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*Transmitted via Overnight Courier*

August 29, 2008

Mr. Richard Hull  
U.S. Environmental Protection Agency  
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One Congress Street, Suite 1100  
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**Re: GE-Pittsfield/Housatonic River Site  
Groundwater Management Area 3 (GEC330)  
Groundwater Quality and NAPL Monitoring Interim Report for Spring 2008**

Dear Mr. Hull:

Enclosed is a report entitled *Groundwater Management Area 3 Groundwater Quality and NAPL Monitoring Interim Report for Spring 2008* (Spring 2008 GMA 3 Report). This report summarizes activities performed at Groundwater Management Area (GMA) 3 (also known as the Plant Site 2 GMA) between January and June 2008, including the results of the spring 2008 round of sampling and analysis of groundwater for GMA 3 and the results of GE's non-aqueous phase liquid (NAPL) monitoring and recovery program in this area. In addition, certain modifications to the interim monitoring program at GMA 3 are proposed to address recent modifications made by MDEP to the Method 1 groundwater quality standards.

Please contact me if you have any questions or comments.

Sincerely,

A handwritten signature in cursive script that reads "Richard W. Gates" followed by a stylized initial "R" and "G".

Richard W. Gates  
Remediation Project Manager

Enclosure

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**General Electric Company  
Pittsfield, Massachusetts**

**Groundwater Management Area 3  
Groundwater Quality and NAPL  
Monitoring Interim Report for  
Spring 2008**

August 2008

ARCADIS

**Groundwater Management  
Area 3 – Groundwater Quality  
and NAPL Monitoring Interim  
Report for Spring 2008**

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Our Ref.:  
B0020186

Date:  
August 2008

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## 1. Introduction

### 1.1 General

On October 27, 2000, a Consent Decree (CD) executed in 1999 by the General Electric Company (GE), the United States Environmental Protection Agency (EPA), the Massachusetts Department of Environmental Protection (MDEP), and several other government agencies was entered by the United States District Court for the District of Massachusetts. The CD governs (among other things) the performance of response actions to address polychlorinated biphenyls (PCBs) and other hazardous constituents in soils, sediment, and groundwater in several Removal Action Areas (RAAs) located in or near Pittsfield, Massachusetts that collectively comprise the GE-Pittsfield/Housatonic River Site (the Site). For groundwater and non-aqueous-phase liquid (NAPL), the areas at and near the GE Pittsfield facility have been divided into five Groundwater Management Areas (GMAs), which are illustrated on Figure 1. These GMAs are described, together with the Performance Standards established for the response actions at and related to them in Section 2.7 of the *Statement of Work for Removal Actions Outside the River* (SOW) (Appendix E to the CD), with further details presented in Attachment H to the SOW (Groundwater/NAPL Monitoring, Assessment, and Response Programs). This report relates to the Plant Site 2 GMA, also known and referred to herein as GMA 3.

On April 24, 2001, GE submitted a *Baseline Monitoring Program Proposal for Plant Site 2 Groundwater Management Area* (GMA 3 Baseline Monitoring Proposal). The GMA 3 Baseline Monitoring Proposal summarized the hydrogeologic information available at that time for GMA 3 and proposed groundwater and NAPL monitoring activities (incorporating as appropriate those activities that were in place at that time) for the baseline monitoring period at this GMA. EPA provided conditional approval of the GMA 3 Baseline Monitoring Proposal by letter of November 21, 2001. Thereafter, certain modifications were made to the GMA 3 baseline monitoring program as a result of EPA approval conditions and/or findings during field reconnaissance of the selected monitoring locations and, subsequently, during implementation of the baseline monitoring program.

Following performance of a limited baseline sampling event in spring 2002, the remainder of the 2002 and 2003 sampling rounds were deferred (with EPA approval) because certain property access issues could not be resolved prior to the scheduled performance of those sampling events. However, GE continued to perform NAPL and groundwater elevation monitoring on an interim basis at all locations for which access was available and collected groundwater samples from one well (78B-R) on a semi-annual basis for analysis of volatile organic compounds (VOCs) and, until fall 2003, PCBs.



The final property access issues were resolved in February 2004, and, beginning with the spring 2004 sampling event, GE commenced the full semi-annual baseline groundwater quality sampling program at GMA 3. The baseline monitoring program consisted of four semi-annual groundwater quality sampling events (with annual sampling conducted at select wells), quarterly groundwater elevation monitoring, and NAPL monitoring and recovery activities, followed by preparation and submittal of semi-annual reports summarizing the groundwater/NAPL monitoring results, comparing the groundwater results with applicable Performance Standards, and, as appropriate, proposing modifications to the monitoring program. The full monitoring program included sampling and analysis of PCBs, certain non-PCB constituents listed in Appendix IX of 40 CFR Part 264, plus three additional constituents -- benzidine, 2-chloroethylvinyl ether, and 1,2-diphenylhydrazine (Appendix IX+3), and/or certain constituents (i.e., natural attenuation parameters) to assess intrinsic and natural processes that may be influencing VOC concentrations in groundwater. The fourth baseline monitoring report for GMA 3, titled *Groundwater Management Area 3 Baseline Groundwater Quality and NAPL Monitoring Interim Report for Fall 2005* (Fall 2005 GMA 3 Monitoring Report), was submitted to EPA on February 26, 2006.

Section 6.1.3 of Attachment H to the SOW provides that if the two-year baseline period ends prior to the completion of soil-related response actions at all the RAAs within a GMA, GE may make a proposal to EPA to modify and/or extend the Baseline Monitoring Program based on the results of the initial assessment and the estimated timing of future response actions at the RAAs in the GMA. The approved GMA 3 Baseline Monitoring Proposal also allows GE to propose a modification and/or extension of the baseline monitoring program based on the results of the initial assessment and the estimated timing of future response actions.

Therefore, as the soil-related Removal Actions at the Unkamet Brook Area RAA within GMA 3 were not yet complete, the Fall 2005 GMA 3 Monitoring Report contained such a proposal to modify and extend baseline groundwater quality monitoring activities at GMA 3 (under a program referred to as the interim monitoring program) until such time as the soil-related Removal Actions at the Unkamet Brook Area RAA are completed and the specific components of a long-term groundwater quality monitoring program are determined. EPA conditionally approved the Fall 2005 GMA 3 Monitoring Report by letter dated May 2, 2006 and GE implemented the approved interim monitoring program during the spring 2006 sampling event, which also involved the collection of groundwater samples from certain wells that did not yet have four complete rounds of sampling as part of the baseline monitoring program. Thereafter, certain modifications were made to the GMA 3 interim monitoring program as a result of EPA approval conditions, revisions to the Massachusetts Contingency Plan (MCP) Method 1 groundwater standards, and/or GE's evaluations of results of activities performed during implementation of the interim monitoring program. GE will continue the approved groundwater and NAPL monitoring program until the completion

of the soil-related Removal Actions at the Unkamet Brook Area RAA. After those soil-related Removal Actions are completed, GE will submit a final baseline monitoring report, including a proposal concerning long-term groundwater quality and NAPL monitoring at GMA 3.

As part of the interim monitoring program for GMA 3, GE is required to submit reports on a semi-annual basis to summarize the groundwater/NAPL monitoring results and related activities and, as appropriate, to propose modifications to the monitoring program. GE's *Groundwater Management Area 3 Groundwater Quality and NAPL Monitoring Interim Report for Fall 2007* (Fall 2007 GMA 3 Monitoring Report) presented the results of the 2007 annual interim groundwater quality sampling event and the semi-annual groundwater elevation and NAPL monitoring activities performed at this GMA during October and November 2007, as well as other routine groundwater elevation and NAPL monitoring/recovery activities performed between July and December 2007. That report also summarized the results of building inspections and subsurface soil gas and indoor air monitoring conducted beneath and within Buildings 51 and 59. The Fall 2007 GMA 3 Monitoring Report was conditionally approved by EPA by letter dated April 23, 2008.

The results of groundwater sampling activities performed at GMA 3 during May 2008, as well as other routine groundwater elevation and NAPL monitoring/recovery activities performed at this GMA between January and June 2008 (henceforth referred to as Spring 2008) are provided in this *Groundwater Management Area 3 Groundwater Quality and NAPL Monitoring Interim Report for Spring 2008* (Spring 2008 GMA 3 Monitoring Report).

The current GMA 3 groundwater sampling program is summarized in Table 1, while the groundwater elevation/NAPL monitoring program is summarized in Table 2. The locations of the monitoring wells utilized in spring 2008 are provided on Figure 2.

## 1.2 Background Information

### 1.2.1 GMA Description

GMA 3 encompasses the portion of the Unkamet Brook Area (as defined in the CD and SOW) located to the east of Plastics Avenue, and occupies an area of approximately 103 acres (as shown on Figures 1 and 2). This area includes the eastern portion of GE's Pittsfield facility, which is generally bounded by Dalton Avenue to the north, Merrill Road to the south, Plastics Avenue to the west, and railroad tracks to the east. GMA 3 also contains commercial/recreational properties located between Merrill Road and the Housatonic River to the southeast of the facility. Unkamet Brook extends from northwest to southeast through the interior of this GMA, although a portion of the brook in the center of the area flows through underground culverts. The GE-owned portion of this GMA located

west of Unkamet Brook is mostly paved and covered with large buildings. The GE-owned portion to the east of Unkamet Brook, as well as much of the land between Merrill Road and the Housatonic River, is undeveloped except for the area associated with Building OP-3 and the commercial area along Merrill Road.

Several well pairs or closely-spaced shallow and deep well clusters have been installed within GMA 3. The approximate depth of a well in a cluster can be identified by the letter contained in the well name (e.g., cluster 39 contains wells 39A, 39B-R, 39D-R, and 39E) which represents the well series, specifically:

- A-series wells are generally screened approximately 45 to 50 feet below ground surface (bgs);
- B-series wells are generally screened at or near the water table, approximately 15 to 25 feet bgs;
- C-series wells are generally screened approximately 95 to 100 feet bgs;
- D-series wells are generally screened approximately 70 to 75 feet bgs; and
- E-series wells are generally screened at depths greater than 150 feet bgs.

Most of the GMA 3 well clusters consist of an A-series well paired with a B-series well, and sometimes one or more of the deeper series wells. In addition, there are individual wells installed at the RAA which were completed based on proposals by GE or in response to EPA requirements. The specifications of the wells monitored at GMA 3 in spring 2008 are listed in Table 3. Prior monitoring data from the well clusters has indicated that the vertical component of the hydraulic gradient is variable at GMA 3. In general, groundwater flows downward in the northern part of the GMA, moves laterally across the central areas, and rises to the south, near the Housatonic River.

Groundwater at GMA 3 generally flows in a southeasterly direction toward the Housatonic River, usually with a pattern that mimics the existing topography. However, localized variations in the flow direction exist due to fill materials used beneath building foundations in the GE Plastics area and the presence of Unkamet Brook. The subsurface conditions across GMA 3 are illustrated on cross-sections A-A' and B-B', presented as Figures 3 and 4, respectively. The locations of these cross-sections are provided on Figure 2. Figure 5 illustrates groundwater elevations and flow direction using data collected during the spring 2008 monitoring round. The horizontal hydraulic gradients are somewhat variable within GMA 3, but generally decrease toward the Housatonic River, corresponding to a flattening in the ground surface topography.

The presence of NAPL in this area has been documented in prior GE reports. NAPL has been observed near Building 59 in coarse gravel that was assumed to be fill material for the foundation of that building. NAPL also has been observed in the vicinity of Building 51. That NAPL may have originated from underground storage tanks located on the northeast side of that building. Previous investigations have identified the NAPL as a light non-aqueous phase liquid (LNAPL) in the soil at and above the groundwater table interface. The LNAPL observed east of Building 51 has been analyzed and determined to be composed of multiple constituents, including PCBs, polynuclear aromatic hydrocarbons (PAHs), ethylbenzene, xylenes, 1,2,4-trichlorobenzene, and 1,4-dichlorobenzene, among other constituents.

Distribution of the LNAPL has been confined to the vicinity of Buildings 51 and 59, along the western boundary of the GMA, due primarily to: (a) the generally low hydraulic gradients in this area; (b) the difference in grain size between the coarse fill materials near and beneath the buildings and the grain size of the surrounding native soils; (c) an apparent groundwater mound present between Buildings 59 and 119, to the south of the NAPL area; and (d) the ongoing LNAPL recovery efforts (both automated and manual) conducted by GE. Prior to spring 2007, dense non-aqueous phase liquid (DNAPL) had not been encountered within any of the monitoring wells within GMA 3. However, DNAPL was observed on one occasion in a single monitoring well located to the south of the former interior landfill. Locations where NAPL has been previously documented are shown on Figure 6. The extent of NAPL observed in spring 2008 is illustrated on Figure 7. A discussion of the current extent of NAPL and the results of NAPL monitoring and recovery activities is provided in Section 3.3.

### 1.2.2 Interim Monitoring Program

As discussed in Section 1.1, the CD and the SOW provide the framework for the performance of groundwater-related activities at a number of GMAs, including the implementation of groundwater monitoring, assessment, and recovery programs. In general, these programs consist of a baseline monitoring program conducted over a period of at least two years to establish existing groundwater conditions and a long-term monitoring program performed to assess groundwater conditions over time and to verify the attainment of the Performance Standards for groundwater. The baseline monitoring program was to be initiated at GMA 3 in the spring of 2002, but, as discussed above, access issues prevented performance of the full baseline monitoring program until spring 2004. The fall 2005 sampling event constituted the fourth baseline sampling event at the majority of the wells in GMA 3. The baseline sampling program was concluded at the remaining wells with the spring 2006 sampling event.

Beginning in spring 2006, as approved by EPA, an interim groundwater quality monitoring program was initiated, consisting of annual sampling (in the spring season) for the analysis of VOCs and natural attenuation parameters at 22 monitoring wells, plus annual sampling (alternating between the spring and fall seasons) for the analysis of VOCs at one additional well. Since the spring 2006 groundwater sampling event, GE has presented the results of each sampling event in interim groundwater quality and NAPL monitoring reports and, based on those results, has proposed and, following EPA approval, implemented modifications to the interim program. A number of program modifications were made in spring 2006, following revisions to the MCP Method 1 groundwater standards that took effect on April 3, 2006. On February 14, 2008, additional revisions to the MCP Method 1 groundwater standards took effect, and, as required by Condition 1 of EPA's April 23, 2008 conditional approval letter, this report discusses the revised standards, evaluates their implications on the interim groundwater quality monitoring program, and proposes further modifications to that program in response to those new standards.

### **1.2.3 NAPL Monitoring Program**

In addition to the wells that were sampled during the baseline monitoring period (each of which continues to be monitored for groundwater elevations on a semi-annual basis during the interim monitoring period), 27 monitoring wells are routinely monitored for groundwater elevation and the presence of NAPL on an established weekly, monthly, quarterly, or semi-annual schedule, as summarized in Table 2. The well locations are shown on Figure 2.

### **1.2.4 Format of Document**

The remainder of this report is presented in five sections. Section 2 describes the groundwater- and NAPL-related activities performed at GMA 3 in spring 2008. Section 3 presents the analytical results obtained during the spring 2008 sampling event performed in April and May 2008. Section 4 provides a summary of the applicable groundwater quality and NAPL-related Performance Standards under the CD and SOW and provides an assessment of the results of the spring 2008 activities, including comparisons to the Performance Standards and the Upper Concentration Limits (UCLs) for groundwater, and an evaluation of the spring 2008 NAPL monitoring/recovery results. Section 5 presents GE's discussion of the implications of new and revised MDEP groundwater quality standards on the interim monitoring program and proposes certain modifications to that program. Finally, Section 6 addresses the schedule for future field and reporting activities related to groundwater quality and NAPL presence at GMA 3.

## 2. Field and Analytical Procedures

### 2.1 General

The activities conducted at GMA 3 during spring 2008 included measurement of groundwater elevations/NAPL levels, manual and automated removal of LNAPL, and the collection and analysis of groundwater samples at select monitoring wells within GMA 3, as described on Tables 1 and 2, and depicted on Figure 2. This section discusses the field procedures used to conduct those field activities and the methods used to analyze the groundwater samples. All activities were performed in general accordance with GE's approved *Field Sampling Plan/Quality Assurance Project Plan (FSP/QAPP)*.

### 2.2 Groundwater Elevation Monitoring

The spring 2008 semi-annual groundwater elevation monitoring round was performed between April 15 and 16, 2008. This activity involved the collection of groundwater level data at the locations listed in Table 4. Groundwater levels and NAPL thicknesses (where NAPL is present) were measured in accordance with the procedures specified in GE's approved FSP/QAPP. The groundwater elevation data presented in Table 4 from wells screened across or near the water table were used to prepare a groundwater elevation contour map for spring 2008 (Figure 5). A summary of all groundwater elevation data collected in spring 2008 is provided in Appendix A.

The spring 2008 groundwater elevations were, on average, approximately 0.14 feet lower than the elevations measured during the prior spring monitoring round in 2007 at water table monitoring locations measured during both monitoring events. Consistent with prior data, groundwater was found to generally flow toward the Housatonic River, with some localized variations in the vicinity of Buildings 51 and 59.

As directed by Condition No. 3 of EPA's April 23, 2008 conditional approval letter for the Fall 2007 GMA 3 Report, GE investigated the condition of monitoring wells 51-7, 51-9, 51-13, and 59-1 which were dry during the fall 2007 monitoring event. Three of these monitoring wells (51-7, 51-9 and 59-1) were found to contain water in spring 2008, while monitoring well 51-13 remained dry. An inspection of the four wells was performed during the spring 2008 monitoring event and each monitoring well was found to contain excess sediment build-ups at the base of the well. That sedimentation was above low water table levels typically encountered in the fall, but below the higher spring groundwater levels (with the exception of well 51-13). To address this situation, GE will re-develop each of these wells to remove the excess sediment prior to the fall 2008 monitoring round.

### 2.3 LNAPL Monitoring and Recovery

This section describes the results of the LNAPL monitoring and recovery activities performed by GE within GMA 3 from January through June 2008, including the April 2008 semi-annual monitoring event and other routine and non-routine monitoring/recovery activities conducted during that period. These activities primarily include the operation of the automated LNAPL recovery systems at wells 51-21 and GMA3-17, the routine measurement of groundwater elevations and NAPL thickness (if present), and the manual removal of NAPL if sufficient thickness is present. All activities were performed in accordance with GE's approved FSP/QAPP.

Approximately three weeks prior to the semi-annual monitoring event, GE performed a bailing round involving the monitoring of all wells where the presence of NAPL was noted during the prior year and manual removal of any NAPL that was present. The purpose of these bailing rounds is to ensure that any NAPL present in a well is also present in the surrounding formation and not remnant oil which may have been trapped in the well since the prior removal event. These bailing round activities provide a consistent basis to compare the current presence and thickness of NAPL between wells that may otherwise be subject to varying NAPL removal schedules.

Routine NAPL monitoring was conducted at the monitoring wells listed in Table 2 on a semi-annual, quarterly, monthly, and/or weekly basis. Table 5 summarizes the overall spring 2008 NAPL monitoring and manual removal data on a well-by-well basis and Table A-1 in Appendix A presents all of the spring 2008 NAPL measurements and removal quantities (when performed) for each well at GMA 3. A month-by-month summary of the LNAPL volume removed by the automated recovery systems in spring 2008 is provided in Table 6. Approximately 31.4 gallons of LNAPL were recovery between January and June 2008 at GMA 3. Approximately 90% of this total was removed by the automated skimmer system at wells 51-21 (12.8 gallons) and the new skimmer system at well GMA 3-17 (14.5 gallons), and the remainder was manually recovered during routine monitoring rounds. Since 1997, approximately 1,449 gallons of LNAPL have been removed from GMA 3 as part of GE's NAPL monitoring and recovery program.

DNAPL was observed at monitoring well GMA3-16 during the spring 2007 monitoring event, which was conducted shortly after installation of this well, and approximately 0.01 gallons of DNAPL was manually removed at that time. No DNAPL has been observed in that well, or any other wells within GMA 3, since that initial and isolated observation in well GMA3-16.

Figure 6 depicts the historical maximum extent of NAPL observed at GMA 3. That figure represents a compilation of past investigations and shows the maximum lateral extent of NAPL that has been observed and documented in prior GE reports, and is not indicative of

current conditions. Figure 7 indicates the extent of NAPL observed during the semi-annual monitoring event conducted at GMA 3 in spring 2008. As shown on Figures 6 and 7, the northern (upgradient) extent of LNAPL has decreased since the onset of the periodic LNAPL monitoring and recovery activities conducted in this area.

**2.4 Groundwater Sampling and Analysis**

The spring 2008 interim sampling event was performed between April 30, 2008 and May 15, 2008 at 25 monitoring wells, 22 of which were sampled as part of GE’s ongoing natural attenuation assessment. Low-flow sampling techniques using either a bladder or peristaltic pump were utilized for the purging and collection of groundwater samples during this sampling event. The specific sampling method utilized, as well as a summary of any observations made during sampling are listed on the field sampling records contained in Appendix C. Field parameters (including temperature, pH, specific conductivity, oxidation-reduction potential, dissolved oxygen, and turbidity) were measured during purging and immediately prior to sampling at all monitoring wells. Each monitoring well that was sampled was purged until field parameters stabilized prior to sample collection. The stabilized field parameters are summarized in Table 7. A general summary of the stabilized field measurement results recorded during the spring 2008 monitoring event is provided below:

Parameter	Units	Range of Stabilized Readings
Turbidity	Nephelometric turbidity units	0 to 27
pH	pH units	6.29 to 8.57
Specific Conductivity	Millisiemens per centimeter	0.244 to 5.503
Oxidation-Reduction Potential	Millivolts	-264.80 to 136.50
Dissolved Oxygen	Milligrams per liter	0.47 to 6.51
Temperature	Degrees Celsius	6.43 to 14.99

As shown above and in Table 7 for this sampling event, none of the groundwater samples extracted from the monitoring wells had turbidity levels greater than the target level of 50 NTU upon stabilization. These results indicate that the sampling and measurement procedures utilized during this sampling event were effective in obtaining groundwater samples with low turbidity.



The groundwater samples were submitted to SGS Environmental Services of Wilmington, North Carolina for laboratory analysis. Groundwater samples collected from the interim monitoring locations were submitted for analysis of VOCs using EPA Method 8260B and/or for PCB analysis (filtered samples) using EPA Method 8082. The groundwater quality samples collected from wells sampled for natural attenuation parameters were submitted for analysis of VOCs using Method 8260B, and for the following additional parameters using the associated EPA Methods:

Parameter	EPA Method
Alkalinity (total)	310
Chloride	325
Dissolved Organic Carbon	360
Ethane, Ethene, Methane	8319
Iron	6000
Nitrate Nitrogen	353.1
Nitrite Nitrogen	354.1
Sulfate (turbidimetric)	375

Select natural attenuation samples were also analyzed for two SVOCs that are breakdown byproducts of chlorobenzene (2-chlorophenol and 4-chlorophenol), using EPA Method 8270C.

Following receipt of the analytical data from the laboratory, the preliminary results were reviewed for completeness and compared to the MCP Method 1 GW-2 and GW-3 standards (where applicable), and to the MCP Upper Concentration Limits (UCLs) for groundwater. The preliminary analytical results were presented in the next monthly report on overall activities at the GE-Pittsfield/Housatonic River Site.

The spring 2008 analytical results were validated in accordance with the FSP/QAPP and the validated results were utilized in the preparation of this report. As discussed in the data validation report provided as Appendix D, 99.9% of the spring 2008 groundwater quality data are considered to be useable, which is greater than the minimum required usability of 90% as specified in the FSP/QAPP. The SVOC, PCB, and natural attenuation parameter sample results were found to be 100% usable. VOC sample results were found to be 99.9% usable. The only rejected datum was one VOCs sample result from well 16B-R, where the 2-chloroethylvinylether result was rejected due to MS/MSD recovery deviations. The validated analytical results are summarized in Section 3 and discussed in Section 4 below.

### 3. Groundwater Analytical Results

#### 3.1 General

This section presents a description of the spring 2008 groundwater analytical results. Tables 8 and 9 provide a comparison of the concentrations of detected constituents with the applicable GW-2 and GW-3 groundwater quality Performance Standards established pursuant to the CD and SOW (for wells where those respective standards apply), while Table 10 presents a comparison of the concentrations of detected constituents with the UCLs for groundwater (for all wells sampled in spring 2008). Table 11 provides a summary of the detected VOCs and natural attenuation parameters at the wells monitored for indications of natural attenuation processes. Table E-1 in Appendix E provides the complete analytical data set (constituents detected and not detected) for the groundwater samples analyzed during this sampling event. An assessment of these results relative to those groundwater quality Performance Standards and the UCLs is provided in Section 4.

#### 3.2 Groundwater Quality Results

##### 3.2.1 VOC Results

Groundwater samples from 24 monitoring wells were analyzed for VOCs during the spring 2008 sampling event. The VOC analytical results are summarized in Table 10 (for constituents detected in one or more groundwater sample) and Table E-1 within Appendix E (for all constituents analyzed). VOCs were not detected above laboratory detection limits in six of the groundwater samples (from monitoring wells 16C-R, 90A, 90B, 111B-R, 115A, and 115B), while up to 11 individual VOCs were observed in one or more of the remaining 18 samples. The most commonly observed VOCs were chlorobenzene (detected in 14 wells) and benzene (detected in 10 wells). Where detected, total VOC concentrations ranged from an estimated concentration of 0.00015 parts per million (ppm) in natural attenuation monitoring well 111A-R to an estimated concentration of 130 ppm in natural attenuation monitoring well 2A.

##### 3.2.2 PCB Results

Filtered groundwater samples from three monitoring wells were analyzed for PCBs as part of the spring 2008 sampling event. The PCB analytical results are summarized in Table E-1 of Appendix E. PCBs were not detected in any of the three groundwater samples.

### 3.2.3 SVOC Results

Groundwater samples from six natural attenuation monitoring wells were analyzed for select SVOCs (i.e., 2-chlorophenol and 4-chlorophenol) in spring 2008 using EPA Method 8270C. The SVOC analytical results for the constituents analyzed are summarized in Table 10 and Table E-1 within Appendix E. The constituent 2-chlorophenol was observed in a single well (16A) at a concentration of 0.022 ppm. The constituent 4-chlorophenol was detected in the same well at a concentration of 0.062 ppm.

The groundwater sample collected from natural attenuation monitoring well 39B-R was also intended to be analyzed for 2-chlorophenol and 4-chlorophenol. However, this sample was inadvertently analyzed for all SVOCs typically analyzed by EPA Method 8270, which includes 2-chlorophenol, but not 4-chlorophenol. These SVOC analytical results are also summarized in Table 10 and Table E-1 of Appendix E. Five SVOCs (1,2-dichlorobenzene, 1,3-dichlorobenzene, 1,4-dichlorobenzene, naphthalene, and phenol) were detected in the sample from well 39B-R.

### 3.2.4 Natural Attenuation Monitoring Results

Groundwater samples from 22 monitoring wells were analyzed for natural attenuation parameters as part of the spring 2008 interim sampling event. The analytical results for these parameters (along with any detected VOCs or SVOCs) are provided in Table 11 and Table E-1 within Appendix E. A summary of the natural attenuation sampling results is provided below:

Parameter	Number Of Detects	Result Range (ppm)
Alkalinity	22	87 to 580
Chloride	21	ND to 1,900
Dissolved Organic Carbon	19	0.66 to 32.9
Ethane	0	ND
Ethene	2	ND to 0.76
Dissolved Iron	13	ND to 3.68
Methane	15	ND to 10.9
Nitrate (Nitrogen)	4	ND to 4.29
Nitrite (Nitrogen)	0	ND
Sulfate (turbidimetric)	19	ND to 169

## 4. Assessment of Results

### 4.1 General

The information presented herein is based on the field monitoring and laboratory results obtained during spring 2008 monitoring period, supplemented with historical data when applicable. This section discusses the groundwater quality Performance Standards, NAPL-related Performance Standards and the results of the interim groundwater sampling event and NAPL monitoring and recovery program at GMA 3 in spring 2008.

### 4.2 Performance Standards

#### 4.2.1 Groundwater Quality Performance Standards

The Performance Standards applicable to response actions for groundwater at GMA 3 are set forth in Section 2.7 and Attachment H (Section 4.1) of the SOW. In general, the Performance Standards for groundwater quality are based on the groundwater classification categories designated in the MCP. The MCP identifies three potential groundwater categories that may be applicable to a given site. One of these, GW-1 groundwater, applies to groundwater that is a current or potential source of potable drinking water. None of the groundwater at any of the GMAs at the Site is classified as GW-1; however, the remaining MCP groundwater categories are applicable to GMA 3 and are described below:

- GW-2 groundwater is defined as groundwater that is a potential source of vapors to the indoor air of buildings. Groundwater is classified as GW-2 if it is located within 30 feet of an existing occupied building and has an average annual depth below ground surface of 15 feet or less. Under the MCP, volatile constituents present within GW-2 groundwater represent a potential source of organic vapors to the indoor air of the overlying occupied structures.
- GW-3 groundwater is defined as groundwater that discharges to surface water. By MCP definition, all groundwater at a site is classified as GW-3 since it is considered to be ultimately discharged to surface water. In accordance with the CD and SOW, all groundwater at GMA 3 is considered as GW-3.

The CD and the SOW allow for the establishment of standards for GW-2 and GW-3 groundwater at the GMAs through use of one of three methods, as generally described in the MCP. The first, known as Method 1, consists of the application of pre-established numerical “Method 1” standards set forth in the MCP for both GW-2 and GW-3 groundwater (310 CMR 40.0974). These “default” standards have been developed to be conservative and will serve as the initial basis for evaluating groundwater at GMA 3. The current MCP

Method 1 GW-2 and GW-3 standards for the constituents detected in the spring 2008 sampling event are listed in Tables 8 and 9, respectively. For constituents for which Method 1 standards do not exist, the MCP provides procedures, known as Method 2, for developing such standards (Method 2 standards) for both GW-2 (310 CMR 40.0983(2)) and GW-3 (310 CMR 40.0983(4)) groundwater. For such constituents that are detected in groundwater during the baseline monitoring program, Attachment H to the SOW states that in the Baseline Monitoring Program Final Report, GE must propose to develop Method 2 standards using the MCP procedures or alternate procedures approved by EPA, or provide a rationale for why such standards need not be developed. For constituents whose concentrations exceed the applicable Method 1 (or Method 2) standards, GE may develop and propose to EPA alternative GW-2 and/or GW-3 standards based on a site-specific risk assessment. This procedure is known as Method 3 in the MCP. Upon EPA approval, these alternative risk-based GW-2 and/or GW-3 standards may be used in lieu of the Method 1 (or Method 2) standards. Of course, whichever method is used to establish such groundwater standards, GW-2 standards will be applied to GW-2 groundwater and GW-3 standards will be applied to GW-3 groundwater.

On February 14, 2008 MDEP implemented revised Method 1 numerical standards for a number of constituents in groundwater, and this report constitutes the first report at this GMA for which those standards will be applied. In addition, in its July 30, 2008 conditional approval letter related to the *Groundwater Management Area 2 Long-Term Monitoring Program Addendum to Monitoring Event Evaluation Report for Fall 2007*, EPA specified that the low-range guidance values developed in that report for cobalt and copper should represent the Method 2 GW-3 standards for these metals at all of the GE Pittsfield GMAs. As such, although neither metal was analyzed for in any of the samples collected during this sampling event, GE has utilized those Method 2 standards in its evaluation of whether there is any need for additional monitoring for those constituents.

Based on consideration of the above points, the specific groundwater quality Performance Standards for GMA 3 consist of the following:

1. At monitoring wells designated as compliance points to assess GW-2 groundwater (i.e., groundwater located at an average depth of 15 feet or less from the ground surface and within 30 feet of an existing occupied building), groundwater quality shall achieve any of the following:
  - (a) the Method 1 GW-2 groundwater standards set forth in the MCP (or, for constituents for which no such standards exist, Method 2 GW-2 standards once developed, unless GE provides and EPA approves a rationale for not developing such Method 2 standards); or

- (b) alternative risk-based GW-2 standards developed by GE and approved by EPA as protective against unacceptable risks due to volatilization and transport of volatile chemicals from groundwater to the indoor air of nearby occupied buildings; or
  - (c) a condition, based on a demonstration approved by EPA, in which constituents in the groundwater do not pose an unacceptable risk to occupants of nearby occupied buildings via volatilization and transport to the indoor air of such buildings.
2. Groundwater quality shall ultimately achieve the following standards at the perimeter monitoring wells designated as compliance points for GW-3 standards:
- (a) the Method 1 GW-3 groundwater standards set forth in the MCP (or, for constituents for which no such standards exist, Method 2 GW-3 standards once developed, unless GE provides and EPA approves a rationale for not developing such Method 2 standards); or
  - (b) alternative risk-based GW-3 standards proposed by GE and approved by EPA as protective against unacceptable risks in surface water due to potential migration of constituents in groundwater.

These Performance Standards are to be applied to the results of the individual monitoring wells included in the monitoring program. Several monitoring wells have been designated as the compliance points for attainment of the Performance Standards identified above. These wells were initially identified in the GMA 3 Baseline Monitoring Proposal (although certain modifications were made subsequent to submittal of that proposal as a result of EPA approval conditions, findings during field reconnaissance of the selected wells, or replacement of certain wells during the course of the baseline monitoring program). As described above in Section 2.4, only selected wells were sampled in spring 2008, including a number of wells designated as natural attenuation monitoring wells, which are used to evaluate natural attenuation mechanisms in groundwater. In addition to the Performance Standards described above, analytical results from all groundwater monitoring wells sampled during the spring 2008 sampling event were compared to the MCP UCLs for groundwater.

#### 4.2.2 NAPL-Related Performance Standards

Under the CD and SOW, GE is required to perform monitoring, recovery, assessment, and other response activities related to NAPL until the applicable NAPL-related Performance Standards are ultimately achieved. The NAPL-related Performance Standards are set forth in Section 2.7 and Attachment H (Section 4.0) of the SOW. They consist of the following:

1. Containment, defined as no discharge of NAPL to surface waters and/or sediments, which shall include no sheens on surface water and no bank seeps of NAPL.
2. For areas near surface waters in which there is no physical containment barrier between the wells and the surface water, elimination of measurable NAPL (i.e., detectable with an oil/water interface probe) in wells near the surface water bank that could potentially discharge NAPL into the surface water, in order to prevent such discharge and assist in achieving groundwater quality Performance Standards.
3. For areas adjacent to physical containment barriers, prevention of any measurable LNAPL migration around the ends of the physical containment barriers.
4. For NAPL areas not located adjacent to surface waters, reduction in the amount of measurable NAPL to levels which eliminate the potential for NAPL migration toward surface water discharge areas or beyond GMA boundaries, and which assist in achieving groundwater quality Performance Standards.
5. For NAPL detected in wells designed to assess GW-2 groundwater (i.e., located at average depths of 15 feet or less from the ground surface and within a horizontal distance of 30 feet from an existing occupied building), a demonstration that constituents in the NAPL do not pose an unacceptable risk to occupants of such building via volatilization and transport to the indoor air of such building. Such demonstration may include assessment activities such as: NAPL sampling, soil gas sampling, desk-top modeling of potential volatilization of chemicals from the NAPL (or associated groundwater) to the indoor air of the nearby occupied buildings, or sampling of the indoor air of such buildings. If necessary, GE shall propose corrective actions, including, but not limited to, containment, recovery, or treatment of NAPL and impacted groundwater.

In addition to these Performance Standards, GE has developed and implemented site-wide criteria for NAPL monitoring and manual recovery requirements, standard procedures for assessment of new NAPL occurrences, and the feasibility of the installation of new recovery systems. Those guidelines, which have been incorporated into GE's approved *Field Sampling Plan/Quality Assurance Project Plan* (FSP/QAPP), are described below.

#### 4.2.3 Manual NAPL Removal Criteria

During routine NAPL monitoring/removal activities at select GE monitoring wells, LNAPL accumulations observed in excess of 0.25 feet are manually removed at the time of monitoring. For DNAPL, accumulations in excess of 0.5 feet are manually removed. Exceptions to these criteria are in place for certain wells that are located either upgradient

of sensitive receptors (i.e., any measurable quantities of NAPL are manually removed) or within the capture zone of automated recovery systems (i.e., no NAPL is manually removed). Any exception to the standard NAPL removal criteria applicable to a given well is shown in Table 2.

These manual removal criteria apply only during routine NAPL monitoring program events (i.e., weekly, monthly, and quarterly). No NAPL removal is required at wells monitored for other reasons between routine monitoring events (e.g., during well inventory inspections, or other non-routine data gathering activities) or in connection with GE's semi-annual NAPL monitoring round during the spring and fall quarterly monitoring events (due to the performance of a bailing round, as discussed below).

Approximately 1 to 2 weeks prior to the spring and fall semi-annual monitoring events, all wells where the presence of NAPL was observed during the prior year are monitored and any recoverable thicknesses of NAPL are manually removed (i.e., the bailing round). For those wells where NAPL was present, after allowing time for NAPL to return, the wells are monitored again as part of the semi-annual monitoring event and the data obtained are utilized to estimate the current thickness of LNAPL in the area. Due to the large number of wells included in the semi-annual monitoring program, and the desire to collect the groundwater elevation data from all wells in the same relative time period so as to provide a more accurate account of flow conditions, no manual removal of NAPL from monitoring wells is required during the actual semi-annual data collection event (i.e., the monitoring round) for those wells from which NAPL had been removed in the bailing round. The purpose for performing the bailing and monitoring rounds is to confirm that the NAPL present in a well is representative of the surrounding formation and does not reflect remnant oil that may have accumulated in the well since the last manual removal. This uniform removal procedure also provides a consistent basis for comparison of data with future NAPL monitoring data.

If a measurable thickness of NAPL is observed during the spring or fall semi-annual monitoring event in a well that was not addressed during the bailing round, the NAPL is manually removed and the well is again monitored after approximately one week to gauge the NAPL thickness. The information obtained during that supplemental monitoring round is utilized in GE's assessment of the seasonal extent of NAPL.

#### **4.2.4 Assessment of New NAPL Observations**

This section describes the process utilized to investigate new or anomalous NAPL observations. Such observations may include either instrument detection of NAPL at a new location or detection of a type of NAPL not typically associated with a particular well (e.g., if



DNAPL was observed in a monitoring well where LNAPL is typically observed). This process generally includes the following steps:

1. Confirmation that NAPL is actually present at the well by bailing or pumping the well to verify that an instrument error did not occur. Additionally, the NAPL will be physically observed in a jar to visually assess its relative density compared to water.
2. The GE Project Manager is notified of the new NAPL occurrence. The GE Project Manager will then arrange to make any required federal or state Agency notifications, as appropriate.
3. Initially, the monitoring frequency at the well will be modified to at least once per week for a period of at least one month, and any observed NAPL will be removed. If additional wells are located in the vicinity and screened at the appropriate interval, they will also be monitored for NAPL presence.
4. Based on the results of Steps 1 and 3 above, GE may recommend that: a) the well be further evaluated for the potential installation of an automated recovery system; b) additional soil borings/monitoring wells be installed in the vicinity; or c) enhanced NAPL monitoring/ recovery activities be implemented.

After completion of these initial assessment activities, monitoring and manual NAPL recovery (if NAPL thicknesses exceed the standard manual removal criteria) activities will revert to their normal intervals (unless more frequent monitoring is recommended), pending Agency approval of any recommendation made by GE.

#### **4.2.5 Criteria for Installation of Automated Recovery Systems**

To aid in the assessment of whether additional automated recovery systems are necessary and feasible at a given location where NAPL is present, several key factors should be considered, specifically:

- The presence of other nearby active NAPL recovery systems;
- Quantity of NAPL available (on a continuing basis) to be recovered;
- Migration potential of the NAPL (considering historical monitoring data and capture areas of existing recovery systems); and
- Technical feasibility and practicality of installing an automated recovery system.

Each of these factors is discussed in more detail below.

If there are already active NAPL recovery systems operating nearby, an assessment must be made as to whether the NAPL area in question will be addressed by the existing system. Additional automated recovery systems are generally not required for NAPL areas that are within the capture zone of an operating active recovery system or positioned upgradient of it, such that the NAPL will ultimately be addressed by the existing recovery system.

If the NAPL area is not already addressed by an existing system, it must be confirmed whether sufficient quantities of NAPL are moving into a well to justify the potential installation of a recovery system. This determination is made through the performance of a NAPL recovery test conducted over a 2- to 3-day period. NAPL is manually removed from the well, initially on an hourly basis, and the amount of NAPL returning to the well between each removal interval is measured and recorded. Depending on the recovery rate, the time intervals of manual removal during the recovery test may be increased or decreased from the initial hourly interval. If the average NAPL quantity that returns to the well over the duration of the test is significant (e.g., greater than 0.5 liter per hour, or greater than 6 to 12 inches per hour in a 2-inch well), the location may be deemed a potential candidate for an automated recovery system based on NAPL quantity. NAPL samples may also be collected during this test and analyzed for chemical and/or physical parameters if such data do not already exist for the NAPL area in question. Physical testing will include specific gravity and viscosity. If warranted, interfacial tension may also be measured.

If it is determined that sufficient NAPL is potentially present, a more detailed analysis of NAPL migration potential is necessary to confirm whether operation of an automated recovery system is appropriate to address the NAPL occurrence and to obtain sufficient information to design such a system. This phase of the evaluation process will vary based on area-specific considerations, but will generally include:

- Assessment of the NAPL physical and chemical properties to assess the migration potential of the NAPL and to aid in selection of pumping equipment and disposal options.
- Assessment of factors that might limit NAPL migration, such as viscosity of the NAPL, soil types, hydraulic factors, and/or presence of existing physical containment barriers. NAPLs with limited potential to migrate offsite or toward surface water bodies may be more appropriately addressed through other measures, such as an enhanced manual removal program.

- Evaluation of potential migration pathways of the NAPL. This evaluation may include the installation and monitoring of sentinel wells (if none already exist) downgradient of the NAPL area. In some cases, installation of an automated recovery system may be deferred until downgradient migration of NAPL can be further assessed by routine monitoring of sentinel wells.

Finally, if after completion of the above evaluations it is determined that additional responses to the presence of NAPL are necessary, the physical characteristics of the area where the system would be located must be taken into consideration, as installation of a recovery system may not be practical in some areas. A generalized automated recovery system will involve a recovery well equipped with NAPL and/or groundwater removal pumps, a holding tank or vessel for the NAPL that is removed, and either piping to route purged groundwater to GE's treatment facility or a large holding tank to store groundwater for disposal (which would need to be accessible to a tanker truck). Some locations may not allow for the placement of these items due to physical or property ownership constraints. In those cases, it may be necessary to implement alternative response actions, such as increased manual monitoring/removal.

### 4.3 Groundwater Quality – Spring 2008

For the purpose of generally assessing current groundwater quality conditions, the analytical results from the spring 2008 groundwater sampling event were compared to the applicable groundwater Performance Standards for GMA 3. These Performance Standards are described in Section 4.2.1 above, and are currently based (on a well-specific basis) on the MCP Method 1 GW-2 and/or GW-3 standards. The following subsections discuss the spring 2008 groundwater analytical results in relation to these Performance Standards, as well as in relation to the MCP UCLs for groundwater. In support of those discussions, Tables 8 and 9 provide a comparison of the concentrations of detected constituents with the currently applicable GW-2 and GW-3 standards, respectively, while Table 10 presents a comparison of the concentrations of detected constituents with the groundwater UCLs.

#### 4.3.1 Groundwater Results Relative to GW-2 Performance Standards

Groundwater samples were collected from two designated GW-2 monitoring wells (i.e., wells 16B-R and 51-14) in spring 2008. The spring 2008 groundwater analytical results for all detected constituents subject to MCP Method 1 GW-2 standards and a comparison of those results with the applicable MCP Method 1 GW-2 standards are presented in Table 8. None of the spring 2008 sample results from GW-2 monitoring wells 16B-R or 51-14 exceeded the GW-2 standards and total VOC concentrations were well below 5 ppm (the level specified in the SOW as a notification level for GW-2 wells within 30 feet of a school or

occupied residential structure and as a trigger level for the proposal of interim response actions).

#### 4.3.2 Groundwater Results Relative to GW-3 Performance Standards

A total of seven monitoring wells at GMA 3 designated as GW-3 monitoring points (i.e., wells 6B-R, 82B-R, 89B, 90B, 95B-R, 111B-R, and 114B-R) were sampled in spring 2008. The spring 2008 groundwater analytical results for all detected constituents and a comparison of those results with the applicable MCP Method 1 GW-3 standards are presented in Table 9. As shown in Table 9, the GW-3 standard for chlorobenzene (1 ppm) was exceeded at three wells (6B-R, 95B-R, and 114 B-R) at concentrations of 2.5 ppm, 10.2 ppm and 1.4 ppm, respectively. It should be noted that the MCP GW-3 standard for PCBs was increased from 0.0003 ppm to 0.01 ppm as part of the February 14, 2008 revisions. Although no PCBs were detected in any filtered samples analyzed in spring 2008, all prior results from GMA 3 that were recorded as exceedances of the prior standard are below the new standard of 0.01 ppm.

The SOW requires that interim response actions must be proposed for baseline sampling results which exceed Method 1 GW-3 standards at downgradient perimeter monitoring wells, in which: (a) such an exceedance had not previously been detected, or (b) there was a previous exceedance of the Method 1 GW-3 standard and the groundwater concentration is greater than or equal to 100 times the GW-3 standard (if the exceedance was not previously addressed). These interim response actions may include: (1) further assessment activities, such as resampling, increasing the sampling frequency to quarterly, additional well installation, and/or continuing the baseline monitoring program; (2) active response actions; and/or (3) the conduct of a site-specific risk evaluation and proposal of alternative risk-based GW-3 Performance Standards.

For the three wells where the Method 1 GW-3 standards for chlorobenzene was exceeded (6B-R, 95B-R and 114B-R), historical VOC data has shown similar or greater concentrations than those detected during spring 2008. In addition, these wells are located in the vicinity of a known chlorobenzene plume. Therefore, GE's proposed response action to address these exceedances is to continue the natural attenuation monitoring program at these locations, as discussed further in Section 5 below.

#### 4.3.3 Groundwater Results Relative to Upper Concentration Limits

In addition to comparing the spring 2008 groundwater analytical results with applicable MCP Method 1 GW-2 and GW-3 standards, all detected constituents have also been compared with the groundwater UCLs specified in the MCP (310 CMR 40.0996(7)), as presented in Table 10. The results shown on Table 10 indicate that one constituent

(chlorobenzene) was detected at levels above the applicable UCL. The UCL for chlorobenzene is 10 ppm, which was exceeded at natural attenuation wells 2A (77 ppm [97 ppm in the duplicate sample]), 16A (37 ppm), 39B-R (16 ppm), 89A (26 ppm), 89D-R (32 ppm), and 95B-R (10.2 ppm). Similar or higher chlorobenzene concentrations have previously been detected at all of these locations. Additionally, with the exception of well 95B-R, the UCL has also been previously exceeded at these locations. The spring 2008 concentration at well 95B-R (10.2 ppm) slightly exceeded the UCL (10 ppm) and the fall 2007 concentration (9.7 ppm). EPA and MDEP were informed of the new UCL exceedance at well 95B-R on May 29, 2008.

The screened intervals of three of these six wells are positioned at depths of approximately 50 feet bgs, indicating that the elevated chlorobenzene levels are associated with the mid-level groundwater unit, which is consistent with prior investigation results showing that the VOC plume is primarily present in the A-series wells to the south of the former Waste Stabilization Basin. Well 39B-R is a water table well located immediately adjacent to the downgradient edge of the former Waste Stabilization Basin. Well 95B-R is a water table well located near the downgradient edge of the known chlorobenzene plume. In Section 5, GE proposes to continue the current natural attenuation monitoring at these locations to further assess the VOC concentrations in groundwater at this area.

#### 4.4 Natural Attenuation Monitoring Results

In addition to collecting and analyzing groundwater samples for comparison with the applicable MCP Method 1 groundwater standards and UCLs, groundwater samples from 22 monitoring wells were analyzed for natural attenuation parameters to assess intrinsic and natural processes that could mitigate groundwater impacts. The analytical results for these parameters (along with any detected VOCs) are provided in Table 11 and Appendix E. In addition, Table F-1 in Appendix F provides a summary of all available historical natural attenuation analytical data (as well as data for selected VOCs analyzed during the natural attenuation monitoring rounds) for the wells that were analyzed for these parameters in spring 2008.

As illustrated in Appendix F, the concentrations of VOCs have decreased significantly from their historical high levels at many locations that have large historical databases. The natural attenuation parameters can be variable at individual monitoring wells or on a spatial basis (both vertically and horizontally). Several natural attenuation parameters have remained relatively stable over time (e.g., alkalinity), or have only been occasionally observed at low levels (e.g., ethane and ethene). Chlorobenzene breakdown byproducts (i.e., 2- and 4-chlorophenol) are also observed in several wells, indicating the continued natural degradation of this constituent. GE will continue to track changes in concentrations of natural attenuation parameters during the course of the interim monitoring program and

will provide updated assessments of these results in future interim summary reports following sampling events when natural attenuation data is collected (i.e., after the spring groundwater quality monitoring rounds). A complete assessment of the natural attenuation parameters and their significance with respect to natural breakdown of VOC constituents in groundwater will be presented in the Baseline Assessment Final Report for this GMA.

Filtered samples from natural attenuation monitoring well 114A were also analyzed for PCBs, in accordance with EPA's December 7, 2006 conditional approval letter which required such analyses to be performed whenever samples from water table well 114B-R were analyzed for PCBs. This analysis was required to assess potential vertical migration of PCBs at this well cluster after an increase in PCB concentrations were observed at well 114B-R in spring 2006. No PCBs were detected in either well 114A or 114B-R in spring 2008, which is consistent with the previous sampling round performed at this well cluster in fall 2007. In Section 5.2 below, GE proposes to discontinue PCB analyses at these wells since the spring 2006 PCB results from well 114B-R appear to be anomalous and are well below the revised MCP Method 1 GW-3 standard for PCBs.

#### 4.5 Overall Assessment of Analytical Results

Graphs illustrating historical concentrations of total VOCs and total PCBs, including the spring 2008 concentrations, are provided in Appendix F for all wells sampled in spring 2008 that were analyzed for those constituents. In addition, Appendix F contains graphs of historical concentrations of individual constituents (i.e., benzene, carbon tetrachloride, and chlorobenzene) that exceeded the applicable MCP Method 1 GW-3 standards or UCLs at monitoring wells during any of the prior baseline monitoring program sampling events that were analyzed for those constituents in spring 2008.

Based on a review of the Concentration vs. Time graphs presented in Appendix F, it appears that concentrations of total VOCs have decreased in comparison to historical high levels in many of the wells downgradient of the former Waste Stabilization Basin, (i.e., the area known to contain the greatest VOC concentrations) where several years of prior data are available. While slight increases have been observed in a few wells during the baseline monitoring program, the constituent concentrations are generally well below historical high levels, particularly at wells (2A, 16A, 16C, 39B/B-R) that are closest to the waste stabilization basin. Total VOC concentrations have exhibited seasonal variation at well 6B/6B-R for the past several years. Specifically, VOC concentrations during the fall monitoring periods have trended upward since baseline monitoring was initiated in 2004, but remained at relatively low levels during the spring monitoring periods. To a lesser extent, the same trend is evident in the benzene and chlorobenzene concentrations at this well, although the chlorobenzene concentrations have decreased significantly from the historical high levels observed prior to the start of the baseline monitoring program. No

trends are evident in the carbon tetrachloride concentrations at well 51-14, as the concentrations have remained at relatively low levels since an exceedance of the Method 1 GW-2 standard for this constituent was observed in spring 2005.

For PCBs, no trends are evident on the historical concentration graphs in Appendix F. Well 82B-R contained PCB concentrations at or near the former GW-3 standard during three monitoring events between spring 2005 and 2006, but all PCB results from this well are well below the new GW-3 standard of 0.010 ppm. Further, no PCBs were detected in the well prior to that time or in the spring 2008 samples. At well 114B-R, the former GW-3 standard was exceeded in the samples analyzed in spring 2006, but no PCBs have been detected in filtered samples analyzed during any other round and the spring 2006 concentration is well below the new GW-3 standard. Based on a review of the data from this well, the spring 2006 result is likely anomalous.

#### **4.6 Evaluation of NAPL Monitoring and Recovery Activities**

##### **4.6.1 Extent of NAPL**

The historical maximum extent of measurable LNAPL at GMA 3 is illustrated on Figure 6. The extent of LNAPL observed during the spring 2008 semi-annual monitoring event is shown on Figure 7. These figures show a significant decrease in the extent of measurable LNAPL observed in spring 2008 (similar to the fall 2007 event) compared to the known maximum extent, particularly along the northeastern edge of the LNAPL area. This reduction in LNAPL extent on the northeastern portion of the LNAPL plume is likely attributable to GE's active NAPL recovery program, which includes automatic skimmer systems in wells 51-21 and GMA3-17, and routine manual recovery of LNAPL at surrounding locations.

GE has also monitored well GMA4-3, located in GMA 4 across Plastics Avenue from well GMA3-13. NAPL has never been detected in that well. Moreover, in EPA's December 7, 2006 conditional approval letter, EPA required GE to include GMA 4 wells 60B and RF-14 in the groundwater elevation table and contour map for GMA 3. Accordingly, GE has included those wells in this report. Except for the potential presence of LNAPL in well GMA3-11 (based on a single suspect instrument reading in spring 2007), the reduction of LNAPL along the northern edge of the LNAPL area and occasional variations in LNAPL presence in well GMA3-13, the extent of LNAPL has remained relatively consistent in recent years.

#### 4.6.2 NAPL Recovery

As discussed in Section 2.4, approximately 35 gallons of LNAPL were recovered at GMA 3 in spring 2008. Of this total, approximately 12.8 gallons were removed by the automated skimmer system at well 51-21, approximately 14.5 gallons were removed by the new automated skimmer system at well GMA3-17, and the remaining 7.7 gallons were manually recovered from other monitoring wells (see Tables 5 and 6). For comparison, over the same time period in spring 2007, approximately 36.9 gallons of LNAPL were recovered at GMA 3 (approximately 31.6 gallons by the automated skimmer system at well 51-21, and approximately 5.3 gallons from other monitoring wells), indicating that the LNAPL recovery volume has been generally consistent with the prior year. Since 1997, approximately 1,449 gallons of LNAPL have been removed from GMA 3 as part of GE's NAPL monitoring and recovery program.

Per Condition 4 of EPA's Conditional approval letter of the fall 2007 GMA 3 NAPL Monitoring Report dated April 23, 2008, GE has evaluated if a connection exists between groundwater elevations and LNAPL recovery volumes at GMA 3. The graphs presented in Appendix B compare the volumes of LNAPL recovered on a quarterly basis since summer 2000 to the average quarterly groundwater elevations of the wells within or adjacent to the known LNAPL area. A graph illustrating the data comparisons for the overall time period for which data were available (i.e., all results from summer 2003 to spring 2008) is presented to assess variations in groundwater elevations and LNAPL recovery between quarters. In addition, graphs of the data from each individual quarter are provided to assess if LNAPL recovery varied based on isolated wet or dry seasons over the same time period.

As shown in the overall data graph, Quarters 3 (July through September) and 4 (October through December), which are typically the seasons with decreased overall groundwater elevations, contained the greatest LNAPL removal during any given year. Quarter 2 (April through June) showed the least LNAPL recovery and the most elevated groundwater elevations compared to the other quarters. However, a review of the graphs for the individual quarters shows that there is only a slight correlation between ground water elevations and the recovery of LNAPL. Overall, groundwater elevations are relatively consistent in this area (generally slightly above or below 987 feet AMSL), and even more so when comparing data over the same time period from year to year, while the volume of LNAPL recovered showed a much greater degree of variation, even between quarters with similar average groundwater elevations.

Although these results may indicate a possibility of a correlation between lower groundwater elevations and higher LNAPL recovery, the relationship is not clearly established and does not appear to be sufficiently significant to warrant modifications to the ongoing NAPL recovery program to optimize recovery.



## 5. Proposed Groundwater and NAPL Monitoring Program Modifications

### 5.1 General

The interim monitoring program now being conducted is designed to continue the natural attenuation monitoring program and obtain additional data from locations where it is not yet clear whether the initial baseline groundwater quality results indicate that the well may require future monitoring in a long-term program.

This section contains GE's evaluation of the effect on the interim groundwater quality monitoring program of the recent revisions to the MCP Method 1 standards and UCLs for groundwater that became effective on February 14, 2008, and a description of GE's proposed modifications to the monitoring program. In light of the new standards, GE has re-evaluated the analytical results from the baseline and interim monitoring program to determine whether, and, if so, how the new Performance Standards should alter the wells and/or parameters included in the interim monitoring program. GE has also reviewed the groundwater analytical data from the spring 2008 interim sampling event for results that, independent of the changes in standards, would indicate the need to modify the interim monitoring program. The results of that evaluation and resulting proposed program modifications are discussed in Section 5.2 below.

### 5.2 Evaluation and Proposed Modifications to Interim Monitoring Program

In the Fall 2005 GMA 3 Baseline Report, GE presented an evaluation of the baseline monitoring results from GMA 3 and proposed to retain certain wells for selected analyses in the interim monitoring program to provide additional data to assist in the determination of whether long-term monitoring would be necessary. Generally speaking, wells that contained constituent concentrations near the values of the future Performance Standards (i.e., average concentrations ranging from greater than 50% of an applicable MCP Method 1 Standard to slightly above the standard) were retained for interim monitoring. In addition, selected wells/analyses were added to the interim monitoring program regardless of constituent concentrations relative to standards based on their location in areas of interest (e.g., adjacent to known source areas and upgradient from occupied buildings), or if constituent concentrations exhibited an increasing trend during the course of baseline monitoring. Groundwater quality monitoring was proposed to be discontinued at locations where constituent concentrations were well below the applicable MCP Method 1 Standards and at locations where concentrations consistently exceeded the standards, as it was apparent that such locations either would not or would be included in a long-term monitoring program.

Following revisions to the MCP that became effective on April 3, 2006, GE repeated that evaluation, comparing all baseline and interim groundwater quality data to the new (“Wave 2”) MCP Method 1 Standards. Based on the same inclusion criteria utilized in fall 2005 at GMA 3 (and at the other GMAs once their two-year baseline monitoring periods expired), GE’s assessment indicated that certain baseline wells that were previously excluded from the interim monitoring program based on historical concentrations of certain constituents that were above the levels of the previously-effective MCP Method 1 standards either were much closer to the MCP Method 1 standards, such that interim monitoring was warranted to assess the need for inclusion of these locations in a long-term monitoring program, or were sufficiently below the MCP Method 1 standards such that further monitoring was not considered necessary. GE’s assessment also indicated that certain wells previously included in the interim monitoring program based on historical concentrations of certain constituents near the levels of the prior MCP Method 1 standards were no longer of interest based on an increase in those standards. In the Spring 2006 GMA 3 Baseline Report, GE identified locations that should be added to the interim monitoring program and proposed to modify the interim monitoring program accordingly. Following EPA conditional approval of those modifications, GE implemented the revised interim monitoring program.

In light of the recent revisions to the MCP that became effective on February 14, 2008, GE has performed a similar evaluation to that conducted in 2006. Specifically, GE initially researched the GMA 3 database for any baseline analytical results where constituent concentrations of at least 50% of an applicable MCP Method 1 Standard were recorded. Any such locations/results were selected for further evaluation, consisting of a statistical evaluation of the constituents at each location, calculation of average concentrations, and a general review of concentrations over time to determine if an increasing trend may be present.

GE has identified several locations that should be added to or removed from the interim monitoring program and therefore proposes to modify the interim monitoring program. These modifications are discussed below. In particular, the modification of the Method 1 GW-3 standard for PCBs (from 0.0003 ppm to 0.010 ppm) has reduced the uncertainty of whether long-term monitoring for PCBs will be necessary to demonstrate compliance with the new GW-3 standard and a corresponding reduction in the GW-3 monitoring wells to be analyzed for PCBs during the interim monitoring program is proposed below.

In addition, as a new Method 1 GW-2 standard for PCBs has been promulgated in the 2008 MCP revision, GE evaluated the existing data from the GW-2 wells at GMA 3 to determine if additional sampling would be required to verify compliance with this new standard. As agreed with EPA, GE used filtered PCB results for this comparison. GE found that the existing PCB database for all dual-purpose GW-2/GW-3 monitoring wells was sufficient, but

that the wells monitored solely for GW-2 compliance were not analyzed for PCBs during the baseline monitoring program, since no GW-2 standard for PCBs was in effect at the time the sampling was performed. As such, GE has proposed to conduct additional sampling for PCBs at those locations, as discussed below.

A summary of the proposed interim sampling program for GMA 3 is provided in Table 12, and the locations where sampling is proposed are illustrated on Figure 8. Specifically, GE proposes the following:

- Average filtered PCB concentrations are well below the new MCP GW-3 standard at all of the wells that are currently analyzed for PCBs under the interim monitoring program. As such, GE proposes that PCB analyses be discontinued at wells 82B-R and 114B-R, which are designated as GW-3 perimeter wells.
- In addition, GE proposes discontinuing monitoring at well 114A, where supplemental PCB analysis was performed to assess vertical migration of PCBs from the vicinity of water table well 114B-R through the water column at this well cluster. No PCBs have been detected in well 114A and, as discussed above, the PCB levels observed in well 114B-R (including the anomalous results from the spring 2006 sampling event) are well below the new MCP GW-3 standard.
- PCB sampling is proposed at the seven GW-2 monitoring wells that were sampled solely for VOCs during the baseline monitoring program. These wells are: 16B-R, 51-14, GMA3-2, GMA3-4, GMA3-8, GMA3-9, and OBG-2.

The wells proposed to be sampled and analyzed for PCBs for comparison to the new GW-2 standard are proposed to be sampled on a semi-annual basis until four sets of PCB data have been collected. At that time, GE will evaluate the data and propose whether to discontinue additional sampling or to add the well to the ongoing interim or long-term monitoring program at GMA 3. As agreed with EPA, GE will analyze filtered groundwater samples for comparison with the GW-2 standard.

The modification to the interim sampling program discussed above (i.e., semi-annual analysis for PCBs at selected GW-2 monitoring wells) is proposed to be initiated in fall 2008. Additional details on the sampling and reporting schedule at GMA 3 are provided in Section 6 below.

### **5.3 NAPL Monitoring Program Modifications**

As discussed in Section 2.2 above, GE will re-develop wells 51-7, 51-9, 51-13, and 59-1 to remove sediment which prohibited the collection of groundwater elevation data in fall 2007. GE will conduct those activities in September 2008 to allow the wells to stabilize prior to the fall 2008 monitoring event. If re-development of those wells is unsuccessful, GE will discuss the need for additional response actions (e.g., well replacement or substitutions in the monitoring program) with EPA. No other changes to GE's ongoing NAPL monitoring or recovery activities at GMA 3 are proposed at this time.

## 6. Schedule of Future Activities

### 6.1 General

This section addresses the schedule for upcoming groundwater quality monitoring activities and reporting for GMA 3. This schedule assumes that the modifications to the interim groundwater monitoring program proposed in Section 5 will be implemented following EPA approval.

### 6.2 Field Activities Schedule

GE will continue its routine groundwater elevation and NAPL monitoring according to the current schedule approved by EPA. Also, as discussed in Section 5.3 above, GE will re-develop selected wells in September 2008. In accordance with the approved semi-annual monitoring schedule, the fall 2008 groundwater elevation monitoring and NAPL monitoring event is scheduled to be completed in October 2008. GE will conduct a NAPL bailing round approximately one to two weeks prior to the fall 2008 semi-annual NAPL monitoring event.

GE will conduct the fall 2008 interim groundwater sampling event at GMA 1 in October to November 2008, in conjunction with groundwater sampling activities that will be performed at the other GMAs. That sampling event will consist of the initial semi-annual sampling and analysis of filtered samples for PCBs at the GW-2 monitoring locations where compliance with the new MCP Method 1 GW-2 standard for PCBs was not verified during the initial baseline monitoring program (see Table 12). Approximately one month prior to that sampling event, GE will inspect and re-develop selected GW-2 monitoring wells that have not recently been utilized as part of the interim monitoring program.

The next natural attenuation monitoring event (conducted each spring) is scheduled for April 2009. GE will sample 22 wells, analyzing for VOCs and the natural attenuation parameters listed in Table 12.

Unlike the natural attenuation sampling, interim groundwater sampling activities alternate between the spring and fall seasons on an annual basis. The next full interim sampling event is scheduled for October 2009, when groundwater samples will be collected and analyzed for VOCs from monitoring wells 6B-R and 51-14, along with the continued semi-annual sampling and analysis for PCBs from the select GW-2 monitoring wells listed in Table 12.

As described in Appendix E (Sub-Slab Soil Gas and Indoor Air Investigation Summary Report for Buildings 51 & 59 - Fall 2007) of GE's Fall 2007 GMA 3 Monitoring Report, during October 2008 GE will conduct its annual inventory within Buildings 51 and 59 of materials and/or products that could contain volatile constituents similar to those that have been previously detected in the indoor air samples and are common to the target constituents in the LNAPL or groundwater. Shortly following completion of the building inventories, GE will perform additional monitoring of soil gas beneath, and indoor air within, Buildings 51 and 59 at or near the same locations that were sampled in fall 2007. That sampling will be performed in conjunction with the fall 2008 interim groundwater sampling event, or sequentially after completion of the groundwater sampling activities.

Prior to performance of field activities, GE will provide EPA with 7 days advance notice to allow the assignment of field oversight personnel.

### **6.3 Reporting Schedule**

GE will submit the *Groundwater Management Area 3 Groundwater Quality and NAPL Monitoring Interim Report for Fall 2008* by February 28, 2009, in accordance with the reporting schedule approved by EPA. That report will present the final, validated fall 2008 interim sampling results and a brief discussion of the results, including any proposals to further modify the interim monitoring program, if necessary. GE will also include the groundwater elevation monitoring results and NAPL monitoring and recovery data for the period of July 2008 through December 2008, along with a summary of other activities related to groundwater quality and NAPL monitoring recovery conducted at GMA 3 during that time period and any proposals to modify those activities, if applicable. Finally, that report will include the results of the fall 2008 round of Buildings 51 and 59 product inventories and sub-slab soil gas/indoor air sampling and analysis.

GE will also continue to provide the results of its ongoing groundwater, NAPL, soil gas, and indoor air monitoring activities and NAPL recovery efforts in its monthly reports on overall activities at the GE-Pittsfield/Housatonic River Site.

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**Tables**

**Table 1  
Groundwater Quality Monitoring Program Summary**

**Groundwater Quality and NAPL Monitoring Interim Report for Spring 2008  
Groundwater Management Area 3  
General Electric Company - Pittsfield, Massachusetts**

Well Number	Well Designation / Analytical Category	Sampling Schedule	Analyses	Comments
2A	Natural Attenuation	Annual <sup>(1)</sup>	See Note 3	
6B-R	GW-3 Perimeter	Annual <sup>(2)</sup>	VOC	
16A	Natural Attenuation	Annual <sup>(1)</sup>	See Note 3	
16B-R	GW-2 Sentinel/Natural Attenuation	Annual <sup>(1)</sup>	See Note 4	
16C-R	Natural Attenuation	Annual <sup>(1)</sup>	See Note 4	
39B-R	Natural Attenuation	Annual <sup>(1)</sup>	See Note 3	
39D-R	Natural Attenuation	Annual <sup>(1)</sup>	See Note 4	
39E	Natural Attenuation	Annual <sup>(1)</sup>	See Note 4	
43A	Natural Attenuation	Annual <sup>(1)</sup>	See Note 4	
43B	Natural Attenuation	Annual <sup>(1)</sup>	See Note 4	
51-14	GW-2 Sentinel	Annual <sup>(2)</sup>	VOC	
82B-R	GW-3 Perimeter	Annual <sup>(2)</sup>	PCB	
89A	Natural Attenuation	Annual <sup>(1)</sup>	See Note 3	
89B	GW-3 Perimeter/Natural Attenuation	Annual <sup>(1)</sup>	See Note 3	
89D-R	Natural Attenuation	Annual <sup>(1)</sup>	See Note 4	
90A	Natural Attenuation	Annual <sup>(1)</sup>	See Note 4	
90B	GW-3 Perimeter/Natural Attenuation	Annual <sup>(1)</sup>	See Note 4	
95A	Natural Attenuation	Annual <sup>(1)</sup>	See Note 3	
95B-R	GW-3 Perimeter/Natural Attenuation	Annual <sup>(1)</sup>	See Note 3	
111A-R	Natural Attenuation	Annual <sup>(1)</sup>	See Note 4	
111B-R	GW-3 Perimeter/Natural Attenuation	Annual <sup>(1)</sup>	See Note 4	
114A	Natural Attenuation / Supplemental	Annual <sup>(1,2)</sup>	See Note 5	Supplemental sampling conducted for PCBs to assess results from GW-3 well 114B-R



**Table 1  
Groundwater Quality Monitoring Program Summary**

**Groundwater Quality and NAPL Monitoring Interim Report for Spring 2008  
Groundwater Management Area 3  
General Electric Company - Pittsfield, Massachusetts**

Well Number	Well Designation / Analytical Category	Sampling Schedule	Analyses	Comments
114B-R	GW-3 Perimeter/Natural Attenuation	Annual <sup>(1,2)</sup>	See Note 5	
115A	Natural Attenuation	Annual <sup>(1)</sup>	See Note 4	
115B	Natural Attenuation	Annual <sup>(1)</sup>	See Note 4	

Notes:

1. Wells sampled under the natural attenuation monitoring program are sampled on an annual basis in the spring.
2. Wells designated for annual interim groundwater quality sampling, will be sampled for the listed parameters during the interim period between the completion of the baseline monitoring program and the initiation of a long-term monitoring program. The sampling schedule alternates between the spring and fall seasons each year.
3. Samples analyzed for: VOCs, two SVOCs (2-chlorophenol and 4-chlorophenol), and Natural Attenuation Parameters (methane, ethane, ethene, chloride, nitrate, nitrite, alkalinity, dissolved organic carbon, sulfate, and dissolved iron).
4. Samples analyzed for: VOCs and Natural Attenuation Parameters (methane, ethane, ethene, chloride, nitrate, nitrite, alkalinity, dissolved organic carbon, sulfate, and dissolved iron).
5. Samples analyzed for: VOCs and Natural Attenuation Parameters (methane, ethane, ethene, chloride, nitrate, nitrite, alkalinity, dissolved organic carbon, sulfate, and dissolved iron) during the spring natural attenuation sampling rounds, and PCBs (filtered samples only) during the alternating spring/fall interim sampling rounds.

**Table 2**  
**Groundwater Elevation/NAPL Monitoring Program Summary**

**Groundwater Quality and NAPL Monitoring Interim Report for Spring 2008**  
**Groundwater Management Area 3**  
**General Electric Company - Pittsfield, Massachusetts**

Well Number	Monitoring Frequency <sup>(1)</sup>	Manual NAPL Removal Criteria <sup>(2)</sup>	Comments
<b>GMA 3 Monitoring Wells</b>			
2A	Semi-Annual	Any Recoverable	
6B-R	Semi-Annual	Any Recoverable	
16A	Semi-Annual	Any Recoverable	
16B-R	Semi-Annual	Any Recoverable	
16C-R	Semi-Annual	Any Recoverable	
39B-R	Semi-Annual	Any Recoverable	
39D-R	Semi-Annual	Any Recoverable	Well 39D-R installed as a replacement for well 39D.
39E	Semi-Annual	Any Recoverable	
43A	Semi-Annual	Any Recoverable	
43B	Semi-Annual	Any Recoverable	
51-5	Monthly	Standard Criteria	
51-6	Monthly	Standard Criteria	
51-7	Monthly	Standard Criteria	
51-8	Weekly	Standard Criteria	
51-9	Monthly	Standard Criteria	
51-11	Monthly	Standard Criteria	
51-12	Monthly	Standard Criteria	
51-13	Monthly	Standard Criteria	
51-14	Monthly	Standard Criteria	
51-15	Monthly	Standard Criteria	
51-16R	Monthly	Standard Criteria	
51-17	Monthly	Standard Criteria	
51-18	Monthly	Standard Criteria	
51-19	Monthly	Standard Criteria	
51-21	None	LNAPL skimmer in operation	Periodic monitoring conducted as part of routine maintenance activities
54B-R	Semi-Annual	Any Recoverable	
59-1	Monthly	Standard Criteria	
59-3R	Monthly	Standard Criteria	
59-7	Monthly	Standard Criteria	
78B-R	Monthly	Any Recoverable	
82B-R	Semi-Annual	Any Recoverable	
89A	Semi-Annual	Any Recoverable	
89B	Semi-Annual	Any Recoverable	
89D-R	Semi-Annual	Any Recoverable	
90A	Semi-Annual	Any Recoverable	
90B	Semi-Annual	Any Recoverable	
95A	Semi-Annual	Any Recoverable	
95B-R	Semi-Annual	Any Recoverable	
111A-R	Semi-Annual	Any Recoverable	
111B-R	Semi-Annual	Any Recoverable	
114A	Semi-Annual	Any Recoverable	
114B-R	Semi-Annual	Any Recoverable	

**Table 2**  
**Groundwater Elevation/NAPL Monitoring Program Summary**

**Groundwater Quality and NAPL Monitoring Interim Report for Spring 2008**  
**Groundwater Management Area 3**  
**General Electric Company - Pittsfield, Massachusetts**

Well Number	Monitoring Frequency <sup>(1)</sup>	Manual NAPL Removal Criteria <sup>(2)</sup>	Comments
115A	Semi-Annual	Any Recoverable	
115B	Semi-Annual	Any Recoverable	
GMA3-1	None	None	Installation of this well has been deferred until re-routing of Unkamet Brook is completed.
GMA3-2	Semi-Annual	Any Recoverable	
GMA3-3	Semi-Annual	Any Recoverable	
GMA3-4	Semi-Annual	Any Recoverable	
GMA3-5	Semi-Annual	Any Recoverable	
GMA3-6	Semi-Annual	Any Recoverable	
GMA3-7	Quarterly	Any Recoverable	Monitored in place of UB-PZ-1.
GMA3-8	Semi-Annual	Any Recoverable	
GMA3-9	Semi-Annual	Any Recoverable	
GMA3-10	Weekly	Standard Criteria	
GMA3-11	Monthly	Any Recoverable	
GMA3-12	Weekly	Standard Criteria	
GMA3-13	Weekly	Any Recoverable	
GMA3-14	Monthly	Any Recoverable	
GMA3-15	Quarterly	Any Recoverable	Monitored in place of UB-PZ-2.
GMA3-16	Weekly	Any Recoverable	
GMA3-17	None	LNAPL skimmer in operation	Periodic monitoring conducted as part of routine maintenance activities
OBG-2	Semi-Annual	Any Recoverable	
UB-MW-10	Monthly	Any Recoverable	
UB-PZ-3	Monthly	Any Recoverable	
<b>GMA 4 Monitoring Wells</b>			
60B-R	Semi-Annual	Any Recoverable	
GMA4-3	Monthly	Any Recoverable	
RF-14	Semi-Annual	Any Recoverable	
<b>GMA 3 Staff Gauges</b>			
GMA3-SG-1	Semi-Annual	Not Applicable	
GMA3-SG-2	Semi-Annual	Not Applicable	
GMA3-SG-3	Semi-Annual	Not Applicable	
GMA3-SG-4	Semi-Annual	Not Applicable	

Notes:

- Monitoring consists of periodic depth to water and NAPL thickness measurements, if present, and may also consist of manual removal of NAPL if thickness greater than the well-specific criteria is observed during a monitoring event.
- Standard LNAPL Removal Criteria: LNAPL is manually removed from a well with this designation if a thickness of greater than 0.25 feet is observed during a monitoring event. At other wells, any recoverable quantities of LNAPL will be removed (except at wells 51-21 and GMA3-17, which are equipped with automated skimmers).
- Any NAPL observed during the bailing round conducted prior to the spring and fall semi-annual monitoring events is manually removed.
- No NAPL is manually removed from any wells during the spring and fall semi-annual monitoring events, provided that NAPL was removed during bailing round.
- No NAPL is manually removed from any wells during non-routine data collection activities.

**Table 3  
Monitoring Well Construction Summary**

**Groundwater Quality and NAPL Monitoring Interim Report for Spring 2008  
Groundwater Management Area 3  
General Electric Company - Pittsfield, Massachusetts**

Well ID	Survey Coordinates		Well Diameter (inches)	Ground Surface Elevation (ft AMSL)	Measuring Point Elevation (ft AMSL)	Depth to Top of Screen (ft bgs)	Screen Length (ft)	Top of Screen Elevation (ft AMSL)	Base of Screen Elevation (ft AMSL)	Average Depth to Groundwater (ft bgs)	Average Groundwater Elevation (ft AMSL)
	Northing	Easting									
2A	537005.10	138853.90	1.00	991.50	994.16	45.00	5.00	946.50	941.50	5.8	985.73
6B-R	537191.50	138910.00	2.00	991.40	993.62	2.00	10.00	989.40	979.40	4.8	986.63
16A	536730.50	139115.60	2.00	991.50	991.77	44.00	6.00	947.50	941.50	6.9	984.59
16B-R	536738.18	139076.37	2.00	991.80	994.87	3.08	10.00	988.72	978.72	6.2	985.59
16C-R	536734.00	139112.40	2.00	991.40	993.23	90.00	10.00	901.40	891.40	7.7	983.67
16E	536730.30	139112.70	1.00	991.40	992.14	144.00	6.00	847.40	841.40	7.2	984.18
34B	536293.70	138394.20	2.00	1,000.50	1,000.56	20.00	5.00	980.50	975.50	14.9	985.60
35B	536443.40	138525.40	2.00	998.03	997.36	18.00	5.00	980.03	975.03	12.6	985.40
39B-R	536938.60	138862.60	2.00	992.29	991.97	4.00	10.00	988.29	978.29	6.8	985.50
39D-R	536941.50	138854.80	2.00	992.30	994.73	55.00	10.00	937.30	927.30	6.3	985.95
39E	536932.10	138851.00	4.00	992.34	992.21	225.00	10.00	767.34	757.34	5.8	986.49
43A	538081.20	137905.90	1.00	991.90	993.79	45.00	5.00	946.90	941.90	5.1	986.81
43B	538081.20	137904.40	1.00	991.90	993.61	15.00	5.00	976.90	971.90	4.2	987.75
50B	538647.00	139106.20	2.00	989.76	991.76	8.50	5.00	981.26	976.26	1.1	988.67
51-05	536750.50	138335.60	2.00	996.91	996.44	5.00	10.00	991.91	981.91	10.5	986.39
51-06	536937.64	138194.32	2.00	997.57	997.36	5.00	10.00	992.57	982.57	10.9	986.70
51-07	536843.80	138244.60	2.00	997.26	997.08	5.00	10.00	992.26	982.26	10.6	986.66
51-08	536677.80	138317.00	2.00	997.39	997.08	5.00	10.00	992.39	982.39	11.2	986.19
51-09	536563.70	138370.30	2.00	997.76	997.70	5.00	10.00	992.76	982.76	10.2	987.56
51-11	536860.00	138774.50	2.00	994.62	994.37	5.00	10.00	989.62	979.62	8.6	986.04
51-12	536497.30	138518.50	2.00	996.83	996.55	5.00	10.00	991.83	981.83	7.6	989.26
51-13	536917.10	138579.80	2.00	997.68	997.42	5.00	10.00	992.68	982.68	9.2	988.46
51-14	536771.40	138502.60	2.00	996.93	996.77	5.00	10.00	991.93	981.93	10.7	986.24
51-15	536808.20	138306.30	2.00	996.68	996.43	5.00	10.00	991.68	981.68	10.4	986.33
51-16R	536830.20	138347.60	2.00	996.70	996.39	5.00	10.00	991.70	981.70	10.2	986.50
51-17	536769.90	138377.40	2.00	996.48	996.43	5.00	10.00	991.48	981.48	10.0	986.44
51-18	536902.90	138463.40	2.00	997.38	997.12	5.00	10.00	992.38	982.38	11.0	986.36
51-19	536823.20	138414.80	2.00	996.65	996.43	5.00	10.00	991.65	981.65	10.5	986.13
51-21	536767.70	138442.35	4.00	996.70*	1,001.49	5.00	10.00	991.70	981.70	10.4	986.28
54B-R	537827.30	139113.60	2.00	989.00	991.49	3.00	10.00	986.00	976.00	2.2	986.80
59-01	536488.80	138238.60	2.00	997.78	997.52	4.00	20.00	993.78	973.78	10.9	986.89
59-03R	536501.00	138260.70	2.00	997.82	997.64	7.30	10.00	990.52	980.52	11.5	986.34
59-07	536517.40	138296.10	2.00	998.27	997.96	4.00	20.00	994.27	974.27	11.8	986.42

**Table 3  
Monitoring Well Construction Summary**

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Groundwater Management Area 3  
General Electric Company - Pittsfield, Massachusetts**

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	Northing	Easting									
74B	537490.90	138374.90	1.00	996.05	995.54	15.00	5.00	981.05	976.05	8.1	987.97
78B-R	537551.80	138716.50	2.00	989.11	988.83	1.82	10.00	987.29	977.29	1.6	987.48
82B-R	536937.40	139621.60	2.00	987.80	989.90	2.00	10.00	985.80	975.80	2.5	985.33
89A	536030.80	139413.40	1.00	983.60	985.76	43.00	5.00	940.60	935.60	0.8	982.81
89B	536031.60	139411.70	2.00	983.10	986.03	4.00	3.00	979.10	976.10	-0.4	983.48
89D-R	536072.20	139434.90	2.00	984.40	987.11	67.50	10.00	916.90	906.90	1.4	983.00
90A	536254.90	139765.40	1.00	986.50	988.07	45.00	5.00	941.50	936.50	3.7	982.79
90B	536251.60	139761.00	2.00	986.50	989.10	8.00	3.00	978.50	975.50	3.9	982.56
95A	535822.10	139769.60	1.00	985.30	987.18	45.00	5.00	940.30	935.30	4.4	980.94
95B-R	535637.20	139722.30	2.00	984.30	986.24	3.00	10.00	981.30	971.30	3.5	980.75
95C	535823.20	139780.30	1.00	985.30	988.16	95.00	5.00	890.30	885.30	1.2	984.07
111A-R	535824.10	139087.80	2.00	995.10	997.35	40.00	10.00	955.10	945.10	11.5	983.61
111B-R	535828.40	139092.00	2.00	994.80	997.48	7.18	10.00	987.62	977.62	11.7	983.12
114A	535499.50	139775.20	1.00	983.20	986.16	45.00	5.00	938.20	933.20	3.6	979.64
114B-R	535503.90	139786.90	2.00	983.50	985.54	4.00	10.00	979.50	969.50	4.1	979.36
114C	535500.50	139792.80	1.00	983.70	986.68	88.00	5.00	895.70	890.70	3.8	979.91
115A	N/A	N/A	1.00	986.69	988.53	36.00	5.00	950.69	945.69	7.8	978.89
115B	N/A	N/A	1.00	988.25	990.90	11.00	5.00	977.25	972.25	8.4	979.89
115C	N/A	N/A	1.00	987.24	988.37	109.00	5.00	878.24	873.24	10.1	977.12
GMA3-2	536596.40	138956.60	2.00	992.25	991.94	5.19	10.00	987.06	977.06	7.9	984.34
GMA3-3	538094.20	138178.20	2.00	990.86	990.45	2.00	10.00	988.86	978.86	2.1	988.81
GMA3-4	537044.70	138021.80	2.00	994.94	994.60	3.57	10.00	991.37	981.37	7.6	987.39
GMA3-5	537323.20	139766.90	2.00	991.50	993.67	4.00	10.00	987.50	977.50	5.5	985.96
GMA3-6	537021.50	138342.30	2.00	997.74	997.49	8.00	10.00	989.74	979.74	12.3	985.49
GMA3-7	536291.70	138397.40	2.00	1000.45	1000.17	10.00	10.00	990.45	980.45	13.1	987.36
GMA3-8	536339.60	138899.10	2.00	994.50	996.24	5.00	10.00	989.50	979.50	8.8	985.68
GMA3-9	537383.20	138385.60	2.00	992.90	992.39	3.00	10.00	989.90	979.90	5.3	987.59
GMA3-10	536659.10	138056.40	2.00	997.78	997.54	9.00	10.00	988.78	978.78	11.0	986.77
GMA3-11	536353.70	138147.90	2.00	997.78	997.25	9.00	10.00	988.78	978.78	10.8	987.03
GMA3-12	536469.20	138169.70	4.00	998.04	997.84	7.00	15.00	991.04	976.04	11.3	986.69
GMA3-13	536534.30	138035.90	2.00	998.00	997.73	8.06	10	989.94	979.94	11.3	986.66
GMA3-14	536710.30	137953.20	2.00	997.66	997.42	7.25	10	990.41	980.41	10.7	986.92
GMA3-15	536710.30	137953.20	2.00	994.60	996.74	6.00	10.00	988.60	978.60	9.0	985.60

**Table 3  
Monitoring Well Construction Summary**

**Groundwater Quality and NAPL Monitoring Interim Report for Spring 2008  
Groundwater Management Area 3  
General Electric Company - Pittsfield, Massachusetts**

Well ID	Survey Coordinates		Well Diameter (inches)	Ground Surface Elevation (ft AMSL)	Measuring Point Elevation (ft AMSL)	Depth to Top of Screen (ft bgs)	Screen Length (ft)	Top of Screen Elevation (ft AMSL)	Base of Screen Elevation (ft AMSL)	Average Depth to Groundwater (ft bgs)	Average Groundwater Elevation (ft AMSL)
	Northing	Easting									
GMA3-16	537542.70	138665.00	2.00	989.80	989.26	2.00	10.00	987.80	977.80	1.5	988.27
GMA3-17	536497.80	138261.50	4.00	998.36	1,002.00	7.00	10.00	991.36	981.36	12.2	986.18
OBG-2	537209.10	139475.80	3.00	992.24	992.20	3.00	11.40	989.24	977.84	5.0	987.21
UB-MW-10	536908.10	138278.30	1.00	996.21	995.99	8.00	10.00	988.21	978.21	9.8	986.45
UB-PZ-1	536336.80	138383.90	1.00	999.00	999.70	9.00	5.00	990.00	985.00	12.2	986.77
UB-PZ-2	536726.10	138735.70	1.00	994.40	994.77	4.00	10.00	990.40	980.40	9.2	985.23
UB-PZ-3	536480.10	138110.00	1.00	998.55	998.15	11.00	5.00	987.55	982.55	12.3	986.28
<b>GMA 4 Monitoring Wells</b>											
60B-R	536021.40	138133.00	2.00	1,003.04	1,002.79	12.00	10.0	991.04	981.04	15.4	987.62
GMA4-3	536289.60	137999.80	2.00	1,004.14	1,003.95	16.09	10.0	988.05	978.05	17.5	986.64
RF-14	536833.60	137753.70	4.00	1,001.90	1,001.59	7.00	15.0	994.90	979.90	11.2	990.74

Notes:

1. The listed wells have been utilized for baseline/interim groundwater quality sampling, groundwater elevation/NAPL monitoring, or hydraulic conductivity testing.
2. ft AMSL: Feet above mean sea level
3. ft bgs: Feet below ground surface
4. ft: Feet
5. N/A: Information not available.

**Table 4**  
**Groundwater Elevation Data - Spring 2008**

**Groundwater Quality and NAPL Monitoring Interim Report for Spring 2008**  
**Groundwater Management Area 3**  
**General Electric Company - Pittsfield, Massachusetts**

<b>Well Number</b>	<b>Overall Average Groundwater Elevation (ft AMSL)</b>	<b>Average Spring Groundwater Elevation (ft AMSL)</b>	<b>Spring 2008 Groundwater Elevation (ft AMSL)</b>	<b>Spring 2008 LNAPL Thickness (ft)</b>	<b>Spring 2008 DNAPL Thickness (ft)</b>
<b>GMA3 Monitoring Wells Screened at Water Table</b>					
02A	985.73	986.64	986.93	0.00	0.00
6B-R	986.63	987.26	987.06	0.00	0.00
16B-R	985.59	985.90	986.06	0.00	0.00
39B-R	985.50	986.22	986.50	0.00	0.00
43B	987.75	987.94	988.44	0.00	0.00
50B	988.67	989.08	989.30	0.00	0.00
51-05	986.71	986.85	987.69	0.00	0.00
51-06	987.04	987.26	988.25	0.00	0.00
51-07	987.11	987.04	987.92	0.00	0.00
51-08	986.54	986.83	987.71	0.02	0.00
51-09	987.96	988.22	988.67	0.00	0.00
51-11	986.31	986.98	987.58	0.00	0.00
51-12	989.50	989.58	989.50	0.00	0.00
51-13	989.27	987.52	<987.61	0.00	0.00
51-14	986.58	986.74	987.36	0.00	0.00
51-15	986.65	986.89	987.75	0.01	0.00
51-16R	986.86	986.92	987.67	0.01	0.00
51-17	986.81	987.00	987.80	0.02	0.00
51-18	986.70	986.83	987.56	0.00	0.00
51-19	986.46	986.74	987.40	0.01	0.00
51-21	986.84	986.61	987.61	<0.01	0.00
54B-R	986.80	987.30	987.86	0.00	0.00
59-01	987.59	987.11	988.10	0.00	0.00
59-03R	986.69	986.89	987.95	0.01	0.00
59-07	986.79	986.96	987.81	0.01	0.00
78B-R	987.48	987.78	988.63	0.00	0.00
82B-R	985.33	986.53	986.66	0.00	0.00
89B	983.48	983.35	983.55	0.00	0.00
90B	982.56	983.25	983.58	0.00	0.00
95B-R	980.75	980.97	981.00	0.00	0.00
111B-R	983.12	983.79	984.01	0.00	0.00
114B-R	979.36	979.77	980.37	0.00	0.00
115B	979.89	980.25	981.19	0.00	0.00
GMA3-2	984.34	985.17	985.78	0.00	0.00
GMA3-3	988.81	989.85	989.90	0.00	0.00
GMA3-4	987.39	988.28	989.10	0.00	0.00
GMA3-5	985.96	986.66	986.66	0.00	0.00
GMA3-6	985.49	985.68	982.29	0.00	0.00
GMA3-7	987.36	987.58	988.22	0.00	0.00
GMA3-8	985.68	986.96	986.92	0.00	0.00
GMA3-9	987.59	988.46	989.21	0.00	0.00
GMA3-10	987.47	987.54	988.03	0.81	0.00
GMA3-11	987.68	987.76	988.13	0.00	0.00
GMA3-12	987.42	987.37	987.93	0.12	0.00
GMA3-13	987.61	987.53	987.98	0.11	0.00
GMA3-14	987.84	987.65	988.10	0.00	0.00
GMA3-15	987.06	986.44	986.64	0.00	0.00
GMA3-16	988.27	988.66	988.86	0.00	0.00
GMA3-17	986.18	986.70	986.70	<0.01	0.00
OBG-2	987.21	987.84	987.99	0.00	0.00
UB-MW-10	986.76	986.94	987.83	0.00	0.00
UB-PZ-3	986.65	986.66	987.83	0.57	0.00

**Table 4**  
**Groundwater Elevation Data - Spring 2008**

**Groundwater Quality and NAPL Monitoring Interim Report for Spring 2008**  
**Groundwater Management Area 3**  
**General Electric Company - Pittsfield, Massachusetts**

<b>Well Number</b>	<b>Overall Average Groundwater Elevation</b> <b>(ft AMSL)</b>	<b>Average Spring Groundwater Elevation</b> <b>(ft AMSL)</b>	<b>Spring 2008 Groundwater Elevation</b> <b>(ft AMSL)</b>	<b>Spring 2008 LNAPL Thickness</b> <b>(ft)</b>	<b>Spring 2008 DNAPL Thickness</b> <b>(ft)</b>
<b>GMA4 Monitoring Wells Screened at Water Table</b>					
60B-R	987.62	988.25	989.69	0.00	0.00
GMA4-3	986.64	987.06	988.04	0.00	0.00
RF-14	990.74	993.45	994.85	0.00	0.00
<b>Monitoring Wells Screened Below Water Table</b>					
16A	984.59	985.46	985.57	0.00	0.00
16C-R	983.67	985.41	986.15	0.00	0.00
39D-R	985.95	986.56	987.03	0.00	0.00
39E	986.49	987.12	987.41	0.00	0.00
43A	986.81	987.89	988.97	0.00	0.00
89A	982.81	983.66	983.60	0.00	0.00
89D-R	983.00	983.77	983.82	0.00	0.00
90A	982.79	983.56	982.69	0.00	0.00
95A	980.94	981.08	981.12	0.00	0.00
111A-R	983.61	984.67	984.72	0.00	0.00
114A	979.64	980.19	980.99	0.00	0.00
115A	978.89	981.36	982.02	0.00	0.00
<b>GMA 3 Staff Gauges</b>					
GMA3-SG-1	NA	NA	993.23	0.00	0.00
GMA3-SG-2	NA	NA	984.16	0.00	0.00
GMA3-SG-3	NA	NA	994.41	0.00	0.00
GMA3-SG-4	NA	NA	989.42	0.00	0.00

Notes:

1. Groundwater elevation/NAPL thickness data collected on April 15 and 16, 2008.
2. Groundwater elevations denoted <## indicate that the well was dry on the date measured and the referenced elevation represents the base of well elevation.
3. Average groundwater elevations based on available seasonal groundwater elevation data since 2000.
4. NA - Data Not Available



**Table 5**  
**LNAPL Monitoring/Manual Recovery Data Summary**

**Groundwater Quality and NAPL Monitoring Interim Report for Spring 2008**  
**Groundwater Management Area 3**  
**General Electric Company - Pittsfield, Massachusetts**

Well Name	Number of Measurements	Measuring Point Elevation (Feet AMSL)	Depth to Water		LNAPL Observations			Manual LNAPL Recovery <sup>(7)</sup>	
			Minimum (Feet BMP)	Maximum (Feet BMP)	Times Observed	Minimum Thickness (Feet)	Maximum Thickness (Feet)	LNAPL Recovery (liters)	LNAPL Recovery (Gallons)
<b>GMA 3 Monitoring Wells</b>									
002A	2	994.16	7.23	7.54	0	---	---	0.00	0.00
6B-R	2	993.62	6.56	6.76	0	---	---	0.00	0.00
16A	2	991.77	6.20	6.48	0	---	---	0.00	0.00
16B-R	2	994.87	8.81	8.98	0	---	---	0.00	0.00
16C-R	2	993.23	7.08	7.30	0	---	---	0.00	0.00
39B-R	3	991.97	5.47	5.65	0	---	---	0.00	0.00
39D-R	3	994.73	7.70	7.99	0	---	---	0.00	0.00
39E	2	992.21	4.80	4.90	0	---	---	0.00	0.00
43A	3	993.79	4.82	4.93	0	---	---	0.00	0.00
43B	3	993.61	5.14	5.17	0	---	---	0.00	0.00
50B	1	991.76	2.46	2.46	0	---	---	0.00	0.00
51-05	7	996.44	3.78	9.99	0	---	---	0.00	0.00
51-06	6	997.36	9.11	10.60	0	---	---	0.00	0.00
51-07	6	997.08	9.16	10.60	0	---	---	0.00	0.00
51-08	27	997.08	9.30	12.03	27	0.01	1.13	3.02	0.80
51-09	6	997.70	9.09	10.40	0	---	---	0.00	0.00
51-11	6	994.37	6.60	8.10	0	---	---	0.00	0.00
51-12	6	996.55	6.85	7.75	0	---	---	0.00	0.00
51-13	6 <sup>4</sup>	997.42	Dry at 9.82-9.83 feet						
51-14	8	996.77	9.30	11.48	0	---	---	0.00	0.00
51-15	7	996.43	8.69	10.11	7	0.01	0.13	0.07	0.02
51-16R	7	996.39	8.73	10.04	4	0.01	0.05	0.00	0.00
51-17	7	996.43	8.65	10.99	7	0.02	1.23	1.01	0.27
51-18	6	997.12	9.56	10.70	0	---	---	0.00	0.00
51-19	7	996.43	9.02	10.74	7	0.01	0.59	0.39	0.10
51-21	26	1,001.49	13.70	15.69	25	<0.01	0.1	0.00	0.00

**Table 5  
LNAPL Monitoring/Manual Recovery Data Summary**

**Groundwater Quality and NAPL Monitoring Interim Report for Spring 2008  
Groundwater Management Area 3  
General Electric Company - Pittsfield, Massachusetts**

Well Name	Number of Measurements	Measuring Point Elevation (Feet AMSL)	Depth to Water		LNAPL Observations			Manual LNAPL Recovery <sup>(7)</sup>	
			Minimum (Feet BMP)	Maximum (Feet BMP)	Times Observed	Minimum Thickness (Feet)	Maximum Thickness (Feet)	LNAPL Recovery (liters)	LNAPL Recovery (Gallons)
54B-R	1	991.49	3.63	3.63	0	---	---	0.00	0.00
59-01	7	997.52	9.41	11.04	0	---	---	0.00	0.00
59-03R	7	997.64	9.70	12.30	7	0.01	1.6	2.59	0.68
59-07	7	997.96	9.36	12.18	7	0.01	0.78	0.53	0.14
78B-R	6	988.83	0.15	0.60	0	---	---	0.00	0.00
82B-R	2	989.90	3.24	3.47	0	---	---	0.00	0.00
89A	2	985.76	2.16	2.60	0	---	---	0.00	0.00
89B	2	986.03	2.48	2.91	0	---	---	0.00	0.00
89D-R	2	987.11	3.29	3.91	0	---	---	0.00	0.00
90A	2	988.07	5.38	5.47	0	---	---	0.00	0.00
90B	2	989.10	5.52	6.70	0	---	---	0.00	0.00
95A	2	987.18	6.06	6.81	0	---	---	0.00	0.00
95B-R	2	986.24	5.24	5.79	0	---	---	0.00	0.00
111A-R	2	997.35	12.63	13.27	0	---	---	0.00	0.00
111B-R	2	997.48	13.47	14.30	0	---	---	0.00	0.00
114A	2	986.16	5.17	5.98	0	---	---	0.00	0.00
114B-R	2	985.54	5.17	5.99	0	---	---	0.00	0.00
115A	2	988.53	6.51	8.12	0	---	---	0.00	0.00
115B	2	990.90	9.71	11.51	0	---	---	0.00	0.00
GMA3-2	1	991.94	6.16	6.16	0	---	---	0.00	0.00
GMA3-3	1	990.45	0.55	0.55	0	---	---	0.00	0.00
GMA3-4	1	994.60	5.50	5.50	0	---	---	0.00	0.00
GMA3-5	1	993.67	7.01	7.01	0	---	---	0.00	0.00
GMA3-6	1	997.49	15.20	15.20	0	---	---	0.00	0.00
GMA3-7	2	1,000.17	11.95	13.29	0	---	---	0.00	0.00
GMA3-8	1	996.24	9.32	9.32	0	---	---	0.00	0.00
GMA3-9	1	992.39	3.18	3.18	0	---	---	0.00	0.00

**Table 5**  
**LNAPL Monitoring/Manual Recovery Data Summary**

**Groundwater Quality and NAPL Monitoring Interim Report for Spring 2008**  
**Groundwater Management Area 3**  
**General Electric Company - Pittsfield, Massachusetts**

Well Name	Number of Measurements	Measuring Point Elevation (Feet AMSL)	Depth to Water		LNAPL Observations			Manual LNAPL Recovery <sup>(7)</sup>	
			Minimum (Feet BMP)	Maximum (Feet BMP)	Times Observed	Minimum Thickness (Feet)	Maximum Thickness (Feet)	LNAPL Recovery (liters)	LNAPL Recovery (Gallons)
GMA3-10	26	997.54	9.72	11.55	26	0.02	0.95	4.57	1.21
GMA3-11	24	997.25	8.98	12.40	0	---	---	0.00	0.00
GMA3-12	27	997.84	9.80	11.88	27	0.02	0.21	0.58	0.15
GMA3-13	26	997.73	9.59	11.65	22	0.01	0.48	1.31	0.35
GMA3-14	5	997.42	9.32	10.78	0	---	---	0.00	0.00
GMA3-15	2	996.74	10.10	10.92	0	---	---	0.00	0.00
GMA3-16	24	989.26	0.40	1.12	0	---	---	0.00	0.00
GMA3-17 <sup>6</sup>	27	1,002.00	15.18	16.80	25	<0.01	0.43	1.11	0.29
OBG-2	1	992.20	4.21	4.21	0	---	---	0.00	0.00
UB-MW-10	6	995.99	8.16	9.50	0	---	---	0.00	0.00
UB-PZ-3	7	998.15	10.85	12.03	7	0.11	0.64	0.30	0.08
<b>GMA 4 Monitoring Wells (Adjacent to GMA 3)</b>									
RF-14	1	1,001.59	6.74	6.74	0	---	---	0.00	0.00
GMA4-3	6	1,003.95	15.91	18.70	0	---	---	0.00	0.00
60B-R	1	1,002.79	13.1	13.10	0	---	---	0.00	0.00

**Total Amount of LNAPL Manually Recovered - January 2008 through June 2008:**

**15.47 liters**

**4.09 gallons**

**Notes:**

1. --- indicates LNAPL or DNAPL was not present in a measurable quantity.
2. ft BMP - feet Below Measuring Point.
3. ft AMSL - Feet Above Mean Sea Level
4. Groundwater was not present in the well at the time measurements were conducted.
5. ft AMSL - Feet Above Mean Sea Level
6. LNAPL recovery data for well GMA3-17 represents manual recovery prior to initiation of automated recovery operations in February 2008.
7. Automated LNAPL recovery data for wells GMA3-17 and well 51-21 is provided in Table 6.

**Table 6**  
**Automated LNAPL Recovery System Summary**

**Groundwater Quality and NAPL Monitoring Interim Report for Spring 2008**  
**Groundwater Management Area 3**  
**General Electric Company - Pittsfield, Massachusetts**

Removal Action Area / Recovery System	January 2008 LNAPL Recovery (Gallons)	February 2008 LNAPL Recovery (Gallons)	March 2008 LNAPL Recovery (Gallons)	April 2008 LNAPL Recovery (Gallons)	May 2008 LNAPL Recovery (Gallons)	June 2008 LNAPL Recovery (Gallons)	Spring 2008 Total LNAPL Recovery (Gallons)
51-21	3.7	4.2	1.4	1.6	1.4	0.5	12.8
GMA3-17	-- <sup>1</sup>	5.1	6.5	2.7	0.2	0.0	14.5

**GMA 3 TOTAL**                                      **Total Amount of LNAPL Recovered by Automated Skimmer Systems - January 2008 through June 2008:                      27.3**

Notes:

<sup>1</sup> Recovery Well GMA3-17 was placed into service on February 7, 2008.

**Table 7**  
**Field Parameter Measurements - Spring 2008**

**Groundwater Quality and NAPL Monitoring Interim Report for Spring 2008**  
**Groundwater Management Area 3**  
**General Electric Company - Pittsfield, Massachusetts**

Well Number	Turbidity (NTU)	Temperature (degrees Celsius)	pH (standard units)	Specific Conductivity (mS/cm)	Oxidation-Reduction Potential (mV)	Dissolved Oxygen (mg/L)
2A	1	10.73	8.24	0.394	-80.2	1.90
6B-R	3	7.33	7.17	0.644	-95.9	1.20
16A	27	14.77	7.93	5.503	-161.9	0.63
16B-R	3	10.65	7.25	1.805	-49.5	2.52
16C-R	5	11.05	7.97	0.244	136.5	1.66
39B-R	3	8.31	7.15	0.983	-39.2	3.67
39D-R	12	9.03	8.57	0.309	10.3	3.98
39E	10	11.64	7.04	0.260	-60.9	0.48
43A	10	8.86	7.20	1.081	-82.5	0.47
43B	4	8.64	7.34	1.176	-91.9	4.90
51-14	0	8.36	6.39	0.462	60.5	6.51
82B-R	1	6.43	6.29	0.566	2.8	0.81
89A	26	11.80	7.74	1.909	-170.3	0.53
89B	8	11.18	6.77	0.950	-67.3	1.32
89D-R	4	11.22	8.08	2.698	-102.8	1.08
90A	10	8.86	7.99	0.428	-157.6	3.62
90B	2	7.42	7.15	0.279	-116.8	0.84
95A	20	12.30	7.63	0.280	-139.4	1.01
95B-R	7	9.70	7.08	1.148	-53.8	0.48
111A-R	2	11.47	8.22	0.723	-11.3	2.06
111B-R	11	14.55	7.67	0.722	29.5	6.11
114A	11	14.99	8.08	0.383	-264.8	0.70
114B-R	6	12.68	7.19	1.019	-68.9	1.70
115A	4	8.64	7.80	0.308	-131.1	4.04
115B	2	7.44	6.86	0.514	-136.2	1.60

**Notes:**

1. Measurements collected during spring 2008 GMA 3 baseline monitoring program sampling activities conducted between April 30 and May 15, 2008.
2. Well parameters were generally monitored continuously during purging by low-flow techniques. Final parameter readings are presented.
3. NTU - Nephelometric Turbidity Units
4. mS/cm - Millisiemens per centimeter
5. mV - Millivolts
6. mg/L - Milligrams per liter (ppm)

**Table 8**  
**Comparison of Groundwater Analytical results to MCP Method 1 GW-2 Standards**

**Groundwater Quality and NAPL Monitoring Interim Report for Spring 2008**  
**Groundwater Management Area 3**  
**General Electric Company - Pittsfield, Massachusetts**  
**(Results are presented in parts per million, ppm)**

Parameter	Sample ID: Date Collected:	Method 1 GW-2 Standards	16B-R 05/01/08	51-14 05/02/08
<b>Volatile Organics</b>				
Benzene		2	0.00075 J	ND(0.0010)
Carbon Tetrachloride		0.002	ND(0.0010)	0.0013
Chlorobenzene		0.2	0.0011	ND(0.0010)
Chloroform		0.05	ND(0.0010)	0.0039
Trichloroethene		0.03	0.00044 J	ND(0.0010)
Total VOCs		5	0.0023 J	0.0052

Notes:

1. Samples were collected by ARCADIS and submitted to SGS Environmental Services, Inc. for analysis of volatiles, semivolatiles and natural attenuation parameters.
2. Samples have been validated as per Field Sampling Plan/Quality Assurance Project Plan (FSP/QAPP), General Electric Company, Pittsfield, Massachusetts, ARCADIS (approved March 15, 2007 and re-submitted March 30, 2007).
3. Only detected volatiles are summarized and presented for the MCP Method 1 GW-2 Standards Comparison.
4. Total VOC results are being compared to the notification level in the SOW of 5 ppm, as there is no MCP Method 1 GW-2 Standard for Total VOCs.

Data Qualifiers:

Organics (volatiles)

J - Indicates that the associated numerical value is an estimated concentration.

**Table 9**  
**Comparison of Groundwater Analytical Results to MCP Method 1 GW-3 Standards**

**Groundwater Quality and NAPL Monitoring Interim Report for Spring 2008**  
**Groundwater Management Area 3**  
**General Electric Company - Pittsfield, Massachusetts**  
**(Results are presented in parts per million, ppm)**

Parameter	Sample ID: Date Collected:	Method 1 GW-3 Standards	6B-R 05/02/08	82B-R 05/02/08	89B 05/05/08	90B 05/14/08	95B-R 05/08/08	111B-R 05/14/08	114B-R 05/13/08
<b>Volatile Organics</b>									
Benzene		10	4.3	NA	0.0067	ND(0.0010)	2.3	ND(0.0010)	0.020 J
Chlorobenzene		1	2.5	NA	0.048	ND(0.0010)	10	ND(0.0010)	1.4
Toluene		40	0.086 J	NA	ND(0.0020)	ND(0.0010)	ND(0.40)	ND(0.0010)	ND(0.040)
<b>PCBs-Filtered</b>									
None Detected		--	NA	--	NA	NA	NA	NA	--
<b>Semivolatile Organics</b>									
None Detected		--	NA	NA	--	NA	--	NA	NA
<b>Natural Attenuation Parameters</b>									
Alkalinity		Not Listed	NA	NA	160	110	240	160	230
Chloride		Not Listed	NA	NA	180	8.5	160	4.3	160
Dissolved Iron		Not Listed	NA	NA	0.902	3.68	0.0214 J	0.0449 J	0.0461 B
Dissolved Organic Carbon		Not Listed	NA	NA	5.28	5.77	3.92	1.31	4.61
Ethane		Not Listed	NA	NA	ND(0.020)	ND(0.020)	ND(0.10)	ND(0.020)	ND(0.10)
Ethene		Not Listed	NA	NA	ND(0.020)	ND(0.020)	ND(0.10)	ND(0.020)	ND(0.10)
Methane		Not Listed	NA	NA	0.338	0.0700	0.871	ND(0.00720)	1.32
Nitrate Nitrogen		Not Listed	NA	NA	ND(0.300)	ND(0.300)	ND(0.300)	4.29	ND(0.300)
Nitrite Nitrogen		Not Listed	NA	NA	ND(0.300)	ND(0.300)	ND(0.300)	ND(0.300)	ND(3.00)
Sulfate (turbidimetric)		Not Listed	NA	NA	0.582	12.1	4.76	169	9.43

**Notes:**

1. Samples were collected by ARCADIS and submitted to SGS Environmental Services, Inc. for analysis of volatiles, semivolatiles and natural attenuation parameters.
2. Samples have been validated as per Field Sampling Plan/Quality Assurance Project Plan (FSP/QAPP), General Electric Company, Pittsfield, Massachusetts, ARCADIS (approved March 15, 2007 and re-submitted March 30, 2007).
3. NA - Not Analyzed.
4. ND - Analyte was not detected. The number in parenthesis is the associated detection limit.
5. With the exception of natural attenuation parameters only those constituents detected in one or more samples are summarized.
6. Shading indicates that value exceeds GW-3 Standards.
7. -- Indicates that all constituents for the parameter group were not detected.

**Data Qualifiers:**

Organics (volatiles, semivolatiles)

B - Indicates an estimated value between the instrument detection limit (IDL) and practical quantitation limit (PQL).

**Table 10**  
**Comparison of Groundwater Analytical Results to MCP UCLs for Groundwater**

**Groundwater Quality and NAPL Monitoring Interim Report for Spring 2008**  
**Groundwater Management Area 3**  
**General Electric Company - Pittsfield, Massachusetts**  
**(Results are presented in parts per million, ppm)**

Sample ID: Parameter Date Collected:	MCP UCL for GroundWater	2A 05/01/08	6B-R 05/02/08	16A 05/01/08	16B-R 05/01/08
<b>Volatile Organics</b>					
1,4-Dioxane	100	ND(1000) J [ND(1000) J]	ND(20) J	ND(200) J	ND(0.10) J
2-Butanone	100	ND(50) J [ND(50) J]	ND(1.0) J	ND(10) J	ND(0.0050) J
Acetone	100	ND(50) J [ND(50) J]	ND(1.0) J	ND(10) J	ND(0.0050) J
Benzene	100	21 [23]	4.3	13	0.00075 J
Carbon Tetrachloride	50	ND(10) [ND(10)]	ND(0.20)	ND(2.0)	ND(0.0010)
Chlorobenzene	10	77 [97]	2.5	37	0.0011
Chloroform	100	ND(10) [ND(10)]	ND(0.20)	ND(2.0)	ND(0.0010)
Toluene	100	1.1 J [1.3 J]	0.086 J	0.62 J	ND(0.0010)
Trichloroethene	50	6.4 J [7.5 J]	ND(0.20)	ND(2.0)	0.00044 J
<b>PCBs-Filtered</b>					
None Detected	--	NA	NA	NA	NA
<b>Semivolatile Organics</b>					
1,2-Dichlorobenzene	20	NA	NA	NA	NA
1,3-Dichlorobenzene	100	NA	NA	NA	NA
1,4-Dichlorobenzene	80	NA	NA	NA	NA
2-Chlorophenol	100	ND(0.0051) [ND(0.0051)]	NA	0.022	NA
4-Chlorophenol	Not Listed	ND(0.0051) [ND(0.0051)]	NA	0.062	NA
Naphthalene	100	NA	NA	NA	NA
Phenol	100	NA	NA	NA	NA



**Table 10**  
**Comparison of Groundwater Analytical Results to MCP UCLs for Groundwater**

**Groundwater Quality and NAPL Monitoring Interim Report for Spring 2008**  
**Groundwater Management Area 3**  
**General Electric Company - Pittsfield, Massachusetts**  
**(Results are presented in parts per million, ppm)**

Parameter	Sample ID: Date Collected:	MCP UCL for GroundWater	16C-R 05/01/08	39B-R 04/30/08	39D-R 04/30/08	39E 05/06/08
<b>Volatile Organics</b>						
1,4-Dioxane		100	ND(0.10) J	ND(40) J	ND(0.10) J	ND(0.10) J
2-Butanone		100	ND(0.0050) J	ND(2.0) J	ND(0.0050) J	ND(0.0050) J
Acetone		100	ND(0.0050) J	ND(2.0) J	ND(0.0050) J	ND(0.0050) J
Benzene		100	ND(0.0010)	0.67	0.00033 J	ND(0.0010)
Carbon Tetrachloride		50	ND(0.0010)	ND(0.40)	ND(0.0010)	ND(0.0010)
Chlorobenzene		10	ND(0.0010)	16	0.040	0.00024 J
Chloroform		100	ND(0.0010)	ND(0.40)	ND(0.0010)	ND(0.0010)
Toluene		100	ND(0.0010)	0.21 J	0.00015 J	0.00025 J
Trichloroethene		50	ND(0.0010)	0.20 J	0.00017 J	ND(0.0010)
<b>PCBs-Filtered</b>						
None Detected		--	NA	NA	NA	NA
<b>Semivolatile Organics</b>						
1,2-Dichlorobenzene		20	NA	0.12	NA	NA
1,3-Dichlorobenzene		100	NA	0.0090 J	NA	NA
1,4-Dichlorobenzene		80	NA	0.25	NA	NA
2-Chlorophenol		100	NA	ND(0.053)	NA	NA
4-Chlorophenol		Not Listed	NA	NA	NA	NA
Naphthalene		100	NA	0.091	NA	NA
Phenol		100	NA	0.038 J	NA	NA

**Table 10**

**Comparison of Groundwater Analytical Results to MCP UCLs for Groundwater**

**Groundwater Quality and NAPL Monitoring Interim Report for Spring 2008**

**Groundwater Management Area 3**

**General Electric Company - Pittsfield, Massachusetts**

**(Results are presented in parts per million, ppm)**

Parameter	Sample ID: Date Collected:	MCP UCL for GroundWater	43A 04/30/08	43B 04/30/08	51-14 05/02/08
<b>Volatile Organics</b>					
1,4-Dioxane		100	0.18 J	0.041 J [ND(0.10) J]	ND(0.10) J
2-Butanone		100	ND(0.0050) J	ND(0.0050) J [ND(0.0050) J]	ND(0.0050) J
Acetone		100	ND(0.0050) J	ND(0.0050) J [ND(0.0050) J]	ND(0.0050) J
Benzene		100	ND(0.0010)	ND(0.0010) [ND(0.0010)]	ND(0.0010)
Carbon Tetrachloride		50	ND(0.0010)	ND(0.0010) [ND(0.0010)]	0.0013
Chlorobenzene		10	ND(0.0010)	ND(0.0010) [ND(0.0010)]	ND(0.0010)
Chloroform		100	ND(0.0010)	ND(0.0010) [ND(0.0010)]	0.0039
Toluene		100	ND(0.0010)	ND(0.0010) [0.00019 J]	ND(0.0010)
Trichloroethene		50	ND(0.0010)	ND(0.0010) [ND(0.0010)]	ND(0.0010)
<b>PCBs-Filtered</b>					
None Detected		--	NA	NA	NA
<b>Semivolatile Organics</b>					
1,2-Dichlorobenzene		20	NA	NA	NA
1,3-Dichlorobenzene		100	NA	NA	NA
1,4-Dichlorobenzene		80	NA	NA	NA
2-Chlorophenol		100	NA	NA	NA
4-Chlorophenol		Not Listed	NA	NA	NA
Naphthalene		100	NA	NA	NA
Phenol		100	NA	NA	NA

**Table 10**  
**Comparison of Groundwater Analytical Results to MCP UCLs for Groundwater**

**Groundwater Quality and NAPL Monitoring Interim Report for Spring 2008**  
**Groundwater Management Area 3**  
**General Electric Company - Pittsfield, Massachusetts**  
**(Results are presented in parts per million, ppm)**

Parameter	Sample ID: Date Collected:	MCP UCL for GroundWater	82B-R 05/02/08	89A 05/05/08	89B 05/05/08
<b>Volatile Organics</b>					
1,4-Dioxane		100	NA	ND(100) J	ND(0.20) J
2-Butanone		100	NA	ND(5.0) J	ND(0.010) J
Acetone		100	NA	ND(5.0) J	ND(0.010) J
Benzene		100	NA	7.1	0.0067
Carbon Tetrachloride		50	NA	ND(1.0)	ND(0.0020)
Chlorobenzene		10	NA	26	0.048
Chloroform		100	NA	ND(1.0)	ND(0.0020)
Toluene		100	NA	ND(1.0)	ND(0.0020)
Trichloroethene		50	NA	ND(1.0)	ND(0.0020)
<b>PCBs-Filtered</b>					
None Detected		--	--	NA	NA
<b>Semivolatile Organics</b>					
1,2-Dichlorobenzene		20	NA	NA	NA
1,3-Dichlorobenzene		100	NA	NA	NA
1,4-Dichlorobenzene		80	NA	NA	NA
2-Chlorophenol		100	NA	ND(0.0052)	ND(0.0051)
4-Chlorophenol		Not Listed	NA	ND(0.0052)	ND(0.0051)
Naphthalene		100	NA	NA	NA
Phenol		100	NA	NA	NA

**Table 10**  
**Comparison of Groundwater Analytical Results to MCP UCLs for Groundwater**

**Groundwater Quality and NAPL Monitoring Interim Report for Spring 2008**  
**Groundwater Management Area 3**  
**General Electric Company - Pittsfield, Massachusetts**  
**(Results are presented in parts per million, ppm)**

Parameter	Sample ID: Date Collected:	MCP UCL for GroundWater	89D-R 05/05/08	90A 05/14/08	90B 05/14/08	95A 05/14/08
<b>Volatile Organics</b>						
1,4-Dioxane		100	ND(160) J	ND(0.10) J	ND(0.10) J	ND(0.10) J
2-Butanone		100	ND(8.0) J	ND(0.0050) J	ND(0.0050) J	ND(0.0050) J
Acetone		100	ND(8.0) J	ND(0.0050) J	ND(0.0050) J	ND(0.0050) J
Benzene		100	8.1	ND(0.0010)	ND(0.0010)	ND(0.0010)
Carbon Tetrachloride		50	ND(1.6)	ND(0.0010)	ND(0.0010)	ND(0.0010)
Chlorobenzene		10	32	ND(0.0010)	ND(0.0010)	0.00035 J
Chloroform		100	ND(1.6)	ND(0.0010)	ND(0.0010)	ND(0.0010)
Toluene		100	ND(1.6)	ND(0.0010)	ND(0.0010)	ND(0.0010)
Trichloroethene		50	ND(1.6)	ND(0.0010)	ND(0.0010)	ND(0.0010)
<b>PCBs-Filtered</b>						
None Detected		--	NA	NA	NA	NA
<b>Semivolatile Organics</b>						
1,2-Dichlorobenzene		20	NA	NA	NA	NA
1,3-Dichlorobenzene		100	NA	NA	NA	NA
1,4-Dichlorobenzene		80	NA	NA	NA	NA
2-Chlorophenol		100	NA	NA	NA	ND(0.0052)
4-Chlorophenol		Not Listed	NA	NA	NA	ND(0.0052)
Naphthalene		100	NA	NA	NA	NA
Phenol		100	NA	NA	NA	NA

**Table 10**  
**Comparison of Groundwater Analytical Results to MCP UCLs for Groundwater**

**Groundwater Quality and NAPL Monitoring Interim Report for Spring 2008**  
**Groundwater Management Area 3**  
**General Electric Company - Pittsfield, Massachusetts**  
**(Results are presented in parts per million, ppm)**

Sample ID: Parameter Date Collected:	MCP UCL for GroundWater	95B-R 05/08/08	111A-R 05/06/08	111B-R 05/14/08	114A 05/13/08
<b>Volatile Organics</b>					
1,4-Dioxane	100	ND(40) J	ND(0.10) J	ND(0.10) J	ND(0.10) J
2-Butanone	100	ND(2.0) J	ND(0.0050) J	ND(0.0050) J	0.011 J
Acetone	100	ND(2.0) J	ND(0.0050) J	ND(0.0050) J	0.15 J
Benzene	100	2.3	ND(0.0010)	ND(0.0010)	ND(0.0010)
Carbon Tetrachloride	50	ND(0.40)	ND(0.0010)	ND(0.0010)	ND(0.0010)
Chlorobenzene	10	10	ND(0.0010)	ND(0.0010)	0.00018 J
Chloroform	100	ND(0.40)	ND(0.0010)	ND(0.0010)	ND(0.0010)
Toluene	100	ND(0.40)	0.00015 J	ND(0.0010)	ND(0.0010)
Trichloroethene	50	ND(0.40)	ND(0.0010)	ND(0.0010)	ND(0.0010)
<b>PCBs-Filtered</b>					
None Detected	--	NA	NA	NA	--
<b>Semivolatile Organics</b>					
1,2-Dichlorobenzene	20	NA	NA	NA	NA
1,3-Dichlorobenzene	100	NA	NA	NA	NA
1,4-Dichlorobenzene	80	NA	NA	NA	NA
2-Chlorophenol	100	ND(0.014)	NA	NA	NA
4-Chlorophenol	Not Listed	ND(0.022)	NA	NA	NA
Naphthalene	100	NA	NA	NA	NA
Phenol	100	NA	NA	NA	NA

**Table 10**  
**Comparison of Groundwater Analytical Results to MCP UCLs for Groundwater**

**Groundwater Quality and NAPL Monitoring Interim Report for Spring 2008**  
**Groundwater Management Area 3**  
**General Electric Company - Pittsfield, Massachusetts**  
**(Results are presented in parts per million, ppm)**

Parameter	Sample ID: Date Collected:	MCP UCL for GroundWater	114B-R 05/13/08	115A 05/15/08	115B 05/15/08
<b>Volatile Organics</b>					
1,4-Dioxane		100	ND(4.0) J	ND(0.10) J	ND(0.10) J
2-Butanone		100	ND(0.20) J	ND(0.0050) J	ND(0.0050) J
Acetone		100	ND(0.20) J	ND(0.0050) J	ND(0.0050) J
Benzene		100	0.020 J	ND(0.0010)	ND(0.0010)
Carbon Tetrachloride		50	ND(0.040)	ND(0.0010)	ND(0.0010)
Chlorobenzene		10	1.4	ND(0.0010)	ND(0.0010)
Chloroform		100	ND(0.040)	ND(0.0010)	ND(0.0010)
Toluene		100	ND(0.040)	ND(0.0010)	ND(0.0010)
Trichloroethene		50	ND(0.040)	ND(0.0010)	ND(0.0010)
<b>PCBs-Filtered</b>					
None Detected		--	--	NA	NA
<b>Semivolatile Organics</b>					
1,2-Dichlorobenzene		20	NA	NA	NA
1,3-Dichlorobenzene		100	NA	NA	NA
1,4-Dichlorobenzene		80	NA	NA	NA
2-Chlorophenol		100	NA	NA	NA
4-Chlorophenol		Not Listed	NA	NA	NA
Naphthalene		100	NA	NA	NA
Phenol		100	NA	NA	NA

**Notes:**

1. Samples were collected by ARCADIS and submitted to SGS Environmental Services, Inc. for analysis of volatiles, semivolatiles and natural attenuation parameters.
2. Samples have been validated as per Field Sampling Plan/Quality Assurance Project Plan (FSP/QAPP), General Electric Company, Pittsfield, Massachusetts, ARCADIS (approved March 15, 2007 and re-submitted March 30, 2007).
3. NA - Not Analyzed.
4. ND - Analyte was not detected. The number in parenthesis is the associated detection limit.
5. With the exception of natural attenuation parameters, only those constituents detected in one or more samples are summarized. Natural attenuation parameter results are presented in Table 11.
6. Field duplicate sample results are presented in brackets.
7. Shading indicates that value exceeds UCL Standards.
8. -- Indicates that all constituents for the parameter group were not detected.

**Data Qualifiers:**

**Organics (volatiles, semivolatiles)**

- J - Indicates that the associated numerical value is an estimated concentration.
- R - Data was rejected due to a deficiency in the data generation process.

**Natural Attenuation Parameters**

- B - Indicates an estimated value between the instrument detection limit (IDL) and practical quantitation limit (PQL).
- J - Indicates that the associated numerical value is an estimated concentration.

**Table 11**  
**Natural Attenuation Parameter Analytical Results**

**Groundwater Quality and NAPL Monitoring Interim Report for Spring 2008**  
**Groundwater Management Area 3**  
**General Electric Company - Pittsfield, Massachusetts**  
**(Results are presented in parts per million, ppm)**

Parameter	Sample ID: Date Collected:	2A 05/01/08	16A 05/01/08	16B-R 05/01/08	16C-R 05/01/08	39B-R 04/30/08
<b>Volatile Organics</b>						
1,4-Dioxane		ND(1000) J [ND(1000) J]	ND(200) J	ND(0.10) J	ND(0.10) J	ND(40) J
2-Butanone		ND(50) J [ND(50) J]	ND(10) J	ND(0.0050) J	ND(0.0050) J	ND(2.0) J
Acetone		ND(50) J [ND(50) J]	ND(10) J	ND(0.0050) J	ND(0.0050) J	ND(2.0) J
Benzene		21 [23]	13	0.00075 J	ND(0.0010)	0.67
Chlorobenzene		77 [97]	37	0.0011	ND(0.0010)	16
Toluene		1.1 J [1.3 J]	0.62 J	ND(0.0010)	ND(0.0010)	0.21 J
Trichloroethene		6.4 J [7.5 J]	ND(2.0)	0.00044 J	ND(0.0010)	0.20 J
<b>PCBs-Filtered</b>						
None Detected		NA	NA	NA	NA	NA
<b>Semivolatile Organics</b>						
1,2-Dichlorobenzene		NA	NA	NA	NA	0.12
1,3-Dichlorobenzene		NA	NA	NA	NA	0.0090 J
1,4-Dichlorobenzene		NA	NA	NA	NA	0.25
2-Chlorophenol		ND(0.0051) [ND(0.0051)]	0.022	NA	NA	ND(0.053)
4-Chlorophenol		ND(0.0051) [ND(0.0051)]	0.062	NA	NA	NA
Naphthalene		NA	NA	NA	NA	0.091
Phenol		NA	NA	NA	NA	0.038 J
<b>Natural Attenuation Parameters</b>						
Alkalinity		170 [170]	450	530	120	310
Chloride		8.9 [8.6]	1900	270	1.2	110
Ethane		ND(0.020) [ND(0.020)]	ND(0.10)	ND(0.10)	ND(0.020)	ND(0.020)
Dissolved Iron		ND(0.100) J	1.23	0.0246 J	ND(0.100) J	ND(0.100) J
Dissolved Organic Carbon		2.09 [2.17]	32.9	6.44	0.856	6.24
Ethene		ND(0.020) [ND(0.020)]	0.37	ND(0.10)	ND(0.020)	ND(0.020)
Methane		ND(0.00720) [ND(0.00720)]	1.91	1.52 J	ND(0.00720)	0.182
Nitrate Nitrogen		ND(0.300) [ND(0.300)]	ND(0.300)	ND(0.300)	0.190 B	0.507
Nitrite Nitrogen		ND(0.300) [ND(0.300)]	ND(3.00)	ND(3.00)	ND(0.300)	ND(0.300)
Sulfate (turbidimetric)		22.2 [21.9]	0.951	15.7	6.38	5.61

**Table 11**  
**Natural Attenuation Parameter Analytical Results**

**Groundwater Quality and NAPL Monitoring Interim Report for Spring 2008**  
**Groundwater Management Area 3**  
**General Electric Company - Pittsfield, Massachusetts**  
**(Results are presented in parts per million, ppm)**

Parameter	Sample ID: Date Collected:	39D-R 04/30/08	39E 05/06/08	43A 04/30/08	43B 04/30/08	89A 05/05/08
<b>Volatile Organics</b>						
1,4-Dioxane		ND(0.10) J	ND(0.10) J	0.18 J	0.041 J [ND(0.10) J]	ND(100) J
2-Butanone		ND(0.0050) J	ND(0.0050) J	ND(0.0050) J	ND(0.0050) J [ND(0.0050) J]	ND(5.0) J
Acetone		ND(0.0050) J	ND(0.0050) J	ND(0.0050) J	ND(0.0050) J [ND(0.0050) J]	ND(5.0) J
Benzene		0.00033 J	ND(0.0010)	ND(0.0010)	ND(0.0010) [ND(0.0010)]	7.1
Chlorobenzene		0.040	0.00024 J	ND(0.0010)	ND(0.0010) [ND(0.0010)]	26
Toluene		0.00015 J	0.00025 J	ND(0.0010)	ND(0.0010) [0.00019 J]	ND(1.0)
Trichloroethene		0.00017 J	ND(0.0010)	ND(0.0010)	ND(0.0010) [ND(0.0010)]	ND(1.0)
<b>PCBs-Filtered</b>						
None Detected		NA	NA	NA	NA	NA
<b>Semivolatile Organics</b>						
1,2-Dichlorobenzene		NA	NA	NA	NA	NA
1,3-Dichlorobenzene		NA	NA	NA	NA	NA
1,4-Dichlorobenzene		NA	NA	NA	NA	NA
2-Chlorophenol		NA	NA	NA	NA	ND(0.0052)
4-Chlorophenol		NA	NA	NA	NA	ND(0.0052)
Naphthalene		NA	NA	NA	NA	NA
Phenol		NA	NA	NA	NA	NA
<b>Natural Attenuation Parameters</b>						
Alkalinity		130	87.0	520	580 [580]	330
Chloride		5.5	25	22	53 [50]	380
Ethane		ND(0.020)	ND(0.10)	ND(0.020)	ND(0.10) [ND(0.10)]	ND(0.20)
Dissolved Iron		0.0401 J	1.21	ND(0.100) J	0.0246 J	ND(0.100) J
Dissolved Organic Carbon		0.844 B	4.35	2.03	2.77 [2.74]	7.00
Ethene		ND(0.020)	ND(0.10)	ND(0.020)	ND(0.10) [ND(0.10)]	ND(0.20)
Methane		ND(0.00720)	1.16	0.0180	1.51 [1.66]	4.36
Nitrate Nitrogen		ND(0.300)	ND(0.300)	ND(0.300)	ND(0.300) [ND(0.300)]	ND(0.300)
Nitrite Nitrogen		ND(0.300)	ND(0.300)	ND(0.300)	ND(0.300) [ND(0.300)]	ND(3.00)
Sulfate (turbidimetric)		20.4	ND(0.300)	103	ND(0.300) [ND(0.300)]	ND(0.300)



**Table 11**  
**Natural Attenuation Parameter Analytical Results**

**Groundwater Quality and NAPL Monitoring Interim Report for Spring 2008**  
**Groundwater Management Area 3**  
**General Electric Company - Pittsfield, Massachusetts**  
**(Results are presented in parts per million, ppm)**

Parameter	Sample ID: Date Collected:	89B 05/05/08	89D-R 05/05/08	90A 05/14/08	90B 05/14/08	95A 05/14/08	95B-R 05/08/08
<b>Volatile Organics</b>							
1,4-Dioxane		ND(0.20) J	ND(160) J	ND(0.10) J	ND(0.10) J	ND(0.10) J	ND(40) J
2-Butanone		ND(0.010) J	ND(8.0) J	ND(0.0050) J	ND(0.0050) J	ND(0.0050) J	ND(2.0) J
Acetone		ND(0.010) J	ND(8.0) J	ND(0.0050) J	ND(0.0050) J	ND(0.0050) J	ND(2.0) J
Benzene		0.0067	8.1	ND(0.0010)	ND(0.0010)	ND(0.0010)	2.3
Chlorobenzene		0.048	32	ND(0.0010)	ND(0.0010)	0.00035 J	10
Toluene		ND(0.0020)	ND(1.6)	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.40)
Trichloroethene		ND(0.0020)	ND(1.6)	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.40)
<b>PCBs-Filtered</b>							
None Detected		NA	NA	NA	NA	NA	NA
<b>Semivolatile Organics</b>							
1,2-Dichlorobenzene		NA	NA	NA	NA	NA	NA
1,3-Dichlorobenzene		NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene		NA	NA	NA	NA	NA	NA
2-Chlorophenol		ND(0.0051)	NA	NA	NA	ND(0.0052)	ND(0.014)
4-Chlorophenol		ND(0.0051)	NA	NA	NA	ND(0.0052)	ND(0.022)
Naphthalene		NA	NA	NA	NA	NA	NA
Phenol		NA	NA	NA	NA	NA	NA
<b>Natural Attenuation Parameters</b>							
Alkalinity		160	320	180	110	130	240
Chloride		180	590	14	8.5	0.77	160
Ethane		ND(0.020)	ND(0.10)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.10)
Dissolved Iron		0.902	0.141 J	0.0211 J	3.68	ND(0.100) J	0.0214 J
Dissolved Organic Carbon		5.28	8.52	1.60	5.77	0.660 B	3.92
Ethene		ND(0.020)	0.76	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.10)
Methane		0.338	1.62	0.0930	0.0700	0.156	0.871
Nitrate Nitrogen		ND(0.300)	ND(0.300)	ND(0.300)	ND(0.300)	ND(0.300)	ND(0.300)
Nitrite Nitrogen		ND(0.300)	ND(3.00)	ND(0.300)	ND(0.300)	ND(0.300)	ND(0.300)
Sulfate (turbidimetric)		0.582	2.68	14.2	12.1	4.41	4.76

**Table 11**  
**Natural Attenuation Parameter Analytical Results**

**Groundwater Quality and NAPL Monitoring Interim Report for Spring 2008**  
**Groundwater Management Area 3**  
**General Electric Company - Pittsfield, Massachusetts**  
**(Results are presented in parts per million, ppm)**

Parameter	Sample ID: Date Collected:	111A-R 05/06/08	111B-R 05/14/08	114A 05/13/08	114B-R 05/13/08	115A 05/15/08	115B 05/15/08
<b>Volatiles Organics</b>							
1,4-Dioxane		ND(0.10) J	ND(0.10) J	ND(0.10) J	ND(4.0) J	ND(0.10) J	ND(0.10) J
2-Butanone		ND(0.0050) J	ND(0.0050) J	0.011 J	ND(0.20) J	ND(0.0050) J	ND(0.0050) J
Acetone		ND(0.0050) J	ND(0.0050) J	0.15 J	ND(0.20) J	ND(0.0050) J	ND(0.0050) J
Benzene		ND(0.0010)	ND(0.0010)	ND(0.0010)	0.020 J	ND(0.0010)	ND(0.0010)
Chlorobenzene		ND(0.0010)	ND(0.0010)	0.00018 J	1.4	ND(0.0010)	ND(0.0010)
Toluene		0.00015 J	ND(0.0010)	ND(0.0010)	ND(0.040)	ND(0.0010)	ND(0.0010)
Trichloroethene		ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.040)	ND(0.0010)	ND(0.0010)
<b>PCBs-Filtered</b>							
None Detected		NA	NA	--	--	NA	NA
<b>Semivolatile Organics</b>							
1,2-Dichlorobenzene		NA	NA	NA	NA	NA	NA
1,3-Dichlorobenzene		NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene		NA	NA	NA	NA	NA	NA
2-Chlorophenol		NA	NA	NA	NA	NA	NA
4-Chlorophenol		NA	NA	NA	NA	NA	NA
Naphthalene		NA	NA	NA	NA	NA	NA
Phenol		NA	NA	NA	NA	NA	NA
<b>Natural Attenuation Parameters</b>							
Alkalinity		140	160	170	230	150	220
Chloride		86	4.3	1.4	160	ND(0.3)	18
Ethane		ND(0.020)	ND(0.020)	ND(2.0)	ND(0.10)	ND(0.020)	ND(0.020)
Dissolved Iron		0.0432 J	0.0449 J	ND(0.100)	0.0461 B	ND(0.100)	ND(0.100)
Dissolved Organic Carbon		1.18	1.31	4.36	4.61	ND(1.0)	ND(1.0)
Ethene		ND(0.020)	ND(0.020)	ND(2.0)	ND(0.10)	ND(0.020)	ND(0.020)
Methane		ND(0.00720)	ND(0.00720)	10.9	1.32	ND(0.00720)	ND(0.00720)
Nitrate Nitrogen		ND(0.300)	4.29	ND(0.300)	ND(0.300)	ND(0.300)	0.168 B
Nitrite Nitrogen		ND(0.300)	ND(0.300)	ND(0.300)	ND(3.00)	ND(0.300)	ND(0.300)
Sulfate (turbidimetric)		71.6	169	1.88	9.43	4.03	14.8

**Notes:**

1. Samples were collected by ARCADIS and submitted to SGS Environmental Services, Inc. for analysis of volatiles, semivolatiles and natural attenuation parameters.
2. Samples have been validated as per Field Sampling Plan/Quality Assurance Project Plan (FSP/QAPP), General Electric Company, Pittsfield, Massachusetts, ARCADIS (approved March 15, 2007 and re-submitted March 30, 2007).
3. NA - Not Analyzed.
4. ND - Analyte was not detected. The number in parenthesis is the associated detection limit.
5. With the exception of natural attenuation parameters only those constituents detected in one or more samples are summarized.
6. Field duplicate sample results are presented in brackets.

**Data Qualifiers:**

Organics (volatiles, semivolatiles)

J - Indicates that the associated numerical value is an estimated concentration.

Natural Attenuation Parameters

B - Indicates an estimated value between the instrument detection limit (IDL) and practical quantitation limit (PQL).

J - Indicates that the associated numerical value is an estimated concentration.

**Table 12**  
**Proposed Interim Groundwater Quality Monitoring Program**

**Groundwater Quality and NAPL Monitoring Interim Report for Spring 2008**  
**Groundwater Management Area 3**  
**General Electric Company - Pittsfield, Massachusetts**

Well Number	Monitoring Well Usage	Sampling Schedule & Analyses			Basis for Inclusion or Exclusion/Comments
		Current Annual Analyses	Proposed Annual Analyses <sup>(2,3)</sup>	Proposed <sup>(4)</sup> Semi-Annual Analyses	
2A	Natural Attenuation	See Note 5	See Note 5 <sup>(2)</sup>	NONE	No changes to the natural attenuation monitoring program are proposed.
6B-R	GW-3 Perimeter	VOC	VOC <sup>(3)</sup>	NONE	Average chlorobenzene concentrations are greater than the GW-3 Standard. Continued interim sampling and analysis proposed to assess increase in VOC concentrations observed since fall 2005, including exceedance of GW-3 Standard for benzene detected in fall 2007.
16A	Natural Attenuation	See Note 5	See Note 5 <sup>(2)</sup>	NONE	No changes to the natural attenuation monitoring program are proposed.
16B-R	GW-2 Sentinel/Natural Attenuation	See Note 6	See Note 6 <sup>(2)</sup>	PCB	Interim sampling proposed to continue under the natural attenuation monitoring program and to evaluate compliance with new MCP GW-2 standard for PCBs.
16C-R	Natural Attenuation	See Note 6	See Note 6 <sup>(2)</sup>	NONE	No changes to the natural attenuation monitoring program are proposed.
39B-R	Natural Attenuation	See Note 5	See Note 5 <sup>(2)</sup>	NONE	No changes to the natural attenuation monitoring program are proposed.
39D-R	Natural Attenuation	See Note 6	See Note 6 <sup>(2)</sup>	NONE	No changes to the natural attenuation monitoring program are proposed.
39E	Natural Attenuation	See Note 6	See Note 6 <sup>(2)</sup>	NONE	No changes to the natural attenuation monitoring program are proposed.
43A	Natural Attenuation	See Note 6	See Note 6 <sup>(2)</sup>	NONE	No changes to the natural attenuation monitoring program are proposed.
43B	Natural Attenuation	See Note 6	See Note 6 <sup>(2)</sup>	NONE	No changes to the natural attenuation monitoring program are proposed.
51-14	GW-2 Sentinel	VOC	VOC <sup>(3)</sup>	PCB	Average carbon tetrachloride concentration is slightly below the GW-2 Standard (i.e., greater than 50%). Continued interim sampling for VOCs proposed to further assess. PCB analyses proposed to evaluate compliance with new MCP GW-2 standard.
82B-R	GW-3 Perimeter	PCB	NONE	NONE	No exceedances/near exceedances of applicable Performance Standards observed during baseline program. PCB concentrations are well below revised GW-3 standard, no further PCB sampling proposed.
89A	Natural Attenuation	See Note 5	See Note 5 <sup>(2)</sup>	NONE	No changes to the natural attenuation monitoring program are proposed.
89B	GW-3 Perimeter/Natural Attenuation	See Note 5	See Note 5 <sup>(2)</sup>	NONE	Average chlorobenzene concentration is greater than the GW-3 Standard. Interim sampling to continue under the natural attenuation monitoring program.
89D-R	Natural Attenuation	See Note 6	See Note 6 <sup>(2)</sup>	NONE	No changes to the natural attenuation monitoring program are proposed.

**Table 12**  
**Proposed Interim Groundwater Quality Monitoring Program**

**Groundwater Quality and NAPL Monitoring Interim Report for Spring 2008**  
**Groundwater Management Area 3**  
**General Electric Company - Pittsfield, Massachusetts**

Well Number	Monitoring Well Usage	Sampling Schedule & Analyses			Basis for Inclusion or Exclusion/Comments
		Current Annual Analyses	Proposed Annual Analyses <sup>(2,3)</sup>	Proposed Semi-Annual Analyses <sup>(4)</sup>	
90A	Natural Attenuation	See Note 6	See Note 6 <sup>(2)</sup>	NONE	No changes to the natural attenuation monitoring program are proposed.
90B	GW-3 Perimeter/Natural Attenuation	See Note 6	See Note 6 <sup>(2)</sup>	NONE	No exceedances/near exceedances of applicable Performance Standards observed during baseline program. No changes to the natural attenuation monitoring program are proposed.
95A	Natural Attenuation	See Note 5	See Note 5 <sup>(2)</sup>	NONE	No changes to the natural attenuation monitoring program are proposed.
95B-R	GW-3 Perimeter/Natural Attenuation	See Note 5	See Note 5 <sup>(2)</sup>	NONE	Average chlorobenzene concentration is greater than the GW-3 Standard. Interim sampling to continue under the natural attenuation monitoring program.
111A-R	Natural Attenuation	See Note 6	See Note 6 <sup>(2)</sup>	NONE	No changes to the natural attenuation monitoring program are proposed.
111B-R	GW-3 Perimeter/Natural Attenuation	See Note 6	See Note 6 <sup>(2)</sup>	NONE	No exceedances/near exceedances of applicable Performance Standards observed during baseline program. No changes to the natural attenuation monitoring program are proposed.
114A	Natural Attenuation / Supplemental	See Note 7	See Note 6 <sup>(2)</sup>	NONE	No changes to the natural attenuation monitoring program are proposed. PCBs have not been detected in this well and PCB concentrations in adjacent water table well 114B-R are well below revised GW-3 standard, no further supplemental PCB sampling proposed.
114B-R	GW-3 Perimeter/Natural Attenuation	See Note 7	See Note 6 <sup>(2)</sup>	NONE	Average chlorobenzene concentration is slightly below the GW-3 Standard (i.e., greater than 50%). Interim sampling proposed to continue under the natural attenuation monitoring program. PCB concentrations are well below revised GW-3 standard, no further PCB sampling proposed.
115A	Natural Attenuation	See Note 6	See Note 6 <sup>(2)</sup>	NONE	No changes to the natural attenuation monitoring program are proposed.
115B	Natural Attenuation	See Note 6	See Note 6 <sup>(2)</sup>	NONE	No changes to the natural attenuation monitoring program are proposed.
GMA3-1	GW-3 Perimeter	NONE	NONE	Deferred	Installation of this well has been deferred until re-routing of Unkamet Brook is completed.
GMA3-2	GW-2 Sentinel	NONE	NONE	PCB	No exceedances/near exceedances of applicable Performance Standards observed during baseline program. PCB analyses proposed to evaluate compliance with new MCP GW-2 standard.
GMA3-4	GW-2 Sentinel	NONE	NONE	PCB	No exceedances/near exceedances of applicable Performance Standards observed during baseline program. PCB analyses proposed to evaluate compliance with new MCP GW-2 standard.

**Table 12**  
**Proposed Interim Groundwater Quality Monitoring Program**

**Groundwater Quality and NAPL Monitoring Interim Report for Spring 2008**  
**Groundwater Management Area 3**  
**General Electric Company - Pittsfield, Massachusetts**

Well Number	Monitoring Well Usage	Sampling Schedule & Analyses			Basis for Inclusion or Exclusion/Comments
		Current Annual Analyses	Proposed <sup>(2,3)</sup> Annual Analyses	Proposed <sup>(4)</sup> Semi-Annual Analyses	
GMA3-8	GW-2 Sentinel	NONE	NONE	PCB	No exceedances/near exceedances of applicable Performance Standards observed during baseline program. PCB analyses proposed to evaluate compliance with new MCP GW-2 standard.
GMA3-9	GW-2 Sentinel	NONE	NONE	PCB	No exceedances/near exceedances of applicable Performance Standards observed during baseline program. PCB analyses proposed to evaluate compliance with new MCP GW-2 standard.
OBG-2	GW-2 Sentinel	NONE	NONE	PCB	No exceedances/near exceedances of applicable Performance Standards observed during baseline program. PCB analyses proposed to evaluate compliance with new MCP GW-2 standard.

**NOTES:**

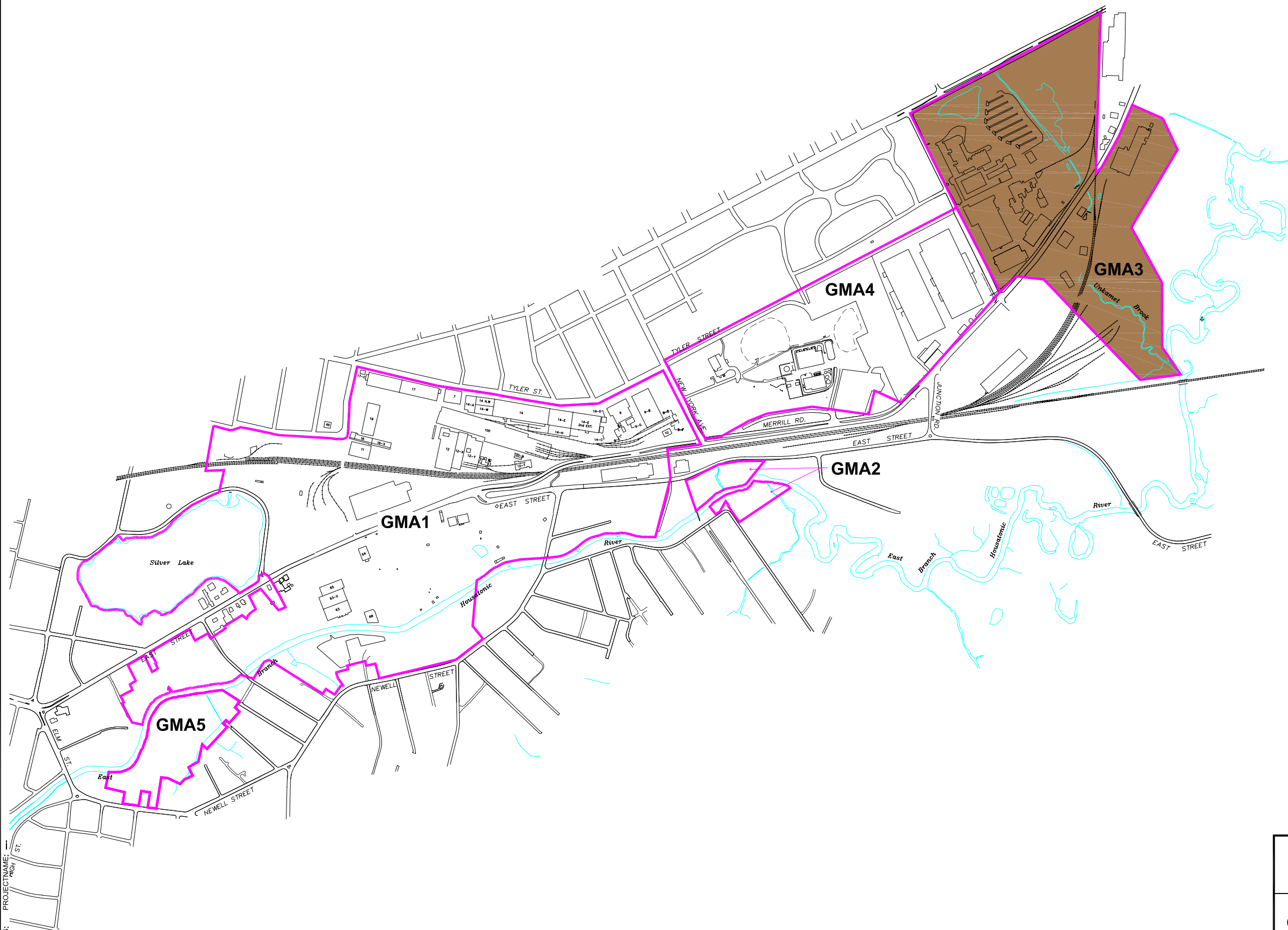
1. The wells listed above have been sampled as part of the baseline monitoring program at GMA 3 and/or during the interim groundwater quality monitoring program.
2. Wells sampled under the natural attenuation monitoring program are proposed to continue to be sampled on an annual basis in the spring.
3. Wells proposed for annual interim groundwater quality sampling, will be sampled for the listed parameters during the interim period between the completion of the baseline monitoring program and the initiation of a long-term monitoring program. The sampling schedule is proposed to alternate between the spring and fall seasons each year, with the next sampling round scheduled for fall 2009.
4. The wells proposed for semi-annual groundwater quality sampling will be sampled for the listed parameters on a semi-annual basis and may be proposed to be removed from the interim groundwater quality monitoring program after the fourth data set is collected.
5. Samples proposed to be analyzed for: VOCs, two SVOCs (2-chlorophenol and 4-chlorophenol), and Natural Attenuation Parameters (methane, ethane, ethene, chloride, nitrate, nitrite, alkalinity, dissolved organic carbon, sulfate, and dissolved iron).
6. Samples proposed to be analyzed for: VOCs and Natural Attenuation Parameters (methane, ethane, ethene, chloride, nitrate, nitrite, alkalinity, dissolved organic carbon, sulfate, and dissolved iron).
7. Samples analyzed for: VOCs and Natural Attenuation Parameters (methane, ethane, ethene, chloride, nitrate, nitrite, alkalinity, dissolved organic carbon, sulfate, and dissolved iron) during the spring natural attenuation sampling rounds, and PCBs (filtered samples only) during the alternating spring/fall interim sampling rounds.
8. All analyses for PCB and metals will be performed on filtered samples only.

ARCADIS

**Figures**

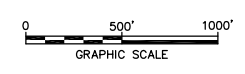
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PROJECT NAME: 20186X10  
 IMAGES: 20186X10



- LEGEND:**
- GMA1** GMA 1—PLANT SITE 1
  - GMA2** GMA 2—FORMER OXBOWS J&K
  - GMA3** GMA 3—PLANT SITE 2
  - GMA4** GMA 4—PLANT SITE 3
  - GMA5** GMA 5—FORMER OXBOWS A&C

- GENERAL NOTES:**
1. MAPPING IS BASED ON AERIAL PHOTOGRAPHS AND PHOTOGRAMMETRIC MAPPING BY LOCKWOOD MAPPING, INC. — FLOWN IN APRIL 1990; DATA PROVIDED BY GENERAL ELECTRIC COMPANY; AND BLASLAND & BOUCK ENGINEERS, P.C. P.C. CONSTRUCTION PLANS.
  2. NOT ALL PHYSICAL FEATURES SHOWN.
  3. SITE BOUNDARIES/LIMITS ARE APPROXIMATE.



GENERAL ELECTRIC COMPANY  
 PITTSFIELD, MASSACHUSETTS  
**GMA 3 MONITORING PROGRAM**

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**GROUNDWATER MANAGEMENT AREAS**

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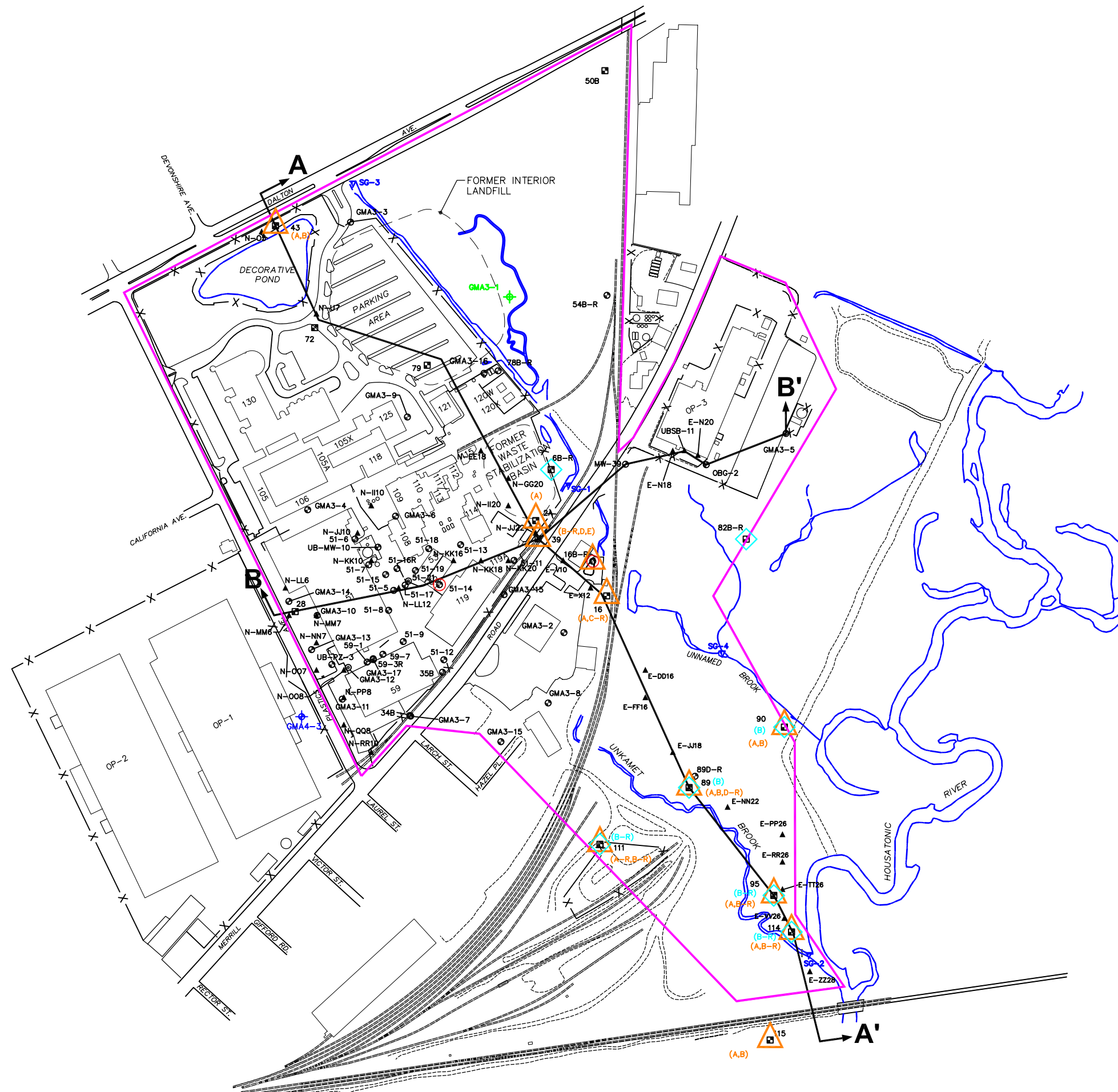


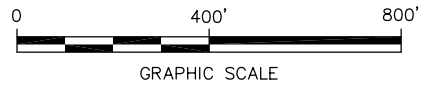
FIGURE  
**1**

CITY: SYR/DIV/GROUP: 85 DB: KEW DMW RCB LD: DMW AM: PD: TM: TR: LYRON\*OFF\*REF\*  
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 XREFS: PROJECTNAME: 1  
 IMAGES: 20186X02  
 20186X00



- LEGEND:**
- SITE BOUNDARY
  - RAILROAD
  - X FENCING
  - UBSB-11 ▲ EXISTING SOIL BORING
  - 51-6 ● EXISTING MONITORING WELL
  - 57 ■ EXISTING MONITORING WELL CLUSTER
  - 51-21 ○ NAPL RECOVERY WELL (SKIMMER)
  - GMA4-3 ◆ GMA4 MONITORING WELL
  - SC-1 ▼ SURFACE WATER STAFF GAUGE
  - GW-2 SENTINEL/COMPLIANCE WELL
  - ◇ GW-3 PERIMETER WELL
  - △ NATURAL ATTENUATION MONITORING WELL
  - ↔ CROSS SECTION LOCATION
  - ◆ PROPOSED MONITORING WELL

- NOTES:**
1. FIGURE IS BASED ON PHOTOGRAPHIC MAPPING BY LOCKWOOD MAPPING, INC.—FLOWN IN APRIL 1990 AND DATA PROVIDED BY GENERAL ELECTRIC COMPANY.
  2. NOT ALL PHYSICAL FEATURES SHOWN.
  3. SITE BOUNDARIES, SAMPLE LOCATIONS AND BUILDING LOCATIONS ARE APPROXIMATE.
  4. FOR WELL CLUSTERS SUBJECT TO DIFFERING MONITORING REQUIREMENTS, THE SPECIFIC WELL INCLUDED FOR EACH TYPE OF MONITORING IS PROVIDED IN PARENTHESES.



GENERAL ELECTRIC COMPANY  
 PITTSFIELD, MASSACHUSETTS  
**GMA 3 MONITORING PROGRAM**

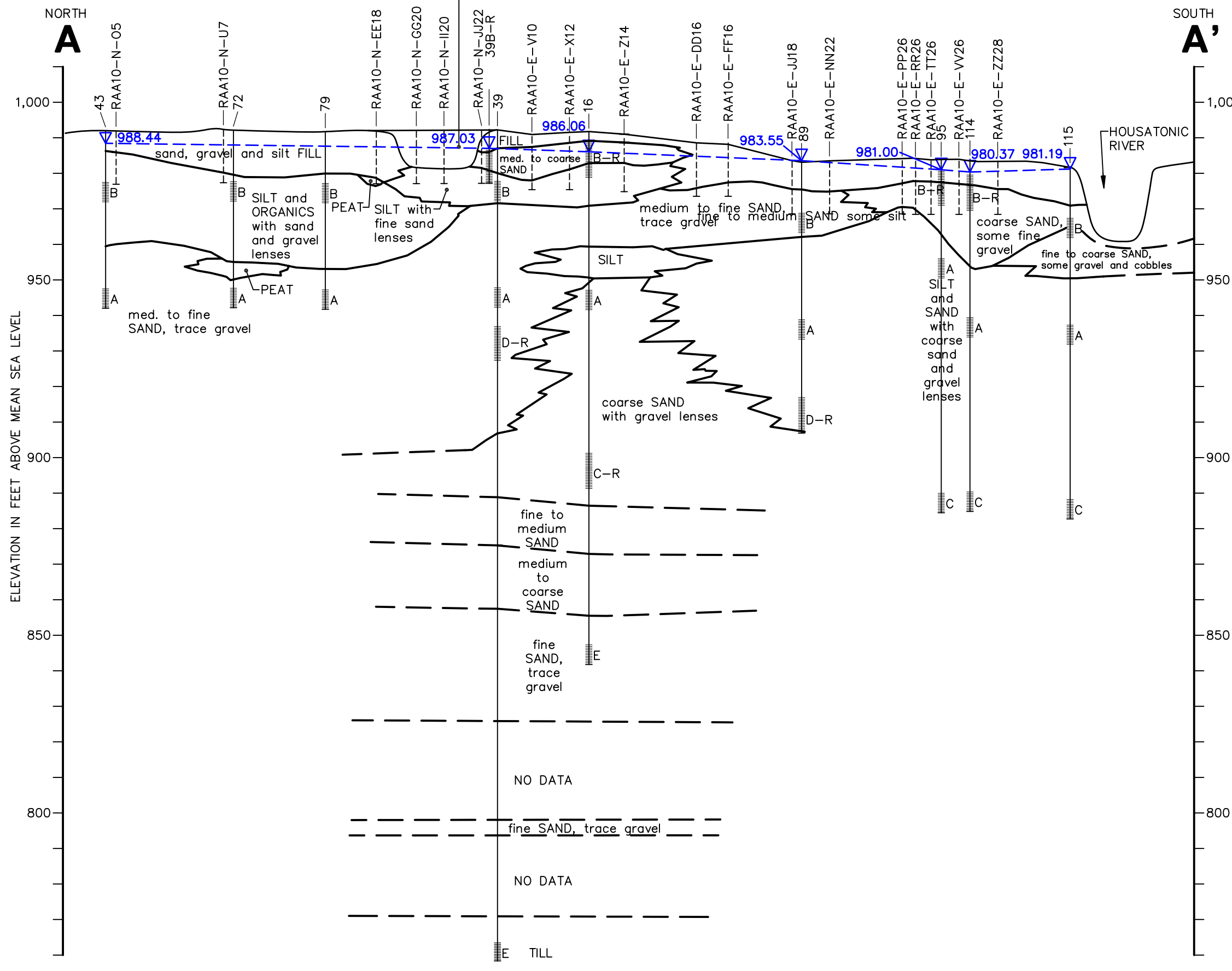
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**SITE PLAN**

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FIGURE  
**2**





**LEGEND:**

- WELL CLUSTER NUMBER: 16
- SCREEN INTERVAL (DEPTH FROM SURFACE): (15-20')
- SOIL BORING NUMBER: RAA10-N-05
- SOIL BORING
- WATER TABLE ELEVATION (B-SERIES WELLS) (APRIL 2008)

**GRAPHIC SCALE:** 0 325' 650'

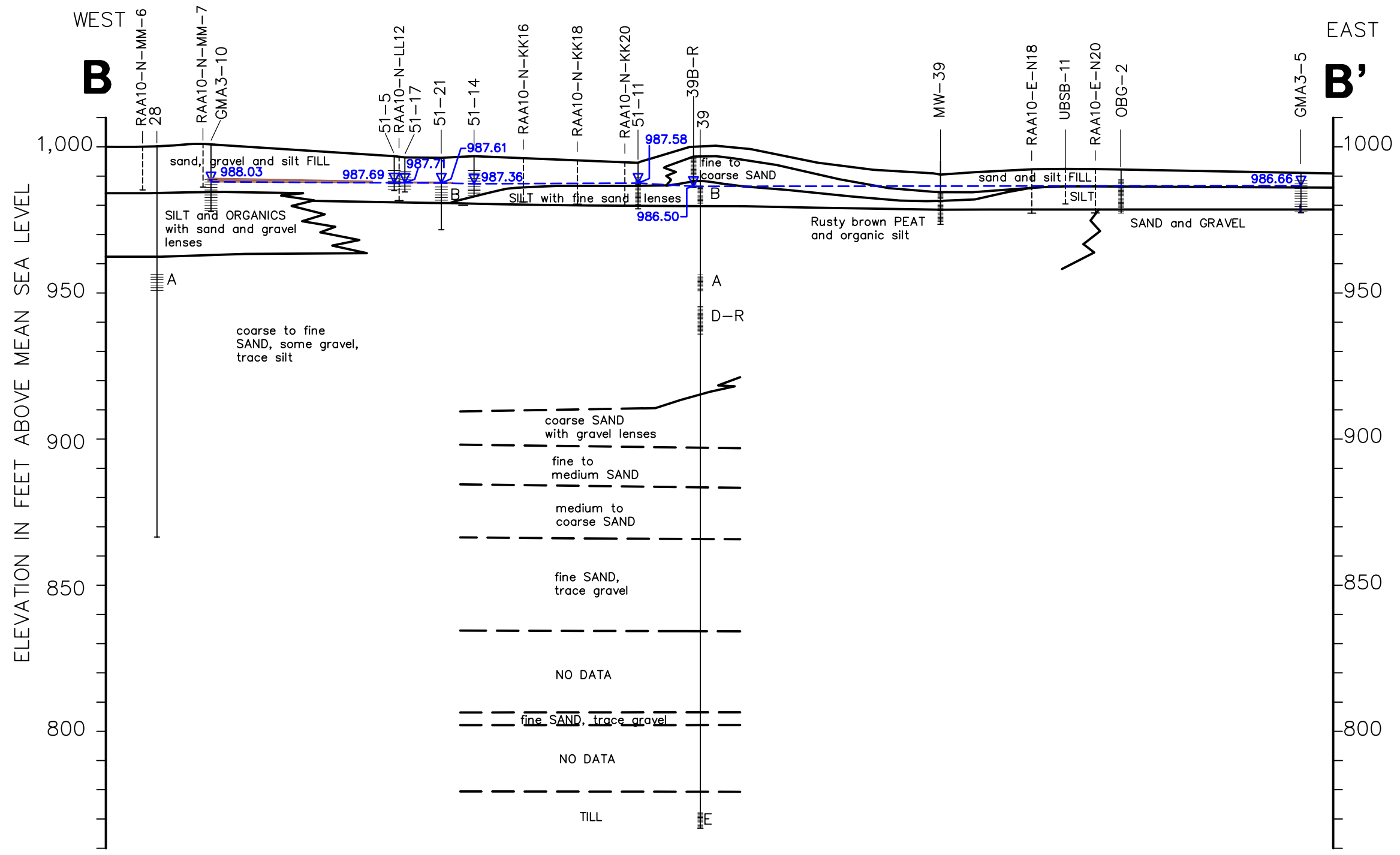
GENERAL ELECTRIC COMPANY  
PITTSFIELD, MASSACHUSETTS  
**GMA 3 MONITORING PROGRAM**

**GENERALIZED GEOLOGIC CROSS SECTION A-A'**

**ARCADIS**

FIGURE 3

CITY: SYR/DIV/GROUP: 85 DB: RCB DMW RCB LD: DMW AM: PD: TM: TR: LYRONK "OFF" REF: G:\CAD\GE-CAD\C-ACT\B020186\00000002\DWG\GMA3\SPRING08\20186\02.DWG LAYOUT: 4 SAVED: 6/25/2008 10:51 AM ACADVER: 7.05 (LMS TECH) PAGES: 17.05 (LMS TECH) PLOTSTYLETABLE: PLT\FULL.CTB PLOTTED: 8/27/2008 3:05 PM BY: BASSETT, RICHARD XREFS: IMAGES: PROJECTNAME: 20186X00



**LEGEND:**

- WELL CLUSTER NUMBER → 39
- WATER TABLE ELEVATION (APRIL 2008) → 986.66
- SCREEN INTERVAL (DEPTH FROM SURFACE) (15-20') → B (45-50') → A
- SOIL BORING NUMBER → RAA10-E-N20
- SOIL BORING →
- LNAPL EXTENT (THICKNESS NOT TO SCALE) (APRIL 2008) →

(56-66' OR 70-75') D

(95-100') C

(225-235' OR 145-150') E



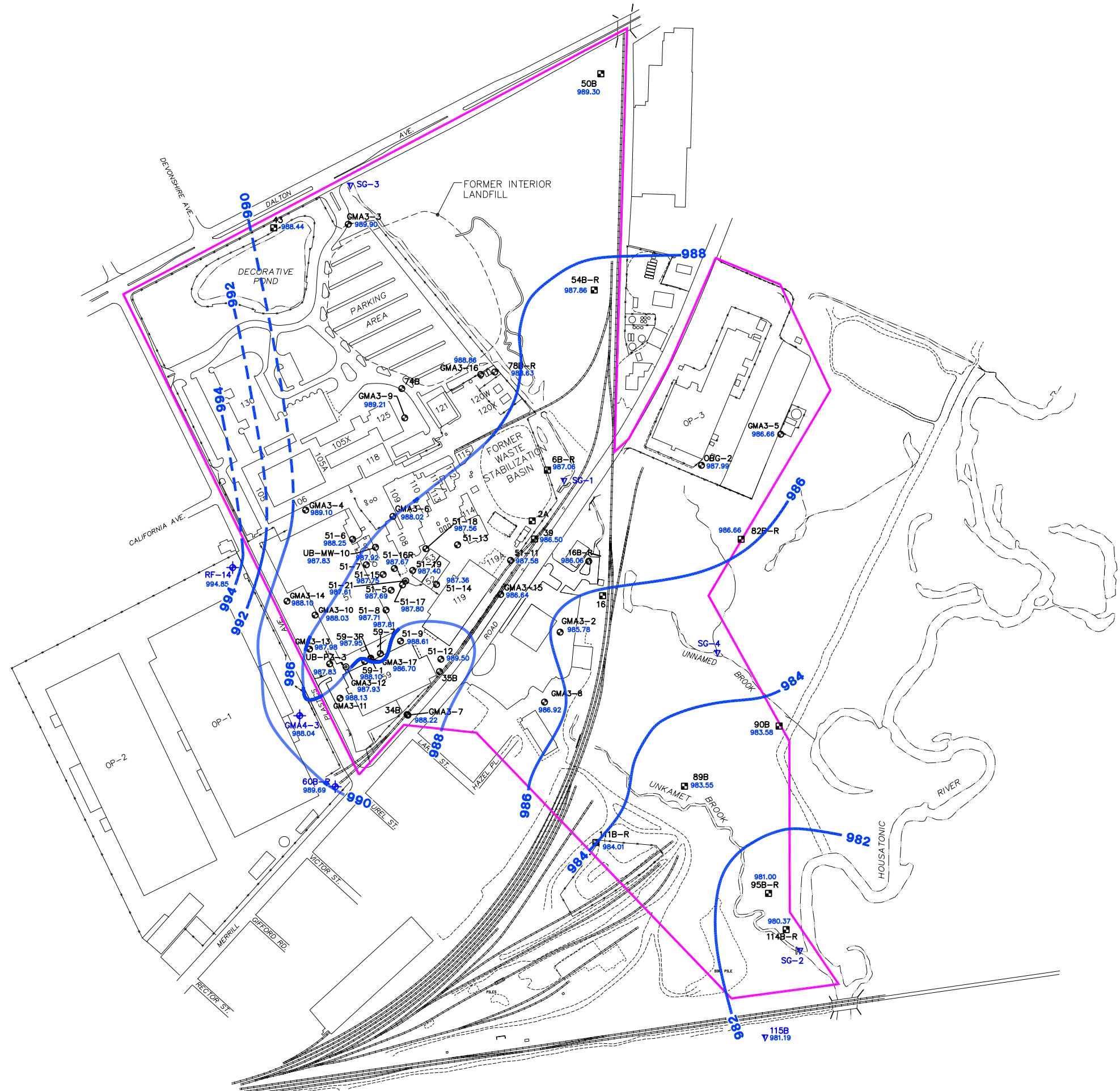
GENERAL ELECTRIC COMPANY  
PITTSFIELD, MASSACHUSETTS  
**GMA 3 MONITORING PROGRAM**

**GENERALIZED GEOLOGIC  
CROSS SECTION B-B'**

FIGURE  
**4**

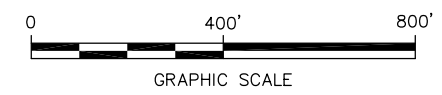
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XREFS: 20186\001 20186\000  
 IMAGES: PROJECTNAME: 1



- LEGEND:**
- SITE BOUNDARY
  - FENCING
  - 51-14 EXISTING MONITORING WELL
  - 54B EXISTING MONITORING WELL CLUSTER
  - 51-21 NAPL RECOVERY WELL (SKIMMER)
  - SG-1 SURFACE WATER STAFF GAUGE
  - GMA4-2 GMA4 MONITORING WELL
  - 986 GROUNDWATER ELEVATION CONTOUR IN FEET (DASHED WHERE INFERRED)
  - 986.06 GROUNDWATER ELEVATION IN FEET

- NOTES:**
1. FIGURE IS BASED ON PHOTOGRAPHIC MAPPING BY LOCKWOOD MAPPING, INC.—FLOWN IN APRIL 1990 AND DATA PROVIDED BY GENERAL ELECTRIC COMPANY.
  2. NOT ALL PHYSICAL FEATURES SHOWN.
  3. SITE BOUNDARIES, SAMPLE AND BUILDING LOCATIONS ARE APPROXIMATE.
  4. FOR WELL CLUSTERS, GROUNDWATER ELEVATION DATA FROM THE UPPERMOST WELL (B-SERIES) WAS UTILIZED IN THE PREPARATION OF THIS FIGURE.



GENERAL ELECTRIC COMPANY  
 PITTSFIELD, MASSACHUSETTS  
**GMA 3 MONITORING PROGRAM**

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**GROUNDWATER ELEVATION  
 CONTOUR MAP - SPRING 2008**

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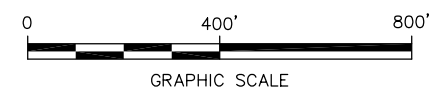
FIGURE  
**5**

CITY: SYR/DIV/GROUP: 85 DB: KEW DMW RCB LD: DMW AM: PD: TM: TR: LYRON\*OFF=REF\*  
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 XREFS: 20186X02 20186X00  
 IMAGES: PROJECTNAME: 1



- LEGEND:**
- SITE BOUNDARY
  - RAILROAD
  - X FENCING
  - 51-6  EXISTING MONITORING WELL
  - 57  EXISTING MONITORING WELL CLUSTER
  - 51-21  NAPL RECOVERY WELL (SKIMMER)
  - GMA4-3  GMA4 MONITORING WELL
  - SG-1  SURFACE WATER STAFF GAUGE
  - MAXIMUM EXTENT OF MEASURABLE LNAPL
  - MAXIMUM EXTENT OF MEASURABLE DNAPL

- NOTES:**
1. FIGURE IS BASED ON PHOTOGRAPHIC MAPPING BY LOCKWOOD MAPPING, INC.—FLOWN IN APRIL 1990 AND DATA PROVIDED BY GENERAL ELECTRIC COMPANY.
  2. NOT ALL PHYSICAL FEATURES SHOWN.
  3. SITE BOUNDARIES, SAMPLE LOCATIONS AND BUILDING LOCATIONS ARE APPROXIMATE.



GENERAL ELECTRIC COMPANY  
 PITTSFIELD, MASSACHUSETTS  
**GMA 3 MONITORING PROGRAM**

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**HISTORICAL EXTENT OF NAPL**

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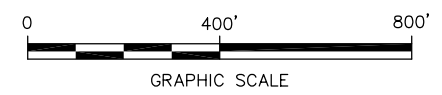
FIGURE  
**6**

CITY: SYR/DIV/GROUP: 85 DB: KEW DMW RCB LD: DMW AM: PD: TM: TR: LYRON\*OFF=REF\*  
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 XREFS: 20186X02 20186X00  
 IMAGES: PROJECTNAME: 1



- LEGEND:**
- SITE BOUNDARY
  - RAILROAD
  - X FENCING
  - 51-6  EXISTING MONITORING WELL
  - 57  EXISTING MONITORING WELL CLUSTER
  - 51-21  NAPL RECOVERY WELL (SKIMMER)
  - GMA4-3  GMA4 MONITORING WELL
  - SC-1  SURFACE WATER STAFF GAUGE
  - EXTENT OF MEASURABLE LNAPL DURING SPRING 2008 SEMI-ANNUAL MONITORING EVENT

- NOTES:**
1. FIGURE IS BASED ON PHOTOGRAPHIC MAPPING BY LOCKWOOD MAPPING, INC.—FLOWN IN APRIL 1990 AND DATA PROVIDED BY GENERAL ELECTRIC COMPANY.
  2. NOT ALL PHYSICAL FEATURES SHOWN.
  3. SITE BOUNDARIES, SAMPLE LOCATIONS AND BUILDING LOCATIONS ARE APPROXIMATE.



GENERAL ELECTRIC COMPANY  
 PITTSFIELD, MASSACHUSETTS  
**GMA 3 MONITORING PROGRAM**

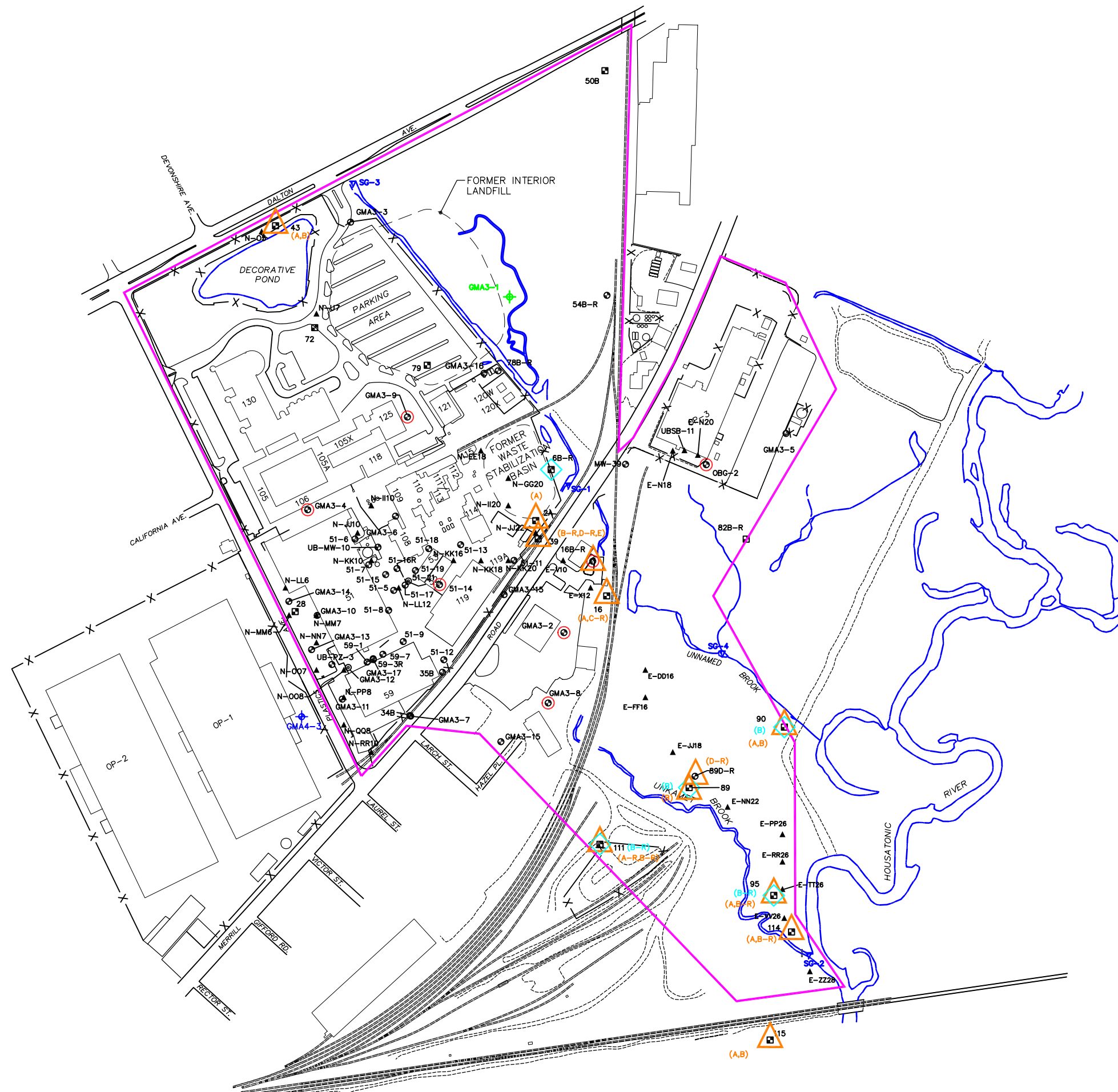
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**EXTENT OF NAPL - SPRING 2008  
 MONITORING EVENT**

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FIGURE  
**7**

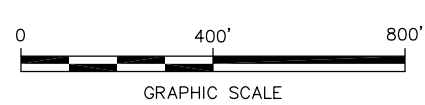
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 XREFS: 20186X02 20186X00  
 IMAGES: PROJECTNAME: 1



**LEGEND:**

	SITE BOUNDARY
	RAILROAD
	FENCING
	UBSB-11 ▲ EXISTING SOIL BORING
	51-6 ● EXISTING MONITORING WELL
	57 ■ EXISTING MONITORING WELL CLUSTER
	51-21 ● NAPL RECOVERY WELL (SKIMMER)
	GMA4-3 ◆ GMA4 MONITORING WELL
	SC-1 ▼ SURFACE WATER STAFF GAUGE
	GW-2 ○ GW-2 SENTINEL/COMPLIANCE WELL
	GW-3 ◇ GW-3 PERIMETER WELL
	▲ NATURAL ATTENUATION MONITORING WELL
	◆ PROPOSED MONITORING WELL

- NOTES:**
- FIGURE IS BASED ON PHOTOGRAPHIC MAPPING BY LOCKWOOD MAPPING, INC.—FLOWN IN APRIL 1990 AND DATA PROVIDED BY GENERAL ELECTRIC COMPANY.
  - NOT ALL PHYSICAL FEATURES SHOWN.
  - SITE BOUNDARIES, SAMPLE LOCATIONS AND BUILDING LOCATIONS ARE APPROXIMATE.
  - FOR WELL CLUSTERS SUBJECT TO DIFFERING MONITORING REQUIREMENTS, THE SPECIFIC WELL INCLUDED FOR EACH TYPE OF MONITORING IS PROVIDED IN PARENTHESES.
  - ALL SAMPLING WILL BE CONDUCTED ON AN ANNUAL BASIS WITH NATURAL ATTENUATION SAMPLED EACH SPRING. ALL OTHER WELLS WILL BE SAMPLED ALTERNATING SPRING./FALL.



GENERAL ELECTRIC COMPANY  
 PITTSFIELD, MASSACHUSETTS  
**GMA 3 MONITORING PROGRAM**

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**PROPOSED INTERIM GROUNDWATER MONITORING PROGRAM**

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**ARCADIS**

FIGURE **8**

ARCADIS

**Appendices**

ARCADIS

**Appendix A**

Groundwater Elevation and  
NAPL Monitoring/Recovery Data



**Table A-1**  
**Groundwater Elevation And Monitoring/Recovery Data**  
**January 2008 - June 2008**

**Groundwater Quality and NAPL Monitoring Interim Report for Spring 2008**  
**Groundwater Management Area 3**  
**General Electric Company - Pittsfield, Massachusetts**

Well Name	Measuring Point Elev. (feet)	Date	Depth to Water (ft BMP)	Depth to LNAPL (ft BMP)	LNAPL Thickness (feet)	Depth to DNAPL (ft BMP)	Total Depth (ft BMP)	DNAPL Thickness (feet)	Corrected Water Elev. (feet)	LNAPL Removed (Liters)	DNAPL Removed (Liters)
<b>GMA 3 Monitoring Wells</b>											
002A	994.16	4/15/2008	7.23	---	0.00	---	55.10	0.00	986.93	---	---
002A	994.16	5/1/2008	7.54	---	0.00	---	54.95	0.00	986.62	---	---
006B-R	993.62	4/15/2008	6.56	---	0.00	---	14.81	0.00	987.06	---	---
006B-R	993.62	5/2/2008	6.76	---	0.00	---	14.61	0.00	986.86	---	---
016A	991.77	4/16/2008	6.20	---	0.00	---	51.07	0.00	985.57	---	---
016A	991.77	5/1/2008	6.48	---	0.00	---	50.90	0.00	985.29	---	---
016B-R	994.87	4/16/2008	8.81	---	0.00	---	16.45	0.00	986.06	---	---
016B-R	994.87	5/1/2008	8.98	---	0.00	---	16.56	0.00	985.89	---	---
016C-R	993.23	4/16/2008	7.08	---	0.00	---	102.90	0.00	986.15	---	---
016C-R	993.23	5/1/2008	7.30	---	0.00	---	102.10	0.00	985.93	---	---
039B-R	991.97	4/15/2008	5.47	---	0.00	---	13.89	0.00	986.50	---	---
039B-R	991.97	4/28/2008	5.65	---	0.00	---	13.70	0.00	986.32	---	---
039B-R	991.97	4/30/2008	5.65	---	0.00	---	13.70	0.00	986.32	---	---
039D-R	994.73	4/15/2008	7.70	---	0.00	---	63.46	0.00	987.03	---	---
039D-R	994.73	4/28/2008	7.99	---	0.00	---	63.29	0.00	986.74	---	---
039D-R	994.73	4/30/2008	7.99	---	0.00	---	63.29	0.00	986.74	---	---
039E	992.21	4/15/2008	4.80	---	0.00	---	239.82	0.00	987.41	---	---
039E	992.21	5/6/2008	4.90	---	0.00	---	239.92	0.00	987.31	---	---
043A	993.79	4/15/2008	4.82	---	0.00	---	51.45	0.00	988.97	---	---
043A	993.79	4/28/2008	4.93	---	0.00	---	51.20	0.00	988.86	---	---
043A	993.79	4/30/2008	4.93	---	0.00	---	51.20	0.00	988.86	---	---
043B	993.61	4/15/2008	5.17	---	0.00	---	16.26	0.00	988.44	---	---
043B	993.61	4/28/2008	5.14	---	0.00	---	22.15	0.00	988.47	---	---
043B	993.61	4/30/2008	5.14	---	0.00	---	22.15	0.00	988.47	---	---
050B	991.76	4/15/2008	2.46	---	0.00	---	15.08	0.00	989.30	---	---
51-05	996.44	1/16/2008	9.99	---	0.00	---	10.89	0.00	986.45	---	---
51-05	996.44	2/26/2008	9.20	---	0.00	---	10.90	0.00	987.24	---	---
51-05	996.44	3/31/2008	9.87	---	0.00	---	10.85	0.00	986.57	---	---
51-05	996.44	4/3/2008	7.96	---	0.00	---	10.63	0.00	988.48	---	---
51-05	996.44	4/15/2008	8.75	---	0.00	---	10.75	0.00	987.69	---	---
51-05	996.44	5/20/2008	9.21	---	0.00	---	10.65	0.00	987.23	---	---
51-05	996.44	6/24/2008	3.78	---	0.00	---	10.60	0.00	992.66	---	---

**Table A-1  
Groundwater Elevation And Monitoring/Recovery Data  
January 2008 - June 2008**

**Groundwater Quality and NAPL Monitoring Interim Report for Spring 2008  
Groundwater Management Area 3  
General Electric Company - Pittsfield, Massachusetts**

Well Name	Measuring Point Elev. (feet)	Date	Depth to Water (ft BMP)	Depth to LNAPL (ft BMP)	LNAPL Thickness (feet)	Depth to DNAPL (ft BMP)	Total Depth (ft BMP)	DNAPL Thickness (feet)	Corrected Water Elev. (feet)	LNAPL Removed (Liters)	DNAPL Removed (Liters)
51-06	997.36	1/16/2008	10.59	---	0.00	---	14.36	0.00	986.77	---	---
51-06	997.36	2/26/2008	9.90	---	0.00	---	14.40	0.00	987.46	---	---
51-06	997.36	3/25/2008	9.14	---	0.00	---	14.35	0.00	988.22	---	---
51-06	997.36	4/15/2008	9.11	---	0.00	---	14.27	0.00	988.25	---	---
51-06	997.36	5/20/2008	10.13	---	0.00	---	14.41	0.00	987.23	---	---
51-06	997.36	6/24/2008	10.60	---	0.00	---	14.35	0.00	986.76	---	---
51-07	997.08	1/16/2008	10.58	---	0.00	---	11.23	0.00	986.50	---	---
51-07	997.08	2/26/2008	9.90	---	0.00	---	11.25	0.00	987.18	---	---
51-07	997.08	3/25/2008	9.20	---	0.00	---	11.20	0.00	987.88	---	---
51-07	997.08	4/15/2008	9.16	---	0.00	---	11.21	0.00	987.92	---	---
51-07	997.08	5/20/2008	10.10	---	0.00	---	11.20	0.00	986.98	---	---
51-07	997.08	6/24/2008	10.60	---	0.00	---	11.22	0.00	986.48	---	---
51-08	997.08	12/31/2007	12.03	10.98	1.05	---	14.60	0.00	986.03	0.648	---
51-08	997.08	1/8/2008	12.02	10.90	1.12	---	14.61	0.00	986.10	0.691	---
51-08	997.08	1/16/2008	11.78	10.65	1.13	---	14.60	0.00	986.35	0.697	---
51-08	997.08	1/23/2008	10.85	10.80	0.05	---	14.60	0.00	986.28	---	---
51-08	997.08	1/30/2008	11.70	10.85	0.85	---	14.62	0.00	986.17	0.524	---
51-08	997.08	2/5/2008	11.40	10.70	0.70	---	14.62	0.00	986.33	0.432	---
51-08	997.08	2/12/2008	11.20	10.45	0.75	---	14.62	0.00	986.58	---	---
51-08	997.08	2/20/2008	10.02	9.98	0.04	---	14.61	0.00	987.10	---	---
51-08	997.08	2/26/2008	10.02	10.01	0.01	---	14.60	0.00	987.07	---	---
51-08	997.08	3/5/2008	10.12	10.10	0.02	---	14.60	0.00	986.98	---	---
51-08	997.08	3/11/2008	9.48	9.46	0.02	---	14.60	0.00	987.62	---	---
51-08	997.08	3/18/2008	9.57	9.55	0.02	---	14.60	0.00	987.53	---	---
51-08	997.08	3/25/2008	9.48	9.45	0.03	---	14.60	0.00	987.63	---	---
51-08	997.08	3/31/2008	9.71	9.61	0.10	---	14.67	0.00	987.46	---	---
51-08	997.08	4/3/2008	9.46	9.42	0.04	---	14.58	0.00	987.66	0.025	---
51-08	997.08	4/9/2008	9.30	9.25	0.05	---	14.62	0.00	987.83	---	---
51-08	997.08	4/15/2008	9.39	9.37	0.02	---	14.58	0.00	987.71	---	---
51-08	997.08	4/22/2008	9.72	9.71	0.01	---	14.60	0.00	987.37	---	---
51-08	997.08	4/29/2008	9.81	9.80	0.01	---	14.60	0.00	987.28	---	---
51-08	997.08	5/6/2008	10.00	9.98	0.02	---	14.60	0.00	987.10	---	---
51-08	997.08	5/14/2008	10.30	10.25	0.05	---	14.60	0.00	986.83	---	---

Table A-1

Groundwater Elevation And Monitoring/Recovery Data  
January 2008 - June 2008

Groundwater Quality and NAPL Monitoring Interim Report for Spring 2008  
Groundwater Management Area 3  
General Electric Company - Pittsfield, Massachusetts

Well Name	Measuring Point Elev. (feet)	Date	Depth to Water (ft BMP)	Depth to LNAPL (ft BMP)	LNAPL Thickness (feet)	Depth to DNAPL (ft BMP)	Total Depth (ft BMP)	DNAPL Thickness (feet)	Corrected Water Elev. (feet)	LNAPL Removed (Liters)	DNAPL Removed (Liters)
51-08	997.08	5/20/2008	10.35	10.33	0.02	---	14.60	0.00	986.75	---	---
51-08	997.08	5/27/2008	10.54	10.50	0.04	---	14.60	0.00	986.58	---	---
51-08	997.08	6/2/2008	10.75	10.72	0.03	---	14.61	0.00	986.36	---	---
51-08	997.08	6/10/2008	10.67	10.65	0.02	---	14.60	0.00	986.43	---	---
51-08	997.08	6/18/2008	10.80	10.70	0.10	---	14.60	0.00	986.37	---	---
51-08	997.08	6/24/2008	10.90	10.73	0.17	---	14.60	0.00	986.34	---	---
51-09	997.70	1/16/2008	10.36	---	0.00	---	11.59	0.00	987.34	---	---
51-09	997.70	2/26/2008	9.45	---	0.00	---	11.60	0.00	988.25	---	---
51-09	997.70	3/25/2008	9.14	---	0.00	---	11.60	0.00	988.56	---	---
51-09	997.70	4/15/2008	9.09	---	0.00	---	11.58	0.00	988.61	---	---
51-09	997.70	5/20/2008	9.90	---	0.00	---	11.58	0.00	987.80	---	---
51-09	997.70	6/24/2008	10.40	---	0.00	---	11.60	0.00	987.30	---	---
51-11	994.37	1/16/2008	7.48	---	0.00	---	13.45	0.00	986.89	---	---
51-11	994.37	2/26/2008	7.30	---	0.00	---	13.48	0.00	987.07	---	---
51-11	994.37	3/25/2008	6.60	---	0.00	---	13.54	0.00	987.77	---	---
51-11	994.37	4/15/2008	6.79	---	0.00	---	13.52	0.00	987.58	---	---
51-11	994.37	5/20/2008	7.90	---	0.00	---	13.52	0.00	986.47	---	---
51-11	994.37	6/24/2008	8.10	---	0.00	---	13.50	0.00	986.27	---	---
51-12	996.55	1/16/2008	7.32	---	0.00	---	13.33	0.00	989.23	---	---
51-12	996.55	2/26/2008	6.98	---	0.00	---	13.32	0.00	989.57	---	---
51-12	996.55	3/25/2008	6.85	---	0.00	---	13.34	0.00	989.70	---	---
51-12	996.55	4/15/2008	7.05	---	0.00	---	13.34	0.00	989.50	---	---
51-12	996.55	5/20/2008	7.35	---	0.00	---	13.35	0.00	989.20	---	---
51-12	996.55	6/24/2008	7.75	---	0.00	---	13.34	0.00	988.80	---	---
51-13	997.42	1/16/2008	Dry at 9.83 (feet BMP)			---	9.83	0.00	NA	---	---
51-13	997.42	2/26/2008	Dry at 9.83 (feet BMP)			---	9.83	0.00	NA	---	---
51-13	997.42	3/25/2008	Dry at 9.83 (feet BMP)			---	9.83	0.00	NA	---	---
51-13	997.42	4/15/2008	Dry at 9.82 (feet BMP)			---	9.82	0.00	NA	---	---
51-13	997.42	5/20/2008	Dry at 9.82 (feet BMP)			---	9.82	0.00	NA	---	---
51-13	997.42	6/24/2008	Dry at 9.83 (feet BMP)			---	9.83	0.00	NA	---	---
51-14	996.77	11/2/2007	11.48	---	0.00	---	14.64	0.00	985.29	---	---
51-14	996.77	1/16/2008	10.49	---	0.00	---	14.68	0.00	986.28	---	---
51-14	996.77	2/26/2008	9.85	---	0.00	---	14.66	0.00	986.92	---	---

**Table A-1  
Groundwater Elevation And Monitoring/Recovery Data  
January 2008 - June 2008**

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Groundwater Management Area 3  
General Electric Company - Pittsfield, Massachusetts**

Well Name	Measuring Point Elev. (feet)	Date	Depth to Water (ft BMP)	Depth to LNAPL (ft BMP)	LNAPL Thickness (feet)	Depth to DNAPL (ft BMP)	Total Depth (ft BMP)	DNAPL Thickness (feet)	Corrected Water Elev. (feet)	LNAPL Removed (Liters)	DNAPL Removed (Liters)
51-14	996.77	3/25/2008	9.30	---	0.00	---	14.66	0.00	987.47	---	---
51-14	996.77	4/15/2008	9.41	---	0.00	---	14.70	0.00	987.36	---	---
51-14	996.77	5/2/2008	9.87	---	0.00	---	14.46	0.00	986.90	---	---
51-14	996.77	5/20/2008	10.25	---	0.00	---	14.60	0.00	986.52	---	---
51-14	996.77	6/24/2008	10.60	---	0.00	---	14.62	0.00	986.17	---	---
51-15	996.43	1/16/2008	10.06	9.97	0.09	---	14.38	0.00	986.45	---	---
51-15	996.43	2/26/2008	9.31	9.26	0.05	---	14.40	0.00	987.17	---	---
51-15	996.43	3/31/2008	9.00	8.87	0.13	---	14.48	0.00	987.55	---	---
51-15	996.43	4/3/2008	8.80	8.69	0.11	---	14.40	0.00	987.73	0.068	---
51-15	996.43	4/15/2008	8.69	8.68	0.01	---	14.38	0.00	987.75	---	---
51-15	996.43	5/20/2008	9.64	9.60	0.04	---	14.38	0.00	986.83	---	---
51-15	996.43	6/24/2008	10.11	10.10	0.01	---	14.40	0.00	986.33	---	---
51-16R	996.39	1/16/2008	9.98	9.96	0.02	---	14.55	0.00	986.43	---	---
51-16R	996.39	2/26/2008	9.22	---	0.00	---	14.55	0.00	987.17	---	---
51-16R	996.39	3/31/2008	8.94	---	0.00	---	14.57	0.00	987.45	---	---
51-16R	996.39	4/3/2008	9.72	---	0.00	---	14.56	0.00	986.67	---	---
51-16R	996.39	4/15/2008	8.73	8.72	0.01	---	14.52	0.00	987.67	---	---
51-16R	996.39	5/20/2008	9.65	9.60	0.05	---	14.52	0.00	986.79	---	---
51-16R	996.39	6/24/2008	10.04	10.02	0.02	---	14.52	0.00	986.37	---	---
51-17	996.43	1/16/2008	10.99	9.76	1.23	---	14.49	0.00	986.58	0.760	---
51-17	996.43	2/26/2008	9.32	9.14	0.18	---	14.50	0.00	987.28	---	---
51-17	996.43	3/31/2008	9.26	8.81	0.45	---	14.59	0.00	987.59	---	---
51-17	996.43	4/3/2008	8.99	8.58	0.41	---	14.55	0.00	987.82	0.253	---
51-17	996.43	4/15/2008	8.65	8.63	0.02	---	14.47	0.00	987.80	---	---
51-17	996.43	5/20/2008	9.68	9.65	0.03	---	14.48	0.00	986.78	---	---
51-17	996.43	6/24/2008	10.04	9.95	0.09	---	14.50	0.00	986.47	---	---
51-18	997.12	1/16/2008	10.63	---	0.00	---	12.61	0.00	986.49	---	---
51-18	997.12	2/26/2008	10.00	---	0.00	---	12.60	0.00	987.12	---	---
51-18	997.12	3/25/2008	9.60	---	0.00	---	12.60	0.00	987.52	---	---
51-18	997.12	4/15/2008	9.56	---	0.00	---	12.57	0.00	987.56	---	---
51-18	997.12	5/20/2008	10.44	---	0.00	---	12.60	0.00	986.68	---	---
51-18	997.12	6/24/2008	10.70	---	0.00	---	12.60	0.00	986.42	---	---
51-19	996.43	1/16/2008	10.74	10.15	0.59	---	14.09	0.00	986.24	0.364	---

**Table A-1  
Groundwater Elevation And Monitoring/Recovery Data  
January 2008 - June 2008**

**Groundwater Quality and NAPL Monitoring Interim Report for Spring 2008  
Groundwater Management Area 3  
General Electric Company - Pittsfield, Massachusetts**

Well Name	Measuring Point Elev. (feet)	Date	Depth to Water (ft BMP)	Depth to LNAPL (ft BMP)	LNAPL Thickness (feet)	Depth to DNAPL (ft BMP)	Total Depth (ft BMP)	DNAPL Thickness (feet)	Corrected Water Elev. (feet)	LNAPL Removed (Liters)	DNAPL Removed (Liters)
51-19	996.43	2/26/2008	9.54	9.50	0.04	---	14.09	0.00	986.93	---	---
51-19	996.43	3/31/2008	9.27	9.21	0.06	---	14.15	0.00	987.22	---	---
51-19	996.43	4/3/2008	9.02	8.98	0.04	---	14.07	0.00	987.45	0.025	---
51-19	996.43	4/15/2008	9.04	9.03	0.01	---	14.07	0.00	987.40	---	---
51-19	996.43	5/20/2008	9.97	9.90	0.07	---	14.06	0.00	986.53	---	---
51-19	996.43	6/24/2008	10.24	10.21	0.03	---	14.05	0.00	986.22	---	---
51-21	1,001.49	1/2/2008	15.38	P	< 0.01	---	NM	0.00	986.11	6.44	---
51-21	1,001.49	1/8/2008	15.32	P	< 0.01	---	NM	0.00	986.17	2.27	---
51-21	1,001.49	1/15/2008	15.10	15.09	0.01	---	NM	0.00	986.40	---	---
51-21	1,001.49	1/22/2008	15.20	15.19	0.01	---	NM	0.00	986.30	4.16	---
51-21	1,001.49	1/29/2008	15.39	---	0.00	---	NM	0.00	986.10	1.14	---
51-21	1,001.49	2/6/2008	15.28	P	< 0.01	---	NM	0.00	986.21	---	---
51-21	1,001.49	2/14/2008	14.70	P	< 0.01	---	NM	0.00	986.79	---	---
51-21	1,001.49	2/19/2008	14.37	14.36	0.01	---	NM	0.00	987.13	---	---
51-21	1,001.49	2/27/2008	14.51	14.50	0.01	---	NM	0.00	986.99	---	---
51-21	1,001.49	3/4/2008	14.70	14.69	0.01	---	NM	0.00	986.80	---	---
51-21	1,001.49	3/12/2008	14.10	14.04	0.06	---	NM	0.00	987.45	---	---
51-21	1,001.49	3/18/2008	14.02	13.99	0.03	---	NM	0.00	987.50	---	---
51-21	1,001.49	3/25/2008	14.70	14.60	0.10	---	NM	0.00	986.88	---	---
51-21	1,001.49	4/3/2008	13.80	P	< 0.01	---	NM	0.00	987.69	---	---
51-21	1,001.49	4/7/2008	13.70	P	< 0.01	---	NM	0.00	987.79	---	---
51-21	1,001.49	4/15/2008	13.88	P	< 0.01	---	NM	0.00	987.61	---	---
51-21	1,001.49	4/22/2008	14.18	P	< 0.01	---	NM	0.00	987.31	---	---
51-21	1,001.49	4/29/2008	14.75	P	< 0.01	---	NM	0.00	986.74	---	---
51-21	1,001.49	5/6/2008	14.47	P	< 0.01	---	NM	NM	987.02	---	---
51-21	1,001.49	5/13/2008	14.79	P	< 0.01	---	NM	NM	986.70	---	---
51-21	1,001.49	5/21/2008	15.69	P	< 0.01	---	NM	NM	985.80	---	---
51-21	1,001.49	5/28/2008	15.00	P	< 0.01	---	NM	NM	986.49	---	---
51-21	1,001.49	6/4/2008	15.20	P	< 0.01	---	NM	0.00	986.29	---	---
51-21	1,001.49	6/11/2008	15.02	P	< 0.01	---	NM	0.00	986.47	---	---
51-21	1,001.49	6/17/2008	15.20	P	< 0.01	---	NM	0.00	986.29	---	---
51-21	1,001.49	6/25/2008	15.11	P	< 0.01	---	NM	0.00	986.38	---	---
054B-R	991.49	4/15/2008	3.63	---	0.00	---	15.58	0.00	987.86	---	---

**Table A-1  
Groundwater Elevation And Monitoring/Recovery Data  
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**Groundwater Quality and NAPL Monitoring Interim Report for Spring 2008  
Groundwater Management Area 3  
General Electric Company - Pittsfield, Massachusetts**

Well Name	Measuring Point Elev. (feet)	Date	Depth to Water (ft BMP)	Depth to LNAPL (ft BMP)	LNAPL Thickness (feet)	Depth to DNAPL (ft BMP)	Total Depth (ft BMP)	DNAPL Thickness (feet)	Corrected Water Elev. (feet)	LNAPL Removed (Liters)	DNAPL Removed (Liters)
59-01	997.52	1/16/2008	11.04	---	0.00	---	11.43	0.00	986.48	---	---
59-01	997.52	2/26/2008	10.30	---	0.00	---	11.38	0.00	987.22	---	---
59-01	997.52	3/31/2008	9.90	---	0.00	---	11.49	0.00	987.62	---	---
59-01	997.52	4/3/2008	9.41	---	0.00	---	11.47	0.00	988.11	---	---
59-01	997.52	4/15/2008	9.42	---	0.00	---	11.43	0.00	988.10	---	---
59-01	997.52	5/20/2008	10.35	---	0.00	---	11.40	0.00	987.17	---	---
59-01	997.52	6/24/2008	10.90	---	0.00	---	11.40	0.00	986.62	---	---
59-03R	997.64	1/16/2008	12.14	11.17	0.97	---	17.04	0.00	986.40	0.599	---
59-03R	997.64	2/26/2008	11.43	10.40	1.03	---	17.03	0.00	987.17	0.636	---
59-03R	997.64	3/31/2008	11.51	10.00	1.51	---	17.11	0.00	987.53	---	---
59-03R	997.64	4/3/2008	9.76	9.75	0.01	---	17.05	0.00	987.89	0.006	---
59-03R	997.64	4/15/2008	9.70	9.69	0.01	---	17.03	0.00	987.95	---	---
59-03R	997.64	5/20/2008	12.30	10.70	1.60	---	17.02	0.00	986.83	0.987	---
59-03R	997.64	6/24/2008	11.74	11.15	0.59	---	17.03	0.00	986.45	0.364	---
59-07	997.96	1/16/2008	12.18	11.40	0.78	---	23.48	0.00	986.51	0.482	---
59-07	997.96	2/26/2008	10.68	10.66	0.02	---	23.50	0.00	987.30	---	---
59-07	997.96	3/31/2008	9.36	9.26	0.10	---	23.54	0.00	988.69	---	---
59-07	997.96	4/3/2008	10.14	10.07	0.07	---	23.48	0.00	987.89	0.043	---
59-07	997.96	4/15/2008	10.16	10.15	0.01	---	23.53	0.00	987.81	---	---
59-07	997.96	5/20/2008	11.00	10.98	0.02	---	23.50	0.00	986.98	---	---
59-07	997.96	6/24/2008	11.46	11.43	0.03	---	23.48	0.00	986.53	---	---
078B-R	988.83	1/16/2008	0.36	---	0.00	---	11.68	0.00	988.47	---	---
078B-R	988.83	2/26/2008	0.15	---	0.00	---	11.70	0.00	988.68	---	---
078B-R	988.83	3/25/2008	Well under water			---	NA	NA	NA	---	---
078B-R	988.83	4/15/2008	0.20	---	0.00	---	11.71	0.00	988.63	---	---
078B-R	988.83	5/20/2008	0.60	---	0.00	---	11.73	0.00	988.23	---	---
078B-R	988.83	6/24/2008	Well is under water			---	11.73	0.00	NA	---	---
082B-R	989.90	4/16/2008	3.24	---	0.00	---	11.87	0.00	986.66	---	---
082B-R	989.90	5/2/2008	3.47	---	0.00	---	11.80	0.00	986.43	---	---
089A	985.76	4/16/2008	2.16	---	0.00	---	47.32	0.00	983.60	---	---
089A	985.76	5/5/2008	2.60	---	0.00	---	47.12	0.00	983.16	---	---
089B	986.03	4/16/2008	2.48	---	0.00	---	8.95	0.00	983.55	---	---
089B	986.03	5/5/2008	2.91	---	0.00	---	8.73	0.00	983.12	---	---

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Well Name	Measuring Point Elev. (feet)	Date	Depth to Water (ft BMP)	Depth to LNAPL (ft BMP)	LNAPL Thickness (feet)	Depth to DNAPL (ft BMP)	Total Depth (ft BMP)	DNAPL Thickness (feet)	Corrected Water Elev. (feet)	LNAPL Removed (Liters)	DNAPL Removed (Liters)
089D-R	987.11	4/16/2008	3.29	---	0.00	---	80	0.00	983.82	---	---
089D-R	987.11	5/4/2008	3.91	---	0.00	---	79.08	0.00	983.20	---	---
090A	988.07	4/16/2008	5.38	---	0.00	---	51.65	0.00	982.69	---	---
090A	988.07	5/14/2008	5.47	---	0.00	---	51.42	0.00	982.60	---	---
090B	989.10	4/16/2008	5.52	---	0.00	---	12.93	0.00	983.58	---	---
090B	989.10	5/14/2008	6.70	---	0.00	---	12.69	0.00	982.40	---	---
095A	987.18	4/16/2008	6.06	---	0.00	---	51.02	0.00	981.12	---	---
095A	987.18	5/14/2008	6.81	---	0.00	---	50.82	0.00	980.37	---	---
095B-R	986.24	4/16/2008	5.24	---	0.00	---	13.63	0.00	981.00	---	---
095B-R	986.24	5/8/2008	5.79	---	0.00	---	13.55	0.00	980.45	---	---
111A-R	997.35	4/16/2008	12.63	---	0.00	---	52.08	0.00	984.72	---	---
111A-R	997.35	5/6/2008	13.27	---	0.00	---	52.10	0.00	984.08	---	---
111B-R	997.48	4/16/2008	13.47	---	0.00	---	19.77	0.00	984.01	---	---
111B-R	997.48	5/14/2008	14.30	---	0.00	---	19.54	0.00	983.18	---	---
114A	986.16	4/16/2008	5.17	---	0.00	---	6.42	0.00	980.99	---	---
114A	986.16	5/13/2008	5.98	---	0.00	---	52.18	0.00	980.18	---	---
114B-R	985.54	4/16/2008	5.17	---	0.00	---	15.26	0.00	980.37	---	---
114B-R	985.54	5/13/2008	5.99	---	0.00	---	15.00	0.00	979.55	---	---
115A	988.53	4/16/2008	6.51	---	0.00	---	42.76	0.00	982.02	---	---
115A	988.53	5/15/2008	8.12	---	0.00	---	42.58	0.00	980.41	---	---
115B	990.90	4/16/2008	9.71	---	0.00	---	15.75	0.00	981.19	---	---
115B	990.90	5/18/2008	11.51	---	0.00	---	15.50	0.00	979.39	---	---
GMA3-2	991.94	4/16/2008	6.16	---	0.00	---	14.98	0.00	985.78	---	---
GMA3-3	990.45	4/15/2008	0.55	---	0.00	---	12.22	0.00	989.90	---	---
GMA3-4	994.60	4/15/2008	5.50	---	0.00	---	13.17	0.00	989.10	---	---
GMA3-5	993.67	4/16/2008	7.01	---	0.00	---	15.50	0.00	986.66	---	---
GMA3-6	997.49	4/15/2008	15.20	---	0.00	---	23.55	0.00	982.29	---	---
GMA3-7	1,000.17	1/16/2008	13.29	---	0.00	---	19.83	0.00	986.88	---	---
GMA3-7	1,000.17	4/15/2008	11.95	---	0.00	---	19.86	0.00	988.22	---	---
GMA3-8	996.24	4/16/2008	9.32	---	0.00	---	15.72	0.00	986.92	---	---
GMA3-9	992.39	4/15/2008	3.18	---	0.00	---	12.65	0.00	989.21	---	---
GMA3-10	997.54	12/31/2007	11.47	11.45	0.02	---	17.78	0.00	986.09	---	---
GMA3-10	997.54	1/8/2008	11.47	11.30	0.17	---	17.78	0.00	986.23	0.105	---

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Well Name	Measuring Point Elev. (feet)	Date	Depth to Water (ft BMP)	Depth to LNAPL (ft BMP)	LNAPL Thickness (feet)	Depth to DNAPL (ft BMP)	Total Depth (ft BMP)	DNAPL Thickness (feet)	Corrected Water Elev. (feet)	LNAPL Removed (Liters)	DNAPL Removed (Liters)
GMA3-10	997.54	1/16/2008	11.30	11.06	0.24	---	17.80	0.00	986.46	---	---
GMA3-10	997.54	1/23/2008	11.40	11.00	0.40	---	17.78	0.00	986.51	0.247	---
GMA3-10	997.54	1/30/2008	11.23	11.11	0.12	---	17.78	0.00	986.42	---	---
GMA3-10	997.54	2/5/2008	11.55	11.15	0.40	---	17.78	0.00	986.36	0.297	---
GMA3-10	997.54	2/12/2008	11.08	10.87	0.21	---	17.78	0.00	986.66	0.130	---
GMA3-10	997.54	2/20/2008	10.56	10.38	0.18	---	17.70	0.00	987.15	---	---
GMA3-10	997.54	2/26/2008	10.40	10.22	0.18	---	17.72	0.00	987.31	---	---
GMA3-10	997.54	3/5/2008	10.32	10.30	0.02	---	17.73	0.00	987.24	---	---
GMA3-10	997.54	3/11/2008	10.15	9.86	0.29	---	17.74	0.00	987.66	0.179	---
GMA3-10	997.54	3/18/2008	10.14	9.75	0.39	---	17.73	0.00	987.76	0.241	---
GMA3-10	997.54	3/25/2008	9.78	9.60	0.18	---	17.74	0.00	987.93	---	---
GMA3-10	997.54	4/3/2008	9.99	9.60	0.39	---	17.74	0.00	987.91	0.241	---
GMA3-10	997.54	4/9/2008	9.72	9.40	0.32	---	17.74	0.00	988.12	0.197	---
GMA3-10	997.54	4/15/2008	10.26	9.45	0.81	---	17.71	0.00	988.03	0.500	---
GMA3-10	997.54	4/22/2008	10.60	9.65	0.95	---	17.72	0.00	987.82	0.586	---
GMA3-10	997.54	4/29/2008	10.54	9.89	0.65	---	17.71	0.00	987.60	0.401	---
GMA3-10	997.54	5/6/2008	10.48	10.04	0.44	---	17.74	0.00	987.47	0.271	---
GMA3-10	997.54	5/14/2008	10.80	10.30	0.50	---	17.71	0.00	987.21	0.308	---
GMA3-10	997.54	5/20/2008	10.85	10.45	0.40	---	17.74	0.00	987.06	0.247	---
GMA3-10	997.54	5/27/2008	10.98	10.60	0.38	---	17.74	0.00	986.91	0.234	---
GMA3-10	997.54	6/2/2008	11.10	10.80	0.30	---	17.71	0.00	986.72	0.185	---
GMA3-10	997.54	6/10/2008	11.04	10.87	0.17	---	17.76	0.00	986.66	---	---
GMA3-10	997.54	6/18/2008	11.00	10.94	0.06	---	17.74	0.00	986.60	---	---
GMA3-10	997.54	6/24/2008	11.30	10.97	0.33	---	17.72	0.00	986.55	0.204	---
GMA3-11	997.25	12/31/2007	12.40	---	0.00	---	18.10	0.00	984.85	---	---
GMA3-11	997.25	1/8/2008	10.60	---	0.00	---	18.07	0.00	986.65	---	---
GMA3-11	997.25	1/16/2008	10.38	---	0.00	---	18.10	0.00	986.87	---	---
GMA3-11	997.25	1/23/2008	10.38	---	0.00	---	18.08	0.00	986.87	---	---
GMA3-11	997.25	1/30/2008	10.45	---	0.00	---	18.08	0.00	986.80	---	---
GMA3-11	997.25	2/5/2008	10.50	---	0.00	---	18.05	0.00	986.75	---	---
GMA3-11	997.25	2/12/2008	10.18	---	0.00	---	18.10	0.00	987.07	---	---
GMA3-11	997.25	2/20/2008	9.75	---	0.00	---	18.02	0.00	987.50	---	---
GMA3-11	997.25	2/26/2008	9.70	---	0.00	---	18.03	0.00	987.55	---	---



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GMA3-11	997.25	3/5/2008	9.65	---	0.00	---	18.02	0.00	987.60	---	---
GMA3-11	997.25	3/11/2008	9.40	---	0.00	---	18.02	0.00	987.85	---	---
GMA3-11	997.25	3/18/2008	9.30	---	0.00	---	18.01	0.00	987.95	---	---
GMA3-11	997.25	3/25/2008	9.20	---	0.00	---	18.00	0.00	988.05	---	---
GMA3-11	997.25	4/3/2008	9.17	---	0.00	---	18.03	0.00	988.08	---	---
GMA3-11	997.25	4/9/2008	8.98	---	0.00	---	18.00	0.00	988.27	---	---
GMA3-11	997.25	4/15/2008	9.12	---	0.00	---	18.08	0.00	988.13	---	---
GMA3-11	997.25	4/22/2008	9.20	---	0.00	---	17.98	0.00	988.05	---	---
GMA3-11	997.25	4/29/2008	9.40	---	0.00	---	17.98	0.00	987.85	---	---
GMA3-11	997.25	5/6/2008	9.58	---	0.00	---	17.98	0.00	987.67	---	---
GMA3-11	997.25	5/14/2008	9.70	---	0.00	---	17.98	0.00	987.55	---	---
GMA3-11	997.25	5/20/2008	9.76	---	0.00	---	17.95	0.00	987.49	---	---
GMA3-11	997.25	5/27/2008	9.90	---	0.00	---	17.98	0.00	987.35	---	---
GMA3-11	997.25	6/2/2008	10.10	---	0.00	---	17.95	0.00	987.15	---	---
GMA3-11	997.25	6/24/2008	10.25	---	0.00	---	17.96	0.00	987.00	---	---
GMA3-12	997.84	12/31/2007	11.88	11.75	0.13	---	21.20	0.00	986.08	---	---
GMA3-12	997.84	1/8/2008	11.74	11.61	0.13	---	21.20	0.00	986.22	0.321	---
GMA3-12	997.84	1/16/2008	11.50	11.38	0.12	---	21.22	0.00	986.45	---	---
GMA3-12	997.84	1/23/2008	11.44	11.35	0.09	---	21.22	0.00	986.48	---	---
GMA3-12	997.84	1/30/2008	11.62	11.50	0.12	---	21.22	0.00	986.33	---	---
GMA3-12	997.84	2/5/2008	11.66	11.50	0.16	---	21.23	0.00	986.33	---	---
GMA3-12	997.84	2/12/2008	11.36	11.18	0.18	---	21.20	0.00	986.65	0.111	---
GMA3-12	997.84	2/20/2008	10.83	10.65	0.18	---	21.20	0.00	987.18	---	---
GMA3-12	997.84	2/26/2008	10.64	10.58	0.06	---	21.21	0.00	987.26	---	---
GMA3-12	997.84	3/5/2008	10.72	10.65	0.07	---	21.21	0.00	987.19	---	---
GMA3-12	997.84	3/11/2008	10.19	10.14	0.05	---	21.20	0.00	987.70	---	---
GMA3-12	997.84	3/18/2008	10.20	10.13	0.07	---	21.21	0.00	987.71	---	---
GMA3-12	997.84	3/25/2008	10.07	9.95	0.12	---	21.21	0.00	987.88	---	---
GMA3-12	997.84	3/31/2008	10.35	10.14	0.21	---	21.23	0.00	987.69	---	---
GMA3-12	997.84	4/3/2008	9.98	9.92	0.06	---	21.22	0.00	987.92	0.148	---
GMA3-12	997.84	4/9/2008	9.80	9.78	0.02	---	21.22	0.00	988.06	---	---
GMA3-12	997.84	4/15/2008	10.02	9.90	0.12	---	21.20	0.00	987.93	---	---
GMA3-12	997.84	4/22/2008	10.17	10.14	0.03	---	21.22	0.00	987.70	---	---

**Table A-1  
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January 2008 - June 2008**

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Groundwater Management Area 3  
General Electric Company - Pittsfield, Massachusetts**

Well Name	Measuring Point Elev. (feet)	Date	Depth to Water (ft BMP)	Depth to LNAPL (ft BMP)	LNAPL Thickness (feet)	Depth to DNAPL (ft BMP)	Total Depth (ft BMP)	DNAPL Thickness (feet)	Corrected Water Elev. (feet)	LNAPL Removed (Liters)	DNAPL Removed (Liters)
GMA3-12	997.84	4/29/2008	10.35	10.33	0.02	---	21.22	0.00	987.51	---	---
GMA3-12	997.84	5/6/2008	10.52	10.50	0.02	---	21.24	0.00	987.34	---	---
GMA3-12	997.84	5/14/2008	10.75	10.70	0.05	---	21.22	0.00	987.14	---	---
GMA3-12	997.84	5/20/2008	10.94	10.87	0.07	---	21.25	0.00	986.97	---	---
GMA3-12	997.84	5/27/2008	11.11	11.03	0.08	---	21.22	0.00	986.80	---	---
GMA3-12	997.84	6/2/2008	11.25	11.22	0.03	---	21.24	0.00	986.62	---	---
GMA3-12	997.84	6/10/2008	11.30	11.21	0.09	---	21.22	0.00	986.62	---	---
GMA3-12	997.84	6/18/2008	11.38	11.30	0.08	---	21.24	0.00	986.53	---	---
GMA3-12	997.84	6/24/2008	11.40	11.35	0.05	---	21.22	0.00	986.49	---	---
GMA3-13	997.73	12/31/2007	11.65	---	0.00	---	17.40	0.00	986.08	---	---
GMA3-13	997.73	1/8/2008	11.48	---	0.00	---	17.40	0.00	986.25	---	---
GMA3-13	997.73	1/16/2008	11.30	---	0.00	---	17.40	0.00	986.43	---	---
GMA3-13	997.73	1/23/2008	11.63	11.15	0.48	---	17.40	0.00	986.55	0.296	---
GMA3-13	997.73	1/30/2008	11.55	11.24	0.31	---	17.40	0.00	986.47	0.191	---
GMA3-13	997.73	2/5/2008	11.41	11.33	0.08	---	17.40	0.00	986.39	0.049	---
GMA3-13	997.73	2/12/2008	11.18	11.03	0.15	---	17.40	0.00	986.69	0.093	---
GMA3-13	997.73	2/20/2008	10.78	10.55	0.23	---	17.40	0.00	987.16	0.142	---
GMA3-13	997.73	2/26/2008	10.85	10.39	0.46	---	17.40	0.00	987.31	---	---
GMA3-13	997.73	3/5/2008	10.55	10.48	0.07	---	17.40	0.00	987.25	0.043	---
GMA3-13	997.73	3/11/2008	10.25	10.01	0.24	---	17.38	0.00	987.70	---	---
GMA3-13	997.73	3/18/2008	10.10	9.95	0.15	---	17.40	0.00	987.77	0.093	---
GMA3-13	997.73	3/25/2008	9.90	9.84	0.06	---	17.40	0.00	987.89	0.037	---
GMA3-13	997.73	4/3/2008	9.80	9.75	0.05	---	17.40	0.00	987.98	0.031	---
GMA3-13	997.73	4/9/2008	9.59	9.56	0.03	---	17.40	0.00	988.17	0.019	---
GMA3-13	997.73	4/15/2008	9.85	9.74	0.11	---	17.46	0.00	987.98	0.068	---
GMA3-13	997.73	4/22/2008	9.90	9.89	0.01	---	17.38	0.00	987.84	0.006	---
GMA3-13	997.73	4/29/2008	10.12	10.10	0.02	---	17.38	0.00	987.63	0.012	---
GMA3-13	997.73	5/6/2008	10.25	10.21	0.04	---	17.38	0.00	987.52	0.025	---
GMA3-13	997.73	5/14/2008	10.50	---	0.00	---	17.40	0.00	987.23	---	---
GMA3-13	997.73	5/20/2008	10.64	10.63	0.01	---	17.38	0.00	987.10	---	---
GMA3-13	997.73	5/27/2008	10.87	10.82	0.05	---	17.38	0.00	986.91	0.031	---
GMA3-13	997.73	6/2/2008	11.03	10.96	0.07	---	17.40	0.00	986.77	0.043	---
GMA3-13	997.73	6/10/2008	11.17	11.03	0.14	---	17.40	0.00	986.69	---	---

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Well Name	Measuring Point Elev. (feet)	Date	Depth to Water (ft BMP)	Depth to LNAPL (ft BMP)	LNAPL Thickness (feet)	Depth to DNAPL (ft BMP)	Total Depth (ft BMP)	DNAPL Thickness (feet)	Corrected Water Elev. (feet)	LNAPL Removed (Liters)	DNAPL Removed (Liters)
GMA3-13	997.73	6/18/2008	11.20	11.19	0.01	---	17.40	0.00	986.54	0.006	---
GMA3-13	997.73	6/24/2008	11.35	11.15	0.20	---	17.38	0.00	986.57	0.123	---
GMA3-14	997.42	1/16/2008	10.47	---	0.00	---	16.55	0.00	986.95	---	---
GMA3-14	997.42	2/26/2008	10.00	---	0.00	---	16.50	0.00	987.42	---	---
GMA3-14	997.42	4/15/2008	9.32	---	0.00	---	16.51	0.00	988.10	---	---
GMA3-14	997.42	5/20/2008	10.24	---	0.00	---	16.44	0.00	987.18	---	---
GMA3-14	997.42	6/24/2008	10.78	---	0.00	---	16.45	0.00	986.64	---	---
GMA3-15	996.74	1/16/2008	10.92	---	0.00	---	17.21	0.00	985.82	---	---
GMA3-15	996.74	4/15/2008	10.10	---	0.00	---	17.28	0.00	986.64	---	---
GMA3-16	989.26	12/31/2007	Water just above riser			---	12.50	0.00	NA	---	---
GMA3-16	989.26	1/8/2008	Water just above riser			---	12.48	0.00	NA	---	---
GMA3-16	989.26	1/16/2008	0.47	---	0.00	---	12.50	0.00	988.79	---	---
GMA3-16	989.26	1/23/2008	0.93	---	0.00	---	12.50	0.00	988.33	---	---
GMA3-16	989.26	1/30/2008	0.96	---	0.00	---	12.50	0.00	988.30	---	---
GMA3-16	989.26	2/5/2008	Water just above riser			---	12.48	0.00	NA	---	---
GMA3-16	989.26	2/12/2008	Water just above riser			---	12.50	0.00	NA	---	---
GMA3-16	989.26	2/20/2008	Water just above riser			---	12.50	0.00	NA	---	---
GMA3-16	989.26	2/26/2008	0.40	---	0.00	---	12.42	0.00	988.86	---	---
GMA3-16	989.26	3/5/2008	Water just above riser			---	NM	NA	NA	---	---
GMA3-16	989.26	3/11/2008	Water just above riser			---	12.44	0.00	NA	---	---
GMA3-16	989.26	3/18/2008	Water just above riser			---	12.43	0.00	NA	---	---
GMA3-16	989.26	3/25/2008	Water just above riser			---	12.43	0.00	NA	---	---
GMA3-16	989.26	4/3/2008	Water just above riser			---	12.38	0.00	NA	---	---
GMA3-16	989.26	4/9/2008	Water just above riser			---	12.32	0.00	NA	---	---
GMA3-16	989.26	4/15/2008	0.40	---	0.00	---	12.28	0.00	988.86	---	---
GMA3-16	989.26	4/22/2008	0.79	---	0.00	---	12.35	0.00	988.47	---	---
GMA3-16	989.26	4/29/2008	0.70	---	0.00	---	12.35	0.00	988.56	---	---
GMA3-16	989.26	5/6/2008	0.78	---	0.00	---	12.35	0.00	988.48	---	---
GMA3-16	989.26	5/14/2008	1.12	---	0.00	---	12.34	0.00	988.14	---	---
GMA3-16	989.26	5/20/2008	0.68	---	0.00	---	12.35	0.00	988.58	---	---
GMA3-16	989.26	5/27/2008	0.98	---	0.00	---	12.34	0.00	988.28	---	---
GMA3-16	989.26	6/2/2008	0.96	---	0.00	---	12.35	0.00	988.30	---	---
GMA3-16	989.26	6/24/2008	0.50	---	0.00	---	12.35	0.00	988.76	---	---

**Table A-1  
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Groundwater Management Area 3  
General Electric Company - Pittsfield, Massachusetts**

Well Name	Measuring Point Elev. (feet)	Date	Depth to Water (ft BMP)	Depth to LNAPL (ft BMP)	LNAPL Thickness (feet)	Depth to DNAPL (ft BMP)	Total Depth (ft BMP)	DNAPL Thickness (feet)	Corrected Water Elev. (feet)	LNAPL Removed (Liters)	DNAPL Removed (Liters)
GMA3-17	1,002.00	12/31/2007	15.95	15.91	0.04	---	23.28	0.00	986.09	0.099	---
GMA3-17	1,002.00	1/8/2008	15.97	15.82	0.15	---	23.28	0.00	986.17	0.371	---
GMA3-17	1,002.00	1/16/2008	15.60	15.55	0.05	---	23.29	0.00	986.45	0.124	---
GMA3-17	1,002.00	1/23/2008	15.75	15.58	0.17	---	23.29	0.00	986.41	0.420	---
GMA3-17	1,002.00	1/30/2008	15.77	15.71	0.06	---	23.29	0.00	986.29	0.037	---
GMA3-17	1,002.00	2/5/2008	15.79	15.70	0.09	---	23.27	0.00	986.29	0.056	---
GMA3-17	1,002.00	2/12/2008	Skimmer Installed			---	NA	NA	NA	---	---
GMA3-17	1,002.00	2/14/2008	16.45	P	< 0.01	---	NM	0.00	985.55	---	---
GMA3-17	1,002.00	4/22/2008	16.70	P	< 0.01	---	NM	0.00	985.30	---	---
GMA3-17	1,002.00	2/19/2008	16.18	16.16	0.02	---	NM	0.00	985.84	---	---
GMA3-17	1,002.00	2/27/2008	16.02	16.00	0.02	---	NM	0.00	986.00	---	---
GMA3-17	1,002.00	5/14/2008	16.70	P	< 0.01	---	NM	0.00	985.30	---	---
GMA3-17	1,002.00	3/4/2008	16.30	16.29	0.01	---	NM	0.00	985.71	---	---
GMA3-17	1,002.00	3/12/2008	16.59	16.16	0.43	---	NM	0.00	985.81	---	---
GMA3-17	1,002.00	3/18/2008	15.61	15.60	0.01	---	NM	0.00	986.40	---	---
GMA3-17	1,002.00	3/25/2008	15.31	15.30	0.01	---	NM	0.00	986.70	---	---
GMA3-17	1,002.00	4/3/2008	15.30	P	< 0.01	---	NM	NM	986.70	---	---
GMA3-17	1,002.00	4/7/2008	15.18	P	< 0.01	---	---	NM	986.82	---	---
GMA3-17	1,002.00	4/15/2008	15.30	P	< 0.01	---	NM	NM	986.70	---	---
GMA3-17	1,002.00	4/22/2008	15.55	15.54	0.01	---	NM	NM	986.46	---	---
GMA3-17	1,002.00	4/29/2008	15.75	P	< 0.01	---	NM	0.00	986.25	---	---
GMA3-17	1,002.00	5/6/2008	15.90	P	< 0.01	---	NM	NM	986.10	---	---
GMA3-17	1,002.00	5/13/2008	16.17	P	< 0.01	---	NM	NM	985.83	---	---
GMA3-17	1,002.00	5/21/2008	16.63	---	0.00	---	NM	NM	985.37	---	---
GMA3-17	1,002.00	5/28/2008	16.51	P	< 0.01	---	NM	NM	985.49	---	---
GMA3-17	1,002.00	6/17/2008	16.80	P	< 0.01	---	NM	NM	985.20	---	---
GMA3-17	1,002.00	6/25/2008	16.78	P	< 0.01	---	NM	NM	985.22	---	---
OBG-2	992.20	4/16/2008	4.21	---	0.00	---	14.88	0.00	987.99	---	---
UB-MW-10	995.99	1/16/2008	9.43	---	0.00	---	14.46	0.00	986.56	---	---
UB-MW-10	995.99	2/26/2008	8.70	---	0.00	---	14.45	0.00	987.29	---	---
UB-MW-10	995.99	3/25/2008	8.20	---	0.00	---	14.30	0.00	987.79	---	---
UB-MW-10	995.99	4/15/2008	8.16	---	0.00	---	14.45	0.00	987.83	---	---
UB-MW-10	995.99	5/20/2008	9.10	---	0.00	---	14.30	0.00	986.89	---	---

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Well Name	Measuring Point Elev. (feet)	Date	Depth to Water (ft BMP)	Depth to LNAPL (ft BMP)	LNAPL Thickness (feet)	Depth to DNAPL (ft BMP)	Total Depth (ft BMP)	DNAPL Thickness (feet)	Corrected Water Elev. (feet)	LNAPL Removed (Liters)	DNAPL Removed (Liters)
UB-MW-10	995.99	6/24/2008	9.50	---	0.00	---	14.35	0.00	986.49	---	---
UB-PZ-3	998.15	1/16/2008	12.03	11.87	0.16	---	13.41	0.00	986.27	---	---
UB-PZ-3	998.15	2/26/2008	11.41	11.04	0.37	---	13.42	0.00	987.08	0.057	---
UB-PZ-3	998.15	3/31/2008	11.12	10.48	0.64	---	13.41	0.00	987.63	---	---
UB-PZ-3	998.15	4/3/2008	10.93	10.36	0.57	---	13.41	0.00	987.75	0.138	---
UB-PZ-3	998.15	4/15/2008	10.85	10.28	0.57	---	13.40	0.00	987.83	---	---
UB-PZ-3	998.15	5/20/2008	11.48	11.30	0.18	---	13.42	0.00	986.84	0.063	---
UB-PZ-3	998.15	6/24/2008	11.95	11.84	0.11	---	13.40	0.00	986.30	0.038	---
<b>Unkamet Brook Staff Gauges</b>											
GMA3-SG-1	988.90	4/15/2008	4.33	Chiseled square in concrete headwall at Outfall 009C					993.23	---	---
GMA3-SG-2	981.61	4/16/2008	2.55	See note 6 regarding depth to water					984.16	---	---
GMA3-SG-3	989.42	4/15/2008	4.99	See note 6 regarding depth to water					994.41	---	---
GMA3-SG-4	989.71	4/16/2008	0.50	See note 6 regarding depth to water					989.42	---	---
<b>GMA 4 Monitoring Wells (Adjacent to GMA3)</b>											
060B-R	1,002.79	4/17/2008	13.10	---	0.00	---	20.78	0.00	989.69	---	---
GMA4-3	1,003.95	1/15/2008	17.52	---	0.00	---	26.25	0.00	986.43	---	---
GMA4-3	1,003.95	2/26/2008	18.70	---	0.00	---	26.24	0.00	985.25	---	---
GMA4-3	1,003.95	3/26/2008	16.00	---	0.00	---	26.24	0.00	987.95	---	---
GMA4-3	1,003.95	4/17/2008	15.91	---	0.00	---	26.23	0.00	988.04	---	---
GMA4-3	1,003.95	5/20/2008	16.80	---	0.00	---	26.24	0.00	987.15	---	---
GMA4-3	1,003.95	6/24/2008	17.40	---	0.00	---	26.21	0.00	986.55	---	---
RF-14	1,001.59	4/17/2008	6.74	---	0.00	---	22.60	0.00	994.85	---	---

Notes:

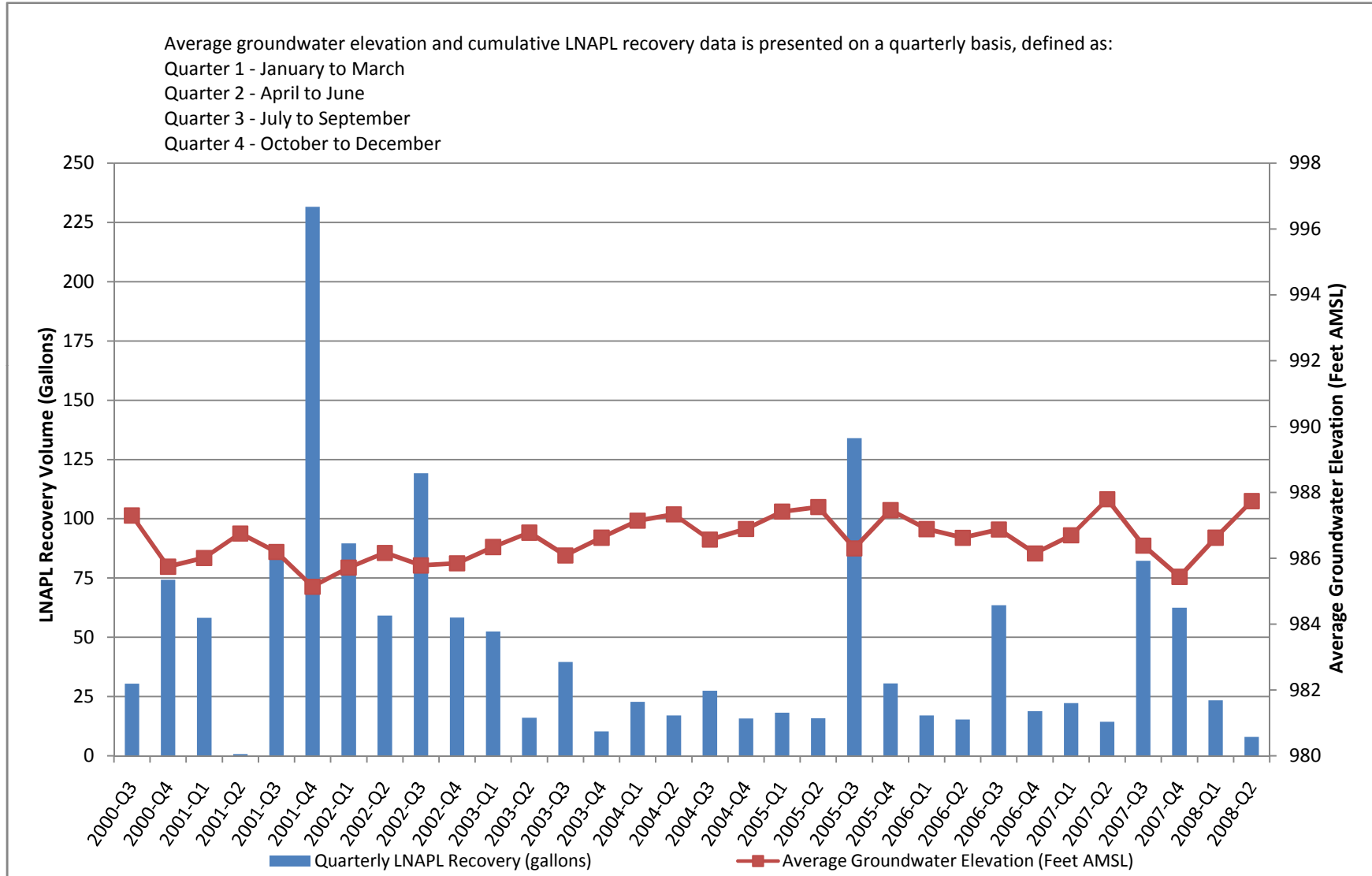
1. ft BMP - feet Below Measuring Point.
2. --- indicates LNAPL or DNAPL was not present in a measurable quantity.
3. NA indicates information not available.
4. NM indicates information not measured.
5. P indicates that LNAPL is present at a thickness that is < 0.01 feet, the corresponding thickness is recorded as such.
6. Survey reference points were established on the GMA 3 staff gauges. The "Depth to Water" value(s) provided in the above table refer to the vertical distance from the surveyed reference point to the water surface.

**Appendix B**

Comparison of Quarterly LNAPL  
Recovery Volumes to Average  
Groundwater Elevations

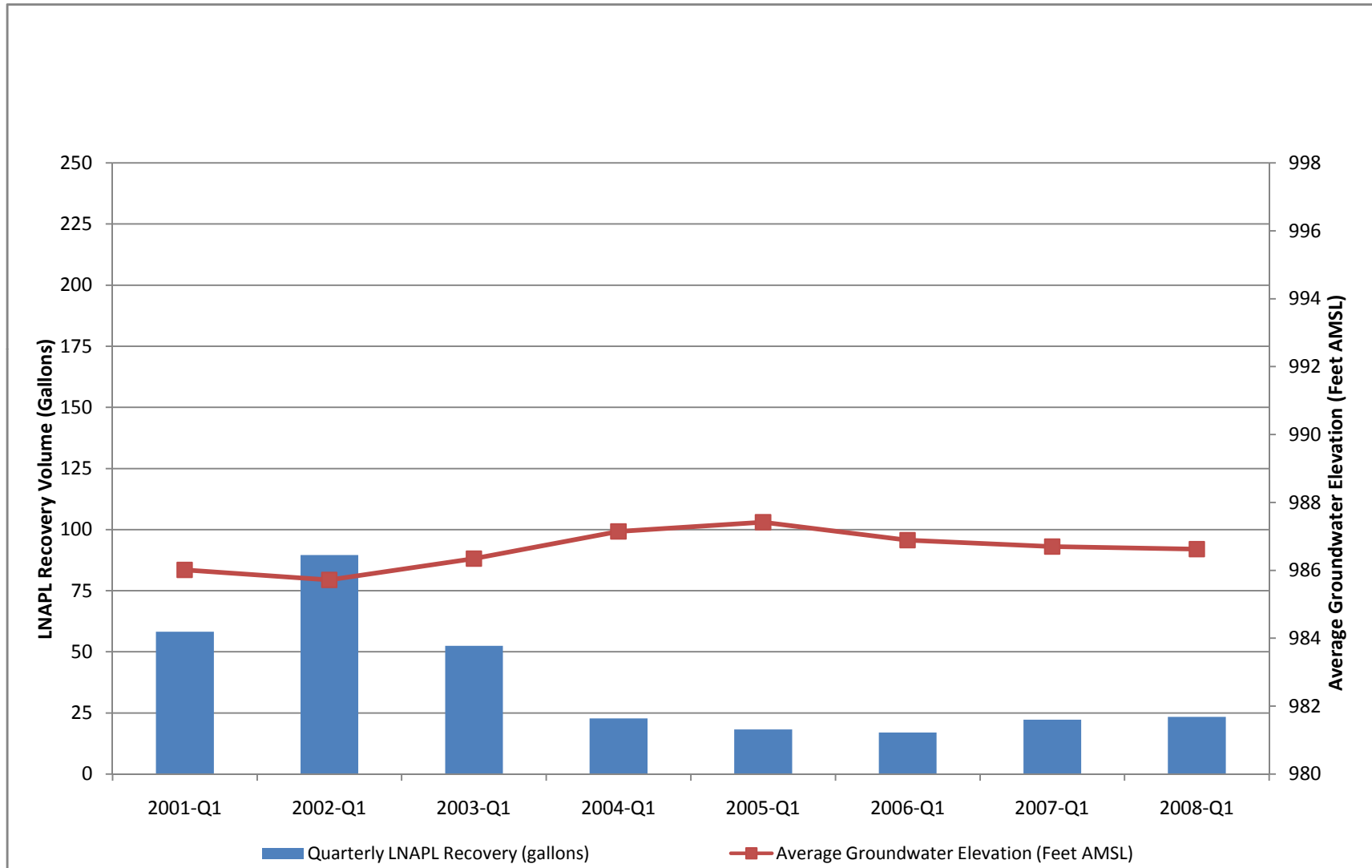
**Appendix B**  
**Comparison of Quarterly LNAPL Recovery to Groundwater Elevation**

**Groundwater Management Area 3**  
**General Electric Company - Pittsfield, Massachusetts**



**Appendix B**  
**LNAPL Recovery vs. Groundwater Elevation**  
**Quarter 1 (January - March), 2001 to 2008**

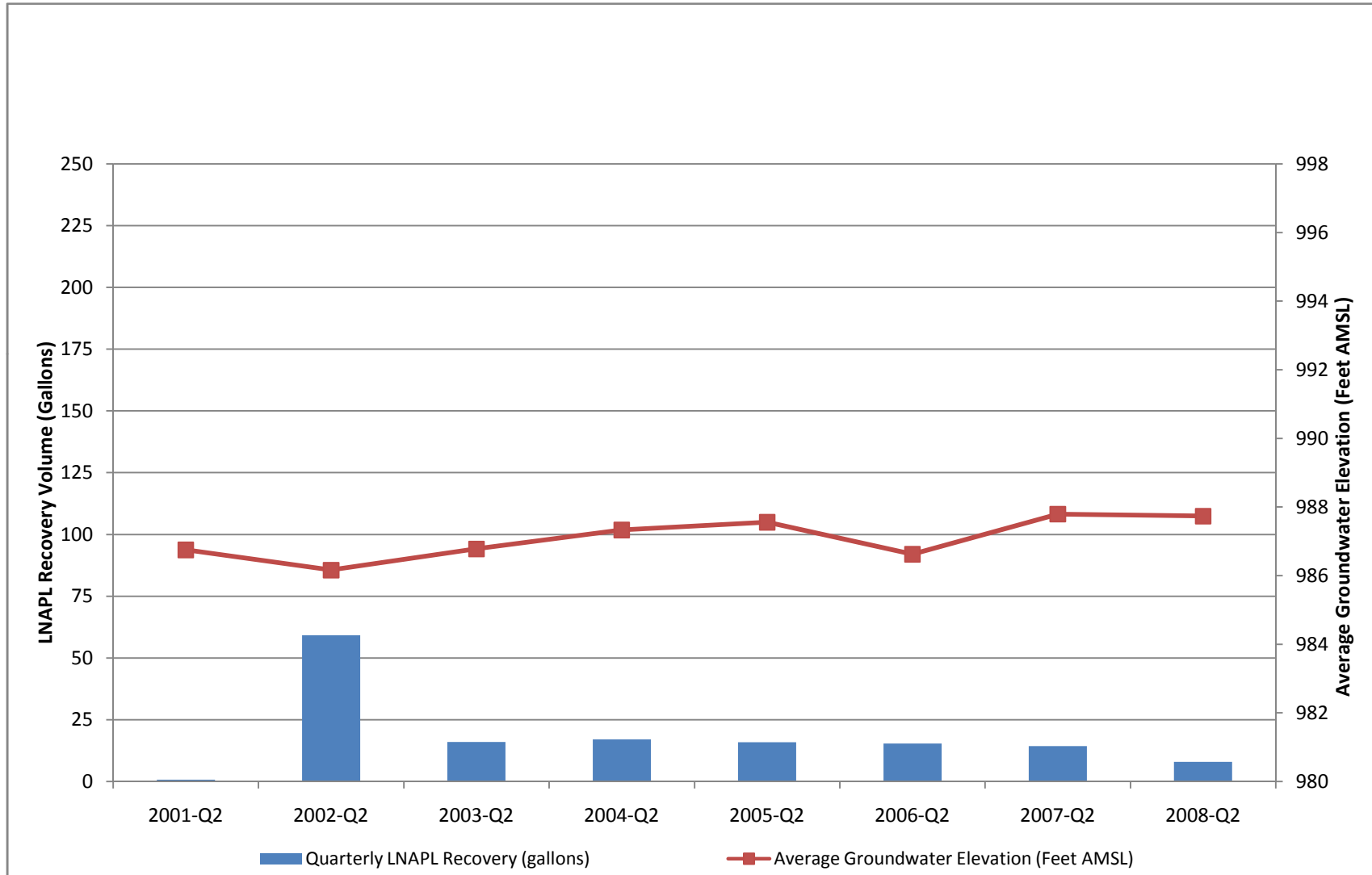
**Groundwater Management Area 3**  
**General Electric Company - Pittsfield, Massachusetts**





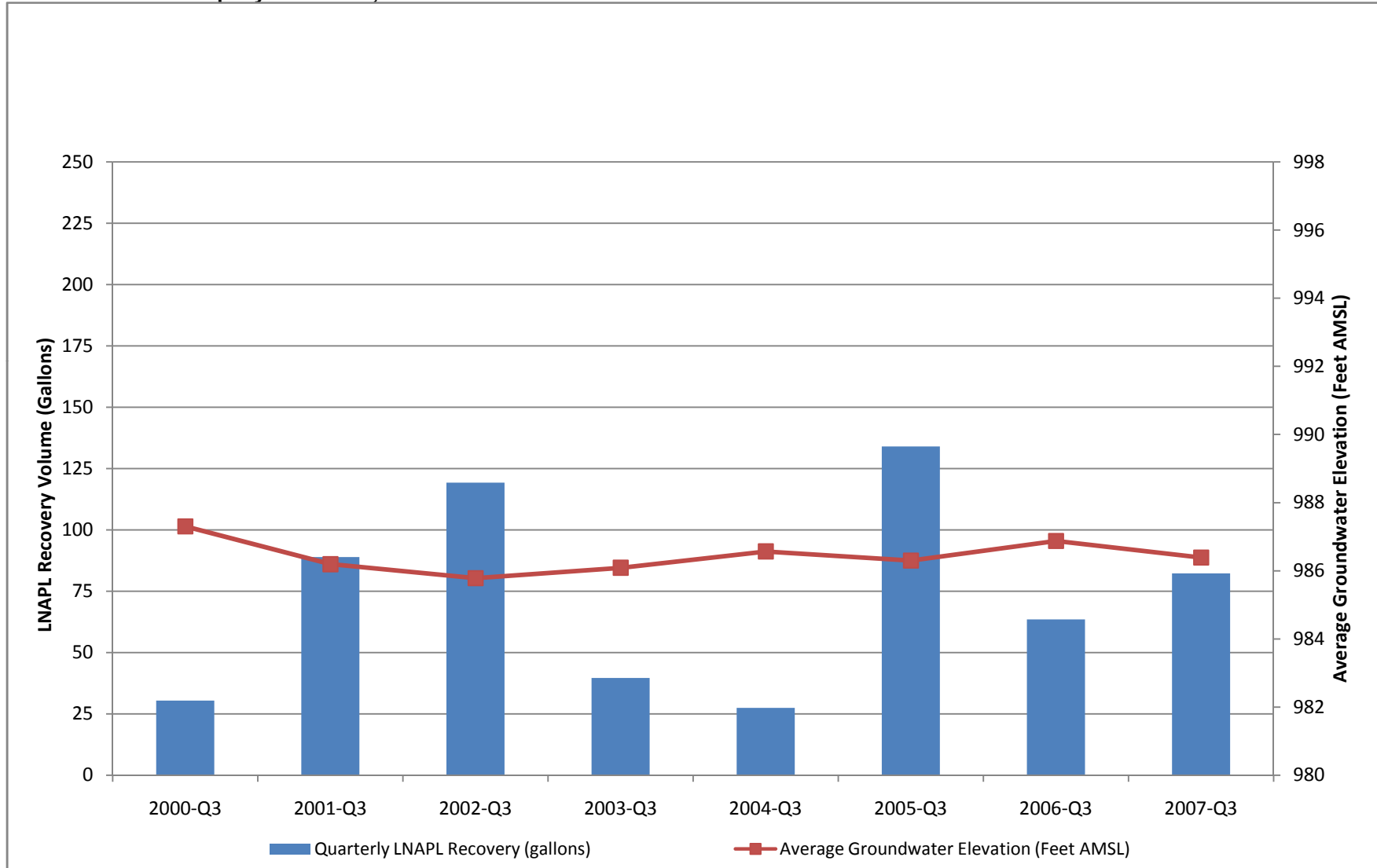
**Appendix B**  
**LNAPL Recovery vs. Groundwater Elevation**  
**Quarter 2 (April - June), 2001 to 2008**

**Groundwater Management Area 3**  
**General Electric Company - Pittsfield, Massachusetts**



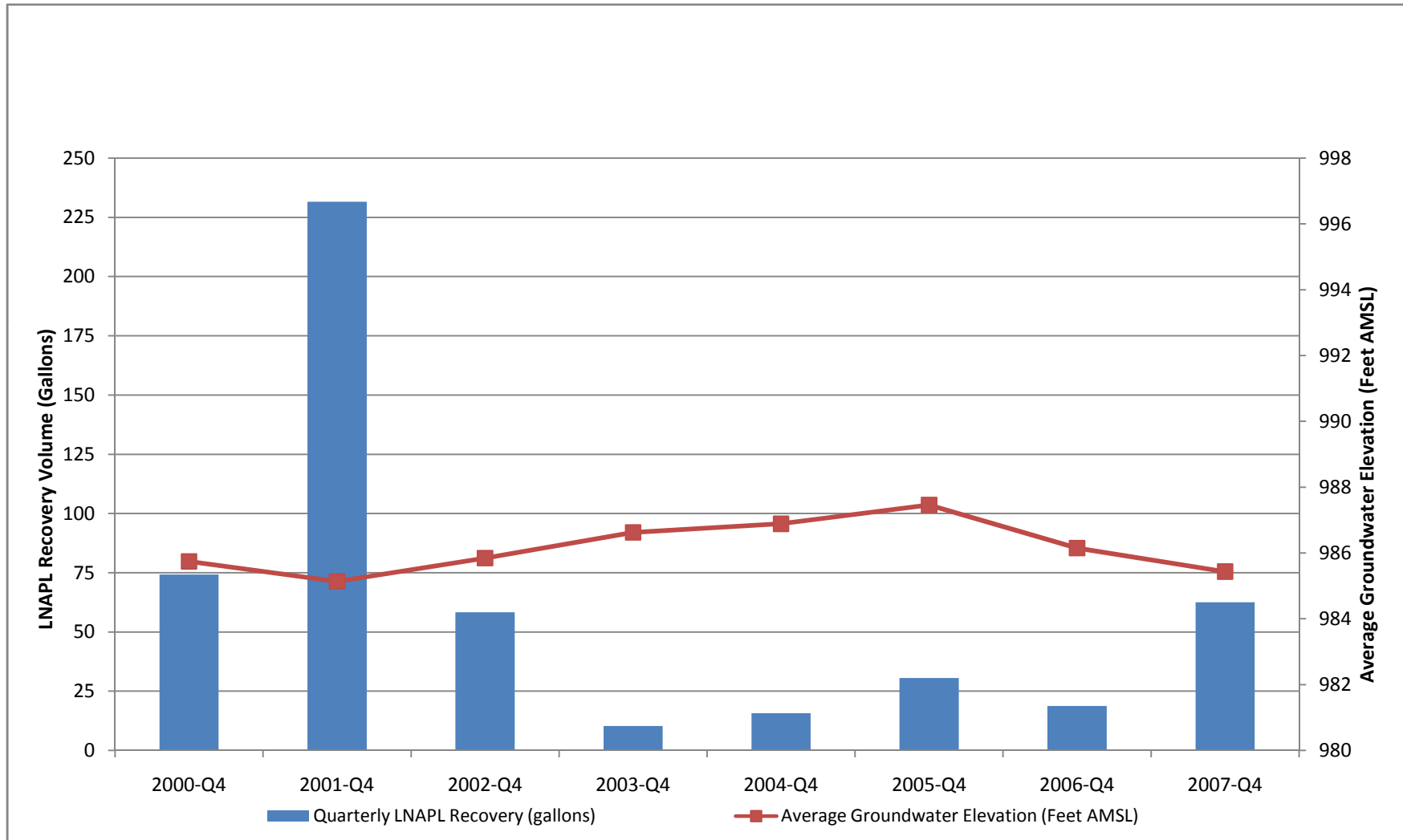
**Appendix B**  
**LNAPL Recovery vs. Groundwater Elevation**  
**Quarter 3 (July - September), 2000 to 2007**

**Groundwater Management Area 3**  
**General Electric Company - Pittsfield, Massachusetts**



**Appendix B**  
**LNAPL Recovery vs. Groundwater Elevation**  
**Quarter 4 (October - December), 2000 to 2007**

**Groundwater Management Area 3**  
**General Electric Company - Pittsfield, Massachusetts**



ARCADIS

**Appendix C**

Field Sampling Data



GROUNDWATER SAMPLING LOG

Well No. 2A

Site/GMA Name G-MA3-2A  
Sampling Personnel KR/DZ  
Date 5/1/08  
Weather Clear 60°

WELL INFORMATION - See Page 1

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
1455	2.00	2.21	7.74	10.45	8.27	0.390	2	2.21	-85.8
1500		2.48		10.68	8.26	0.391	2	2.10	-87.1
1505		2.74	7.71	10.64	8.25	0.393	2	1.98	-89.6
1508		2.90	7.71	10.73	8.25	0.393	1	1.94	-89.4
1511		3.06	7.71	10.73	8.24	0.394	1	1.90	-80.2
<i>Sample Col 1515 GMA Dup 2</i>									

\* The stabilization criteria for each field parameter (three consecutive readings collected at 3- to 5-minute intervals) is listed in each column heading.

OBSERVATIONS/SAMPLING METHOD DEVIATIONS Temp. Flashes Due to Sun

**GROUNDWATER SAMPLING LOG**

Well No. GB-R  
 Key No. \_\_\_\_\_  
 PID Background (ppm) NA  
 Well Headspace (ppm) NA

Site/GMA Name GMA-3  
 Sampling Personnel D. Zub/Kay C.  
 Date 5/2/04  
 Weather Overcast 48°

**WELL INFORMATION**

Reference Point Marked?  N  
 Height of Reference Point \_\_\_\_\_ Meas. From \_\_\_\_\_  
 Well Diameter 2"  
 Screen Interval Depth 2.912 Meas. From BLS  
 Water Table Depth 6.76 Meas. From TIC  
 Well Depth 14.61 Meas. From TIC  
 Length of Water Column 7.90  
 Volume of Water in Well 1.264  
 Intake Depth of Pump/Tubing 4.5 Meas. From TIC

Sample Time 1330  
 Sample ID GBR  
 Duplicate ID \_\_\_\_\_  
 MS/MSD \_\_\_\_\_  
 Split Sample ID \_\_\_\_\_

Reference Point Identification:  
 TIC: Top of Inner (PVC) Casing  
 TOC: Top of Outer (Protective) Casing  
 Grade/BGS: Ground Surface

Redevelop?   N

Required	Analytical Parameters:	Collected
<input checked="" type="checkbox"/>	VOCs (Std. list)	<input checked="" type="checkbox"/>
<input type="checkbox"/>	VOCs (Exp. list)	<input type="checkbox"/>
<input type="checkbox"/>	SVOCs	<input type="checkbox"/>
<input type="checkbox"/>	PCBs (Total)	<input type="checkbox"/>
<input type="checkbox"/>	PCBs (Dissolved)	<input type="checkbox"/>
<input type="checkbox"/>	Metals/inorganics (Total)	<input type="checkbox"/>
<input type="checkbox"/>	Metals/inorganics (Dissolved)	<input type="checkbox"/>
<input type="checkbox"/>	EPA Cyanide (Dissolved)	<input type="checkbox"/>
<input type="checkbox"/>	PAC Cyanide (Dissolved)	<input type="checkbox"/>
<input type="checkbox"/>	PCDDs/PCDFs	<input type="checkbox"/>
<input type="checkbox"/>	Pesticides/Herbicides	<input type="checkbox"/>
<input type="checkbox"/>	Natural Attenuation	<input type="checkbox"/>
<input type="checkbox"/>	Other (Specify)	<input type="checkbox"/>

**EVACUATION INFORMATION**

Pump Start Time 1218  
 Pump Stop Time 1345  
 Minutes of Pumping 290 min 87 min  
 Volume of Water Removed 245 3.09 gallons  
 Did Well Go Dry?   N

Evacuation Method: Bailer ( ) Bladder Pump ( )  
 Peristaltic Pump  Submersible Pump ( ) Other/Specify ( )  
 Pump Type: Geo Pump 2  
 Samples collected by same method as evacuation?  N (specify)

Water Quality Meter Type(s) / Serial Number: #3 - YSI-556 MPJ Hach 2100P Turbidimeter

Time	Pump Rate (gpm)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%*]	pH (0.1 units)*	Sp. Cond. (mS/cm) [3%*]	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
1218	—	—	6.87	—	—	—	9	—	—
1223	200	0.86	7.48	8.01	6.40	0.323	6	20.60	80.3
1228	150	0.46	7.71	8.01	6.78	0.323	2	12.98	30.1
1233	150	0.66	<del>7.53</del>	7.86	6.40	0.324	2	<del>11.75</del>	-35.6
1238	120	0.82	<del>7.87</del>	7.83	6.85	0.359	2	3.13	-79.6
1243	120	<del>0.88</del>	8.25	<del>7.82</del>	6.98	0.379	1	2.11	-82.5
1244	120	1.14	—	7.79	6.92	0.396	1	1.79	-87.2
1253	120	1.29	8.84	7.80	6.94	0.422	2	1.63	<del>-89.9</del>

\* The stabilization criteria for each field parameter (three consecutive readings collected at 3- to 5-minute intervals) is listed in each column heading.

**OBSERVATIONS/SAMPLING METHOD DEVIATIONS**

\* 7.82 PH on 1243

**SAMPLE DESTINATION**

Laboratory: SGS  
 Delivered Via: Fed Ex  
 Airtel #: \_\_\_\_\_

Field Sampling Coordinator: EAR [Signature]

GROUNDWATER SAMPLING LOG

Well No. 6B-R

Site/GMA Name GMA-3  
 Sampling Personnel DAZ KLE  
 Date 5/2/08  
 Weather Overcast 74°

WELL INFORMATION - See Page 1

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
1256	120	1.45	9.12	7.67	6.98	0.446	2	1.53	-89.8
<del>1303</del>	↓	1.61		7.57	7.01	0.479	1	1.41	-88.3
1306	↓	<del>1.71</del>	9.42	7.31	7.05	0.611	2	1.87	-82.1
1309	↓	1.80		7.34	7.05	0.620	3	1.47	-81.3
1312	↓	1.90	9.56	7.39	7.08	0.626	6	1.29	-90.7
1315	↓	1.99	9.68	7.40	7.11	0.628	5	1.24	-94.2
1318	120	2.09		7.41	7.14	0.631	3	1.23	-95.8
1321	↓	2.18	10.12	7.39	7.15	0.638	2	1.24	-98.3
1324	↓	2.28		7.33	7.17	0.644	3	1.20	-95.9
Sample @ 1330									

\* The stabilization criteria for each field parameter (three consecutive readings collected at 3- to 5-minute intervals) is listed in each column heading.

OBSERVATIONS/SAMPLING METHOD DEVIATIONS

Hose come out of Inner casing and started to Draw H<sub>2</sub>O



**GROUNDWATER SAMPLING LOG**

Well No. 16A  
 Key No. -  
 PID Background (ppm) -  
 Well Headspace (ppm) -

Site/GMA Name GMA3 GE P ITSFIELD  
 Sampling Personnel D. ADAMS  
 Date 5/1/03  
 Weather SUNNY 40°F

**WELL INFORMATION**

Reference Point Marked? Y N  
 Height of Reference Point 2" Meas. From -  
 Well Diameter 2"  
 Screen Interval Depth 44.50 Meas. From Ground  
 Water Table Depth 6.48 Meas. From T/L  
 Well Depth 50.90 Meas. From T/L  
 Length of Water Column 2.25 gals  
 Volume of Water in Well 44.42  
 Intake Depth of Pump/Tubing 47 Meas. From T/L

Sample Time 15:00  
 Sample ID 16A  
 Duplicate ID -  
 MSMSD -  
 Split Sample ID -

Required	Analytical Parameters:	Collected
(X)	VOCs (Std. list)	(X)
( )	VOCs (Exp. list)	( )
(X)	SVOCs	(X)
( )	PCBs (Total)	( )
( )	PCBs (Dissolved)	( )
( )	Metals/inorganics (Total)	( )
( )	Metals/inorganics (Dissolved)	( )
( )	EPA Cyanide (Dissolved)	( )
( )	PAC Cyanide (Dissolved)	( )
( )	PCDDs/PCDFs	( )
( )	Pesticides/Herbicides	( )
(X)	Natural Attenuation	(X)
( )	Other (Specify)	( )

Reference Point Identification:  
 TIC: Top of Inner (PVC) Casing  
 TOC: Top of Outer (Protective) Casing  
 Grade/BGS: Ground Surface

Redevelop? Y (N)

**EVACUATION INFORMATION**

Pump Start Time 11:25  
 Pump Stop Time 15:50  
 Minutes of Pumping 265  
 Volume of Water Removed 5.75 gallons  
 Did Well Go Dry? Y (N)

Evacuation Method: Peristaltic Pump (X) Bladder Pump ( )  
Submersible Pump ( ) Other/Specify ( )  
 Pump Type: Geopipe 2  
 Samples collected by same method as evacuation? (Y) N (specify)

Water Quality Meter Type(s) / Serial Number: YSI 556 MPS #2, 03CO392 AE

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]	pH (0.1 units)	Sp. Cond. (mS/cm) [3%]	Turbidity (NTU) [10% or 1 NTU]	DO (mg/l) [10% or 0.1 mg/l]	ORP (mV) [10 mV]
11:30	125	0.17	6.72	-	-	-	138	-	-
11:35	125	0.33	6.96	-	-	-	115	-	-
11:38	125	0.43	6.19	-	-	-	110	-	-
11:45	100	0.61	7.14	-	-	-	114	-	-
11:50	100	0.74	7.59	-	-	-	110	-	-
12:00	100	1.00	7.75	-	-	-	115	-	-
12:15	100	1.40	7.58	-	-	-	138	-	-
12:30	100	1.80	7.61	-	-	-	129	-	-

\* The stabilization criteria for each field parameter (three consecutive readings collected at 3- to 5-minute intervals) is listed in each column heading.  
**OBSERVATIONS/SAMPLING METHOD DEVIATIONS**  
\* Pump STALLED AT 11:40, CAUSING MORE TURBIDITY  
ON RESTRAINT INITIAL PULSE SLIGHTLY ABOVE, NO ODOUR  
TURBINE RAISED 2' AT 12:30 PM

**SAMPLE DESTINATION**

Laboratory: SGS  
 Delivered Via: UPS  
 Airbill #: -

Field Sampling Coordinator: [Signature]

GROUNDWATER SAMPLING LOG

Well No. 16A

Site/GMA Name GMA3
Sampling Personnel O. Downer
Date 5/1/08
Weather Sunny, 60°F

WELL INFORMATION - See Page 1

Table with 10 columns: Time, Pump Rate (L/min.), Total Gallons Removed, Water Level (ft TIC), Temp. (Celsius) [3%]\*, pH [0.1 units]\*, Sp. Cond. (mS/cm) [3%]\*, Turbidity (NTU) [10% or 1 NTU]\*, DO (mg/l) [10% or 0.1 mg/l]\*, ORP (mV) [10 mV]\*. Rows contain data from 12:35 to 14:57.

\* The stabilization criteria for each field parameter (three consecutive readings collected at 3- to 5-minute intervals) is listed in each column heading.

OBSERVATIONS/SAMPLING METHOD DEVIATIONS
Final Pore was clear with moderate flow

**GROUNDWATER SAMPLING LOG**

Well No. 16B-R  
 Key No. EX-37  
 PID Background (ppm) -  
 Well Headspace (ppm) -

Site/GMA Name GTA3-GE P.Hs Bld.  
 Sampling Personnel TIC, DAZ  
 Date 5/1/08  
 Weather 60's Sunny

**WELL INFORMATION**

Reference Point Marked? Y N  
 Height of Reference Point 3' Meas. From Grade  
 Well Diameter 2"  
 Screen Interval Depth 3.08-13.08 Meas. From BGS  
 Water Table Depth 8.98 Meas. From TIC  
 Well Depth 16.56' Meas. From -  
 Length of Water Column 7.58'  
 Volume of Water in Well 1.24 gallons  
 Intake Depth of Pump/Tubing 15' Meas. From TIC

Sample Time 16B-R 1040  
 Sample ID 10:40  
 Duplicate ID -  
 MS/MSD 16B-RMS/HSD  
 Split Sample ID -

**Reference Point Identification:**

TIC: Top of Inner (PVC) Casing  
 TOC: Top of Outer (Protective) Casing  
 Grade/BGS: Ground Surface

Redevelop? Y (N)

Required	Analytical Parameters	Collected
(X)	VOCs (Std. list)	(X)
( )	VOCs (Exp. list)	( )
( )	SVOCs	( )
( )	PCBs (Total)	( )
( )	PCBs (Dissolved)	( )
( )	Metals/inorganics (Total)	( )
( )	Metals/inorganics (Dissolved)	( )
( )	EPA Cyanide (Dissolved)	( )
( )	PAC Cyanide (Dissolved)	( )
( )	PCDDs/PCDFs	( )
( )	Pesticides/Herbicides	( )
(X)	Natural Attenuation	(X)
( )	Other (Specify)	( )

**EVACUATION INFORMATION**

Pump Start Time 0915  
 Pump Stop Time 11:05  
 Minutes of Pumping 110  
 Volume of Water Removed 2.25 gallons  
 Did Well Go Dry? Y (N)

Evacuation Method: Bailer ( ) Bladder Pump (X)  
Peristaltic Pump ( ) Submersible Pump ( ) Other/Specify ( )  
 Pump Type: Mauschalk-System One  
 Samples collected by same method as evacuation? (Y) N (specify)

Water Quality Meter Type(s) / Serial Numbers: YSI 556 MRS 0301461 #3, HACH 2100P turbidimeter

Time	Pump Rate (L/min)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%*]	pH (0.1 units)*	Sp. Cond. (mS/cm) [3%*]	Turbidity (NTU) (10% or 1 NTU)*	DO (mg/l) (10% or 0.1 mg/l)*	ORP (mV) (10 mV)*
<del>0925</del>	150	0.40	9.55				23		
0930	125	0.57	9.76	9.57	7.15	1.527	16	10.08	142.7
0935	100	0.70	9.85	9.46	7.19	1.519	14	7.75	136.0
0940	100	0.83	9.91	9.26	7.18	1.509	13	6.54	119.1
0945	100	0.96	10.13	9.41	7.18	1.511	11	5.51	91.1
0950	75	1.06	10.16	9.83	7.17	1.547	11	4.92	44.3
0955	75	1.16	10.32	9.88	7.18	1.583	7	4.38	23.0
1000	75	1.26	10.50	10.01	7.20	1.653	6	3.82	34.1

\* The stabilization criteria for each field parameter (three consecutive readings collected at 3- to 5-minute intervals) is listed in each column heading.

**OBSERVATIONS/SAMPLING METHOD DEVIATIONS**

- Initial purge clear and no noticeable odor, initial purge rate = 150 ml.  
 0925 Hooked up YSI turbidity below 50 NTU.  
 - YSI covered, Air temperature increasing.

**SAMPLE DESTINATION**

Laboratory: JGS  
 Delivered Via: UPS  
 Airbill #: -

Field Sampling Coordinator: [Signature]

**GROUNDWATER SAMPLING LOG**

Well No. 16B-R

Site/GMA Name GMA 3 - GE Pittsfield  
 Sampling Personnel RIC/DAE  
 Date 5/1/08  
 Weather 60° Sunny

WELL INFORMATION - See Page 1

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (R TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
1005	75	1.36	10.55	10.19	7.21	1.672	5	3.62	-11.9
1010	75	1.46	10.63	10.20	7.22	1.711	4	3.52	-24.0
1015	75	1.55	10.73	10.20	7.22	1.732	4	3.42	-25.9
1020	75	1.65	10.77	10.55	7.26	1.751	4	3.16	-34.0
1025	75	1.75	10.50	10.86	7.22	1.765	4	2.88	-40.1
1028	75	1.81	10.88	10.71	7.23	1.772	3	2.75	-40.3
1031	75	1.87	10.98	10.56	7.21	1.784	3	2.64	-40.7
1034	75	1.93	10.93	10.78	7.24	1.784	3	2.57	-47.1
1037	75	1.99	10.96	10.65	7.25	1.805	3	2.52	-49.5
1040		→	Sampled @ 1040						

\* The stabilization criteria for each field parameter (three consecutive readings collected at 3- to 5-minute intervals) is listed in each column heading.

**OBSERVATIONS/SAMPLING METHOD DEVIATIONS**

\_\_\_\_\_

\_\_\_\_\_

**GROUNDWATER SAMPLING LOG**

Well No. 16C-R  
 Key No. -  
 PID Background (ppm) -  
 Well Headspace (ppm) -

Site/GMA Name GMA3 GE PITTSFIELD  
 Sampling Personnel D. ADANTI  
 Date 5/1/05  
 Weather SUNNY, 40°

**WELL INFORMATION**

Reference Point Marked? Y N  
 Height of Reference Point          Meas. From           
 Well Diameter 2"  
 Screen Interval Depth 90-100 Meas. From Ground  
 Water Table Depth 7.30 Meas. From TIC  
 Well Depth 102.10' Meas. From TIC  
 Length of Water Column 94.80'  
 Volume of Water in Well 15.47 gallons  
 Intake Depth of Pump/Tubing 95 Meas. From TIC

Sample Time 10:55  
 Sample ID 16C-R  
 Duplicate ID -  
 MS/MSD -  
 Spill Sample ID -

Required	Analytical Parameters	Collected
(X)	VOCs (Std. list)	(X)
( )	VOCs (Exp. list)	( )
( )	SVOCs	( )
( )	PCBs (Total)	( )
( )	PCBs (Dissolved)	( )
( )	Metals/Inorganics (Total)	( )
( )	Metals/Inorganics (Dissolved)	( )
( )	EPA Cyanide (Dissolved)	( )
( )	PAC Cyanide (Dissolved)	( )
( )	PCDDs/PCDFs	( )
( )	Pesticides/Herbicides	( )
(X)	Natural Attenuation	(X)
( )	Other (Specify)	( )

Reference Point Identification:  
 TIC: Top of Inner (PVC) Casing  
 TOC: Top of Outer (Protective) Casing  
 Grade/BGS: Ground Surface

Redevelop? Y (N)

**EVACUATION INFORMATION**

Pump Start Time 9:55  
 Pump Stop Time 11:15  
 Minutes of Pumping 80  
 Volume of Water Removed ~2.6 gallons  
 Did Well Go Dry? Y (N)

Evacuation Method: Bailer ( ) Bladder Pump ( )  
Peristaltic Pump (X) Submersible Pump ( ) Other/Specify ( )  
 Pump Type: CEDRAMP 2  
 Samples collected by same method as evacuation? (Y) N (specify)

Water Quality Meter Type(s) / Serial Numbers: YSI 556 MP5 # Hack 2100P Turbidimeter

Time	Pump Rate (L/min)	Total Gallons Removed	Water Level (N TIC)	Temp. (Celsius) (3%)	pH (0.1 units)	Sp. Cond. (mS/cm) (3%)	Turbidity (NTU) (10% or 1 NTU)	DO (mg/l) (10% or 0.1 mg/l)	ORP (mV) (10 mV)
10:00	125	0.17	7.39	-	-	-	16	-	-
10:05	125	0.33	7.96	10.63	7.68	0.252	10	8.40	154.7
10:10	125	0.50	8.51	10.54	7.72	0.249	7	3.58	147.2
10:15	125	0.66	9.11	10.60	7.78	0.248	6	2.60	147.6
10:20	125	0.83	9.46	10.71	7.85	0.247	5	2.35	144.7
10:25	125	0.99	9.87	10.82	7.95	0.246	6	2.03	139.0
10:30	125	1.16	10.20	10.84	7.98	0.246	6	1.94	135.6
10:35	125	1.32	10.51	10.91	8.01	0.246	5	1.86	134.0

\* The stabilization criteria for each field parameter (three consecutive readings collected at 3- to 5-minute intervals) is listed in each column heading.

OBSERVATIONS/SAMPLING METHOD DEVIATIONS Initial purge was clear and odorless  
Final purge was clear and odorless.

**SAMPLE DESTINATION**

Laboratory: SGS  
 Delivered Via: UPS  
 Airbill #: -

Field Sampling Coordinator: [Signature]

**GROUNDWATER SAMPLING LOG**

Well No. 16C-R

Site/GMA Name GMA 3 GE PITSFIELD  
 Sampling Personnel D. BRANTJ  
 Date 5/1/08  
 Weather Sunny 50°

**WELL INFORMATION - See Page 1**

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
10:40	125	1.49	10.66	10.94	8.03	0.245	5	1.75	131.8
10:45	125	1.65	10.80	11.04	7.99	0.244	5	1.69	134.2
10:50	125	1.82		11.05	7.97	0.244	5	1.66	136.5
10:55	SAMPLE								

\* The stabilization criteria for each field parameter (three consecutive readings collected at 3- to 5-minute intervals) is listed in each column heading.

**OBSERVATIONS/SAMPLING METHOD DEVIATIONS**  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**GROUNDWATER SAMPLING LOG**

Well No. 39B-R  
 Key No.         
 PID Background (ppm)         
 Well Headspace (ppm)       

Site/GMA Name GMA 3, GE Pittsfield  
 Sampling Personnel RIC  
 Date 4/30/08  
 Weather low 40's overcast

**WELL INFORMATION**

Reference Point Marked? Y N  
 Height of Reference Point -2" Meas. From BGS  
 Well Diameter 4.2"  
 Screen Interval Depth 4-14 Meas. From THE BGS  
 Water Table Depth 5.65 Meas. From TIC  
 Well Depth 13.70 Meas. From TIC  
 Length of Water Column 8.05'  
 Volume of Water in Well 1.31 gallons  
 Intake Depth of Pump/Tubing ~10" Meas. From TIC

Sample Time 1430  
 Sample ID 39B-R  
 Duplicate ID         
 MS/MSD         
 Split Sample ID       

**Reference Point Identification:**

TIC: Top of Inner (PVC) Casing  
 TOC: Top of Outer (Protective) Casing  
 Grade/BGS: Ground Surface

Redevelop? Y (N)

Required	Analytical Parameters:	Collected
( X )	VOCs (Standard List)	( X )
( )	VOCs (Expanded List)	( )
( X )	SVOCs	( X )
( )	PCBs (Unfiltered)	( )
( )	PCBs (Filtered)	( )
( )	Metals/Inorganics (Unfiltered)	( )
( )	Metals/Inorganics (Filtered)	( )
( )	Total Cyanide (Unfiltered)	( )
( )	Total Cyanide (Filtered)	( )
( )	PAC Cyanide (Filtered)	( )
( )	PCDDs/PCDFs	( )
( )	Pesticides/Herbicides	( )
( X )	Natural Attenuation	( X )
( )	Other (Specify)	( )

**EVACUATION INFORMATION**

Pump Start Time 1322  
 Pump Stop Time 1500  
 Minutes of Pumping 98  
 Volume of Water Removed 2.6 gallons  
 Did Well Go Dry? Y (N)

Evacuation Method: Bailer ( ) Bladder Pump ( )  
 Peristaltic Pump ( X ) Submersible Pump ( ) Other/Specify ( )  
 Pump Type: Geo pump 2  
 Samples collected by same method as evacuation? (Y) N (specify)

Water Quality Meter Type(s) / Serial Numbers: YSI-556 MPS #2 Hach 2100P Turbidity meter

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
1325		0.08	5.68	8.27	-	-	31	-	-
1330	100	0.21	5.65	8.27	7.17	1.259	18	3.01	-92.1
1335	100	0.34	5.68	8.38	7.22	1.230	13	1.77	-84.8
1340	100	0.48	5.68	8.49	7.17	1.158	9	2.07	-72.7
1345	100	0.61	5.68	8.52	7.13	1.098	8	2.82	-63.4
1350	100	0.74	5.68	8.50	7.17	1.055	7	3.37	-56.7
1355	100	0.87	5.68	8.72	7.11	1.494	8	2.10	-73.7
1400		1.00		8.71	7.16	1.339	7	2.82	-70.5

\* The stabilization criteria for each field parameter (three consecutive readings collected at 3- to 5-minute intervals) is listed in each column heading.

**OBSERVATIONS/SAMPLING METHOD DEVIATIONS**

initial purge slight NAPL odor, clear \*1325\* hooked up YSI

**SAMPLE DESTINATION**

Laboratory: SGS  
 Delivered Via: UPS  
 Airbill #:       

Field Sampling Coordinator: [Signature]

**GROUNDWATER SAMPLING LOG**

Well No. 39B-R

Site/GMA Name GMA3 GE Pittsfield  
Sampling Personnel KIC  
Date 4/30/08  
Weather Overcast, low 40's

WELL INFORMATION - See Page 1

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
1405	100	1.14	15.66	8.70	7.19	1.163	5	3.41	-56.8
1410	100	1.27	15.67	8.63	7.19	1.083	5	3.58	-52.2
1415	100	1.40	15.68	8.49	7.17	1.034	3	3.62	-47.0
1420	100	1.53	15.68	8.45	7.16	1.067	<del>4</del> 4	3.61	-43.9
1425	100	1.67	15.68	8.30	7.15	.985	4	3.67	-40.8
1428	100	1.80	15.68	8.31	7.15	.983	3	3.67	-39.2
1430	→ Sampled @ 1430 ←								

\* The stabilization criteria for each field parameter (three consecutive readings collected at 3- to 5-minute intervals) is listed in each column heading.

OBSERVATIONS/SAMPLING METHOD DEVIATIONS

\*DO seems high, no bubbles in flow through cell or tubing.



**GROUNDWATER SAMPLING LOG**

Well No. 39D-R  
 Key No. -  
 PID Background (ppm) -  
 Well Headspace (ppm) -

Site/GMA Name GMA 3  
 Sampling Personnel D. Adanti  
 Date 4/30/08  
 Weather cloudy 100

**WELL INFORMATION**

Reference Point Marked? Y N  
 Height of Reference Point \_\_\_\_\_ Meas. From \_\_\_\_\_  
 Well Diameter 2"  
 Screen Interval Depth 56-66 Meas. From Ground  
 Water Table Depth 7.99 Meas. From TIC  
 Well Depth 63.29 Meas. From TIC  
 Length of Water Column 55.3'  
 Volume of Water in Well 9.02 gallons  
 Intake Depth of Pump/Tubing 60' Meas. From TIC

Sample Time 14:50  
 Sample ID 39D-R  
 Duplicate ID -  
 MS/MSD -  
 Split Sample ID -

Reference Point Identification:  
 TIC: Top of Inner (PVC) Casing  
 TOC: Top of Outer (Protective) Casing  
 Grade/BGS: Ground Surface

Redevelop? (Y) N

Required	Analytical Parameters:	Collected
<input checked="" type="checkbox"/>	VOCs (Standard List)	<input checked="" type="checkbox"/>
<input type="checkbox"/>	VOCs (Expanded List)	<input type="checkbox"/>
<input type="checkbox"/>	SVOCs	<input type="checkbox"/>
<input type="checkbox"/>	PCBs (Unfiltered)	<input type="checkbox"/>
<input type="checkbox"/>	PCBs (Filtered)	<input type="checkbox"/>
<input type="checkbox"/>	Metals/Inorganics (Unfiltered)	<input type="checkbox"/>
<input type="checkbox"/>	Metals/Inorganics (Filtered)	<input type="checkbox"/>
<input type="checkbox"/>	Total Cyanide (Unfiltered)	<input type="checkbox"/>
<input type="checkbox"/>	Total Cyanide (Filtered)	<input type="checkbox"/>
<input type="checkbox"/>	PAC Cyanide (Filtered)	<input type="checkbox"/>
<input type="checkbox"/>	PCDDs/PCDFs	<input type="checkbox"/>
<input type="checkbox"/>	Pesticides/Herbicides	<input type="checkbox"/>
<input checked="" type="checkbox"/>	Natural Attenuation	<input checked="" type="checkbox"/>
<input type="checkbox"/>	Other (Specify)	<input type="checkbox"/>

**EVACUATION INFORMATION**

Pump Start Time 13:45  
 Pump Stop Time 15:10  
 Minutes of Pumping 85  
 Volume of Water Removed 3.59 gallons  
 Did Well Go Dry? Y (N)

Evacuation Method: Bailer ( ) Bladder Pump ( )  
 Peristaltic Pump  Submersible Pump ( ) Other/Specify ( )  
 Pump Type: GEOPUMP 2  
 Samples collected by same method as evacuation? (Y) N (specify)

Water Quality Meter Type(s) / Serial Numbers: YSI 556 MPS #3, 03C1461 AC

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
13:50	200	0.26	8.20	-	-	-	49	-	-
13:55	175	0.49	8.23	9.03	8.51	0.327	52	12.01	57.3
14:00	125	0.66	8.21	8.99	8.63	0.317	48	9.30	40.0
14:05	125	0.82	8.21	9.28	8.63	0.310	44	6.92	32.6
14:10	125	0.99	8.21	9.26	8.62	0.309	37	5.91	26.0
14:15	150	1.19	8.23	9.22	8.61	0.309	28	5.43	22.9
14:20	150	1.39	8.23	9.11	8.60	0.309	24	5.11	18.2
14:25	150	1.58	8.23	8.95	8.60	0.309	16	4.73	15.5

\* The stabilization criteria for each field parameter (three consecutive readings collected at 3- to 5-minute intervals) is listed in each column heading.

**OBSERVATIONS/SAMPLING METHOD DEVIATIONS**

**SAMPLE DESTINATION**

Laboratory: JGS  
 Delivered Via: UPS  
 Airbill #: -

Field Sampling Coordinator: [Signature]

**GROUNDWATER SAMPLING LOG**

Well No. 39D-R

Site/GMA Name GMA3  
 Sampling Personnel D. ADANTI  
 Date 4/30/03  
 Weather Clear, 40°

**WELL INFORMATION - See Page 1**

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
14:30	150	1.78	8.23	8.86	8.58	0.309	15	4.61	15.9
14:35	150	1.98	8.23	8.97	8.57	0.309	13	4.24	14.8
14:40	150	2.18	8.23	8.98	8.56	0.309	13	4.14	11.1
14:45	150	2.38	8.23	9.03	8.57	0.309	12	3.98	10.3

\* The stabilization criteria for each field parameter (three consecutive readings collected at 3- to 5-minute intervals) is listed in each column heading.

**OBSERVATIONS/SAMPLING METHOD DEVIATIONS**

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**GROUNDWATER SAMPLING LOG**

Well No. 39E  
 Key No. NA  
 PID Background (ppm) 0  
 Well Headspace (ppm) 0

Site/GMA Name GE Pittsfield/GMA 3  
 Sampling Personnel GAR/RJP  
 Date 5/6/08  
 Weather Mostly sunny, 65° F

**WELL INFORMATION**

Reference Point Marked?  N  
 Height of Reference Point -0.10' Meas. From Ground  
 Well Diameter 4"  
 Screen Interval Depth 225'-235' Meas. From Ground  
 Water Table Depth 4.90' Meas. From TIC  
 Well Depth 239.92' Meas. From TIC  
 Length of Water Column 235.02'  
 Volume of Water in Well 153.41 gallons  
 Intake Depth of Pump/Tubing 230' Meas. From TIC

Sample Time 13:25  
 Sample ID 39E  
 Duplicate ID -  
 MSMSD -  
 Split Sample ID -

Reference Point Identification:  
 TIC: Top of Inner (PVC) Casing  
 TOC: Top of Outer (Protective) Casing  
 Grade/BGS: Ground Surface

Redevelop?  N

Required	Analytical Parameters:	Collected
<input checked="" type="checkbox"/>	VOCs (Std. list)	<input checked="" type="checkbox"/>
<input type="checkbox"/>	VOCs (Exp. list)	<input type="checkbox"/>
<input type="checkbox"/>	SVOCs	<input type="checkbox"/>
<input type="checkbox"/>	PCBs (Total)	<input type="checkbox"/>
<input type="checkbox"/>	PCBs (Dissolved)	<input type="checkbox"/>
<input type="checkbox"/>	Metals/Inorganics (Total)	<input type="checkbox"/>
<input type="checkbox"/>	Metals/Inorganics (Dissolved)	<input type="checkbox"/>
<input type="checkbox"/>	EPA Cyanide (Dissolved)	<input type="checkbox"/>
<input type="checkbox"/>	PAC Cyanide (Dissolved)	<input type="checkbox"/>
<input type="checkbox"/>	PCDDs/PCDFs	<input type="checkbox"/>
<input type="checkbox"/>	Pesticides/Herbicides	<input type="checkbox"/>
<input checked="" type="checkbox"/>	Natural Attenuation	<input checked="" type="checkbox"/>
<input type="checkbox"/>	Other (Specify)	<input type="checkbox"/>

**EVACUATION INFORMATION**

Pump Start Time 12:10  
 Pump Stop Time 13:45  
 Minutes of Pumping 95  
 Volume of Water Removed 2.50 gallons  
 Did Well Go Dry?  N

Evacuation Method: Bailor ( ) Bladder Pump ( )  
 Peristaltic Pump  Submersible Pump ( ) Other/Specify ( )  
 Pump Type: Geo Pump 2  
 Samples collected by same method as evacuation?  N (specify)

Water Quality Meter Type(s) / Serial Numbers: YSI-556 MPS Mark 2100P Turbidimeter

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
12:15	100ml	0.13	5.08	-	-	-	55	-	-
12:20	100ml	0.26	5.20	-	-	-	17	-	-
12:25	100ml	0.40	5.30	11.54	6.78	0.226	7	6.20	-31.1
12:30	100ml	0.53	5.35	11.42	6.88	0.226	10	1.28	-47.1
12:35	100ml	0.66	5.39	11.43	6.94	0.228	9	0.87	-53.4
12:40	100ml	0.79	5.40	11.54	6.97	0.231	8	0.77	-57.2
12:45	100ml	0.92	5.41	11.52	7.00	0.236	9	0.68	-61.4
12:50	100ml	1.06	5.40	11.48	7.00	0.241	9	0.59	-62.1

\* The stabilization criteria for each field parameter (three consecutive readings collected at 3- to 5-minute intervals) is listed in each column heading.

**OBSERVATIONS/SAMPLING METHOD DEVIATIONS**

Initial Purge: Clear, with suspended solids, odorless  
Final Purge: Clear, with suspended solids, odorless

**SAMPLE DESTINATION**

Laboratory: SGS  
 Delivered Via: UPS  
 Airtel #: -

Field Sampling Coordinator: [Signature]

GROUNDWATER SAMPLING LOG

Well No. 39E

Site/GMA Name GE Pittsfield/GMA 3  
Sampling Personnel GAR/BAB  
Date 5/6/08  
Weather MOSTLY sunny, 70°F

WELL INFORMATION - See Page 1

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
12:55	100ml	1.19	5.40	11.57	7.03	0.245	10	0.56	-64.4
13:00	100ml	1.32	5.40	11.63	7.04	0.249	8	0.54	-66.3
13:05	100ml	1.45	5.35	11.52	7.04	0.250	11	0.52	-67.2
13:10	100ml	1.59	5.36	11.56	7.04	0.254	10	0.52	-66.5
13:15	100ml	1.72	5.35	11.63	7.05	0.257	9	0.47	-61.6
13:20	100ml	1.85	5.36	11.64	7.04	0.260	10	0.48	-60.9

\* The stabilization criteria for each field parameter (three consecutive readings collected at 3- to 5-minute intervals) is listed in each column heading.

OBSERVATIONS/SAMPLING METHOD DEVIATIONS

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**GROUNDWATER SAMPLING LOG**

Well No. 43 A  
 Key No. EX-32  
 PID Background (ppm) -  
 Well Headpace (ppm) -

SMA/GMA Name GMA 3, GE ARISFIELD  
 Sampling Personnel KIC  
 Date 4/30/08  
 Weather 40's, cloudy, snow

**WELL INFORMATION**

Reference Point Marked? Y N  
 Height of Reference Point ~2' Meas. From Gr Grade  
 Well Diameter 1 1/4"  
 Screen Interval Depth 45-60 Meas. From TIC Grade  
 Water Table Depth 4.93 Meas. From TIC  
 Well Depth 51.20 Meas. From TIC  
 Length of Water Column \_\_\_\_\_  
 Volume of Water in Well \_\_\_\_\_  
 Intake Depth of Pump/Tubing ~47' Meas. From TIC

Sample Time 43A 1056  
 Sample ID 43A  
 Duplicate ID \_\_\_\_\_  
 MS/MSD \_\_\_\_\_  
 Split Sample ID \_\_\_\_\_

**Reference Point Identification:**

TIC: Top of Inner (PVC) Casing  
 TOC: Top of Outer (Protective) Casing  
 Grade/BGS: Ground Surface

Redevelop? Y (N)

Required	Analytical Parameters:	Collected
(X)	VOCs (Std. list)	(X)
( )	VOCs (Exp. list)	( )
( )	SVOCs	( )
( )	PCBs (Total)	( )
( )	PCBs (Dissolved)	( )
( )	Metals/Inorganics (Total)	( )
( )	Metals/Inorganics (Dissolved)	( )
( )	EPA Cyanide (Dissolved)	( )
( )	PAC Cyanide (Dissolved)	( )
( )	PCDDs/PCDFs	( )
( )	Pesticides/Herbicides	( )
(X)	Natural Attenuation	(X)
( )	Other (Specify)	( )

**EVACUATION INFORMATION**

Pump Start Time 9:20  
 Pump Stop Time 11:25  
 Minutes of Pumping 125  
 Volume of Water Removed 3.39 gallons  
 Did Well Go Dry? Y (N)

Evacuation Method: Bailer ( ) Bladder Pump ( )  
Peristaltic Pump (X) Submersible Pump ( ) Other/Specify ( )  
 Pump Type: Creopump 2  
 Samples collected by same method as evacuation? Y N (specify)

Water Quality Meter Type(s) / Serial Numbers: YSI 566MPS, (#2) 2100P HACH turb

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
0933	200	0.69	9.32	-	-	-	31	-	-
0938	150	0.89	11.92	8.79	7.95	0.663	25	2.45	-134.9
0943	150	1.09	13.14	8.90	7.82	0.720	15	1.33	-135.9
0948	150	1.28	13.75	8.90	7.50	0.816	15	1.01	-123.4
0953	150	1.48	14.49	9.11	7.48	0.848	14	0.89	-119.0
0958	100	1.61	14.99	9.00	7.43	0.874	17	0.79	-112.3
1003	100	1.74	15.98	9.05	7.38	0.901	15	0.65	-107.9
1008	100	1.88	16.52	9.14	7.36	0.920	20	0.60	-104.1

\* The stabilization criteria for each field parameter (three consecutive readings collected at 3- to 5-minute intervals) is listed in each column heading.

**OBSERVATIONS/SAMPLING METHOD DEVIATIONS**

**SAMPLE DESTINATION**

Laboratory: SGS  
 Delivered Via: UPS  
 Airbill #: \_\_\_\_\_

Field Sampling Coordinator: [Signature]

**GROUNDWATER SAMPLING LOG**

Well No. 43A

Site/GMA Name GMA 3 / GE Pittsfield

Sampling Personnel KIC

Date 4/30/06

Weather Partial clouds, 50's

**WELL INFORMATION - See Page 1**

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
1013	100	2.01	17.04	9.34	7.33	0.936	19	0.59	-99.6
1018	100	2.14	17.38	9.38	7.31	0.954	19	0.53	-96.6
1023	100	2.27	17.86	9.22	7.29	0.978	16	0.54	-94.1
1028	100	2.40	18.44	9.07	7.26	0.999	14	0.52	-91.4
1033	100	2.54	18.64	8.99	7.26	1.018	13	0.48	-87.4
1038	100	2.67	18.80	8.95	7.22	1.033	12	0.51	-86.7
1043	100	2.80	19.14	8.90	7.22	1.051	11	0.48	-85.4
1048	100	2.93	19.29	8.90	7.20	1.071	10	0.47	-84.0
1053	100	3.07	19.37	8.86	7.20	1.081	10	0.47	-82.5
1056	→ Sampled @ 1056.								

\* The stabilization criteria for each field parameter (three consecutive readings collected at 3- to 5-minute intervals) is listed in each column heading.

**OBSERVATIONS/SAMPLING METHOD DEVIATIONS**

× Hard to regulate ~~Air~~ temp, Air temp dropped drastically during purging, flow-through cell was shielded from the sun.

GROUNDWATER SAMPLING LOG

Well No. 43B  
 Key No. FX-37  
 PID Background (ppm) \_\_\_\_\_  
 Well Headspace (ppm) \_\_\_\_\_

Site/GMA Name GE Pittsfield / GMA 3  
 Sampling Personnel D. Adams  
 Date 4/30/03  
 Weather Snowy, 40"

WELL INFORMATION

Reference Point Marked? Y N  
 Height of Reference Point \_\_\_\_\_ Mess. From \_\_\_\_\_  
 Well Diameter 1"  
 Screen Interval Depth 15-20 Mess. From bes Ground  
 Water Table Depth 5.14 Mess. From TIC  
 Well Depth 72.15 Mess. From TIC  
 Length of Water Column 17.01'  
 Volume of Water in Well 0.69 gallon  
 Intake Depth of Pump/Tubing 17' Mess. From TIC

Sample Time 43B 10:35  
 Sample ID 43B  
 Duplicate ID GMA 3 DUP #1  
 MSMSD \_\_\_\_\_  
 Split Sample ID \_\_\_\_\_

Reference Point Identification:

TIC: Top of Inner (PVC) Casing  
 TOC: Top of Outer (Protective) Casing  
 Grade/BGS: Ground Surface

Redevelop? Y (N)

Required	Analytical Parameters:	Collected
(X)	VOCs (Std. list)	(X)
( )	VOCs (Exp. list)	( )
( )	SVOCs	( )
( )	PCBs (Total)	( )
( )	PCBs (Dissolved)	( )
( )	Metals/Inorganics (Total)	( )
( )	Metals/Inorganics (Dissolved)	( )
( )	EPA Cyanide (Dissolved)	( )
( )	PAC Cyanide (Dissolved)	( )
( )	PCDDs/PCDFs	( )
( )	Pesticides/Herbicides	( )
(X)	Natural Attenuation	(X)
( )	Other (Specify)	( )

EVACUATION INFORMATION

Pump Start Time 9:25  
 Pump Stop Time 11:00  
 Minutes of Pumping 95  
 Volume of Water Removed 3.75 gallons  
 Did Well Go Dry? Y (N)

Evacuation Method: Bailer ( ) Bladder Pump ( )  
 Peristaltic Pump (X) Submersible Pump ( ) Other/Specify ( )  
 Pump Type: AED Pump 2  
 Samples collected by same method as evacuation? (Y) N (specify)

Water Quality Meter Type(s) / Serial Numbers: YSI-556 MPS Hach 2100P Turbidimeter

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
9:25	—	—	5.66	—	—	—	0	—	—
9:35	175	0.46	7.09	8.66	6.96	1.144	8	26.65	-82.4
9:40	150	0.66	7.15	8.44	7.15	1.153	8	12.53	-91.8
9:45	150	0.86	7.20	8.58	7.21	1.155	7	9.78	-78.9
9:50	150	1.06	7.24	8.72	7.28	1.156	6	9.29	-67.2
9:55	175	1.29	7.37	8.85	7.33	1.158	5	8.98	-64.9
10:00	150	1.49	7.31	8.69	7.33	1.165	4	7.90	-84.2
10:05	150	1.68	7.26	8.79	7.31	1.167	4	6.85	-82.5

\* The stabilization criteria for each field parameter (three consecutive readings collected at 3- to 5-minute intervals) is listed in each column heading.

OBSERVATIONS/SAMPLING METHOD DEVIATIONS

SAMPLE DESTINATION

Laboratory: SGS  
 Delivered Via: UPS  
 Airbill #: \_\_\_\_\_

Field Sampling Coordinator: [Signature]

GROUNDWATER SAMPLING LOG

Well No. GMA3 430

Site/GMA Name GE Pittsfield / GMA3  
Sampling Personnel D. Adams  
Date 7/30/08  
Weather Sunny, 40°

WELL INFORMATION - See Page 1

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
10:10	175	1.92	7.34	8.82	7.31	1.168	5	6.08	-84.8
10:15	150	2.11	7.27	9.01	7.34	1.170	4	5.45	-89.2
10:20	150	2.31	7.23	8.87	7.35	1.173	4	5.06	-90.1
10:25	175	2.54	7.32	8.68	7.35	1.175	4	4.95	-93.5
10:30	150	2.74	7.26	8.64	7.34	1.176	4	4.90	-91.9

\* The stabilization criteria for each field parameter (three consecutive readings collected at 3- to 5-minute intervals) is listed in each column heading.

OBSERVATIONS/SAMPLING METHOD DEVIATIONS

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

8/10/08  
2429  
413448 - 914



**GROUNDWATER SAMPLING LOG**

Well No. 51-14  
 Key No. -  
 PID Background (ppm) N/A  
 Well Headspace (ppm) N/A

Site/GMA Name GMA3 - GE Pittsfield  
 Sampling Personnel KIC, DAZ  
 Date 5/2/08  
 Weather cloudy, wet, 50's

**WELL INFORMATION**

Reference Point Marked? Y N  
 Height of Reference Point 6.5 Meas. From -  
 Well Diameter 2 1/2"  
 Screen Interval Depth 5-15 Meas. From TIC BLS  
 Water Table Depth 9.87 Meas. From TIC  
 Well Depth 14.46 Meas. From TIC  
 Length of Water Column 4.59  
 Volume of Water in Well 0.799 gallon  
 Intake Depth of Pump/Tubing ~1/3 Meas. From TIC

Sample Time 1055  
 Sample ID 51-14  
 Duplicate ID -  
 MS/MSD -  
 Split Sample ID -

Required	Analytical Parameters:	Collected
(X)	VOCs (Standard List)	(X)
( )	VOCs (Expanded List)	( )
( )	SVOCs	( )
( )	PCBs (Unfiltered)	( )
( )	PCBs (Filtered)	( )
( )	Metals/Inorganics (Unfiltered)	( )
( )	Metals/Inorganics (Filtered)	( )
( )	Total Cyanide (Unfiltered)	( )
( )	Total Cyanide (Filtered)	( )
( )	PAC Cyanide (Filtered)	( )
( )	PCDDs/PCDFs	( )
( )	Pesticides/Herbicides	( )
( )	Natural Attenuation	( )
( )	Other (Specify)	( )

**Reference Point Identification:**

TIC: Top of Inner (PVC) Casing  
 TOC: Top of Outer (Protective) Casing  
 Grade/BGS: Ground Surface

Redevelop? (Y) N - re-install?  
 no curbox.  
 Broken PVC casing

**EVACUATION INFORMATION**

Pump Start Time 0955  
 Pump Stop Time 11:00  
 Minutes of Pumping 65  
 Volume of Water Removed 3.0 gallons  
 Did Well Go Dry? Y (N)

Evacuation Method: Bailer ( ) Bladder Pump (X)  
 Peristaltic Pump ( ) Submersible Pump ( ) Other/Specify ( )  
 Pump Type: Mauschall-System One  
 Samples collected by same method as evacuation? (Y) N (specify)

Water Quality Meter Type(s) / Serial Numbers: YSI 556 MRS #3 03014101 AI, HACH 2100P turbid

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
1002	450	0.83	9.92	/	/	/	197	/	/
1007	150	1.03	/	/	/	-	39	/	/
1012	175	1.28	9.97	8.42	6.43	0.469	20	9.27	63.2
1017	-	1.49	9.91	8.39	6.42	0.466	11	8.77	60.7
1022	175	1.72	9.92	8.39	6.41	0.463	5	8.43	61.3
1027	150	1.92	9.94	8.36	6.39	0.461	3	7.65	61.5
1032	150	2.12		8.31	6.39	0.461	2	7.22	62.1
1037	150	2.31	9.90	8.24	6.39	0.461	1	7.05	62.0

\* The stabilization criteria for each field parameter (three consecutive readings collected at 3- to 5-minute intervals) is listed in each column heading.

OBSERVATIONS/SAMPLING METHOD DEVIATIONS (Do) may be elevated due to air in the water line

**SAMPLE DESTINATION**

Laboratory: SGS  
 Delivered Via: Fed Ex  
 Airbill #: -

Field Sampling Coordinator: [Signature]

GROUNDWATER SAMPLING LOG

Well No. 51-14

Site/GMA Name GMA-3  
Sampling Personnel DAZ/KLC  
Date 5/2/08  
Weather Overcast, 45° Wind

WELL INFORMATION - See Page 1

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
1042	↓	2.51	9.89	8.28	6.39	0.461	1	6.51	60.9
1047	↓	2.71	9.89	8.33	6.39	0.462	1	6.46	61.9
1052	—	2.91	9.91	8.36	6.39	0.462	0	6.51 <sub>avg</sub>	60.5
<i>Sampled @ 1055</i>									

\* The stabilization criteria for each field parameter (three consecutive readings collected at 3- to 5-minute intervals) is listed in each column heading.

OBSERVATIONS/SAMPLING METHOD DEVIATIONS

**GROUNDWATER SAMPLING LOG**

Well No. 82B-R  
 Key No. 2537  
 PID Background (ppm) 0  
 Well Headspace (ppm) 0

Site/GMA Name GE PITTSFID-GMA3  
 Sampling Personnel GAR  
 Date 5/2/08  
 Weather Overcast, light rain, 50°F

**WELL INFORMATION**

Reference Point Marked? Ⓢ N  
 Height of Reference Point +2.40' Meas. From Ground  
 Well Diameter 2"  
 Screen Interval Depth 2'-12" Meas. From Free Ground  
 Water Table Depth 3.47' Meas. From TIC  
 Well Depth 11.80' Meas. From TIC  
 Length of Water Column 8.33'  
 Volume of Water in Well 1.36 gallons  
 Intake Depth of Pump/Tubing 9.4" Meas. From Ground

Sample Time 12:05  
 Sample ID 82B-R  
 Duplicate ID GMA3-DUP-3  
 MSMSD Collected Here  
 Split Sample ID —

Reference Point Identification:  
 TIC: Top of Inner (PVC) Casing  
 TOC: Top of Outer (Protective) Casing  
 Grade/BGS: Ground Surface

Redevelop? Y Ⓢ

Required	Analytical Parameters:	Collected
( )	VOCs (Std. list)	( )
( )	VOCs (Exp. list)	( )
( )	SVOCs	( )
( )	PCBs (Total)	( )
(X)	PCBs (Dissolved)	(X)
( )	Metals/Inorganics (Total)	( )
( )	Metals/Inorganics (Dissolved)	( )
( )	EPA Cyanide (Dissolved)	( )
( )	PAC Cyanide (Dissolved)	( )
( )	PCDDs/PCDFs	( )
( )	Pesticides/Herbicides	( )
( )	Natural Attenuation	( )
( )	Other (Specify)	( )

**EVACUATION INFORMATION**

Pump Start Time 11:00  
 Pump Stop Time 12:45  
 Minutes of Pumping 105  
 Volume of Water Removed 2.75 gallons  
 Did Well Go Dry? Y Ⓢ

Evacuation Method: Bailer ( ) Bladder Pump ( )  
 Peristaltic Pump (X) Submersible Pump ( ) Other/Specify ( )  
 Pump Type: Geo Pump 2  
 Samples collected by same method as evacuation? Ⓢ N (specify)

Water Quality Meter Type(s) / Serial Numbers: YSI-556 MPS Hach 2100P-Turbidimeter

Time	Pump Rate (L/min)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
11:05	100ml	0.13	3.52	—	—	—	2	—	—
11:15	100ml	0.40	3.53	6.79	6.33	0.599	2	6.20	4.0
11:20	100ml	0.53	3.53	6.65	6.29	0.598	1	3.15	3.3
11:25	100ml	0.66	3.53	6.54	6.28	0.596	2	2.04	2.7
11:30	100ml	0.79	3.53	6.52	6.28	0.591	2	1.44	2.4
11:35	100ml	0.92	3.54	6.51	6.28	0.586	2	1.21	2.4
11:40	100ml	1.06	3.53	6.54	6.28	0.580	2	1.07	2.4
11:45	100ml	1.19	3.54	6.52	6.28	0.577	1	0.94	2.3

\* The stabilization criteria for each field parameter (three consecutive readings collected at 3- to 5-minute intervals) is listed in each column heading.

**OBSERVATIONS/SAMPLING METHOD DEVIATIONS**

Initial Purge: Clear, strong methane odor  
Final Purge: Clear, methane odor

**SAMPLE DESTINATION**

Laboratory: SGS  
 Delivered Via: Fed. Ex  
 Airbill #: —

Field Sampling Coordinator: [Signature]

GROUNDWATER SAMPLING LOG

Well No. 82B-R

Site/GMA Name GE Pit Field - GMA 3  
 Sampling Personnel GAR/ESP  
 Date 5/2/08  
 Weather Overcast, 50°F

WELL INFORMATION - See Page 1

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
11:50	100ml	1.32	3.52	6.52	6.29	0.574	2	0.90	2.3
11:55	100ml	1.45	3.52	6.47	6.29	0.571	1	0.83	2.5
12:00	100ml	1.59	3.52	6.43	6.29	0.566	1	0.81	2.8

\* The stabilization criteria for each field parameter (three consecutive readings collected at 3- to 5-minute intervals) is listed in each column heading.

OBSERVATIONS/SAMPLING METHOD DEVIATIONS

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**GROUNDWATER SAMPLING LOG**

Well No. 89A  
 Key No. FX-37  
 PID Background (ppm) -  
 Well Headspace (ppm) -

Site/GMA Name GMA3, GE Pittsfield  
 Sampling Personnel KJC  
 Date 5/5/08  
 Weather Sunny 70

**WELL INFORMATION**

Reference Point Marked? Y N  
 Height of Reference Point \_\_\_\_\_ Meas. From \_\_\_\_\_  
 Well Diameter 2.75"  
 Screen Interval Depth 43-48 Meas. From Ground  
 Water Table Depth 2.60 Meas. From TIC  
 Well Depth 47.12 Meas. From TIC  
 Length of Water Column 44.52'  
 Volume of Water in Well 1.02 gallons  
 Intake Depth of Pump/Tubing 2.45' Meas. From TIC

Sample Time 1400  
 Sample ID 89A  
 Duplicate ID -  
 MSMSD -  
 Split Sample ID -

**Reference Point Identification:**

TIC: Top of Inner (PVC) Casing  
 TOC: Top of Outer (Protective) Casing  
 Grade/BGS: Ground Surface

Redevelop? Y (N)

Required	Analytical Parameters:	Collected
(X)	VOCs (Std. list)	(X)
(X)	VOCs (Exp. list)	( )
( )	SVOCs	(X)
( )	PCBs (Total)	( )
( )	PCBs (Dissolved)	( )
( )	Metals/Inorganics (Total)	( )
( )	Metals/Inorganics (Dissolved)	( )
( )	EPA Cyanide (Dissolved)	( )
( )	PAC Cyanide (Dissolved)	( )
( )	PCDDs/PCDFs	( )
( )	Pesticides/Herbicides	( )
(X)	Natural Attenuation	(X)
( )	Other (Specify)	( )

**EVACUATION INFORMATION**

Pump Start Time 1220  
 Pump Stop Time 1450  
 Minutes of Pumping 150  
 Volume of Water Removed 6.0 gallons  
 Did Well Go Dry? Y (N)

Evacuation Method: Bailer ( ) Bladder Pump (X)  
 Peristaltic Pump (X) Submersible Pump ( ) Other/Specify ( )  
 Pump Type: Geo pump 2  
 Samples collected by same method as evacuation? Y N (specify)

Water Quality Meter Type(s) / Serial Numbers: YSI 6560 MPS 0300392AE #2 HACH 2100P turbidimeter

Time	Pump Rate (L/min.)	Total Gallons Removed	* Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
1235	150	0.59	2.60				24		
1240	150	1.00	0.79	12.13	8.33	1.622	21	4.42	-171.5
1245	150	1.40	0.99	11.18	8.65	1.614	20	1.90	-214.7
1250	150	1.80	1.19	11.99	8.77	1.611	18	1.34	-228.5
1255	150	2.20	1.39	11.88	8.77	1.611	19	1.10	-229.1
1300	150	2.60	1.59	11.89	8.79	1.614	20	0.96	-234.3
1305	150	3.00	1.78	11.98	8.82	1.610	20	0.81	-249.7
1310	150	3.40	1.98	11.73	8.74	1.622	39	0.74	-256.7

\* The stabilization criteria for each field parameter (three consecutive readings collected at 3- to 5-minute intervals) is listed in each column heading.

**OBSERVATIONS/SAMPLING METHOD DEVIATIONS**

- initial purge a little cloudy, no noticeable odor  
 - water level too deep to get regular depth to water readings, almost 3' feet of running water  
 - covered flowthrough cell w/ white k-wipes to regulate temp.

**SAMPLE DESTINATION**

Laboratory: JGS  
 Delivered Via: UPS  
 Airbill #: \_\_\_\_\_

Field Sampling Coordinator: [Signature]

898 DTW = 2.88

Final

**GROUNDWATER SAMPLING LOG**

Well No. 89A

Site/GMA Name GMA3 (66 Pittsfield)

Sampling Personnel KLC

Date 5/5/08

Weather 70, sunny slight breeze

WELL INFORMATION - See Page 1

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
1315	150	1.5	2.18	11.67	8.24	1.774	55	0.78	-241.4
1320	150	1.65	2.38	11.65	7.78	1.871	53	0.60	-197.7
1325	150	1.80	2.58	11.60	7.83	1.892	39	0.58	-189.5
1330	150	1.95	2.77	11.59	7.82	1.898	38	0.57	-182.5
1335	150	2.10	2.97	11.74	7.82	1.897	36	0.56	-175.0
1338	150	2.25	3.09	11.65	7.87	1.904	33	0.56	-172.6
1341	150	2.40	3.21	11.76	7.72	1.904	33	0.54	-172.4
1344	150	2.55	3.33	11.68	7.75	1.908	28	0.54	-172.3
1347	150	2.80	3.45	11.59	7.77	1.908	29	0.55	-172.3
1350	150	2.95	3.57	11.58	7.76	1.908	27	0.54	-171.9
1353	150	3.10	3.69	11.67	7.79	1.908	25	0.54	-171.4
1356	150	3.25	3.80	11.73	7.78	1.908	25	0.55	-170.8
1359	150	3.40	<del>3.88</del>	11.80	7.74	1.909	26	0.53	-170.3
1400		3.92	*3.25						

→ Sampled @ 1400 by KLC ←

\* The stabilization criteria for each field parameter (three consecutive readings collected at 3- to 5-minute intervals) is listed in each column heading.

**OBSERVATIONS/SAMPLING METHOD DEVIATIONS**

**GROUNDWATER SAMPLING LOG**

Well No. 89B  
 Key No. \_\_\_\_\_  
 PID Background (ppm) N/A  
 Well Headspace (ppm) N/A

Site/GMA Name GMA-3  
 Sampling Personnel PAZ, KC  
 Date 5/9/08  
 Weather Sunny, clear, ~65 H wind

**WELL INFORMATION**

Reference Point Marked?  Y  N  
 Height of Reference Point 1.15 Meas. From F  
 Well Diameter 2"  
 4-7 Screen Interval Depth 2.9 Meas. From BLS  
 Water Table Depth 2.91 Meas. From TIC  
 Well Depth 8.73 Meas. From TIC  
 Length of Water Column = 5.75  
 Volume of Water in Well 0.94 gallon  
 Intake Depth of Pump/Tubing 25.5 Meas. From TIC

Sample Time 1325  
 Sample ID 89B  
 Duplicate ID \_\_\_\_\_  
 MS/MSD \_\_\_\_\_  
 Split Sample ID \_\_\_\_\_

**Reference Point Identification:**

TIC: Top of Inner (PVC) Casing  
 TOC: Top of Outer (Protective) Casing  
 Grade/BGS: Ground Surface

Redevelop? Y  N

Required	Analytical Parameters:	Collected
(X)	VOCs (Std. list)	(X)
(X)	VOCs (Exp. list)	( )
( )	SVOCs	(X)
( )	PCBs (Total)	( )
( )	PCBs (Dissolved)	( )
( )	Metals/Inorganics (Total)	( )
( )	Metals/Inorganics (Dissolved)	( )
( )	EPA Cyanide (Dissolved)	( )
( )	PAC Cyanide (Dissolved)	( )
( )	PCDDs/PCDFs	( )
( )	Pesticides/Herbicides	( )
(X)	Natural Attenuation	(X)
( )	Other (Specify)	( )

**EVACUATION INFORMATION**

Pump Start Time 12:13  
 Pump Stop Time 13:55  
 Minutes of Pumping 102  
 Volume of Water Removed 5.4 gallons  
 Did Well Go Dry? Y  N

Evacuation Method: Bailor ( ) Bladder Pump ( )  
 Peristaltic Pump  Submersible Pump ( ) Other/Specify ( )  
 Pump Type: Geo Pump 2

Samples collected by same method as evacuation?  Y  N (specify)

Water Quality Meter Type(s) / Serial Numbers: #3 YSI 556 mps Hach 2100P Turbidity meter

Time	Pump Rate (L/min)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
1213	200	—	2.91	—	—	—	23	—	—
1225	200	0.63	—	10.80	6.45	0.943	16	22.29	-36.0
1230	—	0.89	—	10.61	6.16	0.947	11	16.36	-21.2
1235	—	1.16	—	10.54	6.20	0.950	11	12.49	-26.4
1240	—	1.42	—	10.49	6.31	0.957	9	8.26	-35.5
1245	—	1.69	—	10.62	6.52	0.951	10	4.80	-47.2
1250	—	1.95	—	10.71	6.58	0.952	9	3.02	-55.2
1255	—	2.22	—	10.77	6.67	0.954	8	2.17	-60.2

\* The stabilization criteria for each field parameter (three consecutive readings collected at 3- to 5-minute intervals) is listed in each column heading.

**OBSERVATIONS/SAMPLING METHOD DEVIATIONS**

Temp. May change Due to Sun Exposure

**SAMPLE DESTINATION**

Laboratory: 565  
 Delivered Via: UPS  
 Airbill #: \_\_\_\_\_

Field Sampling Coordinator: FAR [Signature]

**GROUNDWATER SAMPLING LOG**

Well No. ~~898~~ 898

Site/GMA Name GMA-3  
 Sampling Personnel D. Zupk  
 Date 5/4/08  
 Weather Sunny ~65°F

WELL INFORMATION - See Page 1

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
1300	~200	~2.48		10.63	6.68	0.955	9	1.72	-60.3
1305	~150	2.68		10.83	6.69	0.952	8	1.51	-61.5
1310	↓	2.88		11.04	6.74	0.952	10	1.40	-64.2
1313	↓	3.00		10.90	6.74	0.953	8	1.37	-64.5
1316	↓	3.12		11.06	6.75	0.951	7	1.36	-65.2
1319	↓	3.24		11.18	6.77	0.950	8	1.32	-67.3
End of Sample @ 1325 (P)									

\* The stabilization criteria for each field parameter (three consecutive readings collected at 3- to 5-minute intervals) is listed in each column heading.

**OBSERVATIONS/SAMPLING METHOD DEVIATIONS**

Temp High Due to Sun Exposure



GROUNDWATER SAMPLING LOG

Well No. 890-R  
 Key No.         
 PID Background (ppm) N/A  
 Well Headspace (ppm) N/A

Site/GMA Name FMA-3  
 Sampling Personnel D. Zuck  
 Date 5/4/08  
 Weather Sunny 2:45°

WELL INFORMATION

Reference Point Marked? (Y) N  
 Height of Reference Point 2" Meas. From         
 Well Diameter 2"  
 Screen Interval Depth 64.57-74.5' Meas. From BLS  
 Water Table Depth 3.41 Meas. From TIC  
 Well Depth 79.09 Meas. From TIC  
 Length of Water Column 75.12'  
 Volume of Water in Well 12.279 million  
 Intake Depth of Pump/Tubing 69 Meas. From TIC

Sample Time 1505  
 Sample ID 890-R  
 Duplicate ID         
 MSMSD         
 Split Sample ID       

Required	Analytical Parameters:	Collected
(X)	VOCs (Std. list)	(X)
( )	VOCs (Exp. list)	( )
(X)	SVOCs	(+)
( )	PCBs (Total)	( )
( )	PCBs (Dissolved)	( )
( )	Metals/Inorganics (Total)	( )
( )	Metals/Inorganics (Dissolved)	( )
( )	EPA Cyanide (Dissolved)	( )
( )	PAC Cyanide (Dissolved)	( )
( )	PCDDs/PCDFs	( )
( )	Pesticides/Herbicides	( )
(X)	Natural Attenuation	(+)
( )	Other (Specify)	( )

Reference Point Identification:

TIC: Top of Inner (PVC) Casing  
 TOC: Top of Outer (Protective) Casing  
 Grade/BGS: Ground Surface

Redevelop? Y (N)

EVACUATION INFORMATION

Pump Start Time 1415  
 Pump Stop Time 1540  
 Minutes of Pumping 85  
 Volume of Water Removed 9.0 gallons  
 Did Well Go Dry? Y (N)

Evacuation Method: Bailer ( ) Bladder Pump ( )  
 Peristaltic Pump (X) Submersible Pump ( ) Other/Specify ( )  
 Pump Type: Go2 Pump #2  
 Samples collected by same method as evacuation? (Y) N (specify)

Water Quality Meter Type(s) / Serial Numbers: YSI #3 556 M/S Hach 2100P Turbidity meter

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
1415	175	—	—	—	—	—	3	—	—
1420	—	0.23	—	10.58	7.84	2.514	7	11.52	-107.1
1425	—	0.46	—	10.60	7.88	2.682	5	9.64	-108.4
1430	—	0.69	—	10.81	7.93	2.826	6	4.81	-91.4
1435	—	0.92	—	11.13	7.97	2.844	7	2.19	-94.1
1440	—	1.16	—	11.22	8.01	2.832	6	1.68	-100.1
1445	—	1.39	—	11.05	8.03	2.790	6	1.42	-108.1
1450	—	1.62	—	11.24	8.11	2.748	6	1.20	-102.7

\* The stabilization criteria for each field parameter (three consecutive readings collected at 3- to 5-minute intervals) is listed in each column heading.

OBSERVATIONS/SAMPLING METHOD DEVIATIONS

Tap elevated tap to sun exposure

SAMPLE DESTINATION

Laboratory: JGS  
 Delivered Via: UP  
 Airtel #: —

Field Sampling Coordinator: [Signature]

**GROUNDWATER SAMPLING LOG**

Well No. 88D-R

Site/GMA Name GMA-3  
 Sampling Personnel D. Zuck  
 Date 5/4/09  
 Weather Sunny 65

WELL INFORMATION - See Page 1

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
1453	175	1.76		11.37	8.08	2.728	5	1.16	-103.1
1456	↓	1.90		11.20	8.08	2.722	5	1.14	-103.1
1459	↓	2.03		11.22	8.09	2.698	4	1.08	-102.8
<p>sample @ 1505</p>									

\* The stabilization criteria for each field parameter (three consecutive readings collected at 3- to 5-minute intervals) is listed in each column heading.

OBSERVATIONS/SAMPLING METHOD DEVIATIONS

See page 1 for Sun Temp issues.

**GROUNDWATER SAMPLING LOG**

Well No. 90A  
 Key No. FX-37  
 PID Background (ppm) —  
 Well Headspace (ppm) —

Site/GMA Name GMA 3  
 Sampling Personnel RAB  
 Date 5/14/08  
 Weather Sunny High 50s Lt Breeze

**WELL INFORMATION**

Reference Point Marked? Y (N)  
 Height of Reference Point -2' Mess. From ground  
 Well Diameter 4 1/2" 1"  
 Screen Interval Depth 45-50 Mess. From —  
 Water Table Depth 5.47 Mess. From TIC  
 Well Depth 51.42 Mess. From TIC  
 Length of Water Column 45.95'  
 Volume of Water in Well 1.87 gal  
 Intake Depth of Pump/Tubing 47.5' Mess. From ground

Sample Time 1025  
 Sample ID 90A  
 Duplicate ID —  
 MS/MSD —  
 Split Sample ID —

Reference Point Identification:  
 TIC: Top of Inner (PVC) Casing  
 TOC: Top of Outer (Protective) Casing  
 Grade/BGS: Ground Surface

Redevelop? Y (N)

Required	Analytical Parameters:	Collected
(X)	VOCs (Std. list)	(X)
( )	VOCs (Exp. list)	( )
( )	SVOCs	( )
( )	PCBs (Total)	( )
( )	PCBs (Dissolved)	( )
( )	Metals/Inorganics (Total)	( )
( )	Metals/Inorganics (Dissolved)	( )
( )	EPA Cyanide (Dissolved)	( )
( )	PAC Cyanide (Dissolved)	( )
( )	PCDDs/PCDFs	( )
( )	Pesticides/Herbicides	( )
(X)	Natural Attenuation	(X)
( )	Other (Specify)	( )

**EVACUATION INFORMATION**

Pump Start Time 925  
 Pump Stop Time 1045  
 Minutes of Pumping 80  
 Volume of Water Removed 3.2 gal  
 Did Well Go Dry? Y (N)

Evacuation Method: Bailer ( ) Bladder Pump ( )  
 Peristaltic Pump (X) Submersible Pump ( ) Other/Specify ( )  
 Pump Type: Geo Pump 2  
 Samples collected by same method as evacuation? (Y) N (specify)

Water Quality Meter Type(s) / Serial Number: YSI #3 03C1461 AT Hach 2100P Turbidity meter

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
940	150	0.59	5.88	—	—	—	23	—	—
945	↓	0.79	5.88	8.80	7.75	0.411	12	5.96	-199.1
950	↓	0.99	5.88	8.45	7.90	0.415	12	3.87	-188.7
955	150	1.18	5.88	8.68	7.97	0.414	12	3.44	-193.0
1000	↓	1.38	5.88	8.66	7.98	0.416	12	3.45	-183.5
1005	↓	1.58	5.88	8.76	7.99	0.417	12	3.53	-182.9
1010	↓	1.78	5.88	8.75	7.98	0.421	13	3.64	-154.3
1015	↓	1.98	5.88	8.87	7.97	0.423	10	3.66	-155.9

\* The stabilization criteria for each field parameter (three consecutive readings collected at 3- to 5-minute intervals) is listed in each column heading.

OBSERVATIONS/SAMPLING METHOD DEVIATIONS Connected to YSI @ 9:40 YSI flow through all and tubing shaded to minimize temp effects. Initial purge (D) brown color no longer. Purge water lt brown color - fine particles suspended in purge water.

**SAMPLE DESTINATION**

Laboratory: SGS  
 Delivered Via: UPS  
 Airbill #: —

Field Sampling Coordinator: [Signature]

**GROUNDWATER SAMPLING LOG**

Well No. 90A

Site/GMA Name GMA 3  
 Sampling Personnel RAB  
 Date 5/14/08  
 Weather Sunny High 50s Lt Breeze

WELL INFORMATION - See Page 1

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
1020	150	2.18	5.88	8.95	7.96	0.424	10	3.66	-152.8
1025	150	2.37	5.88	8.86	7.99	0.428	10	3.62	-157.6
Sampled @ 1025									

\* The stabilization criteria for each field parameter (three consecutive readings collected at 3- to 5-minute intervals) is listed in each column heading.

**OBSERVATIONS/SAMPLING METHOD DEVIATIONS**

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**GROUNDWATER SAMPLING LOG**

Well No. 90B  
 Key No. -  
 PID Background (ppm) -  
 Well Headspace (ppm) -

Site/GMA Name GMA3-GE Pittsfield  
 Sampling Personnel KIC  
 Date 5/14/08  
 Weather 50's, sunny (early)

**WELL INFORMATION**

Reference Point Marked? (P) N  
 Height of Reference Point 2.5' Meas. From Grade  
 Well Diameter 2"  
 Screen Interval Depth 8-11 Meas. From Grade  
 Water Table Depth 6.70 Meas. From TIC  
 Well Depth 12.69' Meas. From TIC  
 Length of Water Column 5.99'  
 Volume of Water in Well 0.98 gallons  
 Intake Depth of Pump/Tubing ~10' Meas. From TIC

Sample Time 1036  
 Sample ID 90B  
 Duplicate ID -  
 MS/MSD -  
 Spill Sample ID -

**Reference Point Identification:**

TIC: Top of Inner (PVC) Casing  
 TOC: Top of Outer (Protective) Casing  
 Grade/BGS: Ground Surface

Redevelop? Y (N)

Required	Analytical Parameters:	Collected
(X)	VOCs (Std. list)	(X)
( )	VOCs (Exp. list)	( )
( )	SVOCs	( )
( )	PCBs (Total)	( )
( )	PCBs (Dissolved)	( )
( )	Metals/Inorganics (Total)	( )
( )	Metals/Inorganics (Dissolved)	( )
( )	EPA Cyanide (Dissolved)	( )
( )	PAC Cyanide (Dissolved)	( )
( )	PCDDs/PCDFs	( )
( )	Pesticides/Herbicides	( )
(X)	Natural Attenuation	(X)
( )	Other (Specify)	( )

**EVACUATION INFORMATION**

Pump Start Time 0925  
 Pump Stop Time 1105  
 Minutes of Pumping 100  
 Volume of Water Removed 4.0 gallons  
 Did Well Go Dry? Y (N)

Evacuation Method: Bailer ( ) Bladder Pump ( )  
 Peristaltic Pump (X) Submersible Pump ( ) Other/Specify ( )  
 Pump Type: Geopump 2  
 Samples collected by same method as evacuation? (Y) N (specify)

Water Quality Meter Type(s) / Serial Numbers: YSI-556 MPS Hach 2100P Turbidimeter

Time	Pump Rate (L/min)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH (0.1 units)*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
0927	150	0.08	7.03	-	-	-	47	-	-
0930	150	0.20	7.03	-	-	-	18	-	-
0935	150	0.40	7.05	6.82	6.58	0.290	13	3.28	-3.3
0940	200	0.66	6.99	6.89	6.65	0.289	11	2.61	-5.8
0945	150	0.86	6.99	7.26	6.58	0.294	7	1.57	-10.8
0950	150	1.06	6.97	7.13	6.66	0.284	5	1.28	-13.2
0955	160	1.26	6.99	7.36	6.69	0.282	4	1.18	-14.6
1000	150	1.46		7.47	6.71	0.291	2	1.08	-16.7

\* The stabilization criteria for each field parameter (three consecutive readings collected at 3- to 5-minute intervals) is listed in each column heading.

**OBSERVATIONS/SAMPLING METHOD DEVIATIONS**

→ Hooked up to flowthrough cell  
 → YSI flow through cell covered and in shade, air temp increasing creating jumps in temp.

**SAMPLE DESTINATION**

Laboratory: SGS  
 Delivered Via: UPS  
 Airbill #: -

Field Sampling Coordinator: [Signature]

**GROUNDWATER SAMPLING LOG**

Well No. 90B

Site/GMA Name GMA3/GE Pitts Field

Sampling Personnel KIC

Date 5/14/08

Weather 50's, Sunny

WELL INFORMATION - See Page 1

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
1005	150	1.65	6.99	7.37	6.74	0.281	3	1.01	-17.0
1010	150	1.85	6.99	7.46	6.82	0.280	2	0.96	-17.6
1015	150	2.05	6.99	7.33	6.91	0.281	2	0.92	-18.1
<del>1020</del>	<del>150</del>	<del>2.17</del>	<del>6.99</del>	<del>7.43</del>	<del>6.95</del>	<del>0.280</del>	<del>1</del>	<del>0.91</del>	<del>-18.3</del>
1021	150	2.29	6.99	7.62	7.04	0.279	1	0.90	-88.8
1024	150	2.41	6.99	7.48	7.07	0.279	2	0.85	-89.6
1027	150	2.53	6.99	7.42	7.10	0.279	2	0.85	-100.6
<del>1030</del>	<del>150</del>	<del>2.64</del>	<del>6.99</del>	<del>7.37</del>	<del>7.11</del>	<del>0.280</del>	<del>1</del>	<del>0.85</del>	<del>-113.2</del>
1030	150	2.64	6.99	7.37	7.11	0.280	1	0.85	-113.2
1033	150	2.76	6.99	7.42	7.15	0.279	2	0.84	-116.8
1036									

\* The stabilization criteria for each field parameter (three consecutive readings collected at 3- to 5-minute intervals) is listed in each column heading.

OBSERVATIONS/SAMPLING METHOD DEVIATIONS

**GROUNDWATER SAMPLING LOG**

Well No. 95A  
 Key No. FX-37  
 PID Background (ppm) \_\_\_\_\_  
 Well Headspace (ppm) \_\_\_\_\_

Site/GMA Name GMA3  
 Sampling Personnel KLC/RAB  
 Date 5/14/08  
 Weather Sunny Breezy 70s

**WELL INFORMATION**

Reference Point Marked? Y N  
 Height of Reference Point 1.5' Meas. From ground  
 Well Diameter 1.00"  
 Screen Interval Depth 45-50 Meas. From \_\_\_\_\_  
 Water Table Depth 6.81 Meas. From TIC  
 Well Depth 50.82 Meas. From TIC  
 Length of Water Column 44.01'  
 Volume of Water in Well 1.80 gallons  
 Intake Depth of Pump/Tubing 47' Meas. From Ground

Sample Time 1721  
 Sample ID 95A  
 Duplicate ID \_\_\_\_\_  
 MS/MSD \_\_\_\_\_  
 Spill Sample ID \_\_\_\_\_

**Reference Point Identification:**

TIC: Top of Inner (PVC) Casing  
 TOC: Top of Outer (Protective) Casing  
 Grade/BGS: Ground Surface

Redevelop? Y (N)

Required	Analytical Parameters:	Collected
(X)	VOCs (Std. list)	(X)
( )	VOCs (Exp. list)	( )
(X)	SVOCs	(X)
( )	PCBs (Total)	( )
( )	PCBs (Dissolved)	( )
( )	Metals/Inorganics (Total)	( )
( )	Metals/Inorganics (Dissolved)	( )
( )	EPA Cyanide (Dissolved)	( )
( )	PAC Cyanide (Dissolved)	( )
( )	PCDDs/PCDFs	( )
( )	Pesticides/Herbicides	( )
(X)	Natural Attenuation	(X)
( )	Other (Specify)	( )

**EVACUATION INFORMATION**

Pump Start Time 1540  
 Pump Stop Time 1745  
 Minutes of Pumping 125  
 Volume of Water Removed 5.0 gallons  
 Did Well Go Dry? Y (N)

Evacuation Method: Bailer ( ) Bladder Pump (X) stet  
 Peristaltic Pump (X) Submersible Pump ( ) Other/Specify ( )  
 Pump Type: Geopump Z  
 Samples collected by same method as evacuation? (Y) N (specify)

Water Quality Meter Type(s) / Serial Numbers: YST #3 03C1461 AL Hoch Turbidimeter 2100P

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
1550	150	0.40	9.63	13.4			40		
1555	150	0.60		13.47	8.41	0.252	33	3.93	-221.2
1600	150	0.80	12.86	13.19	8.29	0.239	32	2.64	-212.4
1605	100	0.93	13.44	12.84	8.16	0.237	29	1.95	-210.4
1610	150	1.12	13.35	12.98	8.00	0.236	26	1.51	-170.0
1615		1.32	13.55	12.87	7.74	0.251	50	1.34	-166.5
1620		1.52	13.68	12.96	7.72	0.259	67	1.23	-111.6
1625		1.72		12.94	7.67	0.263	77	1.22	-119.6

\* The stabilization criteria for each field parameter (three consecutive readings collected at 3- to 6-minute intervals) is listed in each column heading.

**OBSERVATIONS/SAMPLING METHOD DEVIATIONS**

YST Hooked up @ 1550 Purge water 17 up flow in color no noticeable odor. Flow through cell shaded to minimize temp effects  
Disconnected YST @ 1625 due to high turbidity

**SAMPLE DESTINATION**

Laboratory: 5BJ  
 Delivered Via: UPS  
 Airbill #: \_\_\_\_\_

Field Sampling Coordinator: [Signature]

**GROUNDWATER SAMPLING LOG**

Well No. 95A

Site/GMA Name GMA 3  
 Sampling Personnel KLC / RAB  
 Date 5/14/08  
 Weather Partly Sunny mid 70s

WELL INFORMATION - See Page 1

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
1630	150	1.92	13.88	-	-	-	57	-	-
1633		2.04		-	-	-	48	-	-
1636		2.16		-	-	-	39	-	-
1640		2.32	14.09	13.23	7.54	0.279	34	3.80	-132.3
1645		2.52	14.15	12.55	7.60	0.280	25	2.82	-146.6
1650	150	2.72	14.22	12.79	7.64	0.278	25	1.75	-134.8
1655		2.91	14.30	12.64	7.65	0.278	23	1.27	-141.8
1700		3.11	14.33	12.59	7.64	0.279	24	1.18	-137.2
1703		3.23	14.37	12.40	7.64	0.279	22	1.12	-144.2
1706		3.35		12.35	7.64	0.280	19	1.11	-149.8
1709		3.47	14.39	12.29	7.63	0.280	21	1.09	-145.6
1712		3.59	14.41	12.27	7.63	0.280	16	1.04	-140.2
1715		3.70	14.44	12.13	7.63	0.280	19	1.03	-146.9
1718		3.82	14.45	12.23	7.63	0.280	19	1.02	-141.1
1721		3.94	14.45	12.30	7.63	0.280	20	1.01	-139.4
		Sampled @ 1721							

\* The stabilization criteria for each field parameter (three consecutive readings collected at 3- to 5-minute intervals) is listed in each column heading.

OBSERVATIONS/SAMPLING METHOD DEVIATIONS Reconnected to 95A @ 1636



**GROUNDWATER SAMPLING LOG**

Well No. 95B-R  
 Key No. \_\_\_\_\_  
 PID Background (ppm) 0  
 Well Headpace (ppm) 0

Site/GMA Name GE Pittsfield/GMA-3  
 Sampling Personnel GAR  
 Date 5/8/08  
 Weather Mostly cloudy, 70°F

**WELL INFORMATION**

Reference Point Marked?  Y  N  
 Height of Reference Point +2.0' Meas. From Ground  
 Well Diameter 2"  
 Screen Interval Depth 2'-13' Meas. From Ground  
 Water Table Depth 5.79' Meas. From TIC  
 Well Depth 13.55' Meas. From TIC  
 Length of Water Column 7.76'  
 Volume of Water in Well 1.27 gallons  
 Intake Depth of Pump/Tubing 9.7' Meas. From TIC

Sample Time 15:20  
 Sample ID 95B-R  
 Duplicate ID -  
 MS/MSD Collected Here  
 Split Sample ID -

**Reference Point Identification:**

TIC: Top of Inner (PVC) Casing  
 TOC: Top of Outer (Protective) Casing  
 Grade/BGS: Ground Surface

Redevelop? Y  N

Required	Analytical Parameters:	Collected
<input checked="" type="checkbox"/>	VOCs (Std. list)	<input checked="" type="checkbox"/>
<input type="checkbox"/>	VOCs (Exp. list)	<input type="checkbox"/>
<input checked="" type="checkbox"/>	SVOCs	<input checked="" type="checkbox"/>
<input type="checkbox"/>	PCBs (Total)	<input type="checkbox"/>
<input type="checkbox"/>	PCBs (Dissolved)	<input type="checkbox"/>
<input type="checkbox"/>	Metals/Inorganics (Total)	<input type="checkbox"/>
<input type="checkbox"/>	Metals/Inorganics (Dissolved)	<input type="checkbox"/>
<input type="checkbox"/>	EPA Cyanide (Dissolved)	<input type="checkbox"/>
<input type="checkbox"/>	PAC Cyanide (Dissolved)	<input type="checkbox"/>
<input type="checkbox"/>	PCDDs/PCDFs	<input type="checkbox"/>
<input type="checkbox"/>	Pesticides/Herbicides	<input type="checkbox"/>
<input checked="" type="checkbox"/>	Natural Attenuation	<input checked="" type="checkbox"/>
<input type="checkbox"/>	Other (Specify)	<input type="checkbox"/>

**EVACUATION INFORMATION**

Pump Start Time 14:10  
 Pump Stop Time 17:10  
 Minutes of Pumping 180  
 Volume of Water Removed 4.75 gallons  
 Did Well Go Dry? Y  N

Evacuation Method: Bailer ( ) Bladder Pump ( )  
 Peristaltic Pump  Submersible Pump ( ) Other/Specify ( )  
 Pump Type: Geo Pump 2  
 Samples collected by same method as evacuation?  Y  N (specify)

Water Quality Meter Type(s) / Serial Numbers: YSI-556 MPS Hach 2100P Turbidimeter

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
14:15	100ml	0.13	5.79'	-	-	-	30	-	-
14:20	100ml	0.26	5.79'	-	-	-	26	-	-
14:30	100ml	0.53	5.79'	10.18	7.02	1.156	10	4.30	-57.6
14:35	100ml	0.66	5.79'	9.93	7.03	1.155	8	1.51	-59.4
14:40	100ml	0.79	5.79'	9.93	7.06	1.155	7	1.28	-61.5
14:45	100ml	0.92	5.79'	10.10	7.06	1.156	7	1.06	-64.2
14:50	100ml	1.06	5.79'	9.91	7.08	1.154	8	0.90	-63.2
14:55	100ml	1.19	5.79'	9.89	7.09	1.152	6	0.76	-57.9

\* The stabilization criteria for each field parameter (three consecutive readings collected at 3- to 5-minute intervals) is listed in each column heading.

**OBSERVATIONS/SAMPLING METHOD DEVIATIONS**

Initial Purge: Clear, some suspended solids, odorless  
 Final Purge: Clear, odorless

**SAMPLE DESTINATION**

Laboratory: SGS  
 Delivered Via: UPS  
 Airbill #: \_\_\_\_\_

Field Sampling Coordinator: [Signature]

# GROUNDWATER SAMPLING LOG

Well No. 95B-R

Site/GMA Name GE Pittsfield / GMA-3

Sampling Personnel GAR

Date 5/8/08

Weather Mostly cloudy, 70°F

WELL INFORMATION - See Page 1

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
15:00	100ml	1.32	5.79	9.78	7.08	1.151	8	0.62	-58.3
15:05	100ml	1.45	5.79	9.79	7.09	1.150	8	0.57	-54.6
15:10	100ml	1.59	5.79	9.77	7.08	1.149	8	0.52	-55.5
15:15	100ml	1.72	5.79	9.70	7.08	1.148	7	0.48	-53.8

\* The stabilization criteria for each field parameter (three consecutive readings collected at 3- to 5-minute intervals) is listed in each column heading.

OBSERVATIONS/SAMPLING METHOD DEVIATIONS \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**GROUNDWATER SAMPLING LOG**

Well No. 111A-R  
 Key No. 2537  
 PID Background (ppm) 0  
 Well Headspace (ppm) 0

SNA/GMA Name GE Pittsfield/GMA-3  
 Sampling Personnel GARIBAB  
 Date 5/6/08  
 Weather Mostly sunny, 70°F

**WELL INFORMATION**

Reference Point Marked? Ⓧ N  
 Height of Reference Point +2.30' Meas. From Ground  
 Well Diameter 2"  
 Screen Interval Depth 40'-50' Meas. From Ground  
 Water Table Depth 13.23' Meas. From TIC  
 Well Depth 52.10' Meas. From TIC  
 Length of Water Column 38.83'  
 Volume of Water in Well 6.24 gallons  
 Intake Depth of Pump/Tubing 47.3' Meas. From TIC

Sample Time 16:30  
 Sample ID 111A-R  
 Duplicate ID -  
 MSMSD -  
 Spill Sample ID -

Reference Point Identification:  
 TIC: Top of Inner (PVC) Casing  
 TOC: Top of Outer (Protective) Casing  
 Grade/BGS: Ground Surface

Redevelop? Y (N)

Required	Analytical Parameters:	Collected
<input checked="" type="checkbox"/>	VOCs (Std. list)	<input checked="" type="checkbox"/>
<input type="checkbox"/>	VOCs (Exp. list)	<input type="checkbox"/>
<input type="checkbox"/>	SVOCs	<input type="checkbox"/>
<input type="checkbox"/>	PCBs (Total)	<input type="checkbox"/>
<input type="checkbox"/>	PCBs (Dissolved)	<input type="checkbox"/>
<input type="checkbox"/>	Metals/Inorganics (Total)	<input type="checkbox"/>
<input type="checkbox"/>	Metals/Inorganics (Dissolved)	<input type="checkbox"/>
<input type="checkbox"/>	EPA Cyanide (Dissolved)	<input type="checkbox"/>
<input type="checkbox"/>	PAC Cyanide (Dissolved)	<input type="checkbox"/>
<input type="checkbox"/>	PCDDs/PCDFs	<input type="checkbox"/>
<input type="checkbox"/>	Pesticides/Herbicides	<input type="checkbox"/>
<input checked="" type="checkbox"/>	Natural Attenuation	<input checked="" type="checkbox"/>
<input type="checkbox"/>	Other (Specify)	<input type="checkbox"/>

**EVACUATION INFORMATION**

Pump Start Time 15:05  
 Pump Stop Time 16:45  
 Minutes of Pumping 100  
 Volume of Water Removed 4.0 gallons  
 Did Well Go Dry? Y (N)

Evacuation Method: Bailor ( ) Bladder Pump ( )  
 Peristaltic Pump (X) Submersible Pump ( ) Other/Specify ( )  
 Pump Type: Geo Pump 2  
 Samples collected by same method as evacuation? (Y) N (specify)

Water Quality Meter Type(s) / Serial Numbers: YSI-556 MPS Hach 2100P Turbidity

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
15:10	100ml	0.13	13.93	-	-	-	5	-	-
15:20	100ml	0.40	15.24	11.93	7.76	0.703	9	2.66	-87.7
15:25	100ml	0.60	15.65	11.66	7.87	0.705	12	1.41	-81.3
15:30	150ml	0.80	16.17	11.38	7.97	0.706	12	1.92	-54.0
15:35	150ml	0.99	16.52	11.34	8.10	0.707	7	2.16	-33.0
15:40	150ml	1.19	16.91	11.36	8.19	0.706	5	2.52	-20.9
15:45	150ml	1.39	17.16	11.35	8.28	0.709	3	2.85	-14.0
15:50	150ml	1.59	17.37	11.51	8.30	0.710	4	2.76	-6.5

\* The stabilization criteria for each field parameter (three consecutive readings collected at 3- to 5-minute intervals) is listed in each column heading.

**OBSERVATIONS/SAMPLING METHOD DEVIATIONS**

Initial Purge: Clear, odorless  
Final Purge: Clear, odorless  
Water level is dropping but pump shuts off at below 150ml/min

**SAMPLE DESTINATION**

Laboratory: SGS  
 Delivered Via: UPS  
 Airtel #: -

Field Sampling Coordinator: [Signature]

**GROUNDWATER SAMPLING LOG**

Well No. 111A-R

Site/GMA Name GEP, Hs field / GMA-3  
 Sampling Personnel GAR/BAB  
 Date 5/6/08  
 Weather Partly cloudy, 60°F

WELL INFORMATION - See Page 1

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
15:55	150ml	1.79	17.53	11.42	8.31	0.715	3	2.56	-3.3
16:00	150ml	1.99	17.66	11.45	8.29	0.717	2	2.51	-14.7
16:05	150ml	2.18	17.85	11.55	8.28	0.719	3	2.25	-27.3
16:10	150ml	2.38	17.97	11.54	8.27	0.720	2	2.36	-13.5
16:15	150ml	2.58	18.10	11.51	8.27	0.720	2	2.24	-13.2
16:20	150ml	2.78	18.15	11.54	8.25	0.721	2	2.10	-13.1
16:25	150ml	2.98	18.33	11.47	8.22	0.723	2	2.06	-11.3

\* The stabilization criteria for each field parameter (three consecutive readings collected at 3- to 5-minute intervals) is listed in each column heading.

OBSERVATIONS/SAMPLING METHOD DEVIATIONS \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**GROUNDWATER SAMPLING LOG**

Well No. 111B-R  
 Key No. EX-37  
 PID Background (ppm) \_\_\_\_\_  
 Well Headspace (ppm) \_\_\_\_\_

Site/GMA Name GMA 3  
 Sampling Personnel RLE/RAB  
 Date 5/14/08  
 Weather Sunny High 60.5 LT Breeze

**WELL INFORMATION**

Reference Point Marked?  N  
 Height of Reference Point = 3 Meas. From ground  
 Well Diameter 3"  
 Screen Interval Depth 7.18-17.18 Meas. From \_\_\_\_\_  
 Water Table Depth 14.30 Meas. From TIC  
 Well Depth 19.54 Meas. From TIC  
 Length of Water Column 5.24  
 Volume of Water in Well 0.164 0.86 gallons  
 Intake Depth of Pump/Tubing 14.5 Meas. From ground  
16' (based on water table depth)

Sample Time 14:32  
 Sample ID 111B-R  
 Duplicate ID \_\_\_\_\_  
 MS/MSD \_\_\_\_\_  
 Spill Sample ID \_\_\_\_\_

Required	Analytical Parameters:	Collected
<input checked="" type="checkbox"/>	VOCs (Std. list)	<input checked="" type="checkbox"/>
<input type="checkbox"/>	VOCs (Exp. list)	<input type="checkbox"/>
<input type="checkbox"/>	SVOCs	<input type="checkbox"/>
<input type="checkbox"/>	PCBs (Total)	<input type="checkbox"/>
<input type="checkbox"/>	PCBs (Dissolved)	<input type="checkbox"/>
<input type="checkbox"/>	Metals/Inorganics (Total)	<input type="checkbox"/>
<input type="checkbox"/>	Metals/Inorganics (Dissolved)	<input type="checkbox"/>
<input type="checkbox"/>	EPA Cyanide (Dissolved)	<input type="checkbox"/>
<input type="checkbox"/>	PAC Cyanide (Dissolved)	<input type="checkbox"/>
<input type="checkbox"/>	PCDDs/PCDFs	<input type="checkbox"/>
<input type="checkbox"/>	Pesticides/Herbicides	<input type="checkbox"/>
<input checked="" type="checkbox"/>	Natural Attenuation	<input checked="" type="checkbox"/>
<input type="checkbox"/>	Other (Specify)	<input type="checkbox"/>

Reference Point Identification:  
 TIC: Top of Inner (PVC) Casing  
 TOC: Top of Outer (Protective) Casing  
 Grade/BGS: Ground Surface

Redevelop? Y  N

**EVACUATION INFORMATION**

Pump Start Time 1310  
 Pump Stop Time 1500  
 Minutes of Pumping 110  
 Volume of Water Removed 3-6 gallons  
 Did Well Go Dry? Y  N

Evacuation Method: Bailer ( ) Bladder Pump   
 Peristaltic Pump ( ) Submersible Pump ( ) Other/Specify ( )  
 Pump Type: Marschalle-System One  
 Samples collected by same method as evacuation?  N (specify)

Water Quality Meter Type(s) / Serial Numbers: YSI #3 03C1461 AI Hach - 2100P Turbid. meter  
556-MPS

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
1310	50	-	14.32	-	-	-	47	-	-
1320	50	0.13	14.35	-	-	-	165	-	-
1325	175	0.36	14.42	-	-	-	240	-	-
1330	125	0.53	14.42	-	-	-	117	-	-
1335	100	0.66	14.38	-	-	-	60	-	-
1340	100	0.79	14.38	-	-	-	39	-	-
13.45	100	0.93	14.35	13.71	7.65	0.729	30	4.36	22.3
<del>13.50</del>			14.12	14.30	7.67			3.89	20.5

\* The stabilization criteria for each field parameter (three consecutive readings collected at 3- to 5-minute intervals) is listed in each column heading.  
**OBSERVATIONS/SAMPLING METHOD DEVIATIONS** Hooked up to YSI @ 1340 YSI flow through cell shaded to minimize temp. affects

**SAMPLE DESTINATION**

Laboratory: SGS  
 Delivered Via: UPS  
 Airbill #: \_\_\_\_\_

Field Sampling Coordinator: [Signature]

**GROUNDWATER SAMPLING LOG**

Well No. G 111 B-R

Site/GMA Name GMA 3  
 Sampling Personnel KIC/RAB  
 Date 5/14/08  
 Weather Sunny Breezy Low 70s

WELL INFORMATION - See Page 1

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
1350	100	1.06	14.36	14.32	7.68	0.724	23	4.12	21.8
1355	100	1.19	14.37	<del>14.36</del> 14.36	7.68	0.727	18	4.69	24.8
1400	50	1.26	14.36	14.53	7.68	0.723	16	4.84	25.9
1405	150	1.46	14.40	14.33	7.67	0.724	13	5.39	26.6
1410	200	1.72	14.42	12.60	7.70	0.729	10	6.08	28.4
1415	125	1.89	14.36	13.06	7.68	0.721	11	5.85	31.3
1420	125	2.05	14.37	13.61	7.72	0.725	12	6.02	30.3
1423	125	2.15	14.37	13.81	7.72	0.721	12	5.95	29.4
1426	125	2.25	14.37	14.54	7.68	0.723	10	5.96	29.9
1429	125	2.35	14.35	14.18	7.68	0.729	10	6.68/29	29.3
1432	125	2.45	14.38	14.55	7.67	0.722	11	6.11	29.5
		<i>Sampled @ 1432</i>							

\* The stabilization criteria for each field parameter (three consecutive readings collected at 3- to 5-minute intervals) is listed in each column heading.  
**OBSERVATIONS/SAMPLING METHOD DEVIATIONS** *Note temp fluctuating up and down - all other parameters stable*

**GROUNDWATER SAMPLING LOG**

Well No. 114A  
 Key No. FX-37  
 PID Background (ppm) —  
 Well Headspace (ppm) —

Site/GMA Name GMA 3  
 Sampling Personnel RABI KLC  
 Date 5/13/08  
 Weather Sunny Mid 60S

**WELL INFORMATION**

Reference Point Marked? Y (N)  
 Height of Reference Point 3  
 Well Diameter 4.5" 1"  
 Screen Interval Depth 45-50  
 Water Table Depth 5.98  
 Well Depth 46.20  
 Length of Water Column 40.20  
 Volume of Water in Well 1.88 gal/lons  
 Intake Depth of Pump/Tubing 45-50  
 Reference Point Identification: 47.5 = 45 - last 2' wouldn't go down  
 TIC: Top of Inner (PVC) Casing  
 TOC: Top of Outer (Protective) Casing  
 Grade/BGS: Ground Surface  
 Redevelop? Y (N)

Mess. From ground  
 Mess. From ground  
 Mess. From TIC  
 Mess. From TIC

Sample Time 1340  
 Sample ID 114A  
 Duplicate ID —  
 MS/MSD —  
 Split Sample ID —

Required	Analytical Parameters:	Collected
(X)	VOCs (Std. list)	(X)
( )	VOCs (Exp. list)	( )
( )	SVOCs	( )
( )	PCBs (Total)	( )
(X)	PCBs (Dissolved)	(X)
( )	Metals/Inorganics (Total)	( )
( )	Metals/Inorganics (Dissolved)	( )
( )	EPA Cyanide (Dissolved)	( )
( )	PAC Cyanide (Dissolved)	( )
( )	PCDDs/PCDFs	( )
( )	Pesticides/Herbicides	( )
(X)	Natural Attenuation	(X)
( )	Other (Specify)	( )

**EVACUATION INFORMATION**

Pump Start Time 1240  
 Pump Stop Time 1415  
 Minutes of Pumping 95  
 Volume of Water Removed 2.5 gal/lons  
 Did Well Go Dry? Y (N)

Evacuation Method: Bailer ( ) Bladder Pump ( )  
 Peristaltic Pump (X) Submersible Pump ( ) Other/Specify ( )  
 Pump Type: vacumpump 2  
 Samples collected by same method as evacuation? (Y) N (specify)

Water Quality Meter Type(s) / Serial Numbers: #3 YSI-556 MPJ Hach 2100P Turbidimeter

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
1250	100	0.26	10.94				26		
1255	↓	0.39	12.15	NO READING WATER GOING THROUGH FLOW THROUGH CELL					
1300	100	0.52	13.74	15.30	7.76	0.426	25	1.83	-226.2
1305	100	0.66	15.32	15.32	7.75	0.421	17	1.23	-233.5
1310	100	0.79	16.62	15.15	7.82	0.417	15	0.99	-243.2
1315	↓	0.92	17.62	15.18	7.89	0.411	14	0.88	-253.2
1320	↓	1.05	18.68	15.09	7.97	0.403	14	0.79	-260.8
1325	↓	1.18	19.35	14.89	8.04	0.398	14	0.77	-265.1

\* The stabilization criteria for each field parameter (three consecutive readings collected at 3- to 5-minute intervals) is listed in each column heading.

**OBSERVATIONS/SAMPLING METHOD DEVIATIONS**

Attached to YSI @ 1250  
Initial purge organic small light brown - quickly to clear Flow through cell shaded to minimize temp effect

**SAMPLE DESTINATION**

Laboratory: 565  
 Delivered Via: UPS  
 Airbill #: —

Field Sampling Coordinator: [Signature]

GROUNDWATER SAMPLING LOG

Well No. 114A

Site/GMA Name GMA 3

Sampling Personnel RAB

Date 5/13/08

Weather Sunny High 60s (+ Breeze)

WELL INFORMATION - See Page 1

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
1330	100	1.32	20.25	14.90	8.08	0.392	11	0.74	-267.7
1335	↓	1.45	20.77	15.06	8.05	0.387	11	0.70	-262.9
1340	↓	1.58	21.32	14.99	8.08	0.383	11	0.70	-264.8
Sampled @ 1340									

\* The stabilization criteria for each field parameter (three consecutive readings collected at 3- to 5-minute intervals) is listed in each column heading.

OBSERVATIONS/SAMPLING METHOD DEVIATIONS

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GROUNDWATER SAMPLING LOG

Well No. 114-BR  
 Key No. EX-37  
 PID Background (ppm) —  
 Well Headspace (ppm) —

Site/GMA Name GMA3/GG Pittsfield  
 Sampling Personnel XIC  
 Date 5/15/08  
 Weather 60s, Sunny, slight breeze

WELL INFORMATION

Reference Point Marked? (N)  
 Height of Reference Point ~3' Mess. From Grade  
 Well Diameter 2"  
 Screen Interval Depth 4-14 Mess. From Grade  
 Water Table Depth 8.99 Mess. From TIC  
 Well Depth 15 Mess. From TIC  
 Length of Water Column 9.01'  
 Volume of Water in Well 1.479 gallons  
 Intake Depth of Pump/Tubing ~12' Mess. From TIC

Sample Time 1403  
 Sample ID 114B-R  
 Duplicate ID —  
 MSMSD —  
 Split Sample ID —

Reference Point Identification:  
 TIC: Top of Inner (PVC) Casing  
 TOC: Top of Outer (Protective) Casing  
 Grade/BGS: Ground Surface

Redevelop? Y (N)

Required	Analytical Parameters:	Collected
(X)	VOCs (Std. list)	(X)
( )	VOCs (Exp. list)	( )
( )	SVOCs	( )
( )	PCBs (Total)	( )
(X)	PCBs (Dissolved)	(X)
( )	Metals/Inorganics (Total)	( )
( )	Metals/Inorganics (Dissolved)	( )
( )	EPA Cyanide (Dissolved)	( )
( )	PAC Cyanide (Dissolved)	( )
( )	PCDDs/PCDFs	( )
( )	Pesticides/Herbicides	( )
(X)	Natural Attenuation	(X)
( )	Other (Specify)	( )

EVACUATION INFORMATION

Pump Start Time 1240  
 Pump Stop Time 1440  
 Minutes of Pumping 120  
 Volume of Water Removed 4.75 gallons  
 Did Well Go Dry? Y (N)

Evacuation Method: Bailer ( ) Bladder Pump (X)  
 Peristaltic Pump ( ) Submersible Pump ( ) Other/Specify ( )  
 Pump Type: Marschelle-System One  
 Samples collected by same method as evacuation? (Y) N (specify)

Water Quality Meter Type(s) / Serial Numbers: YSI 556 MPS #2, HACH 2100P turbidimeter

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
1250	200	0.53	6.01	—	—	—	59	—	—
1255	200	0.79	6.01	—	—	—	19	—	—
1300	200	1.06	6.01	14.31	7.02	1.151	14	7.41	30.0
1305	75	1.16	6.01	13.15	6.55	1.070	10	6.53	19.1
1310	100	1.29	6.00	14.58	7.09	1.048	12	4.57	25.8
1315	100	1.42	6.00	15.00	7.12	1.049	11	4.28	-34.1
1320	100	1.56	6.01	13.22	7.15	1.055	10	3.98	-40.3
1325	150	1.76	6.01	13.90	7.13	1.044	11	3.42	-46.5

\* The stabilization criteria for each field parameter (three consecutive readings collected at 3- to 5-minute intervals) is listed in each column heading.

OBSERVATIONS/SAMPLING METHOD DEVIATIONS

- initial purge clear w/orange particulates, no noticeable odor  
 - YSI connected @ 1300  
 - Covered flowthrough cell w/wipes + shaded YSI.

SAMPLE DESTINATION

Laboratory: SGS  
 Delivered Via: UPS  
 Airbill #: —

Field Sampling Coordinator: [Signature]

GROUNDWATER SAMPLING LOG

Well No. 114B-R

Site/GMA Name AMA3/GE Pittsfield  
 Sampling Personnel KLC  
 Date 5/13/08  
 Weather Sunny + 60's

WELL INFORMATION - See Page 1

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
1330	150	1.96	6.01	12.39	7.11	1.043	12	3.21	-49.2
1333	150	2.08	6.01	12.13	7.05	1.031	11	2.91	-51.7
1336	150	2.20	6.01	12.36	6.99	1.027	9	2.74	-49.5
1339	150	2.32	6.01	12.81	7.08	1.031	8	2.41	-52.6
1342	150	2.44	6.01	12.72	7.13	1.027	8	2.34	-55.7
1345	150	2.55	6.01	12.63	7.15	1.022	7	2.23	-59.6
1348	150	2.67	6.01	12.39	7.15	1.017	8	2.04	-62.4
1351	150	2.79	6.01	13.12	7.16	1.019	7	1.89	-63.2
1354	150	2.91	6.01	13.02	7.17	1.022	7	1.75	-63.4
1357	150	3.03	6.01	12.78	7.18	1.020	6	1.72	-66.0
1400	150	3.15	6.01	12.68	7.19	1.019	6	1.70	-68.9
1403	→ Sampled @ 1403 KLC ←								

\* The stabilization criteria for each field parameter (three consecutive readings collected at 3- to 5-minute intervals) is listed in each column heading.

OBSERVATIONS/SAMPLING METHOD DEVIATIONS \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

GROUNDWATER SAMPLING LOG

Well No. 115A  
 Key No. \_\_\_\_\_  
 PID Background (ppm) \_\_\_\_\_  
 Well Headspace (ppm) \_\_\_\_\_

Site/GMA Name GMA 3  
 Sampling Personnel RAB  
 Date 5/15/08  
 Weather Cloudy Misty Mid 30s

WELL INFORMATION

Reference Point Marked? Y (N)  
 Height of Reference Point 1.5' Mess. From ground  
 Well Diameter 2"  
 Screen Interval Depth 36-41 Mess. From Ground  
 Water Table Depth 8.12 Mess. From TIC (14')  
 Well Depth 42.58 Mess. From TIC  
 Length of Water Column 34.46'  
 Volume of Water in Well 5.62 gallons  
 Intake Depth of Pump/Tubing 38.5' Mess. From ground

Sample Time Rh 1033  
 Sample ID 115A  
 Duplicate ID \_\_\_\_\_  
 MS/MSD \_\_\_\_\_  
 Split Sample ID \_\_\_\_\_

Reference Point Identification:  
 TIC: Top of Inner (PVC) Casing  
 TOC: Top of Outer (Protective) Casing  
 Grade/BGS: Ground Surface

Redevelop? Y (N)

Required	Analytical Parameters:	Collected
(X)	VOCs (Std. list)	(X)
( )	VOCs (Exp. list)	( )
( )	SVOCs	( )
( )	PCBs (Total)	( )
( )	PCBs (Dissolved)	( )
( )	Metals/Inorganics (Total)	( )
( )	Metals/Inorganics (Dissolved)	( )
( )	EPA Cyanide (Dissolved)	( )
( )	PAC Cyanide (Dissolved)	( )
( )	PCDDs/PCDFs	( )
( )	Pesticides/Herbicides	( )
(X)	Natural Attenuation	(X)
( )	Other (Specify)	( )

EVACUATION INFORMATION

Pump Start Time 945  
 Pump Stop Time 1055  
 Minutes of Pumping 70  
 Volume of Water Removed 2.75 gallons  
 Did Well Go Dry? Y (N)

Evacuation Method: Bailer ( ) Bladder Pump ( )  
 Peristaltic Pump (X) Submersible Pump ( ) Other/Specify ( )  
 Pump Type: Geopump 2  
 Samples collected by same method as evacuation? (N) (specify)

Water Quality Meter Type(s) / Serial Numbers: YSI 03C1461 AF Hach Turbimeter 2100P  
556 M.P.S

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
945	175	—	8.32	—	—	—	53	—	—
950	150	0.20	8.32	—	—	—	40	—	—
955	150	0.40	8.32	Water going through flow through cell					
1000	150	0.59	8.32	8.94	7.220	0.310	23	5.20	-109.3
1005	150	0.79	8.32	8.63	7.36	0.309	12	3.97	-120.5
1010	150	0.99	8.32	8.63	7.47	0.308	10	3.81	-111.3
1015	150	1.19	8.32	8.63	7.57	0.308	7	3.89	-112.3
1020	150	1.39	8.32	8.60	7.65	0.308	6	3.96	-116.8

\* The stabilization criteria for each field parameter (three consecutive readings collected at 3- to 5-minute intervals) is listed in each column heading.

OBSERVATIONS/SAMPLING METHOD DEVIATIONS  
Hooked up to YSI @ 950

Initial purge - blade suspended particles (fine)

SAMPLE DESTINATION

Laboratory: SGS  
 Delivered Via: UPS  
 Airbill #: \_\_\_\_\_

Field Sampling Coordinator: [Signature]

**GROUNDWATER SAMPLING LOG**

Well No. 115A

Site/GMA Name GMA3  
 Sampling Personnel RAB  
 Date 5/15/08  
 Weather Cloudy Mid 50s

WELL INFORMATION - See Page 1

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
1025	150	1.59	8.32	8.62	7.71	0.308	5	3.99	-124.1
1030	↓	1.78	8.32	8.62	7.77	0.308	4	4.04	-130.2
1033	↓	1.90	8.32	8.64	7.80	0.308	4	4.04	-131.1
<i>Sampled @ 1033</i>									

\* The stabilization criteria for each field parameter (three consecutive readings collected at 3- to 5-minute intervals) is listed in each column heading.

**OBSERVATIONS/SAMPLING METHOD DEVIATIONS**

\_\_\_\_\_

\_\_\_\_\_

**GROUNDWATER SAMPLING LOG**

Well No. 115B  
 Key No. EX-37  
 PID Background (ppm) —  
 Well Headpace (ppm) —

Site/GMA Name GMA3/GE PARK RD  
 Sampling Personnel FIC  
 Date 5/15/08  
 Weather SDS, overcast

**WELL INFORMATION**

Reference Point Marked? Y N  
 Height of Reference Point \_\_\_\_\_  
 Well Diameter 1.00" Meas. From \_\_\_\_\_  
 Screen Interval Depth 11-16' Meas. From Ground  
 Water Table Depth 11.51' Meas. From TIC  
 Well Depth 15.3' Meas. From TIC  
 Length of Water Column 3.99'  
 Volume of Water in Well 0.16 gallon  
 Intake Depth of Pump/Tubing 13.5' Meas. From Ground

Sample Time 1100  
 Sample ID 115B  
 Duplicate ID —  
 MS/MSD —  
 Split Sample ID —

Reference Point Identification:  
 TIC: Top of Inner (PVC) Casing  
 TOC: Top of Outer (Protective) Casing  
 Grade/BGS: Ground Surface

Redevelop? Y (N)

Required	Analytical Parameters:	Collected
(X)	VOCs (Std. list)	(P)
( )	VOCs (Exp. list)	( )
( )	SVOCs	( )
( )	PCBs (Total)	( )
( )	PCBs (Dissolved)	( )
( )	Metals/Inorganics (Total)	( )
( )	Metals/Inorganics (Dissolved)	( )
( )	EPA Cyanide (Dissolved)	( )
( )	PAC Cyanide (Dissolved)	( )
( )	PCDDs/PCDFs	( )
( )	Pesticides/Herbicides	( )
(X)	Natural Attenuation	(X)
( )	Other (Specify)	( )

**EVACUATION INFORMATION**

Pump Start Time 0945  
 Pump Stop Time 1100  
 Minutes of Pumping 115  
 Volume of Water Removed 4.5 gallons  
 Did Well Go Dry? Y (N)

Evacuation Method: Bailer ( ) Bladder Pump ( )  
 Peristaltic Pump (X) Submersible Pump ( ) Other/Specify ( )  
 Pump Type: Geo Pump 2  
 Samples collected by same method as evacuation? (Y) N (specify)

Water Quality Meter Type(s) / Serial Numbers: YSI 03000392 AE Hash 2100P Turbidimeter  
556-MPJ

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
0950	200	0.26	11.58	—	—	—	981	—	—
1000	200	0.39	11.64	—	—	—	6	—	—
1005	150	0.99	11.64	7.89	6.83	0.556	6	6.24	72.2
1010		1.19	11.65	7.52	6.78	0.554	6	3.39	55.4
1015		1.38	11.65	7.44	6.79	0.549	5	2.79	37.0
1020		1.58	11.64	7.47	6.79	0.545	3	2.65	-100.2
1025		1.78	11.65	7.51	6.80	0.539	4	2.41	-122.4
1030	✓	1.98	11.65	7.43	6.82	0.536	2	2.27	-132.8

\* The stabilization criteria for each field parameter (three consecutive readings collected at 3- to 5-minute intervals) is listed in each column heading.

**OBSERVATIONS/SAMPLING METHOD DEVIATIONS**

initial purge dark rusty brown in color. no noticeable odor.

**SAMPLE DESTINATION**

Laboratory: SGS  
 Delivered Via: UPS  
 Airbill #: —

Field Sampling Coordinator: [Signature]

**GROUNDWATER SAMPLING LOG**

Well No. 115B

Site/GMA Name GMA 3 / GE Pittsfield  
Sampling Personnel KIC  
Date 5/15/08  
Weather Overcast, SDS

WELL INFORMATION - See Page 1

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
1035	150	2.18	11.65	7.45	6.83	0.530	1	2.10	-140.3
1040	150	2.38	11.64	7.49	6.83	0.527	1	1.97	-139.0
1045	150	2.57	11.64	7.43	6.83	0.525	2	1.89	-140.7
1050	150	2.77	11.64	7.49	6.84	0.521	2	1.83	-136.9
1055	150	2.97	11.64	7.51	6.85	0.519	2	1.77	-132.8
1100	150	3.17	11.64	7.46	6.85	0.517	2	1.68	-131.4
1105	150	3.37	11.64	7.46	6.86	0.515	2	1.63	-130.4
1108	150	3.49	11.64	7.44	6.86	0.514	2	1.60	-136.7
Sampled		@ 1110							

\* The stabilization criteria for each field parameter (three consecutive readings collected at 3- to 5-minute intervals) is listed in each column heading.

**OBSERVATIONS/SAMPLING METHOD DEVIATIONS**

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**Appendix D**

Data Validation Report

**Appendix D  
Groundwater Sampling Data Validation Report  
Groundwater Management Area 3 – Spring 2008**

**General Electric Company  
Pittsfield, Massachusetts**

**1.0 General**

This attachment summarizes the data validation review performed on behalf of the General Electric Company (GE) for groundwater samples collected between April and May 2008 as part of groundwater quality monitoring activities conducted at Groundwater Management Area 3, located within the General Electric Company/Housatonic River Site in Pittsfield, Massachusetts. The samples were analyzed for polychlorinated biphenyls (PCBs) and/or various other constituents listed in Appendix IX of 40 CFR Part 264, plus three additional constituents -- benzidine, 2-chloroethyl vinyl ether, and 1,2-diphenylhydrazine (hereafter referred to as Appendix IX+3) by SGS Environmental Services, Inc. (formerly Paradigm Analytical Labs, Inc.) of Wilmington, North Carolina. Data validation was performed for five PCB samples, 36 volatile organic compound (VOC) samples, eight semi-volatile organic compound (SVOC) samples, 25 metal samples, 25 anions samples, 25 RSD-175 samples, 25 alkalinity samples, and 25 dissolved organic carbon (DOC) samples.

**2.0 Data Evaluation Procedures**

This attachment outlines the applicable quality control criteria utilized during the data review process and any deviations from those criteria. The data review was conducted in accordance with the following documents:

- *Field Sampling Plan/Quality Assurance Project Plan (FSP/QAPP), General Electric Company, Pittsfield, Massachusetts, ARCADIS BBL (as submitted by GE on March 30, 2007 following approval by EPA on March 15, 2007);*
- *Region I Tiered Organic and Inorganic Data Validation Guidelines, USEPA Region I (July 1, 1993);*
- *Region I Laboratory Data Validation Functional Guidelines for Evaluating Inorganics Analyses, USEPA Region I (June 13, 1988) (Modified February 1989); and*
- *Region I Laboratory Data Validation Functional Guidelines for Evaluating Organics Analyses, USEPA Region I (Draft, December 1996).*

The data were validated to either a Tier I or Tier II level, as described below. Any deviations from the applicable quality control criteria utilized during the data review process are identified below. A tabulated summary of the Tier I/Tier II data review is presented in Table D-1. Each sample subject to evaluation is listed in Table D-1 to document that data review was performed. Samples that required data qualification are listed separately.



The following data qualifiers were used in this data evaluation:

- J The compound was positively identified, but the associated numerical value is an estimated concentration. This qualifier is used when the data evaluation procedure identifies a deficiency in the data generation process. This qualifier is also used when a compound is detected at an estimated concentration less than the corresponding practical quantitation limit (PQL).
- U The compound was analyzed for, but was not detected. The sample quantitation limit is presented. Non-detect sample results are presented as ND(PQL) within this report for consistency with documents previously prepared for investigations conducted at the GE-Pittsfield/Housatonic River Site.
- UJ The compound was not detected above the reported sample quantitation limit. However, the reported limit is estimated and may or may not represent the actual level of quantitation. Non-detect sample results that required qualification are presented as ND(PQL) J within this report for consistency with documents previously prepared for investigations conducted at the GE-Pittsfield/Housatonic River Site.
- R Indicates that the previously reported detection limit or sample result has been rejected due to a major deficiency in the data generation procedure. The data should not be used for any qualitative or quantitative purpose.

### **3.0 Data Validation Procedures**

Section 7.5 of the FSP/QAPP states that analytical data will be validated to a Tier I level following the procedures presented in the *Region I Tiered Organic and Inorganic Data Validation Guidelines* (EPA guidelines). The Tier I review consisted of a completeness evidence audit, as outlined in the *EPA Region I CSF Completeness Evidence Audit Program* (EPA Region I, July 31, 1991), to ensure that laboratory data and documentation were present. In the event data packages were determined to be incomplete, the missing information was requested from the laboratory. Upon completion of the Tier I review, the data packages complied with the EPA Region I Tier I data completeness requirements.

The Tier II data review consisted of a review of data package summary forms for identification of quality assurance/quality control (QA/QC) deviations and qualification of the data according to the Region I Data Validation Functional Guidelines. Additionally, field duplicates were examined for relative percent difference (RPD) compliance with the criteria specified in the FSP/QAPP.

A tabulated summary of the samples subject to Tier I and Tier II data review is presented in the following table.

**Summary of Samples Subjected to Tier I and Tier II Data Validation**

Parameter	Tier I Only			Tier I & Tier II			Total
	Samples	Duplicates	Blanks	Samples	Duplicates	Blanks	
PCBs	0	0	0	3	1	1	5
VOCs	0	0	0	24	2	10	36
SVOCs	0	0	0	7	1	0	8
Metals	0	0	0	22	2	1	25

**Summary of Samples Subjected to Tier I and Tier II Data Validation**

Parameter	Tier I Only			Tier I & Tier II			Total
	Samples	Duplicates	Blanks	Samples	Duplicates	Blanks	
EPA 300.0	0	0	0	22	2	1	25
RSK-175	0	0	0	22	2	1	25
Alkalinity	0	0	0	22	2	1	25
DOC	0	0	0	22	2	1	25
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>144</b>	<b>14</b>	<b>16</b>	<b>174</b>

When qualification of the sample data was required, the sample results associated with a QA/QC parameter deviation were qualified in accordance with the procedures outlined in EPA Region I data validation guidance documents. When the data validation process identified several quality control deficiencies, the cumulative effect of the various deficiencies was employed in assigning the final data qualifier. A summary of the QA/QC parameter deviations that resulted in data qualification is presented in Section 4 below.

**4.0 Summary of QA/QC Parameter Deviations Requiring Data Qualification**

This section provides a summary of the deviations from the applicable QA/QC criteria that resulted in qualification of results.

The initial calibration criterion for organic analyses requires that the average relative response factor (RRF) has a value greater than 0.05. Sample results were qualified as estimated (J) when this criterion was not achieved. The compounds that did not achieve the initial calibration criterion and the number of samples qualified are presented in the following table.

**Compounds Qualified Due to Initial Calibration Deviations (RRF)**

Analysis	Compound	Number of Affected Samples	Qualification
VOCs	1,2-Dibromo-3-chloropropane	36	J
	1,4-Dioxane	36	J
	2-Butanone	31	J
	2-Chloroethylvinylether	30	J
	Acetone	36	J
	Acetonitrile	36	J
	Acrolein	36	J
	Acrylonitrile	31	J
	Isobutanol	36	J
	Methacrylonitrile	10	J
	Propionitrile	36	J
	trans-1,4-Dichloro-2-butene	36	J

**Compounds Qualified Due to Initial Calibration Deviations (RRF)**

<b>Analysis</b>	<b>Compound</b>	<b>Number of Affected Samples</b>	<b>Qualification</b>
SVOCs	4-Phenylenediamine	1	J
	Hexachlorocyclopentadiene	1	J

Several of the organic compounds (including the compounds presented in the above tables detailing RRF deviations) exhibit instrument response factors (RFs) below the USEPA Region I minimum value of 0.05, but meet the analytical method criterion, which does not specify minimum RFs for these compounds. These compounds were analyzed by the laboratory at a higher concentration than the compounds that normally exhibit RFs greater than the USEPA Region I minimum value of 0.05 in an effort to demonstrate acceptable response. USEPA Region I guidelines state that non-detect compound results associated with a RF less than the minimum value of 0.05 are to be rejected (R). However, in the case of these select organic compounds, the RF is an inherent problem with the current analytical methodology; therefore, the non-detect sample results were qualified as estimated (J).

The continuing calibration criterion requires that the percent difference (%D) between the initial calibration RRF and the continuing calibration RRF for VOCs and SVOCs be less than 25%. Sample data for detect and non-detect compounds with %D values that exceeded the continuing calibration criteria were qualified as estimated (J). A summary of the compounds that exceeded the continuing calibration criterion and the number of samples qualified due to those deviations are presented in the following table.

**Compounds Qualified Due to Continuing Calibration of %D Values**

<b>Analysis</b>	<b>Compound</b>	<b>Number of Affected Samples</b>	<b>Qualification</b>
VOCs	1,4-Dioxane	4	J
	2-Butanone	5	J
	2-Hexanone	3	J
	Acetone	10	J
	Acetonitrile	9	J
	Bromomethane	28	J
	Chloroethane	23	J
	Methylene Chloride	3	J
SVOCs	1-Naphthylamine	1	J
	2,4-Dinitrophenol	1	J
	2-Naphthylamine	1	J
	4-Nitroquinoline-1-oxide	1	J
	4-Phenylenediamine	1	J
	Hexachlorocyclopentadiene	1	J
	Hexachlorophene	1	J
	Methapyrilene	1	J

Contract required detection limit (CRDL) standards were analyzed to evaluate instrument performance at low-level concentrations that are near the analytical method PQL. These standards are required to have recoveries between 80% and 120% to verify that the analytical instrumentation was properly calibrated. When CRDL standard recoveries were outside these control limits, the affected samples with detected results at or near the PQL concentration (i.e., less than three times the PQL) were qualified as estimated (J). The analyte that did not meet CRDL criteria and the number of samples qualified due to those deviations are presented in the following table.

**Analyte Qualified Due to CRDL Standard Recovery Deviations**

<b>Analysis</b>	<b>Analyte</b>	<b>Number of Affected Samples</b>	<b>Qualification</b>
Inorganics	Iron	16	J

Matrix spike/matrix spike duplicate (MS/MSD) sample analysis recovery criteria for organics require that the MS/MSD recovery be within the laboratory-generated QC acceptance limits specified on the MS reporting form. Organic sample results associated with MS/MSD recoveries less than the specified control limit, but greater than 10% were qualified as estimated (J) and sample results associated with MS/MSD recoveries less than 10% were qualified as rejected (R). The compounds that did not meet MS/MSD recovery criteria and the number of samples qualified due to those deviations are presented in the following table.

**Compounds Qualified Due to MS/MSD Recovery Deviations**

<b>Analysis</b>	<b>Compound</b>	<b>Number of Affected Samples</b>	<b>Qualification</b>
VOCs	2-Chloroethylvinylether	1	R
RSK-175	Methane	1	J

MS/MSD sample analysis recovery criteria for organics require that the RPD between the MS and MSD recoveries be less than the laboratory-generated QC acceptance limits specified on the MS/MSD reporting form. The compounds that exceeded the RPD limit and the number of samples qualified due to deviations are presented in the following table.

**Compounds Qualified Due to MS/MSD RPD Deviations**

<b>Analysis</b>	<b>Compound</b>	<b>Number of Affected Samples</b>	<b>Qualification</b>
PCBs	All Aroclors	1	J

Blank action levels for compounds/analytes detected in the blanks were calculated at five times the blank concentrations. Detected sample results that were below the blank action level were qualified with a "U." The compounds/analytes detected in method/analytical blanks which resulted in qualification of sample data, along with the number of affected samples, are presented in the following table.

**Compounds/Analytes Qualified Due to Blank Deviations**

Analysis	Compound/Analyte	Number of Affected Samples	Qualification
VOCs	Methylene Chloride	2	U
	Xylenes (total)	1	U
Miscellaneous	Dissolved Organic Carbon	2	U
	Chloride	1	U

Laboratory control sample/laboratory control sample duplicate (LCS/LCSD) analysis recovery criteria for organics must be within the laboratory-generated QC acceptance limits specified on the LCS/LCSD reporting form. Organic sample results associated with the LCS/LCSD that exceeded laboratory-generated QC acceptance limits were qualified as estimated (J). The compound that did not meet LCS/LCSD recovery criteria and the number of samples qualified due to those deviations are presented in the following table.

**Compound Qualified Due to LCS/LCSD Recovery Deviations**

Analysis	Compound	Number of Affected Samples	Qualification
VOCs	Methylene Chloride	3	J

LCS/LCSD sample analysis recovery criteria for organics require that the RPD between the LCS and LCSD recoveries be less than the laboratory-generated QC acceptance limits specified on the LCS/LCSD reporting form. The compound that exceeded the RPD limit and the number of samples qualified due to deviations are presented in the following table.

**Compound Qualified Due to LCS/LCSD RPD Deviations**

Analysis	Compound	Number of Affected Samples	Qualification
VOCs	Iodomethane	4	J

**5.0 Overall Data Usability**

This section summarizes the analytical data in terms of its completeness and usability. Data completeness is defined as the percentage of sample results that have been determined to be usable during the data validation process. The percent usability calculation included analyses evaluated under both the Tier I/II data validation reviews. The percent usability calculation also includes quality control samples (i.e., field/equipment blanks, trip blanks, and field duplicates) to aid in the evaluation of data usability. Data usability is summarized in the following table.

**Data Usability**

Parameter	Percent Usability	Rejected Data
VOCs	99.9	A total of one sample result was rejected due to an MS/MSD recovery deviation.
SVOCs	100	None
PCBs	100	None
Metals	100	None

### **Data Usability**

<b>Parameter</b>	<b>Percent Usability</b>	<b>Rejected Data</b>
EPA 300.0	100	None
RSK-175	100	None
Alkalinity	100	None
DOC	100	None

The data package completeness, as determined from the Tier I data review, was used in combination with the data quality deviations identified during the Tier II data review to determine overall data quality. As specified in the FSP/QAPP, the overall precision, accuracy, representativeness, comparability, and completeness (PARCC) parameters determined from the Tier I and Tier II data reviews were used as indicators of overall data quality. These parameters were assessed through an evaluation of the results of the field and laboratory QA/QC sample analyses to provide a measure of compliance of the analytical data with the Data Quality Objectives (DQOs) specified in the FSP/QAPP. Therefore, the following sections present summaries of the PARCC parameters assessment with regard to the DQOs specified in the FSP/QAPP.

#### **5.1 Precision**

Precision measures the reproducibility of measurements under a given set of conditions. Specifically, it is a quantitative measure of the variability of a group of measurements compared to their average value. For this investigation, precision was defined as the RPD between duplicate sample results. The duplicate samples used to evaluate precision included field duplicates, MS/MSD samples, and LCS/LCSD samples. For this analytical program, 0.16% of the data required qualification due to LCS/LCSD RPD deviations and 0.33% of the data required qualification due to MS/MSD RPD deviations. None of the data required qualification due to field duplicate RPD deviations.

#### **5.2 Accuracy**

Accuracy measures the bias in an analytical system or the degree of agreement of a measurement with a known reference value. For this investigation, accuracy was defined as the percent recovery of QA/QC samples that were spiked with a known concentration of an analyte or compound of interest. The QA/QC samples used to evaluate analytical accuracy included instrument calibration, internal standards, LCS/LCSDs, MS/MSD samples, CRDL samples, and surrogate compound recoveries. For this analytical program, 19.9% of the data required qualification due to instrument calibration deviations, 0.12% of the data required qualification due to LCS/LCSD recovery deviations, 0.08% of the data required qualification due to MS/MSD recovery deviations, and 0.66% of the data required qualification due to CRDL recovery deviations. None of the data required qualification due to surrogate compound recovery deviations or internal standard recovery deviations.

#### **5.3 Representativeness**

Representativeness expresses the degree to which sample data accurately and precisely represents a characteristic of a population, parameter variations at a sampling point, or an environmental condition. Representativeness is a qualitative parameter, which is most concerned with the proper design of the sampling program. The representativeness criterion is best satisfied by making certain that sampling locations are selected properly and a sufficient number of samples are collected. This parameter has been addressed

by collecting samples at locations specified in the EPA-approved work plans, and by following the procedures for sample collection/analyses that were described in the FSP/QAPP. Additionally, the analytical program used procedures consistent with EPA-approved analytical methodology. A QA/QC parameter that is an indicator of the representativeness of a sample is holding time. Holding time criteria are established to maintain the samples in a state that is representative of the in-situ field conditions before analysis. For this analytical data set, none of the data required qualification due to holding time deviations.

#### **5.4 Comparability**

Comparability is a qualitative parameter expressing the confidence with which one data set can be compared with another. This goal was achieved through the use of the standardized techniques for sample collection and analysis presented in the FSP/QAPP. Specifically, all the groundwater samples collected between April and May 2008 were analyzed by EPA SW-846 method 8082 for PCBs, 8260 for VOCs, 8270 for SVOCs, 6000/7000 for metals, 300.0 for anions, RSK-175 for methane, ethane, and ethene, 2320B for alkalinity, and 9060A for dissolved organic carbon.

#### **5.5 Completeness**

Completeness is defined as the percentage of measurements that are judged to be valid or usable to meet the prescribed DQOs. The completeness criterion is essentially the same for all data uses -- the generation of a sufficient amount of valid data. The actual completeness of this analytical data set ranged from 99.9% to 100% for individual analytical parameters and had an overall usability of 99.9%, which is greater than the minimum required usability of 90% as specified in the FSP/QAPP.

Table D-1  
Analytical Data Validation Summary  
Groundwater Management Area 3 - Spring 2008

General Electric Company - Pittsfield, Massachusetts  
(Results are presented in parts per million, ppm)

Sample Delivery Group No.	Sample ID	Date Collected	Matrix	Validation Level	Qualification	Compound	QA/QC Parameter	Value	Control Limits	Qualified Result	Notes
<b>PCBs</b>											
G135-658	82B-R (Filtered)	5/2/2008	Water	Tier II	Yes	Aroclor-1016	MS/MSD RPD	34.5%	<12%	ND(0.000068) J	
						Aroclor-1221	MS/MSD RPD	34.5%	<12%	ND(0.000068) J	
						Aroclor-1232	MS/MSD RPD	34.5%	<12%	ND(0.000068) J	
						Aroclor-1242	MS/MSD RPD	34.5%	<12%	ND(0.000068) J	
						Aroclor-1248	MS/MSD RPD	34.5%	<12%	ND(0.000068) J	
						Aroclor-1254	MS/MSD RPD	34.5%	<12%	ND(0.000068) J	
						Aroclor-1260	MS/MSD RPD	34.5%	<12%	ND(0.000068) J	
						Total PCBs	MS/MSD RPD	34.5%	<12%	ND(0.000068) J	
G135-658	GMA3-DUP-3 (Filtered)	5/2/2008	Water	Tier II	No						
G135-669	114A (Filtered)	5/13/2008	Water	Tier II	No						Duplicate of 82B-R (Filtered)
G135-669	114B-R (Filtered)	5/13/2008	Water	Tier II	No						
G135-673	GMA3-RB-1 (Filtered)	5/15/2008	Water	Tier II	No						
<b>Metals</b>											
G135-656	39B-R (Filtered)	4/30/2008	Water	Tier II	Yes	Iron	CRDL Standard %R	127.0%	80% to 120%	ND(0.100) J	
G135-656	39D-R (Filtered)	4/30/2008	Water	Tier II	Yes	Iron	CRDL Standard %R	127.0%	80% to 120%	0.0401 J	
G135-656	43A (Filtered)	4/30/2008	Water	Tier II	Yes	Iron	CRDL Standard %R	127.0%	80% to 120%	ND(0.100) J	
G135-656	43B (Filtered)	4/30/2008	Water	Tier II	Yes	Iron	CRDL Standard %R	127.0%	80% to 120%	0.0246 J	
G135-656	GMA3-DUP#1 (Filtered)	4/30/2008	Water	Tier II	Yes	Iron	CRDL Standard %R	127.0%	80% to 120%	0.0199 J	Duplicate of 43B (Filtered)
G135-657	16A (Filtered)	5/1/2008	Water	Tier II	No						
G135-657	16B-R (Filtered)	5/1/2008	Water	Tier II	Yes	Iron	CRDL Standard %R	127.0%	80% to 120%	0.0246 J	
G135-657	16C-R (Filtered)	5/1/2008	Water	Tier II	Yes	Iron	CRDL Standard %R	127.0%	80% to 120%	ND(0.100) J	
G135-657	2A (Filtered)	5/1/2008	Water	Tier II	Yes	Iron	CRDL Standard %R	127.0%	80% to 120%	ND(0.100) J	
G135-657	GMA3-DUP2 (Filtered)	5/1/2008	Water	Tier II	Yes	Iron	CRDL Standard %R	127.0%	80% to 120%	ND(0.100) J	Duplicate of 2A (Filtered)
G135-659	89A (Filtered)	5/5/2008	Water	Tier II	Yes	Iron	CRDL Standard %R	129.0%	80% to 120%	ND(0.100) J	
G135-659	89B (Filtered)	5/5/2008	Water	Tier II	No						
G135-659	89D-R (Filtered)	5/5/2008	Water	Tier II	Yes	Iron	CRDL Standard %R	129.0%	80% to 120%	0.141 J	
G135-661	111A-R (Filtered)	5/6/2008	Water	Tier II	Yes	Iron	CRDL Standard %R	127.0%	80% to 120%	0.0432 J	
G135-661	39E (Filtered)	5/6/2008	Water	Tier II	No						
G135-662	95B-R (Filtered)	5/8/2008	Water	Tier II	Yes	Iron	CRDL Standard %R	127.0%	80% to 120%	0.0214 J	
G135-669	114A (Filtered)	5/13/2008	Water	Tier II	No						
G135-669	114B-R (Filtered)	5/13/2008	Water	Tier II	No						
G135-671	111B-R (Filtered)	5/14/2008	Water	Tier II	Yes	Iron	CRDL Standard %R	130.0%	80% to 120%	0.0449 J	
G135-671	90A (Filtered)	5/14/2008	Water	Tier II	Yes	Iron	CRDL Standard %R	130.0%	80% to 120%	0.0211 J	
G135-671	90B (Filtered)	5/14/2008	Water	Tier II	No						
G135-671	95A (Filtered)	5/14/2008	Water	Tier II	Yes	Iron	CRDL Standard %R	130.0%	80% to 120%	ND(0.100) J	
G135-673	115A (Filtered)	5/15/2008	Water	Tier II	No						
G135-673	115B (Filtered)	5/15/2008	Water	Tier II	No						
G135-673	GMA3-RB-1 (Filtered)	5/15/2008	Water	Tier II	No						
<b>VOCs</b>											
G135-656	39B-R	4/30/2008	Water	Tier II	Yes	1,2-Dibromo-3-chloropropane	ICAL RRF	0.025	>0.05	ND(2.0) J	
						1,4-Dioxane	ICAL RRF	0.001	>0.05	ND(40) J	
						2-Butanone	ICAL RRF	0.035	>0.05	ND(2.0) J	
						2-Chloroethylvinylether	ICAL RRF	0.018	>0.05	ND(5.0) J	
						Acetone	ICAL RRF	0.021	>0.05	ND(2.0) J	
						Acetonitrile	ICAL RRF	0.009	>0.05	ND(8.0) J	
						Acrolein	ICAL RRF	0.017	>0.05	ND(10) J	
						Acrylonitrile	ICAL RRF	0.03	>0.05	ND(10) J	
						Bromomethane	CCAL %D	48.0%	<25%	ND(0.40) J	
						Chloroethane	CCAL %D	54.2%	<25%	ND(0.40) J	
						Isobutanol	ICAL RRF	0.003	>0.05	ND(20) J	
						Propionitrile	ICAL RRF	0.011	>0.05	ND(8.0) J	
						trans-1,4-Dichloro-2-butene	ICAL RRF	0.025	>0.05	ND(2.0) J	
G135-656	39D-R	4/30/2008	Water	Tier II	Yes	1,2-Dibromo-3-chloropropane	ICAL RRF	0.011	>0.05	ND(0.0050) J	
						1,4-Dioxane	ICAL RRF	0.001	>0.05	ND(0.10) J	
						2-Butanone	CCAL %D	31.5%	<25%	ND(0.0050) J	
						Acetone	ICAL RRF	0.033	>0.05	ND(0.0050) J	
						Acetone	CCAL %D	60.6%	<25%	ND(0.0050) J	
						Acetonitrile	ICAL RRF	0.009	>0.05	ND(0.020) J	
						Acrolein	ICAL RRF	0.026	>0.05	ND(0.025) J	
						Bromomethane	CCAL %D	26.1%	<25%	ND(0.0010) J	
						Isobutanol	ICAL RRF	0.005	>0.05	ND(0.050) J	
						Methacrylonitrile	ICAL RRF	0.009	>0.05	ND(0.010) J	
						Propionitrile	ICAL RRF	0.016	>0.05	ND(0.020) J	
						trans-1,4-Dichloro-2-butene	ICAL RRF	0.017	>0.05	ND(0.0050) J	
G135-656	43A	4/30/2008	Water	Tier II	Yes	1,2-Dibromo-3-chloropropane	ICAL RRF	0.011	>0.05	ND(0.0050) J	
						1,4-Dioxane	ICAL RRF	0.001	>0.05	0.18 J	
						2-Butanone	CCAL %D	31.5%	<25%	ND(0.0050) J	



Table D-1  
Analytical Data Validation Summary  
Groundwater Management Area 3 - Spring 2008

General Electric Company - Pittsfield, Massachusetts  
(Results are presented in parts per million, ppm)

Sample Delivery Group No.	Sample ID	Date Collected	Matrix	Validation Level	Qualification	Compound	QA/QC Parameter	Value	Control Limits	Qualified Result	Notes
<b>VOCs (continued)</b>											
G135-656	43A	4/30/2008	Water	Tier II	Yes	Acetone	ICAL RRF	0.033	>0.05	ND(0.0050) J	
						Acetone	CCAL %D	60.6%	<25%	ND(0.0050) J	
						Acetonitrile	ICAL RRF	0.009	>0.05	ND(0.020) J	
						Acrolein	ICAL RRF	0.026	>0.05	ND(0.025) J	
						Bromomethane	CCAL %D	26.1%	<25%	ND(0.0010) J	
						Isobutanol	ICAL RRF	0.005	>0.05	ND(0.050) J	
						Methacrylonitrile	ICAL RRF	0.009	>0.05	ND(0.010) J	
						Propionitrile	ICAL RRF	0.016	>0.05	ND(0.020) J	
						trans-1,4-Dichloro-2-butene	ICAL RRF	0.017	>0.05	ND(0.0050) J	
						1,2-Dibromo-3-chloropropane	ICAL RRF	0.011	>0.05	ND(0.0050) J	
						1,4-Dioxane	ICAL RRF	0.001	>0.05	0.041 J	
						2-Butanone	CCAL %D	31.5%	<25%	ND(0.0050) J	
						Acetone	ICAL RRF	0.033	>0.05	ND(0.0050) J	
						Acetone	CCAL %D	60.6%	<25%	ND(0.0050) J	
Acetonitrile	ICAL RRF	0.009	>0.05	ND(0.020) J							
Acrolein	ICAL RRF	0.026	>0.05	ND(0.025) J							
Bromomethane	CCAL %D	26.1%	<25%	ND(0.0010) J							
Isobutanol	ICAL RRF	0.005	>0.05	ND(0.050) J							
Methacrylonitrile	ICAL RRF	0.009	>0.05	ND(0.010) J							
Propionitrile	ICAL RRF	0.016	>0.05	ND(0.020) J							
trans-1,4-Dichloro-2-butene	ICAL RRF	0.017	>0.05	ND(0.0050) J							
G135-656	GMA3-DUP#1	4/30/2008	Water	Tier II	Yes	1,2-Dibromo-3-chloropropane	ICAL RRF	0.011	>0.05	ND(0.0050) J	Duplicate of 43B
						1,4-Dioxane	ICAL RRF	0.001	>0.05	ND(0.10) J	
						2-Butanone	CCAL %D	31.5%	<25%	ND(0.0050) J	
						Acetone	ICAL RRF	0.033	>0.05	ND(0.0050) J	
						Acetone	CCAL %D	60.6%	<25%	ND(0.0050) J	
						Acetonitrile	ICAL RRF	0.009	>0.05	ND(0.020) J	
						Acrolein	ICAL RRF	0.026	>0.05	ND(0.025) J	
						Bromomethane	CCAL %D	26.1%	<25%	ND(0.0010) J	
						Isobutanol	ICAL RRF	0.005	>0.05	ND(0.050) J	
						Methacrylonitrile	ICAL RRF	0.009	>0.05	ND(0.010) J	
						Propionitrile	ICAL RRF	0.016	>0.05	ND(0.020) J	
						trans-1,4-Dichloro-2-butene	ICAL RRF	0.017	>0.05	ND(0.0050) J	
						1,2-Dibromo-3-chloropropane	ICAL RRF	0.011	>0.05	ND(0.0050) J	
						1,4-Dioxane	ICAL RRF	0.001	>0.05	ND(0.10) J	
2-Butanone	CCAL %D	31.5%	<25%	ND(0.0050) J							
Acetone	ICAL RRF	0.033	>0.05	0.0040 J							
Acetone	CCAL %D	60.6%	<25%	0.0040 J							
Acetonitrile	ICAL RRF	0.009	>0.05	ND(0.020) J							
Acrolein	ICAL RRF	0.026	>0.05	ND(0.025) J							
Bromomethane	CCAL %D	26.1%	<25%	ND(0.0010) J							
Isobutanol	ICAL RRF	0.005	>0.05	ND(0.050) J							
Methacrylonitrile	ICAL RRF	0.009	>0.05	ND(0.010) J							
Propionitrile	ICAL RRF	0.016	>0.05	ND(0.020) J							
trans-1,4-Dichloro-2-butene	ICAL RRF	0.017	>0.05	ND(0.0050) J							
G135-657	16A	5/1/2008	Water	Tier II	Yes	1,2-Dibromo-3-chloropropane	ICAL RRF	0.025	>0.05	ND(10) J	
						1,4-Dioxane	ICAL RRF	0.001	>0.05	ND(200) J	
						2-Butanone	ICAL RRF	0.035	>0.05	ND(10) J	
						2-Chloroethylvinylether	ICAL RRF	0.018	>0.05	ND(25) J	
						Acetone	ICAL RRF	0.021	>0.05	ND(10) J	
						Acetonitrile	ICAL RRF	0.009	>0.05	ND(40) J	
						Acrolein	ICAL RRF	0.017	>0.05	ND(50) J	
						Acrylonitrile	ICAL RRF	0.030	>0.05	ND(50) J	
						Bromomethane	CCAL %D	47.2%	<25%	ND(2.0) J	
						Chloroethane	CCAL %D	53.7%	<25%	ND(2.0) J	
						Isobutanol	ICAL RRF	0.003	>0.05	ND(100) J	
						Propionitrile	ICAL RRF	0.011	>0.05	ND(40) J	
						trans-1,4-Dichloro-2-butene	ICAL RRF	0.025	>0.05	ND(10) J	
						1,2-Dibromo-3-chloropropane	ICAL RRF	0.025	>0.05	ND(0.0050) J	
1,4-Dioxane	ICAL RRF	0.001	>0.05	ND(0.10) J							
2-Butanone	ICAL RRF	0.035	>0.05	ND(0.0050) J							
2-Chloroethylvinylether	MSD %R	0.0%	16.7% to 200%	R							
Acetone	ICAL RRF	0.021	>0.05	ND(0.0050) J							
Acetonitrile	ICAL RRF	0.009	>0.05	ND(0.020) J							
Acrolein	ICAL RRF	0.017	>0.05	ND(0.025) J							
Acrylonitrile	ICAL RRF	0.030	>0.05	ND(0.025) J							

Table D-1  
Analytical Data Validation Summary  
Groundwater Management Area 3 - Spring 2008

General Electric Company - Pittsfield, Massachusetts  
(Results are presented in parts per million, ppm)

Sample Delivery Group No.	Sample ID	Date Collected	Matrix	Validation Level	Qualification	Compound	QA/QC Parameter	Value	Control Limits	Qualified Result	Notes
<b>VOCs (continued)</b>											
G135-657	16B-R	5/1/2008	Water	Tier II	Yes	Bromomethane	CCAL %D	48.0%	<25%	ND(0.0010) J	
						Chloroethane	CCAL %D	54.2%	<25%	ND(0.0010) J	
						Iodomethane	LCS/LCSD RPD	102.0%	<30%	ND(0.0010) J	
						Isobutanol	ICAL RRF	0.003	>0.05	ND(0.050) J	
						Propionitrile	ICAL RRF	0.011	>0.05	ND(0.020) J	
						trans-1,4-Dichloro-2-butene	ICAL RRF	0.025	>0.05	ND(0.0050) J	
						1,2-Dibromo-3-chloropropane	ICAL RRF	0.025	>0.05	ND(0.0050) J	
						1,4-Dioxane	ICAL RRF	0.001	>0.05	ND(0.10) J	
						2-Butanone	ICAL RRF	0.035	>0.05	ND(0.0050) J	
						2-Chloroethylvinylether	ICAL RRF	0.018	>0.05	ND(0.013) J	
G135-657	16C-R	5/1/2008	Water	Tier II	Yes	Acetone	ICAL RRF	0.021	>0.05	ND(0.0050) J	
						Acetonitrile	ICAL RRF	0.009	>0.05	ND(0.020) J	
						Acrolein	ICAL RRF	0.017	>0.05	ND(0.025) J	
						Acrylonitrile	ICAL RRF	0.030	>0.05	ND(0.025) J	
						Bromomethane	CCAL %D	48.0%	<25%	ND(0.0010) J	
						Chloroethane	CCAL %D	54.2%	<25%	ND(0.0010) J	
						Iodomethane	LCS/LCSD RPD	102.0%	<30%	ND(0.0010) J	
						Isobutanol	ICAL RRF	0.003	>0.05	ND(0.050) J	
						Propionitrile	ICAL RRF	0.011	>0.05	ND(0.020) J	
						trans-1,4-Dichloro-2-butene	ICAL RRF	0.025	>0.05	ND(0.0050) J	
G135-657	2A	5/1/2008	Water	Tier II	Yes	1,2-Dibromo-3-chloropropane	ICAL RRF	0.025	>0.05	ND(50) J	
						1,4-Dioxane	ICAL RRF	0.001	>0.05	ND(1000) J	
						2-Butanone	ICAL RRF	0.035	>0.05	ND(50) J	
						2-Chloroethylvinylether	ICAL RRF	0.018	>0.05	ND(130) J	
						Acetone	ICAL RRF	0.021	>0.05	ND(50) J	
						Acetonitrile	ICAL RRF	0.009	>0.05	ND(200) J	
						Acrolein	ICAL RRF	0.017	>0.05	ND(250) J	
						Acrylonitrile	ICAL RRF	0.030	>0.05	ND(250) J	
						Bromomethane	CCAL %D	47.2%	<25%	ND(10) J	
						Chloroethane	CCAL %D	53.7%	<25%	ND(10) J	
G135-657	GMA3-DUP2	5/1/2008	Water	Tier II	Yes	Isobutanol	ICAL RRF	0.003	>0.05	ND(500) J	
						Propionitrile	ICAL RRF	0.011	>0.05	ND(200) J	
						trans-1,4-Dichloro-2-butene	ICAL RRF	0.025	>0.05	ND(50) J	
						1,2-Dibromo-3-chloropropane	ICAL RRF	0.025	>0.05	ND(50) J	Duplicate of 2A
						1,4-Dioxane	ICAL RRF	0.001	>0.05	ND(1000) J	
						2-Butanone	ICAL RRF	0.035	>0.05	ND(50) J	
						2-Chloroethylvinylether	ICAL RRF	0.018	>0.05	ND(130) J	
						Acetone	ICAL RRF	0.021	>0.05	ND(50) J	
						Acetonitrile	ICAL RRF	0.009	>0.05	ND(200) J	
						Acrolein	ICAL RRF	0.017	>0.05	ND(250) J	
G135-657	TripBlank	5/1/2008	Water	Tier II	Yes	Acrylonitrile	ICAL RRF	0.030	>0.05	ND(250) J	
						Bromomethane	CCAL %D	47.2%	<25%	ND(10) J	
						Chloroethane	CCAL %D	53.7%	<25%	ND(10) J	
						Isobutanol	ICAL RRF	0.003	>0.05	ND(500) J	
						Propionitrile	ICAL RRF	0.011	>0.05	ND(200) J	
						trans-1,4-Dichloro-2-butene	ICAL RRF	0.025	>0.05	ND(50) J	
						1,2-Dibromo-3-chloropropane	ICAL RRF	0.025	>0.05	ND(0.0050) J	
						1,4-Dioxane	ICAL RRF	0.001	>0.05	ND(0.10) J	
						2-Butanone	ICAL RRF	0.035	>0.05	ND(0.0050) J	
						2-Chloroethylvinylether	ICAL RRF	0.018	>0.05	ND(0.013) J	
G135-658	51-14	5/2/2008	Water	Tier II	Yes	Acetone	ICAL RRF	0.021	>0.05	ND(0.0050) J	
						Acetonitrile	ICAL RRF	0.009	>0.05	ND(0.020) J	
						Acrolein	ICAL RRF	0.017	>0.05	ND(0.025) J	
						Acrylonitrile	ICAL RRF	0.030	>0.05	ND(0.025) J	
						Bromomethane	CCAL %D	48.0%	<25%	ND(0.0010) J	
						Chloroethane	CCAL %D	54.2%	<25%	ND(0.0010) J	
						Iodomethane	LCS/LCSD RPD	102.0%	<30%	ND(0.0010) J	
						Isobutanol	ICAL RRF	0.003	>0.05	ND(0.050) J	
						Propionitrile	ICAL RRF	0.011	>0.05	ND(0.020) J	
						trans-1,4-Dichloro-2-butene	ICAL RRF	0.025	>0.05	ND(0.0050) J	

Table D-1  
Analytical Data Validation Summary  
Groundwater Management Area 3 - Spring 2008

General Electric Company - Pittsfield, Massachusetts  
(Results are presented in parts per million, ppm)

Sample Delivery Group No.	Sample ID	Date Collected	Matrix	Validation Level	Qualification	Compound	QA/QC Parameter	Value	Control Limits	Qualified Result	Notes
<b>VOCs (continued)</b>											
G135-658	51-14	5/2/2008	Water	Tier II	Yes	Acrolein	ICAL RRF	0.017	>0.05	ND(0.025) J	
						Acrylonitrile	ICAL RRF	0.030	>0.05	ND(0.025) J	
						Bromomethane	CCAL %D	47.2%	<25%	ND(0.0010) J	
						Chloroethane	CCAL %D	53.7%	<25%	ND(0.0010) J	
						Isobutanol	ICAL RRF	0.003	>0.05	ND(0.050) J	
						Propionitrile	ICAL RRF	0.011	>0.05	ND(0.020) J	
						trans-1,4-Dichloro-2-butene	ICAL RRF	0.025	>0.05	ND(0.0050) J	
G135-658	6B-R	5/2/2008	Water	Tier II	Yes	1,2-Dibromo-3-chloropropane	ICAL RRF	0.025	>0.05	ND(1.0) J	
						1,4-Dioxane	ICAL RRF	0.001	>0.05	ND(20) J	
						2-Butanone	ICAL RRF	0.035	>0.05	ND(1.0) J	
						2-Chloroethylvinylether	ICAL RRF	0.018	>0.05	ND(2.5) J	
						Acetone	ICAL RRF	0.021	>0.05	ND(1.0) J	
						Acetonitrile	ICAL RRF	0.009	>0.05	ND(4.0) J	
						Acrolein	ICAL RRF	0.017	>0.05	ND(5.0) J	
						Acrylonitrile	ICAL RRF	0.030	>0.05	ND(5.0) J	
						Bromomethane	CCAL %D	47.2%	<25%	ND(0.20) J	
						Chloroethane	CCAL %D	53.7%	<25%	ND(0.20) J	
						Isobutanol	ICAL RRF	0.003	>0.05	ND(10) J	
						Propionitrile	ICAL RRF	0.011	>0.05	ND(4.0) J	
						trans-1,4-Dichloro-2-butene	ICAL RRF	0.025	>0.05	ND(1.0) J	
G135-658	Trip Blank	5/2/2008	Water	Tier II	Yes	1,2-Dibromo-3-chloropropane	ICAL RRF	0.025	>0.05	ND(0.0050) J	
						1,4-Dioxane	ICAL RRF	0.001	>0.05	ND(0.10) J	
						2-Butanone	ICAL RRF	0.035	>0.05	ND(0.0050) J	
						2-Chloroethylvinylether	ICAL RRF	0.018	>0.05	ND(0.013) J	
						Acetone	ICAL RRF	0.021	>0.05	ND(0.0050) J	
						Acetonitrile	ICAL RRF	0.009	>0.05	ND(0.020) J	
						Acrolein	ICAL RRF	0.017	>0.05	ND(0.025) J	
						Acrylonitrile	ICAL RRF	0.030	>0.05	ND(0.025) J	
						Bromomethane	CCAL %D	48.0%	<25%	ND(0.0010) J	
						Chloroethane	CCAL %D	54.2%	<25%	ND(0.0010) J	
						Iodomethane	LCS/LCSD RPD	102.0%	<30%	ND(0.0010) J	
						Isobutanol	ICAL RRF	0.003	>0.05	ND(0.050) J	
						Propionitrile	ICAL RRF	0.011	>0.05	ND(0.020) J	
						trans-1,4-Dichloro-2-butene	ICAL RRF	0.025	>0.05	ND(0.0050) J	
G135-659	89A	5/5/2008	Water	Tier II	Yes	1,2-Dibromo-3-chloropropane	ICAL RRF	0.025	>0.05	ND(5.0) J	
						1,4-Dioxane	ICAL RRF	0.001	>0.05	ND(100) J	
						2-Butanone	ICAL RRF	0.035	>0.05	ND(5.0) J	
						2-Chloroethylvinylether	ICAL RRF	0.018	>0.05	ND(13) J	
						Acetone	ICAL RRF	0.021	>0.05	ND(5.0) J	
						Acetonitrile	ICAL RRF	0.009	>0.05	ND(20) J	
						Acrolein	ICAL RRF	0.017	>0.05	ND(25) J	
						Acrylonitrile	ICAL RRF	0.030	>0.05	ND(25) J	
						Bromomethane	CCAL %D	47.2%	<25%	ND(1.0) J	
						Chloroethane	CCAL %D	53.7%	<25%	ND(1.0) J	
						Isobutanol	ICAL RRF	0.003	>0.05	ND(50) J	
						Propionitrile	ICAL RRF	0.011	>0.05	ND(20) J	
						trans-1,4-Dichloro-2-butene	ICAL RRF	0.025	>0.05	ND(5.0) J	
G135-659	89B	5/5/2008	Water	Tier II	Yes	1,2-Dibromo-3-chloropropane	ICAL RRF	0.025	>0.05	ND(0.010) J	
						1,4-Dioxane	ICAL RRF	0.001	>0.05	ND(0.20) J	
						2-Butanone	ICAL RRF	0.035	>0.05	ND(0.010) J	
						2-Chloroethylvinylether	ICAL RRF	0.018	>0.05	ND(0.025) J	
						Acetone	ICAL RRF	0.021	>0.05	ND(0.010) J	
						Acetonitrile	ICAL RRF	0.009	>0.05	ND(0.040) J	
						Acrolein	ICAL RRF	0.017	>0.05	ND(0.050) J	
						Acrylonitrile	ICAL RRF	0.030	>0.05	ND(0.050) J	
						Bromomethane	CCAL %D	47.2%	<25%	ND(0.0020) J	
						Chloroethane	CCAL %D	53.7%	<25%	ND(0.0020) J	
						Isobutanol	ICAL RRF	0.003	>0.05	ND(0.10) J	
						Propionitrile	ICAL RRF	0.011	>0.05	ND(0.040) J	
						trans-1,4-Dichloro-2-butene	ICAL RRF	0.025	>0.05	ND(0.010) J	
G135-659	89D-R	5/5/2008	Water	Tier II	Yes	1,2-Dibromo-3-chloropropane	ICAL RRF	0.025	>0.05	ND(8.0) J	
						1,4-Dioxane	ICAL RRF	0.001	>0.05	ND(160) J	
						2-Butanone	ICAL RRF	0.035	>0.05	ND(8.0) J	
						2-Chloroethylvinylether	ICAL RRF	0.018	>0.05	ND(20) J	
						Acetone	ICAL RRF	0.021	>0.05	ND(8.0) J	
						Acetonitrile	ICAL RRF	0.009	>0.05	ND(32) J	

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Analytical Data Validation Summary  
Groundwater Management Area 3 - Spring 2008

General Electric Company - Pittsfield, Massachusetts  
(Results are presented in parts per million, ppm)

Sample Delivery Group No.	Sample ID	Date Collected	Matrix	Validation Level	Qualification	Compound	QA/QC Parameter	Value	Control Limits	Qualified Result	Notes
<b>VOCs (continued)</b>											
G135-659	89D-R	5/5/2008	Water	Tier II	Yes	Acrolein	ICAL RRF	0.017	>0.05	ND(40) J	
						Acrylonitrile	ICAL RRF	0.030	>0.05	ND(40) J	
						Bromomethane	CCAL %D	47.2%	<25%	ND(1.6) J	
						Chloroethane	CCAL %D	53.7%	<25%	ND(1.6) J	
						Isobutanol	ICAL RRF	0.003	>0.05	ND(80) J	
						Propionitrile	ICAL RRF	0.011	>0.05	ND(32) J	
						trans-1,4-Dichloro-2-butene	ICAL RRF	0.025	>0.05	ND(3.0) J	
G135-659	TripBlank	5/5/2008	Water	Tier II	Yes	1,2-Dibromo-3-chloropropane	ICAL RRF	0.025	>0.05	ND(0.0050) J	
						1,4-Dioxane	ICAL RRF	0.001	>0.05	ND(0.10) J	
						2-Butanone	ICAL RRF	0.035	>0.05	ND(0.0050) J	
						2-Chloroethylvinylether	ICAL RRF	0.018	>0.05	ND(0.013) J	
						Acetone	ICAL RRF	0.021	>0.05	ND(0.0050) J	
						Acetonitrile	ICAL RRF	0.009	>0.05	ND(0.020) J	
						Acrolein	ICAL RRF	0.017	>0.05	ND(0.025) J	
						Acrylonitrile	ICAL RRF	0.030	>0.05	ND(0.025) J	
						Bromomethane	CCAL %D	47.2%	<25%	ND(0.0010) J	
						Chloroethane	CCAL %D	53.7%	<25%	ND(0.0010) J	
						Isobutanol	ICAL RRF	0.003	>0.05	ND(0.050) J	
						Propionitrile	ICAL RRF	0.011	>0.05	ND(0.020) J	
						trans-1,4-Dichloro-2-butene	ICAL RRF	0.025	>0.05	ND(0.0050) J	
G135-661	111A-R	5/6/2008	Water	Tier II	Yes	1,2-Dibromo-3-chloropropane	ICAL RRF	0.012	>0.05	ND(0.0050) J	
						1,4-Dioxane	ICAL RRF	0.001	>0.05	ND(0.10) J	
						2-Butanone	ICAL RRF	0.033	>0.05	ND(0.0050) J	
						2-Chloroethylvinylether	ICAL RRF	0.014	>0.05	ND(0.013) J	
						2-Hexanone	CCAL %D	34.2%	<25%	ND(0.0050) J	
						Acetone	ICAL RRF	0.017	>0.05	ND(0.0050) J	
						Acetonitrile	ICAL RRF	0.006	>0.05	ND(0.020) J	
						Acrolein	ICAL RRF	0.015	>0.05	ND(0.025) J	
						Acrylonitrile	ICAL RRF	0.027	>0.05	ND(0.025) J	
						Isobutanol	ICAL RRF	0.003	>0.05	ND(0.050) J	
						Methylene Chloride	CCAL %D	44.5%	<25%	ND(0.0050) J	
						Methylene Chloride	LCSD %R	64.2%	72.9% to 120%	ND(0.0050) J	
						Propionitrile	ICAL RRF	0.009	>0.05	ND(0.020) J	
						trans-1,4-Dichloro-2-butene	ICAL RRF	0.020	>0.05	ND(0.0050) J	
						Xylenes (total)	Trip Blank	-	-	ND(0.0010)	
G135-661	39E	5/6/2008	Water	Tier II	Yes	1,2-Dibromo-3-chloropropane	ICAL RRF	0.012	>0.05	ND(0.0050) J	
						1,4-Dioxane	ICAL RRF	0.001	>0.05	ND(0.10) J	
						2-Butanone	ICAL RRF	0.033	>0.05	ND(0.0050) J	
						2-Chloroethylvinylether	ICAL RRF	0.014	>0.05	ND(0.013) J	
						2-Hexanone	CCAL %D	34.2%	<25%	ND(0.0050) J	
						Acetone	ICAL RRF	0.017	>0.05	ND(0.0050) J	
						Acetonitrile	ICAL RRF	0.006	>0.05	ND(0.020) J	
						Acrolein	ICAL RRF	0.015	>0.05	ND(0.025) J	
						Acrylonitrile	ICAL RRF	0.027	>0.05	ND(0.025) J	
						Isobutanol	ICAL RRF	0.003	>0.05	ND(0.050) J	
						Methylene Chloride	CCAL %D	44.5%	<25%	ND(0.0050) J	
						Methylene Chloride	LCSD %R	64.2%	72.9% to 120%	ND(0.0050) J	
						Propionitrile	ICAL RRF	0.009	>0.05	ND(0.020) J	
						trans-1,4-Dichloro-2-butene	ICAL RRF	0.020	>0.05	ND(0.0050) J	
G135-661	Trip Blank	5/6/2008	Water	Tier II	Yes	1,2-Dibromo-3-chloropropane	ICAL RRF	0.012	>0.05	ND(0.0050) J	
						1,4-Dioxane	ICAL RRF	0.001	>0.05	ND(0.10) J	
						2-Butanone	ICAL RRF	0.033	>0.05	ND(0.0050) J	
						2-Chloroethylvinylether	ICAL RRF	0.014	>0.05	ND(0.013) J	
						2-Hexanone	CCAL %D	34.2%	<25%	ND(0.0050) J	
						Acetone	ICAL RRF	0.017	>0.05	ND(0.0050) J	
						Acetonitrile	ICAL RRF	0.006	>0.05	ND(0.020) J	
						Acrolein	ICAL RRF	0.015	>0.05	ND(0.025) J	
						Acrylonitrile	ICAL RRF	0.027	>0.05	ND(0.025) J	
						Isobutanol	ICAL RRF	0.003	>0.05	ND(0.050) J	
						Methylene Chloride	CCAL %D	44.5%	<25%	ND(0.0050) J	
						Methylene Chloride	LCSD %R	64.2%	72.9% to 120%	ND(0.0050) J	
						Propionitrile	ICAL RRF	0.009	>0.05	ND(0.020) J	
						trans-1,4-Dichloro-2-butene	ICAL RRF	0.020	>0.05	ND(0.0050) J	
G135-662	95B-R	5/8/2008	Water	Tier II	Yes	1,2-Dibromo-3-chloropropane	ICAL RRF	0.016	>0.05	ND(2.0) J	
						1,4-Dioxane	ICAL RRF	0.001	>0.05	ND(40) J	
						2-Butanone	ICAL RRF	0.043	>0.05	ND(2.0) J	

Table D-1  
Analytical Data Validation Summary  
Groundwater Management Area 3 - Spring 2008

General Electric Company - Pittsfield, Massachusetts  
(Results are presented in parts per million, ppm)

Sample Delivery Group No.	Sample ID	Date Collected	Matrix	Validation Level	Qualification	Compound	QA/QC Parameter	Value	Control Limits	Qualified Result	Notes						
<b>VOCs (continued)</b>																	
G135-662	95B-R	5/8/2008	Water	Tier II	Yes	2-Chloroethylvinylether	ICAL RRF	0.027	>0.05	ND(5.0) J							
						Acetone	ICAL RRF	0.023	>0.05	ND(2.0) J							
						Acetone	CCAL %D	26.1%	<25%	ND(2.0) J							
						Acetonitrile	ICAL RRF	0.008	>0.05	ND(8.0) J							
						Acrolein	ICAL RRF	0.024	>0.05	ND(10) J							
						Acrylonitrile	ICAL RRF	0.041	>0.05	ND(10) J							
						Isobutanol	ICAL RRF	0.003	>0.05	ND(20) J							
						Methacrylonitrile	ICAL RRF	0.007	>0.05	ND(4.0) J							
						Methylene Chloride	Method Blank	-	-	ND(2.0) J							
						Propionitrile	ICAL RRF	0.013	>0.05	ND(8.0) J							
						trans-1,4-Dichloro-2-butene	ICAL RRF	0.029	>0.05	ND(2.0) J							
						1,2-Dibromo-3-chloropropane	ICAL RRF	0.016	>0.05	ND(0.0050) J							
						1,4-Dioxane	ICAL RRF	0.001	>0.05	ND(0.10) J							
						2-Butanone	ICAL RRF	0.043	>0.05	ND(0.0050) J							
G135-662	TripBlank	5/8/2008	Water	Tier II	Yes	2-Chloroethylvinylether	ICAL RRF	0.027	>0.05	ND(0.013) J							
						Acetone	ICAL RRF	0.023	>0.05	0.0041 J							
						Acetone	CCAL %D	26.1%	<25%	0.0041 J							
						Acetonitrile	ICAL RRF	0.008	>0.05	ND(0.020) J							
						Acrolein	ICAL RRF	0.024	>0.05	ND(0.025) J							
						Acrylonitrile	ICAL RRF	0.041	>0.05	ND(0.025) J							
						Isobutanol	ICAL RRF	0.003	>0.05	ND(0.050) J							
						Methacrylonitrile	ICAL RRF	0.007	>0.05	ND(0.010) J							
						Propionitrile	ICAL RRF	0.013	>0.05	ND(0.020) J							
						trans-1,4-Dichloro-2-butene	ICAL RRF	0.029	>0.05	ND(0.0050) J							
						1,2-Dibromo-3-chloropropane	ICAL RRF	0.016	>0.05	ND(0.0050) J							
						1,4-Dioxane	ICAL RRF	0.001	>0.05	ND(0.10) J							
						2-Butanone	ICAL RRF	0.043	>0.05	0.011 J							
						2-Chloroethylvinylether	ICAL RRF	0.027	>0.05	ND(0.013) J							
G135-669	114A	5/13/2008	Water	Tier II	Yes	Acetone	ICAL RRF	0.023	>0.05	0.15 J							
						Acetone	CCAL %D	26.1%	<25%	0.15 J							
						Acetonitrile	ICAL RRF	0.008	>0.05	ND(0.020) J							
						Acrolein	ICAL RRF	0.024	>0.05	ND(0.025) J							
						Acrylonitrile	ICAL RRF	0.041	>0.05	ND(0.025) J							
						Isobutanol	ICAL RRF	0.003	>0.05	ND(0.050) J							
						Methacrylonitrile	ICAL RRF	0.007	>0.05	ND(0.010) J							
						Propionitrile	ICAL RRF	0.013	>0.05	ND(0.020) J							
						trans-1,4-Dichloro-2-butene	ICAL RRF	0.029	>0.05	ND(0.0050) J							
						1,2-Dibromo-3-chloropropane	ICAL RRF	0.016	>0.05	ND(0.20) J							
						1,4-Dioxane	ICAL RRF	0.001	>0.05	ND(4.0) J							
						2-Butanone	ICAL RRF	0.043	>0.05	ND(0.20) J							
						2-Chloroethylvinylether	ICAL RRF	0.027	>0.05	ND(0.50) J							
						Acetone	ICAL RRF	0.023	>0.05	ND(0.20) J							
G135-669	114B-R	5/13/2008	Water	Tier II	Yes	Acetone	CCAL %D	26.1%	<25%	ND(0.20) J							
						Acetonitrile	ICAL RRF	0.008	>0.05	ND(0.80) J							
						Acrolein	ICAL RRF	0.024	>0.05	ND(1.0) J							
						Acrylonitrile	ICAL RRF	0.041	>0.05	ND(1.0) J							
						Isobutanol	ICAL RRF	0.003	>0.05	ND(2.0) J							
						Methacrylonitrile	ICAL RRF	0.007	>0.05	ND(0.40) J							
						Methylene Chloride	Method Blank	-	-	ND(2.0) J							
						Propionitrile	ICAL RRF	0.013	>0.05	ND(0.80) J							
						trans-1,4-Dichloro-2-butene	ICAL RRF	0.029	>0.05	ND(0.20) J							
						1,2-Dibromo-3-chloropropane	ICAL RRF	0.016	>0.05	ND(0.0050) J							
						1,4-Dioxane	ICAL RRF	0.001	>0.05	ND(0.10) J							
						2-Butanone	ICAL RRF	0.043	>0.05	ND(0.0050) J							
						2-Chloroethylvinylether	ICAL RRF	0.027	>0.05	ND(0.013) J							
						Acetone	ICAL RRF	0.023	>0.05	0.0041 J							
G135-669	TripBlank	5/13/2008	Water	Tier II	Yes	Acetone	CCAL %D	26.1%	<25%	0.0041 J							
						Acetonitrile	ICAL RRF	0.008	>0.05	ND(0.020) J							
						Acrolein	ICAL RRF	0.024	>0.05	ND(0.025) J							
						Acrylonitrile	ICAL RRF	0.041	>0.05	ND(0.025) J							
						Isobutanol	ICAL RRF	0.003	>0.05	ND(0.050) J							
						Methacrylonitrile	ICAL RRF	0.007	>0.05	ND(0.010) J							
						Propionitrile	ICAL RRF	0.013	>0.05	ND(0.020) J							
						trans-1,4-Dichloro-2-butene	ICAL RRF	0.029	>0.05	ND(0.0050) J							
						1,2-Dibromo-3-chloropropane	ICAL RRF	0.016	>0.05	ND(0.0050) J							
						1,4-Dioxane	ICAL RRF	0.001	>0.05	ND(0.10) J							
						G135-671	111B-R	5/14/2008	Water	Tier II	Yes	1,2-Dibromo-3-chloropropane	ICAL RRF	0.025	>0.05	ND(0.0050) J	
												1,4-Dioxane	ICAL RRF	0.001	>0.05	ND(0.10) J	

Table D-1  
Analytical Data Validation Summary  
Groundwater Management Area 3 - Spring 2008

General Electric Company - Pittsfield, Massachusetts  
(Results are presented in parts per million, ppm)

Sample Delivery Group No.	Sample ID	Date Collected	Matrix	Validation Level	Qualification	Compound	QA/QC Parameter	Value	Control Limits	Qualified Result	Notes
<b>VOCs (continued)</b>											
G135-671	111B-R	5/14/2008	Water	Tier II	Yes	2-Butanone	ICAL RRF	0.035	>0.05	ND(0.0050) J	
						2-Chloroethylvinylether	ICAL RRF	0.018	>0.05	ND(0.013) J	
						Acetone	ICAL RRF	0.021	>0.05	ND(0.0050) J	
						Acetonitrile	ICAL RRF	0.009	>0.05	ND(0.020) J	
						Acetonitrile	CCAL %D	44.4%	<25%	ND(0.020) J	
						Acrolein	ICAL RRF	0.017	>0.05	ND(0.025) J	
						Acrylonitrile	ICAL RRF	0.030	>0.05	ND(0.025) J	
						Bromomethane	CCAL %D	48.8%	<25%	ND(0.0010) J	
						Chloroethane	CCAL %D	52.0%	<25%	ND(0.0010) J	
						Isobutanol	ICAL RRF	0.003	>0.05	ND(0.050) J	
						Propionitrile	ICAL RRF	0.011	>0.05	ND(0.020) J	
						trans-1,4-Dichloro-2-butene	ICAL RRF	0.025	>0.05	ND(0.0050) J	
						1,2-Dibromo-3-chloropropane	ICAL RRF	0.025	>0.05	ND(0.0050) J	
						1,4-Dioxane	ICAL RRF	0.001	>0.05	ND(0.10) J	
G135-671	90A	5/14/2008	Water	Tier II	Yes	2-Butanone	ICAL RRF	0.035	>0.05	ND(0.0050) J	
						2-Chloroethylvinylether	ICAL RRF	0.018	>0.05	ND(0.013) J	
						Acetone	ICAL RRF	0.021	>0.05	ND(0.0050) J	
						Acetonitrile	ICAL RRF	0.009	>0.05	ND(0.020) J	
						Acetonitrile	CCAL %D	44.4%	<25%	ND(0.020) J	
						Acrolein	ICAL RRF	0.017	>0.05	ND(0.025) J	
						Acrylonitrile	ICAL RRF	0.030	>0.05	ND(0.025) J	
						Bromomethane	CCAL %D	48.8%	<25%	ND(0.0010) J	
						Chloroethane	CCAL %D	52.0%	<25%	ND(0.0010) J	
						Isobutanol	ICAL RRF	0.003	>0.05	ND(0.050) J	
						Propionitrile	ICAL RRF	0.011	>0.05	ND(0.020) J	
						trans-1,4-Dichloro-2-butene	ICAL RRF	0.025	>0.05	ND(0.0050) J	
						1,2-Dibromo-3-chloropropane	ICAL RRF	0.025	>0.05	ND(0.0050) J	
						1,4-Dioxane	ICAL RRF	0.001	>0.05	ND(0.10) J	
G135-671	90B	5/14/2008	Water	Tier II	Yes	2-Butanone	ICAL RRF	0.035	>0.05	ND(0.0050) J	
						2-Chloroethylvinylether	ICAL RRF	0.018	>0.05	ND(0.013) J	
						Acetone	ICAL RRF	0.021	>0.05	ND(0.0050) J	
						Acetonitrile	ICAL RRF	0.009	>0.05	ND(0.020) J	
						Acetonitrile	CCAL %D	44.4%	<25%	ND(0.020) J	
						Acrolein	ICAL RRF	0.017	>0.05	ND(0.025) J	
						Acrylonitrile	ICAL RRF	0.030	>0.05	ND(0.025) J	
						Bromomethane	CCAL %D	48.8%	<25%	ND(0.0010) J	
						Chloroethane	CCAL %D	52.0%	<25%	ND(0.0010) J	
						Isobutanol	ICAL RRF	0.003	>0.05	ND(0.050) J	
						Propionitrile	ICAL RRF	0.011	>0.05	ND(0.020) J	
						trans-1,4-Dichloro-2-butene	ICAL RRF	0.025	>0.05	ND(0.0050) J	
						1,2-Dibromo-3-chloropropane	ICAL RRF	0.025	>0.05	ND(0.0050) J	
						1,4-Dioxane	ICAL RRF	0.001	>0.05	ND(0.10) J	
G135-671	95A	5/14/2008	Water	Tier II	Yes	2-Butanone	ICAL RRF	0.035	>0.05	ND(0.0050) J	
						2-Chloroethylvinylether	ICAL RRF	0.018	>0.05	ND(0.013) J	
						Acetone	ICAL RRF	0.021	>0.05	ND(0.0050) J	
						Acetonitrile	ICAL RRF	0.009	>0.05	ND(0.020) J	
						Acetonitrile	CCAL %D	44.4%	<25%	ND(0.020) J	
						Acrolein	ICAL RRF	0.017	>0.05	ND(0.025) J	
						Acrylonitrile	ICAL RRF	0.030	>0.05	ND(0.025) J	
						Bromomethane	CCAL %D	48.8%	<25%	ND(0.0010) J	
						Chloroethane	CCAL %D	52.0%	<25%	ND(0.0010) J	
						Isobutanol	ICAL RRF	0.003	>0.05	ND(0.050) J	
						Propionitrile	ICAL RRF	0.011	>0.05	ND(0.020) J	
						trans-1,4-Dichloro-2-butene	ICAL RRF	0.025	>0.05	ND(0.0050) J	
						1,2-Dibromo-3-chloropropane	ICAL RRF	0.025	>0.05	ND(0.0050) J	
						1,4-Dioxane	ICAL RRF	0.001	>0.05	ND(0.10) J	
G135-671	Trip Blank	5/14/2008	Water	Tier II	Yes	2-Butanone	ICAL RRF	0.035	>0.05	ND(0.0050) J	
						2-Chloroethylvinylether	ICAL RRF	0.018	>0.05	ND(0.013) J	
						Acetone	ICAL RRF	0.021	>0.05	ND(0.0050) J	
						Acetonitrile	ICAL RRF	0.009	>0.05	ND(0.020) J	
						Acetonitrile	CCAL %D	44.4%	<25%	ND(0.020) J	
						Acrolein	ICAL RRF	0.017	>0.05	ND(0.025) J	
						Acrylonitrile	ICAL RRF	0.030	>0.05	ND(0.025) J	
						Bromomethane	CCAL %D	48.8%	<25%	ND(0.0010) J	
						Chloroethane	CCAL %D	52.0%	<25%	ND(0.0010) J	
						Isobutanol	ICAL RRF	0.003	>0.05	ND(0.050) J	

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Analytical Data Validation Summary  
Groundwater Management Area 3 - Spring 2008

General Electric Company - Pittsfield, Massachusetts  
(Results are presented in parts per million, ppm)

Sample Delivery Group No.	Sample ID	Date Collected	Matrix	Validation Level	Qualification	Compound	QA/QC Parameter	Value	Control Limits	Qualified Result	Notes
<b>VOCs (continued)</b>											
G135-671	Trip Blank	5/14/2008	Water	Tier II	Yes	Propionitrile	ICAL RRF	0.011	>0.05	ND(0.020) J	
						trans-1,4-Dichloro-2-butene	ICAL RRF	0.025	>0.05	ND(0.0050) J	
G135-673	115A	5/15/2008	Water	Tier II	Yes	1,2-Dibromo-3-chloropropane	ICAL RRF	0.025	>0.05	ND(0.0050) J	
						1,4-Dioxane	ICAL RRF	0.001	>0.05	ND(0.10) J	
						1,4-Dioxane	CCAL %D	26.2%	<25%	ND(0.10) J	
						2-Butanone	ICAL RRF	0.035	>0.05	ND(0.0050) J	
						2-Chloroethylvinylether	ICAL RRF	0.018	>0.05	ND(0.013) J	
						Acetone	ICAL RRF	0.021	>0.05	ND(0.0050) J	
						Acetonitrile	ICAL RRF	0.009	>0.05	ND(0.020) J	
						Acetonitrile	CCAL %D	33.3%	<25%	ND(0.020) J	
						Acrolein	ICAL RRF	0.017	>0.05	ND(0.025) J	
						Acrylonitrile	ICAL RRF	0.030	>0.05	ND(0.025) J	
						Bromomethane	CCAL %D	39.0%	<25%	ND(0.0010) J	
						Chloroethane	CCAL %D	46.9%	<25%	ND(0.0010) J	
						Isobutanol	ICAL RRF	0.003	>0.05	ND(0.050) J	
						Propionitrile	ICAL RRF	0.011	>0.05	ND(0.020) J	
						trans-1,4-Dichloro-2-butene	ICAL RRF	0.025	>0.05	ND(0.0050) J	
G135-673	115B	5/15/2008	Water	Tier II	Yes	1,2-Dibromo-3-chloropropane	ICAL RRF	0.025	>0.05	ND(0.0050) J	
						1,4-Dioxane	ICAL RRF	0.001	>0.05	ND(0.10) J	
						1,4-Dioxane	CCAL %D	26.2%	<25%	ND(0.10) J	
						2-Butanone	ICAL RRF	0.035	>0.05	ND(0.0050) J	
						2-Chloroethylvinylether	ICAL RRF	0.018	>0.05	ND(0.013) J	
						Acetone	ICAL RRF	0.021	>0.05	ND(0.0050) J	
						Acetonitrile	ICAL RRF	0.009	>0.05	ND(0.020) J	
						Acetonitrile	CCAL %D	33.3%	<25%	ND(0.020) J	
						Acrolein	ICAL RRF	0.017	>0.05	ND(0.025) J	
						Acrylonitrile	ICAL RRF	0.030	>0.05	ND(0.025) J	
						Bromomethane	CCAL %D	39.0%	<25%	ND(0.0010) J	
						Chloroethane	CCAL %D	46.9%	<25%	ND(0.0010) J	
						Isobutanol	ICAL RRF	0.003	>0.05	ND(0.050) J	
						Propionitrile	ICAL RRF	0.011	>0.05	ND(0.020) J	
						trans-1,4-Dichloro-2-butene	ICAL RRF	0.025	>0.05	ND(0.0050) J	
G135-673	GMA3-RB-1	5/15/2008	Water	Tier II	Yes	1,2-Dibromo-3-chloropropane	ICAL RRF	0.025	>0.05	ND(0.0050) J	
						1,4-Dioxane	ICAL RRF	0.001	>0.05	ND(0.10) J	
						1,4-Dioxane	CCAL %D	26.2%	<25%	ND(0.10) J	
						2-Butanone	ICAL RRF	0.035	>0.05	ND(0.0050) J	
						2-Chloroethylvinylether	ICAL RRF	0.018	>0.05	ND(0.013) J	
						Acetone	ICAL RRF	0.021	>0.05	ND(0.0050) J	
						Acetonitrile	ICAL RRF	0.009	>0.05	ND(0.020) J	
						Acetonitrile	CCAL %D	33.3%	<25%	ND(0.020) J	
						Acrolein	ICAL RRF	0.017	>0.05	ND(0.025) J	
						Acrylonitrile	ICAL RRF	0.030	>0.05	ND(0.025) J	
						Bromomethane	CCAL %D	39.0%	<25%	ND(0.0010) J	
						Chloroethane	CCAL %D	46.9%	<25%	ND(0.0010) J	
						Isobutanol	ICAL RRF	0.003	>0.05	ND(0.050) J	
						Propionitrile	ICAL RRF	0.011	>0.05	ND(0.020) J	
						trans-1,4-Dichloro-2-butene	ICAL RRF	0.025	>0.05	ND(0.0050) J	
G135-673	TripBlank	5/15/2008	Water	Tier II	Yes	1,2-Dibromo-3-chloropropane	ICAL RRF	0.025	>0.05	ND(0.0050) J	
						1,4-Dioxane	ICAL RRF	0.001	>0.05	ND(0.10) J	
						1,4-Dioxane	CCAL %D	26.2%	<25%	ND(0.10) J	
						2-Butanone	ICAL RRF	0.035	>0.05	ND(0.0050) J	
						2-Chloroethylvinylether	ICAL RRF	0.018	>0.05	ND(0.013) J	
						Acetone	ICAL RRF	0.021	>0.05	ND(0.0050) J	
						Acetonitrile	ICAL RRF	0.009	>0.05	ND(0.020) J	
						Acetonitrile	CCAL %D	33.3%	<25%	ND(0.020) J	
						Acrolein	ICAL RRF	0.017	>0.05	ND(0.025) J	
						Acrylonitrile	ICAL RRF	0.030	>0.05	ND(0.025) J	
						Bromomethane	CCAL %D	39.0%	<25%	ND(0.0010) J	
						Chloroethane	CCAL %D	46.9%	<25%	ND(0.0010) J	
						Isobutanol	ICAL RRF	0.003	>0.05	ND(0.050) J	
						Propionitrile	ICAL RRF	0.011	>0.05	ND(0.020) J	
						trans-1,4-Dichloro-2-butene	ICAL RRF	0.025	>0.05	ND(0.0050) J	
<b>SVOCs</b>											
G135-656	39B-R	4/30/2008	Water	Tier II	Yes	1-Naphthylamine	CCAL %D	67.4%	<25%	ND(0.26) J	
						2,4-Dinitrophenol	CCAL %D	53.0%	<25%	ND(0.26) J	
						2-Naphthylamine	CCAL %D	71.1%	<25%	ND(0.26) J	

**Table D-1**  
**Analytical Data Validation Summary**  
**Groundwater Management Area 3 - Spring 2008**

General Electric Company - Pittsfield, Massachusetts  
 (Results are presented in parts per million, ppm)

Sample Delivery Group No.	Sample ID	Date Collected	Matrix	Validation Level	Qualification	Compound	QA/QC Parameter	Value	Control Limits	Qualified Result	Notes
<b>SVOCs (continued)</b>											
G135-656	39B-R	4/30/2008	Water	Tier II	Yes	4-Nitroquinoline-1-oxide	CCAL %D	45.3%	<25%	ND(0.26) J	
						4-Phenylenediamine	ICAL RRF	0.033	>0.05	ND(0.11) J	
						4-Phenylenediamine	CCAL %D	26.3%	<25%	ND(0.11) J	
						Hexachlorocyclopentadiene	ICAL RRF	0.018	>0.05	ND(0.11) J	
						Hexachlorocyclopentadiene	CCAL %D	40.5%	<25%	ND(0.11) J	
						Hexachlorophene	CCAL %D	32.8%	<25%	ND(0.053) J	
						Methapyrene	CCAL %D	100.0%	<25%	ND(0.053) J	
G135-657	16A	5/1/2008	Water	Tier II	No						
G135-657	2A	5/1/2008	Water	Tier II	No						
G135-657	GMA3-DUP2	5/1/2008	Water	Tier II	No						Duplicate of 2A
G135-659	89A	5/5/2008	Water	Tier II	No						
G135-659	89B	5/5/2008	Water	Tier II	No						
G135-662	95B-R	5/8/2008	Water	Tier II	No						
G135-671	95A	5/14/2008	Water	Tier II	No						
<b>Sulfate, Chloride, Nitrite, Nitrate</b>											
G135-656	39B-R	4/30/2008	Water	Tier II	No						
G135-656	39D-R	4/30/2008	Water	Tier II	No						
G135-656	43A	4/30/2008	Water	Tier II	No						
G135-656	43B	4/30/2008	Water	Tier II	No						
G135-656	GMA3-DUP#1	4/30/2008	Water	Tier II	No						Duplicate of 43B
G135-657	16A	5/1/2008	Water	Tier II	No						
G135-657	16B-R	5/1/2008	Water	Tier II	No						
G135-657	16C-R	5/1/2008	Water	Tier II	No						
G135-657	2A	5/1/2008	Water	Tier II	No						
G135-657	GMA3-DUP2	5/1/2008	Water	Tier II	No						Duplicate of 2A
G135-659	89A	5/5/2008	Water	Tier II	No						
G135-659	89B	5/5/2008	Water	Tier II	No						
G135-659	89D-R	5/5/2008	Water	Tier II	No						
G135-661	111A-R	5/6/2008	Water	Tier II	No						
G135-661	39E	5/6/2008	Water	Tier II	No						
G135-662	95B-R	5/8/2008	Water	Tier II	No						
G135-669	114A	5/13/2008	Water	Tier II	No						
G135-669	114B-R	5/13/2008	Water	Tier II	No						
G135-671	111B-R	5/14/2008	Water	Tier II	No						
G135-671	90A	5/14/2008	Water	Tier II	No						
G135-671	90B	5/14/2008	Water	Tier II	No						
G135-671	95A	5/14/2008	Water	Tier II	No						
G135-673	115A	5/15/2008	Water	Tier II	Yes	Chloride	Rinse Blank	-	-	ND(0.3)	
G135-673	115B	5/15/2008	Water	Tier II	No						
G135-673	GMA3-RB-1	5/15/2008	Water	Tier II	No						
<b>Methane, Ethane, Ethene-RSK-175</b>											
G135-656	39B-R	4/30/2008	Water	Tier II	No						
G135-656	39D-R	4/30/2008	Water	Tier II	No						
G135-656	43A	4/30/2008	Water	Tier II	No						
G135-656	43B	4/30/2008	Water	Tier II	No						
G135-656	GMA3-DUP#1	4/30/2008	Water	Tier II	No						Duplicate of 43B
G135-657	16A	5/1/2008	Water	Tier II	No						
G135-657	16B-R	5/1/2008	Water	Tier II	Yes	Methane	MSD %R	68.6%	70.0% to 130%	1.52 J	
G135-657	16C-R	5/1/2008	Water	Tier II	No						
G135-657	2A	5/1/2008	Water	Tier II	No						
G135-657	GMA3-DUP2	5/1/2008	Water	Tier II	No						Duplicate of 2A
G135-659	89A	5/5/2008	Water	Tier II	No						
G135-659	89B	5/5/2008	Water	Tier II	No						
G135-659	89D-R	5/5/2008	Water	Tier II	No						
G135-661	111A-R	5/6/2008	Water	Tier II	No						
G135-661	39E	5/6/2008	Water	Tier II	No						
G135-662	95B-R	5/8/2008	Water	Tier II	No						
G135-669	114A	5/13/2008	Water	Tier II	No						
G135-669	114B-R	5/13/2008	Water	Tier II	No						
G135-671	111B-R	5/14/2008	Water	Tier II	No						
G135-671	90A	5/14/2008	Water	Tier II	No						
G135-671	90B	5/14/2008	Water	Tier II	No						
G135-671	95A	5/14/2008	Water	Tier II	No						
G135-673	115A	5/15/2008	Water	Tier II	No						
G135-673	115B	5/15/2008	Water	Tier II	No						
G135-673	GMA3-RB-1	5/15/2008	Water	Tier II	No						



**Table D-1**  
**Analytical Data Validation Summary**  
**Groundwater Management Area 3 - Spring 2008**

General Electric Company - Pittsfield, Massachusetts  
 (Results are presented in parts per million, ppm)

Sample Delivery Group No.	Sample ID	Date Collected	Matrix	Validation Level	Qualification	Compound	QA/QC Parameter	Value	Control Limits	Qualified Result	Notes
<b>Alkalinity</b>											
G135-656	39B-R	4/30/2008	Water	Tier II	No						
G135-656	39D-R	4/30/2008	Water	Tier II	No						
G135-656	43A	4/30/2008	Water	Tier II	No						
G135-656	43B	4/30/2008	Water	Tier II	No						
G135-656	GMA3-DUP#1	4/30/2008	Water	Tier II	No						Duplicate of 43B
G135-657	16A	5/1/2008	Water	Tier II	No						
G135-657	16B-R	5/1/2008	Water	Tier II	No						
G135-657	16C-R	5/1/2008	Water	Tier II	No						
G135-657	2A	5/1/2008	Water	Tier II	No						
G135-657	GMA3-DUP2	5/1/2008	Water	Tier II	No						Duplicate of 2A
G135-659	89A	5/5/2008	Water	Tier II	No						
G135-659	89B	5/5/2008	Water	Tier II	No						
G135-659	89D-R	5/5/2008	Water	Tier II	No						
G135-661	111A-R	5/6/2008	Water	Tier II	No						
G135-661	39E	5/6/2008	Water	Tier II	No						
G135-662	95B-R	5/8/2008	Water	Tier II	No						
G135-669	114A	5/13/2008	Water	Tier II	No						
G135-669	114B-R	5/13/2008	Water	Tier II	No						
G135-671	111B-R	5/14/2008	Water	Tier II	No						
G135-671	90A	5/14/2008	Water	Tier II	No						
G135-671	90B	5/14/2008	Water	Tier II	No						
G135-671	95A	5/14/2008	Water	Tier II	No						
G135-673	115A	5/15/2008	Water	Tier II	No						
G135-673	115B	5/15/2008	Water	Tier II	No						
G135-673	GMA3-RB-1	5/15/2008	Water	Tier II	No						
<b>DOC</b>											
G135-656	39B-R (Filtered)	4/30/2008	Water	Tier II	No						
G135-656	39D-R (Filtered)	4/30/2008	Water	Tier II	No						
G135-656	43A (Filtered)	4/30/2008	Water	Tier II	No						
G135-656	43B (Filtered)	4/30/2008	Water	Tier II	No						
G135-656	GMA3-DUP#1 (Filtered)	4/30/2008	Water	Tier II	No						Duplicate of 43B (Filtered)
G135-657	16A (Filtered)	5/1/2008	Water	Tier II	No						
G135-657	16B-R (Filtered)	5/1/2008	Water	Tier II	No						
G135-657	16C-R (Filtered)	5/1/2008	Water	Tier II	No						
G135-657	2A (Filtered)	5/1/2008	Water	Tier II	No						
G135-657	GMA3-DUP2 (Filtered)	5/1/2008	Water	Tier II	No						Duplicate of 2A (Filtered)
G135-659	89A (Filtered)	5/5/2008	Water	Tier II	No						
G135-659	89B (Filtered)	5/5/2008	Water	Tier II	No						
G135-659	89D-R (Filtered)	5/5/2008	Water	Tier II	No						
G135-661	111A-R (Filtered)	5/6/2008	Water	Tier II	No						
G135-661	39E (Filtered)	5/6/2008	Water	Tier II	No						
G135-662	95B-R (Filtered)	5/8/2008	Water	Tier II	No						
G135-669	114A (Filtered)	5/13/2008	Water	Tier II	No						
G135-669	114B-R (Filtered)	5/13/2008	Water	Tier II	No						
G135-671	111B-R (Filtered)	5/14/2008	Water	Tier II	No						
G135-671	90A (Filtered)	5/14/2008	Water	Tier II	No						
G135-671	90B (Filtered)	5/14/2008	Water	Tier II	No						
G135-671	95A (Filtered)	5/14/2008	Water	Tier II	No						
G135-673	115A (Filtered)	5/15/2008	Water	Tier II	Yes	Dissolved Organic Carbon	Rinse Blank	-	-		ND(1.0)
G135-673	115B (Filtered)	5/15/2008	Water	Tier II	Yes	Dissolved Organic Carbon	Rinse Blank	-	-		ND(1.0)
G135-673	GMA3-RB-1 (Filtered)	5/15/2008	Water	Tier II	No						

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**Appendix E**

Spring 2008 Groundwater  
Analytical Results

**Table E-1**  
**Spring 2008 Groundwater Analytical Results**

**Groundwater Quality and NAPL Monitoring Interim Report for Spring 2008**  
**Groundwater Management Area 3**  
**General Electric Company - Pittsfield, Massachusetts**  
**(Results are presented in parts per million, ppm)**

Parameter	Sample ID: Date Collected:	2A 05/01/08	6B-R 05/02/08	16A 05/01/08	16B-R 05/01/08	16C-R 05/01/08
<b>Volatile Organics</b>						
1,1,1,2-Tetrachloroethane		ND(10) [ND(10)]	ND(0.20)	ND(2.0)	ND(0.0010)	ND(0.0010)
1,1,1-Trichloroethane		ND(10) [ND(10)]	ND(0.20)	ND(2.0)	ND(0.0010)	ND(0.0010)
1,1,2,2-Tetrachloroethane		ND(10) [ND(10)]	ND(0.20)	ND(2.0)	ND(0.0010)	ND(0.0010)
1,1,2-Trichloroethane		ND(10) [ND(10)]	ND(0.20)	ND(2.0)	ND(0.0010)	ND(0.0010)
1,1-Dichloroethane		ND(10) [ND(10)]	ND(0.20)	ND(2.0)	ND(0.0010)	ND(0.0010)
1,1-Dichloroethene		ND(10) [ND(10)]	ND(0.20)	ND(2.0)	ND(0.0010)	ND(0.0010)
1,2,3-Trichloropropane		ND(10) [ND(10)]	ND(0.20)	ND(2.0)	ND(0.0010)	ND(0.0010)
1,2-Dibromo-3-chloropropane		ND(50) [ND(50)]	ND(1.0)	ND(10)	ND(0.0050)	ND(0.0050)
1,2-Dibromoethane		ND(10) [ND(10)]	ND(0.20)	ND(2.0)	ND(0.0010)	ND(0.0010)
1,2-Dichloroethane		ND(10) [ND(10)]	ND(0.20)	ND(2.0)	ND(0.0010)	ND(0.0010)
1,2-Dichloropropane		ND(10) [ND(10)]	ND(0.20)	ND(2.0)	ND(0.0010)	ND(0.0010)
1,4-Dioxane		ND(1000) [ND(1000)]	ND(20)	ND(200)	ND(0.10)	ND(0.10)
2-Butanone		ND(50) [ND(50)]	ND(1.0)	ND(10)	ND(0.0050)	ND(0.0050)
2-Chloro-1,3-butadiene		ND(10) [ND(10)]	ND(0.20)	ND(2.0)	ND(0.0010)	ND(0.0010)
2-Chloroethylvinylether		ND(130) [ND(130)]	ND(2.5)	ND(25)	ND(0.013)	ND(0.013)
2-Hexanone		ND(50) [ND(50)]	ND(1.0)	ND(10)	ND(0.0050)	ND(0.0050)
3-Chloropropene		ND(10) [ND(10)]	ND(0.20)	ND(2.0)	ND(0.0010)	ND(0.0010)
4-Methyl-2-pentanone		ND(50) [ND(50)]	ND(1.0)	ND(10)	ND(0.0050)	ND(0.0050)
Acetone		ND(50) [ND(50)]	ND(1.0)	ND(10)	ND(0.0050)	ND(0.0050)
Acetonitrile		ND(200) [ND(200)]	ND(4.0)	ND(40)	ND(0.020)	ND(0.020)
Acrolein		ND(250) [ND(250)]	ND(5.0)	ND(50)	ND(0.025)	ND(0.025)
Acrylonitrile		ND(250) [ND(250)]	ND(5.0)	ND(50)	ND(0.025)	ND(0.025)
Benzene		21 [23]	4.3	13	0.00075 J	ND(0.0010)
Bromodichloromethane		ND(10) [ND(10)]	ND(0.20)	ND(2.0)	ND(0.0010)	ND(0.0010)
Bromoform		ND(10) [ND(10)]	ND(0.20)	ND(2.0)	ND(0.0010)	ND(0.0010)
Bromomethane		ND(10) [ND(10)]	ND(0.20)	ND(2.0)	ND(0.0010)	ND(0.0010)
Carbon Disulfide		ND(10) [ND(10)]	ND(0.20)	ND(2.0)	ND(0.0010)	ND(0.0010)
Carbon Tetrachloride		ND(10) [ND(10)]	ND(0.20)	ND(2.0)	ND(0.0010)	ND(0.0010)
Chlorobenzene		77 [97]	2.5	37	0.0011	ND(0.0010)
Chloroethane		ND(10) [ND(10)]	ND(0.20)	ND(2.0)	ND(0.0010)	ND(0.0010)
Chloroform		ND(10) [ND(10)]	ND(0.20)	ND(2.0)	ND(0.0010)	ND(0.0010)
Chloromethane		ND(10) [ND(10)]	ND(0.20)	ND(2.0)	ND(0.0010)	ND(0.0010)
cis-1,3-Dichloropropene		ND(10) [ND(10)]	ND(0.20)	ND(2.0)	ND(0.0010)	ND(0.0010)
Dibromochloromethane		ND(10) [ND(10)]	ND(0.20)	ND(2.0)	ND(0.0010)	ND(0.0010)
Dibromomethane		ND(10) [ND(10)]	ND(0.20)	ND(2.0)	ND(0.0010)	ND(0.0010)
Dichlorodifluoromethane		ND(10) [ND(10)]	ND(0.20)	ND(2.0)	ND(0.0010)	ND(0.0010)
Ethyl Methacrylate		ND(10) [ND(10)]	ND(0.20)	ND(2.0)	ND(0.0010)	ND(0.0010)
Ethylbenzene		ND(10) [ND(10)]	ND(0.20)	ND(2.0)	ND(0.0010)	ND(0.0010)
Iodomethane		ND(10) [ND(10)]	ND(0.20)	ND(2.0)	ND(0.0010)	ND(0.0010)
Isobutanol		ND(500) [ND(500)]	ND(10)	ND(100)	ND(0.050)	ND(0.050)
Methacrylonitrile		ND(100) [ND(100)]	ND(2.0)	ND(20)	ND(0.010)	ND(0.010)
Methyl Methacrylate		ND(10) [ND(10)]	ND(0.20)	ND(2.0)	ND(0.0010)	ND(0.0010)
Methylene Chloride		ND(50) [ND(50)]	ND(1.0)	ND(10)	ND(0.0050)	ND(0.0050)
Propionitrile		ND(200) [ND(200)]	ND(4.0)	ND(40)	ND(0.020)	ND(0.020)
Styrene		ND(10) [ND(10)]	ND(0.20)	ND(2.0)	ND(0.0010)	ND(0.0010)
Tetrachloroethene		ND(10) [ND(10)]	ND(0.20)	ND(2.0)	ND(0.0010)	ND(0.0010)
Toluene		1.1 J [1.3 J]	0.086 J	0.62 J	ND(0.0010)	ND(0.0010)
trans-1,2-Dichloroethene		ND(10) [ND(10)]	ND(0.20)	ND(2.0)	ND(0.0010)	ND(0.0010)
trans-1,3-Dichloropropene		ND(10) [ND(10)]	ND(0.20)	ND(2.0)	ND(0.0010)	ND(0.0010)
trans-1,4-Dichloro-2-butene		ND(50) [ND(50)]	ND(1.0)	ND(10)	ND(0.0050)	ND(0.0050)
Trichloroethene		6.4 J [7.5 J]	ND(0.20)	ND(2.0)	0.00044 J	ND(0.0010)
Trichlorofluoromethane		ND(10) [ND(10)]	ND(0.20)	ND(2.0)	ND(0.0010)	ND(0.0010)
Vinyl Acetate		ND(25) [ND(25)]	ND(0.50)	ND(5.0)	ND(0.0025)	ND(0.0025)
Vinyl Chloride		ND(10) [ND(10)]	ND(0.20)	ND(2.0)	ND(0.0010)	ND(0.0010)
Xylenes (total)		ND(10) [ND(10)]	ND(0.20)	ND(2.0)	ND(0.0010)	ND(0.0010)
Total VOCs		110 [130 J]	6.9 J	51	0.0023 J	ND(0.10)

**Table E-1**  
**Spring 2008 Groundwater Analytical Results**

**Groundwater Quality and NAPL Monitoring Interim Report for Spring 2008**  
**Groundwater Management Area 3**  
**General Electric Company - Pittsfield, Massachusetts**  
**(Results are presented in parts per million, ppm)**

Parameter	Sample ID: Date Collected:	2A 05/01/08	6B-R 05/02/08	16A 05/01/08	16B-R 05/01/08	16C-R 05/01/08
<b>PCBs-Filtered</b>						
Aroclor-1016		NA	NA	NA	NA	NA
Aroclor-1221		NA	NA	NA	NA	NA
Aroclor-1232		NA	NA	NA	NA	NA
Aroclor-1242		NA	NA	NA	NA	NA
Aroclor-1248		NA	NA	NA	NA	NA
Aroclor-1254		NA	NA	NA	NA	NA
Aroclor-1260		NA	NA	NA	NA	NA
Total PCBs		NA	NA	NA	NA	NA
<b>Semivolatile Organics</b>						
1,2,4,5-Tetrachlorobenzene		NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene		NA	NA	NA	NA	NA
1,2-Dichlorobenzene		NA	NA	NA	NA	NA
1,2-Diphenylhydrazine		NA	NA	NA	NA	NA
1,3,5-Trinitrobenzene		NA	NA	NA	NA	NA
1,3-Dichlorobenzene		NA	NA	NA	NA	NA
1,3-Dinitrobenzene		NA	NA	NA	NA	NA
1,4-Dichlorobenzene		NA	NA	NA	NA	NA
1,4-Naphthoquinone		NA	NA	NA	NA	NA
1-Naphthylamine		NA	NA	NA	NA	NA
2,3,4,6-Tetrachlorophenol		NA	NA	NA	NA	NA
2,4,5-Trichlorophenol		NA	NA	NA	NA	NA
2,4,6-Trichlorophenol		NA	NA	NA	NA	NA
2,4-Dichlorophenol		NA	NA	NA	NA	NA
2,4-Dimethylphenol		NA	NA	NA	NA	NA
2,4-Dinitrophenol		NA	NA	NA	NA	NA
2,4-Dinitrotoluene		NA	NA	NA	NA	NA
2,6-Dichlorophenol		NA	NA	NA	NA	NA
2,6-Dinitrotoluene		NA	NA	NA	NA	NA
2-Acetylamino fluorene		NA	NA	NA	NA	NA
2-Chloronaphthalene		NA	NA	NA	NA	NA
2-Chlorophenol		ND(0.0051) [ND(0.0051)]	NA	0.022	NA	NA
2-Methylnaphthalene		NA	NA	NA	NA	NA
2-Methylphenol		NA	NA	NA	NA	NA
2-Naphthylamine		NA	NA	NA	NA	NA
2-Nitroaniline		NA	NA	NA	NA	NA
2-Nitrophenol		NA	NA	NA	NA	NA
2-Picoline		NA	NA	NA	NA	NA
3&4-Methylphenol		NA	NA	NA	NA	NA
3,3'-Dichlorobenzidine		NA	NA	NA	NA	NA
3,3'-Dimethylbenzidine		NA	NA	NA	NA	NA
3-Methylcholanthrene		NA	NA	NA	NA	NA
3-Nitroaniline		NA	NA	NA	NA	NA
4,6-Dinitro-2-methylphenol		NA	NA	NA	NA	NA
4-Aminobiphenyl		NA	NA	NA	NA	NA
4-Bromophenyl-phenylether		NA	NA	NA	NA	NA
4-Chloro-3-Methylphenol		NA	NA	NA	NA	NA
4-Chloroaniline		NA	NA	NA	NA	NA
4-Chlorobenzilate		NA	NA	NA	NA	NA
4-Chlorophenol		ND(0.0051) [ND(0.0051)]	NA	0.062	NA	NA
4-Chlorophenyl-phenylether		NA	NA	NA	NA	NA
4-Nitroaniline		NA	NA	NA	NA	NA
4-Nitrophenol		NA	NA	NA	NA	NA
4-Nitroquinoline-1-oxide		NA	NA	NA	NA	NA
4-Phenylenediamine		NA	NA	NA	NA	NA
5-Nitro-o-toluidine		NA	NA	NA	NA	NA
7,12-Dimethylbenz(a)anthracene		NA	NA	NA	NA	NA
a,a'-Dimethylphenethylamine		NA	NA	NA	NA	NA
Acenaphthene		NA	NA	NA	NA	NA
Acenaphthylene		NA	NA	NA	NA	NA
Acetophenone		NA	NA	NA	NA	NA
Aniline		NA	NA	NA	NA	NA
Anthracene		NA	NA	NA	NA	NA

**Table E-1**  
**Spring 2008 Groundwater Analytical Results**

**Groundwater Quality and NAPL Monitoring Interim Report for Spring 2008**  
**Groundwater Management Area 3**  
**General Electric Company - Pittsfield, Massachusetts**  
**(Results are presented in parts per million, ppm)**

Parameter	Sample ID: Date Collected:	2A 05/01/08	6B-R 05/02/08	16A 05/01/08	16B-R 05/01/08	16C-R 05/01/08
<b>Semivolatile Organics (continued)</b>						
Aramite		NA	NA	NA	NA	NA
Benzidine		NA	NA	NA	NA	NA
Benzo(a)anthracene		NA	NA	NA	NA	NA
Benzo(a)pyrene		NA	NA	NA	NA	NA
Benzo(b)fluoranthene		NA	NA	NA	NA	NA
Benzo(g,h,i)perylene		NA	NA	NA	NA	NA
Benzo(k)fluoranthene		NA	NA	NA	NA	NA
Benzyl Alcohol		NA	NA	NA	NA	NA
bis(2-Chloroethoxy)methane		NA	NA	NA	NA	NA
bis(2-Chloroethyl)ether		NA	NA	NA	NA	NA
bis(2-Chloroisopropyl)ether		NA	NA	NA	NA	NA
bis(2-Ethylhexyl)phthalate		NA	NA	NA	NA	NA
Butylbenzylphthalate		NA	NA	NA	NA	NA
Chrysene		NA	NA	NA	NA	NA
Diallate		NA	NA	NA	NA	NA
Dibenzo(a,h)anthracene		NA	NA	NA	NA	NA
Dibenzofuran		NA	NA	NA	NA	NA
Diethylphthalate		NA	NA	NA	NA	NA
Dimethylphthalate		NA	NA	NA	NA	NA
Di-n-Butylphthalate		NA	NA	NA	NA	NA
Di-n-Octylphthalate		NA	NA	NA	NA	NA
Diphenylamine		NA	NA	NA	NA	NA
Ethyl Methanesulfonate		NA	NA	NA	NA	NA
Fluoranthene		NA	NA	NA	NA	NA
Fluorene		NA	NA	NA	NA	NA
Hexachlorobenzene		NA	NA	NA	NA	NA
Hexachlorobutadiene		NA	NA	NA	NA	NA
Hexachlorocyclopentadiene		NA	NA	NA	NA	NA
Hexachloroethane		NA	NA	NA	NA	NA
Hexachlorophene		NA	NA	NA	NA	NA
Hexachloropropene		NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene		NA	NA	NA	NA	NA
Isodrin		NA	NA	NA	NA	NA
Isophorone		NA	NA	NA	NA	NA
Isosafrole		NA	NA	NA	NA	NA
Methapyrilene		NA	NA	NA	NA	NA
Methyl Methanesulfonate		NA	NA	NA	NA	NA
Naphthalene		NA	NA	NA	NA	NA
Nitrobenzene		NA	NA	NA	NA	NA
N-Nitrosodiethylamine		NA	NA	NA	NA	NA
N-Nitrosodimethylamine		NA	NA	NA	NA	NA
N-Nitroso-di-n-butylamine		NA	NA	NA	NA	NA
N-Nitroso-di-n-propylamine		NA	NA	NA	NA	NA
N-Nitrosodiphenylamine		NA	NA	NA	NA	NA
N-Nitrosomethylethylamine		NA	NA	NA	NA	NA
N-Nitrosomorpholine		NA	NA	NA	NA	NA
N-Nitrosopiperidine		NA	NA	NA	NA	NA
N-Nitrosopyrrolidine		NA	NA	NA	NA	NA
o,o,o-Triethylphosphorothioate		NA	NA	NA	NA	NA
o-Toluidine		NA	NA	NA	NA	NA
p-Dimethylaminoazobenzene		NA	NA	NA	NA	NA
Pentachlorobenzene		NA	NA	NA	NA	NA
Pentachloroethane		NA	NA	NA	NA	NA
Pentachloronitrobenzene		NA	NA	NA	NA	NA
Pentachlorophenol		NA	NA	NA	NA	NA
Phenacetin		NA	NA	NA	NA	NA
Phenanthrene		NA	NA	NA	NA	NA
Phenol		NA	NA	NA	NA	NA
Pronamide		NA	NA	NA	NA	NA
Pyrene		NA	NA	NA	NA	NA
Pyridine		NA	NA	NA	NA	NA
Safrole		NA	NA	NA	NA	NA
Thionazin		NA	NA	NA	NA	NA

**Table E-1  
Spring 2008 Groundwater Analytical Results**

**Groundwater Quality and NAPL Monitoring Interim Report for Spring 2008  
Groundwater Management Area 3  
General Electric Company - Pittsfield, Massachusetts  
(Results are presented in parts per million, ppm)**

Parameter	Sample ID: Date Collected:	2A 05/01/08	6B-R 05/02/08	16A 05/01/08	16B-R 05/01/08	16C-R 05/01/08
<b>Natural Attenuation Parameters</b>						
Alkalinity		170 [170]	NA	450	530	120
Chloride		8.9 [8.6]	NA	1900	270	1.2
Dissolved Iron		ND(0.100) [ND(0.100)]	NA	1.23	0.0246 B	ND(0.100)
Dissolved Organic Carbon		2.09 [2.17]	NA	32.9	6.44	0.856
Ethane		ND(0.020) [ND(0.020)]	NA	ND(0.10)	ND(0.10)	ND(0.020)
Ethene		ND(0.020) [ND(0.020)]	NA	0.37	ND(0.10)	ND(0.020)
Methane		ND(0.00720) [ND(0.00720)]	NA	1.91	1.52	ND(0.00720)
Nitrate Nitrogen		ND(0.300) [ND(0.300)]	NA	ND(0.300)	ND(0.300)	0.190 B
Nitrite Nitrogen		ND(0.300) [ND(0.300)]	NA	ND(3.00)	ND(3.00)	ND(0.300)
Sulfate (turbidimetric)		22.2 [21.9]	NA	0.951	15.7	6.38

**Table E-1**  
**Spring 2008 Groundwater Analytical Results**

**Groundwater Quality and NAPL Monitoring Interim Report for Spring 2008**  
**Groundwater Management Area 3**  
**General Electric Company - Pittsfield, Massachusetts**  
**(Results are presented in parts per million, ppm)**

Parameter	Sample ID: Date Collected:	39B-R 04/30/08	39D-R 04/30/08	39E 05/06/08	43A 04/30/08	43B 04/30/08
<b>Volatile Organics</b>						
1,1,1,2-Tetrachloroethane		ND(0.40)	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010) [ND(0.0010)]
1,1,1-Trichloroethane		ND(0.40)	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010) [ND(0.0010)]
1,1,2,2-Tetrachloroethane		ND(0.40)	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010) [ND(0.0010)]
1,1,2-Trichloroethane		ND(0.40)	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010) [ND(0.0010)]
1,1-Dichloroethane		ND(0.40)	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010) [ND(0.0010)]
1,1-Dichloroethene		ND(0.40)	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010) [ND(0.0010)]
1,2,3-Trichloropropane		ND(0.40)	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010) [ND(0.0010)]
1,2-Dibromo-3-chloropropane		ND(2.0)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050) [ND(0.0050)]
1,2-Dibromoethane		ND(0.40)	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010) [ND(0.0010)]
1,2-Dichloroethane		ND(0.40)	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010) [ND(0.0010)]
1,2-Dichloropropane		ND(0.40)	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010) [ND(0.0010)]
1,4-Dioxane		ND(40)	ND(0.10)	ND(0.10)	0.18	0.041 J [ND(0.10)]
2-Butanone		ND(2.0)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050) [ND(0.0050)]
2-Chloro-1,3-butadiene		ND(0.40)	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010) [ND(0.0010)]
2-Chloroethylvinylether		ND(5.0)	ND(0.013)	ND(0.013)	ND(0.013)	ND(0.013) [ND(0.013)]
2-Hexanone		ND(2.0)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050) [ND(0.0050)]
3-Chloropropene		ND(0.40)	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010) [ND(0.0010)]
4-Methyl-2-pentanone		ND(2.0)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050) [ND(0.0050)]
Acetone		ND(2.0)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050) [ND(0.0050)]
Acetonitrile		ND(8.0)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020) [ND(0.020)]
Acrolein		ND(10)	ND(0.025)	ND(0.025)	ND(0.025)	ND(0.025) [ND(0.025)]
Acrylonitrile		ND(10)	ND(0.025)	ND(0.025)	ND(0.025)	ND(0.025) [ND(0.025)]
Benzene		0.67	0.00033 J	ND(0.0010)	ND(0.0010)	ND(0.0010) [ND(0.0010)]
Bromodichloromethane		ND(0.40)	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010) [ND(0.0010)]
Bromoform		ND(0.40)	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010) [ND(0.0010)]
Bromomethane		ND(0.40)	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010) [ND(0.0010)]
Carbon Disulfide		ND(0.40)	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010) [ND(0.0010)]
Carbon Tetrachloride		ND(0.40)	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010) [ND(0.0010)]
Chlorobenzene		16	0.040	0.00024 J	ND(0.0010)	ND(0.0010) [ND(0.0010)]
Chloroethane		ND(0.40)	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010) [ND(0.0010)]
Chloroform		ND(0.40)	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010) [ND(0.0010)]
Chloromethane		ND(0.40)	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010) [ND(0.0010)]
cis-1,3-Dichloropropene		ND(0.40)	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010) [ND(0.0010)]
Dibromochloromethane		ND(0.40)	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010) [ND(0.0010)]
Dibromomethane		ND(0.40)	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010) [ND(0.0010)]
Dichlorodifluoromethane		ND(0.40)	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010) [ND(0.0010)]
Ethyl Methacrylate		ND(0.40)	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010) [ND(0.0010)]
Ethylbenzene		ND(0.40)	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010) [ND(0.0010)]
Iodomethane		ND(0.40)	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010) [ND(0.0010)]
Isobutanol		ND(20)	ND(0.050)	ND(0.050)	ND(0.050)	ND(0.050) [ND(0.050)]
Methacrylonitrile		ND(4.0)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010) [ND(0.010)]
Methyl Methacrylate		ND(0.40)	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010) [ND(0.0010)]
Methylene Chloride		ND(2.0)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050) [ND(0.0050)]
Propionitrile		ND(8.0)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020) [ND(0.020)]
Styrene		ND(0.40)	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010) [ND(0.0010)]
Tetrachloroethene		ND(0.40)	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010) [ND(0.0010)]
Toluene		0.21 J	0.00015 J	0.00025 J	ND(0.0010)	ND(0.0010) [0.00019 J]
trans-1,2-Dichloroethene		ND(0.40)	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010) [ND(0.0010)]
trans-1,3-Dichloropropene		ND(0.40)	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010) [ND(0.0010)]
trans-1,4-Dichloro-2-butene		ND(2.0)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050) [ND(0.0050)]
Trichloroethene		0.20 J	0.00017 J	ND(0.0010)	ND(0.0010)	ND(0.0010) [ND(0.0010)]
Trichlorofluoromethane		ND(0.40)	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010) [ND(0.0010)]
Vinyl Acetate		ND(1.0)	ND(0.0025)	ND(0.0025)	ND(0.0025)	ND(0.0025) [ND(0.0025)]
Vinyl Chloride		ND(0.40)	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010) [ND(0.0010)]
Xylenes (total)		ND(0.40)	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010) [ND(0.0010)]
Total VOCs		17	0.041	0.00049 J	0.18	0.041 J [0.00019 J]

**Table E-1  
Spring 2008 Groundwater Analytical Results**

**Groundwater Quality and NAPL Monitoring Interim Report for Spring 2008  
Groundwater Management Area 3  
General Electric Company - Pittsfield, Massachusetts  
(Results are presented in parts per million, ppm)**

Parameter	Sample ID: Date Collected:	39B-R 04/30/08	39D-R 04/30/08	39E 05/06/08	43A 04/30/08	43B 04/30/08
<b>PCBs-Filtered</b>						
Aroclor-1016		NA	NA	NA	NA	NA
Aroclor-1221		NA	NA	NA	NA	NA
Aroclor-1232		NA	NA	NA	NA	NA
Aroclor-1242		NA	NA	NA	NA	NA
Aroclor-1248		NA	NA	NA	NA	NA
Aroclor-1254		NA	NA	NA	NA	NA
Aroclor-1260		NA	NA	NA	NA	NA
Total PCBs		NA	NA	NA	NA	NA
<b>Semivolatile Organics</b>						
1,2,4,5-Tetrachlorobenzene		ND(0.053)	NA	NA	NA	NA
1,2,4-Trichlorobenzene		ND(0.053)	NA	NA	NA	NA
1,2-Dichlorobenzene		0.12	NA	NA	NA	NA
1,2-Diphenylhydrazine		ND(0.053)	NA	NA	NA	NA
1,3,5-Trinitrobenzene		ND(0.26)	NA	NA	NA	NA
1,3-Dichlorobenzene		0.0090 J	NA	NA	NA	NA
1,3-Dinitrobenzene		ND(0.053)	NA	NA	NA	NA
1,4-Dichlorobenzene		0.25	NA	NA	NA	NA
1,4-Naphthoquinone		ND(0.053)	NA	NA	NA	NA
1-Naphthylamine		ND(0.26)	NA	NA	NA	NA
2,3,4,6-Tetrachlorophenol		ND(0.053)	NA	NA	NA	NA
2,4,5-Trichlorophenol		ND(0.053)	NA	NA	NA	NA
2,4,6-Trichlorophenol		ND(0.053)	NA	NA	NA	NA
2,4-Dichlorophenol		ND(0.053)	NA	NA	NA	NA
2,4-Dimethylphenol		ND(0.053)	NA	NA	NA	NA
2,4-Dinitrophenol		ND(0.26)	NA	NA	NA	NA
2,4-Dinitrotoluene		ND(0.053)	NA	NA	NA	NA
2,6-Dichlorophenol		ND(0.053)	NA	NA	NA	NA
2,6-Dinitrotoluene		ND(0.053)	NA	NA	NA	NA
2-Acetylaminofluorene		ND(0.11)	NA	NA	NA	NA
2-Chloronaphthalene		ND(0.053)	NA	NA	NA	NA
2-Chlorophenol		ND(0.053)	NA	NA	NA	NA
2-Methylnaphthalene		ND(0.053)	NA	NA	NA	NA
2-Methylphenol		ND(0.053)	NA	NA	NA	NA
2-Naphthylamine		ND(0.26)	NA	NA	NA	NA
2-Nitroaniline		ND(0.053)	NA	NA	NA	NA
2-Nitrophenol		ND(0.053)	NA	NA	NA	NA
2-Picoline		ND(0.053)	NA	NA	NA	NA
3&4-Methylphenol		ND(0.053)	NA	NA	NA	NA
3,3'-Dichlorobenzidine		ND(0.11)	NA	NA	NA	NA
3,3'-Dimethylbenzidine		ND(0.26)	NA	NA	NA	NA
3-Methylcholanthrene		ND(0.053)	NA	NA	NA	NA
3-Nitroaniline		ND(0.26)	NA	NA	NA	NA
4,6-Dinitro-2-methylphenol		ND(0.26)	NA	NA	NA	NA
4-Aminobiphenyl		ND(0.053)	NA	NA	NA	NA
4-Bromophenyl-phenylether		ND(0.053)	NA	NA	NA	NA
4-Chloro-3-Methylphenol		ND(0.053)	NA	NA	NA	NA
4-Chloroaniline		ND(0.26)	NA	NA	NA	NA
4-Chlorobenzilate		ND(0.053)	NA	NA	NA	NA
4-Chlorophenol		NA	NA	NA	NA	NA
4-Chlorophenyl-phenylether		ND(0.053)	NA	NA	NA	NA
4-Nitroaniline		ND(0.26)	NA	NA	NA	NA
4-Nitrophenol		ND(0.26)	NA	NA	NA	NA
4-Nitroquinoline-1-oxide		ND(0.26)	NA	NA	NA	NA
4-Phenylenediamine		ND(0.11)	NA	NA	NA	NA
5-Nitro-o-toluidine		ND(0.053)	NA	NA	NA	NA
7,12-Dimethylbenz(a)anthracene		ND(0.053)	NA	NA	NA	NA
a,a'-Dimethylphenethylamine		ND(0.26)	NA	NA	NA	NA
Acenaphthene		ND(0.053)	NA	NA	NA	NA
Acenaphthylene		ND(0.053)	NA	NA	NA	NA
Acetophenone		ND(0.053)	NA	NA	NA	NA
Aniline		ND(0.053)	NA	NA	NA	NA
Anthracene		ND(0.053)	NA	NA	NA	NA



**Table E-1**  
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**Groundwater Management Area 3**  
**General Electric Company - Pittsfield, Massachusetts**  
**(Results are presented in parts per million, ppm)**

Parameter	Sample ID: Date Collected:	39B-R 04/30/08	39D-R 04/30/08	39E 05/06/08	43A 04/30/08	43B 04/30/08
<b>Semivolatile Organics (continued)</b>						
Aramite		ND(0.053)	NA	NA	NA	NA
Benzidine		ND(0.11)	NA	NA	NA	NA
Benzo(a)anthracene		ND(0.053)	NA	NA	NA	NA
Benzo(a)pyrene		ND(0.053)	NA	NA	NA	NA
Benzo(b)fluoranthene		ND(0.053)	NA	NA	NA	NA
Benzo(g,h,i)perylene		ND(0.053)	NA	NA	NA	NA
Benzo(k)fluoranthene		ND(0.053)	NA	NA	NA	NA
Benzyl Alcohol		ND(0.11)	NA	NA	NA	NA
bis(2-Chloroethoxy)methane		ND(0.053)	NA	NA	NA	NA
bis(2-Chloroethyl)ether		ND(0.053)	NA	NA	NA	NA
bis(2-Chloroisopropyl)ether		ND(0.053)	NA	NA	NA	NA
bis(2-Ethylhexyl)phthalate		ND(0.053)	NA	NA	NA	NA
Butylbenzylphthalate		ND(0.053)	NA	NA	NA	NA
Chrysene		ND(0.053)	NA	NA	NA	NA
Diallate		ND(0.053)	NA	NA	NA	NA
Dibenzo(a,h)anthracene		ND(0.053)	NA	NA	NA	NA
Dibenzofuran		ND(0.053)	NA	NA	NA	NA
Diethylphthalate		ND(0.053)	NA	NA	NA	NA
Dimethylphthalate		ND(0.053)	NA	NA	NA	NA
Di-n-Butylphthalate		ND(0.053)	NA	NA	NA	NA
Di-n-Octylphthalate		ND(0.053)	NA	NA	NA	NA
Diphenylamine		ND(0.053)	NA	NA	NA	NA
Ethyl Methanesulfonate		ND(0.053)	NA	NA	NA	NA
Fluoranthene		ND(0.053)	NA	NA	NA	NA
Fluorene		ND(0.053)	NA	NA	NA	NA
Hexachlorobenzene		ND(0.053)	NA	NA	NA	NA
Hexachlorobutadiene		ND(0.053)	NA	NA	NA	NA
Hexachlorocyclopentadiene		ND(0.11)	NA	NA	NA	NA
Hexachloroethane		ND(0.053)	NA	NA	NA	NA
Hexachlorophene		ND(0.053)	NA	NA	NA	NA
Hexachloropropene		ND(0.11)	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene		ND(0.053)	NA	NA	NA	NA
Isodrin		ND(0.053)	NA	NA	NA	NA
Isophorone		ND(0.053)	NA	NA	NA	NA
Isosafrole		ND(0.053)	NA	NA	NA	NA
Methapyrilene		ND(0.053)	NA	NA	NA	NA
Methyl Methanesulfonate		ND(0.053)	NA	NA	NA	NA
Naphthalene		0.091	NA	NA	NA	NA
Nitrobenzene		ND(0.053)	NA	NA	NA	NA
N-Nitrosodiethylamine		ND(0.053)	NA	NA	NA	NA
N-Nitrosodimethylamine		ND(0.053)	NA	NA	NA	NA
N-Nitroso-di-n-butylamine		ND(0.053)	NA	NA	NA	NA
N-Nitroso-di-n-propylamine		ND(0.053)	NA	NA	NA	NA
N-Nitrosodiphenylamine		ND(0.053)	NA	NA	NA	NA
N-Nitrosomethylethylamine		ND(0.053)	NA	NA	NA	NA
N-Nitrosomorpholine		ND(0.053)	NA	NA	NA	NA
N-Nitrosopiperidine		ND(0.053)	NA	NA	NA	NA
N-Nitrosopyrrolidine		ND(0.053)	NA	NA	NA	NA
o,o,o-Triethylphosphorothioate		ND(0.053)	NA	NA	NA	NA
o-Toluidine		ND(0.053)	NA	NA	NA	NA
p-Dimethylaminoazobenzene		ND(0.053)	NA	NA	NA	NA
Pentachlorobenzene		ND(0.053)	NA	NA	NA	NA
Pentachloroethane		ND(0.053)	NA	NA	NA	NA
Pentachloronitrobenzene		ND(0.053)	NA	NA	NA	NA
Pentachlorophenol		ND(0.26)	NA	NA	NA	NA
Phenacetin		ND(0.053)	NA	NA	NA	NA
Phenanthrene		ND(0.053)	NA	NA	NA	NA
Phenol		0.038 J	NA	NA	NA	NA
Pronamide		ND(0.053)	NA	NA	NA	NA
Pyrene		ND(0.053)	NA	NA	NA	NA
Pyridine		ND(0.053)	NA	NA	NA	NA
Safrole		ND(0.053)	NA	NA	NA	NA
Thionazin		ND(0.11)	NA	NA	NA	NA

**Table E-1  
Spring 2008 Groundwater Analytical Results**

**Groundwater Quality and NAPL Monitoring Interim Report for Spring 2008  
Groundwater Management Area 3  
General Electric Company - Pittsfield, Massachusetts  
(Results are presented in parts per million, ppm)**

Parameter	Sample ID: Date Collected:	39B-R 04/30/08	39D-R 04/30/08	39E 05/06/08	43A 04/30/08	43B 04/30/08
<b>Natural Attenuation Parameters</b>						
Alkalinity		310	130	87.0	520	580 [580]
Chloride		110	5.5	25	22	53 [50]
Dissolved Iron		ND(0.100)	0.0401 B	1.21	ND(0.100)	0.0246 B [0.0199 B]
Dissolved Organic Carbon		6.24	0.844 B	4.35	2.03	2.77 [2.74]
Ethane		ND(0.020)	ND(0.020)	ND(0.10)	ND(0.020)	ND(0.10) [ND(0.10)]
Ethene		ND(0.020)	ND(0.020)	ND(0.10)	ND(0.020)	ND(0.10) [ND(0.10)]
Methane		0.182	ND(0.00720)	1.16	0.0180	1.51 [1.66]
Nitrate Nitrogen		0.507	ND(0.300)	ND(0.300)	ND(0.300)	ND(0.300) [ND(0.300)]
Nitrite Nitrogen		ND(0.300)	ND(0.300)	ND(0.300)	ND(0.300)	ND(0.300) [ND(0.300)]
Sulfate (turbidimetric)		5.61	20.4	ND(0.300)	103	ND(0.300) [ND(0.300)]

**Table E-1  
Spring 2008 Groundwater Analytical Results**

**Groundwater Quality and NAPL Monitoring Interim Report for Spring 2008  
Groundwater Management Area 3  
General Electric Company - Pittsfield, Massachusetts  
(Results are presented in parts per million, ppm)**

Parameter	Sample ID: Date Collected:	51-14 05/02/08	82B-R 05/02/08	89A 05/05/08	89B 05/05/08	89D-R 05/05/08
<b>Volatile Organics</b>						
1,1,1,2-Tetrachloroethane		ND(0.0010)	NA	ND(1.0)	ND(0.0020)	ND(1.6)
1,1,1-Trichloroethane		ND(0.0010)	NA	ND(1.0)	ND(0.0020)	ND(1.6)
1,1,2,2-Tetrachloroethane		ND(0.0010)	NA	ND(1.0)	ND(0.0020)	ND(1.6)
1,1,2-Trichloroethane		ND(0.0010)	NA	ND(1.0)	ND(0.0020)	ND(1.6)
1,1-Dichloroethane		ND(0.0010)	NA	ND(1.0)	ND(0.0020)	ND(1.6)
1,1-Dichloroethene		ND(0.0010)	NA	ND(1.0)	ND(0.0020)	ND(1.6)
1,2,3-Trichloropropane		ND(0.0010)	NA	ND(1.0)	ND(0.0020)	ND(1.6)
1,2-Dibromo-3-chloropropane		ND(0.0050)	NA	ND(5.0)	ND(0.010)	ND(8.0)
1,2-Dibromoethane		ND(0.0010)	NA	ND(1.0)	ND(0.0020)	ND(1.6)
1,2-Dichloroethane		ND(0.0010)	NA	ND(1.0)	ND(0.0020)	ND(1.6)
1,2-Dichloropropane		ND(0.0010)	NA	ND(1.0)	ND(0.0020)	ND(1.6)
1,4-Dioxane		ND(0.10)	NA	ND(100)	ND(0.20)	ND(160)
2-Butanone		ND(0.0050)	NA	ND(5.0)	ND(0.010)	ND(8.0)
2-Chloro-1,3-butadiene		ND(0.0010)	NA	ND(1.0)	ND(0.0020)	ND(1.6)
2-Chloroethylvinylether		ND(0.013)	NA	ND(13)	ND(0.025)	ND(20)
2-Hexanone		ND(0.0050)	NA	ND(5.0)	ND(0.010)	ND(8.0)
3-Chloropropene		ND(0.0010)	NA	ND(1.0)	ND(0.0020)	ND(1.6)
4-Methyl-2-pentanone		ND(0.0050)	NA	ND(5.0)	ND(0.010)	ND(8.0)
Acetone		ND(0.0050)	NA	ND(5.0)	ND(0.010)	ND(8.0)
Acetonitrile		ND(0.020)	NA	ND(20)	ND(0.040)	ND(32)
Acrolein		ND(0.025)	NA	ND(25)	ND(0.050)	ND(40)
Acrylonitrile		ND(0.025)	NA	ND(25)	ND(0.050)	ND(40)
Benzene		ND(0.0010)	NA	7.1	0.0067	8.1
Bromodichloromethane		ND(0.0010)	NA	ND(1.0)	ND(0.0020)	ND(1.6)
Bromoform		ND(0.0010)	NA	ND(1.0)	ND(0.0020)	ND(1.6)
Bromomethane		ND(0.0010)	NA	ND(1.0)	ND(0.0020)	ND(1.6)
Carbon Disulfide		ND(0.0010)	NA	ND(1.0)	ND(0.0020)	ND(1.6)
Carbon Tetrachloride		0.0013	NA	ND(1.0)	ND(0.0020)	ND(1.6)
Chlorobenzene		ND(0.0010)	NA	26	0.048	32
Chloroethane		ND(0.0010)	NA	ND(1.0)	ND(0.0020)	ND(1.6)
Chloroform		0.0039	NA	ND(1.0)	ND(0.0020)	ND(1.6)
Chloromethane		ND(0.0010)	NA	ND(1.0)	ND(0.0020)	ND(1.6)
cis-1,3-Dichloropropene		ND(0.0010)	NA	ND(1.0)	ND(0.0020)	ND(1.6)
Dibromochloromethane		ND(0.0010)	NA	ND(1.0)	ND(0.0020)	ND(1.6)
Dibromomethane		ND(0.0010)	NA	ND(1.0)	ND(0.0020)	ND(1.6)
Dichlorodifluoromethane		ND(0.0010)	NA	ND(1.0)	ND(0.0020)	ND(1.6)
Ethyl Methacrylate		ND(0.0010)	NA	ND(1.0)	ND(0.0020)	ND(1.6)
Ethylbenzene		ND(0.0010)	NA	ND(1.0)	ND(0.0020)	ND(1.6)
Iodomethane		ND(0.0010)	NA	ND(1.0)	ND(0.0020)	ND(1.6)
Isobutanol		ND(0.0050)	NA	ND(50)	ND(0.10)	ND(80)
Methacrylonitrile		ND(0.010)	NA	ND(10)	ND(0.020)	ND(16)
Methyl Methacrylate		ND(0.0010)	NA	ND(1.0)	ND(0.0020)	ND(1.6)
Methylene Chloride		ND(0.0050)	NA	ND(5.0)	ND(0.010)	ND(8.0)
Propionitrile		ND(0.020)	NA	ND(20)	ND(0.040)	ND(32)
Styrene		ND(0.0010)	NA	ND(1.0)	ND(0.0020)	ND(1.6)
Tetrachloroethene		ND(0.0010)	NA	ND(1.0)	ND(0.0020)	ND(1.6)
Toluene		ND(0.0010)	NA	ND(1.0)	ND(0.0020)	ND(1.6)
trans-1,2-Dichloroethene		ND(0.0010)	NA	ND(1.0)	ND(0.0020)	ND(1.6)
trans-1,3-Dichloropropene		ND(0.0010)	NA	ND(1.0)	ND(0.0020)	ND(1.6)
trans-1,4-Dichloro-2-butene		ND(0.0050)	NA	ND(5.0)	ND(0.010)	ND(8.0)
Trichloroethene		ND(0.0010)	NA	ND(1.0)	ND(0.0020)	ND(1.6)
Trichlorofluoromethane		ND(0.0010)	NA	ND(1.0)	ND(0.0020)	ND(1.6)
Vinyl Acetate		ND(0.0025)	NA	ND(2.5)	ND(0.0050)	ND(4.0)
Vinyl Chloride		ND(0.0010)	NA	ND(1.0)	ND(0.0020)	ND(1.6)
Xylenes (total)		ND(0.0010)	NA	ND(1.0)	ND(0.0020)	ND(1.6)
Total VOCs		0.0052	NA	33	0.055	40

**Table E-1  
Spring 2008 Groundwater Analytical Results**

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General Electric Company - Pittsfield, Massachusetts  
(Results are presented in parts per million, ppm)**

Parameter	Sample ID: Date Collected:	51-14 05/02/08	82B-R 05/02/08	89A 05/05/08	89B 05/05/08	89D-R 05/05/08
<b>PCBs-Filtered</b>						
Aroclor-1016		NA	ND(0.000068) [ND(0.000081)]	NA	NA	NA
Aroclor-1221		NA	ND(0.000068) [ND(0.000081)]	NA	NA	NA
Aroclor-1232		NA	ND(0.000068) [ND(0.000081)]	NA	NA	NA
Aroclor-1242		NA	ND(0.000068) [ND(0.000081)]	NA	NA	NA
Aroclor-1248		NA	ND(0.000068) [ND(0.000081)]	NA	NA	NA
Aroclor-1254		NA	ND(0.000068) [ND(0.000081)]	NA	NA	NA
Aroclor-1260		NA	ND(0.000068) [ND(0.000081)]	NA	NA	NA
Total PCBs		NA	ND(0.000068) [ND(0.000081)]	NA	NA	NA
<b>Semivolatile Organics</b>						
1,2,4,5-Tetrachlorobenzene		NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene		NA	NA	NA	NA	NA
1,2-Dichlorobenzene		NA	NA	NA	NA	NA
1,2-Diphenylhydrazine		NA	NA	NA	NA	NA
1,3,5-Trinitrobenzene		NA	NA	NA	NA	NA
1,3-Dichlorobenzene		NA	NA	NA	NA	NA
1,3-Dinitrobenzene		NA	NA	NA	NA	NA
1,4-Dichlorobenzene		NA	NA	NA	NA	NA
1,4-Naphthoquinone		NA	NA	NA	NA	NA
1-Naphthylamine		NA	NA	NA	NA	NA
2,3,4,6-Tetrachlorophenol		NA	NA	NA	NA	NA
2,4,5-Trichlorophenol		NA	NA	NA	NA	NA
2,4,6-Trichlorophenol		NA	NA	NA	NA	NA
2,4-Dichlorophenol		NA	NA	NA	NA	NA
2,4-Dimethylphenol		NA	NA	NA	NA	NA
2,4-Dinitrophenol		NA	NA	NA	NA	NA
2,4-Dinitrotoluene		NA	NA	NA	NA	NA
2,6-Dichlorophenol		NA	NA	NA	NA	NA
2,6-Dinitrotoluene		NA	NA	NA	NA	NA
2-Acetylaminofluorene		NA	NA	NA	NA	NA
2-Chloronaphthalene		NA	NA	NA	NA	NA
2-Chlorophenol		NA	NA	ND(0.0052)	ND(0.0051)	NA
2-Methylnaphthalene		NA	NA	NA	NA	NA
2-Methylphenol		NA	NA	NA	NA	NA
2-Naphthylamine		NA	NA	NA	NA	NA
2-Nitroaniline		NA	NA	NA	NA	NA
2-Nitrophenol		NA	NA	NA	NA	NA
2-Picoline		NA	NA	NA	NA	NA
3&4-Methylphenol		NA	NA	NA	NA	NA
3,3'-Dichlorobenzidine		NA	NA	NA	NA	NA
3,3'-Dimethylbenzidine		NA	NA	NA	NA	NA
3-Methylcholanthrene		NA	NA	NA	NA	NA
3-Nitroaniline		NA	NA	NA	NA	NA
4,6-Dinitro-2-methylphenol		NA	NA	NA	NA	NA
4-Aminobiphenyl		NA	NA	NA	NA	NA
4-Bromophenyl-phenylether		NA	NA	NA	NA	NA
4-Chloro-3-Methylphenol		NA	NA	NA	NA	NA
4-Chloroaniline		NA	NA	NA	NA	NA
4-Chlorobenzilate		NA	NA	NA	NA	NA
4-Chlorophenol		NA	NA	ND(0.0052)	ND(0.0051)	NA
4-Chlorophenyl-phenylether		NA	NA	NA	NA	NA
4-Nitroaniline		NA	NA	NA	NA	NA
4-Nitrophenol		NA	NA	NA	NA	NA
4-Nitroquinoline-1-oxide		NA	NA	NA	NA	NA
4-Phenylenediamine		NA	NA	NA	NA	NA
5-Nitro-o-toluidine		NA	NA	NA	NA	NA
7,12-Dimethylbenz(a)anthracene		NA	NA	NA	NA	NA
a,a'-Dimethylphenethylamine		NA	NA	NA	NA	NA
Acenaphthene		NA	NA	NA	NA	NA
Acenaphthylene		NA	NA	NA	NA	NA
Acetophenone		NA	NA	NA	NA	NA
Aniline		NA	NA	NA	NA	NA
Anthracene		NA	NA	NA	NA	NA

**Table E-1  
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Parameter	Sample ID: Date Collected:	51-14 05/02/08	82B-R 05/02/08	89A 05/05/08	89B 05/05/08	89D-R 05/05/08
<b>Semivolatile Organics (continued)</b>						
Aramite		NA	NA	NA	NA	NA
Benzidine		NA	NA	NA	NA	NA
Benzo(a)anthracene		NA	NA	NA	NA	NA
Benzo(a)pyrene		NA	NA	NA	NA	NA
Benzo(b)fluoranthene		NA	NA	NA	NA	NA
Benzo(g,h,i)perylene		NA	NA	NA	NA	NA
Benzo(k)fluoranthene		NA	NA	NA	NA	NA
Benzyl Alcohol		NA	NA	NA	NA	NA
bis(2-Chloroethoxy)methane		NA	NA	NA	NA	NA
bis(2-Chloroethyl)ether		NA	NA	NA	NA	NA
bis(2-Chloroisopropyl)ether		NA	NA	NA	NA	NA
bis(2-Ethylhexyl)phthalate		NA	NA	NA	NA	NA
Butylbenzylphthalate		NA	NA	NA	NA	NA
Chrysene		NA	NA	NA	NA	NA
Diallate		NA	NA	NA	NA	NA
Dibenzo(a,h)anthracene		NA	NA	NA	NA	NA
Dibenzofuran		NA	NA	NA	NA	NA
Diethylphthalate		NA	NA	NA	NA	NA
Dimethylphthalate		NA	NA	NA	NA	NA
Di-n-Butylphthalate		NA	NA	NA	NA	NA
Di-n-Octylphthalate		NA	NA	NA	NA	NA
Diphenylamine		NA	NA	NA	NA	NA
Ethyl Methanesulfonate		NA	NA	NA	NA	NA
Fluoranthene		NA	NA	NA	NA	NA
Fluorene		NA	NA	NA	NA	NA
Hexachlorobenzene		NA	NA	NA	NA	NA
Hexachlorobutadiene		NA	NA	NA	NA	NA
Hexachlorocyclopentadiene		NA	NA	NA	NA	NA
Hexachloroethane		NA	NA	NA	NA	NA
Hexachlorophene		NA	NA	NA	NA	NA
Hexachloropropene		NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene		NA	NA	NA	NA	NA
Isodrin		NA	NA	NA	NA	NA
Isophorone		NA	NA	NA	NA	NA
Isosafrole		NA	NA	NA	NA	NA
Methapyrilene		NA	NA	NA	NA	NA
Methyl Methanesulfonate		NA	NA	NA	NA	NA
Naphthalene		NA	NA	NA	NA	NA
Nitrobenzene		NA	NA	NA	NA	NA
N-Nitrosodiethylamine		NA	NA	NA	NA	NA
N-Nitrosodimethylamine		NA	NA	NA	NA	NA
N-Nitroso-di-n-butylamine		NA	NA	NA	NA	NA
N-Nitroso-di-n-propylamine		NA	NA	NA	NA	NA
N-Nitrosodiphenylamine		NA	NA	NA	NA	NA
N-Nitrosomethylethylamine		NA	NA	NA	NA	NA
N-Nitrosomorpholine		NA	NA	NA	NA	NA
N-Nitrosopiperidine		NA	NA	NA	NA	NA
N-Nitrosopyrrolidine		NA	NA	NA	NA	NA
o,o,o-Triethylphosphorothioate		NA	NA	NA	NA	NA
o-Toluidine		NA	NA	NA	NA	NA
p-Dimethylaminoazobenzene		NA	NA	NA	NA	NA
Pentachlorobenzene		NA	NA	NA	NA	NA
Pentachloroethane		NA	NA	NA	NA	NA
Pentachloronitrobenzene		NA	NA	NA	NA	NA
Pentachlorophenol		NA	NA	NA	NA	NA
Phenacetin		NA	NA	NA	NA	NA
Phenanthrene		NA	NA	NA	NA	NA
Phenol		NA	NA	NA	NA	NA
Pronamide		NA	NA	NA	NA	NA
Pyrene		NA	NA	NA	NA	NA
Pyridine		NA	NA	NA	NA	NA
Safrole		NA	NA	NA	NA	NA
Thionazin		NA	NA	NA	NA	NA

**Table E-1  
Spring 2008 Groundwater Analytical Results**

**Groundwater Quality and NAPL Monitoring Interim Report for Spring 2008  
Groundwater Management Area 3  
General Electric Company - Pittsfield, Massachusetts  
(Results are presented in parts per million, ppm)**

Parameter	Sample ID: Date Collected:	51-14 05/02/08	82B-R 05/02/08	89A 05/05/08	89B 05/05/08	89D-R 05/05/08
<b>Natural Attenuation Parameters</b>						
Alkalinity		NA	NA	330	160	320
Chloride		NA	NA	380	180	590
Dissolved Iron		NA	NA	ND(0.100)	0.902	0.141
Dissolved Organic Carbon		NA	NA	7.00	5.28	8.52
Ethane		NA	NA	ND(0.20)	ND(0.020)	ND(0.10)
Ethene		NA	NA	ND(0.20)	ND(0.020)	0.76
Methane		NA	NA	4.36	0.338	1.62
Nitrate Nitrogen		NA	NA	ND(0.300)	ND(0.300)	ND(0.300)
Nitrite Nitrogen		NA	NA	ND(3.00)	ND(0.300)	ND(3.00)
Sulfate (turbidimetric)		NA	NA	ND(0.300)	0.582	2.68

**Table E-1**  
**Spring 2008 Groundwater Analytical Results**

**Groundwater Quality and NAPL Monitoring Interim Report for Spring 2008**  
**Groundwater Management Area 3**  
**General Electric Company - Pittsfield, Massachusetts**  
**(Results are presented in parts per million, ppm)**

Parameter	Sample ID: Date Collected:	90A 05/14/08	90B 05/14/08	95A 05/14/08	95B-R 05/08/08	111A-R 05/06/08	111B-R 05/14/08
<b>Volatiles Organics</b>							
1,1,1,2-Tetrachloroethane		ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.40)	ND(0.0010)	ND(0.0010)
1,1,1-Trichloroethane		ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.40)	ND(0.0010)	ND(0.0010)
1,1,2,2-Tetrachloroethane		ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.40)	ND(0.0010)	ND(0.0010)
1,1,2-Trichloroethane		ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.40)	ND(0.0010)	ND(0.0010)
1,1-Dichloroethane		ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.40)	ND(0.0010)	ND(0.0010)
1,1-Dichloroethene		ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.40)	ND(0.0010)	ND(0.0010)
1,2,3-Trichloropropane		ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.40)	ND(0.0010)	ND(0.0010)
1,2-Dibromo-3-chloropropane		ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(2.0)	ND(0.0050)	ND(0.0050)
1,2-Dibromoethane		ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.40)	ND(0.0010)	ND(0.0010)
1,2-Dichloroethane		ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.40)	ND(0.0010)	ND(0.0010)
1,2-Dichloropropane		ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.40)	ND(0.0010)	ND(0.0010)
1,4-Dioxane		ND(0.10)	ND(0.10)	ND(0.10)	ND(40)	ND(0.10)	ND(0.10)
2-Butanone		ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(2.0)	ND(0.0050)	ND(0.0050)
2-Chloro-1,3-butadiene		ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.40)	ND(0.0010)	ND(0.0010)
2-Chloroethylvinylether		ND(0.013)	ND(0.013)	ND(0.013)	ND(5.0)	ND(0.013)	ND(0.013)
2-Hexanone		ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(2.0)	ND(0.0050)	ND(0.0050)
3-Chloropropene		ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.40)	ND(0.0010)	ND(0.0010)
4-Methyl-2-pentanone		ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(2.0)	ND(0.0050)	ND(0.0050)
Acetone		ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(2.0)	ND(0.0050)	ND(0.0050)
Acetonitrile		ND(0.020)	ND(0.020)	ND(0.020)	ND(8.0)	ND(0.020)	ND(0.020)
Acrolein		ND(0.025)	ND(0.025)	ND(0.025)	ND(10)	ND(0.025)	ND(0.025)
Acrylonitrile		ND(0.025)	ND(0.025)	ND(0.025)	ND(10)	ND(0.025)	ND(0.025)
Benzene		ND(0.0010)	ND(0.0010)	ND(0.0010)	2.3	ND(0.0010)	ND(0.0010)
Bromodichloromethane		ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.40)	ND(0.0010)	ND(0.0010)
Bromoform		ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.40)	ND(0.0010)	ND(0.0010)
Bromomethane		ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.40)	ND(0.0010)	ND(0.0010)
Carbon Disulfide		ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.40)	ND(0.0010)	ND(0.0010)
Carbon Tetrachloride		ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.40)	ND(0.0010)	ND(0.0010)
Chlorobenzene		ND(0.0010)	ND(0.0010)	0.00035 J	10	ND(0.0010)	ND(0.0010)
Chloroethane		ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.40)	ND(0.0010)	ND(0.0010)
Chloroform		ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.40)	ND(0.0010)	ND(0.0010)
Chloromethane		ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.40)	ND(0.0010)	ND(0.0010)
cis-1,3-Dichloropropene		ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.40)	ND(0.0010)	ND(0.0010)
Dibromochloromethane		ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.40)	ND(0.0010)	ND(0.0010)
Dibromomethane		ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.40)	ND(0.0010)	ND(0.0010)
Dichlorodifluoromethane		ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.40)	ND(0.0010)	ND(0.0010)
Ethyl Methacrylate		ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.40)	ND(0.0010)	ND(0.0010)
Ethylbenzene		ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.40)	ND(0.0010)	ND(0.0010)
Iodomethane		ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.40)	ND(0.0010)	ND(0.0010)
Isobutanol		ND(0.050)	ND(0.050)	ND(0.050)	ND(20)	ND(0.050)	ND(0.050)
Methacrylonitrile		ND(0.010)	ND(0.010)	ND(0.010)	ND(4.0)	ND(0.010)	ND(0.010)
Methyl Methacrylate		ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.40)	ND(0.0010)	ND(0.0010)
Methylene Chloride		ND(0.0050)	ND(0.0050)	ND(0.0050)	0.18 J	ND(0.0050)	ND(0.0050)
Propionitrile		ND(0.020)	ND(0.020)	ND(0.020)	ND(8.0)	ND(0.020)	ND(0.020)
Styrene		ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.40)	ND(0.0010)	ND(0.0010)
Tetrachloroethene		ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.40)	ND(0.0010)	ND(0.0010)
Toluene		ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.40)	0.00015 J	ND(0.0010)
trans-1,2-Dichloroethene		ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.40)	ND(0.0010)	ND(0.0010)
trans-1,3-Dichloropropene		ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.40)	ND(0.0010)	ND(0.0010)
trans-1,4-Dichloro-2-butene		ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(2.0)	ND(0.0050)	ND(0.0050)
Trichloroethene		ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.40)	ND(0.0010)	ND(0.0010)
Trichlorofluoromethane		ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.40)	ND(0.0010)	ND(0.0010)
Vinyl Acetate		ND(0.0025)	ND(0.0025)	ND(0.0025)	ND(1.0)	ND(0.0025)	ND(0.0025)
Vinyl Chloride		ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.40)	ND(0.0010)	ND(0.0010)
Xylenes (total)		ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.40)	0.00011 J	ND(0.0010)
Total VOCs		ND(0.10)	ND(0.10)	0.00035 J	12 J	0.00026 J	ND(0.10)

**Table E-1**  
**Spring 2008 Groundwater Analytical Results**

Groundwater Quality and NAPL Monitoring Interim Report for Spring 2008  
 Groundwater Management Area 3  
 General Electric Company - Pittsfield, Massachusetts  
 (Results are presented in parts per million, ppm)

Parameter	Sample ID: Date Collected:	90A 05/14/08	90B 05/14/08	95A 05/14/08	95B-R 05/08/08	111A-R 05/06/08	111B-R 05/14/08
<b>PCBs-Filtered</b>							
Aroclor-1016		NA	NA	NA	NA	NA	NA
Aroclor-1221		NA	NA	NA	NA	NA	NA
Aroclor-1232		NA	NA	NA	NA	NA	NA
Aroclor-1242		NA	NA	NA	NA	NA	NA
Aroclor-1248		NA	NA	NA	NA	NA	NA
Aroclor-1254		NA	NA	NA	NA	NA	NA
Aroclor-1260		NA	NA	NA	NA	NA	NA
Total PCBs		NA	NA	NA	NA	NA	NA
<b>Semivolatile Organics</b>							
1,2,4,5-Tetrachlorobenzene		NA	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene		NA	NA	NA	NA	NA	NA
1,2-Dichlorobenzene		NA	NA	NA	NA	NA	NA
1,2-Diphenylhydrazine		NA	NA	NA	NA	NA	NA
1,3,5-Trinitrobenzene		NA	NA	NA	NA	NA	NA
1,3-Dichlorobenzene		NA	NA	NA	NA	NA	NA
1,3-Dinitrobenzene		NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene		NA	NA	NA	NA	NA	NA
1,4-Naphthoquinone		NA	NA	NA	NA	NA	NA
1-Naphthylamine		NA	NA	NA	NA	NA	NA
2,3,4,6-Tetrachlorophenol		NA	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol		NA	NA	NA	NA	NA	NA
2,4,6-Trichlorophenol		NA	NA	NA	NA	NA	NA
2,4-Dichlorophenol		NA	NA	NA	NA	NA	NA
2,4-Dimethylphenol		NA	NA	NA	NA	NA	NA
2,4-Dinitrophenol		NA	NA	NA	NA	NA	NA
2,4-Dinitrotoluene		NA	NA	NA	NA	NA	NA
2,6-Dichlorophenol		NA	NA	NA	NA	NA	NA
2,6-Dinitrotoluene		NA	NA	NA	NA	NA	NA
2-Acetylaminofluorene		NA	NA	NA	NA	NA	NA
2-Chloronaphthalene		NA	NA	NA	NA	NA	NA
2-Chlorophenol		NA	NA	ND(0.0052)	ND(0.014)	NA	NA
2-Methylnaphthalene		NA	NA	NA	NA	NA	NA
2-Methylphenol		NA	NA	NA	NA	NA	NA
2-Naphthylamine		NA	NA	NA	NA	NA	NA
2-Nitroaniline		NA	NA	NA	NA	NA	NA
2-Nitrophenol		NA	NA	NA	NA	NA	NA
2-Picoline		NA	NA	NA	NA	NA	NA
3&4-Methylphenol		NA	NA	NA	NA	NA	NA
3,3'-Dichlorobenzidine		NA	NA	NA	NA	NA	NA
3,3'-Dimethylbenzidine		NA	NA	NA	NA	NA	NA
3-Methylcholanthrene		NA	NA	NA	NA	NA	NA
3-Nitroaniline		NA	NA	NA	NA	NA	NA
4,6-Dinitro-2-methylphenol		NA	NA	NA	NA	NA	NA
4-Aminobiphenyl		NA	NA	NA	NA	NA	NA
4-Bromophenyl-phenylether		NA	NA	NA	NA	NA	NA
4-Chloro-3-Methylphenol		NA	NA	NA	NA	NA	NA
4-Chloroaniline		NA	NA	NA	NA	NA	NA
4-Chlorobenzilate		NA	NA	NA	NA	NA	NA
4-Chlorophenol		NA	NA	ND(0.0052)	ND(0.022)	NA	NA
4-Chlorophenyl-phenylether		NA	NA	NA	NA	NA	NA
4-Nitroaniline		NA	NA	NA	NA	NA	NA
4-Nitrophenol		NA	NA	NA	NA	NA	NA
4-Nitroquinoline-1-oxide		NA	NA	NA	NA	NA	NA
4-Phenylenediamine		NA	NA	NA	NA	NA	NA
5-Nitro-o-toluidine		NA	NA	NA	NA	NA	NA
7,12-Dimethylbenz(a)anthracene		NA	NA	NA	NA	NA	NA
a,a'-Dimethylphenethylamine		NA	NA	NA	NA	NA	NA
Acenaphthene		NA	NA	NA	NA	NA	NA
Acenaphthylene		NA	NA	NA	NA	NA	NA
Acetophenone		NA	NA	NA	NA	NA	NA
Aniline		NA	NA	NA	NA	NA	NA
Anthracene		NA	NA	NA	NA	NA	NA



**Table E-1**  
**Spring 2008 Groundwater Analytical Results**

**Groundwater Quality and NAPL Monitoring Interim Report for Spring 2008**  
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**General Electric Company - Pittsfield, Massachusetts**  
**(Results are presented in parts per million, ppm)**

Parameter	Sample ID: Date Collected:	90A 05/14/08	90B 05/14/08	95A 05/14/08	95B-R 05/08/08	111A-R 05/06/08	111B-R 05/14/08
<b>Semivolatile Organics (continued)</b>							
Aramite		NA	NA	NA	NA	NA	NA
Benzydine		NA	NA	NA	NA	NA	NA
Benzo(a)anthracene		NA	NA	NA	NA	NA	NA
Benzo(a)pyrene		NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene		NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene		NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene		NA	NA	NA	NA	NA	NA
Benzyl Alcohol		NA	NA	NA	NA	NA	NA
bis(2-Chloroethoxy)methane		NA	NA	NA	NA	NA	NA
bis(2-Chloroethyl)ether		NA	NA	NA	NA	NA	NA
bis(2-Chloroisopropyl)ether		NA	NA	NA	NA	NA	NA
bis(2-Ethylhexyl)phthalate		NA	NA	NA	NA	NA	NA
Butylbenzylphthalate		NA	NA	NA	NA	NA	NA
Chrysene		NA	NA	NA	NA	NA	NA
Diallate		NA	NA	NA	NA	NA	NA
Dibenzo(a,h)anthracene		NA	NA	NA	NA	NA	NA
Dibenzofuran		NA	NA	NA	NA	NA	NA
Diethylphthalate		NA	NA	NA	NA	NA	NA
Dimethylphthalate		NA	NA	NA	NA	NA	NA
Di-n-Butylphthalate		NA	NA	NA	NA	NA	NA
Di-n-Octylphthalate		NA	NA	NA	NA	NA	NA
Diphenylamine		NA	NA	NA	NA	NA	NA
Ethyl Methanesulfonate		NA	NA	NA	NA	NA	NA
Fluoranthene		NA	NA	NA	NA	NA	NA
Fluorene		NA	NA	NA	NA	NA	NA
Hexachlorobenzene		NA	NA	NA	NA	NA	NA
Hexachlorobutadiene		NA	NA	NA	NA	NA	NA
Hexachlorocyclopentadiene		NA	NA	NA	NA	NA	NA
Hexachloroethane		NA	NA	NA	NA	NA	NA
Hexachlorophene		NA	NA	NA	NA	NA	NA
Hexachloropropene		NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene		NA	NA	NA	NA	NA	NA
Isodrin		NA	NA	NA	NA	NA	NA
Isophorone		NA	NA	NA	NA	NA	NA
Isosafrole		NA	NA	NA	NA	NA	NA
Methapyrilene		NA	NA	NA	NA	NA	NA
Methyl Methanesulfonate		NA	NA	NA	NA	NA	NA
Naphthalene		NA	NA	NA	NA	NA	NA
Nitrobenzene		NA	NA	NA	NA	NA	NA
N-Nitrosodiethylamine		NA	NA	NA	NA	NA	NA
N-Nitrosodimethylamine		NA	NA	NA	NA	NA	NA
N-Nitroso-di-n-butylamine		NA	NA	NA	NA	NA	NA
N-Nitroso-di-n-propylamine		NA	NA	NA	NA	NA	NA
N-Nitrosodiphenylamine		NA	NA	NA	NA	NA	NA
N-Nitrosomethylethylamine		NA	NA	NA	NA	NA	NA
N-Nitrosomorpholine		NA	NA	NA	NA	NA	NA
N-Nitrosopiperidine		NA	NA	NA	NA	NA	NA
N-Nitrosopyrrolidine		NA	NA	NA	NA	NA	NA
o,o,o-Triethylphosphorothioate		NA	NA	NA	NA	NA	NA
o-Toluidine		NA	NA	NA	NA	NA	NA
p-Dimethylaminoazobenzene		NA	NA	NA	NA	NA	NA
Pentachlorobenzene		NA	NA	NA	NA	NA	NA
Pentachloroethane		NA	NA	NA	NA	NA	NA
Pentachloronitrobenzene		NA	NA	NA	NA	NA	NA
Pentachlorophenol		NA	NA	NA	NA	NA	NA
Phenacetin		NA	NA	NA	NA	NA	NA
Phenanthrene		NA	NA	NA	NA	NA	NA
Phenol		NA	NA	NA	NA	NA	NA
Pronamide		NA	NA	NA	NA	NA	NA
Pyrene		NA	NA	NA	NA	NA	NA
Pyridine		NA	NA	NA	NA	NA	NA
Safrole		NA	NA	NA	NA	NA	NA
Thionazin		NA	NA	NA	NA	NA	NA

**Table E-1  
Spring 2008 Groundwater Analytical Results**

**Groundwater Quality and NAPL Monitoring Interim Report for Spring 2008  
Groundwater Management Area 3  
General Electric Company - Pittsfield, Massachusetts  
(Results are presented in parts per million, ppm)**

Parameter	Sample ID: Date Collected:	90A 05/14/08	90B 05/14/08	95A 05/14/08	95B-R 05/08/08	111A-R 05/06/08	111B-R 05/14/08
<b>Natural Attenuation Parameters</b>							
Alkalinity		180	110	130	240	140	160
Chloride		14	8.5	0.77	160	86	4.3
Dissolved Iron		0.0211 B	3.68	ND(0.100)	0.0214 B	0.0432 B	0.0449 B
Dissolved Organic Carbon		1.60	5.77	0.660 B	3.92	1.18	1.31
Ethane		ND(0.020)	ND(0.020)	ND(0.020)	ND(0.10)	ND(0.020)	ND(0.020)
Ethene		ND(0.020)	ND(0.020)	ND(0.020)	ND(0.10)	ND(0.020)	ND(0.020)
Methane		0.0930	0.0700	0.156	0.871	ND(0.00720)	ND(0.00720)
Nitrate Nitrogen		ND(0.300)	ND(0.300)	ND(0.300)	ND(0.300)	ND(0.300)	4.29
Nitrite Nitrogen		ND(0.300)	ND(0.300)	ND(0.300)	ND(0.300)	ND(0.300)	ND(0.300)
Sulfate (turbidimetric)		14.2	12.1	4.41	4.76	71.6	169

**Table E-1**  
**Spring 2008 Groundwater Analytical Results**

**Groundwater Quality and NAPL Monitoring Interim Report for Spring 2008**  
**Groundwater Management Area 3**  
**General Electric Company - Pittsfield, Massachusetts**  
**(Results are presented in parts per million, ppm)**

Parameter	Sample ID: Date Collected:	114A 05/13/08	114B-R 05/13/08	115A 05/15/08	115B 05/15/08
<b>Volatile Organics</b>					
1,1,1,2-Tetrachloroethane		ND(0.0010)	ND(0.040)	ND(0.0010)	ND(0.0010)
1,1,1-Trichloroethane		ND(0.0010)	ND(0.040)	ND(0.0010)	ND(0.0010)
1,1,2,2-Tetrachloroethane		ND(0.0010)	ND(0.040)	ND(0.0010)	ND(0.0010)
1,1,2-Trichloroethane		ND(0.0010)	ND(0.040)	ND(0.0010)	ND(0.0010)
1,1-Dichloroethane		ND(0.0010)	ND(0.040)	ND(0.0010)	ND(0.0010)
1,1-Dichloroethene		ND(0.0010)	ND(0.040)	ND(0.0010)	ND(0.0010)
1,2,3-Trichloropropane		ND(0.0010)	ND(0.040)	ND(0.0010)	ND(0.0010)
1,2-Dibromo-3-chloropropane		ND(0.0050)	ND(0.20)	ND(0.0050)	ND(0.0050)
1,2-Dibromoethane		ND(0.0010)	ND(0.040)	ND(0.0010)	ND(0.0010)
1,2-Dichloroethane		ND(0.0010)	ND(0.040)	ND(0.0010)	ND(0.0010)
1,2-Dichloropropane		ND(0.0010)	ND(0.040)	ND(0.0010)	ND(0.0010)
1,4-Dioxane		ND(0.10)	ND(4.0)	ND(0.10)	ND(0.10)
2-Butanone		0.011	ND(0.20)	ND(0.0050)	ND(0.0050)
2-Chloro-1,3-butadiene		ND(0.0010)	ND(0.040)	ND(0.0010)	ND(0.0010)
2-Chloroethylvinylether		ND(0.013)	ND(0.50)	ND(0.013)	ND(0.013)
2-Hexanone		ND(0.0050)	ND(0.20)	ND(0.0050)	ND(0.0050)
3-Chloropropene		ND(0.0010)	ND(0.040)	ND(0.0010)	ND(0.0010)
4-Methyl-2-pentanone		ND(0.0050)	ND(0.20)	ND(0.0050)	ND(0.0050)
Acetone		0.15	ND(0.20)	ND(0.0050)	ND(0.0050)
Acetonitrile		ND(0.020)	ND(0.80)	ND(0.020)	ND(0.020)
Acrolein		ND(0.025)	ND(1.0)	ND(0.025)	ND(0.025)
Acrylonitrile		ND(0.025)	ND(1.0)	ND(0.025)	ND(0.025)
Benzene		ND(0.0010)	0.020 J	ND(0.0010)	ND(0.0010)
Bromodichloromethane		ND(0.0010)	ND(0.040)	ND(0.0010)	ND(0.0010)
Bromoform		ND(0.0010)	ND(0.040)	ND(0.0010)	ND(0.0010)
Bromomethane		ND(0.0010)	ND(0.040)	ND(0.0010)	ND(0.0010)
Carbon Disulfide		ND(0.0010)	ND(0.040)	ND(0.0010)	ND(0.0010)
Carbon Tetrachloride		ND(0.0010)	ND(0.040)	ND(0.0010)	ND(0.0010)
Chlorobenzene		0.00018 J	1.4	ND(0.0010)	ND(0.0010)
Chloroethane		ND(0.0010)	ND(0.040)	ND(0.0010)	ND(0.0010)
Chloroform		ND(0.0010)	ND(0.040)	ND(0.0010)	ND(0.0010)
Chloromethane		ND(0.0010)	ND(0.040)	ND(0.0010)	ND(0.0010)
cis-1,3-Dichloropropene		ND(0.0010)	ND(0.040)	ND(0.0010)	ND(0.0010)
Dibromochloromethane		ND(0.0010)	ND(0.040)	ND(0.0010)	ND(0.0010)
Dibromomethane		ND(0.0010)	ND(0.040)	ND(0.0010)	ND(0.0010)
Dichlorodifluoromethane		ND(0.0010)	ND(0.040)	ND(0.0010)	ND(0.0010)
Ethyl Methacrylate		ND(0.0010)	ND(0.040)	ND(0.0010)	ND(0.0010)
Ethylbenzene		ND(0.0010)	ND(0.040)	ND(0.0010)	ND(0.0010)
Iodomethane		ND(0.0010)	ND(0.040)	ND(0.0010)	ND(0.0010)
Isobutanol		ND(0.050)	ND(2.0)	ND(0.050)	ND(0.050)
Methacrylonitrile		ND(0.010)	ND(0.40)	ND(0.010)	ND(0.010)
Methyl Methacrylate		ND(0.0010)	ND(0.040)	ND(0.0010)	ND(0.0010)
Methylene Chloride		ND(0.0050)	0.016 J	ND(0.0050)	ND(0.0050)
Propionitrile		ND(0.020)	ND(0.80)	ND(0.020)	ND(0.020)
Styrene		ND(0.0010)	ND(0.040)	ND(0.0010)	ND(0.0010)
Tetrachloroethene		ND(0.0010)	ND(0.040)	ND(0.0010)	ND(0.0010)
Toluene		ND(0.0010)	ND(0.040)	ND(0.0010)	ND(0.0010)
trans-1,2-Dichloroethene		ND(0.0010)	ND(0.040)	ND(0.0010)	ND(0.0010)
trans-1,3-Dichloropropene		ND(0.0010)	ND(0.040)	ND(0.0010)	ND(0.0010)
trans-1,4-Dichloro-2-butene		ND(0.0050)	ND(0.20)	ND(0.0050)	ND(0.0050)
Trichloroethene		ND(0.0010)	ND(0.040)	ND(0.0010)	ND(0.0010)
Trichlorofluoromethane		ND(0.0010)	ND(0.040)	ND(0.0010)	ND(0.0010)
Vinyl Acetate		ND(0.0025)	ND(0.10)	ND(0.0025)	ND(0.0025)
Vinyl Chloride		ND(0.0010)	ND(0.040)	ND(0.0010)	ND(0.0010)
Xylenes (total)		ND(0.0010)	ND(0.040)	ND(0.0010)	ND(0.0010)
Total VOCs		0.16	1.4 J	ND(0.10)	ND(0.10)

**Table E-1  
Spring 2008 Groundwater Analytical Results**

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Groundwater Management Area 3  
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(Results are presented in parts per million, ppm)**

Parameter	Sample ID: Date Collected:	114A 05/13/08	114B-R 05/13/08	115A 05/15/08	115B 05/15/08
<b>PCBs-Filtered</b>					
Aroclor-1016		ND(0.000067)	ND(0.000068)	NA	NA
Aroclor-1221		ND(0.000067)	ND(0.000068)	NA	NA
Aroclor-1232		ND(0.000067)	ND(0.000068)	NA	NA
Aroclor-1242		ND(0.000067)	ND(0.000068)	NA	NA
Aroclor-1248		ND(0.000067)	ND(0.000068)	NA	NA
Aroclor-1254		ND(0.000067)	ND(0.000068)	NA	NA
Aroclor-1260		ND(0.000067)	ND(0.000068)	NA	NA
Total PCBs		ND(0.000067)	ND(0.000068)	NA	NA
<b>Semivolatile Organics</b>					
1,2,4,5-Tetrachlorobenzene		NA	NA	NA	NA
1,2,4-Trichlorobenzene		NA	NA	NA	NA
1,2-Dichlorobenzene		NA	NA	NA	NA
1,2-Diphenylhydrazine		NA	NA	NA	NA
1,3,5-Trinitrobenzene		NA	NA	NA	NA
1,3-Dichlorobenzene		NA	NA	NA	NA
1,3-Dinitrobenzene		NA	NA	NA	NA
1,4-Dichlorobenzene		NA	NA	NA	NA
1,4-Naphthoquinone		NA	NA	NA	NA
1-Naphthylamine		NA	NA	NA	NA
2,3,4,6-Tetrachlorophenol		NA	NA	NA	NA
2,4,5-Trichlorophenol		NA	NA	NA	NA
2,4,6-Trichlorophenol		NA	NA	NA	NA
2,4-Dichlorophenol		NA	NA	NA	NA
2,4-Dimethylphenol		NA	NA	NA	NA
2,4-Dinitrophenol		NA	NA	NA	NA
2,4-Dinitrotoluene		NA	NA	NA	NA
2,6-Dichlorophenol		NA	NA	NA	NA
2,6-Dinitrotoluene		NA	NA	NA	NA
2-Acetylaminofluorene		NA	NA	NA	NA
2-Chloronaphthalene		NA	NA	NA	NA
2-Chlorophenol		NA	NA	NA	NA
2-Methylnaphthalene		NA	NA	NA	NA
2-Methylphenol		NA	NA	NA	NA
2-Naphthylamine		NA	NA	NA	NA
2-Nitroaniline		NA	NA	NA	NA
2-Nitrophenol		NA	NA	NA	NA
2-Picoline		NA	NA	NA	NA
3&4-Methylphenol		NA	NA	NA	NA
3,3'-Dichlorobenzidine		NA	NA	NA	NA
3,3'-Dimethylbenzidine		NA	NA	NA	NA
3-Methylcholanthrene		NA	NA	NA	NA
3-Nitroaniline		NA	NA	NA	NA
4,6-Dinitro-2-methylphenol		NA	NA	NA	NA
4-Aminobiphenyl		NA	NA	NA	NA
4-Bromophenyl-phenylether		NA	NA	NA	NA
4-Chloro-3-Methylphenol		NA	NA	NA	NA
4-Chloroaniline		NA	NA	NA	NA
4-Chlorobenzilate		NA	NA	NA	NA
4-Chlorophenol		NA	NA	NA	NA
4-Chlorophenyl-phenylether		NA	NA	NA	NA
4-Nitroaniline		NA	NA	NA	NA
4-Nitrophenol		NA	NA	NA	NA
4-Nitroquinoline-1-oxide		NA	NA	NA	NA
4-Phenylenediamine		NA	NA	NA	NA
5-Nitro-o-toluidine		NA	NA	NA	NA
7,12-Dimethylbenz(a)anthracene		NA	NA	NA	NA
a,a'-Dimethylphenethylamine		NA	NA	NA	NA
Acenaphthene		NA	NA	NA	NA
Acenaphthylene		NA	NA	NA	NA
Acetophenone		NA	NA	NA	NA
Aniline		NA	NA	NA	NA
Anthracene		NA	NA	NA	NA

**Table E-1**  
**Spring 2008 Groundwater Analytical Results**

**Groundwater Quality and NAPL Monitoring Interim Report for Spring 2008**  
**Groundwater Management Area 3**  
**General Electric Company - Pittsfield, Massachusetts**  
**(Results are presented in parts per million, ppm)**

Parameter	Sample ID: Date Collected:	114A 05/13/08	114B-R 05/13/08	115A 05/15/08	115B 05/15/08
<b>Semivolatile Organics (continued)</b>					
Aramite		NA	NA	NA	NA
Benzidine		NA	NA	NA	NA
Benzo(a)anthracene		NA	NA	NA	NA
Benzo(a)pyrene		NA	NA	NA	NA
Benzo(b)fluoranthene		NA	NA	NA	NA
Benzo(g,h,i)perylene		NA	NA	NA	NA
Benzo(k)fluoranthene		NA	NA	NA	NA
Benzyl Alcohol		NA	NA	NA	NA
bis(2-Chloroethoxy)methane		NA	NA	NA	NA
bis(2-Chloroethyl)ether		NA	NA	NA	NA
bis(2-Chloroisopropyl)ether		NA	NA	NA	NA
bis(2-Ethylhexyl)phthalate		NA	NA	NA	NA
Butylbenzylphthalate		NA	NA	NA	NA
Chrysene		NA	NA	NA	NA
Diallylate		NA	NA	NA	NA
Dibenzo(a,h)anthracene		NA	NA	NA	NA
Dibenzofuran		NA	NA	NA	NA
Diethylphthalate		NA	NA	NA	NA
Dimethylphthalate		NA	NA	NA	NA
Di-n-Butylphthalate		NA	NA	NA	NA
Di-n-Octylphthalate		NA	NA	NA	NA
Diphenylamine		NA	NA	NA	NA
Ethyl Methanesulfonate		NA	NA	NA	NA
Fluoranthene		NA	NA	NA	NA
Fluorene		NA	NA	NA	NA
Hexachlorobenzene		NA	NA	NA	NA
Hexachlorobutadiene		NA	NA	NA	NA
Hexachlorocyclopentadiene		NA	NA	NA	NA
Hexachloroethane		NA	NA	NA	NA
Hexachlorophene		NA	NA	NA	NA
Hexachloropropene		NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene		NA	NA	NA	NA
Isodrin		NA	NA	NA	NA
Isophorone		NA	NA	NA	NA
Isosafrole		NA	NA	NA	NA
Methapyrilene		NA	NA	NA	NA
Methyl Methanesulfonate		NA	NA	NA	NA
Naphthalene		NA	NA	NA	NA
Nitrobenzene		NA	NA	NA	NA
N-Nitrosodiethylamine		NA	NA	NA	NA
N-Nitrosodimethylamine		NA	NA	NA	NA
N-Nitroso-di-n-butylamine		NA	NA	NA	NA
N-Nitroso-di-n-propylamine		NA	NA	NA	NA
N-Nitrosodiphenylamine		NA	NA	NA	NA
N-Nitrosomethylethylamine		NA	NA	NA	NA
N-Nitrosomorpholine		NA	NA	NA	NA
N-Nitrosopiperidine		NA	NA	NA	NA
N-Nitrosopyrrolidine		NA	NA	NA	NA
o,o,o-Triethylphosphorothioate		NA	NA	NA	NA
o-Toluidine		NA	NA	NA	NA
p-Dimethylaminoazobenzene		NA	NA	NA	NA
Pentachlorobenzene		NA	NA	NA	NA
Pentachloroethane		NA	NA	NA	NA
Pentachloronitrobenzene		NA	NA	NA	NA
Pentachlorophenol		NA	NA	NA	NA
Phenacetin		NA	NA	NA	NA
Phenanthrene		NA	NA	NA	NA
Phenol		NA	NA	NA	NA
Pronamide		NA	NA	NA	NA
Pyrene		NA	NA	NA	NA
Pyridine		NA	NA	NA	NA
Safrole		NA	NA	NA	NA
Thionazin		NA	NA	NA	NA

**Table E-1  
Spring 2008 Groundwater Analytical Results**

**Groundwater Quality and NAPL Monitoring Interim Report for Spring 2008  
Groundwater Management Area 3  
General Electric Company - Pittsfield, Massachusetts  
(Results are presented in parts per million, ppm)**

Parameter	Sample ID: Date Collected:	114A 05/13/08	114B-R 05/13/08	115A 05/15/08	115B 05/15/08
<b>Natural Attenuation Parameters</b>					
Alkalinity		170	230	150	220
Chloride		1.4	160	0.83	18
Dissolved Iron		ND(0.100)	0.0461 B	ND(0.100)	ND(0.100)
Dissolved Organic Carbon		4.36	4.61	0.684 B	1.42
Ethane		ND(2.0)	ND(0.10)	ND(0.020)	ND(0.020)
Ethene		ND(2.0)	ND(0.10)	ND(0.020)	ND(0.020)
Methane		10.9	1.32	ND(0.00720)	ND(0.00720)
Nitrate Nitrogen		ND(0.300)	ND(0.300)	ND(0.300)	0.168 B
Nitrite Nitrogen		ND(0.300)	ND(3.00)	ND(0.300)	ND(0.300)
Sulfate (turbidimetric)		1.88	9.43	4.03	14.8

**Notes:**

1. Samples were collected by ARCADIS and submitted to SGS Environmental Services, Inc. for analysis of volatiles, semivolatiles and natural attenuation parameters.
2. NA - Not Analyzed.
3. ND - Analyte was not detected. The number in parenthesis is the associated detection limit.
4. Only those constituents detected in one or more samples are summarized.
5. Field duplicate sample results are presented in brackets.

Data Qualifiers:

Organics (volatiles, semivolatiles)

J - Indicates an estimated value less than the practical quantitation limit (PQL).

Natural Attenuation Parameters

B - Indicates an estimated value between the instrument detection limit (IDL) and (PQL).

ARCADIS

**Appendix F**

Historical Groundwater Data

**Table F-1  
Summary Of Historical Groundwater Analytical Results For Benzene And Chlorobenzene -Well 6B-R**

**Groundwater Quality Monitoring Interim Report For Spring 2008  
Groundwater Management Area 3  
General Electric Company - Pittsfield, Massachusetts  
(Results are presented in parts per million, ppm)**

Parameter	Sample ID: Date Collected:	Method 1 GW-2 Standards	Method 1 GW-3 Standards	MCP UCL for GroundWater	Detection Frequency	Minimum Detect	Maximum Detect	Median Value	Arithmetic Average	Geometric Mean	Standard Deviation
<b>Volatile Organics</b>											
Benzene		2	10	100	6/7	0.099	15	0.700	3.89	0.551	5.57
Chlorobenzene		0.2	1	10	6/7	0.073	5.3	0.920	1.74	0.347	2.04

Notes:

1. Samples were collected by ARCADIS between 2002 and 2008 and submitted to SGS Environmental Services, Inc. for analysis.
2. Samples have been validated as per GE's EPA-approved FSP/QAPP, General Electric Company, Pittsfield, Massachusetts.
3. All constituents where a sample concentration greater than 50% of an applicable groundwater quality standard was observed at the listed monitoring well during one or more baseline sampling event are summarized



**Table F-2  
Summary Of Historical Groundwater Analytical Results For Vinyl Chloride-Well 16B-R**

**Groundwater Quality Monitoring Interim Report For Spring 2008  
Groundwater Management Area 3  
General Electric Company - Pittsfield, Massachusetts  
(Results are presented in parts per million, ppm)**

Parameter	Sample ID: Date Collected:	Method 1 GW-2 Standards	Method 1 GW-3 Standards	MCP UCL for GroundWater	Detection Frequency	Minimum Detect	Maximum Detect	Median Value	Arithmetic Average	Geometric Mean	Standard Deviation
<b>Volatile Organics</b>											
Vinyl Chloride		0.002	50	100	1/13	0.0015	0.0015	0.00100	0.00250	0.00172	0.00207

Notes:

1. Samples were collected by ARCADIS between 1996 and 2008 and submitted to SGS Environmental Services, Inc. for analysis.
2. Samples have been validated as per GE's EPA-approved FSP/QAPP, General Electric Company, Pittsfield, Massachusetts.
3. All constituents where a sample concentration greater than 50% of an applicable groundwater quality standard was observed at the listed monitoring well during one or more baseline sampling event are summarized

**Table F-3**  
**Summary Of Historical Groundwater Analytical Results For Carbon Tetrachloride-Well 54-14**

**Groundwater Quality Monitoring Interim Report For Spring 2008**  
**Groundwater Management Area 3**  
**General Electric Company - Pittsfield, Massachusetts**  
**(Results are presented in parts per million, ppm)**

Parameter	Sample ID: Date Collected:	Method 1 GW-2 Standards	Method 1 GW-3 Standards	MCP UCL for GroundWater	Detection Frequency	Minimum Detect	Maximum Detect	Median Value	Arithmetic Average	Geometric Mean	Standard Deviation
<b>Volatile Organics</b>											
Carbon Tetrachloride		0.002	5	50	5/7	0.00029	0.0036	0.00140	0.00183	0.00150	0.00109

Notes:

1. Samples were collected by ARCADIS between 2002 and 2008 and submitted to SGS Environmental Services, Inc. for analysis.
2. Samples have been validated as per GE's EPA-approved FSP/QAPP, General Electric Company, Pittsfield, Massachusetts.
3. All constituents where a sample concentration greater than 50% of an applicable groundwater quality standard was observed at the listed monitoring well during one or more baseline sampling event are summarized

**Table F-4  
Summary Of Historical Groundwater Analytical Results For Chlorobenzene -Well 78B-R**

**Groundwater Quality Monitoring Interim Report For Spring 2008  
Groundwater Management Area 3  
General Electric Company - Pittsfield, Massachusetts  
(Results are presented in parts per million, ppm)**

Parameter	Sample ID: Date Collected:	Method 1 GW-2 Standards	Method 1 GW-3 Standards	MCP UCL for GroundWater	Detection Frequency	Minimum Detect	Maximum Detect	Median Value	Arithmetic Average	Geometric Mean	Standard Deviation
<b>Volatile Organics</b>											
Chlorobenzene		0.2	1	10	8/8	1.9	2.5	2.20	2.20	2.19	0.233

Notes:

1. Samples were collected by ARCADIS between 2002 and 2005 and submitted to SGS Environmental Services, Inc. for analysis.
2. Samples have been validated as per GE's EPA-approved FSP/QAPP, General Electric Company, Pittsfield, Massachusetts.
3. All constituents where a sample concentration greater than 50% of an applicable groundwater quality standard was observed at the listed monitoring well during one or more baseline sampling event are summarized

**Table F-5  
Summary Of Historical Groundwater Analytical Results For Benzene And Chlorobenzene -Well 89B**

**Groundwater Quality Monitoring Interim Report For Spring 2008  
Groundwater Management Area 3  
General Electric Company - Pittsfield, Massachusetts  
(Results are presented in parts per million, ppm)**

Parameter	Sample ID: Date Collected:	Method 1 GW-2 Standards	Method 1 GW-3 Standards	MCP UCL for GroundWater	Detection Frequency	Minimum Detect	Maximum Detect	Median Value	Arithmetic Average	Geometric Mean	Standard Deviation
<b>Volatile Organics</b>											
Benzene		2	10	100	16/18	0.0014	5.8	0.115	0.775	0.0980	1.47
Chlorobenzene		0.2	1	10	17/18	0.01	15	0.765	2.99	0.801	4.57

**Notes:**

1. Samples were collected by ARCADIS between 2002 and 2005 and submitted to SGS Environmental Services, Inc. for analysis.
2. Samples have been validated as per GE's EPA-approved FSP/QAPP, General Electric Company, Pittsfield, Massachusetts.
3. All constituents where a sample concentration greater than 50% of an applicable groundwater quality standard was observed at the listed monitoring well during one or more baseline sampling event are summarized

**Table F-6  
Summary Of Historical Groundwater Analytical Results For Chlorobenzene And cis-1,2-Dichloroethene-Well 95B**

**Groundwater Quality Monitoring Interim Report For Spring 2008  
Groundwater Management Area 3  
General Electric Company - Pittsfield, Massachusetts  
(Results are presented in parts per million, ppm)**

Parameter	Sample ID: Date Collected:	Method 1 GW-2 Standards	Method 1 GW-3 Standards	MCP UCL for GroundWater	Detection Frequency	Minimum Detect	Maximum Detect	Median Value	Arithmetic Average	Geometric Mean	Standard Deviation
<b>Volatile Organics</b>											
Chlorobenzene		0.2	1	10	16/16	0.012	10	0.685	2.62	0.479	3.91
cis-1,2-Dichloroethene		0.1	50	100	2/2	0.31	0.36	0.335	0.335	0.334	0.0354

**Notes:**

1. Samples were collected by ARCADIS between 1997 and 2008 and submitted to SGS Environmental Services, Inc. for analysis.
2. Samples have been validated as per GE's EPA-approved FSP/QAPP, General Electric Company, Pittsfield, Massachusetts.
3. All constituents where a sample concentration greater than 50% of an applicable groundwater quality standard was observed at the listed monitoring well during one or more baseline sampling event are summarized

**Table F-7  
Summary Of Historical Groundwater Analytical Results For Total TEQs (WHO TEFs)-Well 111B**

**Groundwater Quality Monitoring Interim Report For Spring 2008  
Groundwater Management Area 3  
General Electric Company - Pittsfield, Massachusetts  
(Results are presented in parts per million, ppm)**

Parameter	Sample ID: Date Collected:	Method 1 GW-3 Standards	MCP UCL for GroundWater	Detection Frequency	Minimum Detect	Maximum Detect	Median Value	Arithmetic Average	Geometric Mean	Standard Deviation
<b>Dioxins</b>										
Total TEQs (WHO TEFs)		0.0000001	0.000001	3/3	#####	8.6E-08	0.00000000840	0.0000000339	0.0000000174	0.0000000451

Notes:

1. Samples were collected by ARCADIS between 2004 and 2006 and submitted to SGS Environmental Services, Inc. for analysis.
2. Samples have been validated as per GE's EPA-approved FSP/QAPP, General Electric Company, Pittsfield, Massachusetts.
3. All constituents where a sample concentration greater than 50% of an applicable groundwater quality standard was observed at the listed monitoring well during one or more baseline sampling event are summarized

**Table F-8  
Summary Of Historical Groundwater Analytical Results For Chlorobenzene-Well 114B-R**

**Groundwater Quality Monitoring Interim Report For Spring 2008  
Groundwater Management Area 3  
General Electric Company - Pittsfield, Massachusetts  
(Results are presented in parts per million, ppm)**

Parameter	Sample ID: Date Collected:	Method 1 GW-2 Standards	Method 1 GW-3 Standards	MCP UCL for GroundWater	Detection Frequency	Minimum Detect	Maximum Detect	Median Value	Arithmetic Average	Geometric Mean	Standard Deviation
<b>Volatile Organics</b>											
Chlorobenzene		0.2	1	10	16/17	0.0083	3.3	0.330	0.688	0.270	0.886

Notes:

1. Samples were collected by ARCADIS between 1991 and 2008 and submitted to SGS Environmental Services, Inc. for analysis.
2. Samples have been validated as per GE's EPA-approved FSP/QAPP, General Electric Company, Pittsfield, Massachusetts.
3. All constituents where a sample concentration greater than 50% of an applicable groundwater quality standard was observed at the listed monitoring well during one or more baseline sampling event are summarized

**Table F-9  
Summary Of Historical Groundwater Analytical Results For Cadmium-Well GMA3-6**

**Groundwater Quality Monitoring Interim Report For Spring 2008  
Groundwater Management Area 3  
General Electric Company - Pittsfield, Massachusetts  
(Results are presented in parts per million, ppm)**

Parameter	Sample ID: Date Collected:	Method 1 GW-3 Standards	MCP UCL for GroundWater	Detection Frequency	Minimum Detect	Maximum Detect	Median Value	Arithmetic Average	Geometric Mean	Standard Deviation
<b>Inorganics-Filtered</b>										
Cadmium		0.004	0.05	1/5	0.0031	0.0031	0.00250	0.00312	0.00300	0.00108

Notes:

1. Samples were collected by ARCADIS between 2002 and 2005 and submitted to SGS Environmental Services, Inc. for analysis.
2. Samples have been validated as per GE's EPA-approved FSP/QAPP, General Electric Company, Pittsfield, Massachusetts.
3. All constituents where a sample concentration greater than 50% of an applicable groundwater quality standard was observed at the listed monitoring well during one or more baseline sampling event are summarized



**Table F-10**  
**Summary Of Historical Groundwater Analytical Results For Vinyl Chloride-Well OBG-2**

**Groundwater Quality Monitoring Interim Report For Spring 2008**  
**Groundwater Management Area 3**  
**General Electric Company - Pittsfield, Massachusetts**  
**(Results are presented in parts per million, ppm)**

Parameter	Sample ID: Date Collected:	Method 1 GW-2 Standards	Method 1 GW-3 Standards	MCP UCL for GroundWater	Detection Frequency	Minimum Detect	Maximum Detect	Median Value	Arithmetic Average	Geometric Mean	Standard Deviation
<b>Volatile Organics</b>											
Vinyl Chloride		0.002	50	100	1/4	0.0015	0.0015	0.00100	0.00113	0.00111	0.000250

Notes:

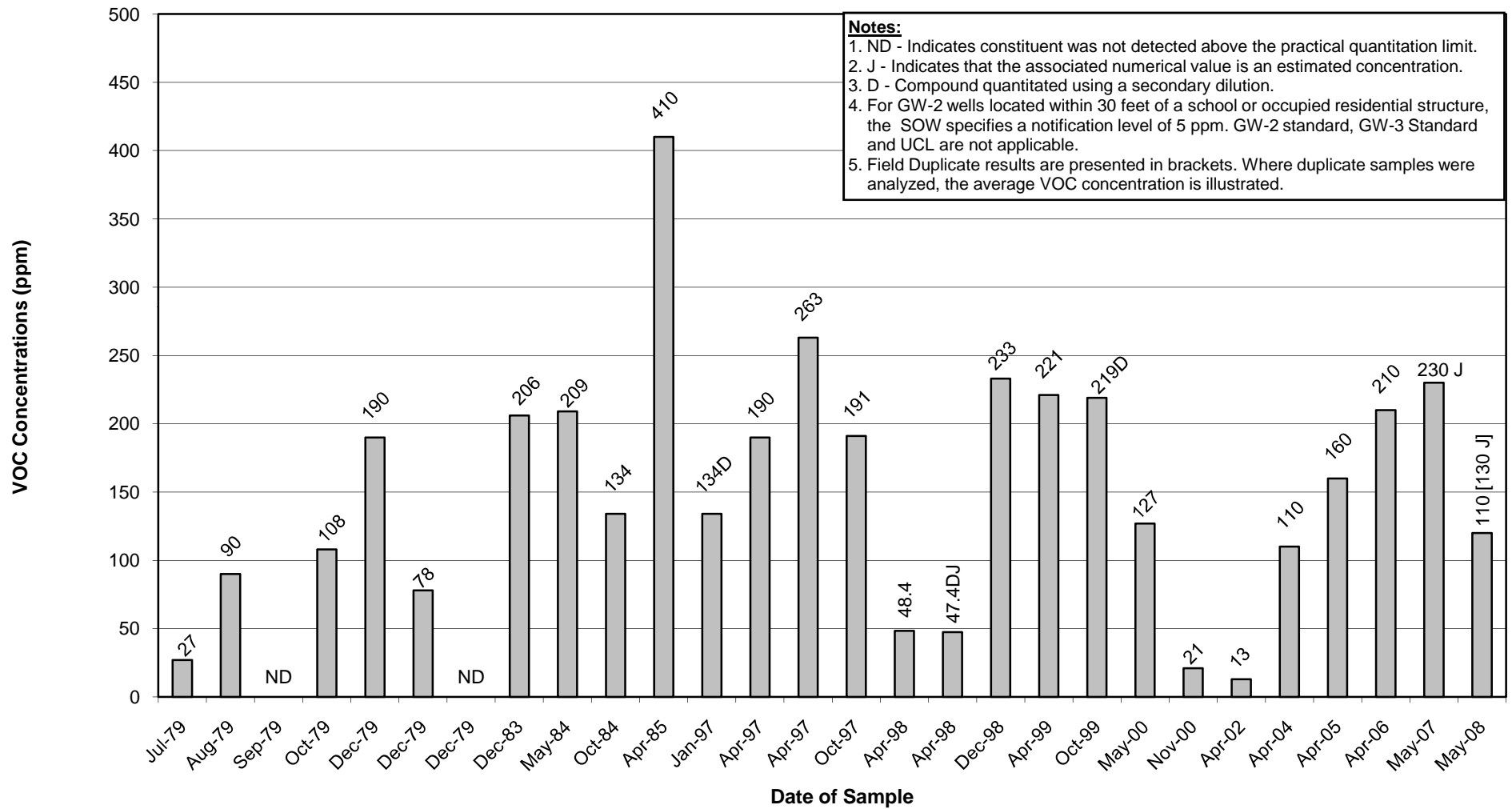
1. Samples were collected by ARCADIS between 2004 and 2005 and submitted to SGS Environmental Services, Inc. for analysis.
2. Samples have been validated as per GE's EPA-approved FSP/QAPP, General Electric Company, Pittsfield, Massachusetts.
3. All constituents where a sample concentration greater than 50% of an applicable groundwater quality standard was observed at the listed monitoring well during one or more baseline sampling event are summarized

**Historical Groundwater Data**

Total VOC Concentrations –  
Wells Sampled in Spring 2008

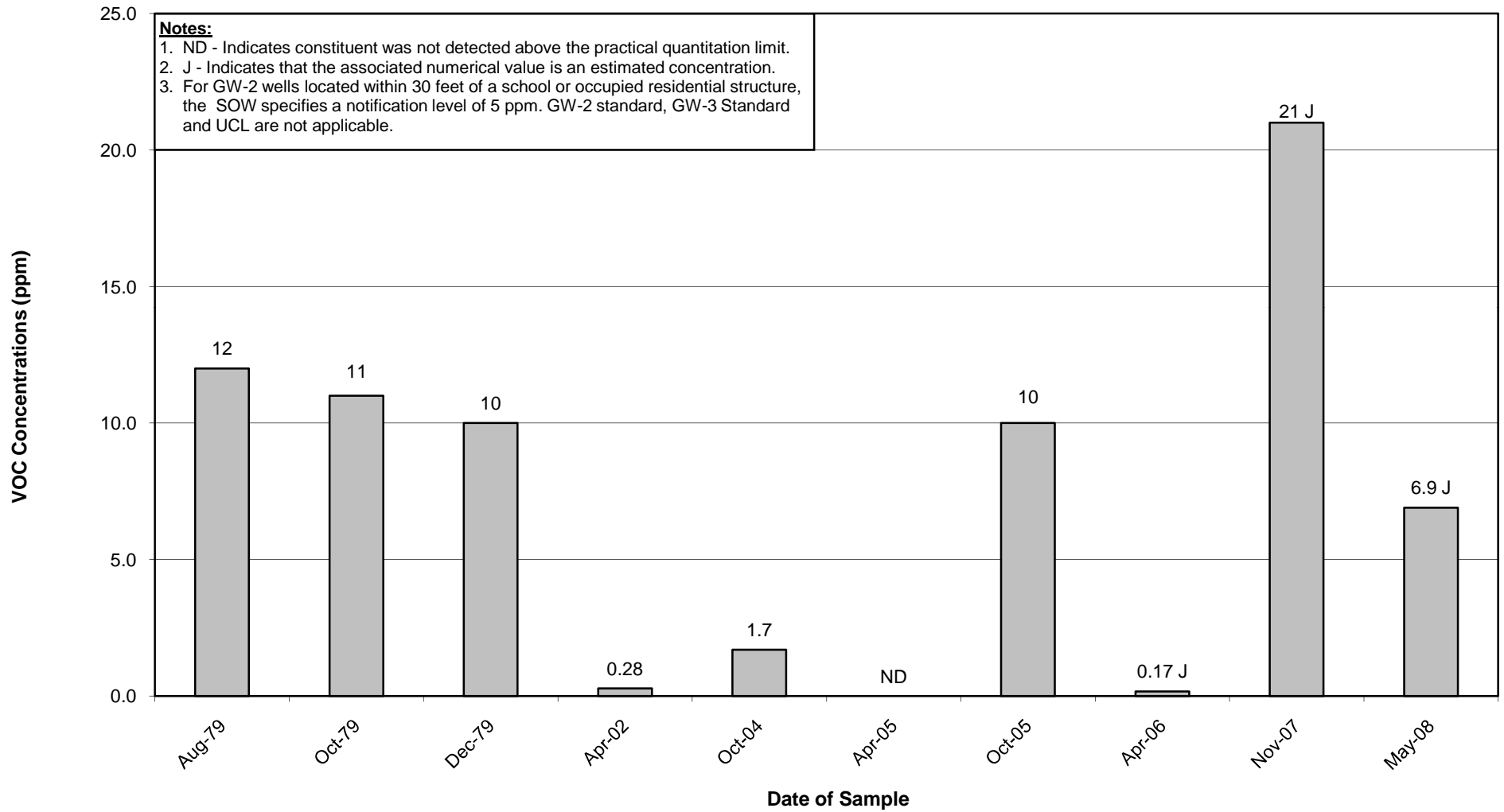
**Appendix F**  
**Well Historical 2A Total VOC Concentrations**

**Groundwater Management Area 3**  
**General Electric Company - Pittsfield, Massachusetts**



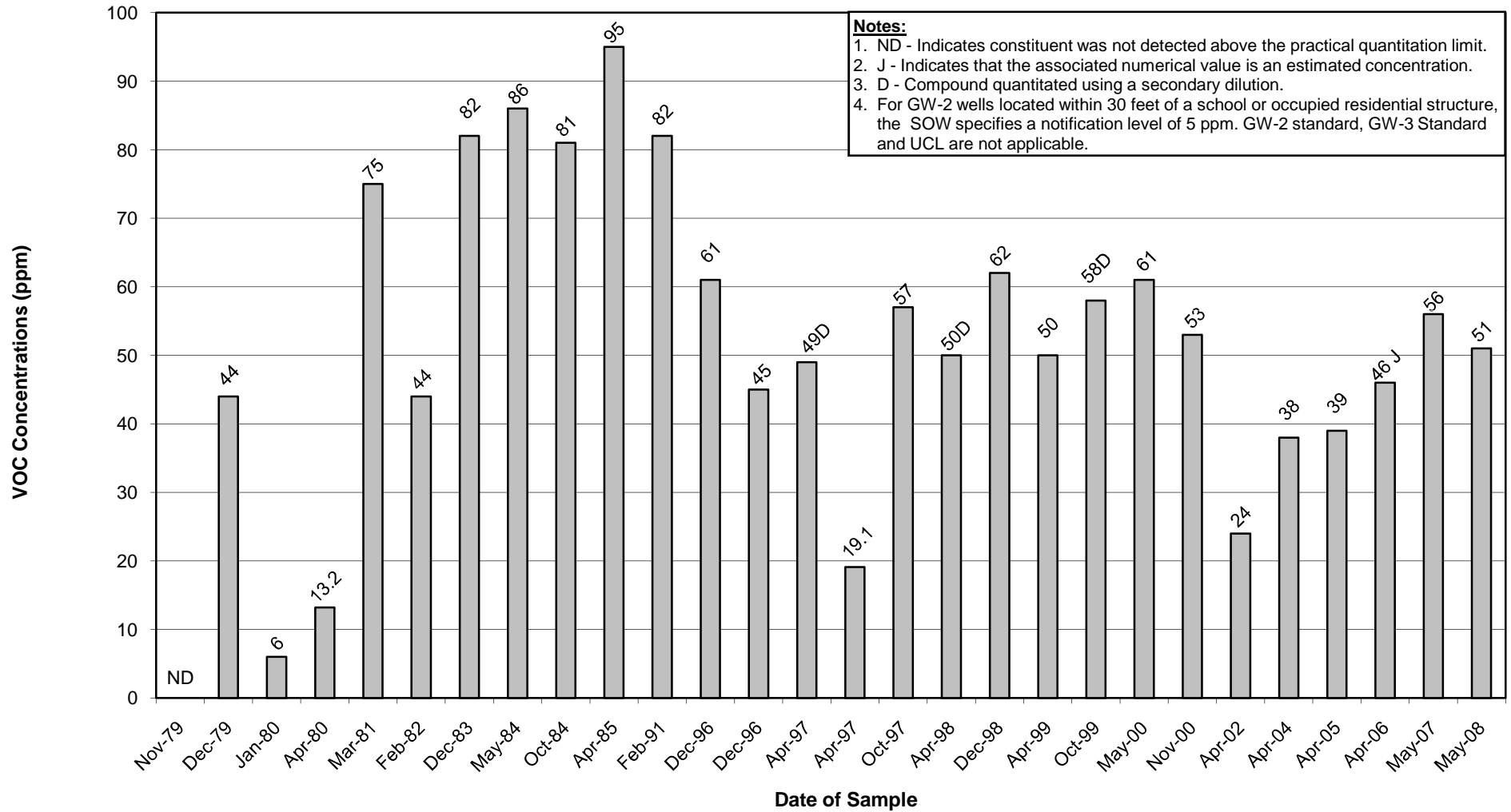
**Appendix F**  
**Well Historical 6B-R Total VOC Concentrations**

**Groundwater Management Area 3**  
**General Electric Company - Pittsfield, Massachusetts**



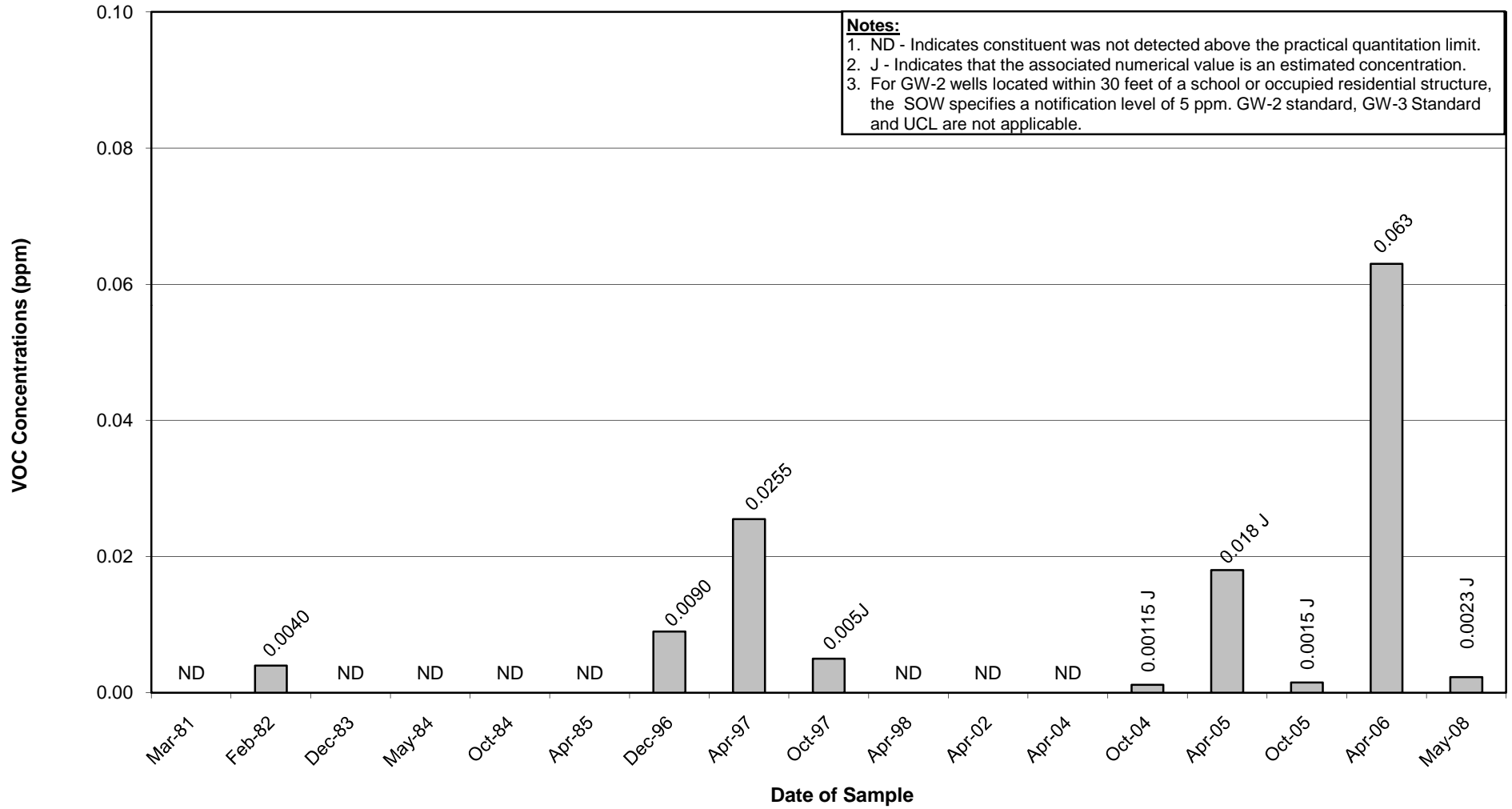
**Appendix F  
Well Historical 16A Total VOC Concentrations**

**Groundwater Management Area 3  
General Electric Company - Pittsfield, Massachusetts**



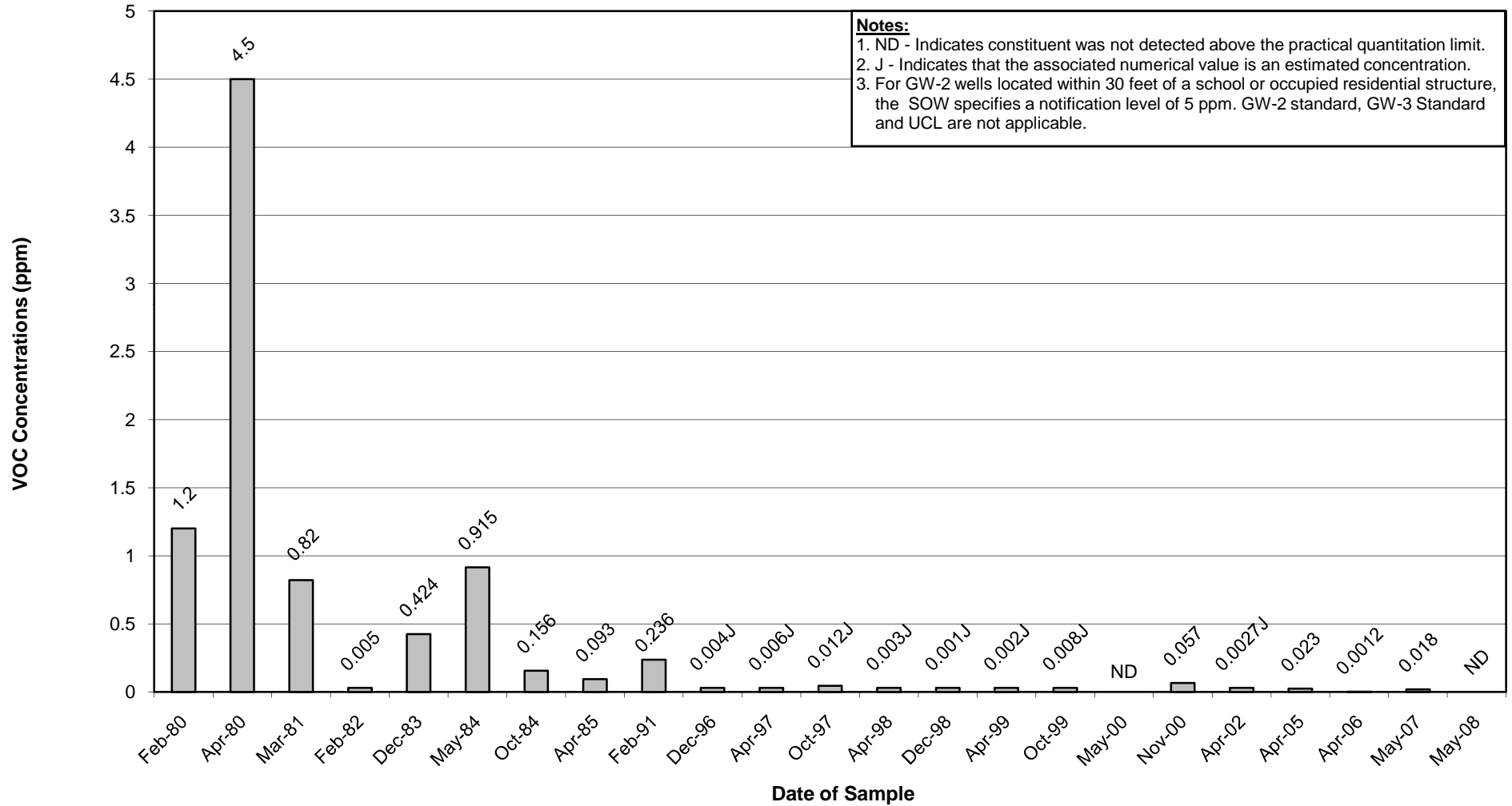
**Appendix F**  
**Well Historical 16B-R Total VOC Concentrations**

**Groundwater Management Area 3**  
**General Electric Company - Pittsfield, Massachusetts**



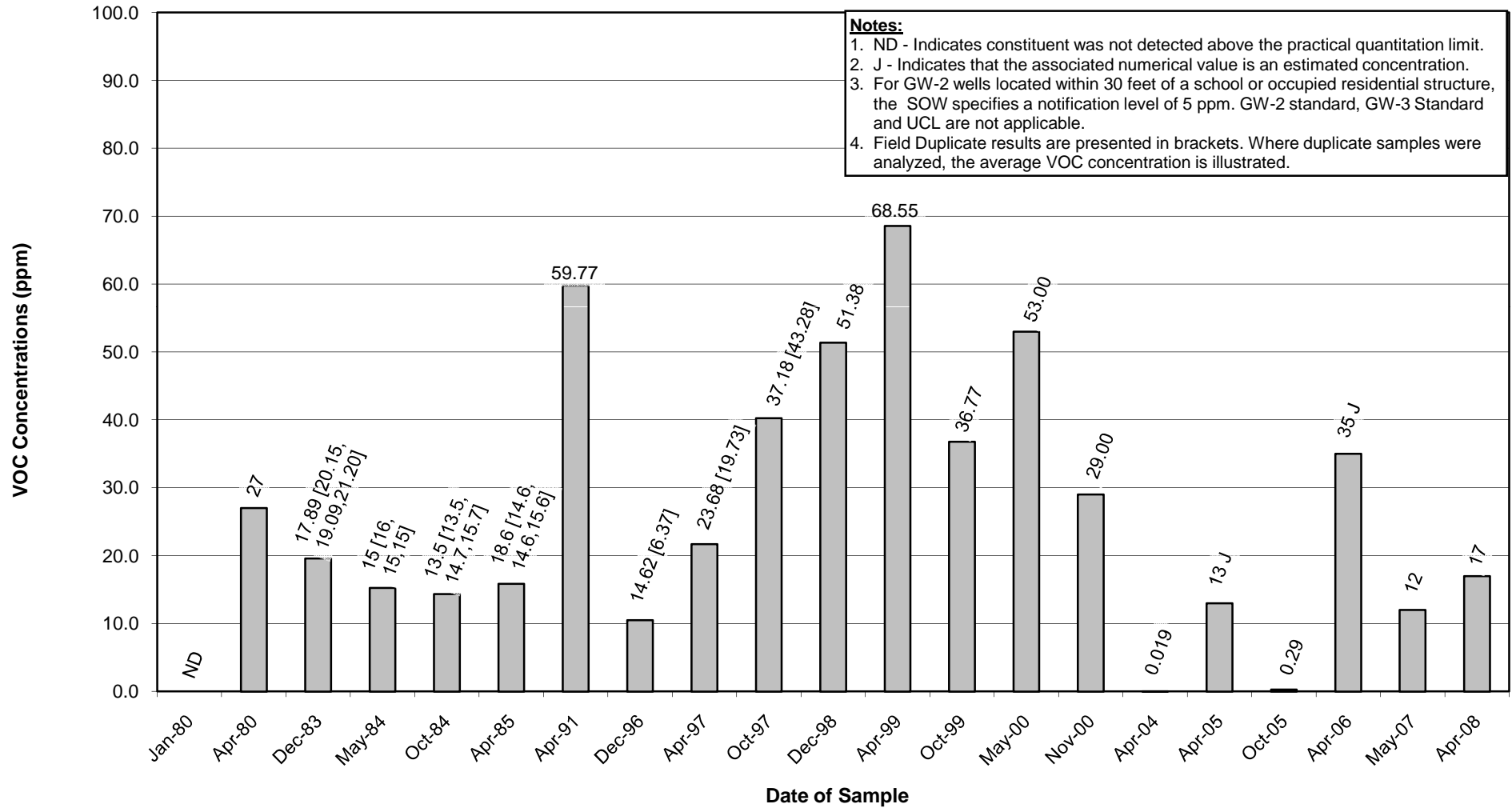
**Appendix F**  
**Well Historical 16C-R Total VOC Concentrations**

**Groundwater Management Area 3**  
**General Electric Company - Pittsfield, Massachusetts**



**Appendix F**  
**Well Historical 39B-R Total VOC Concentrations**

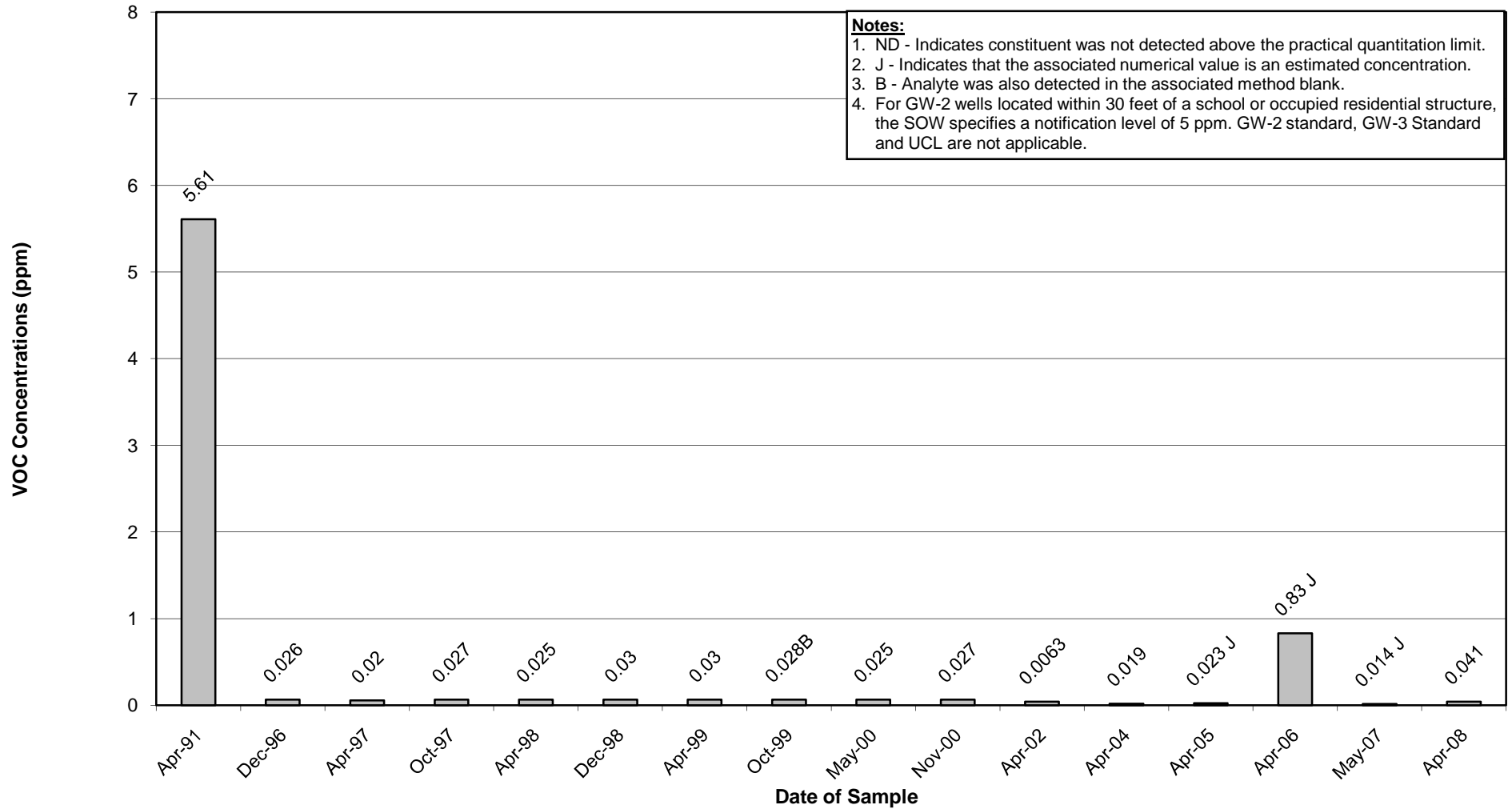
**Groundwater Management Area 3**  
**General Electric Company - Pittsfield, Massachusetts**





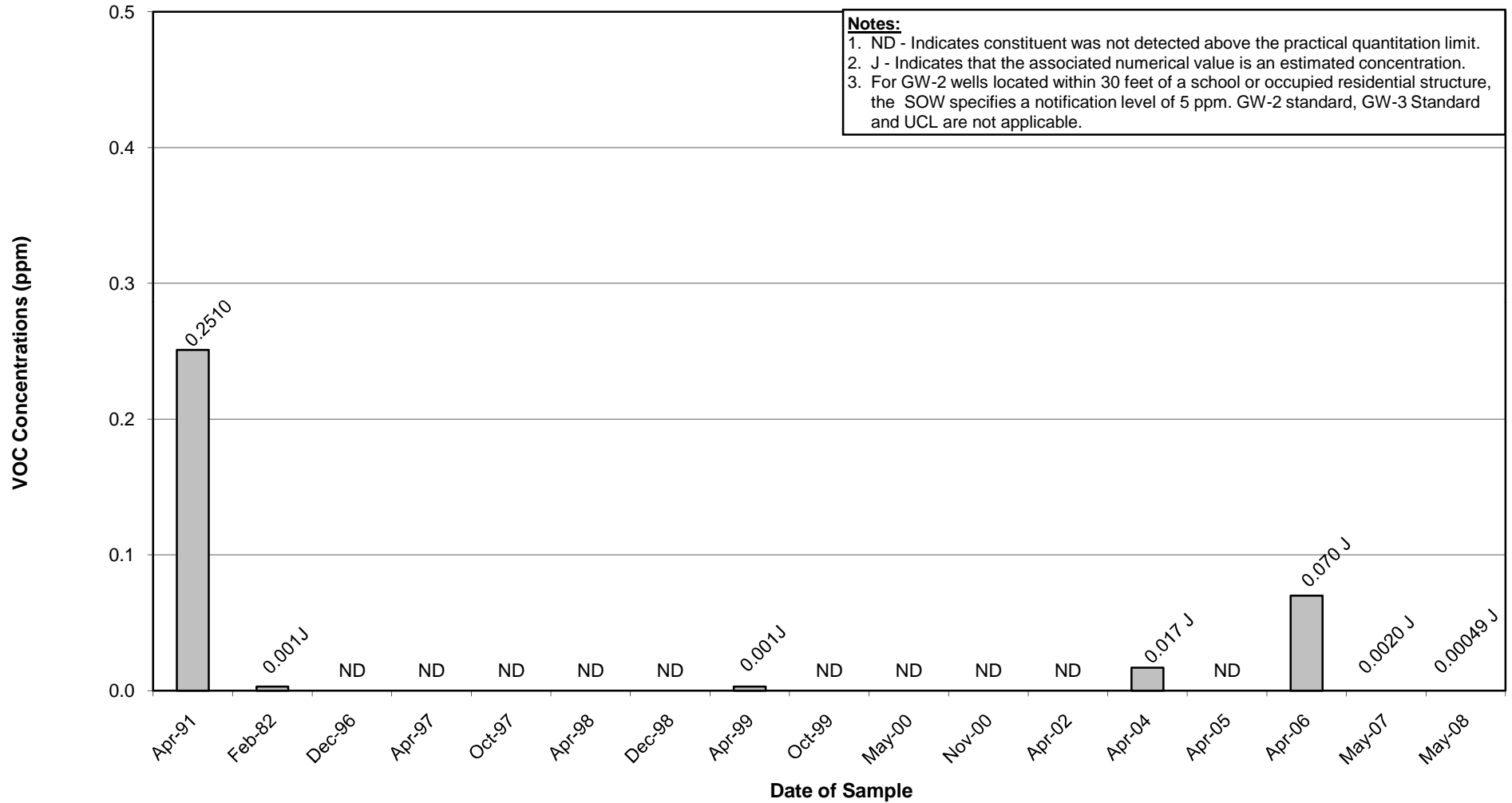
**Appendix F**  
**Well Historical 39D-R Total VOC Concentrations**

**Groundwater Management Area 3**  
**General Electric Company - Pittsfield, Massachusetts**



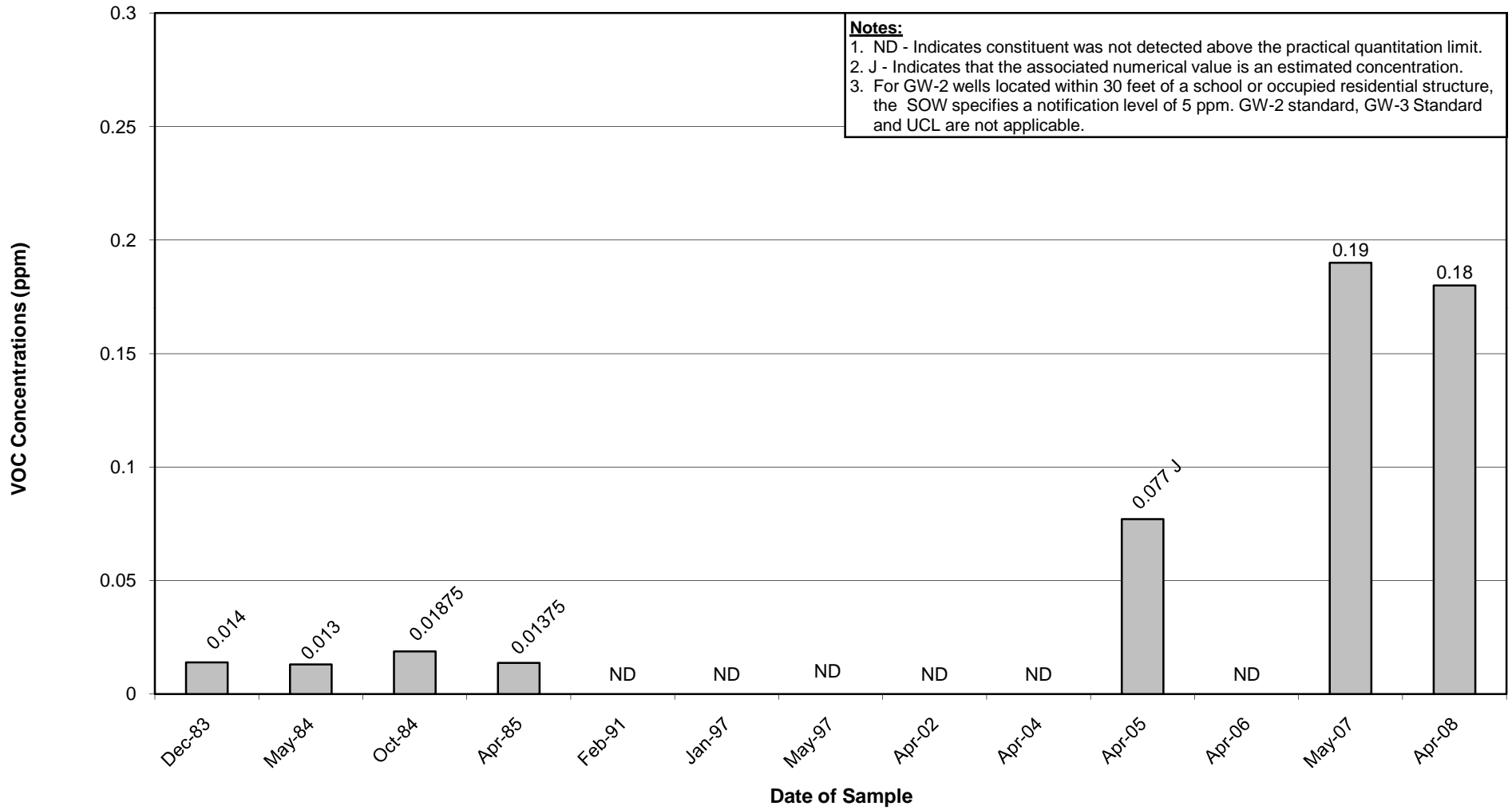
**Appendix F**  
**Well Historical 39E Total VOC Concentrations**

**Groundwater Management Area 3**  
**General Electric Company - Pittsfield, Massachusetts**



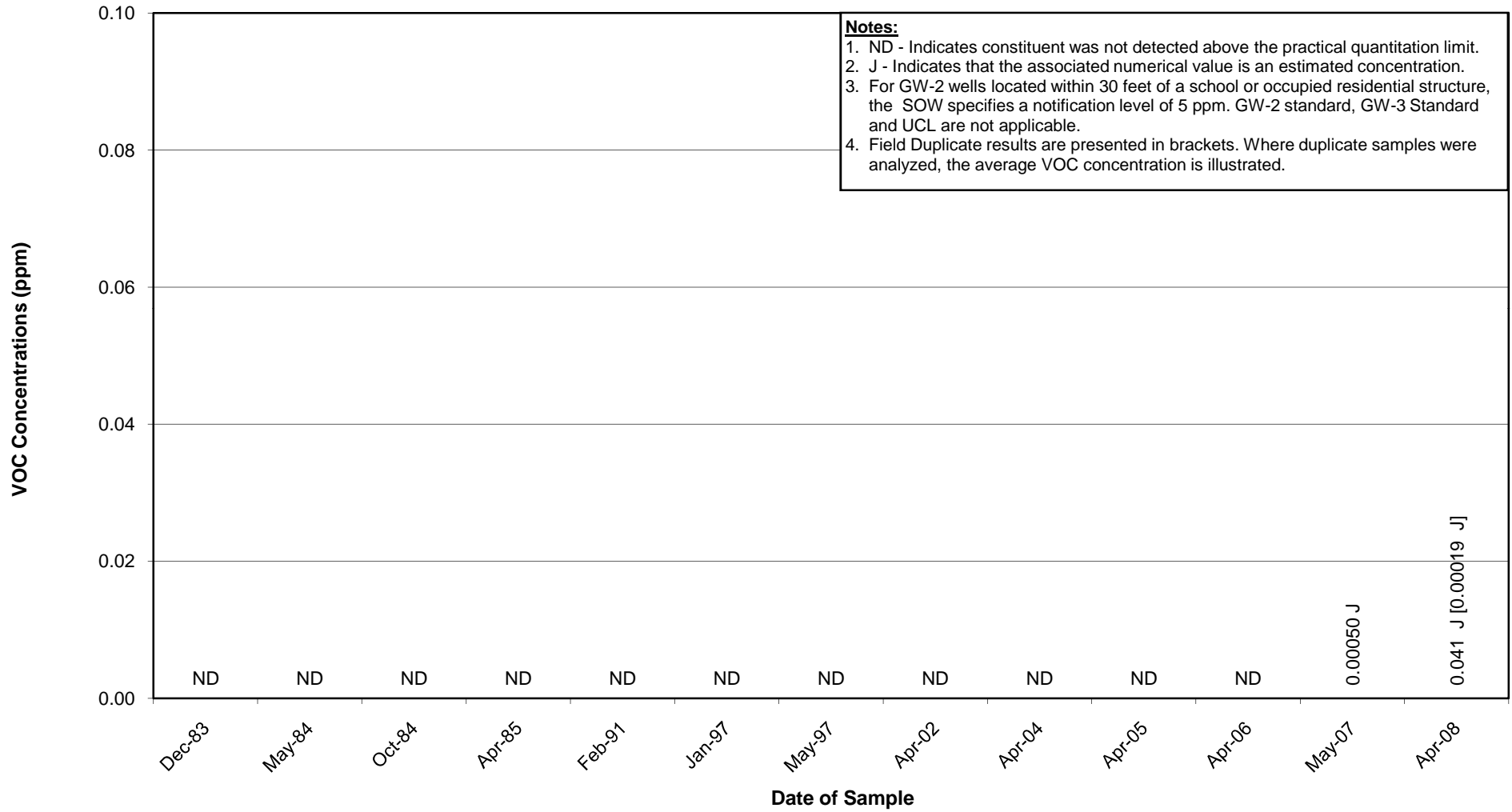
**Appendix F**  
**Well Historical 43A Total VOC Concentrations**

**Groundwater Management Area 3**  
**General Electric Company - Pittsfield, Massachusetts**



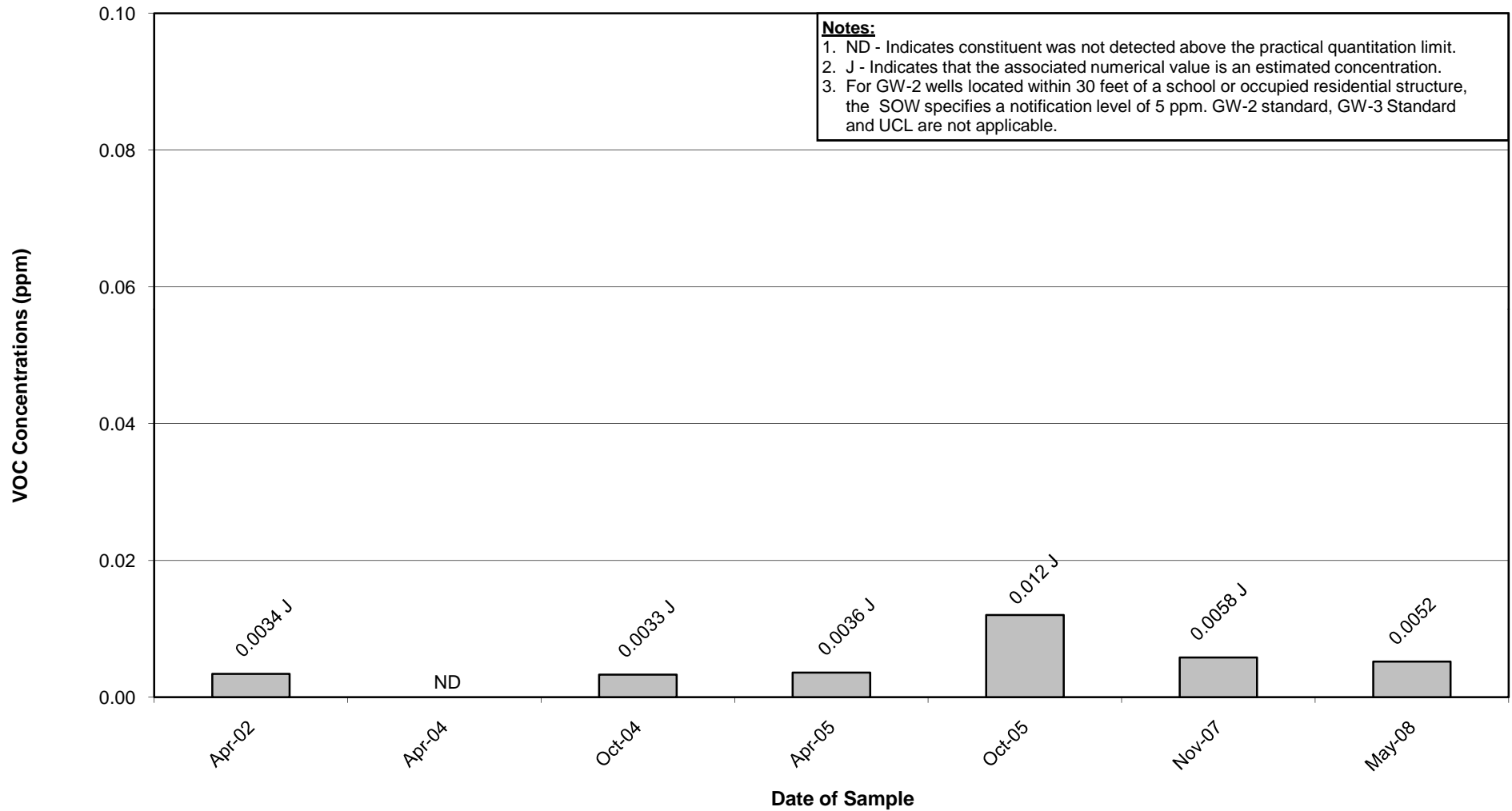
**Appendix F**  
**Well Historical 43B Total VOC Concentrations**

**Groundwater Management Area 3**  
**General Electric Company - Pittsfield, Massachusetts**



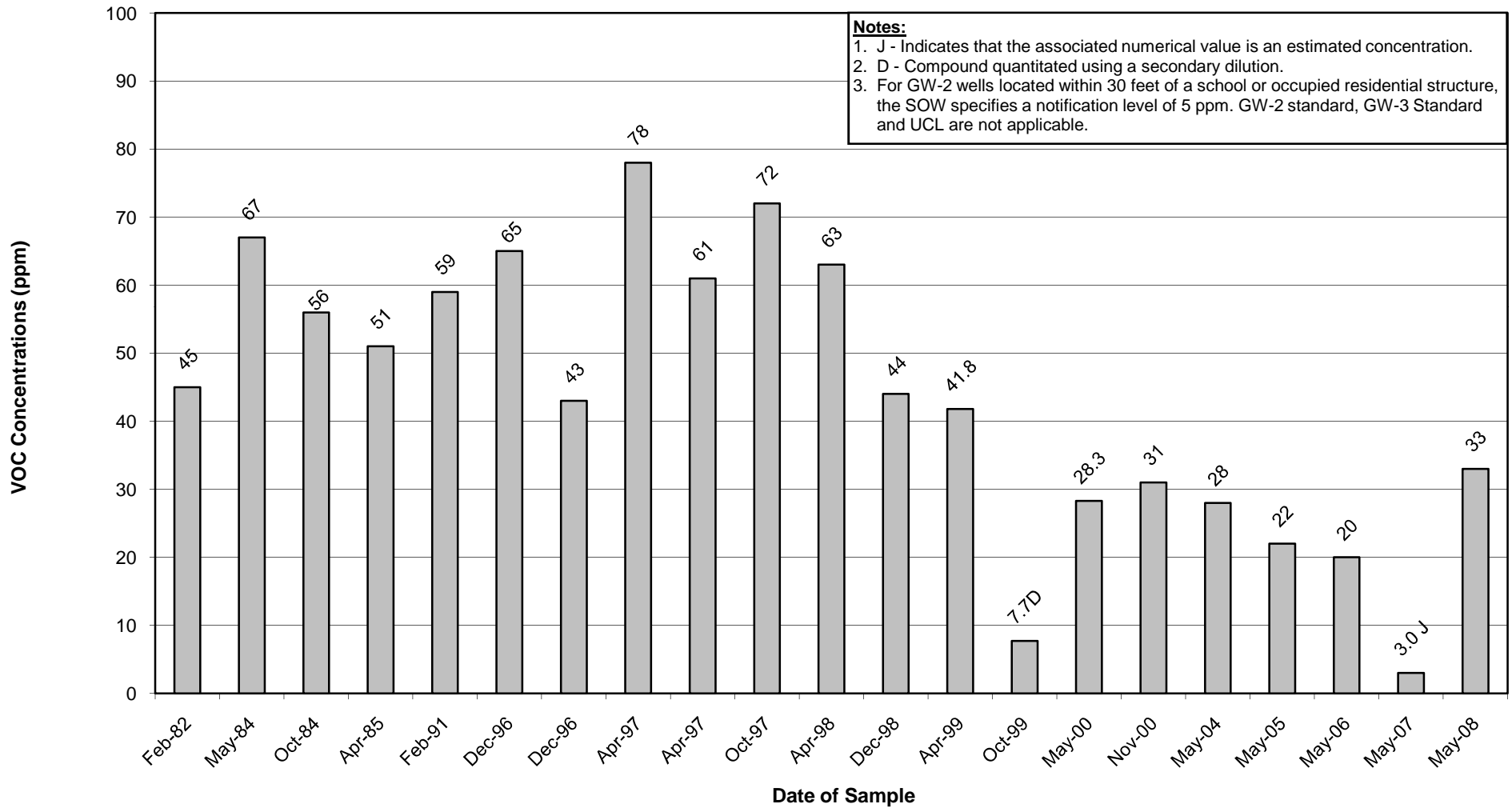
Appendix F  
Well Historical 51-14 Total VOC Concentrations

Groundwater Management Area 3  
General Electric Company - Pittsfield, Massachusetts



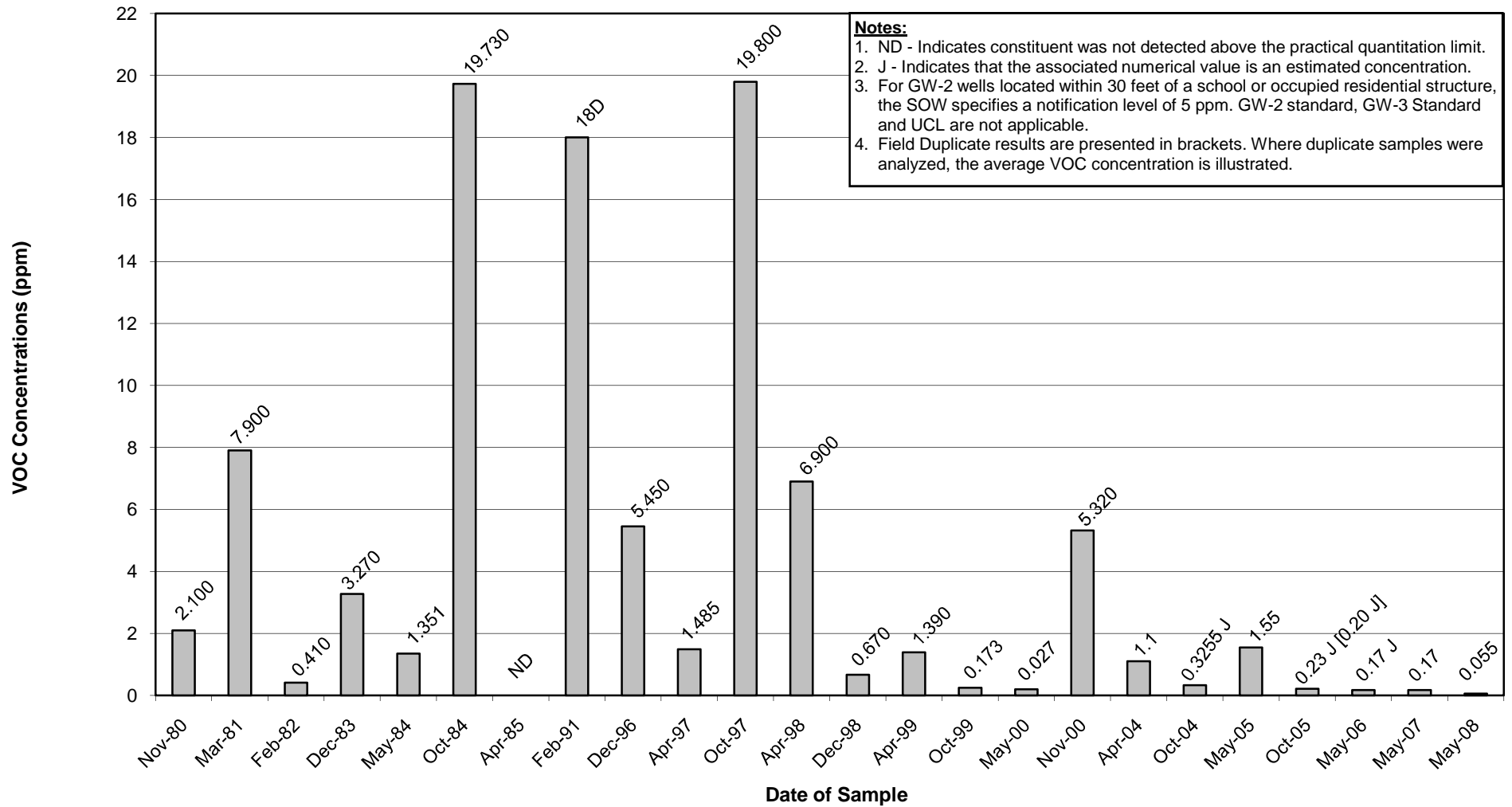
**Appendix F**  
**Well Historical 89A Total VOC Concentrations**

**Groundwater Management Area 3**  
**General Electric Company - Pittsfield, Massachusetts**



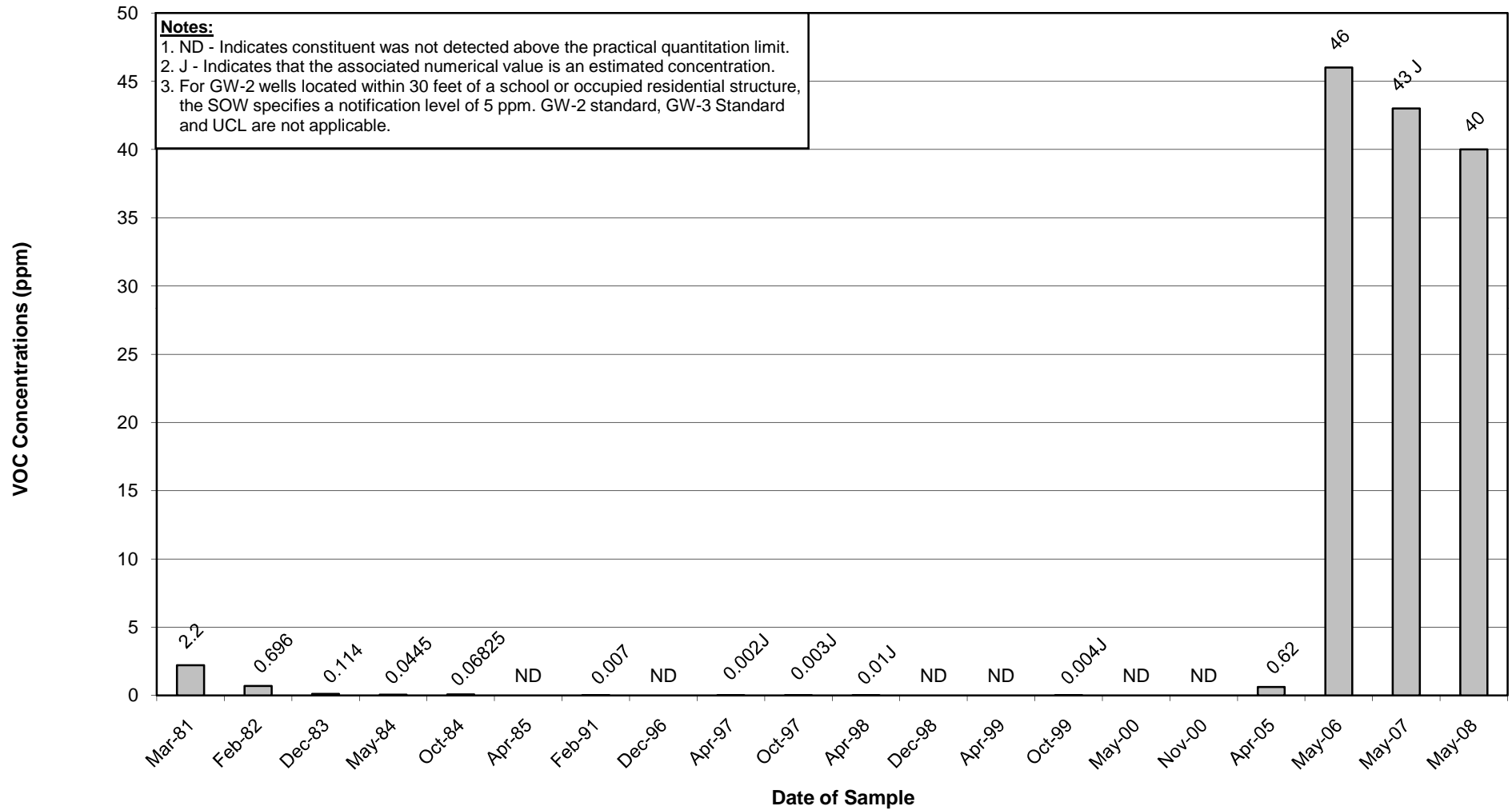
**Appendix F  
Well Historical 89B Total VOC Concentrations**

**Groundwater Management Area 3  
General Electric Company - Pittsfield, Massachusetts**



**Appendix F**  
**Well Historical 89D-R Total VOC Concentrations**

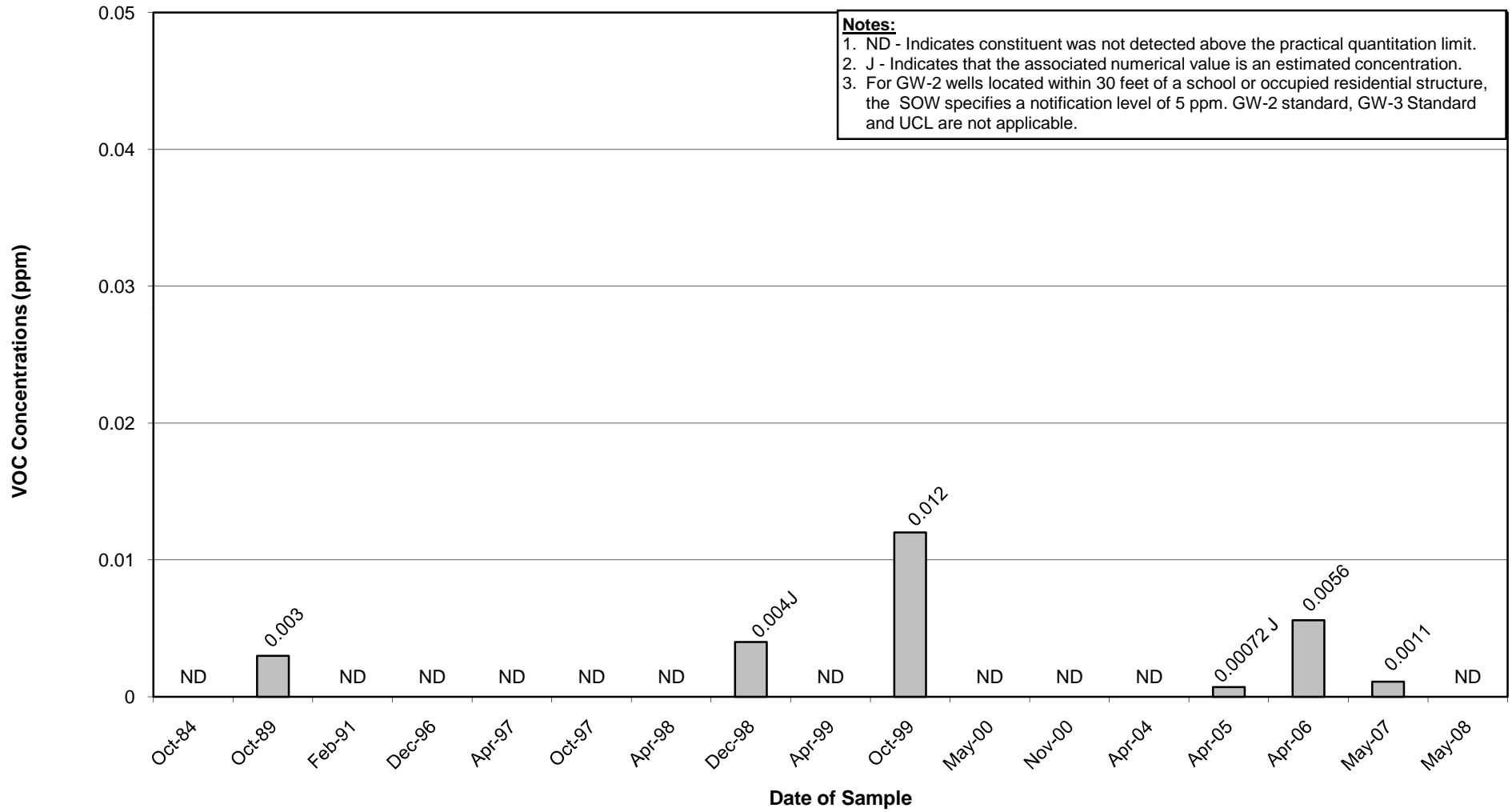
**Groundwater Management Area 3**  
**General Electric Company - Pittsfield, Massachusetts**





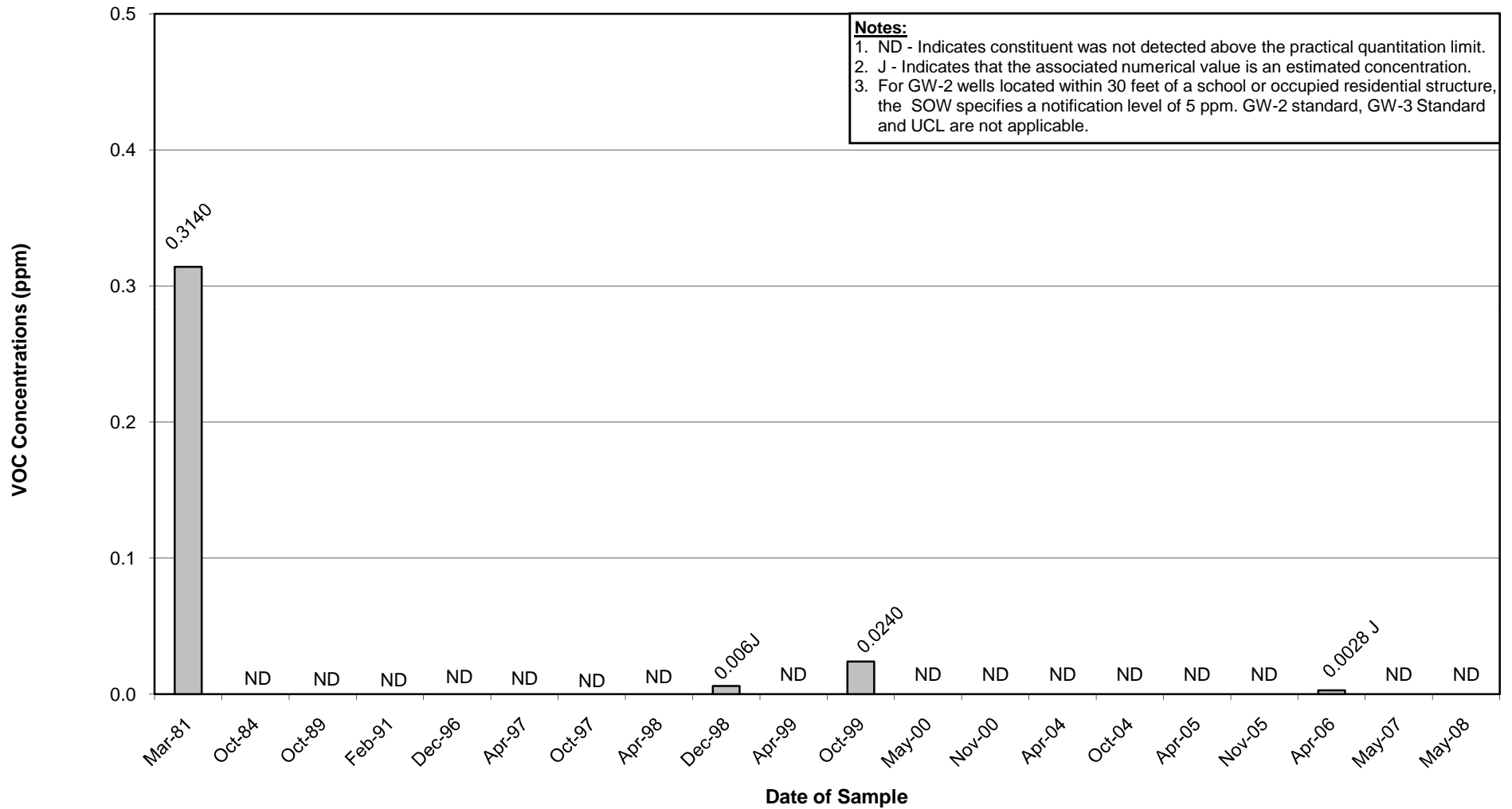
**Appendix F**  
**Well Historical 90A Total VOC Concentrations**

**Groundwater Management Area 3**  
**General Electric Company - Pittsfield, Massachusetts**



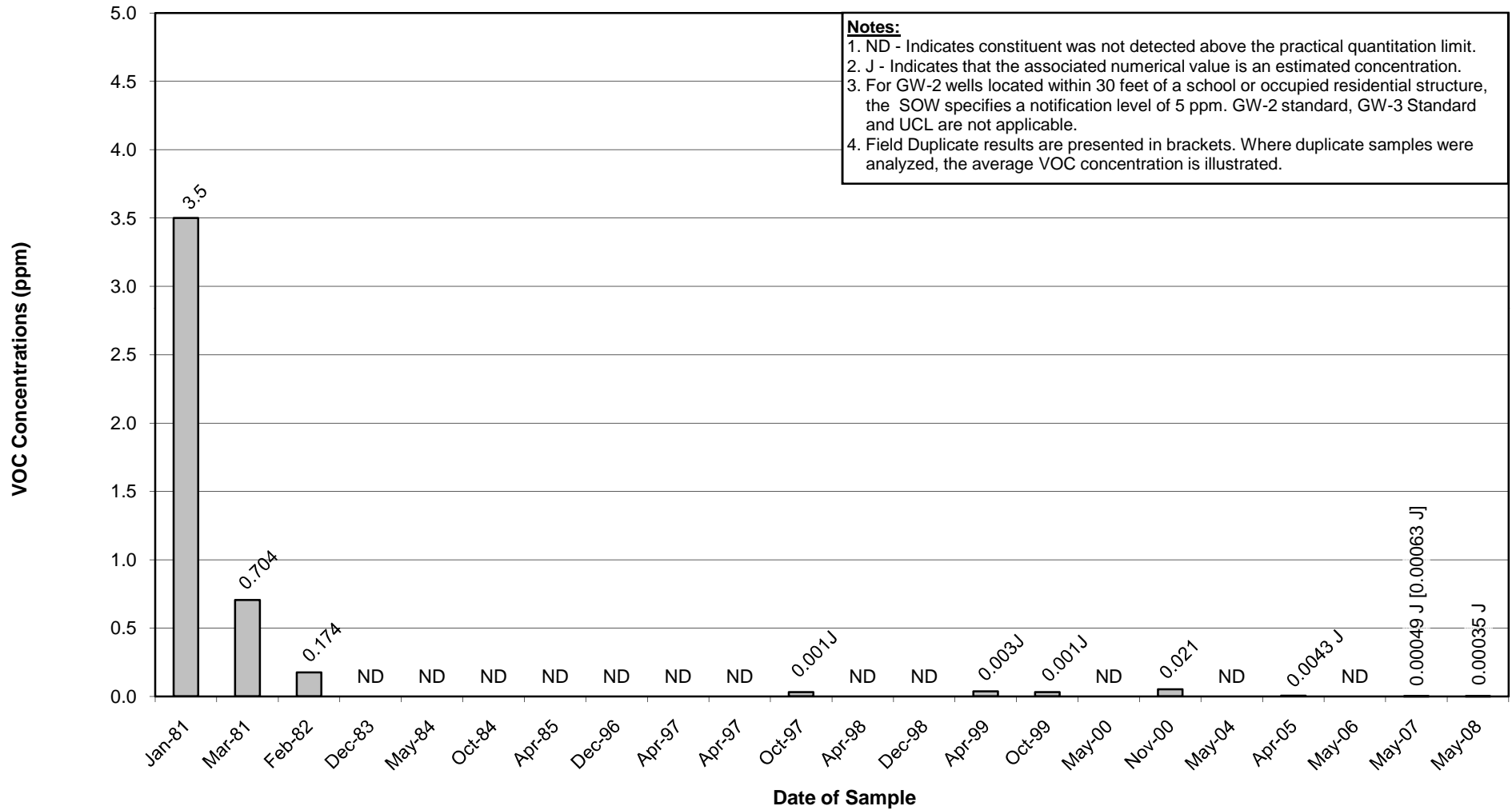
**Appendix F  
Well Historical 90B Total VOC Concentrations**

**Groundwater Management Area 3  
General Electric Company - Pittsfield, Massachusetts**



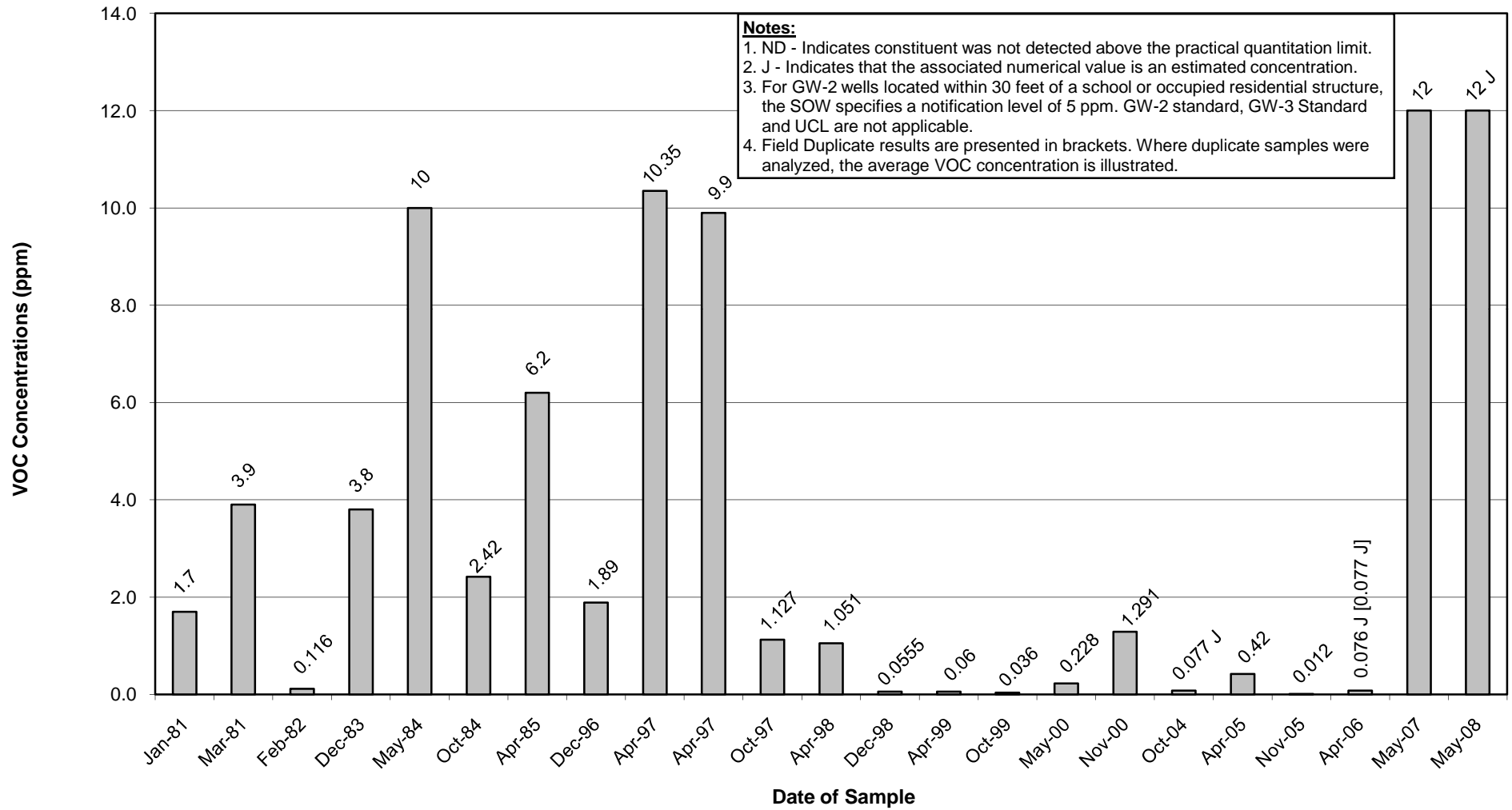
**Appendix F**  
**Well Historical 95A Total VOC Concentrations**

**Groundwater Management Area 3**  
**General Electric Company - Pittsfield, Massachusetts**



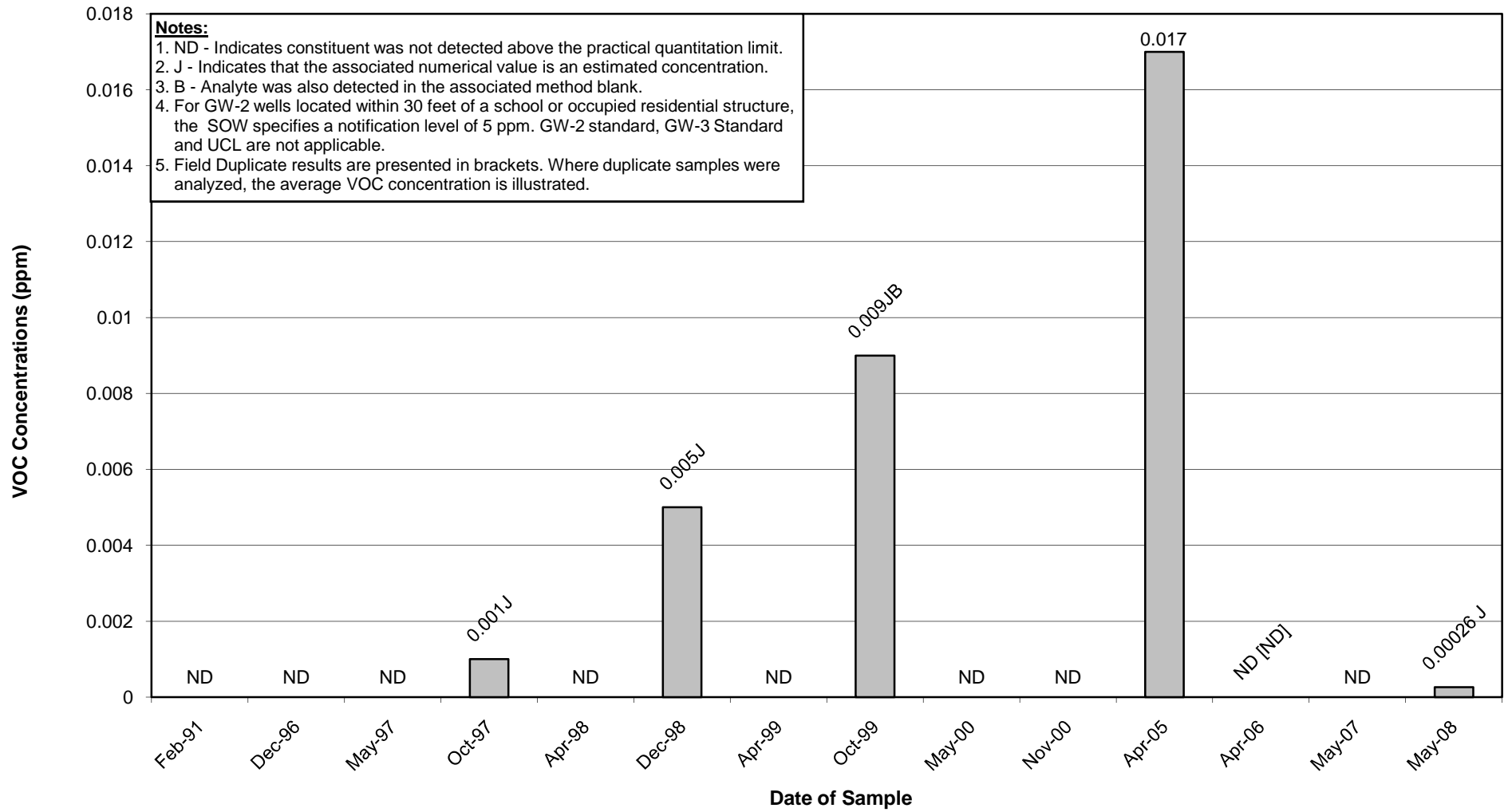
**Appendix F**  
**Well Historical 95B-R Total VOC Concentrations**

**Groundwater Management Area 3**  
**General Electric Company - Pittsfield, Massachusetts**



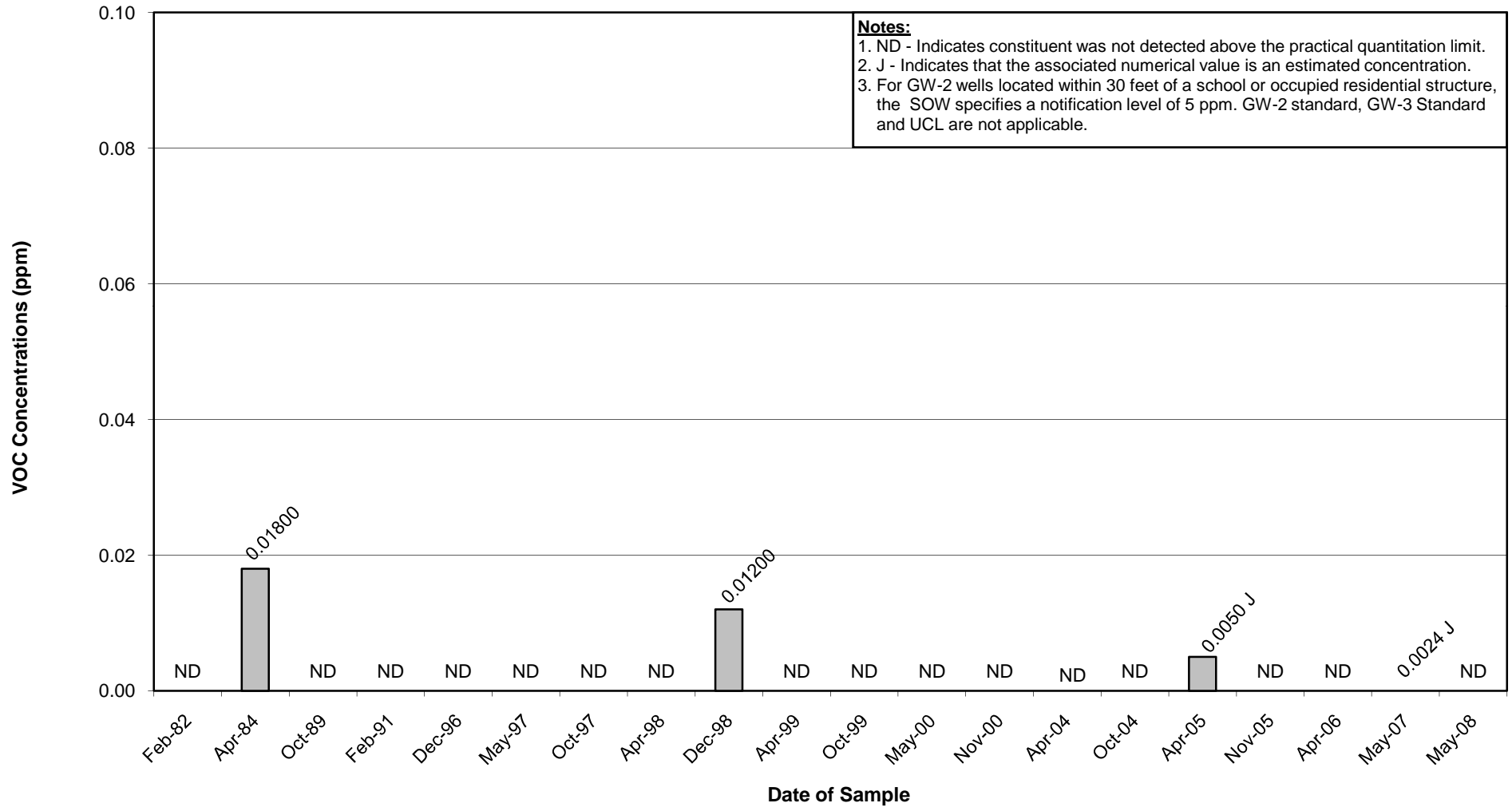
**Appendix F  
Well Historical 111A-R Total VOC Concentrations**

**Groundwater Management Area 3  
General Electric Company - Pittsfield, Massachusetts**



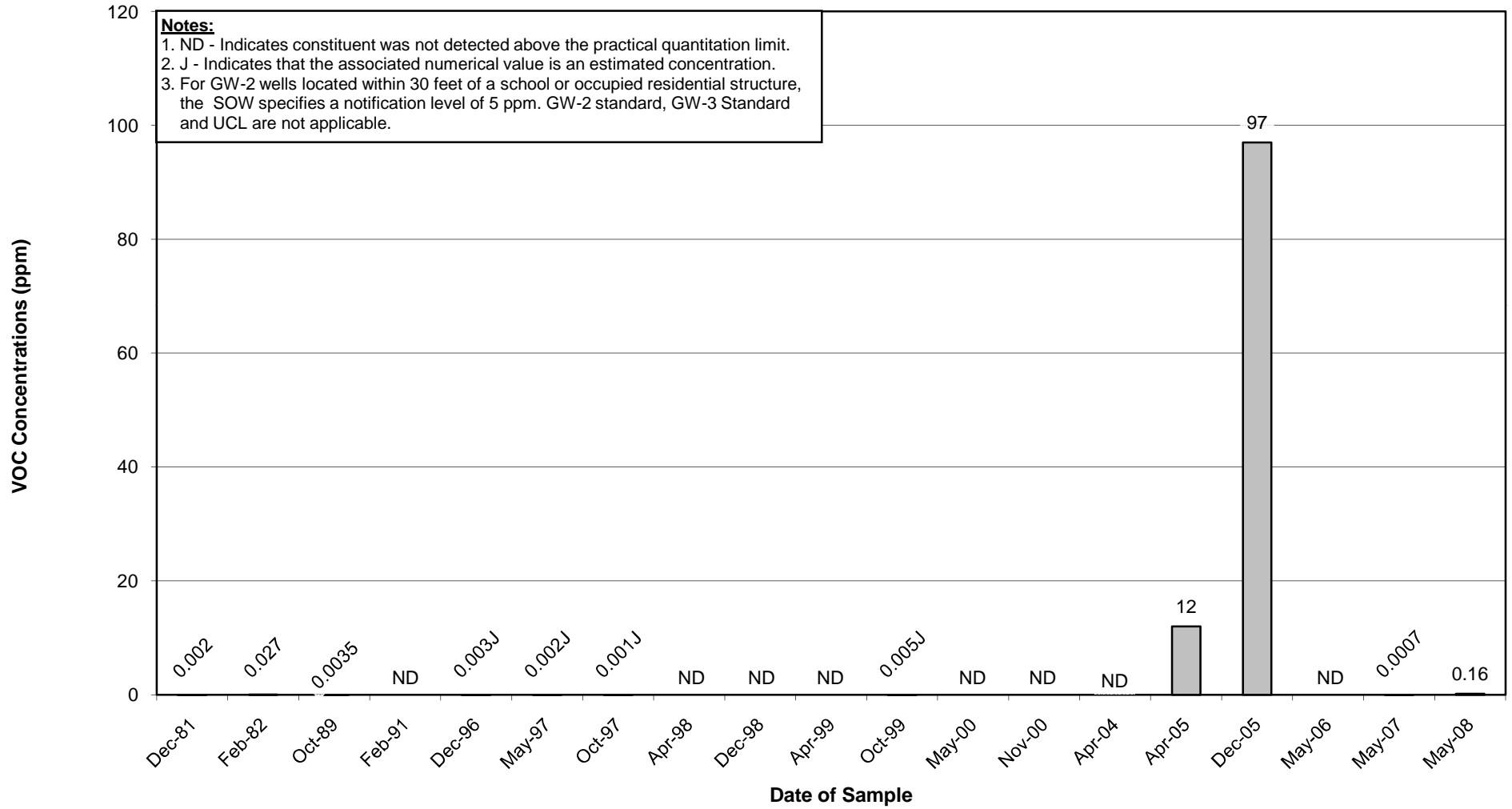
**Appendix F**  
**Well Historical 111B-R Total VOC Concentrations**

**Groundwater Management Area 3**  
**General Electric Company - Pittsfield, Massachusetts**



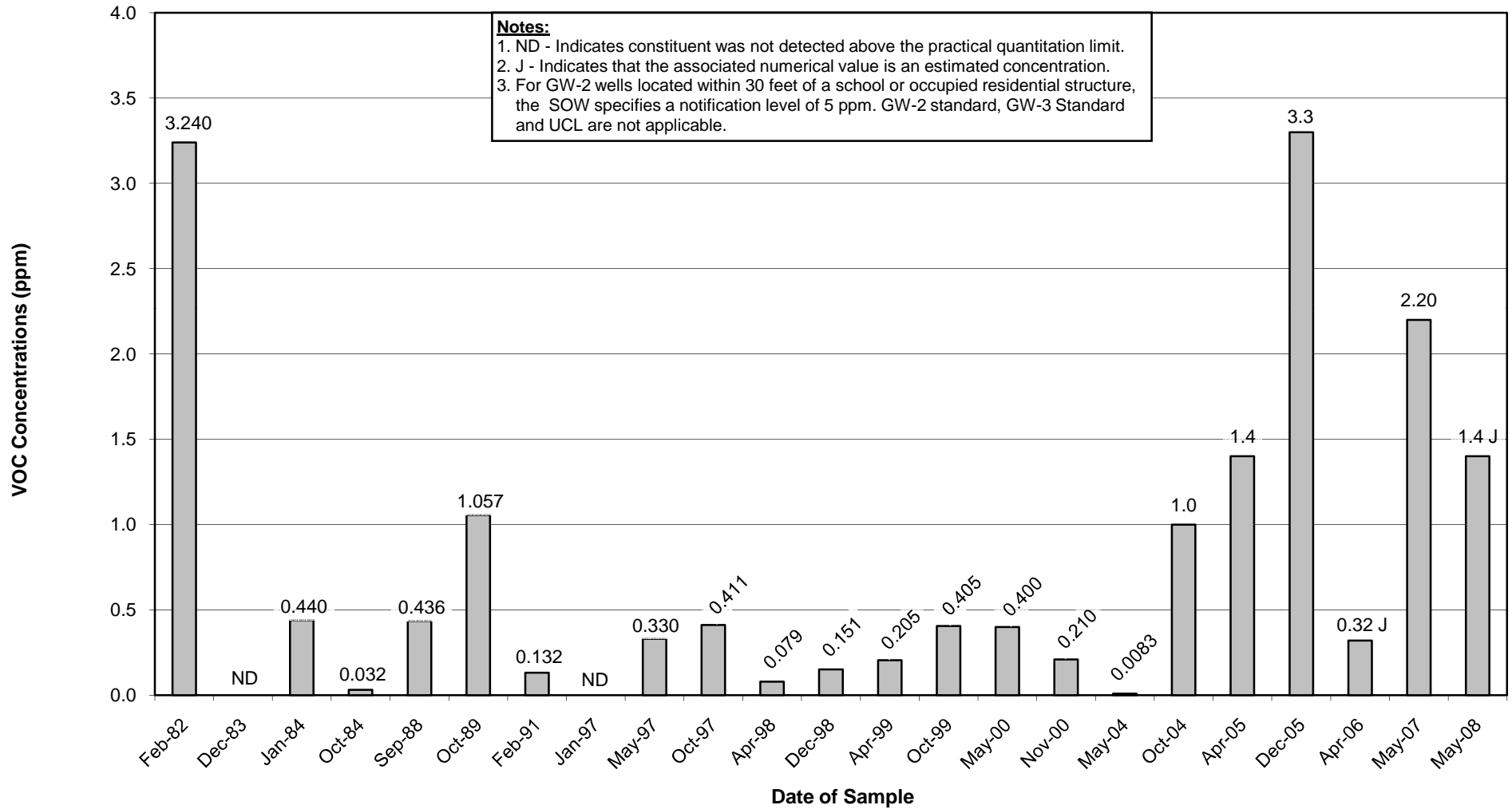
**Appendix F**  
**Well Historical 114A Total VOC Concentrations**

**Groundwater Management Area 3**  
**General Electric Company - Pittsfield, Massachusetts**



**Appendix F**  
**Well Historical 114B-R Total VOC Concentrations**

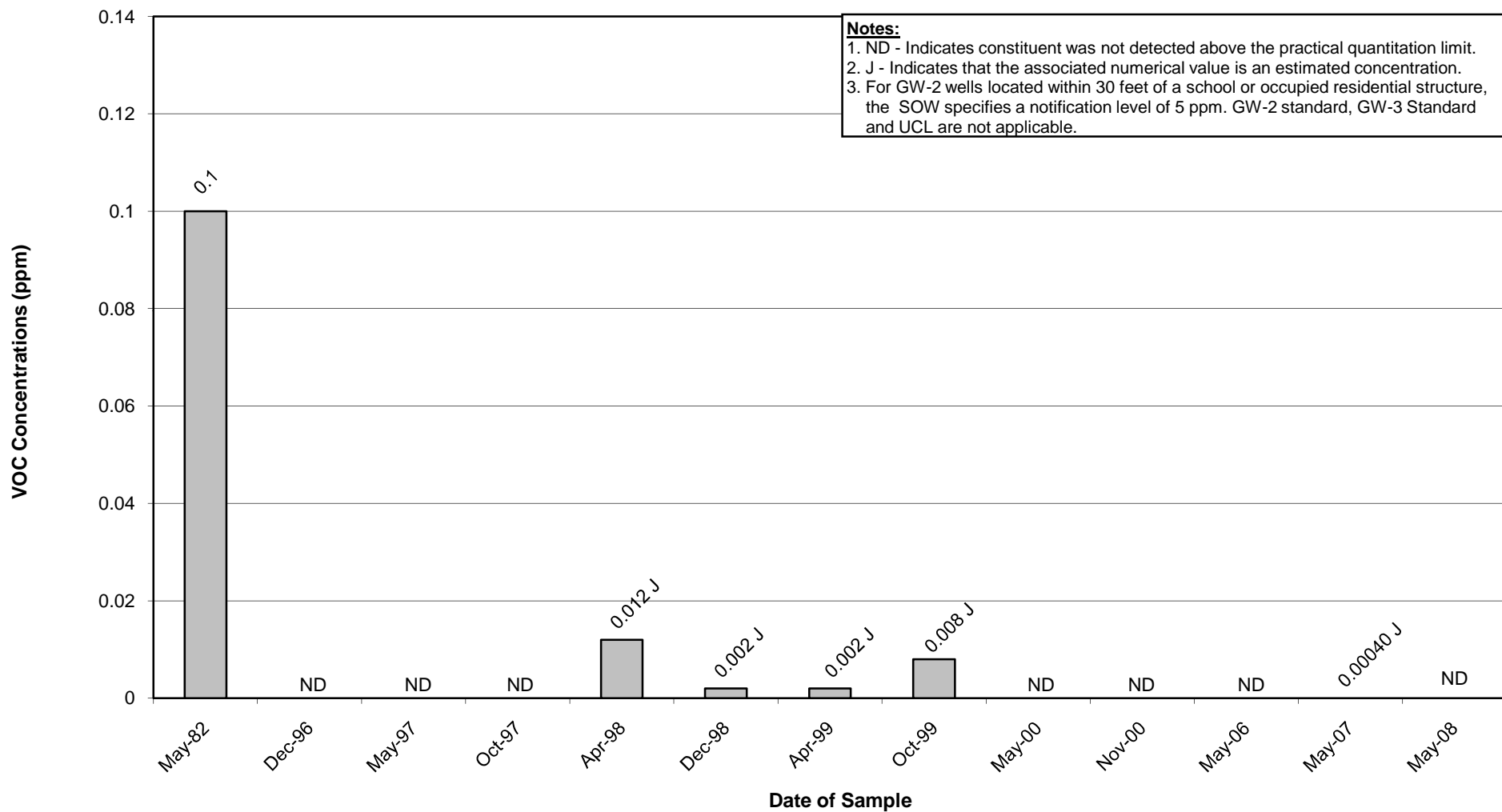
**Groundwater Management Area 3**  
**General Electric Company - Pittsfield, Massachusetts**





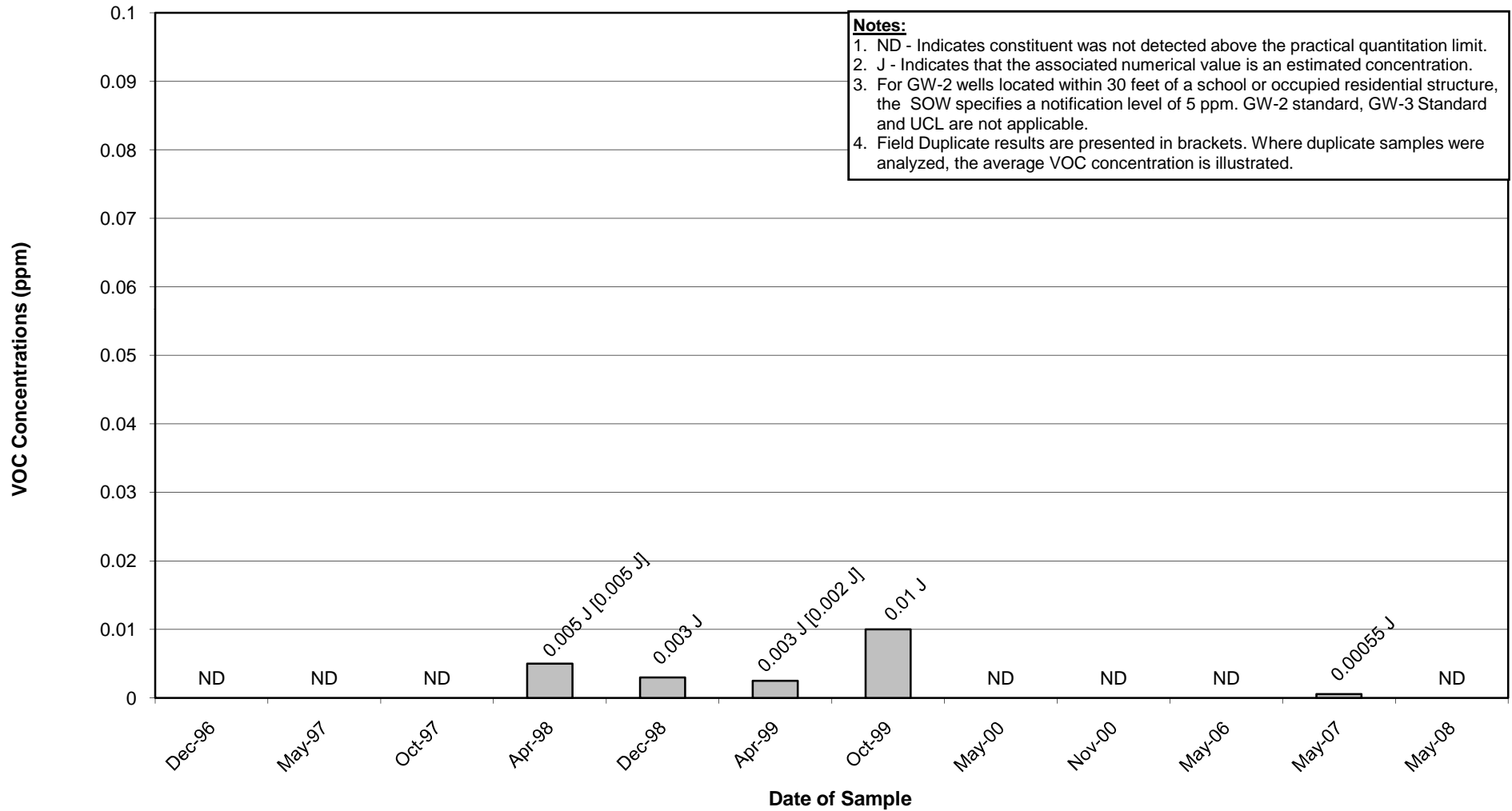
**Appendix F**  
**Well Historical 115A Total VOC Concentrations**

**Groundwater Management Area 3**  
**General Electric Company - Pittsfield, Massachusetts**



**Appendix F**  
**Well Historical 115B Total VOC Concentrations**

**Groundwater Management Area 3**  
**General Electric Company - Pittsfield, Massachusetts**

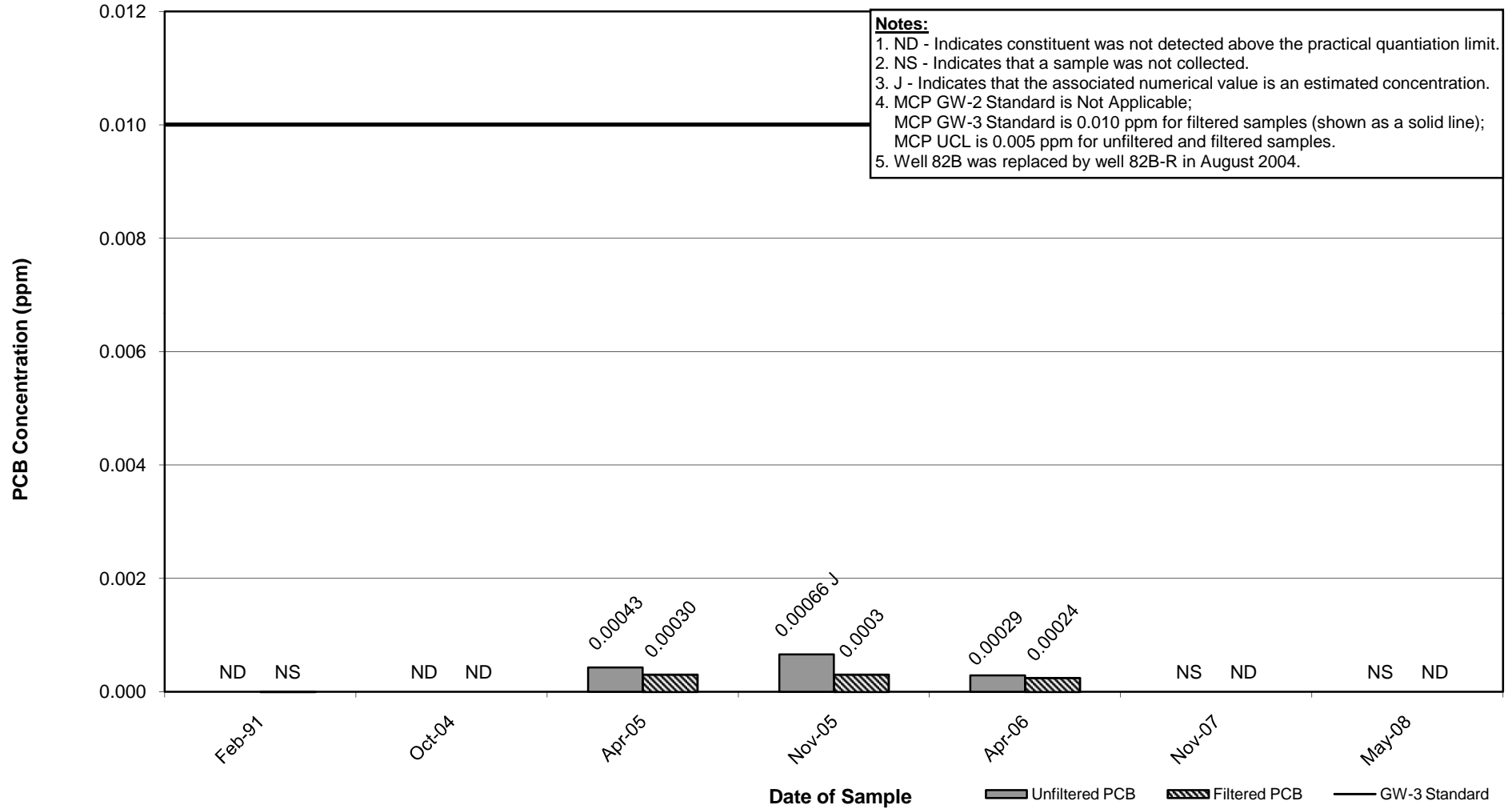


**Historical Groundwater Data**

Total PCB Concentrations –  
Wells Sampled in Spring 2008

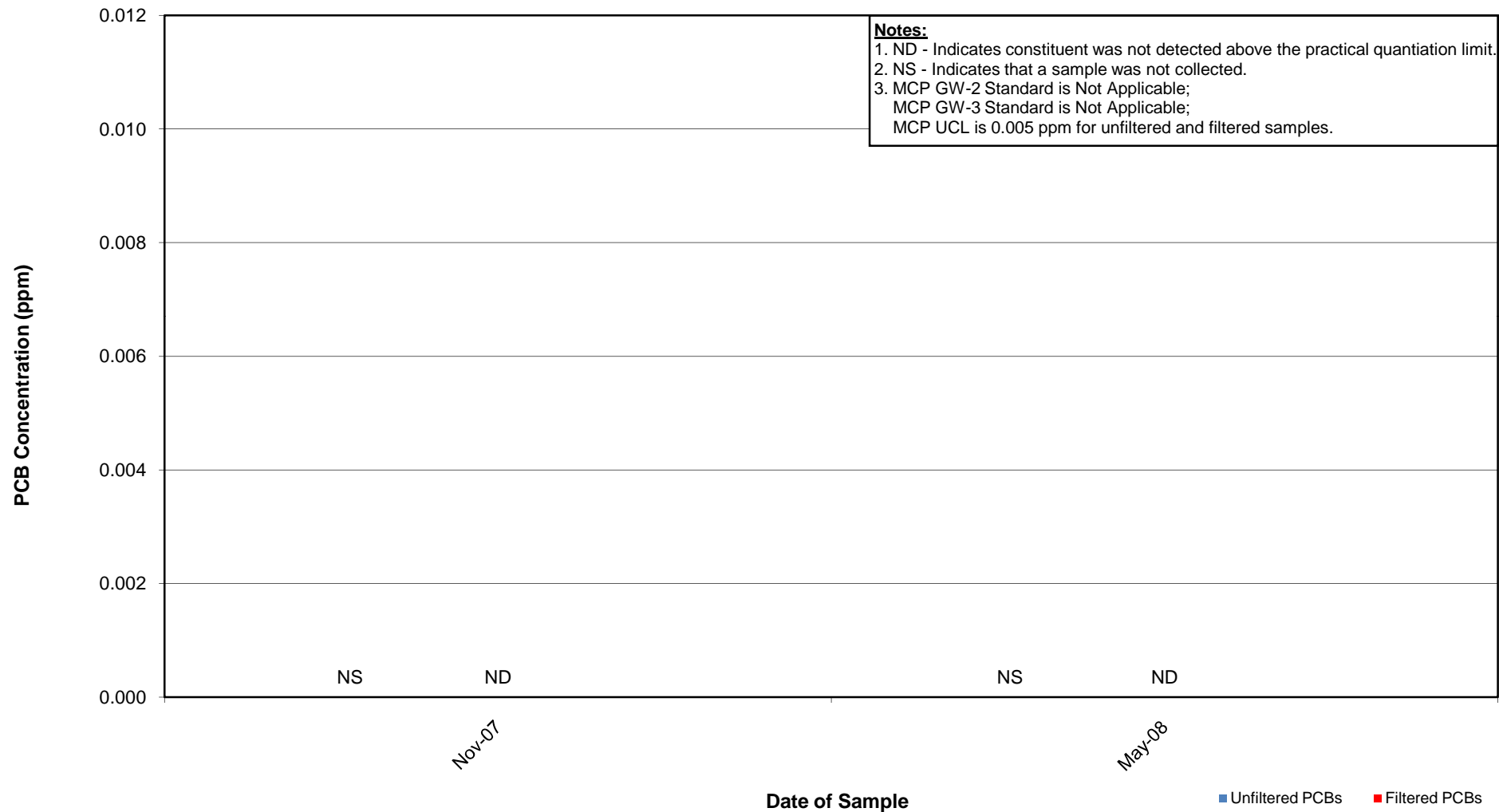
**Appendix F**  
**Well 82B-R Historical Total PCB Concentrations**

**Groundwater Management Area 3**  
**General Electric Company - Pittsfield, Massachusetts**



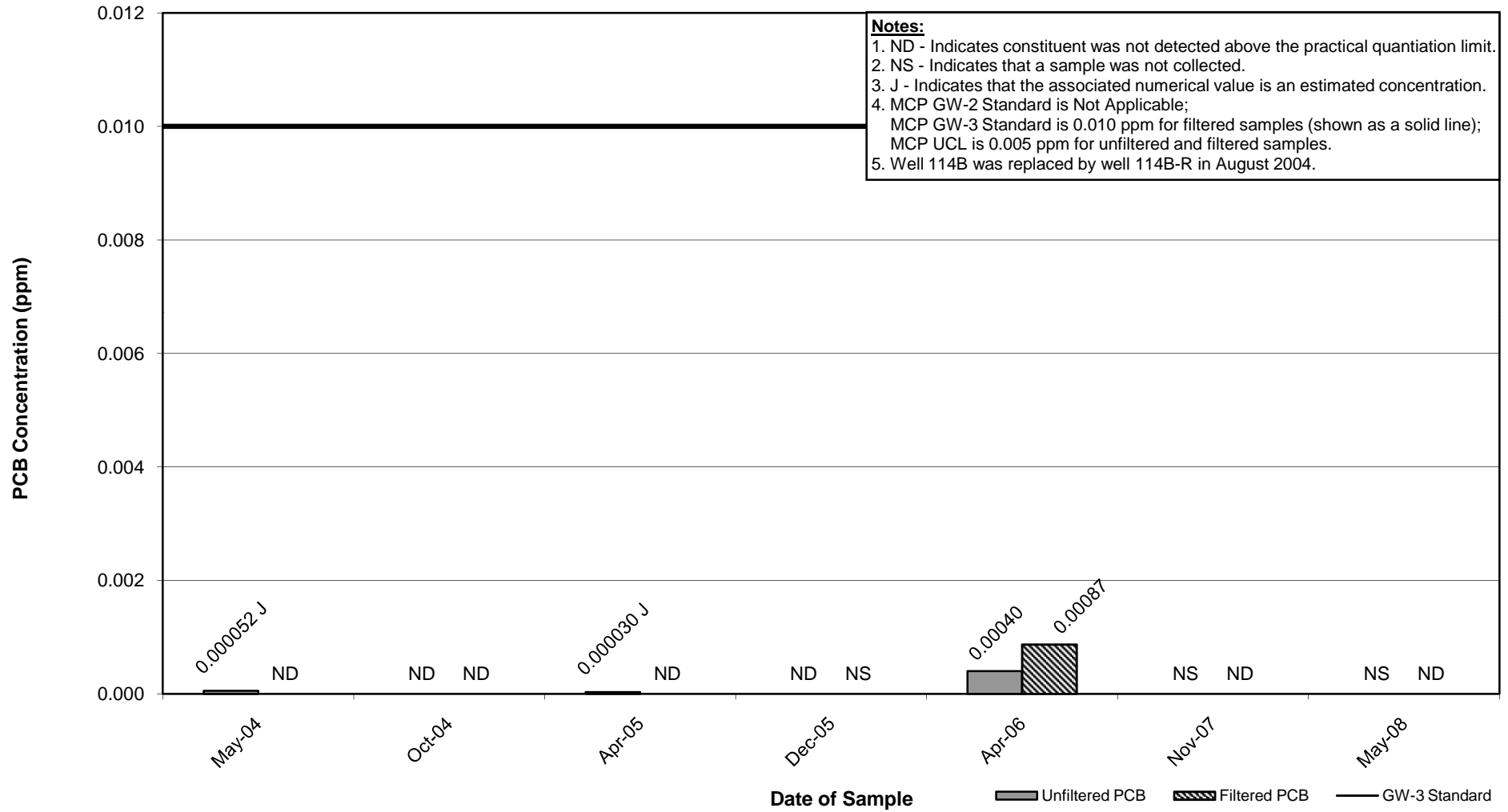
**Appendix F**  
**Well 114A Historical Total PCB Concentrations**

**Groundwater Management Area 3**  
**General Electric Company - Pittsfield, Massachusetts**



**Appendix F**  
**Well 114B-R Historical Total PCB Concentrations**

**Groundwater Management Area 3**  
**General Electric Company - Pittsfield, Massachusetts**

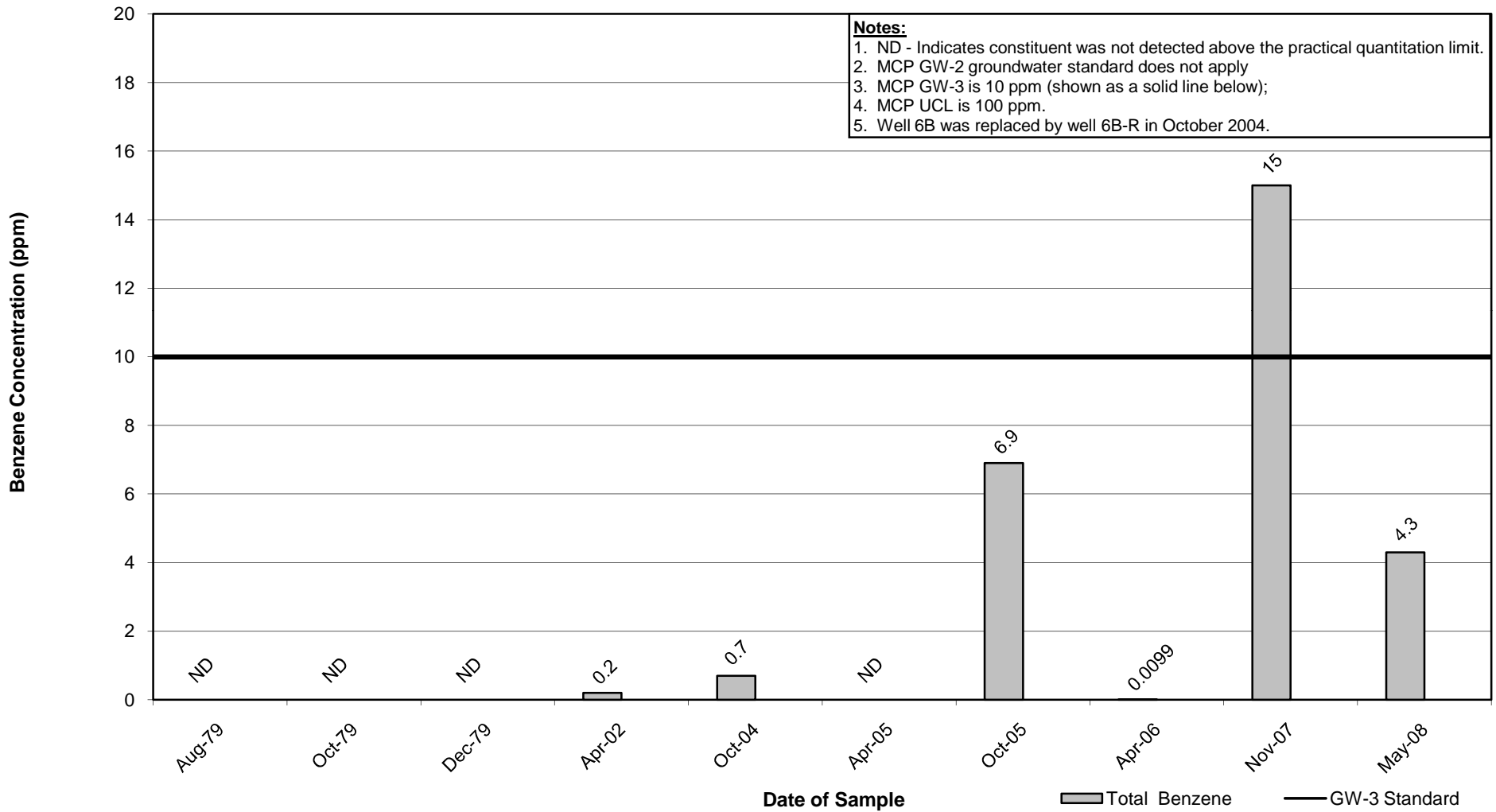


**Historical Groundwater Data**

Benzene Concentrations –  
Selected Wells Sampled in Spring  
2008

**Appendix F**  
**Well 6B/6B-R Historical Benzene Concentrations**

**Groundwater Management Area 3**  
**General Electric Company - Pittsfield, Massachusetts**



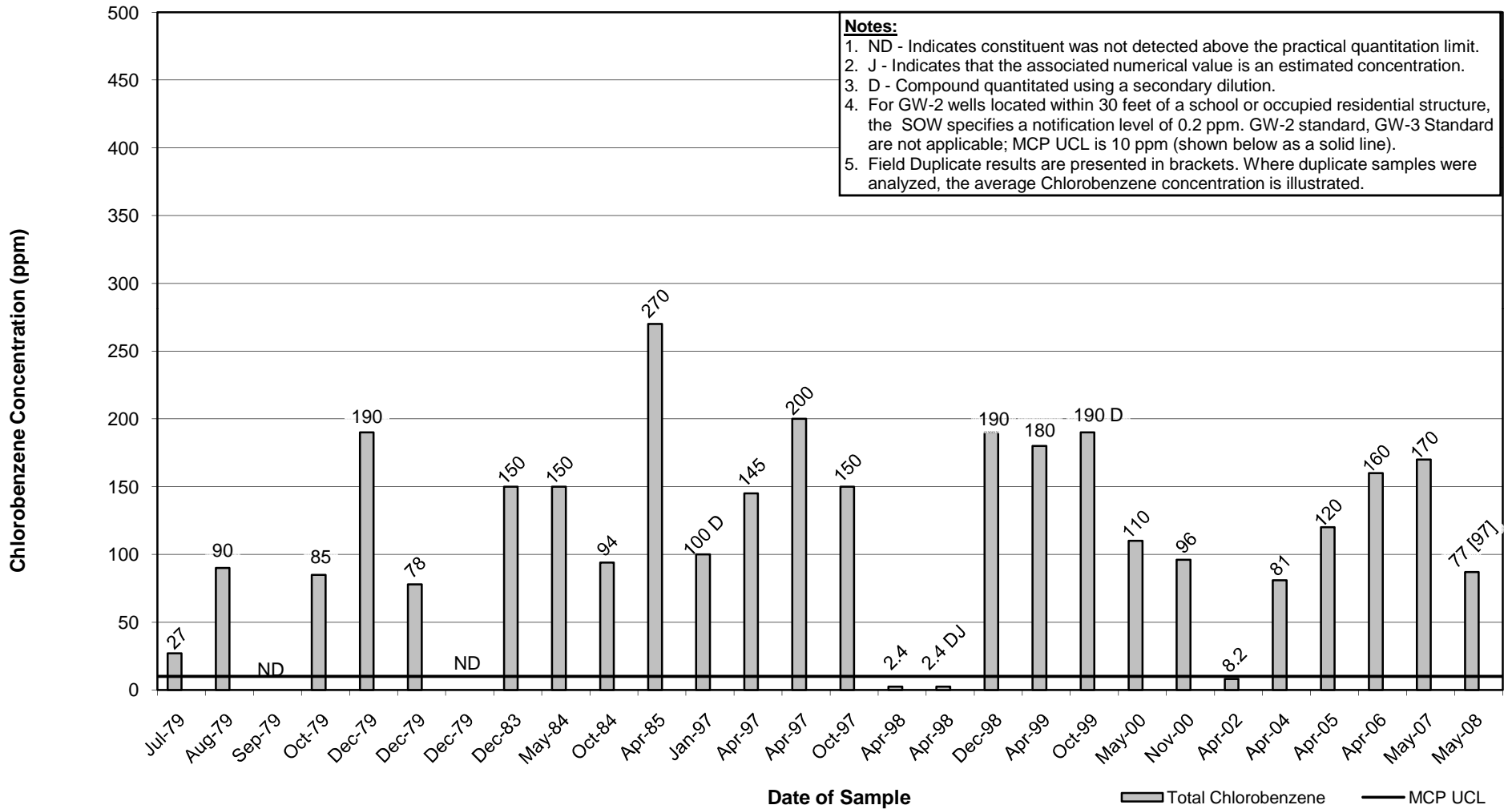


**Historical Groundwater Data**

Chlorobenzene Concentrations –  
Selected Wells Sampled in Spring  
2008

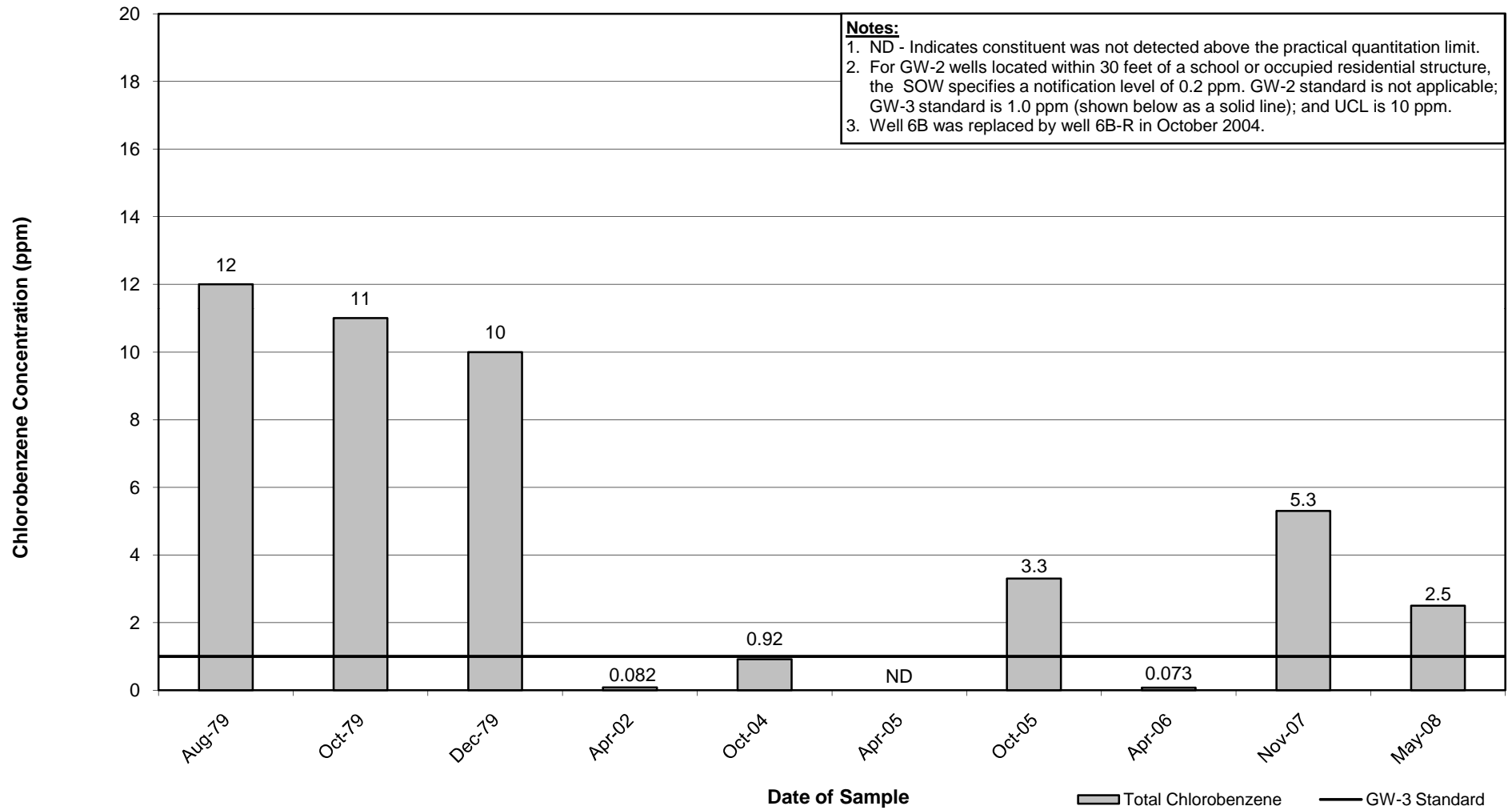
**Appendix F**  
**Well 2A Historical Chlorobenzene Concentrations**

**Groundwater Management Area 3**  
**General Electric Company - Pittsfield, Massachusetts**



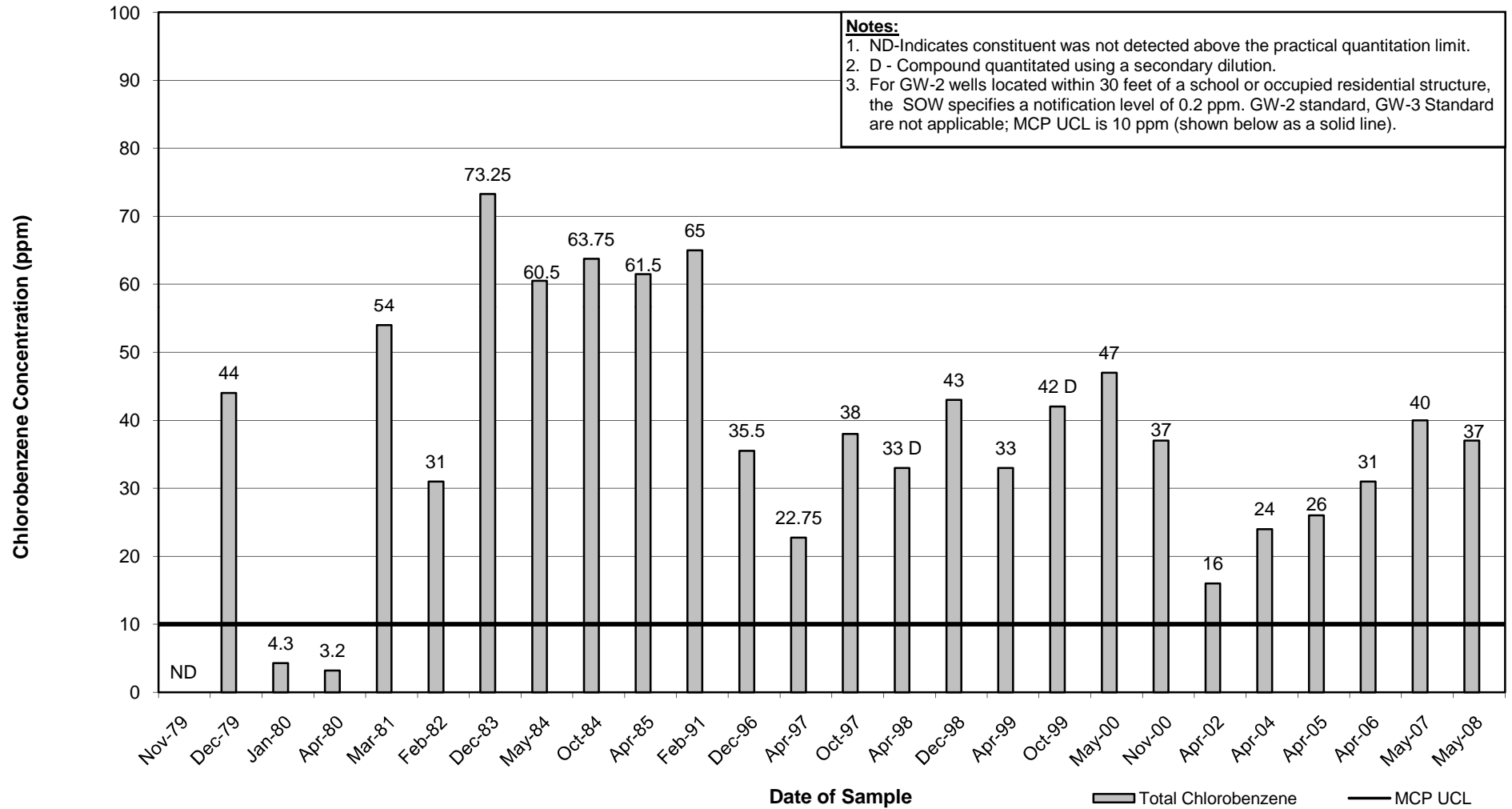
**Appendix F**  
**Well 6B & 6B-R Historical Chlorobenzene Concentrations**

**Groundwater Management Area 3**  
**General Electric Company - Pittsfield, Massachusetts**



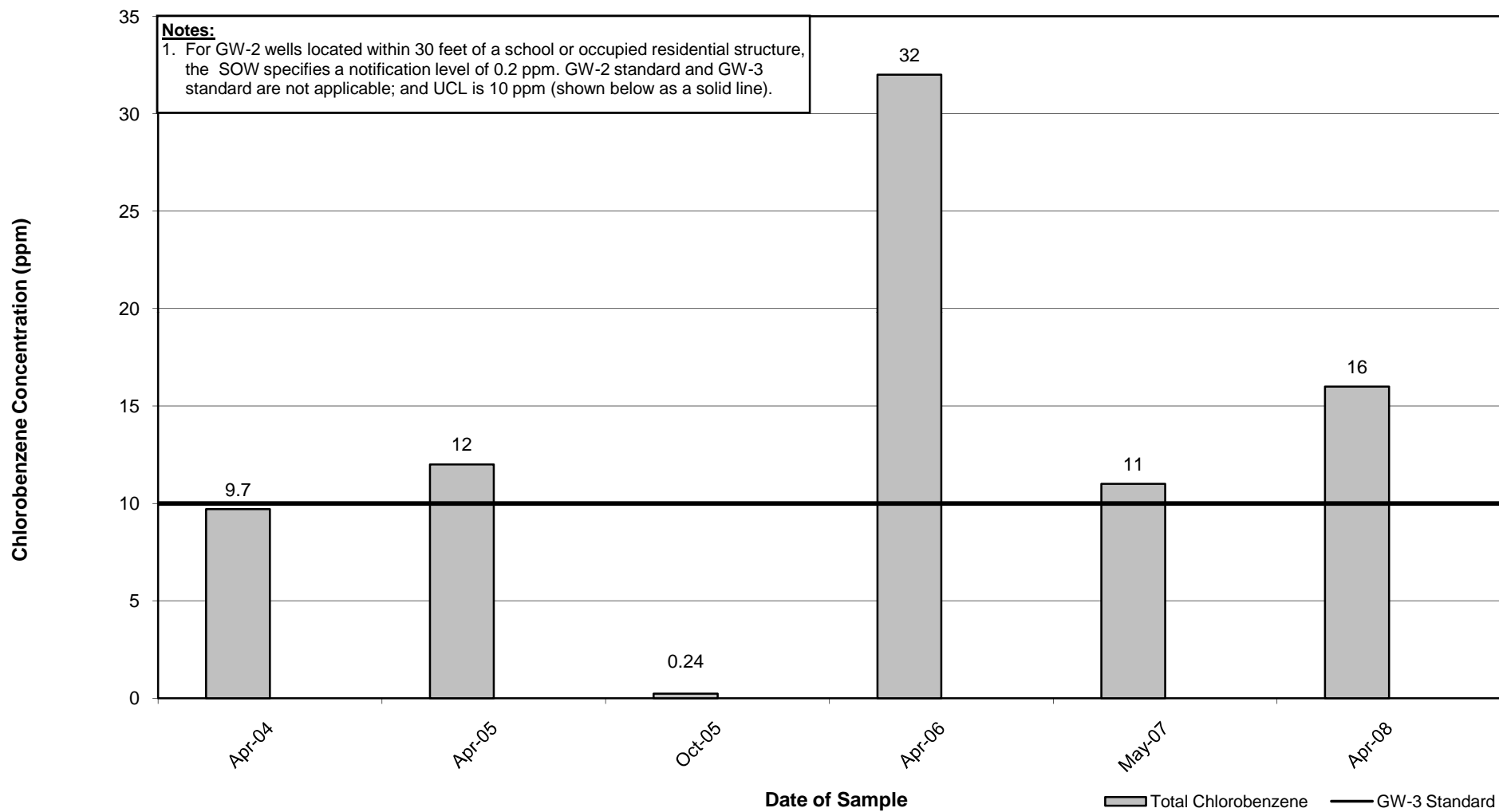
**Appendix F  
Well 16A Historical Chlorobenzene Concentrations**

**Groundwater Management Area 3  
General Electric Company - Pittsfield Massachusetts**



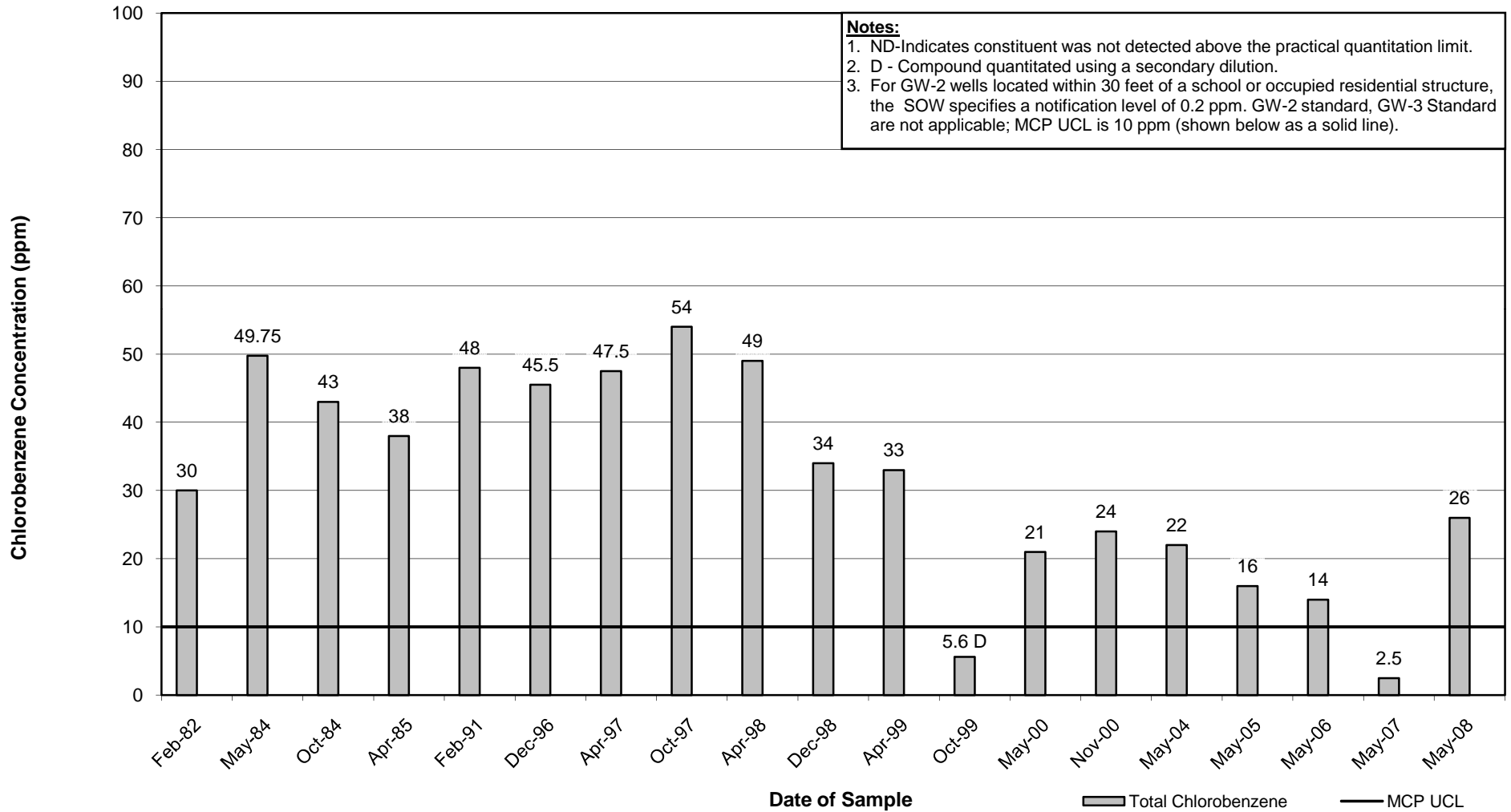
**Appendix F**  
**Well 39B-R Historical Chlorobenzene Concentrations**

**Groundwater Management Area 3**  
**General Electric Company - Pittsfield, Massachusetts**



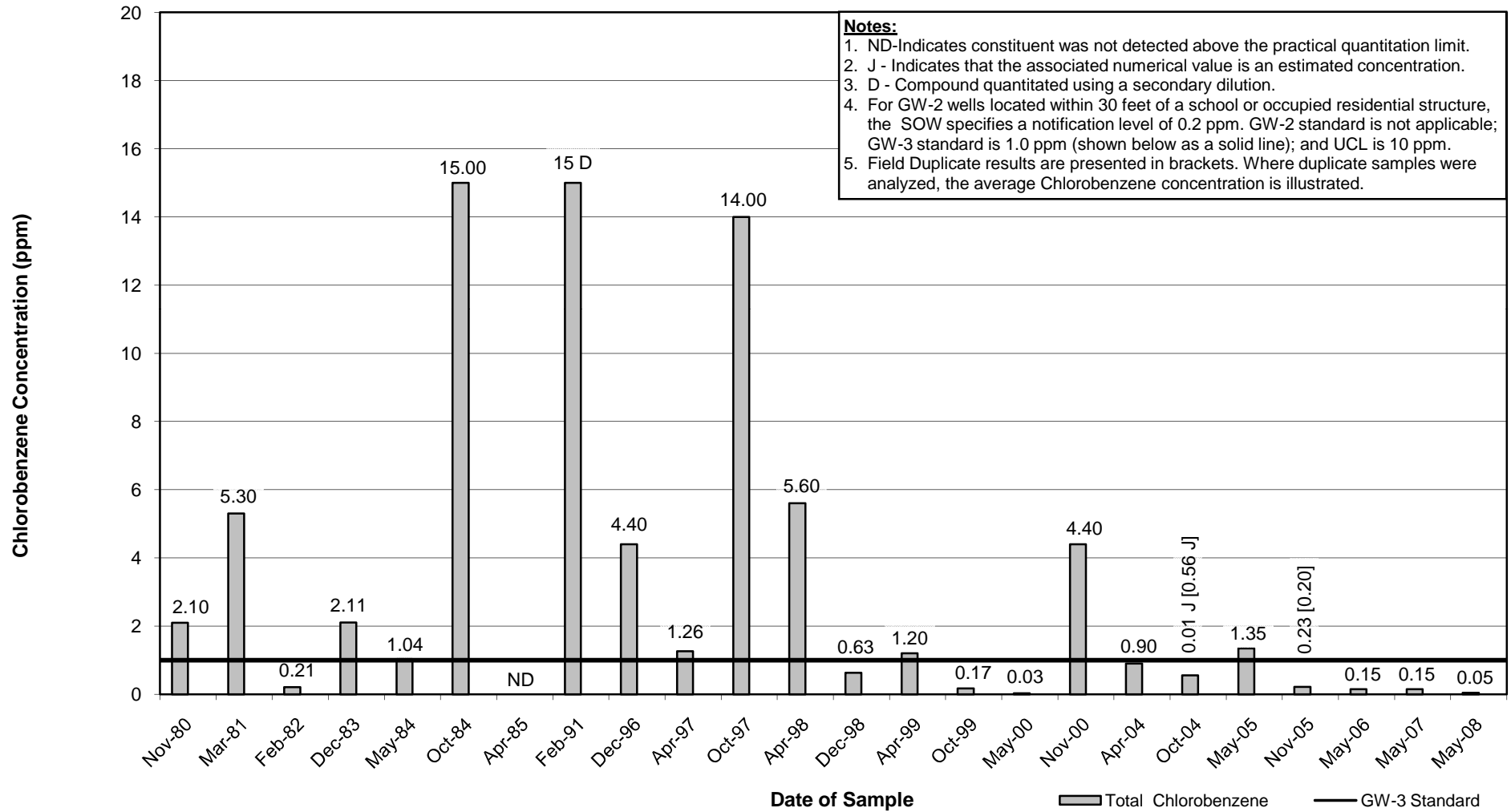
**Appendix F**  
**Well 89A Historical Chlorobenzene Concentrations**

**Groundwater Management Area 3**  
**General Electric Company - Pittsfield, Massachusetts**



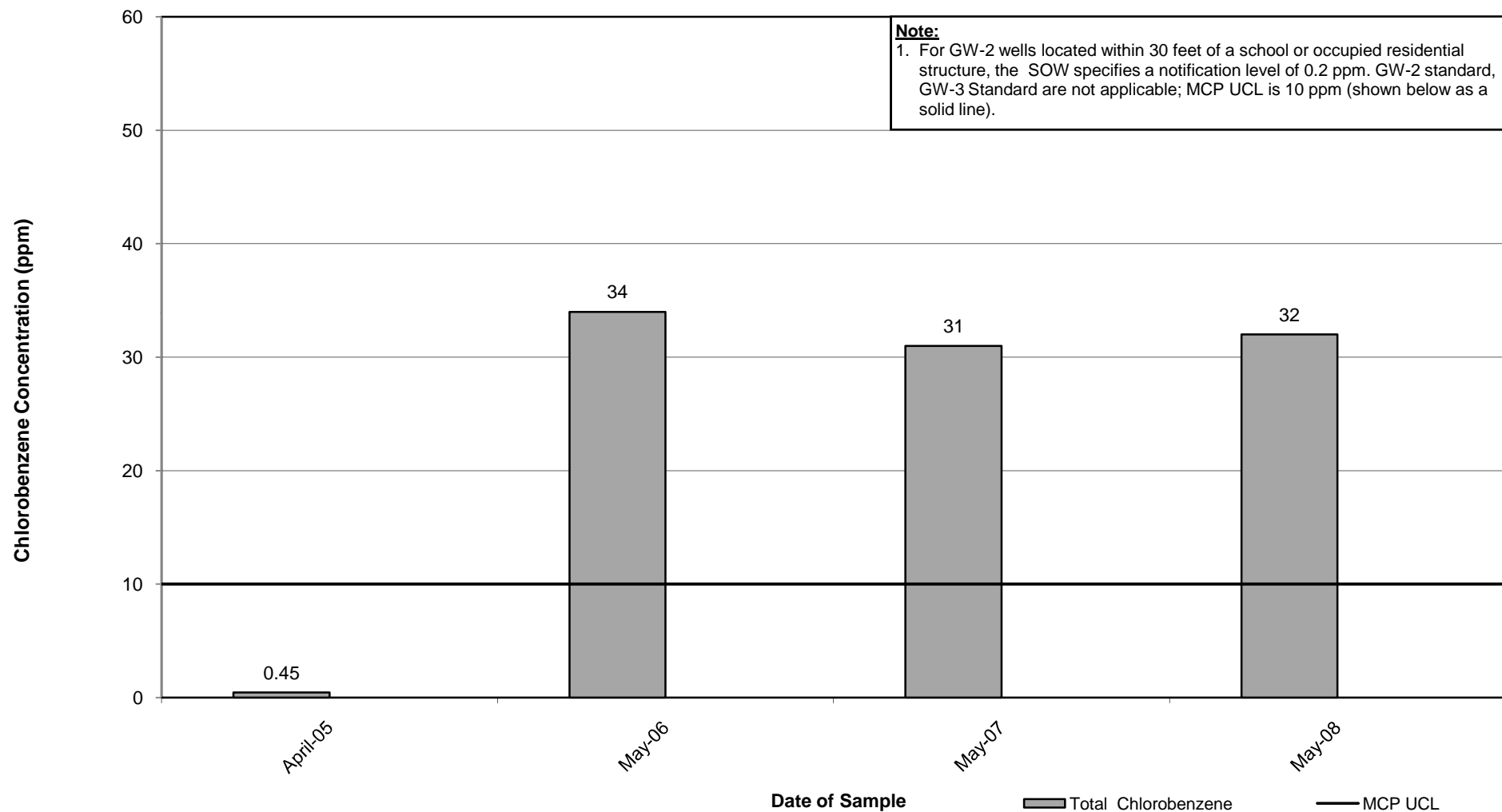
**Appendix F**  
**Well 89B Historical Chlorobenzene Concentrations**

**Groundwater Management Area 3**  
**General Electric Company - Pittsfield, Massachusetts**



Appendix F  
Well 89D-R Historical Chlorobenzene Concentrations

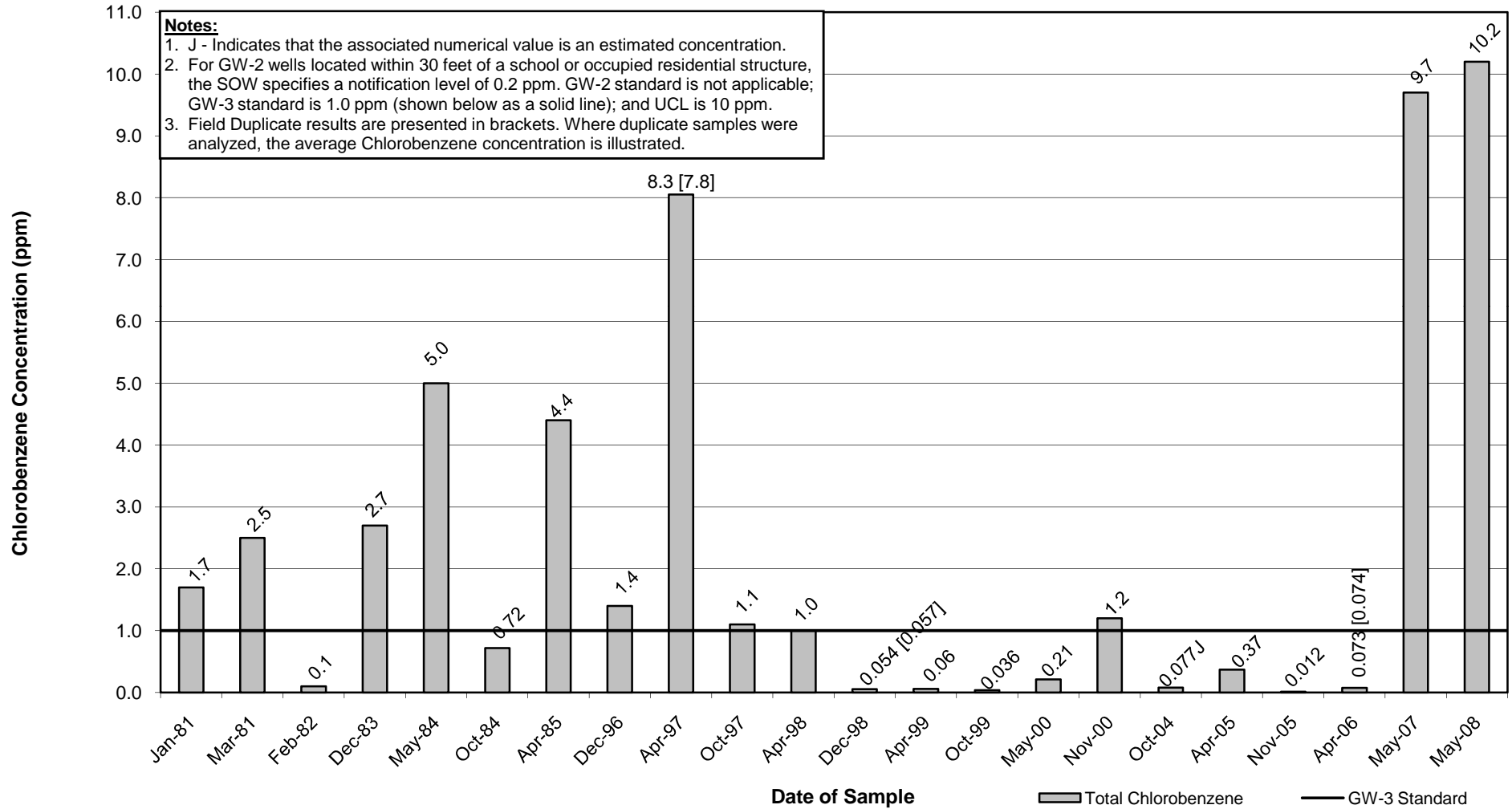
Groundwater Management Area 3  
General Electric Company - Pittsfield, Massachusetts





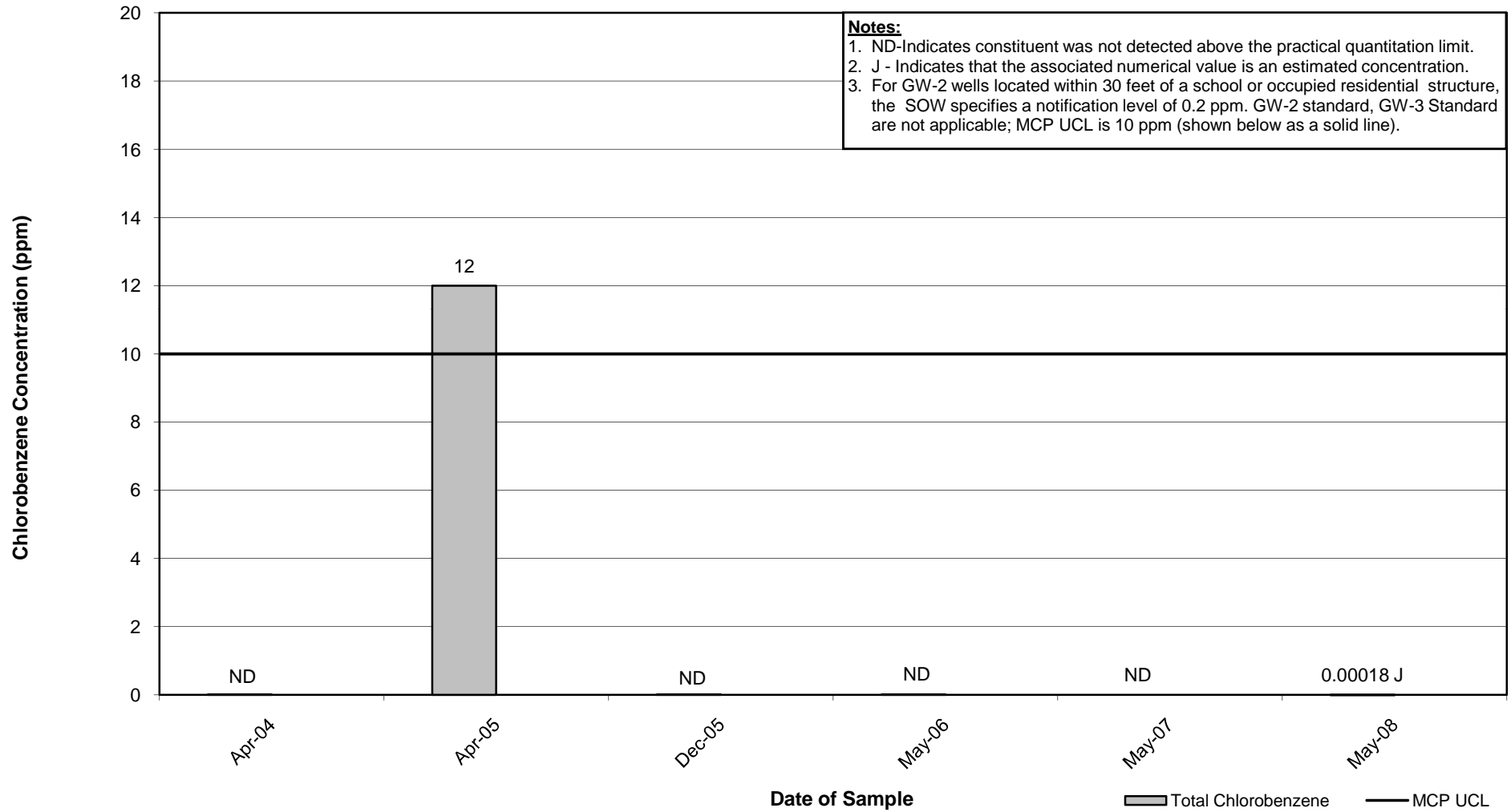
**Appendix F**  
**Well 95B & 95B-R Historical Chlorobenzene Concentrations**

**Groundwater Management Area 3**  
**General Electric Company - Pittsfield, Massachusetts**



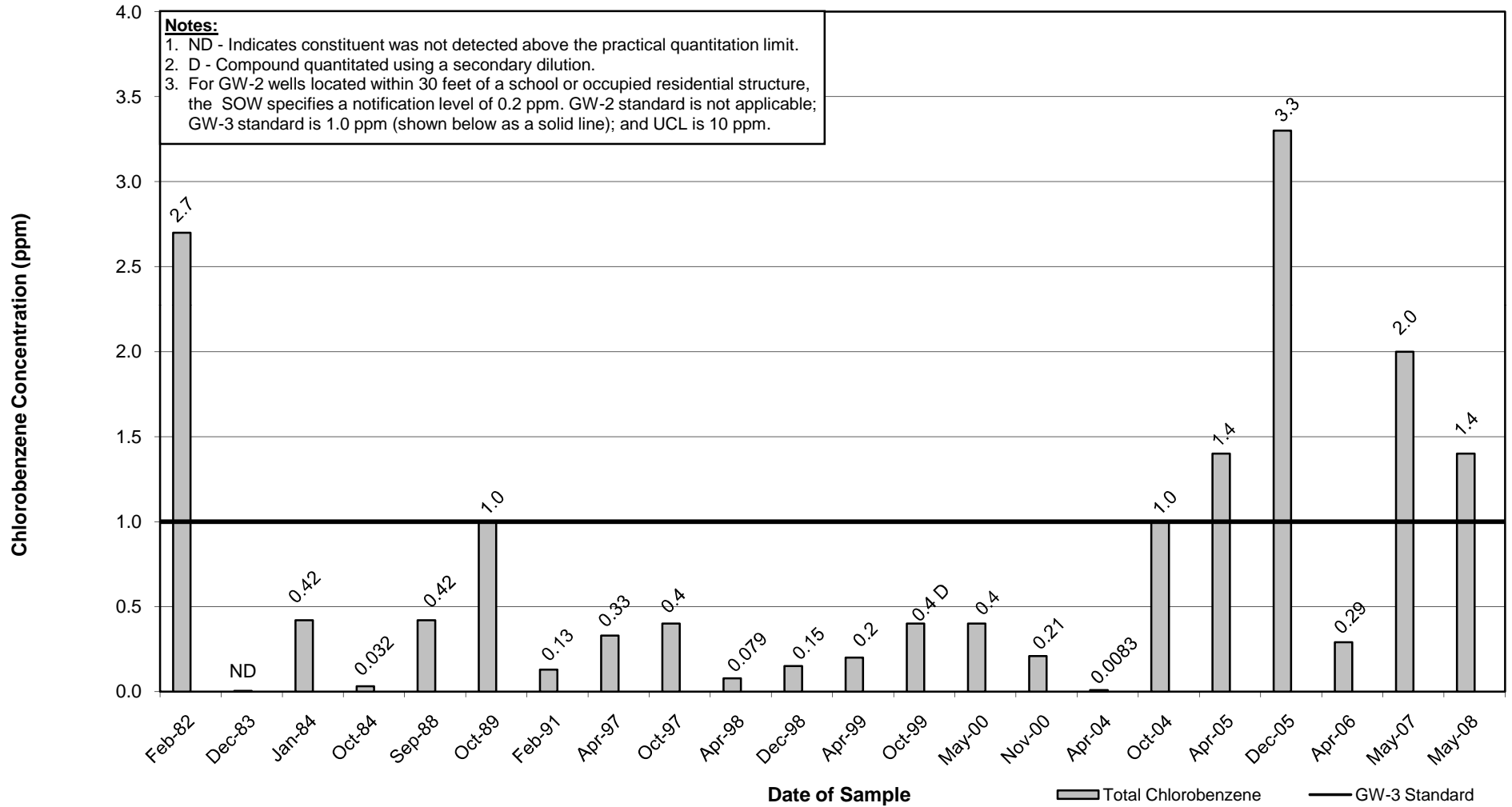
**Appendix F  
Well 114A Historical Chlorobenzene Concentrations**

**Groundwater Management Area 3  
General Electric Company - Pittsfield, Massachusetts**



**Appendix F**  
**Well 114B & 114B-R Historical Chlorobenzene Concentrations**

**Groundwater Management Area 3**  
**General Electric Company - Pittsfield, Massachusetts**



**Historical Groundwater Data**

Carbon Tetrachloride  
Concentrations – Selected Wells  
Sampled in Spring 2008

**Appendix F**  
**Well 51-14 Historical Carbon Tetrachloride Concentrations**

**Groundwater Management Area 3**  
**General Electric Company - Pittsfield, Massachusetts**

