GE
159 Plastics Avenue
Pittsfield, MA 01201
USA

Transmitted Via Overnight Courier

January 30, 2006

Ms. Sharon Hayes
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 (GECD310)
Groundwater Quality Interim Report for Fall 2005

Dear Ms. Hayes:

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 Baseline Groundwater Quality Interim Report for Spring 2003* (July 2003), enclosed is the *Plant Site 1 Groundwater Management Area Groundwater Quality Monitoring Interim Report for Fall 2005.* This report summarizes activities performed as part of the Plant Site 1 Groundwater Management Area (GMA 1) interim groundwater quality monitoring program during fall 2005, 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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R. Howell, EPA (cover letter only)
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Plant Site 1 Groundwater Management Area Groundwater Quality Monitoring Interim Report for Fall 2005

General Electric Company
Pittsfield, Massachusetts

January 2006

BBL
BLASLAND, BOUCK & LEE, INC.
engineers, scientists, economists

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1. Introduction

1.1 General

On October 27, 2000, a Consent Decree (CD) executed in 1999 by the General Electric Company (GE), the United States Environmental Protection Agency (EPA), the Massachusetts Department of Environmental Protection (MDEP), and several other government agencies was entered by the United States District Court for the District of Massachusetts. The CD governs (among other things) the performance of response actions to address polychlorinated biphenyls (PCBs) and other hazardous constituents in 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

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 initial full round of interim groundwater sampling activities performed at this GMA in April 2004 were provided in GE's July 2004 *Plant Site 1 Groundwater Management Area Groundwater Quality Interim Report for Spring 2004* (Spring 2004 GMA 1 Groundwater Quality Report, which was approved by EPA in a letter dated November 12, 2004), while the results of a limited sampling event conducted in fall 2004 at locations that could not be sampled in spring 2004 were provided in the *Plant Site 1 Groundwater Management Area Groundwater Quality Monitoring Interim Report for Fall 2004* (Fall 2004 GMA 1 Groundwater Quality Report, approved by EPA in a letter dated May 31, 2005). The results of the most recent round of interim groundwater sampling activities conducted in fall 2005 are provided in this *Plant Site 1 Groundwater Management Area Groundwater Quality Monitoring Interim Report for Fall 2005* (Fall 2005 GMA 1 Groundwater Quality Report). 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 monitoring and NAPL removal activities at a number of GMAs. Some of these GMAs, including GMA 1, incorporate multiple RAAs to reflect the fact that groundwater may flow between RAAs. GMA 1 encompasses 11 RAAs and occupies an area of approximately 215 acres (Figures 1 and 2). The RAAs within GMA 1 include:

- 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; and
- RAA 18 - East Street Area 1-South.

GMA-1 contains a combination of GE-owned and non-GE-owned industrial areas, residential properties, and recreational areas, including land formerly owned by GE that has been, or will be, transferred to the Pittsfield Economic Development Authority (PEDA) pursuant to the Definitive Economic Development Agreement (DEDA). 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. 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-diphenyhydrazine (Appendix IX+3). The specific groundwater quality parameters for each individual well were selected based on the monitoring objectives of the well.

After the fourth baseline sampling event at most of the wells in GMA 1 in spring 2003, EPA approved the implementation of the interim monitoring 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. 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, one well was replaced based on technical discussion between EPA and GE, and 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.

Based on the spring 2004 groundwater sampling event, GE discussed certain modifications to the interim program with EPA during a technical meeting on May 21, 2004, and submitted a letter to EPA on June 15, 2004 documenting the modifications to the interim groundwater monitoring program that EPA and GE had agreed would be implemented in the future. As a result, in fall 2004, GE conducted a limited sampling event at replacement locations for the wells that could not be sampled in spring 2004, in addition to certain wells that were previously scheduled for semi-annual sampling. On January 28, 2005, GE submitted its Fall 2004 GMA 1 Groundwater Quality Report, providing the results of those tasks. In that document, GE proposed to remove wells GMA1-2 and GMA1-4 from the monitoring program. In addition, the sampling frequency for monitoring

well MW-4R was proposed to be modified from semi-annual to annual monitoring and a reduced analytical parameter list was proposed for this location. Those proposals were approved by EPA in a letter dated May 31, 2005, and, in fall 2005, GE conducted the approved interim groundwater sampling activities for GMA 1, as 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 East Street Mobil Site 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 conducted a file search at MDEP in December 2005 to review any reports that have been submitted regarding this site since submittal of the Fall 2004 GMA 1 Groundwater Quality Report. The most recent report on file is a 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. GE has previously discussed that report in the Spring 2004 GMA 1 Groundwater Quality Report.

1.3 Format to Document

The remainder of this report is presented in four sections. Section 2 describes the groundwater quality-related activities performed at GMA 1 in fall 2005. Section 3 presents the analytical results obtained during the fall 2005 sampling event performed between October 3, 2005 and October 13, 2005. 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 fall 2005 activities, including a comparison to those Performance Standards. Finally, Section 5 proposes a modification to the interim groundwater quality monitoring program, and presents the schedule for future field and reporting activities related to groundwater quality at GMA 1.

2. Field and Analytical Procedures

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 fall 2005 field sampling data are presented in Appendix B. This section discusses the field procedures used to collect groundwater samples and the methods used to analyze the samples. All activities were performed in general accordance with GE's approved *Field Sampling Plan/Quality Assurance Project Plan* (FSP/QAPP).

2.2 Groundwater Sampling and Analysis

The fall 2005 groundwater sampling event was performed between October 3 and 13, 2005. Groundwater samples were collected from all 23 groundwater monitoring wells scheduled for interim sampling. 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 B. 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 B. A general summary of the field measurement results during the fall 2005 monitoring event is provided below:

PARAMETER	UNITS	RANGE
Turbidity	Nephelometric turbidity units (NTU)	1.0 - 12.0
pH	pH units	6.46 – 7.54
Specific Conductivity	Millisiemens per centimeter	0.381 – 8.248
Oxidation-Reduction Potential	Millivolts	-147.9 – 334.2
Dissolved Oxygen	Milligrams per liter	0.40 – 10.78
Temperature	Degrees Celsius	13.68 – 23.89

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 some or all of the following constituents using the associated EPA methods:

CONSTITUENT	EPA METHOD
VOCs	8260B
Semi-Volatile Organic Compounds (SVOCs)	8260B (see below)
PCBs (Filtered Samples)	8082
Total Cyanide (Filtered Samples)	9014
Physiologically Available Cyanide (Filtered Samples)	9014/MDEP PAC Protocol

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. In addition, VOC samples from GW-3 monitoring wells N2SC-07S and NS-17 were also analyzed for the five select SVOCs due to a laboratory processing error.

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. Finally, the data were validated in accordance with the FSP/QAPP and 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, 98.2% of the fall 2005 groundwater quality data are considered to be useable, which is greater than the minimum required usability of 90% as specified in the FSP/QAPP. The VOC and cyanide results were found to be 100% usable. The validated analytical results are summarized in Section 3 and discussed in Section 4 below.

3. Fall 2005 Analytical Results

3.1 General

A description of the fall 2005 groundwater analytical results is presented in this section. The complete analytical data sets are summarized in Appendix A. Tables 4 and 5 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 6 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 Sample Results

The following paragraphs provide an overview of the fall 2005 analytical results from the GMA 1 groundwater quality monitoring wells for each constituent group that was analyzed.

3.2.1 VOC Results

Six groundwater samples were analyzed for VOCs during the fall 2005 sampling event. The VOC analytical results are summarized in Table A-1 of Appendix A. No VOCs were detected in one of the groundwater samples (well 72R), while nine individual VOCs were observed in the remaining samples. Total VOC concentrations ranged from non-detect (in one sample) to 0.46 ppm (N2SC-7S). Three VOCs (benzene, chlorobenzene, and vinyl chloride) were detected in more than one groundwater sample. All detected VOC constituents were below the relevant Method 1 GW-2 and GW-3 standards.

3.2.2 SVOC Results

Five groundwater samples were analyzed for five select SVOCs (1,2-dichlorobenzene, 1,3-dichlorobenzene, 1,4-dichlorobenzene, 1,2,4-trichlorobenzene, and naphthalene) in conjunction with VOC analyses performed for three GW-2 wells and two GW-3 wells, as discussed in Section 2.3. The SVOC analytical results are summarized in Table A-1 of Appendix A. No SVOCs were detected in the three GW-2 wells, while up to two SVOCs were detected in the two GW-3 wells that were inadvertently analyzed for these constituents.

Specifically, 1,3-Dichlorobenzene was detected in the samples collected from wells N2SC-7S and NS-17 and 1,4-dichlorobenzene was detected in the sample from well NS-17. The concentrations of SVOCs in wells N2SC-7S and NS-17 were two to three orders of magnitude below the applicable GW-3 standards.

3.2.3 PCB Results

Filtered groundwater samples from seventeen monitoring wells were analyzed for PCBs as part of the fall 2005 sampling event. The PCB analytical results are summarized in Table A-1 of Appendix A. PCBs (Aroclor 1254 only) were detected in all of the wells analyzed for PCBs. Total PCB concentrations in the filtered samples ranged from an estimated value of 0.000041 ppm (at well GMA1-6) to 0.00081 ppm (at well HR-G3-MW-1).

3.2.4 Cyanide Constituent Results

Five filtered groundwater samples were analyzed for cyanide during the fall 2005 sampling event. The analytical results for these samples are summarized in Table A-1 of Appendix A. Cyanide was not detected in one of the groundwater samples (RF-16). In the remaining four samples, cyanide concentrations ranged from 0.0025 ppm to 0.0052 ppm. All detected cyanide concentrations were below the practical quantitation limit of 0.010 ppm.

As proposed in the Fall 2004 GMA 1 Groundwater Quality Report, GE evaluated the presence of cyanide by submitting each sample for two separate analyses: (1) the standard method that has been utilized in the program (i.e., EPA Method 9014) described above; and (2) the modified analytical method finalized by MDEP to determine the concentrations of physiologically available cyanide (PAC). The PAC protocols are contained in the August 13, 2004 MDEP document entitled *Quality Assurance and Quality Control Requirements and Performance Standards for SWC-846 Method 9014, Total Cyanide and the MADEP Physiologically Available Cyanide (PAC) Protocol for the Massachusetts Contingency Plan (MCP).* The analytical results for these samples are summarized in Table A-1 of Appendix A. PAC was not detected in four of the groundwater samples. One detection at a level below the practical quantitation limit was observed in groundwater collected at well ES2-2A (0.0016 ppm).

As discussed above, all detected cyanide concentrations were below the practical quantitation limit of 0.010 ppm, whether the standard EPA Method 9014 or the PAC Protocol was employed in the analyses. In Section 5.2, GE proposes to implement the PAC Protocol for all future cyanide analyses at GMA 1.

4. Assessment of Results

4.1 General

This report constitutes the fourth interim monitoring report and is the eighth 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 fall 2005 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.

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 fall 2005 sampling event are listed in Tables 4 and 5, 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.

On January 9, 2006, MDEP approved revised numerical standards (Wave 2 Standards) for a number of constituents. In approving those standards, MDEP stated that the revised standards are expected to become effective on April 3, 2006. MDEP stated, however, that parties may, at their option, use those revised standards pursuant to 40 CMR 40.0982(7) to characterize risk at a disposal site and the use of these standards will be considered a Method 2 Risk Characterization. For PCBs, the issued Wave 2 standards do not change the current Method 1 standard, but they state that PCBs will be subject to a further change in a spring 2006 proposal by MDEP. For the assessment of analytical results included in this report, GE has elected to continue to utilize the current MCP Method 1 standards. Once the Wave 2 Standards become effective, GE proposes to incorporate those standards into future data assessments at this GMA.

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);

   (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 in Section 2.3, only selected wells were sampled in fall 2005.

4.3 Groundwater Quality – Fall 2005

For the purpose of generally assessing current groundwater quality conditions, the analytical results from the fall 2005 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 fall 2005 groundwater analytical results in relation to these Performance Standards, as well as in relation to the MCP UCLs for groundwater. In support of those discussions, Tables 4 and 5 provide a comparison of the concentrations of detected constituents with the currently applicable GW-2 and GW-3 standards, respectively, while Table 6 presents a comparison of the concentrations of detected constituents with the groundwater UCLs.

4.3.1 Fall 2005 Groundwater Results Relative to GW-2 Performance Standards

As part of the fall 2005 program, groundwater samples were collected from three wells designated as GW-2 monitoring locations that were scheduled to be sampled for the GW-2 VOC list (i.e., specifically wells 72R, GMA1-6, and LSSC-16S). Although wells ESA1N-52, 139R, and GMA1-18 are also designated as GW-2/GW-3 monitoring locations, these wells are only scheduled for sampling and analysis for PCBs (which does not currently have an associated GW-2 standard) under this interim monitoring program. Therefore, comparisons to the MCP Method 1 GW-2 standards were not performed for these wells.

The fall 2005 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 fall 2005 sample concentrations from the GW-2 monitoring wells sampled for VOCs was above the corresponding GW-2 Performance Standard. In addition, none of the GW-2 wells sampled for VOCs 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 Fall 2005 Groundwater Results Relative to GW-3 Performance Standards

Groundwater samples were collected form each of the 22 wells designated for GW-3 monitoring that were scheduled to be sampled during the fall 2005 interim sampling event. The fall 2005 groundwater analytical

results for all constituents detected in 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 fall 2005 analytical results from all 22 GW-3 monitoring wells that were sampled in fall 2005, only 14 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.

The comparisons set forth in Table 5 show that the filtered PCB sample results from six GW-3 locations were above the MCP Method 1 GW-3 standard of 0.0003 ppm for PCBs. These samples were collected from wells 139R, E2SC-23, E2SC-24, HR-G3-MW-1, LSSC-8S, and LSSC-18. All of these locations 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 139R (although PCBs were previously observed in filtered and unfiltered samples collected from well 139, which was the predecessor to this well). As discussed in Section 4.4 below, GE's proposed response to these exceedances, including the new exceedance in well 139R, is to continue the interim monitoring program.

4.3.3 Fall 2005 Comparison to Upper Concentration Limits

In addition to comparing the fall 2005 groundwater analytical results with applicable MCP Method 1 GW-2 and GW-3 standards, the analytical results from all 23 wells that were sampled were compared with the groundwater UCLs specified in the MCP (310 CMR 40.0996(7)). These comparisons are presented in Table 6. As shown on Table 6, none of the constituents detected in the groundwater samples collected in fall 2005 was found at levels above the applicable groundwater UCLs.

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 fall 2005 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 prior baseline monitoring program sampling events that were analyzed for those constituents in fall 2005. 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.

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

For the six wells where the Method 1 GW-3 standard for PCBs was exceeded (wells 139R, E2SC-23, E2SC-24, HR-G3-MW-1, LSSC-8S, and LSSC-18), prior PCB data has shown similar or greater concentrations than those detected during fall 2005. Therefore, GE's proposed response action to address these exceedances is to continue the interim sampling program at these locations. The filtered PCB results from wells 139R, E2SC-24, and HR-G3-MW-1 are above previous filtered PCB results from these wells, although filtered samples above the Method 1 GW-3 standard have previously been collected from wells E2SC-24 and HR-G3-MW-1. In addition, prior data from unfiltered samples analyzed from these two locations and from well 139, which was replaced by well 139R in October 2004, have shown PCB concentrations greater than the levels detected in the fall 2005 filtered samples. GE's proposed response to address these results is also to continue the interim sampling program at these wells.

5. Monitoring Program Modification and Schedule of Future Activities

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 (which was accomplished), 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 a proposed modification to the interim groundwater monitoring program based on the results of the fall 2005 groundwater sampling event. This section also addresses the schedule for future groundwater quality monitoring activities and reporting for GMA 1. Specifically, this section provides a schedule for the upcoming spring 2006 interim monitoring event and associated reporting activities. A summary of the anticipated spring 2006 interim sampling program is provided in Table 7.

5.2 Modification to Interim Groundwater Quality Monitoring Program

The only general modification to the interim program proposed at this time is to utilize the PAC protocols for future cyanide analyses under the interim monitoring program.

Analytical results above the MCP Method 1 GW-3 standard for cyanide were detected in unfiltered samples collected from several GMA 1 wells during the initial rounds of the baseline monitoring program. In the *Plant Site 1 Groundwater Management Area Baseline Groundwater Quality Interim Report for Spring 2002* (Spring 2002 GMA 1 Groundwater Quality Report), GE's proposed response to those exceedances was to collect and analyze filtered samples for cyanide, in addition to performing analysis of unfiltered samples as part of the remaining baseline activities. The additional data have allowed GE to assess the presence of soluble cyanide in groundwater at GMA 1 and, currently, only filtered samples are collected for cyanide analysis as part of the interim monitoring program.

In the Fall 2004 GMA 1 Groundwater Quality Report, GE proposed to further evaluate the presence of cyanide in groundwater during the next interim monitoring event by incorporating modifications to the analytical method recently finalized by MDEP to determine the concentrations of physiologically available cyanide (PAC) in the samples. Following EPA approval, as discussed above, GE analyzed each sample scheduled for cyanide analysis in the fall 2005 sampling round by the standard method that has been utilized up to the present time in the program (i.e., EPA Method 9014) and also under the PAC protocols contained in the August 13, 2004 MDEP document entitled *Quality Assurance and Quality Control Requirements and Performance Standards for SWC-846 Method 9014, Total Cyanide and the MADEP Physiologically Available Cyanide (PAC) Protocol for the Massachusetts Contingency Plan (MCP)*. Those results, presented in Section 3.2.4, indicated that the two methods produced similar results (i.e., low levels of cyanide detected near or below the practical quantitation limit). Since the PAC data may be more useful to support future risk assessment-related activities related to cyanide in groundwater than the current total cyanide data (if any such activities are found to be necessary), GE proposes to implement the PAC Protocol for all future cyanide analyses from GMA 1 groundwater.

In addition to the general modification to the interim sampling program discussed above, for the next interim sampling event, GE proposes to sample select baseline monitoring program wells that have previously contained cyanide concentrations above the applicable MCP GW-3 standard when analyzed under standard EPA Method 9014, and to analyze those samples for cyanide utilizing the PAC protocols. Specifically, to further assess the presence of PAC at GMA 1, GE proposes to sample wells E2SC-24 and ESA2S-64 in spring 2006 and analyze those samples for cyanide utilizing MDEP's PAC protocols. These two wells contained levels of cyanide above the MCP GW-3 standard when analyzed under EPA Method 9014 during the baseline monitoring program, and the data to be obtained by the proposed PAC analyses may be useful in GE's preparation of a long-term monitoring program proposal for GMA 1.

5.3 Field Activities Schedule

The next interim groundwater quality sampling round is scheduled for April 2006. Prior to performance of these activities, GE will provide EPA with 7 days advance notice to allow the assignment of field oversight personnel.

5.4 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 Spring 2006 Interim Groundwater Quality Report for GMA 1 by July 31, 2006, in accordance with the reporting schedule approved by EPA. That report will present the final, validated spring 2006 interim sampling results and a brief discussion of the results, including any proposals to further modify the interim monitoring program, if necessary. GE will also include an updated summary of available groundwater monitoring results and analytical data collected at the adjacent East Street Mobil Site, to the extent that such 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

TABLE 1
FALL 2005 GROUNDWATER QUALITY MONITORING PROGRAM

PLANT SITE 1 GROUNDWATER MANAGEMENT AREA
GROUNDWATER QUALITY MONITORING INTERIM REPORT FOR FALL 2005
GENERAL ELECTRIC COMPANY-PITTSFIELD, MASSACHUSETTS

Well Number	Monitoring Well Usage	Sampling Schedule	Fall 2005 Analyses [2]	Comments
RAA 1 - 40s COMPLEX				
No interim groundwater quality monitoring scheduled to be performed in this RAA.				
RAA 2 - 30s COMPLEX				
RF-02	GW-3 Perimeter (Downgradient)	Annual [1]	PCB	
RF-16	GW-3 Perimeter (Downgradient)	Annual [1]	Cyanide	Total and Physiologically Available Cyanide analyses were performed.
RAA 3 - 20s COMPLEX				
No interim groundwater quality monitoring scheduled to be performed in this RAA.				
RAA 4 - EAST STREET AREA 2-SOUTH				
GMA1-13	GW-3 General/Source Area Sentinel	Annual [1]	PCB	
E2SC-23	GW-3 Perimeter (Downgradient)	Annual [1]	PCB	
E2SC-24	GW-3 Perimeter (Downgradient)	Annual [1]	PCB	
ES2-02A	GW-3 Perimeter (Downgradient)	Annual [1]	Cyanide	Total and Physiologically Available Cyanide analyses were performed.
ESA2S-52	GW-3 General/Source Area Sentinel	Annual [1]	Cyanide	Total and Physiologically Available Cyanide analyses were performed.
HR-G1-MW-3	GW-3 Perimeter (Downgradient)	Annual [1]	Cyanide	Total and Physiologically Available Cyanide analyses were performed.
HR-G3-MW-1	GW-3 Perimeter (Downgradient)	Annual [1]	PCB	

TABLE 1
FALL 2005 GROUNDWATER QUALITY MONITORING PROGRAM

PLANT SITE 1 GROUNDWATER MANAGEMENT AREA
GROUNDWATER QUALITY MONITORING INTERIM REPORT FOR FALL 2005
GENERAL ELECTRIC COMPANY-PITTSFIELD, MASSACHUSETTS

Well Number	Monitoring Well Usage	Sampling Schedule	Fall 2005 Analyses [2]	Comments
RAA 5 - EAST STREET AREA 2-NORTH				
ES1-05	GW-3 Perimeter (Downgradient)	Annual [1]	PCB	
ES1-27R	GW-3 General/ Source Area Sentinel	Annual [1]	PCB	
RAA 6 - EAST STREET AREA 1-NORTH				
ESA1N-52	GW-2 Sentinel/ GW-3 General/Source Area Sentinel	Annual [1]	PCB	
RAA 12 - LYMAN STREET AREA				
LS-29	GW-3 General/Source Area Sentinel	Annual [1]	PCB	
LSSC-08S	GW-3 Perimeter (Downgradient)	Annual [1]	PCB	
LSSC-16S	GW-2 Sentinel	Annual [1]	VOC (+5 SVOC)	
LSSC-18	GW-3 Perimeter (Downgradient)	Annual [1]	PCB	
MW-4R	GW-3 Perimeter (Downgradient)	Annual [1]	VOC/PCB	
RAA 13 - NEWELL STREET AREA II				
N2SC-07S	GW-3 Perimeter (Downgradient)	Annual [1]	VOC (+5 SVOC)/ PCB	VOC sample also analyzed for 5 SVOCs due to laboratory error
NS-17	GW-3 Perimeter (Downgradient)	Annual [1]	VOC (+5 SVOC)	VOC sample also analyzed for 5 SVOCs due to laboratory error
RAA 14 - NEWELL STREET AREA I				
No interim groundwater quality monitoring scheduled to be performed in this RAA.				

TABLE 1
FALL 2005 GROUNDWATER QUALITY MONITORING PROGRAM

PLANT SITE 1 GROUNDWATER MANAGEMENT AREA
GROUNDWATER QUALITY MONITORING INTERIM REPORT FOR FALL 2005
GENERAL ELECTRIC COMPANY-PITTSFIELD, MASSACHUSETTS

Well Number	Monitoring Well Usage	Sampling Schedule	Fall 2005 Analyses [2]	Comments
RAA 18 - EAST STREET AREA 1 SOUTH				
72R	GW-2 Sentinel/ GW-3 General/Source Area Sentinel	Annual [1]	VOC (+5 SVOC)/ PCB/Cyanide	Total and Physiologically Available Cyanide analyses were performed.
139R	GW-2 Sentinel/ GW-3 Perimeter (Downgradient)	Annual [1]	PCB	
GMA1-6	GW-2 Sentinel/ GW-3 General/Source Area Sentinel	Annual [1]	VOC(+5 SVOC)/ PCB	
GMA1-18	GW-2 Sentinel/ GW-3 General/Source Area Sentinel	Annual [1]	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. 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 MONITORING INTERIM REPORT FOR FALL 2005
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 2 - 30s Complex									
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
RAA 4 - East Street Area 2-South									
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
RAA 5 - East Street Area 2-North									
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
RAA 6 - East Street Area 1-North									
ESA1-52	534253.8	134565.9	2	999.7	999.26	2.0	20.0	997.7	977.7
RAA 12 - Lyman Street Area									
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 MONITORING INTERIM REPORT FOR FALL 2005
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									
72R	543196.1	134234.6	4	1,001.2	1,000.92	4.0	10.0	997.2	987.2
139R	533841.6	135011.0	2	987.4	986.91	6.0	10.0	981.4	971.4
GMA1-6	534084.3	134455.5	2	1,000.7	1,000.44	5.0	10.0	995.7	985.7
GMA1-18	534221.0	134872.5	2	998.5	998.29	4.0	10.0	994.5	985.5

NOTES:

1. The listed wells were scheduled to be utilized during fall 2005 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 - FALL 2005

PLANT SITE 1 GROUNDWATER MANAGEMENT AREA
GROUNDWATER QUALITY MONITORING INTERIM REPORT FOR FALL 2005
GENERAL ELECTRIC COMPANY-PITTSFIELD, MASSACHUSETTS

WELL NUMBER	TURBIDITY (NTU)	TEMPERATURE (DEGREES CELSIUS)	pH (STANDARD UNITS)	SPECIFIC CONDUCTIVITY (mS/cm)	OXIDATION-REDUCTION POTENTIAL (mV)	DISSOLVED OXYGEN (mg/L)
RAA 2 - 30s COMPLEX						
RF-02	5.0	15.80	6.86	1.781	-26.2	1.29
RF-16	2.0	16.85	7.05	0.810	266.0	5.50
RAA 4 - EAST STREET AREA 2-SOUTH						
E2SC-23	2.0	14.13	7.11	0.684	-55.5	0.97
E2SC-24	3.0	15.38	7.05	0.744	-95.2	0.81
ES2-02A	6.0	14.46	6.98	1.582	-147.9	0.49
ESA2S-52	5.0	14.91	6.90	2.928	-28.0	1.85
GMA1-13	10.0	15.26	6.74	0.945	86.6	2.48
HR-G1-MW-3	3.0	15.94	6.97	0.987	-44.4	0.51
HR-G3-MW-1	4.0	15.14	6.94	1.104	-114.6	1.67
RAA 5 - EAST STREET AREA 2-NORTH						
ES1-05	4.0	14.45	6.62	1.432	91.1	1.25
ES1-27R	12.0	23.89	7.54	0.381	330.8	2.24
RAA 6 - EAST STREET AREA 1-NORTH						
ESA1-52	10.0	17.37	7.10	0.586	-82.7	10.78
RAA 12 - LYMAN STREET AREA						
LS-29	4.0	14.16	7.48	0.572	-19.7	5.14
LSSC-08S	2.0	15.54	6.46	8.248	-98.7	0.59
LSSC-16S	3.0	15.53	7.02	1.466	35.4	2.05
LSSC-18	4.0	17.51	6.91	0.762	-74.3	0.86
MW-4R	1.0	16.10	6.73	1.848	-113.8	0.57
RAA 13 - NEWELL STREET AREA II						
N2SC-07S	3.0	13.76	6.83	0.713	-132.5	0.40
NS-17	2.0	13.72	7.07	0.765	-102.2	0.85

TABLE 3
FIELD PARAMETER MEASUREMENTS - FALL 2005

PLANT SITE 1 GROUNDWATER MANAGEMENT AREA
GROUNDWATER QUALITY MONITORING INTERIM REPORT FOR FALL 2005
GENERAL ELECTRIC COMPANY-PITTSFIELD, MASSACHUSETTS

WELL NUMBER	TURBIDITY (NTU)	TEMPERATURE (DEGREES CELSIUS)	pH (STANDARD UNITS)	SPECIFIC CONDUCTIVITY (mS/cm)	OXIDATION-REDUCTION POTENTIAL (mV)	DISSOLVED OXYGEN (mg/L)
RAA 18 - EAST STREET AREA 1-SOUTH						
72R	4.0	23.12	6.54	5.290	334.2	1.28
139R	2.0	13.68	7.20	0.802	160.3	7.15
GMA1-6	6.0	16.10	6.82	1.702	-98.8	0.65
GMA1-18	4.0	14.98	7.30	0.490	102.7	7.72

Notes:

1. Measurements collected during fall 2005 groundwater sampling event performed between October 3 and 13, 2005.
2. Well parameters were generally monitored continuously during purging by low-flow techniques. Final parameter readings are presented.
3. NTU - Nephelometric Turbidity Units
4. mS/cm - Millisiemens per centimeter
5. mV - Millivolts
6. mg/L - Milligrams per liter (ppm)

TABLE 4
COMPARISON OF GROUNDWATER ANALYTICAL RESULTS TO MCP METHOD 1 GW-2 STANDARDS

PLANT SITE 1 GROUNDWATER MANAGEMENT AREA
GROUNDWATER QUALITY MONITORING INTERIM REPORT FOR FALL 2005
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in parts per million, ppm)

Parameter	Site ID / Sample ID: / Date Collected:	Method 1 GW-2 Standards	East St. Area 1 - South 72-R 10/06/05	East St. Area 1 - South GMA1-6 10/13/05	Lyman Street Area LSSC-16S 10/05/05
Volatile Organics					
Chloroform		0.4	ND(0.0050) [ND(0.0050)]	ND(0.0050)	0.0028 J
Dibromomethane		Not Listed	ND(0.0050) [ND(0.0050)]	0.0016 J	ND(0.0050)
Tetrachloroethene		3	ND(0.0020) [ND(0.0020)]	ND(0.0020)	0.0057
Trichloroethene		0.3	ND(0.0050) [ND(0.0050)]	ND(0.0050)	0.00051 J
Total VOCs		5	ND(0.20) [ND(0.20)]	0.0016 J	0.0090 J
Semivolatile Organics					
None Detected		--	--	--	--

Notes:

1. Samples were collected by Blasland Bouck & Lee, Inc., and submitted to SGS Environmental Services, Inc. for analysis of PCBs (filtered), volatiles, selected semivolatiles and cyanide (filtered).
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 29, 2004 and resubmitted June 19, 2004).
3. Only volatile and semivolatile analysis is presented for the MCP Method 1 GW-2 Standards Comparison.
4. ND - Analyte was not detected. The number in parentheses is the associated detection limit.
5. Field duplicate sample results are presented in brackets.
6. Only volatile and semivolatile constituents detected in at least one sample are summarized.
7. -- Indicates that all constituents for the parameter group were not detected.

Data Qualifiers:

Organics (volatiles, semivolatiles)

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

TABLE 5
COMPARISON OF GROUNDWATER ANALYTICAL RESULTS TO MCP METHOD 1 GW-3 STANDARDS

PLANT SITE 1 GROUNDWATER MANAGEMENT AREA
GROUNDWATER QUALITY MONITORING INTERIM REPORT FOR FALL 2005
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in parts per million, ppm)

Site ID		30s Complex		East St. Area 1 - North	East St. Area 1 - South			
Sample ID:	Method 1 GW-3	RF-02	RF-16	ESAIN-52	72-R	139R	GMA1-6	GMA1-18
Parameter Date Collected:	Standards	10/04/05	10/04/05	10/04/05	10/06/05	10/13/05	10/13/05	10/13/05
Volatile Organics								
Benzene	7	NA	NA	NA	ND(0.0050) [ND(0.0050)]	NA	ND(0.0050)	NA
Chlorobenzene	0.5	NA	NA	NA	ND(0.0050) [ND(0.0050)]	NA	ND(0.0050)	NA
Dibromomethane	Not Listed	NA	NA	NA	ND(0.0050) [ND(0.0050)]	NA	0.0016 J	NA
Toluene	50	NA	NA	NA	ND(0.0050) [ND(0.0050)]	NA	ND(0.0050)	NA
Vinyl Chloride	40	NA	NA	NA	ND(0.0020) [ND(0.0020)]	NA	ND(0.0020)	NA
Xylenes (total)	50	NA	NA	NA	ND(0.010) [ND(0.010)]	NA	ND(0.010)	NA
PCBs-Filtered								
Aroclor-1254	Not Listed	0.00029	NA	0.000048 J	0.00012 [0.00010]	0.00039	0.000041 J	0.000042 J
Total PCBs	0.0003	0.00029	NA	0.000048 J	0.00012 [0.00010]	0.00039	0.000041 J	0.000042 J
Semivolatile Organics								
1,3-Dichlorobenzene	8	NA	NA	NA	ND(0.0050) [ND(0.0050)]	NA	ND(0.0050)	NA
1,4-Dichlorobenzene	8	NA	NA	NA	ND(0.0050) [ND(0.0050)]	NA	ND(0.0050)	NA
Inorganics-Filtered								
Cyanide	0.01	NA	ND(0.0100)	NA	0.00280 B [0.00250 B]	NA	NA	NA
Cyanide-MADEP (PAC)	Not Listed	NA	ND(0.0100)	NA	ND(0.0100) [ND(0.0100)]	NA	NA	NA

TABLE 5
COMPARISON OF GROUNDWATER ANALYTICAL RESULTS TO MCP METHOD 1 GW-3 STANDARDS

PLANT SITE 1 GROUNDWATER MANAGEMENT AREA
GROUNDWATER QUALITY MONITORING INTERIM REPORT FOR FALL 2005
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in parts per million, ppm)

Site ID		East St. Area 2 - North		East St. Area 2 - South					
Sample ID:	Method 1 GW-3	ES1-05	ES1-27R	E2SC-23	E2SC-24	ES2-02A	ESA2S-52	GMA1-13	HR-G1-MW-3
Parameter Date Collected:	Standards	10/10/05	10/06/05	10/06/05	10/06/05	10/06/05	10/05/05	10/07/05	10/10/05
Volatile Organics									
Benzene	7	NA	NA	NA	NA	NA	NA	NA	NA
Chlorobenzene	0.5	NA	NA	NA	NA	NA	NA	NA	NA
Dibromomethane	Not Listed	NA	NA	NA	NA	NA	NA	NA	NA
Toluene	50	NA	NA	NA	NA	NA	NA	NA	NA
Vinyl Chloride	40	NA	NA	NA	NA	NA	NA	NA	NA
Xylenes (total)	50	NA	NA	NA	NA	NA	NA	NA	NA
PCBs-Filtered									
Aroclor-1254	Not Listed	0.00013	0.00016	0.00044	0.00049	NA	NA	0.000090	NA
Total PCBs	0.0003	0.00013	0.00016	0.00044	0.00049	NA	NA	0.000090	NA
Semivolatile Organics									
1,3-Dichlorobenzene	8	NA	NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	8	NA	NA	NA	NA	NA	NA	NA	NA
Inorganics-Filtered									
Cyanide	0.01	NA	NA	NA	NA	0.00520 B	0.00460 B	NA	0.00420 B
Cyanide-MADEP (PAC)	Not Listed	NA	NA	NA	NA	0.00160 B	ND(0.0100)	NA	ND(0.0100)

TABLE 5
COMPARISON OF GROUNDWATER ANALYTICAL RESULTS TO MCP METHOD 1 GW-3 STANDARDS

PLANT SITE 1 GROUNDWATER MANAGEMENT AREA
GROUNDWATER QUALITY MONITORING INTERIM REPORT FOR FALL 2005
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in parts per million, ppm)

Site ID		East St. Area 2 - South	Lyman Street Area				Newell St. Area II	
Sample ID:	Method 1 GW-3	HR-G3-MW-1	LS-29	LS-MW-4R	LSSC-08S	LSSC-18	N2SC-07S	NS-17
Parameter / Date Collected:	Standards	10/10/05	10/04/05	10/05/05	10/05/05	10/07/05	10/03/05	10/04/05
Volatile Organics								
Benzene	7	NA	NA	0.044	NA	NA	ND(0.025)	0.0014 J
Chlorobenzene	0.5	NA	NA	ND(0.025)	NA	NA	0.076	0.0094
Dibromomethane	Not Listed	NA	NA	ND(0.025)	NA	NA	ND(0.025)	ND(0.0050)
Toluene	50	NA	NA	0.028	NA	NA	ND(0.025)	ND(0.0050)
Vinyl Chloride	40	NA	NA	ND(0.025)	NA	NA	0.38	0.0080
Xylenes (total)	50	NA	NA	0.090	NA	NA	ND(0.075)	ND(0.010)
PCBs-Filtered								
Aroclor-1254	Not Listed	0.00081	0.00019	0.000087	0.00035	0.00035	0.00026	NA
Total PCBs	0.0003	0.00081	0.00019	0.000087	0.00035	0.00035	0.00026	NA
Semivolatile Organics								
1,3-Dichlorobenzene	8	NA	NA	NA	NA	NA	ND(0.025)	0.0028 J
1,4-Dichlorobenzene	8	NA	NA	NA	NA	NA	0.065	0.017
Inorganics-Filtered								
Cyanide	0.01	NA	NA	NA	NA	NA	NA	NA
Cyanide-MADEP (PAC)	Not Listed	NA	NA	NA	NA	NA	NA	NA

Notes:

1. Samples were collected by Blasland Bouck & Lee, Inc., and submitted to SGS Environmental Services, Inc. for analysis of PCBs (filtered), volatiles, selected semivolatiles and cyanide (filtered).
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 29, 2004 and resubmitted June 19, 2004).
3. NA - Not Analyzed.
4. ND - Analyte was not detected. The number in parentheses is the associated detection limit.
5. Field duplicate sample results are presented in brackets.
6. Only those constituents detected in one or more samples are summarized.
7. Shading indicates that value exceeds GW-3 Standards.

Data Qualifiers:

Organics (volatiles, PCBs, semivolatiles)

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
COMPARISON OF GROUNDWATER ANALYTICAL RESULTS TO MCP UCLs FOR GROUNDWATER

PLANT SITE 1 GROUNDWATER MANAGEMENT AREA
GROUNDWATER QUALITY MONITORING INTERIM REPORT FOR FALL 2005
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in parts per million, ppm)

Site ID		30s Complex		East St. Area 1 - North	East St. Area 1 - South			
Sample ID:	UCL-GW	RF-02	RF-16	ESAIN-52	72-R	139R	GMA1-6	GMA1-18
Parameter Date Collected:	Standards	10/04/05	10/04/05	10/04/05	10/06/05	10/13/05	10/13/05	10/13/05
Volatile Organics								
Benzene	70	NA	NA	NA	ND(0.0050) [ND(0.0050)]	NA	ND(0.0050)	NA
Chlorobenzene	10	NA	NA	NA	ND(0.0050) [ND(0.0050)]	NA	ND(0.0050)	NA
Chloroform	100	NA	NA	NA	ND(0.0050) [ND(0.0050)]	NA	ND(0.0050)	NA
Dibromomethane	Not Listed	NA	NA	NA	ND(0.0050) [ND(0.0050)]	NA	0.0016 J	NA
Tetrachloroethene	50	NA	NA	NA	ND(0.0020) [ND(0.0020)]	NA	ND(0.0020)	NA
Toluene	100	NA	NA	NA	ND(0.0050) [ND(0.0050)]	NA	ND(0.0050)	NA
Trichloroethene	100	NA	NA	NA	ND(0.0050) [ND(0.0050)]	NA	ND(0.0050)	NA
Vinyl Chloride	100	NA	NA	NA	ND(0.0020) [ND(0.0020)]	NA	ND(0.0020)	NA
Xylenes (total)	100	NA	NA	NA	ND(0.010) [ND(0.010)]	NA	ND(0.010)	NA
PCBs-Filtered								
Aroclor-1254	Not Listed	0.00029	NA	0.000048 J	0.00012 [0.00010]	0.00039	0.000041 J	0.000042 J
Total PCBs	0.005	0.00029	NA	0.000048 J	0.00012 [0.00010]	0.00039	0.000041 J	0.000042 J
Semivolatile Organics								
1,3-Dichlorobenzene	100	NA	NA	NA	ND(0.0050) [ND(0.0050)]	NA	ND(0.0050)	NA
1,4-Dichlorobenzene	100	NA	NA	NA	ND(0.0050) [ND(0.0050)]	NA	ND(0.0050)	NA
Inorganics-Filtered								
Cyanide	2	NA	ND(0.0100)	NA	0.00280 B [0.00250 B]	NA	NA	NA
Cyanide-MADEP (PAC)	0	NA	ND(0.0100)	NA	ND(0.0100) [ND(0.0100)]	NA	NA	NA

TABLE 6
COMPARISON OF GROUNDWATER ANALYTICAL RESULTS TO MCP UCLs FOR GROUNDWATER

PLANT SITE 1 GROUNDWATER MANAGEMENT AREA
GROUNDWATER QUALITY MONITORING INTERIM REPORT FOR FALL 2005
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in parts per million, ppm)

Site ID		East St. Area 2 - North		East St. Area 2 - South					
Sample ID:	UCL-GW	ES1-05	ES1-27R	E2SC-23	E2SC-24	ES2-02A	ESA2S-52	GMA1-13	HR-G1-MW-3
Parameter Date Collected:	Standards	10/10/05	10/06/05	10/06/05	10/06/05	10/06/05	10/05/05	10/07/05	10/10/05
Volatile Organics									
Benzene	70	NA	NA	NA	NA	NA	NA	NA	NA
Chlorobenzene	10	NA	NA	NA	NA	NA	NA	NA	NA
Chloroform	100	NA	NA	NA	NA	NA	NA	NA	NA
Dibromomethane	Not Listed	NA	NA	NA	NA	NA	NA	NA	NA
Tetrachloroethene	50	NA	NA	NA	NA	NA	NA	NA	NA
Toluene	100	NA	NA	NA	NA	NA	NA	NA	NA
Trichloroethene	100	NA	NA	NA	NA	NA	NA	NA	NA
Vinyl Chloride	100	NA	NA	NA	NA	NA	NA	NA	NA
Xylenes (total)	100	NA	NA	NA	NA	NA	NA	NA	NA
PCBs-Filtered									
Aroclor-1254	Not Listed	0.00013	0.00016	0.00044	0.00049	NA	NA	0.000090	NA
Total PCBs	0.005	0.00013	0.00016	0.00044	0.00049	NA	NA	0.000090	NA
Semivolatile Organics									
1,3-Dichlorobenzene	100	NA	NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	100	NA	NA	NA	NA	NA	NA	NA	NA
Inorganics-Filtered									
Cyanide	2	NA	NA	NA	NA	0.00520 B	0.00460 B	NA	0.00420 B
Cyanide-MADEP (PAC)	0	NA	NA	NA	NA	0.00160 B	ND(0.0100)	NA	ND(0.0100)

TABLE 6
COMPARISON OF GROUNDWATER ANALYTICAL RESULTS TO MCP UCLs FOR GROUNDWATER

PLANT SITE 1 GROUNDWATER MANAGEMENT AREA
GROUNDWATER QUALITY MONITORING INTERIM REPORT FOR FALL 2005
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in parts per million, ppm)

Site ID		East St. Area 2 - South	Lyman Street Area					Newell St. Area II	
Sample ID:	UCL-GW	HR-G3-MW-1	LS-29	LS-MW-4R	LSSC-08S	LSSC-16S	LSSC-18	N2SC-07S	NS-17
Parameter Date Collected:	Standards	10/10/05	10/04/05	10/05/05	10/05/05	10/05/05	10/07/05	10/03/05	10/04/05
Volatile Organics									
Benzene	70	NA	NA	0.044	NA	ND(0.0050)	NA	ND(0.025)	0.0014 J
Chlorobenzene	10	NA	NA	ND(0.025)	NA	ND(0.0050)	NA	0.076	0.0094
Chloroform	100	NA	NA	ND(0.025)	NA	0.0028 J	NA	ND(0.025)	ND(0.0050)
Dibromomethane	Not Listed	NA	NA	ND(0.025)	NA	ND(0.0050)	NA	ND(0.025)	ND(0.0050)
Tetrachloroethene	50	NA	NA	ND(0.025)	NA	0.0057	NA	ND(0.025) J	ND(0.0020) J
Toluene	100	NA	NA	0.028	NA	ND(0.0050)	NA	ND(0.025)	ND(0.0050)
Trichloroethene	100	NA	NA	ND(0.025)	NA	0.00051 J	NA	ND(0.025)	ND(0.0050)
Vinyl Chloride	100	NA	NA	ND(0.025)	NA	ND(0.0020)	NA	0.38	0.0080
Xylenes (total)	100	NA	NA	0.090	NA	ND(0.010)	NA	ND(0.075)	ND(0.010)
PCBs-Filtered									
Aroclor-1254	Not Listed	0.00081	0.00019	0.000087	0.00035	NA	0.00035	0.00026	NA
Total PCBs	0.005	0.00081	0.00019	0.000087	0.00035	NA	0.00035	0.00026	NA
Semivolatile Organics									
1,3-Dichlorobenzene	100	NA	NA	NA	NA	ND(0.0050)	NA	ND(0.025)	0.0028 J
1,4-Dichlorobenzene	100	NA	NA	NA	NA	ND(0.0050)	NA	0.065	0.017
Inorganics-Filtered									
Cyanide	2	NA	NA	NA	NA	NA	NA	NA	NA
Cyanide-MADEP (PAC)	0	NA	NA	NA	NA	NA	NA	NA	NA

Notes:

1. Samples were collected by Blasland Bouck & Lee, Inc., and submitted to SGS Environmental Services, Inc. for analysis of PCBs (filtered), volatiles, selected semivolatiles and cyanide (filtered).
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 29, 2004 and resubmitted June 19, 2004).
3. NA - Not Analyzed.
4. ND - Analyte was not detected. The number in parentheses is the associated detection limit.
5. Only those constituents detected in one or more samples are summarized.
6. Field duplicate sample results are presented in brackets.

Data Qualifiers:

Organics (volatiles, PCBs, semivolatiles)

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
SPRING 2006 INTERIM GROUNDWATER QUALITY MONITORING ACTIVITIES

PLANT SITE 1 GROUNDWATER MANAGEMENT AREA
GROUNDWATER QUALITY MONITORING INTERIM REPORT FOR FALL 2005
GENERAL ELECTRIC COMPANY-PITTSFIELD, MASSACHUSETTS

Well Number	Monitoring Well Usage	Sampling Schedule	Spring 2006 Analyses [2]	Comments
RAA 1 - 40s COMPLEX				
No interim groundwater quality monitoring scheduled to be performed in this RAA.				
RAA 2 - 30s COMPLEX				
RF-02	GW-3 Perimeter (Downgradient)	Annual [1]	PCB	
RF-16	GW-3 Perimeter (Downgradient)	Annual [1]	Cyanide	MDEP PAC (Physiologically Available Cyanide) Protocols proposed to be utilized
RAA 3 - 20s COMPLEX				
No interim groundwater quality monitoring scheduled to be performed in this RAA.				
RAA 4 - EAST STREET AREA 2-SOUTH				
GMA1-13	GW-3 General/Source Area Sentinel	Annual [1]	PCB	
E2SC-23	GW-3 Perimeter (Downgradient)	Annual [1]	PCB	
E2SC-24	GW-3 Perimeter (Downgradient)	Annual [1] / Spring 2006	PCB / Cyanide	PCB analysis to be conducted on annual basis per approved program / Cyanide analysis utilizing MDEP PAC (Physiologically Available Cyanide) Protocols proposed for spring 2006 only
ES2-02A	GW-3 Perimeter (Downgradient)	Annual [1]	Cyanide	MDEP PAC (Physiologically Available Cyanide) Protocols proposed to be utilized
ESA2S-52	GW-3 General/Source Area Sentinel	Annual [1]	Cyanide	MDEP PAC (Physiologically Available Cyanide) Protocols proposed to be utilized
ESA2S-64	GW-3 Perimeter (Downgradient)	Spring 2006	Cyanide	Cyanide analysis utilizing MDEP PAC (Physiologically Available Cyanide) Protocols proposed for spring 2006 only
HR-G1-MW-3	GW-3 Perimeter (Downgradient)	Annual [1]	Cyanide	MDEP PAC (Physiologically Available Cyanide) Protocols proposed to be utilized
HR-G3-MW-1	GW-3 Perimeter (Downgradient)	Annual [1]	PCB	

TABLE 7
SPRING 2006 INTERIM GROUNDWATER QUALITY MONITORING ACTIVITIES

PLANT SITE 1 GROUNDWATER MANAGEMENT AREA
GROUNDWATER QUALITY MONITORING INTERIM REPORT FOR FALL 2005
GENERAL ELECTRIC COMPANY-PITTSFIELD, MASSACHUSETTS

Well Number	Monitoring Well Usage	Sampling Schedule	Spring 2006 Analyses [2]	Comments
RAA 5 - EAST STREET AREA 2-NORTH				
ES1-05	GW-3 Perimeter (Downgradient)	Annual [1]	PCB	
ES1-27R	GW-3 General/ Source Area Sentinel	Annual [1]	PCB	
RAA 6 - EAST STREET AREA 1-NORTH				
ESA1N-52	GW-2 Sentinel/ GW-3 General/Source Area Sentinel	Annual [1]	PCB	
RAA 12 - LYMAN STREET AREA				
LS-29	GW-3 General/Source Area Sentinel	Annual [1]	PCB	
LSSC-08S	GW-3 Perimeter (Downgradient)	Annual [1]	PCB	
LSSC-16S	GW-2 Sentinel	Annual [1]	VOC (+5 SVOC)	
LSSC-18	GW-3 Perimeter (Downgradient)	Annual [1]	PCB	
MW-4R	GW-3 Perimeter (Downgradient)	Annual [1]	VOC/PCB	
RAA 13 - NEWELL STREET AREA II				
N2SC-07S	GW-3 Perimeter (Downgradient)	Annual [1]	VOC/PCB	
NS-17	GW-3 Perimeter (Downgradient)	Annual [1]	VOC	
RAA 14 - NEWELL STREET AREA I				
No interim groundwater quality monitoring scheduled to be performed in this RAA.				

TABLE 7
SPRING 2006 INTERIM GROUNDWATER QUALITY MONITORING ACTIVITIES

PLANT SITE 1 GROUNDWATER MANAGEMENT AREA
GROUNDWATER QUALITY MONITORING INTERIM REPORT FOR FALL 2005
GENERAL ELECTRIC COMPANY-PITTSFIELD, MASSACHUSETTS

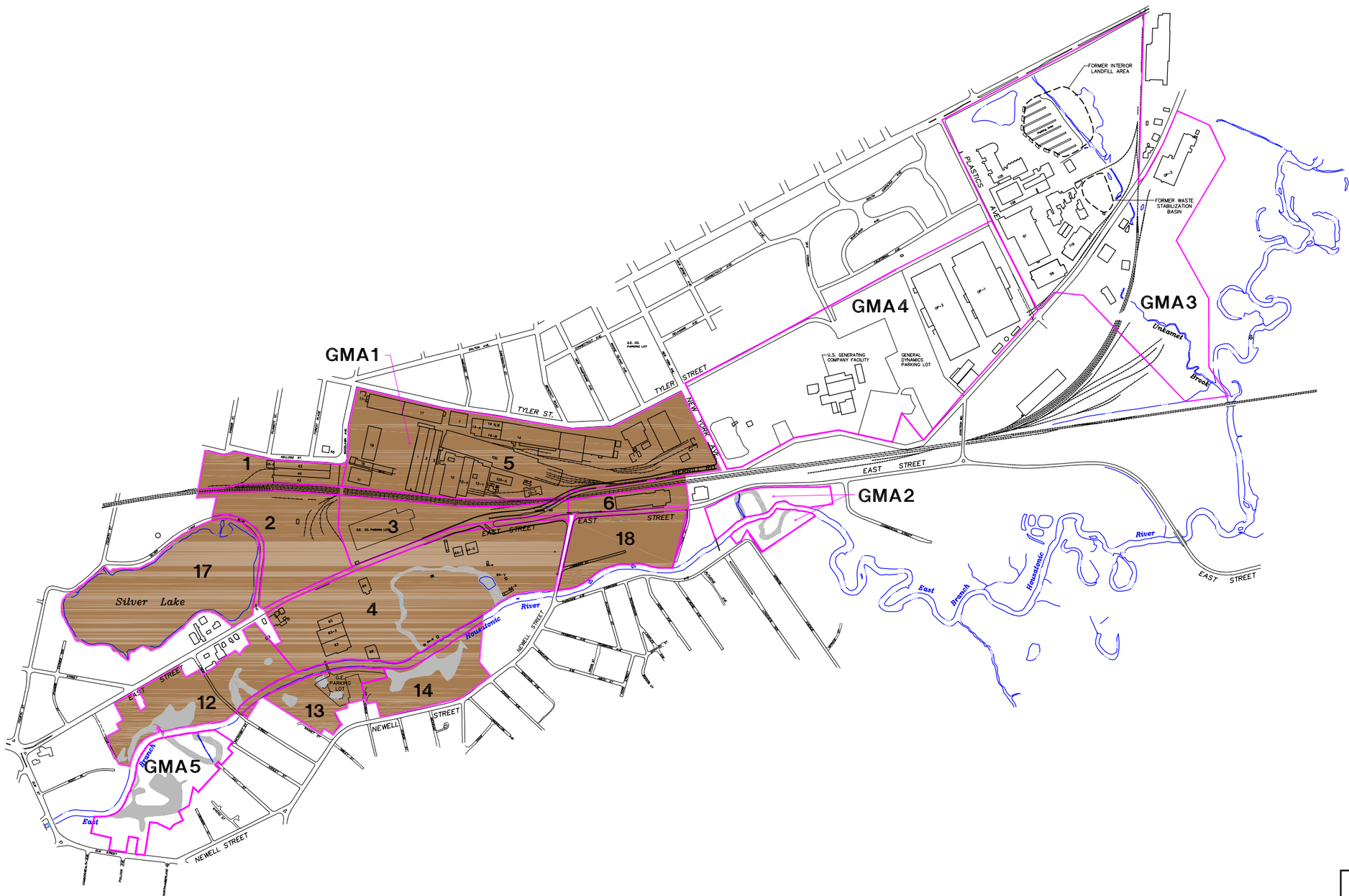
Well Number	Monitoring Well Usage	Sampling Schedule	Spring 2006 Analyses [2]	Comments
RAA 18 - EAST STREET AREA 1 SOUTH				
139R	GW-2 Sentinel/ GW-3 Perimeter (Downgradient)	Annual [1]	PCB	
72R	GW-2 Sentinel/ GW-3 General/Source Area Sentinel	Annual [1]	VOC (+5 SVOC)/ PCB/Cyanide	MDEP PAC (Physiologically Available Cyanide) Protocols proposed to be utilized for cyanide analysis
GMA1-6	GW-2 Sentinel/ GW-3 General/Source Area Sentinel	Annual [1]	VOC(+5 SVOC)/ PCB	
GMA1-18	GW-2 Sentinel/ GW-3 General/Source Area Sentinel	Annual [1]	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. All analyses for PCB, metals, and cyanide conducted under the annual interim monitoring program will be performed on filtered samples only.

Figures



LEGEND:

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.

0 500' 1000'
GRAPHIC SCALE

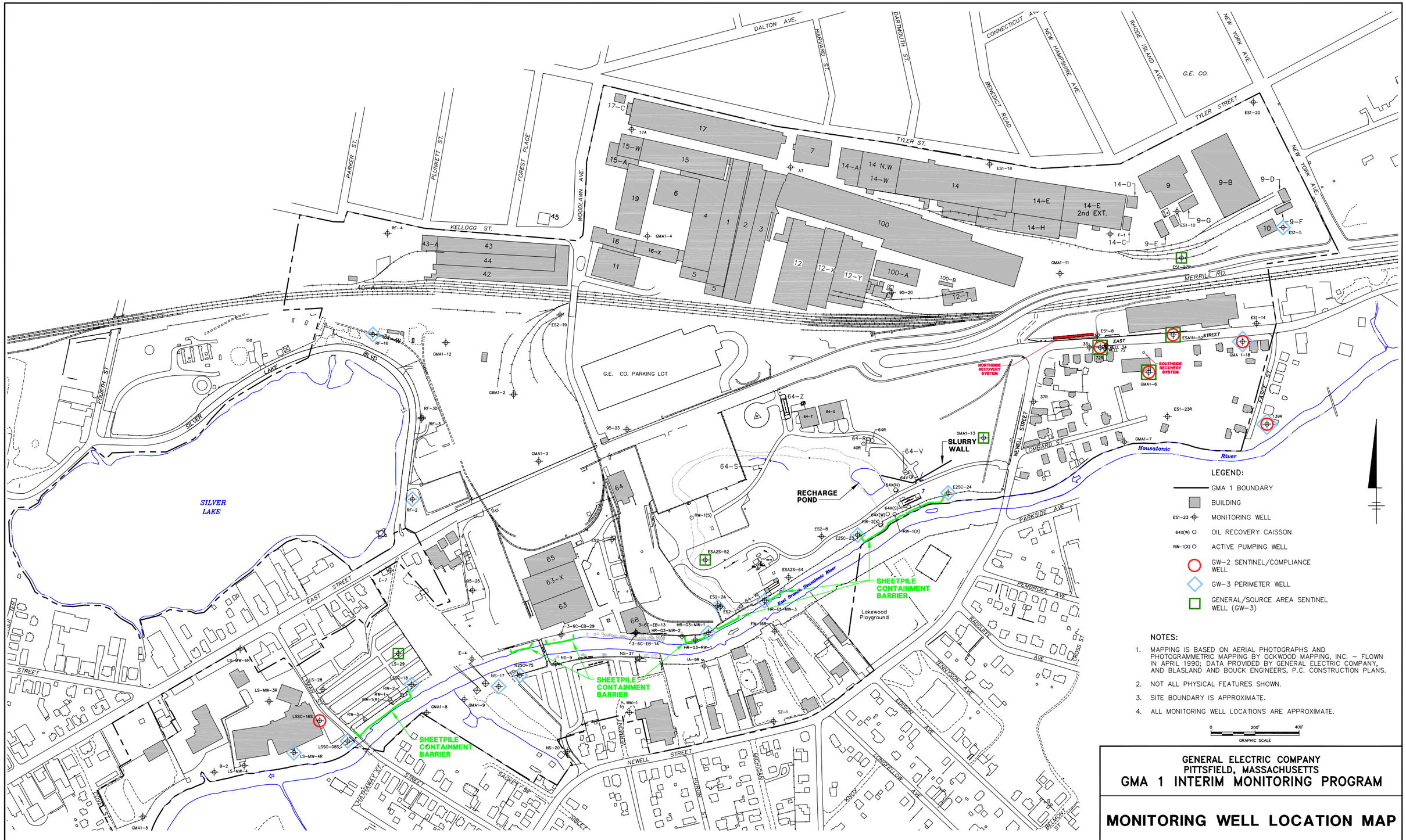
GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS
GMA 1 INTERIM MONITORING PROGRAM

GROUNDWATER MANAGEMENT AREAS

BLASLAND, BOUCK & LEE, INC.
engineers, scientists, economists

FIGURE 1

X:\1011\3X00.DWG
L: ON=*, OFF=REF*
P: PAGSET/PLT-DL
1/30/06 SYR-85-GMS DMW RCA
N/10113001/FALL05/10113B01.DWG



X: 10113X00, X08.DWG
L: ON=*, OFF=REF*
P: PAGESET/PLT-DL2B
1/30/06 SYR-GMS DMW RCA
N/10113001/FALL05/10113B02.DWG

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

GMA 1 INTERIM MONITORING PROGRAM

MONITORING WELL LOCATION MAP

BBL BLASLAND, BOUCK & LEE, INC.
engineers, scientists, economists

FIGURE 2

Appendices

BBL®
BLASLAND, BOUCK & LEE, INC.
engineers, scientists, economists

Appendix A

Groundwater Analytical Results

BLASLAND, BOUCK & LEE, INC.
engineers, scientists, economists

TABLE A-1
FALL 2005 GROUNDWATER ANALYTICAL RESULTS

PLANT SITE 1 GROUNDWATER MANAGEMENT AREA
GROUNDWATER QUALITY MONITORING INTERIM REPORT FOR FALL 2005
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in parts per million, ppm)

Site ID	30s Complex		East St. Area 1 - North	East St. Area 1 - South	
Sample ID:	RF-02	RF-16	ESAIN-52	72-R	139R
Parameter / Date Collected:	10/04/05	10/04/05	10/04/05	10/06/05	10/13/05
Volatile Organics					
1,1,1,2-Tetrachloroethane	NA	NA	NA	ND(0.0050) [ND(0.0050)]	NA
1,1,1-Trichloroethane	NA	NA	NA	ND(0.0050) [ND(0.0050)]	NA
1,1,2,2-Tetrachloroethane	NA	NA	NA	ND(0.0050) [ND(0.0050)]	NA
1,1,2-Trichloroethane	NA	NA	NA	ND(0.0050) [ND(0.0050)]	NA
1,1-Dichloroethane	NA	NA	NA	ND(0.0050) [ND(0.0050)]	NA
1,1-Dichloroethene	NA	NA	NA	ND(0.0010) [ND(0.0010)]	NA
1,2,3-Trichloropropane	NA	NA	NA	ND(0.0050) [ND(0.0050)]	NA
1,2-Dibromo-3-chloropropane	NA	NA	NA	ND(0.0050) [ND(0.0050)]	NA
1,2-Dibromoethane	NA	NA	NA	ND(0.0010) [ND(0.0010)]	NA
1,2-Dichloroethane	NA	NA	NA	ND(0.0050) [ND(0.0050)]	NA
1,2-Dichloropropane	NA	NA	NA	ND(0.0050) [ND(0.0050)]	NA
1,4-Dioxane	NA	NA	NA	ND(0.20) [ND(0.20)]	NA
2-Butanone	NA	NA	NA	ND(0.010) [ND(0.010)]	NA
2-Chloro-1,3-butadiene	NA	NA	NA	ND(0.0050) [ND(0.0050)]	NA
2-Chloroethylvinylether	NA	NA	NA	ND(0.0050) [ND(0.0050)]	NA
2-Hexanone	NA	NA	NA	ND(0.010) [ND(0.010)]	NA
3-Chloropropene	NA	NA	NA	ND(0.0050) [ND(0.0050)]	NA
4-Methyl-2-pentanone	NA	NA	NA	ND(0.010) [ND(0.010)]	NA
Acetone	NA	NA	NA	ND(0.010) [ND(0.010)]	NA
Acetonitrile	NA	NA	NA	ND(0.10) [ND(0.10)]	NA
Acrolein	NA	NA	NA	ND(0.10) [ND(0.10)]	NA
Acrylonitrile	NA	NA	NA	ND(0.0050) [ND(0.0050)]	NA
Benzene	NA	NA	NA	ND(0.0050) [ND(0.0050)]	NA
Bromodichloromethane	NA	NA	NA	ND(0.0050) [ND(0.0050)]	NA
Bromoform	NA	NA	NA	ND(0.0050) [ND(0.0050)]	NA
Bromomethane	NA	NA	NA	ND(0.0020) [ND(0.0020)]	NA
Carbon Disulfide	NA	NA	NA	ND(0.0050) [ND(0.0050)]	NA
Carbon Tetrachloride	NA	NA	NA	ND(0.0050) [ND(0.0050)]	NA
Chlorobenzene	NA	NA	NA	ND(0.0050) [ND(0.0050)]	NA
Chloroethane	NA	NA	NA	ND(0.0050) [ND(0.0050)]	NA
Chloroform	NA	NA	NA	ND(0.0050) [ND(0.0050)]	NA
Chloromethane	NA	NA	NA	ND(0.0050) [ND(0.0050)]	NA
cis-1,3-Dichloropropene	NA	NA	NA	ND(0.0050) [ND(0.0050)]	NA
Dibromochloromethane	NA	NA	NA	ND(0.0050) [ND(0.0050)]	NA
Dibromomethane	NA	NA	NA	ND(0.0050) [ND(0.0050)]	NA
Dichlorodifluoromethane	NA	NA	NA	ND(0.0050) [ND(0.0050)]	NA
Ethyl Methacrylate	NA	NA	NA	ND(0.0050) [ND(0.0050)]	NA
Ethylbenzene	NA	NA	NA	ND(0.0050) [ND(0.0050)]	NA
Iodomethane	NA	NA	NA	ND(0.0050) [ND(0.0050)]	NA
Isobutanol	NA	NA	NA	ND(0.10) [ND(0.10)]	NA
Methacrylonitrile	NA	NA	NA	ND(0.0050) [ND(0.0050)]	NA
Methyl Methacrylate	NA	NA	NA	ND(0.0050) [ND(0.0050)]	NA
Methylene Chloride	NA	NA	NA	ND(0.0050) [ND(0.0050)]	NA
Propionitrile	NA	NA	NA	ND(0.010) [ND(0.010)]	NA
Styrene	NA	NA	NA	ND(0.0050) [ND(0.0050)]	NA
Tetrachloroethene	NA	NA	NA	ND(0.0020) [ND(0.0020)]	NA
Toluene	NA	NA	NA	ND(0.0050) [ND(0.0050)]	NA
trans-1,2-Dichloroethene	NA	NA	NA	ND(0.0050) [ND(0.0050)]	NA
trans-1,3-Dichloropropene	NA	NA	NA	ND(0.0050) [ND(0.0050)]	NA
trans-1,4-Dichloro-2-butene	NA	NA	NA	ND(0.0050) [ND(0.0050)]	NA
Trichloroethene	NA	NA	NA	ND(0.0050) [ND(0.0050)]	NA
Trichlorofluoromethane	NA	NA	NA	ND(0.0050) [ND(0.0050)]	NA
Vinyl Acetate	NA	NA	NA	ND(0.0050) [ND(0.0050)]	NA
Vinyl Chloride	NA	NA	NA	ND(0.0020) [ND(0.0020)]	NA
Xylenes (total)	NA	NA	NA	ND(0.010) [ND(0.010)]	NA
Total VOCs	NA	NA	NA	ND(0.20) [ND(0.20)]	NA

TABLE A-1
FALL 2005 GROUNDWATER ANALYTICAL RESULTS

PLANT SITE 1 GROUNDWATER MANAGEMENT AREA
GROUNDWATER QUALITY MONITORING INTERIM REPORT FOR FALL 2005
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in parts per million, ppm)

Site ID	30s Complex		East St. Area 1 - North	East St. Area 1 - South	
Sample ID:	RF-02	RF-16	ESAIN-52	72-R	139R
Parameter / Date Collected:	10/04/05	10/04/05	10/04/05	10/06/05	10/13/05
PCBs-Filtered					
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	0.00029	NA	0.000048 J	0.00012 [0.00010]	0.00039
Aroclor-1260	ND(0.000065)	NA	ND(0.000065)	ND(0.000065) [ND(0.000065)]	ND(0.000065)
Total PCBs	0.00029	NA	0.000048 J	0.00012 [0.00010]	0.00039
Semivolatile Organics					
1,2,4-Trichlorobenzene	NA	NA	NA	ND(0.0050) [ND(0.0050)]	NA
1,2-Dichlorobenzene	NA	NA	NA	ND(0.0050) [ND(0.0050)]	NA
1,3-Dichlorobenzene	NA	NA	NA	ND(0.0050) [ND(0.0050)]	NA
1,4-Dichlorobenzene	NA	NA	NA	ND(0.0050) [ND(0.0050)]	NA
Naphthalene	NA	NA	NA	ND(0.0050) [ND(0.0050)]	NA
Inorganics-Filtered					
Cyanide	NA	ND(0.0100)	NA	0.00280 B [0.00250 B]	NA
Cyanide-MADEP (PAC)	NA	ND(0.0100)	NA	ND(0.0100) [ND(0.0100)]	NA

TABLE A-1
FALL 2005 GROUNDWATER ANALYTICAL RESULTS

PLANT SITE 1 GROUNDWATER MANAGEMENT AREA
GROUNDWATER QUALITY MONITORING INTERIM REPORT FOR FALL 2005
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in parts per million, ppm)

Site ID	East St. Area 1 - South		East St. Area 2 - North		East St. Area 2 - South	
Sample ID:	GMA1-6	GMA1-18	ES1-05	ES1-27R	E2SC-23	E2SC-24
Parameter / Date Collected:	10/13/05	10/13/05	10/10/05	10/06/05	10/06/05	10/06/05
Volatile Organics						
1,1,1,2-Tetrachloroethane	ND(0.0050) J	NA	NA	NA	NA	NA
1,1,1-Trichloroethane	ND(0.0050)	NA	NA	NA	NA	NA
1,1,2,2-Tetrachloroethane	ND(0.0050)	NA	NA	NA	NA	NA
1,1,2-Trichloroethane	ND(0.0050)	NA	NA	NA	NA	NA
1,1-Dichloroethane	ND(0.0050)	NA	NA	NA	NA	NA
1,1-Dichloroethene	ND(0.0010)	NA	NA	NA	NA	NA
1,2,3-Trichloropropane	ND(0.0050)	NA	NA	NA	NA	NA
1,2-Dibromo-3-chloropropane	ND(0.0050)	NA	NA	NA	NA	NA
1,2-Dibromoethane	ND(0.0010)	NA	NA	NA	NA	NA
1,2-Dichloroethane	ND(0.0050)	NA	NA	NA	NA	NA
1,2-Dichloropropane	ND(0.0050)	NA	NA	NA	NA	NA
1,4-Dioxane	ND(0.20) J	NA	NA	NA	NA	NA
2-Butanone	ND(0.010)	NA	NA	NA	NA	NA
2-Chloro-1,3-butadiene	ND(0.0050)	NA	NA	NA	NA	NA
2-Chloroethylvinylether	ND(0.0050)	NA	NA	NA	NA	NA
2-Hexanone	ND(0.010)	NA	NA	NA	NA	NA
3-Chloropropene	ND(0.0050)	NA	NA	NA	NA	NA
4-Methyl-2-pentanone	ND(0.010)	NA	NA	NA	NA	NA
Acetone	ND(0.010)	NA	NA	NA	NA	NA
Acetonitrile	ND(0.10)	NA	NA	NA	NA	NA
Acrolein	ND(0.10)	NA	NA	NA	NA	NA
Acrylonitrile	ND(0.0050)	NA	NA	NA	NA	NA
Benzene	ND(0.0050)	NA	NA	NA	NA	NA
Bromodichloromethane	ND(0.0050)	NA	NA	NA	NA	NA
Bromoform	ND(0.0050)	NA	NA	NA	NA	NA
Bromomethane	ND(0.0020)	NA	NA	NA	NA	NA
Carbon Disulfide	ND(0.0050)	NA	NA	NA	NA	NA
Carbon Tetrachloride	ND(0.0050)	NA	NA	NA	NA	NA
Chlorobenzene	ND(0.0050)	NA	NA	NA	NA	NA
Chloroethane	ND(0.0050)	NA	NA	NA	NA	NA
Chloroform	ND(0.0050)	NA	NA	NA	NA	NA
Chloromethane	ND(0.0050)	NA	NA	NA	NA	NA
cis-1,3-Dichloropropene	ND(0.0050)	NA	NA	NA	NA	NA
Dibromochloromethane	ND(0.0050)	NA	NA	NA	NA	NA
Dibromomethane	0.0016 J	NA	NA	NA	NA	NA
Dichlorodifluoromethane	ND(0.0050)	NA	NA	NA	NA	NA
Ethyl Methacrylate	ND(0.0050)	NA	NA	NA	NA	NA
Ethylbenzene	ND(0.0050)	NA	NA	NA	NA	NA
Iodomethane	ND(0.0050)	NA	NA	NA	NA	NA
Isobutanol	ND(0.10)	NA	NA	NA	NA	NA
Methacrylonitrile	ND(0.0050)	NA	NA	NA	NA	NA
Methyl Methacrylate	ND(0.0050)	NA	NA	NA	NA	NA
Methylene Chloride	ND(0.0050)	NA	NA	NA	NA	NA
Propionitrile	ND(0.010)	NA	NA	NA	NA	NA
Styrene	ND(0.0050)	NA	NA	NA	NA	NA
Tetrachloroethene	ND(0.0020)	NA	NA	NA	NA	NA
Toluene	ND(0.0050)	NA	NA	NA	NA	NA
trans-1,2-Dichloroethene	ND(0.0050)	NA	NA	NA	NA	NA
trans-1,3-Dichloropropene	ND(0.0050)	NA	NA	NA	NA	NA
trans-1,4-Dichloro-2-butene	ND(0.0050)	NA	NA	NA	NA	NA
Trichloroethene	ND(0.0050)	NA	NA	NA	NA	NA
Trichlorofluoromethane	ND(0.0050)	NA	NA	NA	NA	NA
Vinyl Acetate	ND(0.0050)	NA	NA	NA	NA	NA
Vinyl Chloride	ND(0.0020)	NA	NA	NA	NA	NA
Xylenes (total)	ND(0.010)	NA	NA	NA	NA	NA
Total VOCs	0.0016 J	NA	NA	NA	NA	NA

TABLE A-1
FALL 2005 GROUNDWATER ANALYTICAL RESULTS

PLANT SITE 1 GROUNDWATER MANAGEMENT AREA
GROUNDWATER QUALITY MONITORING INTERIM REPORT FOR FALL 2005
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in parts per million, ppm)

	Site ID	East St. Area 1 - South		East St. Area 2 - North		East St. Area 2 - South	
	Sample ID:	GMA1-6	GMA1-18	ES1-05	ES1-27R	E2SC-23	E2SC-24
Parameter	Date Collected:	10/13/05	10/13/05	10/10/05	10/06/05	10/06/05	10/06/05
PCBs-Filtered							
Aroclor-1016		ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)
Aroclor-1221		ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)
Aroclor-1232		ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)
Aroclor-1242		ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)
Aroclor-1248		ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)
Aroclor-1254		0.000041 J	0.000042 J	0.00013	0.00016	0.00044	0.00049
Aroclor-1260		ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)
Total PCBs		0.000041 J	0.000042 J	0.00013	0.00016	0.00044	0.00049
Semivolatile Organics							
1,2,4-Trichlorobenzene		ND(0.0050)	NA	NA	NA	NA	NA
1,2-Dichlorobenzene		ND(0.0050)	NA	NA	NA	NA	NA
1,3-Dichlorobenzene		ND(0.0050)	NA	NA	NA	NA	NA
1,4-Dichlorobenzene		ND(0.0050)	NA	NA	NA	NA	NA
Naphthalene		ND(0.0050) J	NA	NA	NA	NA	NA
Inorganics-Filtered							
Cyanide		NA	NA	NA	NA	NA	NA
Cyanide-MADEP (PAC)		NA	NA	NA	NA	NA	NA

TABLE A-1
FALL 2005 GROUNDWATER ANALYTICAL RESULTS

PLANT SITE 1 GROUNDWATER MANAGEMENT AREA
GROUNDWATER QUALITY MONITORING INTERIM REPORT FOR FALL 2005
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in parts per million, ppm)

Site ID	East St. Area 2 - South					Lyman Street Area
Sample ID:	ES2-02A	ESA2S-52	GMA1-13	HR-G1-MW-3	HR-G3-MW-1	LS-29
Parameter / Date Collected:	10/06/05	10/05/05	10/07/05	10/10/05	10/10/05	10/04/05
Volatile Organics						
1,1,1,2-Tetrachloroethane	NA	NA	NA	NA	NA	NA
1,1,1-Trichloroethane	NA	NA	NA	NA	NA	NA
1,1,2,2-Tetrachloroethane	NA	NA	NA	NA	NA	NA
1,1,2-Trichloroethane	NA	NA	NA	NA	NA	NA
1,1-Dichloroethane	NA	NA	NA	NA	NA	NA
1,1-Dichloroethene	NA	NA	NA	NA	NA	NA
1,2,3-Trichloropropane	NA	NA	NA	NA	NA	NA
1,2-Dibromo-3-chloropropane	NA	NA	NA	NA	NA	NA
1,2-Dibromoethane	NA	NA	NA	NA	NA	NA
1,2-Dichloroethane	NA	NA	NA	NA	NA	NA
1,2-Dichloropropane	NA	NA	NA	NA	NA	NA
1,4-Dioxane	NA	NA	NA	NA	NA	NA
2-Butanone	NA	NA	NA	NA	NA	NA
2-Chloro-1,3-butadiene	NA	NA	NA	NA	NA	NA
2-Chloroethylvinylether	NA	NA	NA	NA	NA	NA
2-Hexanone	NA	NA	NA	NA	NA	NA
3-Chloropropene	NA	NA	NA	NA	NA	NA
4-Methyl-2-pentanone	NA	NA	NA	NA	NA	NA
Acetone	NA	NA	NA	NA	NA	NA
Acetonitrile	NA	NA	NA	NA	NA	NA
Acrolein	NA	NA	NA	NA	NA	NA
Acrylonitrile	NA	NA	NA	NA	NA	NA
Benzene	NA	NA	NA	NA	NA	NA
Bromodichloromethane	NA	NA	NA	NA	NA	NA
Bromoform	NA	NA	NA	NA	NA	NA
Bromomethane	NA	NA	NA	NA	NA	NA
Carbon Disulfide	NA	NA	NA	NA	NA	NA
Carbon Tetrachloride	NA	NA	NA	NA	NA	NA
Chlorobenzene	NA	NA	NA	NA	NA	NA
Chloroethane	NA	NA	NA	NA	NA	NA
Chloroform	NA	NA	NA	NA	NA	NA
Chloromethane	NA	NA	NA	NA	NA	NA
cis-1,3-Dichloropropene	NA	NA	NA	NA	NA	NA
Dibromochloromethane	NA	NA	NA	NA	NA	NA
Dibromomethane	NA	NA	NA	NA	NA	NA
Dichlorodifluoromethane	NA	NA	NA	NA	NA	NA
Ethyl Methacrylate	NA	NA	NA	NA	NA	NA
Ethylbenzene	NA	NA	NA	NA	NA	NA
Iodomethane	NA	NA	NA	NA	NA	NA
Isobutanol	NA	NA	NA	NA	NA	NA
Methacrylonitrile	NA	NA	NA	NA	NA	NA
Methyl Methacrylate	NA	NA	NA	NA	NA	NA
Methylene Chloride	NA	NA	NA	NA	NA	NA
Propionitrile	NA	NA	NA	NA	NA	NA
Styrene	NA	NA	NA	NA	NA	NA
Tetrachloroethene	NA	NA	NA	NA	NA	NA
Toluene	NA	NA	NA	NA	NA	NA
trans-1,2-Dichloroethene	NA	NA	NA	NA	NA	NA
trans-1,3-Dichloropropene	NA	NA	NA	NA	NA	NA
trans-1,4-Dichloro-2-butene	NA	NA	NA	NA	NA	NA
Trichloroethene	NA	NA	NA	NA	NA	NA
Trichlorofluoromethane	NA	NA	NA	NA	NA	NA
Vinyl Acetate	NA	NA	NA	NA	NA	NA
Vinyl Chloride	NA	NA	NA	NA	NA	NA
Xylenes (total)	NA	NA	NA	NA	NA	NA
Total VOCs	NA	NA	NA	NA	NA	NA

TABLE A-1
FALL 2005 GROUNDWATER ANALYTICAL RESULTS

PLANT SITE 1 GROUNDWATER MANAGEMENT AREA
GROUNDWATER QUALITY MONITORING INTERIM REPORT FOR FALL 2005
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in parts per million, ppm)

Site ID	East St. Area 2 - South					Lyman Street Area
Sample ID:	ES2-02A	ESA2S-52	GMA1-13	HR-G1-MW-3	HR-G3-MW-1	LS-29
Parameter / Date Collected:	10/06/05	10/05/05	10/07/05	10/10/05	10/10/05	10/04/05
PCBs-Filtered						
Aroclor-1016	NA	NA	ND(0.000065)	NA	ND(0.000065)	ND(0.000065)
Aroclor-1221	NA	NA	ND(0.000065)	NA	ND(0.000065)	ND(0.000065)
Aroclor-1232	NA	NA	ND(0.000065)	NA	ND(0.000065)	ND(0.000065)
Aroclor-1242	NA	NA	ND(0.000065)	NA	ND(0.000065)	ND(0.000065)
Aroclor-1248	NA	NA	ND(0.000065)	NA	ND(0.000065)	ND(0.000065)
Aroclor-1254	NA	NA	0.000090	NA	0.00081	0.00019
Aroclor-1260	NA	NA	ND(0.000065)	NA	ND(0.000065)	ND(0.000065)
Total PCBs	NA	NA	0.000090	NA	0.00081	0.00019
Semivolatile Organics						
1,2,4-Trichlorobenzene	NA	NA	NA	NA	NA	NA
1,2-Dichlorobenzene	NA	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	NA	NA	NA	NA	NA	NA
Naphthalene	NA	NA	NA	NA	NA	NA
Inorganics-Filtered						
Cyanide	0.00520 B	0.00460 B	NA	0.00420 B	NA	NA
Cyanide-MADEP (PAC)	0.00160 B	ND(0.0100)	NA	ND(0.0100)	NA	NA

TABLE A-1
FALL 2005 GROUNDWATER ANALYTICAL RESULTS

PLANT SITE 1 GROUNDWATER MANAGEMENT AREA
GROUNDWATER QUALITY MONITORING INTERIM REPORT FOR FALL 2005
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in parts per million, ppm)

Site ID	Lyman Street Area				Newell St. Area II	
Sample ID:	LS-MW-4R	LSSC-08S	LSSC-16S	LSSC-18	N2SC-07S	NS-17
Parameter / Date Collected:	10/05/05	10/05/05	10/05/05	10/07/05	10/03/05	10/04/05
Volatile Organics						
1,1,1,2-Tetrachloroethane	ND(0.025)	NA	ND(0.0050)	NA	ND(0.025)	ND(0.0050)
1,1,1-Trichloroethane	ND(0.025)	NA	ND(0.0050)	NA	ND(0.025)	ND(0.0050)
1,1,2,2-Tetrachloroethane	ND(0.025)	NA	ND(0.0050)	NA	ND(0.025)	ND(0.0050)
1,1,2-Trichloroethane	ND(0.025)	NA	ND(0.0050)	NA	ND(0.025)	ND(0.0050)
1,1-Dichloroethane	ND(0.025)	NA	ND(0.0050)	NA	ND(0.025)	ND(0.0050)
1,1-Dichloroethene	ND(0.025)	NA	ND(0.0010)	NA	ND(0.025)	ND(0.0010)
1,2,3-Trichloropropane	ND(0.025)	NA	ND(0.0050)	NA	ND(0.025)	ND(0.0050)
1,2-Dibromo-3-chloropropane	ND(0.025)	NA	ND(0.0050)	NA	ND(0.025)	ND(0.0050)
1,2-Dibromoethane	ND(0.025)	NA	ND(0.0010)	NA	ND(0.025)	ND(0.0010)
1,2-Dichloroethane	ND(0.025)	NA	ND(0.0050)	NA	ND(0.025)	ND(0.0050)
1,2-Dichloropropane	ND(0.025)	NA	ND(0.0050)	NA	ND(0.025)	ND(0.0050)
1,4-Dioxane	ND(0.50) J	NA	ND(0.20) J	NA	ND(0.50) J	ND(0.20) J
2-Butanone	ND(0.025)	NA	ND(0.010)	NA	ND(0.025) J	ND(0.010) J
2-Chloro-1,3-butadiene	ND(0.025)	NA	ND(0.0050)	NA	ND(0.025)	ND(0.0050)
2-Chloroethylvinylether	ND(0.025)	NA	ND(0.0050)	NA	ND(0.025)	ND(0.0050)
2-Hexanone	ND(0.025)	NA	ND(0.010)	NA	ND(0.025)	ND(0.010)
3-Chloropropene	ND(0.025)	NA	ND(0.0050)	NA	ND(0.025)	ND(0.0050)
4-Methyl-2-pentanone	ND(0.025)	NA	ND(0.010)	NA	ND(0.025)	ND(0.010)
Acetone	ND(0.025)	NA	ND(0.010)	NA	ND(0.025)	ND(0.010)
Acetonitrile	ND(0.25)	NA	ND(0.10)	NA	ND(0.25)	ND(0.10)
Acrolein	ND(0.20)	NA	ND(0.10)	NA	ND(0.20)	ND(0.10)
Acrylonitrile	ND(0.025)	NA	ND(0.0050)	NA	ND(0.025) J	ND(0.0050) J
Benzene	0.044	NA	ND(0.0050)	NA	ND(0.025)	0.0014 J
Bromodichloromethane	ND(0.025)	NA	ND(0.0050)	NA	ND(0.025)	ND(0.0050)
Bromoform	ND(0.025)	NA	ND(0.0050)	NA	ND(0.025)	ND(0.0050)
Bromomethane	ND(0.025) J	NA	ND(0.0020) J	NA	ND(0.025) J	ND(0.0020) J
Carbon Disulfide	ND(0.025)	NA	ND(0.0050)	NA	ND(0.025) J	ND(0.0050) J
Carbon Tetrachloride	ND(0.025)	NA	ND(0.0050)	NA	ND(0.025)	ND(0.0050)
Chlorobenzene	ND(0.025)	NA	ND(0.0050)	NA	0.076	0.0094
Chloroethane	ND(0.025) J	NA	ND(0.0050) J	NA	ND(0.025) J	ND(0.0050) J
Chloroform	ND(0.025)	NA	0.0028 J	NA	ND(0.025)	ND(0.0050)
Chloromethane	ND(0.025)	NA	ND(0.0050)	NA	ND(0.025)	ND(0.0050)
cis-1,3-Dichloropropene	ND(0.025)	NA	ND(0.0050)	NA	ND(0.025)	ND(0.0050)
Dibromochloromethane	ND(0.025)	NA	ND(0.0050)	NA	ND(0.025)	ND(0.0050)
Dibromomethane	ND(0.025)	NA	ND(0.0050)	NA	ND(0.025)	ND(0.0050)
Dichlorodifluoromethane	ND(0.025)	NA	ND(0.0050)	NA	ND(0.025)	ND(0.0050)
Ethyl Methacrylate	ND(0.025)	NA	ND(0.0050)	NA	ND(0.025)	ND(0.0050)
Ethylbenzene	ND(0.025)	NA	ND(0.0050)	NA	ND(0.025)	ND(0.0050)
Iodomethane	ND(0.025)	NA	ND(0.0050)	NA	ND(0.025)	ND(0.0050)
Isobutanol	ND(0.25)	NA	ND(0.10)	NA	ND(0.25)	ND(0.10)
Methacrylonitrile	ND(0.025)	NA	ND(0.0050)	NA	ND(0.025)	ND(0.0050)
Methyl Methacrylate	ND(0.025)	NA	ND(0.0050)	NA	ND(0.025)	ND(0.0050)
Methylene Chloride	ND(0.025)	NA	ND(0.0050)	NA	ND(0.025)	ND(0.0050)
Propionitrile	ND(0.025)	NA	ND(0.010)	NA	ND(0.025) J	ND(0.010) J
Styrene	ND(0.025)	NA	ND(0.0050)	NA	ND(0.025)	ND(0.0050)
Tetrachloroethene	ND(0.025)	NA	0.0057	NA	ND(0.025) J	ND(0.0020) J
Toluene	0.028	NA	ND(0.0050)	NA	ND(0.025)	ND(0.0050)
trans-1,2-Dichloroethene	ND(0.025)	NA	ND(0.0050)	NA	ND(0.025)	ND(0.0050)
trans-1,3-Dichloropropene	ND(0.025)	NA	ND(0.0050)	NA	ND(0.025)	ND(0.0050)
trans-1,4-Dichloro-2-butene	ND(0.025)	NA	ND(0.0050)	NA	ND(0.025)	ND(0.0050)
Trichloroethene	ND(0.025)	NA	0.00051 J	NA	ND(0.025)	ND(0.0050)
Trichlorofluoromethane	ND(0.025)	NA	ND(0.0050)	NA	ND(0.025) J	ND(0.0050) J
Vinyl Acetate	ND(0.025)	NA	ND(0.0050)	NA	ND(0.025) J	ND(0.0050) J
Vinyl Chloride	ND(0.025)	NA	ND(0.0020)	NA	0.38	0.0080
Xylenes (total)	0.090	NA	ND(0.010)	NA	ND(0.075)	ND(0.010)
Total VOCs	0.16	NA	0.0090 J	NA	0.46	0.019 J

TABLE A-1
FALL 2005 GROUNDWATER ANALYTICAL RESULTS

PLANT SITE 1 GROUNDWATER MANAGEMENT AREA
GROUNDWATER QUALITY MONITORING INTERIM REPORT FOR FALL 2005
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in parts per million, ppm)

Site ID	Lyman Street Area				Newell St. Area II	
Sample ID:	LS-MW-4R	LSSC-08S	LSSC-16S	LSSC-18	N2SC-07S	NS-17
Parameter / Date Collected:	10/05/05	10/05/05	10/05/05	10/07/05	10/03/05	10/04/05
PCBs-Filtered						
Aroclor-1016	ND(0.000065)	ND(0.000065)	NA	ND(0.000065)	ND(0.000065)	NA
Aroclor-1221	ND(0.000065)	ND(0.000065)	NA	ND(0.000065)	ND(0.000065)	NA
Aroclor-1232	ND(0.000065)	ND(0.000065)	NA	ND(0.000065)	ND(0.000065)	NA
Aroclor-1242	ND(0.000065)	ND(0.000065)	NA	ND(0.000065)	ND(0.000065)	NA
Aroclor-1248	ND(0.000065)	ND(0.000065)	NA	ND(0.000065)	ND(0.000065)	NA
Aroclor-1254	0.000087	0.00035	NA	0.00035	0.00026	NA
Aroclor-1260	ND(0.000065)	ND(0.000065)	NA	ND(0.000065)	ND(0.000065)	NA
Total PCBs	0.000087	0.00035	NA	0.00035	0.00026	NA
Semivolatile Organics						
1,2,4-Trichlorobenzene	NA	NA	ND(0.0050)	NA	ND(0.025)	ND(0.0050)
1,2-Dichlorobenzene	NA	NA	ND(0.0050)	NA	ND(0.025)	ND(0.0050)
1,3-Dichlorobenzene	NA	NA	ND(0.0050)	NA	ND(0.025)	0.0028 J
1,4-Dichlorobenzene	NA	NA	ND(0.0050)	NA	0.065	0.017
Naphthalene	NA	NA	ND(0.0050)	NA	ND(0.025)	ND(0.0050)
Inorganics-Filtered						
Cyanide	NA	NA	NA	NA	NA	NA
Cyanide-MADEP (PAC)	NA	NA	NA	NA	NA	NA

Notes:

1. Samples were collected by Blasland Bouck & Lee, Inc., and submitted to SGS Environmental Services, Inc. for analysis of PCBs (filtered), volatiles, selected semivolatiles and cyanide (filtered).
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 29, 2004 and resubmitted June 19, 2004).
3. NA - Not Analyzed.
4. ND - Analyte was not detected. The number in parentheses is the associated detection limit.
5. Field duplicate sample results are presented in brackets.

Data Qualifiers:

Organics (volatiles, PCBs, semivolatiles)

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 B

Field Sampling Data

BBL®
BLASLAND, BOUCK & LEE, INC.
engineers, scientists, economists

TABLE B-1
SUMMARY OF GROUNDWATER SAMPLING METHODS

PLANT SITE 1 GROUNDWATER MANAGEMENT AREA
GROUNDWATER QUALITY MONITORING INTERIM REPORT FOR FALL 2005
GENERAL ELECTRIC COMPANY-PITTSFIELD, MASSACHUSETTS

Well ID	Sampling Method								Comments
	Fall 2001	Spring 2002	Fall 2002	Spring 2003	Fall 2003	Spring 2004	Fall 2004	Fall 2005	
RAA 2 - 30s COMPLEX									
GMA1-2	NS	NS	NS	PP	NS	NS	NS	NS	Fall 2005: Well removed from monitoring progam. Fall 2004: Well dry - no sample collected. 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	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	NS	BP	Fall 2003: No sample collected - additional sampling under interim monitoring program to resume in spring 2004.
RAA 4 - EAST STREET AREA 2-SOUTH									
95-09/GMA1-13	BA	PP/BA	NS	PP	BP	BP	NS	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	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	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	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.

TABLE B-1
SUMMARY OF GROUNDWATER SAMPLING METHODS

PLANT SITE 1 GROUNDWATER MANAGEMENT AREA
GROUNDWATER QUALITY MONITORING INTERIM REPORT FOR FALL 2005
GENERAL ELECTRIC COMPANY-PITTSFIELD, MASSACHUSETTS

Well ID	Sampling Method								Comments
	Fall 2001	Spring 2002	Fall 2002	Spring 2003	Fall 2003	Spring 2004	Fall 2004	Fall 2005	
ESA2S-52	PP	PP/BA	PP	PP	NS	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.
HR-G1-MW-3	SP	PP	PP	BP	BP	BP	NS	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	NS	BP	Fall 2001: Pump malfunction during sample collection, was briefly shut down.
RAA 5 - EAST STREET AREA 2-NORTH									
ES1-05	BA	BP	SP	BP	BP	BP	NS	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	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	PP	NS	Fall 2005: Well removed from monitoring progam. 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.
RAA 6 - EAST STREET AREA 1-NORTH									
ES1-08	PP	PP	PP	NS	NS	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.

TABLE B-1
SUMMARY OF GROUNDWATER SAMPLING METHODS

PLANT SITE 1 GROUNDWATER MANAGEMENT AREA
GROUNDWATER QUALITY MONITORING INTERIM REPORT FOR FALL 2005
GENERAL ELECTRIC COMPANY-PITTSFIELD, MASSACHUSETTS

Well ID	Sampling Method								Comments
	Fall 2001	Spring 2002	Fall 2002	Spring 2003	Fall 2003	Spring 2004	Fall 2004	Fall 2005	
ES1-14	PP	PP	PP	PP	NS	NS	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.
ESA1N-52	PP	PP	PP	PP	NS	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).
RAA 12 - LYMAN STREET AREA									
LS-29	SP	BP	NS	PP	PP	PP	NS	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	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	NS	BP	Fall 2003: No sample collected - additional sampling under interim monitoring program to resume in spring 2004. Spring 2003: Tubidity 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	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	PP	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.

TABLE B-1
SUMMARY OF GROUNDWATER SAMPLING METHODS

PLANT SITE 1 GROUNDWATER MANAGEMENT AREA
GROUNDWATER QUALITY MONITORING INTERIM REPORT FOR FALL 2005
GENERAL ELECTRIC COMPANY-PITTSFIELD, MASSACHUSETTS

Well ID	Sampling Method								Comments
	Fall 2001	Spring 2002	Fall 2002	Spring 2003	Fall 2003	Spring 2004	Fall 2004	Fall 2005	
RAA 13 - NEWELL STREET AREA II									
N2SC-07S	SP	BP	PP	BP	BP	BP	NS	BP	Spring 2002: Dissolved oxygen meter malfunction. Fall 2001: Dissolved oxygen meter malfunction.
NS-17	SP	PP/BA	PP	PP	PP	PP	NS	PP	
RAA 18 - EAST STREET AREA 1 SOUTH									
ESA1S-33	NS	NS	NS	PP	NS	NS	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.
72R	NS	NS	NS	NS	NS	NS	PP	BP	Fall 2004: Well added to interim monitoring program in place of well ESA1S-33.
ESA1S-139/139R	PP	PP	BP/BA	PP	NS	NS	PP	PP	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	NS	PP	Fall 2003: No sample collected - additional sampling under interim monitoring program to resume in spring 2004.
GMA1-18	NS	NS	NS	NS	NS	NS	BP	BP	Fall 2004: Well GMA1-18 added to interim monitoring program in place of well ES1-14.

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 LOG

Well No. RF-02
Key No. —
PID Background (ppm) —
Well Headspace (ppm) —

Site/GMA Name 30's Complex
Sampling Personnel MAH JCM
Date 10/4/05
Weather Clear, Sunny, Hot

WELL INFORMATION

Reference Point Marked? Y N
Height of Reference Point ____ Meas. From ____
Well Diameter 4.00"
Screen Interval Depth 3-18', Meas. From TIC
Water Table Depth 7.50', Meas. From TIC
Well Depth 18.30', Meas. From TIC
Length of Water Column 10.80
Volume of Water in Well 7.38 gallons
Intake Depth of Pump/Tubing 12.45 Meas. From TIC

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

Redevelop? Y (N)

Sample Time 1615
Sample ID RF-02
Duplicate ID —
MS/MSD —
Split Sample ID —

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

EVACUATION INFORMATION

Pump Start Time 1526
Pump Stop Time 1622
Minutes of Pumping 56
Volume of Water Removed 1.5 gallons
Did Well Go Dry? Y (N)

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

Water Quality Meter Type(s) / Serial Numbers: YSI 556 MPS 05F0219 AT

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
1528	150	0.08	7.08				11		
1533	125	0.25	7.07				11		
1542	100	0.49	7.05	16.27	6.91	1.751	8	2.55	-2.0
1547	100	0.62	7.07	16.11	6.84	1.764	6	1.99	-16.0
1552	100	0.75	7.07	15.91	6.84	1.776	7	1.62	-30.3
1557	100	0.89	7.07	15.87	6.80	1.777	6	1.35	-25.4
1602	100	1.02	7.07	15.64	6.82	1.784	5	1.25	-32.2
1607	100	1.15	7.07	15.70	6.85	1.782	6	1.23	-29.0

* 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: SGS
Delivered Via: UPS
Airbill #: —

Field Sampling Coordinator:

GROUNDWATER SAMPLING LOG

Well No. RF-02

Site/GMA Name 30- Complex

Sampling Personnel MAH, JCM

Date 10/4/05

Weather clear, sunny, hot

WELL INFORMATION - See Page 1

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
1612	100	1.28	7.07	15.80	6.86	1.781	5	1.29	-26.2

* 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

GROUNDWATER SAMPLING LOG

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

Site/GMA Name 305 Complex
Sampling Personnel MAH JCM
Date 10/4/05
Weather Clear, Sunny, hot

WELL INFORMATION

Reference Point Marked? Y N
Height of Reference Point ____ Meas. From ____
Well Diameter 4.00"
Screen Interval Depth 7-22' Meas. From Ground
Water Table Depth 10.72' Meas. From TIC
20.70 Well Depth ~~20.00~~ Meas. From TIC
Length of Water Column 9.98'
Volume of Water in Well 6.51 gallons
Intake Depth of Pump/Tubing 15.71' Meas. From TIC

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

Redevelop? Y N

Sample Time 1410
Sample ID RF-16
Duplicate ID —
MS/MSD —
Split Sample ID —

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

EVACUATION INFORMATION

Pump Start Time 1315
Pump Stop Time 1410
Minutes of Pumping 55
Volume of Water Removed 1.25 gallons
Did Well Go Dry? Y (N)

Evacuation Method: Bailer ( ) Bladder Pump (✓)
Peristaltic Pump ( ) Submersible Pump ( ) Other/Specify ( )
Pump Type: model 59500 Marschalk
Samples collected by same method as evacuation? Y N (specify)

Water Quality Meter Type(s) / Serial Numbers: YSI 556 MPS 03F0319

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
1320 ~~1325~~	65	0.09	10.74	17.44			4		
1325	100	0.22	10.70				4		
1335	100	0.48	10.73	17.30	7.10	0.809	3	6.10	320.5
1340	100	0.62	10.41	16.99	7.06	0.809	3	5.56	294.0
1345	100	0.75	10.70	16.96	7.14	0.810	3	5.59	276.1
1350	100	0.88	10.73	16.87	7.04	0.809	2	5.05	268.4
1355	100	1.01	10.78	16.85	7.05	0.810	2	5.50	266.0

* 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: SGS
Delivered Via: UPS
Airbill #: —

Field Sampling Coordinator: [signature]

C:\WORK\GEGroundwater\654199\Attachment\3-2

GROUNDWATER SAMPLING LOG

Well No. E28C-23
Key No. FX-37
PID Background (ppm) —
Well Headspace (ppm) —

Site/GMA Name EAST STREET AREA 2 SOUTH / GMA-1
Sampling Personnel MES
Date OCTOBER 6, 2005
Weather PARTLY CLOUDY, 80s

WELL INFORMATION

Reference Point Marked? (Y) N
Height of Reference Point 2.20 - .21 Meas. From GROUND
Well Diameter 2"
Screen Interval Depth 9-19 Meas. From GROUND
Water Table Depth 19.80' Meas. From TIC
Well Depth 21.50' Meas. From TIC
Length of Water Column 1.70
Volume of Water in Well ~~0.027 ft³~~ 0.28 gallons
Intake Depth of Pump/Tubing 20.50 Meas. From TIC

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

Redevelop? Y (N)

Sample Time 1455
Sample ID E28C-23
Duplicate ID —
MS/MSD —
Split Sample ID —

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

EVACUATION INFORMATION

Pump Start Time 1410
Pump Stop Time 1605
Minutes of Pumping 55
Volume of Water Removed 3500
Did Well Go Dry? Y (N)

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

Water Quality Meter Type(s) / Serial Numbers: YSI 556 MSP, HACH 2100P TURBIDIMETER

Time	Pump Rate (L/min.)	Total ~~Gallons~~ Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
1415	100	—	19.80	—	—	—	76	—	—
1420	100	500	19.80	—	—	—	19	—	—
1425	100	1000	19.80	14.02	7.17	0.691	7	1.50	-55.4
1430	100	1500	19.80	14.59	7.12	0.688	4	1.28	-57.5
1435	100	2000	19.80	14.41	7.12	0.687	3	1.08	-58.6
1440	100	2500	19.80	14.25	7.11	0.685	3	0.99	-57.2
1445	100	3000	19.80	14.18	7.12	0.684	2	0.98	-56.4
1450	100	3500	19.80	14.13	7.11	0.684	2	0.97	-55.5

* 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 IS CLEAR

SAMPLE DESTINATION

Laboratory: STL
Delivered Via: UPS

GROUNDWATER SAMPLING LOG

Well No. E28C-24
Key No. FX-87
PID Background (ppm) —
Well Headspace (ppm) —

Site/GMA Name EAST STREET AREA 2 SOUTH / GMA-1
Sampling Personnel AES
Date OCTOBER 16, 2006
Weather SUNNY, 70s, CLEAR SKIES

WELL INFORMATION

Reference Point Marked? (Y) N
Height of Reference Point 2.35-.45 Meas. From GROUND
Well Diameter 2"
Screen Interval Depth 9-19 Meas. From GROUND
Water Table Depth 16.50 Meas. From TIC
Well Depth 21.65 Meas. From TIC
Length of Water Column 5.15
Volume of Water in Well ~~0.11 gal~~ 0.84 gallons
Intake Depth of Pump/Tubing 19.0' Meas. From TIC

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

Redevelop? Y (N)

Sample Time 1335
Sample ID E28C-24
Duplicate ID —
MS/MSD —
Split Sample ID —

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

EVACUATION INFORMATION

Pump Start Time 1230
Pump Stop Time 1350
Minutes of Pumping 80
Volume of Water Removed 5500 mL
Did Well Go Dry? Y (N)

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

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

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
1235	100	—	16.50	—	—	—	162	—	—
1240	100	500	16.57	—	—	—	93	—	—
1245	100	1000	16.58	—	—	—	61	—	—
1250	100	1500	16.58	—	—	—	48	—	—
1255	100	2000	16.58	16.44	7.36	0.773	37	1.80	-90.0
1300	100	2500	16.58	16.64	7.17	0.785	28	1.30	-87.0
1305	100	3000	16.58	15.87	7.07	0.788	26	0.96	-89.7
1310	100	3500	16.58	15.60	7.05	0.790	18	0.84	-92.8

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

OBSERVATIONS/SAMPLING METHOD DEVIATIONS INITIAL PURGE IS ORANGISH IN COLOR WITH VISIBLE PARTICLES.

SAMPLE DESTINATION

Laboratory: SGS
Delivered Via: UPS

GROUNDWATER SAMPLING LOG

Well No. E2SC-24

Site/GMA Name EAST STREET AREA 2 SOUTH / GMA-1
Sampling Personnel AES
Date OCTOBER 6, 2005
Weather SUNNY, 70s, CLEAR SKIES

WELL INFORMATION - See Page 1

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
1315	100	4000	16.58	15.83	7.06	0.745	6	0.79	-95.4
1320	100	4500	16.58	15.57	7.04	0.743	4	0.79	-95.1
1325	100	5000	16.58	15.48	7.05	0.744	3	0.80	-95.4
1330	100	5500	16.58	15.38	7.05	0.744	3	0.81	-95.2
SAMPLE	TIME	1335							

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

OBSERVATIONS/SAMPLING METHOD DEVIATIONS SEE NOTES ON PAGE 1.

GROUNDWATER SAMPLING LOG

Well No. ES2-02A
Key No. —
PID Background (ppm) —
Well Headspace (ppm) —

Site/GMA Name EAST STREET AREA II /GMA-1
Sampling Personnel AES
Date OCTOBER 6, 2005
Weather FOGGY, OVERCAST, COOL (50s)

WELL INFORMATION

Reference Point Marked? (Y) N -0.60
Height of Reference Point ~~2.98~~ Meas. From GROUND
Well Diameter 2"
Screen Interval Depth 3-18 Meas. From GROUND
Water Table Depth 7.80 Meas. From TIC
Well Depth 18.60 Meas. From TIC
Length of Water Column 10.8
Volume of Water in Well ~~0.2448~~ 1.76 gallons
Intake Depth of Pump/Tubing 13.0' Meas. From GROUND

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

Redevelop? Y (N)

Sample Time 1050
Sample ID ES2-02A
Duplicate ID —
MS/MSD ES2-02A MS/MSD
Split Sample ID —

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

EVACUATION INFORMATION

Pump Start Time 0945
Pump Stop Time 1125
Minutes of Pumping 100
Volume of Water Removed 5500 mL
Did Well Go Dry? Y N

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

Water Quality Meter Type(s) / Serial Numbers: YSI 556 MSP, HACH 2100P TURBIDIMETER

Time	Pump Rate (L/min.)	Total ~~Gallons~~ Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
0950	100	—	7.80	—	—	—	20	—	—
0955	100	500	8.10	14.44	6.59	0.529	8	2.22	-85.2
1000	100	1000	8.10	14.25	6.67	0.728	6	0.99	-103.2
1005	100	1500	8.10	14.21	6.75	0.868	6	0.80	-113.8
1010	100	2000	8.10	14.19	6.80	1.088	6	0.71	-123.0
1015	100	2500	8.10	14.14	6.83	1.147	7	0.69	-128.0
1020	100	3000	8.10	14.17	6.88	1.316	6	0.56	-134.2
1025	100	3500	8.10	14.22	6.91	1.390	7	0.56	-137.8

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

OBSERVATIONS/SAMPLING METHOD DEVIATIONS INITIAL PURGE IS TURBID WITH BLACK AND ORANGE PARTICLES, SLIGHT ODOR.

SAMPLE DESTINATION

Laboratory: SGS
Delivered Via: UPS

GROUNDWATER SAMPLING LOG

Well No. ES2-02A

Site/GMA Name EAST STREET AREA 2 SOUTH / GMA-1
Sampling Personnel AES
Date OCTOBER 6, 2005
Weather FOGGY, OVERCAST, COOL (50s)

WELL INFORMATION - See Page 1

Time	* Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
1030	100	4000	8.10	14.35	6.94	1.580	6	0.51	-144.2
1035	100	4500	8.10	14.40	6.96	1.581	6	0.51	-145.3
1040	100	5000	8.10	14.44	6.97	1.581	6	0.50	-146.2
1045	100	5500	8.10	14.46	6.98	1.582	6	0.49	-147.9
SAMPLE	TIME	1050 →							

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

OBSERVATIONS/SAMPLING METHOD DEVIATIONS SEE NOTES ON PAGE 1.

GROUNDWATER SAMPLING LOG

GMA-1

Well No. ESA 25-52 | Site/GMA Name ~~ESA 25-52~~
Key No. — | Sampling Personnel SEL / MAH
PID Background (ppm) 0 | Date 10/5/05
Well Headspace (ppm) 0 | Weather Sunny 75°

WELL INFORMATION

Reference Point Marked? (Y) N
Height of Reference Point 0.0 Meas. From Ground
Well Diameter 2"
Screen Interval Depth 4.5-24.5 Meas. From Ground
Water Table Depth 13.13 Meas. From TIC
Well Depth 24.08 Meas. From TIC
Length of Water Column 10.95
Volume of Water in Well ~~1.87 gal~~ 1.79 gallons
Intake Depth of Pump/Tubing 18.5' Meas. From TIC

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

Redevelop? Y (N)

Sample Time 16:00
Sample ID ESA25-52
Duplicate ID —
MS/MSD —
Split Sample ID —

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

EVACUATION INFORMATION

Pump Start Time 15:00
Pump Stop Time 16:10
Minutes of Pumping 70
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: QED PUMP
Samples collected by same method as evacuation? (Y) N (specify)

Water Quality Meter Type(s) / Serial Numbers: YSI 556 MPS 05F0397AJ

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
15:05	150	0.20	13.17				12		
15:10	150	0.40	13.16	14.66	6.89	3.034	6	9.32	-38.9
15:15	125	0.57	13.18	14.90	6.89	3.001	7	3.68	-52.0
15:20		0.73	13.18	14.87	6.89	3.000	7	2.75	-52.0
15:25		0.90	13.15	14.81	6.88	2.994	6	1.89	-48.2
15:30		1.06	13.18	14.86	6.89	2.978	4	1.36	-44.5
15:35	↓	1.23	13.16	14.68	6.89	2.965	5	1.47	-40.5
15:40		1.39	13.16	14.81	6.89	2.942	5	1.72	-31.5

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

OBSERVATIONS/SAMPLING METHOD DEVIATIONS

SAMPLE DESTINATION

Laboratory: SGS
Delivered Via: UPS
Airbill #: —

Field Sampling Coordinator:

GROUNDWATER SAMPLING LOG

Well No. _____

Site/GMA Name ESA2S-S2
Sampling Personnel SEK / MAH
Date 10-5-05
Weather Sunny 75°

WELL INFORMATION - See Page 1

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
15:45	125	1.56	13.16	14.86	6.90	2.939	5	1.85	-32.7
15:50	↓	1.72	13.16	14.93	6.90	2.929	5	1.87	-32.7
15:55	↓	1.89	13.16	14.91	6.90	2.928	5	1.85	-28.0
16:00	↓	2.05							

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

OBSERVATIONS/SAMPLING METHOD DEVIATIONS _____

GROUNDWATER SAMPLING LOG

Well No. GMA1-13
Key No. no lock
PID Background (ppm) —
Well Headspace (ppm) —

Site/GMA Name GMA1
Sampling Personnel MAH
Date 10/7/2005
Weather overcast, chance of rain

WELL INFORMATION

Reference Point Marked? (Y) N
Height of Reference Point 2.02'
Well Diameter 2.00"
Screen Interval Depth 15-25'
Water Table Depth 19.52'
Well Depth 27.04'
Length of Water Column 7.52
Volume of Water in Well
Intake Depth of Pump/Tubing 23.28

0.19' = TIC To TOC
Meas. From TOC To ground
Meas. From
Meas. From TIC
Meas. From TIC
Meas. From TIC

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

Redevelop? Y (N)

Sample Time 1023
Sample ID GMA1-13
Duplicate ID —
MS/MSD —
Split Sample ID —

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

EVACUATION INFORMATION

Pump Start Time 0900
Pump Stop Time 1042
Minutes of Pumping 102
Volume of Water Removed 2.7 gallons
Did Well Go Dry? Y (N)

Evacuation Method: Bailer ( ) Bladder Pump (X)
Peristaltic Pump ( ) Submersible Pump ( ) Other/Specify ( )
Pump Type: Model 59500 Marschark
Samples collected by same method as evacuation? (Y) N (specify)

Water Quality Meter Type(s) / Serial Numbers: YSI 556 MPS 03F0319 AJ

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
0910	100	0.26	19.55				102		
0915	100	0.39	19.55				80		
0920	100	0.52	19.55				46		
0926	100	0.68	19.54	16.02	6.72	0.912	28	2.68	161.0
0931	100	0.81	19.56	16.06	6.73	0.916	29	2.14	116.0
0936	100	0.94	19.55	15.54	6.70	0.928	28	1.85	90.7
0941	100	1.07	19.55	15.45	6.70	0.929	25	1.55	81.9
0946	100	1.20	19.56	15.39	6.72	0.930	21	1.44	76.3

* 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

SAMPLE DESTINATION

Laboratory: SGS
Delivered Via: UPS
Airbill #: —

Field Sampling Coordinator:

GROUNDWATER SAMPLING LOG

Well No. GMA1-13

Site/GMA Name GMA1
Sampling Personnel MAH
Date 10/7/05
Weather overcast, chance of rain

WELL INFORMATION - See Page 1

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
0951	100	1.33	19.55	15.28	6.72	0.934	19	1.60	59.0
0956	100	1.46	19.56	15.28	6.72	0.936	14	1.91	52.2
1001	100	1.59	19.55	15.26	6.72	0.936	13	2.08	73.0
1006	100	1.72	19.55	15.30	6.73	0.940	11	2.24	95.5
1011	100	1.85	19.54	15.27	6.73	0.941	10	2.37	92.3
1016	100	1.98	19.56	15.23	6.73	0.942	9	2.45	89.1
1021	100	2.11	19.55	15.26	6.74	0.945	10	2.48	86.6

* 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

GROUNDWATER SAMPLING LOG

Well No. HR-G1-MW-3
Key No. —
PID Background (ppm) —
Well Headspace (ppm) —

Site/GMA Name EAST STREET AREA 2-SOUTH / GMA1
Sampling Personnel AES/SAB
Date OCTOBER 10, 2005
Weather OVERCAST, 60s, CHANCE OF RAIN

WELL INFORMATION

Reference Point Marked? (Y) N 2.14 - .36
Height of Reference Point [redacted] Meas. From GROUND
Well Diameter 2"
Screen Interval Depth 7-17 Meas. From GROUND
Water Table Depth 3.50 Meas. From TIC
Well Depth 17.87 Meas. From TIC
Length of Water Column 14.37
Volume of Water in Well [redacted] = .81 ft³ = 2.35 GALLONS
Intake Depth of Pump/Tubing 12.0' Meas. From GROUND

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

Redevelop? Y (N)

Sample Time 1235
Sample ID HR-G1-MW-3
Duplicate ID —
MS/MSD →
Split Sample ID —

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

EVACUATION INFORMATION

Pump Start Time 1140
Pump Stop Time 1245
Minutes of Pumping 65
Volume of Water Removed 5000mL
Did Well Go Dry? Y (N)

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

Water Quality Meter Type(s) / Serial Numbers: YSI 556 MSP, HACH 2100P TURBIDIMETER

Time	Pump Rate ~~(L/min.)~~	Total ~~Gallons~~ Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
1140	100	—	3.50	—	—	—	53	—	—
1145	100	500	3.20	—	—	—	18	—	—
1150	100	1000	3.20	16.71	6.77	0.974	7	1.90	-36.4
1155	100	1500	3.14	16.56	6.93	0.983	7	1.10	-47.3
1200	100	2000	3.14	16.17	6.96	0.980	6	0.80	-47.3
1205	100	2500	3.18	16.02	6.96	0.979	5	0.64	-45.8
1210	100	3000	3.18	16.03	6.96	0.983	4	0.62	-45.8
1215	100	3500	3.18	15.98	6.97	0.987	4	0.54	-46.1

* 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 INITAL PURGE IS LIGHT YELLOW, SLIGHT TURBIDITY

SAMPLE DESTINATION

Laboratory: SGS
Delivered Via: UPS

GROUNDWATER SAMPLING LOG

Well No. HR-61-MW-3

Site/GMA Name EAST STREET AREA 2 SOUTH / GMA-1
Sampling Personnel AES/SAB
Date OCTOBER 10, 2005
Weather OVERCAST, 50s, CHANCE OF RAIN

WELL INFORMATION - See Page 1

Time	Pump Rate ~~(L/min.)~~	Total ~~Gallons~~ Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
1220	100	4000	3.18	15.96	6.97	0.987	3	0.53	-46.2
1225	100	4500	3.18	15.96	6.97	0.987	3	0.52	-45.3
1230	100	5000	3.18	15.94	6.97	0.987	3	0.51	-44.4
~~1235~~	~~100~~	~~5000~~	~~3.18~~						
SAMPLE TIME 1235									

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

OBSERVATIONS/SAMPLING METHOD DEVIATIONS SEE NOTES ON PAGE 1.

GROUNDWATER SAMPLING LOG

Well No. HR-G3-MW-1
Key No. —
PID Background (ppm) —
Well Headspace (ppm) —

Site/GMA Name GMA 1
Sampling Personnel MAH
Date 10/10/05
Weather rainy, overcast, cold

WELL INFORMATION

Reference Point Marked? (Y) N, 0.2 - TOC TO TIC
Height of Reference Point 3.62 ft Meas. From ground To TOC
Well Diameter 2.00"
Screen Interval Depth 4.1-14.1' Meas. From TIC
Water Table Depth 9.83' Meas. From TIC
Well Depth 12.84' Meas. From TIC
Length of Water Column 8.01'
Volume of Water in Well 1.31 gallons
Intake Depth of Pump/Tubing 13.84' Meas. From TIC

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

Redevelop? Y (N)

Sample Time 1345
Sample ID HR-G3-MW-1
Duplicate ID —
MS/MSD —
Split Sample ID —

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

EVACUATION INFORMATION

Pump Start Time 1253
Pump Stop Time 1355
Minutes of Pumping ~~1026~~ 62
Volume of Water Removed ~~2.7 gallons~~ 1.65 gallons
Did Well Go Dry? Y (N)

Evacuation Method: Bailer ( ) Bladder Pump (X)
Peristaltic Pump ( ) Submersible Pump ( ) Other/Specify ( )
Pump Type: Model 5400 Marschalk
Samples collected by same method as evacuation? (Y) N (specify)

Water Quality Meter Type(s) / Serial Numbers: YSI 556 MPS 03E0219 AJ

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
1255	100	0.05	9.80				21		
1300	100	0.18	9.80	15.03	6.96	1.098	9	5.99	-73.0
1305	100	0.31	9.82	15.08	6.97	1.099	6	4.64	-91.9
1310	100	0.45	9.85	15.08	6.97	1.098 MAX	5	3.62	-105.8
1315	100	0.58	9.86	15.11	6.94	1.098	5	3.09	-109.3
1320	100	0.71	9.85	15.13	6.95	1.099	5	2.62	-109.7
1325	100	0.84	9.86	15.13	6.94	1.101	5	2.17	-108.2
1330	100	0.98	9.85	15.14	6.93	1.102	4	1.83	-112.6

* 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

SAMPLE DESTINATION

Laboratory: SGS
Delivered Via: UPS

GROUNDWATER SAMPLING LOG

Well No. HR-G3-MW-1

Site/GMA Name GMA 1
Sampling Personnel MAH
Date 10/10/05
Weather Rainy, overcast, cold

WELL INFORMATION - See Page 1

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
1335	100	1.11	9.85	15.13	6.93	1.104	4	1.73	-112.1
1340	100	1.24	9.86	15.14	6.94	1.104	4	1.67	-114.6

* 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

GROUNDWATER SAMPLING LOG

Well No. ESI-05
Key No. —
PID Background (ppm) —
Well Headspace (ppm) —

Site/GMA Name EAST STREET AREA 1 / GMA-1
Sampling Personnel TIES/SAB
Date OCTOBER 10, 2005
Weather CLOUDY, OVERCAST, COOL (60S) CHANCE OF RAIN

WELL INFORMATION

Reference Point Marked? (Y) N
Height of Reference Point -0.20 Meas. From GROUND
Well Diameter 2"
Screen Interval Depth 35-45 Meas. From GROUND
Water Table Depth 39.01 Meas. From TIC
Well Depth 44.30 Meas. From TIC
Length of Water Column 5.29
Volume of Water in Well 0.12 ft³ = 0.86 GALLONS
Intake Depth of Pump/Tubing 42.0' Meas. From GROUND

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

Redevelop? Y (N)

Sample Time 1530
Sample ID ESI-05
Duplicate ID —
MS/MSD —
Split Sample ID —

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

EVACUATION INFORMATION

Pump Start Time 1420
Pump Stop Time 1530
Minutes of Pumping 70
Volume of Water Removed 4500 mL
Did Well Go Dry? Y (N)

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

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

Time	Pump Rate (L/min.)	Total ~~Gallons~~ Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
1440	100	—	39.01	—	—	—	80	—	—
1445	100	500	39.01	—	—	—	42	—	—
1450	100	1000	39.01	14.99	6.83	1.431	24	6.72	96.2
1455	100	1500	39.01	14.87	6.70	1.480	11	4.17	95.8
1500	100	2000	39.01	14.55	6.65	1.435	5	1.93	95.0
1505	100	2500	39.01	14.50	6.64	1.434	4	1.65	93.9
1510	100	3000	39.01	14.49	6.63	1.433	5	1.40	92.7
1515	100	3500	39.01	14.47	6.63	1.433	4	1.33	91.9

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

OBSERVATIONS/SAMPLING METHOD DEVIATIONS INITIAL PURGE IS TURBID W/ ORGANIC DEBRIS.

SAMPLE DESTINATION

Laboratory: SGS
Delivered Via: UPS

GROUNDWATER SAMPLING LOG

Well No. ES1-05

Site/GMA Name EAST STREET AREA 1 / GMA 1
Sampling Personnel MES/SAB
Date OCTOBER 10, 2005
Weather CLOUDY, OVERCAST, COOL (50S)
CHANCE OF RAIN

WELL INFORMATION - See Page 1

Time	* Pump Rate ~~(L/min.)~~	Total ~~Gallons~~ Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
1520	100	4000	39.01	14.42	6.62	1.482	4	1.28	91.4
1525	100	4500	39.01	14.45	6.62	1.482	4	1.25	91.1
SAMPLE TIME		1530							

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

OBSERVATIONS/SAMPLING METHOD DEVIATIONS SEE NOTES ON PAGE 1.

GROUNDWATER SAMPLING LOG

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

Site/GMA Name GMA-1 ~~ESI-27R~~
Sampling Personnel SEK
Date 10-6-05
Weather Dry Sunny 70°

WELL INFORMATION

Reference Point Marked? Y (N)
Height of Reference Point ~~0.00~~ 0.17' Meas. From TOC
Well Diameter 2"
Screen Interval Depth 93-103 Meas. From TIC
Water Table Depth 10.95 Meas. From TIC
Well Depth 19.05 Meas. From TIC
Length of Water Column 8.10
Volume of Water in Well 1.32
Intake Depth of Pump/Tubing 15' Meas. From TIC

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

Redevelop? Y (N)

Sample Time 12:00
Sample ID ESI-27R
Duplicate ID —
MS/MSD —
Split Sample ID —

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

EVACUATION INFORMATION

Pump Start Time 10:00
Pump Stop Time 12:20
Minutes of Pumping 140
Volume of Water Removed 2.0 gallons
Did Well Go Dry? Y (N)

Evacuation Method: Bailer ( ) Bladder Pump (X)
Peristaltic Pump ( ) Submersible Pump ( ) Other/Specify ( )
Pump Type: Marschalk system One
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% or 0.1 mg/l]*	ORP (mV) [10 mV]*
10:07	100	0.19					45		
10:16	100	~~9.42~~ ~~11.63~~ 2.0	11.63	19.99	7.37	0.37	330	7.62	100.1
10:21	50	0.49					336		
10:26	50	0.56	11.72				225		
10:31	50	0.69					246		
10:36	50	0.86	11.84				186		
10:56	50	0.99					108		
11:06	50	1.12					49		

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

OBSERVATIONS/SAMPLING METHOD DEVIATIONS —

SAMPLE DESTINATION

Laboratory: SGS
Delivered Via: MPJ
Airbill #: —

Field Sampling Coordinator: [signature]

GROUNDWATER SAMPLING LOG

Well No. ES1-27R

Site/GMA Name ~~ES1-27R~~ GMA-1

Sampling Personnel SEK

Date 10-6-05

Weather Sunny 70°

WELL INFORMATION - See Page 1

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
11:22	50	1.33	12.00	23.81	7.55	0.384	26	13.92	322.4
11:27	50	1.40	12.02	23.58	7.54	0.382	24	8.32	328.8
11:32	50	1.47	12.02	23.63	7.54	0.380	22	3.55	331.0
11:37	50	1.54	12.02	23.48	7.54	0.381	18	2.88	332.8
11:42	50	1.61	12.00	23.74	7.54	0.381	15	2.31	329.8
11:47	50	1.68	12.02	23.74	7.54	0.381	12	2.30	329.6
11:52	50	1.75	12.02	23.86	7.54	0.381	11	2.26	330.7
11:57	50	1.82	12.02	23.89	7.54	0.381	12	2.24	330.8

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

OBSERVATIONS/SAMPLING METHOD DEVIATIONS

* NAPL was detected @ Top of water column

GROUNDWATER SAMPLING LOG

Well No. 52
Key No. —
PID Background (ppm) —
Well Headspace (ppm) —

Site/GMA Name EAST STREET Area 1 North
Sampling Personnel MAH, TCM
Date 10/4/05
Weather overcast, warm

WELL INFORMATION

Reference Point Marked? Y N
Height of Reference Point ____ Meas. From ____
Well Diameter 2"
Screen Interval Depth 2-22' Meas. From ____
* 6.51' Water Table Depth ~~15.64'~~ MAH Meas. From TIC
Well Depth ~~15.64'~~ Meas. From TIC
Length of Water Column 8.53'
Volume of Water in Well 1.39 gallons
Intake Depth of Pump/Tubing 8.52' Meas. From TIC
10.775'

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

Redevelop? Y (N)

Sample Time ~~CSAIN~~ MAH - 1115
Sample ID ESAIN-52
Duplicate ID —
MS/MSD —
Split Sample ID —

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

EVACUATION INFORMATION

Pump Start Time 1021
Pump Stop Time 1120
Minutes of Pumping 119
Volume of Water Removed 2.25 gallons
Did Well Go Dry? Y (N)

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

Water Quality Meter Type(s) / Serial Numbers: YSI 556 MPS 03F0519 4I

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
1003	105	0.06	6.51				107		
1008	100	0.19	6.67				93		
1013	100	0.32	7.20				64		
1018	100	0.45	7.85				54		
1023	100	0.59	8.45				30		
1032	100	0.83	8.45	17.45	6.85	0.572	30	260.40	-38.0
1037	100	0.96	8.52	17.37	6.72	0.547	24	62.5	-41.3
1042	100	1.09	8.62	17.31	6.82	0.546	18	29.0	-56.9

* 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
Delivered Via: UPS
Airbill #: —

Field Sampling Coordinator: [signature]

GROUNDWATER SAMPLING LOG

Well No. 52

Site/GMA Name East Street Area 2 North

Sampling Personnel MEK JCM

Date 10/4/05

Weather Overcast, warm

WELL INFORMATION - See Page 1

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
1047	100	1.22	8.72	17.55	6.95	0.557	110	18.46	-58.0
1052	100	1.36	8.76	17.48	6.96	0.563	14	13.86	-58.7
1057	100	1.49	8.90	17.39	6.99	0.573	13	14.12	-62.5
1102	100	1.62	9.45	17.44	7.07	0.580	10	10.05	-70.4
1107	100	1.75	9.12	17.37	7.08	0.584	10	10.73	-74.7
1110	100	1.83	9.19	17.39	7.09	0.586	11	10.75	-80.2
1113	100	1.91	9.28	17.37	7.10	0.586	10	10.78	-82.7

* 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

GROUNDWATER SAMPLING LOG

Well No. LS-29
Key No. —
PID Background (ppm) —
Well Headspace (ppm) —

Site/GMA Name LYMAN STREET AREA / GMA 1
Sampling Personnel MES/MAH
Date OCTOBER 4, 2005
Weather [redacted], SUNNY, 70S

WELL INFORMATION

Reference Point Marked? (Y) N
Height of Reference Point ____ Meas. From GROUND
Well Diameter 2"
Screen Interval Depth 24.6-34.6 Meas. From GROUND
Water Table Depth 15.12 Meas. From TIC
Well Depth 34.58 Meas. From ____
Length of Water Column 19.46'
Volume of Water in Well ~~128 ft³~~ 3.1 Pgallons
Intake Depth of Pump/Tubing 29.00 Meas. From GROUND

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

Redevelop? Y (N)

Sample Time 12:45
Sample ID LS-29
Duplicate ID —
MS/MSD —
Split Sample ID —

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

EVACUATION INFORMATION

Pump Start Time 11:35
Pump Stop Time 12:55
Minutes of Pumping 80
Volume of Water Removed 1.75 gallons
Did Well Go Dry? Y (N)

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

Water Quality Meter Type(s) / Serial Numbers: YSI 556 MSP, HACH TURBIDIMETER

Time	Pump Rate (mL/min.)	Total ~~Gallons~~ Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
1140	100	—	15.12	—	—	—	57	—	—
1145	100	500	15.12	—	—	—	38	—	—
1155	100	1000	15.12	15.29	7.82	0.556	35	9.69	15.3
1200	100	1500	15.11	14.24	7.64	0.556	33	6.35	2.7
1205	100	2000	15.12	14.24	7.56	0.563	19	5.91	-7.6
1210	100	2500	15.12	14.18	7.53	0.566	15	5.75	-11.3
1215	100	3000	15.12	14.39	7.53	0.566	11	5.54	-13.4
1220	100	3500	15.12	14.39	7.54	0.569	10	5.46	-15.6

* 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 PURGE IS COLORLESS, SLIGHTLY TURBID.

SAMPLE DESTINATION

Laboratory: SGS
Delivered Via: UPS
Airbill #: —

Field Sampling Coordinator: [signature]

GROUNDWATER SAMPLING LOG

Well No. LS-29

Site/GMA Name LYMAN STREET AREA/GMA1
Sampling Personnel AES
Date OCTOBER 4, 2005
Weather COOL (60s) OVERCAST

WELL INFORMATION - See Page 1

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
1225	100	4000	15.12	14.67	7.52	0.571	10	5.13	-21.2
1230	100	4500	15.12	14.16	7.51	0.572	5	5.18	-21.2
1235	100	5000	15.12	14.16	7.50	0.572	4	5.16	-20.4
1240	100	5500	15.12	14.16	7.48	0.572	4	5.14	-19.7
SAMPLE TIME 1245									

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

OBSERVATIONS/SAMPLING METHOD DEVIATIONS SEE NOTES ON PAGE 1.

GROUNDWATER SAMPLING LOG

Well No. LSSC-08S
Key No. —
PID Background (ppm) —
Well Headspace (ppm) —

Site/GMA Name LYMAN STREET AREA / GMA1
Sampling Personnel AES
Date OCTOBER 5, 2006
Weather SUNNY, WARM (70s), CLEAR SKIES

WELL INFORMATION

Reference Point Marked? (Y) N
Height of Reference Point -0.28 Meas. From GROUND
Well Diameter 2"
Screen Interval Depth 5-15 Meas. From GROUND
Water Table Depth 12.39 Meas. From TIC
Well Depth 14.52 Meas. From TIC
Length of Water Column 2.13
Volume of Water in Well ~~0.4068~~ 0.35 gallons
Intake Depth of Pump/Tubing 13.5 Meas. From TIC

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

Redevelop? Y (N)

Sample Time 1105
Sample ID LSSC-08
Duplicate ID —
MS/MSD —
Split Sample ID —

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

EVACUATION INFORMATION

Pump Start Time 0920
Pump Stop Time 1120
Minutes of Pumping 120
Volume of Water Removed 10,000mL
Did Well Go Dry? Y (N)

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

Water Quality Meter Type(s) / Serial Numbers: YSI E~~5~~6 MPS, HACH TURBIDIMETER

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
0930	100	—	12.39	—	—	—	578	—	—
0935	100	500	12.45	—	—	—	432	—	—
0940	100	1000	12.49	—	—	—	319	—	—
0945	100	1500	12.50	—	—	—	286	—	—
0950	100	2000	12.50	—	—	—	194	—	—
0955	100	2500	12.50	—	—	—	187	—	—
1000	100	3000	12.50	—	—	—	149	—	—
1005	100	3500	12.50	—	—	—	103	—	—

* 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 (BROWNISH GRAY)

SAMPLE DESTINATION

Laboratory: SGS
Delivered Via: UPS

GROUNDWATER SAMPLING LOG

Well No. LSSC-08S

Site/GMA Name LYMAN STREET AREA / GMA-1
Sampling Personnel RES
Date OCTOBER 5, 2005
Weather SUNNY, WARM (70s), CLEAR SKIES

WELL INFORMATION - See Page 1

Time	* Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
1010	100	4000	12.56	—	—	—	49	—	—
1015	100	4500	12.50	16.10	6.50	3.453	21	3.56	-121.2
1020	100	5000	12.50	15.97	6.49	3.407	15	1.63	-118.6
1025	100	5500	12.50	15.75	6.48	3.356	12	1.10	-115.9
1030	100	6000	12.50	15.60	6.48	3.320	8	0.88	-114.8
1035	100	6500	12.50	15.58	6.48	3.300	6	0.79	-113.6
1040	100	7000	12.50	15.44	6.47	3.276	4	0.69	-113.2
1045	100	7500	12.50	15.48	6.46	3.263	5	0.65	-106.8
1050	100	8000	12.50	15.51	6.47	3.249	6	0.63	-104.5
1055	100	8500	12.50	15.53	6.46	3.249	4	0.64	-103.6
1057	100	9000	12.50	15.54	6.46	3.248	3	0.60	-99.8
1100	100	9500	12.50	15.54	6.46	3.248	2	0.60	-99.2
1103	100	10000	12.50	15.54	6.46	3.248	2	0.59	-98.7
SAMPLE TIME 1105 —									

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

OBSERVATIONS/SAMPLING METHOD DEVIATIONS SEE NOTES ON PAGE 1

GROUNDWATER SAMPLING LOG

Well No. LBSC-16S
Key No. —
PID Background (ppm) —
Well Headspace (ppm) —

Site/GMA Name LIMAN STREET AREA / GMA 1
Sampling Personnel AES
Date OCTOBER 5, 2005
Weather SUNNY, HOT (80s), CLEAR SKIES

WELL INFORMATION

Reference Point Marked? (Y) N
Height of Reference Point -0.12 Meas. From GROUND
Well Diameter 2"
Screen Interval Depth 5-15 Meas. From GROUND
Water Table Depth ~~9.78~~ Meas. From TIC
Well Depth 14.20 Meas. From TIC
Length of Water Column 4.47 (14.20 − 9.78)
Volume of Water in Well ~~0.73 gallons~~ 0.73 gallons
Intake Depth of Pump/Tubing 12.50 Meas. From TIC

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

Redevelop? Y (N)

Sample Time 1230
Sample ID LBSC-16S
Duplicate ID —
MS/MSD —
Split Sample ID —

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

EVACUATION INFORMATION

Pump Start Time 1122
Pump Stop Time 1215
Minutes of Pumping 53
Volume of Water Removed 5500 mL
Did Well Go Dry? Y (N)

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

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

Time	Pump Rate ~~(L/min.)~~	Total ~~Gallons~~ Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
1130	100	—	9.73	—	—	—	67	—	—
1135	100	500	9.74	—	—	—	40	—	—
1140	100	1000	9.74	16.21	7.09	1.454	21 (HB)	2.99	59.6
1145	100	1500	9.74	15.77	7.04	1.469	15	2.22	47.4
1150	100	2000	9.74	15.72	7.03	1.470	15	2.14	44.3
1155	100	2500	9.74	15.68	7.03	1.469	13	2.11	40.7
1200	100	3000	9.74	15.68	7.02	1.467	9	2.07	38.5
1205	100	3500	9.74	15.65	7.02	1.467	8	2.08	36.9

* 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 LIMAN PURGE IS CLEAR, NO ODOR, LITTLE TURBIDITY.

SAMPLE DESTINATION

Laboratory: SGS
Delivered Via: UPS

GROUNDWATER SAMPLING LOG

Well No. LSSC-168

Site/GMA Name LYMAN STREET AREA / GMA-1
Sampling Personnel AES
Date OCTOBER 5, 2005
Weather SUNNY, HOT (80s) CLEAR SKIES

WELL INFORMATION - See Page 1

Time	* Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
1210	100	4000	9.74	15.53	7.02	1.467	6	2.12	35.8
1215	100	4500	9.74	15.51	7.02	1.468	4	2.06	35.6
1220	100	5000	9.74	15.50	7.02	1.466	3	2.04	35.5
1225	100	5500	9.74	15.53	7.02	1.466	3	2.05	35.4
SAMPLE TIME		1230							

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

OBSERVATIONS/SAMPLING METHOD DEVIATIONS SEE NOTES ON PAGE 1

GROUNDWATER SAMPLING LOG

Well No. LS8C-18
Key No. —
PID Background (ppm) —
Well Headspace (ppm) —

Site/GMA Name LYMAN STREET AREA / GMA 1
Sampling Personnel AES
Date OCTOBER 7, 2006
Weather OVERCAST, MUGGY, 70s

WELL INFORMATION

Reference Point Marked? (Y) N
Height of Reference Point -0.30 Meas. From GROUND
Well Diameter 2"
Screen Interval Depth 9-19 Meas. From GROUND
Water Table Depth 15.21 Meas. From TIC
Well Depth 18.60 Meas. From TIC
Length of Water Column 3.39
Volume of Water in Well 0.074 ft³ → 0.55 gallons
Intake Depth of Pump/Tubing 17.50 Meas. From GROUND

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

Redevelop? Y (N)

Sample Time 1005
Sample ID LS8C-18
Duplicate ID —
MS/MSD —
Split Sample ID —

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

EVACUATION INFORMATION

Pump Start Time 0900
Pump Stop Time 1018
Minutes of Pumping 78
Volume of Water Removed 5500 mL
Did Well Go Dry? Y (N)

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

Water Quality Meter Type(s) / Serial Numbers: YSI 556 MSP, HACH 2100P TURBIDIMETER

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
0910	100	—	15.21	—	—	—	14	—	—
0915	100	500	15.85	17.06	6.61	0.752	8	3.27	-54.0
0920	100	1000	15.85	17.55	6.70	0.752	8	2.08	-58.9
0925	100	1500	15.85	17.72	6.75	0.751	6	1.82	-62.3
0980	100	2000	15.85	17.48	6.80	0.754	7	1.61	-68.1
0935	100	2500	15.85	17.25	6.83	0.755	6	1.40	-70.0
0940	100	3000	15.85	17.16	6.81	0.756	6	1.29	-71.1
0945	100	3500	15.85	17.14	6.83	0.757	7	1.01	-71.8
0950	100	4000	15.85	17.18	6.88	0.758	6	0.86	-72.4
0955	100	4500	15.85	17.38	6.89	0.760	4	0.87	-71.2
1000	100	5000	15.85	17.45	6.90	0.761	4	0.87	-73.1
1005	100	5500	15.85	17.51	6.91	0.762	4	0.86	-74.3

* 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 WAS SOME BLACK PARTICLES, MOSTLY CLEAR, NO ODOR.

SAMPLE DESTINATION

Laboratory: SGS
Delivered Via: UPS
Airbill #: —

Field Sampling Coordinator:

GROUNDWATER SAMPLING LOG

Well No. LS-MW-4R
Key No. —
PID Background (ppm) —
Well Headspace (ppm) —

Site/GMA Name LYMAN STREET AREA (GMA1
Sampling Personnel AES
Date OCTOBER 5, 2005
Weather HOT (80S) SUNNY, CLEAR SKIES

WELL INFORMATION

Reference Point Marked? (Y) N
Height of Reference Point -0.31 Meas. From GROUND
Well Diameter 2"
Screen Interval Depth 9-14 Meas. From GROUND
Water Table Depth 9.50 Meas. From TIC
Well Depth 14.1 Meas. From TIC
Length of Water Column 4.16
Volume of Water in Well ~~.7043~~ 0.75 gallons
Intake Depth of Pump/Tubing 12.0' Meas. From GROUND

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

Redevelop? Y (N)

Sample Time 1510
Sample ID LS-MW-4R
Duplicate ID —
MS/MSD —
Split Sample ID —

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

EVACUATION INFORMATION

Pump Start Time 1420
Pump Stop Time 1520
Minutes of Pumping 60
Volume of Water Removed 4000ml
Did Well Go Dry? Y (N)

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

Water Quality Meter Type(s) / Serial Numbers: YSI-556 MPS, HACH 2100P TURBIDIMETER

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
1425	100	—	9.50	—	—	—	31	—	—
1435	100	1000	9.50	16.27	6.85	1.850	17	10.69	-108.3
1440	100	1500	9.60	16.29	6.78	1.850	11	1.69	-108.7
1445	100	2000	9.62	16.24	6.77	1.851	4	0.85	-113.3
1450	100	2500	9.62	16.10	6.75	1.850	2	0.74	-113.3
1455	100	3000	9.62	16.03	6.73	1.849	1	0.60	-113.6
1500	100	3500	9.62	16.05	6.73	1.848	1	0.58	-113.8
1505	100	4000	9.62	16.10	6.73	1.848	1	0.57	-113.8

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

OBSERVATIONS/SAMPLING METHOD DEVIATIONS INITIAL PURGE HAS SOME PARTICULATES (BROWN) SLIGHTLY TURBID

SAMPLE DESTINATION

Laboratory: SGS
Delivered Via: UPS

GROUNDWATER SAMPLING LOG

GE Pittsfield - GMA-1

Well No. N28C-078
Key No. —
PID Background (ppm) —
Well Headspace (ppm) —

Site/GMA Name NEWELL STREET AREA II
Sampling Personnel AES/JCM/ASD
Date OCTOBER 3, 2025
Weather SUNNY, CLEAR SKIES, 80s

WELL INFORMATION

Reference Point Marked? (Y) N
Height of Reference Point — Meas. From Ground
Well Diameter 2"
Screen Interval Depth 8.9'-18.9' Meas. From Ground
Water Table Depth 11.40' Meas. From TIC
Well Depth 18.97' Meas. From TIC
Length of Water Column 7.57'
Volume of Water in Well 1.24 gallon
Intake Depth of Pump/Tubing 15' Meas. From TIC

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

Redevelop? Y (N)

Sample Time 1500
Sample ID N28C-078
Duplicate ID —
MS/MSD —
Split Sample ID —

Required	Analytical Parameters:	Collected
(X)	VOCs (Std. list)- 8260B	(X)
( )	VOCs (Exp. list)	( )
( )	SVOCs	( )
(~~X~~)	PCBs (Total)	( )
(X)	PCBs (Dissolved)	(X)
( )	Metals/Inorganics (Total)	( )
( )	Metals/Inorganics (Dissolved)	( )
( )	EPA Cyanide (Dissolved)	( )
( )	PAC Cyanide (Dissolved)	( )
( )	PCDDs/PCDFs	( )
( )	Pesticides/Herbicides	( )
( )	Natural Attenuation	( )
( )	Other (Specify)	( )

EVACUATION INFORMATION

Pump Start Time 1325
Pump Stop Time 1519
Minutes of Pumping 114
Volume of Water Removed 3 gallons
Did Well Go Dry? Y (N)

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

Water Quality Meter Type(s) / Serial Numbers: YSI 556 MSP, HACH TURBIDIMETER

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
1340	100	~~500~~	11.40	—	—	—	546	—	—
1345	100	500	11.40	—	—	—	450	—	—
1350	100	1000	11.40	—	—	—	49	—	—
1355	100	1500	11.40	15.61	7.12	0.724	27	3.59	-142.0
1400	100	2000	11.40	13.92	6.95	0.713	21	1.84	-140.2
1405	100	2500	11.40	13.96	6.86	0.714	13	0.83	-134.8
1410	100	3000	11.40	13.80	6.85	0.712	13	0.61	-131.1
1415	100	3500	11.40	13.72	6.84	0.710	9	0.50	-131.0

* 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 IS DARK BROWN AND VERY TURBID.

SAMPLE DESTINATION

Laboratory: SGS
Delivered Via: UPS
Airbill #: —

Field Sampling Coordinator:

GROUNDWATER SAMPLING LOG

Well No. N2SC-075

Site/GMA Name NEWELL STREET AREA II
Sampling Personnel AES/JCH/ACR
Date OCTOBER 3, 2005
Weather SUNNY, CLEAR SKIES, 80s

WELL INFORMATION - See Page 1

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
1420	100	4000	11.40	13.73	6.84	0.712	8	0.48	-131.5
1425	100	4500	11.40	13.71	6.85	0.713	5	0.45	-134.1
1430	100	5000	11.40	13.87	6.87	0.713	5	0.43	-134.1
1435	100	5500	11.40	13.79	6.86	0.710	3	0.42	-133.8
1440	100	6000	11.90	13.74	6.84	0.713	4	0.41	-131.8
1445	100	6500	11.40	13.78	6.84	0.714	3	0.41	-132.3
1450	100	7000	11.40	13.76	6.83	0.713	3	0.40	-132.5

* 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

GROUNDWATER SAMPLING LOG

Well No. MS-17
Key No. —
PID Background (ppm) —
Well Headspace (ppm) —

Site/GMA Name NEWELL STREET AREA II
Sampling Personnel AES
Date OCTOBER 4, 2005
Weather OVERCAST, COOL (60s)

WELL INFORMATION

Reference Point Marked? (Y) N
Height of Reference Point 3.80' Meas. From GROUND
Well Diameter 2"
Screen Interval Depth 6-16' Meas. From GROUND
Water Table Depth 13.03 Meas. From TIC
Well Depth 18.60 Meas. From TIC
Length of Water Column 5.57
Volume of Water in Well ~~1.22 ft³~~ 0.909 gallons
Intake Depth of Pump/Tubing ~15.50 Meas. From TIC

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

Redevelop? Y (N)

Sample Time 1100
Sample ID MS-17
Duplicate ID —
MS/MSD —
Split Sample ID —

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

EVACUATION INFORMATION

Pump Start Time 0953
Pump Stop Time 1105
Minutes of Pumping ~~64~~ 72
Volume of Water Removed 6500 mL
Did Well Go Dry? Y (N)

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

Water Quality Meter Type(s) / Serial Numbers: YSI 556 MSP, HACH TURBIDIMETER

Time	Pump Rate (L/min.)	Total ~~Gallons~~ Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
1000	100	—	13.03	—	—	—	45	—	—
1010	100	1000	13.05	14.29	6.81	0.744	30	8.86	-97.6
1015	100	1500	13.05	13.77	6.96	0.765	18	2.04	-108.5
1020	100	2000	13.05	13.74	7.03	0.767	9	1.46	-106.9
1025	100	2500	13.05	13.76	7.04	0.767	9	1.27	-106.9
1030	100	3000	13.05	13.72	7.06	0.766	6	1.08	-107.0
1035	100	3500	13.05	13.80	7.09	0.765	6	1.01	-104.6
1040	100	4000	13.05	13.69	7.08	0.766	4	0.93	-104.2

* 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 IS LIGHT BROWN; ONLY SLIGHTLY TURBID.

SAMPLE DESTINATION

Laboratory: SGS
Delivered Via: UPS
Airbill #: —

Field Sampling Coordinator:

C:\WORK\GEGroundwater\554109\Attachment\D-2

GROUNDWATER SAMPLING LOG

Well No. MS-17

Site/GMA Name NEWELL STREET AREA II

Sampling Personnel AES

Date OCTOBER 4, 2005

Weather OVERCAST, COOL (60S)

WELL INFORMATION - See Page 1

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
1045	100	4500	13.05	13.68	7.10	0.765	3	0.88	-103.2
1050	100	5000	13.05	13.70	7.09	0.765	2	0.86	-102.8
1055	100	5500	13.05	13.72	7.07	0.765	2	0.85	-102.2
SAMPLED AT 1100									

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

OBSERVATIONS/SAMPLING METHOD DEVIATIONS SEE PAGE 1.

GROUNDWATER SAMPLING LOG

Well No. 72R
Key No. —
PID Background (ppm) 0
Well Headspace (ppm) 0

Site/GMA Name 72-R, GMA1
Sampling Personnel SEK
Date 11-6-05
Weather Sunny 75°

WELL INFORMATION

Reference Point Marked? (Y) N
Height of Reference Point -0.15' Meas. From Ground
Well Diameter 4"
Screen Interval Depth 4-14 Meas. From Ground
Water Table Depth 8.15 Meas. From TIC
Well Depth 13.~~28~~ Meas. From TIC
13.43
Length of Water Column 5.28
Volume of Water in Well 1.77
Intake Depth of Pump/Tubing 10.79 Meas. From TIC

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

Redevelop? Y (N)

Sample Time 15:40
Sample ID 72-R
Duplicate ID Dup-1
MS/MSD —
Split Sample ID —

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

EVACUATION INFORMATION

Pump Start Time 14:45
Pump Stop Time 16:20
Minutes of Pumping 95
Volume of Water Removed 2.5 gallons
Did Well Go Dry? Y (N)

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

Water Quality Meter Type(s) / Serial Numbers: YSI 556 MPS 03F0319 AT

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
15:50	100	0.13	8.26	19.17		5.230	6	12.10	307.1
15:56	100	0.29	8.45	↓	6.52	↓	9	↓	↓
15:01	100	0.42	8.50	21.61	6.52	5.259	6	8.07	316.7
15:06	100	0.55	8.51	22.56	6.53	5.266	5	4.64	320.3
15:11	100	0.69	8.52	23.06	6.54	5.276	5	3.08	321.0
15:16	100	0.~~83~~	8.53	23.57	6.54	5.289	5	1.57	320.3
15:21	100	0.95	8.54	23.64	6.54	5.291	4	1.36	322.1
15:26	100	1.08	8.54	23.69	6.54	5.282	4	1.19	324.6

* 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 —

SAMPLE DESTINATION

Laboratory: TGS
Delivered Via: UPS
Airbill #: —

Field Sampling Coordinator:

C:\Documents and Settings\skilmek\Desktop\554199 Attachment D-2

GROUNDWATER SAMPLING LOG

Well No. 72-R

Site/GMA Name 72-R → GMA1
Sampling Personnel SEK
Date 10-6-05
Weather Sunny 75°

WELL INFORMATION - See Page 1

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
15:31	100	1.21	8.55	23.70	6.54	5.287	4	1.25	335.8
15:36	100	1.34	8.55	23.12	6.54	5.290	4	1.28	334.2

* 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

GROUNDWATER SAMPLING LOG

Well No. 139R
Key No. FX-37
PID Background (ppm) 0
Well Headspace (ppm) 0

Site/GMA Name GMA-1
Sampling Personnel GAR
Date 10/13/05
Weather Overcast, Rain, 50°F

WELL INFORMATION

Reference Point Marked? (Y) N
Height of Reference Point -0.50 Meas. From Ground
Well Diameter 2"
Screen Interval Depth 6'-16' Meas. From Ground
Water Table Depth 7.80' Meas. From TIC
Well Depth 14.36' Meas. From TIC
Length of Water Column 6.56
Volume of Water in Well 1.07 gallons
Intake Depth of Pump/Tubing 11.1' Meas. From TIC

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

Redevelop? Y (N)

Sample Time 13:55
Sample ID 139R
Duplicate ID —
MS/MSD —
Split Sample ID —

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

EVACUATION INFORMATION

Pump Start Time 12:45
Pump Stop Time 14:05
Minutes of Pumping 80
Volume of Water Removed 2.1 gallons
Did Well Go Dry? Y (N)

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

Water Quality Meter Type(s) / Serial Numbers: YSI-556 MPS : 03F0319 AJ
Hach 2100P Turbidimeter

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
12:55	100ml	0.26	8.00	—	—	—	9	—	—
13:05	100ml	0.53	8.04	13.99	7.02	0.762	7	41.40	153.0
13:10	100ml	0.66	8.10	13.94	7.14	0.765	5	38.50	152.5
13:15	100ml	0.79	8.14	13.92	7.17	0.773	4	19.36	152.0
13:20	100ml	0.93	8.18	13.92	7.18	0.779	3	13.02	151.3
13:25	100ml	1.06	8.20	13.90	7.19	0.784	3	10.14	152.2
13:30	100ml	1.19	8.21	13.89	7.19	0.788	2	8.93	153.5
13:35	100ml	1.32	8.23	13.87	7.20	0.794	2	8.06	153.7

* 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: Clear, odorless
Final Purge: Clear, odorless

SAMPLE DESTINATION

Laboratory: SGS
Delivered Via: UPS
Airbill #: —

Field Sampling Coordinator:

GROUNDWATER SAMPLING LOG

Well No. 139R

Site/GMA Name GMA-1
Sampling Personnel GAR
Date 10/13/05
Weather Overcast, Rain, 50°F

WELL INFORMATION - See Page 1

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
13:40	100ml	1.46	8.24	13.86	7.20	0.796	2	7.68	154.2
13:45	100ml	1.59	8.25	13.78	7.20	0.799	2	7.50	156.1
13:50	100ml	1.72	8.25	13.74	7.20	0.800	2	7.11	157.9
13:55	100ml	1.85	8.25	13.68	7.20	0.802	2	7.15	160.3

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

OBSERVATIONS/SAMPLING METHOD DEVIATIONS

GROUNDWATER SAMPLING LOG

Well No. GMA1-6
Key No. —
PID Background (ppm) —
Well Headspace (ppm) —

Site/GMA Name EAST STREET AREA 1 SOUTH/GMA-1
Sampling Personnel AES
Date OCTOBER 18, 2005
Weather RAIN, COOL (50s), OVERCAST

WELL INFORMATION

Reference Point Marked? (Y) N
Height of Reference Point -0.35 Meas. From Ground
Well Diameter 2"
Screen Interval Depth 5-15 Meas. From Ground
Water Table Depth 7.85 Meas. From TIC
Well Depth 16.10 Meas. From TIC
Length of Water Column 7.25
Volume of Water in Well 1.18 gallons
Intake Depth of Pump/Tubing 11.5 Meas. From TIC

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

Redevelop? Y (N)

Sample Time 10:05
Sample ID GMA1-6
Duplicate ID —
MS/MSD GMA1-6
Split Sample ID —

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

EVACUATION INFORMATION

Pump Start Time 840
Pump Stop Time 1010
Minutes of Pumping 90
Volume of Water Removed 7600mL
Did Well Go Dry? Y (N)

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

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

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
840	100	—	7.85	—	—	—	470	—	—
850	100	500	8.06	—	—	—	119	—	—
855	100	1000	8.06	—	—	—	92	—	—
900	100	1500	8.06	—	—	—	79	—	—
905	100	2000	8.06	—	—	—	78	—	—
910	100	2500	8.06	—	—	—	71	—	—
915	100	3000	8.06	—	—	—	51	—	—
920	100	3500	8.06	15.80	6.74	1.620	39	1.93	95.1
925	100	4000	8.06	15.99	6.87	1.663	32	1.84	97.9
930	100	4500	8.06	16.02	6.82	1.642	20	0.96	98.9
0935	100	5000	8.06	16.04	6.82	1.694	13	0.91	99.4
0940	100	5500	8.06	16.11	6.82	1.698	11	0.76	100.1

* 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 WATER APPEARS BROWN AND TURBID

SAMPLE DESTINATION

Laboratory: SGS
Delivered Via: UPS
Airbill #: —

Field Sampling Coordinator:

GROUNDWATER SAMPLING LOG

Well No. GMA1-6

Site/GMA Name EAST STREET AREA 1 SOUTH
Sampling Personnel [illegible]
Date OCTOBER 18, 2006
Weather [illegible]

WELL INFORMATION - See Page 1

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
0945	100	6000	8.06	16.19	6.82	1.701	8	0.71	98.2
0950	100	6500	8.06	16.15	6.82	1.702	7	0.64	-98.3
0955	100	7000	8.06	16.12	6.82	1.703	7	0.65	-98.3
1000	100	7500	8.06	16.10	6.82	1.70[illegible]	6	0.65	98.8

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

OBSERVATIONS/SAMPLING METHOD DEVIATIONS

GROUNDWATER SAMPLING LOG

Well No. GMA1-18
Key No. NA
PID Background (ppm) 0
Well Headspace (ppm) 0

Site/GMA Name GMA-1
Sampling Personnel GAR
Date 10/13/05
Weather Overcast, Rain, 50°F

WELL INFORMATION

Reference Point Marked? (Y) N
Height of Reference Point -0.20' Meas. From Ground
Well Diameter 2"
Screen Interval Depth 4'-14' Meas. From Ground
Water Table Depth 3.91' Meas. From TIC
Well Depth 13.73' Meas. From TIC
Length of Water Column 9.82'
Volume of Water in Well 1.60 gallons
Intake Depth of Pump/Tubing 8.8' Meas. From TIC

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

Redevelop? Y (N)

Sample Time 16:40
Sample ID GMA1-18
Duplicate ID —
MS/MSD —
Split Sample ID —

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

EVACUATION INFORMATION

Pump Start Time 15:39
Pump Stop Time 16:50
Minutes of Pumping 71
Volume of Water Removed 1.90 gallons
Did Well Go Dry? Y (N)

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

Water Quality Meter Type(s) / Serial Numbers: YSI-556 MPS:03F0319AI
Hach 2600P Turbidimeter

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
15:44	100ml	0.13	3.93'	—	—	—	13	—	—
15:50	100ml	0.29	3.93	14.50	7.23	0.468	36	38.05	138.6
16:00	100ml	0.56	3.97	15.00	7.27	0.479	30	11.77	162.3
16:05	100ml	0.69	3.97	15.04	7.28	0.488	16	8.36	150.9
16:10	100ml	0.82	3.98	15.06	7.29	0.491	11	7.86	113.6
16:15	100ml	0.95	3.99	15.06	7.29	0.493	7	7.84	106.7
16:20	100ml	1.08	3.99	15.11	7.29	0.494	6	7.80	104.4
16:25	100ml	1.22	3.99	15.06	7.29	0.493	4	7.73	103.9

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

OBSERVATIONS/SAMPLING METHOD DEVIATIONS

Initial Purge: Clear, odorless
Final Purge: Clear, odorless

SAMPLE DESTINATION

Laboratory: SGS
Delivered Via: UPS
Airbill #: —

Field Sampling Coordinator:

GROUNDWATER SAMPLING LOG

Well No. GMA1-18

Site/GMA Name GMA-1
Sampling Personnel GAR
Date 10/13/05
Weather Overcast, Rain, 50°F

WELL INFORMATION - See Page 1

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
16:30	100ml	1.35	3.99	15.02	7.30	0.491	4	7.73	102.9
16:35	100ml	1.48	4.00	14.98	7.30	0.490	4	7.72	102.7

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

OBSERVATIONS/SAMPLING METHOD DEVIATIONS

Appendix C

Historical Groundwater Data

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Historical Groundwater Data

Total VOC Concentrations – Wells Sampled in Fall 2005

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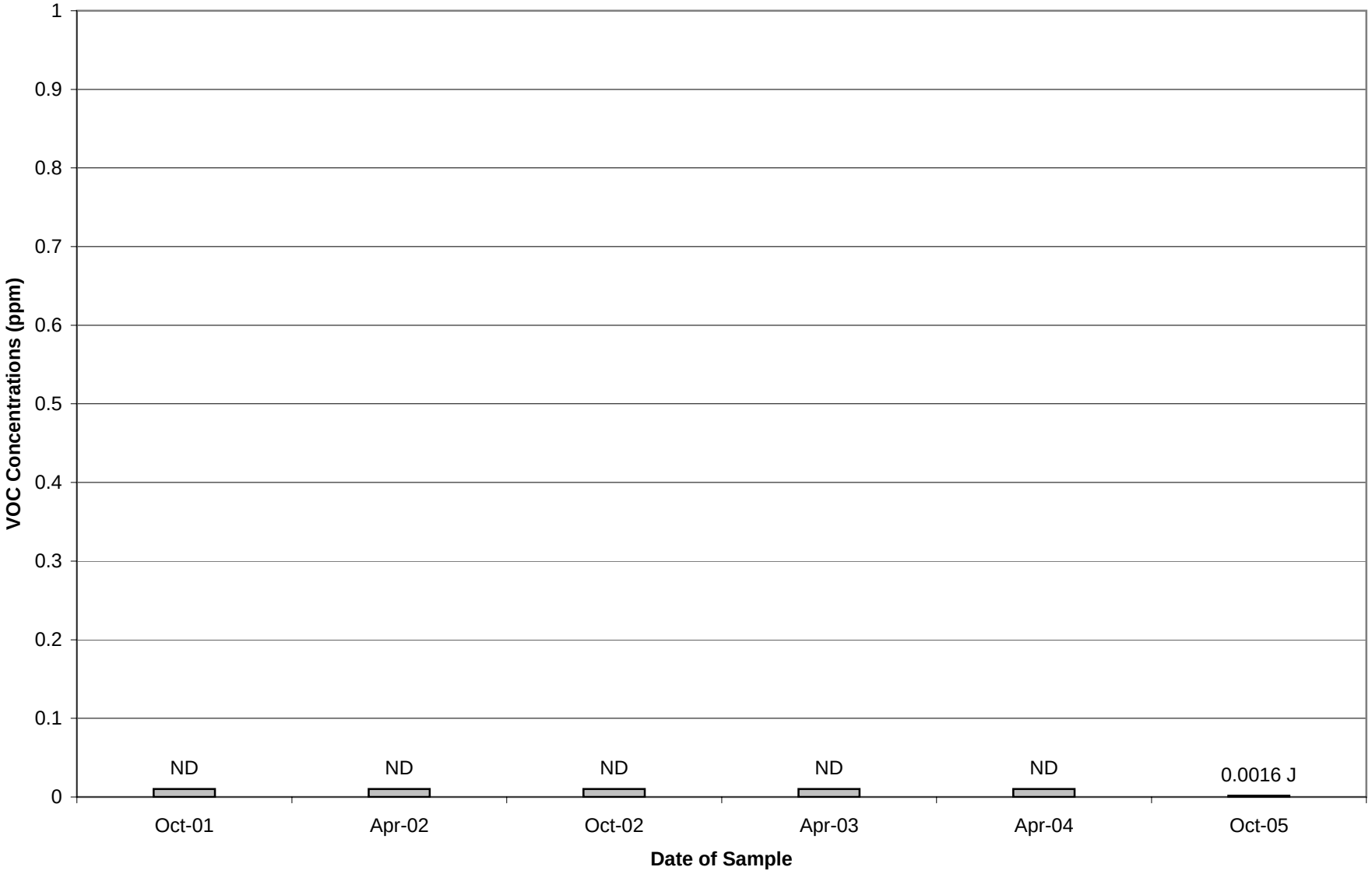
Appendix C

Groundwater Management Area 1
General Electric Company
Pittsfield, Massachusetts

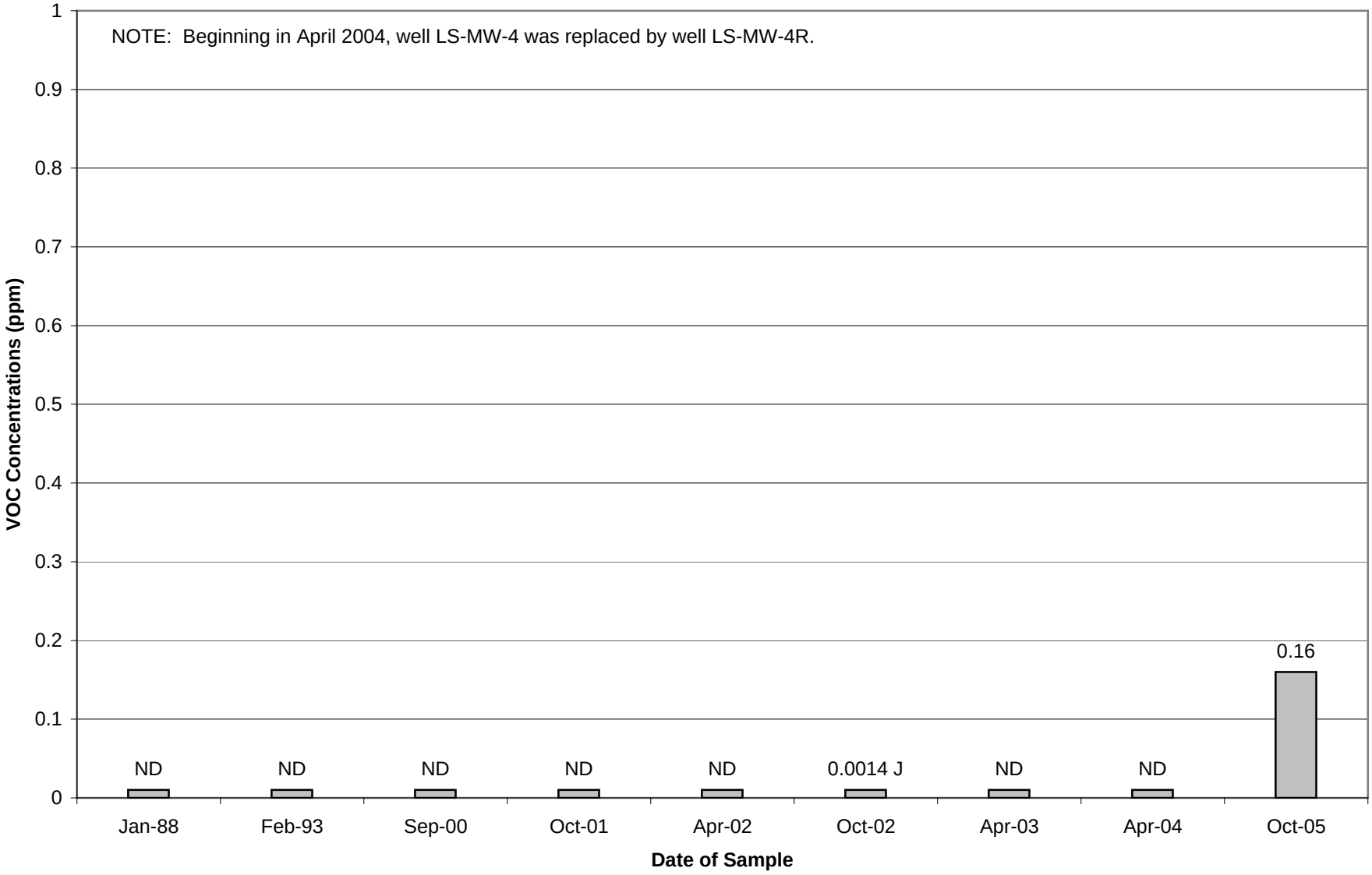
Well GMA1-6 Historical VOC Concentrations



Appendix C

Groundwater Management Area 1
General Electric Company
Pittsfield, Massachusetts

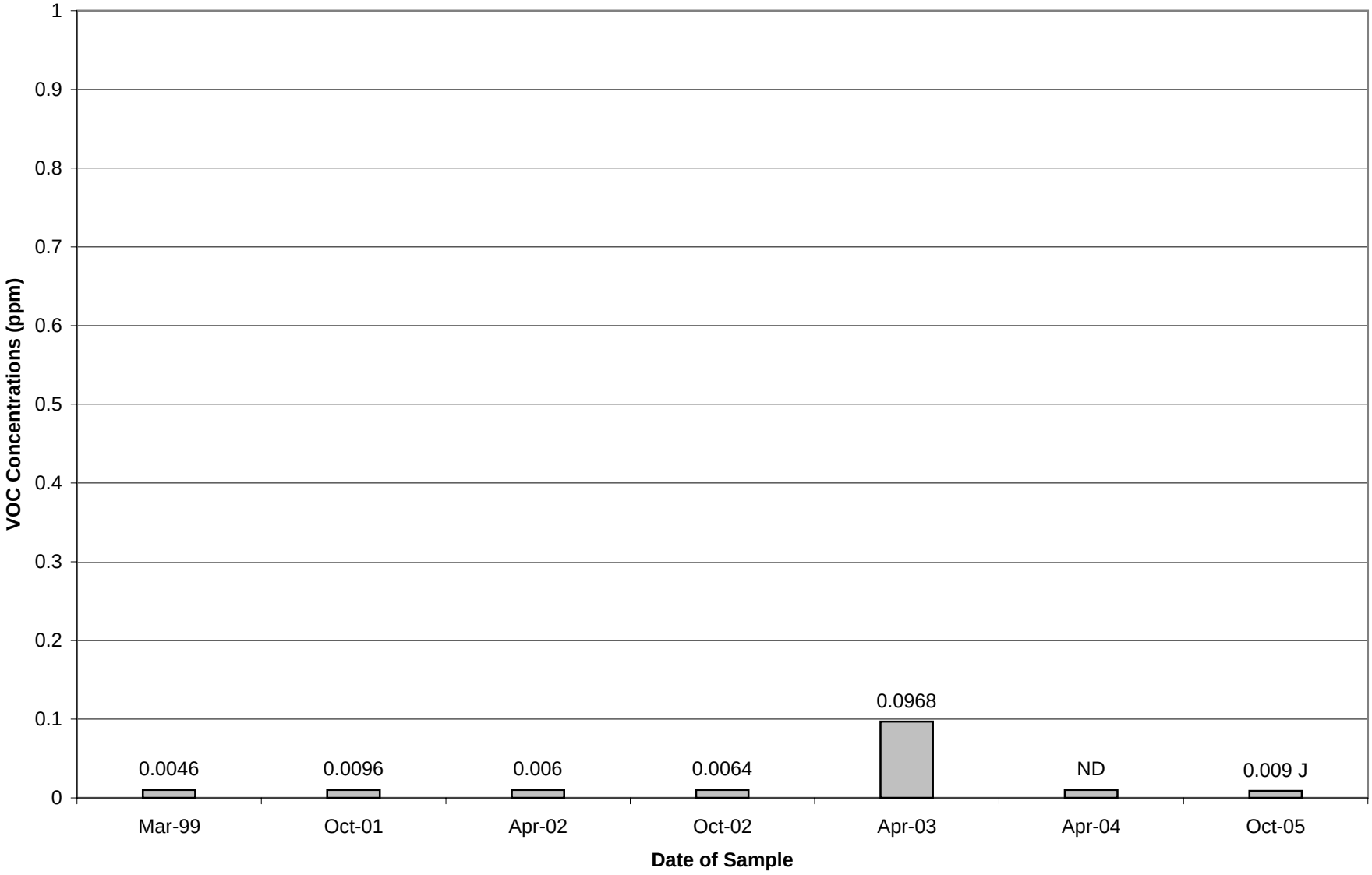
Well LS-MW-4 & LS-MW-4R Historical VOC Concentrations



Appendix C

Groundwater Management Area 1
General Electric Company
Pittsfield, Massachusetts

Well LSSC-16S Historical VOC Concentrations



Appendix C

Groundwater Management Area 1
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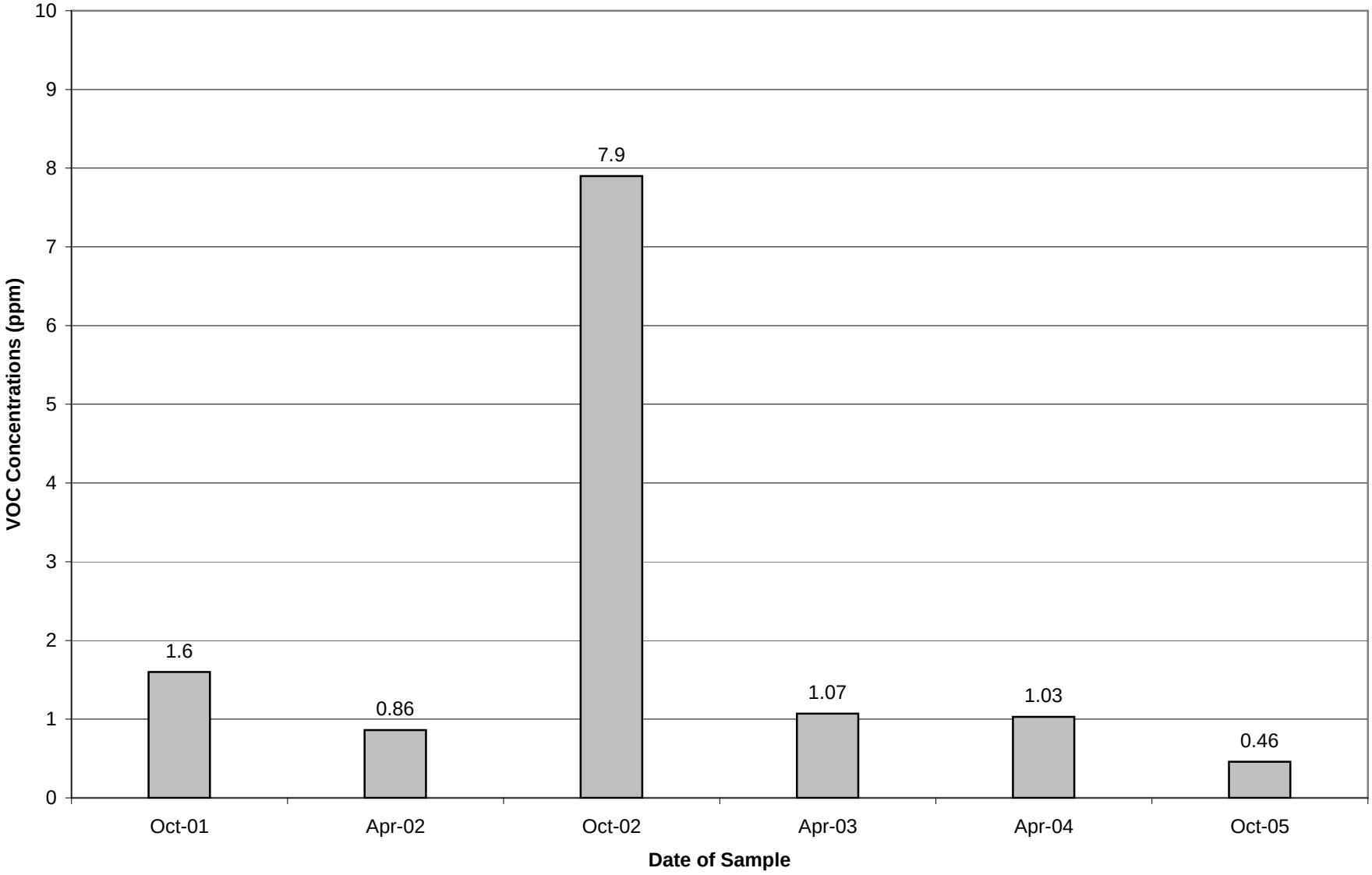
Pittsfield, Massachusetts

Well N2SC-07S Historical VOC Concentrations



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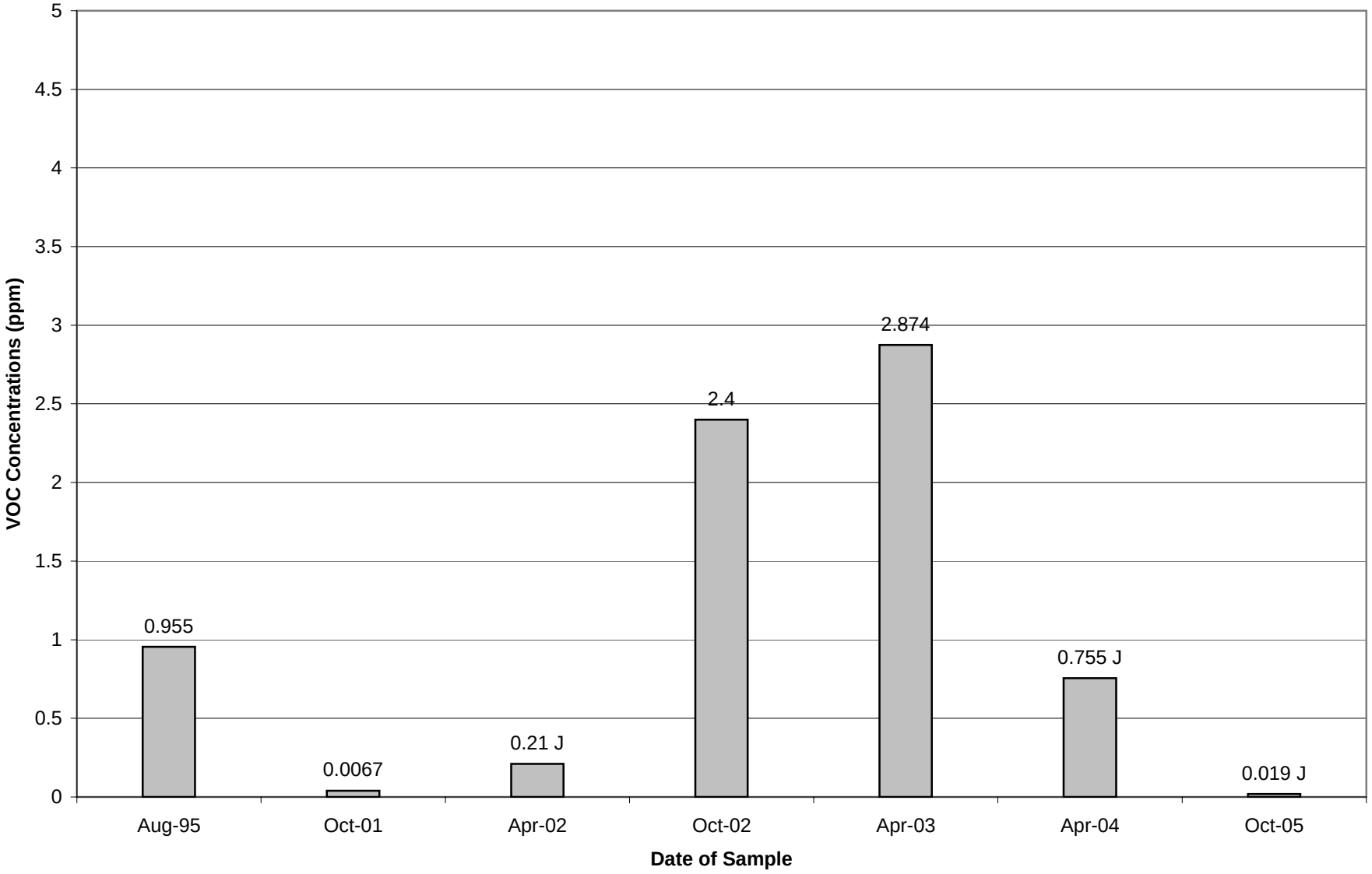
Groundwater Management Area 1
General Electric Company
Pittsfield, Massachusetts

Well NS-17 Historical VOC Concentrations



Historical Groundwater Data

Total PCB Concentrations – Wells Sampled in Fall 2005

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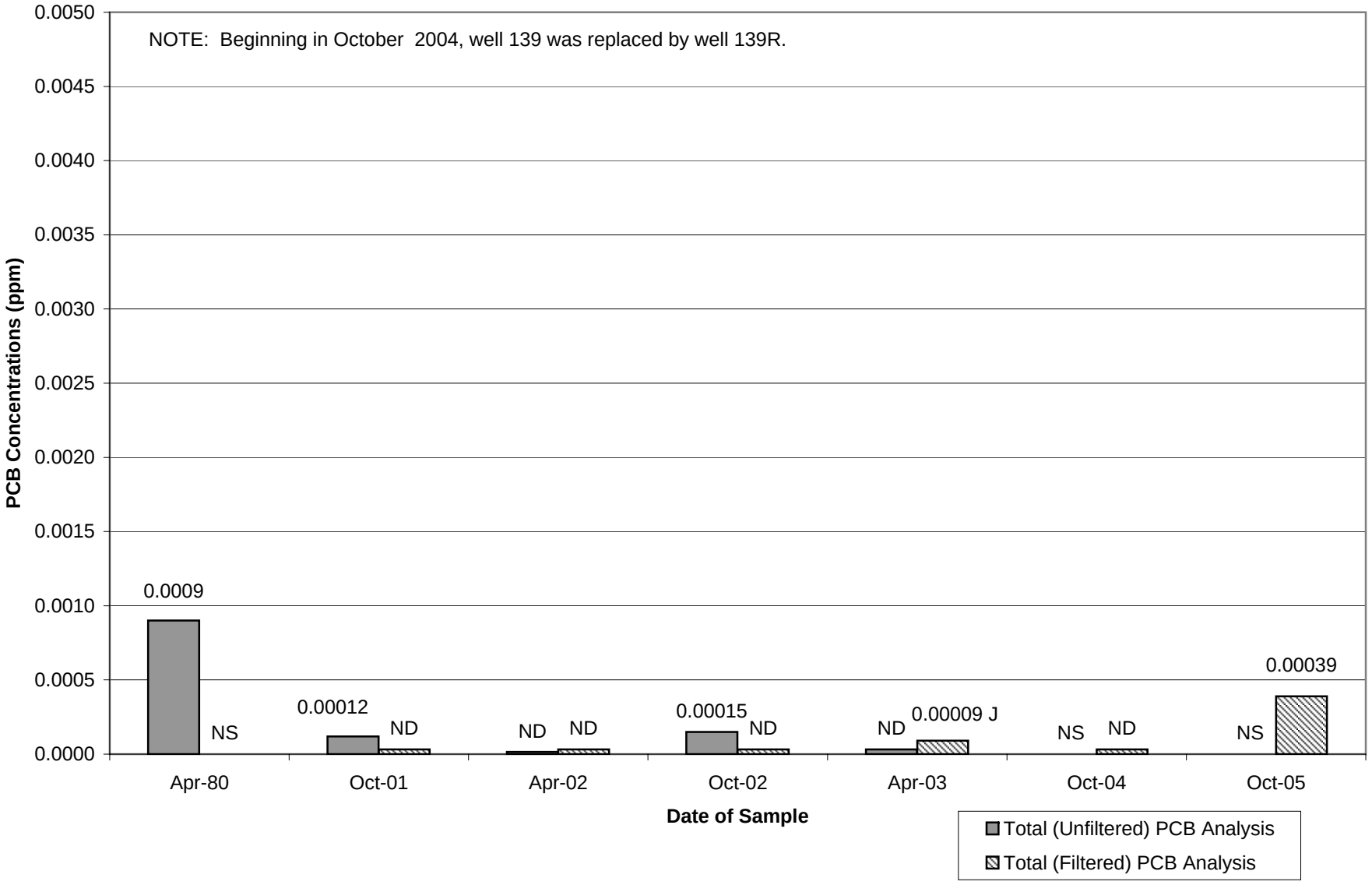
Groundwater Management Area 1
General Electric Company
Pittsfield, Massachusetts

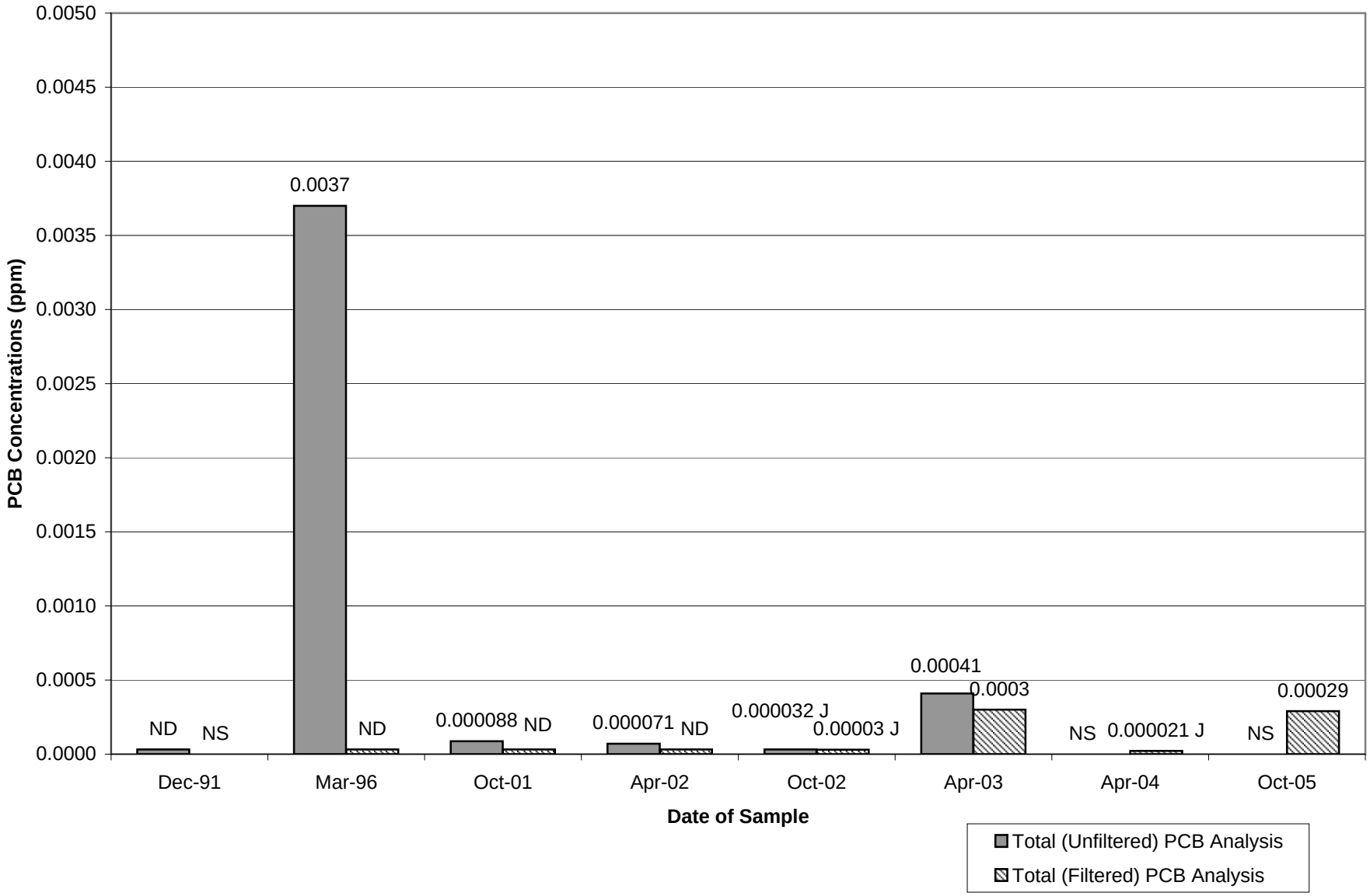
Well 139 & 139R Historical PCB Concentrations



Appendix C

Groundwater Management Area 1
General Electric Company
Pittsfield, Massachusetts

Well RF-02 Historical PCB Concentrations



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Groundwater Management Area 1
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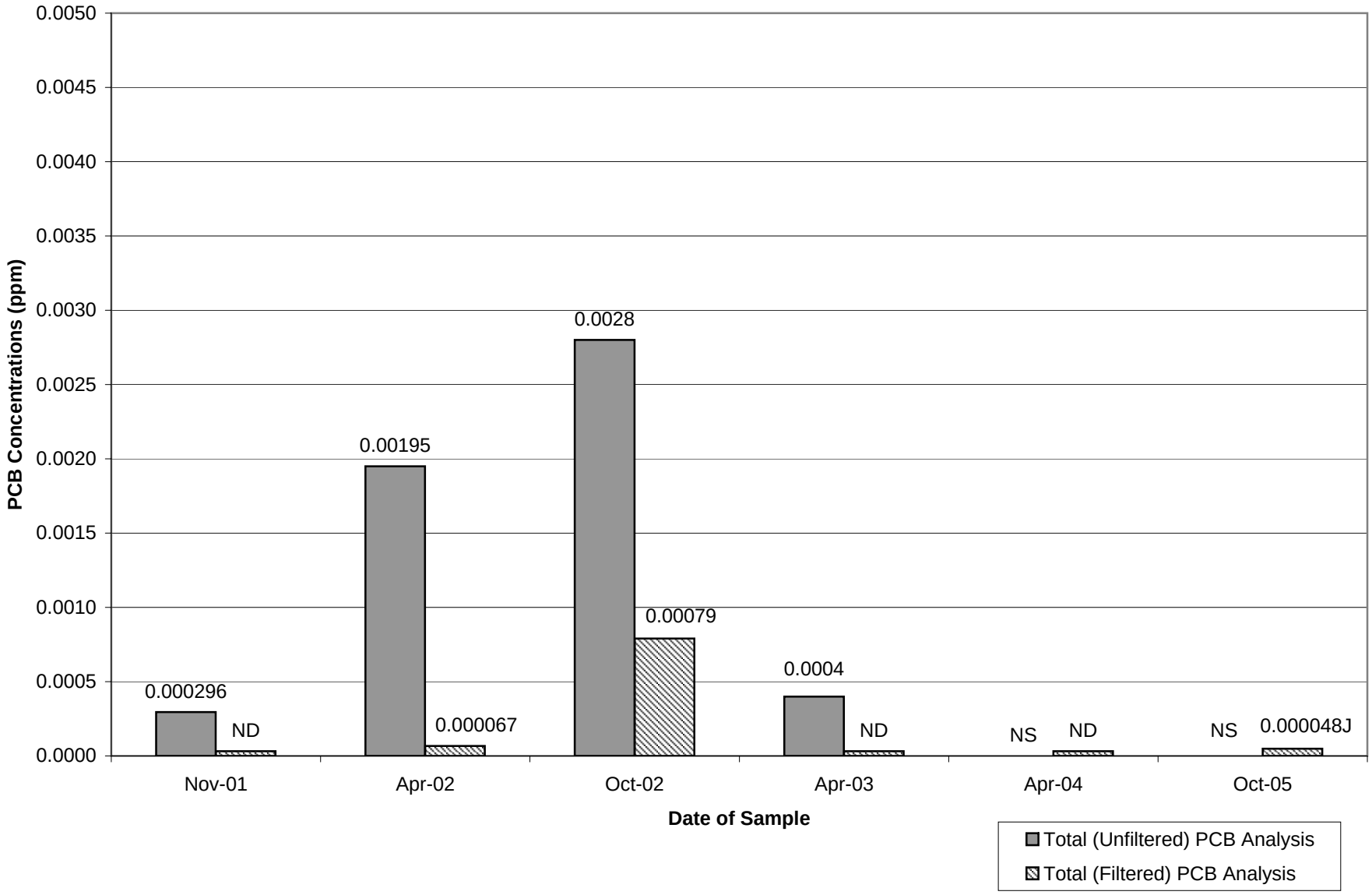
Pittsfield, Massachusetts

Well ESA1N-52 Historical PCB Concentrations



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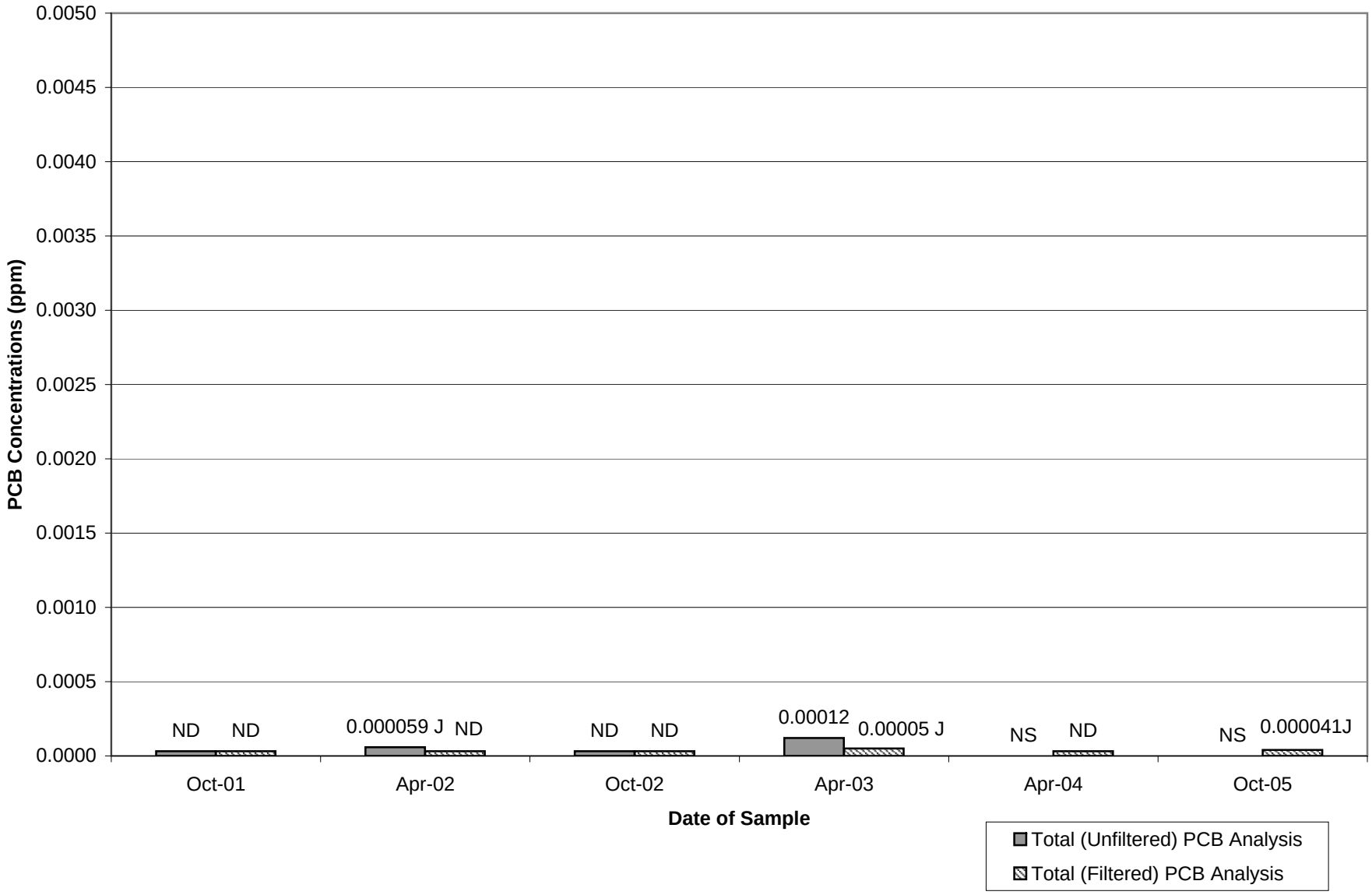
Groundwater Management Area 1
General Electric Company
Pittsfield, Massachusetts

Well GMA1-6 Historical PCB Concentrations



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Groundwater Management Area 1
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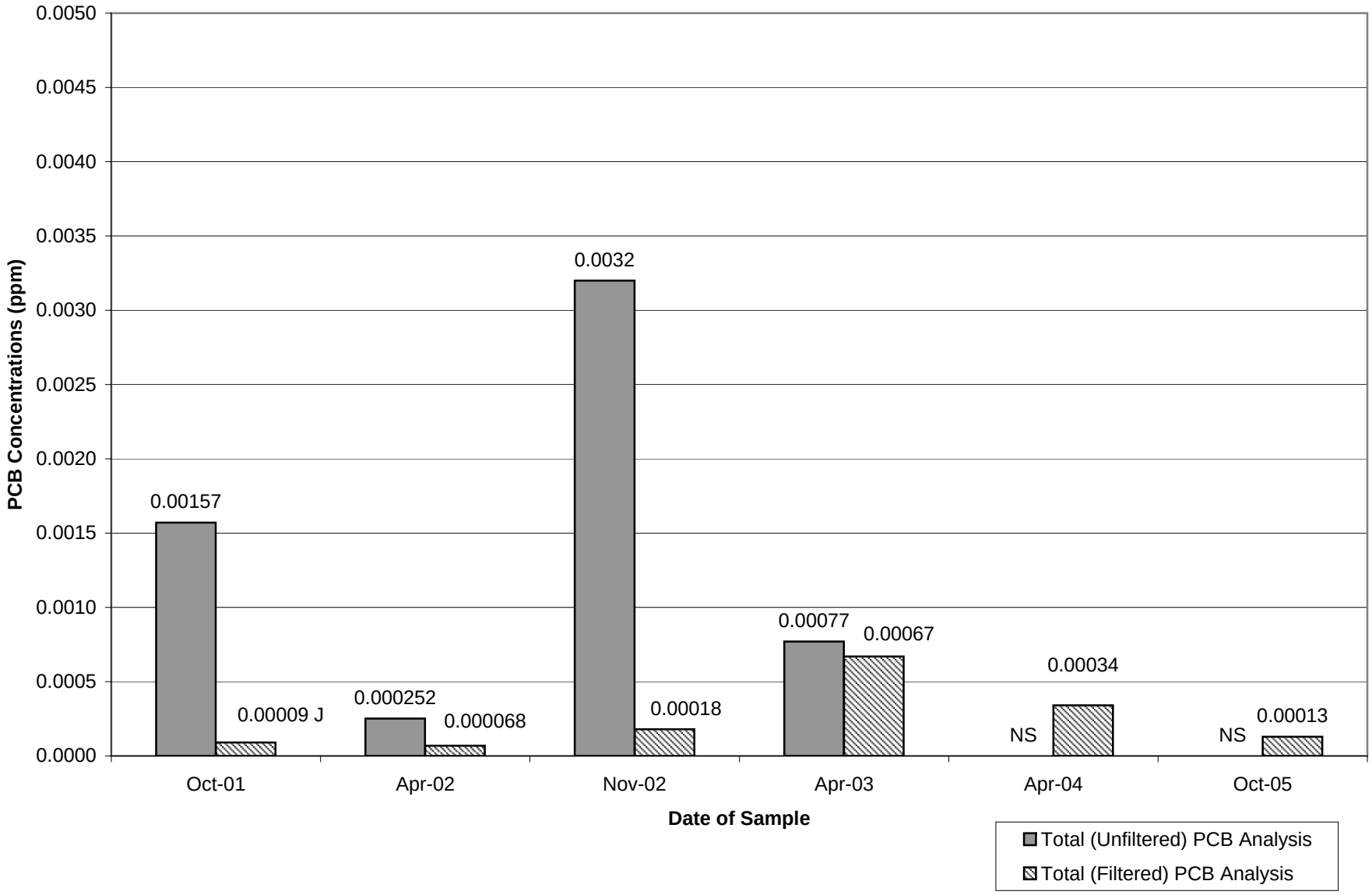
Well ES1-05 Historical PCB Concentrations



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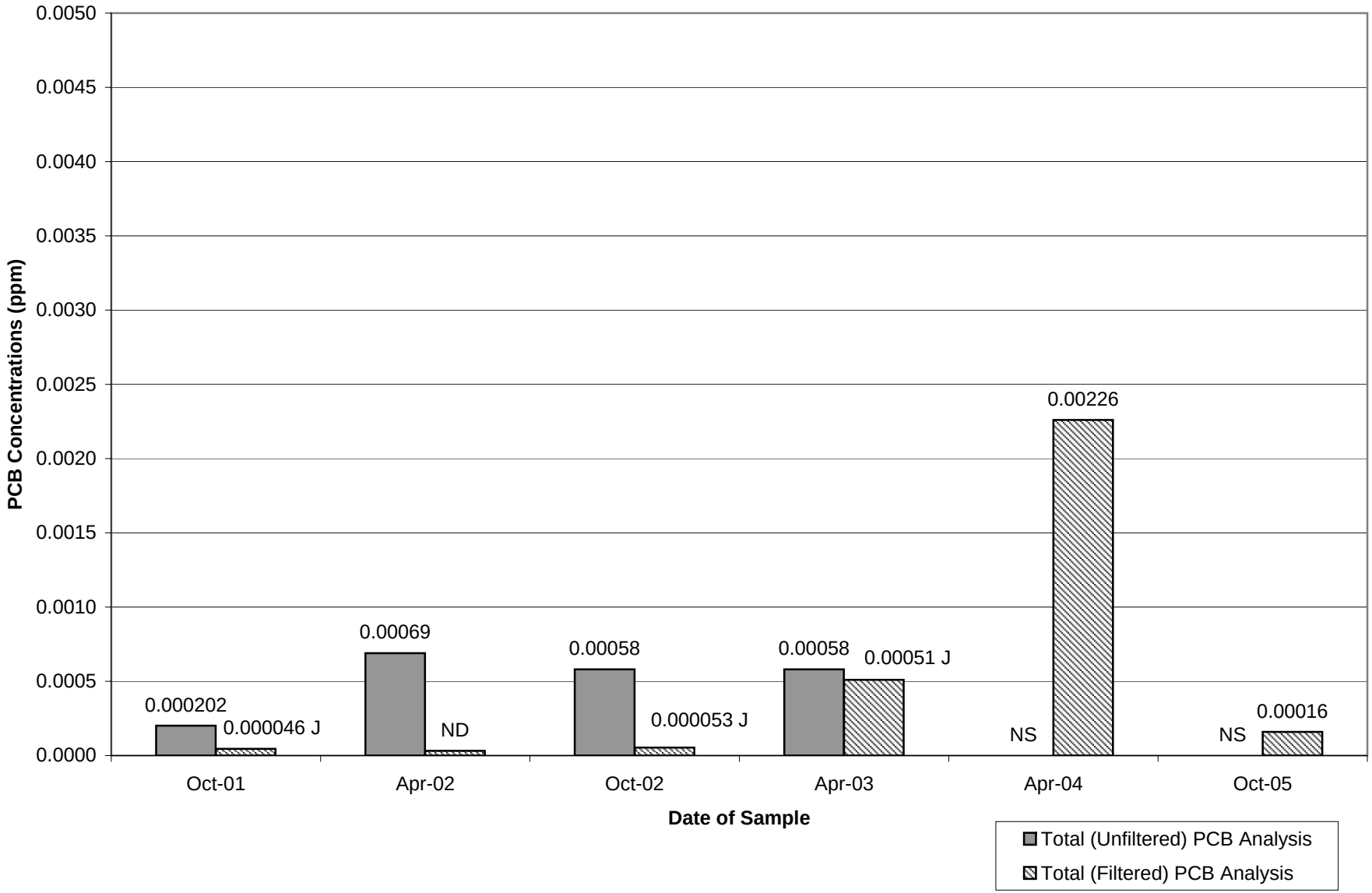
Groundwater Management Area 1
General Electric Company
Pittsfield, Massachusetts

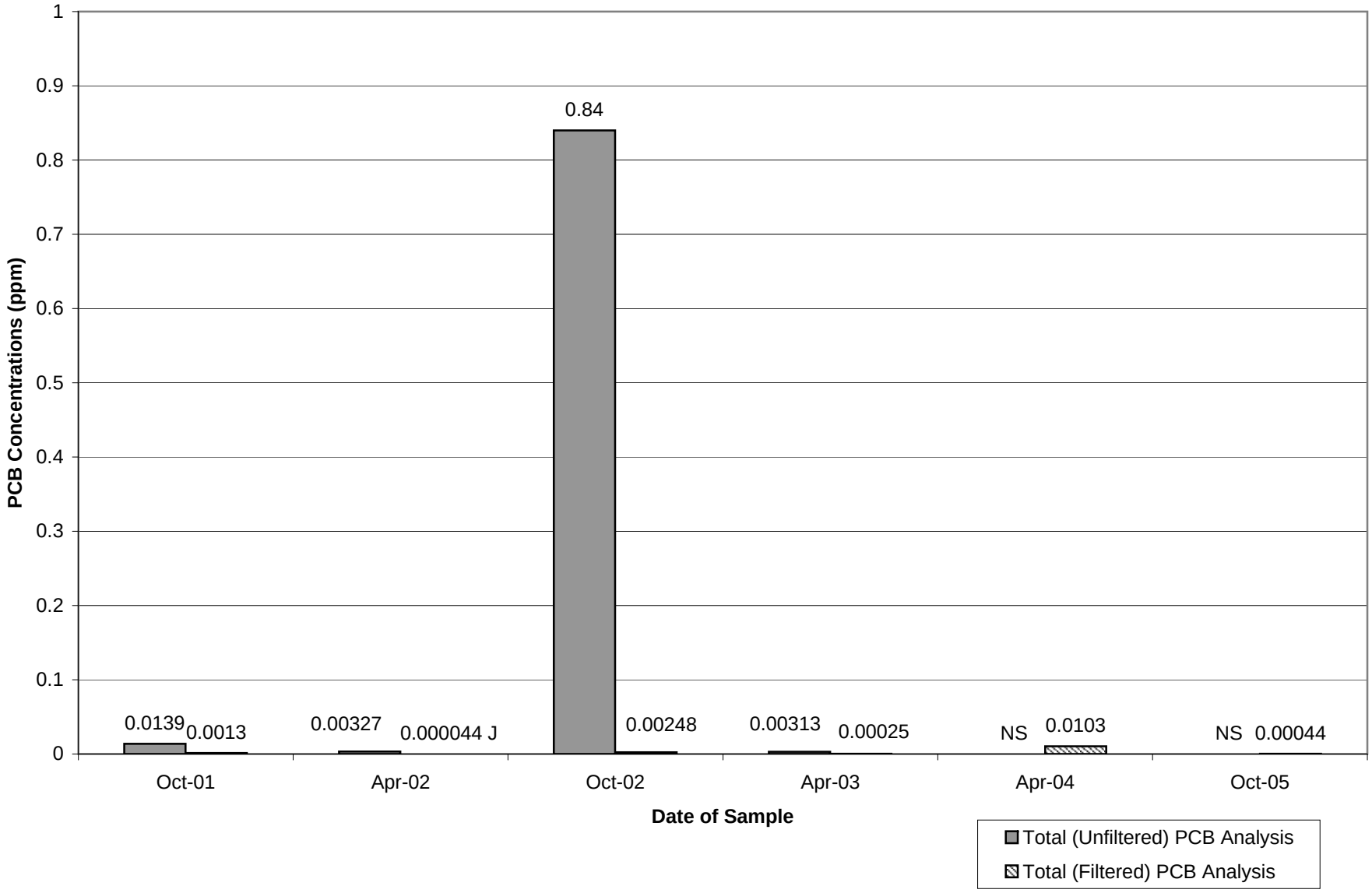
Well ES1-27R Historical PCB Concentrations



Appendix C

Groundwater Management Area 1
General Electric Company
Pittsfield, Massachusetts

Well E2SC-23 Historical PCB Concentrations



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Groundwater Management Area 1
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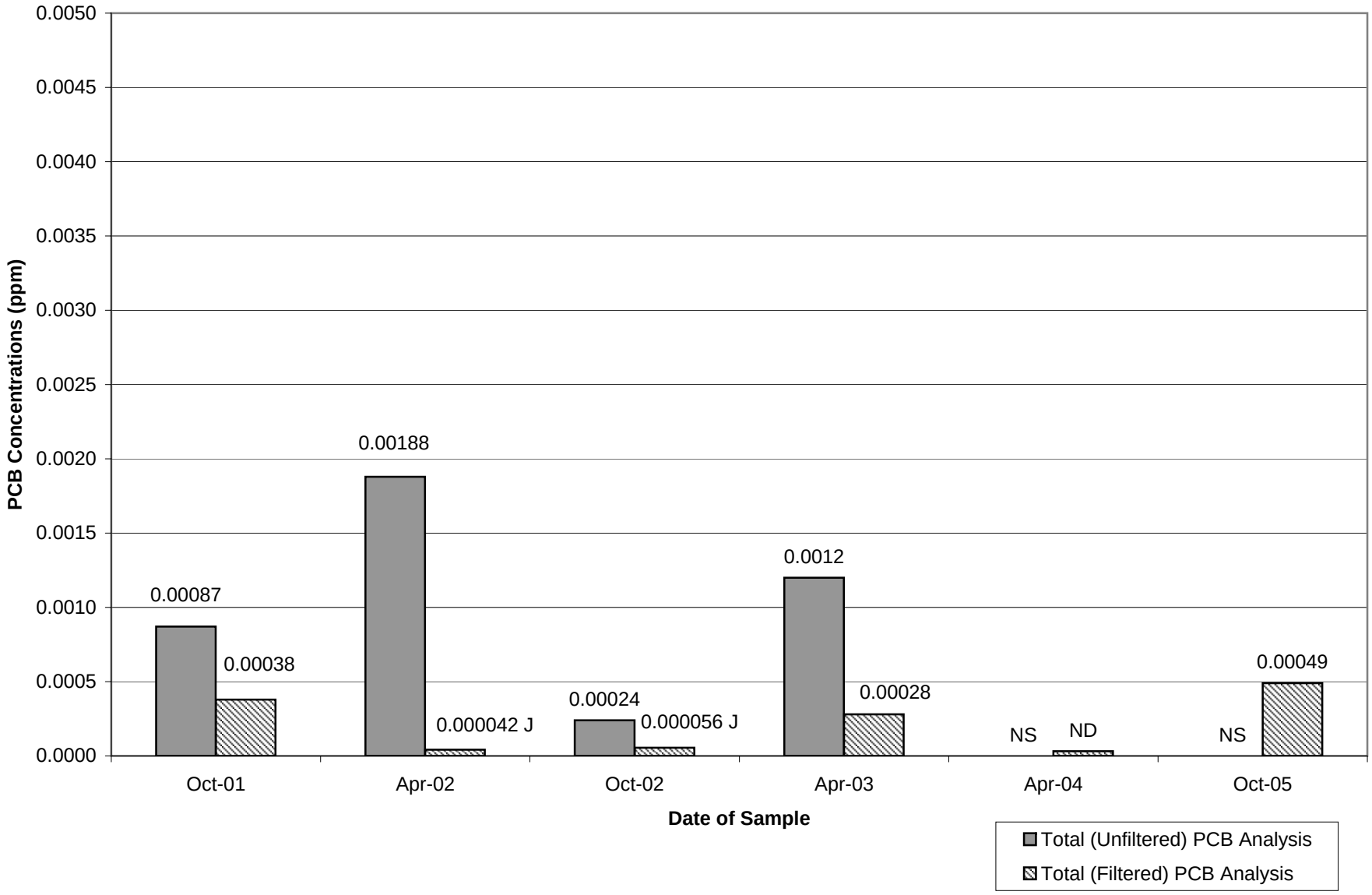
Pittsfield, Massachusetts

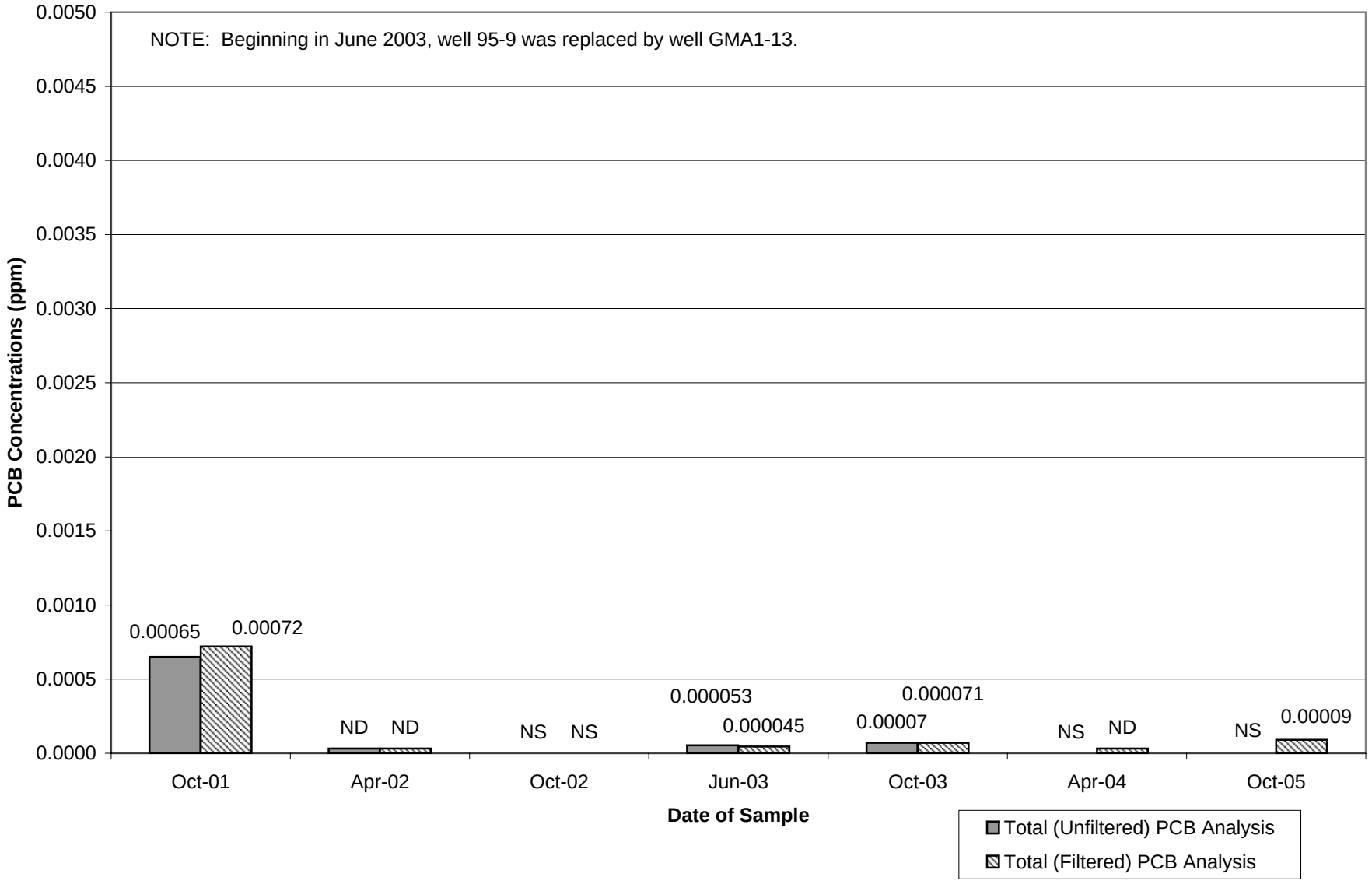
Well E2SC-24 Historical PCB Concentrations



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
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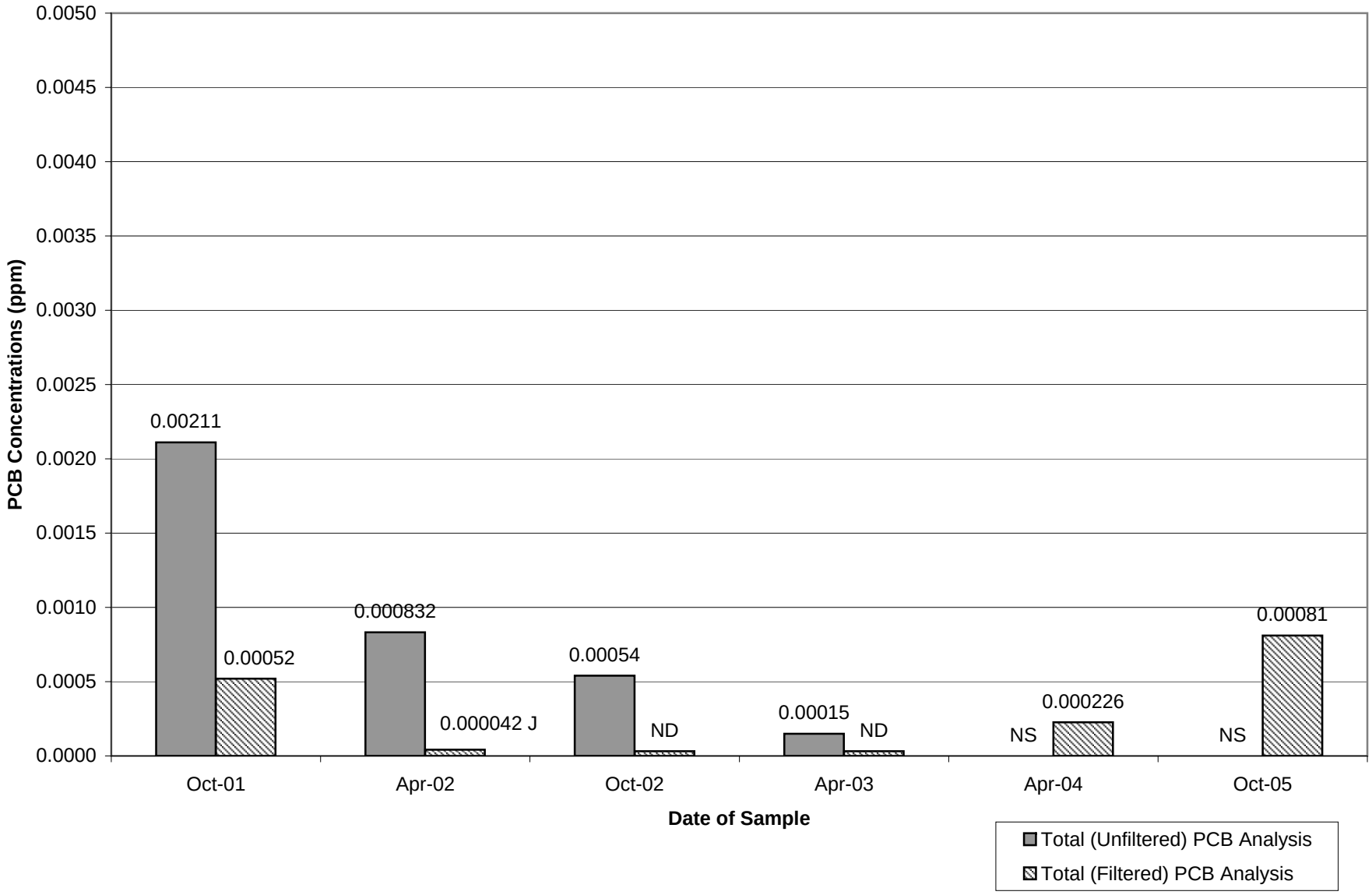
Pittsfield, Massachusetts

Well HR-G3-MW-1 Historical PCB Concentrations



Appendix C

Groundwater Management Area 1
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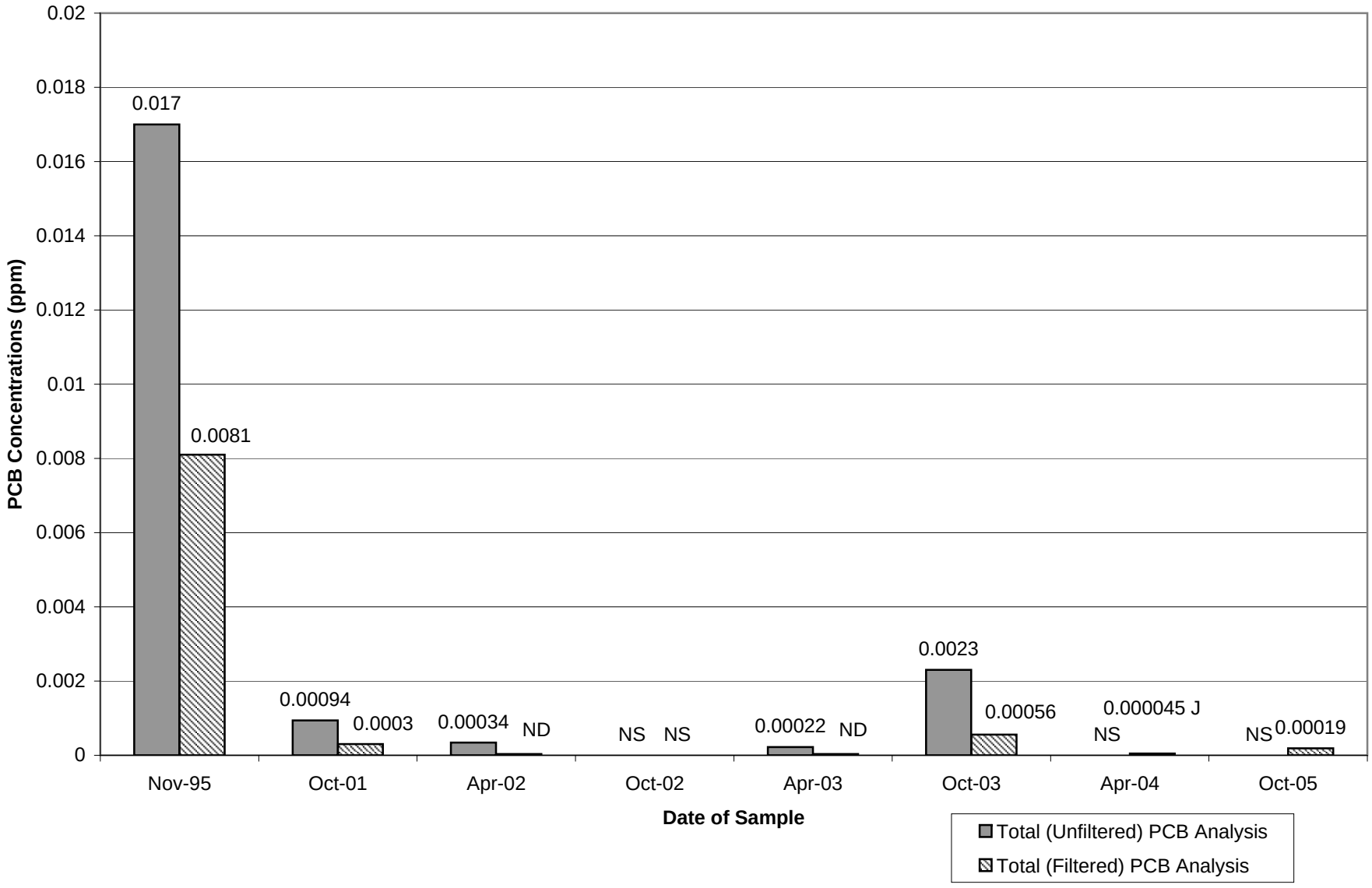
Well LS-29 Historical PCB Concentrations



Appendix C

Groundwater Management Area 1
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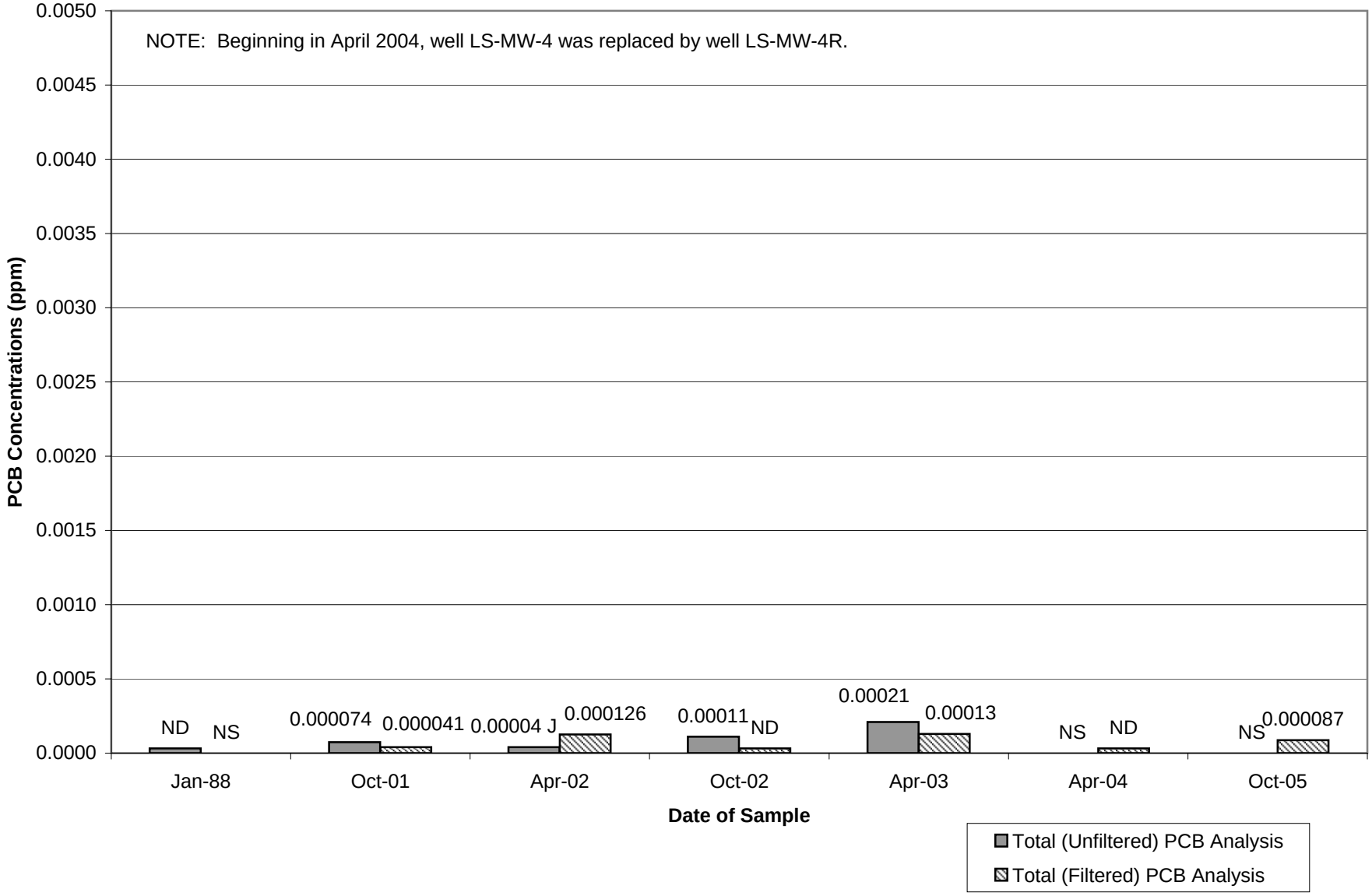
Well LS-MW-4 & LS-MW-4R Historical PCB Concentrations



Appendix C

Groundwater Management Area 1
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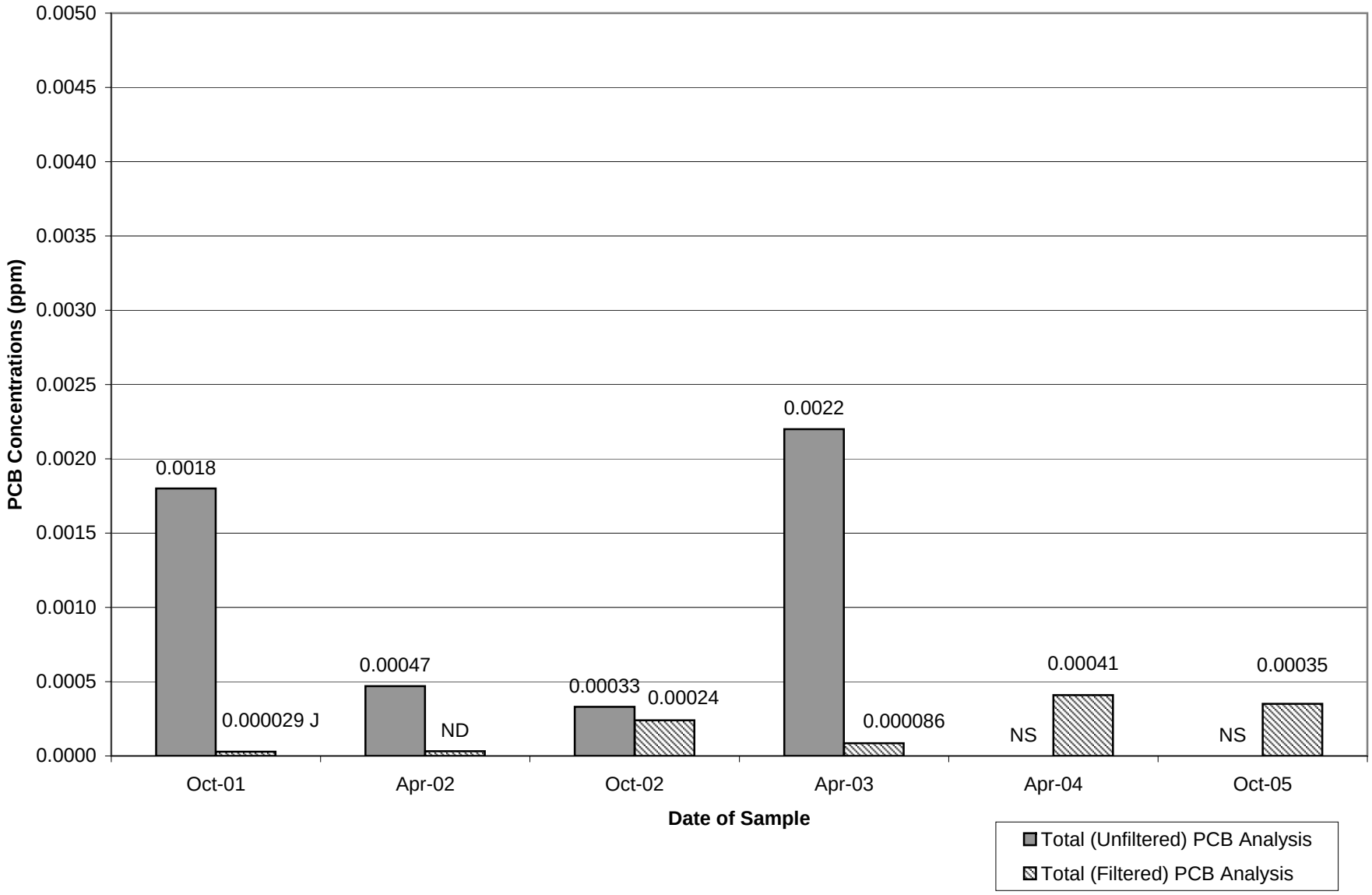
Pittsfield, Massachusetts

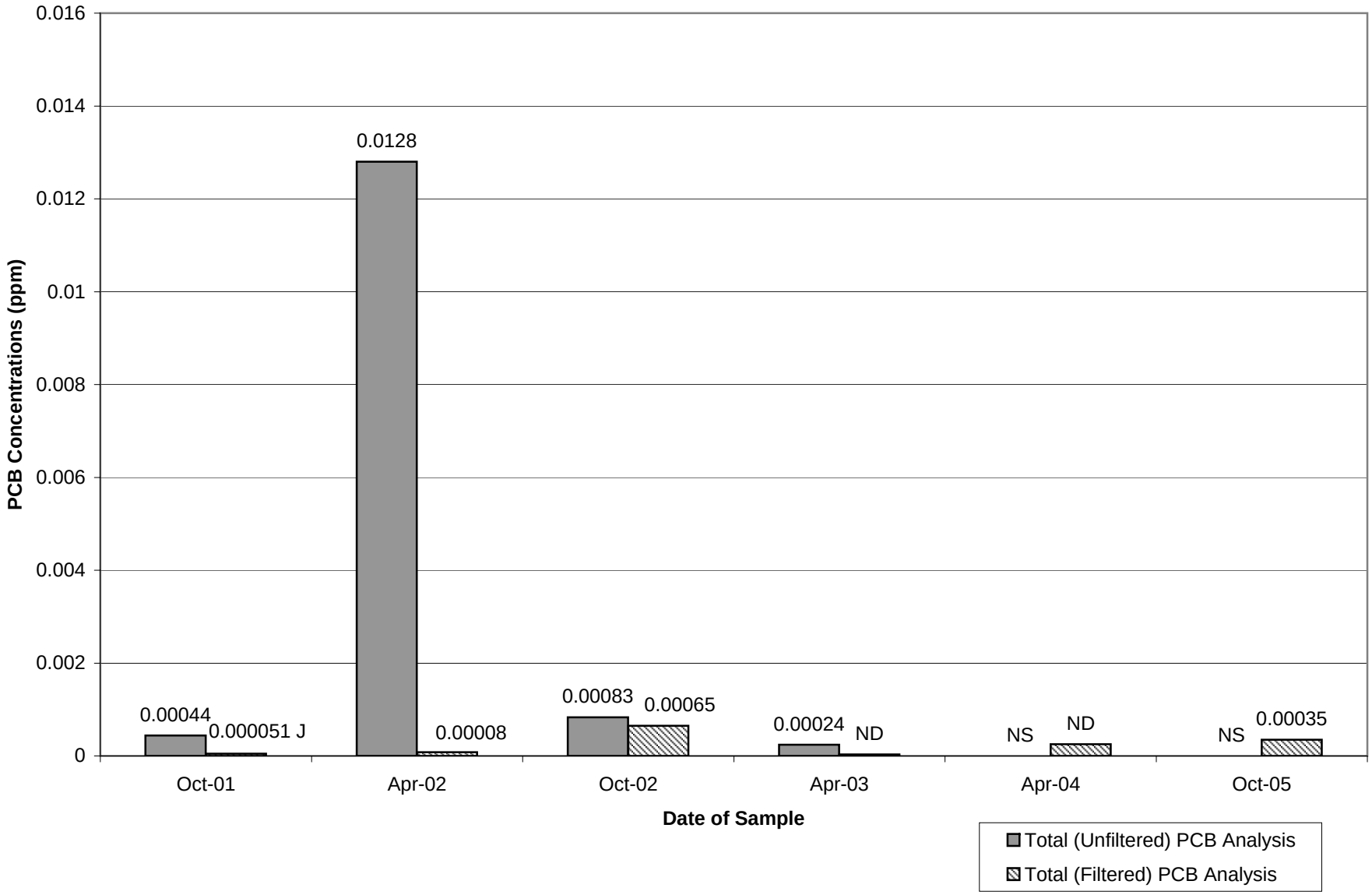
Well LSSC-08S Historical PCB Concentrations



Appendix C

Groundwater Management Area 1
General Electric Company
Pittsfield, Massachusetts

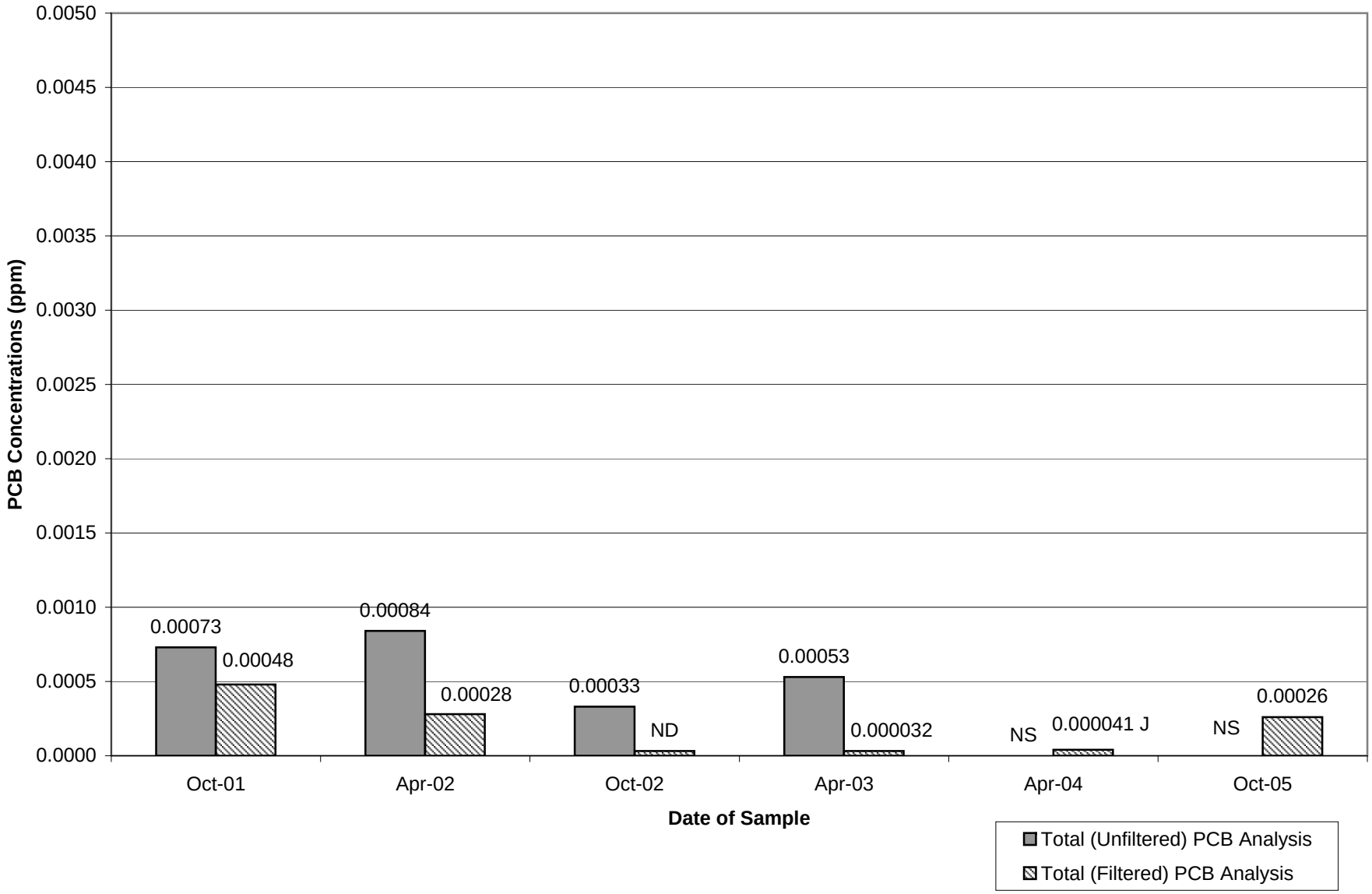
Well LSSC-18 Historical PCB Concentrations



Appendix C

Groundwater Management Area 1
General Electric Company
Pittsfield, Massachusetts

Well N2SC-07S Historical PCB Concentrations



Historical Groundwater Data

Chlorobenzene Concentrations – Selected Wells

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Groundwater Management Area 1
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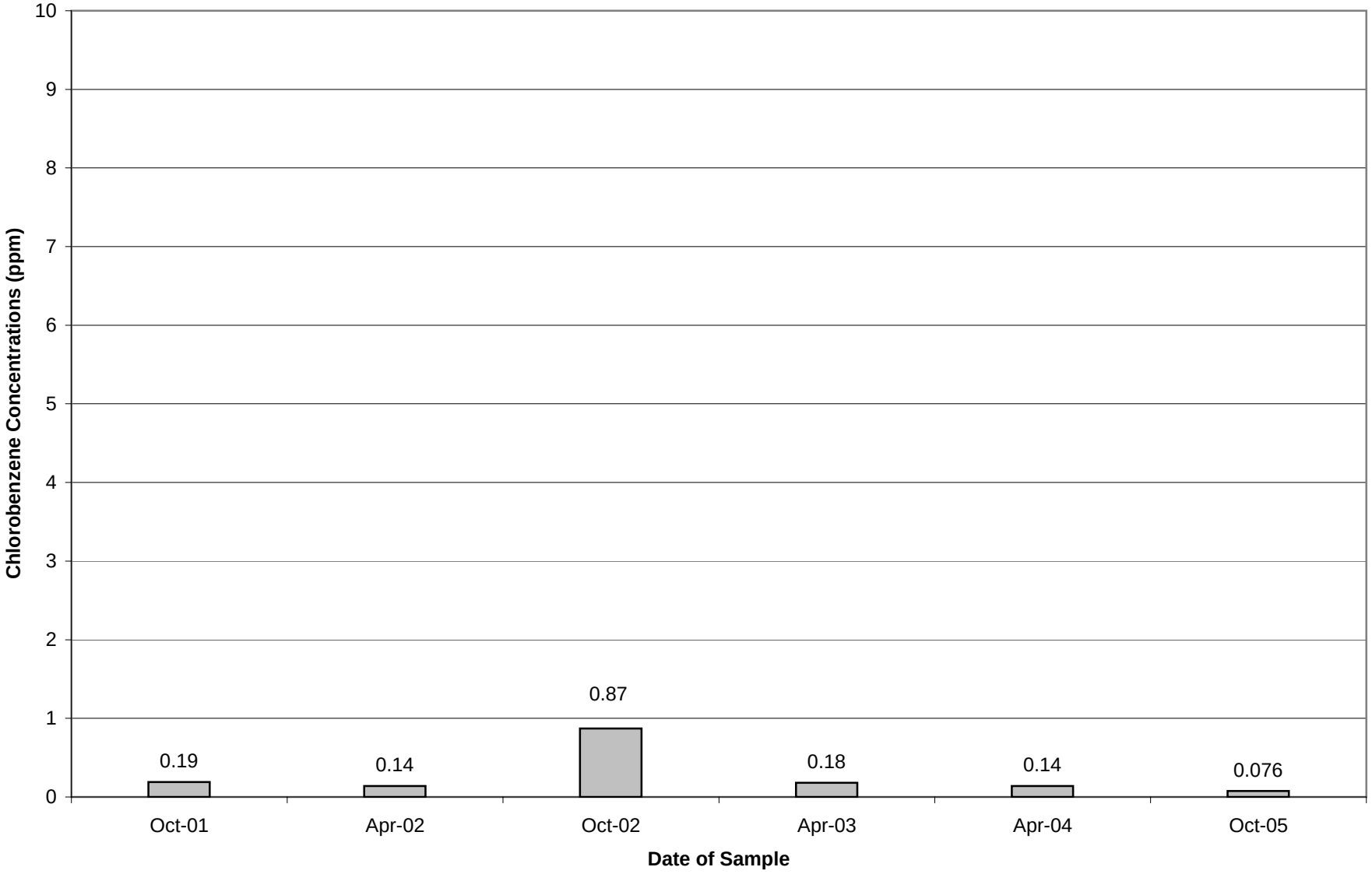
Pittsfield, Massachusetts

Well N2SC-07S Chlorobenzene Concentrations



Historical Groundwater Data

Cyanide Concentrations – Wells Sampled in Fall 2005

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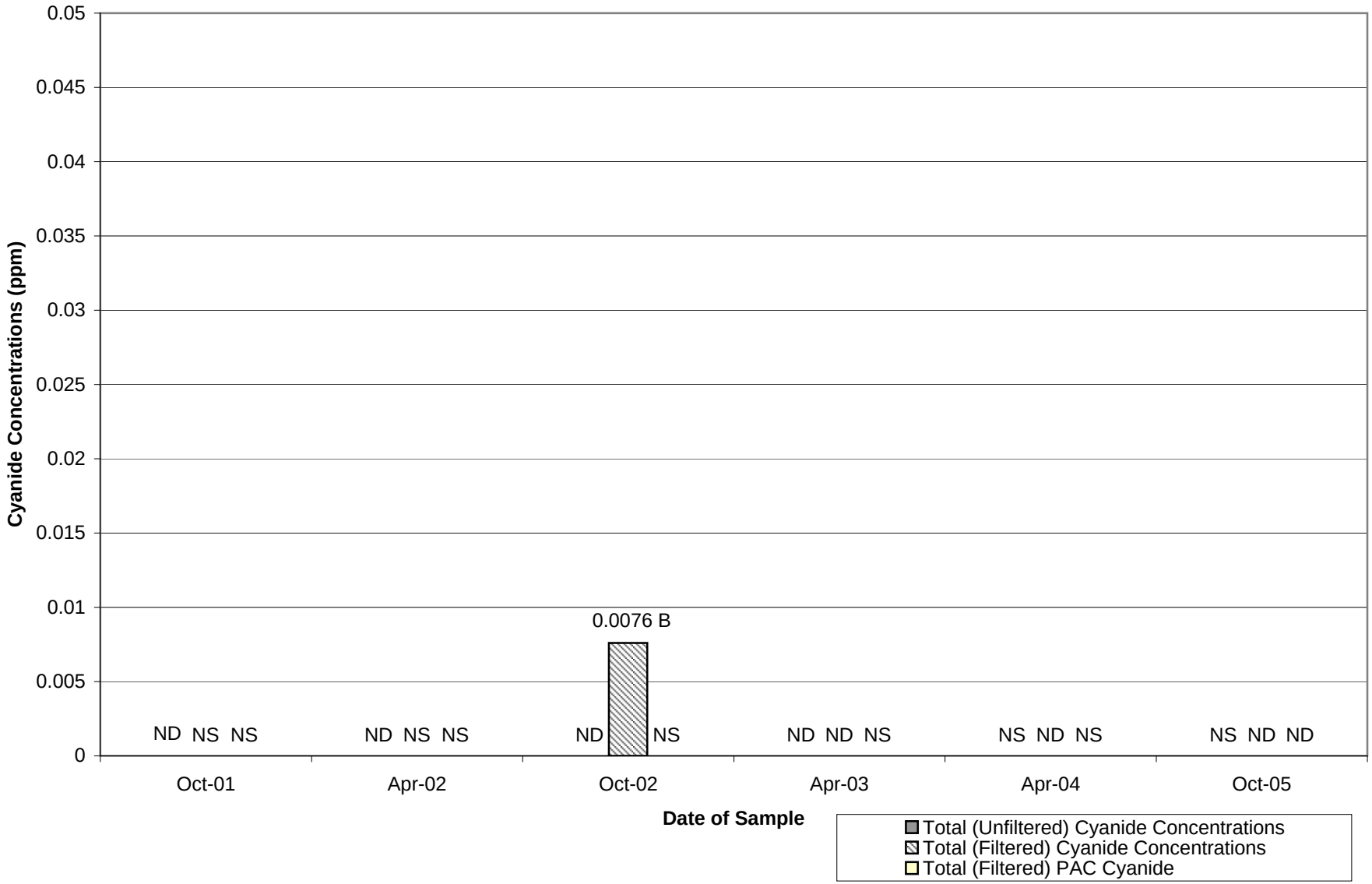
Groundwater Management Area 1
General Electric Company
Pittsfield, Massachusetts

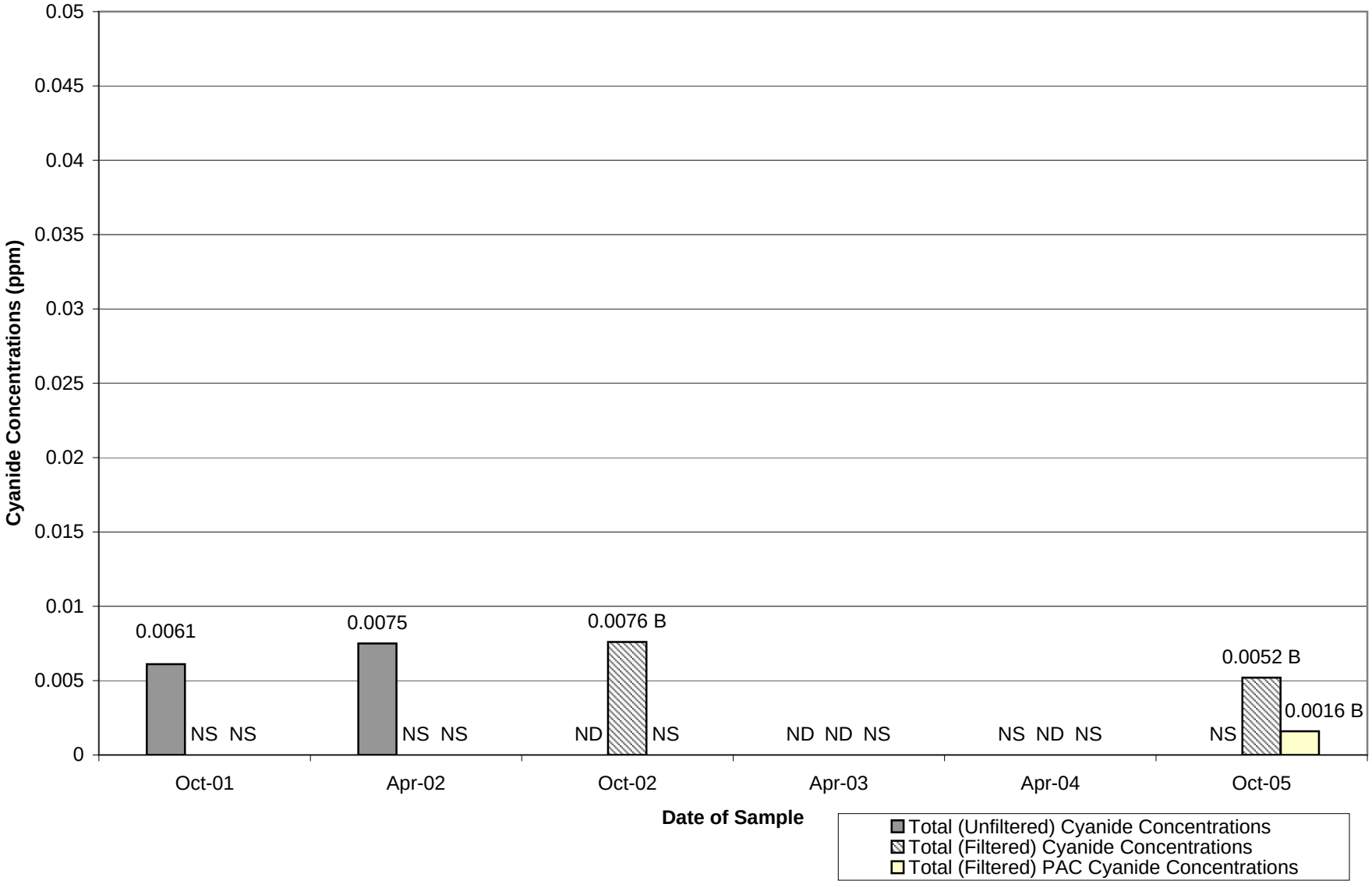
Well RF-16 Unfiltered and Filtered Total and Physiologically Available Cyanide Concentrations



Appendix C

Groundwater Management Area 1
General Electric Company
Pittsfield, Massachusetts

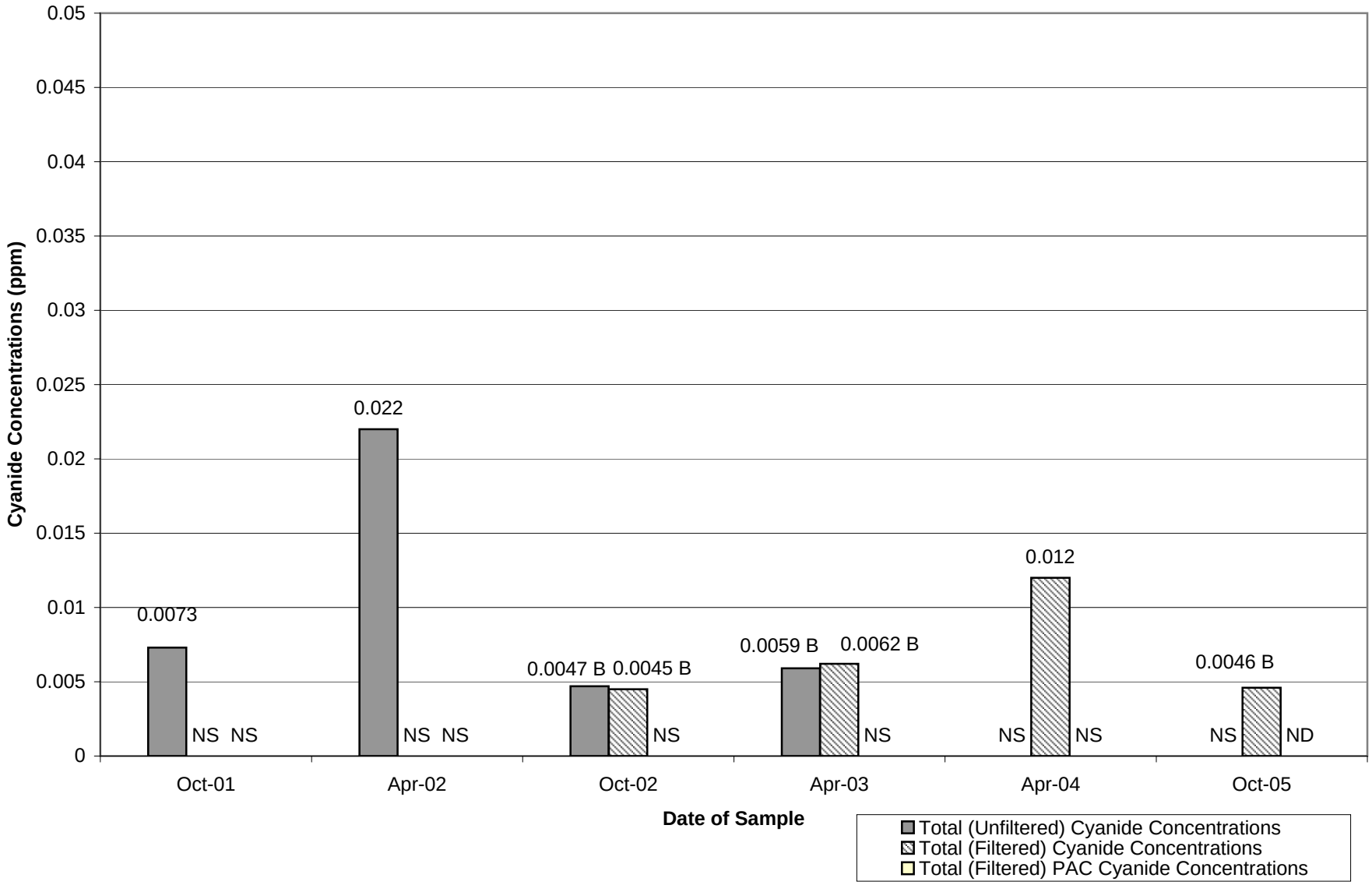
Well ES2-2A Unfiltered and Filtered Total and Physiologically Available Cyanide Concentrations



Appendix C

Groundwater Management Area 1
General Electric Company
Pittsfield, Massachusetts

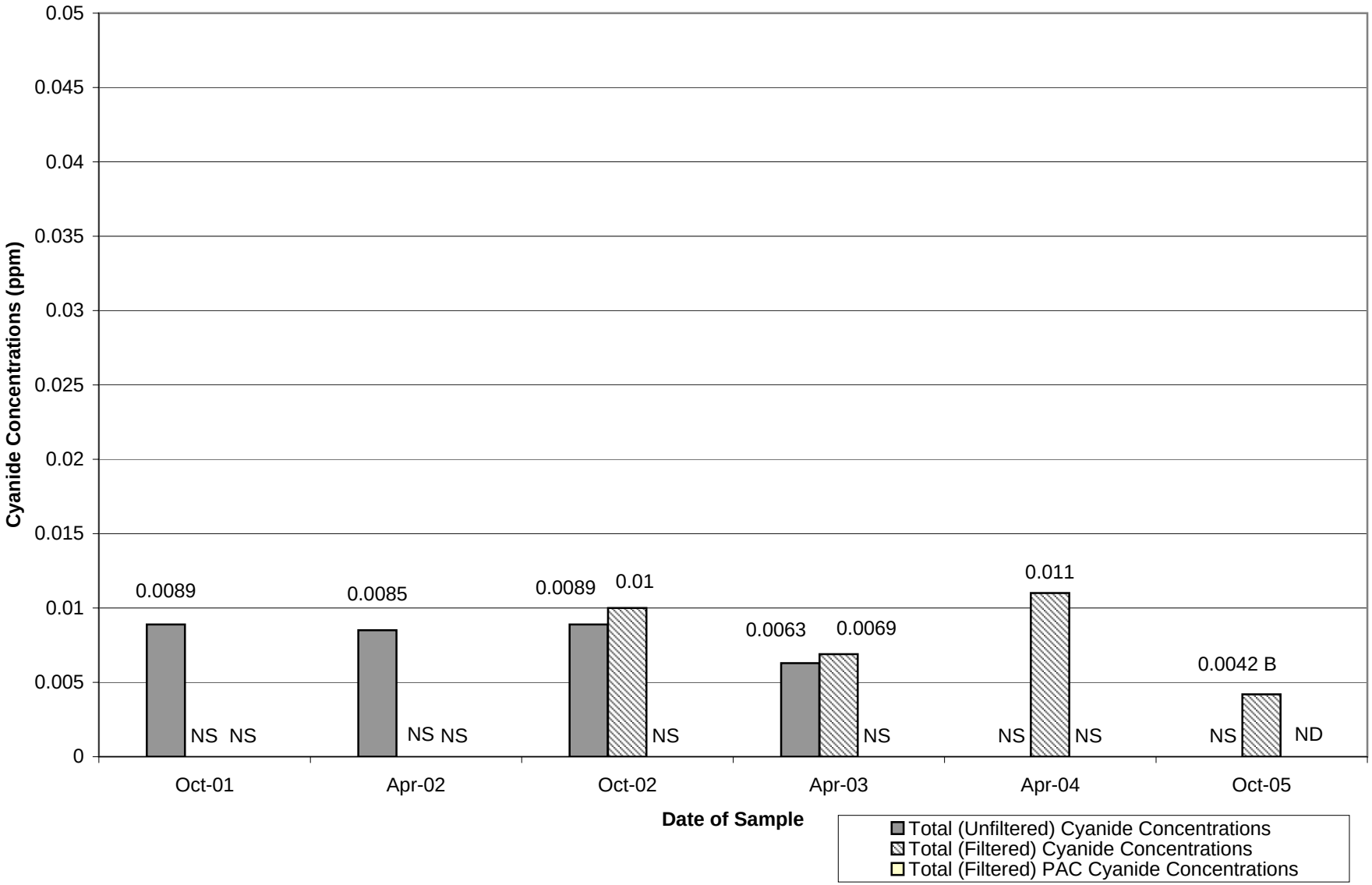
Well ESA2S-52 Unfiltered and Filtered Total and Physiologically Available Cyanide Concentrations



Appendix C

Groundwater Management Area 1
General Electric Company
Pittsfield, Massachusetts

Well HR-G1-MW-3 Unfiltered and Filtered Total and Physiologically Available Cyanide Concentrations



Appendix D

Data Validation Report

BLASLAND, BOUCK & LEE, INC.
engineers, scientists, economists

APPENDIX D
GROUNDWATER SAMPLING DATA VALIDATION REPORT
PLANT SITE 1 GROUNDWATER MANAGEMENT AREA

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

1.0 General

This appendix summarizes the Tier I and Tier II data reviews performed for groundwater samples collected during Remedial Investigation activities at Groundwater Management Area 1 (GMA 1) located in Pittsfield, Massachusetts. The samples were analyzed for various constituents listed in Appendix IX of 40 CFR Part 264, plus one additional constituent -- 2-chloroethyl vinyl ether (hereafter referred to as Appendix IX+1) by SGS Environmental Services, Inc. (formerly CT&E) of Charleston, West Virginia. Data validation was performed for 19 polychlorinated biphenyl (PCB) samples, nine volatile organic compound (VOC) samples, and seven cyanide 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 review was 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 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 (February 1, 1988) (Modified November 1, 1988); and

- *Region I Laboratory Data Validation Functional Guidelines for Evaluating Organics Analyses*, USEPA Region I (Draft, December 1996).

A tabulated summary of the Tier I and Tier II data evaluations 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 were used in this data evaluation.

J The compound was positively identified, but the associated numerical value is an estimated concentration. This qualifier is used when the data evaluation procedure identifies a deficiency in the data generation process. This qualifier is also used when a compound is detected at an estimated concentration less than the corresponding practical quantitation limit (PQL).

U The compound was analyzed for, but was not detected. The sample quantitation limit is presented 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 documents previously prepared for this investigation.

UJ The compound was not detected above the reported sample quantitation limit. However, the reported limit is estimated and may or may not represent the actual level of quantitation. Non-detect sample results that required qualification are presented as ND(PQL) J within this report and in Table D-1 for consistency with documents previously 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 purpose.

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. In the event data packages were determined to be incomplete, the missing information was requested from the laboratory. Upon completion of the Tier I review, the data packages complied with the 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. 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. A tabulated summary of the samples subjected to Tier I and Tier II data evaluations is presented in the following table.

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

Parameter	Tier I Only			Tier I &Tier II			Total
	Samples	Duplicates	Blanks	Samples	Duplicates	Blanks	
PCBs	0	0	0	17	1	1	19
VOCs	0	0	0	6	1	2	9
Cyanide	0	0	0	14	0	0	14
Total	**0**	**0**	**0**	**37**	**2**	**3**	**42**

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

The continuing calibration criterion for organic analyses requires that the continuing calibration RRF have a value greater than 0.05. Sample data for detect and non-detect compounds with RRF values less than 0.05 were qualified as estimated (J). The compound that did not meet the continuing calibration criterion and the number of samples qualified are presented in the following table.

Compound Qualified Due to Continuing Calibration Deviations (RRF)

Analysis	Compound	Number of Affected Samples	Qualification
VOCs	1,4-Dioxane	7	J

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

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

Compounds Qualified Due to Continuing Calibration of %D Values

Analysis	Compounds	Number of Affected Samples	Qualification
VOCs	1,1,1,2-Tetrachloroethane	1	J
	1,4-Dioxane	3	J
	2-Butanone	3	J
	Acrylonitrile	3	J
	Bromomethane	5	J
	Carbon Disulfide	3	J
	Chloroethane	5	J
	Propionitrile	3	J
	Tetrachloroethene	3	J
	Trichlorofluoromethane	3	J
	Vinyl Acetate	3	J

Matrix spike/matrix spike duplicate (MS/MSD) sample analysis recovery criteria for inorganics must be within 75 to 125%. Associated inorganic sample results with MS recoveries less than the 75% control limit were qualified as estimated (J). The analyte that did not meet MS/MSD recovery criteria and the number of samples qualified due to those deviations are presented in the following table.

Analytes/Compounds Qualified Due to MS/MSD Recovery Deviations

Analysis	Compound	Number of Affected Samples	Qualification
Cyanides – PAC method	Cyanide	1	J

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

Compound Qualified Due to MS/MSD RPD Deviations

Analysis	Compound	Number of Affected Samples	Qualification
VOCs	Naphthalene	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, at least one of the PCB surrogate compounds must have a recovery between laboratory-specified control limits. Detected sample results were qualified as estimated (J) for all compounds when surrogate recovery criteria were outside control limits and non-detect sample results were qualified as rejected (R) when associated surrogate recoveries were less than 10%. A summary of the compounds affected by surrogate recovery exceedences and the number of samples qualified due to those deviations are presented in the following table.

Compounds Qualified Due to Surrogate Recovery Deviations

Analysis	Compound	Number of Affected Samples	Qualification
PCBs	Aroclor-1016	1	R
	Aroclor-1221	1	R
	Aroclor-1232	1	R
	Aroclor-1242	1	R
	Aroclor-1248	1	R
	Aroclor-1254	1	R
	Aroclor-1260	1	R
	Total PCBs	1	R

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. The percent usability calculation included analyses evaluated under both the Tier I and Tier II data validation reviews. Data completeness with respect to usability was calculated separately for inorganic and each of the organic analysis. 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 in the following table.

Data Usability

Parameter	Percent Usability	Rejected Data
Cyanide	100	None
VOCs	100	None
PCBs	94.7	A total of eight sample results were rejected due to surrogate recovery deviations.

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, and MS/MSD samples. For this analytical program, 0.15% of the data required qualification due to MS/MSD RPD deviations. None of the data required qualification due to laboratory duplicate RPD deviations, or field duplicate RPD deviations.

5.2 Accuracy

Accuracy measures the bias in an analytical system or the degree of agreement of a measurement with a known reference value. For this investigation, accuracy was defined as the percent recovery of QA/QC samples that were spiked with a known concentration of an analyte or compound of interest. The QA/QC samples used to evaluate analytical accuracy included instrument calibration, internal standards, Laboratory Control Standards (LCSs), MS/MSD samples, CRDL samples, and surrogate compound recoveries. For this analytical program, 6.4% of the data required qualification due to calibration deviations, 0.15% of the data required qualification due to MS/MSD recovery deviations, and 1.2% of the data required qualification due to surrogate compound standard recovery deviations. None of the data required qualification due to internal standards recovery deviations, LCS recovery deviations, or CRDL samples recovery deviations.

5.3 Representativeness

Representativeness expresses the degree to which sample data accurately and precisely represents a characteristic of a population, parameter variations at a sampling point, or an environmental condition. Representativeness is a qualitative parameter, which is most concerned with the proper design of the sampling program. The representativeness criterion is best satisfied by making certain that sampling locations are selected properly and a sufficient number of samples are collected. This parameter has been addressed by collecting samples at locations specified in MDEP-approved work plans, and by following the procedures for sample collection/analyses that were described in the FSP/QAPP. Additionally, the analytical program used procedures consistent with 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[1] 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. 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 set ranged from 94.7 to 100% for individual analytical parameters and had an overall usability of 98.2 %, which is greater than the minimum required usability of 90% as specified in the FSP/QAPP.

[1] Test Methods for evaluating Solid Waste, SW-846, USEPA, Final Update III, December 1996.

TABLE D - 1
ANALYTICAL DATA VALIDATION SUMMARY

PLANT SITE 1 GROUNDWATER MANAGEMENT AREA 1
GROUNDWATER QUALITY MONITORING INTERIM REPORT FOR FALL 2005
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
PCBs											
5J0P052	ESAIN-52 (filtered)	10/4/2005	Water	Tier II	No						
5J0P052	LS-29 (filtered)	10/4/2005	Water	Tier II	No						
5J0P052	N2SC-07S (filtered)	10/3/2005	Water	Tier II	No						
5J0P112	LS-MW-4R (filtered)	10/5/2005	Water	Tier II	No						
5J0P112	LSSC-08S (filtered)	10/5/2005	Water	Tier II	No						
5J0P112	RF-02 (filtered)	10/4/2005	Water	Tier II	No						
5J0P176	72-R (filtered)	10/6/2005	Water	Tier II	No						
5J0P176	DUP-1 (filtered)	10/6/2005	Water	Tier II	No						72-R
5J0P176	E2SC-23 (filtered)	10/6/2005	Water	Tier II	No						
5J0P176	E2SC-24 (filtered)	10/6/2005	Water	Tier II	No						
5J0P176	ES1-27R (filtered)	10/6/2005	Water	Tier II	No						
5J0P176	GMA1-13 (filtered)	10/7/2005	Water	Tier II	No						
5J0P176	LSSC-18 (filtered)	10/7/2005	Water	Tier II	No						
5J0P188	ES1-05 (filtered)	10/10/2005	Water	Tier II	No						
5J0P188	HR-G3-MW-1 (filtered)	10/10/2005	Water	Tier II	No						
5J0P239	GMA1-RB-1 (filtered)	10/11/2005	Water	Tier II	Yes	Aroclor-1016	Surrogate Recovery	7.7%	30% to 132%	R	
						Aroclor-1221	Surrogate Recovery	7.7%	30% to 132%	R	
						Aroclor-1232	Surrogate Recovery	7.7%	30% to 132%	R	
						Aroclor-1242	Surrogate Recovery	7.7%	30% to 132%	R	
						Aroclor-1248	Surrogate Recovery	7.7%	30% to 132%	R	
						Aroclor-1254	Surrogate Recovery	7.7%	30% to 132%	R	
						Aroclor-1260	Surrogate Recovery	7.7%	30% to 132%	R	
						Total PCBs	Surrogate Recovery	7.7%	30% to 132%	R	
5J0P320	139R (filtered)	10/13/2005	Water	Tier II	No						
5J0P320	GMA1-18 (filtered)	10/13/2005	Water	Tier II	No						
5J0P320	GMA1-6 (filtered)	10/13/2005	Water	Tier II	No						
VOCs											
5J0P052	N2SC-07S	10/3/2005	Water	Tier II	Yes	1,4-Dioxane	CCAL RRF	0.005	>0.05	ND(0.50) J	
						1,4-Dioxane	CCAL %D	67.8%	<25%	ND(0.50) J	
						2-Butanone	CCAL %D	31.2%	<25%	ND(0.025) J	
						Acrylonitrile	CCAL %D	99.9%	<25%	ND(0.025) J	
						Bromomethane	CCAL %D	84.8%	<25%	ND(0.025) J	
						Carbon Disulfide	CCAL %D	25.6%	<25%	ND(0.025) J	
						Chloroethane	CCAL %D	99.9%	<25%	ND(0.025) J	
						Propionitrile	CCAL %D	100.0%	<25%	ND(0.025) J	
						Tetrachloroethene	CCAL %D	25.6%	<25%	ND(0.025) J	
						Trichlorofluoromethane	CCAL %D	26.8%	<25%	ND(0.025) J	
						Vinyl Acetate	CCAL %D	100.0%	<25%	ND(0.025) J	
5J0P052	NS-17	10/4/2005	Water	Tier II	Yes	1,4-Dioxane	CCAL RRF	0.005	>0.05	ND(0.20) J	
						1,4-Dioxane	CCAL %D	67.8%	<25%	ND(0.20) J	
						2-Butanone	CCAL %D	31.2%	<25%	ND(0.010) J	
						Acrylonitrile	CCAL %D	99.9%	<25%	ND(0.0050) J	
						Bromomethane	CCAL %D	84.8%	<25%	ND(0.0020) J	
						Carbon Disulfide	CCAL %D	25.6%	<25%	ND(0.0050) J	
						Chloroethane	CCAL %D	99.9%	<25%	ND(0.0050) J	
						Propionitrile	CCAL %D	100.0%	<25%	ND(0.010) J	
						Tetrachloroethene	CCAL %D	25.6%	<25%	ND(0.0020) J	
						Trichlorofluoromethane	CCAL %D	26.8%	<25%	ND(0.0050) J	
						Vinyl Acetate	CCAL %D	100.0%	<25%	ND(0.0050) J	
5J0P052	TRIP BLANK	10/4/2005	Water	Tier II	Yes	1,4-Dioxane	CCAL RRF	0.005	>0.05	ND(0.20) J	
						1,4-Dioxane	CCAL %D	67.8%	<25%	ND(0.20) J	
						2-Butanone	CCAL %D	31.2%	<25%	ND(0.010) J	
						Acrylonitrile	CCAL %D	99.9%	<25%	ND(0.0050) J	
						Bromomethane	CCAL %D	84.8%	<25%	ND(0.0020) J	
						Carbon Disulfide	CCAL %D	25.6%	<25%	ND(0.0050) J	
						Chloroethane	CCAL %D	99.9%	<25%	ND(0.0050) J	
						Propionitrile	CCAL %D	100.0%	<25%	ND(0.010) J	
						Tetrachloroethene	CCAL %D	25.6%	<25%	ND(0.0020) J	
						Trichlorofluoromethane	CCAL %D	26.8%	<25%	ND(0.0050) J	
						Vinyl Acetate	CCAL %D	100.0%	<25%	ND(0.0050) J	

TABLE D - 1
ANALYTICAL DATA VALIDATION SUMMARY

PLANT SITE 1 GROUNDWATER MANAGEMENT AREA 1
GROUNDWATER QUALITY MONITORING INTERIM REPORT FOR FALL 2005
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
VOCs (continued)											
5J0P112	LS-MW-4R	10/5/2005	Water	Tier II	Yes	1,4-Dioxane	CCAL RRF	0.005	>0.05	ND(0.50) J	
						Bromomethane	CCAL %D	73.2%	<25%	ND(0.025) J	
						Chloroethane	CCAL %D	93.6%	<25%	ND(0.025) J	
5J0P112	LSSC-16S	10/5/2005	Water	Tier II	Yes	1,4-Dioxane	CCAL RRF	0.005	>0.05	ND(0.20) J	
5J0P112	LSSC-16S	10/5/2005	Water	Tier II	Yes	Bromomethane	CCAL %D	73.2%	<25%	ND(0.0020) J	
						Chloroethane	CCAL %D	93.6%	<25%	ND(0.0050) J	
5J0P176	72-R	10/6/2005	Water	Tier II	No						
5J0P176	DUP-1	10/6/2005	Water	Tier II	No						72-R
5J0P239	GMA1-RB-1	10/11/2005	Water	Tier II	Yes	1,4-Dioxane	CCAL RRF	0.005	>0.05	ND(0.20) J	
5J0P320	GMA1-6	10/13/2005	Water	Tier II	Yes	1,1,1,2-Tetrachloroethane	CCAL %D	30.8%	<25%	ND(0.0050) J	
						1,4-Dioxane	CCAL RRF	0.004	>0.05	ND(0.20) J	
						Naphthalene	MS/MSD RPD	28.0%	<25%	ND(0.0050) J	
Cyanides											
5J0P052	RF-16 (filtered)	10/4/2005	Water	Tier II	No						
5J0P112	ESA2S-52 (filtered)	10/5/2005	Water	Tier II	No						
5J0P176	72-R (filtered)	10/6/2005	Water	Tier II	No						
5J0P176	DUP-1 (filtered)	10/6/2005	Water	Tier II	No						72-R
5J0P176	ES2-02A (filtered)	10/6/2005	Water	Tier II	No						
5J0P188	HR-G1-MW-3 (filtered)	10/10/2005	Water	Tier II	No						
5J0P239	GMA1-RB-1 (filtered)	10/11/2005	Water	Tier II	No						
Cyanides - PAC method											
5J0P052	RF-16 (filtered)	10/4/2005	Water	Tier II	No						
5J0P112	ESA2S-52 (filtered)	10/5/2005	Water	Tier II	No						
5J0P176	72-R (filtered)	10/6/2005	Water	Tier II	No						
5J0P176	DUP-1 (filtered)	10/6/2005	Water	Tier II	No						72-R
5J0P176	ES2-02A (filtered)	10/6/2005	Water	Tier II	No						
5J0P188	HR-G1-MW-3 (filtered)	10/10/2005	Water	Tier II	No						
5J0P239	GMA1-RB-1 (filtered)	10/11/2005	Water	Tier II	Yes	Cyanide	MS %R	63.0%	75% to 125%	ND(0.0100) J	