DRAFT FINAL
2013 ANNUAL BASEWIDE MONITORING REPORT

AT

FORT DRUM, NEW YORK

Prepared For:

UNITED STATES ARMY ENVIRONMENTAL COMMAND
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Contract Number: W91ZLK-05-D-0011
Delivery Order: 0004

March 2014

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LIST OF ACRONYMS AND ABBREVIATIONS

AAFES	Army Air Force Exchange Service
AAS	Aquifer Air Sparge
ASL	Airfield Sanitary Landfill
AST	Above Ground Storage Tank
bgs	Below ground surface
BTEX	Benzene, Toluene, Ethylbenzene, and total Xylenes
CCAR	Comprehensive Contaminant Assessment Report
COCs	Contaminants of Concern
DO	Dissolved Oxygen
DPE	Dual-phase Extraction
EA	EA Engineering, Science, and Technology
ft	Feet -or- Foot
ft^2	square feet
IRA	Interim Remedial Action
ISCO	*In-Situ* Chemical Oxidation
JP-4	Jet Propellant Fuel
LNAPL	Light Non-aqueous Phase Liquids
MIP	Membrane Interface Probe
MNA	Monitored Natural Attenuation
MPE	Multi-phase Extraction
MSL	Mean Sea Level
MTBE	Methyl-tertiary Butyl Ether
N: P: K	Nitrogen: Phosphorous: Potassium
NYSDEC	New York State Department of Environmental Conservation
OP-TECH	OP-TECH Environmental Services, Inc.
ORC®	Oxygen Release Compound
ORP	Oxidation-reduction Potential
OSL	Old Sanitary Landfill
PCE	Tetrachloroethene
pH	Potential of Hydrogen
Plexus	Plexus Scientific Corporation
ppmv	Parts Per Million by Volume
QAPP	Quality Assurance Program Plan
RAWP	Remedial Action Work Plan
SVE	Soil Vapor Extraction
SVOCs	Semi-Volatile Organic Compounds
TCE	Trichloroethene
TVH	Total Volatile Hydrocarbons
USACE	U.S. Army Corps of Engineers
USEPA	U.S. Environmental Protection Agency
USTs	Underground Storage Tanks
VOCs	Volatile Organic Compounds
WES	Waterways Experiment Station
WWII	World War II
µg/L	Micrograms per Liter

1.0 INTRODUCTION

Fort Drum is located in upstate New York, approximately 10 miles northeast of Watertown and 80 miles north of Syracuse (**Figure 1-1**). The Military Installation encompasses approximately 168 square miles in northeastern Jefferson County and western Lewis County. The 2013 semi-annual basewide groundwater and surface water sampling events were conducted in Spring and Fall of 2013. The basewide monitoring program includes Gasoline Alley sites (Areas 1295, 1595, 1795, 1995, and 3805), the Army Air Force Exchange Service (AAFES) Station (Building P-2140), the Old Sanitary Landfill (OSL), and the Airfield Sanitary Landfill (ASL). Plexus Scientific Corporation (Plexus) performed groundwater sampling, surface water sampling, seep sampling, and well gauging activities under the U.S. Army Environmental Command Contract No. W91ZLK-05-D-0011, Delivery Order 0004.

1.1 Gasoline Alley Site Descriptions

Gasoline Alley is located in the southwest corner of the Fort Drum Military Installation, within the developed portion of the installation known as the Cantonment Area (**Figure 1-2**). The 2-mile-long thoroughfare consists of two parallel one-way streets (Oneida and Ontario Avenues) and the associated unpaved median located between the two avenues.

Nine former fuel dispensing areas were located in or near the Gasoline Alley median. The former dispensing areas are referred to as Areas 1195, 1295, 1395, 1495, 1595, 1795, 1895, 1995, and 3805; however, only five of those areas (Areas 1295, 1595, 1795, 1995, and 3805) are discussed in this report.

1.1.1 Area 1295

Area 1295 is associated with a former unleaded fuel dispensing facility located in the southwestern portion of Gasoline Alley, between Second Street East and Second Street West. The site contained five 20,000 gallon underground storage tanks (USTs), which dispensed gasoline until 1990, when the USTs were converted to diesel fuel. In 1994, all USTs and associated fuel dispensers were removed. The dispenser piping was removed in 1995. During removal, samples were collected and analyzed according to New York State Department of Environmental Conservation (NYSDEC) *Spills Technology and Remediation Series Memo No. 1* guidance (NYSDEC, 1992). Volatile organic compounds (VOCs) and polycyclic aromatic hydrocarbons were reported at concentrations that exceeded soil guidance along the western and at the eastern end of the associated dispenser piping. Numerous data collection and environmental investigations have been conducted at the former Area 1295 fuel dispensing site. These investigations included the installation of groundwater monitoring wells and piezometers, collection of groundwater, subsurface soil, and soil vapor samples for chemical analyses, and a pilot study to evaluate enhanced bioremediation. Three areas of soil and groundwater contamination (former eastern UST and pump house area, former fuel dispenser area, and former western UST area) were identified during the installation of monitoring wells and through direct push sampling.

An extensive site evaluation was performed in 1996 to further characterize contamination at Area 1295. Twenty-five soil borings were drilled and associated soil samples were analyzed for various contaminants. Elevated concentrations of VOCs (including benzene, toluene, ethylbenzene, and total xylenes [BTEX]) and semi-volatile organic compounds (SVOCs) were detected in the soil samples.

An Oxygen Release Compound (ORC®) pilot study was completed in 2000 in the vicinity of monitoring well 1295-MW27, and was found to not be effective in reducing concentrations of BTEX in site groundwater. *In-situ* chemical oxidation (ISCO) injections were conducted in 2006 and 2007, using a hydrogen peroxide-based chemical oxidant mixture with Fenton's Reaction chemistry. Five full-scale injections were conducted at each of three source treatment areas. Results indicated the ISCO injections were initially effective in reducing the total BTEX concentrations in the groundwater at Area 1295; however, rebound of site contaminants of concern (COCs) occurred. Monitoring wells 1295-MW25 and 1295-MWS27 have been sampled annually since the 2000 ORC® pilot study. Monitoring wells 1295-MW26, 1295-MW28 and 1295-MW30 were added to the basewide sampling plan in October 2008.

In 2009, ozone aquifer air sparge (AAS) technology was evaluated at this site and subsequently operated via 12 injection points from July 2010 until December 2010. The unit was shut down due to weather conditions and resumed operation in April 2011. The ozone AAS system was modified in December 2011 to allow uninterrupted operation during inclement winter weather (Plexus, 2012a). No appreciable reduction in total BTEX concentrations has been demonstrated during the operation of the ozone AAS system at Area 1295, indicating that the technology was not effective in treating the COCs, even after modifications to system operations were made. Operation of the ozone AAS system was discontinued on September 20, 2013 to evaluate alternative remedial strategies at the site, including bioaugmentation and anaerobic bioremediation.

1.1.2 Area 1595

Area 1595 was used as a fuel storage and dispensing facility from the late 1940s until the mid-1990s. During the early 1970s, a noticeable petroleum odor and sheen were reported at a spring (now known as Golden Pond) located approximately 500 feet (ft) northwest of Area 1595. In the 1970s, the USTs were removed and replaced. Fueling activities at Area 1595 were discontinued by 1994, when the fuel dispensing equipment was removed.

The three Area 1595 USTs were replaced in 1975. The USTs at Area 1595 were the suspected source of pollutants causing the odors. In 1975 the original two 12,000-gallon USTs and one 25,000-gallon steel UST containing diesel fuel were replaced with two 25,000-gallon USTs and one 12,000-gallon steel UST, which also contained diesel fuel. During the replacement event, a 1-inch diameter hole was discovered in one of the tar-coated type A-36 steel USTs. In the late 1970s, the piping between the USTs, the pump house, and nine fuel dispensers was replaced. A

truck dispensing station was also added at this time. At the time of the replacement, although a petroleum product release occurred, no measures were taken to delineate the extent or specific source(s) of the release.

In the early 1980s, in an attempt to contain the contamination observed in the stream downgradient of the USTs at Area 1595, Fort Drum personnel constructed a collection pond and an earthen dike at the discharge point of the spring to allow accumulation of light non-aqueous phase liquid (LNAPL). Absorbent booms were also placed downstream of the impoundment to capture any LNAPL that might pass beyond the dike. By November 1989, it was estimated that over 7,000 gallons of LNAPL had been collected from the impoundment (Petros, 1989).

In 1991, an Interim Remedial Action (IRA) was implemented at Area 1595. The IRA consisted of a treatment facility (Building 1599) that accepted groundwater from several recovery wells near the impoundment. Product in the wells was pumped into 500-gallon above ground storage tanks (ASTs) located near the recovery wells. Additional recovery wells were installed in 1994 and 1999 to remediate areas of the Area 1595 site and augment the system.

During October 1994, the two 25,000-gallon steel USTs, one 12,000-gallon steel UST, fuel dispensers, and approximately 520 linear ft of associated piping were removed from the site. Two 90-ft sections of pipe and a concrete vault were excavated and removed in July 1995.

The recovery well system was decommissioned in 2005 after removing nearly 8,000 gallons of LNAPL from the subsurface. To address persistent contamination in the soil and groundwater at Area 1595, Soil Vapor Extraction (SVE) and AAS systems were installed. These systems were deemed more effective in treating gasoline-hydrocarbon contamination sorbed to soil particles and dissolved in groundwater than the former system, which was designed for LNAPL removal. The SVE and AAS systems began operation in December 2005.

In 2009, ozone AAS technology was evaluated at this site and was implemented for two months from December 2009 through February 2010. A three-month pilot-test application of a Nitrogen: Phosphorous: Potassium (N: P: K) solution was applied to Area 1595 starting in January 2011, followed by a monthly application for an N: P: K solution from December 2011 through April 2012. System operation continued throughout the three-month pilot test of nutrient application, but was discontinued afterward due to observed asymptotic vapor recovery (Plexus, 2012a). Bioremediation with bioaugmentation is currently being conducted at Area 1595 (Plexus, 2012b).

1.1.3 Area 1795

Area 1795 was used as a fuel storage and dispensing facility from the late 1940s until the mid-1990s. Area 1795 housed two 25,000-gallon and one 12,000-gallon steel unleaded gasoline USTs. A pump house located within the fenced enclosure surrounding the USTs contained the

pumping equipment to deliver fuel products from the tanks to the dispensers located between Oneida and Ontario Avenues. During October 1994, three USTs, dispensing pumps, and approximately 520 linear ft of piping were removed from the fuel dispensing area. Two remaining 90-ft sections of pipeline were removed from the fuel dispensing area during July 1995 (Dow Environmental Inc., 1995).

The earliest report of petroleum contamination at Area 1795 was in a groundwater sample collected from 1795-MW6 in 1986. Subsurface investigations performed since that time have indicated that a dissolved-phase plume extends northwest and downgradient of the former fueling facility, as far as the Area 1795 Creek. Separate-phase product has also been reported in several wells and piezometers installed downgradient of the petroleum release area. The World War II (WWII) Landfill is an area of surface debris located approximately 1,200 ft west and downgradient of Area 1795. The landfill is situated in a wooded area, and is bounded by the Area 1795 Creek to the west. The landfill contained mounds of dumped domestic and construction debris.

Various environmental investigations and data collection activities have been performed at Area 1795 since 1989. These studies have included the installation of groundwater monitoring wells and piezometers; and the collection of groundwater, subsurface soil, soil vapor, surface water, and sediment samples for chemical analyses. In addition, remedial pilot studies have been conducted since 1997 to assess various remedial technologies, such as groundwater depression with separate-phase product recovery, separate-phase product skimming, air sparging, SVE, and bioslurping. A detailed description of previous investigations at Area 1795 can be found in the *Comprehensive Contaminant Assessment Report (CCAR), Volume IV* (EA Engineering, Science, and Technology [EA, 1998]).

Investigations performed at Area 1795 subsequent to the CCAR include a *Source Area Remedial Investigation Data Gap Study* at the former fueling facility sites along Gasoline Alley, a *Separate-Phase Product Plume Delineation/Data Gap Study*, and *a Bioslurping Pilot Study* (EA 1998, 2000, 2001). In addition to the investigations, a groundwater model was developed for the site (U.S. Army Corps of Engineers [USACE] and Waterways Experiment Station [WES], 1997).

A bio-slurping pilot treatment system was shut down in September 2000. Subsequently, select site wells were gauged monthly between September 2000 and July 2006 to monitor the water table elevation and LNAPL. LNAPL was recovered from site wells when present. Upon further evaluation, multi-phase extraction (MPE) and AAS technologies were selected to address the source area vadose zone soil, LNAPL, and saturated smear zone soil at Area 1795 for remediation of site-related contaminants. Site work for the installation of three new SVE/AAS remediation systems was completed between the Spring and Winter of 2007. Start-up and prove-

out of the MPE/SVE/AAS systems began in January 2008. The remedial systems were installed at the following locations:

- Area 1795 Zone 1, south of the railroad tracks, including the median between Oneida and Ontario Avenues (System A);
- Area 1795 Zone 2, north of the railroad tracks and east of the WWII Landfill (System B); and
- Area 1795 Zone 3, north of the WWII Landfill (System C).

Ozone AAS technology was evaluated at this site in February 2010. MPE/SVE/AAS system operation resumed afterward and continues currently (Plexus, 2012c). In June 2011, Plexus performed a membrane interface probe (MIP) investigation to further delineate the source of the total BTEX plume at 1795-MWS3 (Plexus, 2011a). From December 2011 through April 2012, a monthly N: P: K application pilot test was completed at Area 1795. Bioremediation with bioaugmentation is currently being conducted at Area 1795 (Plexus, 2012c).

1.1.4 Areas 1995 and 3805

The two fuel storage and dispensing facilities, Areas 1995 and 3805, operated from the 1940s until the early 1990s. Most recently, Area 3805 was used for the storage and dispensing of jet propellant fuel (JP-4) and Area 1995 was utilized for the storage and dispensing of diesel fuel. The contents of all USTs prior to the late 1980s are unknown. In November 1994 and July 1995, the fuel dispensing facilities were removed from the site (EA, 1998).

The two USTs at Area 1995 were replaced during the early 1970s. Piping and 10 fuel dispensers were replaced and a truck dispensing station was added during the late 1970s. The two USTs and dispensers at Area 3805 were replaced during the 1970s. During the early 1980s, the two USTs were replaced with steel tanks designed to store JP-4. Most recently, Area 1995 contained one 12,000-gallon and one 25,000-gallon diesel fuel tank, and Area 3805 contained two 12,000-gallon JP-4 tanks. All tanks and associated fuel dispensers were removed from the two areas in October 1994.

Numerous field investigations have been performed at Areas 1995 and 3805 to assess the nature and extent of COCs resulting from past site activities. These investigations have included soil vapor surveys; subsurface soil sampling; groundwater sampling; separate-phase product gauging and bail-down tests. In addition, several hydrogeologic investigations have also been performed to assess aquifer characteristics, including the physical characterization and geotechnical analysis of soil, gauging of water table elevations, the performance of slug tests and constant-rate aquifer tests, and the measurement of surface water flow volumes.

Residual petroleum hydrocarbons were reported in vadose zone soil at the former fuel storage and dispensing facilities. Well gauging activities indicated that separate-phase product plumes

existed hydraulically downgradient of all the former fueling facilities. Seasonal movement of the water table created a "smear zone" of residual petroleum product within the subsurface soil. The areal distribution of product was estimated at approximately 400,000 square feet (ft^2) for the Area 3805 plume, and 25,000 ft^2 for the Area 1995 product plume. Historically, product has been reported in wells located approximately 1,100 ft downgradient from the former fueling facilities. The apparent product thicknesses ranged from a sheen of product (<0.01 ft) to approximately 5 ft. Most of the groundwater contamination exists in the upper-most portion of the shallow aquifer.

Several remedial pilot studies have been conducted at Areas 1995 and 3805, including SVE, groundwater depression/ LNAPL recovery, mobile skimmer/LNAPL recovery, bioslurping, and MPE/AAS. In addition to pilot studies, interim corrective measures have also been implemented. An interim corrective action involving a LNAPL recovery system was installed in 1996; this system was decommissioned in April 2003. An MPE/AAS system was installed in the source areas (extent of LNAPL) in Areas 3805 and 1995. A detailed description of previous investigations at Areas 1995 and 3805 can be found in the *CCAR, Volume V* (EA, 1998).

MPE and AAS technologies were selected to address the source area vadose zone soil, LNAPL, and saturated smear zone soil at Areas 3805 and 1995. The remedial systems were installed at the locations described below:

- Area 3805 north, directly south of New York State Route 26 (System A)
- Area 3805 south, remaining portion of Area 3805 south of New York State Route 26 (System B)
- Area 3805, north of New York State Route 26 (System C)
- Area 1995 (System D)

The Area 3805 MPE/AAS systems were started in November 2003 (Systems A and B) and October 2003 (System C). The Area 1995 MPE/AAS system (System D) was started in May 2004 and was discontinued by 2008. The AAS system was expanded in 2007 to enhance remediation of the dissolved plume in the downgradient area of the site and improve the performance of System C. Field activities associated with the AAS system expansion were completed between May and August 2007, which consisted of the installation of 18 AAS wells and associated underground piping, and retrofitting the existing trailer.

The results from the Fall 2010 groundwater sampling event, combined with the soil gas screening conducted during a Fall 2010 intrusive investigation, indicated vadose zone soil contamination persists above the existing, active treatment system. Plexus modified select vertical extraction wells into horizontal extraction wells in March 2012 to provide a recovery and treatment solution for the shallower impacted soil. Additionally, on December 13, 2011, Plexus implemented a five month nutrient application trial in conjunction with AAS system operations.

In June 2011, Plexus performed a MIP investigation to further delineate the source of the total BTEX plume at Area 3805 (Plexus, 2011a). Currently, use of System AB AAS has been discontinued while bioremediation with bioaugmentation is being conducted at Area 3805 (Plexus, 2013a).

1.2 Army Air Force Exchange Service (AAFES) Station (Building P-2140) Site Description

The AAFES Station, Building P-2140, is an active retail gasoline facility, and is located in the southwest corner of Fort Drum at the intersection of Nash Boulevard and First Street West.

In October 1993, OP-TECH Environmental Services, Inc. (OP-TECH) removed five USTs and associated piping at AAFES Station Site, Building P-2140. During the removal of these tanks, it was found that the soil in the tank area and near the associated dispenser piping had been contaminated by gasoline. OP-TECH removed 311 tons of gasoline-contaminated soil from the tanks and dispenser areas. The site was not excavated to clean soil due to the extensive amount of contamination.

During the initial site investigation, a soil vapor survey was conducted to assess the presence of VOCs in unsaturated zone soil in the areas potentially impacted from historical usage, and to provide guidance in the selection of soil boring/monitoring well locations. Based on the results of a vertical profile in the vicinity of the former UST excavation, a target depth of 10 ft below ground surface (bgs) was selected for obtaining soil vapor samples. A total of 31 soil vapor samples from 25 sample locations were obtained and analyzed in the field for the presence of BTEX; the samples were also quantified for total volatile hydrocarbons (TVH). The distribution of reported TVH concentrations indicated the presence of three areas of elevated soil vapor concentrations. The first area, located in the vicinity of the former UST excavation, exhibited the highest reported BTEX and TVH concentrations, at 3,210 parts per million by volume (ppmv) and 8,600 ppmv, respectively. The second area of elevated soil vapor readings was located immediately southwest of the fuel dispenser island and north-northwest of the former UST excavation, with reported concentrations of BTEX and TVH at 172 ppmv and 2,400 ppmv, respectively. The third area of elevated BTEX and TVH concentrations was located southeast of the AAFES Station Site, Building P-2140, with reported BTEX and TVH concentrations of 15 ppmv and 22 ppmv, respectively. The analytical data from soil samples collected indicated residual petroleum-related hydrocarbons were present in vadose zone soil in the area immediately southwest of the fuel dispenser island (2140-MW02; 15 to 17 ft bgs), and the area of the former UST excavation (2140-MW03; 8 to 10 ft bgs).

As presented by EA in 1994, based on the initial site investigation, an area of petroleum-impacted soil and LNAPL extends from the fuel dispenser pad, approximately 150 ft to the southeast to monitoring well 2140-MW05, which is located beyond the line of extraction wells (EX-2140-02 through EX-2140-05). This impacted area corresponds to an overall area of

approximately 8,450 ft^2. Petroleum-impacted soil in the vicinity of the former product lines and the former UST field extends from the release point down to the groundwater table (i.e., approximately 6 to 23 ft bgs) and is estimated to encompass an area of approximately 2,530 ft^2. Petroleum-impacted soil located hydraulically downgradient of the former UST field is present in a 4-ft interval situated above the groundwater table (i.e., approximately 19 to 23 ft bgs) and is estimated to encompass an area of approximately 5,920 ft^2. The estimated volume of subsurface soil targeted for corrective action was estimated to be 2,790 cubic yards (EA, 2000).

A dual-phase extraction (DPE) treatment system began operation on January 30, 2002. The objective of the DPE system was to address LNAPL and residual soil contamination in the source area of the AAFES Station Site, Building P-2140. In order to improve the performance of the DPE system, an AAS system was installed in the source area in 2006 to enhance remediation of the dissolved-phase plume by addressing residual soil contamination below the water table, and increasing contaminant recovery rates during elevated water table periods. Field activities associated with the DPE system enhancements were completed between November 2005 and February 2006, which included the installation of 16 AAS wells and associated underground piping, and retrofitting the existing trailer with AAS equipment.

Downgradient of the source area, an AAS with ozone treatment system was installed in Fall 2000. The AAS ozone treatment system began operation on December 14, 2000. The purpose of the AAS ozone treatment system was to treat the dissolved-phase total BTEX and methyl tert-butyl ether (MTBE) plume downgradient of the source area. In March 2009, the AAS ozone treatment system was implemented, and a request for the system to be shut down was submitted to NYSDEC.

In a March 2009 letter, NYSDEC concurred with the Army's request for shut down of the ozone system at AAFES Station Site, Building P-2140. As part of that concurrence, NYSDEC requested that a Post-Termination Monitoring Program be implemented for a period of three years following the shut down, including sampling five monitoring wells and two surface water locations. Following three years of post-termination monitoring (2009 to 2012), the post-termination monitoring program was discontinued based on analytical results (Plexus, 2013b).

In August 2009, Plexus implemented ozone AAS as an alternative technology in the source area of the BTEX plume. Plexus installed seven ozone injection points ranging between 25 to 30 ft bgs in the area of monitoring wells 2140-MW02 and 2140-MW37. The DPE/AAS system was deactivated on December 22, 2009 in preparation for ozone injection activities. In December 2011, Plexus implemented a five-month nutrient application at the site. Following the nutrient application trial, Plexus continued ozone system operations. The ozone treatment unit began operation on December 22, 2009, and was operating at the site until September 20, 2013. Use of the ozone treatment system was discontinued at the AAFES Station Site, Building P-2140, in

preparation for implementation of bioremediation with bioaugmentation at the site (Plexus, 2013c).

1.3 Sanitary Landfill Site Descriptions

1.3.1 Airfield Sanitary Landfill (ASL)

The ASL is a 37-acre closed landfill located southeast of Wheeler Sack Army Airfield. Quarterly monitoring was initiated in 1994 in accordance with NYSDEC requirements. In 1999, the soil cover was re-graded to improve drainage and 18 inches of soil cover was added. In 2001, Fort Drum conducted groundwater trend analysis, which verified the earlier insignificant impact findings. Plexus performed maintenance of the cap at the ASL in 2009, which consisted of re-grading three areas. Annual landfill inspections and groundwater sampling every five-years (last completed in 2011) continues, as required by the *ASL Post-Closure Monitoring and Maintenance Operations Manua*l (CDM, 1997) and *2009 Annual Basewide Field Sampling Plan* (Plexus, 2009), respectively.

1.3.2 Old Sanitary Landfill (OSL)

The OSL is an approximately 50-acre closed landfill consisting of two cells located on the north side of New York Route 26. Both cells are capped with synthetic covers. The geosynthetic cap for Cell 2 was installed during the Summer of 2008. Leachate from the OSL commingles with the dissolved-phase petroleum constituent plume originating at Area 3805, and discharges to the OSL Creek via seeps in the face of the ravine on the north side of the OSL. The primary contaminant in the leachate is total BTEX. In 2009, Plexus completed additional cap improvement work on Cell 2 to provide sufficient fill and grading to maintain a minimum cap thickness of 16 inches above the liner. All improvement work was completed on the OSL Cell 2 cap by November 2009.

A pilot study phytoremediation program was undertaken in 2004, and subsequently expanded to encompass the length of the OSL Creek and the unnamed creek located between Cells 1 and 2. As part of the phytoremediation program, approximately 22,000 willow shrubs were planted to absorb the leachate and groundwater discharging through the ravine face on the north side of Cell 2.

In October 2011, Plexus performed reconstruction of the northern slope of the OSL Cell 2 to repair a slope disturbance that occurred sometime in the late Spring of 2011. Modifications to the drainage features of the landfill are summarized in the *Work Plan for Old Sanitary Landfill Cap Repair, Fort Drum Military Installation* (Plexus, 2011b).

2.0 GROUNDWATER AND SURFACE WATER MONITORING ACTIVITIES

The 2013 semi-annual basewide groundwater and surface water monitoring activities included Gasoline Alley (Areas 1295, 1595, 1795, 1995, and 3805), the AAFES Station (Building P-2140), and the OSL. The 2013 semi-annual basewide monitoring program was conducted during the Spring (May 20 - May 23, 2013) and Fall (September 23 - October 1, 2013). Field activities were performed in accordance with procedures described in the *Environmental Investigation for Fort Drum, Quality Assurance Program Plan* (QAPP; Plexus, 2008). The 2013 semi-annual basewide monitoring program events were coordinated and performed by Plexus personnel. All field activities were coordinated with Fort Drum Public Works Environmental Division personnel.

2.1 Well Gauging Activities

All wells associated with the active Installation Restoration Program sites were gauged during the Spring and Fall 2013 basewide monitoring program events. The gauging events also included an evaluation of monitoring well condition, confirmation of well construction, and an assessment of sediment build-up. Gauging data collected from the accessible wells during the Spring and Fall 2013 basewide monitoring program events are summarized in **Table 2-1** and **Table 2-2**, respectively. The associated Field Gauging Sheets have been included in **Appendix A**.

All remediation systems were shut down two to three days prior to the gauging events to allow sufficient time for water table recovery where drawdown had occurred due to active remediation. All systems were brought back on-line once the sampling event was complete. Wells were gauged using a standard interface probe that evaluated the presence or absence of LNAPL and measured the thickness of LNAPL when present.

2.2 Groundwater Sampling Activities

Low-flow purging (minimal drawdown) and sampling were used to obtain representative groundwater samples from the formation adjacent to the well screen. Sampling was conducted in accordance with U. S. Environmental Protection Agency (USEPA) approved Region II groundwater sampling procedures (USEPA, 1998). In accordance with Region II guidelines, an electrical submersible centrifugal pump was slowly lowered into the well to the middle of the submerged portion of the screened interval. The pump was slowly lowered to minimize excessive mixing of the stagnant water in the casing above the screen with the screened interval zone water, and to minimize re-suspension of solids that may have collected at the bottom of the well. Water quality parameters monitored throughout purging included temperature, potential of Hydrogen (pH), specific conductance (conductivity), turbidity, dissolved oxygen (DO), and oxidation-reduction potential (ORP). Purging/sampling techniques, water quality parameters, and sample collection notes are summarized in the attached Well Purge Logs (**Appendix B**).

Groundwater samples and all associated quality assurance/quality control samples were submitted to Accutest Laboratories of Dayton, New Jersey, for the specified analyses outlined in the *2009 Annual Basewide Field Sampling Plan* (Plexus, 2009).

2.3 Surface Water and Landfill Seep Sampling Activities

Surface water and landfill seep sampling activities were conducted on September 29, 2013. Plexus field personnel collected surface water samples from three locations along the Area 1595 creek and three surface water samples from locations along the Area 1795 creek (**Figure 2-1**). All field activities were conducted in accordance with the Basewide QAPP (Plexus, 2008), the *2009 Annual Basewide Sampling Plan* (Plexus, 2009) and the *Field Sampling Plan Addendum for the AAFES Station Site, Building P-2140* (Plexus, 2013b). Two landfill seep samples and three surface water samples were collected from the OSL Area (**Figure 2-2**), and are reported in the *2013 Annual Post-Closure Operations and Maintenance Report for the OSL & ASL* (Plexus, 2014), located in **Appendix C**. All surface water and landfill seep samples were shipped to Accutest Laboratories of Dayton, New Jersey, for analysis. Field water quality parameters measured at each location included temperature, pH, specific conductance (conductivity), turbidity, DO, and ORP.

3.0 2013 RESULTS

The Spring and Fall 2013 groundwater gauging results are outlined in **Table 2-1** and **Table 2-2,** respectively. DO, ORP and ferrous iron results, which are important to Monitored Natural Attenuation (MNA) analysis, are summarized for the 2013 Spring and Fall events in **Tables 3-1** and **3-2,** respectively. The groundwater and surface water analytical data discussed in Sections 3.1 through 3.3 below are summarized in **Tables 3-3** through **3-8**. The associated Calibration Logs and Laboratory Analytical and Data Validation Reports are attached in **Appendix D** and **Appendix E**, respectively. **Appendix F** contains the Full Analytical Results.

3.1 Gasoline Alley

3.1.1 Area 1295

The average groundwater elevation at Area 1295 was 625.43 ft above Mean Sea Level (MSL) during the Spring event, and 624.79 ft above MSL during the Fall event. Groundwater flow at Area 1295 was generally to the north-northwest. The Spring and Fall 2013 groundwater contours at Area 1295 are illustrated in **Figure 3-1** and **Figure 3-2**, respectively. LNAPL was not observed at Area 1295 during either event.

Groundwater at Area 1295 was analyzed for VOCs and MNA parameters during the Spring event, and for VOCs, MNA parameters, SVOCs, and metals during the Fall event. The highest total BTEX concentration detected in the sampled wells at Area 1295 during the Spring event was 5,349 micrograms per liter (µg/L) in monitoring well 1295-MW30, with an increase to 6,799.3 µg/L in the same well during the Fall event. The Spring and Fall 2013 total BTEX concentrations and the associated total BTEX plume at Area 1295 are illustrated in **Figure 3-3** and **Figure 3-4**, respectively. Analytes that exceeded screening criteria at Area 1295 include petroleum-range organics and iron; **Tables 3-3** through **3-8** summarize all detected analytes in groundwater at Area 1295 and the associated screening criteria. The Spring and Fall 2013 MNA parameter concentrations at Area 1295 are illustrated in **Figure 3-5** and **Figure 3-6**, respectively.

3.1.2 Area 1595

3.1.2.1 Groundwater Results

The average groundwater elevation at Area 1595 was 622.19 ft above MSL during the Spring event, and 621.42 ft above MSL during the Fall event. Groundwater flow at Area 1595 was generally to the northwest. The Spring and Fall 2013 groundwater contours at Area 1595 are illustrated in **Figure 3-7** and **Figure 3-8**, respectively. LNAPL was not observed during either event at Area 1595.

Groundwater at Area 1595 was analyzed for VOCs and MNA parameters during the Spring and Fall events. The highest total BTEX concentration detected in the sampled wells at Area 1595 during the Spring event was 1,690 µg/L in monitoring well 1595-PZ12, with a decrease to 1,175 µg/L in the same well during the Fall event. The Spring and Fall 2013 total BTEX concentrations and the associated total BTEX plume at Area 1595 are illustrated in **Figure 3-9** and **Figure 3-10**,

respectively. Analytes that exceeded screening criteria at Area 1595 include petroleum-range organics, iron, and manganese; **Tables 3-3** through **3-8** summarize all detected analytes in groundwater at Area 1595 and the associated screening criteria. The Spring and Fall 2013 MNA parameter concentrations at Area 1595 are illustrated in **Figure 3-11** and **Figure 3-12**, respectively.

3.1.2.2 Surface Water Results

Two surface water samples, 1595-SW01 and –SW04, were collected at Area 1595 during the Fall event and were analyzed for VOCs, SVOCs, iron, lead, and hardness. The highest total BTEX concentration detected at the sampled surface water locations at Area 1595 was 11.3 µg/L at 1595-SW01; BTEX was not detected at surface water location 1595-SW04. Of the BTEX components detected at 1595-SW01, only total xylenes exceeded applicable screening criteria. The only other analyte to exceed applicable screening criteria was the nutrient metal iron at both 1595-SW01 and -SW04. **Tables 3-4, 3-5, 3-6,** and **3-8** summarize all detected analytes in surface water at Area 1595 and associated screening criteria. Total BTEX concentrations in surface water at Area 1595 are illustrated in **Figure 3-10**.

3.1.3 Area 1795 (Including WWII Landfill)

3.1.3.1 Groundwater Results

The average groundwater elevation at Area 1795 was 632.29 ft above MSL during the Spring event, and 631.32 ft above MSL during the Fall event. Groundwater flow at Area 1795 was generally to the west-northwest. The Spring and Fall 2013 groundwater contours at Area 1795 are illustrated in **Figure 3-13** and **Figure 3-14**, respectively. LNAPL was observed during the Fall event at Area 1795 in 1795-MWS6 and 1795-PZ6 at thicknesses of 0.45 ft and 0.09 ft, respectively.

Groundwater was analyzed for VOCs and MNA parameters at Area 1795 during the Spring and Fall events; groundwater was only analyzed for VOCs at the two WWII Landfill wells during the Fall event. The highest total BTEX concentration detected in the sampled wells at Area 1795 was 4,465 µg/L in monitoring well 1795-MWS7 during the Spring event, with a decrease in the same well to 2,220.3 µg/L during the Fall event. The Spring and Fall 2013 total BTEX concentrations and the associated total BTEX plume at Area 1795 are illustrated in **Figure 3-15** and **Figure 3-16**, respectively. Analytes that exceeded screening criteria at Area 1795 include petroleum-range organics, iron, and manganese. Monitoring well 1795-MWD13 is the only well in which tetrachloroethene (PCE) was detected, and it exceeded applicable screening criteria during the Fall event at a concentration of 27.8 µg/L. **Tables 3-3** through **3-8** summarize all detected analytes in groundwater and the associated screening criteria. The Spring and Fall 2013 MNA parameter concentrations are illustrated in **Figure 3-17** and **Figure 3-18**, respectively.

3.1.3.2 Surface Water Results

Two surface water samples (1795-SW00 and –SW04) were collected at Area 1795 during the Fall event and were analyzed for VOCs, SVOCs, iron, lead, and hardness. The only analyte

detected in Area 1795 surface water samples, which also exceeded screening criteria, was the nutrient metal iron, in both 1795-SW00 and –SW04. **Tables 3-4, 3-5, 3-6,** and **3-8** summarize all detected analytes in surface water at Area 1795 and associated screening criteria. Total BTEX concentrations at Area 1795 are illustrated in **Figure 3-16**.

3.1.4 Areas 1995 and 3805

The average groundwater elevation for the shallow aquifer in the vicinity of Areas 1995 and 3805 was 633.35 ft above MSL during the Spring event, and 632.60 ft above MSL during the Fall event. Groundwater flow in the vicinity of Areas 1995 and 3805 was generally to the north. The Spring and Fall 2013 groundwater contours in the vicinity of Areas 1995 and 3805 are illustrated in **Figure 3-19** and **Figure 3-20**, respectively. LNAPL was observed in 3805-PZ10 at a thickness of 0.01 ft during the Spring event, and at a thickness of 0.06 ft during the Fall event.

Groundwater at Areas 1995 and 3805 was analyzed for VOCs and MNA parameters during the Spring event, and VOCs, MNA parameters, SVOCs, and metals during the Fall event. The highest total BTEX concentration detected in the sampled wells at Area 1995 and 3805 was 27,040 µg/L in monitoring well 3805-PZ14 during the Spring event, with a decrease to 26,260 µg/L during the Fall event. The Spring and Fall 2013 total BTEX concentrations and the associated total BTEX plume at Areas 1995 and 3805 are illustrated in **Figure 3-21** and **Figure 3-22**, respectively. Analytes that exceeded screening criteria include petroleum-range organics, acetone, chloroform, PCE, trichloroethene (TCE), iron, manganese, and sodium. **Tables 3-3** through **3-8** summarize all detected analytes in groundwater and the associated screening criteria. The Spring and Fall 2013 MNA parameter concentrations are illustrated in **Figure 3-23** and **Figure 3-24**, respectively.

3.2 Army Air Force Exchange Service (AAFES) Station (Building P-2140)

The average groundwater elevation at the AAFES Station, Building P-2140, was 609.52 ft above MSL during the Spring event, and 608.83 ft above MSL during the Fall event. Groundwater flow at the AAFES Station, Building P-2140, was generally to the southeast. The Spring and Fall 2013 groundwater contours at the AAFES Station, Building P-2140, are illustrated in **Figure 3-25** and **Figure 3-26**, respectively. LNAPL was not observed at the AAFES Station (Building P-2140) during either event.

Groundwater was analyzed for VOCs and MNA parameters at the AAFES Station, Building P-2140, during the Spring and Fall events. MTBE was included as part of the VOC analyses specific to the AAFES Station, Building P-2140. The highest total BTEX concentration detected in the sampled wells at the AAFES Station, Building P-2140, was 9,785.4 µg/L in monitoring well 2140-MW06 during the Spring event, with an increase to 13,255 µg/L in monitoring well 2140-MW37 during the Fall event. The Spring and Fall 2013 total BTEX concentrations and the associated total BTEX plume at the AAFES Station, Building P-2140, are illustrated in **Figure 3-27** and **Figure 3-28**, respectively. MTBE was not detected during either event. Analytes that

exceeded screening criteria include petroleum-range organics, acetone, iron, and manganese. **Tables 3-3** through **3-8** summarize all detected analytes in groundwater and the associated screening criteria. The Spring and Fall 2013 MNA parameter concentrations are illustrated in **Figure 3-29** and **Figure 3-30**, respectively.

3.3 Sanitary Landfills

Groundwater, surface water, and seep analyses for both cells of the OSL were collected during the Fall event. The results of these analyses are shown in **Tables 3-4** through **3-6** and **Table 3-8,** and reported in the *2013 Annual Post-Closure Operations and Maintenance Report for the OSL & ASL* (Plexus, 2014) located in **Appendix C**.

4.0 SUMMARY AND DISCUSSION

The goals of the basewide monitoring program are to fulfill current regulatory requirements, update site conceptual models, and evaluate the effectiveness of current remediation systems. The following sections provide an overview discussion of the monitoring results and provide an outline for future monitoring, characterization, and remediation of all sites under the basewide monitoring program.

In general, iron and manganese exceeded groundwater screening criteria at all sites in this report due to the high level of background iron and manganese in the formation sediments. These metals leach from the formation sediments and dissolve into groundwater due to aquifer conditions consistent with biological activity resulting from anoxic, reducing conditions within the contaminant plume.

Site remediation activities have been summarized in the *Quarterly Reports of Progress Operations and Maintenance Systems for Gasoline Alley and Army Air Force Exchange Service Station* (Plexus, 2013d; 4th Quarter 2012 through 3rd Quarter 2013). Remediation activities include the operation and maintenance of active systems and the delivery of micro-nutrients to augment biological activity.

On average, by site, groundwater elevations were 0.65 ft to 0.97 higher during the Spring than in the Fall. This elevation change is reflective of the seasonal variation in precipitation, the onset of extensive snow melting, and thawing of the frozen subsurface.

4.1 Gasoline Alley

4.1.1 Area 1295

Semi-annual groundwater gauging measurements collected at Area 1295 show that average groundwater elevations were 0.65 ft higher during the Spring 2013 event than the Fall 2013 event.

Historical total BTEX data from Area 1295 monitoring wells that exceed screening criteria (**Figure 4-1**) generally demonstrate decreasing or static constituent concentration trends. Plume monitoring well 1295-MW30 has decreased in total BTEX concentration from 14,400 µg/L in Fall 2006 to 6,799.3 µg/L in Fall 2013.

MNA parameter data collected at Area 1295 during both 2013 events (**Figures 3-5** and **3-6**) show that groundwater exhibits an anoxic and reducing environment within the contaminant plume. The MNA parameter data show biological activity is occurring and aerobic respiration is using up all available oxygen within the contaminant plume.

Although the bulk of contamination at Area 1295 has been removed by previous remedial action, the ozone AAS recovery of contaminant mass at Area 1295 has become asymptotic after all optimization efforts were implemented. Therefore, in a recently submitted *Bioaugmentation Pilot*

Study Remedial Action Work Plan (RAWP; Plexus, 2013e) for Area 1295, the Army recommended a change to the following remedial action: enhancement of anaerobic bioremediation and bioaugmentation of the indigenous microbial population.

The current semi-annual groundwater monitoring program at Area 1295 has sufficiently characterized the dissolved-phase contamination. Therefore, the monitoring program (Plexus, 2009) will remain unchanged for 2014, and will continue on a semi-annual basis in order to assess plume stability and develop baseline trend data for any potential future recommendations.

4.1.2 Area 1595

Semi-annual groundwater gauging measurements collected at Area 1595 show that average groundwater elevations were 0.77 ft higher during the Spring 2013 event than the Fall 2013 event.

Historical total BTEX data from Area 1595 monitoring wells that exceed screening criteria (**Figure 4-2**) generally demonstrate decreasing or static constituent concentration trends. Only at wells within the core of the contaminant plume, 1595-PZ9, -PZ12, and -PZ13, where total BTEX has historically demonstrated decreasing trends, were increasing trends demonstrated. These increasing total BTEX trends at 1595-PZ9, -PZ12, and -PZ13 began in Fall 2012. Plexus attributes this increasing trend to the exceptionally low groundwater elevations at Fort Drum following the Spring 2012 sampling event, which have allowed for mobilization of previously trapped, isolated pockets of LNAPL out of pore spaces, as evidenced by measurable product in nearby well 1595-OBG2 during the Fall 2012 monitoring event (Plexus, 2013f).

No results from the Area 1595 surface water samples collected in 2013 exceeded screening criteria, with the exception of the nutrient metal iron in both samples and a slight exceedance of total xylenes (by 3.2 µg/L) in sample 1595-SW01.

MNA parameter data collected during both 2013 events (**Figures 3-11** and **3-12**) show that groundwater exhibits an anoxic and reducing environment within the contaminant plume. The MNA parameter data show biological activity is occurring and aerobic respiration is using up all available oxygen within the contaminant plume.

Although the bulk of contamination at Area 1595 has been removed by previous remedial action, the SVE and AAS system at Area 1595 has become asymptotic after all optimization efforts were implemented. Therefore, in a recently submitted *Bioaugmentation Pilot Study RAWP* (Plexus, 2012b) for Area 1595, the Army recommended a change to the following remedial action: enhancement of anaerobic bioremediation and bioaugmentation of the indigenous microbial population.

The current semi-annual groundwater monitoring program at Area 1595 has sufficiently characterized the dissolved-phase contamination. Therefore, the monitoring program (Plexus, 2009) will remain unchanged for 2014, and will continue on a semi-annual basis in order to assess plume stability and develop baseline trend data for any potential future recommendations.

4.1.3 Area 1795

Semi-annual groundwater gauging measurements collected at Area 1795 show that average groundwater elevations were 0.97 ft higher during the Spring 2013 event than the Fall 2013 event.

With low BTEX levels at monitoring well 1795-MWS11, the plume has bifurcated, showing two distinct hot spots of total BTEX: one hot spot is located around monitoring well 1795-MWS7, and the second hot spot is located around monitoring well 1795-MWS3.

At all monitoring wells exceeding screening criteria, historical total BTEX data (**Figure 4-3**) demonstrate decreasing constituent concentration trends. The monitoring well located in the historic source area of the plume, 1795-MWS7, has decreased in total BTEX concentration from 25,785 µg/L in Fall 2008 to 2,220.3 µg/L in Fall 2013. The monitoring well located at the second hotspot northeast of the historic source location, 1795-MWS3, has decreased in total BTEX concentration from 9,255 µg/L in Fall 2008 to 1,675.4 µg/L in Fall 2013.

MNA parameter data collected during both events (**Figures 3-17** and **3-18**) show that groundwater exhibits an anoxic and reducing environment within the contaminant plume. The MNA parameter data show biological activity is occurring and aerobic respiration is using up all available oxygen within the contaminant plume.

No results from the Area 1795 surface water samples collected in 2013 exceeded screening criteria, with the exception of the nutrient metal iron.

The bulk of contamination at Area 1795 has been removed by previous remedial action, and the SVE and AAS system at Area 1795 continues to remove hydrocarbon mass from the groundwater. Although historic nutrient addition has not had a significant impact on COC concentrations in groundwater, the presence of indigenous microbes identified as petroleum degraders has led the Army to recommend enhancement of anaerobic bioremediation and bioaugmentation of the indigenous microbial population while continuing SVE and AAS, as described in a recently submitted *Bioaugmentation Pilot Study RAWP* (Plexus, 2012c) for Area 1795.

The current semi-annual groundwater monitoring program at Area 1795 is sufficient to characterize the dissolved-phase contamination at the site. Therefore, the monitoring program (Plexus, 2009) will remain unchanged for 2014, and will continue on a semi-annual basis in order to assess plume stability and develop baseline trend data for any potential future recommendations.

4.1.4 Areas 1995 and 3805

Semi-annual groundwater gauging measurements collected at Areas 1995 and 3805 show that average groundwater elevations were 0.75 ft higher during the Spring 2013 event than the Fall 2013 event.

At most monitoring wells exceeding screening criteria, historical total BTEX data (**Figure 4-4**) demonstrate static or decreasing constituent concentration trends, with two exceptions: 3805-MWI9 and –PZ13S. Plexus attributes these increasing trends to the migration of the dissolved-phase total BTEX plume through advection and dispersion.

Impact from PCE at Area 3805 is currently undergoing remedial investigation by Plexus and PARS Environmental Inc. under a different contract. These remedial investigation findings are being treated as a new site, and are not to be part of this report.

MNA parameter data collected during both events (**Figures 3-23** and **3-24**) show that groundwater exhibits an anoxic and reducing environment within the contaminant plume. The MNA parameter data show biological activity is occurring and aerobic respiration is using up all available oxygen within the contaminant plume.

The bulk of contamination at Areas 1995 and 3805 has been removed by previous remedial action, and the SVE and AAS systems at Areas 1995 and 3805 continue to remove hydrocarbon mass from the groundwater. Although historic nutrient addition has not had a significant impact on COC concentrations in groundwater, the presence of indigenous microbes identified as petroleum degraders has led the Army to recommend enhancement of anaerobic bioremediation and bioaugmentation of the indigenous microbial population while continuing SVE and AAS, as described in a recently submitted *Bioaugmentation Pilot Study RAWP* (Plexus, 2013a) for Areas 1995 and 3805.

The current semi-annual groundwater monitoring program at Areas 3805 and 1995 is sufficient to characterize the dissolved-phase contamination at the site. Therefore, the monitoring program (Plexus, 2009) will remain unchanged for 2014, and will continue on a semi-annual basis in order to assess plume stability and develop trend data for any potential future recommendations.

4.2 Army Air Force Exchange Service (AAFES) Station (Building P-2140)

Semi-annual groundwater gauging measurements collected at the AAFES Station, Building P-2140, show that average groundwater elevations were 0.69 ft higher during the Spring 2013 event than the Fall 2013 event.

At monitoring wells exceeding screening criteria, historical total BTEX data (**Figure 4-5**) generally demonstrate decreasing constituent concentration trends, and no increasing trends were observed at the site. Monitoring well 2140-MW07, located in the source area of the plume, has decreased in total BTEX concentration from 32,106 µg/L in Fall 2008 to 9,739.5 µg/L in Fall 2013. MNA parameter data collected during the Fall event (**Figure 3-30)** show that groundwater exhibits an anoxic and reducing environment within the contaminant plume. The MNA parameter data show biological activity is occurring and aerobic respiration is using up all available oxygen within the contaminant plume.

Although the bulk of contamination at the AAFES Station, Building P-2140, has been removed by previous remedial action, the DPE and ozone AAS system at the AAFES Station, Building P-2140, have become asymptotic after all optimization efforts were implemented. Therefore, in a recently submitted *Bioaugmentation Pilot Study RAWP* (Plexus, 2013c) for the AAFES Station, Building P-2140, the Army recommended a change to the following remedial action: enhancement of anaerobic bioremediation and bioaugmentation of the indigenous microbial population.

There has not been a screening criteria exceedance for MTBE at any monitoring well at the AAFES Station, Building P-2140, since September 30, 2009, when sample 2140-MW19 had a MTBE concentration of 0.56 µg/L. Therefore, Plexus recommends removing analysis of MTBE from the sampling program for the AAFES Station, Building P-2140. Otherwise, the current semi-annual groundwater monitoring program at the AAFES Station, Building P-2140, has been sufficient to characterize for the dissolved-phase contamination at the site. Therefore, with the exception of removing MTBE from the sampling program, the monitoring program at the AAFES Station, Building P-2140 (Plexus, 2009; Plexus, 2013b) will remain unchanged for 2014, and will continue on a semi-annual basis in order to assess plume stability and develop trend data for any potential future recommendations.

4.3 Sanitary Landfills

Groundwater, surface water, and seep analyses for the OSL were collected during the Fall 2013 event. The results of these analyses are reported in the *2013 Annual Post-Closure Operations and Maintenance Report for the OSL & ASL* (Plexus, 2014) located in **Appendix C**.

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TABLES

Table 2-1 - Well/Piezometer Gauging Data for Spring 2013

Well ID	Ground Surface Elevation (ft MSL)	Top of Casing Elevation (ft MSL)	Gauging Event Date	Depth to Water (ft btoc)	Groundwater Elevation (ft MSL)
1295-003	632.03	633.87	5/22/13	11.39	622.48
1295-MW25	634.37	635.85	5/22/13	10.68	625.17
1295-MW26	637.20	639.49	5/22/13	10.90	628.59
1295-MWS27	635.45	635.29	5/22/13	7.89	627.40
1295-MWS28	634.73	636.77	5/22/13	12.11	624.66
1295-MWS29	633.63	635.95	5/22/13	11.41	624.54
1295-MW30	634.03	635.85	5/22/13	10.65	625.20
1595-MW3	636.10	638.41	5/20/13	12.95	625.46
1595-MW3A	639.30	641.81	5/20/13	14.36	627.45
1595-MW5	633.70	636.49	5/20/13	15.39	621.10
1595-MW33	636.10	637.90	5/20/13	10.98	626.92
1595-MW34	638.90	640.92	5/20/13	13.87	627.05
1595-MW35	641.70	643.60	5/20/13	13.39	630.21
1595-MWD4	634.50	637.02	5/20/13	12.54	624.48
1595-MWD5	626.61	628.79	5/20/13	8.06	620.73
1595-MWD6	638.07	638.31	5/20/13	18.19	620.12
1595-MWS1	613.26	615.62	5/20/13	9.15	606.47
1595-MWS2	640.04	642.18	5/20/13	14.38	627.80
1595-MWS7	626.80	629.00	5/20/13	8.20	620.80
1595-MWS8	628.90	630.80	5/20/13	8.45	622.35
1595-MWS9	621.00	623.20	5/20/13	4.40	618.80
1595-OBG1	637.20	638.75	5/20/13	16.95	621.80
1595-OBG2	635.50	637.98	5/20/13	11.40	626.58
1595-OBG3	634.63	636.87	5/20/13	12.69	624.18
1595-OBG4	639.20	640.85	5/20/13	15.58	625.27
1595-OBG5	625.00	626.73	5/20/13	14.31	612.42
1595-OBG6	627.00	629.01	5/20/13	7.83	621.18
1595-OBG7	619.90	621.85	5/20/13	6.18	615.67
1595-OBG8	632.30	634.00	5/20/13	7.99	626.01
1595-OBG9	635.30	637.09	5/20/13	9.95	627.14
1595-PZ1	629.70	631.53	5/20/13	10.41	621.12
1595-PZ4	629.26	631.50	5/20/13	9.24	622.26
1595-2PZ5	635.29	637.92	5/20/13	10.44	627.48
1595-PZ7	635.50	637.04	5/20/13	17.06	619.98
1595-PZ8	628.40	630.29	5/20/13	11.26	619.03
1595-PZ9	628.90	630.77	5/20/13	8.10	622.67
1595-PZ10	638.50	640.33	5/20/13	14.31	626.02
1595-PZ11	637.70	639.63	5/20/13	14.23	625.40
1595-PZ12	635.43	637.87	5/20/13	13.50	624.37
1595-2PZ12	635.43	637.87	5/20/13	45.71	592.16
1595-PZ13	639.51	654.40	5/20/13	9.77	644.63
1595-RW2	626.86	628.88	5/20/13	4.82	624.06
1595-RW3	627.20	628.80	5/20/13	8.67	620.13
1595-RW4	636.90	638.96	5/20/13	13.90	625.06

Table 2-1 - Well/Piezometer Gauging Data for Spring 2013

Well ID	Ground Surface Elevation (ft MSL)	Top of Casing Elevation (ft MSL)	Gauging Event Date	Depth to Water (ft btoc)	Groundwater Elevation (ft MSL)
1595-RW5	628.50	630.45	5/20/13	8.81	621.64
1595-RW6	617.17	620.40	5/20/13	3.85	616.55
1595-RW7	620.60	623.30	5/20/13	8.14	615.16
1795-001	654.62	657.12	5/20/13	15.16	641.96
1795-003	648.39	650.82	5/20/13	10.45	640.37
1795-MW6	647.40	649.66	5/20/13	10.25	639.41
1795-MW36	649.30	651.76	5/20/13	11.56	640.20
1795-MW37	649.60	651.55	5/20/13	n/a	n/a
1795-MW38	650.70	652.45	5/20/13	11.60	640.85
1795-MWD13	642.36	644.91	5/20/13	14.91	630.00
1795-MWD20	637.73	640.18	5/20/13	20.84	619.34
1795-MWI12	642.62	644.91	5/20/13	15.04	629.87
1795-MWS1	637.78	640.09	5/20/13	20.89	619.20
1795-MWS2	639.97	642.23	5/20/13	14.48	627.75
1795-MWS3	642.72	644.96	5/20/13	15.00	629.96
1795-MWS4	644.04	646.59	5/20/13	13.58	633.01
1795-MWS5	652.75	654.78	5/20/13	19.01	635.77
1795-MWS6	649.81	651.67	5/20/13	14.01	637.66
1795-MWS7	651.01	653.24	5/20/13	13.61	639.63
1795-MWS8	654.52	656.85	5/20/13	n/a	n/a
1795-MWS10	640.63	642.79	5/20/13	14.25	628.54
1795-MWS11	646.38	648.91	5/20/13	15.96	632.95
1795-MWS14	643.60	646.42	5/20/13	12.28	634.14
1795-MWS15	645.35	648.23	5/20/13	12.74	635.49
1795-MWS16	644.85	647.21	5/20/13	19.02	628.19
1795-MWS17	646.20	648.22	5/20/13	24.09	624.13
1795-MWS18	640.41	642.47	5/20/13	17.45	625.02
1795-MWS19	639.98	642.05	5/20/13	14.98	627.07
1795-MWS21	633.77	636.35	5/20/13	16.51	619.84
1795-PZ1	647.28	649.60	5/20/13	11.28	638.32
1795-PZ2	646.76	648.88	5/20/13	12.09	636.79
1795-PZ3	651.63	653.33	5/20/13	17.64	635.69
1795-PZ4	645.42	647.23	5/20/13	12.66	634.57
1795-PZ5	648.24	650.44	5/20/13	13.69	636.75
1795-PZ6	649.70	651.58	5/20/13	14.35	637.23
1795-PZ7	648.26	650.10	5/20/13	11.02	639.08
1795-PZ8	646.98	648.51	5/20/13	11.51	637.00
1795-PZ9	650.63	652.82	5/20/13	17.11	635.71
1795-PZ10	646.42	648.25	5/20/13	10.36	637.89
1795-PZ13	644.21	644.07	5/20/13	6.83	637.24
1795-PZ14	643.52	646.15	5/20/13	12.28	633.87
1795-PZ15	650.06	651.83	5/20/13	16.43	635.40
1795-PZ16	652.49	654.78	5/20/13	18.40	636.38
1795-PZ17	646.53	648.42	5/20/13	13.08	635.34

Table 2-1 - Well/Piezometer Gauging Data for Spring 2013

Well ID	Ground Surface Elevation (ft MSL)	Top of Casing Elevation (ft MSL)	Gauging Event Date	Depth to Water (ft btoc)	Groundwater Elevation (ft MSL)
1795-PZ18	649.13	651.40	5/20/13	17.71	633.69
1795-RW1	651.36	653.99	5/20/13	17.59	636.40
1795-RW2	645.74	647.68	5/20/13	12.00	635.68
1795-RW3	650.50	652.57	5/20/13	12.35	640.22
1995-MW42	668.60	670.18	5/20/13	24.67	645.51
1995-MW43	669.70	671.83	5/20/13	26.02	645.81
1995-MW44	674.10	676.17	5/20/13	27.57	648.60
1995-MWD5	655.64	657.92	5/20/13	30.50	627.42
1995-MWD8	666.80	669.36	5/20/13	25.45	643.91
1995-MWI4	655.62	658.12	5/20/13	30.65	627.47
1995-MWI7	666.84	669.15	5/20/13	25.04	644.11
1995-MWS1	664.33	666.76	5/20/13	22.43	644.33
1995-MWS10	663.67	665.94	5/20/13	24.35	641.59
1995-MWS2	643.34	645.65	5/20/13	37.11	608.54
1995-MWS3	655.91	658.40	5/20/13	30.83	627.57
1995-MWS6	666.70	669.02	5/20/13	24.96	644.06
1995-MWS9	668.50	670.80	5/20/13	24.33	646.47
1995-RW4	665.63	668.31	5/20/13	24.51	643.80
2140-MW01	648.90	650.60	5/20/13	24.83	625.77
2140-MW02	647.65	647.09	5/20/13	25.00	622.09
2140-MW03	646.70	648.44	5/20/13	28.43	620.01
2140-MW04	643.90	645.87	5/20/13	27.41	618.46
2140-MW05	640.80	642.56	5/20/13	28.15	614.41
2140-MW05D	640.60	642.35	5/20/13	28.75	613.60
2140-MW06	647.00	648.98	5/20/13	29.40	619.58
2140-MW07	646.40	648.30	5/20/13	29.58	618.72
2140-MW08	635.80	637.74	5/20/13	27.81	609.93
2140-MW09	636.06	635.73	5/20/13	25.08	610.65
2140-MW10	635.11	634.94	5/20/13	23.97	610.97
2140-MW11	638.03	637.84	5/20/13	23.91	613.93
2140-MW12	629.48	629.03	5/20/13	20.01	609.02
2140-MW13	617.39	616.87	5/20/13	8.28	608.59
2140-MW14	618.11	617.87	5/20/13	9.38	608.49
2140-MW15	619.03	618.61	5/20/13	10.30	608.31
2140-MW16	612.64	615.01	5/20/13	7.16	607.85
2140-MW17	612.92	615.09	5/20/13	7.30	607.79
2140-MW18	612.37	614.59	5/20/13	6.85	607.74
2140-MW19	614.22	616.19	5/20/13	8.30	607.89
2140-MW20	608.34	610.09	5/20/13	6.56	603.53
2140-MW21	606.50	608.53	5/20/13	7.14	601.39
2140-MW22	620.74	621.80	5/20/13	14.31	607.49
2140-MW23	606.83	609.04	5/20/13	8.65	600.39
2140-MW24	599.49	601.39	5/20/13	9.00	592.39
2140-MW25	594.66	596.53	5/20/13	6.91	589.62

Table 2-1 - Well/Piezometer Gauging Data for Spring 2013

Well ID	Ground Surface Elevation (ft MSL)	Top of Casing Elevation (ft MSL)	Gauging Event Date	Depth to Water (ft btoc)	Groundwater Elevation (ft MSL)
2140-MW26	619.24	618.79	5/20/13	11.18	607.61
2140-MW27	617.72	617.24	5/20/13	9.73	607.51
2140-MW28	616.80	616.28	5/20/13	8.84	607.44
2140-MW29	607.80	609.71	5/20/13	5.08	604.63
2140-MW30	606.69	608.76	5/20/13	7.50	601.26
2140-MW31	607.20	609.57	5/20/13	7.41	602.16
2140-MW32	607.39	609.38	5/20/13	8.10	601.28
2140-MW35	633.40	633.40	5/20/13	23.81	609.59
2140-MW36	640.57	640.57	5/20/13	24.70	615.87
2140-MW37	646.80	646.80	5/20/13	26.02	620.78
2140-PZ01	637.87	637.37	5/20/13	25.27	612.10
2140-PZ03	638.89	638.39	5/20/13	25.51	612.88
3805-002	659.36	661.50	5/20/13	18.46	643.04
3805-003	660.25	662.55	5/20/13	19.70	642.85
3805-014	655.17	656.64	5/20/13	15.99	640.65
3805-015	652.56	654.75	5/20/13	16.41	638.34
3805-016	651.51	653.70	5/20/13	17.74	635.96
3805-MW39	661.60	663.34	5/20/13	19.30	644.04
3805-MW40	663.00	665.23	5/20/13	21.17	644.06
3805-MW41	663.30	665.16	5/20/13	17.63	647.53
3805-MWD7	656.67	659.34	5/20/13	18.48	640.86
3805-MWD10	651.81	654.32	5/20/13	28.09	626.23
3805-MWD13	652.30	654.94	5/20/13	30.49	624.45
3805-MWD16	634.37	636.55	5/20/13	30.78	605.77
3805-MWD18	631.36	633.86	5/20/13	32.05	601.81
3805-MWI6	656.79	659.32	5/20/13	18.09	641.23
3805-MWI9	650.82	653.30	5/20/13	26.91	626.39
3805-MWI12	653.00	655.35	5/20/13	30.34	625.01
3805-MWI15	633.24	635.58	5/20/13	29.10	606.48
3805-MWI17	631.50	634.13	5/20/13	32.18	601.95
3805-MWI20	617.23	619.63	5/20/13	14.26	605.37
3805-MWI22	606.33	608.37	5/20/13	3.13	605.24
3805-MWS1	653.97	656.13	5/20/13	13.19	642.94
3805-MWS2	649.97	652.27	5/20/13	12.66	639.61
3805-MWS3	647.69	650.22	5/20/13	19.01	631.21
3805-MWS4	632.51	634.98	5/20/13	32.59	602.39
3805-MWS5	656.95	659.24	5/20/13	17.97	641.27
3805-MWS8	651.47	653.90	5/20/13	27.31	626.59
3805-MWS11	652.56	654.66	5/20/13	29.54	625.12
3805-MWS14	633.64	636.01	5/20/13	28.76	607.25
3805-MWS19	617.40	619.74	5/20/13	12.77	606.97
3805-MWS21	606.47	608.71	5/20/13	10.20	598.51
3805-MWS23	660.85	662.18	5/20/13	17.39	644.79
3805-MWS24	655.71	657.73	5/20/13	21.61	636.12

Table 2-1 - Well/Piezometer Gauging Data for Spring 2013

Well ID	Ground Surface Elevation (ft MSL)	Top of Casing Elevation (ft MSL)	Gauging Event Date	Depth to Water (ft btoc)	Groundwater Elevation (ft MSL)
3805-P1	656.50	658.71	5/20/13	16.77	641.94
3805-P4	656.30	658.21	5/20/13	16.23	641.98
3805-PZ1	657.09	659.19	5/20/13	18.96	640.23
3805-PZ2D	656.12	657.93	5/20/13	19.66	638.27
3805-PZ2I	656.06	657.87	5/20/13	19.54	638.33
3805-PZ2S	656.10	657.96	5/20/13	19.63	638.33
3805-PZ3	654.06	655.86	5/20/13	21.61	634.25
3805-PZ4	666.68	668.55	5/20/13	24.25	644.30
3805-PZ5	665.96	667.77	5/20/13	24.50	643.27
3805-PZ6	662.43	664.48	5/20/13	24.49	639.99
3805-PZ7	657.09	659.01	5/20/13	20.26	638.75
3805-PZ8	668.07	669.97	5/20/13	24.88	645.09
3805-PZ9	657.16	659.08	5/20/13	14.35	644.73
3805-PZ10	657.65	659.63	5/20/13	19.00	640.63
3805-PZ11	653.68	655.38	5/20/13	21.74	633.64
3805-PZ12I	654.27	656.01	5/20/13	26.29	629.72
3805-PZ12S	653.83	655.50	5/20/13	25.28	630.22
3805-PZ13D	643.95	645.71	5/20/13	23.82	621.89
3805-PZ13I	645.79	647.27	5/20/13	25.86	621.41
3805-PZ13S	643.28	645.09	5/20/13	23.23	621.86
3805-PZ14	658.28	660.39	5/20/13	18.85	641.54
3805-PZ15	655.83	657.61	5/20/13	17.55	640.06
3805-RW1	656.38	658.55	5/20/13	16.39	642.16
3805-RW2	657.22	658.44	5/20/13	13.89	644.55
3805-RW3	653.87	656.23	5/20/13	22.24	633.99
3805-RW5	656.96	658.31	5/20/13	18.35	639.96
3805-RW7	657.14	659.01	5/20/13	16.85	642.16
3805-RW8	655.41	657.55	5/20/13	21.30	636.25
3805-RW9	654.60	656.33	5/20/13	18.62	637.71
3805-RW10	655.26	657.51	5/20/13	20.48	637.03
3805-RW11	655.99	658.74	5/20/13	19.23	639.51
3805-RW12	654.13	656.60	5/20/13	18.52	638.08
3805-RW13	655.85	658.30	5/20/13	14.89	643.41
ASL-MW961	694.45	694.45	5/20/13	n/a	n/a
ASL-MW12A	695.10	697.25	5/20/13	n/a	n/a
ASL-MW13	695.90	698.52	5/20/13	n/a	n/a
ASL-MW14A	696.20	698.25	5/20/13	n/a	n/a
ASL-MW941	694.07	696.40	5/20/13	n/a	n/a
ASL-MW942	694.56	697.36	5/20/13	49.78	647.58
ASL-MW943	695.11	697.82	5/20/13	56.96	640.86
ASL-MW944	693.05	695.35	5/20/13	55.34	640.01
OSL-MW10	641.70	644.24	5/20/13	41.70	602.54
OSL-MW11	642.40	644.30	5/20/13	36.00	608.30
OSL-MW2	637.40	639.74	5/20/13	35.41	604.33

Table 2-1 - Well/Piezometer Gauging Data for Spring 2013

Well ID	Ground Surface Elevation (ft MSL)	Top of Casing Elevation (ft MSL)	Gauging Event Date	Depth to Water (ft btoc)	Groundwater Elevation (ft MSL)
OSL-MW2A	637.30	639.45	5/20/13	39.11	600.34
OSL-MW3	658.06	660.28	5/20/13	23.37	636.91
OSL-MW4	658.15	661.25	5/20/13	51.34	609.91
OSL-MW5	674.66	677.25	5/20/13	65.69	611.56
OSL-MW7	675.10	677.00	5/20/13	24.19	652.81
OSL-MW8	674.50	678.02	5/20/13	32.73	645.29
OSL-MW9A	668.40	670.00	5/20/13	49.69	620.31
WWII-001	643.07	645.01	5/20/13	30.70	614.31
WWII-002	638.36	640.46	5/20/13	17.65	622.81
WWII-003	641.65	643.61	5/20/13	13.78	629.83
WWII-004	638.76	641.12	5/20/13	18.90	622.22
WWII-005	638.35	640.77	5/20/13	21.20	619.57
WWII-006	641.02	643.46	5/20/13	23.78	619.68

Abbreviation Key:

btoc - Below Top of Casing

ft - feet

MSL - Mean Sea Level

n/a - Not Available

Table 2-2 - Well/Piezometer Gauging Data for Fall 2013

Well ID	Ground Surface Elevation (ft MSL)	Top of Casing Elevation (ft MSL)	Gauging Event Date	Depth to Water (ft btoc)	Groundwater Elevation (ft MSL)
1295-003	632.03	633.87	9/23/13	12.17	621.70
1295-MW25	634.37	635.85	9/23/13	11.35	624.50
1295-MW26	637.20	639.49	9/23/13	11.72	627.77
1295-MWS27	635.45	635.29	9/23/13	8.45	626.84
1295-MWS28	634.73	636.77	9/23/13	12.45	624.32
1295-MWS29	633.63	635.95	9/23/13	12.23	623.72
1295-MW30	634.03	635.85	9/23/13	11.20	624.65
1595-MW3	636.10	638.41	9/23/13	14.06	624.35
1595-MW3A	639.30	641.81	9/23/13	15.47	626.34
1595-MW5	633.70	636.49	9/23/13	16.25	620.24
1595-MW33	636.10	637.90	9/23/13	12.14	625.76
1595-MW34	638.90	640.92	9/23/13	15.03	625.89
1595-MW35	641.70	643.60	9/23/13	14.47	629.13
1595-MWD4	634.50	637.02	9/23/13	13.60	623.42
1595-MWD5	626.61	628.79	9/23/13	8.59	620.20
1595-MWD6	638.07	638.31	9/23/13	19.02	619.29
1595-MWS1	613.26	615.62	9/23/13	9.99	605.63
1595-MWS2	640.04	642.18	9/23/13	15.49	626.69
1595-MWS7	626.80	629.00	9/23/13	8.77	620.23
1595-MWS8	628.90	630.80	9/23/13	9.23	621.57
1595-MWS9	621.00	623.20	9/23/13	4.73	618.47
1595-OBG1	637.20	638.75	9/23/13	17.91	620.84
1595-OBG2	635.50	637.98	9/23/13	12.59	625.39
1595-OBG3	634.63	636.87	9/23/13	13.71	623.16
1595-OBG4	639.20	640.85	9/23/13	16.72	624.13
1595-OBG5	625.00	626.73	9/23/13	15.07	611.66
1595-OBG6	627.00	629.01	9/23/13	8.65	620.36
1595-OBG7	619.90	621.85	9/23/13	6.52	615.33
1595-OBG8	632.30	634.00	9/23/13	9.14	624.86
1595-OBG9	635.30	637.09	9/23/13	10.21	626.88
1595-PZ1	629.70	631.53	9/23/13	11.09	620.44
1595-PZ4	629.26	631.50	9/23/13	10.04	621.46
1595-2PZ5	635.29	637.92	9/23/13	11.50	626.42
1595-PZ7	635.50	637.04	9/23/13	17.81	619.23
1595-PZ8	628.40	630.29	9/23/13	11.86	618.43
1595-PZ9	628.90	630.77	9/23/13	8.94	621.83
1595-PZ10	638.50	640.33	9/23/13	15.45	624.88
1595-PZ11	637.70	639.63	9/23/13	15.29	624.34
1595-PZ12	635.43	637.87	9/23/13	14.60	623.27
1595-2PZ12	635.43	637.87	9/23/13	46.48	591.39
1595-PZ13	639.51	654.40	9/23/13	11.00	643.40
1595-RW2	626.86	628.88	9/23/13	n/a	n/a
1595-RW3	627.20	628.80	9/23/13	9.41	619.39
1595-RW4	636.90	638.96	9/23/13	15.01	623.95

Table 2-2 - Well/Piezometer Gauging Data for Fall 2013

Well ID	Ground Surface Elevation (ft MSL)	Top of Casing Elevation (ft MSL)	Gauging Event Date	Depth to Water (ft btoc)	Groundwater Elevation (ft MSL)
1595-RW5	628.50	630.45	9/23/13	9.35	621.10
1595-RW6	617.17	620.40	9/23/13	n/a	n/a
1595-RW7	620.60	623.30	9/23/13	8.53	614.77
1795-001	654.62	657.12	9/23/13	15.28	641.84
1795-003	648.39	650.82	9/23/13	11.86	638.96
1795-MW6	647.40	649.66	9/23/13	11.74	637.92
1795-MW36	649.30	651.76	9/23/13	12.59	639.17
1795-MW37	649.60	651.55	9/23/13	12.22	639.33
1795-MW38	650.70	652.45	9/23/13	11.81	640.64
1795-MWD13	642.36	644.91	9/23/13	16.20	628.71
1795-MWD20	637.73	640.18	9/23/13	22.25	617.93
1795-MWI12	642.62	644.91	9/23/13	16.31	628.60
1795-MWS1	637.78	640.09	9/23/13	22.40	617.69
1795-MWS2	639.97	642.23	9/23/13	15.65	626.58
1795-MWS3	642.72	644.96	9/23/13	16.25	628.71
1795-MWS4	644.04	646.59	9/23/13	15.27	631.32
1795-MWS5	652.75	654.78	9/23/13	20.87	633.91
1795-MWS6	649.81	651.67	9/23/13	15.60	636.07
1795-MWS7	651.01	653.24	9/23/13	14.43	638.81
1795-MWS8	654.52	656.85	9/23/13	15.35	641.50
1795-MWS10	640.63	642.79	9/23/13	15.15	627.64
1795-MWS11	646.38	648.91	9/23/13	17.08	631.83
1795-MWS14	643.60	646.42	9/23/13	13.00	633.42
1795-MWS15	645.35	648.23	9/23/13	13.65	634.58
1795-MWS16	644.85	647.21	9/23/13	20.51	626.70
1795-MWS17	646.20	648.22	9/23/13	25.91	622.31
1795-MWS18	640.41	642.47	9/23/13	18.85	623.62
1795-MWS19	639.98	642.05	9/23/13	16.55	625.50
1795-MWS21	633.77	636.35	9/23/13	17.93	618.42
1795-PZ1	647.28	649.60	9/23/13	12.26	637.34
1795-PZ2	646.76	648.88	9/23/13	13.00	635.88
1795-PZ3	651.63	653.33	9/23/13	19.31	634.02
1795-PZ4	645.42	647.23	9/23/13	14.36	632.87
1795-PZ5	648.24	650.44	9/23/13	15.00	635.44
1795-PZ6	649.70	651.58	9/23/13	16.00	635.58
1795-PZ7	648.26	650.10	9/23/13	12.13	637.97
1795-PZ8	646.98	648.51	9/23/13	13.47	635.04
1795-PZ9	650.63	652.82	9/23/13	18.93	633.89
1795-PZ10	646.42	648.25	9/23/13	12.03	636.22
1795-PZ13	644.21	644.07	9/23/13	7.64	636.43
1795-PZ14	643.52	646.15	9/23/13	13.12	633.03
1795-PZ15	650.06	651.83	9/23/13	18.23	633.60
1795-PZ16	652.49	654.78	9/23/13	20.19	634.59
1795-PZ17	646.53	648.42	9/23/13	14.94	633.48

Table 2-2 - Well/Piezometer Gauging Data for Fall 2013

Well ID	Ground Surface Elevation (ft MSL)	Top of Casing Elevation (ft MSL)	Gauging Event Date	Depth to Water (ft btoc)	Groundwater Elevation (ft MSL)
1795-PZ18	649.13	651.40	9/23/13	19.64	631.76
1795-RW1	651.36	653.99	9/23/13	19.40	634.59
1795-RW2	645.74	647.68	9/23/13	12.95	634.73
1795-RW3	650.50	652.57	9/23/13	13.10	639.47
1995-MW42	668.60	670.18	9/23/13	25.24	644.94
1995-MW43	669.70	671.83	9/23/13	26.71	645.12
1995-MW44	674.10	676.17	9/23/13	27.82	648.35
1995-MWD5	655.64	657.92	9/23/13	31.55	626.37
1995-MWD8	666.80	669.36	9/23/13	26.18	643.18
1995-MWI4	655.62	658.12	9/23/13	31.60	626.52
1995-MWI7	666.84	669.15	9/23/13	25.76	643.39
1995-MWS1	664.33	666.76	9/23/13	23.08	643.68
1995-MWS10	663.67	665.94	9/23/13	25.17	640.77
1995-MWS2	643.34	645.65	9/23/13	38.76	606.89
1995-MWS3	655.91	658.40	9/23/13	31.81	626.59
1995-MWS6	666.70	669.02	9/23/13	25.71	643.31
1995-MWS9	668.50	670.80	9/23/13	24.86	645.94
1995-RW4	665.63	668.31	9/23/13	25.26	643.05
2140-MW01	648.90	650.60	9/23/13	25.32	625.28
2140-MW02	647.65	647.09	9/23/13	25.73	621.36
2140-MW03	646.70	648.44	9/23/13	29.25	619.19
2140-MW04	643.90	645.87	9/23/13	28.22	617.65
2140-MW05	640.80	642.56	9/23/13	29.10	613.46
2140-MW05D	640.60	642.35	9/23/13	29.78	612.57
2140-MW06	647.00	648.98	9/23/13	30.29	618.69
2140-MW07	646.40	648.30	9/23/13	30.46	617.84
2140-MW08	635.80	637.74	9/23/13	28.91	608.83
2140-MW09	636.06	635.73	9/23/13	25.91	609.82
2140-MW10	635.11	634.94	9/23/13	24.75	610.19
2140-MW11	638.03	637.84	9/23/13	24.65	613.19
2140-MW12	629.48	629.03	9/23/13	21.55	607.48
2140-MW13	617.39	616.87	9/23/13	9.80	607.07
2140-MW14	618.11	617.87	9/23/13	10.92	606.95
2140-MW15	619.03	618.61	9/23/13	11.79	606.82
2140-MW16	612.64	615.01	9/23/13	8.50	606.51
2140-MW17	612.92	615.09	9/23/13	8.63	606.46
2140-MW18	612.37	614.59	9/23/13	8.15	606.44
2140-MW19	614.22	616.19	9/23/13	9.60	606.59
2140-MW20	608.34	610.09	9/23/13	7.02	603.07
2140-MW21	606.50	608.53	9/23/13	7.42	601.11
2140-MW22	620.74	621.80	9/23/13	15.60	606.20
2140-MW23	606.83	609.04	9/23/13	9.55	599.49
2140-MW24	599.49	601.39	9/23/13	10.15	591.24
2140-MW25	594.66	596.53	9/23/13	DRY	n/a

Table 2-2 - Well/Piezometer Gauging Data for Fall 2013

Well ID	Ground Surface Elevation (ft MSL)	Top of Casing Elevation (ft MSL)	Gauging Event Date	Depth to Water (ft btoc)	Groundwater Elevation (ft MSL)
2140-MW26	619.24	618.79	9/23/13	12.31	606.48
2140-MW27	617.72	617.24	9/23/13	10.90	606.34
2140-MW28	616.80	616.28	9/23/13	10.00	606.28
2140-MW29	607.80	609.71	9/23/13	5.32	604.39
2140-MW30	606.69	608.76	9/23/13	8.48	600.28
2140-MW31	607.20	609.57	9/23/13	7.71	601.86
2140-MW32	607.39	609.38	9/23/13	15.87	593.51
2140-MW35	633.40	633.40	9/23/13	25.32	608.08
2140-MW36	640.57	640.57	9/23/13	25.43	615.14
2140-MW37	646.80	646.80	9/23/13	26.80	620.00
2140-PZ01	637.87	637.37	9/23/13	DRY	n/a
2140-PZ03	638.89	638.39	9/23/13	26.25	612.14
3805-002	659.36	661.50	9/23/13	19.31	642.19
3805-003	660.25	662.55	9/23/13	20.47	642.08
3805-014	655.17	656.64	9/23/13	17.03	639.61
3805-015	652.56	654.75	9/23/13	17.45	637.30
3805-016	651.51	653.70	9/23/13	18.82	634.88
3805-MW39	661.60	663.34	9/23/13	20.02	643.32
3805-MW40	663.00	665.23	9/23/13	21.89	643.34
3805-MW41	663.30	665.16	9/23/13	17.42	647.74
3805-MWD7	656.67	659.34	9/23/13	19.39	639.95
3805-MWD10	651.81	654.32	9/23/13	29.13	625.19
3805-MWD13	652.30	654.94	9/23/13	31.12	623.82
3805-MWD16	634.37	636.55	9/23/13	31.12	605.43
3805-MWD18	631.36	633.86	9/23/13	32.42	601.44
3805-MWI6	656.79	659.32	9/23/13	19.00	640.32
3805-MWI9	650.82	653.30	9/23/13	27.98	625.32
3805-MWI12	653.00	655.35	9/23/13	31.03	624.32
3805-MWI15	633.24	635.58	9/23/13	29.46	606.12
3805-MWI17	631.50	634.13	9/23/13	32.57	601.56
3805-MWI20	617.23	619.63	9/23/13	14.99	604.64
3805-MWI22	606.33	608.37	9/23/13	3.67	604.70
3805-MWS1	653.97	656.13	9/23/13	14.11	642.02
3805-MWS2	649.97	652.27	9/23/13	13.69	638.58
3805-MWS3	647.69	650.22	9/23/13	20.15	630.07
3805-MWS4	632.51	634.98	9/23/13	33.04	601.94
3805-MWS5	656.95	659.24	9/23/13	18.94	640.30
3805-MWS8	651.47	653.90	9/23/13	28.39	625.51
3805-MWS11	652.56	654.66	9/23/13	30.25	624.41
3805-MWS14	633.64	636.01	9/23/13	29.20	606.81
3805-MWS19	617.40	619.74	9/23/13	13.86	605.88
3805-MWS21	606.47	608.71	9/23/13	10.28	598.43
3805-MWS23	660.85	662.18	9/23/13	18.08	644.10
3805-MWS24	655.71	657.73	9/23/13	22.50	635.23

Table 2-2 - Well/Piezometer Gauging Data for Fall 2013

Well ID	Ground Surface Elevation (ft MSL)	Top of Casing Elevation (ft MSL)	Gauging Event Date	Depth to Water (ft btoc)	Groundwater Elevation (ft MSL)
3805-P1	656.50	658.71	9/23/13	17.73	640.98
3805-P4	656.30	658.21	9/23/13	17.17	641.04
3805-PZ1	657.09	659.19	9/23/13	19.87	639.32
3805-PZ2D	656.12	657.93	9/23/13	20.54	637.39
3805-PZ2I	656.06	657.87	9/23/13	20.40	637.47
3805-PZ2S	656.10	657.96	9/23/13	20.59	637.37
3805-PZ3	654.06	655.86	9/23/13	22.62	633.24
3805-PZ4	666.68	668.55	9/23/13	24.87	643.68
3805-PZ5	665.96	667.77	9/23/13	25.21	642.56
3805-PZ6	662.43	664.48	9/23/13	25.32	639.16
3805-PZ7	657.09	659.01	9/23/13	21.11	637.90
3805-PZ8	668.07	669.97	9/23/13	25.54	644.43
3805-PZ9	657.16	659.08	9/23/13	15.12	643.96
3805-PZ10	657.65	659.63	9/23/13	15.81	643.82
3805-PZ11	653.68	655.38	9/23/13	22.70	632.68
3805-PZ12I	654.27	656.01	9/23/13	27.11	628.90
3805-PZ12S	653.83	655.50	9/23/13	26.08	629.42
3805-PZ13D	643.95	645.71	9/23/13	24.59	621.12
3805-PZ13I	645.79	647.27	9/23/13	26.67	620.60
3805-PZ13S	643.28	645.09	9/23/13	24.02	621.07
3805-PZ14	658.28	660.39	9/23/13	19.70	640.69
3805-PZ15	655.83	657.61	9/23/13	18.52	639.09
3805-RW1	656.38	658.55	9/23/13	17.34	641.21
3805-RW2	657.22	658.44	9/23/13	14.61	643.83
3805-RW3	653.87	656.23	9/23/13	23.21	633.02
3805-RW5	656.96	658.31	9/23/13	19.31	639.00
3805-RW7	657.14	659.01	9/23/13	17.75	641.26
3805-RW8	655.41	657.55	9/23/13	22.16	635.39
3805-RW9	654.60	656.33	9/23/13	19.63	636.70
3805-RW10	655.26	657.51	9/23/13	21.30	636.21
3805-RW11	655.99	658.74	9/23/13	20.16	638.58
3805-RW12	654.13	656.60	9/23/13	19.48	637.12
3805-RW13	655.85	658.30	9/23/13	15.84	642.46
ASL-MW961	694.45	694.45	9/23/13	74.89	619.56
ASL-MW12A	695.10	697.25	9/23/13	65.68	631.57
ASL-MW13	695.90	698.52	9/23/13	56.96	641.56
ASL-MW14A	696.20	698.25	9/23/13	63.01	635.24
ASL-MW941	694.07	696.40	9/23/13	70.58	625.82
ASL-MW942	694.56	697.36	9/23/13	50.25	647.11
ASL-MW943	695.11	697.82	9/23/13	n/a	n/a
ASL-MW944	693.05	695.35	9/23/13	56.24	639.11
OSL-MW10	641.70	644.24	9/23/13	42.38	601.86
OSL-MW11	642.40	644.30	9/23/13	36.76	607.54
OSL-MW2	637.40	639.74	9/23/13	36.48	603.26

Table 2-2 - Well/Piezometer Gauging Data for Fall 2013

Well ID	Ground Surface Elevation (ft MSL)	Top of Casing Elevation (ft MSL)	Gauging Event Date	Depth to Water (ft btoc)	Groundwater Elevation (ft MSL)
OSL-MW2A	637.30	639.45	9/23/13	39.94	599.51
OSL-MW3	658.06	660.28	9/23/13	24.27	636.01
OSL-MW4	658.15	661.25	9/23/13	52.14	609.11
OSL-MW5	674.66	677.25	9/23/13	66.57	610.68
OSL-MW7	675.10	677.00	9/23/13	25.11	651.89
OSL-MW8	674.50	678.02	9/23/13	32.75	645.27
OSL-MW9A	668.40	670.00	9/23/13	50.42	619.58
WWII-001	643.07	645.01	9/23/13	31.86	613.15
WWII-002	638.36	640.46	9/23/13	18.32	622.14
WWII-003	641.65	643.61	9/23/13	14.94	628.67
WWII-004	638.76	641.12	9/23/13	21.30	619.82
WWII-005	638.35	640.77	9/23/13	22.89	617.88
WWII-006	641.02	643.46	9/23/13	25.49	617.97

Abbreviation Key:

btoc - Below Top of Casing

ft - feet

MSL - Mean Sea Level

n/a - Not Available

Table 3-1 - Water Quality Parameters for Groundwater Collected During the Spring 2013 Sampling Event

Well ID	Date	Time	pH	Cond.	Turb.	DO	Temp.	ORP	FE^{2+}
1295-MW25	5/23/2013	11:30	6.62	0.931	0.0	0.00	12.09	-21	0.0
1295-MW26	5/23/2013	08:55	6.41	0.480	0.0	3.94	12.01	165	0.2
1295-MW30	5/23/2013	10:50	7.10	0.808	107.0	1.32	12.21	-120	2.0
1295-MWS27	5/23/2013	12:05	7.46	1.040	1.7	0.00	12.80	-26	0.1
1295-MWS28	5/23/2013	09:45	7.20	1.150	0.0	2.97	11.63	128	0.0
1595 MWS7	5/22/2013	11:55	7.32	0.712	4.7	0.00	12.09	2	0.4
1595-MW33	5/22/2013	12:05	6.75	0.446	0.0	6.01	13.69	99	0.0
1595-OBG2	5/22/2013	11:00	6.71	0.460	20.0	0.00	13.62	-57	1.5
1595-PZ11	5/22/2013	10:40	7.65	0.971	1.5	0.00	13.06	-6	N/A
1595-PZ12	5/22/2013	12:45	7.23	3.050	11.9	0.00	13.81	-48	4.0
1795-MWS11	5/22/2013	09:00	5.41	0.090	2.9	2.71	13.38	194	N/A
1795-MWS21	5/22/2013	09:30	7.10	0.411	47.7	0.53	12.82	-59	N/A
1795-MWS3	5/22/2013	09:40	6.31	0.144	1.7	0.00	11.94	-19	1.1
1795-MWS7	5/21/2013	16:16	7.21	1.480	35.7	0.00	13.29	-53	1.0
1795-PZ15	5/21/2013	16:40	6.91	0.329	11.5	0.00	16.02	106	0.0
1995-MWS9	5/21/2013	09:55	7.07	5.810	6.1	0.00	14.01	-77	2.9
1995-MWS10	5/21/2013	10:58	7.33	1.440	0.9	1.98	15.41	-72	1.8
2140-MW02	5/22/2013	15:25	7.39	2.910	15.1	3.64	15.09	-37	1.4
2140-MW06	5/22/2013	13:05	7.07	4.640	3.1	0.00	16.11	-72	N/A
2140-MW07	5/22/2013	14:15	7.02	2.440	16.8	0.00	17.99	-105	N/A
2140-MW12	5/22/2013	15:15	6.98	1.960	1.3	0.00	17.33	83	0.0
2140-MW14	5/23/2013	09:01	6.50	2.790	0.0	4.95	15.04	199	N/A
2140-MW19	5/23/2013	09:55	7.19	1.900	9.5	1.21	12.00	-39	N/A
2140-MW27	5/23/2013	11:00	6.93	0.605	0.0	3.70	10.59	20	N/A
2140-MW37	5/22/2013	14:40	7.11	6.820	131.0	0.00	15.75	-95	N/A
3805-MWS11	5/21/2013	12:05	6.86	0.515	2.3	0.00	14.03	-76	3.6
3805-MWS24	5/21/2013	14:22	7.20	0.340	22.1	0.00	14.03	-65	2.6
3805-MWS5	5/21/2013	15:37	7.27	0.357	7.1	1.02	14.03	-95	N/A
3805-MWS8	5/21/2013	14:00	6.91	0.418	0.0	0.00	13.52	-62	N/A
3805-PZ12S	5/21/2013	11:10	6.84	0.366	1.0	0.00	13.61	-85	3.2
3805-PZ14	5/21/2013	12:08	7.04	0.217	22.8	0.00	13.50	-49	1.5
3805-PZ3	5/21/2013	15:35	6.42	0.316	1.8	0.00	13.80	-45	4.8
3805-PZ2S	5/21/2013	13:05	6.65	0.314	0.7	0.00	13.36	16	1.4
OSL-MW3	5/21/2013	10:20	6.74	0.603	0.8	0.51	16.05	55	N/A

Abbreviation Key:

Cond. - Conductivity measured in millisiemens per centimeter (mS/cm)
Fe2+ - Ferrous Iron measured in milligrams per liter (mg/L)
ORP - Oxidation-Reduction Potential measured in millivolt (mV)
N/A - Not Available
pH - Potential of Hydrogen
Temp. - Temperature measured in degrees Celsius (°C)
Turb. - Turbitidy measured in Nephelometric Turbidity Units (NTUs)

Table 3-2 - Water Quality Parameters for Groundwater Collected During the Fall 2013 Sampling Event

Well ID	Date	Time	Temp.	pH	ORP	Cond.	Turb.	DO	FE^{2+}
1295-MW25	9/27/2013	09:55	16.30	6.48	-8	2.110	0.0	3.43	2.2
1295-MW26	9/27/2013	12:25	15.53	6.91	76	0.491	0.0	0.00	0.0
1295-MW30	9/27/2013	09:50	15.57	6.69	-110	2.750	5.5	0.00	2.0
1295-MWS27	9/27/2013	11:10	18.25	6.90	-68	1.370	0.0	0.41	2.0
1295-MWS28	9/27/2013	11:15	14.76	7.14	22	2.190	0.0	0.00	0.1
1595-MW33	9/27/2013	16:15	18.02	6.68	79	1.220	0.0	2.45	0.0
1595-MWS7	9/27/2013	14:00	17.15	6.33	-32	0.929	0.0	5.19	1.2
1595-MWS8	9/30/2013	15:15	14.66	6.64	-47	0.997	0.0	2.83	N/A
1595-MWS9	9/30/2013	15:55	13.71	6.86	18	1.260	0.0	3.57	N/A
1595-OBG2	9/27/2013	15:25	18.83	6.33	-47	0.968	12.6	1.18	3.2
1595-PZ11	9/30/2013	13:50	14.17	7.23	-54	0.952	0.0	3.08	N/A
1595-PZ12	9/30/2013	11:20	18.01	6.97	-56	1.430	33.8	4.15	N/A
1595-PZ13	9/30/2013	09:00	14.15	7.17	-121	0.808	0.0	3.01	N/A
1595-PZ9	9/30/2013	14:30	15.70	6.67	-49	0.700	0.0	2.47	N/A
1595-RW4	9/30/2013	12:05	15.31	6.79	-100	0.944	38.9	8.79	N/A
1795-MWD13	10/1/2013	12:20	13.11	7.69	-16	0.734	0.0	1.66	N/A
1795-MWI12	10/1/2013	11:50	10.84	6.95	-81	1.810	0.0	0.00	N/A
1795-MWS1	10/1/2013	10:00	12.91	5.14	195	0.024	0.0	7.20	N/A
1795-MWS10	10/1/2013	09:45	14.90	6.14	62	0.227	0.0	6.52	N/A
1795-MWS11	9/30/2013	15:30	13.99	5.64	112	0.123	34.4	6.52	1.4
1795-MWS2	10/1/2013	11:35	14.77	5.91	100	0.056	12.7	8.01	N/A
1795-MWS21	10/1/2013	10:55	16.61	6.91	-100	0.418	38.3	1.94	N/A
1795-MWS3	9/27/2013	13:55	11.80	6.07	-48	0.246	0.0	0.00	3.2
1795-MWS7	9/27/2013	16:00	17.59	6.80	-34	2.780	0.9	0.00	1.9
1795-PZ13	10/1/2013	11:10	16.88	6.44	-28	2.780	0.0	1.64	N/A
1795-PZ14	10/1/2013	10:30	15.06	6.43	-61	2.840	0.0	4.24	N/A
1795-PZ15	9/27/2013	15:00	15.38	6.50	95	0.560	0.0	0.00	0.0
1795-PZ4	9/30/2013	16:10	16.57	7.00	58	0.375	14.9	5.05	N/A
1795-PZ5	9/30/2013	14:45	18.42	6.57	-20	0.668	0.0	0.67	N/A
1995-MWS10	9/23/2013	17:00	14.95	6.47	-100	0.973	17.9	0.16	1.6
1995-MWS9	9/26/2013	15:45	15.12	6.32	-77	3.850	6.7	0.00	1.1
1995-MW43	9/30/2013	11:05	16.33	6.82	146	1.800	0.0	6.21	N/A
2140-MW02	9/26/2013	08:35	13.03	6.28	-1	3.300	5.9	0.00	0.4
2140-MW04	9/26/2013	11:10	13.73	7.12	22	6.430	2.6	0.00	N/A
2140-MW05	9/26/2013	12:17	13.34	6.74	-108	2.180	25.1	2.81	N/A
2140-MW06	9/26/2013	10"20	13.16	6.92	-98	4.090	9.1	0.00	0.6
2140-MW07	9/26/2013	11:10	15.48	6.52	-95	1.880	14.4	0.27	2.1
2140-MW09	9/26/2013	12:00	0.69	7.01	-62	4.870	1.5	0.00	N/A
2140-MW12	9/26/2013	09:35	13.95	6.89	125	3.480	0.0	0.00	0.0
2140-MW13	9/26/2013	08:50	12.39	6.76	124	5.890	59.2	7.13	N/A
2140-MW37	9/26/2013	09:40	14.30	6.31	-92	8.740	66.1	0.00	5.6
3805-002	9/25/2013	13:45	13.99	6.27	-91	0.439	10.4	1.41	N/A
3805-014	9/30/2013	13:50	16.15	6.50	-64	0.370	81.4	4.49	N/A
3805-016	9/25/2013	15:25	16.54	6.43	-82	0.330	3.3	0.34	N/A
3805-MWD10	9/28/2013	13:25	13.09	8.08	-71	0.568	0.0	7.59	N/A
3805-MWD13	9/28/2013	14:45	12.38	7.97	-86	0.646	0.0	0.00	N/A
3805-MWD16	9/25/2013	09:45	10.77	7.55	-57	0.230	2.1	0.00	N/A
3805-MWD18	9/24/2013	14:05	13.30	7.26	-163	0.208	5.3	0.42	N/A
3805-MWD7	9/28/2013	15:35	14.14	7.85	104	0.657	0.0	7.41	N/A
3805-MWI12	9/24/2013	11:20	11.84	7.08	79	5.310	0.0	0.49	N/A

Table 3-2 - Water Quality Parameters for Groundwater Collected During the Fall 2013 Sampling Event

Well ID	Date	Time	Temp.	pH	ORP	Cond.	Turb.	DO	FE^{2+}
3805-MWI15	9/25/2013	10:35	11.21	7.27	-83	1.300	3.7	0.00	N/A
3805-MWI17	9/24/2013	14:55	11.96	7.03	-102	0.748	0.0	2.03	N/A
3805-MWI20	9/29/2013	12:00	11.53	7.75	58	0.119	0.0	5.58	N/A
3805-MWI6	9/28/2013	15:30	15.43	7.19	-36	2.820	0.0	0.00	N/A
3805-MWI9	9/28/2013	13:55	12.13	6.80	-111	0.600	0.0	0.00	N/A
3805-MWS11	9/26/2013	14:00	15.68	6.71	-118	0.354	0.0	0.42	1.9
3805-MWS14	9/25/2013	09:05	11.68	6.34	-95	3.000	71.8	0.00	N/A
3805-MWS19	9/29/2013	11:15	13.22	5.46	139	0.061	0.0	1.32	N/A
3805-MWS2	9/25/2013	13:05	16.69	6.65	148	0.268	36.7	3.74	N/A
3805-MWS23	9/25/2013	16:20	14.84	6.29	-105	1.950	204.0	0.09	N/A
3805-MWS24	9/26/2013	14:25	13.89	8.42	-115	0.343	5.0	0.00	5.3
3805-MWS3	9/28/2013	14:35	14.14	6.52	119	1.270	0.0	3.41	N/A
3805-MWS4	9/24/2013	13:00	12.58	6.65	-88	0.678	0.0	3.75	N/A
3805-MWS5	9/26/2013	16:35	15.43	6.64	-114	0.215	7.6	0.00	6.4
3805-MWS8	9/28/2013	13:15	12.10	14:09	-94	1.320	0.00	0.00	N/A
3805-MW39	9/30/2013	13:10	14.92	12:57	-58	0.887	18.10	0.74	N/A
3805-PZ6	9/30/2013	12:10	15.95	6.47	-61	0.543	1.3	4.61	N/A
3805-PZ12I	9/28/2013	14:20	4.01	7.49	114	1.480	0.0	7.78	N/A
3805-PZ12S	9/26/2013	14:50	14.79	6.49	-102	0.484	0.0	0.20	3.0
3805-PZ13I	9/25/2013	15:15	12.18	7.20	139	1.750	0.0	1.85	N/A
3805-PZ13D	9/25/2013	14:20	14.54	7.90	137	0.167	0.0	7.88	N/A
3805-PZ13S	9/24/2013	12:15	10.98	6.47	-87	0.910	6.5	0.00	N/A
3805-PZ14	9/26/2013	15:45	13.59	6.62	-80	0.154	17.1	0.00	3.9
3805-PZ2S	9/26/2013	15:15	13.60	6.24	-13	0.360	2.4	0.00	5.8
3805-PZ2I	9/30/2013	09:45	15.61	7.35	1.3	4.280	0.0	5.31	N/A
3805-PZ2D	9/30/2013	08:55	13.14	6.14	-5	0.478	0.0	0.00	N/A
3805-PZ3	9/26/2013	13:45	13.11	6.26	-84	0.349	2.3	0.00	1.9
3805-PZ7	9/30/2013	10:25	15.46	6.93	137	1.540	0.0	8.13	N/A
OSL-MW2	9/24/2013	10:50	10.69	6.35	182	0.242	0.0	7.21	N/A
OSL-MW3	9/24/2013	13:05	12.46	6.95	-92	1.010	0.2	2.58	N/A
OSL-MW8	9/24/2013	13:50	13.24	7.25	48	0.719	0.0	3.27	N/A
OSL-MW9A	9/25/2013	13:20	17.14	6.53	99	0.602	29.8	3.33	N/A
OSL-MW10	9/24/2013	11:58	12.05	6.79	-96	0.759	1.4	0.98	N/A
WWII-002	10/1/2013	09:05	13.09	6.31	160	0.822	0.0	9.39	N/A
WWII-006	10/1/2013	09:15	10.63	6.35	-1	0.178	0.0	1.15	N/A

Abbreviation Key:

Cond. - Conductivity measured in millisiemens per centimeter (mS/cm)

Fe2+ - Ferrous Iron measured in milligrams per liter (mg/L)

ORP - Oxidation-Reduction Potential measured in millivolt (mV)

N/A - Not Available

pH - Potential of Hydrogen

Temp. - Temperature measured in degrees Celsius (°C)

Turb. - Turbidity measured in Nephelometric Turbidity Units (NTUs)

Table 3-3 - Groundwater Analytical Data Summary (Detected Analytes) - Volatile Organic Compounds, Spring 2013

			Area 1295					Area 1595					
			Groundwater					Groundwater					
Analyte	**Screening Value**	**Unit**	**1295-MW25**	**1295-MW26**	**1295-MWS27**	**1295-MWS27 (DUP)**	**1295-MWS28**	**1595-MW33**	**1595-MWS7**	**1595-OBG2**	**1595-OBG2 (DUP)**	**1595-PZ11**	**1595-PZ12**
1,2,4-Trimethylbenzene	None	µg/L	2,540	0.19 U	134	3.3	127	6.5	498	49.7	46.6	1.2 J	462
1,3,5-Trimethylbenzene	None	µg/L	671	0.36 U	30.6	1 J	28.1	0.36 U	154	25.9	25	0.86 J	179
2-Butanone (MEK)	50	µg/L	2.4 U	2.4 U	2.4 U	2.4 U	4.7 U	2.4 U	2.4 U	3 J	3.9 J	2.4 UJ	8.1 J
2-Hexanone	None	µg/L	1.1 U	1.1 U	1.1 U	1.1 U	2.3 U	1.1 U	6.6	1.1 U	1.1 U	1.1 UJ	2 J
4-Methyl-2-pentanone(MIBK)	None	µg/L	0.83 U	0.83 U	0.83 U	0.83 U	1.7 U	0.83 U	2.7 J	0.83 U	0.83 U	0.83 U	3.1 J
Acetone	50	µg/L	3.3 U	3.3 U	3.3 U	3.3 U	6.6 U	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U
Benzene	1	µg/L	0.24 U	0.24 U	**3**	0.24 U	0.47 U	0.24 U	0.37 J	0.32 J	0.31 J	0.24 U	0.24 U
Ethylbenzene	5	µg/L	**1,240**	0.23 U	**108**	1.8	**96.1**	**10.2**	**71.4**	**7.3**	**7**	2.5	**235**
Isopropylbenzene	5	µg/L	**148**	0.45 U	**6**	0.6 J	**5.2**	0.78 J	**30.7**	2.6	2.5	0.45 U	**32.9**
m,p-Xylene	None	µg/L	4,000	0.42 U	487	6	454	8.9	273	34	33	3.5	1,100
Naphthalene	10	µg/L	**493**	1.1 U	**21.7**	1.1 U	**19.3**	3.1 J	**68.9**	**18.8**	**18.1**	2.3 J	**167**
n-Butylbenzene	5	µg/L	**24.7**	0.17 U	0.99 J	0.17 U	0.76 J	0.17 U	**6.3**	1.4 J	1.3 J	0.17 U	**6.7**
n-Propylbenzene	5	µg/L	**309**	0.24 U	**12.7**	1.3 J	**10.9**	0.96 J	**46.9**	4 J	3.8 J	0.28 J	**45.7**
o-Xylene	5	µg/L	**97.6**	0.24 U	**237**	0.24 U	**231**	2.5	**112**	**38**	**36.8**	0.24 U	**166**
p-Isopropyltoluene	5	µg/L	**21.1**	0.22 U	0.68 J	0.22 U	0.6 J	0.22 U	**5.9**	4 J	3.9 J	0.22 U	**6.8**
sec-Butylbenzene	5	µg/L	**18.2**	0.21 U	1.1 J	0.32 J	1 J	0.21 U	4.3 J	2.5 J	2.4 J	0.21 U	**5**
Styrene	5	µg/L	0.21 U	0.21 U	0.21 U	0.21 U	0.43 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
tert-Butylbenzene	None	µg/L	0.3 U	0.3 U	0.3 U	0.3 U	0.61 U	0.3 U	0.3 U	0.75 J	0.72 J	0.3 U	0.3 U
Toluene	5	µg/L	**9**	0.23 U	**376**	0.23 U	**339**	2.3	**7.5**	2.1	2	0.28 J	**185**
Trichloroethene	5	µg/L	0.22 U	0.62 J	0.22 U	0.22 U	0.43 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
Xylene (total)	5	µg/L	**4,100**	0.24 U	**725**	**6**	**685**	**11.4**	**385**	**72**	**69.8**	3.5	**1,270**

Qualifier Key:

U - Analyte not detected in the sample. Value represents the quantitation/detection limit.

J - Result reported is a quantitative estimate

R - Rejected Data

Abbreviation Key:

µg/L - Micrograms per Liter

A Cell Highlighted and Bold Indicates a detected analyte that exceeds the screening criteria
A cell highlighted and not bold Inidcates a detected analyte that does not exceed the screening criteria
Indicates the analyte is not detected or not sampled

Table 3-3 - Groundwater Analytical Data Summary (Detected Analytes) - Volatile Organic Compounds, Spring 2013

			Area 1795					Area 2140						Areas 1995 & 3805	
			Groundwater					Groundwater						Groundwater	
Analyte	**Screening Value**	**Unit**	**1795-MWS11**	**1795-MWS21**	**1795-MWS3**	**1795-MWS7**	**1795-PZ15**	**2140-MW02**	**2140-MW06**	**2140-MW07**	**2140-MW12**	**2140-MW19**	**2140-MW37**	**1995-MWS10**	**1995-MWS9**
1,2,4-Trimethylbenzene	None	µg/L	0.19 U	5.2	288	994	2 U	116	584	1,750	1.8 J	0.19 U	1,630	2 U	236
1,3,5-Trimethylbenzene	None	µg/L	0.36 U	0.36 U	89.4	353 J	0.36 U	36.6	157	785	0.83 J	0.36 U	494	4.3	21.3
2-Butanone (MEK)	50	µg/L	2.4 U	2.4 R	4.7 U	12 U	2.4 U	2.4 U	47 U	47 U	2.4 U	2.4 U	24 R	2.4 R	4.7 U
2-Hexanone	None	µg/L	1.1 U	1.1 U	7 J	5.7 U	1.1 U	4.5 J	23 U	36.5 J	1.1 U	1.1 U	78.3	1.1 U	2.3 U
4-Methyl-2-pentanone(MIBK)	None	µg/L	0.83 U	0.83 U	2.4 J	4.1 U	0.83 U	0.83 U	17 U	17 U	0.83 U	0.83 U	8.3 U	0.83 U	1.7 U
Acetone	50	µg/L	3.3 U	9.2 J	6.6 U	16 U	3.3 U	3.3 U	66 U	66 U	3.3 U	3.3 U	33 U	12.3	6.6 U
Benzene	1	µg/L	0.24 U	**1.8**	0.47 U	1.2 U	0.24 U	**92.3**	**26.4**	**307**	**7.6**	0.3 J	**93.4**	0.24 U	0.71 J
Ethylbenzene	5	µg/L	0.23 U	**45**	**254**	**437 J**	0.43 J	**62.4**	**499**	**57.6**	0.29 J	0.23 U	**642**	**30.4**	**61.3**
Isopropylbenzene	5	µg/L	0.45 U	**10.3**	**16.3**	**19.7**	0.45 U	3.7	**26.8 J**	**14 J**	0.45 J	0.45 U	**53.8**	**5.3**	**18.7**
m,p-Xylene	None	µg/L	0.62 J	5.4	669	2,490	1.4	362	2,430	4,110	3.1	0.42 U	3,830	6.6	123
Naphthalene	10	µg/L	1.1 U	1.1 U	**60.7**	**168**	1.1 U	**19.4**	**103**	**320**	1.8 J	1.1 U	**354**	**35.5**	**174**
n-Butylbenzene	5	µg/L	0.17 U	1.4 J	2.7 J	**15 J**	0.17 U	0.17 U	3.4 U	3.4 U	0.17 U	0.17 U	1.7 U	0.17 U	**1.7 J**
n-Propylbenzene	5	µg/L	0.24 U	**10.5**	**33.4**	**40.7**	0.24 U	**7.6**	**42.8 J**	**16.9 J**	0.24 U	0.24 U	**110**	4.3 J	**23.8**
o-Xylene	5	µg/L	0.24 U	4.4	**227**	**1,370**	0.45 J	**164**	**1,040**	**3,240**	2.7	0.24 U	**1,220**	3.4	**24.9**
p-Isopropyltoluene	5	µg/L	0.22 U	0.76 J	2.4 J	**12.1 J**	0.22 U	0.58 J	4.4 U	**6.1 J**	0.22 U	0.22 U	**6 J**	0.38 J	**5.1 J**
sec-Butylbenzene	5	µg/L	0.21 U	1.4 J	1.7 J	**9.1 J**	0.21 U	0.85 J	4.3 U	4.3 U	0.21 U	0.21 U	**7.4 J**	0.53 J	4.4 J
Styrene	5	µg/L	0.21 U	0.21 U	0.43 U	1.1 U	0.21 U	0.21 U	4.3 U	4.3 U	0.21 U	0.21 U	2.1 U	0.32 J	0.43 U
tert-Butylbenzene	None	µg/L	0.3 U	0.3 U	0.61 U	1.5 U	0.3 U	0.3 U	6.1 U	6.1 U	0.3 U	0.3 U	3 U	0.3 U	0.61 U
Toluene	5	µg/L	0.23 U	**6.2**	**115**	**168**	0.58 J	**440**	**5,790**	**633**	1.8	0.23 U	**1,310**	**9.2**	4.1
Trichloroethene	5	µg/L	0.22 U	0.22 U	0.43 U	1.1 U	0.22 U	0.22 U	4.3 U	4.3 U	0.22 U	0.22 U	2.2 U	0.22 U	0.43 U
Xylene (total)	5	µg/L	0.82 J	**9.8**	**896**	**3,860**	1.9	**526**	**3,470**	**7,350**	**5.7**	0.24 U	**5,050**	**10.1**	**148**

Qualifier Key:

U - Analyte not detected in the sample. Value represents the quantitation/detection limit.

J - Result reported is a quantitative estimate

R - Rejected Data

Abbreviation Key:

µg/L - Micrograms per Liter

A Cell Highlighted and Bold Indicates a detected analyte that exceeds the screening criteria
A cell highlighted and not bold Inidcates a detected analyte that does not exceed the screening criteria
Indicates the analyte is not detected or not sampled

Table 3-3 - Groundwater Analytical Data Summary (Detected Analytes) - Volatile Organic Compounds, Spring 2013

			Areas 1995 & 3805 (continued)									OSL
			Groundwater									Groundwater
Analyte	**Screening Value**	**Unit**	**3805-MWS11**	**3805-MWS24**	**3805-MWS5**	**3805-MWS8**	**3805-PZ12S**	**3805-PZ14**	**3805-PZ14 (DUP)**	**3805-PZ2S**	**3805-PZ3**	**OSL-MW3**
1,2,4-Trimethylbenzene	None	µg/L	899	526	1,010	2 U	1,930	2,730	2,730	175	433	180
1,3,5-Trimethylbenzene	None	µg/L	275	164	322	1.5 J	574	720	589	52.8	130	81.6
2-Butanone (MEK)	50	µg/L	2.4 U	2.4 U	2.7 J	2.4 U	24 R	120 U	24 R	5.9 R	12 R	2.4 U
2-Hexanone	None	µg/L	2.1 J	1.1 U	1.1 U	1.1 U	11 U	57 U	11 U	2.8 U	5.7 U	1.1 U
4-Methyl-2-pentanone(MIBK)	None	µg/L	0.83 U	0.83 U	4.5 J	0.83 U	8.3 U	41 U	8.3 U	2.1 U	4.1 U	0.83 U
Acetone	50	µg/L	3.3 U	3.3 U	3.3 U	3.3 U	33 U	160 U	**73.1 J**	13.5 J	16 U	3.3 U
Benzene	1	µg/L	**9.4**	**2.2**	**15**	**5.6**	**91.5**	12 U	2.4 U	0.61 J	**23.6**	**1.6**
Ethylbenzene	5	µg/L	**194**	**273**	**1,270**	**6.4**	**1,580**	**3,080**	**3,230**	**192**	**549**	**63.9**
Isopropylbenzene	5	µg/L	**40.1**	**7.1**	**24.7**	1.6 J	**76.1**	**146**	**124**	**8.7**	**21.2**	**10.7**
m,p-Xylene	None	µg/L	1,170	2,250	7,470	1.7	7,000	13,500	14,400	796	2,060	65.6
Naphthalene	10	µg/L	**140**	**132**	**345**	1.1 U	**492**	**724**	**673**	**51**	**187**	**27.3**
n-Butylbenzene	5	µg/L	**10.2**	1.2 J	**11.1**	0.43 J	**11.1 J**	**24.2 J**	**21.2 J**	**6.2 J**	0.86 U	2.1 J
n-Propylbenzene	5	µg/L	**76.9**	**11.4**	**10.6**	2.2 J	**154**	**304**	**258**	**25.6**	**37.5**	**39.2**
o-Xylene	5	µg/L	**312**	**1,120**	**3,240**	0.69 J	**2,760**	**6,220**	**6,340**	**350**	**891**	**19.1**
p-Isopropyltoluene	5	µg/L	**7.6**	2.6 J	2.9 J	0.37 J	**7.1 J**	11 U	**7.6 J**	3.2 J	2.2 J	2.2 J
sec-Butylbenzene	5	µg/L	**6.1**	0.78 J	0.4 J	0.59 J	**7.9 J**	**13.2 J**	**11 J**	3.7 J	2 J	2.4 J
Styrene	5	µg/L	0.21 U	0.21 U	0.21 U	0.21 U	2.1 U	11 U	2.1 U	0.54 U	1.1 U	0.21 U
tert-Butylbenzene	None	µg/L	0.3 U	0.3 U	0.3 U	0.3 U	3 U	15 U	3 U	0.76 U	1.5 U	0.3 U
Toluene	5	µg/L	**136**	**425**	**486**	0.83 J	**3,070**	**3,030**	**3,110**	**499**	**1,320**	**20.1**
Trichloroethene	5	µg/L	0.22 U	0.22 U	0.22 U	0.22 U	2.2 U	11 U	2.2 U	0.54 U	1.1 U	0.22 U
Xylene (total)	5	µg/L	**1,480**	**3,360**	**10,700**	2.4	**9,760**	**19,700**	**20,700**	**1,150**	**2,950**	**84.8**

Qualifier Key:

U - Analyte not detected in the sample. Value represents the quantitation/detection limit.

J - Result reported is a quantitative estimate

R - Rejected Data

Abbreviation Key:

µg/L - Micrograms per Liter

A Cell Highlighted and Bold Indicates a detected analyte that exceeds the screening criteria
A cell highlighted and not bold Inidcates a detected analyte that does not exceed the screening criteria
Indicates the analyte is not detected or not sampled

Table 3-4 - Groundwater, Surface Water, and Seep Analytical Data Summary (Detected Analytes) - Volatile Organic Compounds, Fall 2013

			Area 1295						Area 1595						
			Groundwater						Groundwater						
Analyte	**Screening Value**	**Unit**	**1295-MW25**	**1295-MW26**	**1295-MW30**	**1295-MW30 (DUP)**	**1295-MWS27**	**1295-MWS28**	**1595-MW33**	**1595-MWS7**	**1595-MWS8**	**1595-MWS9**	**1595-OBG2**	**1595-PZ11**	**1595-PZ12**
1,2,4-Trimethylbenzene	None	µg/L	1.6 J	0.23 U	2,260	2,470	57.1	0.6 J	2.2	517	12.6	0.57 J	63.6	0.51 J	428
1,2-Dichloroethane	0.6	µg/L	0.22 U	0.22 U	0.22 U	2.2 UJ	0.22 U	0.22 UJ	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.55 U
1,2-Dichloroethene (total)	None	µg/L	0.24 U	0.24 U	0.24 U	2.4 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.6 U
1,3,5-Trimethylbenzene	None	µg/L	0.43 U	0.43 U	572	605	14.8	0.43 U	0.43 U	227	14.5	0.43 U	30.8	0.43 U	124
1,4-Dichlorobenzene	3	µg/L	0.3 U	0.3 U	0.3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.75 U
2-Butanone (MEK)	50	µg/L	3.2 U	3.2 R	3.2 R	32 U	3.2 U	3.2 U	3.2 R	3.2 R	3.2 R	3.2 R	3.2 R	3.2 R	8 R
4-Methyl-2-pentanone(MIBK)	None	µg/L	1.5 U	1.5 U	1.5 U	15 UJ	1.5 U	1.5 UJ	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	3.7 U
Acetone	50	µg/L	3.3 U	3.3 U	3.3 U	33 UJ	3.3 U	3.3 UJ	3.3 U	3.3 U	10 U	3.3 R	3.3 U	3.3 R	8.4 R
Benzene	1	µg/L	0.28 U	0.28 U	0.28 U	2.8 U	0.28 U	0.28 U	0.28 U	0.76 J	0.28 U	0.28 U	0.86 J	0.62 J	0.7 U
Carbon tetrachloride	5	µg/L	0.23 U	0.23 U	0.23 U	2.3 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.57 U
Chloroethane	5	µg/L	0.39 U	0.39 U	0.39 U	3.9 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.97 U
Chloroform	7	µg/L	0.25 U	0.25 U	0.25 U	2.5 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	1.1 J
Chloromethane	5	µg/L	0.36 U	0.36 U	0.36 U	3.6 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.91 U
cis-1,2-Dichloroethene	5	µg/L	0.24 U	0.24 U	0.24 U	2.4 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.6 U
Dichlorodifluoromethane	5	µg/L	0.63 U	0.63 U	0.63 U	6.3 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	1.6 U
Ethylbenzene	5	µg/L	0.79 J	0.21 U	**1,460**	**1,480**	**36.9**	0.34 J	4.3	**327**	**5.8**	0.31 J	**19.5**	**7.5**	**219**
Isopropylbenzene	5	µg/L	**6.2**	0.22 U	**139**	**135**	3.4	0.22 U	3.5	**62.9**	**18.5**	2	**5.2**	2.1	**31**
m,p-Xylene	None	µg/L	0.4 U	0.4 U	4,710	5,190	86.8	1.3	5.5	369	9.4	1	62	0.94 J	758
Naphthalene	10	µg/L	0.25 U	0.25 U	**526**	**600**	**17.8**	0.25 U	**11**	**183**	**33.7**	0.25 U	**39.3**	0.76 J	**166**
n-Butylbenzene	5	µg/L	0.39 U	0.39 U	0.39 U	3.9 U	2.2 J	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.98 U
n-Propylbenzene	5	µg/L	4.7 J	0.32 U	**297**	**305**	**8.7**	0.32 U	3.1 J	**99.8**	**13.7**	0.32 U	**6**	2.6 J	**50.4**
o-Xylene	5	µg/L	0.43 J	0.19 U	**119**	**115**	**38.8**	0.19 U	0.84 J	**106**	4.1	0.66 J	**61.7**	0.19 U	**77.8**
p-Isopropyltoluene	5	µg/L	0.42 U	0.42 U	**17.3**	**15.6 J**	0.61 J	0.42 U	0.42 U	**5.3**	1.8 J	0.42 U	4.3 J	0.42 U	4.2 J
sec-Butylbenzene	5	µg/L	2 J	0.48 U	**13.3**	**14.4 J**	1.1 J	0.48 U	0.55 J	3.7 J	2.8 J	0.48 U	2.6 J	1.3 J	3.7 J
Styrene	5	µg/L	0.3 U	0.3 U	0.3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.76 U
tert-Butylbenzene	None	µg/L	0.25 U	0.25 U	0.25 U	2.5 U	0.25 U	0.25 U	0.25 U	0.25 U	0.58 J	0.25 U	0.83 J	0.25 U	0.62 U
Tetrachloroethene	5	µg/L	0.25 U	0.25 UJ	0.25 UJ	2.5 U	0.25 U	0.25 U	0.25 UJ	0.25 UJ	0.25 U	0.25 U	0.25 UJ	0.25 U	0.63 U
Toluene	5	µg/L	0.44 U	0.44 U	**9.3**	**9.3 J**	3.3	0.44 U	2	**24.7**	1.6	0.44 U	**7.8**	0.44 U	**120**
trans-1,2-Dichloroethene	5	µg/L	0.38 U	0.38 U	0.38 U	3.8 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.95 U
Trichloroethene	5	µg/L	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.62 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.3 U
Xylene (total)	5	µg/L	0.43 J	0.29 J	**4,830**	**5,310**	**126**	1.3	**6.4**	**475**	**13.5**	1.7	**124**	0.94 J	**836**

Qualifier Key:

U - Analyte not detected in the sample. Value represents the quantitation/detection limit.

J - Result reported is a quantitative estimate

Abbreviation Key:

µg/L - Micrograms per Liter

A Cell Highlighted and Bold Indicates a detected analyte that exceeds the screening criteria
A cell highlighted and not bold Inidcates a detected analyte that does not exceed the screening criteria
Indicates the analyte is not detected or not sampled

Table 3-4 - Groundwater, Surface Water, and Seep Analytical Data Summary (Detected Analytes) - Volatile Organic Compounds, Fall 2013

			Area 1595 (continued)						Area 1795				
			Groundwater				Surface Water		Groundwater				
Analyte	Screening Value	Unit	1595-PZ12 (DUP)	1595-PZ13	1595-PZ9	1595-RW4	1595-SW01	1595-SW01 (DUP)	1795-MWD13	1795-MWI12	1795-MWS10	1795-MWS11	1795-MWS11 (DUP)
1,2,4-Trimethylbenzene	None	µg/L	513	332	252	7	2.2	1.9 J	0.23 U	0.47 J	0.23 U	0.58 J	0.62 J
1,2-Dichloroethane	0.6	µg/L	0.44 U	0.55 U	0.44 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
1,2-Dichloroethene (total)	None	µg/L	0.48 U	0.6 U	0.48 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
1,3,5-Trimethylbenzene	None	µg/L	123	67.3	99.9	2	2.5	2.1	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
1,4-Dichlorobenzene	3	µg/L	0.6 U	0.75 U	0.6 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
2-Butanone (MEK)	50	µg/L	6.4 R	8 R	6.4 R	3.2 R	3.2 R	3.2 R	3.2 U	3.2 U	3.2 U	3.2 R	3.2 R
4-Methyl-2-pentanone(MIBK)	None	µg/L	3 U	3.7 U	3 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
Acetone	50	µg/L	6.7 R	25 U	6.7 R	3.3 R	9.3 J	8.9 J	3.3 U	3.3 U	3.3 U	3.3 R	3.3 R
Benzene	1	µg/L	0.56 U	0.7 U	0.56 U	0.28 U	0.28 U	0.28 U	**4.5**	0.3 J	0.28 U	0.28 U	0.28 U
Carbon tetrachloride	5	µg/L	0.45 U	0.57 U	0.45 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
Chloroethane	5	µg/L	0.78 U	0.97 U	0.78 U	0.39 U	0.39 U	0.39 U	0.39 UJ	0.39 UJ	0.39 UJ	0.39 U	0.39 U
Chloroform	7	µg/L	0.49 U	0.99 J	0.91 J	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
Chloromethane	5	µg/L	0.73 U	0.91 U	0.73 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U
cis-1,2-Dichloroethene	5	µg/L	0.48 U	0.6 U	0.48 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
Dichlorodifluoromethane	5	µg/L	1.3 U	1.6 U	1.3 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U
Ethylbenzene	5	µg/L	**219**	**271**	**99.7**	4.6	2	1.7	0.21 U	0.98 J	0.21 U	0.24 J	0.25 J
Isopropylbenzene	5	µg/L	**30.7**	**29.4**	**18.3**	2.4	0.22 U	0.22 U	0.22 U	1.2 J	0.26 J	0.22 U	0.22 U
m,p-Xylene	None	µg/L	755	734	453	5.6	5.2	4.5	0.4 U	0.4 U	0.4 U	0.46 J	0.46 J
Naphthalene	10	µg/L	**170**	**233**	**33**	4.8 J	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
n-Butylbenzene	5	µg/L	0.78 U	0.98 U	0.78 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U
n-Propylbenzene	5	µg/L	**50**	**33.9**	**25.7**	3.2 J	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
o-Xylene	5	µg/L	**78.6**	**164**	**174**	2.1	2.9	2.7	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
p-Isopropyltoluene	5	µg/L	4.2 J	2.9 J	3.7 J	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U
sec-Butylbenzene	5	µg/L	3.6 J	1.2 U	1.9 J	1.2 J	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U
Styrene	5	µg/L	0.6 U	0.76 U	0.6 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
tert-Butylbenzene	None	µg/L	0.49 U	0.62 U	0.49 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
Tetrachloroethene	5	µg/L	0.5 U	0.63 U	0.5 U	0.25 U	0.25 U	0.25 U	**27.8**	0.25 U	0.25 U	0.25 U	0.25 U
Toluene	5	µg/L	**122**	1.1 U	**83.5**	0.48 J	1.1	1	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U
trans-1,2-Dichloroethene	5	µg/L	0.76 U	0.95 U	0.76 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
Trichloroethene	5	µg/L	1 U	1.3 U	1 U	0.5 U	0.5 U	0.5 U	1	0.5 U	0.5 U	0.5 U	0.5 U
Xylene (total)	5	µg/L	**834**	**899**	**628**	**7.7**	**8.2**	**7.1**	0.19 U	0.19 U	0.19 U	0.46 J	0.46 J

Qualifier Key:

U - Analyte not detected in the sample. Value represents the quantitation/detection limit.

J - Result reported is a quantitative estimate

Abbreviation Key:

µg/L - Micrograms per Liter

A Cell Highlighted and Bold Indicates a detected analyte that exceeds the screening criteria
A cell highlighted and not bold Inidcates a detected analyte that does not exceed the screening criteria
Indicates the analyte is not detected or not sampled

Table 3-4 - Groundwater, Surface Water, and Seep Analytical Data Summary (Detected Analytes) - Volatile Organic Compounds, Fall 2013

			Area 1795 (continued)										Area 2140			
			Groundwater										Groundwater			
Analyte	Screening Value	Unit	1795-MWS2	1795-MWS21	1795-MWS3	1795-MWS7	1795-MWS7 (DUP)	1795-PZ13	1795-PZ14	1795-PZ15	1795-PZ4	1795-PZ5	2140-MW02	2140-MW04	2140-MW05	2140-MW07
1,2,4-Trimethylbenzene	None	µg/L	0.23 U	2.3	593	295	316	6.7	23.9	1.8 J	2.1	58.9	6.7	5.4	1,200	2,220
1,2-Dichloroethane	0.6	µg/L	0.22 U	0.22 U	1.1 U	0.55 UJ	0.44 UJ	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	1.1 U	2.2 U
1,2-Dichloroethene (total)	None	µg/L	0.24 U	0.24 U	1.2 U	0.6 U	0.48 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	1.2 U	2.4 U
1,3,5-Trimethylbenzene	None	µg/L	0.43 U	0.43 U	157	97.2	105	4.1	1.9 J	0.6 J	0.43 U	4.3	1.5 J	1.9 J	555	799
1,4-Dichlorobenzene	3	µg/L	0.3 U	0.3 U	1.5 U	0.75 U	0.6 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1.5 U	3 U
2-Butanone (MEK)	50	µg/L	3.2 U	3.2 U	16 R	8 U	6.4 U	3.2 U	3.2 U	3.2 R	3.2 R	3.2 U	3.2 R	3.6 J	16 R	32 R
4-Methyl-2-pentanone(MIBK)	None	µg/L	1.5 U	1.5 U	7.4 U	3.7 UJ	3 UJ	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	7.4 U	15 U
Acetone	50	µg/L	3.3 U	3.3 UJ	17 U	22.9 J	25.3 J	3.3 UJ	3.3 UJ	3.3 U	3.3 R	3.3 U	3.3 U	3.3 R	17 R	33 R
Benzene	1	µg/L	0.28 U	**1.6**	1.4 U	0.7 U	0.56 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	**1.7**	0.28 U	**431**	**329**
Carbon tetrachloride	5	µg/L	0.23 U	0.23 U	1.1 U	0.57 U	0.45 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	1.1 U	2.3 U
Chloroethane	5	µg/L	0.39 UJ	0.39 UJ	1.9 U	0.97 U	0.78 U	0.39 UJ	0.39 U	0.39 U	0.39 U	0.39 UJ	0.39 U	0.39 U	1.9 U	3.9 U
Chloroform	7	µg/L	0.25 U	0.25 U	1.2 U	0.61 U	0.49 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	1.2 U	2.5 U
Chloromethane	5	µg/L	0.36 U	0.36 U	1.8 U	0.91 U	0.73 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	1.8 U	3.6 U
cis-1,2-Dichloroethene	5	µg/L	0.24 U	0.24 U	1.2 U	0.6 U	0.48 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	1.2 U	2.4 U
Dichlorodifluoromethane	5	µg/L	0.63 U	0.63 U	3.2 U	1.6 U	1.3 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	3.2 U	6.3 U
Ethylbenzene	5	µg/L	0.26 J	**22.8**	**356**	**208**	**216**	0.21 U	4.6	0.59 J	0.95 J	**44.7**	3.3	0.31 J	**295**	**80.6**
Isopropylbenzene	5	µg/L	0.22 U	**11.9**	**33.9**	**10.7**	**11.4**	0.22 U	4	0.22 U	0.22 U	3	0.25 J	1.1 J	**38.7**	**20.5**
m,p-Xylene	None	µg/L	0.4 U	0.99 J	948	1,240	1,050	0.43 J	4.1	7.4	0.54 J	47.2	17.6	2	1,880	4,770
Naphthalene	10	µg/L	0.25 U	0.73 J	**114**	**90.4**	**98.8**	0.92 J	0.54 J	0.37 J	0.25 U	6.2	1.6 J	0.6 J	**223**	**396**
n-Butylbenzene	5	µg/L	0.39 U	2.1 J	2 U	0.98 U	0.78 U	0.39 U	1.9 J	0.39 U	0.39 U	0.9 J	0.39 U	1.1 J	**47.2**	**87.5**
n-Propylbenzene	5	µg/L	0.32 U	**9.5**	**79.2**	**20.1**	**22.2**	0.32 U	**10.1**	0.32 U	0.32 U	**6.8**	0.52 J	3.2 J	**89.2**	**26.3 J**
o-Xylene	5	µg/L	0.19 U	1.2	**296**	**712**	**600**	1	0.4 J	**6.2**	0.19 U	**7.4**	**6.7**	0.69 J	**979**	**3,270**
p-Isopropyltoluene	5	µg/L	0.42 U	0.94 J	4.7 J	4 J	4.2 J	2.3 J	1.2 J	0.42 U	0.42 U	0.72 J	0.42 U	0.56 J	**7.8 J**	**8.6 J**
sec-Butylbenzene	5	µg/L	0.48 U	1.9 J	3.8 J	3.3 J	3.5 J	0.48 U	1.6 J	0.48 U	0.48 U	0.77 J	0.48 U	0.58 J	**7.6 J**	4.9 J
Styrene	5	µg/L	0.3 U	0.3 U	1.5 U	0.76 U	0.6 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1.5 U	3 U
tert-Butylbenzene	None	µg/L	0.25 U	0.28 J	1.2 U	0.62 U	0.49 U	0.38 J	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	1.2 U	2.5 U
Tetrachloroethene	5	µg/L	0.25 U	0.25 U	1.3 UJ	0.63 U	0.5 U	0.25 U	0.25 U	0.25 UJ	0.25 U	0.25 U	0.25 U	0.25 U	1.3 U	2.5 U
Toluene	5	µg/L	0.44 U	4.5	**79.4**	**49.3**	**54.3**	0.44 U	0.72 J	0.71 J	0.44 U	3.8	**15**	0.71 J	**1,580**	**711**
trans-1,2-Dichloroethene	5	µg/L	0.38 U	0.38 U	1.9 U	0.95 U	0.76 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	1.9 U	3.8 U
Trichloroethene	5	µg/L	0.5 U	0.5 U	2.5 U	1.3 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U	5 U
Xylene (total)	5	µg/L	0.19 U	2.2	**1,240**	**1,950**	**1,650**	1.5	4.5	**13.7**	0.54 J	**54.5**	**24.3**	2.7	**2,760**	**8,040**

Qualifier Key:

U - Analyte not detected in the sample. Value represents the quantitation/detection limit.

J - Result reported is a quantitative estimate

Abbreviation Key:

µg/L - Micrograms per Liter

A Cell Highlighted and Bold Indicates a detected analyte that exceeds the screening criteria
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Indicates the analyte is not detected or not sampled

Table 3-4 - Groundwater, Surface Water, and Seep Analytical Data Summary (Detected Analytes) - Volatile Organic Compounds, Fall 2013

			Area 2140 (continued)				Areas 1995 & 3805							
			Groundwater				Groundwater							
Analyte	**Screening Value**	**Unit**	**2140-MW07 (DUP)**	**2140-MW09**	**2140-MW12**	**2140-MW37**	**1995-MWS10**	**1995-MWS9**	**3805-014**	**3805-014 (DUP)**	**3805-016**	**3805-MW39**	**3805-MWD10**	**3805-MWD13**
1,2,4-Trimethylbenzene	None	µg/L	2,300	99.2 J	0.23 U	2,530	23.3	278	2,350	2,350	1,290 J	715	0.23 U	0.57 U
1,2-Dichloroethane	0.6	µg/L	2.2 U	0.22 U	**0.85 J**	2.2 U	0.22 U	0.22 U	4.4 U	4.4 U	4.4 UJ	1.1 U	0.22 U	0.55 U
1,2-Dichloroethene (total)	None	µg/L	2.4 U	0.24 U	0.24 U	2.4 U	0.24 U	0.24 U	4.8 U	4.8 U	4.8 UJ	1.2 U	0.24 U	0.6 U
1,3,5-Trimethylbenzene	None	µg/L	833	43.7	0.43 U	656	6	41.8	728	716	323 J	208	0.43 U	1.1 U
1,4-Dichlorobenzene	3	µg/L	3 U	0.3 U	0.3 U	3 U	0.3 U	0.3 U	6 U	6 U	6 UJ	1.5 U	0.3 U	0.75 U
2-Butanone (MEK)	50	µg/L	32 R	3.2 R	3.2 R	**82.9 J**	8.1 J	6 J	64 R	64 R	64 R	16 R	3.2 R	8 R
4-Methyl-2-pentanone(MIBK)	None	µg/L	15 U	1.5 U	1.5 U	15 U	2.5 J	1.5 U	30 U	30 U	30 UJ	7.4 U	1.5 U	3.7 U
Acetone	50	µg/L	33 R	9.4 J	3.3 R	**53.7 J**	16 J	3.6 J	67 R	67 R	67 UJ	17 R	3.3 R	8.4 R
Benzene	1	µg/L	**333**	**9.8**	**31.9**	**145**	0.28 U	0.34 J	5.6 U	5.6 U	**6.8 J**	1.4 U	0.68 J	0.7 U
Carbon tetrachloride	5	µg/L	2.3 U	0.23 U	0.23 U	2.3 U	0.23 U	0.23 U	4.5 U	4.5 U	4.5 UJ	1.1 U	0.23 U	0.91 J
Chloroethane	5	µg/L	3.9 U	0.39 U	0.39 U	3.9 U	0.39 U	0.39 U	7.8 U	7.8 U	7.8 UJ	1.9 U	0.39 U	0.97 U
Chloroform	7	µg/L	2.5 U	0.25 U	0.25 U	2.5 U	0.25 U	0.25 U	**13.8 J**	**11.4 J**	4.9 UJ	2.4 J	0.25 U	1.3 J
Chloromethane	5	µg/L	3.6 U	0.36 U	0.36 U	3.6 U	0.36 U	0.36 U	7.3 U	7.3 U	7.3 UJ	1.8 U	0.36 U	0.91 U
cis-1,2-Dichloroethene	5	µg/L	2.4 U	0.24 U	0.24 U	2.4 U	0.24 U	0.24 U	4.8 U	4.8 U	4.8 UJ	1.2 U	0.24 U	0.6 U
Dichlorodifluoromethane	5	µg/L	6.3 U	0.63 UJ	0.63 U	6.3 U	0.63 U	0.63 U	13 U	13 U	13 UJ	3.2 U	0.63 U	1.6 U
Ethylbenzene	5	µg/L	**84.5**	**139 J**	0.21 U	**1,080**	**189**	**76.6**	**1,040**	**1,090**	**1,590 J**	**300**	0.21 U	0.52 U
Isopropylbenzene	5	µg/L	**21.7**	**10.1**	1.7 J	**91.9**	**22.5**	**26.7**	**110**	**109**	**68.9 J**	**26.4**	0.22 U	0.56 U
m,p-Xylene	None	µg/L	5,090	311	0.4 U	7,220	27.2	183	4,990	5,160	5,490 J	1,910	0.4 U	1 U
Naphthalene	10	µg/L	**397**	**39.6**	6.2	**510**	**124**	**233**	**440**	**452**	**488 J**	**255**	0.25 U	0.63 U
n-Butylbenzene	5	µg/L	**90**	**7.9**	0.47 J	**80.3**	**8.4**	**10.1**	7.8 U	7.8 U	7.8 UJ	2 U	0.39 U	0.98 U
n-Propylbenzene	5	µg/L	**27.2 J**	**17.5**	0.32 U	**180**	**24.1**	**34.2**	**261**	**265**	**153 J**	**45.4**	0.32 U	0.81 U
o-Xylene	5	µg/L	**3,490**	**133 J**	**6.1**	**1,710**	**53.9**	**39.7**	**1,800**	**1,910**	**2,590 J**	**316**	0.19 U	0.48 U
p-Isopropyltoluene	5	µg/L	**9 J**	0.64 J	0.42 U	**8.5 J**	1.3 J	**6.8**	**10.4 J**	**10.8 J**	8.3 UJ	2.5 J	0.42 U	1 U
sec-Butylbenzene	5	µg/L	**5.2 J**	0.77 J	0.64 J	**9.4 J**	2.5 J	**6.3**	**10.3 J**	**11.1 J**	9.5 UJ	2.5 J	0.48 U	1.2 U
Styrene	5	µg/L	3 U	0.3 U	0.3 U	3 U	0.3 U	0.3 U	6 U	6 U	6 UJ	1.5 U	0.3 U	0.76 U
tert-Butylbenzene	None	µg/L	2.5 U	0.25 U	0.25 U	366	0.25 U	0.25 U	4.9 U	4.9 U	4.9 UJ	1.2 U	0.25 U	0.62 U
Tetrachloroethene	5	µg/L	2.5 U	0.25 U	0.25 U	2.5 U	0.25 U	0.25 U	5 U	5 U	5 UJ	1.3 U	0.25 U	**319**
Toluene	5	µg/L	**742**	**450**	0.56 J	**3,070**	**29.6**	**6.8**	**233**	**249**	**3,210 J**	**112**	0.44 U	1.1 U
trans-1,2-Dichloroethene	5	µg/L	3.8 U	0.38 U	0.38 U	3.8 U	0.38 U	0.38 U	7.6 U	7.6 U	7.6 UJ	1.9 U	0.38 U	0.95 U
Trichloroethene	5	µg/L	5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	10 U	10 U	10 UJ	2.5 U	0.5 U	1.3 U
Xylene (total)	5	µg/L	**8,580**	**424 J**	**6.1**	**8,960**	**81.1**	**223**	**6,790**	**7,070**	**8,080 J**	**2,220**	0.19 U	0.48 U

Qualifier Key:

U - Analyte not detected in the sample. Value represents the quantitation/detection limit.

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Abbreviation Key:

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Indicates the analyte is not detected or not sampled

Table 3-4 - Groundwater, Surface Water, and Seep Analytical Data Summary (Detected Analytes) - Volatile Organic Compounds, Fall 2013

			Areas 1995 & 3805 (continued)											
			Groundwater											
Analyte	Screening Value	Unit	3805-MWD16	3805-MWD18	3805-MWD7	3805-MWI12	3805-MWI15	3805-MWI15 (DUP)	3805-MWI17	3805-MWI20	3805-MWI6	3805-MWI9	3805-MWS11	3805-MWS14
1,2,4-Trimethylbenzene	None	µg/L	0.4 J	0.23 U	0.23 U	0.23 U	0.23 UJ	0.23 U	370	0.23 U	10.4	207	714	222
1,2-Dichloroethane	0.6	µg/L	0.22 UJ	0.22 UJ	0.22 U	0.22 UJ	0.22 UJ	0.22 U	2.2 UJ	0.22 U	0.22 U	4.4 U	1.1 U	0.22 U
1,2-Dichloroethene (total)	None	µg/L	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	2.4 U	0.24 U	0.24 U	4.8 U	1.2 U	0.24 U
1,3,5-Trimethylbenzene	None	µg/L	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	91.5	0.43 U	4.3	252	186	71 J
1,4-Dichlorobenzene	3	µg/L	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U	0.3 U	0.3 U	6 U	1.5 U	0.3 U
2-Butanone (MEK)	50	µg/L	3.2 UJ	3.2 U	3.2 R	3.2 U	3.2 R	3.2 R	32 U	3.2 R	10.4 J	64 R	16 R	3.2 R
4-Methyl-2-pentanone(MIBK)	None	µg/L	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	15 U	1.5 U	1.5 U	30 U	7.4 U	1.5 U
Acetone	50	µg/L	3.3 R	3.3 U	3.3 R	3.3 UJ	3.3 R	3.3 R	33 U	3.3 R	39.7 J	67 R	17 R	3.3 R
Benzene	1	µg/L	0.28 U	**17.8**	0.28 U	0.28 U	**4.8**	**4.9**	**1,420**	0.28 U	0.61 J	**147**	**3.1 J**	**6.6**
Carbon tetrachloride	5	µg/L	0.23 UJ	0.23 U	0.73 J	0.23 UJ	0.23 UJ	0.23 U	2.3 U	0.23 U	0.23 U	4.5 U	1.1 U	0.23 U
Chloroethane	5	µg/L	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	3.9 U	0.39 U	0.39 U	7.8 U	1.9 U	0.39 U
Chloroform	7	µg/L	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	2.5 U	0.25 U	0.73 J	**10.8 J**	1.2 U	0.25 U
Chloromethane	5	µg/L	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	3.6 U	0.36 U	0.36 U	7.3 U	1.8 U	0.36 U
cis-1,2-Dichloroethene	5	µg/L	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	2.4 U	0.24 U	0.24 U	4.8 U	1.2 U	0.24 U
Dichlorodifluoromethane	5	µg/L	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	6.3 U	0.63 U	0.63 U	13 U	3.2 U	0.63 U
Ethylbenzene	5	µg/L	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	**877**	0.21 U	**144**	**1,340**	**302**	**141**
Isopropylbenzene	5	µg/L	0.22 UJ	0.22 U	0.22 U	0.22 U	0.29 J	0.34 J	**46.5**	0.22 U	**16.4**	**69.6**	**28**	**14.6**
m,p-Xylene	None	µg/L	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	1,350	0.4 U	26.8	1,760	1,630	331 J
Naphthalene	10	µg/L	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 UJ	**112**	0.25 U	**18.4**	**499**	**120**	**63.4 J**
n-Butylbenzene	5	µg/L	0.39 UJ	0.39 U	0.39 U	0.39 U	0.39 UJ	0.39 U	3.9 U	0.39 U	0.39 U	7.8 U	**27.5**	**14.7**
n-Propylbenzene	5	µg/L	0.32 UJ	0.32 U	0.32 U	0.32 U	0.32 UJ	0.32 U	**88.5**	0.32 U	**19**	**161**	**64.3**	**35.7**
o-Xylene	5	µg/L	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	**153**	0.19 U	1.7	**919**	**410**	**90.7**
p-Isopropyltoluene	5	µg/L	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	4.2 U	0.42 U	0.84 J	8.3 U	**5.1 J**	2.7 J
sec-Butylbenzene	5	µg/L	0.48 UJ	0.48 U	0.48 U	0.48 U	0.48 UJ	0.48 U	4.8 U	0.48 U	1.2 J	9.5 U	4.7 J	2.7 J
Styrene	5	µg/L	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U	0.3 U	0.3 U	6 U	1.5 U	0.3 U
tert-Butylbenzene	None	µg/L	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	2.5 U	0.25 U	0.25 U	4.9 U	1.2 U	0.25 U
Tetrachloroethene	5	µg/L	0.25 U	0.25 U	0.25 U	**55.2 J**	**89.3**	**87.8**	2.5 U	0.25 U	**98.3**	5 U	1.3 U	4.8
Toluene	5	µg/L	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	**146**	0.44 U	**5**	**2,890**	**53.8**	**11.7**
trans-1,2-Dichloroethene	5	µg/L	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	3.8 U	0.38 U	0.38 U	7.6 U	1.9 U	0.38 U
Trichloroethene	5	µg/L	0.5 U	0.5 U	0.5 U	0.55 J	1.6	1.5	5 U	0.72 J	4.8	10 U	2.5 U	1.3
Xylene (total)	5	µg/L	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	**1,500**	0.19 U	**28.5**	**2,680**	**2,040**	**422 J**

Qualifier Key:

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Table 3-4 - Groundwater, Surface Water, and Seep Analytical Data Summary (Detected Analytes) - Volatile Organic Compounds, Fall 2013

			Areas 1995 & 3805 (continued)												
			Groundwater												
Analyte	Screening Value	Unit	3805-MWS23	3805-MWS24	3805-MWS3	3805-MWS4	3805-MWS5	3805-MWS8	3805-PZ12I	3805-PZ12S	3805-PZ13D	3805-PZ13S	3805-PZ14	3805-PZ2D	3805-PZ2D (DUP)
1,2,4-Trimethylbenzene	None	µg/L	1,600	1,360	0.23 U	109	1,320	56	0.23 U	2,290	0.23 U	1,730	2,640	0.57 U	0.57 U
1,2-Dichloroethane	0.6	µg/L	2.2 U	1.1 U	0.22 U	0.22 UJ	5.5 U	0.44 U	0.22 U	4.4 U	0.22 U	2.2 UJ	11 U	0.55 U	0.55 U
1,2-Dichloroethene (total)	None	µg/L	2.4 U	1.2 U	0.24 U	0.24 U	6 U	0.48 U	0.24 U	4.8 U	0.24 U	2.4 U	12 U	0.6 U	0.6 U
1,3,5-Trimethylbenzene	None	µg/L	417	456	0.43 U	12.8	404	20.4	0.43 U	583	0.43 U	513	641	1.1 U	1.1 U
1,4-Dichlorobenzene	3	µg/L	3 U	1.5 U	0.3 U	0.3 U	7.5 U	0.6 U	0.3 U	6 U	0.3 U	3 U	15 U	0.75 U	0.75 U
2-Butanone (MEK)	50	µg/L	32 R	16 R	3.2 R	3.2 U	80 R	6.4 R	3.2 R	**109 J**	3.2 R	32 U	160 R	8 R	8 R
4-Methyl-2-pentanone(MIBK)	None	µg/L	15 U	7.4 U	1.5 U	1.5 U	37 U	3 U	1.5 U	30 U	1.5 U	15 U	74 U	3.7 U	3.7 U
Acetone	50	µg/L	33 R	17 R	3.3 R	3.3 U	84 R	6.7 R	3.3 R	**175 J**	3.3 R	33 U	170 R	8.4 R	8.4 R
Benzene	1	µg/L	**292**	**239**	0.28 U	**58.3**	7 U	**38.5**	0.28 U	**40.5**	0.28 U	2.8 U	14 U	0.7 U	0.7 U
Carbon tetrachloride	5	µg/L	2.3 U	1.1 U	0.23 U	0.23 U	5.7 U	0.45 U	0.23 U	4.5 U	0.23 UJ	2.3 UJ	11 U	0.57 U	0.57 U
Chloroethane	5	µg/L	3.9 U	1.9 U	0.39 U	0.39 U	9.7 U	0.78 U	0.39 U	7.8 U	0.39 U	3.9 U	19 U	0.97 U	0.97 U
Chloroform	7	µg/L	2.5 U	1.2 U	0.25 U	0.25 U	6.1 U	0.49 U	0.39 J	4.9 U	0.46 J	2.5 U	12 U	1 J	1 J
Chloromethane	5	µg/L	3.6 U	1.8 U	0.36 U	0.59 J	9.1 U	0.73 U	0.36 U	7.3 U	0.36 U	3.6 U	18 U	0.91 U	0.91 U
cis-1,2-Dichloroethene	5	µg/L	2.4 U	1.2 U	0.24 U	0.24 U	6 U	0.48 U	0.24 U	4.8 U	0.24 U	2.4 U	12 U	0.6 U	0.6 U
Dichlorodifluoromethane	5	µg/L	6.3 UJ	3.2 U	0.63 U	0.63 U	16 U	1.3 U	0.63 U	13 U	0.63 UJ	6.3 U	32 U	1.6 U	1.6 U
Ethylbenzene	5	µg/L	**2,390**	**1,220**	0.21 U	**123**	**2,350**	**125**	0.21 U	**1,630**	0.21 U	**1,170**	**3,160**	0.52 U	0.52 U
Isopropylbenzene	5	µg/L	**93.6**	**34.9**	0.22 U	**8.6**	**29.6 J**	**7.7**	0.22 U	**109**	0.22 U	**60.4**	**145**	0.56 U	0.56 U
m,p-Xylene	None	µg/L	9,450	8,050	0.4 U	189	12,200	339	0.4 U	7,010	0.4 U	4,560	14,600	1 U	1 U
Naphthalene	10	µg/L	**424**	**440**	0.25 UJ	**38.8**	**524**	**41.9**	0.25 U	**596**	0.25 UJ	**357 J**	**779**	0.63 U	0.63 U
n-Butylbenzene	5	µg/L	**74.1**	**63.8**	0.39 U	0.39 U	**63.5 J**	0.78 U	0.39 U	**87 J**	0.39 UJ	3.9 U	**112 J**	0.98 U	0.98 U
n-Propylbenzene	5	µg/L	**157**	**39.4**	0.32 U	**22**	**11.1 J**	**9.3 J**	0.32 U	**223**	0.32 U	**206**	**306**	0.81 U	0.81 U
o-Xylene	5	µg/L	**1,380**	**3,390**	0.19 U	4.2	**4,660**	**117**	0.19 U	**2,780**	0.19 U	**1,620**	**6,340**	0.48 U	0.48 U
p-Isopropyltoluene	5	µg/L	4.4 J	**6.1 J**	0.42 U	0.83 J	10 U	0.83 U	0.42 U	**9.3 J**	0.42 U	**7.2 J**	21 U	1 U	1 U
sec-Butylbenzene	5	µg/L	4.9 J	2.6 J	0.48 U	0.99 J	12 U	0.97 J	0.48 U	**9.6 J**	0.48 UJ	**9.6 J**	24 U	1.2 U	1.2 U
Styrene	5	µg/L	3 U	1.5 U	0.3 U	0.3 U	7.6 U	0.6 U	0.3 U	6 U	0.3 U	3 U	**189 J**	0.76 U	0.76 U
tert-Butylbenzene	None	µg/L	2.5 U	1.2 U	0.25 U	0.25 U	6.2 U	0.49 U	0.25 U	4.9 U	0.25 U	2.5 U	12 U	0.62 U	0.62 U
Tetrachloroethene	5	µg/L	2.5 U	1.3 U	**14.1**	0.25 U	6.3 U	0.5 U	0.25 U	5 U	0.25 U	2.5 U	13 U	**389**	**429**
Toluene	5	µg/L	**3,990**	**3,400**	0.44 U	**17.6**	**456**	**233**	0.44 U	**2,300**	0.44 U	**697**	**2,100**	1.1 U	1.1 U
trans-1,2-Dichloroethene	5	µg/L	3.8 U	1.9 U	0.38 U	0.38 U	9.5 U	0.76 U	0.38 U	7.6 U	0.38 U	3.8 U	19 U	0.95 U	0.95 U
Trichloroethene	5	µg/L	5 U	2.5 U	0.5 U	0.5 U	13 U	1 U	0.5 U	10 U	0.5 U	5 U	25 U	**6**	**6**
Xylene (total)	5	µg/L	**10,800**	**11,400**	0.19 U	**193**	**17,000**	**457**	0.19 U	**9,790**	0.19 U	**6,180**	**21,000**	0.48 U	0.48 U

Qualifier Key:

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Abbreviation Key:

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Table 3-4 - Groundwater, Surface Water, and Seep Analytical Data Summary (Detected Analytes) - Volatile Organic Compounds, Fall 2013

			Areas 1995 & 3805 (continued)			OSL					
			Groundwater			Groundwater	Landfill Seep			Surface Water	
Analyte	Screening Value	Unit	3805-PZ2I	3805-PZ2S	3805-PZ3	OSL-MW3	OSL-SP01	OSL-SP01 (DUP)	OSL-SP03	OSL-SW09	OSL-SW09 (DUP)
1,2,4-Trimethylbenzene	None	µg/L	0.23 U	293	906	274	145 J	144	98.1	0.47 J	0.46 J
1,2-Dichloroethane	0.6	µg/L	0.22 U	0.44 U	2.2 U	0.22 U	0.22 UJ	0.22 U	0.22 U	0.22 U	0.22 U
1,2-Dichloroethene (total)	None	µg/L	0.24 U	0.48 U	2.4 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
1,3,5-Trimethylbenzene	None	µg/L	0.43 U	98.4	267	82.2	26.2	26	4.6	0.43 U	0.43 U
1,4-Dichlorobenzene	3	µg/L	0.3 U	0.6 U	3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U
2-Butanone (MEK)	50	µg/L	3.2 R	14.7 J	32 R	3.2 U	3.2 U	3.2 U	3.2 U	3.2 R	3.2 U
4-Methyl-2-pentanone(MIBK)	None	µg/L	1.5 U	3.7 J	15 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
Acetone	50	µg/L	3.3 R	36.4 J	33 R	9.7 J	3.3 U	3.3 U	10 U	3.3 U	3.3 U
Benzene	1	µg/L	0.28 U	0.62 J	**97.2**	0.42 J	0.37 J	0.28 U	**19.8**	**1.5 J**	**1.5**
Carbon tetrachloride	5	µg/L	0.23 U	0.45 U	2.3 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
Chloroethane	5	µg/L	0.39 U	0.78 U	3.9 U	3	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U
Chloroform	7	µg/L	0.25 U	0.49 U	2.5 U	0.25 U	0.25 UJ	0.25 U	0.25 U	0.25 U	0.25 U
Chloromethane	5	µg/L	0.36 U	0.73 U	3.6 U	1.4	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U
cis-1,2-Dichloroethene	5	µg/L	0.24 U	0.48 U	2.4 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
Dichlorodifluoromethane	5	µg/L	0.63 U	1.3 UJ	6.3 UJ	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U
Ethylbenzene	5	µg/L	0.21 U	**229**	**889**	**145**	**12.3**	**11.7**	**129**	0.73 J	0.75 J
Isopropylbenzene	5	µg/L	0.22 U	**13.1**	**42.1**	**21.1**	**8.5**	**8.5**	**11.8**	0.22 U	0.22 U
m,p-Xylene	None	µg/L	0.4 U	697	3,770	176	15.4	14.6	79.9	1.1 J	1.1
Naphthalene	10	µg/L	0.25 U	**60.8**	**226**	**49.3**	**14.9**	8.7	**42.8**	0.25 U	0.25 U
n-Butylbenzene	5	µg/L	0.39 U	**17.9**	**34.5 J**	**14.4**	**7.8**	**7.6**	1.3 J	0.39 U	0.39 U
n-Propylbenzene	5	µg/L	0.32 U	**46.8**	**80.1**	**58.2**	**24.3**	**24.2**	**15.8**	0.32 U	0.32 U
o-Xylene	5	µg/L	0.19 U	**286**	**1,680**	**27.9**	0.22 J	0.19 J	4.4	0.19 U	0.19 U
p-Isopropyltoluene	5	µg/L	0.42 U	**9.1 J**	4.2 U	**5.5**	2.8 J	2.7 J	1.2 J	0.42 U	0.42 U
sec-Butylbenzene	5	µg/L	0.48 U	**7.8 J**	4.8 U	**8.9**	3.9 J	3.8 J	1.2 J	0.48 U	0.48 U
Styrene	5	µg/L	0.3 U	0.6 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
tert-Butylbenzene	None	µg/L	0.25 U	0.49 U	2.5 U	0.34 J	0.28 J	0.27 J	0.25 U	0.25 U	0.25 U
Tetrachloroethene	5	µg/L	**60.3**	0.5 U	2.5 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
Toluene	5	µg/L	0.44 U	**269**	**1,880**	**37.3**	0.44 U	0.44 U	**6**	0.44 U	0.44 U
trans-1,2-Dichloroethene	5	µg/L	0.38 U	0.76 U	3.8 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
Trichloroethene	5	µg/L	0.5 U	1 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Xylene (total)	5	µg/L	0.19 U	**983**	**5,450**	**204**	**15.6**	**14.8**	**84.3**	1.1 J	1.1

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Abbreviation Key:

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Table 3-5 - Groundwater, Surface Water, and Seep Analytical Data Summary (Detected Analytes) - Semi-Volatile Organic Compounds, Fall 2013

			Area 1295		Area 3805					OSL		
			Groundwater		Groundwater					Landfill Seep		Surface Water
Analyte	Screening Value	Unit	1295-MW30	1295-MW30 (DUP)	3805-MWI17	3805-MWS14	3805-MWS2	3805-MWS4	3805-PZ13S	OSL-SP01 (DUP)	OSL-SP03	OSL-SW06
2,4-Dimethylphenol	None	µg/L	1.5 U	1.5 U	10.5	1.5 U	1.5 U	1.8 J	54.7	1.5 U	1.5 U	1.6 U
2-Methylnaphthalene	None	µg/L	80	76.5	26.2	11.4	0.38 U	12.8	53	0.38 U	1.3	0.39 U
2-Methylphenol	None	µg/L	1 U	1 U	1 U	1 U	1 U	1 U	5	1 U	1 U	1.1 U
3&4-Methylphenol	None	µg/L	0.93 U	0.93 U	0.93 U	0.93 U	0.93 U	0.93 U	7.1	0.93 U	0.93 U	0.94 U
bis(2-Ethylhexyl)phthalate	5	µg/L	**5.9**	0.59 U	0.59 U	0.59 U	1 J	0.59 UJ	0.6 U	2.6 J	0.59 UJ	4.2
Carbazole	None	µg/L	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.81 J	0.36 U	0.36 U	0.37 U
Fluorene	50	µg/L	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.55 J	0.28 UJ	0.28 UJ	0.28 U
Hexachlorobenzene	0.04	µg/L	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
Naphthalene	10	µg/L	**339**	**349**	**123**	**40.4**	0.26 U	**37.9**	**283**	0.26 U	0.26 U	0.26 U

Qualifier Key:

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Abbreviation Key:

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Table 3-6 - Groundwater, Surface Water, and Seep Analytical Data Summary (Detected Analytes) - Target Analyte Metals, Fall 2013

			Area 1295						Area 1595					
			Groundwater						Groundwater			Surface Water		
Analyte	**Screening Value**	**Unit**	**1295-MW25**	**1295-MW26**	**1295-MW30**	**1295-MW30 (DUP)**	**1295-MWS27**	**1295-MWS28**	**1595-MW33**	**1595-MWS7**	**1595-OBG2**	**1595-SW01**	**1595-SW01 (DUP)**	**1595-SW04**
Aluminum	None	µg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Antimony	3	µg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Arsenic	25	µg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Barium	1000	µg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Cadmium	5	µg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Calcium	None	µg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Chromium	50	µg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Cobalt	None	µg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Copper	200	µg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Iron	300	µg/L	**1,510**	21.4 U	**2,480**	**2,040**	**1,140**	96.6 U	46 B	**7,060**	**16,600**	**24,600 J**	**56,700 J**	**8,130**
Lead	25	µg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	6.2 R	18.9 R	5.8
Magnesium	35000	µg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Manganese	300	µg/L	119	77.5	80	67.8	42.8	23.1	**327**	**1,060**	**622**	NS	NS	NS
Nickel	100	µg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Selenium	10	µg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Silver	50	µg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Sodium	20000	µg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Thallium	0.5	µg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Vanadium	None	µg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Zinc	2000	µg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Qualifier Key:

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J - Result reported is a quantitative estimate

R - Rejected Data

Abbreviation Key:

NS - Not Sampled

µg/L - Micrograms per Liter

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Table 3-6 - Groundwater, Surface Water, and Seep Analytical Data Summary (Detected Analytes) - Target Analyte Metals, Fall 2013

			Area 1795						Area 2140			
			Groundwater				Surface Water		Groundwater			
Analyte	**Screening Value**	**Unit**	**1795-MWS3**	**1795-MWS7**	**1795-MWS7 (DUP)**	**1795-PZ15**	**1795-SW00**	**1795-SW04**	**2140-MW02**	**2140-MW07**	**2140-MW07 (DUP)**	**2140-MW12**
Aluminum	None	µg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Antimony	3	µg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Arsenic	25	µg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Barium	1000	µg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Cadmium	5	µg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Calcium	None	µg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Chromium	50	µg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Cobalt	None	µg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Copper	200	µg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Iron	300	µg/L	**36,800**	**1,170**	**1,560**	**811**	**602**	**1,680**	**824**	**28,900**	**29,500**	**385**
Lead	25	µg/L	NS	NS	NS	NS	3 U	3 U	NS	NS	NS	NS
Magnesium	35000	µg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Manganese	300	µg/L	**1,210**	88.2	97.9	**1,810**	NS	NS	106	**2,810**	**2,880**	**7,790**
Nickel	100	µg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Selenium	10	µg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Silver	50	µg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Sodium	20000	µg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Thallium	0.5	µg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Vanadium	None	µg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Zinc	2000	µg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

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Table 3-6 - Groundwater, Surface Water, and Seep Analytical Data Summary (Detected Analytes) - Target Analyte Metals, Fall 2013

			Areas 1995 & 3805												
			Groundwater												
Analyte	**Screening Value**	**Unit**	**1995-MWS10**	**1995-MWS9**	**3805-MWD16**	**3805-MWD18**	**3805-MWI12**	**3805-MWI15**	**3805-MWI15 (DUP)**	**3805-MWI17**	**3805-MWS11**	**3805-MWS14**	**3805-MWS2**	**3805-MWS24**	**3805-MWS4**
Aluminum	None	µg/L	NS	NS	37.1 J	30 J	11 U	200 U	59.1 J	11 U	NS	35 J	86.5 J	NS	22.1 J
Antimony	3	µg/L	NS	NS	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	NS	1.8 U	1.8 U	NS	1.8 U
Arsenic	25	µg/L	NS	NS	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	3.8	NS	1.5 U	1.5 U	NS	4.5
Barium	1000	µg/L	NS	NS	200 U	22.4 J	104 J	200 U	200 U	45.9 J	NS	200 U	200 U	NS	37 J
Cadmium	5	µg/L	NS	NS	0.24 U	0.9 J	0.8 J	0.24 U	0.24 U	0.8 J	NS	0.3 J	0.24 U	NS	0.7 J
Calcium	None	µg/L	NS	NS	31,800	28,600	107,000	115,000	114,000	92,200	NS	85,800	52,500	NS	45,200
Chromium	50	µg/L	NS	NS	0.92 U	2 J	2.4 J	0.92 U	0.92 U	1 J	NS	0.92 U	0.92 U	NS	1 J
Cobalt	None	µg/L	NS	NS	0.48 U	0.48 U	0.48 U	0.48 U	0.5 J	0.48 U	NS	0.48 U	0.48 U	NS	0.48 U
Copper	200	µg/L	NS	NS	1 U	1.9 J	10 U	1 U	1 U	2.2 J	NS	1 U	1 U	NS	1.1 J
Iron	300	µg/L	**56,700**	**23,700**	100 U	176	19.4 J	**918 J**	**635 J**	**10,100**	**11,300**	**14,700 J**	100 U	**55,900**	**13,200**
Lead	25	µg/L	NS	NS	2.4 U	2.4 U	2.5 J	2.4 U	2.4 U	2.4 U	NS	3.3	2.4 U	NS	2.4 U
Magnesium	35000	µg/L	NS	NS	5,000 U	9,540	8,640	21,200	20,600	12,000	NS	7,220	5,000 U	NS	2,470 J
Manganese	300	µg/L	**4,420**	**483**	15 U	124	15 U	**1,060**	**917**	**325**	**1,640**	**2,450**	15 U	**2,910**	**1,480**
Nickel	100	µg/L	NS	NS	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	NS	1.6 U	1.6 U	NS	1.6 U
Selenium	10	µg/L	NS	NS	2.4 U	2.8 J	5.4 J	2.4 U	2.4 U	5.8 J	NS	2.4 J	2.4 U	NS	4.9 J
Silver	50	µg/L	NS	NS	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	NS	1.5 U	1.5 U	NS	1.5 U
Sodium	20000	µg/L	NS	NS	10,000 U	7,670 J	**895,000**	**92,400**	**97,800**	**65,700**	NS	**427,000**	10,000 U	NS	**101,000**
Thallium	0.5	µg/L	NS	NS	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	NS	1.3 U	1.3 U	NS	1.3 U
Vanadium	None	µg/L	NS	NS	1.9 J	0.72 U	0.72 U	1.1 J	0.8 J	0.72 U	NS	2 J	0.72 U	NS	0.72 U
Zinc	2000	µg/L	NS	NS	4.4 U	8.7 J	4.4 U	5.2 J	4.4 U	4.4 U	NS	4.4 U	4.4 U	NS	4.4 U

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Table 3-6 - Groundwater, Surface Water, and Seep Analytical Data Summary (Detected Analytes) - Target Analyte Metals, Fall 2013

			Areas 1995 & 3805 (continued)						OSL						
			Groundwater						Landfill Seep			Surface Water			
Analyte	**Screening Value**	**Unit**	**3805-MWS5**	**3805-PZ12S**	**3805-PZ13S**	**3805-PZ14**	**3805-PZ2S**	**3805-PZ3**	**OSL-SP01**	**OSL-SP01 (DUP)**	**OSL-SP03**	**OSL-SW06**	**OSL-SW09**	**OSL-SW09 (DUP)**	**OSL-SW10**
Aluminum	None	µg/L	NS	NS	11 U	NS	NS	NS	1,280 J	629 J	89.1 J	200 U	200 U	200 U	200 U
Antimony	3	µg/L	NS	NS	1.8 U	NS	NS	NS	1.8 U	1.8 U	1.8 U	1.8 U	2.2 J	1.8 U	1.8 U
Arsenic	25	µg/L	NS	NS	3 U	NS	NS	NS	2.5 J	2.1 J	3.8	1.5 U	1.6 J	1.5 U	1.5 U
Barium	1000	µg/L	NS	NS	211	NS	NS	NS	43.2 J	35.8 J	117 J	200 U	200 U	200 U	200 U
Cadmium	5	µg/L	NS	NS	0.6 J	NS	NS	NS	0.6 J	0.4 J	0.5 J	3 U	3 U	3 U	3 U
Calcium	None	µg/L	NS	NS	77,300	NS	NS	NS	38,100	38,100	94,300	45,100	50,300	50,000	39,600
Chromium	50	µg/L	NS	NS	6.3 J	NS	NS	NS	2 J	1.4 J	1.7 J	0.92 U	1.4 J	0.92 U	0.92 U
Cobalt	None	µg/L	NS	NS	0.48 U	NS	NS	NS	1.2 J	0.8 J	1 J	0.48 U	0.48 U	0.48 U	0.48 U
Copper	200	µg/L	NS	NS	10 U	NS	NS	NS	4.1 J	3.2 J	2.9 J	1.3 J	1 U	1 U	1 U
Iron	300	µg/L	**42,900**	**49,100**	**50,900**	**8,530**	**9,380**	**36,000**	**29,400 J**	**20,000 J**	**43,300**	**580**	**775**	**738**	100 U
Lead	25	µg/L	NS	NS	8.3	NS	NS	NS	13.1	6.4	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
Magnesium	35000	µg/L	NS	NS	4,800 J	NS	NS	NS	2,370 J	2,320 J	6,270	5,880	5,080	5,090	2,980 J
Manganese	300	µg/L	**505**	**7,360**	**430**	**1,300**	**1,740**	**6,720**	**1,220**	**1,150**	**2,880**	74.9	174	174	15 U
Nickel	100	µg/L	NS	NS	4.8 J	NS	NS	NS	2 J	1.6 U	1.7 J	1.6 U	1.6 U	1.6 U	1.6 U
Selenium	10	µg/L	NS	NS	4.5 J	NS	NS	NS	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
Silver	50	µg/L	NS	NS	1.5 U	NS	NS	NS	1.5 U	1.5 U	2.6 J	1.5 U	1.5 U	1.5 U	1.5 U
Sodium	20000	µg/L	NS	NS	**115,000**	NS	NS	NS	**61,300**	**60,900**	**207,000**	**61,100**	**69,100**	**64,600**	**22,300**
Thallium	0.5	µg/L	NS	NS	1.3 U	NS	NS	NS	1.3 U	1.3 U	1.3 U	10 U	1.3 U	1.3 U	1.3 U
Vanadium	None	µg/L	NS	NS	0.72 U	NS	NS	NS	2 J	0.72 U	0.72 U	0.72 U	0.72 U	0.72 U	0.72 U
Zinc	2000	µg/L	NS	NS	4.4 U	NS	NS	NS	33.1	24.3	6.8 J	4.4 U	4.4 U	4.4 U	4.4 U

Qualifier Key:

U - Analyte not detected in the sample. Value represents the quantitation/detection limit.

J - Result reported is a quantitative estimate

R - Rejected Data

Abbreviation Key:

NS - Not Sampled

µg/L - Micrograms per Liter

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Table 3-7 - Groundwater Analytical Data Summary (Detected Analytes) - Biogeochemical Parameters, Spring 2013

			Area 1295						Area 1595				
			Groundwater						Groundwater				
Analyte	**Screening Value**	**Unit**	**1295-MW25**	**1295-MW26**	**1295-MW30**	**1295-MWS27**	**1295-MWS27 (DUP)**	**1295-MWS28**	**1595-MW33**	**1595-MWS7**	**1595-OBG2**	**1595-OBG2 (DUP)**	**1595-PZ12**
Chloride	None	mg/L	174	29	157	229	186	281	186	177	110	114	862
Ethane	None	µg/L	0.09 U	0.09 U	0.09 U	0.09 U	0.09 UJ	0.09 U	0.09 U	0.77	0.09 U	0.09 U	0.09 U
Iron	300	µg/L	100 U	100 U	**1,550**	**743**	**815**	**323**	52.7 J	**473**	**13,800**	**12,900**	**8,750**
Manganese	300	µg/L	31.3	87.5	25.8	66.7	69.2	53.4	28.8	**321**	**641**	**564**	170
Methane	None	µg/L	2.9	0.03 U	0.03 U	93	0.31 J	129	57.2	110	1,830	1,920	93.4
Nitrogen, Ammonia	None	mg/L	0.2 U	0.2 U	0.34	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.28	0.23	0.39
Nitrogen, Nitrate	None	mg/L	1.6	4.1	0.11 U	1.3	1.3	1.6	3 J	0.36 J	0.54 J	0.66 J	0.84 J
Nitrogen, Nitrate + Nitrite	None	mg/L	1.6	4.1	0.1 U	1.3	1.3	1.6	3 J	0.36 J	0.54 J	0.66 J	0.84 J
Nitrogen, Nitrite	None	mg/L	0.023	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Nitrogen, Total Kjeldahl	None	mg/L	0.67	1.5	0.51	0.52	0.7	0.6	0.79 J	0.42 J	1.4 J	1.3 J	0.7 J
Sulfate	None	mg/L	32.2	44	13.7	20.8	16.4	25.9	29.9	17.8	18.2	19.7	20.1
Total Organic Carbon	None	mg/L	2	1.6	10.3	1.5	1.5	1	4.2	9.4	27.6	27.7	7.2

Qualifier Key:

U - Analyte not detected in the sample. Value represents the quantitation/detection limit.

J - Result reported is a quantitative estimate

R - Rejected Data

Abbreviation Key:

µg/L - Micrograms per Liter

mg/L - milligrams per Liter

A Cell Highlighted and Bold Indicates a detected analyte that exceeds the screening criteria
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Indicates the analyte is not detected or not sampled

Table 3-7 - Groundwater Analytical Data Summary (Detected Analytes) - Biogeochemical Parameters, Spring 2013

			Area 1795			Area 2140		Areas 1995 & 3805								
			Groundwater			Groundwater		Groundwater								
Analyte	**Screening Value**	**Unit**	**1795-MWS3**	**1795-MWS7**	**1795-PZ15**	**2140-MW02**	**2140-MW12**	**1995-MWS10**	**1995-MWS9**	**3805-MWS11**	**3805-MWS24**	**3805-PZ12S**	**3805-PZ14**	**3805-PZ14 (DUP)**	**3805-PZ2S**	**3805-PZ3**
Chloride	None	mg/L	13.4	404	34.3	844	569	356 J	1,560	125	27.1	21.8	2.3	2.2	2.2	2.5
Ethane	None	µg/L	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.33	0.09 U	0.09 U	0.09 U	0.61	0.67	0.09 U	0.09 U
Iron	300	µg/L	**25,300**	**6,220**	**538**	**1,790**	163	**24,000**	**32,400**	**19,600**	**23,100**	**40,900**	**16,700**	**16,700**	**5,630**	**17,300**
Manganese	300	µg/L	**939**	**285**	**1,360**	**550**	**1,160**	**2,220**	**643**	**2,750**	**2,640**	**5,930**	**2,610**	**2,610**	**1,590**	**4,380**
Methane	None	µg/L	11.2	3.1	0.03 U	6.1	1.1	543	5,220	7.8	12.4	5.2	1	1.2	2	5.8
Nitrogen, Ammonia	None	mg/L	0.69	0.55	0.3	0.2 U	0.2 U	0.31	1.3	0.49	0.2	0.41	0.2	0.22	0.3	0.27
Nitrogen, Nitrate	None	mg/L	0.11 U	0.11 U	0.85	3.1 J	0.28	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
Nitrogen, Nitrate + Nitrite	None	mg/L	0.1 U	0.1 U	0.89 J	3.1 J	0.28 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Nitrogen, Nitrite	None	mg/L	0.01 U	0.01 U	0.038	0.023	0.01 U	0.01 U	0.01 U	0.01 R	0.01 U	0.01 U	0.012	0.01 U	0.01 U	0.01 U
Nitrogen, Total Kjeldahl	None	mg/L	1.6 J	5.9 J	2.8 J	0.6 J	0.32 J	2 J	2.6 J	2.4 J	1.8 J	1.6 J	2.4 J	2 J	1.5 J	2.2 J
Sulfate	None	mg/L	17.2	32.4	10 U	41.7	10 U	10 U	10.4	13.4	10 U	10 U	10 U	10 U	10 U	10 U
Total Organic Carbon	None	mg/L	7	20.9	6.6	4.3	5.9	35.9	8.5	3.2	6.8	8.1	14.8	15.6	7	12.3

Qualifier Key:

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Abbreviation Key:

µg/L - Micrograms per Liter

mg/L - milligrams per Liter

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Table 3-8 - Groundwater Analytical Data Summary (Detected Analytes) - MNA Parameters, Fall 2013

			Area 1295						Area 1595					
			Groundwater						Groundwater			Surface Water		
Analyte	**Screening Value**	**Unit**	**1295-MW25**	**1295-MW26**	**1295-MW30**	**1295-MW30 (DUP)**	**1295-MWS27**	**1295-MWS28**	**1595-MW33**	**1595-MWS7**	**1595-OBG2**	**1595-SW01**	**1595-SW01 (DUP)**	**1595-SW04**
Chloride	None	mg/L	558	34.4	796	807	150	613	370	246	281	NS	NS	NS
Ethane	None	µg/L	0.09 U	0.09 U	0.29	0.28	0.09 U	0.09 U	0.09 U	2.3	0.12	NS	NS	NS
Ethene	None	µg/L	0.095 U	0.095 U	0.095 U	0.095 U	0.095 U	0.095 U	0.095 U	0.095 U	0.095 U	NS	NS	NS
Hardness, Total as CaCO3	None	mg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	173 J	216 J	171
Iron	300	µg/L	**1,510**	21.4 U	**2,480**	**2,040**	**1,140**	96.6 U	46 B	**7,060**	**16,600**	**24,600 J**	**56,700 J**	**8,130**
Manganese	300	µg/L	119	77.5	80	67.8	42.8	23.1	**327**	**1,060**	**622**	NS	NS	NS
Methane	None	µg/L	1.2	0.03 U	5.4	5.3	2.2	0.03 U	222	920	5,130	NS	NS	NS
Nitrogen, Ammonia	None	mg/L	0.2 U	0.2 U	0.64	0.61	0.2 U	0.2 U	0.2 U	0.2 U	0.55	NS	NS	NS
Nitrogen, Nitrate	None	mg/L	1.2 J	4.1 J	0.11 U	0.11 U	0.74 J	1.1 J	1.8 J	0.24 J	0.23 J	NS	NS	NS
Nitrogen, Nitrate + Nitrite	None	mg/L	1.2 J	4.1 J	0.1 U	0.1 U	0.74 J	1.1 J	1.8 J	0.24 J	0.23 J	NS	NS	NS
Nitrogen, Nitrite	None	mg/L	0.015	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.022	0.01 U	0.01 U	NS	NS	NS
Nitrogen, Total Kjeldahl	None	mg/L	0.91	0.27	1.6	1.7	0.45	0.66	0.75	0.98	2.6	NS	NS	NS
Sulfate	None	mg/L	23.6	47.4	10 U	10 U	10.2	32.6	45.4	10 U	10 U	NS	NS	NS
Total Organic Carbon	None	mg/L	2.1	2	6.9	7.3	1.6	1 U	4.9	9.7	18.8	NS	NS	NS

Qualifier Key:

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J - Result reported is a quantitative estimate

Abbreviation Key:

NS - Not Sampled

µg/L - Micrograms per Liter

mg/L - milligrams per Liter

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Indicates the analyte is not detected or not sampled

Table 3-8 - Groundwater Analytical Data Summary (Detected Analytes) - MNA Parameters, Fall 2013

			Area 1795						Area 2140			
			Groundwater				Surface Water		Groundwater			
Analyte	**Screening Value**	**Unit**	**1795-MWS3**	**1795-MWS7**	**1795-MWS7 (DUP)**	**1795-PZ15**	**1795-SW00**	**1795-SW04**	**2140-MW02**	**2140-MW07**	**2140-MW07 (DUP)**	**2140-MW12**
Chloride	None	mg/L	33.8	811	796	134	NS	NS	986	461	480	1,050
Ethane	None	µg/L	0.14	0.09 U	0.09 U	0.09 U	NS	NS	0.09 U	0.09 U	0.09 U	0.09 U
Ethene	None	µg/L	0.095 U	0.095 U	0.095 U	0.095 U	NS	NS	0.095 U	0.095 U	0.095 U	0.095 U
Hardness, Total as CaCO3	None	mg/L	NS	NS	NS	NS	263	192	NS	NS	NS	NS
Iron	300	µg/L	**36,800**	**1,170**	**1,560**	**811**	**602**	**1,680**	**824**	**28,900**	**29,500**	**385**
Manganese	300	µg/L	**1,210**	88.2	97.9	**1,810**	NS	NS	106	**2,810**	**2,880**	**7,790**
Methane	None	µg/L	5.6	0.03 U	0.17	0.9	NS	NS	0.38	30.3	32	1.7
Nitrogen, Ammonia	None	mg/L	0.55	0.2	0.2 U	0.2 U	NS	NS	0.2 U	0.86	0.92	0.27
Nitrogen, Nitrate	None	mg/L	0.11 U	1.9 J	2.3 J	0.75 J	NS	NS	2.6	0.22	0.25	0.99
Nitrogen, Nitrate + Nitrite	None	mg/L	0.1 U	2 J	2.4 J	0.76 J	NS	NS	2.6	0.23	0.26	1
Nitrogen, Nitrite	None	mg/L	0.01 U	0.12	0.15	0.01 U	NS	NS	0.01 U	0.01 U	0.01 U	0.01 U
Nitrogen, Total Kjeldahl	None	mg/L	0.94	1.4	1.4	0.98	NS	NS	0.38	1.6	2	0.44
Sulfate	None	mg/L	17	32.9	33.7	10 U	NS	NS	28.4	10 U	10 U	28.4
Total Organic Carbon	None	mg/L	6.3	8.8	9.5	7.4	NS	NS	2	11.9	11.6	2.7

Qualifier Key:

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J - Result reported is a quantitative estimate

Abbreviation Key:

NS - Not Sampled

µg/L - Micrograms per Liter

mg/L - milligrams per Liter

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Indicates the analyte is not detected or not sampled

Table 3-8 - Groundwater Analytical Data Summary (Detected Analytes) - MNA Parameters, Fall 2013

			Areas 1995 & 3805											
			Groundwater											
Analyte	**Screening Value**	**Unit**	**1995-MWS10**	**1995-MWS9**	**3805-MWD16**	**3805-MWD18**	**3805-MWI12**	**3805-MWI15**	**3805-MWI15 (DUP)**	**3805-MWI17**	**3805-MWS11**	**3805-MWS14**	**3805-MWS2**	**3805-MWS24**
Chloride	None	mg/L	248	1,020	NS	NS	NS	NS	NS	NS	36.3	NS	NS	8.9
Ethane	None	µg/L	0.28	0.29	NS	NS	NS	NS	NS	NS	0.09 U	NS	NS	0.27
Ethene	None	µg/L	0.095 U	0.095 U	NS	NS	NS	NS	NS	NS	0.095 U	NS	NS	0.095 U
Hardness, Total as CaCO3	None	mg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Iron	300	µg/L	**56,700**	**23,700**	100 U	176	19.4 J	**918 J**	**635 J**	**10,100**	**11,300**	**14,700 J**	100 U	**55,900**
Manganese	300	µg/L	**4,420**	**483**	15 U	124	15 U	**1,060**	**917**	**325**	**1,640**	**2,450**	15 U	**2,910**
Methane	None	µg/L	3,730	2,370	NS	NS	NS	NS	NS	NS	2.1	NS	NS	18.1
Nitrogen, Ammonia	None	mg/L	1.1	0.64	NS	NS	NS	NS	NS	NS	0.41	NS	NS	0.3
Nitrogen, Nitrate	None	mg/L	0.11 U	0.11 U	NS	NS	NS	NS	NS	NS	0.11 U	NS	NS	0.11 U
Nitrogen, Nitrate + Nitrite	None	mg/L	0.1 U	0.1 U	NS	NS	NS	NS	NS	NS	0.1 U	NS	NS	0.1 U
Nitrogen, Nitrite	None	mg/L	0.01 U	0.01 U	NS	NS	NS	NS	NS	NS	0.01 U	NS	NS	0.01 U
Nitrogen, Total Kjeldahl	None	mg/L	1.5 J	1.2 J	NS	NS	NS	NS	NS	NS	0.2 U	NS	NS	0.2 U
Sulfate	None	mg/L	10 U	10 U	NS	NS	NS	NS	NS	NS	13.6	NS	NS	10 U
Total Organic Carbon	None	mg/L	32.3	8.3	NS	NS	NS	NS	NS	NS	3.3	NS	NS	12

Qualifier Key:

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Abbreviation Key:

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Table 3-8 - Groundwater Analytical Data Summary (Detected Analytes) - MNA Parameters, Fall 2013

			Areas 1995 & 3805 (continued)							OSL						
			Groundwater							Landfill Seep			Surface Water			
Analyte	**Screening Value**	**Unit**	**3805-MWS4**	**3805-MWS5**	**3805-PZ12S**	**3805-PZ13S**	**3805-PZ14**	**3805-PZ2S**	**3805-PZ3**	**OSL-SP01**	**OSL-SP01 (DUP)**	**OSL-SP03**	**OSL-SW06**	**OSL-SW09**	**OSL-SW09 (DUP)**	**OSL-SW10**
Chloride	None	mg/L	NS	2	23.6	NS	4.5	2.5	2.3	NS	NS	NS	NS	NS	NS	NS
Ethane	None	µg/L	NS	0.19	0.17	NS	0.18	0.65	0.2	NS	NS	NS	NS	NS	NS	NS
Ethene	None	µg/L	NS	0.095 U	0.24	NS	0.095 U	0.095 U	0.095 U	NS	NS	NS	NS	NS	NS	NS
Hardness, Total as CaCO3	None	mg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	207	160	145	154
Iron	300	µg/L	**13,200**	**42,900**	**49,100**	**50,900**	**8,530**	**9,380**	**36,000**	**29,400 J**	**20,000 J**	**43,300**	**580**	**775**	**738**	100 U
Manganese	300	µg/L	**1,480**	**505**	**7,360**	**430**	**1,300**	**1,740**	**6,720**	**1,220**	**1,150**	**2,880**	74.9	174	174	15 U
Methane	None	µg/L	NS	105	7	NS	0.29	4.4	27.1	NS	NS	NS	NS	NS	NS	NS
Nitrogen, Ammonia	None	mg/L	NS	0.61	0.4	NS	0.2 U	0.33	0.2 U	NS	NS	NS	NS	NS	NS	NS
Nitrogen, Nitrate	None	mg/L	NS	0.11 U	0.11 U	NS	0.11 U	0.11 U	0.11 U	NS	NS	NS	NS	NS	NS	NS
Nitrogen, Nitrate + Nitrite	None	mg/L	NS	0.1 U	0.1 U	NS	0.1 U	0.1 U	0.1 U	NS	NS	NS	NS	NS	NS	NS
Nitrogen, Nitrite	None	mg/L	NS	0.01 U	0.01 U	NS	0.01 U	0.01 U	0.01 U	NS	NS	NS	NS	NS	NS	NS
Nitrogen, Total Kjeldahl	None	mg/L	NS	0.2 U	0.2 U	NS	0.2 U	0.2 U	0.2 U	NS	NS	NS	NS	NS	NS	NS
Sulfate	None	mg/L	NS	10 U	10 U	NS	10 U	10 U	10 U	NS	NS	NS	NS	NS	NS	NS
Total Organic Carbon	None	mg/L	NS	7.6	10	NS	6.3	14.4	11.6	NS	NS	NS	NS	NS	NS	NS

Qualifier Key:

U - Analyte not detected in the sample. Value represents the quantitation/detection limit.

J - Result reported is a quantitative estimate

Abbreviation Key:

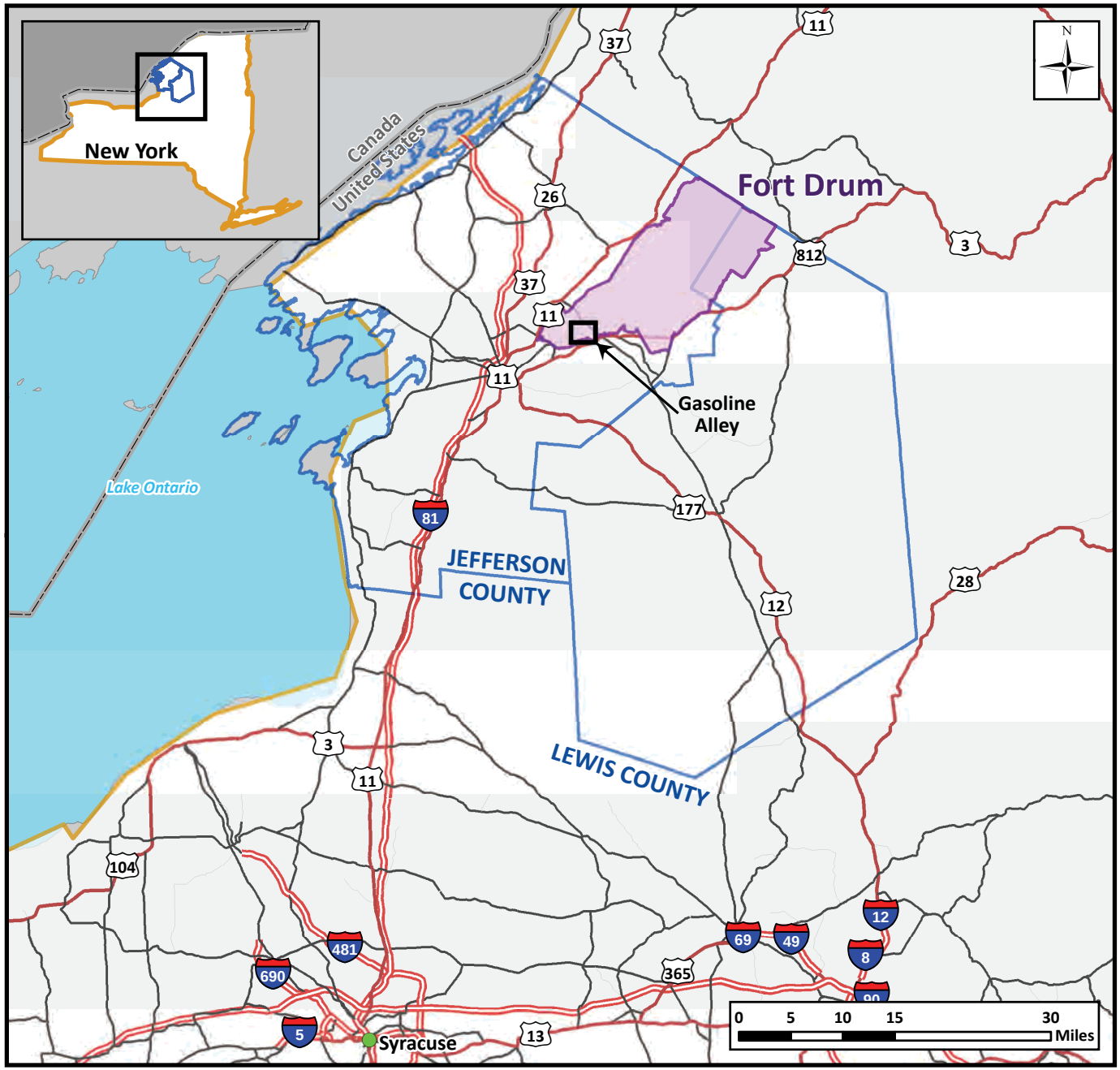
NS - Not Sampled

µg/L - Micrograms per Liter

mg/L - milligrams per Liter

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A cell highlighted and not bold Inidcates a detected analyte that does not exceed the screening criteria
Indicates the analyte is not detected or not sampled

FIGURES



Map Key:

- U.S. - Canada Border
- State Boundary
- County Boundary
- Fort Drum Installation Boundary
- Lake Ontario
- Syracuse
- Interstate
- Highway
- Major Road
- Local Road

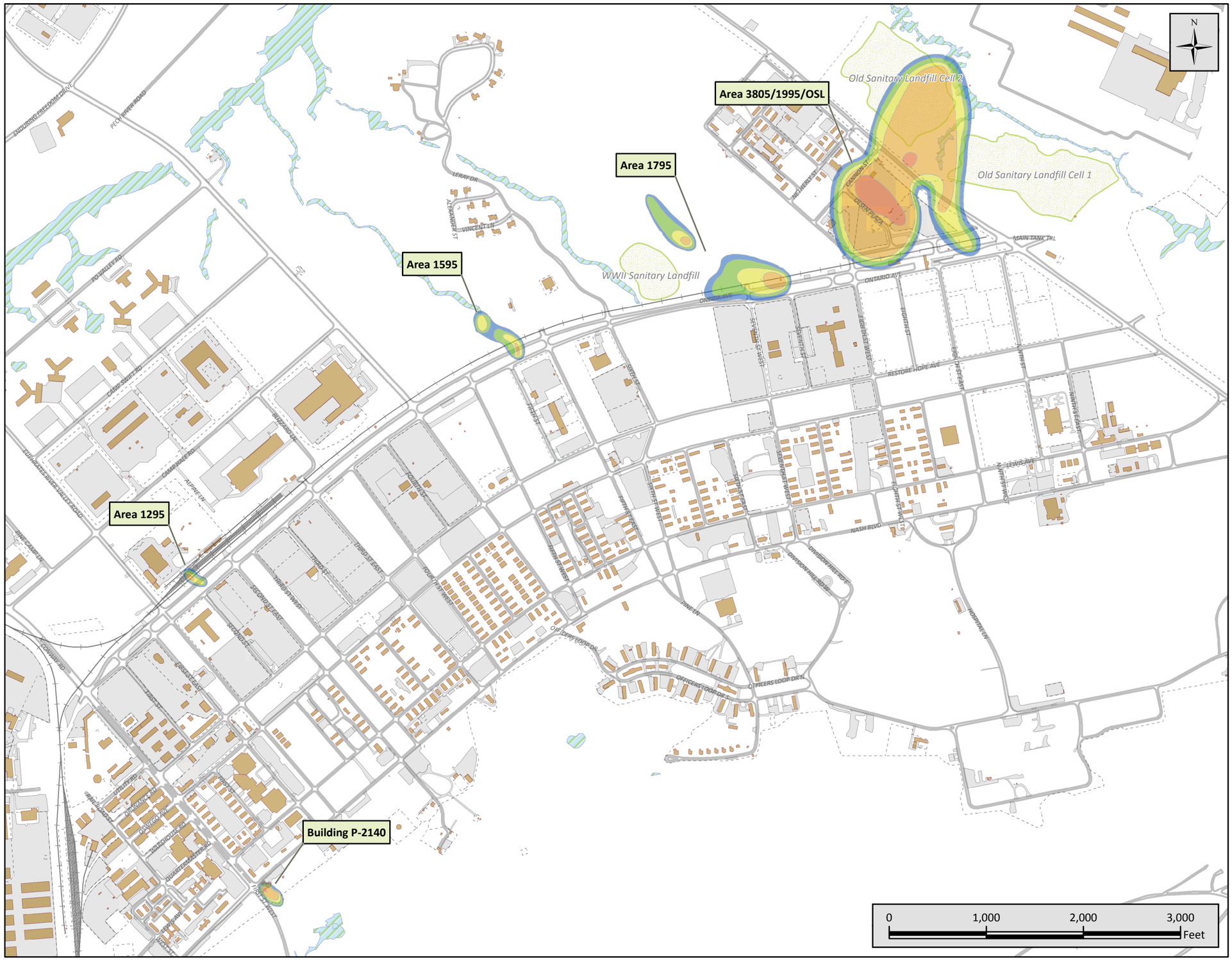
PLEXUS scientific
5510 Cherokee Ave.
Suite 350
Alexandria, VA 22312
(P) 703.820.3339
(F) 703.845.8568

Created By: Betsy Bouton
Date: October 2013

FIGURE 1-1

Site Location Map

2013 Annual Basewide Monitoring Report
Fort Drum, New York



Legend

- Fence Line
- Rail Road
- Paved Roadline
- Landfill Site
- Wetlands
- Building
- Paved Area

Fall 2013 BTEX Plume

- 1 µg/L
- 10 µg/L
- 100 µg/L
- 1,000 µg/L
- 10,000 µg/L

Abbreviation Key:
µg/L = micrograms per liter
BTEX = Benzene, Toluene, Ethylbenzene & Total Xylenes
OSL = Old Sanitary Landfill

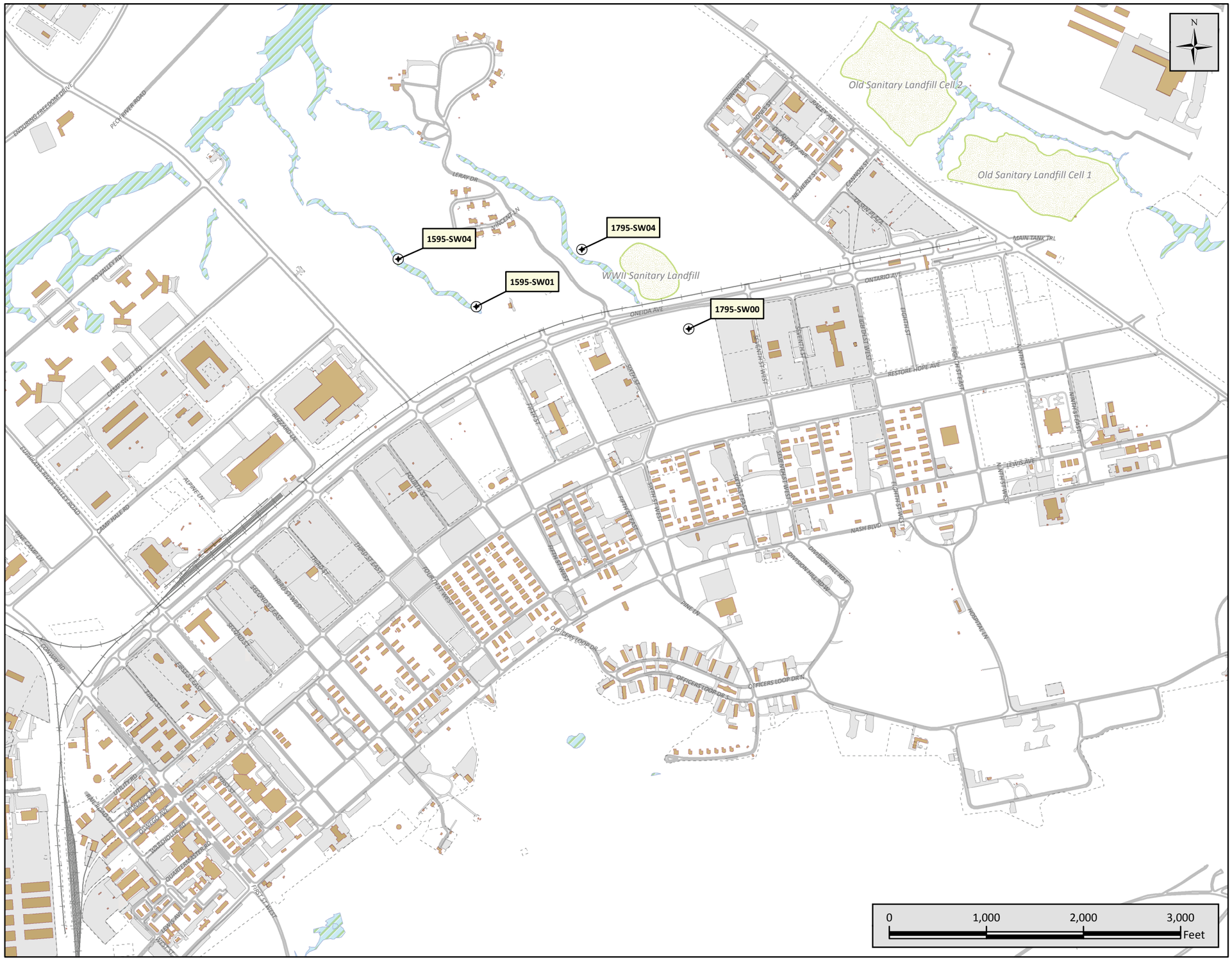
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Suite 350
Alexandria, VA 22312
(P) 703.820.3339
(F) 703.845.8568

Created By: Betsy Bouton
Date: November 2013

FIGURE 1-2

Cantonment Area Map

2013 Annual Basewide Monitoring Report
Fort Drum, New York



Legend

- Surface Water Sample Location
- Fence Line
- Rail Road
- Paved Roadline
- Landfill Site
- Wetlands
- Building
- Paved Area

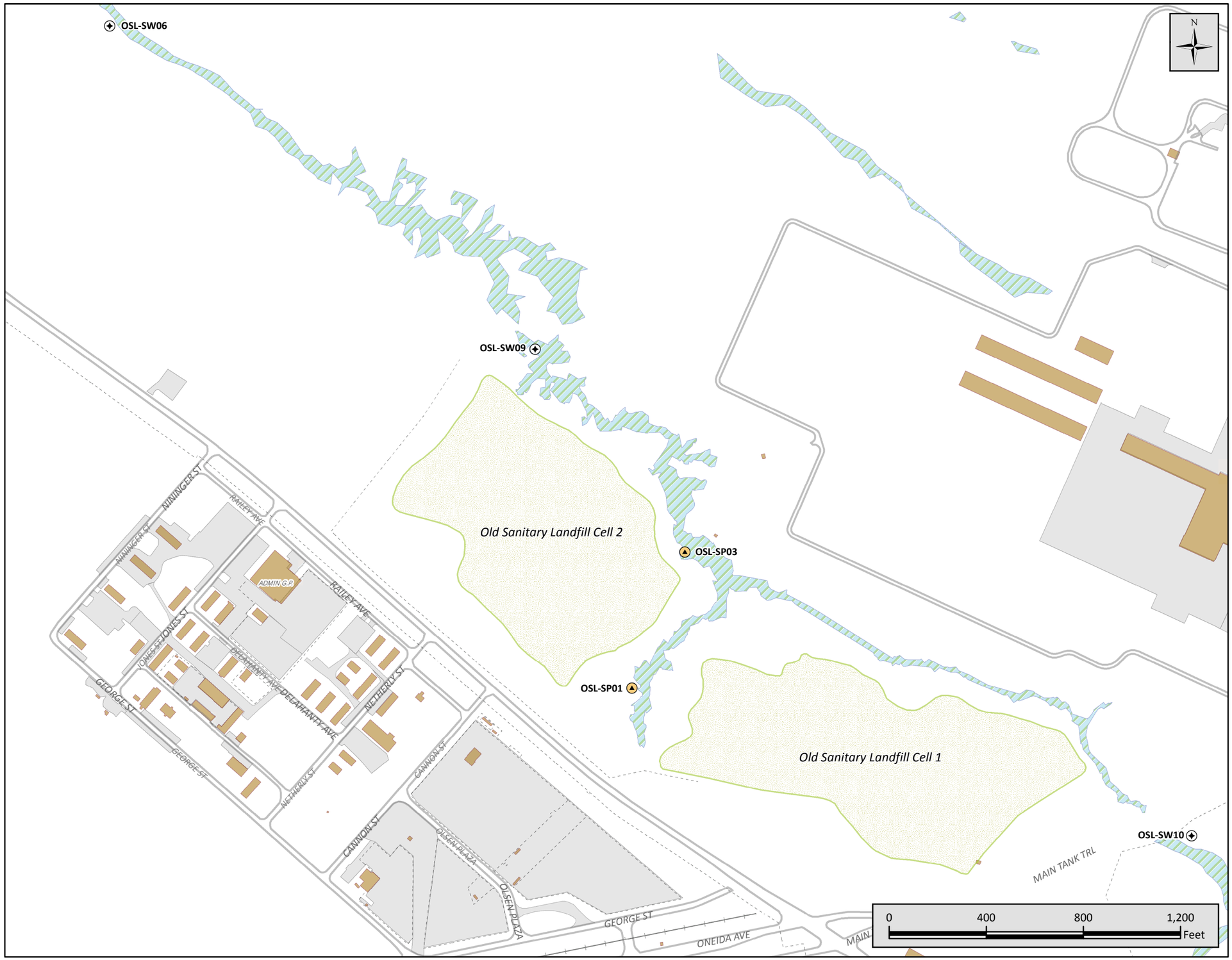
25 years of excellence
PLEXUS scientific
5510 Cherokee Ave.
Suite 350
Alexandria, VA 22312
(P) 703.820.3339
(F) 703.845.8568

Created By: Betsy Bouton
Date: February 2014

FIGURE 2-1

Surface Water Sampling Locations at All Sites (Except OSL)

2013 Annual Basewide Monitoring Report
Fort Drum, New York



Legend

- Landfill Seep Sample Locations
- Surface Water Sample Locations
- Fence Line
- Rail Road
- Paved Roadline
- Landfill Site
- Wetlands
- Building
- Paved Area

PLEXUS scientific

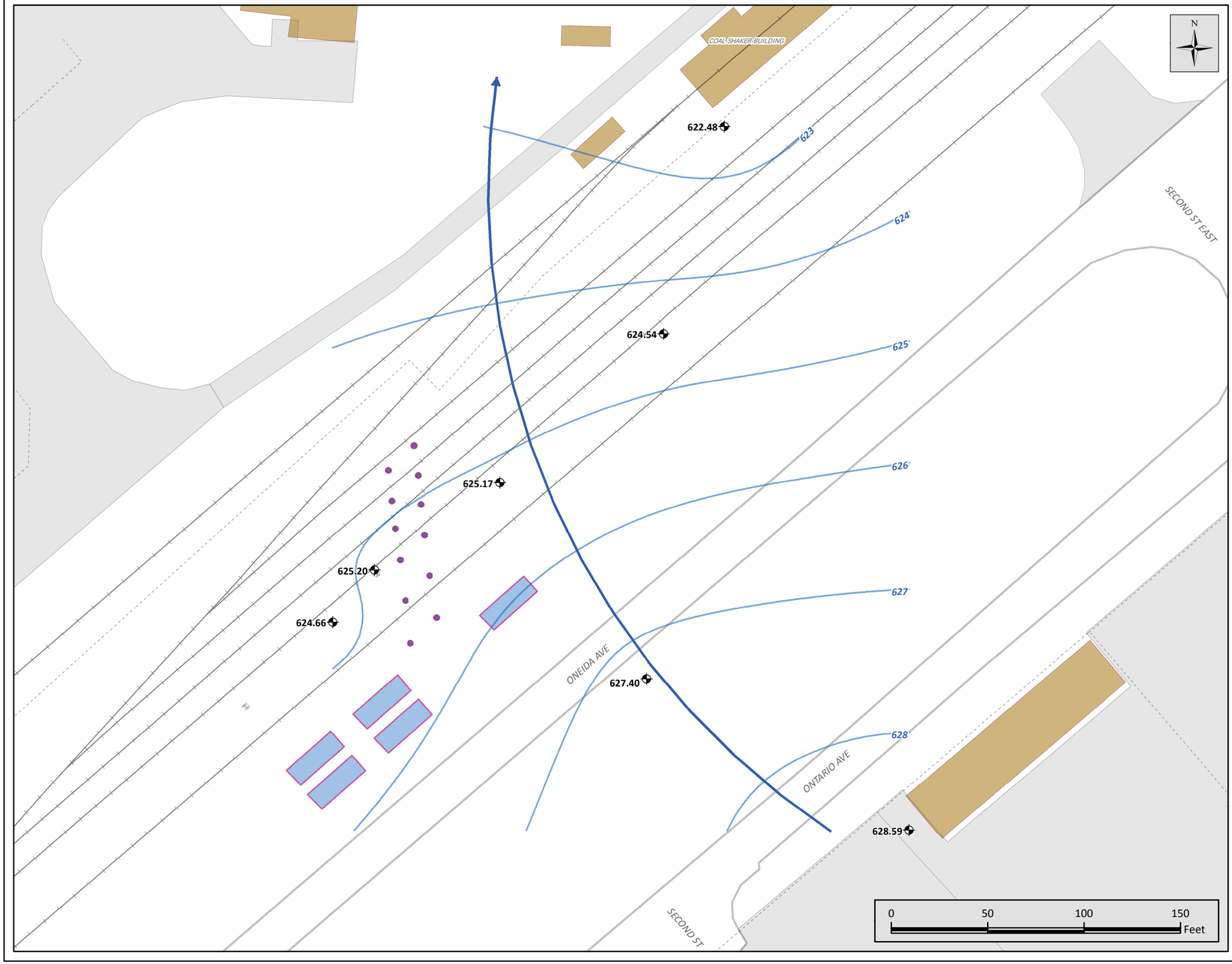
5510 Cherokee Ave.
Suite 350
Alexandria, VA 22312
(P) 703.820.3339
(F) 703.845.8568

Created By: Betsy Bouton
Date: November 2013

FIGURE 2-2

Surface Water and Seep Sampling Locations at the OSL

2013 Annual Basewide Monitoring Report Fort Drum, New York



Legend

- Gauged Wells (ft MSL)
- Other Monitoring Wells
- Ozone Injection Points
- Groundwater Flow Direction
- Groundwater Contour (ft MSL)
- Former UST
- Fence Line
- Rail Road
- Paved Road
- Building
- Paved Area

Abbreviation Key:
ft = Feet
MSL = Mean sea level
UST = Underground Storage Tank

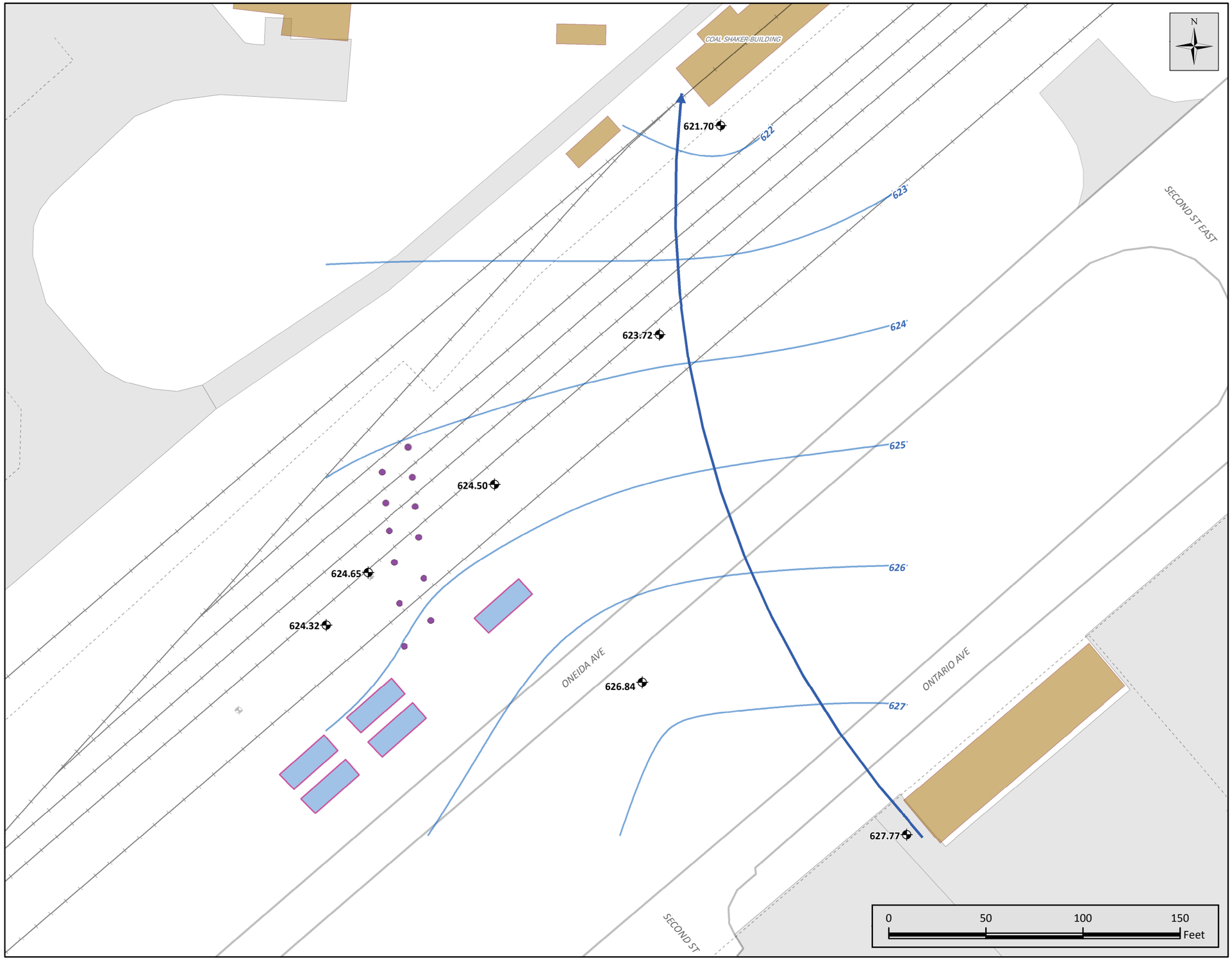
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Date: November 2013

FIGURE 3-1

Area 1295 Groundwater Contour Map, Spring 2013

2013 Annual Basewide Monitoring Report
Fort Drum, New York



Legend

- Gauged Wells (ft MSL)
- Other Monitoring Wells
- Ozone Injection Points
- Groundwater Flow Direction
- Groundwater Contour (ft MSL)
- Former UST
- Fence Line
- Rail Road
- Paved Road
- Building
- Paved Area

Abbreviation Key:
ft = Feet
MSL = Mean sea level
UST = Underground Storage Tank

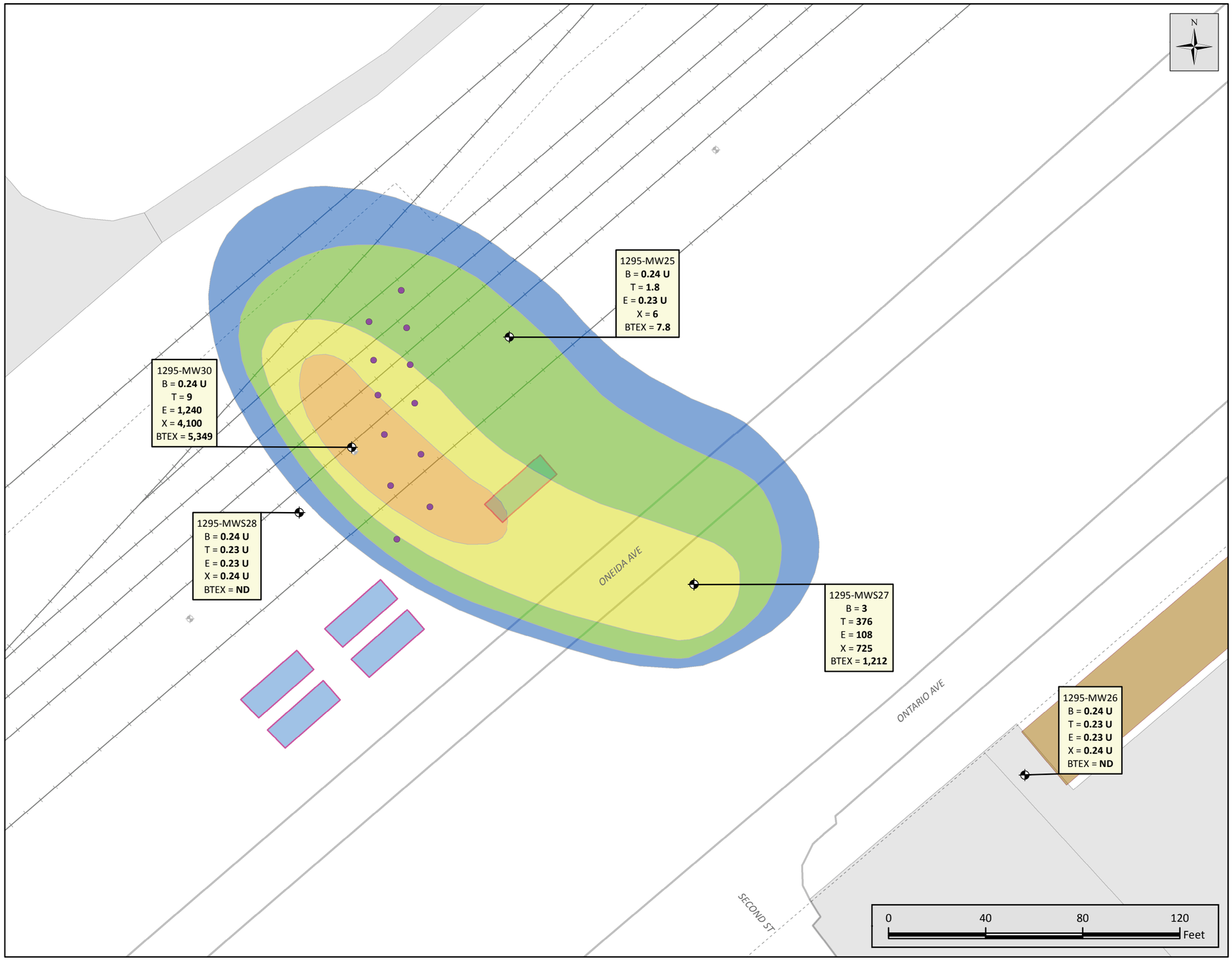
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Date: November 2013

FIGURE 3-2

Area 1295 Groundwater Contour Map, Fall 2013

2013 Annual Basewide Monitoring Report
Fort Drum, New York



Legend

- Sampled Wells
- Other Monitoring Wells
- Ozone Injection Points
- Former UST
- Fence Line
- Rail Road
- Paved Road
- Building
- Paved Area

Fall 2012 BTEX Plume

- 1 µg/L
- 10 µg/L
- 100 µg/L
- 1,000 µg/L

Label Key:
-BTEX result values are expressed in units of µg/L followed by a qualifier if applicable.

Location Well ID	Exceedence Criteria (µg/L):
B= **Benzene**	B = **1**
T= **Toluene**	T = **5**
E= **Ethyl Benzene**	E = **5**
X= **Total Xylenes**	X = **5**
BTEX= **Total BTEX**	

Qualifer Key:
U = Value is less than the method detection limit (MDL)
J = Value is greater than the MDL, but less than the reporting limit (RL)

Abbreviation Key:
µg/L = micrograms per liter
UST = Underground Storage Tank
ND = Not detected

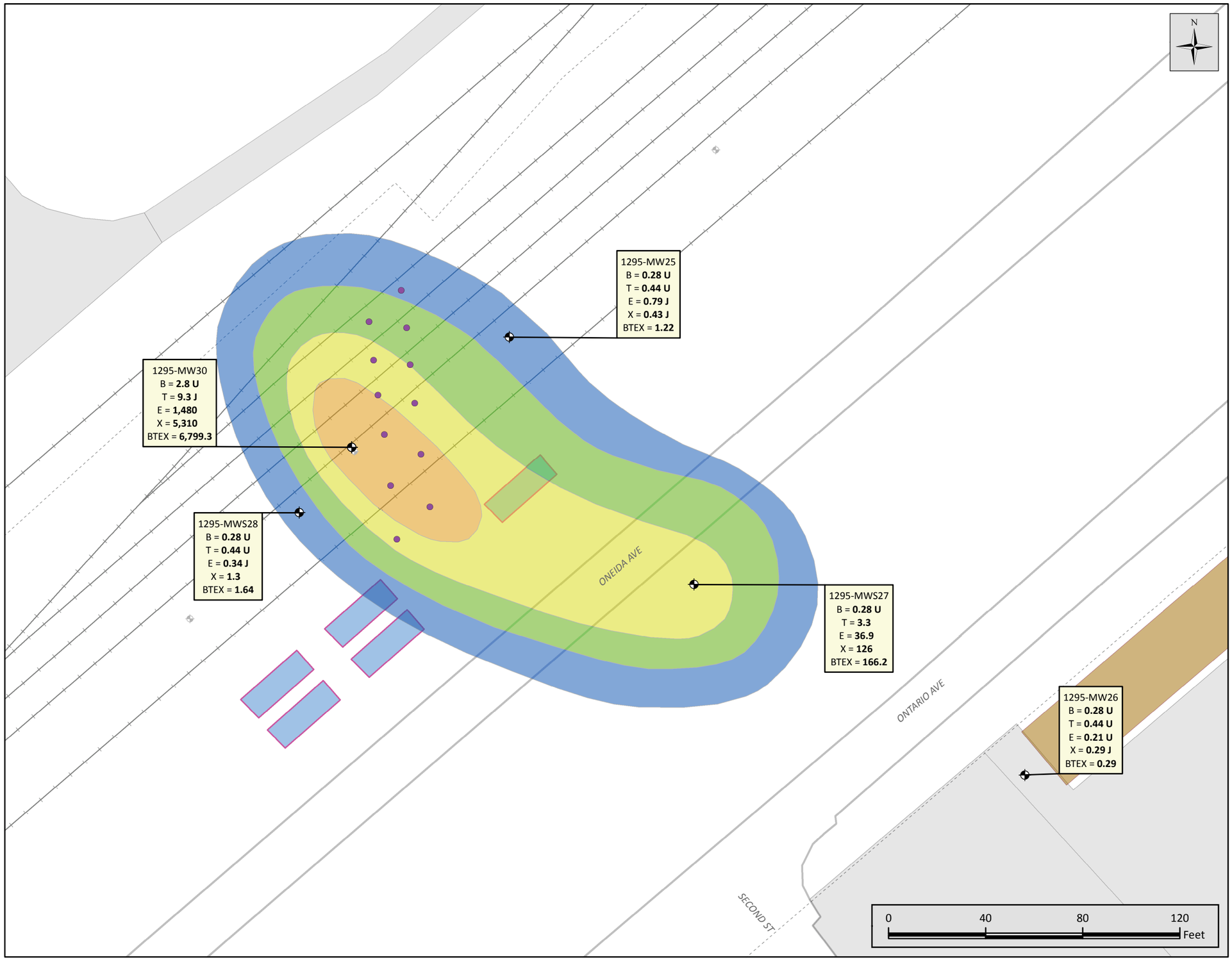
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FIGURE 3-3

Area 1295 Total BTEX Concentration Map, Spring 2013

2013 Annual Basewide Monitoring Report
Fort Drum, New York



Legend

- Sampled Wells
- Other Monitoring Wells
- Ozone Injection Points
- Former UST
- Fence Line
- Rail Road
- Paved Road
- Building
- Paved Area

Fall 2013 BTEX Plume

- 1 µg/L
- 10 µg/L
- 100 µg/L
- 1,000 µg/L

Label Key:
-BTEX result values are expressed in units of µg/L followed by a qualifier if applicable.

Location Well ID	
B=	**Benzene**
T=	**Toluene**
E=	**Ethyl Benzene**
X=	**Total Xylenes**
BTEX=	**Total BTEX**

Exceedence Criteria (µg/L):
B = **1**
T = **5**
E = **5**
X = **5**

Qualifer Key:
U = Value is less than the method detection limit (MDL)
J = Value is greater than the MDL, but less than the reporting limit (RL)

Abbreviation Key:
µg/L = micrograms per liter
UST = Underground Storage Tank
ND = Not detected

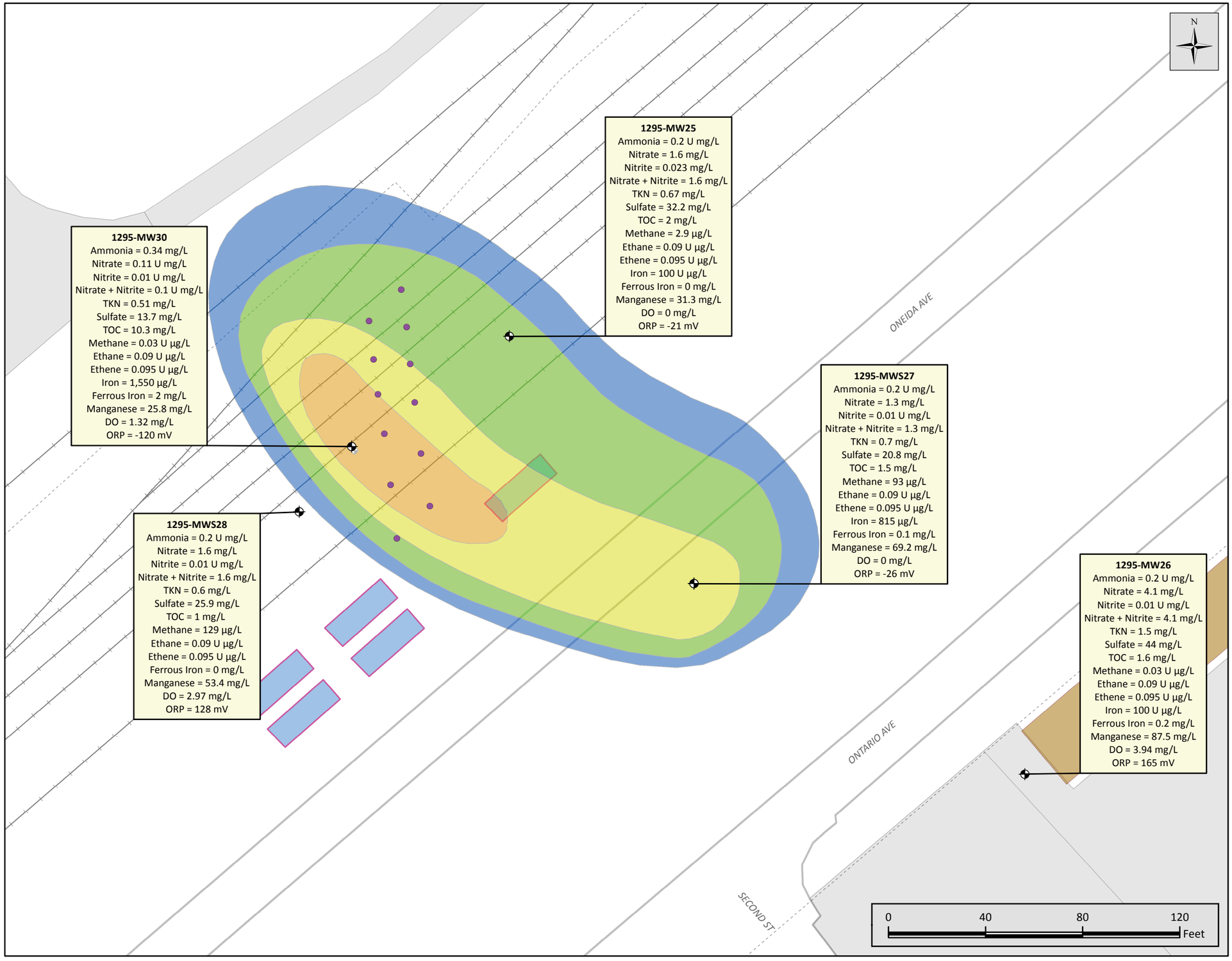
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Date: November 2013

FIGURE 3-4

Area 1295
Total BTEX Concentration Map, Fall 2013

2013 Annual Basewide Monitoring Report
Fort Drum, New York



Legend

- Sampled Wells
- Other Monitoring Wells
- Ozone Injection Points
- Former UST
- Fence Line
- Rail Road
- Paved Road
- Building
- Paved Area

Fall 2012 BTEX Plume

- 1 µg/L
- 10 µg/L
- 100 µg/L
- 1,000 µg/L

Monitored Natural Attenuation Label Key:
Result values are expressed in units of µg/L and mg/L followed by a qualifier if applicable

Abbreviation Key:
µg/L = micrograms per liter
DO = Dissolved Oxygen
mg/L = milligrams per liter
mV = millivolts
ORP = Oxidation Reduction Potential
TKN = Total Kjeldahl Nitrogen
TOC - Total Organic Carbon
UST = Underground Storage Tank

Qualifer Key:
U = Value is less than the method detection limit (MDL)
J = Value is greater than the MDL, but less than the reporting limit (RL)

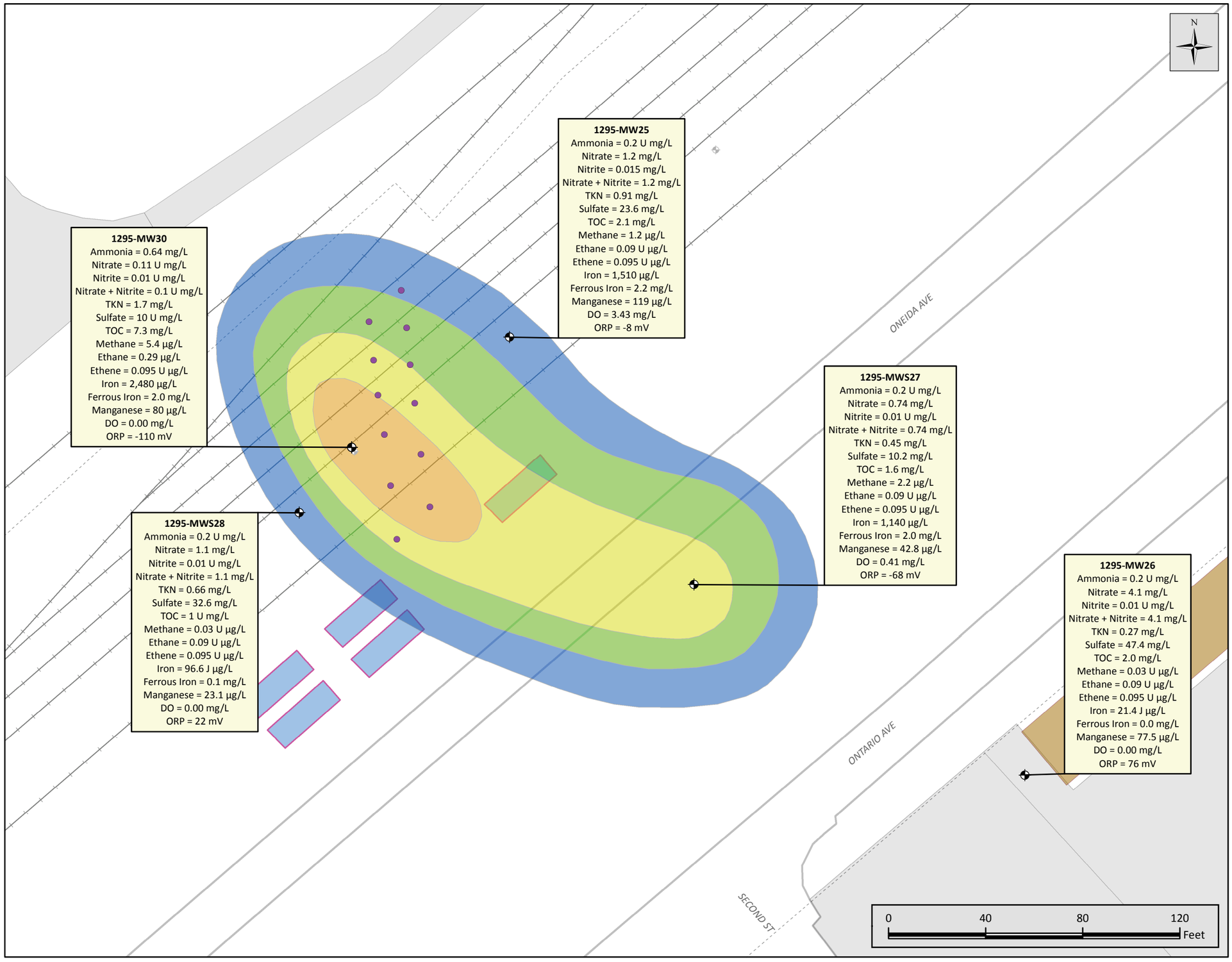
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FIGURE 3-5

Area 1295
MNA Parameter Concentration Map, Spring 2013

2013 Annual Basewide Monitoring Report
Fort Drum, New York



Legend

- Sampled Wells
- Other Monitoring Wells
- Ozone Injection Points
- Former UST
- Fence Line
- Rail Road
- Paved Road
- Building
- Paved Area

Fall 2013 BTEX Plume

- 1 µg/L
- 10 µg/L
- 100 µg/L
- 1,000 µg/L

Monitored Natural Attenuation Label Key:
Result values are expressed in units of µg/L and mg/L followed by a qualifier if applicable

Abbreviation Key:
µg/L = micrograms per liter
DO = Dissolved Oxygen
mg/L = milligrams per liter
mV = millivolts
NS = Not Sampled
ORP = Oxidation Reduction Potential
TKN = Total Kjeldahl Nitrogen
TOC - Total Organic Carbon
UST = Underground Storage Tank

Qualifer Key:
U = Value is less than the method detection limit (MDL)
J = Value is greater than the MDL, but less than the reporting limit (RL)

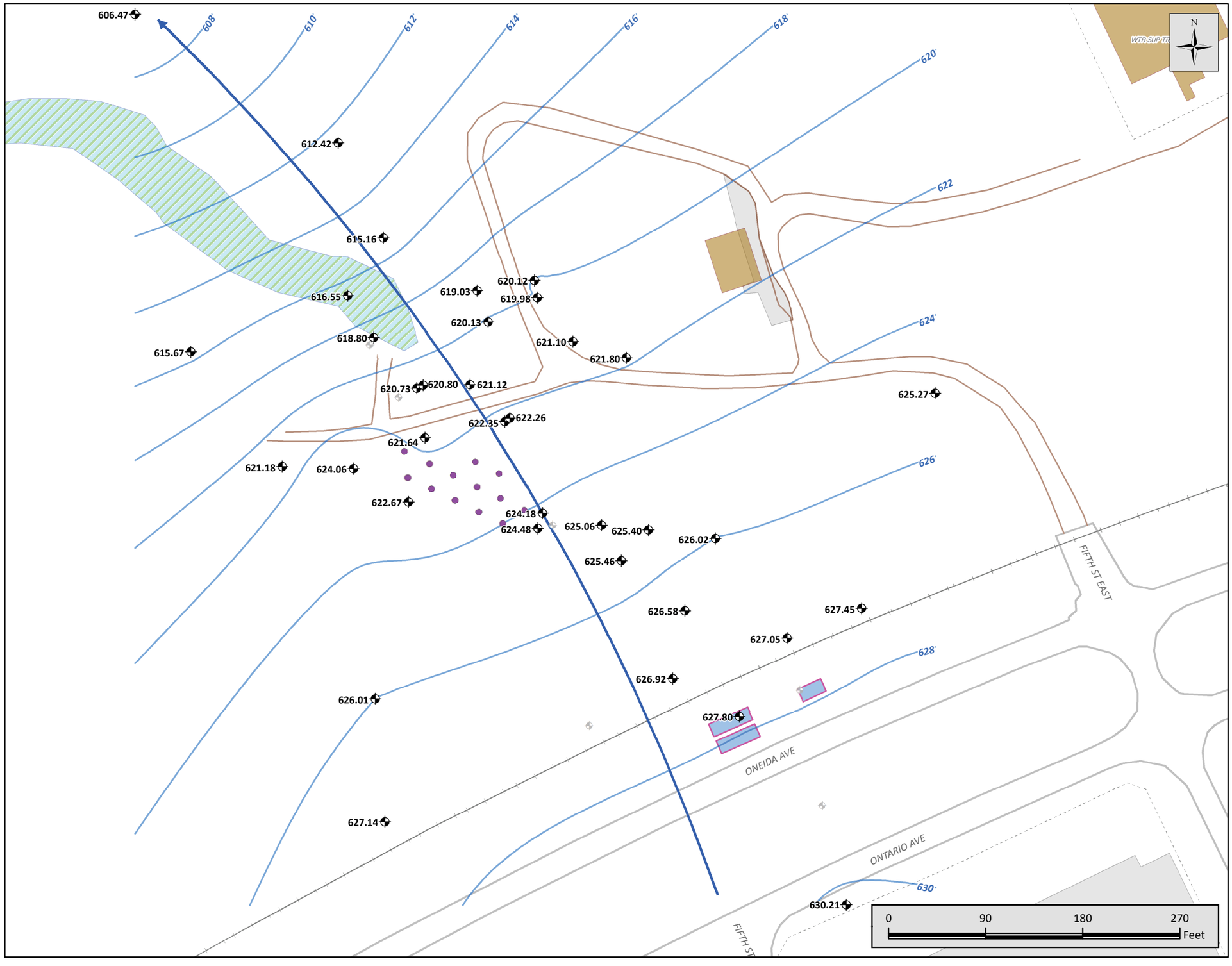
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FIGURE 3-6

Area 1295
MNA Parameter Concentration Map, Fall 2013

2013 Annual Basewide Monitoring Report
Fort Drum, New York



Legend

- Gauged Wells (ft MSL)
- Other Monitoring Wells
- Ozone Injection Points
- Groundwater Flow Direction
- Groundwater Contour (ft MSL)
- Former UST
- Fence Line
- Rail Road
- Paved Road
- Unpaved Road
- Wetlands
- Building
- Paved Area

Abbreviation Key:
ft = Feet
MSL = Mean sea level
UST = Underground Storage Tank

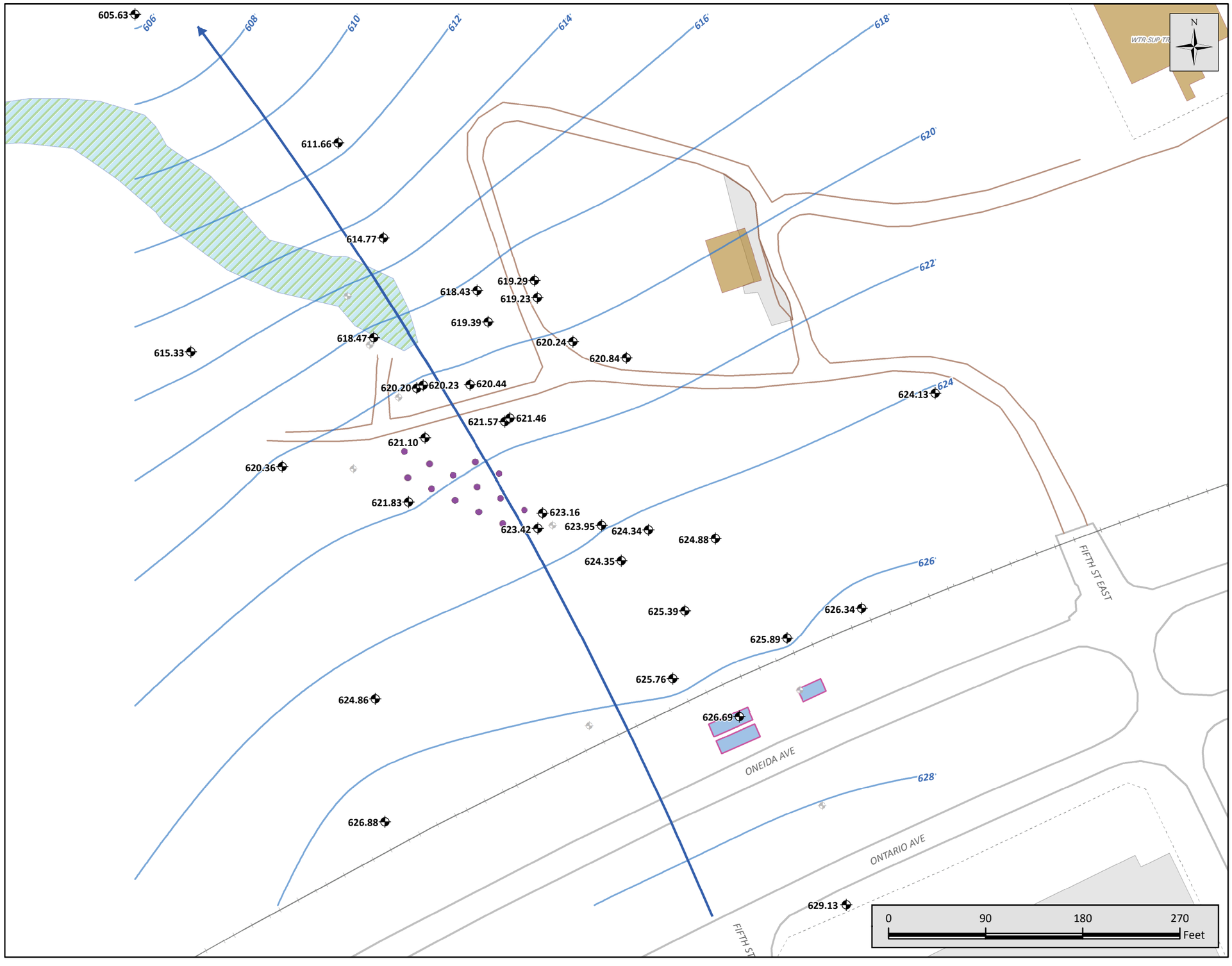
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FIGURE 3-7

Area 1595 Groundwater Contour Map, Spring 2013

2013 Annual Basewide Monitoring Report
Fort Drum, New York



Legend

- Gauged Wells (ft MSL)
- Other Monitoring Wells
- Ozone Injection Points
- Groundwater Flow Direction
- Groundwater Contour (ft MSL)
- Former UST
- Fence Line
- Rail Road
- Paved Road
- Unpaved Road
- Wetlands
- Building
- Paved Area

Abbreviation Key:
ft = Feet
MSL = Mean sea level
UST = Underground Storage Tank

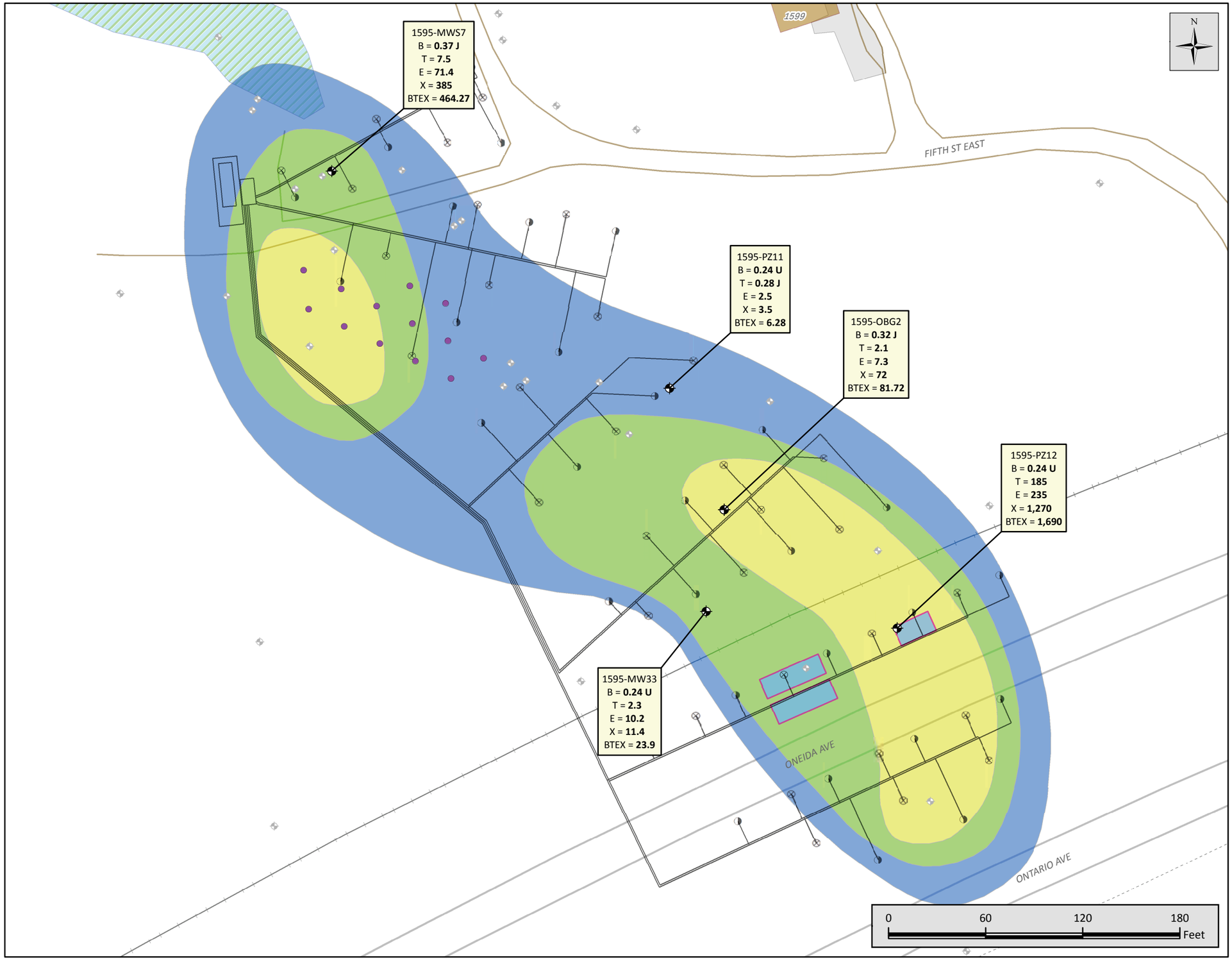
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FIGURE 3-8

Area 1595 Groundwater Contour Map, Fall 2013

2013 Annual Basewide Monitoring Report
Fort Drum, New York



Legend

- Sampled Wells
- Other Monitoring Wells
- Ozone Injection Points
- Air Sparge Wells
- Soil-Vapor Extraction Wells
- System Pipes
- Former UST
- Fence Line
- Rail Road
- Paved Road
- Unpaved Road
- Wetlands
- Building
- Paved Area

Fall 2012 BTEX Plume

- 1 µg/L
- 10 µg/L
- 100 µg/L

Label Key:
-BTEX result values are expressed in units of µg/L followed by a qualifier if applicable.

Location Well ID
B= **Benzene**
T= **Toluene**
E= **Ethyl Benzene**
X= **Total Xylenes**
BTEX= **Total BTEX**

Exceedence Criteria (µg/L):
B = **1**
T = **5**
E = **5**
X = **5**

Qualifer Key:
U = Value is less than the method detection limit (MDL)
J = Value is greater than the MDL, but less than the reporting limit (RL)

Abbreviation Key:
µg/L = micrograms per liter
UST = Underground Storage Tank
ND = Not detected

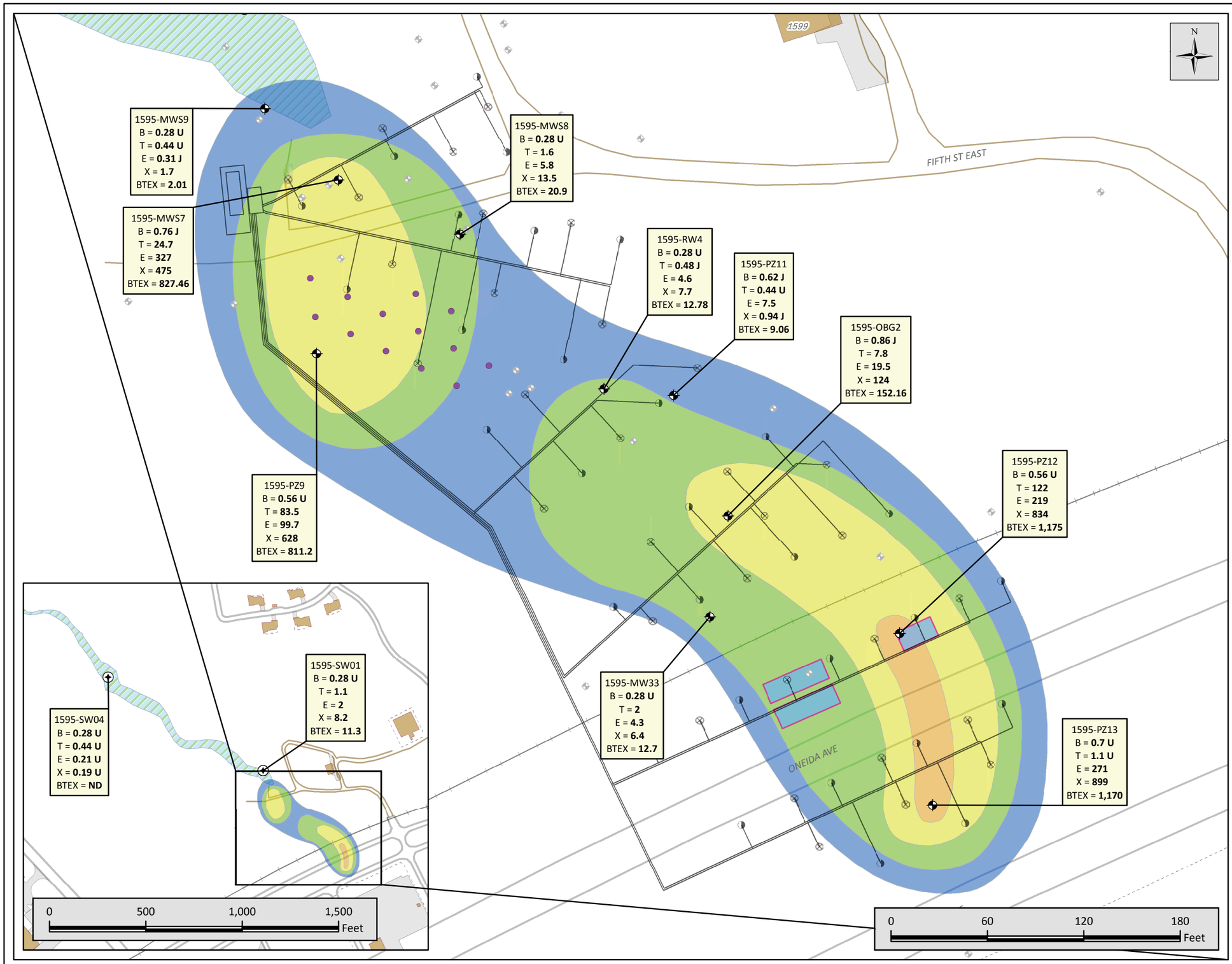
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FIGURE 3-9

Area 1595
Total BTEX Concentration Map, Spring 2013

2013 Annual Basewide Monitoring Report
Fort Drum, New York



Legend

- Sampled Wells
- Surface Water Samples
- Other Monitoring Wells
- Ozone Injection Points
- Air Sparge Wells
- Soil-Vapor Extraction Wells
- System Pipes
- Former UST
- Fence Line
- Rail Road
- Paved Road
- Unpaved Road
- Wetlands
- Building
- Paved Area

Fall 2013 BTEX Plume

- 1 µg/L
- 10 µg/L
- 100 µg/L
- 1,000 µg/L

Label Key:
-BTEX result values are expressed in units of µg/L followed by a qualifier if applicable.

Location Well ID	Exceedence Criteria (µg/L):
B= **Benzene**	B = **1**
T= **Toluene**	T = **5**
E= **Ethyl Benzene**	E = **5**
X= **Total Xylenes**	X = **5**
BTEX= **Total BTEX**	

Qualifer Key:
U = Value is less than the method detection limit (MDL)
J = Value is greater than the MDL, but less than the reporting limit (RL)

Abbreviation Key:
µg/L = micrograms per liter
UST = Underground Storage Tank
ND = Not detected

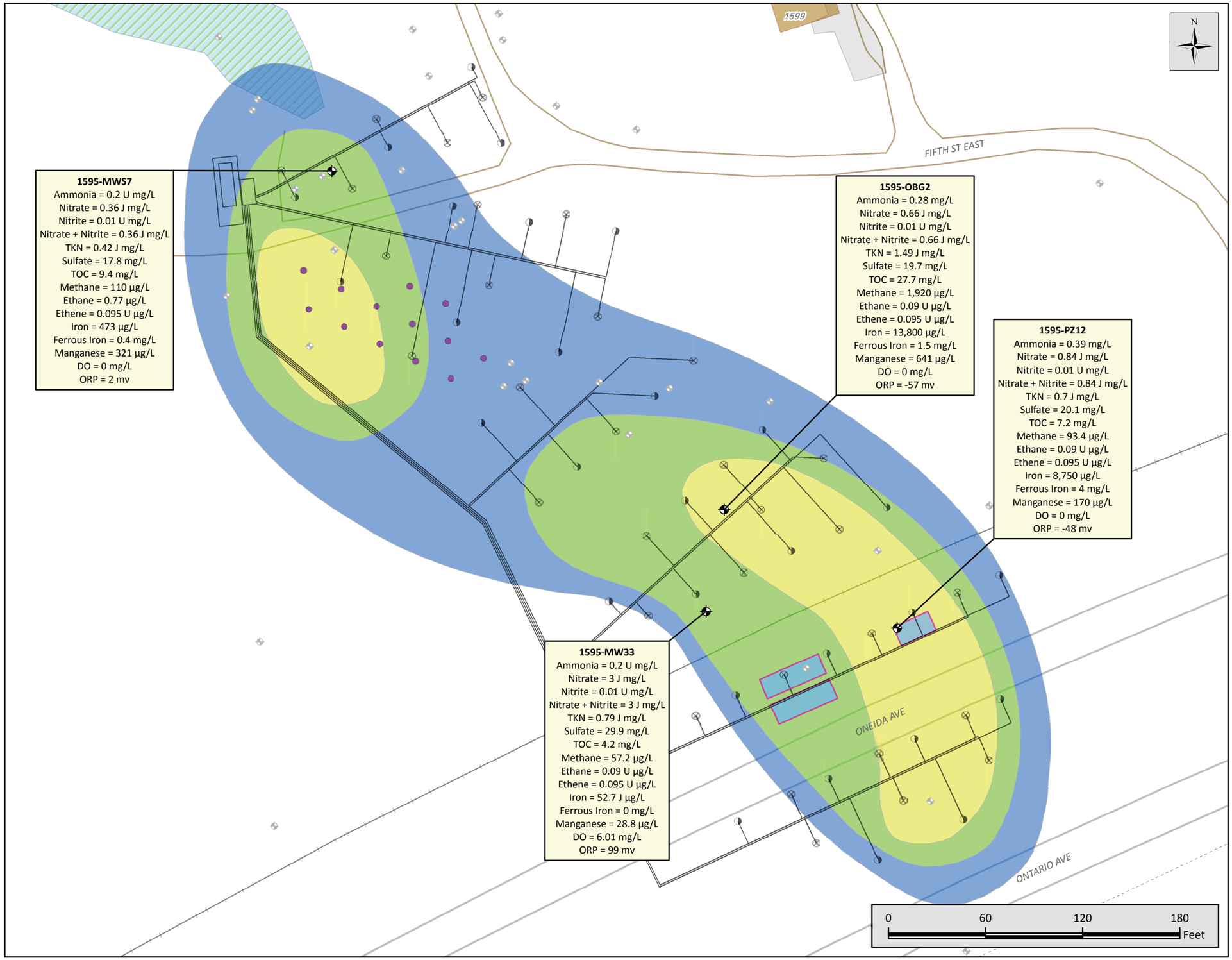
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Date: February 2014

FIGURE 3-10

Area 1595
Total BTEX Concentration Map, Fall 2013

2013 Annual Basewide Monitoring Report
Fort Drum, New York



Legend

- Sampled Wells
- Other Monitoring Wells
- Ozone Injection Points
- Air Sparge Wells
- Soil-Vapor Extraction Wells
- System Pipes
- Former UST
- Fence Line
- Rail Road
- Paved Road
- Unpaved Road
- Wetlands
- Building
- Paved Area

Fall 2012 BTEX Plume

- 1 µg/L
- 10 µg/L
- 100 µg/L

Monitored Natural Attenuation Label Key:
Result values are expressed in units of µg/L and mg/L followed by a qualifier if applicable

Abbreviation Key:
µg/L = micrograms per liter
DO = Dissolved Oxygen
mg/L = milligrams per liter
mV = millivolts
ORP = Oxidation Reduction Potential
TKN = Total Kjeldahl Nitrogen
TOC - Total Organic Carbon
UST = Underground Storage Tank

Qualifer Key:
U = Value is less than the method detection limit (MDL)
J = Value is greater than the MDL, but less than the reporting limit (RL)

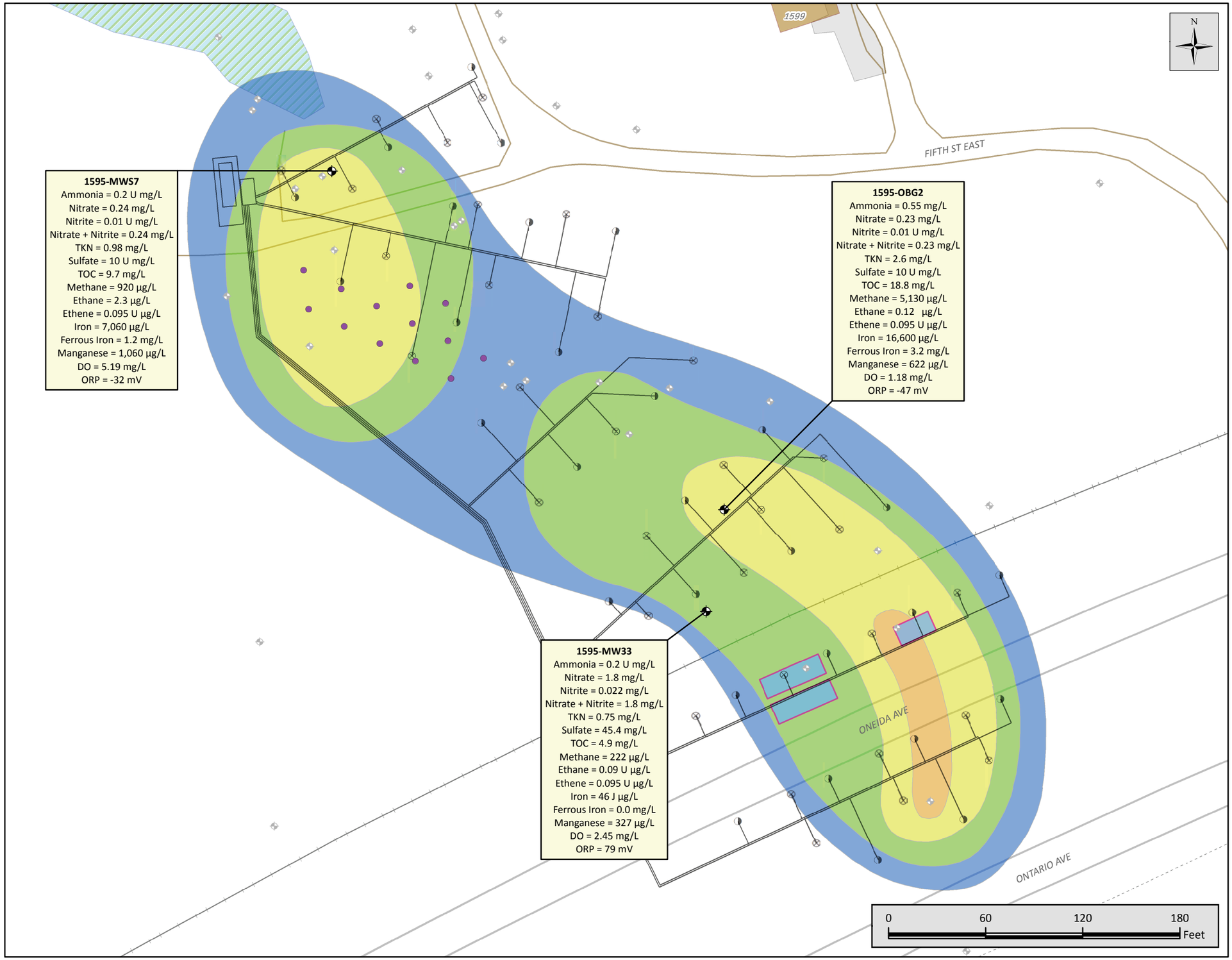
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FIGURE 3-11

Area 1595
MNA Parameter Concentration Map
Spring 2013

2013 Annual Basewide Monitoring Report
Fort Drum, New York



Legend

- Sampled Wells
- Other Monitoring Wells
- Ozone Injection Points
- Air Sparge Wells
- Soil-Vapor Extraction Wells
- System Pipes
- Former UST
- Fence Line
- Rail Road
- Paved Road
- Unpaved Road
- Wetlands
- Building
- Paved Area

Fall 2013 BTEX Plume

- 1 µg/L
- 10 µg/L
- 100 µg/L
- 1,000 µg/L

Monitored Natural Attenuation Label Key:
Result values are expressed in units of µg/L and mg/L followed by a qualifier if applicable

Abbreviation Key:
µg/L = micrograms per liter
DO = Dissolved Oxygen
mg/L = milligrams per liter
mV = millivolts
ORP = Oxidation Reduction Potential
TKN = Total Kjeldahl Nitrogen
TOC - Total Organic Carbon
UST = Underground Storage Tank

Qualifer Key:
U = Value is less than the method detection limit (MDL)
J = Value is greater than the MDL, but less than the reporting limit (RL)

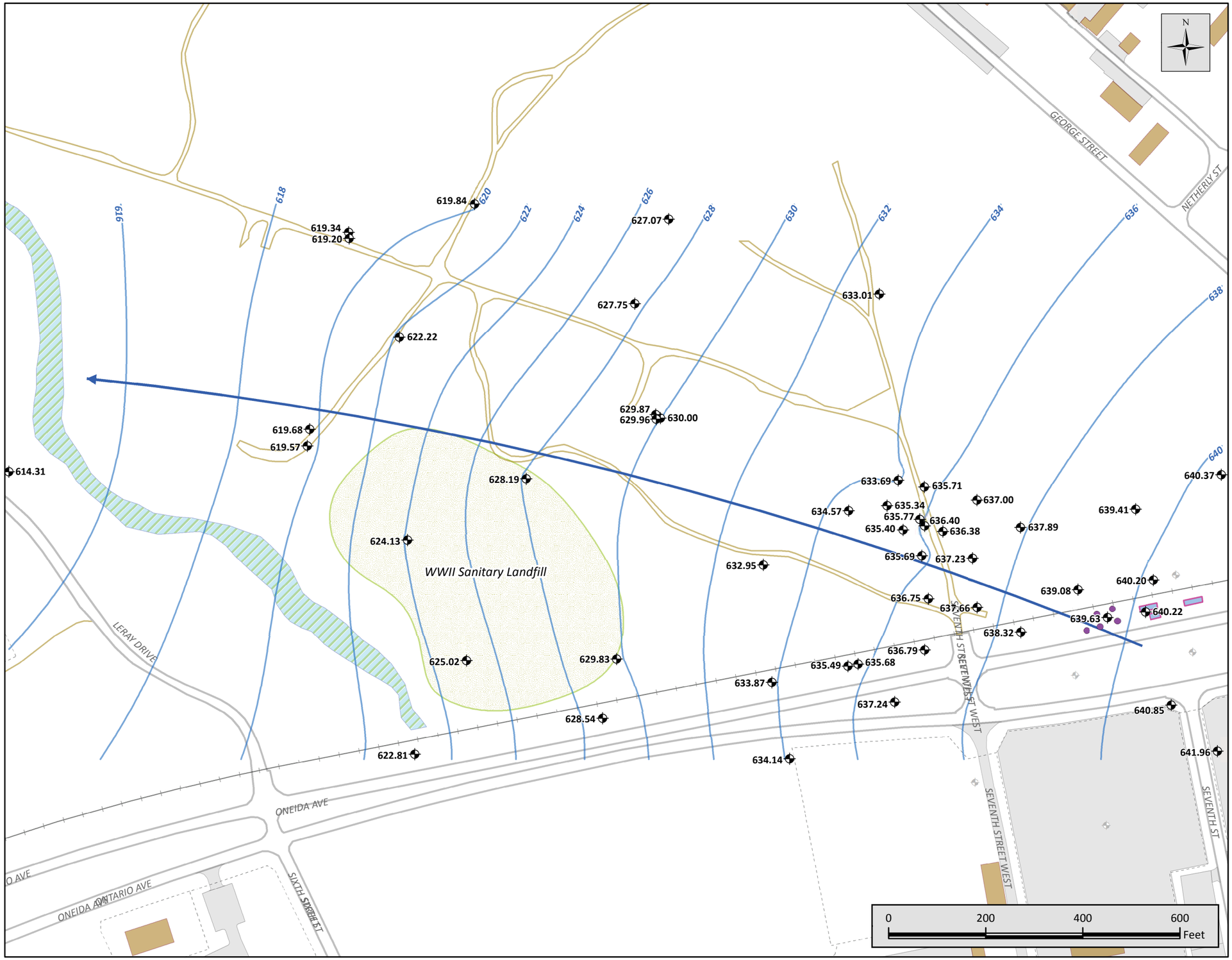
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FIGURE 3-12

Area 1595
MNA Parameter Concentration Map, Fall 2013

2013 Annual Basewide Monitoring Report
Fort Drum, New York



Legend

- Gauged Wells (ft MSL)
- Other Monitoring Wells
- Ozone Injection Points
- Groundwater Flow Direction
- Groundwater Contour (ft MSL)
- Former UST
- Fence Line
- Rail Road
- Paved Road
- Unpaved Road
- Landfill Site
- Building
- Wetlands
- Paved Area

Abbreviation Key:
ft = Feet
MSL = Mean sea level
UST = Underground Storage Tank

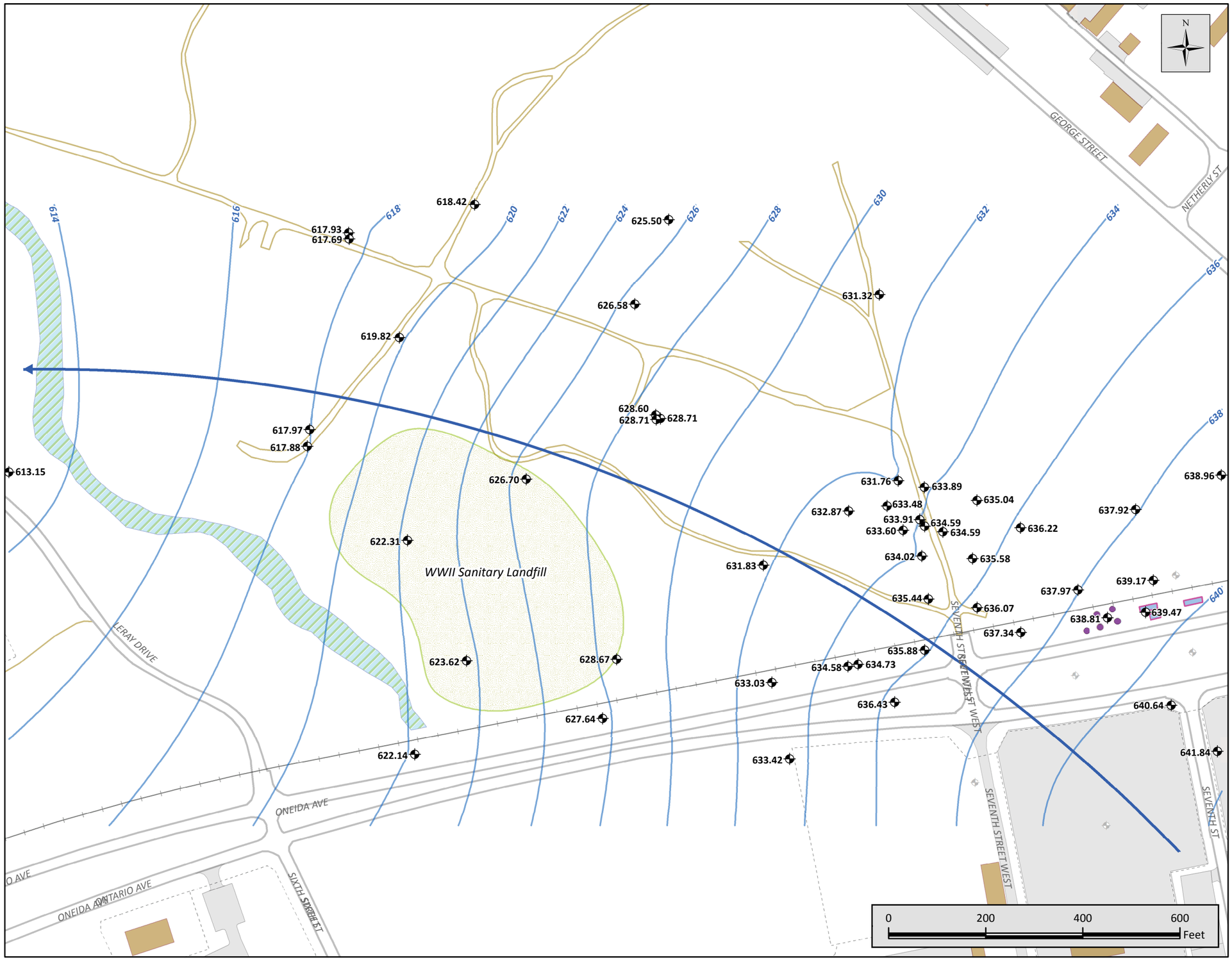
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FIGURE 3-13

Area 1795
Groundwater Contour Map, Spring 2013

2013 Annual Basewide Monitoring Report
Fort Drum, New York



Legend

- Gauged Wells (ft MSL)
- Other Monitoring Wells
- Ozone Injection Points
- Groundwater Flow Direction
- Groundwater Contour (ft MSL)
- Former UST
- Fence Line
- Rail Road
- Paved Road
- Unpaved Road
- Landfill Site
- Building
- Wetlands
- Paved Area

Abbreviation Key:
ft = Feet
MSL = Mean sea level
UST = Underground Storage Tank

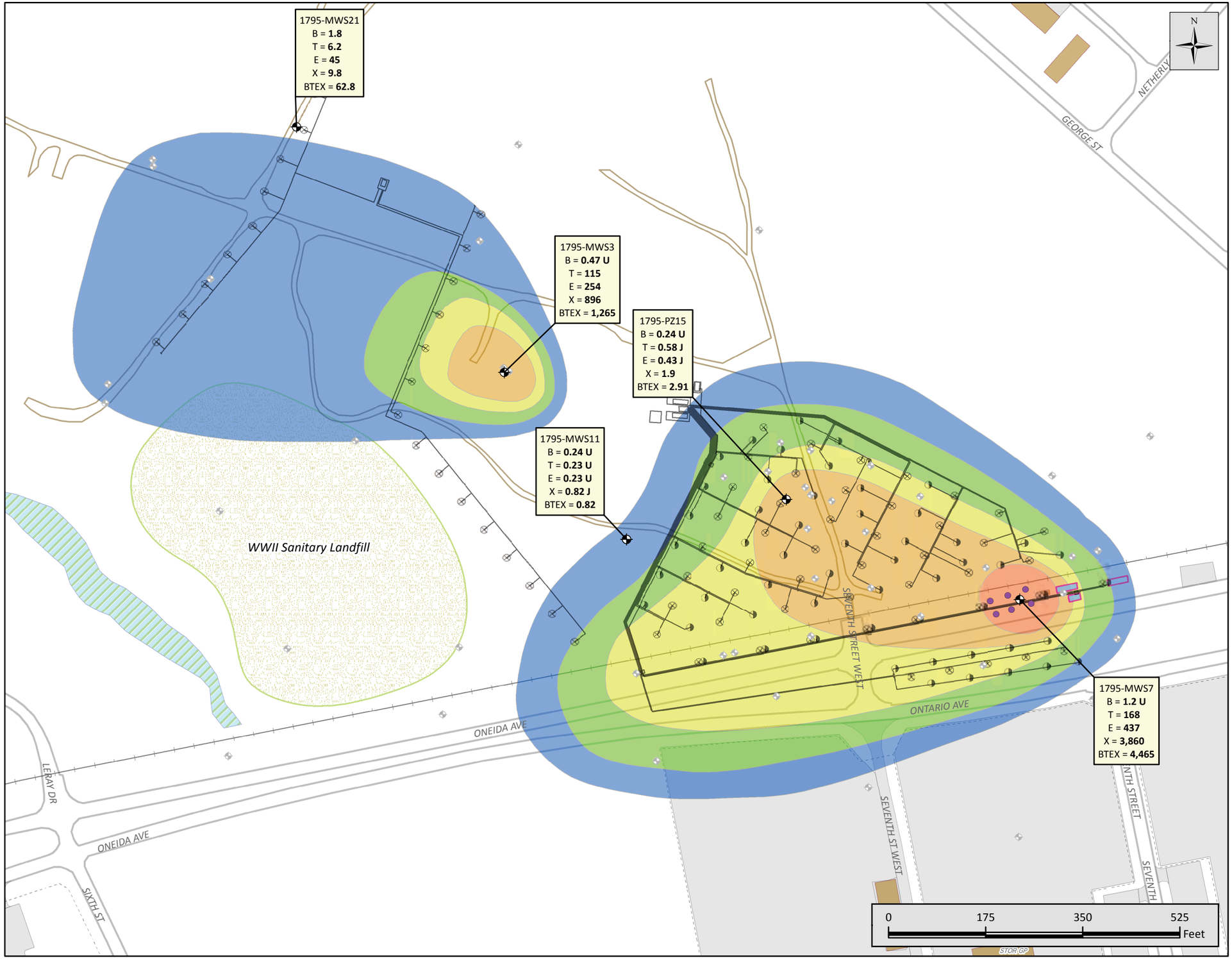
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FIGURE 3-14

Area 1795 Groundwater Contour Map, Fall 2013

2013 Annual Basewide Monitoring Report
Fort Drum, New York



Legend

- Sampled Wells
- Other Monitoring Wells
- Ozone Injection Points
- Air Sparge Wells
- Soil-Vapor Extraction Wells
- System Pipes
- Former UST
- Fence Line
- Rail Road
- Unpaved Road
- Paved Road
- Landfill Site
- Wetlands
- Building
- Paved Area

Fall 2012 BTEX Plume

- 1 µg/L
- 10 µg/L
- 100 µg/L
- 1,000 µg/L
- 10,000 µg/L

Label Key:
-BTEX result values are expressed in units of µg/L followed by a qualifier if applicable.

Location Well ID	Exceedence Criteria (µg/L):
B= **Benzene**	B = **1**
T= **Toluene**	T = **5**
E= **Ethyl Benzene**	E = **5**
X= **Total Xylenes**	X = **5**
BTEX= **Total BTEX**	

Qualifer Key:
U = Value is less than the method detection limit (MDL)
J = Value is greater than the MDL, but less than the reporting limit (RL)

Abbreviation Key:
µg/L = micrograms per liter
UST = Underground Storage Tank
ND = Not detected

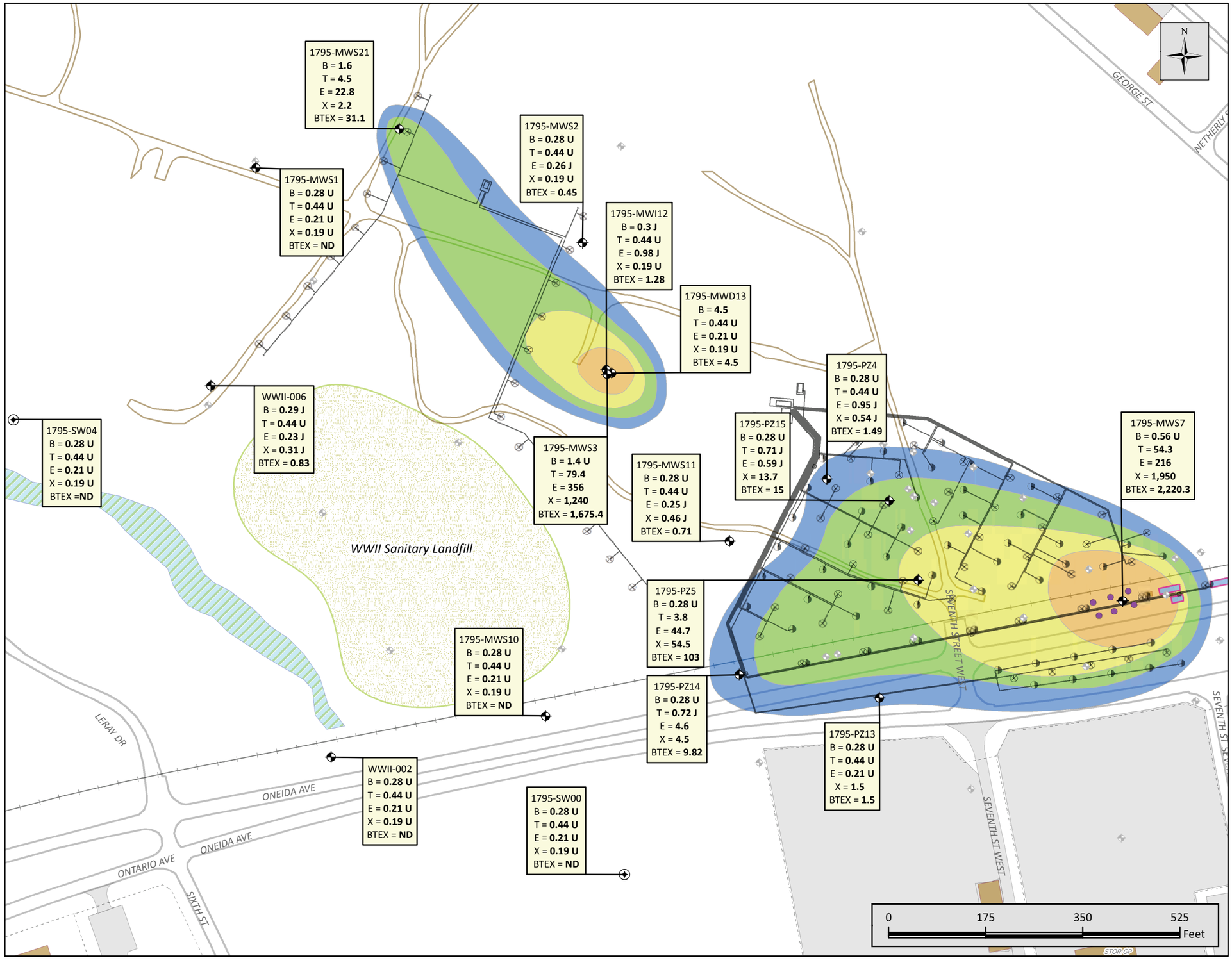
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FIGURE 3-15

Area 1795
Total BTEX Concentration Map
Spring 2013

2013 Annual Basewide Monitoring Report
Fort Drum, New York



Legend

- Sampled Wells
- Surface Water Samples
- Other Monitoring Wells
- Ozone Injection Points
- Air Sparge Wells
- Soil-Vapor Extraction Wells
- System Pipes
- Former UST
- Fence Line
- Rail Road
- Unpaved Road
- Paved Road
- Landfill Site
- Wetlands
- Building
- Paved Area

Fall 2013 BTEX Plume

- 1 µg/L
- 10 µg/L
- 100 µg/L
- 1,000 µg/L

Label Key:
-BTEX result values are expressed in units of µg/L followed by a qualifier if applicable.

Location Well ID	Exceedence Criteria (µg/L):
B= **Benzene**	B = **1**
T= **Toluene**	T = **5**
E= **Ethyl Benzene**	E = **5**
X= **Total Xylenes**	X = **5**
BTEX= **Total BTEX**	

Qualifer Key:
U = Value is less than the method detection limit (MDL)
J = Value is greater than the MDL, but less than the reporting limit (RL)

Abbreviation Key:
µg/L = micrograms per liter
UST = Underground Storage Tank
ND = Not detected

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FIGURE 3-16

Area 1795
Total BTEX Concentration Map, Fall 2013

2013 Annual Basewide Monitoring Report
Fort Drum, New York

1795-PZ15
Ammonia = 0.3 mg/L
Nitrate = 0.85 mg/L
Nitrite = 0.038 mg/L
Nitrate + Nitrite = 0.89 mg/L
TKN = 2.8 J mg/L
Sulfate = 10 U mg/L
TOC = 6.6 mg/L
Methane = 0.03 U µg/L
Ethane = 0.09 U µg/L
Ethene = 0.095 U µg/L
Iron = 538 µg/L
Ferrous Iron = 0 mg/L
Manganese = 1,360 µg/L
DO = 0 mg/L
ORP = 106 mv

1795-MWS7
Ammonia = 0.55 mg/L
Nitrate = 0.11 U mg/L
Nitrite = 0.01 U mg/L
Nitrate + Nitrite = 0.1 U mg/L
TKN = 5.9 J mg/L
Sulfate = 32.4 mg/L
TOC = 20.9 mg/L
Methane = 3.1 µg/L
Ethane = 0.09 U µg/L
Ethene = 0.095 U µg/L
Iron = 6,220 µg/L
Ferrous Iron = 1 mg/L
Manganese = 285 µg/L
DO = 0 mg/L
ORP = -53 mv

1795-MWS3
Ammonia = 0.69 mg/L
Nitrate = 0.11 U mg/L
Nitrite = 0.01 U mg/L
Nitrate + Nitrite = 0.1 U mg/L
TKN = 1.6 J mg/L
Sulfate = 17.2 mg/L
TOC = 7 mg/L
Methane = 11.2 µg/L
Ethane = 0.09 U µg/L
Ethene = 0.095 U µg/L
Iron = 25,300 µg/L
Ferrous Iron = 1.1 mg/L
Manganese = 939 µg/L
DO = 0 mg/L
ORP = -19 mv

WWII Sanitary Landfill

GEORGE ST
NETHERLY
ONEIDA AVE
ONTARIO AVE
LERAY DR
SIXTH ST
SEVENTH STREET WEST
SEVENTH ST WEST
SEVENTH ST

0 175 350 525 Feet

Legend

- Sampled Wells
- Other Monitoring Wells
- Ozone Injection Points
- Air Sparge Wells
- Soil-Vapor Extraction Wells
- System Pipes
- Former UST
- Fence Line
- Rail Road
- Paved Road
- Unpaved Road
- Landfill Site
- Wetlands
- Building
- Paved Area

Fall 2012 BTEX Plume

- 1 µg/L
- 10 µg/L
- 100 µg/L
- 1,000 µg/L
- 10,000 µg/L

Monitored Natural Attenuation Label Key:
Result values are expressed in units of µg/L and mg/L followed by a qualifier if applicable

Abbreviation Key:
µg/L = micrograms per liter
DO = Dissolved Oxygen
mg/L = milligrams per liter
mV = millivolts
ORP = Oxidation Reduction Potential
TKN = Total Kjeldahl Nitrogen
TOC - Total Organic Carbon
UST = Underground Storage Tank

Qualifer Key:
U = Value is less than the method detection limit (MDL)
J = Value is greater than the MDL, but less than the reporting limit (RL)

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FIGURE 3-17

Area 1795
MNA Parameter Concentration Map, Spring 2013

2013 Annual Basewide Monitoring Report
Fort Drum, New York



Legend

- Sampled Wells
- Other Monitoring Wells
- Ozone Injection Points
- Air Sparge Wells
- Soil-Vapor Extraction Wells
- System Pipes
- Former UST
- Fence Line
- Rail Road
- Unpaved Road
- Paved Road
- Landfill Site
- Wetlands
- Building
- Paved Area

Fall 2013 BTEX Plume

- 1 µg/L
- 10 µg/L
- 100 µg/L
- 1,000 µg/L

Monitored Natural Attenuation Label Key:
Result values are expressed in units of µg/L and mg/L followed by a qualifier if applicable

Abbreviation Key:
µg/L = micrograms per liter
DO = Dissolved Oxygen
mg/L = milligrams per liter
mV = millivolts
ORP = Oxidation Reduction Potential
TKN = Total Kjeldahl Nitrogen
TOC - Total Organic Carbon
UST = Underground Storage Tank

Qualifer Key:
U = Value is less than the method detection limit (MDL)
J = Value is greater than the MDL, but less than the reporting limit (RL)

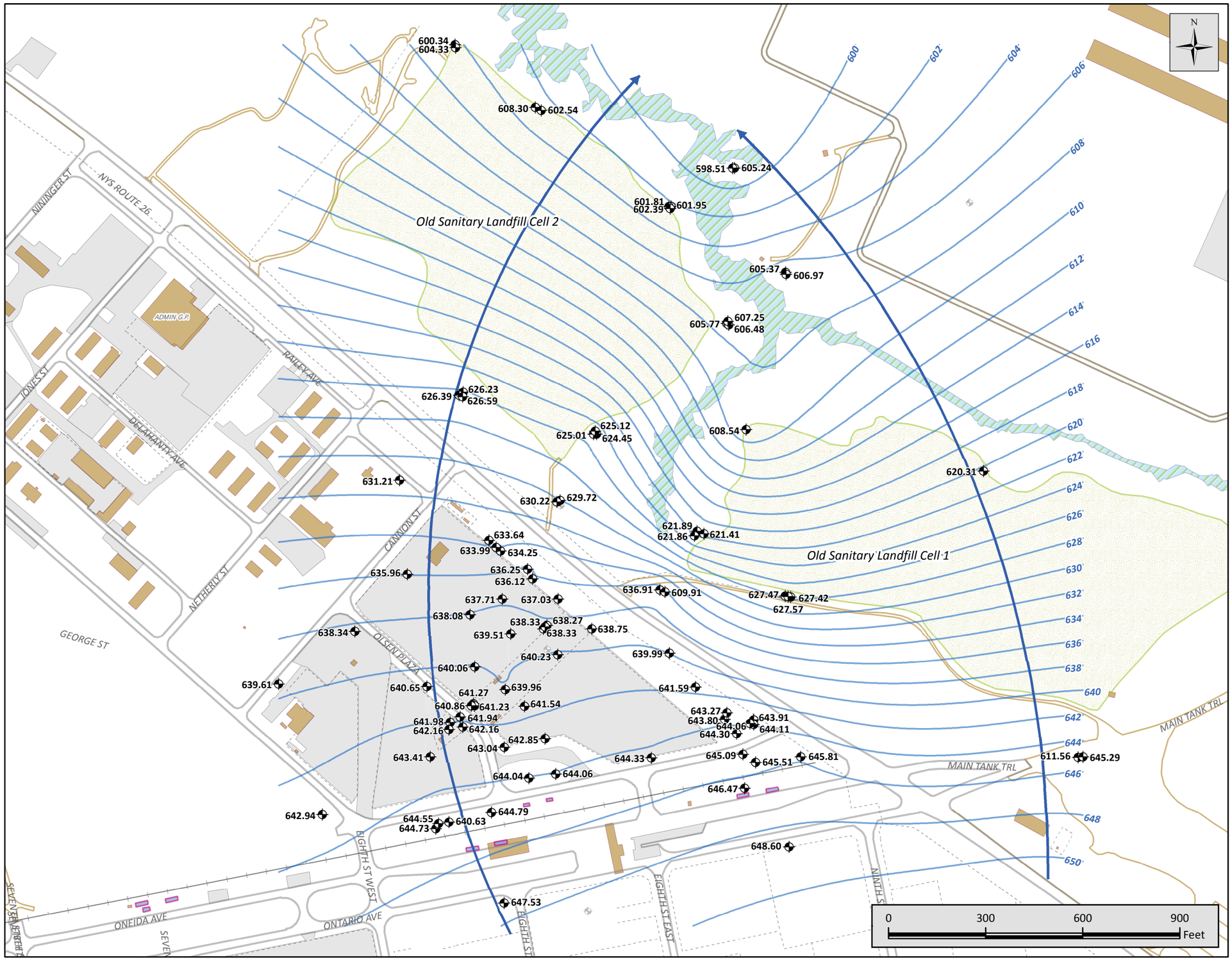
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FIGURE 3-18

Area 1795
MNA Parameter Concentration Map, Fall 2013

2013 Annual Basewide Monitoring Report
Fort Drum, New York



Legend

- Gauged Wells (ft MSL)
- Other Monitoring Wells
- Groundwater Flow Direction
- Groundwater Contour (ft MSL)
- Former UST
- Fence Line
- Rail Road
- Paved Road
- Unpaved Road
- Landfill Site
- Wetlands
- Building
- Paved Area

Abbreviation Key:
ft = Feet
MSL = Mean sea level
UST = Underground Storage Tank

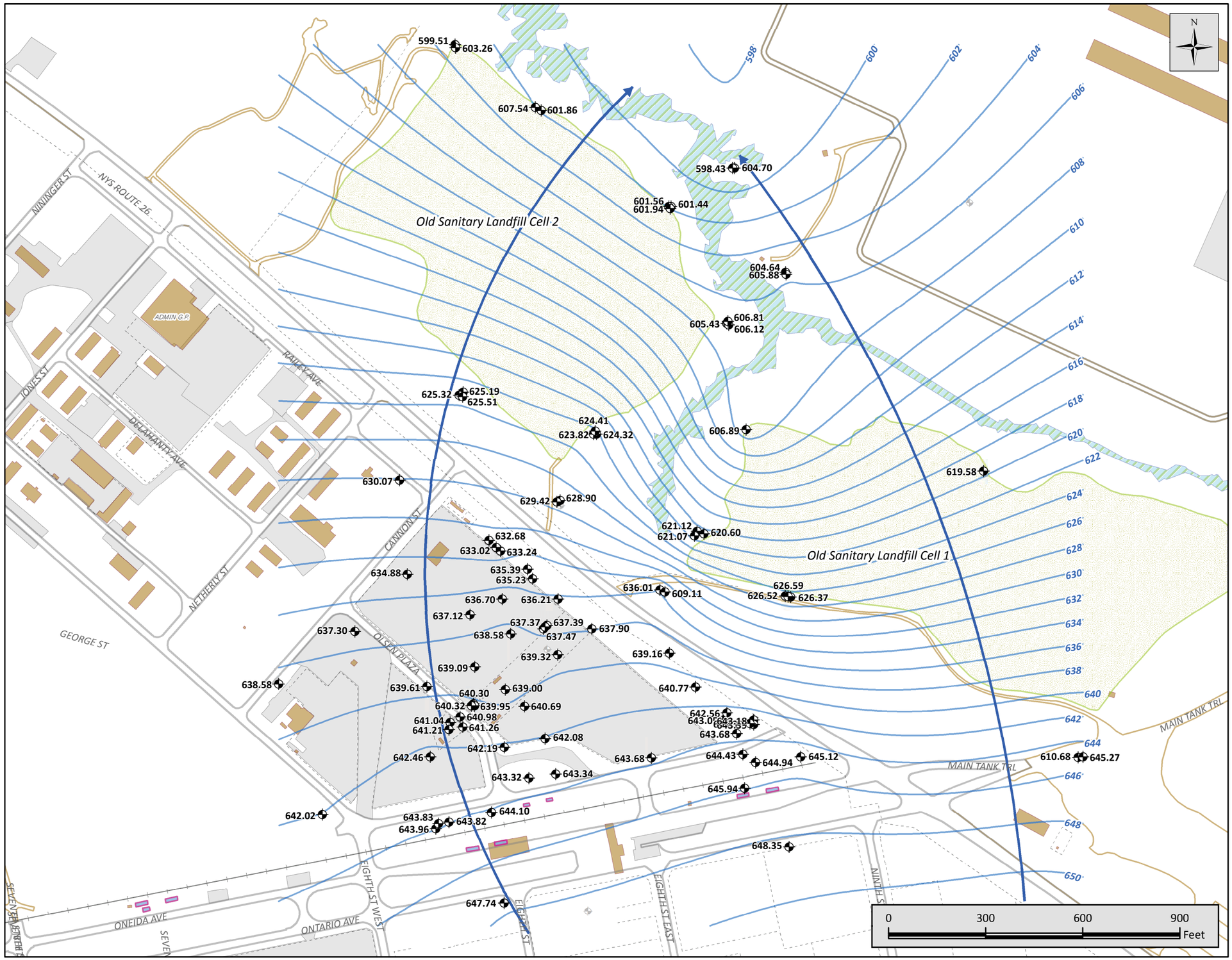
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FIGURE 3-19

Areas 1995 and 3805 Groundwater Contour Map, Spring 2013

2013 Annual Basewide Monitoring Report
Fort Drum, New York



Legend

- Gauged Wells (ft MSL)
- Other Monitoring Wells
- Groundwater Flow Direction
- Groundwater Contour (ft MSL)
- Former UST
- Fence Line
- Rail Road
- Paved Road
- Unpaved Road
- Landfill Site
- Wetlands
- Building
- Paved Area

Abbreviation Key:
ft = Feet
MSL = Mean sea level
UST = Underground Storage Tank

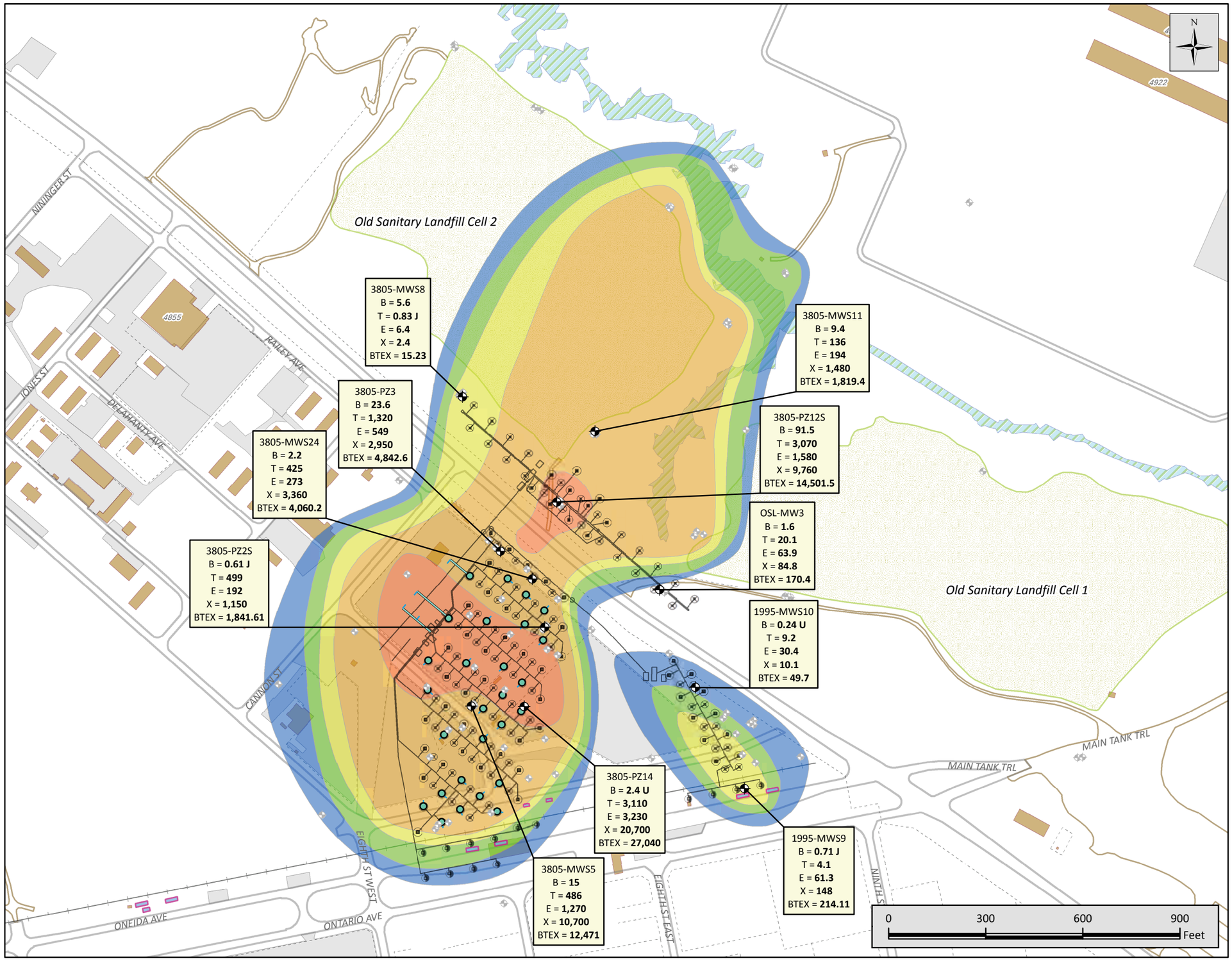
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FIGURE 3-20

Areas 1995 and 3805 Groundwater Contour Map, Fall 2013

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Fort Drum, New York



Legend

- Sampled Wells
- Other Monitoring Wells
- Horizontal SVE Well Modification Locations
- Horizontal SVE Screens
- Horizontal SVE Laterals
- Air Sparge Wells
- Multi-Phase Extraction Wells
- Soil-Vapor Extraction Wells
- System Pipes
- Former UST
- Fence Line
- Rail Road
- Paved Road
- Unpaved Road
- Landfill Site
- Wetlands
- Building
- Paved Area

Fall 2012 BTEX Plume

- 1 µg/L
- 10 µg/L
- 100 µg/L
- 1,000 µg/L
- 10,000 µg/L

Label Key:
-BTEX result values are expressed in units of µg/L followed by a qualifier if applicable.

Location Well ID
B= **Benzene**
T= **Toluene**
E= **Ethyl Benzene**
X= **Total Xylenes**
BTEX= **Total BTEX**

Exceedence Criteria (µg/L):
B = **1**
T = **5**
E = **5**
X = **5**

Qualifer Key:
U = Value is less than the method detection limit (MDL)
J = Value is greater than the MDL, but less than the reporting limit (RL)

Abbreviation Key:
µg/L = micrograms per liter
UST = Underground Storage Tank
ND = Not detected

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FIGURE 3-21

Areas 1995 and 3805 Total BTEX Concentration Map, Spring 2013

2013 Annual Basewide Monitoring Report
Fort Drum, New York



Legend

- Sampled Wells
- Surface Water Samples
- Other Monitoring Wells
- Horizontal SVE Well Modification Locations
- Horizontal SVE Screens
- Horizontal SVE Laterals
- Air Sparge Wells
- Multi-Phase Extraction Wells
- Soil-Vapor Extraction Wells
- System Pipes
- Former UST
- Fence Line
- Rail Road
- Paved Road
- Unpaved Road
- Landfill Site
- Wetlands
- Building
- Paved Area

Fall 2013 BTEX Plume

- 1 µg/L
- 10 µg/L
- 100 µg/L
- 1,000 µg/L
- 10,000 µg/L

Label Key:
-BTEX result values are expressed in units of µg/L followed by a qualifier if applicable.

Location Well ID	Exceedence Criteria (µg/L):
B= **Benzene**	B = **1**
T= **Toluene**	T = **5**
E= **Ethyl Benzene**	E = **5**
X= **Total Xylenes**	X = **5**
BTEX= **Total BTEX**	

Qualifer Key:
U = Value is less than the method detection limit (MDL)
J = Value is greater than the MDL, but less than the reporting limit (RL)

Abbreviation Key:
µg/L = micrograms per liter
UST = Underground Storage Tank
ND = Not detected

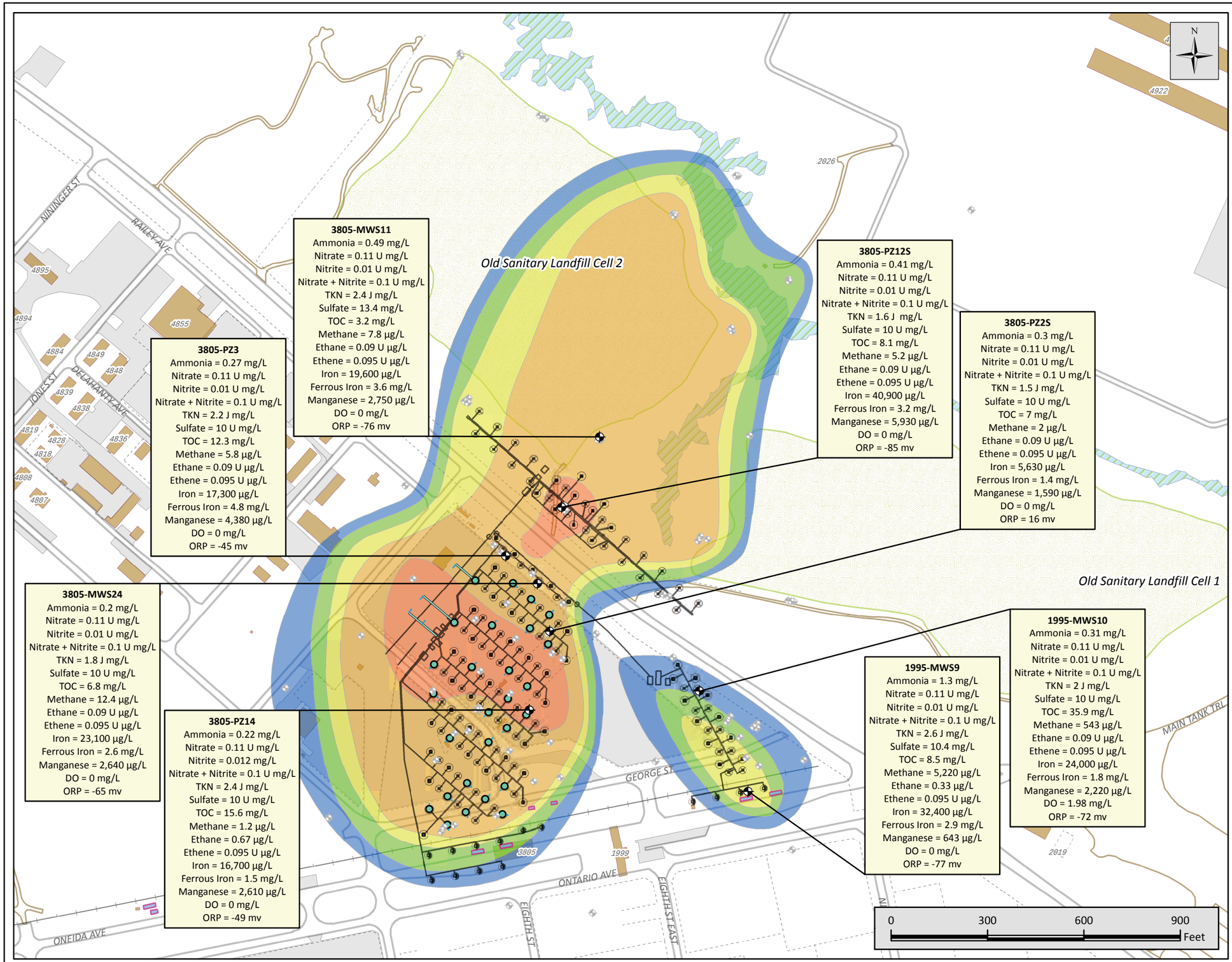
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FIGURE 3-22

Areas 1995 and 3805 Total BTEX Concentration Map, Fall 2013

2013 Annual Basewide Monitoring Report Fort Drum, New York



Legend

- Sampled Wells
- Other Monitoring Wells
- Horizontal SVE Well Modification Locations
- Horizontal SVE Screens
- Horizontal SVE Laterals
- Air Sparge Wells
- Multi-Phase Extraction Wells
- Soil-Vapor Extraction Wells
- System Pipes
- Former UST
- Fence Line
- Rail Road
- Paved Road
- Unpaved Road
- Landfill Site
- Wetlands
- Building
- Paved Area

Fall 2012 BTEX Plume

- 1 µg/L
- 10 µg/L
- 100 µg/L
- 1,000 µg/L
- 10,000 µg/L

Monitored Natural Attenuation Label Key:
Result values are expressed in units of µg/L and mg/L followed by a qualifier if applicable

Abbreviation Key:
µg/L = micrograms per liter
DO = Dissolved Oxygen
mg/L = milligrams per liter
mV = millivolts
ORP = Oxidation Reduction Potential
TKN = Total Kjeldahl Nitrogen
TOC - Total Organic Carbon
UST = Underground Storage Tank

Qualifer Key:
U = Value is less than the method detection limit (MDL)
J = Value is greater than the MDL, but less than the reporting limit (RL)

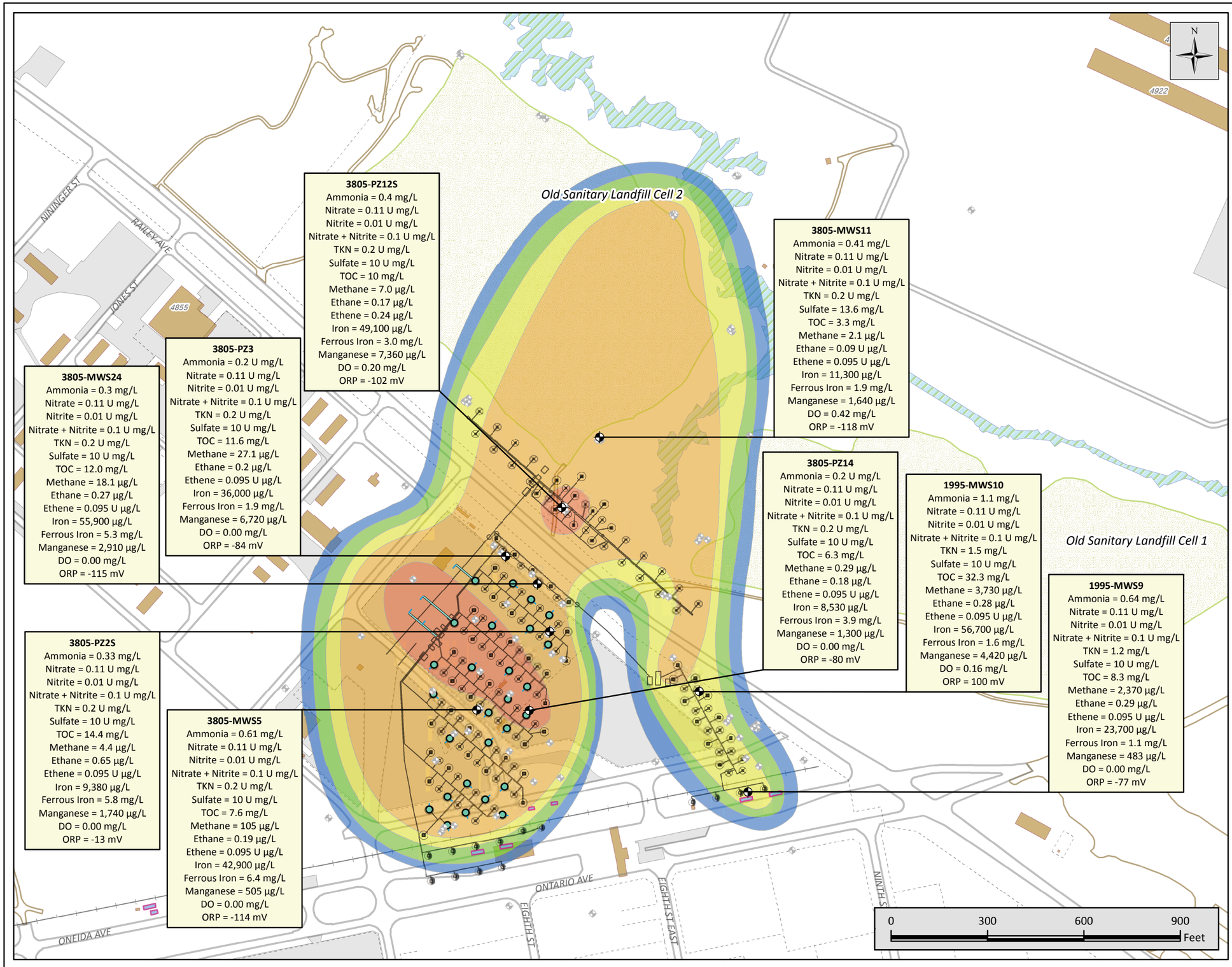
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FIGURE 3-23

Areas 1995 and 3805 MNA Parameter Concentration Map, Spring 2013

2013 Annual Basewide Monitoring Report
Fort Drum, New York



Legend

- Sampled Wells
- Other Monitoring Wells
- Horizontal SVE Well Modification Locations
- Horizontal SVE Screens
- Horizontal SVE Laterals
- Air Sparge Wells
- Multi-Phase Extraction Wells
- Soil-Vapor Extraction Wells
- System Pipes
- Former UST
- Fence Line
- Rail Road
- Paved Road
- Unpaved Road
- Landfill Site
- Wetlands
- Building
- Paved Area

Fall 2013 BTEX Plume

- 1 µg/L
- 10 µg/L
- 100 µg/L
- 1,000 µg/L
- 10,000 µg/L

Monitored Natural Attenuation Label Key:
Result values are expressed in units of µg/L and mg/L followed by a qualifier if applicable

Abbreviation Key:
µg/L = micrograms per liter
DO = Dissolved Oxygen
mg/L = milligrams per liter
mV = millivolts
ORP = Oxidation Reduction Potential
TKN = Total Kjeldahl Nitrogen
TOC - Total Organic Carbon
UST = Underground Storage Tank

Qualifer Key:
U = Value is less than the method detection limit (MDL)
J = Value is greater than the MDL, but less than the reporting limit (RL)

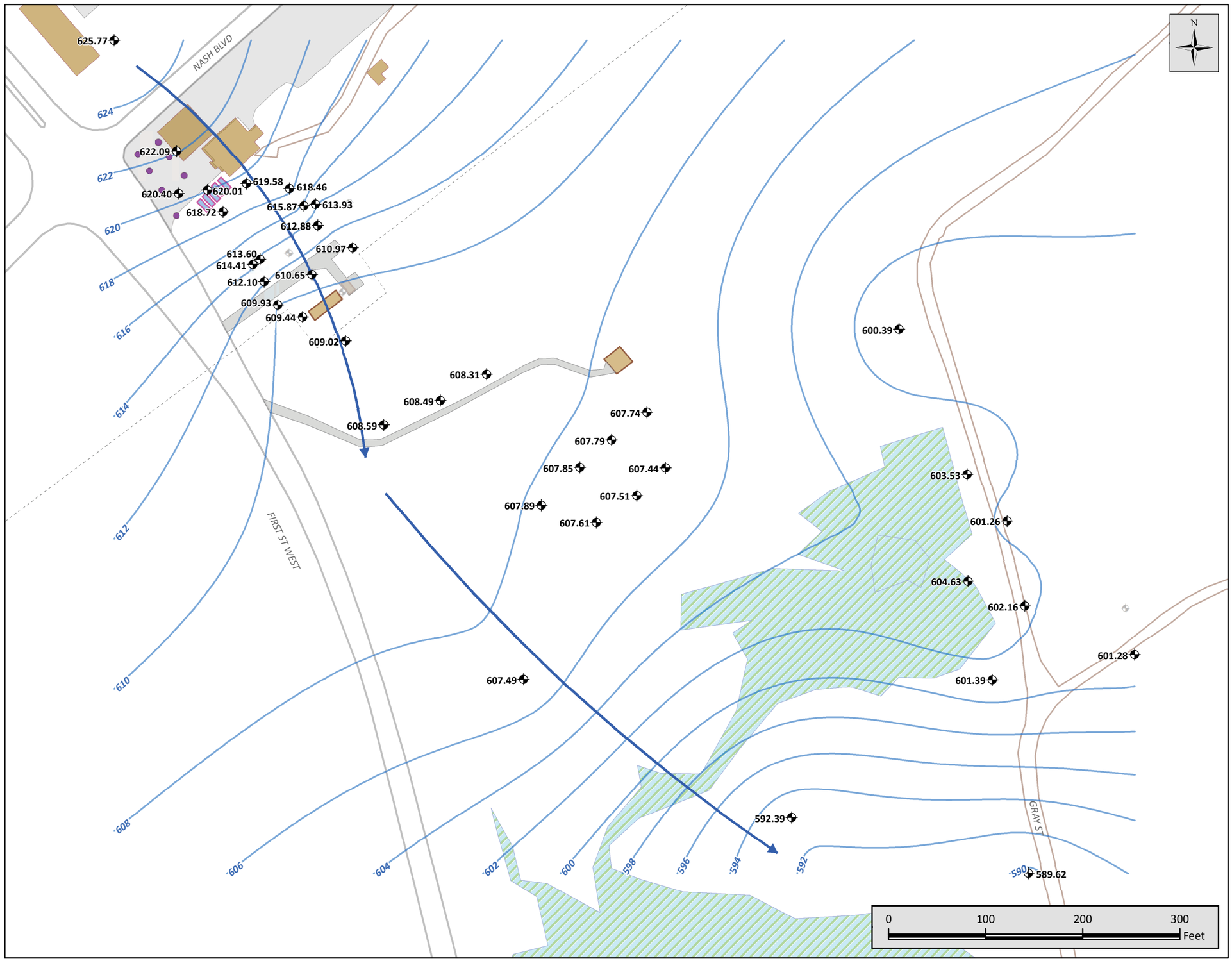
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FIGURE 3-24

Areas 1995 and 3805 MNA Parameter Concentration Map, Fall 2013

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Fort Drum, New York



Legend

- Gauged Wells (ft MSL)
- Other Monitoring Wells
- Ozone Injection Points
- Groundwater Flow Direction
- Groundwater Contour (ft MSL)
- Former UST
- Fence Line
- Paved Road
- Unpaved Road
- Wetlands
- Building
- Paved Area

Abbreviation Key:
ft = Feet
MSL = Mean sea level
UST = Underground Storage Tank

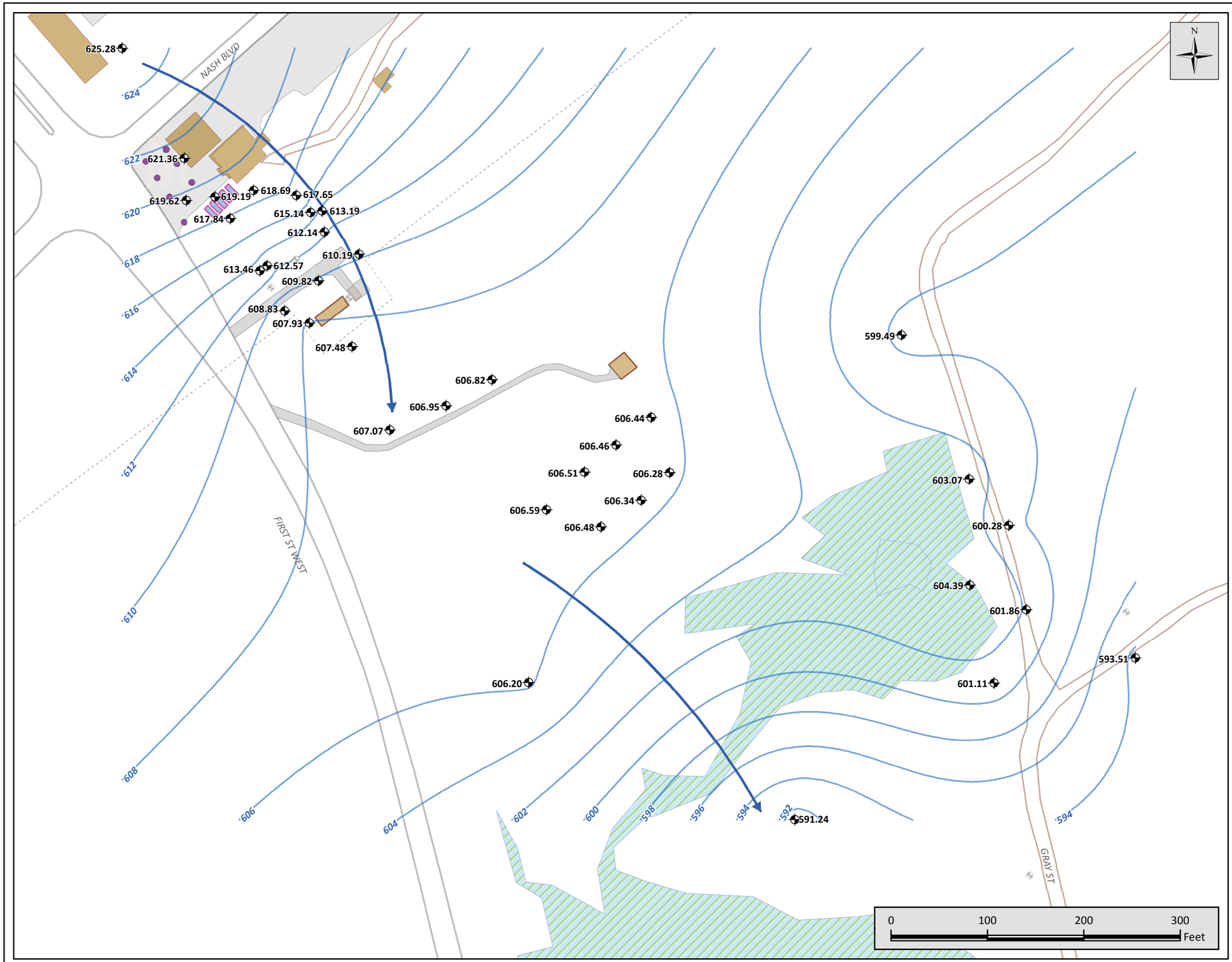
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FIGURE 3-25

AAFES Station, Building P-2140, Groundwater Contour Map, Spring 2013

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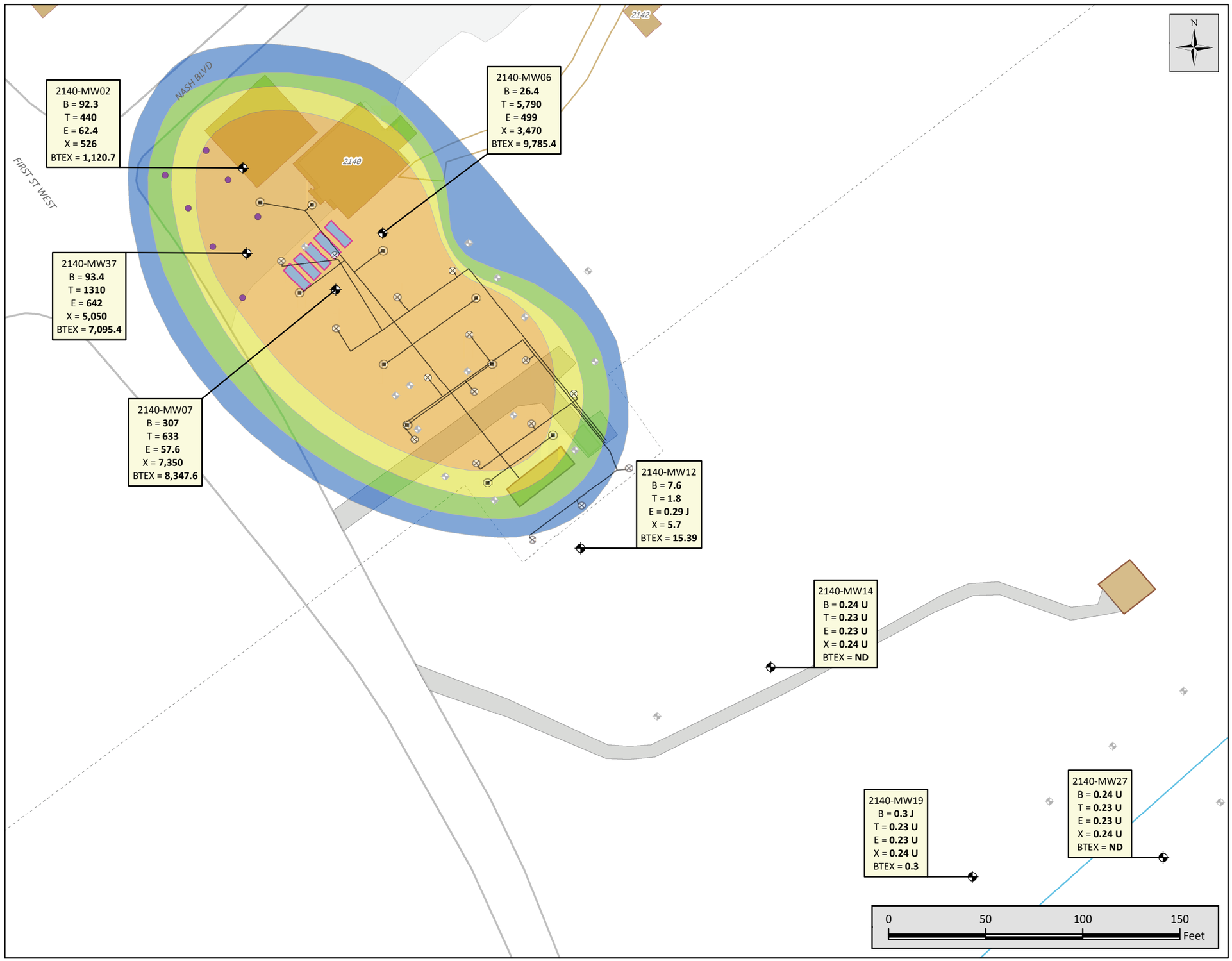
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FIGURE 3-26

AAFES Station, Building P-2140, Groundwater Contour Map, Fall 2013

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Fort Drum, New York



Legend

- Sampled Wells
- Other Monitoring Wells
- Ozone Injection Points
- Airsparge Wells
- Multi-Phase Extraction Wells
- System Pipes
- Ozone Sparging Lines
- Former UST
- Fence Line
- Rail Road
- Paved Road
- Unpaved Road
- Wetlands
- Building
- Paved Area

Fall 2012 BTEX Plume

- 1 µg/L
- 10 µg/L
- 100 µg/L
- 1,000 µg/L

Label Key:
-BTEX result values are expressed in units of µg/L followed by a qualifier if applicable.

Location Well ID	Exceedence Criteria (µg/L):
B= Benzene	B = 1
T= Toluene	T = 5
E= Ethyl Benzene	E = 5
X= Total Xylenes	X = 5
BTEX= Total BTEX	

Qualifer Key:
U = Value is less than the method detection limit (MDL)
J = Value is greater than the MDL, but less than the reporting limit (RL)

Abbreviation Key:
µg/L = micrograms per liter
UST = Underground Storage Tank
ND = Not detected

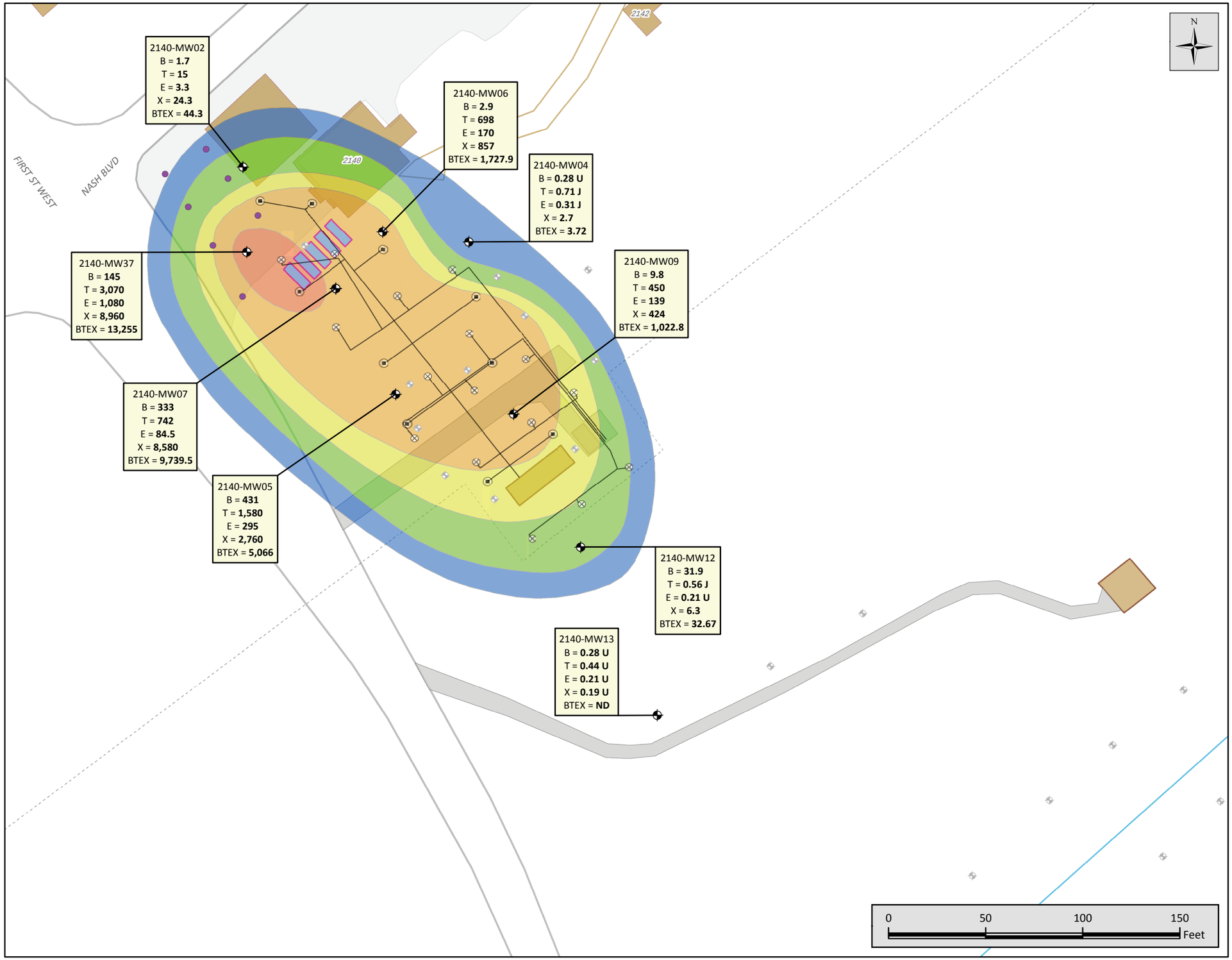
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Date: March 2014

FIGURE 3-27

AAFES Station, Building P-2140, Total BTEX Concentration Map, Spring 2013

2013 Annual Basewide Monitoring Report
Fort Drum, New York



Legend

- Sampled Wells
- Other Monitoring Wells
- Ozone Injection Points
- Airsparge Wells
- Multi-Phase Extraction Wells
- System Pipes
- Ozone Sparging Lines
- Former UST
- Fence Line
- Rail Road
- Paved Road
- Unpaved Road
- Wetlands
- Building
- Paved Area

Fall 2013 BTEX Plume

- 1 µg/L
- 10 µg/L
- 100 µg/L
- 1,000 µg/L
- 10,000 µg/L

Label Key:
-BTEX result values are expressed in units of µg/L followed by a qualifier if applicable.

Location Well ID
B= **Benzene**
T= **Toluene**
E= **Ethyl Benzene**
X= **Total Xylenes**
BTEX= **Total BTEX**

Exceedence Criteria (µg/L):
B = **1**
T = **5**
E = **5**
X = **5**

Qualifer Key:
U = Value is less than the method detection limit (MDL)
J = Value is greater than the MDL, but less than the reporting limit (RL)

Abbreviation Key:
µg/L = micrograms per liter
UST = Underground Storage Tank
ND = Not detected

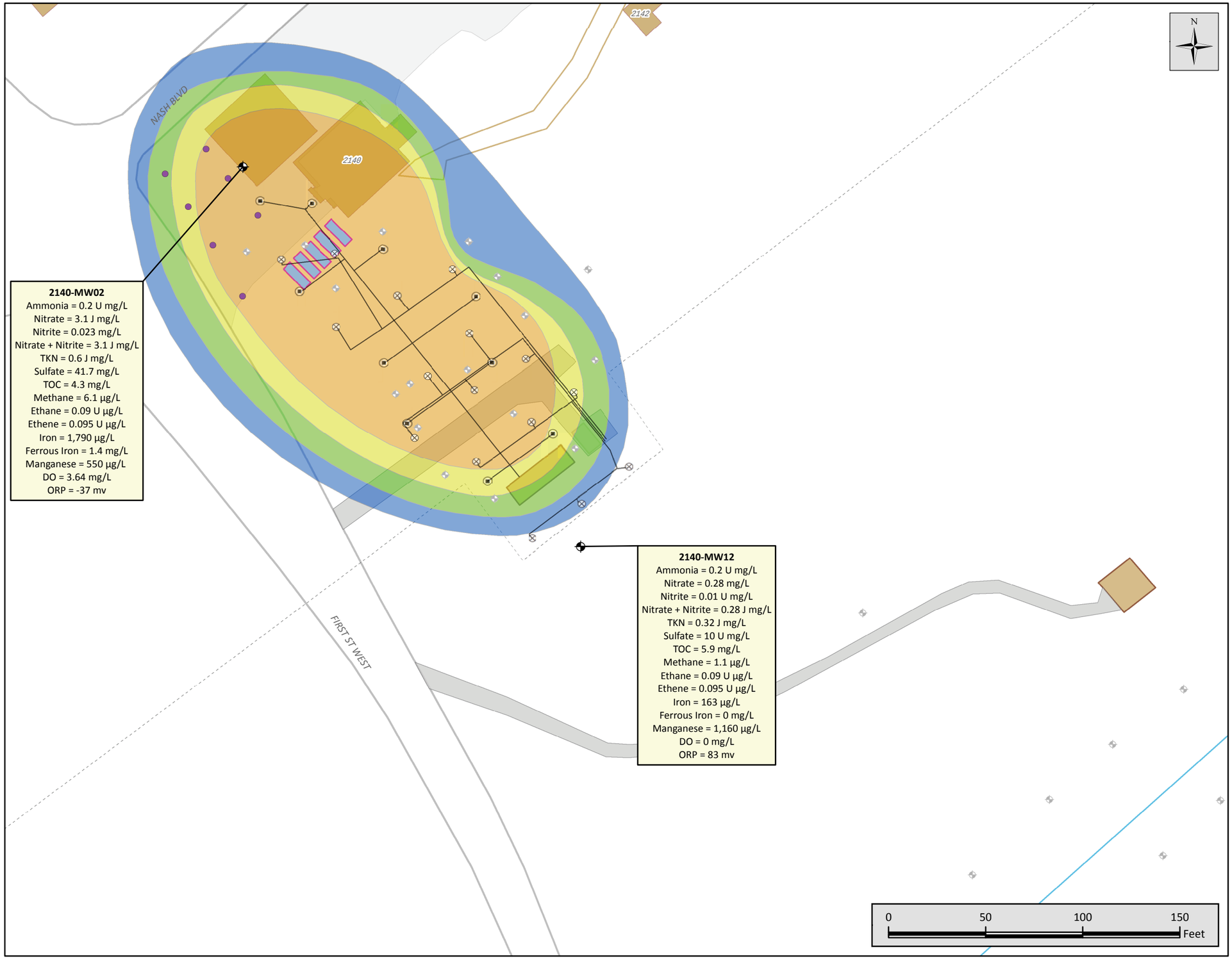
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FIGURE 3-28

AAFES Station, Building P-2140, Total BTEX Concentration Map, Fall 2013

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Legend

- Sampled Wells
- Other Monitoring Wells
- Ozone Injection Points
- Airsparge Wells
- Multi-Phase Extraction Wells
- System Pipes
- Ozone Sparging Lines
- Former UST
- Fence Line
- Rail Road
- Paved Road
- Unpaved Road
- Wetlands
- Building
- Paved Area

Fall 2012 BTEX Plume

- 1 µg/L
- 10 µg/L
- 100 µg/L
- 1,000 µg/L

Monitored Natural Attenuation Label Key:
Result values are expressed in units of µg/L and mg/L followed by a qualifier if applicable

Abbreviation Key:
µg/L = micrograms per liter
DO = Dissolved Oxygen
mg/L = milligrams per liter
mV = millivolts
ORP = Oxidation Reduction Potential
TKN = Total Kjeldahl Nitrogen
TOC - Total Organic Carbon
UST = Underground Storage Tank

Qualifer Key:
U = Value is less than the method detection limit (MDL)
J = Value is greater than the MDL, but less than the reporting limit (RL)

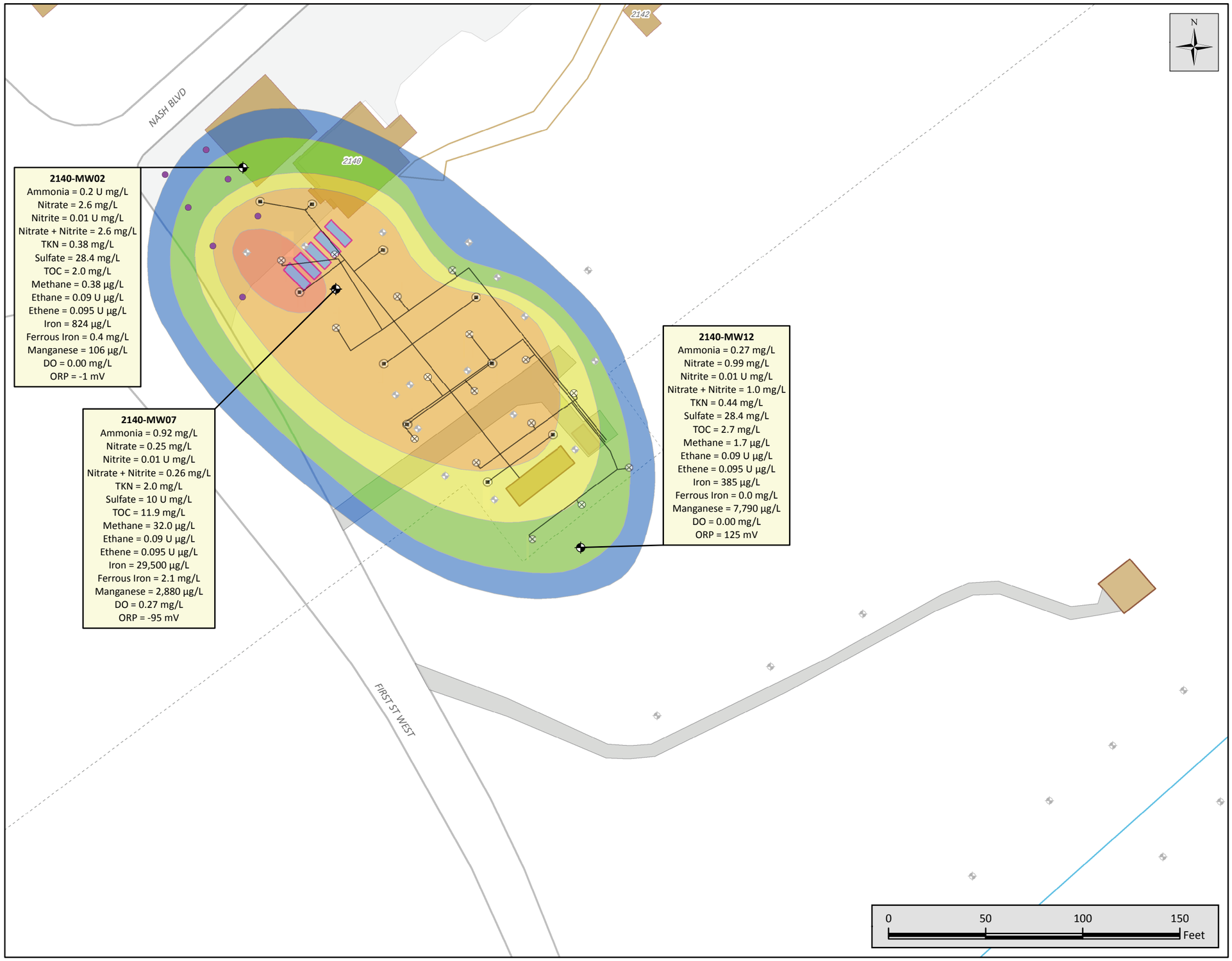
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FIGURE 3-29

AAFES Station, Building P-2140, MNA Parameter Concentration Map, Spring 2013

2013 Annual Basewide Monitoring Report
Fort Drum, New York



Legend

- Sampled Wells
- Other Monitoring Wells
- Ozone Injection Points
- Airsparge Wells
- Multi-Phase Extraction Wells
- System Pipes
- Ozone Sparging Lines
- Former UST
- Fence Line
- Rail Road
- Paved Road
- Unpaved Road
- Wetlands
- Building
- Paved Area

Fall 2013 BTEX Plume

- 1 µg/L
- 10 µg/L
- 100 µg/L
- 1,000 µg/L
- 10,000 µg/L

Monitored Natural Attenuation Label Key:
Result values are expressed in units of µg/L and mg/L followed by a qualifier if applicable

Abbreviation Key:
µg/L = micrograms per liter
DO = Dissolved Oxygen
mg/L = milligrams per liter
mV = millivolts
ORP = Oxidation Reduction Potential
TKN = Total Kjeldahl Nitrogen
TOC - Total Organic Carbon
UST = Underground Storage Tank

Qualifer Key:
U = Value is less than the method detection limit (MDL)
J = Value is greater than the MDL, but less than the reporting limit (RL)

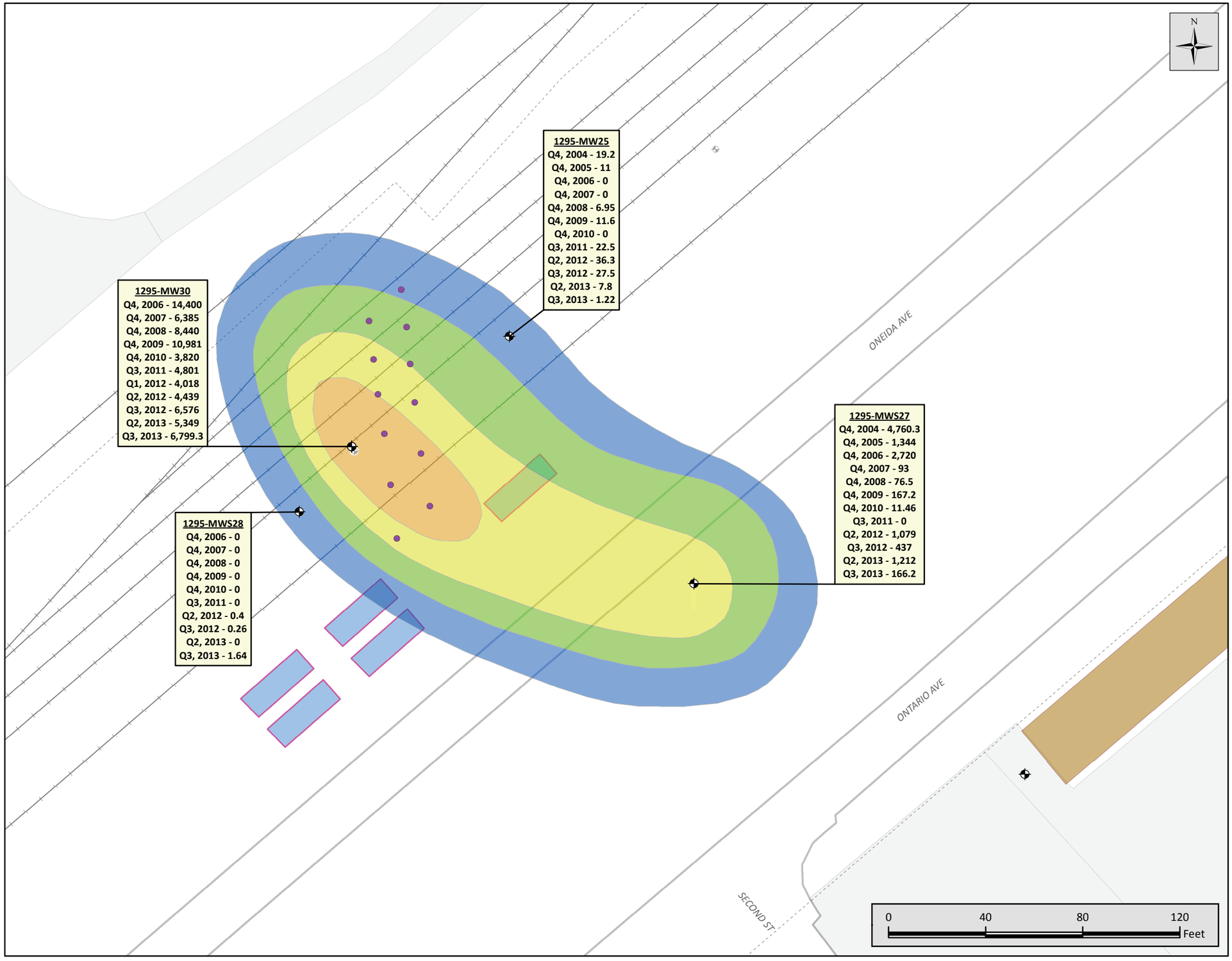
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FIGURE 3-30

AAFES Station, Building P-2140, MNA Parameter Concentration Map, Fall 2013

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Fort Drum, New York



Legend

- Sampled Wells
- Other Monitoring Wells
- Ozone Injection Points
- Former UST
- Fence Line
- Rail Road
- Paved Road
- Building
- Paved Area

Fall 2013 BTEX Plume

- 1 µg/L
- 10 µg/L
- 100 µg/L
- 1,000 µg/L

Historical Total BTEX Label Key:
BTEX result values are expressed in units of µg/L

Location Well ID
Quarter, Year - Total BTEX (µg/L)
Q4, 2008 - 2,000

Abbreviation Key:
µg/L = micrograms per liter
BTEX = Benzene, Toluene, Ethylbenzene & Total Xylenes
NS = Not Sampled
UST = Underground Storage Tank

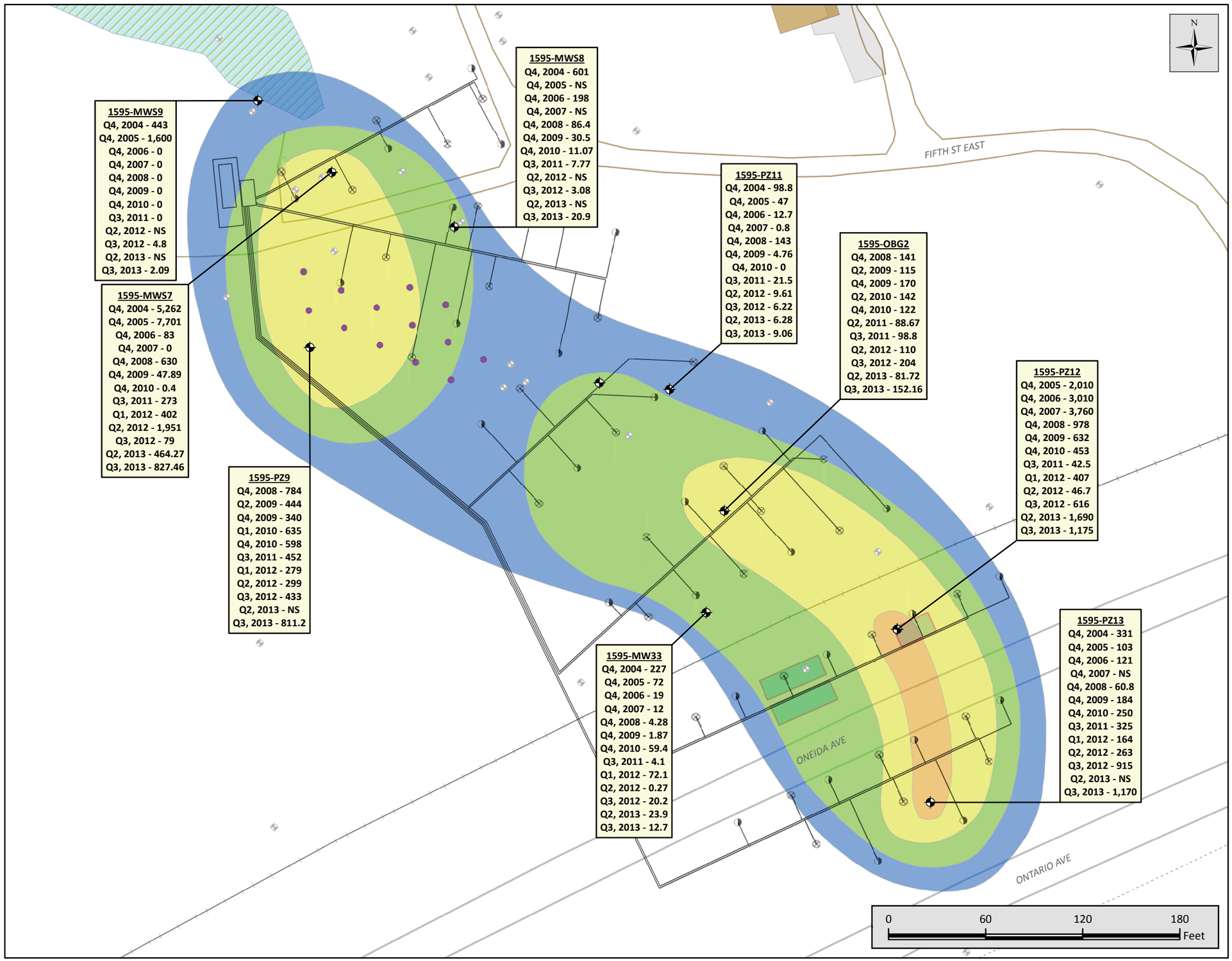
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FIGURE 4-1

Area 1295 Historical Total BTEX Concentration Map, Fall 2004 – Fall 2013

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Fort Drum, New York



Legend

- Sampled Wells
- Other Monitoring Wells
- Ozone Injection Points
- Air Sparge Wells
- Soil-Vapor Extraction Wells
- System Pipes
- Former UST
- Fence Line
- Rail Road
- Paved Road
- Unpaved Road
- Wetlands
- Building
- Paved Area

Fall 2013 BTEX Plume

- 1 µg/L
- 10 µg/L
- 100 µg/L
- 1,000 µg/L

Historical Total BTEX Label Key:
BTEX result values are expressed in units of µg/L

Location Well ID
Quarter, Year - Total BTEX (µg/L)
Q4, 2008 - 2,000

Abbreviation Key:
µg/L = micrograms per liter
BTEX = Benzene, Toluene, Ethylbenzene & Total Xylenes
NS = Not Sampled
UST = Underground Storage Tank

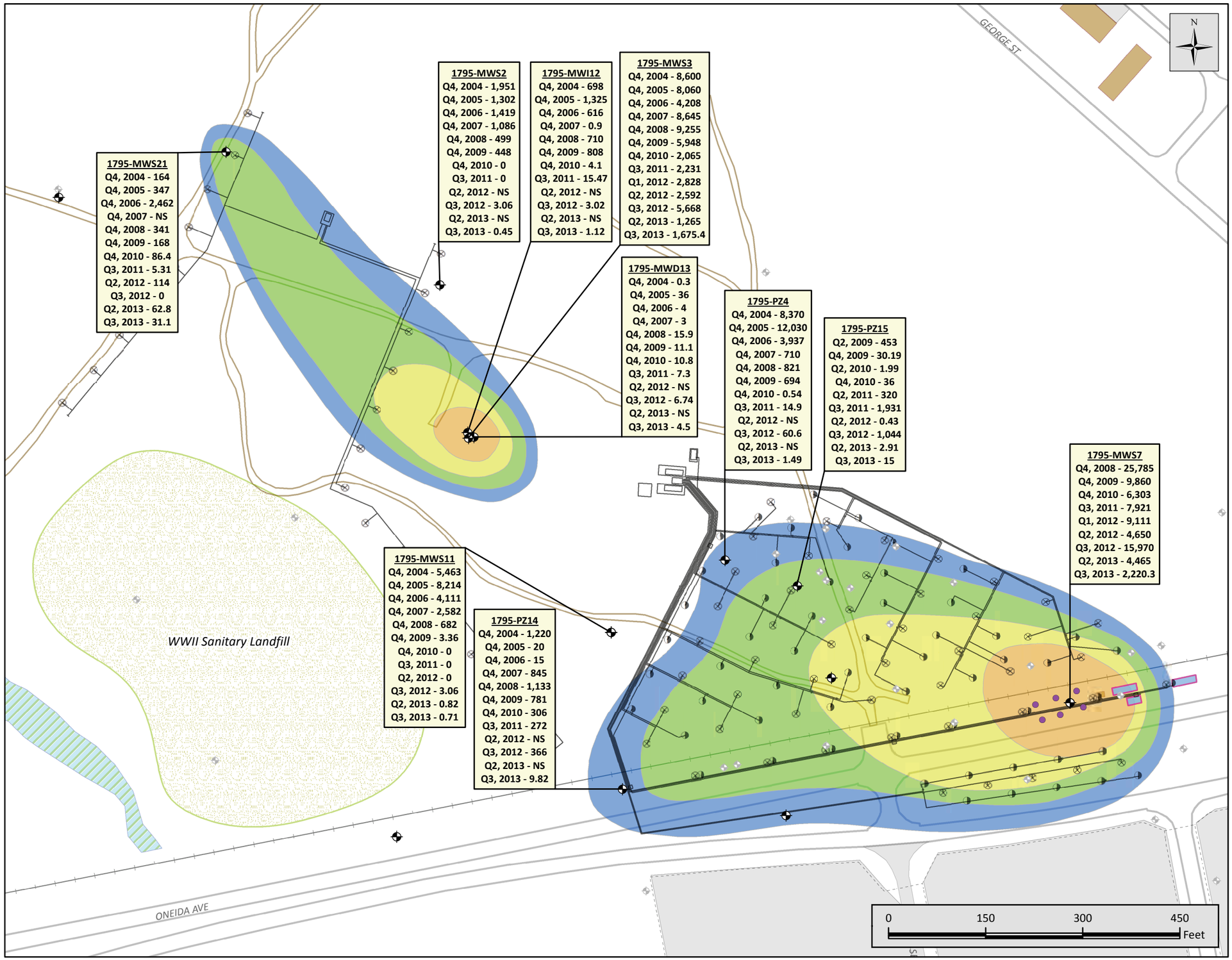
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FIGURE 4-2

Area 1595 Historical Total BTEX Concentration Map, Fall 2004 – Fall 2013

2013 Annual Basewide Monitoring Report
Fort Drum, New York



Legend

- Sampled Wells
- Other Monitoring Wells
- Ozone Injection Points
- Air Sparge Wells
- Soil-Vapor Extraction Wells
- System Pipes
- Former UST
- Fence Line
- Rail Road
- Paved Road
- Unpaved Road
- Landfill Site
- Wetlands
- Building
- Paved Area

Fall 2013 BTEX Plume

- 1 µg/L
- 10 µg/L
- 100 µg/L
- 1,000 µg/L

Historical Total BTEX Label Key:
BTEX result values are expressed in units of µg/L

Location Well ID
Quarter, Year - Total BTEX (µg/L)
Q4, 2008 - 2,000

Abbreviation Key:
µg/L = micrograms per liter
BTEX = Benzene, Toluene, Ethylbenzene & Total Xylenes
NS = Not Sampled
UST = Underground Storage Tank

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FIGURE 4-3

Area 1795 Historical Total BTEX Concentration Map, Fall 2004 – Fall 2013

2013 Annual Basewide Monitoring Report
Fort Drum, New York



Legend

- Sampled Wells
- Other Monitoring Wells
- Horizontal SVE Well Modification Locations
- Horizontal SVE Screens
- Horizontal SVE Laterals
- Air Sparge Wells
- Multi-Phase Extraction Wells
- Soil-Vapor Extraction Wells
- System Pipes
- Former UST
- Fence Line
- Rail Road
- Paved Road
- Unpaved Road
- Landfill Site
- Wetlands
- Building
- Paved Area

Fall 2013 BTEX Plume

- 1 µg/L
- 10 µg/L
- 100 µg/L
- 1,000 µg/L
- 10,000 µg/L

Historical Total BTEX Label Key:
BTEX result values are expressed in units of µg/L

Location Well ID
Quarter, Year - Total BTEX (µg/L)
Q4, 2008 - 2,000

Abbreviation Key:
µg/L = micrograms per liter
BTEX = Benzene, Toluene, Ethylbenzene & Total Xylenes
NS = Not Sampled
UST = Underground Storage Tank

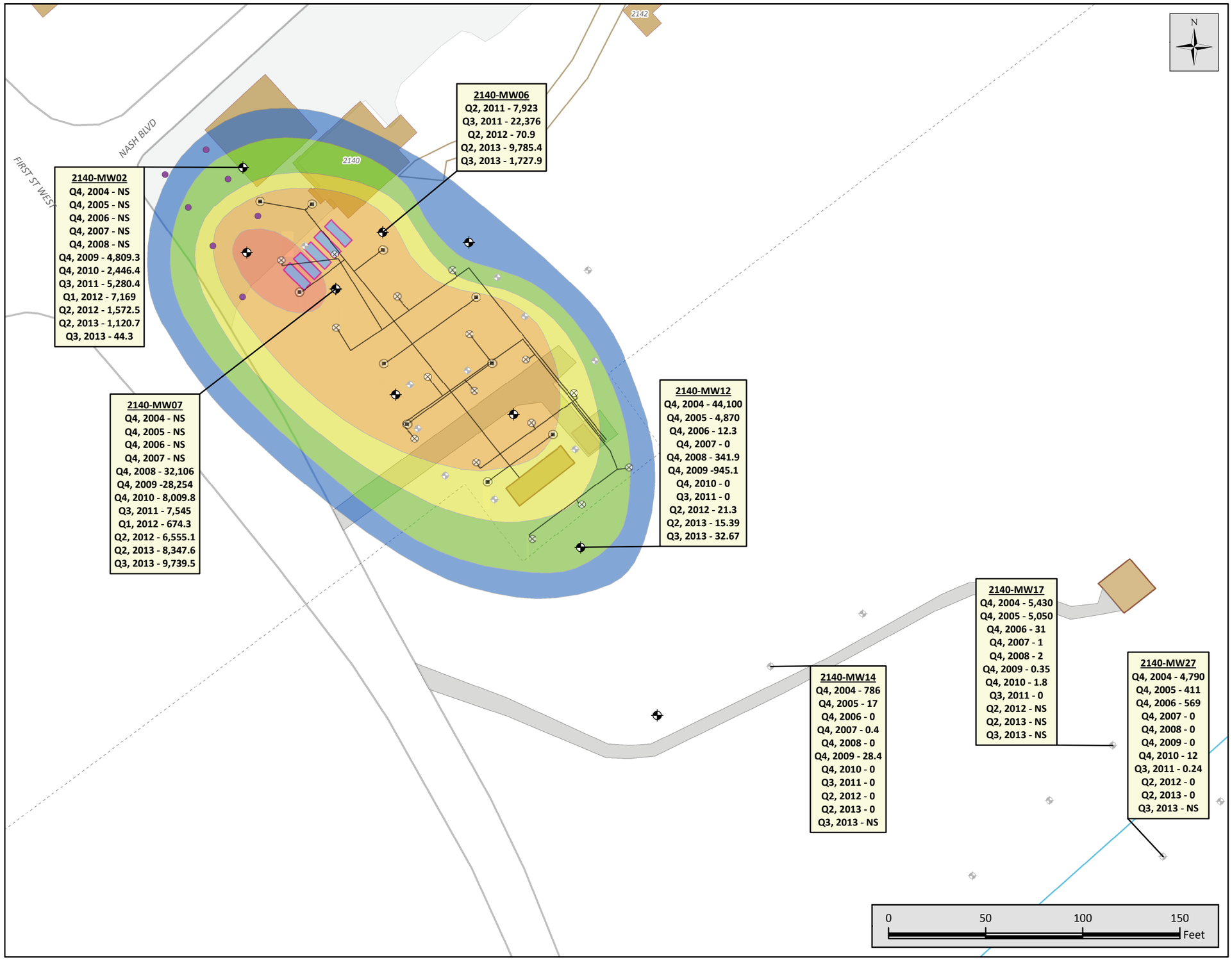
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FIGURE 4-4

Areas 1995 and 3805 Historical Total BTEX Concentration Map, Fall 2004 – Fall 2013

2013 Annual Basewide Monitoring Report
Fort Drum, New York



Legend

- Sampled Wells
- Other Monitoring Wells
- Ozone Injection Points
- Airsparge Wells
- Multi-Phase Extraction Wells
- System Pipes
- Ozone Sparging Lines
- Former UST
- Fence Line
- Rail Road
- Paved Road
- Unpaved Road
- Wetlands
- Building
- Paved Area

Fall 2013 BTEX Plume

- 1 µg/L
- 10 µg/L
- 100 µg/L
- 1,000 µg/L
- 10,000 µg/L

Historical Total BTEX Label Key:
BTEX result values are expressed in units of µg/L

Location Well ID
Quarter, Year - Total BTEX (µg/L)
Q4, 2008 - 2,000

Abbreviation Key:
µg/L = micrograms per liter
BTEX = Benzene, Toluene, Ethylbenzene & Total Xylenes
NS = Not Sampled
UST = Underground Storage Tank

PLEXUS scientific
5510 Cherokee Ave.
Suite 350
Alexandria, VA 22312
(P) 703.820.3339
(F) 703.845.8568

Created By: Betsy Bouton
Date: March 2014

FIGURE 4-5

AAFES Station, Building P-2140, Historical Total BTEX Concentration Map, Fall 2004 – Fall 2013

2013 Annual Basewide Monitoring Report
Fort Drum, New York

APPENDIX A

Field Gauging Sheets

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FORT DRUM - WELL GAUGING

WELL ID	Date	Time	PID Reading (ppm)	DTW Spring 2012	DTW Fall 2012	Depth to Water (ft TOC)	Depth to Product (ft TOC)	Depth to Bottom (ft TOC)	Notes
1295-003	5-22-13	1325	0	10.75	11.56	11.39		16.90	
1295-MW24	-	[illegible]		10.68	-				
1295-MW25	5/22/13	1244	0.3	9.85	10.78	10.68		17.17	no locks
1295-MW26	5/22/13	1335	0	10.42	11.29	10.90		12.50	
1295-MWS27	5/22/13	1310	0	7.45	8.19	7.89		21.90	
1295-MWS28	5/22/13	1256	0	11.70	11.94	12.11	[illegible]	17.65	no lock
1295-MWS29	5/22/13	1238	0	10.68	11.63	11.41		14.92	
1295-MW30	5/22/13	1251	0.2	10.04	10.66	10.65		15.16	no tubing
1595-MW3	5-20-13	9:09	109.6	12.35	14.07	12.95		20.00	(H) no lock
1595-MW3A		8:32	0	13.72	15.65	14.36		18.30	(H) no cap, no lock
1595-MW5		8:51	WS	15.01	16.34	15.39		22.40	(H)
1595-MW33		8:27	3.8	10.23	12.14	10.98		21.60	(H)
1595-MW34		8:30	0	13.17	15.10	13.87		29.99	(H)
1595-MW35		11:22	0	12.60	14.61	13.39			no lock
1595-MWD4		8:39	1.5	11.98	13.58	12.54		35.77	(H)
1595-MWD5		8:08	0	7.75	8.64	8.06		39.75	(H)
1595-MWD6		8:53	0	18.00	19.17	18.19		34.75	(H)
1595-MWS1		7:55	0	9.61	10.16	9.15		16.20	(H)
1595-MWS2		9:1[illegible]	0	13.63	15.56	14.38			
1595-MWS7		8:07	1.3	7.84	8.81	8.20		21.90	(H)
1595-MWS8		8:41	1.8	7.99	9.26	8.45		18.85	(H)
1595-MWS9		8:09	0	4.22	4.80	4.40		21.71	(H) no lock
1595-OBG1		8:49	0.1	16.58	18.04	16.95		21.40	(H)
1595-OBG2		8:29	2718	10.87	12.58	11.40		17.65	(H)
1595-OBG3		8:40	234.6	12.17	13.71	12.69		19.71	(H)
1595-OBG4		9:01	0	15.22	17.06	15.58		24.20	(H) no cap, no lock
1595-OBG5		7:58	0	14.40	14.36	14.31		20.46	(H) no cap
1595-OBG6		8:14	0	7.53	8.55	7.83		15.75	(H)
1595-OBG7		8:13	0	6.05	6.51	6.18		18.45	(H) no cap

WS = wasp spray

FORT DRUM - WELL GAUGING

ID	Date	Time	PID Reading (ppm)	DTW Spring 2012	DTW Fall 2012	Depth to Water (ft TOC)	Depth to Product (ft TOC)	Depth to Bottom (ft TOC)	Notes
1595-OBG8	5-20-13	8:22	0	7.45	9.05	7.99	/	16.60	(H) no cap
1595-OBG9		8:24	0	8.31	10.15	9.95	/	18.30	(H)
1595-PZ1		8:05	0	10.04	11.17	10.41	/	20.04	(H) no cap
1595-PZ4		8:42	4.9	8.75	10.10	9.24	/	18.00	(H) no cap
1595-PZ7		8:52	0	16.80	17.99	17.06	/	32.10	(H)
1595-PZ8		8:03	18.9	11.40	11.96	11.26	/	27.05	(H)
1595-PZ9		8:20	wrap spray	7.68	8.96	8.10	/	26.11	(H)
1595-PZ10		8:34	0.7	13.74	15.54	14.31	/	31.60	(H)
1595-PZ11		8:35	WS	13.63	14.41	14.23	/	28.60	(H)
1595-PZ12		9:11	0.9	12.72	14.68	13.50	/	/	
1595-PZ13		9:16	0.2	9.02	11.08	9.77	/	/	
~~1595-2PZ1~~				~~45.41~~	~~28.10~~				not located
1595-2PZ5	5-20-13	9:24	0	9.66	11.53	10.44	/	/	
1595-2PZ12		9:20	0	45.47	46.35	45.71	/	/	
1595-RW2		8:17	0	4.65	5.31	4.82	/	20.0	
1595-RW5		8:48	0	8.50	16.23	8.67	/	28.61	(H)
1595-RW4		8:37	0	13.35	16.02	13.90	/	31.10	(H) no lock
1595-RW3		8:04	0	8.30	9.30	8.81	/	27.00	(H) no cap, no lock
1595-RW6		8.11	0.1	3.71	4.05	3.85	/	24.54	(S) no cap, no lock
1595-RW7		7:59	0	7.95	8.84	8.14	/	24.00	(S) no cap, no lock
1795-001	5-20-13	14:54	0	14.88	-	15.16	/	/	no lock
1795-003		13:57	0	10.00	-	10.45	/	/	no lock
1795-MW6		14:01	0	9.90	11.62	10.25	/	/	
1795-MW36		13:52	0	11.12	12.35	11.56	/	/	no cap
1795-MW37				10.80	12.03				no key for lock
1795-MW38		14:45	0	11.38	11.71	11.60	/	/	no lock
1795-MWD13		13:15	4	14.51	16.63	14.91	/	/	
1795-MWD20		1440	0.0	20.81	22.84	20.84			
1795-MWI12		13:17	4.2	14.59	16.71	15.04	/	/	

FORT DRUM - WELL GAUGING

WELL ID	Date	Time	PID Reading (ppm)	DTW Spring 2012	DTW Fall 2012	Depth to Water (ft TOC)	Depth to Product (ft TOC)	Depth to Bottom (ft TOC)	Notes
1795-MWS1	5-20-13	1437	0.0	20.91	22.95	20.89			
1795-MWS2		1423	0.7	13.47	15.75	14.48			
1795-MWS3		13:16	3.1	14.57	16.68	15.00	/	/	
1795-MWS4		13:23	0	13.31	15.82	13.56	/	/	
1795-~~MWS5~~ PZ16		13:43	9.0	~~0.00~~	~~20.85~~	18.40	/	/	
1795-MWS6		13:48	40.0	13.64	15.70	14.01	/	/	
1795-MWS7		14:24	0.4	13.13	13.97	13.61	/	/	
1795-MWS8		14:56	15.01	14.55	-				
1795-MWS9		14:56	0	DRY	-	DRY	/	/	
1795-MWS10		14:35	0.1	13.97	15.15	14.25	/	/	
1795-MWS11		13:20	1.6	15.49	17.13	15.96	/	/	
1795-MWS14		15:04	0	12.00	12.80	12.28			
1795-MWS15		14:30	302.6	12.40	13.40	12.74	/	/	
1795-MWS16		1453	0.0	18.98	21.10	19.02			
1795-MWS17		1508	0.0	24.59	26.48	24.09			
1795-MWS18		1504	0.0	17.60	-	17.45			
1795-MWS19		1428	0.3	14.11	16.63	14.98			
1795-MWS21		1435	0.1	16.07	18.15	16.51			
1795-PZ1		14:26	0.7	10.89	11.82	11.28	/	/	
1795-PZ2		14:27	34.1	11.74	12.65	12.09	/	/	
1795-PZ3		13:34	11.3	17.66	18.98	17.64	/	/	
1795-PZ4		13:38	0.8	12.59	14.34	12.66	/	/	
1795-PZ5		13:35	21.4	13.46	14.62	13.69	/	/	
1795-PZ6		13:47	67.1	14.20	16.00	14.35	/	/	
1795-PZ7		13:50	0.2	10.60	11.68	11.02	/	/	no lock
1795-PZ8		13:45	1.8	11.53	13.13	11.51	/	/	
1795-PZ9		13:39	0.1	17.13	18.87	17.11	/	/	no lock
1795-PZ10		14:04	1.9	10.15	11.64	10.36	/	/	
1795-PZ13	↓	15:08	465.6	6.51	7.43	6.83	/	/	

FORT DRUM - WELL GAUGING

WELL ID	Date	Time	PID Reading (ppm)	DTW Spring 2012	DTW Fall 2012	Depth to Water (ft TOC)	Depth to Product (ft TOC)	Depth to Bottom (ft TOC)	Notes
1795-PZ14	5-20-13	14:32	122.9	11.89	12.93	12.28			
1795-PZ15		13:33	0.1	16.42	17.90	16.43			
1795 ~~MW55~~		13:28	0	~~16.08~~	~~17.80~~	19.01			
1795-PZ17		13:31	0.4	13.08	14.75	13.08			
1795-PZ18		13:30	0	18.70	19.53	17.71			
1795-RW1		13:26	WS	17.57	19.07	17.59			
1795-RW2		14:29	32.0	11.68	12.65	12.00			
1795-RW3	↓	14:22	61.9	11.90	12.75	12.35			
1995-MW42	5-20-13	1018	0.2	24.00	25.25	24.67			
1995-MW43		1015	0.1	25.40	26.65	26.02			
1995-MW44		1115	0.0	26.60	27.27	27.57			
1995-MWD5		1135	0.1	30.20	31.76	30.50			
1995-MWD8		0833	0.0	25.01	26.31	25.45			
1995-MWI4		1132	0.1	30.19	31.81	30.65			
1995-MWI7		0735	0.1	24.61	25.87	25.04			
1995-MWS1		0738	0.1	21.93	23.15	22.43			
1995-MWS2		1205	0.0	36.28	38.52	37.11			
1995-MWS3		1130	0.2	30.37	32.00	30.83			
1995-MWS6		0731	~~HT~~ 0.2	24.53	25.80	24.96			
1995-MWS9		1020	~~6.3~~ 11.7	23.60	24.71	24.33			
1995-MWS10		0720	6.3	24.14	25.42	24.35			
1995-RW4	↓	0725	12.8	24.12	25.36	24.51			
2140-MW01	5-20-13	11:13	0	29.94	25.14	24.83			
2140-MW02		10:48	2.4	24.21	25.38	25.00			
2140-MW03		10:50	0.3	27.81	28.86	28.43			
2140-MW04		10:45	0	26.84	27.83	27.41			no lock
2140-MW05		10:52	0.3	27.76	28.86	28.15			no lock
2140-MW05D		10:53	0	28.41	29.37	28.75			no lock
2140-MW06	↓	10:46	182.6	28.85	29.89	29.40			

11.3
17.69

FORT DRUM - WELL GAUGING

WELL ID	Date	Time	PID Reading (ppm)	DTW Spring 2012	DTW Fall 2012	Depth to Water (ft TOC)	Depth to Product (ft TOC)	Depth to Bottom (ft TOC)	Notes
2140-MW07	5-20-13	10:51	0.3	29.16	31.09	29.58	/	/	
2140-MW08	↓	10:37	0	27.80	28.62	27.81	/	/	no lock
2140-MW09		10:38	0	25.03	25.71	25.08	/	/	
2140-MW10		10:40	0	23.49	24.38	23.97	/	/	
2140-MW11		10:42	0	23.50	24.42	23.91	/	/	
2140-MW12		10:28	0.1	19.97	21.27	20.01	/	/	
2140-MW13		10:25	0	8.26	9.56	8.28	/	/	
2140-MW14		10:23	0	9.30	10.65	9.38	/	/	
2140-MW15		10:22	0	10.20	11.53	10.30	/	/	
2140-MW16		9:58	1.4	7.15	8.23	7.16	/	/	
2140-MW17		9:56	1.1	7.28	8.34	7.30	/	/	
2140-MW18		9:56	0.2	6.82	7.92	6.85	/	/	
2140-MW19		9:59	0	8.31	9.40	8.30	/	/	
2140-MW20		9:51	0	6.82	6.86	6.56			
2140-MW21		9:36	0	7.01	6.91	7.14	/	/	
2140-MW22		10:02	0	14.41	15.37	14.31	/	/	
2140-MW23		9:52	0	8.41	9.36	8.65	/	/	no lock
2140-MW24		10:12	0	8.61	9.91	9.00	/	/	no lock
2140-MW25		9:33	0	6.53	-	6.91	/	/	
2140-MW26		10:06	0	15.29	12.14	11.18	/	/	
2140-MW27		10:07	0	10.30	9.66	9.73	/	/	
2140-MW28		10:08	0	8.80	9.80	8.84	/	/	
2140-MW29		9.43	0.8	4.96	5.02	5.08	/	/	
2140-MW30		9:50	0.1	6.91	7.06	7.50	/	/	no lock
2140-MW31		9:42	0	7.11	7.00	7.41	/	/	
2140-MW32		9:38	0	7.82	15.86	8.10	/	/	no lock
2140-MW33		9:39	0	DRY	DRY	DRY	/	/	no lock
2140-MW35		10:38	0	23.83	25.05	23.81	/	/	
2140-MW36	↓	10:44	0	24.15	25.14	24.70	/	/	

FORT DRUM - WELL GAUGING

WELL ID	Date	Time	PID Reading (ppm)	DTW Spring 2012	DTW Fall 2012	Depth to Water (ft TOC)	Depth to Product (ft TOC)	Depth to Bottom (ft TOC)	Notes
2140-MW37		1109	3.9	22.98	26.41	26.02			
2140-PZ01		1054	0.0	25.00	DRY	25.27			
2140-PZ02		1055	0.0	DRY	DRY	DRY			
2140-PZ03		1043	0.0	25.10	25.98	25.51			
3805-001		—	—	21.15	16.74			→	Cut and paved ~~in~~ in new compound
3805-002		9:45	1.2	18.50	19.35	18.46			
3805-003		9:35	0.1	19.64	20.80	19.70			
3805-014		9:55	1.1	15.96	17.40	15.99			
3805-015		10:48	0.0	15.86	17.80	16.41			
3805-016		10:49	0.0	17.37	19.18	17.74			
3805-MW39		~~9:41~~	~~0.8~~	19.24	20.30	~~19.30~~			
3805-MW40		9:38	0.2	20.95	23.10	21.17			
3805-MW41		11:11	0.0	17.25	17.50	17.63			
3805-MWD7		9:50	1.1	18.55	19.75	18.48			
3805-MWD10		12:20	8.6	27.61	29.42	28.09			
3805-MWD13		11:49	3.0	30.24	31.36	30.49			
3805-MWD16		1:01	6.3	30.60	31.10	30.78			
3805-MWD18		12:56	0.0	31.86	32.44	32.05			
3805-MWI6		9:48	5.3	18.16	19.40	18.09			
3805-MWI9		12:24	6.8	26.43	28.26	26.91			
3805-MWI12		11:50	0.2	30.06	31.23	30.34			
3805-MWI15		1:02	10.4	29.01	29.45	29.10			
3805-MWI17		12:55	4.2	31.90	32.57	32.18			
3805-MWI20		1:20	4.3	14.30	15.34	14.26			
3805-MWI22		1:23	0.0	2.68	4.25	3.13			
3805-MWS1		10:42	0.0	12.79	14.30	13.19			
3805-MWS2		10:45	0.1	12.08	14.20	12.66			
3805-MWS3		10:53	0.0	18.59	20.45	19.01			
3805-MWS4		12:51	0.1	32.23	33.03	32.59			

FORT DRUM - WELL GAUGING

WELL ID	Date	Time	PID Reading (ppm)	DTW Spring 2012	DTW Fall 2012	Depth to Water (ft TOC)	Depth to Product (ft TOC)	Depth to Bottom (ft TOC)	Notes
3805-MWS5		9:52	0.6	18.11	19.31	17.97			
3805-MWS8		12:22	0.1	26.82	28.64	27.31			
3805-MWS11		11:51	0.0	29.20	30.39	29.54			
3805-MWS14		1:00	12.6	28.65	29.19	28.76			
3805-MWS19		1:18	1.6	12.70	14.30	12.77			
3805-MWS21		1:25	0.0	10.12	10.38	10.20			
3805-MWS23		10:26	95.5	17.31	18.13	17.39			
3805-MWS24		8:10	16.1	21.60	22.86	21.61			
3805-P1		9:57	0.3	16.89	-	16.77			
3805-P4		10:01	1.3	16.25	-	16.23			
3805-PZ1		8:43	2.6	19.09	20.50	18.96			
3805-PZ2D		8:51	3.5	19.63	20.92	19.66			
3805-~~3905~~-PZ2I		8:48	0.2	19.51	20.83	19.54			3805 - PZ2I
3805-PZ2S		8:50	0.4	19.68	21.00	19.65			[illegible]
3805-PZ3		8:06	0.1	21.50	23.00	21.61			
3805-PZ4		8:28	458.7	23.80	25.03	24.25			
3805-PZ5		8:22	16.1	24.10	25.40	24.50			
3805-PZ6		10:45	2.3	24.26	25.63	24.49			
3805-PZ7		8:16	0.2	20.20	21.50	20.26			
3805-PZ8		2:00	0.9	24.32	25.58	24.88			
3805-PZ9		10:35	1380.0	14.21	15.27	14.35			
3805-PZ10		10:30	289.0	14.90	16.60	19.0	18.99		
3805-PZ11		8:02	0.0	21.59	23.07	21.74			
3805-PZ12I		11:55	10.1	26.09	27.34	26.29			
3805-PZ12S		11:54	4.4	25.02	26.32	25.28			
3805-PZ13D		12:00	0.1	23.40	24.75	23.82			
3805-PZ13I		12:03	0.6	25.48	26.84	25.86			
3805-PZ13S		12:02	0.0	22.89	24.18	23.23			
3805-PZ14		9:31	24.7	18.91	20.15	18.85			

FORT DRUM - WELL GAUGING

WELL ID	Date	Time	PID Reading (ppm)	DTW Spring 2012	DTW Fall 2012	Depth to Water (ft TOC)	Depth to Product (ft TOC)	Depth to Bottom (ft TOC)	Notes
3805-PZ15		9:25	17.2	17.64	20.60	17.55			
3805-RW1		10:04	2.6	16.45	17.70	16.39			
3805-RW2		10:32	251.0	13.75	15.70	13.89			
3805-RW3		8:04	0.0	22.15	23.60	22.24			
3805-RW5		9:26	0.4	18.55	19.75	18.35			
3805-RW6		8:45	0.1	DRY	DRY	—		18.7	DRY
3805-RW7		10:00	5.4	16.94	18.10	16.85		[illegible]	[illegible]
3805-RW8		8:08	26.2	21.20	22.65	21.30			
3805-RW9		8:55	1.7	18.73	20.20	18.62			
3805-RW10		8:15	2.5	21.40	21.70	20.48			
3805-RW11		9:23	1.5	19.25	20.93	19.23			
3805-RW12		9:20	0.4	18.50	45.02	18.52			
3805-RW13		10:05	0.9	14.90	16.12	14.89			
ASL-MW12A				63.01	65.31				
ASL-MW13				54.80	56.27				
ASL-MW14A				60.80	62.36				
ASL-MW941				68.65	70.38				
ASL-MW942		1257	1.2	48.04	49.28	49.78			
ASL-MW943		1222	0.0	55.20	56.96	56.96			
ASL-MW944		1227	0.0	53.50	55.64	55.34			
ASL-MW961				73.02	74.79				
OSL-MW2		12:35	0.0	35.32	36.72	35.41			
OSL-MW2A		12:30	0.0	38.88	40.31	39.11			
OSL-MW3		11:40	0.0	23.13	24.55	23.37			
OSL-MW4		11:38	8.6	50.68	54.35	51.34			
OSL-MW5		11:20	0.0	65.00	67.31	65.69			
OSL-MW7		11:14	0.0	23.58	25.14	24.19			
OSL-MW8		11:20	0.0	32.10	33.94	32.73			
OSL-MW9A		12:11	3.5	49.11	50.27	49.69			

FORT DRUM - WELL GAUGING

WELL ID	Date	Time	PID Reading (ppm)	DTW Spring 2012	DTW Fall 2012	Depth to Water (ft TOC)	Depth to Product (ft TOC)	Depth to Bottom (ft TOC)	Notes
OSL-MW11		12:39	0.0	41.40	42.36	36.60			#11
OSL-MW10		12:43	0.0	35.32	38.65	41.70			#10
WWII-001		3:22	0.1	31.00	33.40	30.70			
WWII-002		3:01	0.1	17.60	18.23	17.65			
WWII-003		3:18	0.9	13.51	15.16	13.78			
WWII-004		2:42	7.8	8.86	20.83	18.90			
WWII-005		2:46	0.1	21.61	23.41	21.20			
WWII-006		2:45	0.0	24.15	25.98	23.78			

FORT DRUM - WELL GAUGING

WELL ID	Date	Time	PID Reading (ppm)	DTW Fall 2012	DTW Spring 2013	Depth to Water (ft TOC)	Depth to Product (ft TOC)	Depth to Bottom (ft TOC)	Notes
1295-003	9-23	11:52	0	11.56	11.39	12.17	—	16.64	Not locked, mislabeled
1295-MW24	9-23			-	-				DOES NOT EXIST
1295-MW25	9-23	11:47	0	10.78	10.68	11.35	—	15.32	Not Locked
1295-MW26	9-23	12:04	0	11.29	10.90	11.72	—	21.64	No lid
1295-MWS27	9-23	11:54	0	8.19	7.89	8.45	—	19.35	No screw in lid
1295-MWS28	9-23	11:42	0	11.94	12.11	12.45	—	17.53	Not locked
1295-MWS29	9-23	11:49	0	11.63	11.41	12.23	—	14.80	locked
1295-MW30	9-23	11:45	0	10.66	10.65	11.20	—	15.00	locked
1595-MW3	9/23	16:15	105	14.07	12.95	14.06	—	20.00	
~~1595-34~~ ~~1595-MW3A~~	9/23	16:01	0.0	15.65	14.36	15.03	—	24.93	
1595-MW5	9/23	15:51	0.0	16.34	15.39	16.25	—	22.37	
1595-MW33	9/23	16:08	0.0	12.14	10.98	12.14	—	21.56	
~~1595-3A~~ ~~1595-MW34~~	9/23	14:11	0.0	15.10	13.87	15.47	—	18.14	
1595-MW35	9/23	17:45	0.0	14.61	13.39	14.47	—	25.00	
1595-MWD4	9/23	16:19	0.0	13.58	12.54	13.60	—	35.77	
1595-MWD5	9/23	16:34	1.4	8.64	8.06	8.59	—	39.68	
1595-MWD6	9/23	15:49	0.0	19.17	18.19	19.02	-	34.74	
1595-MWS1	9/23	17:52	0	10.16	9.15	9.99	—	11.50	locked
1595-MWS2	9/23	16:05	0.0	15.56	14.38	15.49	—	20.21	
1595-MWS7	9/23	16:38	12.9	8.81	8.20	8.77	—	21.87	
1595-MWS8	9/23	16:47	19.4	9.26	8.45	9.23	—	18.82	
1595-MWS9	9/23	16:33	0.0	4.80	4.40	4.73	—	21.71	NO LOCK
1595-OBG1	9/23	15:53	0.0	18.04	16.95	17.91	—	21.19	
1595-OBG2	9/23	16:13	67.6	12.58	11.40	12.59	—	17.40	
1595-OBG3	9/23	16:22	6.7	13.71	12.69	13.71	—	19.69	
1595-OBG4	9/23	17:40	0.0	17.06	15.58	16.72	—	24.16	NO ~~CAB~~CAP, NO LOCK
1595-OBG5	9/23	17:55	0	14.36	14.31	15.07	—	20.38	locked, no cap
1595-OBG6	9/23	18:08	2.4	8.55	7.83	8.65	—	15.61	locked
1595-OBG7	9/23	18:04	0	6.51	6.18	6.52	—	16.44	locked, no cap

FORT DRUM - WELL GAUGING

WELL ID	Date	Time	PID Reading (ppm)	DTW Fall 2012	DTW Spring 2013	Depth to Water (ft TOC)	Depth to Product (ft TOC)	Depth to Bottom (ft TOC)	Notes
1595-OBG8	9-23	18:12	0	9.05	7.99	9.14	—	16.55	locked
1595-OBG9	9-23	18:15	0	10.15	9.95	10.21	—	18.32	locked
1595-PZ1	9/23	16:39	0.0	11.17	10.41	11.09	—	17.38	NO CAP
1595-PZ4	9/23	16:46	0.0	10.10	9.24	10.09	—	17.90	NO CAP
1595-PZ7	9/23	15:47	0.0	17.99	17.06	17.81	-	31.43	
1595-PZ8	9/23	16:44	18.00 / 0.0	11.96	11.26	11.86	-	27.05	COULD NOT REMOVE CAP DUE TO DUCT TAPE
1595-PZ9	9/23	16:25	178	8.96	8.10	8.94	—	25.98	
1595-PZ10	9/23	15:59	19.7	15.54	14.31	15.45	—	31.58	
1595-PZ11	9/23	15:56	13.4	14.41	14.23	15.29	-	28.45	NO LOCK
1595-PZ12	9/23	16:03	0.0	14.68	13.50	14.60	-	29.97	
1595-PZ13	9/23	17:44	0.0	11.08	9.77	11.00	—	17.45	
1595-2PZ1				28.10	-				
1595-2PZ5	9/23	17:52	0.0	11.53	10.44	11.50	—	26.36	
1595-2PZ12	9/23	17:50	0.0	46.35	45.71	46.48	—	93.16	
1595-RW2				5.31	4.82				
1595-RW3	9/23	16:41	0.0	16.23	8.67	9.41	—	26.41	LARGE WASP NEST
1595-RW4	9/23	16:17	0.0	16.02	13.90	15.01	—	30.50	
1595-RW5	9/23	16:28	0.0	9.30	8.81	9.35	—	28.10	
1595-RW6				4.05	3.85				
1595-RW7	9/23	17:58	0.0	8.84	8.14	8.53	-	24.65	not locked
1795-001	9/24	16:46	0	-	15.16	15.28	-	22.10	not locked
1795-003	9/23	16:56	0	-	10.45	11.86	-	12.59	not locked
1795-MW6	9/23	16:50	0	11.62	10.25	11.74	-	14.90	locked
1795-MW36	9/23	17:00	0	12.35	11.56	12.59	-	16.48	locked
1795-MW37	9/23	17:04	0	12.03	-	12.22	-	15.99	locked, no cap
1795-MW38	9/23	16:09	0	11.71	11.60	11.81	—	15.89	no lid
1795-MWD13	9/23	15:18	0	16.63	14.91	16.20	-	49.07	locked
1795-MWD20	9/23	12:22	0	22.84	20.84	22.25	—	38.80	locked
1795-MWI12	9/23	15:15	0	16.71	15.04	16.31	—	34.20	locked

NF + JC + AM

FORT DRUM - WELL GAUGING

WELL ID	Date	Time	PID Reading (ppm)	DTW Fall 2012	DTW Spring 2013	Depth to Water (ft TOC)	Depth to Product (ft TOC)	Depth to Bottom (ft TOC)	Notes
1795-MWS1	9-23	12:25	0	22.95	20.89	22.40	/	24.81	locked
1795-MWS2	9-23	15:03	0	15.75	14.48	15.65	/	21.60	locked
1795-MWS3	9-23	15:17	0	16.68	15.00	16.25	/	21.51	locked
1795-MWS4	9-23	15:12	0	15.82	13.58	15.27	/	19.4	locked
1795-MWS5	9-23	16:29	10.6	20.55	19.01	20.87	/	22.35	locked
P 1795-MWS6	9-23	[illegible]	6.0	15.70	14.01	[illegible]	15.6 SWAD	[illegible]	locked; product virtually confined
1795-MWS7	9-23	16:15	0	13.97	13.61	14.43	/	17.20	locked
→ 1795-MWS8	9-24	16:44	0	-	-	15.35	/	18.90	locked
1795-MWS9	9-24	15:35	0	-	DRY	DRY	/	6.78	locked
1795-MWS10	9-23	15:50	0	15.15	14.25	15.15	/	17.00	locked
1795-MWS11	9-23	15:20	0	17.13	15.96	17.08	/	21.65	locked
1795-MWS14	9-23	16:05	0	12.80	12.28	13.00	/	17.22	locked
1795-MWS15	9-23	15:58	552	13.40	12.74	13.65	/	16.59	locked
1795-MWS16	9-23	15:41	0	21.10	19.02	20.51	/	24.27	locked
1795-MWS17	9-23	15:37	0	26.48	24.09	25.91	/	37.05	locked
1795-MWS18	9-23	15:32	0	-	17.45	18.85	/	18.89	NOT locked
1795-MWS19	9-23	15:07	0	16.63	14.98	16.55	/	25.26	locked
1795-MWS21	9-23	12:17	0	18.15	16.51	17.93	/	26.60	[illegible] locked
1795-PZ1	9-23	16:17	0	11.82	11.28	12.26	/	19.98	NOT locked
1795-PZ2	9-23	16:19	49.1	12.65	12.09	13.00	/	20.72	locked
1795-PZ3	9-23	16:24	0	18.98	17.64	19.31	/	26.11	locked
1795-PZ4	9-23	16:37	0	14.34	12.66	14.36	/	21.46	locked
1795-PZ5	9-23	16:22	0	14.62	13.69	15.00	/	21.78	locked
P 1795-PZ6	9-23	17:12	1,154	16.00	14.35	16.00	15.91	24.71	locked
1795-PZ7	9-23	17:06	0	11.68	11.02	12.13	/	20.89	no lid → stick-up
1795-PZ8	9-23	16:46	27.6	13.13	11.51	13.47	/	21.00	locked
1795-PZ9	9-23	16:39	7.7	18.87	17.11	18.93	/	18.99	no lid → stick up
1795-PZ10	9-23	16:48	0	11.64	10.36	12.03	/	20.61	not locked
1795-PZ13	9-23	16:02	93	7.43	6.83	7.64	/	16.32	good shape

FORT DRUM - WELL GAUGING

WELL ID	Date	Time	PID Reading (ppm)	DTW Fall 2012	DTW Spring 2013	Depth to Water (ft TOC)	Depth to Product (ft TOC)	Depth to Bottom (ft TOC)	Notes
1795-PZ14	9-23	15:53	4.9	12.93	12.28	13.12	/	21.92	locked
1795-PZ15	9-23	16:30	0	17.90	16.43	18.23	/	25.51	locked
1795-PZ16	9-23	16:41	0	19.80	18.40	20.19	/	27.24	locked
1795-PZ17	9-23	16:32	0	14.75	13.08	14.94	/	21.31	locked
1795-PZ18	9-23	16:32	0	19.53	17.71	19.64	/	21.01	
1795-RW1	9-23	16:26	7.8	19.07	17.59	19.40	/	39.52	not locked
1795-RW2	9-23	16:00	1.7	12.65	12.00	12.95	/	37.65	not locked
1795-RW3	9-23	16:13	0	12.75	12.35	13.10	/	40.21	not locked
1995-MW42	9/23	14.58	0.0	25.25	24.67	25.24	—	36.18	
1995-MW43	9/23	14:55	0.0	26.65	26.02	26.71	—	36.78	
1995-MW44	9/23	15:17	0.0	27.27	27.57	27.82	—	39.81	
* 1995-MWD5	9/23	12:38	0.0	31.76	30.50	31.55	—	78.85	COMPLETELY OVERGROWN NEEDS TRIMMING
1995-MWD8	09/23	08:38	0.0	26.31	25.45	26.18	—	73.30	BROKEN STEEL CASING
1995-MWI4	9/23	12:34	0.0	31.81	30.65	31.60	—	56.47	WASP NEST
1995-MWI7	09/23	08:36	0.0	25.87	25.04	25.76	—	48.76	
1995-MWS1	9/23	08:56	0.0	23.15	22.43	23.08	—	31.50	
1995-MWS2	9/23	13:03	0.0	38.52	37.11	38.76	—	40.79	
1995-MWS3	9/23	12:33	0.0	32.00	30.83	31.81	—	37.16	NO CAP
1995-MWS6	09/23	08:32	0.0	25.80	24.96	25.71	—	32.79	
1995-MWS9	09/23	15:01	37.8	24.71	24.33	24.86	—	37.51	
1995-MWS10	09/23	08:51	0.0	25.42	24.35	25.17	—	38.90	
1995-RW4	09/23	08:45	5.6	25.36	24.51	25.26	—	33.00	VERY SOFT BOTTOM
2140-MW01	9-23	9:22	0	25.14	24.83	25.32	/	33.00	locked
2140-MW02	9-23	8:12	4.3	25.38	25.00	25.73	/	31.31	no screw in lid
2140-MW03	9-23	8:23	2.3	28.86	28.43	29.25	/	35.68	locked
2140-MW04	9-23	8:34	2.2	27.83	27.41	28.22	/	36.00	Not locked
2140-MW05	9-23	8:56	0	28.86	28.15	29.10	/	35.95	not locked
2140-MW05D	9-23	8:59	0	29.37	28.75	29.78	/	45.90	not locked
2140-MW06	9-23	8:30	5.6	29.89	29.40	30.29	/	40.47	locked

NF + JC + AM

FORT DRUM - WELL GAUGING → white paint pen

WELL ID	Date	Time	PID Reading (ppm)	DTW Fall 2012	DTW Spring 2013	Depth to Water (ft TOC)	Depth to Product (ft TOC)	Depth to Bottom (ft TOC)	Notes
2140-MW07	9-23	8:26	19.6	31.09	29.58	30.46	/	41.69	locked
2140-MW08	9-23	9:02	0	28.62	27.81	28.91	/	38.30	NOT locked
2140-MW09	9-23	9:05	0	25.71	25.08	25.91	/	32.70	No screws in lid
2140-MW10	9-23	9:07	0	24.38	23.97	24.75	/	33.81	No screws in lid
2140-MW11	9-23	9:12	0	24.42	23.91	25.43	/	32.40	NO screws in lid
2140-MW12	9-23	11:24	0	21.27	20.01	25.32	/	34.20	No screws in lid
2140-MW13	9-23	9:42	0	9.56	8.28	9.80	/	19.21	No screws; full of sediment
2140-MW14	9-23	9:38	0	10.65	9.38	10.92	/	19.80	No screws in lid
2140-MW15	9-23	9:36	0	11.53	10.30	10.79	/	19.20	No screws in lid
2140-MW16	9-23	9:52	0	8.23	7.16	8.50	/	17.95	No LID → stick-up
2140-MW17	9-23	9:50	0	8.34	7.30	8.63	/	17.15	No LID → stick-up
2140-MW18	9-23	9:48	0	7.92	6.85	8.15	/	17.10	No LID → stick-up
2140-MW19	9-23	9:54	0	9.40	8.30	9.60	/	17.10	locked
2140-MW20	9-23	10:09	0.7	6.86	6.56	7.02	/	16.81	No LID → stick-up
2140-MW21	9-23	10:18	0	6.91	7.14	7.42	/	16.94	No lid → stick-up
2140-MW22	9-23	9:56	0	15.37	14.31	15.60	/	24.30	locked
2140-MW23	9-23	9:32	0	9.36	8.65	9.55	/	16.48	NO LID → stick-up
2140-MW24	9-23	10:22	0	9.91	9.00	10.15	/	16.50	NOT locked
2140-MW25	9-23	10:33	0	-	6.91	DRY	/	16.80	locked
2140-MW26	9-23	10:01	0	12.14	11.18	12.31	/	16.50	No screws in lid
2140-MW27	9-23	10:03	0	9.66	9.73	10.9	/	15.60	No screws in lid
2140-MW28	9-23	10:05	0	9.80	8.84	10.0	/	15.41	settled pad
2140-MW29	9-23	10:12	0	5.02	5.08	5.32	/	16.6	No lid → stick-up
2140-MW30	9-23	10:10	0	7.06	7.50	8.48	/	16.11	No lid → stick-up
2140-MW31	9-23	10:14	0	7.00	7.41	7.71	/	15.90	No lid → stick-up
2140-MW32	9-23	10:17	0	15.86	8.10	15.87	/	16.12	No lid → stick-up
2140-MW33	9-23	10:15	0	DRY	DRY	DRY	/	17.02	No lid → stick-up
2140-MW35	9-23	9:45	0	25.05	23.81	21.55	/	34	No screws in lid
2140-MW36	9-23	9:15	0	25.14	24.70	24.65	/	34.72	No screws in lid

FORT DRUM - WELL GAUGING

WELL ID	Date	Time	PID Reading (ppm)	DTW Fall 2012	DTW Spring 2013	Depth to Water (ft TOC)	Depth to Product (ft TOC)	Depth to Bottom (ft TOC)	Notes
2140-MW37	9-23	8:20	10.9	26.41	26.02	26.80	—	34.6	manway full of sediment
2140-PZ01	9-23	9:18	0	DRY	25.27	Dry	—	25.59	no screws
2140-PZ02	9-23	9:16	0	DRY	DRY	Dry	—	24.90	no screws, sed. in manway
2140-PZ03	9-23	9:09	0	25.98	25.51	26.25	—	28.46	no screws in lid
3805-002	9/23	10:21	0.0	19.35	18.46	19.31	—	25.79	
3805-003	9/23	10:08	0.0	20.80	19.70	20.47	—	27.71	
3805-014	9/23	10:58	0.0	17.40	15.99	17.03	—	24.50	
3805-015	9/23	11:17	0.0	17.80	16.41	17.45	—	25.28	
3805-016	9/23	11:08	0.0	19.18	17.74	18.82	—	22.05	
3805-MW39	9/23	10:19	0.0	20.30	19.30	20.02	—	31.21	
3805-MW40	9/23	10:17	0.0	23.10	21.17	21.89	—	31.57	
3805-MW41	9/23	15:11	0.0	17.50	17.63	17.42	—	26.72	
3805-MWD7	9/23	10:34	0.0	19.75	18.48	19.39	—	82.12	
3805-MWD10	9/23	13:33	2.7	29.42	28.09	29.13	—	70.64	
3805-MWD13	9/23	13:42	2.9	31.36	30.49	31.12	—	65.02	
3805-MWD16	9/23	13:55	4.5	31.10	30.78	31.12	—	62.15	
3805-MWD18	9/23	14:04	0.0	32.44	32.05	32.42	—	52.87	NO CAP
3805-MWI6	9/23	10:33	0.0	19.40	18.09	19.00	—	42.64	
3805-MWI9	9/23	13:32	6.0	28.26	26.91	27.98	—	52.83	
3805-MWI12	9/23	13:45	0.0	31.23	30.34	31.03	—	52.63	
3805-MWI15	9/23	13:58	3.4	29.45	29.10	29.46	—	45.70	
3805-MWI17	9/23	14:05	5.9	32.57	32.18	32.57	—	51.10	
3805-MWI20	9/23	12:12	0.0	15.34	14.26	14.99	—	38.14	
3805-MWI22	9/23	12:20	0.0	4.25	3.13	3.67	—	43.43	
3805-MWS1	9/23	11:24	0.0	14.30	13.19	14.11	—	14.90	
3805-MWS2	9/23	11:21	0.0	14.20	12.66	13.69	—	19.58	WASPS
3805-MWS3	9/23	11:13	0.0	20.45	19.01	20.15	4	22.60	
3805-MWS4	9/23	14:02	0.0	33.03	32.59	33.09	—	37.91	
3805-MWS5	9/23	10:39	0.0	19.31	17.97	18.94	—	25.80	NOT LABELED IN FIELD

FORT DRUM - WELL GAUGING

WELL ID	Date	Time	PID Reading (ppm)	DTW Fall 2012	DTW Spring 2013	Depth to Water (ft TOC)	Depth to Product (ft TOC)	Depth to Bottom (ft TOC)	Notes
3805-MWS8	9/23	13:30	0.0	28.64	27.31	28.39	—	31.53	
3805-MWS11	9/23	13:47	0.0	30.39	29.54	30.25	—	35.41	
3805-MWS14	9/23	13:53	6.3	29.19	28.76	29.20	—	34.84	
3805-MWS19	9/23	12:15	0.0	14.30	12.77	13.86	—	24.75	
3805-MWS21	9/23	12:18	0.0	10.38	10.20	10.28	—	24.54	
3805-MWS23	9/23	08:23	1.4	18.13	17.39	18.08	—	29.25	
3805-MWS24	9/23	09:24	0.0	22.86	21.61	22.50	—	32.31	
3805-P1	9/23	10:45	0.0	-	16.77	17.73	—	35.45	
3805-P4	9/23	10:47	0.0	-	16.23	17.17	—	33.75	
3805-PZ1	9/23	09:09	0.0	20.50	18.96	19.87	—	~~27.01~~ 26.01	SOFT CLAY BOTTOM
3805-PZ2D	9/23	09:15	0.8	20.92	19.66	20.54	—	61.10	
3905-PZ2I	9/23	09:10	0.0	20.83	19.54	20.40	—	44.31	
3805-PZ2S	9/23	09:14	0.0	21.00	19.63	20.59	—	23.90	
3805-PZ3	9/23	~~09:15~~ 09:30	~~0.8~~ 0.0	23.00	21.61	22.62	—	31.12	TIME 09:30 PID 0.0
3805-PZ4	9/23	08:41	30.7	25.03	24.25	24.97	—	32.49	LARGE WASP NEST
3805-PZ5	09/23	08:47	0.0	25.40	24.50	25.21	—	31.87	
3805-PZ6	9/23	14:40	0.0	25.63	24.49	25.32	—	32.17	
3805-PZ7	9/23	09:02	0.0	21.50	20.26	21.11	—	28.57	
3805-PZ8	9/23	15:04	0.0	25.58	24.88	25.54	—	30.85	
3805-PZ9	~~09~~ 09/23	08:09	0.0	15.27	14.35	15.12	—	22.02	
3805-PZ10	9/23	08:16	396	16.60	19.00	15.81	15.75	22.02	PRODUCT, NO CAP
3805-PZ11	9/23	09:36	0.0	23.07	21.74	22.70	—	27.94	
3805-PZ12I	9/23	13:25	2.0	27.34	26.29	27.11	—	37.31	
3805-PZ12S	9/23	13:23	10.3	26.32	25.28	26.08	—	33.92	
3805-PZ13D	9/23	12:56	0.0	24.75	23.82	24.59	—	71.72	
3805-PZ13I	9/23	12:59	0.0	26.84	25.86	26.67	—	52.11	
3805-PZ13S	9/23	12:55	0.0	24.18	23.23	24.02	—	33.06	NO CAP
3805-PZ14	9/23	10:05	128	20.15	18.85	19.70	—	31.22	
3805-PZ15	9/23	09:58	1.6	20.60	17.55	18.52	—	27.74	

FORT DRUM - WELL GAUGING

WELL ID	Date	Time	PID Reading (ppm)	DTW Fall 2012	DTW Spring 2013	Depth to Water (ft TOC)	Depth to Product (ft TOC)	Depth to Bottom (ft TOC)	Notes
3805-RW1	9/23	10:50	0.0	17.70	16.39	17.34	—	31.97	
3805-RW2	9/23	08:12	1.7	15.70	13.89	14.61	—	29.80	6 INCH CASING, SOFT BOTTOM NO LOCK, WASP NEST
3805-RW3	9/23	09:32	0.0	23.60	22.24	23.21	—	49.80	NO LOCK
3805-RW5	9/23	10:02	3.4	19.75	18.35	19.31	—	45.81	BROKEN TOP
3805-RW6	9/23	09:08	0.0	DRY	DRY	DRY	—	18.20	
3805-RW7	9/23	10:41	0.0	18.10	16.85	17.75	—	41.30	WASPS
3805-RW8	9/23	09:27	2.8	22.65	21.30	22.16	—	46.47	
3805-RW9	9/23	09:39	2.7	20.20	18.62	19.63	—	44.00	
3805-RW10	9/23	09:20	0.0	21.70	20.48	21.30	—	50.10	6 INCH CASING, SOFT BOTTOM
3805-RW11	9/23	09:55	0.0	20.93	19.23	20.16	—	46.37	
3805-RW12	9/23	09:50	0.0	45.02	18.52	19.98	—	46.00	LARGE, LIVE WASP NEST
3805-RW13	9/23	10:53	0.0	16.12	14.89	15.89	—	40.47	
ASL-MW12A	9/29	13:20	—	65.31	-	65.68	—	78.95	ALL ASL WELLS - NO PID OR INTERFACE PROBE BECAUSE
ASL-MW13	9/29	13:32	—	56.27	-	56.96	—	68.89	OF NOT HAVING ASL KEYS ON GAUGING DAY
ASL-MW14	9/29	14:08	—	62.36	-	63.01	—	76.51	
ASL-MW941	9/29	13:57	—	70.38	-	70.58	—	82.80	
ASL-MW942	9/29	14:17	—	49.28	49.78	50.25	—	59.83	
ASL-MW943	9/29	—	—	56.96	56.96	—	—	—	UNABLE TO ACCESS DUE TO ELECTRIC SECURITY GATE
ASL-MW944	9/29	13:45	—	55.64	55.34	56.29	—	67.65	
ASL-MW961	9/29	14:03	—	74.79	-	74.89	—	85.69	
OSL-MW2	9/23	14:23	0.0	36.72	35.41	36.48	—	48.57	NO LOCK, BARBED WIRE
OSL-MW2A	9/23	14:25	0.0	40.31	39.11	39.94	—	56.23	NO LOCK
OSL-MW3	9/23	12:47	0.0	24.55	23.37	24.27	—	39.39	HORNETS NEST
OSL-MW4	9/23	12:49	6.1	54.35	51.34	52.14	—	100.65	
OSL-MW5	9/23	11:55	0.0	67.31	65.69	66.57	—	149.65	
OSL-MW7	9/23	14:45	0.0	25.14	24.19	25.11	—	39.60	
OSL-MW8	9/23	11:59	0.0	33.94	32.73	32.75	—	49.02	NO CAP
OSL-MW9A	9/23	13:09	0.0	50.27	49.69	50.42	—	63.80	
OSL-MW10	9/23	14:13	0.0	42.36	41.70	42.38	—	51.59	VERY OVERGROWN LARGE WASP NEST, NO CAP

FORT DRUM - WELL GAUGING

WELL ID	Date	Time	PID Reading (ppm)	DTW Fall 2012	DTW Spring 2013	Depth to Water (ft TOC)	Depth to Product (ft TOC)	Depth to Bottom (ft TOC)	Notes
OSL-MW11	9/23	14:18	0.0	38.65	36.00	36.76	—	61.36	NEARLY INACCESSIBLE
WWII-001	9/23	17:16	0	33.40	30.70	31.86	—	39.24	not locked
WWII-002	9/23	15:48	0	18.23	17.65	18.32	—	24.55	locked
WWII-003	9/23	15:27	0	15.16	13.78	14.94	—	18.49	locked
WWII-004	9/23	14:52	0	20.83	18.90	21.30	—	27.71	locked
WWII-005	9/23	14:58	0	23.41	21.20	22.89	—	29.70	locked
WWII-006	9/23	14:56	0	25.98	23.78	25.49	—	46.00	locked

APPENDIX B

Well Purge Logs

PLEXUS scientific

Ground Water Sampling
Low Flow Data Sheet

Plexus Scientific
4501 Ford Avenue, Suite 1200
Alexandria, VA 22302

Date: 5/23/13
Site Name: Drum
Well ID: 1295 - MW25
Sample Depth:
Sampler: JRC & KA

Purge Device: Submersible
Flow Rate: 400 mL/min
Static water level: 10.56
Well TD:
Well Construction: 4" PVC

Time	pH ± 0.1	COND (ms/cm) ± 3%	TURB (NTU) ± 10% or < 10	DO (mg/L) ± 10%	TEMP (°C) ± 3%	ORP (mv) ± 10 mV	VOL PURG (gal) or (L)	DTW (ft TOPVC) < 0.3 ft, drawdown
1100	7.12	0.825	54.6	1.77	12.42	-100	0.0	10.95
1105	6.72	0.839	1.1	0.82	12.38	-46	2.0	10.97
1110	6.64	0.845	0.9	0.56	12.24	-39	4.0	11.16
1115	6.51	0.887	0.0	0.00	11.99	-24	6.0	11.38
1120	6.53	0.908	0.0	0.00	12.00	-23	8.0	11.31
1125	6.60	0.932	0.0	0.00	12.06	-21	10.0	"
1130	6.62	0.931	0.0	0.00	12.09	-21	12.0	"
1130	Sampled							

Comments: $Fe^{2+} = 0.0$

PLEXUS scientific

Ground Water Sampling
Low Flow Data Sheet

Plexus Scientific
4501 Ford Avenue, Suite 1200
Alexandria, VA 22302

Date: 5/23/13
Site Name: Drum
Well ID: 1295 - MW26
Sample Depth:
Sampler: JRC & KCA

Purge Device: Submersible
Flow Rate: 400 mL/min
Static water level: 10.91
Well TD:
Well Construction: 4" PVC

Time	pH ± 0.1	COND (ms/cm) ± 3%	TURB (NTU) ± 10% or < 10	DO (mg/L) ± 10%	TEMP (°C) ± 3%	ORP (mv) ± 10 mV	VOL PURG (gal) or (L)	DTW (ft TOPVC) < 0.3 ft, drawdown
0825	6.16	0.511	5.3	7.08	13.90	175	0.0	10.94
0830	6.38	0.481	0.0	4.40	13.95	163	2.0	10.91
0835	6.42	0.486	0.0	4.31	11.74	163	4.0	10.94
0840	6.38	0.481	0.0	4.01	11.97	164	6.0	"
0845	6.40	0.481	0.0	3.98	11.97	163	8.0	"
0850	6.40	0.480	0.0	3.97	12.00	163	10.0	"
0855	6.41	0.480	0.0	3.94	12.01	165	12.0	"
							~~14.0~~ *	
0855	SAMPLED							

Comments: $Fe^{2+} = 0.2$

PLEXUS scientific

Ground Water Sampling
Low Flow Data Sheet

Plexus Scientific
4501 Ford Avenue, Suite 1200
Alexandria, VA 22302

Date: 5/23/13
Site Name: Drum
Well ID: 1295 - MW30
Sample Depth:
Sampler: SEC & KH

Purge Device: Submersible
Flow Rate: 400 ml/min
Static water level: 10.66
Well TD:
Well Construction: 2" PVC

Time	pH ± 0.1	COND (ms/cm) ± 3%	TURB (NTU) ± 10% or < 10	DO (mg/L) ± 10%	TEMP (°C) ± 3%	ORP (mv) ± 10 mV	VOL PURG (gal) or (L)	DTW (ft TOPVC) < 0.3 ft, drawdown
1010	7.00	0.940	62.4	1.71	12.21	21	0.0	11.50
1015	6.84	0.835	114	0.00	12.45	-60	2.0	11.60
1020	6.88	0.838	108	0.00	12.35	-69	4.0	11.68
1025	6.94	0.828	105	0.00	12.29	-80	6.0	11.65
1030	6.97	0.818	105	0.14	12.30	-92	8.0	11.57
1035	6.99	0.815	103	0.87	12.21	-104	10.0	11.66
1040	7.05	0.814	105	1.28	12.26	-113	12.0	11.69
1045	7.06	0.810	106	1.39	12.31	-118	14.0	11.60
1050	7.10	0.808	107	1.32	12.21	-120	16.0	11.62
1050	Sampled							

Comments: $Fe^{2+} = 2.0$

PLEXUS scientific

Ground Water Sampling
Low Flow Data Sheet

Plexus Scientific
4501 Ford Avenue, Suite 1200
Alexandria, VA 22302

Date: 5-23-2013
Site Name: Ft. Drum
Well ID: 1295-MWS27
Sample Depth:
Sampler: LM

Purge Device: Submersible
Flow Rate: 300
Static water level: 7.89
Well TD:
Well Construction:

Time	pH ± 0.1	COND (ms/cm) ± 3%	TURB (NTU) ± 10% or < 10	DO (mg/L) ± 10%	TEMP (°C) ± 3%	ORP (mv) ± 10 mV	VOL PURG (gal) or (L)	DTW (ft TOPVC) < 0.3 ft, drawdown
1120	7.29	1.25	17.8	0.00	12.73	15	0	8.12
1125	7.32	1.27	15.6	0.00	12.97	16	1.5	8.02
1130	7.40	1.25	11.4	0.00	14.14	17	3.0	8.01
1135	7.41	1.24	13.5	0.00	12.78	20	4.5	8.01
1140	7.41	1.20	9.5	0.00	12.78	14	6.0	8.01
1145	2.42	1.16	7.1	0.00	12.87	1	7.5	8.01
1150	7.44	1.12	5.2	0.00	12.74	-9	9.0	8.01
1155	7.44	1.08	3.7	0.00	12.90	-20	10.5	8.00
1200	7.44	1.05	3.2	0.00	12.84	-25	12.0	8.01
1205	7.46	1.04	1.7	0.00	12.80	-26	13.5	8.01
1205	Sampled							

Comments: Fe: 0.1 VOCs + MNA + DUP-4

PLEXUS scientific

Ground Water Sampling
Low Flow Data Sheet

Plexus Scientific
4501 Ford Avenue, Suite 1200
Alexandria, VA 22302

Date: 5/23/13
Site Name: Drum
Well ID: 1295 - MW528
Sample Depth:
Sampler: JRC - KA

Purge Device: Submersible
Flow Rate: 400 mL/min
Static water level: 12.15
Well TD:
Well Construction: 2" PVC

Time	pH ± 0.1	COND (ms/cm) ± 3%	TURB (NTU) ± 10% or < 10	DO (mg/L) ± 10%	TEMP (°C) ± 3%	ORP (mv) ± 10 mV	VOL PURG (gal) or (L)	DTW (ft TOPVC) < 0.3 ft, drawdown
0915	6.64	1.04	19.4	7.85	12.63	151	0.0	12.36
0920	6.95	1.07	11.8	6.03	12.95	144	2.0	12.32
0925	7.05	1.07	13.3	5.47	12.19	141	4.0	12.56
0930	7.14	1.12	3.2	4.05	11.44	136	6.0	12.57
0935	7.17	1.14	0.0	3.21	11.38	134	8.0	12.59
0940	7.18	1.14	0.0	3.10	11.46	132	10.0	"
0945	7.20	1.15	0.0	2.97	11.63	128	12.0	"
0945	Sampled							

Comments: Fe^{2+} = 0.0

PLEXUS scientific

Ground Water Sampling
Low Flow Data Sheet

Plexus Scientific
4501 Ford Avenue, Suite 1200
Alexandria, VA 22302

Date: 5-22-2013
Site Name: Ft. Drum
Well ID: 1595-MW33
Sample Depth:
Sampler: NF

Purge Device: Submersible
Flow Rate: 300
Static water level: 10.96
Well TD:
Well Construction:

Time	pH ± 0.1	COND (ms/cm) ± 3%	TURB (NTU) ± 10% or < 10	DO (mg/L) ± 10%	TEMP (°C) ± 3%	ORP (mv) ± 10 mV	VOL PURG (gal) or (L)	DTW (ft TOPVC) < 0.3 ft, drawdown
1130	7.09	0.312	6.6	8.44	15.23	-14	0	11.05
1135	6.67	0.311	10.0	7.77	13.64	59	1.5	11.04
1140	6.61	0.330	11.2	7.30	13.30	79	3.0	11.04
1145	6.75	0.361	6.0	6.79	13.39	85	4.5	11.04
1150	6.75	0.412	0.2	6.57	13.56	90	6.0	11.04
1155	6.76	0.440	0.0	6.37	13.76	92	7.5	11.04
1200	6.76	0.443	0.0	6.29	13.59	95	9.0	11.04
1205	6.75	0.446	0.0	6.01	13.69	99	10.5	11.04
1210	Sample						12.0	11.04
12:10	Sampled							

Comments: Fe: 0.0 VOCs + MNA

PLEXUS scientific

Ground Water Sampling
Low Flow Data Sheet

Plexus Scientific
4501 Ford Avenue, Suite 1200
Alexandria, VA 22302

Date: 5/22/13
Site Name: Drum
Well ID: 1595-MW57
Sample Depth:
Sampler: JRC & KA

Purge Device: Submersible
Flow Rate: 400 mL/min
Static water level: 8.11
Well TD:
Well Construction: 2" PVC

Time	pH ± 0.1	COND (ms/cm) ± 3%	TURB (NTU) ± 10% or < 10	DO (mg/L) ± 10%	TEMP (°C) ± 3%	ORP (mv) ± 10 mV	VOL PURG (gal) or (L)	DTW (ft TOPVC) < 0.3 ft, drawdown
1115	7.89	0.757	5.4	2.83	12.78	-36	0.0	8.18
1120	7.84	0.599	5.6	4.36	12.31	-33	2.0	8.17
1125	7.59	0.638	3.2	2.98	12.05	-20	4.0	8.17
1130	7.44	0.652	1.9	1.83	12.06	-10	6.0	"
1135	7.33	0.670	2.4	0.76	11.90	-3	8.0	"
1140	7.32	0.689	3.5	0.35	11.89	-2	10.0	"
1145	7.30	0.702	4.4	0.05	11.99	1	12.0	"
1150	7.31	0.710	5.3	0.00	12.05	1	14.0	"
1155	7.32	0.712	4.7	0.00	12.09	2	16.0	"
1155	Sampled							

Comments: $Fe^{2+} = 0.4$

PLEXUS scientific

Ground Water Sampling
Low Flow Data Sheet

Plexus Scientific
4501 Ford Avenue, Suite 1200
Alexandria, VA 22302

Date: 5-22-2013
Site Name: Ft. Drum
Well ID: 1595-OBG2
Sample Depth:
Sampler: LM

Purge Device: Submersible
Flow Rate: 300
Static water level: 11.41
Well TD:
Well Construction:

Time	pH ± 0.1	COND (ms/cm) ± 3%	TURB (NTU) ± 10% or < 10	DO (mg/L) ± 10%	TEMP (°C) ± 3%	ORP (mv) ± 10 mV	VOL PURG ~~(gal)~~ or (L)	DTW (ft TOPVC) < 0.3 ft, drawdown
1015	6.25	0.147	18.5	0.00	13.09	-5	0	11.50
1020	6.08	0.139	36.9	0.00	14.82	13	1.5	11.51
1025	6.07	0.144	49.1	0.00	14.17	10	3.0	11.51
1030	6.17	0.206	59.3	0.00	13.24	-8	4.5	11.50
1035	6.49	0.366	38.4	0.00	13.26	-39	6.0	11.50
1040	6.58	0.446	30.8	0.00	13.49	-43	7.5	11.50
1045	6.60	0.420	29.6	0.00	13.55	-47	9.0	11.50
1050	6.63	0.450	27.4	0.00	13.63	-50	10.5	11.50
1055	6.65	0.455	25.3	0.00	13.60	-55	12.0	11.50
1100	6.71	0.460	20.0	0.00	13.62	-57	13.5	11.50
11:05	Sampled							

Comments: Fe: 1.5 VOCs+MNA+DUP-3

PLEXUS scientific

Ground Water Sampling
Low Flow Data Sheet

Plexus Scientific
4501 Ford Avenue, Suite 1200
Alexandria, VA 22302

Date: 5/22/13
Site Name: Drum
Well ID: 1595-PZ11
Sample Depth:
Sampler: SRC & KH

Purge Device: Submersible
Flow Rate: 400 mL/min
Static water level: 14.19
Well TD:
Well Construction: 2" PVC

Time	pH ± 0.1	COND (ms/cm) ± 3%	TURB (NTU) ± 10% or < 10	DO (mg/L) ± 10%	TEMP (°C) ± 3%	ORP (mv) ± 10 mV	VOL PURG (~~gal~~) or (L)	DTW (ft TOPVC) < 0.3 ft, drawdown
1010	7.36	0.727	23.2	0.29	13.93	-12	0.0	14.27
1015	7.52	0.847	4.6	0.00	13.44	0	2.0	14.23
1020	7.53	0.900	3.0	0.00	13.40	1	4.0	14.25
1025	7.56	0.927	2.3	0.00	13.40	0	6.0	"
1030	7.60	0.946	1.5	0.00	13.53	-1	8.0	"
1035	7.64	0.956	1.2	0.00	13.27	-4	10.0	"
1040	7.65	0.971	1.5	0.00	13.06	-6	12.0	"
1040	Sampled							

Comments:

PLEXUS scientific

Ground Water Sampling
Low Flow Data Sheet

Plexus Scientific
4501 Ford Avenue, Suite 1200
Alexandria, VA 22302

Date: 5/22/13
Site Name: Drum
Well ID: 1595-PZ12
Sample Depth:
Sampler: SRL & KA

Purge Device: Submersible
Flow Rate: 400 mL/min
Static water level: 13.50
Well TD:
Well Construction: 2" PVC

Time	pH ± 0.1	COND (ms/cm) ± 3%	TURB (NTU) ± 10% or < 10	DO (mg/L) ± 10%	TEMP (°C) ± 3%	ORP (mv) ± 10 mV	VOL PURG (gal) or (L)	DTW (ft TOPVC) < 0.3 ft, drawdown
1210	7.22	2.39	52.7	0.15	13.32	-19	0.0	13.6
1215	7.12	3.78	62.7	0.00	14.38	-36	2.0	13.52
1220	7.14	3.72	37.2	0.00	14.60	-38	4.0	13.52
1225	7.18	3.41	18.7	0.00	14.33	-42	6.0	"
1230	7.20	3.29	15.2	0.00	14.21	-43	8.0	"
1235	7.20	3.19	13.0	0.00	14.27	-45	10.0	"
1240	7.21	3.12	12.2	0.00	13.99	-46	12.0	"
1245	7.23	3.05	11.9	0.00	13.81	-48	14.0	"
1245	Sampled							

Comments: Fe^{2+} = 4.0 (COLLECTED MS, MSD)

PLEXUS scientific

Ground Water Sampling
Low Flow Data Sheet

Plexus Scientific
4501 Ford Avenue, Suite 1200
Alexandria, VA 22302

Date: 20130522
Site Name: Ft. Drum
Well ID: 1795-MW53
Sample Depth:
Sampler: LM

Purge Device: Submersible
Flow Rate: 300
Static water level: 14.95
Well TD:
Well Construction:

Time	pH ± 0.1	COND (ms/cm) ± 3%	TURB (NTU) ± 10% or < 10	DO (mg/L) ± 10%	TEMP (°C) ± 3%	ORP (mv) ± 10 mV	VOL PURG ~~(gal)~~ or (L)	DTW (ft TOPVC) < 0.3 ft, drawdown
910	5.80	0.085	61.4	4.87	12.55	161	0	15.02
915	5.95	0.114	43.1	2.01	13.02	51	1.5	15.01
920	6.09	0.134	24.9	1.07	12.15	18	3.0	15.01
925	6.12	0.134	16.7	0.47	11.98	9	4.5	15.02
930	6.22	0.140	4.5	0.00	11.63	-11	6.0	15.02
935	6.25	0.142	2.8	0.00	11.80	-14	7.5	15.02
940	6.31	0.144	1.7	0.00	11.94	-19	9.0	15.02
945	Sample						10.5	
9:45	Sampled							

Comments: Fe: 1.1 VOCs + MNA + Micro

PLEXUS scientific

Ground Water Sampling
Low Flow Data Sheet

Plexus Scientific
4501 Ford Avenue, Suite 1200
Alexandria, VA 22302

Date: 20130521
Site Name: Ft. Drum 1795
Well ID: MW57
Sample Depth:
Sampler: LM

Purge Device: Submersible
Flow Rate: 300
Static water level: 13.53
Well TD:
Well Construction:

Time	pH ± 0.1	COND (ms/cm) ± 3%	TURB (NTU) ± 10% or < 10	DO (mg/L) ± 10%	TEMP (°C) ± 3%	ORP (mv) ± 10 mV	VOL PURG (gal) or (L)	DTW (ft TOPVC) < 0.3 ft, drawdown
1546	7.02	0.811	25.6	0.42	15.75	-63	0	13.60
1551	7.04	1.81	47.2	0.02	16.02	-47	1.5	13.61
1556	7.12	1.69	45.7	0.00	14.75	-49	3.0	13.61
1601	7.19	1.50	43.4	0.00	13.19	-51	4.5	13.61
1606	7.20	1.46	38.3	0.00	13.14	-52	6.0	13.61
1611	7.21	1.48	36.8	0.00	13.61	-53	7.5	13.61
1616	7.21	1.48	35.7	0.00	13.29	-53	9.0	13.61
1618	Sample							

Comments: Fe: 1.0 VOCs + MNA

PLEXUS scientific

Ground Water Sampling
Low Flow Data Sheet

Plexus Scientific
4501 Ford Avenue, Suite 1200
Alexandria, VA 22302

Date: 20130522
Site Name: Ft. Drum
Well ID: 1795-MWS11
Sample Depth:
Sampler: NF

Purge Device: Submersible
Flow Rate: 300
Static water level: 15.94
Well TD:
Well Construction:

Time	pH ± 0.1	COND (ms/cm) ± 3%	TURB (NTU) ± 10% or < 10	DO (mg/L) ± 10%	TEMP (°C) ± 3%	ORP (mv) ± 10 mV	VOL PURG ~~(gal)~~ or (L)	DTW (ft TOPVC) < 0.3 ft, drawdown
820	5.59	0.119	77.3	13.53	12.78	261	0	16.09
825	5.64	0.100	33.7	2.55	13.06	221	1.5	16.00
830	5.81	0.098	32.2	2.39	13.09	208	3.0	15.97
835	5.94	0.096	27.9	2.11	13.61	195	4.5	15.97
840	5.92	0.092	10.8	2.20	13.80	192	6.0	15.97
845	5.91	0.091	10.0	2.36	13.76	195	7.5	15.97
850	5.91	0.090	8.5	2.53	13.48	196	9.0	15.97
855	5.90	0.090	5.7	2.60	13.41	195	10.5	15.97
900	5.91	0.090	2.9	2.71	13.38	194	12.0	15.97
	Sampled	900						

Comments: VOCs + DVP-2

PLEXUS scientific

Ground Water Sampling
Low Flow Data Sheet

Plexus Scientific
4501 Ford Avenue, Suite 1200
Alexandria, VA 22302

Date: 5/22/13
Site Name: DRUM
Well ID: 1795-MW521
Sample Depth:
Sampler: JRC + KA

Purge Device: SUBMERSIBLE
Flow Rate: 400 ml/min
Static water level: 16.55
Well TD:
Well Construction: 4" PVC

Time	pH ± 0.1	COND (ms/cm) ± 3%	TURB (NTU) ± 10% or < 10	DO (mg/L) ± 10%	TEMP (°C) ± 3%	ORP (mv) ± 10 mV	VOL PURG ~~(gal)~~ or (L)	DTW (ft TOPVC) < 0.3 ft, drawdown
0840	6.50	0.421	175	3.79	13.61	105	0.0	16.72
0845	6.68	0.445	156	0.72	11.68	28	2.0	16.70
0850	6.65	0.451	151	0.32	11.62	17	4.0	16.71
0855	6.60	0.454	119	0.00	11.77	-6	6.0	16.71
0900	6.61	0.452	106	0.00	11.72	-12	8.0	"
0905	6.65	0.445	87.6	0.12	11.73	-20	10.0	"
0910	6.75	0.438	71.3	0.35	12.16	-30	12.0	"
0915	6.84	0.426	58.5	0.44	12.67	-40	14.0	"
0920	6.96	0.419	52.2	0.45	12.83	-51	16.0	"
0925	7.04	0.415	50.7	0.49	12.82	-54	18.0	"
0930	7.10	0.411	47.7	0.53	12.82	-58	20.0	"
0930	Sampled							

Comments:

PLEXUS scientific

Ground Water Sampling
Low Flow Data Sheet

Plexus Scientific
4501 Ford Avenue, Suite 1200
Alexandria, VA 22302

Date: 5/21/13
Site Name: Drum
Well ID: 1795-PZ15
Sample Depth:
Sampler: JRC/KA

Purge Device: Submersible
Flow Rate: 400 mL/min
Static water level: 16.36
Well TD:
Well Construction: 4" PVC

Time	pH ± 0.1	COND (ms/cm) ± 3%	TURB (NTU) ± 10% or < 10	DO (mg/L) ± 10%	TEMP (°C) ± 3%	ORP (mv) ± 10 mV	VOL PURG (gal) or (L)	DTW (ft TOPVC) < 0.3 ft, drawdown
1605	6.77	0.392	120	1.09	16.03	29	0.0	16.42
1610	6.78	0.397	122	1.30	16.48	81	2.0	16.51
1615	6.64	0.356	41.4	0.00	15.81	106	4.0	16.48
1620	6.73	0.340	16.5	0.00	17.09	108	6.0	16.44
1625	6.93	0.346	14.3	0.00	16.80	101	8.0	16.44
1630	6.92	0.340	11.9	0.00	16.36	104	10.0	"
1635	6.91	0.330	12.6	0.00	16.09	107	12.0	"
1640	6.91	0.329	11.5	0.00	16.02	106	14.0	"
1640	Sampled							

Comments: $Fe^{2+} = 0.0$

PLEXUS scientific

Ground Water Sampling
Low Flow Data Sheet

Plexus Scientific
4501 Ford Avenue, Suite 1200
Alexandria, VA 22302

Date: 20130521
Site Name: Ft. Drum 1995
Well ID: MW59
Sample Depth:
Sampler: L.M

Purge Device: Submersible
Flow Rate: 300
Static water level: 24.35
Well TD: 37
Well Construction:

Time	pH ± 0.1	COND (ms/cm) ± 3%	TURB (NTU) ± 10% or < 10	DO (mg/L) ± 10%	TEMP (°C) ± 3%	ORP (mv) ± 10 mV	VOL PURG (gal) or (L)	DTW (ft TOPVC) < 0.3 ft, drawdown
9:25	6.72	5.46	6.9	2.30	16.04	-12	0	24.43
9:30	6.98	6.50	3.0	0.43	14.11	-44	1.5	24.43
9:35	7.01	6.36	2.7	0.18	13.97	-53	3.0	24.42
9:40	7.05	6.03	2.0	0.00	14.31	-67	4.5	24.42
9:45	7.06	5.93	4.5	0.00	14.50	-73	6.0	24.42
9:50	7.07	5.84	5.0	0.00	14.21	-76	7.5	24.42
9:55	7.07	5.81	6.1	0.00	14.01	-77	9.0	24.42
	Sampled	10:00						

Comments: Fe: 2.9 VOCs + MNA

PLEXUS scientific

Ground Water Sampling
Low Flow Data Sheet

Plexus Scientific
4501 Ford Avenue, Suite 1200
Alexandria, VA 22302

Date: 20130521
Site Name: 1995 Ft. Drum
Well ID: MW510
Sample Depth:
Sampler: NF

Purge Device: Submersible
Flow Rate: 300
Static water level: 24.37
Well TD: 39.00 (5)
Well Construction:

Time	pH ± 0.1	COND (ms/cm) ± 3%	TURB (NTU) ± 10% or < 10	DO (mg/L) ± 10%	TEMP (°C) ± 3%	ORP (mv) ± 10 mV	VOL PURG ~~(gal)~~ or (L)	DTW (ft TOPVC) < 0.3 ft, drawdown
1022	7.46	1.02	15.6	3.23	16.87	-80	0	24.41
1027	7.55	1.21	18.3	2.91	16.38	-79	1.5	24.42
1032	7.51	1.48	23.3	2.10	15.06	-79	3.0	24.44
1037	7.45	1.46	15.5	1.72	15.45	-78	4.5	24.43
1042	7.42	1.47	12.7	1.68	15.57	-77	6.0	24.42
1047	7.40	1.48	9.0	1.70	15.38	-76	7.5	24.42
1052	7.37	1.46	5.5	1.73	15.30	-74	9.0	24.42
1058	7.33	1.44	0.9	1.98	15.41	-72	10.5	24.42
	Sampling	1100						

Comments: Fe: 1.8 VOCs + MNA

PLEXUS scientific

Ground Water Sampling
Low Flow Data Sheet

Plexus Scientific
4501 Ford Avenue, Suite 1200
Alexandria, VA 22302

Date: 5/22/13
Site Name: Drum
Well ID: 2140-MW02
Sample Depth:
Sampler: SDC & KA

Purge Device: Submersible
Flow Rate: 400 mL/min
Static water level: 24.99
Well TD:
Well Construction: 2" PVC

Time	pH ± 0.1	COND (ms/cm) ± 3%	TURB (NTU) ± 10% or < 10	DO (mg/L) ± 10%	TEMP (°C) ± 3%	ORP (mv) ± 10 mV	VOL PURG (gal) or (L)	DTW (ft TOPVC) < 0.3 ft, drawdown
1455	7.52	3.18	165	1.97	16.30	-93	0.0	25.42
1500	7.76	0.858	93.9	2.09	15.45	-60	2.0	25.35
1505	7.39	2.00	49.5	2.41	15.49	-39	4.0	25.32
1510	7.37	2.31	35.1	2.80	15.31	-39	6.0	25.38
1515	7.38	2.80	16.3	3.37	15.06	-38	8.0	"
1520	7.38	2.85	15.8	3.54	15.02	-37	10.0	"
1525	7.39	2.91	15.1	3.64	15.09	-37	12.0	"
1525	Sampled							

Comments: $Fe^{2+} = 1.4$

PLEXUS scientific

Ground Water Sampling
Low Flow Data Sheet

Plexus Scientific
4501 Ford Avenue, Suite 1200
Alexandria, VA 22302

Date: 5-22-2013
Site Name: Ft. Drum
Well ID: 2140-MW06
Sample Depth:
Sampler: NF

Purge Device: Submersible
Flow Rate: 300
Static water level: 29.57
Well TD:
Well Construction:

Time	pH ± 0.1	COND (ms/cm) ± 3%	TURB (NTU) ± 10% or < 10	DO (mg/L) ± 10%	TEMP (°C) ± 3%	ORP (mv) ± 10 mV	VOL PURG ~~(gal)~~ or (L)	DTW (ft TOPVC) < 0.3 ft, drawdown
1230	6.85	2.19	12.2	2.59	14.46	32	0	29.91
1235	6.90	4.97	22.8	0.00	15.75	-40	1.5	29.90
1240	7.00	4.95	9.0	0.00	15.90	-63	3.0	29.88
1245	7.01	4.89	7.8	0.00	15.87	-65	4.5	29.88
1250	7.04	4.77	5.0	0.00	15.91	-68	6.0	29.88
1255	7.05	4.73	4.6	0.00	15.96	-69	7.5	29.88
1300	7.07	4.68	3.9	0.00	16.03	-71	9.0	29.88
1305	7.07	4.64	3.1	0.00	16.11	-72	10.5	29.88
Sample								
	Sampled	1305						

Comments: VOCs + MTBE

PLEXUS scientific

Ground Water Sampling
Low Flow Data Sheet

Plexus Scientific
4501 Ford Avenue, Suite 1200
Alexandria, VA 22302

Date: 5-22-2013
Site Name: Ft. Drum
Well ID: 2140-MW07
Sample Depth:
Sampler: LM

Purge Device: Submersible
Flow Rate: 300
Static water level: 29.58
Well TD: 41.75
Well Construction:

Time	pH ± 0.1	COND (ms/cm) ± 3%	TURB (NTU) ± 10% or < 10	DO (mg/L) ± 10%	TEMP (°C) ± 3%	ORP (mv) ± 10 mV	VOL PURG ~~(gal)~~ or (L)	DTW (ft TOPVC) < 0.3 ft, drawdown
1320 ~~7.00~~	6.96	1.89	108	0.07	20.02	-86	0	30.88
1325	6.97	1.84	89.8	0.00	17.69	-93	1.5	30.98
1330	6.94	1.76	81.8	0.00	19.31	-95	3.0	30.98
1335	6.97	1.81	55.9	0.00	18.59	-96	4.5	30.97
1340	6.97	1.86	56.8	0.00	18.85	-97	6.0	30.97
1345	6.97	2.05	17.6	0.00	17.24	-98	7.5	30.97
1350	6.97	2.07	17.8	0.00	17.09	-99	9.0	30.97
1355	6.97	2.18	16.4	0.00	16.94	-100	10.5	30.97
1400	6.99	2.32	14.8	0.00	17.31	-103	12	30.97
1405	7.00	2.40	15.9	0.00	17.74	-105	13.5	30.97
1410	7.01	2.42	16.2	0.00	17.93	-105	15.0	30.97
1415	7.02	2.44	16.8	0.00	17.99	-105	16.5	30.97
14:15	Sampled							

Comments: VOCs + MTBE

PLEXUS scientific

Ground Water Sampling
Low Flow Data Sheet

Plexus Scientific
4501 Ford Avenue, Suite 1200
Alexandria, VA 22302

Date: 5-22-2013
Site Name: Ft. Dix
Well ID: 2140-MW12
Sample Depth:
Sampler:

Purge Device: Submersible
Flow Rate: 300
Static water level: 20.01
Well TD:
Well Construction:

Time	pH ± 0.1	COND (ms/cm) ± 3%	TURB (NTU) ± 10% or < 10	DO (mg/L) ± 10%	TEMP (°C) ± 3%	ORP (mv) ± 10 mV	VOL PURG ~~(gal)~~ or (L)	DTW (ft TOPVC) < 0.3 ft, drawdown
~~1340~~ 1440	7.25	1.75	34.1	1.35	19.99	37	0	20.29
~~1345~~ 1445	6.93	1.89	2.6	0.00	17.04	70	1.5	20.28
~~1350~~ 1450	6.87	1.95	0.9	0.00	16.94	78	3.0	20.28
~~1355~~ 1455	6.87	1.98	1.5	0.00	17.70	80	4.5	20.28
~~1400~~ 1500	6.95	1.99	0.9	0.00	17.98	75	6.0	20.28
1505	7.04	1.97	1.2	0.00	17.63	76	7.5	20.28
1510	7.00	1.96	1.4	0.00	17.65	79	9.0	20.28
1515	6.98	1.96	1.3	0.00	17.33	83	10.5	20.28
1515	Sampled							

Comments: Fe: 0.0 VOCs + MNAs + MTBE

PLEXUS scientific

Ground Water Sampling
Low Flow Data Sheet

Plexus Scientific
4501 Ford Avenue, Suite 1200
Alexandria, VA 22302

Date: 5-23-2013
Site Name: Ft. Drum
Well ID: 2140-MW14
Sample Depth:
Sampler: NF

Purge Device: Submersible
Flow Rate: 300
Static water level: 9.43
Well TD:
Well Construction:

Time	pH ± 0.1	COND (ms/cm) ± 3%	TURB (NTU) ± 10% or < 10	DO (mg/L) ± 10%	TEMP (°C) ± 3%	ORP (mv) ± 10 mV	VOL PURG ~~(gal)~~ or (L)	DTW (ft TOPVC) < 0.3 ft, drawdown
8:21	6.24	0.542	14	23.23	17.41	245	0	9.43
8:26	~~7.66~~ 6.33	0.449	3.2	4.64	15.84	231	1.5	9.41
831	6.29	0.391	2.7	4.20	15.24	227	3.0	9.43
836	6.36	0.345	2.2	4.39	15.31	219	4.5	9.43
841	6.41	0.321	0.0	4.74	15.26	212	6.0	9.43
846	6.44	0.311	0.0	4.55	15.50	209	7.5	9.43
851	6.57	0.285	0.0	4.97	15.29	198	9.0	9.43
856	6.56	0.281	0.0	4.96	15.09	198	10.5	9.43
901	6.50	2.79	0.0	4.95	15.04	199	12.0	9.43
9:05	Sampled							

Comments: VOCs + MTBE

PLEXUS scientific

Ground Water Sampling
Low Flow Data Sheet

Plexus Scientific
4501 Ford Avenue, Suite 1200
Alexandria, VA 22302

Date: 5-23-2013
Site Name: Ft. Drum
Well ID: 2140-MW19
Sample Depth:
Sampler: LM

Purge Device: Submersible
Flow Rate: 300
Static water level: ~~DTW~~ 8.29
Well TD:
Well Construction:

Time	pH ± 0.1	COND (ms/cm) ± 3%	TURB (NTU) ± 10% or < 10	DO (mg/L) ± 10%	TEMP (°C) ± 3%	ORP (mv) ± 10 mV	VOL PURG ~~(gal)~~ or (L)	DTW (ft TOPVC) < 0.3 ft, drawdown
915	7.16	1.96	12.6	0.00	13.30	-28	0	8.32
920	7.18	1.91	12.8	0.00	13.23	-36	1.5	8.32
925	7.17	1.80	12.1	0.00	13.01	-41	3.0	8.32
930	7.12	1.65	11.4	0.01	12.38	-32	4.5	8.32
935	7.11	1.71	11.0	0.30	12.23	-32	6.0	8.32
940	7.12	1.00	10.1	0.89	11.93	-34	7.5	8.32
945	7.14	1.87	10.0	1.17	11.80	-35	9.0	8.32
950	7.17	1.88	9.5	1.20	11.90	-38	10.5	8.32
955	7.19	1.90	9.5	1.21	12.00	-39	12.0	8.32
~~1000~~	↖Sample						13.5	
	Sampled	955						

Comments: VOCs+MTBE

Ground Water Sampling
Low Flow Data Sheet

Plexus Scientific
4501 Ford Avenue, Suite 1200
Alexandria, VA 22302

Date: 5-23-2013
Site Name: Ft. Drum
Well ID: ~~MW27~~ 2140-MW27
Sample Depth:
Sampler: N/F

Purge Device: Submersible
Flow Rate: 306
Static water level: 9.71
Well TD:
Well Construction:

Time	pH ± 0.1	COND (ms/cm) ± 3%	TURB (NTU) ± 10% or < 10	DO (mg/L) ± 10%	TEMP (°C) ± 3%	ORP (mv) ± 10 mV	VOL PURG ~~(gal)~~ or (L)	DTW (ft TOPVC) < 0.3 ft, drawdown
1015	7.48	0.331	1.6	9.79	10.76	5	0	9.76
1020	6.98	0.450	0.8	7.82	11.40	54	1.5	9.76
1025	6.92	0.446	0.5	6.43	10.56	50	3.0	9.76
1030	6.90	0.450	0.9	6.09	10.55	49	4.5	9.76
1035	6.88	0.477	1.2	5.32	10.45	45	6.0	9.76
1040	6.88	0.563	0.4	4.49	10.34	37	7.5	9.76
1045	6.90	0.579	0.0	3.74	10.39	33	9.0	9.76
1050	6.90	0.612	0.0	3.59	10.26	27	10.5	9.76
1055	6.90	0.609	0.0	3.61	10.53	25	12.0	9.76
1100	6.93	0.605	0.0	3.70	10.59	20	13.5	9.76
	Sampled	1100						

Comments: VOCs + MTBE

PLEXUS scientific

Ground Water Sampling
Low Flow Data Sheet

Plexus Scientific
4501 Ford Avenue, Suite 1200
Alexandria, VA 22302

Date: 5/22/13
Site Name: Drum
Well ID: 2140-MW37
Sample Depth:
Sampler: SEC + ICA

Purge Device: Submersible
Flow Rate: 400mL/min
Static water level: 28.96
Well TD:
Well Construction: 2" PVC

Time	pH ± 0.1	COND (ms/cm) ± 3%	TURB (NTU) ± 10% or < 10	DO (mg/L) ± 10%	TEMP (°C) ± 3%	ORP (mv) ± 10 mV	VOL PURG ~~(gal)~~ or (L)	DTW (ft TOPVC) < 0.3 ft, drawdown
1355	6.96	9.55	176	2.69	15.76	-49	0.0	26.50
1400	6.80	13.5	461	3.42	16.41	-56	2.0	26.57
1405	6.81	12.0	159	1.54	15.70	-65	4.0	26.62
1410	6.88	10.2	106	0.89	15.56	-73	6.0	"
1415	6.91	9.61	119	0.62	15.63	-76	8.0	"
1420	6.99	8.19	149	0.00	15.75	-84	10.0	"
1425	7.04	7.55	148	0.00	15.60	-88	12.0	"
1430	7.07	6.99	145	0.00	15.92	-91	14.0	"
1435	7.09	6.91	139	0.00	15.84	-93	16.0	"
1440	7.11	6.82	131	0.00	15.75	-95	18.0	"
1440	Sampled							

Comments:

PLEXUS scientific

Ground Water Sampling
Low Flow Data Sheet

Plexus Scientific
4501 Ford Avenue, Suite 1200
Alexandria, VA 22302

Date: 20130521
Site Name: Ft. Drum . 3805
Well ID: MW55
Sample Depth:
Sampler: NP

Purge Device: Submersible
Flow Rate: 300
Static water level: 17.98
Well TD:
Well Construction:

Time	pH ± 0.1	COND (ms/cm) ± 3%	TURB (NTU) ± 10% or < 10	DO (mg/L) ± 10%	TEMP (°C) ± 3%	ORP (mv) ± 10 mV	VOL PURG (gal) or (L)	DTW (ft TOPVC) < 0.3 ft, drawdown
1452	7.29	0.325	103	2.09	14.71	-54	0	18.18
1457	7.21	0.324	87.5	0.08	14.05	-59	1.5	18.24
1502	7.24	0.325	61.4	0.00	14.09	-64	3.0	18.18
1507	7.23	0.336	18.9	0.00	14.14	-79	4.5	18.18
1512	7.26	0.341	12.5	0.41	14.35	-88	6.0	18.18
1517	7.27	0.352	9.4	0.66	14.16	-92	7.5	18.18
1522	7.27	0.354	8.6	0.82	13.99	-94	9.0	18.18
1527	7.27	0.355	8.7	0.98	13.97	-96	10.5	18.18
1532	7.27	0.356	7.9	[illegible]	13.99	-97	12.0	18.18
1537	7.27	0.357	7.1	1.02	14.03	-95	13.5	18.18
1538	Sample							
	Sampled	1538						

Comments: VOCs

PLEXUS scientific

Ground Water Sampling
Low Flow Data Sheet

Plexus Scientific
4501 Ford Avenue, Suite 1200
Alexandria, VA 22302

Date: 5/21/13
Site Name: Drum
Well ID: 3805-MWS8
Sample Depth:
Sampler: JRC/KA

Purge Device: Submersible
Flow Rate: 400mL/min
Static water level: 27.31
Well TD:
Well Construction: 2" PVC

Time	pH ± 0.1	COND (ms/cm) ± 3%	TURB (NTU) ± 10% or < 10	DO (mg/L) ± 10%	TEMP (°C) ± 3%	ORP (mv) ± 10 mV	VOL PURG ~~(gal)~~ or (L)	DTW (ft TOPVC) < 0.3 ft, drawdown
1330	7.01	0.565	19.9	18.04	15.35	-46	0.0	27.33
1335	7.01	0.536	13.0	10.23	14.65	-50	2.0	27.37
1340	6.94	0.452	2.3	0.94	13.97	-59	4.0	27.36
1345	6.92	0.444	1.2	0.43	13.99	-60	6.0	27.35
1350	6.90	0.431	0.1	0.00	13.90	-61	8.0	"
1355	6.90	0.423	0.0	0.00	13.68	-62	10.0	"
1400	6.91	0.418	0.0	0.00	13.52	-62	12.0	"
1400	Sampled							

Comments: COLLECTED MS/MSD

PLEXUS scientific

Ground Water Sampling
Low Flow Data Sheet

Plexus Scientific
4501 Ford Avenue, Suite 1200
Alexandria, VA 22302

Date: 5/21/13
Site Name: DRUM
Well ID: # 3805 - MW511
Sample Depth:
Sampler: JRC / KA

Purge Device: SUBMERSIBLE
Flow Rate: 400 mL/min
Static water level: 29.50
Well TD:
Well Construction: 2" PVC

Time	pH ± 0.1	COND (ms/cm) ± 3%	TURB (NTU) ± 10% or < 10	DO (mg/L) ± 10%	TEMP (°C) ± 3%	ORP (mv) ± 10 mV	VOL PURG (gal) or (L)	DTW (ft TOPVC) < 0.3 ft, drawdown
1135	6.85	0.336	12.3	2.52	15.0	-70	0.0	29.55
1140	6.84	0.320	19.6	1.79	14.70	-65	2.0	29.56
1145	6.79	0.369	12.5	0.64	14.19	-70	4.0	"
1150	6.76	0.481	4.4	0.00	13.94	-72	6.0	"
1155	6.80	0.505	2.5	0.00	13.84	-73	8.0	"
1200	6.83	0.512	2.3	0.00	14.06	-74	10.0	"
1205	6.86	0.515	2.3	0.00	14.03	-76	12.0	"
1205	Sampled							

Comments: $Fe^{2+} = 3.6$ mg/L

PLEXUS scientific

Ground Water Sampling
Low Flow Data Sheet

Plexus Scientific
4501 Ford Avenue, Suite 1200
Alexandria, VA 22302

Date: 20130521
Site Name: Ft. Drum 3805
Well ID: MW524
Sample Depth:
Sampler: LM

Purge Device: Submersible
Flow Rate: 300
Static water level: 21.60
Well TD: 32.71
Well Construction:

Time	pH ± 0.1	COND (ms/cm) ± 3%	TURB (NTU) ± 10% or < 10	DO (mg/L) ± 10%	TEMP (°C) ± 3%	ORP (mv) ± 10 mV	VOL PURG (gal) or (L)	DTW (ft TOPVC) < 0.3 ft, drawdown
1352	7.24	0.342	32.0	0.22	15.28	-36	0	21.68
1357	7.26	0.339	23.3	0.24	13.52	-40	1.5	21.65
1402	7.22	0.339	23.7	0.00	13.37	-47	3.0	21.65
1407	7.15	0.340	28.4	0.00	13.45	-49	4.5	21.65
1412	7.15	0.338	~~23.1~~	0.00	14.12	-57	6.0	21.65
1417	7.18	0.340	22.8	0.00	14.19	-63	7.5	21.65
1422	7.20	0.340	22.1	0.00	14.03	-65	9.0	21.65
1427	Sample						10.5	21.65
1427	Sample							

Comments: Fe: 2.6 VOCs + MNA

PLEXUS scientific

Ground Water Sampling
Low Flow Data Sheet

Plexus Scientific
4501 Ford Avenue, Suite 1200
Alexandria, VA 22302

Date: 20130521
Site Name: Ft. Drum 3805
Well ID: PZ-25
Sample Depth:
Sampler: NF

Purge Device: Submersible
Flow Rate: 300
Static water level: 19.70
Well TD:
Well Construction:

Time	pH ± 0.1	COND (ms/cm) ± 3%	TURB (NTU) ± 10% or < 10	DO (mg/L) ± 10%	TEMP (°C) ± 3%	ORP (mv) ± 10 mV	VOL PURG (gal) or (L)	DTW (ft TOPVC) < 0.3 ft, drawdown
1235	6.98	0.309	245	2.15	15.08	20	0	19.86
1240	6.91	0.303	93.9	0.75	13.95	25	1.5	19.81
1245	6.87	0.303	64.2	0.34	14.12	24	3.0	19.81
1250	6.77	0.306	1.0	0.00	13.87	20	4.5	19.80
1255	6.72	0.308	1.4	0.00	13.41	18	6.0	19.80
1300	6.68	0.310	0.0	0.00	13.31	16	7.5	19.80
1305	6.65	0.314	0.7	0.00	13.36	16	9.0	19.80
1310							10.5	19.80
13:10	sampled							

Comments: Fe: 1.4 VOCs + MNA

PLEXUS scientific

Ground Water Sampling
Low Flow Data Sheet

Plexus Scientific
4501 Ford Avenue, Suite 1200
Alexandria, VA 22302

Date: 5/21/13
Site Name: Drum
Well ID: 3805-PZ3
Sample Depth:
Sampler: JRC/KA

Purge Device: Submersible
Flow Rate: 400 mL/min
Static water level: 21.57
Well TD:
Well Construction: 2" PVC

Time	pH ± 0.1	COND (ms/cm) ± 3%	TURB (NTU) ± 10% or < 10	DO (mg/L) ± 10%	TEMP (°C) ± 3%	ORP (mv) ± 10 mV	VOL PURG (gal) or (L)	DTW (ft TOPVC) < 0.3 ft, drawdown
1450	6.74	0.352	96.5	0.00	14.50	-3	0.0	21.70
1455	6.46	0.303	103	0.00	14.89	48	2.0	21.74
1500	6.27	0.297	63.4	0.00	14.57	55	4.0	21.72
1505	6.22	0.299	26.4	0.00	14.57	46	6.0	21.71
1510	6.31	0.309	10.2	0.00	14.39	14	8.0	21.72
1515	6.29	0.308	14.1	0.00	13.98	3	10.0	"
1520	6.30	0.311	4.0	0.00	13.78	-11	12.0	"
1525	6.34	0.314	2.3	0.00	13.72	-26	14.0	"
1530	6.38	0.314	2.0	0.00	13.73	-37	16.0	"
1535	6.42	0.316	1.8	0.00	13.80	-45	18.0	"
1535	Sampled							

Comments: $Fe^{2+} = 4.8$ mg/L

PLEXUS scientific

Ground Water Sampling
Low Flow Data Sheet

Plexus Scientific
4501 Ford Avenue, Suite 1200
Alexandria, VA 22302

Date: 5/21
Site Name:
Well ID: 3805 - PZ12S
Sample Depth:
Sampler: JRC/KA

Purge Device: Submersible
Flow Rate: 400 mL/min
Static water level: ~~29.75~~ ~~26.~~ 25.29 KA
Well TD:
Well Construction: 2" PVC

Time	pH ± 0.1	COND (ms/cm) ± 3%	TURB (NTU) ± 10% or < 10	DO (mg/L) ± 10%	TEMP (°C) ± 3%	ORP (mv) ± 10 mV	VOL PURG (gal) or (L)	DTW (ft TOPVC) < 0.3 ft, drawdown
1040	6.79	0.454	3.1	0.34	14.32	-75	0.0	25.45
1045	6.77	0.455	3.2	0.00	14.19	-75	2.0	25.36
1050	6.75	0.439	2.7	0.00	13.72	-78	4.0	25.38
1055	6.76	0.413	2.4	0.00	13.62	-80	6.0	25.40
1100	6.78	0.391	2.1	0.00	13.54	-81	8.0	"
1105	6.82	0.375	1.8	0.00	13.56	-84	10.0	"
1110	6.84	0.366	1.0	0.00	13.61	-85	12.0	"
1110	Sampled							

Comments: Fe^{2+} = 3.2 mg/L

PLEXUS scientific

Ground Water Sampling
Low Flow Data Sheet

Plexus Scientific
4501 Ford Avenue, Suite 1200
Alexandria, VA 22302

Date: 20130521
Site Name: ~~MW~~ 3805 Ft. Drum
Well ID: PZ14
Sample Depth:
Sampler: LM

Purge Device: Submersible
Flow Rate: 300
Static water level: 18.87
Well TD:
Well Construction:

Time	pH ± 0.1	COND (ms/cm) ± 3%	TURB (NTU) ± 10% or < 10	DO (mg/L) ± 10%	TEMP (°C) ± 3%	ORP (mv) ± 10 mV	VOL PURG (gal) or (L)	DTW (ft TOPVC) < 0.3 ft, drawdown
1118	7.90	0.257	34.4	1.00	13.95	-77	0.0	19.00
1123	7.30	0.231	42.2	0.23	14.50	-53	1.5	19.01
1128	7.22	0.229	74.7	0.18	14.04	-50	3.0	19.00
1133	7.11	0.226	111	0.00	13.97	-47	4.5	18.97
1138	7.03	0.223	88.6	0.00	13.35	-45	6.0	18.97
1143	7.03	0.221	71.2	0.00	13.47	-46	7.5	18.97
1148	7.02	0.219	40.3	0.00	13.50	-47	9.0	18.97
1153	7.04	0.217	29.1	0.00	13.62	-49	10.5	18.97
1158	7.03	0.217	23.3	0.00	13.49	-49	12.0	18.97
1203	7.04	0.217	23.0	0.00	13.47	-49	13.5	18.97
1208	7.04	0.217	22.8	0.00	13.50	-49	15.0	18.97
	Sampling	1210						

Comments: FE: 1.5 VOCs + MNA + Micro + DUP-1

PLEXUS scientific

Ground Water Sampling
Low Flow Data Sheet

Plexus Scientific
4501 Ford Avenue, Suite 1200
Alexandria, VA 22302

Date: 5/21/13
Site Name: DRUM
Well ID: ~~3805~~-OSL-MW3
Sample Depth:
Sampler: JRG / KA

Purge Device: SUBMERSIBLE
Flow Rate:
Static water level: 27.37
Well TD: 400 ml/min
Well Construction: 2" PVC

Time	pH ± 0.1	COND (ms/cm) ± 3%	TURB (NTU) ± 10% or < 10	DO (mg/L) ± 10%	TEMP (°C) ± 3%	ORP (mv) ± 10 mV	VOL PURG (gal) or (L)	DTW (ft TOPVC) < 0.3 ft, drawdown
0935	6.56	0.527	54.3	11.99	14.68	90	0.0	23.42
0940	6.60	0.559	39.1	1.48	14.79	92	2.0	23.41
0945	6.60	0.561	26.3	1.55	14.92	95	4.0	23.41
0950	6.61	0.581	10.4	1.36	14.64	85	6.0	"
0955	6.60	0.600	5.1	1.06	14.68	77	8.0	"
1000	6.59	0.602	3.6	0.92	14.31	75	10.0	"
1005	6.56	0.612	1.2	0.79	13.84	71	12.0	"
1010	6.56	0.611	1.0	0.57	14.25	70	14.0	"
1015	6.70	0.609	1.2	0.54	15.68	59	16.0	"
1020	6.74	0.603	0.8	0.51	16.05	55	18.0	"
1020	SAMPLED							

Comments:

Groundwater Monitoring Well Purging and Sampling

PLEXUS scientific

Site Name: Fort Drum
Project #: 8119-4D3
Well ID: 1995-MW43
Initial Water Level: 26.75
Well Construction: 4" PVC

Sampling Method: Submersible
Pump Inlet: 35 ft
Flow Rate: 300 mL/min
Personnel: AM/BB
Date: 9-30-13

Time	Temp +/-3%	pH +/- 0.1	ORP +/- 10 (mV)	Conductivity +/- 3%	Turbidity +/-10% (NTU) or <10	DO +/- 10% (mg/L)	Volume Removed (Liters)	Depth to water +/- 0.3 (ft)
10:35	17.56	7.01	121	1.76	0.0	8.91	0	26.79
10:40	16.52	6.84	139	1.78	0.0	6.85	1.5	26.80
10:45	16.26	6.84	140	1.76	0.0	6.75	3.0	26.80
10:50	16.34	6.85	141	1.76	0.0	6.50	4.5	26.81
10:55	16.48	6.85	143	1.76	0.0	6.21	6.0	26.81
11:00	16.54	6.83	145	1.80	0.0	6.15	7.5	26.81
11:05	16.33	6.82	146	1.80	0.0	6.21	9.0	26.81
SAMPLE								
11:05	16.33	6.82	146	1.80	0.0	6.21	9.0	26.81

QC SAMPLE(S): MNA SAMPLES: Fe2+ =

Notes:

VOC

Groundwater Monitoring Well Purging and Sampling

PLEXUS scientific

Site Name: Fort Drum
Project #: 8119-4D3
Well ID: 1995-MWS10
Initial Water Level: 25.16
Well Construction: 4" PVC

Sampling Method: Submersible
Pump Inlet:
Flow Rate: 300 mL/min
Personnel: NF + JC + AM
Date: 9-26-2013

Time	Temp +/-3%	pH +/- 0.1	ORP +/- 10 (mV)	Conductivity +/- 3%	Turbidity +/-10% (NTU) or <10	DO +/- 10% (mg/L)	Volume Removed (Liters)	Depth to water +/- 0.3 (ft)
16:30	16.34	6.73	-84	0.691	30.2	3.83	0	25.23
16:35	15.43	6.40	-93	0.752	30.5	0.73	1.5	25.22
16:40	15.46	6.42	-97	0.828	30.6	0.41	3	25.22
16:45	15.29	6.44	-98	0.890	22.3	0.24	4.5	25.22
16:50	14.76	6.46	-99	0.945	19.6	0.17	6	25.22
16:55	14.89	6.46	-99	0.959	18.5	0.17	7.5	25.22
17:00	14.95	6.47	-100	0.973	17.9	0.16	9	25.22
SAMPLE								
17:00	14.95	6.47	-100	0.973	17.9	0.16	9	25.22

QC SAMPLE(S): N/A
MNA SAMPLES: Fe2+ = 1.6

Notes: VOCs + MNA

Groundwater Monitoring Well Purging and Sampling

PLEXUS scientific

Site Name: Fort Drum
Project #: 8119-4D3
Well ID: 1995-MW59
Initial Water Level: 24.90
Well Construction: 4" PVC

Sampling Method: Submersible
Pump Inlet:
Flow Rate: 300 mL/min
Personnel: NF + JC + AM
Date: 9-26-203

Time	Temp +/-3%	pH +/- 0.1	ORP +/- 10 (mV)	Conductivity +/- 3%	Turbidity +/-10% (NTU) or <10	DO +/- 10% (mg/L)	Volume Removed (Liters)	Depth to water +/- 0.3 (ft)
15:15	15.13	6.07	-77	4.54	5.0	2.18	0	25.12
15:20	14.55	6.27	-69	4.74	0.7	0.46	1.5	25.10
15:25	14.03	6.30	-72	4.61	0.8	0.07	3	25.12
15:30	14.09	6.32	-74	4.12	5.8	0.00	4.5	25.11
15:35	14.70	6.33	-75	3.94	6.8	0.00	6	25.03
15:40	15.04	6.32	-76	3.92	6.6	0.00	7.5	24.98
15:45	15.12	6.32	-77	3.85	6.7	0.00	9	24.98
SAMPLE								
15:45	15.12	6.32	-77	3.85	6.7	0.00	9	24.98

QC SAMPLE(S): MS / MSD
MNA SAMPLES: Fe2+ = 1.1

Notes: VOCs + MNA + MS/MSD

Groundwater Monitoring Well Purging and Sampling

PLEXUS scientific

Site Name: Fort Drum
Project #: 8119-4D3
Well ID: 3805-PZ6
Initial Water Level: 25.40'
Well Construction: 2" PVC

Sampling Method: Submersible
Pump Inlet: 29'
Flow Rate: 300 mL/min
Personnel: BB/AM
Date: 9/30/13

Time	Temp +/-3%	pH +/- 0.1	ORP +/- 10 (mV)	Conductivity +/- 3%	Turbidity +/-10% (NTU) or <10	DO +/- 10% (mg/L)	Volume Removed (Liters)	Depth to water +/- 0.3 (ft)
1130	17.29	6.80	-104	0.772	135	10.13	0.0	25.42
1135	15.50	6.78	-90	0.755	112	7.70	1.5	25.46
1140	15.06	6.51	-82	0.631	82.6	6.77	3.0	25.45
1145	15.19	6.52	-77	0.585	77.0	6.12	4.5	25.47
1150	15.00	6.51	-72	0.555	23.8	5.42	6.0	25.47
1155	16.26	6.50	-69	0.545	25.7	4.90	7.5	25.45
1200	16.32	6.51	-69	0.540	0.0	4.86	9.0	25.44
1205	15.97	6.45	-65	0.539	0.0	4.74	11.5	25.47
1210	15.95	6.47	-61	0.543	1.3	4.61	13.0	25.46
SAMPLE								
BB 1210	15.95	6.47	-61	0.543	1.3	4.61	13.0	25.46

QC SAMPLE(S): N/A
MNA SAMPLES: Fe2+ = N/A

Notes: VOCs

Groundwater Monitoring Well Purging and Sampling

PLEXUS scientific

Site Name: Fort Drum
Project #: 8119-4D3
Well ID: 3805-002
Initial Water Level: 19.25
Well Construction: 2 inch PVC

Sampling Method: Submersible
Pump Inlet:
Flow Rate: 400 mL/min
Personnel: AM MBW
Date: 9-25-13

Time	Temp +/-3%	pH +/- 0.1	ORP +/- 10 (mV)	Conductivity +/- 3%	Turbidity +/-10% (NTU) or <10	DO +/- 10% (mg/L)	Volume Removed (Liters)	Depth to water +/- 0.3 (ft)
13:20	14.81	6.62	-55	0.265	49.0	7.44	0	19.25
13:25	14.61	6.46	-75	0.362	17.9	3.70	2.0	19.62
13:30	14.34	6.39	-84	0.414	9.2	2.68	4.0	19.72
13:35	14.04	6.32	-88	0.432	10.7	1.59	6.0	19.76
13:40	14.02	6.28	-89	0.436	10.9	1.49	8.0	19.79
13:45	13.99	6.27	-91	0.439	10.4	1.41	10.0	19.78
SAMPLE								
13:45	13.99	6.27	-91	0.439	10.4	1.41	10.0	19.78

QC SAMPLE(S): MNA SAMPLES: Fe2+ =

Notes:

VOCs & (Bio)

Groundwater Monitoring Well Purging and Sampling

PLEXUS scientific

Site Name: Fort Drum
Project #: 8119-4D3
Well ID: 3805-014
Initial Water Level: 17.10
Well Construction: 2" PVC

Sampling Method: Submersible
Pump Inlet: 23'
Flow Rate: 300 mL/min
Personnel: BB/AM
Date: 09/30/13

Time	Temp +/-3%	pH +/- 0.1	ORP +/- 10 (mV)	Conductivity +/- 3%	Turbidity +/-10% (NTU) or <10	DO +/- 10% (mg/L)	Volume Removed (Liters)	Depth to water +/- 0.3 (ft)
13:20	16.29	6.61	-47	0.285	509	8.89	0.0	17.10
13:25	15.62	6.51	-49	0.313	92.1	5.60	1.5	17.25
13:30	15.79	6.50	-59	0.359	88.0	5.53	3.0	17.24
13:35	16.21	6.50	-61	0.357	92.6	5.05	4.5	17.21
13:40	16.14	6.50	-62	0.371	86.5	4.51	6.0	17.21
13:45	16.16	6.50	-63	0.369	81.5	4.71	7.5	17.22
13:50	16.15	6.50	-64	0.370	81.4	4.49	9.0	17.23
SAMPLE								
13:50	16.15	6.50	-64	0.370	81.4	4.49	9.0	17.23

QC SAMPLE(S): DUP-1
MNA SAMPLES: Fe2+ = N/A

Notes: VOCs

Groundwater Monitoring Well Purging and Sampling

PLEXUS scientific

Site Name: Fort Drum
Project #: 8119-4D3
Well ID: 3805 - 016
Initial Water Level: 18.82
Well Construction: 2m PVC

Sampling Method: Submersible
Pump Inlet: 20.5 ft
Flow Rate: 300 mL/min
Personnel: AM MBW
Date: 9/25/13

Time	Temp +/-3%	pH +/- 0.1	ORP +/- 10 (mV)	Conductivity +/- 3%	Turbidity +/-10% (NTU) or <10	DO +/- 10% (mg/L)	Volume Removed (Liters)	Depth to water +/- 0.3 (ft)
1450	17.68	6.88	-102	0.414	16.3	4.95	0	18.82
1455	16.50	6.72	-90	0.337	16.1	4.00	1.5	19.00
1500	16.19	6.63	-84	0.331	17.0	3.44	3.0	19.06
1505	16.49	6.59	-86	0.319	16.4	1.02	4.5	18.95
1510	16.52	6.54	-86	0.319	16.6	0.94	6.0	18.95
1515	16.55	6.49	-85	0.332	3.2	0.38	7.5	18.95
1520	16.56	6.45	-83	0.339	3.1	0.36	9.0	18.96
1525	16.54	6.43	-82	0.333	3.3	0.34	10.5	18.96
SAMPLE								
1525	16.54	6.43	-82	0.33	3.3	0.34	10.5	18.96

QC SAMPLE(S): MNA SAMPLES: Fe2+ =

Notes:

VOCs

Groundwater Monitoring Well Purging and Sampling

PLEXUS scientific

Site Name: Fort Drum
Project #: 8119-4D3
Well ID: 3805-MW39
Initial Water Level: 20.10'
Well Construction: 4" PVC

Sampling Method: Submersible
Pump Inlet: 28'
Flow Rate: 300 mL/min
Personnel: AM BB
Date: 9-30-13

Time	Temp +/-3%	pH +/- 0.1	ORP +/- 10 (mV)	Conductivity +/- 3%	Turbidity +/-10% (NTU) or <10	DO +/- 10% (mg/L)	Volume Removed (Liters)	Depth to water +/- 0.3 (ft)
12:25	14.58	6.20	-45	3.76	644	1.50	0	20.25
12:30	13.60	6.68	-75	3.69	345	4.15	1.5	20.26
12:35	13.65	7.09	-80	2.55	126	2.29	3.0	20.25
12:40	14.19	7.05	-98	1.80	65.2	1.68	4.5	20.24
12:45	14.31	6.99	-102	1.62	89.4	1.17	6.0	20.24
12:50	14.42	6.94	-101	1.49	54.9	0.85	7.5	20.25
12:55	14.52	6.875	-83	1.05	33.0	3.10	9.0	20.25
13:00	14.84	6.64	-62	.896	20.1	0.78	10.5	20.24
13:05	14.94	6.58	-59	.888	18.7	0.71	12	20.25
13:10	14.92	6.54	-58	.887	18.1	0.74	13.5	20.24
SAMPLE								
13:10	14.92	6.54	-58	.887	18.1	0.74	13.5	20.24

QC SAMPLE(S): MNA SAMPLES: Fe2+ =

Notes:

VOCs

Groundwater Monitoring Well Purging and Sampling

PLEXUS scientific

Site Name: Fort Drum
Project #: 8119-4D3
Well ID: 3805-MWD10
Initial Water Level: 29.20
Well Construction: 2" PVC

Sampling Method: Submersible
Pump Inlet:
Flow Rate: 300 mL/min
Personnel: BB & AM
Date: 9/28/2013

Time	Temp +/-3%	pH +/- 0.1	ORP +/- 10 (mV)	Conductivity +/- 3%	Turbidity +/-10% (NTU) or <10	DO +/- 10% (mg/L)	Volume Removed (Liters)	Depth to water +/- 0.3 (ft)
1245	16.10	7.63	44	0.495	0.0	10.56	0.0	31.51
1250	14.75	7.87	17	0.487	0.0	10.04	1.5	~~39~~ 31.09
1255	14.37	7.91	13	0.490	0.0	10.08	3.0	31.91
1300	12.92	8.01	-13	0.511	0.0	9.73	4.5	32.10
1305	12.89	8.03	-30	0.526	0.0	9.30	6.0	32.38
1310	12.99	8.06	-52	0.558	0.0	8.39	7.5	33.25
1315	12.98	8.07	-64	0.569	0.0	7.76	9.0	33.49
1320	13.10	8.08	-69	0.570	0.0	~~7.60~~ 7.34	11.5	33.56
1325	13.09	8.08	-71	0.568	0.0	7.59	13.0	33.61
SAMPLE								
1325	13.09	8.08	-71	0.568	0.0	7.59	13.0	33.61

QC SAMPLE(S):
MNA SAMPLES: Fe2+ =

Notes: VOCs

Groundwater Monitoring Well Purging and Sampling

PLEXUS scientific

Site Name: Fort Drum
Project #: 8119-4D3
Well ID: 3805-MWD13
Initial Water Level: 31.15
Well Construction: 2 inch PVC

Sampling Method: Submersible
Pump Inlet:
Flow Rate: 300 mL/min
Personnel: AM
Date: 9-28-13

Time	Temp +/-3%	pH +/- 0.1	ORP +/- 10 (mV)	Conductivity +/- 3%	Turbidity +/-10% (NTU) or <10	DO +/- 10% (mg/L)	Volume Removed (Liters)	Depth to water +/- 0.3 (ft)
14:15	12.46	7.17	-85	0.539	0.0	0.0	0	31.85
14:20	12.40	7.55	-62	0.529	0.0	0.0	1.5	32.94
14:25	12.34	7.66	-74	0.588	0.0	0.0	3.0	32.90
14:30	12.34	7.82	-87	0.635	0.0	0.0	4.5	32.91
14:35	12.33	7.90	-89	0.641	0.0	0.0	6.0	32.85
14:40	12.34	7.95	-87	0.645	0.0	0.0	7.5	32.88
14:45	12.38	7.97	-86	0.646	0.0	0.0	9.0	32.88
SAMPLE								
14:45	12.38	7.97	-86	0.646	0.0	0.0	9.0	32.88

QC SAMPLE(S): MNA SAMPLES: Fe2+ =

Notes: VOCs

3

Groundwater Monitoring Well Purging and Sampling

PLEXUS scientific

Site Name: Fort Drum
Project #: 8119-4D3
Well ID: 3305-MW.D16
Initial Water Level: 31 80
Well Construction: 2 in PVC

Sampling Method: Submersible
Pump Inlet: 60 ft
Flow Rate: 300 mL/min
Personnel: BR - HBW
Date: 9/25/2013

Time	Temp +/-3%	pH +/- 0.1	ORP +/- 10 (mV)	Conductivity +/- 3%	Turbidity +/-10% (NTU) or <10	DO +/- 10% (mg/L)	Volume Removed (Liters)	Depth to water +/- 0.3 (ft)
0925	10.88	7.59	-84	0.205	3.1	0.00	0	32.42
0930	10.83	7.65	-79	0.202	3.4	0.00	1.5	33.26
0935	10.77	7.60	-70	0.202	2.5	0.00	3.0	33.60
0940	10.76	7.57	-61	0.202	2.2	0 00	4.5	33.72
0945	10.77	7.55	-57	0.203	2.1	0.0	6.0	33.70
SAMPLE								
0945	10.77	7.55	-57	0.203	2.1	0.0	6.0	33.70

QC SAMPLE(S): MNA SAMPLES: Fe2+ =

Notes:

VOCs
SVOCs
Metals

Groundwater Monitoring Well Purging and Sampling

PLEXUS scientific

Site Name: Fort Drum
Project #: 8119-4D3
Well ID: 3805-MWDI8
Initial Water Level: 32.41
Well Construction: 2" PVC

Sampling Method: Submersible
Pump Inlet:
Flow Rate: 300 mL/min
Personnel: NF+JC+AM
Date: 9-24-2013

Time	Temp +/-3%	pH +/- 0.1	ORP +/- 10 (mV)	Conductivity +/- 3%	Turbidity +/-10% (NTU) or <10	DO +/- 10% (mg/L)	Volume Removed (Liters)	Depth to water +/- 0.3 (ft)
13:30	12.43	6.90	-148	0.207	217	1.33	0	34.42
13:35	12.68	6.96	-147	0.205	112	1.15	1.5	36.61
13:40	12.85	6.98	-154	0.197	63.8	1.07	3	36.51
13:45	13.07	7.04	-143	0.195	47.0	0.84	4.5	36.90
13:50	13.12	7.12	-147	0.194	22.4	0.70	6	37.15
13:55	12.99	7.20	-158	0.202	12.8	0.46	7.5	37.90
14:00	13.23	7.25	-161	0.204	6.6	0.44	9	37.98
14:05	13.30	7.26	-163	0.208	5.3	0.42	10.5	38.10
SAMPLE								
14:05	13.30	7.26	-163	0.208	5.3	0.42	10.5	38.10

QC SAMPLE(S): N/A
MNA SAMPLES: Fe2+ = N/A

Notes: VOCs + SVOCs + TAL Metals

Groundwater Monitoring Well Purging and Sampling

PLEXUS scientific

Site Name: Fort Drum
Project #: 8119-4D3
Well ID: 3805-MW D#7
Initial Water Level: 18.[redacted]47
Well Construction: 2" PVC

Sampling Method: Submersible
Pump Inlet:
Flow Rate: 300 mL/min
Personnel: NF + BB
Date: 9-28-2013

Time	Temp +/-3%	pH +/- 0.1	ORP +/- 10 (mV)	Conductivity +/- 3%	Turbidity +/-10% (NTU) or <10	DO +/- 10% (mg/L)	Volume Removed (Liters)	Depth to water +/- 0.3 (ft)
15:05	15.53	8.18	108	0.386	0.0	13.06	0	18.95
15:10	14.97	7.76	119	0.544	0.0	10.73	1.5	20.61
15:15	14.88	7.64	118	0.574	0.0	9.66	3	20.57
15:20	14.45	7.61	116	0.625	0.0	8.83	4.5	20.51
15:25	14.49	7.77	113	0.644	0.0	8.27	6	20.79
15:30	14.18	7.83	107	0.658	0.0	7.89	7.5	21.01
15:35	14.14	7.85	104	0.657	0.0	7.41	9	21.08
SAMPLE								
15:35	14.14	7.85	104	0.657	0.0	7.41	9	21.08

QC SAMPLE(S): N/A
MNA SAMPLES: Fe2+ = N/A

Notes: VOCs

Groundwater Monitoring Well Purging and Sampling

PLEXUS scientific

Site Name: Fort Drum
Project #: 8119-4D3
Well ID: 3805-MWI12
Initial Water Level: 31.02
Well Construction: 2in PVC

Sampling Method: Submersible
Pump Inlet: 40 ft
Flow Rate: 200 mL/min
Personnel: BB MBW
Date: 9/24/2013

Time	Temp +/-3%	pH +/- 0.1	ORP +/- 10 (mV)	Conductivity +/- 3%	Turbidity +/-10% (NTU) or <10	DO +/- 10% (mg/L)	Volume Removed (Liters)	Depth to water +/- 0.3 (ft)
1050	11.28	6.41	149	0,909	~~0.00~~ 2.3	0.00	0	32.00
1055	11.99	6.49	147	0.910	0.5	0.0	1	31.98
1100	12.10	6.50	149	0.920	1.0	0.0	2	32.40
1105	11.90	6.49	108	~~0~~ 451	0.3	0.09	3	33.00
1110	11.87	6.97	80	5.26	0.0	0.57	4	32.70
1115	11.85	6.99	71	5.29	0.0	0.54	5	32.82
1120	11.84	7.08	79	5.31	0.0	0.49	6	32.5
				SAMPLE				
1120								

QC SAMPLE(S): MNA SAMPLES: Fe2+ =

Notes:

Groundwater Monitoring Well Purging and Sampling

PLEXUS scientific

Site Name: Fort Drum
Project #: 8119-4D3
Well ID: 3805 - MWI15
Initial Water Level: 29.70
Well Construction: 2 in PVC

Sampling Method: Submersible
Pump Inlet: 50
Flow Rate: 400 mL/min
Personnel: BB MBW
Date: 9/25/13

Time	Temp +/-3%	pH +/- 0.1	ORP +/- 10 (mV)	Conductivity +/- 3%	Turbidity +/-10% (NTU) or <10	DO +/- 10% (mg/L)	Volume Removed (Liters)	Depth to water +/- 0.3 (ft)
1000	10.79	6.58	-66	1.31	7.0	0.00	0	30.45
1005	11.12	6.69	-62	1.65	5.4	0.00	2.0	30.50
1010	11.22	6.91	-67	1.54	4.5	0.00	4.0	30.65
1015	11.21	7.01	-73	1.43	4.3	0.00	6.0	30.72
1020	11.19	7.09	-79	1.41	3.9	0.00	8.0	30.74
1025	11.20	7.17	-79	1.33	3.6	0.00	10	30.76
1030	11.20	7.24	-82	1.31	3.5	0.00	12	30.65
1035	11.21	7.27	-83	1.30	3.7	0.00	14	30.57
SAMPLE								
10:35	11.21	7.27	-83	1.30	3.7	0.00	14	30.57

QC SAMPLE(S): MS/MSD DUP #2 MNA SAMPLES: Fe2+ =

Notes:

VOC (12)
SVOC (8) Dup-2 @ 0000
Metals (4)

Groundwater Monitoring Well Purging and Sampling

PLEXUS scientific

Site Name: Fort Drum
Project #: 8119-4D3
Well ID: 3805-MW I17
Initial Water Level: 32.52
Well Construction: 2" PVC

Sampling Method: Submersible
Pump Inlet:
Flow Rate: 300 mL/min
Personnel: NF + JC + AM
Date: 9-24-2013

Time	Temp +/-3%	pH +/- 0.1	ORP +/- 10 (mV)	Conductivity +/- 3%	Turbidity +/-10% (NTU) or <10	DO +/- 10% (mg/L)	Volume Removed (Liters)	Depth to water +/- 0.3 (ft)
14:25	13.34	7.26	-163	0.225	5.3	0.21	0	34.35
14:30	12.48	7.08	-112	0.679	2.2	1.55	1.5	34.60
14:35	12.02	6.99	-97	0.764	1.4	2.04	3	34.82
14:40	11.99	7.01	-99	0.757	1.5	1.76	4.5	34.89
14:45	12.00	7.02	-100	0.752	0.0	1.85	6	34.94
14:50	11.92	7.03	-102	0.749	0.0	1.99	7.5	34.98
* 14:55	11.96	7.03	-102	0.748	0.0	2.03	9	34.99
SAMPLE								
14:55	11.96	7.03	-102	0.748	0.0	2.03	9	34.99

QC SAMPLE(S): N/A
MNA SAMPLES: Fe2+ = N/A
Notes: SVOCs + VOCs + TAL Metals

on sample as 14:25 +COC

Groundwater Monitoring Well Purging and Sampling

PLEXUS scientific

Site Name: Fort Drum
Project #: 8119-4D3
Well ID: 3805 - MW120
Initial Water Level: BB ~~14.21~~
Well Construction: 2" PVC

Sampling Method: Submersible
Pump Inlet: ~~28~~ '
Flow Rate: 300 mL/min
Personnel: BB
Date: 9/29/13

Time	Temp +/-3%	pH +/- 0.1	ORP +/- 10 (mV)	Conductivity +/- 3%	Turbidity +/-10% (NTU) or <10	DO +/- 10% (mg/L)	Volume Removed (Liters)	Depth to water +/- 0.3 (ft)
1125	13.05	5.98	113	0.116	0.0	8.59	0.0	BB ~~14.52~~ 15.52
1130	12.06	6.79	85	0.123	0.0	8.24	1.5	15.89
1135	11.96	7.11	63	0.125	0.0	7.42	3.0	16.34
1140	11.73	7.29	58	0.125	0.0	7.07	4.5	16.59
1145	11.67	7.52	60	0.123	0.0	6.62	6.0	16.86
1150	11.67	7.67	61	0.122	0.0	6.04	7.5	16.93
1155	11.53	7.70	59	0.121	0.0	5.69	9.0	16.95
1200	11.53	7.75	58	0.119	0.0	5.58	11.5	17.03
SAMPLE								
1200	11.53	7.75	58	0.119	0.0	5.58	11.5	17.03

QC SAMPLE(S): N/A
MNA SAMPLES: Fe2+ = N/A

Notes: VOCs

Groundwater Monitoring Well Purging and Sampling

PLEXUS scientific

Site Name: Fort Drum
Project #: 8119-4D3
Well ID: 5805-MW-I6
Initial Water Level: 19.03
Well Construction: 2" PVC

Sampling Method: Submersible
Pump Inlet:
Flow Rate: 300mL/min
Personnel: AM
Date: 09-28-13

Time	Temp +/-3%	pH +/- 0.1	ORP +/- 10 (mV)	Conductivity +/- 3%	Turbidity +/-10% (NTU) or <10	DO +/- 10% (mg/L)	Volume Removed (Liters)	Depth to water +/- 0.3 (ft)
15:00	14.28	7.47	-40	1.16	0.0	0.0	0	19.24
15:05	16.56	6.91	5	1.97	0.0	0.0	1.5	19.20
15:10	16.20	6.97	-6	2.53	0.0	0.0	3.0	19.16
15:15	15.80	7.07	-22	2.74	0.0	0.0	4.5	19.19
15:20	15.51	7.15	-33	2.79	0.0	0.0	6.0	19.20
15:25	15.40	7.18	-35	2.80	0.0	0.0	7.5	19.21
15:30	15.43	7.19	-36	2.82	0.0	0.0	9.0	
SAMPLE								

QC SAMPLE(S):
MNA SAMPLES: Fe2+ =

Notes:

VOCs

Groundwater Monitoring Well Purging and Sampling

PLEXUS scientific

Site Name: Fort Drum
Project #: 8119-4D3
Well ID: 3805-MWI9
Initial Water Level: 28.10
Well Construction: 2" PVC

Sampling Method: Submersible
Pump Inlet:
Flow Rate: 300 mL/min
Personnel: AM
Date: 9-28-13

Time	Temp +/-3%	pH +/- 0.1	ORP +/- 10 (mV)	Conductivity +/- 3%	Turbidity +/-10% (NTU) or <10	DO +/- 10% (mg/L)	Volume Removed (Liters)	Depth to water +/- 0.3 (ft)
12:25	12.12	6.89	-97	0.858	0.0	0.0	~~7.5~~ 6.0	28.65
13:30	11.82	6.94	-103	0.451	0.0	0.0	~~3.0~~ 1.5	28.53
13:35	11.84	6.85	-105	0.479	0.0	0.0	~~4.5~~ 3.0	28.52
13:40	11.85	6.80	-107	0.520	0.0	0.0	~~6.0~~ 4.5	28.53
13:45	11.81	6.78	-109	0.585	0.0	0.0	~~7.5~~ 6.0	28.53
13:50	12.04	6.79	-110	0.602	0.0	0.0	~~9.0~~ 7.5	28.50
13:55	12.13	6.80	-111	0.600	0.0	0.0	9.0	28.41
SAMPLE								
13:55	12.13	6.80	-111	0.600	0.0	0.0	9.0	28.41

QC SAMPLE(S): MNA SAMPLES: Fe2+ =

Notes: VOC's

Groundwater Monitoring Well Purging and Sampling

PLEXUS scientific

Site Name: Fort Drum
Project #: 8119-4D3
Well ID: 3805-MWS11
Initial Water Level: 30.16
Well Construction: 2" PVC

Sampling Method: Submersible
Pump Inlet:
Flow Rate: 300 mL/min
Personnel: NF+JC+AM
Date: 9-26-2013

Time	Temp +/-3%	pH +/- 0.1	ORP +/- 10 (mV)	Conductivity +/- 3% mS/cm	Turbidity +/-10% (NTU) or <10	DO +/- 10% (mg/L)	Volume Removed (Liters)	Depth to water +/- 0.3 (ft)
13:30	13.62	6.88	-100	0.366	0.0	1.94	0	30.30
13:35	13.47	6.83	-102	0.365	0.0	1.59	1.5	30.30
13:40	13.02	6.73	-109	0.359	0.0	0.97	3	30.31
13:45	12.89	6.72	-114	0.357	0.0	0.61	4.5	30.31
13:50	12.82	6.71	-116	0.355	0.0	0.46	6	30.31
13:55	12.68	6.71	-117	0.354	0.0	0.43	7.5	30.31
14:00	12.68	6.71	-118	0.354	0.0	0.42	9	30.31
SAMPLE								
14:00	12.68	6.71	-118	0.354	0.0	0.42	9	30.31

QC SAMPLE(S): N/A
MNA SAMPLES: Fe2+ = 1.9

Notes: VOCs + MNA

Groundwater Monitoring Well Purging and Sampling

PLEXUS scientific

Site Name: Fort Drum
Project #: 8119-4D3
Well ID: 3805-MWS14
Initial Water Level: 29.17
Well Construction: 2in PVC

Sampling Method: Submersible
Pump Inlet: 33 ft
Flow Rate: 500 mL/min
Personnel: BB MBW
Date: 9/25/2013

Time	Temp +/-3%	pH +/- 0.1	ORP +/- 10 (mV)	Conductivity +/- 3%	Turbidity +/-10% (NTU) or <10	DO +/- 10% (mg/L)	Volume Removed (Liters)	Depth to water +/- 0.3 (ft)
0830	12.77	5.54	-23	1.03	72.5	6.18	0	29.03
0835	12.45	5.82	-59	1.74	67.0	3.74	1.5	29.29
0840	12.22	5.95	-71	2.09	68.9	2.41	3.0	29.30
0845	12.09	6.06	-78	2.43	70.0	1.28	4.5	29.33
0850	11.92	6.16	-85	2.74	69.1	0.07	6.0	29.34
0855	11.72	6.24	-89	2.87	70.4	0.00	7.5	29.37
0900	11.70	6.29	-92	2.90	71.2	0.00	9.0	29.36
0905	11.68	6.34	-95	3.00	71.8	0.00	10.5	29.37
SAMPLE								
0905	11.68	6.34	-95	3.00	71.8	0.00	10.5	29.37

QC SAMPLE(S): MNA SAMPLES: Fe2+ =

Notes:

VOCs
SVOCs
Metals

Groundwater Monitoring Well Purging and Sampling

PLEXUS scientific

Site Name: Fort Drum
Project #: 8119-4D3
Well ID: 3805-MWS19
Initial Water Level: 13.92
Well Construction: 2" PVC

Sampling Method: Submersible
Pump Inlet: 19.5'
Flow Rate: 300 mL/min
Personnel: BB
Date: 9/29/13

Time	Temp +/-3%	pH +/- 0.1	ORP +/- 10 (mV)	Conductivity +/- 3%	Turbidity +/-10% (NTU) or <10	DO +/- 10% (mg/L)	Volume Removed (Liters)	Depth to water +/- 0.3 (ft)
1045	13.66	5.02	253	0.038	0.0	2.89	0.0	14.06
1050	13.61	5.02	235	0.040	0.0	2.15	1.5	14.06
1055	13.59	5.24	165	0.052	0.0	1.60	3.0	14.07
1100	13.48	5.32	144	0.057	0.0	1.30	4.5	14.08
1105	13.19	5.38	139	0.059	0.0	1.26	6.0	14.09
1110	13.17	5.44	138	0.060	0.0	1.27	7.5	14.10
1115	13.22	5.46	139	0.061	0.0	1.32	9.0	14.11
SAMPLE								
1115	13.22	5.46	139	0.061	0.0	1.32	9.0	14.11

QC SAMPLE(S): N/A
MNA SAMPLES: Fe2+ = N/A

Notes: VOCs only

Groundwater Monitoring Well Purging and Sampling

PLEXUS scientific — 25 years

Site Name: Fort Drum
Project #: 8119-4D3
Well ID: 3805- MW52
Initial Water Level: 13.84
Well Construction: 2in PVC

Sampling Method: Submersible
Pump Inlet: 17 ft
Flow Rate: 200 mL/min
Personnel: AM MBW
Date: 9/25/13

Time	Temp +/-3%	pH +/- 0.1	ORP +/- 10 (mV)	Conductivity +/- 3%	Turbidity +/-10% (NTU) or <10	DO +/- 10% (mg/L)	Volume Removed (Liters)	Depth to water +/- 0.3 (ft)
1240	17.06	7.44	111	0.281	46.7	5.23	0	13.83
1245	16.75	6.90	138	0.271	41.7	4.52	1.0	13.90
1250	16.71	6.72	144	0.270	40.2	4.21	2.0	13.95
1255	16.65	6.66	147	0.269	40.4	4.08	3.0	13.95
1300	16.68	6.63	148	0.269	39.4	3.97	4.0	13.95
1305	16.69	6.65	148	0.268	36.7	3.74	5.0	13.95
SAMPLE								
1305	16.69	6.65	148	0.268	36.7	3.74	5.0	13.95

QC SAMPLE(S): MNA SAMPLES: Fe2+ =

Notes:

VOCs
SVOCs
Metals

Groundwater Monitoring Well Purging and Sampling

PLEXUS scientific

Site Name: Fort Drum
Project #: 8119-4D3
Well ID: 3805 - MWS23
Initial Water Level: 17.90
Well Construction: 4in PVC

Sampling Method: Submersible
Pump Inlet: 30
Flow Rate: 400. mL/min
Personnel: JM MBW
Date: 9/25/13

Time	Temp +/-3%	pH +/- 0.1	ORP +/- 10 (mV)	Conductivity +/- 3%	Turbidity +/-10% (NTU) or <10	DO +/- 10% (mg/L)	Volume Removed (Liters)	Depth to water +/- 0.3 (ft)
1545	14.98	6.07	-54	0.813	327	0.00	0	17.90
1550	14.66	6.04	-67	1.08	311	2.57	2	18.60
1555	15.00	6.11	-83	1.52	293	1.81	4	18.62
1600	15.05	6.21	-94	1.76	251	1.06	6	18.63
1605	14.80	6.25	-98	1.80	244	0.33	8	18.64
1610	14.83	6.27	-100	1.93	222	0.10	10	18.63
1615	14.84	6.28	-103	1.95	215	0.09	12	18.63
1620	14.84	6.29	-105	1.95	204	0.09	14	18.64
SAMPLE								
1620	14.84	6.29	-105	1.95	204	0.09	14	18.64

QC SAMPLE(S): MNA SAMPLES: Fe2+ =

Notes:

10Cs

Groundwater Monitoring Well Purging and Sampling

PLEXUS scientific

Site Name: Fort Drum
Project #: 8119-4D3
Well ID: 3805-MWS24
Initial Water Level: 22.51
Well Construction: 4m PVC

Sampling Method: Submersible
Pump Inlet: 27
Flow Rate: 400 mL/min
Personnel: BB MBN
Date: 9/26/13

Time	Temp +/-3%	pH +/- 0.1	ORP +/- 10 (mV)	Conductivity +/- 3%	Turbidity +/-10% (NTU) or <10	DO +/- 10% (mg/L)	Volume Removed (Liters)	Depth to water +/- 0.3 (ft)
1400	14.14	6.27	-90	0.338	9.2	0.00	0	22.56
1405	13.46	6.30	700	0.343	6.2	0.00	2.00	22.61
1410	13.54	6.31	-101	0.344	6.8	0.00	4.00	22.60
1415	13.93	6.35	-107	0.344	5.3	0.00	6.0	22.57
1420	13.90	6.33	-106	0.344	5.1	0.00	8.0	22.59
1425	13.89	6.42	-115	0.343	5.0	0.00	10.0	22.58
SAMPLE								
1425	13.89	6.42	-115	0.343	5.0	0.00	10.0	22.58

QC SAMPLE(S): MNA SAMPLES: Fe2+ = 5.3

Notes:

VOCs

MNA

Groundwater Monitoring Well Purging and Sampling

PLEXUS scientific

Site Name: Fort Drum
Project #: 8119-4D3
Well ID: 3805-MW53
Initial Water Level: 20'1"
Well Construction: 2inch PVC

Sampling Method: Submersible
Pump Inlet: 22.23 ft
Flow Rate: 300 mL/min
Personnel: MBW AM
Date: 9-25-15

Time	Temp +/-3%	pH +/- 0.1	ORP +/- 10 (mV)	Conductivity +/- 3%	Turbidity +/-10% (NTU) or <10	DO +/- 10% (mg/L)	Volume Removed (Liters)	Depth to water +/- 0.3 (ft)
14:05	15.01	6.09	42.00	1.53	24.2	5.88	0	20.10
14:10	14.67	6.30	81.00	1.48	8.5	4.89	1.5	20.11
14:15	14.26	6.36	99	1.41	3.8	4.55	3.0	20.14
14:20	14.22	6.42	106	1.33	0.3	4.18	4.5	20.17
14:25	14.22	6.49	111	1.31	0.0	3.89	6.0	20.19
14:30	14.17	6.52	114	1.29	0.0	3.65	7.5	20.20
14:35	14.14	6.52	119	1.27	0.0	3.41	9.0	20.20
SAMPLE								
1435	14.14	6.52	119	1.27	0.0	3.41	9.0	20.20

QC SAMPLE(S): MNA SAMPLES: Fe2+ =

Notes:

VOC only

Groundwater Monitoring Well Purging and Sampling

PLEXUS scientific

Site Name: Fort Drum
Project #: 8119-4D3
Well ID: 3805-MW54
Initial Water Level: 32.96
Well Construction: 2" PVC

Sampling Method: Submersible
Pump Inlet:
Flow Rate: 300 mL/min
Personnel: NF+JC+AM
Date: 9-24-2013

Time	Temp +/-3%	pH +/- 0.1	ORP +/- 10 (mV)	Conductivity +/- 3%	Turbidity +/-10% (NTU) or <10	DO +/- 10% (mg/L)	Volume Removed (Liters)	Depth to water +/- 0.3 (ft)
12:30	11.29	6.58	-77	0.690	5.7	6.18	0	33.02
12:35	11.76	6.65	-85	0.683	1.9	5.64	1.5	33.02
12:40	12.02	6.69	-89	0.679	0.8	5.23	3	33.01
12:45	12.20	6.69	-90	0.675	0.0	4.79	4.5	33.01
12:50	12.58	6.67	-88	0.680	0.0	4.10	6	33.01
12:55	12.58	6.67	-89	0.679	0.0	3.81	7.5	33.02
13:00	12.58	6.65	-88	0.678	0.0	3.75	9	33.02
SAMPLE								
13:00	12.58	6.65	-88	0.678	0.0	3.75	9	33.02

QC SAMPLE(S): N/A
MNA SAMPLES: Fe2+ = N/A

Notes: VOCs + SVOCs + TAL Metals

Groundwater Monitoring Well Purging and Sampling

PLEXUS scientific

Site Name: Fort Drum
Project #: 8119-4D3
Well ID: 3805-MW85
Initial Water Level: 18.95
Well Construction: 2M PVC

Sampling Method: Submersible
Pump Inlet: 21.5 ft
Flow Rate: 300 mL/min
Personnel: BB. MBW
Date: 9/26/13

Time	Temp +/-3%	pH +/- 0.1	ORP +/- 10 (mV)	Conductivity +/- 3%	Turbidity +/-10% (NTU) or <10	DO +/- 10% (mg/L)	Volume Removed (Liters)	Depth to water +/- 0.3 (ft)
1605	15.48	6.57	-112	0.257	38.0	0.00	0	19.02
1610	15.36	6.67	-125	0.248	28.6	0.00	1.5	19.12
~~1615~~	~~15.49~~	~~6.14~~	~~-47~~	~~0.000~~				~~18.99~~ MBW
1615	15.89	6.54	-89	0.233	13.6	0.00	3	18.99
1620	15.52	6.56	-100	0.223	7.8	0.00	4.5	19.03
1625	15.42	6.60	-104	0.215	8.0	0.0	6.0	19.15
1630	15.40	6.63	-110	0.214	7.7	0.0	7.5	19.20
1635	15.43	6.64	-114	0.215	7.6	0.0	9.0	19.32
SAMPLE								
1635	15.43	6.64	-114	0.215	7.6	0.0	9.0	19.32

QC SAMPLE(S): MNA SAMPLES: Fe2+ = 6.4

Notes: VOCs
MNA

Groundwater Monitoring Well Purging and Sampling

PLEXUS scientific

Site Name: Fort Drum
Project #: 8119-4D3
Well ID: 3805 - MW58
Initial Water Level: 28.41
Well Construction: 2" PVC

Sampling Method: Submersible
Pump Inlet:
Flow Rate: 300 mL/min
Personnel: NF + JC
Date: 9-28-2013

Time	Temp +/-3%	pH +/- 0.1	ORP +/- 10 (mV)	Conductivity +/- 3%	Turbidity +/-10% (NTU) or <10	DO +/- 10% (mg/L)	Volume Removed (Liters)	Depth to water +/- 0.3 (ft)
12:45	13.17	5.96	-2	1.79	0.0	1.87	0	28.41
12:50	12.96	6.07	-20	1.78	0.0	0.0	1.5	28.50
12:55	12.41	6.38	-65	1.58	0.0	0.0	3.0	28.51
13:00	12.24	6.46	-76	1.50	0.0	0.0	4.5	28.51
13:05	12.17	6.52	-85	1.39	0.0	0.0	6.0	28.51
13:10	12.13	6.55	-90	1.35	0.0	0.0	7.5	28.51
13:15	12.10	6.59	-94	1.32	0.0	0.0	9.0	28.51
SAMPLE								
13:15	12.10	6.59	-94	1.32	0.0	6.0	9.0	28.51

QC SAMPLE(S):
MNA SAMPLES: Fe2+ = N/A

Notes: VOCs

Groundwater Monitoring Well Purging and Sampling

PLEXUS scientific

Site Name: Fort Drum
Project #: 8119-4D3
Well ID: 3805-P21I
Initial Water Level: 27.10
Well Construction: 2" PVC

Sampling Method: Submersible
Pump Inlet:
Flow Rate: 400 mL/min
Personnel: NF + BB
Date: 9-28-2013

Time	Temp +/-3%	pH +/- 0.1	ORP +/- 10 (mV)	Conductivity +/- 3%	Turbidity +/-10% (NTU) or <10	DO +/- 10% (mg/L)	Volume Removed (Liters)	Depth to water +/- 0.3 (ft)
13:45	18.19	7.66	70	0.344	0.0	8.74	0	27.19
13:50	18:20	7.66	80	0.422	0.0	8.40	2	27.16
13:55	18:19	7.49	103	0.960	0.0	9.17	4	27.16
14:00	17:39	7.54	106	1.17	0.0	8.93	6	27.18
14:05	14.58	7.47	112	1.43	0.0	9.10	8	27.22
14:10	13.90	7.46	112	1.49	0.0	8.40	10	27.22
14:15	13.99	7.48	112	1.50	0.0	8.04	12	27.22
14:20	14.01	7.49	114	1.48	0.0	7.78	14	27.22
SAMPLE								

QC SAMPLE(S): N/A
MNA SAMPLES: Fe2+ = N/A

Notes: VOCs

Groundwater Monitoring Well Purging and Sampling

PLEXUS scientific

Site Name: Fort Drum
Project #: 8119-4D3
Well ID: 3805PZ125
Initial Water Level: 26.08
Well Construction: 2" PVC

Sampling Method: Submersible
Pump Inlet:
Flow Rate: 300 mL/min
Personnel: NF + JC + AM
Date: 9-26-2013

Time	Temp +/-3%	pH +/- 0.1	ORP +/- 10 (mV)	Conductivity +/- 3%	Turbidity +/-10% (NTU) or <10	DO +/- 10% (mg/L)	Volume Removed (Liters)	Depth to water +/- 0.3 (ft)
14:15	14.80	6.53	-81	0.462	0.0	3.52	0	26.30
14:20	13.80	6.47	-93	0.475	0.0	0.74	1.5	26.30
14:25	13.77	6.48	-96	0.476	0.0	0.52	3	26.31
14:30	13.71	6.47	-99	0.484	0.0	0.28	4.5	26.29
14:35	13.92	6.48	-101	0.486	0.0	0.22	6	26.22
14:40	14.45	6.48	-102	0.484	0.0	0.22	7.5	26.23
14:45	14.69	6.48	-102	0.485	0.0	0.21	9	26.23
14:50	14.79	6.49	-102	0.484	0.0	0.20	10.5	26.22
SAMPLE								

QC SAMPLE(S): N/A
MNA SAMPLES: Fe2+ = 3.0

Notes: VOCs + MNA

Groundwater Monitoring Well Purging and Sampling

PLEXUS scientific

Site Name: Fort Drum
Project #: 8119-4D3
Well ID: 3805-PZ13D
Initial Water Level: 24.60
Well Construction: 2" PVC

Sampling Method: Submersible
Pump Inlet:
Flow Rate: 300 mL/min
Personnel: NF + JC
Date: 9-25-2017

Time	Temp +/-3%	pH +/- 0.1	ORP +/- 10 (mV)	Conductivity +/- 3%	Turbidity +/-10% (NTU) or <10	DO +/- 10% (mg/L)	Volume Removed (Liters)	Depth to water +/- 0.3 (ft)
13:50	15.33	7.43	138	0.170	4.0	9.54	0	26.41
13:55	14.03	7.36	149	0.171	0.0	9.15	1.5	26.98
14:00	13.87	7.54	145	0.169	0.0	8.59	3	27.55
14:05	14.11	7.74	139	0.168	0.0	8.30	4.5	26.43
14:10	14.22	7.81	138	0.167	0.0	8.16	6	26.18
14:15	14.36	7.85	137	0.168	0.0	8.07	7.5	26.20
14:20	14.54	7.90	137	0.167	0.0	7.88	9	25.97
SAMPLE								
14:20	14.54	7.90	137	0.167	0.0	7.88	9	25.97

QC SAMPLE(S): N/A
MNA SAMPLES: Fe2+ = N/A

Notes: VOCs

Groundwater Monitoring Well Purging and Sampling

PLEXUS scientific — 25 years

Site Name: Fort Drum
Project #: 8119-4D3
Well ID: 2805-PZ13I
Initial Water Level: 27.22
Well Construction: 2" PVC

Sampling Method: Submersible
Pump Inlet:
Flow Rate: 300 mL/min
Personnel: NF + JC
Date: 9-25-2013

Time	Temp +/-3%	pH +/- 0.1	ORP +/- 10 (mV)	Conductivity +/- 3%	Turbidity +/-10% (NTU) or <10	DO +/- 10% (mg/L)	Volume Removed (Liters)	Depth to water +/- 0.3 (ft)
14:35	13.34	7.18	156	1.82	53.8	9.05	0	27.27
14:40	13.13	7.19	150	1.90	20.1	8.06	1.5	27.45
14:45	12.82	7.20	145	1.88	3.0	7.33	3	27.48
14:50	12.77	7.17	144	1.88	0.0	6.69	4.5	27.42
14:55	12.73	7.17	143	1.87	0.0	6.42	6	27.36
15:00	12.39	7.17	143	1.85	0.0	1.69	7.5	28.02
15:05	12.27	7.18	143	1.80	0.0	1.94	9	28.11
15:10	12.12	7.20	140	1.75	0.0	1.87	10.5	27.80
15:15	12.18	7.20	139	1.75	0.0	1.85	13	27.72
SAMPLE								
15:15	12.18	7.20	139	1.75	0.0	1.85	13	27.72

QC SAMPLE(S): N/A
MNA SAMPLES: Fe2+ = N/A

Notes: VOCs

PLEXUS scientific

Groundwater Monitoring Well Purging and Sampling

Site Name: Fort Drum
Project #: 8119-4D3
Well ID: 3805 - PZ13S
Initial Water Level: 23.96
Well Construction: 2in PVC

Sampling Method: Submersible
Pump Inlet: Designated tubing
Flow Rate: 400 mL/min
Personnel: BB MBW
Date: 9/24/2013

Time	Temp +/-3%	pH +/- 0.1	ORP +/- 10 (mV)	Conductivity +/- 3%	Turbidity +/-10% (NTU) or <10	DO +/- 10% (mg/L)	Volume Removed (Liters)	Depth to water +/- 0.3 (ft)
1145	11.03	7.46	-74	0.693	11.4	0.0	~~4.0~~	24.15
1150	11.12	6.61	-74	0.768	11.6	2.51	2.0	24.26
1155	11.03	6.54	-78	0.811	7.0	1.81	4.0	24.38
1200	11.08	6.50	-85	~~0.846~~ 0.846	4.2	0.31	6.0	24.37
12.05	11.10	6.48	-85	0.891	5.6	0.00	8.0	24.39
1210	11.07	6.48	-87	0897	6.0	0.00	10.0	24.40
1215	10.98	6.47	-87	0.910	6.5	000	12.00	24.39
SAMPLE								
1215								

QC SAMPLE(S): MNA SAMPLES: Fe2+ =

Notes:

Groundwater Monitoring Well Purging and Sampling

PLEXUS scientific

Site Name: Fort Drum
Project #: 8119-4D3
Well ID: 3805 - PZ 14
Initial Water Level: 19.74
Well Construction: 2 in PVC

Sampling Method: Submersible
Pump Inlet: 25 ft
Flow Rate: 400 mL/min
Personnel: BB MBW
Date: 9/26/13

Time	Temp +/-3%	pH +/- 0.1	ORP +/- 10 (mV)	Conductivity +/- 3%	Turbidity +/-10% (NTU) or <10	DO +/- 10% (mg/L)	Volume Removed (Liters)	Depth to water +/- 0.3 (ft)
1530	13.78	6.63	-71	0.142	17.2	0.00	0.0	19.87
1535	13.60	6.62	-74	0.148	17.3	0.00	2.0	19.91
1540	13.63	6.62	-75	0.152	16.9	0.00	4.0	19.89
1545	13.59	6.62	-80	0.154	17.1	0.00	6.0	19.90
SAMPLE								
1545	13.59	6.62	-80	0.154	17.1	0.00	6.0	19.90

QC SAMPLE(S):
MNA SAMPLES: Fe2+ = 3.9

Notes: VOCs
MNA

Groundwater Monitoring Well Purging and Sampling

PLEXUS scientific

Site Name: Fort Drum
Project #: 8119-4D3
Well ID: 3805 - ~~MW~~ PZ3
Initial Water Level: 22.62
Well Construction: 2in PVC

Sampling Method: Submersible
Pump Inlet: 26 ft
Flow Rate: 200 mL/min
Personnel: BB MBW
Date: 9/26/13

Time	Temp +/-3%	pH +/- 0.1	ORP +/- 10 (mV)	Conductivity +/- 3%	Turbidity +/-10% (NTU) or <10	DO +/- 10% (mg/L)	Volume Removed (Liters)	Depth to water +/- 0.3 (ft)
1310	15.71	7.72	-98	0.449	27.9	0.00	0	22.64
1315	15.89	6.60	-87	0.425	28.2	0.00	1 ~~1.25~~	22.68
1320	15.24	6.53	-85	0.409	~~28.6~~ 20.6	0.00	2	22.77
1325	13.33	6.43	-84	0.385	10.9	0.00	3	22.79
1330	13.08	6.38	-86	0.359	4.2	0.00	4	22.81
1335	13.09	6.35	-89	0.350	2.4	0.00	5	22.82
1340	13.10	6.28	-86	0.348	2.4	0.00	6	22.81
1345	13.11	6.26	-84	0.349	2.3	0.00	7	22.82
SAMPLE								
1345	13.11	6.26	-84	0.349	2.3	0.00	7	22.82

QC SAMPLE(S): _____ MNA SAMPLES: Fe2+ = 1.9

Notes:

VOCs
MNA

Groundwater Monitoring Well Purging and Sampling

PLEXUS scientific

Site Name: Fort Drum
Project #: 8119-4D3
Well ID: 3805-PZ7
Initial Water Level: 21.20
Well Construction: 2" PVC

Sampling Method: Submersible
Pump Inlet: 26'
Flow Rate: 300 mL/min
Personnel: BB & AM
Date: 9/30/13

Time	Temp +/-3%	pH +/- 0.1	ORP +/- 10 (mV)	Conductivity +/- 3%	Turbidity +/-10% (NTU) or <10	DO +/- 10% (mg/L)	Volume Removed (Liters)	Depth to water +/- 0.3 (ft)
0955	15.86	7.56	98	1.48	0.0	8.53	0.0	21.22
1000	15.45	7.32	117	1.60	0.0	8.45	1.5	21.24
1005	15.14	7.11	127	1.71	0.0	8.38	3.0	21.25
1010	15.25	7.01	131	1.65	0.0	8.23	4.5	21.23
1015	15.38	6.96	134	1.57	0.0	8.14	6.0	21.25
1020	15.35	6.94	136	1.55	0.0	8.12	7.5	21.26
1025	15.46	6.93	137	1.54	0.0	8.13	9.0	21.25
SAMPLE								
1025	15.46	6.93	137	1.54	0.0	8.13	9.0	21.25

QC SAMPLE(S): N/A
MNA SAMPLES: Fe2+ = N/A

Notes: VOCs

Groundwater Monitoring Well Purging and Sampling

PLEXUS scientific

Site Name: Fort Drum
Project #: 8119-4D3
Well ID: 3805-PZ2D
Initial Water Level: 20.61
Well Construction: 2" PVC

Sampling Method: Submersible
Pump Inlet: 40'
Flow Rate: 300 mL/min
Personnel: BB & AM
Date: 9/30/13

Time	Temp +/-3%	pH +/- 0.1	ORP +/- 10 (mV)	Conductivity +/- 3%	Turbidity +/-10% (NTU) or <10	DO +/- 10% (mg/L)	Volume Removed (Liters)	Depth to water +/- 0.3 (ft)
0820	14.24	5.03	261	0.414	0.0	3.14	0.0	20.95
0825	13.91	5.33	246	0.396	0.0	1.67	1.5	21.96
0830	13.96	5.80	120	0.377	0.0	0.06	3.0	21.85
0835	13.48	5.89	49	0.382	0.0	0.00	4.5	21.84
0840	13.37	6.03	7	0.401	0.0	0.00	6.0	21.89
0845	13.26	6.11	-6	0.441	0.0	0.00	7.5	21.95
0850	13.19	6.16	-7	0.446	0.0	0.00	9.0	21.99
0855	13.14	6.14	-5	0.478	0.0	0.00	11.5	21.97
SAMPLE								
0855	13.14	6.14	-5	0.478	0.0	0.00	11.5	21.97

QC SAMPLE(S): DUP-3
MNA SAMPLES: Fe2+ = N/A

Notes: VOCs ONLY

Groundwater Monitoring Well Purging and Sampling

PLEXUS scientific

Site Name: Fort Drum
Project #: 8119-4D3
Well ID: 3805-Pz-2I
Initial Water Level: 20.47
Well Construction: 2" PVC

Sampling Method: Submersible
Pump Inlet: 30ft
Flow Rate: 300 mL/min
Personnel: AM BB
Date: 9-30-12

Time	Temp +/-3%	pH +/- 0.1	ORP +/- 10 (mV)	Conductivity +/- 3%	Turbidity +/-10% (NTU) or <10	DO +/- 10% (mg/L)	Volume Removed (Liters)	Depth to water +/- 0.3 (ft)
9:10	14.38	6.42	33	2.90	0.4	8.32	0	20.65
9:15	14.41	6.55	39	3.14	0.0	8.19	1.5	20.65
9:20	14.50	6.85	55	3.59	0.0	7.87	3.0	20.55
9:25	14.69	7.07	67	3.90	0.0	7.70	4.5	20.67
9:30	14.88	7.19	81	3.96	0.0	6.93	6.0	20.80
9:35	15.16	7.32	103	4.21	0.0	5.57	7.5	20.70
9:40	15.45	7.34	111	4.33	0.0	5.43	9.0	20.71
9:45	15.61	7.35	113	4.28	0.0	5.31	10.5	20.70
SAMPLE								
9:45	15.61	7.35	113	4.28	0.0	5.31	10.5	20.70

QC SAMPLE(S): MNA SAMPLES: Fe2+ =

Notes:

VOCs

Groundwater Monitoring Well Purging and Sampling

PLEXUS scientific

Site Name: Fort Drum
Project #: 8119-4D3
Well ID: 3805-PZ2S
Initial Water Level: 20.60
Well Construction: 2in PVC

Sampling Method: Submersible
Pump Inlet: 23
Flow Rate: 400 mL/min
Personnel: BB MBW
Date: 9/26/13

Time	Temp +/-3%	pH +/- 0.1	ORP +/- 10 (mV)	Conductivity +/- 3%	Turbidity +/-10% (NTU) or <10	DO +/- 10% (mg/L)	Volume Removed (Liters)	Depth to water +/- 0.3 (ft)
1440	14.61	6.28	11	0.327	8.3	0.00	0	20.60
1445	14.49	6.23	26	0.330	83.1	0.00	2	20.72
1450	14.63	6.25	28	0.324	94.0	0.00	4	20.71
1455	14.57	6.30	14	0330	45.0	0.00	6	20.82
1500	13.70	6.24	14	0.342	5.1	0.00	8	20.81
1505	13.63	6.24	-5	0.359	2.2	0.00	10	20.86
1510	13.60	6.21	-10	0.359	2.3	0.00	12	20.91
1515	13.60	6.24	-13	0.360	2.4	0.00	14	20.93
SAMPLE								
1515	13.60	6.24	-13	0.360	2.4	0.00	14	20.93

QC SAMPLE(S):

MNA SAMPLES: Fe2+ = 5.8

Notes: VOCs
MNA

Sediment present at initial pumping

Degraded tubing

Groundwater Monitoring Well Purging and Sampling

PLEXUS scientific

Site Name: Fort Drum
Project #: 8119-4D3
Well ID: OSL-MW2
Initial Water Level: 36.46
Well Construction: 2" PVC

Sampling Method: Submersible
Pump Inlet:
Flow Rate: 300 mL/min
Personnel: NF+JC+AM
Date: 9-24-2013

Time	Temp °C +/-3%	pH +/- 0.1	ORP +/- 10 (mV)	Conductivity +/- 3% mS/cm	Turbidity +/-10% (NTU) or <10	DO +/- 10% (mg/L)	Volume Removed (Liters)	Depth to water +/- 0.3 (ft)
10:20	10.11	5.90	182	0.215	29.7	11.69	0	36.59
10:25	10.71	6.13	174	0.232	0.8	7.37	1.5	36.66
10:30	10.82	6.07	179	0.238	0.7	7.33	3	36.75
10:35	10.70	6.15	180	0.235	0.0	7.25	4.5	36.75
10:40	10.67	6.20	184	0.238	0.0	7.21	6	36.75
10:45	10.67	6.36	178	0.240	0.0	7.17	7.5	36.75
10:50	10.69	6.35	182	0.242	0.0	7.21	9	36.75
SAMPLE								
10:50	10.69	6.35	182	0.242	0.0	7.21	9	36.75

QC SAMPLE(S): DUP-4
MNA SAMPLES: Fe2+ = N/A

Notes: NF+JC+AM

VOCs + SVOCs + TAL Metals + DUP-4

Groundwater Monitoring Well Purging and Sampling

PLEXUS scientific

Site Name: Fort Drum
Project #: 8119-4D3
Well ID: OSL-MW3
Initial Water Level: 24.22
Well Construction: 2" PVC

Sampling Method: Submersible
Pump Inlet: 30.60
Flow Rate: 300 mL/min
Personnel: BB & MBW
Date: 9/24/13

Time	Temp +/-3%	pH +/- 0.1	ORP +/- 10 (mV)	Conductivity +/- 3%	Turbidity +/-10% (NTU) or <10	DO +/- 10% (mg/L)	Volume Removed (Liters)	Depth to water +/- 0.3 (ft)
12:40	12.03	6.70	-79	1.29	16.0	0.00	0.0	24.33
12:45	12.68	6.85	-84	1.21	5.6	0.00	1.5	24.28
12:50	12.75	6.84	-86	1.16	3.3	4.44	3.0	24.36
12:55	12.56	6.92	-87	1.03	0.9	2.67	4.5	24.39
13:00	12.57	6.94	-91	1.02	0.3	2.59	5.0	24.35
13:05	12.46	6.95	-92	1.01	0.2	2.58	6.5	24.31
SAMPLE								
1305								

QC SAMPLE(S): MNA SAMPLES: Fe2+ =

Notes: VOCs

Groundwater Monitoring Well Purging and Sampling

PLEXUS scientific — 25 years

Site Name: Fort Drum
Project #: 8119-4D3
Well ID: OSL-MW8
Initial Water Level: 32.72
Well Construction: 4" PVC

Sampling Method: Submersible
Pump Inlet: 40.00
Flow Rate: 300 ~~75~~ mL/min
Personnel: BB MBW
Date: 9/24/13

Time	Temp +/-3%	pH +/- 0.1	ORP +/- 10 (mV)	Conductivity +/- 3%	Turbidity +/-10% (NTU) or <10	DO +/- 10% (mg/L)	Volume Removed (Liters)	Depth to water +/- 0.3 (ft)
1325	12.36	7.12	-23	0.572	0.0	4.55	0	32.77
1330	13.33	7.12	-3	0.615	0.0	3.90	1.5	32.82
1335	13.44	7.16	18	0.663	0.0	3.34	3.0	32.84
1340	13.28	7.18	29	0.693	0.0	3.24	4.5	32.86
1345	13.21	7.21	38	0.703	0.0	3.19	6.0	32.87
1350	13.24	7.25	48	0.719	0.0	3.27	7.5	32.86
SAMPLE								
1350	1321	7.25	48	0.719	0.0	3.27	7.5	32.86

QC SAMPLE(S): _____ MNA SAMPLES: Fe2+ =

Notes:

VOCs
SVOs
Metals

Groundwater Monitoring Well Purging and Sampling

PLEXUS scientific

Site Name: Fort Drum
Project #: 8119-4D3
Well ID: OSL-MW9A
Initial Water Level: 50.36
Well Construction: 4" PVC

Sampling Method: Submersible
Pump Inlet:
Flow Rate: 300 mL/min
Personnel: NF+JC
Date: 9-25-2013

Time	Temp +/-3%	pH +/- 0.1	ORP +/- 10 (mV)	Conductivity +/- 3%	Turbidity +/-10% (NTU) or <10	DO +/- 10% (mg/L)	Volume Removed (Liters)	Depth to water +/- 0.3 (ft)
12:50	21.62	6.04	129	0.533	105	7.21	0	50.62
12:55	19.63	6.21	144	0.546	103	4.68	1.5	50.65
13:00	18.64	6.31	149	0.556	69.1	4.45	3	50.65
13:05	18.18	6.38	139	0.567	50.4	4.06	4.5	50.65
13:10	17.84	6.41	115	0.574	42.3	3.85	6	50.70
13:15	17.54	6.46	109	0.586	30.0	3.55	7.5	50.77
13:20	17.14	6.53	99	0.602	29.8	3.33	9	50.79
SAMPLE								
13:20	17.14	6.53	99	0.602	29.8	3.33	9	50.79

QC SAMPLE(S): N/A
MNA SAMPLES: Fe2+ = N/A

Notes: VOCs + SVOCs + TAL Metals

Groundwater Monitoring Well Purging and Sampling

PLEXUS scientific

Site Name: Fort Drum
Project #: 8119-4D3
Well ID: OSL-MW10
Initial Water Level: 42.82
Well Construction: 6" PVC

Sampling Method: Submersible
Pump Inlet:
Flow Rate: 300 mL/min
Personnel: NF+JC+AM
Date: 9-24-2013

Time	Temp +/-3%	pH +/- 0.1	ORP +/- 10 (mV)	Conductivity +/- 3%	Turbidity +/-10% (NTU) or <10	DO +/- 10% (mg/L)	Volume Removed (Liters)	Depth to water +/- 0.3 (ft)
11:28	12.09	6.35	38	0.577	34.4	2.47	0	42.79
11:33	11.84	6.44	-37	0.804	27.3	0.57	1.5	43.12
11:38	11.61	6.64	-68	0.788	17.3	0.55	3	43.24
11:43	11.71	6.68	-79	0.782	10.9	0.67	4.5	43.30
11:48	11.78	6.75	-91	0.775	4.7	0.89	6	43.15
11:53	11.91	6.78	-95	0.760	2.9	0.97	7.5	43.07
11:58	12.05	6.79	-96	0.759	1.4	0.98	9	43.03
SAMPLE								
11:58	12.05	6.79	-96	0.759	1.4	0.98	9	43.03

QC SAMPLE(S): N/A
MNA SAMPLES: Fe2+ = N/A

Notes: VOCs + SVOCs + TAL Metals

Groundwater Monitoring Well Purging and Sampling

PLEXUS scientific

Site Name: Fort Drum
Project #: 8119-4D3
Well ID: 1795-MWD13
Initial Water Level: 16.36
Well Construction: 2" PVC

Sampling Method: Submersible
Pump Inlet:
Flow Rate: 300 mL/min
Personnel: NF + JC
Date: 10-1-13

Time	Temp +/-3%	pH +/- 0.1	ORP +/- 10 (mV)	Conductivity +/- 3%	Turbidity +/-10% (NTU) or <10	DO +/- 10% (mg/L)	Volume Removed (Liters)	Depth to water +/- 0.3 (ft)
11:50	15.67	6.42	66	0.590	0.0	3.59	0	17.52
11:55	13.86	7.15	18	0.663	0.0	2.45	1.5	18.87
12:00	13.79	7.38	5	0.694	0.0	2.21	3	18.89
12:05	13.61	7.56	-7	0.719	0.0	1.98	4.5	18.86
12:10	13.39	7.64	-12	0.725	0.0	1.83	6	18.80
12:15	13.33	7.67	-14	0.727	0.0	1.73	7.5	18.79
12:20	13.11	7.69	-16	0.734	0.0	1.66	9	18.78
SAMPLE								
12:20	13.11	7.69	-16	0.734	0.0	1.66	9	18.78

QC SAMPLE(S): N/A
MNA SAMPLES: Fe2+ = N/A

Notes: VOCs

Groundwater Monitoring Well Purging and Sampling

PLEXUS scientific

Site Name: Fort Drum
Project #: 8119-4D3
Well ID: 1795-MW I12
Initial Water Level: 16.45
Well Construction: 2" PVC

Sampling Method: Submersible
Pump Inlet: 25'
Flow Rate: 300 mL/min
Personnel: BB/AM
Date: 10/01/13

Time	Temp +/-3%	pH +/- 0.1	ORP +/- 10 (mV)	Conductivity +/- 3%	Turbidity +/-10% (NTU) or <10	DO +/- 10% (mg/L)	Volume Removed (Liters)	Depth to water +/- 0.3 (ft)
1120	14.98	7.13	-55	1.50	0.0	3.37	0.0	16.46
1125	11.03	7.01	-74	1.83	0.0	0.00	1.5	16.70
1130	10.86	6.97	-76	1.85	0.0	0.00	3.0	16.72
1135	10.89	6.95	-78	1.87	0.0	0.00	4.5	16.68
1140	10.93	6.95	-79	1.86	0.0	0.00	6.0	16.69
1145	10.83	6.95	-81	1.83	0.0	0.00	7.5	16.68
1150	10.84	6.95	-81	1.81	0.0	0.00	9.0	16.68
SAMPLE								
1150	10.84	6.95	-81	1.81	0.0	0.00	9.0	16.68

QC SAMPLE(S): MS/MSD
MNA SAMPLES: Fe2+ =

Notes: VOCs

Groundwater Monitoring Well Purging and Sampling

PLEXUS scientific

Site Name: Fort Drum
Project #: 8119-4D3
Well ID: 1795-MWS1
Initial Water Level: 22.59
Well Construction: 2" PVC

Sampling Method: Submersible
Pump Inlet:
Flow Rate: 300 mL/min
Personnel: NF + JC
Date: 10-1-13

Time	Temp +/-3%	pH +/- 0.1	ORP +/- 10 (mV)	Conductivity +/- 3%	Turbidity +/-10% (NTU) or <10	DO +/- 10% (mg/L)	Volume Removed (Liters)	Depth to water +/- 0.3 (ft)
9:30	11.94	4.39	183	0.147	60.2	7.10	0	22.81
9:35	11.86	4.39	205	0.044	0.0	7.25	1.5	22.88
9:40	12.35	4.69	198	0.031	0.0	7.14	3	22.80
9:45	12.95	4.88	196	0.027	0.0	7.03	4.5	22.72
9:50	13.02	5.04	193	0.025	0.0	7.20	6	22.88
9:55	12.84	5.11	195	0.024	0.0	7.25	7.5	22.81
10:00	12.91	5.14	195	0.024	0.0	7.20	9	22.77
SAMPLE								
10:00	12.91	5.14	195	0.024	0.0	7.20	9	22.77

QC SAMPLE(S): N/A
MNA SAMPLES: Fe2+ = N/A

Notes: VOCs

Groundwater Monitoring Well Purging and Sampling

PLEXUS scientific

Site Name: Fort Drum
Project #: 8119-4D3
Well ID: 1795-MWS10
Initial Water Level: 15.25
Well Construction: 2" PVC

Sampling Method: Submersible
Pump Inlet: 18'
Flow Rate: 300 mL/min
Personnel: AM/BB
Date: 10-1-13

Time	Temp +/-3%	pH +/- 0.1	ORP +/- 10 (mV)	Conductivity +/- 3%	Turbidity +/-10% (NTU) or <10	DO +/- 10% (mg/L)	Volume Removed (Liters)	Depth to water +/- 0.3 (ft)
9:15	15.93	6.58	148	0.202	0.0	10.15	0	15.23
9:20	15.00	6.29	120	0.231	0.0	9.26	1.5	15.57
9:25	15.05	6.18	81	0.225	0.0	8.35	3.0	15.63
9:30	15.05	6.17	71	0.227	0.0	7.78	4.5	15.64
9:35	14.92	6.15	64	0.228	0.0	7.20	6.0	15.69
9:40	14.99	6.14	62	0.227	0.0	6.66	7.5	15.67
9:45	14.98	6.14	62	0.227	0.0	6.52	9.0	15.66
SAMPLE								
9:45	14.98	6.14	62	0.227	0.0	6.52	9.0	15.66

QC SAMPLE(S): MNA SAMPLES: Fe2+ =

Notes:

VOC

Groundwater Monitoring Well Purging and Sampling

PLEXUS scientific

Site Name: Fort Drum
Project #: 8119-4D3
Well ID: 1795-MW911
Initial Water Level: 17.16
Well Construction: 2" PVC

Sampling Method: Submersible
Pump Inlet: 20'
Flow Rate: 300 mL/min
Personnel: BB / AM
Date: 9/30/13

Time	Temp +/-3%	pH +/- 0.1	ORP +/- 10 (mV)	Conductivity +/- 3%	Turbidity +/-10% (NTU) or <10	DO +/- 10% (mg/L)	Volume Removed (Liters)	Depth to water +/- 0.3 (ft)
1455	16.68	7.34	15	0.120	103	8.19	0.0	17.41
1500	14.79	6.38	93	0.119	92.4	7.66	1.5	17.42
1505	14.61	5.99	114	0.119	73.5	7.20	3.0	17.41
1510	14.55	5.73	118	0.120	72.0	6.90	4.5	17.41
1515	14.56	5.75	108	0.121	59.0	6.74	6.0	17.36
1520	14.49	5.67	111	0.121	34.7	6.63	7.5	17.45
1525	14.03	5.67	111	0.122	35.7	6.46	9.0	17.46
1530	13.99	5.64	112	0.123	34.4	6.52	11.5	17.46
SAMPLE								
1530	13.99	5.64	112	0.123	34.4	6.52	11.5	17.46

QC SAMPLE(S): DUP-5
MNA SAMPLES: Fe2+ =

Notes: VOCs

Groundwater Monitoring Well Purging and Sampling

PLEXUS scientific — 25 years of excellence

Site Name: Fort Drum
Project #: 8119-4D3
Well ID: 1795-MWS2
Initial Water Level: 15.66
Well Construction: 2" PVC

Sampling Method: Submersible
Pump Inlet:
Flow Rate: 300 mL/min
Personnel: NF + JC
Date: 10-1-13

Time	Temp +/-3%	pH +/- 0.1	ORP +/- 10 (mV)	Conductivity +/- 3%	Turbidity +/-10% (NTU) or <10	DO +/- 10% (mg/L)	Volume Removed (Liters)	Depth to water +/- 0.3 (ft)
11:05	15.68	7.38	-63	0.059	41.4	9.13	0	16.35
11:10	14.54	6.55	28	0.051	21.1	8.96	1.5	16.03
11:15	14.42	6.26	51	0.051	15.8	8.79	3	16.03
11:20	14.47	5.97	80	0.054	15.5	8.41	4.5	16.02
11:25	14.54	5.93	91	0.055	13.4	8.24	6	16.02
11:30	14.70	5.91	98	0.056	12.9	8.07	7.5	16.02
11:35	14.77	5.91	100	0.056	12.7	8.01	9	16.02
SAMPLE								
11:35	14.77	5.91	100	0.056	12.7	8.01	9	16.02

QC SAMPLE(S): N/A
MNA SAMPLES: Fe2+ = N/A

Notes: VOCs

Groundwater Monitoring Well Purging and Sampling

PLEXUS scientific — 25 years of excellence

Site Name: Fort Drum
Project #: 8119-4D3
Well ID: 1795-MWS21
Initial Water Level: 18.01
Well Construction: 4" PVC

Sampling Method: Submersible
Pump Inlet:
Flow Rate: 300 mL/min
Personnel: NF+JC
Date: 10-1-2013

Time	Temp +/-3%	pH +/- 0.1	ORP +/- 10 (mV)	Conductivity +/- 3%	Turbidity +/-10% (NTU) or <10	DO +/- 10% (mg/L)	Volume Removed (Liters)	Depth to water +/- 0.3 (ft)
10:25	13.82	5.95	51	0.422	121	3.11	0	18.32
10:30	14.68	6.74	-65	0.442	83	1.35	1.5	18.06
10:35	15.99	6.84	-85	0.439	41.2	1.48	3	18.06
10:40	16.13	6.89	-94	0.427	41.1	1.78	4.5	18.06
10:45	16.32	6.89	-95	0.427	39.8	1.78	6	18.06
10:50	16.50	6.89	-98	0.429	39.7	1.85	7.5	18.06
10:55	16.61	6.91	-100	0.418	38.3	1.94	9	18.06
SAMPLE								
10:55	16.61	6.91	-100	0.418	38.3	1.94	9	18.06

QC SAMPLE(S): N/A
MNA SAMPLES: Fe2+ = N/A

Notes: VOCs

Groundwater Monitoring Well Purging and Sampling

PLEXUS scientific

Site Name: Fort Drum
Project #: 8119-4D3
Well ID: 1795-MWS3
Initial Water Level: 16.26
Well Construction: 2" PVC

Sampling Method: Submersible
Pump Inlet: 20'
Flow Rate: 300 mL/min
Personnel: BB
Date: 9/27/2013

Time	Temp +/-3%	pH +/- 0.1	ORP +/- 10 (mV)	Conductivity +/- 3%	Turbidity +/-10% (NTU) or <10	DO +/- 10% (mg/L)	Volume Removed (Liters)	Depth to water +/- 0.3 (ft)
1325	12.87	6.75	-73	0.142	36.7	0.00	0.0	16.31
1330	13.67	6.99	-49	0.141	26.2	0.00	1.5	16.33
1335	12.73	6.29	-55	0.212	13.1	0.00	3.0	16.36
1340	11.98	6.25	-55	0.224	5.1	0.00	4.5	16.39
1345	11.82	6.13	-54	0.236	0.0	0.00	6.0	16.38
1350	11.79	6.05	-52	0.244	0.0	0.00	7.5	16.37
1355	11.80	6.07	-48	0.246	0.0	0.00	9.0	16.39
SAMPLE								
1355	11.80	6.07	-48	0.246	0.0	0.00	9.0	16.39

QC SAMPLE(S): MNA SAMPLES: Fe2+ = 3.2

Notes: MNA
VOCs
MICRO

Groundwater Monitoring Well Purging and Sampling

PLEXUS scientific

Site Name: Fort Drum
Project #: 8119-4D3
Well ID: 1795-MW87
Initial Water Level: 14.28'
Well Construction: 2" PVC

Sampling Method: Submersible
Pump Inlet: 16
Flow Rate: 400 mL/min
Personnel: BB
Date: 09/27/13

Time	Temp +/-3%	pH +/- 0.1	ORP +/- 10 (mV)	Conductivity +/- 3%	Turbidity +/-10% (NTU) or <10	DO +/- 10% (mg/L)	Volume Removed (Liters)	Depth to water +/- 0.3 (ft)
1530	17.20	6.50	-14	2.81	90	0.00	0.0	14.35
1535	17.34	6.64	-22	2.83	5.4	0.00	2.0	14.35
1540	17.28	6.70	-26	2.82	3.3	0.00	4.0	14.34
1545	17.43	6.77	-32	2.76	1.2	0.00	6.0	14.34
1550	17.50	6.78	-34	2.77	0.8	0.00	8.0	14.34
1555	17.58	6.80	-34	2.78	0.9	0.00	10.0	14.33
1600	17.59	6.80	-34	2.78	0.9	0.00	12.0	14.33
SAMPLE								
1600	17.59	6.80	-34	2.78	0.9	0.00	12.0	14.33

QC SAMPLE(S): DUP 6
MNA SAMPLES: Fe2+ = 1.9

Notes: MNA
VOCs
MICRO

Groundwater Monitoring Well Purging and Sampling

PLEXUS scientific

Site Name: Fort Drum
Project #: 8119-4D3
Well ID: 1795-Pz13
Initial Water Level: 7.70
Well Construction: 2" PVC

Sampling Method: Submersible
Pump Inlet: 12'
Flow Rate: 300 mL/min
Personnel: AM/BB
Date: 10-1-13

Time	Temp +/-3%	pH +/- 0.1	ORP +/- 10 (mV)	Conductivity +/- 3%	Turbidity +/-10% (NTU) or <10	DO +/- 10% (mg/L)	Volume Removed (Liters)	Depth to water +/- 0.3 (ft)
10:40	15.16	6.43	-61	2.84	0.0	3.84	0	7.75
10:45	17.08	6.42	-60	2.65	19.5	0.93	1.5	7.79
10:50	17.19	6.43	-49	2.74	5.4	1.10	3.0	7.80
10:55	17.01	6.43	-41	2.75	0.0	1.36	4.5	7.81
11:00	16.88	6.44	-33	2.78	0.0	1.63	6.0	7.81
11:05	16.89	6.44	-29	2.78	0.0	1.57	7.5	7.81
11:10	16.88	6.44	-28	2.78	0.0	1.64	9.0	7.80
SAMPLE								

QC SAMPLE(S): MNA SAMPLES: Fe2+ =

Notes:

VOC

Groundwater Monitoring Well Purging and Sampling

PLEXUS scientific

Site Name: Fort Drum
Project #: 8119-4D3
Well ID: 1795 - PZ14
Initial Water Level: 13.20'
Well Construction: 2" PVC

Sampling Method: Submersible
Pump Inlet: DEDICATED TUBING
Flow Rate: 300 mL/min
Personnel: BB | AM
Date: 10/01/13

Time	Temp +/-3%	pH +/- 0.1	ORP +/- 10 (mV)	Conductivity +/- 3%	Turbidity +/-10% (NTU) or <10	DO +/- 10% (mg/L)	Volume Removed (Liters)	Depth to water +/- 0.3 (ft)
BB 0955	15.52	5.93	-34	2.76	0.0	9.02	0.0	13.25
1000	15.18	6.28	-52	2.93	0.0	7.98	1.5	13.28
1005	15.21	6.35	-54	2.91	0.0	7.01	3.0	13.29
1010	15.26	6.38	-57	2.87	0.0	6.21	4.5	13.29
1015	15.19	6.39	-58	2.83	0.0	5.44	6.0	13.30
1020	15.02	6.41	-60	2.82	0.0	4.31 ~~4.38~~	7.5	13.32
1025	15.03	6.43	-61	2.84	0.0	4.28	9.0	13.31
1030	15.06	6.43	-61	2.84	0.0	4.24	11.5	13.30
SAMPLE								
1030	15.06	6.43	-61	2.84	0.0	4.24	11.5	13.30

QC SAMPLE(S): N/A
MNA SAMPLES: Fe2+ = N/A

Notes: VOCs

Groundwater Monitoring Well Purging and Sampling

PLEXUS scientific

Site Name: Fort Drum
Project #: 8119-4D3
Well ID: 1795-PZ15
Initial Water Level: 18.01'
Well Construction: 4" PVC

Sampling Method: Submersible
Pump Inlet: 22'
Flow Rate: 400 mL/min
Personnel: BB
Date: 9/27/13

Time	Temp +/-3%	pH +/- 0.1	ORP +/- 10 (mV)	Conductivity +/- 3%	Turbidity +/-10% (NTU) or <10	DO +/- 10% (mg/L)	Volume Removed (Liters)	Depth to water +/- 0.3 (ft)
1430	16.36	6.43	13	0.366	76.2	0.00	6.0	18.17
1435	15.52	6.42	62	0.426	14.8	0.00	2.0	18.15
1440	15.30	6.45	78	0.501	0.9	0.00	4.0	18.16
1445	15.29	6.47	80	0.517	0.0	0.00	6.0	18.18
1450	15.31	6.48	88	0.551	0.0	0.00	8.0	18.16
1455	15.41	6.49	91	0.558	0.0	0.00	10.0	18.17
1500	15.38	6.50	95	0.560	0.0	0.00	12.0	18.16
SAMPLE								
1500	15.38	6.50	95	0.560	0.0	0.00	12.0	18.16

QC SAMPLE(S): MNA SAMPLES: Fe2+ = 0.0

Notes: MNA
VOCs

Groundwater Monitoring Well Purging and Sampling

PLEXUS scientific

Site Name: Fort Drum
Project #: 8119-4D3
Well ID: 1795-Pz4
Initial Water Level: 14.35
Well Construction: 2" PVC

Sampling Method: Submersible
Pump Inlet:
Flow Rate: 300 mL/min
Personnel: AM BB
Date: 09-30-13

Time	Temp +/-3%	pH +/- 0.1	ORP +/- 10 (mV)	Conductivity +/- 3%	Turbidity +/-10% (NTU) or <10	DO +/- 10% (mg/L)	Volume Removed (Liters)	Depth to water +/- 0.3 (ft)
15:40	17.34	6.04	55	0.344	52.2	6.17	0	14.33
15:45	16.45	6.35	67	0.300	35.5	5.78	1.5	14.51
15:50	16.31	6.55	68	0.318	23.9	5.59	3.0	14.52
15:55	16.44	6.69	67	0.343	20.1	5.30	4.5	14.52
16:00	16.34	6.92	58	0.374	16.9	5.05	6.0	14.56
16:05	16.51	6.96	58	0.375	15.6	5.02	7.5	14.55
16:10	16.57	7.00	58	0.375	14.9	5.05	9.0	14.56
SAMPLE								
16:10	16.57	7.00	58	0.375	14.9	5.05	9.0	14.56

QC SAMPLE(S): MNA SAMPLES: Fe2+ =

Notes:

VOC

Groundwater Monitoring Well Purging and Sampling

PLEXUS scientific

Site Name: Fort Drum
Project #: 8119-4D3
Well ID: 1795-PZ5
Initial Water Level: 14.90
Well Construction: 2" PVC

Sampling Method: Submersible
Pump Inlet:
Flow Rate: 300 mL/min
Personnel: AM BR
Date: 09-30-13

Time	Temp +/-3%	pH +/- 0.1	ORP +/- 10 (mV)	Conductivity +/- 3%	Turbidity +/-10% (NTU) or <10	DO +/- 10% (mg/L)	Volume Removed (Liters)	Depth to water +/- 0.3 (ft)
14:15	21.14	6.51	-23	0.402	0.0	3.18	0	14.97
14:20	20.04	6.52	-6	0.416	0.0	1.24	1.5	14.98
14:25	18.87	6.55	3	0.472	0.0	0.58	3.0	15.00
14:30	18.55	6.55	-7	0.560	0.0	0.62	4.5	14.99
14:35	18.46	6.57	-14	0.652	0.0	0.69	6.0	14.99
14:40	18.40	6.57	-17	0.671	0.0	0.68	7.5	14.99
14:45	18.42	6.57	-20	0.668	0.0	0.67	9.0	14.99
SAMPLE								
14:45	18.42	6.57	-20	0.668	0.0	0.67	9.0	14.99

QC SAMPLE(S):
MNA SAMPLES: Fe2+ =

Notes: VOCs
MICRO

Groundwater Monitoring Well Purging and Sampling

PLEXUS scientific

Site Name: Fort Drum
Project #: 8119-4D3
Well ID: WWTF-002
Initial Water Level: 18.40'
Well Construction: 2" PVC

Sampling Method: Submersible
Pump Inlet: 22'
Flow Rate: 300 mL/min
Personnel: BB/AM
Date: 10/1/13

Time	Temp +/-3%	pH +/- 0.1	ORP +/- 10 (mV)	Conductivity +/- 3%	Turbidity +/-10% (NTU) or <10	DO +/- 10% (mg/L)	Volume Removed (Liters)	Depth to water +/- 0.3 (ft)
0835	14.51	5.90	158	0.820	0.0	10.32	0.0	18.46
0840	14.26	5.98	156	0.836	0.0	9.89	1.5	18.48
0845	13.12	6.16	154	0.843	6.0	9.76	3.0	18.48
0850	13.23	6.22	156	0.828	0.0	9.56	4.5	18.50
0855	13.18	6.27	158	0.825	0.0	9.46	6.0	18.49
0900	13.08	6.30	160	0.821	0.0	9.35	7.5	18.49
0905	13.09	6.31	160	0.822	0.0	9.39	9.0	18.49
SAMPLE								
0905	13.09	6.31	160	0.822	0.0	9.39	9.0	18.49

QC SAMPLE(S): N/A
MNA SAMPLES: Fe2+ = N/A

Notes: VOCs

Groundwater Monitoring Well Purging and Sampling

PLEXUS scientific

Site Name: Fort Drum
Project #: 8119-4D3
Well ID: WW11-0006
Initial Water Level: 25.60
Well Construction: 2" PVC

Sampling Method: Submersible
Pump Inlet:
Flow Rate: 300 mL/min
Personnel: NF + JC
Date: 10-1-2013

Time	Temp +/-3%	pH +/- 0.1	ORP +/- 10 (mV)	Conductivity +/- 3%	Turbidity +/-10% (NTU) or <10	DO +/- 10% (mg/L)	Volume Removed (Liters)	Depth to water +/- 0.3 (ft)
8:40	11.37	5.81	211	0.136	0.0	7.47	0	27.20
8:45	10.51	6.03	202	0.113	0.0	5.62	1.5	26.68
8:50	10.59	6.12	95	0.133	0.0	2.63	3	26.62
8:55	10.62	6.19	48	0.157	0.0	1.78	4.5	26.62
9:00	10.61	6.21	31	0.165	0.0	1.54	6	26.62
9:05	10.63	6.25	9	0.173	0.0	1.27	7.5	26.61
9:10	10.66	6.30	1	0.178	0.0	1.20	9	26.61
9:15	10.63	6.35	-1	0.178	0.0	1.15	10.5	26.61
SAMPLE								
9:15	10.63	6.35	-1	0.178	0.0	1.15	10.5	26.61

QC SAMPLE(S): N/A
MNA SAMPLES: Fe2+ = N/A

Notes: VOCs

Groundwater Monitoring Well Purging and Sampling

PLEXUS scientific

Site Name: Fort Drum
Project #: 8119-4D3
Well ID: MBW ~~1595~~ 1595-MW33
Initial Water Level: 12.21
Well Construction: 4in PVC

Sampling Method: Submersible
Pump Inlet: 18 ft
Flow Rate: 300 mL/min
Personnel: MBW
Date: 9/28/17

Time	Temp +/-3%	pH +/- 0.1	ORP +/- 10 (mV)	Conductivity +/- 3%	Turbidity +/-10% (NTU) or <10	DO +/- 10% (mg/L)	Volume Removed (Liters)	Depth to water +/- 0.3 (ft)
1545	19.34	6.55	-19	0.956	0.0	3.23	0	12.25
1550	19.22	6.61	27	0.950	0.0	2.07	1.5	12.26
1555	18.89	6.59	59	0.960	0.0	2.19	3.0	12.29
1600	18.67	6.61	65	1.02	0.0	2.25	4.5	12.31
1605	18.39	6.65	72	1.20	0.0	2.35	6.0	12.29
1610	18.18	6.67	76	1.22	0.0	2.44	7.5	12.27
1615	18.02	6.68	79	1.22	0.0	2.45	9.0	12.28
1								
SAMPLE								
1615	18.02	6.68	79	1.22	0.0	2.45	9.0	12.28

QC SAMPLE(S):
MNA SAMPLES: Fe2+ = 0.0

Notes:

MNA
VOCs

Reagan Tubby

Groundwater Monitoring Well Purging and Sampling

PLEXUS scientific

Site Name: Fort Drum
Project #: 8119-4D3
Well ID: 1595-MW57
Initial Water Level: 8.81
Well Construction: 2in PVC

Sampling Method: Submersible
Pump Inlet: 15
Flow Rate: 300 mL/min
Personnel: MBW
Date: 9/27/13

Time	Temp +/-3%	pH +/- 0.1	ORP +/- 10 (mV)	Conductivity +/- 3%	Turbidity +/-10% (NTU) or <10	DO +/- 10% (mg/L)	Volume Removed (Liters)	Depth to water +/- 0.3 (ft)
1330	20.27	6.94	-93	0.808	0.0	9.6	0	8.86
1335	18.14	6.52	-48	0.899	0.0	7.95	1.5	8.9
1340	17.80	6.48	-44	0.911	0.0	7.70	3.0	8.89
1345	17.30	6.38	-37	0.919	0.0	7.06	4.5	8.87
1350	17.20	6.35	-35	0.920	0.0	6.72	6.0	8.88
1355	17.13	6.32	-32	0.926	0.0	6.25	7.5	8.89
1400	17.15	6.33	-32	0.929	0.0	5.19	9.0	8.87
SAMPLE								
1400	17.15	6.33	-32	0.929	0.0	5.19	9.0	8.87

QC SAMPLE(S): MS / MSD
MNA SAMPLES: Fe2+ = 1.2

Notes:

VOCs
MNA
Metals (Bugs)

Decontaminated Tubing

Groundwater Monitoring Well Purging and Sampling

PLEXUS scientific

Site Name: Fort Drum
Project #: 8119-4D3
Well ID: 1595 - MW58
Initial Water Level: 9.34
Well Construction: 2" PVC

Sampling Method: Submersible
Pump Inlet:
Flow Rate: 300 mL/min
Personnel: MF + JC
Date: 9-30-2013

Time	Temp +/-3%	pH +/- 0.1	ORP +/- 10 (mV)	Conductivity +/- 3%	Turbidity +/-10% (NTU) or <10	DO +/- 10% (mg/L)	Volume Removed (Liters)	Depth to water +/- 0.3 (ft)
14:45	14.58	6.53	-42	0.766	22.1	4.13	0	9.42
14:50	14.56	6.54	-42	0.787	17.1	4.07	1.5	9.41
14:55	14.56	6.56	-43	0.863	8.6	3.90	3	9.41
15:00	14.53	6.60	-46	0.945	0.0	3.52	4.5	9.41
15:05	14.58	6.62	-47	0.997	0.0	3.13	6	9.41
15:10	14.72	6.63	-48	1.01	0.0	2.90	7.5	9.41
15:15	14.66	6.64	-47	0.997	0.0	2.83	9	9.41
SAMPLE								
15:15	14.66	6.64	-47	0.997	0.0	2.83	9	9.41

QC SAMPLE(S): N/A
MNA SAMPLES: Fe2+ = N/A

Notes: VOCs

Groundwater Monitoring Well Purging and Sampling

PLEXUS scientific

Site Name: Fort Drum
Project #: 8119-4D3
Well ID: 1595-MW59
Initial Water Level: 4.62
Well Construction: 2" PVC

Sampling Method: Submersible
Pump Inlet:
Flow Rate: 300 mL/min
Personnel: NF + JC
Date: 9-30-2013

Time	Temp +/-3%	pH +/- 0.1	ORP +/- 10 (mV)	Conductivity +/- 3%	Turbidity +/-10% (NTU) or <10	DO +/- 10% (mg/L)	Volume Removed (Liters)	Depth to water +/- 0.3 (ft)
15:25	13.81	6.89	-54	0.971	10.7	5.56	0	4.92
15:30	13.50	6.92	-35	1.12	0.0	4.52	1.5	4.90
15:35	13.65	6.90	-9	1.21	0.0	3.91	3	4.90
15:40	13.66	6.89	-1	1.23	0.0	3.87	4.5	4.90
15:45	13.64	6.87	8	1.24	0.0	3.80	6	4.90
15:50	13.64	6.86	16	1.26	0.0	3.68	7.5	4.90
15:55	13.71	6.86	18	1.26	0.0	3.57	9	4.90
SAMPLE								
15:55								

QC SAMPLE(S): N/A
MNA SAMPLES: Fe2+ = N/A

Notes: VOCs

Groundwater Monitoring Well Purging and Sampling

PLEXUS scientific

Site Name: Fort Drum
Project #: 8119-4D3
Well ID: 1595-OBG2
Initial Water Level: 12.59
Well Construction: 2 in PVC

Sampling Method: Submersible
Pump Inlet: 15 ft
Flow Rate: 300 mL/min
Personnel: MBW
Date: 9/27/13

Time	Temp +/-3%	pH +/- 0.1	ORP +/- 10 (mV)	Conductivity +/- 3%	Turbidity +/-10% (NTU) or <10	DO +/- 10% (mg/L)	Volume Removed (Liters)	Depth to water +/- 0.3 (ft)
1455	19.96	6.06	13	0.178	14.6	4.52	0	12.70
1500	19.57	5.96	-9	0.450	15.2	5.64	1.5	12.81
1505	19.20	6.16	-29	0.672	12.6	2.19	3.0	12.83
1510	19.02	6.22	-38	0.809	12.1	1.45	4.5	12.81
1515	18.85	6.30	-46	0.974	12.8	1.27	6.0	12.82
1520	18.83	6.32	-47	0.969	12.6	1.19	7.5	12.83
1525	18.83	6.33	-47	0.968	12.6	1.18	9.0	12.80
SAMPLE								
1525	18.83	6.33	-47	0.968	12.6	1.18	9.0	12.80

QC SAMPLE(S):

MNA SAMPLES: Fe2+ = 3.2

Notes: VOCs
MNA

Decreased tubing

Groundwater Monitoring Well Purging and Sampling

PLEXUS scientific

Site Name: Fort Drum
Project #: 8119-4D3
Well ID: 1595-PZ11
Initial Water Level: 15.42
Well Construction: 2" PVC

Sampling Method: Submersible
Pump Inlet:
Flow Rate: 300 mL/min
Personnel: NF + JC
Date: 9-30-2013

Time	Temp +/-3%	pH +/- 0.1	ORP +/- 10 (mV)	Conductivity +/- 3%	Turbidity +/-10% (NTU) or <10	DO +/- 10% (mg/L)	Volume Removed (Liters)	Depth to water +/- 0.3 (ft)
13:20	16.47	7.15	-34	0.704	4.6	7.63	0	15.54
13:25	14.65	7.11	-36	0.975	0.0	4.83	1.5	15.53
13:30	14.52	7.14	-35	0.987	0.0	4.25	3	15.53
13:35	14.36	7.18	-40	0.969	0.0	3.77	4.5	15.53
13:40	14.38	7.21	-47	0.958	0.0	3.36	6	15.54
13:45	14.25	7.22	-49	0.952	0.0	3.25	7.5	15.53
13:50	14.17	7.23	-54	0.952	0.0	3.08	9	15.53
SAMPLE								
13:56	14.17	7.23	-54	0.952	0.0	3.08	9	15.53

QC SAMPLE(S):

MNA SAMPLES: Fe2+ = N/A

Notes: VOCs

Groundwater Monitoring Well Purging and Sampling

PLEXUS scientific

Site Name: Fort Drum
Project #: 8119-4D3
Well ID: 1595-PZ12
Initial Water Level: 14.70
Well Construction: 2" PVC

Sampling Method: Submersible
Pump Inlet:
Flow Rate: 300 mL/min
Personnel: NF + JC
Date: 9-30-2013

Time	Temp +/-3%	pH +/- 0.1	ORP +/- 10 (mV)	Conductivity +/- 3%	Turbidity +/-10% (NTU) or <10	DO +/- 10% (mg/L)	Volume Removed (Liters)	Depth to water +/- 0.3 (ft)
10:45	15.36	7.06	-48	1.75	734	14.26	0	14.74
10:50	16.15	7.03	-79	1.81	625	7.29	1.5	14.71
10:55	16.40	7.05	-72	1.77	114	4.23	3	14.77
11:00	17.13	7.09	-70	1.63	65	5.49	4.5	14.79
11:05	17.58	7.02	-64	1.56	45.7	3.99	6	14.76
11:10	17.78	7.00	-61	1.47	35.0	3.97	7.5	14.76
11:15	17.90	6.98	-59	1.44	34.2	4.04	9	14.76
11:20	18.01	6.97	-56	1.43	33.8	4.15	10.5	14.76
SAMPLE								
11:20	18.01	6.97	-56	1.43	33.8	4.15	10.5	14.76

QC SAMPLE(S): DUP-7
MNA SAMPLES: Fe2+ = N/A

Notes: VOCs

Groundwater Monitoring Well Purging and Sampling

PLEXUS scientific

Site Name: Fort Drum
Project #: 8119-4D3
Well ID: 1595-PZ13
Initial Water Level: 11.03
Well Construction: 2" PVC

Sampling Method: Submersible
Pump Inlet:
Flow Rate: 300 mL/min
Personnel: NF + JC
Date: 9-30-2013

Time	Temp +/-3%	pH +/- 0.1	ORP +/- 10 (mV)	Conductivity +/- 3%	Turbidity +/-10% (NTU) or <10	DO +/- 10% (mg/L)	Volume Removed (Liters)	Depth to water +/- 0.3 (ft)
8:20	15.16	6.42	-11	1.53	0.0	3.42	0	11.13
8:25	15.01	6.71	-73	1.46	916	2.42	1.5	11.20
8:30	14.91	6.82	-94	1.25	353	2.08	3	11.25
8:35	14.90	6.87	-102	1.25	612	10.18	4.5	11.19
8:40	15.06	6.99	-111	0.973	52.4	9.49	6	11.09
8:45	14.45	7.10	-119	0.884	23.2	2.74	7.5	11.28
8:50	14.36	7.13	-122	0.826	3.3	2.74	9	11.27
8:55	14.30	7.17	-123	0.819	0.0	2.90	10.5	11.33
9:00	14.15	7.17	-121	0.808	0.0	3.01	13	11.30
SAMPLE								
9:00	14.15	7.17	-121	0.808	0.0	3.01	13	11.30

QC SAMPLE(S): N/A
MNA SAMPLES: Fe2+ = N/A

Notes: VOCs + Micro

Groundwater Monitoring Well Purging and Sampling

PLEXUS scientific

Site Name: Fort Drum
Project #: 8119-4D3
Well ID: 159S-PZ9
Initial Water Level: 9.06
Well Construction: 2" PVC

Sampling Method: Submersible
Pump Inlet:
Flow Rate: 300 mL/min
Personnel: NF + JC
Date: 9-30-2013

Time	Temp +/-3%	pH +/- 0.1	ORP +/- 10 (mV)	Conductivity +/- 3%	Turbidity +/-10% (NTU) or <10	DO +/- 10% (mg/L)	Volume Removed (Liters)	Depth to water +/- 0.3 (ft)
14:00	14.76	7.12	-51	0.460	0.0	4.67	0	9.20
14:05	15.71	6.71	-44	0.483	0.0	3.25	1.5	9.16
14:10	15.32	6.66	-47	0.535	0.0	3.06	3	9.16
14:15	15.27	6.64	-48	0.600	0.0	2.90	4.5	9.16
14:20	15.31	6.66	-50	0.679	0.0	2.59	6	9.16
14:25	15.32	6.66	-49	0.700	0.0	2.55	7.5	9.16
14:30	15.27	6.67	-49	0.700	0.0	2.47	9	9.16
SAMPLE								
14:30	15.27	6.67	-49	0.700	0.0	2.47	9	9.16

QC SAMPLE(S): N/A
MNA SAMPLES: Fe2+ = N/A

Notes: VOCs + MICRO

Groundwater Monitoring Well Purging and Sampling

PLEXUS scientific

Site Name: Fort Drum
Project #: 8119-4D3
Well ID: 1595-RW4
Initial Water Level: 15.04
Well Construction: 8" PVC

Sampling Method: Submersible
Pump Inlet:
Flow Rate: 300 mL/min
Personnel: NFFJC
Date: 9-30-2013

Time	Temp +/-3%	pH +/- 0.1	ORP +/- 10 (mV)	Conductivity +/- 3%	Turbidity +/-10% (NTU) or <10	DO +/- 10% (mg/L)	Volume Removed (Liters)	Depth to water +/- 0.3 (ft)
11:35	15.85	7.06	-79	0.585	18.1	11.95	0	15.04
11:40	14.69	6.83	-89	0.873	22.5	10.91	1.5	15.18
11:45	14.70	6.81	-92	0.894	28.8	10.29	3	15.25
11:50	14.82	6.80	-95	0.913	36.6	9.68	4.5	15.26
11:55	14.95	6.79	-97	0.920	37.0	9.32	6	15.26
12:00	15.12	6.79	-99	0.933	37.6	9.02	7.5	15.26
12:05	15.31	6.79	-100	0.944	38.9	8.79	9	15.26
SAMPLE								
12.05	15.31	6.79	-100	0.944	38.9	8.79	9	15.26

QC SAMPLE(S): N/A
MNA SAMPLES: Fe2+ = N/A

Notes: VOC's

Groundwater Monitoring Well Purging and Sampling

PLEXUS scientific

Site Name: Fort Drum
Project #: 8119-4D3
Well ID: 2140 - MW02
Initial Water Level: 25.70
Well Construction: 2" PVC

Sampling Method: Submersible
Pump Inlet: 30 ft
Flow Rate: 400 mL/min
Personnel: AM MBW
Date: 9/26/13

Time	Temp +/-3%	pH +/- 0.1	ORP +/- 10 (mV)	Conductivity +/- 3%	Turbidity +/-10% (NTU) or <10	DO +/- 10% (mg/L)	Volume Removed (Liters)	Depth to water +/- 0.3 (ft)
~~8:08~~	~~22.10~~	~~3.93~~	~~311~~	~~4.22~~	~~3.6~~	~~8.38~~	~~10~~	~~25.70~~
~~0810~~	~~12.10~~	~~5.83~~	~~311~~					
0805	12.88	5.98	37	2.47	5.9	0.0	0	25.70
0810	12.72	5.97	29	2.75	6.0	0.0	2	26.29
0815	12.70	6.10	11	3.17	12.6	0.0	4	26.00
0820	12.84	6.20	9	3.21	9.4	0.0	6	25.97
0825	13.05	6.26	7	3.22	7.0	0.0	8	
0830	1304	6.28	4	3.23	6.4	0.0	10	
0835	1303	6.28	-1	3.20	5.9	0.0	12	
SAMPLE								
~~0835~~	1303	6.28	-1	3.30	5.9	0.0	12	

QC SAMPLE(S):

MNA SAMPLES: Fe2+ = 0.4 mg/L

Notes:

VOC + MTBE

MNA

Designated tubing

Groundwater Monitoring Well Purging and Sampling

PLEXUS scientific

Site Name: Fort Drum
Project #: 8119-4D3
Well ID: 2140-MW04
Initial Water Level: 28.11
Well Construction: 2" PVC

Sampling Method: Submersible
Pump Inlet: 35 ft
Flow Rate: 300 mL/min
Personnel: AM MBW
Date: 9/26/13

Time	Temp +/-3%	pH +/- 0.1	ORP +/- 10 (mV)	Conductivity +/- 3%	Turbidity +/-10% (NTU) or <10	DO +/- 10% (mg/L)	Volume Removed (Liters)	Depth to water +/- 0.3 (ft)
10:45	16.33	6.89	-15	7.16	26.6	4.48	0	28.11
10:50	13.65	7.06	-5	7.50	22.7	0.00	1.5	28.90
10:55	13.2	7.16	8	6.95	2.9	0.00	3.0	28.96
11:00	13.68	7.15	14	6.86	2.5	0.00	4.5	28.72
11:05	13.71	7.14	18	6.67	2.7	0.00	6.0	28.80
11:10	13.73	7.12	22	6.43	2.6	0.00	7.5	28.59
SAMPLE								
11:10	13.73	7.12	22	6.43	2.6	0.00	7.5	28.59

QC SAMPLE(S): MNA SAMPLES: Fe2+ =

Notes:

VOC + MTBE

Decreased tubing

Groundwater Monitoring Well Purging and Sampling

PLEXUS scientific

Site Name: Fort Drum
Project #: 8119-4D3
Well ID: 2140-MW05
Initial Water Level: 29.00'
Well Construction: 2" PVC

Sampling Method: Submersible
Pump Inlet:
Flow Rate: 300 mL/min
Personnel: NF + JC
Date: 9-26-2013

Time	Temp +/-3%	pH +/- 0.1	ORP +/- 10 (mV)	Conductivity +/- 3%	Turbidity +/-10% (NTU) or <10	DO +/- 10% (mg/L)	~~Volume~~ Removed (Liters)	Depth to water +/- 0.3 (ft)
12:00	16.32	6.97	-11	2.26	55.8	4.00	0 1	
12:05	14.24	6.85	-109	2.24	49.7	3.14	1.5 2	
12:10	13.64	6.83	-109	2.14	39.5	3.01	3 3	
12:12	13.38	6.79	-110	2.16	22.8	2.88	4.5 3.5	
12:15	13.35	6.76	-110	2.20	25.7	2.85	6 4	
12:17	13.34	6.74	-108	2.18	25.1	2.81	7.5 4.5	
							9	
SAMPLE								
12:17	13.34	6.74	-108	2.18	25.1	2.81	4.5	

QC SAMPLE(S): N/A
MNA SAMPLES: Fe2+ =
Notes: VOCs

TD = 36 ft
- 29 ft
7 FT water

0.163 gal/ft ≈ 1.14 gallons
× 3
3.42

Groundwater Monitoring Well Purging and Sampling

PLEXUS scientific — 25 years

Site Name: Fort Drum
Project #: 8119-4D3
Well ID: 2140-MW6
Initial Water Level: 30' 1.3"
Well Construction: 2inch PVC

Sampling Method: Submersible
Pump Inlet: 35 ft
Flow Rate: ~~300~~ mL/min
Personnel: MBW, AM
Date: 9-26-13

Time	Temp +/-3%	pH +/- 0.1	ORP +/- 10 (mV)	Conductivity +/- 3%	Turbidity +/-10% (NTU) or <10	DO +/- 10% (mg/L)	Volume Removed (Liters)	Depth to water +/- 0.3 (ft)
10~~0~~00	13.90	6.77	-69	4.13	24.4	0.0	0	30.90
10~~0~~05	13.79	6.77	-96	4.12	12.4	0.0	1.5	31.06
10~~0~~10	13.72	6.84	-99	4.16	10.0	0.0	3.0	31.22
1015	13.20	6.88	-99	4.13	9.9	0.0	4.5	31.26
1020	13.16	6.92	-98	4.09	9.1	0.0	6.0	31.28
SAMPLE								
1020								

QC SAMPLE(S): MNA SAMPLES: Fe2+ = ~~0.6~~

Notes:

VOCs + MTBE

BIO

Designated tubing

Groundwater Monitoring Well Purging and Sampling

PLEXUS scientific

Site Name: Fort Drum
Project #: 8119-4D3
Well ID: 2140-MW07
Initial Water Level: 30.40
Well Construction: 2" PVC

Sampling Method: Submersible
Pump Inlet:
Flow Rate: 300 mL/min
Personnel: NF + JC
Date: 9-26-2013

Time	Temp +/-3%	pH +/- 0.1	ORP +/- 10 (mV)	Conductivity +/- 3%	Turbidity +/-10% (NTU) or <10	DO +/- 10% (mg/L)	Volume Removed (Liters)	Depth to water +/- 0.3 (ft)
10:40	16.43	6.64	-97	1.69	89.9	3.15	0	31.64
10:45	15.15	6.54	-97	1.72	76.4	0.83	1.5	31.50
10:50	15.24	6.53	-97	1.74	60.7	0.71	3	31.90
10:55	15.27	6.52	-96	1.81	24.1	0.41	4.5	31.85
11:00	15.39	6.52	-95	1.84	15.8	0.30	6	31.82
11:05	15.40	6.52	-95	1.87	15.0	0.28	7.5	31.83
11:10	15.48	6.52	-95	1.88	14.4	0.27	9	31.77
SAMPLE								
11:10	15.48	6.52	-95	1.88	14.4	0.27	9	31.77

QC SAMPLE(S): DUP-8
MNA SAMPLES: Fe2+ = 2.1 mg/L

Notes: VOCs + MNA + DUP-8

Groundwater Monitoring Well Purging and Sampling

PLEXUS scientific

Site Name: Fort Drum
Project #: 8119-4D3
Well ID: 2140 - MW 09
Initial Water Level: 25.81
Well Construction: 2 inch PVC

Sampling Method: Submersible
Pump Inlet:
Flow Rate: 300 mL/min
Personnel: MBW AM
Date: 9-26-13

Time	Temp +/-3%	pH +/- 0.1	ORP +/- 10 (mV)	Conductivity +/- 3%	Turbidity +/-10% (NTU) or <10	DO +/- 10% (mg/L)	Volume Removed (Liters)	Depth to water +/- 0.3 (ft)
10:30	15.65	7.28	7	5.08	10.1	0.49	0	25.81
11:35	15.51	7.21	-29	5.05	2.1	0.00	1.5	26.02
11:40	15.93	7.15	-53	5.00	1.9	0.00	3.0	26.01
11:45	16.02	7.10	-63	4.94	1.5	0.00	4.5	26.08
11:50	15.98	7.07	-63	4.89	1.6	0.00	6.0	26.07
11:55	15.95	7.06	-60	4.91	1.6	0.00	7.5	26.07
12:00	15.96	7.01	-62	4.87	1.5	0.00	9.0	26.06
SAMPLE								
12:00	15.96	7.01	-62	4.87	1.5	0.00	9.0	26.06

QC SAMPLE(S): MS/MSD
MNA SAMPLES: Fe2+ =

Notes:

VOC

designated tubing

Groundwater Monitoring Well Purging and Sampling

PLEXUS scientific

Site Name: Fort Drum
Project #: 8119-4D3
Well ID: 7140-MW12
Initial Water Level: 21.55
Well Construction: 4" PVC

Sampling Method: Submersible
Pump Inlet:
Flow Rate: 300 mL/min
Personnel: NF+JC
Date: 9-26-2013

Time	Temp +/-3%	pH +/- 0.1	ORP +/- 10 (mV)	Conductivity +/- 3%	Turbidity +/-10% (NTU) or <10	DO +/- 10% (mg/L)	Volume Removed (Liters)	Depth to water +/- 0.3 (ft)
9:00	12.58	6.97	152	3.35	0.0	0.70	0	21.99
9:05	12.31	6.90	149	3.32	0.0	0.04	1.5	22.01
9:10	12.96	6.87	136	3.30	0.0	0.00	3	21.94
9:15	13.28	6.86	129	3.31	0.0	0.00	4.5	22.05
9:20	13.89	6.86	128	3.37	0.0	0.00	6	22.16
9:25	13.56	6.85	116	3.48	0.0	0.00	7.5	22.25
9:30	13.88	6.91	125	3.46	0.0	0.00	9	21.98
9:35	13.95	6.89	125	3.48	0.0	0.00	10.5	21.99
SAMPLE								
9:35	13.95	6.89	125	3.48	0.0	0.00	10.5	21.99

QC SAMPLE(S): N/A
MNA SAMPLES: Fe2+ = 0.0 MG/L
Notes: VOCs + MNA

Groundwater Monitoring Well Purging and Sampling

PLEXUS scientific

Site Name: Fort Drum
Project #: 8119-4D3
Well ID: 2140-MW#13
Initial Water Level: 9.65
Well Construction: 4" PVC

Sampling Method: Submersible
Pump Inlet:
Flow Rate: 300 mL/min
Personnel: NF+JC
Date: 9-26-2013

Time	Temp +/-3%	pH +/- 0.1	ORP +/- 10 (mV)	Conductivity +/- 3%	Turbidity +/-10% (NTU) or <10	DO +/- 10% (mg/L)	Volume Removed (Liters)	Depth to water +/- 0.3 (ft)
8:15	11.90	5.84	262	6.17	27.8	14.58	0	10.22
8:20	12.07	6.27	216	6.52	116	9.81	1.5	9.98
8:25	11.93	6.44	195	6.44	110	9.31	3	9.92
8:30	12.07	6.60	163	6.31	90.2	8.50	4.5	9.95
8:35	12.07	6.64	153	6.24	83.3	8.26	6	9.95
8:40	12.20	6.72	134	6.07	69.0	7.67	7.5	9.95
8:45	12.38	6.74	124	5.96	63.1	7.32	9	9.95
8:50	12.39	6.76	124	5.89	59.2	7.13	10.5	9.96
SAMPLE								
8:50	12.39	6.76	124	5.89	59.2	7.13	10.5	9.96

QC SAMPLE(S): N/A
MNA SAMPLES: Fe2+ = N/A

Notes: VOCs + MTBE

Groundwater Monitoring Well Purging and Sampling

PLEXUS scientific

Site Name: Fort Drum
Project #: 8119-4D3
Well ID: 2140 – MW37
Initial Water Level: 26.76
Well Construction: 2in PVC

Sampling Method: Submersible
Pump Inlet: 35 ft
Flow Rate: 400 mL/min
Personnel: AM MB KW
Date: 9/26/13

Time	Temp +/-3%	pH +/- 0.1	ORP +/- 10 (mV)	Conductivity +/- 3%	Turbidity +/-10% (NTU) or <10	DO +/- 10% (mg/L)	Volume Removed (Liters)	Depth to water +/- 0.3 (ft)
0910	13.10	5.99	-88	9.49	96.0	0.00	0	26.76
0915	13.53	6.05	-94	9.63	63.7	0.00	2	27.30
0920	13.82	6.11	-94	9.56	53.0	0.0	4	27.39
0925	14.05	6.18	-93	9.16	6.45	0.0	6	27.34
0930	14.24	6.21	-91	8.97	67.4	0.0	8	27.28
0935	14.29	6.25	-91	8.87	66.9	0.0	10	27.15
0940	14.30	6.31	-92	8.74	66.1	0.0	12	27.05
SAMPLE								
940	14.30	6.31	-92	8.74	66.1	0.0	12	27.05

QC SAMPLE(S):

MNA SAMPLES: Fe2+ = ~~5.6 mg/L~~

Notes:

VOCs + MTBE

Dedicated tubing

Groundwater Monitoring Well Purging and Sampling

PLEXUS scientific — 25 years

Site Name: Fort Drum
Project #: 8119-4D3
Well ID: 1295 - MW25
Initial Water Level: 11.44
Well Construction: 4" PVC

Sampling Method: Submersible
Pump Inlet: ~~11~~ 14'
Flow Rate: 400 mL/min
Personnel: BB
Date: 9/27/13

Time	Temp +/-3%	pH +/- 0.1	ORP +/- 10 (mV)	Conductivity +/- 3%	Turbidity +/-10% (NTU) or <10	DO +/- 10% (mg/L)	Volume Removed (Liters)	Depth to water +/- 0.3 (ft)
0915	15.33	5.78	180	2.21	0.0	7.85	0.0	11.76
0920	15.21	5.93	160	2.21	0.0	6.62	2.0	11.65
0925	15.29	6.00	95	2.20	0.0	6.02	4.0	11.67
0930	15.42	6.08	66	2.18	0.0	5.67	6.0	11.69
0935	15.62	6.21	30	2.15	0.0	4.80	8.0	11.70
0940	15.70	6.29	14	2.13	0.0	4.27	10.0	11.65
0945	16.07	6.38	-2	2.12	0.0	3.70	12.0	11.67
0950	16.26	6.45	-7	2.11	0.0	3.61	14.0	11.65
0955	16.30	6.48	-8	2.11	0.0	3.43	16.0	11.64
SAMPLE								
0955	16.30	6.48	-8	2.11	0.0	3.43	16.0	11.64

QC SAMPLE(S): MNA SAMPLES: Fe2+ = 2.2

Notes: Dedicated tubing
MNA
VOCs

Groundwater Monitoring Well Purging and Sampling

PLEXUS scientific

Site Name: Fort Drum
Project #: 8119-4D3
Well ID: 1295-MW26
Initial Water Level: 11.80
Well Construction: 4" PVC

Sampling Method: Submersible
Pump Inlet: 17'
Flow Rate: 400 mL/min
Personnel: BB/MBW
Date: 9/27/13

Time	Temp +/-3%	pH +/- 0.1	ORP +/- 10 (mV)	Conductivity +/- 3%	Turbidity +/-10% (NTU) or <10	DO +/- 10% (mg/L)	Volume Removed (Liters)	Depth to water +/- 0.3 (ft)
1155	15.80	7.61	62	0.522	0.0	0.00	0.0	11.85
1200	15.31	7.26	72	0.503	0.0	0.00	2.0	11.86
1205	15.20	7.21	74	0.502	0.0	0.00	4.0	11.87
1210	15.16	7.01	80	0.497	0.0	0.00	6.0	11.86
1215	15.22	6.99	80	0.494	0.0	0.00	8.0	11.85
1220	15.41	6.98	75	0.495	0.0	0.00	10.0	11.85
1225	15.53	6.91	76	0.491	0.0	0.00	12.0	11.85
SAMPLE								
1225	15.53	6.91	76	0.491	0.0	0.00	12.0	11.85

QC SAMPLE(S): MNA SAMPLES: Fe2+ = 0.0

Notes: MNA
VOCs

Groundwater Monitoring Well Purging and Sampling

PLEXUS scientific

Site Name: Fort Drum
Project #: 8119-4D3
Well ID: 1295-MW30
Initial Water Level: 11.28
Well Construction: 2in PVC

Sampling Method: Submersible
Pump Inlet:
Flow Rate: 300 mL/min
Personnel: MBW
Date: 9/27/2013

Time	Temp +/-3%	pH +/- 0.1	ORP +/- 10 (mV)	Conductivity +/- 3%	Turbidity +/-10% (NTU) or <10	DO +/- 10% (mg/L)	Volume Removed (Liters)	Depth to water +/- 0.3 (ft)
0915	1567	5.85	-12	2.70	8.3	4.00	0	11.30
0920	1581	6.14	-43	2.79	0.9	0.00	1.5	11.57
0925	1564	6.31	-60	2.86	3.1	0.00	3.0	11.89
0930	1554	6.50	-88	2.81	8.0	0.00	4.5	12.20
0935	1553	6.54	-92	2.80	7.4	0.0	6.0	12.11
0940	15.54	6.60	-101	2.80	5.9	0.0	7.5	12.08
0945	15.56	6.66	-107	2.78	5.6	0.0	9.0	11.89
0950	15.57	6.69	-110	2.75	5.5	0.0	10.5	11.92
SAMPLE								
950	15.57	6.69	-110	2.75	5.5	0.0	10.5	11.92

QC SAMPLE(S): Dup 9
MNA SAMPLES: Fe2+ = 20

Notes:

VOCs
MNA
SVOCs
Micro (Bugs)

Groundwater Monitoring Well Purging and Sampling

PLEXUS scientific

Site Name: Fort Drum
Project #: 8119-4D3
Well ID: 1295-MWA 1295-MWS27
Initial Water Level: 8.65
Well Construction: 4" PVC

Sampling Method: Submersible
Pump Inlet: 12'
Flow Rate: 300 mL/min
Personnel: BB
Date: 9/27/13

Time	Temp +/-3%	pH +/- 0.1	ORP +/- 10 (mV)	Conductivity +/- 3%	Turbidity +/-10% (NTU) or <10	DO +/- 10% (mg/L)	Volume Removed (Liters)	Depth to water +/- 0.3 (ft)
1035	18.22	6.95	-29	1.10	0.0	0.91	0.0	9.05
1040	18.20	6.94	-29	1.14	0.0	0.77	1.5	9.00
1045	18.22	6.92	-37	1.34	0.0	0.43	3.0	8.97
1050	18.25	6.91	-45	1.35	0.0	0.35	4.5	8.92
1055	18.25	6.91	-51	1.35	0.0	0.32	6.0	8.94
1100	18.21	6.91	-63	1.34	0.0	0.38	7.5	8.96
1105	18.24	6.90	-68	1.36	0.0	0.40	9.0	8.97
1110	18.35	6.90	-68	1.37	0.0	0.41	11.5	8.98
SAMPLE								
1110	18.25	6.90	-68	1.37	0.0	0.41	11.5	8.98

QC SAMPLE(S):

MNA SAMPLES: Fe2+ = 2.0

Notes: VOCs
MNA
Micro

Groundwater Monitoring Well Purging and Sampling

PLEXUS scientific

Site Name: Fort Drum
Project #: 8119-4D3
Well ID: 1295-MW528
Initial Water Level: 12.44
Well Construction: 2" PVC

Sampling Method: Submersible
Pump Inlet: 15 ft
Flow Rate: 400 mL/min
Personnel: MBW
Date: 9/27/13

Time	Temp +/-3%	pH +/- 0.1	ORP +/- 10 (mV)	Conductivity +/- 3%	Turbidity +/-10% (NTU) or <10	DO +/- 10% (mg/L)	Volume Removed (Liters)	Depth to water +/- 0.3 (ft)
1040	1501	7.13	-1	2.28	112.8	0.00	0	12.60
1045	1543	7.12	5	2.15	79.7	0.00	2.0	12.68
1050	1520	7.13	12	2.12	16.5	0.00	4.0	12.77
1055	1510	7.12	15	2.14	4.7	0.00	6.0	12.99
1100	1502	7.14	16	2.14	0.5	0.00	8.0	13.02
1105	14.97	7.11	19	2.18	0.0	0.00	10.0	12.97
1110	14.82	7.14	22	2.18	0.0	0.00	12.0	12.98
1115	14.76	7.14	22	2.19	0.0	0.00	14.0	12.96
SAMPLE								
1115	14.76	7.14	22	2.19	0.0	0.00	14.0	12.96

QC SAMPLE(S):

MNA SAMPLES: Fe2+ = 0.1

Notes: VOCs
MNA

Groundwater Monitoring Well Purging and Sampling

PLEXUS scientific

Site Name: Fort Drum
Project #: 8119-4D3
Well ID: 1595-SW01
Initial Water Level: N/A
Well Construction: N/A

Sampling Method: Submersible
Pump Inlet: N/A
Flow Rate: N/A mL/min
Personnel: NF + JC + AM
Date: 9-27-2013

Time	Temp +/-3%	pH +/- 0.1	ORP +/- 10 (mV)	Conductivity +/- 3%	Turbidity +/-10% (NTU) or <10	DO +/- 10% (mg/L)	Volume Removed (Liters)	Depth to water +/- 0.3 (ft)
SAMPLE								
14:10	15.11	7.13	-64	0.888	296	6.35	N/A	N/A

QC SAMPLE(S): SWDUP-1
MNA SAMPLES: Fe2+ = N/A

Notes: VOCs + SVOCs + Fe + Pb + Hardness

Groundwater Monitoring Well Purging and Sampling

PLEXUS scientific

Site Name: Fort Drum
Project #: 8119-4D3
Well ID: 1595-MW-SW04
Initial Water Level: N/A
Well Construction: N/A

Sampling Method: Submersible
Pump Inlet: N/A
Flow Rate: N/A mL/min
Personnel: NF + JC + AM
Date: 9-27-2013

Time	Temp +/-3%	pH +/- 0.1	ORP +/- 10 (mV)	Conductivity +/- 3%	Turbidity +/-10% (NTU) or <10	DO +/- 10% (mg/L)	Volume Removed (Liters)	Depth to water +/- 0.3 (ft)
SAMPLE								
14:30	13.96	7.34	25	0.892	0.00	8.90	N/A	N/A

QC SAMPLE(S): N/A
MNA SAMPLES: Fe2+ = N/A

Notes: VOCs + SVOCs + Fe + Pb + Hardness

Groundwater Monitoring Well Purging and Sampling

PLEXUS scientific

Site Name: Fort Drum
Project #: 8119-4D3
Well ID: 1595-SW08
Initial Water Level: N/A
Well Construction: N/A

Sampling Method: Submersible
Pump Inlet: N/A
Flow Rate: N/A mL/min
Personnel: NF + JC + AM
Date: 9-27-2013

Time	Temp +/-3%	pH +/- 0.1	ORP +/- 10 (mV)	Conductivity +/- 3%	Turbidity +/-10% (NTU) or <10	DO +/- 10% (mg/L)	Volume Removed (Liters)	Depth to water +/- 0.3 (ft)
	16.45	7.81	97	0.964	0.0	11.58	N/A	N/A
SAMPLE								
15:00	16.45	7.81	97	0.964	0.0	11.58	N/A	N/A

QC SAMPLE(S):
MNA SAMPLES: Fe2+ = N/A

Notes: VOCs + SVOCs + Fe + Pb + Hardness

Groundwater Monitoring Well Purging and Sampling

PLEXUS scientific

Site Name: Fort Drum
Project #: 8119-4D3
Well ID: 1795-SW00
Initial Water Level: N/A
Well Construction: N/A

Sampling Method: Submersible
Pump Inlet: N/A
Flow Rate: N/A mL/min
Personnel: NF + JC + AM
Date: 9-27-2013

Time	Temp +/-3%	pH +/- 0.1	ORP +/- 10 (mV)	Conductivity +/- 3%	Turbidity +/-10% (NTU) or <10	DO +/- 10% (mg/L)	Volume Removed (Liters)	Depth to water +/- 0.3 (ft)
SAMPLE								
16:00	13.52	8.26	118	0.649	0.0	8.85	N/A	N/A

QC SAMPLE(S): N/A
MNA SAMPLES: Fe2+ = N/A

Notes: VOCs + SVOCs + Fe + Pb + Hardness

Groundwater Monitoring Well Purging and Sampling

PLEXUS scientific

Site Name: Fort Drum
Project #: 8119-4D3
Well ID: 1795-SW04
Initial Water Level: N/A
Well Construction: N/A

Sampling Method: Submersible
Pump Inlet: N/A
Flow Rate: N/A mL/min
Personnel: NF + JC + AM
Date: 9-27-2013

Time	Temp +/-3%	pH +/- 0.1	ORP +/- 10 (mV)	Conductivity +/- 3%	Turbidity +/-10% (NTU) or <10	DO +/- 10% (mg/L)	Volume Removed (Liters)	Depth to water +/- 0.3 (ft)
SAMPLE								
15:30	13.24	8.13	99	0.808	0.0	11.42	N/A	N/A

QC SAMPLE(S): N/A
MNA SAMPLES: Fe2+ = N/A

Notes: VOCs + SVOCs + Fe + Pb + Hardness

Groundwater Monitoring Well Purging and Sampling

PLEXUS scientific

Site Name: Fort Drum
Project #: 8119-4D3
Well ID: 1795-SW08
Initial Water Level: N/A
Well Construction: N/A

Sampling Method: Submersible
Pump Inlet: N/A
Flow Rate: N/A mL/min
Personnel: NF + JC + AM
Date: 9-27-2013

Time	Temp +/-3%	pH +/- 0.1	ORP +/- 10 (mV)	Conductivity +/- 3%	Turbidity +/-10% (NTU) or <10	DO +/- 10% (mg/L)	Volume Removed (Liters)	Depth to water +/- 0.3 (ft)
SAMPLE								
15:50	12.50	8.17	106	0.972	0.0	10.11	N/A	N/A

QC SAMPLE(S): N/A
MNA SAMPLES: Fe2+ = N/A

Notes: VOCs + SVOCs + Fe + Pb + Hardness

Groundwater Monitoring Well Purging and Sampling

PLEXUS scientific

Site Name: Fort Drum
Project #: 8119-4D3
Well ID: OSL-SW01
Initial Water Level: N/A
Well Construction: N/A

Sampling Method: Submersible
Pump Inlet: N/A
Flow Rate: N/A mL/min
Personnel: NF + JC + AM
Date: 9-27-2013

Time	Temp +/-3%	pH +/- 0.1	ORP +/- 10 (mV)	Conductivity +/- 3%	Turbidity +/-10% (NTU) or <10	DO +/- 10% (mg/L)	Volume Removed (Liters)	Depth to water +/- 0.3 (ft)
SAMPLE								
10:45	11.28	6.41	170	0.628	0.0	11.71	N/A	N/A

QC SAMPLE(S): N/A
MNA SAMPLES: Fe2+ = N/A
Notes: VOCs + SVOCs + TAL Metals + Hardness

Groundwater Monitoring Well Purging and Sampling

PLEXUS scientific

Site Name: Fort Drum
Project #: 8119-4D3
Well ID: OB-SW04
Initial Water Level: N/A
Well Construction: N/A

Sampling Method: Submersible
Pump Inlet: N/A
Flow Rate: N/A mL/min
Personnel: NF + JC + AM
Date: 9-27-2013

Time	Temp +/-3%	pH +/- 0.1	ORP +/- 10 (mV)	Conductivity +/- 3%	Turbidity +/-10% (NTU) or <10	DO +/- 10% (mg/L)	Volume Removed (Liters)	Depth to water +/- 0.3 (ft)
SAMPLE								
11:00	12.44	6.84	154	0.711	0.6	9.71	N/A	N/A

QC SAMPLE(S):
MNA SAMPLES: Fe2+ = N/A

Notes: VOCs + SVOCs + TAL Metals + Hardness

Groundwater Monitoring Well Purging and Sampling

PLEXUS scientific

Site Name: Fort Drum
Project #: 8119-4D3
Well ID: OSL-SW06
Initial Water Level: N/A
Well Construction: N/A

Sampling Method: Submersible
Pump Inlet: N/A
Flow Rate: N/A mL/min
Personnel: NF + JC + AM
Date:

Time	Temp +/-3%	pH +/- 0.1	ORP +/- 10 (mV)	Conductivity +/- 3%	Turbidity +/-10% (NTU) or <10	DO +/- 10% (mg/L)	Volume Removed (Liters)	Depth to water +/- 0.3 (ft)
SAMPLE								
11:30	9.75	7.49	139	0.521	0.0	10.13	N/A	N/A

QC SAMPLE(S): N/A
MNA SAMPLES: Fe2+ = N/A

Notes: VOCs + SVOCs + TAL Metals + Hardness

Groundwater Monitoring Well Purging and Sampling

PLEXUS scientific

Site Name: Fort Drum
Project #: 8119-4D3
Well ID: OSL-SW09
Initial Water Level: N/A
Well Construction: N/A

Sampling Method: Submersible
Pump Inlet: N/A
Flow Rate: N/A mL/min
Personnel: NF + JC + AM
Date: 9-27-2013

Time	Temp +/-3%	pH +/- 0.1	ORP +/- 10 (mV)	Conductivity +/- 3%	Turbidity +/-10% (NTU) or <10	DO +/- 10% (mg/L)	Volume Removed (Liters)	Depth to water +/- 0.3 (ft)
SAMPLE								
12:30	11.36	7.46	49	0.547	0.0	10.81	N/A	N/A

QC SAMPLE(S): DUP-2 + MS/MSD
MNA SAMPLES: Fe2+ = N/A

Notes: VOCs + SVOCs + TAL Metals + Hardness

Groundwater Monitoring Well Purging and Sampling

PLEXUS scientific

Site Name: Fort Drum
Project #: 8119-4D3
Well ID: OSL-SW10
Initial Water Level: N/A
Well Construction: N/A

Sampling Method: Submersible
Pump Inlet: N/A
Flow Rate: N/A mL/min
Personnel: NF + JC + AM
Date: 9-27-2013

Time	Temp +/-3%	pH +/- 0.1	ORP +/- 10 (mV)	Conductivity +/- 3%	Turbidity +/-10% (NTU) or <10	DO +/- 10% (mg/L)	Volume Removed (Liters)	Depth to water +/- 0.3 (ft)
SAMPLE								
12:00	10.60	7.79	125	0.296	0.0	10.51	N/A	N/A

QC SAMPLE(S): N/A
MNA SAMPLES: Fe2+ = N/A

Notes: VOCs + SVOCs +

Groundwater Monitoring Well Purging and Sampling

PLEXUS scientific

Site Name: Fort Drum
Project #: 8119-4D3
Well ID: OSL-SP01
Initial Water Level: N/A
Well Construction: N/A

Sampling Method: Submersible
Pump Inlet: N/A
Flow Rate: N/A mL/min
Personnel: NF+JC+AM+BB
Date: 9-29-2013

Time	Temp +/-3%	pH +/- 0.1	ORP +/- 10 (mV)	Conductivity +/- 3%	Turbidity +/-10% (NTU) or <10	DO +/- 10% (mg/L)	Volume Removed (Liters)	Depth to water +/- 0.3 (ft)
SAMPLE								
0930	12.74	5.81	56	0.622	784	5.56	N/A	N/A

QC SAMPLE(S): SEDUP-1, MS/MSD
MNA SAMPLES: Fe2+ = N/A
Notes: VOCs + SVOCs + TAL Metals + Fe + Pb

Groundwater Monitoring Well Purging and Sampling

PLEXUS scientific

Site Name: Fort Drum
Project #: 8119-4D3
Well ID: SP01-EFF
Initial Water Level: N/A
Well Construction: N/A

Sampling Method: Submersible
Pump Inlet:
Flow Rate: N/A mL/min
Personnel: NF+JC+AM+BB
Date: 9-29-2013

Time	Temp +/-3%	pH +/- 0.1	ORP +/- 10 (mV)	Conductivity +/- 3%	Turbidity +/-10% (NTU) or <10	DO +/- 10% (mg/L)	Volume Removed (Liters)	Depth to water +/- 0.3 (ft)
SAMPLE								
1000	11.63	6.13	19	1.50	90.9	8.03	N/A	N/A

QC SAMPLE(S): N/A
MNA SAMPLES: Fe2+ = N/A

Notes: VOCs + Fe + Pb

Groundwater Monitoring Well Purging and Sampling

PLEXUS scientific

Site Name: Fort Drum
Project #: 8119-4D3
Well ID: OSL-SP03
Initial Water Level: N/A
Well Construction: N/A

Sampling Method: Submersible
Pump Inlet: N/A
Flow Rate: N/A mL/min
Personnel: NF + JC + AM
Date: 9-29-2013

Time	Temp +/-3%	pH +/- 0.1	ORP +/- 10 (mV)	Conductivity +/- 3%	Turbidity +/-10% (NTU) or <10	DO +/- 10% (mg/L)	Volume Removed (Liters)	Depth to water +/- 0.3 (ft)
SAMPLE								
1045	12.43	7.04	-98	1.76	554	3.92	N/A	N/A

QC SAMPLE(S): N/A
MNA SAMPLES: Fe2+ = N/A
Notes: VOCs + SVOCs + TAL Metals + Fe + Pb

Groundwater Monitoring Well Purging and Sampling

PLEXUS scientific

Site Name: Fort Drum
Project #: 8119-4D3
Well ID: SP03-EFF
Initial Water Level: N/A
Well Construction: N/A

Sampling Method: Submersible
Pump Inlet: N/A
Flow Rate: N/A mL/min
Personnel: NF + JC + AM
Date: 9-29-2013

Time	Temp +/-3%	pH +/- 0.1	ORP +/- 10 (mV)	Conductivity +/- 3%	Turbidity +/-10% (NTU) or <10	DO +/- 10% (mg/L)	Volume Removed (Liters)	Depth to water +/- 0.3 (ft)
SAMPLE								
1100	12.86	6.97	-65	1.77	19.7	4.80	N/A	N/A

QC SAMPLE(S): N/A
MNA SAMPLES: Fe2+ = N/A

Notes: VOCs + Fe + Pb

Groundwater Monitoring Well Purging and Sampling

PLEXUS scientific

Site Name: Fort Drum
Project #: 8119-4D3
Well ID: LC009
Initial Water Level: N/A
Well Construction: N/A

Sampling Method: Submersible
Pump Inlet: N/A
Flow Rate: N/A mL/min
Personnel: NF + JC + AM
Date: 9-29-2013

Time	Temp +/-3%	pH +/- 0.1	ORP +/- 10 (mV)	Conductivity +/- 3%	Turbidity +/-10% (NTU) or <10	DO +/- 10% (mg/L)	Volume Removed (Liters)	Depth to water +/- 0.3 (ft)
SAMPLE								
1145	13.72	7.00	-80	0.909	85.9	3.19	N/A	N/A

QC SAMPLE(S): N/A
MNA SAMPLES: Fe2+ = N/A

Notes: VOCs + Fe + Pb

Groundwater Monitoring Well Purging and Sampling

PLEXUS scientific

Site Name: Fort Drum
Project #: 8119-4D3
Well ID: LC009-EFF
Initial Water Level: N/A
Well Construction: N/A

Sampling Method: Submersible
Pump Inlet: N/A
Flow Rate: N/A mL/min
Personnel: NF+JC+AM
Date: 9-29-2013

Time	Temp +/-3%	pH +/- 0.1	ORP +/- 10 (mV)	Conductivity +/- 3%	Turbidity +/-10% (NTU) or <10	DO +/- 10% (mg/L)	Volume Removed (Liters)	Depth to water +/- 0.3 (ft)
SAMPLE								
1200	12.23	7.04	-88	0.922	128	3.24	N/A	N/A

QC SAMPLE(S): N/A
MNA SAMPLES: Fe2+ = N/A

Notes: VOCs + Fe + Pb

Groundwater Monitoring Well Purging and Sampling

PLEXUS scientific

Site Name: Fort Drum
Project #: 8119-4D3
Well ID: LS31
Initial Water Level: N/A
Well Construction: N/A

Sampling Method: Submersible
Pump Inlet: N/A
Flow Rate: N/A mL/min
Personnel: AM / BB / JC / NF
Date: 9/29/13

Time	Temp +/-3%	pH +/- 0.1	ORP +/- 10 (mV)	Conductivity +/- 3%	Turbidity +/-10% (NTU) or <10	DO +/- 10% (mg/L)	Volume Removed (Liters)	Depth to water +/- 0.3 (ft)
SAMPLE								
1015	12.21	6.68	-48	1.70	181	3.55	N/A	N/A

QC SAMPLE(S): N/A
MNA SAMPLES: Fe2+ = N/A

Notes: VOCs + Fe + Pb

Groundwater Monitoring Well Purging and Sampling

PLEXUS scientific

Site Name: Fort Drum
Project #: 8119-4D3
Well ID: LS31-EFF
Initial Water Level: N/A
Well Construction: N/A

Sampling Method: Submersible
Pump Inlet: N/A
Flow Rate: N/A mL/min
Personnel: AM + NF + JC + BB
Date: 9-29-2013

Time	Temp +/-3%	pH +/- 0.1	ORP +/- 10 (mV)	Conductivity +/- 3%	Turbidity +/-10% (NTU) or <10	DO +/- 10% (mg/L)	Volume Removed (Liters)	Depth to water +/- 0.3 (ft)
SAMPLE								
1030	11.28	7.16	-79	0.983	92.1	3.81	N/A	N/A

QC SAMPLE(S): N/A
MNA SAMPLES: Fe2+ = N/A

Notes: VOCs + Fe + Pb

Groundwater Monitoring Well Purging and Sampling

PLEXUS scientific — 25 years

Site Name: Fort Drum
Project #: 8119-4D3
Well ID: LS34
Initial Water Level: N/A
Well Construction: N/A

Sampling Method: Submersible
Pump Inlet: N/A
Flow Rate: N/A mL/min
Personnel: NF + JC + AM
Date: 9-29-2013

Time	Temp +/-3%	pH +/- 0.1	ORP +/- 10 (mV)	Conductivity +/- 3%	Turbidity +/-10% (NTU) or <10	DO +/- 10% (mg/L)	Volume Removed (Liters)	Depth to water +/- 0.3 (ft)
SAMPLE								
1115	12.17	7.14	-79	1.12	123	3.45	N/A	N/A

QC SAMPLE(S): N/A
MNA SAMPLES: Fe2+ = N/A

Notes: VOCs + Fe + Pb

Groundwater Monitoring Well Purging and Sampling

PLEXUS scientific

Site Name: Fort Drum
Project #: 8119-4D3
Well ID: LS34-EFF
Initial Water Level: N/A
Well Construction: N/A

Sampling Method: Submersible
Pump Inlet: N/A
Flow Rate: N/A mL/min
Personnel: NF + JC + AM
Date: 9-29-2013

Time	Temp +/-3%	pH +/- 0.1	ORP +/- 10 (mV)	Conductivity +/- 3%	Turbidity +/-10% (NTU) or <10	DO +/- 10% (mg/L)	Volume Removed (Liters)	Depth to water +/- 0.3 (ft)
SAMPLE								
1130	11.90	6.98	-83	1.07	32.3	2.98	N/A	N/A

QC SAMPLE(S): N/A
MNA SAMPLES: Fe2+ = N/A

Notes: VOCs + Fe + Pb

APPENDIX C

2013 Annual Post-Closure Operations and Maintenance Report for the OSL and ASL

(Plexus, 2014)

DRAFT FINAL 2013 ANNUAL POST-CLOSURE OPERATIONS AND MAINTENANCE REPORT OLD SANITARY LANDFILL AND AIRFIELD SANITARY LANDFILL AT FORT DRUM, NEW YORK

Prepared For:

UNITED STATES ARMY ENVIRONMENTAL COMMAND
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Delivery Order: 0004

March 2014

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ATTACHMENTS

Attachment A OSL Cell 2 Erosion Photographs
Attachment B All OSL Analytical Results, Fall 2013

LIST OF ACRONYMS AND ABBREVIATIONS

ASL	Airfield Sanitary Landfill
OSL	Old Sanitary Landfill
Phyto	Phytoremediation
Plexus	Plexus Scientific Corporation
SVOCs	Semi-Volatile Organic Compounds
TAL	Target Analyte List
USEPA	United States Environmental Protection Agency
VOCs	Volatile Organic Compounds

1.0 Synopsis of Work Performed

This report summarizes the compliance work performed by Plexus Scientific Corporation (Plexus) in accordance with the *Post-Closure Monitoring and Maintenance Operations Manual, Old Sanitary Landfill* (Plexus, 2010). Additionally, the Airfield Sanitary Landfill (ASL) was inspected in accordance with the *Final Work Plan Addendum for the Groundwater Sampling at the Airfield Sanitary Landfill* (Malcolm Pirnie Inc., 1999).

Plexus performed annual monitoring for Cells 1 and 2 of the Old Sanitary Landfill (OSL) and the ASL at Fort Drum, New York, from September 23 - 29, 2013. Plexus performed the annual inspections of Cells 1 and 2 of the OSL and the ASL on November 21, 2013. The results of the OSL and ASL inspections and monitoring are summarized in this report.

2.0 Old Sanitary Landfill (OSL)

2.1 Old Sanitary Landfill (OSL) Inspection

The landfill inspections at the Fort Drum OSL are designed to monitor the integrity of the cap and security fence in accordance with previously established inspection criteria outlined in the approved manual (Plexus, 2010). Plexus conducted the inspection by assessing each of the specified inspection criteria (**Table 2-1; Figure 2-1**). The inspection was conducted on November 21, 2013. Only one deficiency was noted during the OSL inspection—erosion beneath a landfill run-off drain pipe that will need repairing.

2.1.1 Inspection Summary

Generally, both cells of the OSL were found to be in good condition. The vegetative cover and vents all appeared to be in good working condition. No issues affecting the security and integrity of the cap were noted during the inspection.

Significant erosion was found under a landfill run-off drain pipe on the northeast boundary of the OSL Cell 2. Refer to **Attachment A** for photographs of the erosion damage.

2.1.2 Future Actions

Plexus will continue the annual landfill inspections as required by the OSL *Post-Closure Monitoring and Maintenance Operations Manual* (Plexus, 2010).

The slope erosion damage under the landfill run-off drain pipe on the northeast boundary of the OSL Cell 2 will be repaired following winter snow melt. The repair will be reported on in the *2014 Annual Post-Closure Operations and Maintenance Report for the OSL and ASL*.

2.2 Old Sanitary Landfill (OSL) Post-Closure Environmental Monitoring

The OSL post-closure monitoring program includes sampling groundwater monitoring wells around Cells 1 and 2 of the OSL, the surface water of the OSL creek that runs east to west along the northern border of the landfill, and two landfill seeps at Cell 2. Environmental monitoring locations and analysis for post-closure activities are summarized in **Table 2-2**.

2.2.1 Groundwater

Groundwater monitoring wells were sampled as part of the post-closure monitoring plan from September 24-25, 2013. The monitoring locations are shown in **Figure 2-2**. **Table 2-2** summarizes the environmental sampling plan for the groundwater monitoring locations. Each well was sampled for volatile organic compounds (VOCs) and semi-volatile organic compounds (SVOCs) in accordance with United States Environmental Protection Agency (USEPA) analytical methods 8260B and 8270C, respectively, and target analyte list (TAL) metals in accordance with USEPA Method 6010.

2.2.1.1 Groundwater Results

Results for analytes detected in OSL groundwater monitoring wells are summarized in **Table 2-3**. Samples that exceeded criteria are shown in **Figure 2-3**. Complete groundwater analytical results are located in **Attachment B**. Groundwater criteria exceedances include petroleum-range organics and metals (iron, manganese, sodium, and thallium). Tetrachloroethene only exceeded groundwater criteria in one monitoring well (3805-MWI15).

The analytical data validation reports are located in **Appendix E** of the *2013 Annual Basewide Sampling and Monitoring Report* (Plexus, 2014).

2.2.1.2 Future Actions

The groundwater sampling program at the OSL is sufficient to characterize the conditions at the site, and the program will remain unchanged for 2014.

2.2.2 Surface Water

Surface water samples were collected along the OSL Creek on September 27, 2013 at the sample locations shown in **Figure 2-2. Table 2-2** summarizes the environmental sampling plan for the surface water monitoring points. Surface water samples were analyzed for VOCs, SVOCs, and TAL metals in accordance with corresponding USEPA analytical methods 8260B, 8270C, and 6010.

2.2.2.1 Surface Water Results

Results for analytes detected in OSL surface water are summarized in **Table 2-4.** Samples that exceeded criteria are shown in **Figure 2-4.** Complete surface water analytical results are located in **Attachment B**. The only analyte to exceed screening criteria was benzene at monitoring point OSL-SW09. The nearest downstream sample, OSL-SW06, had no VOC detections, and only one SVOC detection, of bis(2-ethylhexyl)phthalate, which Plexus attributes to laboratory blank contamination. This lack of detections indicates that petroleum-range organics discharging from the OSL are confined to the proximity of the landfill. All three surface water samples exceeded screening criteria for the nutrient metal sodium, and both samples collected downstream of OSL-SW10 exceeded the criteria for the nutrient metal iron.

The analytical data validation reports are located in **Appendix E** of the *2013 Annual Basewide Sampling and Monitoring Report* (Plexus, 2014).

2.2.2.2 Future Actions

The surface water sampling program at the OSL is sufficient to characterize the conditions at the site, and the program will remain unchanged for 2014.

2.2.3 Landfill Seeps

Seep samples OSL-SP01 and OSL-SP03 were collected on September 29, 2013 at the sample locations shown in **Figure 2-2**. Seep samples were collected to analyze the landfill leachate that drains into the phytoremediation areas (phyto; **Figure 2-5**) prior to discharge into the OSL Creek. **Table 2-2** summarizes the environmental sampling plan for the landfill seeps. These samples were analyzed for VOCs, SVOCs, and TAL metals in accordance with corresponding USEPA analytical methods 8260B, 8270C, and 6010.

2.2.3.1 Landfill Seep Results

The analytical results of the landfill seep monitoring are summarized in **Table 2-4**. Samples that exceeded criteria are shown in **Figure 2-6.** Complete landfill seep analytical results are located in **Attachment B**. Both seep samples exceeded criteria for petroleum-range organics, and nutrient metals (iron, manganese, and sodium).

The analytical data validation reports are located in **Appendix E** of the *2013 Annual Basewide Sampling and Monitoring Report* (Plexus, 2014).

2.2.3.2 Future Actions

The landfill seep sampling program at the OSL is sufficient to characterize the conditions at the site, and the program will remain unchanged for 2014.

2.3 Phytoremediation (Phyto) Plot Inspection

The annual inspection of the phyto plot assesses the survivability of the planted black willow (*Salix nigra*) trees within the plantation areas. The phyto plot is designed to reduce contaminant concentrations and hydraulically control the landfill's leachate seeps to minimize contaminants entering the OSL Creek (Kline, 2008). In addition to general survivability, the phyto plot inspection assesses weed control, the presence of insect and disease problems, and the effects of animal activity. **Figure 2-5** shows the planting areas and environmental monitoring locations. The annual inspection was conducted on November 21, 2013.

2.3.1 Inspection Summary

The inspection of the planting areas revealed no significant signs of abnormal willow tree die-off in the phyto plot plantation areas. Weeds, insect, disease, and effects of animal activity were found to have no impact on willow tree survivability in the planting areas.

2.3.2 Future Actions

Plexus will continue annual inspections of the phyto plot in accordance with the *Post-Closure Monitoring and Maintenance Operations Manual, Old Sanitary Landfill* (Plexus, 2010).

2.4 Phytoremediation (Phyto) Plot Environmental Monitoring

To monitor the function of the phyto plot, landfill seep run-off samples were collected on September 29, 2013 near the edge of the planting areas where run-off from the landfill seeps enters the phyto plot. Each seep sample was paired with an effluent seep sample collected where run-off from the seep discharges into the OSL Creek. Locations of the seeps are shown in **Figure 2-5**. **Table 2-2** summarizes the environmental sampling plan for the phyto plot. These

samples were analyzed for VOCs in accordance with USEPA Method 8260B, and for iron and lead in accordance with USEPA Method 6010.

Biomass from the system's willow trees was sampled for VOCs in 2009 and 2012, and will be sampled for VOCs again during the 2015 phyto plot environmental monitoring event.

2.4.1 Seep Results

The analytical results of the landfill seep monitoring location samples are summarized in **Table 2-4**. Samples that exceeded criteria are shown in **Figure 2-6.** Complete phyto plot seep analytical results are located in **Attachment B**. All influent seep samples except LS31 exceeded criteria for petroleum-range organics. However, LS31 was the only influent seep sample to exceed criteria for tetrachloroethene. The three farthest downstream effluent seep samples, SPO3-EFF, LS34-EFF, and LC009-EFF, exceeded criteria for petroleum-range organics. LS31-EFF was the only effluent seep sample to exceed criteria for tetrachloroethene. All seep samples exceeded criteria for the nutrient metal iron.

The analytical data validation reports are located in **Appendix E** of the *2013 Annual Basewide Sampling and Monitoring Report* (Plexus, 2014).

2.4.2 Future Actions

Analytical results from all effluent seep samples, with the exception of LC009-EFF, demonstrate significant reductions in the concentrations of VOCs compared to the influent seep samples. Previous analytical results of the biomass samples demonstrate that the biomass is absorbing VOCs from the groundwater and reducing VOC concentrations in the effluent seep samples (Plexus, 2013). As the biomass matures, VOC absorption rates should increase. The reductions in VOC concentrations from the influent seep to the effluent seep samples and the presence of VOCs in the biomass samples indicate the phyto plot is continuing to function in its purpose to reduce VOCs leaching from the landfill and discharging into the OSL Creek. Therefore, the monitoring program will remain unchanged for 2014.

3.0 Airfield Sanitary Landfill (ASL)

3.1 Airfield Sanitary Landfill (ASL) Inspection

The landfill inspections at the Fort Drum ASL are designed to monitor the integrity of the cap and security fence in accordance with the approved manual (CDM, 1997). Plexus evaluated the condition of the landfill according to a series of previously established inspection criteria designed to generate an overall picture of the landfill's status. Plexus conducted the inspection by assessing each of the specified criteria (**Table 3-1; Figure 3-1**), and where deficiencies were noted, corrective actions were implemented. The inspection was conducted on November 21, 2013.

3.1.1 Inspection Summary

Generally, the ASL is in good condition. The vegetative cover, drainage features, and vents all appeared to be in good working condition. No issues affecting the security and integrity of the cap were noted during the inspection. Small animal burrows were discovered in a berm near the southeast corner of the landfill, and subsequently backfilled,.

3.1.2 Future Actions

Plexus will continue the annual landfill inspections as required by the *ASL Post-Closure Monitoring and Maintenance Operations Manual* (CDM, 1997).

3.2 Airfield Sanitary Landfill (ASL) Environmental Monitoring

Groundwater at the ASL was sampled in 2011 and will be sampled again in 2016, in accordance with the *2009 Annual Basewide Field Sampling Plan (Plexus, 2009).*

4.0 References

CDM, 1997. *Post-Closure Monitoring and Maintenance Operations Manual, Airfield Sanitary Landfill,* Fort Drum, New York.

Kline, Asa B; 2008. *Hydraulic Control in Willow Phytoremediation Systems at Fort Drum, New York.* Master of Science Thesis, SUNY College of Environmental Science and Forestry, Syracuse, New York. December.

Malcolm Pirnie Inc., 1999. *Final Work Plan Addendum for the Groundwater Sampling at the Airfield Sanitary Landfill*. Fort Drum, New York.

Plexus Scientific Corporation (Plexus), 2009. *2009 Annual Basewide Field Sampling Plan,* Fort Drum, New York. September.

Plexus, 2010. *Post-Closure Monitoring and Maintenance Operations Manual, Old Sanitary Landfill,* Fort Drum, New York. January.

Plexus, 2013. *Draft 2012 Annual Post-Closure Operations and Maintenance Report*, Old Sanitary Landfill and Airfield Sanitary Landfill, Fort Drum, New York. April.

Plexus, 2014. *Draft 2013 Annual Basewide Sampling and Monitoring Report,* Fort Drum, New York. March.

Tables

Table 2-1 OSL Cell 1 2 Inspection Worksheet

INSPECTION PLAN

Fort Drum OSL Cell 1 & 2 Inspection Report

YEARLY INSPECTION CHECKLIST

DATE: 11/21/2013 QUARTER: 4th

NAME: Michael Brewin YEAR: 2013

ITEM	CONDITIONS	YES	NO	ACTION TO BE TAKEN/COMMENTS
Vegetative Layer/Cover Inspections				
General	General vegetative conditions acceptable?	X		
	Stressed or damaged vegetation?		X	
	Deep-rooted or woody vegetation?		X	
	Potential hazardous conditions?		X	
Erosion and Surface	Erosion damage, gullies, breaches?	X		(See below) Erosion under Drainage Pipe
	Areas of subsidence?		X	
	Surface water ponding/accum.?		X	
	Obvious differential settlement?		X	
	Potential hazardous conditions?		X	
Animal Control	Damage due to burrowing animals?		X	
	Obvious presence of animals?		X	
Surface Activities	Unauthorized trespassing?		X	
	Intrusive activities/vehicle use?		X	
	Dumping or disposal?		X	
	Structures?		X	
Fences and Signs	Fence integrity good?	X		
	Site secure?	X		
	Perimeter signs intact and visible?	X		
Gas Vent Pipes	Damaged or Obstructed?		X	
Drainage Ditches	Drainage features clear/unobstructed?	X		
	Accumulation of sediment/debris?		X	

Other Notes

Drainage Pipe on the Northeast boundary of the OSL cell 2 has significant erosion beneath the landfill run-off drainage pipe. Slope disturbance will need to be repaired once the winter snow cover has gone (see associated photographs).

Table 2-2 - Summary of the OSL Post-Closure Plan Monitoring Locations

Sample ID	VOCs	SVOCs	TAL Metals	Iron	Lead	Hardness	QA/QC samples	
	8260B	8270C	6010/7000	6010B	6010B	EPA 130.2	DUP	MS/MSD
Groundwater Monitoring Locations								
3805-MWD16	X	X	X					
3805-MWD18	X	X	X					
3805-MWI15	X	X	X				X	X
3805-MWI17	X	X	X					
3805-MWS14	X	X	X					
3805-MWS4	X	X	X					
OSL-MW2	X	X	X				X	
OSL-MW8	X	X	X					
OSL-MW9A	X	X	X					
OSL-MW10	X	X	X					
Surface Water Monitoring Locations								
OSL-SW06	X	X	X			X		
OSL-SW09	X	X	X			X	X	X
OSL-SW10	X	X	X			X		
Seep Monitoring Locations								
OSL-SP01	X	X	X	X	X		X	X
SP01-EFF	X			X	X			
OSL-SP03	X	X	X	X	X			
SP03-EFF	X			X	X			
LC009	X			X	X			
LC009-EFF	X			X	X			
LS31	X			X	X			
LS31-EFF	X			X	X			
LS34	X			X	X			
LS34-EFF	**X**			**X**	**X**			

Abbreviation Key:

VOCs - Volatile Organic Compounds

SVOCs - Semi-volatile Organic Compounds

TAL - Target Analyte List

QA/QC - Quality Assurance/Quality Control

DUP - Duplicate

MS/MSD - Matrix Spike/Matrix Spike Duplicate

OSL - Old Sanitary Landfill

Table 2-3 - OSL Groundwater Analytical Data Summary (Detected Analytes)

Analyte	Screening Value	Unit	3805-MWD16	3805-MWD18	3805-MWI15	3805-MWI15 (DUP)	3805-MWI17	3805-MWS14	3805-MWS4	3805-PZ13S	OSL-MW2	OSL-MW2 (DUP)	OSL-MW8	OSL-MW9A	OSL-MW10
Volatile Organic Compounds (VOCs)															
1,2,4-Trimethylbenzene	None	µg/L	0.4 J	0.23 U	0.23 UJ	0.23 U	370	222	109	1,730	0.23 U	0.23 U	0.24 J	0.23 UJ	0.23 U
1,3,5-Trimethylbenzene	None	µg/L	0.43 U	0.43 U	0.43 U	0.43 U	91.5	71 J	12.8	513	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
1,4-Dichlorobenzene	3	µg/L	0.3 U	0.3 U	0.3 U	0.3 U	3 U	0.3 U	0.3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Benzene	1	µg/L	0.28 U	**17.8**	**4.8**	**4.9**	**1,420**	**6.6**	**58.3**	2.8 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
Chloromethane	5	µg/L	0.36 U	0.36 U	0.36 U	0.36 U	3.6 U	0.36 U	0.59 J	3.6 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U
Dichlorodifluoromethane	5	µg/L	0.63 U	0.63 U	0.63 U	0.63 U	6.3 U	0.63 U	0.63 U	6.3 U	0.63 U	0.63 U	0.63 U	0.63 U	2 J
Ethylbenzene	5	µg/L	0.21 U	0.21 U	0.21 U	0.21 U	**877**	**141**	**123**	**1,170**	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
Isopropylbenzene	5	µg/L	0.22 UJ	0.22 U	0.29 J	0.34 J	**46.5**	**14.6**	**8.6**	**60.4**	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
m,p-Xylene	None	µg/L	0.4 U	0.4 U	0.4 U	0.4 U	1,350	331 J	189	4,560	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Naphthalene	10	µg/L	0.25 U	0.25 U	0.25 U	0.25 UJ	**112**	**63.4 J**	**38.8**	**357 J**	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
n-Butylbenzene	5	µg/L	0.39 UJ	0.39 U	0.39 UJ	0.39 U	3.9 U	**14.7**	0.39 U	3.9 U	0.39 U	0.39 U	0.39 U	0.39 UJ	0.39 U
n-Propylbenzene	5	µg/L	0.32 UJ	0.32 U	0.32 UJ	0.32 U	**88.5**	**35.7**	**22**	**206**	0.32 U	0.32 U	0.32 U	0.32 UJ	0.32 U
o-Xylene	5	µg/L	0.19 U	0.19 U	0.19 U	0.19 U	**153**	**90.7**	4.2	**1,620**	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
p-Isopropyltoluene	5	µg/L	0.42 U	0.42 U	0.42 U	0.42 U	4.2 U	2.7 J	0.83 J	**7.2 J**	0.42 U	0.42 U	0.42 U	0.42 UJ	0.42 U
sec-Butylbenzene	5	µg/L	0.48 UJ	0.48 U	0.48 UJ	0.48 U	4.8 U	2.7 J	0.99 J	**9.6 J**	0.48 U	0.48 U	0.48 U	0.48 UJ	0.48 U
Tetrachloroethene	5	µg/L	0.25 U	0.25 U	**89.3**	**87.8**	2.5 U	4.8	0.25 U	2.5 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
Toluene	5	µg/L	0.44 U	0.44 U	0.44 U	0.44 U	**146**	**11.7**	**17.6**	**697**	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U
Trichloroethene	5	µg/L	0.5 U	0.5 U	1.6	1.5	5 U	1.3	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Xylene (total)	5	µg/L	0.19 U	0.19 U	0.19 U	0.19 U	**1,500**	**422 J**	**193**	**6,180**	0.19 U	0.19 U	0.29 J	0.19 U	0.19 U
Semi-Volatile Organic Compounds (SVOCs)															
2,4-Dimethylphenol	None	µg/L	1.5 U	1.5 U	1.5 R	1.5 U	10.5	1.5 U	1.8 J	54.7	1.5 U	1.5 U	1.5 U	1.5 U	1.6 U
2-Methylnaphthalene	None	µg/L	0.38 U	0.38 U	0.38 U	0.38 U	26.2	11.4	12.8	53	0.38 U	0.38 U	0.38 U	0.38 U	0.4 U
2-Methylphenol	None	µg/L	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	5	1 U	1 U	1 U	1 U	1.1 U
3&4-Methylphenol	None	µg/L	0.93 U	0.93 U	0.93 UJ	0.93 U	0.93 U	0.93 U	0.93 U	7.1	0.93 U	0.93 U	0.93 U	0.93 U	0.97 U
Carbazole	None	µg/L	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.81 J	0.36 U	0.36 U	0.36 U	0.36 U	0.38 U
Fluorene	50	µg/L	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.81 J	0.36 U	0.36 U	0.36 U	0.36 U	0.38 U
Hexachlorobenzene	0.04	µg/L	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.59 J	0.36 U
Naphthalene	10	µg/L	0.26 U	0.26 U	0.26 U	0.26 U	**123**	**40.4**	**37.9**	**283**	0.26 U	0.26 U	0.26 U	0.26 U	0.27 U
Target Analyte Metals															
Aluminum	None	µg/L	37.1 J	30 J	200 U	59.1 J	11 U	35 J	22.1 J	11 U	13.4 J	11.3 J	11 U	22.7 J	11 U
Arsenic	25	µg/L	1.5 U	1.5 U	1.5 U	1.5 U	3.8	1.5 U	4.5	3 U	1.5 U	1.5 U	1.5 U	2 J	1.5 U
Barium	1000	µg/L	200 U	22.4 J	200 U	200 U	45.9 J	200 U	37 J	211	8.6 J	9 J	20.6 J	200 U	34.6 J
Cadmium	5	µg/L	0.24 U	0.9 J	0.24 U	0.24 U	0.8 J	0.3 J	0.7 J	0.6 J	0.6 J	0.6 J	1 J	0.24 U	0.8 J
Calcium	None	µg/L	31,800	28,600	115,000	114,000	92,200	85,800	45,200	77,300	43,200	45,700	48,900	27,800	68,900
Chromium	50	µg/L	0.92 U	2 J	0.92 U	0.92 U	1 J	0.92 U	1 J	6.3 J	1.6 J	1.4 J	1.6 J	2.2 J	1.1 J
Cobalt	None	µg/L	0.48 U	0.48 U	0.48 U	0.5 J	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	1.1 J	0.48 U
Copper	200	µg/L	1 U	1.9 J	1 U	1 U	2.2 J	1 U	1.1 J	10 U	1.4 J	1.2 J	10 U	10 U	1.5 J
Iron	300	µg/L	100 U	176	**918 J**	**635 J**	**10,100**	**14,700 J**	**13,200**	**50,900**	24.3 J	19.9 J	29.5 J	**4,040 J**	**8,070**
Lead	25	µg/L	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	3.3	2.4 U	8.3	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
Magnesium	35000	µg/L	5,000 U	9,540	21,200	20,600	12,000	7,220	2,470 J	4,800 J	3,990 J	4,240 J	3,570 J	5,000 U	5,720
Manganese	300	µg/L	15 U	124	**1,060**	**917**	**325**	**2,450**	**1,480**	**430**	15 U	15 U	15 U	**2,700**	**390**
Nickel	100	µg/L	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	4.8 J	1.6 U	1.6 U	1.6 U	2.1 J	1.6 U
Selenium	10	µg/L	2.4 U	2.8 J	2.4 U	2.4 U	5.8 J	2.4 J	4.9 J	4.5 J	2.7 J	4.3 J	3.4 J	2.4 U	4.7 J
Sodium	20000	µg/L	10,000 U	7,670 J	**92,400**	**97,800**	**65,700**	**427,000**	**101,000**	**115,000**	10,000 U	10,000 U	**149,000**	**127,000**	**86,200**
Thallium	0.5	µg/L	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	**1.8 J**	**1.9 J**	1.3 U	**2.7 J**
Vanadium	None	µg/L	1.9 J	0.72 U	1.1 J	0.8 J	0.72 U	2 J	0.72 U	0.72 U	0.72 U	0.72 U	50 U	2.5 J	0.72 U
Zinc	2000	µg/L	4.4 U	8.7 J	5.2 J	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U

Qualifier Key:

U - Analyte not detected in the sample. Value represents the quantitation/detection limit.

J - Result reported is a quantitative estimate

R - Rejected Data

Abbreviation Key:

µg/L - Micrograms per Liter

A Cell Highlighted and Bold Indicates a detected analyte that exceeds the screening criteria
A cell highlighted and not bold Indicates a detected analyte that does not exceed the screening criteria
Indicates the analyte is not detected or not sampled

Table 2-4 - OSL Landfill Seep and Surface Water Analytical Data Summary (Detected Analytes)

			Landfill Seep											Surface Water			
Analyte	**Screening Value**	**Unit**	**LC009**	**LC009-EFF**	**LS31**	**LS31-EFF**	**LS34**	**LS34-EFF**	**OSL-SP01**	**OSL-SP01 (DUP)**	**SP01-EFF**	**OSL-SP03**	**SP03-EFF**	**OSL-SW06**	**OSL-SW09**	**OSL-SW09 (DUP)**	**OSL-SW10**
Volatile Organic Compounds (VOCs)																	
1,2,4-Trimethylbenzene	None	µg/L	293	355	0.23 U	0.23 U	471	246	145 J	144	3.3	98.1	15.4	0.23 U	0.47 J	0.46 J	0.23 U
1,2-Dichloroethene (total)	None	µg/L	0.24 U	0.24 U	2.3	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
1,3,5-Trimethylbenzene	None	µg/L	66.1	73.5	0.43 U	0.43 U	109	30.5	26.2	26	0.43 U	4.6	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
1,4-Dichlorobenzene	3	µg/L	0.3 U	0.3 U	0.3 U	0.3 U	0.52 J	0.43 J	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
2-Butanone (MEK)	50	µg/L	3.4 J	3.2 U	3.2 U	3.2 U	3.2 U	3.2 U	3.2 U	3.2 U	3.2 U	3.2 U	3.2 U	3.2 R	3.2 R	3.2 U	3.2 R
Benzene	1	µg/L	**226**	**477**	0.54 J	0.28 U	**84.8**	**70.6**	0.37 J	0.28 U	0.28 U	**19.8**	**15.7**	0.28 U	**1.5 J**	**1.5**	0.28 U
Chloroform	7	µg/L	0.25 U	0.25 U	0.25 U	0.54 J	0.25 U	0.25 U	0.25 UJ	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
cis-1,2-Dichloroethene	5	µg/L	0.24 U	0.24 U	1.7	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
Ethylbenzene	5	µg/L	**282**	**416**	0.28 J	0.21 U	**482**	**218**	**12.3**	**11.7**	1.6	**129**	**23**	0.21 U	0.73 J	0.75 J	0.21 U
Isopropylbenzene	5	µg/L	**19.6**	**34.5**	0.47 J	0.22 U	**25.8**	**12.8**	**8.5**	**8.5**	0.34 J	**11.8**	3.5	0.22 U	0.22 U	0.22 U	0.22 U
m,p-Xylene	None	µg/L	538	504	0.4 U	0.4 U	1,020	342	15.4	14.6	3.2	79.9	10.1	0.4 U	1.1 J	1.1	0.4 U
Naphthalene	10	µg/L	**113**	**185**	0.25 U	0.25 U	**145**	**91.4**	**14.9**	8.7	1.3 J	**42.8**	**14.8**	0.25 U	0.25 U	0.25 U	0.25 U
n-Butylbenzene	5	µg/L	4.8 J	**6.1**	0.39 U	0.39 U	4.9 J	2.7 J	**7.8**	**7.6**	0.39 U	1.3 J	0.53 J	0.39 U	0.39 U	0.39 U	0.39 U
n-Propylbenzene	5	µg/L	**38.8**	**69**	0.32 U	0.32 U	**49.2**	**20.5**	**24.3**	**24.2**	0.45 J	**15.8**	3 J	0.32 U	0.32 U	0.32 U	0.32 U
o-Xylene	5	µg/L	**13.2**	**13.7**	0.19 U	0.19 U	**36.7**	**8.2**	0.22 J	0.19 J	0.19 U	4.4	3	0.19 U	0.19 U	0.19 U	0.19 U
p-Isopropyltoluene	5	µg/L	2.6 J	**5.1**	0.42 U	0.42 U	4.2 J	**5.9**	2.8 J	2.7 J	0.42 U	1.2 J	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U
sec-Butylbenzene	5	µg/L	2.9 J	4.6 J	0.48 U	0.48 U	3.2 J	1.8 J	3.9 J	3.8 J	0.48 U	1.2 J	0.48 J	0.48 U	0.48 U	0.48 U	0.48 U
tert-Butylbenzene	None	µg/L	0.25 U	0.33 J	0.25 U	0.25 U	0.32 J	0.25 U	0.28 J	0.27 J	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
Tetrachloroethene	5	µg/L	0.25 U	0.25 U	**5.9**	**5.5**	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
Toluene	5	µg/L	**25.9**	**37.8**	0.44 U	0.44 U	**63.4**	**25.7**	0.44 U	0.44 U	0.44 U	**6**	1.6	0.44 U	0.44 U	0.44 U	0.44 U
trans-1,2-Dichloroethene	5	µg/L	0.38 U	0.38 U	0.53 J	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
Trichloroethene	5	µg/L	0.5 U	0.5 U	2.4	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Xylene (total)	5	µg/L	**551**	**518**	0.19 U	0.19 U	**1,060**	**350**	**15.6**	**14.8**	3.2	**84.3**	**13.1**	0.19 U	1.1 J	1.1	0.19 U
Semi-Volatile Organic Compounds (SVOCs)																	
2-Methylnaphthalene	None	µg/L	NS	NS	NS	NS	NS	NS	0.38 U	0.38 U	NS	1.3	NS	0.39 U	0.38 U	0.39 U	0.4 U
bis(2-Ethylhexyl)phthalate	5	µg/L	NS	NS	NS	NS	NS	NS	0.59 UJ	2.6 J	NS	0.59 UJ	NS	4.2	0.59 U	0.6 U	0.6 U
Target Analyte Metals																	
Aluminum	None	µg/L	NS	NS	NS	NS	NS	NS	1,280 J	629 J	NS	89.1 J	NS	200 U	200 U	200 U	200 U
Antimony	3	µg/L	NS	NS	NS	NS	NS	NS	1.8 U	1.8 U	NS	1.8 U	NS	1.8 U	2.2 J	1.8 U	1.8 U
Arsenic	25	µg/L	NS	NS	NS	NS	NS	NS	2.5 J	2.1 J	NS	3.8	NS	1.5 U	1.6 J	1.5 U	1.5 U
Barium	1000	µg/L	NS	NS	NS	NS	NS	NS	43.2 J	35.8 J	NS	117 J	NS	200 U	200 U	200 U	200 U
Cadmium	5	µg/L	NS	NS	NS	NS	NS	NS	0.6 J	0.4 J	NS	0.5 J	NS	3 U	3 U	3 U	3 U
Calcium	None	µg/L	NS	NS	NS	NS	NS	NS	38,100	38,100	NS	94,300	NS	45,100	50,300	50,000	39,600
Chromium	50	µg/L	NS	NS	NS	NS	NS	NS	2 J	1.4 J	NS	1.7 J	NS	0.92 U	1.4 J	0.92 U	0.92 U
Cobalt	None	µg/L	NS	NS	NS	NS	NS	NS	1.2 J	0.8 J	NS	1 J	NS	0.48 U	0.48 U	0.48 U	0.48 U
Copper	200	µg/L	NS	NS	NS	NS	NS	NS	4.1 J	3.2 J	NS	2.9 J	NS	1.3 J	1 U	1 U	1 U
Iron	300	µg/L	**31,800**	**35,100**	**10,000**	**6,560**	**44,600**	**48,500**	**29,400 J**	**20,000 J**	**11,100**	**43,300**	**24,400**	**580**	**775**	**738**	100 U
Lead	25	µg/L	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	13.1	6.4	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
Magnesium	35000	µg/L	NS	NS	NS	NS	NS	NS	2,370 J	2,320 J	NS	6,270	NS	5,880	5,080	5,090	2,980 J
Manganese	300	µg/L	NS	NS	NS	NS	NS	NS	**1,220**	**1,150**	NS	**2,880**	NS	74.9	174	174	15 U
Nickel	100	µg/L	NS	NS	NS	NS	NS	NS	2 J	1.6 U	NS	1.7 J	NS	1.6 U	1.6 U	1.6 U	1.6 U
Silver	50	µg/L	NS	NS	NS	NS	NS	NS	1.5 U	1.5 U	NS	2.6 J	NS	1.5 U	1.5 U	1.5 U	1.5 U
Sodium	20000	µg/L	NS	NS	NS	NS	NS	NS	**61,300**	**60,900**	NS	**207,000**	NS	**61,100**	**69,100**	**64,600**	**22,300**
Vanadium	None	µg/L	NS	NS	NS	NS	NS	NS	2 J	0.72 U	NS	0.72 U	NS	0.72 U	0.72 U	0.72 U	0.72 U
Zinc	2000	µg/L	NS	NS	NS	NS	NS	NS	33.1	24.3	NS	6.8 J	NS	4.4 U	4.4 U	4.4 U	4.4 U
Hardness																	
Hardness, Total as CaCO3	None	mg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	207	160	145	154

Qualifier Key:

U - Analyte not detected in the sample. Value represents the quantitation/detection limit.

J - Result reported is a quantitative estimate

R - Rejected Data

Abbreviation Key:

NS - Not Sampled

µg/L - Micrograms per Liter

mg/L - milligrams per Liter

A Cell Highlighted and Bold Indicates a detected analyte that exceeds the screening criteria
A cell highlighted and not bold Indicates a detected analyte that does not exceed the screening criteria
Indicates the analyte is not detected or not sampled

Table 3-1 ASL Inspection Worksheet

INSPECTION PLAN
Fort Drum ASL Inspection Report
YEARLY INSPECTION CHECKLIST

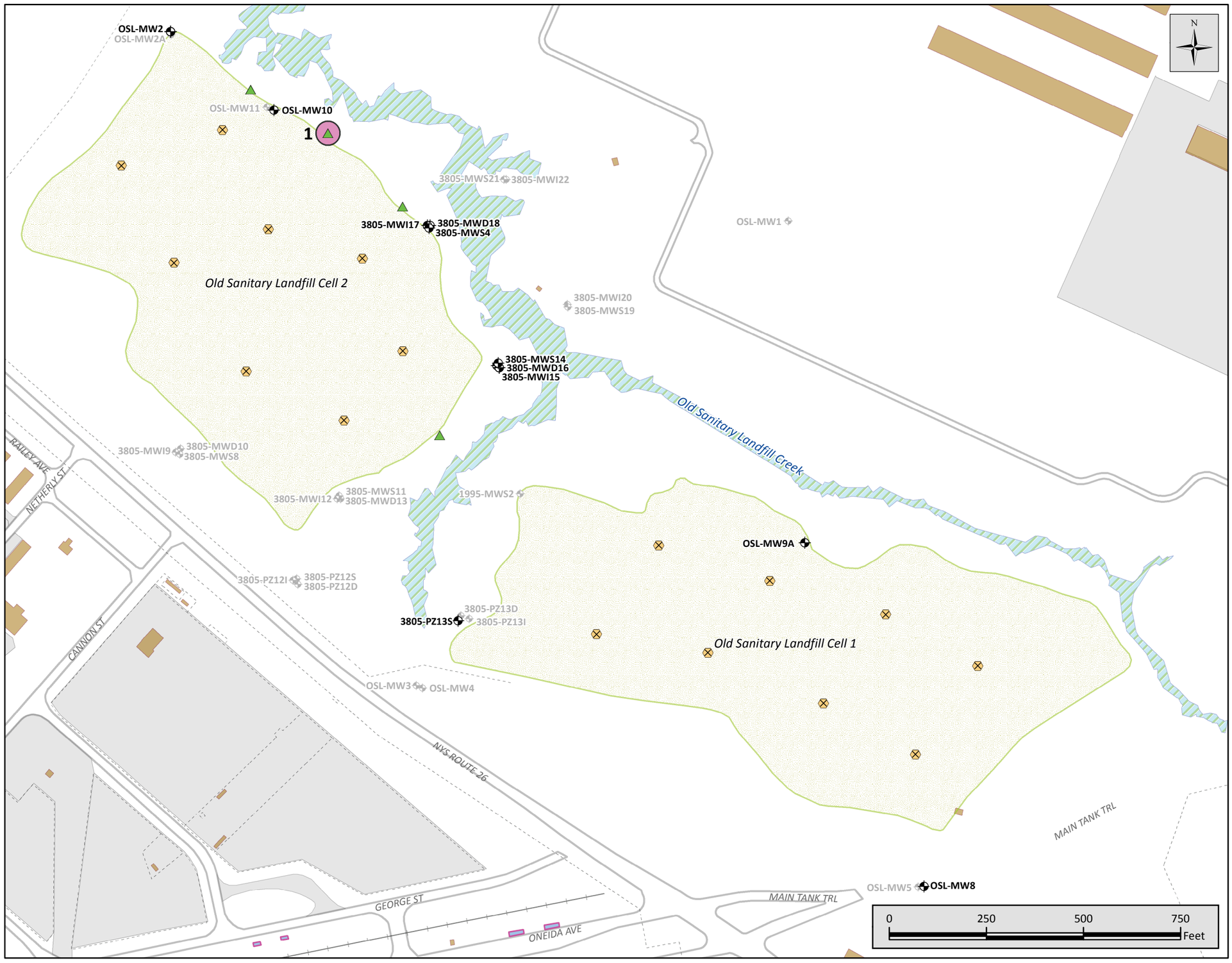
DATE: 11/21/2013 QUARTER: 4th
NAME: Michael Brewin YEAR: 2013

ITEM	CONDITIONS	YES	NO	ACTION TO BE TAKEN/COMMENTS
Vegetative Layer/Cover Inspections				
General	General vegetative conditions acceptable?	X		
	Stressed or damaged vegetation?		X	
	Deep-rooted or woody vegetation?		X	
	Potential hazardous conditions?		X	
Erosion and Surface	Erosion damage, gullies, breaches?		X	
	Areas of subsidence?		X	
	Surface water ponding/accum.?		X	
	Obvious differential settlement?		X	
	Potential hazardous conditions?		X	
Animal Control	Damage due to burrowing animals?	X		Minor burrowing activity - burrows backfilled
	Obvious presence of animals?		X	
Surface Activities	Unauthorized trespassing?		X	
	Intrusive activities/vehicle use?		X	
	Dumping or disposal?		X	
	Structures?		X	
Fences and Signs	Fence integrity good?	X		
	Site secure?	X		
	Perimeter signs intact and visible?	X		
Gas Vent Pipes	Damaged or Obstructed?		X	
Drainage Ditches	Drainage features clear/unobstructed?	X		
	Accumulation of sediment/debris?		X	

Other Notes

Some minor burrows were oberved in the Southeast corner of the landfill in a berm. Burrows were destroyed at the time of the inspection.

Figures



Legend

- Inspection Issues
- Landfill Vents
- Runoff Drains
- OSL Sampled Monitoring Points
- Other Monitoring Wells
- Former UST
- Fence Line
- Rail Road
- Paved Roadline
- Landfill Site
- Wetlands
- Building
- Paved Area

Abbreviation Key:
OSL - Old Sanitary Landfill
UST - Underground Storage Tank
Inspection Issues:
1 - Erosion Damage

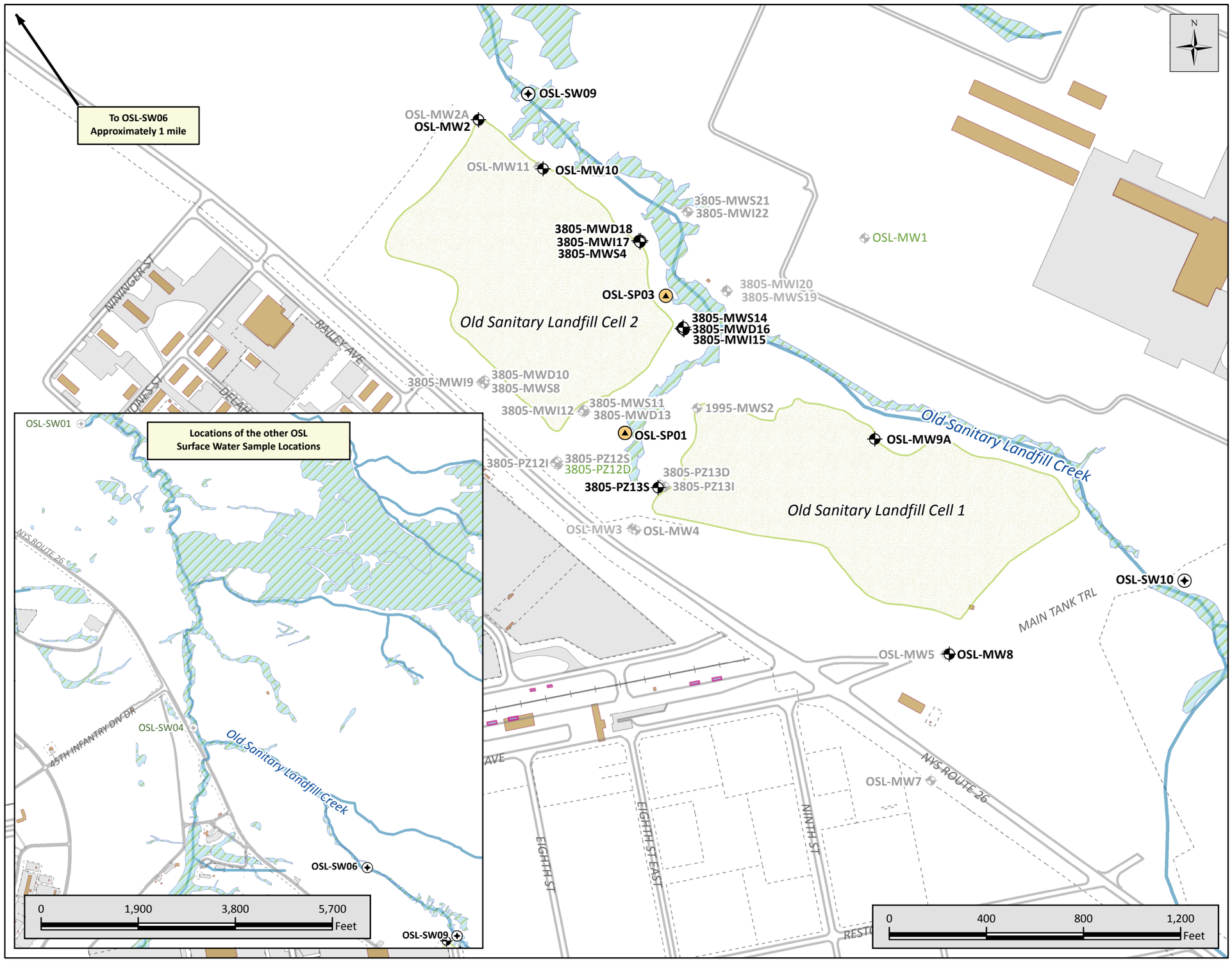
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Date: March 2014

FIGURE 2-1

Old Sanitary Landfill Inspection

2013 Annual Post-Closure Operations and Maintenance Report, Old Sanitary Landfill and Airfield Sanitary Landfill
Fort Drum, New York



Legend

- OSL Sampled Monitoring Points
- Landfill Seep Sample Locations
- Surface Water Sample Locations
- Other Monitoring Wells
- Other Surface Water Locations
- Former UST
- Fence Line
- Rail Road
- Paved Roadline
- Landfill Site
- Wetlands
- Streams
- Building
- Parking Lots

3805 - Indicates a monitoring point that is sampled as part of the Post-Closure Monitoring Plan

3805 - Indicates a monitoring point that is not sampled.

3805 - Indicates a monitoring point is removed from the monitoring point inventory (abandoned/destroyed/missing).

Abbreviation Key:
OSL - Old Sanitary Landfill
UST - Underground Storage Tank

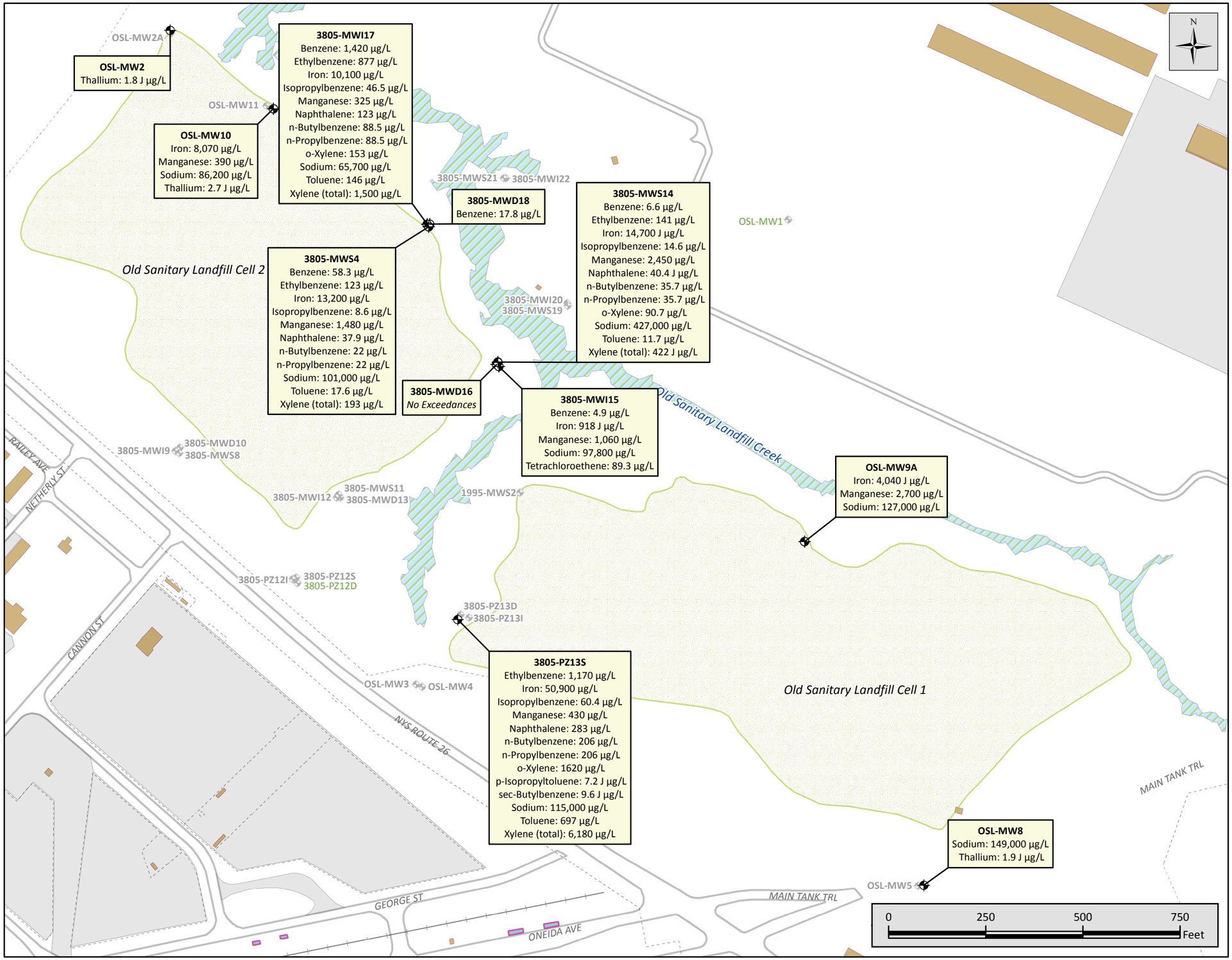
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FIGURE 2-2

OSL Post-Closure Plan, Landfill Environmental Monitoring Sampling Locations

2013 Annual Post-Closure Operations and Maintenance Report, Old Sanitary Landfill and Airfield Sanitary Landfill Fort Drum, New York



Legend

- OSL Sampled Monitoring Points
- Other Monitoring Wells
- Former UST
- Fence Line
- Rail Road
- Paved Roadline
- Landfill Site
- Wetlands
- Building
- Paved Area

3805 - Indicates a monitoring point that is sampled as part of the Post-Closure Monitoring Plan

3805 - Indicates a monitoring point that is not sampled.

3805 - Indicates a monitoring point is removed from the monitoring point inventory (abandoned/destroyed/missing).

Abbreviation Key:
µg/L - Micrograms per liter
J - Qualifier indicating that the result value is estimated
OSL - Old Sanitary Landfill
UST - Underground Storage Tank

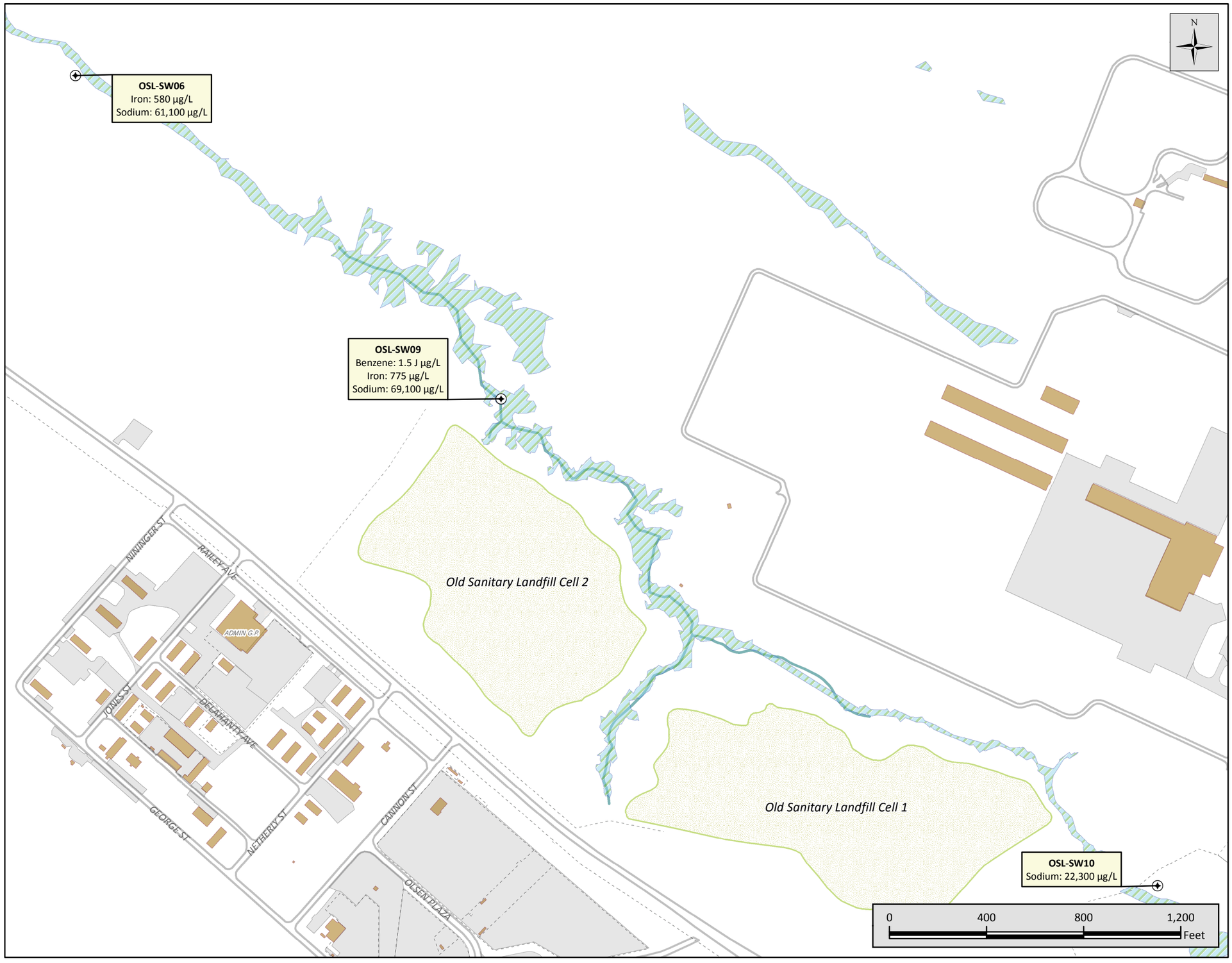
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FIGURE 2-3

Old Sanitary Landfill Groundwater Sample Exceedances

2013 Annual Post-Closure Operations and Maintenance Report, Old Sanitary Landfill and Airfield Sanitary Landfill Fort Drum, New York



Legend

- Surface Water Sampling Location
- Fence Line
- Rail Road
- Paved Roadline
- Landfill Site
- Wetlands
- Streams
- Building
- Paved Area

Abbreviation Key:
µg/L - Micrograms per liter
J - Qualifier indicating that the result value is estimated
OSL - Old Sanitary Landfill

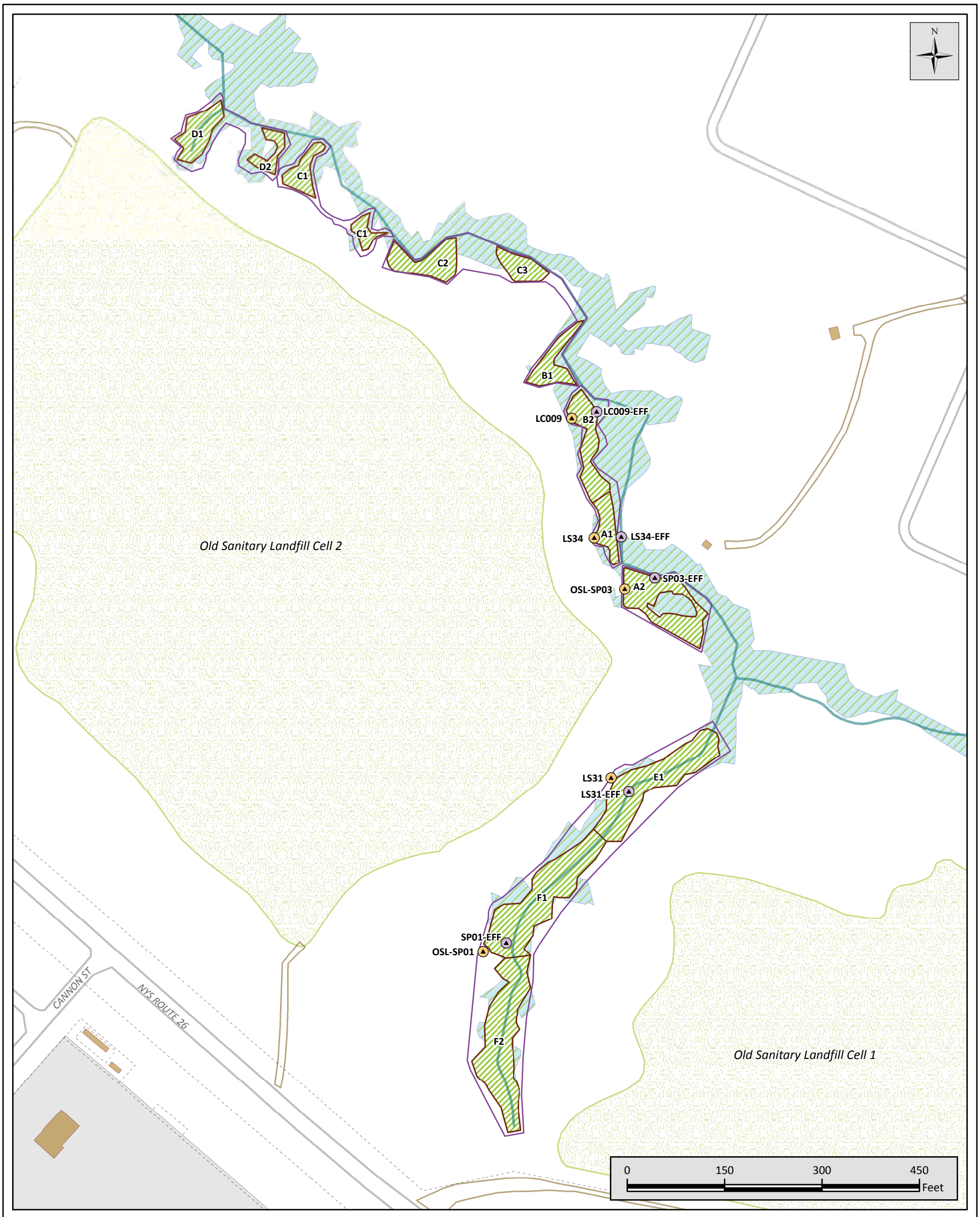
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FIGURE 2-4

Old Sanitary Landfill
Surface Water Exceedances

2013 Annual Post-Closure Operations and Maintenance Report, Old Sanitary Landfill and Airfield Sanitary Landfill
Fort Drum, New York



Legend

- Influent Seep Samples
- Effluent Seep Samples
- Perimeter Fence
- Zone of Plantation
- Fence Line
- Paved Roadline
- Unpaved Road
- Landfill Site
- Wetlands
- Streams
- Building
- Paved Area

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FIGURE 2-5

Phytoremediation Plot Overview

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Fort Drum, New York**

LC009
Benzene: 226 µg/L
Ethylbenzene: 282 µg/L
Iron: 31,800 µg/L
Isopropylbenzene: 19.6 µg/L
Naphthalene: 113 µg/L
n-Propylbenzene: 38.8 µg/L
o-Xylene: 38.8 µg/L
p-Isopropyltoluene: 13.2 µg/L
Toluene: 25.9 µg/L
Xylene (total): 551 µg/L

LC009-EFF
Benzene: 477 µg/L
Ethylbenzene: 416 µg/L
Iron: 35,100 µg/L
Isopropylbenzene: 34.5 µg/L
Naphthalene: 185 µg/L
n-Butylbenzene: 6.1 µg/L
n-Propylbenzene: 69 µg/L
o-Xylene: 69 µg/L
p-Isopropyltoluene: 13.7 µg/L
sec-Butylbenzene: 5.1 µg/L
Toluene: 37.8 µg/L
Xylene (total): 518 µg/L

LS34
Benzene: 84.8 µg/L
Ethylbenzene: 482 µg/L
Iron: 44,600 µg/L
Isopropylbenzene: 25.8 µg/L
Naphthalene: 145 µg/L
n-Propylbenzene: 49.2 µg/L
o-Xylene: 49.2 µg/L
p-Isopropyltoluene: 36.7 µg/L
Toluene: 63.4 µg/L
Xylene (total): 1,060 µg/L

LS34-EFF
Benzene: 70.6 µg/L
Ethylbenzene: 218 µg/L
Iron: 48,500 µg/L
Isopropylbenzene: 12.8 µg/L
Naphthalene: 91.4 µg/L
n-Propylbenzene: 20.5 µg/L
o-Xylene: 20.5 µg/L
p-Isopropyltoluene: 8.2 µg/L
sec-Butylbenzene: 5.9 µg/L
Toluene: 25.7 µg/L
Xylene (total): 350 µg/L

OSL-SP03
Benzene: 19.8 µg/L
Ethylbenzene: 129 µg/L
Iron: 43,300 µg/L
Isopropylbenzene: 11.8 µg/L
Manganese: 2,880 µg/L
Naphthalene: 42.8 µg/L
n-Propylbenzene: 15.8 µg/L
o-Xylene: 15.8 µg/L
Sodium: 207,000 µg/L
Toluene: 6 µg/L
Xylene (total): 84.3 µg/L

SP03-EFF
Benzene: 15.7 µg/L
Ethylbenzene: 23 µg/L
Iron: 24,400 µg/L
Naphthalene: 14.8 µg/L
Toluene: 1.6 µg/L
Xylene (total): 13.1 µg/L

LS31
Iron: 10,000 µg/L
Tetrachloroethene: 5.9 µg/L

LS31-EFF
Iron: 6,560 µg/L
Tetrachloroethene: 5.5 µg/L

OSL-SP01
Ethylbenzene: 12.3 µg/L
Iron: 29,400 J µg/L
Isopropylbenzene: 8.5 µg/L
Manganese: 1,220 µg/L
Naphthalene: 14.9 µg/L
n-Butylbenzene: 7.8 µg/L
n-Propylbenzene: 24.3 µg/L
o-Xylene: 24.3 µg/L
Sodium: 61,300 µg/L
Xylene (total): 15.6 µg/L

SP01-EFF
Iron: 11,100 µg/L

B1, B2, A1, A2, E1, F1, F2

Old Sanitary Landfill Cell 2
Old Sanitary Landfill Cell 1
Old Sanitary Landfill Creek
Unnamed Creek

N

0 100 200 300 Feet

Legend

- Influent Seep Samples
- Effluent Seep Samples
- Perimeter Fence
- Zone of Plantation
- Fence Line
- Paved Roadline
- Unpaved Road
- Landfill Site
- Wetlands
- Streams
- Building
- Paved Area

Abbreviation Key:
µg/L - Micrograms per liter
J - Qualifier indicating that the result value is estimated
OSL - Old Sanitary Landfill

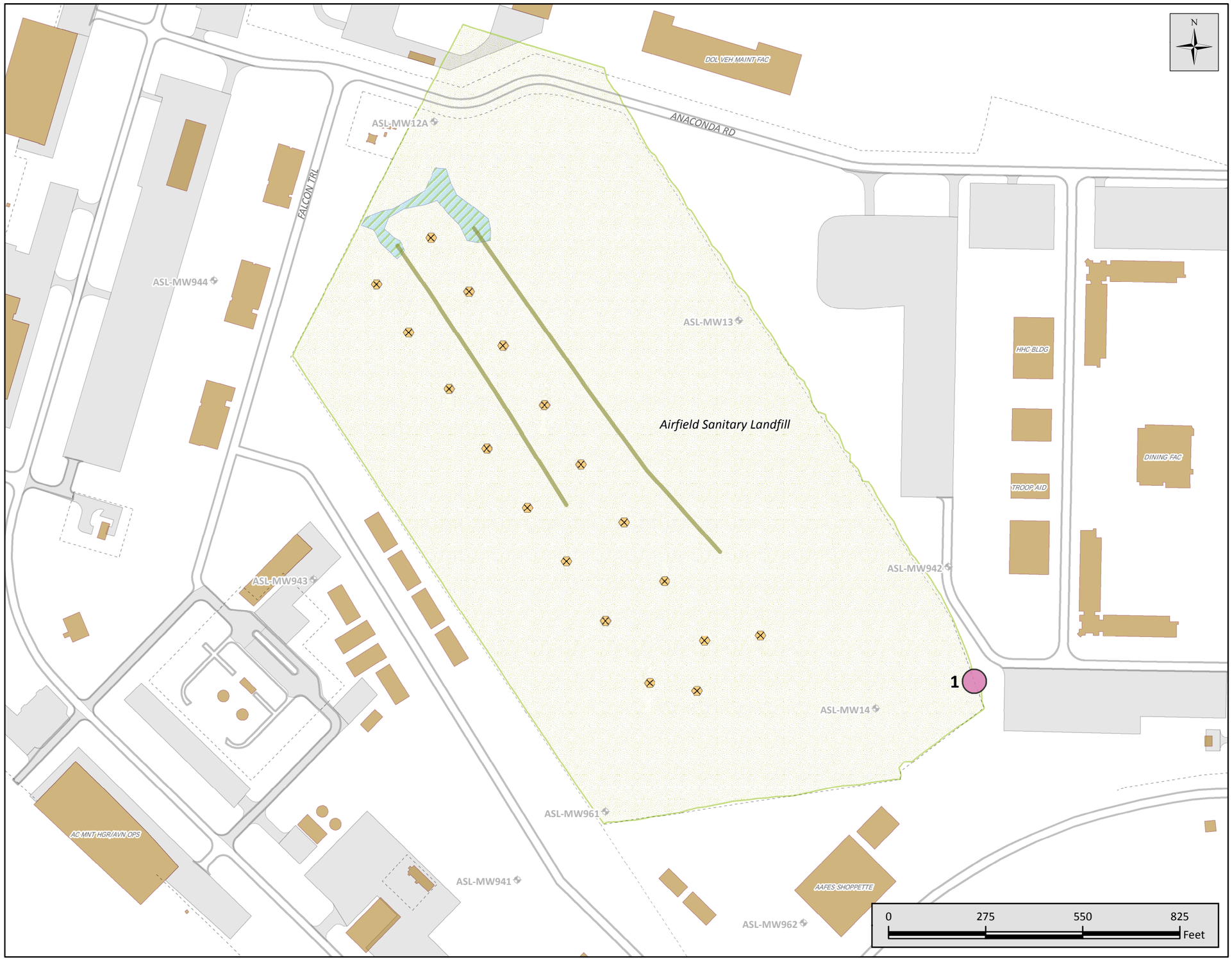
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FIGURE 2-6

Seep Sample Exceedances

**2013 Annual Post-Closure Operations and Maintenance Report, Old Sanitary Landfill and Airfield Sanitary Landfill
Fort Drum, New York**



Legend

- Inspection Issues
- Monitoring Wells
- Landfill Vents
- Fence Line
- Rail Road
- Paved Roadline
- Landfill Site
- Drainage Swales
- Wetlands
- Building
- Paved Area

Inspection Issues:

1 - Small Animal Burrows

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FIGURE 3-1

Airfield Sanitary Landfill Inspection

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Fort Drum, New York

ATTACHMENT A

OSL Cell 2 Erosion Photographs



Photograph 1: Soil erosion under landfill run-off drain pipe



Photograph 2: Soil erosion under landfill run-off drain pipe

ATTACHMENT B

All OSL Analytical Results, Fall 2013

Attachment B - All OSL Volatile Organic Compound Analytical Results, Fall 2013

			Groundwater													Landfill Seep									
Analyte	Screening Value	Unit	3805-MWD16	3805-MWD18	3805-MWI15	3805-MWI15 (DUP)	3805-MWI17	3805-MWS14	3805-MWS4	3805-PZ13S	OSL-MW2	OSL-MW2 (DUP)	OSL-MW8	OSL-MW9A	OSL-MW10	LC009	LC009-EFF	LS31	LS31-EFF	LS34	LS34-EFF	OSL-SP01	OSL-SP01 (DUP)	SP01-EFF	OSL-SP03	SP03-EFF
1,1,1,2-Tetrachloroethane	5	µg/L	0.21 U	0.21 U	0.21 U	0.21 U	2.1 U	0.21 U	0.21 U	2.1 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 UJ	0.21 U	0.21 U	0.21 U	0.21 U
1,1,1-Trichloroethane	5	µg/L	0.25 U	0.25 U	0.25 U	0.25 U	2.5 U	0.25 U	0.25 U	2.5 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,1,2,2-Tetrachloroethane	5	µg/L	0.2 UJ	0.2 U	0.2 UJ	0.2 U	2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloroethane	1	µg/L	0.21 U	0.21 U	0.21 U	0.21 U	2.1 U	0.21 U	0.21 U	2.1 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 UJ	0.21 U	0.21 U	0.21 U	0.21 U
1,1-Dichloroethane	5	µg/L	0.26 U	0.26 U	0.26 U	0.26 U	2.6 U	0.26 U	0.26 U	2.6 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 UJ	0.26 U	0.26 U	0.26 U	0.26 U
1,1-Dichloropropene	5	µg/L	0.17 U	0.17 U	0.17 U	0.17 U	1.7 U	0.17 U	0.17 U	1.7 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
1,2,3-Trichlorobenzene	None	µg/L	0.24 U	0.24 U	0.24 U	0.24 UJ	2.4 U	0.24 UJ	0.24 U	2.4 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
1,2,3-Trichloropropane	0.04	µg/L	0.67 U	0.67 U	0.67 U	0.67 U	6.7 U	0.67 U	0.67 U	6.7 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U
1,2,4-Trichlorobenzene	5	µg/L	0.22 U	0.22 U	0.22 U	0.22 U	2.2 U	0.22 U	0.22 U	2.2 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
1,2,4-Trimethylbenzene	None	µg/L	0.4 J	0.23 U	0.23 UJ	0.23 U	370	222	109	1,730	0.23 U	0.23 U	0.24 J	0.23 UJ	0.23 U	293	355	0.23 U	0.23 U	471	246	145 J	144	3.3	98.1	15.4
1,2-Dibromoethane	0.0006	µg/L	0.16 U	0.16 U	0.16 U	0.16 U	1.6 U	0.16 U	0.16 U	1.6 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 UJ	0.16 U	0.16 U	0.16 U	0.16 U
1,2-Dichlorobenzene	3	µg/L	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloroethane	0.6	µg/L	0.22 UJ	0.22 UJ	0.22 UJ	0.22 U	2.2 UJ	0.22 U	0.22 UJ	2.2 UJ	0.22 UJ	0.22 UJ	0.22 UJ	0.22 UJ	0.22 UJ	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 UJ	0.22 U	0.22 U	0.22 U	0.22 U
1,2-Dichloroethene (total)	None	µg/L	0.24 U	0.24 U	0.24 U	0.24 U	2.4 U	0.24 U	0.24 U	2.4 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	2.3	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
1,2-Dichloropropane	1	µg/L	0.28 U	0.28 U	0.28 U	0.28 U	2.8 U	0.28 U	0.28 U	2.8 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 UJ	0.28 U	0.28 U	0.28 U	0.28 U
1,3,5-Trimethylbenzene	None	µg/L	0.43 U	0.43 U	0.43 U	0.43 U	91.5	71 J	12.8	513	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	66.1	73.5	0.43 U	0.43 U	109	30.5	26.2	26	0.43 U	4.6	0.43 U
1,3-Dichloropropane	None	µg/L	0.23 U	0.23 U	0.23 U	0.23 U	2.3 U	0.23 U	0.23 U	2.3 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 UJ	0.23 U	0.23 U	0.23 U	0.23 U
1,4-Dichlorobenzene	3	µg/L	0.3 U	0.3 U	0.3 U	0.3 U	3 U	0.3 U	0.3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.52 J	0.43 J	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U
2,2-Dichloropropane	None	µg/L	0.21 U	0.21 U	0.21 U	0.21 U	2.1 U	0.21 U	0.21 U	2.1 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
2-Butanone (MEK)	50	µg/L	3.2 UJ	3.2 U	3.2 R	3.2 R	32 U	3.2 R	3.2 U	32 U	3.2 U	3.2 U	3.2 U	3.2 R	3.2 U	3.4 J	3.2 U	3.2 U	3.2 U	3.2 U	3.2 U	3.2 U	3.2 U	3.2 U	3.2 U	3.2 U
2-Hexanone	None	µg/L	1.7 U	1.7 U	1.7 U	1.7 UJ	17 U	1.7 UJ	1.7 U	17 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
4-Methyl-2-pentanone(MIBK)	None	µg/L	1.5 U	1.5 U	1.5 U	1.5 U	15 U	1.5 U	1.5 U	15 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
Acetone	50	µg/L	3.3 R	3.3 U	3.3 R	3.3 R	33 U	3.3 R	3.3 U	33 U	3.3 U	3.3 U	3.3 UJ	3.3 R	3.3 U	10.7 U	10 U	3.3 U	3.3 U	10 U	10 U	3.3 U	3.3 U	3.3 U	10 U	10 U
Benzene	1	µg/L	0.28 U	**17.8**	**4.8**	**4.9**	**1,420**	**6.6**	**58.3**	2.8 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	**226**	**477**	0.54 J	0.28 U	**84.8**	**70.6**	0.37 J	0.28 U	0.28 U	**19.8**	**15.7**
Bromobenzene	None	µg/L	0.25 U	0.25 U	0.25 U	0.25 U	2.5 U	0.25 U	0.25 U	2.5 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 UJ	0.25 U	0.25 U	0.25 U	0.25 U
Bromodichloromethane	50	µg/L	0.21 U	0.21 U	0.21 U	0.21 U	2.1 U	0.21 U	0.21 U	2.1 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 UJ	0.21 U	0.21 U	0.21 U	0.21 U
Bromoform	50	µg/L	0.3 U	0.3 U	0.3 U	0.3 UJ	3 U	0.3 UJ	0.3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Bromomethane	5	µg/L	0.56 UJ	0.56 U	0.56 UJ	0.56 UJ	5.6 U	0.56 UJ	0.56 U	5.6 U	0.56 U	0.56 U	0.56 U	0.56 UJ	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U
Carbon disulfide	None	µg/L	0.18 U	0.18 U	0.18 U	0.18 U	1.8 U	0.18 U	0.18 U	1.8 U	0.18 U	0.18 U	0.18 UJ	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
Carbon tetrachloride	5	µg/L	0.23 UJ	0.23 U	0.23 UJ	0.23 U	2.3 U	0.23 U	0.23 U	2.3 UJ	0.23 U	0.23 U	0.23 UJ	0.23 UJ	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
Chlorobenzene	5	µg/L	0.35 U	0.35 U	0.35 U	0.35 U	3.5 U	0.35 U	0.35 U	3.5 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 UJ	0.35 U	0.35 U	0.35 U	0.35 U
Chloroethane	5	µg/L	0.39 U	0.39 U	0.39 U	0.39 U	3.9 U	0.39 U	0.39 U	3.9 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 UJ	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U
Chloroform	7	µg/L	0.25 U	0.25 U	0.25 U	0.25 U	2.5 U	0.25 U	0.25 U	2.5 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.54 J	0.25 U	0.25 U	0.25 UJ	0.25 U	0.25 U	0.25 U	0.25 U
Chloromethane	5	µg/L	0.36 U	0.36 U	0.36 U	0.36 U	3.6 U	0.36 U	0.59 J	3.6 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U
cis-1,2-Dichloroethene	5	µg/L	0.24 U	0.24 U	0.24 U	0.24 U	2.4 U	0.24 U	0.24 U	2.4 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	1.7	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
cis-1,3-Dichloropropene	0.4	µg/L	0.15 U	0.15 U	0.15 U	0.15 U	1.5 U	0.15 U	0.15 U	1.5 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 UJ	0.15 U	0.15 U	0.15 U	0.15 U
Dibromochloromethane	50	µg/L	0.19 U	0.19 U	0.19 U	0.19 UJ	1.9 U	0.19 UJ	0.19 U	1.9 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 UJ	0.19 U	0.19 U	0.19 U	0.19 U
Dichlorodifluoromethane	5	µg/L	0.63 U	0.63 U	0.63 U	0.63 U	6.3 U	0.63 U	0.63 U	6.3 U	0.63 U	0.63 U	0.63 U	0.63 U	2 J	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U
Ethyl Ether	None	µg/L	0.56 UJ	0.56 U	0.56 UJ	0.56 U	5.6 U	0.56 U	0.56 U	5.6 U	0.56 U	0.56 U	0.56 U	0.56 UJ	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U
Ethylbenzene	5	µg/L	0.21 U	0.21 U	0.21 U	0.21 U	**877**	**141**	**123**	**1,170**	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	**282**	**416**	0.28 J	0.21 U	**482**	**218**	**12.3**	**11.7**	1.6	**129**	**23**
Isopropylbenzene	5	µg/L	0.22 UJ	0.22 U	0.29 J	0.34 J	**46.5**	**14.6**	**8.6**	**60.4**	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	**19.6**	**34.5**	0.47 J	0.22 U	**25.8**	**12.8**	**8.5**	**8.5**	0.34 J	**11.8**	3.5
m,p-Xylene	None	µg/L	0.4 U	0.4 U	0.4 U	0.4 U	1,350	331 J	189	4,560	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	538	504	0.4 U	0.4 U	1,020	342	15.4	14.6	3.2	79.9	10.1
Methylene chloride	5	µg/L	0.86 U	0.86 U	0.86 U	0.86 U	8.6 U	0.86 U	0.86 U	8.6 U	0.86 U	0.86 U	0.86 U	0.86 U	0.86 U	0.86 U	0.86 U	0.86 U	0.86 U	0.86 U	0.86 U	0.86 U	0.86 U	0.86 U	0.86 U	0.86 U
Naphthalene	10	µg/L	0.25 U	0.25 U	0.25 U	0.25 UJ	**112**	**63.4 J**	**38.8**	**357 J**	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	**113**	**185**	0.25 U	0.25 U	**145**	**91.4**	**14.9**	8.7	1.3 J	**42.8**	**14.8**
n-Butylbenzene	5	µg/L	0.39 UJ	0.39 U	0.39 UJ	0.39 U	3.9 U	**14.7**	0.39 U	3.9 U	0.39 U	0.39 U	0.39 U	0.39 UJ	0.39 U	4.8 J	**6.1**	0.39 U	0.39 U	4.9 J	2.7 J	**7.8**	**7.6**	0.39 U	1.3 J	0.53 J
n-Propylbenzene	5	µg/L	0.32 UJ	0.32 U	0.32 UJ	0.32 U	**88.5**	**35.7**	**22**	**206**	0.32 U	0.32 U	0.32 U	0.32 UJ	0.32 U	**38.8**	**69**	0.32 U	0.32 U	**49.2**	**20.5**	**24.3**	**24.2**	0.45 J	**15.8**	3 J
o-Xylene	5	µg/L	0.19 U	0.19 U	0.19 U	0.19 U	**153**	**90.7**	4.2	**1,620**	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	**13.2**	**13.7**	0.19 U	0.19 U	**36.7**	**8.2**	0.22 J	0.19 J	0.19 U	4.4	3
p-Isopropyltoluene	5	µg/L	0.42 U	0.42 U	0.42 U	0.42 U	4.2 U	2.7 J	0.83 J	**7.2 J**	0.42 U	0.42 U	0.42 U	0.42 UJ	0.42 U	2.6 J	**5.1**	0.42 U	0.42 U	4.2 J	**5.9**	2.8 J	2.7 J	0.42 U	1.2 J	0.42 U
sec-Butylbenzene	5	µg/L	0.48 UJ	0.48 U	0.48 UJ	0.48 U	4.8 U	2.7 J	0.99 J	**9.6 J**	0.48 U	0.48 U	0.48 U	0.48 UJ	0.48 U	2.9 J	4.6 J	0.48 U	0.48 U	3.2 J	1.8 J	3.9 J	3.8 J	0.48 U	1.2 J	0.48 J
Styrene	5	µg/L	0.3 U	0.3 U	0.3 U	0.3 U	3 U	0.3 U	0.3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
tert-Butylbenzene	None	µg/L	0.25 U	0.25 U	0.25 U	0.25 U	2.5 U	0.25 U	0.25 U	2.5 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.33 J	0.25 U	0.25 U	0.32 J	0.25 U	0.28 J	0.27 J	0.25 U	0.25 U	0.25 U
Tetrachloroethene	5	µg/L	0.25 U	0.25 U	**89.3**	**87.8**	2.5 U	4.8	0.25 U	2.5 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	**5.9**	**5.5**	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
Tetrahydrofuran	50	µg/L	2 UJ	2 U	2 UJ	2 U	20 U	2 U	2 U	20 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Toluene	5	µg/L	0.44 U	0.44 U	0.44 U	0.44 U	**146**	**11.7**	**17.6**	**697**	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	**25.9**	**37.8**	0.44 U	0.44 U	**63.4**	**25.7**	0.44 U	0.44 U	0.44 U	**6**	1.6
trans-1,2-Dichloroethene	5	µg/L	0.38 U	0.38 U	0.38 U	0.38 U	3.8 U	0.38 U	0.38 U	3.8 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.53 J	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
trans-1,3-Dichloropropene	0.4	µg/L	0.21 U	0.21 U	0.21 U	0.21 U	2.1 U	0.21 U	0.21 U	2.1 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 UJ	0.21 U	0.21 U	0.21 U	0.21 U
Trichloroethene	5	µg/L	0.5 U	0.5 U	1.6	1.5	5 U	1.3	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.4	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane	5	µg/L	0.33 U	0.33 U	0.33 U	0.33 U	3.3 U	0.33 U	0.33 U	3.3 U	0.33 U	0.33 U	0.33 UJ	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Vinyl Acetate	None	µg/L	2.5 U	2.5 U	2.5 U	2.5 U	25 U	2.5 U	2.5 U	25 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Vinyl chloride	2	µg/L	0.41 U	0.41 U	0.41 U	0.41 U	4.1 U	0.41 U	0.41 U	4.1 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U
Xylene (total)	5	µg/L	0.19 U	0.19 U	0.19 U	0.19 U	**1,500**	**422 J**	**193**	**6,180**	0.19 U	0.19 U	0.29 J	0.19 U	0.19 U	**551**	**518**	0.19 U	0.19 U	**1,060**	**350**	**15.6**	**14.8**	3.2	**84.3**	**13.1**

Qualifier Key:

U - Analyte not detected in the sample. Value represents the quantitation/detection limit.

J - Result reported is a quantitative estimate

R - Rejected Data

Abbreviation Key:

µg/L - Micrograms per Liter

A Cell Highlighted and Bold Indicates a detected analyte that exceeds the screening criteria
A cell highlighted and not bold Indicates a detected analyte that does not exceed the screening criteria
Indicates the analyte is not detected or not sampled

Analyte	Screening Value	Unit	Surface Water			
			OSL-SW06	OSL-SW09	OSL-SW09 (DUP)	OSL-SW10
1,1,1,2-Tetrachloroethane	5	µg/L	0.21 U	0.21 U	0.21 U	0.21 U
1,1,1-Trichloroethane	5	µg/L	0.25 U	0.25 U	0.25 U	0.25 U
1,1,2,2-Tetrachloroethane	5	µg/L	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloroethane	1	µg/L	0.21 U	0.21 U	0.21 U	0.21 U
1,1-Dichloroethane	5	µg/L	0.26 U	0.26 U	0.26 U	0.26 U
1,1-Dichloropropene	5	µg/L	0.17 U	0.17 U	0.17 U	0.17 U
1,2,3-Trichlorobenzene	None	µg/L	0.24 U	0.24 U	0.24 U	0.24 U
1,2,3-Trichloropropane	0.04	µg/L	0.67 U	0.67 U	0.67 U	0.67 U
1,2,4-Trichlorobenzene	5	µg/L	0.22 U	0.22 U	0.22 U	0.22 U
1,2,4-Trimethylbenzene	None	µg/L	0.23 U	0.47 J	0.46 J	0.23 U
1,2-Dibromoethane	0.0006	µg/L	0.16 U	0.16 U	0.16 U	0.16 U
1,2-Dichlorobenzene	3	µg/L	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloroethane	0.6	µg/L	0.22 U	0.22 U	0.22 U	0.22 U
1,2-Dichloroethene (total)	None	µg/L	0.24 U	0.24 U	0.24 U	0.24 U
1,2-Dichloropropane	1	µg/L	0.28 U	0.28 U	0.28 U	0.28 U
1,3,5-Trimethylbenzene	None	µg/L	0.43 U	0.43 U	0.43 U	0.43 U
1,3-Dichloropropane	None	µg/L	0.23 U	0.23 UJ	0.23 U	0.23 U
1,4-Dichlorobenzene	3	µg/L	0.3 U	0.3 U	0.3 U	0.3 U
2,2-Dichloropropane	None	µg/L	0.21 U	0.21 U	0.21 UJ	0.21 U
2-Butanone (MEK)	50	µg/L	3.2 R	3.2 R	3.2 U	3.2 R
2-Hexanone	None	µg/L	1.7 U	1.7 U	1.7 U	1.7 U
4-Methyl-2-pentanone(MIBK)	None	µg/L	1.5 U	1.5 U	1.5 U	1.5 U
Acetone	50	µg/L	3.3 U	3.3 U	3.3 U	3.3 U
Benzene	1	µg/L	0.28 U	**1.5 J**	**1.5**	0.28 U
Bromobenzene	None	µg/L	0.25 U	0.25 U	0.25 U	0.25 U
Bromodichloromethane	50	µg/L	0.21 U	0.21 U	0.21 U	0.21 U
Bromoform	50	µg/L	0.3 U	0.3 U	0.3 U	0.3 U
Bromomethane	5	µg/L	0.56 U	0.56 U	0.56 U	0.56 U
Carbon disulfide	None	µg/L	0.18 U	0.18 U	0.18 U	0.18 U
Carbon tetrachloride	5	µg/L	0.23 U	0.23 U	0.23 U	0.23 U
Chlorobenzene	5	µg/L	0.35 U	0.35 U	0.35 U	0.35 U
Chloroethane	5	µg/L	0.39 U	0.39 U	0.39 U	0.39 U
Chloroform	7	µg/L	0.25 U	0.25 U	0.25 U	0.25 U
Chloromethane	5	µg/L	0.36 U	0.36 U	0.36 U	0.36 U
cis-1,2-Dichloroethene	5	µg/L	0.24 U	0.24 U	0.24 U	0.24 U
cis-1,3-Dichloropropene	0.4	µg/L	0.15 U	0.15 U	0.15 U	0.15 U
Dibromochloromethane	50	µg/L	0.19 U	0.19 U	0.19 U	0.19 U
Dichlorodifluoromethane	5	µg/L	0.63 U	0.63 U	0.63 U	0.63 U
Ethyl Ether	None	µg/L	0.56 U	0.56 U	0.56 U	0.56 U
Ethylbenzene	5	µg/L	0.21 U	0.73 J	0.75 J	0.21 U
Isopropylbenzene	5	µg/L	0.22 U	0.22 U	0.22 U	0.22 U
m,p-Xylene	None	µg/L	0.4 U	1.1 J	1.1	0.4 U
Methylene chloride	5	µg/L	0.86 U	0.86 U	0.86 U	0.86 U
Naphthalene	10	µg/L	0.25 U	0.25 U	0.25 U	0.25 U
n-Butylbenzene	5	µg/L	0.39 U	0.39 U	0.39 U	0.39 U
n-Propylbenzene	5	µg/L	0.32 U	0.32 U	0.32 U	0.32 U
o-Xylene	5	µg/L	0.19 U	0.19 U	0.19 U	0.19 U
p-Isopropyltoluene	5	µg/L	0.42 U	0.42 U	0.42 U	0.42 U
sec-Butylbenzene	5	µg/L	0.48 U	0.48 U	0.48 U	0.48 U
Styrene	5	µg/L	0.3 U	0.3 U	0.3 U	0.3 U
tert-Butylbenzene	None	µg/L	0.25 U	0.25 U	0.25 U	0.25 U
Tetrachloroethene	5	µg/L	0.25 U	0.25 U	0.25 U	0.25 U
Tetrahydrofuran	50	µg/L	2 U	2 U	2 UJ	2 U
Toluene	5	µg/L	0.44 U	0.44 U	0.44 U	0.44 U
trans-1,2-Dichloroethene	5	µg/L	0.38 U	0.38 U	0.38 U	0.38 U
trans-1,3-Dichloropropene	0.4	µg/L	0.21 U	0.21 U	0.21 U	0.21 U
Trichloroethene	5	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane	5	µg/L	0.33 U	0.33 U	0.33 U	0.33 U
Vinyl Acetate	None	µg/L	2.5 U	2.5 U	2.5 U	2.5 U
Vinyl chloride	2	µg/L	0.41 U	0.41 U	0.41 U	0.41 U
Xylene (total)	5	µg/L	0.19 U	1.1 J	1.1	0.19 U

Qualifier Key:

U - Analyte not detected in the sample. Value represents the quantitation/detection limit.

J - Result reported is a quantitative estimate

R - Rejected Data

Abbreviation Key:

µg/L - Micrograms per Liter

A Cell Highlighted and Bold Indicates a detected analyte that exceeds the screening criteria
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Indicates the analyte is not detected or not sampled

Attachment B - All OSL Semi-Volatile Organic Compound Analytical Results, Fall 2013

Analyte	Screening Value	Unit	Groundwater													Landfill Seep		
			3805-MWD16	3805-MWD18	3805-MWI15	3805-MWI15 (DUP)	3805-MWI17	3805-MWS14	3805-MWS4	3805-PZ13S	OSL-MW2	OSL-MW2 (DUP)	OSL-MW8	OSL-MW9A	OSL-MW10	OSL-SP01	OSL-SP01 (DUP)	OSL-SP03
1,2,4-Trichlorobenzene	5	µg/L	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.32 U	0.31 U	0.31 U	0.31 U	0.31 U	0.33 U	0.31 U	0.31 U	0.31 U
1,2-Dichlorobenzene	3	µg/L	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.3 U	0.29 U	0.29 U	0.29 U
1,4-Dichlorobenzene	3	µg/L	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.37 U	0.36 U	0.36 U	0.36 U
2,4,5-Trichlorophenol	None	µg/L	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
2,4,6-Trichlorophenol	None	µg/L	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.4 U	1.3 U	1.3 U	1.3 U
2,4-Dichlorophenol	None	µg/L	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
2,4-Dimethylphenol	None	µg/L	1.5 U	1.5 U	1.5 R	1.5 U	10.5	1.5 U	1.8 J	54.7	1.5 U	1.5 U	1.5 U	1.5 U	1.6 U	1.5 U	1.5 U	1.5 U
2,4-Dinitrophenol	None	µg/L	17 U	17 U	17 R	17 U	17 U	17 U	17 U	17 U	17 U	17 U	17 U	17 U	17 U	17 U	17 U	17 U
2,4-Dinitrotoluene	5	µg/L	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.45 U	0.43 U	0.43 U	0.43 U
2,6-Dinitrotoluene	5	µg/L	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.47 U	0.46 U	0.46 U	0.46 U	0.46 U	0.49 U	0.46 U	0.46 U	0.46 U
2-Chloronaphthalene	10	µg/L	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.31 U	0.3 U	0.3 U	0.3 U
2-Chlorophenol	None	µg/L	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	0.99 U	0.97 U	0.97 U	0.97 U	0.97 U	1 U	0.97 U	0.97 U	0.97 U
2-Methylnaphthalene	None	µg/L	0.38 U	0.38 U	0.38 U	0.38 U	26.2	11.4	12.8	53	0.38 U	0.38 U	0.38 U	0.38 U	0.4 U	0.38 U	0.38 U	1.3
2-Methylphenol	None	µg/L	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	5	1 U	1 U	1 U	1 U	1.1 U	1 U	1 U	1 U
2-Nitroaniline	5	µg/L	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.2 U	1.1 U	1.1 U	1.1 U
2-Nitrophenol	None	µg/L	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.6 U	1.5 U	1.5 U	1.5 U
3&4-Methylphenol	None	µg/L	0.93 U	0.93 U	0.93 UJ	0.93 U	0.93 U	0.93 U	0.93 U	7.1	0.93 U	0.93 U	0.93 U	0.93 U	0.97 U	0.93 U	0.93 U	0.93 U
3-Nitroaniline	5	µg/L	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
4-Bromophenyl phenyl ether	None	µg/L	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.38 U	0.36 UJ	0.36 UJ	0.36 UJ
4-Chlorophenyl phenyl ether	None	µg/L	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.32 U	0.31 U	0.31 U	0.31 U	0.31 U	0.33 U	0.31 U	0.31 U	0.31 U
4-Nitrophenol	None	µg/L	5.2 U	5.2 UJ	5.2 U	5.2 U	5.2 UJ	5.2 U	5.2 UJ	5.3 UJ	5.2 UJ	5.2 UJ	5.2 UJ	5.2 U	5.5 UJ	5.2 U	5.2 U	5.2 U
Acenaphthene	20	µg/L	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.27 U	0.26 U	0.26 U	0.26 U	0.26 U	0.28 U	0.26 U	0.26 U	0.26 U
Acenaphthylene	None	µg/L	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.24 U	0.23 U	0.23 U	0.23 U
Anthracene	50	µg/L	0.29 U	0.29 U	0.29 UJ	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.3 U	0.29 U	0.29 U	0.29 U
Benzo(a)anthracene	0.002	µg/L	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.24 U	0.23 U	0.23 U	0.23 U
Benzo(a)pyrene	0	µg/L	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.24 U	0.23 U	0.23 U	0.23 U
Benzo(b)fluoranthene	0.002	µg/L	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.47 U	0.46 U	0.46 U	0.46 U	0.46 U	0.48 U	0.46 U	0.46 U	0.46 U
Benzo(g,h,i)perylene	None	µg/L	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.33 U	0.32 U	0.32 U	0.32 U	0.32 U	0.34 U	0.32 U	0.32 U	0.32 U
Benzo(k)fluoranthene	0.002	µg/L	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.52 U	0.51 U	0.51 U	0.51 U	0.51 U	0.54 U	0.51 U	0.51 U	0.51 U
bis(2-Chloroethoxy)methane	5	µg/L	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.32 U	0.31 U	0.31 U	0.31 U
bis(2-Chloroethyl)ether	5	µg/L	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.32 U	0.31 U	0.31 U	0.31 U
bis(2-Ethylhexyl)phthalate	5	µg/L	0.59 U	0.59 UJ	0.59 U	0.59 U	0.59 U	0.59 U	0.59 UJ	0.6 U	0.59 UJ	0.59 UJ	0.59 U	0.59 U	0.62 U	0.59 UJ	2.6 J	0.59 UJ
Carbazole	None	µg/L	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.81 J	0.36 U	0.36 U	0.36 U	0.36 U	0.38 U	0.36 U	0.36 U	0.36 U
Chrysene	0.002	µg/L	0.29 U	0.29 U	0.29 UJ	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.3 U	0.29 U	0.29 U	0.29 U
Dibenzofuran	None	µg/L	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.28 U	0.27 U	0.27 U	0.27 U
Diethyl phthalate	None	µg/L	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.34 U	0.33 U	0.33 U	0.33 U
Dimethyl phthalate	None	µg/L	0.28 U	0.28 U	0.28 UJ	0.28 U	0.28 U	0.28 U	0.28 U	0.29 U	0.28 U	0.28 U	0.28 U	0.28 U	0.3 U	0.28 U	0.28 U	0.28 U
Di-n-butyl phthalate	None	µg/L	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U	0.57 U	0.56 U	0.56 U	0.56 U	0.56 U	0.58 U	0.56 UJ	0.56 UJ	0.56 UJ
Di-n-octyl phthalate	None	µg/L	0.31 UJ	0.31 UJ	0.31 UJ	0.31 UJ	0.31 U	0.31 UJ	0.31 UJ	0.31 U	0.31 UJ	0.31 UJ	0.31 U	0.31 UJ	0.32 U	0.31 UJ	0.31 UJ	0.31 UJ
Fluoranthene	50	µg/L	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.33 U	0.32 U	0.32 U	0.32 U
Fluorene	50	µg/L	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.55 J	0.28 U	0.28 U	0.28 U	0.28 U	0.29 U	0.28 UJ	0.28 UJ	0.28 UJ
Hexachlorobenzene	0.04	µg/L	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.59 J	0.36 U	0.34 U	0.34 U	0.34 U
Hexachlorocyclopentadiene	5	µg/L	7.1 U	7.1 U	7.1 R	7.1 U	7.1 U	7.1 U	7.1 U	7.3 U	7.1 U	7.1 U	7.1 U	7.1 U	7.5 U	7.1 UJ	7.1 UJ	7.1 UJ
Hexachloroethane	5	µg/L	0.55 U	0.55 U	0.55 U	0.55 U	0.55 U	0.55 U	0.55 U	0.56 U	0.55 U	0.55 U	0.55 U	0.55 U	0.58 U	0.55 U	0.55 U	0.55 U
Indeno(1,2,3-cd)pyrene	0.002	µg/L	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.38 U	0.37 U	0.37 U	0.37 U	0.37 U	0.39 U	0.37 U	0.37 U	0.37 U
Naphthalene	10	µg/L	0.26 U	0.26 U	0.26 U	0.26 U	**123**	**40.4**	**37.9**	**283**	0.26 U	0.26 U	0.26 U	0.26 U	0.27 U	0.26 U	0.26 U	0.26 U
Nitrobenzene	0.4	µg/L	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.43 U	0.42 U	0.42 U	0.42 U	0.42 U	0.44 U	0.42 U	0.42 U	0.42 U
N-Nitroso-di-n-propylamine	50	µg/L	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.31 U	0.3 U	0.3 U	0.3 U	0.3 U	0.32 U	0.3 U	0.3 U	0.3 U
N-Nitrosodiphenylamine	50	µg/L	0.31 U	0.31 U	0.31 UJ	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.32 U	0.31 U	0.31 U	0.31 U
Pentachlorophenol	None	µg/L	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.5 U	1.4 U	1.4 U	1.4 U
Phenanthrene	50	µg/L	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.3 U	0.29 U	0.29 U	0.29 U	0.29 U	0.31 U	0.29 U	0.29 U	0.29 U
Phenol	1	µg/L	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
Pyrene	50	µg/L	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.28 U	0.27 U	0.27 U	0.27 U	0.27 U	0.28 U	0.27 U	0.27 U	0.27 U

Qualifier Key:

U - Analyte not detected in the sample. Value represents the quantitation/detection limit.

J - Result reported is a quantitative estimate

R - Rejected Data

Abbreviation Key:

µg/L - Micrograms per Liter

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A cell highlighted and not bold Indicates a detected analyte that does not exceed the screening criteria
Indicates the analyte is not detected or not sampled

Analyte	Screening Value	Unit	Surface Water			
			OSL-SW06	OSL-SW09	OSL-SW09 (DUP)	OSL-SW10
1,2,4-Trichlorobenzene	5	µg/L	0.32 U	0.31 U	0.32 U	0.32 U
1,2-Dichlorobenzene	3	µg/L	0.29 U	0.29 U	0.29 U	0.29 U
1,4-Dichlorobenzene	3	µg/L	0.36 U	0.36 U	0.36 U	0.37 U
2,4,5-Trichlorophenol	None	µg/L	1.6 U	1.6 U	1.6 U	1.6 U
2,4,6-Trichlorophenol	None	µg/L	1.3 U	1.3 U	1.3 U	1.3 U
2,4-Dichlorophenol	None	µg/L	1.2 U	1.2 U	1.2 U	1.2 U
2,4-Dimethylphenol	None	µg/L	1.6 U	1.5 U	1.6 U	1.6 U
2,4-Dinitrophenol	None	µg/L	17 UJ	17 UJ	17 UJ	17 UJ
2,4-Dinitrotoluene	5	µg/L	0.43 U	0.43 U	0.43 U	0.44 U
2,6-Dinitrotoluene	5	µg/L	0.47 U	0.46 U	0.47 U	0.48 U
2-Chloronaphthalene	10	µg/L	0.3 U	0.3 U	0.3 U	0.31 U
2-Chlorophenol	None	µg/L	0.99 U	0.97 U	0.99 U	1 U
2-Methylnaphthalene	None	µg/L	0.39 U	0.38 U	0.39 U	0.4 U
2-Methylphenol	None	µg/L	1.1 U	1 U	1.1 U	1.1 U
2-Nitroaniline	5	µg/L	1.1 U	1.1 U	1.1 U	1.1 U
2-Nitrophenol	None	µg/L	1.5 U	1.5 U	1.5 U	1.5 U
3&4-Methylphenol	None	µg/L	0.94 U	0.93 U	0.94 U	0.95 U
3-Nitroaniline	5	µg/L	1.3 U	1.3 U	1.3 U	1.3 U
4-Bromophenyl phenyl ether	None	µg/L	0.36 U	0.36 U	0.36 U	0.37 U
4-Chlorophenyl phenyl ether	None	µg/L	0.32 U	0.31 U	0.32 U	0.32 U
4-Nitrophenol	None	µg/L	5.3 UJ	5.2 UJ	5.3 UJ	5.4 UJ
Acenaphthene	20	µg/L	0.27 U	0.26 U	0.27 U	0.27 U
Acenaphthylene	None	µg/L	0.23 U	0.23 U	0.23 U	0.24 U
Anthracene	50	µg/L	0.29 U	0.29 U	0.29 U	0.3 U
Benzo(a)anthracene	0.002	µg/L	0.23 U	0.23 U	0.23 U	0.23 U
Benzo(a)pyrene	0	µg/L	0.23 U	0.23 U	0.23 U	0.23 U
Benzo(b)fluoranthene	0.002	µg/L	0.47 U	0.46 U	0.47 U	0.47 U
Benzo(g,h,i)perylene	None	µg/L	0.33 U	0.32 U	0.33 U	0.33 U
Benzo(k)fluoranthene	0.002	µg/L	0.52 U	0.51 U	0.52 U	0.52 U
bis(2-Chloroethoxy)methane	5	µg/L	0.31 U	0.31 U	0.31 U	0.32 U
bis(2-Chloroethyl)ether	5	µg/L	0.31 U	0.31 U	0.31 U	0.32 U
bis(2-Ethylhexyl)phthalate	5	µg/L	4.2	0.59 U	0.6 U	0.6 U
Carbazole	None	µg/L	0.37 U	0.36 U	0.37 U	0.37 U
Chrysene	0.002	µg/L	0.29 U	0.29 U	0.29 U	0.3 U
Dibenzofuran	None	µg/L	0.27 U	0.27 U	0.27 U	0.27 U
Diethyl phthalate	None	µg/L	0.33 U	0.33 U	0.33 U	0.34 U
Dimethyl phthalate	None	µg/L	0.29 U	0.28 U	0.29 U	0.29 U
Di-n-butyl phthalate	None	µg/L	0.57 U	0.56 U	0.57 U	0.57 U
Di-n-octyl phthalate	None	µg/L	0.31 UJ	0.31 UJ	0.31 UJ	0.32 UJ
Fluoranthene	50	µg/L	0.32 U	0.32 U	0.32 U	0.33 U
Fluorene	50	µg/L	0.28 U	0.28 U	0.28 U	0.29 U
Hexachlorobenzene	0.04	µg/L	0.34 U	0.34 U	0.34 U	0.35 U
Hexachlorocyclopentadiene	5	µg/L	7.3 U	7.1 U	7.3 U	7.3 U
Hexachloroethane	5	µg/L	0.56 U	0.55 U	0.56 U	0.57 U
Indeno(1,2,3-cd)pyrene	0.002	µg/L	0.38 U	0.37 U	0.38 U	0.39 U
Naphthalene	10	µg/L	0.26 U	0.26 U	0.26 U	0.27 U
Nitrobenzene	0.4	µg/L	0.43 U	0.42 U	0.43 U	0.43 U
N-Nitroso-di-n-propylamine	50	µg/L	0.31 U	0.3 U	0.31 U	0.31 U
N-Nitrosodiphenylamine	50	µg/L	0.31 U	0.31 U	0.31 U	0.31 U
Pentachlorophenol	None	µg/L	1.4 U	1.4 U	1.4 U	1.4 U
Phenanthrene	50	µg/L	0.3 U	0.29 U	0.3 U	0.3 U
Phenol	1	µg/L	1.3 U	1.3 U	1.3 U	1.3 U
Pyrene	50	µg/L	0.28 U	0.27 U	0.28 U	0.28 U

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Abbreviation Key:

µg/L - Micrograms per Liter

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Indicates the analyte is not detected or not sampled

Attachment B - All OSL Target Analyte Metals and Hardness Analytical Results, Fall 2013

Analyte	Screening Value	Unit	Groundwater								
			3805-MWD16	3805-MWD18	3805-MWI15	3805-MWI15 (DUP)	3805-MWI17	3805-MWS14	3805-MWS4	3805-PZ13S	OSL-MW2
Aluminum	None	µg/L	37.1 J	30 J	200 U	59.1 J	11 U	35 J	22.1 J	11 U	13.4 J
Antimony	3	µg/L	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U
Arsenic	25	µg/L	1.5 U	1.5 U	1.5 U	1.5 U	3.8	1.5 U	4.5	3 U	1.5 U
Barium	1000	µg/L	200 U	22.4 J	200 U	200 U	45.9 J	200 U	37 J	211	8.6 J
Beryllium	3	µg/L	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Cadmium	5	µg/L	0.24 U	0.9 J	0.24 U	0.24 U	0.8 J	0.3 J	0.7 J	0.6 J	0.6 J
Calcium	None	µg/L	31,800	28,600	115,000	114,000	92,200	85,800	45,200	77,300	43,200
Chromium	50	µg/L	0.92 U	2 J	0.92 U	0.92 U	1 J	0.92 U	1 J	6.3 J	1.6 J
Cobalt	None	µg/L	0.48 U	0.48 U	0.48 U	0.5 J	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U
Copper	200	µg/L	1 U	1.9 J	1 U	1 U	2.2 J	1 U	1.1 J	10 U	1.4 J
Iron	300	µg/L	100 U	176	**918 J**	**635 J**	**10,100**	**14,700 J**	**13,200**	**50,900**	24.3 J
Lead	25	µg/L	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	3.3	2.4 U	8.3	2.4 U
Magnesium	35000	µg/L	5,000 U	9,540	21,200	20,600	12,000	7,220	2,470 J	4,800 J	3,990 J
Manganese	300	µg/L	15 U	124	**1,060**	**917**	**325**	**2,450**	**1,480**	**430**	15 U
Mercury	0.7	µg/L	0.089 U	0.089 U	0.089 U	0.089 U	0.089 U	0.089 U	0.089 U	0.089 U	0.089 U
Nickel	100	µg/L	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	4.8 J	1.6 U
Potassium	None	µg/L	10,000 U	10,000 U	10,000 U	10,000 U	10,000 U	10,000 U	10,000 U	10,000 U	10,000 U
Selenium	10	µg/L	2.4 U	2.8 J	2.4 U	2.4 U	5.8 J	2.4 J	4.9 J	4.5 J	2.7 J
Silver	50	µg/L	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
Sodium	20000	µg/L	10,000 U	7,670 J	**92,400**	**97,800**	**65,700**	**427,000**	**101,000**	**115,000**	10,000 U
Thallium	0.5	µg/L	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
Vanadium	None	µg/L	1.9 J	0.72 U	1.1 J	0.8 J	0.72 U	2 J	0.72 U	0.72 U	0.72 U
Zinc	2000	µg/L	4.4 U	8.7 J	5.2 J	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U
Hardness, Total as CaCO3	None	mg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS

Qualifier Key:

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J - Result reported is a quantitative estimate

Abbreviation Key:

NS - Not Sampled

µg/L - Micrograms per Liter

mg/L - milligrams per Liter

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A cell highlighted and not bold Indicates a detected analyte that does not exceed the screening criteria
Indicates the analyte is not detected or not sampled

Analyte	Screening Value	Unit	Groundwater (continued)				Landfill Seep										
			OSL-MW2 (DUP)	OSL-MW8	OSL-MW9A	OSL-MW10	LC009	LC009-EFF	LS31	LS31-EFF	LS34	LS34-EFF	OSL-SP01	OSL-SP01 (DUP)	SP01-EFF	OSL-SP03	SP03-EFF
Aluminum	None	µg/L	11.3 J	11 U	22.7 J	11 U	NS	NS	NS	NS	NS	NS	1,280 J	629 J	NS	89.1 J	NS
Antimony	3	µg/L	1.8 U	1.8 U	1.8 U	1.8 U	NS	NS	NS	NS	NS	NS	1.8 U	1.8 U	NS	1.8 U	NS
Arsenic	25	µg/L	1.5 U	1.5 U	2 J	1.5 U	NS	NS	NS	NS	NS	NS	2.5 J	2.1 J	NS	3.8	NS
Barium	1000	µg/L	9 J	20.6 J	200 U	34.6 J	NS	NS	NS	NS	NS	NS	43.2 J	35.8 J	NS	117 J	NS
Beryllium	3	µg/L	0.17 U	0.17 U	0.17 U	0.17 U	NS	NS	NS	NS	NS	NS	0.17 U	0.17 U	NS	0.17 U	NS
Cadmium	5	µg/L	0.6 J	1 J	0.24 U	0.8 J	NS	NS	NS	NS	NS	NS	0.6 J	0.4 J	NS	0.5 J	NS
Calcium	None	µg/L	45,700	48,900	27,800	68,900	NS	NS	NS	NS	NS	NS	38,100	38,100	NS	94,300	NS
Chromium	50	µg/L	1.4 J	1.6 J	2.2 J	1.1 J	NS	NS	NS	NS	NS	NS	2 J	1.4 J	NS	1.7 J	NS
Cobalt	None	µg/L	0.48 U	0.48 U	1.1 J	0.48 U	NS	NS	NS	NS	NS	NS	1.2 J	0.8 J	NS	1 J	NS
Copper	200	µg/L	1.2 J	10 U	10 U	1.5 J	NS	NS	NS	NS	NS	NS	4.1 J	3.2 J	NS	2.9 J	NS
Iron	300	µg/L	19.9 J	29.5 J	**4,040 J**	**8,070**	**31,800**	**35,100**	**10,000**	**6,560**	**44,600**	**48,500**	**29,400 J**	**20,000 J**	**11,100**	**43,300**	**24,400**
Lead	25	µg/L	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	13.1	6.4	2.4 U	2.4 U	2.4 U
Magnesium	35000	µg/L	4,240 J	3,570 J	5,000 U	5,720	NS	NS	NS	NS	NS	NS	2,370 J	2,320 J	NS	6,270	NS
Manganese	300	µg/L	15 U	15 U	**2,700**	**390**	NS	NS	NS	NS	NS	NS	**1,220**	**1,150**	NS	**2,880**	NS
Mercury	0.7	µg/L	0.089 U	0.089 U	0.089 U	0.089 U	NS	NS	NS	NS	NS	NS	0.089 U	0.089 U	NS	0.089 U	NS
Nickel	100	µg/L	1.6 U	1.6 U	2.1 J	1.6 U	NS	NS	NS	NS	NS	NS	2 J	1.6 U	NS	1.7 J	NS
Potassium	None	µg/L	10,000 U	10,000 U	10,000 U	10,000 U	NS	NS	NS	NS	NS	NS	10,000 U	10,000 U	NS	10,000 U	NS
Selenium	10	µg/L	4.3 J	3.4 J	2.4 U	4.7 J	NS	NS	NS	NS	NS	NS	2.4 U	2.4 U	NS	2.4 U	NS
Silver	50	µg/L	1.5 U	1.5 U	1.5 U	1.5 U	NS	NS	NS	NS	NS	NS	1.5 U	1.5 U	NS	2.6 J	NS
Sodium	20000	µg/L	10,000 U	**149,000**	**127,000**	**86,200**	NS	NS	NS	NS	NS	NS	**61,300**	**60,900**	NS	**207,000**	NS
Thallium	0.5	µg/L	**1.8 J**	**1.9 J**	1.3 U	**2.7 J**	NS	NS	NS	NS	NS	NS	1.3 U	1.3 U	NS	1.3 U	NS
Vanadium	None	µg/L	0.72 U	50 U	2.5 J	0.72 U	NS	NS	NS	NS	NS	NS	2 J	0.72 U	NS	0.72 U	NS
Zinc	2000	µg/L	4.4 U	4.4 U	4.4 U	4.4 U	NS	NS	NS	NS	NS	NS	33.1	24.3	NS	6.8 J	NS
Hardness, Total as CaCO3	None	mg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Qualifier Key:

U - Analyte not detected in the sample. Value represents the quantitation/detection limit.

J - Result reported is a quantitative estimate

Abbreviation Key:

NS - Not Sampled

µg/L - Micrograms per Liter

mg/L - milligrams per Liter

A Cell Highlighted and Bold Indicates a detected analyte that exceeds the screening criteria
A cell highlighted and not bold Indicates a detected analyte that does not exceed the screening criteria
Indicates the analyte is not detected or not sampled

Analyte	Screening Value	Unit	Surface Water			
			OSL-SW06	OSL-SW09	OSL-SW09 (DUP)	OSL-SW10
Aluminum	None	µg/L	200 U	200 U	200 U	200 U
Antimony	3	µg/L	1.8 U	2.2 J	1.8 U	1.8 U
Arsenic	25	µg/L	1.5 U	1.6 J	1.5 U	1.5 U
Barium	1000	µg/L	200 U	200 U	200 U	200 U
Beryllium	3	µg/L	0.17 U	0.17 U	0.17 U	0.17 U
Cadmium	5	µg/L	3 U	3 U	3 U	3 U
Calcium	None	µg/L	45,100	50,300	50,000	39,600
Chromium	50	µg/L	0.92 U	1.4 J	0.92 U	0.92 U
Cobalt	None	µg/L	0.48 U	0.48 U	0.48 U	0.48 U
Copper	200	µg/L	1.3 J	1 U	1 U	1 U
Iron	300	µg/L	**580**	**775**	**738**	100 U
Lead	25	µg/L	2.4 U	2.4 U	2.4 U	2.4 U
Magnesium	35000	µg/L	5,880	5,080	5,090	2,980 J
Manganese	300	µg/L	74.9	174	174	15 U
Mercury	0.7	µg/L	0.089 U	0.089 U	0.089 U	0.089 U
Nickel	100	µg/L	1.6 U	1.6 U	1.6 U	1.6 U
Potassium	None	µg/L	10,000 U	10,000 U	10,000 U	10,000 U
Selenium	10	µg/L	2.4 U	2.4 U	2.4 U	2.4 U
Silver	50	µg/L	1.5 U	1.5 U	1.5 U	1.5 U
Sodium	20000	µg/L	**61,100**	**69,100**	**64,600**	**22,300**
Thallium	0.5	µg/L	10 U	1.3 U	1.3 U	1.3 U
Vanadium	None	µg/L	0.72 U	0.72 U	0.72 U	0.72 U
Zinc	2000	µg/L	4.4 U	4.4 U	4.4 U	4.4 U
Hardness, Total as CaCO3	None	mg/L	207	160	145	154

Qualifier Key:

U - Analyte not detected in the sample. Value represents the quantitation/detection limit.

J - Result reported is a quantitative estimate

Abbreviation Key:

NS - Not Sampled

µg/L - Micrograms per Liter

mg/L - milligrams per Liter

A Cell Highlighted and Bold Indicates a detected analyte that exceeds the screening criteria
A cell highlighted and not bold Indicates a detected analyte that does not exceed the screening criteria
Indicates the analyte is not detected or not sampled

APPENDIX D

Calibration Logs

PLEXUS scientific

PID
Instrument Calibration Sheet
DAILY LOG

Plexus Scientific
4501 Ford Avenue, Suite 1200
Alexandria, VA 22302

Project Name: Fort Drum

Calibrating Personnel: AB

Instrument Name/Model: 2000

Date & Time of Calibration	Zero Cal Reading (PPM)	Span Gas Reading (PPM)	Comments (Are readings within 1-2 PPM?)
5/20/13 725	0.0	100.0	

PLEXUS scientific

PID
Instrument Calibration Sheet
DAILY LOG

Plexus Scientific
4501 Ford Avenue, Suite 1200
Alexandria, VA 22302

Project Name: Fort Drum

Calibrating Personnel: AB

Instrument Name/Model: 3000

Date & Time of Calibration	Zero Cal Reading (PPM)	Span Gas Reading (PPM)	Comments (Are readings within 1-2 PPM?)
5/20/13 715	0.0	100.2	Yes

PLEXUS scientific

Ground Water Parameter
Instrument Calibration Sheet
DAILY LOG

Plexus Scientific
4501 Ford Avenue, Suite 1200
Alexandria, VA 22302

Project Name: Ft. Drum 2013 Spring Sampling

Calibrating Personnel: NF+JC

Instrument Name/Model: Horiba U-52 S/N 19242

Date of Calibration: 20130521 **Time of Calibration:** 8:30

Weather Conditions: Cloudy; 60% chance of storms

Barometric Pressure: (inches Hg) x 25.4 = mm Hg

Calibration Event				
Parameter	**Initial Reading**	**Value Entered**	**Calibrated Reading**	**Comment**
pH (4.01)	4.03	4	4.00	
Conductivity (mS/m)	4.67	4.49	4.49	
Turbidity (1.0 NTU)	0.0	0	0.0	
DO (mg/L)	10.08	n/a	9.14	
ORP (mV)	282	n/a	286	
Water TEMP (°C)	20.88	n/a	20.91	

Notes:

PLEXUS scientific

Ground Water Parameter
Instrument Calibration Sheet
DAILY LOG

Plexus Scientific
4501 Ford Avenue, Suite 1200
Alexandria, VA 22302

Project Name: Ft. Drum 2013 Spring Sampling

Calibrating Personnel: NF+JC

Instrument Name/Model: Horiba U-52 S/N 21833

Date of Calibration: 20130521 **Time of Calibration:** 8:29

Weather Conditions: Cloudy; 60% chance of storms

Barometric Pressure: (inches Hg) x 25.4 = mm Hg

Calibration Event				
Parameter	**Initial Reading**	**Value Entered**	**Calibrated Reading**	**Comment**
pH (4.01)	3.93	4	4.00	
Conductivity (mS/m)	4.70	4.49	4.48	
Turbidity (1.0 NTU)	0.0	0	0.0	
DO (mg/L)	10.26	n/a	9.25	
ORP (mV)	338	n/a	339	
Water TEMP (°C)	21.26	n/a	21.28	

Notes:

PLEXUS scientific

Ground Water Parameter
Instrument Calibration Sheet
DAILY LOG

Plexus Scientific
4501 Ford Avenue, Suite 1200
Alexandria, VA 22302

Project Name: FT. DRUM SPRING SAMPLING 2013

Calibrating Personnel: JRC / NF

Instrument Name/Model: HORIBA U52 S/N19242

Date of Calibration: 5/22/13 **Time of Calibration:** 0720

Weather Conditions: FOG, 60°

Barometric Pressure: (inches Hg) x 25.4 = mm Hg

Calibration Event				
Parameter	**Initial Reading**	**Value Entered**	**Calibrated Reading**	**Comment**
pH (4.01)	4.07	4.00	4.00	
Conductivity (mS/m)	4.11	4.49	4.48	
Turbidity (1.0 NTU)	0.0	0.0	0.0	
DO (mg/L)	8.57	N/A	9.07	
ORP (mV)	289	N/A	289	
Water TEMP (°C)	20.69	N/A	20.68	

Notes:

PLEXUS scientific

Ground Water Parameter
Instrument Calibration Sheet
DAILY LOG

Plexus Scientific
4501 Ford Avenue, Suite 1200
Alexandria, VA 22302

Project Name: Ft. Drum 2013 Spring Sampling

Calibrating Personnel: NF

Instrument Name/Model: Horiba U52 S/N 021833

Date of Calibration: 5-22-13 **Time of Calibration:** 7:30

Weather Conditions: 60°, cloudy

Barometric Pressure: (inches Hg) x 25.4 = mm Hg

Calibration Event				
Parameter	**Initial Reading**	**Value Entered**	**Calibrated Reading**	**Comment**
pH (4.01)	4.04	4.0	4.00	
Conductivity (mS/m)	4.43	4.49	4.49	
Turbidity (1.0 NTU)	2.0	0	0.1	
DO (mg/L)	9.14	N/A	9.16	
ORP (mV)	375	N/A	375	
Water TEMP (°C)	20.72	N/A	20.71	

Notes:

PLEXUS scientific

Ground Water Parameter
Instrument Calibration Sheet
DAILY LOG

Plexus Scientific
4501 Ford Avenue, Suite 1200
Alexandria, VA 22302

Project Name: DRUM SPRING SAMPLING

Calibrating Personnel: NF

Instrument Name/Model: HORIBA U-52 S/N019242

Date of Calibration: 5/23/13 **Time of Calibration:** 0715

Weather Conditions: CLOUDY 68°

Barometric Pressure: (inches Hg) x 25.4 = mm Hg

Calibration Event				
Parameter	**Initial Reading**	**Value Entered**	**Calibrated Reading**	**Comment**
pH (4.01)	4.44	4.00	4.00	
Conductivity (mS/m)	4.49	4.49	4.48	
Turbidity (1.0 NTU)	14.8	0.00	0.0	
DO (mg/L)	9.17	N/A	8.84	
ORP (mV)	275	N/A	276	
Water TEMP (°C)	22.09	N/A	22.08	

Notes:

PLEXUS scientific

Ground Water Parameter
Instrument Calibration Sheet
DAILY LOG

Plexus Scientific
4501 Ford Avenue, Suite 1200
Alexandria, VA 22302

Project Name: DRUM SPRING SAMPLING

Calibrating Personnel: NF

Instrument Name/Model: ~~HORIBA~~ U52 S/N ~~[illegible]~~ 021833

Date of Calibration: 5/23/13 **Time of Calibration:** 0715

Weather Conditions: CLOUDY 68°

Barometric Pressure: (inches Hg) x 25.4 = mm Hg

Calibration Event				
Parameter	**Initial Reading**	**Value Entered**	**Calibrated Reading**	**Comment**
pH (4.01)	3.97	4.00	4.00	
Conductivity (mS/m)	4.35	4.49	4.49	
Turbidity (1.0 NTU)	0.0	0.00	0.0	
DO (mg/L)	8.85	N/A	8.77	
ORP (mV)	329	N/A	328	
Water TEMP (°C)	22.39	N/A	22.37	

Notes:

PLEXUS scientific

PID
Instrument Calibration Sheet
DAILY LOG

Plexus Scientific
4501 Ford Avenue, Suite 1200
Alexandria, VA 22302

Project Name: DRUM ANNUAL SAMPLING

Calibrating Personnel: JRC

Instrument Name/Model: ~~HO~~ MINI RAE 2000

Date & Time of Calibration	Zero Cal Reading (PPM)	Span Gas Reading (PPM)	Comments (Are readings within 1-2 PPM?)
9/23/13 0715 110635	0.0	100.0	Y
9/23/13 0720 046311	0.0	98.7	Y

PLEXUS scientific

Ground Water Parameter
Instrument Calibration Sheet
DAILY LOG

Plexus Scientific
4501 Ford Avenue, Suite 1200
Alexandria, VA 22302

Project Name: FORT DRUM 2013 BASEWIDE

Calibrating Personnel: MBW

Instrument Name/Model: HORIBA U-5000 # 21157

Date of Calibration: 09/24/13 Time of Calibration: 0700

Weather Conditions:

Barometric Pressure: (inches Hg) x 25.4 = mm Hg

Calibration Event				
Parameter	Initial Reading	Value Entered	Calibrated Reading	Comment
pH (4.01)	3.96	4.01	4.00	
Conductivity (mS/m)	4.51	4.49	4.50	
Turbidity (1.0 NTU)	0	0	0	
DO (mg/L)	9.18	8.92	8.93	
ORP (mV)				
Water TEMP (°C)				

Notes:

PLEXUS scientific

Ground Water Parameter
Instrument Calibration Sheet
DAILY LOG

Plexus Scientific
4501 Ford Avenue, Suite 1200
Alexandria, VA 22302

Project Name: FORT DRUM 2013 FALL BASEWIDE SAMPLING EVENT

Calibrating Personnel: MARIA BOREJSZA-WYSOCKA

Instrument Name/Model: HORIBA U-5000 #021341

Date of Calibration: 09/24/13 Time of Calibration: 0700

Weather Conditions:

Barometric Pressure: (inches Hg) x 25.4 = mm Hg

Calibration Event				
Parameter	Initial Reading	Value Entered	Calibrated Reading	Comment
pH (4.01)	3.82	4.01	4.01	
Conductivity (mS/m)	4.45	4.49	4.48	
Turbidity (1.0 NTU)	0	0	0	
DO (mg/L)	8.82	8.92	8.90	
ORP (mV)				
Water TEMP (°C)				

Notes:

PLEXUS scientific

Ground Water Parameter
Instrument Calibration Sheet
DAILY LOG

Plexus Scientific
4501 Ford Avenue, Suite 1200
Alexandria, VA 22302

Project Name: FORT DRUM 2013 PALL BASEWIDE SAMPLING EVENT

Calibrating Personnel: MARIA BOREJSZA-WYSOCKA

Instrument Name/Model: HORIBA U-5000 # 21157

Date of Calibration: 09/25/2013 Time of Calibration: 06:55

Weather Conditions:

Barometric Pressure: (inches Hg) x 25.4 = mm Hg

Calibration Event				
Parameter	Initial Reading	Value Entered	Calibrated Reading	Comment
pH (4.01)	3.95	4.01	3.98	
Conductivity (mS/m)	4.55	4.49	4.51	
Turbidity (1.0 NTU)	0	0	0	
DO (mg/L)	8.89	8.92	8.90	
ORP (mV)				
Water TEMP (°C)				

Notes:

PLEXUS scientific

Ground Water Parameter
Instrument Calibration Sheet
DAILY LOG

Plexus Scientific
4501 Ford Avenue, Suite 1200
Alexandria, VA 22302

Project Name: FORT DRUM 2013 PALL BASEWIDE SAMPLING EVENT

Calibrating Personnel: MARIA BOREJSZA-WYSOCKA

Instrument Name/Model: HORIBA U-5000 #021341

Date of Calibration: 09/25/13 Time of Calibration: 06:55

Weather Conditions:

Barometric Pressure: (inches Hg) x 25.4 = mm Hg

Calibration Event				
Parameter	Initial Reading	Value Entered	Calibrated Reading	Comment
pH (4.01)	3.94	4.01	3.99	
Conductivity (mS/m)	4.46	4.49	4.49	
Turbidity (1.0 NTU)	0	0	0	
DO (mg/L)	9.00	8.92	8.90	
ORP (mV)				
Water TEMP (°C)				

Notes:

PLEXUS scientific

Ground Water Parameter
Instrument Calibration Sheet
DAILY LOG

Plexus Scientific
4501 Ford Avenue, Suite 1200
Alexandria, VA 22302

Project Name: FORT DRUM 2013 PALL BASEWIDE SAMPLING EVENT

Calibrating Personnel: MARIA BOREJSZA-WYSOCKA

Instrument Name/Model: HORIBA U-5000 #21157

Date of Calibration: 09/26/13 Time of Calibration: 0700

Weather Conditions:

Barometric Pressure: (inches Hg) x 25.4 = mm Hg

Calibration Event				
Parameter	Initial Reading	Value Entered	Calibrated Reading	Comment
pH (4.01)	3.96	4.01	3.98	
Conductivity (mS/m)	4.52	4.49	4.50	
Turbidity (1.0 NTU)	0	0	0	
DO (mg/L)	9.18	8.92	8.94	
ORP (mV)				
Water TEMP (°C)				

Notes:

PLEXUS scientific

Ground Water Parameter
Instrument Calibration Sheet
DAILY LOG

Plexus Scientific
4501 Ford Avenue, Suite 1200
Alexandria, VA 22302

Project Name: FORT DRUM 2013 PALL BASEWIDE SAMPLING EVENT

Calibrating Personnel: MARIA BOREJSZA-WYSOCKA

Instrument Name/Model: HORIBA U-5000

Date of Calibration: 09/26/13 # 021341 Time of Calibration: 0700

Weather Conditions:

Barometric Pressure: (inches Hg) x 25.4 = mm Hg

Calibration Event				
Parameter	Initial Reading	Value Entered	Calibrated Reading	Comment
pH (4.01)	3.92	4.01	3.97	
Conductivity (mS/m)	4.47	4.49	4.49	
Turbidity (1.0 NTU)	0	0	0	
DO (mg/L)	8.95	8.92	8.91	
ORP (mV)				
Water TEMP (°C)				

Notes:

PLEXUS scientific

Ground Water Parameter
Instrument Calibration Sheet
DAILY LOG

Plexus Scientific
4501 Ford Avenue, Suite 1200
Alexandria, VA 22302

Project Name: FORT DRUM 2013 PALL BASEWIDE SAMPLING EVENT

Calibrating Personnel: MARIA BOREJSZA-WYSOCKA

Instrument Name/Model: HORIBA U-5000 #2157

Date of Calibration: 09/27/13 Time of Calibration: 0815

Weather Conditions:

Barometric Pressure: (inches Hg) x 25.4 = mm Hg

Calibration Event				
Parameter	Initial Reading	Value Entered	Calibrated Reading	Comment
pH (4.01)	3.98	4.01	4.00	
Conductivity (mS/m)	4.46	4.49	4.49	
Turbidity (1.0 NTU)	0	0	0	
DO (mg/L)	8.83	8.92	8.90	
ORP (mV)				
Water TEMP (°C)				

Notes:

PLEXUS scientific

Ground Water Parameter
Instrument Calibration Sheet
DAILY LOG

Plexus Scientific
4501 Ford Avenue, Suite 1200
Alexandria, VA 22302

Project Name: FORT DRUM 2013 PALL BASEWIDE SAMPLING EVENT

Calibrating Personnel: MARIA BOREJSZA-WYSOCKA

Instrument Name/Model: HORIBA U-5000 # 021341

Date of Calibration: 09/27/13 Time of Calibration: 0815

Weather Conditions:

Barometric Pressure: (inches Hg) x 25.4 = mm Hg

Calibration Event				
Parameter	Initial Reading	Value Entered	Calibrated Reading	Comment
pH (4.01)	3.91	4.01	4.00	
Conductivity (mS/m)	4.43	4.49	4.50	
Turbidity (1.0 NTU)	0	0	0	
DO (mg/L)	8.85	8.92	8.87	
ORP (mV)				
Water TEMP (°C)				

Notes:

PLEXUS Scientific

Ground Water Parameter
Instrument Calibration Sheet
DAILY LOG

Plexus Scientific
4501 Ford Avenue, Suite 1200
Alexandria, VA 22302

Project Name: Fort Drum Fall 2013 Baseride Sampling Event

Calibrating Personnel: NF

Instrument Name/Model: Horiba 18104 U-5000

Date of Calibration: 9-27-2013 **Time of Calibration:** 9:30

Weather Conditions: blue skies, 70° F

Barometric Pressure: **(inches Hg) x 25.4 =** **mm Hg**

Calibration Event				
Parameter	**Initial Reading**	**Value Entered**	**Calibrated Reading**	**Comment**
pH (4.01)	4.01	4.0	3.99	
Conductivity (mS/m)	4.61	4.49	4.48	
Turbidity (1.0 NTU)	12.8	0	0.0	
DO (mg/L)	11.53		9.70	
ORP (mV)	298		299	
Water TEMP (°C)	19.25		19.25	

Notes:

PLEXUS Scientific

Ground Water Parameter
Instrument Calibration Sheet
DAILY LOG

Plexus Scientific
4501 Ford Avenue, Suite 1200
Alexandria, VA 22302

Project Name: Fort Drum 2013 Fall Baseweida Sampling Event

Calibrating Personnel: Aaron Myers

Instrument Name/Model: Horiba U-5000 16900

Date of Calibration: 09-28-2013 **Time of Calibration:** 1145

Weather Conditions: Blue Skies

Barometric Pressure: **(inches Hg) x 25.4 =** **mm Hg**

Calibration Event				
Parameter	**Initial Reading**	**Value Entered**	**Calibrated Reading**	**Comment**
pH (4.01)	4.25	4.0	3.99	
Conductivity (mS/m)	4.78	4.49	4.48	
Turbidity (1.0 NTU)	18.7	0	0.0	
DO (mg/L)	11.47		9.10	
ORP (mV)	294		292	
Water TEMP (°C)	22.21		22.25	

Notes:

PLEXUS SCIENTIFIC

Ground Water Parameter
Instrument Calibration Sheet
DAILY LOG

Plexus Scientific
4501 Ford Avenue, Suite 1200
Alexandria, VA 22302

Project Name: Fort Drum 2013 Fall Basewide Sampling Event

Calibrating Personnel: NF

Instrument Name/Model: Horiba U-5000 #18104

Date of Calibration: 9-28-2013 **Time of Calibration:** 11:45

Weather Conditions: blue skies, warm

Barometric Pressure: **(inches Hg) x 25.4 =** **mm Hg**

Calibration Event				
Parameter	**Initial Reading**	**Value Entered**	**Calibrated Reading**	**Comment**
pH (4.01)	3.96	4.0	4.00	
Conductivity (mS/m)	4.34	4.49	4.48	
Turbidity (1.0 NTU)	0.0	0	0.2	
DO (mg/L)	10.64		9.36	
ORP (mV)	290		287	
Water TEMP (°C)	21.90		21.93	

Notes:

PLEXUS SCIENTIFIC

Ground Water Parameter
Instrument Calibration Sheet
DAILY LOG

Plexus Scientific
4501 Ford Avenue, Suite 1200
Alexandria, VA 22302

Project Name: Ft. Drum Fall 2013 Baseride Sampling Event

Calibrating Personnel: NF

Instrument Name/Model: Horiba U-5000 #018104

Date of Calibration: 9-29-2013 **Time of Calibration:** 8:25

Weather Conditions: blue skies, warm

Barometric Pressure: **(inches Hg) x 25.4 =** **mm Hg**

Calibration Event				
Parameter	**Initial Reading**	**Value Entered**	**Calibrated Reading**	**Comment**
pH (4.01)	4.15	4.0	4.01	
Conductivity (mS/m)	4.57	4.49	4.50	
Turbidity (1.0 NTU)	22.2	0	0.3	
DO (mg/L)	9.94		10.01	
ORP (mV)	266		314	
Water TEMP (°C)	21.92		21.26	

Notes:

PLEXUS SCIENTIFIC

Ground Water Parameter
Instrument Calibration Sheet
DAILY LOG

Plexus Scientific
4501 Ford Avenue, Suite 1200
Alexandria, VA 22302

Project Name: Fort Drum Fall 2013 Baseride Sampling Event

Calibrating Personnel: NF

Instrument Name/Model: Horiba U-5000 #19494

Date of Calibration: 9-29-2013 **Time of Calibration:** 8:15

Weather Conditions: blue skies, warm

Barometric Pressure: **(inches Hg) x 25.4 =** **mm Hg**

Calibration Event				
Parameter	**Initial Reading**	**Value Entered**	**Calibrated Reading**	**Comment**
pH (4.01)	3.91	4.0	3.96	
Conductivity (mS/m)	4.48	4.49	4.48	
Turbidity (1.0 NTU)	0.0	0	0.0	
DO (mg/L)	8.25		8.21	
ORP (mV)			307	
Water TEMP (°C)			2228	

Notes:

PLEXUS SCIENTIFIC

Ground Water Parameter
Instrument Calibration Sheet
DAILY LOG

Plexus Scientific
4501 Ford Avenue, Suite 1200
Alexandria, VA 22302

Project Name: Fort Drum Fall 2013 Basewide Sampling Event

Calibrating Personnel: NF

Instrument Name/Model: Horiba U-5000 # 16900

Date of Calibration: 9-29-2013 **Time of Calibration:** 8:00

Weather Conditions: blue skies, warm

Barometric Pressure: **(inches Hg) x 25.4 =** **mm Hg**

Calibration Event				
Parameter	**Initial Reading**	**Value Entered**	**Calibrated Reading**	**Comment**
pH (4.01)	4.10	4.0		
Conductivity (mS/m)	4.10	4.49		
Turbidity (1.0 NTU)	8.8	0		
DO (mg/L)	10.70			
ORP (mV)	273			
Water TEMP (°C)	22.39			

Notes: Error ; told to clean sensors ; did so w/ DI water multiple times ; still got error

PLEXUS Scientific

Ground Water Parameter
Instrument Calibration Sheet
DAILY LOG

Plexus Scientific
4501 Ford Avenue, Suite 1200
Alexandria, VA 22302

Project Name: Ft. Drum Fall 2013 Basewide Sampling Event

Calibrating Personnel: NF

Instrument Name/Model: Horiba U-5000 # 018104

Date of Calibration: 9-30-2013 **Time of Calibration:** 7:46

Weather Conditions: blue skies, cool

Barometric Pressure: **(inches Hg) x 25.4 =** **mm Hg**

Calibration Event				
Parameter	**Initial Reading**	**Value Entered**	**Calibrated Reading**	**Comment**
pH (4.01)	3.99	4.0	4.00	
Conductivity (mS/m)	4.82	4.49	4.50	
Turbidity (1.0 NTU)	19.6	0	1.1	
DO (mg/L)	8.80		9.18	
ORP (mV)	293		292	
Water TEMP (°C)	21.23		21.23	

Notes:

PLEXUS Scientific

Ground Water Parameter
Instrument Calibration Sheet
DAILY LOG

Plexus Scientific
4501 Ford Avenue, Suite 1200
Alexandria, VA 22302

Project Name: Ft Drum Fall 2013 Basewide Sampling Event

Calibrating Personnel: NF

Instrument Name/Model: Horiba U-5000

Date of Calibration: 10-1-2013 **Time of Calibration:**

Weather Conditions: blue skies, warm

Barometric Pressure: (inches Hg) x 25.4 = mm Hg

Calibration Event				
Parameter	**Initial Reading**	**Value Entered**	**Calibrated Reading**	**Comment**
pH (4.01)	~~4~~ 4.10	4.0	4.00	
Conductivity (mS/m)	4.88	4.49	4.49	
Turbidity (1.0 NTU)	9.6	0	0.4	
DO (mg/L)	7.89		9.21	
ORP (mV)	286		286	
Water TEMP (°C)	22.11		22.17	

Notes:

PLEXUS Scientific

Ground Water Parameter
Instrument Calibration Sheet
DAILY LOG

Plexus Scientific
4501 Ford Avenue, Suite 1200
Alexandria, VA 22302

Project Name: Ft. Drum Fall 2013 Baseride Sampling Event

Calibrating Personnel: NF

Instrument Name/Model: Horiba U-5000 #18104

Date of Calibration: 10-1-2013 **Time of Calibration:** 8:05

Weather Conditions: blue skies, warm

Barometric Pressure: **(inches Hg) x 25.4 =** **mm Hg**

Calibration Event				
Parameter	**Initial Reading**	**Value Entered**	**Calibrated Reading**	**Comment**
pH (4.01)	4.15	4.0	3.98	
Conductivity (mS/m)	4.72	4.49	4.50	
Turbidity (1.0 NTU)	24.5	0	0.0	
DO (mg/L)	12.60		9.41	
ORP (mV)	266		280	
Water TEMP (°C)	21.96		21.56	

Notes:

APPENDIX E

Laboratory Analytical and Data Validation Reports

(Available on compact disc)

APPENDIX F

Full Analytical Results

APPENDIX F - All Volatile Organic Compound Analytical Results, Spring 2013

			Area 1295						Area 1595						Area 1795					
			Groundwater						Groundwater						Groundwater					
Analyte	Screening Value	Unit	1295-MW25	1295-MW26	1295-MW30	1295-MWS27	1295-MWS27 (DUP)	1295-MWS28	1595-MW33	1595-MWS7	1595-OBG2	1595-OBG2 (DUP)	1595-PZ11	1595-PZ12	1795-MWS11	1795-MWS11 (DUP)	1795-MWS21	1795-MWS3	1795-MWS7	1795-PZ15
1,1,1,2-Tetrachloroethane	5	µg/L	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.49 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.49 U	1.2 U	0.24 U
1,1,1-Trichloroethane	5	µg/L	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.47 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.47 U	1.2 U	0.24 U
1,1,2,2-Tetrachloroethane	5	µg/L	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.43 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.43 U	1.1 U	0.21 U
1,1,2-Trichloroethane	1	µg/L	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.57 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.57 U	1.4 U	0.29 U
1,1-Dichloroethane	5	µg/L	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.21 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.21 U	0.53 U	0.11 U
1,1-Dichloropropene	5	µg/L	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.61 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.61 U	1.5 U	0.3 U
1,2,3-Trichlorobenzene		µg/L	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.56 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.56 U	1.4 U	0.28 U
1,2,3-Trichloropropane	0.04	µg/L	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	1.1 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	1.1 U	2.7 U	0.53 U
1,2,4-Trichlorobenzene	5	µg/L	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.41 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.41 U	1 U	0.2 U
1,2,4-Trimethylbenzene		µg/L	2,540	0.19 U	0.19 U	134	3.3	127	6.5	498	49.7	46.6	1.2 J	462	0.19 U	0.19 U	5.2	288	994	2 U
1,2-Dibromoethane	0.0006	µg/L	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.39 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.39 U	0.98 U	0.2 U
1,2-Dichlorobenzene	3	µg/L	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.43 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.43 U	1.1 U	0.22 U
1,2-Dichloroethane	0.6	µg/L	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.52 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.52 U	1.3 U	0.26 U
1,2-Dichloroethene (total)		µg/L	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.38 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.38 U	0.94 U	0.19 U
1,2-Dichloropropane	1	µg/L	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.97 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.97 U	2.4 U	0.48 U
1,3,5-Trimethylbenzene		µg/L	671	0.36 U	0.36 U	30.6	1 J	28.1	0.36 U	154	25.9	25	0.86 J	179	0.36 U	0.36 U	0.36 U	89.4	353 J	0.36 U
1,3-Dichloropropane		µg/L	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.45 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.45 U	1.1 U	0.23 U
1,4-Dichlorobenzene	3	µg/L	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.6 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.6 U	1.5 U	0.3 U
2,2-Dichloropropane		µg/L	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.29 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.29 U	0.74 U	0.15 U
2-Butanone (MEK)	50	µg/L	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	4.7 U	2.4 U	2.4 U	3 J	3.9 J	2.4 UJ	8.1 J	2.4 U	2.4 UJ	2.4 R	4.7 U	12 U	2.4 U
2-Hexanone		µg/L	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	2.3 U	1.1 U	6.6	1.1 U	1.1 U	1.1 UJ	2 J	1.1 U	1.1 UJ	1.1 U	7 J	5.7 U	1.1 U
4-Methyl-2-pentanone(MIBK)		µg/L	0.83 U	0.83 U	0.83 U	0.83 U	0.83 U	1.7 U	0.83 U	2.7 J	0.83 U	0.83 U	0.83 U	3.1 J	0.83 U	0.83 U	0.83 U	2.4 J	4.1 U	0.83 U
Acetone	50	µg/L	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U	6.6 U	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U	9.2 J	6.6 U	16 U	3.3 U
Benzene	1	µg/L	0.24 U	0.24 U	0.24 U	**3**	0.24 U	0.47 U	0.24 U	0.37 J	0.32 J	0.31 J	0.24 U	0.24 U	0.24 U	0.24 U	**1.8**	0.47 U	1.2 U	0.24 U
Bromobenzene	None	µg/L	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.28 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.28 U	0.69 U	0.14 U
Bromodichloromethane	50	µg/L	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.41 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.41 U	1 U	0.21 U
Bromoform	50	µg/L	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.43 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.43 U	1.1 U	0.21 U
Bromomethane	5	µg/L	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.44 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.44 U	1.1 U	0.22 U
Carbon disulfide	None	µg/L	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.38 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.38 U	0.95 U	0.19 U
Carbon tetrachloride	5	µg/L	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.43 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.43 U	1.1 U	0.22 U
Chlorobenzene	5	µg/L	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.46 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.46 U	1.1 U	0.23 U
Chloroethane	5	µg/L	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.52 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.52 U	1.3 U	0.26 U
Chloroform	7	µg/L	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.41 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.41 U	1 U	0.2 U
Chloromethane	5	µg/L	0.21 U	0.21 U	0.21 UJ	0.21 U	0.21 UJ	0.41 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 UJ	0.41 U	1 U	0.21 U
cis-1,2-Dichloroethene	5	µg/L	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.38 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.38 U	0.94 U	0.19 U
cis-1,3-Dichloropropene	0.4	µg/L	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.41 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.41 U	1 U	0.21 U
Dibromochloromethane	50	µg/L	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.27 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.27 U	0.68 U	0.14 U
Dichlorodifluoromethane	5	µg/L	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.54 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.54 U	1.3 U	0.27 U
Ethyl Ether	None	µg/L	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.69 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.69 U	1.7 U	0.35 U
Ethylbenzene	5	µg/L	**1,240**	0.23 U	0.23 U	**108**	1.8	**96.1**	**10.2**	**71.4**	**7.3**	**7**	2.5	**235**	0.23 U	0.23 U	**45**	**254**	**437 J**	0.43 J
Isopropylbenzene	5	µg/L	**148**	0.45 U	0.45 U	**6**	0.6 J	**5.2**	0.78 J	**30.7**	2.6	2.5	0.45 U	**32.9**	0.45 U	0.45 U	**10.3**	**16.3**	**19.7**	0.45 U
m,p-Xylene	None	µg/L	4,000	0.42 U	0.42 U	487	6	454	8.9	273	34	33	3.5	1,100	0.62 J	0.42 U	5.4	669	2,490	1.4
Methyl Tert Butyl Ether	10	µg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Methylene chloride	5	µg/L	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	1.4 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	1.4 U	3.5 U	0.7 U
Naphthalene	10	µg/L	**493**	1.1 U	1.1 U	**21.7**	1.1 U	**19.3**	3.1 J	**68.9**	**18.8**	**18.1**	2.3 J	**167**	1.1 U	1.1 U	1.1 U	**60.7**	**168**	1.1 U
n-Butylbenzene	5	µg/L	**24.7**	0.17 U	0.17 U	0.99 J	0.17 U	0.76 J	0.17 U	**6.3**	1.4 J	1.3 J	0.17 U	**6.7**	0.17 U	0.17 U	1.4 J	2.7 J	**15 J**	0.17 U
n-Propylbenzene	5	µg/L	**309**	0.24 U	0.24 U	**12.7**	1.3 J	**10.9**	0.96 J	**46.9**	4 J	3.8 J	0.28 J	**45.7**	0.24 U	0.24 U	**10.5**	**33.4**	**40.7**	0.24 U
o-Xylene	5	µg/L	**97.6**	0.24 U	0.24 U	**237**	0.24 U	**231**	2.5	**112**	**38**	**36.8**	0.24 U	**166**	0.24 U	0.24 U	4.4	**227**	**1,370**	0.45 J
p-Isopropyltoluene	5	µg/L	**21.1**	0.22 U	0.22 U	0.68 J	0.22 U	0.6 J	0.22 U	**5.9**	4 J	3.9 J	0.22 U	**6.8**	0.22 U	0.22 U	0.76 J	2.4 J	**12.1 J**	0.22 U
sec-Butylbenzene	5	µg/L	**18.2**	0.21 U	0.21 U	1.1 J	0.32 J	1 J	0.21 U	4.3 J	2.5 J	2.4 J	0.21 U	**5**	0.21 U	0.21 U	1.4 J	1.7 J	**9.1 J**	0.21 U
Styrene	5	µg/L	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.43 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.43 U	1.1 U	0.21 U
tert-Butylbenzene	None	µg/L	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.61 U	0.3 U	0.3 U	0.75 J	0.72 J	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.61 U	1.5 U	0.3 U
Tetrachloroethene	5	µg/L	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.56 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.56 U	1.4 U	0.28 U
Tetrahydrofuran	50	µg/L	5.4 U	5.4 U	5.4 U	5.4 U	5.4 U	11 U	5.4 U	5.4 U	5.4 U	5.4 U	5.4 U	5.4 U	5.4 U	5.4 U	5.4 U	11 U	27 U	5.4 U
Toluene	5	µg/L	**9**	0.23 U	0.23 U	**376**	0.23 U	**339**	2.3	**7.5**	2.1	2	0.28 J	**185**	0.23 U	0.23 U	**6.2**	**115**	**168**	0.58 J
trans-1,2-Dichloroethene	5	µg/L	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.42 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.42 U	1.1 U	0.21 U
trans-1,3-Dichloropropene	0.4	µg/L	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.38 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.38 U	0.95 U	0.19 U
Trichloroethene	5	µg/L	0.22 U	0.62 J	0.22 U	0.22 U	0.22 U	0.43 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.43 U	1.1 U	0.22 U
Trichlorofluoromethane	5	µg/L	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.53 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.53 U	1.3 U	0.27 U
Vinyl Acetate	None	µg/L	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	2.2 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	2.2 U	5.6 U	1.1 U
Vinyl chloride	2	µg/L	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.41 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.41 U	1 U	0.21 U
Xylene (total)	5	µg/L	**4,100**	0.24 U	0.24 U	**725**	**6**	**685**	**11.4**	**385**	**72**	**69.8**	3.5	**1,270**	0.82 J	0.42 U	**9.8**	**896**	**3,860**	1.9

Qualifier Key:

U - Analyte not detected in the sample. Value represents the quantitation/detection limit.

J - Result reported is a quantitative estimate

R - Rejected Data

Abbreviation Key:

µg/L - Micrograms per Liter

A Cell Highlighted and Bold Indicates a detected analyte that exceeds the screening criteria
A cell highlighted and not bold Inidcates a detected analyte that does not exceed the screening criteria
Indicates the analyte is not detected or not sampled

APPENDIX F - All Volatile Organic Compound Analytical Results, Spring 2013

			Area 2140								Areas 1995 & 3805											OSL
			Groundwater								Groundwater											Groundwater
Analyte	Screening Value	Unit	2140-MW02	2140-MW06	2140-MW07	2140-MW12	2140-MW14	2140-MW19	2140-MW27	2140-MW37	1995-MWS10	1995-MWS9	3805-MWS11	3805-MWS24	3805-MWS5	3805-MWS8	3805-PZ12S	3805-PZ14	3805-PZ14 (DUP)	3805-PZ2S	3805-PZ3	OSL-MW3
1,1,1,2-Tetrachloroethane	5	µg/L	0.24 U	4.9 U	4.9 U	0.24 U	0.24 U	0.24 U	0.24 U	2.4 U	0.24 U	0.49 U	0.24 U	0.24 U	0.24 U	0.24 U	2.4 U	12 U	2.4 U	0.61 U	1.2 U	0.24 U
1,1,1-Trichloroethane	5	µg/L	0.24 U	4.7 U	4.7 U	0.24 U	0.24 U	0.24 U	0.24 U	2.4 U	0.24 U	0.47 U	0.24 U	0.24 U	0.24 U	0.24 U	2.4 U	12 U	2.4 U	0.59 U	1.2 U	0.24 U
1,1,2,2-Tetrachloroethane	5	µg/L	0.21 U	4.3 U	4.3 U	0.21 U	0.21 U	0.21 U	0.21 U	2.1 U	0.21 U	0.43 U	0.21 U	0.21 U	0.21 U	0.21 U	2.1 U	11 U	2.1 U	0.54 U	1.1 U	0.21 U
1,1,2-Trichloroethane	1	µg/L	0.29 U	5.7 U	5.7 U	0.29 U	0.29 U	0.29 U	0.29 U	2.9 U	0.29 U	0.57 U	0.29 U	0.29 U	0.29 U	0.29 U	2.9 U	14 U	2.9 U	0.72 U	1.4 U	0.29 U
1,1-Dichloroethane	5	µg/L	0.11 U	2.1 U	2.1 U	0.11 U	0.11 U	0.11 U	0.11 U	1.1 U	0.11 U	0.21 U	0.11 U	0.11 U	0.11 U	0.11 U	1.1 U	5.3 U	1.1 U	0.27 U	0.53 U	0.11 U
1,1-Dichloropropene	5	µg/L	0.3 U	6.1 U	6.1 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U	0.3 U	0.61 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U	15 U	3 U	0.76 U	1.5 U	0.3 U
1,2,3-Trichlorobenzene		µg/L	0.28 U	5.6 U	5.6 U	0.28 U	0.28 U	0.28 U	0.28 U	2.8 U	0.28 U	0.56 U	0.28 U	0.28 U	0.28 U	0.28 U	2.8 U	14 U	2.8 U	0.71 U	1.4 U	0.28 U
1,2,3-Trichloropropane	0.04	µg/L	0.53 U	11 U	11 U	0.53 U	0.53 U	0.53 U	0.53 U	5.3 U	0.53 U	1.1 U	0.53 U	0.53 U	0.53 U	0.53 U	5.3 U	27 U	5.3 U	1.3 U	2.7 U	0.53 U
1,2,4-Trichlorobenzene	5	µg/L	0.2 U	4.1 U	4.1 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.41 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	10 U	2 U	0.51 U	1 U	0.2 U
1,2,4-Trimethylbenzene		µg/L	116	584	1,750	1.8 J	0.19 U	0.19 U	0.19 U	1,630	2 U	236	899	526	1,010	2 U	1,930	2,730	2,730	175	433	180
1,2-Dibromoethane	0.0006	µg/L	0.2 U	3.9 U	3.9 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.39 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	9.8 U	2 U	0.49 U	0.98 U	0.2 U
1,2-Dichlorobenzene	3	µg/L	0.22 U	4.3 U	4.3 U	0.22 U	0.22 U	0.22 U	0.22 U	2.2 U	0.22 U	0.43 U	0.22 U	0.22 U	0.22 U	0.22 U	2.2 U	11 U	2.2 U	0.54 U	1.1 U	0.22 U
1,2-Dichloroethane	0.6	µg/L	0.26 U	5.2 U	5.2 U	0.26 U	0.26 U	0.26 U	0.26 U	2.6 U	0.26 U	0.52 U	0.26 U	0.26 U	0.26 U	0.26 U	2.6 U	13 U	2.6 U	0.65 U	1.3 U	0.26 U
1,2-Dichloroethene (total)		µg/L	0.19 U	3.8 U	3.8 U	0.19 U	0.19 U	0.19 U	0.19 U	1.9 U	0.19 U	0.38 U	0.19 U	0.19 U	0.19 U	0.19 U	1.9 U	9.4 U	1.9 U	0.47 U	0.94 U	0.19 U
1,2-Dichloropropane	1	µg/L	0.48 U	9.7 U	9.7 U	0.48 U	0.48 U	0.48 U	0.48 U	4.8 U	0.48 U	0.97 U	0.48 U	0.48 U	0.48 U	0.48 U	4.8 U	24 U	4.8 U	1.2 U	2.4 U	0.48 U
1,3,5-Trimethylbenzene		µg/L	36.6	157	785	0.83 J	0.36 U	0.36 U	0.36 U	494	4.3	21.3	275	164	322	1.5 J	574	720	589	52.8	130	81.6
1,3-Dichloropropane		µg/L	0.23 U	4.5 U	4.5 U	0.23 U	0.23 U	0.23 U	0.23 U	2.3 U	0.23 U	0.45 U	0.23 U	0.23 U	0.23 U	0.23 U	2.3 U	11 U	2.3 U	0.56 U	1.1 U	0.23 U
1,4-Dichlorobenzene	3	µg/L	0.3 U	6 U	6 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U	0.3 U	0.6 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U	15 U	3 U	0.75 U	1.5 U	0.3 U
2,2-Dichloropropane		µg/L	0.15 U	2.9 U	2.9 U	0.15 U	0.15 U	0.15 U	0.15 U	1.5 U	0.15 U	0.29 U	0.15 U	0.15 U	0.15 U	0.15 U	1.5 U	7.4 U	1.5 U	0.37 U	0.74 U	0.15 U
2-Butanone (MEK)	50	µg/L	2.4 U	47 U	47 U	2.4 U	2.4 U	2.4 U	2.4 U	24 R	2.4 R	4.7 U	2.4 U	2.4 U	2.7 J	2.4 U	24 R	120 U	24 R	5.9 R	12 R	2.4 U
2-Hexanone		µg/L	4.5 J	23 U	36.5 J	1.1 U	1.1 U	1.1 U	1.1 U	78.3	1.1 U	2.3 U	2.1 J	1.1 U	1.1 U	1.1 U	11 U	57 U	11 U	2.8 U	5.7 U	1.1 U
4-Methyl-2-pentanone(MIBK)		µg/L	0.83 U	17 U	17 U	0.83 U	0.83 U	0.83 U	0.83 U	8.3 U	0.83 U	1.7 U	0.83 U	0.83 U	4.5 J	0.83 U	8.3 U	41 U	8.3 U	2.1 U	4.1 U	0.83 U
Acetone	50	µg/L	3.3 U	66 U	66 U	3.3 U	3.3 U	3.3 U	3.3 U	33 U	12.3	6.6 U	3.3 U	3.3 U	3.3 U	3.3 U	33 U	160 U	**73.1 J**	13.5 J	16 U	3.3 U
Benzene	1	µg/L	**92.3**	**26.4**	**307**	**7.6**	**0.24 U**	0.3 J	0.24 U	**93.4**	0.24 U	0.71 J	**9.4**	**2.2**	**15**	**5.6**	**91.5**	12 U	2.4 U	0.61 J	**23.6**	**1.6**
Bromobenzene	None	µg/L	0.14 U	2.8 U	2.8 U	0.14 U	0.14 U	0.14 U	0.14 U	1.4 U	0.14 U	0.28 U	0.14 U	0.14 U	0.14 U	0.14 U	1.4 U	6.9 U	1.4 U	0.35 U	0.69 U	0.14 U
Bromodichloromethane	50	µg/L	0.21 U	4.1 U	4.1 U	0.21 U	0.21 U	0.21 U	0.21 U	2.1 U	0.21 U	0.41 U	0.21 U	0.21 U	0.21 U	0.21 U	2.1 U	10 U	2.1 U	0.52 U	1 U	0.21 U
Bromoform	50	µg/L	0.21 U	4.3 U	4.3 U	0.21 U	0.21 U	0.21 U	0.21 U	2.1 U	0.21 U	0.43 U	0.21 U	0.21 U	0.21 U	0.21 U	2.1 U	11 U	2.1 U	0.54 U	1.1 U	0.21 U
Bromomethane	5	µg/L	0.22 U	4.4 U	4.4 U	0.22 U	0.22 U	0.22 U	0.22 U	2.2 U	0.22 U	0.44 U	0.22 U	0.22 U	0.22 U	0.22 U	2.2 U	11 U	2.2 U	0.55 U	1.1 U	0.22 U
Carbon disulfide	None	µg/L	0.19 U	3.8 U	3.8 U	0.19 U	0.19 U	0.19 U	0.19 U	1.9 U	0.19 U	0.38 U	0.19 U	0.19 U	0.19 U	0.19 U	1.9 U	9.5 U	1.9 U	0.47 U	0.95 U	0.19 U
Carbon tetrachloride	5	µg/L	0.22 U	4.3 U	4.3 U	0.22 U	0.22 U	0.22 U	0.22 U	2.2 U	0.22 U	0.43 U	0.22 U	0.22 U	0.22 U	0.22 U	2.2 U	11 U	2.2 U	0.54 U	1.1 U	0.22 U
Chlorobenzene	5	µg/L	0.23 U	4.6 U	4.6 U	0.23 U	0.23 U	0.23 U	0.23 U	2.3 U	0.23 U	0.46 U	0.23 U	0.23 U	0.23 U	0.23 U	2.3 U	11 U	2.3 U	0.57 U	1.1 U	0.23 U
Chloroethane	5	µg/L	0.26 U	5.2 U	5.2 U	0.26 U	0.26 U	0.26 U	0.26 U	2.6 U	0.26 U	0.52 U	0.26 U	0.26 U	0.26 U	0.26 U	2.6 U	13 U	2.6 U	0.66 U	1.3 U	0.26 U
Chloroform	7	µg/L	0.2 U	4.1 U	4.1 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.41 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	10 U	2 U	0.51 U	1 U	0.2 U
Chloromethane	5	µg/L	0.21 U	4.1 U	4.1 U	0.21 U	0.21 U	0.21 U	0.21 U	2.1 UJ	0.21 U	0.41 U	0.21 U	0.21 U	0.21 U	0.21 U	2.1 U	10 U	2.1 U	0.52 U	1 U	0.21 U
cis-1,2-Dichloroethene	5	µg/L	0.19 U	3.8 U	3.8 U	0.19 U	0.19 U	0.19 U	0.19 U	1.9 U	0.19 U	0.38 U	0.19 U	0.19 U	0.19 U	0.19 U	1.9 U	9.4 U	1.9 U	0.47 U	0.94 U	0.19 U
cis-1,3-Dichloropropene	0.4	µg/L	0.21 U	4.1 U	4.1 U	0.21 U	0.21 U	0.21 U	0.21 U	2.1 U	0.21 U	0.41 U	0.21 U	0.21 U	0.21 U	0.21 U	2.1 U	10 U	2.1 U	0.52 U	1 U	0.21 U
Dibromochloromethane	50	µg/L	0.14 U	2.7 U	2.7 U	0.14 U	0.14 U	0.14 U	0.14 U	1.4 U	0.14 U	0.27 U	0.14 U	0.14 U	0.14 U	0.14 U	1.4 U	6.8 U	1.4 U	0.34 U	0.68 U	0.14 U
Dichlorodifluoromethane	5	µg/L	0.27 U	5.4 U	5.4 U	0.27 U	0.27 U	0.27 U	0.27 U	2.7 U	0.27 U	0.54 U	0.27 U	0.27 U	0.27 U	0.27 U	2.7 U	13 U	2.7 U	0.67 U	1.3 U	0.27 U
Ethyl Ether	None	µg/L	0.35 U	6.9 U	6.9 U	0.35 U	0.35 U	0.35 U	0.35 U	3.5 U	0.35 U	0.69 U	0.35 U	0.35 U	0.35 U	0.35 U	3.5 U	17 U	3.5 U	0.87 U	1.7 U	0.35 U
Ethylbenzene	5	µg/L	**62.4**	**499**	**57.6**	0.29 J	0.23 U	0.23 U	0.23 U	**642**	**30.4**	**61.3**	**194**	**273**	**1,270**	**6.4**	**1,580**	**3,080**	**3,230**	**192**	**549**	**63.9**
Isopropylbenzene	5	µg/L	3.7	**26.8 J**	**14 J**	0.45 J	0.45 U	0.45 U	0.45 U	**53.8**	**5.3**	**18.7**	**40.1**	**7.1**	**24.7**	1.6 J	**76.1**	**146**	**124**	**8.7**	**21.2**	**10.7**
m,p-Xylene	None	µg/L	362	2,430	4,110	3.1	0.42 U	0.42 U	0.42 U	3,830	6.6	123	1,170	2,250	7,470	1.7	7,000	13,500	14,400	796	2,060	65.6
Methyl Tert Butyl Ether	10	µg/L	0.16 U	3.3 U	3.3 U	0.16 U	0.16 U	0.16 U	0.16 U	1.6 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Methylene chloride	5	µg/L	0.7 U	14 U	14 U	0.7 U	0.7 U	0.7 U	0.7 U	7 U	0.7 U	1.4 U	0.7 U	0.7 U	0.7 U	0.7 U	7 U	35 U	7 U	1.8 U	3.5 U	0.7 U
Naphthalene	10	µg/L	**19.4**	**103**	**320**	1.8 J	1.1 U	1.1 U	1.1 U	**354**	**35.5**	**174**	**140**	**132**	**345**	1.1 U	**492**	**724**	**673**	**51**	**187**	**27.3**
n-Butylbenzene	5	µg/L	0.17 U	3.4 U	3.4 U	0.17 U	0.17 U	0.17 U	0.17 U	1.7 U	0.17 U	**1.7 J**	**10.2**	1.2 J	**11.1**	0.43 J	**11.1 J**	**24.2 J**	**21.2 J**	**6.2 J**	0.86 U	2.1 J
n-Propylbenzene	5	µg/L	**7.6**	**42.8 J**	**16.9 J**	0.24 U	0.24 U	0.24 U	0.24 U	**110**	4.3 J	**23.8**	**76.9**	**11.4**	**10.6**	2.2 J	**154**	**304**	**258**	**25.6**	**37.5**	**39.2**
o-Xylene	5	µg/L	**164**	**1,040**	**3,240**	2.7	0.24 U	0.24 U	0.24 U	**1,220**	3.4	**24.9**	**312**	**1,120**	**3,240**	0.69 J	**2,760**	**6,220**	**6,340**	**350**	**891**	**19.1**
p-Isopropyltoluene	5	µg/L	0.58 J	4.4 U	**6.1 J**	0.22 U	0.22 U	0.22 U	0.22 U	**6 J**	0.38 J	**5.1 J**	**7.6**	2.6 J	2.9 J	0.37 J	**7.1 J**	11 U	**7.6 J**	3.2 J	2.2 J	2.2 J
sec-Butylbenzene	5	µg/L	0.85 J	4.3 U	4.3 U	0.21 U	0.21 U	0.21 U	0.21 U	**7.4 J**	0.53 J	4.4 J	**6.1**	0.78 J	0.4 J	0.59 J	**7.9 J**	**13.2 J**	**11 J**	3.7 J	2 J	2.4 J
Styrene	5	µg/L	0.21 U	4.3 U	4.3 U	0.21 U	0.21 U	0.21 U	0.21 U	2.1 U	0.32 J	0.43 U	0.21 U	0.21 U	0.21 U	0.21 U	2.1 U	11 U	2.1 U	0.54 U	1.1 U	0.21 U
tert-Butylbenzene	None	µg/L	0.3 U	6.1 U	6.1 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U	0.3 U	0.61 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U	15 U	3 U	0.76 U	1.5 U	0.3 U
Tetrachloroethene	5	µg/L	0.28 U	5.6 U	5.6 U	0.28 U	0.28 U	0.28 U	0.28 U	2.8 U	0.28 U	0.56 U	0.28 U	0.28 U	0.28 U	0.28 U	2.8 U	14 U	2.8 U	0.7 U	1.4 U	0.28 U
Tetrahydrofuran	50	µg/L	5.4 U	110 U	110 U	5.4 U	5.4 U	5.4 U	5.4 U	54 U	5.4 U	11 U	5.4 U	5.4 U	5.4 U	5.4 U	54 U	270 U	54 U	14 U	27 U	5.4 U
Toluene	5	µg/L	**440**	**5,790**	**633**	1.8	0.23 U	0.23 U	0.23 U	**1,310**	**9.2**	4.1	**136**	**425**	**486**	0.83 J	**3,070**	**3,030**	**3,110**	**499**	**1,320**	**20.1**
trans-1,2-Dichloroethene	5	µg/L	0.21 U	4.2 U	4.2 U	0.21 U	0.21 U	0.21 U	0.21 U	2.1 U	0.21 U	0.42 U	0.21 U	0.21 U	0.21 U	0.21 U	2.1 U	11 U	2.1 U	0.53 U	1.1 U	0.21 U
trans-1,3-Dichloropropene	0.4	µg/L	0.19 U	3.8 U	3.8 U	0.19 U	0.19 U	0.19 U	0.19 U	1.9 U	0.19 U	0.38 U	0.19 U	0.19 U	0.19 U	0.19 U	1.9 U	9.5 U	1.9 U	0.47 U	0.95 U	0.19 U
Trichloroethene	5	µg/L	0.22 U	4.3 U	4.3 U	0.22 U	0.22 U	0.22 U	0.22 U	2.2 U	0.22 U	0.43 U	0.22 U	0.22 U	0.22 U	0.22 U	2.2 U	11 U	2.2 U	0.54 U	1.1 U	0.22 U
Trichlorofluoromethane	5	µg/L	0.27 U	5.3 U	5.3 U	0.27 U	0.27 U	0.27 U	0.27 U	2.7 U	0.27 U	0.53 U	0.27 U	0.27 U	0.27 U	0.27 U	2.7 U	13 U	2.7 U	0.67 U	1.3 U	0.27 U
Vinyl Acetate	None	µg/L	1.1 U	22 U	22 U	1.1 U	1.1 U	1.1 U	1.1 U	11 U	1.1 U	2.2 U	1.1 U	1.1 U	1.1 U	1.1 U	11 U	56 U	11 U	2.8 U	5.6 U	1.1 U
Vinyl chloride	2	µg/L	0.21 U	4.1 U	4.1 U	0.21 U	0.21 U	0.21 U	0.21 U	2.1 U	0.21 U	0.41 U	0.21 U	0.21 U	0.21 U	0.21 U	2.1 U	10 U	2.1 U	0.52 U	1 U	0.21 U
Xylene (total)	5	µg/L	**526**	**3,470**	**7,350**	**5.7**	**0.24 U**	0.24 U	0.24 U	**5,050**	**10.1**	**148**	**1,480**	**3,360**	**10,700**	2.4	**9,760**	**19,700**	**20,700**	**1,150**	**2,950**	**84.8**

Qualifier Key:

U - Analyte not detected in the sample. Value represents the quantitation/detection limit.

J - Result reported is a quantitative estimate

R - Rejected Data

Abbreviation Key:

µg/L - Micrograms per Liter

A Cell Highlighted and Bold Indicates a detected analyte that exceeds the screening criteria
A cell highlighted and not bold Inidcates a detected analyte that does not exceed the screening criteria
Indicates the analyte is not detected or not sampled

APPENDIX F - All Volatile Organic Compound Analytical Results, Fall 2013

			Area 1295						Area 1595													Area 1795		
			Groundwater						Groundwater									Surface Water				Groundwater		
Analyte	Screening Value	Unit	1295-MW25	1295-MW26	1295-MW30	1295-MW30 (DUP)	1295-MWS27	1295-MWS28	1595-MW33	1595-MWS7	1595-MWS8	1595-MWS9	1595-OBG2	1595-PZ11	1595-PZ12	1595-PZ12 (DUP)	1595-PZ13	1595-PZ9	1595-RW4	1595-SW01	1595-SW01 (DUP)	1595-SW04	1595-SW08	1795-MWD13	1795-MWI12	1795-MWS1
1,1,1,2-Tetrachloroethane	5	µg/L	0.21 U	0.21 U	0.21 U	2.1 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.52 U	0.41 U	0.52 U	0.41 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
1,1,1-Trichloroethane	5	µg/L	0.25 U	0.25 U	0.25 U	2.5 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.62 U	0.5 U	0.62 U	0.5 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,1,2,2-Tetrachloroethane	5	µg/L	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.49 U	0.39 U	0.49 U	0.39 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloroethane	1	µg/L	0.21 U	0.21 U	0.21 U	2.1 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.53 U	0.42 U	0.53 U	0.42 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
1,1-Dichloroethane	5	µg/L	0.26 U	0.26 U	0.26 U	2.6 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.65 U	0.52 U	0.65 U	0.52 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U
1,1-Dichloropropene	5	µg/L	0.17 U	0.17 U	0.17 U	1.7 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.43 U	0.34 U	0.43 U	0.34 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
1,2,3-Trichlorobenzene	None	µg/L	0.24 U	0.24 U	0.24 U	2.4 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.61 U	0.49 U	0.61 U	0.49 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
1,2,3-Trichloropropane	0.04	µg/L	0.67 U	0.67 U	0.67 U	6.7 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	1.7 U	1.3 U	1.7 U	1.3 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U
1,2,4-Trichlorobenzene	5	µg/L	0.22 U	0.22 U	0.22 U	2.2 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.54 U	0.43 U	0.54 U	0.43 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
1,2,4-Trimethylbenzene	None	µg/L	1.6 J	0.23 U	2,260	2,470	57.1	0.6 J	2.2	517	12.6	0.57 J	63.6	0.51 J	428	513	332	252	7	2.2	1.9 J	0.23 U	0.23 U	0.23 U	0.47 J	0.23 U
1,2-Dibromoethane	0.0006	µg/L	0.16 U	0.16 U	0.16 U	1.6 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.4 U	0.32 U	0.4 U	0.32 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
1,2-Dichlorobenzene	3	µg/L	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.51 U	0.41 U	0.51 U	0.41 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloroethane	0.6	µg/L	0.22 U	0.22 U	0.22 U	2.2 UJ	0.22 U	0.22 UJ	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.55 U	0.44 U	0.55 U	0.44 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
1,2-Dichloroethene (total)	None	µg/L	0.24 U	0.24 U	0.24 U	2.4 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.6 U	0.48 U	0.6 U	0.48 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
1,2-Dichloropropane	1	µg/L	0.28 U	0.28 U	0.28 U	2.8 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.7 U	0.56 U	0.7 U	0.56 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
1,3,5-Trimethylbenzene	None	µg/L	0.43 U	0.43 U	572	605	14.8	0.43 U	0.43 U	227	14.5	0.43 U	30.8	0.43 U	124	123	67.3	99.9	2	2.5	2.1	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
1,3-Dichloropropane	None	µg/L	0.23 U	0.23 U	0.23 U	2.3 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.56 U	0.45 U	0.56 U	0.45 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
1,4-Dichlorobenzene	3	µg/L	0.3 U	0.3 U	0.3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.75 U	0.6 U	0.75 U	0.6 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
2,2-Dichloropropane	None	µg/L	0.21 UJ	0.21 U	0.21 U	2.1 UJ	0.21 U	0.21 UJ	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.53 U	0.42 U	0.53 U	0.42 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
2-Butanone (MEK)	50	µg/L	3.2 U	3.2 R	3.2 R	32 U	3.2 U	3.2 U	3.2 R	3.2 R	3.2 R	3.2 R	3.2 R	3.2 R	8 R	6.4 R	8 R	6.4 R	3.2 R	3.2 R	3.2 R	3.2 R	3.2 R	3.2 U	3.2 U	3.2 U
2-Hexanone	None	µg/L	1.7 U	1.7 U	1.7 U	17 UJ	1.7 U	1.7 UJ	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	4.3 U	3.4 U	4.3 U	3.4 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
4-Methyl-2-pentanone(MIBK)	None	µg/L	1.5 U	1.5 U	1.5 U	15 UJ	1.5 U	1.5 UJ	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	3.7 U	3 U	3.7 U	3 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
Acetone	50	µg/L	3.3 U	3.3 U	3.3 U	33 UJ	3.3 U	3.3 UJ	3.3 U	3.3 U	10 U	3.3 R	3.3 U	3.3 R	8.4 R	6.7 R	25 U	6.7 R	3.3 R	9.3 J	8.9 J	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U
Benzene	1	µg/L	0.28 U	0.28 U	0.28 U	2.8 U	0.28 U	0.28 U	0.28 U	0.76 J	0.28 U	0.28 U	0.86 J	0.62 J	0.7 U	0.56 U	0.7 U	0.56 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	**4.5**	0.3 J	0.28 U
Bromobenzene	None	µg/L	0.25 U	0.25 U	0.25 U	2.5 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.63 U	0.5 U	0.63 U	0.5 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
Bromodichloromethane	50	µg/L	0.21 U	0.21 U	0.21 U	2.1 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.53 U	0.42 U	0.53 U	0.42 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
Bromoform	50	µg/L	0.3 U	0.3 U	0.3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.75 U	0.6 U	0.75 U	0.6 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Bromomethane	5	µg/L	0.56 U	0.56 U	0.56 U	5.6 U	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U	1.4 U	1.1 U	1.4 U	1.1 U	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U
Carbon disulfide	None	µg/L	0.18 U	0.18 U	0.18 U	1.8 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.46 U	0.36 U	0.46 U	0.36 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
Carbon tetrachloride	5	µg/L	0.23 U	0.23 U	0.23 U	2.3 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.57 U	0.45 U	0.57 U	0.45 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
Chlorobenzene	5	µg/L	0.35 U	0.35 U	0.35 U	3.5 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.87 U	0.69 U	0.87 U	0.69 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
Chloroethane	5	µg/L	0.39 U	0.39 U	0.39 U	3.9 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.97 U	0.78 U	0.97 U	0.78 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 UJ	0.39 UJ	0.39 UJ
Chloroform	7	µg/L	0.25 U	0.25 U	0.25 U	2.5 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	1.1 J	0.49 U	0.99 J	0.91 J	0.25 U	0.25 U	0.25 U	0.25 U	0.36 J	0.25 U	0.25 U	0.25 U
Chloromethane	5	µg/L	0.36 U	0.36 U	0.36 U	3.6 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.91 U	0.73 U	0.91 U	0.73 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U
cis-1,2-Dichloroethene	5	µg/L	0.24 U	0.24 U	0.24 U	2.4 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.6 U	0.48 U	0.6 U	0.48 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
cis-1,3-Dichloropropene	0.4	µg/L	0.15 U	0.15 U	0.15 U	1.5 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.38 U	0.3 U	0.38 U	0.3 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
Dibromochloromethane	50	µg/L	0.19 U	0.19 U	0.19 U	1.9 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.48 U	0.38 U	0.48 U	0.38 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
Dichlorodifluoromethane	5	µg/L	0.63 U	0.63 U	0.63 U	6.3 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	1.6 U	1.3 U	1.6 U	1.3 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U
Ethyl Ether	None	µg/L	0.56 U	0.56 U	0.56 U	5.6 U	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U	1.4 U	1.1 U	1.4 U	1.1 U	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U
Ethylbenzene	5	µg/L	0.79 J	0.21 U	**1,460**	**1,480**	**36.9**	0.34 J	4.3	**327**	**5.8**	0.31 J	**19.5**	**7.5**	**219**	**219**	**271**	**99.7**	4.6	2	1.7	0.21 U	0.21 U	0.21 U	0.98 J	0.21 U
Isopropylbenzene	5	µg/L	**6.2**	0.22 U	**139**	**135**	3.4	0.22 U	3.5	**62.9**	**18.5**	2	**5.2**	2.1	**31**	**30.7**	**29.4**	**18.3**	2.4	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	1.2 J	0.22 U
m,p-Xylene	None	µg/L	0.4 U	0.4 U	4,710	5,190	86.8	1.3	5.5	369	9.4	1	62	0.94 J	758	755	734	453	5.6	5.2	4.5	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Methyl Tert Butyl Ether	10	µg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Methylene chloride	5	µg/L	0.86 U	0.86 U	0.86 U	8.6 U	0.86 U	0.86 U	0.86 U	0.86 U	0.86 U	0.86 U	0.86 U	0.86 U	2.2 U	1.7 U	2.2 U	1.7 U	0.86 U	0.86 U	0.86 U	0.86 U	0.86 U	0.86 U	0.86 U	0.86 U
Naphthalene	10	µg/L	0.25 U	0.25 U	**526**	**600**	**17.8**	0.25 U	**11**	**183**	**33.7**	0.25 U	**39.3**	0.76 J	**166**	**170**	**233**	**33**	4.8 J	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
n-Butylbenzene	5	µg/L	0.39 U	0.39 U	0.39 U	3.9 U	2.2 J	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.98 U	0.78 U	0.98 U	0.78 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U
n-Propylbenzene	5	µg/L	4.7 J	0.32 U	**297**	**305**	**8.7**	0.32 U	3.1 J	**99.8**	**13.7**	0.32 U	**6**	2.6 J	**50.4**	**50**	**33.9**	**25.7**	3.2 J	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
o-Xylene	5	µg/L	0.43 J	0.19 U	**119**	**115**	**38.8**	0.19 U	0.84 J	**106**	4.1	0.66 J	**61.7**	0.19 U	**77.8**	**78.6**	**164**	**174**	2.1	2.9	2.7	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
p-Isopropyltoluene	5	µg/L	0.42 U	0.42 U	**17.3**	**15.6 J**	0.61 J	0.42 U	0.42 U	**5.3**	1.8 J	0.42 U	4.3 J	0.42 U	4.2 J	4.2 J	2.9 J	3.7 J	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U
sec-Butylbenzene	5	µg/L	2 J	0.48 U	**13.3**	**14.4 J**	1.1 J	0.48 U	0.55 J	3.7 J	2.8 J	0.48 U	2.6 J	1.3 J	3.7 J	3.6 J	1.2 U	1.9 J	1.2 J	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U
Styrene	5	µg/L	0.3 U	0.3 U	0.3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.76 U	0.6 U	0.76 U	0.6 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
tert-Butylbenzene	None	µg/L	0.25 U	0.25 U	0.25 U	2.5 U	0.25 U	0.25 U	0.25 U	0.25 U	0.58 J	0.25 U	0.83 J	0.25 U	0.62 U	0.49 U	0.62 U	0.49 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
Tetrachloroethene	5	µg/L	0.25 U	0.25 UJ	0.25 UJ	2.5 U	0.25 U	0.25 U	0.25 UJ	0.25 UJ	0.25 U	0.25 U	0.25 UJ	0.25 U	0.63 U	0.5 U	0.63 U	0.5 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	**27.8**	0.25 U	0.25 U
Tetrahydrofuran	50	µg/L	2 UJ	2 U	2 U	20 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	5 U	4 U	5 U	4 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Toluene	5	µg/L	0.44 U	0.44 U	**9.3**	**9.3 J**	3.3	0.44 U	2	**24.7**	1.6	0.44 U	**7.8**	0.44 U	**120**	**122**	1.1 U	**83.5**	0.48 J	1.1	1	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U
trans-1,2-Dichloroethene	5	µg/L	0.38 U	0.38 U	0.38 U	3.8 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.95 U	0.76 U	0.95 U	0.76 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
trans-1,3-Dichloropropene	0.4	µg/L	0.21 U	0.21 U	0.21 U	2.1 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.52 U	0.41 U	0.52 U	0.41 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
Trichloroethene	5	µg/L	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.62 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.3 U	1 U	1.3 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1	0.5 U	0.5 U
Trichlorofluoromethane	5	µg/L	0.33 U	0.33 U	0.33 U	3.3 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.84 U	0.67 U	0.84 U	0.67 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Vinyl Acetate	None	µg/L	2.5 U	2.5 UJ	2.5 UJ	25 U	2.5 U	2.5 U	2.5 UJ	2.5 UJ	2.5 U	2.5 U	2.5 UJ	2.5 U	6.3 U	5.1 U	6.3 U	5.1 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Vinyl chloride	2	µg/L	0.41 U	0.41 U	0.41 U	4.1 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	1 U	0.83 U	1 U	0.83 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U
Xylene (total)	5	µg/L	0.43 J	0.29 J	**4,830**	**5,310**	**126**	1.3	**6.4**	**475**	**13.5**	1.7	**124**	0.94 J	**836**	**834**	**899**	**628**	**7.7**	**8.2**	**7.1**	**0.19 U**	0.19 U	0.19 U	0.19 U	0.19 U

Qualifier Key:

U - Analyte not detected in the sample. Value represents the quantitation/detection limit.

J - Result reported is a quantitative estimate

Abbreviation Key:

NS - Not Sampled

µg/L - Micrograms per Liter

A Cell Highlighted and Bold Indicates a detected analyte that exceeds the screening criteria
A cell highlighted and not bold Inidcates a detected analyte that does not exceed the screening criteria
Indicates the analyte is not detected or not sampled

APPENDIX F - All Volatile Organic Compound Analytical Results, Fall 2013

			Area 1795 (continued)																Area 2140						
			Groundwater													Surface Water			Groundwater						
Analyte	Screening Value	Unit	1795-MWS10	1795-MWS11	1795-MWS11 (DUP)	1795-MWS2	1795-MWS21	1795-MWS3	1795-MWS7	1795-MWS7 (DUP)	1795-PZ13	1795-PZ14	1795-PZ15	1795-PZ4	1795-PZ5	1795-SW00	1795-SW04	1795-SW08	2140-MW02	2140-MW04	2140-MW05	2140-MW07	2140-MW07 (DUP)	2140-MW09	2140-MW12
1,1,1,2-Tetrachloroethane	5	µg/L	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	1 U	0.52 U	0.41 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	1 U	2.1 U	2.1 U	0.21 U	0.21 U
1,1,1-Trichloroethane	5	µg/L	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	1.2 U	0.62 U	0.5 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	1.2 U	2.5 U	2.5 U	0.25 U	0.25 U
1,1,2,2-Tetrachloroethane	5	µg/L	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.98 U	0.49 U	0.39 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.98 U	2 U	2 U	0.2 U	0.2 U
1,1,2-Trichloroethane	1	µg/L	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	1.1 U	0.53 U	0.42 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	1.1 U	2.1 U	2.1 U	0.21 U	0.21 U
1,1-Dichloroethane	5	µg/L	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	1.3 U	0.65 U	0.52 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	1.3 U	2.6 U	2.6 U	0.26 U	0.26 U
1,1-Dichloropropene	5	µg/L	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.85 U	0.43 U	0.34 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.85 U	1.7 U	1.7 U	0.17 U	0.17 U
1,2,3-Trichlorobenzene	None	µg/L	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	1.2 U	0.61 U	0.49 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	1.2 U	2.4 U	2.4 U	0.24 U	0.24 U
1,2,3-Trichloropropane	0.04	µg/L	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	3.3 U	1.7 U	1.3 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	3.3 U	6.7 U	6.7 U	0.67 U	0.67 U
1,2,4-Trichlorobenzene	5	µg/L	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	1.1 U	0.54 U	0.43 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	1.1 U	2.2 U	2.2 U	0.22 U	0.22 U
1,2,4-Trimethylbenzene	None	µg/L	0.23 U	0.58 J	0.62 J	0.23 U	2.3	593	295	316	6.7	23.9	1.8 J	2.1	58.9	0.23 U	0.23 U	0.23 U	6.7	5.4	1,200	2,220	2,300	99.2 J	0.23 U
1,2-Dibromoethane	0.0006	µg/L	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.8 U	0.4 U	0.32 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.8 U	1.6 U	1.6 U	0.16 U	0.16 U
1,2-Dichlorobenzene	3	µg/L	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.51 U	0.41 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	2 U	2 U	0.2 U	0.2 U
1,2-Dichloroethane	0.6	µg/L	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	1.1 U	0.55 UJ	0.44 UJ	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	1.1 U	2.2 U	2.2 U	0.22 U	**0.85 J**
1,2-Dichloroethene (total)	None	µg/L	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	1.2 U	0.6 U	0.48 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	1.2 U	2.4 U	2.4 U	0.24 U	0.24 U
1,2-Dichloropropane	1	µg/L	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	1.4 U	0.7 U	0.56 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	1.4 U	2.8 U	2.8 U	0.28 U	0.28 U
1,3,5-Trimethylbenzene	None	µg/L	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	157	97.2	105	4.1	1.9 J	0.6 J	0.43 U	4.3	0.43 U	0.43 U	0.43 U	1.5 J	1.9 J	555	799	833	43.7	0.43 U
1,3-Dichloropropane	None	µg/L	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	1.1 U	0.56 U	0.45 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	1.1 U	2.3 U	2.3 U	0.23 U	0.23 U
1,4-Dichlorobenzene	3	µg/L	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1.5 U	0.75 U	0.6 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1.5 U	3 U	3 U	0.3 U	0.3 U
2,2-Dichloropropane	None	µg/L	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	1.1 U	0.53 UJ	0.42 UJ	0.21 U	0.21 UJ	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 UJ	1.1 UJ	2.1 UJ	2.1 UJ	0.21 UJ	0.21 UJ
2-Butanone (MEK)	50	µg/L	3.2 U	3.2 R	3.2 R	3.2 U	3.2 U	16 R	8 U	6.4 U	3.2 U	3.2 U	3.2 R	3.2 R	3.2 U	3.2 R	3.2 R	3.2 R	3.2 R	3.6 J	16 R	32 R	32 R	3.2 R	3.2 R
2-Hexanone	None	µg/L	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	8.5 U	4.3 UJ	3.4 UJ	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	8.5 U	17 U	17 U	1.7 U	1.7 U
4-Methyl-2-pentanone(MIBK)	None	µg/L	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	7.4 U	3.7 UJ	3 UJ	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	7.4 U	15 U	15 U	1.5 U	1.5 U
Acetone	50	µg/L	3.3 U	3.3 R	3.3 R	3.3 U	3.3 UJ	17 U	22.9 J	25.3 J	3.3 UJ	3.3 UJ	3.3 U	3.3 R	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U	3.3 R	17 R	33 R	33 R	9.4 J	3.3 R
Benzene	1	µg/L	0.28 U	0.28 U	0.28 U	0.28 U	**1.6**	1.4 U	0.7 U	0.56 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	**1.7**	0.28 U	**431**	**329**	**333**	**9.8**	**31.9**
Bromobenzene	None	µg/L	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	1.3 U	0.63 U	0.5 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	1.3 U	2.5 U	2.5 U	0.25 U	0.25 U
Bromodichloromethane	50	µg/L	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	1.1 U	0.53 U	0.42 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	1.1 U	2.1 U	2.1 U	0.21 U	0.21 U
Bromoform	50	µg/L	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1.5 U	0.75 U	0.6 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1.5 U	3 U	3 U	0.3 U	0.3 U
Bromomethane	5	µg/L	0.56 U	0.56 U	0.56 U	0.56 U	0.56 UJ	2.8 U	1.4 U	1.1 U	0.56 UJ	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U	0.56 UJ	2.8 UJ	5.6 UJ	5.6 UJ	0.56 UJ	0.56 UJ
Carbon disulfide	None	µg/L	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.91 U	0.46 U	0.36 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.91 U	1.8 U	1.8 U	0.18 U	0.18 U
Carbon tetrachloride	5	µg/L	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	1.1 U	0.57 U	0.45 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	1.1 U	2.3 U	2.3 U	0.23 U	0.23 U
Chlorobenzene	5	µg/L	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	1.7 U	0.87 U	0.69 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	1.7 U	3.5 U	3.5 U	0.35 U	0.35 U
Chloroethane	5	µg/L	0.39 UJ	0.39 U	0.39 U	0.39 UJ	0.39 UJ	1.9 U	0.97 U	0.78 U	0.39 UJ	0.39 U	0.39 U	0.39 U	0.39 UJ	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	1.9 U	3.9 U	3.9 U	0.39 U	0.39 U
Chloroform	7	µg/L	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	1.2 U	0.61 U	0.49 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	1.2 U	2.5 U	2.5 U	0.25 U	0.25 U
Chloromethane	5	µg/L	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	1.8 U	0.91 U	0.73 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	1.8 U	3.6 U	3.6 U	0.36 U	0.36 U
cis-1,2-Dichloroethene	5	µg/L	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	1.2 U	0.6 U	0.48 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	1.2 U	2.4 U	2.4 U	0.24 U	0.24 U
cis-1,3-Dichloropropene	0.4	µg/L	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.76 U	0.38 U	0.3 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.76 U	1.5 U	1.5 U	0.15 U	0.15 U
Dibromochloromethane	50	µg/L	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.96 U	0.48 U	0.38 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.96 U	1.9 U	1.9 U	0.19 U	0.19 U
Dichlorodifluoromethane	5	µg/L	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	3.2 U	1.6 U	1.3 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	3.2 U	6.3 U	6.3 U	0.63 UJ	0.63 U
Ethyl Ether	None	µg/L	0.56 U	0.56 U	0.56 U	0.56 U	0.56 UJ	2.8 U	1.4 U	1.1 U	0.56 UJ	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U	2.8 U	5.6 U	5.6 U	0.56 U	0.56 U
Ethylbenzene	5	µg/L	0.21 U	0.24 J	0.25 J	0.26 J	**22.8**	**356**	**208**	**216**	0.21 U	4.6	0.59 J	0.95 J	**44.7**	**0.21 U**	**0.21 U**	**0.21 U**	3.3	0.31 J	**295**	**80.6**	**84.5**	**139 J**	0.21 U
Isopropylbenzene	5	µg/L	0.26 J	0.22 U	0.22 U	0.22 U	**11.9**	**33.9**	**10.7**	**11.4**	0.22 U	4	0.22 U	0.22 U	3	0.22 U	0.22 U	0.22 U	0.25 J	1.1 J	**38.7**	**20.5**	**21.7**	**10.1**	1.7 J
m,p-Xylene	None	µg/L	0.4 U	0.46 J	0.46 J	0.4 U	0.99 J	948	1,240	1,050	0.43 J	4.1	7.4	0.54 J	47.2	0.4 U	0.4 U	0.4 U	17.6	2	1,880	4,770	5,090	311	0.4 U
Methyl Tert Butyl Ether	10	µg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.29 U	0.29 U	1.4 U	2.9 U	2.9 U	0.29 U	0.29 U
Methylene chloride	5	µg/L	0.86 U	0.86 U	0.86 U	0.86 U	0.86 U	4.3 U	2.2 U	1.7 U	0.86 U	0.86 U	0.86 U	0.86 U	0.86 U	0.86 U	0.86 U	0.86 U	0.86 U	0.86 U	4.3 U	8.6 U	8.6 U	0.86 U	0.86 U
Naphthalene	10	µg/L	0.25 U	0.25 U	0.25 U	0.25 U	0.73 J	**114**	**90.4**	**98.8**	0.92 J	0.54 J	0.37 J	0.25 U	6.2	0.25 U	0.25 U	0.25 U	1.6 J	0.6 J	**223**	**396**	**397**	**39.6**	6.2
n-Butylbenzene	5	µg/L	0.39 U	0.39 U	0.39 U	0.39 U	2.1 J	2 U	0.98 U	0.78 U	0.39 U	1.9 J	0.39 U	0.39 U	0.9 J	0.39 U	0.39 U	0.39 U	0.39 U	1.1 J	**47.2**	**87.5**	**90**	**7.9**	0.47 J
n-Propylbenzene	5	µg/L	0.32 U	0.32 U	0.32 U	0.32 U	**9.5**	**79.2**	**20.1**	**22.2**	0.32 U	**10.1**	0.32 U	0.32 U	**6.8**	**0.32 U**	**0.32 U**	**0.32 U**	0.52 J	3.2 J	**89.2**	**26.3 J**	**27.2 J**	**17.5**	0.32 U
o-Xylene	5	µg/L	0.19 U	0.19 U	0.19 U	0.19 U	1.2	**296**	**712**	**600**	1	0.4 J	**6.2**	0.19 U	**7.4**	**0.19 U**	**0.19 U**	**0.19 U**	**6.7**	0.69 J	**979**	**3,270**	**3,490**	**133 J**	**6.1**
p-Isopropyltoluene	5	µg/L	0.42 U	0.42 U	0.42 U	0.42 U	0.94 J	4.7 J	4 J	4.2 J	2.3 J	1.2 J	0.42 U	0.42 U	0.72 J	0.42 U	0.42 U	0.42 U	0.42 U	0.56 J	**7.8 J**	**8.6 J**	**9 J**	0.64 J	0.42 U
sec-Butylbenzene	5	µg/L	0.48 U	0.48 U	0.48 U	0.48 U	1.9 J	3.8 J	3.3 J	3.5 J	0.48 U	1.6 J	0.48 U	0.48 U	0.77 J	0.48 U	0.48 U	0.48 U	0.48 U	0.58 J	**7.6 J**	4.9 J	**5.2 J**	0.77 J	0.64 J
Styrene	5	µg/L	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1.5 U	0.76 U	0.6 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1.5 U	3 U	3 U	0.3 U	0.3 U
tert-Butylbenzene	None	µg/L	0.25 U	0.25 U	0.25 U	0.25 U	0.28 J	1.2 U	0.62 U	0.49 U	0.38 J	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	1.2 U	2.5 U	2.5 U	0.25 U	0.25 U
Tetrachloroethene	5	µg/L	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	1.3 UJ	0.63 U	0.5 U	0.25 U	0.25 U	0.25 UJ	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	1.3 U	2.5 U	2.5 U	0.25 U	0.25 U
Tetrahydrofuran	50	µg/L	2 U	2 U	2 U	2 U	2 U	10 U	5 U	4 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	10 U	20 U	20 U	2 U	2 U
Toluene	5	µg/L	0.44 U	0.44 U	0.44 U	0.44 U	4.5	**79.4**	**49.3**	**54.3**	0.44 U	0.72 J	0.71 J	0.44 U	3.8	0.44 U	0.44 U	0.44 U	**15**	0.71 J	**1,580**	**711**	**742**	**450**	0.56 J
trans-1,2-Dichloroethene	5	µg/L	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	1.9 U	0.95 U	0.76 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	1.9 U	3.8 U	3.8 U	0.38 U	0.38 U
trans-1,3-Dichloropropene	0.4	µg/L	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	1 U	0.52 U	0.41 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	1 U	2.1 U	2.1 U	0.21 U	0.21 U
Trichloroethene	5	µg/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U	1.3 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U	5 U	5 U	0.5 U	0.5 U
Trichlorofluoromethane	5	µg/L	0.33 U	0.33 U	0.33 U	0.33 U	0.33 UJ	1.7 U	0.84 U	0.67 U	0.33 UJ	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	1.7 U	3.3 U	3.3 U	0.33 UJ	0.33 U
Vinyl Acetate	None	µg/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	13 UJ	6.3 U	5.1 U	2.5 U	2.5 U	2.5 UJ	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	13 U	25 U	25 U	2.5 U	2.5 U
Vinyl chloride	2	µg/L	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	2.1 U	1 U	0.83 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	2.1 U	4.1 U	4.1 U	0.41 U	0.41 U
Xylene (total)	5	µg/L	0.19 U	0.46 J	0.46 J	0.19 U	2.2	**1,240**	**1,950**	**1,650**	1.5	4.5	**13.7**	0.54 J	**54.5**	**0.19 U**	**0.19 U**	**0.19 U**	**24.3**	2.7	**2,760**	**8,040**	**8,580**	**424 J**	**6.1**

Qualifier Key:

U - Analyte not detected in the sample. Value represents the quantitation/detection limit.

J - Result reported is a quantitative estimate

Abbreviation Key:

NS - Not Sampled

µg/L - Micrograms per Liter

A Cell Highlighted and Bold Indicates a detected analyte that exceeds the screening criteria
A cell highlighted and not bold Inidcates a detected analyte that does not exceed the screening criteria
Indicates the analyte is not detected or not sampled

APPENDIX F - All Volatile Organic Compound Analytical Results, Fall 2013

			Area 2140 (continued)		Areas 1995 & 3805																			
			Groundwater		Groundwater																			
Analyte	**Screening Value**	**Unit**	**2140-MW13**	**2140-MW37**	**1995-MW43**	**1995-MWS10**	**1995-MWS9**	**3805-014**	**3805-014 (DUP)**	**3805-016**	**3805-MW39**	**3805-MWD10**	**3805-MWD13**	**3805-MWD16**	**3805-MWD18**	**3805-MWD7**	**3805-MWI12**	**3805-MWI15**	**3805-MWI15 (DUP)**	**3805-MWI17**	**3805-MWI20**	**3805-MWI6**	**3805-MWI9**	**3805-MWS11**	**3805-MWS14**
1,1,1,2-Tetrachloroethane	5	µg/L	0.21 U	2.1 U	0.21 U	0.21 U	0.21 U	4.1 U	4.1 U	4.1 UJ	1 U	0.21 U	0.52 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	2.1 U	0.21 U	0.21 U	4.1 U	1 U	0.21 U
1,1,1-Trichloroethane	5	µg/L	0.25 U	2.5 U	0.25 U	0.25 U	0.25 U	5 U	5 U	5 UJ	1.2 U	0.25 U	0.62 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	2.5 U	0.25 U	0.25 U	5 U	1.2 U	0.25 U
1,1,2,2-Tetrachloroethane	5	µg/L	0.2 U	2 U	0.2 U	0.2 U	0.2 U	3.9 U	3.9 U	3.9 UJ	0.98 U	0.2 U	0.49 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	2 U	0.2 U	0.2 U	3.9 U	0.98 U	0.2 U
1,1,2-Trichloroethane	1	µg/L	0.21 U	2.1 U	0.21 U	0.21 U	0.21 U	4.2 U	4.2 U	4.2 UJ	1.1 U	0.21 U	0.53 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	2.1 U	0.21 U	0.21 U	4.2 U	1.1 U	0.21 U
1,1-Dichloroethane	5	µg/L	0.26 U	2.6 U	0.26 U	0.26 U	0.26 U	5.2 U	5.2 U	5.2 UJ	1.3 U	0.26 U	0.65 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	2.6 U	0.26 U	0.26 U	5.2 U	1.3 U	0.26 U
1,1-Dichloropropene	5	µg/L	0.17 U	1.7 U	0.17 U	0.17 U	0.17 U	3.4 U	3.4 U	3.4 UJ	0.85 U	0.17 U	0.43 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	1.7 U	0.17 U	0.17 U	3.4 U	0.85 U	0.17 U
1,2,3-Trichlorobenzene	None	µg/L	0.24 U	2.4 U	0.24 U	0.24 U	0.24 U	4.9 U	4.9 U	4.9 UJ	1.2 U	0.24 U	0.61 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 UJ	2.4 U	0.24 U	0.24 U	4.9 U	1.2 U	0.24 UJ
1,2,3-Trichloropropane	0.04	µg/L	0.67 U	6.7 U	0.67 U	0.67 U	0.67 U	13 U	13 U	13 UJ	3.3 U	0.67 U	1.7 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	6.7 U	0.67 U	0.67 U	13 U	3.3 U	0.67 U
1,2,4-Trichlorobenzene	5	µg/L	0.22 U	2.2 U	0.22 U	0.22 U	0.22 U	4.3 U	4.3 U	4.3 UJ	1.1 U	0.22 U	0.54 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	2.2 U	0.22 U	0.22 U	4.3 U	1.1 U	0.22 U
1,2,4-Trimethylbenzene	None	µg/L	0.23 U	2,530	0.23 U	23.3	278	2,350	2,350	1,290 J	715	0.23 U	0.57 U	0.4 J	0.23 U	0.23 U	0.23 U	0.23 UJ	0.23 U	370	0.23 U	10.4	207	714	222
1,2-Dibromoethane	0.0006	µg/L	0.16 U	1.6 U	0.16 U	0.16 U	0.16 U	3.2 U	3.2 U	3.2 UJ	0.8 U	0.16 U	0.4 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	1.6 U	0.16 U	0.16 U	3.2 U	0.8 U	0.16 U
1,2-Dichlorobenzene	3	µg/L	0.2 U	2 U	0.2 U	0.2 U	0.2 U	4.1 U	4.1 U	4.1 UJ	1 U	0.2 U	0.51 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	4.1 U	1 U	0.2 U
1,2-Dichloroethane	0.6	µg/L	**0.22 U**	2.2 U	0.22 U	0.22 U	0.22 U	4.4 U	4.4 U	4.4 UJ	1.1 U	0.22 U	0.55 U	0.22 UJ	0.22 UJ	0.22 U	0.22 UJ	0.22 UJ	0.22 U	2.2 UJ	0.22 U	0.22 U	4.4 U	1.1 U	0.22 U
1,2-Dichloroethene (total)	None	µg/L	0.24 U	2.4 U	0.24 U	0.24 U	0.24 U	4.8 U	4.8 U	4.8 UJ	1.2 U	0.24 U	0.6 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	2.4 U	0.24 U	0.24 U	4.8 U	1.2 U	0.24 U
1,2-Dichloropropane	1	µg/L	0.28 U	2.8 U	0.28 U	0.28 U	0.28 U	5.6 U	5.6 U	5.6 UJ	1.4 U	0.28 U	0.7 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	2.8 U	0.28 U	0.28 U	5.6 U	1.4 U	0.28 U
1,3,5-Trimethylbenzene	None	µg/L	0.43 U	656	0.43 U	6	41.8	728	716	323 J	208	0.43 U	1.1 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	91.5	0.43 U	4.3	252	186	71 J
1,3-Dichloropropane	None	µg/L	0.23 U	2.3 U	0.23 U	0.23 U	0.23 U	4.5 U	4.5 U	4.5 UJ	1.1 U	0.23 U	0.56 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	2.3 U	0.23 U	0.23 U	4.5 U	1.1 U	0.23 U
1,4-Dichlorobenzene	3	µg/L	0.3 U	3 U	0.3 U	0.3 U	0.3 U	6 U	6 U	6 UJ	1.5 U	0.3 U	0.75 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U	0.3 U	0.3 U	6 U	1.5 U	0.3 U
2,2-Dichloropropane	None	µg/L	0.21 UJ	2.1 UJ	0.21 U	0.21 U	0.21 U	4.2 U	4.2 U	4.2 UJ	1.1 U	0.21 U	0.53 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	2.1 U	0.21 U	0.21 U	4.2 U	1.1 U	0.21 U
2-Butanone (MEK)	50	µg/L	3.2 R	**82.9 J**	3.2 R	8.1 J	6 J	64 R	64 R	64 R	16 R	3.2 R	8 R	3.2 UJ	3.2 U	3.2 R	3.2 U	3.2 R	3.2 R	32 U	3.2 R	10.4 J	64 R	16 R	3.2 R
2-Hexanone	None	µg/L	1.7 U	17 U	1.7 U	1.7 U	1.7 U	34 U	34 U	34 UJ	8.5 U	1.7 U	4.3 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 UJ	17 U	1.7 U	1.7 U	34 U	8.5 U	1.7 UJ
4-Methyl-2-pentanone(MIBK)	None	µg/L	1.5 U	15 U	1.5 U	2.5 J	1.5 U	30 U	30 U	30 UJ	7.4 U	1.5 U	3.7 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	15 U	1.5 U	1.5 U	30 U	7.4 U	1.5 U
Acetone	50	µg/L	3.3 R	**53.7 J**	3.3 R	16 J	3.6 J	67 R	67 R	67 UJ	17 R	3.3 R	8.4 R	3.3 R	3.3 U	3.3 R	3.3 UJ	3.3 R	3.3 R	33 U	3.3 R	39.7 J	67 R	17 R	3.3 R
Benzene	1	µg/L	**0.28 U**	**145**	0.28 U	0.28 U	0.34 J	5.6 U	5.6 U	**6.8 J**	1.4 U	0.68 J	0.7 U	0.28 U	**17.8**	0.28 U	0.28 U	**4.8**	**4.9**	**1,420**	0.28 U	0.61 J	**147**	**3.1 J**	**6.6**
Bromobenzene	None	µg/L	0.25 U	2.5 U	0.25 U	0.25 U	0.25 U	5 U	5 U	5 UJ	1.3 U	0.25 U	0.63 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	2.5 U	0.25 U	0.25 U	5 U	1.3 U	0.25 U
Bromodichloromethane	50	µg/L	0.21 U	2.1 U	0.21 U	0.21 U	0.21 U	4.2 U	4.2 U	4.2 UJ	1.1 U	0.21 U	0.53 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	2.1 U	0.21 U	0.21 U	4.2 U	1.1 U	0.21 U
Bromoform	50	µg/L	0.3 U	3 U	0.3 U	0.3 U	0.3 U	6 U	6 U	6 UJ	1.5 U	0.3 U	0.75 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	3 U	0.3 U	0.3 U	6 U	1.5 U	0.3 UJ
Bromomethane	5	µg/L	0.56 UJ	5.6 UJ	0.56 U	0.56 UJ	0.56 UJ	11 U	11 U	11 UJ	2.8 U	0.56 U	1.4 U	0.56 UJ	0.56 U	0.56 U	0.56 U	0.56 UJ	0.56 UJ	5.6 U	0.56 U	0.56 U	11 U	2.8 UJ	0.56 UJ
Carbon disulfide	None	µg/L	0.18 U	1.8 U	0.18 U	0.18 U	0.18 U	3.6 U	3.6 U	3.6 UJ	0.91 U	0.18 U	0.46 U	0.18 U	0.18 U	0.18 U	0.18 UJ	0.18 U	0.18 U	1.8 U	0.18 U	0.18 U	3.6 U	0.91 U	0.18 U
Carbon tetrachloride	5	µg/L	0.23 U	2.3 U	0.23 U	0.23 U	0.23 U	4.5 U	4.5 U	4.5 UJ	1.1 U	0.23 U	0.91 J	0.23 UJ	0.23 U	0.73 J	0.23 UJ	0.23 UJ	0.23 U	2.3 U	0.23 U	0.23 U	4.5 U	1.1 U	0.23 U
Chlorobenzene	5	µg/L	0.35 U	3.5 U	0.35 U	0.35 U	0.35 U	6.9 U	6.9 U	6.9 UJ	1.7 U	0.35 U	0.87 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	3.5 U	0.35 U	0.35 U	6.9 U	1.7 U	0.35 U
Chloroethane	5	µg/L	0.39 U	3.9 U	0.39 U	0.39 U	0.39 U	7.8 U	7.8 U	7.8 UJ	1.9 U	0.39 U	0.97 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	3.9 U	0.39 U	0.39 U	7.8 U	1.9 U	0.39 U
Chloroform	7	µg/L	0.25 U	2.5 U	0.25 U	0.25 U	0.25 U	**13.8 J**	**11.4 J**	4.9 UJ	2.4 J	0.25 U	1.3 J	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	2.5 U	0.25 U	0.73 J	**10.8 J**	1.2 U	0.25 U
Chloromethane	5	µg/L	0.36 U	3.6 U	0.36 U	0.36 U	0.36 U	7.3 U	7.3 U	7.3 UJ	1.8 U	0.36 U	0.91 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	3.6 U	0.36 U	0.36 U	7.3 U	1.8 U	0.36 U
cis-1,2-Dichloroethene	5	µg/L	0.24 U	2.4 U	0.24 U	0.24 U	0.24 U	4.8 U	4.8 U	4.8 UJ	1.2 U	0.24 U	0.6 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	2.4 U	0.24 U	0.24 U	4.8 U	1.2 U	0.24 U
cis-1,3-Dichloropropene	0.4	µg/L	0.15 U	1.5 U	0.15 U	0.15 U	0.15 U	3 U	3 U	3 UJ	0.76 U	0.15 U	0.38 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	1.5 U	0.15 U	0.15 U	3 U	0.76 U	0.15 U
Dibromochloromethane	50	µg/L	0.19 U	1.9 U	0.19 U	0.19 U	0.19 U	3.8 U	3.8 U	3.8 UJ	0.96 U	0.19 U	0.48 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 UJ	1.9 U	0.19 U	0.19 U	3.8 U	0.96 U	0.19 UJ
Dichlorodifluoromethane	5	µg/L	0.63 U	6.3 U	0.63 U	0.63 U	0.63 U	13 U	13 U	13 UJ	3.2 U	0.63 U	1.6 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	6.3 U	0.63 U	0.63 U	13 U	3.2 U	0.63 U
Ethyl Ether	None	µg/L	0.56 U	5.6 U	0.56 U	0.56 U	0.56 U	11 U	11 U	11 UJ	2.8 U	0.56 U	1.4 U	0.56 UJ	0.56 U	0.56 U	0.56 U	0.56 UJ	0.56 U	5.6 U	0.56 U	0.56 U	11 U	2.8 U	0.56 U
Ethylbenzene	5	µg/L	0.21 U	**1,080**	**0.21 U**	**189**	**76.6**	**1,040**	**1,090**	**1,590 J**	**300**	0.21 U	0.52 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	**877**	0.21 U	**144**	**1,340**	**302**	**141**
Isopropylbenzene	5	µg/L	0.22 U	**91.9**	0.22 U	**22.5**	**26.7**	**110**	**109**	**68.9 J**	**26.4**	0.22 U	0.56 U	0.22 UJ	0.22 U	0.22 U	0.22 U	0.29 J	0.34 J	**46.5**	0.22 U	**16.4**	**69.6**	**28**	**14.6**
m,p-Xylene	None	µg/L	0.4 U	7,220	0.4 U	27.2	183	4,990	5,160	5,490 J	1,910	0.4 U	1 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	1,350	0.4 U	26.8	1,760	1,630	331 J
Methyl Tert Butyl Ether	10	µg/L	0.29 U	2.9 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Methylene chloride	5	µg/L	0.86 U	8.6 U	0.86 U	0.86 U	0.86 U	17 U	17 U	17 UJ	4.3 U	0.86 U	2.2 U	0.86 U	0.86 U	0.86 U	0.86 U	0.86 U	0.86 U	8.6 U	0.86 U	0.86 U	17 U	4.3 U	0.86 U
Naphthalene	10	µg/L	0.25 U	**510**	0.25 U	**124**	**233**	**440**	**452**	**488 J**	**255**	0.25 U	0.63 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 UJ	**112**	0.25 U	**18.4**	**499**	**120**	**63.4 J**
n-Butylbenzene	5	µg/L	0.39 U	**80.3**	0.39 U	**8.4**	**10.1**	7.8 U	7.8 U	7.8 UJ	2 U	0.39 U	0.98 U	0.39 UJ	0.39 U	0.39 U	0.39 U	0.39 UJ	0.39 U	3.9 U	0.39 U	0.39 U	7.8 U	**27.5**	**14.7**
n-Propylbenzene	5	µg/L	0.32 U	**180**	**0.32 U**	**24.1**	**34.2**	**261**	**265**	**153 J**	**45.4**	0.32 U	0.81 U	0.32 UJ	0.32 U	0.32 U	0.32 U	0.32 UJ	0.32 U	**88.5**	0.32 U	**19**	**161**	**64.3**	**35.7**
o-Xylene	5	µg/L	**0.19 U**	**1,710**	**0.19 U**	**53.9**	**39.7**	**1,800**	**1,910**	**2,590 J**	**316**	0.19 U	0.48 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	**153**	0.19 U	1.7	**919**	**410**	**90.7**
p-Isopropyltoluene	5	µg/L	0.42 U	**8.5 J**	0.42 U	1.3 J	**6.8**	**10.4 J**	**10.8 J**	8.3 UJ	2.5 J	0.42 U	1 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	4.2 U	0.42 U	0.84 J	8.3 U	**5.1 J**	2.7 J
sec-Butylbenzene	5	µg/L	0.48 U	**9.4 J**	0.48 U	2.5 J	**6.3**	**10.3 J**	**11.1 J**	9.5 UJ	2.5 J	0.48 U	1.2 U	0.48 UJ	0.48 U	0.48 U	0.48 U	0.48 UJ	0.48 U	4.8 U	0.48 U	1.2 J	9.5 U	4.7 J	2.7 J
Styrene	5	µg/L	0.3 U	3 U	0.3 U	0.3 U	0.3 U	6 U	6 U	6 UJ	1.5 U	0.3 U	0.76 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U	0.3 U	0.3 U	6 U	1.5 U	0.3 U
tert-Butylbenzene	None	µg/L	0.25 U	366	0.25 U	0.25 U	0.25 U	4.9 U	4.9 U	4.9 UJ	1.2 U	0.25 U	0.62 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	2.5 U	0.25 U	0.25 U	4.9 U	1.2 U	0.25 U
Tetrachloroethene	5	µg/L	0.25 U	2.5 U	0.25 U	0.25 U	0.25 U	5 U	5 U	5 UJ	1.3 U	0.25 U	**319**	0.25 U	0.25 U	0.25 U	**55.2 J**	**89.3**	**87.8**	2.5 U	0.25 U	**98.3**	5 U	1.3 U	4.8
Tetrahydrofuran	50	µg/L	2 U	20 U	2 U	2 U	2 U	40 U	40 U	40 UJ	10 U	2 U	5 U	2 UJ	2 U	2 U	2 U	2 UJ	2 U	20 U	2 U	2 U	40 U	10 U	2 U
Toluene	5	µg/L	0.44 U	**3,070**	0.44 U	**29.6**	**6.8**	**233**	**249**	**3,210 J**	**112**	0.44 U	1.1 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	**146**	0.44 U	**5**	**2,890**	**53.8**	**11.7**
trans-1,2-Dichloroethene	5	µg/L	0.38 U	3.8 U	0.38 U	0.38 U	0.38 U	7.6 U	7.6 U	7.6 UJ	1.9 U	0.38 U	0.95 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	3.8 U	0.38 U	0.38 U	7.6 U	1.9 U	0.38 U
trans-1,3-Dichloropropene	0.4	µg/L	0.21 U	2.1 U	0.21 U	0.21 U	0.21 U	4.1 U	4.1 U	4.1 UJ	1 U	0.21 U	0.52 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	2.1 U	0.21 U	0.21 U	4.1 U	1 U	0.21 U
Trichloroethene	5	µg/L	0.5 U	5 U	0.5 U	0.5 U	0.5 U	10 U	10 U	10 UJ	2.5 U	0.5 U	1.3 U	0.5 U	0.5 U	0.5 U	0.55 J	1.6	1.5	5 U	0.72 J	4.8	10 U	2.5 U	1.3
Trichlorofluoromethane	5	µg/L	0.33 U	3.3 U	0.33 U	0.33 U	0.33 U	6.7 U	6.7 U	6.7 UJ	1.7 U	0.33 U	0.84 U	0.33 U	0.33 U	0.33 U	0.33 UJ	0.33 U	0.33 U	3.3 U	0.33 U	0.33 U	6.7 U	1.7 U	0.33 U
Vinyl Acetate	None	µg/L	2.5 U	25 U	2.5 U	2.5 U	2.5 U	51 U	51 U	51 UJ	13 U	2.5 U	6.3 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	25 U	2.5 U	2.5 U	51 U	13 U	2.5 U
Vinyl chloride	2	µg/L	0.41 U	4.1 U	0.41 U	0.41 U	0.41 U	8.3 U	8.3 U	8.3 UJ	2.1 U	0.41 U	1 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	4.1 U	0.41 U	0.41 U	8.3 U	2.1 U	0.41 U
Xylene (total)	5	µg/L	**0.19 U**	**8,960**	**0.19 U**	**81.1**	**223**	**6,790**	**7,070**	**8,080 J**	**2,220**	0.19 U	0.48 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	**1,500**	0.19 U	**28.5**	**2,680**	**2,040**	**422 J**

Qualifier Key:

U - Analyte not detected in the sample. Value represents the quantitation/detection limit.

J - Result reported is a quantitative estimate

Abbreviation Key:

NS - Not Sampled

µg/L - Micrograms per Liter

A Cell Highlighted and Bold Indicates a detected analyte that exceeds the screening criteria
A cell highlighted and not bold Inidcates a detected analyte that does not exceed the screening criteria
Indicates the analyte is not detected or not sampled

APPENDIX F - All Volatile Organic Compound Analytical Results, Fall 2013

			Areas 1995 & 3805 (continued)																			OSL			
			Groundwater																			Groundwater	Landfill Seep		
Analyte	Screening Value	Unit	3805-MWS19	3805-MWS2	3805-MWS23	3805-MWS24	3805-MWS3	3805-MWS4	3805-MWS5	3805-MWS8	3805-PZ12I	3805-PZ12S	3805-PZ13D	3805-PZ13I	3805-PZ13S	3805-PZ14	3805-PZ2D	3805-PZ2D (DUP)	3805-PZ2I	3805-PZ2S	3805-PZ3	3805-PZ7	OSL-MW3	OSL-SP01	OSL-SP01 (DUP)	OSL-SP03
1,1,1,2-Tetrachloroethane	5	µg/L	0.21 U	0.21 U	2.1 U	1 U	0.21 U	0.21 U	5.2 U	0.41 U	0.21 U	4.1 U	0.21 U	0.21 U	2.1 U	10 U	0.52 U	0.52 U	0.21 U	0.41 U	2.1 U	0.21 U	0.21 U	0.21 UJ	0.21 U	0.21 U
1,1,1-Trichloroethane	5	µg/L	0.25 U	0.25 U	2.5 U	1.2 U	0.25 U	0.25 U	6.2 U	0.5 U	0.25 U	5 U	0.25 U	0.25 U	2.5 U	12 U	0.62 U	0.62 U	0.25 U	0.5 U	2.5 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,1,2,2-Tetrachloroethane	5	µg/L	0.2 U	0.2 U	2 U	0.98 U	0.2 U	0.2 U	4.9 U	0.39 U	0.2 U	3.9 U	0.2 U	0.2 UJ	2 U	9.8 U	0.49 U	0.49 U	0.2 U	0.39 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloroethane	1	µg/L	0.21 U	0.21 U	2.1 U	1.1 U	0.21 U	0.21 U	5.3 U	0.42 U	0.21 U	4.2 U	0.21 U	0.21 U	2.1 U	11 U	0.53 U	0.53 U	0.21 U	0.42 U	2.1 U	0.21 U	0.21 U	0.21 UJ	0.21 U	0.21 U
1,1-Dichloroethane	5	µg/L	0.26 U	0.26 U	2.6 U	1.3 U	0.26 U	0.26 U	6.5 U	0.52 U	0.26 U	5.2 U	0.26 U	0.26 U	2.6 U	13 U	0.65 U	0.65 U	0.26 U	0.52 U	2.6 U	0.26 U	0.26 UJ	0.26 UJ	0.26 U	0.26 U
1,1-Dichloropropene	5	µg/L	0.17 U	0.17 U	1.7 U	0.85 U	0.17 U	0.17 U	4.3 U	0.34 U	0.17 U	3.4 U	0.17 U	0.17 U	1.7 U	8.5 U	0.43 U	0.43 U	0.17 U	0.34 U	1.7 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
1,2,3-Trichlorobenzene	None	µg/L	0.24 U	0.24 U	2.4 U	1.2 U	0.24 UJ	0.24 U	6.1 U	0.49 U	0.24 U	4.9 U	0.24 UJ	0.24 U	2.4 U	12 U	0.61 U	0.61 U	0.24 U	0.49 U	2.4 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
1,2,3-Trichloropropane	0.04	µg/L	0.67 U	0.67 U	6.7 U	3.3 U	0.67 U	0.67 U	17 U	1.3 U	0.67 U	13 U	0.67 U	0.67 U	6.7 U	33 U	1.7 U	1.7 U	0.67 U	1.3 U	6.7 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U
1,2,4-Trichlorobenzene	5	µg/L	0.22 U	0.22 U	2.2 U	1.1 U	0.22 U	0.22 U	5.4 U	0.43 U	0.22 U	4.3 U	0.22 U	0.22 U	2.2 U	11 U	0.54 U	0.54 U	0.22 U	0.43 U	2.2 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
1,2,4-Trimethylbenzene	None	µg/L	0.23 U	0.23 U	1,600	1,360	0.23 U	109	1,320	56	0.23 U	2,290	0.23 U	0.23 UJ	1,730	2,640	0.57 U	0.57 U	0.23 U	293	906	0.23 U	274	145 J	144	98.1
1,2-Dibromoethane	0.0006	µg/L	0.16 U	0.16 U	1.6 U	0.8 U	0.16 U	0.16 U	4 U	0.32 U	0.16 U	3.2 U	0.16 U	0.16 U	1.6 U	8 U	0.4 U	0.4 U	0.16 U	0.32 U	1.6 U	0.16 U	0.16 U	0.16 UJ	0.16 U	0.16 U
1,2-Dichlorobenzene	3	µg/L	0.2 U	0.2 U	2 U	1 U	0.2 U	0.2 U	5.1 U	0.41 U	0.2 U	4.1 U	0.2 U	0.2 U	2 U	10 U	0.51 U	0.51 U	0.2 U	0.41 U	2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U
1,2-Dichloroethane	0.6	µg/L	0.22 U	0.22 U	2.2 U	1.1 U	0.22 U	0.22 UJ	5.5 U	0.44 U	0.22 U	4.4 U	0.22 U	0.22 UJ	2.2 UJ	11 U	0.55 U	0.55 U	0.22 U	0.44 U	2.2 U	0.22 U	0.22 U	0.22 UJ	0.22 U	0.22 U
1,2-Dichloroethene (total)	None	µg/L	0.24 U	0.24 U	2.4 U	1.2 U	0.24 U	0.24 U	6 U	0.48 U	0.24 U	4.8 U	0.24 U	0.24 U	2.4 U	12 U	0.6 U	0.6 U	0.24 U	0.48 U	2.4 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
1,2-Dichloropropane	1	µg/L	0.28 U	0.28 U	2.8 U	1.4 U	0.28 U	0.28 U	7 U	0.56 U	0.28 U	5.6 U	0.28 U	0.28 U	2.8 U	14 U	0.7 U	0.7 U	0.28 U	0.56 U	2.8 U	0.28 U	0.28 U	0.28 UJ	0.28 U	0.28 U
1,3,5-Trimethylbenzene	None	µg/L	0.43 U	0.43 U	417	456	0.43 U	12.8	404	20.4	0.43 U	583	0.43 U	0.43 U	513	641	1.1 U	1.1 U	0.43 U	98.4	267	0.43 U	82.2	26.2	26	4.6
1,3-Dichloropropane	None	µg/L	0.23 U	0.23 U	2.3 U	1.1 U	0.23 U	0.23 U	5.6 U	0.45 U	0.23 U	4.5 U	0.23 U	0.23 U	2.3 U	11 U	0.56 U	0.56 U	0.23 U	0.45 U	2.3 U	0.23 U	0.23 U	0.23 UJ	0.23 U	0.23 U
1,4-Dichlorobenzene	3	µg/L	0.3 U	0.3 U	3 U	1.5 U	0.3 U	0.3 U	7.5 U	0.6 U	0.3 U	6 U	0.3 U	0.3 U	3 U	15 U	0.75 U	0.75 U	0.3 U	0.6 U	3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U
2,2-Dichloropropane	None	µg/L	0.21 U	0.21 U	2.1 U	1.1 U	0.21 U	0.21 U	5.3 U	0.42 U	0.21 U	4.2 U	0.21 U	0.21 U	2.1 U	11 U	0.53 U	0.53 U	0.21 U	0.42 U	2.1 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
2-Butanone (MEK)	50	µg/L	3.2 R	3.2 U	32 R	16 R	3.2 R	3.2 U	80 R	6.4 R	3.2 R	**109 J**	3.2 R	3.2 R	32 U	160 R	8 R	8 R	3.2 R	14.7 J	32 R	3.2 R	3.2 U	3.2 U	3.2 U	3.2 U
2-Hexanone	None	µg/L	1.7 U	1.7 U	17 U	8.5 U	1.7 UJ	1.7 U	43 U	3.4 U	1.7 U	34 U	1.7 UJ	1.7 U	17 U	85 U	4.3 U	4.3 U	1.7 U	3.4 U	17 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
4-Methyl-2-pentanone(MIBK)	None	µg/L	1.5 U	1.5 U	15 U	7.4 U	1.5 U	1.5 U	37 U	3 U	1.5 U	30 U	1.5 U	1.5 U	15 U	74 U	3.7 U	3.7 U	1.5 U	3.7 J	15 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
Acetone	50	µg/L	3.3 R	3.3 R	33 R	17 R	3.3 R	3.3 U	84 R	6.7 R	3.3 R	**175 J**	3.3 R	3.3 R	33 U	170 R	8.4 R	8.4 R	3.3 R	36.4 J	33 R	3.3 R	9.7 J	3.3 U	3.3 U	10 U
Benzene	1	µg/L	0.28 U	0.28 U	**292**	**239**	0.28 U	**58.3**	7 U	**38.5**	0.28 U	**40.5**	0.28 U	0.28 U	2.8 U	14 U	0.7 U	0.7 U	0.28 U	0.62 J	**97.2**	**0.28 U**	0.42 J	0.37 J	0.28 U	**19.8**
Bromobenzene	None	µg/L	0.25 U	0.25 U	2.5 U	1.3 U	0.25 U	0.25 U	6.3 U	0.5 U	0.25 U	5 U	0.25 U	0.25 U	2.5 U	13 U	0.63 U	0.63 U	0.25 U	0.5 U	2.5 U	0.25 U	0.25 U	0.25 UJ	0.25 U	0.25 U
Bromodichloromethane	50	µg/L	0.21 U	0.21 U	2.1 U	1.1 U	0.21 U	0.21 U	5.3 U	0.42 U	0.21 U	4.2 U	0.21 U	0.21 U	2.1 U	11 U	0.53 U	0.53 U	0.21 U	0.42 U	2.1 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
Bromoform	50	µg/L	0.3 U	0.3 U	3 U	1.5 U	0.3 UJ	0.3 U	7.5 U	0.6 U	0.3 U	6 U	0.3 UJ	0.3 U	3 U	15 U	0.75 U	0.75 U	0.3 U	0.6 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Bromomethane	5	µg/L	0.56 U	0.56 U	5.6 U	2.8 UJ	0.56 UJ	0.56 U	14 UJ	1.1 U	0.56 U	11 UJ	0.56 UJ	0.56 UJ	5.6 U	28 UJ	1.4 U	1.4 U	0.56 U	1.1 U	5.6 U	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U
Carbon disulfide	None	µg/L	0.18 U	0.18 U	1.8 U	0.91 U	0.18 U	0.18 U	4.6 U	0.36 U	0.18 U	3.6 U	0.18 U	0.18 U	1.8 U	9.1 U	0.46 U	0.46 U	0.18 U	0.36 U	1.8 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
Carbon tetrachloride	5	µg/L	0.23 U	0.23 U	2.3 U	1.1 U	0.23 U	0.23 U	5.7 U	0.45 U	0.23 U	4.5 U	0.23 UJ	0.23 UJ	2.3 UJ	11 U	0.57 U	0.57 U	0.23 U	0.45 U	2.3 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
Chlorobenzene	5	µg/L	0.35 U	0.35 U	3.5 U	1.7 U	0.35 U	0.35 U	8.7 U	0.69 U	0.35 U	6.9 U	0.35 U	0.35 U	3.5 U	17 U	0.87 U	0.87 U	0.35 U	0.69 U	3.5 U	0.35 U	0.35 U	0.35 UJ	0.35 U	0.35 U
Chloroethane	5	µg/L	0.39 U	0.39 U	3.9 U	1.9 U	0.39 U	0.39 U	9.7 U	0.78 U	0.39 U	7.8 U	0.39 U	0.39 U	3.9 U	19 U	0.97 U	0.97 U	0.39 U	0.78 U	3.9 U	0.39 U	3	0.39 U	0.39 U	0.39 U
Chloroform	7	µg/L	0.25 U	0.25 U	2.5 U	1.2 U	0.25 U	0.25 U	6.1 U	0.49 U	0.39 J	4.9 U	0.46 J	0.25 U	2.5 U	12 U	1 J	1 J	0.25 U	0.49 U	2.5 U	0.25 U	0.25 U	0.25 UJ	0.25 U	0.25 U
Chloromethane	5	µg/L	0.36 U	0.36 U	3.6 U	1.8 U	0.36 U	0.59 J	9.1 U	0.73 U	0.36 U	7.3 U	0.36 U	0.36 U	3.6 U	18 U	0.91 U	0.91 U	0.36 U	0.73 U	3.6 U	0.36 U	1.4	0.36 U	0.36 U	0.36 U
cis-1,2-Dichloroethene	5	µg/L	0.24 U	0.24 U	2.4 U	1.2 U	0.24 U	0.24 U	6 U	0.48 U	0.24 U	4.8 U	0.24 U	0.24 U	2.4 U	12 U	0.6 U	0.6 U	0.24 U	0.48 U	2.4 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
cis-1,3-Dichloropropene	0.4	µg/L	0.15 U	0.15 U	1.5 U	0.76 U	0.15 U	0.15 U	3.8 U	0.3 U	0.15 U	3 U	0.15 UJ	0.15 U	1.5 U	7.6 U	0.38 U	0.38 U	0.15 U	0.3 U	1.5 U	0.15 U	0.15 U	0.15 UJ	0.15 U	0.15 U
Dibromochloromethane	50	µg/L	0.19 U	0.19 U	1.9 U	0.96 U	0.19 UJ	0.19 U	4.8 U	0.38 U	0.19 U	3.8 U	0.19 UJ	0.19 U	1.9 U	9.6 U	0.48 U	0.48 U	0.19 U	0.38 U	1.9 U	0.19 U	0.19 U	0.19 UJ	0.19 U	0.19 U
Dichlorodifluoromethane	5	µg/L	0.63 U	0.63 U	6.3 UJ	3.2 U	0.63 U	0.63 U	16 U	1.3 U	0.63 U	13 U	0.63 UJ	0.63 U	6.3 U	32 U	1.6 U	1.6 U	0.63 U	1.3 UJ	6.3 UJ	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U
Ethyl Ether	None	µg/L	0.56 U	0.56 U	5.6 U	2.8 U	0.56 U	0.56 U	14 U	1.1 U	0.56 U	11 U	0.56 U	0.56 UJ	5.6 U	28 U	1.4 U	1.4 U	0.56 U	1.1 U	5.6 U	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U
Ethylbenzene	5	µg/L	0.21 U	0.21 U	**2,390**	**1,220**	0.21 U	**123**	**2,350**	**125**	0.21 U	**1,630**	0.21 U	0.21 U	**1,170**	**3,160**	0.52 U	0.52 U	0.21 U	**229**	**889**	0.21 U	**145**	**12.3**	**11.7**	**129**
Isopropylbenzene	5	µg/L	0.22 U	0.22 U	**93.6**	**34.9**	0.22 U	**8.6**	**29.6 J**	**7.7**	0.22 U	**109**	0.22 U	0.22 UJ	**60.4**	**145**	0.56 U	0.56 U	0.22 U	**13.1**	**42.1**	0.22 U	**21.1**	**8.5**	**8.5**	**11.8**
m,p-Xylene	None	µg/L	0.4 U	0.4 U	9,450	8,050	0.4 U	189	12,200	339	0.4 U	7,010	0.4 U	0.4 U	4,560	14,600	1 U	1 U	0.4 U	697	3,770	0.4 U	176	15.4	14.6	79.9
Methyl Tert Butyl Ether	10	µg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Methylene chloride	5	µg/L	0.86 U	0.86 U	8.6 U	4.3 U	0.86 U	0.86 U	22 U	1.7 U	0.86 U	17 U	0.86 U	0.86 U	8.6 U	43 U	2.2 U	2.2 U	0.86 U	1.7 U	8.6 U	0.86 U	0.86 U	0.86 U	0.86 U	0.86 U
Naphthalene	10	µg/L	0.25 U	0.25 U	**424**	**440**	0.25 UJ	**38.8**	**524**	**41.9**	0.25 U	**596**	0.25 UJ	0.25 U	**357 J**	**779**	0.63 U	0.63 U	0.25 U	**60.8**	**226**	0.25 U	**49.3**	**14.9**	8.7	**42.8**
n-Butylbenzene	5	µg/L	0.39 U	0.39 U	**74.1**	**63.8**	0.39 U	0.39 U	**63.5 J**	0.78 U	0.39 U	**87 J**	0.39 UJ	0.39 UJ	3.9 U	**112 J**	0.98 U	0.98 U	0.39 U	**17.9**	**34.5 J**	0.39 U	**14.4**	**7.8**	**7.6**	1.3 J
n-Propylbenzene	5	µg/L	0.32 U	0.32 U	**157**	**39.4**	0.32 U	**22**	**11.1 J**	**9.3 J**	0.32 U	**223**	0.32 U	0.32 UJ	**206**	**306**	0.81 U	0.81 U	0.32 U	**46.8**	**80.1**	0.32 U	**58.2**	**24.3**	**24.2**	**15.8**
o-Xylene	5	µg/L	0.19 U	0.19 U	**1,380**	**3,390**	0.19 U	4.2	**4,660**	**117**	0.19 U	**2,780**	0.19 U	0.19 U	**1,620**	**6,340**	0.48 U	0.48 U	0.19 U	**286**	**1,680**	0.19 U	**27.9**	0.22 J	0.19 J	4.4
p-Isopropyltoluene	5	µg/L	0.42 U	0.42 U	4.4 J	**6.1 J**	0.42 U	0.83 J	10 U	0.83 U	0.42 U	**9.3 J**	0.42 U	0.42 U	**7.2 J**	21 U	1 U	1 U	0.42 U	**9.1 J**	4.2 U	0.42 U	**5.5**	2.8 J	2.7 J	1.2 J
sec-Butylbenzene	5	µg/L	0.48 U	0.48 U	4.9 J	2.6 J	0.48 U	0.99 J	12 U	0.97 J	0.48 U	**9.6 J**	0.48 UJ	0.48 UJ	**9.6 J**	24 U	1.2 U	1.2 U	0.48 U	**7.8 J**	4.8 U	0.48 U	**8.9**	3.9 J	3.8 J	1.2 J
Styrene	5	µg/L	0.3 U	0.3 U	3 U	1.5 U	0.3 U	0.3 U	7.6 U	0.6 U	0.3 U	6 U	0.3 U	0.3 U	3 U	**189 J**	0.76 U	0.76 U	0.3 U	0.6 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
tert-Butylbenzene	None	µg/L	0.25 U	0.25 U	2.5 U	1.2 U	0.25 U	0.25 U	6.2 U	0.49 U	0.25 U	4.9 U	0.25 U	0.25 U	2.5 U	12 U	0.62 U	0.62 U	0.25 U	0.49 U	2.5 U	0.25 U	0.34 J	0.28 J	0.27 J	0.25 U
Tetrachloroethene	5	µg/L	0.25 U	0.25 U	2.5 U	1.3 U	**14.1**	0.25 U	6.3 U	0.5 U	0.25 U	5 U	0.25 U	0.25 U	2.5 U	13 U	**389**	**429**	**60.3**	0.5 U	2.5 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
Tetrahydrofuran	50	µg/L	2 U	2 UJ	20 U	10 U	2 U	2 U	50 U	4 U	2 U	40 U	2 U	2 UJ	20 U	100 U	5 U	5 U	2 U	4 U	20 U	2 U	2 U	2 U	2 U	2 U
Toluene	5	µg/L	0.44 U	0.44 U	**3,990**	**3,400**	0.44 U	**17.6**	**456**	**233**	0.44 U	**2,300**	0.44 U	0.44 U	**697**	**2,100**	1.1 U	1.1 U	0.44 U	**269**	**1,880**	0.44 U	**37.3**	0.44 U	0.44 U	**6**
trans-1,2-Dichloroethene	5	µg/L	0.38 U	0.38 U	3.8 U	1.9 U	0.38 U	0.38 U	9.5 U	0.76 U	0.38 U	7.6 U	0.38 U	0.38 U	3.8 U	19 U	0.95 U	0.95 U	0.38 U	0.76 U	3.8 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
trans-1,3-Dichloropropene	0.4	µg/L	0.21 U	0.21 U	2.1 U	1 U	0.21 U	0.21 U	5.2 U	0.41 U	0.21 U	4.1 U	0.21 U	0.21 U	2.1 U	10 U	0.52 U	0.52 U	0.21 U	0.41 U	2.1 U	0.21 U	0.21 U	0.21 UJ	0.21 U	0.21 U
Trichloroethene	5	µg/L	0.5 U	0.5 U	5 U	2.5 U	0.5 U	0.5 U	13 U	1 U	0.5 U	10 U	0.5 U	0.5 U	5 U	25 U	**6**	**6**	0.5 U	1 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane	5	µg/L	0.33 U	0.33 U	3.3 U	1.7 U	0.33 U	0.33 U	8.4 U	0.67 U	0.33 U	6.7 U	0.33 UJ	0.33 U	3.3 U	17 U	0.84 U	0.84 U	0.33 U	0.67 U	3.3 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Vinyl Acetate	None	µg/L	2.5 U	2.5 UJ	25 U	13 U	2.5 U	2.5 U	63 U	5.1 U	2.5 U	51 U	2.5 U	2.5 U	25 U	130 U	6.3 U	6.3 U	2.5 U	5.1 U	25 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Vinyl chloride	2	µg/L	0.41 U	0.41 U	4.1 U	2.1 U	0.41 U	0.41 U	10 U	0.83 U	0.41 U	8.3 U	0.41 U	0.41 U	4.1 U	21 U	1 U	1 U	0.41 U	0.83 U	4.1 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U
Xylene (total)	5	µg/L	0.19 U	0.19 U	**10,800**	**11,400**	0.19 U	**193**	**17,000**	**457**	0.19 U	**9,790**	0.19 U	0.19 U	**6,180**	**21,000**	0.48 U	0.48 U	0.19 U	**983**	**5,450**	0.19 U	**204**	**15.6**	**14.8**	**84.3**

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µg/L - Micrograms per Liter

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			OSL (continued)			
			Surface Water			
Analyte	Screening Value	Unit	OSL-SW06	OSL-SW09	OSL-SW09 (DUP)	OSL-SW10
1,1,1,2-Tetrachloroethane	5	µg/L	0.21 U	0.21 U	0.21 U	0.21 U
1,1,1-Trichloroethane	5	µg/L	0.25 U	0.25 U	0.25 U	0.25 U
1,1,2,2-Tetrachloroethane	5	µg/L	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloroethane	1	µg/L	0.21 U	0.21 U	0.21 U	0.21 U
1,1-Dichloroethane	5	µg/L	0.26 U	0.26 U	0.26 U	0.26 U
1,1-Dichloropropene	5	µg/L	0.17 U	0.17 U	0.17 U	0.17 U
1,2,3-Trichlorobenzene	None	µg/L	0.24 U	0.24 U	0.24 U	0.24 U
1,2,3-Trichloropropane	0.04	µg/L	0.67 U	0.67 U	0.67 U	0.67 U
1,2,4-Trichlorobenzene	5	µg/L	0.22 U	0.22 U	0.22 U	0.22 U
1,2,4-Trimethylbenzene	None	µg/L	0.23 U	0.47 J	0.46 J	0.23 U
1,2-Dibromoethane	0.0006	µg/L	0.16 U	0.16 U	0.16 U	0.16 U
1,2-Dichlorobenzene	3	µg/L	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloroethane	0.6	µg/L	0.22 U	0.22 U	0.22 U	0.22 U
1,2-Dichloroethene (total)	None	µg/L	0.24 U	0.24 U	0.24 U	0.24 U
1,2-Dichloropropane	1	µg/L	0.28 U	0.28 U	0.28 U	0.28 U
1,3,5-Trimethylbenzene	None	µg/L	0.43 U	0.43 U	0.43 U	0.43 U
1,3-Dichloropropane	None	µg/L	0.23 U	0.23 UJ	0.23 U	0.23 U
1,4-Dichlorobenzene	3	µg/L	0.3 U	0.3 U	0.3 U	0.3 U
2,2-Dichloropropane	None	µg/L	0.21 U	0.21 U	0.21 UJ	0.21 U
2-Butanone (MEK)	50	µg/L	3.2 R	3.2 R	3.2 U	3.2 R
2-Hexanone	None	µg/L	1.7 U	1.7 U	1.7 U	1.7 U
4-Methyl-2-pentanone(MIBK)	None	µg/L	1.5 U	1.5 U	1.5 U	1.5 U
Acetone	50	µg/L	3.3 U	3.3 U	3.3 U	3.3 U
Benzene	1	µg/L	0.28 U	**1.5 J**	**1.5**	0.28 U
Bromobenzene	None	µg/L	0.25 U	0.25 U	0.25 U	0.25 U
Bromodichloromethane	50	µg/L	0.21 U	0.21 U	0.21 U	0.21 U
Bromoform	50	µg/L	0.3 U	0.3 U	0.3 U	0.3 U
Bromomethane	5	µg/L	0.56 U	0.56 U	0.56 U	0.56 U
Carbon disulfide	None	µg/L	0.18 U	0.18 U	0.18 U	0.18 U
Carbon tetrachloride	5	µg/L	0.23 U	0.23 U	0.23 U	0.23 U
Chlorobenzene	5	µg/L	0.35 U	0.35 U	0.35 U	0.35 U
Chloroethane	5	µg/L	0.39 U	0.39 U	0.39 U	0.39 U
Chloroform	7	µg/L	0.25 U	0.25 U	0.25 U	0.25 U
Chloromethane	5	µg/L	0.36 U	0.36 U	0.36 U	0.36 U
cis-1,2-Dichloroethene	5	µg/L	0.24 U	0.24 U	0.24 U	0.24 U
cis-1,3-Dichloropropene	0.4	µg/L	0.15 U	0.15 U	0.15 U	0.15 U
Dibromochloromethane	50	µg/L	0.19 U	0.19 U	0.19 U	0.19 U
Dichlorodifluoromethane	5	µg/L	0.63 U	0.63 U	0.63 U	0.63 U
Ethyl Ether	None	µg/L	0.56 U	0.56 U	0.56 U	0.56 U
Ethylbenzene	5	µg/L	0.21 U	0.73 J	0.75 J	0.21 U
Isopropylbenzene	5	µg/L	0.22 U	0.22 U	0.22 U	0.22 U
m,p-Xylene	None	µg/L	0.4 U	1.1 J	1.1	0.4 U
Methyl Tert Butyl Ether	10	µg/L	NS	NS	NS	NS
Methylene chloride	5	µg/L	0.86 U	0.86 U	0.86 U	0.86 U
Naphthalene	10	µg/L	0.25 U	0.25 U	0.25 U	0.25 U
n-Butylbenzene	5	µg/L	0.39 U	0.39 U	0.39 U	0.39 U
n-Propylbenzene	5	µg/L	0.32 U	0.32 U	0.32 U	0.32 U
o-Xylene	5	µg/L	0.19 U	0.19 U	0.19 U	0.19 U
p-Isopropyltoluene	5	µg/L	0.42 U	0.42 U	0.42 U	0.42 U
sec-Butylbenzene	5	µg/L	0.48 U	0.48 U	0.48 U	0.48 U
Styrene	5	µg/L	0.3 U	0.3 U	0.3 U	0.3 U
tert-Butylbenzene	None	µg/L	0.25 U	0.25 U	0.25 U	0.25 U
Tetrachloroethene	5	µg/L	0.25 U	0.25 U	0.25 U	0.25 U
Tetrahydrofuran	50	µg/L	2 U	2 U	2 UJ	2 U
Toluene	5	µg/L	0.44 U	0.44 U	0.44 U	0.44 U
trans-1,2-Dichloroethene	5	µg/L	0.38 U	0.38 U	0.38 U	0.38 U
trans-1,3-Dichloropropene	0.4	µg/L	0.21 U	0.21 U	0.21 U	0.21 U
Trichloroethene	5	µg/L	0.5 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane	5	µg/L	0.33 U	0.33 U	0.33 U	0.33 U
Vinyl Acetate	None	µg/L	2.5 U	2.5 U	2.5 U	2.5 U
Vinyl chloride	2	µg/L	0.41 U	0.41 U	0.41 U	0.41 U
Xylene (total)	5	µg/L	0.19 U	1.1 J	1.1	0.19 U

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Abbreviation Key:

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µg/L - Micrograms per Liter

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APPENDIX F - All Biogeochemical Parameter Analytical Results, Spring 2013

			Area 1295						Area 1595				
			Groundwater						Groundwater				
Analyte	**Screening Value**	**Unit**	**1295-MW25**	**1295-MW26**	**1295-MW30**	**1295-MWS27**	**1295-MWS27 (DUP)**	**1295-MWS28**	**1595-MW33**	**1595-MWS7**	**1595-OBG2**	**1595-OBG2 (DUP)**	**1595-PZ12**
Chloride	None	mg/L	174	29	157	229	186	281	186	177	110	114	862
Ethane	None	µg/L	0.09 U	0.09 U	0.09 U	0.09 U	0.09 UJ	0.09 U	0.09 U	0.77	0.09 U	0.09 U	0.09 U
Ethene	None	µg/L	0.095 U	0.095 U	0.095 U	0.095 U	0.095 UJ	0.095 U	0.095 U	0.095 U	0.095 U	0.095 U	0.095 U
Iron	300	µg/L	100 U	100 U	**1,550**	**743**	**815**	**323**	52.7 J	**473**	**13,800**	**12,900**	**8,750**
Manganese	300	µg/L	31.3	87.5	25.8	66.7	69.2	53.4	28.8	**321**	**641**	**564**	170
Methane	None	µg/L	2.9	0.03 U	0.03 U	93	0.31 J	129	57.2	110	1,830	1,920	93.4
Nitrogen, Ammonia	None	mg/L	0.2 U	0.2 U	0.34	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.28	0.23	0.39
Nitrogen, Nitrate	None	mg/L	1.6	4.1	0.11 U	1.3	1.3	1.6	3 J	0.36 J	0.54 J	0.66 J	0.84 J
Nitrogen, Nitrate + Nitrite	None	mg/L	1.6	4.1	0.1 U	1.3	1.3	1.6	3 J	0.36 J	0.54 J	0.66 J	0.84 J
Nitrogen, Nitrite	None	mg/L	0.023	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Nitrogen, Total Kjeldahl	None	mg/L	0.67	1.5	0.51	0.52	0.7	0.6	0.79 J	0.42 J	1.4 J	1.3 J	0.7 J
Sulfate	None	mg/L	32.2	44	13.7	20.8	16.4	25.9	29.9	17.8	18.2	19.7	20.1
Total Organic Carbon	None	mg/L	2	1.6	10.3	1.5	1.5	1	4.2	9.4	27.6	27.7	7.2

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R - Rejected Data

Abbreviation Key:

µg/L - Micrograms per Liter

mg/L - milligrams per Liter

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			Area 1795			Area 2140		Areas 1995 & 3805					
			Groundwater			Groundwater		Groundwater					
Analyte	**Screening Value**	**Unit**	**1795-MWS3**	**1795-MWS7**	**1795-PZ15**	**2140-MW02**	**2140-MW12**	**1995-MWS10**	**1995-MWS9**	**3805-MWS11**	**3805-MWS24**	**3805-PZ12S**	**3805-PZ14**
Chloride	None	mg/L	13.4	404	34.3	844	569	356 J	1,560	125	27.1	21.8	2.3
Ethane	None	µg/L	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.33	0.09 U	0.09 U	0.09 U	0.61
Ethene	None	µg/L	0.095 U	0.095 U	0.095 U	0.095 U	0.095 U	0.095 U	0.095 U	0.095 U	0.095 U	0.095 U	0.095 U
Iron	300	µg/L	**25,300**	**6,220**	**538**	**1,790**	163	**24,000**	**32,400**	**19,600**	**23,100**	**40,900**	**16,700**
Manganese	300	µg/L	**939**	**285**	**1,360**	**550**	**1,160**	**2,220**	**643**	**2,750**	**2,640**	**5,930**	**2,610**
Methane	None	µg/L	11.2	3.1	0.03 U	6.1	1.1	543	5,220	7.8	12.4	5.2	1
Nitrogen, Ammonia	None	mg/L	0.69	0.55	0.3	0.2 U	0.2 U	0.31	1.3	0.49	0.2	0.41	0.2
Nitrogen, Nitrate	None	mg/L	0.11 U	0.11 U	0.85	3.1 J	0.28	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
Nitrogen, Nitrate + Nitrite	None	mg/L	0.1 U	0.1 U	0.89 J	3.1 J	0.28 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Nitrogen, Nitrite	None	mg/L	0.01 U	0.01 U	0.038	0.023	0.01 U	0.01 U	0.01 U	0.01 R	0.01 U	0.01 U	0.012
Nitrogen, Total Kjeldahl	None	mg/L	1.6 J	5.9 J	2.8 J	0.6 J	0.32 J	2 J	2.6 J	2.4 J	1.8 J	1.6 J	2.4 J
Sulfate	None	mg/L	17.2	32.4	10 U	41.7	10 U	10 U	10.4	13.4	10 U	10 U	10 U
Total Organic Carbon	None	mg/L	7	20.9	6.6	4.3	5.9	35.9	8.5	3.2	6.8	8.1	14.8

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			Areas 1995 & 3805 (contined)		
			Groundwater		
Analyte	**Screening Value**	**Unit**	**3805-PZ14 (DUP)**	**3805-PZ2S**	**3805-PZ3**
Chloride	None	mg/L	2.2	2.2	2.5
Ethane	None	µg/L	0.67	0.09 U	0.09 U
Ethene	None	µg/L	0.095 U	0.095 U	0.095 U
Iron	300	µg/L	**16,700**	**5,630**	**17,300**
Manganese	300	µg/L	**2,610**	**1,590**	**4,380**
Methane	None	µg/L	1.2	2	5.8
Nitrogen, Ammonia	None	mg/L	0.22	0.3	0.27
Nitrogen, Nitrate	None	mg/L	0.11 U	0.11 U	0.11 U
Nitrogen, Nitrate + Nitrite	None	mg/L	0.1 U	0.1 U	0.1 U
Nitrogen, Nitrite	None	mg/L	0.01 U	0.01 U	0.01 U
Nitrogen, Total Kjeldahl	None	mg/L	2 J	1.5 J	2.2 J
Sulfate	None	mg/L	10 U	10 U	10 U
Total Organic Carbon	None	mg/L	15.6	7	12.3

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			Area 1295						Area 1595				
			Groundwater						Groundwater			Surface Water	
Analyte	**Screening Value**	**Unit**	**1295-MW25**	**1295-MW26**	**1295-MW30**	**1295-MW30 (DUP)**	**1295-MWS27**	**1295-MWS28**	**1595-MW33**	**1595-MWS7**	**1595-OBG2**	**1595-SW01**	**1595-SW01 (DUP)**
Chloride	None	mg/L	558	34.4	796	807	150	613	370	246	281	NS	NS
Ethane	None	µg/L	0.09 U	0.09 U	0.29	0.28	0.09 U	0.09 U	0.09 U	2.3	0.12	NS	NS
Ethene	None	µg/L	0.095 U	0.095 U	0.095 U	0.095 U	0.095 U	0.095 U	0.095 U	0.095 U	0.095 U	NS	NS
Hardness, Total as CaCO3	None	mg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	173 J	216 J
Iron	300	µg/L	**1,510**	21.4 U	**2,480**	**2,040**	**1,140**	96.6 U	46 B	**7,060**	**16,600**	**24,600 J**	**56,700 J**
Manganese	300	µg/L	119	77.5	80	67.8	42.8	23.1	**327**	**1,060**	**622**	NS	NS
Methane	None	µg/L	1.2	0.03 U	5.4	5.3	2.2	0.03 U	222	920	5,130	NS	NS
Nitrogen, Ammonia	None	mg/L	0.2 U	0.2 U	0.64	0.61	0.2 U	0.2 U	0.2 U	0.2 U	0.55	NS	NS
Nitrogen, Nitrate	None	mg/L	1.2 J	4.1 J	0.11 U	0.11 U	0.74 J	1.1 J	1.8 J	0.24 J	0.23 J	NS	NS
Nitrogen, Nitrate + Nitrite	None	mg/L	1.2 J	4.1 J	0.1 U	0.1 U	0.74 J	1.1 J	1.8 J	0.24 J	0.23 J	NS	NS
Nitrogen, Nitrite	None	mg/L	0.015	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.022	0.01 U	0.01 U	NS	NS
Nitrogen, Total Kjeldahl	None	mg/L	0.91	0.27	1.6	1.7	0.45	0.66	0.75	0.98	2.6	NS	NS
Sulfate	None	mg/L	23.6	47.4	10 U	10 U	10.2	32.6	45.4	10 U	10 U	NS	NS
Total Organic Carbon	None	mg/L	2.1	2	6.9	7.3	1.6	1 U	4.9	9.7	18.8	NS	NS

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			Area 1595 (continued)		Area 1795							Area 2140	
			Surface Water		Groundwater				Surface Water			Groundwater	
Analyte	**Screening Value**	**Unit**	**1595-SW04**	**1595-SW08**	**1795-MWS3**	**1795-MWS7**	**1795-MWS7 (DUP)**	**1795-PZ15**	**1795-SW00**	**1795-SW04**	**1795-SW08**	**2140-MW02**	**2140-MW07**
Chloride	None	mg/L	NS	NS	33.8	811	796	134	NS	NS	NS	986	461
Ethane	None	µg/L	NS	NS	0.14	0.09 U	0.09 U	0.09 U	NS	NS	NS	0.09 U	0.09 U
Ethene	None	µg/L	NS	NS	0.095 U	0.095 U	0.095 U	0.095 U	NS	NS	NS	0.095 U	0.095 U
Hardness, Total as CaCO3	None	mg/L	171	197	NS	NS	NS	NS	263	192	180	NS	NS
Iron	300	µg/L	**8,130**	117	**36,800**	**1,170**	**1,560**	**811**	**602**	**1,680**	**458**	**824**	**28,900**
Manganese	300	µg/L	NS	NS	**1,210**	88.2	97.9	**1,810**	NS	NS	NS	106	**2,810**
Methane	None	µg/L	NS	NS	5.6	0.03 U	0.17	0.9	NS	NS	NS	0.38	30.3
Nitrogen, Ammonia	None	mg/L	NS	NS	0.55	0.2	0.2 U	0.2 U	NS	NS	NS	0.2 U	0.86
Nitrogen, Nitrate	None	mg/L	NS	NS	0.11 U	1.9 J	2.3 J	0.75 J	NS	NS	NS	2.6	0.22
Nitrogen, Nitrate + Nitrite	None	mg/L	NS	NS	0.1 U	2 J	2.4 J	0.76 J	NS	NS	NS	2.6	0.23
Nitrogen, Nitrite	None	mg/L	NS	NS	0.01 U	0.12	0.15	0.01 U	NS	NS	NS	0.01 U	0.01 U
Nitrogen, Total Kjeldahl	None	mg/L	NS	NS	0.94	1.4	1.4	0.98	NS	NS	NS	0.38	1.6
Sulfate	None	mg/L	NS	NS	17	32.9	33.7	10 U	NS	NS	NS	28.4	10 U
Total Organic Carbon	None	mg/L	NS	NS	6.3	8.8	9.5	7.4	NS	NS	NS	2	11.9

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			Area 2140 (continued)		Areas 1995 & 3805								
			Groundwater		Groundwater								
Analyte	**Screening Value**	**Unit**	**2140-MW07 (DUP)**	**2140-MW12**	**1995-MWS10**	**1995-MWS9**	**3805-MWD16**	**3805-MWD18**	**3805-MWI12**	**3805-MWI15**	**3805-MWI15 (DUP)**	**3805-MWI17**	**3805-MWS11**
Chloride	None	mg/L	480	1,050	248	1,020	NS	NS	NS	NS	NS	NS	36.3
Ethane	None	µg/L	0.09 U	0.09 U	0.28	0.29	NS	NS	NS	NS	NS	NS	0.09 U
Ethene	None	µg/L	0.095 U	0.095 U	0.095 U	0.095 U	NS	NS	NS	NS	NS	NS	0.095 U
Hardness, Total as CaCO3	None	mg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Iron	300	µg/L	**29,500**	**385**	**56,700**	**23,700**	100 U	176	19.4 J	**918 J**	**635 J**	**10,100**	**11,300**
Manganese	300	µg/L	**2,880**	**7,790**	**4,420**	**483**	15 U	124	15 U	**1,060**	**917**	**325**	**1,640**
Methane	None	µg/L	32	1.7	3,730	2,370	NS	NS	NS	NS	NS	NS	2.1
Nitrogen, Ammonia	None	mg/L	0.92	0.27	1.1	0.64	NS	NS	NS	NS	NS	NS	0.41
Nitrogen, Nitrate	None	mg/L	0.25	0.99	0.11 U	0.11 U	NS	NS	NS	NS	NS	NS	0.11 U
Nitrogen, Nitrate + Nitrite	None	mg/L	0.26	1	0.1 U	0.1 U	NS	NS	NS	NS	NS	NS	0.1 U
Nitrogen, Nitrite	None	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	NS	NS	NS	NS	NS	NS	0.01 U
Nitrogen, Total Kjeldahl	None	mg/L	2	0.44	1.5 J	1.2 J	NS	NS	NS	NS	NS	NS	0.2 U
Sulfate	None	mg/L	10 U	28.4	10 U	10 U	NS	NS	NS	NS	NS	NS	13.6
Total Organic Carbon	None	mg/L	11.6	2.7	32.3	8.3	NS	NS	NS	NS	NS	NS	3.3

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mg/L - milligrams per Liter

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Indicates the analyte is not detected or not sampled

			Areas 1995 & 3805 (continued)										OSL		
			Groundwater										Landfill Seep		
Analyte	**Screening Value**	**Unit**	**3805-MWS14**	**3805-MWS2**	**3805-MWS24**	**3805-MWS4**	**3805-MWS5**	**3805-PZ12S**	**3805-PZ13S**	**3805-PZ14**	**3805-PZ2S**	**3805-PZ3**	**OSL-SP01**	**OSL-SP01 (DUP)**	**OSL-SP03**
Chloride	None	mg/L	NS	NS	8.9	NS	2	23.6	NS	4.5	2.5	2.3	NS	NS	NS
Ethane	None	µg/L	NS	NS	0.27	NS	0.19	0.17	NS	0.18	0.65	0.2	NS	NS	NS
Ethene	None	µg/L	NS	NS	0.095 U	NS	0.095 U	0.24	NS	0.095 U	0.095 U	0.095 U	NS	NS	NS
Hardness, Total as CaCO3	None	mg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Iron	300	µg/L	**14,700 J**	100 U	**55,900**	**13,200**	**42,900**	**49,100**	**50,900**	**8,530**	**9,380**	**36,000**	**29,400 J**	**20,000 J**	**43,300**
Manganese	300	µg/L	**2,450**	15 U	**2,910**	**1,480**	**505**	**7,360**	**430**	**1,300**	**1,740**	**6,720**	**1,220**	**1,150**	**2,880**
Methane	None	µg/L	NS	NS	18.1	NS	105	7	NS	0.29	4.4	27.1	NS	NS	NS
Nitrogen, Ammonia	None	mg/L	NS	NS	0.3	NS	0.61	0.4	NS	0.2 U	0.33	0.2 U	NS	NS	NS
Nitrogen, Nitrate	None	mg/L	NS	NS	0.11 U	NS	0.11 U	0.11 U	NS	0.11 U	0.11 U	0.11 U	NS	NS	NS
Nitrogen, Nitrate + Nitrite	None	mg/L	NS	NS	0.1 U	NS	0.1 U	0.1 U	NS	0.1 U	0.1 U	0.1 U	NS	NS	NS
Nitrogen, Nitrite	None	mg/L	NS	NS	0.01 U	NS	0.01 U	0.01 U	NS	0.01 U	0.01 U	0.01 U	NS	NS	NS
Nitrogen, Total Kjeldahl	None	mg/L	NS	NS	0.2 U	NS	0.2 U	0.2 U	NS	0.2 U	0.2 U	0.2 U	NS	NS	NS
Sulfate	None	mg/L	NS	NS	10 U	NS	10 U	10 U	NS	10 U	10 U	10 U	NS	NS	NS
Total Organic Carbon	None	mg/L	NS	NS	12	NS	7.6	10	NS	6.3	14.4	11.6	NS	NS	NS

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			OSL (continued)			
			Surface Water			
Analyte	**Screening Value**	**Unit**	**OSL-SW06**	**OSL-SW09**	**OSL-SW09 (DUP)**	**OSL-SW10**
Chloride	None	mg/L	NS	NS	NS	NS
Ethane	None	µg/L	NS	NS	NS	NS
Ethene	None	µg/L	NS	NS	NS	NS
Hardness, Total as CaCO3	None	mg/L	207	160	145	154
Iron	300	µg/L	**580**	**775**	**738**	100 U
Manganese	300	µg/L	74.9	174	174	15 U
Methane	None	µg/L	NS	NS	NS	NS
Nitrogen, Ammonia	None	mg/L	NS	NS	NS	NS
Nitrogen, Nitrate	None	mg/L	NS	NS	NS	NS
Nitrogen, Nitrate + Nitrite	None	mg/L	NS	NS	NS	NS
Nitrogen, Nitrite	None	mg/L	NS	NS	NS	NS
Nitrogen, Total Kjeldahl	None	mg/L	NS	NS	NS	NS
Sulfate	None	mg/L	NS	NS	NS	NS
Total Organic Carbon	None	mg/L	NS	NS	NS	NS

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APPENDIX F - All Semi-Volatile Organic Compound Analytical Results, Fall 2013

			Area 1295		Area 1595				Area 1795			Area 3805								
			Groundwater		Surface Water				Surface Water			Groundwater								
Analyte	Screening Value	Unit	1295-MW30	1295-MW30 (DUP)	1595-SW01	1595-SW01 (DUP)	1595-SW04	1595-SW08	1795-SW00	1795-SW04	1795-SW08	3805-MWD16	3805-MWD18	3805-MWI12	3805-MWI15	3805-MWI15 (DUP)	3805-MWI17	3805-MWS14	3805-MWS2	3805-MWS4	3805-PZ13S
1,2,4-Trichlorobenzene	5	µg/L	0.31 U	0.31 U	0.32 U	0.31 U	0.33 U	0.31 U	0.31 U	0.32 U	0.33 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.32 U
1,2-Dichlorobenzene	3	µg/L	0.29 U	0.29 U	0.29 U	0.29 U	0.3 U	0.29 U	0.29 U	0.29 U	0.3 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U
1,4-Dichlorobenzene	3	µg/L	0.36 U	0.36 U	0.36 U	0.36 U	0.37 U	0.36 U	0.36 U	0.36 U	0.37 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U
2,4,5-Trichlorophenol	None	µg/L	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
2,4,6-Trichlorophenol	None	µg/L	1.3 U	1.3 U	1.3 U	1.3 U	1.4 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
2,4-Dichlorophenol	None	µg/L	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
2,4-Dimethylphenol	None	µg/L	1.5 U	1.5 U	1.6 U	1.5 U	1.6 U	1.5 U	1.5 U	1.6 U	1.6 U	1.5 U	1.5 U	1.5 U	1.5 R	1.5 U	10.5	1.5 U	1.5 U	1.8 J	54.7
2,4-Dinitrophenol	None	µg/L	17 UJ	17 UJ	17 U	17 U	17 U	17 U	17 U	17 U	17 U	17 U	17 U	17 U	17 R	17 U	17 U	17 U	17 U	17 U	17 U
2,4-Dinitrotoluene	5	µg/L	0.43 U	0.43 U	0.43 U	0.43 U	0.45 U	0.43 U	0.43 U	0.43 U	0.44 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
2,6-Dinitrotoluene	5	µg/L	0.46 U	0.46 U	0.47 U	0.46 U	0.49 U	0.46 U	0.46 U	0.47 U	0.48 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.47 U
2-Chloronaphthalene	10	µg/L	0.3 U	0.3 U	0.3 U	0.3 U	0.31 U	0.3 U	0.3 U	0.3 U	0.31 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
2-Chlorophenol	None	µg/L	0.97 U	0.97 U	0.99 U	0.97 U	1 U	0.97 U	0.97 U	0.99 U	1 U	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	0.99 U
2-Methylnaphthalene	None	µg/L	80	76.5	0.39 U	0.38 U	0.4 U	0.38 U	0.38 U	0.39 U	0.4 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	26.2	11.4	0.38 U	12.8	53
2-Methylphenol	None	µg/L	1 U	1 U	1.1 U	1 U	1.1 U	1 U	1 U	1.1 U	1.1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	5
2-Nitroaniline	5	µg/L	1.1 U	1.1 U	1.1 U	1.1 U	1.2 U	1.1 U	1.1 U	1.1 U	1.2 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
2-Nitrophenol	None	µg/L	1.5 U	1.5 U	1.5 U	1.5 U	1.6 U	1.5 U	1.5 U	1.5 U	1.6 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
3&4-Methylphenol	None	µg/L	0.93 U	0.93 U	0.94 U	0.93 U	0.97 U	0.93 U	0.93 U	0.94 U	0.96 U	0.93 U	0.93 U	0.93 U	0.93 UJ	0.93 U	0.93 U	0.93 U	0.93 U	0.93 U	7.1
3-Nitroaniline	5	µg/L	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
4-Bromophenyl phenyl ether	None	µg/L	0.36 U	0.36 U	0.36 U	0.36 U	0.38 U	0.36 U	0.36 U	0.36 U	0.37 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U
4-Chlorophenyl phenyl ether	None	µg/L	0.31 U	0.31 U	0.32 U	0.31 U	0.33 U	0.31 U	0.31 U	0.32 U	0.33 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.32 U
4-Nitrophenol	None	µg/L	5.2 UJ	5.2 UJ	5.3 U	5.2 U	5.5 U	5.2 U	5.2 U	5.3 U	5.4 U	5.2 U	5.2 UJ	5.2 UJ	5.2 U	5.2 U	5.2 UJ	5.2 U	5.2 U	5.2 UJ	5.3 UJ
Acenaphthene	20	µg/L	0.26 U	0.26 U	0.27 U	0.26 U	0.28 U	0.26 U	0.26 U	0.27 U	0.27 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.27 U
Acenaphthylene	None	µg/L	0.23 U	0.23 U	0.23 U	0.23 U	0.24 U	0.23 U	0.23 U	0.23 U	0.24 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
Anthracene	50	µg/L	0.29 U	0.29 U	0.29 U	0.29 U	0.3 U	0.29 U	0.29 U	0.29 U	0.3 U	0.29 U	0.29 U	0.29 U	0.29 UJ	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U
Benzo(a)anthracene	0.002	µg/L	0.23 U	0.23 U	0.23 UJ	0.23 UJ	0.24 U	0.23 U	0.23 U	0.23 U	0.24 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
Benzo(a)pyrene	0	µg/L	0.23 U	0.23 U	0.23 U	0.23 U	0.24 U	0.23 U	0.23 U	0.23 U	0.24 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
Benzo(b)fluoranthene	0.002	µg/L	0.46 U	0.46 U	0.47 U	0.46 U	0.48 U	0.46 U	0.46 U	0.47 U	0.48 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.47 U
Benzo(g,h,i)perylene		µg/L	0.32 U	0.32 U	0.33 U	0.32 U	0.34 U	0.32 U	0.32 U	0.33 U	0.34 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.33 U
Benzo(k)fluoranthene	0.002	µg/L	0.51 U	0.51 U	0.52 U	0.51 U	0.54 U	0.51 U	0.51 U	0.52 U	0.53 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.52 U
bis(2-Chloroethoxy)methane	5	µg/L	0.31 U	0.31 U	0.31 U	0.31 U	0.32 U	0.31 U	0.31 U	0.31 U	0.32 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U
bis(2-Chloroethyl)ether	5	µg/L	0.31 U	0.31 U	0.31 U	0.31 U	0.32 U	0.31 U	0.31 U	0.31 U	0.32 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U
bis(2-Ethylhexyl)phthalate	5	µg/L	**5.9**	0.59 U	0.6 UJ	0.59 UJ	0.62 U	**10.7**	0.59 U	0.6 U	0.61 U	0.59 U	0.59 UJ	0.59 U	0.59 U	0.59 U	0.59 U	0.59 U	1 J	0.59 UJ	0.6 U
Carbazole		µg/L	0.36 U	0.36 U	0.37 U	0.36 U	0.38 U	0.36 U	0.36 U	0.37 U	0.38 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.81 J
Chrysene	0.002	µg/L	0.29 U	0.29 U	0.29 UJ	0.29 U	0.3 U	0.29 U	0.29 U	0.29 U	0.3 U	0.29 U	0.29 U	0.29 U	0.29 UJ	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U
Dibenzofuran		µg/L	0.27 U	0.27 U	0.27 U	0.27 U	0.28 U	0.27 U	0.27 U	0.27 U	0.28 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
Diethyl phthalate		µg/L	0.33 U	0.33 U	0.33 U	0.33 U	0.34 U	0.33 U	0.33 U	0.33 U	0.34 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Dimethyl phthalate		µg/L	0.28 U	0.28 U	0.29 U	0.28 U	0.3 U	0.28 U	0.28 U	0.29 U	0.29 U	0.28 U	0.28 U	0.28 U	0.28 UJ	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.29 U
Di-n-butyl phthalate		µg/L	0.56 U	0.56 U	0.57 U	0.56 U	0.58 U	0.56 U	0.56 U	0.57 U	0.58 U	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U	0.57 U
Di-n-octyl phthalate		µg/L	0.31 U	0.31 U	0.31 UJ	0.31 UJ	0.32 UJ	0.31 UJ	0.31 UJ	0.31 UJ	0.32 UJ	0.31 UJ	0.31 UJ	0.31 U	0.31 UJ	0.31 UJ	0.31 U	0.31 UJ	0.31 UJ	0.31 UJ	0.31 U
Fluoranthene	50	µg/L	0.32 U	0.32 U	0.32 U	0.32 U	0.33 U	0.32 U	0.32 U	0.32 U	0.33 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
Fluorene	50	µg/L	0.28 U	0.28 U	0.28 U	0.28 U	0.29 U	0.28 U	0.28 U	0.28 U	0.29 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.55 J
Hexachlorobenzene	0.04	µg/L	0.34 U	0.34 U	0.34 U	0.34 U	0.36 U	0.34 U	0.34 U	0.34 U	0.35 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
Hexachlorocyclopentadiene	5	µg/L	7.1 U	7.1 U	7.3 UJ	7.1 UJ	7.5 UJ	7.1 UJ	7.1 UJ	7.3 UJ	7.4 UJ	7.1 U	7.1 U	7.1 U	7.1 R	7.1 U	7.1 U	7.1 U	7.1 U	7.1 U	7.3 U
Hexachloroethane	5	µg/L	0.55 U	0.55 U	0.56 U	0.55 U	0.58 U	0.55 U	0.55 U	0.56 U	0.57 U	0.55 U	0.55 U	0.55 U	0.55 U	0.55 U	0.55 U	0.55 U	0.55 U	0.55 U	0.56 U
Indeno(1,2,3-cd)pyrene	0.002	µg/L	0.37 U	0.37 U	0.38 U	0.37 U	0.39 U	0.37 U	0.37 U	0.38 U	0.39 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.38 U
Naphthalene	10	µg/L	**339**	**349**	0.26 U	0.26 U	0.27 U	0.26 U	0.26 U	0.26 U	0.27 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	**123**	**40.4**	0.26 U	**37.9**	**283**
Nitrobenzene	0.4	µg/L	0.42 U	0.42 U	0.43 U	0.42 U	0.44 U	0.42 U	0.42 U	0.43 U	0.44 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.43 U
N-Nitroso-di-n-propylamine	50	µg/L	0.3 U	0.3 U	0.31 U	0.3 U	0.32 U	0.3 U	0.3 U	0.31 U	0.31 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.31 U
N-Nitrosodiphenylamine	50	µg/L	0.31 U	0.31 U	0.31 U	0.31 U	0.32 U	0.31 U	0.31 U	0.31 U	0.32 U	0.31 U	0.31 U	0.31 U	0.31 UJ	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U
Pentachlorophenol		µg/L	1.4 U	1.4 U	1.4 U	1.4 U	1.5 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U
Phenanthrene	50	µg/L	0.29 U	0.29 U	0.3 U	0.29 U	0.31 U	0.29 U	0.29 U	0.3 U	0.3 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.3 U
Phenol	1	µg/L	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
Pyrene	50	µg/L	0.27 U	0.27 U	0.28 UJ	0.27 UJ	0.28 U	0.27 U	0.27 U	0.28 U	0.28 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.28 U

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			OSL						
			Landfill Seep			Surface Water			
Analyte	Screening Value	Unit	OSL-SP01	OSL-SP01 (DUP)	OSL-SP03	OSL-SW06	OSL-SW09	OSL-SW09 (DUP)	OSL-SW10
1,2,4-Trichlorobenzene	5	µg/L	0.31 U	0.31 U	0.31 U	0.32 U	0.31 U	0.32 U	0.32 U
1,2-Dichlorobenzene	3	µg/L	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U
1,4-Dichlorobenzene	3	µg/L	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.37 U
2,4,5-Trichlorophenol	None	µg/L	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
2,4,6-Trichlorophenol	None	µg/L	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
2,4-Dichlorophenol	None	µg/L	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
2,4-Dimethylphenol	None	µg/L	1.5 U	1.5 U	1.5 U	1.6 U	1.5 U	1.6 U	1.6 U
2,4-Dinitrophenol	None	µg/L	17 U	17 U	17 U	17 UJ	17 UJ	17 UJ	17 UJ
2,4-Dinitrotoluene	5	µg/L	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.44 U
2,6-Dinitrotoluene	5	µg/L	0.46 U	0.46 U	0.46 U	0.47 U	0.46 U	0.47 U	0.48 U
2-Chloronaphthalene	10	µg/L	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.31 U
2-Chlorophenol	None	µg/L	0.97 U	0.97 U	0.97 U	0.99 U	0.97 U	0.99 U	1 U
2-Methylnaphthalene	None	µg/L	0.38 U	0.38 U	1.3	0.39 U	0.38 U	0.39 U	0.4 U
2-Methylphenol	None	µg/L	1 U	1 U	1 U	1.1 U	1 U	1.1 U	1.1 U
2-Nitroaniline	5	µg/L	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
2-Nitrophenol	None	µg/L	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
3&4-Methylphenol	None	µg/L	0.93 U	0.93 U	0.93 U	0.94 U	0.93 U	0.94 U	0.95 U
3-Nitroaniline	5	µg/L	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
4-Bromophenyl phenyl ether	None	µg/L	0.36 UJ	0.36 UJ	0.36 UJ	0.36 U	0.36 U	0.36 U	0.37 U
4-Chlorophenyl phenyl ether	None	µg/L	0.31 U	0.31 U	0.31 U	0.32 U	0.31 U	0.32 U	0.32 U
4-Nitrophenol	None	µg/L	5.2 U	5.2 U	5.2 U	5.3 UJ	5.2 UJ	5.3 UJ	5.4 UJ
Acenaphthene	20	µg/L	0.26 U	0.26 U	0.26 U	0.27 U	0.26 U	0.27 U	0.27 U
Acenaphthylene	None	µg/L	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.24 U
Anthracene	50	µg/L	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.3 U
Benzo(a)anthracene	0.002	µg/L	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
Benzo(a)pyrene	0	µg/L	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
Benzo(b)fluoranthene	0.002	µg/L	0.46 U	0.46 U	0.46 U	0.47 U	0.46 U	0.47 U	0.47 U
Benzo(g,h,i)perylene		µg/L	0.32 U	0.32 U	0.32 U	0.33 U	0.32 U	0.33 U	0.33 U
Benzo(k)fluoranthene	0.002	µg/L	0.51 U	0.51 U	0.51 U	0.52 U	0.51 U	0.52 U	0.52 U
bis(2-Chloroethoxy)methane	5	µg/L	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.32 U
bis(2-Chloroethyl)ether	5	µg/L	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.32 U
bis(2-Ethylhexyl)phthalate	5	µg/L	0.59 UJ	2.6 J	0.59 UJ	4.2	0.59 U	0.6 U	0.6 U
Carbazole		µg/L	0.36 U	0.36 U	0.36 U	0.37 U	0.36 U	0.37 U	0.37 U
Chrysene	0.002	µg/L	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.3 U
Dibenzofuran		µg/L	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
Diethyl phthalate		µg/L	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.34 U
Dimethyl phthalate		µg/L	0.28 U	0.28 U	0.28 U	0.29 U	0.28 U	0.29 U	0.29 U
Di-n-butyl phthalate		µg/L	0.56 UJ	0.56 UJ	0.56 UJ	0.57 U	0.56 U	0.57 U	0.57 U
Di-n-octyl phthalate		µg/L	0.31 UJ	0.31 UJ	0.31 UJ	0.31 UJ	0.31 UJ	0.31 UJ	0.32 UJ
Fluoranthene	50	µg/L	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.33 U
Fluorene	50	µg/L	0.28 UJ	0.28 UJ	0.28 UJ	0.28 U	0.28 U	0.28 U	0.29 U
Hexachlorobenzene	0.04	µg/L	**0.34 U**	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.35 U
Hexachlorocyclopentadiene	5	µg/L	7.1 UJ	7.1 UJ	7.1 UJ	7.3 U	7.1 U	7.3 U	7.3 U
Hexachloroethane	5	µg/L	0.55 U	0.55 U	0.55 U	0.56 U	0.55 U	0.56 U	0.57 U
Indeno(1,2,3-cd)pyrene	0.002	µg/L	0.37 U	0.37 U	0.37 U	0.38 U	0.37 U	0.38 U	0.39 U
Naphthalene	10	µg/L	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.27 U
Nitrobenzene	0.4	µg/L	0.42 U	0.42 U	0.42 U	0.43 U	0.42 U	0.43 U	0.43 U
N-Nitroso-di-n-propylamine	50	µg/L	0.3 U	0.3 U	0.3 U	0.31 U	0.3 U	0.31 U	0.31 U
N-Nitrosodiphenylamine	50	µg/L	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U
Pentachlorophenol		µg/L	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U
Phenanthrene	50	µg/L	0.29 U	0.29 U	0.29 U	0.3 U	0.29 U	0.3 U	0.3 U
Phenol	1	µg/L	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
Pyrene	50	µg/L	0.27 U	0.27 U	0.27 U	0.28 U	0.27 U	0.28 U	0.28 U

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			Area 1295						Area 1595				
			Groundwater						Groundwater			Surface Water	
Analyte	**Screening Value**	**Unit**	**1295-MW25**	**1295-MW26**	**1295-MW30**	**1295-MW30 (DUP)**	**1295-MWS27**	**1295-MWS28**	**1595-MW33**	**1595-MWS7**	**1595-OBG2**	**1595-SW01**	**1595-SW01 (DUP)**
Aluminum	None	µg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Antimony	3	µg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Arsenic	25	µg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Barium	1000	µg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Beryllium	3	µg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Cadmium	5	µg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Calcium	None	µg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Chromium	50	µg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Cobalt	None	µg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Copper	200	µg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Iron	300	µg/L	**1,510**	21.4 U	**2,480**	**2,040**	**1,140**	96.6 U	46 B	**7,060**	**16,600**	**24,600 J**	**56,700 J**
Lead	25	µg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	6.2 R	18.9 R
Magnesium	35000	µg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Manganese	300	µg/L	119	77.5	80	67.8	42.8	23.1	**327**	**1,060**	**622**	NS	NS
Mercury	0.7	µg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Nickel	100	µg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Potassium	None	µg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Selenium	10	µg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Silver	50	µg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Sodium	20000	µg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Thallium	0.5	µg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Vanadium	None	µg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Zinc	2000	µg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

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			Area 1595 (continued)		Area 1795							Area 2140	
			Surface Water		Groundwater				Surface Water			Groundwater	
Analyte	**Screening Value**	**Unit**	**1595-SW04**	**1595-SW08**	**1795-MWS3**	**1795-MWS7**	**1795-MWS7 (DUP)**	**1795-PZ15**	**1795-SW00**	**1795-SW04**	**1795-SW08**	**2140-MW02**	**2140-MW07**
Aluminum	None	µg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Antimony	3	µg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Arsenic	25	µg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Barium	1000	µg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Beryllium	3	µg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Cadmium	5	µg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Calcium	None	µg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Chromium	50	µg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Cobalt	None	µg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Copper	200	µg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Iron	300	µg/L	**8,130**	117	**36,800**	**1,170**	**1,560**	**811**	**602**	**1,680**	**458**	**824**	**28,900**
Lead	25	µg/L	5.8	2.4 U	NS	NS	NS	NS	3 U	3 U	2.4 U	NS	NS
Magnesium	35000	µg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Manganese	300	µg/L	NS	NS	**1,210**	88.2	97.9	**1,810**	NS	NS	NS	106	**2,810**
Mercury	0.7	µg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Nickel	100	µg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Potassium	None	µg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Selenium	10	µg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Silver	50	µg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Sodium	20000	µg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Thallium	0.5	µg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Vanadium	None	µg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Zinc	2000	µg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

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			Area 2140 (continued)		Areas 1995 & 3805								
			Groundwater		Groundwater								
Analyte	**Screening Value**	**Unit**	**2140-MW07 (DUP)**	**2140-MW12**	**1995-MWS10**	**1995-MWS9**	**3805-MWD16**	**3805-MWD18**	**3805-MWI12**	**3805-MWI15**	**3805-MWI15 (DUP)**	**3805-MWI17**	**3805-MWS11**
Aluminum	None	µg/L	NS	NS	NS	NS	37.1 J	30 J	11 U	200 U	59.1 J	11 U	NS
Antimony	3	µg/L	NS	NS	NS	NS	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	NS
Arsenic	25	µg/L	NS	NS	NS	NS	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	3.8	NS
Barium	1000	µg/L	NS	NS	NS	NS	200 U	22.4 J	104 J	200 U	200 U	45.9 J	NS
Beryllium	3	µg/L	NS	NS	NS	NS	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	NS
Cadmium	5	µg/L	NS	NS	NS	NS	0.24 U	0.9 J	0.8 J	0.24 U	0.24 U	0.8 J	NS
Calcium	None	µg/L	NS	NS	NS	NS	31,800	28,600	107,000	115,000	114,000	92,200	NS
Chromium	50	µg/L	NS	NS	NS	NS	0.92 U	2 J	2.4 J	0.92 U	0.92 U	1 J	NS
Cobalt	None	µg/L	NS	NS	NS	NS	0.48 U	0.48 U	0.48 U	0.48 U	0.5 J	0.48 U	NS
Copper	200	µg/L	NS	NS	NS	NS	1 U	1.9 J	10 U	1 U	1 U	2.2 J	NS
Iron	300	µg/L	**29,500**	**385**	**56,700**	**23,700**	100 U	176	19.4 J	**918 J**	**635 J**	**10,100**	**11,300**
Lead	25	µg/L	NS	NS	NS	NS	2.4 U	2.4 U	2.5 J	2.4 U	2.4 U	2.4 U	NS
Magnesium	35000	µg/L	NS	NS	NS	NS	5,000 U	9,540	8,640	21,200	20,600	12,000	NS
Manganese	300	µg/L	**2,880**	**7,790**	**4,420**	**483**	15 U	124	15 U	**1,060**	**917**	**325**	**1,640**
Mercury	0.7	µg/L	NS	NS	NS	NS	0.089 U	0.089 U	0.089 U	0.089 U	0.089 U	0.089 U	NS
Nickel	100	µg/L	NS	NS	NS	NS	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	NS
Potassium	None	µg/L	NS	NS	NS	NS	10,000 U	10,000 U	10,000 U	10,000 U	10,000 U	10,000 U	NS
Selenium	10	µg/L	NS	NS	NS	NS	2.4 U	2.8 J	5.4 J	2.4 U	2.4 U	5.8 J	NS
Silver	50	µg/L	NS	NS	NS	NS	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	NS
Sodium	20000	µg/L	NS	NS	NS	NS	10,000 U	7,670 J	**895,000**	**92,400**	**97,800**	**65,700**	NS
Thallium	0.5	µg/L	NS	NS	NS	NS	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	NS
Vanadium	None	µg/L	NS	NS	NS	NS	1.9 J	0.72 U	0.72 U	1.1 J	0.8 J	0.72 U	NS
Zinc	2000	µg/L	NS	NS	NS	NS	4.4 U	8.7 J	4.4 U	5.2 J	4.4 U	4.4 U	NS

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			Areas 1995 & 3805 (continued)										OSL		
			Groundwater										Landfill Seep		
Analyte	**Screening Value**	**Unit**	**3805-MWS14**	**3805-MWS2**	**3805-MWS24**	**3805-MWS4**	**3805-MWS5**	**3805-PZ12S**	**3805-PZ13S**	**3805-PZ14**	**3805-PZ2S**	**3805-PZ3**	**OSL-SP01**	**OSL-SP01 (DUP)**	**OSL-SP03**
Aluminum	None	µg/L	35 J	86.5 J	NS	22.1 J	NS	NS	11 U	NS	NS	NS	1,280 J	629 J	89.1 J
Antimony	3	µg/L	1.8 U	1.8 U	NS	1.8 U	NS	NS	1.8 U	NS	NS	NS	1.8 U	1.8 U	1.8 U
Arsenic	25	µg/L	1.5 U	1.5 U	NS	4.5	NS	NS	3 U	NS	NS	NS	2.5 J	2.1 J	3.8
Barium	1000	µg/L	200 U	200 U	NS	37 J	NS	NS	211	NS	NS	NS	43.2 J	35.8 J	117 J
Beryllium	3	µg/L	0.17 U	0.17 U	NS	0.17 U	NS	NS	0.17 U	NS	NS	NS	0.17 U	0.17 U	0.17 U
Cadmium	5	µg/L	0.3 J	0.24 U	NS	0.7 J	NS	NS	0.6 J	NS	NS	NS	0.6 J	0.4 J	0.5 J
Calcium	None	µg/L	85,800	52,500	NS	45,200	NS	NS	77,300	NS	NS	NS	38,100	38,100	94,300
Chromium	50	µg/L	0.92 U	0.92 U	NS	1 J	NS	NS	6.3 J	NS	NS	NS	2 J	1.4 J	1.7 J
Cobalt	None	µg/L	0.48 U	0.48 U	NS	0.48 U	NS	NS	0.48 U	NS	NS	NS	1.2 J	0.8 J	1 J
Copper	200	µg/L	1 U	1 U	NS	1.1 J	NS	NS	10 U	NS	NS	NS	4.1 J	3.2 J	2.9 J
Iron	300	µg/L	**14,700 J**	100 U	**55,900**	**13,200**	**42,900**	**49,100**	**50,900**	**8,530**	**9,380**	**36,000**	**29,400 J**	**20,000 J**	**43,300**
Lead	25	µg/L	3.3	2.4 U	NS	2.4 U	NS	NS	8.3	NS	NS	NS	13.1	6.4	2.4 U
Magnesium	35000	µg/L	7,220	5,000 U	NS	2,470 J	NS	NS	4,800 J	NS	NS	NS	2,370 J	2,320 J	6,270
Manganese	300	µg/L	**2,450**	15 U	**2,910**	**1,480**	**505**	**7,360**	**430**	**1,300**	**1,740**	**6,720**	**1,220**	**1,150**	**2,880**
Mercury	0.7	µg/L	0.089 U	0.089 U	NS	0.089 U	NS	NS	0.089 U	NS	NS	NS	0.089 U	0.089 U	0.089 U
Nickel	100	µg/L	1.6 U	1.6 U	NS	1.6 U	NS	NS	4.8 J	NS	NS	NS	2 J	1.6 U	1.7 J
Potassium	None	µg/L	10,000 U	10,000 U	NS	10,000 U	NS	NS	10,000 U	NS	NS	NS	10,000 U	10,000 U	10,000 U
Selenium	10	µg/L	2.4 J	2.4 U	NS	4.9 J	NS	NS	4.5 J	NS	NS	NS	2.4 U	2.4 U	2.4 U
Silver	50	µg/L	1.5 U	1.5 U	NS	1.5 U	NS	NS	1.5 U	NS	NS	NS	1.5 U	1.5 U	2.6 J
Sodium	20000	µg/L	**427,000**	10,000 U	NS	**101,000**	NS	NS	**115,000**	NS	NS	NS	**61,300**	**60,900**	**207,000**
Thallium	0.5	µg/L	1.3 U	1.3 U	NS	1.3 U	NS	NS	1.3 U	NS	NS	NS	1.3 U	1.3 U	1.3 U
Vanadium	None	µg/L	2 J	0.72 U	NS	0.72 U	NS	NS	0.72 U	NS	NS	NS	2 J	0.72 U	0.72 U
Zinc	2000	µg/L	4.4 U	4.4 U	NS	4.4 U	NS	NS	4.4 U	NS	NS	NS	33.1	24.3	6.8 J

Qualifier Key:

U - Analyte not detected in the sample. Value represents the quantitation/detection limit.

J - Result reported is a quantitative estimate

R - Rejected Data

Abbreviation Key:

NS - Not Sampled

µg/L - Micrograms per Liter

A Cell Highlighted and Bold Indicates a detected analyte that exceeds the screening criteria
A cell highlighted and not bold Inidcates a detected analyte that does not exceed the screening criteria
Indicates the analyte is not detected or not sampled

			OSL (contined)			
			Surface Water			
Analyte	**Screening Value**	**Unit**	**OSL-SW06**	**OSL-SW09**	**OSL-SW09 (DUP)**	**OSL-SW10**
Aluminum	None	µg/L	200 U	200 U	200 U	200 U
Antimony	3	µg/L	1.8 U	2.2 J	1.8 U	1.8 U
Arsenic	25	µg/L	1.5 U	1.6 J	1.5 U	1.5 U
Barium	1000	µg/L	200 U	200 U	200 U	200 U
Beryllium	3	µg/L	0.17 U	0.17 U	0.17 U	0.17 U
Cadmium	5	µg/L	3 U	3 U	3 U	3 U
Calcium	None	µg/L	45,100	50,300	50,000	39,600
Chromium	50	µg/L	0.92 U	1.4 J	0.92 U	0.92 U
Cobalt	None	µg/L	0.48 U	0.48 U	0.48 U	0.48 U
Copper	200	µg/L	1.3 J	1 U	1 U	1 U
Iron	300	µg/L	**580**	**775**	**738**	100 U
Lead	25	µg/L	2.4 U	2.4 U	2.4 U	2.4 U
Magnesium	35000	µg/L	5,880	5,080	5,090	2,980 J
Manganese	300	µg/L	74.9	174	174	15 U
Mercury	0.7	µg/L	0.089 U	0.089 U	0.089 U	0.089 U
Nickel	100	µg/L	1.6 U	1.6 U	1.6 U	1.6 U
Potassium	None	µg/L	10,000 U	10,000 U	10,000 U	10,000 U
Selenium	10	µg/L	2.4 U	2.4 U	2.4 U	2.4 U
Silver	50	µg/L	1.5 U	1.5 U	1.5 U	1.5 U
Sodium	20000	µg/L	**61,100**	**69,100**	**64,600**	**22,300**
Thallium	0.5	µg/L	10 U	1.3 U	1.3 U	1.3 U
Vanadium	None	µg/L	0.72 U	0.72 U	0.72 U	0.72 U
Zinc	2000	µg/L	4.4 U	4.4 U	4.4 U	4.4 U

Qualifier Key:

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