



Corporate Environmental Programs  
General Electric Company  
100 Woodlawn Avenue, Pittsfield, MA 01201

*Transmitted Via Overnight Courier*

July 30, 2004

Mr. James M. DiLorenzo  
U.S. Environmental Protection Agency  
EPA — New England  
One Congress Street, Suite 1100  
Boston, Massachusetts 02114-2023

Re: **GE-Pittsfield/Housatonic River Site  
Groundwater Management Area 1 (GEC310)  
Groundwater Quality Interim Report for Spring 2004**

Dear Mr. DiLorenzo:

In accordance with GE's approved *Baseline Monitoring Program Proposal for Plant Site 1 Groundwater Management Area* (September 2000) and *Plant Site 1 Groundwater Management Area Groundwater Quality Interim Report for Spring 2003* (July 2003), enclosed is the *Plant Site 1 Groundwater Management Area Groundwater Quality Interim Report for Spring 2004*. This report summarizes activities performed as part of the Plant Site 1 Groundwater Management Area (GMA 1) interim groundwater quality monitoring program during spring 2004, including the results of the latest groundwater sampling and analysis round at GMA 1.

Please call Andrew Silfer or me if you have any questions regarding this report.

Sincerely,

John F. Novotny, P.E.  
Manager - Facilities and Brownfields Programs

**Enclosure**

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**TECHNICAL REPORT**

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*Plant Site 1  
Groundwater Management Area  
Groundwater Quality Monitoring  
Interim Report for Spring 2004*

**General Electric Company  
Pittsfield, Massachusetts**

**July 2004**

**BBL**<sup>®</sup>  
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engineers, scientists, economists

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# 1. Introduction

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## 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 soil, 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 RAAs at and near the GE Pittsfield facility have been divided into five separate 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 1 Groundwater Management Area, also known as and referred to herein as GMA 1.

In September 2000, GE submitted a *Baseline Monitoring Program Proposal for Plant Site 1 Groundwater Management Area* (GMA 1 Baseline Monitoring Proposal). The GMA 1 Baseline Monitoring Proposal summarized the hydrogeologic information available at that time for GMA 1 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 1 Baseline Monitoring Proposal by letter of March 20, 2001. Thereafter, certain modifications were made to the GMA 1 baseline monitoring program as a result of EPA approval conditions and/or findings during field reconnaissance of the selected monitoring locations. Those modifications were documented in update letters from GE to EPA dated May 18, August 16, and August 22, 2001.

The baseline monitoring program, which was initiated in fall 2001, consisted of four semi-annual groundwater quality sampling events followed by preparation and submittal of reports summarizing the groundwater monitoring results and, as appropriate, proposal of modifications to the monitoring program. The fourth baseline monitoring report for GMA 1, entitled *Plant Site 1 Groundwater Management Area Baseline Groundwater Quality Interim Report for Spring 2003* (Spring 2003 GMA 1 Groundwater Quality Report), was

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submitted to EPA on July 30, 2003. 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 in 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 1 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, the Spring 2003 GMA 1 Groundwater Quality Report contained a proposal to modify and extend baseline groundwater quality monitoring activities at GMA 1 (under a program referred to as an interim monitoring program) until such time as the soil-related Removal Actions at the GMA 1 RAAs are completed and the specific components of a long-term groundwater quality monitoring program are determined. EPA conditionally approved the Spring 2003 GMA 1 Groundwater Quality Report by letter dated September 23, 2003. Under the approved interim monitoring program, annual water quality sampling (alternating between the spring and fall seasons) at selected GMA 1 wells was scheduled to begin in spring 2004, following a limited sampling event in fall 2003 involving the collection of groundwater samples from six wells that did not yet have four complete rounds of sampling as part of the baseline monitoring program. Additionally, the fall 2003 event included the collection of samples for mercury analysis from 12 wells at which mercury had been detected in the fall 2002 sampling round.

As part of the interim groundwater quality monitoring program, GE is required to submit reports after each groundwater sampling event to summarize the groundwater monitoring results and related activities and, as appropriate, propose modifications to the monitoring program. The results of the fall 2003 limited sampling event were provided in GE’s January 2004 *Plant Site 1 Groundwater Management Area Groundwater Quality Interim Report for Fall 2003* (Fall 2003 GMA 1 Groundwater Quality Report). This *Plant Site 1 Groundwater Management Area Groundwater Quality Interim Report for Spring 2004* (Spring 2004 GMA 1 Groundwater Quality Report) presents the results of the initial full round of interim groundwater sampling activities performed at this GMA in April 2004. It should be noted that this report is intended to provide groundwater quality information for GMA 1. The results of GE’s groundwater flow monitoring, as well as assessments of the presence and extent of NAPL at GMA 1 (including summaries of GE’s NAPL recovery efforts), are presented in separate semi-annual reports submitted under GE’s NAPL monitoring program.

## **1.2 Background Information**

As discussed above, the CD and SOW provide for the performance of groundwater-related Removal Actions at a number of GMAs. Some of these GMAs, including GMA 1, incorporate multiple RAAs to reflect the fact that

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groundwater may flow between RAAs. GMA 1 incorporates 11 RAAs and occupies an area of approximately 215 acres (Figures 1 and 2). The RAAs within GMA 1 include the following:

- RAA 1 - 40s Complex
- RAA 2 - 30s Complex
- RAA 3 - 20s Complex
- RAA 4 - East Street Area 2-South
- RAA 5 - East Street Area 2-North
- RAA 6 - East Street Area 1-North
- RAA 12 - Lyman Street Area
- RAA 13 - Newell Street Area II
- RAA 14 - Newell Street Area I
- RAA 17 - Silver Lake Area
- RAA 18 - East Street Area 1-South

The GMA contains a combination of GE-owned and non-GE-owned industrial areas, residential properties, and recreational areas. The Housatonic River flows through the southern portion of this GMA, while Silver Lake is located along the western boundary.

Certain portions of this GMA originally consisted of land associated with oxbows or low-lying areas of the Housatonic River. Re-channelization and straightening of the Housatonic River in the early 1940s by the City of Pittsfield and the United States Army Corps of Engineers (USACE) separated several of these oxbows and low-lying areas from the active course of the river. These oxbows and low-lying areas were subsequently filled with various materials from a variety of sources, resulting in the current surface elevations and topography.

As discussed in Section 1.1 above, the CD and the SOW provide for the performance of groundwater-related Removal Actions at the 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 initiated at GMA 1 in the fall of 2001 and the spring 2003 sampling event constituted the fourth baseline sampling event at most of the wells in GMA 1. EPA has approved the implementation of a modified monitoring program (referred to as the “interim monitoring

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program”) until the completion of the soil-related Removal Actions at the GMA 1 RAAs, at which time a long-term monitoring program will commence.

As set forth in the GMA 1 Baseline Monitoring Proposal and Addendum, the baseline monitoring program at this GMA initially involved a total of 65 monitoring wells. Subsequent modifications to the program resulted in the addition of one well (LSSC-08I) and replacement of five wells with substitute monitoring wells (ESA2S-52 for ES2-17, MW-3R for MW-3, GMA1-13 for 95-9, ESA1S-33 for ES1-8, and ES1-23R for ES1-23). All of these wells were monitored for groundwater elevations on a quarterly basis and sampled on a semi-annual basis for analysis of PCBs and/or certain other 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). The specific groundwater quality parameters for each individual well were selected based on the monitoring objectives of the well.

In the Spring 2003 GMA 1 Groundwater Quality Report, GE described its proposed interim groundwater quality monitoring program. Certain specific monitoring tasks were to be performed in fall 2003, and GE submitted its Fall 2003 GMA 1 Groundwater Quality Report providing the results of those tasks. Beginning in spring 2004, as approved by EPA, the interim groundwater quality monitoring program was to consist of annual sampling (alternating between the spring and fall seasons) and analysis for select constituents at 22 GMA 1 wells. Locations selected for interim groundwater quality monitoring were wells downgradient of known NAPL areas/recovery systems where no additional hydraulic controls are in place, and/or those where analytical results from the baseline monitoring rounds did not conclusively indicate whether long-term monitoring would be necessary. In addition, well MW-4 was replaced with a new well (MW-4R) which was to be sampled during the spring and fall of 2004, after which GE will evaluate whether the analytical results are consistent with prior data from well MW-4 and propose either an appropriate sampling schedule for the remainder of the interim monitoring program. In addition, GE was to continue its efforts to complete baseline sampling and analyses at two GMA 1 baseline monitoring wells (GMA1-2 and GMA1-4) where four baseline sampling rounds had yet to be completed.

GE initiated the spring 2004 groundwater sampling event on April 6, 2004 and completed the required sampling at most of the GMA 1 locations. However, GE was unable to sample four of the required monitoring wells at this GMA, and discussed these situations with EPA during a technical meeting on May 21, 2004. GE submitted a letter to EPA on June 15, 2004 containing a summary of the discussions concerning each of the wells that could not be sampled and the EPA-approved modifications to the interim groundwater monitoring program that



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will be implemented in the future (discussed in Section 5.2). The GMA 1 interim monitoring program activities performed in spring 2004 are summarized in Table 1.

A separate non-GE-related disposal site, as designated under the MCP, is located on an adjacent property near the northern edge of the Lyman Street Area. This disposal site is the O'Connell Mobil Station site (MDEP Site No. 1-13347) (also referred to as the "East Street Mobil Site") at 730 East Street. GE understands this site is currently being addressed by O'Connell Oil Associates, Inc. to satisfy the requirements of Massachusetts General Laws Chapter 21E and the MCP. Available documentation indicates that soluble-phase contaminants related to gasoline releases from the O'Connell Mobil Station may have migrated onto GMA 1. GE is required to include available monitoring results from response actions performed at this adjacent site in the groundwater monitoring reports for GMA 1, to the extent that information is available to GE. To fulfill this requirement, GE has conducted a file search at MDEP and has reviewed one report that has been submitted regarding this site since submittal of the Fall 2003 GMA 1 Groundwater Quality Report. That March 2004 report, entitled *Phase IV Remedy Implementation Plan; 730 East Street; Pittsfield, MA; RTN# 1-13347* (Phase IV RIP), prepared by ECS Marin on behalf of O'Connell Oil Associates, Inc., presents a plan to excavate and replace impacted soils and to implement a quarterly groundwater elevation monitoring and sampling program. No groundwater monitoring results were included in that report, which states that the most recent groundwater level measurements were conducted on February 27, 2003. GE has previously presented the results of those 2003 measurements in the Spring 2003 GMA 1 Groundwater Quality Report.

### **1.3 Format to Document**

The remainder of this report is presented in five sections. Section 2 describes the groundwater quality-related activities performed at GMA 1 in spring 2004. Section 3 presents the analytical results obtained during the spring 2004 sampling event performed between April 6, 2004 and May 3, 2004. Section 4 provides a summary of the applicable groundwater quality Performance Standards identified in the CD and SOW, and provides an assessment of the results of the spring 2004 activities, including a comparison to those Performance Standards. Section 5 proposes certain modifications to the interim groundwater quality monitoring program, which will be continued until such time as the soil-related Removal Actions at the GMA 1 RAAs are completed and the needs for a long-term monitoring program may be fully delineated. Finally, Section 6 presents the schedule for future field and reporting activities related to groundwater quality at GMA 1.

## ***2. Field and Analytical Procedures***

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### **2.1 General**

The activities conducted as part of the interim groundwater monitoring program, and summarized herein, primarily involved the collection and analysis of groundwater samples at select monitoring wells within GMA 1, as described in Table 1. The construction details of the wells are provided in Table 2 and the spring 2004 field sampling data are presented in Appendix A. This section discusses the field procedures used to collect groundwater samples, as well as the methods used to analyze the groundwater samples. In addition, information regarding the inspections of the condition of wells that were scheduled to be sampled in spring 2004 is also provided in this section. All activities were performed in accordance with GE's approved *Field Sampling Plan/Quality Assurance Project Plan* (FSP/QAPP).

### **2.2 Well Inspections**

In conjunction with the quarterly groundwater elevation monitoring event conducted in January 2004, GE attempted to conduct inspections of all wells to be sampled in spring 2004. These inspections were performed to identify any issues with the wells and to allow time for the repair or replacement of any wells found to be damaged prior to the spring 2004 sampling event. Most of the wells were able to be inspected at that time, although seven wells could not be located or accessed, primarily due to the presence of ice and snow. GE continued its attempt to complete the well inspections in February and March 2004, before initiating the spring 2004 sampling event in April 2004.

### **2.3 Groundwater Sampling and Analysis**

The bulk of the spring 2004 groundwater sampling was performed between April 6 and 12, 2004. However, the original sample analysis for well E2SC-24 was canceled due to extremely low surrogate recoveries, such that the data would have been deemed unusable following data validation. In response, GE re-sampled well E2SC-24 on May 3, 2004.

Groundwater samples were scheduled to be collected from 25 groundwater monitoring wells. A total of 21 monitoring wells were actually sampled. Four wells could not be sampled for the following reasons:

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- Well GMA1-2 was found to be dry at the time of sampling (as had been the case during three of the previous four baseline monitoring events).
  - Sample turbidity at well ESA1S-33 (which was added to the GMA 1 groundwater quality monitoring program in spring 2003 as a replacement for well ES1-8) did not decrease below the target of 50 nephelometric turbidity units (NTU). In the Fall 2003 GMA 1 Groundwater Quality Report, GE had proposed to remove well ESA1S-33 from the groundwater quality monitoring program and to propose a new sampling location in this area if the well failed to produce low turbidity samples.
  - Well 139 was found to be filled with debris and was unable to be sampled. An obstruction was noted in this well during the pre-sampling well inspections, but it was thought that the obstruction might consist of frozen water within the well.
  - Well ES1-14 is located on a non-GE-owned property at 1277 East Street and the property owner has denied access to GE to conduct sampling activities.

GE discussed proposed modifications to the interim groundwater monitoring program to address these situations with EPA during a technical meeting on May 21, 2004 and EPA provided verbal approval of GE's proposed responses. Those approved modifications were documented in a letter to EPA dated June 15, 2004 and are summarized in Section 5.2 herein.

All of the groundwater samples were collected by the low-flow techniques as specified in the FSP/QAPP. 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 sampling methods utilized at each well are specified in Appendix A. Each monitoring well was purged utilizing low-flow techniques until field parameters (including temperature, pH, specific conductivity, oxidation-reduction potential, dissolved oxygen, and turbidity) stabilized prior to sample collection. Field parameters were measured in combination with the sampling activities at the monitoring wells. The stabilized field parameter measurements are presented in Table 3 and the field sampling data are provided in Appendix A. A general summary of the field measurement results during the spring 2004 monitoring event is provided below:

PARAMETER	UNITS	RANGE
Turbidity	Nephelometric turbidity units (NTU)	1.0 – 34.0
pH	pH units	6.45 – 7.54
Specific Conductivity	Millisiemens per centimeter	0.380 – 4.124
Oxidation-Reduction Potential	Millivolts	-387.3 – 267.2
Dissolved Oxygen	Milligrams per liter	0.17 – 11.78
Temperature	Degrees Celsius	7.45 – 11.36

The collected groundwater samples were submitted to SGS Environmental Services, Inc. of Charleston, West Virginia for laboratory analysis. For the groundwater samples that were monitored for compliance with the GW-3 standards, the samples were submitted for analysis of the following constituents using the associated EPA methods:

CONSTITUENT	EPA METHOD
VOCs	8260B
Semi-Volatile Organic Compounds (SVOCs)	8270C
PCBs (Filtered Samples)	8082
Polychlorinated Dibenzo-p-dioxins and Polychlorinated Dibenzofurans (PCDDs/PCDFs)	8290
Metals (Filtered Samples)	6010B, 7000A, and 7470A
Cyanide (Filtered Samples)	9014
Sulfide	9034

For the groundwater samples collected from wells that were monitored solely for compliance with the GW-2 standards, the samples were submitted for analysis of the VOCs listed in GE's FSP/QAPP, as well as five compounds listed as SVOCs in the FSP/QAPP (1,2-dichlorobenzene, 1,3-dichlorobenzene, 1,4-dichlorobenzene, 1,2,4-trichlorobenzene, and naphthalene). The VOCs and five SVOCs were analyzed using EPA Method 8260B in accordance with a letter from GE to EPA dated September 28, 2001.

Following receipt of the analytical data from the laboratory, the preliminary results were reviewed for completeness and compared to the Massachusetts Contingency Plan (MCP) Method 1 GW-2 (where applicable) and GW-3 standards, 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, along with a discussion identifying sample results received with concentrations above the applicable MCP Method 1 standards and/or UCLs. Finally, the data were validated in accordance with the FSP/QAPP and

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the validated results were utilized in the preparation of this report. The data validation report is provided in Appendix D. As discussed in the data validation report, 100% of the spring 2004 groundwater quality data are considered to be useable.

## ***3. Groundwater Analytical Results***

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### **3.1 General**

A description of the spring 2004 groundwater analytical results is presented in this section. Tables 3 and 4 provide a comparison of the concentrations of all detected constituents with the currently applicable groundwater quality Performance Standards established in the CD and SOW, while Table 5 presents a comparison of the concentrations of detected constituents with the UCLs for groundwater. 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**

The following subsections provide an overview of the spring 2004 analytical results from the GMA 1 groundwater quality monitoring wells for each constituent group that was analyzed.

#### **3.2.1 VOC Results**

Groundwater samples collected from six groundwater quality monitoring wells were analyzed for VOCs during the spring 2004 sampling event. The VOC analytical results are summarized in Appendix B. No VOCs were detected in three of the groundwater samples (wells GMA1-6, LSSC-16S, and LS-MW-4R), while three individual VOCs were observed in one or more of the remaining three samples. Specifically, chloroform was detected in the groundwater sample from well GMA1-4, while chlorobenzene and vinyl chloride were each detected in samples from wells N2SC-07S and NS-17. Total VOC concentrations ranged from non-detect (in three samples) to 1.03 parts per million (ppm) at well N2SC-07S.

#### **3.2.2 SVOC Results**

A groundwater sample collected from GW-3 monitoring well LS-MW-4R was analyzed for SVOCs during the spring 2004 sampling event. In addition, samples from three wells that are GW-2 wells only were analyzed for five select SVOCs (1,2-dichlorobenzene, 1,3-dichlorobenzene, 1,4-dichlorobenzene, 1,2,4-trichlorobenzene, and naphthalene), as discussed in Section 2.3. The SVOC analytical results are summarized in Appendix B. No

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SVOCs were detected in the GW-3 groundwater sample from well LS-MW-4R or in the three wells that were analyzed for five select SVOCs (wells GMA1-4, GMA1-6, and LSSC-16S).

### **3.2.3 PCB Results**

Filtered groundwater samples from 14 monitoring wells were analyzed for PCBs as part of the spring 2004 sampling event. The PCB analytical results are summarized in Appendix B. One or more PCB Aroclors were detected in eight of these wells. Total PCB concentrations ranged from non-detect (at six wells) to 0.0103 ppm (at well E2SC-23) in the filtered samples.

### **3.2.4 PCDD/PCDF Results**

A groundwater sample from one monitoring well (well LS-MW-4R) was analyzed for PCDDs/PCDFs during the spring 2004 sampling event. The analytical results presented in Appendix B summarize the individual PCDD/PCDF compounds that were detected in the groundwater sample. In addition, total Toxicity Equivalency Quotients (TEQs) were calculated for the PCDD/PCDF compounds using the Toxicity Equivalency Factors (TEFs) derived by the World Health Organization (WHO). In calculating those TEQs, the concentrations of individual PCDD/PCDF compounds that were not detected were represented as one-half of the analytical detection limit for those compounds. The total TEQ concentration of the sample was  $2.3 \times 10^{-8}$  ppm.

### **3.2.5 Inorganic Constituent Results**

A filtered groundwater sample from monitoring wells LS-MW-4R was analyzed for inorganic constituents during the spring 2004 sampling event. Also, four additional filtered groundwater samples were analyzed for cyanide only. The analytical results for these samples are summarized in Appendix B. Five individual inorganic constituents (arsenic, barium, beryllium, vanadium, and zinc) were observed in the LS-MW-4R sample, while cyanide was detected in the filtered sample from wells ESA2S-52 and HR-G1-MW-3.

## 4. Assessment of Results

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### 4.1 General

This report constitutes the second interim monitoring report and is the sixth groundwater quality monitoring report submitted since commencement of the GMA 1 baseline groundwater monitoring program. The information presented herein is based on the laboratory results obtained during the spring 2004 groundwater sampling event, supplemented with historical groundwater analytical data when available.

### 4.2 Groundwater Quality Performance Standards

The Performance Standards applicable to response actions for groundwater at GMA 1 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 1 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 to groundwater 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. It should be noted that some groundwater within GMA 1 does not in fact discharge directly to surface water because of the operation of numerous groundwater pumping systems. Water extracted from these systems is transferred to an on-site treatment plant for processing prior to discharge. Nevertheless, in accordance with the CD and SOW, all groundwater at GMA 1 is considered as GW-3.



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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 1. The current MCP Method 1 GW-2 and GW-3 standards for the constituents detected in the spring 2004 sampling event are listed in Tables 3 and 4, respectively. (In the event of any discrepancy between the standards listed in these tables and those published in the MCP, the latter will be controlling.) 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.

Based on consideration of the above points, the specific groundwater quality Performance Standards for GMA 1 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);

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- (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 1 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 and in Sections 4.3.1 (for GW-2 wells) and 4.3.2 (for GW-3 wells), only selected wells were sampled in spring 2004.

#### **4.3 Groundwater Quality – Spring 2004**

For the purpose of generally assessing current groundwater quality conditions, the analytical results from the spring 2004 groundwater sampling event were compared to the applicable groundwater Performance Standards for GMA 1. These Performance Standards are described in Section 4.2 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 2004 groundwater analytical results in relation to these Performance Standards, as well as in relation

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to the MCP UCLs for groundwater. In support of those discussions, Tables 3 and 4 provide a comparison of the concentrations of detected constituents with the currently applicable GW-2 and GW-3 standards, respectively, while Table 5 presents a comparison of the concentrations of detected constituents with the groundwater UCLs.

#### **4.3.1 Spring 2004 Groundwater Results Relative to GW-2 Performance Standards**

As part of the spring 2004 program, groundwater samples were collected from three wells designated as GW-2 wells that were scheduled to be sampled for the GW-2 VOC list (i.e., specifically wells GMA1-4, GMA1-6, and LSSC-16). Although well ESA1N-52 is also designated as a GW-2/GW-3 monitoring location, this well is only scheduled for sampling and analysis for PCBs under the interim monitoring program. Therefore, the analytical data from well ESA1N-52 is not included in the comparisons to the MCP Method 1 GW-2 standards discussed herein. No samples were obtained from wells ESA1S-33, 139, or GMA1-2, as discussed in Section 2.2.

The spring 2004 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 4. As shown in Table 4, none of the spring 2004 sample concentrations from the GW-2 monitoring wells sampled was above the corresponding GW-2 Performance Standard. In addition, none of the GW-2 wells exhibited total VOC concentrations above 5 ppm (the level specified in the SOW as a notification level for GW-2 wells located within 30 feet of a school or occupied residential structure and as a trigger level for the proposal of interim response actions). These results are consistent with the results from prior sampling events.

#### **4.3.2 Spring 2004 Groundwater Results Relative to GW-3 Performance Standards**

Groundwater samples were collected from 19 of the 22 wells designated as GW-3 wells that were scheduled to be sampled during the spring 2004 interim sampling event. No samples were obtained from wells ES1-14, ESA1S-33, or 139, as discussed in Section 2.2. The spring 2004 groundwater analytical results for all constituents detected in the GW-3 monitoring wells and a comparison of those results with the applicable MCP Method 1 GW-3 standards are presented in Table 5. Although that table provides a comparison of the spring 2004 analytical results from all 19 GW-3 monitoring wells that were sampled in spring 2004, only 13 of those wells (i.e., the downgradient GW-3 perimeter wells as identified in Table 1) have been designated as compliance points for the GW-3 standards.

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The comparisons set forth in Table 5 show that two constituents, filtered total PCBs and cyanide, were found at levels above their respective MCP Method 1 GW-3 standards in several groundwater samples collected in spring 2004. No other constituents were detected at concentrations above their respective MCP Method 1 GW-3 standards in spring 2004. Graphs showing the historical concentrations of total VOCs, total PCBs, and cyanide at all wells analyzed for these constituents in spring 2004, along with the concentrations of other constituents analyzed in spring 2004 at locations where the MCP Method 1 GW-3 standards were previously exceeded, are included in Appendix C.

The filtered PCB sample results from four GW-3 locations were found to be above the MCP Method 1 GW-3 standard of 0.0003 ppm for PCBs. The samples were collected from wells ES1-5 and ES1-27R, located in the East Street Area 2-North RAA (although one sample from well ES1-5 was slightly above the 0.0003 ppm standard for total PCBs, a duplicate sample result was slightly below the standard); well E2SC-23, located in the East Street Area 2-South RAA; and well LSSC-08S, located in the Lyman Street Area RAA. Three of these locations (ES1-5, E2SC-23, and LSSC-08S) are downgradient perimeter wells. Filtered PCB concentrations in excess of the MCP Method 1 GW-3 standard were previously detected in each of these wells, except for well LSSC-08S (although such concentrations were previously observed in this well in unfiltered PCB samples and in filtered PCB samples in deep well LSSC-08I, which is paired with this well).

Cyanide levels slightly greater than the MCP Method 1 GW-3 standard of 0.01 ppm were observed in the filtered samples from East Street Area 2-South wells ESA2S-52 and HR-G1-MW-3 (0.012 ppm and 0.011 ppm, respectively). Cyanide was previously detected at concentrations in excess of the MCP Method 1 GW-3 standard at well HR-G1-MW-3, which is a downgradient perimeter well (well ESA2S-52 is categorized as a General/Source Area Sentinel well).

The SOW requires that for sampling results which exceed the 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), GE must propose interim response actions (SOW Att. H, p. 24). 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 (SOW Att. H, p. 24).

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The only exceedances of the Method 1 GW-3 standards which were observed in a downgradient perimeter well for the first time in spring 2004 were filtered PCBs in well LSSC-08S at a concentration of 0.00041 ppm, which is slightly above the 0.0003 ppm standard. As discussed above, PCB concentrations above the Method 1 GW-3 standard were previously observed in unfiltered samples from this well and in filtered samples from deep well LSSC-08I, which is paired with this well. In addition, as illustrated on the historical PCB concentration graph for well LSSC-08S, the spring 2004 PCB result is not significantly increased relative to prior filtered samples from this well. Therefore, it appears that the PCB concentration observed at this well in spring 2004 is part of a typical fluctuation in PCB concentrations in this area and not representative of a new finding or an increasing trend. GE's proposed response to address this GW-3 exceedance is to continue the interim groundwater quality monitoring program at this well to obtain additional data to further evaluate PCB concentrations.

#### **4.3.3 Spring 2004 Comparison to Upper Concentration Limits**

In addition to comparing the spring 2004 groundwater analytical results with applicable MCP Method 1 GW-2 and MCP Method 1 GW-3 standards, the analytical results from all 21 wells that were sampled have also been compared with the groundwater UCLs specified in the MCP (310 CMR 40.0996(7)). These comparisons are presented in Table 6 and summarized below. The only constituent found at levels above its corresponding UCL in any of the samples collected in spring 2004 was PCBs in the filtered sample from well E2SC-23, which was above the MCP UCL of 0.005 ppm. The UCL for PCBs was previously exceeded in unfiltered samples this location, but not in any prior filtered samples. GE notified EPA and DEP of this result on April 27, 2004.

#### **4.4 Overall Assessment of Groundwater Analytical Results**

Graphs illustrating historical total VOC concentrations and filtered/unfiltered PCB and cyanide concentrations for all wells sampled in spring 2004 that have been previously sampled and analyzed for those constituents are presented in Appendix C. In addition, Appendix C contains graphs of historical concentrations of individual constituents that exceeded the applicable MCP Method 1 GW-3 standards or UCLs at GW-3 monitoring wells during any of the four baseline monitoring program sampling events that were analyzed for those constituents in spring 2004. No exceedances of the MCP Method 1 GW-2 standards have been documented at the GW-2 monitoring wells, and therefore no graphs have been prepared based on GW-2 sampling data.

## ***5. Monitoring Program Modifications***

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### **5.1 General**

In spring 2004, GE initiated the interim groundwater monitoring program to be conducted until completion of the soil-related Removal Actions at the RAAs that comprise GMA 1. Aside from completing baseline sampling events at certain locations that could not be sampled during every round of the initial two-year baseline monitoring program, the interim monitoring program is designed to 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 monitoring program.

This section contains a description of previously-approved modifications to the interim groundwater monitoring program which were developed based on the results of the spring 2004 groundwater sampling event.

### **5.2 Modifications to Interim Groundwater Quality Monitoring Program**

The modifications to the interim program that will be implemented based on the inability to sample certain wells in spring 2004 are described below. These modifications were previously approved by EPA, as documented in GE's June 15, 2004 letter to EPA:

- GE will remove well ESA1S-33 from the interim monitoring program and replace it with well 72R, which is located approximately 50 feet east of well ESA1S-33. Groundwater samples will be sampled as part of the interim groundwater monitoring program and will be analyzed for the VOCs listed in GE's FSP/QAPP, as well as five compounds listed as SVOCs in the FSP/QAPP (1,2-dichlorobenzene, 1,3-dichlorobenzene, 1,4-dichlorobenzene, 1,2,4-trichlorobenzene, and naphthalene), PCBs (filtered samples only) and cyanide (filtered samples only), per the approved sampling requirement for well ESA1S-33. Although scheduled to be sampled annually as part of the interim groundwater monitoring program, this well will be sampled in fall 2004 to provide monitoring data for 2004.
- GE will decommission well 139 and install a new well, to be designated as well 139R, near the location of the former well, provided that access can be obtained. Well 139R will be sampled and will be analyzed for PCBs (filtered samples only) under the interim monitoring program. Although scheduled to be sampled

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annually as part of the interim groundwater monitoring program, this well will be sampled in fall 2004 to provide monitoring data for 2004.

- GE will install a new monitoring well to the south of East Street to replace well ES1-14 for interim monitoring purposes, provided that access can be obtained. This new well, to be designated as well GMA1-18, will be sampled and analyzed for PCBs (filtered samples only) under the interim monitoring program. Although scheduled to be sampled annually as part of the interim groundwater monitoring program, this well will be sampled in fall 2004 to provide monitoring data for 2004.

GE does not propose any additional modifications to the interim program at this time. A summary of the anticipated fall 2004 interim sampling program, including the modifications discussed in GE's June 15, 2004 letter, is provided in Table 7.

## **6. Schedule of Future Activities**

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### **6.1 General**

This section addresses the schedule for future groundwater quality monitoring activities and reporting for GMA 1. This schedule assumes that the modifications to the interim groundwater quality monitoring program discussed in Section 5 will be implemented. Specifically, this section provides a schedule for the upcoming fall 2004 interim monitoring event and associated reporting activities.

### **6.2 Field Activities Schedule**

GE will continue its routine groundwater elevation and NAPL monitoring activities according to the schedule approved by EPA under GE's NAPL monitoring program. All future groundwater elevation monitoring and reporting will be conducted under the NAPL monitoring program.

GE initiated plans to decommission well 139 and install/develop the two replacement monitoring wells (wells 139R and GMA1-18) in July 2004. These activities will be completed in August 2004 in order to allow the wells to equilibrate prior to sampling in the fall.

GE anticipates that the fall 2004 interim sampling event will take place in October 2004. The three replacement monitoring wells (wells 72R, 139R, and GMA1-18) will be sampled for the analytes listed in Table 7 in order to obtain data for 2004, since the original wells (wells ESA1S-33, 139, and ES1-14) included in the interim monitoring program could not be sampled during the spring 2004 sampling event. In addition, the two wells that still do not have four complete baseline monitoring data sets (wells GMA1-2 and GMA1-4) will be sampled for the GW-2 analytical parameter list that was previously approved for baseline monitoring and replacement well MW-4R will be sampled for the GW-3 analytical parameter list (excluding pesticides/herbicides and unfiltered samples for PCBs and inorganics).

The next full interim groundwater quality sampling round is scheduled for October 2005. Approximately two to three months prior to that sampling event, GE will conduct an inspection of all wells to be sampled to ascertain whether any of the wells were damaged since the prior sampling event. If any of the wells is found to be



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unusable, GE will repair the well, install a replacement well, or propose an alternate course of action to EPA, as appropriate.

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

### **6.3 Reporting Schedule**

GE will continue to provide the results of preliminary groundwater analytical data in its monthly reports on overall activities at the GE-Pittsfield/Housatonic River Site.

GE will submit the Fall 2004 Interim Groundwater Quality Report for GMA 1 by January 31, 2005, in accordance with the reporting schedule approved by EPA. That report will present the final, validated fall 2004 interim sampling results and a brief discussion of the results, including any proposals to further modify the interim monitoring program, if necessary. In the event that the groundwater monitoring program at the adjacent East Street Mobil Site (discussed in Section 1.2) is initiated in 2004, GE will also include a summary of available groundwater monitoring results and analytical data collected at this adjacent site, to the extent that information is available to GE.

Subsequent annual Interim Groundwater Quality Reports for GMA 1 will be submitted by January 31 where sampling activities were performed in the prior fall, or by July 31 where sampling activities were performed in the prior spring.

# *Tables*

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**TABLE 1  
 SPRING 2004 GROUNDWATER QUALITY MONITORING PROGRAM**

**PLANT SITE 1 GROUNDWATER MANAGEMENT AREA  
 GROUNDWATER QUALITY INTERIM REPORT FOR SPRING 2004  
 GENERAL ELECTRIC COMPANY-PITTSFIELD, MASSACHUSETTS**

Well Number	Monitoring Well Usage	Sampling Schedule	Spring 2004 Analyses <sup>(4)</sup>	Comments
<b>RAA 1 - 40s COMPLEX</b>				
No interim groundwater quality monitoring scheduled to be performed in this RAA.				
<b>RAA 2 - 30s COMPLEX</b>				
GMA1-2	GW-2 Sentinel	Semi-Annual <sup>(2)</sup>	None	Well was dry and unable to be sampled (scheduled to be sampled for VOCs and 5 SVOCs).
RF-02	GW-3 Perimeter (Downgradient)	Annual <sup>(1)</sup>	PCB	
RF-16	GW-3 Perimeter (Downgradient)	Annual <sup>(1)</sup>	Cyanide	
<b>RAA 3 - 20s COMPLEX</b>				
No interim groundwater quality monitoring scheduled to be performed in this RAA.				
<b>RAA 4 - EAST STREET AREA 2-SOUTH</b>				
GMA1-13	GW-3 General/Source Area Sentinel	Annual <sup>(1)</sup>	PCB	
E2SC-23	GW-3 Perimeter (Downgradient)	Annual <sup>(1)</sup>	PCB	
E2SC-24	GW-3 Perimeter (Downgradient)	Annual <sup>(1)</sup>	PCB	Initial sample analysis was canceled due to extremely low surrogate recoveries. The well was re-sampled on May 3, 2004 and analyzed.
ES2-02A	GW-3 Perimeter (Downgradient)	Annual <sup>(1)</sup>	Cyanide	
ESA2S-52	GW-3 General/Source Area Sentinel	Annual <sup>(1)</sup>	Cyanide	
HR-G1-MW-3	GW-3 Perimeter (Downgradient)	Annual <sup>(1)</sup>	Cyanide	
HR-G3-MW-1	GW-3 Perimeter (Downgradient)	Annual <sup>(1)</sup>	PCB	

**TABLE 1  
SPRING 2004 GROUNDWATER QUALITY MONITORING PROGRAM**

**PLANT SITE 1 GROUNDWATER MANAGEMENT AREA  
GROUNDWATER QUALITY INTERIM REPORT FOR SPRING 2004  
GENERAL ELECTRIC COMPANY-PITTSFIELD, MASSACHUSETTS**

<b>Well Number</b>	<b>Monitoring Well Usage</b>	<b>Sampling Schedule</b>	<b>Spring 2004 Analyses <sup>(4)</sup></b>	<b>Comments</b>
<b>RAA 5 - EAST STREET AREA 2-NORTH</b>				
ES1-05	GW-3 Perimeter (Downgradient)	Annual	PCB	
ES1-27R	GW-3 General/Source Area Sentinel	Annual <sup>(1)</sup>	PCB	
GMA1-4	GW-2 Sentinel	Semi-Annual <sup>(2)</sup>	VOC(+5 SVOC)	
<b>RAA 6 - EAST STREET AREA 1-NORTH</b>				
ES1-14	GW-2 Sentinel/ GW-3 General/Source Area Sentinel	Annual <sup>(1)</sup>	None	Well (scheduled to be sampled for PCBs) was not sampled as access was not granted by the property owner . Well GMA1-18 will be installed and utilized for future monitoring events.
ESA1N-52	GW-2 Sentinel/ GW-3 General/Source Area Sentinel	Annual <sup>(1)</sup>	PCB	
<b>RAA 12 - LYMAN STREET AREA</b>				
LS-29	GW-3 General/Source Area Sentinel	Annual <sup>(1)</sup>	PCB	
LSSC-08S	GW-3 Perimeter (Downgradient)	Annual <sup>(1)</sup>	PCB	
LSSC-16S	GW-2 Sentinel	Annual <sup>(1)</sup>	VOC (+5 SVOC)	
LSSC-18	GW-3 Perimeter (Downgradient)	Annual <sup>(1)</sup>	PCB	
MW-4R	GW-3 Perimeter (Downgradient)	Semi-Annual <sup>(3)</sup>	APP. IX, excl. pest/herb (minimum of 2 rounds)	
<b>RAA 13 - NEWELL STREET AREA II</b>				
N2SC-07S	GW-3 Perimeter (Downgradient)	Annual <sup>(1)</sup>	VOC/PCB	
NS-17	GW-3 Perimeter (Downgradient)	Annual <sup>(1)</sup>	VOC	

**TABLE 1  
 SPRING 2004 GROUNDWATER QUALITY MONITORING PROGRAM**

**PLANT SITE 1 GROUNDWATER MANAGEMENT AREA  
 GROUNDWATER QUALITY INTERIM REPORT FOR SPRING 2004  
 GENERAL ELECTRIC COMPANY-PITTSFIELD, MASSACHUSETTS**

Well Number	Monitoring Well Usage	Sampling Schedule	Spring 2004 Analyses <sup>(4)</sup>	Comments
<b>RAA 14 - NEWELL STREET AREA I</b>				
No interim groundwater quality monitoring scheduled to be performed in this RAA.				
<b>RAA 18 - EAST STREET AREA 1 SOUTH</b>				
139	GW-2 Sentinel/ GW-3 Perimeter (Downgradient)	Annual <sup>(1)</sup>	None	Well was found to be damaged and unable to be sampled (scheduled to be sampled for PCBs). Well 139R will be installed and utilized for future monitoring events.
ESA1S-33	GW-2 Sentinel/ GW-3 General/Source Area Sentinel	Annual <sup>(1)</sup>	None	Turbidity of groundwater unable to be reduced to a level suitable for sampling (scheduled to be sampled for VOCs(+5 SVOCs), PCB, and Cyanide). Well 72R will be utilized for future monitoring events.
GMA1-6	GW-2 Sentinel/ GW-3 General/Source Area Sentinel	Annual <sup>(1)</sup>	VOC(+5 SVOC)/ PCB	

**NOTES:**

1. The wells scheduled for annual 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 will alternate between the spring and fall seasons each year, beginning with spring 2004.
2. Well included due to less than four rounds of baseline data (i.e., GMA1-2 and GMA1-4) will be sampled 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 or if, despite additional attempts, the data cannot be obtained.
3. Samples will be collected from well MW-4R on a semi-annual basis during 2004, at a minimum, after which GE will propose to retain or modify the sampling schedule and/or analyses to be performed.
4. All analyses for PCB, metals, and cyanide conducted under the annual interim monitoring program were performed on filtered samples only.

**TABLE 2  
MONITORING WELL CONSTRUCTION**

**PLANT SITE 1 GROUNDWATER MANAGEMENT AREA  
GROUNDWATER QUALITY INTERIM REPORT FOR SPRING 2004  
GENERAL ELECTRIC COMPANY-PITTSFIELD, MASSACHUSETTS**

Well Number	Survey Coordinates		Well Diameter (inches)	Ground Surface Elevation (feet AMSL)	Measuring Point Elevation (feet AMSL)	Depth to Top of Screen (feet BGS)	Screen Length (feet)	Top of Screen Elevation (feet AMSL)	Base of Screen Elevation (feet AMSL)
	Northing	Easting							
<b>RAA 2 - 30s Complex</b>									
GMA1-2	533981.9	131570.5	2	1,007.0	1,006.75	6.2	10.0	1,000.8	990.8
RF-02	533507.3	131111.2	4	983.4	982.43	3.0	15.0	980.4	965.4
RF-16	534255.3	130931.5	4	988.2	987.91	7.0	15.0	981.2	966.2
<b>RAA 4 - East Street Area 2-South</b>									
E2SC-23	533344.4	133132.7	2	990.1	992.07	9.0	10.0	981.1	971.1
E2SC-24	533535.5	133544.4	2	986.0	987.90	9.0	10.0	977.0	967.0
ES2-02A	533023.6	132497.9	2	980.2	979.63	3.0	15.0	977.2	962.2
ESA2S-52	533231.0	132441.0	2	985.5	985.18	4.2	20.0	981.3	961.3
GMA1-13	533785.7	133705.2	2	989.5	991.41	15.0	10.0	974.5	964.5
HR-G1-MW-3	533046.0	132710.1	2	978.3	980.21	7.0	10.0	971.3	961.3
HR-G3-MW-1	532900.3	132455.1	2	980.3	982.45	4.1	10.0	976.2	966.2
<b>RAA 5 - East Street Area 2-North</b>									
ES1-05	534740.6	135064.1	2	1,023.4	1,023.33	35.0	10.0	988.4	978.4
ES1-27R	534603.1	134604.2	2	1,023.4	1,023.19	9.3	10.0	1,014.1	1,004.1
GMA1-4	534702.1	132178.3	2	1,011.8	1,011.52	10.3	10.0	1,001.5	991.5
<b>RAA 6 - East Street Area 1-North</b>									
ES1-14	534305.6	134930.7	1	998.8	998.74	10.0	10.0	988.8	978.8
ESA1-52	534253.8	134565.9	2	999.7	999.26	2.0	20.0	997.7	977.7
<b>RAA 12 - Lyman Street Area</b>									
LS-29	532807.6	131047.4	2	988.4	988.25	24.6	10.0	963.8	953.8
LSSC-08S	532408.9	130817.2	2	983.6	983.11	5.0	10.0	978.6	968.6
LSSC-16S	532500.5	130690.3	2	981.5	981.37	5.0	10.0	976.5	966.5
LSSC-18	532664.7	131107.5	2	987.6	987.32	9.0	10.0	978.6	968.6
MW-4R	532351.6	130525.4	2	981.2	980.82	5.5	10.0	975.7	965.7

**TABLE 2  
MONITORING WELL CONSTRUCTION**

**PLANT SITE 1 GROUNDWATER MANAGEMENT AREA  
GROUNDWATER QUALITY INTERIM REPORT FOR SPRING 2004  
GENERAL ELECTRIC COMPANY-PITTSFIELD, MASSACHUSETTS**

Well Number	Survey Coordinates		Well Diameter (inches)	Ground Surface Elevation (feet AMSL)	Measuring Point Elevation (feet AMSL)	Depth to Top of Screen (feet BGS)	Screen Length (feet)	Top of Screen Elevation (feet AMSL)	Base of Screen Elevation (feet AMSL)
	Northing	Easting							
RAA 13 - Newell Street Area II									
N2SC-07S	532707.0	131599.5	2	983.2	982.93	8.9	10.0	974.3	964.3
NS-17	532656.2	131503.3	2	982.0	984.64	6.0	10.0	976.0	966.0
RAA 18 - East Street Area 1-South									
139	533863.2	134993.8	1.5	987.1	987.13	5.0	10.0	982.1	972.1
ESA1S-33	534197.3	134185.0	2	999.5	999.50	3.0	20.0	996.5	976.5
GMA1-6	534084.3	134455.5	2	1,000.7	1,000.44	5.0	10.0	995.7	985.7

NOTES:

1. The listed wells were scheduled to be utilized during spring 2004 for baseline groundwater quality sampling.
2. feet AMSL: Feet above mean sea level
3. feet BGS: Feet below ground surface

**TABLE 3  
FIELD PARAMETER MEASUREMENTS - SPRING 2004**

**PLANT SITE 1 GROUNDWATER MANAGEMENT AREA  
GROUNDWATER QUALITY INTERIM REPORT FOR SPRING 2004  
GENERAL ELECTRIC COMPANY-PITTSFIELD, MASSACHUSETTS**

<b>WELL NUMBER</b>	<b>TURBIDITY (NTU)</b>	<b>TEMPERATURE (DEGREES CELSIUS)</b>	<b>pH (STANDARD UNITS)</b>	<b>SPECIFIC CONDUCTIVITY (mS/cm)</b>	<b>OXIDATION- REDUCTION POTENTIAL (mV)</b>	<b>DISSOLVED OXYGEN (mg/L)</b>
<b>RAA 2 - 30s COMPLEX</b>						
RF-02	34.0	8.25	6.82	1.384	7.7	0.55
RF-16	4.0	7.45	7.07	0.389	-219.5	11.78
<b>RAA 4 - EAST STREET AREA 2-SOUTH</b>						
E2SC-23	3.0	6.84	7.19	0.551	245.6	8.02
E2SC-24	1.0	8.40	6.59	0.936	33.9	0.34
ES2-02A	6.0	7.76	6.45	0.465	-387.3	0.40
ESA2S-52	2.0	10.94	7.06	4.124	-381.2	0.33
GMA1-13	21.0	8.52	6.66	0.702	267.2	3.46
HR-G1-MW-3	4.0	9.56	6.88	1.121	-356.3	0.77
HR-G3-MW-1	3.0	9.63	6.76	1.675	-300.1	1.79
<b>RAA 5 - EAST STREET AREA 2-NORTH</b>						
ES1-05	10.0	11.36	6.80	1.235	-54.6	1.11
ES1-27R	5.0	7.68	7.54	0.380	-208.1	9.05
GMA1-4	2.0	8.67	7.33	1.321	-238.2	9.26
<b>RAA 6 - EAST STREET AREA 1-NORTH</b>						
ESA1-52	12.0	8.44	7.41	0.646	-18.0	0.31



**TABLE 3  
FIELD PARAMETER MEASUREMENTS - SPRING 2004**

**PLANT SITE 1 GROUNDWATER MANAGEMENT AREA  
GROUNDWATER QUALITY INTERIM REPORT FOR SPRING 2004  
GENERAL ELECTRIC COMPANY-PITTSFIELD, MASSACHUSETTS**

<b>WELL NUMBER</b>	<b>TURBIDITY (NTU)</b>	<b>TEMPERATURE (DEGREES CELSIUS)</b>	<b>pH (STANDARD UNITS)</b>	<b>SPECIFIC CONDUCTIVITY (mS/cm)</b>	<b>OXIDATION- REDUCTION POTENTIAL (mV)</b>	<b>DISSOLVED OXYGEN (mg/L)</b>
<b>RAA 12 - LYMAN STREET AREA</b>						
LS-29	20.0	10.42	7.40	0.587	164.6	4.67
LSSC-08S	2.0	9.00	6.51	1.294	-262.1	4.36
LSSC-16S	7.0	11.26	6.74	1.565	-304.1	2.94
LSSC-18	2.0	8.98	7.33	1.164	117.5	5.77
MW-4R	4.0	10.98	6.50	1.113	-354.7	0.31
<b>RAA 13 - NEWELL STREET AREA II</b>						
N2SC-07S	1.0	9.39	6.83	1.034	-61.6	0.61
NS-17	4.0	9.67	6.69	0.763	-364.4	0.40
<b>RAA 18 - EAST STREET AREA 1-SOUTH</b>						
GMA1-6	4.0	11.29	6.77	1.524	-74.4	0.17

Notes:

1. Measurements collected during spring 2004 groundwater sampling event performed between April 6 and 12, 2004.
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)
7. NM = Parameter was not measured due to insufficient water available.

**TABLE 4**  
**MCP METHOD 1 GW-2 STANDARDS COMPARISON**  
**BASELINE GROUNDWATER QUALITY INTERIM REPORT FOR SPRING 2004**

**GROUNDWATER MANAGEMENT AREA 1**  
**GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**  
**(Results are presented in parts per million, ppm)**

Site ID:	Method 1 GW-2	East St. Area 1 - South	East St. Area 2 - North	Lyman Street Area
Sample ID:	Standards	GMA1-6	GMA1-4	LSSC-16S
Parameter Date Collected:		04/09/04	04/06/04	04/09/04
<b>Volatile Organics</b>				
Chloroform	0.4	ND(0.0050)	0.0057	ND(0.0050) [ND(0.0050)]
Total VOCs	Not Listed	ND(0.20)	0.0057	ND(0.20) [ND(0.20)]
<b>Semivolatile Organics</b>				
None Detected	--	NA	NA	NA

Notes:

1. Samples were collected by Blasland Bouck & Lee, Inc., and were submitted to SGS Environmental Services, Inc. for analysis of PCBs and Appendix IX+3 constituents.
2. Samples have been validated as per Field Sampling Plan/Quality Assurance Project Plan (FSP/QAPP), General Electric Company, Pittsfield, Massachusetts, Blasland Bouck & Lee, Inc. (approved May 25, 2004 and resubmitted June 15, 2004).
3. Only volatile and semivolatile analysis is presented for the MCP Method 1 GW-2 Standards Comparison.
4. NA - Not Analyzed.
5. ND - Analyte was not detected. The number in parentheses is the associated detection limit.
6. Field duplicate sample results are presented in brackets.
7. Only volatile and semivolatile constituents detected in at least one sample are summarized.
8. - Indicates that all constituents for the parameter group were not detected.

**TABLE 5**  
**MCP METHOD 1 GW-3 STANDARDS COMPARISON**  
**BASELINE GROUNDWATER QUALITY INTERIM REPORT FOR SPRING 2004**

**GROUNDWATER MANAGEMENT AREA 1**  
**GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**  
(Results are presented in parts per million, ppm)

Parameter	Site ID: Sample ID: Date Collected:	Method 1 GW-3 Standards	30s Complex		East St. Area 1 - North	East St. Area 1 - South
			RF-02 04/06/04	RF-16 04/07/04	ESA1N-52 04/09/04	GMA1-6 04/09/04
<b>Volatile Organics</b>						
Chlorobenzene		0.5	NA	NA	NA	ND(0.0050)
Vinyl Chloride		40	NA	NA	NA	ND(0.0020)
<b>PCBs-Filtered</b>						
Aroclor-1254		Not Listed	0.000021 J	NA	ND(0.000065)	ND(0.000065)
Aroclor-1260		Not Listed	ND(0.000065)	NA	ND(0.000065)	ND(0.000065)
Total PCBs		0.0003	0.000021 J	NA	ND(0.000065)	ND(0.000065)
<b>Semivolatile Organics</b>						
None Detected		--	NA	NA	NA	NA
<b>Furans</b>						
2,3,7,8-TCDF		Not Listed	NA	NA	NA	NA
TCDFs (total)		Not Listed	NA	NA	NA	NA
1,2,3,7,8-PeCDF		Not Listed	NA	NA	NA	NA
2,3,4,7,8-PeCDF		Not Listed	NA	NA	NA	NA
PeCDFs (total)		Not Listed	NA	NA	NA	NA
1,2,3,4,7,8-HxCDF		Not Listed	NA	NA	NA	NA
1,2,3,6,7,8-HxCDF		Not Listed	NA	NA	NA	NA
1,2,3,7,8,9-HxCDF		Not Listed	NA	NA	NA	NA
2,3,4,6,7,8-HxCDF		Not Listed	NA	NA	NA	NA
HxCDFs (total)		Not Listed	NA	NA	NA	NA
1,2,3,4,6,7,8-HpCDF		Not Listed	NA	NA	NA	NA
1,2,3,4,7,8,9-HpCDF		Not Listed	NA	NA	NA	NA
HpCDFs (total)		Not Listed	NA	NA	NA	NA
OCDF		Not Listed	NA	NA	NA	NA
None Detected		Not Listed	NA	NA	NA	NA
<b>Dioxins</b>						
2,3,7,8-TCDD		Not Listed	NA	NA	NA	NA
TCDDs (total)		Not Listed	NA	NA	NA	NA
1,2,3,7,8-PeCDD		Not Listed	NA	NA	NA	NA
PeCDDs (total)		Not Listed	NA	NA	NA	NA
1,2,3,4,7,8-HxCDD		Not Listed	NA	NA	NA	NA
1,2,3,6,7,8-HxCDD		Not Listed	NA	NA	NA	NA
1,2,3,7,8,9-HxCDD		Not Listed	NA	NA	NA	NA
HxCDDs (total)		Not Listed	NA	NA	NA	NA
1,2,3,4,6,7,8-HpCDD		Not Listed	NA	NA	NA	NA
HpCDDs (total)		Not Listed	NA	NA	NA	NA
OCDD		Not Listed	NA	NA	NA	NA
Total TEQs (WHO TEFs)		0.0000001	NA	NA	NA	NA
<b>Inorganics-Unfiltered</b>						
None Detected		--	NA	NA	NA	NA
<b>Inorganics-Filtered</b>						
Arsenic		0.4	NA	NA	NA	NA
Barium		30	NA	NA	NA	NA
Beryllium		0.05	NA	NA	NA	NA
Cyanide		0.01	NA	ND(0.0100) [ND(0.0100)]	NA	NA
Vanadium		2	NA	NA	NA	NA
Zinc		0.9	NA	NA	NA	NA

**TABLE 5**  
**MCP METHOD 1 GW-3 STANDARDS COMPARISON**  
**BASELINE GROUNDWATER QUALITY INTERIM REPORT FOR SPRING 2004**

**GROUNDWATER MANAGEMENT AREA 1**  
**GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**  
(Results are presented in parts per million, ppm)

Parameter	Site ID:	Method 1 GW-3 Standards	East St. Area 2 - North		East St. Area 2 - South
	Sample ID: Date Collected:		ES1-05 04/06/04	ES1-27R 04/06/04	E2SC-23 04/07/04
<b>Volatile Organics</b>					
Chlorobenzene		0.5	NA	NA	NA
Vinyl Chloride		40	NA	NA	NA
<b>PCBs-Filtered</b>					
Aroclor-1254		Not Listed	0.00034 [0.00028]	0.0019	0.0056
Aroclor-1260		Not Listed	ND(0.000065) [ND(0.000065)]	0.00036	0.0047
Total PCBs		0.0003	0.00034 [0.00028]	0.00226	0.0103
<b>Semivolatile Organics</b>					
None Detected		--	NA	NA	NA
<b>Furans</b>					
2,3,7,8-TCDF		Not Listed	NA	NA	NA
TCDFs (total)		Not Listed	NA	NA	NA
1,2,3,7,8-PeCDF		Not Listed	NA	NA	NA
2,3,4,7,8-PeCDF		Not Listed	NA	NA	NA
PeCDFs (total)		Not Listed	NA	NA	NA
1,2,3,4,7,8-HxCDF		Not Listed	NA	NA	NA
1,2,3,6,7,8-HxCDF		Not Listed	NA	NA	NA
1,2,3,7,8,9-HxCDF		Not Listed	NA	NA	NA
2,3,4,6,7,8-HxCDF		Not Listed	NA	NA	NA
HxCDFs (total)		Not Listed	NA	NA	NA
1,2,3,4,6,7,8-HpCDF		Not Listed	NA	NA	NA
1,2,3,4,7,8,9-HpCDF		Not Listed	NA	NA	NA
HpCDFs (total)		Not Listed	NA	NA	NA
OCDF		Not Listed	NA	NA	NA
None Detected		Not Listed	NA	NA	NA
<b>Dioxins</b>					
2,3,7,8-TCDD		Not Listed	NA	NA	NA
TCDDs (total)		Not Listed	NA	NA	NA
1,2,3,7,8-PeCDD		Not Listed	NA	NA	NA
PeCDDs (total)		Not Listed	NA	NA	NA
1,2,3,4,7,8-HxCDD		Not Listed	NA	NA	NA
1,2,3,6,7,8-HxCDD		Not Listed	NA	NA	NA
1,2,3,7,8,9-HxCDD		Not Listed	NA	NA	NA
HxCDDs (total)		Not Listed	NA	NA	NA
1,2,3,4,6,7,8-HpCDD		Not Listed	NA	NA	NA
HpCDDs (total)		Not Listed	NA	NA	NA
OCDD		Not Listed	NA	NA	NA
Total TEQs (WHO TEFs)		0.0000001	NA	NA	NA
<b>Inorganics-Unfiltered</b>					
None Detected		--	NA	NA	NA
<b>Inorganics-Filtered</b>					
Arsenic		0.4	NA	NA	NA
Barium		30	NA	NA	NA
Beryllium		0.05	NA	NA	NA
Cyanide		0.01	NA	NA	NA
Vanadium		2	NA	NA	NA
Zinc		0.9	NA	NA	NA

**TABLE 5**  
**MCP METHOD 1 GW-3 STANDARDS COMPARISON**  
**BASELINE GROUNDWATER QUALITY INTERIM REPORT FOR SPRING 2004**

**GROUNDWATER MANAGEMENT AREA 1**  
**GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**  
(Results are presented in parts per million, ppm)

Parameter	Site ID: Sample ID: Date Collected:	Method 1 GW-3 Standards	East St. Area 2 - South			
			E2SC-24 05/03/04	ES2-02A 04/07/04	ESA2S-52 04/07/04	GMA1-13 04/07/04
<b>Volatile Organics</b>						
Chlorobenzene		0.5	NA	NA	NA	NA
Vinyl Chloride		40	NA	NA	NA	NA
<b>PCBs-Filtered</b>						
Aroclor-1254		Not Listed	ND(0.000065)	NA	NA	ND(0.000065)
Aroclor-1260		Not Listed	ND(0.000065)	NA	NA	ND(0.000065)
Total PCBs		0.0003	ND(0.000065)	NA	NA	ND(0.000065)
<b>Semivolatile Organics</b>						
None Detected		--	NA	NA	NA	NA
<b>Furans</b>						
2,3,7,8-TCDF		Not Listed	NA	NA	NA	NA
TCDFs (total)		Not Listed	NA	NA	NA	NA
1,2,3,7,8-PeCDF		Not Listed	NA	NA	NA	NA
2,3,4,7,8-PeCDF		Not Listed	NA	NA	NA	NA
PeCDFs (total)		Not Listed	NA	NA	NA	NA
1,2,3,4,7,8-HxCDF		Not Listed	NA	NA	NA	NA
1,2,3,6,7,8-HxCDF		Not Listed	NA	NA	NA	NA
1,2,3,7,8,9-HxCDF		Not Listed	NA	NA	NA	NA
2,3,4,6,7,8-HxCDF		Not Listed	NA	NA	NA	NA
HxCDFs (total)		Not Listed	NA	NA	NA	NA
1,2,3,4,6,7,8-HpCDF		Not Listed	NA	NA	NA	NA
1,2,3,4,7,8,9-HpCDF		Not Listed	NA	NA	NA	NA
HpCDFs (total)		Not Listed	NA	NA	NA	NA
OCDF		Not Listed	NA	NA	NA	NA
None Detected		Not Listed	NA	NA	NA	NA
<b>Dioxins</b>						
2,3,7,8-TCDD		Not Listed	NA	NA	NA	NA
TCDDs (total)		Not Listed	NA	NA	NA	NA
1,2,3,7,8-PeCDD		Not Listed	NA	NA	NA	NA
PeCDDs (total)		Not Listed	NA	NA	NA	NA
1,2,3,4,7,8-HxCDD		Not Listed	NA	NA	NA	NA
1,2,3,6,7,8-HxCDD		Not Listed	NA	NA	NA	NA
1,2,3,7,8,9-HxCDD		Not Listed	NA	NA	NA	NA
HxCDDs (total)		Not Listed	NA	NA	NA	NA
1,2,3,4,6,7,8-HpCDD		Not Listed	NA	NA	NA	NA
HpCDDs (total)		Not Listed	NA	NA	NA	NA
OCDD		Not Listed	NA	NA	NA	NA
Total TEQs (WHO TEFs)		0.0000001	NA	NA	NA	NA
<b>Inorganics-Unfiltered</b>						
None Detected		--	NA	NA	NA	NA
<b>Inorganics-Filtered</b>						
Arsenic		0.4	NA	NA	NA	NA
Barium		30	NA	NA	NA	NA
Beryllium		0.05	NA	NA	NA	NA
Cyanide		0.01	NA	ND(0.0100)	0.0120	NA
Vanadium		2	NA	NA	NA	NA
Zinc		0.9	NA	NA	NA	NA

**TABLE 5**  
**MCP METHOD 1 GW-3 STANDARDS COMPARISON**  
**BASELINE GROUNDWATER QUALITY INTERIM REPORT FOR SPRING 2004**

**GROUNDWATER MANAGEMENT AREA 1**  
**GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**  
(Results are presented in parts per million, ppm)

Parameter	Site ID: Sample ID: Date Collected:	Method 1 GW-3 Standards	East St. Area 2 - South		Lyman Street Area	
			HR-G1-MW-3 04/08/04	HR-G3-MW-1 04/08/04	LS-29 04/08/04	LS-MW-4R 04/09/04
<b>Volatile Organics</b>						
Chlorobenzene		0.5	NA	NA	NA	ND(0.0050)
Vinyl Chloride		40	NA	NA	NA	ND(0.0020)
<b>PCBs-Filtered</b>						
Aroclor-1254		Not Listed	NA	0.00016	0.000045 J	ND(0.000065)
Aroclor-1260		Not Listed	NA	0.000066	ND(0.000065)	ND(0.000065)
Total PCBs		0.0003	NA	0.000226	0.000045 J	ND(0.000065)
<b>Semivolatile Organics</b>						
None Detected		--	NA	NA	NA	--
<b>Furans</b>						
2,3,7,8-TCDF		Not Listed	NA	NA	NA	ND(0.0000000024)
TCDFs (total)		Not Listed	NA	NA	NA	ND(0.000000010)
1,2,3,7,8-PeCDF		Not Listed	NA	NA	NA	ND(0.000000011)
2,3,4,7,8-PeCDF		Not Listed	NA	NA	NA	ND(0.000000072)
PeCDFs (total)		Not Listed	NA	NA	NA	ND(0.000000018)
1,2,3,4,7,8-HxCDF		Not Listed	NA	NA	NA	ND(0.000000082)
1,2,3,6,7,8-HxCDF		Not Listed	NA	NA	NA	ND(0.000000085)
1,2,3,7,8,9-HxCDF		Not Listed	NA	NA	NA	ND(0.000000072)
2,3,4,6,7,8-HxCDF		Not Listed	NA	NA	NA	ND(0.000000059)
HxCDFs (total)		Not Listed	NA	NA	NA	ND(0.000000024)
1,2,3,4,6,7,8-HpCDF		Not Listed	NA	NA	NA	ND(0.000000070)
1,2,3,4,7,8,9-HpCDF		Not Listed	NA	NA	NA	ND(0.000000056)
HpCDFs (total)		Not Listed	NA	NA	NA	ND(0.000000013)
OCDF		Not Listed	NA	NA	NA	ND(0.000000092)
None Detected		Not Listed	NA	NA	NA	--
<b>Dioxins</b>						
2,3,7,8-TCDD		Not Listed	NA	NA	NA	ND(0.000000032)
TCDDs (total)		Not Listed	NA	NA	NA	ND(0.000000032)
1,2,3,7,8-PeCDD		Not Listed	NA	NA	NA	ND(0.000000011)
PeCDDs (total)		Not Listed	NA	NA	NA	ND(0.000000011)
1,2,3,4,7,8-HxCDD		Not Listed	NA	NA	NA	0.000000078 J
1,2,3,6,7,8-HxCDD		Not Listed	NA	NA	NA	ND(0.000000077)
1,2,3,7,8,9-HxCDD		Not Listed	NA	NA	NA	ND(0.000000086)
HxCDDs (total)		Not Listed	NA	NA	NA	ND(0.000000016)
1,2,3,4,6,7,8-HpCDD		Not Listed	NA	NA	NA	ND(0.000000065)
HpCDDs (total)		Not Listed	NA	NA	NA	ND(0.000000065)
OCDD		Not Listed	NA	NA	NA	ND(0.000000015)
Total TEQs (WHO TEFs)		0.0000001	NA	NA	NA	0.000000012
<b>Inorganics-Unfiltered</b>						
None Detected		--	NA	NA	NA	--
<b>Inorganics-Filtered</b>						
Arsenic		0.4	NA	NA	NA	0.00490 B
Barium		30	NA	NA	NA	0.0480 B
Beryllium		0.05	NA	NA	NA	0.000650 B
Cyanide		0.01	0.0110	NA	NA	ND(0.0100)
Vanadium		2	NA	NA	NA	0.00190 B
Zinc		0.9	NA	NA	NA	0.160

**TABLE 5**  
**MCP METHOD 1 GW-3 STANDARDS COMPARISON**  
**BASELINE GROUNDWATER QUALITY INTERIM REPORT FOR SPRING 2004**

**GROUNDWATER MANAGEMENT AREA 1**  
**GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**  
(Results are presented in parts per million, ppm)

Parameter	Site ID:	Lyman Street Area		Newell St. Area II		
	Sample ID: Date Collected:	Method 1 GW-3 Standards	LSSC-08S 04/08/04	LSSC-18 04/08/04	N2SC-07S 04/12/04	NS-17 04/12/04
<b>Volatile Organics</b>						
Chlorobenzene		0.5	NA	NA	0.14	0.075 J
Vinyl Chloride		40	NA	NA	0.89	0.68
<b>PCBs-Filtered</b>						
Aroclor-1254		Not Listed	0.00041	ND(0.00050)	0.000041 J	NA
Aroclor-1260		Not Listed	ND(0.000065)	ND(0.00050)	ND(0.000065)	NA
Total PCBs		0.0003	0.00041	ND(0.00050)	0.000041 J	NA
<b>Semivolatile Organics</b>						
None Detected		--	NA	NA	NA	NA
<b>Furans</b>						
2,3,7,8-TCDF		Not Listed	NA	NA	NA	NA
TCDFs (total)		Not Listed	NA	NA	NA	NA
1,2,3,7,8-PeCDF		Not Listed	NA	NA	NA	NA
2,3,4,7,8-PeCDF		Not Listed	NA	NA	NA	NA
PeCDFs (total)		Not Listed	NA	NA	NA	NA
1,2,3,4,7,8-HxCDF		Not Listed	NA	NA	NA	NA
1,2,3,6,7,8-HxCDF		Not Listed	NA	NA	NA	NA
1,2,3,7,8,9-HxCDF		Not Listed	NA	NA	NA	NA
2,3,4,6,7,8-HxCDF		Not Listed	NA	NA	NA	NA
HxCDFs (total)		Not Listed	NA	NA	NA	NA
1,2,3,4,6,7,8-HpCDF		Not Listed	NA	NA	NA	NA
1,2,3,4,7,8,9-HpCDF		Not Listed	NA	NA	NA	NA
HpCDFs (total)		Not Listed	NA	NA	NA	NA
OCDF		Not Listed	NA	NA	NA	NA
None Detected		Not Listed	NA	NA	NA	NA
<b>Dioxins</b>						
2,3,7,8-TCDD		Not Listed	NA	NA	NA	NA
TCDDs (total)		Not Listed	NA	NA	NA	NA
1,2,3,7,8-PeCDD		Not Listed	NA	NA	NA	NA
PeCDDs (total)		Not Listed	NA	NA	NA	NA
1,2,3,4,7,8-HxCDD		Not Listed	NA	NA	NA	NA
1,2,3,6,7,8-HxCDD		Not Listed	NA	NA	NA	NA
1,2,3,7,8,9-HxCDD		Not Listed	NA	NA	NA	NA
HxCDDs (total)		Not Listed	NA	NA	NA	NA
1,2,3,4,6,7,8-HpCDD		Not Listed	NA	NA	NA	NA
HpCDDs (total)		Not Listed	NA	NA	NA	NA
OCDD		Not Listed	NA	NA	NA	NA
Total TEQs (WHO TEFs)		0.0000001	NA	NA	NA	NA
<b>Inorganics-Unfiltered</b>						
None Detected		--	NA	NA	NA	NA
<b>Inorganics-Filtered</b>						
Arsenic		0.4	NA	NA	NA	NA
Barium		30	NA	NA	NA	NA
Beryllium		0.05	NA	NA	NA	NA
Cyanide		0.01	NA	NA	NA	NA
Vanadium		2	NA	NA	NA	NA
Zinc		0.9	NA	NA	NA	NA

**TABLE 5**  
**MCP METHOD 1 GW-3 STANDARDS COMPARISON**  
**BASELINE GROUNDWATER QUALITY INTERIM REPORT FOR SPRING 2004**

**GROUNDWATER MANAGEMENT AREA 1**  
**GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**  
**(Results are presented in parts per million, ppm)**

Notes:

1. Samples were collected by Blasland Bouck & Lee, Inc., and submitted to SGS Environmental Services, Inc. for analysis of PCBs and Appendix IX+3 constituents.
2. Samples have been validated as per Field Sampling Plan/Quality Assurance Project Plan (FSP/QAPP), General Electric Company, Pittsfield, Massachusetts, Blasland Bouck & Lee, Inc. (approved May 25, 2004 and resubmitted June 15, 2004).
3. NA - Not Analyzed.
4. ND - Analyte was not detected. The number in parentheses is the associated detection limit.
5. Total 2,3,7,8-TCDD toxicity equivalents (TEQs) were calculated using Toxicity Equivalency Factors (TEFs) derived by the World Health Organization (WHO) and published by Van den Berg et al. In Environmental Health Perspectives 106(2), December 1998.
6. Field duplicate sample results are presented in brackets.
7. With the exception of dioxin/furans, only those constituents detected in one or more samples are summarized.
8. Shading indicates that value exceeds GW-3 Standards.
9. -- Indicates that all constituents for the parameter group were not detected.

Data Qualifiers:

Organics (volatiles, PCBs, semivolatiles, dioxin/furans)

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

Inorganics

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



**TABLE 6**  
**MCP UCL COMPARISON**  
**GROUNDWATER QUALITY INTERIM REPORT FOR SPRING 2004**

**GROUNDWATER MANAGEMENT AREA 1**  
**GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**  
(Results are presented in parts per million, ppm)

Parameter	Site ID: Sample ID: Date Collected:	UCL-GW Standards	30s Complex		East St. Area 1 - North	East St. Area 1 - South
			RF-02 04/06/04	RF-16 04/07/04	ESA1N-52 04/09/04	GMA1-6 04/09/04
<b>Volatile Organics</b>						
Chlorobenzene		10	NA	NA	NA	ND(0.0050)
Chloroform		100	NA	NA	NA	ND(0.0050)
Vinyl Chloride		100	NA	NA	NA	ND(0.0020)
<b>PCBs-Filtered</b>						
Aroclor-1254		Not Listed	0.000021 J	NA	ND(0.000065)	ND(0.000065)
Aroclor-1260		Not Listed	ND(0.000065)	NA	ND(0.000065)	ND(0.000065)
Total PCBs		0.005	0.000021 J	NA	ND(0.000065)	ND(0.000065)
<b>Semivolatile Organics</b>						
None Detected		--	NA	NA	NA	NA
<b>Furans</b>						
2,3,7,8-TCDF		Not Listed	NA	NA	NA	NA
TCDFs (total)		Not Listed	NA	NA	NA	NA
1,2,3,7,8-PeCDF		Not Listed	NA	NA	NA	NA
2,3,4,7,8-PeCDF		Not Listed	NA	NA	NA	NA
PeCDFs (total)		Not Listed	NA	NA	NA	NA
1,2,3,4,7,8-HxCDF		Not Listed	NA	NA	NA	NA
1,2,3,6,7,8-HxCDF		Not Listed	NA	NA	NA	NA
1,2,3,7,8,9-HxCDF		Not Listed	NA	NA	NA	NA
2,3,4,6,7,8-HxCDF		Not Listed	NA	NA	NA	NA
HxCDFs (total)		Not Listed	NA	NA	NA	NA
1,2,3,4,6,7,8-HpCDF		Not Listed	NA	NA	NA	NA
1,2,3,4,7,8,9-HpCDF		Not Listed	NA	NA	NA	NA
HpCDFs (total)		Not Listed	NA	NA	NA	NA
OCDF		Not Listed	NA	NA	NA	NA
None Detected		Not Listed	NA	NA	NA	NA
<b>Dioxins</b>						
2,3,7,8-TCDD		Not Listed	NA	NA	NA	NA
TCDDs (total)		Not Listed	NA	NA	NA	NA
1,2,3,7,8-PeCDD		Not Listed	NA	NA	NA	NA
PeCDDs (total)		Not Listed	NA	NA	NA	NA
1,2,3,4,7,8-HxCDD		Not Listed	NA	NA	NA	NA
1,2,3,6,7,8-HxCDD		Not Listed	NA	NA	NA	NA
1,2,3,7,8,9-HxCDD		Not Listed	NA	NA	NA	NA
HxCDDs (total)		Not Listed	NA	NA	NA	NA
1,2,3,4,6,7,8-HpCDD		Not Listed	NA	NA	NA	NA
HpCDDs (total)		Not Listed	NA	NA	NA	NA
OCDD		Not Listed	NA	NA	NA	NA
Total TEQs (WHO TEFs)		0.000001	NA	NA	NA	NA
<b>Inorganics-Unfiltered</b>						
None Detected		--	NA	NA	NA	NA
<b>Inorganics-Filtered</b>						
Arsenic		4	NA	NA	NA	NA
Barium		100	NA	NA	NA	NA
Beryllium		0.5	NA	NA	NA	NA
Cyanide		2	NA	ND(0.0100) [ND(0.0100)]	NA	NA
Vanadium		20	NA	NA	NA	NA
Zinc		20	NA	NA	NA	NA

**TABLE 6**  
**MCP UCL COMPARISON**  
**GROUNDWATER QUALITY INTERIM REPORT FOR SPRING 2004**

**GROUNDWATER MANAGEMENT AREA 1**  
**GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**  
(Results are presented in parts per million, ppm)

Parameter	Site ID: Sample ID: Date Collected:	UCL-GW Standards	East St. Area 2 - North			East St. Area 2 - South
			ES1-05 04/06/04	ES1-27R 04/06/04	GMA1-4 04/06/04	E2SC-23 04/07/04
<b>Volatile Organics</b>						
Chlorobenzene		10	NA	NA	ND(0.0050)	NA
Chloroform		100	NA	NA	0.0057	NA
Vinyl Chloride		100	NA	NA	ND(0.0020)	NA
<b>PCBs-Filtered</b>						
Aroclor-1254		Not Listed	0.00034 [0.00028]	0.0019	NA	0.0056
Aroclor-1260		Not Listed	ND(0.000065) [ND(0.000065)]	0.00036	NA	0.0047
Total PCBs		0.005	0.00034 [0.00028]	0.00226	NA	0.0103
<b>Semivolatile Organics</b>						
None Detected		--	NA	NA	NA	NA
<b>Furans</b>						
2,3,7,8-TCDF		Not Listed	NA	NA	NA	NA
TCDFs (total)		Not Listed	NA	NA	NA	NA
1,2,3,7,8-PeCDF		Not Listed	NA	NA	NA	NA
2,3,4,7,8-PeCDF		Not Listed	NA	NA	NA	NA
PeCDFs (total)		Not Listed	NA	NA	NA	NA
1,2,3,4,7,8-HxCDF		Not Listed	NA	NA	NA	NA
1,2,3,6,7,8-HxCDF		Not Listed	NA	NA	NA	NA
1,2,3,7,8,9-HxCDF		Not Listed	NA	NA	NA	NA
2,3,4,6,7,8-HxCDF		Not Listed	NA	NA	NA	NA
HxCDFs (total)		Not Listed	NA	NA	NA	NA
1,2,3,4,6,7,8-HpCDF		Not Listed	NA	NA	NA	NA
1,2,3,4,7,8,9-HpCDF		Not Listed	NA	NA	NA	NA
HpCDFs (total)		Not Listed	NA	NA	NA	NA
OCDF		Not Listed	NA	NA	NA	NA
None Detected		Not Listed	NA	NA	NA	NA
<b>Dioxins</b>						
2,3,7,8-TCDD		Not Listed	NA	NA	NA	NA
TCDDs (total)		Not Listed	NA	NA	NA	NA
1,2,3,7,8-PeCDD		Not Listed	NA	NA	NA	NA
PeCDDs (total)		Not Listed	NA	NA	NA	NA
1,2,3,4,7,8-HxCDD		Not Listed	NA	NA	NA	NA
1,2,3,6,7,8-HxCDD		Not Listed	NA	NA	NA	NA
1,2,3,7,8,9-HxCDD		Not Listed	NA	NA	NA	NA
HxCDDs (total)		Not Listed	NA	NA	NA	NA
1,2,3,4,6,7,8-HpCDD		Not Listed	NA	NA	NA	NA
HpCDDs (total)		Not Listed	NA	NA	NA	NA
OCDD		Not Listed	NA	NA	NA	NA
Total TEQs (WHO TEFs)		0.000001	NA	NA	NA	NA
<b>Inorganics-Unfiltered</b>						
None Detected		--	NA	NA	NA	NA
<b>Inorganics-Filtered</b>						
Arsenic		4	NA	NA	NA	NA
Barium		100	NA	NA	NA	NA
Beryllium		0.5	NA	NA	NA	NA
Cyanide		2	NA	NA	NA	NA
Vanadium		20	NA	NA	NA	NA
Zinc		20	NA	NA	NA	NA

**TABLE 6**  
**MCP UCL COMPARISON**  
**GROUNDWATER QUALITY INTERIM REPORT FOR SPRING 2004**

**GROUNDWATER MANAGEMENT AREA 1**  
**GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**  
(Results are presented in parts per million, ppm)

Parameter	Site ID:	UCL-GW Standards	East St. Area 2 - South				
	Sample ID: Date Collected:		E2SC-24 05/03/04	ES2-02A 04/07/04	ESA2S-52 04/07/04	GMA1-13 04/07/04	HR-G1-MW-3 04/08/04
<b>Volatile Organics</b>							
Chlorobenzene		10	NA	NA	NA	NA	NA
Chloroform		100	NA	NA	NA	NA	NA
Vinyl Chloride		100	NA	NA	NA	NA	NA
<b>PCBs-Filtered</b>							
Aroclor-1254		Not Listed	ND(0.000065)	NA	NA	ND(0.000065)	NA
Aroclor-1260		Not Listed	ND(0.000065)	NA	NA	ND(0.000065)	NA
Total PCBs		0.005	ND(0.000065)	NA	NA	ND(0.000065)	NA
<b>Semivolatile Organics</b>							
None Detected		--	NA	NA	NA	NA	NA
<b>Furans</b>							
2,3,7,8-TCDF		Not Listed	NA	NA	NA	NA	NA
TCDFs (total)		Not Listed	NA	NA	NA	NA	NA
1,2,3,7,8-PeCDF		Not Listed	NA	NA	NA	NA	NA
2,3,4,7,8-PeCDF		Not Listed	NA	NA	NA	NA	NA
PeCDFs (total)		Not Listed	NA	NA	NA	NA	NA
1,2,3,4,7,8-HxCDF		Not Listed	NA	NA	NA	NA	NA
1,2,3,6,7,8-HxCDF		Not Listed	NA	NA	NA	NA	NA
1,2,3,7,8,9-HxCDF		Not Listed	NA	NA	NA	NA	NA
2,3,4,6,7,8-HxCDF		Not Listed	NA	NA	NA	NA	NA
HxCDFs (total)		Not Listed	NA	NA	NA	NA	NA
1,2,3,4,6,7,8-HpCDF		Not Listed	NA	NA	NA	NA	NA
1,2,3,4,7,8,9-HpCDF		Not Listed	NA	NA	NA	NA	NA
HpCDFs (total)		Not Listed	NA	NA	NA	NA	NA
OCDF		Not Listed	NA	NA	NA	NA	NA
None Detected		Not Listed	NA	NA	NA	NA	NA
<b>Dioxins</b>							
2,3,7,8-TCDD		Not Listed	NA	NA	NA	NA	NA
TCDDs (total)		Not Listed	NA	NA	NA	NA	NA
1,2,3,7,8-PeCDD		Not Listed	NA	NA	NA	NA	NA
PeCDDs (total)		Not Listed	NA	NA	NA	NA	NA
1,2,3,4,7,8-HxCDD		Not Listed	NA	NA	NA	NA	NA
1,2,3,6,7,8-HxCDD		Not Listed	NA	NA	NA	NA	NA
1,2,3,7,8,9-HxCDD		Not Listed	NA	NA	NA	NA	NA
HxCDDs (total)		Not Listed	NA	NA	NA	NA	NA
1,2,3,4,6,7,8-HpCDD		Not Listed	NA	NA	NA	NA	NA
HpCDDs (total)		Not Listed	NA	NA	NA	NA	NA
OCDD		Not Listed	NA	NA	NA	NA	NA
Total TEQs (WHO TEFs)		0.000001	NA	NA	NA	NA	NA
<b>Inorganics-Unfiltered</b>							
None Detected		--	NA	NA	NA	NA	NA
<b>Inorganics-Filtered</b>							
Arsenic		4	NA	NA	NA	NA	NA
Barium		100	NA	NA	NA	NA	NA
Beryllium		0.5	NA	NA	NA	NA	NA
Cyanide		2	NA	ND(0.0100)	0.0120	NA	0.0110
Vanadium		20	NA	NA	NA	NA	NA
Zinc		20	NA	NA	NA	NA	NA

**TABLE 6  
MCP UCL COMPARISON  
GROUNDWATER QUALITY INTERIM REPORT FOR SPRING 2004**

**GROUNDWATER MANAGEMENT AREA 1  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
(Results are presented in parts per million, ppm)**

Parameter	Site ID: Sample ID: Date Collected:	UCL-GW Standards	East St. Area 2 - South HR-G3-MW-1 04/08/04	LS-29 04/08/04	Lyman Street Area LS-MW-4R 04/09/04	LSSC-08S 04/08/04
	<b>Volatile Organics</b>					
Chlorobenzene		10	NA	NA	ND(0.0050)	NA
Chloroform		100	NA	NA	ND(0.0050)	NA
Vinyl Chloride		100	NA	NA	ND(0.0020)	NA
<b>PCBs-Filtered</b>						
Aroclor-1254		Not Listed	0.00016	0.000045 J	ND(0.000065)	0.00041
Aroclor-1260		Not Listed	0.000066	ND(0.000065)	ND(0.000065)	ND(0.000065)
Total PCBs		0.005	0.000226	0.000045 J	ND(0.000065)	0.00041
<b>Semivolatile Organics</b>						
None Detected		--	NA	NA	--	NA
<b>Furans</b>						
2,3,7,8-TCDF		Not Listed	NA	NA	ND(0.0000000024)	NA
TCDFs (total)		Not Listed	NA	NA	ND(0.0000000010)	NA
1,2,3,7,8-PeCDF		Not Listed	NA	NA	ND(0.000000011)	NA
2,3,4,7,8-PeCDF		Not Listed	NA	NA	ND(0.0000000072)	NA
PeCDFs (total)		Not Listed	NA	NA	ND(0.000000018)	NA
1,2,3,4,7,8-HxCDF		Not Listed	NA	NA	ND(0.0000000082)	NA
1,2,3,6,7,8-HxCDF		Not Listed	NA	NA	ND(0.0000000085)	NA
1,2,3,7,8,9-HxCDF		Not Listed	NA	NA	ND(0.0000000072)	NA
2,3,4,6,7,8-HxCDF		Not Listed	NA	NA	ND(0.0000000059)	NA
HxCDFs (total)		Not Listed	NA	NA	ND(0.000000024)	NA
1,2,3,4,6,7,8-HpCDF		Not Listed	NA	NA	ND(0.0000000070)	NA
1,2,3,4,7,8,9-HpCDF		Not Listed	NA	NA	ND(0.0000000056)	NA
HpCDFs (total)		Not Listed	NA	NA	ND(0.000000013)	NA
OCDF		Not Listed	NA	NA	ND(0.0000000092)	NA
None Detected		Not Listed	NA	NA	--	NA
<b>Dioxins</b>						
2,3,7,8-TCDD		Not Listed	NA	NA	ND(0.0000000032)	NA
TCDDs (total)		Not Listed	NA	NA	ND(0.0000000032)	NA
1,2,3,7,8-PeCDD		Not Listed	NA	NA	ND(0.000000011)	NA
PeCDDs (total)		Not Listed	NA	NA	ND(0.000000011)	NA
1,2,3,4,7,8-HxCDD		Not Listed	NA	NA	0.0000000078 J	NA
1,2,3,6,7,8-HxCDD		Not Listed	NA	NA	ND(0.0000000077)	NA
1,2,3,7,8,9-HxCDD		Not Listed	NA	NA	ND(0.0000000086)	NA
HxCDDs (total)		Not Listed	NA	NA	ND(0.000000016)	NA
1,2,3,4,6,7,8-HpCDD		Not Listed	NA	NA	ND(0.0000000065)	NA
HpCDDs (total)		Not Listed	NA	NA	ND(0.0000000065)	NA
OCDD		Not Listed	NA	NA	ND(0.000000015)	NA
Total TEQs (WHO TEFs)		0.000001	NA	NA	0.000000012	NA
<b>Inorganics-Unfiltered</b>						
None Detected		--	NA	NA	--	NA
<b>Inorganics-Filtered</b>						
Arsenic		4	NA	NA	0.00490 B	NA
Barium		100	NA	NA	0.0480 B	NA
Beryllium		0.5	NA	NA	0.000650 B	NA
Cyanide		2	NA	NA	ND(0.0100)	NA
Vanadium		20	NA	NA	0.00190 B	NA
Zinc		20	NA	NA	0.160	NA

**TABLE 6**  
**MCP UCL COMPARISON**  
**GROUNDWATER QUALITY INTERIM REPORT FOR SPRING 2004**

**GROUNDWATER MANAGEMENT AREA 1**  
**GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**  
(Results are presented in parts per million, ppm)

Parameter	Site ID: Sample ID: Date Collected:	UCL-GW Standards	Lyman Street Area		Newell St. Area II	
			LSSC-16S 04/09/04	LSSC-18 04/08/04	N2SC-07S 04/12/04	NS-17 04/12/04
<b>Volatile Organics</b>						
Chlorobenzene		10	ND(0.0050) [ND(0.0050)]	NA	0.14	0.075 J
Chloroform		100	ND(0.0050) [ND(0.0050)]	NA	ND(0.050)	ND(0.10)
Vinyl Chloride		100	ND(0.0020) [ND(0.0020)]	NA	0.89	0.68
<b>PCBs-Filtered</b>						
Aroclor-1254		Not Listed	NA	ND(0.00050)	0.000041 J	NA
Aroclor-1260		Not Listed	NA	ND(0.00050)	ND(0.000065)	NA
Total PCBs		0.005	NA	ND(0.00050)	0.000041 J	NA
<b>Semivolatile Organics</b>						
None Detected		--	NA	NA	NA	NA
<b>Furans</b>						
2,3,7,8-TCDF		Not Listed	NA	NA	NA	NA
TCDFs (total)		Not Listed	NA	NA	NA	NA
1,2,3,7,8-PeCDF		Not Listed	NA	NA	NA	NA
2,3,4,7,8-PeCDF		Not Listed	NA	NA	NA	NA
PeCDFs (total)		Not Listed	NA	NA	NA	NA
1,2,3,4,7,8-HxCDF		Not Listed	NA	NA	NA	NA
1,2,3,6,7,8-HxCDF		Not Listed	NA	NA	NA	NA
1,2,3,7,8,9-HxCDF		Not Listed	NA	NA	NA	NA
2,3,4,6,7,8-HxCDF		Not Listed	NA	NA	NA	NA
HxCDFs (total)		Not Listed	NA	NA	NA	NA
1,2,3,4,6,7,8-HpCDF		Not Listed	NA	NA	NA	NA
1,2,3,4,7,8,9-HpCDF		Not Listed	NA	NA	NA	NA
HpCDFs (total)		Not Listed	NA	NA	NA	NA
OCDF		Not Listed	NA	NA	NA	NA
None Detected		Not Listed	NA	NA	NA	NA
<b>Dioxins</b>						
2,3,7,8-TCDD		Not Listed	NA	NA	NA	NA
TCDDs (total)		Not Listed	NA	NA	NA	NA
1,2,3,7,8-PeCDD		Not Listed	NA	NA	NA	NA
PeCDDs (total)		Not Listed	NA	NA	NA	NA
1,2,3,4,7,8-HxCDD		Not Listed	NA	NA	NA	NA
1,2,3,6,7,8-HxCDD		Not Listed	NA	NA	NA	NA
1,2,3,7,8,9-HxCDD		Not Listed	NA	NA	NA	NA
HxCDDs (total)		Not Listed	NA	NA	NA	NA
1,2,3,4,6,7,8-HpCDD		Not Listed	NA	NA	NA	NA
HpCDDs (total)		Not Listed	NA	NA	NA	NA
OCDD		Not Listed	NA	NA	NA	NA
Total TEQs (WHO TEFs)		0.000001	NA	NA	NA	NA
<b>Inorganics-Unfiltered</b>						
None Detected		--	NA	NA	NA	NA
<b>Inorganics-Filtered</b>						
Arsenic		4	NA	NA	NA	NA
Barium		100	NA	NA	NA	NA
Beryllium		0.5	NA	NA	NA	NA
Cyanide		2	NA	NA	NA	NA
Vanadium		20	NA	NA	NA	NA
Zinc		20	NA	NA	NA	NA

**TABLE 6**  
**MCP UCL COMPARISON**  
**GROUNDWATER QUALITY INTERIM REPORT FOR SPRING 2004**

**GROUNDWATER MANAGEMENT AREA 1**  
**GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**  
**(Results are presented in parts per million, ppm)**

Notes:

1. Samples were collected by Blasland Bouck & Lee, Inc., and submitted to SGS Environmental Services, Inc. for analysis of PCBs and Appendix IX+3 constituents.
2. Samples have been validated as per Field Sampling Plan/Quality Assurance Project Plan (FSP/QAPP), General Electric Company, Pittsfield, Massachusetts, Blasland Bouck & Lee, Inc. (approved May 25, 2004 and resubmitted June 15, 2004).
3. NA - Not Analyzed.
4. ND - Analyte was not detected. The number in parentheses is the associated detection limit.
5. Total 2,3,7,8-TCDD toxicity equivalents (TEQs) were calculated using Toxicity Equivalency Factors (TEFs) derived by the World Health Organization (WHO) and published by Van den Berg et al. In Environmental Health Perspectives 106(2), December 1998.
6. With the exception of dioxin/furans, only those constituents detected in one or more samples are summarized.
7. Field duplicate sample results are presented in brackets.
8. Shading indicates that value exceeds UCL Standards.
9. - Indicates that all constituents for the parameter group were not detected.

Data Qualifiers:

Organics (volatiles, PCBs, semivolatiles, dioxin/furans)

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

Inorganics

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

**TABLE 7  
FALL 2004 INTERIM GROUNDWATER QUALITY MONITORING ACTIVITIES**

**PLANT SITE 1 GROUNDWATER MANAGEMENT AREA  
GROUNDWATER QUALITY INTERIM REPORT FOR SPRING 2004  
GENERAL ELECTRIC COMPANY-PITTSFIELD, MASSACHUSETTS**

<b>Well Number</b>	<b>Monitoring Well Usage</b>	<b>Sampling Schedule</b>	<b>Analyses <sup>(4)</sup></b>	<b>Basis for Inclusion in Interim Monitoring Program</b>
<b>RAA 2 - 30s COMPLEX</b>				
GMA1-2	GW-2 Sentinel	Semi-Annual <sup>(2)</sup>	VOC (+5 SVOC)	Three additional sample sets are required due to lack of water during prior baseline sampling events.
<b>RAA 5 - EAST STREET AREA 2-NORTH</b>				
GMA1-4	GW-2 Sentinel	Semi-Annual <sup>(2)</sup>	VOC(+5 SVOC)	One additional sample set is required due to lack of water during prior baseline sampling events.
<b>RAA 12 - LYMAN STREET AREA</b>				
MW-4R	GW-3 Perimeter (Downgradient)	Semi-Annual <sup>(3)</sup>	APP. IX, excl. pest/herb (minimum of 2 rounds)	Location added to interim monitoring program per September 23, 2003 EPA conditional approval letter. Sampling schedule may be proposed to be modified from semi-annual to annual after 2004 data is evaluated.
<b>RAA 18 - EAST STREET AREA 1 SOUTH</b>				
139R	GW-2 Sentinel/ GW-3 Perimeter (Downgradient)	Annual <sup>(1)</sup>	PCB	Replacement for well 139 (which was unable to be sampled in spring 2004) will be sampled in fall 2004 to provide monitoring data for 2004.
72R	GW-2 Sentinel/ GW-3 General/Source Area Sentinel	Annual <sup>(1)</sup>	VOC(+5 SVOC)/ PCB/Cyanide	Replacement for well ESA1S-33 (which was unable to be sampled in spring 2004) will be sampled in fall 2004 to provide monitoring data for 2004.

**TABLE 7  
FALL 2004 INTERIM GROUNDWATER QUALITY MONITORING ACTIVITIES**

**PLANT SITE 1 GROUNDWATER MANAGEMENT AREA  
GROUNDWATER QUALITY INTERIM REPORT FOR SPRING 2004  
GENERAL ELECTRIC COMPANY-PITTSFIELD, MASSACHUSETTS**

Well Number	Monitoring Well Usage	Sampling Schedule	Analyses <sup>(4)</sup>	Basis for Inclusion in Interim Monitoring Program
GMA1-18	GW-2 Sentinel/ GW-3 General/Source Area Sentinel	Annual <sup>(1)</sup>	PCB	Replacement for well ES1-14 (which was unable to be sampled in spring 2004) will be sampled in fall 2004 to provide monitoring data for 2004.

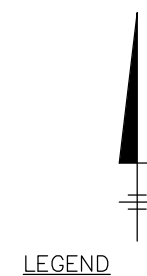
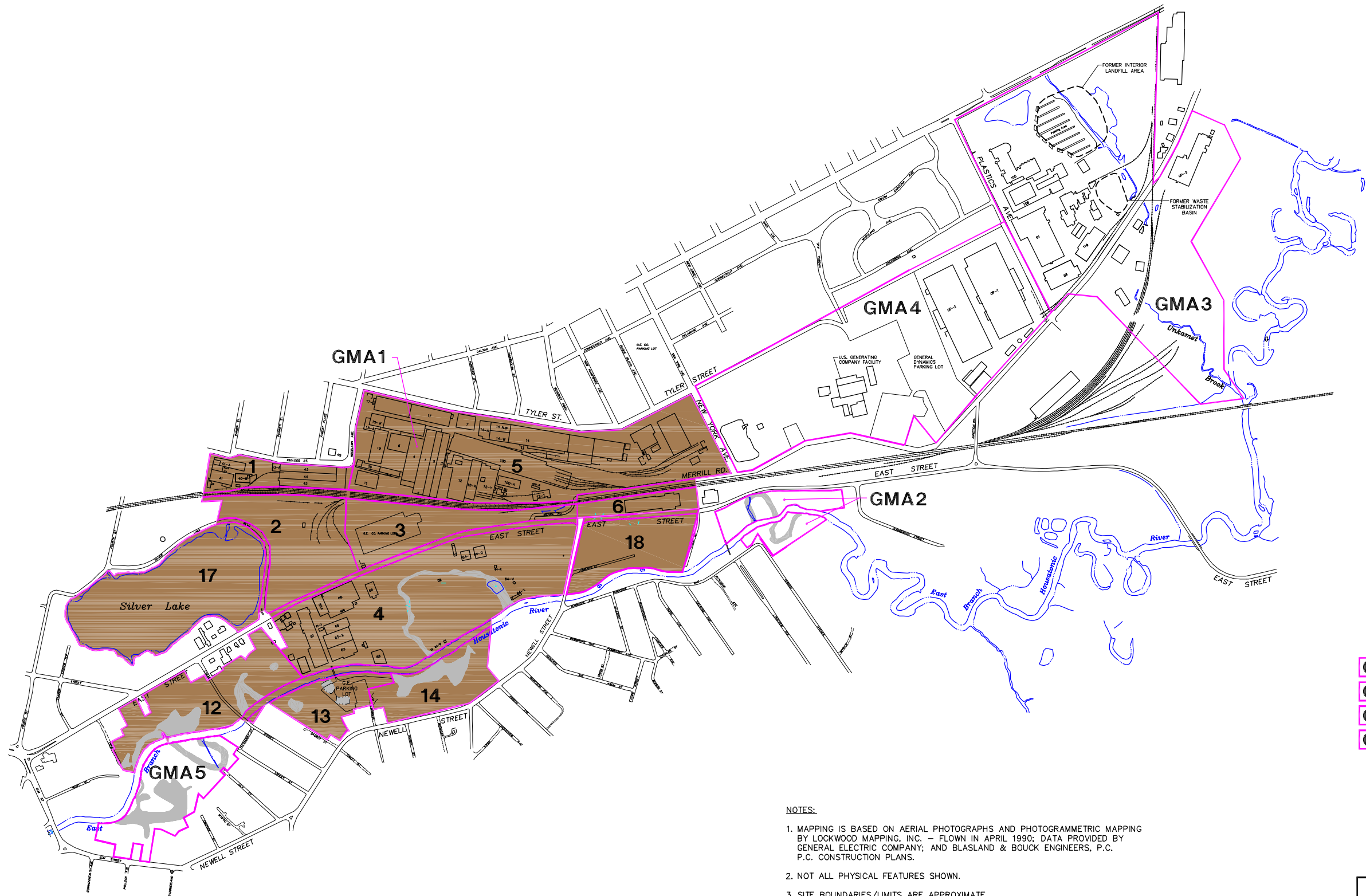
**NOTES:**

1. The sampling schedule for wells proposed for annual groundwater quality sampling will alternate between the spring and fall seasons each year, beginning with spring 2004, during the interim period between the completion of the baseline monitoring program and the initiation of a long-term monitoring program. Wells 72R, 139R, and GMA1-18 will be sampled in fall 2004, as the wells that they replace in the interim monitoring program were not able to be sampled in spring 2004, as scheduled.
2. Wells that are included due to less than four rounds of baseline data (i.e., GMA1-2 and GMA1-4) will be sampled 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 or if, despite additional attempts, the data cannot be obtained.
3. Samples will be collected from well MW-4R on a semi-annual basis during 2004, at a minimum, after which GE will propose to retain or modify the sampling schedule and/or analyses to be performed.
4. All analyses for PCB, metals, and cyanide conducted under the annual interim monitoring program will be performed on filtered samples only.



# *Figures*

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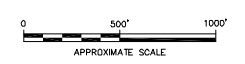
**GMA 1  
(PLANT SITE 1)**

- COMPRISED OF:
- RAA 1-40s COMPLEX
  - RAA 2-30s COMPLEX
  - RAA 3-20s COMPLEX
  - RAA 4-EAST STREET AREA 2 SOUTH
  - RAA 5-EAST STREET AREA 2 NORTH
  - RAA 6-EAST STREET AREA 1 NORTH
  - RAA 12-LYMAN STREET AREA (INCLUDING FORMER OXBOWS B, D AND E)
  - RAA 13-NEWELL STREET AREA II
  - RAA 14-NEWELL STREET AREA I
  - RAA 17-SILVER LAKE AREA
  - RAA 18-EAST STREET AREA 1 SOUTH (NAPL/GROUNDWATER ONLY)

- 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

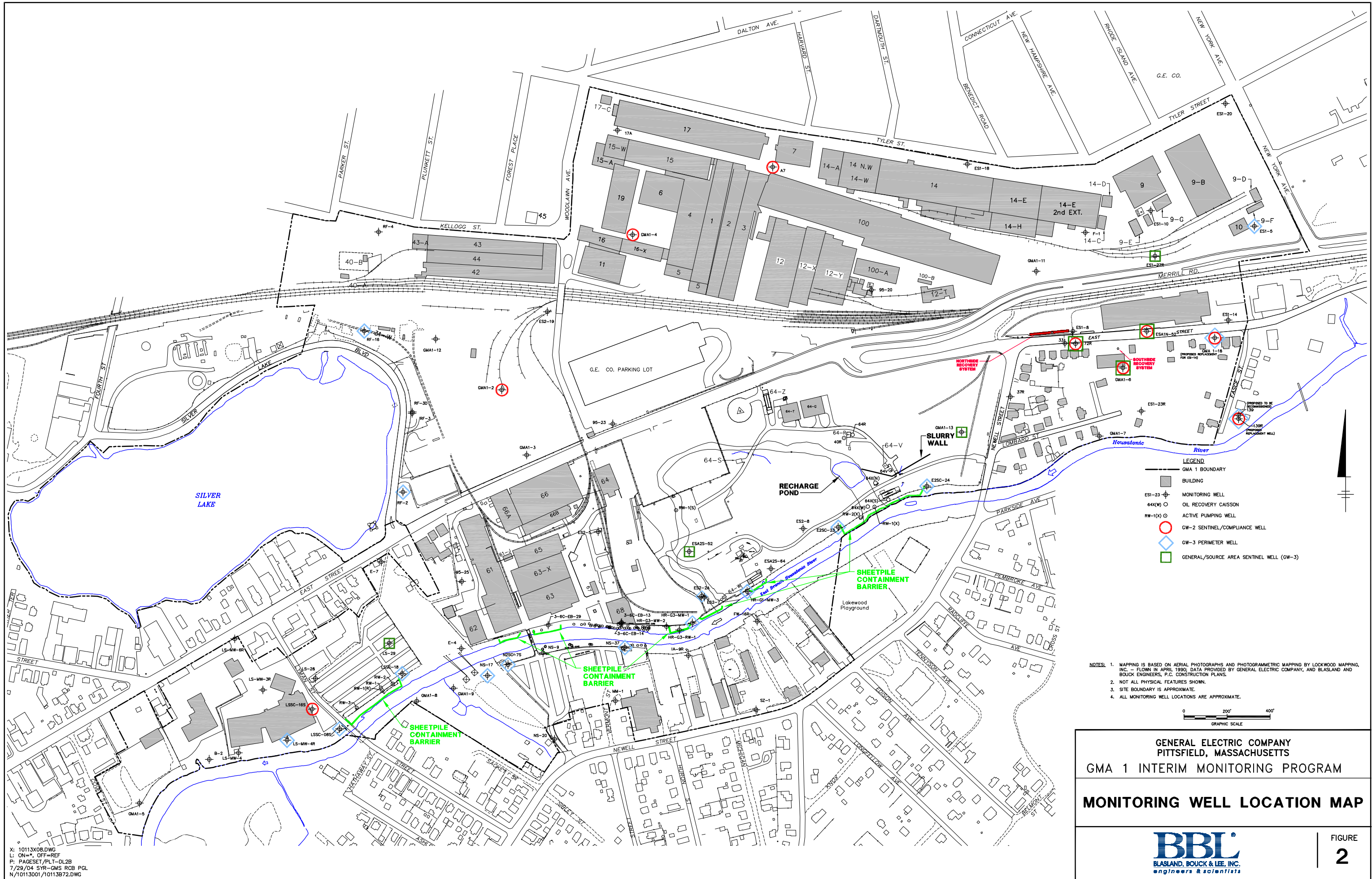
**NOTES:**

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.

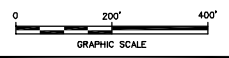


GENERAL ELECTRIC COMPANY  
PITTSFIELD, MASSACHUSETTS  
GMA 1 INTERIM MONITORING PROGRAM  
**GROUNDWATER MANAGEMENT  
AREAS**





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 AND BOUCK ENGINEERS, P.C. CONSTRUCTION PLANS.  
 2. NOT ALL PHYSICAL FEATURES SHOWN.  
 3. SITE BOUNDARY IS APPROXIMATE.  
 4. ALL MONITORING WELL LOCATIONS ARE APPROXIMATE.



**GENERAL ELECTRIC COMPANY  
 PITTSFIELD, MASSACHUSETTS  
 GMA 1 INTERIM MONITORING PROGRAM**

**MONITORING WELL LOCATION MAP**



X: 10113X08.DWG  
 L: ON=\*, OFF=REF  
 P: PAGESET/PLT-DL2B  
 7/29/04 SYR-GMS RCB PGL  
 N/10113001/10113B72.DWG

# *Appendices*

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# *Appendix A*

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## **Field Sampling Data**

**TABLE A-1**  
**SUMMARY OF GROUNDWATER SAMPLING METHODS**  
**PLANT SITE 1 GROUNDWATER MANAGEMENT AREA**  
**GROUNDWATER QUALITY INTERIM REPORT FOR SPRING 2004**  
**GENERAL ELECTRIC COMPANY-PITTSFIELD, MASSACHUSETTS**

Well ID	Sampling Method						Comments
	Fall 2001	Spring 2002	Fall 2002	Spring 2003	Fall 2003	Spring 2004	
<b>RAA 2 - 30s COMPLEX</b>							
GMA1-2	NS	NS	NS	PP	NS	NS	Spring 2004: Well dry - no sample collected. Fall 2003: Well dry - no sample collected. Spring 2003: Well purged dry. Sample collected after recharge. Insufficient water to collect field parameter data (except for turbidity). Fall 2002: Well dry - no sample collected. Spring 2002: Well dry - no sample collected. Fall 2001: Well dry - no sample collected.
RF-02	SP	PP	PP	BP	NS	PP	Fall 2003: No sample collected - additional sampling under interim monitoring program to resume in spring 2004.
RF-16	PP	BP	PP	BP	NS	BP	Fall 2003: No sample collected - additional sampling under interim monitoring program to resume in spring 2004.
<b>RAA 4 - EAST STREET AREA 2-SOUTH</b>							
95-09/GMA1-13	BA	PP/BA	NS	PP	BP	BP	Spring 2003: Well 95-9 replaced by well GMA1-13 Fall 2002: Well damaged - no sample collected. Fall 2001: Field parameters not collected.
E2SC-23	SP/PP/BA	PP/BA	PP	BP	NS	BP	Fall 2003: No sample collected - additional sampling under interim monitoring program to resume in spring 2004. Fall 2002: Well dried during purging. Several visits required to collect sample volume.  Fall 2001: Submersible pump malfunction, change to peristaltic pump. Well purged dry, samples collected after recharge - multiple visits required (bailer used for VOC collection).
E2SC-24	SP	PP/BA	PP	BP	NS	BP	Spring 2004: Initial sample analysis canceled due to extremely low surrogate recoveries. A second sample was collected and analyzed. Fall 2003: No sample collected - additional sampling under interim monitoring program to resume in spring 2004. Fall 2001: Slightly turbid (<50 NTU)
ES2-02A	SP	BP	PP	BP	NS	BP	Fall 2003: No sample collected - additional sampling under interim monitoring program to resume in spring 2004. Fall 2001: Unable to get turbidity below 50 NTU.
ESA2S-52	PP	PP/BA	PP	PP	NS	PP	Fall 2003: No sample collected - additional sampling under interim monitoring program to resume in spring 2004. Fall 2002: Well officially added to monitoring program in place of well ES2-17. Fall 2001: Dissolved oxygen meter malfunction. Fall 2001 - Spring 2002: Well sampled as supplemental monitoring point.

**TABLE A-1  
SUMMARY OF GROUNDWATER SAMPLING METHODS**

**PLANT SITE 1 GROUNDWATER MANAGEMENT AREA  
GROUNDWATER QUALITY INTERIM REPORT FOR SPRING 2004  
GENERAL ELECTRIC COMPANY-PITTSFIELD, MASSACHUSETTS**

Well ID	Sampling Method						Comments
	Fall 2001	Spring 2002	Fall 2002	Spring 2003	Fall 2003	Spring 2004	
HR-G1-MW-3	SP	PP	PP	BP	BP	BP	Fall 2003: River elevation very high, water near base of well. Spring 2002: Dissolved oxygen meter malfunction. Fall 2001: Unable to get turbidity below 50 NTU.
HR-G3-MW-1	SP	PP	PP	BP	BP	BP	Fall 2001: Pump malfunction during sample collection, was briefly shut down.
<b>RAA 5 - EAST STREET AREA 2-NORTH</b>							
ES1-05	BA	BP	SP	BP	BP	BP	Spring 2003: Portion of well casing broken. Fall 2002: Well almost dry - unable to get turbidity below 50 NTU. Spring 2002: Well casing broken at top. Fall 2001: Field parameters not collected.
ES1-27R	SP	BP	PP	BP	NS	BP	Fall 2003: No sample collected - additional sampling under interim monitoring program to resume in spring 2004. Fall 2002: Dissolved oxygen meter malfunction.
GMA1-4	NS	NS	NS	PP	PP	PP	Spring 2003: Well cover missing. Fall 2002: Well dry - no sample collected. Spring 2002: Well dry - no sample collected. Fall 2001: Well dry - no sample collected.
<b>RAA 6 - EAST STREET AREA 1-NORTH</b>							
ES1-08	PP	PP	PP	NS	NS	NS	Spring 2003: Well removed from baseline program (replaced by well ESA1S-33). Fall 2002: LNAPL present (removed prior to sampling). Well dried several times during sampling. Spring 2002: LNAPL present (removed prior to sampling). Fall 2001: LNAPL present (removed prior to sampling). Well dried several times during sampling.
ES1-14	PP	PP	PP	PP	NS	NS	Spring 2004: No sample collected due to property access issue - well to be replaced by well GMA1-18 for future interim monitoring events. Fall 2003: No sample collected - additional sampling under interim monitoring program scheduled to resume in spring 2004. Fall 2002: Dissolved oxygen meter malfunction. Well dried several times during sampling, unable to measure water levels during purging.. Spring 2002: Slightly turbid (<50 NTU), unable to measure water levels during purging. Fall 2001: Well purged dry. Sample collected after recharge.



**TABLE A-1  
SUMMARY OF GROUNDWATER SAMPLING METHODS**

**PLANT SITE 1 GROUNDWATER MANAGEMENT AREA  
GROUNDWATER QUALITY INTERIM REPORT FOR SPRING 2004  
GENERAL ELECTRIC COMPANY-PITTSFIELD, MASSACHUSETTS**

Well ID	Sampling Method						Comments
	Fall 2001	Spring 2002	Fall 2002	Spring 2003	Fall 2003	Spring 2004	
ESA1N-52	PP	PP	PP	PP	NS	PP	Fall 2003: No sample collected - additional sampling under interim monitoring program to resume in spring 2004. Spring 2003: Sheen observed, Fall 2002: Slight sheen observed, Spring 2002: LNAPL present (removed prior to sampling). Fall 2001: LNAPL present (removed prior to sampling).
<b>RAA 12 - LYMAN STREET AREA</b>							
LS-29	SP	BP	NS	PP	PP	PP	Spring 2003: Pump type changed from bladder pump to peristaltic pump. Fall 2002: Well not sampled; Casing broken.
LSSC-08S	PP	BP	PP	BP	NS	BP	Fall 2003: No sample collected - additional sampling under interim monitoring program to resume in spring 2004. Fall 2001: Turbidity meter malfunction. Samples visually clear.
LSSC-16S	SP	PP/BA	PP	BP	NS	BP	Fall 2003: No sample collected - additional sampling under interim monitoring program to resume in spring 2004. Spring 2003: Turbidity relatively high (40 NTU); did not reduce at very low pumping rate. Trace sheen observed during initial purge, not present at time of sampling.
LSSC-18	SP/PP	PP/BA	PP	BP	NS	BP	Fall 2003: No sample collected - additional sampling under interim monitoring program to resume in spring 2004. Fall 2001: Turbidity meter malfunction. Samples visually clear. Submersible pump malfunction during sample collection, change to peristaltic pump for PCDD/PCDF collection.
MW-4/MW-4R	PP	PP	PP	PP	NS	PP	Fall 2003: No sample collected - additional sampling under interim monitoring program to resume at replacement well MW-4R in spring 2004. Spring 2003: Well cap missing - replaced. Fall 2002: Turbidity meter malfunction. Samples visually clear.
<b>RAA 13 - NEWELL STREET AREA II</b>							
N2SC-07S	SP	BP	PP	BP	BP	BP	Spring 2002: Dissolved oxygen meter malfunction. Fall 2001: Dissolved oxygen meter malfunction.
NS-17	SP	PP/BA	PP	PP	PP	PP	



**TABLE A-1  
SUMMARY OF GROUNDWATER SAMPLING METHODS**

**PLANT SITE 1 GROUNDWATER MANAGEMENT AREA  
GROUNDWATER QUALITY INTERIM REPORT FOR SPRING 2004  
GENERAL ELECTRIC COMPANY-PITTSFIELD, MASSACHUSETTS**

Well ID	Sampling Method						Comments
	Fall 2001	Spring 2002	Fall 2002	Spring 2003	Fall 2003	Spring 2004	
RAA 18 - EAST STREET AREA 1 SOUTH							
ESA1S-33	NS	NS	NS	PP	NS	NS	Spring 2004: No sample collected - well to be replaced by well 72R for future interim monitoring events. Fall 2003: No sample collected - additional sampling under interim monitoring program scheduled to resume in spring 2004.  Spring 2003: Well added to monitoring program in place of well ES1-8. Turbidity >50 NTU, not reducing at minimum pumping rate. Will use bladder pump for future sampling events.
ESA1S-139	PP	PP	BP/BA	PP	NS	NS	Spring 2004: No sample collected - well to be replaced by well 139R for future interim monitoring events. Fall 2003: No sample collected - additional sampling under interim monitoring program scheduled to resume in spring 2004. Fall 2002: Well dried during purging with bladder pump. Several visits required to collect sample volume with bailer. Fall 2001: Well purged dry. Sample collected after recharge.
GMA1-6	PP	PP	PP	PP	NS	PP	Fall 2003: No sample collected - additional sampling under interim monitoring program to resume in spring 2004.

NOTES:

- BP - Bladder Pump
- PP - Peristaltic Pump
- SP - Submersible Pump
- BA - Bailer
- PP/BA - Peristaltic Pump with Bailer used for VOC sample collection
- NS - Not Sampled

GROUNDWATER SAMPLING FIELD LOG

Well No. RF-02  
 Key No. N/A  
 PID Background (ppm) 0.0  
 Well Headspace (ppm) 0.0

Site/GMA Name GMA 1 / 30's Complex  
 Sampling Personnel SL/EMF  
 Date 4/6/04  
 Weather mostly sunny, clearing, ~40F

WELL INFORMATION

Reference Point Marked? (Y) N  
 Height of Reference Point -1.05 Meas. From BGS  
 Well Diameter 4"  
 Screen Interval Depth 3-18' Meas. From BGS  
 Water Table Depth 4.48 Meas. From TIC  
 Well Depth 18.93 Meas. From TIC  
 Length of Water Column 13.95  
 Volume of Water in Well 9.1 (gallons)  
 Intake Depth of pump/tubing 11.46 Meas. From TIC

Sample Time 1625  
 Sample ID RF-02  
 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
( )	VOCs (Std. list)	( )
( )	VOCs (Exp. list)	( )
( )	SVOCs	( )
( )	PCBs (Total)	( )
( )	PCBs (Dissolved)	( )
( )	Metals/inorg. (Total)	( )
( )	Metals/inorg. (Dissolved)	( )
( )	PCDDs/PCDFs	( )
( )	Pest/Herb	( )
( )	Natural Attenuation	( )
( )	Other (Specify)	( )

EVACUATION INFORMATION

Pump Start Time 15.07  
 Pump Stop Time 16.33  
 Minutes of Pumping 80 min  
 Volume of water removed 2.3 (gallons)  
 Did well go dry? Y (N)

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

Water Quality Meter Type(s) / Serial Numbers: YSI 556 (030392 AE) HACH 200P 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%]*	ORP (mV) [10 mV]*
1508	0.100	0	4.50	---	---	---	115	---	---
1513	0.100	0.1	4.50	---	---	---	69	---	---
1518	0.100	0.3	4.50	---	---	---	67	---	---
1523	0.100	0.4	4.50	---	---	---	65	---	---
1528	0.100	0.5	4.50	---	---	---	63	---	---
1533	0.100	0.7	4.50	---	---	---	59	---	---
1538	0.100	0.8	4.50	---	---	---	59	---	---
1543	0.100	0.9	4.50	8.55	7.09	1.359	43	4.32	78.5
1548	0.100	1.1	4.50	8.30	6.93	1.368	45	0.91	74.3
1553	0.100	1.2	4.50	8.19	6.89	1.369	44	0.74	63.2
1558	0.100	1.3	4.50	8.22	6.78	1.374	42	0.68	50.6
1603	0.100	1.5	4.50	8.20	6.78	1.384	40	0.70	40.1

\* 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 PULL WATER WAS TURBO, ORANGE BROWN, DARKER  
FINAL PULL WATER WAS CLEAR, COLORLESS, O2/DO 100%

SAMPLE DESTINATION

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

Field Sampling Coordinator: [Signature]

**GROUNDWATER SAMPLING FIELD LOG**

Well No. BF-03  
 Key No. \_\_\_\_\_  
 PID Background (ppm) 0.0  
 Well Headspace (ppm) 0.0

Site/GMA Name GMA1 / 30's COMPLEX  
 Sampling Personnel SJ/EMF  
 Date 4/16/04  
 Weather Mostly sunny, windy, 44°F

**WELL INFORMATION**

Reference Point Marked? (Y) N  
 Height of Reference Point \_\_\_\_\_ Meas. From \_\_\_\_\_  
 Well Diameter \_\_\_\_\_  
 Screen Interval Depth \_\_\_\_\_ Meas. From \_\_\_\_\_  
 Water-Table Depth \_\_\_\_\_ Meas. From \_\_\_\_\_  
 Well Depth \_\_\_\_\_ Meas. From \_\_\_\_\_  
 Length of Water Column \_\_\_\_\_  
 Volume of Water in Well \_\_\_\_\_  
 Intake Depth of pump/tubing \_\_\_\_\_ Meas. From \_\_\_\_\_

Sample Time 1625  
 Sample ID \_\_\_\_\_  
 Duplicate ID \_\_\_\_\_  
 MSMSD \_\_\_\_\_  
 Split Sample ID \_\_\_\_\_

*SEE PAGE 1*

Required	Analytical Parameters:	Collected
( )	VOCs (Std. list)	( )
( )	VOCs (Exp. list)	( )
( )	SVOCs	( )
( )	PCBs (Total)	( )
( )	PCBs (Dissolved)	( )
( )	Metals/Inorg. (Total)	( )
( )	Metals/Inorg. (Dissolved)	( )
( )	PCDDs/PCDFs	( )
( )	Pest/Herb	( )
( )	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 \_\_\_\_\_  
 Pump Stop Time \_\_\_\_\_  
 Minutes of Pumping \_\_\_\_\_  
 Volume of water removed \_\_\_\_\_  
 Did well go dry? Y N

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

Water Quality Meter Type(s) / Serial Numbers: \_\_\_\_\_

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%]*	ORP (mV) [10 mV]*
1608	0.100	1.6	4.50	8.22	6.83	1.384	40	0.64	34.7
1613	0.100	1.7	4.50	8.25	6.78	1.383	39	0.60	29.7
1618	0.100	1.8	4.50	8.21	6.76	1.383	36	0.56	15.2
1623	0.100	2.0	4.50	8.25	6.82	1.384	34	0.55	7.7

\* 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**

**SAMPLE DESTINATION**

Laboratory: QSG  
 Delivered Via: COURIER  
 Airbill #: \_\_\_\_\_

Field Sampling Coordinator: \_\_\_\_\_

*[Signature]*

GROUNDWATER SAMPLING FIELD LOG

Well No. RF-16
Key No. -
PID Background (ppm) 0
Well Headspace (ppm) 0

Site/GMA Name GMAI
Sampling Personnel JAP/KLB
Date 4/7/04
Weather 40°, CLOUDY

WELL INFORMATION

Reference Point Marked? (Y) N
Height of Reference Point -0.23 Meas. From BGS
Well Diameter 4 in
Screen Interval Depth 7'-22" Meas. From BGS
Water Table Depth 8.56' Meas. From TIC
Well Depth 20.89' Meas. From TIC
Length of Water Column 12.32'
Volume of Water in Well 8.04 gal
Intake Depth of pump/tubing 15' Meas. From TIC

Sample Time 10:40
Sample ID RF-16
Duplicate ID DUP-2
MS/MSD -
Split Sample ID -

Table with 3 columns: Required, Analytical Parameters, Collected. Lists parameters like VOCs, SVOCs, PCBs, Metals, etc.

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 10:55
Minutes of Pumping 60
Volume of water removed 1.55 gal
Did well go dry? Y (N)

Evacuation Method: Bailer ( ) Bladder Pump (X)
Peristaltic Pump ( ) Submersible Pump ( ) Other/Specify ( )
Pump Type: MARSCHALK SYSTEM 1
Samples collected by same method as evacuation? (Y) N(specify)

Water Quality Meter Type(s) / Serial Numbers: HACH TURBIDIMETER 021000028329
YSI 556 03C1461

Table with 10 columns: Time, Pump Rate, Total Gallons Removed, Water Level (ft TIC), Temp. (Celsius), pH, Sp. Cond. (mS/cm), Turbidity (NTU), DO (mg/l), ORP (mV). Contains 8 rows of data.

\* 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, COLORLESS, ODORLESS
FINAL PURGE - CLEAR, COLORLESS, ODORLESS

DUPLICATE SAMPLE COLLECTED - DUP-2

SAMPLE DESTINATION

Laboratory:
Delivered Via:
Airbill #:

Field Sampling Coordinator:

**GROUNDWATER SAMPLING FIELD LOG**

Well No. EZY-23  
 Key No. FX-37  
 PID Background (ppm) 0.0  
 Well Headspace (ppm) 0.0

Site/GMA Name GMA1 EAST ST AREA 2 SOUTH  
 Sampling Personnel SL JEMF  
 Date 4/9/04  
 Weather Mostly cloudy, 45°F

**WELL INFORMATION**

Reference Point Marked?  Y  N  
 Height of Reference Point 2.01 Meas. From ARISE GRADE  
 Well Diameter 2"  
 Screen Interval Depth 9-19' Meas. From BGS  
 Water Table Depth 15.62 Meas. From TIC  
 Well Depth 21.28' Meas. From TIC  
 Length of Water Column 5.66'  
 Volume of Water in Well 0.9 Gallons  
 Intake Depth of pump/tubing 18.45' Meas. From TIC

Sample Time 1522  
 Sample ID EZY-23  
 Duplicate ID ---  
 MSMSD ---  
 Split Sample ID ---

**Reference Point Identification:**

TIC: Top of Inner (PVC) casing  
 TOC: Top of outer (protective) casing  
 Grader/BGS: Ground Surface

Redevelop? Y  N

**EVACUATION INFORMATION**

Pump Start Time ~~1442~~ 1442  
 Pump Stop Time 1532  
 Minutes of Pumping 50  
 Volume of water removed 1.3 Gallons  
 Did well go dry? Y  N

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

Water Quality Meter Type(s) / Serial Numbers YSI 556 (03110230 AC) w/ 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%]	ORP (mV) [10 mV]
1442	0.100	0	15.68	---	---	---	74	---	---
1447	0.100	0.1	15.75	---	---	---	43	---	---
1452	0.100	0.3	15.79	7.81	6.89	0.541	18	13.47	242.2
1457	0.100	0.4	15.85	7.49	7.06	0.540	14	8.91	244.7
1502	0.100	0.5	15.90	7.22	7.12	0.541	8	8.60	245.4
1507	0.100	0.7	15.95	7.10	7.16	0.541	6	8.44	245.4
1512	0.100	0.8	16.00	6.98	7.18	0.547	4	8.30	245.8
1517	0.100	0.9	16.05	6.91	7.19	0.549	4	8.12	245.6
1522	0.100	1.1	16.10	6.84	7.19	0.557	3	8.02	245.6

\* 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 PUMP/WATER IS LIGHT BROWN, SLIGHTLY TURBID, ODORLESS.  
FINAL PUMP/WATER IS CLEAR, COLORLESS, ODORLESS.

**SAMPLE DESTINATION**

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

Field Sampling Coordinator: [Signature]

GROUNDWATER SAMPLING FIELD LOG

max 102

Well No. E25C-24  
 Key No. FX37  
 PID Background (ppm) N/A  
 Well Headspace (ppm) N/A

SiberGMA Name GMA 1 Plant Site 1  
 Sampling Personnel R. Blasland, Chad VanCoilliy  
 Date 5/3/04  
 Weather Mostly Cloudy 40-45°

**WELL INFORMATION**

Reference Point Marked? 0 N  
 Height of Reference Point -0.46 Meas. From TOC  
 Well Diameter 2"  
 Screen Interval Depth 9-19 Meas. From BGS  
 Water Table Depth 14.03 Meas. From TIC  
 Well Depth 21.75 Meas. From TIC  
 Length of Water Column 7.72  
 Volume of Water in Well 1.26  
 Intake Depth of pump/tubing 16.0 Meas. From BGS

Sample Time 14:20  
 Sample ID E25C-24  
 Duplicate ID N/A  
 MS/MSD N/A  
 Split Sample ID N/A

Reference Point Identification:  
 TIC: Top of inner (PVC) casing  
 TOC: Top of outer (protective) casing  
 G/S: Ground Surface

Required	Analytical Parameters:	Collected
( )	VCCs (Std. list)	( )
( )	VCCs (Exp. list)	( )
( )	SVCCs	( )
( )	PCBs (Total)	( )
( )	PCBs (Dissolved)	( )
( )	Metals/Inorg. (Total)	( )
( )	Metals/Inorg. (Dissolved)	( )
( )	PCDDs/PCDFs	( )
( )	Pes/Herb	( )
( )	Natural Attenuation	( )
( )	Other (Specify)	( )

Re-develop? Y N

**EVACUATION INFORMATION**

Pump Start Time 12:55  
 Pump Stop Time 14:20  
 Minutes of Pumping 85  
 Volume of water removed 2.1  
 Did well go dry? Y (N)

Evacuation Method: Roller ( ) Bladder Pump   
 Air-lift Pump ( ) Submersible Pump ( ) Other (Specify) ( )  
 Pump Type: Marshall's Bladder S.S. Pump  
 Samples collected by some method as evacuation? Y (N/Specify)

Water Quality Meter Type(s) / Serial Numbers: YSI 556 MPS HACH 2100 P Turb.

total  
MLs.

500  
1400  
1900  
2400  
2900  
3400  
3900  
4400  
4900  
5400  
5900

Time	Pump Rate ML/min.	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius)	pH	Sp. Cond. (mS/cm)	Turbidity (NTU)	DO (mg/l)	ORP (mV)
12:59	100	0	14.03	—	—	—	58	—	—
13:06	100	0.12	14.03	—	—	—	37	—	—
13:15	100	0.36	14.03	8.60	6.67	0.908	18	0.83	170.4
13:20	100	0.49	14.03	8.41	6.70	0.914	11	2.03	166.7
13:25	100	0.62	14.03	8.37	6.72	0.918	8	0.78	161.5
13:30	100	0.75	14.03	8.45	6.73	0.918	6	0.60	153.2
13:35	100	0.88	14.03	8.39	6.72	0.921	5	0.58	145.9
13:40	100	1.01	14.03	8.36	6.71	0.924	4	0.59	132.1
13:45	100	1.14	14.03	8.36	6.69	0.924	4	0.53	122.9
13:50	100	1.27	14.03	8.43	6.73	0.924	3	0.48	113.7
13:55	100	1.39	14.03	8.42	6.72	0.926	2	0.49	104.7
14:00	100	1.52	14.03	8.43	6.75	0.927	2	0.47	93.6

\* 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 Begin surge; H2O clear some suspended particles  
No odor, No color

Due to ORP > 10 millivolts 2nd page log required.

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

This well was re-sampled

Field Sampling Coordinator: [Signature]



GROUNDWATER SAMPLING FIELD LOG

( SEE PAGE 1 )

Well No. E25c-24  
 Key No. \_\_\_\_\_  
 PID Background (ppm) \_\_\_\_\_  
 Well Headspace (ppm) \_\_\_\_\_

Site/GMA Name \_\_\_\_\_  
 Sampling Personnel \_\_\_\_\_  
 Date \_\_\_\_\_  
 Weather \_\_\_\_\_

WELL INFORMATION

Reference Point Marked? Y N  
 Height of Reference Point \_\_\_\_\_ Meas. From \_\_\_\_\_  
 Well Diameter \_\_\_\_\_  
 Screen Interval Depth \_\_\_\_\_ Meas. From \_\_\_\_\_  
 Water Table Depth \_\_\_\_\_ Meas. From \_\_\_\_\_  
 Well Depth \_\_\_\_\_ Meas. From \_\_\_\_\_  
 Length of Water Column \_\_\_\_\_  
 Volume of Water in Well \_\_\_\_\_  
 Intake Depth of pump/tubing \_\_\_\_\_ Meas. From \_\_\_\_\_

Sample Time \_\_\_\_\_  
 Sample ID \_\_\_\_\_  
 Duplicate ID \_\_\_\_\_  
 MSMSO \_\_\_\_\_  
 Split Sample ID \_\_\_\_\_

Reference Point Identification:  
 TIC, Top of inner (PVC) casing  
 TOC, Top of outer (protective) casing  
 Grade/BS, Ground Surface

Redeveloped? Y N

( SEE PAGE 1 )

Required	Analytical Parameters	Collected
<input type="checkbox"/>	VOCs (Std. list)	<input 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/Inorg. (Total)	<input type="checkbox"/>
<input type="checkbox"/>	Metals/Inorg. (Dissolved)	<input type="checkbox"/>
<input type="checkbox"/>	PCDDs/PCDFs	<input type="checkbox"/>
<input type="checkbox"/>	Res/Herb	<input type="checkbox"/>
<input type="checkbox"/>	Natural Attenuation	<input type="checkbox"/>
<input type="checkbox"/>	Other (Specify)	<input type="checkbox"/>

EVACUATION INFORMATION

Pump Start Time \_\_\_\_\_  
 Pump Stop Time \_\_\_\_\_  
 Minutes of Pumping \_\_\_\_\_  
 Volume of water removed \_\_\_\_\_  
 Was well go dry? Y N

Evacuation Method: Header  Bladder Pump   
 Peristaltic Pump  Submersible Pump  Other/Specify \_\_\_\_\_  
 Pump Type: \_\_\_\_\_  
 Samples collected by same method as evacuation? Y (Specify) \_\_\_\_\_

Water Quality Meter Type(s) / Serial Number(s): \_\_\_\_\_

total  
 MLs.  
 6400  
 6700  
 7000  
 7300  
 7600  
 7900  
 8200

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft. TC)	Temp. (Celsius)	pH	So. Cond. (mS/cm)	Turbidity (NTU)	DO (mg/l)	CRP (mV)
							10% of 1 NTU	1.0 mg/l	110 mV
14:03	100	1.65	14.03	8.49	6.74	0.928	2	0.41	85.9
14:06	100	1.73	14.03	8.52	6.71	0.928	2	0.40	79.4
14:09	100	1.81	14.03	8.60	6.69	0.928	2	0.37	65.0
14:11	100	1.88	14.03	8.47	6.67	0.933	1	0.34	50.4
14:14	100	1.96	14.03	8.43	6.66	0.935	1	0.33	40.8
14:17	100	2.04	14.03	8.42	6.61	0.935	1	0.34	39.0
14:20	100	2.1	14.03	8.40	6.59	0.936	1	0.34	33.9

\* 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 @ 14:03 begin readings every 3 mins.

End Pump; H2O clear, No odor, No color.

SAMPLE DESTINATION

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

Field Sampling Coordinator: [Signature]

GROUNDWATER SAMPLING FIELD LOG

Well No. ES2-02A  
 Key No. \_\_\_\_\_  
 PID Background (ppm) 0  
 Well Headspace (ppm) 0

Site/GMA Name GMAI  
 Sampling Personnel KLB, JAP  
 Date 4/7/04  
 Weather 30's, cloudy

WELL INFORMATION

Reference Point Marked? (Y) N  
 Height of Reference Point -0.6 Meas. From Ground  
 Well Diameter 2"  
 Screen Interval Depth 3-18.0' Meas. From BGS  
 Water Table Depth 4.51-5.5' Meas. From TIC  
 Well Depth 17.48' Meas. From TIC  
 Length of Water Column 12.97'  
 Volume of Water in Well 2.1 gal  
 Intake Depth of pump/tubing 11.0' Meas. From TIC

Sample Time 1625  
 Sample ID ES2-02A  
 Duplicate ID \_\_\_\_\_  
 MS/MSD \_\_\_\_\_  
 Split Sample ID \_\_\_\_\_

Required	Analytical Parameters:	Collected
( )	VOCs (Std. list)	( )
( )	VOCs (Exp. list)	( )
( )	SVOCs	( )
( )	PCBs (Total)	( )
( )	PCBs (Dissolved)	( )
( )	Metals/Inorg. (Total)	( )
( )	Metals/Inorg. (Dissolved)	( )
( )	PCDDs/PCDFs	( )
( )	Pest/Herb	( )
( )	Natural Attenuation	( )
(X)	Other (Specify)	(X)

CYANIDE - FILTERED

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 15:12  
 Pump Stop Time 16:30  
 Minutes of Pumping 78  
 Volume of water removed 1.98  
 Did well go dry? Y (N)

Evacuation Method: Bailer ( ) Bladder Pump (X)  
 Peristaltic Pump ( ) Submersible Pump ( ) Other/Specify ( )  
 Pump Type: Marschalk System 1  
 Samples collected by same method as evacuation? (Y) N(specify)

Water Quality Meter Type(s) / Serial Numbers. HACH Turbidimeter 02100028329  
YSI 556 03C1461

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%]*	ORP (mV) [10 mV]*
1512	0.150	—	5.03	—	—	—	27	—	—
1520	.100	0.216	5.20	—	—	—	15	—	—
1532	0.100	0.5291	5.20	7.74	6.52	0.423	7	5.01	-360.7
1537	0.100	0.6412	5.20	7.71	6.44	0.424	5	1.40	-384.5
1542	0.100	0.7935	5.20	7.67	6.40	0.425	8	0.88	-376.4
1547	0.100	0.9256	5.20	7.64	6.39	0.427	5	0.83	-375.9
1552	0.100	1.051	5.20	7.70	6.40	0.428	6	0.66	-352.9
1557	0.100	1.183	5.25	7.77	6.39	0.430	5	0.53	-402.7
1601	0.100	1.289	5.25	7.82	6.41	0.434	6	0.47	-384.0
1605	0.100	1.395	5.25	7.81	6.41	0.439	5	0.46	-403.0
1609	0.100	1.501	5.25	7.77	6.42	0.444	5	0.44	-366.1
1613	0.100	1.607	5.25	7.69	6.42	0.449	4	0.52	-386.3

\* 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, COLORLESS, ORGANIC DEBRIS, ~~ODOR~~

FINAL PURGE - CLEAR, COLORLESS, SOME ORGANIC DEBRIS

SAMPLE DESTINATION

Laboratory: SG ENVIRONMENTAL  
 Delivered Via: COURIER  
 Airbill #: \_\_\_\_\_

Field Sampling Coordinator: \_\_\_\_\_





**GROUNDWATER SAMPLING FIELD LOG**

Well No. ES2-02A  
 Key No. \_\_\_\_\_  
 PID Background (ppm) 0  
 Well Headspace (ppm) 0

Site/GMA Name GMA 1  
 Sampling Personnel JAP/KLB  
 Date 4/7/04  
 Weather High 30's, cloudy

**WELL INFORMATION**

Reference Point Marked? (Y) N  
 Height of Reference Point -0.6 Meas. From Ground  
 Well Diameter 2"  
 Screen Interval Depth 3-18' Meas. From BGS  
 Water Table Depth 5.51' Meas. From TIC  
 Well Depth 17.48' Meas. From TIC  
 Length of Water Column 12.97'  
 Volume of Water in Well 2.1 gal  
 Intake Depth of pump/tubing 11.8' Meas. From TIC

Sample Time 1625  
 Sample ID ES2-02A  
 Duplicate ID \_\_\_\_\_  
 MS/MSD \_\_\_\_\_  
 Split Sample ID \_\_\_\_\_

Required	Analytical Parameters:	Collected
( )	VOCs (Std. list)	( )
( )	VOCs (Exp. list)	( )
( )	SVOCs	( )
( )	PCBs (Total)	( )
( )	PCBs (Dissolved)	( )
( )	Metals/Inorg. (Total)	( )
( )	Metals/Inorg. (Dissolved)	( )
( )	PCDDs/PCDFs	( )
( )	Pes/Herb	( )
( )	Natural Attenuation	( )
(X)	Other (Specify)	(X)

Reference Point Identification:  
 TIC: Top of Inner (PVC) casing  
 TOC: Top of outer (protective) casing  
 Grade@GS: Ground Surface

Redevelop? Y (N)

**EVACUATION INFORMATION**

Pump Start Time 1512  
 Pump Stop Time 1630  
 Minutes of Pumping 78  
 Volume of water removed 1.98  
 Did well go dry? Y (N)

Evacuation Method: Bailer ( ) Bladder Pump (X)  
 Peristaltic Pump ( ) Submersible Pump ( ) Other/Specify ( )  
 Pump Type: Marschalk System 1  
 Samples collected by same method as evacuation? (Y) N(specify)

CYANIDE-FILTER FILTERED  
UNFILTER

Water Quality Meter Type(s) / Serial Numbers. HACH Turbidimeter 021000 28329  
YSS 556 03C1461

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%]*	ORP (mV) [10 mV]*
1616	0.100	1.687	5.25	7.72	6.43	0.455	0.455	0.47	-394.0
1619	0.100	1.766	5.25	7.74	6.44	0.459	5	0.43	-392.6
1622	0.100	1.845	5.25	7.76	6.45	0.463	6	0.40	-387.3

\* 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, colorless, organic debris, odor  
Final purge: Clear, colorless, same organic debris

SAMPLE DESTINATION  
 Laboratory: \_\_\_\_\_  
 Delivered Via: \_\_\_\_\_  
 Airbill #: \_\_\_\_\_

Field Sampling Coordinator: \_\_\_\_\_

**GROUNDWATER SAMPLING FIELD LOG**

Well No. ESA2S-52  
 Key No. -  
 PID Background (ppm) 0  
 Well Headspace (ppm) 0

Site/GMA Name GMA1  
 Sampling Personnel KLG, JAP  
 Date 4/7/04  
 Weather 40°, Cloudy

**WELL INFORMATION**

Reference Point Marked? Q N  
 Height of Reference Point -0.35 Meas. From GROUND  
 Well Diameter 2 in  
 Screen Interval Depth 4.2-24.2 Meas. From TC BGS  
 Water Table Depth 10.1' Meas. From TIC  
 Well Depth 24.0' Meas. From TIC  
 Length of Water Column 13.9'  
 Volume of Water in Well 2.27 gal  
 Intake Depth of pump/tubing 17.0' Meas. From TC

Sample Time 13:00  
 Sample ID ESA2S-52  
 Duplicate ID -  
 MS/MSD collected  
 Split Sample ID -

Reference Point Identification:  
 TIC: Top of Inner (PVC) casing  
 TOC: Top of outer (protective) casing  
 Grade/BGS: Ground Surface

Required	Analytical Parameters:	Collected
( )	VOCs (Std. list)	( )
( )	VOCs (Exp. list)	( )
( )	SVOCs	( )
( )	PCBs (Total)	( )
( )	PCBs (Dissolved)	( )
( )	Metals/Inorg. (Total)	( )
( )	Metals/Inorg. (Dissolved)	( )
( )	PCDDs/PCDFs	( )
( )	Pest/Herb	( )
( )	Natural Attenuation	( )
( X )	Other (Specify)	( X )

Cyanide-Filtered

Redevelop? Y N

**EVACUATION INFORMATION**

Pump Start Time 11:47  
 Pump Stop Time 13:13  
 Minutes of Pumping 86  
 Volume of water removed 2.16852 gal  
 Did well go dry? Y (N)

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

Water Quality Meter Type(s) / Serial Numbers. HACH Turbidimeter 02100028329  
YSI 556 03C1461

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%]*	ORP (mV) [10 mV]*
11:47	0.125	0.25	10.1	-	-	-	4	-	-
11:55	0.125	0.2676	10.1	10.81	6.88	4.018	3	3.61	-359.3
12:00	0.125	0.4219	10.1	11.01	7.02	4.128	2	1.41	-380.6
12:05	0.125	0.5952	10.1	11.17	7.06	4.151	2	0.61	-385.3
12:10	0.125	0.7605	10.1	11.06	7.07	4.166	2	0.45	-390.6
12:15	0.125	0.9258	10.1	11.08	7.08	4.166	2	0.35	-330.3
12:20	0.150	1.1242	10.1	11.12	7.07	4.164	2	0.32	-309.9
12:24	0.125	1.2565	10.1	11.04	7.08	4.157	2	0.29	-319.7
12:28	0.125	1.3888	10.1	11.00	7.07	4.153	2	0.33	-353.0
12:32	0.125	1.5211	10.1	10.97	7.07	4.150	2	0.32	-316.3
12:36	0.100	1.6270	10.1	10.90	7.07	4.145	2	0.30	-325.9
12:39	0.100	1.7323	10.1	10.83	7.07	4.144	2	0.31	-324.9

\* 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 water had moderate petroleum odor, slight yellowish color, some debris (organic)

MS/MSD Samples collected

**SAMPLE DESTINATION**

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

Field Sampling Coordinator: \_\_\_\_\_

**GROUNDWATER SAMPLING FIELD LOG**

Well No. ESA2S-52  
 Key No.             
 PID Background (ppm) 0  
 Well Headspace (ppm) 0

Site/GMA Name GMA1  
 Sampling Personnel KLB/JAP  
 Date 4/7/04  
 Weather 40°, cloudy

**WELL INFORMATION**

Reference Point Marked? (Y) N  
 Height of Reference Point -0.35 Meas. From Ground  
 Well Diameter 2"  
 Screen Interval Depth 4.2-24.2 Meas. From BGS  
 Water Table Depth 10.1' Meas. From TIC  
 Well Depth 24.0' Meas. From TIC  
 Length of Water Column 13.9'  
 Volume of Water in Well 2.27 gal  
 Intake Depth of pump/tubing 17.0' Meas. From TIC

Sample Time 13:00  
 Sample ID ESA2S-52  
 Duplicate ID             
 MS/MSD Collected  
 Split Sample ID           

Required	Analytical Parameters:	Collected
( )	VOCs (Std. list)	( )
( )	VOCs (Exp. list)	( )
( )	SVOCs	( )
( )	PCBs (Total)	( )
( )	PCBs (Dissolved)	( )
( )	Metals/Inorg. (Total)	( )
( )	Metals/Inorg. (Dissolved)	( )
( )	PCDDs/PCDFs	( )
( )	Pest/Herb	( )
( )	Natural Attenuation	( )
(X)	Other (Specify) <u>Cyanide-filtered</u>	(X)

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 11:47  
 Pump Stop Time 13:13  
 Minutes of Pumping 86  
 Volume of water removed 2.4852 gal  
 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.

HACH Turbidimeter 02100028329  
YSI 536 03C1461

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%]*	ORP (mV) [10 mV]*
12:42	0.100	1.8386	10.1	10.89	7.07	4.137	3	0.30	-314.4
12:45	0.100	1.9407	10.1	10.82	7.07	4.137	2	0.33	-318.8
12:48	0.100	2.0502	10.1	10.86	7.06	4.130	2	0.32	-382.4
12:53	0.100	2.1246	10.1	10.92	7.07	4.126	2	0.33	-377.1
12:56	0.100	2.2090	10.1	10.92	7.06	4.126	1	0.33	-378.6
12:59	0.100	2.2884	10.1	10.94	7.06	4.124	2	0.33	-381.2

\* 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 Initial purge water - moderate petroleum color, slight yellowish color, some organic debris

MS/MSD sample collected

**SAMPLE DESTINATION**

Laboratory:             
 Delivered Via:             
 Airbill #:           

Field Sampling Coordinator:

**GROUNDWATER SAMPLING FIELD LOG**

Well No. GMA1-13  
 Key No. N/A  
 PID Background (ppm) 0.0  
 Well Headspace (ppm) 0.0

Site/GMA Name GMA1 / EAST V. AREA 2 SOUTH  
 Sampling Personnel SLJ/EMF  
 Date 4/7/04  
 Weather Cloudy ~40°F

**WELL INFORMATION**

Reference Point Marked? (Y) N  
 Height of Reference Point 1.87' Meas. From AGS  
 Well Diameter 2"  
 Screen Interval Depth 15'-25' Meas. From BGS  
 Water Table Depth 16.44' Meas. From TIC  
 Well Depth 29.9' Meas. From TIC  
 Length of Water Column 12.75'  
 Volume of Water in Well 2.1 gallons  
 Intake Depth of pump/tubing 24.19' Meas. From TIC

Sample Time 1320  
 Sample ID GMA1-13  
 Duplicate ID ---  
 MS/MSD ---  
 Split Sample ID ---

**Reference Point Identification:**

TIC: Top of Inner (PVC) casing  
 TOC: Top of outer (protective) casing  
 GBS/BGS: Ground Surface

Redevelop? Y (N)

**EVACUATION INFORMATION**

Pump Start Time 1230  
 Pump Stop Time 1330  
 Minutes of Pumping 60 min  
 Volume of water removed 1.6 gallons  
 Did well go dry? Y (N)

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

Water Quality Meter Type(s) / Serial Numbers: YS: 556 #4 (03MO230 AC) 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%]*	ORP (mV) [10 mV]*
1230	0.100	0	16.45	---	---	---	112	---	---
1235	0.100	0.1	16.45	---	---	---	53	---	---
1240	0.100	0.3	16.45	---	---	---	37	---	---
1245	0.100	0.4	16.45	8.00	6.46	0.673	34	4.54	292.3
1250	0.100	0.5	16.45	8.05	6.44	0.673	33	4.32	292.7
1255	0.100	0.7	16.45	7.98	6.40	0.676	31	4.19	291.2
1300	0.100	0.8	16.45	7.99	6.51	0.680	23	3.99	284.1
1305	0.100	0.9	16.45	7.94	6.50	0.683	23	3.87	282.6
1310	0.100	1.1	16.45	8.17	6.65	0.692	22	3.64	276.7
1315	0.100	1.2	16.45	8.38	6.65	0.698	21	3.49	270.7
1320	0.100	1.3	16.45	8.52	6.66	0.702	21	3.46	267.2

\* 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 INITIAL PUMP/WATER WAS SLIGHTLY TURBID, LIGHT BROWN, WOODLESS  
FINAL PUMP/WATER WAS CLEAR, COLORLESS, ODDLESS

**SAMPLE DESTINATION**

Laboratory: SGS ENVIRONMENTAL  
 Delivered Via: COURIER  
 Airbill #: \_\_\_\_\_

Field Sampling Coordinator: [Signature]

**GROUNDWATER SAMPLING FIELD LOG**

Well No. HR-G1-MW-3  
 Key No. FV-37  
 PID Background (ppm) 0  
 Well Headspace (ppm) 0

Site/GMA Name GMA1  
 Sampling Personnel KLB/JAP  
 Date 4/8/04  
 Weather 50°, sunny, partly cloudy

**WELL INFORMATION**

Reference Point Marked? (Y) N  
 Height of Reference Point 1.8' Meas. From Ground  
 Well Diameter 2"  
 Screen Interval Depth 7-17.0' Meas. From SP-TIC-BGS  
 Water Table Depth 7.03 Meas. From TIC  
 Well Depth 17.95' Meas. From TIC  
 Length of Water Column 10.92'  
 Volume of Water in Well 1.78 gal  
 Intake Depth of pump/tubing 13.5' Meas. From TIC

Sample Time 1400  
 Sample ID HR-G1-MW-3  
 Duplicate ID \_\_\_\_\_  
 MS/MSO \_\_\_\_\_  
 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
( )	VOCs (Std. list)	( )
( )	VOCs (Exp. list)	( )
( )	SVOCs	( )
( )	PCBs (Total)	( )
( )	PCBs (Dissolved)	( )
( )	Metals/Inorg. (Total)	( )
( )	Metals/Inorg. (Dissolved)	( )
( )	PCDDs/PCDFs	( )
( )	Pest/Herb	( )
( )	Natural Attenuation	( )
(X)	Other (Specify)	(X)

Cyanide - Filtered

**EVACUATION INFORMATION**

Pump Start Time 1255  
 Pump Stop Time 1406  
 Minutes of Pumping 71  
 Volume of water removed 1.67 gal  
 Did well go dry? Y (N)

Evacuation Method: Bailer ( ) Bladder Pump (X)  
 Peristaltic Pump ( ) Submersible Pump ( ) Other: Specify ( )  
 Pump Type Marschalk System 1  
 Samples collected by same method as evacuation? (Y) (Specify)

Water Quality Meter Type(s) / Serial Numbers HACH TURBIDMETER 02100025329  
YSI 556 - 03C1461

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) (3%)	pH (10.1 units)	Sp. Cond. (mS/cm) (3%)	Turbidity (NTU) (10% or 1 NTU)	DO (mg/l) (10%)	CRP (mV) (10 mV)
1258	0.125	-	7.01	-	-	-	129	-	-
1303	0.100	0.1323	7.01	-	-	-	17	-	-
1313	0.100	0.3969	7.01	12.07	6.90	1.121	17	3.30	-399.9
1318	0.100	0.5292	7.01	11.81	6.84	1.119	31	1.88	-380.0
1323	0.100	0.6615	7.01	11.23	6.84	1.123	20	1.45	-358.0
1328	0.100	0.7938	7.01	10.76	6.86	1.121	13	1.27	-350.8
1333	0.100	0.9261	7.01	10.25	6.87	1.118	11	1.12	-347.6
1338	0.100	1.058	7.01	10.02	6.86	1.116	8	0.97	-352.0
1343	0.100	1.190	7.01	10.00	6.87	1.120	6	0.83	-351.0
1348	0.100	1.322	7.01	9.73	6.88	1.115	5	0.82	-353.4
1352	0.100	1.428	7.01	9.74	6.87	1.122	5	0.82	-353.9
1356	0.100	1.534	7.01	9.56	6.88	1.121	4	0.77	-356.3

\* 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: CLOUDY, LIGHT ORANGE, TURBID  
FINAL PURGE - CLEAR, COLORLESS, ODORLESS

**SAMPLE DESTINATION**

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

Field Sampling Coordinator: \_\_\_\_\_



**GROUNDWATER SAMPLING FIELD LOG**

Well No. HR-G3-MW-1  
 Key No. FX-37  
 PID Background (ppm) 0  
 Well Headspace (ppm) 0

Site/GMA Name GMA 1  
 Sampling Personnel JAP/KLB  
 Date 9/8/04  
 Weather 45°, CLOUDY

**WELL INFORMATION**

Reference Point Marked?  Y  N  
 Height of Reference Point 3.4 Meas. From GROUND  
 Well Diameter 2"  
 Screen Interval Depth 4.1-14.1' Meas. From BGS  
 Water Table Depth 13.41' Meas. From TIC  
 Well Depth 17.52' Meas. From TIC  
 Length of Water Column 4.39' 17.80'  
 Volume of Water in Well 0.716 gal  
 Intake Depth of pump/tubing 15.5' Meas. From TIC

Sample Time 10:34  
 Sample ID HR-G3-MW-1  
 Duplicate ID \_\_\_\_\_  
 MS/MSD \_\_\_\_\_  
 Split Sample ID \_\_\_\_\_

Required	Analytical Parameters:	Collected
<input type="checkbox"/>	VOCs (Std. list)	<input 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 checked="" type="checkbox"/>	PCBs (Dissolved)	<input checked="" type="checkbox"/>
<input type="checkbox"/>	Metals/Inorg. (Total)	<input type="checkbox"/>
<input type="checkbox"/>	Metals/Inorg. (Dissolved)	<input type="checkbox"/>
<input type="checkbox"/>	PCDDs/PCDFs	<input type="checkbox"/>
<input type="checkbox"/>	Pest/Herb	<input type="checkbox"/>
<input type="checkbox"/>	Natural Attenuation	<input 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 9:20  
 Pump Stop Time 10:45  
 Minutes of Pumping 85  
 Volume of water removed 2.00 gal  
 Did well go dry? Y  N

Evacuation Method: Bailer  Bladder Pump   
 Peristaltic Pump  Submersible Pump  Other/Specify   
 Pump Type: MARSHALL SYSTEM 1  
 Samples collected by same method as evacuation?  N(specify)

Water Quality Meter Type(s) / Serial Numbers. HACH TURBIDIMETER 021000028329  
YSI 556 OSC 1461

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%]*	ORP (mV) [10 mV]*
9:26	0.100	-	13.41	-	-	-	143	-	-
9:31	0.100	0.1323	13.48	-	-	-	76	-	-
9:36	0.100	0.2646	13.50	-	-	-	49	-	-
9:44	0.100	0.4762	13.51	8.95	6.58	1.651	32	5.91	-314.8
9:49	0.100	0.6085	13.50	8.87	6.64	1.654	20	2.43	-313.0
9:54	0.100	0.7408	13.46	9.00	6.66	1.655	15	2.03	-308.1
9:59	0.100	0.8731	13.48	9.05	6.69	1.657	13	1.90	-306.0
10:04	0.100	1.0054	13.48	9.20	6.73	1.662	8	1.92	-301.7
10:09	0.100	1.1377	13.48	9.33	6.74	1.665	5	1.91	-299.7
10:14	0.100	1.2670	13.47	9.23	6.78	1.668	4	1.93	-298.3
10:19	0.100	1.3993	13.47	9.52	6.74	1.670	4	1.96	-298.4
10:24	0.100	1.5316	13.47	9.54	6.76	1.669	3	1.85	-300.3

\* 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: CLOUDY, TURBID, ODOR

**SAMPLE DESTINATION**

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

Field Sampling Coordinator: \_\_\_\_\_

**GROUNDWATER SAMPLING FIELD LOG**

Well No. HR-G3-MW-1  
 Key No. FX-37  
 PID Background (ppm) 0  
 Well Headspace (ppm) 0

Site/GMA Name GMA1  
 Sampling Personnel JAP/KLB  
 Date 4/8/04  
 Weather 45°, CLOUDY

**WELL INFORMATION**

Reference Point Marked?  Y  N  
 Height of Reference Point 3.4' Meas. From Ground  
 Well Diameter 2"  
 Screen Interval Depth 4.1-14.1' Meas. From BGS  
 Water Table Depth 13.41' Meas. From TIC  
 Well Depth 17.80' Meas. From TIC  
 Length of Water Column 4.39'  
 Volume of Water in Well 0.716 gal  
 Intake Depth of pump/tubing 15.5' Meas. From TIC

Sample Time 10:34  
 Sample ID HR-G3-MW-1  
 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
( )	VOCs (Std. list)	( )
( )	VOCs (Exp. list)	( )
( )	SVOCs	( )
( )	PCBs (Total)	( )
( X )	PCBs (Dissolved)	( X )
( )	Metals/Inorg. (Total)	( )
( )	Metals/Inorg. (Dissolved)	( )
( )	PCDDs/PCDFs	( )
( )	Pest/Herb	( )
( )	Natural Attenuation	( )
( )	Other (Specify)	( )

**EVACUATION INFORMATION**

Pump Start Time 9:20  
 Pump Stop Time 10:45  
 Minutes of Pumping 85  
 Volume of water removed 2.00 gal  
 Did well go dry? Y  N

Evacuation Method: Bailer ( ) Bladder Pump ( X )  
 Peristaltic Pump ( ) Submersible Pump ( ) Other/Specify ( )  
 Pump Type Marschalk System 1  
 Samples collected by same method as evacuation?  Y (Specify)

Water Quality Meter Type(s)/ Serial Numbers HACH Turbidimeter 02100028329  
YSI 556 03C461

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%]*	ORP (mV) [10 mV]*
10:28	0.100	1.6374	13.47	9.53	6.76	1.674	3	1.86	-301.0
10:32	0.100	1.7432	13.47	9.63	6.76	1.675	3	1.79	-300.1

\* 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: Cloudy, turbid, odor  
Final purge: Colorless, clear

**SAMPLE DESTINATION**

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

Field Sampling Coordinator: \_\_\_\_\_

**GROUNDWATER SAMPLING FIELD LOG**

Well No. ES1-05  
 Key No.         
 PID Background (ppm) 0.0  
 Well Headspace (ppm) 0.0

Site/GMA Name ES1-05 GMA1 - ESA 2 NORTH  
 Sampling Personnel SL/EMF  
 Date 4/16/04  
 Weather Mostly sunny, windy, ~40F

**WELL INFORMATION**

Reference Point Marked?  Y  N  
 Height of Reference Point -0.16 Meas. From BGS  
 Well Diameter 2"  
 Screen Interval Depth 35-45' Meas. From BGS  
 Water Table Depth 39.24 Meas. From TIC  
 Well Depth 44.39 Meas. From TTC  
 Length of Water Column 5.15  
 Volume of Water in Well 0.8 gallons  
 Intake Depth of pump/tubing 40' Meas. From BGS

Sample Time 1225  
 Sample ID ES1-05  
 Duplicate ID DUP-1  
 MS/MSO         
 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 type="checkbox"/>	VOCs (Std. list)	<input 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 checked="" type="checkbox"/>
<input type="checkbox"/>	Metals/Inorg. (Total)	<input type="checkbox"/>
<input type="checkbox"/>	Metals/Inorg. (Dissolved)	<input type="checkbox"/>
<input type="checkbox"/>	PCDDs/PCDFs	<input type="checkbox"/>
<input type="checkbox"/>	Pest/Herb	<input type="checkbox"/>
<input type="checkbox"/>	Natural Attenuation	<input type="checkbox"/>
<input type="checkbox"/>	Other (Specify)	<input type="checkbox"/>

**EVACUATION INFORMATION**

Pump Start Time 1130  
 Pump Stop Time 1251  
 Minutes of Pumping 81 minutes  
 Volume of water removed 2.1 gallons  
 Did well go dry? Y  N

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

Water Quality Meter Type(s) / Serial Numbers YSI 556 #2 (03C0392 AE) w/ 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%)*	ORP (mV) (10 mV)*
1136	0.100	0	39.45	—	—	—	64	—	—
1136	0.100	0.1	39.45	—	—	—	55	—	—
1141	0.100	0.3	39.45	—	—	—	41	—	—
1146	0.100	0.4	39.45	11.43	6.36	0.603	—	7.38	96.1
1151	0.100	0.5	39.45	11.33	6.49	1.197	18	2.00	33.4
1156	0.100	0.7	39.45	11.27	6.67	1.203	16	1.55	-11.0
1201	0.100	0.8	39.45	11.25	6.67	1.208	15	1.48	-35.8
1206	0.100	0.9	39.45	11.25	6.75	1.218	13	1.36	-48.0
1211	0.100	1.1	39.45	11.27	6.74	1.223	11	1.30	-50.3
1216	0.100	1.2	39.45	11.25	6.74	1.230	10	1.20	-53.9
1221	0.100	1.3	39.45	11.36	6.80	1.235	10	1.11	-58.6

\* 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 slightly turbid, light gray, odorless  
FINAL PURGE WATER WAS CLEAR, COLORLESS, ODORLESS

**SAMPLE DESTINATION**

Laboratory: CITE  
 Delivered Via: COURIER  
 Airbill #:       

Field Sampling Coordinator: [Signature]



**GROUNDWATER SAMPLING FIELD LOG**

Well No. ESI-27R  
 Key No. \_\_\_\_\_  
 PID Background (ppm) 0  
 Well Headspace (ppm) 0

Site/GMA Name GMA1  
 Sampling Personnel KIR, JAP  
 Date 4/6/04  
 Weather 35°, SUNNY, WINDY

**WELL INFORMATION**

Reference Point Marked? (Y) N  
 Height of Reference Point -0.26 Meas. From GROUND  
 Well Diameter 2"  
 Screen Interval Depth 9.3-19.3 Meas. From 19.3 BGS  
 Water Table Depth 6.71 Meas. From TIC  
 Well Depth 19.25' Meas. From TIC  
 Length of Water Column 12.54'  
 Volume of Water in Well 2.04 gal  
 Intake Depth of pump/tubing 14.0' Meas. From TIC

Sample Time 11:22  
 Sample ID ESI-27R  
 Duplicate ID \_\_\_\_\_  
 MS/MSD COLLECTED  
 Split Sample ID \_\_\_\_\_

Required	Analytical Parameters:	Collected
( )	VOCs (Std. list)	( )
( )	VOCs (Exp. list)	( )
( )	SVOCs	( )
( )	PCBs (Total)	( )
(X)	PCBs (Dissolved)	(X)
( )	Metals/Inorg. (Total)	( )
( )	Metals/Inorg. (Dissolved)	( )
( )	PCDDs/PCDFs	( )
( )	Pest/Herb	( )
( )	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 10:00  
 Pump Stop Time 12:07  
 Minutes of Pumping 127 min  
 Volume of water removed 3.36 gal  
 Did well go dry? Y (N)

Evacuation Method: Bailer ( ) Bladder Pump (X)  
 Peristaltic Pump ( ) Submersible Pump ( ) Other/Specify ( )  
 Pump Type: MARQUARDT SYSTEM 1  
 Samples collected by same method as evacuation? (Y) N(specify)

Water Quality Meter Type(s) / Serial Numbers. HACH TURBIDIMETER 021000028329  
YSI 556 03C1461

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%]*	ORP (mV) [10 mV]*
10:10	100 mL	-	7.50	-	-	-	23	-	-
10:15	100 mL	0.1587	7.76	7.42	7.84	0.390	18	21.47	-224.6
10:21	100 mL	0.2910	7.80	7.11	7.84	0.392	17	9.55	-221.2
10:26	100 mL	0.4233	7.80	7.32	7.15	0.389	15	9.12	-221.7
10:31	75 mL	0.5224	7.78	7.44	7.21	0.389	16	9.05	-219.8
10:36	75 mL	0.6215	7.85	7.50	7.24	0.388	15	8.93	-218.4
10:41	75 mL	0.7206	7.80	7.32	7.39	0.390	13	9.07	-219.5
10:46	200 mL	0.9848	7.85	7.47	7.40	0.390	10	8.96	-219.0
10:51	150 mL	1.1830	8.15	7.72	7.49	0.388	7	8.93	-216.5
10:56	100 mL	1.3153	8.15	7.54	7.48	0.383	7	9.11	-214.0
11:00	100 mL	1.4211	8.15	7.44	7.39	0.377	7	9.16	-212.0
11:04	100 mL	1.5269	8.20	7.46	7.50	0.374	7	9.14	-211.1

\* 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, COLORLESS, ODORLESS  
FINAL PURGE - CLEAR, COLORLESS, ODORLESS

MS/MSD COLLECTED

**SAMPLE DESTINATION**

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

Field Sampling Coordinator: \_\_\_\_\_

**GROUNDWATER SAMPLING FIELD LOG**

Well No. ESI-27R  
 Key No. -  
 PID Background (ppm) -  
 Well Headspace (ppm) -

Site/GMA Name GMA1  
 Sampling Personnel KLJ, JAP  
 Date 4/6/04  
 Weather 35°, SUNNY, WINDY

**WELL INFORMATION**

Reference Point Marked? Y N  
 Height of Reference Point \_\_\_\_\_ Meas. From \_\_\_\_\_  
 Well Diameter \_\_\_\_\_  
 Screen Interval Depth \_\_\_\_\_ Meas. From \_\_\_\_\_  
 Water Table Depth \_\_\_\_\_ Meas. From \_\_\_\_\_  
 Well Depth \_\_\_\_\_ Meas. From \_\_\_\_\_  
 Length of Water Column \_\_\_\_\_  
 Volume of Water in Well \_\_\_\_\_  
 Intake Depth of pump/tubing \_\_\_\_\_ Meas. From \_\_\_\_\_

Sample Time \_\_\_\_\_  
 Sample ID \_\_\_\_\_  
 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
( )	VOCs (Std. list)	( )
( )	VOCs (Exp. list)	( )
( )	SVOCs	( )
( )	PCBs (Total)	( )
( )	PCBs (Dissolved)	( )
( )	Metals/Inorg. (Total)	( )
( )	Metals/Inorg. (Dissolved)	( )
( )	PCDDs/PCDFs	( )
( )	Pest/Herb	( )
( )	Natural Attenuation	( )
( )	Other (Specify)	( )

SEE PAGE 1 OF 2

**EVACUATION INFORMATION**

Pump Start Time \_\_\_\_\_  
 Pump Stop Time \_\_\_\_\_  
 Minutes of Pumping \_\_\_\_\_  
 Volume of water removed \_\_\_\_\_  
 Did well go dry? Y N

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

Water Quality Meter Type(s) / Serial Numbers \_\_\_\_\_

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%]*	ORP (mV) [10 mV]*
11:08	125ml	1.6592	8.20	7.36	7.54	0.375	6	9.15	-209.0
11:12	125ml	1.7913	8.30	7.57	7.56	0.377	6	9.00	-208.1
11:16	100ml	1.8970	8.35	7.67	7.56	0.379	5	9.07	-208.8
11:20	100ml	2.003	8.30	7.68	7.54	0.380	5	9.05	-208.1

\* 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: \_\_\_\_\_  
 Delivered Via: \_\_\_\_\_  
 Airbill #: \_\_\_\_\_

Field Sampling Coordinator: \_\_\_\_\_



**GROUNDWATER SAMPLING FIELD LOG**

Well No. GMA1-4  
 Key No. -  
 PID Background (ppm) -  
 Well Headspace (ppm) -

Site/GMA Name GMA1  
 Sampling Personnel KLB, JAP  
 Date 4/6/04  
 Weather SUNNY, WINDY, 45°

**WELL INFORMATION**

Reference Point Marked?  Y  N  
 Height of Reference Point -0.45 Meas. From GRADE  
 Well Diameter 2"  
 Screen Interval Depth 10.3-20.3 Meas. From BGS  
 Water Table Depth 15.38 Meas. From TIC  
 Well Depth 14.71 Meas. From TIC  
 Length of Water Column 4.13'  
 Volume of Water in Well 47  
 Intake Depth of pump/tubing 17.75' Meas. From TIC

Sample Time 1505  
 Sample ID GMA1-4  
 Duplicate ID -  
 MS/MSD COLLECTED  
 Split Sample ID -

Required	Analytical Parameters:	Collected
<input type="checkbox"/>	VOCs (Std. list)	<input type="checkbox"/>
<input checked="" type="checkbox"/>	VOCs (Exp. list)	<input checked="" 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/Inorg. (Total)	<input type="checkbox"/>
<input type="checkbox"/>	Metals/Inorg. (Dissolved)	<input type="checkbox"/>
<input type="checkbox"/>	PCODs/PCDFs	<input type="checkbox"/>
<input type="checkbox"/>	Pest/Herb	<input type="checkbox"/>
<input type="checkbox"/>	Natural Attenuation	<input 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 2:10 1410  
 Pump Stop Time 1515  
 Minutes of Pumping 65  
 Volume of water removed 1.72 gal  
 Did well go dry? Y  N

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

Water Quality Meter Type(s) / Serial Numbers: YSI 559 03C1461

HAU TURBIDIMETER 02100028329

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%]*	ORP (mV) [10 mV]*
1420	100 mL	-	15.36	-	-	-	12	-	-
1440	100 mL	0.529	15.35	8.00	7.36	1.346	10	10.33	-245.7
1445	100 mL	0.6613	15.37	8.13	7.27	1.326	5	10.06	-240.8
1450	100 mL	0.7936	15.37	8.42	7.30	1.324	3	9.74	-241.3
1454	100 mL	0.8194	15.37	8.57	7.32	1.322	3	9.91	-241.2
1458	100 mL	0.9251	15.37	8.63	7.33	1.322	2	9.40	-240.9
1502	100 mL	1.031	15.37	8.67	7.33	1.321	2	9.26	-236.2

\* 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 INITIAL PURGE: CLEAR, COLORLESS, ODORLESS  
FINAL PURGE: CLEAR, COLORLESS, ODORLESS  
MS/MSD COLLECTED

**SAMPLE DESTINATION**

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

Field Sampling Coordinator: \_\_\_\_\_



GROUNDWATER SAMPLING FIELD LOG

Well No. ESAIN-52  
 Key No. \_\_\_\_\_  
 PID Background (ppm) 0.0  
 Well Headspace (ppm) 0.0

Site/GMA Name GMA 1 / EAST ST. AREA / NORTH  
 Sampling Personnel JL / EME  
 Date 4/9/04  
 Weather Partly Cloudy, ~50°F

WELL INFORMATION

Reference Point Marked? (Y) N  
 Height of Reference Point -0.48' Meas. From BGS  
 Well Diameter 2"  
 Screen Interval Depth 2-22' Meas. From BGS  
 Water Table Depth 4.51' Meas. From TIC  
 Well Depth 15.43' Meas. From TIC  
 Length of Water Column 10.89'  
 Volume of Water in Well 1.8 gal/box  
 Intake Depth of pump/tubing 10' Meas. From TIC

Sample Time 1015  
 Sample ID ESAIN-52  
 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
( )	VOCs (Std. list)	( )
( )	VOCs (Exp. list)	( )
( )	SVOCs	( )
( )	PCBs (Total)	( )
( X )	PCBs (Dissolved)	( X )
( )	Metals/Inorg. (Total)	( )
( )	Metals/Inorg. (Dissolved)	( )
( )	PCDDs/PCDFs	( )
( )	Pest/Herb	( )
( )	Natural Attenuation	( )
( )	Other (Specify)	( )

EVACUATION INFORMATION

Pump Start Time 0855  
 Pump Stop Time 1025  
 Minutes of Pumping 90 min  
 Volume of water removed 2.4 Gal/box  
 Did well go dry? Y (N)

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

Water Quality Meter Type(s) / Serial Numbers: YSI SSL (03M0230 AC) / HAL H 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%)*	ORP (mV) (10 mV)*
0855	0.100	0	4.92	—	—	—	884	—	—
0900	0.100	0.1	5.49	—	—	—	75	—	—
0905	0.100	0.3	5.75	—	—	—	61	—	—
0910	0.100	0.4	5.88	—	—	—	49	—	—
0915	0.100	0.5	5.95	8.28	7.00	0.635	24	1.50	193.7
0920	0.100	0.7	5.98	8.05	7.17	0.639	31	0.56	151.8
0925	0.100	0.8	6.00	8.23	7.26	0.638	28	0.43	125.8
0930	0.100	0.9	6.00	8.00	7.30	0.638	28	0.37	100.3
0935	0.100	1.1	6.00	7.96	7.33	0.637	23	0.37	87.4
0940	0.100	1.2	6.00	8.10	7.32	0.637	21	0.31	78.4
0945	0.100	1.3	6.00	8.26	7.36	0.638	20	0.30	62.2
0950	0.100	1.5	6.00	8.40	7.39	0.641	17	0.30	37.4

\* 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 PUMP WATER WAS DARK BROWN, VERY TURBID, SLIGHT ODOUR.

SAMPLE DESTINATION

Laboratory: SGS ENVIRONMENTAL  
 Delivered Via: COURIER  
 Airbill #: \_\_\_\_\_

Field Sampling Coordinator: [Signature]

**GROUNDWATER SAMPLING FIELD LOG**

Well No. ESA/N-52 Site/GMA Name GMA1 / EAST ST. AREA 1 NORTH  
 Key No. \_\_\_\_\_ Sampling Personnel SL / EMF  
 PID Background (ppm) \_\_\_\_\_ Date 4/8/04  
 Well Headspace (ppm) \_\_\_\_\_ Weather Mostly cloudy, ~80°F

**WELL INFORMATION**

Reference Point Marked? Y N  
 Height of Reference Point \_\_\_\_\_ Meas. From \_\_\_\_\_  
 Well Diameter \_\_\_\_\_  
 Screen Interval Depth \_\_\_\_\_ Meas. From \_\_\_\_\_  
 Water Table Depth \_\_\_\_\_ Meas. From \_\_\_\_\_  
 Well Depth \_\_\_\_\_ Meas. From \_\_\_\_\_  
 Length of Water Column \_\_\_\_\_  
 Volume of Water in Well \_\_\_\_\_  
 Intake Depth of pump/tubing \_\_\_\_\_ Meas. From \_\_\_\_\_

Sample Time \_\_\_\_\_  
 Sample ID \_\_\_\_\_  
 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
( )	VOCs (Std. list)	( )
( )	VOCs (Exp. list)	( )
( )	SVOCs	( )
( )	PCBs (Total)	( )
( )	PCBs (Dissolved)	( )
( )	Metals/Inorg. (Total)	( )
( )	Metals/Inorg. (Dissolved)	( )
( )	PCDDs/PCDFs	( )
( )	Pest/Herb	( )
( )	Natural Attenuation	( )
( )	Other (Specify)	( )

SEE PAGE 1

**EVACUATION INFORMATION**

Pump Start Time \_\_\_\_\_  
 Pump Stop Time \_\_\_\_\_  
 Minutes of Pumping \_\_\_\_\_  
 Volume of water removed \_\_\_\_\_  
 Did well go dry? Y N

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

Water Quality Meter Type(s) / Serial Numbers: \_\_\_\_\_

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%]*	ORP (mV) [10 mV]*
<del>0950</del>	0.100	1.6	6.00	8.85	7.39	0.641	16	0.31	16.2
1000	0.100	1.7	6.00	8.83	7.41	0.643	14	0.32	7.7
1005	0.100	1.8	6.00	8.81	7.41	0.643	14	0.30	-2.6
1010	0.100	2.0	6.00	8.59	7.39	0.645	13	0.29	-9.5
1015	0.100	2.1	6.00	8.44	7.41	0.644	12	0.31	-18.0

\* 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 \_\_\_\_\_

**SAMPLE DESTINATION**

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

Field Sampling Coordinator: \_\_\_\_\_





**GROUNDWATER SAMPLING FIELD LOG**

Well No. LS-29  
 Key No. \_\_\_\_\_  
 PID Background (ppm) 0.0  
 Well Headspace (ppm) 0.0

Site/GMA Name GMA1 / LYMAN ST. AREA  
 Sampling Personnel SLL/EMM  
 Date 4/8/04  
 Weather PARTLY CLOUDY ~50°F

**WELL INFORMATION**

Reference Point Marked?  Y  N  
 Height of Reference Point -0.18 Meas. From BGS  
 Well Diameter 2"  
 Screen Interval Depth 24.6-34.6 Meas. From BGS  
 Water Table Depth 12.72 Meas. From TIC  
 Well Depth 34.64 Meas. From TIC  
 Length of Water Column 21.92  
 Volume of Water in Well 3.6 gallons  
 Intake Depth of pump/tubing 29.0' Meas. From BGS

Sample Time 1445  
 Sample ID LS-29  
 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
( )	VOCs (Std. list)	( )
( )	VOCs (Exp. list)	( )
( )	SVOCs	( )
( )	PCBs (Total)	( )
( X )	PCBs (Dissolved)	( X )
( )	Metals/Inorg. (Total)	( )
( )	Metals/Inorg. (Dissolved)	( )
( )	PCDDs/PCDFs	( )
( )	Pest/Herb	( )
( )	Natural Attenuation	( )
( )	Other (Specify)	( )

**EVACUATION INFORMATION**

Pump Start Time 1355  
 Pump Stop Time 1455  
 Minutes of Pumping (60 MINUTE)  
 Volume of water removed 1.6 gallons  
 Did well go dry?  Y  N

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

Water Quality Meter Type(s) / Serial Numbers: YSI 550 (03MO230 AC) / HACH TURBIDITY METER

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [5%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10%]*	ORP (mV) [10 mV]*
1355	0.100	0	12.75	—	—	—	18	—	—
1400	0.100	0.1	12.75	—	—	—	82	—	—
1405	0.100	0.3	12.75	—	—	—	86	—	—
1410	0.100	0.4	12.75	—	—	—	70	—	—
1415	0.100	0.5	12.75	—	—	—	39	—	—
1420	0.100	0.7	12.75	10.53	7.39	0.589	39	5.84	165.8
1425	0.100	0.8	12.75	10.54	7.40	0.590	26	4.74	168.4
1430	0.100	0.9	12.75	10.49	7.39	0.597	23	4.45	168.5
1435	0.100	1.1	12.75	10.20	7.38	0.596	19	4.55	167.4
1440	0.100	1.2	12.75	10.27	7.39	0.593	19	4.56	166.1
1445	0.100	1.3	12.75	10.42	7.40	0.587	20	4.67	164.4

\* 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 \*HAD TO SWITCH TO THE PERISTALTIC PUMP BECAUSE THE WELL CASING IS DAMAGED ~ 2'-3' BGS AND CAN'T GET THE BLADDER PUMP PAVED IT.  
INITIAL PUMP WATER WAS CLEAR, COLORED, COARSE  
FINAL PUMP WATER WAS CLEAR, COLORLESS, COARSE

**SAMPLE DESTINATION**

Laboratory: SGS ENVIRONMENTAL  
 Delivered Via: COURIER  
 Airbill #: \_\_\_\_\_

Field Sampling Coordinator: [Signature]

**GROUNDWATER SAMPLING FIELD LOG**

Well No. LSSC-085  
 Key No. \_\_\_\_\_  
 PID Background (ppm) 0  
 Well Headspace (ppm) 0

Site/GMA Name GMA1  
 Sampling Personnel JAP/KLB  
 Date 4/8/04  
 Weather CLOUDY, 50°

**WELL INFORMATION**

Reference Point Marked?  Y  N  
 Height of Reference Point -0.25 Meas. From GROUND  
 Well Diameter 2"  
 Screen Interval Depth 5-15.0' Meas. From BGS  
 Water Table Depth 10.80 Meas. From TIC  
 Well Depth 14.78' Meas. From TIC  
 Length of Water Column 3.98'  
 Volume of Water in Well 0.65 gal  
 Intake Depth of pump/tubing 13.00' Meas. From TIC

Sample Time <sup>SP</sup> LSSC-085 16:34  
 Sample ID LSSC-085  
 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

Required	Analytical Parameters:	Collected
( )	VOCs (Std. list)	( )
( )	VOCs (Exp. list)	( )
( )	SVOCs	( )
( )	PCBs (Total)	( )
( X )	PCBs (Dissolved)	( X )
( )	Metals/Inorg. (Total)	( )
( )	Metals/Inorg. (Dissolved)	( )
( )	PCDDs/PCDFs	( )
( )	Pest/Herb	( )
( )	Natural Attenuation	( )
( )	Other (Specify)	( )

Redevelop? Y  N

**EVACUATION INFORMATION**

Pump Start Time 15:08  
 Pump Stop Time 16:42  
 Minutes of Pumping 94  
 Volume of water removed 2.35 gal  
 Did well go dry? Y  N

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

Water Quality Meter Type(s) / Serial Numbers. HACH TURBIDIMETER 02100028329  
YSI 556 03C.1461

2646

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%]*	ORP (mV) [10 mV]*
15:14	0.100	—	10.85	—	—	—	27	—	—
15:24	0.100	0.0204	10.90	10.26	6.53	1.144	18	11.20	-263.6
15:29	0.100	0.3969	10.94	10.01	6.51	1.161	16	8.98	-258.5
15:34	0.100	0.5292	10.96	9.74	6.52	1.175	12	8.52	-254.3
15:39	0.100	0.6615	10.99	9.62	6.53	1.191	10	8.12	-256.1
15:43	0.100	0.7673	10.99	9.52	6.54	1.200	9	7.81	-256.2
15:47	0.100	0.8731	10.99	9.45	6.52	1.213	7	7.41	-258.8
15:51	0.100	0.9789	11.00	9.34	6.51	1.227	5	6.93	-259.8
15:55	0.100	1.0847	11.00	9.26	6.51	1.242	5	6.52	-261.5
15:59	0.100	1.1905	11.01	9.16	6.51	1.254	4	6.14	-262.7
16:03	0.100	1.2963	11.01	9.12	6.52	1.264	3	5.75	-264.7
16:07	0.100	1.4021	11.05	9.08	6.51	1.271	3	5.50	-264.1

\* 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: Slightly yellow, clear, odorless  
~~Final Purge: CLEAR, COLORLESS, ODORLESS~~

**SAMPLE DESTINATION**

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

Field Sampling Coordinator: \_\_\_\_\_

GROUNDWATER SAMPLING FIELD LOG

Well No. LSSC-085  
 Key No. \_\_\_\_\_  
 PID Background (ppm) 0  
 Well Headspace (ppm) 0

Site/GMA Name GMA 1  
 Sampling Personnel JAP  
 Date 4/8/04  
 Weather CLOUDY, 50°

WELL INFORMATION

Reference Point Marked?  Y  N  
 Height of Reference Point -0.25 Meas. From GROUND  
 Well Diameter 2"  
 Screen Interval Depth 5-15.0' Meas. From BGS  
 Water Table Depth 10.80' Meas. From TIC  
 Well Depth 14.78' Meas. From TIC  
 Length of Water Column 3.98'  
 Volume of Water in Well 0.65 gal  
 Intake Depth of pump/tubing 13.00' Meas. From TIC

Sample Time 16:36  
 Sample ID LSSC-085  
 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
( )	VOCs (Std. list)	( )
( )	VOCs (Exp. list)	( )
( )	SVOCs	( )
( )	PCBs (Total)	( )
( X )	PCBs (Dissolved)	( X )
( )	Metals/Inorg. (Total)	( )
( )	Metals/Inorg. (Dissolved)	( )
( )	PCDDs/PCDFs	( )
( )	Pest/Herb	( )
( )	Natural Attenuation	( )
( )	Other (Specify)	( )

EVACUATION INFORMATION

Pump Start Time 15:08  
 Pump Stop Time 16:42  
 Minutes of Pumping 94  
 Volume of water removed 2.35 gal  
 Did well go dry? Y  N

Evacuation Method: Baker ( ) Bladder Pump ( X )  
 Peristaltic Pump ( ) Submersible Pump ( ) Other/Specify ( )  
 Pump Type MARSHALL SYSTEM 1  
 Samples collected by same method as evacuation?  Y  N (Specify)

Water Quality Meter Type(s) / Serial Numbers HACH TURBIDIMETER 02100028329  
YSZ 556 03C1461

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%]*	ORP (mV) [10 mV]*
16:11	0.100	1.5080	11.05	9.07	6.50	1.277	2	5.18	-266.1
16:15	0.100	1.6138	11.02	9.08	6.51	1.283	2	4.91	-266.8
16:19	0.100	1.7196	11.07	9.08	6.51	1.287	1	4.70	-268.6
16:23	0.100	1.8254	11.07	9.06	6.50	1.291	2	4.44	-270.3
16:27	0.100	1.9312	11.05	9.04	6.50	1.294	1	4.28	-270.5
16:30	0.100	2.0370	11.05	9.04	6.51	1.294	1	4.26	-269.0
16:33	0.100	2.0900	11.05	9.00	6.51	1.294	2	4.36	-262.1

\* 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: slightly yellow, clear, odorless  
Final purge: Slightly yellow, clear, no odor

SAMPLE DESTINATION

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

Field Sampling Coordinator: \_\_\_\_\_



GROUNDWATER SAMPLING FIELD LOG

Well No. LSSC-165  
 Key No. -  
 PID Background (ppm) 0  
 Well Headspace (ppm) 0

Site/GMA Name LYMAN - GMAI  
 Sampling Personnel KLBJAP  
 Date 4/9/04  
 Weather 50°, CLOUDY

WELL INFORMATION

Reference Point Marked? (Y) N  
 Height of Reference Point -0.20 Meas. From BGS  
 Well Diameter 2"  
 Screen interval Depth 5'-15' Meas. From BGS  
 Water Table Depth 7.86' Meas. From TIC  
 Well Depth 14.72' Meas. From TIC  
 Length of Water Column 6.86'  
 Volume of Water in Well 1.12 gal  
 Intake Depth of pump/tubing 11.5' Meas. From TIC

Sample Time 10:42  
 Sample ID LSSC-165  
 Duplicate ID DUP-3  
 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
( )	VOCs (Std. list)	( )
(X)	VOCs (Exp. list)	(X)
( )	SVOCs	( )
( )	PCBs (Total)	( )
( )	PCBs (Dissolved)	( )
( )	Metals/Inorg. (Total)	( )
( )	Metals/Inorg. (Dissolved)	( )
( )	PCDDs/PCDFs	( )
( )	Pest/Herb	( )
( )	Natural Attenuation	( )
( )	Other (Specify)	( )

EVACUATION INFORMATION

Pump Start Time 8:45 8:48  
 Pump Stop Time 10:50  
 Minutes of Pumping 122 min  
 Volume of water removed 3.0 gal  
 Did well go dry? Y (N)

Evacuation Method: Bailer ( ) Bladder Pump (X)  
 Peristaltic Pump ( ) Submersible Pump ( ) Other Specify ( )  
 Pump Type MARSCHALK SYSTEM I  
 Samples collected by same method as evacuation? Y (Specify)

Water Quality Meter Type(s) / Serial Number: HACH TURBIDIMETER 021000028329  
YSI 550 03C1461

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%)*	ORP (mV) (10 mV)*
8:49	0.150	-	7.86	-	-	-	153	-	-
8:54	0.100	0.1323	7.86	-	-	-	157	-	-
8:59	0.100	0.2646	7.86	-	-	-	102	-	-
9:04	0.100	0.3969	7.86	-	-	-	95	-	-
9:09	0.100	0.5292	7.86	-	-	-	78	-	-
9:14	0.100	0.6615	7.86	-	-	-	61	-	-
9:19	0.100	0.7938	7.86	-	-	-	47	-	-
9:24	0.100	0.9261	7.86	-	-	-	41	-	-
9:34	0.100	1.0584	7.86	10.64	6.54	2.091	41	4.90	-316.9
9:39	0.100	1.1907	7.86	10.72	6.58	2.055	30	4.11	-311.8
9:44	0.100	1.3230	7.86	10.53	6.60	2.077	26	3.64	-308.2
9:59	0.100	1.4553	7.86	10.81	6.62	1.974	25	3.29	-307.0

\* 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 - TURBID, CLOUDY, GREY-BROWN IN COLOR, ADDRESS

SAMPLE DESTINATION

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

Field Sampling Coordinator: \_\_\_\_\_

**GROUNDWATER SAMPLING FIELD LOG**

Well No. LSSC-16S  
 Key No. \_\_\_\_\_  
 PID Background (ppm) 0  
 Well Headspace (ppm) 0

Site/GMA Name LYMAN-GMA1  
 Sampling Personnel KLB/JAP  
 Date 4/9/04  
 Weather 50° cloudy

**WELL INFORMATION**

Reference Point Marked? (Y) N  
 Height of Reference Point -0.20 Meas. From BGS  
 Well Diameter 2"  
 Screen Interval Depth 5'-15' Meas. From BGS  
 Water Table Depth 7.86' Meas. From TIC  
 Well Depth 14.72' Meas. From TIC  
 Length of Water Column 6.86'  
 Volume of Water in Well 1.12 gal  
 Intake Depth of pump/tubing 11.5' Meas. From TIC

Sample Time 10:42  
 Sample ID LSSC-16S  
 Duplicate ID DUP-3  
 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
( )	VOCs (Std. list)	( )
(X)	VOCs (Exp. list)	(X)
( )	SVOCs	( )
( )	PCBs (Total)	( )
( )	PCBs (Dissolved)	( )
( )	Metals/Inorg. (Total)	( )
( )	Metals/Inorg. (Dissolved)	( )
( )	PCDDs/PCDFs	( )
( )	Pest/Herb	( )
( )	Natural Attenuation	( )
( )	Other (Specify)	( )

**EVACUATION INFORMATION**

Pump Start Time 8:48  
 Pump Stop Time 10:50  
 Minutes of Pumping 122 min  
 Volume of water removed 3.0 gal  
 Did well go dry? Y (N)

Evacuation Method: Boiler ( ) Bladder Pump (X)  
 Peristaltic Pump ( ) Submersible Pump ( ) Other Specify ( )  
 Pump Type MARSHACK SYSTEM 1  
 Samples collected by same method as evacuation? (Y) (Specify)

Water Quality Meter Type(s)/ Serial Numbers NACH TURBIDIMETER 021000028329  
YSI 556 03C1461

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%)*	ORP (mV) (10 mV)*
9:54	0.100	1.588	7.86	10.97	6.64	1.934	23	3.02	-309.8
9:59	0.100	1.720	7.86	11.02	6.67	1.869	19	2.93	-308.5
10:04	0.100	1.852	7.86	11.00	6.67	1.831	17	2.94	-308.1
10:09	0.100	1.984	7.86	10.83	6.69	1.794	15	2.96	-306.8
10:14	0.100	2.116	7.86	10.62	6.68	1.754	15	2.85	-305.3
10:19	0.100	2.245	7.86	10.99	6.70	1.711	12	2.69	-308.3
10:24	0.100	2.377	7.86	11.41	6.73	1.673	10	2.79	-307.4
10:29	0.100	2.509	7.86	11.28	6.74	1.618	9	2.90	-304.2
10:33	0.100	2.615	7.86	11.37	6.75	1.585	8	2.90	-304.9
10:37	0.100	2.721	7.86	11.30	6.75	1.579	8	2.95	-303.4
10:41	0.100	2.827	7.86	11.26	6.74	1.565	7	2.94	-304.1

\* 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 Final purge: Clear, colorless, odorless

DUPLICATE SAMPLE COLLECTED - DUP-3

**SAMPLE DESTINATION**

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

Field Sampling Coordinator: \_\_\_\_\_

**GROUNDWATER SAMPLING FIELD LOG**

Well No. LSSC-18  
 Key No. \_\_\_\_\_  
 PID Background (ppm) 0.0  
 Well Headspace (ppm) 0.0

Site/GMA Name GMA1 / LUMMA ST AREA  
 Sampling Personnel SLL/EMF  
 Date 4/8/04  
 Weather Mostly cloudy, 45°F

**WELL INFORMATION**

Reference Point Marked? (Y) N  
 Height of Reference Point -0.24 Meas. From BGS  
 Well Diameter 2"  
 Screen Interval Depth 9-11' Meas. From BGS  
 Water Table Depth 12.80 Meas. From TIC  
 Well Depth 18.70 Meas. From TIC  
 Length of Water Column 5.90'  
 Volume of Water in Well 1.0 Gallons  
 Intake Depth of pump/tubing 15.75' Meas. From TIC

Sample Time 1620  
 Sample ID LSSC-18  
 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
( )	VOCs (Std. list)	( )
( )	VOCs (Exp. list)	( )
( )	SVOCs	( )
( )	PCBs (Total)	( )
(X)	PCBs (Dissolved)	(X)
( )	Metals/Inorg. (Total)	( )
( )	Metals/Inorg. (Dissolved)	( )
( )	PCODs/PCDFs	( )
( )	Pest/Herb	( )
( )	Natural Attenuation	( )
( )	Other (Specify)	( )

**EVACUATION INFORMATION**

Pump Start Time 1525  
 Pump Stop Time 1630  
 Minutes of Pumping 65 min  
 Volume of water removed 1.76 Gallons  
 Did well go dry? Y (N)

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

Water Quality Meter Type(s) / Serial Numbers. YSI 556 (03MO230AL) / 1740 2000 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%]*	ORP (mV) [10 mV]*
1525	0.100	0	12.80	—	—	—	1	—	—
1530	0.100	0.1	12.80	—	—	—	247	—	—
1535	0.100	0.3	12.80	—	—	—	78	—	—
1540	0.100	0.4	12.80	—	—	—	34	—	—
1545	0.100	0.5	12.80	9.80	7.30	1.161	14	11.83	125.9
1550	0.100	0.7	12.80	9.77	7.32	1.162	12	7.22	124.3
1555	0.100	0.8	12.80	9.56	7.29	1.164	9	6.32	122.7
1600	0.100	0.9	12.80	9.36	7.33	1.165	7	6.01	120.0
1605	0.100	1.1	12.80	9.18	7.34	1.166	6	5.96	117.5
1610	0.100	1.2	12.80	9.09	7.35	1.165	2	5.85	116.7
1615	0.100	1.3	12.80	9.01	7.34	1.165	2	5.82	116.9
1620	0.100	1.5	12.80	8.98	7.35	1.164	2	5.77	117.5

\* 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 PUMP WATER WAS CLEAR, COLORED, ODORLESS  
FINAL PUMP WATER WAS CLEAR, COLORLESS, ODORLESS.

**SAMPLE DESTINATION**

Laboratory: SGS ENVIRONMENTAL  
 Delivered Via: CARRIER  
 Airbill #: \_\_\_\_\_

Field Sampling Coordinator: [Signature]

**GROUNDWATER SAMPLING FIELD LOG**

Well No. LS-MW-4R  
 Key No. \_\_\_\_\_  
 PID Background (ppm) 0  
 Well Headspace (ppm) 0

Site/GMA Name LYMAN - GMA1  
 Sampling Personnel KLB/JAP  
 Date 4/9/04  
 Weather 45° Partly cloudy/sunny

**WELL INFORMATION**

Reference Point Marked? (Y) N  
 Height of Reference Point -0.4' Meas. From BGS  
 Well Diameter 2"  
 Screen Interval Depth 9-14' Meas. From BGS  
 Water Table Depth 7.94' Meas. From TIC  
 Well Depth 14.16' Meas. From TIC  
 Length of Water Column 6.22'  
 Volume of Water in Well 1.0 gal  
 Intake Depth of pump/tubing 11.5' Meas. From TIC

Sample Time 13:13  
 Sample ID LS-MW-4R  
 Duplicate ID \_\_\_\_\_  
 MS/MSD \_\_\_\_\_  
 Split Sample ID \_\_\_\_\_

Reference Point Identification:  
 TIC: Top of Inner (PVC) casing  
 TGC: Top of outer (protective) casing  
 Grader/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 checked="" type="checkbox"/>
<input type="checkbox"/>	PCBs (Total)	<input type="checkbox"/>
<input checked="" type="checkbox"/>	PCBs (Dissolved)	<input checked="" type="checkbox"/>
<input type="checkbox"/>	Metals/Inorg. (Total)	<input type="checkbox"/>
<input checked="" type="checkbox"/>	Metals/Inorg. (Dissolved)	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	PCDDs/PCDFs	<input checked="" type="checkbox"/>
<input type="checkbox"/>	Pest/Herb	<input type="checkbox"/>
<input type="checkbox"/>	Natural Attenuation	<input type="checkbox"/>
<input checked="" type="checkbox"/>	Other (Specify) <u>Cyanide - filtered sulfide</u>	<input checked="" type="checkbox"/>

**EVACUATION INFORMATION**

Pump Start Time 12:30  
 Pump Stop Time 14:00  
 Minutes of Pumping 90  
 Volume of water removed 3.0 gal  
 Did well go dry? Y (N)

Evacuation Method: Bailer ( ) Bladder Pump ( )  
 Peristaltic Pump  Submersible Pump ( ) Other Specify ( )  
 Pump Type Geopump 2 602JP  
 Samples collected by same method as evacuation? (Y) (Specify)

Water Quality Meter Type(s) / Serial Numbers HACH TURBIDIMETER 612000028329  
YSI 556 03C1461

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) (3%)*	pH (1 unit)*	Sp. Cond. (mS/cm) (3%)*	Turbidity (NTU) (10% or 1 NTU)*	DO (mg/l) (10%)*	ORP (mV) (10 mV)*
12:31	0.125	—	7.96	—	—	—	22	—	—
12:36	0.125	0.165	7.97	11.24	6.51	1.094	11	4.49	-401.6
12:41	0.125	0.330	7.97	10.90	6.44	1.108	10	6.44	-391.8
12:46	0.125	0.495	7.97	10.69	6.45	1.113	9	0.57	-346.2
12:50	0.125	0.627	7.97	10.73	6.45	1.114	7	0.50	-350.6
12:54	0.125	0.759	7.97	10.75	6.47	1.115	6	0.46	-360.3
12:58	0.125	0.891	7.97	10.84	6.47	1.115	6	0.45	-354.0
13:02	0.125	1.023	7.97	10.94	6.49	1.115	5	0.33	-359.9
13:06	0.125	1.155	7.98	10.98	6.50	1.114	4	0.37	-363.4
13:10	0.125	1.287	7.98	10.98	6.50	1.113	4	0.31	-354.7

\* 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: slightly yellow color, organic debris (orange), color  
Final purge: CLEAR, COLORLESS, ODORLESS

**SAMPLE DESTINATION**

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

Field Sampling Coordinator: \_\_\_\_\_

## GROUNDWATER SAMPLING FIELD LOG

Well No. NZSC-07S  
 Key No. EX-37  
 PID Background (ppm) 0.0  
 Well Headspace (ppm) 0.0

Site/GMA Name GMA1 / NEWELL ST. AREA II  
 Sampling Personnel SL/GAR  
 Date 4/12/04  
 Weather Mostly sunny Partly cloudy ~50°F

## WELL INFORMATION

Reference Point Marked? (Y) N  
 Height of Reference Point 0.3 Meas. From BGS  
 Well Diameter 2"  
 Screen Interval Depth 8.9-18.9 Meas. From BGS  
 Water Table Depth 10.05 Meas. From TIC  
 Well Depth 19.00 Meas. From TIC  
 Length of Water Column 8.95  
 Volume of Water in Well 1.46 Gallons  
 Intake Depth of pump/tubing 14.53 Meas. From TIC

Sample Time 1145  
 Sample ID NZSC-07S  
 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)	( A )
( )	VOCs (Exp. list)	( )
( )	SVOCs	( )
( )	PCBs (Total)	( )
( X )	PCBs (Dissolved)	( X )
( )	Metals/Inorg. (Total)	( )
( )	Metals/Inorg. (Dissolved)	( )
( )	PCDDs/PCDFs	( )
( )	Pest/Herb	( )
( )	Natural Attenuation	( )
( )	Other (Specify)	( )

## EVACUATION INFORMATION

Pump Start Time 1055  
 Pump Stop Time 1156  
 Minutes of Pumping 60 minutes  
 Volume of water removed 1.6 Gallons  
 Did well go dry? Y (N)

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

Water Quality Meter Type(s) / Serial Numbers: YSI 550 MPS (03M0230 AC) / 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%)*	ORP (mV) (10 mV)*
1055	0.100	0	10.06	---	---	---	93	---	---
1100	0.100	0.1	10.06	---	---	---	19	---	---
1105	0.100	0.3	10.05	9.79	6.80	1.013	8	13.16	-31.3
1110	0.100	0.4	10.05	9.59	6.78	1.029	8	0.84	-51.0
1115	0.100	0.5	10.05	9.37	6.80	1.035	9	0.90	-57.2
1120	0.100	0.7	10.05	9.36	6.80	1.032	8	0.92	-58.4
1125	0.100	0.8	10.05	9.37	6.81	1.033	5	0.81	-60.2
1130	0.100	0.9	10.05	9.42	6.83	1.034	4	0.77	-59.3
1135	0.100	1.1	10.05	9.42	6.83	1.034	2	0.59	-60.0
1140	0.100	1.2	10.05	9.49	6.83	1.033	1	0.68	-61.2
1145	0.100	1.3	10.05	9.39	6.83	1.034	1	0.61	-61.6

\* 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 PUMPED WATER WAS LIGHT BROWN, SLIGHTLY TURBID, OBOYLEN  
FINAL PUMPED WATER WAS CLEAR, (ODORLESS), COLORLESS

## SAMPLE DESTINATION

Laboratory: SGS ENVIRONMENTAL  
 Delivered Via: CARRIER  
 Airbill #: \_\_\_\_\_

Field Sampling Coordinator: [Signature]



## GROUNDWATER SAMPLING FIELD LOG

Well No. NS-17  
 Key No. FY-37  
 PID Background (ppm) 0  
 Well Headspace (ppm) 0

Site/GMA Name GMA1 - NEWELL ST.  
 Sampling Personnel JAP/KLR  
 Date 4/12/04  
 Weather PARTLY SUNNY, 50°

## WELL INFORMATION

Reference Point Marked?  Y  N  
 Height of Reference Point 2.5' Meas. From GROUND  
 Well Diameter 2"  
 Screen Interval Depth 6-116' Meas. From BGS  
 Water Table Depth 11.6' Meas. From TIC  
 Well Depth 18.79' Meas. From TIC  
 Length of Water Column 7.19'  
 Volume of Water in Well 1.2 gal  
 Intake Depth of pump/tubing 15' Meas. From TIC

Sample Time 12:15  
 Sample ID NS-17  
 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

## EVACUATION INFORMATION

Pump Start Time 11:10 11:12  
 Pump Stop Time 12:16  
 Minutes of Pumping 64  
 Volume of water removed 1.64 gal  
 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 03C1461HACH TURBIDIMETER 021000028329

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%]*	ORP (mV) [10 mV]*
11:12	1.00	-	11.60	-	-	-	34	-	-
11:16	0.100	0.1058	11.60	10.12	6.55	0.757	7	3.10	-379.7
11:21	0.100	0.2381	11.60	9.88	6.55	0.760	7	0.91	-386.7
11:26	0.100	0.3704	11.60	9.90	6.57	0.760	5	0.69	-388.5
11:31	0.100	0.5027	11.60	9.89	6.65	0.760	6	0.63	-387.5
11:36	0.100	0.6350	11.60	9.90	6.73	0.760	6	0.59	-384.6
11:41	0.100	0.7673	11.60	9.73	6.72	0.762	7	0.58	-388.0
11:46	0.100	0.8996	11.60	9.60	6.68	0.762	5	0.52	-384.0
11:50	0.100	1.005	11.60	9.57	6.76	0.763	6	0.49	-381.7
11:54	0.100	1.111	11.60	9.58	6.76	0.763	6	0.53	-351.4
11:58	0.100	1.217	11.60	9.69	6.73	0.763	5	0.51	-330.6
12:02	0.100	1.323	11.60	9.69	6.68	0.763	4	0.51	-367.5

\* 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: SLIGHTLY YELLOW, CLEAR, RUST PARTICLES, OBORFINAL PURGE: CLEAR, COLORLESS

## SAMPLE DESTINATION

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

Field Sampling Coordinator: 

GROUNDWATER SAMPLING FIELD LOG

Well No. NS-17  
 Key No. Fx-37  
 PID Background (ppm) 0  
 Well Headspace (ppm) 0

Site/GMA Name GMA 1 - NEWELL  
 Sampling Personnel JAP/KLB  
 Date 4/12/04  
 Weather PARTLY SUNNY, 50°

WELL INFORMATION

Reference Point Marked? (Y) N  
 Height of Reference Point 2.5' Meas. From GROUND  
 Well Diameter 2"  
 Screen Interval Depth 6-16' Meas. From BGS  
 Water Table Depth 11.60' Meas. From TIC  
 Well Depth 18.79' Meas. From TIC  
 Length of Water Column 7.19'  
 Volume of Water in Well 1.2 gal  
 Intake Depth of pump/tubing 15' Meas. From TIC

Sample Time 12:15  
 Sample ID NS-17  
 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/Inorg. (Total)	( )
( )	Metals/Inorg. (Dissolved)	( )
( )	PCODs/PCDFs	( )
( )	Pest/Herb	( )
( )	Natural Attenuation	( )
( )	Other (Specify)	( )

EVACUATION INFORMATION

Pump Start Time 11:12  
 Pump Stop Time 12:16  
 Minutes of Pumping 64  
 Volume of water removed 3P 1.64 gal  
 Did well go dry? Y (N) 1.64

Evacuation Method: Bailer ( ) Bladder Pump ( )  
 Peristaltic Pump (X) Submersible Pump ( ) Other (Specify) ( )  
 Pump type GRO PUMP 2  
 Samples collected by same method as evacuation? (Y) (Specify)

Water Quality Meter Type(s) / Serial Numbers YS1 556 03C1461

HACH TURBIDIMETER 021000028329 → DR 0.1 mg/L <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%)*	ORP (mV) (10 mV)*
12:06	0.100	1.429	11.60	9.68	6.67	0.763	4	0.42	-364.1
12:10	0.100	1.535	11.60	9.65	6.63	0.763	4	0.42	-360.5
12:13	0.100	1.614	11.60	9.67	6.69	0.763	4	0.40	-364.4

\* 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 FIELD LOG**

Well No. GMA1-6  
 Key No. \_\_\_\_\_  
 PID Background (ppm) 0.0  
 Well Headspace (ppm) 0.0

Site/GMA Name GMA1 / EAST ST. AREA 1 SOUTH  
 Sampling Personnel SL/EDL  
 Date 9/14/04  
 Weather \_\_\_\_\_

**WELL INFORMATION**

Reference Point Marked? (Y) N  
 Height of Reference Point -0.42' Meas. From BGS  
 Well Diameter 2"  
 Screen Interval Depth 5-15' Meas. From BGS  
 Water Table Depth 7.49' Meas. From TIC  
 Well Depth 15.18' Meas. From TIC  
 Length of Water Column 7.69'  
 Volume of Water in Well 1.3 gallons  
 Intake Depth of pump/tubing 11.34' Meas. From TIC

Sample Time 1435  
 Sample ID GMA1-6  
 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
( )	VOCs (Std. list)	( )
( X )	VOCs (Exp.list)	( X )
( )	SVOCs	( )
( )	PCBs (Total)	( )
( X )	PCBs (Dissolved)	( X )
( )	Metals/Inorg. (Total)	( )
( )	Metals/Inorg. (Dissolved)	( )
( )	PCDDs/PCDFs	( )
( )	Pest/Herb	( )
( )	Natural Attenuation	( )
( )	Other (Specify)	( )

**EVACUATION INFORMATION**

Pump Start Time 1320  
 Pump Stop Time 1445  
 Minutes of Pumping 85  
 Volume of water removed 2.2 gallons  
 Did well go dry? Y (N)

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

Water Quality Meter Type(s) / Serial Numbers: YSI 556 (03M0230 AC) / 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%]*	ORP (mV) [10 mV]*
1320	0.100	0	7.58	—	—	—	201	—	—
1325	0.100	0.1	7.62	—	—	—	192	—	—
1330	0.100	0.2	7.64	—	—	—	209	—	—
1335	0.100	0.4	7.69	—	—	—	183	—	—
1340	0.100	0.5	7.72	—	—	—	144	—	—
1345	0.100	0.7	7.72	—	—	—	101	—	—
1350	0.100	0.8	7.75	—	—	—	53	—	—
1355	0.100	0.9	7.78	—	—	—	30	—	—
1400	0.100	1.1	7.90	10.53	6.67	1.578	21	0.96	-57.3
1405	0.100	1.2	7.90	10.62	6.71	1.523	12	0.34	-60.0
1410	0.100	1.3	7.90	10.69	6.68	1.524	8	0.30	-63.6
1415	0.100	1.5	7.90	10.86	6.74	1.524	7	0.26	-66.5

\* 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 PUMP WATER WAS ORANGE BROWN, TURBID, SLIGHT ODOR  
FINAL PUMP WATER WAS CLEAR, COLORLESS, SLIGHT ODOR

**SAMPLE DESTINATION**

Laboratory: SES ENVIRONMENTAL  
 Delivered Via: CARRIER  
 Airbill #: \_\_\_\_\_

Field Sampling Coordinator: [Signature]



**GROUNDWATER SAMPLING FIELD LOG**

Well No. GMA 1-6  
 Key No. \_\_\_\_\_  
 PID Background (ppm) 0.1  
 Well Headspace (ppm) \_\_\_\_\_

Site/GMA Name GMA1 / EAST ST. AREA 1 SOUTH  
 Sampling Personnel SL / EMT  
 Date 4/19/04  
 Weather Partly cloudy ~50°F

**WELL INFORMATION**

Reference Point Marked? Y N  
 Height of Reference Point \_\_\_\_\_ Meas. From \_\_\_\_\_  
 Well Diameter \_\_\_\_\_  
 Screen Interval Depth \_\_\_\_\_ Meas. From \_\_\_\_\_  
 Water Table Depth \_\_\_\_\_ Meas. From \_\_\_\_\_  
 Well Depth \_\_\_\_\_ Meas. From \_\_\_\_\_  
 Length of Water Column \_\_\_\_\_  
 Volume of Water in Well \_\_\_\_\_  
 Intake Depth of pump/tubing \_\_\_\_\_ Meas. From \_\_\_\_\_

Sample Time 1  
 Sample ID \_\_\_\_\_  
 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

*SEEPAGE 1*

Required	Analytical Parameters:	Collected
( )	VOCs (Std. list)	( )
( )	VOCs (Exp. list)	( )
( )	SVOCs	( )
( )	PCBs (Total)	( )
( )	PCBs (Dissolved)	( )
( )	Metals/Inorg. (Total)	( )
( )	Metals/Inorg. (Dissolved)	( )
( )	PCODs/PCDFs	( )
( )	Pest/Herb	( )
( )	Natural Attenuation	( )
( )	Other (Specify)	( )

**EVACUATION INFORMATION**

Pump Start Time \_\_\_\_\_  
 Pump Stop Time \_\_\_\_\_  
 Minutes of Pumping \_\_\_\_\_  
 Volume of water removed \_\_\_\_\_  
 Did well go dry? Y N

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

Water Quality Meter Type(s) / Serial Numbers: \_\_\_\_\_

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) (3%)*	pH (0.1 units) (0.76)*	Sp. Cond. (mS/cm) (3%)*	Turbidity (NTU) (10% or 1 NTU)*	DO (mg/l) (10%)*	ORP (mV) (10 mV)*
1420	0.100	1.6	7.80	11.13	6.76	1.530	5	0.21	-69.6
1425	0.100	1.7	7.80	11.23	6.71	1.520	4	0.21	-70.6
1430	0.100	1.8	7.80	11.17	6.76	1.520	4	0.19	-73.0
1435	0.100	2.0	7.80	11.29	6.77	1.524	4	0.17	-74.9

\* 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 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**SAMPLE DESTINATION**

Laboratory: SGS ENVIRONMENTAL  
 Delivered Via: COURIER  
 Airbill #: \_\_\_\_\_

Field Sampling Coordinator: [Signature]

## *Appendix B*

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# **Groundwater Analytical Results**

**TABLE B-1  
SPRING 2004 GROUNDWATER ANALYTICAL RESULTS**

**GROUNDWATER QUALITY INTERIM REPORT FOR SPRING 2004  
GROUNDWATER MANAGEMENT AREA 1  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
(Results are presented in parts per million, ppm)**

Parameter	Site ID:	30s Complex		East St. Area 1 - North	East St. Area 1 - South	East St. Area 2 - North
	Sample ID: Date Collected:	RF-02 04/06/04	RF-16 04/07/04	ESA1N-52 04/09/04	GMA1-6 04/09/04	ES1-05 04/06/04
<b>Volatile Organics</b>						
1,1,1,2-Tetrachloroethane		NA	NA	NA	ND(0.0050)	NA
1,1,1-Trichloroethane		NA	NA	NA	ND(0.0050)	NA
1,1,2,2-Tetrachloroethane		NA	NA	NA	ND(0.0050)	NA
1,1,2-Trichloroethane		NA	NA	NA	ND(0.0050)	NA
1,1-Dichloroethane		NA	NA	NA	ND(0.0050)	NA
1,1-Dichloroethene		NA	NA	NA	ND(0.0010)	NA
1,2,3-Trichloropropane		NA	NA	NA	ND(0.0050)	NA
1,2-Dibromo-3-chloropropane		NA	NA	NA	ND(0.0050)	NA
1,2-Dibromoethane		NA	NA	NA	ND(0.0010)	NA
1,2-Dichloroethane		NA	NA	NA	ND(0.0050)	NA
1,2-Dichloropropane		NA	NA	NA	ND(0.0050)	NA
1,4-Dioxane		NA	NA	NA	ND(0.20) J	NA
2-Butanone		NA	NA	NA	ND(0.010) J	NA
2-Chloro-1,3-butadiene		NA	NA	NA	ND(0.0050)	NA
2-Chloroethylvinylether		NA	NA	NA	ND(0.0050)	NA
2-Hexanone		NA	NA	NA	ND(0.010) J	NA
3-Chloropropene		NA	NA	NA	ND(0.0050)	NA
4-Methyl-2-pentanone		NA	NA	NA	ND(0.010)	NA
Acetone		NA	NA	NA	ND(0.010) J	NA
Acetonitrile		NA	NA	NA	ND(0.10) J	NA
Acrolein		NA	NA	NA	ND(0.10) J	NA
Acrylonitrile		NA	NA	NA	ND(0.0050)	NA
Benzene		NA	NA	NA	ND(0.0050)	NA
Bromodichloromethane		NA	NA	NA	ND(0.0050)	NA
Bromoform		NA	NA	NA	ND(0.0050)	NA
Bromomethane		NA	NA	NA	ND(0.0020)	NA
Carbon Disulfide		NA	NA	NA	ND(0.0050)	NA
Carbon Tetrachloride		NA	NA	NA	ND(0.0050)	NA
Chlorobenzene		NA	NA	NA	ND(0.0050)	NA
Chloroethane		NA	NA	NA	ND(0.0050)	NA
Chloroform		NA	NA	NA	ND(0.0050)	NA
Chloromethane		NA	NA	NA	ND(0.0050)	NA
cis-1,3-Dichloropropene		NA	NA	NA	ND(0.0050)	NA
Dibromochloromethane		NA	NA	NA	ND(0.0050)	NA
Dibromomethane		NA	NA	NA	ND(0.0050)	NA
Dichlorodifluoromethane		NA	NA	NA	ND(0.0050) J	NA
Ethyl Methacrylate		NA	NA	NA	ND(0.0050)	NA
Ethylbenzene		NA	NA	NA	ND(0.0050)	NA
Iodomethane		NA	NA	NA	ND(0.0050)	NA
Isobutanol		NA	NA	NA	ND(0.10) J	NA
Methacrylonitrile		NA	NA	NA	ND(0.0050)	NA
Methyl Methacrylate		NA	NA	NA	ND(0.0050)	NA
Methylene Chloride		NA	NA	NA	ND(0.0050)	NA
Propionitrile		NA	NA	NA	ND(0.010) J	NA
Styrene		NA	NA	NA	ND(0.0050)	NA
Tetrachloroethene		NA	NA	NA	ND(0.0020)	NA
Toluene		NA	NA	NA	ND(0.0050)	NA
trans-1,2-Dichloroethene		NA	NA	NA	ND(0.0050)	NA
trans-1,3-Dichloropropene		NA	NA	NA	ND(0.0050)	NA
trans-1,4-Dichloro-2-butene		NA	NA	NA	ND(0.0050)	NA
Trichloroethene		NA	NA	NA	ND(0.0050)	NA
Trichlorofluoromethane		NA	NA	NA	ND(0.0050) J	NA
Vinyl Acetate		NA	NA	NA	ND(0.0050)	NA
Vinyl Chloride		NA	NA	NA	ND(0.0020)	NA
Xylenes (total)		NA	NA	NA	ND(0.010)	NA
Total VOCs		NA	NA	NA	ND(0.20)	NA

**TABLE B-1  
SPRING 2004 GROUNDWATER ANALYTICAL RESULTS**

**GROUNDWATER QUALITY INTERIM REPORT FOR SPRING 2004  
GROUNDWATER MANAGEMENT AREA 1  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
(Results are presented in parts per million, ppm)**

Parameter	Site ID:	30s Complex		East St. Area 1 - North	East St. Area 1 - South	East St. Area 2 - North
	Sample ID: Date Collected:	RF-02 04/06/04	RF-16 04/07/04	ESA1N-52 04/09/04	GMA1-6 04/09/04	ES1-05 04/06/04
<b>PCBs-Filtered</b>						
Aroclor-1016		ND(0.000065)	NA	ND(0.000065)	ND(0.000065)	ND(0.000065) [ND(0.000065)]
Aroclor-1221		ND(0.000065)	NA	ND(0.000065)	ND(0.000065)	ND(0.000065) [ND(0.000065)]
Aroclor-1232		ND(0.000065)	NA	ND(0.000065)	ND(0.000065)	ND(0.000065) [ND(0.000065)]
Aroclor-1242		ND(0.000065)	NA	ND(0.000065)	ND(0.000065)	ND(0.000065) [ND(0.000065)]
Aroclor-1248		ND(0.000065)	NA	ND(0.000065)	ND(0.000065)	ND(0.000065) [ND(0.000065)]
Aroclor-1254		0.000021 J	NA	ND(0.000065)	ND(0.000065)	0.00034 [0.00028]
Aroclor-1260		ND(0.000065)	NA	ND(0.000065)	ND(0.000065)	ND(0.000065) [ND(0.000065)]
Total PCBs		0.000021 J	NA	ND(0.000065)	ND(0.000065)	0.00034 [0.00028]
<b>Semivolatle Organics</b>						
1,2,4,5-Tetrachlorobenzene		NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene		NA	NA	NA	ND(0.0050)	NA
1,2-Dichlorobenzene		NA	NA	NA	ND(0.0050)	NA
1,2-Diphenylhydrazine		NA	NA	NA	NA	NA
1,3,5-Trinitrobenzene		NA	NA	NA	NA	NA
1,3-Dichlorobenzene		NA	NA	NA	ND(0.0050)	NA
1,3-Dinitrobenzene		NA	NA	NA	NA	NA
1,4-Dichlorobenzene		NA	NA	NA	ND(0.0050)	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	NA	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-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

**TABLE B-1  
SPRING 2004 GROUNDWATER ANALYTICAL RESULTS**

**GROUNDWATER QUALITY INTERIM REPORT FOR SPRING 2004  
GROUNDWATER MANAGEMENT AREA 1  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
(Results are presented in parts per million, ppm)**

Parameter	Site ID:	30s Complex		East St. Area 1 - North	East St. Area 1 - South	East St. Area 2 - North
	Sample ID: Date Collected:	RF-02 04/06/04	RF-16 04/07/04	ESA1N-52 04/09/04	GMA1-6 04/09/04	ES1-05 04/06/04
<b>Semivolatile Organics (continued)</b>						
Aniline		NA	NA	NA	NA	NA
Anthracene		NA	NA	NA	NA	NA
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	ND(0.0050)	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

**TABLE B-1  
SPRING 2004 GROUNDWATER ANALYTICAL RESULTS**

**GROUNDWATER QUALITY INTERIM REPORT FOR SPRING 2004  
GROUNDWATER MANAGEMENT AREA 1  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
(Results are presented in parts per million, ppm)**

Parameter	Site ID:	30s Complex		East St. Area 1 - North	East St. Area 1 - South	East St. Area 2 - North
	Sample ID: Date Collected:	RF-02 04/06/04	RF-16 04/07/04	ESA1N-52 04/09/04	GMA1-6 04/09/04	ES1-05 04/06/04
<b>Semivolatile Organics (continued)</b>						
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
<b>Furans</b>						
2,3,7,8-TCDF		NA	NA	NA	NA	NA
TCDFs (total)		NA	NA	NA	NA	NA
1,2,3,7,8-PeCDF		NA	NA	NA	NA	NA
2,3,4,7,8-PeCDF		NA	NA	NA	NA	NA
PeCDFs (total)		NA	NA	NA	NA	NA
1,2,3,4,7,8-HxCDF		NA	NA	NA	NA	NA
1,2,3,6,7,8-HxCDF		NA	NA	NA	NA	NA
1,2,3,7,8,9-HxCDF		NA	NA	NA	NA	NA
2,3,4,6,7,8-HxCDF		NA	NA	NA	NA	NA
HxCDFs (total)		NA	NA	NA	NA	NA
1,2,3,4,6,7,8-HpCDF		NA	NA	NA	NA	NA
1,2,3,4,7,8,9-HpCDF		NA	NA	NA	NA	NA
HpCDFs (total)		NA	NA	NA	NA	NA
OCDF		NA	NA	NA	NA	NA
<b>Dioxins</b>						
2,3,7,8-TCDD		NA	NA	NA	NA	NA
TCDDs (total)		NA	NA	NA	NA	NA
1,2,3,7,8-PeCDD		NA	NA	NA	NA	NA
PeCDDs (total)		NA	NA	NA	NA	NA
1,2,3,4,7,8-HxCDD		NA	NA	NA	NA	NA
1,2,3,6,7,8-HxCDD		NA	NA	NA	NA	NA
1,2,3,7,8,9-HxCDD		NA	NA	NA	NA	NA
HxCDDs (total)		NA	NA	NA	NA	NA
1,2,3,4,6,7,8-HpCDD		NA	NA	NA	NA	NA
HpCDDs (total)		NA	NA	NA	NA	NA
OCDD		NA	NA	NA	NA	NA
Total TEQs (WHO TEFs)		NA	NA	NA	NA	NA
<b>Inorganics-Unfiltered</b>						
Sulfide		NA	NA	NA	NA	NA
<b>Inorganics-Filtered</b>						
Antimony		NA	NA	NA	NA	NA
Arsenic		NA	NA	NA	NA	NA
Barium		NA	NA	NA	NA	NA
Beryllium		NA	NA	NA	NA	NA
Cadmium		NA	NA	NA	NA	NA
Chromium		NA	NA	NA	NA	NA
Cobalt		NA	NA	NA	NA	NA
Copper		NA	NA	NA	NA	NA
Cyanide		NA	ND(0.0100) [ND(0.0100)]	NA	NA	NA
Lead		NA	NA	NA	NA	NA
Mercury		NA	NA	NA	NA	NA
Nickel		NA	NA	NA	NA	NA
Selenium		NA	NA	NA	NA	NA
Silver		NA	NA	NA	NA	NA
Thallium		NA	NA	NA	NA	NA
Tin		NA	NA	NA	NA	NA
Vanadium		NA	NA	NA	NA	NA
Zinc		NA	NA	NA	NA	NA

**TABLE B-1  
SPRING 2004 GROUNDWATER ANALYTICAL RESULTS**

**GROUNDWATER QUALITY INTERIM REPORT FOR SPRING 2004  
GROUNDWATER MANAGEMENT AREA 1  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
(Results are presented in parts per million, ppm)**

Parameter	Site ID:	East St. Area 2 - North		East St. Area 2 - South			
	Sample ID: Date Collected:	ES1-27R 04/06/04	GMA1-4 04/06/04	E2SC-23 04/07/04	E2SC-24 05/03/04	ES2-02A 04/07/04	ESA2S-52 04/07/04
<b>Volatiles Organics</b>							
1,1,1,2-Tetrachloroethane		NA	ND(0.0050)	NA	NA	NA	NA
1,1,1-Trichloroethane		NA	ND(0.0050)	NA	NA	NA	NA
1,1,2,2-Tetrachloroethane		NA	ND(0.0050)	NA	NA	NA	NA
1,1,2-Trichloroethane		NA	ND(0.0050)	NA	NA	NA	NA
1,1-Dichloroethane		NA	ND(0.0050)	NA	NA	NA	NA
1,1-Dichloroethene		NA	ND(0.0010)	NA	NA	NA	NA
1,2,3-Trichloropropane		NA	ND(0.0050)	NA	NA	NA	NA
1,2-Dibromo-3-chloropropane		NA	ND(0.0050)	NA	NA	NA	NA
1,2-Dibromoethane		NA	ND(0.0010)	NA	NA	NA	NA
1,2-Dichloroethane		NA	ND(0.0050)	NA	NA	NA	NA
1,2-Dichloropropane		NA	ND(0.0050)	NA	NA	NA	NA
1,4-Dioxane		NA	ND(0.20) J	NA	NA	NA	NA
2-Butanone		NA	ND(0.010) J	NA	NA	NA	NA
2-Chloro-1,3-butadiene		NA	ND(0.0050)	NA	NA	NA	NA
2-Chloroethylvinylether		NA	ND(0.0050)	NA	NA	NA	NA
2-Hexanone		NA	ND(0.010) J	NA	NA	NA	NA
3-Chloropropene		NA	ND(0.0050)	NA	NA	NA	NA
4-Methyl-2-pentanone		NA	ND(0.010)	NA	NA	NA	NA
Acetone		NA	ND(0.010) J	NA	NA	NA	NA
Acetonitrile		NA	ND(0.10) J	NA	NA	NA	NA
Acrolein		NA	ND(0.10) J	NA	NA	NA	NA
Acrylonitrile		NA	ND(0.0050)	NA	NA	NA	NA
Benzene		NA	ND(0.0050)	NA	NA	NA	NA
Bromodichloromethane		NA	ND(0.0050)	NA	NA	NA	NA
Bromoform		NA	ND(0.0050)	NA	NA	NA	NA
Bromomethane		NA	ND(0.0020)	NA	NA	NA	NA
Carbon Disulfide		NA	ND(0.0050)	NA	NA	NA	NA
Carbon Tetrachloride		NA	ND(0.0050)	NA	NA	NA	NA
Chlorobenzene		NA	ND(0.0050)	NA	NA	NA	NA
Chloroethane		NA	ND(0.0050)	NA	NA	NA	NA
Chloroform		NA	0.0057	NA	NA	NA	NA
Chloromethane		NA	ND(0.0050)	NA	NA	NA	NA
cis-1,3-Dichloropropene		NA	ND(0.0050)	NA	NA	NA	NA
Dibromochloromethane		NA	ND(0.0050)	NA	NA	NA	NA
Dibromomethane		NA	ND(0.0050)	NA	NA	NA	NA
Dichlorodifluoromethane		NA	ND(0.0050)	NA	NA	NA	NA
Ethyl Methacrylate		NA	ND(0.0050)	NA	NA	NA	NA
Ethylbenzene		NA	ND(0.0050)	NA	NA	NA	NA
Iodomethane		NA	ND(0.0050)	NA	NA	NA	NA
Isobutanol		NA	ND(0.10) J	NA	NA	NA	NA
Methacrylonitrile		NA	ND(0.0050)	NA	NA	NA	NA
Methyl Methacrylate		NA	ND(0.0050)	NA	NA	NA	NA
Methylene Chloride		NA	ND(0.0050)	NA	NA	NA	NA
Propionitrile		NA	ND(0.010) J	NA	NA	NA	NA
Styrene		NA	ND(0.0050)	NA	NA	NA	NA
Tetrachloroethene		NA	ND(0.0020)	NA	NA	NA	NA
Toluene		NA	ND(0.0050)	NA	NA	NA	NA
trans-1,2-Dichloroethene		NA	ND(0.0050)	NA	NA	NA	NA
trans-1,3-Dichloropropene		NA	ND(0.0050)	NA	NA	NA	NA
trans-1,4-Dichloro-2-butene		NA	ND(0.0050)	NA	NA	NA	NA
Trichloroethene		NA	ND(0.0050)	NA	NA	NA	NA
Trichlorofluoromethane		NA	ND(0.0050)	NA	NA	NA	NA
Vinyl Acetate		NA	ND(0.0050)	NA	NA	NA	NA
Vinyl Chloride		NA	ND(0.0020)	NA	NA	NA	NA
Xylenes (total)		NA	ND(0.010)	NA	NA	NA	NA
Total VOCs		NA	0.0057	NA	NA	NA	NA

**TABLE B-1  
SPRING 2004 GROUNDWATER ANALYTICAL RESULTS**

**GROUNDWATER QUALITY INTERIM REPORT FOR SPRING 2004  
GROUNDWATER MANAGEMENT AREA 1  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
(Results are presented in parts per million, ppm)**

Parameter	Site ID:	East St. Area 2 - North		East St. Area 2 - South			
	Sample ID: Date Collected:	ES1-27R 04/06/04	GMA1-4 04/06/04	E2SC-23 04/07/04	E2SC-24 05/03/04	ES2-02A 04/07/04	ESA2S-52 04/07/04
<b>PCBs-Filtered</b>							
Aroclor-1016		ND(0.000065)	NA	ND(0.00025)	ND(0.000065)	NA	NA
Aroclor-1221		ND(0.000065)	NA	ND(0.00025)	ND(0.000065)	NA	NA
Aroclor-1232		ND(0.000065)	NA	ND(0.00025)	ND(0.000065)	NA	NA
Aroclor-1242		ND(0.000065)	NA	ND(0.00025)	ND(0.000065)	NA	NA
Aroclor-1248		ND(0.000065)	NA	ND(0.00025)	ND(0.000065)	NA	NA
Aroclor-1254		0.0019	NA	0.0056	ND(0.000065)	NA	NA
Aroclor-1260		0.00036	NA	0.0047	ND(0.000065)	NA	NA
Total PCBs		0.00226	NA	0.0103	ND(0.000065)	NA	NA
<b>Semivolatile Organics</b>							
1,2,4,5-Tetrachlorobenzene		NA	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene		NA	ND(0.0050)	NA	NA	NA	NA
1,2-Dichlorobenzene		NA	ND(0.0050)	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	ND(0.0050)	NA	NA	NA	NA
1,3-Dinitrobenzene		NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene		NA	ND(0.0050)	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	NA	NA	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-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



**TABLE B-1  
SPRING 2004 GROUNDWATER ANALYTICAL RESULTS**

**GROUNDWATER QUALITY INTERIM REPORT FOR SPRING 2004  
GROUNDWATER MANAGEMENT AREA 1  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
(Results are presented in parts per million, ppm)**

Parameter	Site ID:	East St. Area 2 - North		East St. Area 2 - South			
	Sample ID: Date Collected:	ES1-27R 04/06/04	GMA1-4 04/06/04	E2SC-23 04/07/04	E2SC-24 05/03/04	ES2-02A 04/07/04	ESA2S-52 04/07/04
<b>Semivolatile Organics (continued)</b>							
Aniline		NA	NA	NA	NA	NA	NA
Anthracene		NA	NA	NA	NA	NA	NA
Aramite		NA	NA	NA	NA	NA	NA
Benzidine		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
Diallyl		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	ND(0.0050)	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

**TABLE B-1  
 SPRING 2004 GROUNDWATER ANALYTICAL RESULTS**

**GROUNDWATER QUALITY INTERIM REPORT FOR SPRING 2004  
 GROUNDWATER MANAGEMENT AREA 1  
 GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
 (Results are presented in parts per million, ppm)**

Parameter	Site ID:	East St. Area 2 - North		East St. Area 2 - South			
	Sample ID: Date Collected:	ES1-27R 04/06/04	GMA1-4 04/06/04	E2SC-23 04/07/04	E2SC-24 05/03/04	ES2-02A 04/07/04	ESA2S-52 04/07/04
<b>Semivolatile Organics (continued)</b>							
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
<b>Furans</b>							
2,3,7,8-TCDF		NA	NA	NA	NA	NA	NA
TCDFs (total)		NA	NA	NA	NA	NA	NA
1,2,3,7,8-PeCDF		NA	NA	NA	NA	NA	NA
2,3,4,7,8-PeCDF		NA	NA	NA	NA	NA	NA
PeCDFs (total)		NA	NA	NA	NA	NA	NA
1,2,3,4,7,8-HxCDF		NA	NA	NA	NA	NA	NA
1,2,3,6,7,8-HxCDF		NA	NA	NA	NA	NA	NA
1,2,3,7,8,9-HxCDF		NA	NA	NA	NA	NA	NA
2,3,4,6,7,8-HxCDF		NA	NA	NA	NA	NA	NA
HxCDFs (total)		NA	NA	NA	NA	NA	NA
1,2,3,4,6,7,8-HpCDF		NA	NA	NA	NA	NA	NA
1,2,3,4,7,8,9-HpCDF		NA	NA	NA	NA	NA	NA
HpCDFs (total)		NA	NA	NA	NA	NA	NA
OCDF		NA	NA	NA	NA	NA	NA
<b>Dioxins</b>							
2,3,7,8-TCDD		NA	NA	NA	NA	NA	NA
TCDDs (total)		NA	NA	NA	NA	NA	NA
1,2,3,7,8-PeCDD		NA	NA	NA	NA	NA	NA
PeCDDs (total)		NA	NA	NA	NA	NA	NA
1,2,3,4,7,8-HxCDD		NA	NA	NA	NA	NA	NA
1,2,3,6,7,8-HxCDD		NA	NA	NA	NA	NA	NA
1,2,3,7,8,9-HxCDD		NA	NA	NA	NA	NA	NA
HxCDDs (total)		NA	NA	NA	NA	NA	NA
1,2,3,4,6,7,8-HpCDD		NA	NA	NA	NA	NA	NA
HpCDDs (total)		NA	NA	NA	NA	NA	NA
OCDD		NA	NA	NA	NA	NA	NA
Total TEQs (WHO TEFs)		NA	NA	NA	NA	NA	NA
<b>Inorganics-Unfiltered</b>							
Sulfide		NA	NA	NA	NA	NA	NA
<b>Inorganics-Filtered</b>							
Antimony		NA	NA	NA	NA	NA	NA
Arsenic		NA	NA	NA	NA	NA	NA
Barium		NA	NA	NA	NA	NA	NA
Beryllium		NA	NA	NA	NA	NA	NA
Cadmium		NA	NA	NA	NA	NA	NA
Chromium		NA	NA	NA	NA	NA	NA
Cobalt		NA	NA	NA	NA	NA	NA
Copper		NA	NA	NA	NA	NA	NA
Cyanide		NA	NA	NA	NA	ND(0.0100)	0.0120
Lead		NA	NA	NA	NA	NA	NA
Mercury		NA	NA	NA	NA	NA	NA
Nickel		NA	NA	NA	NA	NA	NA
Selenium		NA	NA	NA	NA	NA	NA
Silver		NA	NA	NA	NA	NA	NA
Thallium		NA	NA	NA	NA	NA	NA
Tin		NA	NA	NA	NA	NA	NA
Vanadium		NA	NA	NA	NA	NA	NA
Zinc		NA	NA	NA	NA	NA	NA

**TABLE B-1  
 SPRING 2004 GROUNDWATER ANALYTICAL RESULTS**

**GROUNDWATER QUALITY INTERIM REPORT FOR SPRING 2004  
 GROUNDWATER MANAGEMENT AREA 1  
 GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
 (Results are presented in parts per million, ppm)**

Parameter	Site ID:	East St. Area 2 - South			Lyman Street Area		
	Sample ID: Date Collected:	GMA1-13 04/07/04	HR-G1-MW-3 04/08/04	HR-G3-MW-1 04/08/04	LS-29 04/08/04	LS-MW-4R 04/09/04	LSSC-08S 04/08/04
<b>Volatile Organics</b>							
1,1,1,2-Tetrachloroethane		NA	NA	NA	NA	ND(0.0050)	NA
1,1,1-Trichloroethane		NA	NA	NA	NA	ND(0.0050)	NA
1,1,2,2-Tetrachloroethane		NA	NA	NA	NA	ND(0.0050)	NA
1,1,2-Trichloroethane		NA	NA	NA	NA	ND(0.0050)	NA
1,1-Dichloroethane		NA	NA	NA	NA	ND(0.0050)	NA
1,1-Dichloroethene		NA	NA	NA	NA	ND(0.0010)	NA
1,2,3-Trichloropropane		NA	NA	NA	NA	ND(0.0050)	NA
1,2-Dibromo-3-chloropropane		NA	NA	NA	NA	ND(0.0050)	NA
1,2-Dibromoethane		NA	NA	NA	NA	ND(0.0010)	NA
1,2-Dichloroethane		NA	NA	NA	NA	ND(0.0050)	NA
1,2-Dichloropropane		NA	NA	NA	NA	ND(0.0050)	NA
1,4-Dioxane		NA	NA	NA	NA	ND(0.20) J	NA
2-Butanone		NA	NA	NA	NA	ND(0.010) J	NA
2-Chloro-1,3-butadiene		NA	NA	NA	NA	ND(0.0050)	NA
2-Chloroethylvinylether		NA	NA	NA	NA	ND(0.0050)	NA
2-Hexanone		NA	NA	NA	NA	ND(0.010) J	NA
3-Chloropropene		NA	NA	NA	NA	ND(0.0050)	NA
4-Methyl-2-pentanone		NA	NA	NA	NA	ND(0.010)	NA
Acetone		NA	NA	NA	NA	ND(0.010) J	NA
Acetonitrile		NA	NA	NA	NA	ND(0.10) J	NA
Acrolein		NA	NA	NA	NA	ND(0.10) J	NA
Acrylonitrile		NA	NA	NA	NA	ND(0.0050)	NA
Benzene		NA	NA	NA	NA	ND(0.0050)	NA
Bromodichloromethane		NA	NA	NA	NA	ND(0.0050)	NA
Bromoform		NA	NA	NA	NA	ND(0.0050)	NA
Bromomethane		NA	NA	NA	NA	ND(0.0020)	NA
Carbon Disulfide		NA	NA	NA	NA	ND(0.0050)	NA
Carbon Tetrachloride		NA	NA	NA	NA	ND(0.0050)	NA
Chlorobenzene		NA	NA	NA	NA	ND(0.0050)	NA
Chloroethane		NA	NA	NA	NA	ND(0.0050)	NA
Chloroform		NA	NA	NA	NA	ND(0.0050)	NA
Chloromethane		NA	NA	NA	NA	ND(0.0050)	NA
cis-1,3-Dichloropropene		NA	NA	NA	NA	ND(0.0050)	NA
Dibromochloromethane		NA	NA	NA	NA	ND(0.0050)	NA
Dibromomethane		NA	NA	NA	NA	ND(0.0050)	NA
Dichlorodifluoromethane		NA	NA	NA	NA	ND(0.0050) J	NA
Ethyl Methacrylate		NA	NA	NA	NA	ND(0.0050)	NA
Ethylbenzene		NA	NA	NA	NA	ND(0.0050)	NA
Iodomethane		NA	NA	NA	NA	ND(0.0050)	NA
Isobutanol		NA	NA	NA	NA	ND(0.10) J	NA
Methacrylonitrile		NA	NA	NA	NA	ND(0.0050)	NA
Methyl Methacrylate		NA	NA	NA	NA	ND(0.0050)	NA
Methylene Chloride		NA	NA	NA	NA	ND(0.0050)	NA
Propionitrile		NA	NA	NA	NA	ND(0.010) J	NA
Styrene		NA	NA	NA	NA	ND(0.0050)	NA
Tetrachloroethene		NA	NA	NA	NA	ND(0.0020)	NA
Toluene		NA	NA	NA	NA	ND(0.0050)	NA
trans-1,2-Dichloroethene		NA	NA	NA	NA	ND(0.0050)	NA
trans-1,3-Dichloropropene		NA	NA	NA	NA	ND(0.0050)	NA
trans-1,4-Dichloro-2-butene		NA	NA	NA	NA	ND(0.0050)	NA
Trichloroethene		NA	NA	NA	NA	ND(0.0050)	NA
Trichlorofluoromethane		NA	NA	NA	NA	ND(0.0050) J	NA
Vinyl Acetate		NA	NA	NA	NA	ND(0.0050)	NA
Vinyl Chloride		NA	NA	NA	NA	ND(0.0020)	NA
Xylenes (total)		NA	NA	NA	NA	ND(0.010)	NA
Total VOCs		NA	NA	NA	NA	ND(0.20)	NA

**TABLE B-1  
SPRING 2004 GROUNDWATER ANALYTICAL RESULTS**

**GROUNDWATER QUALITY INTERIM REPORT FOR SPRING 2004  
GROUNDWATER MANAGEMENT AREA 1  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
(Results are presented in parts per million, ppm)**

Parameter	Site ID:	East St. Area 2 - South			Lyman Street Area		
	Sample ID: Date Collected:	GMA1-13 04/07/04	HR-G1-MW-3 04/08/04	HR-G3-MW-1 04/08/04	LS-29 04/08/04	LS-MW-4R 04/09/04	LSSC-08S 04/08/04
<b>PCBs-Filtered</b>							
Aroclor-1016		ND(0.000065)	NA	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)
Aroclor-1221		ND(0.000065)	NA	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)
Aroclor-1232		ND(0.000065)	NA	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)
Aroclor-1242		ND(0.000065)	NA	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)
Aroclor-1248		ND(0.000065)	NA	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)
Aroclor-1254		ND(0.000065)	NA	0.00016	0.000045 J	ND(0.000065)	0.00041
Aroclor-1260		ND(0.000065)	NA	0.000066	ND(0.000065)	ND(0.000065)	ND(0.000065)
Total PCBs		ND(0.000065)	NA	0.000226	0.000045 J	ND(0.000065)	0.00041
<b>Semivolatile Organics</b>							
1,2,4,5-Tetrachlorobenzene		NA	NA	NA	NA	ND(0.010) J	NA
1,2,4-Trichlorobenzene		NA	NA	NA	NA	ND(0.010) J	NA
1,2-Dichlorobenzene		NA	NA	NA	NA	ND(0.010) J	NA
1,2-Diphenylhydrazine		NA	NA	NA	NA	ND(0.010) J	NA
1,3,5-Trinitrobenzene		NA	NA	NA	NA	ND(0.010) J	NA
1,3-Dichlorobenzene		NA	NA	NA	NA	ND(0.010) J	NA
1,3-Dinitrobenzene		NA	NA	NA	NA	ND(0.010) J	NA
1,4-Dichlorobenzene		NA	NA	NA	NA	ND(0.010) J	NA
1,4-Naphthoquinone		NA	NA	NA	NA	ND(0.010) J	NA
1-Naphthylamine		NA	NA	NA	NA	ND(0.010) J	NA
2,3,4,6-Tetrachlorophenol		NA	NA	NA	NA	ND(0.010)	NA
2,4,5-Trichlorophenol		NA	NA	NA	NA	ND(0.010)	NA
2,4,6-Trichlorophenol		NA	NA	NA	NA	ND(0.010)	NA
2,4-Dichlorophenol		NA	NA	NA	NA	ND(0.010)	NA
2,4-Dimethylphenol		NA	NA	NA	NA	ND(0.010)	NA
2,4-Dinitrophenol		NA	NA	NA	NA	ND(0.050)	NA
2,4-Dinitrotoluene		NA	NA	NA	NA	ND(0.010) J	NA
2,6-Dichlorophenol		NA	NA	NA	NA	ND(0.010)	NA
2,6-Dinitrotoluene		NA	NA	NA	NA	ND(0.010) J	NA
2-Acetylaminofluorene		NA	NA	NA	NA	ND(0.010) J	NA
2-Chloronaphthalene		NA	NA	NA	NA	ND(0.010) J	NA
2-Chlorophenol		NA	NA	NA	NA	ND(0.010)	NA
2-Methylnaphthalene		NA	NA	NA	NA	ND(0.010) J	NA
2-Methylphenol		NA	NA	NA	NA	ND(0.010)	NA
2-Naphthylamine		NA	NA	NA	NA	ND(0.010) J	NA
2-Nitroaniline		NA	NA	NA	NA	ND(0.050) J	NA
2-Nitrophenol		NA	NA	NA	NA	ND(0.010)	NA
2-Picoline		NA	NA	NA	NA	ND(0.010) J	NA
3&4-Methylphenol		NA	NA	NA	NA	ND(0.010)	NA
3,3'-Dichlorobenzidine		NA	NA	NA	NA	ND(0.020) J	NA
3,3'-Dimethylbenzidine		NA	NA	NA	NA	ND(0.010) J	NA
3-Methylcholanthrene		NA	NA	NA	NA	ND(0.010) J	NA
3-Nitroaniline		NA	NA	NA	NA	ND(0.050) J	NA
4,6-Dinitro-2-methylphenol		NA	NA	NA	NA	ND(0.050)	NA
4-Aminobiphenyl		NA	NA	NA	NA	ND(0.010) J	NA
4-Bromophenyl-phenylether		NA	NA	NA	NA	ND(0.010) J	NA
4-Chloro-3-Methylphenol		NA	NA	NA	NA	ND(0.010)	NA
4-Chloroaniline		NA	NA	NA	NA	ND(0.010) J	NA
4-Chlorobenzilate		NA	NA	NA	NA	ND(0.010) J	NA
4-Chlorophenyl-phenylether		NA	NA	NA	NA	ND(0.010) J	NA
4-Nitroaniline		NA	NA	NA	NA	ND(0.050) J	NA
4-Nitrophenol		NA	NA	NA	NA	ND(0.050)	NA
4-Nitroquinoline-1-oxide		NA	NA	NA	NA	ND(0.010) J	NA
4-Phenylenediamine		NA	NA	NA	NA	ND(0.010) J	NA
5-Nitro-o-toluidine		NA	NA	NA	NA	ND(0.010) J	NA
7,12-Dimethylbenz(a)anthracene		NA	NA	NA	NA	ND(0.010) J	NA
a,a'-Dimethylphenethylamine		NA	NA	NA	NA	ND(0.010) J	NA
Acenaphthene		NA	NA	NA	NA	ND(0.010) J	NA
Acenaphthylene		NA	NA	NA	NA	ND(0.010) J	NA
Acetophenone		NA	NA	NA	NA	ND(0.010) J	NA

**TABLE B-1  
SPRING 2004 GROUNDWATER ANALYTICAL RESULTS**

**GROUNDWATER QUALITY INTERIM REPORT FOR SPRING 2004  
GROUNDWATER MANAGEMENT AREA 1  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
(Results are presented in parts per million, ppm)**

Parameter	Site ID:	East St. Area 2 - South			Lyman Street Area		
	Sample ID: Date Collected:	GMA1-13 04/07/04	HR-G1-MW-3 04/08/04	HR-G3-MW-1 04/08/04	LS-29 04/08/04	LS-MW-4R 04/09/04	LSSC-08S 04/08/04
<b>Semivolatile Organics (continued)</b>							
Aniline		NA	NA	NA	NA	ND(0.010) J	NA
Anthracene		NA	NA	NA	NA	ND(0.010) J	NA
Aramite		NA	NA	NA	NA	ND(0.010) J	NA
Benzidine		NA	NA	NA	NA	ND(0.020) J	NA
Benzo(a)anthracene		NA	NA	NA	NA	ND(0.010) J	NA
Benzo(a)pyrene		NA	NA	NA	NA	ND(0.010) J	NA
Benzo(b)fluoranthene		NA	NA	NA	NA	ND(0.010) J	NA
Benzo(g,h,i)perylene		NA	NA	NA	NA	ND(0.010) J	NA
Benzo(k)fluoranthene		NA	NA	NA	NA	ND(0.010) J	NA
Benzyl Alcohol		NA	NA	NA	NA	ND(0.020) J	NA
bis(2-Chloroethoxy)methane		NA	NA	NA	NA	ND(0.010) J	NA
bis(2-Chloroethyl)ether		NA	NA	NA	NA	ND(0.010) J	NA
bis(2-Chloroisopropyl)ether		NA	NA	NA	NA	ND(0.010) J	NA
bis(2-Ethylhexyl)phthalate		NA	NA	NA	NA	ND(0.0060) J	NA
Butylbenzylphthalate		NA	NA	NA	NA	ND(0.010) J	NA
Chrysene		NA	NA	NA	NA	ND(0.010) J	NA
Diallate		NA	NA	NA	NA	ND(0.010) J	NA
Dibenzo(a,h)anthracene		NA	NA	NA	NA	ND(0.010) J	NA
Dibenzofuran		NA	NA	NA	NA	ND(0.010) J	NA
Diethylphthalate		NA	NA	NA	NA	ND(0.010) J	NA
Dimethylphthalate		NA	NA	NA	NA	ND(0.010) J	NA
Di-n-Butylphthalate		NA	NA	NA	NA	ND(0.010) J	NA
Di-n-Octylphthalate		NA	NA	NA	NA	ND(0.010) J	NA
Diphenylamine		NA	NA	NA	NA	ND(0.010) J	NA
Ethyl Methanesulfonate		NA	NA	NA	NA	ND(0.010) J	NA
Fluoranthene		NA	NA	NA	NA	ND(0.010) J	NA
Fluorene		NA	NA	NA	NA	ND(0.010) J	NA
Hexachlorobenzene		NA	NA	NA	NA	ND(0.010) J	NA
Hexachlorobutadiene		NA	NA	NA	NA	ND(0.0010)	NA
Hexachlorocyclopentadiene		NA	NA	NA	NA	ND(0.010) J	NA
Hexachloroethane		NA	NA	NA	NA	ND(0.010) J	NA
Hexachlorophene		NA	NA	NA	NA	ND(0.020) J	NA
Hexachloropropene		NA	NA	NA	NA	ND(0.010) J	NA
Indeno(1,2,3-cd)pyrene		NA	NA	NA	NA	ND(0.010) J	NA
Isodrin		NA	NA	NA	NA	ND(0.010) J	NA
Isophorone		NA	NA	NA	NA	ND(0.010) J	NA
Isosafrole		NA	NA	NA	NA	ND(0.010) J	NA
Methapyrilene		NA	NA	NA	NA	ND(0.010) J	NA
Methyl Methanesulfonate		NA	NA	NA	NA	ND(0.010) J	NA
Naphthalene		NA	NA	NA	NA	ND(0.010) J	NA
Nitrobenzene		NA	NA	NA	NA	ND(0.010) J	NA
N-Nitrosodiethylamine		NA	NA	NA	NA	ND(0.010) J	NA
N-Nitrosodimethylamine		NA	NA	NA	NA	ND(0.010) J	NA
N-Nitroso-di-n-butylamine		NA	NA	NA	NA	ND(0.010) J	NA
N-Nitroso-di-n-propylamine		NA	NA	NA	NA	ND(0.010) J	NA
N-Nitrosodiphenylamine		NA	NA	NA	NA	ND(0.010) J	NA
N-Nitrosomethylethylamine		NA	NA	NA	NA	ND(0.010) J	NA
N-Nitrosomorpholine		NA	NA	NA	NA	ND(0.010) J	NA
N-Nitrosopiperidine		NA	NA	NA	NA	ND(0.010) J	NA
N-Nitrosopyrrolidine		NA	NA	NA	NA	ND(0.010) J	NA
o,o,o-Triethylphosphorothioate		NA	NA	NA	NA	ND(0.010) J	NA
o-Toluidine		NA	NA	NA	NA	ND(0.010) J	NA
p-Dimethylaminoazobenzene		NA	NA	NA	NA	ND(0.010) J	NA
Pentachlorobenzene		NA	NA	NA	NA	ND(0.010) J	NA
Pentachloroethane		NA	NA	NA	NA	ND(0.010) J	NA
Pentachloronitrobenzene		NA	NA	NA	NA	ND(0.010) J	NA
Pentachlorophenol		NA	NA	NA	NA	ND(0.050)	NA
Phenacetin		NA	NA	NA	NA	ND(0.010) J	NA
Phenanthrene		NA	NA	NA	NA	ND(0.010) J	NA

**TABLE B-1  
 SPRING 2004 GROUNDWATER ANALYTICAL RESULTS**

**GROUNDWATER QUALITY INTERIM REPORT FOR SPRING 2004  
 GROUNDWATER MANAGEMENT AREA 1  
 GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
 (Results are presented in parts per million, ppm)**

Parameter	Site ID:	East St. Area 2 - South			Lyman Street Area		
	Sample ID: Date Collected:	GMA1-13 04/07/04	HR-G1-MW-3 04/08/04	HR-G3-MW-1 04/08/04	LS-29 04/08/04	LS-MW-4R 04/09/04	LSSC-08S 04/08/04
<b>Semivolatile Organics (continued)</b>							
Phenol		NA	NA	NA	NA	ND(0.010)	NA
Pronamide		NA	NA	NA	NA	ND(0.010) J	NA
Pyrene		NA	NA	NA	NA	ND(0.010) J	NA
Pyridine		NA	NA	NA	NA	ND(0.010) J	NA
Safrole		NA	NA	NA	NA	ND(0.010) J	NA
Thionazin		NA	NA	NA	NA	ND(0.010) J	NA
<b>Furans</b>							
2,3,7,8-TCDF		NA	NA	NA	NA	ND(0.000000024)	NA
TCDFs (total)		NA	NA	NA	NA	ND(0.000000010)	NA
1,2,3,7,8-PeCDF		NA	NA	NA	NA	ND(0.000000011)	NA
2,3,4,7,8-PeCDF		NA	NA	NA	NA	ND(0.000000072)	NA
PeCDFs (total)		NA	NA	NA	NA	ND(0.000000018)	NA
1,2,3,4,7,8-HxCDF		NA	NA	NA	NA	ND(0.000000082)	NA
1,2,3,6,7,8-HxCDF		NA	NA	NA	NA	ND(0.000000085)	NA
1,2,3,7,8,9-HxCDF		NA	NA	NA	NA	ND(0.000000072)	NA
2,3,4,6,7,8-HxCDF		NA	NA	NA	NA	ND(0.000000059)	NA
HxCDFs (total)		NA	NA	NA	NA	ND(0.000000024)	NA
1,2,3,4,6,7,8-HpCDF		NA	NA	NA	NA	ND(0.000000070)	NA
1,2,3,4,7,8,9-HpCDF		NA	NA	NA	NA	ND(0.000000056)	NA
HpCDFs (total)		NA	NA	NA	NA	ND(0.000000013)	NA
OCDF		NA	NA	NA	NA	ND(0.000000092)	NA
<b>Dioxins</b>							
2,3,7,8-TCDD		NA	NA	NA	NA	ND(0.000000032)	NA
TCDDs (total)		NA	NA	NA	NA	ND(0.000000032)	NA
1,2,3,7,8-PeCDD		NA	NA	NA	NA	ND(0.000000011)	NA
PeCDDs (total)		NA	NA	NA	NA	ND(0.000000011)	NA
1,2,3,4,7,8-HxCDD		NA	NA	NA	NA	0.000000078 J	NA
1,2,3,6,7,8-HxCDD		NA	NA	NA	NA	ND(0.000000077)	NA
1,2,3,7,8,9-HxCDD		NA	NA	NA	NA	ND(0.000000086)	NA
HxCDDs (total)		NA	NA	NA	NA	ND(0.000000016)	NA
1,2,3,4,6,7,8-HpCDD		NA	NA	NA	NA	ND(0.000000065)	NA
HpCDDs (total)		NA	NA	NA	NA	ND(0.000000065)	NA
OCDD		NA	NA	NA	NA	ND(0.000000015)	NA
Total TEQs (WHO TEFs)		NA	NA	NA	NA	0.000000012	NA
<b>Inorganics-Unfiltered</b>							
Sulfide		NA	NA	NA	NA	ND(5.00)	NA
<b>Inorganics-Filtered</b>							
Antimony		NA	NA	NA	NA	ND(0.0600)	NA
Arsenic		NA	NA	NA	NA	0.00490 B	NA
Barium		NA	NA	NA	NA	0.0480 B	NA
Beryllium		NA	NA	NA	NA	0.000650 B	NA
Cadmium		NA	NA	NA	NA	ND(0.00500)	NA
Chromium		NA	NA	NA	NA	ND(0.0100)	NA
Cobalt		NA	NA	NA	NA	ND(0.0500)	NA
Copper		NA	NA	NA	NA	ND(0.0250)	NA
Cyanide		NA	0.0110	NA	NA	ND(0.0100)	NA
Lead		NA	NA	NA	NA	ND(0.00300)	NA
Mercury		NA	NA	NA	NA	ND(0.000200)	NA
Nickel		NA	NA	NA	NA	ND(0.0400)	NA
Selenium		NA	NA	NA	NA	ND(0.00500)	NA
Silver		NA	NA	NA	NA	ND(0.00500)	NA
Thallium		NA	NA	NA	NA	ND(0.0100)	NA
Tin		NA	NA	NA	NA	ND(0.0300)	NA
Vanadium		NA	NA	NA	NA	0.00190 B	NA
Zinc		NA	NA	NA	NA	0.160	NA

**TABLE B-1  
SPRING 2004 GROUNDWATER ANALYTICAL RESULTS**

**GROUNDWATER QUALITY INTERIM REPORT FOR SPRING 2004  
GROUNDWATER MANAGEMENT AREA 1  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
(Results are presented in parts per million, ppm)**

Parameter	Site ID:	Lyman Street Area		Newell St. Area II	
	Sample ID: Date Collected:	LSSC-16S 04/09/04	LSSC-18 04/08/04	N2SC-07S 04/12/04	NS-17 04/12/04
<b>Volatile Organics</b>					
1,1,1,2-Tetrachloroethane		ND(0.0050) [ND(0.0050)]	NA	ND(0.050)	ND(0.10)
1,1,1-Trichloroethane		ND(0.0050) [ND(0.0050)]	NA	ND(0.050)	ND(0.10)
1,1,2,2-Tetrachloroethane		ND(0.0050) [ND(0.0050)]	NA	ND(0.050)	ND(0.10)
1,1,2-Trichloroethane		ND(0.0050) [ND(0.0050)]	NA	ND(0.050)	ND(0.10)
1,1-Dichloroethane		ND(0.0050) [ND(0.0050)]	NA	ND(0.050)	ND(0.10)
1,1-Dichloroethene		ND(0.0010) [ND(0.0010)]	NA	ND(0.050)	ND(0.10)
1,2,3-Trichloropropane		ND(0.0050) [ND(0.0050)]	NA	ND(0.050)	ND(0.10)
1,2-Dibromo-3-chloropropane		ND(0.0050) [ND(0.0050)]	NA	ND(0.050)	ND(0.10)
1,2-Dibromoethane		ND(0.0010) [ND(0.0010)]	NA	ND(0.050)	ND(0.10)
1,2-Dichloroethane		ND(0.0050) [ND(0.0050)]	NA	ND(0.050)	ND(0.10)
1,2-Dichloropropane		ND(0.0050) [ND(0.0050)]	NA	ND(0.050)	ND(0.10)
1,4-Dioxane		ND(0.20) J [ND(0.20) J]	NA	ND(1.0) J	ND(2.0) J
2-Butanone		ND(0.010) J [ND(0.010) J]	NA	ND(0.050) J	ND(0.10) J
2-Chloro-1,3-butadiene		ND(0.0050) [ND(0.0050)]	NA	ND(0.050)	ND(0.10)
2-Chloroethylvinylether		ND(0.0050) [ND(0.0050)]	NA	ND(0.050)	ND(0.10)
2-Hexanone		ND(0.010) J [ND(0.010) J]	NA	ND(0.050) J	ND(0.10) J
3-Chloropropene		ND(0.0050) [ND(0.0050)]	NA	ND(0.050)	ND(0.10)
4-Methyl-2-pentanone		ND(0.010) [ND(0.010)]	NA	ND(0.050)	ND(0.10)
Acetone		ND(0.010) J [ND(0.010) J]	NA	ND(0.050) J	ND(0.10) J
Acetonitrile		ND(0.10) J [ND(0.10) J]	NA	ND(0.50) J	ND(1.0) J
Acrolein		ND(0.10) J [ND(0.10) J]	NA	ND(0.50) J	ND(1.0) J
Acrylonitrile		ND(0.0050) [ND(0.0050)]	NA	ND(0.050)	ND(0.10)
Benzene		ND(0.0050) [ND(0.0050)]	NA	ND(0.050)	ND(0.10)
Bromodichloromethane		ND(0.0050) [ND(0.0050)]	NA	ND(0.050)	ND(0.10)
Bromoform		ND(0.0050) [ND(0.0050)]	NA	ND(0.050)	ND(0.10)
Bromomethane		ND(0.0020) [ND(0.0020)]	NA	ND(0.050)	ND(0.10)
Carbon Disulfide		ND(0.0050) [ND(0.0050)]	NA	ND(0.050)	ND(0.10)
Carbon Tetrachloride		ND(0.0050) [ND(0.0050)]	NA	ND(0.050)	ND(0.10)
Chlorobenzene		ND(0.0050) [ND(0.0050)]	NA	0.14	0.075 J
Chloroethane		ND(0.0050) [ND(0.0050)]	NA	ND(0.050)	ND(0.10)
Chloroform		ND(0.0050) [ND(0.0050)]	NA	ND(0.050)	ND(0.10)
Chloromethane		ND(0.0050) [ND(0.0050)]	NA	ND(0.050)	ND(0.10)
cis-1,3-Dichloropropene		ND(0.0050) [ND(0.0050)]	NA	ND(0.050)	ND(0.10)
Dibromochloromethane		ND(0.0050) [ND(0.0050)]	NA	ND(0.050)	ND(0.10)
Dibromomethane		ND(0.0050) [ND(0.0050)]	NA	ND(0.050)	ND(0.10)
Dichlorodifluoromethane		ND(0.0050) J [ND(0.0050) J]	NA	ND(0.050) J	ND(0.10) J
Ethyl Methacrylate		ND(0.0050) [ND(0.0050)]	NA	ND(0.050)	ND(0.10)
Ethylbenzene		ND(0.0050) [ND(0.0050)]	NA	ND(0.050)	ND(0.10)
Iodomethane		ND(0.0050) [ND(0.0050)]	NA	ND(0.050)	ND(0.10)
Isobutanol		ND(0.10) J [ND(0.10) J]	NA	ND(1.0) J	ND(2.0) J
Methacrylonitrile		ND(0.0050) [ND(0.0050)]	NA	ND(0.050)	ND(0.10)
Methyl Methacrylate		ND(0.0050) [ND(0.0050)]	NA	ND(0.050)	ND(0.10)
Methylene Chloride		ND(0.0050) [ND(0.0050)]	NA	ND(0.050)	ND(0.10)
Propionitrile		ND(0.010) J [ND(0.010) J]	NA	ND(0.10) J	ND(0.20) J
Styrene		ND(0.0050) [ND(0.0050)]	NA	ND(0.050)	ND(0.10)
Tetrachloroethene		ND(0.0020) [ND(0.0020)]	NA	ND(0.050)	ND(0.10)
Toluene		ND(0.0050) [ND(0.0050)]	NA	ND(0.050)	ND(0.10)
trans-1,2-Dichloroethene		ND(0.0050) [ND(0.0050)]	NA	ND(0.050)	ND(0.10)
trans-1,3-Dichloropropene		ND(0.0050) [ND(0.0050)]	NA	ND(0.050)	ND(0.10)
trans-1,4-Dichloro-2-butene		ND(0.0050) [ND(0.0050)]	NA	ND(0.050)	ND(0.10)
Trichloroethene		ND(0.0050) [ND(0.0050)]	NA	ND(0.050)	ND(0.10)
Trichlorofluoromethane		ND(0.0050) J [ND(0.0050) J]	NA	ND(0.050) J	ND(0.10) J
Vinyl Acetate		ND(0.0050) [ND(0.0050)]	NA	ND(0.050)	ND(0.10)
Vinyl Chloride		ND(0.0020) [ND(0.0020)]	NA	0.89	0.68
Xylenes (total)		ND(0.010) [ND(0.010)]	NA	ND(0.050)	ND(0.10)
Total VOCs		ND(0.20) [ND(0.20)]	NA	1.03	0.76 J

**TABLE B-1  
SPRING 2004 GROUNDWATER ANALYTICAL RESULTS**

**GROUNDWATER QUALITY INTERIM REPORT FOR SPRING 2004  
GROUNDWATER MANAGEMENT AREA 1  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
(Results are presented in parts per million, ppm)**

Parameter	Site ID:	Lyman Street Area		Newell St. Area II	
	Sample ID: Date Collected:	LSSC-16S 04/09/04	LSSC-18 04/08/04	N2SC-07S 04/12/04	NS-17 04/12/04
<b>PCBs-Filtered</b>					
Aroclor-1016		NA	ND(0.00050)	ND(0.000065)	NA
Aroclor-1221		NA	ND(0.00050)	ND(0.000065)	NA
Aroclor-1232		NA	ND(0.00050)	ND(0.000065)	NA
Aroclor-1242		NA	ND(0.00050)	ND(0.000065)	NA
Aroclor-1248		NA	ND(0.00050)	ND(0.000065)	NA
Aroclor-1254		NA	ND(0.00050)	0.000041 J	NA
Aroclor-1260		NA	ND(0.00050)	ND(0.000065)	NA
Total PCBs		NA	ND(0.00050)	0.000041 J	NA
<b>Semivolatile Organics</b>					
1,2,4,5-Tetrachlorobenzene		NA	NA	NA	NA
1,2,4-Trichlorobenzene		ND(0.0050) [ND(0.0050)]	NA	NA	NA
1,2-Dichlorobenzene		ND(0.0050) [ND(0.0050)]	NA	NA	NA
1,2-Diphenylhydrazine		NA	NA	NA	NA
1,3,5-Trinitrobenzene		NA	NA	NA	NA
1,3-Dichlorobenzene		ND(0.0050) [ND(0.0050)]	NA	NA	NA
1,3-Dinitrobenzene		NA	NA	NA	NA
1,4-Dichlorobenzene		ND(0.0050) [ND(0.0050)]	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-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



**TABLE B-1  
SPRING 2004 GROUNDWATER ANALYTICAL RESULTS**

**GROUNDWATER QUALITY INTERIM REPORT FOR SPRING 2004  
GROUNDWATER MANAGEMENT AREA 1  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
(Results are presented in parts per million, ppm)**

Parameter	Site ID:	Lyman Street Area		Newell St. Area II	
	Sample ID: Date Collected:	LSSC-16S 04/09/04	LSSC-18 04/08/04	N2SC-07S 04/12/04	NS-17 04/12/04
<b>Semivolatile Organics (continued)</b>					
Aniline		NA	NA	NA	NA
Anthracene		NA	NA	NA	NA
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
Diallate		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		ND(0.0050) [ND(0.0050)]	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
<b>Semivolatile Organics (continued)</b>					

**TABLE B-1  
 SPRING 2004 GROUNDWATER ANALYTICAL RESULTS**

**GROUNDWATER QUALITY INTERIM REPORT FOR SPRING 2004  
 GROUNDWATER MANAGEMENT AREA 1  
 GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
 (Results are presented in parts per million, ppm)**

Parameter	Site ID:	Lyman Street Area		Newell St. Area II	
	Sample ID: Date Collected:	LSSC-16S 04/09/04	LSSC-18 04/08/04	N2SC-07S 04/12/04	NS-17 04/12/04
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
<b>Furans</b>					
2,3,7,8-TCDF		NA	NA	NA	NA
TCDFs (total)		NA	NA	NA	NA
1,2,3,7,8-PeCDF		NA	NA	NA	NA
2,3,4,7,8-PeCDF		NA	NA	NA	NA
PeCDFs (total)		NA	NA	NA	NA
1,2,3,4,7,8-HxCDF		NA	NA	NA	NA
1,2,3,6,7,8-HxCDF		NA	NA	NA	NA
1,2,3,7,8,9-HxCDF		NA	NA	NA	NA
2,3,4,6,7,8-HxCDF		NA	NA	NA	NA
HxCDFs (total)		NA	NA	NA	NA
1,2,3,4,6,7,8-HpCDF		NA	NA	NA	NA
1,2,3,4,7,8,9-HpCDF		NA	NA	NA	NA
HpCDFs (total)		NA	NA	NA	NA
OCDF		NA	NA	NA	NA
<b>Dioxins</b>					
2,3,7,8-TCDD		NA	NA	NA	NA
TCDDs (total)		NA	NA	NA	NA
1,2,3,7,8-PeCDD		NA	NA	NA	NA
PeCDDs (total)		NA	NA	NA	NA
1,2,3,4,7,8-HxCDD		NA	NA	NA	NA
1,2,3,6,7,8-HxCDD		NA	NA	NA	NA
1,2,3,7,8,9-HxCDD		NA	NA	NA	NA
HxCDDs (total)		NA	NA	NA	NA
1,2,3,4,6,7,8-HpCDD		NA	NA	NA	NA
HpCDDs (total)		NA	NA	NA	NA
OCDD		NA	NA	NA	NA
Total TEQs (WHO TEFs)		NA	NA	NA	NA
<b>Inorganics-Unfiltered</b>					
Sulfide		NA	NA	NA	NA
<b>Inorganics-Filtered</b>					
Antimony		NA	NA	NA	NA
Arsenic		NA	NA	NA	NA
Barium		NA	NA	NA	NA
Beryllium		NA	NA	NA	NA
Cadmium		NA	NA	NA	NA
Chromium		NA	NA	NA	NA
Cobalt		NA	NA	NA	NA
Copper		NA	NA	NA	NA
Cyanide		NA	NA	NA	NA
Lead		NA	NA	NA	NA
Mercury		NA	NA	NA	NA
Nickel		NA	NA	NA	NA
Selenium		NA	NA	NA	NA
Silver		NA	NA	NA	NA
Thallium		NA	NA	NA	NA
Tin		NA	NA	NA	NA
Vanadium		NA	NA	NA	NA
Zinc		NA	NA	NA	NA

**TABLE B-1  
SPRING 2004 GROUNDWATER ANALYTICAL RESULTS**

**GROUNDWATER QUALITY INTERIM REPORT FOR SPRING 2004  
GROUNDWATER MANAGEMENT AREA 1  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
(Results are presented in parts per million, ppm)**

Notes:

1. Samples were collected by Blasland Bouck & Lee, Inc., and submitted to SGS Environmental Services, Inc. for analysis of PCBs and Appendix IX+3 constituents.
2. Samples have been validated as per Field Sampling Plan/Quality Assurance Project Plan (FSP/QAPP), General Electric Company, Pittsfield, Massachusetts, Blasland Bouck & Lee, Inc. (approved May 25, 2004 and resubmitted June 15, 2004).
3. NA - Not Analyzed.
4. ND - Analyte was not detected. The number in parentheses is the associated detection limit.
5. Total 2,3,7,8-TCDD toxicity equivalents (TEQs) were calculated using Toxicity Equivalency Factors (TEFs) derived by the World Health Organization (WHO) and published by Van den Berg et al. In Environmental Health Perspectives 106(2), December 1998.
6. Field duplicate sample results are presented in brackets.

Data Qualifiers:

Organics (volatiles, PCBs, semivolatiles, dioxin/furans)

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

Inorganics

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

## *Appendix C*

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# Historical Groundwater Data

# *Historical Groundwater Data*

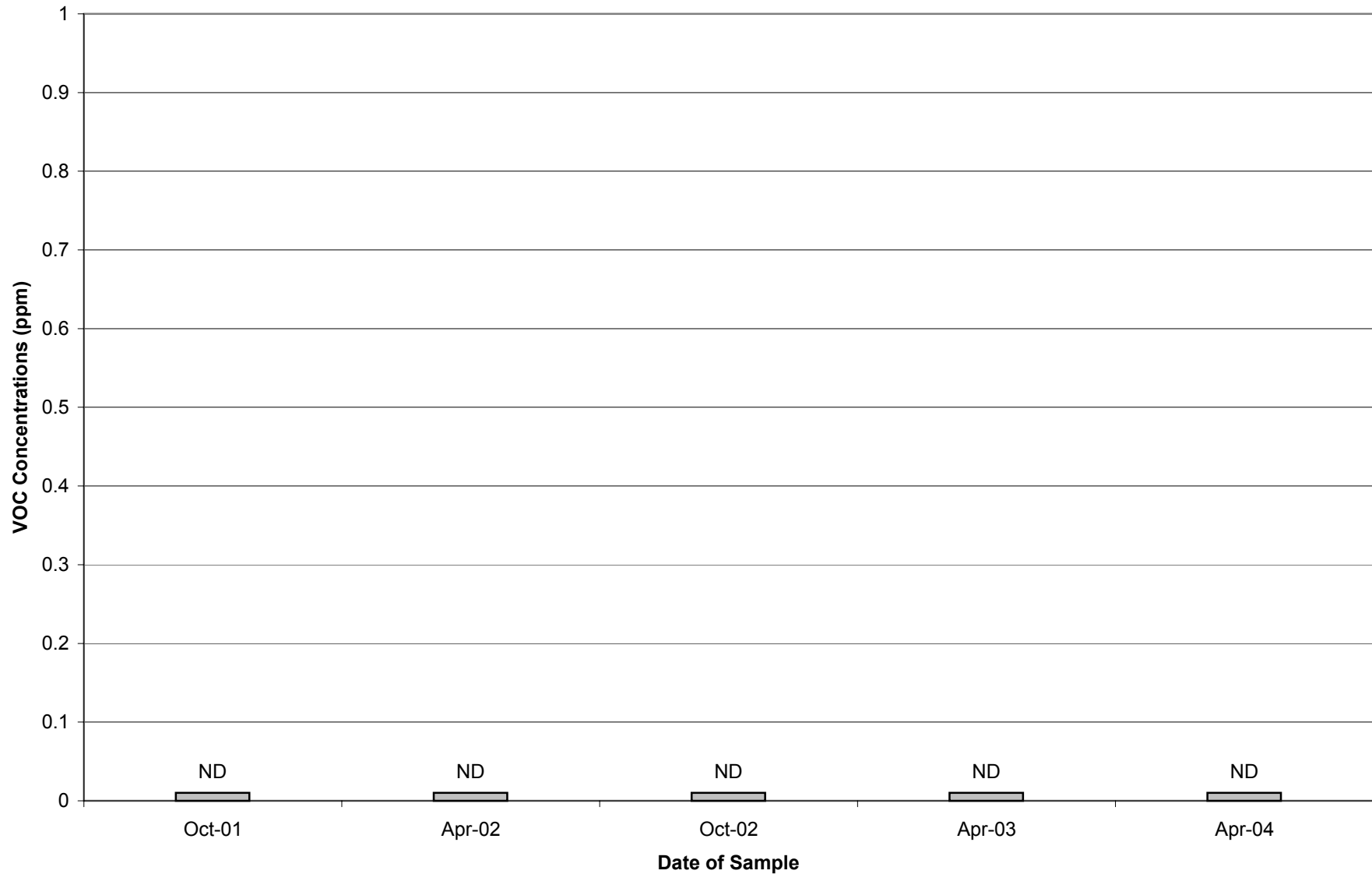
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## **Total VOC Concentrations – Wells Sampled in Spring 2004**

# Appendix C

## Groundwater Management Area 1 General Electric Company Pittsfield, Massachusetts

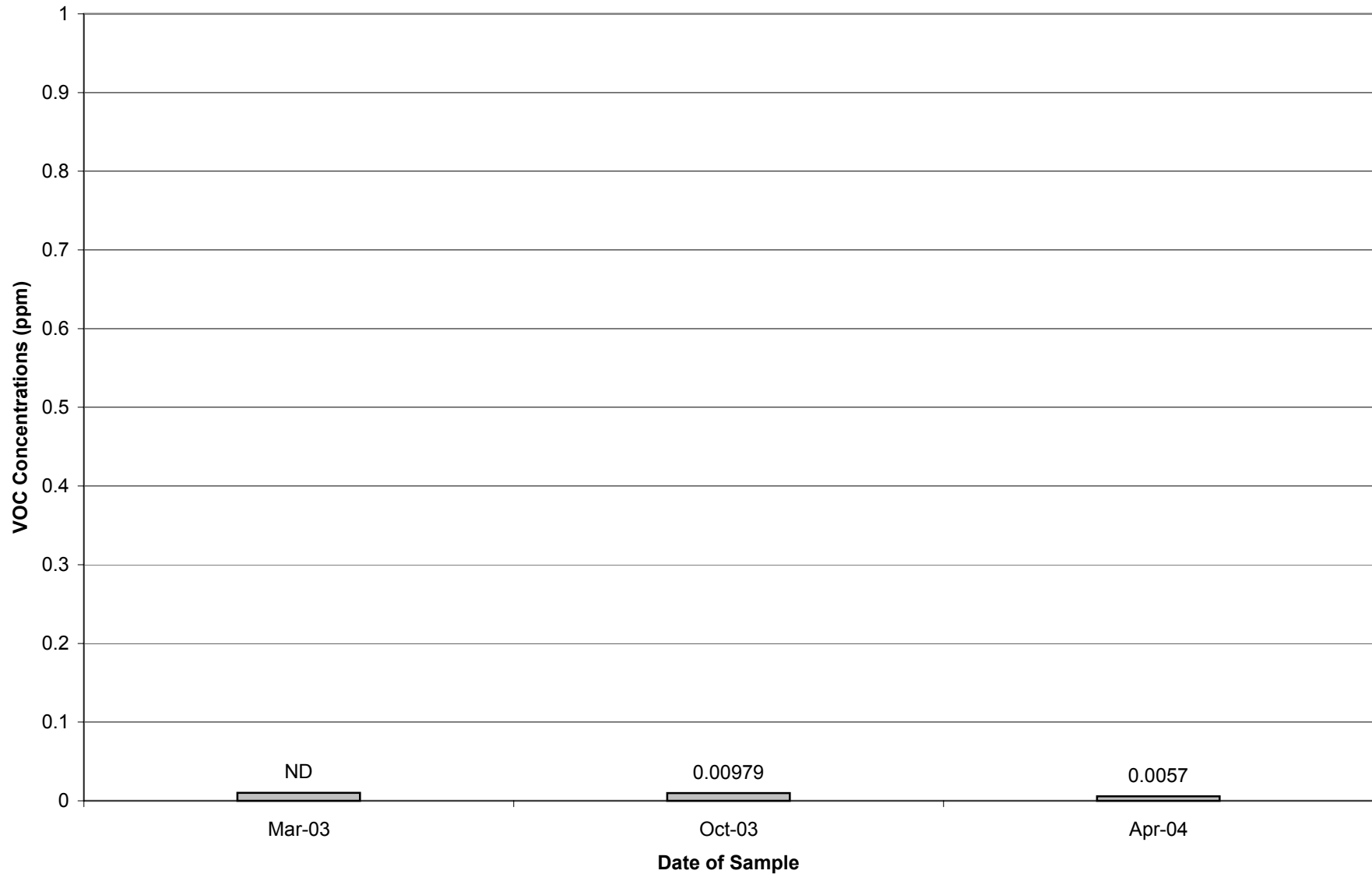
### Well GMA1-6 Historical VOC Concentrations



## Appendix C

### Groundwater Management Area 1 General Electric Company Pittsfield, Massachusetts

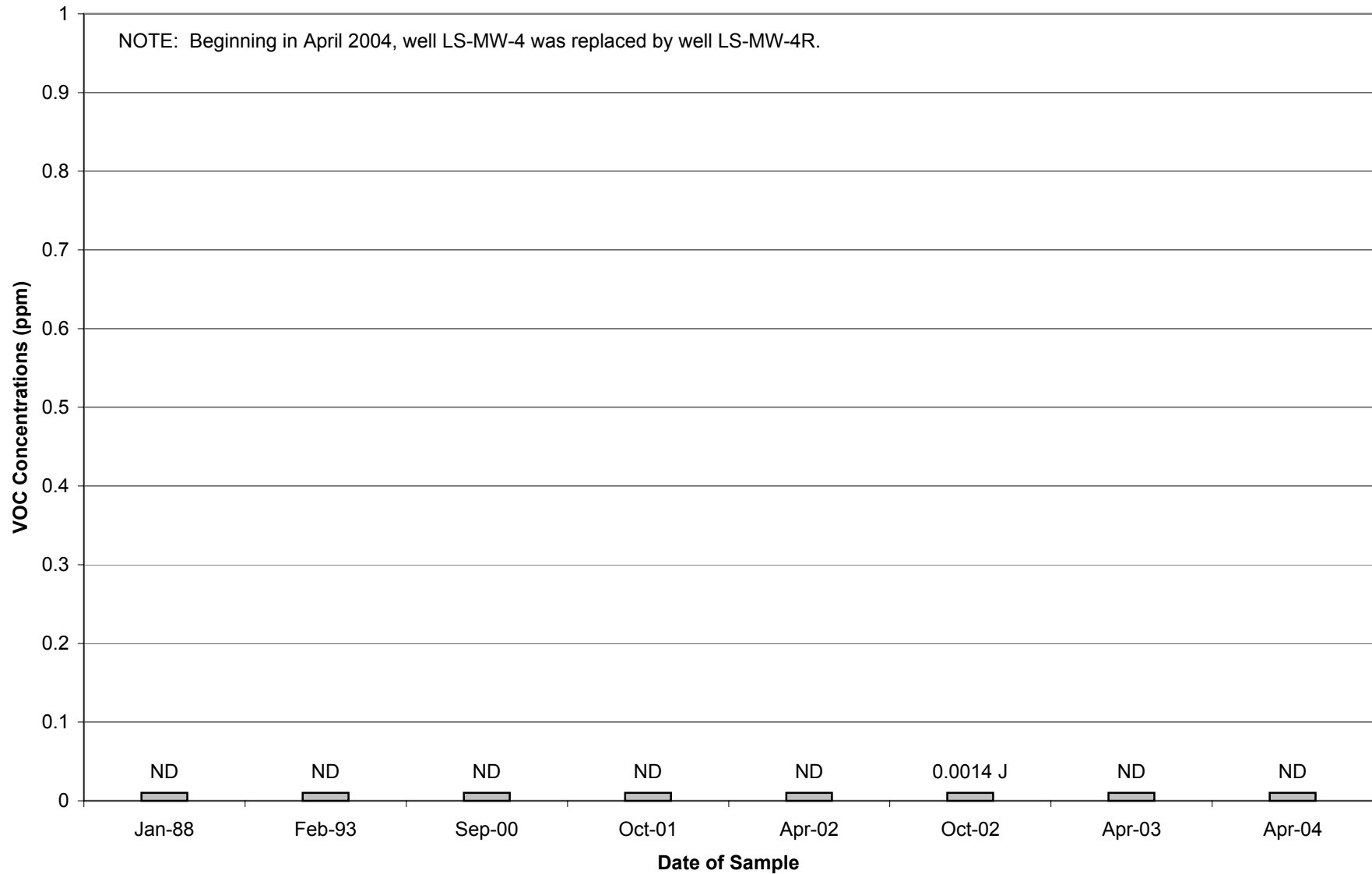
#### Well GMA1-4 Historical VOC Concentrations



## Appendix C

### Groundwater Management Area 1 General Electric Company Pittsfield, Massachusetts

#### Well LS-MW-4 & LS-MW-4R Historical VOC Concentrations

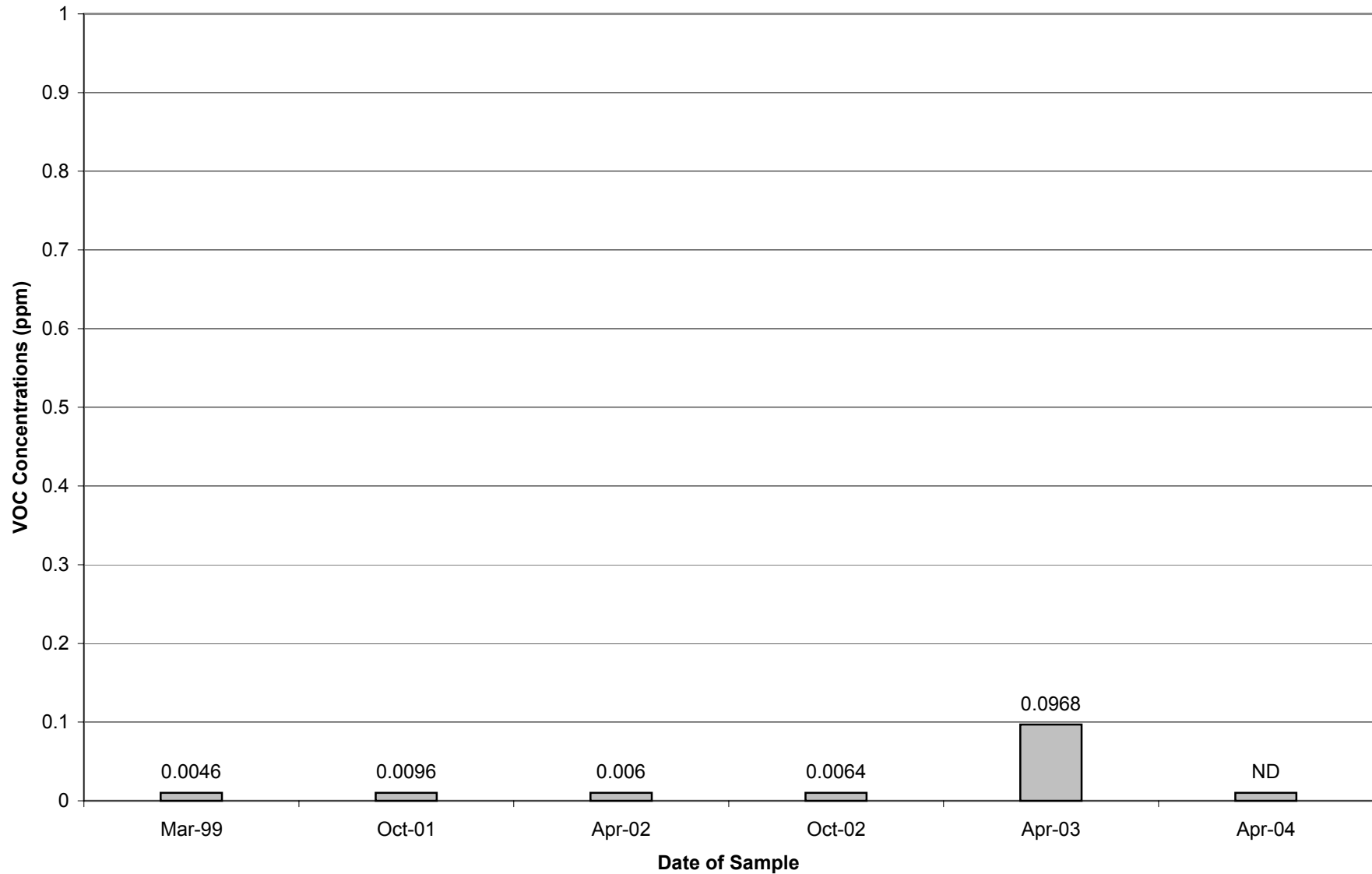




## Appendix C

### Groundwater Management Area 1 General Electric Company Pittsfield, Massachusetts

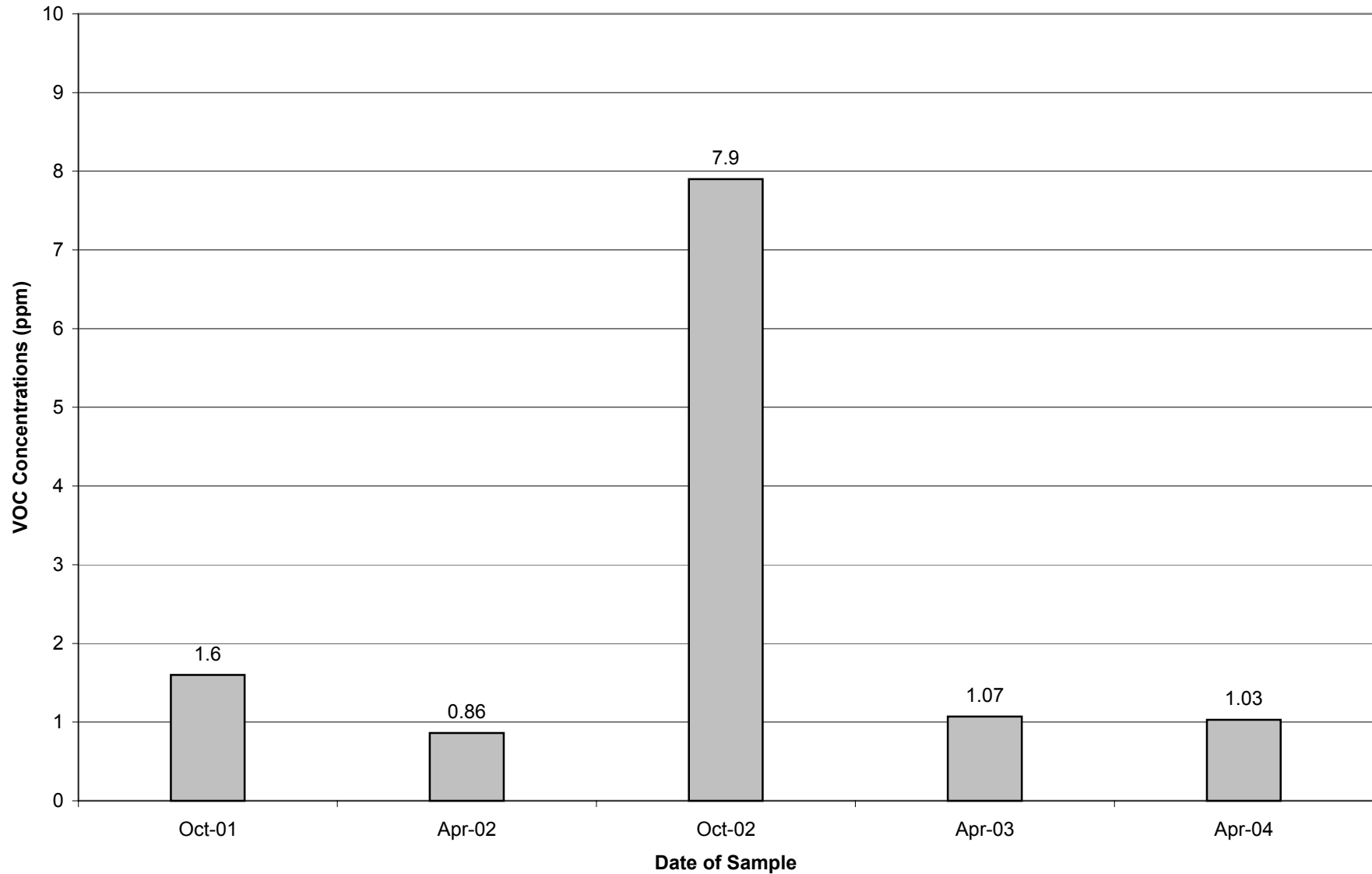
#### Well LSSC-16S Historical VOC Concentrations



# Appendix C

## Groundwater Management Area 1 General Electric Company Pittsfield, Massachusetts

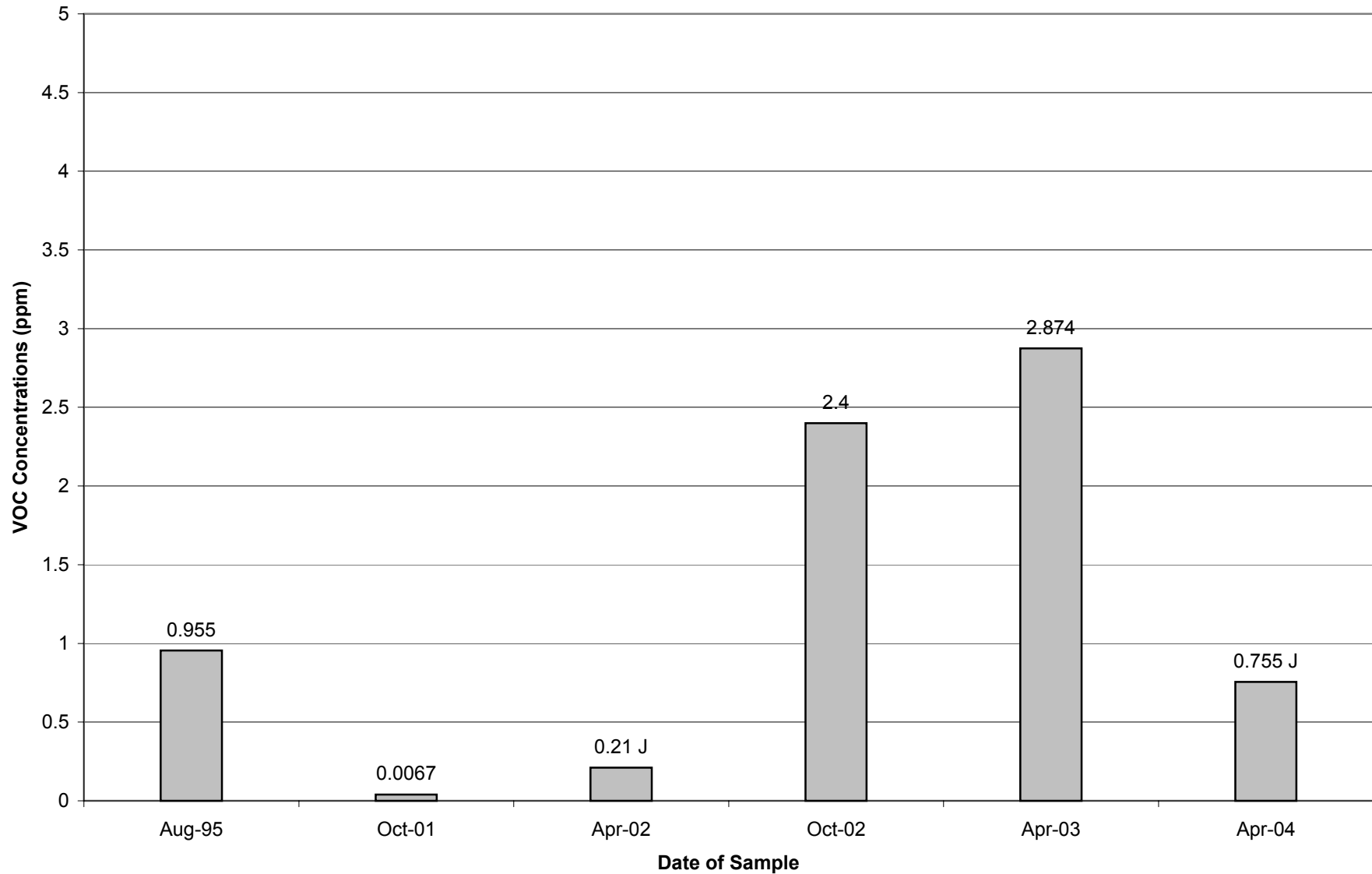
### Well N2SC-07S Historical VOC Concentrations



## Appendix C

### Groundwater Management Area 1 General Electric Company Pittsfield, Massachusetts

#### Well NS-17 Historical VOC Concentrations



# *Historical Groundwater Data*

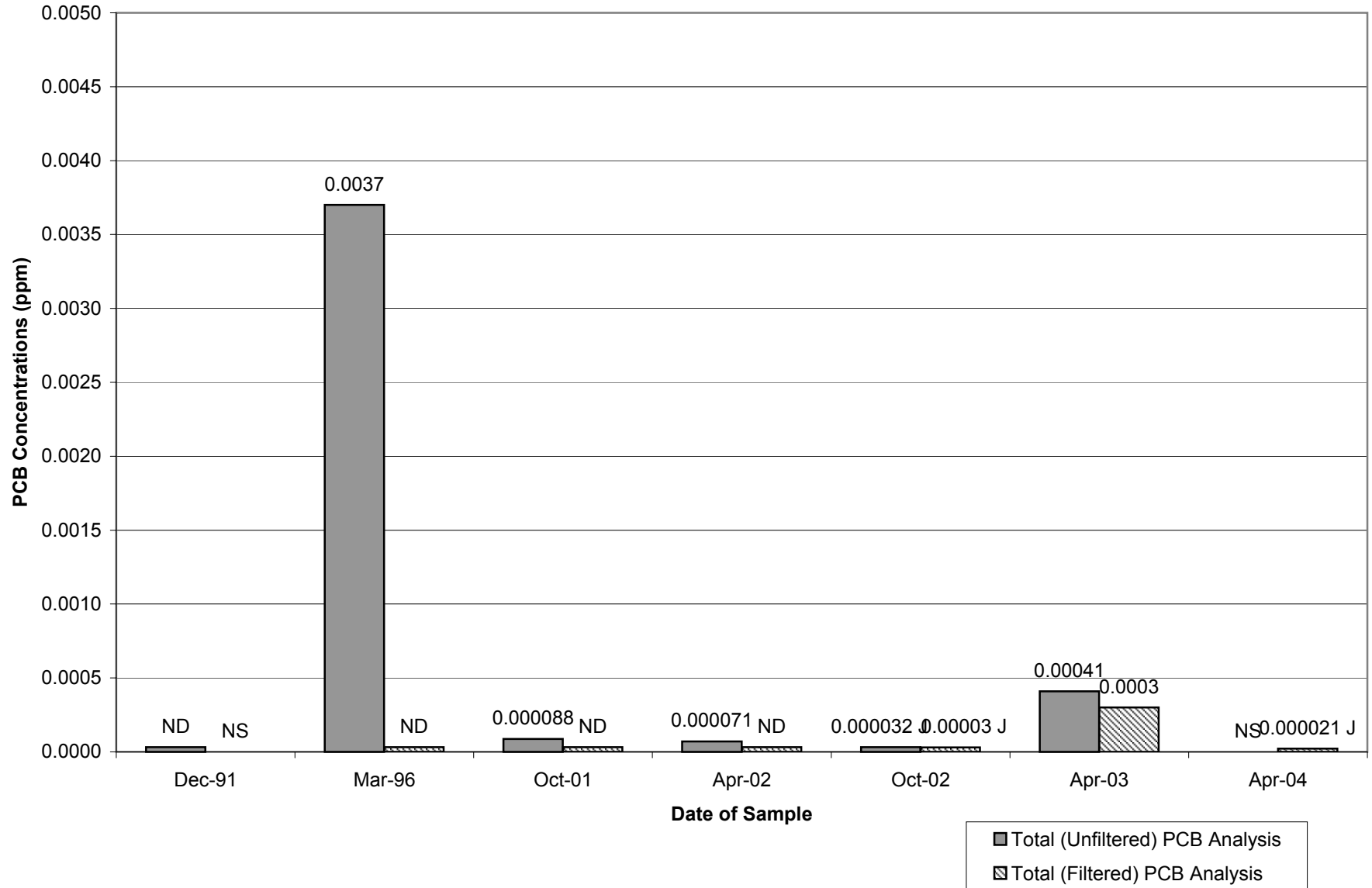
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## **Total PCB Concentrations – Wells Sampled in Spring 2004**

Appendix C

Groundwater Management Area 1  
General Electric Company  
Pittsfield, Massachusetts

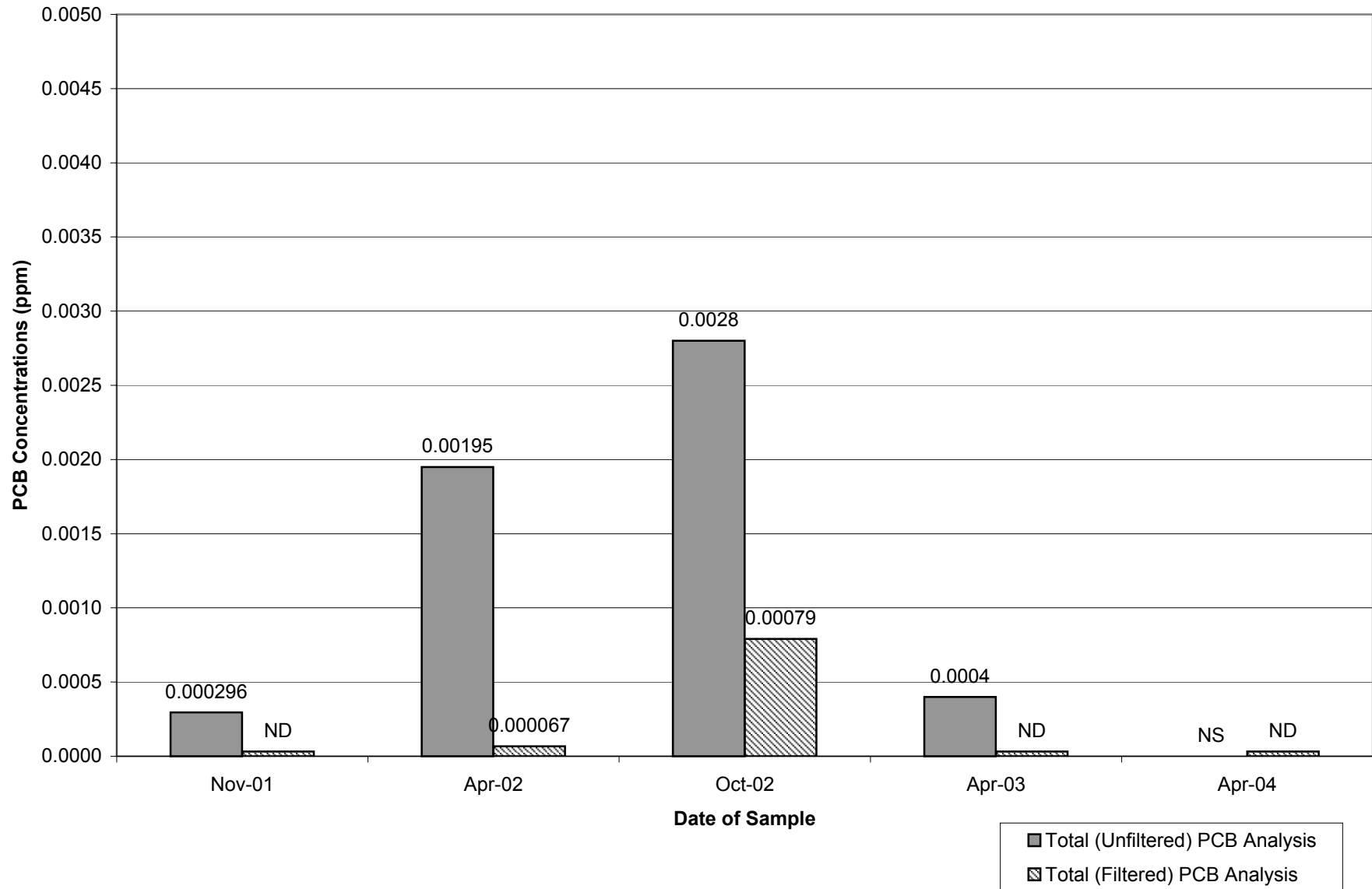
Well RF-02 Historical PCB Concentrations



## Appendix C

### Groundwater Management Area 1 General Electric Company Pittsfield, Massachusetts

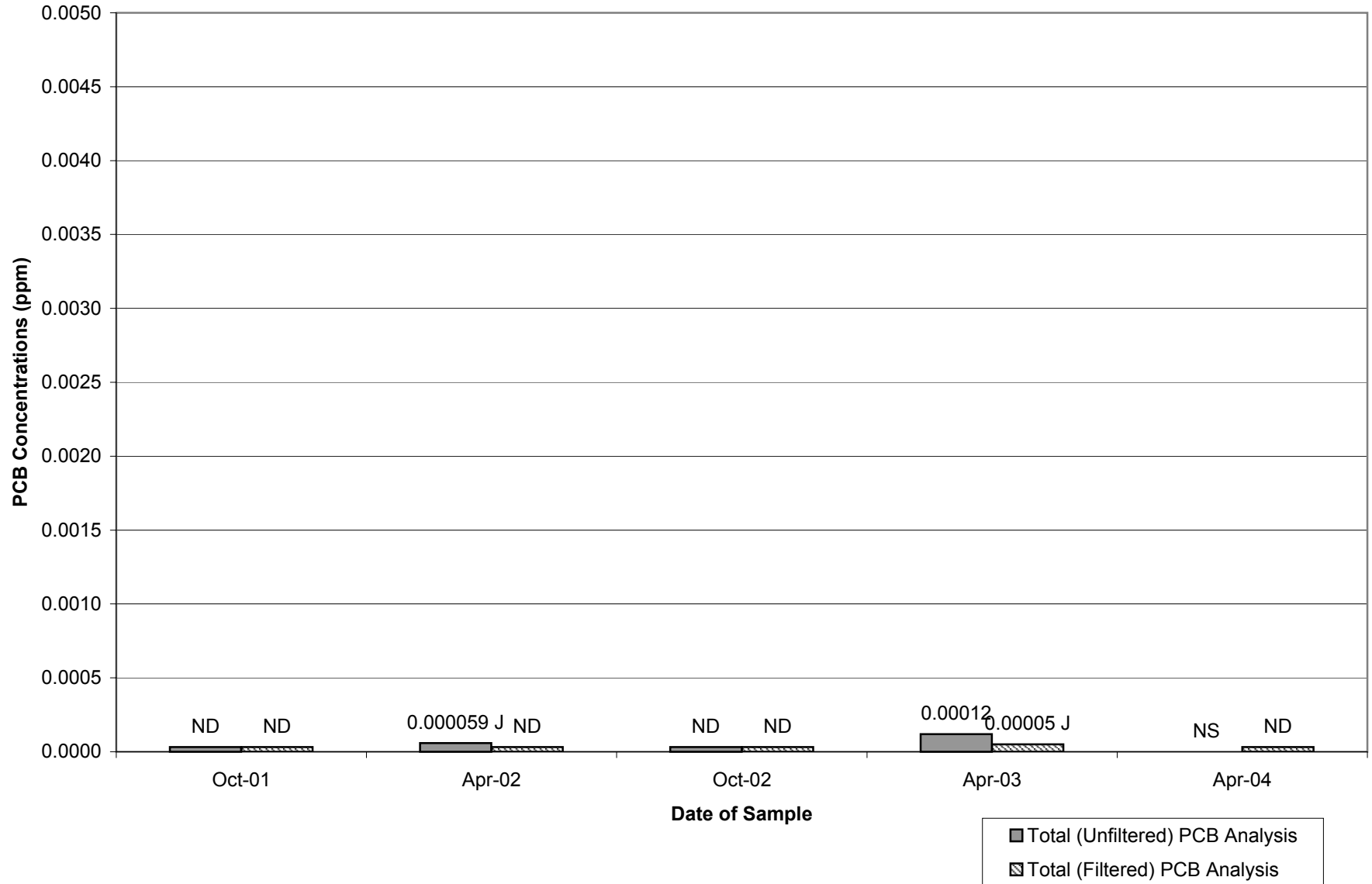
#### Well ESA1N-52 Historical PCB Concentrations



# Appendix C

## Groundwater Management Area 1 General Electric Company Pittsfield, Massachusetts

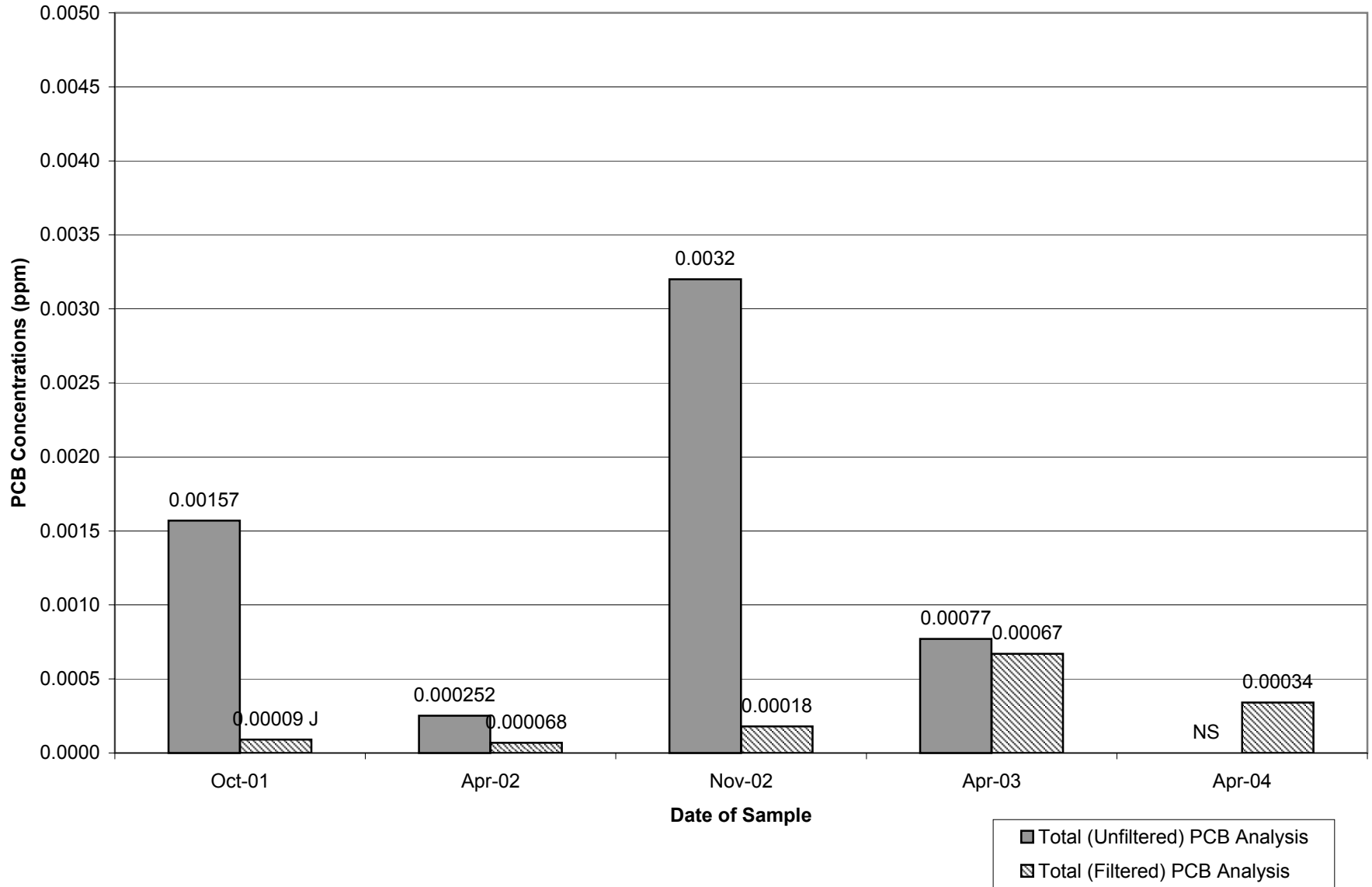
### Well GMA1-6 Historical PCB Concentrations



# Appendix C

## Groundwater Management Area 1 General Electric Company Pittsfield, Massachusetts

### Well ES1-05 Historical PCB Concentrations

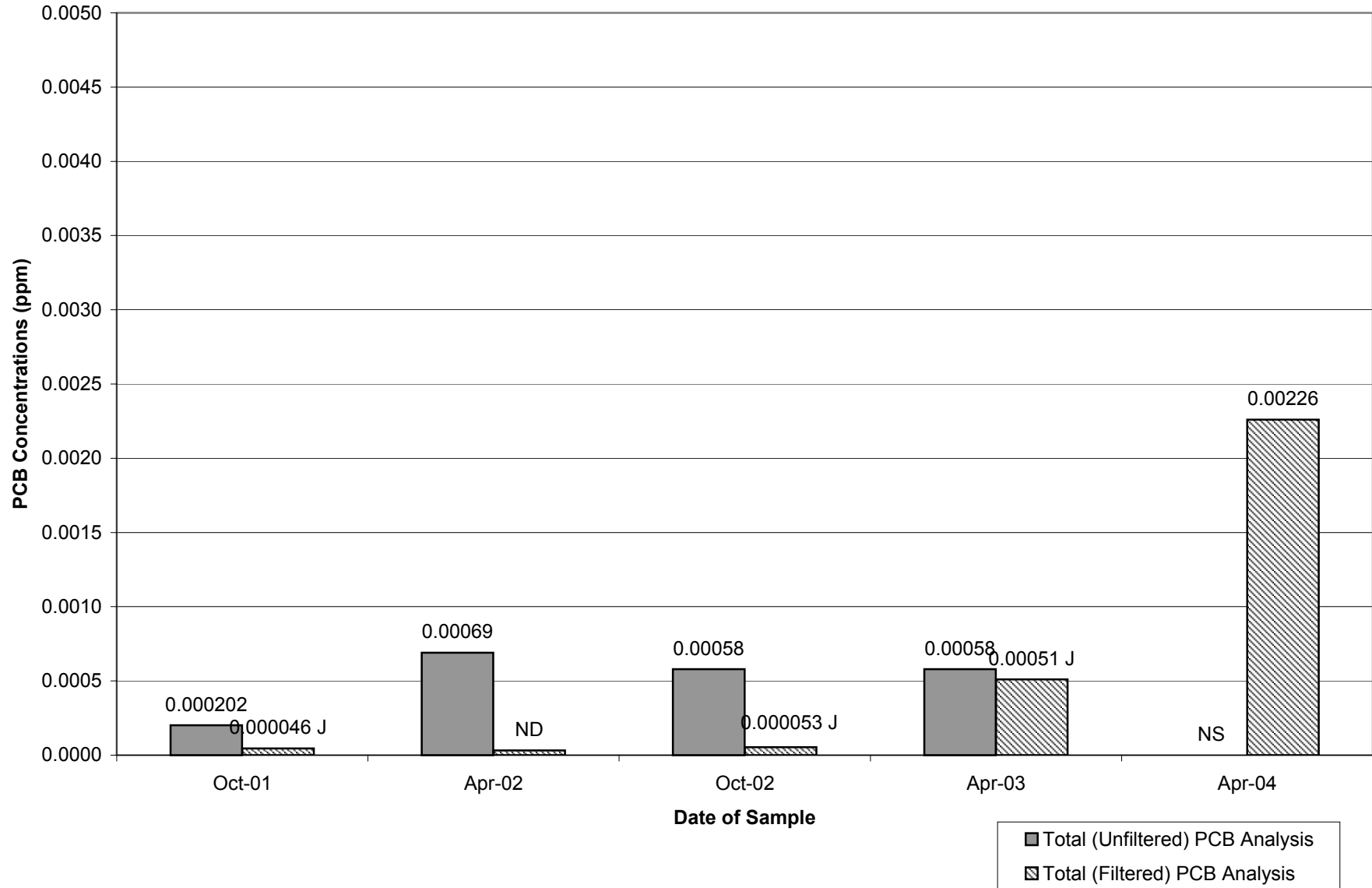




# Appendix C

## Groundwater Management Area 1 General Electric Company Pittsfield, Massachusetts

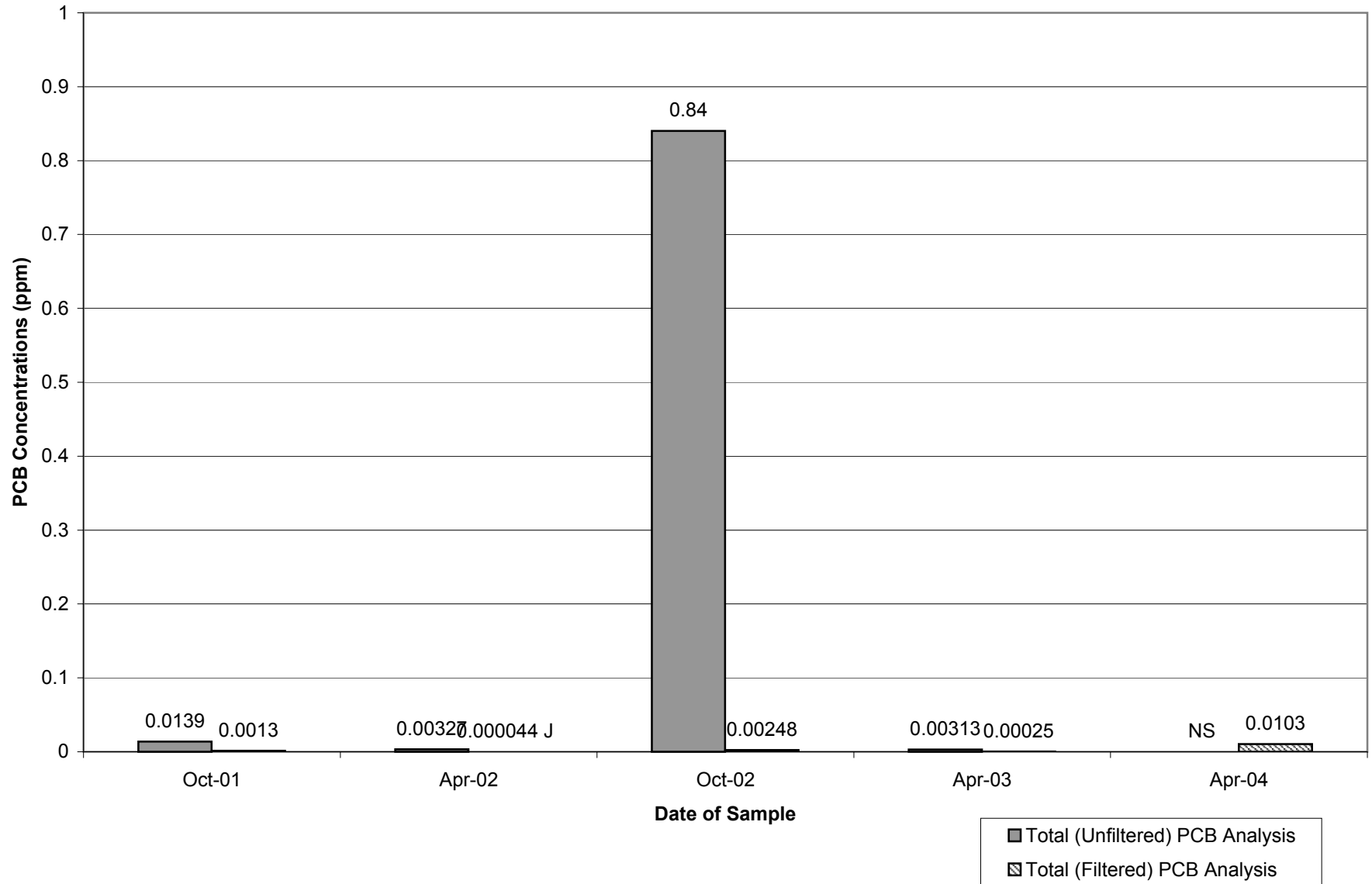
### Well ES1-27R Historical PCB Concentrations



# Appendix C

## Groundwater Management Area 1 General Electric Company Pittsfield, Massachusetts

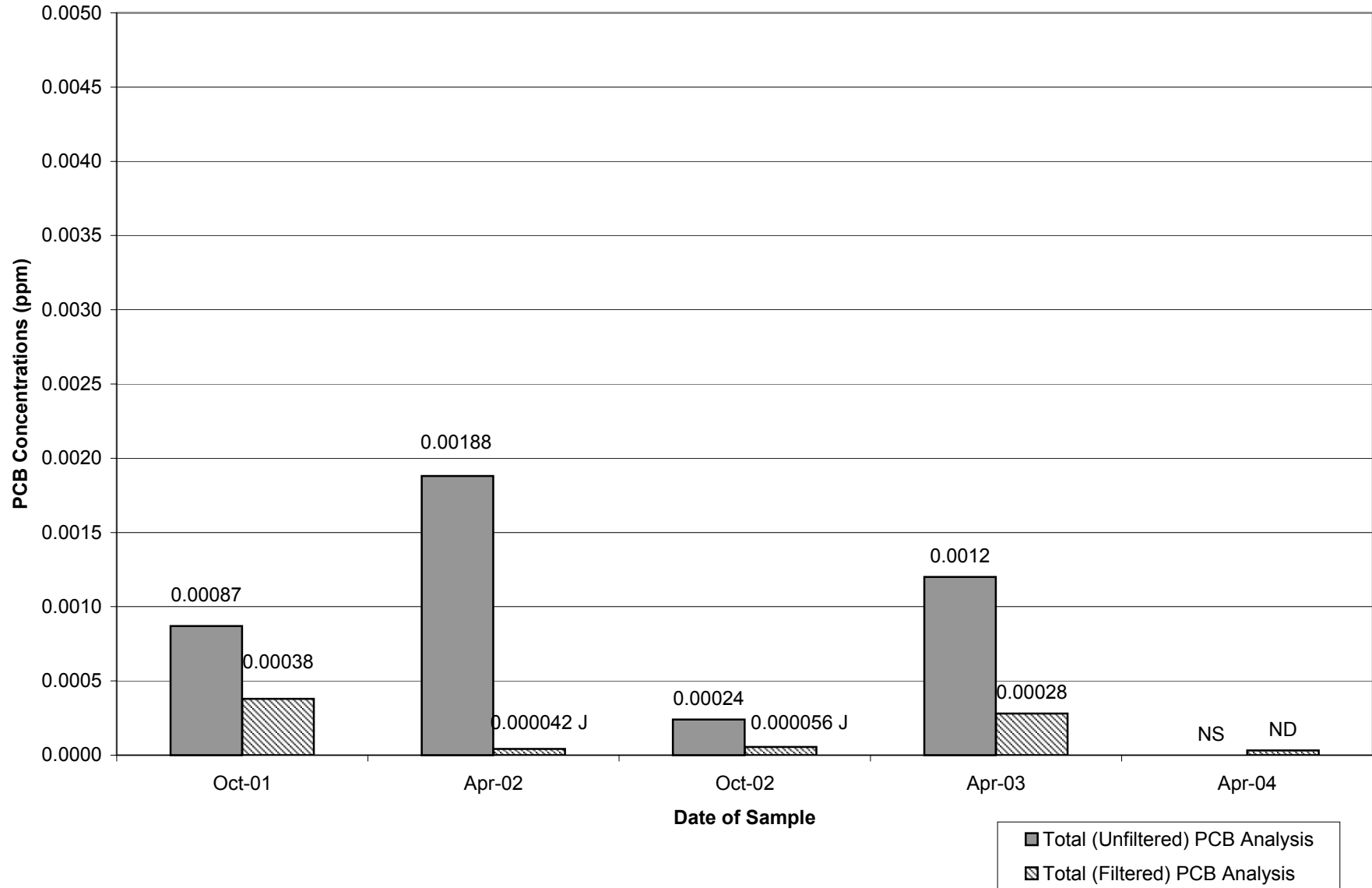
### Well E2SC-23 Historical PCB Concentrations



# Appendix C

## Groundwater Management Area 1 General Electric Company Pittsfield, Massachusetts

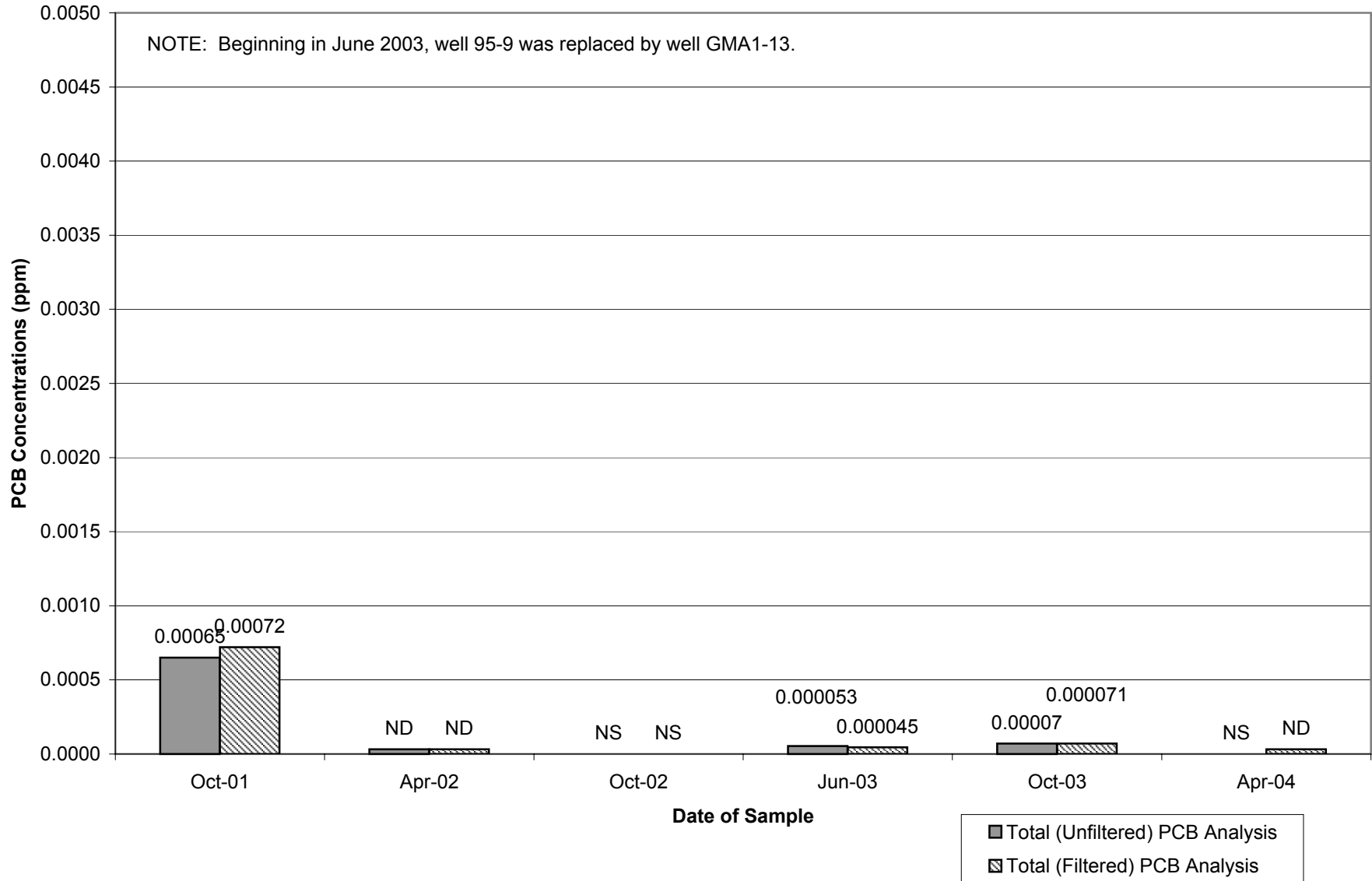
### Well E2SC-24 Historical PCB Concentrations



## Appendix C

### Groundwater Management Area 1 General Electric Company Pittsfield, Massachusetts

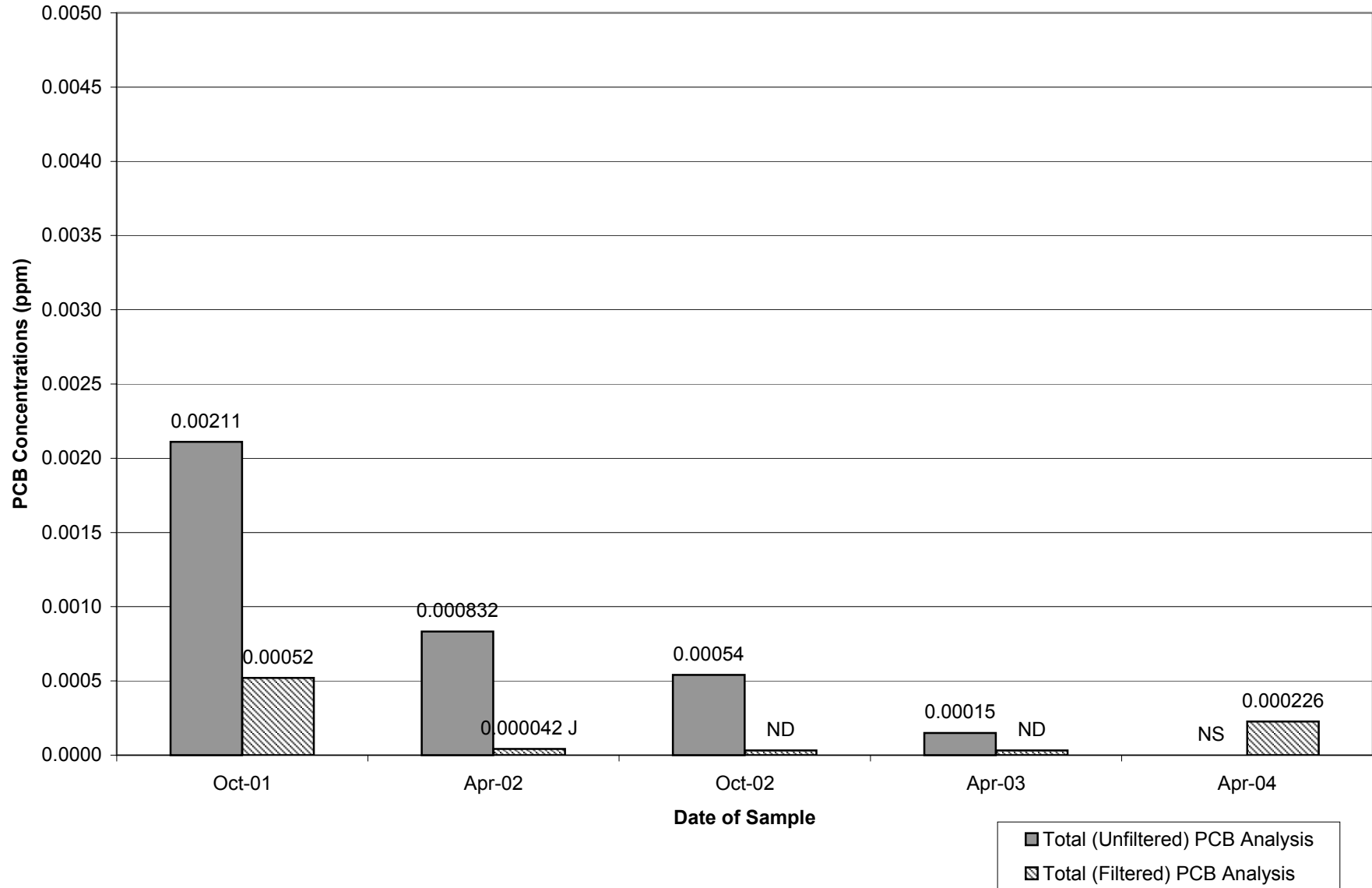
#### Well 95-9 & GMA1-13 Historical PCB Concentrations



# Appendix C

## Groundwater Management Area 1 General Electric Company Pittsfield, Massachusetts

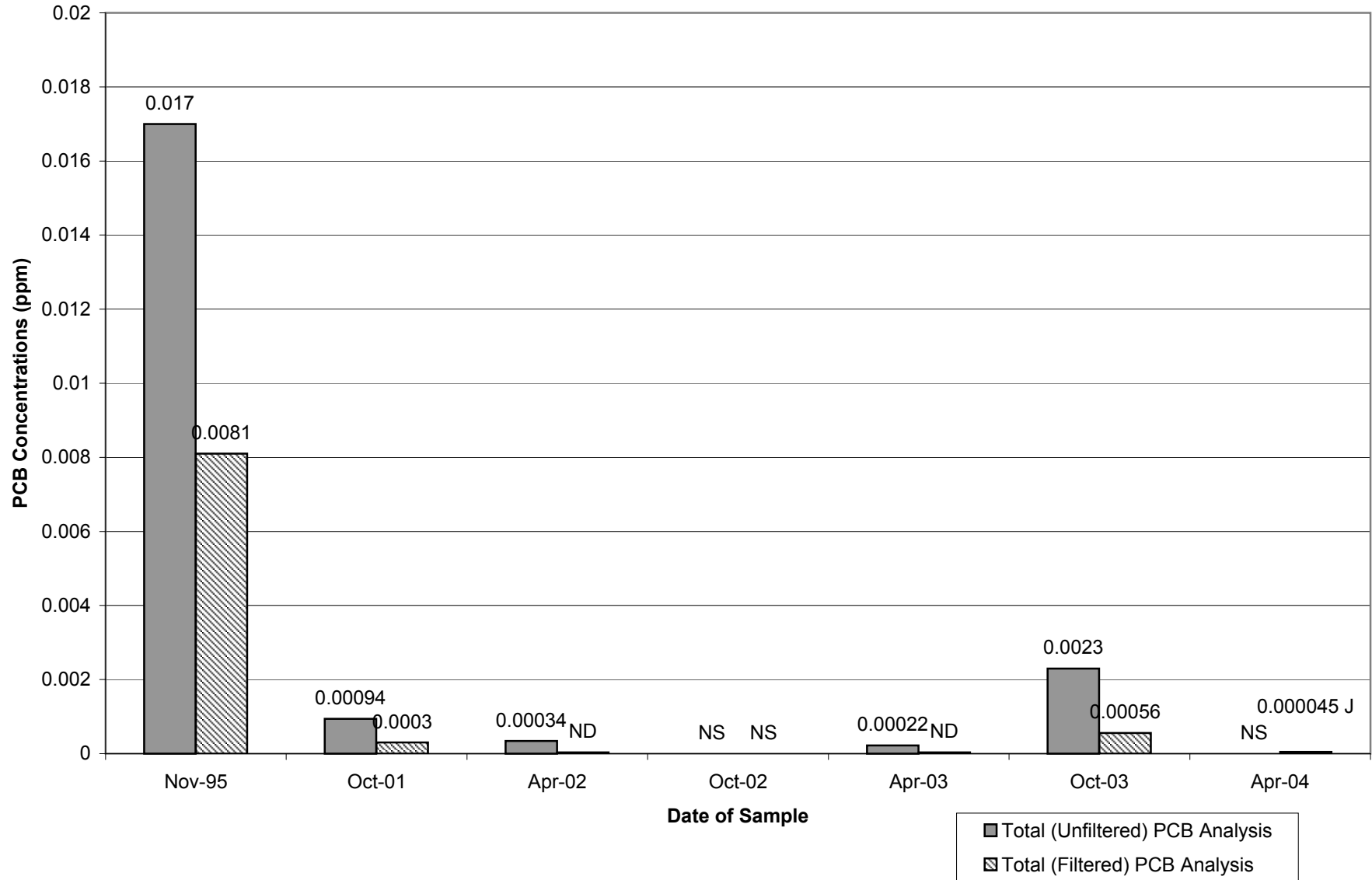
### Well HR-G3-MW-1 Historical PCB Concentrations



# Appendix C

## Groundwater Management Area 1 General Electric Company Pittsfield, Massachusetts

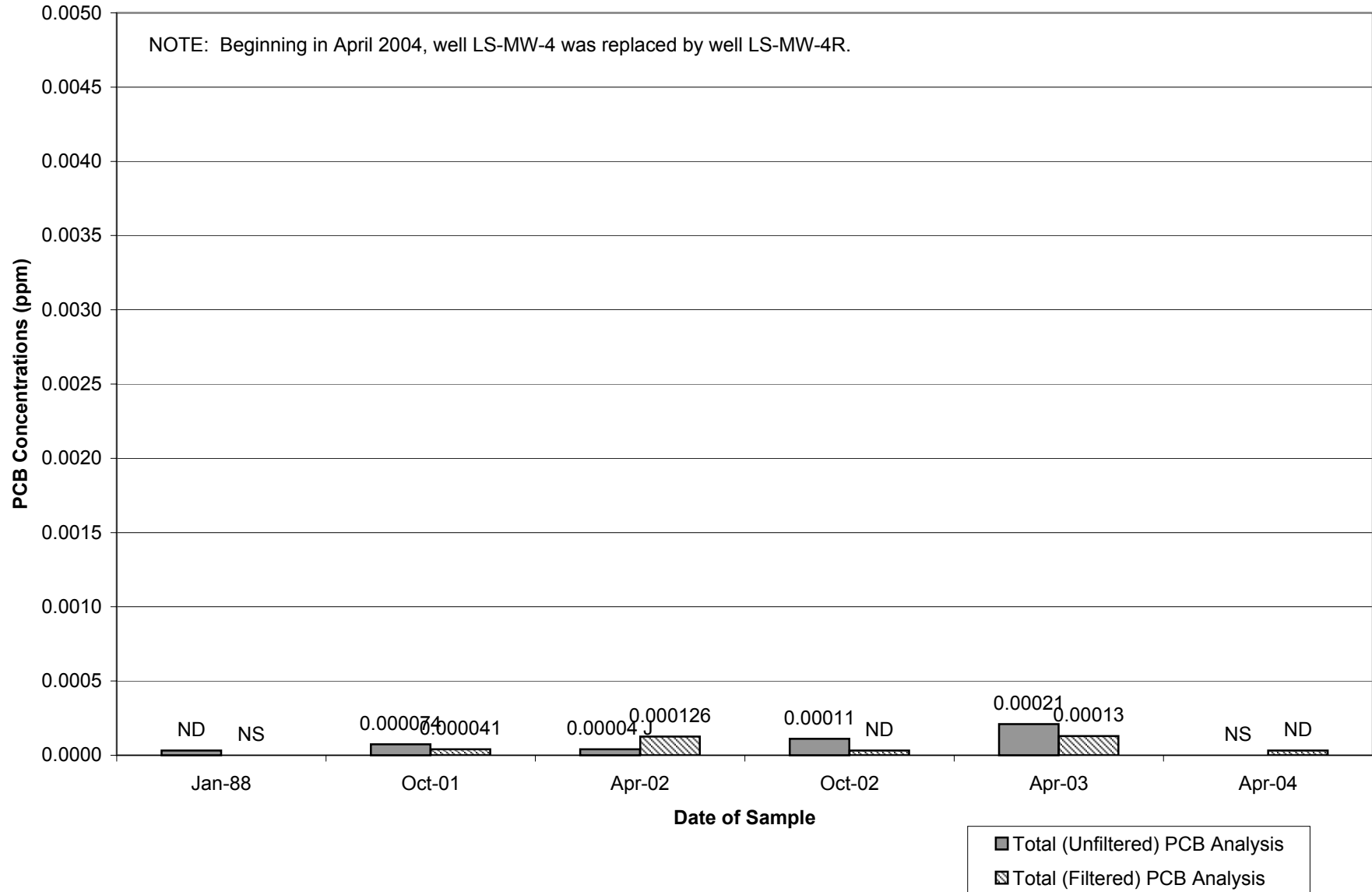
### Well LS-29 Historical PCB Concentrations



# Appendix C

## Groundwater Management Area 1 General Electric Company Pittsfield, Massachusetts

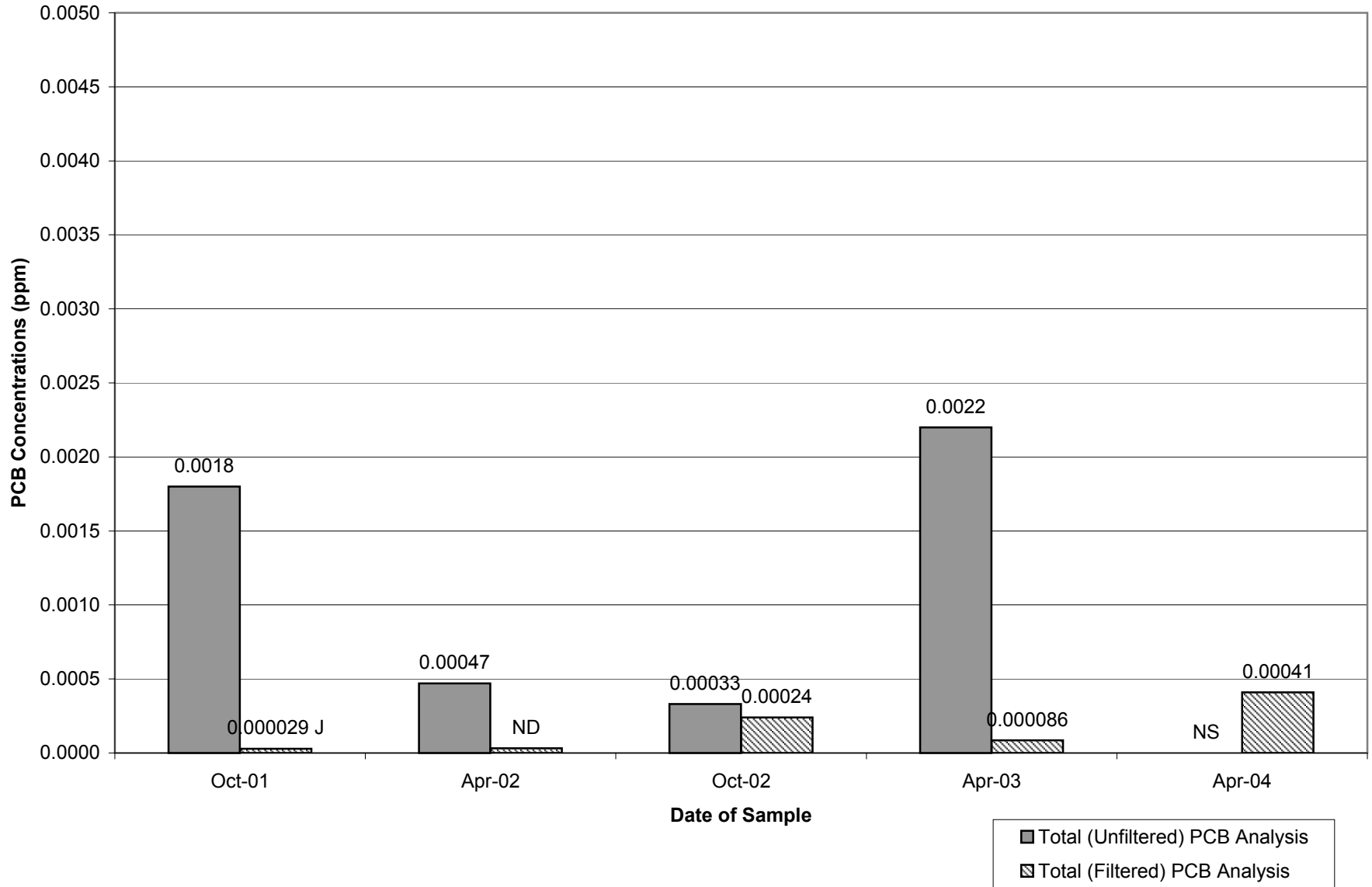
### Well LS-MW-4 & LS-MW-4R Historical PCB Concentrations



Appendix C

Groundwater Management Area 1  
General Electric Company  
Pittsfield, Massachusetts

Well LSSC-08S Historical PCB Concentrations

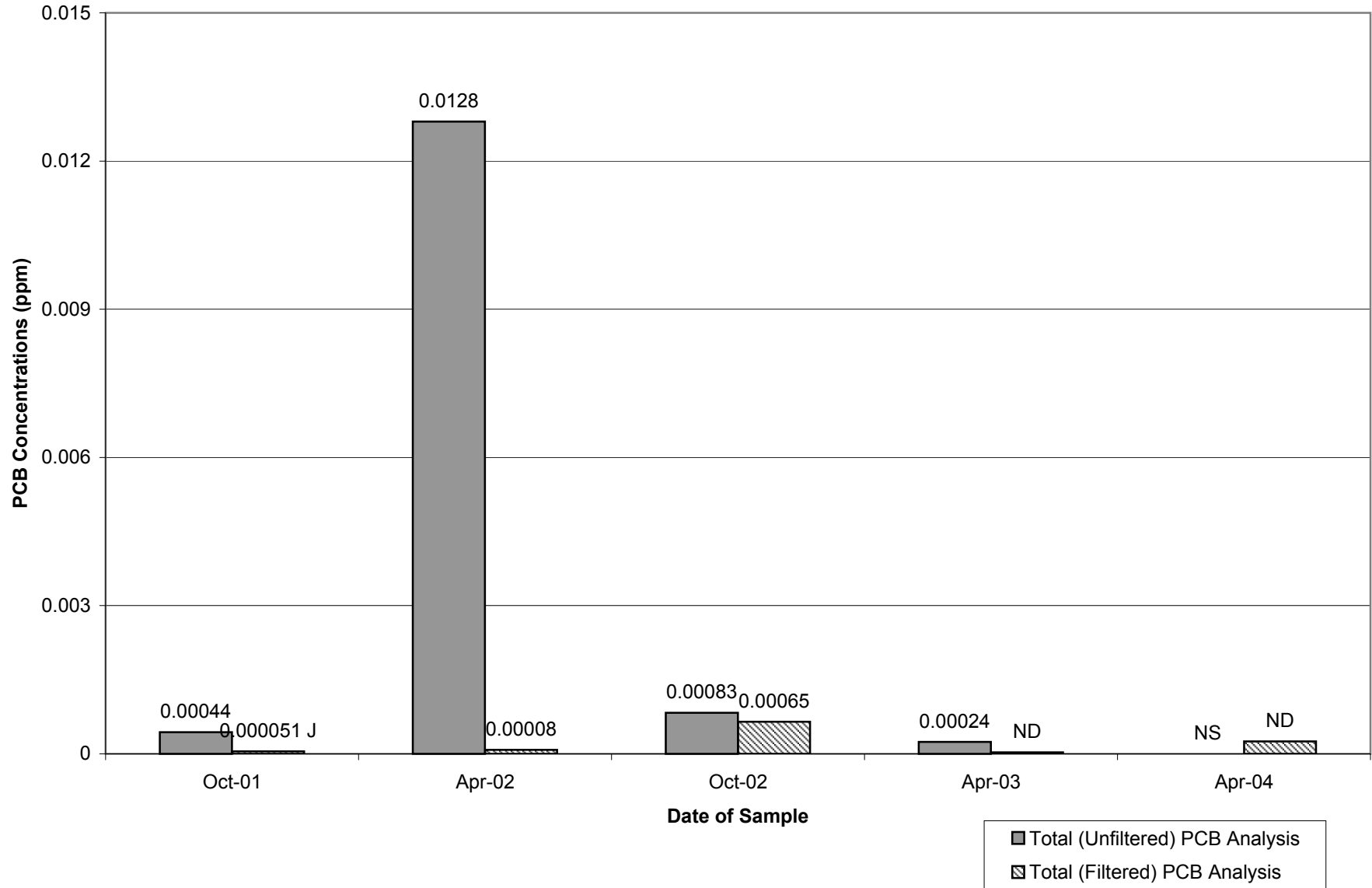




Appendix C

Groundwater Management Area 1  
General Electric Company  
Pittsfield, Massachusetts

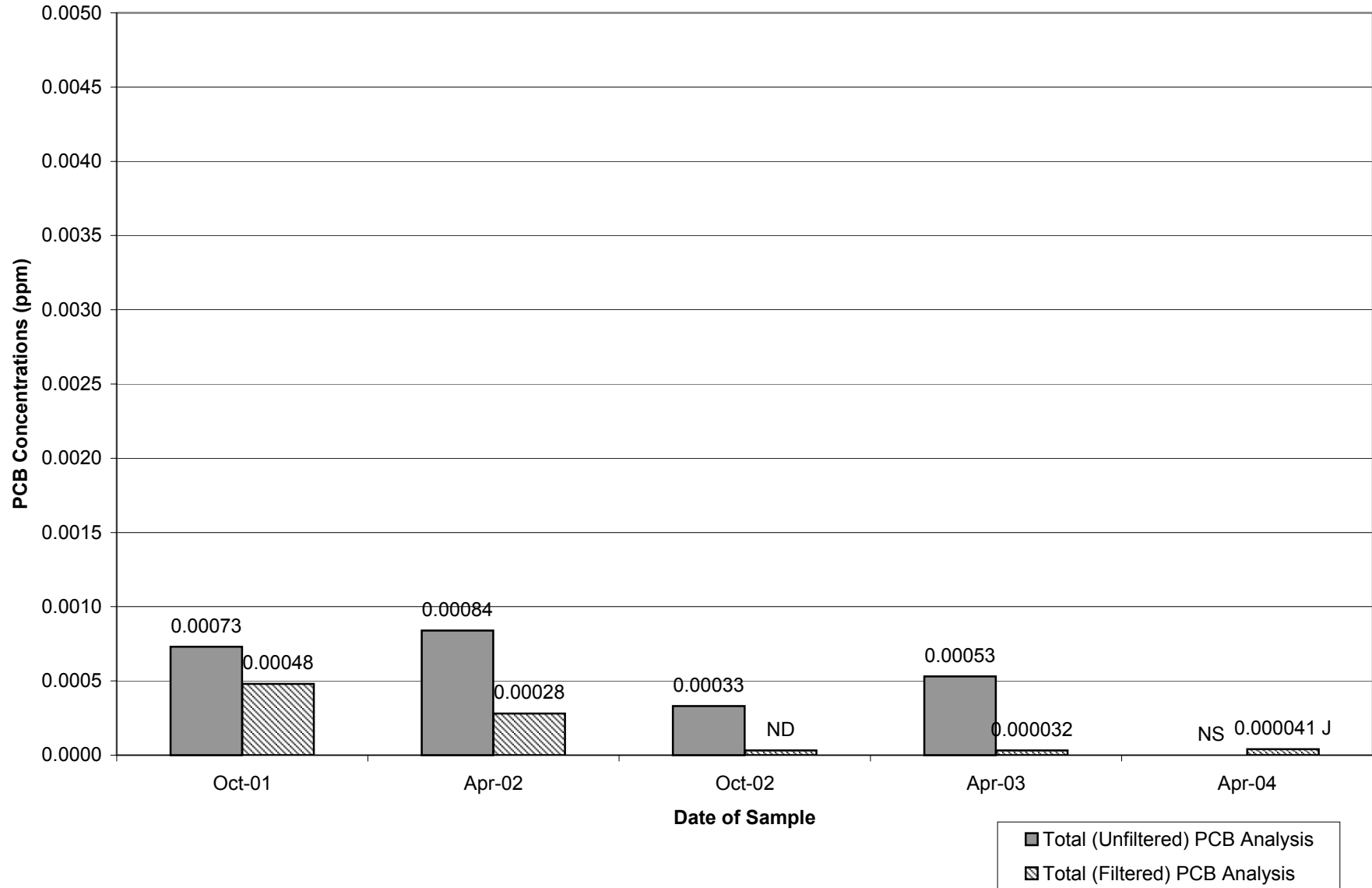
Well LSSC-18 Historical PCB Concentrations



Appendix C

Groundwater Management Area 1  
General Electric Company  
Pittsfield, Massachusetts

Well N2SC-07S Historical PCB Concentrations



# *Historical Groundwater Data*

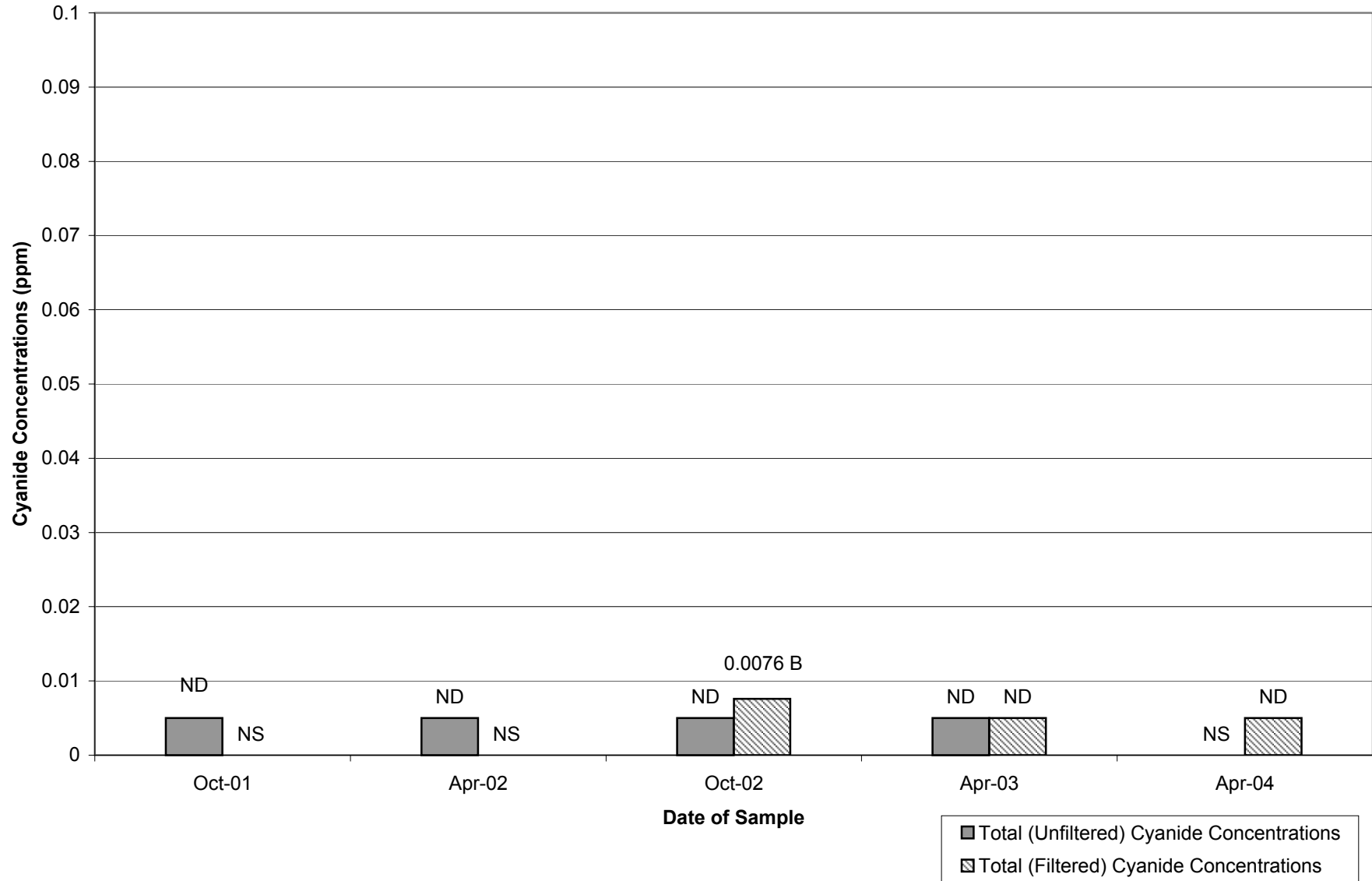
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## **Cyanide Concentrations – Wells Sampled in Spring 2004**

# Appendix C

## Groundwater Management Area 1 General Electric Company Pittsfield, Massachusetts

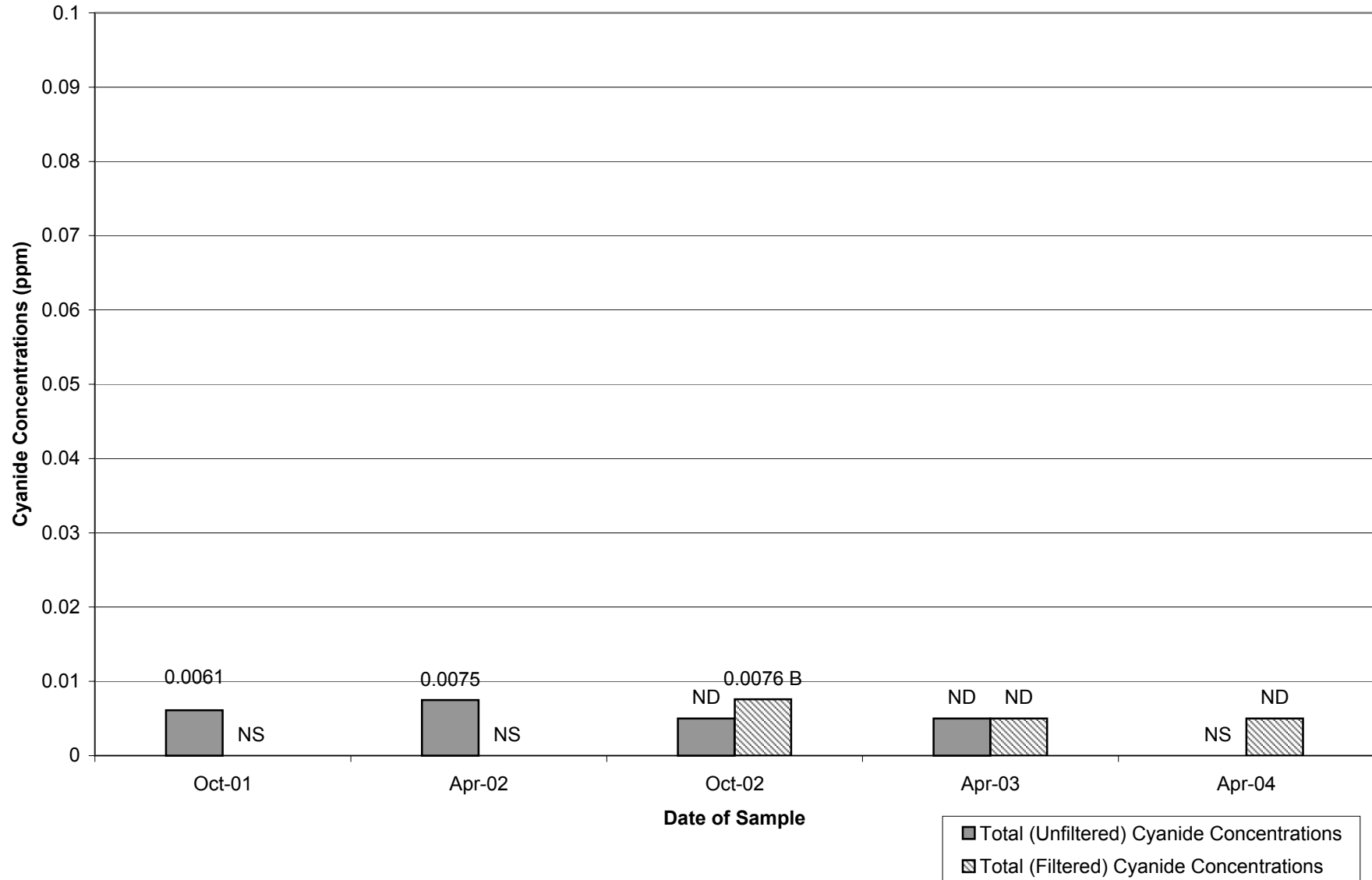
### Well RF-16 Unfiltered and Filtered Cyanide Concentrations



# Appendix C

## Groundwater Management Area 1 General Electric Company Pittsfield, Massachusetts

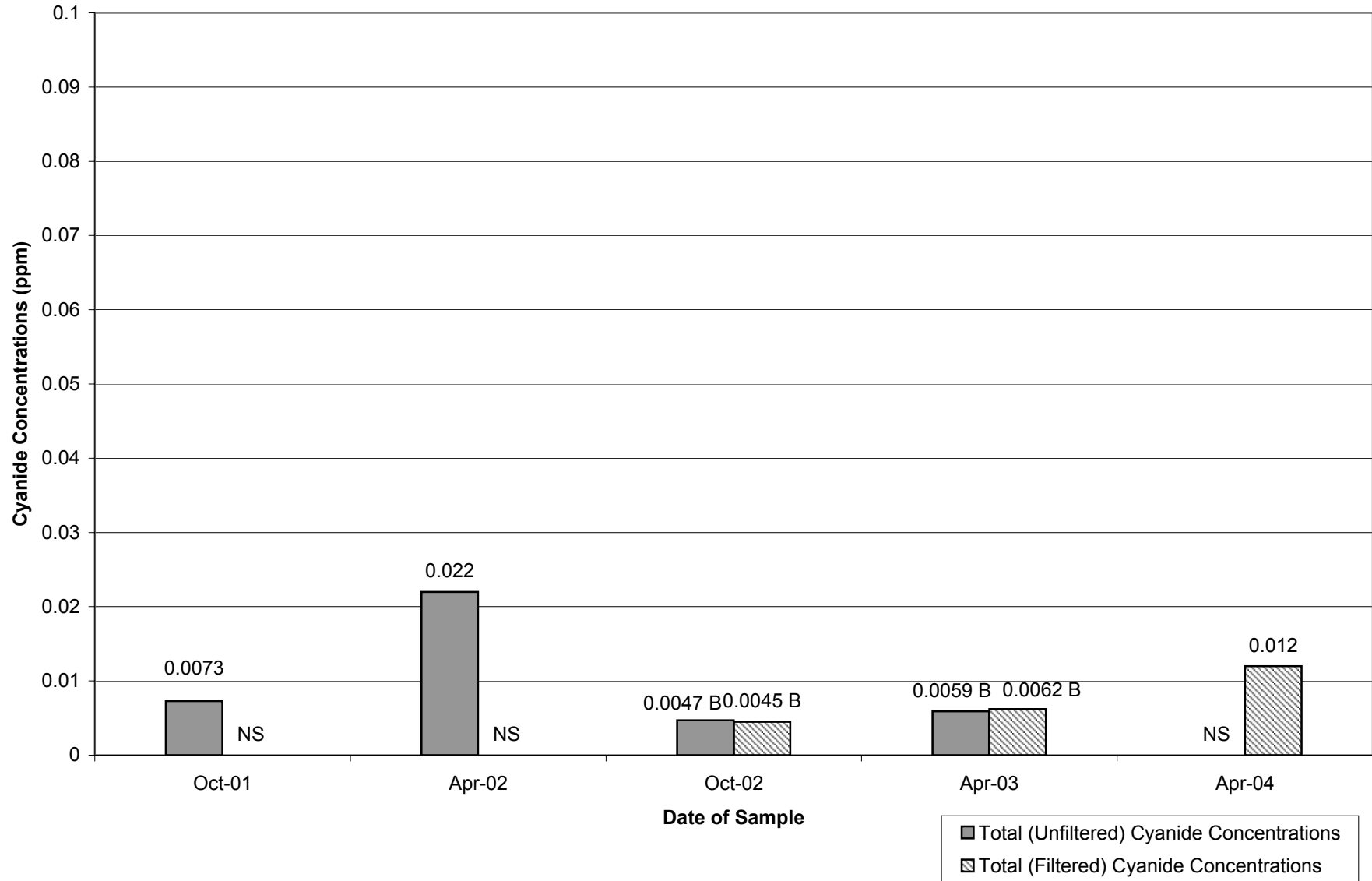
### Well ES2-2A Unfiltered and Filtered Cyanide Concentrations



# Appendix C

## Groundwater Management Area 1 General Electric Company Pittsfield, Massachusetts

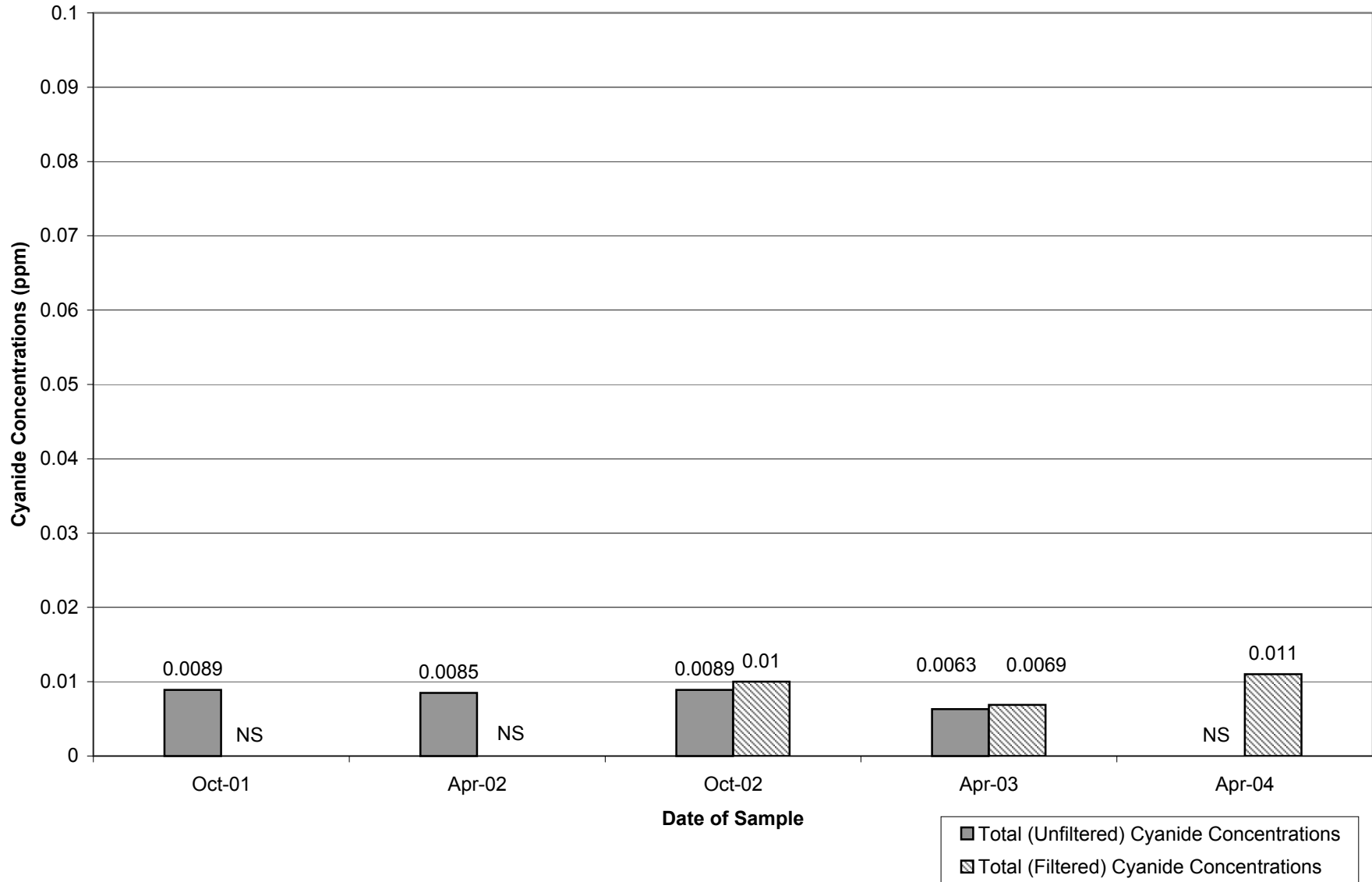
### Well ESA2S-52 Unfiltered and Filtered Cyanide Concentrations



Appendix C

Groundwater Management Area 1  
General Electric Company  
Pittsfield, Massachusetts

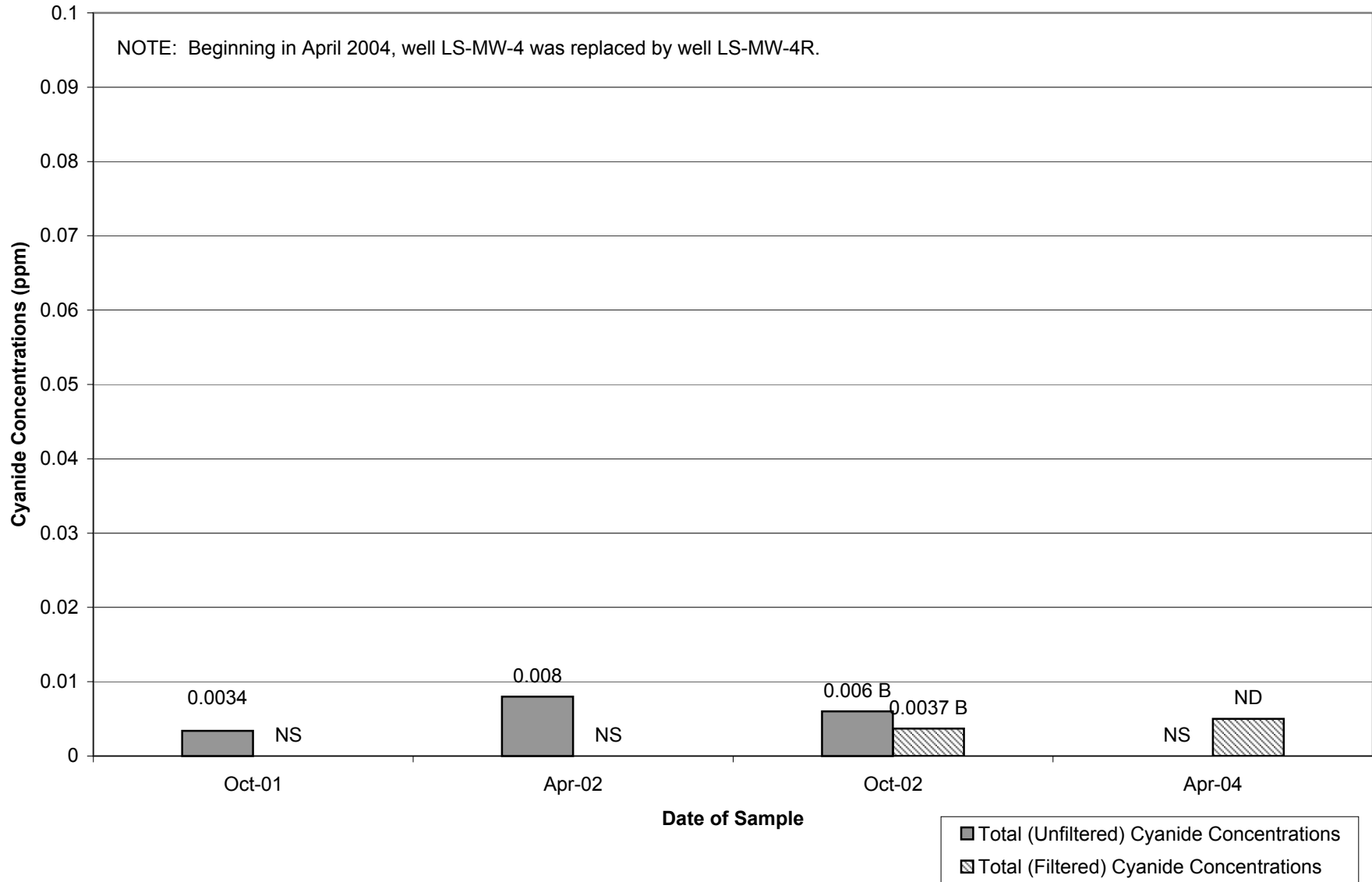
Well HR-G1-MW-3 Unfiltered and Filtered Cyanide Concentrations



# Appendix C

## Groundwater Management Area 1 General Electric Company Pittsfield, Massachusetts

### Well LS-MW-4 & LS-MW-4R Unfiltered and Filtered Cyanide Concentrations





# *Historical Groundwater Data*

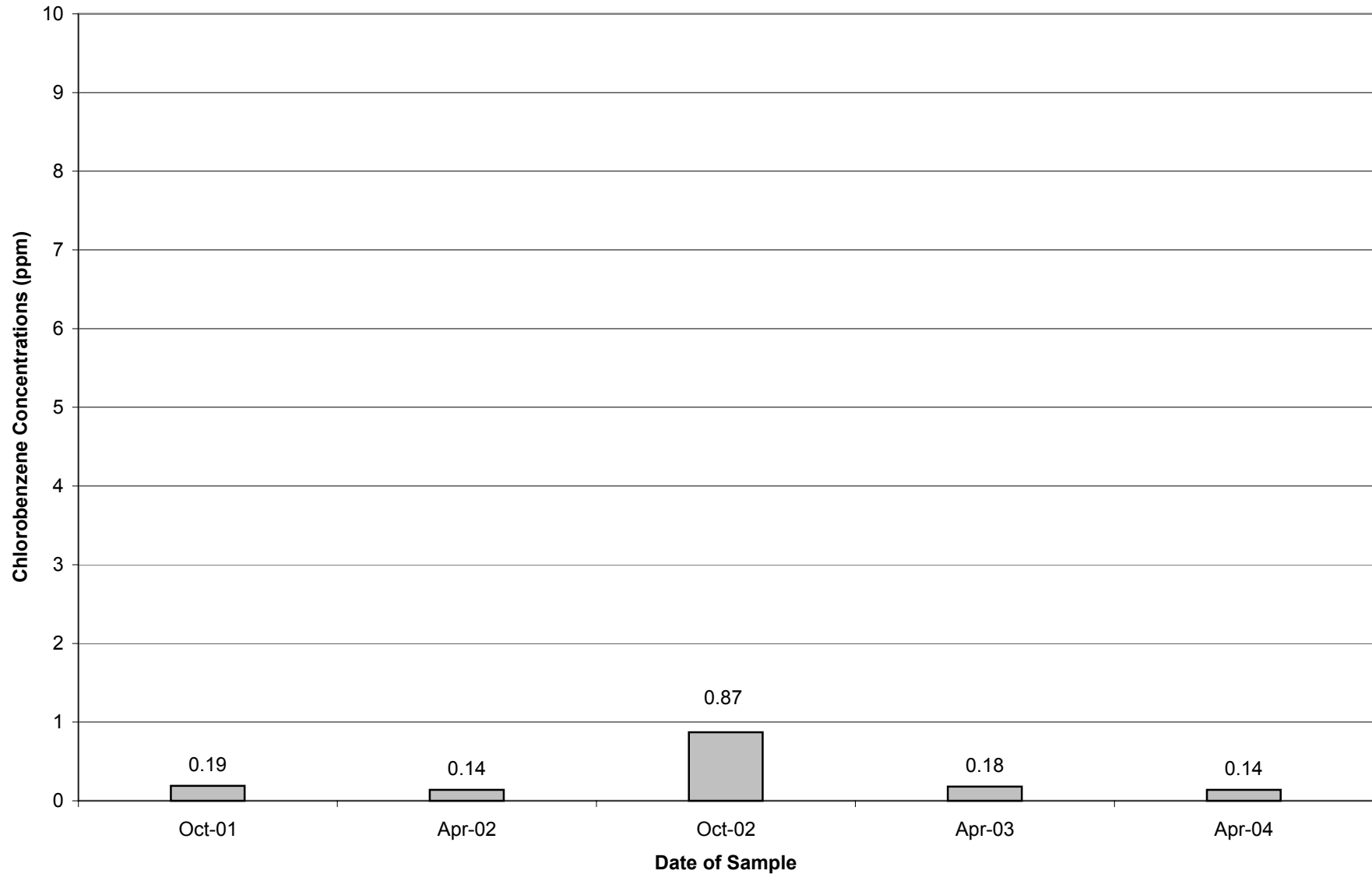
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## **Chlorobenzene Concentrations – Selected Wells**

Appendix C

Groundwater Management Area 1  
General Electric Company  
Pittsfield, Massachusetts

Well N2SC-07S Chlorobenzene Concentrations



# *Appendix D*

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## **Data Validation Report**

**APPENDIX D  
GENERAL ELECTRIC COMPANY  
PITTSFIELD, MASSACHUSETTS**

**GROUNDWATER MANAGEMENT AREA 1**

**DATA VALIDATION REPORT – SPRING 2004**

**1.0 General**

This Appendix summarizes the Tier I and Tier II data reviews performed for groundwater samples collected at the Plant Site 1 Groundwater Management Area (GMA 1) located in Pittsfield, Massachusetts. The samples were analyzed for various 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. of Charleston, West Virginia. Data validation was performed for 16 polychlorinated biphenyl (PCB) samples, 11 volatile organic compound (VOC) samples, one semi-volatile organic compound (SVOC) sample, one polychlorinated dibenzo-p-dioxin (PCDD)/polychlorinated dibenzofuran (PCDF) sample, one metals sample, and seven cyanide/sulfide samples.

**2.0 Data Evaluation Procedures**

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

- *Field Sampling Plan/Quality Assurance Project Plan, General Electric Company, Pittsfield, Massachusetts*, Blasland, Bouck & Lee, Inc. ([BBL]; FSP/QAPP, approved May 25, 2004 and resubmitted June 15, 2004);
- *Region I Tiered Organic and Inorganic Data Validation Guidelines*, USEPA Region I (July 1, 1993);
- *Region I Laboratory Data Validation Functional Guidelines for Evaluating Organics Analyses*, USEPA Region I (February 1, 1988) (Modified November 1, 1988);
- *Region I Laboratory Data Validation Functional Guidelines for Evaluating Inorganics Analyses*, USEPA Region I (June 13, 1988) (Modified February 1989);
- *Region I Laboratory Data Validation Functional Guidelines for Evaluating Organics Analyses*, USEPA Region I (Draft, December 1996); and
- *National Functional Guidelines for Dioxin/Furan Data Validation*, USEPA (Draft, January 1996).

A tabulated summary of the Tier II data evaluation is presented in Table D-1. Each sample subjected to evaluation is listed in Table D-1 to document that data review was performed, as well as present the highest level of data validation (Tier I or Tier II) that was applied. Samples that required data qualification are listed separately for each parameter (compound or analyte) that required qualification.

The following data qualifiers have been used in this data evaluation.

- J The compound or analyte was positively identified, but the associated numeric 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 or analyte is detected at estimated concentrations less than the practical quantitation limit (PQL).
- U The compound or analyte was analyzed for, but not detected. The sample quantitation limit is presented and adjusted for dilution and (for solid samples only) percent moisture. Non-detect sample results are presented as ND(PQL) within this report and in Table D-1 for consistency with previous documents prepared for this investigation.
- UJ The compound or analyte was not detected above the reported sample quantitation limit. However, the reported limit is approximate 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 and in Table D-1 for consistency with previous documents prepared for this investigation.
- 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 purposes.

### **3.0 Data Validation Procedures**

The FSP/QAPP provides (in Section 7.5) that all 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* (USEPA guidelines). Accordingly, 100% of the analytical data for these investigations were subjected to Tier I review. The Tier I review consisted of a completeness evidence audit, as outlined in the *USEPA Region I CSF Completeness Evidence Audit Program* (USEPA Region I, 7/31/91), to ensure that all laboratory data and documentation were present. A tabulated summary of the samples subjected to Tier I and Tier II data evaluation is presented below.

**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	5	0	0	9	1	1	16
VOCs	0	0	0	6	1	4	11
SVOCs	0	0	0	1	0	0	1
PCDDs/PCDFs	0	0	0	1	0	0	1
Metals	0	0	0	1	0	0	1
Cyanide/Sulfide	4	1	0	1	0	1	7
<b>Total</b>	<b>9</b>	<b>1</b>	<b>0</b>	<b>19</b>	<b>2</b>	<b>6</b>	<b>37</b>

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 USEPA Region I Tier I data completeness requirements.

As specified in the FSP/QAPP, approximately 25% of the laboratory sample delivery group packages were randomly chosen to be subjected to Tier II review. A Tier II review was also performed to resolve data usability limitations identified from laboratory qualification of the data during the Tier I data review. The Tier II data review consisted of a review of all 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. Due to the variable sizes of the data packages and the number of data qualification issues identified during the Tier I review, approximately 73% of the data were subjected to a Tier II review. The Tier II review resulted in the qualification of data for several samples due to minor QA/QC deficiencies. Additionally, all field duplicates were examined for relative percent difference (RPD) compliance with the criteria specified in the FSP/QAPP.

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 USEPA 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 below for each analytical method.

#### **4.0 Data Review**

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 exceeded. The compounds that exceeded initial calibration criterion and the number of samples qualified are presented below.

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

<b>Analysis</b>	<b>Compound</b>	<b>Number of Affected Samples</b>	<b>Qualification</b>
VOCs	1,4-Dioxane	11	J
	2-Butanone	11	J
	Acetone	11	J
	Acetonitrile	11	J
	Acrolein	11	J
	Isobutanol	11	J
	Propionitrile	11	J
SVOCs	4-Nitroquinoline-1-oxide	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-detected 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-detected sample results were qualified as estimated (J).

The continuing calibration criterion requires that the percent different (%D) between the initial calibration RRF and the continuing calibration RRF for VOCs and SVOCs be less than 25%. Sample data for detected and non-detected compounds with %D values exceeding the continuing calibration criterion were qualified as

estimated (J). A summary of the compounds exceeding continuing calibration criterion and the number of samples qualified due to those deviations are identified below.

**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	2-Hexanone	10	J
	Bromoform	1	J
	Carbon Disulfide	1	J
	Dichlorodifluoromethane	8	J
	Trichlorofluoromethane	8	J
SVOCs	1,2-Diphenylhydrazine	1	J
	2-Nitroaniline	1	J
	a,a'-Dimethylphenethylamine	1	J
	Benzyl Alcohol	1	J
	Hexachlorophene	1	J
	p-Dimethylaminoazobenzene	1	J

Internal standard compounds for SVOC analysis are required to have area counts that are not greater than two times (+100%) or less than one-half (-50%) of the area counts for the continuing calibration standard. Internal standard compounds that exceeded recovery criteria resulted in the qualification of sample results for compounds that were quantified with the deviant standard. SVOC sample results for the associated compounds were qualified as estimated (J) when the internal standard recovery was less than 50%, but greater than 25%. The PCDDs/PCDFs internal standard compound recovery criteria require that internal standard recoveries be between 40 and 140%. PCDDs/PCDFs sample results for the associated compounds were qualified as estimated (J) when the internal standard recovery was less than 25%, but greater than 10%. Compounds associated with internal standards which exceeded the recovery criteria and the numbers of samples qualified due to those deviations are identified below.

**Compounds Qualified Due to Internal Standard Deviations**

<b>Analysis</b>	<b>Compound</b>	<b>Number of Affected Samples</b>	<b>Qualification</b>
SVOCs	3-Methylcholanthrene	1	J
	7,12-Dimethylbenz(a)anthracene	1	J
	Benzo(a)pyrene	1	J
	Benzo(b)fluoranthene	1	J
	Benzo(g,h,i)perylene	1	J
	Benzo(k)fluoranthene	1	J
	Di-n-Octylphthalate	1	J
	Dibenzo(a,h)anthracene	1	J
	Indeno(1,2,3-cd)pyrene	1	J
PCDDs/PCDFs	1,2,3,4,6,7,8-HpCDD	1	J
	1,2,3,4,6,7,8-HpCDF	1	J
	1,2,3,4,7,8,9-HpCDF	1	J
	1,2,3,4,7,8-HxCDF	1	J
	1,2,3,6,7,8-HxCDD	1	J
	1,2,3,6,7,8-HxCDF	1	J

**Compounds Qualified Due to Internal Standard Deviations**

Analysis	Compound	Number of Affected Samples	Qualification
PCDDs/PCDFs	1,2,3,7,8,9-HxCDF	1	J
	1,2,3,7,8-PeCDD	1	J
	1,2,3,7,8-PeCDF	1	J
	2,3,4,7,8-PeCDF	1	J
	2,3,7,8-TCDD	1	J
	HpCDDs (total)	1	J
	HpCDFs (total)	1	J
	HxCDDs (total)	1	J
	HxCDFs (total)	1	J
	OCDD	1	J
	OCDF	1	J
	PeCDDs (total)	1	J
	PeCDFs (total)	1	J
	TCDDs (total)	1	J

Surrogate compounds are analyzed with every organic sample to aid in evaluation of the sample extraction efficiency. As specified in the FSP/QAPP, two of the three SVOC surrogate compounds within each fraction must be within the laboratory-specified control limits. Sample data for non-detect compounds with surrogate recoveries that exceeded the surrogate recovery criteria and exhibited recoveries greater than 10% were qualified as estimated (J). A summary of the compounds affected by surrogate recovery deviations and the number of samples qualified due to those deviations are shown below.

**Compounds Qualified Due to Surrogate Recovery Deviations**

Analysis	Compound	Number of Affected Samples	Qualification
SVOCs	All base neutral compounds	97	J

**5.0 Overall Data Usability**

This section summarizes the analytical data in terms of its completeness and usability for site characterization purposes. Data completeness is defined as the percentage of sample results that have been determined to be usable during the data validation process. Data completeness with respect to usability was calculated separately for inorganic and each of the organic analyses. The percent usability calculation included analyses evaluated under both Tier I and Tier II data validation reviews. The percent usability calculation also includes quality control samples collected to aid in the evaluation of data usability. Therefore, field/equipment blank, trip blank, and field duplicate data determined to be unusable as a result of the validation process are represented in the percent usability value tabulated below.

**Data Usability**

Parameter	Percent Usability	Rejected Data
Inorganics	100	None
Cyanide and Sulfide	100	None
VOCs	100	None
SVOCs	100	None
PCBs	100	None
PCDDs/PCDFs	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 laboratory duplicates, field duplicates, matrix spike/matrix spike duplicate (MS/MSD) samples, and ICP serial dilution samples. For this analytical program, none of the data required qualification for MS/MSD RPD, laboratory duplicate RPD, field duplicate RPD, or ICP serial dilutions.

### **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, laboratory control standards (LCSs), MS/MSD samples, CRDL samples, and surrogate compound recoveries. For this analytical program, 10.9% of the data required qualification for calibration deviations, 0.88% for internal standard recoveries and 9.5% for surrogate compound recoveries. None of the data required qualification for MS/MSD recovery deviations, LCS recoveries or CRDL standard recoveries.

### **5.3 Representativeness**

Representativeness expresses the degree to which sample data accurately and precisely represent 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 Agency-approved work plans and by following the procedures for sample collection/analyses described in the FSP/QAPP. Additionally, the analytical program used procedures consistent with USEPA-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 program, none of the data required qualification for exceeding holding time requirements.

## **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. The USEPA SW-846<sup>1</sup> analytical methods presented in the FSP/QAPP are updated on occasion by the USEPA to benefit from recent technological advancements in analytical chemistry and instrumentation. In most cases, the method upgrades include the incorporation of new technology that improves the sensitivity and stability of the instrumentation or allows the laboratory to increase throughput without hindering accuracy and precision. Overall, the analytical methods for this investigation have remained consistent in their general approach through continued use of the basic analytical techniques (e.g., sample extraction/preparation, instrument calibration, QA/QC procedures). Through this use of consistent base analytical procedures and by requiring that updated procedures meet the QA/QC criteria specified in the FSP/QAPP, the analytical data from past, present, and future sampling events will be comparable to allow for qualitative and quantitative assessment of site conditions.

## **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 for individual analytical parameters and overall usability of this data set is 100%.

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<sup>1</sup> Test Methods for evaluating Solid Waste, SW-846, USEPA, Final Update III, December 1996.

TABLE D - 1  
ANALYTICAL DATA VALIDATION SUMMARY - SPRING 2004  
GROUNDWATER MANAGEMENT AREA 1  
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>											
4D0P114	DUP-1	4/6/2004	Water	Tier II	No						ES1-05
4D0P114	ES1-05	4/6/2004	Water	Tier II	No						
4D0P114	ES1-27R	4/6/2004	Water	Tier II	No						
4D0P162	GMA1-13	4/7/2004	Water	Tier I	No						
4D0P162	RF-02	4/6/2004	Water	Tier I	No						
4D0P219	E2SC-23	4/7/2004	Water	Tier I	No						
4D0P219	HR-G3-MW-1	4/8/2004	Water	Tier I	No						
4D0P219	LS-29	4/8/2004	Water	Tier I	No						
4D0P243	ESA1N-52	4/9/2004	Water	Tier II	No						
4D0P243	GMA1-6	4/9/2004	Water	Tier II	No						
4D0P243	LS-MW-4R	4/9/2004	Water	Tier II	No						
4D0P243	LSSC-08S	4/8/2004	Water	Tier II	No						
4D0P243	LSSC-18	4/8/2004	Water	Tier II	No						
4D0P257	N2SC-07S	4/12/2004	Water	Tier II	No						
4E0P033	E2SC-24	5/3/2004	Water	Tier II	No						
4E0P033	RINSE BLANK-1	5/3/2004	Water	Tier II	No						
<b>Metals</b>											
4D0P243	LS-MW-4R	4/9/2004	Water	Tier II	No						
<b>VOCs</b>											
4D0P114	GMA1-4	4/6/2004	Water	Tier II	Yes	1,4-Dioxane	ICAL RRF	0.001	>0.05	ND(0.20) J	
						2-Butanone	ICAL RRF	0.037	>0.05	ND(0.010) J	
						2-Hexanone	CCAL %D	34.4%	<25%	ND(0.010) J	
						Acetone	ICAL RRF	0.049	>0.05	ND(0.010) J	
						Acetonitrile	ICAL RRF	0.037	>0.05	ND(0.10) J	
						Acrolein	ICAL RRF	0.001	>0.05	ND(0.10) J	
						Isobutanol	ICAL RRF	0.011	>0.05	ND(0.10) J	
						Propionitrile	ICAL RRF	0.018	>0.05	ND(0.010) J	
4D0P114	TRIP BLANK	4/6/2004	Water	Tier II	Yes	1,4-Dioxane	ICAL RRF	0.001	>0.05	ND(0.20) J	
						2-Butanone	ICAL RRF	0.037	>0.05	ND(0.010) J	
						2-Hexanone	CCAL %D	34.4%	<25%	ND(0.010) J	
						Acetone	ICAL RRF	0.049	>0.05	ND(0.010) J	
						Acetonitrile	ICAL RRF	0.037	>0.05	ND(0.10) J	
						Acrolein	ICAL RRF	0.001	>0.05	ND(0.10) J	
						Isobutanol	ICAL RRF	0.011	>0.05	ND(0.10) J	
						Propionitrile	ICAL RRF	0.018	>0.05	ND(0.010) J	
4D0P243	DUP-3	4/9/2004	Water	Tier II	Yes	1,4-Dioxane	ICAL RRF	0.001	>0.05	ND(0.20) J	LSSC-16S
						2-Butanone	ICAL RRF	0.037	>0.05	ND(0.010) J	
						2-Hexanone	CCAL %D	36.8%	<25%	ND(0.010) J	
						Acetone	ICAL RRF	0.049	>0.05	ND(0.010) J	
						Acetonitrile	ICAL RRF	0.037	>0.05	ND(0.10) J	
						Acrolein	ICAL RRF	0.001	>0.05	ND(0.10) J	
						Dichlorodifluoromethane	CCAL %D	25.2%	<25%	ND(0.0050) J	
						Isobutanol	ICAL RRF	0.011	>0.05	ND(0.10) J	
						Propionitrile	ICAL RRF	0.018	>0.05	ND(0.010) J	
						Trichlorofluoromethane	CCAL %D	33.6%	<25%	ND(0.0050) J	
4D0P243	GMA1-6	4/9/2004	Water	Tier II	Yes	1,4-Dioxane	ICAL RRF	0.001	>0.05	ND(0.20) J	
						2-Butanone	ICAL RRF	0.037	>0.05	ND(0.010) J	
						2-Hexanone	CCAL %D	36.8%	<25%	ND(0.010) J	
						Acetone	ICAL RRF	0.049	>0.05	ND(0.010) J	
						Acetonitrile	ICAL RRF	0.037	>0.05	ND(0.10) J	
						Acrolein	ICAL RRF	0.001	>0.05	ND(0.10) J	
						Dichlorodifluoromethane	CCAL %D	25.2%	<25%	ND(0.0050) J	
						Isobutanol	ICAL RRF	0.011	>0.05	ND(0.10) J	
						Propionitrile	ICAL RRF	0.018	>0.05	ND(0.010) J	
						Trichlorofluoromethane	CCAL %D	33.6%	<25%	ND(0.0050) J	

TABLE D - 1  
ANALYTICAL DATA VALIDATION SUMMARY - SPRING 2004  
GROUNDWATER MANAGEMENT AREA 1  
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>											
4D0P243	LS-MW-4R	4/9/2004	Water	Tier II	Yes	1,4-Dioxane	ICAL RRF	0.001	>0.05	ND(0.20) J	
						2-Butanone	ICAL RRF	0.037	>0.05	ND(0.010) J	
						2-Hexanone	CCAL %D	36.8%	<25%	ND(0.010) J	
						Acetone	ICAL RRF	0.049	>0.05	ND(0.010) J	
						Acetonitrile	ICAL RRF	0.037	>0.05	ND(0.10) J	
						Acrolein	ICAL RRF	0.001	>0.05	ND(0.10) J	
						Dichlorodifluoromethane	CCAL %D	25.2%	<25%	ND(0.0050) J	
						Isobutanol	ICAL RRF	0.011	>0.05	ND(0.10) J	
						Propionitrile	ICAL RRF	0.018	>0.05	ND(0.010) J	
						Trichlorofluoromethane	CCAL %D	33.6%	<25%	ND(0.0050) J	
						Trichlorofluoromethane	ICAL RRF	0.001	>0.05	ND(0.20) J	
						4D0P243	LSSC-16S	4/9/2004	Water	Tier II	Yes
2-Butanone	ICAL RRF	0.037	>0.05	ND(0.010) J							
2-Hexanone	CCAL %D	36.8%	<25%	ND(0.010) J							
Acetone	ICAL RRF	0.049	>0.05	ND(0.010) J							
Acetonitrile	ICAL RRF	0.037	>0.05	ND(0.10) J							
Acrolein	ICAL RRF	0.001	>0.05	ND(0.10) J							
Dichlorodifluoromethane	CCAL %D	25.2%	<25%	ND(0.0050) J							
Isobutanol	ICAL RRF	0.011	>0.05	ND(0.10) J							
Propionitrile	ICAL RRF	0.018	>0.05	ND(0.010) J							
Trichlorofluoromethane	CCAL %D	33.6%	<25%	ND(0.0050) J							
Trichlorofluoromethane	ICAL RRF	0.001	>0.05	ND(0.20) J							
4D0P243	TRIP BLANK	4/8/2004	Water	Tier II	Yes						
						2-Butanone	ICAL RRF	0.037	>0.05	ND(0.010) J	
						2-Hexanone	CCAL %D	36.8%	<25%	ND(0.010) J	
						Acetone	ICAL RRF	0.049	>0.05	ND(0.010) J	
						Acetonitrile	ICAL RRF	0.037	>0.05	ND(0.10) J	
						Acrolein	ICAL RRF	0.001	>0.05	ND(0.10) J	
						Dichlorodifluoromethane	CCAL %D	25.2%	<25%	ND(0.0050) J	
						Isobutanol	ICAL RRF	0.011	>0.05	ND(0.10) J	
						Propionitrile	ICAL RRF	0.018	>0.05	ND(0.010) J	
						Trichlorofluoromethane	CCAL %D	33.6%	<25%	ND(0.0050) J	
						Trichlorofluoromethane	ICAL RRF	0.001	>0.05	ND(1.0) J	
						4D0P257	N2SC-07S	4/12/2004	Water	Tier II	Yes
2-Butanone	ICAL RRF	0.037	>0.05	ND(0.050) J							
2-Hexanone	CCAL %D	31.6%	<25%	ND(0.050) J							
Acetone	ICAL RRF	0.049	>0.05	ND(0.050) J							
Acetonitrile	ICAL RRF	0.037	>0.05	ND(0.50) J							
Acrolein	ICAL RRF	0.001	>0.05	ND(0.50) J							
Dichlorodifluoromethane	CCAL %D	26.4%	<25%	ND(0.050) J							
Isobutanol	ICAL RRF	0.011	>0.05	ND(1.0) J							
Propionitrile	ICAL RRF	0.018	>0.05	ND(0.10) J							
Trichlorofluoromethane	CCAL %D	29.6%	<25%	ND(0.050) J							

TABLE D - 1  
ANALYTICAL DATA VALIDATION SUMMARY - SPRING 2004  
  
GROUNDWATER MANAGEMENT AREA 1  
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>											
4D0P257	NS-17	4/12/2004	Water	Tier II	Yes	1,4-Dioxane	ICAL RRF	0.001	>0.05	ND(2.0) J	
						2-Butanone	ICAL RRF	0.037	>0.05	ND(0.10) J	
						2-Hexanone	CCAL %D	31.6%	<25%	ND(0.10) J	
						Acetone	ICAL RRF	0.049	>0.05	ND(0.10) J	
						Acetonitrile	ICAL RRF	0.037	>0.05	ND(1.0) J	
						Acrolein	ICAL RRF	0.001	>0.05	ND(1.0) J	
						Dichlorodifluoromethane	CCAL %D	26.4%	<25%	ND(0.10) J	
						Isobutanol	ICAL RRF	0.011	>0.05	ND(2.0) J	
						Propionitrile	ICAL RRF	0.018	>0.05	ND(0.20) J	
						Trichlorofluoromethane	CCAL %D	29.6%	<25%	ND(0.10) J	
						4D0P257	TRIP BLANK	4/12/2004	Water	Tier II	Yes
						2-Butanone	ICAL RRF	0.037	>0.05	ND(0.10) J	
						2-Hexanone	CCAL %D	31.6%	<25%	ND(0.10) J	
						Acetone	ICAL RRF	0.049	>0.05	ND(0.10) J	
						Acetonitrile	ICAL RRF	0.037	>0.05	ND(1.0) J	
						Acrolein	ICAL RRF	0.001	>0.05	ND(1.0) J	
						Dichlorodifluoromethane	CCAL %D	26.4%	<25%	ND(0.10) J	
						Isobutanol	ICAL RRF	0.011	>0.05	ND(2.0) J	
						Propionitrile	ICAL RRF	0.018	>0.05	ND(0.20) J	
						Trichlorofluoromethane	CCAL %D	29.6%	<25%	ND(0.10) J	
4E0P033	RINSE BLANK-1	5/3/2004	Water	Tier II	Yes	1,4-Dioxane	ICAL RRF	0.001	>0.05	ND(0.20) J	
						2-Butanone	ICAL RRF	0.037	>0.05	ND(0.10) J	
						Acetone	ICAL RRF	0.049	>0.05	ND(0.10) J	
						Acetonitrile	ICAL RRF	0.037	>0.05	ND(0.10) J	
						Acrolein	ICAL RRF	0.001	>0.05	ND(0.10) J	
						Bromoform	CCAL %D	29.6%	<25%	ND(0.0050) J	
						Carbon Disulfide	CCAL %D	29.6%	<25%	ND(0.0050) J	
						Isobutanol	ICAL RRF	0.011	>0.05	ND(0.10) J	
						Propionitrile	ICAL RRF	0.018	>0.05	ND(0.10) J	

TABLE D - 1  
ANALYTICAL DATA VALIDATION SUMMARY - SPRING 2004

GROUNDWATER MANAGEMENT AREA 1  
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</b>											
4D0P243	LS-MW-4R	4/9/2004	Water	Tier II	Yes	1,2,4,5-Tetrachlorobenzene	Surrogate Recovery Base-neutral	26.0%,31.0%,23.0%	43.0% to 116.0%, 35.0% to 114.0%, 33.0% to 141.0%	ND(0.010) J	USE REANALYSIS
						1,2,4-Trichlorobenzene	Surrogate Recovery Base-neutral	26.0%,31.0%,23.0%	43.0% to 116.0%, 35.0% to 114.0%, 33.0% to 141.0%	ND(0.010) J	
						1,2-Dichlorobenzene	Surrogate Recovery Base-neutral	26.0%,31.0%,23.0%	43.0% to 116.0%, 35.0% to 114.0%, 33.0% to 141.0%	ND(0.010) J	
						1,2-Diphenylhydrazine	CCAL %D	28.5%	<25%	ND(0.010) J	
						1,2-Diphenylhydrazine	Surrogate Recovery Base-neutral	26.0%,31.0%,23.0%	43.0% to 116.0%, 35.0% to 114.0%, 33.0% to 141.0%	ND(0.010) J	
						1,3,5-Trinitrobenzene	Surrogate Recovery Base-neutral	26.0%,31.0%,23.0%	43.0% to 116.0%, 35.0% to 114.0%, 33.0% to 141.0%	ND(0.010) J	
						1,3-Dichlorobenzene	Surrogate Recovery Base-neutral	26.0%,31.0%,23.0%	43.0% to 116.0%, 35.0% to 114.0%, 33.0% to 141.0%	ND(0.010) J	
						1,3-Dinitrobenzene	Surrogate Recovery Base-neutral	26.0%,31.0%,23.0%	43.0% to 116.0%, 35.0% to 114.0%, 33.0% to 141.0%	ND(0.010) J	
						1,4-Dichlorobenzene	Surrogate Recovery Base-neutral	26.0%,31.0%,23.0%	43.0% to 116.0%, 35.0% to 114.0%, 33.0% to 141.0%	ND(0.010) J	
						1,4-Dinitroquinone	Surrogate Recovery Base-neutral	26.0%,31.0%,23.0%	43.0% to 116.0%, 35.0% to 114.0%, 33.0% to 141.0%	ND(0.010) J	
						1-Naphthylamine	Surrogate Recovery Base-neutral	26.0%,31.0%,23.0%	43.0% to 116.0%, 35.0% to 114.0%, 33.0% to 141.0%	ND(0.010) J	
						2,4-Dinitrotoluene	Surrogate Recovery Base-neutral	26.0%,31.0%,23.0%	43.0% to 116.0%, 35.0% to 114.0%, 33.0% to 141.0%	ND(0.010) J	
						2,6-Dinitrotoluene	Surrogate Recovery Base-neutral	26.0%,31.0%,23.0%	43.0% to 116.0%, 35.0% to 114.0%, 33.0% to 141.0%	ND(0.010) J	
						2-Acetylaminofluorene	Surrogate Recovery Base-neutral	26.0%,31.0%,23.0%	43.0% to 116.0%, 35.0% to 114.0%, 33.0% to 141.0%	ND(0.010) J	
						2-Chloronaphthalene	Surrogate Recovery Base-neutral	26.0%,31.0%,23.0%	43.0% to 116.0%, 35.0% to 114.0%, 33.0% to 141.0%	ND(0.010) J	
						2-Methylnaphthalene	Surrogate Recovery Base-neutral	26.0%,31.0%,23.0%	43.0% to 116.0%, 35.0% to 114.0%, 33.0% to 141.0%	ND(0.010) J	
						2-Naphthylamine	Surrogate Recovery Base-neutral	26.0%,31.0%,23.0%	43.0% to 116.0%, 35.0% to 114.0%, 33.0% to 141.0%	ND(0.010) J	
						2-Nitroaniline	CCAL %D	56.4%	<25%	ND(0.050) J	
						2-Nitroaniline	Surrogate Recovery Base-neutral	26.0%,31.0%,23.0%	43.0% to 116.0%, 35.0% to 114.0%, 33.0% to 141.0%	ND(0.050) J	
						2-Picoline	Surrogate Recovery Base-neutral	26.0%,31.0%,23.0%	43.0% to 116.0%, 35.0% to 114.0%, 33.0% to 141.0%	ND(0.010) J	
						3,3'-Dichlorobenzidine	Surrogate Recovery Base-neutral	26.0%,31.0%,23.0%	43.0% to 116.0%, 35.0% to 114.0%, 33.0% to 141.0%	ND(0.020) J	
						3,3'-Dimethylbenzidine	Surrogate Recovery Base-neutral	26.0%,31.0%,23.0%	43.0% to 116.0%, 35.0% to 114.0%, 33.0% to 141.0%	ND(0.010) J	
						3-Methylcholanthrene	Internal Standard Perylene-d12 %R	43.7%	50% to 200%	ND(0.010) J	
						3-Methylcholanthrene	Surrogate Recovery Base-neutral	26.0%,31.0%,23.0%	43.0% to 116.0%, 35.0% to 114.0%, 33.0% to 141.0%	ND(0.010) J	
						3-Nitroaniline	Surrogate Recovery Base-neutral	26.0%,31.0%,23.0%	43.0% to 116.0%, 35.0% to 114.0%, 33.0% to 141.0%	ND(0.050) J	
						4-Aminobiphenyl	Surrogate Recovery Base-neutral	26.0%,31.0%,23.0%	43.0% to 116.0%, 35.0% to 114.0%, 33.0% to 141.0%	ND(0.010) J	
						4-Bromophenyl-phenylether	Surrogate Recovery Base-neutral	26.0%,31.0%,23.0%	43.0% to 116.0%, 35.0% to 114.0%, 33.0% to 141.0%	ND(0.010) J	
						4-Chloroaniline	Surrogate Recovery Base-neutral	26.0%,31.0%,23.0%	43.0% to 116.0%, 35.0% to 114.0%, 33.0% to 141.0%	ND(0.010) J	
						4-Chlorobenzilate	Surrogate Recovery Base-neutral	26.0%,31.0%,23.0%	43.0% to 116.0%, 35.0% to 114.0%, 33.0% to 141.0%	ND(0.010) J	
						4-Chlorophenyl-phenylether	Surrogate Recovery Base-neutral	26.0%,31.0%,23.0%	43.0% to 116.0%, 35.0% to 114.0%, 33.0% to 141.0%	ND(0.010) J	
						4-Nitroaniline	Surrogate Recovery Base-neutral	26.0%,31.0%,23.0%	43.0% to 116.0%, 35.0% to 114.0%, 33.0% to 141.0%	ND(0.050) J	
						4-Nitroquinoline-1-oxide	ICAL RRF	0.034	>0.05	ND(0.010) J	
						4-Nitroquinoline-1-oxide	Surrogate Recovery Base-neutral	26.0%,31.0%,23.0%	43.0% to 116.0%, 35.0% to 114.0%, 33.0% to 141.0%	ND(0.010) J	
						4-Phenylenediamine	Surrogate Recovery Base-neutral	26.0%,31.0%,23.0%	43.0% to 116.0%, 35.0% to 114.0%, 33.0% to 141.0%	ND(0.010) J	
						5-Nitro-o-toluidine	Surrogate Recovery Base-neutral	26.0%,31.0%,23.0%	43.0% to 116.0%, 35.0% to 114.0%, 33.0% to 141.0%	ND(0.010) J	
						7,12-Dimethylbenz(a)anthracene	Internal Standard Perylene-d12 %R	43.7%	50% to 200%	ND(0.010) J	
						7,12-Dimethylbenz(a)anthracene	Surrogate Recovery Base-neutral	26.0%,31.0%,23.0%	43.0% to 116.0%, 35.0% to 114.0%, 33.0% to 141.0%	ND(0.010) J	
						a,a'-Dimethylphenethylamine	CCAL %D	27.1%	<25%	ND(0.010) J	
						a,a'-Dimethylphenethylamine	Surrogate Recovery Base-neutral	26.0%,31.0%,23.0%	43.0% to 116.0%, 35.0% to 114.0%, 33.0% to 141.0%	ND(0.010) J	
						Acenaphthene	Surrogate Recovery Base-neutral	26.0%,31.0%,23.0%	43.0% to 116.0%, 35.0% to 114.0%, 33.0% to 141.0%	ND(0.010) J	
						Acenaphthylene	Surrogate Recovery Base-neutral	26.0%,31.0%,23.0%	43.0% to 116.0%, 35.0% to 114.0%, 33.0% to 141.0%	ND(0.010) J	
						Acetophenone	Surrogate Recovery Base-neutral	26.0%,31.0%,23.0%	43.0% to 116.0%, 35.0% to 114.0%, 33.0% to 141.0%	ND(0.010) J	
						Aniline	Surrogate Recovery Base-neutral	26.0%,31.0%,23.0%	43.0% to 116.0%, 35.0% to 114.0%, 33.0% to 141.0%	ND(0.010) J	
						Anthracene	Surrogate Recovery Base-neutral	26.0%,31.0%,23.0%	43.0% to 116.0%, 35.0% to 114.0%, 33.0% to 141.0%	ND(0.010) J	
						Aramite	Surrogate Recovery Base-neutral	26.0%,31.0%,23.0%	43.0% to 116.0%, 35.0% to 114.0%, 33.0% to 141.0%	ND(0.010) J	
						Benzidine	Surrogate Recovery Base-neutral	26.0%,31.0%,23.0%	43.0% to 116.0%, 35.0% to 114.0%, 33.0% to 141.0%	ND(0.020) J	
						Benzo(a)anthracene	Surrogate Recovery Base-neutral	26.0%,31.0%,23.0%	43.0% to 116.0%, 35.0% to 114.0%, 33.0% to 141.0%	ND(0.010) J	
						Benzo(a)pyrene	Internal Standard Perylene-d12 %R	43.7%	50% to 200%	ND(0.010) J	
						Benzo(a)pyrene	Surrogate Recovery Base-neutral	26.0%,31.0%,23.0%	43.0% to 116.0%, 35.0% to 114.0%, 33.0% to 141.0%	ND(0.010) J	
						Benzo(b)fluoranthene	Internal Standard Perylene-d12 %R	43.7%	50% to 200%	ND(0.010) J	
						Benzo(b)fluoranthene	Surrogate Recovery Base-neutral	26.0%,31.0%,23.0%	43.0% to 116.0%, 35.0% to 114.0%, 33.0% to 141.0%	ND(0.010) J	
						Benzo(g,h,i)perylene	Internal Standard Perylene-d12 %R	43.7%	50% to 200%	ND(0.010) J	
						Benzo(g,h,i)perylene	Surrogate Recovery Base-neutral	26.0%,31.0%,23.0%	43.0% to 116.0%, 35.0% to 114.0%, 33.0% to 141.0%	ND(0.010) J	
						Benzo(k)fluoranthene	Internal Standard Perylene-d12 %R	43.7%	50% to 200%	ND(0.010) J	
						Benzo(k)fluoranthene	Surrogate Recovery Base-neutral	26.0%,31.0%,23.0%	43.0% to 116.0%, 35.0% to 114.0%, 33.0% to 141.0%	ND(0.010) J	
						Benzyl Alcohol	CCAL %D	29.5%	<25%	ND(0.020) J	

TABLE D - 1  
ANALYTICAL DATA VALIDATION SUMMARY - SPRING 2004

GROUNDWATER MANAGEMENT AREA 1  
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
SVOCs (continued)											
						bis(2-Chloroethoxy)methane	Surrogate Recovery Base-neutral	26.0%,31.0%,23.0%	43.0% to 116.0%, 35.0% to 114.0%, 33.0% to 141.0%	ND(0.010) J	
						bis(2-Chloroethyl)ether	Surrogate Recovery Base-neutral	26.0%,31.0%,23.0%	43.0% to 116.0%, 35.0% to 114.0%, 33.0% to 141.0%	ND(0.010) J	
						bis(2-Chloroisopropyl)ether	Surrogate Recovery Base-neutral	26.0%,31.0%,23.0%	43.0% to 116.0%, 35.0% to 114.0%, 33.0% to 141.0%	ND(0.010) J	
						bis(2-Ethylhexyl)phthalate	Surrogate Recovery Base-neutral	26.0%,31.0%,23.0%	43.0% to 116.0%, 35.0% to 114.0%, 33.0% to 141.0%	ND(0.0060) J	
						Butylbenzylphthalate	Surrogate Recovery Base-neutral	26.0%,31.0%,23.0%	43.0% to 116.0%, 35.0% to 114.0%, 33.0% to 141.0%	ND(0.010) J	
						Chrysene	Surrogate Recovery Base-neutral	26.0%,31.0%,23.0%	43.0% to 116.0%, 35.0% to 114.0%, 33.0% to 141.0%	ND(0.010) J	
						Diallylate	Surrogate Recovery Base-neutral	26.0%,31.0%,23.0%	43.0% to 116.0%, 35.0% to 114.0%, 33.0% to 141.0%	ND(0.010) J	
						Dibenzo(a,h)anthracene	Internal Standard Perylene-d12 %R	43.7%	50% to 200%	ND(0.010) J	
						Dibenzo(a,h)anthracene	Surrogate Recovery Base-neutral	26.0%,31.0%,23.0%	43.0% to 116.0%, 35.0% to 114.0%, 33.0% to 141.0%	ND(0.010) J	
						Dibenzofuran	Surrogate Recovery Base-neutral	26.0%,31.0%,23.0%	43.0% to 116.0%, 35.0% to 114.0%, 33.0% to 141.0%	ND(0.010) J	
						Diethylphthalate	Surrogate Recovery Base-neutral	26.0%,31.0%,23.0%	43.0% to 116.0%, 35.0% to 114.0%, 33.0% to 141.0%	ND(0.010) J	
						Dimethylphthalate	Surrogate Recovery Base-neutral	26.0%,31.0%,23.0%	43.0% to 116.0%, 35.0% to 114.0%, 33.0% to 141.0%	ND(0.010) J	
						Di-n-Butylphthalate	Surrogate Recovery Base-neutral	26.0%,31.0%,23.0%	43.0% to 116.0%, 35.0% to 114.0%, 33.0% to 141.0%	ND(0.010) J	
						Di-n-Octylphthalate	Internal Standard Perylene-d12 %R	43.7%	50% to 200%	ND(0.010) J	
						Di-n-Octylphthalate	Surrogate Recovery Base-neutral	26.0%,31.0%,23.0%	43.0% to 116.0%, 35.0% to 114.0%, 33.0% to 141.0%	ND(0.010) J	
						Diphenylamine	Surrogate Recovery Base-neutral	26.0%,31.0%,23.0%	43.0% to 116.0%, 35.0% to 114.0%, 33.0% to 141.0%	ND(0.010) J	
						Ethyl Methanesulfonate	Surrogate Recovery Base-neutral	26.0%,31.0%,23.0%	43.0% to 116.0%, 35.0% to 114.0%, 33.0% to 141.0%	ND(0.010) J	
						Fluoranthene	Surrogate Recovery Base-neutral	26.0%,31.0%,23.0%	43.0% to 116.0%, 35.0% to 114.0%, 33.0% to 141.0%	ND(0.010) J	
						Fluorene	Surrogate Recovery Base-neutral	26.0%,31.0%,23.0%	43.0% to 116.0%, 35.0% to 114.0%, 33.0% to 141.0%	ND(0.010) J	
						Hexachlorobenzene	Surrogate Recovery Base-neutral	26.0%,31.0%,23.0%	43.0% to 116.0%, 35.0% to 114.0%, 33.0% to 141.0%	ND(0.010) J	
						Hexachlorocyclopentadiene	Surrogate Recovery Base-neutral	26.0%,31.0%,23.0%	43.0% to 116.0%, 35.0% to 114.0%, 33.0% to 141.0%	ND(0.010) J	
						Hexachloroethane	Surrogate Recovery Base-neutral	26.0%,31.0%,23.0%	43.0% to 116.0%, 35.0% to 114.0%, 33.0% to 141.0%	ND(0.010) J	
						Hexachlorophene	CCAL %D	99.9%	<25%	ND(0.020) J	
						Hexachlorophene	Surrogate Recovery Base-neutral	26.0%,31.0%,23.0%	43.0% to 116.0%, 35.0% to 114.0%, 33.0% to 141.0%	ND(0.020) J	
						Hexachloropropene	Surrogate Recovery Base-neutral	26.0%,31.0%,23.0%	43.0% to 116.0%, 35.0% to 114.0%, 33.0% to 141.0%	ND(0.010) J	
						Indeno(1,2,3-cd)pyrene	Internal Standard Perylene-d12 %R	43.7%	50% to 200%	ND(0.010) J	
						Indeno(1,2,3-cd)pyrene	Surrogate Recovery Base-neutral	26.0%,31.0%,23.0%	43.0% to 116.0%, 35.0% to 114.0%, 33.0% to 141.0%	ND(0.010) J	
						Isodrin	Surrogate Recovery Base-neutral	26.0%,31.0%,23.0%	43.0% to 116.0%, 35.0% to 114.0%, 33.0% to 141.0%	ND(0.010) J	
						Isophorone	Surrogate Recovery Base-neutral	26.0%,31.0%,23.0%	43.0% to 116.0%, 35.0% to 114.0%, 33.0% to 141.0%	ND(0.010) J	
						Isosafrole	Surrogate Recovery Base-neutral	26.0%,31.0%,23.0%	43.0% to 116.0%, 35.0% to 114.0%, 33.0% to 141.0%	ND(0.010) J	
						Methapyrene	Surrogate Recovery Base-neutral	26.0%,31.0%,23.0%	43.0% to 116.0%, 35.0% to 114.0%, 33.0% to 141.0%	ND(0.010) J	
						Methyl Methanesulfonate	Surrogate Recovery Base-neutral	26.0%,31.0%,23.0%	43.0% to 116.0%, 35.0% to 114.0%, 33.0% to 141.0%	ND(0.010) J	
						Naphthalene	Surrogate Recovery Base-neutral	26.0%,31.0%,23.0%	43.0% to 116.0%, 35.0% to 114.0%, 33.0% to 141.0%	ND(0.010) J	
						Nitrobenzene	Surrogate Recovery Base-neutral	26.0%,31.0%,23.0%	43.0% to 116.0%, 35.0% to 114.0%, 33.0% to 141.0%	ND(0.010) J	
						N-Nitrosodiethylamine	Surrogate Recovery Base-neutral	26.0%,31.0%,23.0%	43.0% to 116.0%, 35.0% to 114.0%, 33.0% to 141.0%	ND(0.010) J	
						N-Nitrosodimethylamine	Surrogate Recovery Base-neutral	26.0%,31.0%,23.0%	43.0% to 116.0%, 35.0% to 114.0%, 33.0% to 141.0%	ND(0.010) J	
						N-Nitroso-di-n-butylamine	Surrogate Recovery Base-neutral	26.0%,31.0%,23.0%	43.0% to 116.0%, 35.0% to 114.0%, 33.0% to 141.0%	ND(0.010) J	
						N-Nitroso-di-n-propylamine	Surrogate Recovery Base-neutral	26.0%,31.0%,23.0%	43.0% to 116.0%, 35.0% to 114.0%, 33.0% to 141.0%	ND(0.010) J	
						N-Nitrosodiphenylamine	Surrogate Recovery Base-neutral	26.0%,31.0%,23.0%	43.0% to 116.0%, 35.0% to 114.0%, 33.0% to 141.0%	ND(0.010) J	
						N-Nitrosomethyllethylamine	Surrogate Recovery Base-neutral	26.0%,31.0%,23.0%	43.0% to 116.0%, 35.0% to 114.0%, 33.0% to 141.0%	ND(0.010) J	
						N-Nitrosomorpholine	Surrogate Recovery Base-neutral	26.0%,31.0%,23.0%	43.0% to 116.0%, 35.0% to 114.0%, 33.0% to 141.0%	ND(0.010) J	
						N-Nitrosopiperidine	Surrogate Recovery Base-neutral	26.0%,31.0%,23.0%	43.0% to 116.0%, 35.0% to 114.0%, 33.0% to 141.0%	ND(0.010) J	
						N-Nitrosopyrrolidine	Surrogate Recovery Base-neutral	26.0%,31.0%,23.0%	43.0% to 116.0%, 35.0% to 114.0%, 33.0% to 141.0%	ND(0.010) J	
						o,o,o-Triethylphosphorothioate	Surrogate Recovery Base-neutral	26.0%,31.0%,23.0%	43.0% to 116.0%, 35.0% to 114.0%, 33.0% to 141.0%	ND(0.010) J	
						o-Toluidine	Surrogate Recovery Base-neutral	26.0%,31.0%,23.0%	43.0% to 116.0%, 35.0% to 114.0%, 33.0% to 141.0%	ND(0.010) J	
						p-Dimethylaminoazobenzene	CCAL %D	30.6%	<25%	ND(0.010) J	
						p-Dimethylaminoazobenzene	Surrogate Recovery Base-neutral	26.0%,31.0%,23.0%	43.0% to 116.0%, 35.0% to 114.0%, 33.0% to 141.0%	ND(0.010) J	
						Pentachlorobenzene	Surrogate Recovery Base-neutral	26.0%,31.0%,23.0%	43.0% to 116.0%, 35.0% to 114.0%, 33.0% to 141.0%	ND(0.010) J	
						Pentachloroethane	Surrogate Recovery Base-neutral	26.0%,31.0%,23.0%	43.0% to 116.0%, 35.0% to 114.0%, 33.0% to 141.0%	ND(0.010) J	
						Pentachloronitrobenzene	Surrogate Recovery Base-neutral	26.0%,31.0%,23.0%	43.0% to 116.0%, 35.0% to 114.0%, 33.0% to 141.0%	ND(0.010) J	
						Phenacetin	Surrogate Recovery Base-neutral	26.0%,31.0%,23.0%	43.0% to 116.0%, 35.0% to 114.0%, 33.0% to 141.0%	ND(0.010) J	
						Phenanthrene	Surrogate Recovery Base-neutral	26.0%,31.0%,23.0%	43.0% to 116.0%, 35.0% to 114.0%, 33.0% to 141.0%	ND(0.010) J	
						Pronamide	Surrogate Recovery Base-neutral	26.0%,31.0%,23.0%	43.0% to 116.0%, 35.0% to 114.0%, 33.0% to 141.0%	ND(0.010) J	
						Pyrene	Surrogate Recovery Base-neutral	26.0%,31.0%,23.0%	43.0% to 116.0%, 35.0% to 114.0%, 33.0% to 141.0%	ND(0.010) J	
						Pyridine	Surrogate Recovery Base-neutral	26.0%,31.0%,23.0%	43.0% to 116.0%, 35.0% to 114.0%, 33.0% to 141.0%	ND(0.010) J	
						Safrole	Surrogate Recovery Base-neutral	26.0%,31.0%,23.0%	43.0% to 116.0%, 35.0% to 114.0%, 33.0% to 141.0%	ND(0.010) J	
						Thionazin	Surrogate Recovery Base-neutral	26.0%,31.0%,23.0%	43.0% to 116.0%, 35.0% to 114.0%, 33.0% to 141.0%	ND(0.010) J	

TABLE D - 1  
ANALYTICAL DATA VALIDATION SUMMARY - SPRING 2004  
GROUNDWATER MANAGEMENT AREA 1  
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>PCDDs/PCDFs</b>											
4D0P243	LS-MW-4R	4/9/2004	Water	Tier II	Yes	1,2,3,4,6,7,8-HpCDD	Method Blank	-	-	ND(0.000000065)	
						1,2,3,4,6,7,8-HpCDF	Method Blank	-	-	ND(0.000000070)	
						1,2,3,4,7,8,9-HpCDF	Method Blank	-	-	ND(0.000000056)	
						1,2,3,4,7,8-HxCDF	Method Blank	-	-	ND(0.000000082)	
						1,2,3,6,7,8-HxCDD	Method Blank	-	-	ND(0.000000077)	
						1,2,3,6,7,8-HxCDF	Method Blank	-	-	ND(0.000000085)	
						1,2,3,7,8,9-HxCDF	Method Blank	-	-	ND(0.000000072)	
						1,2,3,7,8-PeCDD	Method Blank	-	-	ND(0.00000011)	
						1,2,3,7,8-PeCDF	Method Blank	-	-	ND(0.00000011)	
						2,3,4,7,8-PeCDF	Method Blank	-	-	ND(0.000000072)	
						2,3,7,8-TCDD	Method Blank	-	-	ND(0.000000032)	
						HpCDDs (total)	Method Blank	-	-	ND(0.000000065)	
						HpCDFs (total)	Method Blank	-	-	ND(0.00000013)	
						HxCDDs (total)	Method Blank	-	-	ND(0.00000016)	
						HxCDFs (total)	Method Blank	-	-	ND(0.00000024)	
						OCDD	Method Blank	-	-	ND(0.00000015)	
						OCDF	Method Blank	-	-	ND(0.00000092)	
						PeCDDs (total)	Method Blank	-	-	ND(0.00000011)	
						PeCDFs (total)	Method Blank	-	-	ND(0.00000018)	
						TCDDs (total)	Method Blank	-	-	ND(0.000000032)	
<b>Sulfide and Cyanide</b>											
4D0P162	DUP-2	4/7/2004	Water	Tier I	No						RF-16
4D0P162	ESA2S-52	4/7/2004	Water	Tier I	No						
4D0P162	RF-16	4/7/2004	Water	Tier I	No						
4D0P219	ES2-02A	4/7/2004	Water	Tier I	No						
4D0P219	HR-G1-MW-3	4/8/2004	Water	Tier I	No						
4D0P243	LS-MW-4R	4/9/2004	Water	Tier II	No						
4E0P033	RINSE BLANK-1	5/3/2004	Water	Tier II	No						