

# HRP Associates, Inc.

*Creating the Right Solutions Together*

January 28, 2013

Payson Long, P.E.  
New York State Department of Environmental Conservation  
Division of Environmental Remediation  
625 Broadway  
Albany, New York 12233

**RE: GROUNDWATER MONITORING AND ABRIVIATED PILOT TEST REPORT, DECEMBER 2012, FORT EDWARD LANDFILL, SITE NO. 558001, WORK ASSIGNMENT NO. D006130-2 (HRP #NEW9622.OM)**

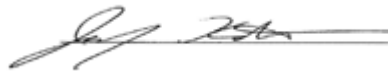
Dear Mr. Long:

HRP Engineering P.C (dba HRP Associates, Inc.) (HRP) submits the enclosed groundwater monitoring report with pilot test data for the above-referenced site. The scope of the monitoring program was developed based on the plan for Work Assignment No. D006130-22 of the State Superfund Standby Contract between the New York State Department of Environmental Conservation (NYSDEC) and HRP.

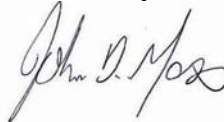
HRP's conclusions are summarized in Section 4.0 of this report. If you have any questions or require any additional information, please contact HRP at (860) 674-9570.

Sincerely yours,

HRP ASSOCIATES, INC.



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Senior Project Geologist



John D. Moss  
Senior Project Hydrogeologist



Adam G. Fox, P.E.  
Project Manager

Attachments

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**GROUNDWATER MONITORING AND ABRIVIATED PILOT TEST REPORT  
DECEMBER 2012**

**FORT EDWARD LANDFILL  
SITE NO. 5-58-001**

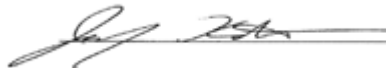
**WORK ASSIGNMENT NO.  
D006130-22**

**HRP #NEW9622.OM**

**January 28, 2013**

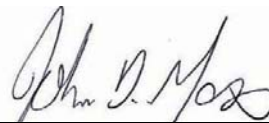
**Prepared For: SUPERFUND STANDBY PROGRAM  
NEW YORK STATE  
DEPARTMENT OF ENVIRONMENTAL  
CONSERVATION  
625 BROADWAY  
ALBANY, NEW YORK**

**Prepared By: HRP *Associates, Inc.*  
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## INTRODUCTION

This groundwater monitoring and abbreviated pilot test report describes the groundwater sampling event and pilot test conducted at the Fort Edward Landfill Site (Site No. 558001) in September 2012, located at Leavy Hollow Road in the Town of Fort Edward, Washington County, New York. The work was performed in accordance with the Work Plan for Work Assignment (WA) No. D006130-22 of the State Superfund Standby Contract between the New York State Department of Environmental Conservation (NYSDEC) and HRP Engineering P.C. (HRP) and with the September 2012 Fort Edward Landfill Leachate/Groundwater Collection System Pilot Test Work Plan completed by Aztech Technologies, Inc. (Aztech) of Ballston Spa, New York.

The groundwater monitoring component of the work plan requires sampling of 13 monitoring wells associated with this Site on a "five-quarter" basis (i.e., approximately every 15 months), with a maximum of three (3) sampling events during this WA. Subsequently, the Leachate/Groundwater Collection System Pilot Test work plan was developed to determine the effectiveness of recent upgrades to the system as well as determine recovery pump specifications for the improved operation, maintenance, and monitoring (OM&M) of the active leachate/groundwater treatment system at the Site.

### 1.1 Site Description and Background

The former municipal landfill site is located at Leavy Hollow Road in the Town of Fort Edward, New York (Figure 1). General Electric (GE) historically dumped approximately 850 tons of polychlorinated biphenyl (PCB)-containing scrap capacitors at this landfill. This waste represents approximately 79% of the total hazardous waste identified at this site. As a result of the 1980 "Seven Site Agreement" with the NYSDEC, GE produced a report in 1983 recommending encapsulation of the landfill within a slurry wall and cap; however, operation continued until 1991 and the proposed remedy was not initiated. Due to the extended operation of this landfill and the given problems associated with a similar encapsulation remedy taken at the adjacent Kingsbury Landfill (Site 5-58-008), the 1983 Remedial Design proposal was modified. The modified remedy included the construction of an impermeable landfill cap and a leachate collection system, plus the construction of a pre-treatment building with final treatment in the three (3) constructed wetland cells (cell 1 through cell 3) and a polishing pond [From: NYSDEC Registry of Inactive Hazardous Waste Disposal Sites, April 2002].

## GROUNDWATER SAMPLING

Groundwater sampling was performed in accordance with the Work Plan for WA No. D006130-22 of the State Superfund Standby Contract between NYSDEC and HRP. According to the work plan, groundwater is sampled from on-site monitoring wells at a frequency of once per five-quarters, for a maximum of three (3) sampling events during this WA. This report summarizes the second of these events. Groundwater sampling was conducted by Aztech from September 18 through September 21, 2012.

Table 1 presents a list of the site monitoring wells, the depth-to-water data collected during previous sampling events (2007 through 2008), Aztech's first event (2011) under the HRP WA, and the most recent event, and calculated groundwater elevations. The locations of

these wells are presented on Figure 2. The condition of all 13 site wells was assessed by Aztech during the September 2012 sampling event and recorded on the logs presented in Appendix A. Groundwater Sampling Records are presented in Appendix B.

## **1.2 Groundwater Sampling Methodology**

The work plan called for sampling 13 onsite wells (MW-1, MW-1A, MW-1D, MW-2, MW-2A, MW-4, MW-5, MW-06(A), MW-6B, MW-6C, MW-7, MW-8, and MW-NEW). MW-5 could not be sampled because the well could not be located during the sampling event. Therefore, groundwater samples were collected from a total of 12 monitoring wells. A duplicate sample, FD-1, was obtained from MW-1D.

Prior to sampling each well, a depth-to-water measurement was taken using an electronic water level indicator from a notched position on the top of casing. Each monitoring well was purged of three (3) well volumes using either a Monsoon<sup>®</sup> pump with low-flow sampling controller or a peristaltic pump, each with single-use disposable tubing, as noted on the logs in Appendix B. Prior to use at each monitoring well, the Monsoon<sup>®</sup> pump was decontaminated by a liquinox bath followed by a distilled water rinse. New tubing was used at each well location.

After purging up to three (3) well volumes of groundwater, the groundwater was pumped through a flow cell equipped with a multi-parameter probe (e.g., YSI<sup>®</sup> or similar) to measure temperature, conductivity, pH, turbidity, dissolved oxygen, and oxidation/reduction potential (Appendix B). All groundwater samples were bottled in laboratory-provided containers. Samples were packed on ice and submitted under standard Chain-of-Custody (COC) procedures to Test America in Amherst, New York. Each sample was analyzed for volatile organic compounds (VOC) by USEPA Method 8260, Contract Laboratory Program (CLP) Target Analyte List (TAL) metals, and polychlorinated biphenyls (PCB) by Method 8082.

## **RESULTS**

### **1.3 Well Inventory**

Twelve (12) monitoring wells were inventoried on log sheets included in Appendix A. Based on the visual well inventory; nine monitoring wells were identified in good condition. Surface seals were not observed at MW-2, MW-2A, or MW-7 and the seals require repair or replacement. VOC concentrations in each well headspace were screened with a MiniRAE 3000 photoionization detector (PID) that had been field calibrated to manufacture's standards. All readings were 0.0 parts per million by volume (PPMV).

At the time of completing this report, Aztech has not confirmed the locations of wells UI-MW-1, UI-MW-2, UI-MW-3, and UI-MW-4 on the site map sampled during the previous groundwater monitoring event or MW-4 sampled during the September 2012 groundwater monitoring event. In addition, survey elevation data is not available for monitoring well MW-1D, MW-4, and MW-NEW.

#### 1.4 **Groundwater Flow**

Water level and total well depth measurements were obtained at twelve (12) monitoring wells located on-site. The measurements are noted on the inspection logs and sampling logs in Appendix A and Appendix B, respectively. The measurements and calculated groundwater elevations for the 12 monitoring wells are presented on Table 1. Measuring-point elevations were obtained from the November 1995 Final Engineering Report for the Site, prepared by URS Consultants, Inc. through Earth Tech. Depth-to-water measurements were converted to water table elevations and contoured as shown in Figure 2. The overall direction of groundwater flow beneath the landfill is to the east-southeast as indicated. Depth to water was measured in the extraction wells (EW-1 through EW-3 and EW-4 [leachate collection]) depth to water was collected, however groundwater elevations were not calculated as the wells are part of the existing groundwater leachate collection system and not representative of naturally occurring subsurface groundwater conditions.

#### 1.5 **Analytical Results**

The analytical results for the September 2012 groundwater sampling event are presented on Table 2. Only detected compounds/metals are tabulated. Concentrations above the New York State Ambient Water Quality Standards (AWQS) and Guidance Values for groundwater are shown in bold font in a shaded cell for easy reference. Historical analytical data for select compounds, made available by the NYSDEC for the period of 1995 to 2012, are presented in Table 3.

##### ***Volatile Organic Compounds***

Volatile organic compounds (VOCs) concentrations detected in the 12 sampled monitoring wells ranged from below reporting limits (<0.41 µg/L) to 18 µg/L of 1,2,4-trichlorobenzene in MW-6A. MW-6A and MW-6C are located on the northeast side of the landfill. VOCs were detected above laboratory minimum detection limits in four (4) monitoring wells: MW-1A, MW-6C, MW-6A, and MW-7. The concentrations of benzene (2.1 ug/L [micrograms per liter]), and chlorobenzene (18 ug/L) in MW-6C and 1,2,4-trichlorobenzene (18 ug/L), 1,3-dichlorobenzene (7.6 ug/L), and 1,4-dichlorobenzene (3.5 ug/L) in MW-6A exceed the NYSDEC Class GA Criteria.

Historical total VOC data are presented on Table 3, on Figure 3 and on the concentrations versus time graph Figure 6 for the MW-6 well nest. No historical total VOC data was available for the other wells which were therefore not included in the table.

Table 3 and the graph presented in Figure 6 show the total VOC concentrations for MW-6(A), MW-6B, and MW-6C. VOC totals from 1995 through 2000 include only concentrations of VOCs that were detected above AWQS, however the 2007, 2008, 2011, and 2012 totals include all detections, whether above or below AWQS. MW-6A has shown an increase in concentrations of total VOCs between 2000 and 2011, but decreased to 35.41 ug/L in 2012. MW-6B has shown no detectable VOCs since May 1999. MW-6C total VOC concentrations have remained relatively constant between 2007 and 2012.

In summary, VOCs do not appear to be widely present at high concentrations in site groundwater.

### ***Metals***

During the September 2012 sampling event, each of the 23 metals in the CLP scan were detected. Iron, Magnesium, manganese, and sodium were present in groundwater at concentrations exceeding the AWQS. The most commonly exceeded standard was iron (10 of 12 sampled wells); next was total sodium (9 of 12 wells); and finally manganese, with 5 of 12 wells exceeding the AWQS.

Limited historical total metals data are presented on Table 3, on Figure 4 and on the concentrations versus time graphs presented in Figure 7 through Figure 10. All sampled monitoring wells had AWQS exceedances for one or more metals during the September 2012 monitoring event. Ten of the twelve wells had exceedances for multiple metals, with the exceptions being MW-01 and MW-1D (only exceedance was sodium).

NEW-MW showed the highest concentrations of magnesium and total sodium of the 12 wells sampled in September 2012. Historical data for this well was not provided by NYSDEC. MW-7, located near the foot of the cap on the north side of the landfill, featured the highest iron concentration in the current sampling event.

Table 3 and the graphs in Figures 7 through 10 summarize recent and historical concentrations of four metals (iron, manganese, magnesium, and iron) detected at six monitoring well locations (MW-2, MW-2A, MW-6A, MW-6B, MW-6C, MW-7). Within this group of wells, only MW-6C exceeded the guidance value (GV) for magnesium (35,000 µg/L). In general, concentrations of magnesium (Figure 7) with the exception of MW-6C have fallen substantially (to well below the GV) since the May 2000 sampling event. From a historical perspective, the magnesium concentration in MW-6B in the 2007 event appears to be anomalous.

None of the six wells graphed on Figure 8 have ever met the AWQS for iron (300 µg/L). Moreover, the iron concentrations have decreased slightly, if at all, since the first sampling events in the spring and summer of 1995, with the exception being MW-6B, which has had a substantial decrease in iron concentration from between 2007 until the most recent sampling event (September 2012). MW-2A, MW-6B, MW-6C and MW-7 decreased slightly from the last sample event for iron.

Figure 9 shows a historical graph for manganese concentrations. Wells exceeding the standard for manganese (300 µg/L) include MW-2, MW-2A, MW-6B, MW-6C and MW-7. The concentration in MW-2A, which meet AWQS standards, is at the lowest end of its historic range for manganese.

MW-06B and MW-7 met the AWQS for total sodium (20,000 µg/L; Table 2). Concentrations of total sodium in MW-06, MW-7, and MW-8 (Table 3 and Figure 10) have remained relatively constant and above the AWQS over time. The concentration of sodium in MW-06B shows a notable decreasing trend.



As an upgradient, background well for the site, MW-8 depicts groundwater quality without significant site impacts. Iron and selenium were detected above AWQS in this well in 2007 but no metals were detected above the AWQS during the 2008 or 2011 sampling events. Iron was detected above AWQS in this well in September 2012.

### ***PCB Organics***

Total polychlorinated biphenyls (PCBs) were detected in nine (9) groundwater samples and ranging between 0.00028 ug/L and 0.0074 ug/L at concentrations exceeding the AWQS. Total PCB data is presented on Table 3 and on Figure 5 for the groundwater wells analyzed during the most recent sampling event. PCBs were not detected in 1995 but were present in one sample collected in 2008 and were detected in groundwater samples collected from MW-6C and UI-MW-4 during the 2011 sampling event.

In summary, PCBs have not generally been historically detected in site groundwater, however, total PCBs exceeded NYSDEC Class GA criteria in 9 of the 12 monitoring wells sampled in September 2012.

## **4.0 LEACHATE/GROUNDWATER COLLECTION SYSTEM PILOT TEST**

The Groundwater Water Treatment System (GWTS) consists of three (3) extraction wells (EW) (EW-1 through EW-3) and a subsurface collection trench that feeds the three (3) treatment cells (Cell 1 [TC-1] through Cell 3 [TC-3]) that ultimately discharge to a polishing pond. The estimated extraction rates for the system were reported by Aztech to be 3 gallons per minute (GPM) (EW-1), 13 gpm (EW-2), and 6 gpm (EW-3), for a total extraction rate of 22 gpm from the three (3) extraction wells. EW-4 (leachate collection) and groundwater collection trench recover leachate and shallow groundwater at a reported rate of approximately 6.6 GPM from the southeast corner of the landfill for treatment via the GWTS. EW-5 (Effluent Collection Sump) discharges treated water, remediated via gravity feed flow through the three (3) treatment cells, to the polishing pond (located southwest of Cell-3 and west of former monitoring well MW-5). The combined influent samples include water from EW-1 through EW-4 prior to treatment through the GWTS. An effluent sample from the polishing pond was also collected to monitor water after remediation.

### **4.1 Objective/Purpose of the Leachate/Groundwater Collection System Pilot Test**

A pilot test was conducted at the existing GWTS including additional controls (i.e. pumping water to a frac tank for retention purposes) from September 24 through September 27, 2012. The data produced will be analyzed to determine how best to upgrade the system to help regulate water flow to and through the GWTS. The purpose of the pilot test was to verify the flow rates of the GWTS after the recent modifications, including the full automation of the groundwater collection system. The pilot test data will also be utilized to size pumps for the proposed treatment system modifications as part of the facility's Remedial System Optimization (RSO).

## 4.2 Scope

In conjunction with the 5<sup>th</sup> Quarterly Groundwater Sampling event (September 2012), the pilot test was performed to characterize the influent and effluent leachate and groundwater concentrations to the GWTS. The pilot test sample locations are included on Figure 10.

The Pilot Test used a temporary frac tank mobilized to the Site prior to September 24, 2012. Leachate and groundwater extracted from the extraction wells and the collection trench was directed to the frac tank prior to discharge into the treatment cells (Cell 1 through Cell-3) which exist inline prior to the polishing pond. The frac tank provided extended equalization/storage capacity as to not overwhelm the existing treatment building's distribution pumps to the existing treatment cells. The groundwater was transferred to the treatment building's equalization (EQ) tank for discharge to the treatment cells before sample EW-5 (Effluent, or Effluent Collection Sump) was collected post treatment. Flow readings from each of the collection points, as gallons per minute (GPM), were recorded during the pilot test by the remote monitoring system control panel located in the existing GWTS shed. Monitoring samples from each of the individual collection points (EW-1, EW-2, EW-3, EW-4, EW-5 [Effluent Collection Sump] and Combined Influent) were collected and analyzed for chemical characteristics at both the start-up of the pilot test as well as at the start of each day of the pilot test to establish a normalized loading to the treatment system. Samples were collected from each of the cells to evaluate the condition of the cells themselves, as well as from the sample points located between each of the cells to evaluate groundwater concentrations as it flows through the cells. A sample was collected from the polishing pond effluent (PPE) to evaluate the final concentrations of the water after treatment. The samples were analyzed for the following parameters: VOCs, Contract Laboratory Program (CLP) Metals, Mercury (Hg), Phenols, PCBs, Nitrate, Nitrite, Sulfur, Ammonia, Sulfate, Sulfide, total organic compounds (TOC), total suspended solids (TSS), total dissolved solids (TDS), Methane, chemical oxygen demand (COD), biological oxygen demand (BOD), Phosphorous, Hardness, Alkalinity, and expanded parameters including oxidation reduction potential (ORP), pH, dissolved oxygen (DO), carbon dioxide (CO<sub>2</sub>), temperature, conductivity, and turbidity. The results of the pilot test are presented in attached Table 4 and will be discussed further in the upcoming pilot test report.

A surface water sample (Pond 13) was collected from a surface water area adjacent to the polishing pond to monitor surface water. Surface water sample Runoff 14 was collected from the stream (Glens Falls Feeder Canal) on the north side of the site to monitor water leaving the Site. Groundwater sample Runoff 15 was collected from a monitoring well at the southeast corner of the landfill adjacent to the service road and NEW-MW observed to be under artesian conditions. Due to the apparent upgradient location and the close proximity of this monitoring well to the polishing pond, a grab groundwater sample was collected from the monitoring well. The samples were collected on September 26 and September 28, 2012 and were analyzed for VOC by USEPA Method 8260, CLP, TAL metals, and PCBs by Method 8082.

Water level and total well depth measurements were obtained at four (4) extraction wells located on-site. These values were not used to calculate groundwater

contours as they are interconnected with the GWTS and are not representative of naturally occurring groundwater depths. The measurements are noted on the inspection logs and sampling logs in Appendix A and Appendix B, respectively. EW-3 was identified as having damaged PVC located at the top of casing.

## 5.0 CONCLUSIONS

VOCs do not appear to be widely present at high concentrations in site groundwater. Concentrations of VOCs appear to be decreasing over time.

Total PCBs over AWSQ standards were detected in 9 of the 12 groundwater monitoring wells sampled during the September 2012 monitoring event. Additionally, PCBs were detected in groundwater samples from MW-6 during the 2008 sampling event and in MW-6C and UW-MW-4 during the 2011 sampling event. Total PCB levels appear to be increasing across the Site.

A total of twenty-three metals were detected in groundwater at concentrations above the laboratory minimum detection limits. A total of four (4) metals were detected in groundwater at concentrations exceeding the AWQS. All sampled monitoring wells identified one or more metals at concentrations exceeding the AWQS. The most common metal exceeding its respective standard was iron.

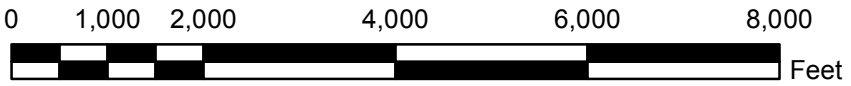
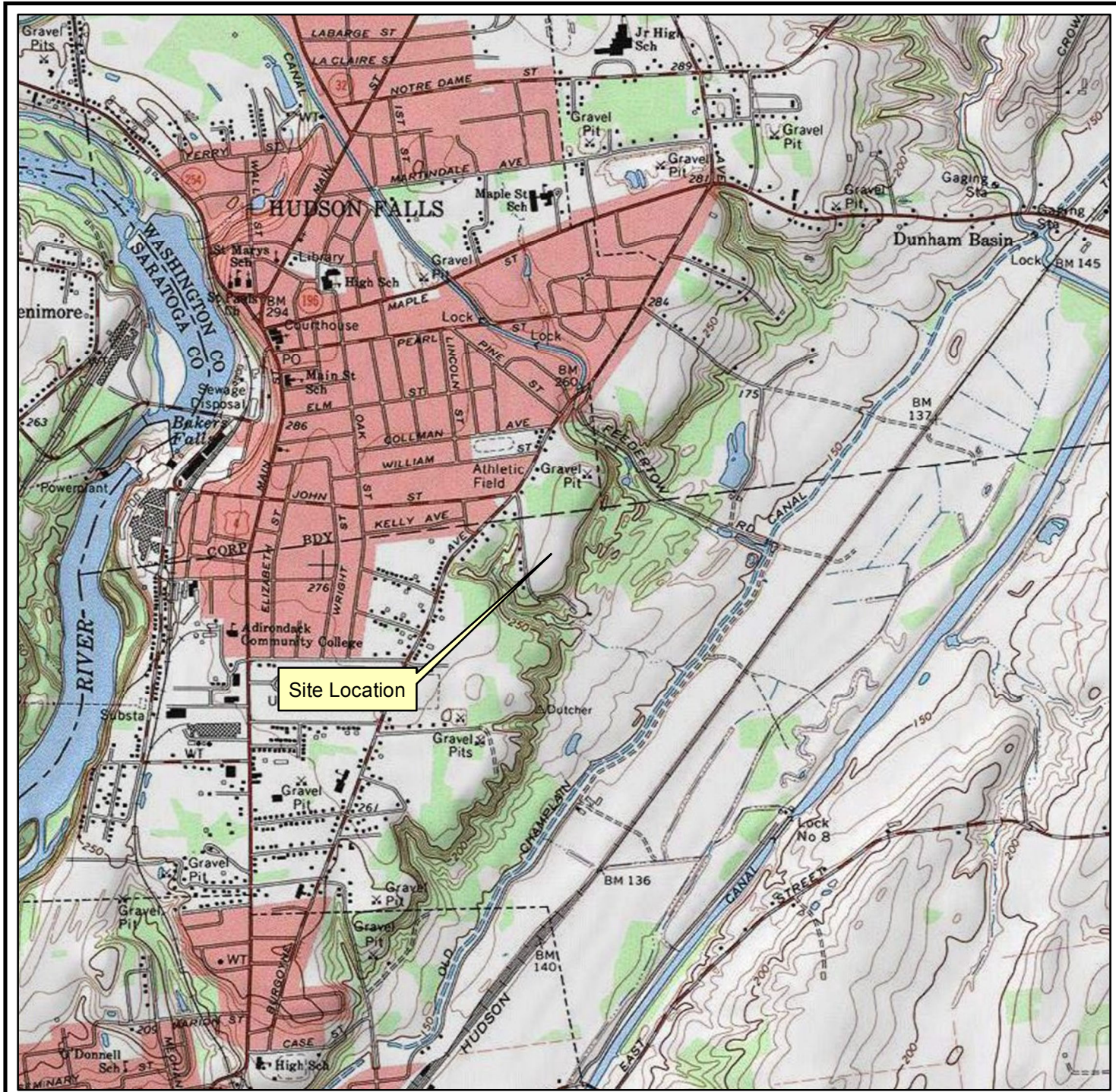
The existing groundwater remedial system should remain in operation to treat elevated metals, PCBs, and VOC concentrations. Although VOC levels do not appear to be problematic in the monitoring well results, vinyl chloride and cis-1,2-DCE have been noted at high concentrations in the groundwater influent to the treatment system.

The pilot test data will be further discussed and evaluated in an upcoming pilot test report.

The next round of groundwater sampling will occur at this Site during the winter of 2013.

## FIGURES





1 inch = 2,000 feet

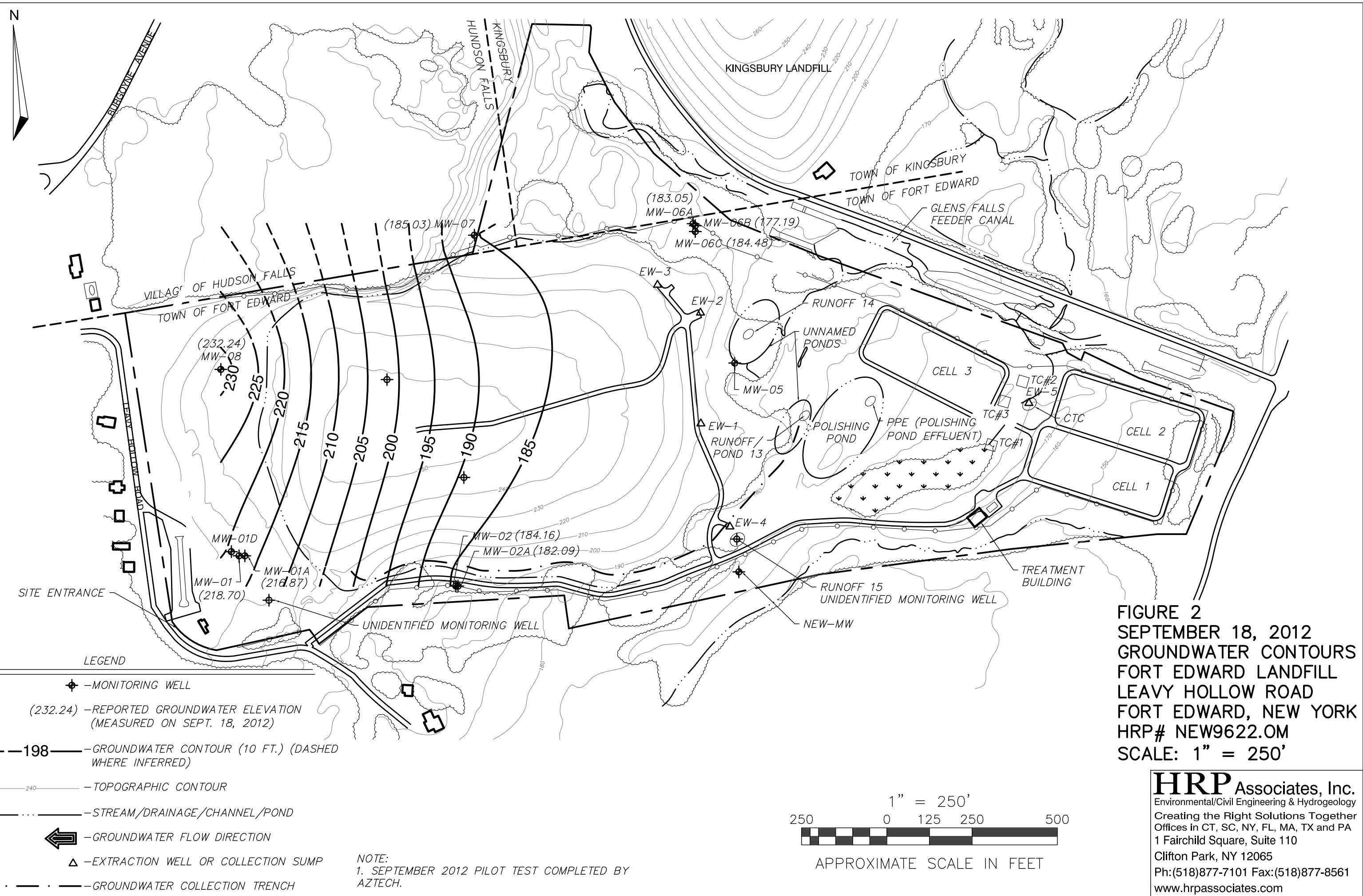


USGS Quadrangle Information  
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 Name: Hudson Falls, New York  
 Date Pub: 1968

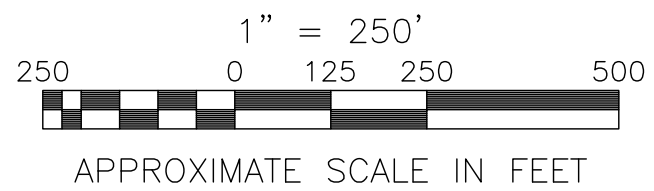
**Figure 1**  
**Site Location**  
**Fort Edward Landfill**  
**Leavy Hollow Road**  
**Fort Edward, New York**  
**HRP# NEW9622.OM**  
**Scale 1" = 2,000'**

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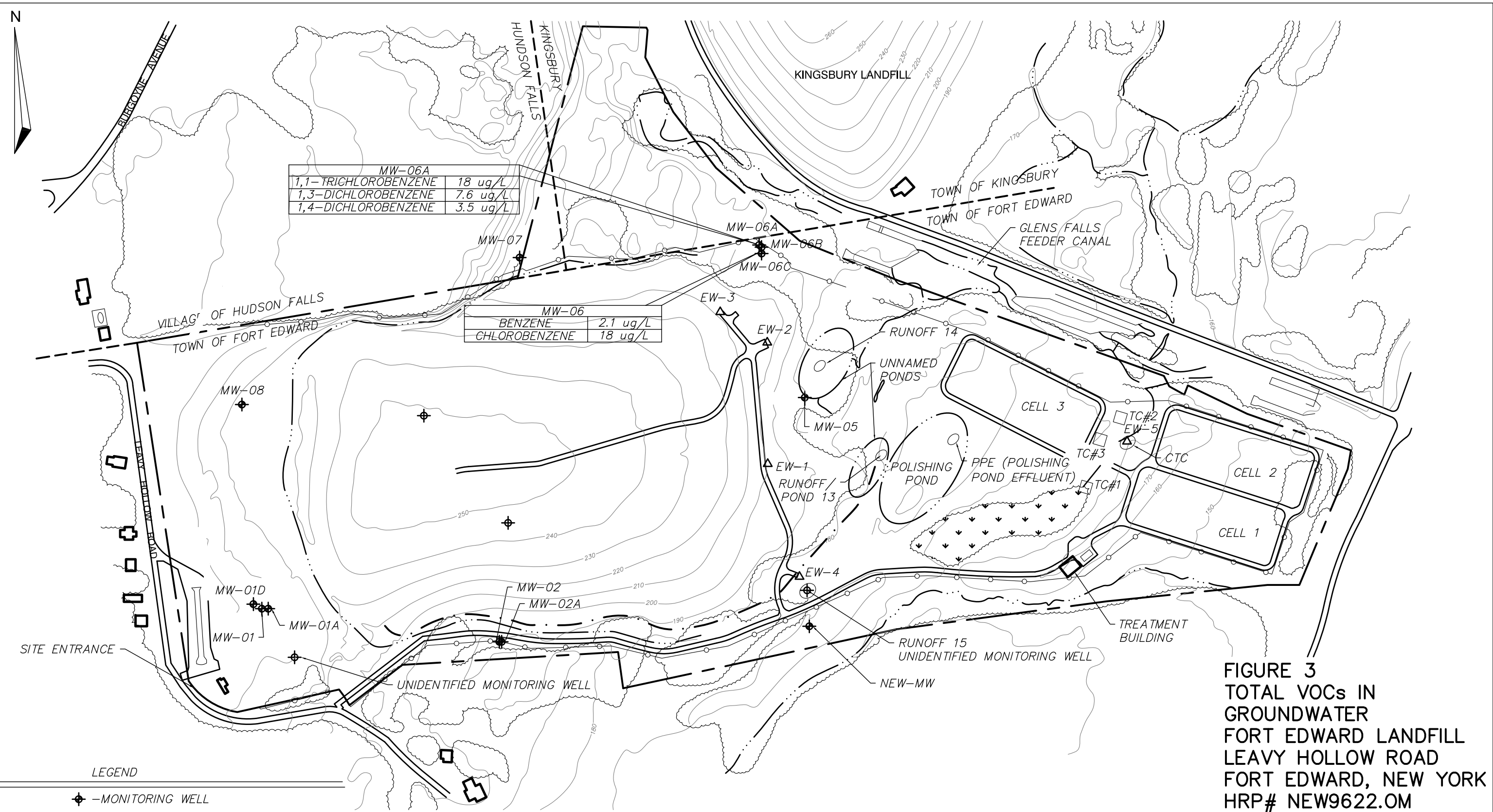


**FIGURE 2**  
**SEPTEMBER 18, 2012**  
**GROUNDWATER CONTOURS**  
**FORT EDWARD LANDFILL**  
**LEAVY HOLLOW ROAD**  
**FORT EDWARD, NEW YORK**  
**HRP# NEW9622.OM**  
**SCALE: 1" = 250'**



NOTE:  
 1. SEPTEMBER 2012 PILOT TEST COMPLETED BY  
 AZTECH.

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MW-06A	
1,1-TRICHLORO BENZENE	18 ug/L
1,3-DICHLORO BENZENE	7.6 ug/L
1,4-DICHLORO BENZENE	3.5 ug/L

MW-06	
BENZENE	2.1 ug/L
CHLORO BENZENE	18 ug/L

**FIGURE 3**  
**TOTAL VOCs IN**  
**GROUNDWATER**  
**FORT EDWARD LANDFILL**  
**LEAVY HOLLOW ROAD**  
**FORT EDWARD, NEW YORK**  
**HRP# NEW9622.OM**  
**SCALE: 1" = 250'**

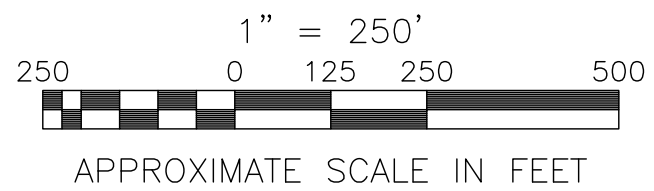
**LEGEND**

- ⊕ - MONITORING WELL
- 240 — TOPOGRAPHIC CONTOUR
- STREAM/DRAINAGE/CHANNEL/POND
- △ - EXTRACTION WELL OR COLLECTION SUMP
- . - - GROUNDWATER COLLECTION TRENCH

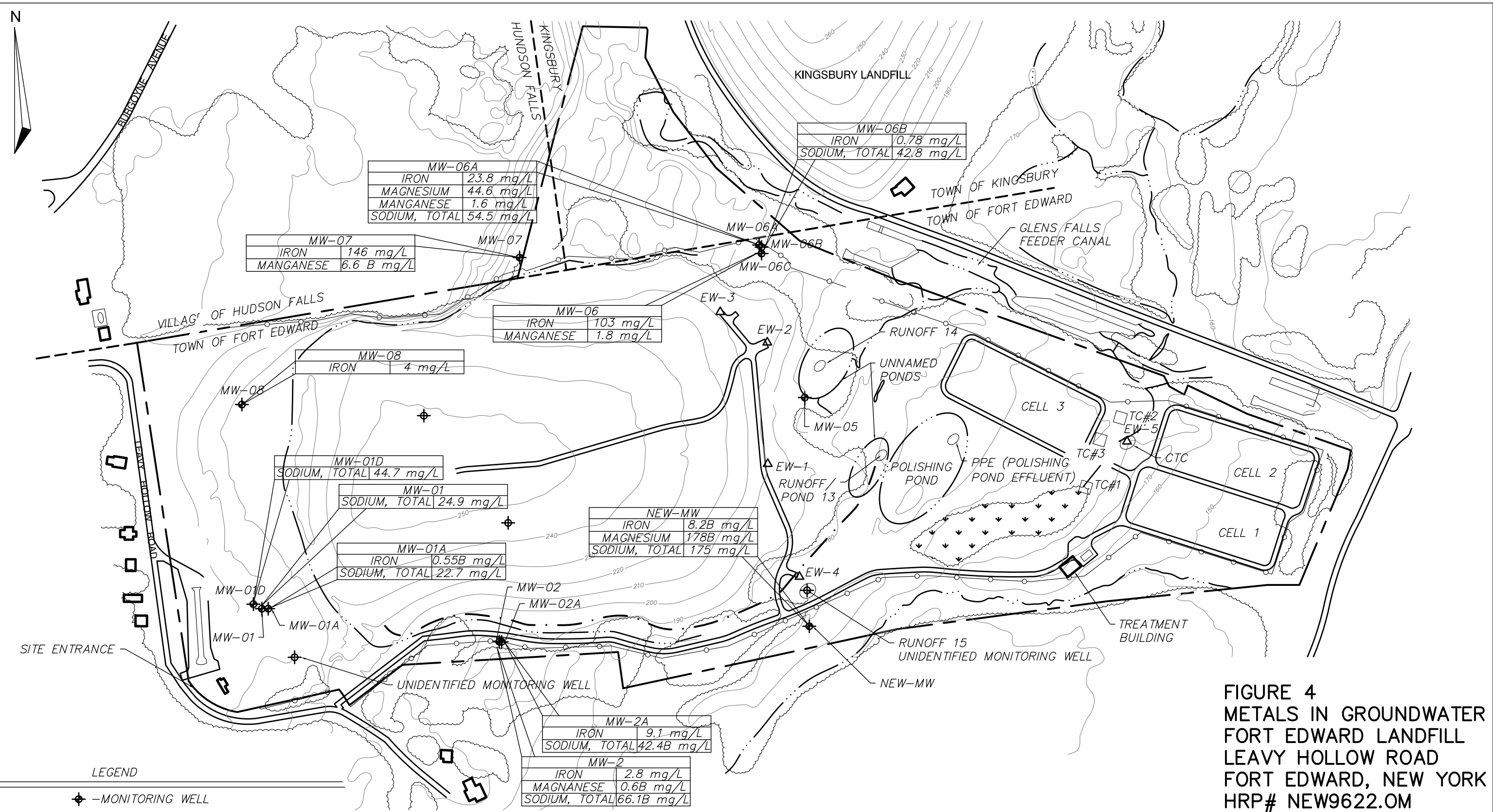
ALL CONCENTRATIONS REPORTED IN ug/L (MICROGRAMS PER LITER)

**NOTE:**

1. SEPTEMBER 2012 PILOT TEST COMPLETED BY AZTECH.
2. SAMPLES COLLECTED DURING SEPTEMBER 18 THROUGH SEPTEMBER 21, 2012



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MW-06A	
IRON	23.8 mg/L
MAGNESIUM	44.6 mg/L
MANGANESE	1.6 mg/L
SODIUM, TOTAL	54.5 mg/L

MW-07	
IRON	146 mg/L
MANGANESE	6.6 B mg/L

MW-06	
IRON	103 mg/L
MANGANESE	1.8 mg/L

MW-08	
IRON	4 mg/L

MW-01D	
SODIUM, TOTAL	44.7 mg/L

MW-01	
SODIUM, TOTAL	24.9 mg/L

MW-01A	
IRON	0.55B mg/L
SODIUM, TOTAL	22.7 mg/L

NEW-MW	
IRON	8.2B mg/L
MAGNESIUM	178B mg/L
SODIUM, TOTAL	175 mg/L

MW-2A	
IRON	9.1 mg/L
SODIUM, TOTAL	42.4B mg/L

MW-2	
IRON	2.8 mg/L
MANGANESE	0.6B mg/L
SODIUM, TOTAL	66.1B mg/L

MW-06B	
IRON	10.78 mg/L
SODIUM, TOTAL	42.8 mg/L

**FIGURE 4**  
**METALS IN GROUNDWATER**  
**FORT EDWARD LANDFILL**  
**LEAVY HOLLOW ROAD**  
**FORT EDWARD, NEW YORK**  
**HRP# NEW9622.0M**  
**SCALE: 1" = 250'**

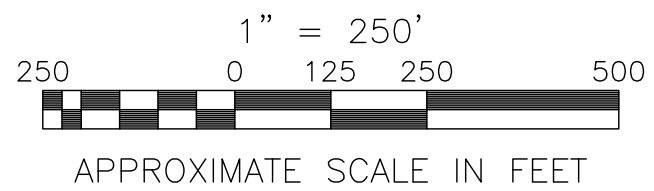
**LEGEND**

- ⊕ - MONITORING WELL
- 240 — - TOPOGRAPHIC CONTOUR
- · — · — - STREAM/DRAINAGE/CHANNEL/POND
- △ - EXTRACTION WELL OR COLLECTION SUMP
- · - · - - GROUNDWATER COLLECTION TRENCH

LAB QUALIFIER B = RESULTS DETECTED IN THE USB  
 ALL CONCENTRATIONS REPORTED IN mg/L (MILLIGRAMS PER LITER)

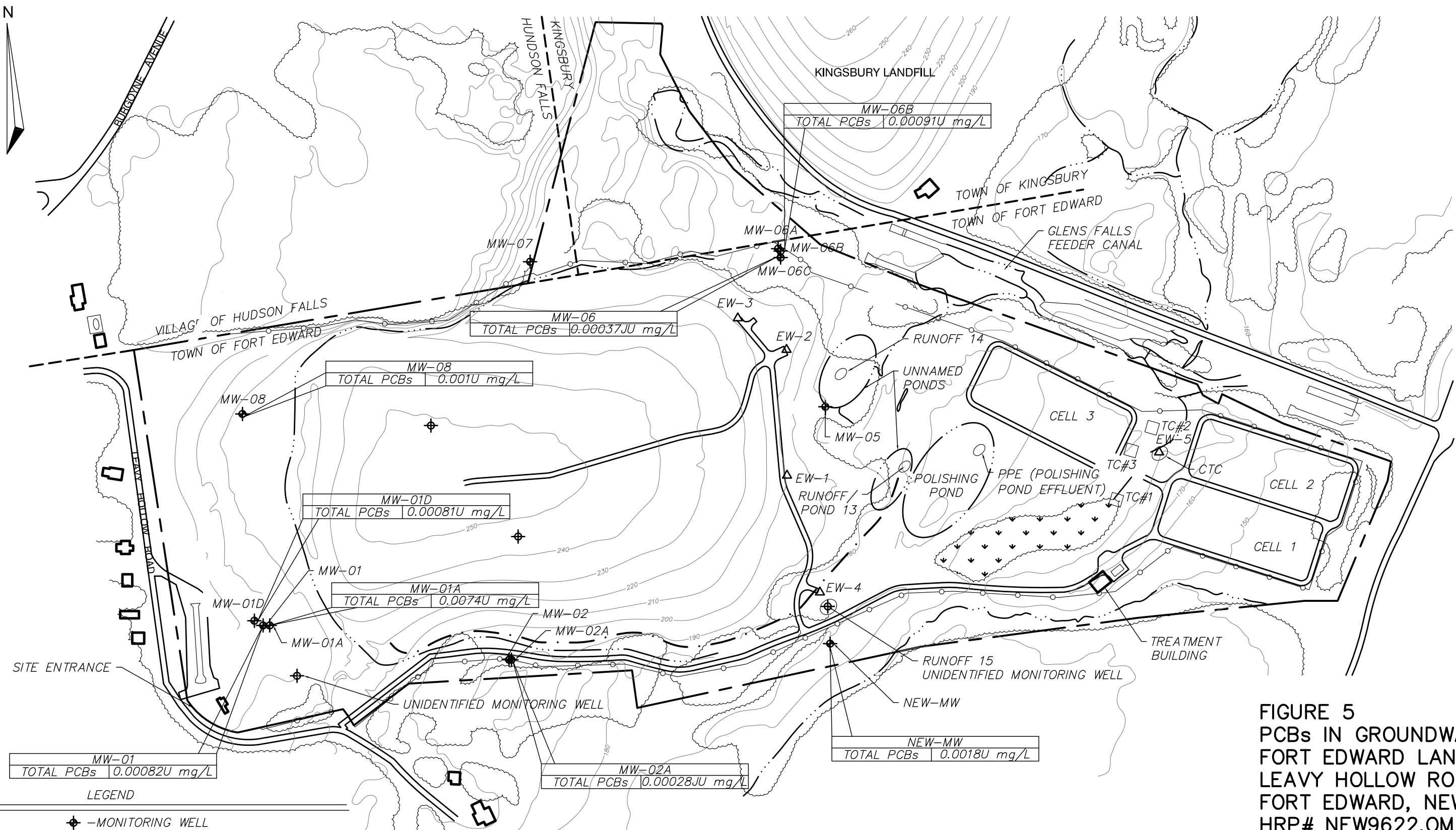
**NOTE:**

1. SEPTEMBER 2012 PILOT TEST COMPLETED BY AZTECH.
2. SAMPLES COLLECTED DURING SEPTEMBER 18 THROUGH SEPTEMBER 21, 2012



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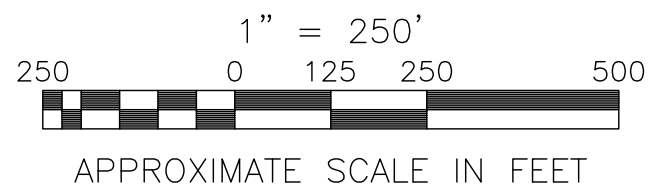


MW-01	TOTAL PCBs	0.00082U mg/L
-------	------------	---------------

LEGEND

- ⊕ - MONITORING WELL
- 240 — - TOPOGRAPHIC CONTOUR
- · — · — - STREAM/DRAINAGE/CHANNEL/POND
- △ - EXTRACTION WELL OR COLLECTION SUMP
- · - - - - GROUNDWATER COLLECTION TRENCH

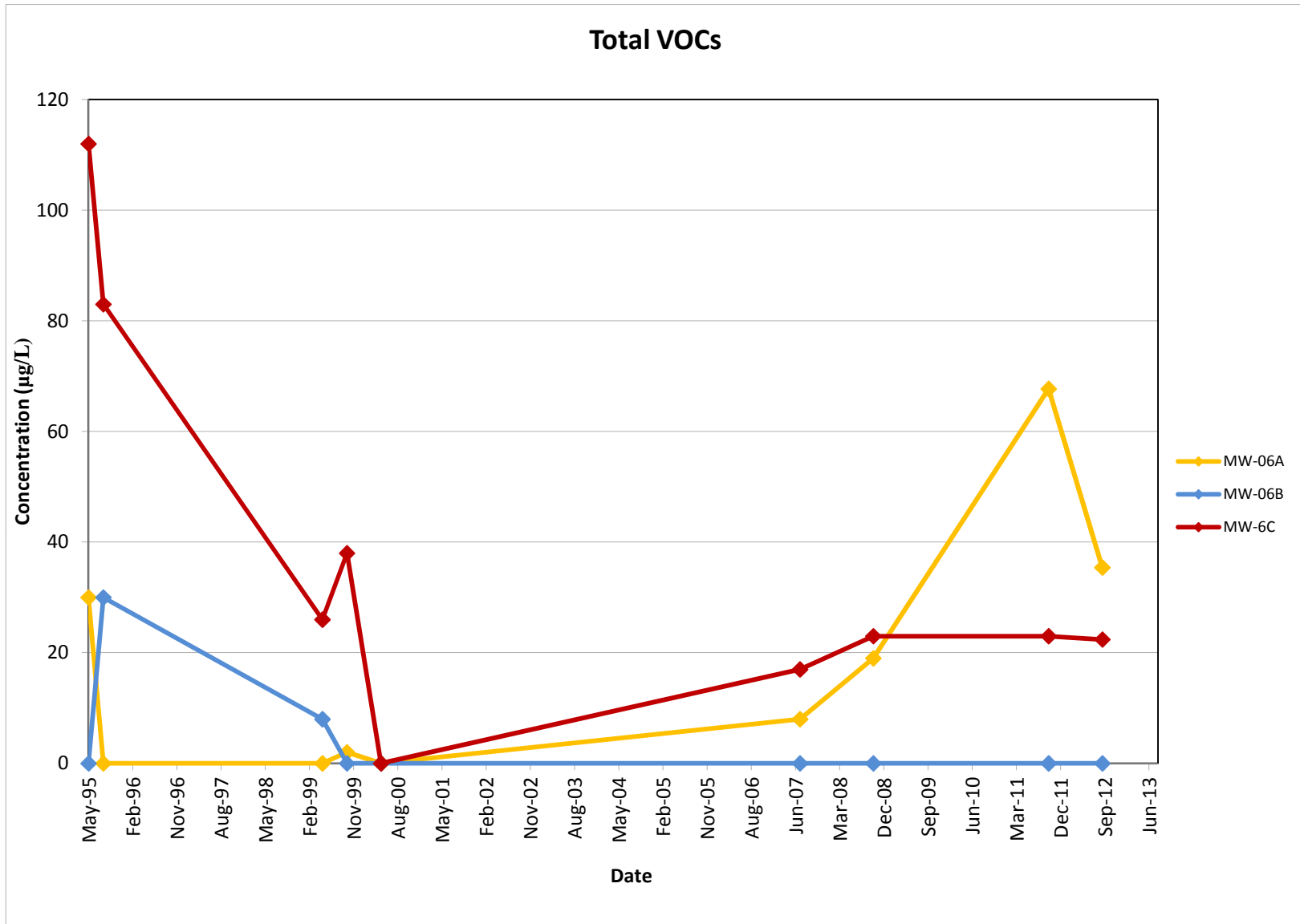
NOTE:  
 1. SEPTEMBER 2012 PILOT TEST COMPLETED BY AZTECH.  
 2. SAMPLES COLLECTED DURING SEPTEMBER 18 THROUGH SEPTEMBER 21, 2012



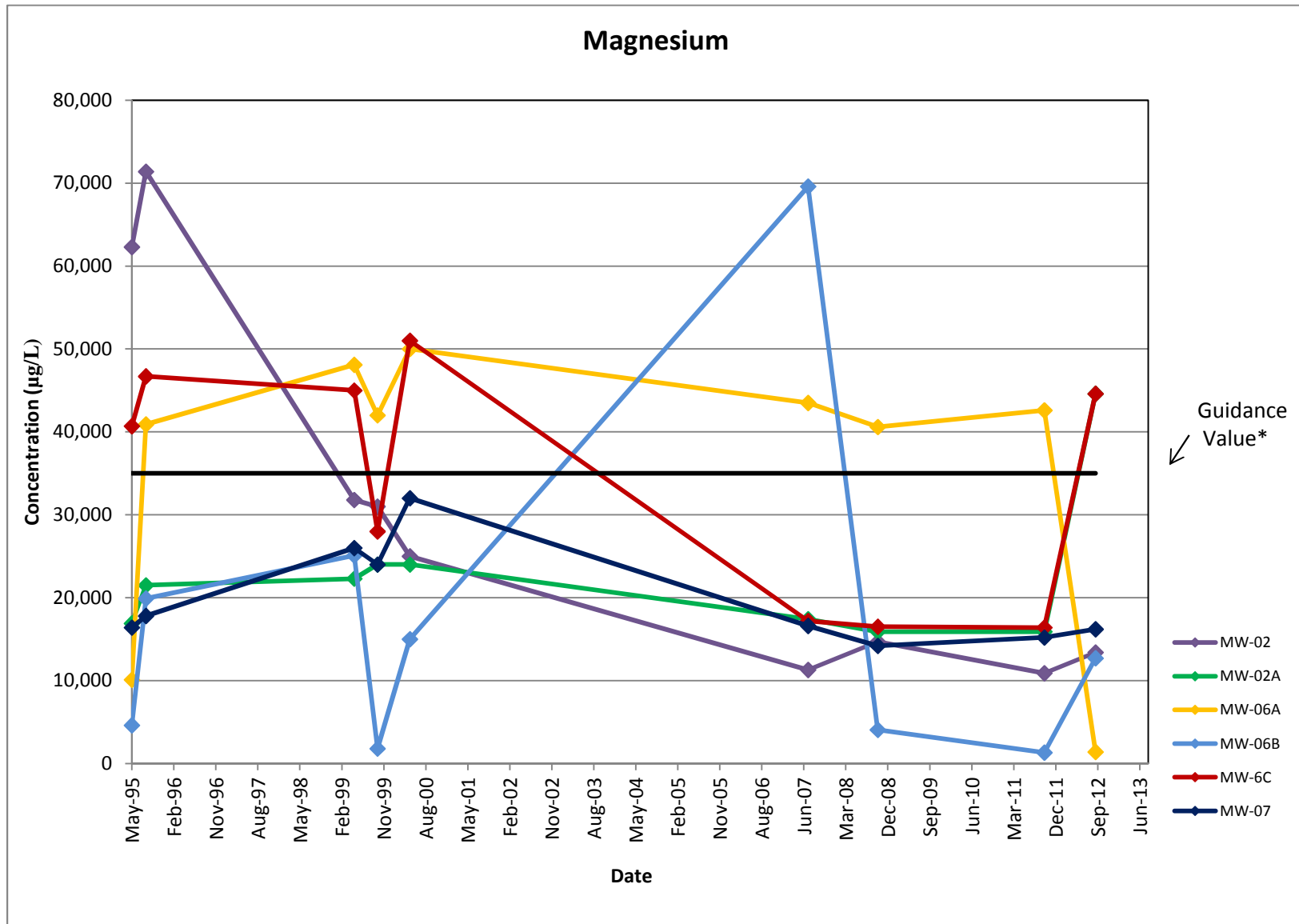
**FIGURE 5**  
**PCBs IN GROUNDWATER**  
**FORT EDWARD LANDFILL**  
**LEAVY HOLLOW ROAD**  
**FORT EDWARD, NEW YORK**  
**HRP# NEW9622.OM**  
**SCALE: 1" = 250'**

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**FIGURE 6**  
**TOTAL VOCs in GROUNDWATER**  
Fort Edward Landfill  
Town of Fort Edward, New York  
Site No. 5-58-001

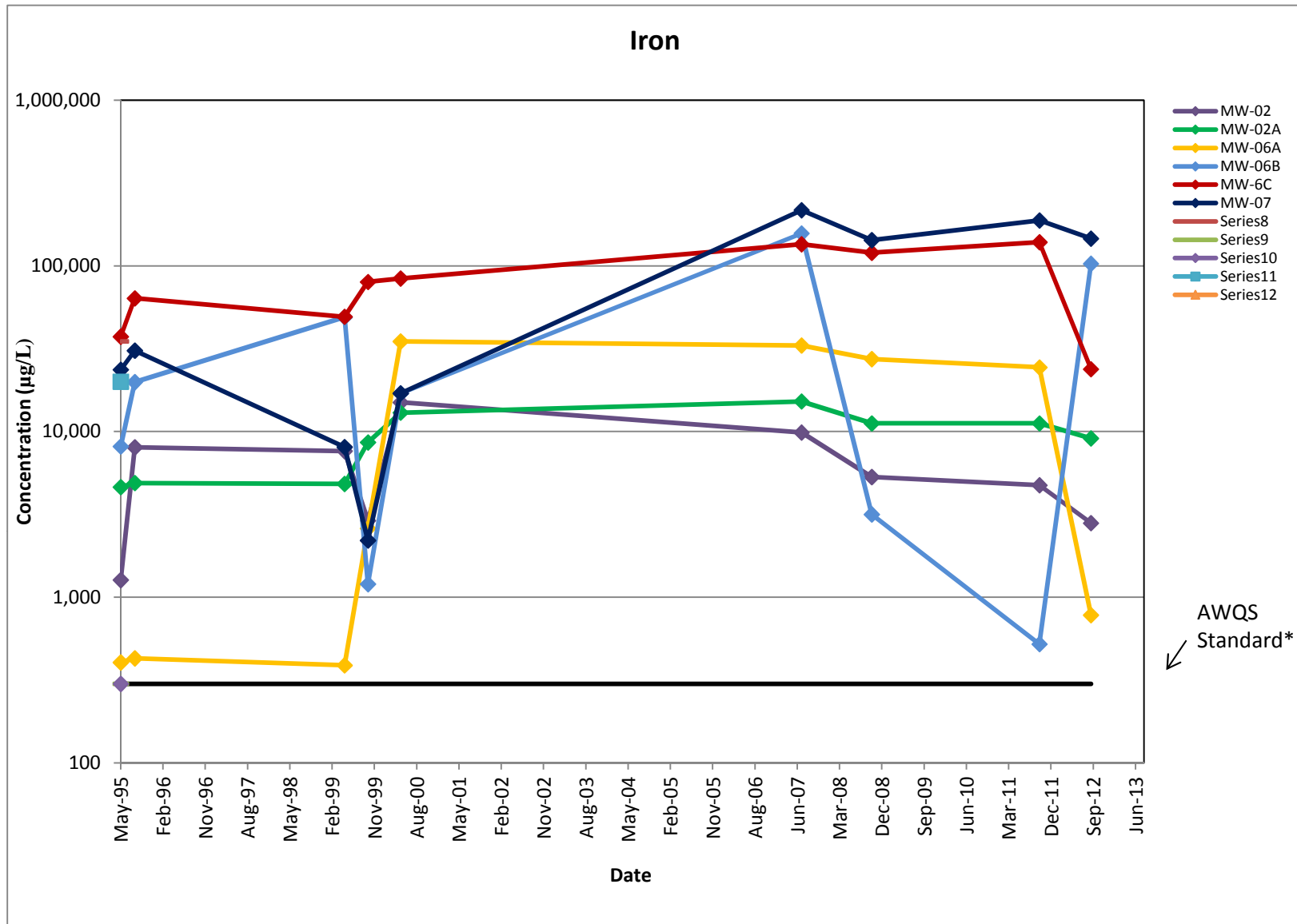


**FIGURE 7**  
**SELECTED METALS DATA in GROUNDWATER**  
 Fort Edward Landfill  
 Town of Fort Edward, NY  
 Site No. 5-58-001



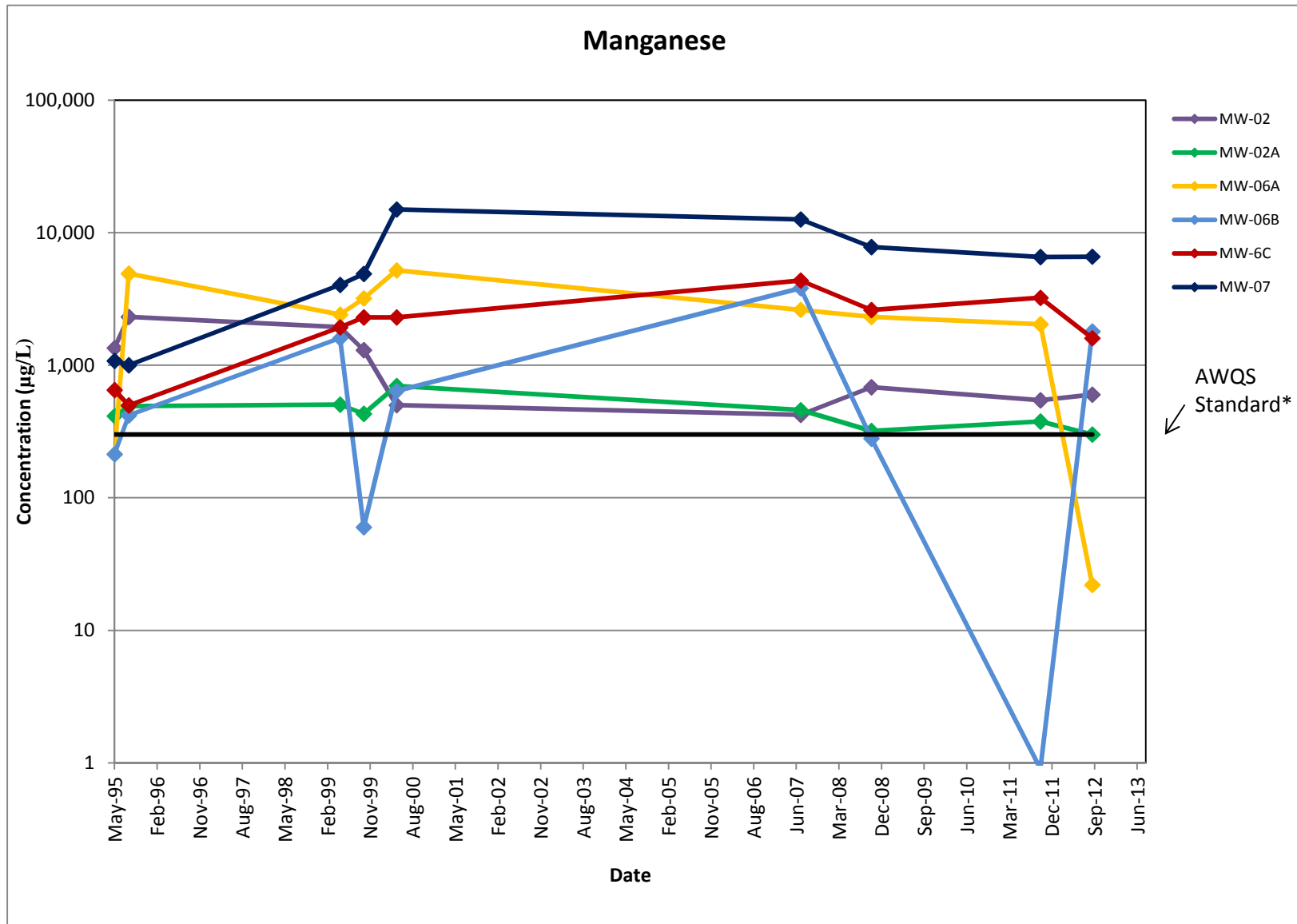
\*NYSDEC TOGS 1.1.1 - Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations - June 1998

**FIGURE 8**  
**SELECTED METALS DATA in GROUNDWATER**  
 Fort Edward Landfill  
 Town of Fort Edward, NY  
 Site No. 5-58-001



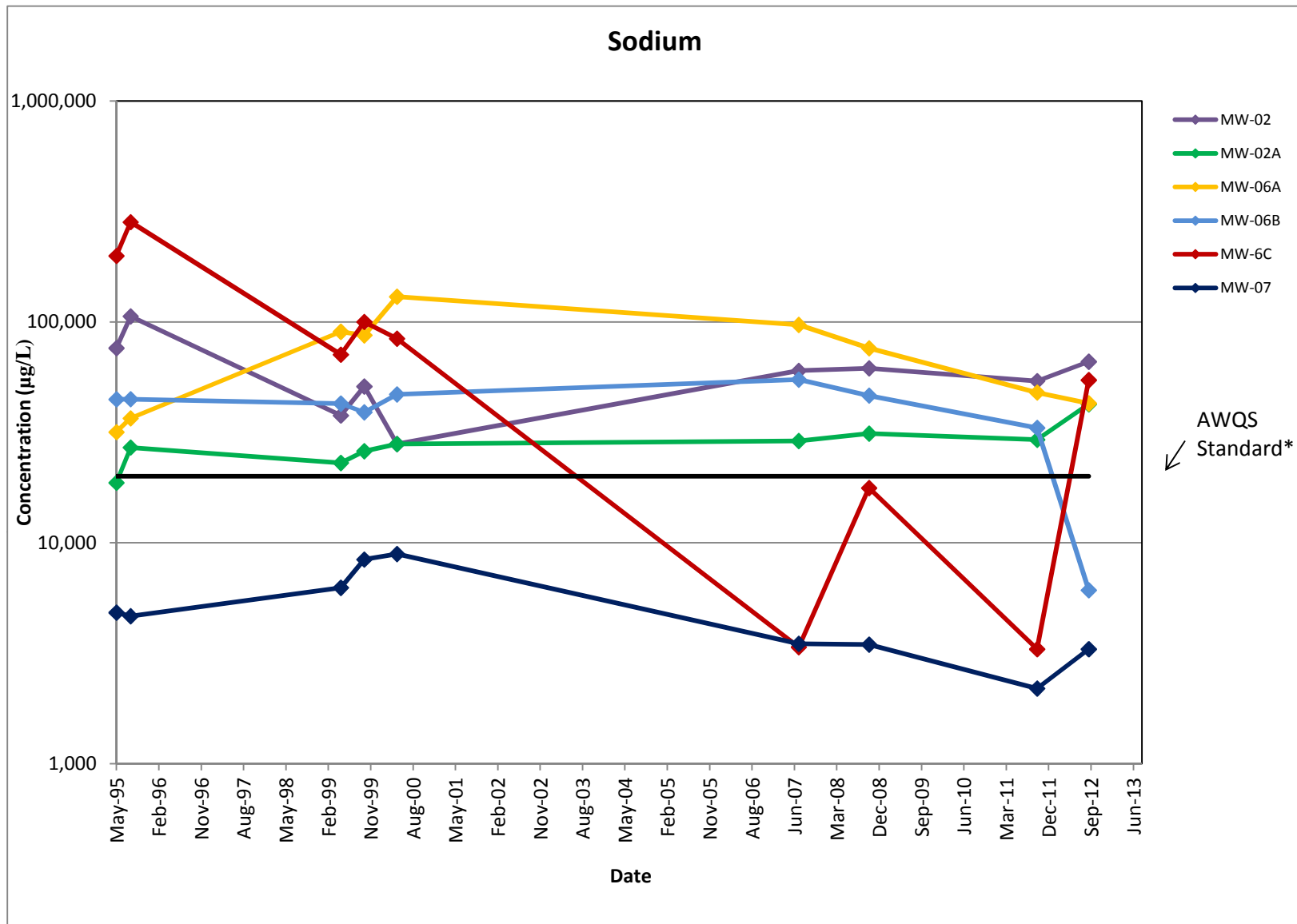
\*NYSDEC TOGS 1.1.1 - Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations - June 1998

**FIGURE 9**  
**SELECTED METALS DATA in GROUNDWATER**  
 Fort Edward Landfill  
 Town of Fort Edward, NY  
 Site No. 5-58-001

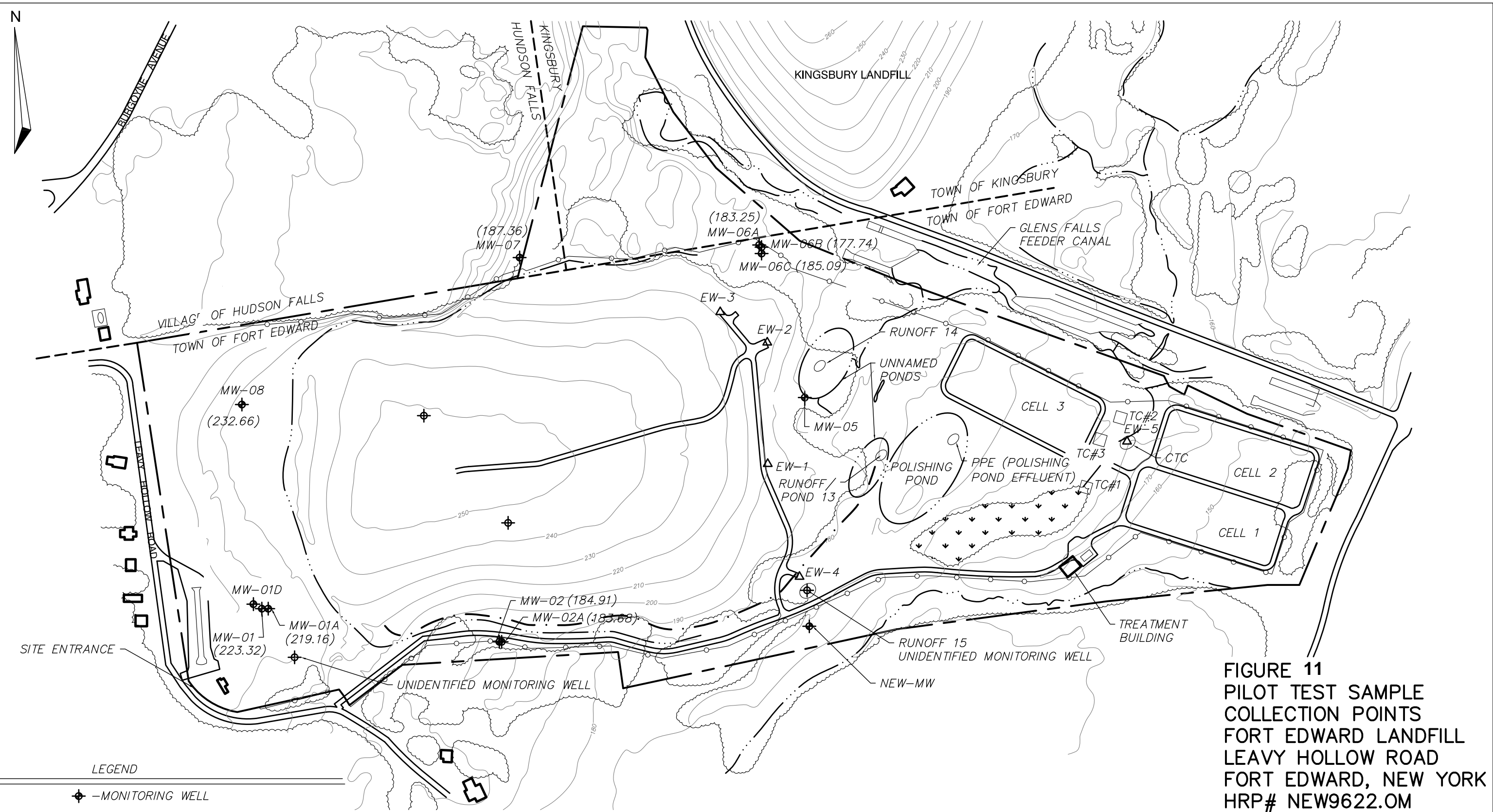


\*NYSDEC TOGS 1.1.1 - Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations - June 1998

**FIGURE 10**  
**SELECTED METALS DATA in GROUNDWATER**  
 Fort Edward Landfill  
 Town of Fort Edward, NY  
 Site No. 5-58-001

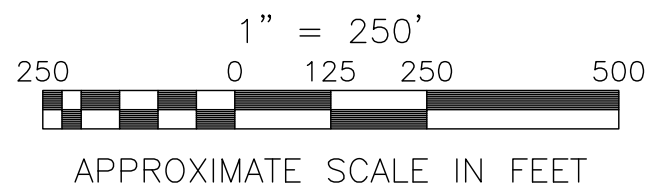


\*NYSDEC TOGS 1.1.1 - Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations - June 1998



- LEGEND**
- ◆ - MONITORING WELL
  - (219.16) - REPORTED GROUNDWATER ELEVATION (MEASURED ON OCT. 27, 2008)
  - 240 — TOPOGRAPHIC CONTOUR
  - ... - - - - - STREAM/DRAINAGE/CHANNEL/POND
  - △ - EXTRACTION WELL OR COLLECTION SUMP
  - - - - - - GROUNDWATER COLLECTION TRENCH

**NOTE:**  
 1. SEPTEMBER 2012 PILOT TEST COMPLETED BY AZTECH.



**FIGURE 11**  
**PILOT TEST SAMPLE**  
**COLLECTION POINTS**  
**FORT EDWARD LANDFILL**  
**LEAVY HOLLOW ROAD**  
**FORT EDWARD, NEW YORK**  
**HRP# NEW9622.OM**  
**SCALE: 1" = 250'**

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## TABLES



**Table 1**  
**Water Level Data**  
**Fort Edward Landfill**  
**Town of Fort Edward, New York**  
**Site #5-58-001**

Well ID	Elevation of Riser *	Groundwater Elevation July 11 and 12, 2007	Groundwater Elevation October 27, 2008	Depth to Water June 29, 2011	Groundwater Elevation June 29, 2011	Depth to Water September 18, 2012	Groundwater Elevation September 18, 2012	Well Depth (ft)
MW-1	258.87	221.56	220.35	35.55	223.32	40.17	218.70	48.60
MW-1A	257.51	218.59	227.00	38.35	219.16	40.64	216.87	65.07
MW-1D	---	---	---	41.68	---	47.46	---	---
MW-2	192.59	184.43	184.57	7.68	184.91	8.43	184.16	18.24
MW-2A	192.4	183.13	183.67	8.72	183.68	10.31	182.09	26.80
MW-4	---	---	---	---	---	5.19	---	---
MW-5	---	---	---	5.87	---	NA	---	10.50
MW-06(A)	193.61	183.17	183.11	10.36	183.25	10.56	183.05	61.30
MW-6B	193.68	178.68	177.74	15.94	177.74	16.49	177.19	81.70
MW-6C	193.08	184.85	185.00	7.99	185.09	8.60	184.48	17.90
MW-7	203.43	187.63	186.46	16.07	187.36	18.40	185.03	27.50
MW-08	240.24	232.44	232.21	7.58	232.66	8.00	232.24	12.38
NEW-MW	---	---	---	6.65	---	7.84	---	22.13
UI-MW-1	---	---	---	36.55	---	---	---	---
UI-MW-2	---	---	---	41.60	---	---	---	---
UI-MW-3	---	---	---	60.08	---	---	---	67.40
UI-MW-4	---	---	---	5.93	---	---	---	7.57

All measurements in feet

\* Elevation Data from URS 1995 survey

NA = Well could not be located



**Table 3**  
**Historical Groundwater Analytical Data**  
**May 1995 - September 2012**  
**Fort Edward Landfill**  
**Town of Fort Edward, New York**  
**Site No. 5-58-001**

Well ID	Analyte	AWQS+GV	Sample Date								
			May-95	Aug-95	May-99	Oct-99	May-00	Jul-07	Oct-08	Oct-11	Sep-12
MW-02	Iron	300	<b>1,270</b>	<b>8,030</b>	<b>7,620</b>	<b>2,900</b>	<b>15,000</b>	<b>9,860</b>	<b>5,320</b>	<b>4,740</b>	<b>2,800</b>
	Magnesium	35,000 (GV)	<b>62,300</b>	<b>71,400</b>	31,800	31,000	25,000	11,300	14,700	10,900	13,400
	Manganese	300	<b>1,350</b>	<b>2,320</b>	<b>1,940</b>	<b>1,300</b>	<b>500</b>	<b>423</b>	<b>684</b>	<b>544</b>	<b>600</b>
	Sodium	20,000	<b>76,100</b>	<b>106,000</b>	<b>37,700</b>	<b>51,000</b>	<b>28,000</b>	<b>60,100</b>	<b>61,700</b>	<b>54,000</b>	<b>66,100</b>
MW-02A	Iron	300	<b>4,620</b>	<b>4,890</b>	<b>4,830</b>	<b>8,600</b>	<b>13,000</b>	<b>15,200</b>	<b>11,200</b>	<b>11,200</b>	<b>9,100</b>
	Magnesium	35,000 (GV)	16,900	21,500	22,300	24,000	24,000	17,400	15,900	15,900	<b>44,600</b>
	Manganese	300	<b>414</b>	<b>492</b>	<b>505</b>	<b>430</b>	<b>700</b>	<b>459</b>	<b>319</b>	<b>376</b>	<b>300</b>
	Sodium	20,000	18,700	<b>27,000</b>	<b>23,000</b>	<b>26,000</b>	<b>28,000</b>	<b>28,900</b>	<b>31,200</b>	<b>29,300</b>	<b>42,400</b>
MW-06A	TVOCs		30	ND	ND	2	ND	8	19	67.7	35.41
	Benzene	1	ND	ND	ND	<b>2</b>	ND	<b>6</b>	ND	ND	<b>2</b>
	Chloroform	7	<b>30</b>	ND	ND	ND	ND	2	ND	ND	ND
	Iron	300	<b>404</b>	<b>428</b>	<b>388</b>	<b>2,600</b>	<b>35,000</b>	<b>33,100</b>	<b>27,400</b>	<b>24,400</b>	<b>780</b>
MW-06B	Magnesium	35,000 (GV)	10,100	<b>40,900</b>	<b>48,100</b>	<b>42,000</b>	<b>50,000</b>	<b>43,500</b>	<b>40,600</b>	<b>42,600</b>	1,400
	Manganese	300	214	<b>4,910</b>	<b>2,410</b>	<b>3,200</b>	<b>5,200</b>	<b>2,620</b>	<b>2,320</b>	<b>2,040</b>	22
	Sodium	20,000	<b>31,700</b>	<b>36,600</b>	<b>90,300</b>	<b>87,000</b>	<b>130,000</b>	<b>96,900</b>	<b>76,000</b>	<b>47,900</b>	<b>42,800</b>
	TVOCs		ND	30	8	ND	ND	ND	ND	ND	ND
MW-6C	Toluene	5	ND	<b>30</b>	<b>8</b>	ND	ND	ND	ND	ND	ND
	Iron	300	<b>8,130</b>	<b>19,900</b>	<b>49,000</b>	<b>1,200</b>	<b>17,000</b>	<b>157,000</b>	<b>3,160</b>	<b>521</b>	<b>103,000</b>
	Magnesium	35,000 (GV)	4,610	19,900	25,100	1,800	15,000	<b>69,600</b>	4,070	1,320	12,700
	Manganese	300	213	<b>419</b>	<b>1,600</b>	60	<b>640</b>	<b>3,820</b>	280	ND	<b>1,800</b>
MW-6C	Sodium	20,000	<b>44,600</b>	<b>44,700</b>	<b>42,700</b>	<b>39,000</b>	<b>47,000</b>	<b>54,800</b>	<b>46,400</b>	<b>33,100</b>	6,100
	TVOCs		112	83	26	38	ND	17	23	23	22.4
	Benzene	1	<b>13</b>	<b>14</b>	<b>2</b>	<b>4</b>	ND	ND	ND	ND	ND
	Chlorobenzene	5	<b>24</b>	<b>29</b>	<b>24</b>	<b>34</b>	ND	<b>17</b>	<b>23</b>	<b>23</b>	ND
MW-07	Xylene	5	<b>68</b>	<b>40</b>	ND	ND	ND	ND	ND	ND	ND
	Vinyl Chloride	2	<b>7</b>	ND	ND	ND	ND	ND	ND	ND	ND
	Iron	300	<b>37,400</b>	<b>63,700</b>	<b>49,300</b>	<b>80,000</b>	<b>84,000</b>	<b>135,000</b>	<b>120,000</b>	<b>139,000</b>	<b>23,800</b>
	Magnesium	35,000 (GV)	<b>40,700</b>	<b>46,700</b>	<b>45,000</b>	28,000	<b>51,000</b>	17,200	16,500	16,400	<b>44,600</b>
MW-07	Manganese	300	<b>651</b>	<b>499</b>	<b>1,930</b>	<b>2,300</b>	<b>2,300</b>	<b>4,360</b>	<b>2,610</b>	<b>3,230</b>	<b>1,600</b>
	Sodium	20,000	<b>199,000</b>	<b>283,000</b>	<b>71,100</b>	<b>100,000</b>	<b>84,000</b>	3,370	17,700	3,300	<b>54,500</b>
	Iron	300	<b>23,600</b>	<b>30,800</b>	<b>8,060</b>	<b>2,200</b>	<b>17,000</b>	<b>217,000</b>	<b>143,000</b>	<b>188,000</b>	<b>146,000</b>
	Magnesium	35,000 (GV)	16,400	17,800	26,000	24,000	32,000	16,600	14,200	15,200	16,200
MW-07	Manganese	300	<b>1,080</b>	<b>1,000</b>	<b>4,040</b>	<b>4,900</b>	<b>15,000</b>	<b>12,600</b>	<b>7,800</b>	<b>6,570</b>	<b>6,600</b>
	Sodium	20,000	4,830	4,650	6,260	8,400	8,900	3,490	3,460	2,190	3,300

Notes  
All Concentrations are in µg/L  
ND = Not detected above Method Detection Limit  
95-'00 Data Source: Final Evaluation and Assessment Report. Fort Edward Landfill. NYSDEC. July 2001. URS Consultants  
Highlighted cells - Sample Exceeds NYSDEC Class GA Criteria





**APPENDIX A**

**MONITORING WELL FIELD OBSERVATION LOGS**

SITE NAME:

FLLF

SITE ID.:

FLLF

INSPECTOR:

CA

DATE/TIME:

9/18/12 1205

WELL ID.:

Nick MW

### MONITORING WELL FIELD INSPECTION LOG

WELL VISIBLE? (If not, provide directions below) .....

YES	NO
X	

WELL COORDINATES? NYTM X \_\_\_\_\_ NYTM Y \_\_\_\_\_

PDOP Reading from Trimble Pathfinder: \_\_\_\_\_ Satellites: \_\_\_\_\_  
GPS Method (circle) Trimble And/Or Magellan

WELL I.D. VISIBLE? .....

YES	NO
X	
X	

WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back).....

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL: .....

YES	NO
X	
X	
X	

SURFACE SEAL PRESENT? .....

SURFACE SEAL COMPETENT? (If cracked, heaved etc., describe below) .....

PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below) .....

HEADSPACE READING (ppm) AND INSTRUMENT USED.....

TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable)

PROTECTIVE CASING MATERIAL TYPE: .....

MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches): .....

0  
3.28  
Steel  
4"

LOCK PRESENT? .....

LOCK FUNCTIONAL? .....

DID YOU REPLACE THE LOCK? .....

IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes, describe below)

WELL MEASURING POINT VISIBLE? .....

YES	NO
X	
X	
X	
	X
X	

MEASURE WELL DEPTH FROM MEASURING POINT (Feet): .....

MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet): .....

MEASURE WELL DIAMETER (Inches): .....

WELL CASING MATERIAL: .....

PHYSICAL CONDITION OF VISIBLE WELL CASING: .....

ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE .....

PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES.....

22.14  
7.84  
2"  
PVC  
Good  
None

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.): ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.

ACCESSIBLE

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.) AND ASSESS THE TYPE OF RESTORATION REQUIRED.

in woods

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT (e.g. Gas station, salt pile, etc.):

Landfill

REMARKS:

SITE NAME:

FLLF

SITE ID:

FLLF

INSPECTOR:

CD

DATE/TIME:

9/9/12

WELL ID:

MW1

### MONITORING WELL FIELD INSPECTION LOG

WELL VISIBLE? (If not, provide directions below) .....

YES	NO
X	

WELL COORDINATES? NYTM X \_\_\_\_\_ NYTM Y \_\_\_\_\_

PDOP Reading from Trimble Pathfinder: \_\_\_\_\_ Satellites: \_\_\_\_\_

GPS Method (circle) Trimble And/Or Magellan

WELL I.D. VISIBLE? .....

YES	NO
X	
X	

WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back).....

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL: .....

MW1

SURFACE SEAL PRESENT? .....

YES	NO
X	
X	
X	

SURFACE SEAL COMPETENT? (If cracked, heaved etc., describe below) .....

PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below) .....

HEADSPACE READING (ppm) AND INSTRUMENT USED.....

0

TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (if applicable)

4

PROTECTIVE CASING MATERIAL TYPE: .....

GALV

MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches): .....

4"

LOCK PRESENT? .....

YES	NO
X	
X	
	X
	X
X	

LOCK FUNCTIONAL? .....

DID YOU REPLACE THE LOCK? .....

IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes, describe below)

WELL MEASURING POINT VISIBLE? .....

MEASURE WELL DEPTH FROM MEASURING POINT (Feet): .....

48.55

MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet): .....

40.17

MEASURE WELL DIAMETER (Inches): .....

2

WELL CASING MATERIAL: .....

PVC

PHYSICAL CONDITION OF VISIBLE WELL CASING: .....

Good

ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE .....

PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES.....

N/A

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.

Good

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.) AND ASSESS THE TYPE OF RESTORATION REQUIRED.

Field

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT (e.g. Gas station, salt pile, etc.):

Landfill

REMARKS:



SITE NAME:

FCLF

SITE ID.:

FCLF

INSPECTOR:

CR

MONITORING WELL FIELD INSPECTION LOG

DATE/TIME:

9/18/12 230

WELL ID.:

~~200~~ MW1A

WELL VISIBLE? (If not, provide directions below) .....

YES	NO
X	

WELL COORDINATES? NYTM X \_\_\_\_\_ NYTM Y \_\_\_\_\_

PDOP Reading from Trimble Pathfinder: \_\_\_\_\_ Satellites: \_\_\_\_\_  
GPS Method (circle) Trimble And/Or Magellan

WELL I.D. VISIBLE? .....

YES	NO
X	
X	

WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back).....

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL: .....

YES	NO
X	
X	
X	

SURFACE SEAL PRESENT? .....

SURFACE SEAL COMPETENT? (If cracked, heaved etc., describe below) .....

PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below) .....

HEADSPACE READING (ppm) AND INSTRUMENT USED.....

TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable)

PROTECTIVE CASING MATERIAL TYPE: .....

MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches): .....

0  
P.P.S.E.N  
STEEL  
6

LOCK PRESENT? .....

LOCK FUNCTIONAL? .....

DID YOU REPLACE THE LOCK? .....

IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes, describe below)

WELL MEASURING POINT VISIBLE? .....

YES	NO
X	
X	
	X
	X
X	

MEASURE WELL DEPTH FROM MEASURING POINT (Feet): .....

MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet): .....

MEASURE WELL DIAMETER (Inches): .....

WELL CASING MATERIAL: .....

PHYSICAL CONDITION OF VISIBLE WELL CASING: .....

ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE .....

PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES.....

2"  
Good  
NONE

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.

ACCESSIBLE

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.) AND ASSESS THE TYPE OF RESTORATION REQUIRED.

FIELD

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT (e.g. Gas station, salt pile, etc.):

Land Fill

REMARKS:

SITE NAME: FLLF

SITE ID.: FLLF

INSPECTOR: CA

DATE/TIME: 9/19/12

WELL ID.: MW010

### MONITORING WELL FIELD INSPECTION LOG

WELL VISIBLE? (If not, provide directions below) ..... 

YES	NO
X	

WELL COORDINATES? NYTM X \_\_\_\_\_ NYTM Y \_\_\_\_\_

PDOP Reading from Trimble Pathfinder: \_\_\_\_\_ Satellites: \_\_\_\_\_

GPS Method (circle)      Trimble    And/Or    Magellan

WELL I.D. VISIBLE? ..... 

YES	NO
X	

WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back)..... 

YES	NO
X	

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL: ..... MW010

SURFACE SEAL PRESENT? ..... 

YES	NO
X	

SURFACE SEAL COMPETENT? (If cracked, heaved etc., describe below) ..... 

YES	NO
X	

PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below) ..... 

YES	NO
X	

HEADSPACE READING (ppm) AND INSTRUMENT USED: ..... 0

TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable) ..... STEEL BEAM

PROTECTIVE CASING MATERIAL TYPE: ..... 6"

MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches): ..... 

YES	NO
X	

LOCK PRESENT? ..... 

YES	NO
X	

LOCK FUNCTIONAL? ..... 

YES	NO
X	

DID YOU REPLACE THE LOCK? ..... 

YES	NO
	X

IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes, describe below) ..... 

YES	NO
	X

WELL MEASURING POINT VISIBLE? ..... 

YES	NO
X	

MEASURE WELL DEPTH FROM MEASURING POINT (Feet): ..... 2101

MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet): ..... 47.46

MEASURE WELL DIAMETER (Inches): ..... 2"

WELL CASING MATERIAL: ..... PVC

PHYSICAL CONDITION OF VISIBLE WELL CASING: ..... GOOD

ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE ..... none

PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES: ..... none

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.

ACCESSIBLE WITH 4 WHEEL DRIVE

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.) AND ASSESS THE TYPE OF RESTORATION REQUIRED.

FIELD

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT (e.g. Gas station, salt pile, etc.):

LANDFILL

REMARKS:

SITE NAME: Fort Edward Landfill

SITE ID.:  
INSPECTOR: KCB  
DATE/TIME: 9/21/2012/1000  
WELL ID.: MW-02

### MONITORING WELL FIELD INSPECTION LOG

WELL VISIBLE? (If not, provide directions below) ..... 

YES	NO
<input checked="" type="checkbox"/>	<input type="checkbox"/>

WELL COORDINATES? NYTM X \_\_\_\_\_ NYTM Y \_\_\_\_\_  
 PDOP Reading from Trimble Pathfinder: \_\_\_\_\_ Satellites: \_\_\_\_\_  
 GPS Method (circle) Trimble And/Or Magellan

WELL I.D. VISIBLE? ..... 

YES	NO
<input checked="" type="checkbox"/>	<input type="checkbox"/>

WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back)..... 

YES	NO
<input checked="" type="checkbox"/>	<input type="checkbox"/>

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL: ..... 

YES	NO
<input type="checkbox"/>	<input checked="" type="checkbox"/>

SURFACE SEAL PRESENT? ..... 

YES	NO
<input type="checkbox"/>	<input checked="" type="checkbox"/>

SURFACE SEAL COMPETENT? (If cracked, heaved etc., describe below) ..... 

YES	NO
<input type="checkbox"/>	<input checked="" type="checkbox"/>

PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below) ..... 

YES	NO
<input checked="" type="checkbox"/>	<input type="checkbox"/>

HEADSPACE READING (ppm) AND INSTRUMENT USED..... 0.0 ppm

TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable) ..... Steel - 2 feet

PROTECTIVE CASING MATERIAL TYPE: ..... yellow square steel

MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches): .....

LOCK PRESENT? ..... 

YES	NO
<input checked="" type="checkbox"/>	<input type="checkbox"/>

LOCK FUNCTIONAL? ..... 

YES	NO
<input type="checkbox"/>	<input checked="" type="checkbox"/>

DID YOU REPLACE THE LOCK? ..... 

YES	NO
<input type="checkbox"/>	<input checked="" type="checkbox"/>

IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes, describe below) ..... 

YES	NO
<input type="checkbox"/>	<input checked="" type="checkbox"/>

WELL MEASURING POINT VISIBLE? .....

MEASURE WELL DEPTH FROM MEASURING POINT (Feet): .....

MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet): .....

MEASURE WELL DIAMETER (Inches): .....

WELL CASING MATERIAL: .....

PHYSICAL CONDITION OF VISIBLE WELL CASING: ..... arc good

ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE ..... NA

PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES..... NA

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.) AND ASSESS THE TYPE OF RESTORATION REQUIRED.

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT (e.g. Gas station, salt pile, etc.):

REMARKS:

SITE NAME: \_\_\_\_\_

SITE ID: \_\_\_\_\_

INSPECTOR: \_\_\_\_\_

DATE/TIME: \_\_\_\_\_

WELL ID: \_\_\_\_\_

Fort Edward  
landfill  
KLB  
9/21/2012 / 0800  
MW-2

### MONITORING WELL FIELD INSPECTION LOG

WELL VISIBLE? (If not, provide directions below) Y \_\_\_\_\_

YES	NO
<input checked="" type="checkbox"/>	<input type="checkbox"/>

WELL COORDINATES? NYTM X \_\_\_\_\_ NYTM Y \_\_\_\_\_

PDOP Reading from Trimble Pathfinder: \_\_\_\_\_ Satellites: \_\_\_\_\_  
GPS Method (circle) Trimble And/Or Magellan

WELL I.D. VISIBLE? \_\_\_\_\_

YES	NO
<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>

WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back) \_\_\_\_\_

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL: \_\_\_\_\_

on casing and PVC cap

SURFACE SEAL PRESENT? \_\_\_\_\_

YES	NO
<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>

SURFACE SEAL COMPETENT? (If cracked, heaved etc., describe below) \_\_\_\_\_

PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below) \_\_\_\_\_

HEADSPACE READING (ppm) AND INSTRUMENT USED \_\_\_\_\_

TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable) \_\_\_\_\_

PROTECTIVE CASING MATERIAL TYPE: \_\_\_\_\_

MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches): \_\_\_\_\_

0.0 ppm  
Spec 2 feet  
square yellow steel

LOCK PRESENT? \_\_\_\_\_

LOCK FUNCTIONAL? \_\_\_\_\_

DID YOU REPLACE THE LOCK? \_\_\_\_\_

IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes, describe below) \_\_\_\_\_

WELL MEASURING POINT VISIBLE? \_\_\_\_\_

YES	NO
<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>

MEASURE WELL DEPTH FROM MEASURING POINT (Feet): \_\_\_\_\_

MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet): \_\_\_\_\_

MEASURE WELL DIAMETER (Inches): \_\_\_\_\_

WELL CASING MATERIAL: \_\_\_\_\_

PHYSICAL CONDITION OF VISIBLE WELL CASING: \_\_\_\_\_

ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE \_\_\_\_\_

PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES \_\_\_\_\_

MW-2 18.27  
8.43  
2 inch  
PVC  
good condition  
NA  
unknown

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.

gate at roadway, wells approximately 8 feet from gate down gradient

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden. etc.) AND ASSESS THE TYPE OF RESTORATION REQUIRED.

In a wetland area

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT (e.g. Gas station, salt pile, etc.):

landfill

REMARKS:



SITE NAME:

FULLF

SITE ID:

F2012

INSPECTOR:

C12

DATE/TIME:

9/20/12

WELL ID:

MW1

### MONITORING WELL FIELD INSPECTION LOG

WELL VISIBLE? (If not, provide directions below) .....

YES	NO
X	

WELL COORDINATES? NYTM X \_\_\_\_\_ NYTM Y \_\_\_\_\_

PDOP Reading from Trimble Pathfinder: \_\_\_\_\_ Satellites: \_\_\_\_\_  
GPS Method (circle) Trimble And/Or Magellan

WELL I.D. VISIBLE? .....

YES	NO
X	
X	

WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back).....

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL: .....

MW1

YES	NO
X	
X	
X	

SURFACE SEAL PRESENT? .....

SURFACE SEAL COMPETENT? (If cracked, heaved etc., describe below) .....

PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below) .....

HEADSPACE READING (ppm) AND INSTRUMENT USED.....

TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable)

PROTECTIVE CASING MATERIAL TYPE: .....

MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches): .....

0  
SPEL & 5' 5" (approx)  
STEEL

LOCK PRESENT? .....

LOCK FUNCTIONAL? .....

DID YOU REPLACE THE LOCK? .....

IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes, describe below)

WELL MEASURING POINT VISIBLE? .....

YES	NO
	X
	X
	X
	X
X	

MEASURE WELL DEPTH FROM MEASURING POINT (Feet): .....

MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet): .....

MEASURE WELL DIAMETER (Inches): .....

WELL CASING MATERIAL: .....

PHYSICAL CONDITION OF VISIBLE WELL CASING: .....

ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE .....

PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES.....

7.62  
5.19  
4"  
PVC  
(200)  
N/A

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.

SEMI-MP

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.) AND ASSESS THE TYPE OF RESTORATION REQUIRED.

SEMI-MP

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT (e.g. Gas station, salt pile, etc.):

LAMPFILL

REMARKS:

Sketch

SITE NAME: FOLF

SITE ID: FOLF  
INSPECTOR: CJ  
DATE/TIME: 9/20/12  
WELL ID: MW6

### MONITORING WELL FIELD INSPECTION LOG

WELL VISIBLE? (If not, provide directions below) .....  
WELL COORDINATES? NYTM X \_\_\_\_\_ NYTM Y \_\_\_\_\_  
PDOP Reading from Trimble Pathfinder: \_\_\_\_\_ Satellites: \_\_\_\_\_  
GPS Method (circle) Trimble And/Or Magellan

YES	NO
X	

WELL I.D. VISIBLE? .....  
WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back).....

YES	NO
X	
X	

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL: .....

MW6

YES	NO
X	
X	
X	

SURFACE SEAL PRESENT? .....  
SURFACE SEAL COMPETENT? (If cracked, heaved etc., describe below) .....  
PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below) .....

HEADSPACE READING (ppm) AND INSTRUMENT USED.....  
TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable)  
PROTECTIVE CASING MATERIAL TYPE: .....  
MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches): .....

0  
5' 4" PVC 4"  
PVC  
4"

LOCK PRESENT? .....  
LOCK FUNCTIONAL? .....  
DID YOU REPLACE THE LOCK? .....  
IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes, describe below)  
WELL MEASURING POINT VISIBLE? .....

YES	NO
X	
X	
	X
	X
X	

MEASURE WELL DEPTH FROM MEASURING POINT (Feet): .....  
MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet): .....  
MEASURE WELL DIAMETER (Inches): .....  
WELL CASING MATERIAL: .....  
PHYSICAL CONDITION OF VISIBLE WELL CASING: .....  
ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE .....  
PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES.....

17.94  
8.60  
2"  
PVC  
Good  
None

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.

4' in hole near

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.) AND ASSESS THE TYPE OF RESTORATION REQUIRED.

woods

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT (e.g. Gas station, salt pile, etc.):

Landfill

REMARKS:

SITE NAME: FLLF

SITE ID.: FLLF

INSPECTOR: CIT

**MONITORING WELL FIELD INSPECTION LOG**

DATE/TIME: 9/20/12

WELL ID.: MW 617

WELL VISIBLE? (If not, provide directions below) .....

YES	NO
X	

WELL COORDINATES? NYTM X \_\_\_\_\_ NYTM Y \_\_\_\_\_

PDOP Reading from Trimble Pathfinder: \_\_\_\_\_ Satellites: \_\_\_\_\_  
GPS Method (circle) Trimble And/Or Magellan

WELL I.D. VISIBLE? .....

YES	NO
X	
X	

WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back).....

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL: .....

MW 617

YES	NO
X	
X	
X	

SURFACE SEAL PRESENT? .....

SURFACE SEAL COMPETENT? (If cracked, heaved etc., describe below) .....

PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below) .....

HEADSPACE READING (ppm) AND INSTRUMENT USED.....

TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable)

PROTECTIVE CASING MATERIAL TYPE: .....

MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches): .....

0  
SQUARE 2'  
CONCRETE  
4"

LOCK PRESENT? .....

LOCK FUNCTIONAL? .....

DID YOU REPLACE THE LOCK? .....

IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes, describe below)

WELL MEASURING POINT VISIBLE? .....

YES	NO
X	
X	
	X
	X
X	

MEASURE WELL DEPTH FROM MEASURING POINT (Feet): .....

MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet): .....

MEASURE WELL DIAMETER (Inches): .....

WELL CASING MATERIAL: .....

PHYSICAL CONDITION OF VISIBLE WELL CASING: .....

ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE .....

PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES.....

61.30  
10.56  
2"  
PVC  
GOOD  
None

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.

4 WHEEL DRIVE

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.) AND ASSESS THE TYPE OF RESTORATION REQUIRED.

WOODS

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT (e.g. Gas station, salt pile, etc.):

LANDFILL

REMARKS:

SITE NAME:

F2LF

SITE ID:

F2LF

INSPECTOR:

CB

DATE/TIME:

9/20/12

WELL ID:

MW6B

### MONITORING WELL FIELD INSPECTION LOG

WELL VISIBLE? (If not, provide directions below) ..... 

YES	NO
X	

WELL COORDINATES? NYTM X \_\_\_\_\_ NYTM Y \_\_\_\_\_  
 PDOP Reading from Trimble Pathfinder: \_\_\_\_\_ Satellites: \_\_\_\_\_  
 GPS Method (circle)      Trimble      And/Or      Magellan

WELL I.D. VISIBLE? ..... 

YES	NO
X	

WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back)..... 

YES	NO
X	

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL: ..... MW6B

SURFACE SEAL PRESENT? ..... 

YES	NO
X	

SURFACE SEAL COMPETENT? (If cracked, heaved etc., describe below) ..... 

X	
---	--

PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below) ..... 

X	
---	--

HEADSPACE READING (ppm) AND INSTRUMENT USED..... 0

TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable) ..... 544MM 2'

PROTECTIVE CASING MATERIAL TYPE: ..... CRALU

MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches): ..... 4"

LOCK PRESENT? ..... 

YES	NO
X	

LOCK FUNCTIONAL? ..... 

X	
---	--

DID YOU REPLACE THE LOCK? ..... 

	X
--	---

IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes, describe below) ..... 

	X
--	---

WELL MEASURING POINT VISIBLE? ..... 

X	
---	--

MEASURE WELL DEPTH FROM MEASURING POINT (Feet): ..... 81.59

MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet): ..... 16.49

MEASURE WELL DIAMETER (Inches): ..... 2"

WELL CASING MATERIAL: ..... PVC

PHYSICAL CONDITION OF VISIBLE WELL CASING: ..... C-60

ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE ..... None

PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES..... None

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.

4 WHEEL DRIVE

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.) AND ASSESS THE TYPE OF RESTORATION REQUIRED.

WOODS

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT (e.g. Gas station, salt pile, etc.):

LANDFILL

REMARKS:



SITE NAME: Fert Edward Landfill

SITE ID: FELP  
INSPECTOR: KC/BB  
DATE/TIME: 9/21/12 / 1230  
WELL ID: MW-7

**MONITORING WELL FIELD INSPECTION LOG**

WELL VISIBLE? (If not, provide directions below) .....  
WELL COORDINATES? NYTM X \_\_\_\_\_ NYTM Y \_\_\_\_\_  
PDOP Reading from Trimble Pathfinder: \_\_\_\_\_ Satellites: \_\_\_\_\_  
GPS Method (circle) Trimble And/Or Magellan

YES	NO
<input checked="" type="checkbox"/>	<input type="checkbox"/>

WELL I.D. VISIBLE? .....  
WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back).....

YES	NO
<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL: .....  
SURFACE SEAL PRESENT? .....  
SURFACE SEAL COMPETENT? (If cracked, heaved etc., describe below) .....  
PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below) .....

YES	NO
<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

HEADSPACE READING (ppm) AND INSTRUMENT USED.....  
TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable)  
PROTECTIVE CASING MATERIAL TYPE: .....  
MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches): .....

0.0 ppm  
steel / 3.7"  
square steel 4.07"

LOCK PRESENT? .....  
LOCK FUNCTIONAL? .....  
DID YOU REPLACE THE LOCK? .....  
IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes, describe below)  
WELL MEASURING POINT VISIBLE? .....

YES	NO
<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>

- marked by BB 9/21/12

MEASURE WELL DEPTH FROM MEASURING POINT (Feet): .....  
MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet): .....  
MEASURE WELL DIAMETER (Inches): .....  
WELL CASING MATERIAL: .....  
PHYSICAL CONDITION OF VISIBLE WELL CASING: .....  
ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE .....  
PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES.....

27.65  
18.40  
2 inches  
PVC  
good  
NA

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.

brush area on slope near fence.  
have to walk to area - stone swale near by.

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.)  
AND ASSESS THE TYPE OF RESTORATION REQUIRED.

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT

(e.g. Gas station, salt pile, etc.):  
landfill.

REMARKS:

no lock and no well cap (gripper)

SITE NAME:

FELF

SITE ID.:

FELF

INSPECTOR:

CP

DATE/TIME:

9/19/12

WELL ID.:

MW8

MONITORING WELL FIELD INSPECTION LOG

WELL VISIBLE? (If not, provide directions below) .....

YES	NO
X	

WELL COORDINATES? NYTM X \_\_\_\_\_ NYTM Y \_\_\_\_\_

PDOP Reading from Trimble Pathfinder: \_\_\_\_\_ Satellites: \_\_\_\_\_  
GPS Method (circle) Trimble And/Or Magellan

WELL I.D. VISIBLE? .....

YES	NO
X	
X	

WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back).....

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL: .....

SURFACE SEAL PRESENT? .....

YES	NO
X	
X	
X	

SURFACE SEAL COMPETENT? (If cracked, heaved etc., describe below) .....

PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below) .....

HEADSPACE READING (ppm) AND INSTRUMENT USED.....

TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable)

PROTECTIVE CASING MATERIAL TYPE: .....

MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches): .....

C  
GRAVEL 6"  
GRAVEL  
4"

LOCK PRESENT? .....

YES	NO
X	
X	
	X
	X
X	

LOCK FUNCTIONAL? .....

DID YOU REPLACE THE LOCK? .....

IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes, describe below)

WELL MEASURING POINT VISIBLE? .....

MEASURE WELL DEPTH FROM MEASURING POINT (Feet): .....

12.39

MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet): .....

8.00

MEASURE WELL DIAMETER (Inches): .....

2"

WELL CASING MATERIAL: .....

PVC

PHYSICAL CONDITION OF VISIBLE WELL CASING: .....

Good

ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE .....

PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES.....

NONE

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.

None Good

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.) AND ASSESS THE TYPE OF RESTORATION REQUIRED.

FIELD

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT (e.g. Gas station, salt pile, etc.):

LANDFILL

REMARKS:

SITE NAME:

FIELD

SITE ID:

FT42L12111211

INSPECTOR:

CRIBS

DATE/TIME:

9/18/12

WELL ID:

R121

### MONITORING WELL FIELD INSPECTION LOG

WELL VISIBLE? (If not, provide directions below) .....

YES	NO
X	

WELL COORDINATES? NYTM X \_\_\_\_\_ NYTM Y \_\_\_\_\_

PDOP Reading from Trimble Pathfinder: \_\_\_\_\_ Satellites: \_\_\_\_\_  
GPS Method (circle) Trimble And/Or Magellan

WELL I.D. VISIBLE? .....

YES	NO
X	
X	

WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back).....

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL: .....

SURFACE SEAL PRESENT? .....

YES	NO
X	
X	
X	

SURFACE SEAL COMPETENT? (If cracked, heaved etc., describe below) .....

PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below) .....

HEADSPACE READING (ppm) AND INSTRUMENT USED.....

0	
-	
-	

TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable)

PROTECTIVE CASING MATERIAL TYPE: .....

MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches): .....

LOCK PRESENT? .....

YES	NO
	X
	X
	X
X	

LOCK FUNCTIONAL? .....

DID YOU REPLACE THE LOCK? .....

IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes, describe below)

WELL MEASURING POINT VISIBLE? .....

MEASURE WELL DEPTH FROM MEASURING POINT (Feet): .....

42.75

MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet): .....

25.12

MEASURE WELL DIAMETER (Inches): .....

6"

WELL CASING MATERIAL: .....

SS

PHYSICAL CONDITION OF VISIBLE WELL CASING: .....

Good

ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE .....

-

PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES.....

no

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.) AND ASSESS THE TYPE OF RESTORATION REQUIRED.

FIELD

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT (e.g. Gas station, salt pile, etc.):

Ringwell

REMARKS:



SITE NAME: Fort Edward Landfill

SITE ID.: FortED Landfill  
INSPECTOR: KC/CA  
DATE/TIME: 9/17/2012/1430  
WELL ID.: EW-2

**MONITORING WELL FIELD INSPECTION LOG**

WELL VISIBLE? (If not, provide directions below) .....  
WELL COORDINATES? NYTM X \_\_\_\_\_ NYTM Y \_\_\_\_\_  
PDOP Reading from Trimble Pathfinder: \_\_\_\_\_ Satellites: \_\_\_\_\_  
GPS Method (circle) Trimble And/Or Magellan

YES	NO
<input checked="" type="checkbox"/>	<input type="checkbox"/>

WELL I.D. VISIBLE? .....  
WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back).....

YES	NO
<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>

on electr box

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL: .....

SURFACE SEAL PRESENT? .....  
SURFACE SEAL COMPETENT? (If cracked, heaved etc., describe below) .....  
PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below) .....

YES	NO
<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>
<u>NA</u>	<u>NA</u>

man hole

HEADSPACE READING (ppm) AND INSTRUMENT USED.....  
TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable)  
PROTECTIVE CASING MATERIAL TYPE: .....  
MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches): .....

0.0 ppm  
NA - casing subsurface  
NA

LOCK PRESENT? .....  
LOCK FUNCTIONAL? .....  
DID YOU REPLACE THE LOCK? .....  
IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes, describe below)  
WELL MEASURING POINT VISIBLE? .....

YES	NO
<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>

MEASURE WELL DEPTH FROM MEASURING POINT (Feet): .....  
MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet): .....  
MEASURE WELL DIAMETER (Inches): .....  
WELL CASING MATERIAL: .....  
PHYSICAL CONDITION OF VISIBLE WELL CASING: .....  
ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE .....  
PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES.....

45.59 } From inside  
24.907 } lip of  
6 inches } man hole  
good PVC } casing  
good } North side  
unknown - no overhead

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.

Roadway leads up to well.

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.) AND ASSESS THE TYPE OF RESTORATION REQUIRED.

end of Roadway - brush surrounding

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT (e.g. Gas station, salt pile, etc.)

landfill

REMARKS:

SITE NAME: Fert Edward Landfill

SITE ID.: FT Ed Landfill  
INSPECTOR: KC/CA  
DATE/TIME: 9/17  
WELL ID.: E-W-3

**MONITORING WELL FIELD INSPECTION LOG**

WELL VISIBLE? (If not, provide directions below) .....  
WELL COORDINATES? NYTM X \_\_\_\_\_ NYTM Y \_\_\_\_\_  
PDOP Reading from Trimble Pathfinder: \_\_\_\_\_ Satellites: \_\_\_\_\_  
GPS Method (circle)      Trimble      And/Or      Magellan

YES	NO
<input checked="" type="checkbox"/>	<input type="checkbox"/>

WELL I.D. VISIBLE? .....  
WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back).....

YES	NO
<input checked="" type="checkbox"/>	<input type="checkbox"/>

(on box)

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL: .....

SURFACE SEAL PRESENT? .....  
SURFACE SEAL COMPETENT? (If cracked, heaved etc., describe below) .....  
PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below) .....

YES	NO
<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>

(manhole)

HEADSPACE READING (ppm) AND INSTRUMENT USED.....  
TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (if applicable) NA  
PROTECTIVE CASING MATERIAL TYPE: NA.....  
MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches): NA.....

0.0 ppm  
top of casing subsurface  
in a vault

LOCK PRESENT? .....  
LOCK FUNCTIONAL? .....  
DID YOU REPLACE THE LOCK? .....  
IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes, describe below) .....  
WELL MEASURING POINT VISIBLE? .....

YES	NO
<input type="checkbox"/>	<input checked="" type="checkbox"/>
<u>NA</u>	<u>NA</u>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>

MEASURE WELL DEPTH FROM MEASURING POINT (Feet): .....  
MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet): .....  
MEASURE WELL DIAMETER (Inches): .....  
WELL CASING MATERIAL: .....  
PHYSICAL CONDITION OF VISIBLE WELL CASING: .....  
ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE .....  
PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES.....

47.85 (SSE)  
27.75  
20 inches  
PVC  
top of casing broken in  
places.

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.): ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.

Road way leading up to location

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.) AND ASSESS THE TYPE OF RESTORATION REQUIRED.

ground

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT (e.g. Gas station, salt pile, etc.):

REMARKS:

NYSDEC  
 Fort Edward Landfill  
 Monitoring Well Water Level

WELL ID	GROUND ELEVATION (ft)	Top of Riser ELEVATION (ft)	Well Depth (ft)	Current Readings		
				Well Depth (ft)	Depth to water (ft)	Elev. (ft)
EW 3			48.85	28.25		
EW 2			45.59	24.10		
EW 1			42.85	29.12		
nan mw			22.14	7.84		
mw 1A			65.08	40.64		
mw 1D			71.01	47.46		
mw 1			48.55	40.17		
mw 8			12.39	8.00		
mw 4			7.62	5.19		
mw 6A			61.30	10.56		
mw 6B			81.59	16.49		
mw 6			17.94	8.60		

taken from top of well SSE  
 ← taken from side N side of inside lip of manhole

**APPENDIX B**

**MONITORING WELL SAMPLING REPORTS**





Site Name	F-2L13
Site Location	FEED M4
Well ID	MW-1
Sampled By	CA B

**Well Information**

Flush Mount or Riser	FLUSH
Measuring Point	TEL
Measuring Point Elevation	
Depth to Water	40.17
Depth to Bottom of Well	48.55

Dia. Well	Well Volume Multiplier
1	0.0408
1.5	0.0918
2	0.1631
3	0.3670
4	0.6525
5	1.0195
6	1.4681
8	2.6100
10	4.0782
12	5.8726

Well Volume Gallons = Multiplier x Length of Water Column



EXPERTISE YOU CAN COUNT ON

Stabilization is achieved when the following changes are noted over three consecutive 3.5 minute readings

- ± 0.1 change in pH
- ± 3% change in conductivity
- ± 10 millivolt change in ORP
- ± 10% change in DO and Turbidity

Date	9/19/12
Weather	Cloud
Purging Equipment	MARISSA
Sampling Equipment	
Decon Method	ALCOHOL
Riser Diameter	
Well Volume Calculation	41.83 VOL

Time	Volume Removed (Gallons)	Turbidity (NTU)	pH	Temperature (°C)	Dissolved O2 (mg/L)	Conductivity (mS/cm)	ORP (mV)	Depth to Water	Pumping Rate
10:55	Start	6.90	5.00	13.18	7.36	0.461	-157.9	40.17	
11:05	2.5gl	28.0	4.74	13.78°	6.87	0.481	-133.3	41.96	
11:15	2.8gl	16.0	4.50	14.38°	6.69	0.465	-133.8	41.96	
11:25	3.5gl	9.80	5.21	14.08°	6.58	0.441	-250.5	42.14	
11:35	4.5	8.30	4.81	14.49	6.81	0.452	-264.7	41.79	
11:45	5.5	4.70	4.67	14.49	6.82	0.446	-258.8	41.66	
12:15	Sampling								

50 mg/l CO<sub>2</sub>

Site Name	FWLF
Site Location	Ft. Det. NY
Well ID	WU 1A
Sampled By	CR



Well Information

Flush Mount or Riser	FL
Measuring Point	FOC
Measuring Point Elevation	
Depth to Water	10.64
Depth to Bottom of Well	65.08

Stabilization is achieved when the following changes are noted over three consecutive 3-5 minute readings

- ± 0.1 change in pH
- + 3% change in conductivity
- ± 10 millivolt change in ORP
- + 10% change in DO and Turbidity

EXPERTISE YOU CAN COUNT ON

Dia. Well	Well Volume Multiplier
1	0.0408
1.5	0.0918
2	0.1631
3	0.3670
4	0.6525
5	1.0195
6	1.4681
8	2.6100
10	4.0782
12	5.8726

Well Volume Gallons = Multiplier x Length of Water Column

Date	9/18/12
Weather	KLIM
Purging Equipment	MERSENER
Sampling Equipment	MERSENER
Decon Method	ALCONOX
Riser Diameter	2"
Well Volume Calculation	7.95 = 3 VOL

Time	Volume Removed (Gallons)	Turbidity (NTU)	pH	Temperature (°C)	Dissolved O2 (mg/L)	Conductivity (mS/cm)	ORP (mV)	Depth to Water	Pumping Rate
250	START	50	5.71	12.97	1.53	0.157	-175.8	45.41	
300	1.5	12.0	6.01	13.18	1.08	0.152	-203.1	48.31	
310	2.5	20.0	6.03	13.18	0.80	0.173	-224.3	51.23	
	SAMPLED	WELL	LEFT	GOING	DOWN				

CO2 8.75 mg/L

Site Name	FULL
Site Location	FTLD NY
Well ID	MLD
Sampled By	CA BB



EXPERTISE YOU CAN COUNT ON

Well Information

Flush Mount or Riser	Assembled
Measuring Point	TC
Measuring Point Elevation	
Depth to Water	47.46
Depth to Bottom of Well	> 101

Stabilization is achieved when the following changes are noted over three consecutive 3-5 minute readings

- ± 0.1 change in pH
- ± 3% change in conductivity
- ± 10 millivolt change in ORP
- ± 10% change in DO and Turbidity

Dia. Well	Well Volume Multiplier
1	0.0408
1.5	0.0918
2	0.1631
3	0.3670
4	0.6525
5	1.0195
6	1.4681
8	2.6100
10	4.0782
12	5.8726

Well Volume Gallons = Multiplier x Length of Water Column

Date	9/19/12
Weather	Clear
Purging Equipment	memotech
Sampling Equipment	memotech
Decon Method	ALCONOX
Riser Diameter	2"
Well Volume Calculation	2.73 x 3

26.19 GAL

Time	Volume Removed (Gallons)	Turbidity (NTU)	pH	Temperature (°C)	Dissolved O2 (mg/L)	Conductivity (mS/cm)	ORP (mV)	Depth to Water	Pumping Rate
7:50	START	5.50	4.49	11.27	1.28	0.244	-210.5		
8:00	1 GAL	6.30	4.55	11.53	0.19	0.262	-238.2	56.02	
8:10	2.5 gal	5.70	4.72	12.26°C	0.08	0.260	-270.7	59.37	
8:20	4 gal	4.90	4.77	12.76°C	0.06	0.265	-282.7	61.02	
8:30	5 gal	3.30	4.77	12.72°C	0.07	0.268	-263.2	62.80	
8:40	6 gal	2.80	4.79	13.91°C	0.07	0.273	-252.2	62.32	
8:50	7.5 gal	2.10	5.33	13.18°C	0.07	0.271	-262.6	63.61	
9:00	8 gal	3.60	4.96	13.06°C	0.09	0.266	-261.6	65.50	
9:10	8.5 gal	2.90	5.28	13.22°C	0.08	0.270	-234.5	65.78	
9:20	9.5 GAL	3.50	5.12	13.15	0.09	0.269	-225.8	66.95	
9:30	10.5 gal	3.30	5.12	13.32°C	0.08	0.272	-240.6	65.89	
9:40	12 GAL	5.30	5.10	12.46	0.08	0.255	-248.7		
9:50	SAMPLED								

\* Dug collected from this well \*

35 mg/L CO2





Site Name	FUEL
Site Location	FTLD, NY
Well ID	MW4
Sampled By	CIA



EXPERTISE YOU CAN COUNT ON

Well Information

Flush Mount or Riser	RISER
Measuring Point	TDC
Measuring Point Elevation	
Depth to Water	5.19
Depth to Bottom of Well	7.62

Stabilization is achieved when the following changes are noted over three consecutive 3-5 minute readings:  
 ± 0.1 change in pH  
 ± 3% change in conductivity  
 ± 10 millivolt change in ORP  
 ± 10% change in DO and Turbidity

Dia. Well	Well Volume Multiplier
1	0.0408
1.5	0.0918
2	0.1631
3	0.3670
4	0.6525
5	1.0195
6	1.4681
8	2.6100
10	4.0782
12	5.8726

Well Volume Gallons = Multiplier x Length of Water Column

Date	9/20/12
Weather	Clear
Purging Equipment	Handpump
Sampling Equipment	1"
Decon Method	Alc. wash
Riser Diameter	4"
Well Volume Calculation	4.75' x 0.26 = 30.0

Time	Volume Removed (Gallons)	Turbidity (NTU)	pH	Temperature (F)	Dissolved O2 (mg/L)	Conductivity (mS/cm)	ORP (mV)	Depth to Water	Pumping Rate
6:40	57 ml	280	3.63	13.64	1.72	0.641	-181.5	5.35'	
6:50	2 Gall	45	3.24	13.37	0.62	0.657	-140.5	5.57	
7:00	4 Gall	19	3.09	13.58	0.43	0.681	-136.8	5.59	
7:15	4.75 Gall SAMPLED								

CO<sub>2</sub> 195 mg/L

Site Name	FELP
Site Location	FTW 04
Well ID	21126
Sampled By	CJF/BJ



EXPERTISE YOU CAN COUNT ON

Well Information

Flush Mount or Riser	Riser
Measuring Point	TWC
Measuring Point Elevation	
Depth to Water	8.60
Depth to Bottom of Well	17.94

Stabilization is achieved when the following changes are noted over three consecutive 3-5 minute readings

- ± 0.1 change in pH
- ± 3% change in conductivity
- ± 10 millivolt change in ORP
- ± 10% change in DO and Turbidity

Dia. Well	Well Volume Multiplier
1	0.0408
1.5	0.0918
2	0.1631
3	0.3670
4	0.6525
5	1.0195
6	1.4681
8	2.6100
10	4.0782
12	5.8726
Well Volume Gallons = Multiplier x Length of Water Column	

Date	9/20/16
Weather	Clear
Purging Equipment	Monsie
Sampling Equipment	"
Decon Method	Alconox
Riser Diameter	2"
Well Volume Calculation	4.57 = 3 well vol.

Time	Volume Removed (Gallons)	Turbidity (NTU)	pH	Temperature (F)	Dissolved O2 (mg/L)	Conductivity (mS/cm)	ORP (mV)	Depth to Water	Pumping Rate
1135	START	TO HEAT	2.87	13.62	0.73	0.728	-104.0	8.63	
1145	1 GAL	250	2.56	13.63	0.76	0.669	-115.9		
1150	2.5 GAL	29	2.50	13.52	0.30	0.644	-126.4		
1155	4 GAL	20	2.47	13.62	0.20	0.644	-131.1		
1700	4.5 GAL SAMPLED								

CO2 15C DROPS COLOR CHANGE TO YELLOW

Site Name	FELF
Site Location	F.P. No. 14
Well ID	MV01A
Sampled By	C.P.B.B.



Well Information

Flush Mount or Riser	Riser
Measuring Point	10L
Measuring Point Elevation	
Depth to Water	10.56
Depth to Bottom of Well	61.30

Stabilization is achieved when the following changes are noted over three consecutive 3-5 minute readings

- ± 0.1 change in pH
- ± 3% change in conductivity
- ± 10 millivolt change in ORP
- + 10% change in DO and Turbidity

EXPERTISE YOU CAN COUNT ON

Dia. Well	Well Volume Multiplier
1	0.0408
1.5	0.0918
2	0.1631
3	0.3670
4	0.6525
5	1.0195
6	1.4681
8	2.6100
10	4.0782
12	5.8726

Well Volume Gallons = Multiplier x Length of Water Column

Date	9/20/12
Weather	Cloudy
Purging Equipment	MV3000
Sampling Equipment	1L
Decon Method	ALC/VER
Riser Diameter	2 1/2"
Well Volume Calculation	24.82 = 3 x 10.27 Vol

Time	Volume Removed (Gallons)	Turbidity (NTU)	pH	Temperature (°C)	Dissolved O2 (mg/L)	Conductivity (mS/cm)	ORP (mV)	Depth to Water	Pumping Rate
830	START	5.90	3.11	11.95	1.34	0.845	-101.7		
840	3 GAL	4.00	2.95	12.14	0.46	0.966	-118.9	10.83	
850	5 GAL	2.30	2.95	12.20	0.25	0.973	-127.7	10.84	
900	7 GAL	1.20	2.94	12.25	0.19	0.974	-141.9	10.83	
910	9 GAL	0.75	2.91	12.39	0.15	0.981	-150.6	10.83	
920	11.5 GAL	<del>0.80</del> 0.80	2.96	12.50	0.12	0.981	-160.0	10.83	
930	13 GAL	0.75	2.98	12.56	0.11	0.983	-162.0	10.84	
940	15 GAL	0.80	2.99	12.55	0.10	0.983	-165.3	10.84	
	SAMPLED								

CO<sub>2</sub> 225 mg/L



Site Name	F2LP
Site Location	FTWA NY
Well ID	MW6B
Sampled By	CA OB



EXPERTISE YOU CAN COUNT ON

Well Information	
Flush Mount or Riser	
Measuring Point	TWC
Measuring Point Elevation	
Depth to Water	16.49
Depth to Bottom of Well	81.57

Stabilization is achieved when the following changes are noted over three consecutive 3-5 minute readings

- ± 0.1 change in pH
- ± 3% change in conductivity
- ± 10 millivolt change in ORP
- ± 10% change in DO and Turbidity

Dia. Well	Well Volume Multiplier
1	0.0408
1.5	0.0918
2	0.1631
3	0.3670
4	0.6525
5	1.0195
6	1.4681
8	2.6100
10	4.0782
12	5.8726

Well Volume Gallons = Multiplier x Length of Water Column

Date	9/20/12
Weather	Clear
Purging Equipment	MDS 500
Sampling Equipment	"
Decon Method	ALCONOX
Riser Diameter	2"
Well Volume Calculation	31.85 = 3 well vol

Time	Volume Removed (Gallons)	Turbidity (NTU)	pH	Temperature (°C)	Dissolved O2 (mg/L)	Conductivity (mS/cm)	ORP (mV)	Depth to Water	Pumping Rate
10:02	START	0.80	3.59	12.63	3.76	0.219	-80.2		
10:15	1 GAL	13.0	3.71	12.86	3.25	0.188	-76.6	24.15	
10:25	2.5 GAL	14.0	3.84	13.24	3.02	0.189	-81.2	30.75	
10:30	3 GAL	18.0	3.86	13.27	3.13	0.189	-75.4	31.50	
10:35	3.5 GAL	19.0	3.86	13.29	3.12	0.189	-72.1		
10:40	4 GAL	19.0	3.89	13.41	3.17	0.190	-70.1		
10:50	SAMPLES								

CO<sub>2</sub> 30 mg/L



Site Name	F.W.F
Site Location	FRED NY
Well ID	MU. 8
Sampled By	C.A.B.B



EXPERTISE YOU CAN COUNT ON

Well Information	
Flush Mount or Riser	RISER
Measuring Point	TC
Measuring Point Elevation	
Depth to Water	8.00
Depth to Bottom of Well	12.39

Stabilization is achieved when the following changes are noted over three consecutive 3-5 minute readings

- ± 0.1 change in pH
- ± 3% change in conductivity
- ± 10 millivolt change in ORP
- ± 10% change in DO and Turbidity

Dia. Well	Well Volume Multiplier
1	0.0408
1.5	0.0918
2	0.1631
3	0.3670
4	0.6525
5	1.0195
6	1.4681
8	2.6100
10	4.0782
12	5.8726
Well Volume Gallons = Multiplier x Length of Water Column	

Date	9/19/12
Weather	CLAY
Purging Equipment	MENSCUM
Sampling Equipment	MENSCUM
Decon Method	ALCOHOL
Riser Diameter	2
Well Volume Calculation	2.13 GAL = 3 WELL VOL.

Time	Volume Removed (Gallons)	Turbidity (NTU)	pH	Temperature (F)	Dissolved O2 (mg/L)	Conductivity (mS/cm)	ORP (mV)	Depth to Water	Pumping Rate
12:5	START	4.50	4.12	17.02	0.51	0.354	-258.3	8.74	
13:5	1 GAL	6.90	3.60	17.29	0.22	0.349	-210.5	9.20	
14:5	2 GAL	5.60	3.26	16.09	0.09	0.345	-199.4	9.94	
15:5	2.5 GAL	5.30	3.17	16.21	0.10	0.342	-190.7		

45 mg/l CO2

Site Name	LEWIS LAMP FILL
Site Location	ETW, M9
Well ID	EW 1
Sampled By	CAOB



EXPERTISE YOU CAN COUNT ON

Well Information

Flush Mount or Riser	FLUSH
Measuring Point	TO MANHOLE
Measuring Point Elevation	
Depth to Water	25.12
Depth to Bottom of Well	47.35

Stabilization is achieved when the following changes are noted over three consecutive 3-5 minute readings  
 ± 0.1 change in pH  
 ± 3% change in conductivity  
 ± 10 millivolt change in ORP  
 ± 10% change in DO and Turbidity

Dia. Well	Well Volume Multiplier
1	0.0408
1.5	0.0918
2	0.1631
3	0.3670
4	0.6525
5	1.0195
6	1.4681
8	2.6100
10	4.0782
12	5.8726

Well Volume Gallons = Multiplier x Length of Water Column

Date	9/18/12
Weather	RAIN
Purging Equipment	MANHOLES PUMP
Sampling Equipment	"
Decon Method	ALCONOX
Riser Diameter	6"
Well Volume Calculation	6" 76 83-78

START 9:10

Time	Volume Removed (Gallons)	Turbidity (NTU)	pH	Temperature (°C)	Dissolved O2 (mg/L)	Conductivity (mS/cm)	ORP (mV)	Depth to Water	Pumping Rate
9:10	START	80.0	2.50	14.73	1.10	1,339	-85.9	25.12	
9:15	1 GAL	60.0	2.45	14.49	1.04	1,435	-97.3	25.38	
9:25	4 GAL	50.0	2.48	14.61	0.48	1,351	-96.1	25.38	
9:35	6 GAL	28.0	2.48	14.75	<del>0.21</del>	1,342	-96.0	25.40	
9:45	7.5 GAL	24.0	2.48	14.77	0.16	1,349	-95.3	25.41	
9:55	9 GAL	18.0	2.49	14.85	0.14	1,383	-96.2	25.41	
10:05	11 GAL	15.0	2.48	14.80	0.09	1,435	-93.1	25.41	
10:15	12.5	12.0	2.50	14.91	0.09	1,456	-94.0	25.41	
10:25	15	12.0	2.49	14.99	0.09	1,495	-93.0	25.41	
10:35	17 gal	10.0	2.50	14.86°C	0.08	1,527	-95.1	25.44	
10:45	18.5 gal	11.0	2.48	14.88°C	0.07	1,560	-95.0	25.45	
		CO <sub>2</sub> 575 mg/l							

Site Name	Fort Ed. Landfill
Site Location	Fort Ed., N.Y.
Well ID	EW-2
Sampled By	KC/CA



EXPERTISE YOU CAN COUNT ON

Well Information	
Flush Mount or Riser	Sub surface inside lip of manhole cover
Measuring Point	North side inside lip of manhole cover on North side
Measuring Point Elevation	?
Depth to Water	24.12
Depth to Bottom of Well	45.59

Standardization is achieved when the following changes are noted over three consecutive 3-5 minute readings:  
 ± 0.1 change in pH  
 ± 3% change in conductivity  
 ± 10 millivolt change in ORP  
 ± 10% change in DO and Turbidity

Dia. Well	Well Volume Multiplier
1	0.0408
1.5	0.0918
2	0.1631
3	0.3670
4	0.6525
5	1.0195
6	1.4681
8	2.6100
10	4.0782
12	5.8726

Well Volume Gallons = Multiplier x Length of Water Column

Date	9/17/2012
Weather	Sunny - Southeast wind @ 70°F
Purging Equipment	Monsoon pump
Sampling Equipment	Monsoon pump
Decon Method	Alconox
Riser Diameter	6 inch
Well Volume Calculation	94.56

300 Mg/L CO<sub>2</sub> Titration

current

Time	Volume Removed (Gallons)	Turbidity (NTU)	pH	Temperature (F)	Dissolved O <sub>2</sub> (mg/L)	Conductivity (mS/cm)	ORP (mV)	Depth to Water	Pumping Rate
1410			3.37	14.69	0.09	1.176	-792.6	25.65	
1424	2.5 gallons		3.33	14.92	0.23	1.183	-185.2	27.01	10.8
1430	4.5 gallons		3.30	14.51	0.40	1.166	-190.3	28.10	11.7
1438	5 gallons		3.30	14.56	0.27	1.165	-195.6	29.05	11.7
1446	10 gallons	24	3.30	14.64	0.21	1.167	-198.7	29.81	—
		28							

MS MSD SAMPLES TAKEN FROM EW-2



Site Name	FDL 2
Site Location	FRAN NY
Well ID	W 4
Sampled By	CA BA



EXPERTISE YOU CAN COUNT ON

Well Information

Flush Mount or Riser	
Measuring Point	
Measuring Point Elevation	
Depth to Water	
Depth to Bottom of Well	

Stabilization is achieved when the following changes are noted over three consecutive 3-5 minute readings

- ± 0.1 change in pH
- ± 3% change in conductivity
- ± 10 millivolt change in ORP
- ± 10% change in DO and Turbidity

Dia. Well	Well Volume Multiplier
1	0.0408
1.5	0.0918
2	0.1631
3	0.3670
4	0.6525
5	1.0195
6	1.4681
8	2.6100
10	4.0782
12	5.8726

Well Volume Gallons = Multiplier x Length of Water Column

Date	9/20/12
Weather	Cloudy
Purging Equipment	
Sampling Equipment	
Decon Method	
Riser Diameter	MANHOLE
Well Volume Calculation	

Time	Volume Removed (Gallons)	Turbidity (NTU)	pH	Temperature (F)	Dissolved O2 (mg/L)	Conductivity (mS/cm)	ORP (mV)	Depth to Water	Pumping Rate
2:15		27.0	3.13	17.93	1.30	0.726	-100.5		

CO2 200 Drops No Color Change

Site Name	FLLP
Site Location	RTD NY
Well ID	COMBINED LINE
Sampled By	CA BB



EXPERTISE YOU CAN COUNT ON

Well Information

Flush Mount or Riser	CULVERT
Measuring Point	TOC
Measuring Point Elevation	
Depth to Water	
Depth to Bottom of Well	

Stabilization is achieved when the following changes are noted over three consecutive 3-5 minute readings

- ± 0.1 change in pH
- ± 3% change in conductivity
- ± 10 millivolt change in ORP
- ± 10% change in DO and Turbidity

Dia. Well	Well Volume Multiplier
1	0.0408
1.5	0.0918
2	0.1631
3	0.3670
4	0.6525
5	1.0195
6	1.4681
8	2.6100
10	4.0782
12	5.8726

Well Volume Gallons = Multiplier x Length of Water Column

Date	9/20/12
Weather	Cloudy
Purging Equipment	Monsieur
Sampling Equipment	
Decon Method	ALCOX
Riser Diameter	
Well Volume Calculation	

Time	Volume Removed (Gallons)	Turbidity (NTU)	pH	Temperature (F)	Dissolved O2 (mg/L)	Conductivity (mS/cm)	ORP (mV)	Depth to Water	Pumping Rate
130	no purge			1					
130		24.0	3.46	15.80	6.05	0.659	-50.8		

CO<sub>2</sub> 100 mg/L



**APPENDIX C**  
**LABORATORY REPORTS**

**APPENDIX D**  
**PILOT TEST DATA**

# Ft Edward Pilot Test

Date 9/25/12  
Extraction Well - 2

	Time	Flow Rate	Gallons	Pressure	Total			
<del>12</del>	10:14	5.16		11.8	14.58			
	10:12	4.87		7.5	11.81			
	12:18	Sampling		Sampling	7.47			
	1:20	Not Running So there's enough water for sampling						
9/26/12	7:54	4.74		7.5	13.28			
	9:50	5.08		4.8	11.54			
	10:54	5.09		3.8	11.34			
	12:17	4.81		6.0	11.16			
	1:06	5.13		2.9	10.45			
	1:57	5.02		3.7	10.41			
	2:50	5.04		3.5	10.34			
9/27/12								
<del>2:48</del>	8:48	4.87		9.5	18.78			
9:00	9:55	5.02		4.5	9.66			
4:57	9:57	5.14		2.8	10.06			
11:47	11:57	4.96		3.8	10.31			
12:46	12:56	4.90		5.0	11.30			
2:00	2:00	5.05		5.6	11.47			
	2:57	5.14		3.4	11.54			

SIGNED \_\_\_\_\_

# Ft Edward Pilot Test

Date 9/25/12  
Extraction Well - 2

Date	Time	Flow Rate	Gallons	Pressure	Total			
9/25/12	10:14	6.11		12.6	14.52			
	10:16	Recovering		Recovering	11.79			
	12:20	Sampling		Sampling	7.47			
	1:20	Not Running So theres water for sampling						
9/26/12	8:55	5.89		12.2	15.74			
	9:50	6.59		5.4	11.33			
	10:52		Recovering					
	11:05	6.71		21.6	10.71			
	12:11	6.75		4.4	11.30			
	1:09	6.68		4.9	11.36			
	1:57		Reclaiming					
	2:03	6.50		3.7	10.31			
	2:46	6.48		3.4	10.28			
9/27/12	8:48	6.53		10.2	18.78			
<del>8:55</del>	<del>8:55</del>	<del>6.56</del>		<del>2.8</del>	<del>10.11</del>			
9:55	9:55	off for sampling						
11:09	11:09	6.78		3.9	9.18			
11:50	11:50	6.63		3.35	10.48			
12:49	12:49	6.75		3.6	9.86			
2:00	2:00	6.73		5.9	11.89			
2:57	2:57	6.71		3.2	11.54			

SIGNED \_\_\_\_\_

# Ft Edward Pilot Test

Date 9/25/12  
Extraction Well - 3

Date	Time	Flow Rate	Gallons	Pressure	Total			
9/25/12	10:15	3.20		11.3	14.58			
	10:16	Recovering		Recovering	11:79			
	12:20	Recovering		Recovering	7.47			
	1:20	Not Running So there's Enough water for Sampling						
9/26/12	8:55	3.18		13.2	12.89			
	9:50	0	Recovering					
	10:51	3.51		5.7	12.46			
	12:10	3.68		4.5	11.75			
	1:22	3.70		1.6	9.75			
	1:57	Recharging						
	2:03	3.51		5.1	10.31			
	2:44	3.73		1.9	9.89			
9/27/12								
<del>8:48</del>	8:48	5.51		11.3	18.78			
9:25	9:55	off for Sampling						
11:40	11:16	3.70		1.4	9.04			
11:35	11:55	3.62		1.5	9.58			
12:55	12:55	3.70		2.1	9.97			
1:58	1:57	3.69		2.1	11.45			
3:2	3:00	3.51		2.3	11.28			

SIGNED \_\_\_\_\_

# Ft Edward Pilot Test

Date 9/25/12  
Extraction Well - 4

Date	Time	Flow Rate	Gallons	Pressure	Total		
9/25/12	10:15	1.12		13.0	14.58		
	10:13	6.43		9.8	11.81		
	12:19	8.94		4.7	7.40	Replaced Flow Cell	
	1:20	9.07					
9/26/12	8:54	6.06		7.9	12.99		
	9:50	6.62		6.7	11.41		
	10:53	6.86		4.9	11.89		
	12:11	6.54		3.8	12.04		
	1:03	6.55		2.8	9.97		
	1:57	6.49		3.0	10.24		
	2:44	6.52		3.1	10.41		
		6.55		4.8	10.52		
9/27/12							
<del>8:48</del>	8:48	3.08		8.8	18.78		
<del>9:35</del>	9:55	6.70		2.8	10.11		
<del>9:57</del>	9:57	6.75		3.0	10.06		
<del>11:54</del>	11:54	6.33		3.4	9.63		
<del>12:49</del>	12:49	6.60		3.4	9.86		
<del>1:59</del>	1:59	6.47		3.8	11.89		
	2:57	6.43		3.0	11.54		

SIGNED \_\_\_\_\_