/L			5U		
Fluorene	µg/L			5U		
Hexachlorobenzene	µg/L	1		5U		
Hexachlorocyclopentadiene	µg/L			5U		
Hexachloroethane	µg/L	20		5U		
m+p Methylphenol	µg/L			5U		
Naphthalene	µg/L	3210		5U		
Nitrobenzene	µg/L	47.9		5U		
Pentachlorophenol	µg/L	1		5U		
Phenanthrene	µg/L			5U		
Phenol	µg/L	59,300		5U		
Pyrene	µg/L			5U		
Radionuclides						
Americium-241	pCi/L	0.49		0.1646U		0.00941U
Neptunium-237	pCi/L	0.54		-0.02815U		0.01742U
Plutonium-238	pCi/L			-0.02109U		0U
Plutonium-239/240	pCi/L	0.51		-0.007024U		0.01738U
Technetium-99	pCi/L	3790		-3.28U		-1.95U
Uranium	µg/L	1000		0.08838U		0.04221U
Uranium-233/234	pCi/L	124,000		0.05791U		0.06377U
Uranium-235	pCi/L	43		0.008926U		0U

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X735-04G						
Uranium-236	pCi/L			0U		0.007847U
Uranium-238	pCi/L	6.7		0.0289U		0.01414U
Polychlorinated Biphenyls						
PCB-1016	µg/L			1U		
PCB-1221	µg/L			1U		
PCB-1232	µg/L			1U		
PCB-1242	µg/L			1U		
PCB-1248	µg/L			1U		
PCB-1254	µg/L			1U		
PCB-1260	µg/L	0.5		1U		
Other Parameters						
Alkalinity	mg/L			78		78
Ammonia as Nitrogen	mg/L			0.022B		
Chemical Oxygen Demand (COD)	mg/L			20U		
Chloride	mg/L			0.98B		0.74B
Cyanide	mg/L	200,000		0.01U		
Dissolved Solids	mg/L			120		120
Nitrate/Nitrite as Nitrogen	mg/L			0.1U		
Sulfate	mg/L			21		18
Sulfide	mg/L			0.8B		
Herbicides and Pesticides						
2,4-D	µg/L	70		4U		
4,4'-DDD	µg/L	0.859		0.05U		
4,4'-DDE	µg/L			0.05U		
4,4'-DDT	µg/L	0.46		0.05U		
alpha-BHC	µg/L			0.05U		
beta-BHC	µg/L			0.05U		
Chlordane	µg/L			0.5U		
delta-BHC	µg/L			0.05U		
Dieldrin	µg/L			0.05U		
Endosulfan I	µg/L			0.05U		
Endosulfan II	µg/L			0.05U		
Endrin	µg/L			0.05U		
Heptachlor	µg/L	0.4		0.05U		
Heptachlor epoxide	µg/L	0.2		0.05U		
Lindane	µg/L	0.2		0.05U		
Methoxychlor	µg/L			0.1U		
Silvex	µg/L	50		1U		
Toxaphene	µg/L			5U		
Field Measurements						

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X735-04G						
Conductivity	µS/cm			177		202
Depth to Water	ft			2.65		10.33
Dissolved Oxygen	mg/L			nm		nm
pH	Std Unit			6.22		6.19
Temperature	deg C			10.5		10.52
Turbidity	NTU			2		16
X735-04GA						
Metals						
Antimony	µg/L	36.5		2U		
Arsenic	µg/L	92		5U		
Barium	µg/L	2000		51		
Beryllium	µg/L	6.5		1U		
Cadmium	µg/L	6.5		0.059B		
Calcium	µg/L			1100		
Chromium	µg/L	100		1.4B		
Cobalt	µg/L	13		0.62B		0.58B
Copper	µg/L	21		2U		
Iron	µg/L			130		
Lead	µg/L	50		1U		
Magnesium	µg/L			820		
Manganese	µg/L	14,300		26		
Mercury	µg/L	2		0.057B		0.031B
Nickel	µg/L	100		5.7		5.5
Potassium	µg/L			710B		
Selenium	µg/L	50		5U		
Silver	µg/L	50		5U		
Sodium	µg/L			18000		19000
Thallium	µg/L	10.5		0.034B		
Tin	µg/L	61,100		10U		
Vanadium	µg/L	713		5U		
Zinc	µg/L	30,500		8.4B		
Volatile Organic Compounds						
1,1,1,2-Tetrachloroethane	µg/L	11		1U		
1,1,1-Trichloroethane	µg/L	200		1U		
1,1,2,2-Tetrachloroethane	µg/L	0.83		1U		
1,1,2-Trichloroethane	µg/L	5		1U		
1,1-Dichloroethane	µg/L	5860		1U		
1,1-Dichloroethene	µg/L	7		1U		
1,2,3-Trichloropropane	µg/L	0.0379		1U		
1,2,4-Trichlorobenzene	µg/L	70		1U		

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X735-04GA						
1,2-Dibromo-3-chloropropane	µg/L	0.2		5U		
1,2-Dibromoethane	µg/L			1U		
1,2-Dichlorobenzene	µg/L	600		1U		
1,2-Dichloroethane	µg/L	5		1U		
1,2-Dichloropropane	µg/L	5		1U		
1,2-Dimethylbenzene	µg/L	10,000		1U		
1,3-Dichlorobenzene	µg/L			1U		
1,4-Dichlorobenzene	µg/L	75		1U		
2-Butanone	µg/L	53,800		6U		
2-Hexanone	µg/L			5U		
4-Methyl-2-pentanone	µg/L	6360		5U		
Acetone	µg/L	10,200		10U		
Acrylonitrile	µg/L	0.431		20U		
Benzene	µg/L	5		1U		
Bromochloromethane	µg/L			1U		
Bromodichloromethane	µg/L	100		1U		
Bromoform	µg/L	100		1U		
Bromomethane	µg/L	140		2U		
Carbon disulfide	µg/L	6270		2U		
Carbon tetrachloride	µg/L	5		1U		
Chlorobenzene	µg/L	100		1U		
Chloroethane	µg/L	246,000		2U		
Chloroform	µg/L	100		1U		
Chloromethane	µg/L	13.4		2U		
cis-1,2-Dichloroethene	µg/L	70		1U		
cis-1,3-Dichloropropene	µg/L			1U		
Dibromochloromethane	µg/L	3.12		1U		
Dibromomethane	µg/L	999		1U		
Dichlorodifluoromethane	µg/L	4560		2U		
Ethylbenzene	µg/L	700		1U		
Hexachlorobutadiene	µg/L	3.7		5U		
Iodomethane	µg/L			1U		
M + P Xylene	µg/L	10,000		2U		
Methylene chloride	µg/L	5		5U		
Styrene	µg/L	100		1U		
Tetrachloroethene	µg/L	5		1U		
Toluene	µg/L	1000		1U		
trans-1,2-Dichloroethene	µg/L	100		1U		
trans-1,3-Dichloropropene	µg/L			1U		
trans-1,4-Dichloro-2-butene	µg/L			3U		

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X735-04GA						
Trichloroethene	µg/L	5		1U		
Trichlorofluoromethane	µg/L	12,100		2U		
Vinyl acetate	µg/L	6840		3U		
Vinyl chloride	µg/L	2		1U		
Semivolatile Organic Compounds						
2,4,6-Trichlorophenol	µg/L	26		5U		
2,4-Dichlorophenol	µg/L			5U		
2,4-Dimethylphenol	µg/L			5U		
2-Chlorophenol	µg/L	465		5U		
2-Methyl-4,6-dinitrophenol	µg/L			5U		
2-Methylphenol	µg/L	4760		5U		
2-Nitrophenol	µg/L			5U		
4-Chloro-3-methylphenol	µg/L			5U		
4-Nitrophenol	µg/L			5U		
Acenaphthene	µg/L			5U		
Acenaphthylene	µg/L			5U		
Anthracene	µg/L			5U		
Benzo(a)pyrene	µg/L			5U		
Bis(2-chloroethyl) ether	µg/L			5U		
Bis(2-chloroisopropyl) ether	µg/L			5U		
Bis(2-ethylhexyl)phthalate	µg/L	6		5U		
Butyl benzyl phthalate	µg/L	14,900		5U		
Chrysene	µg/L			5U		
Diethyl phthalate	µg/L	71,300		5U		
Dimethyl phthalate	µg/L			5U		
Di-n-butyl phthalate	µg/L	7450		5U		
Di-n-octylphthalate	µg/L	1470		5U		
Diphenylamine	µg/L			5U		
Fluoranthene	µg/L			5U		
Fluorene	µg/L			5U		
Hexachlorobenzene	µg/L	1		5U		
Hexachlorocyclopentadiene	µg/L			5U		
Hexachloroethane	µg/L	20		5U		
m+p Methylphenol	µg/L			5U		
Naphthalene	µg/L	3210		5U		
Nitrobenzene	µg/L	47.9		5U		
Pentachlorophenol	µg/L	1		5U		
Phenanthrene	µg/L			5U		
Phenol	µg/L	59,300		5U		
Pyrene	µg/L			5U		

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X735-04GA						
Radionuclides						
Americium-241	pCi/L	0.49		0.007008U		0.02406U
Neptunium-237	pCi/L	0.54		-0.006897U		0.01475U
Plutonium-238	pCi/L			0.00002759U		0.01472U
Plutonium-239/240	pCi/L	0.51		0.006939U		0.007356U
Technetium-99	pCi/L	3790		0.841U		1.03U
Uranium	µg/L	1000		-0.04135U		0.05913U
Uranium-233/234	pCi/L	124,000		0.007014U		0.03982U
Uranium-235	pCi/L	43		0U		0U
Uranium-236	pCi/L			0U		0U
Uranium-238	pCi/L	6.7		-0.01389U		0.01987U
Polychlorinated Biphenyls						
PCB-1016	µg/L			1U		
PCB-1221	µg/L			1U		
PCB-1232	µg/L			1U		
PCB-1242	µg/L			1U		
PCB-1248	µg/L			1U		
PCB-1254	µg/L			1U		
PCB-1260	µg/L	0.5		1U		
Other Parameters						
Alkalinity	mg/L			13		7.8
Ammonia as Nitrogen	mg/L			0.026B		
Chemical Oxygen Demand (COD)	mg/L			20U		
Chloride	mg/L			13		14
Cyanide	mg/L	200,000		0.01U		
Dissolved Solids	mg/L			99		85
Nitrate/Nitrite as Nitrogen	mg/L			1.5		
Sulfate	mg/L			12		11
Sulfide	mg/L			4U		
Herbicides and Pesticides						
2,4-D	µg/L	70		4U		
4,4'-DDD	µg/L	0.859		0.05U		
4,4'-DDE	µg/L			0.05U		
4,4'-DDT	µg/L	0.46		0.05U		
alpha-BHC	µg/L			0.05U		
beta-BHC	µg/L			0.05U		
Chlordane	µg/L			0.5U		
delta-BHC	µg/L			0.05U		
Dieldrin	µg/L			0.05U		
Endosulfan I	µg/L			0.05U		

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X735-04GA						
Endosulfan II	µg/L			0.05U		
Endrin	µg/L			0.05U		
Heptachlor	µg/L	0.4		0.05U		
Heptachlor epoxide	µg/L	0.2		0.05U		
Lindane	µg/L	0.2		0.05U		
Methoxychlor	µg/L			0.1U		
Silvex	µg/L	50		1U		
Toxaphene	µg/L			5U		
Field Measurements						
Conductivity	µS/cm			102		113
Depth to Water	ft			15.08		18.01
Dissolved Oxygen	mg/L			1		2.42
pH	Std Unit			4.85		4.78
Temperature	deg C			12.2		14.1
Turbidity	NTU			7		7
X735-05G						
Metals						
Antimony	µg/L	36.5		2U		
Arsenic	µg/L	92		0.32B		
Barium	µg/L	2000		51		
Beryllium	µg/L	6.5		1U		
Cadmium	µg/L	6.5		0.15B		
Calcium	µg/L			44000		
Chromium	µg/L	100		0.73B		
Cobalt	µg/L	13		0.14B		0.44B
Copper	µg/L	21		0.67B		
Iron	µg/L			540		
Lead	µg/L	50		0.24B		
Magnesium	µg/L			17000		
Manganese	µg/L	14,300		5.2		
Mercury	µg/L	2		0.2U		0.2U
Nickel	µg/L	100		8.7		72
Potassium	µg/L			720B		
Selenium	µg/L	50		5U		
Silver	µg/L	50		0.19B		
Sodium	µg/L			8600		13000
Thallium	µg/L	10.5		1U		
Tin	µg/L	61,100		10U		
Vanadium	µg/L	713		0.99B		
Zinc	µg/L	30,500		5.4B		

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X735-05G						
Volatile Organic Compounds						
1,1,1,2-Tetrachloroethane	µg/L	11		1U		
1,1,1-Trichloroethane	µg/L	200		1U		
1,1,2,2-Tetrachloroethane	µg/L	0.83		1U		
1,1,2-Trichloroethane	µg/L	5		1U		
1,1-Dichloroethane	µg/L	5860		1U		
1,1-Dichloroethene	µg/L	7		1U		
1,2,3-Trichloropropane	µg/L	0.0379		1U		
1,2,4-Trichlorobenzene	µg/L	70		1U		
1,2-Dibromo-3-chloropropane	µg/L	0.2		5U		
1,2-Dibromoethane	µg/L			1U		
1,2-Dichlorobenzene	µg/L	600		1U		
1,2-Dichloroethane	µg/L	5		1U		
1,2-Dichloropropane	µg/L	5		1U		
1,2-Dimethylbenzene	µg/L	10,000		1U		
1,3-Dichlorobenzene	µg/L			1U		
1,4-Dichlorobenzene	µg/L	75		1U		
2-Butanone	µg/L	53,800		6U		
2-Hexanone	µg/L			5U		
4-Methyl-2-pentanone	µg/L	6360		5U		
Acetone	µg/L	10,200		10U		
Acrylonitrile	µg/L	0.431		20U		
Benzene	µg/L	5		1U		
Bromochloromethane	µg/L			1U		
Bromodichloromethane	µg/L	100		1U		
Bromoform	µg/L	100		1U		
Bromomethane	µg/L	140		2U		
Carbon disulfide	µg/L	6270		2U		
Carbon tetrachloride	µg/L	5		1U		
Chlorobenzene	µg/L	100		1U		
Chloroethane	µg/L	246,000		2U		
Chloroform	µg/L	100		1U		
Chloromethane	µg/L	13.4		2U		
cis-1,2-Dichloroethene	µg/L	70		1U		
cis-1,3-Dichloropropene	µg/L			1U		
Dibromochloromethane	µg/L	3.12		1U		
Dibromomethane	µg/L	999		1U		
Dichlorodifluoromethane	µg/L	4560		2U		
Ethylbenzene	µg/L	700		1U		
Hexachlorobutadiene	µg/L	3.7		5U		

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X735-05G						
Iodomethane	µg/L			1U		
M + P Xylene	µg/L	10,000		2U		
Methylene chloride	µg/L	5		5U		
Styrene	µg/L	100		1U		
Tetrachloroethene	µg/L	5		1U		
Toluene	µg/L	1000		1U		
trans-1,2-Dichloroethene	µg/L	100		1U		
trans-1,3-Dichloropropene	µg/L			1U		
trans-1,4-Dichloro-2-butene	µg/L			3U		
Trichloroethene	µg/L	5		1U		
Trichlorofluoromethane	µg/L	12,100		2U		
Vinyl acetate	µg/L	6840		3U		
Vinyl chloride	µg/L	2		1U		
Semivolatile Organic Compounds						
2,4,6-Trichlorophenol	µg/L	26		5U		
2,4-Dichlorophenol	µg/L			5U		
2,4-Dimethylphenol	µg/L			5U		
2-Chlorophenol	µg/L	465		5U		
2-Methyl-4,6-dinitrophenol	µg/L			5U		
2-Methylphenol	µg/L	4760		5U		
2-Nitrophenol	µg/L			5U		
4-Chloro-3-methylphenol	µg/L			5U		
4-Nitrophenol	µg/L			5U		
Acenaphthene	µg/L			5U		
Acenaphthylene	µg/L			5U		
Anthracene	µg/L			5U		
Benzo(a)pyrene	µg/L			5U		
Bis(2-chloroethyl) ether	µg/L			5U		
Bis(2-chloroisopropyl) ether	µg/L			5U		
Bis(2-ethylhexyl)phthalate	µg/L	6		5U		
Butyl benzyl phthalate	µg/L	14,900		5U		
Chrysene	µg/L			5U		
Diethyl phthalate	µg/L	71,300		5U		
Dimethyl phthalate	µg/L			5U		
Di-n-butyl phthalate	µg/L	7450		5U		
Di-n-octylphthalate	µg/L	1470		5U		
Diphenylamine	µg/L			5U		
Fluoranthene	µg/L			5U		
Fluorene	µg/L			5U		
Hexachlorobenzene	µg/L	1		5U		

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X735-05G						
Hexachlorocyclopentadiene	µg/L			5U		
Hexachloroethane	µg/L	20		5U		
m+p Methylphenol	µg/L			5U		
Naphthalene	µg/L	3210		5U		
Nitrobenzene	µg/L	47.9		5U		
Pentachlorophenol	µg/L	1		5U		
Phenanthrene	µg/L			5U		
Phenol	µg/L	59,300		5U		
Pyrene	µg/L			5U		
Radionuclides						
Americium-241	pCi/L	0.49		0.008875U		0.02477U
Neptunium-237	pCi/L	0.54		-0.09428U		0U
Plutonium-238	pCi/L			0.01347U		0.007976U
Plutonium-239/240	pCi/L	0.51		0.00001344U		0.01595U
Technetium-99	pCi/L	3790		-2.04U		-4.85U
Uranium	µg/L	1000		0.1249U		0.1635
Uranium-233/234	pCi/L	124,000		0.01408U		0.08823
Uranium-235	pCi/L	43		0U		0.00837U
Uranium-236	pCi/L			-0.007758U		0U
Uranium-238	pCi/L	6.7		0.042U		0.05418
Polychlorinated Biphenyls						
PCB-1016	µg/L			1U		
PCB-1221	µg/L			1U		
PCB-1232	µg/L			1U		
PCB-1242	µg/L			1U		
PCB-1248	µg/L			1U		
PCB-1254	µg/L			1U		
PCB-1260	µg/L	0.5		1U		
Other Parameters						
Alkalinity	mg/L			140		170
Ammonia as Nitrogen	mg/L			0.025B		
Chemical Oxygen Demand (COD)	mg/L			6.5B		
Chloride	mg/L			3.7		8.2
Cyanide	mg/L	200,000		0.01U		
Dissolved Solids	mg/L			230		280
Nitrate/Nitrite as Nitrogen	mg/L			0.2		
Sulfate	mg/L			34		43
Sulfide	mg/L			4U		
Herbicides and Pesticides						
2,4-D	µg/L	70		4U		

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X735-05G						
4,4'-DDD	µg/L	0.859		0.05U		
4,4'-DDE	µg/L			0.05U		
4,4'-DDT	µg/L	0.46		0.05U		
alpha-BHC	µg/L			0.05U		
beta-BHC	µg/L			0.05U		
Chlordane	µg/L			0.5U		
delta-BHC	µg/L			0.05U		
Dieldrin	µg/L			0.05U		
Endosulfan I	µg/L			0.05U		
Endosulfan II	µg/L			0.05U		
Endrin	µg/L			0.05U		
Heptachlor	µg/L	0.4		0.05U		
Heptachlor epoxide	µg/L	0.2		0.05U		
Lindane	µg/L	0.2		0.05U		
Methoxychlor	µg/L			0.1U		
Silvex	µg/L	50		1U		
Toxaphene	µg/L			5U		
Field Measurements						
Conductivity	µS/cm			360		468
Depth to Water	ft			8.85		9.99
Dissolved Oxygen	mg/L			3		0.37
pH	Std Unit			6.86		6.34
Temperature	deg C			11.5		14.13
Turbidity	NTU			12		17
X735-05GA						
Metals						
Antimony	µg/L	36.5		2U		
Arsenic	µg/L	92		5U		
Barium	µg/L	2000		29		
Beryllium	µg/L	6.5		1U		
Cadmium	µg/L	6.5		1U		
Calcium	µg/L			24000		
Chromium	µg/L	100		0.51B		
Cobalt	µg/L	13		1.9		1.5
Copper	µg/L	21		2U		
Iron	µg/L			180		
Lead	µg/L	50		1U		
Magnesium	µg/L			17000		
Manganese	µg/L	14,300		14		
Mercury	µg/L	2		0.2U		0.073B

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X735-05GA						
Nickel	µg/L	100		2.9		3.4
Potassium	µg/L			630B		
Selenium	µg/L	50		5U		
Silver	µg/L	50		5U		
Sodium	µg/L			14000		14000
Thallium	µg/L	10.5		1U		
Vanadium	µg/L	713		0.3B		
Zinc	µg/L	30,500		3.8B		
Volatile Organic Compounds						
1,1,1,2-Tetrachloroethane	µg/L	11		1U		
1,1,1-Trichloroethane	µg/L	200		1U		
1,1,2,2-Tetrachloroethane	µg/L	0.83		1U		
1,1,2-Trichloroethane	µg/L	5		1U		
1,1-Dichloroethane	µg/L	5860		1U		
1,1-Dichloroethene	µg/L	7		1U		
1,2,3-Trichloropropane	µg/L	0.0379		1U		
1,2-Dibromo-3-chloropropane	µg/L	0.2		5U		
1,2-Dibromoethane	µg/L			1U		
1,2-Dichlorobenzene	µg/L	600		1U		
1,2-Dichloroethane	µg/L	5		1U		
1,2-Dichloropropane	µg/L	5		1U		
1,2-Dimethylbenzene	µg/L	10,000		1U		
1,4-Dichlorobenzene	µg/L	75		1U		
2-Butanone	µg/L	53,800		6U		
2-Hexanone	µg/L			5U		
4-Methyl-2-pentanone	µg/L	6360		5U		
Acetone	µg/L	10,200		2J		
Acrylonitrile	µg/L	0.431		20U		
Benzene	µg/L	5		1U		
Bromochloromethane	µg/L			1U		
Bromodichloromethane	µg/L	100		1U		
Bromoform	µg/L	100		1U		
Bromomethane	µg/L	140		2U		
Carbon disulfide	µg/L	6270		2U		
Carbon tetrachloride	µg/L	5		1U		
Chlorobenzene	µg/L	100		1U		
Chloroethane	µg/L	246,000		2U		
Chloroform	µg/L	100		1U		
Chloromethane	µg/L	13.4		2U		
cis-1,2-Dichloroethene	µg/L	70		1U		

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X735-05GA						
cis-1,3-Dichloropropene	µg/L			1U		
Dibromochloromethane	µg/L	3.12		1U		
Dibromomethane	µg/L	999		1U		
Ethylbenzene	µg/L	700		1U		
Hexachlorobutadiene	µg/L	3.7		5U		
Iodomethane	µg/L			1U		
M + P Xylene	µg/L	10,000		2U		
Methylene chloride	µg/L	5		0.49J		
Styrene	µg/L	100		1U		
Tetrachloroethene	µg/L	5		1U		
Toluene	µg/L	1000		1U		
trans-1,2-Dichloroethene	µg/L	100		1U		
trans-1,3-Dichloropropene	µg/L			1U		
trans-1,4-Dichloro-2-butene	µg/L			3U		
Trichloroethene	µg/L	5		1U		
Trichlorofluoromethane	µg/L	12,100		2U		
Vinyl acetate	µg/L	6840		3U		
Vinyl chloride	µg/L	2		1U		
Semivolatile Organic Compounds						
2,4,6-Trichlorophenol	µg/L	26		5U		
2,4-Dichlorophenol	µg/L			5U		
2,4-Dimethylphenol	µg/L			5U		
2-Chlorophenol	µg/L	465		5U		
2-Methyl-4,6-dinitrophenol	µg/L			5U		
2-Methylphenol	µg/L	4760		5U		
2-Nitrophenol	µg/L			5U		
4-Chloro-3-methylphenol	µg/L			5U		
4-Nitrophenol	µg/L			5U		
Acenaphthene	µg/L			5U		
Acenaphthylene	µg/L			5U		
Anthracene	µg/L			5U		
Benzo(a)pyrene	µg/L			5U		
Bis(2-chloroethyl) ether	µg/L			5U		
Bis(2-chloroisopropyl) ether	µg/L			5U		
Bis(2-ethylhexyl)phthalate	µg/L	6		5U		
Butyl benzyl phthalate	µg/L	14,900		5U		
Chrysene	µg/L			5U		
Diethyl phthalate	µg/L	71,300		5U		
Dimethyl phthalate	µg/L			5U		
Di-n-butyl phthalate	µg/L	7450		5U		

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X735-05GA						
Di-n-octylphthalate	µg/L	1470		5U		
Diphenylamine	µg/L			5U		
Fluoranthene	µg/L			5U		
Fluorene	µg/L			5U		
Hexachlorobenzene	µg/L	1		5U		
Hexachlorocyclopentadiene	µg/L			5U		
Hexachloroethane	µg/L	20		5U		
m+p Methylphenol	µg/L			5U		
Naphthalene	µg/L	3210		5U		
Nitrobenzene	µg/L	47.9		5U		
Pentachlorophenol	µg/L	1		5U		
Phenanthrene	µg/L			5U		
Phenol	µg/L	59,300		5U		
Pyrene	µg/L			5U		
Radionuclides						
Americium-241	pCi/L	0.49		0.01508U		0.008082U
Neptunium-237	pCi/L	0.54		0.000007012U		0.01524U
Plutonium-238	pCi/L			-0.006978U		0U
Plutonium-239/240	pCi/L	0.51		0.021U		0.00762U
Technetium-99	pCi/L	3790		-3.59U		1.01U
Uranium	µg/L	1000		0.002291U		0.2052U
Uranium-233/234	pCi/L	124,000		0.01946U		0.007728U
Uranium-235	pCi/L	43		0.007982U		0U
Uranium-236	pCi/L			0.007167U		0U
Uranium-238	pCi/L	6.7		0.00001935U		0.06894U
Polychlorinated Biphenyls						
PCB-1016	µg/L			1U		
PCB-1221	µg/L			1U		
PCB-1232	µg/L			1U		
PCB-1242	µg/L			1U		
PCB-1248	µg/L			1U		
PCB-1254	µg/L			1U		
PCB-1260	µg/L	0.5		1U		
Other Parameters						
Alkalinity	mg/L			58		52
Ammonia as Nitrogen	mg/L			0.11		
Chemical Oxygen Demand (COD)	mg/L			9.6B		
Chloride	mg/L			13		11
Cyanide	mg/L	200,000		0.0038B		
Dissolved Solids	mg/L			210		250

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X735-05GA						
Nitrate/Nitrite as Nitrogen	mg/L			0.28		
Sulfate	mg/L			79		130
Sulfide	mg/L			4U		
Herbicides and Pesticides						
2,4-D	µg/L	70		4U		
4,4'-DDD	µg/L	0.859		0.05U		
4,4'-DDE	µg/L			0.05U		
4,4'-DDT	µg/L	0.46		0.05U		
alpha-BHC	µg/L			0.05U		
beta-BHC	µg/L			0.05U		
Chlordane	µg/L			0.5U		
delta-BHC	µg/L			0.05U		
Dieldrin	µg/L			0.05U		
Endosulfan I	µg/L			0.05U		
Endosulfan II	µg/L			0.05U		
Endrin	µg/L			0.05U		
Heptachlor	µg/L	0.4		0.05U		
Heptachlor epoxide	µg/L	0.2		0.05U		
Lindane	µg/L	0.2		0.05U		
Methoxychlor	µg/L			0.1U		
Silvex	µg/L	50		1U		
Toxaphene	µg/L			5U		
Field Measurements						
Conductivity	µS/cm			311		391
Depth to Water	ft			10.62		12.49
Dissolved Oxygen	mg/L			3		8.53
pH	Std Unit			5.92		5.8
Temperature	deg C			11.4		14.19
Turbidity	NTU			14		7
X735-06GAA						
Metals						
Antimony	µg/L	36.5		2U		
Arsenic	µg/L	92		0.71B		
Barium	µg/L	2000		17		
Beryllium	µg/L	6.5		0.47B		
Cadmium	µg/L	6.5		1.2		
Calcium	µg/L			15000		
Chromium	µg/L	100		0.9B		
Cobalt	µg/L	13		15		19
Copper	µg/L	21		0.96B		

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X735-06GAA						
Iron	µg/L			1800		
Lead	µg/L	50		1.1		
Magnesium	µg/L			11000		
Manganese	µg/L	14,300		320		
Mercury	µg/L	2		0.2U		0.2U
Nickel	µg/L	100		52		65
Potassium	µg/L			2800B		
Selenium	µg/L	50		5U		
Silver	µg/L	50		5U		
Sodium	µg/L			40000		34000
Thallium	µg/L	10.5		0.16B		
Vanadium	µg/L	713		1.5B		
Zinc	µg/L	30,500		50		
Volatile Organic Compounds						
1,1,1,2-Tetrachloroethane	µg/L	11		1U		
1,1,1-Trichloroethane	µg/L	200		1U		
1,1,2,2-Tetrachloroethane	µg/L	0.83		1U		
1,1,2-Trichloroethane	µg/L	5		1U		
1,1-Dichloroethane	µg/L	5860		1U		
1,1-Dichloroethene	µg/L	7		1U		
1,2,3-Trichloropropane	µg/L	0.0379		1U		
1,2-Dibromo-3-chloropropane	µg/L	0.2		5U		
1,2-Dibromoethane	µg/L			1U		
1,2-Dichlorobenzene	µg/L	600		1U		
1,2-Dichloroethane	µg/L	5		1U		
1,2-Dichloropropane	µg/L	5		1U		
1,2-Dimethylbenzene	µg/L	10,000		1U		
1,4-Dichlorobenzene	µg/L	75		1U		
2-Butanone	µg/L	53,800		6U		
2-Hexanone	µg/L			5U		
4-Methyl-2-pentanone	µg/L	6360		5U		
Acetone	µg/L	10,200		10U		
Acrylonitrile	µg/L	0.431		20U		
Benzene	µg/L	5		1U		
Bromochloromethane	µg/L			1U		
Bromodichloromethane	µg/L	100		1U		
Bromoform	µg/L	100		1U		
Bromomethane	µg/L	140		2U		
Carbon disulfide	µg/L	6270		2U		
Carbon tetrachloride	µg/L	5		1U		

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X735-06GAA						
Chlorobenzene	µg/L	100		1U		
Chloroethane	µg/L	246,000		2U		
Chloroform	µg/L	100		1U		
Chloromethane	µg/L	13.4		2U		
cis-1,2-Dichloroethene	µg/L	70		1U		
cis-1,3-Dichloropropene	µg/L			1U		
Dibromochloromethane	µg/L	3.12		1U		
Dibromomethane	µg/L	999		1U		
Ethylbenzene	µg/L	700		1U		
Hexachlorobutadiene	µg/L	3.7		5U		
Iodomethane	µg/L			1U		
M + P Xylene	µg/L	10,000		2U		
Methylene chloride	µg/L	5		0.46J		
Styrene	µg/L	100		1U		
Tetrachloroethene	µg/L	5		1U		
Toluene	µg/L	1000		1U		
trans-1,2-Dichloroethene	µg/L	100		1U		
trans-1,3-Dichloropropene	µg/L			1U		
trans-1,4-Dichloro-2-butene	µg/L			3U		
Trichloroethene	µg/L	5		1U		
Trichlorofluoromethane	µg/L	12,100		2U		
Vinyl acetate	µg/L	6840		3U		
Vinyl chloride	µg/L	2		1U		
Semivolatile Organic Compounds						
2,4,6-Trichlorophenol	µg/L	26		5U		
2,4-Dichlorophenol	µg/L			5U		
2,4-Dimethylphenol	µg/L			5U		
2-Chlorophenol	µg/L	465		5U		
2-Methyl-4,6-dinitrophenol	µg/L			5U		
2-Methylphenol	µg/L	4760		5U		
2-Nitrophenol	µg/L			5U		
4-Chloro-3-methylphenol	µg/L			5U		
4-Nitrophenol	µg/L			5U		
Acenaphthene	µg/L			5U		
Acenaphthylene	µg/L			5U		
Anthracene	µg/L			5U		
Benzo(a)pyrene	µg/L			5U		
Bis(2-chloroethyl) ether	µg/L			5U		
Bis(2-chloroisopropyl) ether	µg/L			5U		
Bis(2-ethylhexyl)phthalate	µg/L	6		5U		

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X735-06GAA						
Butyl benzyl phthalate	µg/L	14,900		5U		
Chrysene	µg/L			5U		
Diethyl phthalate	µg/L	71,300		5U		
Dimethyl phthalate	µg/L			5U		
Di-n-butyl phthalate	µg/L	7450		5U		
Di-n-octylphthalate	µg/L	1470		5U		
Diphenylamine	µg/L			5U		
Fluoranthene	µg/L			5U		
Fluorene	µg/L			5U		
Hexachlorobenzene	µg/L	1		5U		
Hexachlorocyclopentadiene	µg/L			5U		
Hexachloroethane	µg/L	20		5U		
m+p Methylphenol	µg/L			5U		
Naphthalene	µg/L	3210		5U		
Nitrobenzene	µg/L	47.9		5U		
Pentachlorophenol	µg/L	1		5U		
Phenanthrene	µg/L			5U		
Phenol	µg/L	59,300		5U		
Pyrene	µg/L			5U		
Radionuclides						
Americium-241	pCi/L	0.49		0.007406U		0.008475U
Neptunium-237	pCi/L	0.54		-0.02956U		0U
Plutonium-238	pCi/L			0.02952U		0.007996U
Plutonium-239/240	pCi/L	0.51		0.00002949U		0.024U
Technetium-99	pCi/L	3790		1.75U		-1.62U
Uranium	µg/L	1000		0.2714		0.1792
Uranium-233/234	pCi/L	124,000		0.1046		0.03015
Uranium-235	pCi/L	43		0.008606U		0U
Uranium-236	pCi/L			0U		0.006679U
Uranium-238	pCi/L	6.7		0.09042		0.06018
Polychlorinated Biphenyls						
PCB-1016	µg/L			1U		
PCB-1221	µg/L			1U		
PCB-1232	µg/L			1U		
PCB-1242	µg/L			1U		
PCB-1248	µg/L			1U		
PCB-1254	µg/L			1U		
PCB-1260	µg/L	0.5		1U		
Other Parameters						
Alkalinity	mg/L			1.5B		5U

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X735-06GAA						
Ammonia as Nitrogen	mg/L			0.11		
Chemical Oxygen Demand (COD)	mg/L			5.8B		
Chloride	mg/L			25		25
Cyanide	mg/L	200,000		0.0044B		
Dissolved Solids	mg/L			280		260
Nitrate/Nitrite as Nitrogen	mg/L			0.17		
Sulfate	mg/L			120		120
Sulfide	mg/L			4U		
Herbicides and Pesticides						
2,4-D	µg/L	70		4U		
4,4'-DDD	µg/L	0.859		0.05U		
4,4'-DDE	µg/L			0.05U		
4,4'-DDT	µg/L	0.46		0.05U		
alpha-BHC	µg/L			0.05U		
beta-BHC	µg/L			0.05U		
Chlordane	µg/L			0.5U		
delta-BHC	µg/L			0.05U		
Dieldrin	µg/L			0.05U		
Endosulfan I	µg/L			0.05U		
Endosulfan II	µg/L			0.05U		
Endrin	µg/L			0.05U		
Heptachlor	µg/L	0.4		0.05U		
Heptachlor epoxide	µg/L	0.2		0.05U		
Lindane	µg/L	0.2		0.05U		
Methoxychlor	µg/L			0.1U		
Silvex	µg/L	50		1U		
Toxaphene	µg/L			5U		
Field Measurements						
Conductivity	µS/cm			370		371
Depth to Water	ft			16.05		19.45
Dissolved Oxygen	mg/L			1		4.54
pH	Std Unit			4.52		4.59
Temperature	deg C			13.8		13.42
Turbidity	NTU			89		18
X735-12G						
Metals						
Antimony	µg/L	36.5		2U		
Arsenic	µg/L	92		5U		
Barium	µg/L	2000		37		
Beryllium	µg/L	6.5		1U		

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X735-12G						
Cadmium	µg/L	6.5		0.054B		
Calcium	µg/L			33000		
Chromium	µg/L	100		0.56B		
Cobalt	µg/L	13		0.079B		0.15B
Copper	µg/L	21		2U		
Iron	µg/L			100U		
Lead	µg/L	50		1U		
Magnesium	µg/L			19000		
Manganese	µg/L	14,300		3.8		
Mercury	µg/L	2		0.2U		0.2U
Nickel	µg/L	100		4.1		8.3
Potassium	µg/L			900B		
Selenium	µg/L	50		5U		
Silver	µg/L	50		5U		
Sodium	µg/L			23000		17000
Thallium	µg/L	10.5		1U		
Tin	µg/L	61,100		10U		
Vanadium	µg/L	713		0.15B		
Zinc	µg/L	30,500		5B		
Volatile Organic Compounds						
1,1,1,2-Tetrachloroethane	µg/L	11		1U		
1,1,1-Trichloroethane	µg/L	200		1U		
1,1,2,2-Tetrachloroethane	µg/L	0.83		1U		
1,1,2-Trichloroethane	µg/L	5		1U		
1,1-Dichloroethane	µg/L	5860		1U		
1,1-Dichloroethene	µg/L	7		1U		
1,2,3-Trichloropropane	µg/L	0.0379		1U		
1,2,4-Trichlorobenzene	µg/L	70		1U		
1,2-Dibromo-3-chloropropane	µg/L	0.2		5U		
1,2-Dibromoethane	µg/L			1U		
1,2-Dichlorobenzene	µg/L	600		1U		
1,2-Dichloroethane	µg/L	5		1U		
1,2-Dichloropropane	µg/L	5		1U		
1,2-Dimethylbenzene	µg/L	10,000		1U		
1,3-Dichlorobenzene	µg/L			1U		
1,4-Dichlorobenzene	µg/L	75		1U		
2-Butanone	µg/L	53,800		6U		
2-Hexanone	µg/L			5U		
4-Methyl-2-pentanone	µg/L	6360		5U		
Acetone	µg/L	10,200		10U		

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X735-12G						
Acrylonitrile	µg/L	0.431		20U		
Benzene	µg/L	5		1U		
Bromochloromethane	µg/L			1U		
Bromodichloromethane	µg/L	100		1U		
Bromoform	µg/L	100		1U		
Bromomethane	µg/L	140		2U		
Carbon disulfide	µg/L	6270		2U		
Carbon tetrachloride	µg/L	5		1U		
Chlorobenzene	µg/L	100		1U		
Chloroethane	µg/L	246,000		2U		
Chloroform	µg/L	100		1U		
Chloromethane	µg/L	13.4		2U		
cis-1,2-Dichloroethene	µg/L	70		1U		
cis-1,3-Dichloropropene	µg/L			1U		
Dibromochloromethane	µg/L	3.12		1U		
Dibromomethane	µg/L	999		1U		
Dichlorodifluoromethane	µg/L	4560		2U		
Ethylbenzene	µg/L	700		1U		
Hexachlorobutadiene	µg/L	3.7		5U		
Iodomethane	µg/L			1U		
M + P Xylene	µg/L	10,000		2U		
Methylene chloride	µg/L	5		5U		
Styrene	µg/L	100		1U		
Tetrachloroethene	µg/L	5		1U		
Toluene	µg/L	1000		1U		
trans-1,2-Dichloroethene	µg/L	100		1U		
trans-1,3-Dichloropropene	µg/L			1U		
trans-1,4-Dichloro-2-butene	µg/L			3U		
Trichloroethene	µg/L	5		1U		
Trichlorofluoromethane	µg/L	12,100		2U		
Vinyl acetate	µg/L	6840		3U		
Vinyl chloride	µg/L	2		1U		
Semivolatile Organic Compounds						
2,4,6-Trichlorophenol	µg/L	26		5U		
2,4-Dichlorophenol	µg/L			5U		
2,4-Dimethylphenol	µg/L			5U		
2-Chlorophenol	µg/L	465		5U		
2-Methyl-4,6-dinitrophenol	µg/L			5U		
2-Methylphenol	µg/L	4760		5U		
2-Nitrophenol	µg/L			5U		

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X735-12G						
4-Chloro-3-methylphenol	µg/L			5U		
4-Nitrophenol	µg/L			5U		
Acenaphthene	µg/L			5U		
Acenaphthylene	µg/L			5U		
Anthracene	µg/L			5U		
Benzo(a)pyrene	µg/L			5U		
Bis(2-chloroethyl) ether	µg/L			5U		
Bis(2-chloroisopropyl) ether	µg/L			5U		
Bis(2-ethylhexyl)phthalate	µg/L	6		5U		
Butyl benzyl phthalate	µg/L	14,900		5U		
Chrysene	µg/L			5U		
Diethyl phthalate	µg/L	71,300		5U		
Dimethyl phthalate	µg/L			5U		
Di-n-butyl phthalate	µg/L	7450		5U		
Di-n-octylphthalate	µg/L	1470		5U		
Diphenylamine	µg/L			5U		
Fluoranthene	µg/L			5U		
Fluorene	µg/L			5U		
Hexachlorobenzene	µg/L	1		5U		
Hexachlorocyclopentadiene	µg/L			5U		
Hexachloroethane	µg/L	20		5U		
m+p Methylphenol	µg/L			5U		
Naphthalene	µg/L	3210		5U		
Nitrobenzene	µg/L	47.9		5U		
Pentachlorophenol	µg/L	1		5U		
Phenanthrene	µg/L			5U		
Phenol	µg/L	59,300		5U		
Pyrene	µg/L			5U		
Radionuclides						
Americium-241	pCi/L	0.49		0.00001599U		0.02527U
Neptunium-237	pCi/L	0.54		0.006692U		0.008705U
Plutonium-238	pCi/L			0.01997U		0.01736U
Plutonium-239/240	pCi/L	0.51		0.00001329U		-0.008655U
Technetium-99	pCi/L	3790		-1.08U		2.53U
Uranium	µg/L	1000		0.2013		0.3801
Uranium-233/234	pCi/L	124,000		0.09031		0.1439
Uranium-235	pCi/L	43		0U		-0.009335U
Uranium-236	pCi/L			0.008343U		0.00839U
Uranium-238	pCi/L	6.7		0.06759		0.1285
Polychlorinated Biphenyls						

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X735-12G						
PCB-1016	µg/L			1U		
PCB-1221	µg/L			1U		
PCB-1232	µg/L			1U		
PCB-1242	µg/L			1U		
PCB-1248	µg/L			1U		
PCB-1254	µg/L			1U		
PCB-1260	µg/L	0.5		1U		
Other Parameters						
Alkalinity	mg/L			160		170
Ammonia as Nitrogen	mg/L			0.043B		
Chemical Oxygen Demand (COD)	mg/L			20U		
Chloride	mg/L			4.9		6.9
Cyanide	mg/L	200,000		0.0027B		
Dissolved Solids	mg/L			230		220
Nitrate/Nitrite as Nitrogen	mg/L			0.74		
Sulfate	mg/L			34		29
Sulfide	mg/L			4U		
Herbicides and Pesticides						
2,4-D	µg/L	70		4U		
4,4'-DDD	µg/L	0.859		0.05U		
4,4'-DDE	µg/L			0.05U		
4,4'-DDT	µg/L	0.46		0.05U		
alpha-BHC	µg/L			0.05U		
beta-BHC	µg/L			0.05U		
Chlordane	µg/L			0.5U		
delta-BHC	µg/L			0.05U		
Dieldrin	µg/L			0.05U		
Endosulfan I	µg/L			0.05U		
Endosulfan II	µg/L			0.05U		
Endrin	µg/L			0.05U		
Heptachlor	µg/L	0.4		0.05U		
Heptachlor epoxide	µg/L	0.2		0.05U		
Lindane	µg/L	0.2		0.05U		
Methoxychlor	µg/L			0.1U		
Silvex	µg/L	50		1U		
Toxaphene	µg/L			5U		
Field Measurements						
Conductivity	µS/cm			370		405
Depth to Water	ft			17.68		20.2
Dissolved Oxygen	mg/L			4		4.05

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X735-12G						
pH	Std Unit			6.56		6.41
Temperature	deg C			12.5		14.33
Turbidity	NTU			1		5
X735-13GA						
Metals						
Antimony	µg/L	36.5		2U		
Arsenic	µg/L	92		0.58B		
Barium	µg/L	2000		19		
Beryllium	µg/L	6.5		1U		
Cadmium	µg/L	6.5		0.14B		
Calcium	µg/L			3600		
Chromium	µg/L	100		1.8B		
Cobalt	µg/L	13		0.65B		0.33B
Copper	µg/L	21		1B		
Iron	µg/L			1900		
Lead	µg/L	50		0.62B		
Magnesium	µg/L			2700		
Manganese	µg/L	14,300		9.2		
Mercury	µg/L	2		0.2U		0.2U
Nickel	µg/L	100		3.7		7.2
Potassium	µg/L			1300B		
Selenium	µg/L	50		1.1B		
Silver	µg/L	50		5U		
Sodium	µg/L			13000		30000
Thallium	µg/L	10.5		0.04B		
Vanadium	µg/L	713		2.6B		
Zinc	µg/L	30,500		6.1B		
Volatile Organic Compounds						
1,1,1,2-Tetrachloroethane	µg/L	11		1U		
1,1,1-Trichloroethane	µg/L	200		1U		
1,1,2,2-Tetrachloroethane	µg/L	0.83		1U		
1,1,2-Trichloroethane	µg/L	5		1U		
1,1-Dichloroethane	µg/L	5860		1U		
1,1-Dichloroethene	µg/L	7		1U		
1,2,3-Trichloropropane	µg/L	0.0379		1U		
1,2-Dibromo-3-chloropropane	µg/L	0.2		5U		
1,2-Dibromoethane	µg/L			1U		
1,2-Dichlorobenzene	µg/L	600		1U		
1,2-Dichloroethane	µg/L	5		1U		
1,2-Dichloropropane	µg/L	5		1U		

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X735-13GA						
1,2-Dimethylbenzene	µg/L	10,000		1U		
1,4-Dichlorobenzene	µg/L	75		1U		
2-Butanone	µg/L	53,800		6U		
2-Hexanone	µg/L			5U		
4-Methyl-2-pentanone	µg/L	6360		5U		
Acetone	µg/L	10,200		10U		
Acrylonitrile	µg/L	0.431		20U		
Benzene	µg/L	5		1U		
Bromochloromethane	µg/L			1U		
Bromodichloromethane	µg/L	100		1U		
Bromoform	µg/L	100		1U		
Bromomethane	µg/L	140		2U		
Carbon disulfide	µg/L	6270		2U		
Carbon tetrachloride	µg/L	5		1U		
Chlorobenzene	µg/L	100		1U		
Chloroethane	µg/L	246,000		2U		
Chloroform	µg/L	100		1U		
Chloromethane	µg/L	13.4		2U		
cis-1,2-Dichloroethene	µg/L	70		1U		
cis-1,3-Dichloropropene	µg/L			1U		
Dibromochloromethane	µg/L	3.12		1U		
Dibromomethane	µg/L	999		1U		
Ethylbenzene	µg/L	700		1U		
Hexachlorobutadiene	µg/L	3.7		5U		
Iodomethane	µg/L			1U		
M + P Xylene	µg/L	10,000		2U		
Methylene chloride	µg/L	5		0.42J		
Styrene	µg/L	100		1U		
Tetrachloroethene	µg/L	5		1U		
Toluene	µg/L	1000		1U		
trans-1,2-Dichloroethene	µg/L	100		1U		
trans-1,3-Dichloropropene	µg/L			1U		
trans-1,4-Dichloro-2-butene	µg/L			3U		
Trichloroethene	µg/L	5		1U		
Trichlorofluoromethane	µg/L	12,100		2U		
Vinyl acetate	µg/L	6840		3U		
Vinyl chloride	µg/L	2		1U		
Semivolatile Organic Compounds						
2,4,6-Trichlorophenol	µg/L	26		5U		
2,4-Dichlorophenol	µg/L			5U		

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X735-13GA						
2,4-Dimethylphenol	µg/L			5U		
2-Chlorophenol	µg/L	465		5U		
2-Methyl-4,6-dinitrophenol	µg/L			5U		
2-Methylphenol	µg/L	4760		5U		
2-Nitrophenol	µg/L			5U		
4-Chloro-3-methylphenol	µg/L			5U		
4-Nitrophenol	µg/L			5U		
Acenaphthene	µg/L			5U		
Acenaphthylene	µg/L			5U		
Anthracene	µg/L			5U		
Benzo(a)pyrene	µg/L			5U		
Bis(2-chloroethyl) ether	µg/L			5U		
Bis(2-chloroisopropyl) ether	µg/L			5U		
Bis(2-ethylhexyl)phthalate	µg/L	6		5U		
Butyl benzyl phthalate	µg/L	14,900		5U		
Chrysene	µg/L			5U		
Diethyl phthalate	µg/L	71,300		5U		
Dimethyl phthalate	µg/L			5U		
Di-n-butyl phthalate	µg/L	7450		5U		
Di-n-octylphthalate	µg/L	1470		5U		
Diphenylamine	µg/L			5U		
Fluoranthene	µg/L			5U		
Fluorene	µg/L			5U		
Hexachlorobenzene	µg/L	1		5U		
Hexachlorocyclopentadiene	µg/L			5U		
Hexachloroethane	µg/L	20		5U		
m+p Methylphenol	µg/L			5U		
Naphthalene	µg/L	3210		5U		
Nitrobenzene	µg/L	47.9		5U		
Pentachlorophenol	µg/L	1		5U		
Phenanthrene	µg/L			5U		
Phenol	µg/L	59,300		5U		
Pyrene	µg/L			5U		
Radionuclides						
Americium-241	pCi/L	0.49		0.007032U		-0.008992U
Neptunium-237	pCi/L	0.54		-0.01577U		-0.007631U
Plutonium-238	pCi/L			0.00000788U		0.00767U
Plutonium-239/240	pCi/L	0.51		0.04733U		0.00000761U
Technetium-99	pCi/L	3790		0.325U		-3.01U
Uranium	µg/L	1000		0.1259U		0.1596

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X735-13GA						
Uranium-233/234	pCi/L	124,000		0.0708		0.08615
Uranium-235	pCi/L	43		0U		0.008173U
Uranium-236	pCi/L			-0.01566U		0U
Uranium-238	pCi/L	6.7		0.04239U		0.0529
Polychlorinated Biphenyls						
PCB-1016	µg/L			1U		
PCB-1221	µg/L			1U		
PCB-1232	µg/L			1U		
PCB-1242	µg/L			1U		
PCB-1248	µg/L			1U		
PCB-1254	µg/L			1U		
PCB-1260	µg/L	0.5		1U		
Other Parameters						
Alkalinity	mg/L			26		31
Ammonia as Nitrogen	mg/L			0.098B		
Chemical Oxygen Demand (COD)	mg/L			5.1B		
Chloride	mg/L			2.4B		6.8
Cyanide	mg/L	200,000		0.0037B		
Dissolved Solids	mg/L			87		250
Nitrate/Nitrite as Nitrogen	mg/L			0.18		
Sulfate	mg/L			19		140
Sulfide	mg/L			4U		
Herbicides and Pesticides						
2,4-D	µg/L	70		4U		
4,4'-DDD	µg/L	0.859		0.05U		
4,4'-DDE	µg/L			0.05U		
4,4'-DDT	µg/L	0.46		0.05U		
alpha-BHC	µg/L			0.05U		
beta-BHC	µg/L			0.05U		
Chlordane	µg/L			0.5U		
delta-BHC	µg/L			0.05U		
Dieldrin	µg/L			0.05U		
Endosulfan I	µg/L			0.05U		
Endosulfan II	µg/L			0.05U		
Endrin	µg/L			0.05U		
Heptachlor	µg/L	0.4		0.05U		
Heptachlor epoxide	µg/L	0.2		0.05U		
Lindane	µg/L	0.2		0.05U		
Methoxychlor	µg/L			0.1U		
Silvex	µg/L	50		1U		

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X735-13GA						
Toxaphene	µg/L			5U		
Field Measurements						
Conductivity	µS/cm			92		355
Depth to Water	ft			22.27		25.68
Dissolved Oxygen	mg/L			4		4.11
pH	Std Unit			6.05		5.81
Temperature	deg C			14.1		13.1
Turbidity	NTU			48		26
X735-16B						
Metals						
Antimony	µg/L	39.5		2U		
Arsenic	µg/L	50		5U		
Barium	µg/L	4011		24		
Beryllium	µg/L	7		1U		
Cadmium	µg/L	7		1U		
Calcium	µg/L			30000		
Chromium	µg/L	100		1.2B		
Cobalt	µg/L	91		0.41B		0.3B
Copper	µg/L	22.5		2U		
Iron	µg/L			100U		
Lead	µg/L	50		1U		
Magnesium	µg/L			14000		
Manganese	µg/L	14,300		45		
Mercury	µg/L	2		0.2U		0.2U
Nickel	µg/L	840		1.4B		0.51B
Potassium	µg/L			1700B		
Selenium	µg/L	50		0.87B		
Silver	µg/L	50		5U		
Sodium	µg/L			24000		20000
Thallium	µg/L	21.5		0.035B		
Vanadium	µg/L	713		5U		
Zinc	µg/L	30,500		10U		
Volatile Organic Compounds						
1,1,1,2-Tetrachloroethane	µg/L	11		1U		
1,1,1-Trichloroethane	µg/L	200		1U		
1,1,2,2-Tetrachloroethane	µg/L	0.83		1U		
1,1,2-Trichloroethane	µg/L	5		1U		
1,1-Dichloroethane	µg/L	5860		1U		
1,1-Dichloroethene	µg/L	7		1U		
1,2,3-Trichloropropane	µg/L	0.0379		1U		

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X735-16B						
1,2-Dibromo-3-chloropropane	µg/L	0.2		5U		
1,2-Dibromoethane	µg/L			1U		
1,2-Dichlorobenzene	µg/L	600		1U		
1,2-Dichloroethane	µg/L	5		1U		
1,2-Dichloropropane	µg/L	5		1U		
1,2-Dimethylbenzene	µg/L	10,000		1U		
1,4-Dichlorobenzene	µg/L	75		1U		
2-Butanone	µg/L	53,800		6U		
2-Hexanone	µg/L			5U		
4-Methyl-2-pentanone	µg/L	6360		5U		
Acetone	µg/L	10,200		10U		
Acrylonitrile	µg/L	0.431		20U		
Benzene	µg/L	10.5		1U		
Bromochloromethane	µg/L			1U		
Bromodichloromethane	µg/L	100		1U		
Bromoform	µg/L	100		1U		
Bromomethane	µg/L	140		2U		
Carbon disulfide	µg/L	6270		2U		
Carbon tetrachloride	µg/L	5		1U		
Chlorobenzene	µg/L	100		1U		
Chloroethane	µg/L	246,000		2U		
Chloroform	µg/L	100		1U		
Chloromethane	µg/L	13.4		2U		
cis-1,2-Dichloroethene	µg/L	70		1U		
cis-1,3-Dichloropropene	µg/L			1U		
Dibromochloromethane	µg/L	3.12		1U		
Dibromomethane	µg/L	999		1U		
Ethylbenzene	µg/L	700		1U		
Iodomethane	µg/L			1U		
M + P Xylene	µg/L	10,000		2U		
Methylene chloride	µg/L	5		0.4J		
Styrene	µg/L	100		1U		
Tetrachloroethene	µg/L	5		1U		
Toluene	µg/L	1000		1U		
trans-1,2-Dichloroethene	µg/L	100		1U		
trans-1,3-Dichloropropene	µg/L			1U		
trans-1,4-Dichloro-2-butene	µg/L			3U		
Trichloroethene	µg/L	5		1U		
Trichlorofluoromethane	µg/L	12,100		2U		
Vinyl acetate	µg/L	6840		3U		

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X735-16B						
Vinyl chloride	µg/L	2		1U		
Radionuclides						
Americium-241	pCi/L	0.49		0.00798U		0.009222U
Neptunium-237	pCi/L	0.54		-0.02787U		0.007201U
Plutonium-238	pCi/L			0U		0.02148U
Plutonium-239/240	pCi/L	0.51		0.02088U		0.02148U
Technetium-99	pCi/L	3790		-0.304U		-2.56U
Uranium	µg/L	1000		-0.02222U		0.08838
Uranium-233/234	pCi/L	124,000		-0.01345U		0.05362
Uranium-235	pCi/L	43		-0.008319U		0U
Uranium-236	pCi/L			0U		-0.006593U
Uranium-238	pCi/L	6.7		-0.006724U		0.02973
Other Parameters						
Alkalinity	mg/L			69		53
Ammonia as Nitrogen	mg/L			0.096B		
Chemical Oxygen Demand (COD)	mg/L			6.9B		
Chloride	mg/L			41		38
Dissolved Solids	mg/L			250		230
Nitrate/Nitrite as Nitrogen	mg/L			1.1		
Sulfate	mg/L			55		64
Field Measurements						
Conductivity	µS/cm			386		374
Depth to Water	ft			25.2		27.64
Dissolved Oxygen	mg/L			2		1.05
pH	Std Unit			5.92		5.49
Temperature	deg C			13.4		12.65
Turbidity	NTU			1		6
X735-17B						
Metals						
Antimony	µg/L	39.5		0.18B		
Arsenic	µg/L	50		3B		
Barium	µg/L	4011		62		
Beryllium	µg/L	7		1U		
Cadmium	µg/L	7		1U		
Calcium	µg/L			20000		
Chromium	µg/L	100		0.98B		
Cobalt	µg/L	91		0.7B		1.5
Copper	µg/L	22.5		0.88B		
Iron	µg/L			340		
Lead	µg/L	50		1U		

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X735-17B						
Magnesium	µg/L			17000		
Manganese	µg/L	14,300		150		
Mercury	µg/L	2		0.044B		0.2U
Nickel	µg/L	840		1.4B		2.3
Potassium	µg/L			5200		
Selenium	µg/L	50		0.77B		
Silver	µg/L	50		5U		
Sodium	µg/L			50000		50000
Thallium	µg/L	21.5		0.021B		
Vanadium	µg/L	713		0.46B		
Zinc	µg/L	30,500		3.7B		
Volatile Organic Compounds						
1,1,1,2-Tetrachloroethane	µg/L	11		2U		
1,1,1-Trichloroethane	µg/L	200		2U		
1,1,2,2-Tetrachloroethane	µg/L	0.83		1U		
1,1,2-Trichloroethane	µg/L	5		2U		
1,1-Dichloroethane	µg/L	5860		2U		
1,1-Dichloroethene	µg/L	7		2U		
1,2,3-Trichloropropane	µg/L	0.0379		1U		
1,2-Dibromo-3-chloropropane	µg/L	0.2		5U		
1,2-Dibromoethane	µg/L			2U		
1,2-Dichlorobenzene	µg/L	600		2U		
1,2-Dichloroethane	µg/L	5		2U		
1,2-Dichloropropane	µg/L	5		2U		
1,2-Dimethylbenzene	µg/L	10,000		2U		
1,4-Dichlorobenzene	µg/L	75		2U		
2-Butanone	µg/L	53,800		6U		
2-Hexanone	µg/L			5U		
4-Methyl-2-pentanone	µg/L	6360		5U		
Acetone	µg/L	10,200		10U		
Acrylonitrile	µg/L	0.431		20U		
Benzene	µg/L	10.5		2U		
Bromochloromethane	µg/L			2U		
Bromodichloromethane	µg/L	100		2U		
Bromoform	µg/L	100		2U		
Bromomethane	µg/L	140		2U		
Carbon disulfide	µg/L	6270		2U		
Carbon tetrachloride	µg/L	5		2U		
Chlorobenzene	µg/L	100		2U		
Chloroethane	µg/L	246,000		2U		

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X735-17B						
Chloroform	µg/L	100		2U		
Chloromethane	µg/L	13.4		2U		
cis-1,2-Dichloroethene	µg/L	70		2U		
cis-1,3-Dichloropropene	µg/L			2U		
Dibromochloromethane	µg/L	3.12		2U		
Dibromomethane	µg/L	999		2U		
Ethylbenzene	µg/L	700		2U		
Iodomethane	µg/L			1U		
M + P Xylene	µg/L	10,000		2U		
Methylene chloride	µg/L	5		5U		
Styrene	µg/L	100		2U		
Tetrachloroethene	µg/L	5		2U		
Toluene	µg/L	1000		2U		
trans-1,2-Dichloroethene	µg/L	100		1U		
trans-1,3-Dichloropropene	µg/L			2U		
trans-1,4-Dichloro-2-butene	µg/L			3U		
Trichloroethene	µg/L	5		2U		
Trichlorofluoromethane	µg/L	12,100		2U		
Vinyl acetate	µg/L	6840		3U		
Vinyl chloride	µg/L	2		1U		
Radionuclides						
Americium-241	pCi/L	0.49		-0.01724U		0.007441U
Neptunium-237	pCi/L	0.54		-0.02806U		0.02466U
Plutonium-238	pCi/L			0.02807U		0.01641U
Plutonium-239/240	pCi/L	0.51		0.00002804U		0U
Technetium-99	pCi/L	3790		1.82U		0.0224U
Uranium	µg/L	1000		0.1491U		0.2268
Uranium-233/234	pCi/L	124,000		0.1465		0.2107
Uranium-235	pCi/L	43		-0.007837U		0.01677U
Uranium-236	pCi/L			-0.01409U		0.01506U
Uranium-238	pCi/L	6.7		0.05085U		0.07461
Other Parameters						
Alkalinity	mg/L			190		200
Ammonia as Nitrogen	mg/L			0.12		
Chemical Oxygen Demand (COD)	mg/L			6.6B		
Chloride	mg/L			16		16
Dissolved Solids	mg/L			240		270
Nitrate/Nitrite as Nitrogen	mg/L			0.18		
Sulfate	mg/L			9		9.7
Field Measurements						

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X735-17B						
Conductivity	µS/cm			413		463
Depth to Water	ft			21.1		23.71
Dissolved Oxygen	mg/L			nm		nm
pH	Std Unit			8.49		7.62
Temperature	deg C			14.5		12.31
Turbidity	NTU			4		7
X735-18B						
Metals						
Antimony	µg/L	39.5		2U		
Arsenic	µg/L	50		1.5B		
Barium	µg/L	4011		42		
Beryllium	µg/L	7		1U		
Cadmium	µg/L	7		1U		
Calcium	µg/L			35000		
Chromium	µg/L	100		2U		
Cobalt	µg/L	91		0.17B		0.1B
Copper	µg/L	22.5		2U		
Iron	µg/L			56B		
Lead	µg/L	50		1U		
Magnesium	µg/L			17000		
Manganese	µg/L	14,300		82		
Mercury	µg/L	2		0.045B		0.2U
Nickel	µg/L	840		0.73B		2U
Potassium	µg/L			3000		
Selenium	µg/L	50		5U		
Silver	µg/L	50		5U		
Sodium	µg/L			28000		29000
Thallium	µg/L	21.5		0.025B		
Vanadium	µg/L	713		0.17B		
Zinc	µg/L	30,500		10U		
Volatile Organic Compounds						
1,1,1,2-Tetrachloroethane	µg/L	11		2U		
1,1,1-Trichloroethane	µg/L	200		2U		
1,1,2,2-Tetrachloroethane	µg/L	0.83		1U		
1,1,2-Trichloroethane	µg/L	5		2U		
1,1-Dichloroethane	µg/L	5860		2U		
1,1-Dichloroethene	µg/L	7		2U		
1,2,3-Trichloropropane	µg/L	0.0379		1U		
1,2-Dibromo-3-chloropropane	µg/L	0.2		5U		
1,2-Dibromoethane	µg/L			2U		

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X735-18B						
1,2-Dichlorobenzene	µg/L	600		2U		
1,2-Dichloroethane	µg/L	5		2U		
1,2-Dichloropropane	µg/L	5		2U		
1,2-Dimethylbenzene	µg/L	10,000		2U		
1,4-Dichlorobenzene	µg/L	75		2U		
2-Butanone	µg/L	53,800		6U		
2-Hexanone	µg/L			5U		
4-Methyl-2-pentanone	µg/L	6360		5U		
Acetone	µg/L	10,200		1.9J		
Acrylonitrile	µg/L	0.431		20U		
Benzene	µg/L	10.5		2U		
Bromochloromethane	µg/L			2U		
Bromodichloromethane	µg/L	100		2U		
Bromoform	µg/L	100		2U		
Bromomethane	µg/L	140		2U		
Carbon disulfide	µg/L	6270		2U		
Carbon tetrachloride	µg/L	5		2U		
Chlorobenzene	µg/L	100		2U		
Chloroethane	µg/L	246,000		2U		
Chloroform	µg/L	100		2U		
Chloromethane	µg/L	13.4		2U		
cis-1,2-Dichloroethene	µg/L	70		2U		
cis-1,3-Dichloropropene	µg/L			2U		
Dibromochloromethane	µg/L	3.12		2U		
Dibromomethane	µg/L	999		2U		
Ethylbenzene	µg/L	700		2U		
Iodomethane	µg/L			1U		
M + P Xylene	µg/L	10,000		2U		
Methylene chloride	µg/L	5		5U		
Styrene	µg/L	100		2U		
Tetrachloroethene	µg/L	5		2U		
Toluene	µg/L	1000		2U		
trans-1,2-Dichloroethene	µg/L	100		1U		
trans-1,3-Dichloropropene	µg/L			2U		
trans-1,4-Dichloro-2-butene	µg/L			3U		
Trichloroethene	µg/L	5		0.22J		
Trichlorofluoromethane	µg/L	12,100		2U		
Vinyl acetate	µg/L	6840		3U		
Vinyl chloride	µg/L	2		1U		
Radionuclides						

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X735-18B						
Americium-241	pCi/L	0.49		0.02144U		-0.01716U
Neptunium-237	pCi/L	0.54		0.007206U		-0.006339U
Plutonium-238	pCi/L			0.02152U		0.01898U
Plutonium-239/240	pCi/L	0.51		0.02151U		0.01898U
Technetium-99	pCi/L	3790		11		-5.62U
Uranium	µg/L	1000		0.08287U		0.1856
Uranium-233/234	pCi/L	124,000		0.05743U		0.1715
Uranium-235	pCi/L	43		-0.008841U		0.008459U
Uranium-236	pCi/L			-0.007938U		0U
Uranium-238	pCi/L	6.7		0.02867U		0.0616
Other Parameters						
Alkalinity	mg/L			180		180
Ammonia as Nitrogen	mg/L			0.2		
Chemical Oxygen Demand (COD)	mg/L			20U		
Chloride	mg/L			9.6		8.8
Dissolved Solids	mg/L			220		240
Nitrate/Nitrite as Nitrogen	mg/L			0.024B		
Sulfate	mg/L			13		18
Field Measurements						
Conductivity	µS/cm			433		393
Depth to Water	ft			26.91		29.65
Dissolved Oxygen	mg/L			3		1.84
pH	Std Unit			7.6		8.08
Temperature	deg C			17.5		10.33
Turbidity	NTU			3		8
X735-19G						
Metals						
Antimony	µg/L	36.5		2U		
Arsenic	µg/L	92		5U		
Barium	µg/L	2000		18		
Beryllium	µg/L	6.5		1U		
Cadmium	µg/L	6.5		0.55B		
Calcium	µg/L			53000		
Chromium	µg/L	100		2U		
Cobalt	µg/L	13		3.9		3.4
Copper	µg/L	21		2U		
Iron	µg/L			100U		
Lead	µg/L	50		1U		
Magnesium	µg/L			30000		
Manganese	µg/L	14,300		1400		

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X735-19G						
Mercury	µg/L	2		0.045B		0.2U
Nickel	µg/L	100		8.8		7.2
Potassium	µg/L			2000B		
Selenium	µg/L	50		0.99B		
Silver	µg/L	50		5U		
Sodium	µg/L			33000		36000
Thallium	µg/L	10.5		0.025B		
Vanadium	µg/L	713		5U		
Zinc	µg/L	30,500		11		
Volatile Organic Compounds						
1,1,1,2-Tetrachloroethane	µg/L	11		2U		
1,1,1-Trichloroethane	µg/L	200		2U		
1,1,2,2-Tetrachloroethane	µg/L	0.83		1U		
1,1,2-Trichloroethane	µg/L	5		2U		
1,1-Dichloroethane	µg/L	5860		2U		
1,1-Dichloroethene	µg/L	7		2U		
1,2,3-Trichloropropane	µg/L	0.0379		1U		
1,2-Dibromo-3-chloropropane	µg/L	0.2		5U		
1,2-Dibromoethane	µg/L			2U		
1,2-Dichlorobenzene	µg/L	600		2U		
1,2-Dichloroethane	µg/L	5		2U		
1,2-Dichloropropane	µg/L	5		2U		
1,2-Dimethylbenzene	µg/L	10,000		2U		
1,4-Dichlorobenzene	µg/L	75		2U		
2-Butanone	µg/L	53,800		6U		
2-Hexanone	µg/L			5U		
4-Methyl-2-pentanone	µg/L	6360		5U		
Acetone	µg/L	10,200		7.2J		
Acrylonitrile	µg/L	0.431		20U		
Benzene	µg/L	5		2U		
Bromochloromethane	µg/L			2U		
Bromodichloromethane	µg/L	100		2U		
Bromoform	µg/L	100		2U		
Bromomethane	µg/L	140		2U		
Carbon disulfide	µg/L	6270		2U		
Carbon tetrachloride	µg/L	5		2U		
Chlorobenzene	µg/L	100		2U		
Chloroethane	µg/L	246,000		2U		
Chloroform	µg/L	100		2U		
Chloromethane	µg/L	13.4		2U		

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X735-19G						
cis-1,2-Dichloroethene	µg/L	70		2U		
cis-1,3-Dichloropropene	µg/L			2U		
Dibromochloromethane	µg/L	3.12		2U		
Dibromomethane	µg/L	999		2U		
Ethylbenzene	µg/L	700		2U		
Iodomethane	µg/L			1U		
M + P Xylene	µg/L	10,000		2U		
Methylene chloride	µg/L	5		5U		
Styrene	µg/L	100		2U		
Tetrachloroethene	µg/L	5		2U		
Toluene	µg/L	1000		2U		
trans-1,2-Dichloroethene	µg/L	100		1U		
trans-1,3-Dichloropropene	µg/L			2U		
trans-1,4-Dichloro-2-butene	µg/L			3U		
Trichloroethene	µg/L	5		2U		
Trichlorofluoromethane	µg/L	12,100		2U		
Vinyl acetate	µg/L	6840		3U		
Vinyl chloride	µg/L	2		1U		
Radionuclides						
Americium-241	pCi/L	0.49		0.007772U		0U
Neptunium-237	pCi/L	0.54		0.007107U		-0.007559U
Plutonium-238	pCi/L			0.02118U		0.02264U
Plutonium-239/240	pCi/L	0.51		0.01412U		0U
Technetium-99	pCi/L	3790		1.63U		-2.42U
Uranium	µg/L	1000		0.08126U		0.07736U
Uranium-233/234	pCi/L	124,000		0.006858U		0.01344U
Uranium-235	pCi/L	43		0.000008427U		-0.00825U
Uranium-236	pCi/L			0U		0U
Uranium-238	pCi/L	6.7		0.02731U		0.02673U
Other Parameters						
Alkalinity	mg/L			89		81
Ammonia as Nitrogen	mg/L			0.024B		
Chemical Oxygen Demand (COD)	mg/L			20U		
Chloride	mg/L			70		56
Dissolved Solids	mg/L			430		420
Nitrate/Nitrite as Nitrogen	mg/L			0.19		
Sulfate	mg/L			140		150
Field Measurements						
Conductivity	µS/cm			675		649
Depth to Water	ft			24.81		27.68

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X735-19G						
Dissolved Oxygen	mg/L			1		2.47
pH	Std Unit			5.96		5.96
Temperature	deg C			14.2		13.71
Turbidity	NTU			1		6
X735-20B						
Metals						
Antimony	µg/L	39.5		2U		
Arsenic	µg/L	50		4.9B		
Barium	µg/L	4011		190		
Beryllium	µg/L	7		1U		
Cadmium	µg/L	7		1U		
Calcium	µg/L			70000		
Chromium	µg/L	100		2U		
Cobalt	µg/L	91		0.54B		3.6
Copper	µg/L	22.5		2U		
Iron	µg/L			1300		
Lead	µg/L	50		1U		
Magnesium	µg/L			36000		
Manganese	µg/L	14,300		1700		
Mercury	µg/L	2		0.043B		0.2U
Nickel	µg/L	840		1.5B		2.7
Potassium	µg/L			11000		
Selenium	µg/L	50		0.75B		
Silver	µg/L	50		5U		
Sodium	µg/L			38000		34000
Thallium	µg/L	21.5		1U		
Vanadium	µg/L	713		5U		
Zinc	µg/L	30,500		10U		
Volatile Organic Compounds						
1,1,1,2-Tetrachloroethane	µg/L	11		2U		
1,1,1-Trichloroethane	µg/L	200		2U		
1,1,2,2-Tetrachloroethane	µg/L	0.83		1U		
1,1,2-Trichloroethane	µg/L	5		2U		
1,1-Dichloroethane	µg/L	5860		2U		
1,1-Dichloroethene	µg/L	7		2U		
1,2,3-Trichloropropane	µg/L	0.0379		1U		
1,2-Dibromo-3-chloropropane	µg/L	0.2		5U		
1,2-Dibromoethane	µg/L			2U		
1,2-Dichlorobenzene	µg/L	600		2U		
1,2-Dichloroethane	µg/L	5		2U		

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X735-20B						
1,2-Dichloropropane	µg/L	5		2U		
1,2-Dimethylbenzene	µg/L	10,000		2U		
1,4-Dichlorobenzene	µg/L	75		2U		
2-Butanone	µg/L	53,800		6U		
2-Hexanone	µg/L			5U		
4-Methyl-2-pentanone	µg/L	6360		5U		
Acetone	µg/L	10,200		10U		
Acrylonitrile	µg/L	0.431		20U		
Benzene	µg/L	10.5		2U		
Bromochloromethane	µg/L			2U		
Bromodichloromethane	µg/L	100		2U		
Bromoform	µg/L	100		2U		
Bromomethane	µg/L	140		2U		
Carbon disulfide	µg/L	6270		2U		
Carbon tetrachloride	µg/L	5		2U		
Chlorobenzene	µg/L	100		2U		
Chloroethane	µg/L	246,000		2U		
Chloroform	µg/L	100		2U		
Chloromethane	µg/L	13.4		2U		
cis-1,2-Dichloroethene	µg/L	70		2U		
cis-1,3-Dichloropropene	µg/L			2U		
Dibromochloromethane	µg/L	3.12		2U		
Dibromomethane	µg/L	999		2U		
Ethylbenzene	µg/L	700		2U		
Iodomethane	µg/L			1U		
M + P Xylene	µg/L	10,000		2U		
Methylene chloride	µg/L	5		5U		
Styrene	µg/L	100		2U		
Tetrachloroethene	µg/L	5		2U		
Toluene	µg/L	1000		2U		
trans-1,2-Dichloroethene	µg/L	100		1U		
trans-1,3-Dichloropropene	µg/L			2U		
trans-1,4-Dichloro-2-butene	µg/L			3U		
Trichloroethene	µg/L	5		2U		
Trichlorofluoromethane	µg/L	12,100		2U		
Vinyl acetate	µg/L	6840		3U		
Vinyl chloride	µg/L	2		1U		
Radionuclides						
Americium-241	pCi/L	0.49		-0.02865U		0.0314U
Neptunium-237	pCi/L	0.54		-0.01353U		0.01395U

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X735-20B						
Plutonium-238	pCi/L			0U		0.01392U
Plutonium-239/240	pCi/L	0.51		-0.00676U		0.01392U
Technetium-99	pCi/L	3790		7.23U		-4.32U
Uranium	µg/L	1000		0.327		0.1464
Uranium-233/234	pCi/L	124,000		0.2685		0.09152
Uranium-235	pCi/L	43		0.01577U		0U
Uranium-236	pCi/L			0U		0U
Uranium-238	pCi/L	6.7		0.1085		0.04918
Other Parameters						
Alkalinity	mg/L			200		140
Ammonia as Nitrogen	mg/L			0.17		
Chemical Oxygen Demand (COD)	mg/L			8B		
Chloride	mg/L			55		59
Dissolved Solids	mg/L			490		470
Nitrate/Nitrite as Nitrogen	mg/L			0.17		
Sulfate	mg/L			120		140
Field Measurements						
Conductivity	µS/cm			850		730
Depth to Water	ft			25.27		27.99
Dissolved Oxygen	mg/L			4		nm
pH	Std Unit			7.24		6.41
Temperature	deg C			15.7		12.67
Turbidity	NTU			3		7
X735-21G						
Metals						
Antimony	µg/L	36.5		2U		
Arsenic	µg/L	92		0.22B		
Barium	µg/L	2000		81		
Beryllium	µg/L	6.5		0.12B		
Cadmium	µg/L	6.5		0.37B		
Calcium	µg/L			31000		
Chromium	µg/L	100		0.64B		
Cobalt	µg/L	13		13		10
Copper	µg/L	21		0.72B		
Iron	µg/L			930		
Lead	µg/L	50		1U		
Magnesium	µg/L			24000		
Manganese	µg/L	14,300		2100		
Mercury	µg/L	2		1.6		0.36
Nickel	µg/L	100		33		23

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X735-21G						
Potassium	µg/L			740B		
Selenium	µg/L	50		5U		
Silver	µg/L	50		5U		
Sodium	µg/L			8300		11000
Thallium	µg/L	10.5		0.05B		
Tin	µg/L	61,100		10U		
Vanadium	µg/L	713		5U		
Zinc	µg/L	30,500		18		
Volatile Organic Compounds						
1,1,1,2-Tetrachloroethane	µg/L	11		1U		
1,1,1-Trichloroethane	µg/L	200		1U		
1,1,2,2-Tetrachloroethane	µg/L	0.83		1U		
1,1,2-Trichloroethane	µg/L	5		1U		
1,1-Dichloroethane	µg/L	5860		1U		
1,1-Dichloroethene	µg/L	7		1U		
1,2,3-Trichloropropane	µg/L	0.0379		1U		
1,2-Dibromo-3-chloropropane	µg/L	0.2		5U		
1,2-Dibromoethane	µg/L			1U		
1,2-Dichlorobenzene	µg/L	600		1U		
1,2-Dichloroethane	µg/L	5		1U		
1,2-Dichloropropane	µg/L	5		1U		
1,2-Dimethylbenzene	µg/L	10,000		1U		
1,4-Dichlorobenzene	µg/L	75		1U		
2-Butanone	µg/L	53,800		6U		
2-Hexanone	µg/L			5U		
4-Methyl-2-pentanone	µg/L	6360		5U		
Acetone	µg/L	10,200		10U		
Acrylonitrile	µg/L	0.431		20U		
Benzene	µg/L	5		1U		
Bromochloromethane	µg/L			1U		
Bromodichloromethane	µg/L	100		1U		
Bromoform	µg/L	100		1U		
Bromomethane	µg/L	140		2U		
Carbon disulfide	µg/L	6270		2U		
Carbon tetrachloride	µg/L	5		1U		
Chlorobenzene	µg/L	100		1U		
Chloroethane	µg/L	246,000		2U		
Chloroform	µg/L	100		1U		
Chloromethane	µg/L	13.4		2U		
cis-1,2-Dichloroethene	µg/L	70		0.4J		

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X735-21G						
cis-1,3-Dichloropropene	µg/L			1U		
Dibromochloromethane	µg/L	3.12		1U		
Dibromomethane	µg/L	999		1U		
Ethylbenzene	µg/L	700		1U		
Hexachlorobutadiene	µg/L	3.7		5U		
Iodomethane	µg/L			1U		
M + P Xylene	µg/L	10,000		2U		
Methylene chloride	µg/L	5		5U		
Styrene	µg/L	100		1U		
Tetrachloroethene	µg/L	5		1U		
Toluene	µg/L	1000		1U		
trans-1,2-Dichloroethene	µg/L	100		1U		
trans-1,3-Dichloropropene	µg/L			1U		
trans-1,4-Dichloro-2-butene	µg/L			3U		
Trichloroethene	µg/L	5		1U		
Trichlorofluoromethane	µg/L	12,100		2U		
Vinyl acetate	µg/L	6840		3U		
Vinyl chloride	µg/L	2		1U		
Semivolatile Organic Compounds						
2,4,6-Trichlorophenol	µg/L	26		5U		
2,4-Dichlorophenol	µg/L			5U		
2,4-Dimethylphenol	µg/L			5U		
2-Chlorophenol	µg/L	465		5U		
2-Methyl-4,6-dinitrophenol	µg/L			5U		
2-Methylphenol	µg/L	4760		5U		
2-Nitrophenol	µg/L			5U		
4-Chloro-3-methylphenol	µg/L			5U		
4-Nitrophenol	µg/L			5U		
Acenaphthene	µg/L			5U		
Acenaphthylene	µg/L			5U		
Anthracene	µg/L			5U		
Benzo(a)pyrene	µg/L			5U		
Bis(2-chloroethyl) ether	µg/L			5U		
Bis(2-chloroisopropyl) ether	µg/L			5U		
Bis(2-ethylhexyl)phthalate	µg/L	6		5U		
Butyl benzyl phthalate	µg/L	14,900		5U		
Chrysene	µg/L			5U		
Diethyl phthalate	µg/L	71,300		5U		
Dimethyl phthalate	µg/L			5U		
Di-n-butyl phthalate	µg/L	7450		5U		

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X735-21G						
Di-n-octylphthalate	µg/L	1470		5U		
Diphenylamine	µg/L			5U		
Fluoranthene	µg/L			5U		
Fluorene	µg/L			5U		
Hexachlorobenzene	µg/L	1		5U		
Hexachlorocyclopentadiene	µg/L			5U		
Hexachloroethane	µg/L	20		5U		
m+p Methylphenol	µg/L			5U		
Naphthalene	µg/L	3210		5U		
Nitrobenzene	µg/L	47.9		5U		
Pentachlorophenol	µg/L	1		5U		
Phenanthrene	µg/L			5U		
Phenol	µg/L	59,300		5U		
Pyrene	µg/L			5U		
Radionuclides						
Americium-241	pCi/L	0.49		-0.01538U		0.01686U
Neptunium-237	pCi/L	0.54		-0.006541U		-0.02119U
Plutonium-238	pCi/L			0.01965U		0.02115U
Plutonium-239/240	pCi/L	0.51		0.0262U		0.01411U
Technetium-99	pCi/L	3790		-0.549U		-3.19U
Uranium	µg/L	1000		0.3966		0.2584
Uranium-233/234	pCi/L	124,000		0.2429		0.1924
Uranium-235	pCi/L	43		0.02429U		0.008185U
Uranium-236	pCi/L			0.007271U		0.000007343U
Uranium-238	pCi/L	6.7		0.1311		0.08608
Polychlorinated Biphenyls						
PCB-1016	µg/L			1U		
PCB-1221	µg/L			1U		
PCB-1232	µg/L			1U		
PCB-1242	µg/L			1U		
PCB-1248	µg/L			1U		
PCB-1254	µg/L			1U		
PCB-1260	µg/L	0.5		1U		
Other Parameters						
Alkalinity	mg/L			130		65
Ammonia as Nitrogen	mg/L			0.076B		
Chemical Oxygen Demand (COD)	mg/L			10B		
Chloride	mg/L			6.4		7.7
Cyanide	mg/L	200,000		0.01U		
Dissolved Solids	mg/L			250		160

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X735-21G						
Nitrate/Nitrite as Nitrogen	mg/L			0.035B		
Sulfate	mg/L			71		44
Sulfide	mg/L			0.8B		
Herbicides and Pesticides						
2,4-D	µg/L	70		4U		
4,4'-DDD	µg/L	0.859		0.05U		
4,4'-DDE	µg/L			0.05U		
4,4'-DDT	µg/L	0.46		0.05U		
alpha-BHC	µg/L			0.05U		
beta-BHC	µg/L			0.011JP		
Chlordane	µg/L			0.5U		
delta-BHC	µg/L			0.05U		
Dieldrin	µg/L			0.05U		
Endosulfan I	µg/L			0.05U		
Endosulfan II	µg/L			0.05U		
Endrin	µg/L			0.05U		
Heptachlor	µg/L	0.4		0.012JP		
Heptachlor epoxide	µg/L	0.2		0.05U		
Lindane	µg/L	0.2		0.05U		
Methoxychlor	µg/L			0.1U		
Silvex	µg/L	50		1U		
Toxaphene	µg/L			5U		
Field Measurements						
Conductivity	µS/cm			395		252
Depth to Water	ft			18.08		19.85
Dissolved Oxygen	mg/L			nm		1
pH	Std Unit			5.43		5.4
Temperature	deg C			12.8		12.98
Turbidity	NTU			1		10
X737-05B						
Metals						
Antimony	µg/L	39.5		2U		
Arsenic	µg/L	50		12		
Barium	µg/L	4011		37		
Beryllium	µg/L	7		1U		
Cadmium	µg/L	7		1U		
Calcium	µg/L			17000		
Chromium	µg/L	100		1.3B		
Cobalt	µg/L	91		0.23B		0.26B
Copper	µg/L	22.5		2U		

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X737-05B						
Iron	µg/L			6300		
Lead	µg/L	50		1U		
Magnesium	µg/L			7600		
Manganese	µg/L	14,300		370		
Mercury	µg/L	2		0.2U		0.2U
Nickel	µg/L	840		0.87B		1.4B
Potassium	µg/L			2000B		
Selenium	µg/L	50		5U		
Silver	µg/L	50		5U		
Sodium	µg/L			20000		21000
Thallium	µg/L	21.5		0.021B		
Tin	µg/L	61,100		10U		
Vanadium	µg/L	713		0.35B		
Zinc	µg/L	30,500		3.4B		
Volatile Organic Compounds						
1,1,1,2-Tetrachloroethane	µg/L	11		1U		
1,1,1-Trichloroethane	µg/L	200		1U		
1,1,2,2-Tetrachloroethane	µg/L	0.83		1U		
1,1,2-Trichloroethane	µg/L	5		1U		
1,1-Dichloroethane	µg/L	5860		1U		
1,1-Dichloroethene	µg/L	7		1U		
1,2,3-Trichloropropane	µg/L	0.0379		1U		
1,2-Dibromo-3-chloropropane	µg/L	0.2		5U		
1,2-Dibromoethane	µg/L			1U		
1,2-Dichlorobenzene	µg/L	600		1U		
1,2-Dichloroethane	µg/L	5		1U		
1,2-Dichloropropane	µg/L	5		1U		
1,2-Dimethylbenzene	µg/L	10,000		1U		
1,4-Dichlorobenzene	µg/L	75		1U		
2-Butanone	µg/L	53,800		6U		
2-Hexanone	µg/L			5U		
4-Methyl-2-pentanone	µg/L	6360		5U		
Acetone	µg/L	10,200		10U		
Acrylonitrile	µg/L	0.431		20U		
Benzene	µg/L	10.5		1U		
Bromochloromethane	µg/L			1U		
Bromodichloromethane	µg/L	100		1U		
Bromoform	µg/L	100		1U		
Bromomethane	µg/L	140		2U		
Carbon disulfide	µg/L	6270		2U		

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X737-05B						
Carbon tetrachloride	µg/L	5		1U		
Chlorobenzene	µg/L	100		1U		
Chloroethane	µg/L	246,000		2U		
Chloroform	µg/L	100		1U		
Chloromethane	µg/L	13.4		2U		
cis-1,2-Dichloroethene	µg/L	70		1U		
cis-1,3-Dichloropropene	µg/L			1U		
Dibromochloromethane	µg/L	3.12		1U		
Dibromomethane	µg/L	999		1U		
Ethylbenzene	µg/L	700		1U		
Iodomethane	µg/L			1U		
M + P Xylene	µg/L	10,000		2U		
Methylene chloride	µg/L	5		5U		
Styrene	µg/L	100		1U		
Tetrachloroethene	µg/L	5		1U		
Toluene	µg/L	1000		1U		
trans-1,2-Dichloroethene	µg/L	100		1U		
trans-1,3-Dichloropropene	µg/L			1U		
Trans-1,4-Dichloro-2-butene	µg/L			3U		
Trichloroethene	µg/L	5		1U		
Trichlorofluoromethane	µg/L	12,100		2U		
Vinyl acetate	µg/L	6840		3U		
Vinyl chloride	µg/L	2		1U		
Radionuclides						
Americium-241	pCi/L	0.49		0.01422U		-0.009271U
Neptunium-237	pCi/L	0.54		-0.02884U		0.000007778U
Plutonium-238	pCi/L			0.02162U		0U
Plutonium-239/240	pCi/L	0.51		0.007227U		0.01553U
Technetium-99	pCi/L	3790		1.63U		-0.286U
Uranium	µg/L	1000		0.004174U		0.002375U
Uranium-233/234	pCi/L	124,000		0.05066U		0.02155U
Uranium-235	pCi/L	43		0.01561U		0.008852U
Uranium-236	pCi/L			-0.007U		0U
Uranium-238	pCi/L	6.7		0.00004415U		0.000007155U
Other Parameters						
Alkalinity	mg/L			66		70
Ammonia as Nitrogen	mg/L			0.13		
Chemical Oxygen Demand (COD)	mg/L			5.1B		
Chloride	mg/L			7.8		8
Dissolved Solids	mg/L			180		150

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X737-05B						
Nitrate/Nitrite as Nitrogen	mg/L			0.041B		
Sulfate	mg/L			47		45
Field Measurements						
Conductivity	µS/cm			261		274
Depth to Water	ft			10.71		12.6
Dissolved Oxygen	mg/L			1		0.19
pH	Std Unit			6.16		6.22
Temperature	deg C			13.9		13.19
Turbidity	NTU			20		19
X737-06G						
Metals						
Antimony	µg/L	36.5		2U		
Arsenic	µg/L	92		5U		
Barium	µg/L	2000		36		
Beryllium	µg/L	6.5		1U		
Cadmium	µg/L	6.5		0.07B		
Calcium	µg/L			42000		
Chromium	µg/L	100		0.98B		
Cobalt	µg/L	13		0.069B		0.078B
Copper	µg/L	21		2U		
Iron	µg/L			53B		
Lead	µg/L	50		1U		
Magnesium	µg/L			23000		
Manganese	µg/L	14,300		130		
Mercury	µg/L	2		0.2U		0.2U
Nickel	µg/L	100		5.1		1.8B
Potassium	µg/L			1500B		
Selenium	µg/L	50		5U		
Silver	µg/L	50		5U		
Sodium	µg/L			23000		22000
Thallium	µg/L	10.5		0.023B		
Tin	µg/L	61,100		10U		
Vanadium	µg/L	713		0.15B		
Zinc	µg/L	30,500		10U		
Volatile Organic Compounds						
1,1,1,2-Tetrachloroethane	µg/L	11		1U		
1,1,1-Trichloroethane	µg/L	200		1U		
1,1,2,2-Tetrachloroethane	µg/L	0.83		1U		
1,1,2-Trichloroethane	µg/L	5		1U		
1,1-Dichloroethane	µg/L	5860		1U		

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X737-06G						
1,1-Dichloroethene	µg/L	7		1U		
1,2,3-Trichloropropane	µg/L	0.0379		1U		
1,2-Dibromo-3-chloropropane	µg/L	0.2		5U		
1,2-Dibromoethane	µg/L			1U		
1,2-Dichlorobenzene	µg/L	600		1U		
1,2-Dichloroethane	µg/L	5		1U		
1,2-Dichloropropane	µg/L	5		1U		
1,2-Dimethylbenzene	µg/L	10,000		1U		
1,4-Dichlorobenzene	µg/L	75		1U		
2-Butanone	µg/L	53,800		6U		
2-Hexanone	µg/L			5U		
4-Methyl-2-pentanone	µg/L	6360		5U		
Acetone	µg/L	10,200		2.1J		
Acrylonitrile	µg/L	0.431		20U		
Acrylonitrile	µg/L	0.431		20U		
Benzene	µg/L	5		1U		
Bromochloromethane	µg/L			1U		
Bromodichloromethane	µg/L	100		1U		
Bromoform	µg/L	100		1U		
Bromomethane	µg/L	140		2U		
Carbon disulfide	µg/L	6270		2U		
Carbon tetrachloride	µg/L	5		1U		
Chlorobenzene	µg/L	100		1U		
Chloroethane	µg/L	246,000		2U		
Chloroform	µg/L	100		1U		
Chloromethane	µg/L	13.4		2U		
cis-1,2-Dichloroethene	µg/L	70		1U		
cis-1,3-Dichloropropene	µg/L			1U		
Dibromochloromethane	µg/L	3.12		1U		
Dibromomethane	µg/L	999		1U		
Ethylbenzene	µg/L	700		1U		
Hexachlorobutadiene	µg/L	3.7		5U		
Iodomethane	µg/L			1U		
M + P Xylene	µg/L	10,000		2U		
Methylene chloride	µg/L	5		0.51J		
Styrene	µg/L	100		1U		
Tetrachloroethene	µg/L	5		1U		
Toluene	µg/L	1000		1U		
trans-1,2-Dichloroethene	µg/L	100		1U		
trans-1,3-Dichloropropene	µg/L			1U		

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X737-06G						
Trans-1,4-Dichloro-2-butene	µg/L			3U		
Trichloroethene	µg/L	5		1U		
Trichlorofluoromethane	µg/L	12,100		2U		
Vinyl acetate	µg/L	6840		3U		
Vinyl chloride	µg/L	2		1U		
Semivolatile Organic Compounds						
2,4,6-Trichlorophenol	µg/L	26		5U		
2,4-Dichlorophenol	µg/L			5U		
2,4-Dimethylphenol	µg/L			5U		
2-Chlorophenol	µg/L	465		5U		
2-Methyl-4,6-dinitrophenol	µg/L			5U		
2-Methylphenol	µg/L	4760		5U		
2-Nitrophenol	µg/L			5U		
4-Chloro-3-methylphenol	µg/L			5U		
4-Nitrophenol	µg/L			5U		
Acenaphthene	µg/L			5U		
Acenaphthylene	µg/L			5U		
Anthracene	µg/L			5U		
Benzo(a)pyrene	µg/L			5U		
Bis(2-chloroethyl) ether	µg/L			5U		
Bis(2-chloroisopropyl) ether	µg/L			5U		
Bis(2-ethylhexyl)phthalate	µg/L	6		5U		
Butyl benzyl phthalate	µg/L	14,900		5U		
Chrysene	µg/L			5U		
Diethyl phthalate	µg/L	71,300		5U		
Dimethyl phthalate	µg/L			5U		
Di-n-butyl phthalate	µg/L	7450		5U		
Di-n-octylphthalate	µg/L	1470		5U		
Diphenylamine	µg/L			5U		
Fluoranthene	µg/L			5U		
Fluorene	µg/L			5U		
Hexachlorobenzene	µg/L	1		5U		
Hexachlorocyclopentadiene	µg/L			5U		
Hexachloroethane	µg/L	20		5U		
m+p Methylphenol	µg/L			5U		
Naphthalene	µg/L	3210		5U		
Nitrobenzene	µg/L	47.9		5U		
Pentachlorophenol	µg/L	1		5U		
Phenanthrene	µg/L			5U		
Phenol	µg/L	59,300		5U		

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X737-06G						
Pyrene	µg/L			5U		
Radionuclides						
Americium-241	pCi/L	0.49		0.007242U		0.01865U
Neptunium-237	pCi/L	0.54		-0.047U		-0.01569U
Plutonium-238	pCi/L			0.00002009U		0.01568U
Plutonium-239/240	pCi/L	0.51		-0.01338U		0.01568U
Technetium-99	pCi/L	3790		-2.14U		1.04U
Uranium	µg/L	1000		0.05948U		-0.00009971U
Uranium-233/234	pCi/L	124,000		-0.006372U		0.007132U
Uranium-235	pCi/L	43		0.007948U		0U
Uranium-236	pCi/L			-0.007122U		-0.007853U
Uranium-238	pCi/L	6.7		0.01932U		0.000007076U
Polychlorinated Biphenyls						
PCB-1016	µg/L			1U		
PCB-1221	µg/L			1U		
PCB-1232	µg/L			1U		
PCB-1242	µg/L			1U		
PCB-1248	µg/L			1U		
PCB-1254	µg/L			1U		
PCB-1260	µg/L	0.5		1U		
Other Parameters						
Alkalinity	mg/L			110		110
Ammonia as Nitrogen	mg/L			0.081B		
Chemical Oxygen Demand (COD)	mg/L			4.8B		
Chloride	mg/L			14		22
Cyanide	mg/L	200,000		0.01U		
Dissolved Solids	mg/L			330		310
Nitrate/Nitrite as Nitrogen	mg/L			0.41		
Sulfate	mg/L			130		110
Sulfide	mg/L			4U		
Herbicides and Pesticides						
2,4-D	µg/L	70		4U		
4,4'-DDD	µg/L	0.859		0.05U		
4,4'-DDE	µg/L			0.05U		
4,4'-DDT	µg/L	0.46		0.05U		
alpha-BHC	µg/L			0.05U		
beta-BHC	µg/L			0.05U		
Chlordane	µg/L			0.5U		
delta-BHC	µg/L			0.05U		
Dieldrin	µg/L			0.05U		

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X737-06G						
Endosulfan I	µg/L			0.05U		
Endosulfan II	µg/L			0.05U		
Endrin	µg/L			0.05U		
Heptachlor	µg/L	0.4		0.05U		
Heptachlor epoxide	µg/L	0.2		0.05U		
Lindane	µg/L	0.2		0.05U		
Methoxychlor	µg/L			0.1U		
Silvex	µg/L	50		1U		
Toxaphene	µg/L			5U		
Field Measurements						
Conductivity	µS/cm			483		475
Depth to Water	ft			32.54		35.09
Dissolved Oxygen	mg/L			1		0.52
pH	Std Unit			6.17		5.97
Temperature	deg C			14.3		12.54
Turbidity	NTU			2		7
X737-07B						
Metals						
Antimony	µg/L	39.5		2U		
Arsenic	µg/L	50		12		
Barium	µg/L	4011		96		
Beryllium	µg/L	7		1U		
Cadmium	µg/L	7		1U		
Calcium	µg/L			61000		
Chromium	µg/L	100		0.51B		
Cobalt	µg/L	91		0.077B		0.13B
Copper	µg/L	22.5		2U		
Iron	µg/L			7200		
Lead	µg/L	50		1U		
Magnesium	µg/L			30000		
Manganese	µg/L	14,300		220		
Mercury	µg/L	2		0.2U		0.2U
Nickel	µg/L	840		0.89B		1.8B
Potassium	µg/L			3600		
Selenium	µg/L	50		5U		
Silver	µg/L	50		0.22B		
Sodium	µg/L			39000		37000
Thallium	µg/L	21.5		1U		
Tin	µg/L	61,100		10U		
Vanadium	µg/L	713		5U		

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X737-07B						
Zinc	µg/L	30,500		3.1B		
Volatile Organic Compounds						
1,1,1,2-Tetrachloroethane	µg/L	11		1U		
1,1,1-Trichloroethane	µg/L	200		1U		
1,1,2,2-Tetrachloroethane	µg/L	0.83		1U		
1,1,2-Trichloroethane	µg/L	5		1U		
1,1-Dichloroethane	µg/L	5860		1U		
1,1-Dichloroethene	µg/L	7		1U		
1,2,3-Trichloropropane	µg/L	0.0379		1U		
1,2-Dibromo-3-chloropropane	µg/L	0.2		5U		
1,2-Dibromoethane	µg/L			1U		
1,2-Dichlorobenzene	µg/L	600		1U		
1,2-Dichloroethane	µg/L	5		1U		
1,2-Dichloropropane	µg/L	5		1U		
1,2-Dimethylbenzene	µg/L	10,000		1U		
1,4-Dichlorobenzene	µg/L	75		1U		
2-Butanone	µg/L	53,800		6U		
2-Hexanone	µg/L			5U		
4-Methyl-2-pentanone	µg/L	6360		5U		
Acetone	µg/L	10,200		10U		
Acrylonitrile	µg/L	0.431		20U		
Benzene	µg/L	10.5		1U		
Bromochloromethane	µg/L			1U		
Bromodichloromethane	µg/L	100		1U		
Bromoform	µg/L	100		1U		
Bromomethane	µg/L	140		2U		
Carbon disulfide	µg/L	6270		2U		
Carbon tetrachloride	µg/L	5		1U		
Chlorobenzene	µg/L	100		1U		
Chloroethane	µg/L	246,000		2U		
Chloroform	µg/L	100		1U		
Chloromethane	µg/L	13.4		2U		
cis-1,2-Dichloroethene	µg/L	70		1U		
cis-1,3-Dichloropropene	µg/L			1U		
Dibromochloromethane	µg/L	3.12		1U		
Dibromomethane	µg/L	999		1U		
Ethylbenzene	µg/L	700		1U		
Iodomethane	µg/L			1U		
M + P Xylene	µg/L	10,000		2U		
Methylene chloride	µg/L	5		0.43J		

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X737-07B						
Styrene	µg/L	100		1U		
Tetrachloroethene	µg/L	5		1U		
Toluene	µg/L	1000		1U		
trans-1,2-Dichloroethene	µg/L	100		1U		
trans-1,3-Dichloropropene	µg/L			1U		
Trans-1,4-Dichloro-2-butene	µg/L			3U		
Trichloroethene	µg/L	5		1U		
Trichlorofluoromethane	µg/L	12,100		2U		
Vinyl acetate	µg/L	6840		3U		
Vinyl chloride	µg/L	2		1U		
Radionuclides						
Americium-241	pCi/L	0.49		-0.007761U		0.009721U
Neptunium-237	pCi/L	0.54		-0.02054U		-0.007403U
Plutonium-238	pCi/L			0.00001367U		-0.007382U
Plutonium-239/240	pCi/L	0.51		0.02053U		0.00739U
Technetium-99	pCi/L	3790		-2.99U		2.06U
Uranium	µg/L	1000		-0.04109U		0.06213U
Uranium-233/234	pCi/L	124,000		-0.01383U		0.01397U
Uranium-235	pCi/L	43		0.000008563U		0U
Uranium-236	pCi/L			0.007696U		-0.007731U
Uranium-238	pCi/L	6.7		-0.01385U		0.02092U
Other Parameters						
Alkalinity	mg/L			170		180
Ammonia as Nitrogen	mg/L			0.29		
Chemical Oxygen Demand (COD)	mg/L			20U		
Chloride	mg/L			17		19
Dissolved Solids	mg/L			490		440
Nitrate/Nitrite as Nitrogen	mg/L			0.064B		
Sulfate	mg/L			180		150
Field Measurements						
Conductivity	µS/cm			684		708
Depth to Water	ft			32.73		35.18
Dissolved Oxygen	mg/L			0.5		1.8
pH	Std Unit			6.5		6.49
Temperature	deg C			13.3		12.71
Turbidity	NTU			6		15
X737-08B						
Metals						
Antimony	µg/L	39.5		3.4		
Arsenic	µg/L	50		300		

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X737-08B						
Barium	µg/L	4011		120		
Beryllium	µg/L	7		1U		
Cadmium	µg/L	7		1U		
Calcium	µg/L			50000		
Chromium	µg/L	100		0.67B		
Cobalt	µg/L	91		0.092B		0.55B
Copper	µg/L	22.5		2U		
Iron	µg/L			1600		
Lead	µg/L	50		1U		
Magnesium	µg/L			24000		
Manganese	µg/L	14,300		78		
Mercury	µg/L	2		0.2U		0.2U
Nickel	µg/L	840		0.9B		7.3
Potassium	µg/L			4500		
Selenium	µg/L	50		5U		
Silver	µg/L	50		5U		
Sodium	µg/L			36000		36000
Thallium	µg/L	21.5		1U		
Tin	µg/L	61,100		10U		
Vanadium	µg/L	713		0.15B		
Zinc	µg/L	30,500		10U		
Volatile Organic Compounds						
1,1,1,2-Tetrachloroethane	µg/L	11		1U		
1,1,1-Trichloroethane	µg/L	200		1U		
1,1,2,2-Tetrachloroethane	µg/L	0.83		1U		
1,1,2-Trichloroethane	µg/L	5		1U		
1,1-Dichloroethane	µg/L	5860		1U		
1,1-Dichloroethene	µg/L	7		1U		
1,2,3-Trichloropropane	µg/L	0.0379		1U		
1,2-Dibromo-3-chloropropane	µg/L	0.2		5U		
1,2-Dibromoethane	µg/L			1U		
1,2-Dichlorobenzene	µg/L	600		1U		
1,2-Dichloroethane	µg/L	5		1U		
1,2-Dichloropropane	µg/L	5		1U		
1,2-Dimethylbenzene	µg/L	10,000		1U		
1,4-Dichlorobenzene	µg/L	75		1U		
2-Butanone	µg/L	53,800		6U		
2-Hexanone	µg/L			5U		
4-Methyl-2-pentanone	µg/L	6360		5U		
Acetone	µg/L	10,200		10U		

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X737-08B						
Acrylonitrile	µg/L	0.431		20U		
Benzene	µg/L	10.5		1U		
Bromochloromethane	µg/L			1U		
Bromodichloromethane	µg/L	100		1U		
Bromoform	µg/L	100		1U		
Bromomethane	µg/L	140		2U		
Carbon disulfide	µg/L	6270		2U		
Carbon tetrachloride	µg/L	5		1U		
Chlorobenzene	µg/L	100		1U		
Chloroethane	µg/L	246,000		2U		
Chloroform	µg/L	100		1U		
Chloromethane	µg/L	13.4		2U		
cis-1,2-Dichloroethene	µg/L	70		1U		
cis-1,3-Dichloropropene	µg/L			1U		
Dibromochloromethane	µg/L	3.12		1U		
Dibromomethane	µg/L	999		1U		
Ethylbenzene	µg/L	700		1U		
Iodomethane	µg/L			1U		
M + P Xylene	µg/L	10,000		2U		
Methylene chloride	µg/L	5		0.34J		
Styrene	µg/L	100		1U		
Tetrachloroethene	µg/L	5		1U		
Toluene	µg/L	1000		1U		
trans-1,2-Dichloroethene	µg/L	100		1U		
trans-1,3-Dichloropropene	µg/L			1U		
Trans-1,4-Dichloro-2-butene	µg/L			3U		
Trichloroethene	µg/L	5		1U		
Trichlorofluoromethane	µg/L	12,100		2U		
Vinyl acetate	µg/L	6840		3U		
Vinyl chloride	µg/L	2		1U		
Radionuclides						
Americium-241	pCi/L	0.49		0.01646U		-0.01382U
Neptunium-237	pCi/L	0.54		-0.06404U		-0.015U
Plutonium-238	pCi/L			0.02132U		0.015U
Plutonium-239/240	pCi/L	0.51		0.04976U		-0.00747U
Technetium-99	pCi/L	3790		0.509U		-3.45U
Uranium	µg/L	1000		0.4403		0.3592
Uranium-233/234	pCi/L	124,000		0.5361		0.6397
Uranium-235	pCi/L	43		0.008266U		0U
Uranium-236	pCi/L			0.01485U		0.01575U

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X737-08B						
Uranium-238	pCi/L	6.7		0.1471		0.1206
Other Parameters						
Alkalinity	mg/L			250		270
Ammonia as Nitrogen	mg/L			0.24		
Chemical Oxygen Demand (COD)	mg/L			9.3B		
Chloride	mg/L			12		11
Dissolved Solids	mg/L			350		490
Nitrate/Nitrite as Nitrogen	mg/L			0.1U		
Sulfate	mg/L			51		100
Field Measurements						
Conductivity	µS/cm			571		856
Depth to Water	ft			33.03		34.79
Dissolved Oxygen	mg/L			nm		nm
pH	Std Unit			7.56		7.34
Temperature	deg C			14.2		11
Turbidity	NTU			9		6
X737-09G						
Metals						
Antimony	µg/L	36.5		0.076B		
Arsenic	µg/L	92		3.6B		
Barium	µg/L	2000		140		
Beryllium	µg/L	6.5		1U		
Cadmium	µg/L	6.5		0.05B		
Calcium	µg/L			21000		
Chromium	µg/L	100		2.5		
Cobalt	µg/L	13		0.59B		1.5
Copper	µg/L	21		1.5B		
Iron	µg/L			9800		
Lead	µg/L	50		0.67B		
Magnesium	µg/L			10000		
Manganese	µg/L	14,300		230		
Mercury	µg/L	2		0.2U		0.2U
Nickel	µg/L	100		3.5		4
Potassium	µg/L			4600		
Selenium	µg/L	50		5U		
Silver	µg/L	50		5U		
Sodium	µg/L			35000		36000
Thallium	µg/L	10.5		0.032B		
Tin	µg/L	61,100		10U		
Vanadium	µg/L	713		1.7B		

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X737-09G						
Zinc	µg/L	30,500		6.2B		
Volatile Organic Compounds						
1,1,1,2-Tetrachloroethane	µg/L	11		1U		
1,1,1-Trichloroethane	µg/L	200		1U		
1,1,2,2-Tetrachloroethane	µg/L	0.83		1U		
1,1,2-Trichloroethane	µg/L	5		1U		
1,1-Dichloroethane	µg/L	5860		1U		
1,1-Dichloroethene	µg/L	7		1U		
1,2,3-Trichloropropane	µg/L	0.0379		1U		
1,2-Dibromo-3-chloropropane	µg/L	0.2		5U		
1,2-Dibromoethane	µg/L			1U		
1,2-Dichlorobenzene	µg/L	600		1U		
1,2-Dichloroethane	µg/L	5		1U		
1,2-Dichloropropane	µg/L	5		1U		
1,2-Dimethylbenzene	µg/L	10,000		1U		
1,4-Dichlorobenzene	µg/L	75		1U		
2-Butanone	µg/L	53,800		6U		
2-Hexanone	µg/L			5U		
4-Methyl-2-pentanone	µg/L	6360		5U		
Acetone	µg/L	10,200		10U		
Acrylonitrile	µg/L	0.431		20U		
Benzene	µg/L	5		1U		
Bromochloromethane	µg/L			1U		
Bromodichloromethane	µg/L	100		1U		
Bromoform	µg/L	100		1U		
Bromomethane	µg/L	140		2U		
Carbon disulfide	µg/L	6270		2U		
Carbon tetrachloride	µg/L	5		1U		
Chlorobenzene	µg/L	100		1U		
Chloroethane	µg/L	246,000		2U		
Chloroform	µg/L	100		1U		
Chloromethane	µg/L	13.4		2U		
cis-1,2-Dichloroethene	µg/L	70		1U		
cis-1,3-Dichloropropene	µg/L			1U		
Dibromochloromethane	µg/L	3.12		1U		
Dibromomethane	µg/L	999		1U		
Ethylbenzene	µg/L	700		1U		
Hexachlorobutadiene	µg/L	3.7		5U		
Iodomethane	µg/L			1U		
M + P Xylene	µg/L	10,000		2U		

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X737-09G						
Methylene chloride	µg/L	5		5U		
Styrene	µg/L	100		1U		
Tetrachloroethene	µg/L	5		1U		
Toluene	µg/L	1000		1U		
trans-1,2-Dichloroethene	µg/L	100		1U		
trans-1,3-Dichloropropene	µg/L			1U		
Trans-1,4-Dichloro-2-butene	µg/L			3U		
Trichloroethene	µg/L	5		1U		
Trichlorofluoromethane	µg/L	12,100		2U		
Vinyl acetate	µg/L	6840		3U		
Vinyl chloride	µg/L	2		1U		
Semivolatile Organic Compounds						
2,4,6-Trichlorophenol	µg/L	26		5U		
2,4-Dichlorophenol	µg/L			5U		
2,4-Dimethylphenol	µg/L			5U		
2-Chlorophenol	µg/L	465		5U		
2-Methyl-4,6-dinitrophenol	µg/L			5U		
2-Methylphenol	µg/L	4760		5U		
2-Nitrophenol	µg/L			5U		
4-Chloro-3-methylphenol	µg/L			5U		
4-Nitrophenol	µg/L			5U		
Acenaphthene	µg/L			5U		
Acenaphthylene	µg/L			5U		
Anthracene	µg/L			5U		
Benzo(a)pyrene	µg/L			5U		
Bis(2-chloroethyl) ether	µg/L			5U		
Bis(2-chloroisopropyl) ether	µg/L			5U		
Bis(2-ethylhexyl)phthalate	µg/L	6		5U		
Butyl benzyl phthalate	µg/L	14,900		5U		
Chrysene	µg/L			5U		
Diethyl phthalate	µg/L	71,300		5U		
Dimethyl phthalate	µg/L			5U		
Di-n-butyl phthalate	µg/L	7450		5U		
Di-n-octylphthalate	µg/L	1470		5U		
Diphenylamine	µg/L			5U		
Fluoranthene	µg/L			5U		
Fluorene	µg/L			5U		
Hexachlorobenzene	µg/L	1		5U		
Hexachlorocyclopentadiene	µg/L			5U		
Hexachloroethane	µg/L	20		5U		

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X737-09G						
m+p Methylphenol	µg/L			5U		
Naphthalene	µg/L	3210		5U		
Nitrobenzene	µg/L	47.9		5U		
Pentachlorophenol	µg/L	1		5U		
Phenanthrene	µg/L			5U		
Phenol	µg/L	59,300		5U		
Pyrene	µg/L			5U		
Radionuclides						
Americium-241	pCi/L	0.49		0.02791U		0U
Neptunium-237	pCi/L	0.54		-0.006746U		0.000007969U
Plutonium-238	pCi/L			0.01351U		0.000007947U
Plutonium-239/240	pCi/L	0.51		0.01351U		0.007954U
Technetium-99	pCi/L	3790		0.756U		-3.77U
Uranium	µg/L	1000		0.2081		0.0872U
Uranium-233/234	pCi/L	124,000		0.05673U		0.04405U
Uranium-235	pCi/L	43		-0.008737U		0U
Uranium-236	pCi/L			-0.007844U		0U
Uranium-238	pCi/L	6.7		0.07076		0.0293U
Polychlorinated Biphenyls						
PCB-1016	µg/L			1U		
PCB-1221	µg/L			1U		
PCB-1232	µg/L			1U		
PCB-1242	µg/L			1U		
PCB-1248	µg/L			1U		
PCB-1254	µg/L			1U		
PCB-1260	µg/L	0.5		1U		
Other Parameters						
Alkalinity	mg/L			100		98
Ammonia as Nitrogen	mg/L			0.13		
Chemical Oxygen Demand (COD)	mg/L			7.6B		
Chloride	mg/L			23		25
Cyanide	mg/L	200,000		0.01U		
Dissolved Solids	mg/L			210		220
Nitrate/Nitrite as Nitrogen	mg/L			0.06B		
Sulfate	mg/L			32		31
Sulfide	mg/L			4U		
Herbicides and Pesticides						
2,4-D	µg/L	70		4U		
4,4'-DDD	µg/L	0.859		0.05U		
4,4'-DDE	µg/L			0.05U		

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X737-09G						
4,4'-DDT	µg/L	0.46		0.05U		
alpha-BHC	µg/L			0.05U		
beta-BHC	µg/L			0.05U		
Chlordane	µg/L			0.5U		
delta-BHC	µg/L			0.05U		
Dieldrin	µg/L			0.05U		
Endosulfan I	µg/L			0.05U		
Endosulfan II	µg/L			0.05U		
Endrin	µg/L			0.05U		
Heptachlor	µg/L	0.4		0.05U		
Heptachlor epoxide	µg/L	0.2		0.05U		
Lindane	µg/L	0.2		0.05U		
Methoxychlor	µg/L			0.1U		
Silvex	µg/L	50		1U		
Toxaphene	µg/L			5U		
Field Measurements						
Conductivity	µS/cm			359		372
Depth to Water	ft			32.61		33.4
Dissolved Oxygen	mg/L			nm		nm
pH	Std Unit			6.4		6.21
Temperature	deg C			15.5		12.09
Turbidity	NTU			64		24

STATISTICAL EVALUATION

X-735 LANDFILLS

STATISTICAL EVALUATION OF X-735 COMPLIANCE WELLS - 2008

STATISTICAL METHODOLOGY

Intra-well Shewart-CUSUM (cumulative summation) control charts are constructed using historical baseline data for each compliance well. Initially, eight samples representing previous sampling events from 1998 through 2001 were used to represent the baseline. In 2005, these baseline data for Berea wells only were updated to include the six sampling events from 2002 through 2004. In the fourth quarter of 2007, the baseline data for Berea wells only were updated to include sampling events from the second quarter of 2005 through the second quarter of 2007. The baseline data for Gallia wells were updated in 2008 to include sampling events from the second quarter of 2002 through the fourth quarter of 2007.

Control charts are constructed showing two control limits calculated using the baseline compliance well data. If either or both of these limits are exceeded by subsequent compliance well samples, an out-of-control condition (i.e., release or impact) is indicated. The Shewart control limit (SCL) is sensitive to rapid increases in compliance well concentrations, while the decision internal value (h) threshold, or limit, is sensitive to gradual concentration increases.

The SCL and h limits used for the control charts are based on the goal of attaining a site-wide 5% false positive rate while maintaining at least a 20% false negative rate (or 80% statistical power). Gibbons (1999) provides tables used to establish appropriate thresholds. In addition, verification resampling is incorporated into the control chart scheme if necessary to achieve the 5%/20% goal. An additional parameter (k) is used in calculating the CUSUM for future compliance well data, which are then compared to the h threshold. Selection of the k value (commonly selected to be approximately one-half the size of an important displacement, D) in conjunction with the h threshold is such that together they allow a displacement of two standard deviations (above baseline) to be detected quickly (i.e., between sampling rounds).

Nonparametric or Poisson prediction limits are calculated in cases where the percentage of nondetects exceeds 50%. In these cases, the pooled historical compliance well data (and possibly background well data) is used to calculate the prediction limits. Pooling of the historical compliance well data is necessary to obtain sufficient numbers of baseline/background data to attain a site-wide false positive rate of approximately 5% ($\alpha^* \sim 0.05$) using an individual test false positive rate of approximately 1% ($\alpha \sim 0.01$). These performance standards are consistent with OAC 3745-29-10(C)(7)(a-f) (effective June 1, 1994) and Federal regulations promulgated by U.S. EPA and codified in Title 40 of the Code of Federal Regulations Part 264, Subpart F, which are designed to provide an adequate balance between the site-wide and individual test false positive rates. To achieve these performance standards using the prediction limit approach, it is necessary to incorporate verification resampling into the sampling strategy. Without verification resampling, an impracticably large number of baseline/background samples are necessary to achieve these same performance standards.

Shewart-CUSUM control chart statistics for well X735-02GA – 2008

Indicator parameter	Shewart Control Limit (SCL)[a]	(Shewart)[b] Sample results		Decision Internal Limit (h)	(CUSUM)[c] Sample results	
		2nd Qtr.	4th Qtr.		2nd Qtr.	4th Qtr.
Alkalinity, Total (mg/L)	44	48	37	45	47	45
Chloride (mg/L)	37	22	25	40	20	22
Dissolved solids, Total (mg/L)	219	180	180	227	169	179
Sodium (μg/L)	28633	24000	24000	29616	22526	24279
Sulfate (mg/L)	58	46	47	60	44	44
Cobalt (μg/L)	10	0.056	0.058	11	2	2
Mercury (μg/L)	3.7	0.046	< 0.2			
Nickel (μg/L)	14	2.3	2.2	15	4	4

[a]Or upper prediction limit for mercury. The upper prediction limit is used to evaluate data for mercury because in more than 50% of the samples that make up the baseline data set for this well, mercury was not detected.
[b]These results must not exceed the Shewart Control Limit (SCL) or upper prediction limit (mercury only).
[c]These results must not exceed the Decision Internal Limit (h).

Shewart-CUSUM control chart statistics for well X735-03GA – 2008

Indicator parameter	Shewart Control Limit (SCL)[a]	(Shewart)[b] Sample results		Decision Internal Limit (h)	(CUSUM)[c] Sample results	
		2nd Qtr.	4th Qtr.		2nd Qtr.	4th Qtr.
Alkalinity, Total (mg/L)	35	30	28	36	30	30
Chloride (mg/L)	40	24	21	41	26	26
Dissolved solids, Total (mg/L)	262	220	200	270	207	201
Sodium (μg/L)	31979	27000	27000	32751	25843	25876
Sulfate (mg/L)	88	74	75	91	69	76
Cobalt (μg/L)	57	0.053	0.075	63	6	6
Mercury (μg/L)	2	< 0.2	< 0.2			
Nickel (μg/L)	14	2.4	3	15	5	5

[a]Or upper prediction limit for mercury. The upper prediction limit is used to evaluate data for mercury because in more than 50% of the samples that make up the baseline data set for this well, mercury was not detected.
[b]These results must not exceed the Shewart Control Limit (SCL) or upper prediction limit (mercury only).
[c]These results must not exceed the Decision Internal Limit (h).

Shewart-CUSUM control chart statistics for well X735-04GA – 2008

Indicator parameter	Shewart Control Limit (SCL)[a]	(Shewart)[b] Sample results		Decision Internal Limit (h)	(CUSUM)[c] Sample results	
		2nd Qtr.	4th Qtr.		2nd Qtr.	4th Qtr.
Alkalinity, Total (mg/L)	19	13	7.8	21	11	9
Chloride (mg/L)	21	13	14	22	13	13
Dissolved solids, Total (mg/L)	197	99	85	211	78	78
Sodium (μg/L)	24950	18000	19000	25988	16550	17444
Sulfate (mg/L)	12	12	11	12	11	14
Cobalt (μg/L)	57	0.62	0.58	63	6.4	6.4
Mercury (μg/L)	2	0.057	0.031			
Nickel (μg/L)	36	5.7	5.5	40	9.2	9.2

[a]Or upper prediction limit for mercury. The upper prediction limit is used to evaluate data for mercury because in more than 50% of the samples that make up the baseline data set for this well, mercury was not detected.
[b]These results must not exceed the Shewart Control Limit (SCL) or upper prediction limit (mercury only).
[c]These results must not exceed the Decision Internal Limit (h).

Shewart-CUSUM control chart statistics for well X735-05GA – 2008

Indicator parameter	Shewart Control Limit (SCL)[a]	(Shewart)[b] Sample results		Decision Internal Limit (h)	(CUSUM)[c] Sample results	
		2nd Qtr.	4th Qtr.		2nd Qtr.	4th Qtr.
Alkalinity, Total (mg/L)	106	58	52	113	50	50
Chloride (mg/L)	42	13	11	46	9	9
Dissolved solids, Total (mg/L)	438	210	250	463	242	242
Sodium (μg/L)	53144	14000	14000	58162	13000	13000
Sulfate (mg/L)	296	79	130	317	129	129
Cobalt (μg/L)	50	1.9	1.5	55	7.3	7.3
Mercury (μg/L)	3.7	< 0.2	0.073			
Nickel (μg/L)	15	2.9	3.4	16	5.8	5.8

[a]Or upper prediction limit for mercury. The upper prediction limit is used to evaluate data for mercury because in more than 50% of the samples that make up the baseline data set for this well, mercury was not detected.
[b]These results must not exceed the Shewart Control Limit (SCL) or upper prediction limit (mercury only).
[c]These results must not exceed the Decision Internal Limit (h).

Shewart-CUSUM control chart statistics for well X735-06GAA – 2008

Indicator parameter	Shewart Control Limit (SCL)[a]	(Shewart)[b] Sample results		Decision Internal Limit (h)	(CUSUM)[c] Sample results	
		2nd Qtr.	4th Qtr.		2nd Qtr.	4th Qtr.
Alkalinity, Total (mg/L)	102	1.5	< 5	113	14	14
Chloride (mg/L)	39	25	25	42	21	24
Dissolved solids, Total (mg/L)	365	280	260	381	256	255
Sodium (μg/L)	50859	40000	34000	53392	36201	35806
Sulfate (mg/L)	194	120	120	205	104	104
Cobalt (μg/L)	33	15	19	34	17	17
Mercury (μg/L)	2	< 0.2	< 0.2			
Nickel (μg/L)	104	52	65	110	59	59

[a]Or upper prediction limit for mercury. The upper prediction limit is used to evaluate data for mercury because in more than 50% of the samples that make up the baseline data set for this well, mercury was not detected.
[b]These results must not exceed the Shewart Control Limit (SCL) or upper prediction limit (mercury only).
[c]These results must not exceed the Decision Internal Limit (h).

Shewart-CUSUM control chart statistics for well X735-17B – 2008

Indicator parameter	Shewart Control Limit (SCL)	(Shewart)[a] Sample results		Decision Internal Limit (h)	(CUSUM)[b] Sample results	
		2nd Qtr.	4th Qtr.		2nd Qtr.	4th Qtr.
Alkalinity, Total (mg/L)	353	190	200	374	187	187
Chloride (mg/L)	22	16	16	23	16	16
Dissolved solids, Total (mg/L)	386	240	270	404	246	246
Sodium (μg/L)	58236	50000	50000	59708	49122	50451
Sulfate (mg/L)	21	9	9.7	22	10	10

[a]These results must not exceed the Shewart Control Limit (SCL).
[b]These results must not exceed the Decision Internal Limit (h).

Shewart-CUSUM control chart statistics for well X735-18B – 2008

Indicator parameter	Shewart Control Limit (SCL)	(Shewart)[a] Sample results		Decision Internal Limit (h)	(CUSUM)[b] Sample results	
		2nd Qtr.	4th Qtr.		2nd Qtr.	4th Qtr.
Alkalinity, Total (mg/L)	234	180	180	244	166	172
Chloride (mg/L)	12	9.6	8.8	13	9	9
Dissolved solids, Total (mg/L)	344	220	240	361	208	215
Sodium (μg/L)	32822	28000	29000	33905	32593	35811
Sulfate (mg/L)	24	13	18	25	14	16

[a]These results must not exceed the Shewart Control Limit (SCL).
[b]These results must not exceed the Decision Internal Limit (h).

Shewart-CUSUM control chart statistics for well X735-21G – 2008

Indicator parameter	Shewart Control Limit (SCL)	(Shewart)[a] Sample results		Decision Internal Limit (h)	(CUSUM)[b] Sample results	
		2nd Qtr.	4th Qtr.		2nd Qtr.	4th Qtr.
Alkalinity, Total (mg/L)	327	130	65	360	82	71
Chloride (mg/L)	18	6.4	7.7	19	9	9
Dissolved solids, Total (mg/L)	531	250	160	573	199	199
Sodium (μg/L)	16092	8300	11000	17060	8346	9548
Sulfate (mg/L)	153	71	44	164	64	64
Cobalt (μg/L)	35	13	10	38	14	14
Mercury (μg/L)	4.3	1.6	0.36	4.7	1.1	1.1
Nickel (μg/L)	61	33	23	65	31	31

[a]These results must not exceed the Shewart Control Limit (SCL).
[b]These results must not exceed the Decision Internal Limit (h).

ANALYTICAL DATA TABLES
X-734 LANDFILLS

Laboratory Data Qualifiers and Other Abbreviations

B	Inorganics: the reported value was obtained from a reading that was less than practical quantitation limit but greater than or equal to the instrument detection limit. Organics: the analyte was detected in the laboratory blank sample.
E	Inorganics: the reported value is estimated because of the presence of interferences. Organics: the result exceeds the calibration range.
J	Organics: the reported value is an estimated concentration greater than the method detection limit but less than the practical quantitation limit. All others: the reported value is qualified as estimated.
P	Pesticide/Aroclor: there is greater than 25% difference for detected concentrations between the two gas chromatograph columns.
U	Undetected
nm	For field measurements: not measured due to insufficient water remaining in the well after sampling.

X-734 Landfills

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
RSY-02B						
Metals						
Antimony	µg/L	39.5		0.16B		0.2B
Arsenic	µg/L	50		0.33B		0.41B
Barium	µg/L	4011		23		25
Beryllium	µg/L	7		1U		1U
Cadmium	µg/L	7		1U		1U
Calcium	µg/L			150000		140000
Chromium	µg/L	100		2.8		7.3
Cobalt	µg/L	91		0.29B		0.35B
Copper	µg/L	22.5		0.6B		1B
Iron	µg/L			180		270
Lead	µg/L	50		1U		0.19B
Magnesium	µg/L			100000		98000
Manganese	µg/L	14,300		270		230
Nickel	µg/L	840		2.7		3.5
Potassium	µg/L			22000		22000
Selenium	µg/L	50		5U		0.96B
Silver	µg/L	50		0.27B		0.67B
Sodium	µg/L			170000		170000
Thallium	µg/L	21.5		1U		1U
Vanadium	µg/L	713		5U		5U
Zinc	µg/L	30,500		10U		4.3B
Volatile Organic Compounds						
1,1,1,2-Tetrachloroethane	µg/L	11		2U		2U
1,1,1-Trichloroethane	µg/L	200		2U		2U
1,1,2,2-Tetrachloroethane	µg/L	0.83		1U		1U
1,1,2-Trichloroethane	µg/L	5		2U		2U
1,1-Dichloroethane	µg/L	5860		2U		2U
1,1-Dichloroethene	µg/L	7		2U		2U
1,2,3-Trichloropropane	µg/L	0.0379		1U		1U
1,2-Dibromo-3-chloropropane	µg/L	0.2		5U		5U
1,2-Dibromoethane	µg/L			2U		2U
1,2-Dichlorobenzene	µg/L	600		2U		2U
1,2-Dichloroethane	µg/L	5		2U		2U
1,2-Dichloropropane	µg/L	5		2U		2U
1,2-Dimethylbenzene	µg/L	10,000		2U		2U
1,4-Dichlorobenzene	µg/L	75		2U		2U
2-Butanone	µg/L	53,800		6U		6U
2-Hexanone	µg/L			5U		5U

X-734 Landfills

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
RSY-02B						
4-Methyl-2-pentanone	µg/L	6360		5U		5U
Acetone	µg/L	10,200		10U		10U
Acrylonitrile	µg/L	0.431		20U		20U
Benzene	µg/L	10.5		2U		2U
Bromochloromethane	µg/L			2U		2U
Bromodichloromethane	µg/L	100		2U		2U
Bromoform	µg/L	100		2U		2U
Bromomethane	µg/L	140		2U		2U
Carbon disulfide	µg/L	6270		2U		2U
Carbon tetrachloride	µg/L	5		2U		2U
Chlorobenzene	µg/L	100		2U		2U
Chloroethane	µg/L	246,000		2U		2U
Chloroform	µg/L	100		2U		2U
Chloromethane	µg/L	13.4		2U		2U
cis-1,2-Dichloroethene	µg/L	70		2U		2U
cis-1,3-Dichloropropene	µg/L			2U		2U
Dibromochloromethane	µg/L	3.12		2U		2U
Dibromomethane	µg/L	999		2U		2U
Ethylbenzene	µg/L	700		2U		2U
Iodomethane	µg/L			1U		1U
M + P Xylene	µg/L	10,000		2U		2U
Methylene chloride	µg/L	5		5U		0.46BJ
Styrene	µg/L	100		2U		2U
Tetrachloroethene	µg/L	5		2U		2U
Toluene	µg/L	1000		2U		2U
trans-1,2-Dichloroethene	µg/L	100		1U		1U
trans-1,3-Dichloropropene	µg/L			2U		2U
Trans-1,4-Dichloro-2-butene	µg/L			3U		3U
Trichloroethene	µg/L	5		2U		2U
Trichlorofluoromethane	µg/L	12,100		2U		2U
Vinyl acetate	µg/L	6840		3U		3U
Vinyl chloride	µg/L	2		1U		1U
Radionuclides						
Americium-241	pCi/L	0.49		0.02306U		0U
Neptunium-237	pCi/L	0.54		-0.05573U		0U
Plutonium-238	pCi/L			0.01392U		0.01489U
Plutonium-239/240	pCi/L	0.51		-0.03473U		0.007446U
Technetium-99	pCi/L	3790		-0.119U		-2.04U
Uranium	µg/L	1000		0.06478U		0.06287U
Uranium-233/234	pCi/L	124,000		0.0798U		0.09169

X-734 Landfills

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
RSY-02B						
Uranium-235	pCi/L	43		0U		0U
Uranium-236	pCi/L			0.008032U		0U
Uranium-238	pCi/L	6.7		0.02172U		0.02112U
Other Parameters						
Alkalinity	mg/L			480		480
Ammonia as Nitrogen	mg/L			0.7		0.58
Chemical Oxygen Demand (COD)	mg/L			20U		20U
Chloride	mg/L			140		150
Dissolved Solids	mg/L			1400		1400
Nitrate/Nitrite as Nitrogen	mg/L			0.16		0.25
Sulfate	mg/L			450		480
Field Measurements						
Conductivity	µS/cm			1885		1984
Depth to Water	ft			22.1		24.6
Dissolved Oxygen	mg/L			nm		nm
pH	Std Unit			7.17		7
Temperature	deg C			13.7		13.18
Turbidity	NTU			11		12
X734-01G						
Metals						
Antimony	µg/L	36.5		2U		0.37B
Arsenic	µg/L	92		70		89
Barium	µg/L	2000		97		140
Beryllium	µg/L	6.5		1U		1U
Cadmium	µg/L	6.5		1U		1U
Calcium	µg/L			180000		160000
Chromium	µg/L	100		0.71B		0.67B
Cobalt	µg/L	13		11		11
Copper	µg/L	21		2U		2.9
Iron	µg/L			32000		28000
Lead	µg/L	50		1U		0.55B
Magnesium	µg/L			110000		100000
Manganese	µg/L	14,300		3800		3800
Nickel	µg/L	100		3.9		3.4
Potassium	µg/L			1300B		1100B
Selenium	µg/L	50		5U		5U
Silver	µg/L	50		5U		5U
Sodium	µg/L			25000		25000
Thallium	µg/L	10.5		1U		1U
Vanadium	µg/L	713		0.19B		0.24B

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X734-01G						
Zinc	µg/L	30,500		2.4B		11
Volatile Organic Compounds						
1,1,1,2-Tetrachloroethane	µg/L	11		2U		2U
1,1,1-Trichloroethane	µg/L	200		2U		2U
1,1,2,2-Tetrachloroethane	µg/L	0.83		1U		1U
1,1,2-Trichloroethane	µg/L	5		2U		2U
1,1-Dichloroethane	µg/L	5860		2U		2U
1,1-Dichloroethene	µg/L	7		2U		2U
1,2,3-Trichloropropane	µg/L	0.0379		1U		1U
1,2-Dibromo-3-chloropropane	µg/L	0.2		5U		5U
1,2-Dibromoethane	µg/L			2U		2U
1,2-Dichlorobenzene	µg/L	600		2U		2U
1,2-Dichloroethane	µg/L	5		2U		2U
1,2-Dichloropropane	µg/L	5		2U		2U
1,2-Dimethylbenzene	µg/L	10,000		2U		2U
1,4-Dichlorobenzene	µg/L	75		2U		2U
2-Butanone	µg/L	53,800		6U		6U
2-Hexanone	µg/L			5U		5U
4-Methyl-2-pentanone	µg/L	6360		5U		5U
Acetone	µg/L	10,200		10U		10U
Acrylonitrile	µg/L	0.431		20U		20U
Benzene	µg/L	5		2U		2U
Bromochloromethane	µg/L			2U		2U
Bromodichloromethane	µg/L	100		2U		2U
Bromoform	µg/L	100		2U		2U
Bromomethane	µg/L	140		2U		2U
Carbon disulfide	µg/L	6270		2U		2U
Carbon tetrachloride	µg/L	5		2U		2U
Chlorobenzene	µg/L	100		2U		2U
Chloroethane	µg/L	246,000		2U		2U
Chloroform	µg/L	100		2U		2U
Chloromethane	µg/L	13.4		2U		2U
cis-1,2-Dichloroethene	µg/L	70		2U		2U
cis-1,3-Dichloropropene	µg/L			2U		2U
Dibromochloromethane	µg/L	3.12		2U		2U
Dibromomethane	µg/L	999		2U		2U
Ethylbenzene	µg/L	700		2U		2U
Iodomethane	µg/L			1U		1U
M + P Xylene	µg/L	10,000		2U		2U
Methylene chloride	µg/L	5		5U		0.37BJ

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X734-01G						
Styrene	µg/L	100		2U		2U
Tetrachloroethene	µg/L	5		2U		2U
Toluene	µg/L	1000		2U		2U
trans-1,2-Dichloroethene	µg/L	100		1U		1U
trans-1,3-Dichloropropene	µg/L			2U		2U
Trans-1,4-Dichloro-2-butene	µg/L			3U		3U
Trichloroethene	µg/L	5		2U		2U
Trichlorofluoromethane	µg/L	12,100		2U		2U
Vinyl acetate	µg/L	6840		3U		3U
Vinyl chloride	µg/L	2		1U		1U
Radionuclides						
Americium-241	pCi/L	0.49		0.01365U		0.02639U
Neptunium-237	pCi/L	0.54		-0.00764U		0.00000655U
Plutonium-238	pCi/L			0.03057U		0.00655U
Plutonium-239/240	pCi/L	0.51		0.00001527U		0.006537U
Technetium-99	pCi/L	3790		-2.43U		0.567U
Uranium	µg/L	1000		0.2379		0.1588
Uranium-233/234	pCi/L	124,000		0.1071		0.1003
Uranium-235	pCi/L	43		0.01762U		0U
Uranium-236	pCi/L			0U		-0.007398U
Uranium-238	pCi/L	6.7		0.07836		0.05338
Other Parameters						
Alkalinity	mg/L			250		230
Ammonia as Nitrogen	mg/L			0.42		0.38
Chemical Oxygen Demand (COD)	mg/L			20U		20U
Chloride	mg/L			25		25
Dissolved Solids	mg/L			1200		1200
Nitrate/Nitrite as Nitrogen	mg/L			0.036B		0.073B
Sulfate	mg/L			630		640
Field Measurements						
Conductivity	µS/cm			1479		1524
Depth to Water	ft			58.89		60.32
Dissolved Oxygen	mg/L			nm		nm
pH	Std Unit			6.38		6.27
Temperature	deg C			15.2		13.04
Turbidity	NTU			41		34
X734-02B						
Metals						
Antimony	µg/L	39.5		0.21B		0.098B
Arsenic	µg/L	50		3B		3.1B

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X734-02B						
Barium	µg/L	4011		1200		1200
Beryllium	µg/L	7		1U		1U
Cadmium	µg/L	7		1U		1U
Calcium	µg/L			73000		69000
Chromium	µg/L	100		1B		0.76B
Cobalt	µg/L	91		0.95B		0.48B
Copper	µg/L	22.5		0.65B		2U
Iron	µg/L			2300		2300
Lead	µg/L	50		0.28B		1U
Magnesium	µg/L			27000		25000
Manganese	µg/L	14,300		92		81
Nickel	µg/L	840		2		1.5B
Potassium	µg/L			17000		15000
Selenium	µg/L	50		5U		1.2B
Silver	µg/L	50		5U		5U
Sodium	µg/L			450000		420000
Thallium	µg/L	21.5		1U		1U
Vanadium	µg/L	713		0.15B		0.14B
Zinc	µg/L	30,500		2.5B		2.8B
Volatile Organic Compounds						
1,1,1,2-Tetrachloroethane	µg/L	11		2U		2U
1,1,1-Trichloroethane	µg/L	200		2U		2U
1,1,2,2-Tetrachloroethane	µg/L	0.83		1U		1U
1,1,2-Trichloroethane	µg/L	5		2U		2U
1,1-Dichloroethane	µg/L	5860		2U		2U
1,1-Dichloroethene	µg/L	7		2U		2U
1,2,3-Trichloropropane	µg/L	0.0379		1U		1U
1,2-Dibromo-3-chloropropane	µg/L	0.2		5U		5U
1,2-Dibromoethane	µg/L			2U		2U
1,2-Dichlorobenzene	µg/L	600		2U		2U
1,2-Dichloroethane	µg/L	5		2U		2U
1,2-Dichloropropane	µg/L	5		2U		2U
1,2-Dimethylbenzene	µg/L	10,000		2U		2U
1,4-Dichlorobenzene	µg/L	75		2U		2U
2-Butanone	µg/L	53,800		6U		6U
2-Hexanone	µg/L			5U		5U
4-Methyl-2-pentanone	µg/L	6360		5U		5U
Acetone	µg/L	10,200		10U		10U
Acrylonitrile	µg/L	0.431		20U		20U
Benzene	µg/L	10.5		2U		2U

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X734-02B						
Bromochloromethane	µg/L			2U		2U
Bromodichloromethane	µg/L	100		2U		2U
Bromoform	µg/L	100		2U		2U
Bromomethane	µg/L	140		2U		2U
Carbon disulfide	µg/L	6270		2U		2U
Carbon tetrachloride	µg/L	5		2U		2U
Chlorobenzene	µg/L	100		2U		2U
Chloroethane	µg/L	246,000		2U		2U
Chloroform	µg/L	100		2U		2U
Chloromethane	µg/L	13.4		2U		2U
cis-1,2-Dichloroethene	µg/L	70		2U		2U
cis-1,3-Dichloropropene	µg/L			2U		2U
Dibromochloromethane	µg/L	3.12		2U		2U
Dibromomethane	µg/L	999		2U		2U
Ethylbenzene	µg/L	700		2U		2U
Iodomethane	µg/L			1U		1U
M + P Xylene	µg/L	10,000		2U		2U
Methylene chloride	µg/L	5		0.43BJ		5U
Styrene	µg/L	100		2U		2U
Tetrachloroethene	µg/L	5		2U		2U
Toluene	µg/L	1000		2U		2U
trans-1,2-Dichloroethene	µg/L	100		1U		1U
trans-1,3-Dichloropropene	µg/L			2U		2U
Trans-1,4-Dichloro-2-butene	µg/L			3U		3U
Trichloroethene	µg/L	5		2U		2U
Trichlorofluoromethane	µg/L	12,100		2U		2U
Vinyl acetate	µg/L	6840		3U		3U
Vinyl chloride	µg/L	2		1U		1U
Radionuclides						
Americium-241	pCi/L	0.49		0.008374U		0.01547U
Neptunium-237	pCi/L	0.54		0.00001264U		-0.0157U
Plutonium-238	pCi/L			0.01893U		0.000007828U
Plutonium-239/240	pCi/L	0.51		0.01263U		0.01567U
Technetium-99	pCi/L	3790		-5.66U		0.787U
Uranium	µg/L	1000		-0.07113U		0.1595
Uranium-233/234	pCi/L	124,000		0.00004783U		0.02305U
Uranium-235	pCi/L	43		0U		0U
Uranium-236	pCi/L			-0.00882U		-0.008497U
Uranium-238	pCi/L	6.7		-0.02386U		0.05364
Other Parameters						

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X734-02B						
Alkalinity	mg/L			470		470
Ammonia as Nitrogen	mg/L			4.2		3.9
Chemical Oxygen Demand (COD)	mg/L			18B		20U
Chloride	mg/L			540		560
Dissolved Solids	mg/L			1200		1400
Nitrate/Nitrite as Nitrogen	mg/L			0.1U		0.1U
Sulfate	mg/L			5U		5U
Field Measurements						
Conductivity	µS/cm			2525		2666
Depth to Water	ft			16.9		17.3
Dissolved Oxygen	mg/L			nm		nm
pH	Std Unit			6.89		6.86
Temperature	deg C			14.2		14.32
Turbidity	NTU			4		8
X734-03G						
Metals						
Antimony	µg/L	36.5		2U		2U
Arsenic	µg/L	92		5.5		3.2B
Barium	µg/L	2000		160		110
Beryllium	µg/L	6.5		1U		1U
Cadmium	µg/L	6.5		1U		1U
Calcium	µg/L			52000		33000
Chromium	µg/L	100		2U		2U
Cobalt	µg/L	13		4		2.7
Copper	µg/L	21		2U		2U
Iron	µg/L			2900		1400
Lead	µg/L	50		1U		1U
Magnesium	µg/L			23000		13000
Manganese	µg/L	14,300		1100		1100
Nickel	µg/L	100		2.3		1.7B
Potassium	µg/L			7500		3000
Selenium	µg/L	50		5U		0.91B
Silver	µg/L	50		5U		5U
Sodium	µg/L			13000		21000
Thallium	µg/L	10.5		0.045B		0.036B
Vanadium	µg/L	713		5U		5U
Zinc	µg/L	30,500		2.2B		3.4B
Volatile Organic Compounds						
1,1,1,2-Tetrachloroethane	µg/L	11		2U		2U
1,1,1-Trichloroethane	µg/L	200		2U		2U

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X734-03G						
1,1,2,2-Tetrachloroethane	µg/L	0.83		1U		1U
1,1,2-Trichloroethane	µg/L	5		2U		2U
1,1-Dichloroethane	µg/L	5860		2U		2U
1,1-Dichloroethene	µg/L	7		2U		2U
1,2,3-Trichloropropane	µg/L	0.0379		1U		1U
1,2-Dibromo-3-chloropropane	µg/L	0.2		5U		5U
1,2-Dibromoethane	µg/L			2U		2U
1,2-Dichlorobenzene	µg/L	600		2U		2U
1,2-Dichloroethane	µg/L	5		2U		2U
1,2-Dichloropropane	µg/L	5		2U		2U
1,2-Dimethylbenzene	µg/L	10,000		2U		2U
1,4-Dichlorobenzene	µg/L	75		2U		2U
2-Butanone	µg/L	53,800		6U		6U
2-Hexanone	µg/L			5U		5U
4-Methyl-2-pentanone	µg/L	6360		5U		5U
Acetone	µg/L	10,200		10U		10U
Acrylonitrile	µg/L	0.431		20U		20U
Benzene	µg/L	5		2U		2U
Bromochloromethane	µg/L			2U		2U
Bromodichloromethane	µg/L	100		2U		2U
Bromoform	µg/L	100		2U		2U
Bromomethane	µg/L	140		2U		2U
Carbon disulfide	µg/L	6270		2U		2U
Carbon tetrachloride	µg/L	5		2U		2U
Chlorobenzene	µg/L	100		2U		2U
Chloroethane	µg/L	246,000		2U		2U
Chloroform	µg/L	100		2U		2U
Chloromethane	µg/L	13.4		2U		2U
cis-1,2-Dichloroethene	µg/L	70		2U		2U
cis-1,3-Dichloropropene	µg/L			2U		2U
Dibromochloromethane	µg/L	3.12		2U		2U
Dibromomethane	µg/L	999		2U		2U
Ethylbenzene	µg/L	700		2U		2U
Iodomethane	µg/L			1U		1U
M + P Xylene	µg/L	10,000		2U		2U
Methylene chloride	µg/L	5		0.39BJ		5U
Styrene	µg/L	100		2U		2U
Tetrachloroethene	µg/L	5		2U		2U
Toluene	µg/L	1000		2U		2U
trans-1,2-Dichloroethene	µg/L	100		1U		1U

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X734-03G						
trans-1,3-Dichloropropene	µg/L			2U		2U
Trans-1,4-Dichloro-2-butene	µg/L			3U		3U
Trichloroethene	µg/L	5		2U		2U
Trichlorofluoromethane	µg/L	12,100		2U		2U
Vinyl acetate	µg/L	6840		3U		3U
Vinyl chloride	µg/L	2		1U		1U
Radionuclides						
Americium-241	pCi/L	0.49		0.01215U		0.02868U
Neptunium-237	pCi/L	0.54		0.00004046U		-0.006971U
Plutonium-238	pCi/L			0U		0.01392U
Plutonium-239/240	pCi/L	0.51		-0.01007U		0.006959U
Technetium-99	pCi/L	3790		-4.79U		0.147U
Uranium	µg/L	1000		0.3627		0.07025U
Uranium-233/234	pCi/L	124,000		0.2747		0.06305
Uranium-235	pCi/L	43		0U		0U
Uranium-236	pCi/L			0.00845U		0U
Uranium-238	pCi/L	6.7		0.1218		0.0236U
Other Parameters						
Alkalinity	mg/L			210		83
Ammonia as Nitrogen	mg/L			0.39		0.19
Chemical Oxygen Demand (COD)	mg/L			7.6B		20U
Chloride	mg/L			16		38
Dissolved Solids	mg/L			280		250
Nitrate/Nitrite as Nitrogen	mg/L			0.1U		0.1U
Sulfate	mg/L			28		67
Field Measurements						
Conductivity	µS/cm			478		441
Depth to Water	ft			12.25		12.34
Dissolved Oxygen	mg/L			1		1.11
pH	Std Unit			6.69		6.72
Temperature	deg C			9.7		16.36
Turbidity	NTU			2		6
X734-04G						
Metals						
Antimony	µg/L	36.5		2U		2U
Arsenic	µg/L	92		1.2B		1.5B
Barium	µg/L	2000		35		43
Beryllium	µg/L	6.5		1U		1U
Cadmium	µg/L	6.5		1U		0.056B
Calcium	µg/L			76000		80000

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X734-04G						
Chromium	µg/L	100		2U		2U
Cobalt	µg/L	13		5.2		3.7
Copper	µg/L	21		2U		2U
Iron	µg/L			2800		3300
Lead	µg/L	50		1U		1U
Magnesium	µg/L			52000		53000
Manganese	µg/L	14,300		2000		2400
Nickel	µg/L	100		3.7		4.6
Potassium	µg/L			6200		6500
Selenium	µg/L	50		5U		1.1B
Silver	µg/L	50		5U		5U
Sodium	µg/L			50000		56000
Thallium	µg/L	10.5		1U		1U
Vanadium	µg/L	713		5U		5U
Zinc	µg/L	30,500		2.4B		3.9B
Volatile Organic Compounds						
1,1,1,2-Tetrachloroethane	µg/L	11		2U		2U
1,1,1-Trichloroethane	µg/L	200		2U		2U
1,1,2,2-Tetrachloroethane	µg/L	0.83		1U		1U
1,1,2-Trichloroethane	µg/L	5		2U		2U
1,1-Dichloroethane	µg/L	5860		2U		2U
1,1-Dichloroethene	µg/L	7		2U		2U
1,2,3-Trichloropropane	µg/L	0.0379		1U		1U
1,2-Dibromo-3-chloropropane	µg/L	0.2		5U		5U
1,2-Dibromoethane	µg/L			2U		2U
1,2-Dichlorobenzene	µg/L	600		2U		2U
1,2-Dichloroethane	µg/L	5		2U		2U
1,2-Dichloropropane	µg/L	5		2U		2U
1,2-Dimethylbenzene	µg/L	10,000		2U		2U
1,4-Dichlorobenzene	µg/L	75		2U		2U
2-Butanone	µg/L	53,800		6U		6U
2-Hexanone	µg/L			5U		5U
4-Methyl-2-pentanone	µg/L	6360		5U		5U
Acetone	µg/L	10,200		2.1J		10U
Acrylonitrile	µg/L	0.431		20U		20U
Benzene	µg/L	5		2U		2U
Bromochloromethane	µg/L			2U		2U
Bromodichloromethane	µg/L	100		2U		2U
Bromoform	µg/L	100		2U		2U
Bromomethane	µg/L	140		2U		2U

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X734-04G						
Carbon disulfide	µg/L	6270		2U		2U
Carbon tetrachloride	µg/L	5		2U		2U
Chlorobenzene	µg/L	100		2U		2U
Chloroethane	µg/L	246,000		2U		2U
Chloroform	µg/L	100		2U		2U
Chloromethane	µg/L	13.4		2U		2U
cis-1,2-Dichloroethene	µg/L	70		2U		2U
cis-1,3-Dichloropropene	µg/L			2U		2U
Dibromochloromethane	µg/L	3.12		2U		2U
Dibromomethane	µg/L	999		2U		2U
Ethylbenzene	µg/L	700		2U		2U
Iodomethane	µg/L			1U		1U
M + P Xylene	µg/L	10,000		2U		2U
Methylene chloride	µg/L	5		5U		5U
Styrene	µg/L	100		2U		2U
Tetrachloroethene	µg/L	5		2U		2U
Toluene	µg/L	1000		2U		2U
trans-1,2-Dichloroethene	µg/L	100		1U		1U
trans-1,3-Dichloropropene	µg/L			2U		2U
Trans-1,4-Dichloro-2-butene	µg/L			3U		3U
Trichloroethene	µg/L	5		2U		2U
Trichlorofluoromethane	µg/L	12,100		2U		2U
Vinyl acetate	µg/L	6840		3U		3U
Vinyl chloride	µg/L	2		1U		1U
Radionuclides						
Americium-241	pCi/L	0.49		0.01658U		-0.01621U
Neptunium-237	pCi/L	0.54		-0.02131U		0U
Plutonium-238	pCi/L			0.01421U		0.007775U
Plutonium-239/240	pCi/L	0.51		-0.01419U		-0.007752U
Technetium-99	pCi/L	3790		-3.87U		-2.94U
Uranium	µg/L	1000		1.627		1.715
Uranium-233/234	pCi/L	124,000		0.5933		0.762
Uranium-235	pCi/L	43		-0.00912U		0.0266U
Uranium-236	pCi/L			0U		0.01592U
Uranium-238	pCi/L	6.7		0.5477		0.5739
Other Parameters						
Alkalinity	mg/L			280		300
Ammonia as Nitrogen	mg/L			0.36		0.47
Chemical Oxygen Demand (COD)	mg/L			5.5B		20U
Chloride	mg/L			72		92

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X734-04G						
Dissolved Solids	mg/L			580		630
Nitrate/Nitrite as Nitrogen	mg/L			0.1U		0.039B
Sulfate	mg/L			120		120
Field Measurements						
Conductivity	µS/cm			937		1080
Depth to Water	ft			7.5		7.88
Dissolved Oxygen	mg/L			1.8		3.01
pH	Std Unit			6.55		6.08
Temperature	deg C			11.4		14.46
Turbidity	NTU			8		11
X734-05B						
Metals						
Antimony	µg/L	39.5		0.38B		0.094B
Arsenic	µg/L	50		2.7B		3.4B
Barium	µg/L	4011		250		260
Beryllium	µg/L	7		1U		1U
Cadmium	µg/L	7		1U		1U
Calcium	µg/L			11000		11000
Chromium	µg/L	100		0.7B		0.59B
Cobalt	µg/L	91		0.5B		0.22B
Copper	µg/L	22.5		0.91B		0.71B
Iron	µg/L			500		210
Lead	µg/L	50		1.2		0.45B
Magnesium	µg/L			7000		7200
Manganese	µg/L	14,300		55		51
Nickel	µg/L	840		2.8		1.4B
Potassium	µg/L			7200		5600
Selenium	µg/L	50		5U		0.96B
Silver	µg/L	50		5U		5U
Sodium	µg/L			130000		82000
Thallium	µg/L	21.5		0.04B		0.029B
Vanadium	µg/L	713		0.75B		0.24B
Zinc	µg/L	30,500		2.4B		3.2B
Volatile Organic Compounds						
1,1,1,2-Tetrachloroethane	µg/L	11		2U		2U
1,1,1-Trichloroethane	µg/L	200		2U		2U
1,1,2,2-Tetrachloroethane	µg/L	0.83		1U		1U
1,1,2-Trichloroethane	µg/L	5		2U		2U
1,1-Dichloroethane	µg/L	5860		2U		2U
1,1-Dichloroethene	µg/L	7		2U		2U

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X734-05B						
1,2,3-Trichloropropane	µg/L	0.0379		1U		1U
1,2-Dibromo-3-chloropropane	µg/L	0.2		5U		5U
1,2-Dibromoethane	µg/L			2U		2U
1,2-Dichlorobenzene	µg/L	600		2U		2U
1,2-Dichloroethane	µg/L	5		2U		2U
1,2-Dichloropropane	µg/L	5		2U		2U
1,2-Dimethylbenzene	µg/L	10,000		0.25J		0.34J
1,4-Dichlorobenzene	µg/L	75		2U		2U
2-Butanone	µg/L	53,800		6U		6U
2-Hexanone	µg/L			5U		5U
4-Methyl-2-pentanone	µg/L	6360		5U		5U
Acetone	µg/L	10,200		10U		10U
Acrylonitrile	µg/L	0.431		20U		20U
Benzene	µg/L	10.5		1.2J		2.2
Bromochloromethane	µg/L			2U		2U
Bromodichloromethane	µg/L	100		2U		2U
Bromoform	µg/L	100		2U		2U
Bromomethane	µg/L	140		2U		2U
Carbon disulfide	µg/L	6270		2U		2U
Carbon tetrachloride	µg/L	5		2U		2U
Chlorobenzene	µg/L	100		2U		2U
Chloroethane	µg/L	246,000		2U		2U
Chloroform	µg/L	100		2U		2U
Chloromethane	µg/L	13.4		2U		2U
cis-1,2-Dichloroethene	µg/L	70		2U		2U
cis-1,3-Dichloropropene	µg/L			2U		2U
Dibromochloromethane	µg/L	3.12		2U		2U
Dibromomethane	µg/L	999		2U		2U
Ethylbenzene	µg/L	700		0.34J		0.44J
Iodomethane	µg/L			1U		1U
M + P Xylene	µg/L	10,000		2U		2U
Methylene chloride	µg/L	5		5U		0.48BJ
Styrene	µg/L	100		2U		2U
Tetrachloroethene	µg/L	5		2U		2U
Toluene	µg/L	1000		0.2J		0.67J
trans-1,2-Dichloroethene	µg/L	100		1U		1U
trans-1,3-Dichloropropene	µg/L			2U		2U
Trans-1,4-Dichloro-2-butene	µg/L			3U		3U
Trichloroethene	µg/L	5		2U		2U
Trichlorofluoromethane	µg/L	12,100		2U		2U

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X734-05B						
Vinyl acetate	µg/L	6840		3U		3U
Vinyl chloride	µg/L	2		1U		1U
Radionuclides						
Americium-241	pCi/L	0.49		0.00002932U		0.01037U
Neptunium-237	pCi/L	0.54		0.00001545U		-0.0154U
Plutonium-238	pCi/L			0.007711U		0.03074U
Plutonium-239/240	pCi/L	0.51		0.02313U		0.007686U
Technetium-99	pCi/L	3790		-3.3U		-0.838U
Uranium	µg/L	1000		0.7151		0.3286
Uranium-233/234	pCi/L	124,000		0.3903		0.231
Uranium-235	pCi/L	43		0.01965U		-0.009815U
Uranium-236	pCi/L			0.008822U		0U
Uranium-238	pCi/L	6.7		0.2385		0.1113
Other Parameters						
Alkalinity	mg/L			160		150
Ammonia as Nitrogen	mg/L			1.6		1.6
Chemical Oxygen Demand (COD)	mg/L			8.6B		20U
Chloride	mg/L			98		130
Dissolved Solids	mg/L			340		310
Nitrate/Nitrite as Nitrogen	mg/L			0.1U		0.1U
Sulfate	mg/L			1.6B		5U
Field Measurements						
Conductivity	µS/cm			616		nm
Depth to Water	ft			11.14		10.8
Dissolved Oxygen	mg/L			nm		nm
pH	Std Unit			9.42		nm
Temperature	deg C			11.6		nm
Turbidity	NTU			13		nm
X734-06G						
Metals						
Antimony	µg/L	36.5		2U		2U
Arsenic	µg/L	92		0.22B		5U
Barium	µg/L	2000		17		25
Beryllium	µg/L	6.5		1U		1U
Cadmium	µg/L	6.5		0.063B		0.08B
Calcium	µg/L			64000		58000
Chromium	µg/L	100		4.1		0.91B
Cobalt	µg/L	13		9		7.1
Copper	µg/L	21		0.67B		0.6B
Iron	µg/L			1000		710

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X734-06G						
Lead	µg/L	50		1U		1U
Magnesium	µg/L			48000		45000
Manganese	µg/L	14,300		2800		3400
Nickel	µg/L	100		13		16
Potassium	µg/L			2000B		1400B
Selenium	µg/L	50		5U		0.78B
Silver	µg/L	50		5U		5U
Sodium	µg/L			22000		22000
Thallium	µg/L	10.5		1U		1U
Vanadium	µg/L	713		5U		0.14B
Zinc	µg/L	30,500		5.3B		7.4B
Volatile Organic Compounds						
1,1,1,2-Tetrachloroethane	µg/L	11		2U		2U
1,1,1-Trichloroethane	µg/L	200		2U		2U
1,1,2,2-Tetrachloroethane	µg/L	0.83		1U		1U
1,1,2-Trichloroethane	µg/L	5		2U		2U
1,1-Dichloroethane	µg/L	5860		2U		2U
1,1-Dichloroethene	µg/L	7		2U		2U
1,2,3-Trichloropropane	µg/L	0.0379		1U		1U
1,2-Dibromo-3-chloropropane	µg/L	0.2		5U		5U
1,2-Dibromoethane	µg/L			2U		2U
1,2-Dichlorobenzene	µg/L	600		2U		2U
1,2-Dichloroethane	µg/L	5		2U		2U
1,2-Dichloropropane	µg/L	5		2U		2U
1,2-Dimethylbenzene	µg/L	10,000		2U		2U
1,4-Dichlorobenzene	µg/L	75		2U		2U
2-Butanone	µg/L	53,800		6U		6U
2-Hexanone	µg/L			5U		5U
4-Methyl-2-pentanone	µg/L	6360		5U		5U
Acetone	µg/L	10,200		10U		10U
Acrylonitrile	µg/L	0.431		20U		20U
Benzene	µg/L	5		2U		2U
Bromochloromethane	µg/L			2U		2U
Bromodichloromethane	µg/L	100		2U		2U
Bromoform	µg/L	100		2U		2U
Bromomethane	µg/L	140		2U		2U
Carbon disulfide	µg/L	6270		2U		2U
Carbon tetrachloride	µg/L	5		2U		2U
Chlorobenzene	µg/L	100		2U		2U
Chloroethane	µg/L	246,000		2U		2U

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X734-06G						
Chloroform	µg/L	100		2U		2U
Chloromethane	µg/L	13.4		2U		2U
cis-1,2-Dichloroethene	µg/L	70		2U		2U
cis-1,3-Dichloropropene	µg/L			2U		2U
Dibromochloromethane	µg/L	3.12		2U		2U
Dibromomethane	µg/L	999		2U		2U
Ethylbenzene	µg/L	700		2U		2U
Iodomethane	µg/L			1U		1U
M + P Xylene	µg/L	10,000		2U		2U
Methylene chloride	µg/L	5		5U		5U
Styrene	µg/L	100		2U		2U
Tetrachloroethene	µg/L	5		2U		2U
Toluene	µg/L	1000		2U		2U
trans-1,2-Dichloroethene	µg/L	100		1U		1U
trans-1,3-Dichloropropene	µg/L			2U		2U
Trans-1,4-Dichloro-2-butene	µg/L			3U		3U
Trichloroethene	µg/L	5		2U		0.17J
Trichlorofluoromethane	µg/L	12,100		2U		2U
Vinyl acetate	µg/L	6840		3U		3U
Vinyl chloride	µg/L	2		1U		1U
Radionuclides						
Americium-241	pCi/L	0.49		0.01234U		0.01157U
Neptunium-237	pCi/L	0.54		0.006604U		0U
Plutonium-238	pCi/L			0.0197U		0.01432U
Plutonium-239/240	pCi/L	0.51		0.006566U		0U
Technetium-99	pCi/L	3790		-5.96U		3.44U
Uranium	µg/L	1000		-0.08513U		0.08431U
Uranium-233/234	pCi/L	124,000		0.06468U		0.07294
Uranium-235	pCi/L	43		0U		-0.008988U
Uranium-236	pCi/L			0.000007945U		0U
Uranium-238	pCi/L	6.7		-0.02861U		0.02913U
Other Parameters						
Alkalinity	mg/L			160		140
Ammonia as Nitrogen	mg/L			0.95		0.071B
Chemical Oxygen Demand (COD)	mg/L			5.8B		20U
Chloride	mg/L			17		21
Dissolved Solids	mg/L			480		520
Nitrate/Nitrite as Nitrogen	mg/L			0.1U		0.1U
Sulfate	mg/L			200		5U
Field Measurements						

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X734-06G						
Conductivity	µS/cm			749		770
Depth to Water	ft			12.85		13.38
Dissolved Oxygen	mg/L			nm		nm
pH	Std Unit			6.3		5.9
Temperature	deg C			10.9		15
Turbidity	NTU			52		26
X734-10G						
Metals						
Antimony	µg/L	36.5		2U		2U
Arsenic	µg/L	92		5U		5U
Barium	µg/L	2000		13		15
Beryllium	µg/L	6.5		1U		1U
Cadmium	µg/L	6.5		0.21B		0.21B
Calcium	µg/L			83000		87000
Chromium	µg/L	100		2U		2U
Cobalt	µg/L	13		0.28B		0.37B
Copper	µg/L	21		2U		2U
Iron	µg/L			100U		100U
Lead	µg/L	50		1U		1U
Magnesium	µg/L			48000		49000
Manganese	µg/L	14,300		13		15
Nickel	µg/L	100		5		5.4
Potassium	µg/L			1300B		1000B
Selenium	µg/L	50		4.3B		5.8
Silver	µg/L	50		5U		5U
Sodium	µg/L			42000		44000
Thallium	µg/L	10.5		1U		1U
Vanadium	µg/L	713		5U		5U
Zinc	µg/L	30,500		10		13
Volatile Organic Compounds						
1,1,1,2-Tetrachloroethane	µg/L	11		2U		2U
1,1,1-Trichloroethane	µg/L	200		2U		2U
1,1,2,2-Tetrachloroethane	µg/L	0.83		1U		1U
1,1,2-Trichloroethane	µg/L	5		2U		2U
1,1-Dichloroethane	µg/L	5860		2U		2U
1,1-Dichloroethene	µg/L	7		2U		2U
1,2,3-Trichloropropane	µg/L	0.0379		1U		1U
1,2-Dibromo-3-chloropropane	µg/L	0.2		5U		5U
1,2-Dibromoethane	µg/L			2U		2U
1,2-Dichlorobenzene	µg/L	600		2U		2U

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X734-10G						
1,2-Dichloroethane	µg/L	5		2U		2U
1,2-Dichloropropane	µg/L	5		2U		2U
1,2-Dimethylbenzene	µg/L	10,000		2U		2U
1,4-Dichlorobenzene	µg/L	75		2U		2U
2-Butanone	µg/L	53,800		6U		6U
2-Hexanone	µg/L			5U		5U
4-Methyl-2-pentanone	µg/L	6360		5U		5U
Acetone	µg/L	10,200		2.1J		10U
Acrylonitrile	µg/L	0.431		20U		20U
Benzene	µg/L	5		2U		2U
Bromochloromethane	µg/L			2U		2U
Bromodichloromethane	µg/L	100		2U		2U
Bromoform	µg/L	100		2U		2U
Bromomethane	µg/L	140		2U		2U
Carbon disulfide	µg/L	6270		2U		2U
Carbon tetrachloride	µg/L	5		2U		2U
Chlorobenzene	µg/L	100		2U		2U
Chloroethane	µg/L	246,000		2U		2U
Chloroform	µg/L	100		2U		2U
Chloromethane	µg/L	13.4		2U		2U
cis-1,2-Dichloroethene	µg/L	70		2U		2U
cis-1,3-Dichloropropene	µg/L			2U		2U
Dibromochloromethane	µg/L	3.12		2U		2U
Dibromomethane	µg/L	999		2U		2U
Ethylbenzene	µg/L	700		2U		2U
Iodomethane	µg/L			1U		1U
M + P Xylene	µg/L	10,000		2U		2U
Methylene chloride	µg/L	5		5U		5U
Styrene	µg/L	100		2U		2U
Tetrachloroethene	µg/L	5		2U		2U
Toluene	µg/L	1000		2U		2U
trans-1,2-Dichloroethene	µg/L	100		1U		1U
trans-1,3-Dichloropropene	µg/L			2U		2U
Trans-1,4-Dichloro-2-butene	µg/L			3U		3U
Trichloroethene	µg/L	5		2U		2U
Trichlorofluoromethane	µg/L	12,100		2U		2U
Vinyl acetate	µg/L	6840		3U		3U
Vinyl chloride	µg/L	2		1U		1U
Radionuclides						
Americium-241	pCi/L	0.49		0.0118U		0.03909U

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X734-10G						
Neptunium-237	pCi/L	0.54		0.000006704U		0U
Plutonium-238	pCi/L			0.000006685U		0.02065U
Plutonium-239/240	pCi/L	0.51		0.02009U		0.01377U
Technetium-99	pCi/L	3790		-4.75U		1.46U
Uranium	µg/L	1000		0.2996		0.4457
Uranium-233/234	pCi/L	124,000		0.1369		0.1806
Uranium-235	pCi/L	43		0U		0.009688U
Uranium-236	pCi/L			0U		0U
Uranium-238	pCi/L	6.7		0.1007		0.1489
Other Parameters						
Alkalinity	mg/L			140		160
Ammonia as Nitrogen	mg/L			0.035B		0.031B
Chemical Oxygen Demand (COD)	mg/L			20U		20U
Chloride	mg/L			13		13
Dissolved Solids	mg/L			650		690
Nitrate/Nitrite as Nitrogen	mg/L			1.1		1.4
Sulfate	mg/L			320		340
Field Measurements						
Conductivity	µS/cm			840		951
Depth to Water	ft			15.41		17.99
Dissolved Oxygen	mg/L			1		1.28
pH	Std Unit			5.93		5.83
Temperature	deg C			13.5		14.2
Turbidity	NTU			1		3
X734-14G						
Metals						
Antimony	µg/L	36.5		2U		0.095B
Arsenic	µg/L	92		0.52B		1B
Barium	µg/L	2000		19		20
Beryllium	µg/L	6.5		1U		1U
Cadmium	µg/L	6.5		0.064B		0.06B
Calcium	µg/L			120000		110000
Chromium	µg/L	100		0.96B		1.5B
Cobalt	µg/L	13		1.5		2.5
Copper	µg/L	21		2U		1.5B
Iron	µg/L			530		1200
Lead	µg/L	50		0.29B		0.69B
Magnesium	µg/L			67000		65000
Manganese	µg/L	14,300		140		160
Nickel	µg/L	100		6		7.9

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X734-14G						
Potassium	µg/L			3100		2700B
Selenium	µg/L	50		5U		5U
Silver	µg/L	50		3.6B		5.3
Sodium	µg/L			52000		52000
Thallium	µg/L	10.5		1U		1U
Vanadium	µg/L	713		0.58B		1.2B
Zinc	µg/L	30,500		4B		12
Volatile Organic Compounds						
1,1,1,2-Tetrachloroethane	µg/L	11		2U		2U
1,1,1-Trichloroethane	µg/L	200		2U		2U
1,1,2,2-Tetrachloroethane	µg/L	0.83		1U		1U
1,1,2-Trichloroethane	µg/L	5		2U		2U
1,1-Dichloroethane	µg/L	5860		2U		2U
1,1-Dichloroethene	µg/L	7		2U		2U
1,2,3-Trichloropropane	µg/L	0.0379		1U		1U
1,2-Dibromo-3-chloropropane	µg/L	0.2		5U		5U
1,2-Dibromoethane	µg/L			2U		2U
1,2-Dichlorobenzene	µg/L	600		2U		2U
1,2-Dichloroethane	µg/L	5		2U		2U
1,2-Dichloropropane	µg/L	5		2U		2U
1,2-Dimethylbenzene	µg/L	10,000		2U		2U
1,4-Dichlorobenzene	µg/L	75		2U		2U
2-Butanone	µg/L	53,800		6U		6U
2-Hexanone	µg/L			5U		5U
4-Methyl-2-pentanone	µg/L	6360		5U		5U
Acetone	µg/L	10,200		2.4J		10U
Acrylonitrile	µg/L	0.431		20U		20U
Benzene	µg/L	5		2U		2U
Bromochloromethane	µg/L			2U		2U
Bromodichloromethane	µg/L	100		2U		2U
Bromoform	µg/L	100		2U		2U
Bromomethane	µg/L	140		2U		2U
Carbon disulfide	µg/L	6270		2U		2U
Carbon tetrachloride	µg/L	5		2U		2U
Chlorobenzene	µg/L	100		2U		2U
Chloroethane	µg/L	246,000		2U		2U
Chloroform	µg/L	100		2U		2U
Chloromethane	µg/L	13.4		2U		2U
cis-1,2-Dichloroethene	µg/L	70		2U		2U
cis-1,3-Dichloropropene	µg/L			2U		2U

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X734-14G						
Dibromochloromethane	µg/L	3.12		2U		2U
Dibromomethane	µg/L	999		2U		2U
Ethylbenzene	µg/L	700		2U		2U
Iodomethane	µg/L			1U		1U
M + P Xylene	µg/L	10,000		2U		2U
Methylene chloride	µg/L	5		5U		0.44BJ
Styrene	µg/L	100		2U		2U
Tetrachloroethene	µg/L	5		2U		2U
Toluene	µg/L	1000		2U		2U
trans-1,2-Dichloroethene	µg/L	100		1U		1U
trans-1,3-Dichloropropene	µg/L			2U		2U
Trans-1,4-Dichloro-2-butene	µg/L			3U		3U
Trichloroethene	µg/L	5		2U		2U
Trichlorofluoromethane	µg/L	12,100		2U		2U
Vinyl acetate	µg/L	6840		3U		3U
Vinyl chloride	µg/L	2		1U		1U
Radionuclides						
Americium-241	pCi/L	0.49		0.03623U		0U
Neptunium-237	pCi/L	0.54		0.006411U		0U
Plutonium-238	pCi/L			0.01275U		0.01445U
Plutonium-239/240	pCi/L	0.51		-0.006361U		0.007223U
Technetium-99	pCi/L	3790		-4.9U		-2.78U
Uranium	µg/L	1000		0.8049		0.6074
Uranium-233/234	pCi/L	124,000		0.4365		0.3273
Uranium-235	pCi/L	43		0.008548U		0U
Uranium-236	pCi/L			0U		-0.007544U
Uranium-238	pCi/L	6.7		0.2697		0.2041
Other Parameters						
Alkalinity	mg/L			230		240
Ammonia as Nitrogen	mg/L			0.038B		0.024B
Chemical Oxygen Demand (COD)	mg/L			8.3B		20U
Chloride	mg/L			71		72
Dissolved Solids	mg/L			860		880
Nitrate/Nitrite as Nitrogen	mg/L			0.1U		0.057B
Sulfate	mg/L			330		370
Field Measurements						
Conductivity	µS/cm			1146		1244
Depth to Water	ft			23.22		23.95
Dissolved Oxygen	mg/L			nm		nm
pH	Std Unit			6.45		6.26

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X734-14G						
Temperature	deg C			14.4		14.41
Turbidity	NTU			49		40
X734-15G						
Metals						
Antimony	µg/L	36.5		0.07B		0.095B
Arsenic	µg/L	92		17		17
Barium	µg/L	2000		79		71
Beryllium	µg/L	6.5		1U		1U
Cadmium	µg/L	6.5		0.042B		0.061B
Calcium	µg/L			83000		49000
Chromium	µg/L	100		2		3.9
Cobalt	µg/L	13		54		42
Copper	µg/L	21		0.91B		1.5B
Iron	µg/L			35000		15000
Lead	µg/L	50		0.58B		1.2
Magnesium	µg/L			48000		31000
Manganese	µg/L	14,300		5100		2900
Nickel	µg/L	100		12		15
Potassium	µg/L			2700B		1300B
Selenium	µg/L	50		5U		0.76B
Silver	µg/L	50		5U		5U
Sodium	µg/L			59000		44000
Thallium	µg/L	10.5		0.025B		0.055B
Vanadium	µg/L	713		1.3B		2.2B
Zinc	µg/L	30,500		7.4B		11
Volatile Organic Compounds						
1,1,1,2-Tetrachloroethane	µg/L	11		2U		2U
1,1,1-Trichloroethane	µg/L	200		2U		2U
1,1,2,2-Tetrachloroethane	µg/L	0.83		1U		1U
1,1,2-Trichloroethane	µg/L	5		2U		2U
1,1-Dichloroethane	µg/L	5860		2U		0.22J
1,1-Dichloroethene	µg/L	7		2U		2U
1,2,3-Trichloropropane	µg/L	0.0379		1U		1U
1,2-Dibromo-3-chloropropane	µg/L	0.2		5U		5U
1,2-Dibromoethane	µg/L			2U		2U
1,2-Dichlorobenzene	µg/L	600		2U		2U
1,2-Dichloroethane	µg/L	5		2U		2U
1,2-Dichloropropane	µg/L	5		2U		2U
1,2-Dimethylbenzene	µg/L	10,000		2U		2U
1,4-Dichlorobenzene	µg/L	75		2U		2U

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X734-15G						
2-Butanone	µg/L	53,800		6U		6U
2-Hexanone	µg/L			5U		5U
4-Methyl-2-pentanone	µg/L	6360		5U		5U
Acetone	µg/L	10,200		1.9J		10U
Acrylonitrile	µg/L	0.431		20U		20U
Benzene	µg/L	5		2U		2U
Bromochloromethane	µg/L			2U		2U
Bromodichloromethane	µg/L	100		2U		2U
Bromoform	µg/L	100		2U		2U
Bromomethane	µg/L	140		2U		2U
Carbon disulfide	µg/L	6270		2U		2U
Carbon tetrachloride	µg/L	5		2U		2U
Chlorobenzene	µg/L	100		2U		2U
Chloroethane	µg/L	246,000		2U		2U
Chloroform	µg/L	100		2U		2U
Chloromethane	µg/L	13.4		2U		2U
cis-1,2-Dichloroethene	µg/L	70		2U		2U
cis-1,3-Dichloropropene	µg/L			2U		2U
Dibromochloromethane	µg/L	3.12		2U		2U
Dibromomethane	µg/L	999		2U		2U
Ethylbenzene	µg/L	700		2U		2U
Iodomethane	µg/L			1U		1U
M + P Xylene	µg/L	10,000		2U		2U
Methylene chloride	µg/L	5		5U		5U
Styrene	µg/L	100		2U		2U
Tetrachloroethene	µg/L	5		2U		2U
Toluene	µg/L	1000		2U		2U
trans-1,2-Dichloroethene	µg/L	100		1U		1U
trans-1,3-Dichloropropene	µg/L			2U		2U
Trans-1,4-Dichloro-2-butene	µg/L			3U		3U
Trichloroethene	µg/L	5		2U		2U
Trichlorofluoromethane	µg/L	12,100		2U		2U
Vinyl acetate	µg/L	6840		3U		3U
Vinyl chloride	µg/L	2		1U		1U
Radionuclides						
Americium-241	pCi/L	0.49		0.01075U		0.0000126U
Neptunium-237	pCi/L	0.54		-0.03398U		0U
Plutonium-238	pCi/L			0.006783U		0.006935U
Plutonium-239/240	pCi/L	0.51		0.03392U		0.01383U
Technetium-99	pCi/L	3790		-2.24U		2.52U

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X734-15G						
Uranium	µg/L	1000		0.6087		0.06878U
Uranium-233/234	pCi/L	124,000		0.1883		0.0849
Uranium-235	pCi/L	43		0.01857U		0.000009513U
Uranium-236	pCi/L			0U		0U
Uranium-238	pCi/L	6.7		0.2029		0.02311U
Other Parameters						
Alkalinity	mg/L			340		180
Ammonia as Nitrogen	mg/L			0.64		0.19
Chemical Oxygen Demand (COD)	mg/L			21		20U
Chloride	mg/L			13		15
Dissolved Solids	mg/L			660		470
Nitrate/Nitrite as Nitrogen	mg/L			0.063B		0.084B
Sulfate	mg/L			190		160
Field Measurements						
Conductivity	µS/cm			965		703
Depth to Water	ft			15.6		16.83
Dissolved Oxygen	mg/L			1		2.44
pH	Std Unit			6.29		5.9
Temperature	deg C			12.4		14.89
Turbidity	NTU			34		130
X734-16G						
Metals						
Antimony	µg/L	36.5		0.22B		
Arsenic	µg/L	92		32		
Barium	µg/L	2000		230		
Beryllium	µg/L	6.5		1U		
Cadmium	µg/L	6.5		1U		
Calcium	µg/L			100000		
Chromium	µg/L	100		1.1B		
Cobalt	µg/L	13		11		
Copper	µg/L	21		2.4		
Iron	µg/L			22000		
Lead	µg/L	50		0.31B		
Magnesium	µg/L			44000		
Manganese	µg/L	14,300		2700		
Nickel	µg/L	100		23		
Potassium	µg/L			8900		
Selenium	µg/L	50		5U		
Silver	µg/L	50		5U		
Sodium	µg/L			9600		

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X734-16G						
Thallium	µg/L	10.5		0.024B		
Vanadium	µg/L	713		0.27B		
Zinc	µg/L	30,500		4.5B		
Volatile Organic Compounds						
1,1,1,2-Tetrachloroethane	µg/L	11		2U		
1,1,1-Trichloroethane	µg/L	200		2U		
1,1,2,2-Tetrachloroethane	µg/L	0.83		1U		
1,1,2-Trichloroethane	µg/L	5		2U		
1,1-Dichloroethane	µg/L	5860		2U		
1,1-Dichloroethene	µg/L	7		2U		
1,2,3-Trichloropropane	µg/L	0.0379		1U		
1,2-Dibromo-3-chloropropane	µg/L	0.2		5U		
1,2-Dibromoethane	µg/L			2U		
1,2-Dichlorobenzene	µg/L	600		2U		
1,2-Dichloroethane	µg/L	5		2U		
1,2-Dichloropropane	µg/L	5		2U		
1,2-Dimethylbenzene	µg/L	10,000		2U		
1,4-Dichlorobenzene	µg/L	75		2U		
2-Butanone	µg/L	53,800		6U		
2-Hexanone	µg/L			5U		
4-Methyl-2-pentanone	µg/L	6360		5U		
Acetone	µg/L	10,200		4J		
Acrylonitrile	µg/L	0.431		20U		
Benzene	µg/L	5		2U		
Bromochloromethane	µg/L			2U		
Bromodichloromethane	µg/L	100		2U		
Bromoform	µg/L	100		2U		
Bromomethane	µg/L	140		2U		
Carbon disulfide	µg/L	6270		2U		
Carbon tetrachloride	µg/L	5		2U		
Chlorobenzene	µg/L	100		2U		
Chloroethane	µg/L	246,000		2U		
Chloroform	µg/L	100		2U		
Chloromethane	µg/L	13.4		2U		
cis-1,2-Dichloroethene	µg/L	70		2U		
cis-1,3-Dichloropropene	µg/L			2U		
Dibromochloromethane	µg/L	3.12		2U		
Dibromomethane	µg/L	999		2U		
Ethylbenzene	µg/L	700		2U		
Iodomethane	µg/L			1U		

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X734-16G						
M + P Xylene	µg/L	10,000		2U		
Methylene chloride	µg/L	5		5U		
Styrene	µg/L	100		2U		
Tetrachloroethene	µg/L	5		2U		
Toluene	µg/L	1000		2U		
trans-1,2-Dichloroethene	µg/L	100		1U		
trans-1,3-Dichloropropene	µg/L			2U		
Trans-1,4-Dichloro-2-butene	µg/L			3U		
Trichloroethene	µg/L	5		2U		
Trichlorofluoromethane	µg/L	12,100		2U		
Vinyl acetate	µg/L	6840		3U		
Vinyl chloride	µg/L	2		1U		
Radionuclides						
Americium-241	pCi/L	0.49		0.01194U		
Neptunium-237	pCi/L	0.54		-0.0214U		
Plutonium-238	pCi/L			0.007133U		
Plutonium-239/240	pCi/L	0.51		-0.007119U		
Technetium-99	pCi/L	3790		0.458U		
Uranium	µg/L	1000		0.9029		
Uranium-233/234	pCi/L	124,000		0.485		
Uranium-235	pCi/L	43		0.009349U		
Uranium-236	pCi/L			0.000008387U		
Uranium-238	pCi/L	6.7		0.3025		
Other Parameters						
Alkalinity	mg/L			440		
Ammonia as Nitrogen	mg/L			3		
Chemical Oxygen Demand (COD)	mg/L			40		
Chloride	mg/L			4.1		
Dissolved Solids	mg/L			480		
Nitrate/Nitrite as Nitrogen	mg/L			0.04B		
Sulfate	mg/L			1.8B		
Field Measurements						
Conductivity	µS/cm			806		
Depth to Water	ft			10.59		
Dissolved Oxygen	mg/L			nm		
pH	Std Unit			6.96		
Temperature	deg C			13		
Turbidity	NTU			28		
X734-18G						
Metals						

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X734-18G						
Antimony	µg/L	36.5		2U		2U
Arsenic	µg/L	92		0.24B		0.41B
Barium	µg/L	2000		36		41
Beryllium	µg/L	6.5		1U		1U
Cadmium	µg/L	6.5		1U		1U
Calcium	µg/L			140000		110000
Chromium	µg/L	100		1.4B		2.5
Cobalt	µg/L	13		0.98B		3
Copper	µg/L	21		0.65B		1.2B
Iron	µg/L			410		1100
Lead	µg/L	50		0.23B		0.8B
Magnesium	µg/L			130000		90000
Manganese	µg/L	14,300		240		590
Nickel	µg/L	100		3.5		5.8
Potassium	µg/L			3800		1900B
Selenium	µg/L	50		5U		0.75B
Silver	µg/L	50		5U		5U
Sodium	µg/L			28000		21000
Thallium	µg/L	10.5		0.024B		0.022B
Vanadium	µg/L	713		0.53B		0.98B
Zinc	µg/L	30,500		2.5B		5.9B
Volatile Organic Compounds						
1,1,1,2-Tetrachloroethane	µg/L	11		2U		2U
1,1,1-Trichloroethane	µg/L	200		2U		2U
1,1,2,2-Tetrachloroethane	µg/L	0.83		1U		1U
1,1,2-Trichloroethane	µg/L	5		2U		2U
1,1-Dichloroethane	µg/L	5860		2U		2U
1,1-Dichloroethene	µg/L	7		2U		2U
1,2,3-Trichloropropane	µg/L	0.0379		1U		1U
1,2-Dibromo-3-chloropropane	µg/L	0.2		5U		5U
1,2-Dibromoethane	µg/L			2U		2U
1,2-Dichlorobenzene	µg/L	600		2U		2U
1,2-Dichloroethane	µg/L	5		2U		2U
1,2-Dichloropropane	µg/L	5		2U		2U
1,2-Dimethylbenzene	µg/L	10,000		2U		2U
1,4-Dichlorobenzene	µg/L	75		2U		2U
2-Butanone	µg/L	53,800		6U		6U
2-Hexanone	µg/L			5U		5U
4-Methyl-2-pentanone	µg/L	6360		5U		5U
Acetone	µg/L	10,200		15		10U

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X734-18G						
Acrylonitrile	µg/L	0.431		20U		20U
Benzene	µg/L	5		2U		2U
Bromochloromethane	µg/L			2U		2U
Bromodichloromethane	µg/L	100		2U		2U
Bromoform	µg/L	100		2U		2U
Bromomethane	µg/L	140		2U		2U
Carbon disulfide	µg/L	6270		2U		2U
Carbon tetrachloride	µg/L	5		2U		2U
Chlorobenzene	µg/L	100		2U		2U
Chloroethane	µg/L	246,000		2U		2U
Chloroform	µg/L	100		2U		2U
Chloromethane	µg/L	13.4		2U		2U
cis-1,2-Dichloroethene	µg/L	70		2U		2U
cis-1,3-Dichloropropene	µg/L			2U		2U
Dibromochloromethane	µg/L	3.12		2U		2U
Dibromomethane	µg/L	999		2U		2U
Ethylbenzene	µg/L	700		2U		2U
Iodomethane	µg/L			1U		1U
M + P Xylene	µg/L	10,000		2U		2U
Methylene chloride	µg/L	5		5U		5U
Styrene	µg/L	100		2U		2U
Tetrachloroethene	µg/L	5		2U		2U
Toluene	µg/L	1000		2U		2U
trans-1,2-Dichloroethene	µg/L	100		1U		1U
trans-1,3-Dichloropropene	µg/L			2U		2U
Trans-1,4-Dichloro-2-butene	µg/L			3U		3U
Trichloroethene	µg/L	5		2U		2U
Trichlorofluoromethane	µg/L	12,100		2U		2U
Vinyl acetate	µg/L	6840		3U		3U
Vinyl chloride	µg/L	2		1U		1U
Radionuclides						
Americium-241	pCi/L	0.49		0.01325U		0.04087U
Neptunium-237	pCi/L	0.54		0.007203U		0.000006589U
Plutonium-238	pCi/L			0.02148U		-0.006564U
Plutonium-239/240	pCi/L	0.51		0.01434U		0.006577U
Technetium-99	pCi/L	3790		-1.63U		-5.76U
Uranium	µg/L	1000		1.52		1.658
Uranium-233/234	pCi/L	124,000		0.7851		0.9245
Uranium-235	pCi/L	43		0.02549U		0.02019U
Uranium-236	pCi/L			0U		0U

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X734-18G						
Uranium-238	pCi/L	6.7		0.5086		0.5552
Other Parameters						
Alkalinity	mg/L			700		570
Ammonia as Nitrogen	mg/L			0.07B		0.053B
Chemical Oxygen Demand (COD)	mg/L			8.6B		20U
Chloride	mg/L			23		17
Dissolved Solids	mg/L			860		850
Nitrate/Nitrite as Nitrogen	mg/L			0.1U		0.027B
Sulfate	mg/L			180		220
Field Measurements						
Conductivity	µS/cm			1322		1434
Depth to Water	ft			35.67		38.06
Dissolved Oxygen	mg/L			nm		nm
pH	Std Unit			6.68		6.51
Temperature	deg C			14.3		12.61
Turbidity	NTU			22		21
X734-20G						
Metals						
Antimony	µg/L	36.5		0.076B		0.12B
Arsenic	µg/L	92		0.49B		5U
Barium	µg/L	2000		32		12
Beryllium	µg/L	6.5		1U		1U
Cadmium	µg/L	6.5		0.053B		1U
Calcium	µg/L			42000		36000
Chromium	µg/L	100		2U		0.66B
Cobalt	µg/L	13		32		0.56B
Copper	µg/L	21		5.5		1.2B
Iron	µg/L			2100		63B
Lead	µg/L	50		1U		1U
Magnesium	µg/L			18000		15000
Manganese	µg/L	14,300		5000		54
Nickel	µg/L	100		25		4.7
Potassium	µg/L			620B		430B
Selenium	µg/L	50		5U		5U
Silver	µg/L	50		0.29B		7.7
Sodium	µg/L			25000		17000
Thallium	µg/L	10.5		0.055B		0.04B
Vanadium	µg/L	713		5U		5U
Zinc	µg/L	30,500		9.3B		2.8B
Volatile Organic Compounds						

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X734-20G						
1,1,1,2-Tetrachloroethane	µg/L	11		2U		2U
1,1,1-Trichloroethane	µg/L	200		2U		2U
1,1,2,2-Tetrachloroethane	µg/L	0.83		1U		1U
1,1,2-Trichloroethane	µg/L	5		2U		2U
1,1-Dichloroethane	µg/L	5860		2U		2U
1,1-Dichloroethene	µg/L	7		2U		2U
1,2,3-Trichloropropane	µg/L	0.0379		1U		1U
1,2-Dibromo-3-chloropropane	µg/L	0.2		5U		5U
1,2-Dibromoethane	µg/L			2U		2U
1,2-Dichlorobenzene	µg/L	600		2U		2U
1,2-Dichloroethane	µg/L	5		2U		2U
1,2-Dichloropropane	µg/L	5		2U		2U
1,2-Dimethylbenzene	µg/L	10,000		2U		2U
1,4-Dichlorobenzene	µg/L	75		2U		2U
2-Butanone	µg/L	53,800		6U		6U
2-Hexanone	µg/L			5U		5U
4-Methyl-2-pentanone	µg/L	6360		5U		5U
Acetone	µg/L	10,200		2J		10U
Acrylonitrile	µg/L	0.431		20U		20U
Benzene	µg/L	5		2U		2U
Bromochloromethane	µg/L			2U		2U
Bromodichloromethane	µg/L	100		2U		0.25J
Bromoform	µg/L	100		2U		2U
Bromomethane	µg/L	140		2U		2U
Carbon disulfide	µg/L	6270		2U		2U
Carbon tetrachloride	µg/L	5		2U		2U
Chlorobenzene	µg/L	100		2U		2U
Chloroethane	µg/L	246,000		2U		2U
Chloroform	µg/L	100		2U		0.79J
Chloromethane	µg/L	13.4		2U		2U
cis-1,2-Dichloroethene	µg/L	70		2U		2U
cis-1,3-Dichloropropene	µg/L			2U		2U
Dibromochloromethane	µg/L	3.12		2U		0.34J
Dibromomethane	µg/L	999		2U		2U
Ethylbenzene	µg/L	700		2U		2U
Iodomethane	µg/L			1U		1U
M + P Xylene	µg/L	10,000		2U		2U
Methylene chloride	µg/L	5		5U		5U
Styrene	µg/L	100		2U		2U
Tetrachloroethene	µg/L	5		2U		2U

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X734-20G						
Toluene	µg/L	1000		2U		2U
trans-1,2-Dichloroethene	µg/L	100		1U		1U
trans-1,3-Dichloropropene	µg/L			2U		2U
Trans-1,4-Dichloro-2-butene	µg/L			3U		3U
Trichloroethene	µg/L	5		2U		2U
Trichlorofluoromethane	µg/L	12,100		2U		2U
Vinyl acetate	µg/L	6840		3U		3U
Vinyl chloride	µg/L	2		1U		1U
Radionuclides						
Americium-241	pCi/L	0.49		-0.009834U		0.008296U
Neptunium-237	pCi/L	0.54		-0.01407U		-0.0253U
Plutonium-238	pCi/L			0.02814U		0.02528U
Plutonium-239/240	pCi/L	0.51		0.02814U		0.01685U
Technetium-99	pCi/L	3790		0.5U		-1.52U
Uranium	µg/L	1000		-0.04519U		-0.0232U
Uranium-233/234	pCi/L	124,000		0.007623U		0.01409U
Uranium-235	pCi/L	43		0U		-0.008681U
Uranium-236	pCi/L			0U		0U
Uranium-238	pCi/L	6.7		-0.01519U		-0.007023U
Other Parameters						
Alkalinity	mg/L			39		28
Ammonia as Nitrogen	mg/L			0.061B		0.13
Chemical Oxygen Demand (COD)	mg/L			4.8B		8.8B
Chloride	mg/L			13		24
Dissolved Solids	mg/L			320		230
Nitrate/Nitrite as Nitrogen	mg/L			0.1U		0.1U
Sulfate	mg/L			170		120
Field Measurements						
Conductivity	µS/cm			444		418
Depth to Water	ft			6.4		5.6
Dissolved Oxygen	mg/L			nm		nm
pH	Std Unit			5.78		6.7
Temperature	deg C			10.7		9.7
Turbidity	NTU			9		2
X734-22G						
Metals						
Antimony	µg/L	36.5		2U		0.22B
Arsenic	µg/L	92		1.3B		4.4B
Barium	µg/L	2000		47		58
Beryllium	µg/L	6.5		1U		0.19B

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X734-22G						
Cadmium	µg/L	6.5		0.11B		0.16B
Calcium	µg/L			89000		90000
Chromium	µg/L	100		1.7B		4.1
Cobalt	µg/L	13		0.84B		2.8
Copper	µg/L	21		1B		3.1
Iron	µg/L			1900		7300
Lead	µg/L	50		0.62B		2.6
Magnesium	µg/L			43000		43000
Manganese	µg/L	14,300		38		73
Nickel	µg/L	100		4.8		9
Potassium	µg/L			2000B		1900B
Selenium	µg/L	50		5U		0.94B
Silver	µg/L	50		5U		5U
Sodium	µg/L			53000		48000
Thallium	µg/L	10.5		0.02B		0.061B
Vanadium	µg/L	713		3.7B		10
Zinc	µg/L	30,500		10		27
Volatile Organic Compounds						
1,1,1,2-Tetrachloroethane	µg/L	11		2U		2U
1,1,1-Trichloroethane	µg/L	200		2U		2U
1,1,2,2-Tetrachloroethane	µg/L	0.83		1U		1U
1,1,2-Trichloroethane	µg/L	5		2U		2U
1,1-Dichloroethane	µg/L	5860		2U		2U
1,1-Dichloroethene	µg/L	7		2U		2U
1,2,3-Trichloropropane	µg/L	0.0379		1U		1U
1,2-Dibromo-3-chloropropane	µg/L	0.2		5U		5U
1,2-Dibromoethane	µg/L			2U		2U
1,2-Dichlorobenzene	µg/L	600		2U		2U
1,2-Dichloroethane	µg/L	5		2U		2U
1,2-Dichloropropane	µg/L	5		2U		2U
1,2-Dimethylbenzene	µg/L	10,000		2U		2U
1,4-Dichlorobenzene	µg/L	75		2U		2U
2-Butanone	µg/L	53,800		6U		6U
2-Hexanone	µg/L			5U		5U
4-Methyl-2-pentanone	µg/L	6360		5U		5U
Acetone	µg/L	10,200		10U		10U
Acrylonitrile	µg/L	0.431		20U		20U
Benzene	µg/L	5		2U		2U
Bromochloromethane	µg/L			2U		2U
Bromodichloromethane	µg/L	100		2U		2U

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X734-22G						
Bromoform	µg/L	100		2U		2U
Bromomethane	µg/L	140		2U		2U
Carbon disulfide	µg/L	6270		2U		2U
Carbon tetrachloride	µg/L	5		2U		2U
Chlorobenzene	µg/L	100		2U		2U
Chloroethane	µg/L	246,000		2U		2U
Chloroform	µg/L	100		2U		2U
Chloromethane	µg/L	13.4		2U		2U
cis-1,2-Dichloroethene	µg/L	70		2U		2U
cis-1,3-Dichloropropene	µg/L			2U		2U
Dibromochloromethane	µg/L	3.12		2U		2U
Dibromomethane	µg/L	999		2U		2U
Ethylbenzene	µg/L	700		2U		2U
Iodomethane	µg/L			1U		1U
M + P Xylene	µg/L	10,000		2U		2U
Methylene chloride	µg/L	5		5U		5U
Styrene	µg/L	100		2U		2U
Tetrachloroethene	µg/L	5		2U		2U
Toluene	µg/L	1000		2U		2U
trans-1,2-Dichloroethene	µg/L	100		1U		1U
trans-1,3-Dichloropropene	µg/L			2U		2U
Trans-1,4-Dichloro-2-butene	µg/L			3U		3U
Trichloroethene	µg/L	5		2U		2U
Trichlorofluoromethane	µg/L	12,100		2U		2U
Vinyl acetate	µg/L	6840		3U		3U
Vinyl chloride	µg/L	2		1U		1U
Radionuclides						
Americium-241	pCi/L	0.49		0.03065U		0.01091U
Neptunium-237	pCi/L	0.54		0.007356U		0.007358U
Plutonium-238	pCi/L			0.02198U		-0.00733U
Plutonium-239/240	pCi/L	0.51		0.007335U		-0.00733U
Technetium-99	pCi/L	3790		-6.21U		-1.11U
Uranium	µg/L	1000		0.8992		1.136
Uranium-233/234	pCi/L	124,000		0.3915		0.5481
Uranium-235	pCi/L	43		0.01857U		0U
Uranium-236	pCi/L			0U		0U
Uranium-238	pCi/L	6.7		0.3005		0.3817
Other Parameters						
Alkalinity	mg/L			240		230
Ammonia as Nitrogen	mg/L			0.037B		0.045B

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X734-22G						
Chemical Oxygen Demand (COD)	mg/L			20U		20U
Chloride	mg/L			71		76
Dissolved Solids	mg/L			620		640
Nitrate/Nitrite as Nitrogen	mg/L			0.26		0.26
Sulfate	mg/L			170		180
Field Measurements						
Conductivity	µS/cm			878		989
Depth to Water	ft			23.81		25.33
Dissolved Oxygen	mg/L			2		2.43
pH	Std Unit			6.27		6.35
Temperature	deg C			14.1		13.76
Turbidity	NTU			56		267
X734-23G						
Metals						
Antimony	µg/L	36.5		2U		2U
Arsenic	µg/L	92		1.4B		2.2B
Barium	µg/L	2000		47		47
Beryllium	µg/L	6.5		1U		1U
Cadmium	µg/L	6.5		1U		1U
Calcium	µg/L			13000		12000
Chromium	µg/L	100		2U		0.76B
Cobalt	µg/L	13		110		110
Copper	µg/L	21		2U		1.1B
Iron	µg/L			53000		50000
Lead	µg/L	50		1U		0.62B
Magnesium	µg/L			23000		20000
Manganese	µg/L	14,300		9000		8300
Nickel	µg/L	100		18		16
Potassium	µg/L			880B		500B
Selenium	µg/L	50		5U		0.72B
Silver	µg/L	50		0.37B		5U
Sodium	µg/L			41000		39000
Thallium	µg/L	10.5		0.038B		0.054B
Vanadium	µg/L	713		5U		0.78B
Zinc	µg/L	30,500		11		13
Volatile Organic Compounds						
1,1,1,2-Tetrachloroethane	µg/L	11		2U		2U
1,1,1-Trichloroethane	µg/L	200		2U		2U
1,1,2,2-Tetrachloroethane	µg/L	0.83		1U		1U
1,1,2-Trichloroethane	µg/L	5		2U		2U

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X734-23G						
1,1-Dichloroethane	µg/L	5860		2U		2U
1,1-Dichloroethene	µg/L	7		2U		2U
1,2,3-Trichloropropane	µg/L	0.0379		1U		1U
1,2-Dibromo-3-chloropropane	µg/L	0.2		5U		5U
1,2-Dibromoethane	µg/L			2U		2U
1,2-Dichlorobenzene	µg/L	600		2U		2U
1,2-Dichloroethane	µg/L	5		2U		2U
1,2-Dichloropropane	µg/L	5		2U		2U
1,2-Dimethylbenzene	µg/L	10,000		2U		2U
1,4-Dichlorobenzene	µg/L	75		2U		2U
2-Butanone	µg/L	53,800		6U		6U
2-Hexanone	µg/L			5U		5U
4-Methyl-2-pentanone	µg/L	6360		5U		5U
Acetone	µg/L	10,200		4.5J		10U
Acrylonitrile	µg/L	0.431		20U		20U
Benzene	µg/L	5		2U		2U
Bromochloromethane	µg/L			2U		2U
Bromodichloromethane	µg/L	100		2U		2U
Bromoform	µg/L	100		2U		2U
Bromomethane	µg/L	140		2U		2U
Carbon disulfide	µg/L	6270		2U		2U
Carbon tetrachloride	µg/L	5		2U		2U
Chlorobenzene	µg/L	100		2U		2U
Chloroethane	µg/L	246,000		2U		2U
Chloroform	µg/L	100		2U		2U
Chloromethane	µg/L	13.4		2U		2U
cis-1,2-Dichloroethene	µg/L	70		12		9.5
cis-1,3-Dichloropropene	µg/L			2U		2U
Dibromochloromethane	µg/L	3.12		2U		2U
Dibromomethane	µg/L	999		2U		2U
Ethylbenzene	µg/L	700		2U		2U
Iodomethane	µg/L			1U		1U
M + P Xylene	µg/L	10,000		2U		2U
Methylene chloride	µg/L	5		5U		5U
Styrene	µg/L	100		2U		2U
Tetrachloroethene	µg/L	5		2U		2U
Toluene	µg/L	1000		2U		2U
trans-1,2-Dichloroethene	µg/L	100		0.57J		0.43J
trans-1,3-Dichloropropene	µg/L			2U		2U
Trans-1,4-Dichloro-2-butene	µg/L			3U		3U

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
X734-23G						
Trichloroethene	µg/L	5		0.29J		0.17J
Trichlorofluoromethane	µg/L	12,100		2U		2U
Vinyl acetate	µg/L	6840		3U		3U
Vinyl chloride	µg/L	2		4.2		5.4
Radionuclides						
Americium-241	pCi/L	0.49		0.01799U		-0.008911U
Neptunium-237	pCi/L	0.54		0.02734U		-0.007592U
Plutonium-238	pCi/L			0.01362U		0.00001514U
Plutonium-239/240	pCi/L	0.51		0.006822U		0.01516U
Technetium-99	pCi/L	3790		-5.63U		-1.83U
Uranium	µg/L	1000		-0.02028U		0.08942U
Uranium-233/234	pCi/L	124,000		-0.02689U		0.02258U
Uranium-235	pCi/L	43		0U		0U
Uranium-236	pCi/L			-0.01492U		0U
Uranium-238	pCi/L	6.7		-0.0067U		0.03005U
Other Parameters						
Alkalinity	mg/L			160		140
Ammonia as Nitrogen	mg/L			0.99		1.1
Chemical Oxygen Demand (COD)	mg/L			21		9.5B
Chloride	mg/L			53		52
Dissolved Solids	mg/L			350		330
Nitrate/Nitrite as Nitrogen	mg/L			0.1		0.15
Sulfate	mg/L			67		67
Field Measurements						
Conductivity	µS/cm			610		635
Depth to Water	ft			22.49		22.9
Dissolved Oxygen	mg/L			2		3.52
pH	Std Unit			5.72		5.88
Temperature	deg C			13		13.23
Turbidity	NTU			10		13

ANALYTICAL DATA TABLES
X-533 SWITCHYARD AREA

Laboratory Data Qualifiers and Other Abbreviations

B	Inorganics: the reported value was obtained from a reading that was less than practical quantitation limit but greater than or equal to the instrument detection limit. Organics: the analyte was detected in the laboratory blank sample.
E	Inorganics: the reported value is estimated because of the presence of interferences. Organics: the result exceeds the calibration range.
J	Organics: the reported value is an estimated concentration greater than the method detection limit but less than the practical quantitation limit. All others: the reported value is qualified as estimated.
P	Pesticide/Aroclor: there is greater than 25% difference for detected concentrations between the two gas chromatograph columns.
U	Undetected
nm	For field measurements: not measured due to insufficient water remaining in the well after sampling.

X-533 Switchyard Area

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
F-03G						
Metals						
Cadmium	µg/L	6.5		46		50
Cobalt	µg/L	13		82		200
Nickel	µg/L	100		480		1200
Field Measurements						
Conductivity	µS/cm			650		1237
Depth to Water	ft			9.38		17.18
Dissolved Oxygen	mg/L			2		nm
pH	Std Unit			4.35		4.71
Temperature	deg C			11.8		16.23
Turbidity	NTU			73		30
TCP-01G						
Metals						
Cadmium	µg/L	6.5		20		16
Cobalt	µg/L	13		53		46
Nickel	µg/L	100		220		190
Field Measurements						
Conductivity	µS/cm			554		588
Depth to Water	ft			8.28		10.33
Dissolved Oxygen	mg/L			nm		nm
pH	Std Unit			4.18		4.44
Temperature	deg C			15.1		15.08
Turbidity	NTU			182		71
X533-03G						
Metals						
Cadmium	µg/L	6.5		11		17
Cobalt	µg/L	13		35		48
Nickel	µg/L	100		190		260
Field Measurements						
Conductivity	µS/cm			552		834
Depth to Water	ft			14.67		15.31
Dissolved Oxygen	mg/L			2		2.16
pH	Std Unit			4.41		4.36
Temperature	deg C			12		14.91
Turbidity	NTU			23		23.8

APPENDIX E

OTHER IGWMP MONITORING SAMPLING RESULTS

ANALYTICAL DATA TABLES
SURFACE WATER

Laboratory Data Qualifiers and Other Abbreviations

B	Inorganics: the reported value was obtained from a reading that was less than practical quantitation limit but greater than or equal to the instrument detection limit. Organics: the analyte was detected in the laboratory blank sample.
E	Inorganics: the reported value is estimated because of the presence of interferences. Organics: the result exceeds the calibration range.
J	Organics: the reported value is an estimated concentration greater than the method detection limit but less than the practical quantitation limit. All others: the reported value is qualified as estimated.
P	Pesticide/Aroclor: there is greater than 25% difference for detected concentrations between the two gas chromatograph columns.
U	Undetected
nm	For field measurements: not measured due to insufficient water remaining in the well after sampling.

Surface Water

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
BRC-SW01						
Metals						
Calcium	µg/L		27000	8200	15000	23000
Iron	µg/L		71B	170	46B	50B
Magnesium	µg/L		25000	5900	12000	17000
Potassium	µg/L		5500	1900B	2700B	3500
Sodium	µg/L		170000	110000	30000	64000
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L		2U	2U	2U	2U
1,1,2,2-Tetrachloroethane	µg/L		1U	1U	1U	1U
1,1,2-Trichloroethane	µg/L		2U	2U	2U	2U
1,1-Dichloroethane	µg/L		2U	2U	2U	2U
1,1-Dichloroethene	µg/L		2U	2U	2U	2U
1,2-Dichlorobenzene	µg/L		2U	2U	2U	2U
1,2-Dichloroethane	µg/L		2U	2U	2U	2U
1,2-Dimethylbenzene	µg/L		2U	2U	2U	2U
1,4-Dichlorobenzene	µg/L		2U	2U	2U	2U
2-Butanone	µg/L		6U	6U	6U	6U
4-Methyl-2-pentanone	µg/L		5U	5U	5U	5U
Acetone	µg/L		2.5J	10U	10U	2.4J
Benzene	µg/L		2U	2U	2U	2U
Bromodichloromethane	µg/L		3.2	6.9	2.3	2.5
Bromoform	µg/L		2U	1.1J	0.56J	1.7J
Bromomethane	µg/L		2U	2U	2U	2U
Carbon disulfide	µg/L		2U	2U	2U	2U
Carbon tetrachloride	µg/L		2U	2U	2U	2U
Chlorobenzene	µg/L		2U	2U	2U	2U
Chloroethane	µg/L		2U	2U	2U	2U
Chloroform	µg/L		3.5	10	4.2	2.6
Chloromethane	µg/L		2U	2U	2U	2U
cis-1,2-Dichloroethene	µg/L		2U	2U	2U	2U
Dibromochloromethane	µg/L		3	5.1	2.4	3.2
Ethylbenzene	µg/L		2U	2U	2U	2U
M + P Xylene	µg/L		2U	2U	2U	2U
Methylene chloride	µg/L		5U	5U	5U	0.34BJ
Tetrachloroethene	µg/L		2U	2U	2U	2U
Toluene	µg/L		2U	2U	2U	2U
trans-1,2-Dichloroethene	µg/L		1U	1U	1U	1U
Trichloroethene	µg/L		2U	2U	2U	2U
Trichlorofluoromethane	µg/L		2U	2U	2U	2U

Surface Water

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
BRC-SW01						
Vinyl chloride	µg/L		1U	1U	1U	1U
Radionuclides						
Americium-241	pCi/L		0.02899U	-0.02995U	0.03494U	0.008166U
Neptunium-237	pCi/L		-0.006537U	0.01871U	-0.1455U	0.02148U
Plutonium-238	pCi/L		-0.01303U	0.006224U	0.01384U	0.01428U
Plutonium-239/240	pCi/L		0.000006526U	0.01243U	0.01385U	0U
Technetium-99	pCi/L		-7.02U	-4.68U	0.0558U	-2.47U
Uranium	µg/L		0.3904	0.08437U	0.1827U	1.332
Uranium-233/234	pCi/L		0.339	0.1022U	0.07785U	0.9065
Uranium-235	pCi/L		0.01779U	-0.008996U	0.01066U	0.02621U
Uranium-236	pCi/L		0U	-0.008069U	0.009575U	0.007845U
Uranium-238	pCi/L		0.1296	0.02919U	0.0604U	0.4453
Other Parameters						
Alkalinity	mg/L		70	44	45	53
Chloride	mg/L		260	140	34	110
Sulfate	mg/L		100	55	59	88
Field Measurements						
Conductivity	µS/cm		1083	714	337	625
pH	Std Unit		9.27	9.09	8.31	8.45
Temperature	deg C		16.2	20.5	23.9	13.9
Turbidity	NTU		5	6.25	4	5
BRC-SW02						
Metals						
Calcium	µg/L		30000	26000	28000	25000
Iron	µg/L		2000	970	410	470
Magnesium	µg/L		17000	13000	18000	18000
Potassium	µg/L		3600	2400B	3500	3300
Sodium	µg/L		130000	110000	140000	130000
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L		2U	2U	2U	2U
1,1,2,2-Tetrachloroethane	µg/L		1U	1U	1U	1U
1,1,2-Trichloroethane	µg/L		2U	2U	2U	2U
1,1-Dichloroethane	µg/L		2U	2U	2U	2U
1,1-Dichloroethene	µg/L		2U	2U	2U	2U
1,2-Dichlorobenzene	µg/L		2U	2U	2U	2U
1,2-Dichloroethane	µg/L		2U	2U	2U	2U
1,2-Dimethylbenzene	µg/L		2U	2U	2U	2U
1,4-Dichlorobenzene	µg/L		2U	2U	2U	2U
2-Butanone	µg/L		6U	6U	6U	6U
4-Methyl-2-pentanone	µg/L		5U	5U	5U	5U

Surface Water

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
BRC-SW02						
Acetone	µg/L		10U	10U	10U	10U
Benzene	µg/L		2U	2U	2U	2U
Bromodichloromethane	µg/L		2U	2U	2U	2U
Bromoform	µg/L		2U	2U	2U	2U
Bromomethane	µg/L		2U	2U	2U	2U
Carbon disulfide	µg/L		2U	2U	2U	2U
Carbon tetrachloride	µg/L		2U	2U	2U	2U
Chlorobenzene	µg/L		2U	2U	2U	2U
Chloroethane	µg/L		2U	2U	2U	2U
Chloroform	µg/L		2U	2U	2U	2U
Chloromethane	µg/L		2U	2U	2U	2U
cis-1,2-Dichloroethene	µg/L		2U	2U	2U	2U
Dibromochloromethane	µg/L		2U	2U	2U	2U
Ethylbenzene	µg/L		2U	2U	2U	2U
M + P Xylene	µg/L		2U	2U	2U	2U
Methylene chloride	µg/L		5U	5U	5U	5U
Tetrachloroethene	µg/L		2U	2U	2U	2U
Toluene	µg/L		2U	2U	2U	2U
trans-1,2-Dichloroethene	µg/L		1U	1U	1U	1U
Trichloroethene	µg/L		2U	2U	2U	2U
Trichlorofluoromethane	µg/L		2U	2U	2U	2U
Vinyl chloride	µg/L		1U	1U	1U	1U
Radionuclides						
Americium-241	pCi/L		0.01844U	0.008747U	0.008166U	0.008958U
Neptunium-237	pCi/L		0U	0.000007415U	-0.02771U	-0.07295U
Plutonium-238	pCi/L		0.01351U	0.02961U	0.00002764U	0.02914U
Plutonium-239/240	pCi/L		0.006762U	0.007416U	0.006931U	0.00002183U
Technetium-99	pCi/L		-1.14U	-4.06U	-2.95U	-3.07U
Uranium	µg/L		0.9466	0.8174	0.5985	0.4982
Uranium-233/234	pCi/L		0.8687	0.7519	0.6234	0.707
Uranium-235	pCi/L		0.01701U	0.02728U	0.03496U	0.000008983U
Uranium-236	pCi/L		0.007636U	0U	0U	0.01615U
Uranium-238	pCi/L		0.3165	0.2722	0.198	0.1673
Other Parameters						
Alkalinity	mg/L		66	65	77	61
Chloride	mg/L		160	170	200	190
Sulfate	mg/L		130	67	74	100
Field Measurements						
Conductivity	µS/cm		886	819	893	1137
pH	Std Unit		6.46	7.47	7.05	5.98

Surface Water

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
BRC-SW02						
Temperature	deg C		2.6	20.5	22.4	5.84
Turbidity	NTU		33	19	5	14
EDD-SW01						
Metals						
Calcium	µg/L		19000	18000	15000	21000
Iron	µg/L		450	170	180	130
Magnesium	µg/L		18000	13000	12000	15000
Potassium	µg/L		3900	3100	2900B	3300
Sodium	µg/L		26000	20000	16000	26000
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L		2U	2U	2U	2U
1,1,2,2-Tetrachloroethane	µg/L		1U	1U	1U	1U
1,1,2-Trichloroethane	µg/L		2U	2U	2U	2U
1,1-Dichloroethane	µg/L		2U	2U	2U	2U
1,1-Dichloroethene	µg/L		2U	2U	2U	2U
1,2-Dichlorobenzene	µg/L		2U	2U	2U	2U
1,2-Dichloroethane	µg/L		2U	2U	2U	2U
1,2-Dimethylbenzene	µg/L		2U	2U	2U	2U
1,4-Dichlorobenzene	µg/L		2U	2U	2U	2U
2-Butanone	µg/L		6U	6U	6U	6U
4-Methyl-2-pentanone	µg/L		5U	5U	5U	5U
Acetone	µg/L		10U	10U	10U	10U
Benzene	µg/L		2U	2U	2U	2U
Bromodichloromethane	µg/L		3.4	3.6	2.2	1.5J
Bromoform	µg/L		0.38J	0.46J	0.52J	1.7J
Bromomethane	µg/L		2U	2U	2U	2U
Carbon disulfide	µg/L		2U	2U	2U	2U
Carbon tetrachloride	µg/L		2U	2U	2U	2U
Chlorobenzene	µg/L		2U	2U	2U	2U
Chloroethane	µg/L		2U	2U	2U	2U
Chloroform	µg/L		2.8	4.4	3	1.3J
Chloromethane	µg/L		2U	2U	2U	2U
cis-1,2-Dichloroethene	µg/L		0.27J	0.17J	0.17J	0.27J
Dibromochloromethane	µg/L		3.3	3.4	2.5	2.9
Ethylbenzene	µg/L		2U	2U	2U	2U
M + P Xylene	µg/L		2U	2U	2U	2U
Methylene chloride	µg/L		5U	5U	0.45J	0.38BJ
Tetrachloroethene	µg/L		2U	2U	2U	2U
Toluene	µg/L		2U	2U	2U	2U
trans-1,2-Dichloroethene	µg/L		1U	1U	1U	1U

Surface Water

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
EDD-SW01						
Trichloroethene	µg/L		0.82J	0.45J	0.23J	0.64J
Trichlorofluoromethane	µg/L		2U	2U	2U	2U
Vinyl chloride	µg/L		1U	1U	1U	1U
Radionuclides						
Americium-241	pCi/L		0.02445U	-0.01545U	0.007687U	0.02115U
Neptunium-237	pCi/L		0.007278U	-0.02096U	-0.02059U	0.00000864U
Plutonium-238	pCi/L		0.000007244U	0.01396U	0.01376U	0.04313U
Plutonium-239/240	pCi/L		0.01451U	-0.006961U	-0.01371U	0.008624U
Technetium-99	pCi/L		-1.19U	3.22U	2.79U	7.58U
Uranium	µg/L		0.4726	0.4987	0.2779	3.511
Uranium-233/234	pCi/L		1.115	0.8445	0.3311	2.703
Uranium-235	pCi/L		0.09297	0.05735	0U	0.16
Uranium-236	pCi/L		0.008348U	0.008582U	0U	0.03193U
Uranium-238	pCi/L		0.1504	0.1624	0.09338	1.165
Other Parameters						
Alkalinity	mg/L		45	40	36	46
Chloride	mg/L		38	33	29	39
Sulfate	mg/L		64	54	52	74
Field Measurements						
Conductivity	µS/cm		343	316	265	379
pH	Std Unit		7.89	8.46	8.14	7.99
Temperature	deg C		7.14	18.5	23.5	9.31
Turbidity	NTU		14	3	5	4
LBC-SW01						
Metals						
Calcium	µg/L		20000	19000	15000	21000
Iron	µg/L		280	110	97B	120
Magnesium	µg/L		19000	14000	13000	15000
Potassium	µg/L		3800	3000	3100	3400
Sodium	µg/L		25000	19000	17000	26000
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L		2U	2U	2U	2U
1,1,2,2-Tetrachloroethane	µg/L		1U	1U	1U	1U
1,1,2-Trichloroethane	µg/L		2U	2U	2U	2U
1,1-Dichloroethane	µg/L		2U	2U	2U	2U
1,1-Dichloroethene	µg/L		2U	2U	2U	2U
1,2-Dichlorobenzene	µg/L		2U	2U	2U	2U
1,2-Dichloroethane	µg/L		2U	2U	2U	2U
1,2-Dimethylbenzene	µg/L		2U	2U	2U	2U
1,4-Dichlorobenzene	µg/L		2U	2U	2U	2U

Surface Water

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
LBC-SW01						
2-Butanone	µg/L		6U	6U	6U	6U
4-Methyl-2-pentanone	µg/L		5U	5U	5U	5U
Acetone	µg/L		10U	10U	10U	10U
Benzene	µg/L		2U	2U	2U	2U
Bromodichloromethane	µg/L		2.5	2.9	1.8J	1.1J
Bromoform	µg/L		2U	0.3J	0.44J	1.3J
Bromomethane	µg/L		2U	2U	2U	2U
Carbon disulfide	µg/L		2U	2U	2U	2U
Carbon tetrachloride	µg/L		2U	2U	2U	2U
Chlorobenzene	µg/L		2U	2U	2U	2U
Chloroethane	µg/L		2U	2U	2U	2U
Chloroform	µg/L		1.9J	3.5	2.5	1J
Chloromethane	µg/L		2U	2U	2U	2U
cis-1,2-Dichloroethene	µg/L		0.23J	0.25J	2U	0.27J
Dibromochloromethane	µg/L		2.6	2.5	2	2.1
Ethylbenzene	µg/L		2U	2U	2U	2U
M + P Xylene	µg/L		2U	2U	2U	2U
Methylene chloride	µg/L		5U	5U	0.44J	5U
Tetrachloroethene	µg/L		2U	2U	2U	2U
Toluene	µg/L		2U	2U	2U	2U
trans-1,2-Dichloroethene	µg/L		1U	1U	1U	1U
Trichloroethene	µg/L		0.51J	0.43J	0.16J	0.52J
Trichlorofluoromethane	µg/L		2U	2U	2U	2U
Vinyl chloride	µg/L		1U	1U	1U	1U
Radionuclides						
Americium-241	pCi/L		0.01595U	0.009752U	0.01513U	0.009905U
Neptunium-237	pCi/L		0.007886U	-0.01398U	-0.09432U	-0.007451U
Plutonium-238	pCi/L		0.01573U	0.006982U	0.0145U	0.01488U
Plutonium-239/240	pCi/L		0.02359U	-0.01393U	-0.01447U	0.01488U
Technetium-99	pCi/L		7.6U	-0.928U	2.02U	7.96U
Uranium	µg/L		0.5919	0.3872	0.2111	3.928
Uranium-233/234	pCi/L		1.031	0.8775	0.2179	3.144
Uranium-235	pCi/L		0.03582U	0.000008449U	0.008671U	0.146
Uranium-236	pCi/L		0.008041U	0.01519U	0U	0.01639U
Uranium-238	pCi/L		0.1956	0.13	0.07015	1.307
Other Parameters						
Alkalinity	mg/L		47	46	37	43
Chloride	mg/L		35	31	29	41
Sulfate	mg/L		70	59	50	73
Field Measurements						

Surface Water

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
LBC-SW01						
Conductivity	µS/cm		348	320	265	386
pH	Std Unit		7.75	8.09	8.02	7.88
Temperature	deg C		6.44	18.9	24.9	8.22
Turbidity	NTU		8	4	5	7
LBC-SW02						
Metals						
Calcium	µg/L		19000	19000	15000	22000
Iron	µg/L		210	120	94B	130
Magnesium	µg/L		18000	14000	13000	16000
Potassium	µg/L		3700	3100	3100	3300
Sodium	µg/L		25000	20000	17000	26000
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L		2U	2U	2U	2U
1,1,2,2-Tetrachloroethane	µg/L		1U	1U	1U	1U
1,1,2-Trichloroethane	µg/L		2U	2U	2U	2U
1,1-Dichloroethane	µg/L		2U	2U	2U	2U
1,1-Dichloroethene	µg/L		2U	2U	2U	2U
1,2-Dichlorobenzene	µg/L		2U	2U	2U	2U
1,2-Dichloroethane	µg/L		2U	2U	2U	2U
1,2-Dimethylbenzene	µg/L		2U	2U	2U	2U
1,4-Dichlorobenzene	µg/L		2U	2U	2U	2U
2-Butanone	µg/L		6U	6U	6U	6U
4-Methyl-2-pentanone	µg/L		5U	5U	5U	5U
Acetone	µg/L		10U	10U	10U	10U
Benzene	µg/L		2U	2U	2U	2U
Bromodichloromethane	µg/L		1.8J	1.5J	0.8J	0.59J
Bromoform	µg/L		2U	0.2J	2U	0.88J
Bromomethane	µg/L		2U	2U	2U	2U
Carbon disulfide	µg/L		2U	2U	2U	2U
Carbon tetrachloride	µg/L		2U	2U	2U	2U
Chlorobenzene	µg/L		2U	2U	2U	2U
Chloroethane	µg/L		2U	2U	2U	2U
Chloroform	µg/L		1.3J	1.9J	1.1J	0.55J
Chloromethane	µg/L		2U	2U	2U	2U
cis-1,2-Dichloroethene	µg/L		2U	2U	2U	2U
Dibromochloromethane	µg/L		1.8J	1.5J	1J	1.2J
Ethylbenzene	µg/L		2U	2U	2U	2U
M + P Xylene	µg/L		2U	2U	2U	2U
Methylene chloride	µg/L		5U	5U	0.42J	5U
Tetrachloroethene	µg/L		2U	2U	2U	2U

Surface Water

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
LBC-SW02						
Toluene	µg/L		2U	2U	2U	2U
trans-1,2-Dichloroethene	µg/L		1U	1U	1U	1U
Trichloroethene	µg/L		0.34J	0.21J	2U	0.27J
Trichlorofluoromethane	µg/L		2U	2U	2U	2U
Vinyl chloride	µg/L		1U	1U	1U	1U
Radionuclides						
Americium-241	pCi/L		0.01682U	0.009191U	0.007556U	0.02273U
Neptunium-237	pCi/L		0.000006544U	0.01381U	0.006791U	0.000006398U
Plutonium-238	pCi/L		0.01306U	0.04128U	0.000006732U	0U
Plutonium-239/240	pCi/L		-0.01304U	0.01378U	0.006752U	0.006386U
Technetium-99	pCi/L		6.13U	3.29U	1.89U	7.72U
Uranium	µg/L		0.4718	0.404	0.2195	3.426
Uranium-233/234	pCi/L		1.072	0.8379	0.3263	3.253
Uranium-235	pCi/L		0.01763U	0.05393	0.000007588U	0.1458
Uranium-236	pCi/L		0.007914U	0U	0U	0.05389
Uranium-238	pCi/L		0.1569	0.1309	0.07373	1.138
Other Parameters						
Alkalinity	mg/L		45	45	37	47
Chloride	mg/L		36	30	29	39
Sulfate	mg/L		68	61	52	75
Field Measurements						
Conductivity	µS/cm		350	352	268	389
pH	Std Unit		7.61	8.06	7.83	7.99
Temperature	deg C		6.01	17.3	24.8	7.06
Turbidity	NTU		4	6	4	3
LBC-SW03						
Metals						
Calcium	µg/L		20000	17000	16000	23000
Iron	µg/L		180	130	140	130
Magnesium	µg/L		19000	13000	14000	17000
Potassium	µg/L		3500	2700B	3300	3000
Sodium	µg/L		25000	17000	17000	26000
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L		2U	2U	2U	2U
1,1,2,2-Tetrachloroethane	µg/L		1U	1U	1U	1U
1,1,2-Trichloroethane	µg/L		2U	2U	2U	2U
1,1-Dichloroethane	µg/L		2U	2U	2U	2U
1,1-Dichloroethene	µg/L		2U	2U	2U	2U
1,2-Dichlorobenzene	µg/L		2U	2U	2U	2U
1,2-Dichloroethane	µg/L		2U	2U	2U	2U

Surface Water

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
LBC-SW03						
1,2-Dimethylbenzene	µg/L		2U	2U	2U	2U
1,4-Dichlorobenzene	µg/L		2U	2U	2U	2U
2-Butanone	µg/L		6U	6U	6U	6U
4-Methyl-2-pentanone	µg/L		5U	5U	5U	5U
Acetone	µg/L		10U	10U	10U	10U
Benzene	µg/L		2U	2U	2U	2U
Bromodichloromethane	µg/L		0.41J	0.3J	2U	2U
Bromoform	µg/L		2U	2U	2U	0.49J
Bromomethane	µg/L		2U	2U	2U	2U
Carbon disulfide	µg/L		2U	2U	2U	2U
Carbon tetrachloride	µg/L		2U	2U	2U	2U
Chlorobenzene	µg/L		2U	2U	2U	2U
Chloroethane	µg/L		2U	2U	2U	2U
Chloroform	µg/L		0.27J	0.3J	2U	2U
Chloromethane	µg/L		2U	2U	2U	2U
cis-1,2-Dichloroethene	µg/L		2U	2U	2U	2U
Dibromochloromethane	µg/L		0.57J	0.35J	0.19J	0.42J
Ethylbenzene	µg/L		2U	2U	2U	2U
M + P Xylene	µg/L		2U	2U	2U	2U
Methylene chloride	µg/L		5U	5U	0.38J	5U
Tetrachloroethene	µg/L		2U	2U	2U	2U
Toluene	µg/L		2U	2U	2U	2U
trans-1,2-Dichloroethene	µg/L		1U	1U	1U	1U
Trichloroethene	µg/L		2U	2U	2U	2U
Trichlorofluoromethane	µg/L		2U	2U	2U	2U
Vinyl chloride	µg/L		1U	1U	1U	1U
Radionuclides						
Americium-241	pCi/L		0.01926U	0.03376U	0.02204U	0.000008899U
Neptunium-237	pCi/L		0.01483U	0.0206U	0.01906U	0.01601U
Plutonium-238	pCi/L		-0.01474U	0.0274U	0.01267U	0.02393U
Plutonium-239/240	pCi/L		-0.007378U	0.00686U	0.006339U	0.01595U
Technetium-99	pCi/L		6.41U	1.35U	-0.323U	12.2
Uranium	µg/L		0.7891	0.4843	0.4309	4.032
Uranium-233/234	pCi/L		1.199	0.7844	0.6631	3.564
Uranium-235	pCi/L		0.06238	0.03584U	0.03339U	0.2003
Uranium-236	pCi/L		-0.007994U	0.008052U	0U	0.01798U
Uranium-238	pCi/L		0.2596	0.1595	0.1418	1.337
Other Parameters						
Alkalinity	mg/L		46	46	41	53
Chloride	mg/L		36	31	29	39

Surface Water

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
LBC-SW03						
Sulfate	mg/L		81	70	55	82
Field Measurements						
Conductivity	µS/cm		370	348	282	409
pH	Std Unit		7.86	7.98	7.83	7.95
Temperature	deg C		3.11	18.05	24.5	5.72
Turbidity	NTU		3	5	14	3
LBC-SW04						
Metals						
Calcium	µg/L		24000	22000	19000	25000
Iron	µg/L		180	290	370	130
Magnesium	µg/L		20000	16000	15000	17000
Potassium	µg/L		3500	3000	3200	2800B
Sodium	µg/L		25000	20000	18000	26000
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L		2U	2U	2U	2U
1,1,2,2-Tetrachloroethane	µg/L		1U	1U	1U	1U
1,1,2-Trichloroethane	µg/L		2U	2U	2U	2U
1,1-Dichloroethane	µg/L		2U	2U	2U	2U
1,1-Dichloroethene	µg/L		2U	2U	2U	2U
1,2-Dichlorobenzene	µg/L		2U	2U	2U	2U
1,2-Dichloroethane	µg/L		2U	2U	2U	2U
1,2-Dimethylbenzene	µg/L		2U	2U	2U	2U
1,4-Dichlorobenzene	µg/L		2U	2U	2U	2U
2-Butanone	µg/L		6U	6U	6U	6U
4-Methyl-2-pentanone	µg/L		5U	5U	5U	5U
Acetone	µg/L		10U	10U	10U	10U
Benzene	µg/L		2U	2U	2U	2U
Bromodichloromethane	µg/L		0.23J	2U	2U	2U
Bromoform	µg/L		2U	2U	2U	2U
Bromomethane	µg/L		2U	2U	2U	2U
Carbon disulfide	µg/L		2U	2U	2U	2U
Carbon tetrachloride	µg/L		2U	2U	2U	2U
Chlorobenzene	µg/L		2U	2U	2U	2U
Chloroethane	µg/L		2U	2U	2U	2U
Chloroform	µg/L		2U	2U	2U	2U
Chloromethane	µg/L		2U	2U	2U	2U
cis-1,2-Dichloroethene	µg/L		2U	2U	2U	2U
Dibromochloromethane	µg/L		0.32J	2U	2U	2U
Ethylbenzene	µg/L		2U	2U	2U	2U
M + P Xylene	µg/L		2U	2U	2U	2U

Surface Water

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
LBC-SW04						
Methylene chloride	µg/L		5U	5U	0.39J	5U
Tetrachloroethene	µg/L		2U	2U	2U	2U
Toluene	µg/L		2U	2U	2U	2U
trans-1,2-Dichloroethene	µg/L		1U	1U	1U	1U
Trichloroethene	µg/L		2U	2U	2U	2U
Trichlorofluoromethane	µg/L		2U	2U	2U	2U
Vinyl chloride	µg/L		1U	1U	1U	1U
Radionuclides						
Americium-241	pCi/L		-0.02034U	-0.008574U	0.00001449U	0.02836U
Neptunium-237	pCi/L		-0.01377U	-0.03576U	-0.02677U	-0.02854U
Plutonium-238	pCi/L		0.02062U	0.02144U	0.02675U	0.000007116U
Plutonium-239/240	pCi/L		0.006879U	0.007172U	0.006693U	0.007122U
Technetium-99	pCi/L		6.87U	5.99U	3.01U	9.59
Uranium	µg/L		1.062	0.6553	0.4389	3.448
Uranium-233/234	pCi/L		1.354	1.073	0.7836	2.91
Uranium-235	pCi/L		0.03498U	0.03461U	0.00864U	0.1113
Uranium-236	pCi/L		0U	0.00777U	0.00775U	0.05831
Uranium-238	pCi/L		0.3537	0.217	0.1466	1.148
Other Parameters						
Alkalinity	mg/L		54	57	48	55
Chloride	mg/L		36	31	30	38
Sulfate	mg/L		77	68	56	78
Field Measurements						
Conductivity	µS/cm		424	369	327	437
pH	Std Unit		7.87	8.1	8.16	8.24
Temperature	deg C		4.89	17	22.2	5.59
Turbidity	NTU		5	6	11	3
NHP-SW01						
Metals						
Calcium	µg/L		27000	30000	25000	32000
Iron	µg/L		230	270	370	300
Magnesium	µg/L		19000	18000	17000	17000
Potassium	µg/L		3400	3000	3300	2600B
Sodium	µg/L		30000	32000	23000	31000
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L		2U	2U	2U	2U
1,1,2,2-Tetrachloroethane	µg/L		1U	1U	1U	1U
1,1,2-Trichloroethane	µg/L		2U	2U	2U	2U
1,1-Dichloroethane	µg/L		2U	2U	2U	2U
1,1-Dichloroethene	µg/L		2U	2U	2U	2U

Surface Water

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
NHP-SW01						
1,2-Dichlorobenzene	µg/L		2U	2U	2U	2U
1,2-Dichloroethane	µg/L		2U	2U	2U	2U
1,2-Dimethylbenzene	µg/L		2U	2U	2U	2U
1,4-Dichlorobenzene	µg/L		2U	2U	2U	2U
2-Butanone	µg/L		6U	6U	6U	6U
4-Methyl-2-pentanone	µg/L		5U	5U	5U	5U
Acetone	µg/L		10U	13	10U	10U
Benzene	µg/L		2U	2U	2U	2U
Bromodichloromethane	µg/L		0.59J	0.2J	2U	0.22J
Bromoform	µg/L		2U	2U	2U	2U
Bromomethane	µg/L		2U	2U	2U	2U
Carbon disulfide	µg/L		2U	2U	2U	2U
Carbon tetrachloride	µg/L		2U	2U	2U	2U
Chlorobenzene	µg/L		2U	2U	2U	2U
Chloroethane	µg/L		2U	2U	2U	2U
Chloroform	µg/L		0.65J	0.38J	2U	0.25J
Chloromethane	µg/L		2U	2U	2U	2U
cis-1,2-Dichloroethene	µg/L		2U	2U	2U	2U
Dibromochloromethane	µg/L		0.59J	0.19J	2U	0.26J
Ethylbenzene	µg/L		2U	2U	2U	2U
M + P Xylene	µg/L		2U	2U	2U	2U
Methylene chloride	µg/L		5U	5U	5U	5U
Tetrachloroethene	µg/L		2U	2U	2U	2U
Toluene	µg/L		2U	2U	2U	2U
trans-1,2-Dichloroethene	µg/L		1U	1U	1U	1U
Trichloroethene	µg/L		2U	2U	2U	2U
Trichlorofluoromethane	µg/L		2U	2U	2U	2U
Vinyl chloride	µg/L		1U	1U	1U	1U
Radionuclides						
Americium-241	pCi/L		0.000009282U	0.02639U	0.01629U	0.01696U
Neptunium-237	pCi/L		-0.03517U	0.0000332U	-0.01561U	0.00000848U
Plutonium-238	pCi/L		0.01406U	0.00001655U	0.01564U	0.00001691U
Plutonium-239/240	pCi/L		-0.006954U	0.02486U	0.01564U	0.01693U
Technetium-99	pCi/L		5.4U	2.06U	0.173U	1.34U
Uranium	µg/L		2.828	2.871	2.217	4.714
Uranium-233/234	pCi/L		1.193	1.413	0.8152	1.907
Uranium-235	pCi/L		0.08897	0.0949	0.03219U	0.07729
Uranium-236	pCi/L		0U	0U	0.007223U	0.000007704U
Uranium-238	pCi/L		0.9422	0.9562	0.7419	1.577
Other Parameters						

Surface Water

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
NHP-SW01						
Alkalinity	mg/L		66	75	68	73
Chloride	mg/L		44	47	35	46
Sulfate	mg/L		67	66	64	78
Field Measurements						
Conductivity	µS/cm		405	437	361	443
pH	Std Unit		7.63	8.06	7.77	8.03
Temperature	deg C		4.08	17.1	24.8	6.12
Turbidity	NTU		5	8	13	9
UND-SW01						
Metals						
Calcium	µg/L		85000	70000	68000	100000
Iron	µg/L		89B	110	930	73B
Magnesium	µg/L		30000	27000	23000	52000
Potassium	µg/L		1900B	2500B	1900B	3000
Sodium	µg/L		64000	67000	69000	54000
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L		2U	2U	2U	2U
1,1,2,2-Tetrachloroethane	µg/L		1U	1U	1U	1U
1,1,2-Trichloroethane	µg/L		2U	2U	2U	2U
1,1-Dichloroethane	µg/L		2U	2U	0.23J	2U
1,1-Dichloroethene	µg/L		2U	0.28J	0.36J	2U
1,2-Dichlorobenzene	µg/L		2U	2U	2U	2U
1,2-Dichloroethane	µg/L		2U	2U	2U	2U
1,2-Dimethylbenzene	µg/L		2U	2U	2U	2U
1,4-Dichlorobenzene	µg/L		2U	2U	2U	2U
2-Butanone	µg/L		6U	6U	6U	6U
4-Methyl-2-pentanone	µg/L		5U	5U	5U	5U
Acetone	µg/L		10U	10U	10U	10U
Benzene	µg/L		2U	2U	2U	2U
Bromodichloromethane	µg/L		2U	2U	2U	2U
Bromoform	µg/L		2U	2U	2U	2U
Bromomethane	µg/L		2U	2U	2U	2U
Carbon disulfide	µg/L		2U	2U	2U	2U
Carbon tetrachloride	µg/L		2U	2U	2U	2U
Chlorobenzene	µg/L		2U	2U	2U	2U
Chloroethane	µg/L		2U	2U	2U	2U
Chloroform	µg/L		2U	2U	2U	2U
Chloromethane	µg/L		2U	2U	2U	2U
cis-1,2-Dichloroethene	µg/L		0.24J	0.29J	0.51J	0.17J
Dibromochloromethane	µg/L		2U	2U	2U	2U

Surface Water

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
UND-SW01						
Ethylbenzene	µg/L		2U	2U	2U	2U
M + P Xylene	µg/L		2U	2U	2U	2U
Methylene chloride	µg/L		5U	5U	5U	5U
Tetrachloroethene	µg/L		2U	2U	2U	2U
Toluene	µg/L		2U	2U	2U	2U
trans-1,2-Dichloroethene	µg/L		1U	1U	1U	1U
Trichloroethene	µg/L		3.6	5.1	6.7	1.6J
Trichlorofluoromethane	µg/L		2U	2U	2U	2U
Vinyl chloride	µg/L		1U	1U	1U	1U
Radionuclides						
Americium-241	pCi/L		0.00001294U	-0.008282U	0.03306U	0.01117U
Neptunium-237	pCi/L		0.006651U	0.00002042U	-0.0265U	-0.02261U
Plutonium-238	pCi/L		0.02635U	0.02717U	0.01323U	0.007526U
Plutonium-239/240	pCi/L		0.006652U	0.0068U	-0.01321U	0U
Technetium-99	pCi/L		-2.9U	-6.22U	-2.39U	-1.05U
Uranium	µg/L		2.301	2.025	1.405	3.251
Uranium-233/234	pCi/L		0.7793	1.147	0.4571	1.355
Uranium-235	pCi/L		0.02575U	0.03452U	0.0179U	0.07112
Uranium-236	pCi/L		0U	0.02324U	0U	0U
Uranium-238	pCi/L		0.7708	0.6771	0.4706	1.086
Other Parameters						
Alkalinity	mg/L		240	210	230	160
Chloride	mg/L		71	76	54	49
Sulfate	mg/L		98	96	73	330
Field Measurements						
Conductivity	µS/cm		808	836	722	1076
pH	Std Unit		7.76	7.43	7.07	7.45
Temperature	deg C		5.2	16.7	18	8.17
Turbidity	NTU		3	3	14	3
UND-SW02						
Metals						
Calcium	µg/L		53000	44000	42000	65000
Iron	µg/L		2000	300	46B	340
Magnesium	µg/L		24000	17000	19000	26000
Potassium	µg/L		2900B	2000B	2400B	3500
Sodium	µg/L		28000	32000	40000	33000
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L		2U	2U	2U	2U
1,1,2,2-Tetrachloroethane	µg/L		1U	1U	1U	1U
1,1,2-Trichloroethane	µg/L		2U	2U	2U	2U

Surface Water

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
UND-SW02						
1,1-Dichloroethane	µg/L		2U	2U	2U	2U
1,1-Dichloroethene	µg/L		2U	2U	2U	2U
1,2-Dichlorobenzene	µg/L		2U	2U	2U	2U
1,2-Dichloroethane	µg/L		2U	2U	2U	2U
1,2-Dimethylbenzene	µg/L		2U	2U	2U	2U
1,4-Dichlorobenzene	µg/L		2U	2U	2U	2U
2-Butanone	µg/L		6U	6U	6U	5.6J
4-Methyl-2-pentanone	µg/L		5U	5U	5U	5U
Acetone	µg/L		10U	10U	10U	10U
Benzene	µg/L		2U	2U	2U	2U
Bromodichloromethane	µg/L		2U	2U	2U	2U
Bromoform	µg/L		2U	2U	2U	2U
Bromomethane	µg/L		2U	2U	2U	2U
Carbon disulfide	µg/L		2U	2U	2U	2U
Carbon tetrachloride	µg/L		2U	2U	2U	2U
Chlorobenzene	µg/L		2U	2U	2U	2U
Chloroethane	µg/L		2U	2U	2U	2U
Chloroform	µg/L		2U	2U	2U	2U
Chloromethane	µg/L		2U	2U	2U	2U
cis-1,2-Dichloroethene	µg/L		2U	2U	2U	2U
Dibromochloromethane	µg/L		2U	2U	2U	2U
Ethylbenzene	µg/L		2U	2U	2U	2U
M + P Xylene	µg/L		2U	2U	2U	2U
Methylene chloride	µg/L		5U	5U	5U	5U
Tetrachloroethene	µg/L		2U	2U	2U	2U
Toluene	µg/L		2U	2U	2U	2U
trans-1,2-Dichloroethene	µg/L		1U	1U	1U	1U
Trichloroethene	µg/L		2U	2U	2U	2U
Trichlorofluoromethane	µg/L		2U	2U	2U	2U
Vinyl chloride	µg/L		1U	1U	1U	1U
Radionuclides						
Americium-241	pCi/L		0.02154U	0.03015U	-0.008193U	-0.009194U
Neptunium-237	pCi/L		-0.01303U	-0.01552U	-0.007189U	-0.008126U
Plutonium-238	pCi/L		0.02602U	0.03099U	0.02876U	0.008119U
Plutonium-239/240	pCi/L		0.01952U	0.0155U	0.00001437U	0.00001622U
Technetium-99	pCi/L		-4.13U	-4.98U	1.35U	1.26U
Uranium	µg/L		1.547	1.484	1.113	2.326
Uranium-233/234	pCi/L		0.6694	0.7935	0.5158	0.6414
Uranium-235	pCi/L		0.008785U	0U	0.02651U	0.03597U
Uranium-236	pCi/L		0.02366U	0.01628U	-0.01585U	0.00001613U

Surface Water

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
UND-SW02						
Uranium-238	pCi/L		0.5188	0.4986	0.3717	0.7784
Other Parameters						
Alkalinity	mg/L		120	130	120	110
Chloride	mg/L		39	41	35	34
Sulfate	mg/L		87	55	79	170
Field Measurements						
Conductivity	µS/cm		579	517	524	671
pH	Std Unit		8.47	8.27	6.35	8.01
Temperature	deg C		2.5	18.9	19.5	5.19
Turbidity	NTU		45	7	6	11
WDD-SW01						
Metals						
Calcium	µg/L		31000	32000	24000	37000
Iron	µg/L		310	330	270	220
Magnesium	µg/L		22000	19000	16000	22000
Potassium	µg/L		3500	3200	3200	3400
Sodium	µg/L		33000	36000	23000	33000
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L		2U	2U	2U	2U
1,1,2,2-Tetrachloroethane	µg/L		1U	1U	1U	1U
1,1,2-Trichloroethane	µg/L		2U	2U	2U	2U
1,1-Dichloroethane	µg/L		2U	2U	2U	2U
1,1-Dichloroethene	µg/L		2U	2U	2U	2U
1,2-Dichlorobenzene	µg/L		2U	2U	2U	2U
1,2-Dichloroethane	µg/L		2U	2U	2U	2U
1,2-Dimethylbenzene	µg/L		2U	2U	2U	2U
1,4-Dichlorobenzene	µg/L		2U	2U	2U	2U
2-Butanone	µg/L		6U	6U	6U	6U
4-Methyl-2-pentanone	µg/L		5U	5U	5U	5U
Acetone	µg/L		10U	10U	10U	10U
Benzene	µg/L		2U	2U	2U	2U
Bromodichloromethane	µg/L		0.48J	0.55J	0.63J	0.78J
Bromoform	µg/L		0.73J	1.7J	0.73J	0.83J
Bromomethane	µg/L		2U	2U	2U	2U
Carbon disulfide	µg/L		2U	2U	2U	2U
Carbon tetrachloride	µg/L		2U	2U	2U	2U
Chlorobenzene	µg/L		2U	2U	2U	2U
Chloroethane	µg/L		2U	2U	2U	2U
Chloroform	µg/L		0.26J	0.27J	0.43J	0.39J
Chloromethane	µg/L		2U	2U	2U	2U

Surface Water

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
WDD-SW01						
cis-1,2-Dichloroethene	µg/L		2U	2U	2U	2U
Dibromochloromethane	µg/L		0.97J	1.5J	1.2J	1.2J
Ethylbenzene	µg/L		2U	2U	2U	2U
M + P Xylene	µg/L		2U	2U	2U	2U
Methylene chloride	µg/L		5U	5U	0.4J	5U
Tetrachloroethene	µg/L		2U	2U	2U	2U
Toluene	µg/L		2U	2U	2U	2U
trans-1,2-Dichloroethene	µg/L		1U	1U	1U	1U
Trichloroethene	µg/L		2U	2U	2U	2U
Trichlorofluoromethane	µg/L		2U	2U	2U	2U
Vinyl chloride	µg/L		1U	1U	1U	1U
Radionuclides						
Americium-241	pCi/L		0.0086U	0.00002547U	0.02469U	0.009874U
Neptunium-237	pCi/L		0.02244U	0.000006848U	-0.01555U	-0.08032U
Plutonium-238	pCi/L		0.02237U	-0.006821U	0.008926U	0.00000801U
Plutonium-239/240	pCi/L		0U	-0.01364U	0.00672U	0.008025U
Technetium-99	pCi/L		-4.91U	-5.72U	-3.22U	-1.46U
Uranium	µg/L		0.9757	1.229	0.5436	6.274
Uranium-233/234	pCi/L		0.4487	0.5712	0.1549	2.579
Uranium-235	pCi/L		0.008786U	0.01784U	0.000008677U	0.09942
Uranium-236	pCi/L		0.01578U	0.01602U	0U	0U
Uranium-238	pCi/L		0.327	0.4113	0.1827	2.099
Other Parameters						
Alkalinity	mg/L		64	63	45	62
Chloride	mg/L		46	53	35	48
Sulfate	mg/L		98	92	73	130
Field Measurements						
Conductivity	µS/cm		466	496	342	544
pH	Std Unit		7.99	7.56	7.75	7.67
Temperature	deg C		7.2	15.08	20.4	8.19
Turbidity	NTU		3	3	6	3
WDD-SW02						
Metals						
Calcium	µg/L		100000	75000	95000	70000
Iron	µg/L		1300	690	2700	1100
Magnesium	µg/L		37000	26000	32000	25000
Potassium	µg/L		3400	5800	3400	2400B
Sodium	µg/L		120000	110000	120000	100000
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L		2U	2U	2U	2U

Surface Water

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
WDD-SW02						
1,1,2,2-Tetrachloroethane	µg/L		1U	1U	1U	1U
1,1,2-Trichloroethane	µg/L		2U	2U	2U	2U
1,1-Dichloroethane	µg/L		2U	2U	2U	2U
1,1-Dichloroethene	µg/L		2U	2U	2U	2U
1,2-Dichlorobenzene	µg/L		2U	2U	2U	2U
1,2-Dichloroethane	µg/L		2U	2U	2U	2U
1,2-Dimethylbenzene	µg/L		2U	2U	2U	2U
1,4-Dichlorobenzene	µg/L		2U	2U	2U	2U
2-Butanone	µg/L		6U	6U	6U	6U
4-Methyl-2-pentanone	µg/L		5U	5U	5U	5U
Acetone	µg/L		10U	10U	10U	10U
Benzene	µg/L		2U	1.1J	2U	2U
Bromodichloromethane	µg/L		2U	0.23J	2U	2U
Bromoform	µg/L		2U	2U	2U	2U
Bromomethane	µg/L		2U	2U	2U	2U
Carbon disulfide	µg/L		2U	2U	2U	2U
Carbon tetrachloride	µg/L		2U	2U	2U	2U
Chlorobenzene	µg/L		2U	2U	2U	2U
Chloroethane	µg/L		2U	2U	2U	2U
Chloroform	µg/L		2U	0.26J	2U	2U
Chloromethane	µg/L		2U	2U	2U	2U
cis-1,2-Dichloroethene	µg/L		2U	2U	2U	2U
Dibromochloromethane	µg/L		2U	0.25J	2U	2U
Ethylbenzene	µg/L		2U	2U	2U	2U
M + P Xylene	µg/L		2U	2U	2U	2U
Methylene chloride	µg/L		5U	5U	5U	5U
Tetrachloroethene	µg/L		2U	2U	2U	2U
Toluene	µg/L		2U	2U	2U	2U
trans-1,2-Dichloroethene	µg/L		1U	1U	1U	1U
Trichloroethene	µg/L		2U	2U	2U	2U
Trichlorofluoromethane	µg/L		2U	2U	2U	2U
Vinyl chloride	µg/L		1U	1U	1U	1U
Radionuclides						
Americium-241	pCi/L		-0.02595U	0.03889U	0.007827U	-0.009163U
Neptunium-237	pCi/L		0.01317U	-0.02679U	-0.09117U	0.00003737U
Plutonium-238	pCi/L		0.01968U	0.02006U	0.01909U	0.00001863U
Plutonium-239/240	pCi/L		0.01312U	-0.006679U	0.01276U	-0.01863U
Technetium-99	pCi/L		-1.43U	-1.89U	-0.572U	-2.59U
Uranium	µg/L		2.588	2.484	2.044	2.245
Uranium-233/234	pCi/L		1.122	0.8895	1.082	1.047

Surface Water

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
WDD-SW02						
Uranium-235	pCi/L		0.03571U	0.04389	0.009031U	0.01808U
Uranium-236	pCi/L		0U	-0.007874U	0.008101U	0U
Uranium-238	pCi/L		0.8666	0.8309	0.6861	0.7529
Other Parameters						
Alkalinity	mg/L		220	190	200	150
Chloride	mg/L		190	190	170	130
Sulfate	mg/L		160	110	160	140
Field Measurements						
Conductivity	µS/cm		1199	1047	1102	976
pH	Std Unit		7.92	8.01	7.82	7.86
Temperature	deg C		6.54	14.75	18.2	8.52
Turbidity	NTU		15	9.01	21	10
WDD-SW03						
Metals						
Calcium	µg/L		34000	37000	25000	35000
Iron	µg/L		170	140	100	130
Magnesium	µg/L		22000	19000	17000	19000
Potassium	µg/L		3400	3200	3200	2900B
Sodium	µg/L		35000	41000	25000	31000
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L		2U	2U	2U	2U
1,1,2,2-Tetrachloroethane	µg/L		1U	1U	1U	1U
1,1,2-Trichloroethane	µg/L		2U	2U	2U	2U
1,1-Dichloroethane	µg/L		2U	2U	2U	2U
1,1-Dichloroethene	µg/L		2U	2U	2U	2U
1,2-Dichlorobenzene	µg/L		2U	2U	2U	2U
1,2-Dichloroethane	µg/L		2U	2U	2U	2U
1,2-Dimethylbenzene	µg/L		2U	2U	2U	2U
1,4-Dichlorobenzene	µg/L		2U	2U	2U	2U
2-Butanone	µg/L		6U	6U	6U	3.3J
4-Methyl-2-pentanone	µg/L		5U	5U	5U	5U
Acetone	µg/L		10U	10U	10U	10U
Benzene	µg/L		2U	2U	2U	2U
Bromodichloromethane	µg/L		0.19J	2U	2U	0.25J
Bromoform	µg/L		2U	0.21J	2U	2U
Bromomethane	µg/L		2U	2U	2U	2U
Carbon disulfide	µg/L		2U	2U	2U	2U
Carbon tetrachloride	µg/L		2U	2U	2U	2U
Chlorobenzene	µg/L		2U	2U	2U	2U
Chloroethane	µg/L		2U	2U	2U	2U

Surface Water

Location/Analyte	Unit	PRG	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
WDD-SW03						
Chloroform	µg/L		2U	0.18J	2U	0.35J
Chloromethane	µg/L		2U	2U	2U	2U
cis-1,2-Dichloroethene	µg/L		2U	2U	2U	2U
Dibromochloromethane	µg/L		0.31J	0.19J	2U	0.24J
Ethylbenzene	µg/L		2U	2U	2U	2U
M + P Xylene	µg/L		2U	2U	2U	2U
Methylene chloride	µg/L		5U	5U	5U	5U
Tetrachloroethene	µg/L		2U	2U	2U	2U
Toluene	µg/L		2U	2U	2U	2U
trans-1,2-Dichloroethene	µg/L		1U	1U	1U	1U
Trichloroethene	µg/L		2U	2U	2U	2U
Trichlorofluoromethane	µg/L		2U	2U	2U	2U
Vinyl chloride	µg/L		1U	1U	1U	1U
Radionuclides						
Americium-241	pCi/L		0.009802U	0.01709U	0.00001611U	0.01861U
Neptunium-237	pCi/L		-0.006864U	-0.009125U	-0.03355U	0.02479U
Plutonium-238	pCi/L		0.00001373U	0.000009118U	0.03353U	0.008257U
Plutonium-239/240	pCi/L		0.000006866U	-0.01824U	0.01342U	0.0165U
Technetium-99	pCi/L		-2.5U	-6.08U	-0.303U	-2.86U
Uranium	µg/L		1.321	1.885	0.6196	4.29
Uranium-233/234	pCi/L		0.7586	0.8692	0.2414	2.294
Uranium-235	pCi/L		0.04456	0.02659U	0.008271U	0.06539U
Uranium-236	pCi/L		0U	0.007957U	0.00000742U	0.008386U
Uranium-238	pCi/L		0.4398	0.6309	0.2075	1.436
Other Parameters						
Alkalinity	mg/L		78	84	57	76
Chloride	mg/L		52	60	36	45
Sulfate	mg/L		95	83	74	110
Field Measurements						
Conductivity	µS/cm		531	514	357	551
pH	Std Unit		8.21	7.55	8.34	7.8
Temperature	deg C		4.6	15.63	22.2	6.3
Turbidity	NTU		4	3	3	6

ANALYTICAL DATA TABLES
WATER SUPPLY MONITORING PROGRAM

Laboratory Data Qualifiers and Other Abbreviations

B	Inorganics: the reported value was obtained from a reading that was less than practical quantitation limit but greater than or equal to the instrument detection limit. Organics: the analyte was detected in the laboratory blank sample.
E	Inorganics: the reported value is estimated because of the presence of interferences. Organics: the result exceeds the calibration range.
J	Organics: the reported value is an estimated concentration greater than the method detection limit but less than the practical quantitation limit. All others: the reported value is qualified as estimated.
P	Pesticide/Aroclor: there is greater than 25% difference for detected concentrations between the two gas chromatograph columns.
U	Undetected
nm	For field measurements: not measured due to insufficient water remaining in the well after sampling.

Results for water supply regular and duplicate samples first and third quarters 2008

Location/Analyte	Unit	First quarter regular sample			First quarter duplicate sample			Third quarter regular sample			Third quarter duplicate sample		
		Result	DL	TPU	Result	DL	TPU	Result	DL	TPU	Result	DL	TPU
RES-004													
Metals													
Calcium	µg/L	15000	34		14000	34		16000	34		16000	34	
Iron	µg/L	100U	22		27B	22		100U	22		72B	22	
Magnesium	µg/L	9900	43		9600	43		11000	11		10000	11	
Potassium	µg/L	1200B	240		1100B	240		850B	240		940B	240	
Sodium	µg/L	37000	92		36000	92		35000	92		34000	92	
Volatile Organic Compounds													
1,1,1-Trichloroethane	µg/L	2U	0.16		2U	0.16		2U	0.16		2U	0.16	
1,1,2,2-Tetrachloroethane	µg/L	1U	0.2		1U	0.2		1U	0.2		1U	0.2	
1,1,2-Trichloroethane	µg/L	2U	0.32		2U	0.32		2U	0.32		2U	0.32	
1,1-Dichloroethane	µg/L	2U	0.16		2U	0.16		2U	0.16		2U	0.16	
1,1-Dichloroethene	µg/L	2U	0.14		2U	0.14		2U	0.14		2U	0.14	
1,2-Dichlorobenzene	µg/L	2U	0.13		2U	0.13		2U	0.13		2U	0.13	
1,2-Dichloroethane	µg/L	2U	0.13		2U	0.13		2U	0.13		2U	0.13	
1,2-Dimethylbenzene	µg/L	2U	0.19		2U	0.19		2U	0.19		2U	0.19	
1,4-Dichlorobenzene	µg/L	2U	0.16		2U	0.16		2U	0.16		2U	0.16	
2-Butanone	µg/L	6U	1.8		6U	1.8		6U	1.8		6U	1.8	
4-Methyl-2-pentanone	µg/L	5U	1		5U	1		5U	1		5U	1	
Acetone	µg/L	10U	1.9		10U	1.9		10U	1.9		10U	1.9	
Benzene	µg/L	2U	0.16		2U	0.16		2U	0.16		2U	0.16	
Bromodichloromethane	µg/L	2U	0.17		2U	0.17		2U	0.17		2U	0.17	
Bromoform	µg/L	2U	0.19		2U	0.19		2U	0.19		2U	0.19	
Bromomethane	µg/L	2U	0.21		2U	0.21		2U	0.21		2U	0.21	
Carbon disulfide	µg/L	2U	0.45		2U	0.45		2U	0.45		2U	0.45	
Carbon tetrachloride	µg/L	2U	0.19		2U	0.19		2U	0.19		2U	0.19	
Chlorobenzene	µg/L	2U	0.17		2U	0.17		2U	0.17		2U	0.17	
Chloroethane	µg/L	2U	0.41		2U	0.41		2U	0.41		2U	0.41	
Chloroform	µg/L	2U	0.16		2U	0.16		2U	0.16		2U	0.16	
Chloromethane	µg/L	2U	0.3		2U	0.3		2U	0.3		2U	0.3	
cis-1,2-Dichloroethene	µg/L	2U	0.15		2U	0.15		2U	0.15		2U	0.15	
Dibromochloromethane	µg/L	2U	0.17		2U	0.17		2U	0.17		2U	0.17	
Ethylbenzene	µg/L	2U	0.16		2U	0.16		2U	0.16		2U	0.16	
M + P Xylene	µg/L	2U	0.34		2U	0.34		2U	0.34		2U	0.34	
Methylene chloride	µg/L	5U	0.32		5U	0.32		0.46BJ	0.32		0.43BJ	0.32	

DL = Detection limit. TPU = Total propagated uncertainty

Results for water supply regular and duplicate samples first and third quarters 2008

Location/Analyte	Unit	First quarter regular sample			First quarter duplicate sample			Third quarter regular sample			Third quarter duplicate sample		
		Result	DL	TPU	Result	DL	TPU	Result	DL	TPU	Result	DL	TPU
RES-004													
Tetrachloroethene	µg/L	2U	0.2		2U	0.2		2U	0.2		2U	0.2	
Toluene	µg/L	2U	0.17		2U	0.17		2U	0.17		2U	0.17	
trans-1,2-Dichloroethene	µg/L	1U	0.15		1U	0.15		1U	0.15		1U	0.15	
Trichloroethene	µg/L	2U	0.16		2U	0.16		2U	0.16		2U	0.16	
Trichlorofluoromethane	µg/L	2U	0.29		2U	0.29		2U	0.29		2U	0.29	
Vinyl chloride	µg/L	1U	0.4		1U	0.4		1U	0.4		1U	0.4	
Radionuclides													
Americium-241	pCi/L	0.00785U	0.02	0.01572	0.000009881U	0.07	0.02796	0.007907U	0.06	0.02737	0.000009464U	0.07	0.02678
Neptunium-237	pCi/L	-0.05385U	0.12	0.05087	-0.02006U	0.08	0.03003	0.000007153U	0.05	0.02024	-0.007071U	0.07	0.02455
Plutonium-238	pCi/L	-0.006715U	0.05	0.01346	0.00002001U	0.07	0.0327	0.02856U	0.02	0.02879	0.01414U	0.05	0.02831
Plutonium-239/240	pCi/L	0.00004029U	0.09	0.04655	0.00002669U	0.08	0.03776	0.007147U	0.05	0.02474	-0.007052U	0.07	0.02448
Technetium-99	pCi/L	-4.57U	9.16	5.22	-6.86U	9.17	5.15	-1.93U	8.7	5.14	0.734U	8.78	5.23
Uranium	µg/L	0.1197	0.06	0.09865	0.1432U	0.16	0.1241	0.02194U	0.16	0.06924	0.01292U	0.09	0.0408
Uranium-233/234	pCi/L	0.06599U	0.08	0.05658	0.07576	0.05	0.05059	0.02005U	0.05	0.02998	0.0195U	0.02	0.02265
Uranium-235	pCi/L	0.008137U	0.02	0.01631	0U	0.02	0.00016	0.008242U	0.02	0.01652	-0.02403U	0.09	0.02791
Uranium-236	pCi/L	0U	0.02	0.00014	0U	0.02	0.00014	-0.007393U	0.05	0.01482	0U	0.02	0.00014
Uranium-238	pCi/L	0.0395	0.02	0.03305	0.04812U	0.05	0.04169	0.006675U	0.05	0.02312	0.006485U	0.02	0.01301
Other Parameters													
Alkalinity	mg/L	14	1.1		14	1.1		12	1.1		12	1.1	
Chloride	mg/L	22	0.25		21	0.25		25	0.25		25	0.25	
Sulfate	mg/L	59	1.2		59	1.2		56	1.2		55	1.2	
Field Measurements													
Conductivity	µS/cm	315						373					
pH	Std Unit	5.73						5.39					
Temperature	deg C	8.5						21.7					
Turbidity	NTU	1						4					
RES-005													
Metals													
Calcium	µg/L	14000	34		14000	34		17000	34		17000	34	
Iron	µg/L	54B	22		66B	22		88B	22		91B	22	
Magnesium	µg/L	9800	43		9400	43		11000	11		11000	11	
Potassium	µg/L	1100B	240		1100B	240		760B	240		710B	240	
Sodium	µg/L	36000	92		36000	92		37000	92		37000	92	

DL = Detection limit. TPU = Total propagated uncertainty

Results for water supply regular and duplicate samples first and third quarters 2008

Location/Analyte	Unit	First quarter regular sample			First quarter duplicate sample			Third quarter regular sample			Third quarter duplicate sample		
		Result	DL	TPU	Result	DL	TPU	Result	DL	TPU	Result	DL	TPU
RES-005													
Volatile Organic Compounds													
1,1,1-Trichloroethane	µg/L	2U	0.16		2U	0.16		2U	0.16		2U	0.16	
1,1,2,2-Tetrachloroethane	µg/L	1U	0.2		1U	0.2		1U	0.2		1U	0.2	
1,1,2-Trichloroethane	µg/L	2U	0.32		2U	0.32		2U	0.32		2U	0.32	
1,1-Dichloroethane	µg/L	2U	0.16		2U	0.16		2U	0.16		2U	0.16	
1,1-Dichloroethene	µg/L	2U	0.14		2U	0.14		2U	0.14		2U	0.14	
1,2-Dichlorobenzene	µg/L	2U	0.13		2U	0.13		2U	0.13		2U	0.13	
1,2-Dichloroethane	µg/L	2U	0.13		2U	0.13		2U	0.13		2U	0.13	
1,2-Dimethylbenzene	µg/L	2U	0.19		2U	0.19		2U	0.19		2U	0.19	
1,4-Dichlorobenzene	µg/L	2U	0.16		2U	0.16		2U	0.16		2U	0.16	
2-Butanone	µg/L	6U	1.8		6U	1.8		6U	1.8		6U	1.8	
4-Methyl-2-pentanone	µg/L	5U	1		5U	1		5U	1		5U	1	
Acetone	µg/L	3.4J	1.9		2.2J	1.9		10U	1.9		10U	1.9	
Benzene	µg/L	2U	0.16		2U	0.16		2U	0.16		2U	0.16	
Bromodichloromethane	µg/L	2U	0.17		2U	0.17		2U	0.17		2U	0.17	
Bromoform	µg/L	2U	0.19		2U	0.19		2U	0.19		2U	0.19	
Bromomethane	µg/L	2U	0.21		2U	0.21		2U	0.21		2U	0.21	
Carbon disulfide	µg/L	2U	0.45		2U	0.45		2U	0.45		2U	0.45	
Carbon tetrachloride	µg/L	2U	0.19		2U	0.19		2U	0.19		2U	0.19	
Chlorobenzene	µg/L	2U	0.17		2U	0.17		2U	0.17		2U	0.17	
Chloroethane	µg/L	2U	0.41		2U	0.41		2U	0.41		2U	0.41	
Chloroform	µg/L	2U	0.16		2U	0.16		2U	0.16		2U	0.16	
Chloromethane	µg/L	2U	0.3		2U	0.3		2U	0.3		2U	0.3	
cis-1,2-Dichloroethene	µg/L	2U	0.15		2U	0.15		2U	0.15		2U	0.15	
Dibromochloromethane	µg/L	2U	0.17		2U	0.17		2U	0.17		2U	0.17	
Ethylbenzene	µg/L	2U	0.16		2U	0.16		2U	0.16		2U	0.16	
M + P Xylene	µg/L	2U	0.34		2U	0.34		2U	0.34		2U	0.34	
Methylene chloride	µg/L	5U	0.32		5U	0.32		0.47BJ	0.32		0.46BJ	0.32	
Tetrachloroethene	µg/L	2U	0.2		2U	0.2		2U	0.2		2U	0.2	
Toluene	µg/L	2U	0.17		2U	0.17		2U	0.17		2U	0.17	
trans-1,2-Dichloroethene	µg/L	1U	0.15		1U	0.15		1U	0.15		1U	0.15	
Trichloroethene	µg/L	2U	0.16		2U	0.16		2U	0.16		2U	0.16	
Trichlorofluoromethane	µg/L	2U	0.29		2U	0.29		2U	0.29		2U	0.29	
Vinyl chloride	µg/L	1U	0.4		1U	0.4		1U	0.4		1U	0.4	

DL = Detection limit. TPU = Total propagated uncertainty

Results for water supply regular and duplicate samples first and third quarters 2008

Location/Analyte	Unit	First quarter regular sample			First quarter duplicate sample			Third quarter regular sample			Third quarter duplicate sample		
		Result	DL	TPU	Result	DL	TPU	Result	DL	TPU	Result	DL	TPU
RES-005													
Radionuclides													
Americium-241	pCi/L	0U	0.02	0.00012	0.007657U	0.06	0.0265	0.03217U	0.06	0.03953	0.0000171U	0.08	0.03421
Neptunium-237	pCi/L	-0.02898U	0.13	0.06173	-0.06206U	0.14	0.06376	0.00001416U	0.07	0.02833	0.008269U	0.09	0.04362
Plutonium-238	pCi/L	0.00001448U	0.07	0.02897	0.006894U	0.05	0.02387	0.007066U	0.02	0.01416	0.03288U	0.02	0.03317
Plutonium-239/240	pCi/L	-0.05789U	0.12	0.0464	-0.02064U	0.07	0.02398	-0.02118U	0.08	0.0246	-0.008204U	0.08	0.02848
Technetium-99	pCi/L	-3.77U	8.99	5.33	-4.11U	9.37	5.11	-3.56U	8.68	5.09	-3.83U	8.62	5.12
Uranium	µg/L	0.09715	0.06	0.08708	0.03537U	0.06	0.05021	0.04063U	0.15	0.07741	0.04065U	0.07	0.05772
Uranium-233/234	pCi/L	0.01922U	0.07	0.03847	0.01192U	0.06	0.0292	0.03231	0.02	0.02918	0.01371U	0.07	0.03874
Uranium-235	pCi/L	0.007896U	0.02	0.01582	0U	0.02	0.00016	0.007971U	0.02	0.01597	0U	0.02	0.00015
Uranium-236	pCi/L	0U	0.02	0.00014	0U	0.02	0.00014	0.007157U	0.02	0.01434	0U	0.02	0.00014
Uranium-238	pCi/L	0.03194	0.02	0.02916	0.01189U	0.02	0.01687	0.0129U	0.05	0.02589	0.01366U	0.02	0.0194
Other Parameters													
Alkalinity	mg/L	13	1.1		15	1.1		12	1.1		13	1.1	
Chloride	mg/L	22	0.25		22	0.25		25	0.25		25	0.25	
Sulfate	mg/L	63	1.2		62	1.2		57	1.2		58	1.2	
Field Measurements													
Conductivity	µS/cm	313						382					
pH	Std Unit	5.56						5.23					
Temperature	deg C	10.1						21.9					
Turbidity	NTU	1						3					
RES-012													
Metals													
Calcium	µg/L	82000	34		81000	34		87000	34		83000	34	
Iron	µg/L	690	22		680	22		490	22		510	22	
Magnesium	µg/L	25000	43		25000	43		26000	11		25000	11	
Potassium	µg/L	3000	240		2900B	240		2300B	240		2500B	240	
Sodium	µg/L	20000	92		20000	92		14000	92		14000	92	
Volatile Organic Compounds													
1,1,1-Trichloroethane	µg/L	2U	0.16		2U	0.16		2U	0.16		2U	0.16	
1,1,2,2-Tetrachloroethane	µg/L	1U	0.2		1U	0.2		1U	0.2		1U	0.2	
1,1,2-Trichloroethane	µg/L	2U	0.32		2U	0.32		2U	0.32		2U	0.32	
1,1-Dichloroethane	µg/L	2U	0.16		2U	0.16		2U	0.16		2U	0.16	
1,1-Dichloroethene	µg/L	2U	0.14		2U	0.14		2U	0.14		2U	0.14	

DL = Detection limit. TPU = Total propagated uncertainty

Results for water supply regular and duplicate samples first and third quarters 2008

Location/Analyte	Unit	First quarter regular sample			First quarter duplicate sample			Third quarter regular sample			Third quarter duplicate sample		
		Result	DL	TPU	Result	DL	TPU	Result	DL	TPU	Result	DL	TPU
RES-012													
1,2-Dichlorobenzene	µg/L	2U	0.13		2U	0.13		2U	0.13		2U	0.13	
1,2-Dichloroethane	µg/L	2U	0.13		2U	0.13		2U	0.13		2U	0.13	
1,2-Dimethylbenzene	µg/L	2U	0.19		2U	0.19		2U	0.19		2U	0.19	
1,4-Dichlorobenzene	µg/L	2U	0.16		2U	0.16		2U	0.16		2U	0.16	
2-Butanone	µg/L	6U	1.8		6U	1.8		6U	1.8		6U	1.8	
4-Methyl-2-pentanone	µg/L	5U	1		5U	1		5U	1		5U	1	
Acetone	µg/L	2.2J	1.9		10U	1.9		10U	1.9		10U	1.9	
Benzene	µg/L	2U	0.16		2U	0.16		2U	0.16		2U	0.16	
Bromodichloromethane	µg/L	2U	0.17		2U	0.17		2U	0.17		2U	0.17	
Bromoform	µg/L	2U	0.19		2U	0.19		2U	0.19		2U	0.19	
Bromomethane	µg/L	2U	0.21		2U	0.21		2U	0.21		2U	0.21	
Carbon disulfide	µg/L	2U	0.45		2U	0.45		2U	0.45		2U	0.45	
Carbon tetrachloride	µg/L	2U	0.19		2U	0.19		2U	0.19		2U	0.19	
Chlorobenzene	µg/L	2U	0.17		2U	0.17		2U	0.17		2U	0.17	
Chloroethane	µg/L	2U	0.41		2U	0.41		2U	0.41		2U	0.41	
Chloroform	µg/L	2U	0.16		2U	0.16		2U	0.16		2U	0.16	
Chloromethane	µg/L	2U	0.3		2U	0.3		2U	0.3		2U	0.3	
cis-1,2-Dichloroethene	µg/L	2U	0.15		2U	0.15		2U	0.15		2U	0.15	
Dibromochloromethane	µg/L	2U	0.17		2U	0.17		2U	0.17		2U	0.17	
Ethylbenzene	µg/L	2U	0.16		2U	0.16		2U	0.16		2U	0.16	
M + P Xylene	µg/L	2U	0.34		2U	0.34		2U	0.34		2U	0.34	
Methylene chloride	µg/L	5U	0.32		5U	0.32		0.44BJ	0.32		0.46BJ	0.32	
Tetrachloroethene	µg/L	2U	0.2		2U	0.2		2U	0.2		2U	0.2	
Toluene	µg/L	2U	0.17		2U	0.17		2U	0.17		2U	0.17	
trans-1,2-Dichloroethene	µg/L	1U	0.15		1U	0.15		1U	0.15		1U	0.15	
Trichloroethene	µg/L	2U	0.16		2U	0.16		2U	0.16		2U	0.16	
Trichlorofluoromethane	µg/L	2U	0.29		2U	0.29		2U	0.29		2U	0.29	
Vinyl chloride	µg/L	1U	0.4		1U	0.4		1U	0.4		1U	0.4	
Radionuclides													
Americium-241	pCi/L	0.01194U	0.03	0.02392	0.009081U	0.08	0.04052	0.0127U	0.09	0.04396	0.02553U	0.03	0.03623
Neptunium-237	pCi/L	-0.03876U	0.10	0.03505	-0.02105U	0.11	0.0467	-0.02718U	0.09	0.03348	-0.01406U	0.08	0.0282
Plutonium-238	pCi/L	0.02321U	0.02	0.02698	0.01404U	0.07	0.0344	-0.006772U	0.06	0.02351	0.007022U	0.02	0.01407
Plutonium-239/240	pCi/L	0.01549U	0.07	0.03795	0.007027U	0.07	0.03137	0.02036U	0.05	0.03045	0.02107U	0.05	0.03151
Technetium-99	pCi/L	-2.33U	9.89	4.89	-5.22U	9.12	5.22	-2.18U	8.77	5.09	0.177U	8.49	5.04

DL = Detection limit. TPU = Total propagated uncertainty

Results for water supply regular and duplicate samples first and third quarters 2008

Location/Analyte	Unit	First quarter regular sample			First quarter duplicate sample			Third quarter regular sample			Third quarter duplicate sample		
		Result	DL	TPU	Result	DL	TPU	Result	DL	TPU	Result	DL	TPU
RES-012													
Uranium	µg/L	1.379	0.21	0.3813	1.294	0.15	0.3656	1.28	0.06	0.3728	1.274	0.07	0.3721
Uranium-233/234	pCi/L	0.4711	0.1	0.1361	0.611	0.02	0.1464	0.6443	0.08	0.1572	0.6074	0.08	0.1554
Uranium-235	pCi/L	0.000008178U	0.06	0.02314	0.03141U	0.02	0.03165	0.01606U	0.02	0.0228	0.03445U	0.02	0.03473
Uranium-236	pCi/L	0U	0.02	0.00015	0.000007044U	0.05	0.01993	0.007208U	0.02	0.01445	0U	0.02	0.00014
Uranium-238	pCi/L	0.4635	0.06	0.1281	0.4319	0.05	0.1227	0.4287	0.02	0.1252	0.425	0.02	0.1249
Other Parameters													
Alkalinity	mg/L	230	1.1		230	1.1		250	1.1		250	1.1	
Chloride	mg/L	32	0.25		32	0.25		28	0.25		28	0.25	
Sulfate	mg/L	66	1.2		65	1.2		55	1.2		55	1.2	
Field Measurements													
Conductivity	µS/cm	601						669					
pH	Std Unit	9.2						7.14					
Temperature	deg C	12.2						14.6					
Turbidity	NTU	8						4					
RES-014													
Metals													
Calcium	µg/L	2500	34		2500	34		2200	34		2300	34	
Iron	µg/L	39B	22		37B	22		80B	22		98B	22	
Magnesium	µg/L	1300	43		1200	43		1100	11		1100	11	
Potassium	µg/L	450B	240		350B	240		480B	240		430B	240	
Sodium	µg/L	5700	92		5500	92		5100	92		5300	92	
Volatile Organic Compounds													
1,1,1-Trichloroethane	µg/L	2U	0.16		2U	0.16		2U	0.16		2U	0.16	
1,1,2,2-Tetrachloroethane	µg/L	1U	0.2		1U	0.2		1U	0.2		1U	0.2	
1,1,2-Trichloroethane	µg/L	2U	0.32		2U	0.32		2U	0.32		2U	0.32	
1,1-Dichloroethane	µg/L	2U	0.16		2U	0.16		2U	0.16		2U	0.16	
1,1-Dichloroethene	µg/L	2U	0.14		2U	0.14		2U	0.14		2U	0.14	
1,2-Dichlorobenzene	µg/L	2U	0.13		2U	0.13		2U	0.13		2U	0.13	
1,2-Dichloroethane	µg/L	2U	0.13		2U	0.13		2U	0.13		2U	0.13	
1,2-Dimethylbenzene	µg/L	2U	0.19		2U	0.19		2U	0.19		2U	0.19	
1,4-Dichlorobenzene	µg/L	2U	0.16		2U	0.16		2U	0.16		2U	0.16	
2-Butanone	µg/L	6U	1.8		6U	1.8		6U	1.8		6U	1.8	
4-Methyl-2-pentanone	µg/L	5U	1		5U	1		5U	1		5U	1	
Acetone	µg/L	3.2J	1.9		10U	1.9		10U	1.9		10U	1.9	

DL = Detection limit. TPU = Total propagated uncertainty

Results for water supply regular and duplicate samples first and third quarters 2008

Location/Analyte	Unit	First quarter regular sample			First quarter duplicate sample			Third quarter regular sample			Third quarter duplicate sample		
		Result	DL	TPU	Result	DL	TPU	Result	DL	TPU	Result	DL	TPU
RES-014													
Benzene	µg/L	2U	0.16		2U	0.16		2U	0.16		2U	0.16	
Bromodichloromethane	µg/L	2U	0.17		2U	0.17		2U	0.17		2U	0.17	
Bromoform	µg/L	2U	0.19		2U	0.19		2U	0.19		2U	0.19	
Bromomethane	µg/L	2U	0.21		2U	0.21		2U	0.21		2U	0.21	
Carbon disulfide	µg/L	2U	0.45		2U	0.45		2U	0.45		2U	0.45	
Carbon tetrachloride	µg/L	2U	0.19		2U	0.19		2U	0.19		2U	0.19	
Chlorobenzene	µg/L	2U	0.17		2U	0.17		2U	0.17		2U	0.17	
Chloroethane	µg/L	2U	0.41		2U	0.41		2U	0.41		2U	0.41	
Chloroform	µg/L	2U	0.16		2U	0.16		2U	0.16		2U	0.16	
Chloromethane	µg/L	2U	0.3		2U	0.3		2U	0.3		2U	0.3	
cis-1,2-Dichloroethene	µg/L	2U	0.15		2U	0.15		2U	0.15		2U	0.15	
Dibromochloromethane	µg/L	2U	0.17		2U	0.17		2U	0.17		2U	0.17	
Ethylbenzene	µg/L	2U	0.16		2U	0.16		2U	0.16		2U	0.16	
M + P Xylene	µg/L	2U	0.34		2U	0.34		2U	0.34		2U	0.34	
Methylene chloride	µg/L	5U	0.32		5U	0.32		0.45BJ	0.32		0.45BJ	0.32	
Tetrachloroethene	µg/L	2U	0.2		2U	0.2		2U	0.2		2U	0.2	
Toluene	µg/L	2U	0.17		2U	0.17		2U	0.17		2U	0.17	
trans-1,2-Dichloroethene	µg/L	1U	0.15		1U	0.15		1U	0.15		1U	0.15	
Trichloroethene	µg/L	2U	0.16		2U	0.16		2U	0.16		2U	0.16	
Trichlorofluoromethane	µg/L	2U	0.29		2U	0.29		2U	0.29		2U	0.29	
Vinyl chloride	µg/L	1U	0.4		1U	0.4		1U	0.4		1U	0.4	
Radionuclides													
Americium-241	pCi/L	0.0073U	0.07	0.03258	0U	0.02	0.00012	0.007502U	0.06	0.02596	0.007319U	0.02	0.01466
Neptunium-237	pCi/L	-0.01412U	0.12	0.06022	-0.0645U	0.12	0.04897	0.007056U	0.02	0.01414	-0.04401U	0.11	0.04188
Plutonium-238	pCi/L	0.02124U	0.05	0.03177	0.01289U	0.05	0.02581	0.02815U	0.02	0.02837	-0.01462U	0.08	0.02933
Plutonium-239/240	pCi/L	0.000007072U	0.05	0.02001	-0.01928U	0.09	0.03869	0.01407U	0.02	0.01998	-0.05119U	0.12	0.04897
Technetium-99	pCi/L	-7.92U	8.85	5.31	-3.17U	9.33	5.15	-3.42U	8.1	5.48	-2.47U	8.63	5.16
Uranium	µg/L	0.06115U	0.07	0.07118	0.02078U	0.21	0.09851	0.02057U	0.07	0.04098	0.000291U	0.21	0.08568
Uranium-233/234	pCi/L	0.02751U	0.02	0.02773	0.006301U	0.1	0.05153	0.01379U	0.07	0.03897	0.00002884U	0.09	0.0408
Uranium-235	pCi/L	0U	0.02	0.00015	0.007711U	0.02	0.01545	0U	0.02	0.00015	0U	0.02	0.00016
Uranium-236	pCi/L	-0.007609U	0.06	0.01525	0.006924U	0.02	0.01387	0.007627U	0.02	0.01528	0.01599U	0.02	0.0227
Uranium-238	pCi/L	0.02059U	0.02	0.02392	0.006257U	0.07	0.03301	0.006872U	0.02	0.01377	0.00001439U	0.07	0.02879
Other Parameters													
Alkalinity	mg/L	11	1.1		10	1.1		9	1.1		10	1.1	

DL = Detection limit. TPU = Total propagated uncertainty

Results for water supply regular and duplicate samples first and third quarters 2008

Location/Analyte	Unit	First quarter regular sample			First quarter duplicate sample			Third quarter regular sample			Third quarter duplicate sample		
		Result	DL	TPU	Result	DL	TPU	Result	DL	TPU	Result	DL	TPU
RES-014													
Chloride	mg/L	2.8B	0.25		2.8B	0.25		2.9B	0.25		2.9B	0.25	
Sulfate	mg/L	6.8	0.23		6.6	0.23		5.6	0.23		5.5	0.23	
Field Measurements													
Conductivity	µS/cm	48						52					
pH	Std Unit	7.56						5.59					
Temperature	deg C	4.35						19.3					
Turbidity	NTU	1						2					
RES-015													
Metals													
Calcium	µg/L	69000	34		67000	34		75000	34		70000	34	
Iron	µg/L	1400	22		1500	22		2800	22		2700	22	
Magnesium	µg/L	18000	43		17000	43		19000	11		18000	11	
Potassium	µg/L	4900	240		4900	240		4500	240		4500	240	
Sodium	µg/L	78000	92		80000	92		76000	92		72000	92	
Volatile Organic Compounds													
1,1,1-Trichloroethane	µg/L	2U	0.16		2U	0.16		2U	0.16		2U	0.16	
1,1,2,2-Tetrachloroethane	µg/L	1U	0.2		1U	0.2		1U	0.2		1U	0.2	
1,1,2-Trichloroethane	µg/L	2U	0.32		2U	0.32		2U	0.32		2U	0.32	
1,1-Dichloroethane	µg/L	2U	0.16		2U	0.16		2U	0.16		2U	0.16	
1,1-Dichloroethene	µg/L	2U	0.14		2U	0.14		2U	0.14		2U	0.14	
1,2-Dichlorobenzene	µg/L	2U	0.13		2U	0.13		2U	0.13		2U	0.13	
1,2-Dichloroethane	µg/L	2U	0.13		2U	0.13		2U	0.13		2U	0.13	
1,2-Dimethylbenzene	µg/L	2U	0.19		2U	0.19		2U	0.19		2U	0.19	
1,4-Dichlorobenzene	µg/L	2U	0.16		2U	0.16		2U	0.16		2U	0.16	
2-Butanone	µg/L	6U	1.8		6U	1.8		6U	1.8		6U	1.8	
4-Methyl-2-pentanone	µg/L	5U	1		5U	1		5U	1		5U	1	
Acetone	µg/L	10U	1.9		2.1J	1.9		10U	1.9		4.3J	1.9	
Benzene	µg/L	2U	0.16		2U	0.16		2U	0.16		2U	0.16	
Bromodichloromethane	µg/L	2U	0.17		2U	0.17		2U	0.17		2U	0.17	
Bromoform	µg/L	2U	0.19		2U	0.19		2U	0.19		2U	0.19	
Bromomethane	µg/L	2U	0.21		2U	0.21		2U	0.21		2U	0.21	
Carbon disulfide	µg/L	2U	0.45		2U	0.45		2U	0.45		2U	0.45	
Carbon tetrachloride	µg/L	2U	0.19		2U	0.19		2U	0.19		2U	0.19	
Chlorobenzene	µg/L	2U	0.17		2U	0.17		2U	0.17		2U	0.17	

DL = Detection limit. TPU = Total propagated uncertainty

Results for water supply regular and duplicate samples first and third quarters 2008

Location/Analyte	Unit	First quarter regular sample			First quarter duplicate sample			Third quarter regular sample			Third quarter duplicate sample		
		Result	DL	TPU	Result	DL	TPU	Result	DL	TPU	Result	DL	TPU
RES-015													
Chloroethane	µg/L	2U	0.41		2U	0.41		2U	0.41		2U	0.41	
Chloroform	µg/L	2U	0.16		2U	0.16		2U	0.16		2U	0.16	
Chloromethane	µg/L	2U	0.3		2U	0.3		2U	0.3		2U	0.3	
cis-1,2-Dichloroethene	µg/L	2U	0.15		2U	0.15		2U	0.15		2U	0.15	
Dibromochloromethane	µg/L	2U	0.17		2U	0.17		2U	0.17		2U	0.17	
Ethylbenzene	µg/L	2U	0.16		2U	0.16		2U	0.16		2U	0.16	
M + P Xylene	µg/L	2U	0.34		2U	0.34		2U	0.34		2U	0.34	
Methylene chloride	µg/L	5U	0.32		5U	0.32		0.41BJ	0.32		0.48BJ	0.32	
Tetrachloroethene	µg/L	2U	0.2		2U	0.2		2U	0.2		2U	0.2	
Toluene	µg/L	2U	0.17		2U	0.17		2U	0.17		2U	0.17	
trans-1,2-Dichloroethene	µg/L	1U	0.15		1U	0.15		1U	0.15		1U	0.15	
Trichloroethene	µg/L	2U	0.16		2U	0.16		2U	0.16		2U	0.16	
Trichlorofluoromethane	µg/L	2U	0.29		2U	0.29		2U	0.29		2U	0.29	
Vinyl chloride	µg/L	1U	0.4		1U	0.4		1U	0.4		1U	0.4	
Radionuclides													
Americium-241	pCi/L	-0.0137U	0.15	0.06144	-0.01087U	0.12	0.04875	0.000008332U	0.06	0.02358	0.000009943U	0.07	0.02814
Neptunium-237	pCi/L	-0.05319U	0.11	0.04082	-0.02723U	0.09	0.03354	0.009319U	0.03	0.01868	0.006784U	0.05	0.02349
Plutonium-238	pCi/L	0.000007578U	0.06	0.02144	0.006803U	0.05	0.02355	0.02788U	0.03	0.03241	0.02028U	0.05	0.03032
Plutonium-239/240	pCi/L	0.000007578U	0.06	0.02144	-0.006789U	0.05	0.01361	0.02789U	0.07	0.04172	-0.006738U	0.07	0.03022
Technetium-99	pCi/L	-5.89U	8.97	5.35	1.37U	9.55	5.7	1.9U	8.19	4.9	0.85U	7.81	4.64
Uranium	µg/L	0.174	0.15	0.1307	0.4618	0.07	0.2044	0.1621	0.07	0.1165	0.1847U	0.23	0.1607
Uranium-233/234	pCi/L	0.1093	0.02	0.05475	0.1109	0.09	0.07205	0.06824	0.06	0.05178	0.08872	0.07	0.06053
Uranium-235	pCi/L	0.00793U	0.02	0.01589	0.03419U	0.02	0.03447	0U	0.02	0.00015	0.008417U	0.02	0.01687
Uranium-236	pCi/L	0U	0.02	0.00014	0U	0.02	0.00014	0U	0.02	0.00014	0U	0.02	0.00014
Uranium-238	pCi/L	0.05774	0.05	0.04384	0.1521	0.02	0.06846	0.05447	0.02	0.03914	0.0613U	0.07	0.05392
Other Parameters													
Alkalinity	mg/L	120	1.1		120	1.1		130	1.1		130	1.1	
Chloride	mg/L	160	1.3		160	1.3		160	1.3		160	1.3	
Sulfate	mg/L	62	1.2		65	1.2		66	1.2		63	1.2	
Field Measurements													
Conductivity	µS/cm	818						885					
pH	Std Unit	8.71						7.24					
Temperature	deg C	9.6						21.9					
Turbidity	NTU	3						6					

DL = Detection limit. TPU = Total propagated uncertainty

Results for water supply regular and duplicate samples first and third quarters 2008

Location/Analyte	Unit	First quarter regular sample			First quarter duplicate sample			Third quarter regular sample			Third quarter duplicate sample		
		Result	DL	TPU	Result	DL	TPU	Result	DL	TPU	Result	DL	TPU
RES-016													
Metals													
Calcium	µg/L	72000	34		72000	34		100000	34		98000	34	
Iron	µg/L	1300	22		1400	22		1700	22		1600	22	
Magnesium	µg/L	23000	43		23000	43		34000	11		31000	11	
Potassium	µg/L	1400B	240		1300B	240		940B	240		1100B	240	
Sodium	µg/L	14000	92		14000	92		6300	92		6200	92	
Volatile Organic Compounds													
1,1,1-Trichloroethane	µg/L	2U	0.16		2U	0.16		2U	0.16		2U	0.16	
1,1,2,2-Tetrachloroethane	µg/L	1U	0.2		1U	0.2		1U	0.2		1U	0.2	
1,1,2-Trichloroethane	µg/L	2U	0.32		2U	0.32		2U	0.32		2U	0.32	
1,1-Dichloroethane	µg/L	2U	0.16		2U	0.16		2U	0.16		2U	0.16	
1,1-Dichloroethene	µg/L	2U	0.14		2U	0.14		2U	0.14		2U	0.14	
1,2-Dichlorobenzene	µg/L	2U	0.13		2U	0.13		2U	0.13		2U	0.13	
1,2-Dichloroethane	µg/L	2U	0.13		2U	0.13		2U	0.13		2U	0.13	
1,2-Dimethylbenzene	µg/L	2U	0.19		2U	0.19		2U	0.19		2U	0.19	
1,4-Dichlorobenzene	µg/L	2U	0.16		2U	0.16		2U	0.16		2U	0.16	
2-Butanone	µg/L	6U	1.8		6U	1.8		6U	1.8		6U	1.8	
4-Methyl-2-pentanone	µg/L	5U	1		5U	1		5U	1		5U	1	
Acetone	µg/L	10U	1.9		2.1J	1.9		10U	1.9		10U	1.9	
Benzene	µg/L	2U	0.16		2U	0.16		2U	0.16		2U	0.16	
Bromodichloromethane	µg/L	2U	0.17		2U	0.17		2U	0.17		2U	0.17	
Bromoform	µg/L	2U	0.19		2U	0.19		2U	0.19		2U	0.19	
Bromomethane	µg/L	2U	0.21		2U	0.21		2U	0.21		2U	0.21	
Carbon disulfide	µg/L	2U	0.45		2U	0.45		2U	0.45		2U	0.45	
Carbon tetrachloride	µg/L	2U	0.19		2U	0.19		2U	0.19		2U	0.19	
Chlorobenzene	µg/L	2U	0.17		2U	0.17		2U	0.17		2U	0.17	
Chloroethane	µg/L	2U	0.41		2U	0.41		2U	0.41		2U	0.41	
Chloroform	µg/L	2U	0.16		2U	0.16		2U	0.16		2U	0.16	
Chloromethane	µg/L	2U	0.3		2U	0.3		2U	0.3		2U	0.3	
cis-1,2-Dichloroethene	µg/L	2U	0.15		2U	0.15		2U	0.15		2U	0.15	
Dibromochloromethane	µg/L	2U	0.17		2U	0.17		2U	0.17		2U	0.17	
Ethylbenzene	µg/L	2U	0.16		2U	0.16		2U	0.16		2U	0.16	
M + P Xylene	µg/L	2U	0.34		2U	0.34		2U	0.34		2U	0.34	
Methylene chloride	µg/L	5U	0.32		5U	0.32		0.49BJ	0.32		0.47BJ	0.32	

DL = Detection limit. TPU = Total propagated uncertainty

Results for water supply regular and duplicate samples first and third quarters 2008

Location/Analyte	Unit	First quarter regular sample			First quarter duplicate sample			Third quarter regular sample			Third quarter duplicate sample		
		Result	DL	TPU	Result	DL	TPU	Result	DL	TPU	Result	DL	TPU
RES-016													
Tetrachloroethene	µg/L	2U	0.2		2U	0.2		2U	0.2		2U	0.2	
Toluene	µg/L	2U	0.17		2U	0.17		2U	0.17		2U	0.17	
trans-1,2-Dichloroethene	µg/L	1U	0.15		1U	0.15		1U	0.15		1U	0.15	
Trichloroethene	µg/L	2U	0.16		2U	0.16		2U	0.16		2U	0.16	
Trichlorofluoromethane	µg/L	2U	0.29		2U	0.29		2U	0.29		2U	0.29	
Vinyl chloride	µg/L	1U	0.4		1U	0.4		1U	0.4		1U	0.4	
Radionuclides													
Americium-241	pCi/L	0.009979U	0.07	0.03454	0.03318U	0.08	0.04958	0.00001449U	0.11	0.041	-0.01338U	0.1	0.0268
Neptunium-237	pCi/L	-0.02856U	0.09	0.0288	0.006875U	0.06	0.03068	-0.01307U	0.07	0.02621	-0.0222U	0.08	0.02579
Plutonium-238	pCi/L	-0.007113U	0.07	0.02469	0.00002051U	0.07	0.0335	0.02611U	0.02	0.0263	0.01477U	0.02	0.02098
Plutonium-239/240	pCi/L	-0.02135U	0.09	0.03197	0.006848U	0.05	0.02371	0.006526U	0.02	0.01308	0U	0.02	0.00012
Technetium-99	pCi/L	-1.09U	9.67	5.09	0.0936U	9.28	5.5	-1.58U	8.07	4.93	2.18U	8.08	4.85
Uranium	µg/L	0.8135	0.16	0.2951	1.005	0.27	0.3667	0.9323	0.06	0.291	1.071	0.07	0.3272
Uranium-233/234	pCi/L	0.391	0.06	0.1191	0.1653	0.13	0.09653	0.3716	0.07	0.1126	0.3972	0.06	0.1181
Uranium-235	pCi/L	0.01723U	0.02	0.02446	0.008859U	0.02	0.01776	0U	0.02	0.00016	0.04152	0.02	0.03751
Uranium-236	pCi/L	0.007734U	0.02	0.0155	-0.007939U	0.07	0.02756	0.000007089U	0.05	0.02006	-0.007448U	0.05	0.01493
Uranium-238	pCi/L	0.2718	0.05	0.0991	0.3369	0.09	0.1232	0.3133	0.02	0.09778	0.356	0.02	0.1098
Other Parameters													
Alkalinity	mg/L	230	1.1		230	1.1		320	1.1		330	1.1	
Chloride	mg/L	22	0.25		22	0.25		12	0.25		12	0.25	
Sulfate	mg/L	42	0.23		42	0.23		37	0.23		37	0.23	
Field Measurements													
Conductivity	µS/cm	530						741					
pH	Std Unit	8.73						6.99					
Temperature	deg C	4.92						21.34					
Turbidity	NTU	1						2					

DL = Detection limit. TPU = Total propagated uncertainty

APPENDIX F

NPDES SAMPLING RESULTS

ANALYTICAL DATA TABLES
DOE NPDES

Laboratory Data Qualifiers and Other Abbreviations

B	Inorganics: the reported value was obtained from a reading that was less than practical quantitation limit but greater than or equal to the instrument detection limit. Organics: the analyte was detected in the laboratory blank sample.
E	Inorganics: the reported value is estimated because of the presence of interferences. Organics: the result exceeds the calibration range.
J	Organics: the reported value is an estimated concentration greater than the method detection limit but less than the practical quantitation limit. All others: the reported value is qualified as estimated.
P	Pesticide/Aroclor: there is greater than 25% difference for detected concentrations between the two gas chromatograph columns.
U	Undetected
nm	For field measurements: not measured due to insufficient water remaining in the well after sampling.

Chemical parameters at DOE NPDES outfalls
January 2008 - June 2008

Parameter	Units	January		February		March		April		May		June		
Outfall 012: X-2230M Holding Pond														
Iron	µg/l	5000	1600	2600	670	1500	1800	2400	430					
Oil and Grease	mg/L	3.8B	2.5B	3.9B	4.2B	2.7B	3.9B	4.3B	3.7B					
Suspended Solids	mg/L	62	20	19	4.8	14	19	21	5.6					
Total PCB	µg/L					1U								
Trichloroethene	µg/L	1U	0.21J	1U	0.28J	0.29J	1U	0.2J	1U					
Outfall 013: X-2230N Holding Pond														
Oil and Grease	mg/L	2.4B	3.7B	2B	4.3B	9.3	5	4.7B	2.8B					
Suspended Solids	mg/L	22	5.6	7.6	3.2B	10	30	18	2.8B					
Total PCB	µg/L					1U								
Outfall 015: X-624 Groundwater Treatment Facility (X-237 Interceptor Trench at X-701B Holding Pond)														
Total PCB	µg/L					1U						1U		
Trichloroethene	µg/L	0.34J	0.48J	0.32J	0.44J	0.5J	2.5	1.3	1.2	5.1	1.2	1.8	1.2	0.63J
Outfall 608: X-622 Groundwater Treatment Facility (Quadrant I groundwater collection systems)														
trans-1,2-Dichloroethene	µg/L	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U
Trichloroethene	µg/L	0.8J	0.85J	0.88J	0.84J	0.79J	0.84J	1.1	1.6	2	1.8	2.1	1.7	1.8
Outfall 610: X-623 Groundwater Treatment Facility (X-701B extraction wells)														
trans-1,2-Dichloroethene	µg/L	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U
Trichloroethene	µg/L	1U	2.1	1U	0.17J	0.24J	1U	1U	0.17J	0.19J	1U	1U	1U	1U
Outfall 611: X-627 Groundwater Treatment Facility (X-700 & X-705 building sumps)														
Trichloroethene	µg/L	0.39J	0.37J	0.31J	0.69J	0.46J	0.44J	0.64J	1U	0.61J	0.58J	0.84J	3.3	1.8
Outfall 613: X-6002 Particle Separator														
Suspended Solids	mg/L	31	2.4B	4U	2B	1.2B	4U	2.4B	4					

Outfalls 012, 013, and 613 were transferred to USEC beginning in May 2008.

Chemical parameters at DOE NPDES outfalls
July 2008 - December 2008

Parameter	Units	July		August		September		October		November		December		
Outfall 015: X-624 Groundwater Treatment Facility (X-237 Interceptor Trench at X-701B Holding Pond)														
Total PCB	µg/L			1U								1U		
Trichloroethene	µg/L	0.56J	1U	0.24J	0.19J	0.17J	1U	1.3	0.47J	0.59J	1U	0.25J	3.3	0.23J
Outfall 608: X-622 Groundwater Treatment Facility (Quadrant I groundwater collection systems)														
trans-1,2-Dichloroethene	µg/L	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U
Trichloroethene	µg/L	1.7	1.8	1	0.63J	2.1	2.1	2	2	3	2.2	1.8	1.1	0.68J
Outfall 610: X-623 Groundwater Treatment Facility (X-701B extraction wells)														
trans-1,2-Dichloroethene	µg/L	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U
Trichloroethene	µg/L	1U	1U	1U	1U	1U	1U	1U	1U	0.31J	1U	1U	1U	1U
Outfall 611: X-627 Groundwater Treatment Facility (X-700 & X-705 building sumps)														
Trichloroethene	µg/L	1.6	2.4	4.3	1.3	1.5	0.8J	0.27J	0.23J	0.53J	0.21J	0.68J	1U	0.31J

Radionuclides at DOE NPDES outfalls (not including transuranics)
January 2008 - December 2008

Parameter	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Outfall 012: X-2230M Holding Pond												
Technetium-99	3.1U	-3.58U	-3.3U	-2.57U								
Uranium	1.106	1.232	1.428	0.91								
Uranium-233/234	0.5371	0.5302	0.704	0.5733								
Uranium-235	0.01866U	0U	0.0253U	0.0179U								
Uranium-236	0U	0.01506U	0U	0U								
Uranium-238	0.3699	0.4138	0.4775	0.3042								
Outfall 013: X-2230N Holding Pond												
Technetium-99	2.8U	-1.62U	-3.82U	-0.0608U								
Uranium	0.5828	1.608	1.54	0.8729								
Uranium-233/234	0.5158	0.7062	1	0.4909								
Uranium-235	0.03181U	0.05227	0.03684U	-0.007562U								
Uranium-236	-0.007127U	0.007822U	0U	0.006796U								
Uranium-238	0.193	0.5356	0.5141	0.2939								
Outfall 015: X-624 Groundwater Treatment Facility (X-237 Interceptor Trench at X-701B Holding Pond)												
Technetium-99	4.92U	-5.72U	-6.59U	-7.72U	0.102U	-2.5U	-0.866U	2.19U	-2.14U	-7U	-0.875U	-3.24U
Uranium	0.4007	0.5993	0.9353	1.244	1.064	0.5427	0.7368	0.1786	0.2623	0.3261	1.15	1.631
Uranium-233/234	0.6033	0.5124	0.7993	0.875	0.8765	0.4831	0.8562	0.1979	0.2673	0.1877	1.463	1.981
Uranium-235	0.01731U	0.008001U	0.04889	0.03599U	0.01833U	0.02668U	0.06161	0.008136U	0.01782U	0.01781U	0.05885	0.06957
Uranium-236	0.00777U	0U	0.007317U	0U	-0.00822U	0.01597U	-0.007895U	0.007305U	0.000007995U	-0.01597U	0.02643U	0U
Uranium-238	0.133	0.2007	0.3099	0.4148	0.3559	0.1799	0.2421	0.05924	0.08653	0.1081	0.3809	0.5417

Uranium is reported in µg/L.
Technetium-99 and uranium isotopes are reported in pCi/L.
Outfalls 012 and 013 were transferred to USEC beginning in May 2008.

Radionuclides at DOE NPDES outfalls (not including transuranics)
January 2008 - December 2008

Parameter	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Outfall 608: X-622 Groundwater Treatment Facility (Quadrant I groundwater collection systems)												
Technetium-99	547	599	308	675	839	172	975	878	682	929	649	1140
Uranium	0.8802	0.7706	0.9551	1.082	0.8325	0.5093	1.075	0.605	0.5632	0.9469	0.4882	0.6143
Uranium-233/234	0.5808	0.4547	0.6693	0.6659	0.4661	0.4586	0.6223	0.4827	0.326	0.5693	0.3037	0.5698
Uranium-235	0.02653U	0.01674U	0.0086U	0.01826U	-0.008447U	0.04491U	0.008254U	0.008646U	0.02567U	0.01779U	0.009606U	0.01874U
Uranium-236	0U	0.007518U	0.01544U	0U	0U	0.008063U	0U	0.007747U	0.007682U	0.02395U	0U	0U
Uranium-238	0.2934	0.2574	0.3201	0.3619	0.2805	0.1671	0.3606	0.2025	0.1869	0.3164	0.1632	0.2047
Outfall 610: X-623 Groundwater Treatment Facility (X-701B extraction wells)												
Technetium-99	829	505	90.9	43.6	116	232	754	542	720	594	560	0.557U
Uranium	12.26	4.405	0.8258	2.974	10.42	53.65	15.72	29.07	11.52	55.1	287.9	238.4
Uranium-233/234	15.24	5.505	1.342	4.859	15.47	67.48	18.64	35.44	14.43	66.78	349.8	308.5
Uranium-235	0.7961	0.17	0.04333	0.275	0.6918	2.832	0.9032	1.726	0.7226	2.87	15.7	14.33
Uranium-236	0.06993	0.05343U	0.01558U	0.01703U	0.04141	0.5418	0.1365	0.2894	0.1314	0.4789	2.985	1.669
Uranium-238	4.046	1.465	0.2735	0.9744	3.44	17.77	5.202	9.611	3.804	18.25	95.33	78.82
Outfall 611: X-627 Groundwater Treatment Facility (X-700 & X-705 building sumps)												
Technetium-99	975	971	893	1300	967	1190	1200	1310	-2.7U	-2.78U	4.76U	17.1
Uranium	4.669	5.573	6.683	7.188	4.836	4.301	4.382	4.453	4.331	4.83	0.9046	3.959
Uranium-233/234	5.401	5.82	9.308	9.535	5.024	5.791	4.816	3.857	3.249	5.825	1.162	3.359
Uranium-235	0.3269	0.3268	0.3101	0.4387	0.2057	0.246	0.2689	0.2107	0.1202	0.3062	0.05408	0.1679
Uranium-236	0.0301U	0.04192	0.0602	0.04019	0.008046U	0.04091	0.03018U	0.02365U	0.02312U	0.02426U	0.02428U	0.007933U
Uranium-238	1.539	1.843	2.217	2.375	1.606	1.423	1.448	1.477	1.444	1.595	0.299	1.315

Uranium is reported in µg/L.
Technetium-99 and uranium isotopes are reported in pCi/L.
Outfalls 012 and 013 were transferred to USEC beginning in May 2008.

Transuranic radionuclides at DOE NPDES outfalls third quarter 2007 through fourth quarter 2008

Outfall	Parameter	Units	3Q 2007	4Q 2007	1Q 2008	2Q 2008	3Q 2008	4Q 2008
Outfall 012	Americium-241	pCi/L	-0.009146U	-0.04067U	0.008764U			
	Neptunium-237	pCi/L	-0.1261U	0.01589U	0.03183U			
	Plutonium-238	pCi/L	-0.006961U	0.01586U	0.0238U			
	Plutonium-239/240	pCi/L	-0.07686U	0.00793U	0.01587U			
Outfall 013	Americium-241	pCi/L	0.03136U	0.0102U	0.02901U			
	Neptunium-237	pCi/L	-0.06705U	-0.02374U	-0.03043U			
	Plutonium-238	pCi/L	0.02976U	0.01582U	-0.007591U			
	Plutonium-239/240	pCi/L	-0.01486U	-0.007887U	-0.04555U			
Outfall 015	Americium-241	pCi/L	-0.02792U	0.05028U	0.02927U	-0.009378U	0.02059U	0.02023U
	Neptunium-237	pCi/L	-0.04404U	-0.01419U	-0.006829U	0.006871U	-0.02547U	0.007894U
	Plutonium-238	pCi/L	0.007339U	0.0142U	0.006837U	0.0137U	0.01914U	0.02362U
	Plutonium-239/240	pCi/L	-0.01463U	0.01419U	0.006851U	0.02054U	-0.00634U	0.00788U
Outfall 608	Americium-241	pCi/L	0.00003423U	0U	0.03966U	-0.01155U	0U	0.01956U
	Neptunium-237	pCi/L	-0.01535U	-0.02271U	-0.007171U	-0.02208U	0.00002657U	0.007155U
	Plutonium-238	pCi/L	-0.007634U	0.01512U	0.00718U	0.00001468U	-0.00661U	0.01427U
	Plutonium-239/240	pCi/L	0.02301U	0.000007548U	0.007187U	0.007361U	0.00004637U	-0.01426U
Outfall 610	Americium-241	pCi/L	0.01416U	0U	-0.04831U	0.03058U	-0.01188U	0.00001728U
	Neptunium-237	pCi/L	-0.05857U	0.02122U	-0.02837U	0U	0.01528U	0.008028U
	Plutonium-238	pCi/L	0.00001462U	0.04936U	-0.01417U	0.028U	0.007613U	0.01598U
	Plutonium-239/240	pCi/L	-0.01461U	0.007063U	0.00002125U	0.007007U	0.00762U	0U
Outfall 611	Americium-241	pCi/L	0.00001364U	0U	0.02784U	-0.01405U	0.00001538U	0.008518U
	Neptunium-237	pCi/L	0.03157U	-0.03614U	0.03556U	0.02193U	0.06149U	0.02452U
	Plutonium-238	pCi/L	0.03143U	0.02167U	-0.01414U	0.01458U	0.007661U	0.02445U
	Plutonium-239/240	pCi/L	-0.03137U	-0.03604U	0.007104U	0.02189U	-0.0153U	-0.008136U

Outfalls 012 and 013 were transferred to USEC beginning in May 2008.

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