



Environment

Prepared for:
Superfund Standby Program
NYSDEC
Albany, NY

Prepared by:
AECOM
Chestnut Ridge, NY
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January 2012

Periodic Review Report Dzus Fasteners Site, Site #1-52-033 Work Assignment No. D004445-14.3



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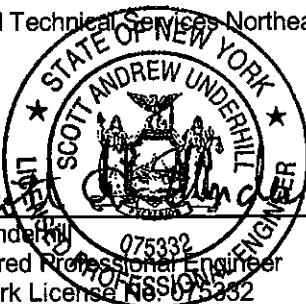
Periodic Review Report Dzus Fasteners Site, Site #1-52-033 Work Assignment No. D004445-14.3

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.


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January 24, 2011
Date

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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 October 2010 to November 2011.

The Dzus Fastener facility was used to manufacture 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 eradicator, 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 led to the determination that the site is in general compliance with the applicable requirements as presented in the ROD.

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 show a general increase in cadmium concentration over the last 3 years. The trend is especially prominent at the sediment sampling location immediately downgradient of the storm sewer outfall behind the nearby shopping plaza (SED-6 location). Based on available contaminant data, AECOM recommends collection of first-flush sample from the stormwater outfall. It is also AECOM's recommendation to re-inspect 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 are inconclusive in regards to the temporal trend in contaminant concentrations and effectiveness of remedial actions undertaken at the lake. Continued monitoring of the current site is necessary for evaluating the cadmium concentrations.
- 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.
- Re-evaluate the need to include cyanide on the analyte list for future sampling events based on the contaminants of concern identified 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 sampling procedures on a five-quarter basis.
- 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 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 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, if available, the Site Management Plan (SMP);
- Evaluate all treatment units, and recommend repairs or changes, if necessary;
- 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 1100 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 and 2010. Fish Tissue sampling was completed in 2006, 2007 and 2010. 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 ppm 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 eradicator. 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, 2007) and Project Management Plan (Earth Tech, February 2007) have been developed under the current work assignment. 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 2a).

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 2011:

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

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 and 2011). Monitoring well MW-1

was destroyed and therefore was not sampled in 2008, 2010 or 2011. A site visit of AECOM personnel on August 18, 2009 (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.

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, five sampling events (groundwater, surface water and sediment) have been conducted at the Site and three 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 and 2011.

Following summarizes the current monitoring program:

- Water levels in monitoring wells are currently measured on a five quarter basis;
- Groundwater samples are collected from monitoring wells on a five-quarter basis and analyzed for TAL metals. The current groundwater sampling effort includes 14 monitoring 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. 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 currently 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 continued in 2010; and
- Preparation of sampling reports that summarize analytical results of each sampling round.

In June 2006, August 2007, November 2008, March 2010 and May 2011, 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 presented 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 presented 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 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 thru 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 just 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.

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 and May 2011:

| Activity | Required Frequency (X) | Compliance Dates |
|------------------------|------------------------|------------------|
| | Five Quarter | |
| Groundwater Monitoring | X | 2006-2011 |
| Water Level Monitoring | X | 2006-2011 |
| Surface Water Sampling | X | 2006-2011 |
| Sediment Sampling | X | 2006-2011 |
| Fish Tissue Sampling | X | 2006, 2007, 2010 |

Groundwater Level Measurement

Groundwater level measurements from 2006 through 2011 in the 14 monitoring wells (13 in 2008 and 2010) are presented in Table 2. Comparison of the groundwater elevations in the monitoring wells shows that the general groundwater flow direction is towards the southwest. A groundwater contour map is presented in Figure 3 and was constructed using data from the May 2011 sampling event.

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 and 2011. The summary of groundwater results for these sampling events is presented in Table 3. A summary of groundwater results is presented in Figure 4.

Concentrations of ten metals have been detected above their Class GA criteria at least once during the four rounds of groundwater sampling at the Site. These metals are antimony, arsenic, cadmium, chromium, iron, lead, manganese, selenium, sodium, and thallium. Concentrations of chromium and selenium exceeded the criterion for the first time during the March 2010 sampling event.

Antimony – Class GA criterion of 3 micrograms per liter (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 µg/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 µg/L in MW-22A.
- **May 2011 – Not detected in any of the 13 filtered or unfiltered 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 seven of 13 unfiltered samples and 5 of 13 filtered samples. No exceedances.**

Cadmium – Class GA criterion of 5 µg/L

- June 2006 – Detected in all 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 µg/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 µg/L in MW-22A.
- **May 2011 – Detected in nine of 13 unfiltered samples; seven exceedances: maximum of 924 µg/L in MW-23A. Detected in six of 23 filtered samples; six exceedances, maximum concentration of 13.1 µg/L in MW-3.**

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 in 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.**

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 29,700 µg/L in MW-23A.

- November 2008 – Detected in 12 of 13 monitoring wells. Eight exceedances: maximum 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 of the Final Groundwater Sampling Report (May 2011 Sampling Event), (AECOM, 2011b).

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

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 µg/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.**

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.**

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.**

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 µg/L in MW-13A.
- **May 2011 – Not detected in any of the 13 unfiltered or 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 the Round 5 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 nephelometric units (NTU) at the time of sampling in 12 of the 13 samples; the turbidity in MW-3 was 331 NTU (Table 4). The turbidity was 10 NTU or less in seven of the samples, and between 12 and 40 NTU in the other six. Due to the anomalous results in sample MW-23B (see discussion in Section 4.5), the filtered sample data are suspect and therefore not included in the discussion.

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. However, as discussed in greater detail in the Groundwater Sampling Report, May 2011 Sampling Event (AECOM, 2011b), the metals data from MW-23B are not included in this discussion as the data appeared anomalous but a source of the error could not be determined and the data were flagged as “use with caution”; so only 12 filtered/unfiltered pairs are included in this discussion. The “percent dissolved” shown on the table is

the ratio of the filtered sample concentration to the total (unfiltered) sample concentration. In order to calculate a value where a metal was not detected in the filtered sample, a value of “0” is used on the table (rather than “ND”).

Concentrations of metals that typically exist primarily in the dissolved phase (i.e., sodium, potassium, and calcium) were generally similar in the filtered and unfiltered samples, regardless of the sample turbidity. The remaining metals showed consistently large decreases in the filtered samples. Aluminum was detected in nine samples at concentrations from 99 to 8,520 µg/L, but was not detected in any of the filtered samples. Concentrations of beryllium, copper, chromium (except MW-22A), lead, mercury, silver, and vanadium also showed a similar pattern (not detected or detected at much lower concentrations in the filtered samples).

The highest concentration of iron detected at the Site (88,900 µg/L in MW-2) was in a sample with low turbidity (8.5 NTU). The sample from MW-15B had low turbidity (8 NTU) and in that sample the dissolved (filtered sample) concentrations of all 11 detected metals were similar to (80 to 105 percent of the concentration in the filtered sample). However, significantly lower concentrations of several metals (aluminum, iron, manganese) were observed in the filtered samples (relative to the unfiltered sample) at which the turbidity was reported as “0” in the unfiltered sample.

In the unfiltered sample with the highest turbidity (331 NTU in MW-3), the iron concentration (7,430 µg/L) was in the middle of the range of detections in unfiltered samples. Iron generally followed this pattern, with the exception of MW-15B (dissolved concentration only 20 percent less than the total concentration). The ratio of dissolved to filtered concentrations was variable for a number of metals, such as arsenic (0 to 89 percent), barium (2.3 to 105 percent), cadmium (0 to 50 percent, although all but one of the eight were less than 20 percent), cobalt (0 to 85 percent), manganese (0 to 114 percent), nickel (0 to 105 percent), and zinc (11.5 to 99 percent).

With the exception of aluminum, the concentrations of metals detected in the unfiltered sample from MW-3 were generally in the middle or upper middle of the concentrations observed in unfiltered samples; and reductions in the concentrations of metals in the filtered sample were not noticeably greater than that seen in samples with much lower turbidity. Interestingly, MW-3 was one of five samples (excluding MW-23B) in which the unfiltered sample cadmium concentration was greater than 10 µg/L (74 µg/L in MW-3, and ranging from 19 µg/L in MW-9 to 924 µg/L in MW-23A); despite the wide range of concentrations in the unfiltered samples, the cadmium concentrations in the filtered samples were all similar (9.5 µg/L to 13.1 µg/L).

A second round of filtered samples will be collected during the next five-quarter sampling event scheduled for August 2012. These two data filtered data sets will be used to evaluate whether filtered sample data provide information useful in characterizing long terms trends in metals concentrations.

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 five sampling events are summarized below.

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 five samples at concentrations ranging from 387 µg/L to 738 µg/L, all of which exceeded the Class A criterion of 300 µg/L.
- Manganese was detected in all five samples at concentrations ranging from 862 µg/L to 1,610 µg/L, all of which exceeded the criterion of 300 µg/L.
- Sodium detected in all five samples but only exceeded the criterion of 20,000 µg/L during event 4 (22,500 µg/L).
- **May 2011 sampling event: exceedances of iron and manganese.**

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 five samples at concentrations ranging from 478 µg/L to 819 µg/L, all of which exceeded the Class A criterion of 300 µg/L.
- Manganese was detected in all five samples at concentrations ranging from 819 µg/L to 1,560 µg/L, all of which exceeded the criterion of 300 µg/L.
- Sodium was detected in all five samples but only exceeded the 20,000 µg/L criterion during the Round 4 sampling event (22,000 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.
- **May 2011 sampling event: exceedances of iron and manganese.**

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 five samples at concentrations ranging from 280 µg/L to 788 µg/L, four of which (all except Round 2) exceeded the Class A criterion of 300 µg/L.
- Manganese was detected in all five samples at concentrations ranging from 73.9 µg/L to 1,790 µg/L, four of which (all except Round 2) exceed the criterion of 300 µg/L.

- Sodium was detected during all five sampling events but only exceeded the 20,000 µg/L criterion during the fourth sampling event at 23,300 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.
- **May 2011 sampling event: exceedances of iron and manganese.**

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 above the Class A criterion of 300 µg/L during all five sampling events at concentrations ranging from 322 µg/L to 741 µg/L.
- Manganese was detected in all five samples at concentrations ranging from 135 µg/L to 1,630 µg/L, four of which (all except Round 2) exceeded the 300 µg/L criterion.
- Sodium was detected in all five samples but only exceeded the 20,000 µg/L criterion during the Round 4 sampling event (22,900 µg/L).
- **May 2011 sampling event: exceedances of iron and manganese.**

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 or 5.
- Cadmium was detected in all five samples at concentrations ranging from 3 µg/L to 8.8 µg/L, four of which (all except Round 3) exceeded the Class A criterion of 5 µg/L.
- Iron was detected above the Class A criterion of 300 µg/L during all five 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 five sampling events at concentrations ranging from 450 µg/L to 1,420 µg/L.
- Sodium was detected during all five sampling events at concentrations ranging from 18,100 µg/L to 26,900 µg/L, four of which (all except Round 3) exceeded the Class A criterion of 20,000 µg/L.
- **May 2011 sampling event: exceedances of cadmium, 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 five sampling events at concentrations ranging from 639 µg/L to 5,400 µg/L.
- Manganese (Class A criterion of 300 µg/L) was detected above the criterion during all five 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 five sampling events at concentrations ranging from 20,500 µg/L, 33,800 µg/L.
- **May 2011 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 re-dredged 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. 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. Ten 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 five 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 five sampling events at concentrations ranging from 1.5 mg/kg to 16.1 mg/kg, four 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 five sampling events at concentrations ranging from 11.6 mg/kg to 81.2 mg/kg.
- Chromium was detected during all five sampling events at concentrations ranging from 2.8 mg/kg to 50 mg/kg, three of which exceeded the guidance value of 26 mg/kg.

- Copper was detected above the guidance value of 16 mg/kg during all five sampling events at concentrations ranging from 38.6 mg/kg to 127 mg/kg.
- Iron was detected during all five sampling events at concentrations ranging from 3,880 mg/kg to 44,600 mg/kg, two of which exceeded the guidance value of 20,000 mg/kg.
- Lead was detected during all five sampling events at concentrations ranging from 19.3 mg/kg to 226 mg/kg, four of which (all except Round 2) exceeded the guidance value of 31 mg/kg.
- Manganese was detected during all five sampling events at concentrations ranging from 181 mg/kg to 22,600 mg/kg, four of which (all except Round 3) exceeded the guidance value of 460 mg/kg.
- Mercury was detected during all five sampling events at concentrations ranging from 0.0071 mg/kg to 0.38 mg/kg, four of which (all except Round 2) exceeded the guidance value of 0.15 mg/kg).
- Nickel was detected during all five sampling events at concentrations ranging from 3 mg/kg to 24.1 mg/kg, three of which exceeded the guidance value of 16 mg/kg.
- Zinc was detected during all five sampling events at concentrations ranging from 71.6 mg/kg to 572 mg/kg, four of which (all except Round 2) exceeded the guidance value of 120 mg/kg.
- **May 2011 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 five sampling events at concentrations ranging from 1.8 mg/kg to 20.2 mg/kg, three of which exceeded the guidance value of 6 mg/kg.
- Cadmium was detected above the guidance value of 0.6 mg/kg during all five sampling events at concentrations ranging from 12.5 mg/kg to 133 mg/kg.
- Chromium was detected during all five sampling events at concentrations ranging from 6.5 mg/kg to 49.4 mg/kg, three of which exceeded the guidance value of 26 mg/kg.
- Copper was detected during all five sampling events at concentrations ranging from 15.6 mg/kg to 210 mg/kg, four of which exceeded the guidance value of 16 mg/kg.
- Iron was detected during all five sampling events at concentrations ranging from 3,850 mg/kg to 27,500 mg/kg, two of which exceeded the guidance value of 20,000 mg/kg.
- Lead was detected during all five sampling events at concentrations ranging from 25.8 mg/kg to 375 mg/kg, four of which (all except Round 3) exceeded the guidance value of 31 mg/kg.
- Manganese was detected during all five sampling events at concentrations ranging from 153 mg/kg to 3,510 mg/kg, four of which (all except Round 1) exceeded the guidance value of 460 mg/kg.

- Mercury was detected during all five sampling events at concentrations ranging from 0.18 mg/kg to 0.5 mg/kg, three of which exceeded the guidance value of 0.15 mg/kg.
- Nickel was detected during all five sampling events at concentrations ranging from 3.2 mg/kg to 22 mg/kg, three of which exceeded the guidance value of 16 mg/kg.
- Zinc was detected during all five sampling events at concentrations ranging from 67.9 mg/kg to 406 mg/kg, four of which exceeded the guidance value of 120 mg/kg.
- **May 2011 sampling event: exceedances of arsenic, cadmium, chromium, copper, 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 five sampling events at concentrations ranging from 1.5 mg/kg to 27.7 mg/kg.
- Copper was detected during all five sampling events at concentrations ranging from 2.7 mg/kg to 32.5 mg/kg, four of which (all except Round 1) exceeded the guidance value of 16 mg/kg.
- Lead was detected during all five sampling events at concentrations ranging from 9.2 mg/kg to 85.9 mg/kg, four of which (all except Round 1) exceeded the guidance value of 31 mg/kg.
- Manganese was detected during all five 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.
- **May 2011 sampling event: exceedances of cadmium, copper, lead and manganese.**

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 cadmium, copper, lead, manganese, mercury, silver, and zinc.

- Cadmium was detected above the guidance value of 0.6 mg/kg during all five sampling events at concentrations ranging from 14.8 mg/kg to 47.3 mg/kg.
- Copper was detected above the guidance value of 16 mg/kg during all five sampling events at concentrations ranging from 17.1 mg/kg to 49.5 mg/kg.
- Lead was detected above the guidance value of 31 mg/kg during all five sampling events at concentrations ranging from 60.6 to 193 mg/kg.
- Manganese was detected during all five sampling events at concentrations ranging from 272 mg/kg to 11,700 mg/kg, four of which (all except Round 4) exceeded the guidance value of 460 mg/kg.
- Mercury was detected during all five sampling events but only exceeded the guidance value of 0.15 mg/kg during Round 3 and 5 at concentrations of 0.21 mg/kg and 0.18 mg/kg.
- 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 five sampling events at concentrations ranging from 71.3 mg/kg to 232 mg/kg, three of which exceeded the guidance value of 120 mg/kg.

- **May 2011 sampling event: exceedances of cadmium, copper, lead, manganese, mercury and zinc.**

Sample SED-5 was collected from Willetts Creek approximately 30 feet north of the footbridge behind the high 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 five 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 five sampling events at concentrations ranging from 0.43 mg/kg to 73.5 mg/kg, four of which (all except Round 1) exceeded the guidance value of 0.6 mg/kg.
- Chromium was detected during all five sampling events at concentrations ranging from 2.7 mg/kg 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 five 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 five 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 five 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 five 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 five 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 five sampling events at concentrations ranging from 1.0 mg/kg 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 five 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.
- **May 2011 sampling event: exceedances of arsenic, cadmium, chromium, copper, iron, lead, manganese, mercury, nickel and zinc.**

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 during all five sampling events at concentrations ranging from 0.076 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 five sampling events at concentrations ranging from 0.79 mg/kg 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 four of the five sampling events at concentrations ranging from 0.23 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 five sampling events at concentrations ranging from 2.4 mg/kg 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 five 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 five sampling events at concentrations ranging from 2,810 mg/kg 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 five 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 five sampling events at concentrations ranging from 21.3 mg/kg 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 three of the five sampling events and the detected value equaled the guidance value of 0.15 mg/kg during Round 3.
- Nickel was detected during all five sampling events at concentrations ranging from 1.8 mg/kg 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 five sampling events at concentrations ranging from 17.2 mg/kg to 409 mg/kg, but only exceeded the guidance value of 120 mg/kg during Round 3 at a concentration of 409 mg/kg.
- **May 2011 sampling event: exceedances of copper, iron and lead.**

Fish Tissue Analytical

Fish Tissue sampling events in Lake Capri were conducted in July 2006, May 2007 and October 2010. 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 be still 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 and 2010 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 µg/kg; South 2 with 28 µg/kg; and North 1 with 80 µg/kg. The nine composite samples reported cadmium concentrations ranging from 39 µg/kg to 270 µg/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 µg/kg. Cadmium concentrations for the other four fish tissue samples ranged from 190 to 230 µg/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.

Due to the small numbers and small sizes of fish collected, it is not possible to statistically analyze the results. It should be noted that cadmium results for the three fish sampling events could be the result of weights below 100 g and because the samples contain whole bodies and not just fillets. 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. It is also important to note that 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.

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

| 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 |
| Source Control when removal is not feasible | OU1, approximately 8,100 cubic yards of contaminated soils were treated through in-situ stabilization/solidification, completed in December 1996 | 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 |
| 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) that has been rendered ineffective due to destruction, 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 \$25,000, based on costs incurred in calendar year.

This includes all costs associated with the completion of one round of groundwater monitoring and fish tissue sampling conducted in May 2011, including subcontractor, AECOM field and reporting labor, and lab fees. Estimated OM&M costs presented in the 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 is slightly 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 SAP does not cover riprap monitoring and maintenance. This problem is categorized as moderate and results in a lack of knowledge in regards to site contamination.

5.1.2 Monitoring

Groundwater

Cadmium has been present in every sample collected during all five sampling events with exceedances noted in 11 samples during Round 1, ten samples during Round 2, eight samples during Round 3, nine out of 12 Round 4 samples, and nine of 13 Round 5 samples (6 of 13 filtered samples). The cadmium results are graphically presented on Figure 7 (shallow monitoring wells) and Figure 8 (deep monitoring wells). Isoconcentration maps were also prepared for cadmium in groundwater and are shown on Figure 9A (June 2006), Figure 9B (November 2008) and Figure 9C (May 2011). 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 concentrations in these seven monitoring wells have exceeded the criterion in each of the five sampling events (note that in the Round 5 samples for MW-22A, the cadmium concentration in the unfiltered sample exceeded the criterion but was not detected in the filtered sample). As shown on the isoconcentration maps (Figures 9A, 9B and 9C), the cadmium groundwater plume has not changed significantly since 2006 (Figure 9A), although the concentrations at MW-13A and MW-23A have shown a wide range of values.

Concentrations of iron, manganese, and sodium have exceeded the criterion in numerous wells but these compounds are typically found in groundwater on Long Island are most likely representative

of background conditions and not Site-related. There have been sporadic exceedances of antimony, lead, and thallium but the concentrations and locations of the exceedances have not been replicated during the five sampling events and are most likely a result of entrained sediment in the samples and are not representative of the dissolved groundwater concentrations.

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 at least once in five of six surface water samples, with most detections exceeding the 3 µg/L criterion. However, the exceedances have not been duplicated in any sample. Antimony concentrations do not appear to be a Site related.

Cadmium concentrations in surface water samples are illustrated in the Figure 10. Cadmium was detected in three of five sampling events in Willetts Creek sample SW-6. However, the only exceedance was during Round 3, which was anomalously high at 75.4 µg/L. Cadmium was detected in all five rounds in Willetts Creek sample SW-5 and slightly exceeded the criterion in four samples. The highest concentration detected was 8.8 µg/L during Round 5. Cadmium concentrations did not exceed the criterion in any of the four samples from Lake Capri samples during the five sampling events. Continued monitoring is necessary to determine if the exceedance in SW-6 during Round 3 is an isolated occurrence. As noted above in the discussion of sediment sample results, cadmium is present in co-located sediment samples; the cadmium noted in surface water samples may be a result of sediment leaching and not a result of Site contaminants migrating off-site.

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

During the five 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. The high sodium concentrations noted in Lake Capri during March 2010 may be the result of surface water runoff containing high concentrations of road salt.

Sediments

The samples 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, lowest effects level. Cadmium has been detected above the lowest effects criterion in 25 of 30 samples collected during the five rounds of sampling. Copper has been detected above the criterion in 24 of 30 samples collected and lead has been detected in 22 of 30 samples collected. 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 metals 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 and three exceedances in Round 5. Further sampling is necessary to establish whether the exceedances noted in Round 3 at SED-6 can be replicated. 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 and ten exceedances in Round 5. 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. Additional sampling is recommended to determine the extent of this contamination in Willetts Creek at this location.

Cadmium concentrations in sediment samples are illustrated on the bar chart on Figure 11. As shown on the bar chart, three of four samples from Lake Capri have consistently above the highest effects level during all five sampling events and the third sample (SW-3, located in the southwest corner of the Lake) has exceeded the highest effects level three of five times. The two samples from Willetts Creek, The concentrations are also plotted on the maps in Figures 12A (June 2006), 12B November 2008) and 12C (May 2011).

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 sample SED-5 during the last three sampling events. The extent of this contamination in Willetts Creek needs to be assessed. Additional samples should be collected around location SED-5 to determine the extent of contamination. In addition, the entire length of the creek from the Dzus Facility to Lake Capri should 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.
- Perform five-~~year periodic~~year periodic review of the Site in 2016.

6.0 References

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Tables

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

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 | 8.00 | 14.03 | could not be located, damaged during snow removal |
| | | 8/22/07 | 8.62 | 13.41 | |
| | | 11/11/08 | NC | | |
| | | 3/10/10 | NC | | |
| | | 5/25/11 | NC | | |
| MW-2 | 21.42 | 6/8/06 | 8.15 | 13.27 | |
| | | 8/22/07 | 8.50 | 12.92 | |
| | | 11/11/08 | 8.30 | 13.12 | |
| | | 3/10/10 | 7.43 | 13.99 | |
| | | 5/25/11 | 7.77 | 13.65 | |
| MW-3 | 19.71 | 6/8/06 | 5.77 | 13.94 | |
| | | 8/22/07 | 6.30 | 13.41 | |
| | | 11/11/08 | 6.25 | 13.46 | |
| | | 3/10/10 | 5.36 | 14.35 | |
| | | 5/25/11 | 5.62 | 14.09 | |
| MW-9 | 18.83 | 6/8/06 | 4.59 | 14.24 | |
| | | 8/22/07 | 5.15 | 13.68 | |
| | | 11/11/08 | 5.01 | 13.82 | |
| | | 3/10/10 | 4.19 | 14.64 | |
| | | 5/25/11 | 4.45 | 14.38 | |
| MW-9B | 18.75 | 6/8/06 | 4.50 | 14.25 | |
| | | 8/22/07 | 5.05 | 13.70 | |
| | | 11/11/08 | 4.93 | 13.82 | |
| | | 3/10/10 | 4.11 | 14.64 | |
| | | 5/25/11 | 4.36 | 14.39 | |
| MW-13A | 16.02 | 6/8/06 | 2.59 | 13.43 | |
| | | 8/22/07 | 3.02 | 13.00 | |
| | | 11/11/08 | 2.90 | 13.12 | |
| | | 3/10/10 | 2.27 | 13.75 | |
| | | 5/25/11 | 2.51 | 13.51 | |
| MW-13B | 15.82 | 6/8/06 | 2.39 | 13.43 | |
| | | 8/22/07 | 2.85 | 12.97 | |
| | | 11/11/08 | 2.69 | 13.13 | |
| | | 3/10/10 | 2.08 | 13.74 | |
| | | 5/25/11 | 2.32 | 13.50 | |
| 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 | |

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

| Well # | Reference Elevation | Date | Depth To Water | Water Table Elevation | Comments |
|--------|---------------------|----------|----------------|-----------------------|--------------------------------|
| MW-15B | 19.06 | 6/7/06 | 5.35 | 13.71 | unable to access, ACE Hardware |
| | | 8/22/07 | 5.70 | 13.36 | |
| | | 11/11/08 | 5.58 | 13.48 | |
| | | 3/10/10 | NC | | |
| | | 5/25/11 | 5.10 | 13.96 | |
| 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 | |
| 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 | |
| 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 | |
| MW-23A | 17.34 | 6/7/06 | 4.59 | 12.75 | |
| | | 8/22/07 | 4.80 | 12.54 | |
| | | 11/11/08 | 4.62 | 12.72 | |
| | | 3/10/10 | 4.16 | 13.18 | |
| | | 5/25/11 | 4.38 | 12.96 | |
| MW-23B | 17.29 | 6/7/06 | 4.51 | 12.78 | |
| | | 8/22/07 | 5.05 | 12.24 | |
| | | 11/11/08 | 4.59 | 12.70 | |
| | | 3/10/10 | 4.06 | 13.23 | |
| | | 5/25/11 | 4.31 | 12.98 | |

Notes:

All measurements in feet from top of casing
 Vertical data NGVD

TABLE 3
DZUS FASTENERS SITE (1-52-033)
JUNE 2006 THROUGH MAY 2011 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

| Sample Location Sample ID Laboratory ID Sample Date Filtered/Unfiltered | NYSDEC Class GA Ground Water Criteria | 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 3/10/10 conc. Q | MW-1 DMW-1 destroyed 5/25/11 conc. Q |
|---|---|--|--|---|--|--|
| Aluminum | NC | 4,180 | 3,160 | NA | NA | NA |
| Antimony | 3 | ND | ND | NA | NA | NA |
| Arsenic | 25 | 4.3 B | 3.8 B | NA | NA | NA |
| Barium | 1,000 | 80.2 B | 73.3 B | NA | NA | NA |
| Beryllium | 3 | 0.42 B | 0.25 B | NA | NA | NA |
| Cadmium | 5 | 23.9 | 5.1 | NA | NA | NA |
| Calcium | NC | 8,790 | 7,150 | NA | NA | NA |
| Chromium | 50 | 8 B | 5 B | NA | NA | NA |
| Cobalt | NC | 5.1 B | 6.9 BE | NA | NA | NA |
| Copper | 200 | 18.3 B | 16 B | NA | NA | NA |
| Iron | 300 | 13,200 | 12,600 | NA | NA | NA |
| Lead | 25 | 3.9 B | 9.8 B | NA | NA | NA |
| Magnesium | 35,000 | 3,010 | 2,420 | NA | NA | NA |
| Manganese | 300 | 210 | 158 | NA | NA | NA |
| Mercury | 0.7 | ND | ND | NA | NA | NA |
| Nickel | 100 | 8.7 B | 8.7 B | NA | NA | NA |
| Potassium | NC | 1,760 | 1,680 | NA | NA | NA |
| Selenium | 10 | ND | 5.4 B | NA | NA | NA |
| Silver | 50 | ND | ND | NA | NA | NA |
| Sodium | 20,000 | 22,500 | 23,100 | NA | NA | NA |
| Thallium | 0.5 | 1.9 B | 5.5 B | NA | NA | NA |
| Vanadium | NC | 7.8 B | 8.2 B | NA | NA | NA |
| Zinc | 2,000 | 244 | 196 | NA | NA | NA |

Notes: All values in µg/L
NC - No Criteria
NA - Not analyzed
ND - Not Detected
BOLD/Italics - exceeds criterion
B - Estimated value (greater than MDL but less than RL)
N - Matrix spike recovery falls outside of the control limit
E - Estimated due to matrix interference
* - Replicate RPDs were not within QC limits

TABLE 3
DZUS FASTENERS SITE (1-52-033)
JUNE 2006 THROUGH MAY 2011 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

| Sample Location Sample ID Laboratory ID Sample Date Filtered/Unfiltered | NYSDEC Class GA Ground Water Criteria | MW-2 MW-2 E0773-10A 6/7/06 Unfiltered conc. Q | MW-2 DMW-2 F1193-04A 8/22/07 Unfiltered conc. Q | MW-2 DMW-2 G2114-01 11/11/08 Unfiltered conc. Q | MW-2 DMW-2 J0429-10A 3/10/10 Unfiltered conc. Q | MW-2 DMW-2 K0942-01 5/25/11 Unfiltered conc. Q | MW-2 DMW-2 K0942-02 5/25/11 Filtered conc. Q |
|---|---|--|--|--|--|---|---|
| Aluminum | NC | 7,090 | 1,580 | 242 | 3,880 E | 1,500 | ND |
| Antimony | 3 | ND | 7.3 B | ND | 9.4 B | ND | ND |
| Arsenic | 25 | 3.9 B | 6.3 B | ND | 7.7 B | 12.4 B | 5 B |
| Barium | 1,000 | 96.5 B | 212 | 38.7 B | 47.9 B | 51.1 B | 34.2 B |
| Beryllium | 3 | 0.4 B | 0.71 B | 0.27 B | 0.51 B | 0.33 B | ND |
| Cadmium | 5 | 4.2 B | 8.6 | 2.7 B | 10.4 | ND | ND |
| Calcium | NC | 15,500 | 28,200 | 14,500 | 11,100 | 38,700 | 34,500 |
| Chromium | 50 | 8.8 B | 3.1 B | ND | 6.8 B | 2.2 B | ND |
| Cobalt | NC | 18.3 B | 27 BE | 13.8 B | 9.3 B | 11.4 B | 7.6 B |
| Copper | 200 | 19.3 B | 8.3 B | 12.6 B | 34.9 | 7.9 B | ND |
| Iron | 300 | 14,900 | 25,200 | 23,300 | 12,000 N | 88,900 | 17,600 |
| Lead | 25 | 14.7 | 4.2 B | 5.2 B | 6.9 B | 7.5 B | ND |
| Magnesium | 35,000 | 3,740 | 4,690 | 2,700 | 2,810 | 3,690 | 3,510 |
| Manganese | 300 | 518 | 989 | 2,150 | 768 | 882 | 655 |
| Mercury | 0.7 | ND | ND | ND | 0.084 B | ND | ND |
| Nickel | 100 | 13.3 B | 9 B | 4.7 B | 13.5 B | 6.5 B | 2.8 B |
| Potassium | NC | 2,140 | 2,780 | 1,880 | 1,450 | 2,470 | 2,410 |
| Selenium | 10 | 1.4 B | ND | ND | ND | ND | ND |
| Silver | 50 | ND | ND | ND | ND | ND | ND |
| Sodium | 20,000 | 21,500 | 66,200 | 18,600 | 18,200 | 25,200 | 24,100 |
| Thallium | 0.5 | 2.3 B | 6.3 B | ND | ND | ND | ND |
| Vanadium | NC | 11.9 B | 4 B | ND | 16.2 B | 2.5 B | ND |
| Zinc | 2,000 | 138 | 82.8 | 64.3 | 109 | 111 | 30.5 B |

Notes: All values in µg/L
NC - No Criteria
NA - Not analyzed
ND - Not Detected
BOLD/Italics - exceeds criterion
B - Estimated value (greater than MDL but less than RL)
N - Matrix spike recovery falls outside of the control limit
E - Estimated due to matrix interference
* - Replicate RPDs were not within QC limits

TABLE 3
DZUS FASTENERS SITE (1-52-033)
JUNE 2006 THROUGH MAY 2011 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

| Sample Location Sample ID Laboratory ID Sample Date Filtered/Unfiltered | NYSDEC Class GA Ground Water Criteria | MW-3 MW-3 E0773-07A 6/8/06 Unfiltered conc. Q | MW-3 DMW-3 F1193-07A 8/22/07 Unfiltered conc. Q | MW-3 DMW-3 G2114-04 11/11/08 Unfiltered conc. Q | MW-3 DMW-3 J0429-11A 3/10/10 Unfiltered conc. Q | MW-3 DMW-3 K0942-03 5/25/11 Unfiltered conc. Q | MW-3 DMW-3 K0942-04 5/25/11 Filtered conc. Q |
|---|---|--|--|--|--|---|---|
| Aluminum | NC | 5,650 | 620 | 314 | 2,890 E | 8,520 | ND |
| Antimony | 3 | ND | ND | ND | 7.2 B | ND | ND |
| Arsenic | 25 | 2.9 B | ND | ND | 3.2 B | 7.1 B | 6.3 B |
| Barium | 1,000 | 90.9 B | 37.2 B | 28.3 B | 35.3 B | 59.7 B | 20.3 B |
| Beryllium | 3 | 0.26 B | ND | ND | 0.25 B | 0.7 B | ND |
| Cadmium | 5 | 77.4 | 74.4 | 70.8 | 98.4 | 73.5 | 13.1 |
| Calcium | NC | 17,800 | 17,200 | 11,800 | 10,600 | 11,000 | 9,750 |
| Chromium | 50 | 9.2 B | 1.6 B | ND | 6.4 B | 11.4 B | ND |
| Cobalt | NC | 4.4 B | 1.6 BE | ND | 2.2 B | 4.7 B | ND |
| Copper | 200 | 16.1 B | 5.4 B | ND | 6.8 B | 9.7 B | ND |
| Iron | 300 | 4,430 | 649 | 253 | 3,680 N | 7,430 | ND |
| Lead | 25 | ND | 3.8 B | 2.7 B | 3.9 B | 7.5 B | ND |
| Magnesium | 35,000 | 4,160 | 3,820 | 2,650 | 2,670 | 2,890 | 1,970 |
| Manganese | 300 | 423 | 301 | 262 | 553 | 980 | ND |
| Mercury | 0.7 | ND | ND | ND | 0.067 B | 0.057 B | ND |
| Nickel | 100 | 6.8 B | 2.1 B | 1.6 B | 7.4 B | 5 B | ND |
| Potassium | NC | 2,630 | 2,050 | 1,420 | 1,500 | 2,170 | 1,790 |
| Selenium | 10 | ND | 8.4 B | ND | 10.6 B | ND | ND |
| Silver | 50 | ND | 3.5 B | ND | ND | ND | ND |
| Sodium | 20,000 | 27,700 | 31,000 | 25,000 | 20,700 | 20,400 | 19,400 |
| Thallium | 0.5 | 2.5 B | ND | ND | ND | ND | ND |
| Vanadium | NC | 8.1 B | 1.1 B | ND | 4 B | 9.6 B | ND |
| Zinc | 2,000 | 87 | 29.4 B | 26.2 B | 29 B | 34 B | 18.9 B |

Notes: All values in µg/L
NC - No Criteria
NA - Not analyzed
ND - Not Detected
BOLD/Italics - exceeds criterion
B - Estimated value (greater than MDL but less than RL)
N - Matrix spike recovery falls outside of the control limit
E - Estimated due to matrix interference
* - Replicate RPDs were not within QC limits

TABLE 3
DZUS FASTENERS SITE (1-52-033)
JUNE 2006 THROUGH MAY 2011 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

| Sample Location | NYSDEC | 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 |
| Laboratory ID | Ground | E0773-09A | F1193-06A | G2114-02 | J0429-12A | K0942-05 | K0942-06 |
| Sample Date | Water | 6/8/06 | 8/22/07 | 11/11/08 | 3/10/10 | 5/25/11 | 5/25/11 |
| Filtered/Unfiltered | Criteria | Unfiltered | Unfiltered | Unfiltered | Unfiltered | Unfiltered | Filtered |
| | | conc. Q | conc. Q | conc. Q | conc. Q | conc. Q | conc. Q |
| Aluminum | NC | 16,800 | 3,520 | 611 | 2,300 E | 2,850 | ND |
| Antimony | 3 | ND | ND | ND | ND | ND | ND |
| Arsenic | 25 | 32.6 | 16.2 B | ND | 11.4 B | 11.5 B | 4.9 B |
| Barium | 1,000 | 102 B | 44.7 B | 30.2 B | 39.2 B | 71 B | 49.2 B |
| Beryllium | 3 | 0.63 B | ND | 0.21 B | 0.29 B | 0.42 B | ND |
| Cadmium | 5 | 32.8 | 22.4 | 15.5 | 17.5 | 18.7 | 9.5 |
| Calcium | NC | 16,000 | 15,100 | 10,800 | 21,900 | 29,000 | 25,600 |
| Chromium | 50 | 125 | 62.2 | 35.3 | 62.7 | 85.5 | 2.9 B |
| Cobalt | NC | 5.2 B | 4.9 BE | 1.5 B | 2 B | 2.5 B | ND |
| Copper | 200 | 62.3 | 41.4 | 17.3 B | 32.5 | 41.1 | ND |
| Iron | 300 | 21,600 | 12,400 | 3,670 | 11,300 N | 11,600 | 1,760 |
| Lead | 25 | 11.6 | 10.6 | 5.9 B | 8.1 B | 9.9 B | ND |
| Magnesium | 35,000 | 3,170 | 1,550 | 2,690 | 4,210 | 4,110 | 3,900 |
| Manganese | 300 | 151 | 117 | 62.6 | 124 | 149 | 15.3 B |
| Mercury | 0.7 | ND | ND | ND | 0.088 B | ND | ND |
| Nickel | 100 | 18.3 B | 7.3 B | 3.3 B | 8 B | 6.5 B | 2.4 B |
| Potassium | NC | 3,270 | 4,830 | 1,720 | 3,950 | 6,310 | 5,210 |
| Selenium | 10 | 2.7 B | ND | ND | ND | ND | ND |
| Silver | 50 | ND | ND | ND | ND | ND | ND |
| Sodium | 20,000 | 25,500 | 52,100 | 16,100 | 29,100 | 72,800 | 68,700 |
| Thallium | 0.5 | ND | ND | ND | ND | ND | ND |
| Vanadium | NC | 33.1 B | 13.4 B | 5.5 B | 10.4 B | 12.8 B | ND |
| Zinc | 2,000 | 170 | 73.1 | 55.9 | 82.8 | 90.9 | 36.6 B |

Notes: All values in µg/L
NC - No Criteria
NA - Not analyzed
ND - Not Detected
BOLD/Italics - exceeds criterion
B - Estimated value (greater than MDL but less than RL)
N - Matrix spike recovery falls outside of the control limit
E - Estimated due to matrix interference
* - Replicate RPDs were not within QC limits

TABLE 3
DZUS FASTENERS SITE (1-52-033)
JUNE 2006 THROUGH MAY 2011 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

| Sample Location | NYSDEC | MW-9B | MW-9B | MW-9B | MW-9B | MW-9B | MW-9B |
|---------------------|----------|------------|--------------|------------|---------------|------------|----------|
| Sample ID | Class GA | MW-9B | DMW-9B | DMW-9B | DMW-9B | DMW-9B | DMW-9B |
| Laboratory ID | Ground | E0773-08A | F1193-05A | G2114-03 | J0429-14A | K0942-07 | K0942-08 |
| Sample Date | Water | 6/8/06 | 8/22/07 | 11/11/08 | 3/10/10 | 5/25/11 | 5/25/11 |
| Filtered/Unfiltered | Criteria | Unfiltered | Unfiltered | Unfiltered | Unfiltered | Unfiltered | Filtered |
| | | conc. Q | conc. Q | conc. Q | conc. Q | conc. Q | conc. Q |
| Aluminum | NC | 213 | 177 B | ND | 49.5 BE | 99.1 B | ND |
| Antimony | 3 | 1.8 B | 4.6 B | ND | ND | ND | ND |
| Arsenic | 25 | ND | ND | ND | ND | ND | 6.2 B |
| Barium | 1,000 | 45.5 B | 25.5 B | 27.1 B | 17.1 B | 14.4 B | 12.8 B |
| Beryllium | 3 | ND | ND | ND | 0.051 B | ND | ND |
| Cadmium | 5 | 2.9 B | 1.2 B | 0.23 B | 3.6 B | ND | ND |
| Calcium | NC | 10,800 | 11,900 | 8,180 | 6,950 | 8,580 | 8,480 |
| Chromium | 50 | 2.2 B | 3.4 B | ND | 2.4 B | 1.4 B | ND |
| Cobalt | NC | 2.6 B | 1.5 BE | ND | ND | ND | ND |
| Copper | 200 | 28.8 B | 14.8 B | ND | ND | ND | ND |
| Iron | 300 | 561 | 429 | 134 B | 286 N | 528 | 31.8 B |
| Lead | 25 | ND | 6 B | ND | ND | ND | ND |
| Magnesium | 35,000 | 1,640 | 1,630 | 1,330 | 1,380 | 1,490 | 1,430 |
| Manganese | 300 | 211 | 306 | 171 | 69.5 | 92.4 | ND |
| Mercury | 0.7 | ND | ND | ND | ND | ND | ND |
| Nickel | 100 | 8.6 B | 2.9 B | ND | 1.9 B | 1.8 B | 0.88 B |
| Potassium | NC | 2,140 | 2,050 | 1,940 | 1,950 | 1,910 | 1,670 |
| Selenium | 10 | ND | ND | ND | 12.7 B | ND | ND |
| Silver | 50 | ND | 2.2 B | ND | ND | ND | ND |
| Sodium | 20,000 | 8,070 | 10,100 | 11,800 | 7,660 | 6,730 | 6,650 |
| Thallium | 0.5 | ND | ND | ND | ND | ND | ND |
| Vanadium | NC | ND | 0.83 B | ND | ND | ND | ND |
| Zinc | 2,000 | 83.7 | 36 B | 35.3 B | 23.3 B | 27.1 B | 25.4 B |

Notes: All values in µg/L
NC - No Criteria
NA - Not analyzed
ND - Not Detected
BOLD/italics - exceeds criterion
B - Estimated value (greater than MDL but less than RL)
N - Matrix spike recovery falls outside of the control limit
E - Estimated due to matrix interference
* - Replicate RPDs were not within QC limits

TABLE 3
DZUS FASTENERS SITE (1-52-033)
JUNE 2006 THROUGH MAY 2011 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

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

Notes: All values in µg/L
NC - No Criteria
NA - Not analyzed
ND - Not Detected
BOLD/Italics - exceeds criterion
B - Estimated value (greater than MDL but less than RL)
N - Matrix spike recovery falls outside of the control limit
E - Estimated due to matrix interference
* - Replicate RPDs were not within QC limits

TABLE 3
DZUS FASTENERS SITE (1-52-033)
JUNE 2006 THROUGH MAY 2011 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

| Sample Location | NYSDEC | 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 |
| Laboratory ID | Ground | E0773-14A | F1193-13A | G2114-13 | J0429-16A | K0942-19 | K0942-20 |
| Sample Date | Water | 6/8/06 | 8/22/07 | 11/12/08 | 3/10/10 | 5/25/11 | 5/25/11 |
| Filtered/Unfiltered | Criteria | Unfiltered | Unfiltered | Unfiltered | Unfiltered | Unfiltered | Filtered |
| | | conc. Q | conc. Q | conc. Q | conc. Q | conc. Q | conc. Q |
| Aluminum | NC | 330 | 133 B | ND | 114 BE | 106 B | ND |
| Antimony | 3 | ND | ND | ND | ND | ND | ND |
| Arsenic | 25 | ND | ND | ND | ND | ND | ND |
| Barium | 1,000 | 54.3 B | 29 B | 33.4 B | 21.5 B | 14.4 B | 12.6 B |
| Beryllium | 3 | ND | ND | ND | ND | ND | ND |
| Cadmium | 5 | 15 | 9.8 | 2.3 B | 4.2 B | 2.2 B | ND |
| Calcium | NC | 10,700 | 9,840 | 11,700 | 8,880 | 10,900 | 10,900 |
| Chromium | 50 | 27.8 | 27.2 | 22.3 | 17.8 B | 11.7 B | 10.7 B |
| Cobalt | NC | 3.9 B | 1.9 BE | ND | ND | ND | ND |
| Copper | 200 | 19.3 B | 13.8 B | ND | ND | 6.5 B | ND |
| Iron | 300 | 614 | 404 | 106 B | 286 N | 469 | ND |
| Lead | 25 | ND | 7.7 B | 3.1 B | ND | ND | ND |
| Magnesium | 35,000 | 1,710 | 1,600 | 1,910 | 1,350 | 1,560 | 1,530 |
| Manganese | 300 | 621 | 426 | 153 | 243 | 148 | ND |
| Mercury | 0.7 | ND | ND | ND | ND | ND | ND |
| Nickel | 100 | 9.8 B | 4.2 B | ND | 1.3 B | 1.5 B | ND |
| Potassium | NC | 2,410 | 1,820 | 2,100 | 1,570 | 1,910 E | 1,680 E |
| Selenium | 10 | ND | 6.2 B | ND | ND | ND | ND |
| Silver | 50 | ND | 2.3 B | ND | ND | ND | ND |
| Sodium | 20,000 | 7,880 | 6,710 | 9,280 | 8,060 | 6,720 | 6,880 |
| Thallium | 0.5 | ND | ND | ND | ND | ND | ND |
| Vanadium | NC | 1.3 B | 0.96 B | ND | 0.54 B | ND | ND |
| Zinc | 2,000 | 45.9 B | 33.2 B | 24.3 B | 24.3 B | 32.7 B | 32.5 B |

Notes: All values in µg/L
NC - No Criteria
NA - Not analyzed
ND - Not Detected
BOLD/Italics - exceeds criterion
B - Estimated value (greater than MDL but less than RL)
N - Matrix spike recovery falls outside of the control limit
E - Estimated due to matrix interference
* - Replicate RPDs were not within QC limits

TABLE 3
DZUS FASTENERS SITE (1-52-033)
JUNE 2006 THROUGH MAY 2011 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

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

Notes: All values in µg/L
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ND - Not Detected
BOLD/italics - exceeds criterion
B - Estimated value (greater than MDL but less than RL)
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* - Replicate RPDs were not within QC limits

TABLE 3
DZUS FASTENERS SITE (1-52-033)
JUNE 2006 THROUGH MAY 2011 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

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

Notes: All values in µg/L
NC - No Criteria
NA - Not analyzed
ND - Not Detected
BOLD/Italics - exceeds criterion
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E - Estimated due to matrix interference
* - Replicate RPDs were not within QC limits

TABLE 3
DZUS FASTENERS SITE (1-52-033)
JUNE 2006 THROUGH MAY 2011 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

| Sample Location | NYSDEC | MW-18 | MW-18 | MW-18 | MW-18 | MW-18 | MW-18 |
|---------------------|----------|--------------|--------------|--------------|-----------------|--------------|----------|
| Sample ID | Class GA | MW-18 | DMW-18 | DMW-18 | DMW-18 | DMW-18 | DMW-18 |
| Laboratory ID | Ground | E0773-06A | F1193-16A | G2114-06 | J0429-18A | K0942-25 | K0942-26 |
| Sample Date | Water | 6/8/06 | 8/23/07 | 11/11/08 | 3/9/10 | 5/25/11 | 5/25/11 |
| Filtered/Unfiltered | Criteria | Unfiltered | Unfiltered | Unfiltered | Unfiltered | Unfiltered | Filtered |
| | | 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 |
| Antimony | 3 | ND | ND | 5.1 B | 12.2 B | ND | ND |
| Arsenic | 25 | ND | ND U | ND | 5.9 B | 7 B | ND |
| Barium | 1,000 | 168 B | 71.3 B | 166 B | 283 | 109 B | 13.4 B |
| Beryllium | 3 | ND | ND | ND | 0.31 B | 0.29 B | ND |
| Cadmium | 5 | 3 B | 1.2 B | 9.8 | 18.1 | 1.3 B | ND |
| Calcium | NC | 13,900 | 9,790 | 12,600 | 27,000 | 19,000 | 18,400 |
| Chromium | 50 | 2.2 B | 0.63 B | ND | 5 B | 3.9 B | ND |
| Cobalt | NC | 7.3 B | 5.5 BE | 2 B | 11.6 B | 9.2 B | ND |
| Copper | 200 | 17.7 B | 3.5 B | 11.1 B | 112 | 12.2 B | ND |
| Iron | 300 | 1,150 | 1,320 | 114 B | 4,620 | 2,890 | ND |
| Lead | 25 | ND | 1.9 B | ND | 19 | ND | ND |
| Magnesium | 35,000 | 2,340 | 1,550 | 2,440 | 4,130 | 3,300 | 3,070 |
| Manganese | 300 | 6,270 | 4,490 | 2,870 | 10,100 * | 3,450 | ND |
| Mercury | 0.7 | ND | ND | ND | ND | ND | ND |
| Nickel | 100 | 17.5 B | 13 B | 29.3 B | 48 BE | 15.7 B | ND |
| Potassium | NC | 1,520 | 1,180 | 1,540 | 4,120 E | 2,050 E | 1,860 E |
| Selenium | 10 | ND | ND | ND | 16.4 B | ND | ND |
| Silver | 50 | ND | 1.5 B | ND | ND | ND | ND |
| Sodium | 20,000 | 7,870 | 6,020 | 12,100 | 10,600 | 16,800 | 17,300 |
| Thallium | 0.5 | 26.5 | ND | ND | 64.5 | ND | ND |
| Vanadium | NC | 2.6 B | 1.4 B | ND | 5 B | 3.9 B | ND |
| Zinc | 2,000 | 235 | 89 | 265 | 366 | 192 | 22.2 B |

Notes: All values in µg/L
NC - No Criteria
NA - Not analyzed
ND - Not Detected
BOLD/Italics - exceeds criterion
B - Estimated value (greater than MDL but less than RL)
N - Matrix spike recovery falls outside of the control limit
E - Estimated due to matrix interference
* - Replicate RPDs were not within QC limits

TABLE 3
DZUS FASTENERS SITE (1-52-033)
JUNE 2006 THROUGH MAY 2011 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

| Sample Location | NYSDEC | 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 |
| Laboratory ID | Ground | E0773-11A | F1193-09A | G2114-09 | J0429-19A | K0942-11 | K0942-12 |
| Sample Date | Water | 6/7/06 | 8/22/07 | 11/12/08 | 3/9/10 | 5/25/11 | 5/25/11 |
| Filtered/Unfiltered | Criteria | Unfiltered | Unfiltered | Unfiltered | Unfiltered | Unfiltered | Filtered |
| | | conc. Q | conc. Q | conc. Q | conc. Q | conc. Q | conc. Q |
| Aluminum | NC | 4,320 | 2,870 | 2,620 | 1,060 | 159 B | ND |
| Antimony | 3 | 1.7 B | 5.2 B | ND | 13 B | ND | ND |
| Arsenic | 25 | 16 B | 3.8 B | 7.2 B | 15.4 B | 7.5 B | 4.5 B |
| Barium | 1,000 | 167 B | 76.9 B | 69.6 B | 109 B | 106 B | 111 B |
| Beryllium | 3 | 0.15 B | ND | 0.21 B | 0.19 B | ND | ND |
| Cadmium | 5 | 38.9 | 22.1 | 13.5 | 13.7 | 6.8 | ND |
| Calcium | NC | 52,100 | 37,500 | 55,700 | 104,000 | 114,000 | 96,400 |
| Chromium | 50 | 18 B | 12.8 B | 13 B | 8.8 B | 2.8 B | 0.76 B |
| Cobalt | NC | 2.2 B | 5.2 BE | ND | 1.4 B | ND | ND |
| Copper | 200 | 32.3 | 24 B | 19.3 B | 21.5 B | 7.9 B | ND |
| Iron | 300 | 70,400 | 22,400 | 22,000 | 61,100 | 16,700 | 2,260 |
| Lead | 25 | 8.6 B | 13.1 | 11.3 | 12.4 | ND | ND |
| Magnesium | 35,000 | 8,300 | 5,580 | 7,860 | 13,800 | 15,600 | 13,100 |
| Manganese | 300 | 1,280 | 1,190 | 1,030 | 912 * | 683 | 780 |
| Mercury | 0.7 | ND | ND | ND | 0.094 B | ND | ND |
| Nickel | 100 | 6 B | 3.7 B | 2.6 B | 4.7 BE | 2.4 B | 1.4 B |
| Potassium | NC | 4,560 | 3,530 | 3,980 | 3,430 E | 4,520 E | 5,120 E |
| Selenium | 10 | 8.7 B | ND | ND | 24.3 B | ND | ND |
| Silver | 50 | ND | ND | ND | ND | ND | ND |
| Sodium | 20,000 | 95,200 | 69,400 | 39,900 | 57,800 | 100,000 | 134,000 |
| Thallium | 0.5 | ND | 2.8 B | ND | ND | ND | ND |
| Vanadium | NC | 17.4 B | 9.2 B | 7 B | 6.3 B | 3.1 B | ND |
| Zinc | 2,000 | 1,650 | 1,170 | 714 | 1,360 | 1,000 | 546 |

Notes: All values in µg/L
NC - No Criteria
NA - Not analyzed
ND - Not Detected
BOLD/Italics - exceeds criterion
B - Estimated value (greater than MDL but less than RL)
N - Matrix spike recovery falls outside of the control limit
E - Estimated due to matrix interference
* - Replicate RPDs were not within QC limits

TABLE 3
DZUS FASTENERS SITE (1-52-033)
JUNE 2006 THROUGH MAY 2011 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

| Sample Location Sample ID Laboratory ID Sample Date Filtered/Unfiltered | NYSDEC Class GA Ground Water Criteria | MW-22B MW-22B E0773-12A 6/7/06 Unfiltered conc. Q | MW-22B DMW-22B F1193-08A 8/22/07 Unfiltered conc. Q | MW-22B DMW-22B G2114-11 11/12/08 Unfiltered conc. Q | MW-22B DMW-22B J0429-20A 3/9/10 Unfiltered conc. Q | MW-22B DMW-22B k0942-13 5/25/11 Unfiltered conc. Q | MW-22B DMW-22B k0942-13 5/25/11 Filtered conc. Q |
|---|---|--|--|--|---|---|---|
| Aluminum | NC | 763 B | 151 B | ND | 56.3 B | ND | ND |
| Antimony | 3 | ND | 4.7 B | ND | 8.7 B | ND | ND |
| Arsenic | 25 | 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 |
| Beryllium | 3 | ND | ND | ND | 0.039 B | ND | ND |
| Cadmium | 5 | 29 B | 4.4 B | 1.2 B | 1.7 B | ND | ND |
| Calcium | NC | 12,800 | 20,400 | 27,200 | 21,400 | 19,500 | 19,700 |
| Chromium | 50 | 7.9 B | 1.5 B | ND | 1.6 B | 0.66 B | ND |
| Cobalt | NC | 17.4 B | 3.9 BE | 1.5 B | 1 B | ND | ND |
| Copper | 200 | 118 B | 4 B | ND | ND | ND | ND |
| Iron | 300 | 4,600 | 1,120 | 518 | 358 | 164 B | ND |
| Lead | 25 | 8.6 B | 3 B | 2.4 B | 3.3 B | ND | ND |
| Magnesium | 35,000 | 2,660 B | 3,130 | 5,090 | 3,510 | 3,230 | 3,300 |
| Manganese | 300 | 2,310 | 2,440 | 775 | 940 * | 589 | 342 |
| Mercury | 0.7 | ND | ND | ND | ND | ND | ND |
| Nickel | 100 | 28 B | 2.7 B | 6.5 B | 2 BE | 0.85 B | ND |
| Potassium | NC | 3,000 B | 2,500 | 1,910 | 4,220 E | 4,740 E | 4,260 E |
| Selenium | 10 | ND | ND | ND | 19 B | ND | ND |
| Silver | 50 | ND | 4.2 B | ND | ND | ND | ND |
| Sodium | 20,000 | 8,170 B | 17,100 | 11,300 | 14,400 | 12,700 | 13,600 |
| Thallium | 0.5 | 20.1 B | 3.5 B | ND | ND | ND | ND |
| Vanadium | NC | ND | 0.49 B | ND | ND | ND | ND |
| Zinc | 2,000 | 194 B | 39.4 B | 29.8 B | 34.6 B | 20.1 B | 17.6 B |

Notes: All values in µg/L
NC - No Criteria
NA - Not analyzed
ND - Not Detected
BOLD/Italics - exceeds criterion
B - Estimated value (greater than MDL but less than RL)
N - Matrix spike recovery falls outside of the control limit
E - Estimated due to matrix interference
* - Replicate RPDs were not within QC limits

TABLE 3
DZUS FASTENERS SITE (1-52-033)
JUNE 2006 THROUGH MAY 2011 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

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

Notes: All values in µg/L
NC - No Criteria
NA - Not analyzed
ND - Not Detected
BOLD/Italics - exceeds criterion
B - Estimated value (greater than MDL but less than RL)
N - Matrix spike recovery falls outside of the control limit
E - Estimated due to matrix interference
* - Replicate RPDs were not within QC limits

TABLE 3
DZUS FASTENERS SITE (1-52-033)
JUNE 2006 THROUGH MAY 2011 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

| Sample Location | NYSDEC | 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 |
| Laboratory ID | Ground | E0773-02A | F1193-11A | G2114-15 | J0429-22A | K0942-27 | K0942-28 |
| Sample Date | Water | 6/7/06 | 8/22/07 | 11/12/08 | 3/10/10 | 5/25/11 | 5/25/11 |
| Filtered/Unfiltered | Criteria | Unfiltered | Unfiltered | Unfiltered | Unfiltered | Unfiltered | Filtered |
| | | conc. Q | conc. Q | conc. Q | conc. Q | conc. Q | conc. Q |
| Aluminum | NC | 2,450 | 632 | 406 | 2,820 | 1,810 | ND |
| Antimony | 3 | 3.2 B | ND | ND | 6.2 B | ND | ND |
| Arsenic | 25 | 4.1 B | ND | ND | 6.7 B | ND | ND |
| Barium | 1,000 | 215 | 86.4 B | 64.6 B | 77.4 B | 64.8 B | 150 B |
| Beryllium | 3 | 0.21 B | ND | 0.13 B | 0.3 B | ND | ND |
| Cadmium | 5 | 320 | 60 | 42.2 | 43.8 | 40.1 | 5.8 |
| Calcium | NC | 21,500 | 25,100 | 15,700 | 24,400 | 24,800 | 21,700 |
| Chromium | 50 | 74.9 | 13.9 B | 4.3 B | 61.6 | 12.6 B | 8.5 B |
| Cobalt | NC | 4.8 B | 2.4 BE | ND | 3.5 B | 1.7 B | 0.91 B |
| Copper | 200 | 94.6 | 19.8 B | 24.6 B | 54.8 | 25.6 B | 13.9 B |
| Iron | 300 | 8,220 | 2,140 | 1,270 | 7,870 | 5,200 | 36,100 |
| Lead | 25 | 35.7 | 10.3 | 17.7 | 43.9 | 22.6 | ND |
| Magnesium | 35,000 | 1,890 | 1,290 | 1,590 | 2,730 | 4,150 | 2,460 |
| Manganese | 300 | 548 | 508 | 52.1 | 398 * | 126 | 169 |
| Mercury | 0.7 | 0.11 B | ND | ND | 0.11 B | ND | ND |
| Nickel | 100 | 68.8 | 16.7 B | 20.5 B | 23.2 BE | 14.8 B | 10 B |
| Potassium | NC | 2,400 | 1,970 | 1,660 | 1,650 E | 2,450 E | 2,110 E |
| Selenium | 10 | ND | 8.6 B | ND | 19.3 B | ND | ND |
| Silver | 50 | ND | 5 B | 0.81 B | ND | ND | ND |
| Sodium | 20,000 | 2,390 | 3,870 | 2,200 | 84,400 | 18,900 | 18,500 |
| Thallium | 0.5 | 3.1 B | ND | ND | 6.1 B | ND | ND |
| Vanadium | NC | 17.7 B | 9 B | 5.9 B | 12.1 B | 12.9 B | ND |
| Zinc | 2,000 | 417 | 145 | 198 | 376 | 410 | 47 B |

Notes: All values in µg/L
NC - No Criteria
NA - Not analyzed
ND - Not Detected
BOLD/Italics - exceeds criterion
B - Estimated value (greater than MDL but less than RL)
N - Matrix spike recovery falls outside of the control limit
E - Estimated due to matrix interference
* - Replicate RPDs were not within QC limits

TABLE 4
DZUS FASTENERS SITE (1-52-033)
MAY 2011 SAMPLING EVENT

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-2 | DMW-2 | DMW-3 | DMW-3 | DMW-3 | DMW-9 | DMW-9 | DMW-9 |
| Laboratory ID | Ground | K0942-01 | K0942-02 | K0942-02 | K0942-03 | K0942-04 | K0942-04 | K0942-05 | K0942-06 | K0942-06 |
| Sample Date | Water | 5/25/11 | 5/25/11 | 5/25/11 | 5/25/11 | 5/25/11 | 5/25/11 | 5/25/11 | 5/25/11 | 5/25/11 |
| 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 | 1,500 | 0 | 0.0% | 8,520 | 0 | 0.0% | 2,850 | 0 | 0.0% |
| Antimony | 3 | ND | ND | NC | ND | ND | NC | ND | ND | NC |
| Arsenic | 25 | 12.4 B | 5.0 B | 40.3% | 7.1 B | 6.3 B | 88.7% | 11.5 B | 4.9 B | 42.6% |
| Barium | 1,000 | 51.1 B | 34.2 B | 66.9% | 59.7 B | 20.3 B | 34.0% | 71 B | 49.2 B | 69.3% |
| Beryllium | 3 | 0.33 B | 0 | 0.0% | 0.70 B | 0 | 0.0% | 0.42 B | 0 | 0.0% |
| Cadmium | 5 | ND | ND | NC | 73.5 | 13.1 | 17.8% | 18.7 | 9.5 | 50.8% |
| Calcium | NC | 38,700 | 34,500 | 89.1% | 11,000 | 9,750 | 88.6% | 29,000 | 25,600 | 88.3% |
| Chromium | 50 | 2.2 B | 0 | 0.0% | 11.4 B | 0 | 0.0% | 85.5 | 2.9 B | 3.4% |
| Cobalt | NC | 11.4 B | 7.6 B | 66.7% | 4.7 B | 0 | 0.0% | 2.5 B | 0 | 0.0% |
| Copper | 200 | 7.9 B | 0 | 0.0% | 9.7 B | 0 | 0.0% | 41.1 | 0 | 0.0% |
| Iron | 300 | 88,900 | 17,600 | 19.8% | 7,430 | 0 | 0.0% | 11,600 | 1,760 | 15.2% |
| Lead | 25 | 7.5 B | 0 | 0.0% | 7.5 B | 0 | 0.0% | 9.9 B | 0 | 0.0% |
| Magnesium | 35,000 | 3,690 | 3,510 | 95.1% | 2,890 | 1,970 | 68.2% | 4,110 | 3,900 | 94.9% |
| Manganese | 300 | 882 | 655 | 74.3% | 980 | 0 | 0.0% | 149 | 15 B | 10.3% |
| Mercury | 0.7 | ND | ND | NC | 0.057 B | 0 | 0.0% | ND | ND | NC |
| Nickel | 100 | 6.5 B | 2.8 B | 43.1% | 5.0 B | 0 | 0.0% | 6.5 B | 2.4 B | 36.9% |
| Potassium | NC | 2,470 | 2,410 | 97.6% | 2,170 | 1,790 | 82.5% | 6,310 | 5,210 | 82.6% |
| 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 | 25,200 | 24,100 | 95.6% | 20,400 | 19,400 | 95.1% | 72,800 | 68,700 | 94.4% |
| Thallium | 0.5 | ND | ND | NC | ND | ND | NC | ND | ND | NC |
| Vanadium | NC | 2.5 B | 0 | 0.0% | 9.6 B | 0 | 0.0% | 12.8 B | 0 | 0.0% |
| Zinc | 2,000 | 111 | 30.5 B | 27.5% | 34 B | 18.9 B | 55.6% | 90.9 | 36.6 B | 40.3% |

Notes: ND - Not Detected
B - Estimated value (greater than MDL but less than RL)
NC - both filtered and unfiltered result was "not detected"
BOLD/Italics - exceeds criterion

TABLE 4
DZUS FASTENERS SITE (1-52-033)
MAY 2011 SAMPLING EVENT

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-9B | DMW-9B | DMW-13A | DMW-13A | DMW-13A | DMW-13B | DMW-13B | DMW-13B |
| Laboratory ID | Ground | K0942-07 | K0942-08 | K0942-08 | K0942-17 | K0942-18 | K0942-18 | K0942-19 | K0942-20 | K0942-20 |
| Sample Date | Water | 5/25/11 | 5/25/11 | 5/25/11 | 5/25/11 | 5/25/11 | 5/25/11 | 5/25/11 | 5/25/11 | 5/25/11 |
| 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 | 99 B | 0 | 0.0% | 2,100 | 0 | 0.0% | 106 B | 0 | 0.0% |
| Antimony | 3 | ND | ND | NC | ND | ND | NC | ND | ND | NC |
| Arsenic | 25 | ND | 6.2 B | | 13.1 B | 0 | 0.0% | ND | ND | NC |
| Barium | 1,000 | 14.4 B | 12.8 B | 88.9% | 886 | 20.5 B | 2.3% | 14.4 B | 12.6 B | 87.5% |
| Beryllium | 3 | ND | ND | NC | ND | ND | NC | ND | ND | NC |
| Cadmium | 5 | ND | ND | NC | 373 | 10.3 | 2.8% | 2.2 B | 0 | NC |
| Calcium | NC | 8,580 | 8,480 | 98.8% | 27,500 | 24,900 | 90.5% | 10,900 | 10,900 | 100.0% |
| Chromium | 50 | 1.4 B | 0 | 0.0% | 22.1 | 0 | 0.0% | 11.7 B | 10.7 B | 91.5% |
| Cobalt | NC | ND | ND | NC | 268 | 1.1 B | 0.4% | ND | ND | NC |
| Copper | 200 | ND | ND | NC | 20.8 B | 0 | 0.0% | 6.5 B | 0 | 0.0% |
| Iron | 300 | 528 | 32 B | 6.0% | 2,310 | 0 | 0.0% | 469 | 0 | 0.0% |
| Lead | 25 | ND | ND | 0.0% | ND | ND | NC | ND | ND | NC |
| Magnesium | 35,000 | 1,490 | 1,430 | 96.0% | 3,820 | 3,340 | 87.4% | 1,560 | 1,530 | 98.1% |
| Manganese | 300 | 92 | 0 | 0.0% | 61,600 | 1,720 | 2.8% | 148 | 0 | 0.0% |
| Mercury | 0.7 | ND | ND | NC | ND | ND | NC | ND | ND | NC |
| Nickel | 100 | 1.8 B | 0.88 B | 48.9% | 3.3 B | 0 | 0.0% | 1.5 B | 0 | 0.0% |
| Potassium | NC | 1,910 | 1,670 | 87.4% | 6,700 E | 5,990 E | 89.4% | 1,910 E | 1,680 E | 88.0% |
| Selenium | 10 | ND | ND | NC | ND | ND | NC | ND | ND | NC |
| Silver | 50 | ND | ND | NC | 12.1 B | 0 | 0.0% | ND | ND | NC |
| Sodium | 20,000 | 6,730 | 6,650 | 98.8% | 38,400 | 37,500 | 97.7% | 6,720 | 6,880 | 102.4% |
| Thallium | 0.5 | ND | ND | NC | ND | ND | NC | ND | ND | NC |
| Vanadium | NC | ND | ND | NC | 6.4 B | 0 | 0.0% | ND | ND | NC |
| Zinc | 2,000 | 27.1 B | 25.4 B | 93.7% | 36.1 B | 18 B | 49.9% | 32.7 B | 32.5 B | 99.4% |

Notes: ND - Not Detected
B - Estimated value (greater than MDL but less than RL)
NC - both filtered and unfiltered result was "not detected"
BOLD/Italics - exceeds criterion

TABLE 4
DZUS FASTENERS SITE (1-52-033)
MAY 2011 SAMPLING EVENT

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-15A | DMW-15A | DMW-15B | DMW-15B | DMW-15B | DMW-18 | DMW-18 | DMW-18 |
| Laboratory ID | Ground | K0942-21 | K0942-22 | K0942-22 | K0942-23 | K0942-24 | K0942-24 | K0942-25 | K0942-26 | K0942-26 |
| Sample Date | Water | 5/25/11 | 5/25/11 | 5/25/11 | 5/25/11 | 5/25/11 | 5/25/11 | 5/25/11 | 5/25/11 | 5/25/11 |
| 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 | 3,280 | 0 | 0.0% |
| Antimony | 3 | ND | ND | NC | ND | ND | NC | ND | ND | NC |
| Arsenic | 25 | ND | ND | NC | 5.5 B | 4.8 B | 87.3% | 7.0 B | 0 | 0.0% |
| Barium | 1,000 | 23.1 B | 16.4 B | 71.0% | 34.6 B | 34.4 B | 99.4% | 109 B | 13.4 B | 12.3% |
| Beryllium | 3 | ND | ND | MC | ND | ND | NC | 0.29 B | 0 | 0.0% |
| Cadmium | 5 | 63 | 12.2 | 19.4% | ND | ND | NC | 1.3 B | 0 | 0.0% |
| Calcium | NC | 16,300 | 16,600 | 101.8% | 12,000 | 11,900 | 99.2% | 19,000 | 18,400 | 96.8% |
| Chromium | 50 | 1.3 B | 0 | 0.0% | ND | ND | NC | 3.9 B | 0 | 0.0% |
| Cobalt | NC | ND | ND | NC | 1.4 B | 1.2 B | 85.7% | 9.2 B | 0 | 0.0% |
| Copper | 200 | 9.8 B | 0 | 0.0% | ND | ND | NC | 12.2 B | 0 | 0.0% |
| Iron | 300 | 164 B | 0 | 0.0% | 1,410 | 1,130 | 80.1% | 2,890 | 0 | 0.0% |
| Lead | 25 | ND | ND | NC | ND | ND | NC | ND | ND | NC |
| Magnesium | 35,000 | 2,410 | 2,380 | 98.8% | 4,860 | 4,920 | 101.2% | 3,300 | 3,070 | 93.0% |
| Manganese | 300 | 1,510 | 56 | 3.7% | 182 | 182 | 100.0% | 3,450 | 0 | 0.0% |
| Mercury | 0.7 | ND | ND | NC | ND | ND | NC | ND | ND | NC |
| Nickel | 100 | 1.7 B | 0 | 0.0% | 1.9 B | 2 B | 105.3% | 15.7 B | 0 | 0.0% |
| Potassium | NC | 2,290 E | 2,290 E | 100.0% | 1,890 E | 1,860 E | 98.4% | 2,050 E | 1,860 E | 90.7% |
| 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 | 19,500 | 19,800 | 101.5% | 40,600 | 40,600 | 100.0% | 16,800 | 17,300 | 103.0% |
| Thallium | 0.5 | ND | ND | NC | ND | ND | NC | ND | ND | NC |
| Vanadium | NC | ND | ND | NC | ND | ND | NC | 3.9 B | 0 | 0.0% |
| Zinc | 2,000 | 31.7 B | 25.9 B | 81.7% | 37.3 B | 33.7 B | 90.3% | 192 | 22.2 B | 11.6% |

Notes: ND - Not Detected
B - Estimated value (greater than MDL but less than RL)
NC - both filtered and unfiltered result was "not detected"
BOLD/Italics - exceeds criterion

TABLE 4
DZUS FASTENERS SITE (1-52-033)
MAY 2011 SAMPLING EVENT

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-22A | DMW-22A | DMW-22B | DMW-22B | DMW-22B |
| Laboratory ID | Ground | K0942-11 | K0942-12 | K0942-12 | k0942-13 | k0942-13 | k0942-13 |
| Sample Date | Water | 5/25/11 | 5/25/11 | 5/25/11 | 5/25/11 | 5/25/11 | 5/25/11 |
| Filtered/Unfiltered | Criteria | Unfiltered | Filtered | Percent | Unfiltered | Filtered | Percent |
| Metal | | conc. Q | conc. Q | Dissolved | conc. Q | conc. Q | Dissolved |
| Aluminum | NC | 159 B | 0 | 0.0% | ND | ND | NC |
| Antimony | 3 | ND | ND | NC | ND | ND | NC |
| Arsenic | 25 | 7.5 B | 4.5 B | 60.0% | ND | ND | NC |
| Barium | 1,000 | 106 B | 111 B | 104.7% | 43.3 B | 35.6 B | 82.2% |
| Beryllium | 3 | ND | ND | NC | ND | ND | NC |
| Cadmium | 5 | 6.8 | 0 | NC | ND | ND | NC |
| Calcium | NC | 114,000 | 96,400 | 84.6% | 19,500 | 19,700 | 101.0% |
| Chromium | 50 | 2.8 B | 0.76 B | 27.1% | 0.66 B | 0 | 0.0% |
| Cobalt | NC | ND | ND | NC | ND | ND | NC |
| Copper | 200 | 7.9 B | 0 | 0.0% | ND | ND | NC |
| Iron | 300 | 16,700 | 2,260 | 13.5% | 164 B | 0 | 0.0% |
| Lead | 25 | ND | ND | 0.0% | ND | ND | 0.0% |
| Magnesium | 35,000 | 15,600 | 13,100 | 84.0% | 3,230 | 3,300 | 102.2% |
| Manganese | 300 | 683 | 780 | 114.2% | 589 | 342 | 58.1% |
| Mercury | 0.7 | ND | ND | NC | ND | ND | NC |
| Nickel | 100 | 2.4 B | 1.4 B | 58.3% | 0.85 B | 0 | 0.0% |
| Potassium | NC | 4,520 E | 5,120 E | 113.3% | 4,740 E | 4,260 E | 89.9% |
| Selenium | 10 | ND | ND | NC | ND | ND | NC |
| Silver | 50 | ND | ND | NC | ND | ND | NC |
| Sodium | 20,000 | 100,000 | 134,000 | 134.0% | 12,700 | 13,600 | 107.1% |
| Thallium | 0.5 | ND | ND | NC | ND | ND | NC |
| Vanadium | NC | 3.1 B | 0 | 0.0% | ND | ND | NC |
| Zinc | 2,000 | 1000 | 546 | 54.6% | 20.1 B | 17.6 B | 87.6% |

Notes: ND - Not Detected
B - Estimated value (greater than MDL but less than RL)
NC - both filtered and unfiltered result was "not detected"
BOLD/italics - exceeds criterion

TABLE 4
DZUS FASTENERS SITE (1-52-033)
MAY 2011 SAMPLING EVENT

TOTAL VERSUS DISSOLVED METALS CONCENTRATIONS IN GROUNDWATER

| Sample Location Sample ID Laboratory ID Sample Date Filtered/Unfiltered Metal | NYSDEC Class GA Ground Water Criteria | MW-23A DMW-23A K0942-15 5/25/11 Unfiltered conc. Q | MW-23A DMW-23A K0942-16 5/25/11 Filtered conc. Q | MW-23A DMW-23A K0942-16 5/25/11 Percent Dissolved | MW-23B DMW-23B K0942-27 5/25/11 Unfiltered conc. Q | MW-23B DMW-23B K0942-28 5/25/11 Filtered conc. Q | MW-23B DMW-23B K0942-28 5/25/11 Percent Dissolved |
|--|---|---|---|--|---|---|--|
| Aluminum | NC | 5,060 | 0 | 0.0% | 1,810 | 0 | 0.0% |
| Antimony | 3 | ND | ND | NC | ND | ND | NC |
| Arsenic | 25 | 7.4 B | 0 | 0.0% | ND | ND | NC |
| Barium | 1,000 | 47.4 B | 34.6 B | 73.0% | 64.8 B | 150 B | 231.5% |
| Beryllium | 3 | ND | ND | NC | ND | ND | NC |
| Cadmium | 5 | 924 | 9.5 | 1.0% | 40.1 | 5.8 | 14.5% |
| Calcium | NC | 29,300 | 27,800 | 94.9% | 24,800 | 21,700 | 87.5% |
| Chromium | 50 | 6.4 B | 0.97 B | 15.2% | 12.6 B | 8.5 B | 67.5% |
| Cobalt | NC | ND | ND | NC | 1.7 B | 0.91 B | 53.5% |
| Copper | 200 | 190 | ND | NC | 25.6 B | 13.9 B | 54.3% |
| Iron | 300 | 15,200 | 2,030 | 13.4% | 5,200 | 36,100 | 694.2% |
| Lead | 25 | 5.6 B | 0 | 0.0% | 22.6 | 0 | 0.0% |
| Magnesium | 35,000 | 5,160 | 5,100 | 98.8% | 4,150 | 2,460 | 59.3% |
| Manganese | 300 | 1,600 | 1,480 | 92.5% | 126 | 169 | 134.1% |
| Mercury | 0.7 | 0.035 B | 0 | 0.0% | ND | ND | NC |
| Nickel | 100 | 3.7 B | 1.2 B | 32.4% | 14.8 B | 10 B | 67.6% |
| Potassium | NC | 6,270 E | 6,420 E | 102.4% | 2,450 E | 2,110 E | 86.1% |
| Selenium | 10 | ND | ND | NC | ND | ND | NC |
| Silver | 50 | ND | ND | NC | ND | ND | NC |
| Sodium | 20,000 | 67,900 | 70,800 | 104.3% | 18,900 | 18,500 | 97.9% |
| Thallium | 0.5 | ND | ND | NC | ND | ND | NC |
| Vanadium | NC | 16.4 B | 0 | 0.0% | 12.9 B | 0 | NC |
| Zinc | 2,000 | 70.5 | 15.6 B | 22.1% | 410 | 47 B | 11.5% |

Notes: ND - Not Detected
B - Estimated value (greater than MDL but less than RL)
NC - both filtered and unfiltered result was "not detected"
BOLD/Italics - exceeds criterion

TABLE 5
DZUS FASTENERS SITE (1-52-033)
JUNE 2006 THROUGH MAY 2011 SAMPLING EVENTS
SUMMARY OF TAL METALS IN WILLETTS CREEK AND LAKE CAPRI SURFACE WATER SAMPLES

| Sample Location | NYSDEC Class A | Lake Capri | Lake Capri | Lake Capri | Lake Capri | Lake Capri | Lake Capri | Lake Capri | Lake Capri | Lake Capri | Lake Capri |
|-----------------|-------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Sample ID | Surface | SW-1 | SW-1 | SW-1 | SW-1 | SW-1 | SW-2 | SW-2 | SW-2 | SW-2 | SW-2 |
| Laboratory ID | Water | E0868-01A | F1193-20A | G2136-11 | J0376-01A | K0911-08 | E0868-03A | F1194-02A | G2136-09 | J0376-02A | K0911-09 |
| Sample Date | Criteria | 6/21/06 | 8/23/07 | 11/14/08 | 3/4/10 | 5/22/11 | 6/21/06 | 8/23/07 | 11/14/08 | 3/4/10 | 5/22/11 |
| | | conc. Q | conc. Q | conc. Q | conc. Q | 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 | 16.8 B | 98.4 B | ND | 33.2 B | ND |
| Antimony | 3 | ND | ND | 6.0 B | ND | ND | ND | ND | ND | 5.7 B | ND |
| Arsenic | 50 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Barium | 1,000 | 13.2 B | 23.1 B | 31.8 B | 22.4 B | 13.6 B | 12.2 B | 24.3 B | 32.4 B | 24.2 B | 12.9 B |
| Beryllium | 3 | ND | ND | ND | ND | ND U | ND | ND | ND | ND | ND |
| Cadmium | 5 | 1.1 B | 2.3 B | 1.5 B | 2.6 B | 1.6 B | 1.0 B | 2.1 B | 2.0 B | 2.8 B | 1.7 B |
| Calcium | NC | 15,100 | 14,100 | 14,300 | 15,300 | 13,900 | 14,900 | 13,300 | 14,300 | 16,100 | 13,900 |
| Chromium | 50 | 0.6 B | 0.95 B | ND | 0.52 B | 1.3 B | 0.52 B | 1.2 B | ND | 0.86 B | 0.72 B |
| Cobalt | NC | 0.94 B | 1.4 BE | ND | 0.76 B | 0.77 B | 0.92 B | 1 B | ND | 1 B | ND |
| Copper | 200 | 8.9 B | 3.1 B | ND | ND | ND | ND | 4.4 B | ND | 6.2 B | ND |
| Iron | 300 | 691 | 738 | 598 | 387 | 416 | 649 | 819 | 675 | 478 | 508 |
| Lead | 50 | ND | 2.1 B | ND | ND | ND | ND | 3.1 B | 2.4 B | ND | ND |
| Magnesium | 35,000 | 3,500 | 2,860 | 3,570 | 3,420 | 2,960 | 3,490 | 2,940 | 3,530 | 3,700 | 2,940 |
| Manganese | 300 | 1,050 | 862 | 1,610 | 996 | 1,000 | 1,010 | 819 E | 1,560 | 968 | 1,080 |
| Mercury | 0.7 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Nickel | 100 | 1.3 B | 0.6 B | ND | 1.6 B | ND | 1.1 B | 0.81 B | ND | 2.4 B | ND |
| Potassium | NC | 2,000 | 1,930 | 2,250 | 2,070 | 2,040 | 1,990 | 1,990 | 2,320 | 2,080 | 1,990 |
| Selenium | 10 | ND | 6 B | ND | ND | ND | ND | ND | ND | ND | ND |
| Silver | 50 | 1.8 B | 2.8 B | 0.98 B | ND | ND | 1.6 B | 3.1 B | ND | ND | ND |
| Sodium | 20,000 | 18,500 | 15,800 | 19,000 | 22,500 | 18,700 | 18,100 | 16,200 E | 19,500 | 22,000 | 18,600 |
| Thallium | 0.5 | ND | ND | ND | ND | ND | ND | ND | ND | 7.2 B | ND |
| Vanadium | NC | 0.78 B | 0.79 B | ND | 2.6 B | ND | ND | 0.88 B | 1.1 B | 3.3 B | ND |
| Zinc | 2,000 | 22.4 B | 22.8 B | 22.3 B | 38 B | 22.3 B | 15.6 B | 27.4 B | 21 B | 34.5 B | 20.3 B |

Notes: All values in µg/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
* - Replicate RPDs were not within QC limits

TABLE 5
DZUS FASTENERS SITE (1-52-033)
JUNE 2006 THROUGH MAY 2011 SAMPLING EVENTS
SUMMARY OF TAL METALS IN WILLETTS CREEK AND LAKE CAPRI SURFACE WATER SAMPLES

| Sample Location | NYSDEC Class A | Lake Capri | Lake Capri | Lake Capri | Lake Capri | Lake Capri | Lake Capri | Lake Capri | Lake Capri | Lake Capri | Lake Capri |
|-----------------|-------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Sample ID | Surface | SW-3 | SW-3 | SW-3 | SW-3 | SW-3 | SW-4 | SW-4 | SW-4 | SW-4 | SW-4 |
| Laboratory ID | Water | E0868-05A | F1194-04A | G2136-13 | J0376-03A | K0911-10 | E0868-07A | F1194-06A | G2136-15 | J0376-04A | K0911-11 |
| Sample Date | Criteria | 6/21/06 | 8/23/07 | 11/14/08 | 3/4/10 | 5/22/11 | 6/21/06 | 8/23/07 | 11/14/08 | 3/4/10 | 5/22/11 |
| | | conc. Q | conc. Q | conc. Q | conc. Q | conc. Q | conc. Q | conc. Q | conc. Q | conc. Q | conc. Q |
| Aluminum | NC | 69.5 B | 37 U | ND | 27 B | ND | ND | ND | ND | 27.4 B | ND |
| Antimony | 3 | ND | ND | ND | 7.2 B | ND | ND | ND | ND | ND | ND |
| Arsenic | 50 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Barium | 1,000 | 7.9 B | 12.6 B | 38.6 B | 19.6 B | 10.1 B | 5.7 B | 14 B | 31.9 B | 20.2 B | 9.8 B |
| Beryllium | 3 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Cadmium | 5 | 1.9 B | 0.32 B | 0.97 B | 2.8 B | 1.4 B | 0.89 B | 0.77 B | 0.63 B | 2.6 B | 1.4 B |
| Calcium | NC | 15,200 | 13,100 | 14,000 | 15,000 | 13,900 | 14,600 | 12,900 | 14,000 | 15,300 | 13,700 |
| Chromium | 50 | 0.58 B | 0.7 B | ND | 0.59 B | 0.67 B | ND | 0.88 B | ND | 0.51 B | 0.75 B |
| Cobalt | NC | 0.72 B | 1.0 B | ND | ND | ND | 0.37 B | 1.2 B | ND | ND | ND |
| Copper | 200 | ND | 3.9 B | ND | ND | ND | 11.7 B | 4.9 B | ND | ND | ND |
| Iron | 300 | 788 | 280 | 772 | 332 | 311 | 610 | 609 | 741 | 344 | 322 |
| Lead | 50 | 0.92 B | ND | ND | ND | ND | ND | 2.2 B | ND | ND | ND |
| Magnesium | 35,000 | 3,540 | 2,990 | 3,440 | 3,380 | 3,030 | 3,510 | 2,950 | 3,490 | 3,420 | 2,980 |
| Manganese | 300 | 882 | 73.9 E | 1,790 | 911 | 990 | 786 | 135 E | 1,630 | 943 | 918 |
| Mercury | 0.7 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Nickel | 100 | 0.96 B | ND | ND | 1.3 B | ND | 0.6 B | ND | ND | 0.88 B | ND |
| Potassium | NC | 2,000 | 2,020 | 2,290 | 2,000 | 2,000 | 1,950 | 2,040 | 2,310 | 1,980 | 1,960 |
| Selenium | 10 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Silver | 50 | 1.3 B | 3.4 B | 0.64 B | ND | ND | ND | 2.8 B | ND | ND | ND |
| Sodium | 20,000 | 18,300 | 16,800 E | 17,700 | 23,300 | 18,800 | 18,100 | 16,600 E | 17,800 | 22,900 | 18,700 |
| Thallium | 0.5 | ND | ND | ND | 5.9 B | ND | ND | ND | ND | ND | ND |
| Vanadium | NC | 0.7 B | 0.42 B | ND | 2.8 B | ND | ND | ND | ND | 2 B | ND |
| Zinc | 2,000 | 21.5 B | 14 B | 16.4 B | 33.4 B | 18.9 B | 20.2 B | 18 B | 9.7 B | 31.9 B | 18.9 B |

Notes: All values in µg/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
* - Replicate RPDs were not within QC limits

TABLE 5
DZUS FASTENERS SITE (1-52-033)
JUNE 2006 THROUGH MAY 2011 SAMPLING EVENTS
SUMMARY OF TAL METALS IN WILLETTS CREEK AND LAKE CAPRI SURFACE WATER SAMPLES

| Sample Location | NYSDEC | Willetts | Willetts | Willetts | Willetts | Willetts | Willetts | Willetts | Willetts | Willetts | Willetts |
|-----------------|----------|---------------|---------------|--------------|---------------|---------------|---------------|-----------------|---------------|---------------|---------------|
| Sample ID | Class A | Creek | Creek | Creek | Creek | Creek | Creek | Creek | Creek | Creek | Creek |
| Laboratory ID | Surface | SW-5 | SW-5 | SW-5 | SW-5 | SW-5 | SW-6 | SW-6 | SW-6 | SW-6 | SW-6 |
| Sample Date | Water | E0868-09A | F1193-18A | G2114-20 | J0376-05A | K0911-12 | E0868-11A | F1194-08A | G2114-16 | J0376-06 | K0911-13 |
| | Criteria | 6/21/06 | 8/23/07 | 11/12/08 | 3/4/10 | 5/22/11 | 6/21/06 | 8/23/07 | 11/12/08 | 3/4/10 | 5/22/11 |
| | | conc. Q | conc. Q | conc. Q | conc. Q | conc. Q | conc. Q | conc. Q | conc. Q | conc. Q | conc. Q |
| Aluminum | NC | 15.3 B | ND | ND | 79.3 B | 305 | 40.5 B | ND | 190 B | 63.9 B | 103 B |
| Antimony | 3 | 1.5 B | 4.4 B | ND | ND | ND | ND | 8 B | ND | ND | ND |
| Arsenic | 50 | ND | ND | ND | 5.2 B | ND | ND | ND | ND | ND | ND |
| Barium | 1,000 | 36.9 B | 36.4 B | 26.2 B | 24.6 B | 40.7 B | 35.5 B | 40.6 B | 37.7 B | 22.8 B | 27.8 B |
| Beryllium | 3 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Cadmium | 5 | 5.7 | 5.6 | 3 B | 5.1 | 8.8 | 0.55 B | 2.8 B | 75.4 | ND | ND |
| Calcium | NC | 14,400 | 16,100 | 12,500 | 17,800 | 19,200 | 26,700 | 27,200 | 20,100 | 19,200 | 25,100 |
| Chromium | 50 | ND | 0.39 B | ND | 0.99 B | 2.6 B | 0.99 B | 0.88 B | 7.2 B | 1.5 B | 0.73 B |
| Cobalt | NC | 0.82 B | 1.9 BE | ND | ND | 1.8 B | 3.1 B | 2.8 B | ND | ND | ND |
| Copper | 200 | ND | 1.7 B | ND | 5.6 B | 11.3 B | ND | 2.8 B | ND | ND | ND |
| Iron | 300 | 632 | 599 | 1,060 | 959 | 4,080 | 5,400 | 2,170 | 4,010 | 639 | 2,280 |
| Lead | 50 | ND | ND | ND | ND | 10.2 | ND | 2.5 B | 9.8 B | ND | ND |
| Magnesium | 35,000 | 3,550 | 3,420 | 3,100 | 3,960 | 4,020 | 5,130 | 5,290 | 4,080 | 4,320 | 4,960 |
| Manganese | 300 | 1,420 | 1,110 | 956 | 450 | 923 | 2,610 | 1,510 E | 1,040 | 406 | 869 |
| Mercury | 0.7 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Nickel | 100 | 0.98 B | 0.85 B | ND | 1.1 B | 1.4 B | 1.4 B | 1.5 B | ND | 1.8 B | ND |
| Potassium | NC | 2,080 | 2,040 | 1,780 | 2,070 | 2,340 | 2,230 | 2,480 | 2,830 | 2,250 | 2,810 |
| Selenium | 10 | ND | ND | ND | ND | ND | ND | ND | ND | 10.5 B | ND |
| Silver | 50 | ND | 3.1 B | ND | ND | ND | ND | 5.9 B | ND | ND | ND |
| Sodium | 20,000 | 21,100 | 21,800 | 18,100 | 20,300 | 26,900 | 29,200 | 33,600 E | 26,000 | 20,500 | 33,800 |
| Thallium | 0.5 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Vanadium | NC | ND | ND | 0.99 B | 12.1 B | 6.9 B | 1.1 B | 0.63 B | 1.6 B | 1.6 B | ND |
| Zinc | 2,000 | 22 B | 21.2 B | 10.4 B | 38.5 B | 98.7 | 35.6 B | 32.2 B | 48.2 B | 43.3 B | 35.8 B |

Notes: All values in µg/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

* - Replicate RPDs were not within QC limits

TABLE 6
DUZS FASTENERS SITE (1-52-033)
JUNE 2006 THROUGH MAY 2011 SAMPLING EVENTS
SUMMARY OF TAL METALS IN WILLETTS CREEK AND LAKE CAPRI SEDIMENT SAMPLES

| Sample Location | NYSDEC Technical Guidance for Sediment Criteria | | Lake Capri SED-1 | Lake Capri SED-1 | Lake Capri SED-1 | Lake Capri SED-1 | Lake Capri SED-1 | Lake Capri SED-2 | Lake Capri SED-2 | Lake Capri SED-2 | Lake Capri SED-2 | Lake Capri SED-2 |
|-----------------|---|----------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| Sample ID | Laboratory ID | | E0868-02A | F1193-19A | G2136-10 | J0376-09A | K0911-01 | E0868-04A | F1194-01A | G2136-08 | J0376-10A | K0911-02 |
| Sample Date | Lowest Effect | Highest Effect | 6/21/06 | 8/23/07 | 11/14/08 | 3/4/10 | 5/22/11 | 6/21/06 | 8/23/07 | 11/14/08 | 3/4/10 | 5/22/11 |
| | conc. | Q | conc. | Q | conc. | Q | conc. | Q | conc. | Q | conc. | Q |
| Aluminum | NC | NC | 5,020 | 895 | 7630 * | 6,730 E | 9,620 | 15,500 | 1,850 | 2,800 * | 9,050 E | 8,310 |
| Antimony | 2.0 | 25 | 0.7 B | 0.41 B | 2.2 BN | 6.4 | ND | 0.92 B | 0.82 B | 0.19 BN | 1.3 B | ND |
| Arsenic | 6.0 | 33 | 7.9 | 1.5 | 8.7 | 16.1 | 15.2 * | 19.7 | 2 B | 1.8 | 20.2 | 13.4 * |
| Barium | NC | NC | 81.2 | 31.9 | 67.7 B*E | 175 | 445 | 89.8 | 57.9 | 40.8 *E | 173 | 108 |
| Beryllium | NC | NC | 0.5 B | 0.074 B | 0.64 B | 0.75 BE | 0.87 B | 1.2 | 0.16 B | 0.16 B | 0.89 E | 0.75 B |
| Cadmium | 0.6 | 9 | 47.8 | 11.6 | 61.4 N*E | 69.2 | 81.2 * | 133 | 21.2 | 12.5 N*E | 111 | 96.6 * |
| Calcium | NC | NC | 2,540 | 646 | 3,140 * | 5,180 * | 7,440 * | 2,860 | 1,320 | 1,400 * | 3,810 * | 4,330 * |
| Chromium | 26 | 110 | 20.7 | 2.8 | 27.1 E | 39.1 * | 50 * | 33.7 | 7.7 | 6.5 E | 49.4 * | 45.2 * |
| Cobalt | NC | NC | 7.6 | 3.7 | 20.2 E | 20.9 | 29.4 E | 12.1 | 8.1 | 3 BE | 17.8 | 11.1 E |
| Copper | 16 | 110 | 38.6 | 86.3 | 65.7 | 127 * | 121 * | 210 | 19.6 | 15.6 | 97.7 * | 80.2 * |
| Iron | 20,000 | 20,000 | 10,300 | 3,880 | 19,700 E | 36,000 | 44,600 * | 20,300 | 8,940 | 3,850 E | 27,500 | 17,300 * |
| Lead | 31 | 110 | 170 | 19.3 | 176 N*E | 225 | 226 N* | 315 | 40.7 | 25.8 N*E | 375 | 315 N* |
| Magnesium | NC | NC | 1,300 | 217 | 1,260 *E | 1,770 | 2,100 *E | 1,510 | 404 | 305 *E | 1,690 | 1,360 *E |
| Manganese | 460 | 1,100 | 1,290 | 1,200 | 181 * | 2,250 | 22,600 * | 153 | 1,300 | 769 * | 3,510 | 1,480 * |
| Mercury | 0.15 | 1.3 | 0.21 | 0.0071 B | 0.34 | 0.38 | 0.33 B | 0.45 | 0.047 BN | 0.018 B | 0.35 | 0.5 |
| Nickel | 16 | 50 | 11.4 | 3 | 19.4 | 24.1 E | 24.1 * | 17.6 | 6.8 E | 3.2 B | 22 E | 17.6 * |
| Potassium | NC | NC | 514 | 91.9 | 465 * | 429 | 748 | 555 | 200 E | 123 * | 373 | 389 |
| Selenium | NC | NC | 1.6 B | 0.64 B | ND | 5 B | ND | 2.2 B | 1.2 B | ND | ND | ND |
| Silver | 1.0 | 2.2 | ND | ND | ND | ND | 2.7 B | 0.33 B | ND | ND | ND | ND |
| Sodium | NC | NC | 117 | 44.2 B | 136 B | 339 | 433 | 143 | 92.5 B | 46.5 B | 200 | 219 |
| Thallium | NC | NC | 5.8 | ND | ND | 12.7 | 3.8 B | 0.39 B | ND | ND | 20.5 | 2.5 B |
| Vanadium | NC | NC | 29.4 | 5.1 | 39.9 E | 78.7 E | 99.2 | 55.9 | 11.9 | 5.8 E | 61.3 E | 54 |
| Zinc | 120 | 270 | 215 | 71.6 | 445 *E | 493 * | 572 * | 402 | 138 | 67.9 *E | 495 * | 406 * |

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 limits

TABLE 6
DUZS FASTENERS SITE (1-52-033)
JUNE 2006 THROUGH MAY 2011 SAMPLING EVENTS
SUMMARY OF TAL METALS IN WILLETTS CREEK AND LAKE CAPRI SEDIMENT SAMPLES

| Sample Location | NYSDEC Technical Guidance for Sediment Criteria | | Lake Capri SED-3 | Lake Capri SED-3 | Lake Capri SED-3 | Lake Capri SED-3 | Lake Capri SED-3 | Lake Capri SED-4 | Lake Capri SED-4 | Lake Capri SED-4 | Lake Capri SED-4 | Lake Capri SED-4 |
|-----------------|---|----------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| Sample ID | Laboratory ID | | E0868-06A | F1194-03A | G2136-14 | J0376-11A | K0911-03 | E0868-08A | F1194-05A | G2136-16 | J0376-12A | K0911-04 |
| Sample Date | Lowest Effect | Highest Effect | 6/21/06 | 8/23/07 | 11/14/08 | 3/4/10 | 5/22/11 | 6/21/06 | 8/23/07 | 11/14/08 | 3/4/10 | 5/22/11 |
| | | | conc. Q | conc. Q | conc. Q | conc. Q | 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 | 2,730 | 3,290 | 1,790 * | 2,170 E | 5,850 |
| Antimony | 2.0 | 25 | ND | 0.35 B | 0.63 BN | ND | ND | 0.22 B | 0.76 B | 0.42 BN | 0.3 B | ND |
| Arsenic | 6.0 | 33 | 0.31 B | 3.1 | 4.2 B | 2.4 | 5.7 * | 3.4 | 4 | 3.9 | 1.9 | 4.4 * |
| Barium | NC | NC | 6.7 | 29.7 | 88.2 *E | 23.1 | 65.1 | 41.5 | 47.8 | 177 *E | 18.7 | 64.8 |
| Beryllium | NC | NC | 0.047 B | 0.18 B | 0.3 B | 0.29 BE | 0.5 | 0.2 B | 0.22 B | 0.13 B | 0.19 BE | 0.45 B |
| Cadmium | 0.6 | 9 | 1.5 | 27.7 | 1.7 N*E | 22.3 | 16.1 * | 32.3 | 32.3 | 15.8 N*E | 14.8 | 47.3 * |
| Calcium | NC | NC | 104 | 605 | 11,700 * | 1,260 * | 2,940 * | 588 | 1,240 | 8,090 * | 758 * | 2,560 * |
| Chromium | 26 | 110 | 1.5 | 7.9 | 9.6 E | 13.7 * | 9.1 * | 8.6 | 12.5 | 6.8 E | 8.1 * | 21.7 * |
| Cobalt | NC | NC | 0.66 B | 4.7 | 12.6 E | 3.6 | 5.7 E | 4.9 | 10 | 7 E | 3.1 | 9.5 E |
| Copper | 16 | 110 | 2.7 | 16.7 | 32.4 | 32.5 * | 10.9 * | 21.6 | 35.7 | 17.1 | 22.6 * | 49.5 * |
| Iron | 20,000 | 20,000 | 920 | 5,730 | 10,900 E | 3,770 | 6,240 * | 4,450 | 9,330 | 7,280 E | 2,540 | 9,170 * |
| Lead | 31 | 110 | 9.2 | 44.2 | 34 N*E | 85.9 | 46 N* | 71.2 | 193 | 34.3 N*E | 60.6 | 129 N* |
| Magnesium | NC | NC | 121 | 326 | 4,200 *E | 527 | 675 *E | 352 | 519 | 653 *E | 304 | 868 *E |
| Manganese | 460 | 1,100 | 89.8 | 568 | 908 * | 357 | 1,090 * | 837 | 845 | 11,700 * | 272 | 1,150 * |
| Mercury | 0.15 | 1.3 | 0.016 B | 0.049 BN | 0.074 B | 0.11 | 0.061 B | 0.096 | 0.059 BN | 0.21 | 0.082 | 0.18 |
| Nickel | 16 | 50 | 1.6 B | 5 E | 8.5 B | 7.4 E | 5.8 * | 6 | 10.7 E | 6.3 | 4.8 E | 13 * |
| Potassium | NC | NC | 115 | 168 E | 1,010 * | 173 | 254 | 145 | 236 E | 281 * | 103 | 383 |
| Selenium | NC | NC | 0.2 B | 1.2 B | ND | ND | ND | 0.76 B | 1.9 B | 3.3 | ND | ND |
| Silver | 1.0 | 2.2 | ND | ND | ND | ND | ND | ND | ND | 1.1 B | ND | ND |
| Sodium | NC | NC | 13.7 B | 51.5 B | 528 | 90.5 | 103 | 35.4 B | 87 | 131 | 56 B | 145 B |
| Thallium | NC | NC | 0.33 B | ND | ND | 1.7 | 1.1 B | 3.7 | ND | 2.8 | 1.6 | 1.7 B |
| Vanadium | NC | NC | 1.8 | 9.5 | 36.4 E | 12.5 E | 10.7 | 9.2 | 16.9 | 7.4 E | 7.2 E | 26.6 |
| Zinc | 120 | 270 | 10 | 110 | 71.3 *E | 106 * | 73.5 * | 122 | 186 | 110 *E | 71.3 * | 232 * |

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 limits

TABLE 6
DUZS FASTENERS SITE (1-52-033)
JUNE 2006 THROUGH MAY 2011 SAMPLING EVENTS
SUMMARY OF TAL METALS IN WILLETTS CREEK AND LAKE CAPRI SEDIMENT SAMPLES

| Sample Location | NYSDEC Technical Guidance for Sediment Criteria | | Willetts Creek SED-5 | Willetts Creek SED-5 | Willetts Creek SED-5 | Willetts Creek SED-5 | Willetts Creek SED-5 | Willetts Creek SED-6 | Willetts Creek SED-6 | Willetts Creek SED-6 | Willetts Creek SED-6 | Willetts Creek SED-6 |
|-----------------|---|--------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| Laboratory ID | Lowest Effect | | E0868-10A | F1193-17A | G2114-21 | J0376-13A | K0911-05 | E0868-12A | F1194-07A | G2114-17 | J0376-14 | K0911-06 |
| Sample Date | Highest Effect | | 6/21/06 | 8/23/07 | 11/14/08 | 3/4/10 | 5/22/11 | 6/21/06 | 8/23/07 | 11/14/08 | 3/4/10 | 5/22/11 |
| | | | conc. Q | conc. Q | conc. Q | conc. Q | 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 | 1,030 | 775 | 7,700 | 802 E | 1,370 |
| Antimony | 2.0 | 25 | 0.074 B | 0.27 B | 1.1 BN | 0.68 B | 1.4 BN | 0.076 | 0.38 B | 2.6 N | 0.38 B | 0.44 BN |
| Arsenic | 6.0 | 33 | 0.6 B | 0.52 B | 8.2 | 6.5 | 9.3 * | 0.97 | 0.84 B | 6.4 | 0.79 | 2.7 * |
| Barium | NC | NC | 12.1 | 13.6 | 96.6 | 84.6 | 114 | 7.4 | 4.7 B | 89.7 | 3.6 B | 10.4 |
| Beryllium | NC | NC | 0.083 B | 0.03 B | 0.34 B | 0.24 BE | 0.57 B | 0.094 | 0.049 B | 0.36 B | 0.069 BE | 0.11 B |
| Cadmium | 0.6 | 9 | 0.43 | 1.6 | 52 | 28.8 | 73.5 * | 0.23 | 0.31 | 101 | 0.31 | ND |
| Calcium | NC | NC | 228 | 1,430 | 4,150 | 3,470 * | 7,960 * | 4,760 | 599 | 7,690 | 2,450 * | 4,670 * |
| Chromium | 26 | 110 | 3.8 | 2.7 | 33.3 | 18.5 * | 44 * | 2.4 | 3.4 | 41.8 | 4.4 * | 15.9 * |
| Cobalt | NC | NC | 1.2 B | 1.1 B | 7.8 | 7.4 | 13.3 E | 1.8 | 0.77 B | 8.1 | 0.65 B | 1.9 BE |
| Copper | 16 | 110 | 4.7 | 4.7 | 103 | 54 * | 166 * | 28.3 | 6.3 | 77.3 | 9.4 * | 21.5 * |
| Iron | 20,000 | 20,000 | 3,400 | 3,410 | 23,900 | 25,800 | 39,900 * | 3,290 | 2,900 | 25,600 | 2,810 | 36,900 * |
| Lead | 31 | 110 | 7.9 | 4.9 | 215 E | 83.3 | 229 N* | 7.9 | 10.3 | 109 E | 9.5 | 39.7 N* |
| Magnesium | NC | NC | 604 | 864 | 1,370 | 701 | 1,370 *E | 2,930 | 468 | 1,980 | 1,410 | 1,290 *E |
| Manganese | 460 | 1,100 | 174 | 291 | 2,140 | 3,750 | 1,210 * | 102 | 30.4 | 978 | 21.3 | 118 * |
| Mercury | 0.15 | 1.3 | 0.016 B | 0.0055 B | 0.48 | 0.26 | 0.37 | 0.036 B | ND | 0.15 | ND | 0.019 B |
| Nickel | 16 | 50 | 1.6 | 1 B | 19.2 | 8 E | 22.5 * | 1.8 | 1.9 BE | 17.2 | 1.8 BE | 10.1 * |
| Potassium | NC | NC | 135 | 58.3 | 320 | 188 | 360 | 118 | 122 E | 528 | 66.4 | 97.5 |
| Selenium | NC | NC | 0.28 B | 0.56 B | ND | 2.3 B | ND | ND | 0.69 B | ND | ND | ND |
| Silver | 1.0 | 2.2 | ND | ND | ND | 0.52 B | ND | ND | ND | ND | ND | ND |
| Sodium | NC | NC | 18.3 B | 102 | 204 | 141 | 323 | 24.9 B | 70.7 | 414 | 47.7 | 51.8 |
| Thallium | NC | NC | 0.56 B | ND | 2.1 B | 20.1 | 1.9 B | 0.25 B | 0.36 B | 0.98 B | ND | ND |
| Vanadium | NC | NC | 5.6 | 4.5 | 54.2 | 44.6 E | 175 | 9.9 | 6 | 42.4 | 4.2 E | 8.5 |
| Zinc | 120 | 270 | 13.2 | 26.2 | 290 E | 171 * | 440 * | 17.2 | 24.2 | 409 E | 31 * | 68.9 * |

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

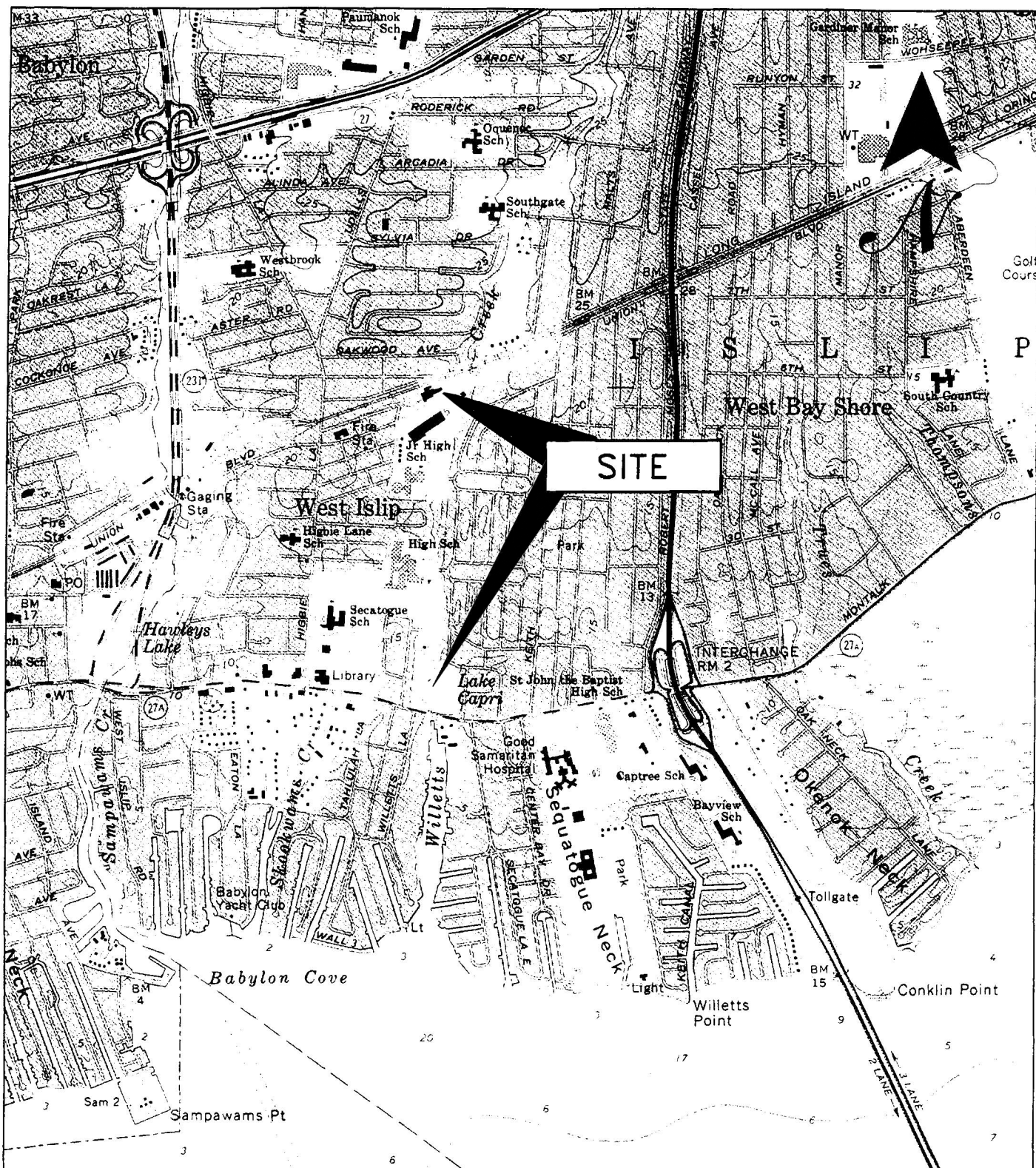
* - Percent recovery for duplicates were not within QC limits

N - Spike recoveries were not within QC limits

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

| Sampling Event | Sample | Common Name | Total Weight (g) | Cadmium Concentration (µg/kg) |
|--|-------------|-----------------|------------------|-------------------------------|
| July 2006 | South 1 | Largemouth bass | 700 | 28 |
| | South 2 | Largemouth bass | 240 | 28 |
| | South 3* | Bluegill | 24** | 190 |
| | South 4* | Largemouth bass | 6** | 270 |
| | North 1 | Pumpkinseed | 110 | 80 |
| | North 2 | Pumpkinseed | 24** | 120 |
| | North 3 | Bluegill | 124 | 39 |
| | North 4 | Bluegill | 61** | 76 |
| | North 5 | American eel | 51** | 120 |
| | North 6* | Pumpkinseed | 61** | 130 |
| | North 7* | Largemouth bass | 30** | 160 |
| | North 8* | Bluegill | 60** | 140 |
| May 2007 | North 1 | American eel | 56** | 170 |
| | North 2 | Bluegill | 33** | 230 |
| | North 3 | American eel | 152 | 170 |
| | North 4* | American eel | 33** | 220 |
| | North 5* | Bluegill | 24.5** | 190 |
| | North 6* | Bluegill | 20** | 190 |
| October 2010 | DF-F1-BG-1* | Bluegill | 94** | 260 |
| | DF-F1-BG-2* | Bluegill | 78** | 120 |
| | DF-F1-BG-3* | Bluegill | 64** | 200 |
| | DF-F1-BG-4* | Bluegill | 41** | 160 |
| | DF-F1-EE-1* | American eel | 15** | 370 |
| | DF-F1-PS-1 | Pumpkinseed | 138 | 7.6 |
| | DF-F1-PS-2* | Pumpkinseed | 50** | 170 |
| | DF-F1-PS-3* | Pumpkinseed | 140 | 96 |
| | DF-F2-BG-1* | Bluegill | 102 | 210 |
| | DF-F2-BG-2* | Bluegill | 140 | 230 |
| | DF-F2-BG-3* | Bluegill | 144 | 120 |
| | DF-F2-EE-1* | American eel | 31** | 250 |
| | DF-F2-LB-1 | Largemouth bass | 649 | 38 |
| | DF-F2-LB-2* | Largemouth bass | 71** | 150 |
| | DF-F2-PS-1 | Pumpkinseed | 50.5** | 270 |
| | DF-F2-PS-2* | Pumpkinseed | 177.5 | 120 |
| Notes: * Sample comprised of more than one individual. | | | | |
| ** Total sample weight below the 100g minimum sample requirement | | | | |

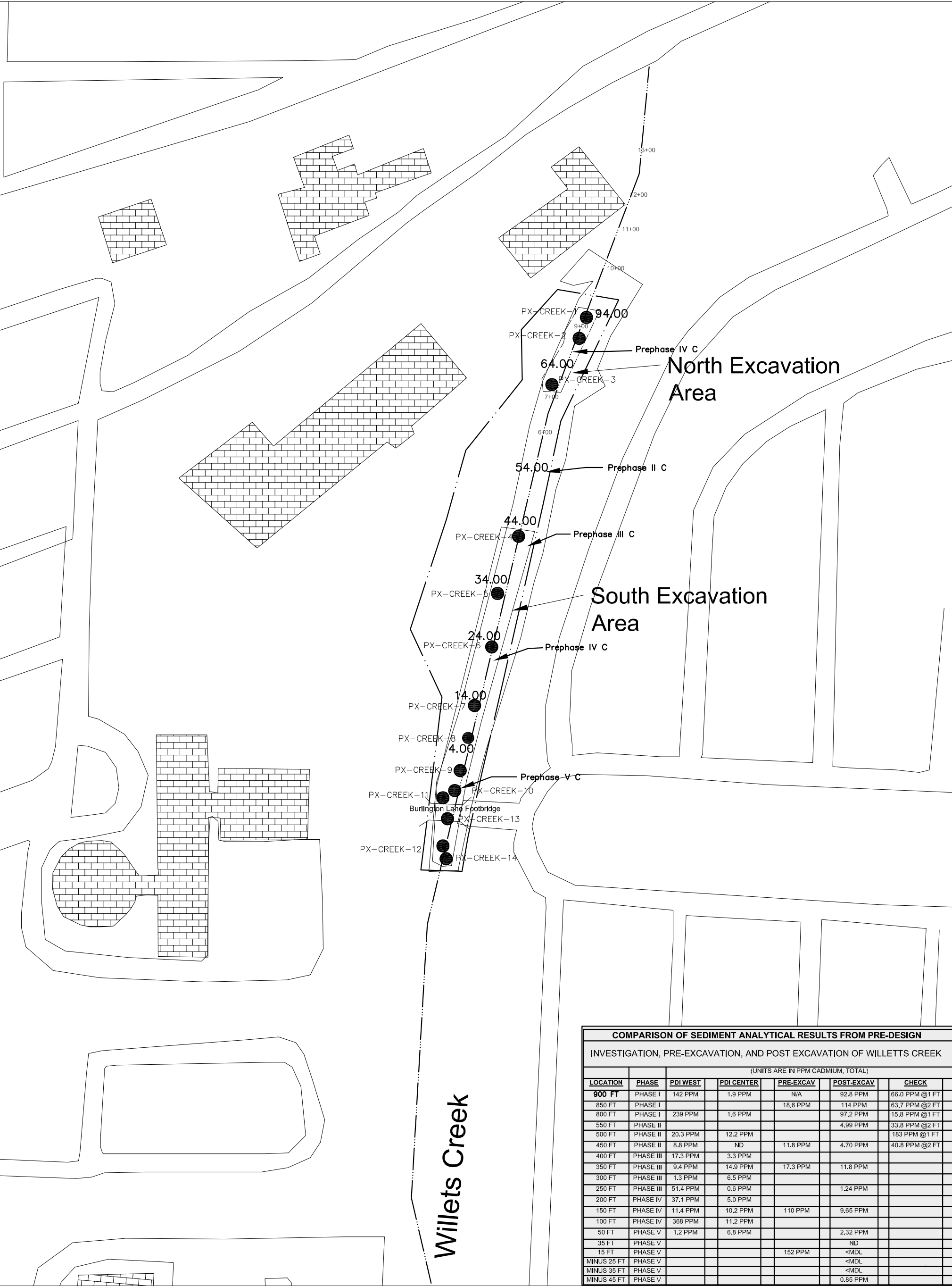
Figures



PORTION OF MAP 34 OF 39 SUFFOLK COUNTY LAST
AMENDMENT DATE 10-12-94
BAY SHORE WEST, NY QUADRANGLE. SCALE 1"=2000'



FIGURE 1
SITE LOCATION MAP
DZUS FASTENER SITE
LAKE CAPRI/WILLETTS CREEK



Legend

- Excavation Boundary
- Project Boundary
- Approximate Centerline of Creek Bed
- Wetlands Boundary

N

Comparison of Pre and Post Excavation Results for Willett's Creek (adopted from Figure 4, Construction and Certification Report (OU2), 2000)

Multi Site G

PROJECT NO. 95900.03

DWG NO.

Dzus Fasteners

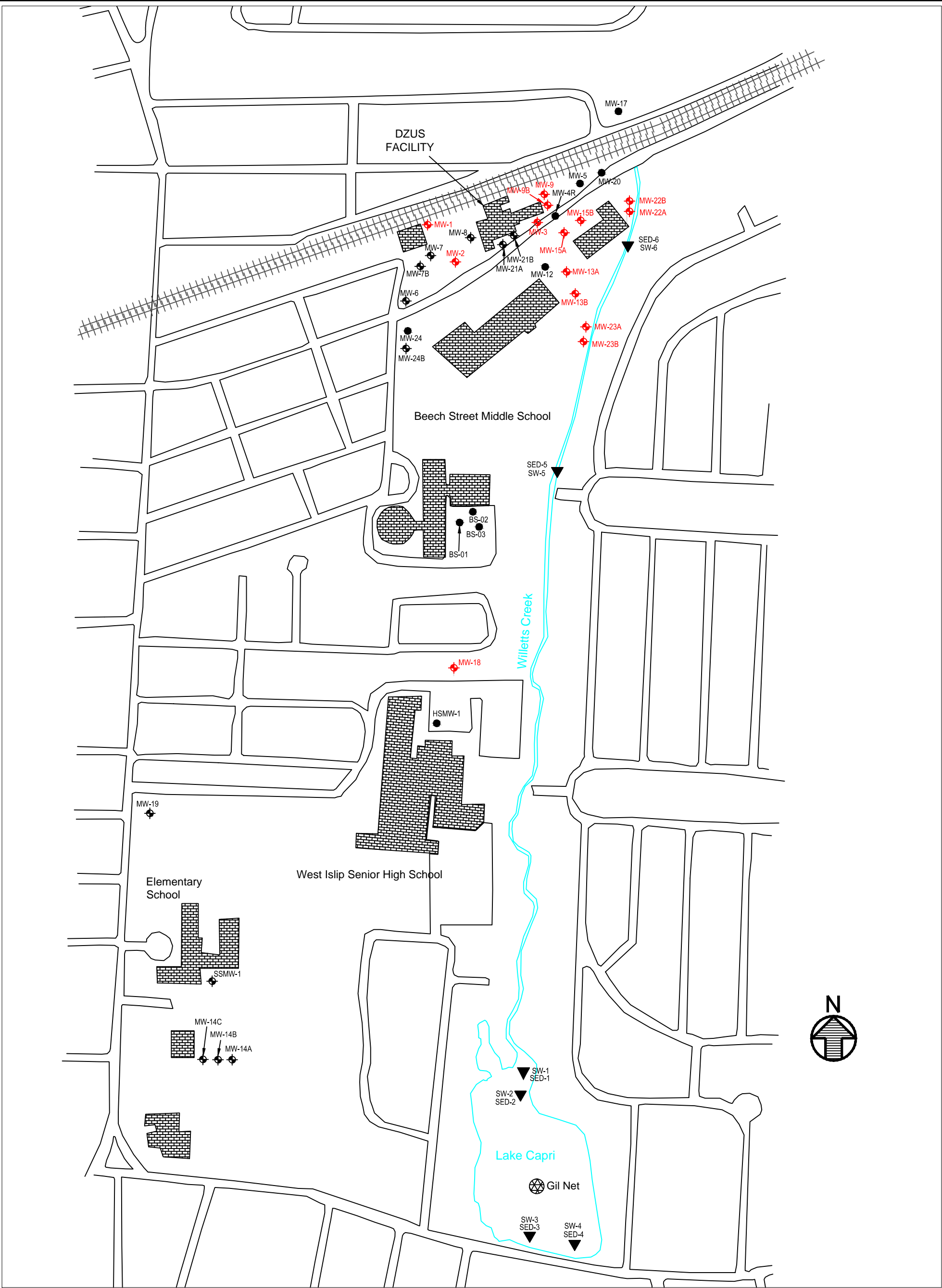
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SHEET

Figure 1A

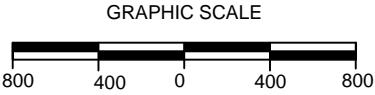
REV 1

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LEGEND:

- EXISTING WELLS INCLUDED IN LONG TERM MONITORING (MW-1 was damaged in December 2007.)
- EXISTING MONITORING WELLS
- MISSING MONITORING WELLS
- SURFACE WATER AND SEDIMENT SAMPLE LOCATION
- RAILROAD TRACKS



Prepared by :

AECOM

SUBMITTED BY :

PK

DRAWN BY :

SC/jk

APPROVED BY :

PK

MULTI SITE G - Dzus Fasteners
SITE NO. 1-52-033

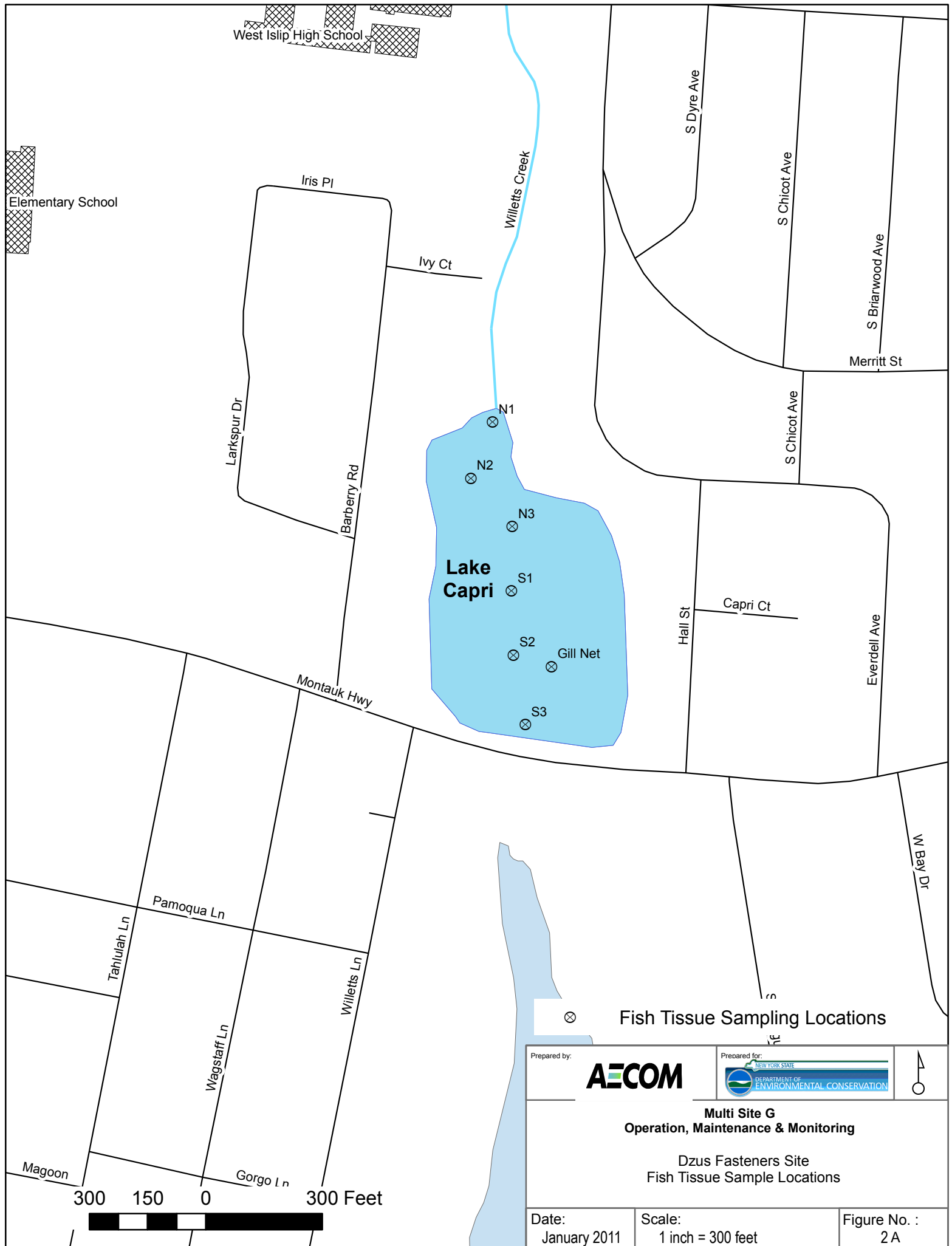
SITE PLAN

DATE :
JULY 2011

SCALE :
AS SHOWN

DRAWING NO. :

2



Fish Tissue Sampling Locations

Prepared by:

AECOM

Prepared for:



Multi Site G
Operation, Maintenance & Monitoring

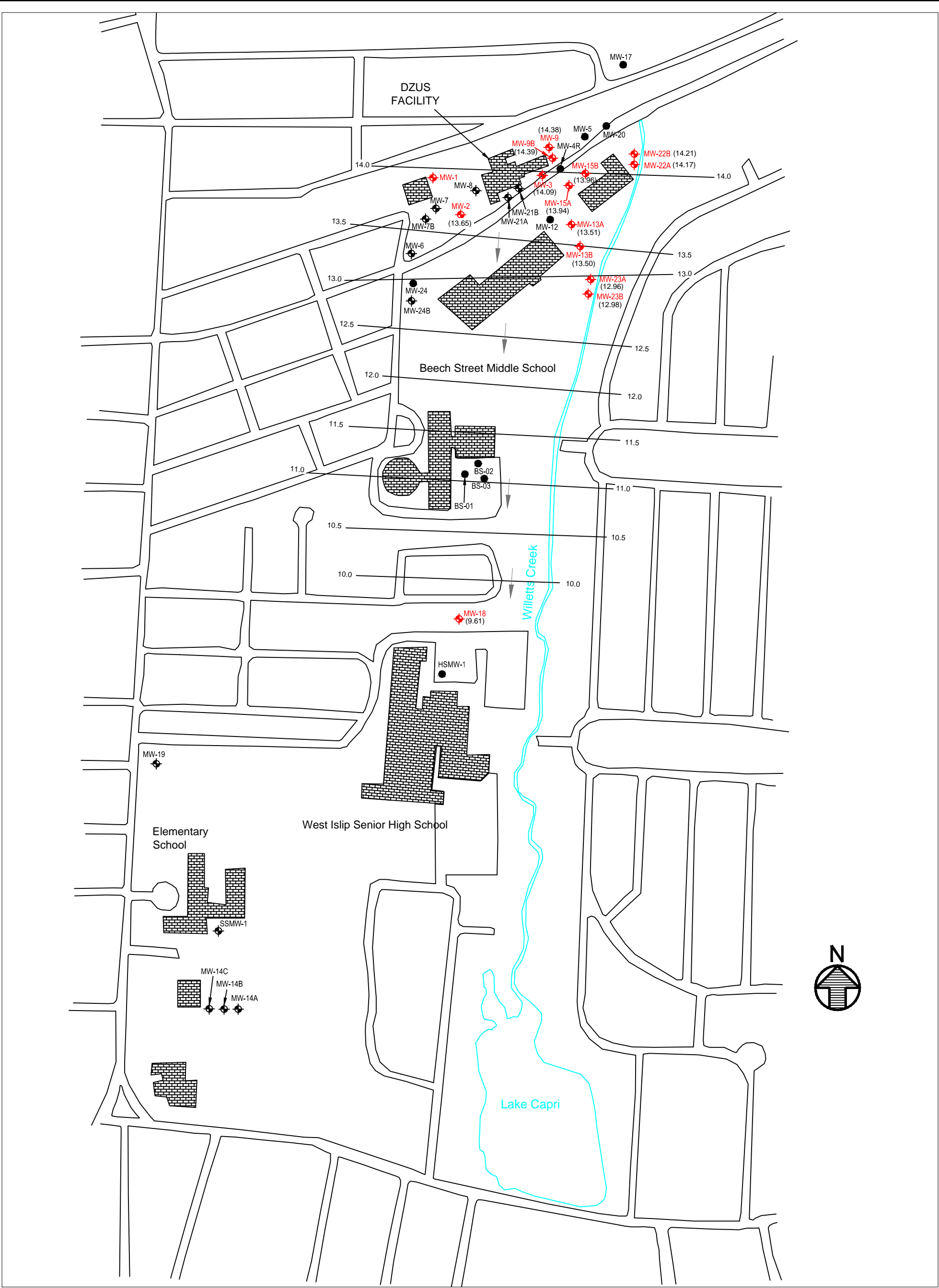
Dzus Fasteners Site
Fish Tissue Sample Locations

Date:
January 2011

Scale:
1 inch = 300 feet

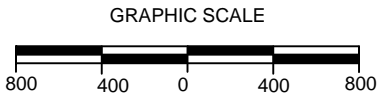
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2 A


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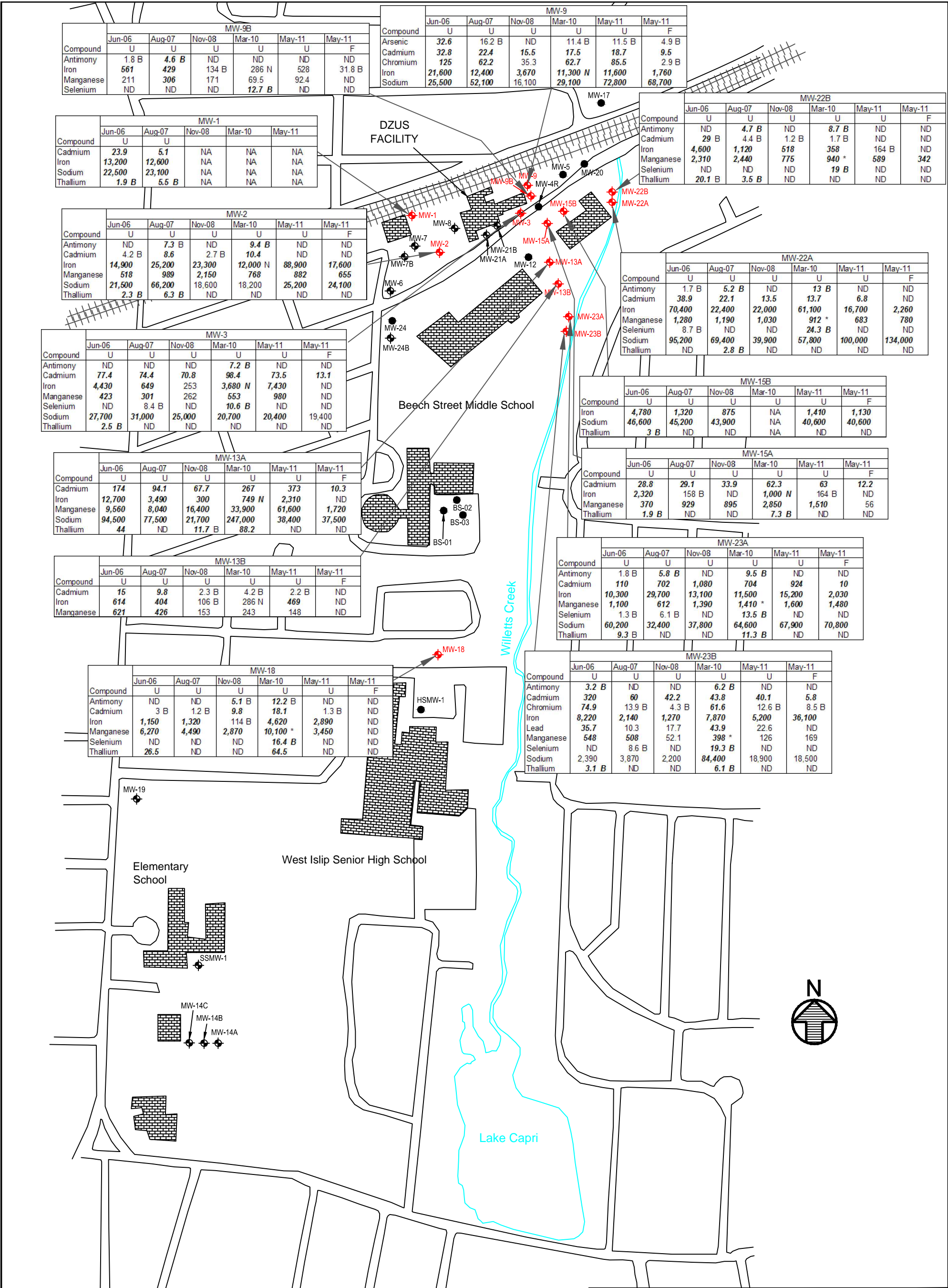
LEGEND:

- EXISTING WELLS INCLUDED IN LONG TERM MONITORING (MW-1 was damaged in December 2007.)
- EXISTING MONITORING WELLS
- MISSING MONITORING WELLS
- (9.61) GROUNDWATER ELEVATIONS IN FEET ABOVE MEAN SEA LEVEL
- -10.0 - - GROUNDWATER ISOPLETH CONTOUR INTERVAL - 0.5 ft
- DIRECTION OF GROUNDWATER FLOW



| | | | | | |
|----------------|--|---|---------------|--|--|
| Prepared by : | |  | | | |
| SUBMITTED BY : | | | | MULTI SITE G - Dzus Fasteners SITE NO. 1-52-033 | |
| PK | | | | | |
| DRAWN BY : | | | | | |
| SC/jk | | | | GROUNDWATER CONTOUR MAP MAY 25, 2011 | |
| APPROVED BY : | | | | | |
| PK | | | | | |
| DATE : | | SCALE : | DRAWING NO. : | | |
| JULY 2011 | | AS SHOWN | 3 | | |

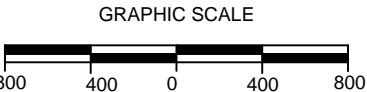
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LEGEND:

- EXISTING WELLS INCLUDED IN LONG TERM MONITORING (MW-1 was damaged in December 2007.)
- EXISTING MONITORING WELLS
- MISSING MONITORING WELLS
- ALL CONCENTRATIONS IN mg/Kg
- BOLD RESULTS EXCEED CRITERION
- RAILROAD TRACKS

| Compound | NYSDEC Criteria |
|-----------------------|-----------------|
| Antimony | 3 |
| Arsenic | 25 |
| Cadmium | 5 |
| Chromium | 50 |
| Iron | 300 |
| Lead | 25 |
| Manganese | 300 |
| Selenium | 10 |
| Sodium | 20,000 |
| Thallium | 0.5 |
| U - Unfiltered sample | |
| F - Filtered sample | |



Prepared by :

AECOM

SUBMITTED BY :

PK

DRAWN BY :

SC/jk

APPROVED BY :

PK

MULTI SITE G - Dzus Fasteners
SITE NO. 1-52-033

SUMMARY OF TAL
METALS IN
GROUNDWATER

DATE :

JULY 2011

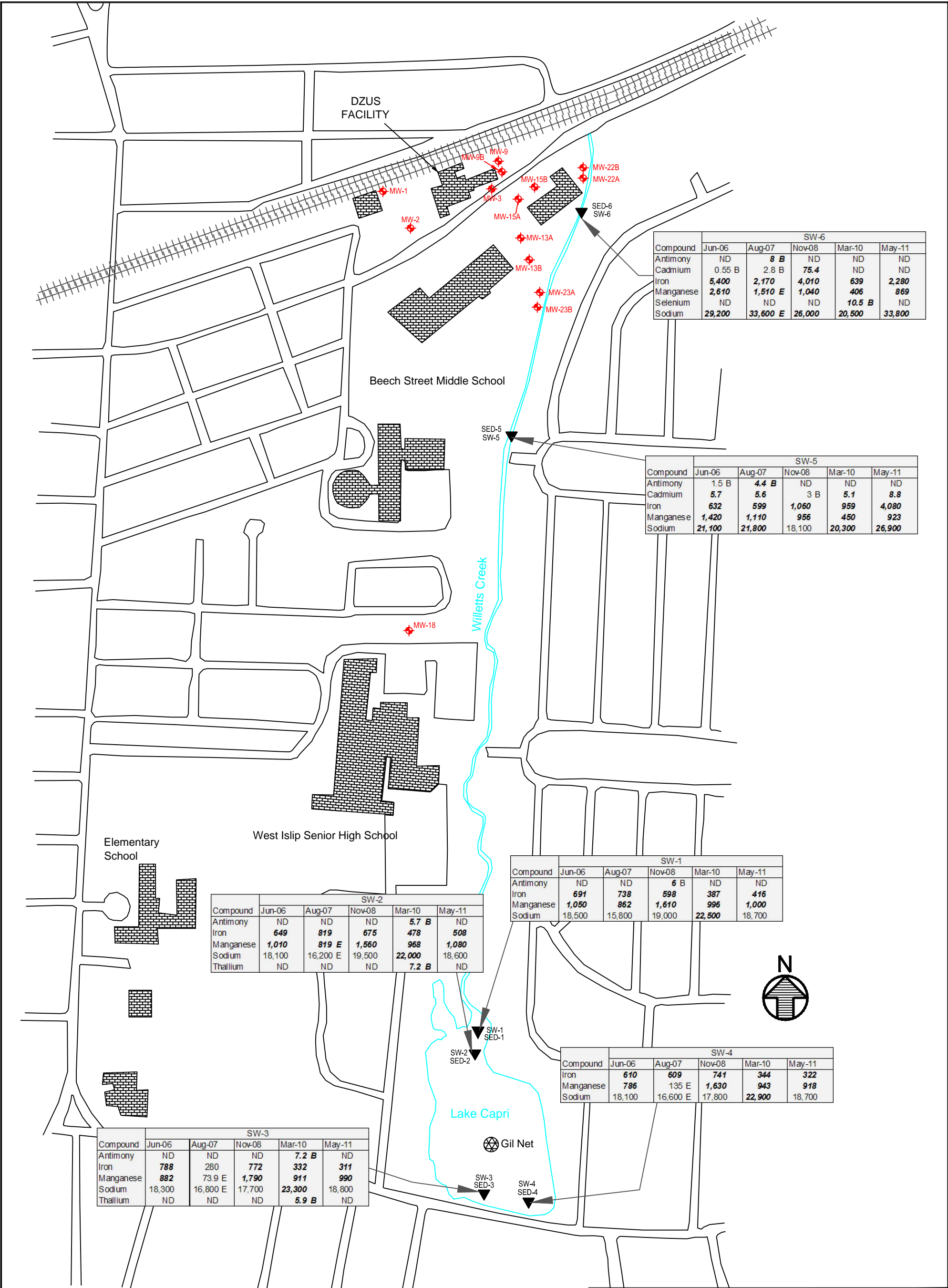
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AS SHOWN

DRAWING NO. :

4

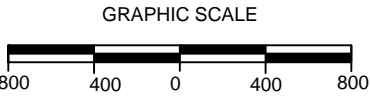
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LEGEND:

- EXISTING WELLS INCLUDED
IN LONG TERM MONITORING
(MW-1 was damaged in December 2007.)
- ALL CONCENTRATIONS IN mg/Kg
- BOLD RESULTS EXCEED CRITERION**
- RAILROAD TRACKS
- SURFACE WATER, SEDIMENT SAMPLE LOCATION

| Compound | Surface Criteria |
|-----------|------------------|
| Antimony | 3 |
| Cadmium | 5 |
| Iron | 300 |
| Lead | 50 |
| Manganese | 300 |
| Selenium | 10 |
| Sodium | 20,000 |
| Thallium | 0.5 |



Prepared by :

AECOM

SUBMITTED BY :

PK

DRAWN BY :

SC/jk

APPROVED BY :

PK

MULTI SITE G - Dzus Fasteners
SITE NO. 1-52-033

**SUMMARY OF TAL
METALS IN SURFACE
WATER**

DATE :
JULY 2011

SCALE :
AS SHOWN

DRAWING NO. :
5

File: J:\Project\Dzus\601135736\Cadd\Draft Dzus R4 GW report - May 25 2011.dwg Layout: SedMetl-Fig6 User: KarchJ1 Plotted: Jul 26, 2011 - 11:33am

| Compound | SED-6 | | | | |
|-----------|-------------|--------|---------------|--------|-----------------|
| | Jun-06 | Aug-07 | Nov-08 | Mar-10 | May-11 |
| Antimony | 0.076 | 0.38 B | 2.6 N | 0.38 B | 0.44 BN |
| Arsenic | 0.97 | 0.84 B | 6.4 | 0.79 | 2.7 * |
| Cadmium | 0.23 | 0.31 | 101 | 0.31 | ND |
| Chromium | 2.4 | 3.4 | 41.8 | 4.4 * | 15.9 * |
| Copper | 28.3 | 6.3 | 77.3 | 9.4 * | 21.5 * |
| Iron | 3,290 | 2,900 | 25,600 | 2,810 | 36,900 * |
| Lead | 7.9 | 10.3 | 109 E | 9.5 | 39.7 N* |
| Manganese | 102 | 30.4 | 978 | 21.3 | 118 * |
| Mercury | 0.036 B | ND | 0.15 | ND | 0.019 B |
| Nickel | 1.8 | 1.9 BE | 17.2 | 1.8 BE | 10.1 * |
| Zinc | 17.2 | 24.2 | 409 E | 31 * | 68.9 * |

| Compound | SED-5 | | | | |
|-----------|---------|------------|---------------|---------------|-----------------|
| | Jun-06 | Aug-07 | Nov-08 | Mar-10 | May-11 |
| Arsenic | 0.6 B | 0.52 B | 8.2 | 6.5 | 9.3 * |
| Cadmium | 0.43 | 1.6 | 52 | 28.8 | 73.5 * |
| Chromium | 3.8 | 2.7 | 33.3 | 18.5 * | 44 * |
| Copper | 4.7 | 4.7 | 103 | 54 * | 166 * |
| Iron | 3,400 | 3,410 | 23,900 | 25,800 | 39,900 * |
| Lead | 7.9 | 4.9 | 215 E | 83.3 | 229 N* |
| Manganese | 174 | 291 | 2,140 | 3,750 | 1,210 * |
| Mercury | 0.016 B | 0.0055 B | 0.48 | 0.26 | 0.37 |
| Nickel | 1.6 | 1 B | 19.2 | 8 E | 22.5 * |
| Zinc | 13.2 | 26.2 | 290 E | 171 * | 440 * |

| Compound | SED-2 | | | | |
|-----------|---------------|--------------|-----------------|---------------|----------------|
| | Jun-06 | Aug-07 | Nov-08 | Mar-10 | May-11 |
| Arsenic | 19.7 | 2 B | 1.8 | 20.2 | 13.4 * |
| Cadmium | 133 | 21.2 | 12.5 N*E | 111 | 96.6 * |
| Chromium | 33.7 | 7.7 | 6.5 E | 49.4 * | 45.2 * |
| Copper | 210 | 19.6 | 15.6 | 97.7 * | 80.2 * |
| Iron | 20,300 | 8,940 | 3,850 E | 27,500 | 17,300 * |
| Lead | 315 | 40.7 | 25.8 N*E | 375 | 315 N* |
| Manganese | 153 | 1,300 | 769 * | 3,510 | 1,480 * |
| Mercury | 0.45 | 0.047 BN | 0.018 B | 0.35 | 0.5 |
| Nickel | 17.6 | 6.8 E | 3.2 B | 22 E | 17.6 * |
| Zinc | 402 | 138 | 67.9 *E | 495 * | 406 * |

| Compound | SED-1 | | | | |
|-----------|--------------|--------------|-----------------|---------------|-----------------|
| | Jun-06 | Aug-07 | Nov-08 | Mar-10 | May-11 |
| Antimony | 0.7 B | 0.41 B | 2.2 BN | 6.4 | ND |
| Arsenic | 7.9 | 1.5 | 8.7 | 16.1 | 15.2 * |
| Cadmium | 47.8 | 11.6 | 61.4 N*E | 69.2 | 81.2 * |
| Chromium | 20.7 | 2.8 | 27.1 E | 39.1 * | 50 * |
| Copper | 38.6 | 86.3 | 65.7 | 127 * | 121 * |
| Iron | 10,300 | 3,880 | 19,700 E | 36,000 | 44,600 * |
| Lead | 170 | 19.3 | 176 N*E | 225 | 226 N* |
| Manganese | 1,290 | 1,200 | 181 * | 2,250 | 22,600 * |
| Mercury | 0.21 | 0.0071 B | 0.34 | 0.38 | 0.33 B |
| Nickel | 11.4 | 3 | 19.4 | 24.1 E | 24.1 * |
| Zinc | 215 | 71.6 | 445 *E | 493 * | 572 * |

| Compound | SED-4 | | | | |
|-----------|-------------|-------------|-----------------|---------------|----------------|
| | Jun-06 | Aug-07 | Nov-08 | Mar-10 | May-11 |
| Cadmium | 32.3 | 32.3 | 15.8 N*E | 14.8 | 47.3 * |
| Copper | 21.6 | 35.7 | 17.1 | 22.6 * | 49.5 * |
| Lead | 71.2 | 193 | 34.3 N*E | 60.6 | 129 N* |
| Manganese | 837 | 845 | 11,700 * | 272 | 1,150 * |
| Mercury | 0.096 | 0.059 BN | 0.21 | 0.082 | 0.18 |
| Silver | ND | ND | 1.1 B | ND | ND |
| Zinc | 122 | 186 | 110 *E | 71.3 * | 232 * |

| Compound | SED-3 | | | | |
|-----------|------------|-------------|----------------|---------------|----------------|
| | Jun-06 | Aug-07 | Nov-08 | Mar-10 | May-11 |
| Cadmium | 1.5 | 27.7 | 1.7 N*E | 22.3 | 16.1 * |
| Copper | 2.7 | 16.7 | 32.4 | 32.5 * | 10.9 * |
| Lead | 9.2 | 44.2 | 34 N*E | 85.9 | 46 N* |
| Manganese | 89.8 | 568 | 908 * | 357 | 1,090 * |

LEGEND:



EXISTING WELLS INCLUDED IN LONG TERM MONITORING (MW-1 was damaged in December 2007.) ALL CONCENTRATIONS IN mg/Kg

BOLD RESULTS EXCEED CRITERION



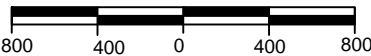
RAILROAD TRACKS



SURFACE WATER, SEDIMENT SAMPLE LOCATION

| Compound | NYSDEC Sediment Criteria | |
|-----------|--------------------------|----------------|
| | Lowest Effect | Highest Effect |
| Antimony | 2.0 | 25 |
| Arsenic | 6.0 | 33 |
| Cadmium | 0.6 | 9 |
| Chromium | 26 | 110 |
| Copper | 16 | 110 |
| Iron | 20,000 | 20,000 |
| Lead | 31 | 110 |
| Manganese | 460 | 1,100 |
| Mercury | 0.15 | 1.3 |
| Nickel | 16 | 50 |
| Zinc | 120 | 270 |

GRAPHIC SCALE



Prepared by :

AECOM

SUBMITTED BY :

PK

DRAWN BY :

SC/jk

APPROVED BY :

PK

MULTI SITE G - Dzus Fasteners
SITE NO. 1-52-033

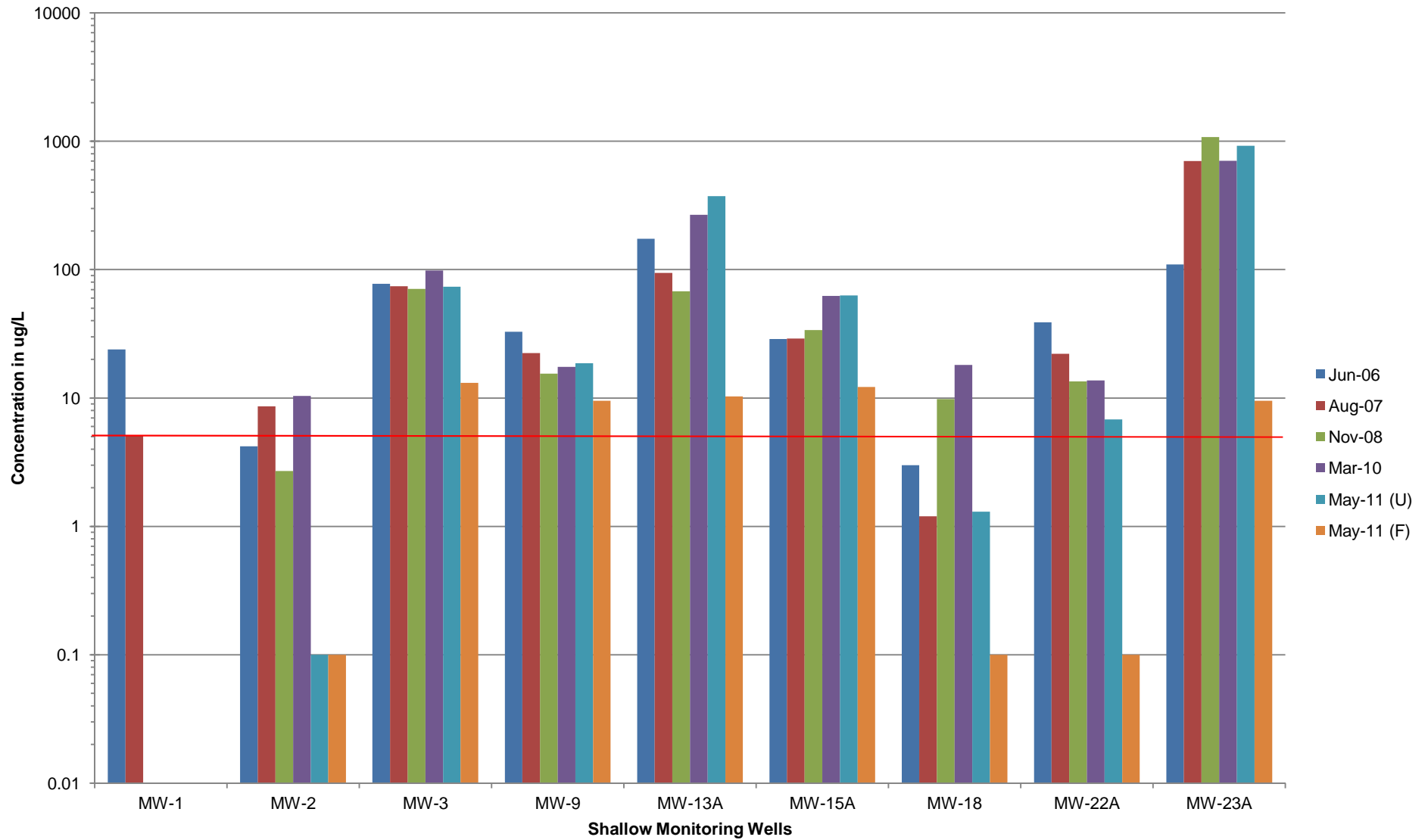
SUMMARY OF TAL METALS IN SEDIMENT

DATE :
JULY 2011

SCALE :
AS SHOWN

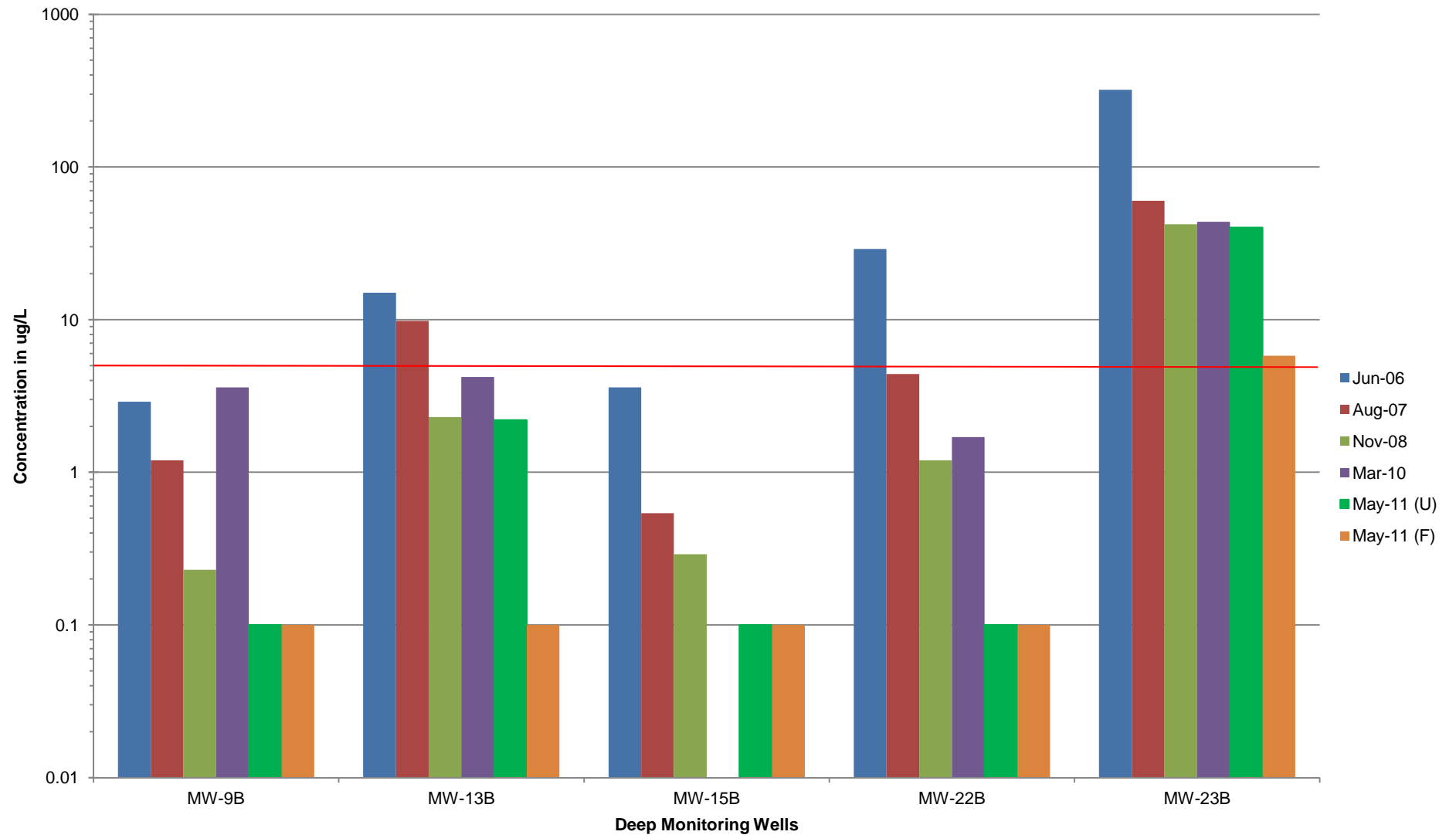
DRAWING NO. :
6

Figure 7
Cadmium Concentrations in Shallow Monitoring Wells
Dzus Fasteners Site (1-52-033)



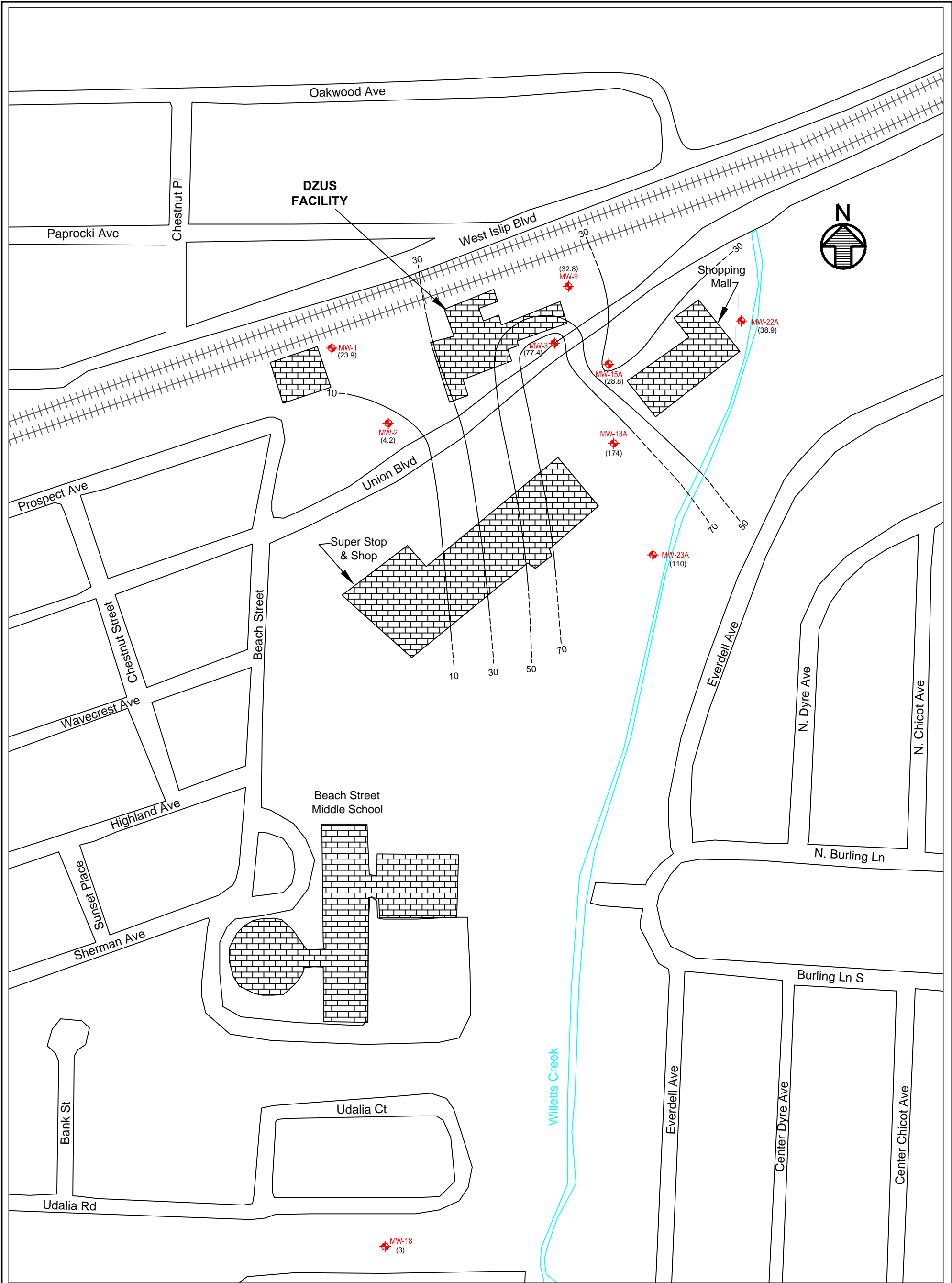
Cadmium Class GA criterion is 5 ug/L
 ND values set to 0.1 ug/L for plotting purposes

Figure 8
Cadmium Concentrations in Deep Monitoring Wells
Dzus Fasteners Site (1-52-033)



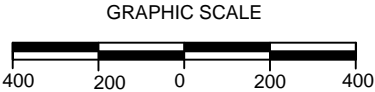
Cadmium Class GA criterion is 5 ug/L
ND values set to 0.1 ug/L for plotting purposes

File: J:\Project\Dzus\60135736\Cadd\Drawings\CadmiumGW - Jan 2012.dwg Layout: Fig9A User: karchj1 Plotted: Jan 20, 2012 - 2:31pm



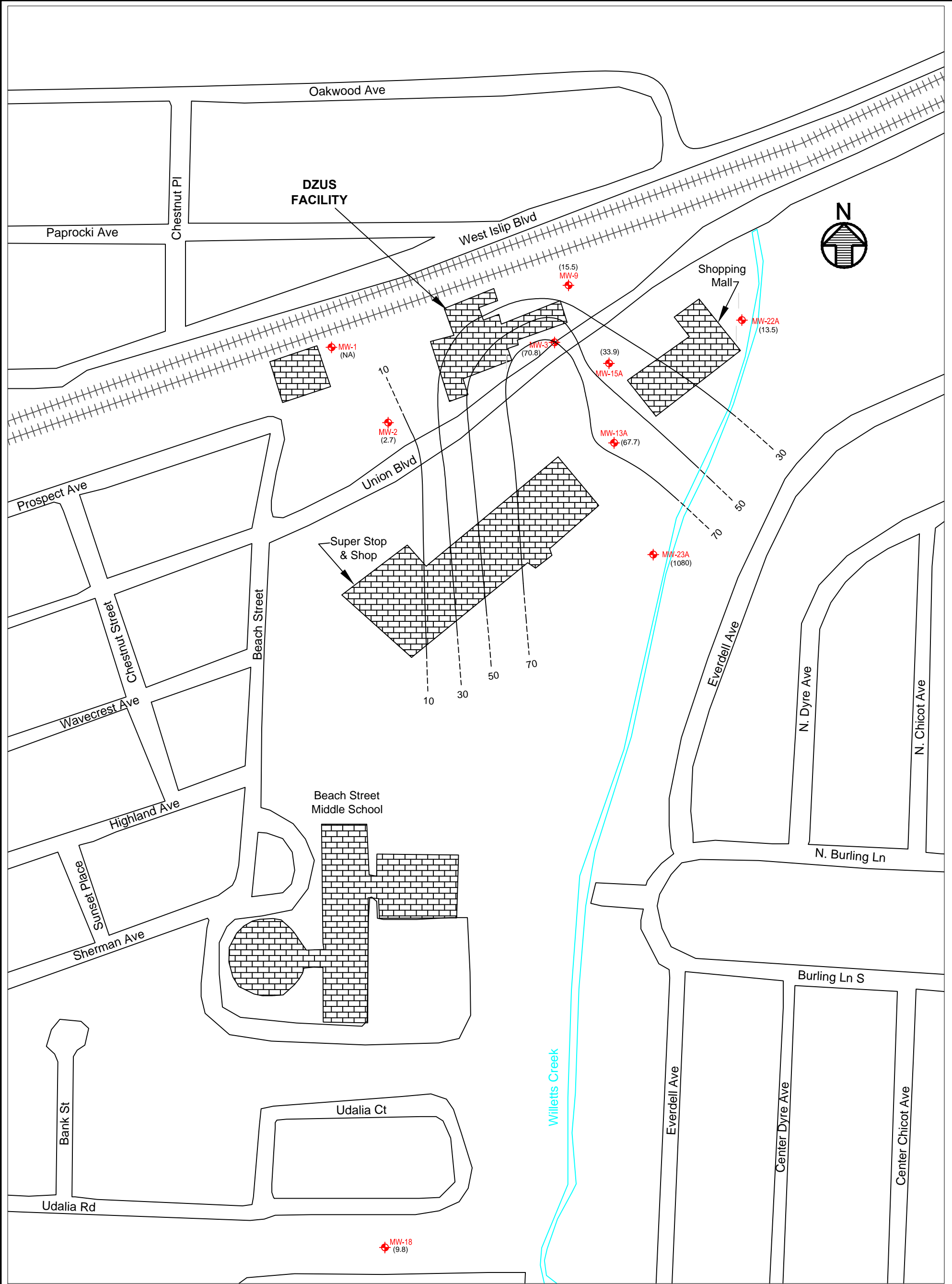
LEGEND:

- MW-18** MONITORING WELL LOCATION AND ID
- (3)** CADMIUM CONCENTRATION IN ug/L (UNFILTERED)
- NA** NOT SAMPLED
- ND** NOT DETECTED
- 10** CADMIUM IN GROUNDWATER ISOPLETH (ug/L). INSUFFICIENT DATA POINTS TO CLOSE THE ISOPLETH LINES.
- RAILROAD TRACKS



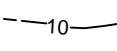
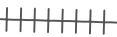


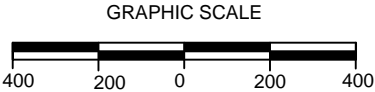
| | | |
|------------------------------|--|-----------------------------|
| Prepared by : <div></div> | | |
| SUBMITTED BY : <div>PK</div> | MULTI SITE G - Dzus Fasteners SITE NO. 1-52-033 | |
| DRAWN BY : <div>SC/jk</div> | CADMIUM IN GROUNDWATER ISOCONCENTRATION MAP SHALLOW WELLS JUNE 2006 | |
| APPROVED BY : <div>PK</div> | DATE : <div>JANUARY 2012</div> | SCALE : <div>AS SHOWN</div> |
| | FIGURE NO. : | 9A |


File: J:\Project\Dzus\60135736\Cadd\Drawings\CadmiumGW - Jan 2012.dwg Layout: Fig9B User: karchj1 Plotted: Jan 20, 2012 - 2:31pm



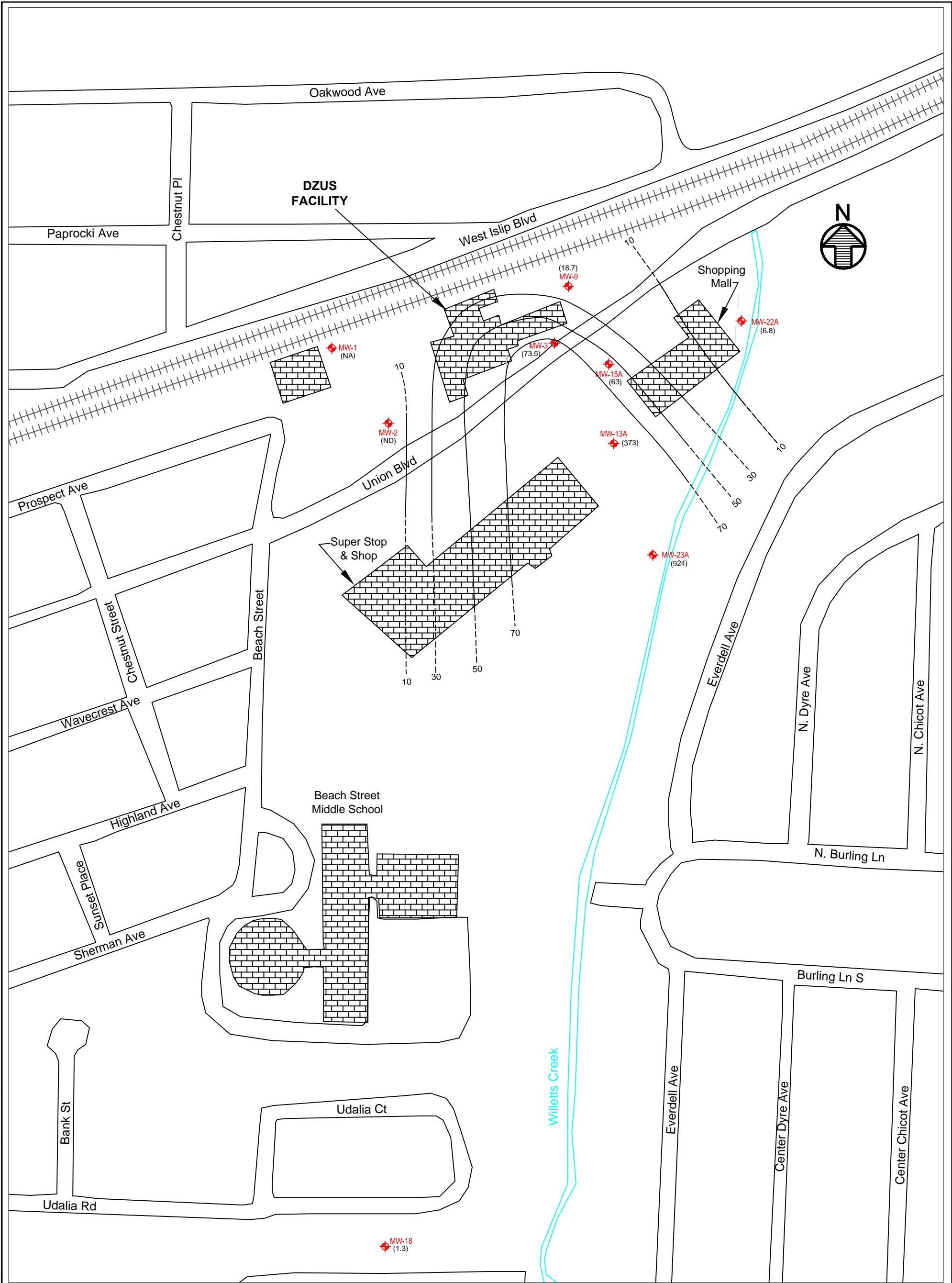
LEGEND:

-  **MONITORING WELL LOCATION AND ID**
-  **(9.8) CADMIUM CONCENTRATION IN ug/L (UNFILTERED)**
- NA NOT SAMPLED**
- ND NOT DETECTED**
-  **CADMIUM IN GROUNDWATER ISOPLETH (ug/L). INSUFFICIENT DATA POINTS TO CLOSE THE ISOPLETH LINES.**
-  **RAILROAD TRACKS**


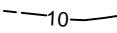



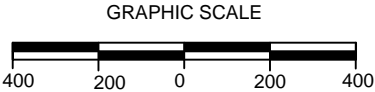
| | | | |
|--|--|--|-----------------------------|
| Prepared by : <div></div> | | | |
| SUBMITTED BY : <div>PK</div> | | MULTI SITE G - Dzus Fasteners SITE NO. 1-52-033 | |
| DRAWN BY : <div>SC/jk</div> | | CADMIUM IN GROUNDWATER ISOCONCENTRATION MAP SHALLOW WELLS NOVEMBER 2008 | |
| APPROVED BY : <div>PK</div> | | DATE : <div>JANUARY 2012</div> | SCALE : <div>AS SHOWN</div> |
| FIGURE NO. : | | | 9B |

File: J:\Project\Dzus\60135736\Cadd\Drawings\CadmiumGW - Jan 2012.dwg Layout: Fig9C User: karchj1 Plotted: Jan 20, 2012 - 2:30pm



LEGEND:

-  **MONITORING WELL LOCATION AND ID**
- (1.3)** CADMIUM CONCENTRATION IN ug/L (UNFILTERED)
- NA** NOT SAMPLED
- ND** NOT DETECTED
-  **CADMIUM IN GROUNDWATER ISOPLETH (ug/L).**
INSUFFICIENT DATA POINTS TO CLOSE THE ISOPLETH LINES.
-  **RAILROAD TRACKS**




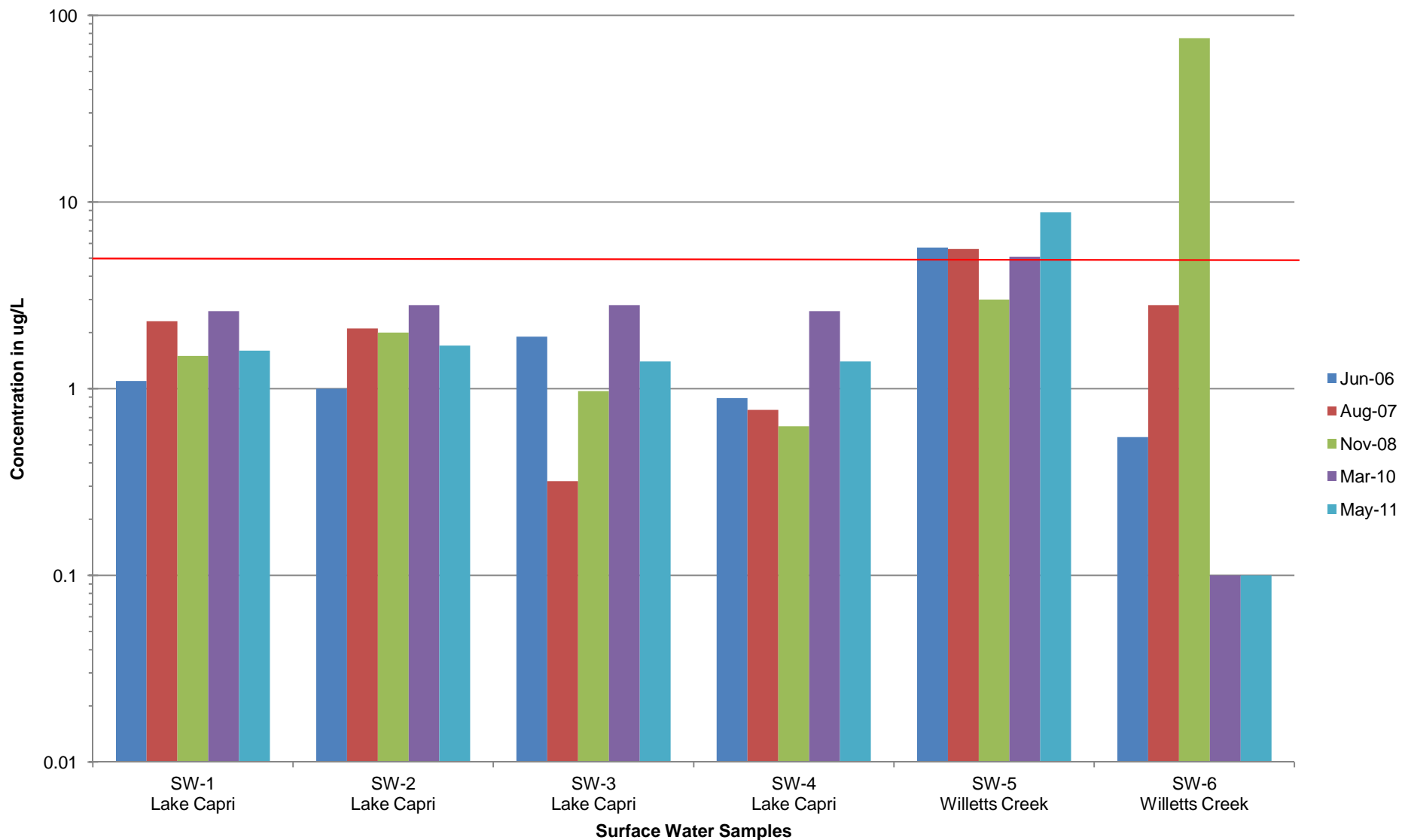
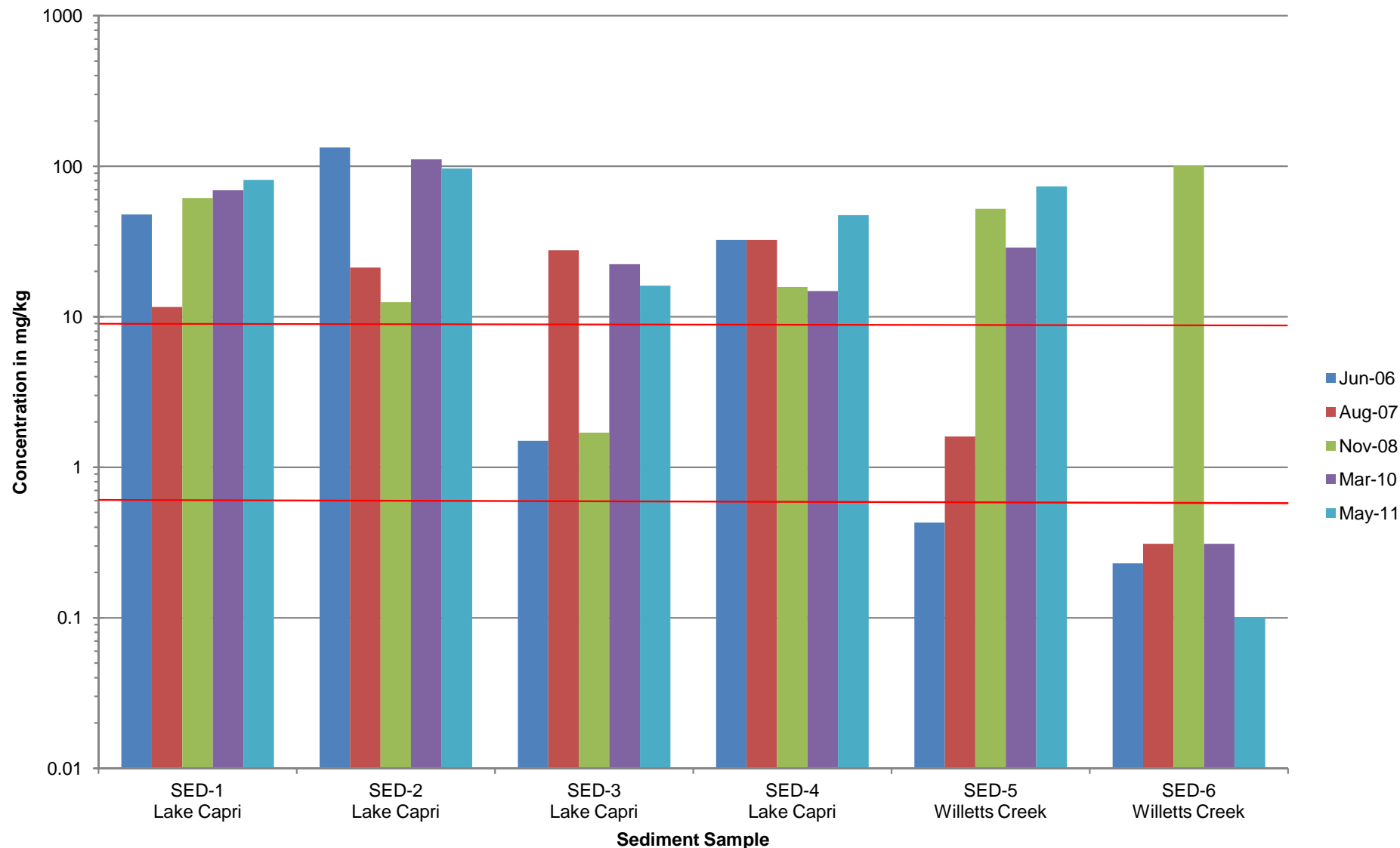
| | | | |
|----------------|--|---|---------------------------|
| Prepared by : | |  | |
| SUBMITTED BY : | | MULTI SITE G - Dzus Fasteners SITE NO. 1-52-033 | |
| PK | | CADMIUM IN GROUNDWATER ISOCONCENTRATION MAP SHALLOW WELLS MAY 2011 | |
| DRAWN BY : | | | |
| SC/jk | | | |
| APPROVED BY : | | | |
| PK | | DATE : | SCALE : |
| | | JANUARY 2012 | AS SHOWN |
| | | | FIGURE NO. : 9C |

Figure 10
Cadmium Concentrations in Surface Water Samples
Dzus Fasteners Site (1-52-033)



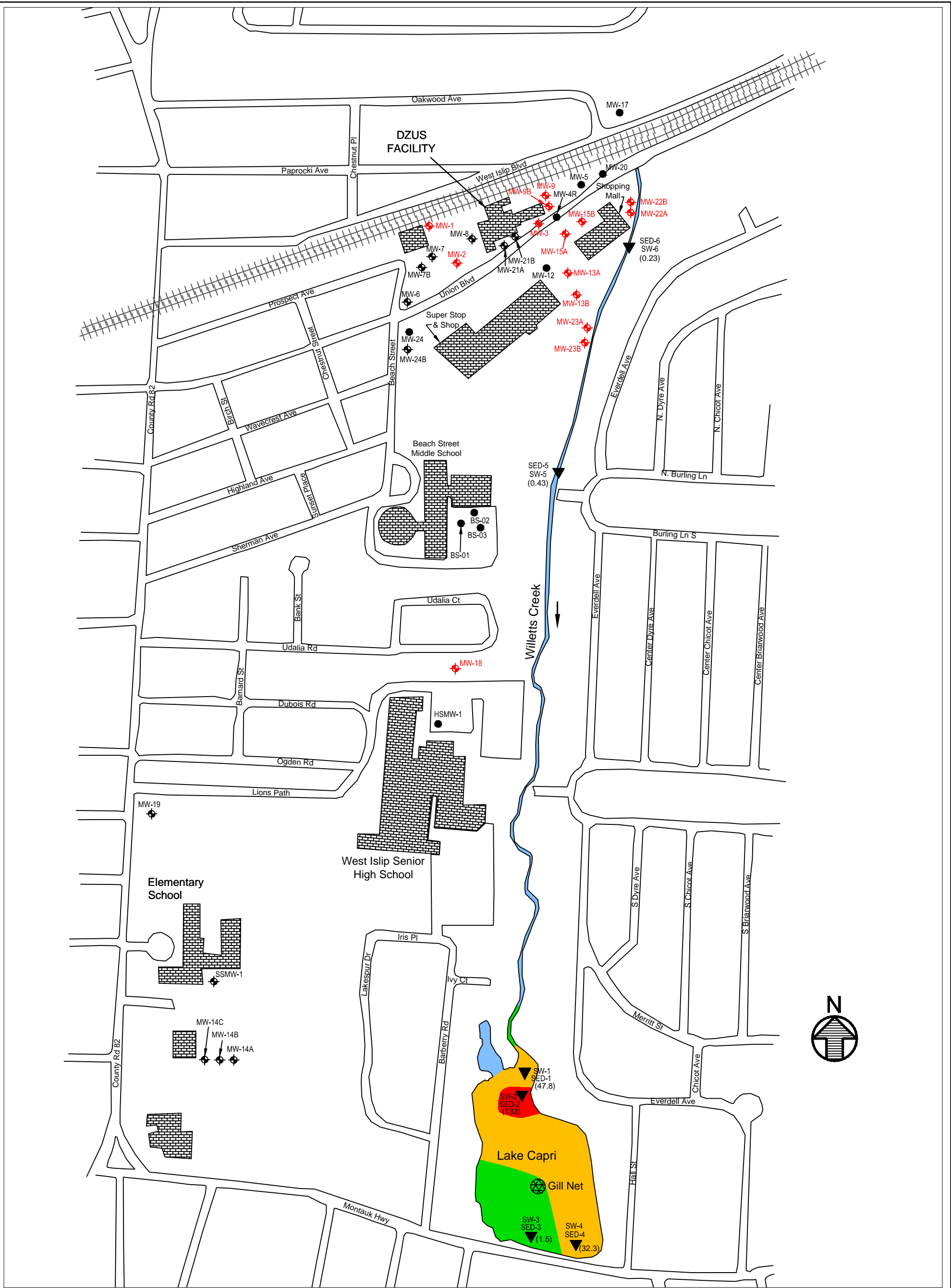
Class A surface water criterion is 5 ug/L
ND values were set to 0.1 ug/L for plotting purposes

Figure 11
Cadmium Concentrations in Sediment Samples
Dzus Fasteners Site (1-52-033)



ND values set to 0.1 mg/kg for plotting purposes
 Lowest effects level is 0.6 mg/kg, highest effects level is 9 mg/kg

File: J:\Project\Dzus\60135736\Cadd\Drawings\Cd Conc - 2006-June.dwg Layout: Fig12A User: karchj1 Plotted: Jan 20, 2012 - 2:29pm



LEGEND:

- EXISTING WELLS INCLUDED IN LONG TERM MONITORING (MW-1 was damaged in December 2007.)
- EXISTING MONITORING WELLS
- MISSING MONITORING WELLS
- SURFACE WATER AND SEDIMENT SAMPLE LOCATION
- (32.3) CADMIUM CONCENTRATION IN mg/kg
- RAILROAD TRACKS

KEY:

- <0.6 mg/kg
- 0.6-9.0 mg/kg
- 9.0-90 mg/kg
- >90 mg/kg
- DIRECTION OF STREAM FLOW

NOTES:

- LOWEST EFFECTS LEVEL 0.6 mg/kg
- HIGHEST EFFECTS LEVEL 9.0 mg/kg

GRAPHIC SCALE



Prepared by :

AECOM

SUBMITTED BY :

PK

DRAWN BY :

SC/jk

APPROVED BY :

PK

MULTI SITE G - Dzus Fasteners
SITE NO. 1-52-033

CADMIUM
CONCENTRATIONS IN
SEDIMENT
JUNE 2006

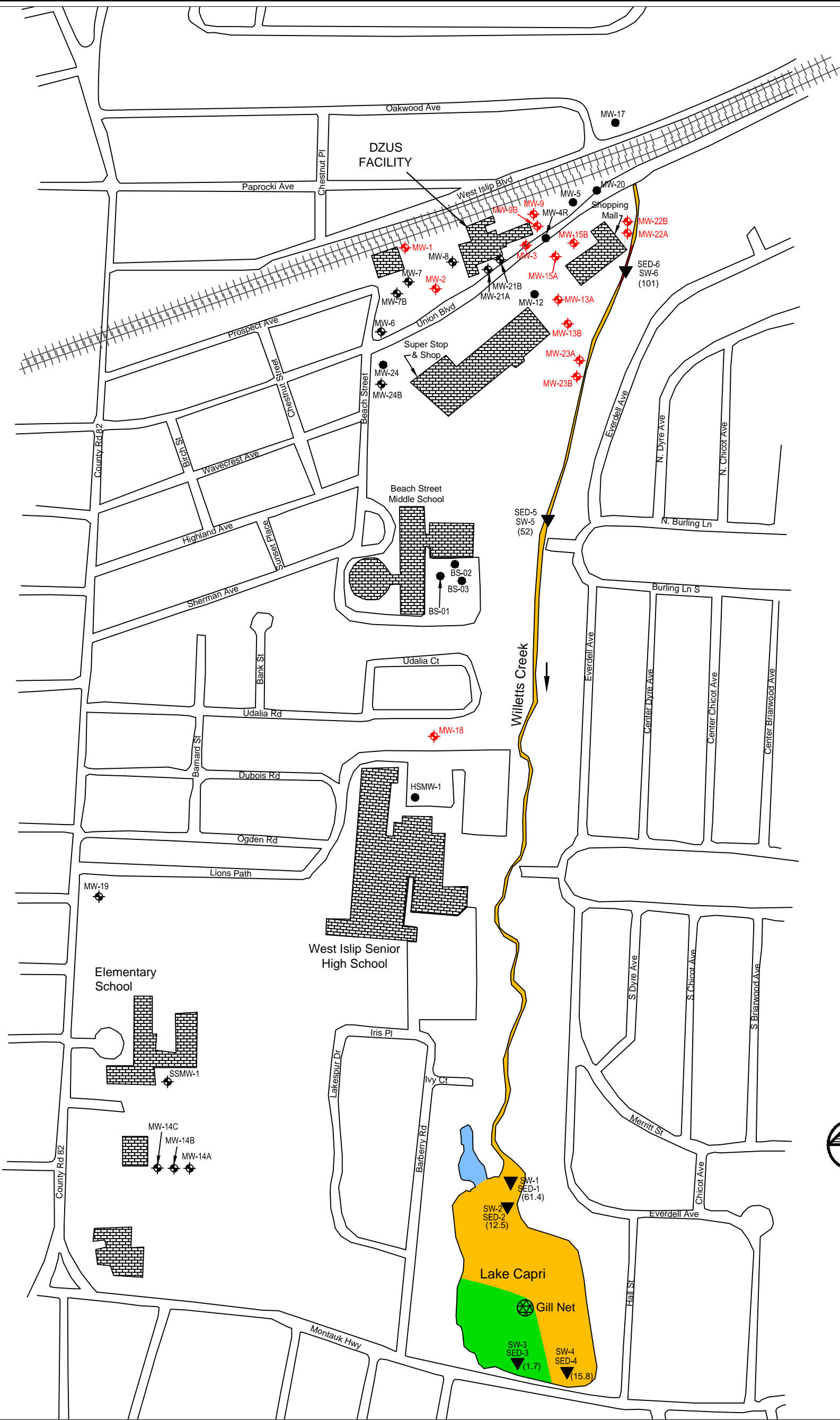
DATE :
JANUARY 2012

SCALE :
AS SHOWN

DRAWING NO. :

12A

File: J:\Project\Dzus\60135736\Cadd\Drawings\Cd Conc - 2008-Nov.dwg Layout: Fig12B User: karchj1 Plotted: Jan 20, 2012 - 2:29pm



LEGEND:

- EXISTING WELLS INCLUDED IN LONG TERM MONITORING (MW-1 was damaged in December 2007.)
- EXISTING MONITORING WELLS
- MISSING MONITORING WELLS
- SURFACE WATER AND SEDIMENT SAMPLE LOCATION
- (1.7) CADMIUM CONCENTRATION IN mg/kg
- RAILROAD TRACKS

KEY:

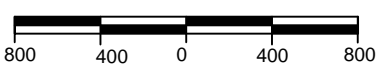
- <0.6 mg/kg
- 0.6-9.0 mg/kg
- 9.0-90 mg/kg
- >90 mg/kg

DIRECTION OF STREAM FLOW

NOTES:

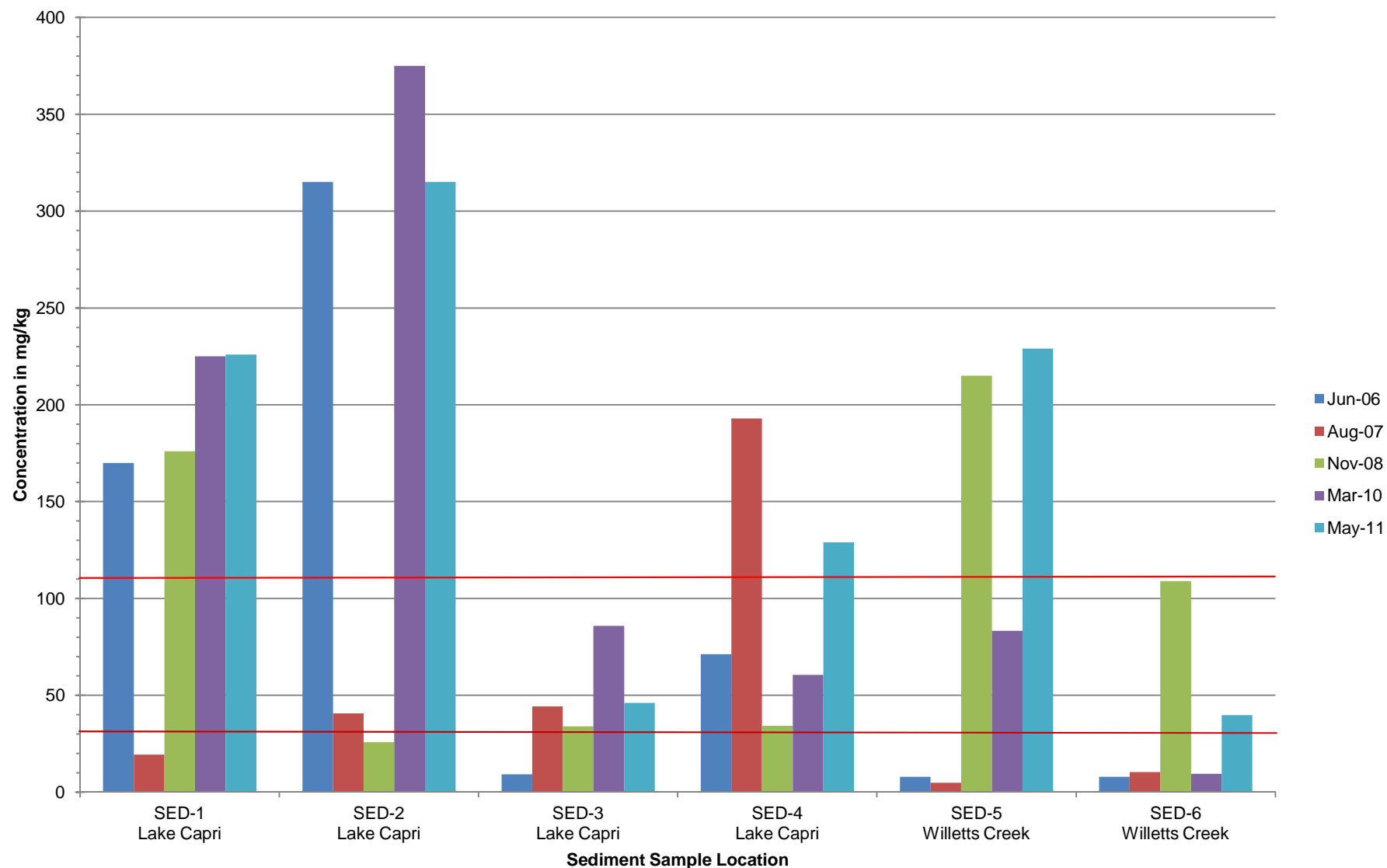
LOWEST EFFECTS LEVEL 0.6 mg/kg
HIGHEST EFFECTS LEVEL 9.0 mg/kg

GRAPHIC SCALE



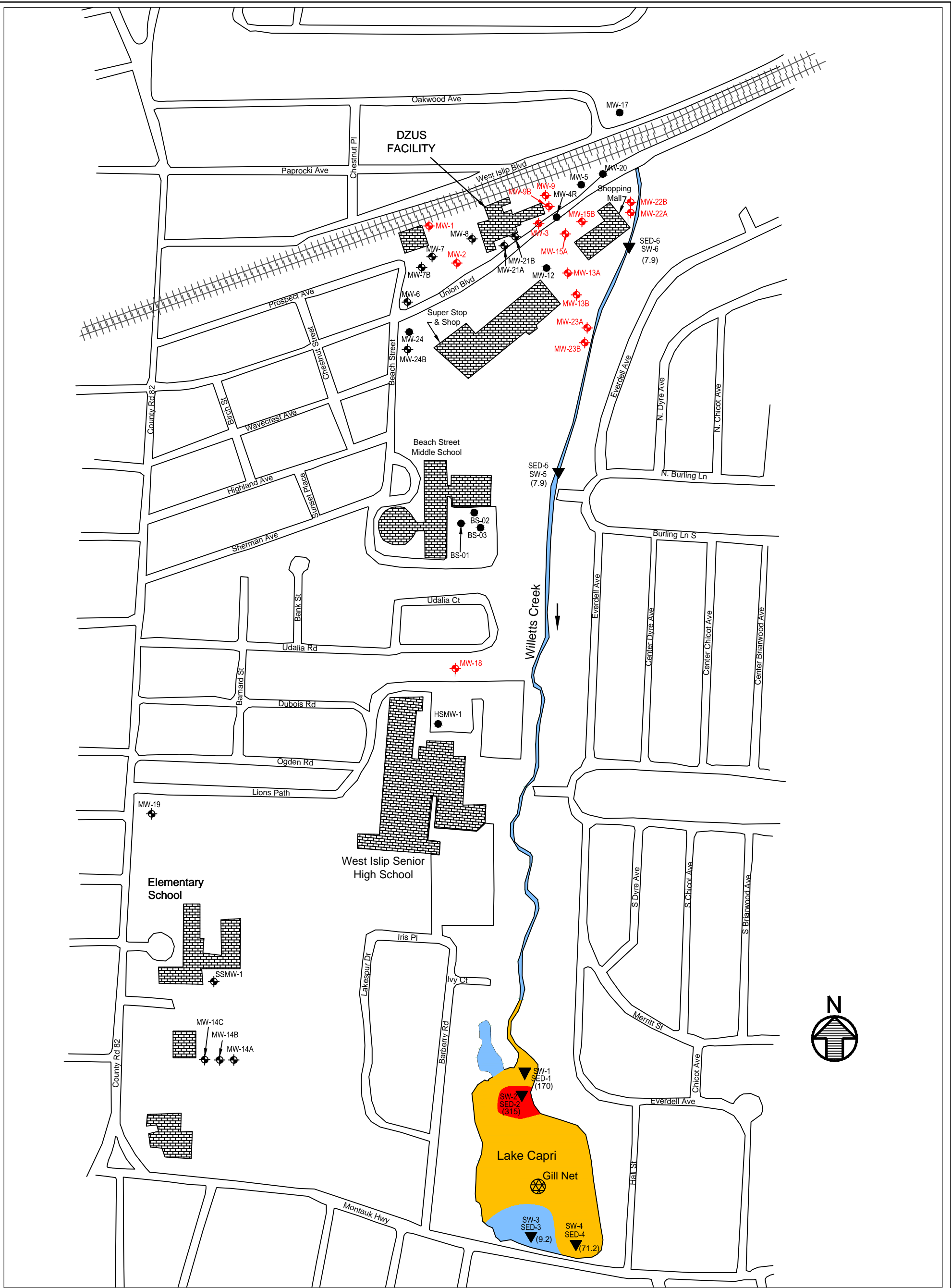
| | | |
|------------------------|---------------------|---|
| Prepared by : | | |
| | | |
| SUBMITTED BY : PK | | MULTI SITE G - Dzus Fasteners SITE NO. 1-52-033 CADMIUM CONCENTRATIONS IN SEDIMENT NOVEMBER 2008 |
| DRAWN BY : SC/jk | | |
| APPROVED BY : PK | | |
| DATE : JANUARY 2012 | SCALE : AS SHOWN | DRAWING NO. : 12B |

Figure 13
Lead Concentrations in Sediment Samples
Dzus Fasteners Site (1-52-033)



Lowest effects level is 31 mg/kg,
highest effects level is 110 mg/kg

File: J:\Project\Dzus\60135736\Cadd\Drawings\Pb Conc - 2006-June.dwg Layout: Fig14A User: karchj1 Plotted: Jan 20, 2012 - 2:28pm



LEGEND:

- EXISTING WELLS INCLUDED IN LONG TERM MONITORING (MW-1 was damaged in December 2007.)
- EXISTING MONITORING WELLS
- MISSING MONITORING WELLS
- SURFACE WATER AND SEDIMENT SAMPLE LOCATION
- (170) LEAD CONCENTRATION IN mg/kg
- RAILROAD TRACKS

KEY:

- <31mg/kg
- 31-110 mg/kg
- 110-300 mg/kg
- >300 mg/kg

DIRECTION OF STREAM FLOW

NOTES:

LOWEST EFFECTS LEVEL 31 mg/kg
HIGHEST EFFECTS LEVEL 110 mg/kg

GRAPHIC SCALE



Prepared by :

AECOM

SUBMITTED BY :

PK

DRAWN BY :

SC/jk

APPROVED BY :

PK

MULTI SITE G - Dzus Fasteners
SITE NO. 1-S2-033

**LEAD CONCENTRATIONS
IN SEDIMENT
JUNE 2006**

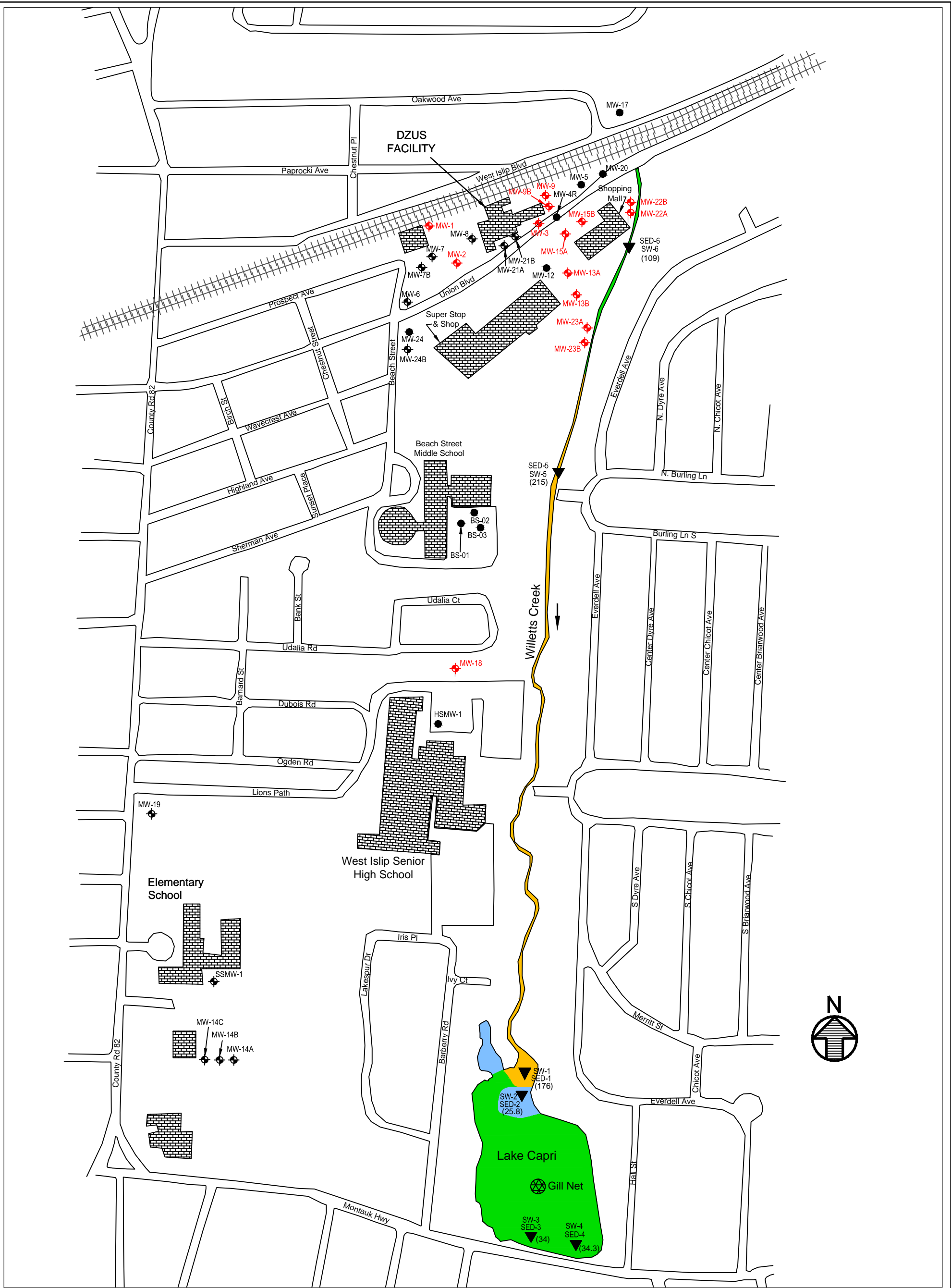
DATE :
JANUARY 2012

SCALE :
AS SHOWN

DRAWING NO. :

14A

File: J:\Project\Dzus\60135736\Cadd\Drawings\Pb Conc - 2008-Nov.dwg Layout: Fig14B User: karchj1 Plotted: Jan 20, 2012 - 2:31pm



LEGEND:

- EXISTING WELLS INCLUDED IN LONG TERM MONITORING (MW-1 was damaged in December 2007.)
- EXISTING MONITORING WELLS
- MISSING MONITORING WELLS
- SURFACE WATER AND SEDIMENT SAMPLE LOCATION
- (34) LEAD CONCENTRATION IN mg/kg
- RAILROAD TRACKS

KEY:

- <31mg/kg
- 31-110 mg/kg
- 110-300 mg/kg
- >300 mg/kg

DIRECTION OF STREAM FLOW

NOTES:

- LOWEST EFFECTS LEVEL 31 mg/kg
- HIGHEST EFFECTS LEVEL 110 mg/kg

GRAPHIC SCALE



Prepared by :

AECOM

SUBMITTED BY :

PK

DRAWN BY :

SC/jk

APPROVED BY :

PK

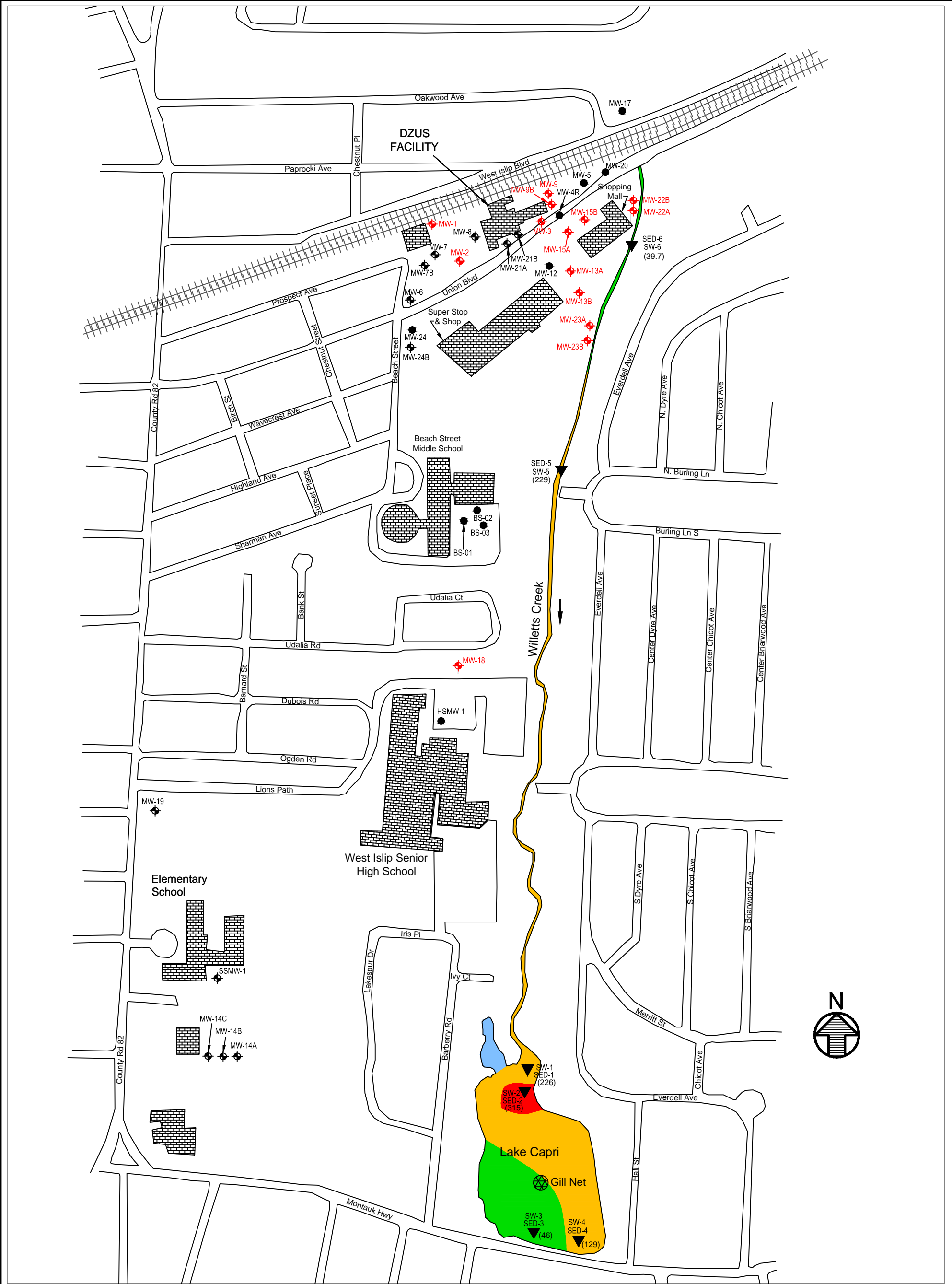
MULTI SITE G - Dzus Fasteners
SITE NO. 1-S2-033
**LEAD CONCENTRATIONS
IN SEDIMENT
NOVEMBER 2008**

DATE :
JANUARY 2012

SCALE :
AS SHOWN

DRAWING NO. :
14B

File: J:\Project\Dzus\60135736\Cadd\Drawings\Pb Conc - 2011-May.dwg Layout: Fig14C User: karcj1 Plotted: Jan 20, 2012 - 2:29pm



LEGEND:

- EXISTING WELLS INCLUDED IN LONG TERM MONITORING (MW-1 was damaged in December 2007.)
- EXISTING MONITORING WELLS
- MISSING MONITORING WELLS
- SURFACE WATER AND SEDIMENT SAMPLE LOCATION
- (34) LEAD CONCENTRATION IN mg/kg
- RAILROAD TRACKS

KEY:

- <31mg/kg
- 31-110 mg/kg
- 110-300 mg/kg
- >300 mg/kg

DIRECTION OF STREAM FLOW

NOTES:

- LOWEST EFFECTS LEVEL 31 mg/kg
- HIGHEST EFFECTS LEVEL 110 mg/kg

GRAPHIC SCALE



Prepared by :

AECOM

SUBMITTED BY :

PK

DRAWN BY :

SC/jk

APPROVED BY :

PK

MULTI SITE G - Dzus Fasteners
SITE NO. 1-S2-033

**LEAD CONCENTRATIONS
IN SEDIMENT
MAY 2011**

DATE :
JANUARY 2012

SCALE :
AS SHOWN

DRAWING NO. :

14C

Appendix A

IC/EC Certification

Appendix B

Post-Dredging Results

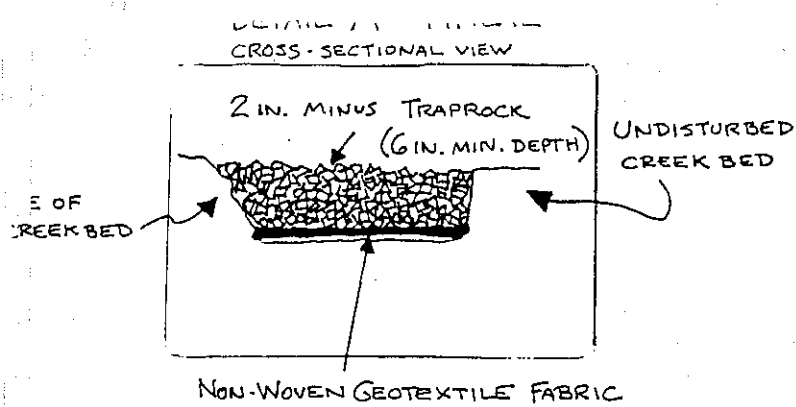
DZUS Fastener Site
NYSDEC Site ID Number 1-52-033

**COMPARISON OF ANALYTICAL RESULTS FROM PRE-DESIGN INVESTIGATION,
PRE-EXCAVATION, AND POST-EXCAVATION OF WILLETS 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* |
| -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".



WILLETTS CREEK BACKFILL DETAIL

[N.T.S.]

30 IN. RCP
STORMWATER
DIFFUSION PIPE

RIPRAP

DETAIL A
(TYPICAL)

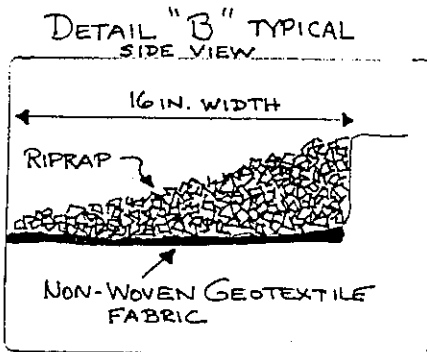
CENTER OF
FLOW LINE

STATION
950±

TOE OF
CREEK BED

STATION 750±

DETAIL B



CONSTRUCTION CERTIFICATION REPORT

DZUS FASTENER SITE (OU2)

APPENDIX D

POST DREDGING/EXCAVATION DATA

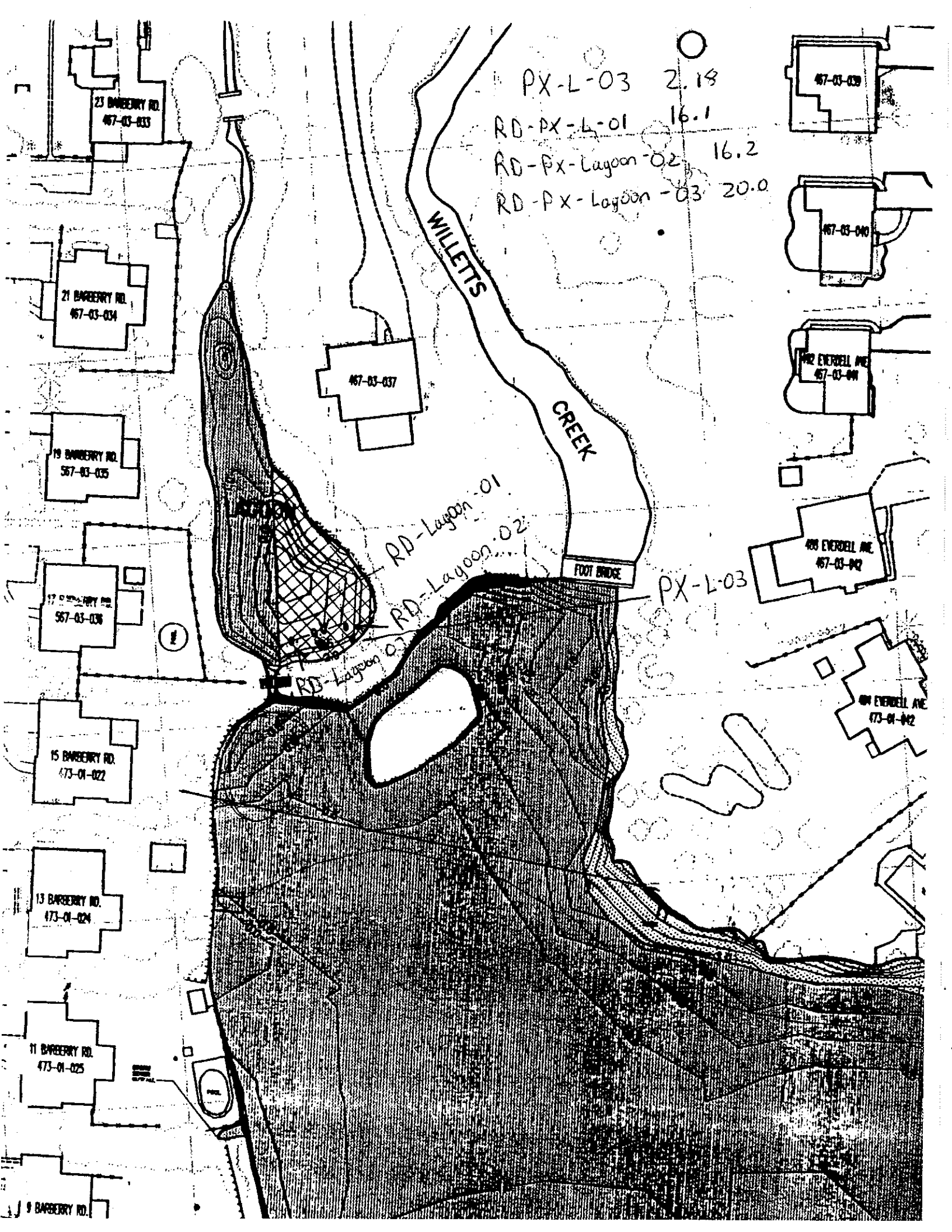
LAGOON ANALYTICAL DATA SUMMARY

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

NORTH LAGOON AREA

POST EXCAVATION SAMPLES

| ID# | Collection Date | Collected By | Collection Time | Analytical 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 | | |
| 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 | Jwoif | 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

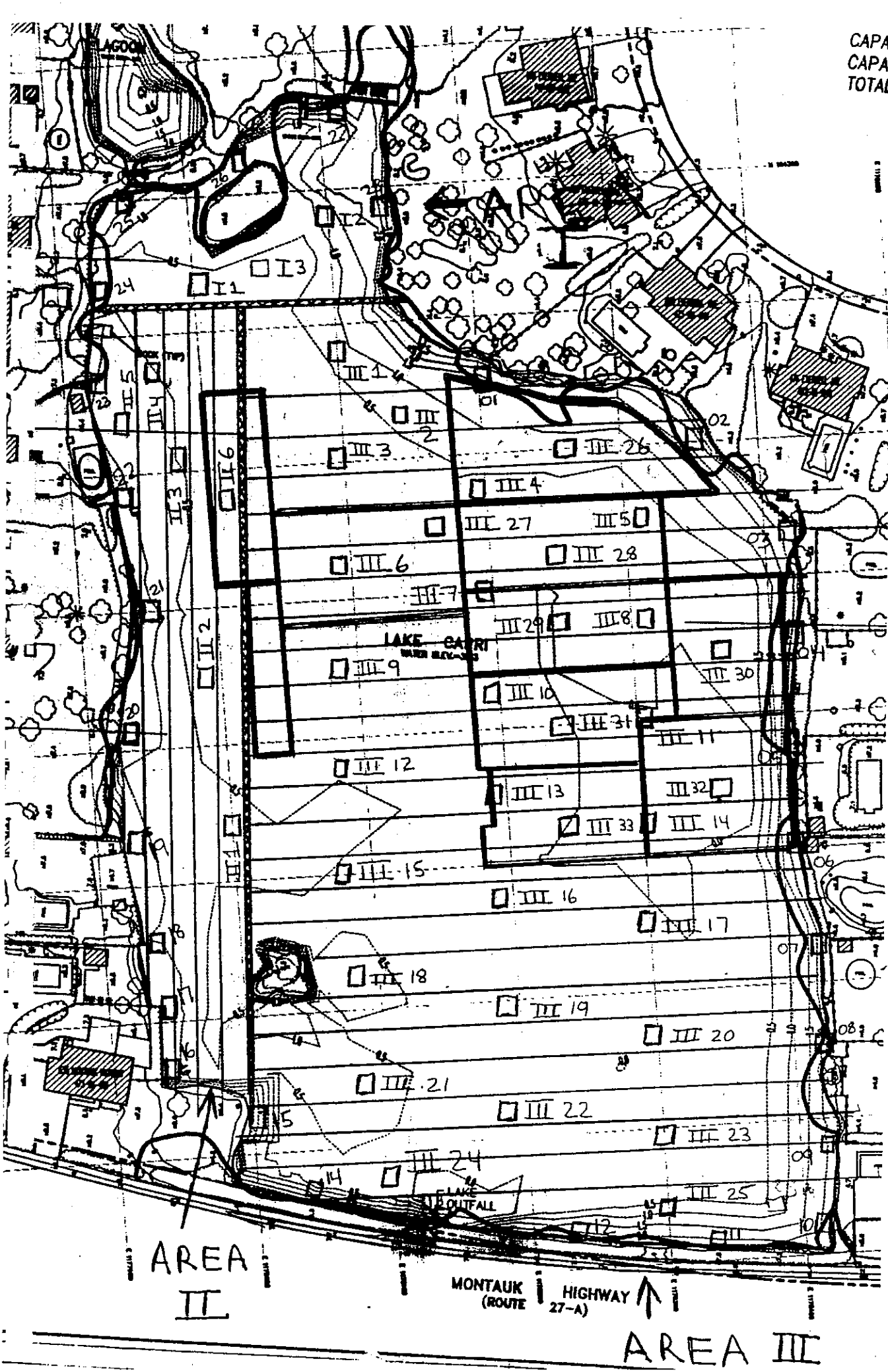
LAKE CAPRI ANALYTICAL DATA SUMMARY

Lake

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

SHORELINE POST-EXCAVATION SAMPLES - Total Cd (ppm)

| PX | 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 | | |



Shoreline Samples: PX-Shore line - 01 → PX-Shore line - 28

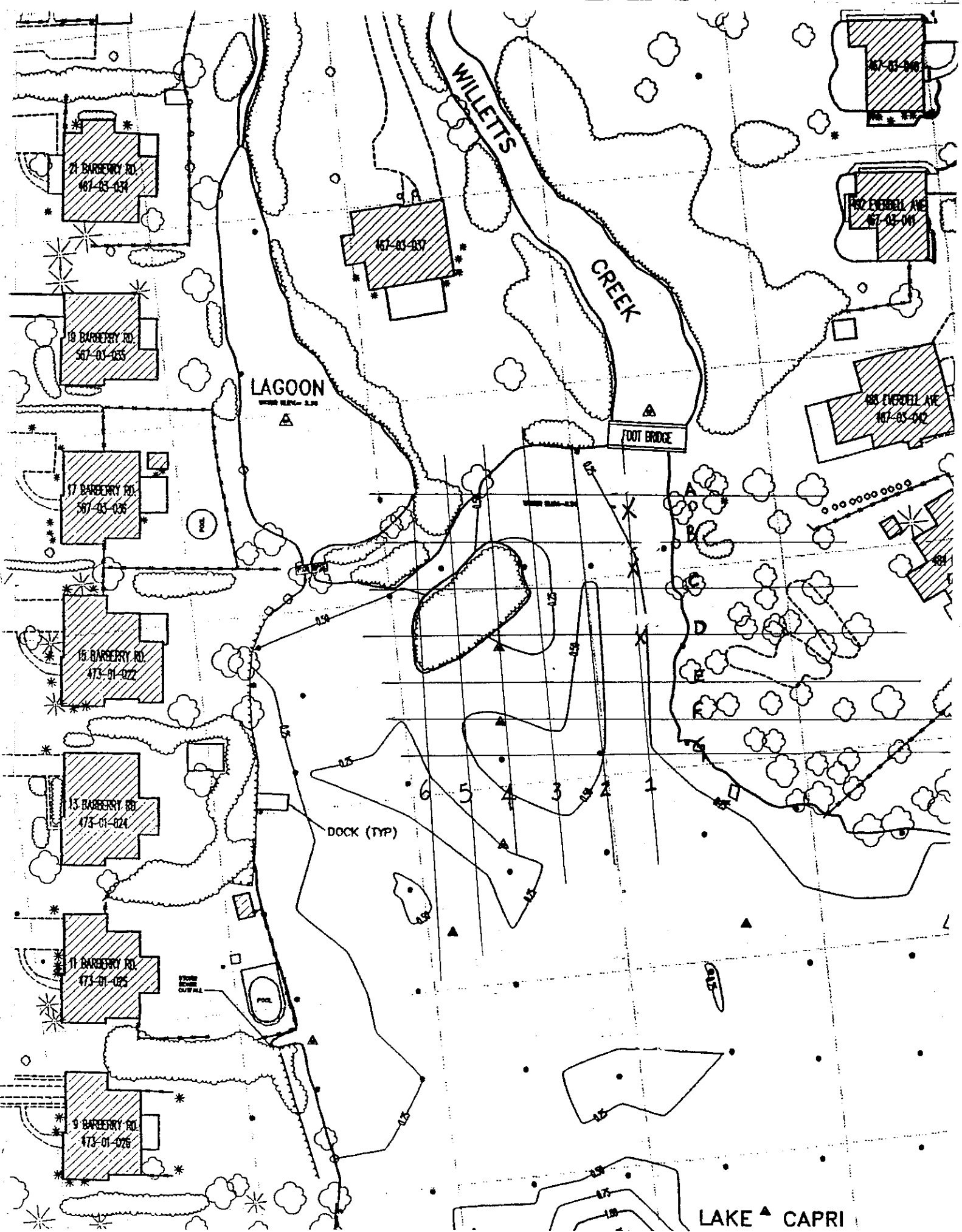
Lake Samples: PX-Lake - I - 1
 Area ↑ Sample #

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

| <i>GRID LOCATION</i> | <i>AT GRADE</i> | <i>12 in < GRADE</i> | <i>30 in < GRADE</i> |
|--------------------------|-----------------|-------------------------|-------------------------|
| A1 | 0.12 ppm | <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 |
| 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 | | | |

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

| <i>GRID LOCATION</i> | <i>AT GRADE</i> | <i>12 in < GRADE</i> | <i>30 in < GRADE</i> |
|--------------------------|------------------|-------------------------|-------------------------|
| 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 | | | |



LAKE ▲ CAPRI

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

POST EXCAVATION (TOTAL CADMIUM) LABORATORY ANALYTICAL RESULTS

| Chain of Custody # | ERM Sample ID | Date Collected | Date Analyzed | Date Data Received | Date Cat B Package Received | Earth Tech Analytical Results (ppm) | ERM/BWE Analytical Results (ppm) | Notes |
|--------------------|-------------------|----------------|---------------|--------------------|-----------------------------|-------------------------------------|----------------------------------|---|
| I 7116-1 | Dup 091799 | 09/17/99 | 09/18/99 | 09/20/99 | 10/15/99 | | 34.8 | |
| I 7116-2 | PX-Cove-A1 | 09/17/99 | 09/18/99 | 09/20/99 | 10/15/99 | | 0.13 | J - Concentration detected below MDL |
| I 5258-1 | PX-Cove-A1-RD | 10/28/99 | 10/29/99 | 10/29/99 | 12/08/99 | | 0.44 | J - Concentration detected below MDL Revised 12/2/99 Orig. reported as 0.34 ppm U |
| I 7116-3 | PX-Cove-C1 | 09/17/99 | 09/18/99 | 09/20/99 | 10/15/99 | | 37.8 | |
| I 5258-2 | PX-Cove-C1-RD | 10/28/99 | 10/29/99 | 10/29/99 | 12/08/99 | | 2.71 | |
| I 7116-4 | PX-Cove-E1 | 09/17/99 | 09/18/99 | 09/20/99 | 10/15/99 | | 11.5 | |
| I 5258-3 | PX-Cove-E1-RD | 10/28/99 | 10/29/99 | 10/29/99 | 12/08/99 | | 2.01 | |
| I 7116-9 | PX-Cove-B2 | 09/17/99 | 09/18/99 | 09/20/99 | 10/15/99 | | 12.4 | |
| J 5254-2 | PX-Cove-B2-RD | 10/27/99 | 10/28/99 | 10/28/99 | 12/02/99 | | 1.95 | Experimental Sample 1' below grade Revised 11/29/99 Orig. reported as 1.95 ppm |
| I 7116-7 | PX-Cove-D2 | 09/17/99 | 09/18/99 | 09/20/99 | 10/15/99 | | 24.1 | |
| J 5254-1 | PX-Cove-D2-RD | 10/26/99 | 10/28/99 | 10/28/99 | 12/02/99 | | 174.1 | Experimental Sample 1' below grade Revised 11/29/99 |
| I 7116-5 | PX-Cove-F2 | 09/17/99 | 09/18/99 | 09/20/99 | 10/15/99 | | 6.02 | |
| J 5254-3 | PX-Cove-F2-RD | 10/27/99 | 10/28/99 | 10/28/99 | 12/02/99 | | 57.3 | Experimental Sample 1' below grade Revised 11/29/99 |
| I 7116-10 | PX-Cove-A3 | 09/17/99 | 09/18/99 | 09/20/99 | 10/15/99 | | 28.6 | |
| I 7116-11 | PX-Cove-A3 MS/MSD | 09/17/99 | 09/18/99 | 09/20/99 | 10/15/99 | | 28.5 | |
| J 5253-3 | PX-Cove-A3-RD | 10/26/99 | 10/28/99 | 10/28/99 | 12/02/99 | | 60.8 | Experimental Sample 1' below grade Revised 11/29/99 Orig. reported as 60.9 ppm |
| I 7116-8 | PX-Cove-C3 | 09/17/99 | 09/18/99 | 09/20/99 | 10/15/99 | | 10.4 | |
| J 5253-2 | PX-Cove-C3-RD | 10/26/99 | 10/28/99 | 10/28/99 | 12/02/99 | | 8.63 | Experimental Sample 1' below grade Revised 11/29/99 |

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

POST EXCAVATION (TOTAL CADMIUM) LABORATORY ANALYTICAL RESULTS

| Chain of Custody # | ERM Sample ID | Date Collected | Date Analyzed | Date Data Received | Date Cat B Package Received | Earth Tech Analytical Results (ppm) | ERM/BWE Analytical Results (ppm) | Notes |
|--------------------|-----------------------|----------------|---------------|--------------------|-----------------------------|-------------------------------------|----------------------------------|---|
| I 1716-6 | PX-Cove-E3 | 09/17/99 | 09/18/99 | 09/20/99 | 10/15/99 | | 44.8 | |
| J 5253-1 | PX-Cove-E3-RD | 10/26/99 | 10/28/99 | 10/28/99 | 12/02/99 | | 38.0 | Experimental Sample 1' below grade Revised 11/29/99 |
| LAKE BOTTOM | | | | | | | | |
| I 5160-1 | PX-LB-201 | 10/09/99 | 10/11/99 | 10/12/99 | 11/19/99 | | 0.22 | J - Concentration detected below MDL |
| J 3965-1 | PX-Lake-25A | 12/10/99 | 12/13/99 | 12/15/99 | 01/19/00 | | 14.1 | |
| J 4623-1 | PX-Lake-25A +4 | 12/17/99 | 10/20/99 | 12/21/99 | 01/19/00 | .80/90/90 | 1.99 | Revised 1/13/00 Orig. reported as 1.98 ppm |
| SHORELINE | | | | | | | | |
| I 9836-1 | PX-Shoreline-01 | 09/29/99 | 09/29/99 | 09/30/99 | 11/19/99 | | 0.41 | |
| I 9836-2 | PX-Shoreline-02 | 09/29/99 | 09/29/99 | 09/30/99 | 11/19/99 | | 0.70 | |
| I 9836-3 | PX-Shoreline-03 | 09/29/99 | 09/29/99 | 09/30/99 | 11/19/99 | | 0.45 | |
| I 9836-4 | PX-Shoreline-04 | 09/29/99 | 09/29/99 | 09/30/99 | 11/19/99 | | 0.17 | |
| I 9836-5 | PX-Shoreline-05 | 09/29/99 | 09/29/99 | 09/30/99 | 11/19/99 | | 0.55 | |
| I 9836-6 | PX-Shoreline-06 | 09/29/99 | 09/29/99 | 09/30/99 | 11/19/99 | | 1.13 | |
| J 3953-2 | PX-Shoreline-07 +4 | 12/05/99 | 12/07/99 | 12/07/99 | 01/19/00 | 1.3 | 1.59 | Revised 1/11/00 Orig. reported as 1.56 ppm |
| J 3956-2 | PX-Shoreline-08 +4 | 12/08/99 | 12/10/99 | 12/13/99 | 01/19/00 | | 2.06 | Revised 1/12/00 Orig. reported as 2.07 ppm |
| J 3962-2 | PX-Shoreline-09 +4 | 12/09/99 | 12/13/99 | 12/14/99 | 01/19/00 | 0.9 | 1.59 | |
| J 3946-2 | PX-Shoreline-10 | 12/03/99 | 12/04/99 | 12/06/99 | 01/19/00 | | 1.73 | Prior to Augering Revised 1/11/00 |
| J 3946-3 | PX-Shoreline-11 | 12/03/99 | 12/04/99 | 12/06/99 | 01/19/00 | | 61.0 | Orig. reported as 61.2 ppm Prior to Augering |
| J 3964-2 | PX-Shoreline-11 +4 | 12/10/99 | 12/14/99 | 12/14/99 | 01/19/00 | | 3.37 | Revised 1/12/00 Orig. reported as 3.40 ppm |
| J 4619-4 | PX-Shoreline-11 +4 RS | 12/15/99 | 12/16/99 | 12/16/99 | 01/19/00 | | 1.58 | Revised 1/13/00 Orig. reported as 1.6 ppm |
| J 3946-4 | PX-Shoreline-12 | 12/03/99 | 12/04/99 | 12/06/99 | 01/19/00 | | 0.92 | Prior to Augering J - Concentration detected below MDL |

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

POST EXCAVATION (TOTAL CADMIUM) LABORATORY ANALYTICAL RESULTS

| Chain of Custody # | ERM Sample ID | Date Collected | Date Analyzed | Date Data Received | Date Cat B Package Received | Earth Tech Analytical Results (ppm) | ERM/BWE Analytical Results (ppm) | Notes |
|--------------------|-------------------------------|----------------|---------------|--------------------|-----------------------------|-------------------------------------|----------------------------------|---|
| J 3964-3 | PX-Shoreline-12 +4 | 12/10/99 | 12/14/99 | 12/14/99 | 01/19/00 | | 6.47 | |
| J 4620-1 | PX-Shoreline-12 +4 RD | 12/15/99 | 12/16/99 | 12/16/99 | 01/19/00 | | 0.46 | |
| J 3964-4 | PX-Shoreline-13 +4 | 12/10/99 | 12/14/99 | 12/14/99 | 01/19/00 | | 1.76 | Revised 1/12/00 Orig. reported as 1.77 ppm |
| J 3966-2 | PX-Shoreline-14 | 12/10/99 | 12/13/99 | 12/15/99 | 01/24/00 | | 69.8 | |
| J 4620-3 | PX-Shoreline-14 +4 | 12/15/99 | 12/16/99 | 12/16/99 | 01/19/00 | | 1.63 | |
| J 3966-3 | PX-Shoreline-15 | 12/10/99 | 12/13/99 | 12/15/99 | 01/24/00 | | 2.09 | |
| J 4619-1 | PX-Shoreline-15 +4 | 12/15/99 | 12/16/99 | 12/16/99 | 01/19/00 | | 2.51 | Revised 1/13/00 Orig. reported as 2.52 ppm |
| J 4619-2 | PX-Shoreline-16 +4 | 12/15/99 | 12/16/99 | 12/16/99 | 01/19/00 | | 2.75 | Revised 1/13/00 Orig. reported as 2.76 ppm |
| J 4618-2 | PX-Shoreline-17 +4 | 12/14/99 | 12/15/99 | 12/15/99 | 01/19/00 | 0.2 | 0.69 | |
| J 3414-3 | PX-Shoreline-18 | 11/13/99 | 11/18/99 | 11/19/99 | 01/07/00 | 0.8 | 1.43 | |
| J 3414-2 | PX-Shoreline-19 | 11/13/99 | 11/18/99 | 11/19/99 | 01/07/00 | | 0.48 | |
| J 3414-1 | PX-Shoreline-20 | 11/13/99 | 11/18/99 | 11/19/99 | 01/07/00 | | 0.62 | |
| J 3411-1 | 111299 Dup | 11/12/99 | 11/18/99 | 11/18/99 | 01/07/00 | | 0.47 | J - Concentration detected below MDL Revised 1/04/00 Orig. reported as 0.74 ppm |
| J 3411-2 | PX-Shoreline-21 | 11/12/99 | 11/15/99 | 11/18/99 | 01/07/00 | | 0.75 | |
| J 3415-3 | PX-Shoreline-21 +4 | 11/13/99 | 11/21/99 | 11/22/99 | 01/07/00 | 0.7 | 0.86 | |
| J 3411-3 | PX-Shoreline-22 | 11/12/99 | 11/15/99 | 11/18/99 | 01/07/00 | | 0.49 | J - Concentration detected below MDL |
| J 3415-2 | PX-Shoreline-22 +4 | 11/13/99 | 11/21/99 | 11/22/99 | 01/07/00 | | 0.70 | |
| I 5165-1 | PX-Shoreline-23 | 10/14/99 | 10/18/99 | 10/20/99 | 12/02/99 | | 1.05 | Revised 11/29/99 Orig. reported as 0.82 ppm |
| J 3415-1 | PX-Shoreline-23 +4 | 11/13/99 | 11/21/99 | 11/22/99 | 01/07/00 | BDL | 0.48 | J - Concentration detected below MDL |
| I 5164-1 | PX-Shoreline-24 | 10/14/99 | 10/15/99 | 10/18/99 | 11/19/99 | | 2.44 | |
| I 5162-1 | PX-Shoreline-25 | 10/13/99 | 10/15/99 | 10/18/99 | 11/19/99 | | 0.18 | J - Concentration detected below MDL |
| I 5075 | PX-Shoreline 26 is PX-Lake-01 | 07/26/99 | | | | | 1.02 | |

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

POST EXCAVATION (TOTAL CADMIUM) LABORATORY ANALYTICAL RESULTS

| Chain of Custody # | ERM Sample ID | Date Collected | Date Analyzed | Date Data Received | Date Cat B Package Received | Earth Tech Analytical Results (ppm) | ERM/BWE Analytical Results (ppm) | Notes |
|--------------------|-----------------|----------------|---------------|--------------------|-----------------------------|-------------------------------------|----------------------------------|---|
| I 5257-1 | PX-Shoreline-27 | 10/27/99 | 10/29/99 | 10/29/99 | 12/08/99 | | 0.47 | J - Concentration detected below MDL |
| I 5261-1 | PX-Shoreline-28 | 10/28/99 | 10/29/99 | 10/29/99 | 12/08/99 | | 1.00 | |
| LAKE I | | | | | | | | |
| 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 Orig. reported as 37.2 ppm |
| I 5256-2 | 102799 | 10/27/99 | 10/29/99 | 10/29/99 | 12/02/99 | | 30.6 | Duplicate Revised 11/29/99 Orig. reported as 30.3 ppm |
| I 7123-1 | PX-Lake-I-2-RD | 11/05/99 | 11/10/99 | 11/11/99 | 12/08/99 | | 2.98 | Revised 12/2/99 Orig. reported as 2.99 ppm |
| J 3416-2 | PX-Lake-I-3 +4 | 11/15/99 | 11/18/99 | 11/19/99 | 01/07/00 | | 0.43 | U - Analytical value is a non-detect |
| LAKE II | | | | | | | | |
| I 7126-2 | PX-Lake-II-1 | 11/08/99 | 11/10/99 | 11/16/99 | 12/08/99 | | 0.450 | J - Concentration detected below MDL Revised 12/2/99 Orig. reported as 0.34 ppm U |
| J 3415-4 | PX-Lake-II-1 +4 | 11/13/99 | 11/21/99 | 11/22/99 | 01/07/00 | 1.7 | 1.45 | |
| I 7126-3 | PX-Lake-II-2 | 11/09/99 | 11/10/99 | 11/16/99 | 12/08/99 | | 0.45 | J - Concentration detected below MDL |
| J 3415-5 | PX-Lake-II-2 +4 | 11/13/99 | 11/21/99 | 11/22/99 | 01/07/00 | | 0.43 | |
| J 3409-1 | PX-Lake-II-3 | 11/11/99 | 11/15/99 | 11/17/99 | 01/19/00 | | 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 | 01/07/00 | | 0.45 | J - Concentration detected below MDL |
| J 3409-2 | PX-Lake-II-4 | 11/11/99 | 11/15/99 | 11/17/99 | 01/19/00 | | 0.42 | J - Concentration detected below MDL |
| J 3415-7 | PX-Lake-II-4 +4 | 11/13/99 | 11/21/99 | 11/22/99 | 01/07/00 | | 0.51 | |
| J 3411-4 | PX-Lake-II-5 | 11/12/99 | 11/15/99 | 11/18/99 | 01/07/00 | | 0.45 | J - Concentration detected below MDL |
| J 3415-8 | PX-Lake-II-5 +4 | 11/13/99 | 11/21/99 | 11/22/99 | 01/07/00 | | 0.45 | J - Concentration detected below MDL |
| I 7126-1 | PX-Lake-II-6 | 11/08/99 | 11/10/99 | 11/16/99 | 12/08/99 | | 0.45 | J - Concentration detected below MDL |
| J 3415-9 | PX-Lake-II-6 +4 | 11/13/99 | 11/21/99 | 11/22/99 | 01/07/00 | 0.1 | 0.83 | J - Concentration detected below MDL Revised 01/04/00 Orig. reported as 1.48 ppm |
| LAKE III | | | | | | | | |

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Appendix C

Site Inspection Photos

AECOM

PHOTOGRAPHIC LOG

Client Name: Dzus Fasteners
NYS DEC Work Order D004445-14.2A

Site Location: Dzus Fasteners Site,
West Islip, NY

Project No.

Photo No.
1

Date:
08/19/09

Direction Photo
Taken:
Facing east

Description:

Willets Creek, by the
outfall, sampling location
SED-6

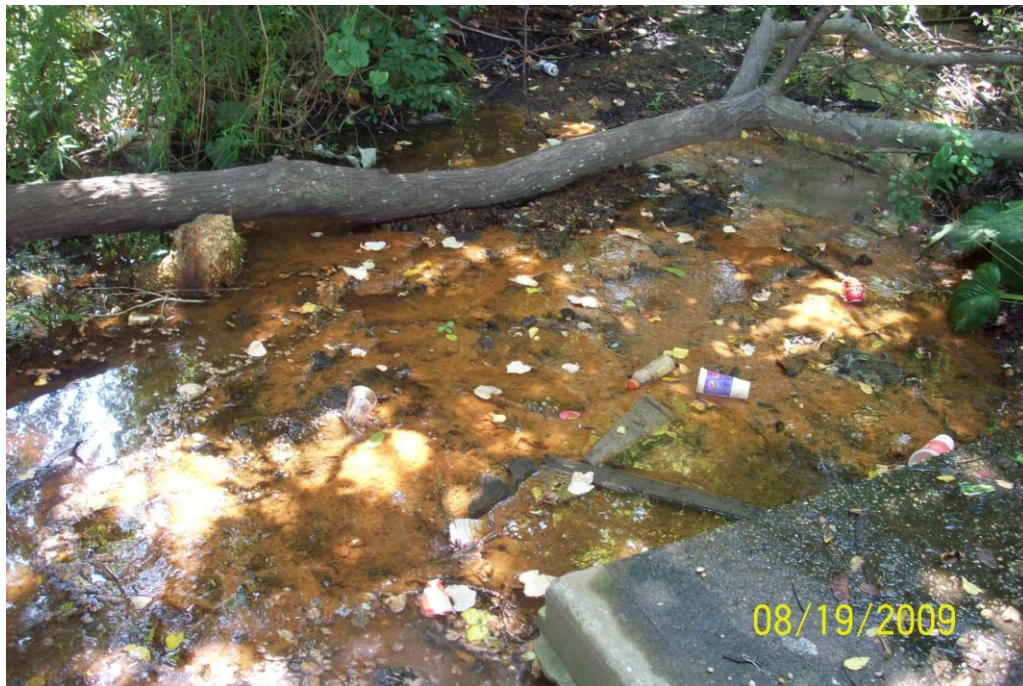


Photo No.
2

Date:
08/19/09

Direction Photo
Taken:

Facing east

Description:

DZUS Fasteners site,
asphalt cap.



AECOM

PHOTOGRAPHIC LOG

Client Name: Dzus Fasteners
NYS DEC Work Order D004445-14.2A

Site Location: Dzus Fasteners Site,
West Islip, NY

Project No.

Photo No.
3

Date:
08/19/09

**Direction Photo
Taken:**
Facing east

Description:

DZUS Fasteners site,
asphalt cap.



Photo No.
4

Date:
08/19/09

**Direction Photo
Taken:**
Facing east

Description:

Willetts Creek. Just
south of the Middle
School Burling Lane
bridge, location of SED-
5 sample.



AECOM

PHOTOGRAPHIC LOG

Client Name: Dzus Fasteners
NYS DEC Work Order D004445-14.2A

Site Location: Dzus Fasteners Site,
West Islip, NY

Project No.

Photo No.
5

Date:
08/19/09

Direction Photo
Taken:
Facing north

Description:

Willetts Creek,
immediately north of the
Edmore Lane bridge



Photo No.
6

Date:
08/19/09

Direction Photo
Taken:
Facing North-west

Description:

Lake Capri



Appendix D

Well Sampling Logs



| | | | | |
|---|--------------------------|-------------------|---------------------|--------|
| WELL SAMPLING FORM | PROJECT | PROJECT No. | SHEET | SHEETS |
| | MULTI SITE-G | 87616 / 03 | 1 OF | 1 |
| LOCATION | | DATE WELL STARTED | DATE WELL COMPLETED | |
| Dzus Fasteners, West Islip, NY, #1-52-033 | | 6/8/06 | 6/8/06 | |
| CLIENT | NAME OF INSPECTOR | | | |
| New York State Department of Environmental Conservation | Kevin Seise, Jason Klein | | | |
| DRILLING COMPANY | SIGNATURE OF INSPECTOR | | | |

PUMP INTAKE DEPTH:

[illegible]

Analytical Parameters: TAL Metals



| | | | | |
|---|--------------------------|---------------------|-------|--------|
| WELL SAMPLING FORM | PROJECT | PROJECT No. | SHEET | SHEETS |
| | MULTI SITE-G | 87616 / 03 | 1 OF | 1 |
| LOCATION | DATE WELL STARTED | DATE WELL COMPLETED | | |
| Dzus Fasteners, West Islip, NY, #1-52-033 | 6/8/06 | 6/8/06 | | |
| CLIENT | NAME OF INSPECTOR | | | |
| New York State Department of Environmental Conservation | Kevin Seise, Jason Klein | | | |
| DRILLING COMPANY | SIGNATURE OF INSPECTOR | | | |

PUMP INTAKE DEPTH:

Analytical Parameters: TAL Metals



| | | | | |
|---|--------------------------|-------------------|---------------------|--------|
| WELL SAMPLING FORM | PROJECT | PROJECT No. | SHEET | SHEETS |
| | MULTI SITE-G | 87616 / 03 | 1 OF | 1 |
| LOCATION | | DATE WELL STARTED | DATE WELL COMPLETED | |
| Dzus Fasteners, West Islip, NY, #1-52-033 | | 6/8/06 | 6/8/06 | |
| CLIENT | NAME OF INSPECTOR | | | |
| New York State Department of Environmental Conservation | Kevin Seise, Jason Klein | | | |
| DRILLING COMPANY | SIGNATURE OF INSPECTOR | | | |

PUMP INTAKE DEPTH:

Analytical Parameters: TAL Metals

[illegible]



| | | | | |
|---|--------------------------|-------------------|---------------------|--------|
| WELL SAMPLING FORM | PROJECT | PROJECT No. | SHEET | SHEETS |
| | MULTI SITE-G | 87616 / 03 | 1 OF | 1 |
| LOCATION | | DATE WELL STARTED | DATE WELL COMPLETED | |
| Dzus Fasteners, West Islip, NY, #1-52-033 | | 6/8/06 | 6/8/06 | |
| CLIENT | NAME OF INSPECTOR | | | |
| New York State Department of Environmental Conservation | Kevin Seise, Jason Klein | | | |
| DRILLING COMPANY | SIGNATURE OF INSPECTOR | | | |

PUMP INTAKE DEPTH:

Analytical Parameters: TAL Metals



| | | | | |
|---|--------------|--------------------------|---------------------|--------|
| WELL SAMPLING FORM | PROJECT | PROJECT No. | SHEET | SHEETS |
| | MULTI SITE-G | 87616 / 03 | 1 OF | 1 |
| LOCATION | | DATE WELL STARTED | DATE WELL COMPLETED | |
| Dzus Fasteners, West Islip, NY, #1-52-033 | | 6/8/06 | 6/8/06 | |
| CLIENT | | NAME OF INSPECTOR | | |
| New York State Department of Environmental Conservation | | Kevin Seise, Jason Klein | | |
| DRILLING COMPANY | | SIGNATURE OF INSPECTOR | | |

PUMP INTAKE DEPTH:

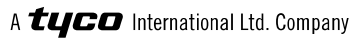
Analytical Parameters: TAL Metals



| | | | | |
|---|--------------|--------------------------|---------------------|--------|
| WELL SAMPLING FORM | PROJECT | PROJECT No. | SHEET | SHEETS |
| | MULTI SITE-G | 87616 / 03 | 1 OF | 1 |
| LOCATION | | DATE WELL STARTED | DATE WELL COMPLETED | |
| Dzus Fasteners, West Islip, NY, #1-52-033 | | 6/8/06 | 6/8/06 | |
| CLIENT | | NAME OF INSPECTOR | | |
| New York State Department of Environmental Conservation | | Kevin Seise, Jason Klein | | |
| DRILLING COMPANY | | SIGNATURE OF INSPECTOR | | |

PUMP INTAKE DEPTH:

Analytical Parameters: TAL Metals



| | | | | |
|---|--------------|--------------------------|---------------------|--------|
| WELL SAMPLING FORM | PROJECT | PROJECT No. | SHEET | SHEETS |
| | MULTI SITE-G | 87616 / 03 | 1 OF | 1 |
| LOCATION | | DATE WELL STARTED | DATE WELL COMPLETED | |
| Dzus Fasteners, West Islip, NY, #1-52-033 | | 6/7/06 | 6/7/06 | |
| CLIENT | | NAME OF INSPECTOR | | |
| New York State Department of Environmental Conservation | | Kevin Seise, Jason Klein | | |
| DRILLING COMPANY | | SIGNATURE OF INSPECTOR | | |

PUMP INTAKE DEPTH:

Analytical Parameters: TAL Metals



| | | | | |
|---|--------------------------|-------------------|---------------------|--------|
| WELL SAMPLING FORM | PROJECT | PROJECT No. | SHEET | SHEETS |
| | MULTI SITE-G | 87616 / 03 | 1 OF | 1 |
| LOCATION | | DATE WELL STARTED | DATE WELL COMPLETED | |
| Dzus Fasteners, West Islip, NY, #1-52-033 | | 6/7/06 | 6/7/06 | |
| CLIENT | NAME OF INSPECTOR | | | |
| New York State Department of Environmental Conservation | Kevin Seise, Jason Klein | | | |
| DRILLING COMPANY | SIGNATURE OF INSPECTOR | | | |

ONE WELL VOLUME : 12.88

WELL TD: 84.31

PUMP INTAKE DEPTH:

[illegible]

Pump Type: Centrifugal pump with black poly tubing

Analytical Parameters: TAL Metals



| | | | | |
|---|--------------------------|-------------------|---------------------|--------|
| WELL SAMPLING FORM | PROJECT | PROJECT No. | SHEET | SHEETS |
| | MULTI SITE-G | 87616 / 03 | 1 OF | 1 |
| LOCATION | | DATE WELL STARTED | DATE WELL COMPLETED | |
| Dzus Fasteners, West Islip, NY, #1-52-033 | | 6/8/06 | 6/8/06 | |
| CLIENT | NAME OF INSPECTOR | | | |
| New York State Department of Environmental Conservation | Kevin Seise, Jason Klein | | | |
| DRILLING COMPANY | SIGNATURE OF INSPECTOR | | | |

PUMP INTAKE DEPTH:

Analytical Parameters: TAL Metals



| | | | | |
|---|--------------|--------------------------|---------------------|--------|
| WELL SAMPLING FORM | PROJECT | PROJECT No. | SHEET | SHEETS |
| | MULTI SITE-G | 87616 / 03 | 1 OF | 1 |
| LOCATION | | DATE WELL STARTED | DATE WELL COMPLETED | |
| Dzus Fasteners, West Islip, NY, #1-52-033 | | 6/7/06 | 6/7/06 | |
| CLIENT | | NAME OF INSPECTOR | | |
| New York State Department of Environmental Conservation | | Kevin Seise, Jason Klein | | |
| DRILLING COMPANY | | SIGNATURE OF INSPECTOR | | |

PUMP INTAKE DEPTH:

Analytical Parameters: TAL Metals



| | | | | |
|---|--------------|--------------------------|---------------------|--------|
| WELL SAMPLING FORM | PROJECT | PROJECT No. | SHEET | SHEETS |
| | MULTI SITE-G | 87616 / 03 | 1 OF | 1 |
| LOCATION | | DATE WELL STARTED | DATE WELL COMPLETED | |
| Dzus Fasteners, West Islip, NY, #1-52-033 | | 6/7/06 | 6/7/06 | |
| CLIENT | | NAME OF INSPECTOR | | |
| New York State Department of Environmental Conservation | | Kevin Seise, Jason Klein | | |
| DRILLING COMPANY | | SIGNATURE OF INSPECTOR | | |

PUMP INTAKE DEPTH:

Analytical Parameters: TAL Metals



| | | | | |
|---|--------------|--------------------------|---------------------|--------|
| WELL SAMPLING FORM | PROJECT | PROJECT No. | SHEET | SHEETS |
| | MULTI SITE-G | 87616 / 03 | 1 OF | 1 |
| LOCATION | | DATE WELL STARTED | DATE WELL COMPLETED | |
| Dzus Fasteners, West Islip, NY, #1-52-033 | | 6/7/06 | 6/7/06 | |
| CLIENT | | NAME OF INSPECTOR | | |
| New York State Department of Environmental Conservation | | Kevin Seise, Jason Klein | | |
| DRILLING COMPANY | | SIGNATURE OF INSPECTOR | | |

PUMP INTAKE DEPTH:

Analytical Parameters: TAL Metals



| | | | | |
|---|--------------|--------------------------|---------------------|--------|
| WELL SAMPLING FORM | PROJECT | PROJECT No. | SHEET | SHEETS |
| | MULTI SITE-G | 87616 / 03 | 1 OF | 1 |
| LOCATION | | DATE WELL STARTED | DATE WELL COMPLETED | |
| Dzus Fasteners, West Islip, NY, #1-52-033 | | 6/7/06 | 6/7/06 | |
| CLIENT | | NAME OF INSPECTOR | | |
| New York State Department of Environmental Conservation | | Kevin Seise, Jason Klein | | |
| DRILLING COMPANY | | SIGNATURE OF INSPECTOR | | |

PUMP INTAKE DEPTH:

[illegible]

Analytical Parameters: TAL Metals



| | | | | |
|---|--------------------------|-------------------|---------------------|--------|
| WELL SAMPLING FORM | PROJECT | PROJECT No. | SHEET | SHEETS |
| | MULTI SITE-G | 87616 / 03 | 1 OF | 1 |
| LOCATION | | DATE WELL STARTED | DATE WELL COMPLETED | |
| Dzus Fasteners, West Islip, NY, #1-52-033 | | 6/21/06 | 6/21/06 | |
| CLIENT | NAME OF INSPECTOR | | | |
| New York State Department of Environmental Conservation | Kevin Seise, Jason Klein | | | |
| DRILLING COMPANY | SIGNATURE OF INSPECTOR | | | |

ONE WELL VOLUME :

WELL TD:

PUMP INTAKE DEPTH:

[illegible]

Pump Type: grab sample

Analytical Parameters: TAL Metals



| | | | | |
|---|--------------------------|---------------------|-------|--------|
| WELL SAMPLING FORM | PROJECT | PROJECT No. | SHEET | SHEETS |
| | MULTI SITE-G | 87616 / 03 | 1 | 1 |
| LOCATION | DATE WELL STARTED | DATE WELL COMPLETED | | |
| Dzus Fasteners, West Islip, NY, #1-52-033 | 6/21/06 | 6/21/06 | | |
| CLIENT | NAME OF INSPECTOR | | | |
| New York State Department of Environmental Conservation | Kevin Seise, Jason Klein | | | |
| DRILLING COMPANY | SIGNATURE OF INSPECTOR | | | |

PUMP INTAKE DEPTH:

Analytical Parameters: TAL Metals



| | | | | | | |
|---|--|-------------------------|---|--------------------------------|---------|-------|
| WELL SAMPLING FORM | | PROJECT MULTI SITE-G | PROJECT No. 87616 / 03 | SHEET 1 | OF 1 | SHEET |
| LOCATION Dzus Fasteners, West Islip, NY, #1-52-033 | | | DATE WELL STARTED 6/21/06 | DATE WELL COMPLETED 6/21/06 | | |
| CLIENT New York State Department of Environmental Conservation | | | NAME OF INSPECTOR Kevin Seise, Jason Klein | | | |
| DRILLING COMPANY | | | SIGNATURE OF INSPECTOR | | | |

ONE WELL VOLUME :

WELL TD:

PUMP INTAKE DEPTH:

[illegible]

Pump Type: grab sample

Analytical Parameters: TAL Metals



| | | | | |
|---|--------------------------|-------------------|---------------------|--------|
| WELL SAMPLING FORM | PROJECT | PROJECT No. | SHEET | SHEETS |
| | MULTI SITE-G | 87616 / 03 | 1 OF | 1 |
| LOCATION | | DATE WELL STARTED | DATE WELL COMPLETED | |
| Dzus Fasteners, West Islip, NY, #1-52-033 | | 6/21/06 | 6/21/06 | |
| CLIENT | NAME OF INSPECTOR | | | |
| New York State Department of Environmental Conservation | Kevin Seise, Jason Klein | | | |
| DRILLING COMPANY | SIGNATURE OF INSPECTOR | | | |

ONE WELL VOLUME :

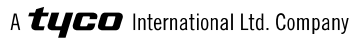
WELL TD:

PUMP INTAKE DEPTH:

[illegible]

Analytical Parameters: TAL Metals

[illegible]



| | | | | |
|---|--------------|--------------------------|---------------------|--------|
| WELL SAMPLING FORM | PROJECT | PROJECT No. | SHEET | SHEETS |
| | MULTI SITE-G | 87616 / 03 | 1 OF | 1 |
| LOCATION | | DATE WELL STARTED | DATE WELL COMPLETED | |
| Dzus Fasteners, West Islip, NY, #1-52-033 | | 6/21/06 | 6/21/06 | |
| CLIENT | | NAME OF INSPECTOR | | |
| New York State Department of Environmental Conservation | | Kevin Seise, Jason Klein | | |
| DRILLING COMPANY | | SIGNATURE OF INSPECTOR | | |

PUMP INTAKE DEPTH:

Analytical Parameters: TAL Metals

[illegible]

[illegible]

[illegible]

[illegible]



| | | | | |
|---|--------------------------------|---------------------|-------|--------|
| WELL SAMPLING FORM | PROJECT | PROJECT No. | SHEET | SHEETS |
| | MULTI SITE-G | 95900 - 30 | 1 | 1 |
| LOCATION | DATE WELL STARTED | DATE WELL COMPLETED | | |
| Dzus Fastners, West Islip, NY #1-52-033 | 8/22/07 | 8/22/07 | | |
| CLIENT | NAME OF INSPECTOR | | | |
| New York State Department of Environmental Conservation | Mihir Chokshi, Saby Chatterjee | | | |
| DRILLING COMPANY | SIGNATURE OF INSPECTOR | | | |

ONE WELL VOLUME : 6.9 WELL TD: 44.5 ft PUMP INTAKE DEPTH: 10 ft

[illegible]

Analytical Parameters: TAL Metals

[illegible]

[illegible]

[illegible]

[illegible]

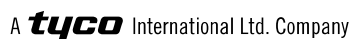


| | | | | |
|---|--------------------------------|-------------------|---------------------|--------|
| WELL SAMPLING FORM | PROJECT | PROJECT No. | SHEET | SHEETS |
| | MULTI SITE-G | 95900 - 30 | 1 | 1 |
| LOCATION | | DATE WELL STARTED | DATE WELL COMPLETED | |
| Dzus Fastners, West Islip, NY #1-52-033 | | 8/23/07 | 8/23/07 | |
| CLIENT | NAME OF INSPECTOR | | | |
| New York State Department of Environmental Conservation | Mihir Chokshi, Saby Chatterjee | | | |
| DRILLING COMPANY | SIGNATURE OF INSPECTOR | | | |

ONE WELL VOLUME : 1.8 WELL TD: 13.45 ft PUMP INTAKE DEPTH: 9 ft

[illegible]

Analytical Parameters: TAL Metals

[illegible]



| | | | | |
|---|--------------------------------|-------------------|---------------------|--------|
| WELL SAMPLING FORM | PROJECT | PROJECT No. | SHEET | SHEETS |
| | MULTI SITE-G | 95900 - 30 | 1 | 1 |
| LOCATION | | DATE WELL STARTED | DATE WELL COMPLETED | |
| Dzus Fastners, West Islip, NY #1-52-033 | | 8/22/07 | 8/22/07 | |
| CLIENT | NAME OF INSPECTOR | | | |
| New York State Department of Environmental Conservation | Mihir Chokshi, Saby Chatterjee | | | |
| DRILLING COMPANY | SIGNATURE OF INSPECTOR | | | |

ONE WELL VOLUME : 6 WELL TD: 44.5 ft PUMP INTAKE DEPTH: 10 ft

[illegible]

Analytical Parameters: TAL Metals

[illegible]



| | | | | |
|---|--------------------------------|---------------------|-------|--------|
| WELL SAMPLING FORM | PROJECT | PROJECT No. | SHEET | SHEETS |
| | MULTI SITE-G | 95900 - 30 | 1 | 1 |
| LOCATION | DATE WELL STARTED | DATE WELL COMPLETED | | |
| Dzus Fastners, West Islip, NY #1-52-033 | 8/22/07 | 8/22/07 | | |
| CLIENT | NAME OF INSPECTOR | | | |
| New York State Department of Environmental Conservation | Mihir Chokshi, Saby Chatterjee | | | |
| DRILLING COMPANY | SIGNATURE OF INSPECTOR | | | |

ONE WELL VOLUME : 6.59 WELL TD: 44.5 ft PUMP INTAKE DEPTH: 10 ft

[illegible]

Analytical Parameters: TAL Metals



| | | | | |
|---|--------------------------------|-------------------|---------------------|--------|
| WELL SAMPLING FORM | PROJECT | PROJECT No. | SHEET | SHEETS |
| | MULTI SITE-G | 95900 - 30 | 1 | 1 |
| LOCATION | | DATE WELL STARTED | DATE WELL COMPLETED | |
| Dzus Fastners, West Islip, NY #1-52-033 | | 8/23/07 | 8/23/07 | |
| CLIENT | NAME OF INSPECTOR | | | |
| New York State Department of Environmental Conservation | Mihir Chokshi, Saby Chatterjee | | | |
| DRILLING COMPANY | SIGNATURE OF INSPECTOR | | | |

ONE WELL VOLUME :

WELL TD:

PUMP INTAKE DEPTH:

[illegible]

Pump Type: None, dipped bottles into the water for collection

Analytical Parameters: TAL Metals

[illegible]

[illegible]



| | | | | |
|---|--------------------------------|---------------------|-------|--------|
| WELL SAMPLING FORM | PROJECT | PROJECT No. | SHEET | SHEETS |
| | MULTI SITE-G | 95900 - 30 | 1 | 1 |
| LOCATION | DATE WELL STARTED | DATE WELL COMPLETED | | |
| Dzus Fastners, West Islip, NY #1-52-033 | 8/23/07 | 8/23/07 | | |
| CLIENT | NAME OF INSPECTOR | | | |
| New York State Department of Environmental Conservation | Mihir Chokshi, Saby Chatterjee | | | |
| DRILLING COMPANY | SIGNATURE OF INSPECTOR | | | |

ONE WELL VOLUME :

WELL TD:

PUMP INTAKE DEPTH:

[illegible]

Pump Type: None, dipped bottles into the water for collection

Analytical Parameters: TAL Metals

[illegible]



| | | | | |
|---|--------------------------------|---------------------|-------|--------|
| WELL SAMPLING FORM | PROJECT | PROJECT No. | SHEET | SHEETS |
| | MULTI SITE-G | 95900 - 30 | 1 | 1 |
| LOCATION | DATE WELL STARTED | DATE WELL COMPLETED | | |
| Dzus Fastners, West Islip, NY #1-52-033 | 8/23/07 | 8/23/07 | | |
| CLIENT | NAME OF INSPECTOR | | | |
| New York State Department of Environmental Conservation | Mihir Chokshi, Saby Chatterjee | | | |
| DRILLING COMPANY | SIGNATURE OF INSPECTOR | | | |

ONE WELL VOLUME :

WELL TD:

PUMP INTAKE DEPTH:

[illegible]

Pump Type: None, dipped bottles into the water for collection

Analytical Parameters: TAL Metals

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

AECOM

WELL NO. MW- 2

[illegible]

AECOM

WELL NO. MW-3

[illegible]

AECOM

WELL NO. MW- 9

[illegible]

AECOM

WELL NO. MW- 9B

[illegible]

AECOM

WELL NO. MW- 13A

[illegible]

AECOM

WELL NO. MW- 13B

[illegible]

AECOM

WELL NO. MW- 15A

[illegible]

AECOM

WELL NO. MW- 18

[illegible]

AECOM

WELL NO. MW- 22A

[illegible]

AECOM

WELL NO. MW- 22B

[illegible]

AECOM

WELL NO. MW- 23A

[illegible]

AECOM

WELL NO. MW- 23B

[illegible]



WELL NO. MW- 02

[illegible]



WELL NO. MW- 03

[illegible]



WELL NO. MW- 09

[illegible]



WELL NO. MW- 09B

[illegible]



WELL NO. MW-13A

[illegible]



WELL NO. MW-13B

[illegible]



WELL NO. MW-15B

[illegible]



WELL NO. MW-15B

[illegible]



WELL NO. MW-18

[illegible]



WELL NO. MW-22A

[illegible]



WELL NO. MW-22B

[illegible]



WELL NO. MW-23A

[illegible]



WELL NO. MW-23B

[illegible]