

Environment

Prepared for: Superfund Standby Program NYSDEC Albany, NY Prepared by: AECOM Chestnut Ridge, NY 60277021 April 2013

2012 Periodic Review Report Dzus Fasteners Site, Site #1-52-033 Work Assignment No. D007626-17

Final

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Engineering Certification

I, Scott A. Underhill, certify that I am currently a NYS registered professional engineer and that this Periodic Review Report for the Dzus Fasteners Site (Site Number # 1-52-033) was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10).

Respectfully submitted,
AECOM Technical Services Northeast, Inc.
New York License No. 075332

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Executive Summary

AECOM Technical Services Northeast, Inc (AECOM) has prepared this Periodic Review Report (PRR) for the Dzus Fasteners Site (the Site) in West Islip, Suffolk County, NY (Figure 1). The period of review for this report is November 2011 to December 2012.

The Dzus Fastener facility was used to manufacturer fasteners and springs from 1932 to the present. Discharge of oils, heavy metals and salts via on-site leaching pools led to the contamination of soil, groundwater, and nearby surface waters and sediment in Willetts Creek and Lake Capri. An initial site inspection took place in August 1983. Contamination was discovered later in August 1983 and a preliminary site assessment was completed in September 1984. A phase I investigation was completed and a phase II investigation was submitted by Dzus in August of 1990. The primary contaminant of concern at the Site, and in Willetts Creek and Lake Capri, is cadmium. Dzus completed an Interim Remedial Measure (IRM) in October 1990. During the IRM a leach field on the eastern side of the site was removed. A remedial investigation / feasibility study (RI/FS) was initiated on the site in 1992. The site was then broken up into the two Operable Units (OU1: the Dzus facility; and OU2: the offsite localities including Willetts Creek and Lake Capri). A Record of Decision (ROD) for OU1 was issued for the site in March 1995, and a ROD for OU2 was issued for the site in October 1997. In response to the ROD for OU1, the remedy for contaminated groundwater in the vicinity of the Dzus facility consisted of source removal and ongoing natural attenuation. An asphalt cover at the eastern parking lot at the Dzus manufacturing facility was constructed to eliminate the potential for direct human contact with the underlying contaminated soils at the site, and to eliminate or reduce the mobility of soil contaminants that would cause further groundwater degradation. In response to the ROD for OU2, Lake Capri and a portion of Willetts Creek were dredged in 1999 and riprap was used to cover portions identified as having deeper zones of contamination in order to prevent future erosion.

In accordance with the remedial design, the fish population of Lake Capri was eradicated using Rotenone, a NYSDEC approved fish eradicant, in July 1999. In 2000 after completion of the remedial activities, the lake was restocked with silversides; bluegill, *Lepomis macrochirus*; and largemouth bass, *Microptera salmoides*.

The periodic review (PR) process is used for determining if a remedy continues to be properly managed, as set forth in the ROD and continues to be protective of human health and the environment. The results of PR have lead to the determination that the site is in general compliance with the applicable requirements as presented in the ROD.

Conclusions

Site Maintenance: Groundwater monitoring well MW-1 could not be located. The asphalt cover located at the Dzus Fasteners Facility currently has vegetation growing through cracks in the pavement. The current maintenance status of the riprap in Willetts Creek and Lake Capri is

unknown. The LTMP laid out guidelines for monitoring the riprap but there are no written records of its condition and maintenance.

- Groundwater: The only metal of concern found consistently in off-site wells above the Class GA criteria is cadmium. The majority of the exceedances are concentrated along the eastern side of the Site. Concentrations of iron, manganese, and sodium have exceeded the criterion in numerous wells but these compounds are typically found in groundwater on Long Island and are most likely representative of background conditions and not Site-related.
- Surface Water: Seven metals have been detected at concentrations above their Class A Surface Water criteria including antimony, cadmium, iron, manganese, selenium, sodium and thallium. Cadmium concentrations did not exceed the criterion in any of the surface water samples during the September 2012 sampling event. Antimony, iron, manganese, sodium concentrations do not appear to be Site related. Selenium and thallium have not been detected in the past two sampling rounds.
- Sediments: The sediment sample data indicate that the surficial sediments in Lake Capri and Willetts Creek remain contaminated with metals concentrations above the applicable NYSDEC Technical Guidance for Sediment Criteria. Copper, lead and several other metals (i.e., antimony, arsenic, chromium, iron, manganese, mercury, nickel, and zinc) have been detected sporadically at concentrations exceeding the criteria during the five sampling events.
- Fish Tissue: Fish samples collected were well below the target of 80 samples of at least 100 g and as a consequence, most samples consisted of numerous small fish. Fish size and numbers were inadequate for the assessment of cadmium contamination of fish tissues.

Recommendations

- Locate the damaged/destroyed monitoring well MW-1 and assess conditions.
- Establish the inspection protocol of the asphalt cover at the Dzus Fasteners facility.
- Perform an evaluation of the riprap erosion controls currently in place in Willetts Creek and in Lake Capri.
- Continue sampling on a five-quarter basis.
- Re-evaluate the current fish sampling protocol.
- Remove cyanide from the list of chemical analyses.
- The extent of elevated cadmium concentrations in sediments from Willetts Creek and Lake Capri needs to be assessed.
- Prepare a Site Management Plan (SMP).
- Perform five-year periodic review of the Site in 2016.

1.0 Introduction

1.1 Site History and Remedial Program

The Dzus Fastener Manufacturing Facility (Site) is located at 425 Union Boulevard in West Islip, Suffolk County, New York (Figure 1). The Dzus Fastener facility, a manufacturer of fastener and springs since 1932, was responsible for the release of oils, heavy metals, and salts via onsite leaching pools used for the disposal of hazardous waste and former discharge into Upper Willetts Creek, located immediately east of the facility. These operations led to soil and groundwater contamination at the Dzus facility and downstream groundwater, sediment, and surface water contamination of nearby Willetts Creek and Lake Capri, an eight-acre man-made lake.

An Interim Remedial Measure (IRM) conducted in 1991 resulted in removal of a leach pool at the eastern side of the Site. The project was divided into two operable units. Operable Unit 1 (OU1) consisted of the manufacturing facility itself. A Record of Decision (ROD) for OU1 was issued for the Site by New York State Department of Environmental Conservation (NYSDEC) in March 1995. The selected remedy consisted of the following:

- In-situ stabilization/solidification for soils containing cadmium at concentrations greater than 10 parts per million (ppm). Three areas on the western portion of the facility were excavated and mixed with the soils to be treated on the eastern portion of the Site;
- Design and installation of a final topsoil/asphalt cover at the eastern portion of the Site, which would protect the treatment cells from erosion;
- Implementation of institutional controls, such as deed restrictions at the Site.

The second operable unit, Operable Unit 2 (OU2) consisted of offsite contamination, including sediment and water contamination of Willetts Creek and Lake Capri. A ROD for OU2 was issued for the Site by NYSDEC in October 1997. The selected remedy consisted of the following:

- Dredging, dewatering and off-site disposal of contaminated sediments from Lake Capri;
- Excavation and off-site disposal of approximately 100 cubic yards of sediment from Willetts Creek, corresponding to levels of cadmium exceeding 9 ppm;
- A long-term monitoring program to evaluate the effectiveness of the on-site remedy and to verify that existing groundwater plume does not impact public health or environment.

An Operation, Maintenance and Monitoring (OM&M) program for the Site was based on NYSDEC Draft DER-10 – Technical Guidance for Site Investigation and Remediation (December 2002). As part of the OM&M, a long-term monitoring plan (LTMP) was developed for OU1 and OU2 with regard to monitoring of groundwater, surface water, sediment, and the asphalt cover (engineering control) in the manufacturing facility's eastern parking lot. The Final Sampling and Analysis Plan (SAP), dated June 2007, outlines the most recent sample collection procedures.

The primary contaminant of concern at the Site is cadmium, but several other metals including antimony, arsenic, chromium, iron, lead, manganese, sodium, and thallium have been found in exceedance of published standards in soil and groundwater at the Dzus facility and in the water and sediments of nearby Willetts Creek and Lake Capri.

1.2 Remedy Evaluation and Recommendations Summary

In summary, this Periodic Review Report (PRR) is intended to evaluate the ongoing management of the selected remedial program for OU1 and OU2, as designed. Based on information reviewed as part of this PRR, implementation of investigation and maintenance activities is required in order to ensure that the remedy is performing properly and effectively, and is protective of public health and the environment.

In order to return to compliance with the requirements presented in the ROD and OM&M program, a summary of recommended investigation and maintenance activities is provided below. Details with regard to these recommendations are also provided in Section 5.0 of this Report.

- Continue sampling on a five-quarter basis in order to better evaluate temporal trends for cadmium and other metals found in exceedance of the NYSDEC groundwater, surface water, and sediment criteria.
- Monitoring results of sediment sampling of Willetts Creek indicate that cadmium concentrations continue to exceed the cleanup goal of 9 mg/kg. It is AECOM's recommendation to re-sample the length of Willetts Creek to determine if the current sampling locations are appropriate and sufficient for characterizing the long-term effectiveness of remedial actions.
- Sediment monitoring results of Lake Capri also indicate exceedances of the 9 mg/kg cleanup goal. AECOM recommends re-sampling the lake to determine if hotspots are present and to evaluate current sampling locations.
- Re-evaluate the current fish sampling protocol. Currently, Lake Capri does not provide fish of
 sufficient number or of sufficient size to meet the SAP requirements for fish tissue sampling.
 Other options for obtaining accurate cadmium levels in edible sized fish should be considered
 (e.g., towed gill nets or a more robust trapping program). Also evaluate whether the
 restocking program was successful in reestablishing a large healthy fishy population in Lake
 Capri. The current NYSDOH fish advisory applies only to carp. Several rounds of fish
 collection have failed to capture any carp. NYSDOH should consider revising the fish
 advisory to include other species.
- Re-evaluate the need to include cyanide on the analyte list for future sampling events based on the contaminants of concern indentified in the ROD for OU1 and OU2.
- Locate damaged or destroyed monitoring wells MW-1 and MW-17 and either repair or properly abandon the wells. If either well is abandoned, a replacement well should be considered.
- Establish the inspection protocol of the asphalt cover at the Dzus Fasteners facility. The evaluation can be completed and reported along with the sampling program on a five-quarter basis.

- Perform an evaluation of the riprap erosion controls currently in place in Willetts Creek and in Lake Capri. The evaluation can be completed along with the re-sampling effort in the creek and lake scheduled for 2013.
- Evaluate the implemented remedies' effectiveness towards moving the Site to closure.
- Perform annual, desktop periodic reviews of the Site.

Total annual costs for completion of all the required monitoring is approximately \$25,000, based on costs incurred in calendar year 2011 (this excludes the cost of fish monitoring).

2.0 Site Overview

AECOM has prepared this PRR for the Dzus Fastener Manufacturing Site, located in the Town of West Islip, Suffolk County, New York. This PRR covers the period of November 2011 through December 2012. This work was performed for the New York State Department of Environmental Conservation (NYSDEC) under Work Assignment D004445-14.3 of AECOM's Superfund Standby Contract with NYSDEC. The NYSDEC has assigned the Site the ID No. 1-52-033 on the NYSDEC's registry of inactive hazardous waste sites. Dzus Fastener is a Class 4 site. A Class 4 site is a site that has been remediated but requires continued OM&M.

2.1 Objectives of the Periodic Review

The periodic review process is used for determining if a remedy continues to be properly managed as set forth in the guidance documents for the Site, and is protective of human health and the environment. The objectives of the periodic review for sites in the State Superfund Program are as follows:

- Determine if the remedy remains in place, is performing properly and effectively, and is protective of public health and the environment;
- Evaluate compliance with the decision document(s) and the SMP;
- Evaluate the condition of the remedy;
- Verify, if appropriate, that the intent of Institutional Controls (IC) continues to be met, and that Engineering Controls (EC) remain in place, are effective and protective of public health and the environment;
- Evaluate the implemented remedies' effectiveness towards moving the Site to closure; and,
- Evaluate costs.

2.2 Remedial History

The Dzus Fasteners facility was used to manufacture fasteners and springs from 1932 to the present. Discharge of oils, heavy metals and salts via onsite leaching pools led to the contamination of soil, groundwater, and nearby surface waters and sediment. The principal containment of concern is cadmium, reported as high as 1,100 parts per billion (ppb) during groundwater sampling in 1998, and in the Lake Capri and upper Willetts Creek sediments at maximum concentrations of 407 parts per million (ppm). Other constituents, such as chromium and cyanide in groundwater, and zinc, iron and lead in surface water, were also present, but at frequencies and concentrations of lesser environmental concern. Of the 36 groundwater wells identified in the 1998 Pre-Design Investigation (PDI), 14 are currently used for groundwater monitoring (one of the wells used for monitoring was damaged between the 2007 and 2008 sampling events), eight have been covered over or abandoned, two were not found, and 12 are not currently a part of the regular monitoring at the Dzus facility. Due

to contamination in Lake Capri and Willetts Creek, limits were placed on consumption of fish species from the lake to no greater than one meal per month.

The initial site inspection took place in August 1983. The contamination was discovered later in August 1983 and the preliminary site assessment was completed in September 1984. A Phase I investigation was completed and a Phase II investigation was submitted by Dzus in August of 1990. Dzus then completed an Interim Remedial Measure (IRM) in October 1990. During the IRM a leach field on the eastern side of the site was removed. A remedial investigation / feasibility study (RI/FS) was initiated on the site in 1992. The site was then broken up into the two Operable Units: OU1, the Dzus facility; and OU2, the offsite localities including Willetts Creek and Lake Capri. A ROD for OU1 was issued for the site in March 1995. The remedial goals as specified in the OU1 ROD are as follows (NYSDEC, 1995):

Eliminate the potential for direct human contact with the contaminated soils at the site;

- Eliminate or reduce the mobility of contaminants in on-site soils that would cause further groundwater contamination; and,
- Eliminate the hazardous wastes on-site or treat them to render them as non-hazardous.

The remedy for contaminated groundwater in the vicinity of the Dzus facility consisted of source removal and ongoing natural attenuation. The remedy for contaminated soils at the Site (OU1), included solidification of on-site soils containing greater than 10 ppm cadmium which was completed in 1996. An asphalt cover at the eastern parking lot at the Dzus manufacturing facility was constructed to eliminate the potential for direct human contact with the underlying contaminated soils at the site, and to eliminate or reduce the mobility of soil contaminants that would cause further groundwater degradation.

A ROD for OU2 was issued for the site in October 1997. The remedial goals are as follows:

- Manage contaminated groundwater to prevent human exposure and to minimize impacts to the environment;
- Reduce cadmium concentrations in sediments to levels that are protective of human health and the environment; and,
- Eliminate the potential for direct human or animal contact with contaminated sediments.

In response to the ROD for OU2, Lake Capri and a portion of Willetts Creek were dredged in 1999 and riprap was used to cover portions identified as having deeper zones of contamination in order to prevent future erosion. Per the remedial design, fish population was eradicated from Lake Capri. Following the remedial measures for OU1 and OU2, the long term monitoring plan (LTMP) was developed in 2000. The Final Sampling and Analysis Plan (SAP) dated June 2007 is the most recent document outlining sampling procedures. Groundwater, surface water, and sediment sampling was completed in 2006, 2007, 2008, 2010, 2011 and 2012. Fish Tissue sampling was completed in 2006, 2007, 2010 and 2012. Below is a detailed description of remedial activities implemented at OU2.

Willetts Creek

Blue Water Environmental, Inc. (BWE) of Farmingdale, Long Island, New York, was the contractor who performed the dredging. BWE mechanically excavated impacted portions of Willetts Creek using a low ground pressure excavator and transporting excavated sediments directly to roll-offs. Water within the creek was controlled using isolation pumps.

Post excavation sampling and analysis were conducted after dredging of an area was complete to determine if the Willetts Creek target cleanup level of 9 mg/kg cadmium had been reached. The sampling results are provided in Appendix B and Figure 1A. They largely confirmed successful removal of targeted sediments for the excavated portions of Willetts Creek with the exception of the northern region (Earth Tech, 2000a). With approval from NYSDEC further remediation to that region involved placement of a non-woven geo-textile, 2-inch minus stone and 4 to 6-inch riprap to serve as an erosion barrier.

Lake Capri

Lake Capri, including the 0.25 acre lagoon in the northwest corner of the lake, was dredged using hydraulic dredging methods where possible, and mechanical excavation where the minimum draft of the dredge could not be met, and where maneuverability of the dredge was hampered by obstacles or debris. The east shoreline, north shoreline and the lagoon were mechanically excavated as well as regions around a small island in the northern part of the lake. The Design Analysis Report (DAR) estimated that approximately 19,000 cubic yards (cy) of sediment would be removed from Lake Capri and the lagoon. Actual sediments removed were approximately 17,095 cy, estimated from comparison of pre- and post-excavation hydrographic surveys. A model SP 920 Mudcat dredge was deployed in Lake Capri using an 8-inch diameter cutter head attachment and 100 hp booster pump for conveying the dredge slurry to the processing facility setup in the nearby high school parking lot.

Post excavation sampling and analysis were conducted for Lake Capri following the dredging to ensure removal of contaminated sediment. Additional excavation was performed in the areas which still contained variable amounts of cadmium-contaminated sediments to reach a set-up goal of 1 mg/kg of cadmium. The sampling results are provided in Appendix B

Sediments removed by mechanical or hydraulic dredge were sampled on a per load basis for total and/or TCLP cadmium for waste classification, and processed and disposed offsite in a manner complying with a NYSDEC Research, Design and Development (RD&D) permit allowing BWE to mix/process Lake Capri sediments. All the waste material from the Site was classified as non-hazardous. The resultant material was deemed a "beneficial use" under the permit specifications. The liquid portion of the dredged material was processed in a temporary water treatment system. Treated effluent was discharged back in to the lake under NYSDEC authorized State Pollutant Discharge Elimination System (SPDES) permit limits. Both the liquid and solid treatment procedures and treatment system parameters are described in the Construction Certification Report (October 2000).

Per the remediation design, in July 1999 the fish population of Lake Capri was eradicated using a concentration of 20 milligrams per liter (mg/L) of Rotenone, a NYSDEC approved fish eradicant. 5,800 pounds of fish carcasses were removed via netting and collected in a vacuum truck for transport and disposal. In 2000 after completion of the remedial activities, the lake was restocked with silversides, bluegill (*Lepomis macrochirus*) and largemouth bass (*Microptera salmoides*).

3.0 Evaluate Remedy Performance, Effectiveness, and Protectiveness

A SAP (Earth Tech, 2007a) and Project Management Plan (Earth Tech, February 2007b) were developed under a previous work assignment (D004445-14). The SAP outlines the following activities on a five-quarter basis:

- Monitoring well inspection: Inspect the 14 monitoring wells designated for groundwater sampling and complete the NYSDEC Monitoring Well Field Inspection Log for each. Obsolete and damaged wells need to be properly abandoned.
- Groundwater monitoring: 14 wells are designated for periodic groundwater sampling and analysis of target analyte list (TAL) metals (Figure 2).
- Surface water monitoring: surface water sampling at six locations, two from Willetts Creek and four from Lake Capri (Figure 2) and analyzed for TAL metals.
- Sediment monitoring: sediment sampling at six designated locations co-located with the surface water samples (Figure 2) and analyzed for TAL metals.
- Fish tissue sampling: collect fish tissue samples at the north and south ends of Lake Capri (Figure 2).

3.1 Operation and Maintenance Plan Compliance Report

The current operation and monitoring (O&M) program at the Site consists of groundwater monitoring well inspection and repair.

3.1.1 O&M Plan Compliance

The following summarizes operation and maintenance activities undertaken at the Site from 2006 through 2012:

	Required Frequency (X)			Compliance Dates
Activity	Annually	Five- Quarter	As needed	
Groundwater Monitoring Well Inspection and Maintenance		х		2006, 2007, 2008, 2010, 2011 and 2012

3.1.2 Evaluation of O&M Activities

Logs of monitoring well inspections have been submitted to NYSDEC as part of periodic groundwater sampling reports (Earth Tech, 2006, 2007, 2009 and AECOM, 2010, 2011 and 2012). Monitoring well

MW-1 was destroyed and therefore was not sampled in 2008, 2010 or 2011. A site visit of AECOM personnel on August 22, 2012 (Appendix C) to the Dzus Fasteners facility revealed that vegetation was growing within cracks in the asphalt cover. Regular inspection of the asphalt cover and rip rap is needed to ensure proper protection of human health and wildlife; this is currently not included in the SAP.

3.2 Monitoring Plan Compliance Report

The Final Project Management Plan (Earth Tech, February 2007a) and Final SAP (Earth Tech, 2007b) are referenced as the Site guidance documents. This PRR assesses whether the site has been managed as set forth in these documents. To date, six sampling events (groundwater, surface water and sediment) have been conducted at the Site and four rounds of fish tissue samples have been collected. Analysis performed during each sampling event included TAL metal analysis for groundwater, sediment, surface water, and cadmium analysis for fish tissue sampling. Three recent reports outline the data analysis and results for the Site and nearby Willetts Creek and Lake Capri. Data reports were finalized in 2006, 2007, 2009, 2010, 2011 and 2012. The August/September 2012 sampling event reports for groundwater, surface water, sediment are currently in review.

The current monitoring program is as follows:

- Water levels measurements are collected from all Site monitoring wells on a five quarter basis;
- Groundwater sampling is conducted from 14 monitoring wells on a five-quarter basis and analyzed for TAL metals. During the 2011 and 2012 sampling events, both filtered and unfiltered metals samples were collected; however, this is not part of the long-term monitoring program. The 14 monitoring wells are MW-1, MW-2, MW-3, MW-9, MW-9B, MW-13A, MW-13B, MW-15A, MW-15B, MW-18, MW-22A, MW-22B, MW-23A, and MW-23B. Field measurements of temperature, pH, conductivity, oxygen reduction potential, dissolved oxygen and turbidity are recorded during each sampling event;
- Sediment and surface water sampling is conducted on a five quarter basis and analyzed for TAL metals;
- Fish samples are currently collected on a five quarter basis and analyzed for cadmium. Fish sampling was suspended by NYSDEC during the 2008 sampling event but restarted in 2010; and,
- Preparation of sampling reports that summarize analytical results of each sampling round;

In June 2006, August 2007, November 2008, March 2010, May 2011 and August 2012, AECOM conducted sampling events at the Dzus Fastener facility, Willetts Creek, and Lake Capri. Sampling for 2006 was directed in accordance with the SAP prepared by Earth Tech, dated April 2006. On June 8, 2006, Earth Tech (now AECOM) conducted groundwater sampling at the following wells: MW-1, MW-2, MW-3, MW-9, MW-9B, MW-13A, MW-13B, MW-15A, MW-15B, MW-18, MW-22A, MW-22B, MW-23A, and MW-23B. A summary of well construction data is presented in Table 1. Groundwater samples were analyzed for TAL metals. Prior to sampling, a synoptic round of water

level measurements was collected from the 14 selected monitoring wells. The locations of the wells are shown on Figure 2. On June 21, 2006, sediment and surface water samples were collected at six co-located locations and analyzed for TAL metals. These sampling locations are also shown on Figure 2. Fish samples were collected from the north and south parts of Lake Capri in July 2006. Fish were collected using electro shocking, gill nets and traps, and analyzed for cadmium on a wet weight basis.

The second round of sampling occurred August 22 and 23, 2007. Water levels and groundwater sampling were conducted on the same 14 wells that were sampled in June 2006. The samples were analyzed for TAL metals. Surface water and sediment sampling took place at the same six co-located locations as in 2006 and were also analyzed for metals. Fish sampling took place on May 10, 2007 and samples were analyzed for cadmium. Fish were collected using electro shocking, traps, and baited lines. Sampling was conducted in accordance with the June 2007 SAP.

The third round of sampling occurred November 11 through 15, 2008. Water levels and groundwater sampling were conducted on the same wells as the two previous years with the exception of MW-1, which was not located and is believed to have been damaged or destroyed by snowplowing. The samples were analyzed for TAL metals; surface water and sediment sampling took place at six co-located locations as in previous years. Based on discussion with NYSDEC, fish monitoring was not conducted due to low number and inadequate size of fish collected during sampling in 2006 and 2007.

The fourth round of groundwater sampling occurred March 9 and 10, 2010. The fourth round of surface water and sediment sampling was conducted on March 4, 2010. Of the 14 monitoring wells identified for long-term sampling, only 12 were sampled in March 2010; MW-1 was destroyed during the winter of 2007/2008, and MW-15B, located in the parking lot of Ace Hardware, was covered by several pallets of mulch and could not be accessed during the sampling event. Groundwater samples were analyzed for TAL metals. Surface water and co-located sediment samples were collected at the same locations as during previous years and were also analyzed for TAL metals. Fish tissue samples were collected on October 13 and 14, 2010. Fish were collected using electroshocking and traps. All sampling was conducted in accordance with the June 2007 SAP.

The fifth round of groundwater sampling occurred on May 25, 2011. The fifth round of surface water and sediment sampling occurred on May 22, 2011. Of the 14 monitoring wells identified for long-term sampling, 13 were sampled in May 2011. MW-1 was destroyed as noted above and was not sampled. In an effort to better understand the metals data collected from monitoring well samples, Round 5 groundwater samples were filtered in the field using 0.45 micron filters and both total and dissolved samples were analyzed for TAL metals. Surface water and co-located sediment samples were collected at the same locations as during previous years and were also analyzed for TAL metals. All sampling was conducted in accordance with the June 2007 SAP.

The sixth round of groundwater sampling occurred in August 2012. The sixth round of surface water and sediment sampling occurred in September 2012. Of the 14 monitoring wells identified for

long-term sampling, 13 were sampled in August 2012. As noted above, MW-1 was destroyed and was not sampled. As during Round 5, groundwater samples were also filtered in the field using 0.45 micron filters and both total and dissolved samples were analyzed for TAL metals. Surface water and co-located sediment samples were collected at the same locations as during previous years and were also analyzed for TAL metals. All sampling was conducted in accordance with the June 2007 SAP. For Round 6 groundwater sampling, NYSDEC requested that all groundwater samples be collected using low-flow techniques. Previous sampling was performed using the volumetric method. A peristaltic pump with dedicated poly tubing was used to purge each well prior to sampling. The flow rate was set to between 200 to 500 milliliters per minute (mL/min). Field measurements of pH, temperature, specific conductivity, dissolved oxygen (DO), and oxidation reduction potential (ORP) were collected at five-minute intervals until all parameters were stabilized. Fish tissue samples were collected on September 17, 18 and 19, 2012. Fish were collected using bailed lines, gill nets and traps. All sampling was conducted in accordance with the June 2007 SAP.

3.2.1 Monitoring Plan Compliance Report

The following summarizes monitoring activities at the Site conducted to-date in accordance with the SAP. AECOM conducted sampling events at the Dzus Fastener facility, Willetts Creek, and Lake Capri in June 2006, August 2007, November 2008, March 2010, May 2011 and August 2012:

Activity	Required Frequency (X)	Compliance Dates
Activity	Five Quarter	
Groundwater Monitoring	Х	2006-2012
Water Level Monitoring	х	2006-2012
Surface Water Sampling	х	2006-2012
Sediment Sampling	х	2006-2012
Fish Tissue Sampling ¹	х	2006, 2007, 2010, 2012

1 Fish tissue sampling was not conducted in 2008 at the request of NYSDEC due to the small number of fish collected in 2006 and 2007.

Groundwater Level Measurement

Groundwater level measurements from 2006 through 2012 in the 14 monitoring wells (13 in 2008 through 2012) are presented in Table 2. Comparison of the groundwater elevations in the monitoring wells shows that the general groundwater flow direction is towards the south-southwest. A groundwater contour map is presented in Figure 3 and was constructed using data from the August

2012 sampling event. A groundwater hydrograph is shown in Figure 3A. As shown on this figure, the elevations in each well tend to rise and fall in sync.

3.2.2 Confirm that Performance Standards are Being Met

The sections below discuss the results of the groundwater, surface water, sediment, and fish tissue sampling conducted in accordance with the guidance documents and provide a summary of the results.

Groundwater

Fourteen monitoring wells are included in the long term monitoring plan: MW-1, MW-2, MW-3, MW-9, MW-9B, MW-13A, MW-13B, MW-15A, MW-15B, MW-18, MW-22A, MW-22B, MW-23A, and MW-23B and are shown on Figure 2. Laboratory analytical results for the TAL metal analyses have been provided in the groundwater monitoring reports in for the four sampling events that occurred in 2006, 2007, 2008, 2010, 2011 and 2012. The summary of groundwater results for these sampling events is presented in Table 3. A summary of groundwater results is presented in Figure 4.

Ten metals have been detected at concentrations above their Class GA criteria at least once during the six rounds of groundwater sampling at the Site. These metals include antimony, arsenic, cadmium, chromium, iron, lead, manganese, selenium, sodium, and thallium. Out of these metals, only antimony, cadmium, chromium, iron, manganese, sodium and thallium were detected at concentrations above Class GA criteria in August 2012.

Antimony - Class GA criterion of 3 µg/L

June 2006 - Detected in four of 14 monitoring wells; one exceedance: 3.2 µg/L at MW-23B.

- August 2007 Detected in four of 14 monitoring wells; four exceedances: maximum 7.3 μ g/L in MW-2.
- November 2008 Detected in one of 13 monitoring wells; one exceedance: 5.1 µg/L in MW-18.
- March 2010 Detected in seven of 12 monitoring wells; seven exceedances: maximum of 13 in MW-22A.
- May 2011 Not detected in any of the 13 filtered or unfiltered monitoring well samples.
- August 2012 Detected in two of 13 unfiltered monitoring well samples; two exceedances: maximum of 10.7 μ g/L in MW-3. Not detected in any of the 13 filtered monitoring well samples.

Arsenic - Class GA criterion of 25 µg/L

June 2006 – Detected in nine of 14 monitoring wells; one exceedance: 32.6 µg/L in MW-9.

August 2007 - Detected in five of 14 monitoring wells; no exceedances.

November 2008 - Detected in two of 13 monitoring wells; no exceedances.

March 2010 – Detected in seven of 12 monitoring wells; no exceedances.

May 2011 – Detected in 7 of 13 unfiltered samples and 5 of 13 filtered samples. No exceedances.

August 2012 – Not detected in any of the 13 unfiltered or filtered monitoring well samples.

Cadmium – Class GA criterion of 5 µg/L

June 2006 – Detected in all 14 monitoring wells; ten exceedances: maximum of 320 µg/L at MW-23B.

August 2007 - Detected in all 14 monitoring wells; ten exceedances: maximum 702 µg/L in MW-23A.

- November 2008 Detected in all 13 monitoring wells: eight exceedances: maximum of 1,080 µg/L in MW-23A.
- March 2010 Detected in 12 of 13 monitoring wells; nine exceedances: maximum of 704 μ g/L in MW-23A.
- May 2011 Detected in nine of 13 unfiltered samples; seven exceedances: maximum of 924 μg/L in MW-23A. Detected in six of 13 filtered samples; six exceedances, maximum of 13.1 μg/L in MW-3.

August 2012 – Detected in seven of 13 unfiltered samples; five exceedances: maximum of 93.5 μ g/L in MW-13A. Detected in seven of 13 filtered samples; four exceedances, maximum of 64.4 μ g/L in MW-13A.

Chromium - Class GA criterion of 50 µg/L

June 2006 – Detected in all 14 monitoring wells; two exceedances: maximum 125 µg/L in MW-9.

- August 2007 Detected all 14 monitoring wells; one exceedance: 62.2 µg/L in MW-9.
- November 2008 Detected in five of 13 monitoring wells; no exceedances.
- March 2010 Detected in all 12 monitoring wells; two exceedances: maximum of 62.7 µg/L in MW-9.
- May 2011 Detected in 12 of 13 unfiltered samples; one exceedance in MW-9 at 85.5 µg/L. Detected in five of 13 filtered samples, no exceedances.

August 2012 – detected in ten of 13 unfiltered samples; no exceedances. Detected in eight of 13 filtered samples; no exceedances.

Iron – Class GA criterion of 300 µg/L

June 2006 - Detected in all 14 monitoring wells; 14 exceedances: maximum 70,400 µg/L in MW-22A.

- August 2007 Detected in all 14 monitoring wells; 13 exceedances: maximum of 29,700 μg/L in MW-23A.
- November 2008 Detected in 12 of 13 monitoring wells; eight exceedances: maximum of 23,300 µg/L in MW-2.
- March 2010 Detected in all 12 monitoring wells; ten exceedances: maximum of 61,100 µg/L in MW-22A.
- May 2011 detected in all 13 unfiltered samples; ten exceedances, maximum of 88,900 µg/L in MW-2. Detected in seven of 12 usable filtered samples; six exceedances, maximum of 17,600 µg/L in MW-2. Note that the reported concentration of 36,100 µg/L in MW-23B is not considered usable (see discussion in Section 4.5).

August 2012 - detected in 11 of 13 unfiltered samples; six exceedances: maximum of 3,690 μ g/L in MW-13A. Detected in six of 13 filtered samples; four exceedances: maximum of 2,690 μ g/L in MW-22A.

Lead - Class GA criterion of 25 µg/L

June 2006 – Detected in ten of 14 monitoring wells; one exceedance: 35.7 µg/L in MW-23B.

August 2007 – Detected in 13 of 14 monitoring wells; no exceedances.

November 2008 - Detected in eight of 13 monitoring wells; no exceedances.

March 2010 – Detected in ten of 12 monitoring wells; one exceedance: 43.9 µg/L in MW-23B.

May 2011 – Detected in five of 23 unfiltered samples, no exceedances. Detected below the criterion in one filtered sample.

August 2012 – Not detected in any of the 13 unfiltered or filtered monitoring well samples.

Manganese - Class GA criterion of 300 µg/L

- June 2006 Detected in all 14 monitoring wells; ten exceedances: maximum 9,560 µg/L in MW-13A.
- August 2007 Detected in all 14 monitoring wells; 11 exceedances: maximum 8,040 µg/L in MW-13A.
- November 2008 Detected in all 13 monitoring wells; seven exceedances: maximum 16,400 µg/L in MW-13A.
- March 2010 Detected in all 12 monitoring wells; nine exceedances: maximum of 33,900 μ g/L in MW-13A.
- May 2011 Detected in all 13 unfiltered samples; eight exceedances, maximum of 61,600 μg/L in MW-13A. Detected in nine of 13 filtered samples; four exceedances, maximum of 1,720 μg/L in MW-13A.

August 2012 – Detected in 12 of 13 unfiltered samples; maximum of 6,190 μg/L in MW-13A. Detected in ten of 13 filtered samples; four exceedances: maximum of 3,430 μg/L in MW-13A.

Selenium – Class GA criterion of 10 µg/L

June 2006 – Detected in four of 14 monitoring wells; no exceedances.

August 2007 – Detected in five of 14 monitoring wells; no exceedances.

November 2008 - Not detected in any of the 13 monitoring wells.

March 2010 – Detected in seven of 12 monitoring wells; seven exceedances: maximum 24.3 µg/L in MW-22A.

May 2011 – Not detected in any of the 13 unfiltered or filtered samples.

August 2012 - Not detected in any of the 13 unfiltered or filtered samples.

Sodium – Class GA criterion of 20,000 µg/L

- June 2006 Detected in all 14 monitoring wells; eight exceedances: maximum 95,200 µg/L in MW-22A.
- August 2007 Detected in all 14 monitoring wells; ten exceedances: maximum 77,500 μg/L in MW-13A.
- November 2008 Detected in all 13 monitoring wells; five exceedances: maximum 43,900 µg/L in MW-15B.
- March 2010 Detected in all 12 monitoring wells; six exceedances: maximum 247,000 µg/L in MW-15B.
- May 2011 Detected in all 13 unfiltered samples; seven exceedances, maximum of 100,000 μg/L in MW-22A. Detected in all 13 filtered samples; seven exceedances, maximum of 134,000 μg/L in MW-22A.
- August 2012 Detected in all 13 unfiltered samples; seven exceedances, maximum of 74,100 μ g/L in MW-23A. Detected in all 13 filtered samples; seven exceedances, maximum of 73,400 μ g/L in MW-23A.

Thallium – Class GA criterion of 0.5 µg/L

- June 2006 Detected in eight of 14 monitoring wells. Eight exceedances: maximum 44 µg/L in MW-13A.
- August 2007 Detected in four of 14 monitoring wells. Four exceedances: maximum 6.3 µg/L in MW-2.
- November 2008 Detected in one of 13 monitoring wells. One exceedance: 11.7 µg/L in MW-13.
- March 2010 Detected in five of 12 monitoring wells. Five exceedances: maximum 88.2 μ g/L in MW-13A.
- May 2011 Not detected in any of the 13 unfiltered or filtered samples.

August 2012 – Detected in one of 13 unfiltered samples. One exceedance: 9.2 µg/L in MW-13A. Not detected in any of the 13 filtered samples.

Filtered versus Unfiltered Metals Groundwater Samples

Concentrations of total metals in groundwater samples at the Site tended to be highly variable between sampling events, as did field measurements of turbidity at time of sample collection. Turbidity is typically correlated with the presence of suspended matter (e.g., entrained soil particles in the sample). Therefore, both total metals (unfiltered) and dissolved metals (field filtered) groundwater samples were collected during this sampling event to evaluate the effect of turbidity on the metals concentrations.

The NYSDEC criterion for filtering groundwater samples is provided in DER-10 Section 2.1(g). At the Dzus Fasteners Site, the turbidity was below 50 NTU at the time of sampling in all 13 samples (Table 4). The turbidity was zero NTU in eight samples, and between 27.6 and 41.2 NTU in the other five.

Table 4 presents a comparison of the total metals and the dissolved metals data for the 13 filtered/ unfiltered sample pairs collected at the Dzus Fasteners Site. The "percent dissolved" shown on the table is the ratio of the filtered sample concentration to the total (unfiltered) sample concentration. Where a metal was not detected in the filtered sample, no calculation was made.

Concentrations of total metals tended to be higher in the more turbid samples though this was not consistently the case. Overall, no clear relationship between turbidity (ranging from 0 to 41.25 NTUs) and total metals concentrations could be developed.

For samples with low turbidity, only small differences between the total metals and dissolved metals concentrations was observed (MW-3, MW-13, MW-15, Mw-18, and MW-22 all had less than 5 NTUs with no detectable aluminum in either unfiltered or filtered), with only MW-2 having detectable concentration of aluminum (328 μ g/L) with a turbidity of 0 NTU. As expected, wells with higher turbidities had consistently lower concentrations of metals associated with particles in the filtered samples. The only exceptions were metals detected at concentrations below the contract required reporting limit (nickel in samples MW-9, MW-13A, and MW-15B, and zinc in MW-15B).

As expected, concentrations of metals that typically exist primarily in the dissolved phase (sodium, potassium, and calcium) were generally similar in the filtered and unfiltered samples, regardless of the sample turbidity.

Surface Water Analytical

Six surface water samples were collected from Lake Capri and Willetts Creek at the locations shown on Figure 2. A summary of the detections is presented in Table 5. The results were compared to the NYSDEC Class A surface water criteria. A summary of the exceedances is presented on Figure 5. Detections and criteria exceedances for the six sampling events are summarized below. During the September 2012 sampling, manganese and sodium exceeded surface water criteria at all locations, and iron exceeded the criterion at SW-5 and SW-6, the two Willetts Creek sampling locations.

Surface water sample SW-1 was collected on the north end of Lake Capri near the mouth of Willetts Creek. Four metals, including antimony, iron, manganese and sodium, were detected at concentrations above the Class A criteria during at least one of the five sampling events.

- Antimony was only detected in the Round 3 sample at a concentration of 6 µg/L, which exceeded the Class A criterion of 3 µg/L.
- Iron was detected in all six samples at concentrations ranging from 172 μg/L to 738 μg/L, five of which exceeded the Class A criterion of 300 μg/L.
- Manganese was detected in all six samples at concentrations ranging from 552 μg/L to 1,610 μg/L, all of which exceeded the criterion of 300 μg/L.
- Sodium detected in all six samples but only exceeded the criterion of 20,000 μg/L during event 4 and 6 (22,500 μg/L and 24,600 μg/L).
- September 2012 sampling event: exceedances of manganese and sodium.

Surface water sample SW-2 was collected on the north end of Lake Capri near the mouth of Willetts Creek (south of SW-1). Five metals, including antimony, iron, manganese, sodium and thallium, were detected at concentrations above the Class A criteria during at least one of the five sampling events.

- Antimony was only detected during Round 4 at a concentration of 5.7 µg/L which exceeded the Class A criterion of 3 µg/L.
- Iron was detected in all six samples at concentrations ranging from 176 μg/L to 819 μg/L, five of which exceeded the Class A criterion of 300 μg/L.
- Manganese was detected in all six samples at concentrations ranging from 564 μg/L to 1,560 μg/L, all of which exceeded the criterion of 300 μg/L.
- Sodium was detected in all six samples but only exceeded the 20,000 µg/L criterion during the Round 4 and 6 sampling events (22,000 µg/L and 23,800 µg/L).
- Thallium was only detected during Round 4 at a concentration of 7.2 μg/L which exceeded the criterion of 0.5 μg/L.
- September 2012 sampling event: exceedances of manganese and sodium.

Surface water sample SW-3 was collected on the south end of Lake Capri just west of the spillway. Five metals, including antimony, iron, manganese, sodium and thallium were detected at concentrations above the Class A criteria during at least one of the five sampling events.

- Antimony was only detected during Round 4 at a concentration 7.2 μg/L which exceeded the criterion of 3 μg/L.
- Iron was detected in all six samples at concentrations ranging from 144 μg/L to 788 μg/L, four of which exceeded the Class A criterion of 300 μg/L.
- Manganese was detected in all six samples at concentrations ranging from 73.9 μg/L to 1,790 μg/L, five of which (all except Round 2) exceed the criterion of 300 μg/L.
- Sodium was detected during all six sampling events but only exceeded the 20,000 μg/L criterion during the Rounds 4 and 6 (23,300 μg/L and 23,500 μg/L).
- Thallium was only detected during Round 4 at a concentration of 5.9 µg/L which exceeded the criterion of 0.5 µg/L.
- September 2012 sampling event: exceedances of manganese and sodium.

Surface water sample SW-4 was collected on the south end of Lake Capri just east of the spillway. Three metals, including iron, manganese and sodium were detected at concentrations above the Class A criteria during at least one of the five sampling events.

- Iron was detected in all six samples at concentrations ranging from 152 μg/L to 741 μg/L, five of which (all except Round 6) exceeded the 300 μg/L criterion.
- Manganese was detected in all six samples at concentrations ranging from 135 μg/L to 1,630 μg/L, five of which (all except Round 2) exceeded the 300 μg/L criterion.
- Sodium was detected in all six samples but only exceeded the 20,000 µg/L criterion during the Round 4 and 6 sampling events (22,900 µg/L and 23,900 µg/L).

• September 2012 sampling event: exceedances of manganese and sodium.

Surface water sample SW-5 was collected from Willetts Creek just north of the footbridge behind the middle school. Five metals, including antimony, cadmium, iron, manganese and sodium were detected at concentrations above the Class A criteria during at least one of the five sampling events.

- Antimony was detected during Rounds 1 and 2 at concentrations of 1.5 μg/L and 4.4 μg/L but only the Round 2 concentration exceeded the Class A criterion of 3 μg/L. Antimony was not detected in sampling events 3, 4, 5 or 6.
- Cadmium was detected in all six samples at concentrations ranging from 3 µg/L to 8.8 µg/L, four of which (all except Round 3 and 5) exceeded the Class A criterion of 5 µg/L.
- Iron was detected above the Class A criterion of 300 μg/L during all six sampling events at concentrations ranging from 599 μg/L to 4,080 μg/L.
- Manganese was detected above the Class A criterion of 300 μg/L during all six sampling events at concentrations ranging from 450 μg/L to 1,420 μg/L.
- Sodium was detected during all six sampling events at concentrations ranging from 18,100 μg/L to 28,100 μg/L, five of which (all except Round 3) exceeded the Class A criterion of 20,000 μg/L.
- September 2012 sampling event: exceedances of iron, manganese and sodium.

Surface water sample SW-6 was collected from Willetts Creek just south of the Blockbuster Video store in the small shopping center. Six metals, including antimony, cadmium, iron, manganese, selenium and sodium, were detected at concentrations above the Class A criteria during at least one of the five sampling events.

- Antimony was only detected during Round 2 at a concentration of 8 µg/L which exceeded the Class A criterion of 3 µg/L.
- Cadmium was detected during the first three sampling rounds but only exceeded the Class A criterion of 5 µg/L criterion during the Round 3 sampling event at a concentration of 75.4 µg/L.
- Iron (Class A criterion of 300 μg/L) was detected above the criterion during all six sampling events at concentrations ranging from 639 μg/L to 6,840 μg/L.
- Manganese (Class A criterion of 300 µg/L) was detected above the criterion during all six sampling events at concentrations ranging from 406 µg/L to 2,610 µg/L.
- Selenium was only detected during Round 4 at a concentration of 10.5 μg/L, which exceeded the Class A criterion of 10 μg/L.
- Sodium (Class A criterion of 20,000) was detected above the criterion during all six sampling events at concentrations ranging from 20,500 μg/L, 33,800 μg/L.
- September 2012 sampling event: exceedances of iron, manganese and sodium.

Sediment Analytical

Immediately following dredging activities in 1999, sediment samples were collected and analyzed for cadmium. The results of the post-dredging sediment samples are presented in Appendix B. If sampling indicated cadmium levels continued to be in exceedance after dredging, the area was redredged and then re-sampled for cadmium. Cadmium concentrations in an upper reach of Willetts Creek exceeded 9 ppm. A variable and deep depositional region existed here due to an outfall in the creek at this location. The decision by the NYSDEC was to encapsulate this region of the creek with geotextile, stone, and riprap. A deeper zone of contamination was also identified in Lake Capri, and riprap was used to isolate it from the environment.

Six co-located sediment samples were collected at the same locations as the surface water samples as shown on Figure 2. The data presented in Table 6 were compared to the NYSDEC Technical Guidance for Sediment Criteria lowest effects values. The laboratory data summary packages are also included in Appendix C. A summary of the exceedances is presented on Figure 6.

Sample SED-1 was collected on the north end of Lake Capri near the mouth of Willetts Creek. Eleven metals, including antimony, arsenic, cadmium, chromium, copper, iron, lead, manganese, mercury, nickel, and zinc, were detected at concentrations above the guidance values.

- Antimony was detected during four of six sampling events, and the Round 3 (2.2 mg/kg) and Round 4 (6.4 mg/kg) concentrations exceeded the guidance value of 2 mg/kg.
- Arsenic was detected during all six sampling events at concentrations ranging from 1.5 mg/kg to 18.1 mg/kg, five of which (all except Round 2) exceeded the guidance value of 6.0 mg/kg.
- Cadmium exceeded the guidance value of 0.6 mg/kg during all six sampling events at concentrations ranging from 11.6 mg/kg to 89.8 mg/kg.
- Chromium was detected during all six sampling events at concentrations ranging from 2.8 mg/kg to 57.4 mg/kg, four of which exceeded the guidance value of 26 mg/kg.
- Copper was detected above the guidance value of 16 mg/kg during all six sampling events at concentrations ranging from 38.6 mg/kg to 144 mg/kg.
- Iron was detected during all six sampling events at concentrations ranging from 3,880 mg/kg to 44,600 mg/kg, three of which exceeded the guidance value of 20,000 mg/kg.
- Lead was detected during all six sampling events at concentrations ranging from 19.3 mg/kg to 289 mg/kg, five of which (all except Round 2) exceeded the guidance value of 31 mg/kg.
- Manganese was detected during all six sampling events at concentrations ranging from 181 mg/kg to 22,600 mg/kg, five of which (all except Round 3) exceeded the guidance value of 460 mg/kg.
- Mercury was detected during all six sampling events at concentrations ranging from 0.0071 mg/kg to 0.52 mg/kg, five of which (all except Round 2) exceeded the guidance value of 0.15 mg/kg).

- Nickel was detected during all six sampling events at concentrations ranging from 3 mg/kg to 27.3 mg/kg, four of which exceeded the guidance value of 16 mg/kg.
- Zinc was detected during all six sampling events at concentrations ranging from 71.6 mg/kg to 642 mg/kg, five of which (all except Round 2) exceeded the guidance value of 120 mg/kg.
- September 2012 sampling event: exceedances of arsenic, cadmium, chromium, copper, iron, lead, manganese, mercury, nickel and zinc.

Sample SED-2 was collected on the north end of Lake Capri near the mouth of Willetts Creek, just south of SED-1. Ten metals, including arsenic, cadmium, chromium, copper, iron, lead, manganese, mercury, nickel, and zinc, were detected at concentrations above the guidance values at least once during the five sampling events.

- Arsenic was detected during all six sampling events at concentrations ranging from 1.8 mg/kg to 20.2 mg/kg, four of which exceeded the guidance value of 6 mg/kg.
- Cadmium was detected above the guidance value of 0.6 mg/kg during all six sampling events at concentrations ranging from 12.5 mg/kg to 133 mg/kg.
- Chromium was detected during all six sampling events at concentrations ranging from 6.5 mg/kg to 49.4 mg/kg, four of which exceeded the guidance value of 26 mg/kg.
- Copper was detected during all six sampling events at concentrations ranging from 15.6 mg/kg to 210 mg/kg, five of which exceeded the guidance value of 16 mg/kg.
- Iron was detected during all six sampling events at concentrations ranging from 3,850 mg/kg to 27,500 mg/kg, three of which exceeded the guidance value of 20,000 mg/kg.
- Lead was detected during all six sampling events at concentrations ranging from 25.8 mg/kg to 408 mg/kg, five of which (all except Round 3) exceeded the guidance value of 31 mg/kg.
- Manganese was detected during all six sampling events at concentrations ranging from 153 mg/kg to 3,790 mg/kg, five of which (all except Round 1) exceeded the guidance value of 460 mg/kg.
- Mercury was detected during all six sampling events at concentrations ranging from 0.18 mg/kg to 0.5 mg/kg, four of which exceeded the guidance value of 0.15 mg/kg.
- Nickel was detected during all six sampling events at concentrations ranging from 3.2 mg/kg to 22 mg/kg, four of which exceeded the guidance value of 16 mg/kg.
- Zinc was detected during all six sampling events at concentrations ranging from 67.9 mg/kg to 526 mg/kg, five of which exceeded the guidance value of 120 mg/kg.
- September 2012 sampling event: exceedances of arsenic, cadmium, chromium, copper, iron, lead, manganese, mercury, nickel and zinc.

Sample SED-3 was collected on the south end of Lake Capri just west of the spillway. Four metals have been detected above the guidance values including cadmium, copper, lead, and manganese.

- Cadmium was detected above the guidance value of 0.6 mg/kg during all six sampling events at concentrations ranging from of 1.5 mg/kg to 27.7 mg/kg.
- Copper was detected during all six sampling events at concentrations ranging from 2.7 mg/kg to 32.5 mg/kg, three of which exceeded the guidance value of 16 mg/kg.
- Lead was detected during all six sampling events at concentrations ranging from 9.2 mg/kg to 85.9 mg/kg, four of which exceeded the guidance value of 31 mg/kg.
- Manganese was detected during all six sampling events at concentrations ranging from 89.9 mg/kg to 1,090 mg/kg, three of which exceeded the guidance value of 460 mg/kg.
- September 2012 sampling event: one exceedance of cadmium.

Sample SED-4 was collected on the south end of Lake Capri just east of the spillway. Seven metals were detected at concentrations that exceed the guidance values including arsenic, cadmium, copper, lead, manganese, mercury, nickel, silver, and zinc.

- Arsenic was detected in all six sampling events at concentrations ranging from 1.9 μg/L to 6.2 μg/L, one of which exceeded the guidance value of 6 μg/L.
- Cadmium was detected above the guidance value of 0.6 mg/kg during all six sampling events at concentrations ranging from 14.8 mg/kg to 79.5 mg/kg.
- Chromium was detected in all six sampling events at concentrations ranging from 6.8 μ g/L to 45.4 μ g/L, one of which exceeded the criterion of 26 μ g/L.
- Copper was detected above the guidance value of 16 mg/kg during all six sampling events at concentrations ranging from 17.1 mg/kg to 117 mg/kg.
- Lead was detected above the guidance value of 31 mg/kg during all six sampling events at concentrations ranging from 60.6 to 297 mg/kg.
- Manganese was detected during all six sampling events at concentrations ranging from 272 mg/kg to 11,700 mg/kg, five of which (all except Round 4) exceeded the guidance value of 460 mg/kg.
- Mercury was detected during all six sampling events at concentrations of 0.21 mg/kg and 0.39 mg/kg, three of which exceeded the guidance value of 0.15 µg/L.
- Silver was only detected during Round 3 at a concentration of 1.1 mg/kg which exceeds the guidance value of 1 mg/kg.
- Zinc was detected during all six sampling events at concentrations ranging from 71.3 mg/kg to 323 mg/kg, four of which exceeded the guidance value of 120 mg/kg.
- September 2012 sampling event: exceedances of arsenic, cadmium, chromium, copper, lead, manganese, mercury, nickel and zinc.

Sample SED-5 was collected from Willetts Creek approximately 30 feet north of the footbridge behind the middle school. Ten metals have been detected above the guidance values at this location, including arsenic, cadmium, chromium, copper, iron, lead, manganese, mercury, nickel, and zinc.

• Arsenic was detected during all six sampling events at concentrations ranging from 0.52 mg/kg to 9.3 mg/kg, three of which exceeded the guidance value of 6 mg/kg.

- Cadmium was detected during all six sampling events at concentrations ranging from 0.43 mg/kg to 73.5 mg/kg, five of which (all except Round 1) exceeded the guidance value of 0.6 mg/kg.
- Chromium was detected during all six sampling events at concentrations ranging from 2.7 to 44 mg/kg, but only exceeded the guidance value of 26 mg/kg during Round 3 and 5 at concentrations of 33.3 mg/kg and 44 mg/kg.
- Copper was detected during all six sampling events at concentrations ranging from 4.7 mg/kg to 166 mg/kg, three of which exceeded the guidance value of 16 mg/kg.
- Iron was detected during all six sampling events at concentrations ranging from 3,400 mg/kg to 39,900 mg/kg, three of which exceeded the guidance value of 20,000 mg/kg.
- Lead was detected during all six sampling events at concentrations ranging from 4.9 mg/kg to 229 mg/kg, three of which exceeded the guidance value of 31 mg/kg.
- Manganese was detected during all six sampling events at concentrations ranging from 174 mg/kg to 3,750 mg/kg, three of which exceeded the guidance value of 460 mg/kg.
- Mercury was detected during all six sampling events at concentrations ranging from 0.0055 mg/kg to 0.48 mg/kg, three of which exceeded the guidance value of 0.15 mg/kg.
- Nickel was detected during all six sampling events at concentrations ranging from 1.0 to 22.5 mg/kg but only exceeded the guidance value of 16 mg/kg during Rounds 3 and 5 at concentrations of 19.2 mg/kg and 22.5 mg/kg.
- Zinc was detected during all six sampling events at concentrations ranging from 13.2 mg/kg to 440 mg/kg, three of which exceeded the guidance value of 120 mg/kg.
- September 2012 sampling event: one exceedance of cadmium.

Sample SED-6 was collected from Willetts Creek just south of the Blockbuster Video store in the small shopping center. Eleven metals were detected above the guidance values at this location, including antimony, arsenic, cadmium, chromium, copper, iron, lead, manganese, mercury, nickel and zinc.

- Antimony was detected in five of six sampling at concentrations ranging from not detected to 2.6 mg/kg but only exceeded the guidance value of 2 mg/kg during Round 3 at a concentration of 2.6 mg/kg.
- Arsenic was detected during all six sampling events at concentrations ranging from 0.79 to 6.4 mg/kg but only exceeded the guidance value of 6 mg/kg during Round 3 at a concentration of 6.4 mg/kg.
- Cadmium was detected during five of the six sampling events at concentrations ranging from not detected to 101 mg/kg but only exceeded the guidance value of 0.6 mg/kg during Round 3 at a concentration of 101 mg/kg. Cadmium was not detected in the Round 5 sample.
- Chromium was detected during all six sampling events at concentrations ranging from 2.4 to 41.8 mg/kg but only exceeded the guidance value of 26 during Round 3 at a concentration of 41.8 mg/kg.
- Copper was detected during all six sampling events at concentrations ranging from 6.3 mg/kg to 77.3 mg/kg, three of which exceeded the guidance value of 16 mg/kg.

- Iron was detected during all six sampling events at concentrations ranging from 2,120 to 36,900 mg/kg but only exceeded the guidance value of 20,000 mg/kg during Rounds 3 and 5 at concentrations of 25,600 mg/kg and 36,900 mg/kg.
- Lead was detected during all six sampling events at concentrations ranging from 7.9 mg/kg to 109 mg/kg, two of which exceeded the guidance value of 31 mg/kg.
- Manganese was detected during all six sampling events at concentrations ranging from 16.2 to 978 mg/kg but only exceeded the guidance value of 460 mg/kg during Round 3 at a concentration of 978 mg/kg.
- Mercury was detected in four of the six sampling events. Three samples were less than the guidance value and the Round 3 sample equaled the guidance value of 0.15 mg/kg.
- Nickel was detected during all six sampling events at concentrations ranging from 1.8 to 17.2 mg/kg, but only exceeded the guidance value of 16 mg/kg during Round 3 at a concentration of 17.2 mg/kg.
- Zinc was detected during all six sampling events at concentrations ranging from 17.2 to 409 mg/kg, but only exceeded the guidance value of 120 mg/kg during Round 3 at a concentration of 409 mg/kg.
- September 2012 sampling event: no exceedances.

Fish Tissue Analytical

Fish Tissue sampling events in Lake Capri were conducted in July 2006, May 2007, October 2010 and September 2012. No fish sampling was conducted in 2008 or 2009 upon discussion with NYSDEC due to low number and inadequate size of fish collected during 2006 and 2007 monitoring events. According to the Final SAP, the original objectives for fish tissue sampling were to collect fish samples from two stations. Station 1 is located at the north end of Lake Capri, south of the footbridge over the east branch of Willetts Creek, in the general vicinity of sediment samples SED-1 and SED-2. Station 2 is located at the south end of Lake Capri near the lake outfall, and in the general vicinity of sediment samples SED-3 and SED-4.

American eel, bluegill, carp and largemouth bass were the target species for the fish tissue sampling efforts. A target of ten samples for each of species was to be collected from each station: If a targeted species was not available, the sample goal was ten samples across four species. If less than four species were available, the total samples should still be equal to 40 samples per station for the available species. A total of 80 samples (40 per station) were to be analyzed for cadmium only. A minimum samples mass of 100 g was desired (either from an individual fish or from a composite of a single species).

Cadmium analysis on the fish samples for 2006, 2007, 2010 and 2012 was performed by Pace Laboratories in Wisconsin. The samples were prepared in accordance with NYSDEC guidelines and cadmium was analyzed using the SW846 M3050 preparation method, and the SW846 6020 analysis method.

The results of the fish sampling efforts are shown in Table 7. During the fish sampling in 2006, four fish species were collected: largemouth bass, bluegill, American eel, and pumpkinseed. During the fish sampling in 2007, two fish species were collected: bluegill and American eel. During the fish sampling in 2010, four species were collected: bluegill, American eel, largemouth bass and pumpkinseed. No carp were collected in 2006, 2007 or 2010. Fish collection numbers were below the target of 40 per station.

For 2006, fish sample size was also below the target of 100 g per sample for all but three of the collected samples. A total of 12 fish samples were analyzed in 2006, four from the south and eight from the north. These samples were collected from 62 individuals. Only three of the samples (South 1, South 2, North 1, and North 3) were comprised of edible sized fish. The other nine samples were composite samples from more than one individual. Cadmium concentrations in the edible sized fish were as follows: South 1 with 28 μ g/kg; South 2 with 28 μ g/kg; and North 1 with 80 μ g/kg. The nine composite samples reported cadmium concentrations ranging from 39 μ g/kg to 270 μ g/kg.

A total of six fish samples were analyzed in 2007, all samples came from the North of Lake Capri. These samples were collected from 46 individuals. Only two samples (North 1 and North 3) were comprised of edible sized fish and only the North 3 sample weighed greater than 100 g. Three of the remaining samples were composite samples from more than one individual. Cadmium concentrations for both the edible sized fish were 170 μ g/kg. Cadmium concentrations for the other four fish tissue samples ranged from 190 to 230 μ g/kg.

Of the six fish samples collected in 2010, only samples DF-F2-LB-1 and DF-F1-PS-1 were comprised of edible sized fish. These samples also had cadmium concentrations of 0.0076 and 0.038 mg/kg, respectively. The higher concentrations recorded in the other samples, which often consisted of yearlings, ranged from 0.096 mg/kg to 0.37 mg/kg. However, this range may be a result of the low weights of the samples, many of which are below the 100 g sample requirement, and that 13 of 15 samples contain whole body analysis not just fillets. For example, the number of individual fish comprising samples DF-F1-PS-3, DF-F2-BG-3, and DF- F2-PS-2, were 40, 46, and 46, respectively. However, a review of the data shows that there is no discernable trend regarding differences in cadmium concentrations between the north and south locations, for both edible sized fish and the smaller yearlings. A similar range of data was also observed in previous fish sampling efforts in 2006 and 2007 (Table 7). No variation amongst species was observed; however it should be noted that the one edible size bass that was captured represents a fish at the top of the lake's food chain.

A total of five species comprising the 44 samples were obtained from Lake Capri in September 2012. Four freshwater species and one catadromous species were captured during the sampling. The freshwater fish species included: blue gill, largemouth bass, pumpkinseed, and one red ear sunfish, *Lepomis microlophus*. The catadromous species was an American eel. All of these fish species are piscivorous, however, due to their size blue gills, pumpkinseeds, and red ear sunfish would only prey on very small fish no bigger than the size of small minnows (2 cm) in length. These species also prey upon a variety of insects, benthic invertebrates and other food sources. Eels and largemouth bass prey upon the sunfish and other fish species and aquatic fauna. Largemouth bass also have been known to feed on crustaceans (e.g., cray fish), small waterfowl, and small mammals.

Due to the small numbers and small sizes of fish collected, statistical analysis was not possible. The New York State Department of Health (NYSDOH) fish advisory for cadmium in Lake Capri fish tissue is 1 mg/kg in carp. Though no carp were collected, all fish sample cadmium results were well below the advisory limit. The current NYSDOH fish advisory recommends eating no more than one meal per month of American eel and carp. In addition to cadmium, the fish advisory lists the manufactured pesticide chlordane as a chemical of concern for Lake Capri. Chlordane is not believed to be associated with the Dzus Fastener facility.

3.3 IC/EC Certification Plan Report

Engineering controls at the Site currently consist of environmental monitoring to determine effectiveness of the remedy. There are no institutional controls.

DER-10	Unified Information System	Actual Site Conditions
Source Removal	IRM completed in October 1990, removed approximately 1,960 cubic yards of contaminated soils	Contaminated soil removed from area of former oil/water separator and former dry wells
when removal soils were treated through in-		OU1 in-situ stabilization/solidification of eastern corner of the Site (includes former oil/water separator)
Containment / Isolation	Not mentioned	Soil and asphalt cap over the treatment cell in the eastern corner of the Site (includes the former oil/water separator, former dry wells, laterals from former dry well #4, and drain line to Willetts Creek)
Source removal	OU2 dredging and offsite disposal of sediment from Lake Capri and portions of Willetts Creek	OU2 dredging and offsite disposal of sediment from Lake Capri and portions of Willetts Creek
Containment / Isolation	Not mentioned	Riprap was placed in portions of Lake Capri and Willetts Creek to cover areas where cadmium concentrations exceeded the cleanup goals of 9 mg/kg (1999 remediation of Lake Capri and Willetts Creek).
Long Term Monitoring	Long term monitoring of groundwater	Long term monitoring of groundwater

Comparison of DER-10, Unified Information System and Actual Site Conditions

Long Term Monitoring	Long term monitoring of sediment and surface water in Lake Capri and Willetts Creek	Long term monitoring of sediment and surface water in Lake Capri and Willetts Creek
Long Term Monitoring	Long term monitoring of fish tissue in lake Capri	Long term monitoring of fish tissue in Lake Capri

3.3.1 IC/EC Requirements and Compliance

Determination of compliance with the IC/EC at the Site is made based on the following criteria:

- The EC(s) applied at the site are in place and unchanged from the previous certification,
- Nothing has occurred that would impair the ability of such controls to protect the public health and the environment, or constitute a violation or failure to comply with any element of the SMP for such controls,
- Access to the Site will continue to be provided to the NYSDEC to evaluate the remedy, including access to evaluate the continued maintenance of such controls (*future access cannot be guaranteed, but access for maintenance and inspections has not been an issue to date, and is not anticipated to become one*).

Currently, certification that the site ECs are in compliance with the requirements stated above, cannot be completed because of the following deficiencies:

- The environmental well network includes one well (MW-1) rendered ineffective and is in need of replacement and/or proper abandonment. This well is one of the 14 wells listed for regular site monitoring.
- The asphalt cap on the eastern side of the Dzus Fastener currently is damaged and needs to be repaired.

Detailed descriptions of the deficiencies identified at the Site and the severity presented is included in Section 5.0, including a proposed schedule to utilize in bringing the Site into compliance with the EC Certification requirements.

3.3.2 IC/EC Certification Forms

See Appendix A.

4.0 Evaluate Costs

4.1 Summary of Costs

A total annual cost for the required monitoring is approximately \$39,000, based on costs incurred in calendar year 2012.

This includes all costs associated with the completion of one round of groundwater monitoring, surface water sampling, sediment sampling and fish tissue sampling conducted in August and September 2012, including subcontractor, AECOM field labor, and lab fees. The cost also includes the preparation of one fish tissue sampling report and one groundwater sampling report. Estimated OM&M costs presented in the 1997 ROD were projected to be \$21,950 per year for the first ten years of operation, actual cost incurred during the most recent sampling event are higher than the original ROD estimate.

5.0 Conclusions and Recommendations

5.1 Conclusions

5.1.1 Operations and Maintenance

Groundwater monitoring well MW-1 has not been sampled since August 2007. This well is believed to have been destroyed by a snowplow. This well has not been properly abandoned and the loss of this well results in a data gap for determining current site contamination. This problem is categorized as moderate as the damaged well could allow for direct infiltration of precipitation.

The asphalt cover located at the Dzus Fasteners Facility currently has vegetation growing through cracks in the pavement. This deficiency is categorized as low and in its current a state (see Appendix C) may result in increased contaminant mobility. The LTMP laid out guidelines for monitoring the asphalt cover but there are no written records of cap maintenance. The SAP does not cover cap monitoring or maintenance.

The current maintenance status of the riprap in Willetts Creek and Lake Capri is unknown. The LTMP laid out guidelines for monitoring the riprap but there are no written records of its condition and maintenance. The current SAP does not cover riprap monitoring and maintenance but this item will be addressed in the SMP. This problem is categorized as moderate and results in a lack of knowledge in regards to site contamination.

5.1.2 Monitoring

A Summary of cadmium results in each media sampled (groundwater, surface water and sediment) during the long-term monitoring is show on Table 8.

Groundwater

The first four sampling events collected only unfiltered groundwater samples. During the Round 5 and Round 6 sampling events, both unfiltered and field filtered samples were collected to determine the percentage of each dissolved metals compared to the total metals.

Cadmium has been detected in the majority of unfiltered samples collected during the six sampling events with exceedances of New York Class GA Groundwater criteria noted in ten samples during Round 1, ten samples during Round 2, eight samples during Round 3, nine samples in Round 4, seven unfiltered samples during Round 5 and five unfiltered samples in Round 6. Only six filtered samples exceeded the criteria during Round 5, with the highest concentration at 13.3 μ g/L (criterion is 5 μ g/L). Only four filtered samples exceeded the criterion in Round 6, with the highest concentration noted at MW-13A (64.4 μ g/L). The majority of the exceedances are concentrated along the eastern side of the Site in wells MW-3, MW-9, MW-13A, MW-15A, MW-22A, MW-23A, and MW-23B. The

majority of the samples (both unfiltered and filtered) collected from these seven wells during the previous six sampling events have exceeded the criterion as shown on Figures 7 and 8. Most of these wells are showing a downward trend in concentration.

During Round 5, six samples had concentrations of cadmium in both the filtered and unfiltered samples allowing for a comparison of the results. The percent dissolved phase ranged from 1 percent to 50.8 percent. Filtering only changed one result from exceeding the 5 μ g/L criterion to less than the criterion. However, the degree of exceedance is significantly lower in the filtered samples, as the filtered sample concentrations exceeding the criterion ranged from 6 to 1 μ g/L in the filtered samples. During Round 6, the percent dissolved phase ranged from 10.4 percent to 92.6 percent. Filtering changed one result from exceeding to less than the criterion.

Chromium has been detected in the majority of samples collected at the Site during the six sampling rounds but has only exceeded the 50 µg/L criterion in two wells, MW-9 (four of six samples) and MW-23B (two of six samples). Based on two sets of filtered versus unfiltered data, the percent dissolved in MW-9 was 3.4 and 89.8 percent and in MW-23B was 67.5 and 72.9 percent.

Concentrations of iron, manganese, and sodium have exceeded the criterion in numerous wells but these compounds are typically found in groundwater on Long Island and are most likely representative of background conditions and not Site-related. There have been sporadic exceedances of antimony, arsenic, lead, selenium and thallium but the concentrations and locations of the exceedances have not been replicated during the six sampling events and are most likely a result of entrained sediment in the samples and are not representative of the dissolved groundwater concentrations. The Round 5 and Round 6 filtered sample data suggest that field-measured turbidity is not a good predictor of the fraction of metals detected in a sample which are in the dissolved phase in a sample (i.e., concentration detected in the filtered sample).

The only metal of concern found consistently in off-site wells above the Class GA criteria is cadmium. Dissolved concentrations in off-site wells ranged from 9.7 μ g/L at MW-15A (200 ft south of the Site) to 3.3 μ g/L in shallow well MW-23A and 33.1 μ g/L in deep well MW-23B (approximately 1,200 ft south of the Site). An isoconcentration map of the dissolved cadmium groundwater values from the August 2012 sampling event is shown on Figure 9.

Surface Water

Seven metals have been detected at concentrations above their Class A Surface Water criteria including antimony, cadmium, iron, manganese, selenium, sodium and thallium.

Antimony has been sporadically detected during the six sampling events in five of six surface water samples, with most detections exceeding the 3 μ g/L criterion. However, the exceedances have not been duplicated in any sample. Antimony concentrations do not appear to be Site related.

Cadmium was detected in three of six sampling events in Willetts Creek sample SW-6. However, the only exceedance was during Round 3, which was anomalously high at 75.4 μ g/L. Cadmium has not

been detected during the last three sampling events in SW-6. Cadmium was detected in all six rounds in Willetts Creek sample SW-5 and slightly exceeded the criterion in four samples. The highest concentration detected was 8.8 μ g/L during Round 5. Cadmium concentrations did not exceed the criterion in any of the four Lake Capri samples during the six sampling events.

With a few exceptions, iron and manganese were detected in all six surface water samples above the criterion during all six sampling events. This is most likely a result of natural conditions in Willetts Creek and not Site related.

During the six sampling rounds, selenium has been detected twice in two surface water samples with one exceedance. The selenium concentration in Willetts Creek surface water sample SW-6 slightly exceeded the criterion during Round 4.

Sodium concentrations have exceeded the criterion in the two Willetts Creek samples (SW-5 and SW-6) in the majority of the samples. Sodium concentrations in the four Lake Capri samples were below the criterion during rounds 1, 2, 3 and 5 but all four exceeded the criterion during Round 4 and Round 6. It is probable that the high sodium concentrations noted in Lake Capri during March 2010 were the result of surface water runoff containing high concentrations of road salt.

Sediments

The sediment sample data indicate that the surficial sediments in Lake Capri and Willetts Creek remain contaminated with metals concentrations above the applicable NYSDEC Technical Guidance for Sediment Criteria. Cadmium has been detected above the lowest effects criterion in 30 of 36 samples collected during the six rounds of sampling and above the highest effects level in 26 of 36 samples as shown on Figures 7 and 8. The four lake samples indicate that cadmium is still a contaminant of concern for the lake bottom sediments. The lower Willetts Creek sample (SED-5) indicates that cadmium contamination is still present in the lower reach of the creek. The sediment sample nearest the Site, SED-6, has mostly been below the guidance values.

Copper has been detected above the lowest effects criterion in 24 of 30 samples collected. Of these, six were above the highest effects level. Copper results are shown on Figure 10. The highest concentrations appear to be along the southern end of the lake (SED-1 and SED-2).

Lead has been detected above the lowest effects criterion in 25 of 36 samples collected as shown on Figure 11. Of these, 14 were above the highest effects level. The highest concentrations appear to be along the southern end of the lake (SED-1 and SED-2).

Several other metals including antimony, arsenic, chromium, iron, manganese, mercury, nickel, and zinc, have been detected sporadically at concentrations exceeding the criteria during the five sampling events.

There was a significant increase in the number of metal concentrations that exceeded the criterion in the two Willetts Creek sediment samples collected during Round 3. At upstream sample SED-6, there

was one exceedance during Round 1, no exceedances during Round 2, 11 exceedances during Round 3, no exceedances for any metal in Round 4, three exceedances during Round 5 and no exceedances during Round 6. With the exception of the Round 5 iron concentration, the concentrations of metals detected in Rounds 4 and 5 have been much lower than those reported in Round 3, and are generally similar to the concentrations detected in Rounds 1 and 2.

At downstream sample SED-5, there were no exceedances during Round 1, one exceedance in Round 2, ten exceedances during Round 3, eight exceedances in Round 4, ten exceedances in Round 5 and one exceedance during Round 6. The highest concentrations of eight of the ten metals exceeding criteria (all except mercury and manganese) were detected in the Round 5 sample at SED-5. If the sample concentrations in SED-5 are compared to the highest effects level criteria, there are still exceedances of cadmium, copper, iron, lead, manganese and zinc.

Fish Tissue

Fish samples collected were well below the target of 80 samples of at least 100 g (40 from the north and 40 from the south). The majority of fish caught were also below the 100 g sample size and as a consequence, most samples consisted of numerous small fish. Fish size and numbers were inadequate for the assessment of cadmium contamination of fish tissues.

5.2 Recommendations

In order to return to compliance with the requirements presented in the ROD and OM&M program, a summary of the recommended investigation and maintenance activities is provided below:

- Continue sampling on a five-quarter basis in order to better evaluate temporal trend for cadmium and other metals found in exceedance of the NYSDEC groundwater, surface water and sediment criteria.
- Continue monitoring the current site to evaluate cadmium concentrations. Sediment monitoring results of Lake Capri show elevated cadmium concentrations above cleanup level and suggest that remedial actions undertaken at the lake may not be completely effective.
- Re-evaluate the current fish sampling protocol. Currently, Lake Capri does not provide fish of sufficient number or of sufficient size to meet the current requirements for fish tissue sampling. Other options for obtaining accurate cadmium levels in edible sized fish should be considered (e.g., towed gill nets or a more robust trapping program). Also evaluate whether the restocking program was successful in re-establishing a large healthy fish population in Lake Capri.
- Re-evaluate the need to include cyanide on the analytical list for future sampling events based on COCs indicated in the RODs for OU1 and OU2.
- Locate the damaged/destroyed monitoring well MW-1 and properly abandon or repair the well. If the well is abandoned, a replacement should be considered.
- Upgradient monitoring well MW-17 could not be located by the field crew during the May 2011 sampling event. Additional effort is needed to locate this well. Once located, the well should be assessed for future sampling or properly abandoned if found to be damaged.

- Establish the inspection protocol of the asphalt cover at the Dzus Fasteners facility. The evaluation can be completed and reported along with the sampling program on a five-quarter basis.
- Perform an evaluation of the riprap erosion controls currently in place in Willetts Creek and in Lake Capri. The evaluation can be completed and reported along with the sampling program on a five-quarter basis.
- Elevated concentrations of several metals have been detected in Willetts Creek. The extent of this contamination in Willetts Creek needs to be assessed. The entire length of the creek from the Dzus Facility to Lake Capri will be surveyed to determine if other locations are more appropriate for future sampling and if additional sampling locations are needed to evaluate the effectiveness of the dredging performed in 1999.
- Elevated concentrations of several metals have been detected in Lake Capri sediment samples. The lake bottom will be sampling on a grid pattern to establish whether hot spots continue to exist in the lake. The sampling will also aid in establishing whether the current sampling locations are sufficient to monitor the lake.
- Prepare a Site Management Plan.
- Perform five-year periodic review of the Site in 2016.

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TABLE 1 DZUS FASTENERS SITE (1-52-033) WELL CONSTRUCTION DATA

Well Number	Latitude	Longitude	Ground Elevation	Top of Riser Elevation	Top of Casing Elevation	Total Depth of Well
MW-1 MW-2 MW-3 MW-9 MW-9B MW-13A MW-13B MW-13B MW-15B MW-15B MW-17 MW-18 MW-22A MW-22B MW-23A MW-23B	40° 42.49 40° 42.45 40° 42.49 40° 42.50 40° 42.49 40° 42.44 40° 42.43 40° 42.49 40° 42.49 40° 42.50 40° 42.491 40° 42.491 40° 42.402 40° 42.403	73° 18.10 73° 18.10 73° 18.02 73° 18.02 73° 18.01 73° 17.100 73° 17.99 73° 17.97 73° 17.96 73° 17.941 73° 17.941 73° 17.991 73° 17.987	22.44 22.16 20.23 19.14 19.08 16.34 16.14 19.45 19.35 14.69 20.49 20.35 17.57 17.54	22.03 21.42 19.71 18.83 18.75 16.02 15.82 19.09 19.06 14.31 20.09 19.95 17.34 17.29	22.44 22.16 20.23 19.14 19.08 16.34 16.14 19.45 19.35 14.66 20.49 20.35 17.57 17.54	$15.3 \\ 14.3 \\ 15.0 \\ 11.5 \\ 44.5 \\ 10.7 \\ 44.3 \\ 28.8 \\ 84.7 \\ 13.5 \\ 14.4 \\ 44.5 \\ 14.3 \\ 44.5 \\ 14.3 \\ 44.5 \\ 14.3 \\ 44.5 \\ 14.3 \\ 44.5 \\ 14.3 \\ 14.5 \\ 14.3 \\ 14.5 \\ 15.5 \\ $

Notes:

All elevations and depths are in feet

Vertical datum: on-site benchmark from previous survey.

Latitude / Longitude taken from a previous report

Survey performed by YEC, Inc., on April 18, 2007

TABLE 2 DZUS FASTENERS SITE (1-52-033) GROUNDWATER ELEVATIONS

Well #	Reference Elevation	Date	Depth To Water	Water Table Elevation	Comments
MW-1	22.03	6/8/06 8/22/07 11/11/08 3/10/10 5/25/11 8/22/12	8.00 8.62 NC NC NC NC	14.03 13.41	could not be located, damaged during snow removal
MW-2	21.42	6/8/06 8/22/07 11/11/08 3/10/10 5/25/11 8/22/12	8.15 8.50 8.30 7.43 7.77 8.33	13.27 12.92 13.12 13.99 13.65 13.09	
MW-3	19.71	6/8/06 8/22/07 11/11/08 3/10/10 5/25/11 8/22/12	5.77 6.30 6.25 5.36 5.62 6.23	13.94 13.41 13.46 14.35 14.09 13.48	
MW-9	18.83	6/8/06 8/22/07 11/11/08 3/10/10 5/25/11 8/22/12	4.59 5.15 5.01 4.19 4.45 5.05	14.24 13.68 13.82 14.64 14.38 13.78	
MW-9B	18.75	6/8/06 8/22/07 11/11/08 3/10/10 5/25/11 8/22/12	4.50 5.05 4.93 4.11 4.36 5.00	14.25 13.70 13.82 14.64 14.39 13.75	
MW-13A	16.02	6/8/06 8/22/07 11/11/08 3/10/10 5/25/11 8/22/12	2.59 3.02 2.90 2.27 2.51 2.93	13.43 13.00 13.12 13.75 13.51 13.09	

TABLE 2 DZUS FASTENERS SITE (1-52-033) GROUNDWATER ELEVATIONS

Well #	Reference	Date	Depth	Water Table	Comments
	Elevation		To Water	Elevation	
MW-13B	15.82	6/8/06 8/22/07	2.39 2.85	13.43 12.97	
		0/22/07 11/11/08	2.65	12.97	
		3/10/10	2.03	13.74	
		5/25/11	2.32	13.50	
		8/22/12	2.77	13.05	
MW-15A	19.09	6/7/06	5.48	13.61	
		8/22/07	5.80	13.29	
		11/11/08	5.64	13.45	
		3/10/10	4.95	14.14	
		5/25/11	5.15	13.94	
		8/22/12	5.69	13.40	
MW-15B	19.06	6/7/06	5.35	13.71	
		8/22/07	5.70	13.36	
		11/11/08	5.58	13.48	
		3/10/10	NC 5.10	12.06	unable to access, ACE Hardware
		5/25/11 8/22/12	5.10 5.65	13.96 13.41	
		0/22/12	5.05	13.41	
MW-17		5/25/11			Could not be located
MW-18	14.31	6/8/06	7.93	6.38	
		8/23/07	5.05	9.26	
		11/11/08	4.98	9.33	
		3/10/10	4.52	9.79	
		5/25/11	4.70	9.61	
		8/22/12	4.92	9.39	
MW-22A	20.09	6/7/06	6.00	14.09	
		8/22/07	6.44	13.65	
		11/11/08	6.38	13.71	
		3/10/10	5.78	14.31	
		5/25/11	5.92	14.17	
		8/22/12	6.45	13.64	
MW-22B	19.95	6/7/06	5.82	14.13	
		8/22/07	6.30	13.65	
		11/11/08	6.20	13.75	
		3/10/10	5.61	14.34	
		5/25/11	5.74	14.21	
		8/22/12	6.28	13.67	

TABLE 2 DZUS FASTENERS SITE (1-52-033) **GROUNDWATER ELEVATIONS**

Well #	Reference Elevation	Date	Depth To Water	Water Table Elevation	Comments
MW-23A	17.34	6/7/06 8/22/07 11/11/08 3/10/10 5/25/11 8/22/12	4.59 4.80 4.62 4.16 4.38 5.30	12.75 12.54 12.72 13.18 12.96 12.04	
MW-23B	17.29	6/7/06 8/22/07 11/11/08 3/10/10 5/25/11 8/22/12	4.51 5.05 4.59 4.06 4.31 4.62	12.78 12.24 12.70 13.23 12.98 12.67	

Notes:

All measurements in feet from top of casing

Veritcal data NGVD

Sample Location Sample ID Laboratory ID Sample Date Filtered/Unfiltered	Class GA Ground	MW-1 MW-1 E0773-05A 6/8/06 Unfiltered conc. Q	MW-1 DMW-1 F1193-01A 8/22/07 Unfiltered conc. Q	MW-1 DMW-1 destroyed 11/11/08 conc. Q		MW-1 DMW-1 destroyed 5/25/11 conc. Q	MW-1 DMW-1 destroyed 8/22/12 conc. Q	
Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium Cobalt Copper Iron Lead Magnesium Manganese Mercury Nickel Potassium Selenium Silver Sodium	NC 3 25 1,000 3 5 NC 50 NC 200 300 25 35,000 300 0.7 100 NC 10 50 20,000	4,180 ND 4.3 B 80.2 B 0.42 B 23.9 8,790 8.0 B 5.1 B 18.3 B 13,200 3.9 B 3,010 210 ND 8.7 B 1,760 ND 8.7 B 1,760 ND 22,500	3,160 ND 3.8 B 73.3 B 0.25 B 5.1 7,150 5.0 B 6.9 BE 16.0 B 12,600 9.8 B 2,420 158 ND 8.7 B 1,680 5.4 B ND 8.7 B	NA NA NA NA NA NA NA NA NA NA NA NA NA N	NA NA NA NA NA NA NA NA NA NA NA NA NA N	NA NA NA NA NA NA NA NA NA NA NA NA NA N	NA NA NA NA NA NA NA NA NA NA NA NA NA N	
Thallium Vanadium Zinc	0.5 NC 2,000	1.9 B 7.8 B 244	5.5 B 8.2 B 196	NA NA NA	NA NA NA	NA NA NA	NA NA NA	

Notes: All val

All values in µg/L

BOLD/Italics - exceeds criterion

NC - No Criteria ND - Not Detected

NA - Not analyzed

E - Estimated due to matrix interference

B - Estimated value (greater than MDL but less than RL)N - Matrix spike recovery falls outside of the control limit

* - Replicate RPDs were not within QC limits

AECOM Technical Services Northeast, Inc.

Sample Location				MW-2	MW-2	MW-2	MW-2	MW-2	MW-2
Sample ID		MW-2	DMW-2	DMW-2	DMW-2	DMW-2	DMW-2	DMW-2	DMW-2F
Laboratory ID	Ground	E0773-10A	F1193-04A	G2114-01	J0429-10A	K0942-01	K0942-02	L1807-19	L1808-15
Sample Date	Water	6/7/06	8/22/07	11/11/08	3/10/10	5/25/11	5/25/11	8/22/12	8/22/12
Filtered/Unfiltered	Criteria	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Filtered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	7,090	1,580	242	3,880 E	1,500	ND	328	ND
Antimony	3	ND	7.3 B	ND	9.4 B	ND	ND	ND	ND
Arsenic	25	3.9 B	6.3 B	ND	7.7 B	12.4 B	5.0 B	ND	ND
Barium	1,000	96.5 B	212	38.7 B	47.9 B	51.1 B	34.2 B	20.4 B	18.4 B
Beryllium	3	0.4 B	0.71 B	0.27 B	0.51 B	0.33 B	ND	ND	ND
Cadmium	5	4.2 B	8.6	2.7 B	10.4	ND	ND	ND	ND
Calcium	NC	15,500	28,200	14,500	11,100	38,700	34,500	12,500 E	12,300
Chromium	50	8.8 B	3.1 B	ND	6.8 B	2.2 B	ND	0.73 B	ND
Cobalt	NC	18.3 B	27 BE	13.8 B	9.3 B	11.4 B	7.6 B	1.2 B	1.0 B
Copper	200	19.3 B	8.3 B	12.6 B	34.9	7.9 B	ND	ND	ND
Iron	300	14,900	25,200	23,300	12,000 N	88,900	17,600	1,590 E	1,060
Lead	25	14.7	4.2 B	5.2 B	6.9 B	7.5 B	ND	ND	ND
Magnesium	35,000	3,740	4,690	2,700	2,810	3,690	3,510	1,850	1,790
Manganese	300	518	989	2,150	768	882	655	124	115
Mercury	0.7	ND	ND	ND	0.084 B	ND	ND	ND	ND
Nickel	100	13.3 B	9.0 B	4.7 B	13.5 B	6.5 B	2.8 B	1.7 B	1.3 B
Potassium	NC	2,140	2,780	1,880	1,450	2,470	2,410	1,440	1,430
Selenium	10	1.4 B	ND	ND	ND	ND	ND	ND	ND
Silver	50	ND	ND	ND	ND	ND	ND	ND	ND
Sodium	20,000	21,500	66,200	18,600	18,200	25,200	24,100	24,400 E	23,500
Thallium	0.5	2.3 B	6.3 B	ND	ND	ND	ND	ND	ND
Vanadium	NC	11.9 B	4.0 B	ND	16.2 B	2.5 B	ND	ND	ND
Zinc	2,000	138	82.8	64.3	109	111	30.5 B	18.4 B	5.2 B

Notes: All values in µg/L

BOLD/Italics - exceeds criterion

NC - No Criteria ND - Not Detected

NA - Not analyzed

E - Estimated due to matrix interference

B - Estimated value (greater than MDL but less than RL) N - Matrix spike recovery falls outside of the control limit

* - Replicate RPDs were not within QC limits

AECOM Technical Services Northeast, Inc.

Sample Location	NYSDEC	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3
Sample ID	Class GA	MW-3	DMW-3	DMW-3	DMW-3	DMW-3	DMW-3	DMW-3	DMW-3F
Laboratory ID	Ground	E0773-07A	F1193-07A	G2114-04	J0429-11A	K0942-03	K0942-04	L1807-20	L1808-17
Sample Date	Water	6/8/06	8/22/07	11/11/08	3/10/10	5/25/11	5/25/11	8/22/12	8/22/12
Filtered/Unfiltered	Criteria	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Filtered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q				
Aluminum	NC	5,650	620	314	2,890 E	8,520	ND	ND	ND
Antimony	3	ND	ND	ND	7.2 B	ND	ND	10.7 B	ND
Arsenic	25	2.9 B	ND	ND	3.2 B	7.1 B	6.3 B	ND	ND
Barium	1,000	90.9 B	37.2 B	28.3 B	35.3 B	59.7 B	20.3 B	29.0 B	28.0 B
Beryllium	3	0.26 B	ND	ND	0.25 B	0.7 B	ND	ND	ND
Cadmium	5	77.4	74.4	70.8	98.4	73.5	13.1	16.3	15.1
Calcium	NC	17,800	17,200	11,800	10,600	11,000	9,750	11,100 E	10,700
Chromium	50	9.2 B	1.6 B	ND	6.4 B	11.4 B	ND	ND	0.90 B
Cobalt	NC	4.4 B	1.6 BE	ND	2.2 B	4.7 B	ND	ND	ND
Copper	200	16.1 B	5.4 B	ND	6.8 B	9.7 B	ND	ND	ND
Iron	300	4,430	649	253	3,680 N	7,430	ND	50.5 B	ND
Lead	25	ND	3.8 B	2.7 B	3.9 B	7.5 B	ND	ND	ND
Magnesium	35,000	4,160	3,820	2,650	2,670	2,890	1,970	2,220	2,180
Manganese	300	423	301	262	553	980	ND	ND	ND
Mercury	0.7	ND	ND	ND	0.067 B	0.057 B	ND	ND	ND
Nickel	100	6.8 B	2.1 B	1.6 B	7.4 B	5.0 B	ND	0.92 B	ND
Potassium	NC	2,630	2,050	1,420	1,500	2,170	1,790	2,420	2,400
Selenium	10	ND	8.4 B	ND	10.6 B	ND	ND	ND	ND
Silver	50	ND	3.5 B	ND	ND	ND	ND	ND	ND
Sodium	20,000	27,700	31,000	25,000	20,700	20,400	19,400	23,400 E	23,000
Thallium	0.5	2.5 B	ND	ND	ND	ND	ND	ND	ND
Vanadium	NC	8.1 B	1.1 B	ND	4 B	9.6 B	ND	ND	ND
Zinc	2,000	87.0	29.4 B	26.2 B	29.0 B	34.0 B	18.9 B	ND	7.1 B

Notes: All values in µg/L

BOLD/Italics - exceeds criterion

NC - No Criteria

NA - Not analyzed

E - Estimated due to matrix interference

N - Matrix spike recovery falls outside of the control limit

B - Estimated value (greater than MDL but less than RL)

* - Replicate RPDs were not within QC limits

ND - Not Detected

AECOM Technical Services Northeast, Inc.

Sample Location		MW-9		MW-9	MW-9	MW-9	MW-9	MW-9	MW-9
Sample ID	Class GA	MW-9	DMW-9	DMW-9	DMW-9	DMW-9	DMW-9	DMW-9	DMW-9F
Laboratory ID		E0773-09A	F1193-06A	G2114-02	J0429-12A	K0942-05	K0942-06	L1807-21	L1808-19
Sample Date	Water	6/8/06	8/22/07	11/11/08	3/10/10	5/25/11	5/25/11	8/22/12	8/22/12
Filtered/Unfiltered	Criteria	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Filtered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q				
Aluminum	NC	16,800	3,520	611	2,300 E	2,850	ND	163 B	ND
Antimony	3	ND	ND	ND	ND	ND	ND	9.5 B	ND
Arsenic	25	32.6	16.2 B	ND	11.4 B	11.5 B	4.9 B	ND	ND
Barium	1,000	102 B	44.7 B	30.2 B	39.2 B	71.0 B	49.2 B	17.8 B	17.0 B
Beryllium	3	0.63 B	ND	0.21 B	0.29 B	0.42 B	ND	ND	ND
Cadmium	5	32.8	22.4	15.5	17.5	18.7	9.5	4.9 B	4.4 B
Calcium	NC	16,000	15,100	10,800	21,900	29,000	25,600	13,900 E	13,700
Chromium	50	125	62.2	35.3	62.7	85.5	2.9 B	8.3 B	4.0 B
Cobalt	NC	5.2 B	4.9 BE	1.5 B	2.0 B	2.5 B	ND	ND	ND
Copper	200	62.3	41.4	17.3 B	32.5	41.1	ND	ND	ND
Iron	300	21,600	12,400	3,670	11,300 N	11,600	1,760	556 E	ND
Lead	25	11.6	10.6	5.9 B	8.1 B	9.9 B	ND	ND	ND
Magnesium	35,000	3,170	1,550	2,690	4,210	4,110	3,900	3,300	3,220
Manganese	300	151	117	62.6	124	149	15.3 B	ND	ND
Mercury	0.7	ND	ND	ND	0.088 B	ND	ND	ND	ND
Nickel	100	18.3 B	7.3 B	3.3 B	8.0 B	6.5 B	2.4 B	1.4 B	2.3 B
Potassium	NC	3,270	4,830	1,720	3,950	6,310	5,210	1,420	1,390
Selenium	10	2.7 B	ND	ND	ND	ND	ND	ND	ND
Silver	50	ND	ND	ND	ND	ND	ND	ND	ND
Sodium	20,000	25,500	52,100	16,100	29,100	72,800	68,700	26,300 E	25,900
Thallium	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium	NC	33.1 B	13.4 B	5.5 B	10.4 B	12.8 B	ND	ND	ND
Zinc	2,000	170	73.1	55.9	82.8	90.9	36.6 B	12.9 B	11.8 B

Notes: All values in µg/L

BOLD/Italics - exceeds criterion

NC - No Criteria ND - Not Detected

NA - Not analyzed

* - Replicate RPDs were not within QC limits

B - Estimated value (greater than MDL but less than RL) E - Estimated due to matrix interference

N - Matrix spike recovery falls outside of the control limit

AECOM Technical Services Northeast, Inc.

Sample Location			MW-9B	MW-9B	MW-9B	MW-9B	MW-9B	MW-9B	MW-9B
Sample ID	Class GA		DMW-9B	DMW-9B	DMW-9B	DMW-9B	DMW-9B	DMW-9B	DMW-9BF
Laboratory ID			F1193-05A	G2114-03	J0429-14A	K0942-07	K0942-08	L1807-22	L1808-18
Sample Date		6/8/06	8/22/07	11/11/08	3/10/10	5/25/11	5/25/11	8/22/12	8/22/12
Filtered/Unfiltered	Criteria	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Filtered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q				
Aluminum	NC	213	177 B	ND	49.5 BE	99.1 B	ND	ND	ND
Antimony	3	1.8 B	4.6 B	ND	ND	ND	ND	ND	ND
Arsenic	25	ND	ND	ND	ND	ND	6.2 B	ND	ND
Barium	1,000	45.5 B	25.5 B	27.1 B	17.1 B	14.4 B	12.8 B	22.2 B	21.1 B
Beryllium	3	ND	ND	ND	0.051 B	ND	ND	ND	ND
Cadmium	5	2.9 B	1.2 B	0.23 B	3.6 B	ND	ND	ND	ND
Calcium	NC	10,800	11,900	8,180	6,950	8,580	8,480	9,300 E	8,330
Chromium	50	2.2 B	3.4 B	ND	2.4 B	1.4 B	ND	0.82 B	ND
Cobalt	NC	2.6 B	1.5 BE	ND	ND	ND	ND	ND	ND
Copper	200	28.8 B	14.8 B	ND	ND	ND	ND	ND	ND
Iron	300	561	429	134 B	286 N	528	31.8 B	39.5 B	ND
Lead	25	ND	6.0 B	ND	ND	ND	ND	ND	ND
Magnesium	35,000	1,640	1,630	1,330	1,380	1,490	1,430	1,680	1,480
Manganese	300	211	306	171	69.5	92.4	ND	ND	ND
Mercury	0.7	ND	ND	ND	ND	ND	ND	ND	ND
Nickel	100	8.6 B	2.9 B	ND	1.9 B	1.8 B	0.88 B	ND	ND
Potassium	NC	2,140	2,050	1,940	1,950	1,910	1,670	1,800	1,790
Selenium	10	ND	ND	ND	12.7 B	ND	ND	ND	ND
Silver	50	ND	2.2 B	ND	ND	ND	ND	ND	ND
Sodium	20,000	8,070	10,100	11,800	7,660	6,730	6,650	21,400 E	19,700
Thallium	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium	NC	ND	0.83 B	ND	ND	ND	ND	ND	ND
Zinc	2,000	83.7	36.0 B	35.3 B	23.3 B	27.1 B	25.4 B	ND	ND

Notes: All values in µg/L

BOLD/Italics - exceeds criterion

NC - No Criteria ND - Not Detected

NA - Not analyzed

E - Estimated due to matrix interference

B - Estimated value (greater than MDL but less than RL)N - Matrix spike recovery falls outside of the control limit

* - Replicate RPDs were not within QC limits

AECOM Technical Services Northeast, Inc.

Sample Location	NYSDEC	MW-13A	MW-13A	MW-13A	MW-13A	MW-13A	MW-13A	MW-13A	MW-13A
Sample ID	Class GA	MW-13A	DMW-13A	DMW-13A	DMW-13A	DMW-13A	DMW-13A	DMW-13A	DMW-13AF
Laboratory ID	Ground	E0773-13A	F1193-14A	F1193-14A	J0429-15A	K0942-17	K0942-18	L1807-15	L1808-25
Sample Date	Water	6/8/06	8/22/07	11/12/08	3/10/10	5/25/11	5/25/11	8/22/12	8/22/12
Filtered/Unfiltered	Criteria	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Filtered	Unfiltered	Filtered
		conc. Q	conc.	conc.	conc.	conc.	conc.	conc.	conc.
Aluminum	NC	15,000	2,560	258	529 E	2,100	ND	204	ND
Antimony	3	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	25	5.7 B	ND	ND	ND	13.1 B	ND	ND	ND
Barium	1,000	176 B	94.0 B	185 B	605	886	20.5 B	77.9 B	31.4 B
Beryllium	3	0.53 B	ND	ND	0.073 B	ND	ND	ND	ND
Cadmium	5	174	94.1	67.7	267	373	10.3	93.5	64.4
Calcium	NC	37,900	23,300	19,900	43,700	27,500	24,900	7,850	7,800
Chromium	50	12.9 B	2.7 B	ND	3.9 B	22.1	ND	2.8 B	1.9 B
Cobalt	NC	55.8	45.4 BE	35.4 B	144	268	1.1 B	33.7 B	15.1 B
Copper	200	34.3	ND	ND	17.9 B	20.8 B	ND	6.7 B	ND
Iron	300	12,700	3,490	300	749 N	2,310	ND	3,690	1,580
Lead	25	5.7 B	2.5 B	ND	5.3 B	ND	ND	ND	ND
Magnesium	35,000	5,580	3,640	2,630	4,570	3,820	3,340	936	960
Manganese	300	9,560	8,040	16,400	33,900	61,600	1,720	6,190	3,430
Mercury	0.7	ND	ND	ND	0.063 B	ND	ND	ND	ND
Nickel	100	9.4 B	2.1 B	ND	2.6 B	3.3 B	ND	1.1 B	2.7 B
Potassium	NC	7,430	6,390	3,680	7,510	6,700 E	5,990 E	2,250 E	2,140
Selenium	10	ND	ND	ND	ND	ND	ND	ND	ND
Silver	50	ND	3.5 B	ND	ND	12.1 B	ND	ND	ND
Sodium	20,000	94,500	77,500	21,700	247,000	38,400	37,500	47,000	46,900
Thallium	0.5	44	ND	11.7 B	88.2	ND	ND	9.2 B	ND
Vanadium	NC	17.6 B	3.7 B	ND	2.7 B	6.4 B	ND	ND	ND
Zinc	2,000	53.3	16.8 B	20.8 B	27.4 B	36.1 B	18.0 B	9.5 B	ND

Notes: All values in µg/L

BOLD/Italics - exceeds criterion

NC - No Criteria ND - Not Detected

NA - Not analyzed

E - Estimated due to matrix interference

B - Estimated value (greater than MDL but less than RL)EN - Matrix spike recovery falls outside of the control limit*

* - Replicate RPDs were not within QC limits

AECOM Technical Services Northeast, Inc.

Sample Location	NYSDEC	MW-13B	MW-13B	MW-13B	MW-13B	MW-13B	MW-13B	MW-13B	MW-13B
Sample ID	Class GA	MW-13B	DMW-13B	DMW-13B	DMW-13B	DMW-13B	DMW-13B	DMW-13B	DMW-13BF
Laboratory ID	Ground	E0773-14A	F1193-13A	G2114-13	J0429-16A	K0942-19	K0942-20	L1807-27	L1808-23
Sample Date	Water	6/8/06	8/22/07	11/12/08	3/10/10	5/25/11	5/25/11	8/22/12	8/22/12
Filtered/Unfiltered	Criteria	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Filtered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q				
Aluminum	NC	330	133 B	ND	114 BE	106 B	ND	ND	ND
Antimony	3	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	25	ND	ND	ND	ND	ND	ND	ND	ND
Barium	1,000	54.3 B	29.0 B	33.4 B	21.5 B	14.4 B	12.6 B	23.1 B	22.4 B
Beryllium	3	ND	ND	ND	ND	ND	ND	ND	ND
Cadmium	5	15	9.8	2.3 B	4.2 B	2.2 B	ND	1.5 B	1.1 B
Calcium	NC	10,700	9,840	11,700	8,880	10,900	10,900	11,300 E	10,600
Chromium	50	27.8	27.2	22.3	17.8 B	11.7 B	10.7 B	21.2	21.4
Cobalt	NC	3.9 B	1.9 BE	ND	ND	ND	ND	ND	ND
Copper	200	19.3 B	13.8 B	ND	ND	6.5 B	ND	ND	ND
Iron	300	614	404	106 B	286 N	469	ND	ND	ND
Lead	25	ND	7.7 B	3.1 B	ND	ND	ND	ND	ND
Magnesium	35,000	1,710	1,600	1,910	1,350	1,560	1,530	1,630	1,550
Manganese	300	621	426	153	243	148	ND	54.3	19.7 B
Mercury	0.7	ND	ND	ND	ND	ND	ND	ND	ND
Nickel	100	9.8 B	4.2 B	ND	1.3 B	1.5 B	ND	ND	ND
Potassium	NC	2,410	1,820	2,100	1,570	1,910 E	1,680 E	1,340	1,360
Selenium	10	ND	6.2 B	ND	ND	ND	ND	ND	ND
Silver	50	ND	2.3 B	ND	ND	ND	ND	ND	ND
Sodium	20,000	7,880	6,710	9,280	8,060	6,720	6,880	9,260 E	8,950
Thallium	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium	NC	1.3 B	0.96 B	ND	0.54 B	ND	ND	ND	ND
Zinc	2,000	45.9 B	33.2 B	24.3 B	24.3 B	32.7 B	32.5 B	ND	ND

Notes:

All values in µg/L

NC - No Criteria ND - Not Detected

BOLD/Italics - exceeds criterion

E - Estimated due to matrix interference

N - Matrix spike recovery falls outside of the control limit

B - Estimated value (greater than MDL but less than RL)

NA - Not analyzed

* - Replicate RPDs were not within QC limits

AECOM Technical Services Northeast, Inc.

Sample Location	NYSDEC	MW-15A	MW-15A	MW-15A	MW-15A	MW-15A	MW-15A	MW-15A	MW-15A
Sample ID	Class GA	MW-15A	DMW-15A	DMW-15A	DMW-15A	DMW-15A	DMW-15A	DMW-15A	DMW-15AF
Laboratory ID	Ground	E0773-03A	F1193-15A	G2114-08	J0429-17A	K0942-21	K0942-22	L1807-25	L1808-21
Sample Date	Water	6/7/06	8/22/07	11/12/08	3/9/10	5/25/11	5/25/11	8/22/12	8/22/12
Filtered/Unfiltered	Criteria	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Filtered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q				
Aluminum	NC	773	ND	ND	335 E	ND	ND	ND	ND
Antimony	3	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	25	ND	ND	ND	ND	ND	ND	ND	ND
Barium	1,000	53.7 B	15.5 B	20.1 B	30.8 B	23.1 B	16.4 B	15.9 B	15.0 B
Beryllium	3	ND	ND	ND	0.074 B	ND	ND	ND	ND
Cadmium	5	28.8	29.1	33.9	62.3	63	12.2	16.8	9.7
Calcium	NC	18,900	13,700	12,100	14,800	16,300	16,600	13,500 E	13,400
Chromium	50	3 B	0.45 B	ND	4.6 B	1.3 B	ND	ND	1.2 B
Cobalt	NC	3.2 B	1.3 BE	ND	0.9 B	ND	ND	ND	ND
Copper	200	38	4.8 B	ND	8.4 B	9.8 B	ND	ND	ND
Iron	300	2,320	158 B	ND	1,000 N	164 B	ND	ND	ND
Lead	25	9.9 B	1.7 B	ND	5.2 B	ND	ND	ND	ND
Magnesium	35,000	3,170	2,240	1,890	2,780	2,410	2,380	2,460	2,440
Manganese	300	370	929	895	2,850	1,510	56	238	41.1 B
Mercury	0.7	ND	ND	ND	ND	ND	ND	ND	ND
Nickel	100	7.1 B	0.85 B	ND	3.6 B	1.7 B	ND	ND	1.1 B
Potassium	NC	2,090	1,960	1,610	2,140	2,290 E	2,290 E	2,110	2,230
Selenium	10	ND	ND	ND	ND	ND	ND	ND	ND
Silver	50	ND	3.4 B	ND	ND	ND	ND	ND	ND
Sodium	20,000	18,000	13,300	9,040	17,100	19,500	19,800	20,400 E	20,400
Thallium	0.5	1.9 B	ND	ND	7.3 B	ND	ND	ND	ND
Vanadium	NC	2.6 B	ND	ND	0.69 B	ND	ND	ND	ND
Zinc	2,000	155	18.8 B	24.3 B	33.5 B	31.7 B	25.9 B	ND	ND

Notes: All value

All values in µg/L

NC - No Criteria ND - Not Detected

NA - Not analyzed

BOLD/Italics - exceeds criterion

E - Estimated due to matrix interference

B - Estimated value (greater than MDL but less than RL) N - Matrix spike recovery falls outside of the control limit

* - Replicate RPDs were not within QC limits

AECOM Technical Services Northeast, Inc.

Sample Location	NYSDEC	MW-15B	MW-15B	MW-15B	MW-15B	MW-15B	MW-15B	MW-15B	MW-15B
Sample ID	Class GA	MW-15B	DMW-15B	DMW-15B	DMW-15B	DMW-15B	DMW-15B	DMW-15B	DMW-15BF
Laboratory ID	Ground	E0773-04A	F1193-10A	G2114-07	Inaccessible	K0942-23	K0942-24	L1807-24	L1808-20
Sample Date	Water	6/7/06	8/22/07	11/12/08	3/10/10	5/25/11	5/25/11	8/22/12	8/22/12
Filtered/Unfiltered	Criteria	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Filtered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	224	58.6 B	ND	NA	ND	ND	ND	ND
Antimony	3	ND	ND	ND	NA	ND	ND	ND	ND
Arsenic	25	1.7 B	ND	ND	NA	5.5 B	4.8 B	ND	4.3 B
Barium	1,000	83.6 B	40.6 B	45.0 B	NA	34.6 B	34.4 B	32.4 B	29.4 B
Beryllium	3	ND	ND	0.19 B	NA	ND	ND	ND	ND
Cadmium	5	3.6 B	0.54 B	0.29 B	NA	ND	ND	ND	ND
Calcium	NC	16,400	13,700	13,700	NA	12,000	11,900	12,200 E	11,500
Chromium	50	2.1 B	0.56 B	ND	NA	ND	ND	ND	ND
Cobalt	NC	5.5 B	2.7 BE	1.9 B	NA	1.4 B	1.2 B	1.5 B	1.4 B
Copper	200	20.4 B	2.5 B	ND	NA	ND	ND	ND	18.1 B
Iron	300	4,780	1,320	875	NA	1,410	1,130	1,510 E	48.4 B
Lead	25	3.3 B	ND	3.6 B	NA	ND	ND	ND	ND
Magnesium	35,000	5,930	5,290	5,240	NA	4,860	4,920	4,700	4,490
Manganese	300	239	228	267	NA	182	182	189	174
Mercury	0.7	ND	ND	ND	NA	ND	ND	ND	ND
Nickel	100	11.5 B	1.4 B	2.2 B	NA	1.9 B	2.0 B	1.5 B	2.7 B
Potassium	NC	2,450	1,500	1,980	NA	1,890 E	1,860 E	1,470	1,510
Selenium	10	ND	ND	ND	NA	ND	ND	ND	ND
Silver	50	ND	2.5 B	1.0 B	NA	ND	ND	ND	ND
Sodium	20,000	46,600	45,200	43,900	NA	40,600	40,600	40,800 E	39,100
Thallium	0.5	3.0 B	ND	ND	NA	ND	ND	ND	ND
Vanadium	NC	0.72 B	ND	ND	NA	ND	ND	ND	ND
Zinc	2,000	129	16.8 B	38.9 B	NA	37.3 B	33.7 B	12.1 B	23.7 B

Notes:

All values in µg/L

NC - No Criteria

BOLD/Italics - exceeds criterion

E - Estimated due to matrix interference

NA - Not analyzed

ND - Not Detected

B - Estimated value (greater than MDL but less than RL) * - Replicate RPDs were not within QC limits N - Matrix spike recovery falls outside of the control limit

AECOM Technical Services Northeast, Inc.

Sample Location			MW-18	MW-18	MW-18	MW-18	MW-18	MW-18	MW-18
Sample ID		MW-18	DMW-18	DMW-18	DMW-18	DMW-18	DMW-18	DMW-18	DMW-18F
Laboratory ID	Ground	E0773-06A	F1193-16A	G2114-06	J0429-18A	K0942-25	K0942-26	L1807-18	L1808-28
Sample Date		6/8/06	8/23/07	11/11/08	3/9/10	5/25/11	5/25/11	8/23/12	8/23/12
Filtered/Unfiltered	Criteria	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Filtered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	1,430	829	88.1 B	2,270	3,280	ND	ND	ND
Antimony	3	ND	ND	5.1 B	12.2 B	ND	ND	ND	ND
Arsenic	25	ND	ND U	ND	5.9 B	7.0 B	ND	ND	ND
Barium	1,000	168 B	71.3 B	166 B	283	109 B	13.4 B	19.7 B	17.0 B
Beryllium	3	ND	ND	ND	0.31 B	0.29 B	ND	ND	ND
Cadmium	5	3 B	1.2 B	9.8	18.1	1.3 B	ND	ND	ND
Calcium	NC	13,900	9,790	12,600	27,000	19,000	18,400	14,000	14,300
Chromium	50	2.2 B	0.63 B	ND	5 B	3.9 B	ND	0.75 B	ND
Cobalt	NC	7.3 B	5.5 BE	2.0 B	11.6 B	9.2 B	ND	ND	ND
Copper	200	17.7 B	3.5 B	11.1 B	112	12.2 B	ND	ND	ND
Iron	300	1,150	1,320	114 B	4,620	2,890	ND	35.3 B	ND
Lead	25	ND	1.9 B	ND	19	ND	ND	ND	ND
Magnesium	35,000	2,340	1,550	2,440	4,130	3,300	3,070	2,360	2,410
Manganese	300	6,270	4,490	2,870	10,100 *	3,450	ND	113	23.4 B
Mercury	0.7	ND	ND	ND	ND	ND	ND	ND	ND
Nickel	100	17.5 B	13.0 B	29.3 B	48.0 BE	15.7 B	ND	ND	ND
Potassium	NC	1,520	1,180	1,540	4,120 E	2,050 E	1,860 E	2,310 E	2,410
Selenium	10	ND	ND	ND	16.4 B	ND	ND	ND	ND
Silver	50	ND	1.5 B	ND	ND	ND	ND	ND	ND
Sodium	20,000	7,870	6,020	12,100	10,600	16,800	17,300	17,900	18,700
Thallium	0.5	26.5	ND	ND	64.5	ND	ND	ND	ND
Vanadium	NC	2.6 B	1.4 B	ND	5.0 B	3.9 B	ND	ND	ND
Zinc	2,000	235	89.0	265	366	192	22.2 B	ND	ND

Notes: All valu

All values in µg/L

BOLD/Italics - exceeds criterion B - Estimated value (greater than MDL but less than RL) NC - No Criteria ND - Not Detected

NA - Not analyzed

E - Estimated due to matrix interference

N - Matrix spike recovery falls outside of the control limit * - Replicate RPDs were not within QC limits

AECOM Technical Services Northeast, Inc.

Sample Location	NYSDEC	MW-22A	MW-22A	MW-22A	MW-22A	MW-22A	MW-22A	MW-22A	MW-22A
Sample ID	Class GA	MW-22A	DMW-22A	DMW-22A	DMW-22A	DMW-22A	DMW-22A	DMW-22A	DMW-22AF
Laboratory ID	Ground	E0773-11A	F1193-09A	G2114-09	J0429-19A	K0942-11	K0942-12	L1807-17	L1808-27
Sample Date	Water	6/7/06	8/22/07	11/12/08	3/9/10	5/25/11	5/25/11	8/23/12	8/23/12
Filtered/Unfiltered	Criteria	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Filtered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q				
Aluminum	NC	4,320	2,870	2,620	1,060	159 B	ND	ND	ND
Antimony	3	1.7 B	5.2 B	ND	13.0 B	ND	ND	ND	ND
Arsenic	25	16.0 B	3.8 B	7.2 B	15.4 B	7.5 B	4.5 B	ND	ND
Barium	1,000	167 B	76.9 B	69.6 B	109 B	106 B	111 B	36.1 B	37.8 B
Beryllium	3	0.15 B	ND	0.21 B	0.19 B	ND	ND	ND	ND
Cadmium	5	38.9	22.1	13.5	13.7	6.8	ND	ND	ND
Calcium	NC	52,100	37,500	55,700	104,000	114,000	96,400	27,600	28,200
Chromium	50	18.0 B	12.8 B	13.0 B	8.8 B	2.8 B	0.76 B	2.2 B	1.7 B
Cobalt	NC	2.2 B	5.2 BE	ND	1.4 B	ND	ND	ND	ND
Copper	200	32.3	24.0 B	19.3 B	21.5 B	7.9 B	ND	ND	ND
Iron	300	70,400	22,400	22,000	61,100	16,700	2,260	2,700	2,690
Lead	25	8.6 B	13.1	11.3	12.4	ND	ND	ND	ND
Magnesium	35,000	8,300	5,580	7,860	13,800	15,600	13,100	4,060	4,210
Manganese	300	1,280	1,190	1,030	912 *	683	780	437	443
Mercury	0.7	ND	ND	ND	0.094 B	ND	ND	ND	ND
Nickel	100	6.0 B	3.7 B	2.6 B	4.7 BE	2.4 B	1.4 B	ND	ND
Potassium	NC	4,560	3,530	3,980	3,430 E	4,520 E	5,120 E	2,980 E	3,040
Selenium	10	8.7 B	ND	ND	24.3 B	ND	ND	ND	ND
Silver	50	ND	ND	ND	ND	ND	ND	ND	ND
Sodium	20,000	95,200	69,400	39,900	57,800	100,000	134,000	59,700	61,000
Thallium	0.5	ND	2.8 B	ND	ND	ND	ND	ND	ND
Vanadium	NC	17.4 B	9.2 B	7.0 B	6.3 B	3.1 B	ND	ND	ND
Zinc	2,000	1,650	1,170	714	1,360	1,000	546	16.9 B	16.1 B

All values in µg/L Notes:

BOLD/Italics - exceeds criterion

B - Estimated value (greater than MDL but less than RL)

NC - No Criteria ND - Not Detected

NA - Not analyzed

E - Estimated due to matrix interference

N - Matrix spike recovery falls outside of the control limit * - Replicate RPDs were not within QC limits

AECOM Technical Services Northeast, Inc.

Sample Location	NYSDEC	MW-22B	MW-22B	MW-22B	MW-22B	MW-22B	MW-22B	MW-22B	MW-22B
Sample ID	Class GA	MW-22B	DMW-22B	DMW-22B	DMW-22B	DMW-22B	DMW-22B	DMW-22B	DMW-22BF
Laboratory ID	Ground	E0773-12A	F1193-08A	G2114-11	J0429-20A	k0942-13	k0942-13	L1807-16	L1808-26
Sample Date	Water	6/7/06	8/22/07	11/12/08	3/9/10	5/25/11	5/25/11	8/23/12	8/23/12
Filtered/Unfiltered	Criteria	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Filtered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	763 B	151 B	ND	56.3 B	ND	ND	ND	ND
Antimony	3	ND	4.7 B	ND	8.7 B	ND	ND	ND	ND
Arsenic	25	ND	ND	ND	ND	ND	ND	ND	ND
Barium	1,000	76.6 B	48.2 B	41.3 B	57.6 B	43.3 B	35.6 B	39.6 B	40.5 B
Beryllium	3	ND	ND	ND	0.039 B	ND	ND	ND	ND
Cadmium	5	29.0 B	4.4 B	1.2 B	1.7 B	ND	ND	ND	ND
Calcium	NC	12,800	20,400	27,200	21,400	19,500	19,700	22,400	22,500
Chromium	50	7.9 B	1.5 B	ND	1.6 B	0.66 B	ND	ND	ND
Cobalt	NC	17.4 B	3.9 BE	1.5 B	1.0 B	ND	ND	ND	ND
Copper	200	118 B	4.0 B	ND	ND	ND	ND	ND	ND
Iron	300	4,600	1,120	518	358	164 B	ND	110 B	ND
Lead	25	8.6 B	3 B	2.4 B	3.3 B	ND	ND	ND	ND
Magnesium	35,000	2,660 B	3,130	5,090	3,510	3,230	3,300	3,860	3,950
Manganese	300	2,310	2,440	775	94 0 *	589	342	748	726
Mercury	0.7	ND	ND	ND	ND	ND	ND	ND	ND
Nickel	100	28.0 B	2.7 B	6.5 B	2.0 BE	0.85 B	ND	ND	ND
Potassium	NC	3,000 B	2,500	1,910	4,220 E	4,740 E	4,260 E	4,470 E	4,270
Selenium	10	ND	ND	ND	19.0 B	ND	ND	ND	ND
Silver	50	ND	4.2 B	ND	ND	ND	ND	ND	ND
Sodium	20,000	8,170 B	17,100	11,300	14,400	12,700	13,600	19,200	19,000
Thallium	0.5	20.1 B	3.5 B	ND	ND	ND	ND	ND	ND
Vanadium	NC	ND	0.49 B	ND	ND	ND	ND	ND	ND
Zinc	2,000	194 B	39.4 B	29.8 B	34.6 B	20.1 B	17.6 B	5.7 B	ND

Notes: All value

All values in µg/L

BOLD/Italics - exceeds criterion

NC - No Criteria ND - Not Detected

NA - Not analyzed

E - Estimated due to matrix interference

B - Estimated value (greater than MDL but less than RL)N - Matrix spike recovery falls outside of the control limit

* - Replicate RPDs were not within QC limits

AECOM Technical Services Northeast, Inc.

Sample Location	NYSDEC	MW-23A	MW-23A	MW-23A	MW-23A	MW-23A	MW-23A	MW-23A	MW-23A
Sample ID	Class GA	MW-23A	DMW-23A	DMW-23A	DMW-23A	DMW-23A	DMW-23A	DMW-23A	DMW-23AF
Laboratory ID	Ground	E0773-01A	F1193-12A	G2114-14	J0429-21A	K0942-15	K0942-16	L1807-28	L1808-24
Sample Date	Water	6/7/06	8/22/07	11/12/08	3'10/10	5/25/11	5/25/11	8/22/12	8/22/12
Filtered/Unfiltered	Criteria	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Filtered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	941	2,440	3,200	3,790	5,060	ND	161 B	ND
Antimony	3	1.8 B	5.8 B	ND	9.5 B	ND	ND	ND	ND
Arsenic	25	2.0 B	4.1 B	5.8 B	7.9 B	7.4 B	ND	ND	ND
Barium	1,000	87.5 B	51.2 B	40.1 B	47.8 B	47.4 B	34.6 B	28.0 B	27.3 B
Beryllium	3	ND	ND	0.29 B	0.23 B	ND	ND	ND	ND
Cadmium	5	110	702	1,080	704	924	9.5	31.7	3.3 B
Calcium	NC	34,200	40,900	31,000	38,600	29,300	27,800	26,700 E	26,400
Chromium	50	3.6 B	4.9 B	3.6 B	6.4 B	6.4 B	0.97 B	1.2 B	4.0 B
Cobalt	NC	3.2 B	6.1 BE	ND	0.76 B	ND	ND	ND	ND
Copper	200	33.2	35.9	47.6	137	190	ND	6.7 B	ND
Iron	300	10,300	29,700	13,100	11,500	15,200	2,030	1,860 E	602
Lead	25	ND	6.6 B	9.5 B	11.2	5.6 B	ND	ND	ND
Magnesium	35,000	6,660	6,280	9,020	8,010	5,160	5,100	4,950	4,750
Manganese	300	1,100	612	1,390	1,410 *	1,600	1,480	1,110	1,170
Mercury	0.7	0.065 B	ND	ND	0.12 B	0.035 B	ND	ND	ND
Nickel	100	9.3 B	7.1 B	2.2 B	6.3 BE	3.7 B	1.2 B	ND	2.0 B
Potassium	NC	7,070	5,200	6,780	6,930 E	6,270 E	6,420 E	5,770	5,790
Selenium	10	1.3 B	6.1 B	ND	13.5 B	ND	ND	ND	ND
Silver	50	0.92 B	ND	ND	ND	ND	ND	ND	ND
Sodium	20,000	60,200	32,400	37,800	64,600	67,900	70,800	74,100 E	73,400
Thallium	0.5	9.3 B	ND	ND	11.3 B	ND	ND	ND	ND
Vanadium	NC	5.5 B	12.6 B	20.5 B	11.4 B	16.4 B	ND	1.1 B	ND
Zinc	2,000	181	26.9 B	42.7 B	48.3 B	70.5	15.6 B	ND	5.9 B

Notes: All valu

All values in µg/L

NC - No Criteria NA - Not analyzed

BOLD/Italics - exceeds criterion

E - Estimated due to matrix interference

B - Estimated value (greater than MDL but less than RL)
 N - Matrix spike recovery falls outside of the control limit

* - Replicate RPDs were not within QC limits

ND - Not Detected

AECOM Technical Services Northeast, Inc.

Sample Location	NYSDEC	MW-23B	MW-23B	MW-23B	MW-23B	MW-23B	MW-23B	MW-23B	MW-23B
Sample ID	Class GA	MW-23B	DMW-23B	DMW-23B	DMW-23B	DMW-23B	DMW-23B	DMW-23B	DMW-23BF
Laboratory ID		E0773-02A	F1193-11A	G2114-15	J0429-22A	K0942-27	K0942-28	L1807-26	L1808-22
Sample Date	Water	6/7/06	8/22/07	11/12/08	3/10/10	5/25/11	5/25/11	8/22/12	8/22/12
Filtered/Unfiltered	Criteria	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Filtered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q				
Aluminum	NC	2,450	632	406	2,820	1,810	ND	103 B	ND
Antimony	3	3.2 B	ND	ND	6.2 B	ND	ND	ND	ND
Arsenic	25	4.1 B	ND	ND	6.7 B	ND	ND	ND	ND
Barium	1,000	215	86.4 B	64.6 B	77.4 B	64.8 B	150 B	29.0 B	26.8 B
Beryllium	3	0.21 B	ND	0.13 B	0.3 B	ND	ND	ND	ND
Cadmium	5	320	60.0	42.2	43.8	40.1	5.8	69.6	33.1
Calcium	NC	21,500	25,100	15,700	24,400	24,800	21,700	18,100 E	17,700
Chromium	50	74.9	13.9 B	4.3 B	61.6	12.6 B	8.5 B	10.7 B	7.8 B
Cobalt	NC	4.8 B	2.4 BE	ND	3.5 B	1.7 B	0.91 B	ND	ND
Copper	200	94.6	19.8 B	24.6 B	54.8	25.6 B	13.9 B	4.1 B	ND
Iron	300	8,220	2,140	1,270	7,870	5,200	36,100	279 E	117 B
Lead	25	35.7	10.3	17.7	43.9	22.6	ND	ND	ND
Magnesium	35,000	1,890	1,290	1,590	2,730	4,150	2,460	2,950	2,910
Manganese	300	548	508	52.1	398 *	126	169	138	135
Mercury	0.7	0.11 B	ND	ND	0.11 B	ND	ND	ND	ND
Nickel	100	68.8	16.7 B	20.5 B	23.2 BE	14.8 B	10 B	2.4 B	1.3 B
Potassium	NC	2,400	1,970	1,660	1,650 E	2,450 E	2,110 E	1,760	1,820
Selenium	10	ND	8.6 B	ND	19.3 B	ND	ND	ND	ND
Silver	50	ND	5.0 B	0.81 B	ND	ND	ND	ND	ND
Sodium	20,000	2,390	3,870	2,200	84,400	18,900	18,500	15,000 E	14,700
Thallium	0.5	3.1 B	ND	ND	6.1 B	ND	ND	ND	ND
Vanadium	NC	17.7 B	9.0 B	5.9 B	12.1 B	12.9 B	ND	ND	ND
Zinc	2,000	417	145	198	376	410	47 B	17.7 B	ND

Notes: All valu

All values in µg/L

BOLD/Italics - exceeds criterion

NC - No Criteria ND - Not Detected

NA - Not analyzed

E - Estimated due to matrix interference

* - Replicate RPDs were not within QC limits

N - Matrix spike recovery falls outside of the control limit

B - Estimated value (greater than MDL but less than RL)

AECOM Technical Services Northeast, Inc.

TOTAL VERSUS DISSOLVED METALS CONCENTRATIONS IN GROUNDWATER

Sample Location	NYSDEC	MW-2	MW-2	MW-2	MW-3	MW-3	MW-3	MW-9	MW-9	MW-9
Sample ID	Class GA	DMW-2	DMW-2F		DMW-3	DMW-3F		DMW-9	DMW-9F	
Laboratory ID	Ground	L1807-19	L1808-15		L1807-20	L1808-17		L1807-21	L1808-19	
Sample Date	Water	8/22/12	8/22/12		8/22/12	8/22/12		8/22/12	8/22/12	
Filtered/Unfiltered	Criteria	Unfiltered	Filtered	Percent	Unfiltered	Filtered	Percent	Unfiltered	Filtered	Percent
Metal		conc. Q	conc. Q	Dissolved	conc. Q	conc. Q	Dissolved	conc. Q	conc. Q	Dissolved
Aluminum	NC	328	ND	NC	ND	ND	NC	163 B	ND	NC
Antimony	3	ND	ND	NC	10.7 B	ND	NC	9.5 B	ND	NC
Arsenic	25	ND	ND	NC	ND	ND	NC	ND	ND	NC
Barium	1,000	20.4 B	18.4 B	90.2%	29.0 B	28.0 B	96.6%	17.8 B	17.0 B	95.5%
Beryllium	3	ND	ND	NC	ND	ND	NC	ND	ND	NC
Cadmium	5	ND	ND	NC	16.3	15.1	92.6%	4.9 B	4.4 B	89.8%
Calcium	NC	12,500 E	12,300	98.4%	11,100 E	10,700	96.4%	13,900 E	13,700	98.6%
Chromium	50	0.73 B	ND	NC	ND	0.9 B	NC	8.3 B	4.0 B	48.2%
Cobalt	NC	1.2 B	1 B	83.3%	ND	ND	NC	ND	ND	NC
Copper	200	ND	ND	NC	ND	ND	NC	ND	ND	NC
Iron	300	1,590 E	1,060	66.7%	50.5 B	ND	NC	556 E	ND	NC
Lead	25	ND	ND	NC	ND	ND	NC	ND	ND	NC
Magnesium	35,000	1,850	1,790	96.8%	2,220	2,180	98.2%	3,300	3,220	97.6%
Manganese	300	124	115	92.7%	ND	ND	NC	ND	ND	NC
Mercury	0.7	ND	ND	NC	ND	ND	NC	ND	ND	NC
Nickel	100	1.7 B	1.3 B	76.5%	0.92 B	ND	NC	1.4 B	2.3 B	164.3%
Potassium	NC	1,440	1,430	99.3%	2,420	2,400	99.2%	1,420	1,390	97.9%
Selenium	10	ND	ND	NC	ND	ND	NC	ND	ND	NC
Silver	50	ND	ND	NC	ND	ND	NC	ND	ND	NC
Sodium	20,000	24,400 E	23,500	96.3%	23,400 E	23,000	98.3%	26,300 E	25,900	98.5%
Thallium	0.5	ND	ND	NC	ND	ND	NC	ND	ND	NC
Vanadium	NC	ND	ND	NC	ND	ND	NC	ND	ND	NC
Zinc	2,000	18.4 B	5.2 B	28.3%	ND	7.1 B	NC	12.9 B	11.8 B	91.5%
Turbidity	50 NTU	0.0			0.0			34.1		

Notes: ND - Not Detected

B - Estimated value (greater than MDL but less than RL)

NC - both filtered and unfiltered result was "not detected"

TOTAL VERSUS DISSOLVED METALS CONCENTRATIONS IN GROUNDWATER

Sample Location	NYSDEC	MW-9B	MW-9B	MW-9B	MW-13A	MW-13A	MW-13A	MW-13B	MW-13B	MW-13B
Sample ID	Class GA	DMW-9B	DMW-9BF		DMW-13A	DMW-13AF		DMW-13B	DMW-13BF	
Laboratory ID	Ground	L1807-22	L1808-18		L1807-15	L1808-25		L1807-27	L1808-23	
Sample Date	Water	8/22/12	8/22/12		8/22/12	8/22/12		8/22/12	8/22/12	
Filtered/Unfiltered	Criteria	Unfiltered	Filtered	Percent	Unfiltered	Filtered	Percent	Unfiltered	Filtered	Percent
Metal		conc. Q	conc. Q	Dissolved	conc.	conc.	Dissolved	conc. Q	conc. Q	Dissolved
Aluminum	NC	ND	ND	NC	204	ND	NC	ND	ND	NC
Antimony	3	ND	ND	NC	ND	ND	NC	ND	ND	NC
Arsenic	25	ND	ND	NC	ND	ND	NC	ND	ND	NC
Barium	1,000	22.2 B	21.1 B	95.0%	77.9 B	31.4 B	40.3%	23.1 B	22.4 B	97.0%
Beryllium	3	ND	ND	NC	ND	ND	NC	ND	ND	NC
Cadmium	5	ND	ND	NC	93.5	64.4	68.9%	1.5 B	1.1 B	73.3%
Calcium	NC	9,300 E	8,330	89.6%	7,850	7,800	99.4%	11,300 E	10,600	93.8%
Chromium	50	0.82 B	ND	NC	2.8 B	1.9 B	67.9%	21.2	21.4	100.9%
Cobalt	NC	ND	ND	NC	33.7 B	15.1 B	44.8%	ND	ND	NC
Copper	200	ND	ND	NC	6.7 B	ND	NC	ND	ND	NC
Iron	300	39.5 B	ND	NC	3,690	1,580	42.8%	ND	ND	NC
Lead	25	ND	ND	NC	ND	ND	NC	ND	ND	NC
Magnesium	35,000	1,680	1,480	88.1%	936	960	102.6%	1,630	1,550	95.1%
Manganese	300	ND	ND	NC	6,190	3,430	55.4%	54.3	19.7 B	36.3%
Mercury	0.7	ND	ND	NC	ND	ND	NC	ND	ND	NC
Nickel	100	ND	ND	NC	1.1 B	2.7 B	245.5%	ND	ND	NC
Potassium	NC	1,800	1,790	99.4%	2,250 E	2,140	95.1%	1,340	1,360	101.5%
Selenium	10	ND	ND	NC	ND	ND	NC	ND	ND	NC
Silver	50	ND	ND	NC	ND	ND	NC	ND	ND	NC
Sodium	20,000	21,400 E	19,700	92.1%	47,000	46,900	99.8%	9,260 E	8,950	96.7%
Thallium	0.5	ND	ND	NC	9.2 B	ND	NC	ND	ND	NC
Vanadium	NC	ND	ND	NC	ND	ND	NC	ND	ND	NC
Zinc	2,000	ND	ND	NC	9.5 B	ND	NC	ND	ND	NC
Turbidity	50 NTU	27.6			41.2			0.0		

Notes: ND - Not Detected

 ${\sf B}$ - Estimated value (greater than MDL but less than RL)

NC - both filtered and unfiltered result was "not detected"

TOTAL VERSUS DISSOLVED METALS CONCENTRATIONS IN GROUNDWATER

Sample Location	NYSDEC	MW-15A	MW-15A	MW-15A	MW-15B	MW-15B	MW-15B	MW-18	MW-18	MW-18
Sample ID	Class GA	DMW-15A	DMW-15AF		DMW-15B	DMW-15BF		DMW-18	DMW-18F	
Laboratory ID	Ground	L1807-25	L1808-21		L1807-24	L1808-20		L1807-18	L1808-28	
Sample Date	Water	8/22/12	8/22/12		8/22/12	8/22/12		8/23/12	8/23/12	
Filtered/Unfiltered	Criteria	Unfiltered	Filtered	Percent	Unfiltered	Filtered	Percent	Unfiltered	Filtered	Percent
Metal		conc. Q	conc. Q	Dissolved	conc. Q	conc. Q	Dissolved	conc. Q	conc. Q	Dissolved
Aluminum	NC	ND	ND	NC	ND	ND	NC	ND	ND	NC
Antimony	3	ND	ND	NC	ND	ND	NC	ND	ND	NC
Arsenic	25	ND	ND	NC	ND	4.3 B	NC	ND	ND	NC
Barium	1,000	15.9 B	15.0 B	94.3%	32.4 B	29.4 B	90.7%	19.7 B	17.0 B	86.3%
Beryllium	3	ND	ND	NC	ND	ND	NC	ND	ND	NC
Cadmium	5	16.8	9.7	57.7%	ND	ND	NC	ND	ND	NC
Calcium	NC	13,500 E	13,400	99.3%	12,200 E	11,500	94.3%	14,000	14,300	102.1%
Chromium	50	ND	1.2 B	NC	ND	ND	NC	0.75 B	ND	NC
Cobalt	NC	ND	ND	NC	1.5 B	1.4 B	93.3%	ND	ND	NC
Copper	200	ND	ND	NC	ND	18.1 B	NC	ND	ND	NC
Iron	300	ND	ND	NC	1,510 E	48.4 B	3.2%	35.3 B	ND	NC
Lead	25	ND	ND	NC	ND	ND	NC	ND	ND	NC
Magnesium	35,000	2,460	2,440	99.2%	4,700	4,490	95.5%	2,360	2,410	102.1%
Manganese	300	238	41.1 B	17.3%	189	174	92.1%	113	23.4 B	20.7%
Mercury	0.7	ND	ND	NC	ND	ND	NC	ND	ND	NC
Nickel	100	ND	1.1 B	NC	1.5 B	2.7 B	180.0%	ND	ND	NC
Potassium	NC	2,110	2,230	105.7%	1,470	1,510	102.7%	2,310 E	2,410	104.3%
Selenium	10	ND	ND	NC	ND	ND	NC	ND	ND	NC
Silver	50	ND	ND	NC	ND	ND	NC	ND	ND	NC
Sodium	20,000	20,400 E	20,400	100.0%	40,800 E	39,100	95.8%	17,900	18,700	104.5%
Thallium	0.5	ND	ND	NC	ND	ND	NC	ND	ND	NC
Vanadium	NC	ND	ND	NC	ND	ND	NC	ND	ND	NC
Zinc	2,000	ND	ND	NC	12.1 B	23.7 B	195.9%	ND	ND	NC
Turbidity	50 NTU	0.0			32.3	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	0.0		

Notes: ND - Not Detected

B - Estimated value (greater than MDL but less than RL)

NC - both filtered and unfiltered result was "not detected"

TOTAL VERSUS DISSOLVED METALS CONCENTRATIONS IN GROUNDWATER

Sample Location	NYSDEC	MW-22A	MW-22A	MW-22A	MW-22B	MW-22B	MW-22B
Sample ID	Class GA	DMW-22A	DMW-22AF		DMW-22B	DMW-22BF	
Laboratory ID	Ground	L1807-17	L1808-27		L1807-16	L1808-26	
Sample Date	Water	8/23/12	8/23/12		8/23/12	8/23/12	
Filtered/Unfiltered	Criteria	Unfiltered	Filtered	Percent	Unfiltered	Filtered	Percent
Metal		conc. Q	conc. Q	Dissolved	conc. Q	conc. Q	Dissolved
Aluminum	NC	ND	ND	NC	ND	ND	NC
Antimony	3	ND	ND	NC	ND	ND	NC
Arsenic	25	ND	ND	NC	ND	ND	NC
Barium	1,000	36.1 B	37.8 B	104.7%	39.6 B	40.5 B	102.3%
Beryllium	3	ND	ND	NC	ND	ND	NC
Cadmium	5	ND	ND	NC	ND	ND	NC
Calcium	NC	27,600	28,200	102.2%	22,400	22,500	100.4%
Chromium	50	2.2 B	1.7 B	77.3%	ND	ND	NC
Cobalt	NC	ND	ND	NC	ND	ND	NC
Copper	200	ND	ND	NC	ND	ND	NC
Iron	300	2,700	2,690	99.6%	110 B	ND	NC
Lead	25	ND	ND	NC	ND	ND	NC
Magnesium	35,000	4,060	4,210	103.7%	3,860	3,950	102.3%
Manganese	300	437	443	101.4%	748	726	97.1%
Mercury	0.7	ND	ND	NC	ND	ND	NC
Nickel	100	ND	ND	NC	ND	ND	NC
Potassium	NC	2,980 E	3,040	102.0%	4,470 E	4,270	95.5%
Selenium	10	ND	ND	NC	ND	ND	NC
Silver	50	ND	ND	NC	ND	ND	NC
Sodium	20,000	59,700	61,000	102.2%	19,200	19,000	99.0%
Thallium	0.5	ND	ND	NC	ND	ND	NC
Vanadium	NC	ND	ND	NC	ND	ND	NC
Zinc	2,000	16.9 B	16.1 B	95.3%	5.7 B	ND	NC
Turbidity	50 NTU	35.2			0.0	· · · · · · · · · · · · · · · · · · ·	

Notes: ND - Not Detected

B - Estimated value (greater than MDL but less than RL)

NC - both filtered and unfiltered result was "not detected"

TOTAL VERSUS DISSOLVED METALS CONCENTRATIONS IN GROUNDWATER

Sample Location	NYSDEC	MW-23A	MW-23A	MW-23A	MW-23B	MW-23B	MW-23B
Sample ID	Class GA	DMW-23A	DMW-23AF		DMW-23B	DMW-23BF	
Laboratory ID	Ground	L1807-28	L1808-24		L1807-26	L1808-22	
Sample Date	Water	8/22/12	8/22/12		8/22/12	8/22/12	
Filtered/Unfiltered	Criteria	Unfiltered	Filtered	Percent	Unfiltered	Filtered	Percent
Metal		conc. Q	conc. Q	Dissolved	conc. Q	conc. Q	Dissolved
Aluminum	NC	161 B	ND	NC	103 B	ND	NC
Antimony	3	ND	ND	NC	ND	ND	NC
Arsenic	25	ND	ND	NC	ND	ND	NC
Barium	1,000	28.0 B	27.3 B	97.5%	29.0 B	26.8 B	92.4%
Beryllium	3	ND	ND	NC	ND	ND	NC
Cadmium	5	31.7	3.3 B	10.4%	69.6	33.1	47.6%
Calcium	NC	26,700 E	26,400	98.9%	18,100 E	17,700	97.8%
Chromium	50	1.2 B	4.0 B	333.3%	10.7 B	7.8 B	72.9%
Cobalt	NC	ND	ND	NC	ND	ND	NC
Copper	200	6.7 B	ND	NC	4.1 B	ND	NC
Iron	300	1,860 E	602	32.4%	279 E	117 B	41.9%
Lead	25	ND	ND	NC	ND	ND	NC
Magnesium	35,000	4,950	4,750	96.0%	2,950	2,910	98.6%
Manganese	300	1,110	1,170	105.4%	138	135	97.8%
Mercury	0.7	ND	ND	NC	ND	ND	NC
Nickel	100	ND	2.0 B	NC	2.4 B	1.3 B	54.2%
Potassium	NC	5,770	5,790	100.3%	1,760	1,820	103.4%
Selenium	10	ND	ND	NC	ND	ND	NC
Silver	50	ND	ND	NC	ND	ND	NC
Sodium	20,000	74,100 E	73,400	99.1%	15,000 E	14,700	98.0%
Thallium	0.5	ND	ND	NC	ND	ND	NC
Vanadium	NC	1.1 B	ND	NC	ND	ND	NC
Zinc	2,000	ND	5.9 B	NC	17.7 B	ND	NC
Turbidity	50 NTU	0.0			0.0		

Notes: ND - Not Detected

B - Estimated value (greater than MDL but less than RL)

NC - both filtered and unfiltered result was "not detected"

Sample Location	NYSDEC	Lake	Lake	Lake	Lake	Lake	Lake
	Class A	Capri	Capri	Capri	Capri	Capri	Capri
Sample ID	Surface	SW-1	SW-1	SW-1	SW-1	SW-1	SW-1
Laboratory ID	Water	E0868-01A	F1193-20A	G2136-11	J0376-01A	K0911-08	L1949-01
Sample Date	Criteria	6/21/06	8/23/07	11/14/08	3/4/10	5/22/11	09/17/12
		conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	31.9 B	40.1 B	ND	29.6 B	ND	ND
Antimony	3	ND	ND	6.0 B	ND	ND	ND
Arsenic	50	ND	ND	ND	ND	ND	ND
Barium	1,000	13.2 B	23.1 B	31.8 B	22.4 B	13.6 B	20.8 B
Beryllium	3	ND	ND	ND	ND	ND U	ND
Cadmium	5	1.1 B	2.3 B	1.5 B	2.6 B	1.6 B	ND
Calcium	NC	15,100	14,100	14,300	15,300	13,900	14,900
Chromium	50	0.6 B	0.95 B	ND	0.52 B	1.3 B	ND
Cobalt	NC	0.94 B	1.4 BE	ND	0.76 B	0.77 B	ND
Copper	200	8.9 B	3.1 B	ND	ND	ND	ND
Iron	300	691	738	598	387	416	172 B
Lead	50	ND	2.1 B	ND	ND	ND	ND
Magnesium	35,000	3,500	2,860	3,570	3,420	2,960	3,420
Manganese	300	1,050	862	1,610	996	1,000	552
Mercury	0.7	ND	ND	ND	ND	ND	ND
Nickel	100	1.3 B	0.6 B	ND	1.6 B	ND	ND
Potassium	NC	2,000	1,930	2,250	2,070	2,040	2,300
Selenium	10	ND	6 B	ND	ND	ND	ND
Silver	50	1.8 B	2.8 B	0.98 B	ND	ND	ND
Sodium	20,000	18,500	15,800	19,000	22,500	18,700	24,600
Thallium	0.5	ND	ND	ND	ND	ND	ND
Vanadium	NC	0.78 B	0.79 B	ND	2.6 B	ND	ND
Zinc	2,000	22.4 B	22.8 B	22.3 B	38 B	22.3 B	10.1 B

Notes: All values in μ g/L

NC - No Criteria

ND - Not Detected

BOLD/Italics - exceeds criterion

B - Estimated value (greater than MDL but less than RL)

E - Estimated due to matrix interference

Sample Location	NYSDEC	Lake	Lake	Lake	Lake	Lake	Lake
	Class A	Capri	Capri	Capri	Capri	Capri	Capri
Sample ID	Surface	SW-2	SW-2	SW-2	SW-2	SW-2	SW-2
Laboratory ID	Water	E0868-03A	F1194-02A	G2136-09	J0376-02A	K0911-09	L1949-02
Sample Date	Criteria	6/21/06	8/23/07	11/14/08	3/4/10	5/22/11	09/17/12
		conc. Q	conc.	conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	16.8 B	98.4 B	ND	33.2 B	ND	ND
Antimony	3	ND	ND	ND	5.7 B	ND	ND
Arsenic	50	ND	ND	ND	ND	ND	ND
Barium	1,000	12.2 B	24.3 B	32.4 B	24.2 B	12.9 B	20.2 B
Beryllium	3	ND	ND	ND	ND	ND	ND
Cadmium	5	1.0 B	2.1 B	2.0 B	2.8 B	1.7 B	ND
Calcium	NC	14,900	13,300	14,300	16,100	13,900	14,700
Chromium	50	0.52 B	1.2 B	ND	0.86 B	0.72 B	ND
Cobalt	NC	0.92 B	1 B	ND	1 B	ND	ND
Copper	200	ND	4.4 B	ND	6.2 B	ND	ND
Iron	300	649	819	675	478	508	176 B
Lead	50	ND	3.1 B	2.4 B	ND	ND	ND
Magnesium	35,000	3,490	2,940	3,530	3,700	2,940	3,360
Manganese	300	1,010	819 E	1,560	968	1,080	564
Mercury	0.7	ND	ND	ND	ND	ND	ND
Nickel	100	1.1 B	0.81 B	ND	2.4 B	ND	ND
Potassium	NC	1,990	1,990	2,320	2,080	1,990	2,330
Selenium	10	ND	ND	ND	ND	ND	ND
Silver	50	1.6 B	3.1 B	ND	ND	ND	ND
Sodium	20,000	18,100	16,200 E	19,500	22,000	18,600	23,800
Thallium	0.5	ND	ND	ND	7.2 B	ND	ND
Vanadium	NC	ND	0.88 B	1.1 B	3.3 B	ND	ND
Zinc	2,000	15.6 B	27.4 B	21 B	34.5 B	20.3 B	5.3 B

Notes: All values in μ g/L

NC - No Criteria

ND - Not Detected

BOLD/Italics - exceeds criterion

B - Estimated value (greater than MDL but less than RL)

E - Estimated due to matrix interference

Sample Location	NYSDEC	Lake	Lake	Lake	Lake	Lake	Lake
	Class A	Capri Capri Capri Ca		Capri	Capri	Capri	
Sample ID	Surface	SW-3	SW-3	SW-3	SW-3	SW-3	SW-3
Laboratory ID	Water	E0868-05A	F1194-04A	G2136-13	J0376-03A	K0911-10	L1949-03
Sample Date	Criteria	6/21/06	8/23/07	11/14/08	3/4/10	5/22/11	09/17/12
		conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	69.5 B	37 U	ND	27 B	ND	ND
Antimony	3	ND	ND	ND	7.2 B	ND	ND
Arsenic	50	ND	ND	ND	ND	ND	ND
Barium	1,000	7.9 B	12.6 B	38.6 B	19.6 B	10.1 B	17.2 B
Beryllium	3	ND	ND	ND	ND	ND	ND
Cadmium	5	1.9 B	0.32 B	0.97 B	2.8 B	1.4 B	ND
Calcium	NC	15,200	13,100	14,000	15,000	13,900	14,500
Chromium	50	0.58 B	0.7 B	ND	0.59 B	0.67 B	ND
Cobalt	NC	0.72 B	1.0 B	ND	ND	ND	ND
Copper	200	ND	3.9 B	ND	ND	ND	ND
Iron	300	788	280	772	332	311	144 B
Lead	50	0.92 B	ND	ND	ND	ND	ND
Magnesium	35,000	3,540	2,990	3,440	3,380	3,030	3,310
Manganese	300	882	73.9 E	1,790	911	990	355
Mercury	0.7	ND	ND	ND	ND	ND	ND
Nickel	100	0.96 B	ND	ND	1.3 B	ND	ND
Potassium	NC	2,000	2,020	2,290	2,000	2,000	2,210
Selenium	10	ND	ND	ND	ND	ND	ND
Silver	50	1.3 B	3.4 B	0.64 B	ND	ND	ND
Sodium	20,000	18,300	16,800 E	17,700	23,300	18,800	23,500
Thallium	0.5	ND	ND	ND	5.9 B	ND	ND
Vanadium	NC	0.7 B	0.42 B	ND	2.8 B	ND	ND
Zinc	2,000	21.5 B	14 B	16.4 B	33.4 B	18.9 B	ND

Notes: All values in μ g/L

NC - No Criteria

ND - Not Detected

BOLD/Italics - exceeds criterion

B - Estimated value (greater than MDL but less than RL)

E - Estimated due to matrix interference

Sample Location	NYSDEC	Lake	Lake	Lake	Lake	Lake	Lake
	Class A	Capri Capri (Capri	Capri	Capri	Capri
Sample ID	Surface	SW-4	SW-4	SW-4	SW-4	SW-4	SW-4
Laboratory ID	Water	E0868-07A	F1194-06A	G2136-15	J0376-04A	K0911-11	L1949-04
Sample Date	Criteria	6/21/06	8/23/07	11/14/08	3/4/10	5/22/11	09/17/12
		conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	ND	ND	ND	27.4 B	ND	ND
Antimony	3	ND	ND	ND	ND	ND	ND
Arsenic	50	ND	ND	ND	ND	ND	ND
Barium	1,000	5.7 B	14 B	31.9 B	20.2 B	9.8 B	19.6 B
Beryllium	3	ND	ND	ND	ND	ND	ND
Cadmium	5	0.89 B	0.77 B	0.63 B	2.6 B	1.4 B	ND
Calcium	NC	14,600	12,900	14,000	15,300	13,700	13,900
Chromium	50	ND	0.88 B	ND	0.51 B	0.75 B	ND
Cobalt	NC	0.37 B	1.2 B	ND	ND	ND	ND
Copper	200	11.7 B	4.9 B	ND	ND	ND	ND
Iron	300	610	609	741	344	322	152 B
Lead	50	ND	2.2 B	ND	ND	ND	ND
Magnesium	35,000	3,510	2,950	3,490	3,420	2,980	3,190
Manganese	300	786	135 E	1,630	943	918	463
Mercury	0.7	ND	ND	ND	ND	ND	ND
Nickel	100	0.6 B	ND	ND	0.88 B	ND	ND
Potassium	NC	1,950	2,040	2,310	1,980	1,960	2,150
Selenium	10	ND	ND	ND	ND	ND	ND
Silver	50	ND	2.8 B	ND	ND	ND	ND
Sodium	20,000	18,100	16,600 E	17,800	22,900	18,700	23,900
Thallium	0.5	ND	ND	ND	ND	ND	ND
Vanadium	NC	ND	ND	ND	2 B	ND	ND
Zinc	2,000	20.2 B	18 B	9.7 B	31.9 B	18.9 B	5.3 B

Notes: All values in μ g/L

NC - No Criteria

ND - Not Detected

BOLD/Italics - exceeds criterion

B - Estimated value (greater than MDL but less than RL)

E - Estimated due to matrix interference

Sample Location	NYSDEC	Willetts	Willetts	Willetts	Willetts	Willetts	Willetts
	Class A	Creek	Creek	Creek	Creek	Creek	Creek
Sample ID	Surface	SW-5	SW-5	SW-5	SW-5	SW-5	SW-5
Laboratory ID	Water	E0868-09A	F1193-18A	G2114-20	J0376-05A	K0911-12	L1949-05
Sample Date	Criteria	6/21/06	8/23/07	11/12/08	3/4/10	5/22/11	09/18/12
		conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	15.3 B	ND	ND	79.3 B	305	ND
Antimony	3	1.5 B	4.4 B	ND	ND	ND	ND
Arsenic	50	ND	ND	ND	5.2 B	ND	ND
Barium	1,000	36.9 B	36.4 B	26.2 B	24.6 B	40.7 B	31.4 B
Beryllium	3	ND	ND	ND	ND	ND	ND
Cadmium	5	5.7	5.6	3 B	5.1	8.8	4.1 B
Calcium	NC	14,400	16,100	12,500	17,800	19,200	15,200
Chromium	50	ND	0.39 B	ND	0.99 B	2.6 B	ND
Cobalt	NC	0.82 B	1.9 BE	ND	ND	1.8 B	ND
Copper	200	ND	1.7 B	ND	5.6 B	11.3 B	3.8 B
Iron	300	632	599	1,060	959	4,080	690
Lead	50	ND	ND	ND	ND	10.2	ND
Magnesium	35,000	3,550	3,420	3,100	3,960	4,020	3,510
Manganese	300	1,420	1,110	956	450	923	519
Mercury	0.7	ND	ND	ND	ND	ND	ND
Nickel	100	0.98 B	0.85 B	ND	1.1 B	1.4 B	ND
Potassium	NC	2,080	2,040	1,780	2,070	2,340	2,240
Selenium	10	ND	ND	ND	ND	ND	ND
Silver	50	ND	3.1 B	ND	ND	ND	ND
Sodium	20,000	21,100	21,800	18,100	20,300	26,900	28,100
Thallium	0.5	ND	ND	ND	ND	ND	ND
Vanadium	NC	ND	ND	0.99 B	12.1 B	6.9 B	ND
Zinc	2,000	22 B	21.2 B	10.4 B	38.5 B	98.7	15.9 B

Notes: All values in μ g/L

NC - No Criteria

ND - Not Detected

BOLD/Italics - exceeds criterion

B - Estimated value (greater than MDL but less than RL)

E - Estimated due to matrix interference

Sample Location	NYSDEC	Willetts	Willetts	Willetts	Willetts	Willetts	Willetts
	Class A	Creek	Creek	Creek	Creek	Creek	Creek
Sample ID	Surface	SW-6	SW-6	SW-6	SW-6	SW-6	SW-6
Laboratory ID	Water	E0868-11A	F1194-08A	G2114-16	J0376-06	K0911-13	L1949-06
Sample Date	Criteria	6/21/06	8/23/07	11/12/08	3/4/10	5/22/11	09/17/12
		conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	40.5 B	ND	190 B	63.9 B	103 B	84.4 B
Antimony	3	ND	8.0 B	ND	ND	ND	ND
Arsenic	50	ND	ND	ND	ND	ND	ND
Barium	1,000	35.5 B	40.6 B	37.7 B	22.8 B	27.8 B	23.6 B
Beryllium	3	ND	ND	ND	ND	ND	ND
Cadmium	5	0.55 B	2.8 B	75.4	ND	ND	ND
Calcium	NC	26,700	27,200	20,100	19,200	25,100	21,400
Chromium	50	0.99 B	0.88 B	7.2 B	1.5 B	0.73 B	1.7 B
Cobalt	NC	3.1 B	2.8 B	ND	ND	ND	ND
Copper	200	ND	2.8 B	ND	ND	ND	ND
Iron	300	5,400	2,170	4,010	639	2,280	6,840
Lead	50	ND	2.5 B	9.8 B	ND	ND	ND
Magnesium	35,000	5,130	5,290	4,080	4,320	4,960	4,860
Manganese	300	2,610	1,510 E	1,040	406	869	1,160
Mercury	0.7	ND	ND	ND	ND	ND	ND
Nickel	100	1.4 B	1.5 B	ND	1.8 B	ND	0.91 B
Potassium	NC	2,230	2,480	2,830	2,250	2,810	2,460
Selenium	10	ND	ND	ND	10.5 B	ND	ND
Silver	50	ND	5.9 B	ND	ND	ND	ND
Sodium	20,000	29,200	33,600 E	26,000	20,500	33,800	32,100
Thallium	0.5	ND	ND	ND	ND	ND	ND
Vanadium	NC	1.1 B	0.63 B	1.6 B	1.6 B	ND	ND
Zinc	2,000	35.6 B	32.2 B	48.2 B	43.3 B	35.8 B	21.3 B

Notes: All values in μ g/L

NC - No Criteria

ND - Not Detected

BOLD/Italics - exceeds criterion

B - Estimated value (greater than MDL but less than RL)

E - Estimated due to matrix interference

Sample	NYS	DEC	Lake	Lake	Lake	Lake	Lake	Lake
Location	Tech	inical	Capri	Capri	Capri	Capri	Capri	Capri
Sample ID	Guida	nce for	SED-1	SED-1	SED-1	SED-1	SED-1	SED-1
Laboratory ID	Sedimen	t Criteria	E0868-02A	F1193-19A	G2136-10	J0376-09A	K0911-01	L1949-09
Sample Date	Lowest	Highest	6/21/06	8/23/07	11/14/08	3/4/10	5/22/11	9/17/12
	Effect	Effect	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	NC	5,020	895	7630 *	6,730 E	9,620	10,800
Antimony	2.0	25	0.7 B	0.41 B	2.2 BN	6.4	ND	ND
Arsenic	6.0	33	7.9	1.5	8.7	16.1	15.2 *	18.1
Barium	NC	NC	81.2	31.9	67.7 B*E	175	445	203
Beryllium	NC	NC	0.5 B	0.074 B	0.64 B	0.75 BE	0.87 B	0.34 B
Cadmium	0.6	9	47.8	11.6	61.4 N*E	69.2	81.2 *	89.8
Calcium	NC	NC	2,540	646	3,140 *	5,180 *	7,440 *	3,340
Chromium	26	110	20.7	2.8	27.1 E	39.1 *	50 *	57.4
Cobalt	NC	NC	7.6	3.7	20.2 E	20.9	29.4 E	19.7 B
Copper	16	110	38.6	86.3	65.7	127 *	121 *	144
Iron	20,000	20,000	10,300	3,880	19,700 E	36,000	44,600 *	26,700
Lead	31	110	170	19.3	176 N*E	225	226 N*	289
Magnesium	NC	NC	1,300	217	1,260 *E	1,770	2,100 *E	2170
Manganese	460	1,100	1,290	1,200	181 *	2,250	22,600 *	3,620
Mercury	0.15	1.3	0.21	0.0071 B	0.34	0.38	0.33 B	0.52
Nickel	16	50	11.4	3.0	19.4	24.1 E	24.1 *	27.3
Potassium	NC	NC	514	91.9	465 *	429	748	660
Selenium	NC	NC	1.6 B	0.64 B	ND	5.0 B	ND	6.1 B
Silver	1.0	2.2	ND	ND	ND	ND	2.7 B	ND
Sodium	NC	NC	117	44.2 B	136 B	339	433	388 B
Thallium	NC	NC	5.8	ND	ND	12.7	3.8 B	8.6 B
Vanadium	NC	NC	29.4	5.1	39.9 E	78.7 E	99.2	90.5
Zinc	120	270	215	71.6	445 *E	493 *	572 *	642

Notes: All values in mg/kg

NC - No Criteria

ND - Not Detected

B - Estimated value (greater than MDL but less than RL)

BOLD/Italics - exceeds lowest effects criterion

E - Replicate RPDs were not within QC limits

* - Percent recovery for duplicates were not within QC limits

N - Spike recoveries were not within QC limts

Sample	NYS	DEC	Lake	Lake	Lake	Lake	Lake	Lake
Location		nical	Capri	Capri	Capri	Capri	Capri	Capri
Sample ID		nce for	SED-2	SED-2	SED-2	SED-2	SED-2	SED-2
Laboratory ID			E0868-04A	F1194-01A	G2136-08	J0376-10A	K0911-02	L1949-10
Sample Date	Lowest			8/23/07	11/14/08	3/4/10	5/22/11	9/17/12
·	Effect	Effect	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	NC	15,500	1,850	2,800 *	9,050 E	8,310	8,300
Antimony	2.0	25	0.92 B	0.82 B	0.19 BN	1.3 B	ND	ND
Arsenic	6.0	33	19.7	2 B	1.8	20.2	13.4 *	19.2
Barium	NC	NC	89.8	57.9	40.8 *E	173	108	209
Beryllium	NC	NC	1.2	0.16 B	0.16 B	0.89 E	0.75 B	0.40 B
Cadmium	0.6	9	133	21.2	12.5 N*E	111	96.6 *	122
Calcium	NC	NC	2,860	1,320	1,400 *	3,810 *	4,330 *	4,090
Chromium	26	110	33.7	7.7	6.5 E	49.4 *	45.2 *	47.7
Cobalt	NC	NC	12.1	8.1	3 BE	17.8	11.1 E	16.5
Copper	16	110	210	19.6	15.6	97.7 *	80.2 *	91.0
Iron	20,000	20,000	20,300	8,940	3,850 E	27,500	17,300 *	25,400
Lead	31	110	315	40.7	25.8 N*E	375	315 N*	408
Magnesium	NC	NC	1,510	404	305 *E	1,690	1,360 *E	1,500
Manganese	460	1,100	153	1,300	769 *	3,510	1,480 *	3,790
Mercury	0.15	1.3	0.45	0.047 BN	0.018 B	0.35	0.5	0.49
Nickel	16	50	17.6	6.8 E	3.2 B	22 E	17.6 *	21.9
Potassium	NC	NC	555	200 E	123 *	373	389	428
Selenium	NC	NC	2.2 B	1.2 B	ND	ND	ND	6.2 B
Silver	1.0	2.2	0.33 B	ND	ND	ND	ND	ND
Sodium	NC	NC	143	92.5 B	46.5 B	200	219	228
Thallium	NC	NC	0.39 B	ND	ND	20.5	2.5 B	9.8
Vanadium	NC	NC	55.9	11.9	5.8 E	61.3 E	54.0	60.8
Zinc	120	270	402	138	67.9 *E	495 *	406 *	526

Notes: All values in mg/kg

NC - No Criteria

ND - Not Detected

B - Estimated value (greater than MDL but less than RL)

BOLD/Italics - exceeds lowest effects criterion

E - Replicate RPDs were not within QC limits

* - Percent recovery for duplicates were not within QC limits

Sample	NYS	DEC	Lake	Lake	Lake	Lake	Lake	Lake
Location	Tech	nical	Capri	Capri	Capri	Capri	Capri	Capri
Sample ID	Guidar	nce for	SED-3	SED-3	SED-3	SED-3	SED-3	SED-3
Laboratory ID	Sedimen	t Criteria	E0868-06A	F1194-03A	G2136-14	J0376-11A	K0911-03	L1949-11
Sample Date	Lowest	Highest	6/21/06	8/23/07	11/14/08	3/4/10	5/22/11	9/17/12
	Effect	Effect	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	NC	690	2,010	5,860 *	3,490 E	5,890	1,580
Antimony	2.0	25	ND	0.35 B	0.63 BN	ND	ND	ND
Arsenic	6.0	33	0.31 B	3.1	4.2 B	2.4	5.7 *	2.3
Barium	NC	NC	6.7	29.7	88.2 *E	23.1	65.1	10.2 B
Beryllium	NC	NC	0.047 B	0.18 B	0.30 B	0.29 BE	0.50	0.037 B
Cadmium	0.6	9	1.5	27.7	1.7 N*E	22.3	16.1 *	14.1
Calcium	NC	NC	104	605	11,700 *	1,260 *	2,940 *	199
Chromium	26	110	1.5	7.9	9.6 E	13.7 *	9.1 *	3.7
Cobalt	NC	NC	0.66 B	4.7	12.6 E	3.6	5.7 E	2.4 B
Copper	16	110	2.7	16.7	32.4	32.5 *	10.9 *	8.5
Iron	20,000	20,000	920	5,730	10,900 E	3,770	6,240 *	1,830
Lead	31	110	9.2	44.2	34.0 N*E	85.9	46.0 N*	21.4
Magnesium	NC	NC	121	326	4,200 *E	527	675 *E	158
Manganese	460	1,100	89.8	568	908 *	357	1,090 *	132
Mercury	0.15	1.3	0.016 B	0.049 BN	0.074 B	0.11	0.061 B	0.032 B
Nickel	16	50	1.6 B	5.0 E	8.5 B	7.4 E	5.8 *	2.4 B
Potassium	NC	NC	115	168 E	1,010 *	173	254	68.7
Selenium	NC	NC	0.2 B	1.2 B	ND	ND	ND	ND
Silver	1.0	2.2	ND	ND	ND	ND	ND	ND
Sodium	NC	NC	13.7 B	51.5 B	528	90.5	103	21.8 B
Thallium	NC	NC	0.33 B	ND	ND	1.7	1.1 B	0.36 B
Vanadium	NC	NC	1.8	9.5	36.4 E	12.5 E	10.7	3.3
Zinc	120	270	10.0	110	71.3 *E	106 *	73.5 *	44.7

Notes: All values in mg/kg

NC - No Criteria

ND - Not Detected

B - Estimated value (greater than MDL but less than RL)

BOLD/Italics - exceeds lowest effects criterion

E - Replicate RPDs were not within QC limits

* - Percent recovery for duplicates were not within QC limits

Sample	NYS	DEC	Lake	Lake	Lake	Lake	Lake	Lake
Location	Tech	nical	Capri	Capri	Capri	Capri	Capri	Capri
Sample ID	Guidar	nce for	SED-4	SED-4	SED-4	SED-4	SED-4	SED-4
Laboratory ID	Sedimen	t Criteria	E0868-08A	F1194-05A	G2136-16	J0376-12A	K0911-04	L1949-12
Sample Date	Lowest	Highest	6/21/06	8/23/07	11/14/08	3/4/10	5/22/11	9/17/12
	Effect	Effect	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	NC	2,730	3,290	1,790 *	2,170 E	5,850	11,700
Antimony	2.0	25	0.22 B	0.76 B	0.42 BN	0.3 B	ND	ND
Arsenic	6.0	33	3.4	4.0	3.9	1.9	4.4 *	6.2 B
Barium	NC	NC	41.5	47.8	177 *E	18.7	64.8	103
Beryllium	NC	NC	0.2 B	0.22 B	0.13 B	0.19 BE	0.45 B	0.36 B
Cadmium	0.6	9	32.3	32.3	15.8 N*E	14.8	47.3 *	79.5
Calcium	NC	NC	588	1,240	8,090 *	758 *	2,560 *	3,200
Chromium	26	110	8.6	12.5	6.8 E	8.1 *	21.7 *	45.4
Cobalt	NC	NC	4.9	10.0	7.0 E	3.1	9.5 E	13.3 B
Copper	16	110	21.6	35.7	17.1	22.6 *	49.5 *	117
Iron	20,000	20,000	4,450	9,330	7,280 E	2,540	9,170 *	12,800
Lead	31	110	71.2	193	34.3 N*E	60.6	129 N*	297
Magnesium	NC	NC	352	519	653 *E	304	868 *E	1,650
Manganese	460	1,100	837	845	11,700 *	272	1,150 *	1,820
Mercury	0.15	1.3	0.096	0.059 BN	0.21	0.082	0.18	0.39
Nickel	16	50	6.0	10.7 E	6.3	4.8 E	13 *	25.3
Potassium	NC	NC	145	236 E	281 *	103	383	623
Selenium	NC	NC	0.76 B	1.9 B	3.3	ND	ND	4.6 B
Silver	1.0	2.2	ND	ND	1.1 B	ND	ND	ND
Sodium	NC	NC	35.4 B	87.0	131	56 B	145 B	312 B
Thallium	NC	NC	3.7	ND	2.8	1.6	1.7 B	4.6 B
Vanadium	NC	NC	9.2	16.9	7.4 E	7.2 E	26.6	41.2
Zinc	120	270	122	186	110 *E	71.3 *	232 *	323

Notes: All values in mg/kg

NC - No Criteria

ND - Not Detected

B - Estimated value (greater than MDL but less than RL)

BOLD/Italics - exceeds lowest effects criterion

E - Replicate RPDs were not within QC limits

* - Percent recovery for duplicates were not within QC limits

Sample	NYS	DEC	Willetts	Willetts	Willetts	Willetts	Willetts	Willetts
Location	Tech	inical	Creek	Creek	Creek	Creek	Creek	Creek
Sample ID	Guidar	nce for	SED-5	SED-5	SED-5	SED-5	SED-5	SED-5
Laboratory ID	Sedimen	t Criteria	E0868-10A	F1193-17A	G2114-21	J0376-13A	K0911-05	L1949-13
Sample Date	Lowest	Highest	6/21/06	8/23/07	11/14/08	3/4/10	5/22/11	9/18/12
	Effect	Effect	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	NC	1,060	552	5,150	2,540 E	6,300	345
Antimony	2.0	25	0.074 B	0.27 B	1.1 BN	0.68 B	1.4 BN	ND
Arsenic	6.0	33	0.6 B	0.52 B	8.2	6.5	9.3 *	1.6
Barium	NC	NC	12.1	13.6	96.6	84.6	114	15.1
Beryllium	NC	NC	0.083 B	0.03 B	0.34 B	0.24 BE	0.57 B	0.010 B
Cadmium	0.6	9	0.43	1.6	52	28.8	73.5 *	1.7
Calcium	NC	NC	228	1,430	4,150	3,470 *	7,960 *	330
Chromium	26	110	3.8	2.7	33.3	18.5 *	44.0 *	3.5
Cobalt	NC	NC	1.2 B	1.1 B	7.8	7.4	13.3 E	1.1 B
Copper	16	110	4.7	4.7	103	54 *	166 *	9.0
Iron	20,000	20,000	3,400	3,410	23,900	25,800	39,900 *	4,180
Lead	31	110	7.9	4.9	215 E	83.3	229 N*	9.4
Magnesium	NC	NC	604	864	1,370	701	1,370 *E	75.8
Manganese	460	1,100	174	291	2,140	3,750	1,210 *	417
Mercury	0.15	1.3	0.016 B	0.0055 B	0.48	0.26	0.37	0.023 B
Nickel	16	50	1.6	1.0 B	19.2	8.0 E	22.5 *	1.9 B
Potassium	NC	NC	135	58.3	320	188	360	29.6 B
Selenium	NC	NC	0.28 B	0.56 B	ND	2.3 B	ND	0.87 B
Silver	1.0	2.2	ND	ND	ND	0.52 B	ND	0.084 B
Sodium	NC	NC	18.3 B	102	204	141	323	11.7 B
Thallium	NC	NC	0.56 B	ND	2.1 B	20.1	1.9 B	0.76 B
Vanadium	NC	NC	5.6	4.5	54.2	44.6 E	175	7.8
Zinc	120	270	13.2	26.2	290 E	171 *	44 0 *	24.2

Notes: All values in mg/kg

NC - No Criteria

ND - Not Detected

B - Estimated value (greater than MDL but less than RL)

BOLD/Italics - exceeds lowest effects criterion

E - Replicate RPDs were not within QC limits

* - Percent recovery for duplicates were not within QC limits

Sample	NYS	DEC	Willetts	Willetts	Willetts	Willetts	Willetts	Willetts
Location	Tech	nical	Creek	Creek	Creek	Creek	Creek	Creek
Sample ID	Guida	nce for	SED-6	SED-6	SED-6	SED-6	SED-6	SED-6
Laboratory ID	Sedimen	nt Criteria	E0868-12A	F1194-07A	G2114-17	J0376-14	K0911-06	L1949-14
Sample Date	Lowest	Highest	6/21/06	8/23/07	11/14/08	3/4/10	5/22/11	9/18/12
	Effect	Effect	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	NC	1,030	775	7,700	802 E	1,370	574
Antimony	2.0	25	0.076	0.38 B	2.6 N	0.38 B	0.44 BN	
Arsenic	6.0	33	0.97	0.84 B	6.4	0.79	2.7 *	0.64 B
Barium	NC	NC	7.4	4.7 B	89.7	3.6 B	10.4	2.7 B
Beryllium	NC	NC	0.094	0.049 B	0.36 B	0.069 BE	0.11 B	ND
Cadmium	0.6	9	0.23	0.31	101	0.31	ND	0.30
Calcium	NC	NC	4,760	599	7,690	2,450 *	4,670 *	299
Chromium	26	110	2.4	3.4	41.8	4.4 *	15.9 *	5.4
Cobalt	NC	NC	1.8	0.77 B	8.1	0.65 B	1.9 BE	0.50 B
Copper	16	110	28.3	6.3	77.3	9.4 *	21.5 *	8.0
Iron	20,000	20,000	3,290	2,900	25,600	2,810	36,900 *	2,120
Lead	31	110	7.9	10.3	109 E	9.5	39.7 N*	8.7
Magnesium	NC	NC	2,930	468	1,980	1,410	1,290 *E	263
Manganese	460	1,100	102	30.4	978	21.3	118 *	16.2
Mercury	0.15	1.3	0.036 B	ND	0.15	ND	0.019 B	0.011 B
Nickel	16	50	1.8	1.9 BE	17.2	1.8 BE	10.1 *	2.0 B
Potassium	NC	NC	118	122 E	528	66.4	97.5	54.2 B
Selenium	NC	NC	ND	0.69 B	ND	ND	ND	ND
Silver	1.0	2.2	ND	ND	ND	ND	ND	0.080 B
Sodium	NC	NC	24.9 B	70.7	414	47.7	51.8	22.0 B
Thallium	NC	NC	0.25 B	0.36 B	0.98 B	ND	ND	ND
Vanadium	NC	NC	9.9	6.0	42.4	4.2 E	8.5	3.2
Zinc	120	270	17.2	24.2	409 E	31.0 *	68.9 *	38.9

Notes: All values in mg/kg

NC - No Criteria

ND - Not Detected

B - Estimated value (greater than MDL but less than RL)

BOLD/Italics - exceeds lowest effects criterion

E - Replicate RPDs were not within QC limits

* - Percent recovery for duplicates were not within QC limits

TABLE 7 DZUS FASTENERS SITE (SITE # 1-52-033) JULY 2006, MAY 2007, OCTOBER 2010 & SEPTEMBER 2012 SUMMARY OF CADMIUM IN FISH TISSUE

Sampling Event	Sample	Common Name	Total Weight (g)	Cadmium Concentration (µg/kg)
July 2006	South 1 South 2 South 3* South 4* North 1 North 2 North 3 North 3 North 4 North 5 North 6* North 7* North 8*	Largemouth bass Largemouth bass Bluegill Largemouth bass Pumpkinseed Pumpkinseed Bluegill Bluegill American eel Pumpkinseed Largemouth bass Bluegill	700 240 24** 6** 110 24** 124 61** 51** 61** 30** 60**	28 28 190 270 80 120 39 76 120 130 160 140
May 2007	North 1 North 2 North 3 North 4* North 5* North 6*	American eel Bluegill American eel American eel Bluegill Bluegill	56** 33** 152 33** 24.5** 20**	170 230 170 220 190 190
October 2010	DF-F1-BG-1* DF-F1-BG-2* DF-F1-BG-3* DF-F1-BG-4* DF-F1-EE-1* DF-F1-PS-1 DF-F1-PS-2* DF-F1-PS-3* DF-F2-BG-1* DF-F2-BG-2* DF-F2-BG-3* DF-F2-EE-1* DF-F2-LB-1 DF-F2-LB-2* DF-F2-PS-1 DF-F2-PS-2*	Bluegill Bluegill Bluegill American eel Pumpkinseed Pumpkinseed Bluegill Bluegill Bluegill American eel Largemouth bass Largemouth bass Pumpkinseed Pumpkinseed	94** 78** 64** 15** 138 50** 140 102 140 144 31** 649 71** 50.5** 177.5	260 120 200 160 370 7.6 170 96 210 230 120 250 38 150 270 120
September 2012	DF-N-AE-01 DF-N-BG-01 DF-N-BG-02 DF-N-BG-03 DF-N-BG-04 DF-N-BG-05 DF-N-PS-01 DF-N-SF-01 DF-S-BG-01	American Eel Blue gill Blue gill Blue gill Blue gill Blue gill Pumpkinseed Sun Fish (mixed specie Blue gill	697 103 (0.5-7) 110 (1-5) 120 104 235 136 93 (1-5)** 196	0.39 0.14 0.22 0.18 0.15 <0.0089 0.19 0.11 0.011J

TABLE 7 DZUS FASTENERS SITE (SITE # 1-52-033) JULY 2006, MAY 2007, OCTOBER 2010 & SEPTEMBER 2012 SUMMARY OF CADMIUM IN FISH TISSUE

Sampling Event	Sample	Common Name	Total Weight (g)	Cadmium Concentration (µg/kg)
Event		Name	weight (g)	concentration (µg/kg)
	DF-S-BG-02	Blue gill	126	0.32
	DF-S-BG-03	Blue gill	199	0.027J
	DF-S-BG-04	Blue gill	140	0.24
	DF-S-BG-05	Blue gill	209	0.19
	DF-S-BG-06	Blue gill	108	0.17
	DF-S-BG-07	Blue gill	245	0.017J
	DF-S-BG-08	Blue gill	158	0.25
	DF-S-BG-09	Blue gill	191	0.015J
	DF-S-BG-10	Blue gill	236	0.1
	DF-S-BG-11	Blue gill	214	0.012J
	DF-S-BG-12	Blue gill	132	0.11
	DF-S-BG-13	Blue gill	142	0.23
	DF-S-BG-14	Blue gill	231	<0.010
	DF-S-BG-15	Blue gill	131	0.21
	DF-S-BG-16	Blue gill	150	0.24
	DF-S-BG-17	Blue gill	74**	0.43
	DF-S-BG-18	Blue gill	392	0.027J
September	DF-S-BG-19	Blue gill	244	<0.0097
2012	DF-S-BG-20	Blue gill	165	0.18
	DF-S-LB-01	Largemouth Bass	73 (7-14)**	0.083J
	DF-S-LB-02	Largemouth Bass	1032	<0.0090
	DF-S-LB-03	Largemouth Bass	103	0.17
	DF-S-PS-01	Pumpkinseed	113	0.26
	DF-S-PS-02	Pumpkinseed	152	0.27
	DF-S-PS-03	Pumpkinseed	136	0.48
	DF-S-PS-04	Pumpkinseed	115	0.24
	DF-S-PS-05	Pumpkinseed	147	0.35
	DF-S-PS-06	Pumpkinseed	186	0.28
	DF-S-PS-07	Pumpkinseed	81**	0.22
	DF-S-PS-08	Pumpkinseed	190	0.041J
	DF-S-PS-09	Pumpkinseed	142	0.26
	DF-S-PS-10	Pumpkinseed	138	0.17
	DF-S-PS-11	Pumpkinseed	117	0.31
	DF-S-PS-12	Pumpkinseed	179	0.55
	DF-S-RB-01	Red ear sunfish	227	0.019J
		than one individual.)g minimum sample requ	irement	

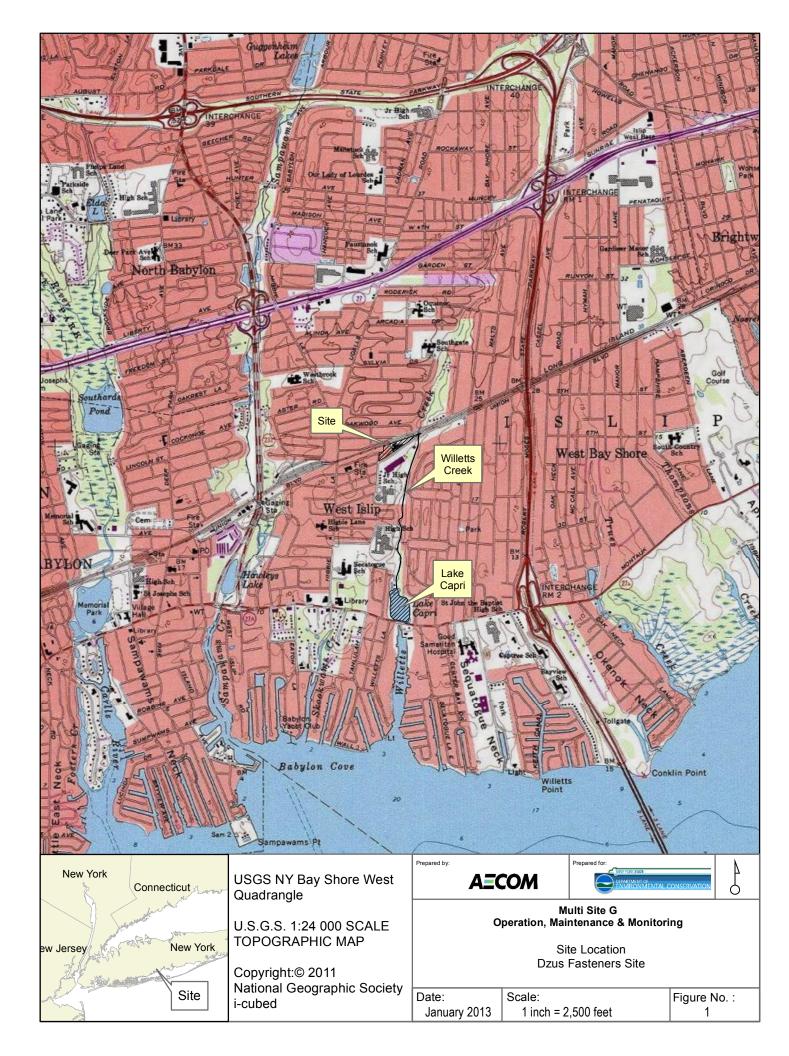
TABLE 8DZUS FASTENERS SITE (SITE # 1-52-033)JULY 2006, AUGUST 2007, NOVEMBER 2008, MARCH 2010, MAY 2011 & SEPTEMBER 2012SUMMARY OF CADMIUM RESULTS

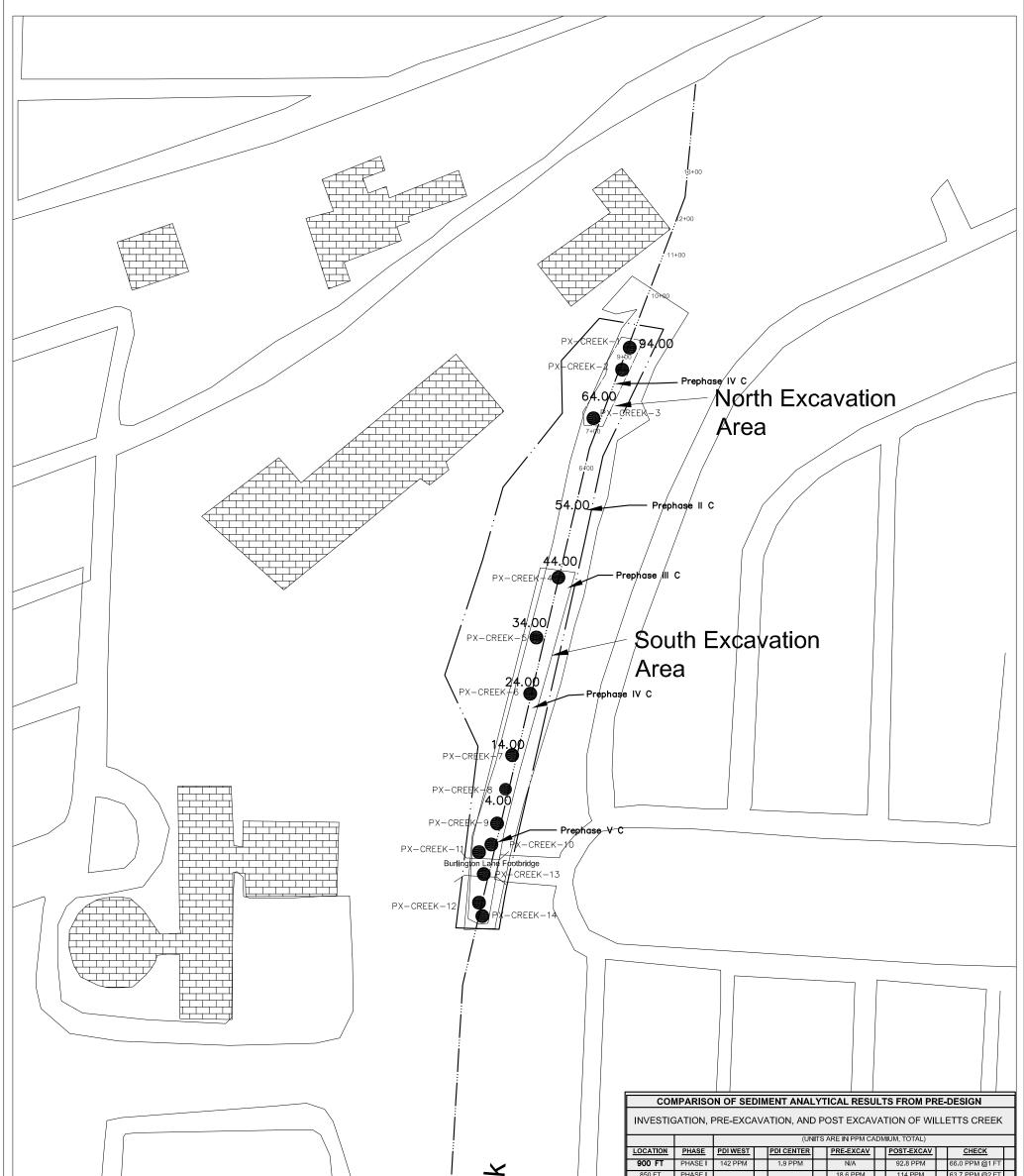
Media	Cleanup Criterion	Number of Samples Collected	Number of Detections	Range of Detections	# Detections Above Criterion	Comments
<u>Groundwater</u>	5 µg/L	79 unfiltered	69	0.23 - 924	49	Exceedances are mostly on the eastern side of the site. There is a downard trend in concentration
		26 filtered	13	1.1 - 64.4	10	in most wells.
<u>Surface Water</u> (µg/L)	5 µg/L	36	29	0.32 - 8.8	5	Exceedances are limited to creek samples.
<u>Sediment</u> Lowest effects	0.6 mg/kg	42	41	0.23 - 122	30	3 of 4 lake samples are consistently above the criterion as is 1 creek sample.
Highest effects*	9 mg/kg	42	41	0.23 - 122	26	

Notes:

* - Cleanup criterion for Lake Capri and Willetts Creek sediment is the highest effects level, 9 mg/kg.

Figures





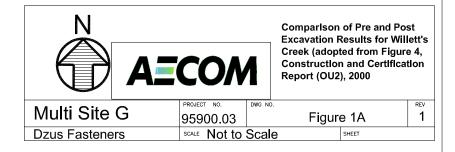
	850 FT	PHASE	\sim		18.6 PPM	114 PPM	63.7 PPM @2 FT
	800 FT	PHASE I	239 PPM	1.6 PPM		97.2 PPM	15.8 PPM @1 FT
	550 FT	PHASE II				4.99 PPM	33.8 PPM @2 FT
U U	500 FT	PHASE II	20.3 PPM	12.2 PPM			183 PPM @1 FT
	450 FT	PHASE II	8.8 PPM	ND	11.8 PPM	4.70 PPM	40.8 PPM @2 FT
	400 FT	PHASE III	17.3 PPM	3.3 PPM	\sim		
	350 FT	PHASE III	9.4 PPM	14.9 PPM	17.3 PPM	11.8 PPM	
()	300 FT	PHASE III	1.3 PPM	6.5 PPM			
	250 FT	PHASE III	51.4 PPM	0.6 PPM		1.24 PPM	
	200 FT	PHASE IV	37.1 PPM	5.0 PPM			
	150 FT	PHASE IV	11.4 PPM	10.2 PPM	110 PPM	9.65 PPM	
	100 FT	PHASE IV	368 PPM	11.2 PPM			
	50 FT	PHASE V	1.2 PPM	6.8 PPM		2.32 PPM	
	35 FT	PHASE V				ND	
	15 FT	PHASE V			152 PPM	<mdl< td=""><td></td></mdl<>	
i i i i i i i i i i i i i i i i i i i	MINUS 25 F					<mdl< td=""><td></td></mdl<>	
		PHASE V				<mdl< td=""><td></td></mdl<>	
	MINUS 45 F	PHASE V				0.85 PPM	

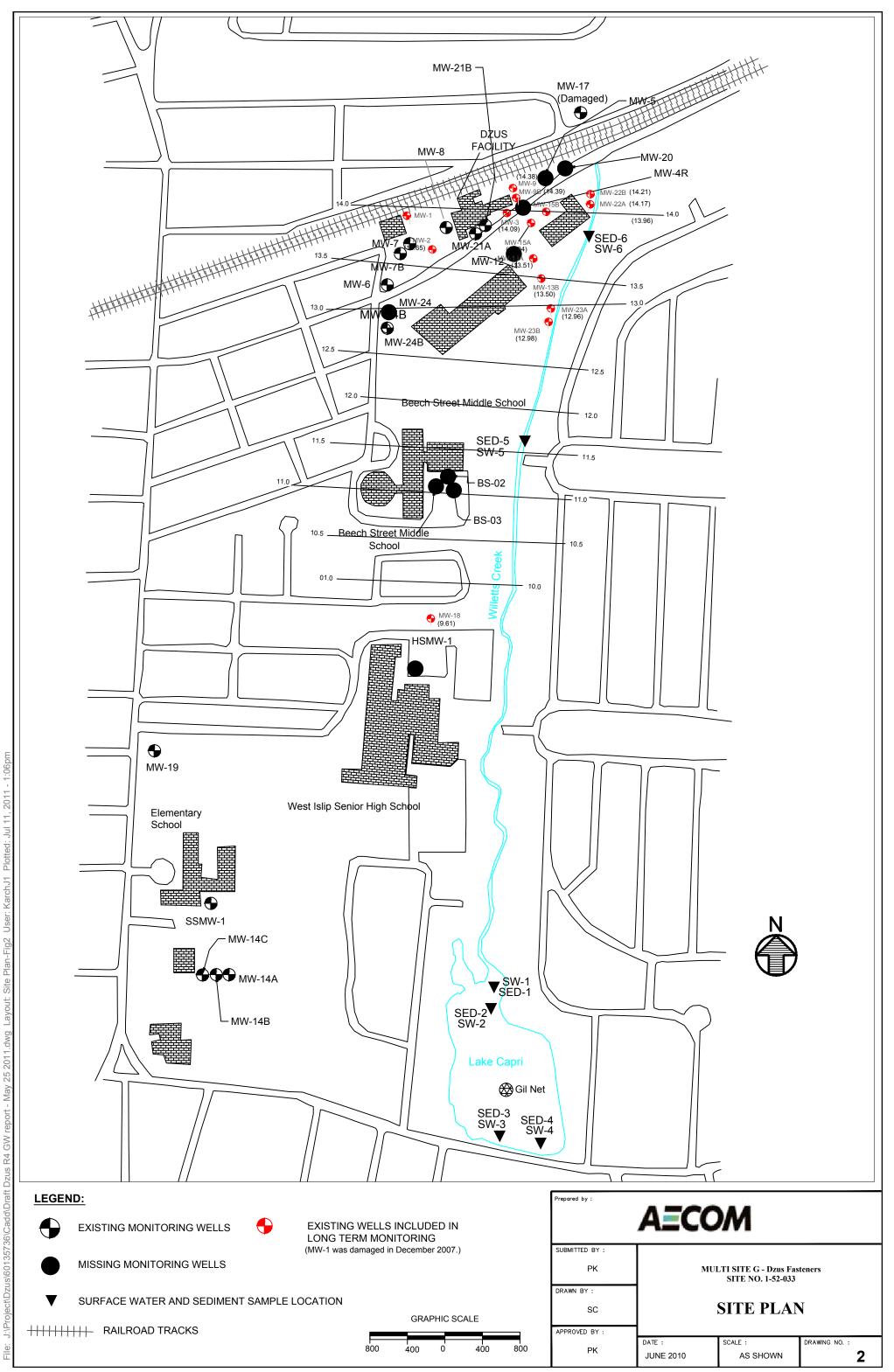
Legend

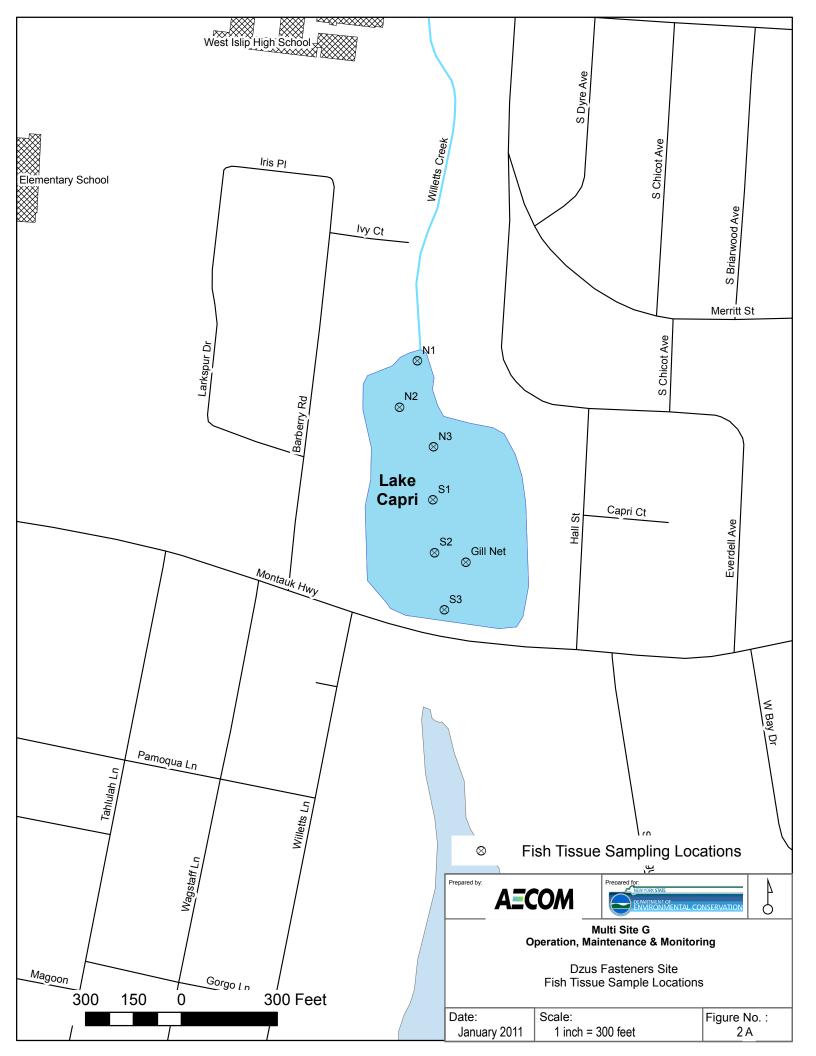
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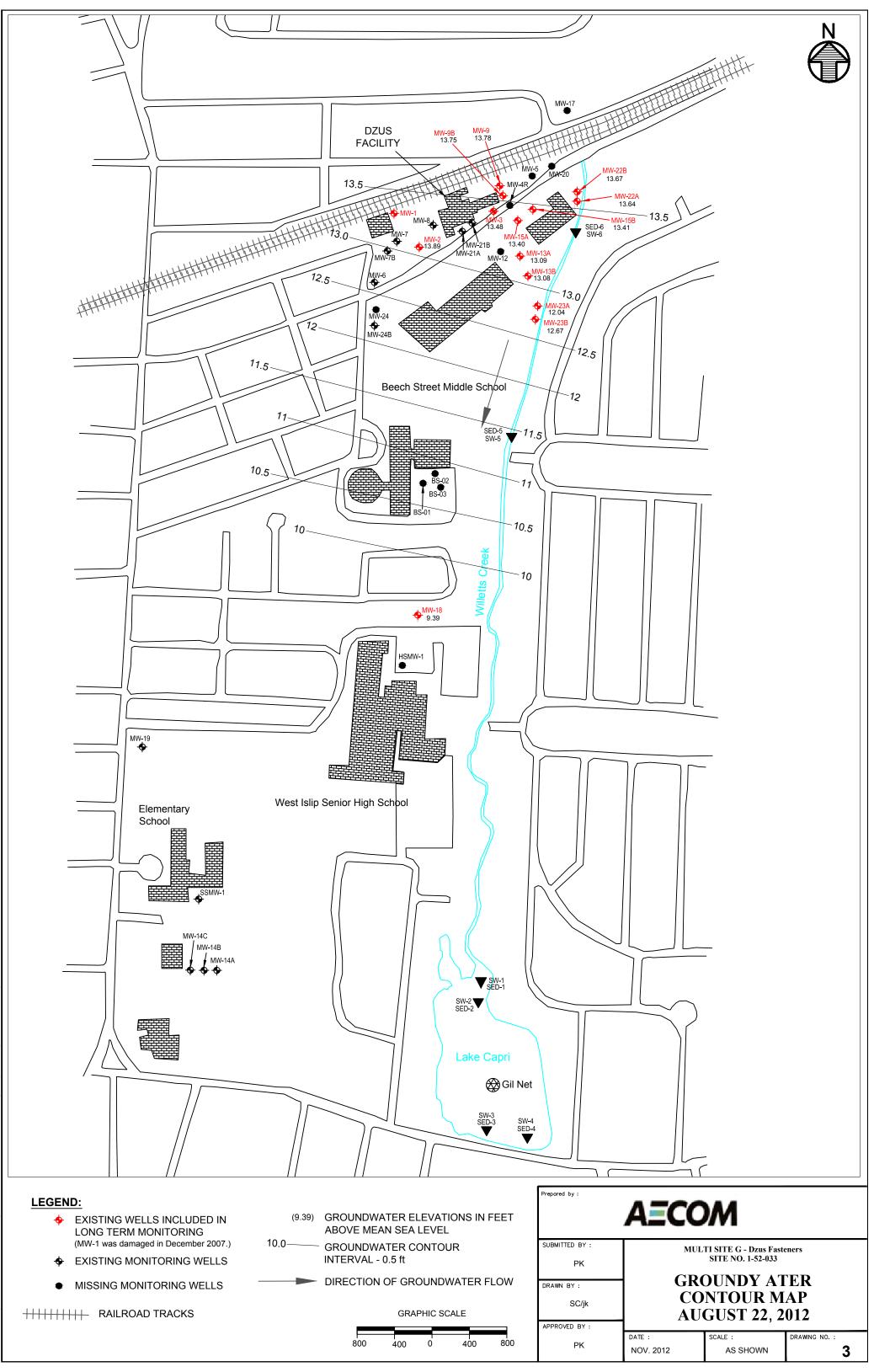
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- —— Excavation Boundary
 - Project Boundary
 - Approximate Centerline of Creek BedWetlands Boundary

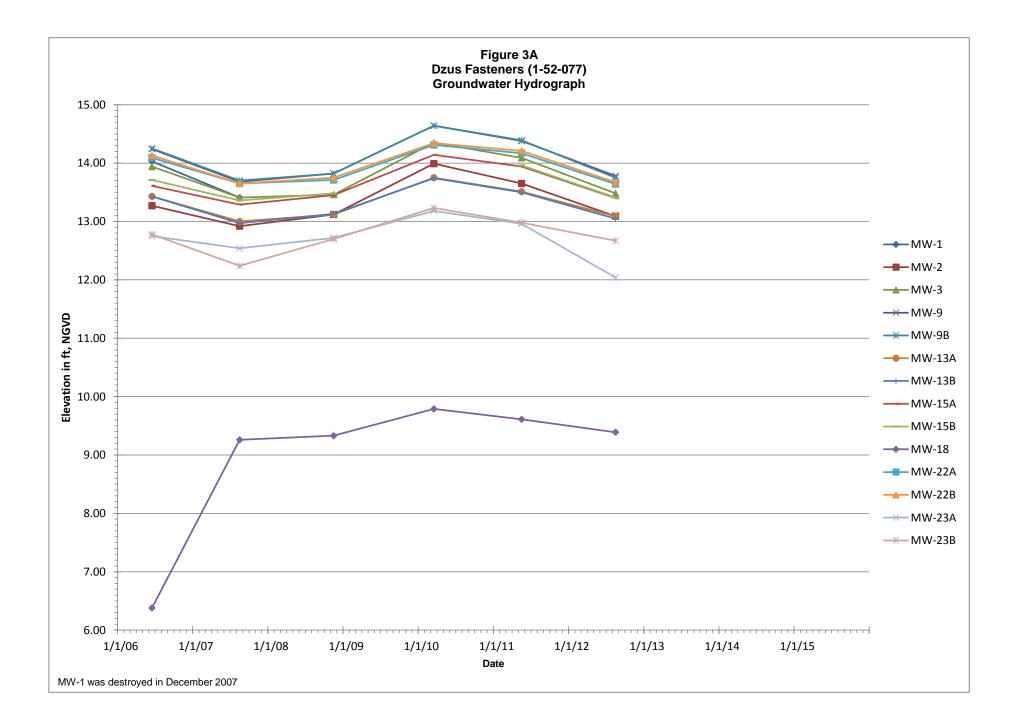








carchj1 Plotted: Nov 13, 2012 - 1:57pm





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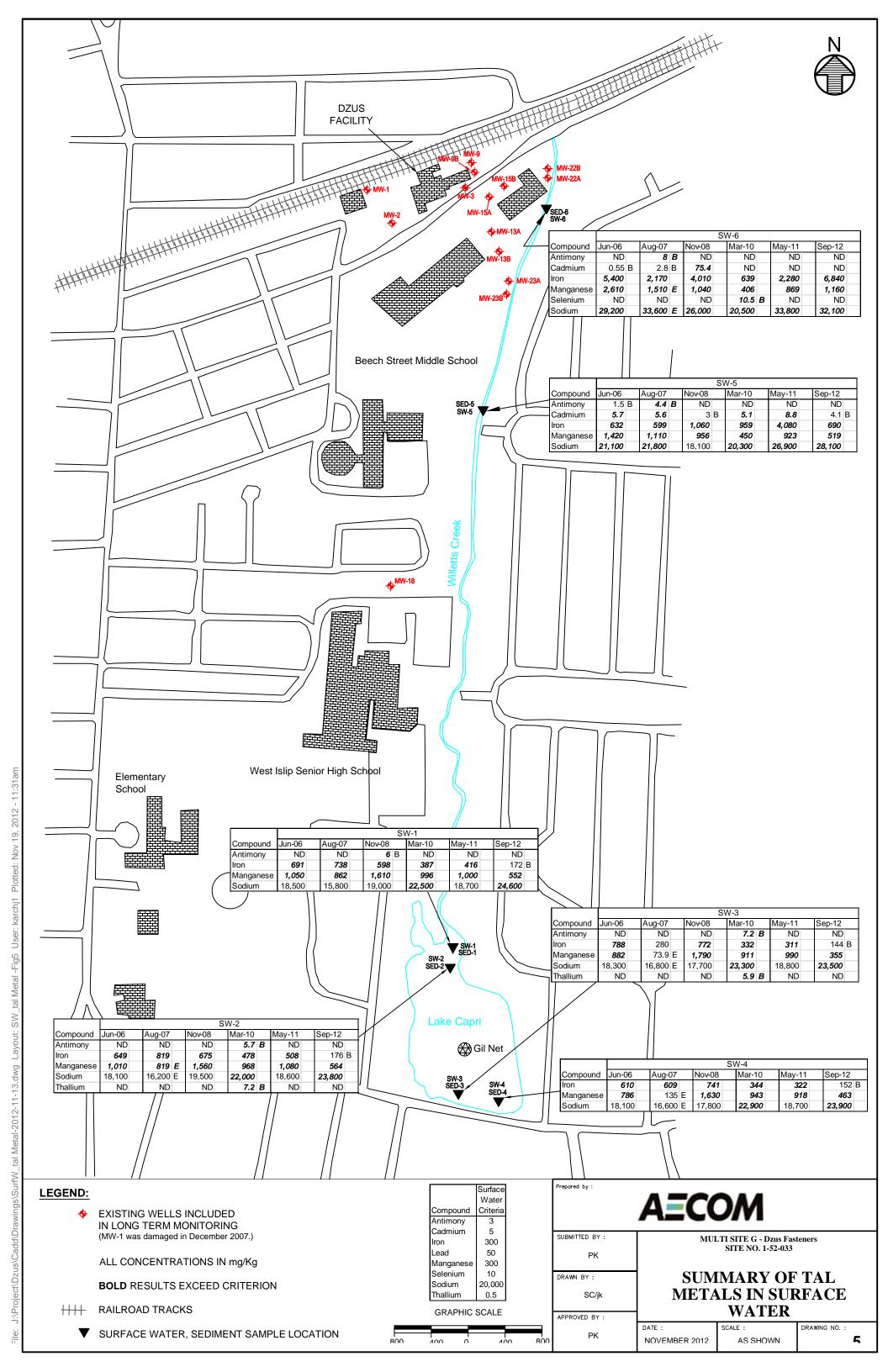
ay-11	Aug-12	Aug-12
F	U	F
ND	ND	ND
ND	ND	ND
ND	110 B	ND
342	748	726
ND	ND	ND
ND	ND	ND

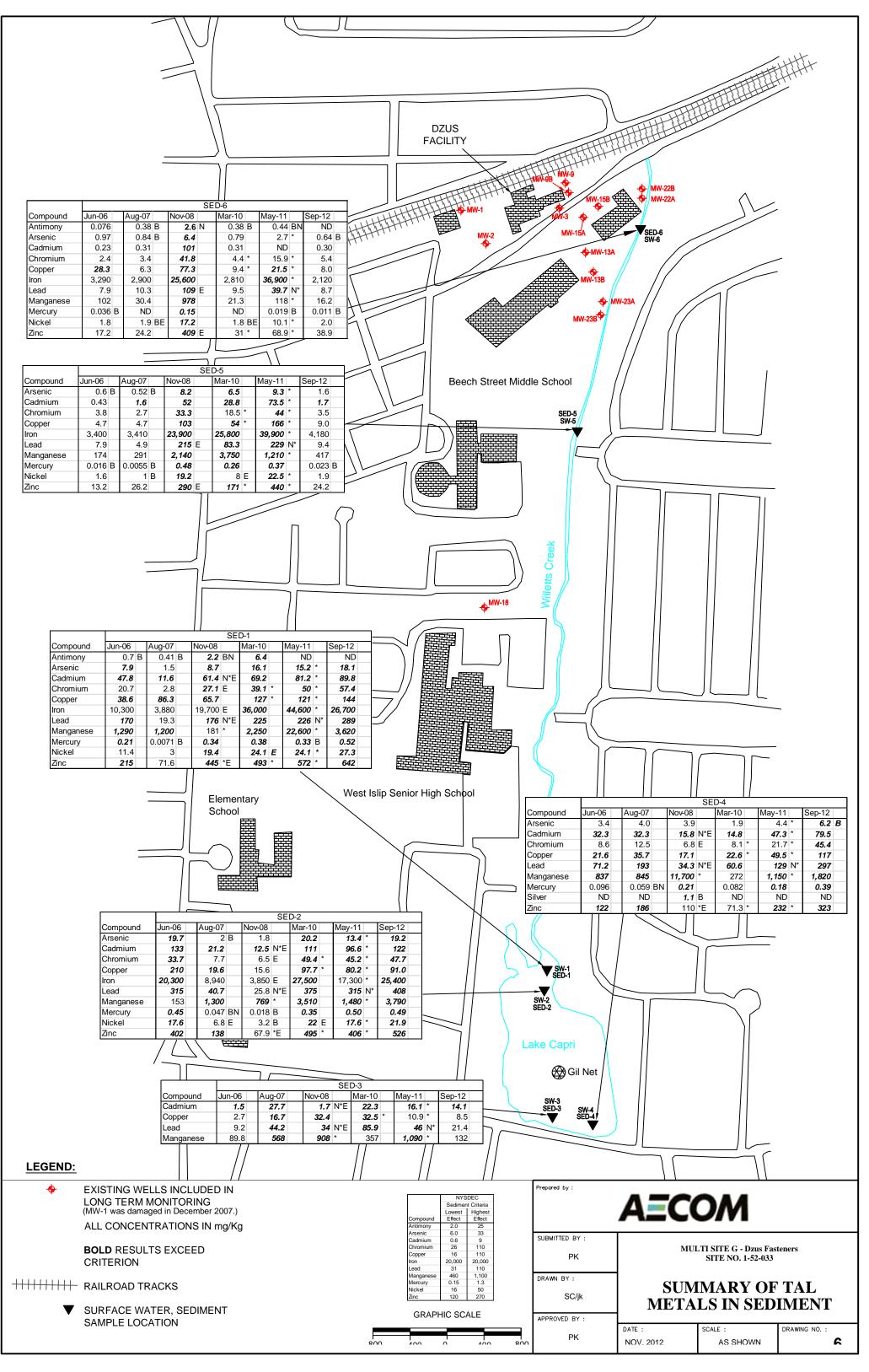
ay-11	Aug-12	Aug-12
F	U	F
ND	ND	ND
ND	ND	ND
2,260	2,700	2,690
780	437	443
ND	ND	ND
4,000	59,700	61,000
ND	ND	ND

Aug-12
F
48.4 B
39,100
ND

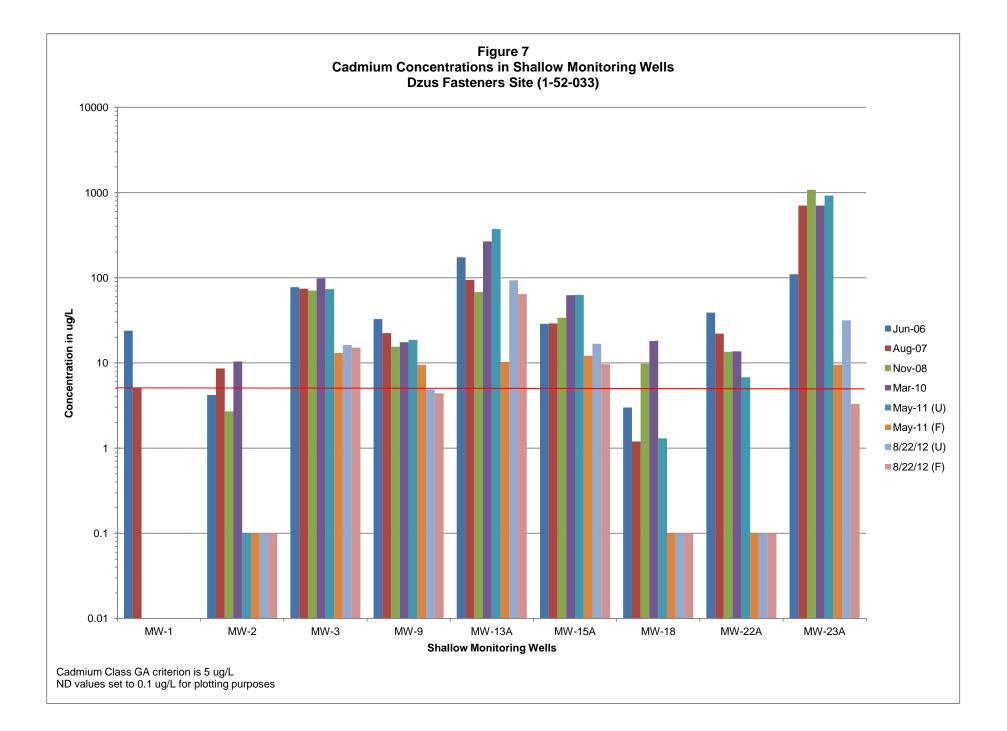


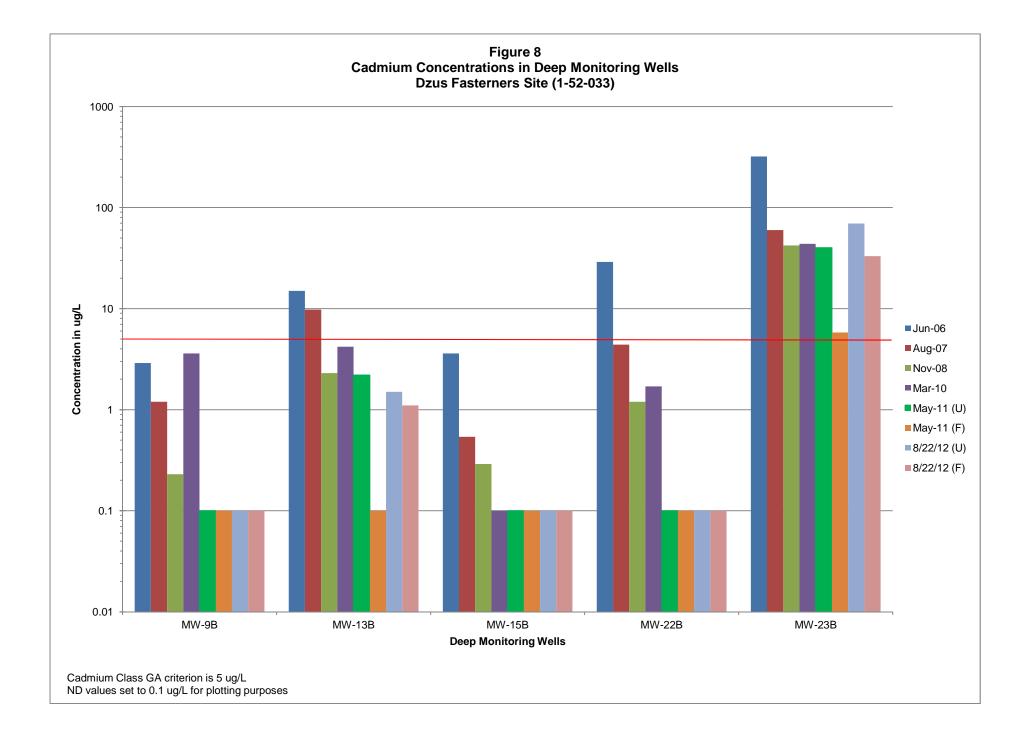


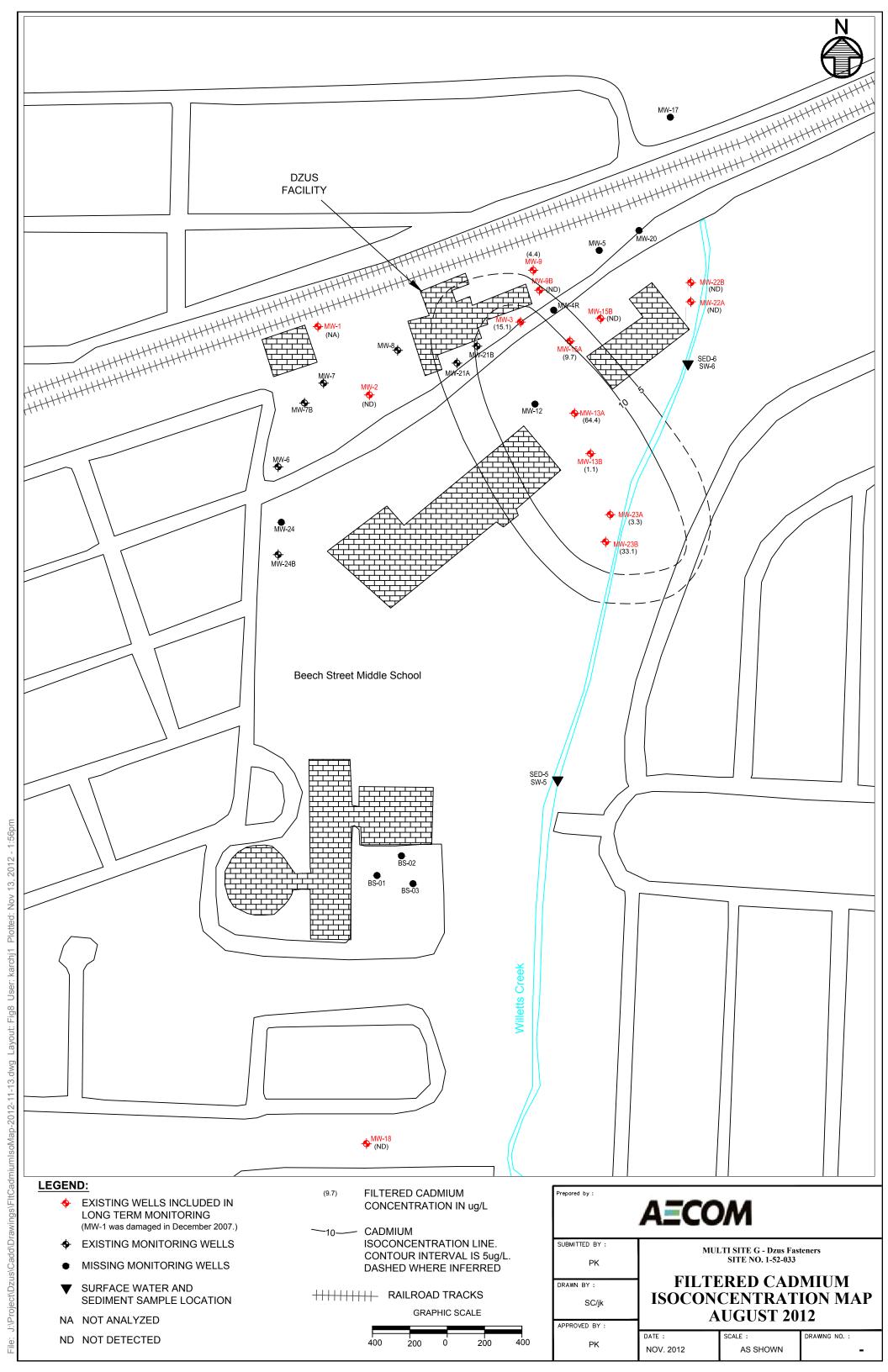


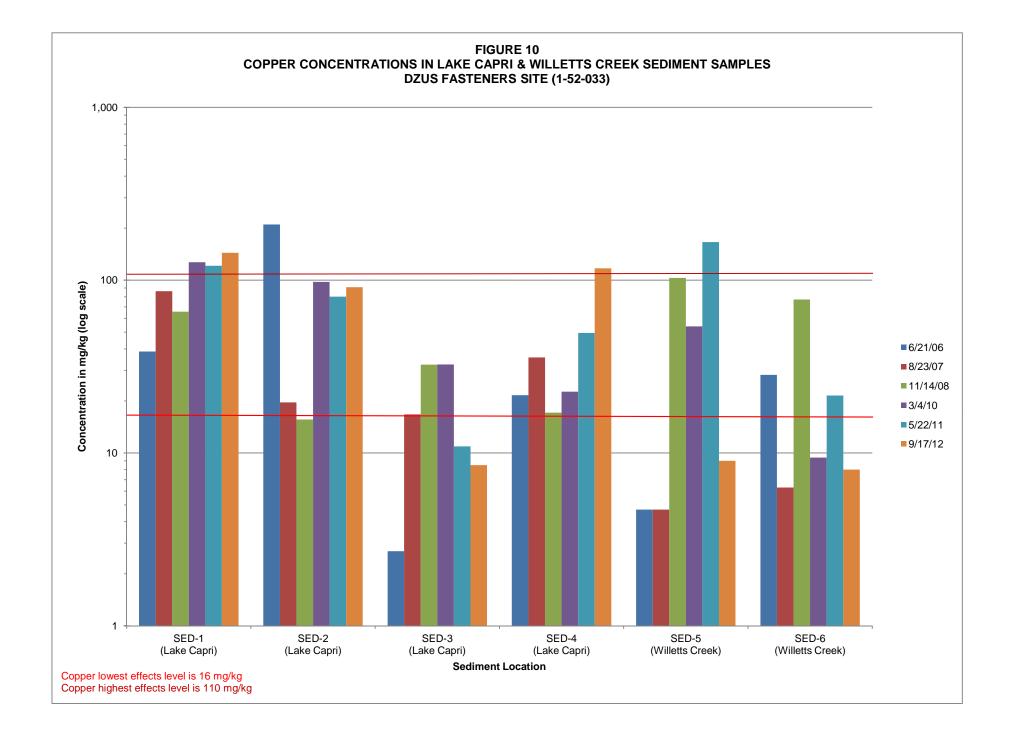


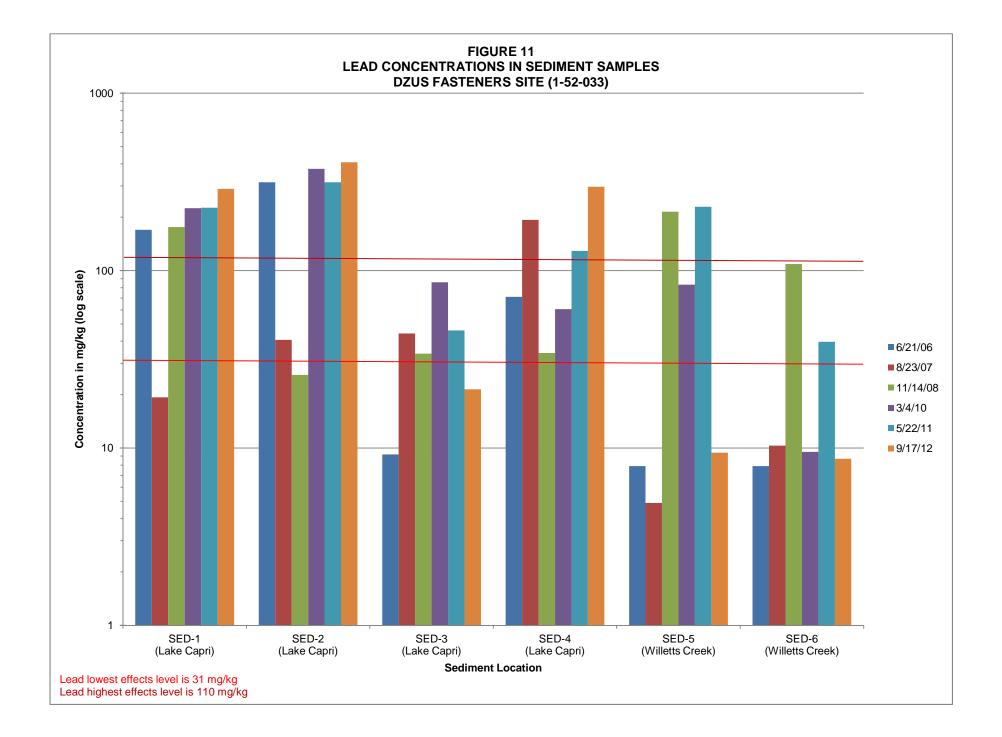
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Appendix A

IC/EC Certification

Enclosure 1 Engineering Controls - Engineering Standby Contractor Certification Form

Sit	e No. 152033		Box 1								
Sit	e Name Dzus Fastener Co., Inc.										
Cit Co	Site Address: 425 Union Boulevard Zip Code: 11795 City/Town: West Islip County: Suffolk Site Acreage: 1.0										
Re	porting Period: November 01, 2011 to December 31, 2013										
			YES	NO							
1.	Is the information above correct?	×									
	If NO, include handwritten above or on a separate sheet.										
2.	To your knowledge has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?		X								
3.	To your knowledge has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?		×								
4.	To your knowledge have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?		X								
	If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.										
5.	To your knowledge is the site currently undergoing development?			Ø							
	Во										
			YES	NO							
6.	Is the current site use consistent with the use(s) listed below? Industrial	Ø									
7.	Are all ICs/ECs in place and functioning as designed?	Ø									
	THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and contact the EC PM regarding the development of a Corrective Measures Work Plan to address these issues.										
Sig	ature of Engineering Standby Contractor Date										

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(97) *1 •

Periodic Review Report (PRR) Certification Statements							
1. I certify by checking "YES" below that:							
a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the certification, including data and material prepared by previous							
b) to the best of my knowledge and belief, the work and conclusions described i are in accordance with the requirements of the site remedial program, and general	cation d NO						
	X						
 If this site has an IC/EC Plan (or equivalent as required in the Decision Document), for each Institutional or Engineering control listed in Boxes 3 and/or 4, I certify by checking "YES" below that all of the following statements are true: 							
(a) the Institutional Control and/or Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;							
(b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;							
(c) nothing has occurred that would constitute a failure to comply with the Site Managem	ient Plan, oi	r equivalent if no					
Site Management Plan exists.	YES	NO					
	×						
IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and contact the DEC PM regarding the development of a Corrective Measures Work Plan to address th	ese issues.						
λ							
Signature of Engineering Standby Contractor Date							

SITE NO. 152033								
Description of Institutional Controls								
Parcel	<u>Owner</u>	Institutional Control						
455000100063000	Stephen Meshover							
	·	Site Management Plan						
		Landuse Restriction						
+deed restriction-Restricting	land use and ground water use							
+deed restriction-Restricting land use and ground water use +Site Management Plan-Including Groundwater monitoring, Surface Water Monitoing, Sediment monitoring, Biota monitoring Plans, Soil Management plan, Institional contol/engineering control plan.								
		institional contol/engineering control plan.						
455000100064000	Stephen Meshover							
		Landuse Restriction						
		Site Management Plan						
+deed restriction-Restricting land use and ground water use +Site Management Plan-Including Groundwater monitoring, Surface Water Monitoing, Sediment monitoring, Biota monitoring Plans, Soil Management plan, Institional contol/engineering control plan.								
Description of Eng	gineering Controls							
Parcel	Engineering Cor	ntrol						
455000100063000								
	Cover System							
+topsoil/asphalt cover at the eastern portion of the Site, which would protect the treatment cells from erosion +long-term monitoring program to evaluate the effectiveness of the on-site remedy and to verify that existing groundwater plume does not impact public health or environment. 455000100064000								
	Cover System							
+topsoil/asphalt cover at the eastern portion of the Site, which would protect the treatment cells from erosion +long-term monitoring program to evaluate the effectiveness of the on-site remedy and to verify that existing groundwater plume does not impact public health or environment.								

IC/EC CERTIFICATIONS Box 6 **Professional Engineer Signature** I certify that all information in Boxes 2 through 5 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law. SCOTT A. UNDERHILL at AECOM 40 BRITISH AMERICAN BLUD NY 12110 (print business address) LATHAM OF NEW am certifying as a Professional Engineer. G. Un 4-19-13 Date Signature of Professional Engineer LICE E)

Enclosure 2

Certification Instructions

I. Verification of Site Details (Box 1 and Box 2):

Answer the "YES/NO" questions in the Verification of Site Details Section. The Engineering Standby Contractor may include handwritten changes and/or other supporting documentation, as necessary.

II. Certification of Institutional Controls/ Engineering Controls (Boxes 3, 4, and 5)

1. Review the listed IC/ECs, confirming that all existing controls are listed, and that all existing controls are still applicable. If there is a control that is no longer applicable the Engineering Standby Contractor should petition the Department separately to request approval to remove the control.

2. In Box 5, complete certifications for all Plan components, as applicable, by checking the corresponding checkbox.

3. If you <u>cannot</u> certify "YES" for each Control listed in Box 3 & Box 4, sign and date the form in Box 5. Attach supporting documentation that explains why the **Certification** cannot be rendered. The DEC PM should be contacted to begin development of a plan of proposed corrective measures and an associated schedule for completing the corrective measures, including detailed cost information in a proposed budget. Note that this **Certification** form must be submitted even if an IC or EC cannot be certified

If the Department concurs with the explanation, the proposed corrective measures, and the proposed schedule and budget, a letter authorizing the implementation of those corrective measures will be issued by the Department's Project Manager. Once the corrective measures are complete, a revised Periodic Review Report (with a signed IC/EC Certification) must be submitted which covers both the period for which a certification initially could not be provided and the ensuing time period until the corrective measure was completed. This revised PRR should be submitted within 45 days after completion of the corrective measures to the Department. If the Department has any questions or concerns regarding the PRR and/or completion of the IC/EC Certification, the Project Manager will contact you.

III. IC/EC Certification by Signature (Box 6):

Where the site has Institutional and Engineering Controls, the certification statement in Box 6 must be completed by a Professional Engineer or Qualified Environmental Professional, as noted on the form.

If you certified "YES" for each Institutional and Engineering Control, please complete and sign the IC/EC Certification page.

IV. Certification Form Modifications

Changes to the Certification Form shall be discussed with the Project Manager prior to submission. Any approved changes must be made on the Certification Form provided by Site Control and supporting documentation or reasoning shall be attached.

Enclosure 3 Periodic Review Report (PRR) General Guidance

- I. Executive Summary: (1/2-page or less)
 - A. Provide a brief summary of site, nature and extent of contamination, and remedial history.
 - B. Effectiveness of the Remedial Program Provide overall conclusions regarding;
 - 1. progress made during the reporting period toward meeting the remedial objectives for the site
 - 2. the ultimate ability of the remedial program to achieve the remedial objectives for the site. Compliance
 - 1. Identify any areas of non-compliance regarding the major elements of the Site Management Plan (SMP, i.e., the Institutional/Engineering Control (IC/EC) Plan, the Monitoring Plan, and the
 - Operation & Maintenance (O&M) Plan).
 - 2. Propose steps to be taken and a schedule to correct any areas of non-compliance.
 - D. Recommendations

С.

Α.

- 1. recommend whether any changes to the SMP are needed
- 2. recommend any changes to the frequency for submittal of PRRs (increase, decrease)
- 3. recommend whether the requirements for discontinuing site management have been met.
- II. Site Overview (one page or less)

A. Describe the site location, boundaries (figure), significant features, surrounding area, and the nature and extent of contamination prior to site remediation.

B. Describe the chronology of the main features of the remedial program for the site, the components of the selected remedy, cleanup goals, site closure criteria, and any significant changes to the selected remedy that have been made since remedy selection.

III. Evaluate Remedy Performance, Effectiveness, and Protectiveness

Using tables, graphs, charts and bulleted text to the extent practicable, describe the effectiveness of the remedy in achieving the remedial goals for the site. Base findings, recommendations, and conclusions objective data. Evaluations and should be presented simply and concisely.

on

IV. IC/EC Plan Compliance Report (if applicable)

- IC/EC Requirements and Compliance
 - 1. Describe each control, its objective, and how performance of the control is evaluated.
 - 2. Summarize the status of each goal (whether it is fully in place and its effectiveness).
- 3. Corrective Measures: describe steps proposed to address any deficiencies in ICECs.
- 4. Conclusions and recommendations for changes.
- B. IC/EC Certification

The certification must be complete (even if there are IC/EC deficiencies), and certified by the appropriate party as set forth in a Department-approved certification form(s).

V. Monitoring Plan Compliance Report (if applicable)

A. Components of the Monitoring Plan (tabular presentations preferred) - Describe the requirements of the monitoring plan by media (i.e., soil, groundwater, sediment, etc.) and by any remedial technologies being used at the site.

B. Summary of Monitoring Completed During Reporting Period - Describe the monitoring tasks actually completed during this PRR reporting period. Tables and/or figures should be used to show all data.

C. Comparisons with Remedial Objectives - Compare the results of all monitoring with the remedial objectives for the site. Include trend analyses where possible.

D. Monitoring Deficiencies - Describe any ways in which monitoring did not fully comply with the monitoring plan.

E. Conclusions and Recommendations for Changes - Provide overall conclusions regarding the monitoring completed and the resulting evaluations regarding remedial effectiveness.

VI. Operation & Maintenance (O&M) Plan Compliance Report (if applicable)

A. Components of O&M Plan - Describe the requirements of the O&M plan including required activities, frequencies, recordkeeping, etc.

B. Summary of O&M Completed During Reporting Period - Describe the O&M tasks actually completed during this PRR reporting period.

C. Evaluation of Remedial Systems - Based upon the results of the O&M activities completed, evaluated the ability of each component of the remedy subject to O&M requirements to perform as designed/expected.

D. O&M Deficiencies - Identify any deficiencies in complying with the O&M plan during this PRR reporting period.

E. Conclusions and Recommendations for Improvements - Provide an overall conclusion regarding O&M for the site and identify any suggested improvements requiring changes in the O&M Plan.

VII. Overall PRR Conclusions and Recommendations

- A. Compliance with SMP For each component of the SMP (i.e., IC/EC, monitoring, O&M), summarize;
 - 1. whether all requirements of each plan were met during the reporting period
 - 2. any requirements not met
 - 3. proposed plans and a schedule for coming into full compliance.

B. Performance and Effectiveness of the Remedy - Based upon your evaluation of the components of the SMP, form conclusions about the performance of each component and the ability of the remedy to achieve the remedial objectives for the site.

C. Future PRR Submittals

1. Recommend, with supporting justification, whether the frequency of the submittal of PRRs should be changed (either increased or decreased).

2. If the requirements for site closure have been achieved, contact the Departments Project Manager

for the site to determine what, if any, additional documentation is needed to support a decision to discontinue site management.

VIII. Additional Guidance

Additional guidance regarding the preparation and submittal of an acceptable PRR can be obtained from the Departments Project Manager for the site.

Appendix B

Post-Dredging Results

DZUS Fastener Site NYSDEC Site ID Number 1-52-033

COMPARISON OF ANALYTICAL RESULTS FROM PRE-DESIGN INVESTIGATION, PRE-EXCAVATION, AND POST-EXCAVATION OF WILLETTS CREEK

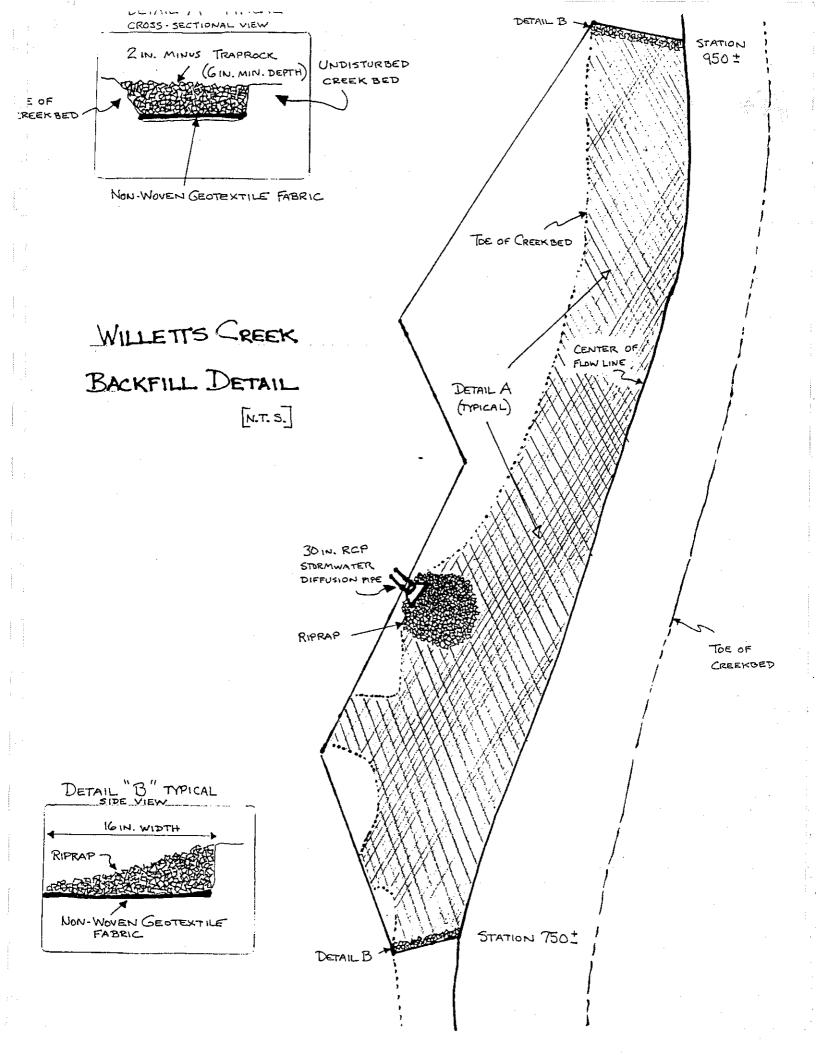
Location (In Feet)	PDI West	PDI Centerline	Pre-Excavation	Post-Excavation
900	142 ppm	1.9 ppm		92.8 ppm
850	· · · · · · · · · · · · · · · · · · ·		18.6 ppm	114.0 ppm
800	239 ppm	1.6 ppm		97.2 ppm
550				4.99 ppm
500	20.3 ppm	12.2 ppm		
450	8.8 ppm	ND	11.8 ppm	4.70 ppm
400	17.3 ppm	3.3 ppm		
350	9.4 ppm	14.9 ppm	17.3 ppm	11.8 ppm
300	1.3 ppm	6.5 ppm		
250	51.4 ppm	0.6 ppm		1.24 ppm
200	37.1 ppm	5.0 ppm		
150	11.4 ppm	10.2 ppm	110 ppm	9.65 ppm
100	368 ppm	11.2 ppm		
50	1.2 ppm	6.8 ppm		2.32 ppm, ND*
00	37.6 ppm	9.7 ppm	152 ppm	<mdl*< td=""></mdl*<>
-50				

* These samples were not taken exactly at 50 ft north of bridge, but within 15 - 35 feet north of bridge.

NOTE: The analytical results was the basis for decision to encapsulate per detail "Willets Creek Backfill Detail".

L:\Work\32419\CertRpt\CertRpt Tables\Analytical Result Comparison.xls

9/18/00



CONSTRUCTION CERTIFICATION REPORT

DZUS FASTENER SITE (OU2)

APPENDIX D

POST DREDGING/EXCAVATON DATA

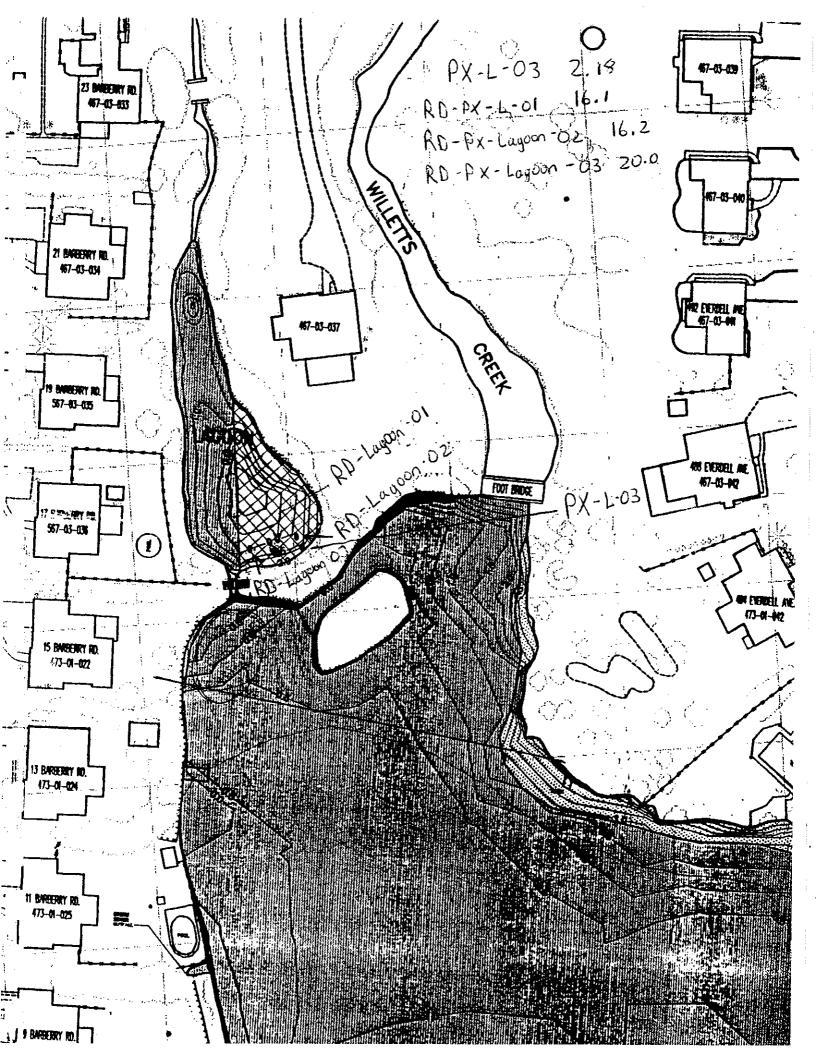
LAGOON ANALYTICAL DATA SUMMARY

DZUS Fastener Site NYSDEC Site ID Number 1-52-033 POST- EXCAVATION SAMPLING REQUIREMENTS

NORTH LAGOON AREA

POST EXCAVATION SAMPLES

ID#	Collection	Collected	Collection	Analytical		Commente
	Date	By	Time	Results		Comments
PX-L-01	07/20/99	JShn	1455 hrs.	<0.5 ppm Cd total		
PX-L-02	07/22/99	JShn	1400 hrs.	0.42 ppm		
PX-L-03	07/22/99	JShn	1415 hrs	2.18 ppm		
				11.7 ppm	(SciLab)	split check
RD-PX-L-01	07/28/99	JShn	1515 hrs	16.1 ppm		post redredge
				6.5 ppm	(SciLab)	split check
RD-PX-L-02	08/03/99	Jwolf	1540 hrs	18.2 ppm		6ft under H20
				12.7 ppm	(SciLab)	
RD-PX-L-03	08/03/99	Jwolf	1550 hrs	20.0 ppm		8ft under H20
				24.3 ppm	(SciLab)	
RD-PX-L-04	09/10/99	Jwolf	1330 hrs	50.5 ppm		
RD-PX-L-05	09/10/99	Jwolf	1340 hrs	131 ppm		
	00/40/00	1	4050 1			
RD-PX-L-06	09/10/99	Jwolf	1350 hrs	1.14 ppm		
RD-PX-L-07	09/10/99	Jwolf	0400 hrs	0.30 ppm		
RD-PX-L-08	09/13/99	Jwolf	1500 hrs	0.17 ppm		
				2.3 ppm	(SciLab)	
RD-PX-L-09	09/13/99	Jwolf	1515 hrs	0.23 ppm	. /	
				0.93 ppm	(SciLab)	



CONSTRUCTION CERTIFICATION REPORT

DZUS FASTENER SITE (OU2)

APPENDIX D

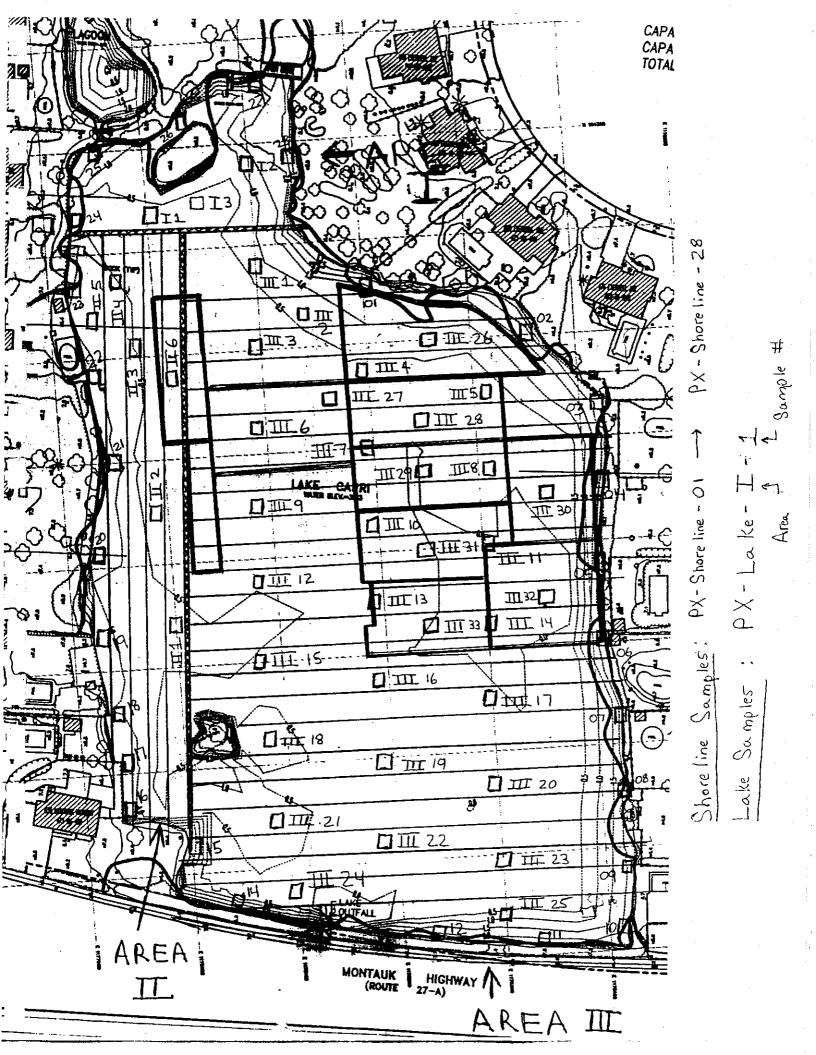
POST DREDGING/EXCAVATION DATA

LAKE CAPRI ANALYTICAL DATA SUMMARY

Lake

SHORELINE POST-EXCAVATION SAMPLES - Total Cd (ppm)

РХ	Dry	Wet	Wet + 4hr	QA/QC
1	1.02	0.41		
2	0.71	0.70		
3 ·	0.11	0.45		
4	9.96	0.17		· · · ·
4d	1.13			
4s	8.60			
5	0.98	0.55		
6	0.70	1.13		
7	0.89	1.56		1.30
8	1.98		2.07	
9	NA		1.59	0.90
10	NA	1.73		
11	NA	61.20	3.37	
12	NA	0.47	6.47	
13	NA		1.77	
14	NA			
15	NA			
16	NA			
17	NA			
18	NA	1.43		0.80
19	NA	0.29		
20	NA	0.62		
21	NA	0.74	0.86	0.70
22	NA	0.25	0.70	
23	NA	0.82	0.22	<0.1
24	NA	2.45		
25	NA	0.18		
26	NA			
27	NA	0.31		
28	NA	1.00	[······	

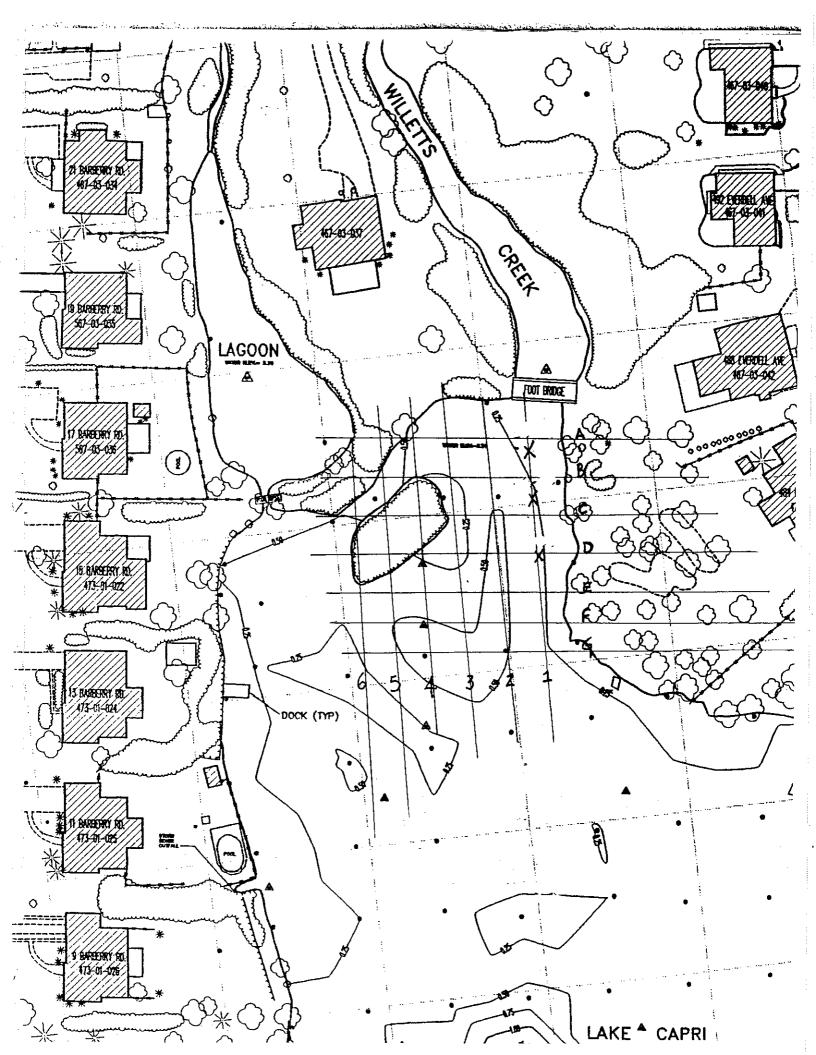


DZUS Fastener Site NYSDEC Site ID Number 1-52-033 ANALYTICAL RESULTS FOR NORTHEAST COVE AREA

GRID LOCATION	AT GRADE	12 in < GRADE	30 in < GRADE
A1	0.12 ppm	<mdl< th=""><th></th></mdl<>	
B1			
C1	37.8 ppm	0.4 ppm	3.7 ppm
D1			
E1	11.5 ppm	0.7 ppm	
F1	· · · · · · · · · · · · · · · · · · ·	0.3 ppm	
G1			
A2			
B2	12.4 ppm	1.2 ppm	73 ppm
C2	: 		6.5 ppm
D2	24.1 ppm	11.0 ppm	1.0 ppm /1.7 ppm
E2	·		
F2	5.96 ppm	0.1 ppm	<mdl< th=""></mdl<>
G2			
A3	28.6 ppm	1.1 ppm	
B3	· · · · · · · · · · · · · · · · · · ·		
C3	10.3 ppm	2.7 ppm	
D3			
E3	44.9 ppm		0.20 ppm
F3		3.9 ppm	
G3	31.0 ppm		
A4			
B4			
C4			
D4			
E4			0.70 ppm
F4	<u>.</u>		

DZUS Fastener Site NYSDEC Site ID Number 1-52-033 ANALYTICAL RESULTS FOR NORTHEAST COVE AREA

GRID LOCATION	AT GRADE	12 in < GRADE	30 in < GRADE
G4			
A5			
B5			
C5			
D5			
E5		·····	
F5	135 ppm	0.1 ppm	
G5			
A6			
B6			
C6			
D6			
E6			
F6			
G6	1.0 ppm /4.0 ppm		
A7			
B7			
C7			
D7			
E7			
F7			
G7			
A8			
B8			
C8			
D8			
E8			



POST EXCAVATION (TOTAL CADMIUM) LABORATORY ANALYTICAL RESULTS

		• •	low MDL	low MDL						WW Prade			iw grade		w grade			w grade	mq		w grade
Notes			J - Concentration detected below MDL	J - Concentration detected below MDL Revised 12/2/99	1 +C'N 80 PM 10/2					Experimental Sample 1' below grade	Revised 11/29/99 Orie, renorted as 1.95 norm		Experimental Sample 1' below grade Revised 11/20/00		Experimental Sample 1' below grade	KCVI8CO 11/29/99		Experimental Sample 1' below grade Revised 11/29/99	Oug. reported as 60.9 ppm		Experimental Sample 1' below grade Revised 11/29/99
			J - Concen	J - Concen						Experime	Oii		Experime		Experimen			Experimen	Otig.		Experimen
ERM/BWF Analytical Results (ppm)		34.8	0.13	0.44	37.8	2.71	11 5	2.01	17.4		1.95	24.1	174.1	6.02	573	28.6	28.5		60.8	10.4	8.63
Earth Tech Analytical Results (ppm)															-						
Date Cat B Package Received		10/15/99	10/15/99	12/08/99	10/15/99	12/08/99	10/15/99	12/08/99	10/15/99		12/02/99	10/15/99	12/02/99	10/15/99	12/02/99	10/15/99	10/15/99		12/02/99	10/15/99	12/02/99
Date Data Received		09/20/99	09/20/99	10/29/99	66/20/60	10/29/99	09/20/99	10/29/99	. 66/07/60		10/28/99	09/20/99	10/28/99	09/20/99	10/28/99	09/20/99	09/20/99		10/40/22	66/02/60	10/28/99
Date Analyzed		09/18/99	09/18/99	10/29/99	09/18/09	10/29/99	66/81/60	10/29/99	09/18/99		10/28/99	66/81/60	10/28/99	09/18/99	10/28/99	09/18/99	09/18/99	10/28/00	(()),T/),T	66/81/60	10/28/99
Date Collected		09/17/99	66/L1/60	10/28/99	09/17/99	10/28/99	66/11/60	10/28/99	66/11/60		10/27/99	66/11/60	10/26/99	66/L1/60	10/27/99	66/11/60	66/L1/60	00/96/00	00/11/00	66111160	10/26/99
ERM Sample ID		66/160 dn/	PX-Cove-AI	PX-Cove-A1-RD	PX-Cove-C1	PX-Cove-C1-RD	PX-Cove-E1	PX-Cove-E1-RD	PX-Cove-B2		PX-Cove-B2-RD	PX-Cove-D2	PX-Cove-D2-RD	PX-Cove-F2	PX-Cove-F2-RD	PX-Cove-A3	PX-Cove-A3 MS/MSD	PX-Cove-A3-RD	PX-Cove-C3		PX-Cove-C3-RD
Chain of Custody#	CONT	1-911/1	17116-2	I 5258-1	I 7116-3	I 5258-2	17116-4	I 5258-3	I 7116-9		J 5254-2	I 7116-7	J 5254-1	I 7116-5	J 5254-3	I 7116-10	I 7116-11	J 5253-3	I7116-8		J 5253-2 PX-C

Page 1

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POST EXCAVATION (TOTAL CADMIUM) LABORATORY ANALYTICAL RESULTS

2	5140VI	Experimental Sample 1' below grade Revised 11/29/99		J - Concentration detected below MDF		Revised 1/13/00 Otte renorted as 1 98 nom	ndd act or barreday for	-						Revised 1/11/00 One renorted as 1.56 mm	Revised 1/12/00	Ind I for an manufax .	Prior to Austering	Revised 1/11/00 Ong reported as 61.2 ppm	Revised 1/12/00	Revised 1/13/00 Orig. reported as 1.6 mm	Prior to Augering J - Concentration detected helow MDI	TATEAT LINEAR STAAAAAAA TAALAAAAAA
ERM/BWE Analytical Results (torm)	44.8	38.0		0.22	14.1	1.99		0.41	0.70	0.45	0.17	0.55	1.13	1.59	2.06	1.59	1.73	610	3.37	1.58	0.92	
Barth Tech Analyrical Reaults (num)	2					06'/06'/08'								1.3		0.9						
Date Cat B Package Roceived	10/15/99	12/02/99		11/19/99	01/19/00	01/16/00		11/19/99	11/19/99	11/19/99	11/19/99	11/19/99	11/19/99	01/19/00	01/19/00	01/10/00	01/19/00	00/61/10	01/19/00	01/19/00	01/19/00	
Date Data Received	09/20/99	10/28/99		10/12/99	12/15/99	12/21/99		09/30/99	09/30/99	66/0£/60	09/30/99	09/30/99	09/30/99	12/07/99	12/13/99	12/14/99	12/06/99	12/06/99	12/14/99	12/16/99	12/06/99	
Date Analyzed	66/81/60	10/28/99		10/11/99	12/13/99	10/20/99		09/29/99	09/29/99	09/29/99	09/29/99	09/29/99	09/29/99	12/07/99	12/10/99	12/13/99	12/04/99	12/04/99	12/14/99	12/16/99	12/04/99	
Date Collected	66/11/60	10/26/99		10/09/99	12/10/99	12/17/99		66/67/60	09/29/99	09/29/99	09/29/99	09/29/99	09/29/99	12/05/99	12/08/99	12/09/99	12/03/99	12/03/99	12/10/99	12/15/99	12/03/99	299.xls
ERM Sample ID	PX-Cove-E3	PX-Cove-E3-RD	N. Contraction of the second sec	PX-LB-201	PX-Lake-25A	PX-Lake-25A +4		PX-Shoreline-01	PX-Shoreline-02	PX-Shoreline-03	PX-Shoreline-04	PX-Shoreline-05	PX-Shoreline-06	PX-Shoreline-07 +4	PX-Shoreline-08 +4	PX-Shoreline-09 +4	PX-Shoreline-10	PX-Shoreline-11	PX-Shoreline-11 +4	PX-Shoreline-11 +4 RS	PX-Shoreline-12	File: L:/work/32419/certrpt tables/post ex data 122299.xis
Chain of Custody#	I 7116-6	J 5253-1	LAKE BOTTON	I 5160-1	J 3965-1	J 4623-1	SHORELINE	I 9836-1	I 9836-2	I 9836-3	I 9836-4	I 9836-5	I 9836-6	J 3953-2	J 3956-2	J 3962-2	J 3946-2	J 3946-3	J 3964-2	J 4619-4	J 3946-4	FIIE: L:WORKL

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POST EXCAVATION (TOTAL CADMIUM) LABORATORY ANALYTICAL RESULTS

		Notes			Revised 1/12/00 Otix. reported as 1.77 pnm				Revised 1/13/00 Onie. reported as 2.52 mm	Revised 1/13/00	India are secondar des				I. Orenentending descend to L	Revised 1/04/00	TING LI'N SO NATAJAT GATA	J - Concentration detected below MDJ		Revised 11/29/99 Orig. renorted as 0.82 nom	I - Concentration deterred below MDV	TITAL MATAG ANGAGES TRANSMISSION	I - Concentration detected balance Land	TOTAL WUISD המוצעה המשפחות אוניים - ר	
	Analytical Results	(ndd)	6.47	0.46	1.76	69.8	1.63	2.09	2.51	2.75	0.69	1 43	0.48	0,63	0.47	0.75	0.86	0.49	0.70	1.05	0.48	2.44	0.18	1.02	
Earth Tech	Results	(mdd)									0.2	0.8					0.7				BDL	-			
Date	Package	Received	01/19/00	01/19/00	00/61/10	01/24/00	00/61/10	01/24/00	00/61/10	00/10/00	01/19/00	01/02/00	01/02/00	01/07/00	01/07/00	00/20/10	01/02/00	01/02/00	00/L0/10	12/02/99	01/01/00	11/19/99	11/19/99		
	Date Data	Received	12/14/99	12/16/99	12/14/99	12/15/99	12/16/99	12/15/99	12/16/99	12/16/99	12/15/99	11/19/99	11/19/99	11/19/99	11/18/99	11/18/99	11/22/99	11/18/99	11/22/99	10/20/99	11/22/99	10/18/99	10/18/99		
	Date	Analyzed	12/14/99	12/16/99	12/14/99	12/13/99	12/16/99	12/13/99	12/16/99	12/16/99	12/15/99	11/18/99	11/18/99	11/18/99	11/18/99	11/15/99	11/21/99	11/15/99	11/21/99	10/18/99	11/21/99	10/15/99	10/15/99		
	Date	Collected	12/10/99	12/15/99	12/10/99	12/10/99	12/15/99	12/10/99	12/15/99	12/15/99	12/14/99	11/13/99	11/13/99	11/13/99	11/12/99	11/12/99	11/13/99	11/12/99	11/13/99	10/14/99	11/13/99	10/14/99	10/13/99	07/26/99	299.xls
		ERM Sample IB	PX-Shoreline-12 +4	PX-Shoreline-12 +4 RD	PX-Shoreline-13 +4	PX-Shoreline-14	PX-Shoreline-14 +4	PX-Shoreline-15	PX-Shoreline-15 +4	PX-Shoreline-16 +4	PX-Shoreline-17 +4	PX-Shoreline-18	PX-Shoreline-19	PX-Shoreline-20	111299 Dup	PX-Shoreline-21	PX-Shoreline-21 +4	PX-Shoreline-22	PX-Shoreline-22 +4	PX-Shoreline-23	PX-Shoreline-23 +4	PX-Shoreline-24	PX-Shoreline-25	PX-Shoreline 26 is PX-Lake-01	File: L:work/32419/certrpt tables/post ex data 122299.xls
	Chain of	Custody#	J 3964-3	J 4620-1	J 3964-4	J 3966-2	J 4620-3	J 3966-3	J 4619-1	J 4619-2	J 4618-2	J 3414-3	J 3414-2	J 3414-1	J 3411-1	J 3411-2	J 3415-3	J 3411-3	J 3415-2	I 5165-I	J 3415-1	I 5164-1	I 5162-1	I 5075	File: L:/work%

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POST EXCAVATION (TOTAL CADMIUM) LABORATORY ANALYTICAL RESULTS

					Date	Earth Tech		
C.E.L.L.		,			Cat B	Analytical	ERMENVE	
Custody#	ERM Sample ID	Date Collected	Date	Date Data Received	Package Received	Results	Analytical Results	•
I 5257-1	PX-Shoreline-27	10/27/99	10/29/99	00/06/01	17/08/00	21112 A		Notes
I 5261-1	PX-Shoreline-28	00/86/01	10/00/00		660001		0.47	J - Concentration detected below MDL
1 1 2 2 2		66/07/01	10/22/99	10/77/99	12/08/99		1.00	
I 5256-1	PX-Lake-I-2	10/27/99	10/29/99	10/29/99	12/02/99		35.8	Revised 11/29/99
								Durbicate
I 5256-2	102799	10/27/99	10/29/99	10/29/99	12/02/99		30.6	Revised 11/29/99 Otig: reported as 30.3 mm
I 7123-1	PX-Lake-I-2-RD	11/05/99	11/10/99	66/11/11	12/08/99		2 <u>98</u>	Revised 12/2/99
1 34 16-2	PY_L 2.1. AL						0/-7	Utile reported as 2.99 ppm
2-01-0 2	- 688	96/51/11	11/18/99	11/19/99	01/07/00		0.43	U - Analytical value is a non-detect
1/ 205 //								
								J - Concentration detected helow MDT
I 7126-2	PX-Lake-II-1	11/08/99	11/10/99	11/16/99	12/08/99		0.450	Revised 12/2/99
J 3415-4	PX-Lake-II-1 +4	11/13/99	11/21/99	11/22/99	00/20/10	17	1 45	D Udd to no an india and
I 7126-3	PX-Lake-II-2	11/09/99	11/10/99	11/16/00	00/80/01			
J 3415-5	PX-Lake-II-2 +4	11/13/00	00/10/11		17/00/22		0.45	J - Concentration detected below MDL
1 2400 1		66/01/11	66/17/13	11/22/99	01/02/00		0.43	
1-60+C r	PX-Lake-li-3	11/11/99	11/15/99	11/17/99	00/61/10		0.43	U - Analytical value is a non-detect
J 3415-6	PX-Lake-II-3 +4	11/13/99	11/21/99	11/22/99	01/02/00		0.45	J - Concentration detected below MDT
J 3409-2	PX-Lake-II-4	11/11/99	11/15/99	66/11/11	01/10/00		CF ()	
J 3415-7	PX-Lake-II-4 +4	11/13/99	11/21/99	11/22/99	01/07/00			- Concentration detected below MDJ.
J 3411-4	PX-Lake-II-5	11/12/99	11/15/99	11/18/00	00/20/10		Ic.n	
J 3415-8	PX-1 ake-II-5 +4	00/21/11			00/10/70		0.45	J - Concentration detected below MDL
1 70121		66/01/11	11/21/99	11/22/99	01/07/00		0.45	J - Concentration detected below MDL
1-07171	LA-Lake-II-0	11/08/99	11/10/99	11/16/99	12/08/99		0.45	J - Concentration detected below MDI
J 3415-9	PX-Lake-II-6 +4	11/13/99	11/21/99	11/22/99	01/01/00	0.1	0.83	Revised 01/04/00 Orig. reported as 1.48 mm
LA KUMI								nudd ac i ar ar ar a
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File: L:\work\32419\certrpt tables\post ex data 122299.xis

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Appendix C

Site Inspection Photos

AECOM

Client Name: Dzus Fasteners

NYS DEC Work Order D007626-17

PHOTOGRAPHIC LOG

Site Location: Dzus Fasteners Site, West Islip, NY Project No. 60277021



Description:

Photo No.

1

Taken: Facing east

Direction Photo

Willetts Creek near MW-22A and MW-22B

Photo No.Date:208/22/12Direction PhotoTaken:

Facing east

Description:

Willetts Creek near MW-22A and MW-22B



AECOM

PHOTOGRAPHIC LOG

Client Name NYS DEC W		Site Location: Dzus Fasteners Site, West Islip, NY	Project No. 60277021
Photo No. 3	Date: 08/19/09		
Direction Ph Taken: Facing east	oto		
Description: DZUS Fastene asphalt cap.			
			08/19/2009



AECOM

Photo No.

6 08/ Direction Photo

Facing North-west

Description:

Lake Capri

Taken:

Date: 08/19/09

PHOTOGRAPHIC LOG

08/19/200

Project No.

60277021

 Client Name: Dzus Fasteners NYS DEC Work Order D007626-17
 Site Location: Dzus Fasteners Site, West Islip, NY

 Photo No. 5
 Date: 08/19/09

 Direction Photo Taken: Facing north
 The second seco



Appendix D

Well Sampling Logs



				PROJECT					PROJECT No.	SHEET	SHEETS
		LING FOR	RM	MULTI S	ITE-G				87616 / 03	1 оғ	1
				/ 114 FO O				DATE WELL S		DATE WELL COMPLETED	
DZUS F	astene	rs, West I	Islip, NY	′, #1-52-C	33			6/8/06 NAME OF INS		6/8/06	
	ork Sta	te Depart	ment of	Environn	nental (Conserv	vation		ise, Jason Kl	ein	
DRILLING	COMPANY	to Dopart		211110111		5011001	lation	SIGNATURE C	F INSPECTOR		
		4.45			WELL TD:	45.00					
ONE WELL	. VOLUME :	1.15			WELL ID:	15.00			PUMP II	NTAKE DEPTH:	
	Depth			FIE	D MEAS	SUREME	NTS				
	to	Purge					•				
Time	Water	Rate	Temp.	Conduct.	DO	рН	ORP	Turbidity		REMARKS	
	(ft) 8	(ml/min)	(C)	(ms/cm)	(mg/L)	E 47	047.0	(ntu)			
12:00	8		14.5	0.138	6.09	5.47	247.8				
12:00			13.79	0.138	6.77	5.59	226.7	20	Purge Volum	ie 3.456 gal.	
									[
D	T	Contrite		a	مارىم – ان	م الم					
Pump	i ype:	Centrifug	ai pum	o with bla	ск роју	tuping					
Analyti		omotora		TAL Meta							
Analyti	cai Par	ameters:			215						



				PROJECT					PROJECT No.	SHEET	SHEETS
WELL LOCATION		LING FO	RM	MULTI S	ITE-G			DATE WELL S	87616 / 03	1 OF	1
		rs, West I	slin NN	/ #1-52-0	33			6/8/06		6/8/06	
CLIENT	asterie	13, 10031	1311p, 141	, #1 02 0				NAME OF INS		0/0/00	
New Y	<u>ork S</u> ta	te Depart	ment of	Environn	nental C	<u>Cons</u> erv	vation	Kevin Se	ise, Jason Kl	ein	
DRILLING	COMPANY							SIGNATURE C	OF INSPECTOR		
ONE WELL		1.00			WELL TD:	14.3			PUMP II	NTAKE DEPTH:	
	Depth			FIEI	LD MEAS		NTS		1		
	to	Purge		1121							
Time	Water	Rate	Temp.	Conduct.	DO	рН	ORP	Turbidity		REMARKS	
	(ft)	(ml/min)	(C)	(ms/cm)	(mg/L)			(ntu)			
	8.15		14.79	0.206	3.4	5.95	193.1	1.23			
14:35			14.34	0.172	6.01	5.97	119.1	1.79	Purge Volum	ne 3.0 gal.	
 							l		1		
Pump	Tyne	Centrifug	al num	n with bla	ck noly	tubing					
i unp	i ype.	Centinug	a pun		or hold	uning					
Analyti	cal Par	ameters:		TAL Meta	als						
, that y t											



WELL SAMPLING FORM MULTI SITE-G 87616 / 03 1 or 1 Discrime Date well states Dates Date well states D					PROJECT					PROJECT No.	SHEET	SHEETS
Dzus Fasteners, West Islip, NY, #1-52-03 6/8/06 6/8/06 New York State Department of Environmental Conservation DRILING COMPANY New York State Department of Environmental Conservation DRILING COMPANY New York State Department of Environmental Conservation DRILING COMPANY ONE WELL YOLME WELL TD: 15.03 PUMP INTAKE OF INSPECTOR ONE WELL YOLME WELL TD: 15.03 PUMP INTAKE OF INSPECTOR Time Water Rate (ntfmin) FIELD MEASUREMENTS PUMP INTAKE DEPTIL Time Water Rate (ntfmin) Conduct (NO) PH OR P Turbidity 9:20 16.6 0.193 7.19 5.8 227.4 1.6 9:20 16.1 0.226 6.44 5.76 229.1 1.6 9:20 16.1 0.226 6.44 5.76 229.1 1.6 1.6 9:20 16.1 0.226 6.44 5.76 229.1 1.6 1.6 9:20 16.1 0.226 6.44 5.76 229.1 1.6 1.6 9:20 16.1 0.26 1.6	WELL	SAMP	LING FOR	RM	MULTI S	ITE-G				87616 / 03		1
MARE OF INSPECTOR MARE OF INSPECTOR NAME OF INSPECTOR SINUARE OF INSPECTOR NAME OF INSPECTOR Conduct No TIME WELL VOLUME : VELT: 15.03 PURP INTAKE OF PITE TIME WITH TO			*** \\/***		μ4 ΕΩ C							
New York State Department of Environmental Conservation DRILLING CONFARY Kevin Seise, Jason Klein DRATIKE OF INSPECTOR ONE WELL VOLME WEL TO: 15.03 PUMP MTAKE DEPTIN Time Order Transport FIELD MEASUREMENTS (1) (might) PUTATE 57.77 16.66 0.193 7.19 5.8 227.4 1.8 9:20 16.61 0.226 6.44 5.76 229.1 1.6 9:20 16.1 0.226 6.44 5.76 229.1 1.6 9:20 16.1 0.226 6.44 5.76 229.1 1.6 9:20 16.1 0.226 6.44 5.76 29.1 1.6 9:20 16.1 0.226 6.44 5.76 29.1 1.6 9:20 16.1 0.226 6.44 5.76 29.1 1.6 9:20 16.1 0.226 6.44 5.76 29.1 1.6 9:20 16.1 0.226 1.4 1.4 1.4 1.4 9:20 16.1 </td <td></td> <td>astene</td> <td>rs, west i</td> <td>siip, ivi</td> <td>r, #1-52-U</td> <td>33</td> <td></td> <td></td> <td></td> <td></td> <td>0/8/06</td> <td></td>		astene	rs, west i	siip, ivi	r, #1-52-U	33					0/8/06	
Desk Purge FIELD MEASUREMENTS Purge (nt/min) REMARKS 5.77 16.65 0.193 7.19 5.8 227.4 1.8 9:20 16.1 0.226 6.44 5.76 229.1 1.6 1 1 1 0.226 6.44 5.76 229.1 1.6 9:20 1 16.1 0.226 6.44 5.76 229.1 1.6 1 1 1.2 1.2 1.4 1.4 1.4 1.4 1 1 1.2 1.4 1.4 1.4 1.4 1.4 1 1 1.4 1.4 1.4 1.4 1.4 1.4 1 1 1.4 1.4 1.4 1.4 1.4 1 1 1.4 1.4 1.4 1.4 1.4 1 1 1.4 1.4 1.4 1.4 1.4 1 1 1.4 1.4 1.4 1.		ork Sta	te Depart	ment of	Environn	nental (Conserv	vation			ein	
Deptit Function FIELD MEASUREMENTS REMARKS 5.77 16.65 0.193 7.19 5.8 227.4 1.8 9:20 1 16.1 0.226 6.44 5.76 229.1 1.6 10 10 10 10 10 10 10 10 11 10.226 6.44 5.76 229.1 1.6 10	DRILLING	COMPANY	to Dopun					adon	SIGNATURE C	F INSPECTOR		
Deptit Function FIELD MEASUREMENTS REMARKS 5.77 16.65 0.193 7.19 5.8 227.4 1.8 9:20 1 16.1 0.226 6.44 5.76 229.1 1.6 10 10 10 10 10 10 10 10 11 10.226 6.44 5.76 229.1 1.6 10												
Deptit Function FIELD MEASUREMENTS REMARKS 5.77 16.65 0.193 7.19 5.8 227.4 1.8 9:20 1 16.1 0.226 6.44 5.76 229.1 1.6 10 10 10 10 10 10 10 10 11 10.226 6.44 5.76 229.1 1.6 10												
io Purge Rate (m/min) Temp. Top Conduct. (m/s/cm) D0 PH ORP Turbidity (ntu) REMARKS 5.77 16.65 0.193 7.19 5.8 227.4 1.8 9:20 16.1 0.226 6.44 5.76 229.1 1.6 10 10 10 10 10 10 10 10 11 10 10 10 10 10 10 10 11 10 10 10 10 10 10 10 10 11 10 10 10 10 10 10 10 10 11 10 10 10 10 10 10 10 10 10 12 10 </td <td>ONE WELL</td> <td>VOLUME</td> <td></td> <td></td> <td></td> <td>WELL TD:</td> <td>15.03</td> <td></td> <td></td> <td>PUMP I</td> <td>NTAKE DEPTH:</td> <td></td>	ONE WELL	VOLUME				WELL TD:	15.03			PUMP I	NTAKE DEPTH:	
io Purge Rate (m/min) Temp. Top Conduct. (m/s/cm) D0 PH ORP Turbidity (ntu) REMARKS 5.77 16.65 0.193 7.19 5.8 227.4 1.8 9:20 16.1 0.226 6.44 5.76 229.1 1.6 10 10 10 10 10 10 10 10 11 10 10 10 10 10 10 10 11 10 10 10 10 10 10 10 10 11 10 10 10 10 10 10 10 10 11 10 10 10 10 10 10 10 10 10 12 10 </td <td></td> <td>Depth</td> <td></td> <td></td> <td>FIE</td> <td>D MEAS</td> <td>UREME</td> <td>NTS</td> <td></td> <td></td> <td></td> <td></td>		Depth			FIE	D MEAS	UREME	NTS				
Time Water (ft) Retwork (ml/ml) Temp. Conduct. (ms/cm) Do PH ORP Turbidity (nti) REMARKS 5.77 16.65 0.193 7.19 5.8 227.4 1.8			Purge									
5.77 16.65 0.193 7.19 5.8 227.4 1.8 9:20 16.1 0.226 6.44 5.76 229.1 1.6 9 1 1 1 1 1 1 1 9 1 1 1 1 1 1 1 9 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Time	Water		Temp.	Conduct.	DO	рН	ORP	Turbidity		REMARKS	
9:20 16.1 0.226 6.44 5.76 229.1 1.6 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		(ft)	(ml/min)	(C)	(ms/cm)	(mg/L)			(ntu)			
Image:		5.77		16.65	0.193	7.19	5.8	227.4	1.8			
	9:20			16.1	0.226	6.44	5.76	229.1	1.6			
										-		
	Pump	Type:	Centrifug	al pum	o with bla	ck poly	tubing					
Analytical Parameters: TAL Metals	-		-				-					
	Analyti	cal Par	ameters:		TAL Meta	als						



									PROJECT No.	SHEET	SHEETS
		LING FO	RM	MULTI S	IIE-G			DATE WELL S	87616 / 03	DATE WELL COMPLETED	1
Dzus F		rs, West I	lslip, N	/, #1-52-0)33			6/8/06		6/8/06	
CLIENT						_	_	NAME OF INS			
New Y	Ork Sta	te Depart	ment of	Environn	nental (Conserv	/ation	Kevin Se	ise, Jason Kl	ein	
DRILLING	COMPANY							SIGNATURE	OF INSPECTOR		
ONE WELI		1.19			WELL TD:	11.93			PUMP I	NTAKE DEPTH:	
	Depth	_		FIE	LD MEAS	SUREME	NTS				
Time	to Water	Purge Rate	Temp.	Conduct.	DO	рН	ORP	Turbidity	-	REMARKS	
Time	(ft)	(ml/min)	(C)	(ms/cm)	(mg/L)	pri	ON	(ntu)			
	4.59	. ,	17.5	0.067	7.75	6.72	183.3	4.52			
8:50			16.61	0.202	7.5	6.04	211.8	2.68	Purge Volun	ne 3.59 gal.	
 											
_	_	• • •									
Pump	Type:	Centrifug	al pum	o with bla	ck poly	tubing					
Analyti	ical Dar	amotore		TAL Meta	ale						
Analyt	ical Par	ameters:			215						



				PROJECT					PROJECT No.	SHEET	Γ	SHEETS
		LING FOR	RM	MULTI S	ITE-G				87616 / 03	1	OF	1
				/ 114 50 5				DATE WELL S		DATE WELL COMPLI	ETED	
DZUS F	astene	rs, West I	slip, N۱	′, #1-52-C)33			6/8/06		6/8/06		
	ork Sta	te Depart	mont of	Environn	nontal (Oncon	vation	NAME OF INS	ise, Jason Kle	ain		
	COMPANY	te Depart				JUIISEIN	alion	SIGNATURE	F INSPECTOR			
								l				
ONE WELL	VOLUME	6.48			WELL TD:	44.22			PUMP IN	ITAKE DEPTH:		
	Danth						NTO		1			
	Depth to	Burgo		FIE	LD MEAS	SUREME	IN15					
Time	Water	Purge Rate	Temp.	Conduct.	DO	рН	ORP	Turbidity		REMARKS		
Time	(ft)	(ml/min)	(C)	(ms/cm)	(mg/L)	pri	UNI	(ntu)				
	4.5	(,	18.19	0.089	7.03	5.91	222.8	2.37				
9:10	7.0		15.8	0.000	3.96	5.66	235.8	1.06	Purge Volum	o 10 11 col		
9.10			15.0	0.15	5.90	5.00	233.0	1.00	Fuige voluit	ie 19.44 gai.		
Pump	Type:	Centrifug	al pum	o with bla	ck poly	tubing						
		0	• •		. ,	5						
Analvti	cal Par	ameters:		TAL Meta	als							



WELL NO. MW-13A

				PROJECT					PROJECT No.	SHEET	SHEETS
WELL	SAMP	LING FOR	RM	MULTI S	ITE-G				87616 / 03	1 оғ	1
			alia AD	(114 50 0				DATE WELL S		DATE WELL COMPLETED	
DZUS F	astene	rs, West I	slip, N۱	r, #1-52-0	33			6/8/06 NAME OF INS		6/8/06	
	ork Sta	te Depart	ment of	Environn	nental (Oneon	vation		ise, Jason Kl	ein	
	COMPANY	to Depart			ional (SIGNATURE	DF INSPECTOR		
								-			
ONE WELL	VOLUME				WELL TD:	10.65			PUMP II	NTAKE DEPTH:	
	Depth			FIE	D MEAS	SUREME	NTS				
	to	Purge									
Time	Water	Rate	Temp.	Conduct.	DO	рН	ORP	Turbidity		REMARKS	
	(ft)	(ml/min)	(C)	(ms/cm)	(mg/L)			(ntu)			
	2.59		19.07	0.342	2.72	6.62	196.9	110			
7:50			17.1	0.622	2.32	6.86	232.7	92			
-											
							}				
Dume	Tunai	Contrifue		o with his	ok nobi	tubing					
Pump	rype:	Centrifug	ai pum	o with dia	ск роју	uping					
Analyt		omotore									
Analyti	cal Par	ameters:		TAL Meta	215						



WELL NO. MW-13B

				PROJECT					PROJECT No.	SHEET	SHEETS
WELL	SAMP	LING FOR	RM	MULTI S	ITE-G				87616 / 03	1 оғ	1
				(114 50 0				DATE WELL S		DATE WELL COMPLETED	
DZUS F	-astene	rs, West I	ISIIP, NY	r, #1-52-0	33			6/8/06 NAME OF INS		6/8/06	
	ork Sta	te Depart	ment of	Environn	nental (Concor	vation		ise, Jason Kl	oin	
	COMPANY	le Depart			ientai (auon	SIGNATURE	DF INSPECTOR		
								•			
ONE WELI		:			WELL TD:	44.95			PUMP I	NTAKE DEPTH:	
	Depth			FIE	D MEAS	SUREME	NTS				
	to	Purge									
Time	Water	Rate	Temp.	Conduct.	DO	рΗ	ORP	Turbidity	1	REMARKS	
	(ft)	(ml/min)	(C)	(ms/cm)	(mg/L)			(ntu)			
	2.39		16.2	0.101	8.49	6.63	226.4				
8:04			15.53	0.098	5.55	5.77	238				
-											
-											
			1				1		<u> </u>		
Dump	Type	Centrifug	سيرم اور	a with bla	ck now	tubing					
runp	i ype.	Centinug	jai pum		ck poly	lubing					
Apolyti	ical Dor	ameters:		TAL Meta	ale						
Anaiyt	icai Fal	anieteis.			215						



WELL NO. MW-15A

				PROJECT					PROJECT No.	SHEET	SHEETS
WELL	SAMP	LING FOR		MULTI S	ITE-G				87616 / 03	1 оғ	1
LOCATION				-				DATE WELL S	TARTED	DATE WELL COMPLETED	
Dzus F	astene	rs, West I	lslip, N	/, #1-52-0)33			6/7/06		6/7/06	
	l. 04			—				NAME OF INS		- ! -	
INEW Y	OFK Sta	te Depart	ment of	Environr	nental	Jonser	/ation	KEVIN SE	ise, Jason Kloper	ein	
DIGLEING								OIGNATORE C			
ONE WELL	VOLUME	3.754			WELL TD:	28.55			PUMP II	NTAKE DEPTH:	
	Donth			EIE			NTO				
	Depth to	Purge		FIE							
Time	Water	Rate	Temp.	Conduct.	DO	pН	ORP	Turbidity	-	REMARKS	
	(ft)	(ml/min)	(C)	(ms/cm)	(mg/L)			(ntu)			
	5.48		15.97	0.186	1.16	5.68	188.3	3.27			
11:42			14.54	0.18	4.8	5.99	180.9	1.62	Purge Volum	ne 11.26 gal.	
								L			
								L			
								L			
								L			
.	T	Oracit			al. a . I	4 b . ¹					
Pump	i ype:	Centrifug	ai pum	p with bla	ск роју	tubing					
A				-	- 1-						
Analyti	cai Par	ameters:		TAL Meta	ais						



WELL NO. MW-15B

				PROJECT					PROJECT No.	SHEET	SHEETS
		LING FOI	RM	MULTI S	ITE-G				87616 / 03		ог 1
								DATE WELL S			
DZUS F	astene	rs, West I	slip, N۱	′, #1-52-C	33			6/7/06 NAME OF INS		6/7/06	
	ork Sta	te Depart	mont of	Environn	oontal (Concor	ation		ise, Jason Kl	oin	
	COMPANY	te Depart			lentar	JUNSEN	alion	SIGNATURE	FINSPECTOR		
ONE WELL	VOLUME	12.88			WELL TD:	84.31			PUMP II	NTAKE DEPTH:	
	Donth				D MEAS		NTO		1		
	Depth to	Purge		FIE		DUREINIE					
Time	Water	Rate	Temp.	Conduct.	DO	pН	ORP	Turbidity		REMARKS	
	(ft)	(ml/min)	(C)	(ms/cm)	(mg/L)	pri	0.4	(ntu)			
	5.35	(,	15.95	0.305	2.79	5.34	178.3	3.85			
11:15	5.41		14.25	0.297	2.92	5.43	189	1.67	Purge Volum	ne 38.659 gal	
11.10	0.41		14.20	0.201	2.02	0.40	100	1.07	i dige volui	10 00.000 gui	
								L			
							1		1		
Pump	Tyne	Centrifug	al num	n with hla	ck noly	tubing					
i unp	i ype.	Sentinuy	a pun		or poly	ability					
Analyti	cal Par	ameters:		TAL Meta	ale						
<i>r</i> -inalyti	uai Fal	anie(813.			315						



				PROJECT					PROJECT No.	SHEET	SHEETS	
WELL	SAMP	LING FOR		MULTI S	ITE-G				87616 / 03	1 оғ	1	
LOCATION								DATE WELL S	TARTED	DATE WELL COMPLETED		
Dzus F	astene	rs, West I	slip, N۱	⁄, #1-52-0	33			6/8/06		6/8/06		
				F				NAME OF INS		- !		
INEW Y	OFK Sta	te Depart	ment of	Environn	nental C	onser	vation	KEVIN SE	ise, Jason Klop DF INSPECTOR	ein		
DRILLING	COMPANY							SIGNATORE	JF INSFECTOR			
ONE WELL	VOLUME :	0.898			WELL TD:	13.43			PUMP II	NTAKE DEPTH:		
	Depth to	Purge		FIE	LD MEAS	SUREME	NTS					
Time	Water	Rate	Temp.	Conduct.	DO	pН	ORP	Turbidity	1	REMARKS		
	(ft)	(ml/min)	(C)	(ms/cm)	(mg/L)	-		(ntu)				
	7.93		14.68	0.099	7.74	6.16	217.5					
11:15			13.63	0.111	4.19	6.11	218.2	2.2				
									i inge retim	<u> </u>		
							ļ					
							İ					
							ļ					
							1					
								1				
Pump	Type	Centrifug	al num	n with hla	ck poly	tubing						
unp	i ype.	Centinug	a pun		or poly	cubing						
Analyt		omete		TAL M4-4								
Analyti	cal Par	ameters:		TAL Meta	ais							

A **tyco** International Ltd. Company

WELL NO. MW-22A

				PROJECT					PROJECT No.	SHEET	SHEETS
		LING FOR	RM	MULTI S	ITE-G				87616 / 03	1 оғ	1
LOCATION								DATE WELL S			
Dzus F	astene	rs, West I	slip, N۱	⁄, #1-52-C)33			6/7/06		6/7/06	
	orle Sto	to Donort	mont of	Fnuironn	oontol (otion	NAME OF INS		ain	
	COMPANY	te Depart	ment of	EINIOIII	lentar	Jonsen	alion	SIGNATURE	ise, Jason Kle	ent	
ONE WELL	VOLUME :				WELL TD:	14.4			PUMP II	NTAKE DEPTH:	
	Depth to	Purge		FIEI	D MEAS	SUREME	NTS				
Time	Water	Rate	Temp.	Conduct.	DO	pН	ORP	Turbidity		REMARKS	
	(ft) (ml/min) (C) (ms/cm) (mg/L)						••••	(ntu)			
	6	(13.65	0.615	2.54	6.31	19.1	1.36			
9:50	<u> </u>		13.27	0.677	2.76	6.43	23.2	1.41	Duplicate		
0.00			10.21	0.077	2.70	0.40	20.2	1.71	Dapiloate		
							<u> </u>				
									1		
	_										
Pump	Туре:	Centrifug	al pum	o with bla	ck poly	tubing					
Analyti	cal Par	ameters:		TAL Meta	als						

A **tyco** International Ltd. Company

WELL NO. MW-22B

				PROJECT					PROJECT No.	SHEET	SHEETS
		LING FOR	RM	MULTI S	ITE-G				87616 / 03	1 оғ	1
LOCATION								DATE WELL S			
Dzus F	astene	rs, West I	slip, N۱	′, #1-52-0)33			6/7/06		6/7/06	
	ork Sta	to Doport	mont of	Environn	oontol (Concor		NAME OF INS		oin	
DRILLING	COMPANY	te Depart	ment of	EINIOIII	lentar	Jonsen	alion	SIGNATURE	ise, Jason Klop DF INSPECTOR	eni	
-											
ONE WELL	VOLUME	:			WELL TD:	14.4			PUMP II	NTAKE DEPTH:	
	Depth			FIF	LD MEAS		NTS				
	to	Purge									
Time	Water	Rate	Temp.	Conduct.	DO	рН	ORP	Turbidity		REMARKS	
	(ft)	(ml/min)	(C)	(ms/cm)	(mg/L)	-		(ntu)			
	5.82		14.1	0.106	5.84	5.6	184.1	1.38			
10:00			14.32	0.104	5.76	5.43	180.6	1.25	MS		
									MSD		
									l		
Dumo	Tupor	Contrifue		a with his	ok naby	tubica					
Fump	i ype:	Centrifug	ai pum	o with bla	ск рогу	lubing					
Anche		omotora									
Analyti	cal Par	ameters:		TAL Meta	215						



WELL NO. MW-23A

				PROJECT					PROJECT No.	SHEET	SHEETS
		LING FOI	RM	MULTI S	ITE-G				87616 / 03	1 оғ	1
								DATE WELL S		DATE WELL COMPLETED	
DZUS F	astene	rs, West I	ISIIP, NY	7, #1-52-0	33			6/7/06 NAME OF INS	PECTOP	6/7/06	
	ork Sta	te Depart	ment of	Environn	nental (Conserv	vation		ise, Jason Kl	ein	
DRILLING	COMPANY	to Dopurt		LINIOI				SIGNATURE C	F INSPECTOR		
		4 000									
ONE WELI		1.628			WELL TD:	14.57			PUMP II	NTAKE DEPTH:	
	Depth			FIE	D MEAS	SUREME	NTS				
	to	Purge									
Time	Water	Rate	Temp.	Conduct.	DO	рН	ORP	Turbidity		REMARKS	
	(ft)	(ml/min)	(C)	(ms/cm)	(mg/L)			(ntu)			
	4.59		17.45	0.404	1.4	6.43	3.6	170			
9:30			17	0.449	3.17	6.3	18.5		Purge Volum	ne 4.886 gal.	
									<u> </u>		
Dumo	Tunai	Contrifue		a with he	ok noby	tubina					
Fump	rype:	Centrifug	ai pum	s with bla	ск рогу	uning					
Apolyt		amotora		TAL Meta							
Analyt	cai Par	ameters:			215						



WELL NO. MW-23B

	_			PROJECT					PROJECT No.	SHEET	SHEETS
	SAMP	LING FO	RM	MULTI S	ITE-G				87616 / 03		- 1
		ers, West I	elin NN	/ #1.52 0	133			date well s 6/7/06		DATE WELL COMPLETED 6/7/06	
DZUS F	asiene	13, VVE3L	ыр, м	,#1-52-0				NAME OF INS	PECTOR	0///00	
New Y	ork Sta	te Depart	ment of	Environn	nental (Conserv	/ation	Kevin Se	ise, Jason Kl	ein	
DRILLING	COMPANY							SIGNATURE C	OF INSPECTOR		
ONE WELL		6.55			WELL TD:	44.67				NTAKE DEPTH:	
	-		-								
	Depth			FIE	LD MEAS	SUREME	NTS				
Time	to Water	Purge	Toma	Conduct	DO	nLi		Turbidia	-	DEMARKE	
Time	(ft)	Rate (ml/min)	Temp. (C)	Conduct. (ms/cm)	DO (mg/L)	рН	ORP	Turbidity (ntu)		REMARKS	
	4.51	()	18.62	0.056	6.68	6.86	75.4	200			
9:40			16.56	0.048	6.45	6.52	62.4	12.3			
0.10									Purge Volum		
l											
	_										
Pump	Туре:	Centrifug	al pum	o with bla	ck poly	tubing					
Analyti	ical Par	ameters:		TAL Meta	als						



			1	PROJECT					PROJECT No.	SHEET	SHEETS
WELL	SAMPL	ING FOF	RM	MULTI S	ITE-G				95900 - 30	1 оғ	1
LOCATION								DATE WELL S	TARTED	DATE WELL COMPLETED	
Dzus F	astners	s, West Is	lip, NY	#1-52-03	3			8/22/07	PECTOR	8/22/07	
CLIENT Now Y	ork Stat	e Departi	ment of	Environn	nental (Conser	ation			hatteriee	
DRILLING	COMPANY	Departi	HOLL OF			2011001	anon	SIGNATURE	okshi, Saby C		
						45.0	£1.			40 ft	
ONE WELL	VOLUME :		1	١	WELL TD:	15.3	ft		PUMP II	NTAKE DEPTH: 16 ft	
	Depth			FIEI		UREME	NTS				
	to	Purge									
Time	Water	Rate	Temp.	Conduct.	DO	рН	ORP	Turbidity		REMARKS	
	(ft)	(ml/min)	(C)	(ms/cm)	(mg/L)			(ntu)		-	
8:50	8.62							ļ	Static water	level	
8:55	8.6		18.1	0	9.21	7.36	152	34.9	Pump on		
9:00	9		17.1	0	9.4	6.41	165	0			
								L			
								ļ	Purged appr		
9:00									Collected sa	mple DMW-1	
								ļ		uplicate (DMW-101)	
								<u> </u>	also collecte	d	
					<u> </u>				L		
							ļ				
								1			
											11000/12000110000007-1000-1
					ļ		<u> </u>				
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	- T	0	1		-1	4 1					
Pump	i ype:	Centrifug	jai pum	p with bla	ск роју	tubing					
Analyti	ical Par	ameters:		TAL Met	ais						
L											

WELL NO. MW-2

A *tuco* International Ltd. Company

1					TEO				PROJECT №. 95900 - 30	SHEET 1 OF	she f 1
OCATION		ING FOR		MULTI SI				DATE WELL ST		DATE WELL COMPLETED	
)zus Fa	astners.	<u>, We</u> st Isl	lip, NY i	#1-52-033	}			8/22/07		8/22/07	
IENT						ODEOT	ation	NAME OF INSP Mihir Cho	kshi. Sahu Ci	hatteriee	
IEW YC	Ork State	e Departi	ment of	Environm	ional U	JUISEIN		SIGNATURE OI	okshi, Saby Cl FINSPECTOR		
				<u></u>				L			
NE WELL	VOLUME :		2		VELL TD:	14.3			PUMP II	NTAKE DEPTH: 15 ft	
Ι	Depth to	Purge	I	FIEL	D MEAS	UREME					
Time	Water	Rate	Temp.	Conduct.	DO	рН	ORP	Turbidity	l	REMARKS	
	(ft)	(ml/min)	(C)	(ms/cm)	(mg/L)		L	(ntu)	Ctatic		
9:25	8.5	·	لَـــَـ			<u> </u>	ļ	1.1000	Static water	IEVEI	
9:30	8.5		22.7	0	8.05	6.5	-5	> 1000 475	Pump on		
9:35	-		20.5	0.41	7.2	6.4 6.37	-40 -41	475 500	 		
9:40	9	<u> </u>	20.8	8.42	5.31	0.3/	-41	1 300	Purged appr	ox 6 dal	
	<u> </u>	L	<u> </u>	├ 1	\vdash	┝	 	1			
9:40	<u> </u>	ι	+ ,	t		t	†		Collected sa	ample DMW-2	
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									<u> </u>		
Pump	Туре:	Centrifu	gal pun	np with bla	ack poly	y tubing	3				
Analy	tical Pa	rameters:	:	TAL Me	tals						

WELL NO. MW-3

A **tuco** International Ltd. Company

				project MULTI SI	TE-G				project no. 95900 - 30	SHEET 1 OI	SHEETS = 1	
OCATION								DATE WELL S 8/22/07	TARTED	DATE WELL COMPLETED 8/22/07		
LIENT	astricts	, 1103113	<u></u>	#1-52-033		NAME OF INSPECTOR						
	OMPANY	te Departi	ment of	Environm	iental C	onserv	ation	SIGNATURE C	okshi, Saby C	nauerjee		
ONE WELL	VOLUME :		1	W	LL TD:	PUMP INTAKE DEPTH: 12 ft						
ſ	Depth to Water (ft) 6.3	Purge		FIEI	D MEAS	SUREME	NTS					
Time		Rate	Temp.	Conduct.	DO (mg/l)	рН	ORP	Turbidity (ntu)		REMARKS		
		(ml/min)	(C)	(ms/cm)	(mg/L)			(11.0)	Static water	level		
10:55	6.3		23.8	0.29	8.3	6.16	76	118	Pump on			
11:00	0.0		20	0.26	8.6	6.3	120	240	l			
11:10												
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			ļ	<u> </u>			ļ		Collected as	mple DMW-3		
11:15									Conected se			
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1				np with bl		y tubing]					
Analy	tical Pa	arameters	•	TAL Me	lais							

WELL NO. MW-9

A **tuco** International Ltd. Company

				PROJECT					PROJECT No.	SHEET		SHEETS
		ING FOR	RM	MULTI SI	IE-G			DATE WELL ST	95900 - 30 tarted	DATE WELL COMPLETED	OF	1
location Dzus Fa				#1-52-033	}	-		DATE WELL ST 8/22/07 NAME OF INSP		8/22/07		
CLIENT				Environm		Onser	ation	Mihir Cho	okshi, Saby Cl	hatteriee		_
	COMPANY							SIGNATURE OF	F INSPECTOR			
ONE WELL	VOLUME :		1	w	VELL TD:	11.5	ft		PUMP II	intake depth: 10 ft		
Т	Depth			FIEL	DMEAS	UREME	NTS					
Time	to Water	Purge Rate	Temp.	Conduct.	DO	рН	ORP	Turbidity	1	REMARKS		
Time	Water (ft)	Rate (ml/min)	Temp. (C)	(ms/cm)	00 (mg/L)			(ntu)			-	
	5.15						·		Static water	level		
10:35			21.9	0.259	8.55	5.98	109		Pump on			
10:40	5.22		23.6	0.261	8.5	6.09	53	16.6				
10:45	the second se		24.5	0.269	7.83	6.2	75	160	L			
							L		Purged appr	rox 5 gal		
10.50			├ ──┤	├ ──── │	L	└───┤	ļ	 	Collected so	ample DMW-9		
10:50	├ ──┤		<u>+</u> ∖		├ ───┤	<u> </u>	<u> </u>					
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 	+	1	1				1					
	1	L		L	L	<u> </u>						
Pump	Type:	Centrifu	gal pur	np with bla	ack poly	/ tubing					-	
Analyl	tical Pa	rameters:	•	TAL Met	tals							

WELL NO. MW-9B

PLING FOF rs, West Is ate Departu Purge Rate (ml/min)	lip, NY	Environm	3 mental C WELL TD: LD MEAS (mg/L) 8.43 10.4	44.5	ft	DATE WELL ST 8/22/07 NAME OF INSP Mihir Cho SIGNATURE O	PECTOR Dikshi, Saby C F INSPECTOR	<u>аркемаркя</u>	1	
ate Departr Purge Rate (ml/min)	Temp. (C) 21.1 15.2	Environm v FIEL Conduct. (ms/cm) 0 0.2	vell TD: LD MEAS 00 (mg/L) 8.43 10.4	44.5 UREME pH	ft NTS	8/22/07 NAME OF INSP Mihir Cho SIGNATURE O	PECTOR Dikshi, Saby C F INSPECTOR	8/22/07 hatterjee ntake depth: 10 ft		
r Purge Rate (ml/min)	6.9 Temp. (C) 21.1 15.2	FIEL Conduct. (ms/cm) 0 0.2	VELL TD: DO (mg/L) 8.43 10.4	44.5 UREME pH	ft NTS	Mihir Cho SIGNATURE O	okshi, Saby C FINSPECTOR	NTAKE DEPTH: 10 ft		
r Purge Rate (ml/min)	6.9 Temp. (C) 21.1 15.2	FIEL Conduct. (ms/cm) 0 0.2	VELL TD: DO (mg/L) 8.43 10.4	44.5 UREME pH	ft NTS	SIGNATURE O	FINSPECTOR	NTAKE DEPTH: 10 ft		
Purge Rate (ml/min)	Temp. (C) 21.1 15.2	FIEL Conduct. (ms/cm) 0 0.2	DO (mg/L) 8.43 10.4	pH	NTS		PUMP I			
Purge Rate (ml/min)	(C) 21.1 15.2	Conduct. (ms/cm) 0 0.2	DO (mg/L) 8.43 10.4	рН				REMARKS		
Rate (ml/min)	(C) 21.1 15.2	(ms/cm) 0 0.2	(mg/L) 8.43 10.4		ORP		1	REMARKS		
	15.2	0.2	10.4	67		(ntu)				
	15.2	0.2	10.4	67	_		Static water	level		
		1			49	93	Pump on			
	15	0.184	00	6.3	112	40	ļ			
		ļ	8.3	5.83	149	64	<u></u>			
	<u> </u>	1					Purged appr	rox 21 gal		
	+	1					Collected sa	ample DMW-9B		
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		+	+	1	+	-	1			
		Centrifugal pur	Centrifugal pump with bl	Centrifugal pump with black poly	Centrifugal pump with black poly tubing	Centrifugal pump with black poly tubing	Centrifugal pump with black poly tubing	Centrifugal pump with black poly tubing	Image: Sector of the sector	

Dzus App A- well sampling forms.xls (MW-9B)



A *tuco* International Ltd. Company

WELL NO. MW-13A

				PROJECT					PROJECT No.	SHEET	SHEETS
WELL	SAMPI	ING FOF	RM	MULTI S	ITE-G			-	95900 - 30	1 OF	1
		Montha	lin NV	#1.50.02	2			DATE WELL S 8/22/07		DATE WELL COMPLETED 8/22/07	
DZUS F	astners	s, west is	пр, мт	#1-52-03	5		•••	NAME OF INSI		0/22/01	
New Y	ork Stat	te Departi	ment of	Environn	nental C	Conser	vation	Mihir Cho	okshi. Saby C	hatterjee	
DRILLING	COMPANY							SIGNATURE C	FINSPECTOR		
								<u> </u>			
ONE WELI	VOLUME :		1	١	VELL TD:	10.72	ft		PUMP II	NTAKE DEPTH: 6 ft	
	Depth to	Purge		FIE	D MEAS	SUREME	NTS				
Time	Water	Rate	Temp.	Conduct.	DO	рН	ORP	Turbidity		REMARKS	
	(ft)	(ml/min)	(C)	(ms/cm)	(mg/L)			(ntu)			
	3.02								Static water	level	
	3.02		24	0.52	8.08	6.38	57	131	Pump on		
	3.02		22.3	0.555	8.28	6.25	59	81			
									Purged appr	ox 4 gal	
15:10									Collected co	mple DMW-13A	
15:10									Collected sa		
 											
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Pump	ump Type: Centrifugal pump with black poly tubing										
Analyt	ical Par	ameters:		TAL Met	als						

A *tuco* International Ltd. Company

WELL NO. MW-13B

Ē				PROJECT	<u>an an u>				PROJECT No.	SHEET	SHEETS
		LING FOF	RM	MULTI S	ITE-G				95900 - 30	1 OF	1
		N/		#1 FO 00	2			DATE WELL S	TARTED	DATE WELL COMPLETED	
DZUS F	astners	s, West Is	пр, NY	#1-52-03	5			8/22/07	PECTOR	8/22/07	
	ork Stat	te Departr	nent of	Environn	nental C	Conser	ation			hatteriee	
DRILLING	COMPANY							SIGNATURE C	okshi, Saby C		
			6.89	-	VELL TD:	11 05	ft			NTAKE DEPTH: 6 ft	
ONE WELL	. VOLUME :		0.09	\	VELL ID:	44.20	11			VIANE DEPIN: U IL	
	Depth			FIEI	D MEAS	UREME	NTS				
	to	Purge						r			
Time	Water	Rate	Temp.	Conduct.	DO	рН	ORP	Turbidity		REMARKS	
	(ft)	(ml/min)	(C)	(ms/cm)	(mg/L)			(ntu)	Static water	laval	
14:05	2.85		16.0	0 100	0.4	6.50	147	80		level	
14:25	2.85		16.8	0.123	9.4	6.52		481	Pump on		
14:30	2.9		17.2	0.123	9.1 8.6	5.72 5.35	191 210	129			
14:35	2.96 2.98		17.5 17.6	0.131	9.94	5.3	210	129	Purged appr	ov 22 gol	
14:40	2.90		17.0	0.13	9.94	0.0		1.34	n urgeu appr	UN ZZ Yai	
14:50								<u> </u>	Collected so	mple DMW-13B	
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	Pump Type: Centrifugal pump with black poly tubing										
Pump	Type:	Centrifug	jal pum	p with bla	ck poly	tubing					
					_						
Analyti	ical Par	ameters:		TAL Met	als						



A *tyco* International Ltd. Company

WELL NO. MW-15A

1				PROJECT					PROJECT No.	SHEET	SHEETS
		LING FOR	RM	MULTI S	ITE-G				95900 - 30	1	<u>of 1</u>
		Mostic	lin NV	#1-52-03	2			DATE WELL S 8/22/07		DATE WELL COMPLETED 8/22/07	
CLIENT	astriers	5, VVESUS	пр, м г	#1-52-05	5			NAME OF INSI		0/22/07	
	ork Sta	te Depart	ment of	Environn	nental (Conser	/ation		okshi, Saby C	hatterjee	
DRILLING	COMPANY							SIGNATURE C	FINSPECTOR		
ļ											
ONE WELL	. VOLUME :		4	١	VELL TD:	28.8	ft		PUMP II	NTAKE DEPTH: 11 ft	
	Depth			FIEI	D MEAS	SUREME	NTS				
	to	Purge						I —			
Time	Water	Rate (ml/min)	Temp. (C)	Conduct.	DO (mail)	рН	ORP	Turbidity (ntu)		REMARKS	
	(ft) 5.8	(mvmm)	(0)	(ms/cm)	(mg/L)			(nu)	Static water	lovol	
15:30	5.8		23	0.246	7.21	6.83	97	269	Pump on		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
15:35	5.82		19.5	0.240	8.35	5.9	171	203			
15:40	5.88		17.3	0.195	8.15	5.54	209	51.3			
15:40	5.9		17.2	0.185	6.25	5.27	260	260	Purged appr	ov 15 gal	
15:50	5.9		17.2	0.100	0.25	5.21	200	200	r uigeu appi	UX 15 Yai	
15.50											
15:50									Collected sa	mple DMW-15	
13.50									Conected 3a		
						 					
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Pump	Pump Type: Centrifugal pump with black poly tubing										
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Analvti	ical Par	ameters:		TAL Meta	als						
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A *tuco* International Ltd. Company

WELL NO. MW-15B

<u> </u>				PROJECT					PROJECT No.	SHEET		SHEETS	
WELL	SAMP	LING FOF	RM	MULTI S	ITE-G				95900 - 30	1	OF	1	
location Dzus F		s, West Is	lip, NY	#1-52-03	3			DATE WELL S 8/22/07		DATE WELL COMPLETED 8/22/07	1		
CLIENT	ork Sta	te Departi	mont of	Environn	aontal (Concon	ation	NAME OF INS		hattariaa			
DRILLING	COMPANY	te Departi	nent of	CIVIOIII	ientai C	JUNSEN	allon	SIGNATURE C	okshi, Saby C	nallerjee			
ONE WELL	. VOLUME :	:	13	v	WELL TD:	84.7	ft		PUMP IN	itake depth: 9 ft			
	Depth to	Purge		FIEI	LD MEAS	SUREME	NTS						
Time	Water	Rate	Temp.	Conduct.	DO	рН	ORP	Turbidity	1	REMARKS			
	(ft)	(ml/min)	(C)	(ms/cm)	(mg/L)			(ntu)					
	5.7							ļ	Static water	evel			
12:20	5.7		28.6	0.37	7.6	6.4	113	69	Pump on				
12:30	7		15.4	0.36	9.75	6.1	148						
12:40	6.9		16.5	0.37	9.75	5.6	154	0	Purged appr				
									Fuigeu appi	JX 40 yai	•		
12:50									Collected sa	mple DMW-15B			
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Pump	Туре:	Centrifug	al pum	p with bla	ck poly	tubing							
Analyti	alytical Parameters: TAL Metals												



A *tuco* International Ltd. Company

WELL NO. MW-18

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	CARADI								PROJECT No.	SHEET	SHEETS
LOCATION		LING FOP	- TIVI	MULTI S	IIE-G			DATE WELL S	95900 - 30 TARTED	DATE WELL COMPLETED	of 1
Dzus F	astner	s, West Is	lip, NY	#1-52-03	3			8/23/07		8/23/07	
client New Y	ork Sta	te Departi	ment of	Environn	nental (Consen	vation	NAME OF INS		hatteriee	
DRILLING	COMPANY						unon	SIGNATURE C	okshi, Saby C	ilationjeo	
								1			
ONE WELI	VOLUME :		1.8		WELL TD:				PUMP II	NTAKE DEPTH: 9 ft	
	Depth to	Purge		FIEI	LD MEAS	SUREME	NTS				
Time	Water	Rate	Temp.	Conduct.	DO	рН	ORP	Turbidity		REMARKS	
ļ	(ft)	(ml/min)	(C)	(ms/cm)	(mg/L)			(ntu)			
0.00	5.05		10.0	0.11	7.0	5.04	000		Static water	level	
8:30 8:35	5.05 5.1		18.9 19.6	0.11	7.3 7.59	5.64 6.02	228	155	Pump on		
8:40	5.31		19.0	0.9	6.02	6.02	212 186	124 220			
8:45	0.01		10.0	0.100	0.02	0.00	100		Purged appr	ox 4.5 gal	
									<u> </u>		
8:45									Collected sa	mple DMW-18	
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Pump	Type:	Centrifug	al pum	p with bla	ck poly	tubing					
Analyti	lytical Parameters: TAL Metals										
L											

WELL NO. MW-22A

			I	PROJECT					PROJECT No.	SHEET	SHEET
		ING FOF		MULTI S	TE-G				95900 - 30		of 1
LOCATION								DATE WELL S		DATE WELL COMPLETED	
Dzus F	astners	s, West Is	lip, NY	#1-52-03	3			8/22/07		8/22/07	
CLIENT		- D ·		F	ontel C	`	untin-	NAME OF INSP		battorica	
New Yo	ork Stat	e Departi	ment of	Environn	iental C	Jonser	ation		okshi, Saby C	nallerjee	
URILLING	JUWPANY										
								1			
ONE WELL	VOLUME :		1		VELL TD:	14.4			PUMP	NTAKE DEPTH: 11 ft	
	Depth to	Purge			D MEAS						
Time	Water	Rate	Temp.	Conduct.	DO	рН	ORP	Turbidity		REMARKS	
	(ft)	(ml/min)	(C)	(ms/cm)	(mg/L)			(ntu)			
12:00			20.5	0.36	8.4	6.14	71	446	Static water	level	
12:00			19.8	0.41	9.1	6.3	21	110	Pump on		
12:05	6.56										
12:10							ļ				
								<u> </u>	Purged appr	ox 5.5 gal	
								<u> </u>			
12:10							ļ		Collected sa	mple DMW-22A	
								<u> </u>	L		
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	Γ										
	£										
Pump	Type:	Centrifug	gal pum	p with bla	ick poly	tubing					
l '				-							
Analyt	ical Par	ameters:		TAL Met	als						
L											

WELL NO. MW-22B

A **tuco** International Ltd. Company

	7			PROJECT					PROJECT No.	SHEET	SHEETS								
		ING FOF		MULTI SI	TE-G				95900 - 30	1 оғ	1								
LOCATION Dzus F				#1-52-033				date well st 8/22/07		DATE WELL COMPLETED 8/22/07									
CLIENT						0000		NAME OF INSP		hatteriee									
	ORK Stat	ue Departi	ment of	Environm	iental C	unserv	alion	SIGNATURE OF	okshi, Saby Cl	ananeijee									
	ANT			·				l											
ONE WELL	VOLUME :		6	w	WELL TD:	44.5	ft		PUMP I	NTAKE DEPTH: 10 ft									
	Depth to	Purge		FIEL	LD MEAS	UREME	NTS												
Time	to Water	Purge Rate	Temp.	Conduct.	DO	pН	ORP	Turbidity	1	REMARKS									
	(ft)	(ml/min)	(C)	(ms/cm)	(mg/L)		l	(ntu)											
11:35	6.3	· · · · · ·							Static water	level									
11:35	6.31		17.7	0.22	9.3	6.15	139		Pump on										
11:40	6.4		17	0.28	8.9	6.07	136	20			. <u></u>								
11:45	6.41		18.3	0.282	9.33	6.04	123	15.3	Ļ										
11:50			15.5	0.264	5.76	6	170	59.5	Purged appr	rox 21 gal									
							ļ	ļ		mala DAMA AGE									
11:55						L	ļ	_	Uollected sa	ample DMW-22B									
				ļi	L	L	Ļ		 	:									
		ļ		ļ															
	ļ4		 	 	└───	ļ	 		+										
	ļi	 	<u> </u> i	 	 	 	┣───		+										
	 i	 	<u> </u>	<u>↓</u>	├ ───	 	╂────	+		*******									
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	├ ────	 	+	+	t	┼────		+	1										
	<u> </u>	<u> </u>	+	+	+	t	<u>†</u>	1	1										
	+	<u> </u>	+	<u>+</u>	t	t	1	-											
	<u> </u>	<u> </u>	1	1	†	†	1	1	1	······································									
	1	1	1	1	†	1	1												
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[<u> </u>	<u></u>		+	+	+	+	+	+										
ŀ	1	<u> </u>		<u> </u>	<u> </u>	<u> </u>	<u> </u>	_ <u></u>	1										
Pump	Type:	Centrifu	gal pum	np with bla	ıck poly	' tubing													
				TAL Met		-													
	a									Analytical Parameters: TAL Metals									

WELL NO. MW-23A

A *tuco* International Ltd. Company

				PROJECT					PROJECT No.	SHEET	SHEET
	SAMPL	ING FOR		MULTI SI	TE-G				95900 - 30	1 OF DATE WELL COMPLETED	= 1
OCATION				41 ED 000	}			DATE WELL ST 8/22/07		8/22/07	
TATAT				#1-52-033				NAME OF INSP	ECTOR		
Jew Yo	ork State	e Departr	ment of	Environm	ental C	onserv	ation	Mihir Cho	okshi, Saby C	hatterjee	<u>,</u>
RILLING C	OMPANY							SIGNATURE O	FINSPECTOR		
								L			
NE WELL	VOLUME :		2		VELL TD:	14.3			PUMP	INTAKE DEPTH: 10 ft	
	Depth to	Purge			D MEAS			Truck (REMARKS	
Time	Water	Rate	Temp.	Conduct.	DO (ma/L)	рН	ORP	Turbidity (ntu)	Į	HEMARKS	
14:00	(ft)	(ml/min)	(C)	(ms/cm)	(mg/L)	ļ	 	()	Static water	level	
14:00	4.8		23.8	0.39	6.12	5.88	30	445	Pump on		
14:00 14:10	4.8 4.99	ļj	23.8	0.39	5.64	6.24	27	534	<u> </u>		
14.10	-+.99			0.002			<u> </u>	1			
	·	 	<u>+</u> `		t		[Purged appr	rox 6 gal	
	h		1			<u> </u>					
14:15		<u> </u>	1						Collected sa	ample DMW-23A	
									ļ		
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		L		ļ	ļ	ļ	_				
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D	Τ	Cartel	and me	nn with LI	ack not	y tuhina	1				
-ump	, ype:	Centrift	₄yaı pur	mp with bla	uur 401	ຸເດມແ	7				
Anch	tical D-	rameters	•	TAL Me	tals						
naly	uudi Ma	arameters	••								
		-									

WELL NO. MW-23B

A *tuco* International Ltd. Company

			IF	PROJECT					PROJECT No.	SHEET	SHEETS
WELL	SAMPL	ING FOR		MULTI SI	TE-G		·····		95900 - 30	1 OF	1
LOCATION Dzus Fa				#1-52-033				date well st 8/22/07		DATE WELL COMPLETED 8/22/07	
CLIENT								NAME OF INSP		3	
New Yo	ork Stat	e Departr	ment of	Environm	ental C	onserv	ation	Mihir Cho	okshi, Saby Cl	nauerjee	
DRILLING C	OMPANY							URE 0			
ONE WELL	VOLUME :		6.59		VELL TD:	44.5			PUMP IN	NTAKE DEPTH: 10 ft	
	Depth to	Purge			D MEAS						
Time	Water	Rate		Conduct.	DO	рН	ORP	Turbidity	Į	REMARKS	
	(ft)	(ml/min)	(C)		(mg/L)		۱i	(ntu)	Stoti-	laval	
	4.75	·]			<u> </u>	<u> </u>	L		Static water I		
13:25	4.75	·]	16.4	0.06	9.7	5.85	160		Pump on		
13:35	4.8	<u> </u>	21.8	0.174	8.73	5.94	143	623	ļ	<u>, , , , , , , , , , , , , , , , , , , </u>	
13:40	4.82		16	0.187	7.93	5.73	196	147	Dures		
13:50	4.91		16	0.178	4.48	5.46	217	219	Purged appr	ux 22 gai	
13:55		├ ───┤	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>		Collected sa	ample DMW-23B	
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i	└───┤		<u>├</u> \	<u>├</u> \	├───┤	<u>├</u> ``	ł				
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 	<u> </u>		_L	<u> </u>	<u></u>	<u> </u>	<u> </u>				
Pump	Type:	Centrifu	gal purr	np with bla	ack poly	<i>i</i> tubing	1				
Analyt	rical Par	rameters:		TAL Met	als						
L							-				

		•		PROJECT					PROJECT No.	SHEET	SHEETS
WELL	SAMP	LING FOR		Multi Site	G				95900	1 оғ	1
LOCATION							DATE WELL STARTED	DATE WELL COMPL	ETED		
Dzus F	astene	rs, West I	slip, N۱	/ #1-52-0	33				11/11/08	11/11/08	
INEW Y	ork Sta company	te Depart	ment of	Environn	nental C	Jonser	ation		MA / SC SIGNATURE OF INSPECTOR		
DIVICTING									UNDER OF INSPECTOR		
									1		
		LL VOLUME :		Gallons		WELL TD:		ft	PUMP INTAKE DEPTH:	ft	
	Depth to	Purge		FIE	LD MEAS	SUREME	NTS				
Time	Water	Rate	Temp.	Conduct.	DO	рН	ORP	Turbidity	REM	ARKS	
	(ft)	(gal/min)	(°C)	(µs/cm)	(mg/L)			(ntu)			
									Static water level		
									pump on		
											
						ļ	Well was destroyed	during snow			
									removal in Decembe	er 2007	
								L			
								L			
				L				L			
								L			
								L			
								ļ			
									<u> </u>		
Pump	Type										
i unp	i ype.										
Analvti	cal Par	ameters:									

		-		PROJECT					PROJECT No.	SHEET	SHEETS
WELL	SAMP	LING FOR		Multi Site	G				95900	1 оғ	1
LOCATION							DATE WELL STARTED	DATE WELL COMPL	ETED		
Dzus F	astene	rs, West I	slip, N۱	/ #1-52-0	33				11/11/08	11/11/08	
	orle Cto	to Donort	mont of	Environn	nontal (otion		NAME OF INSPECTOR MA / SC		
DRILLING	COMPANY	te Depart	ment of	EINNIOUL	nentar	Jonsen	vation		SIGNATURE OF INSPECTOR		
			1.0	Collora			44.0	4		40 5 4	
	ONE WE	LL VOLUME :	1.0	Gallons		WELL TD:	14.3	π	PUMP INTAKE DEPTH:	13.5 ft	
	Depth			FIE	LD MEAS	SUREME	INTS				
Time	to Water	Purge Rate	Temp.	Conduct.	DO	рН	ORP	Turbidity	DEM	ARKS	
Time	(ft)	(gal/min)	(°C)	(µs/cm)	(mg/L)	рп	OKF	(ntu)		ARRS	
	(,	(9)	()	(µ.0, 0)	(()					
11:50	8.30								Static water level		
12:30	8.30	0.3	15.89	289	9.52	6.81	-82	342	pump on		
12:35	8.40		14.89	300	7.5	6.8	-110	661			
12:40	8.42		15.9	348	7.9	6.7	-116	41			
12:45	8.42	0.3	16	325	7.62	6.7	-123	18			
12:50									Collect sample DMV	V-2	
							<u> </u>	l	1		
Pumn	Type	Centrifug	al num	n with hla		tubing					
i unp	гурс.	Centinuy	a pun		or poly	ubiliy					
Analvti	cal Par	ameters:		TAL meta	als						
				.,							

		•		PROJECT			PROJECT No.	SHEET	SHEETS		
WELL	SAMP	LING FOR		Multi Site		95900	1 оғ	1			
LOCATION									DATE WELL STARTED	DATE WELL COMPL	
Dzus F	astene	rs, West I	slip, N۱	(#1-52-0	33				11/11/08	11/11/08	
									NAME OF INSPECTOR		
	ork Sta	te Depart	ment of	Environn	nental (Jonser	ation		MA / SC SIGNATURE OF INSPECTOR		
DRILLING	COMPANY								SIGNATURE OF INSPECTOR		
	ONE WE	LL VOLUME :	1.4	Gallons		WELL TD:	15.0	ft	I PUMP INTAKE DEPTH:	12.0 ft	
									1		
	Depth to	Purge		FIE	LD MEAS	SUREME	NTS				
Time	Water	Rate	Temp.	Conduct.	DO	рН	ORP	Turbidity	REM	ARKS	
TIME	(ft)	(gal/min)	(°C)	(µs/cm)	(mg/L)	pri	ON	(ntu)		ANNO	
	(17)	(gui/iiii)	(0)	(µ0/011)	(g/_/			(inca)			
14:45	6.25								Static water level		
14:55	6.25	0.4	20.1	199	9.58	6.12	93	16	Pump on		
15:00	6.25	0.1	22	238	8.98	6.07	82	24			
15:05	6.25		21.9	245	8.9	6.06	97	16	Purged 6 gal		
15:10	6.25	0.4	21.95	250	10	i argoa o gai					
10.10	0.20	0	200	200	10						
15:15							Collect sample DMV	V-3			
10.10											
					Duplicate DMW-53						
									1		
									1		
									1		
								1	ł		
Pump	Type:	Centrifug	al pum	o with bla	ck poly	tubina					
p		Jonandy	- Point		en pory						
Analyti	cal Par	ameters:		VOCs, T							

		•	I	PROJECT					PROJECT No.	SHEET	SHEETS
WELL	SAMP	LING FOI		Multi Site	G		95900	1 оғ	1		
LOCATION						DATE WELL STARTED	DATE WELL COMP	PLETED			
Dzus F	astene	rs, West	slip, N۱	(#1-52-0		11/11/08	11/11/08				
	orly Sta	ta Danart	mont of	Environn	oontol (otion				
DRILLING	OFK STA	te Depart	ment of	Environn	nental	Jonsen	ation		MA / SC SIGNATURE OF INSPECTOR		
DIGLEING											
				o							
	ONE WE	LL VOLUME :	1.1	Gallons	١	WELL TD:	11.5	ft	PUMP INTAKE DEPTH:	10.0 ft	
	Depth	_		FIE	LD MEAS	SUREME	NTS				
Time	to Water	Purge	Tamm	Conduct	DO		000	Tunkiditu	DEM		
Time	(ft)	Rate (gal/min)	Temp. (°C)	Conduct. (µs/cm)	DO (mg/L)	рН	ORP	Turbidity (ntu)	REM	IARKS	
	(11)	(gai/min)	(0)	(µ5/cm)	(iiig/L)			(iitu)			
13:40	5.01								Static water level		
13:50	5.08	0.3	19.42	287	9	6.66	-66	51	Pump on		
13:55	5.08	0.0	19.4	323	8.26	6.68	-92	525			
14:00	5.12		22.3	176	8.23	6.31	-70	191			
14:05	5.12	0.3	22.14	177	9.37	6.28	-60	42	Purged approx 5 ga	1	
	0	0.0			0.0.	0.20				<u>-</u>	
14:10									Collect sample DMV	V-9	
										<u> </u>	
D	Tunai	Contritue		o with his	ماريممان	tub in r					
rump	i ype:	Centritug	ai pum	p with bla	ск рогу	gniaus					
Analyti	cal Dar	ameters:		TAL meta	ale						
riaiyti	uai Fal	ameters.			313						

		•		PROJECT					PROJECT No.	SHEET	SHEETS
WELL	SAMP	LING FOI		Multi Site		95900	1 оғ	1			
LOCATION						DATE WELL STARTED	DATE WELL COMPL	ETED			
Dzus F	astene	rs, West I	slip, N۱	/ #1-52-0	33				11/11/08	11/11/08	
	orle Cto	ta Danart	mont of	Environn	nontal (otion		NAME OF INSPECTOR MA / SC		
DRILLING	COMPANY	te Depart	ment of	EINNIOUL	nentar	Jonsen	alion		SIGNATURE OF INSPECTOR		
				.						10.04	
	ONE WE	LL VOLUME :	6.4	Gallons	١	NELL TD:	44.5	ft	PUMP INTAKE DEPTH:	10.0 ft	
	Depth			FIE		SUREME	NTS				
	to	Purge									
Time	Water	Rate	Temp.	Conduct.	DO	рН	ORP	Turbidity	REM	ARKS	
	(ft)	(gal/min)	(°C)	(µs/cm)	(mg/L)			(ntu)			
	1.00										
44.00	4.93	4 7		005	0.00	0.40	10.0	07	Static water level		
14:20	5.05	1.7	22.28	285	8.96	6.46	10.6	37	Pump on		
14:25	5.08		16.8	141	10.1 8.93	6.19 6.03	32 74	6			
14:30	5.12	4.5	15.28	139	5 1	D	- 1				
14:35	5.12	1.5	16.12	141	Purged approx 25 g	al					
1 4 . 10					Collect comple DMV						
14:40					Collect sample DMV	V-9B					
Pump ⁻	Туре:	Centrifug	al pum	p with bla	ck poly	tubing					
Analyti	cal Par	ameters:		TAL meta	als						

WELL NO. MW- 13A

				PROJECT					PROJECT No.	SHEET	SHEETS
WELL	SAMP	LING FOR	RM	Multi Site	G		95900	1 оғ	1		
					~~		DATE WELL STARTED	DATE WELL COMPL	ETED		
DZUS F	astene	rs, West I	slip, N۱	(#1-52-0	33				11/12/08 NAME OF INSPECTOR	11/12/08	
	ork Sta	te Departi	ment of	Environn	nontal (Oneon	ation		MA / SC		
DRILLING	COMPANY	te Depart				5011361	allon		SIGNATURE OF INSPECTOR		
	ONE WE	LL VOLUME :	1.3	Gallons	١	WELL TD:	10.7	ft	PUMP INTAKE DEPTH:	6.0 ft	
	Depth to	Purge		FIE	LD MEAS	SUREME	NTS				
Time	Water	Rate	Temp.	Conduct.	DO	рН	ORP	Turbidity	REM	ARKS	
	(ft)	(gal/min)	(°C)	(µs/cm)	(mg/L)	P	••••	(ntu)			
11:40	2.90								Static water level		
11:50	2.90	0.3	19.58	310	8.7	6.99	21	42	Pump on		
11:55	2.93		21.9	374	8.5	6.92	26	108			
12:00	2.93		21.8	355	8.26	7	44	300			
12:05	2.93	0.3	21.9	348	7.82	7.02	48	310	Purged approx 5 ga		
12:10						Collect sample DMV	N/ 12A				
12.10										V-13A	
								1	!		
Pump ⁻	Type:	Centrifug	al pum	p with bla	ck polv	tubing					
•		0	•		. ,	5					
Analyti	cal Par	ameters:		VOCs, T	AL meta	als					

WELL NO. MW- 13B

				PROJECT			PROJECT No.	SHEET	SHEETS		
		LING FOI	RM	Multi Site	G		95900	1 оғ	1		
LOCATION							DATE WELL STARTED	DATE WELL COMPI	LETED		
Dzus F	astene	rs, West I	slip, N۱	(#1-52-0	33				11/12/08	11/12/08	
CLIENT Now V	ork Sta	te Depart	ment of	Environn	nontal (Oneon	ation		NAME OF INSPECTOR MA / SC		
DRILLING	COMPANY	te Depart				0011301			SIGNATURE OF INSPECTOR		
	ONE WE	LL VOLUME :	6.8	Gallons	١	WELL TD:	44.3	ft	PUMP INTAKE DEPTH:	6.0 ft	
	Depth to	Purge		FIE	LD MEAS	SUREME	NTS				
Time	Water	Rate	Temp.	Conduct.	DO	рН	ORP	Turbidity	REM	ARKS	
Time	(ft)	(gal/min)	(°C)	(µs/cm)	(mg/L)	pri	OI	(ntu)		AIIIO	
	. ,		. ,		(U /			,			
11:40	2.73								Static water level		
12:20	2.73	1	20.71	224	8.67	6.74	76	13	Pump on		
12:25	2.80		18	176	9.28	5.98	106	5			
12:30	2.80		17.9	177	9.2	5.8	127	9			
12:35	2.80		18.17	181	11	Purged approx 22 g	al				
12:40	2.80	1	19	184	11						
12:45					Collect sample DMV	V-13B					
				<u>.</u>			1		ł		
Pump ⁻	Tvpe:	Centrifug	al pum	o with bla	ck polv	tubina					
P	71- 21				- 2.9						
Analyti	cal Par	ameters:		TAL meta	als						

WELL NO. MW- 15A

				PROJECT					PROJECT No.	SHEET	SHEETS
		LING FOF	RM	Multi Site	G		95900	1 оғ	1		
							DATE WELL STARTED	DATE WELL COMPL	ETED		
Dzus F	astene	rs, West I	slip, N۱	/ #1-52-0	33				11/12/08	11/12/08	
CLIENT	ork Sta	te Departi	mont of	Environn	nontal (Concor	ation		NAME OF INSPECTOR MA / SC		
		te Depart				JUIISEIN	allon		SIGNATURE OF INSPECTOR		
	ONE WE	LL VOLUME :	3.8	Gallons	N	WELL TD:	28.8	ft	PUMP INTAKE DEPTH:	11.0 ft	
	Denth						NTO				
	Depth to	Purge		FIE	LD MEAS	SUREME	INTS				
Time	Water	Rate	Temp.	Conduct.	DO	рН	ORP	Turbidity	REM	ARKS	
-	(ft)	(gal/min)	(°C)	(µs/cm)	(mg/L)	•	-	(ntu)		-	
07:25	5.66								Static water level		
08:55	5.68	1.6	18.5	293	9.86	5.92	25	12	Pump on		
09:00	5.70		21.5	179	9.46	6.09	64	40			
9:05	5.70		22	192	9.45	6.25	34	1			
9:10	5.70		21	186	1	Purged approx 12 g	al				
9:15	5.70	1.6	20.8	185	3						
9:20					Collect sample DMV	V-15A					
				L							
									1		
									1		
									1		
I					1			1	ł		
Pump	Type:	Centrifug	al pum	p with bla	ck polv	tubina					
) - . .										
Analvti	cal Par	ameters:		VOCs, T	AL meta	als					
				,							

WELL NO. MW- 15B

				PROJECT					PROJECT No.	SHEET	SHEETS
		LING FOR	RM	Multi Site	e G		95900	1 оғ	1		
		ers, West I		/ #1_52 A	33				date well started 11/12/08	DATE WELL COMPL 11/12/08	_ETED
DZUS F	asterie		isiip, ivi	#1-52-0	33				NAME OF INSPECTOR	11/12/00	
New Y	ork Sta	te Depart	ment of	Environn	nental (Conserv	vation		MA / SC		
DRILLING	COMPANY	•							SIGNATURE OF INSPECTOR		
		ELL VOLUME :	12.9	Gallons		WELL TD:	84.7	ft	PUMP INTAKE DEPTH:	9.0 ft	
	Depth	D		FIE	LD MEAS	SUREME	NTS				
Time	to Water	Purge Rate	Temp.	Conduct.	DO	рН	ORP	Turbidity	REM	ARKS	
Time	(ft)	(gal/min)	(°C)	(µs/cm)	(mg/L)	pri	OI	(ntu)		ANNO	
	,	(0 /	. ,		(U /			. ,			
7:25	5.62								Static water level		
8:10	5.69	0.6	11.01	267	11.8	7.2	42	20	Pump on		
8:15	6.85		15.63	345	10.05	5.77	77	6			
8:20	7.10		15.92	356	9.67	5.59	102	5			
8:25	7.10		14.26	350	9.5	5.54	91	11	Purged approx 40 g	al	
8:30	7.08		15.35	347	9.31	5.61	94	9			
8:35	7.88	0.6	15.12	342	9.61	5.52	93	1			
8:40						Collect sample DMV	V-15B				
		_									
Pump	Type:	Centrifug	al pum	p with bla	ck poly	tubing					
	. –										
Analyti	cal Par	ameters:		TAL meta	als						

		•		PROJECT					PROJECT No.	SHEET	SHEETS
WELL	SAMP	LING FOI		Multi Site	G				95900	1 оғ	1
LOCATION							DATE WELL STARTED	DATE WELL COMP			
Dzus F	astene	rs, West I	slip, N۱	Y #1-52-0	33		11/11/08	11/11/08			
									NAME OF INSPECTOR		
	ork Sta	te Depart	ment of	Environn	nental	Conser	ation		MA / SC SIGNATURE OF INSPECTOR		
DRILLING	COMPANY								SIGNATORE OF INSPECTOR		
	ONE WE	ILL VOLUME :	1.4	Gallons	١	WELL TD:	13.5	ft	PUMP INTAKE DEPTH:	9.0 ft	
	Depth to	Purge		FIE	LD MEA	SUREME	NTS				
Time	Water	Rate	Temp.	Conduct.	DO	рН	ORP	Turbidity	RFM	ARKS	
	(ft)	(gal/min)	(°C)	(µs/cm)	(mg/L)	pri	0.11	(ntu)			
	. ,		. ,	. , ,	,			. ,			
15:55	4.98								Static water level		
16:00	5.00	0.3	20.9	250	9.22	6.64	33	29	Pump on		
16:05	5.03		22.5	214	9.42	6.55	58	86			
16:10	5.03		22.63	203	9.3	6.55	88	10			
16:15	5.03	0.3	23	209	8.28	6.6	91	7	Purged approx 5 ga	Ī	
16:20									Collect sample DMV	V-18	
Pump	Туре:	Centrifug	al pum	p with bla	ck poly	tubing					
Analyti	cal Par	ameters:		TAL meta	als						

WELL NO. MW- 22A

		-		PROJECT					PROJECT No.	SHEET	SHEETS
WELL	SAMP	LING FOR		Multi Site	e G		95900	1 оғ	1		
LOCATION	l						DATE WELL STARTED	DATE WELL COMPL	ETED		
Dzus F	astene	rs, West I	islip, N۱	Y #1-52-0	33				11/12/08	11/12/08	
CLIENT	ork Sta	to Doport	mont of	f Environn	~ontol (Concon	ration		NAME OF INSPECTOR MA / SC		
DRILLING	COMPANY	te Depart	ment of	Environi	nemarc	-0115ei v	allon		IVIA / SC SIGNATURE OF INSPECTOR		
			1.0				44.4	~		14.0.4	
	ONE WE	ELL VOLUME :	1.3	Gallons	V	WELL TD:	14.4	ft	PUMP INTAKE DEPTH:	11.0 ft	
	Depth			FIE	LD MEAS	SUREME	NTS				
T :ma	to Water	Purge	-	Canduat	- <u></u>			Turkidity	- DEM		
Time	Water (ft)	Rate (gal/min)	Temp. (°C)	Conduct. (µs/cm)	DO (mg/L)	рН	ORP	Turbidity (ntu)	KEIWI	ARKS	
	('''	(gai, iiii)		(µ3/011)	('	(11.4)			
09:50	6.4		├ ───┤		├ ───┦		'		Static water level		
10:10	6.4	0.3	18.93	374	10.04	6.53	27	210	Pump on		
10:15	6.48		21	481	9.24	6.55	-37	170			
10:20	6.6		22.2	483	9.08	6.67	-58	40	1		
10:25	6.58	0.3	21.87	504	19	Purged approx 5 gal	1				
_	_										
10:30						Collect sample DMV	V-22A				
									MS/MSD		
						Duplicate DMW-72					
						\square					
						$\Box $					
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			<u> </u>	'	<u> </u>	<u> </u>	 '				
			<u> </u>		<u> </u>	<u> </u>	 '				
			<u> </u>		<u> </u>	<u> </u>	 '				
			<u> </u>		<u> </u>	<u> </u>	 '				
			<u> </u>	'	<u> </u>	<u> </u>	 '				
			<u> </u>		<u> </u>	<u> </u>	 '				
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			<u> </u>	ļ'	<u> </u>	<u> </u>	 '				
			<u> </u>				Ľ'				
	_		_								
Pump	Туре:	Centrifug	jal pum	p with bla	ck poly	tubing					
		1		.							
Analyti	cal Par	ameters:		TAL meta	ais						

WELL NO. MW- 22B

		<u> </u>	· · · · · · · · · · · · · · · · · · ·	PROJECT					PROJECT No.	SHEET	SHEETS
WELL	SAMP	LING FOF		Multi Site	∋ G		95900	1 оғ	1		
LOCATION	l						DATE WELL STARTED	DATE WELL COMPL	.ETED		
Dzus F	astene	ers, West I	Islip, NY	/ #1-52-0	33				11/12/08	11/12/08	
CLIENT	ork Sta	ite Departi	mont of	Environr	mantal (200000	ration		NAME OF INSPECTOR MA / SC		
DRILLING	COMPANY	е реран	ment or	Environi	lientai c	2011261	/auon		SIGNATURE OF INSPECTOR		
	ONE WE	ELL VOLUME :	6.2	Gallons	١	WELL TD:	44.5	ft	PUMP INTAKE DEPTH:	10.0 ft	
	Depth to	Purge		FIE	LD MEAS	SUREME	INTS				
Time	Water	Rate	Temp.	Conduct.	DO	рН	ORP	Turbidity	REM	ARKS	
	(ft)	(gal/min)	(°C)	(µs/cm)	(mg/L)	-		(ntu)			
		[!	<u> </u>		<u>[</u>						
09:50	6.23	<u> </u>	<u> </u>		<u> </u>		<u> </u>		Static water level		
10:40	6.22	1	21.6	348	9.1	7.06	-105	49	Pump on		
10:45	6.31	<u> </u>	18.25	258	9.63 8.5	7.01	-84 23	23			
10:50	6.31	<u> </u>	16.7	251	10 3						
10:55	6.31		17	253	Purged approx 20 g	al					
11:00	6.31	1	17.14	254							
		[!	[!	['	<u>['</u>		['				
11:05		<u> </u>	<u> </u>	<u> </u>	Collect sample DMV	V-22B					
<u> </u>		<u> </u>	<u> </u>								
		<u> </u>	<u> </u>		<u> </u>		<u> </u>				
		<u> </u>	<u> </u>		<u> </u>		<u> </u>				
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Pump ⁻	Tvpe:	Centrifug	al pum	p with bla	ck poly	tubing					
		- U									
Analyti	cal Par	rameters:		TAL meta	als						

WELL NO. MW- 23A

		<u> </u>		PROJECT			PROJECT No.	SHEET	SHEETS		
WELL	SAMP	LING FOR		Multi Site	∋ G		95900	1 оғ	1		
LOCATION							DATE WELL STARTED	DATE WELL COMPL			
Dzus F	astene	rs, West I	slip <u>, N</u>	Y #1-52-0	33				11/12/08	11/12/08	
CLIENT						-			NAME OF INSPECTOR		
New Y	ork Sta	te Depart	ment of	f Environn	nental (Conserv	/ation		MA / SC		
DRILLING	COMPANY								SIGNATURE OF INSPECTOR		
I	ONE WE	ELL VOLUME :	1.6	Gallons	,	WELL TD:	14.3	ft	PUMP INTAKE DEPTH:	10.0 ft	
Ļ									-		
1	Depth	Derrore		FIE	LD MEAS	SUREME	NTS				
Time	to Water	Purge Rate	Temp.	Conduct.	DO		ORP	Turbidity	- DEM	ARKS	
Time	vvater (ft)	(gal/min)	(°C)	(µs/cm)	(mg/L)	рН	UKF	(ntu)		AKNO	
	(17	(90,000)		(µ3/011)	(!	├ ───┦	(inco)	<u> </u>		
13:05	4.64		<u> </u>	 	<u> </u>	┟───┦	i────′		Static water level		
13:20	4.64	0.4	20.16	252	8.75	6.27	49	10	Pump on		
13:25	4.7	01	20.10	513	8.12	6.54	-43	27			
13:30	4.7		22.5	580	8.18	6.69	-70	40	1		
13:35	4.7	0.4	23.4	618	60	Purged approx 6 gal	I				
10.00	4.7	U. T	20.7	010	00	Fuiged approx o gai	1				
13:40			 '	 '		Collect sample DMV	N-23∇				
13.40			┢────┘	 '	┢────┘	┢───┦				V-23A	
			<u> </u>								
			1								
	 		┟────┘	 '	┟────┘	┟───┦	┢────┘				
			┟────┘	 '	┟────┘	┟───┦	┢────┘				
			┟────┘	 '	┟────┘	┟───┦	┟────┘		 		
			┟────┘		┟────┘	├ ───┦	┟────┘				
			┟────┘	 '	┟───┘	┟─── ┦	┟────┘				
			───	'	───	├ ───┦	┢────┘				
			┟────┘		┟────┘	├ ───┦	┟────┘				
			───┘	 '	───┘	↓ /	┢────┘				
			┟────┘	 '	───′	├ ───┦	┢────┘				
			───	'	───	├ ───┦	┢────┘				
			───┘	ļ'	───┘	↓ !	┢────┘		<u> </u>		
			───′	ļ!	───┘	↓ !	└───┘				
			───′		───′	├ ───┦	├ ────┘				
			───┘	ļ'	───┘	↓ !	┢────┘		<u> </u>		
			───┘	ļ'	───┘	↓ !	┢────┘		<u> </u>		
			───′	ļ!	───┘	↓ !	└───┘				
			┟────┘	ļ'	┟────┘	└─── ┦	┢────┘		<u> </u>		
			┟────┘	ļ'	┟────┘	└─── ┦	┢────┘		<u> </u>		
			───′	ļ!	───┘	↓ !	└───┘				
			┟────┘	ļ'	┟────┘	└─── ┦	┢────┘		<u> </u>		
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	<u> </u>		<u> </u>		<u> </u>						
D	T	0				4 I					
Pump	Type:	Centritug	jai pum	p with bla	ск роіу	tubing					
د. ۱۰ مارین				TAL meta							
Anaiyu	cai rai	ameters:		TAL Meta	315						

WELL NO. MW- 23B

		<u> </u>		PROJECT			PROJECT No.	SHEET	SHEETS		
WELL	SAMP	LING FOR		Multi Site	e G		95900	1 оғ	1		
LOCATION	4			•			DATE WELL STARTED	DATE WELL COMPL	ETED		
Dzus F	astene	ers, West I	slip, N)	<u>í #1-52-0</u>	33				11/12/08	11/12/08	
CLIENT	ork Sta	to Doport	mont of	f Environr	~ontol (Concon	ration		NAME OF INSPECTOR MA / SC		
	COMPANY	te Depart	ment of	Environi	nentar	JUNSEIN	allon		IVIA / SC SIGNATURE OF INSPECTOR		
				2			44.5	*.	•	10.0.4	
	ONE WE	ELL VOLUME :	6.5	Gallons	١	WELL TD:	44.5	ft	PUMP INTAKE DEPTH:	10.0 ft	
	Depth			FIE	LD MEA	SUREME	NTS		1		
	to	Purge									
Time	Water	Rate	Temp.	Conduct.		рН	ORP	Turbidity	REM	ARKS	
	(ft)	(gal/min)	(°C)	(µs/cm)	(mg/L)	↓ ′	 '	(ntu)	 		
12:05	4 50	ļ'	↓ ′	ļ'	 '	 /	'	 	Otatia watar laval		
13:05	4.58	1	24.96	450	0.00	6.74	52	22	Static water level		
13:50 13:55	4.58 4.70	1	21.86		8.23 9	6.74 7.07	-53	33 24	Pump on		
13:55	4.70	 '	22.08 28.38		9.21	6.34	-85 -29	24	<u> </u>		
14:00	4.75	 '	20.30	201	9.21	6.34 5.9	-29 50	41	Purged approx 20 g		
14:05	4.75	1	16.8	213	8.8	5.9 5.83	50 70	8	Pulyeu applox 20 g	al	
14.10	4.75		10.0	212	<u> </u>						
14:15		 '	┟────┘	 '	 '	├ ───┦	 '		Collect sample DMV	1/_22R	
14.10		<u> </u>	├─── ′	<u> </u>	├ ───'	┨────┦	<u> </u> '			V-23D	
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			ii						1		
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	J	<u>.</u>							4		
Pump ⁻	Type:	Centrifug	al pum	p with bla	ck poly	tubing					
		-				•					
Analyti	cal Par	rameters:		TAL meta	als						

AECC	ЭМ						WELL NO. MW- 2					
				PROJECT			_		PROJECT No.	SHEET		SHEETS
		LING FOR	RM	D004445	<u>5-14.3, r</u>	Multi Si	te G		60135736.30	1	OF	1
		- Moot	!'m NP	V 4 50 00					DATE WELL STARTED			
DZUS F	astene	rs, west i	isiip, iv	Y 1-52-03	3				March 10, 2010	March	n 10, 20	10
	ork Sta	te Depart	ment o	f Environn	mental a	and Cor	nservat	ion	Celeste Foster & St	aci Birn	haum	
DRILLING	COMPANY	10 0000.1			nontai c		100110		SIGNATURE OF INSPECTOR	<u>uoi e.i</u>	Daam	
ı												
	ONE WE	ELL VOLUME :	6.87	Gallons	1	WELL TD:	14.3	; ft	PUMP INTAKE DEPTH:	1	5 ft	
,	Depth			FIE		SUREME	ENTS		Т			
ب	to	Purge										
Time	Water	Rate	Temp.	Conduct.	DO	рН	ORP	Turbidity	REM	IARKS		
ا ا	(ft)	(mL/min)	(°C)	(µs/cm)	(mg/L)	-		(ntu)				
·												
14:41	7.43								Static water level			
14:47								1	pump on			-
14:53		1.38	1		1 1		1	Purged 5 gal				
14:57		1.38			++	<u> </u>	+	Purged 10 gal				
14:59		1.38		 	ł'	┣────	┼────	Purged 15 gal				
15:02		1.38			'	┝───┘	┣───		Purged 20 gal			
15:02		1.38		╂────	{ '	 '	╂────	Purged 25 gal Turne	od off			
15.05	7.00	1.50	──		 '	───	Purgeu 25 gar runn					
j′	 '	ļ'	──	───	 '	 '	──	┥────				
		15:00	───	───	 '	 '	──	<u> </u>	<u> </u>			
San	npled at	15:00	───		 '	 '	──	───	<u> </u>			
 '			<u> </u>	<u> </u>	<u> </u> '	<u>ٰ</u>	<u> </u>	<u> </u>				
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<u> </u>	 '	 '	_		<u> </u> '	 '	<u> </u>					
	<u> </u>											
<u> </u>					!							
l'	l'				!	l'						
Dump		Grundfor	- Padi I	Flo 2 with		hina Ta	-flon br					
Fump	Type.	Grunulus	Keuri		ροιγ ται	Jing, re	HUIT Da	llei				
Analyti	cal Par	rameters:	TAL m	letals								

AECO	DM								WELL NO. MW-3							
WELL	SVWD		ЭМ	project D004445	1/2		to G		PROJECT №. 60135736.30	SHEET 1 of	sheets 1					
		LING FO	X IVI	D004443	-14.3, 1		le G		DATE WELL STARTED	1 OF DATE WELL COMP						
Dzus F	astene	rs, West I	lslip, N`	Y 1-52-03	3				March 10, 2010	March 10, 20	J10					
New Y	ork Sta	te Depart	ment of	f Environr	nental a	and Cor	nservat	ion	Celeste Foster & St	taci Birnbaum						
DRILLING	COMPANY								SIGNATURE OF INSPECTOR							
	ONE WE	LL VOLUME :	1.73	Gallons	v	WELL TD:	15	ft	PUMP INTAKE DEPTH	12 ft						
	Depth	_		FIE	LD MEAS	SUREME	NTS									
Time	to Water	Purge Rate	Temp.	Conduct.	DO	рН	ORP	Turbidity	DEN	IARKS						
Time	(ft)	(mL/min)	(°C)	(µs/cm)	(mg/L)	рп	UKP	(ntu)	KEN	ARNS						
	()	((-)	(1-0, 011)	((,								
14:25	5.36					Static water level										
14:31	5.42	1 gal/min pump on 1 gal/min pump on														
14:34																
14:36		1 gal/min				purged 5 gal										
14:38		1 gal/min														
14:41		1 gal/min							purged 10 gal							
14:44	Coll	ected Sar	npie													
		HORI	BA BR	OKEN												
							<u> </u>		<u> </u>							
Pump	Туре:	Grundfos	s Redi F	lo 2 with	poly tub	oing, Te	eflon ba	iler								
Analyti	cal Par	ameters:	TAL m	Metals &	HG											

AECO	DM					WELL NO. MW- 9						
				PROJECT		PROJECT No.	SHEET		SHEETS			
		LING FO	RM	D004445	-14.3, N	/lulti Si	te G		60135736.30	1	OF	1
LOCATION Dzus F		rs, West I	slip, N	(1-52-03	3				date well started March 10, 2010 Name of inspector	DATE WELL March 1		
CLIENT	ork Sta	to Donart	mont of	Environn	oontal a		eenvet	ion	Celeste Foster & St	aci Birnha	m	
	COMPANY	ie Depair					1561 Val		SIGNATURE OF INSPECTOR		um	
	ONE WE	LL VOLUME :	1.19	Gallons	v	VELL TD:	11.5	ft	PUMP INTAKE DEPTH:	10	ft	
	Depth			FIE	LD MEAS	SUREME	INTS					
	to	Purge	_									
Time	Water	Rate	Temp.	Conduct.	DO (mm/l)	рН	ORP	Turbidity	REN	IARKS		
	(ft)	(mL/min)	(°C)	(µs/cm)	(mg/L)			(ntu)				
13:37	4.19								Static water level			
13:50	4.13	0.55							pump on			
13:57	4.22	0.55							2 gal pruged			
13:58	4.28	0.55					3 gal purged					
14:00	4.3	0.55							5 gal purged			
14:01		Furned of	:						6 gal total purge			
14:04		V-9-2010							9 9 m 1 m 1 m 9 m 9 m			
		9-201003		/								
		HORI	BA BR	OKEN								
							<u> </u>	[ļ			
Pump	Type	Grundfog	Redi F	lo 2 with	noly tub	nina Ta	flon ha	iler				
. unp	. , po.	Signator										
Analvti	cal Par	ameters:	TAL m	etals								

AECO	ЭМ						WELL NO. MW- 9B					
				PROJECT					PROJECT No.	SHEET		SHEETS
		LING FOR	R <u>M</u>	D004445	₀- <u>14.3, </u> №	<u>Multi Si</u>	te G		60135736.30		OF	1
				<u> </u>					DATE WELL STARTED	DATE WELL C		
Dzus F	astene	rs, West I	islip, N	Y 1-52-03	3				March 10, 2010	March 10), 201	0
CLIENT	ork Sta	to Donart	monto	f Environn	montal c	and Cor	noorvat	ion	Celeste Foster & Sta	ooi Pirnha	m	
	COMPANY	le Depart	ment of	Environi	lleinai a		1501 vai	1011	SIGNATURE OF INSPECTOR		um	
	-											
			0.50	Collona			11 E	4	.	10.1	£1.	
	ONE WE	ELL VOLUME :	00.0 T	Gallons		WELL TD:	44.5	fτ	PUMP INTAKE DEPTH:	10 f	t	
	to	Purge		• •		5011211.2						l
Time	Water	-	Temp.	Conduct.	DO	pН	ORP	Turbidity	REM	ARKS		l
-	(ft)	(mL/min)	(°C)	(µs/cm)	(mg/L)	-		(ntu)				
13:38	4.11	1.32							Static water level			
13:49		1.32							pump on			
13:55		1.32			!				5 gal purge			
13:58		1.32		1	├ ── /	<u> </u>	10 gal purge					
14:01		1.32					15 gal purge					
14:03		1.32	├───		╂─────	20 gal purge						
14:07		1.32	├───		├ ───┦	┝───	┣───	 	25 gal purge			
14:07	7.20	1.02	┣────	╂────	┨────┦	┢────	╂────	┼────	Turned off			
14:00	 '	├ ────′	┣────	╂────	┨────┦	┢────	╂────	┼────	collected sample			
14.10	 '	┟────┘	┣───	┨─────	├ ───┦	├───	──	╂─────				
	 '	<u> </u> '	┣───	<u> </u>	└─── /	┣────			1			
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	 '	HORI	BA BR	OKEN	ļ!	<u> </u>	<u> </u>	\square				
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Dump	Tunou	Crundfor	Dadir	- حام Ω يينith	noly tub	aina Tu	oflan ha	ilor				
Fump	rype.	Grundios	, Reul r	Flo 2 with	poly luc	Jing, re	short ba	liei				
Arachuti			T 11 m									
Analyti	Carrar	rameters:	TAL III	letais								

AECC	ЭМ						WELL NO. MW- 13	3A				
				PROJECT					PROJECT No.	SHEET		SHEETS
		LING FOR	RM	D004445	<u>i-14.3, ۱</u>	Multi Si	te G		60135736.30	1	OF	1
						_	_		DATE WELL STARTED	DATE WELL		
DZUS F	astene	rs, west i	isiip, iv	Y 1-52-03	3				March 10, 2010	March 1	10, 20	10
	ork Sta	ite Depart	ment o	of Environn	mental a	and Cor	nserva [†]		Celeste Foster & St	taci Birnb	aum	ļ
DRILLING	COMPANY	to Depair			<u>Homas</u>		100110.1	10.1	SIGNATURE OF INSPECTOR	1001 2		
	ONE WE	ELL VOLUME :	1.33	3 Gallons	1	WELL TD:	10.7	´ ft	PUMP INTAKE DEPTH:	: 8	3 ft	
, i	Depth			FIE	ELD MEAS	SUREME	NTS		Τ			
	to	Purge										ļ
Time	Water	Rate	Temp.			рН	ORP	Turbidity	REM	MARKS		ļ
<u> </u>	(ft)	(mL/min)	(°C)	(µs/cm)	(mg/L)	↓′		(ntu)	Ļ			
!		ļ'	 '		<u> </u> '	└───′		·				
15:17			 '		<u> </u> '	└───′		·	Static water level			
15:27	2.29	0.71	 '		↓ '	└───′		<u> </u>	pump on			
15:28		0.71	<u> </u>		<u> </u>	└── ′		'	<u> </u>			
15:30		0.71	<u> </u> '		<u> </u>	└── ′		!	<u> </u>			
15:32		0.71	<u> </u>		<u> </u>	<u> </u>		!				I
15:34	2.35	0.71	<u> </u>		<u> </u>	<u> </u>		!				
15:37	<u> </u>		<u> </u>		<u> </u>	'	Turned off 5 gal pu	rged and	sampl	ed		
	<u> </u>		<u> </u>		<u> </u>	<u> </u>						
	<u> </u>		<u> </u>		<u> </u>	<u> </u>		!				
	<u> </u>		<u> </u>		<u> </u>	<u> </u>		!				
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l			<u> </u>	<u> </u>	├ ── <i>!</i>	<u> </u>	<u> </u>	<u>+</u>	†			
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l'			<u> </u>	<u> </u>	├ ──┦	<u> </u>	<u> </u>	<u>+</u>	+			
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Dum		Grundfor	e Rodi I	Flo 2 with	poly tuł	oina Tr	oflon hr	oilor				
i unp	Type.	Grunalee) Itouri		poly tas	Jing, io	mon bu					
Analyti	cal Par	rameters:	TAL m	ietals								

AECO)M								WELL NO. MW- 13	3		
				PROJECT					PROJECT No.	SHEET	5	SHEETS
WELL	SAMP	LING FOR	RM	D004445	5-14.3, №	√lulti Si	te G		60135736.30		OF	1
LOCATION					-				DATE WELL STARTED	DATE WELL C		
Dzus F	astene	rs, West I	slip, N۱،	Y 1-52-03	3				March 10, 2010	March 10	<u>, 2010</u>	<u>)</u>
	arle Sto	to Doport	mont of	4 Environr					NAME OF INSPECTOR			
	OFK Sta	te Depart	ment of	f Environn	nemai a		Iservau	ION	Celeste Foster & Sta SIGNATURE OF INSPECTOR	ICI BIITIDAL	Jm	
DRIEE	00000 7								SIGNATORE OF INCLESSES.			I
									<u> </u>			
	-	LL VOLUME :	6.88	Gallons		WELL TD:	44.3	ft	PUMP INTAKE DEPTH:	8 f	t	
	Depth			FIE	LD MEAS	JUREME	INTS					
Time	to Water	Purge	Tamp	Canduat				Turkidity	BEM			I
Time	Water (ft)	Rate (mL/min)	Temp. (°C)	Conduct. (µs/cm)	DO (mg/L)	рН	ORP	Turbidity (ntu)		ARKS		
	(17	(1111/11111)		(µə/ciii)	(iiig/⊏)	/'	├───	(incu)	1			
15:15	2.08		'	 '		Static water level						
15:15		2.27	'	 '	╂───┦	i'	───	 				
15:20	2.19	2.27	 '	<u> </u> '	├ ───┦	i'		pump on				
15:29	2.3	2.27	 '	 '	──┦	 	5 gal purge					
			 '	i	 	10 gal purge						
15:33	2.31	2.27	 '	 '	──┤	┢────┘	──	───	15 gal purge			
15:35	2.3	2.27	 '	ļ'	↓	⊢−−− ′	──	 	20 gal purge			
15:37	2.05	2.27	 '	ļ!		┢──────────────────		Ļ	25 gal purge pump c	off		
15:41			 '	ļ!		┢──────────────────		Ļ	collected sample			
 '			 '	ļ!	ļļ	└────'	──					
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Pump	Туре:	Grundfos	s Redi F	-lo 2 with	poly tuk	bing, Te	əflon bə	uler				
Analyti	cal Par	ameters:	TAL m	etals								

AECO	ЭМ								WELL NO. MW- 15	БА		
	2 A MD			PROJECT	- 44.0 1		· 0		PROJECT No.	SHEET		SHEETS
	SAMP	LING FOR		D004445)-14.3, I	VIUITI SI	te G		60135736.30 date well started	1 DATE WELI	OF L COMPLET	1 TED
Dzus F	astene	ers. West I	Islip, NY	Y 1-52-03	3				March 9, 2010	March 9		
CLIENT New Y	ork Sta	ate Depart	ment of	f Environr	nental ;	and Cor	nservat	ion	Celeste Foster & St	taci Birnh	aum	
DRILLING	COMPANY	te Dopurt			nontai e		1001 100		SIGNATURE OF INSPECTOR		aum	
		ELL VOLUME :	3.96	Gallons			28.81	ft	PUMP INTAKE DEPTH:	: 10) ft	
	Depth			FIE	LD MEAS	SUREME	INTS					
Time	to Water	Purge Rate	Temp.	Conduct.	DO	рН	ORP	Turbidity		MARKS		
11110	(ft)	(mL/min)	(°C)	(µs/cm)	(mg/L)	-	U.	(ntu)		ANNO		
13:48									Static water level			
14:03		0.94	13.13		9.58	5.86	145	0	pump on			
14:08		0.94	13.72		9.11	5.41	156	0				
14:16		0.94	14.15	0.212	8.71	5.44	146	0				
14:19	 	ļ'	└─── '	 	ļ'	 '		 	15 gal purged- pum	ip ott		
14:22		 '	 '	───	¹	 '	──	───	collected sample			
	 	'	 '	 	¹	 '	───		+			
		<u> </u> '	┟────┘	 	 '	 '	──	───	<u> </u>			
	ł	 '	┟────┘	╂────	 '	 '	┨────	╂────	+			
		'	 '	├───	 '	 '	┼───	├───	+			
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		╂─────	├ ───┦	<u> </u>	'	 '	┨────	╂────	+			
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Pump	Type:	Grundfos	3 Redi F	⁻ lo 2 with	poly tuł	oing, Te	əflon ba	uler				
Analyti	cal Par	rameters:	TAL m	etals								

AECO	DM						WELL NO. MW- 18			
		LING FOI	RM	project D004445	5-14.3 <u>,</u> N	/ulti Si	te G		project №. 60135736.30	SHEET SHEETS 1 OF 1
		ers, West I	lslip, N	(1-52-03	3				date well started March 9, 2010	DATE WELL COMPLETED March 9, 2010
client New Y drilling	ork Sta company	te Depart	ment of	Environr	nental a	ind Cor	nservat	ion	NAME OF INSPECTOR Celeste Foster & Si SIGNATURE OF INSPECTOR	taci Birnbaum
	ONE WE	ELL VOLUME :	1.47	Gallons	V	VELL TD:	13.5	ft	I PUMP INTAKE DEPTH	10 ft
	Depth to	Purge		FIE	LD MEAS	SUREME	INTS			
Time	Water (ft)	Rate (mL/min)	Temp. (°C)	Conduct. (µs/cm)	DO (mg/L)	рН	ORP	Turbidity (ntu)	REN	IARKS
12:57	4.47					Static water level				
13:02	4.55	0.7	11.9	0.234	10.39	6.22	134	67.7	pump on	
13:04		0.7	11.1	0.217	10.76		140	114		
13:06	4.55	0.7	11.37	0.212	10.49	5.52	150	0	Zaala	1 - 44
13:07 13:09									7 gal purged turned sample collected	l off
13.09									sample collected	
				ļ						
							<u> </u>		<u> </u>	
-		Grundfos			poly tub	oing, Te	eflon ba	iler		
Analyti	cal Par	ameters:	TAL m	etals						

AECO	ЭМ					WELL NO. MW- 22				
WELL	SAMP	LING FOI	RM	project D004445	5-14.3, I	Multi Si	te G		PROJECT №. 60135736.30	SHEET SHEE 1 of 1
OCATION		ers, West I	Islin NN	(1-52-03	3				date well started March 9, 2010	DATE WELL COMPLETED March 9, 2010
LIENT									NAME OF INSPECTOR	
	Ork Sta	te Depart	ment of	Environr	nental a	and Cor	nservati	on	Celeste Foster & Sta	aci Birnbaum
		ELL VOLUME :	1.41			WELL TD:	14.4	ft	PUMP INTAKE DEPTH:	10 ft
	Depth to	Purge		FIE	LD MEAS	SUREME	INTS			
Time	Water	Rate	Temp.	Conduct.	DO	рН	ORP	Turbidity	REM	ARKS
	(ft)	(mL/min)	(°C)	(µs/cm)	(mg/L)			(ntu)		
14:46	5.75								Static water level	
14:48	5.9	0.6	10.84	0.584	9.69	5.87	145	46	pump on	
14:51	5.98	0.6	10.42		9.383		148	68		
14:57	5.98	0.6	10.16		9.92	6.02	146	57		
14:58 15:01	5.98	0.6	10.28	0.668	9.78	5.83	142	7.9	6 gal purged turned sample collected	off
15.01									sample collected	
				ļ						
	•	!	<u>.</u>		<u>-</u>	<u>.</u>			!	
oump	Type:	Grundfos	s Redi F	lo 2 with	poly tub	oing, Te	eflon ba	iler		
			-							
nalyti	ical Par	ameters:	TAL m	etals						

SAIVIF	LING FOR		110001111		60135736.30	1 оғ	1			
		X IVI	D004445	-14.3, 1		e G		DATE WELL STARTED	I OF DATE WELL COMPLE	
astene	rs, West I	slip, NY	1-52-03	3				March 9, 2010	March 9, 2010	
								NAME OF INSPECTOR		
Ork Sta	te Depart	ment of	Environn	nental a	and Cor	iservati	on	Celeste Foster & St	aci Birnbaum	
	ELL VOLUME :	6.35					ft	PUMP INTAKE DEPTH:	11 ft	
-	Purgo		FIE	LD MEAS	SUREME	NTS				
Water		Temp.	Conduct.	DO	Ha	ORP	Turbidity	REM	IARKS	
(ft)	(mL/min)	(°C)	(µs/cm)	(mg/L)			(ntu)			
								Static water level		
5.8 2 11.89 0.245 10.03 5.23 169 5.8 2 12.92 2.245 10.03 5.23 169								pump on		
5.83 2 12.83 0.268 9.36 5.6 175										
4 5.8 2 13.21 0.288 9.07 5.78 172										
5.8	2	13.16	0.265	8.81	5.6	169	0		ott	
								sample collected		
	ļ									
Туре:	Grundfos	Redi F	lo 2 with	poly tuk	bing, Te	flon ba	iler			
	оле we Depth to Water (ft) 5.55 5.8 5.83 5.83 5.79 5.8 5.79 5.8 	ONE WELL VOLUME : Depth Purge Kate (mL/min) 5.55 - 5.8 2 5.83 2 5.8 2 5.79 2 5.8 2 5.79 2 5.8 2 5.79 2 5.8 2	ONE WELL VOLUME : 6.35 Depth to Rate Rate Rate (°C) Temp. (°C) 5.55 - 5.8 2 11.89 5.83 2 12.83 5.8 2 13.62 5.79 2 13.62 5.8 2 13.16 5.8 2 13.16 5.8 2 13.16 5.8 2 13.16 5.8 2 13.16 5.8 2 13.16 6.35 - - 6.35 - - 6.36 - - 6.37 - - 7.9 2 13.62 5.8 2 13.16 6.39 - - 6.39 - - 7.9 2 - - 7.9 2 - - 7.9 2 - - 7.9 2 - - 7.9 2 - - 7	ONE WELL VOLUME : 6.35 Gallons Depth to Purge Rate (mL/min) Temp. (°C) Conduct. (µs/cm) 5.55 - - - 5.8 2 11.89 0.245 5.83 2 12.83 0.268 5.8 2 13.21 0.288 5.79 2 13.62 0.269 5.8 2 13.16 0.265 5.8 2 13.16 0.265 5.8 2 13.16 0.265 5.8 2 13.16 0.265 5.8 2 13.16 0.265 5.8 2 13.16 0.265 6.0 - - - 10 - - - 11.89 0.245 - - 13.62 0.269 - - 11.80 1.00 - - 11.80 1.01 - - 11.80 1.01 <	ONE WELL VOLUME : 6.35 Gallons Depth to Water (ft) Purge Rate (mL/min) FIELD MEAS Temp. Conduct. (µs/cm) DO (mg/L) 5.55 2 11.89 0.245 10.03 5.83 2 11.89 0.245 10.03 5.83 2 13.21 0.288 9.07 5.79 2 13.62 0.269 8.76 5.8 2 13.16 0.265 8.81 2 13.16 0.265 8.81 2 13.16 0.265 8.81 2 13.16 0.265 8.81 2 13.16 0.265 8.81 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 3 2 3 2 3 3 2 3 2 3 3 3	ONE WELL VOLUME : 6.35 Gallons Well TD: Depth to Purge Rate (mL/min) Temp. (°C) Conduct. DO (mg/L) PH 5.55 - - - - - 5.8 2 11.89 0.245 10.03 5.23 5.8 2 13.21 0.288 9.07 5.78 5.79 2 13.62 0.265 8.81 5.6 5.8 2 13.16 0.265 8.81 5.6 5.8 2 13.16 0.265 8.81 5.6 5.8 2 13.16 0.265 8.81 5.6 5.8 2 13.16 0.265 8.81 5.6 5.8 2 13.16 0.265 8.81 5.6 6 1 1 1 1 1 1 1 1 1 1 1 1	ONE WELL VOLUME: 6.35 Gallons WELL TD: 44.5 Depth to Purge Rate Temp. Conduct. DO pH ORP (tt) (mL/min) (°C) (µs/cm) (mg/L) pH ORP 5.55	NEWELL VOLUME: 6.35 Gallons WELL TD: 44.5 ft FIELD MEASUREMENTS to Purge FIELD MEASUREMENTS 5.55 Conduct. DO pH ORP Turbidity (ntu) 5.58 2 11.89 0.245 10.03 5.23 169 0 5.83 2 13.21 0.288 9.07 5.78 172 0 5.8 2 13.16 0.265 8.81 5.6 170 0 5.8 2 13.16 0.265 8.81 5.6 169 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0<	ONE WELL VOLUME: 6.35 Gallons WELL TO: 44.5 ft PUMP INTAKE DEPTH: Depth to Water Purge Rate (mL/min) FIELD MEASUREMENTS REM 5.55 1 0 2 1000 pt/l (ntu) REM 5.85 2 11.89 0.245 10.03 5.23 169 0 pump on 5.83 2 13.21 0.288 9.07 5.78 172 0 10 gal purge 5.83 2 13.62 0.269 8.76 5.66 170 0 15 gal purge 5.8 2 13.16 0.265 8.81 5.6 169 0 20 gal purge turned 5.8 2 13.16 0.265 8.81 5.6 169 0 20 gal purge turned 5.8 2 13.16 2 2 2 2 2 2 3 2 3 2 3 2 3 2 3 2 3 2 3 3 3	ONE WELL VOLUME: 6.35 Gallons WELL TO: 44.5 ft PUMP INTAKE DEPTH: 11 ft Depth to multimining FIELD MEASUREMENTS REMARKS REMARKS 5.55 Image: Conduct. DO PH ORP Turbidity REMARKS 5.81 2 11.89 0.245 10.03 5.23 169 0 pump on 5.82 11.89 0.268 9.36 5.6 175 0 5 gal purge 5.8 2 13.82 0.268 9.36 5.6 170 0 15 gal purge 5.8 2 13.16 0.265 8.81 5.6 169 0 20 gal purge turmed off 5.8 2 13.16 0.265 8.81 5.6 169 0 20 gal purge turmed off 5.8 2 13.16 0.265 8.81 5.6 169 0 20 gal purge turmed off 5.8 2 13.62 0.265 8.81 5.6 169 0 20 gal purge turmed off 5.8 2 13.21 0.265 8.81 5.6

AECC	ЭМ						WELL NO. MW- 23	BA				
				PROJECT					PROJECT No.	SHEET		SHEETS
		LING FO	RM	D004445	i-14.3, ۲	Multi Si	te G		60135736.30	1	OF	1
		are Most	Jolio N	V 1 52-03	2				date well started March 10, 2010	date well March 1		
DZUS F	astene	15, WESL	15iip, iv	Y 1-52-03	<u> </u>				NAME OF INSPECTOR	March	0,20	10
New Y	ork Sta	ate Depart	ment o	of Environn	nental a	and Cor	nservat	ion	Celeste Foster & S	taci Birnb	aum	
DRILLING	COMPANY	· ·							SIGNATURE OF INSPECTOR			
	ONE WE	ELL VOLUME :	15.5	5 Gallons	١	WELL TD:	14.3	, ft	PUMP INTAKE DEPTH	: 10	ft	
	Depth		1	FIE	LD MEAS	SUREMF	ENTS					
I	to	Purge										
Time	Water		Temp.			рН	ORP	Turbidity	REM	MARKS		
	(ft)	(mL/min)	(°C)	(µs/cm)	(mg/L)	───	──	(ntu)	<u> </u>			
15.50	4.45	───	───	───	 '	┣────	╂────	╂────	Otatia watar laval			
15:53		\vdash	───	───	 '	───	──	───	Static water level			I
15:56		1	──	───	 '	───	───	pump on				
16:01	4.31	1	───	───	 '	───	───	+			I	
16:02		1	───	───	 '	┣────	╂────	╂────				
16:03		1	──	───	 '	┣───	──		tate 10 gol purgod			
16:06	4.1	1	───	───	 '	╂────	total 10 gal purged					
16:10	───	───	───	───	 '	┣────	╂────	╂────	sample collected			
	┣───		<u> </u>		 '	┣────	───	───	<u> </u>			
ļ/	───		IBA BR		┟───┘	┣───	──	───				
J	──		BA DR		┟───┘	┣───	──	───	+			
J	──		┣───	───	┟───┘	┣───	──	───	+			
	┣───		┣───		┟────┘	┣────	───	───	<u> </u>			
J	──		┣───	───	┟───┘	┣───	──	───	+			
J	──		──		┨────┘	──	──		+			
J	───	┨─────	──		 '	───	╂────	╂────	+			
J	╂────	┨─────	┨────	+	├ ───┘	┟────	╂────		+			
J	┣───	╂────	╂────	╂────	├ ───′	├───	╂────	╂────	+			
P	┣────	╂────	╂────	╂────	├ ───′	┢────	╂────		+			
P	├───	┼────	├───	+	 '	┢────	┼───		+			
P	├───	┼────	├───	+	 '	┢────	┼───		+			
P	├───	┼────	┼────	+		├───	┼───		+			
P	├───	┼────	├───	+	 '	┢────	┼───		+			
	┣───	+				┝───	<u> </u>		+			
	├───	┼────	┼────	+		├───	┼───		+			
	┣───	+				┝───	<u> </u>		+			
	├───	┼────	┼───			┢────	╂────		+			
	┣───	+					+					
	├───			+	├ ───┘		 		1			
	├───			+	├ ───┘		 		1			
	┣───	+				┝───	<u> </u>		+			
	┣───	+				┝───	<u> </u>		+			
<u> </u> !	├───	┼────	┼───			┢────	╂────		+			
	L	<u> </u>	L	<u> </u>		L	L		<u> </u>			
Dump		Grundfor	e Redi I	Flo 2 with	poly tuł	oina Tr	oflon ha	ailor				
runp	Type.	Orunaioa	SILCULI		poly luc	Jing, it	511011 60					
Analyti	ical Par	rameters:	TAL m	ootole								
Anaiyu	lai rai	ameters.	TALI	letais								

AECO	ЭМ								WELL NO. MW- 23	В	
				PROJECT					PROJECT No.	SHEET	SHEET
		LING FOR	RM	D004445	i-14.3, ľ	Multi Si	te G		60135736.30		of 1
LOCATION				-					DATE WELL STARTED	DATE WELL CO	
Dzus F	astene	ers, West I	islip, N`	<u>Y 1-52-03</u>	3				March 10, 2010	March 10,	, 2010
	arle Cha	to Donort	in a set a	f Englisher	n o n tol 4			ian		a ai Dirah ai	
	OFK Sta	ate Depart	ment o	r Environn	nental a	and Cor	nservati	ion	Celeste Foster & Sta	aci Birnbau	m
DRILLING	COMPANY								SIGNATORE OF INSPECTOR		
		ELL VOLUME :	6.59	Gallons		WELL TD:	44.5	ft	PUMP INTAKE DEPTH:	10 ft	
	Depth			FIE	LD MEAS	SUREME	INTS				
	to	Purge	L					<u> </u>			
Time	Water		Temp.	Conduct.		рН	ORP	Turbidity	REM	ARKS	
	(ft)	(mL/min)	(°C)	(µs/cm)	(mg/L)	 '	 '	(ntu)	<u> </u>		
4 5 4 7	4.00		───	<u> </u>	 '	 '	 '	<u> </u>			
15:47		'		<u> </u>	 '	 '	 '		Static water level		
15:55		1.64			'	<u> </u>	'		pump on		
16:01		1.64							purged 5 gal		
16:03		1.64							purged 10 gal		
16:05	4.39	1.64				<u> </u>			purged 15 gal		
16:07	4.39	1.64			· · · ·				purged 20 gal		
16:09	4.12	1.64			1				purged 25 gal and tu	urned off	
16:11			1		† · · · ·				collected sample		
-	<u> </u>		1	1				<u> </u>			
	<u> </u>			+		'			1		
	ł		╂────		<i>י</i>	┣────┘		<u> </u>	1		
	<u> </u>	⁻		╂─────	├─── ′	 '	'		1		
	 	'	──		┨────┘	 '		 	<u> </u>		
	┣────				↓ ′	 '		 	<u> </u>		
		HUKI	BA BR		 '	 '	 '	 	 		
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	ł	1	1	1	ł			<u> </u>	1		
	<u> </u>			+		'			1		
	 		├───	 		┣────		<u> </u>			
	<u> </u>			╂─────	'	 '	'		1		
	 	'	──		┨────┘	 '		 	<u> </u>		
	───	 '	───	───	 '	 '	 '	───	<u> </u>		
	<u> </u>	ļ		<u> </u>	<u> </u> '	 '		Ļ	ļ		
		ļ'	Ļ		 '	 '	 '	Ļ			
						<u> </u>					
						<u> </u>					
											
	•			4	•		•		+		
Pump	Type:	Grundfos	s Redi F	Flo 2 with	polv tuł	oina. Te	eflon ba	iler			
					1	,					
Δnalvti	ical Par	rameters:	TAI m	netals							
Anaryt		ameters.									

AECOM WELL NO. MW- 02										
WELL SAMPLING FORM Dzus Fasteners (1-52-033)							PROJECT №. 60135736	SHEET SHEETS 1 of 1		
LOCATION West Islip, Suffolk County, NY							date 5/25/201	1		
CLIENT								NAME OF INSPECTOR		
NYSDEC							Celeste Foster/Stephen Wright			
ONE WELL VOLUME : 1.1			gallons	WELL TD:		ft	PUMP INTAKE DEPT	тн: 10 ft		
	Depth to	Purge	I	FIELD MEA	SUREMEN	TS				
Time	Water (ft)	Rate (gal/min)	Temp. (C)	Conduct. (ms/cm)	рН	Turbidity (ntu)		REMARK	(S	
1125	7.77						static water	level		
1135	8.02	1	14.95	0.360	6.32	4.78	pump on			
1145	8.02	1	13.74	0.388	6.28	8.3	T 1 "	45 11		
1150 1155	8.02	1	13.82	0.410	6.19	8.5		pump, 15 gallons p	burged	
1100							Samples collected: unfiltered sample DMW-02U and			
								filtered sample DMW-02F		
Pump	Туре:	Grundfos	/hand b	ailer for sa	imple col	llection				
Analyti	cal Par	ameters:		TAL meta	als					

A	CO	M						WELL NO. MW- 0	3
	04440			PROJECT				PROJECT No.	SHEET SHEETS
		LING FOR	K IVI	Dzus Fas	steners (1-52-033)		60135736 date	1 оғ 1
		ffolk Cou	nty, NY					5/25/2011 NAME OF INSPECTOR	
NYSDI	EC							Celeste Foster/Ste	phen Wright
ONE WELL	VOLUME	:	1.5	gallons	WELL TD:	15.0	ft	PUMP INTAKE DEPTH	: 8 ft
	Depth to	Purge	I	FIELD MEAS	SUREMEN	ITS			
Time	Water (ft)	Rate (gal/min)	Temp. (C)	Conduct. (ms/cm)	рН	Turbidity (ntu)		REMARKS	i
1315	5.62						static water	level	
1320	5.62	0.8	16.93	0.188	6.21	167	hand bailed	8 gallons for purge	ŧ
1330	5.62	0.8	16.03	1.190	6.09	331			
1335							Samples co	llected:	
								ample DMW-03U a	
							field filtered	sample DMW-03F	
Pump	Туре:	Hand bai	led						
Analyti	cal Par	ameters:		TAL meta	als				

A=	CO							WELL NO. MW-	
WELL	SAMP		RM	PROJECT Dzus Fas	steners (*	1-52-033)		PROJECT №. 60135736	SHEET SHEETS
LOCATION				12 200 1 00		,		DATE	
CLIENT		ffolk Cour	ity, in f					5/25/201 NAME OF INSPECTOR	
NYSDI	EC							Celeste Foster/St	ephen Wright
ONE WELL		:	1.2	gallons	WELL TD:	12.0	ft	PUMP INTAKE DEPT	тн: 8 ft
	Depth to	Purge	I	FIELD MEAS	SUREMEN	TS			
Time	Water (ft)	Rate (gal/min)	Temp. (C)	Conduct. (ms/cm)	рН	Turbidity (ntu)		REMARK	S
1215	4.45			· · · ·		· ·	static water	level	
1225							pump on		
1230	4.60	1	15.84	0.545	6.30	57.9			
1234	4.61	1	15.27	0.546	6.06	12.0	Turne e el effu		
1236 1240	4.61	1					Samples co	pump, 12 gallons p	burgea
1240								ample DMW-09U a	and
								sample DMW-090	
1242								ates collected:	
							unfiltered s	ample DMW-59U a	and
							field filtered	sample DMW-59	F
				 					
Pump	Туре:	Grundfos	/hand b	ailer for sa	imple col	llection			
Analyti	cal Par	ameters:		TAL meta	als				

A	CO							WELL NO. MW-	
WELL	SAMP		RM	PROJECT Dzus Fas	steners (1-52-033)		PROJECT №. 60135736	SHEET SHEETS
LOCATION					(/		DATE	
CLIENT		ffolk Cour	ily, în î					5/25/201 NAME OF INSPECTOR	
NYSD	EC							Celeste Foster/St	ephen Wright
ONE WELL			6.5	gallons	WELL TD:	44.1	ft	PUMP INTAKE DEPT	н: 8 ft
	Depth to	Purge	I	FIELD MEAS	SUREMEN	TS			
Time	Water (ft)	Rate (gal/min)	Temp. (C)	Conduct. (ms/cm)	рН	Turbidity (ntu)		REMARK	S
1220	4.36						static water	level	
1230							pump on		
1232	4.51	2.5	15.10	0.151	6.14	15			
1245 1250	4.51 4.53	1 1	14.93 14.91	0.133	5.76 5.51	0			
1255	4.53	1	15.00	0.133	5.45	0			
1258	1.00		10.00	0.101	0.10	Ū	Turned off	pump, 50 gallons p	ourged
1305							Samples co	ollected:	
								ample DMW-09BU	
							field filtered	l sample DMW-09	3F
	1								
			-						
Pump	Туре:	Grundfos	/hand b	ailer for sa	ample co	llection			
Analyti	cal Par	ameters:		TAL meta	als				

A	CO	M					WELL NO. MW-13A
		LING FO	RM	PROJECT Dzus Fas	steners (*	1-52-033)	PROJECT No. SHEET SHEETS 60135736 1 of 1
LOCATION West I		Iffolk Cou	nty, NY				date 5/25/2011
client NYSD	EC						NAME OF INSPECTOR Celeste Foster/Stephen Wright
	VOLUME	:	1.3	gallons	WELL TD:	10.7	ft pump intake depth: 4.5 ft
	Depth to	Purge		FIELD MEA	SUREMEN	TS	
Time	Water (ft)	Rate (gal/min)	Temp. (C)	Conduct. (ms/cm)	рН	Turbidity (ntu)	REMARKS
1445	2.51	,		· · · /			static water level
1458							pump on
1500	2.59	0.7	16.32	0.622	7.05	153	
1505	2.60	0.7	15.67	0.540	6.79	30	Turned off pump, 10 gallons purged
1510						-	Samples collected:
						-	unfiltered sample DMW-13AU and
							field filtered sample DMW-13AF
						-	
Dump	Турај	Crupdfor	/hond h	nilor for or		llastion	
Fump	i ype.	Grundios		ailer for sa		nection	
Analyt	ical Par	ameters:		TAL meta	als		

A	CO	M						WELL NO. MW-13B	
WELL	SAMP	LING FOI	RM	PROJECT Dzus Fas	steners (*	1-52-033)		ргојест №. 60135736	SHEET SHEETS 1 of 1
LOCATION West I		Iffolk Cou	nty, NY					DATE 5/25/2011 NAME OF INSPECTOR	
NYSDI	EC							Celeste Foster/Stepl	nen Wright
ONE WELI	VOLUME	:	7	gallons	WELL TD:	44.4	ft	PUMP INTAKE DEPTH:	4.5 ft
	Depth	Dunna	1	FIELD MEAS	SUREMEN	TS			
Time	to Water (ft)	Purge Rate (gal/min)	Temp. (C)	Conduct. (ms/cm)	рН	Turbidity (ntu)		REMARKS	
1450	2.32	(gui/iiii)	(0)			(inta)	static water	level	
1457							pump on		
1502	2.44	1	15.26	0.154	6.80	10			
1510	2.44	1	15.26	0.151	5.76	0			
1515	2.46	1	15.06	0.145	5.60	0			
1520							25 gallons		
1525								oump, 30 gallons pure	ged
1530							Samples co		
								ample DMW-13BU ar	nd
							neid nitered	sample DMW-13BF	
Pump	Type:	Grundfos	/hand b	ailer for sa	ample col	llection			
					-				
Analyti	cal Par	ameters:		TAL meta	als				

A	CO	M						WELL NO. MW-1	5A
WELL	SAMP	LING FOR	RM	PROJECT	teners (*	1-52-033)		project №. 60135736	SHEET SHEETS
LOCATION	I			D203 1 83	steriers (1-52-055)		DATE	
West I	slip, Su	ffolk Cour	nty, NY					5/25/201 NAME OF INSPECTOR	1
NYSD	EC							Celeste Foster/St	ephen Wright
ONE WELL		:		gallons	WELL TD:		ft	PUMP INTAKE DEPT	н: 8 ft
	Depth to	Purge	I	FIELD MEAS	SUREMEN	TS			
Time	Water (ft)	Rate (gal/min)	Temp. (C)	Conduct. (ms/cm)	рН	Turbidity (ntu)		REMARK	s
930	5.15	(0.00 /	(-/	(/			static water	level	
1000	5.31	1.3	13.88	0.248	5.55	12	pump on		
1010	5.31	1.3	13.89	0.242	5.59	10.0			
1015	5.31	1.3	13.86	0.243	5.56	8.0		oump, 20 gallons p	urged
1020							Samples co	ample DMW-15AU	land
							field filtered	sample DMW-15A0	
-		Grundfos ameters:		ailer for sa TAL meta	-	llection			
					-				

A	CO	M						WELL NO. MW-1	I5B
	SAMD	LING FOR			toporo (1-52-033)		project №. 60135736	SHEET SHEETS
			X IVI	DZUS FAS	steners (1-52-033)		DATE	1 OF 1
West I	slip, Su	ffolk Cour	nty, NY					5/25/201	1
client NYSDI	EC							Celeste Foster/St	ephen Wright
ONE WELI	VOLUME	:	12	gallons	WELL TD:	83.7	ft	PUMP INTAKE DEPT	гн: 10 ft
	Depth to	Purge		FIELD MEAS	SUREMEN	TS			
Time	Water (ft)	Rate (gal/min)	Temp. (C)	Conduct. (ms/cm)	рН	Turbidity (ntu)		REMARK	ί S
930	5.1						static water	level	
945							pump on		
950	8.1	2.7	14.85	0.363	5.66	8.0			
955	8.1	2.7	13.91	0.358	5.43	8.0	T	40	
1000 1005	8.1	2.7	13.97	0.358	5.40	8.0		oump, 40 gallons p	ourged
1005							Samples co	ample DMW-15BL	land
								sample DMW-15BC	
						-			
Pump	Туре:	Grundfos	/hand b	ailer for sa	imple co	llection	1		
Analyti	cal Par	ameters:		TAL meta	als				

A	CO	M					,	WELL NO. MW-18	
WELL	SAMD	LING FO			toporo (/	1-52-033)		project №. 60135736	SHEET SHEETS 1 of 1
	JAIVIE			DZUS Fas		1-52-055)		DATE	1 of 1
West I	slip, Su	ffolk Cou	nty, NY					5/25/2011	
client NYSDI	EC							NAME OF INSPECTOR Celeste Foster/Ste	ohen Wright
ONE WELL	VOLUME	:	1.5	gallons	WELL TD:		ft	PUMP INTAKE DEPTH:	4.7 ft
	Depth to	Purge	I	FIELD MEAS	SUREMEN	ITS			
Time	Water (ft)	Rate (gal/min)	Temp. (C)	Conduct. (ms/cm)	рН	Turbidity (ntu)		REMARKS	
1715	4.70						static water I	level	
1715	4.70	0.5	14.67	0.222	6.15	95	hand bailed		
1730	4.70	0.5	14.55	0.220	6.03	40			
4740							10 gallons p		
1740							Samples col		, d
								mple DMW-18U ar sample DMW-18F	IU
Pump	Туре:	Hand bai	led						
Analyti	cal Par	ameters:		TAL meta	als				

LOCATION West Islip, CLIENT NYSDEC ONE WELL VOL Time 1355 5.9 1410 1413 6.0	AMPLING FO	1.4	gallons FIELD MEAS Conduct. (ms/cm) 1.25 1.43	WELL TD:		DATE 5/25/2011 NAME OF INSPECTOR Celeste Foster/Stephen Wright	SHEETS 1
West Islip, CLIENT NYSDEC ONE WELL VOL Time 1355 1410 1413 1420	LUME : to Purge ater Rate (ft) (gal/min) .92 .07 1.2	1.4 Temp. (C) 14.51	gallons FIELD MEAS Conduct. (ms/cm) 1.25	well td: SUREMEN pH 6.41	14.2 TS Turbidity (ntu) 90.1	DATE 5/25/2011 NAME OF INSPECTOR Celeste Foster/Stephen Wright ft PUMP INTAKE DEPTH: 8 ft REMARKS static water level	
NYSDEC ONE WELL VOL Time 1355 1410 1413 1416 6.0 1420	epth to Purge ater Rate (ft) (gal/min) .92 .07 1.2	Temp. (C) 14.51	FIELD MEAS Conduct. (ms/cm) 1.25	pH 6.41	TS Turbidity (ntu) 90.1	Celeste Foster/Stephen Wright ft PUMP INTAKE DEPTH: 8 ft REMARKS static water level	
De t Time Wa (f 1355 5.9 1410 1413 1413 6.0 1416 6.0 1420 1420	epth to Purge ater Rate (ft) (gal/min) .92 .07 1.2	Temp. (C) 14.51	FIELD MEAS Conduct. (ms/cm) 1.25	pH 6.41	TS Turbidity (ntu) 90.1	REMARKS static water level	
time time Time Wa 1355 5.9 1410 1413 1416 6.0 1420 1420	to Purge Rate (gal/min) .92 .07 1.2	Temp. (C) 14.51	Conduct. (ms/cm) 1.25	рН 6.41	Turbidity (ntu) 90.1	static water level	
Time Wa 1355 5.9 1410 1 1413 6.0 1416 6.0 1420 1	ater Rate (ft) (gal/min) .92 .07 1.2	(C) 14.51	(ms/cm) 1.25	6.41	(ntu) 90.1	static water level	
141014136.014166.014200	.07 1.2						
1413 6.0 1416 6.0 1420						pump on	
1416 6.0 1420							
1420				0.51	13.0		
						Turned off pump, 12 gallons purged	
						Samples collected:	
						unfiltered sample DMW-22AU and	
						field filtered sample DMW-22AF	
1	I					1	
^{>} ump Typ		s/hand ba	ailer for sa	imple col	llection		
Analytical	be: Grundfo		TAL meta	als			

WELL SAMPLING FORM Protect Dzus Fasteners (1-52-03) Protect No. 60135736 SHEET 1 or USCATION USCATION West Islip, Suffolk County, NY 0.3 gallons well value (1-52-03) DATE 5/25/2011 West Islip, Suffolk County, NY 0.3 gallons well value (1-52-03) Celeste Foster/152-03 Celeste Foster/152-03 ONE well value (1-52-03) 0.45.5ft Puwp wrake permit 8 ft The Well value (1-52-03) FIELD MEASUREMENTS REMARKS Celeste Foster/152-03 1410 5.74 Temp. Conduct. PH Turbidity (nu) REMARKS 1410 0.238 6.11 10 11417 5.91 1 14.75 0.238 6.11 10 1412 5.91 1 14.75 0.250 5.95 10 1 14.75 2.82 1 <td< th=""><th>A</th><th>CO</th><th>M</th><th></th><th></th><th></th><th></th><th></th><th>WELL NO. MW-2</th><th></th></td<>	A	CO	M						WELL NO. MW-2	
Docknow Date Sufficiency West Isip, Suffolk County, NY S/25/2011 CLEW NYSDEC One well volume: 6.3 gallons well to: 44.5 ft Pume Private Detrie 8 ft Time Value Purge FIELD MEASUREMENTS REMARKS 6.3 gallons well to: 8 ft 1400 5.74 Conduct. pH Turbidity REMARKS 14.5 ft Pump mixe Detrie 8 ft 1410 Conduct. pH Turbidity REMARKS 14.1 ft 0.238 ft 6.43 10 14.1 ft 14.1 ft 0.250 ft 10 14.1 ft 14.1 ft 0.250 ft 10 14.1 ft 14.0 ft 0.250 ft 10 11.1 ft 10 11.1 ft 10 11.1 ft 10.1 ft 10 11.1 ft 10.1 ft 11.1 ft 0.250 ft 10 11.1 ft 10.1 ft 11.1 ft 10.1 ft 10 11.1 ft 10.1 ft 11.1 ft 11.1 ft 11.1 ft 11.1 ft 11.1 ft <td< th=""><th>WELL</th><th>SVWD</th><th></th><th>эм</th><th></th><th>stopore (</th><th>1 52 022)</th><th></th><th></th><th></th></td<>	WELL	SVWD		эм		stopore (1 52 022)			
CLEAT NYSDEC NYSDEC NUMER OF MARKETOR Celeste Foster/Stephen Wright Celeste Foster/Stephen Wright Celeste Foster/Stephen Wright Celeste Foster/Stephen Wright Celeste Foster/Stephen Wright NAME OF MARKETOR Celeste Foster/Stephen Wright NAME OF MARKETOR PUMP INTAKE DEFTH: 8 ft PUMP INTAKE DEFTH	LOCATION	l			DZUS Fas		1-52-055)		DATE	
NYSDEC Celeste Foster/Stephen Wright ONE WELL VOLUME: 6.3 gallons well to: 44.5 ft PUMP NTAKE DEPTH: 8 ft Time Viet (ft) Purge Temp. Conduct. pH Turbidity REMARKS 1400 5.74 1 14.73 0.238 6.11 10 11 14.73 0.238 6.11 10 11 14.15 0.258 5.95 10 11 14.13 0.258 5.95 10 11 14.07 0.250 5.95 10 11 14.07 0.250 5.95 10 11 14.07 0.250 5.95 10 11 14.07 0.250 5.95 10 11 14.07 0.250 5.95 10 11 14.07 0.250 5.95 10 11 14.07 0.250 5.95 10 11 14.07 0.250 5.95 10 11 14.07 12 14.07 10 10 11 14.07 10 <td>West I</td> <td>slip, Su</td> <td>ffolk Cou</td> <td>nty, NY</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>1</td>	West I	slip, Su	ffolk Cou	nty, NY						1
Deptine FIELD MEASUREMENTS REMARKS 1400 5.74 Conduct pH Turbidity REMARKS 1410 Conduct pH Turbidity static water level pump on 1411 Conduct pH Turbidity static water level pump on 1412 5.91 1 14.73 0.238 6.11 10 pump on 1421 5.91 1 14.70 0.238 6.43 10 pump on 1422 5.91 1 14.07 0.250 5.95 10 pump on 1422 5.91 1 14.07 0.250 5.95 10 pump on 1422 5.91 1 14.07 0.250 5.95 10 pump on 1422 5.91 1 14.07 0.250 5.95 10 pump on 1422 5.91 1 14.07 0.250 5.95 10 pump on 1421 5.91 1		EC								ephen Wright
io Purge (gal/min)	ONE WELI	VOLUME	:	6.3	gallons	WELL TD:	44.5	ft	PUMP INTAKE DEPT	н: 8 ft
Time Water (t) Rate (gal/min) Temp. (C) Conduct. (ms/cm) PH Turbidity (ms/cm) REMARKS 1400 5.74 pump on 1410 5.74 pump on 1412 5.91 1 14.73 0.238 6.43 10 1421 5.91 1 14.07 0.250 5.95 10 1422 Turned off pump, 20 gallons purged 1422 Samples collected: 1422 1422 1422 1423 <						SUREMEN	TS			
1400 5.74	Time	Water	Rate			рН	-		REMARK	S
1412 5.91 1 14.73 0.238 6.11 10 1417 5.91 1 14.15 0.288 6.43 10 1421 5.91 1 14.07 0.250 5.95 10 1422 1 14.07 0.250 5.95 10 Immed off pump, 20 gallons purged 1422 1 14.07 0.250 5.95 10 Immed off pump, 20 gallons purged 1422 1 14.07 0.250 5.95 10 Immed off pump, 20 gallons purged 1422 1 14.07 0.250 5.95 10 Immed off pump, 20 gallons purged 1420 1 14.07 0.250 5.95 10 Immed off pump, 20 gallons purged 1430 1 1 1 10 Immed off pump, 20 gallons purged Immed off pump, 20 gallons purged 1430 1 1 1 1 1 1 1 14 1 1 1 1 1 1 1 14 1 1 1 1 1 <td< td=""><td>1400</td><td></td><td></td><td></td><td></td><td></td><td></td><td>static water</td><td>· level</td><td></td></td<>	1400							static water	· level	
1417 5.91 1 14.15 0.288 6.43 10 1421 5.91 1 14.07 0.250 5.95 10 1422								pump on		
1421 5.91 1 14.07 0.250 5.95 10 1422 Image: Constraint of the symples collected: Image: Constraint of the symples collected: Image: Constraint of the symples collected: 1430 Image: Constraint of the symples collected: Image: Constraint of the symples collected: Image: Constraint of the symples collected: 1430 Image: Constraint of the symples collected: Image: Constraint of the symples collected: Image: Constraint of the symples collected: 1430 Image: Constraint of the symples collection Image: Constraint of the symples collection Image: Constraint of the symples collection 1430 Image: Constraint of the symples collection Image: Constraint of the symples collection Image: Constraint of the symples collection 1430 Image: Constraint of the symples collection Image: Constraint of the symples collection Image: Constraint of the symples collection 1430 Image: Constraint of the symples collection Image: Constraint of the symple collection Image: Constraint of the symple collection 1430 Image: Constraint of the symple collection Image: Constraint of the symple collection Image: Constraint of the symple collection 1430 Image: Constraint of the symple collection Image: Constraint of the symple collection										
1422 Image: Construction of the construc										
1430		5.91	1	14.07	0.250	5.95	10	T 1 (1	00 "	
Image: Sector of the sector										ourged
Image: Image:	1430									and
Image: Structure for sample collection Image: Structure for sample collection Image: Structure for sample collection										
								neid nitered		
	Pump	Туре:	Grundfos	/hand b	ailer for sa	ample co	llection			
Analytical Parameters: TAL metals	Analyti	cal Par	ameters:		TAL meta	als				

WELL SAMPLING FORM Dzus Fasteners (1-52-033) 60135736 LOCATION DATE West Islip, Suffolk County, NY 5 CLIENT NAME OF INSP NYSDEC Celeste F ONE WELL VOLUME : 1.6 gallons Depth FIELD MEASUREMENTS		CO							WELL NO. MW-2	
LOCATION DATE West Islip, Suffolk County, NY 55 CLIENT NAME OF INSP ONE WELL VOLUME : 1.6 gallons WELL TD: 14.4 ft PUMP IN Time Vater Rate (gal/min) (C) (ms/cm) (ntu) 1545 4.38 FIELD MEASUREMENTS (ft) (gal/min) (C) (ms/cm) (ntu) 5tatic water level 1602 pump on 1605 4.61 2 15.87 0.589 6.66 30 1608 4.61 2 15.72 0.604 6.67 15 Turned off pump, 10 g 1615 S Samples collected: U Static water level Sample DMN		SAMP		RM	PROJECT	steners (1-52-033)		PROJECT №. 60135736	SHEET SHEETS
NAME OF INSP Celeste F ONE WELL VOLUME : 1.6 gallons well TD: 14.4 ft PUMP IN Depth to Purge Rate (gal/min) FIELD MEASUREMENTS 14.4 ft PUMP IN Time Water (ft) Purge (gal/min) Temp. (C) Conduct. (ms/cm) pH Turbidity (ntu) 14.4 ft PUMP IN 1545 4.38	CATION						== 000)		DATE	
ONE WELL VOLUME : 1.6 gallons WELL TD: 14.4 ft PUMP IN Depth to Time Purge Rate (gal/min) Temp. (C) Conduct. (ms/cm) pH Turbidity (ntu) 1545 4.38	ENT	siip, Su	ITTOIK COUI	nty, NY					5/25/201 NAME OF INSPECTOR	11
Depth to Purge Rate Temp. (C) Conduct. (ms/cm) pH Turbidity (ntu) 1545 4.38	YSDE	EC							Celeste Foster/S	tephen Wright
to Water (ft)Purge Rate (gal/min)Temp. (C)Conduct. (ms/cm)pHTurbidity (ntu)15454.38Image: Conduct (ms/cm)pHTurbidity (ntu)1602Image: Conduct (ms/cm)PHStatic water level16034.61Image: Conduct (ms/cm)Image: Conduct (ms/cm)pump on16054.61215.870.5896.663016084.61215.720.6046.6715Turned off pump, 10 g1615Image: Conduct (ms/cm)Image: Conduct (ms/cm)Image: Conduct (ms/cm)Image: Conduct (ms/cm)1615Image: Conduct (ms/cm)Image: Conduct (ms/cm)Image: Conduct (ms/cm)Image: Conduct (ms/cm)1615Image: Conduct (ms/cm)Image: Conduct (ms/cm)I	E WELL				•			ft	PUMP INTAKE DEP	гн: 7 ft
(ft) (gal/min) (C) (ms/cm) (ntu) 1545 4.38 static water level 1602 pump on 1605 4.61 2 15.87 0.589 6.66 30 1608 4.61 2 15.72 0.604 6.67 15 Turned off pump, 10 gr 1615 Samples collected: 1615 samples collected: 1615 samples collected: 1615 samples collected:				l	FIELD MEAS	SUREMEN	TS			
1602	Time			-		рН	-		REMAR	(S
1605 4.61 2 15.87 0.589 6.66 30 1608 4.61 2 15.72 0.604 6.67 15 Turned off pump, 10 g 1615 Samples collected: unfiltered sample DMV field filtered sample DMV		4.38						static water	level	
1608 4.61 2 15.72 0.604 6.67 15 Turned off pump, 10 g 1615 Samples collected: unfiltered sample DMV field filtered sample DMV								pump on		
1615 Samples collected: unfiltered sample DM field filtered sample D										
unfiltered sample DMV field filtered sample D		4.61	2	15.72	0.604	6.67	15			purged
field filtered sample D	615									Lond
Image: Contract with and with a second second with with a second second with with a second second with with a second second with with a second second with with a second secon										
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Pump Type: Grundfos/hand bailer for sample collection	-					-	llection			
Analytical Parameters: TAL metals	nalyti	cal Par	ameters:		TAL meta	als				

A=	CO	M						WELL NO. MW-2	
WELL	SAMP		RM	PROJECT Dzus Fas	steners (*	1-52-033)		PROJECT №. 60135736	SHEET SHEETS 1 of 1
LOCATION						,		date 5/25/201	1
CLIENT		ffolk Cour	ily, in f					NAME OF INSPECTOR	
NYSDI	EC							Celeste Foster/St	ephen Wright
ONE WELL		:	6.5	gallons	WELL TD:	44.2	ft	PUMP INTAKE DEPT	н: 7 ft
	Depth to	Purge	I	FIELD MEAS	SUREMEN	TS			
Time	Water (ft)	Rate (gal/min)	Temp. (C)	Conduct. (ms/cm)	рН	Turbidity (ntu)		REMARK	S
1550	4.31						static water	level	
1600							pump on		
1607	4.54	2.3	15.08	0.183	5.99	26.6			
1610 1613	4.54 4.54	2.3 2.3	14.91 14.62	0.176 0.173	5.75 5.61	2.6 0	Turned off r	pump, 30 gallons p	urged
1620	4.04	2.5	14.02	0.175	5.01	0	Samples co		Julgeu
1020								ample DMW-23BL	J and
								sample DMW-23I	
Pump	Туре:	Grundfos	/hand b	ailer for sa	ample col	llection			
Analyti	cal Par	ameters:		TAL meta	als				

VELL S DECATION Vest IS LIENT IYSDE		LING FOI	RM									
Vest Is				Dzus Fas	steners				60135736	1	OF	1
IENT		,							DATE WELL SAMPLED			
	siip, in i	, 							8/22/2012 NAME OF INSPECTOR			
	С								Celeste Foster an	d Rita Pap	agian	
	ONE WE	LL VOLUME :	0.99	gallons	١	WELL TD:	14.4	ft	PUMP INTAKE DEPT			
	Depth to	Purge		FIE	LD MEAS	SUREME	NTS					
Time	Water (ft)	Rate (mL/min)	Temp. (℃)	Conduct. (µs/cm)	DO (mg/L)	рН	ORP	Turbidity (ntu)	RE	MARKS		
9:00	8.33								Static water level			
9:15									pump on			
9:25	8.33	200	20.15	0.228	2.71	6.03	124	0.0	clear			
9:35	8.33	200	20.03		1.80	5.99	114	0.0				
9:45	8.33	200	19.94		1.75	5.99	120	0.0				
9:55	8.33	200	20.05	0.209	1.83	6.03	119	0.0				
0:15									Unfiltered Sample		ollocto	
0.15									+MS/MSD	Divivi-2 C	ollecte	u
0:20									Filtered Sample D	MW-2E C	ollecter	<u>d</u>
0.20									+MS/MSD	10100-21 00	JIECIE	<u>, </u>
0:25									Duplicate Unfiltere	d DMW-5	2 Colle	octe
0:30									Dupicate Filtered			
									1/4" poly tubing pu	it back into	the w	ell.
					 			L				
					<u> </u>							
		L						L				
			1						I			

	SVWD	LING FO		PROJECT Dzus Fas	etonore				project №. 60135736	SHEET 1	OF	sні 1
				DZUS Fat	steriers				DATE WELL SAMPLED		OF	
/est l	slip, NY	/							8/22/2012			
ient YSDI	EC								NAME OF INSPECTOR Celeste Foster al	nd Rita Pa	pagian	
	ONE WE	LL VOLUME :	1.43	gallons	N	WELL TD:	15.0	ft	PUMP INTAKE DEP		2 ft	
	Depth	_		FIE	LD MEAS	SUREME	NTS					
Time	to Water	Purge Rate	Temp.	Conduct.	DO	pН	ORP	Turbidity		EMARKS		
iiiie	(ft)	(mL/min)	(°C)	(µs/cm)	(mg/L)	pn	UN	(ntu)				
0:54	6.23		. ,		,			. ,	Static water level			
1:00	6.23								pump on			
1:05	6.23	350	19.61	0.226	9.53	5.90	158	42.3				
1:15	6.23	350	19.02	0.202	3.23	5.76	194	0.0				
1:25	6.23	350	18.98	0.202	3.10	5.70	217	0.0				
1:35	6.23	350	19.00	0.201	0.31	5.66	223				_	
1:45	6.23	350	19.10	0.202	2.99	5.64	226	0.0				_
1:50									Unfiltered Sample			
1:55									Filtered Sample I	DMW-3F (Collecte	d
									1/4" poly tubing p	out back in	to the w	/ell.
				-								
		ļ						L				
ump	Type:	Peristalti	c Pump									

	CO			PROJECT					WELL NO.	MW-9		SHEE
VELL	SAMP	LING FOR		Dzus Fas	steners				60135736	1	OF	1
OCATION		,							DATE WELL SAMPLED			
Vest I: Lient	slip, NY	,							8/22/2012 NAME OF INSPECTOR			
IYSDE	EC								Celeste Foster an	d Rita Par	bagian	
	ONE WE	LL VOLUME :	1.12	gallons	١	VELL TD:	11.95	ft	PUMP INTAKE DEPT		9 ft	
	Depth	_		FIE	LD MEA	SUREME	NTS					
Time	to Water	Purge Rate	Temp.	Conduct.	DO	pН	ORP	Turbidity	ы	EMARKS		
me	(ft)	(mL/min)	remp. (℃)	(µs/cm)	(mg/L)	рп	UKP	(ntu)				
2:10	5.05	(,,	(0)	(µ=, =)	(()	Static water level			
2:14	5.05								pump on			
2:15	5.05	275	22.42	0.218	3.29	5.94	61.9	clear				
2:25	5.05	275	22.43	0.234	3.33	6.03	45.7					
2:35	5.05	275	22.49	0.234	3.29	6.00	36.6					
2:40	5.05 275 22.49 0.234 3.29 6.00 215 36.6 5.05 275 22.44 0.235 3.20 5.98 212 34.1											
2:45									Filtered Sample D			
2:50									Unfiltered Sample	DMW-9 (Collecte	эd
									1/4" poly tubing p	ut back int	o the w	/ell.
ump	Туре:	Peristalti	c Pump									
nalyti	cal Par	ameters:	TAL M	etals (Tot	al and I	Field Fil	tered)					

				PROJECT					PROJECT No.	SHEET		SHE
		LING FOR	RM	Dzus Fas	steners				60135736 date well sampled	1	OF	1
	slip, NY	,							8/22/2012			
IENT									NAME OF INSPECTOR			
YSD	EC								Celeste Foster ar	nd Rita Pa	pagian	
	ONE WE	LL VOLUME :	6.38	gallons	١	WELL TD:	44.1	ft	PUMP INTAKE DEP	тн: 4	2 ft	
	Depth to	Durgo		FIE	LD MEAS	SUREME	NTS					
Time	Water	Purge Rate	Temp.	Conduct.	DO	рН	ORP	Turbidity	R	EMARKS		
	(ft)	(mL/min)	(℃)	(µs/cm)	(mg/L)	pri	U.U.	(ntu)				
0:45	5.00		. ,		,			. ,	Static water level			
0:59	5.00								pump on			
1:00	5.00	250	18.29	0.158	6.27	5.69	225	61.2	clear			
1:10	5.00	250	18.23	0.171	4.18	5.59	222	66.1				
1:20	5.00	250	17.86	0.175	3.75	5.53	222	54.3				
1:30	5.00	250	17.64	0.177	3.58	5.50	225	51.9				
1:40	5.00	250	17.54	0.178	3.59	5.48	226	36.0				
1:50	5.00	250	17.58	0.177	3.58	5.51	229	27.6				
2:00									Filtered Sample			
2:05									Unfiltered Sample	e DMW-9E	3 Collec	cted
									1/4" poly tubing p	ut back in	o the v	vell.
				-								
					1							
					-							
ump ⁻	Type:	Peristaltic	c Pump									
•			•									

WELL SAMPLING FORM Dzus Fasteners 60135736 80136736 1 or 1 West Isip, NY Cerr NYSDEC Date Fasteners B/22/2012 Date of INSPECTOR Celeste Foster and Rita Papagian One well volume: 1.74 gallons well to: 10.70 ft Pump MTAKE DEPTH 8 ft Time Water Rate Temp. Conduct. D0 PH OR Turbidity REMARKS 17:40 Temp. Conduct. D0 PH OR Turbidity REMARKS 18:00 2.95 275 21.36 0.257 0.54 7.02 -38 156.0 18:20 2.96 275 21.71 0.270 0.56 7.02 -38 156.0 18:20 2.96 275 21.71 0.270 0.56 7.02 -38 156.0 18:20 2.96 275 21.71 0.270 0.56 7.02 -66 14.7 18:40 2.95 275 21.16 0.270 0.59 7.01	A	CO	///							WELL NO.	MW-13A
December Vest Islip, NY ELLENT NYSDEC ONE WELL VOLUME: 1.74 gallons WELL TO: 10.70 ft Purge ft (ft) Furge Rate (ft) Furge Temp. Conduct. DO pH ORP Turbidity (ft) (mL/min) FT (C) (us/cm) (mg/L) PH ORP Turbidity (ft) (us/cm) (mg/L) PH ORP Turbidity TEMP. Conduct. DO pH ORP Turbidity (ft) (us/cm) (mg/L) PH ORP Turbidity 18:10 2.95 275 21.36 0.257 0.54 7.02 -38 156.0 18:20 2.95 275 21.32 0.266 0.59 7.04 -66 21.1 18:30 2.95 275 21.31 0.266 0.59 7.04 -66 14.2 18:40 2.95 275 21.17 0.270 0.56 7.02 -66 14.7 18:40 2.95 275 21.16 0.270 0.59 7.01 -66 14.2 18:40 2.95 275 21.16 0.270 0.59 7.01 -66 14.2 18:45 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	WELL	SAMP			PROJECT	etoners				PROJECT №. 60135736	SHEET SHEETS
Celeste Foster and Rita Papagian ONE WELL VOLUME: 1.74 gallons WELL TO: 10.70 ft PUMP WTAKE DEPTH: 8 ft Time Water FIELD MEASUREMENTS REMARKS 17:40 Time Conduct. D0 pH ORP Turbidity REMARKS 17:40 FIELD MEASUREMENTS REMARKS 17:40 FIELD MEASUREMENTS REMARKS 17:40 FULD MEASUREMENTS REMARKS 18:10 2.95 275 21.36 0.257 0.70 Static water level 18:10 2.95 275 21.16 0.270 0.56 7.02 -38 156.0 18:20 2.95 275 21.16 0.270 0.59 7.01 -66 14.2 18:40 2.95 275 Collected 18:40 Colspan= 4 Collected 18:45 Colspan= 4	LOCATION	N			DZUSTU	5101010				DATE WELL SAMPLED	
Celeste Foster and Rita Papagian ONE WELL VOLUME: 1.74 gallons WELL TO: 10.70 ft PUMP WTAKE DEPTH: 8 ft Time Water FIELD MEASUREMENTS REMARKS 17:40 Time Conduct. D0 pH ORP Turbidity REMARKS 17:40 Colspan="4">Conduct. D0 pH ORP Turbidity 17:40 Colspan="4">Conduct. D0 pH ORP Turbidity 18:10 2.95 275 21.36 0.257 0.54 7.02 -38 156.0 18:20 2.95 275 21.16 0.270 0.56 7.02 -66 14.7 18:40 2.95 275 21.16 0.270 0.56 7.02 -66 14.2 18:40 2.95 275 21.16 0.270 0.56 7.02 -66 14.7 18:40 2.95 2.75 21.46 <td< td=""><td>West I</td><td>slip, NY</td><td>(</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>	West I	slip, NY	(
Defering 1.4.4 gallons weither 10.70 ft Purp marked defering 8 ft Image: defering FELD MEASUREMENTS EMARKS EMARKS EMARKS EMARKS 17:50 Image: defering Image: defering Image: defering Static water level Image: defering 17:50 Image: defering Image: defering Image: defering Image: defering Static water level 17:50 Image: defering Image: defering Image: defering Image: defering Static water level 18:00 Image: defering Image: defering Image: defering Image: defering Image: defering 18:10 2.95 275 21:23 0.266 0.59 7.01 -66 14.7 18:40 Image: defering Image: defering Image: defering Image: defering Image: defering 18:40 Image: defering Image: defering Image: defering Image: defering Image: defering 18:40 Image: defering Image: defering Image: defering Image: defering Image: defering 18:40 Image: defering Image: defering Image: defering Image: defering Image: defering 18:40 Image: defering Image: defering Image:											and Rita Papagian
Depth to (f) Purge Rate (f) FIELD MEASUREMENTS REMARKS 17:40 Imp. Conduct. DO pH ORP Turbidity (ntu) REMARKS 17:50 Imp. Conduct. DO pH ORP Turbidity (ntu) REMARKS 18:00 Imp. Conduct. DO pH ORP Turbidity (ntu) National Static water level 18:00 2.95 275 21.36 0.257 0.54 7.02 -38 156.0 18:20 2.95 275 21.17 0.270 0.56 7.02 -66 14.7 18:30 2.95 275 21.16 0.270 0.59 7.01 -66 14.2 18:45 Imp. Imp. Imp. Imp. Imp. Imp. Imp. 18:45 Imp. Imp. Imp. Imp. Imp. Imp. Imp. 18:45 Imp. Imp. Imp. Imp. Imp. Imp. Imp. Imp.				4 74	acliana			40.70	£4	- -	· -
is waterPurge (nLLmin)Purge (nLMin)Purge (ngLin)Purge (ngLin)Purge (ngLin)REMARKS17:40IIIIIIIIII17:40IIIIIIIIII17:50IIIIIIIIIII17:50IIIIIIIIIII17:50III				1.74	-				Tt	PUMP INTAKE DE	PTH: OIL
Ime (t) Water (t) Temp. (t) Conduct. (u) Do (mg/L) PH ORP Turbidity (nu) REMARKS 17:40 - - - - Static water level pump on, no water 17:50 - - - - - water 18:10 2.95 275 21.36 0.257 0.54 7.02 -38 156.0 18:20 2.95 275 21.17 0.270 0.56 7.02 -66 14.7 18:40 2.95 275 21.16 0.270 0.56 7.02 -66 14.7 18:40 2.95 275 21.16 0.270 0.59 7.04 -66 14.7 18:40 - - - - - - - - - 18:40 - - - - - - - - 18:40 - - - - - - - <td></td> <td></td> <td></td> <td></td> <td>FIE</td> <td></td> <td>SUREME</td> <td>INTS</td> <td></td> <td></td> <td></td>					FIE		SUREME	INTS			
(n) (n) (vs/cm) (ng/L) (nu) Static water level 17:40 - - - - Static water level 17:50 - - - - water 18:00 - - - - water 18:01 2.95 275 21.30 0.266 0.59 7.04 -66 14.7 18:02 2.95 275 21.17 0.270 0.56 7.02 -66 14.7 18:30 2.95 275 21.16 0.270 0.59 7.01 -66 14.2 18:45 - - - - - - - 18:45 - - - - - - - 18:45 - - - - - - - - 18:45 - - - - - - - - - 18:45 <td>Time</td> <td></td> <td></td> <td>Temp.</td> <td>Conduct.</td> <td>DO</td> <td>рH</td> <td>ORP</td> <td>Turbidity</td> <td>4</td> <td>REMARKS</td>	Time			Temp.	Conduct.	DO	рH	ORP	Turbidity	4	REMARKS
17:50 Image: state of the state of th		(ft)					•	-	-		
18:00 v v v v v water 18:10 2.95 275 21.36 0.257 0.54 7.02 -38 156.0 18:20 2.95 275 21.13 0.266 0.59 7.04 -66 21.1 18:30 2.95 275 21.17 0.270 0.59 7.01 -66 14.7 18:40 2.95 275 21.16 0.270 0.59 7.01 -66 14.7 18:40 2.95 275 21.16 0.270 0.59 7.01 -66 14.2 18:40 2.95 275 21.16 0.270 0.59 7.01 -66 14.2 18:40 2.95 275 21.16 0.270 0.59 7.01 -66 14.2 18:50 1 1 1 0.270 0.59 7.01 -66 14.2 18:50 1 1 1 1 1 1 1 1 18:50 1 1 1 1 1				ļ'	 	<u> </u>		<u> </u>			
18:10 2.95 275 21.36 0.257 0.54 7.02 -38 156.0 18:20 2.95 275 21.23 0.266 0.59 7.04 -66 21.1 18:30 2.95 275 21.17 0.270 0.56 7.02 -66 14.7 18:40 2.95 275 21.16 0.270 0.59 7.01 -66 14.7 18:40 2.95 275 21.16 0.270 0.59 7.01 -66 14.2 18:45 2.95 2.75 21.16 0.270 0.59 7.01 -66 14.2 18:45 2.95 2.75 21.16 0.270 0.59 7.01 -66 14.2 18:45 2.95 2.75 21.17 0.270 1.95 7.02 -66 14.2 18:45 2.95 2.75 21.17 0.270 1.96 7.02 -66 14.2 18:50 2.95 2.75 21.17 2.75 2.75 21.75 2.75 21.75 18:50 </td <td></td> <td></td> <td>───</td> <td><u> </u>'</td> <td> </td> <td>──</td> <td>ļ'</td> <td>┝───</td> <td>───</td> <td><u> </u></td> <td>ter</td>			───	<u> </u> '	 	──	ļ'	┝───	───	<u> </u>	ter
18:20 2.95 275 21.23 0.266 0.59 7.04 -66 21.1 18:30 2.95 275 21.17 0.270 0.56 7.02 -66 14.7 18:40 2.95 275 21.16 0.270 0.59 7.01 -66 14.7 18:40 2.95 275 21.16 0.270 0.59 7.01 -66 14.7 18:45			275	21 36	0.257	0.54	7.02	-38	156.0	Water	
18:30 2.95 275 21.17 0.270 0.56 7.02 -66 14.7 18:40 2.95 275 21.16 0.270 0.59 7.01 -66 14.2 18:45										+	
18:40 2.95 275 21.16 0.270 0.59 7.01 -66 14.2 18:45										+	
18:50										<u> </u>	
18:50											
Image: Sector of the sector			<u> </u>	' <u>ـــــا</u>		<u> </u>		[<u> </u>		
Image: Sector sector	18:50			<u> </u> '	 		ļ'			Filtered Sample	DMW-13AF Collected
Image: Sector sector		<u> </u>	───	 '	 		i	<u> </u>	───	1/4" poly tubing	nut back into the well
		├───	├───	┝───┘	<u> </u>	┼───	'	├───	├───		put back into the wen.
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			<u> </u>			<u> </u>	<u> </u>		<u> </u>		
	Pump	Type:	Peristalti	c Pump)						
Analytical Parameters: TAL Metals (Total and Field Filtered)		·) P - ·		.							
	Analyti	ical Par	ameters:	TAL M	etals (Tot	tal and	Field Fi	ltered)			

				PROJECT					WELL NO. PROJECT No.	MW-1	02	SHE
		LING FOR	RM	Dzus Fas	steners				60135736	1	OF	1
	⊧ slip, NY	,							DATE WELL SAMPLED 8/22/2012			
LIENT	sip, i v i								NAME OF INSPECTOR			
IYSDE	EC								Celeste Foster an	d Rita Pa	pagian	
	ONE WE	LL VOLUME :	6.79	gallons	١	VELL TD:	44.4	ft	PUMP INTAKE DEPT	н: 39.	4 ft	
	Depth to	Purge		FIE	LD MEAS	SUREME	NTS					
Time	Water (ft)	Rate (mL/min)	Temp. (℃)	Conduct. (µs/cm)	DO (mg/L)	рН	ORP	Turbidity (ntu)	RI	MARKS		
6:15	2.77								Static water level			
6:25									pump on			
6:35	2.79	275	17.80	0.129	19.02	5.76	254	8.5	clear			
6:45	2.77	275	18.72	0.135	15.93	5.76	255	4.3				
6:55	2.77	275	18.43	0.135	15.69	5.68	260	0.0				
7:05	2.77	275	18.98	0.136	14.82	5.67	263	0.0				
7:15	2.77	275	18.85	0.136	14.49	5.69	262	0.0				
7.00									l la filta na di Caranda			
7:20 7:25									Unfiltered Sample			
7.25									Filtered Sample D		r Colle	ciec
									1/4" poly tubing pu	it back in	to the v	vell
				-								
				-								
						1						
umo -	Type:	Peristalti	c Pumn									
P		. eneration	p									
nalvti	cal Par	ameters:	ται Μ	etals (Tot	al and I	Field Fi	ltered)					

A/1771 I									PROJECT No.	SHEET		SHE
		LING FOR	< IVI	Dzus Fas	steners				60135736 Date well sampled	1	OF	1
Vest Is	slip, NY	/							8/22/2012			
lient NYSDE	-0								NAME OF INSPECTOR			
1120	-0								Celeste Foster an	d Rita Pa	pagian	
	ONE WE	LL VOLUME :	2.14	gallons	,	WELL TD:	18.8	ft	PUMP INTAKE DEPT	н: 2	7 ft	
	Depth to	Purge		FIE	LD MEA	SUREME	NTS					
Time	Water	Rate	Temp.	Conduct.	DO	рН	ORP	Turbidity	RE	MARKS		
	(ft)	(mL/min)	(°C)	(µs/cm)	(mg/L)			(ntu)				
14:20	5.69								Static water level			
14:30									pump on			
14:35	5.69	300	19.12	0.203	2.61	5.74	240	0.0	clear			
14:45	5.69	300	19.11	0.212	2.62	5.67	245	0.0				
14:55	5.69	300	19.01	0.212	4.48	5.63	252	0.0				
15:05	5.69	300	18.48	0.213	4.08	5.61	258	0.0				
15:15	5.69	300	18.44	0.214	4.08	5.60	260	0.0				
15:25	5.69	300	18.44	0.214	4.09	5.60	261	0.0				
15:30									Unfiltered Sample			oto
15:35									Filtered Sample D			
15.55									Fillered Sample D	10100-15A	Colle	Lieu
									1/4" poly tubing pu	it back int	o the w	المر
												/011.
		ļ						ļ				
		L										
					1				1			
umn -	Type	Peristalti	Pump									
amp	i ype.	- cristailli	s i unp									

	CO			PROJECT					WELL NO.	MW-	150	SHEE
VELL	SAMP	LING FOR	RM	Dzus Fas	steners				60135736	1	OF	1
OCATION	-								DATE WELL SAMPLED			
Vest I: Lient	slip, NY	/							8/22/2012 NAME OF INSPECTOR			
VYSDI	EC								Celeste Foster ar	d Rita Pa	apagian	I
	ONE WE	LL VOLUME :	12.80	gallons	,	WELL TD:	84.2	ft	PUMP INTAKE DEP	гн: 76	6.2 ft	
	Depth			FIE	LD MEA	SUREME	NTS					
Time	to Water	Purge Rate	Temp.	Conduct.	DO	рН	ORP	Turbidity		EMARKS		
me	(ft)	(mL/min)	remp. (℃)	(µs/cm)	(mg/L)	рп	UKF	(ntu)	ĸ	LIVIARNO		
14:10	5.65		(- /	() · · · · /	(3 /			()	Static water level			
14:25	5.70								pump on			
14:35	5.70	275	18.82	0.314	1.49	5.32	248	5.8	clear			
14:45	5.70	275	18.77	0.314	1.39	5.27	256	121	light brown			
14:55	5.70	275	18.62	0.313	1.80	5.25	260	10.4	clear			
15:05	5.70	275	18.60		1.81	5.23	263	35.4				
15:15	5.70	275	18.14	0.311	1.89	5.21	269	32.3				
15:20									Filtered Sample	DMW-15	3F Colle	cted
15:25									Unfiltered Sample	e DMW-1	5B Coll	ectec
									1/4" (OD) poly tub		d not go) bacl
									into well, discarde	ed		
									l			
				-	-				-			
Pump	Type:	Peristalti	c Pump	1								
nalyti	cal Par	ameters:	TAL M	etals (Tot	al and I	Field Fi	ltered)					

	CO			PROJECT					WELL NO.	IVIV	V-18		SHEE
VELL	SAMP		RM	Dzus Fas	steners				60135736		1	OF	1
OCATION	l								DATE WELL SAMPLED		-		-
Vest I:	slip, NY	/							8/23/2012 NAME OF INSPECTOR				
IENI VYSDI	FC								Celeste Foster a	nd Rita	Pana	aian	
	_0											-	
	ONE WE	LL VOLUME :	1.38	gallons	v	/ELL TD*:	13.4 *difficult to	ft get past 6.7 ft	PUMP INTAKE DEF	PTH:	10	ft	
	Depth to	Purge		FIE	LD MEAS	SUREME							
Time	Water	Rate	Temp.	Conduct.	DO	pН	ORP	Turbidity	- F	REMARK	s		
	(ft)	(mL/min)	(°C)	(µs/cm)	(mg/L)	P	••••	(ntu)					
17:30	4.92								Static water level				
17:35									pump on				
17:40	4.92	300	19.62	0.255	6.71	6.61	181	228					
17:50	4.92	300	18.94	0.218	1.96	6.29	190	0.0					
18:00	4.92	300	18.89	0.214	2.01	6.17	197	0.0					
18:10	4.92	300	18.80	0.214	1.99	6.14	199	0.0					
18:20	4.92	300	18.78	0.212	1.99	6.14	200	0.0					
18:25									Filtered Sample				
8:30									Unfiltered Sampl	e DMW	-18 C	Collec	ted
									1/4" poly tubing p	out back	c into ⁻	the w	ell.
									1				
									1				
									1				
	l		l	1	1	l	l	1	I				
umn	Type [.]	Peristaltic	: Pump	1									
чр	. , , , , , , , , , , , , , , , , , , ,	· onotanti	e i amp										
noluti	ool Dor	ameters:		otolo (Tot		Field Fi	ltorod)						

				PROJECT					WELL NO. PROJECT No.	MW-22		SHE
		LING FOI	RM	Dzus Fas	steners				60135736	1	OF	1
CATION	slip, NY	,							DATE WELL SAMPLED 8/23/2012			
	511p, 141								NAME OF INSPECTOR			
IYSDE	EC								Celeste Foster ar	nd Rita Pa	pagian	
	ONE WE	LL VOLUME :	1.28	gallons	١	WELL TD:	14.32	ft	PUMP INTAKE DEP	тн: 1	0 ft	
	Depth	_		FIE	LD MEA	SUREME	INTS					
Time	to Water	Purge Rate	Temp.	Conduct.	DO	pН	ORP	Turbidity		EMARKS		
me	(ft)	(mL/min)	(℃)	(µs/cm)	(mg/L)	рп	OKF	(ntu)		LWARRS		
4:30	6.45	,	(- /	(Part /	(3)				Static water level			
4:35	6.45								pump on			
4:45	6.45	250	30.08	0.310	1.32	6.68	-37	0.0				
4:55	6.45	250	27.90	0.303	0.94	6.58	-66	147	rust colored			
5:05	6.45	250	27.40	0.310	0.76	6.63	-90	349				
5:15	6.45	250	27.67	0.311	0.70	6.65	-100	200				
5:25	6.45	250	27.57	0.375	0.76	6.62	-99	15.9				
5:35	6.45	250	27.02	0.404	0.72	6.61	-100	31.5				
5:45	6.45	250	27.03	0.407	0.75	6.69	-108	49.8				
6:05	6.45	250	27.07	0.409	0.75	6.68	-106	36.3				
6:15	6.45	250	27.03	0.409	0.77	6.68	-108	35.2				
10.00												
6:20 6:25									Filtered Sample D			
0.25									Unfiltered Sample			ecte
									1/4" poly tubing p	ut back int	o the w	المر
									1/4 poly tubility p			von.
)	Turce	Doriotali	o Dunor									
ump	i ype:	Peristalti	e Pump									

				PROJECT					WELL NO. PROJECT No.	MW-22 SHEET		SHE
		LING FOR	RM	Dzus Fas	steners				60135736	1	OF	1
	slip, NY	/							DATE WELL SAMPLED 8/23/2012			
LIENT	siip, iv i								NAME OF INSPECTOR			
IYSDE	EC								Celeste Foster and	l Rita Pap	bagian	
	ONE WE	LL VOLUME :	6.23	gallons	١	VELL TD:	44.5	ft	PUMP INTAKE DEPTH	e 40) ft	
	Depth	_		FIE	LD MEAS	SUREME	NTS					
Time	to Water	Purge Rate	Tomm	Conduct	DO	mLl		Turkidity	DE			
Time	Water (ft)	(mL/min)	Temp. (℃)	Conduct. (µs/cm)	DO (mg/L)	рН	ORP	Turbidity (ntu)	RE	MARKS		
4:30	6.28	((0)	(µs/cm)	(iiig/L)			(iitu)	Static water level			
4:40	6.28								pump on			
4:50	6.28	250	17.16	0.290	4.15	6.26	185	0.0				
5:00	6.28	250	17.31	0.289	2.13	6.22	187	0.0				
5:10	6.28	250	17.08	0.278	1.06	6.12	191	0.0				
5:20	6.28	250	16.89	0.275	0.96	6.10	190	0.0				
5:30	6.28	250	16.56	0.275	0.86	6.10	189	0.0				
5:40	6.28	250	16.75	0.274	0.81	6.14	183	0.0				
5:50	6.28	250	16.50	0.272	0.70	6.13	181	0.0				
6:00	6.28	250	16.55	0.272	0.68	6.12	180	0.0				
6:10	6.28	250	16.58	0.272	0.64	6.10	180	0.0				
6:12									Unfiltered Sample	DMW-22	B Colle	ecte
6:17									Filtered Sample D	MW-22BF	- Colle	ctec
									1/4" poly tubing put	t back int	o the w	vell.
	_		_									
ump ⁻	l ype:	Peristalti	c Pump									

	CO			PROJECT					WELL NO.	MW-23	DA .	SHEE
VELL	SAMP		RM	Dzus Fas	steners				60135736	1	OF	1
OCATION									DATE WELL SAMPLED			
Vest Is	slip, NY	/							8/22/2012 NAME OF INSPECTOR			
	EC								Celeste Foster an	d Rita Par	pagian	
	ONE WE	LL VOLUME :	1.48	gallons	,	WELL TD:	14.4	ft	PUMP INTAKE DEPT	тн: 12	2 ft	
	Depth to	Purge		FIE	LD MEA	SUREME	NTS					
Time	Water	Rate	Temp.	Conduct.	DO	pН	ORP	Turbidity	RI	EMARKS		
	(ft)	(mL/min)	(°C)	(µs/cm)	(mg/L)			(ntu)				
17:20	5.30								Static water level			
17:25	5.30								pump on			
17:30	5.30	275	22.45		4.10	6.47	-75	0.0				
17:40	5.30	275	22.49	0.494	1.25	6.52	-44	0.0				
17:50	5.30	275	22.58	0.492	1.20	6.53	-50 -59	0.0				
18:00	5.20	275	22.60	0.491	1.21	6.56	0.0					
10.05												<u> </u>
18:05 18:10									Filtered Sample D Unfiltered Sample			
10.10									Unimered Sample	DIVIVV-23		JCIEC
									1/4" poly tubing p	It back int	o tha w	
												/611.
'ump	Type:	Peristalti	c Pump									
-				—								
nalyti	cal Par	ameters:	I AL M	etais (1 ot	ai and	riela Fi	itered)					

ONE WELL VOLUME : 6.45 gallons WELL TD: 44.2 ft PUMP INTAKE DE Time Depth to (ft) Purge Rate (mL/min) Temp. (°C) Conduct. (µs/cm) DO (mg/L) pH ORP Turbidity (ntu) Image: Conduct. (ntu) DO (ntu) pH ORP Turbidity (ntu) Image: Conduct. (ntu) DO (ntu) pH ORP Turbidity (ntu) Image: Conduct. (ntu) DO (ntu) PUMP INTAKE DE 16:10 4.62 Temp. (°C) Conduct. (µs/cm) DO (mg/L) PH ORP Turbidity (ntu) Image: Conduct. (ntu) DO (ntu) Static water level pump on 16:25 4.60 250 19.06 0.184 1.28 6.12 -88 0.0 Clear 16:35 4.60 250 19.17 0.207 1.00 5.91 -45 0.0 Image: Conduct Note: Conduct	MW-23B			
Vest Islip, NY B/22/2012 NAME OF INSPECTOR Celeste Foster a ONE WELL VOLUME: 6.45 gallons well To: 44.2 ft PUMP INTAKE DE Image: Construct of the second secon	1 of 1			
Lient NAME OF INSPECTOR Celeste Foster a ONE WELL VOLUME : 6.45 gallons WELL TD: 44.2 ft PUMP INTAKE DE Depth (t) Purge (mL/min) Temp. (C) Conduct. (µs/cm) DO (mg/L) PH ORP Turbidity (ntu) 66:10 4.60 250 19.06 0.184 1.28 6.12 -88 0.0 clear 16:25 4.60 250 19.23 0.203 1.24 5.91 -45 0.0 16:35 4.60 250 19.11 0.207 1.00 5.91 -6 0.0 16:55 4.60 250 19.11 0.207 1.03 5.94 -1 0.0 17:10 Image: Contract in the image: Contr	DATE WELL SAMPLED			
INSDEC Celeste Foster a ONE WELL VOLUME : 6.45 gallons WELL TD: 44.2 ft PUMP INTAKE DE Time Purge (ft) Temp. Conduct. (C) DO (mg/L) PH ORP Turbidity (nut) Pump INTAKE DE 16:10 4.62 - - - Static water leve pump on - 16:25 4.60 250 19.06 0.184 1.28 6.12 -88 0.0 clear - 16:35 4.60 250 19.17 0.207 1.00 5.91 -6 0.0 -				
ONE WELL VOLUME: 6.45 gallons WELL TO: 44.2 ft PUMP INTAKE DE Image: Time water (ft) Purge (ft) (mL/min) FIELD MEASUREMENTS Temp. Conduct. DO (mg/L) PH ORP Turbidity (ntu) 16:10 4.62 Image: Time (ntu) FIELD MEASUREMENTS Static water leve pump on the static water leve pump	and Rita Papagian			
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nalytical Parameters: TAL Metals (Total and Field Filtered)				