GE
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Pittsfield, MA 01201
USA

Transmitted via Overnight Courier

February 27, 2009

Mr. Dean Tagliaferro
U.S. Environmental Protection Agency
c/o Weston Solutions, Inc.
10 Lyman Street
Pittsfield, MA 01201

Re: GE-Pittsfield/Housatonic River Site
Groundwater Management Area 3 (GECD330)
Groundwater Quality and NAPL Monitoring Interim Report for Fall 2008

Dear Mr. Tagliaferro:

Enclosed is a report entitled *Groundwater Management Area 3 Groundwater Quality and NAPL Monitoring Interim Re port for Fall 2008* (Fall 2008 GM A 3 Report). This report summarizes activities performed at Groundwater Management Area (GMA) 3 (also known as the Plant Site 2 GMA) between July and December 2008, including the results of the fall 2008 round of sampling and analysis of groundwater for GMA 3 and the results of GE's non-aqueous phase liquid (NAPL) monitoring and recovery program in this area. In addition, this report summarizes the results of building inspections and subsurface soil gas and indoor air monitoring conducted beneath and within Buildings 51 and 59 in October 2008 and provides a discussion of upcoming interim groundwater quality and NAPL monitoring activities to be conducted at GMA 3 in 2009.

Please contact me if you have any questions or comments.

Sincerely,

Richard W. Gates/RLC for

Richard W. Gates
Remediation Project Manager

Enclosure
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Groundwater Management Area 3 Groundwater Quality and NAPL Monitoring Interim Report for Fall 2008

February 2009

ARCADIS

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

(Fall 2008 GMA 3 Monitoring Report)

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Table of Contents

Table of Contents

Tables

Figures

Table of Contents

Appendices

1. Introduction

1.1 General

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

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

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

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

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

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

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

As part of the interim monitoring program for GMA 3, GE is required to submit reports on a semi-annual basis to summarize the groundwater/NAPL monitoring results and related activities and, as appropriate, to propose modifications to the monitoring program. GE's *Groundwater Management Area 3 Groundwater Quality and NAPL Monitoring Interim Report for Spring 2008* (Spring 2008 GMA 3 Monitoring Report) presented the results of the spring 2008 annual interim groundwater quality sampling event and the semi-annual groundwater elevation and NAPL monitoring activities performed at this GMA during April and May 2008, as well as other routine groundwater elevation and NAPL monitoring/recovery activities performed between January and June 2008. That report also assessed revisions made to the MCP groundwater quality standards in February 2008 and proposed certain modifications the interim groundwater quality monitoring program at GMA 3. The Spring 2008 GMA 3 Monitoring Report was conditionally approved by EPA by letter dated October 23, 2008.

The results of groundwater sampling activities performed at GMA 3 during October 2008, as well as other routine groundwater elevation and NAPL monitoring/recovery activities performed at this GMA between July and December 2008 (henceforth referred to as Fall 2008) are provided in this *Groundwater Management Area 3 Groundwater Quality and NAPL Monitoring Interim Report for Fall 2008* (Fall 2008 GMA 3 Monitoring Report). This report also summarizes the results of building inspections and subsurface soil gas and indoor air monitoring conducted beneath and within Buildings 51 and 59 in October 2008.

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

1.2 Background Information

1.2.1 GMA Description

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

southeast through the interior of this GMA, although a portion of the brook in the center of the area flows through underground culverts. The GE-owned portion of this GMA located west of Unkamet Brook is mostly paved and covered with large buildings. The GE-owned portion to the east of Unkamet Brook, as well as much of the land between Merrill Road and the Housatonic River, is undeveloped except for the area associated with Building OP-3 and the commercial area along Merrill Road.

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

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

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

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

GMA 3, but generally decrease toward the Housatonic River, corresponding to a flattening in the ground surface topography.

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

Distribution of the LNAPL has been confined to the vicinity of Buildings 51 and 59, along the western boundary of the GMA, due primarily to: (a) the generally low hydraulic gradients in this area; (b) the difference in grain size between the coarse fill materials near and beneath the buildings and the grain size of the surrounding native soils; (c) an apparent groundwater mound present between Buildings 59 and 119, to the south of the NAPL area; and (d) the ongoing LNAPL recovery efforts (both automated and manual) conducted by GE. Prior to spring 2007, dense non-aqueous phase liquid (DNAPL) had not been encountered within any of the monitoring wells within GMA 3. However, DNAPL was observed on one occasion in a single monitoring well (GMA3-16) located to the south of the former interior landfill. Locations where NAPL has been previously documented are shown on Figure 6. The extent of NAPL observed in fall 2008 is illustrated on Figure 7. A discussion of the current extent of NAPL and the results of NAPL monitoring and recovery activities is provided in Section 3.5.

1.2.2 Interim Monitoring Program

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

majority of the wells in GMA 3. The baseline sampling program was concluded at the remaining wells with the spring 2006 sampling event.

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

1.2.3 NAPL Monitoring Program

In addition to the wells that were sampled during the baseline monitoring period (each of which continues to be monitored for groundwater elevations on a semi-annual basis during the interim monitoring period), 27 monitoring wells are routinely monitored for groundwater elevation and the presence of any NAPL on an established weekly, monthly, quarterly, or semi-annual schedule, as summarized in Table 2. The well locations are shown on Figure 2. It should be noted that although Table 2 lists manual NAPL removal criteria for all wells, NAPL has only been actually detected in a subset of the wells, which are highlighted on Figure 6.

1.3 Format of Document

The remainder of this report is presented in three sections. Section 2 describes the groundwater- and NAPL-related activities performed at GMA 3 in fall 2008. as well as the results of building inspections and subsurface soil gas and indoor air monitoring conducted beneath and within Buildings 51 and 59 in October 2008. Section 3 presents the analytical results obtained during the fall 2008 sampling event performed in October 2008, provides a summary of the applicable groundwater quality and NAPL-related Performance Standards under the CD and SOW, and provides an assessment of the results of the fall 2008 activities, including comparisons to the Performance Standards and the Upper Concentration Limits (UCLs) for groundwater, and an evaluation of the fall 2008 NAPL

monitoring/recovery results. Finally, Section 4 addresses the schedule for future field and reporting activities related to groundwater quality and NAPL presence at GMA 3.

2. Field and Analytical Procedures

2.1 General

The activities conducted at GMA 3 during fall 2008 included measurement of groundwater elevations/NAPL levels, manual and automated removal of LNAPL, collection and analysis of groundwater samples at select monitoring wells within GMA 3, and additional assessment activities related to the soil gas investigation performed within and in the vicinity of Buildings 51 and 59. This section discusses the field procedures used to conduct those field activities and the methods used to analyze the groundwater samples. All activities were performed in general accordance with GE's approved *Field Sampling Plan/Quality Assurance Project Plan* (FSP/QAPP).

2.2 Monitoring Well Inspections and Repairs

In spring 2008, monitoring well inventories were conducted at all 25 wells that were sampled during the interim sampling event and at 29 other wells that were monitored only for groundwater elevation and/or the presence of NAPL. As necessary, wells were flagged for additional well integrity evaluations to determine the need for repair or replacement, and an extensive well maintenance operation was initiated in fall 2008. This task included but was not limited to: reinstallation of manholes, protective covers, and flush-mounted pads; replacement of missing bolts, washers, well cover gaskets; replacement of broken J-plug/well caps; and the adjustment/re-surveying of measuring point elevation marks.

2.3 Well Re-Development

Prior to the fall 2008 sampling round, each GW-2 monitoring well scheduled for PCB analysis was re-developed, as those wells had generally not been sampled since the final full baseline sampling events in fall 2005 or spring 2006. Additional monitoring wells within GMA 3 were also re-developed based on observations of excessive sedimentation during the well inventories, or, for wells 51-7 51-9, 51-13, and 59-1, as part of follow-up to well inspections performed in response to EPA requirements contained in its April 23, 2008 conditional approval letter (11 wells in total were redeveloped). The wells that were re-developed are listed in Table A-3 (Appendix A), along with the development results.

For most wells, re-development consisted of groundwater removal by a positive displacement, peristaltic, and/or submersible pump (depending on well diameter and rate of recharge) until temperature/pH/conductivity field parameters stabilized and the purged groundwater was relatively free of sediment (i.e., less than 50 NTU). At certain wells where

the initial re-development efforts were unsuccessful, an additional development technique (air sparging) was utilized.

Sediment was successfully removed from wells 51-9, 51-13, and 59-1 and groundwater was encountered during subsequent monitoring rounds performed at each location (prior to development, sediment had filled these wells above the fall water table level). Although well 51-7 was not re-developed in fall 2008 (well 59-7 was inadvertently developed instead), groundwater was present in this well during all monitoring events. Groundwater elevation and well depth data for these wells can be found in Table A-1 in Appendix A. GE will re-develop well 51-7 prior to the spring 2009 semi-annual monitoring event. In addition, during the spring 2009 semi-annual monitoring event, GE will note the degree of sedimentation in the other three wells and assess if additional development or other activities are needed.

2.4 Groundwater Elevation Monitoring

The fall 2008 semi-annual groundwater elevation monitoring round was performed on October 29, 2008. This activity involved the collection of groundwater level data at the locations listed in Table 4. Groundwater levels and NAPL thicknesses (where NAPL is present) were measured in accordance with the procedures specified in GE's approved FSP/QAPP. The groundwater elevation data presented in Table 4 from wells screened across or near the water table were used to prepare a groundwater elevation contour map for fall 2008 (Figure 5). A summary of all groundwater elevation data collected in fall 2008 is provided in Appendix A.

The fall 2008 groundwater elevations were, on average, approximately 1.02 feet higher than the elevations measured during the prior fall monitoring round in 2007 at water table monitoring locations measured during both monitoring events. Consistent with prior data, groundwater was found to generally flow toward the Housatonic River, with some localized variations in the vicinity of Buildings 51 and 59.

2.5 LNAPL Monitoring and Recovery

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

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

Routine NAPL monitoring was conducted at the monitoring wells listed in Table 2 on a semi-annual, quarterly, monthly, and/or weekly basis. Table 5 summarizes the overall fall 2008 NAPL monitoring and manual removal data on a well-by-well basis and Table A-1 in Appendix A presents all of the fall 2008 NAPL measurements and removal quantities (when performed) for each well at GMA 3. A month-by-month summary of the LNAPL volume removed by the automated recovery systems in fall 2008 is provided in Table 6. Approximately 59.4 gallons of LNAPL were recovery between July and December 2008 at GMA 3. Approximately 87% of this total was removed by the automated skimmer system at wells 51-21 (45.1 gallons) and the skimmer system at well GMA 3-17 (6.5 gallons), and the remainder was manually recovered during routine monitoring rounds. Since 1997, approximately 1,506 gallons of LNAPL have been removed from GMA 3 as part of GE's NAPL monitoring and recovery program.

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

Figure 6 depicts the historical maximum extent of NAPL observed at GMA 3. That figure represents a compilation of past investigations and shows the maximum lateral extent of NAPL that has been observed and documented in prior GE reports, and is not indicative of current conditions. Figure 7 indicates the extent of NAPL observed during the semi-annual monitoring event conducted at GMA 3 in fall 2008. As shown on Figures 6 and 7, the northern extent of LNAPL has decreased since the onset of the periodic LNAPL monitoring and recovery activities conducted in this area. This northern section of the LNAPL plume includes recovery well 51-21, which has removed the majority of LNAPL recovered.

2.6 Groundwater Sampling and Analysis

The fall 2008 interim sampling event was performed in October 2008 at seven monitoring wells. Low-flow sampling techniques using either a bladder or peristaltic pump were utilized for the purging and collection of groundwater samples during this sampling event. The

specific sampling method utilized, as well as a summary of any observations made during sampling are listed on the field sampling records contained in Appendix C. Field parameters (including temperature, pH, specific conductivity, oxidation-reduction potential, dissolved oxygen, and turbidity) were measured during purging and immediately prior to sampling at all monitoring wells. Each monitoring well that was sampled was purged until field parameters stabilized prior to sample collection. The stabilized field parameters are summarized in Table 7. A general summary of the stabilized field measurement results recorded during the fall 2008 monitoring event is provided below:

Parameter	Units	Range of Stabilized Readings
Turbidity	Nephelometric turbidity units	1 to 15
pH	pH units	6.35 to 7.13
Specific Conductivity	Millisiemens per centimeter	0.400 to 1.780
Oxidation-Reduction Potential	Millivolts	-148.6 to 84.1
Dissolved Oxygen	Milligrams per liter	0.04 to 11.37
Temperature	Degrees Celsius	10.91 to 17.84

As shown above and in Table 7 for this sampling event, none of the groundwater samples extracted from the monitoring wells had turbidity levels greater than the target level of 50 NTU upon stabilization. Also stabilized pH readings ranged from 6.35 to 7.13 which were within the range of 5 to 8.5, typically observed in groundwater. These results indicate that the sampling and measurement procedures utilized during this sampling event were effective in obtaining groundwater samples with low turbidity.

The groundwater samples were submitted to SGS Environmental Services of Wilmington, North Carolina for laboratory analysis. Groundwater samples collected from the interim monitoring locations were submitted for analysis of PCB analysis (filtered samples) using EPA Method 8082.

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

The fall 2008 analytical results were validated in accordance with the FSP/QAPP and the validated results were utilized in the preparation of this report. As discussed in the data

validation report provided as Appendix D, 100% of the fall 2008 groundwater quality data are considered to be useable. The validated analytical results are summarized in Section 3 and discussed in Section 4 below.

2.7 Soil Gas/Indoor Air Investigations

On October 28, 2008, GE conducted sub-slab soil gas and indoor air sampling within Buildings 51 and 59. GE collected three sub-slab soil gas samples and three indoor air samples from beneath and within each of those buildings using the same procedures (i.e., the SUMMA® canister method) that were used to perform the previous sampling round in fall 2007. The samples were collected to provide further information regarding the potential migration of VOCs and certain semi-volatile organic compounds (SVOCs) from the subsurface LNAPL toward and into Buildings 51 and 59.

Prior to the sampling activities, GE performed a visual assessment within each building to identify readily apparent materials and/or products that could contain chemicals that represent a potential source of volatile constituents in indoor air and that are common to the target constituents identified in the groundwater or LNAPL.

Results of the sub-slab soil gas and indoor sampling activities, including the results of the building products and materials inventories, are provided as Appendix E.

3. Fall 2008 Results and Assessment of Results

3.1 General

This section discusses the groundwater quality Performance Standards, NAPL-related Performance Standards and the results of the interim groundwater sampling event and NAPL monitoring and recovery program at GMA 3 in fall 2008. The information presented herein is based on the field monitoring and laboratory results obtained during fall 2008 monitoring period, supplemented with historical data when applicable. Table F-1 in Appendix F provides the complete analytical data set for the groundwater samples analyzed during this sampling event. An assessment of these results relative to those groundwater quality Performance Standards and the UCLs is provided in Section 4.

3.2 Performance Standards

3.2.1 Groundwater Quality Performance Standards

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

- GW-2 groundwater is defined as groundwater that is a potential source of vapors to the indoor air of buildings. Groundwater is classified as GW-2 if it is located within 30 feet of an existing occupied building and has an average annual depth below ground surface of 15 feet or less. Under the MCP, volatile constituents present within GW-2 groundwater represent a potential source of organic vapors to the indoor air of the overlying occupied structures.

- GW-3 groundwater is defined as groundwater that discharges to surface water. By MCP definition, all groundwater at a site is classified as GW-3 since it is considered to be ultimately discharged to surface water. In accordance with the CD and SOW, all groundwater at GMA 3 is considered as GW-3. However, as discussed below, no GW-3 sampling was performed at this GMA during fall 2008.

The CD and the SOW allow for the establishment of standards for GW-2 and GW-3 groundwater at the GMAs through use of one of three methods, as generally described in

the MCP. The first, known as Method 1, consists of the application of pre-established numerical "Method 1" standards set forth in the MCP for both GW-2 and GW-3 groundwater (310 CMR 40.0974). These "default" standards have been developed to be conservative and will serve as the initial basis for evaluating groundwater at GMA 3. The current MCP Method 1 GW-2 standards for the constituents analyzed in the fall 2008 sampling event are listed in Table 8. No GW-3-related sampling was conducted in fall 2008, so those standards are not presented in this report. For constituents for which Method 1 standards do not exist, the MCP provides procedures, known as Method 2, for developing such standards (Method 2 standards) for both GW-2 (310 CMR 40.0983(2)) and GW-3 (310 CMR 40.0983(4)) groundwater. For such constituents that are detected in groundwater during the baseline monitoring program, Attachment H to the SOW states that in the Baseline Monitoring Program Final Report, GE must propose to develop Method 2 standards using the MCP procedures or alternate procedures approved by EPA, or provide a rationale for why such standards need not be developed. For constituents whose concentrations exceed the applicable Method 1 (or Method 2) standards, GE may develop and propose to EPA alternative GW-2 and/or GW-3 standards based on a site-specific risk assessment. This procedure is known as Method 3 in the MCP. Upon EPA approval, these alternative risk-based GW-2 and/or GW-3 standards may be used in lieu of the Method 1 (or Method 2) standards. Of course, whichever method is used to establish such groundwater standards, GW-2 standards will be applied to GW-2 groundwater and GW-3 standards will be applied to GW-3 groundwater.

On February 14, 2008 MDEP implemented revised Method 1 numerical standards for a number of constituents in groundwater, and those standards were used in the preparation of this report. In addition, in its July 30, 2008 conditional approval letter related to the *Groundwater Management Area 2 Long-Term Monitoring Program Addendum to Monitoring Event Evaluation Report for Fall 2007*, EPA specified that the low-range guidance values developed in that report for cobalt and copper should represent the Method 2 GW-3 standards for these metals at all of the GE Pittsfield GMAs, including GMA 3 (although no samples were analyzed for those parameters in fall 2008).

Based on consideration of the above points, the specific groundwater quality Performance Standards for the sampling of GMA 3 conducted in fall 2008 consist of the following**:**

- At monitoring wells designated as compliance points to assess GW-2 groundwater (i.e., groundwater located at an average depth of 15 feet or less from the ground surface and within 30 feet of an existing occupied building), groundwater quality shall achieve any of the following:

  (a) the Method 1 GW-2 groundwater standards set forth in the MCP (or, for constituents for which no such standards exist, Method 2 GW-2 standards once

developed, unless GE provides and EPA approves a rationale for not developing such Method 2 standards); or

(b) alternative risk-based GW-2 standards developed by GE and approved by EPA as protective against unacceptable risks due to volatilization and transport of volatile chemicals from groundwater to the indoor air of nearby occupied buildings; or

(c) a condition, based on a demonstration approved by EPA, in which constituents in the groundwater do not pose an unacceptable risk to occupants of nearby occupied buildings via volatilization and transport to the indoor air of such buildings.

As described above in Section 2.6, only selected wells were sampled in fall 2008. In addition to the Performance Standards described above, analytical results from all groundwater monitoring wells sampled during the fall 2008 sampling event were compared to the MCP UCLs for groundwater.

3.2.2 NAPL-Related Performance Standards

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

1. Containment, defined as no discharge of NAPL to surface waters and/or sediments, which shall include no sheens on surface water and no bank seeps of NAPL.

2. For areas near surface waters in which there is no physical containment barrier between the wells and the surface water, elimination of measurable NAPL (i.e., detectable with an oil/water interface probe) in wells near the surface water bank that could potentially discharge NAPL into the surface water, in order to prevent such discharge and assist in achieving groundwater quality Performance Standards.

3. For areas adjacent to physical containment barriers, prevention of any measurable LNAPL migration around the ends of the physical containment barriers.

4. For NAPL areas not located adjacent to surface waters, reduction in the amount of measurable NAPL to levels which eliminate the potential for NAPL migration toward surface water discharge areas or beyond GMA boundaries, and which assist in achieving groundwater quality Performance Standards.

5. For NAPL detected in wells designed to assess GW-2 groundwater (i.e., located at average depths of 15 feet or less from the ground surface and within a horizontal distance of 30 feet from an existing occupied building), a demonstration that constituents in the NAPL do not pose an unacceptable risk to occupants of such building via volatilization and transport to the indoor air of such building. Such demonstration may include assessment activities such as: NAPL sampling, soil gas sampling, desk-top modeling of potential volatilization of chemicals from the NAPL (or associated groundwater) to the indoor air of the nearby occupied buildings, or sampling of the indoor air of such buildings. If necessary, GE shall propose corrective actions, including, but not limited to, containment, recovery, or treatment of NAPL and impacted groundwater.

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

3.2.3 Manual NAPL Removal Criteria

During routine NAPL monitoring/removal activities at select GE monitoring wells, LNAPL accumulations observed in excess of 0.25 feet are manually removed at the time of monitoring. For DNAPL, accumulations in excess of 0.5 feet are manually removed. Exceptions to these criteria are in place for certain wells that are located either upgradient of sensitive receptors (i.e., any measurable quantities of NAPL are manually removed) or within the capture zone of automated recovery systems (i.e., no NAPL is manually removed). Any exception to the standard NAPL removal criteria applicable to a given well is shown in Table 2.

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

Approximately 1 to 2 weeks prior to the spring and fall semi-annual monitoring events, all wells where the presence of NAPL was observed during the prior year are monitored and any recoverable thicknesses of NAPL are manually removed (i.e., the bailing round). For those wells where NAPL was present, after allowing time for NAPL to return, the wells are monitored again as part of the semi-annual monitoring event and the data obtained are

utilized to estimate the current thickness of LNAPL in the area. Due to the large number of wells included in the semi-annual monitoring program, and the desire to collect the groundwater elevation data from all wells in the same relative time period so as to provide a more accurate account of flow conditions, no manual removal of NAPL from monitoring wells is required during the actual semi-annual data collection event (i.e., the monitoring round) for those wells from which NAPL had been removed in the bailing round. The purpose for performing the bailing and monitoring rounds is to confirm that the NAPL present in a well is representative of the surrounding formation and does not reflect remnant oil that may have accumulated in the well since the last manual removal. This uniform removal procedure also provides a consistent basis for comparison of data with future NAPL monitoring data.

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

3.2.4 Assessment of New NAPL Observations

This section describes the process utilized to investigate new or anomalous NAPL observations. Such observations may include either instrument detection of NAPL at a new location or detection of a type of NAPL not typically associated with a particular well (e.g., if DNAPL was observed in a monitoring well where LNAPL is typically observed). This process generally includes the following steps:

1. Confirmation that NAPL is actually present at the well by bailing or pumping the well to verify that an instrument error did not occur. Additionally, the NAPL will be physically observed in a jar to visually assess its relative density compared to water.

2. The GE Project Manager is notified of the new NAPL occurrence. The GE Project Manager will then arrange to make any required federal or state Agency notifications, as appropriate.

3. Initially, the monitoring frequency at the well will be modified to at least once per week for a period of at least one month, and any observed NAPL will be removed. If additional wells are located in the vicinity and screened at the appropriate interval, they will also be monitored for NAPL presence.

4. Based on the results of Steps 1 and 3 above, GE may recommend that: a) the well be further evaluated for the potential installation of an automated recovery system;

b) additional soil borings/monitoring wells be installed in the vicinity; or c) enhanced NAPL monitoring/ recovery activities be implemented.

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

3.2.5 Criteria for Installation of Automated Recovery Systems

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

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

Each of these factors is discussed in more detail below.

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

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

collected during this test and analyzed for chemical and/or physical parameters if such data do not already exist for the NAPL area in question. Physical testing will include specific gravity and viscosity. If warranted, interfacial tension may also be measured.

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

- Assessment of the NAPL physical and chemical properties to assess the migration potential of the NAPL and to aid in selection of pumping equipment and disposal options.

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

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

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

3.3 Fall 2008 Groundwater Quality Results

Filtered groundwater samples from seven monitoring wells were analyzed for PCBs as part of the fall 2008 sampling event. The PCB analytical results are summarized in Tables 8, 9, and F-1 (Appendix F). PCBs were not detected in any of groundwater wells sampled.

3.4 Assessment of Analytical Results

For the purpose of generally assessing current groundwater quality conditions, the analytical results from the fall 2008 groundwater sampling event were compared to the applicable groundwater Performance Standards for GMA 3, which are described in Section 4.2.1 above. Since no analytes were detected in any samples, Tables 8 and 9 provide a comparison of the analytical detection limits for each groundwater sample with the applicable MCP GW-2 Standard and UCL for groundwater, verifying that the detection limits achieved were suitable to evaluate compliance with those standards.

The fall 2008 groundwater sampling event was limited to the collection of samples from select GW-2 monitoring points to evaluate compliance with the new MCP GW-2 Standard for PCBs and represented the first time that most of the wells was analyzed for PCBs. The only historical PCB data available for comparison with the current results was a sample from well OBG-2 that was analyzed for PCBs in January 1997. As shown in Appendix G, like the fall 2008 data, the 1997 sample from this well contained no PCBs. As previously proposed, GE will continue to evaluate these areas as additional data is obtained during future sampling events.

As noted in Condition 4 of EPA's conditional approval letter dated October 23, 2008, a reference to a table summarizing all available historical natural attenuation analytical data for the wells that were analyzed for these parameters in spring 2008 was intended to be included in the Spring 2008 GMA 3 monitoring report, but the table was inadvertently omitted from the document. That table is provided as Table G-1 in Appendix G of this report.

3.5 Evaluation of NAPL Monitoring and Recovery Activities

3.5.1 Extent of NAPL

The historical maximum extent of measurable LNAPL at GMA 3 is illustrated on Figure 6 and the extent of LNAPL observed during the fall 2008 semi-annual monitoring event is shown on Figure 7. The LNAPL thicknesses detected during the fall 2008 semi-annual monitoring event are listed in Table 4. In addition to the GMA 3 wells, Table 4 and Figures 6 and 7 include certain wells outside of GMA 3. In particular, GE has monitored well

GMA4-3, located in GMA 4 across Plastics Avenue from GMA 3. NAPL has never been detected in that well. Also, in EPA's December 7, 2006 conditional approval letter, EPA required GE to include GMA 4 wells 60B-R and RF-14 on groundwater elevation contour maps for GMA 3. Accordingly, GE has included those wells in this report. These figures show a decrease in the extent of measurable LNAPL observed in fall 2008 compared to the known maximum extent, particularly along the northern edge of the LNAPL area. This reduction in LNAPL extent on the northern portion of the LNAPL plume is likely attributable to GE's active NAPL recovery program, which includes automatic skimmer systems in wells 51-21 and GMA3-17, plus routine manual recovery of LNAPL at surrounding locations.

Except for the potential presence of LNAPL in well GMA3-11 (based on a single suspect instrument reading from spring 2007), the reduction of LNAPL along the northern edge of the LNAPL area and occasional variations in LNAPL presence along the edges of the known LNAPL area, the extent of LNAPL has remained relatively consistent in recent years. LNAPL was observed in the same wells during the fall 2008 semi-annual monitoring event where it was detected during the previous fall monitoring event conducted in 2007.

In April 2007, DNAPL was observed in well GMA3-16 during the first monitoring round performed after its installation. Since that time, the well has been checked on a weekly basis and no additional DNAPL has entered the well. With the exception of this one observation, DNAPL has not been observed at any of the GMA 3 wells.

3.5.2 NAPL Recovery

As discussed in Section 2.4, approximately 59.4 gallons of LNAPL were recovered at GMA 3 in fall 2008. Of this total, approximately 45.1 gallons were removed by the automated skimmer system at well 51-21, approximately 6.5 gallons were removed by the new automated skimmer system at well GMA3-17, and the remaining 7.8 gallons were manually recovered from other monitoring wells (see Tables 5 and 6). For comparison, over the same time period in fall 2007, approximately 145 gallons of LNAPL were recovered at GMA 3. Most of this amount (133.2 gallons) was removed by the skimmer system at well 51-21 and the remaining 11.8 gallons were recovered manually (the automated system at GMA3-17 was not activated until February 2008), indicating that the LNAPL recovery volume has been significantly decreased compared to the prior year. Since 1997, approximately 1,506 gallons of LNAPL have been removed from GMA 3 as part of GE's NAPL monitoring and recovery program.

Per Condition 4 of EPA's conditional approval letter of the fall 2007 GMA 3 NAPL Monitoring Report dated April 23, 2008, GE has continued to evaluate if a connection exists between groundwater elevations and LNAPL recovery volumes at GMA 3. The graphs presented in Appendix B compare the volumes of LNAPL recovered on a quarterly basis

since summer 2000 to the average quarterly groundwater elevations of the wells within or adjacent to the known LNAPL area. A graph illustrating the data comparisons for the overall time period for which data were available (i.e., all results from summer 2003 to fall 2008) is presented to assess variations in groundwater elevations and LNAPL recovery between quarters. In addition, graphs of the data from each individual quarter are provided to assess if LNAPL recovery varied based on isolated wet or dry seasons over the same time period.

As shown in the overall data graph, Quarters 3 (July through September) and 4 (October through December), which are typically the seasons with decreased overall groundwater elevations, contained the greatest LNAPL removal during any given year, including 2008. Quarter 2 (April through June) typically showed the least LNAPL recovery and the most elevated groundwater elevations compared to the other quarters. However, a review of the graphs for the individual quarters shows that there is only a slight correlation between ground water elevations and the recovery of LNAPL. Overall, groundwater elevations are relatively consistent in this area (generally slightly above or below 987 feet AMSL), and even more so when comparing data over the same time period from year to year, while the volume of LNAPL recovered showed a much greater degree of variation, even between quarters with similar average groundwater elevations.

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

4. Schedule of Future Activities

4.1 General

Since GE has proposed no modifications to the groundwater or NAPL monitoring program requiring EPA approval prior to performance, this section summarizes the schedule for upcoming groundwater quality and NAPL monitoring activities and reporting for GMA 3. A summary of the interim groundwater sampling program activities to be conducted in spring 2009 is provided in Table 10. The monitoring wells subject to sampling in spring 2009 are illustrated on Figure 8. GE will also continue to monitor groundwater elevations at the GMA 3 wells where such monitoring is required in accordance with the approved monitoring schedule.

4.2 Field Activities Schedule

GE will continue its routine groundwater elevation and NAPL monitoring according to the current schedule approved by EPA. In accordance with the approved semi-annual monitoring schedule, the spring 2009 groundwater elevation monitoring and NAPL monitoring event is scheduled to be completed in April 2009. GE will also re-develop well 51-7 and will conduct a NAPL bailing round approximately two to four weeks prior to the spring 2009 semi-annual NAPL monitoring event.

GE will conduct the spring 2009 interim groundwater sampling event at GMA 3 in April 2009, in conjunction with groundwater sampling activities that will be performed at the other GMAs. That event will include the next natural attenuation monitoring event (conducted each spring) and the second PCB sampling event at the GW-2 monitoring wells that were sampled in fall 2008. Overall, GE will sample 28 wells, analyzing for VOCs, PCBs, and natural attenuation parameters, as listed in Table 10. Approximately one month prior to that sampling event, GE will inspect and re-develop selected GW-2 monitoring wells that have not recently been utilized as part of the interim monitoring program.

As discussed in Appendix E, during October 2009 GE will conduct its annual inventory of materials and/or products within Buildings 51 and 59 that could contain volatile constituents similar to those that have been previously detected in the indoor air samples and are common to the target constituents in the LNAPL or groundwater. Shortly following completion of the building inventories, GE will perform additional monitoring of soil gas beneath, and indoor air within, Buildings 51 and 59 at or near the same locations that were sampled in fall 2008.

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

4.3 Reporting Schedule

GE will submit a Spring 2009 Groundwater Quality and NAPL Monitoring Report for GMA 3 by August 31, 2009. That report will present the groundwater quality sampling and groundwater elevation monitoring results and NAPL monitoring and recovery data for the period of January 2009 through June 2009. It will also contain a summary of other activities related to groundwater quality and NAPL monitoring/recovery conducted at GMA 3 during that time period and any proposals to modify those activities, if applicable.

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

The results of the next round of building inventories and sub-slab soil gas/indoor air sampling will be presented as part of the Fall 2009 NAPL Monitoring Report for GMA 3, which will be submitted by February 28, 2010.

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Tables

Table 1
Groundwater Quality Monitoring Program Summary

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

Well Number	Well Designation / Analytical Category	Sampling Schedule	Analyses	Comments
16B-R	GW-2 Sentinel/Natural Attenuation	Semi-Annual	PCB	Natural attenuation sampling not performed - see Note 1.
GMA3-2	GW-2 Sentinel	Semi-Annual	PCB	
GMA3-4	GW-2 Sentinel	Semi-annual	PCB	
GMA3-8	GW-2 Sentinel	Semi-annual	PCB	
GMA3-9	GW-2 Sentinel	Semi-annual	PCB	
OBG-2	GW-2 Sentinel	Semi-annual	PCB	
51-14	GW-2 Sentinel	Semi-annual	PCB	

Notes:

1. Wells sampled under the natural attenuation monitoring program are sampled on an annual basis in the spring.
2. These GW-2 Sentinel were added to the interim monitoring program in fall 2008 to assess compliance with the new MCP Method 1 GW-2 standard for PCBs. These wells are scheduled for four semi-annual sampling rounds of groundwater quality sampling for PCBs, after which the needs for additional sampling during the interim period or as part of a long-term monitoring program will be assessed.
3. All analyses for PCBs conducted under the GMA 3 groundwater quality monitoring program are performed on filtered samples only.

Table 2
Groundwater Elevation/NAPL Monitoring Program Summary

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

Well Number	Monitoring Frequency [1]	Manual NAPL Removal Criteria [2]	Comments
GMA 3 Monitoring Wells			
2A	Semi-Annual	Notification/Removal	
6B-R	Semi-Annual	Notification/Removal	
16A	Semi-Annual	Notification/Removal	
16B-R	Semi-Annual	Notification/Removal	
16C-R	Semi-Annual	Notification/Removal	
39B-R	Semi-Annual	Notification/Removal	
39D-R	Semi-Annual	Notification/Removal	
39E	Semi-Annual	Notification/Removal	
43A	Semi-Annual	Notification/Removal	
43B	Semi-Annual	Notification/Removal	
51-5	Monthly	Standard Criteria	
51-6	Monthly	Standard Criteria	
51-7	Monthly	Standard Criteria	
51-8	Weekly	Standard Criteria	
51-9	Monthly	Standard Criteria	
51-11	Monthly	Standard Criteria	
51-12	Monthly	Standard Criteria	
51-13	Monthly	Standard Criteria	
51-14	Monthly	Standard Criteria	
51-15	Monthly	Standard Criteria	
51-16R	Monthly	Standard Criteria	
51-17	Monthly	Standard Criteria	
51-18	Monthly	Standard Criteria	
51-19	Monthly	Standard Criteria	
51-21	None	LNAPL skimmer in operation	Periodic monitoring conducted as part of routine maintenance activities
54B-R	Semi-Annual	Notification/Removal	
59-1	Monthly	Standard Criteria	
59-3R	Monthly	Standard Criteria	
59-7	Monthly	Standard Criteria	
78B-R	Monthly	Notification/Removal	
82B-R	Semi-Annual	Notification/Removal	
89A	Semi-Annual	Notification/Removal	
89B	Semi-Annual	Notification/Removal	
89D-R	Semi-Annual	Notification/Removal	
90A	Semi-Annual	Notification/Removal	
90B	Semi-Annual	Notification/Removal	
95A	Semi-Annual	Notification/Removal	
95B-R	Semi-Annual	Notification/Removal	
111A-R	Semi-Annual	Notification/Removal	
111B-R	Semi-Annual	Notification/Removal	
114A	Semi-Annual	Notification/Removal	
114B-R	Semi-Annual	Notification/Removal	
115A	Semi-Annual	Notification/Removal	
115B	Semi-Annual	Notification/Removal	
GMA3-1	None	None	Installation of this well has been deferred until re-routing of Unkamet Brook is completed.
GMA3-2	Semi-Annual	Notification/Removal	

Table 2
Groundwater Elevation/NAPL Monitoring Program Summary

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

Well Number	Monitoring Frequency (1)	Manual NAPL Removal Criteria (2)	Comments
GMA3-3	Semi-Annual	Notification/Removal	
GMA3-4	Semi-Annual	Notification/Removal	
GMA3-5	Semi-Annual	Notification/Removal	
GMA3-6	Semi-Annual	Notification/Removal	
GMA3-7	Quarterly	Notification/Removal	
GMA3-8	Semi-Annual	Notification/Removal	
GMA3-9	Semi-Annual	Notification/Removal	
GMA3-10	Weekly	Standard Criteria	
GMA3-11	Monthly	Any Recoverable	
GMA3-12	Weekly	Standard Criteria	
GMA3-13	Weekly	Any Recoverable	
GMA3-14	Monthly	Notification/Removal	
GMA3-15	Quarterly	Notification/Removal	
GMA3-16	Weekly	Any Recoverable	
GMA3-17	None	LNAPL skimmer in operation	Periodic monitoring conducted as part of routine maintenance activities
OBG-2	Semi-Annual	Notification/Removal	
UB-MW-10	Monthly	Any Recoverable	
UB-PZ-3	Monthly	Any Recoverable	
GMA 4 Monitoring Wells			
60B-R	Semi-Annual	Notification/Removal	
GMA4-3	Monthly	Notification/Removal	
RF-14	Semi-Annual	Notification/Removal	
GMA 3 Staff Gauges			
GMA3-SG-1	Semi-Annual	Not Applicable	
GMA3-SG-2	Semi-Annual	Not Applicable	
GMA3-SG-3	Semi-Annual	Not Applicable	
GMA3-SG-4	Semi-Annual	Not Applicable	

Notes:

1. Monitoring consists of periodic depth to water and NAPL thickness measurements, if present, and may also consist of manual removal of NAPL if a thickness greater than the well-specific criteria is observed during a monitoring event.
2. The Manual NAPL Removal Criteria listed above consist of the following:
   Standard Criteria - LNAPL thickness of greater than 0.25 feet or DNAPL thickness of greater than 0.5 feet.
   Any Recoverable - All recoverable LNAPL or DNAPL is removed, regardless of observed thickness.
   Notification/Removal - NAPL is not known to be present in the well. Per the Plant Site NAPL monitoring program protocol, if NAPL is observed, any recoverable thickness will be removed and EPA shall be notified of the new occurrence.
   The well will then be monitored on a weekly basis and any recoverable LNAPL observed will be removed.
   After one month of monitoring, the monitoring results will be reviewed to evaluate potential future response actions.
3. Any NAPL observed during the bailing round conducted prior to the spring and fall semi-annual monitoring events is manually removed.
4. No NAPL is manually removed from any wells during the spring and fall semi-annual monitoring events, provided that NAPL was removed during the bailing round.
5. No NAPL is required to be manually removed from any well during non-routine data collection activities.

Table 3
Monitoring Well Construction Summary

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

Well ID	Survey Coordinates		Well Diameter (inches)	Ground Surface Elevation (ft AMSL)	Measuring Point Elevatin (ft AMSL)	Depth to Top of Screen (ft bgs)	Screen Length (ft)	Top of Screen Elevation (ft AMSL)	Base of Screen Elevation (ft AMSL)	Average Depth to Groundwater (ft bgs)	Average Groundwater Elevation (ft AMSL)
	Northing	Easting									
2A	537005.10	138853.90	1.00	991.50	994.16	45.00	5.00	946.50	941.50	5.8	985.74
6B-R	537191.50	138910.00	2.00	991.40	993.62	2.00	10.00	989.40	979.40	4.7	986.69
16A	536730.50	139115.60	2.00	991.50	991.77	44.00	6.00	947.50	941.50	6.9	984.62
16B-R	536738.18	139076.37	2.00	991.80	994.87	3.08	10.00	988.72	978.72	6.2	985.59
16C-R	536734.00	139112.40	2.00	991.40	993.23	90.00	10.00	901.40	891.40	7.7	983.71
16E	536730.30	139112.70	1.00	991.40	992.14	144.00	6.00	847.40	841.40	7.2	984.18
34B	536293.70	138394.20	2.00	1,000.50	1,000.56	20.00	5.00	980.50	975.50	14.9	985.60
35B	536443.40	138525.40	2.00	998.03	997.36	18.00	5.00	980.03	975.03	12.6	985.40
39B-R	536938.60	138862.60	2.00	992.29	991.97	4.00	10.00	988.29	978.29	5.9	985.50
39D-R	536941.50	138854.80	2.00	992.30	994.73	55.00	10.00	937.30	927.30	6.3	985.95
39E	536932.10	138851.00	4.00	992.34	992.21	225.00	10.00	767.34	757.34	5.8	986.51
43A	538081.20	137905.90	1.00	991.90	993.79	45.00	5.00	946.90	941.90	5.1	986.83
43B	538081.20	137904.40	1.00	991.90	993.61	15.00	5.00	976.90	971.90	4.1	987.78
50B	538647.00	139106.20	2.00	989.76	991.76	8.50	5.00	981.26	976.26	1.1	988.67
51-05	536750.50	138335.60	2.00	996.91	996.44	5.00	10.00	991.91	981.91	10.4	986.38
51-06	536937.64	138194.32	2.00	997.57	997.36	5.00	10.00	992.57	982.57	10.9	986.70
51-07	536843.80	138244.60	2.00	997.26	997.08	5.00	10.00	992.26	982.26	10.1	986.67
51-08	536677.80	138317.00	2.00	997.39	997.08	5.00	10.00	992.39	982.39	11.1	986.20
51-09	536563.70	138370.30	2.00	997.76	997.70	5.00	10.00	992.76	982.76	9.7	987.56
51-11	536860.00	138774.50	2.00	994.62	994.37	5.00	10.00	989.62	979.62	8.1	986.05
51-12	536497.30	138518.50	2.00	996.83	996.55	5.00	10.00	991.83	981.83	7.5	989.26
51-13	536917.10	138579.80	2.00	997.68	997.42	5.00	10.00	992.68	982.68	10.0	988.46
51-14	536771.40	138502.60	2.00	996.93	996.77	5.00	10.00	991.93	981.93	10.8	986.24
51-15	536808.20	138306.30	2.00	996.68	996.43	5.00	10.00	991.68	981.68	10.1	986.34
51-16R	536830.20	138347.60	2.00	996.70	996.39	5.00	10.00	991.70	981.70	10.3	986.49
51-17	536769.90	138377.40	2.00	996.48	996.43	5.00	10.00	991.48	981.48	10.1	986.45
51-18	536902.90	138463.40	2.00	997.38	997.12	5.00	10.00	992.38	982.38	11.0	986.36
51-19	536823.20	138414.80	2.00	996.65	996.43	5.00	10.00	991.65	981.65	10.4	986.14
51-21	536767.70	138442.35	4.00	996.70*	1,001.49	5.00	10.00	991.70	981.70	15.5	986.28

Table 3
Monitoring Well Construction Summary

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

Well ID	Survey Coordinates		Well Diameter (inches)	Ground Surface Elevation (ft AMSL)	Measuring Point Elevatin (ft AMSL)	Depth to Top of Screen (ft bgs)	Screen Length (ft)	Top of Screen Elevation (ft AMSL)	Base of Screen Elevation (ft AMSL)	Average Depth to Groundwater (ft bgs)	Average Groundwater Elevation (ft AMSL)
	Northing	Easting									
54B-R	537827.30	139113.60	2.00	989.00	991.49	3.00	10.00	986.00	976.00	3.8	986.85
59-01	536488.80	138238.60	2.00	997.78	997.52	4.00	20.00	993.78	973.78	11.6	986.86
59-03R	536501.00	138260.70	2.00	997.82	997.64	7.30	10.00	990.52	980.52	11.6	986.34
59-07	536517.40	138296.10	2.00	998.27	997.96	4.00	20.00	994.27	974.27	11.8	986.43
74B	537490.90	138374.90	1.00	996.05	995.54	15.00	5.00	981.05	976.05	8.1	987.97
78B-R	537551.80	138716.50	2.00	989.11	988.83	1.82	10.00	987.29	977.29	0.4	987.50
82B-R	536937.40	139621.60	2.00	987.80	989.90	2.00	10.00	985.80	975.80	5.7	985.28
89A	536030.80	139413.40	1.00	983.60	985.76	43.00	5.00	940.60	935.60	0.7	982.87
89B	536031.60	139411.70	2.00	983.10	986.03	4.00	3.00	979.10	976.10	2.0	983.51
89D-R	536072.20	139434.90	2.00	984.40	987.11	67.50	10.00	916.90	906.90	1.4	982.99
90A	536254.90	139765.40	1.00	986.50	988.07	45.00	5.00	941.50	936.50	3.6	982.86
90B	536251.60	139761.00	2.00	986.50	989.10	8.00	3.00	978.50	975.50	4.9	982.62
95A	535822.10	139769.60	1.00	985.30	987.18	45.00	5.00	940.30	935.30	4.3	980.98
95B-R	535637.20	139722.30	2.00	984.30	986.24	3.00	10.00	981.30	971.30	4.1	980.84
95C	535823.20	139780.30	1.00	985.30	988.16	95.00	5.00	890.30	885.30	1.2	984.07
111A-R	535824.10	139087.80	2.00	995.10	997.35	40.00	10.00	955.10	945.10	11.5	983.60
111B-R	535828.40	139092.00	2.00	994.80	997.48	7.18	10.00	987.62	977.62	13.7	983.13
114A	535499.50	139775.20	1.00	983.20	986.16	45.00	5.00	938.20	933.20	3.5	979.72
114B-R	535503.90	139786.90	2.00	983.50	985.54	4.00	10.00	979.50	969.50	3.8	979.48
114C	535500.50	139792.80	1.00	983.70	986.68	88.00	5.00	895.70	890.70	3.8	979.91
115A	N/A	N/A	1.00	986.69	988.53	36.00	5.00	950.69	945.69	7.6	979.04
115B	N/A	N/A	1.00	988.25	990.90	11.00	5.00	977.25	972.25	9.6	980.03
115C	N/A	N/A	1.00	987.24	988.37	109.00	5.00	878.24	873.24	10.1	977.12
GMA3-2	536596.40	138956.60	2.00	992.25	991.94	5.19	10.00	987.06	977.06	6.8	984.35
GMA3-3	538094.20	138178.20	2.00	990.86	990.45	2.00	10.00	988.86	978.86	2.1	988.81
GMA3-4	537044.70	138021.80	2.00	994.94	994.60	3.57	10.00	991.37	981.37	7.2	987.38
GMA3-5	537323.20	139766.90	2.00	991.50	993.67	4.00	10.00	987.50	977.50	7.2	985.99
GMA3-6	537021.50	138342.30	2.00	997.74	997.49	8.00	10.00	989.74	979.74	10.9	985.58
GMA3-7	536291.70	138397.40	2.00	1000.45	1000.17	10.00	10.00	990.45	980.45	13.9	987.35

Table 3
Monitoring Well Construction Summary

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

Well ID	Survey Coordinates		Well Diameter (inches)	Ground Surface Elevation (ft AMSL)	Measuring Point Elevatin (ft AMSL)	Depth to Top of Screen (ft bgs)	Screen Length (ft)	Top of Screen Elevation (ft AMSL)	Base of Screen Elevation (ft AMSL)	Average Depth to Groundwater (ft bgs)	Average Groundwater Elevation (ft AMSL)
	Northing	Easting									
GMA3-8	536339.60	138899.10	2.00	994.50	996.24	5.00	10.00	989.50	979.50	10.3	985.68
GMA3-9	537383.20	138385.60	2.00	992.90	992.39	3.00	10.00	989.90	979.90	4.6	987.64
GMA3-10	536659.10	138056.40	2.00	997.78	997.54	9.00	10.00	988.78	978.78	11.5	986.75
GMA3-11	536353.70	138147.90	2.00	997.78	997.25	9.00	10.00	988.78	978.78	10.8	987.02
GMA3-12	536469.20	138169.70	4.00	998.04	997.84	7.00	15.00	991.04	976.04	11.7	986.68
GMA3-13	536534.30	138035.90	2.00	998.00	997.73	8.06	10	989.94	979.94	11.7	986.65
GMA3-14	536710.30	137953.20	2.00	997.66	997.42	7.25	10	990.41	980.41	10.9	986.93
GMA3-15	536710.30	137953.20	2.00	994.60	996.74	6.00	10.00	988.60	978.60	11.0	985.64
GMA3-16	537542.70	138665.00	2.00	989.80	989.26	2.00	10.00	987.80	977.80	1.3	988.52
GMA3-17	536497.80	138261.50	4.00	998.36	1,002.00	7.00	10.00	991.36	981.36	17.3	986.06
OBG-2	537209.10	139475.80	3.00	992.24	992.20	3.00	11.40	989.24	977.84	5.0	987.21
UB-MW-10	536908.10	138278.30	1.00	996.21	995.99	8.00	10.00	988.21	978.21	9.9	986.45
UB-PZ-1	536336.80	138383.90	1.00	999.00	999.70	9.00	5.00	990.00	985.00	12.2	986.77
UB-PZ-2	536726.10	138735.70	1.00	994.40	994.77	4.00	10.00	990.40	980.40	9.2	985.23
UB-PZ-3	536480.10	138110.00	1.00	998.55	998.15	11.00	5.00	987.55	982.55	12.3	986.27
GMA 4 Monitoring Wells											
60B-R	536021.40	138133.00	2.00	1,003.04	1,002.79	12.00	10.0	991.04	981.04	16.2	987.62
GMA4-3	536289.60	137999.80	2.00	1,004.14	1,003.95	16.09	10.0	988.05	978.05	18.1	986.64
RF-14	536833.60	137753.70	4.00	1,001.90	1,001.59	7.00	15.0	994.90	979.90	10.3	990.74

Notes:

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

Table 4
Groundwater Elevation Data - Fall 2008

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

Well Number	Overall Average Groundwater Elevation (ft AMSL)	Average Fall Groundwater Elevation (ft AMSL)	Fall 2008 Groundwater Elevation (ft AMSL)	Fall 2008 LNAPL Thickness (ft)	Fall 2008 DNAPL Thickness (ft)
GMA3 Monitoring Wells Screened at Water Table					
02A	985.74	985.74	986.41	0.00	0.00
6B-R	986.69	986.69	988.28	0.00	0.00
16B-R	985.59	984.62	985.42	0.00	0.00
39B-R	985.50	985.50	986.11	0.00	0.00
43B	986.83	987.78	988.77	0.00	0.00
50B	987.78	988.67	988.75	0.00	0.00
51-05	986.38	986.38	986.06	0.00	0.00
51-06	986.70	986.70	986.44	0.00	0.00
51-07	986.67	986.67	986.97	0.00	0.00
51-08	986.20	986.20	986.03	1.40	0.00
51-09	987.56	987.56	NA	NA	NA
51-11	986.05	986.05	986.29	0.00	0.00
51-12	989.26	989.26	989.05	0.00	0.00
51-13	988.46	988.46	NA	NA	NA
51-14	986.24	986.24	985.96	0.00	0.00
51-15	986.34	986.34	986.38	0.05	0.00
51-16R	986.49	986.49	986.10	0.01	0.00
51-17	986.45	986.45	986.33	1.02	0.00
51-18	986.36	986.36	986.17	0.00	0.00
51-19	986.14	986.14	985.98	0.27	0.00
51-21	986.28	986.28	986.00	0.00	0.00
54B-R	986.85	986.85	987.73	0.00	0.00
59-01	986.86	986.86	985.97	0.00	0.00
59-03R	986.34	986.34	986.08	0.81	0.00
59-07	986.43	986.43	986.16	0.02	0.00
78B-R	987.50	987.50	988.39	0.00	0.00
82B-R	985.28	985.28	984.18	0.00	0.00
89B	983.51	983.51	983.71	0.00	0.00
90B	982.62	982.62	984.18	0.00	0.00
95B-R	980.84	980.84	982.17	0.00	0.00
111B-R	983.13	983.13	983.77	0.00	0.00
114B-R	979.48	979.48	981.76	0.00	0.00
115B	980.03	980.03	981.28	0.00	0.00
GMA3-2	984.35	984.35	985.15	0.00	0.00
GMA3-3	988.81	988.81	NA	NA	NA
GMA3-4	987.38	987.38	987.42	0.00	0.00
GMA3-5	985.99	985.99	986.44	0.00	0.00
GMA3-6	985.58	985.58	986.61	0.00	0.00
GMA3-7	987.35	987.35	986.24	0.00	0.00
GMA3-8	985.68	985.68	985.91	0.00	0.00
GMA3-9	987.64	987.64	987.75	0.00	0.00
GMA3-10	986.75	986.75	986.07	0.30	0.00
GMA3-11	987.02	987.02	986.45	0.00	0.00
GMA3-12	986.68	986.68	986.10	0.70	0.00
GMA3-13	986.65	986.65	986.07	0.03	0.00
GMA3-14	986.93	986.93	986.52	0.00	0.00

Table 4
Groundwater Elevation Data - Fall 2008

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

Well Number	Overall Average Groundwater Elevation (ft AMSL)	Average Fall Groundwater Elevation (ft AMSL)	Fall 2008 Groundwater Elevation (ft AMSL)	Fall 2008 LNAPL Thickness (ft)	Fall 2008 DNAPL Thickness (ft)
GMA3-15	985.64	985.64	985.73	0.00	0.00
GMA3-16	988.52	988.52	989.26	0.00	0.00
GMA3-17	986.06	986.06	984.70	0.00	0.00
OBG-2	987.21	987.21	987.20	0.00	0.00
UB-MW-10	986.45	986.45	986.08	0.00	0.00
UB-PZ-3	986.27	986.27	985.83	0.10	0.00
GMA4 Monitoring Wells Screened at Water Table					
60B-R	987.62	987.62	986.81	0.00	0.00
GMA4-3	986.64	986.64	986.02	0.00	0.00
RF-14	990.74	990.74	991.56	0.00	0.00
Monitoring Wells Screened Below Water Table					
16A	985.76	984.62	985.37	0.00	0.00
16C-R	984.59	983.71	985.90	0.00	0.00
39D-R	983.67	985.95	986.38	0.00	0.00
39E	985.95	986.51	986.96	0.00	0.00
43A	986.49	986.83	988.77	0.00	0.00
89A	986.81	982.87	983.80	0.00	0.00
89D-R	982.81	982.99	983.99	0.00	0.00
90A	983.00	982.86	984.14	0.00	0.00
95A	982.79	980.98	982.18	0.00	0.00
111A-R	980.94	983.60	984.10	0.00	0.00
114A	983.61	979.72	981.99	0.00	0.00
115A	979.64	979.04	981.92	0.00	0.00
GMA 3 Staff Gauges					
GMA3-SG-1	NA	NA	992.96	0.00	0.00
GMA3-SG-2	NA	NA	980.39	0.00	0.00
GMA3-SG-3	NA	NA	988.70	0.00	0.00
GMA3-SG-4	NA	NA	985.78	0.00	0.00

Notes:

1. Groundwater elevation/NAPL thickness data collected on October 28 and 29, 2008.
2. Groundwater elevations denoted <## indicate that the well was dry on the date measured and the referenced elevation represents the base of well elevation.
3. Average groundwater elevations based on available seasonal groundwater elevation data since 2000.
4. NA - Data Not Available

Table 5
LNAPL Monitoring/Recovery Data Summary
Groundwater Quality and NAPL Monitoring Interim Report for Fall 2008

Groundwater Management Area 3
General Electric Company - Pittsfield, Massachusetts

Well Name	Number of Measurements	Measuring Point Elevation (Feet AMSL)	Depth to Water		LNAPL Observations			LNAPL Recovery [6]	
			Minimum (Feet BMP)	Maximum (Feet BMP)	Times Observed	Minimum Thickness (Feet)	Maximum Thickness (Feet)	LNAPL Recovery (liters)	LNAPL Recovery (Gallons)
GMA3 Monitoring Wells									
002A	1	994.16	7.75	7.75	0	---	---	0.00	0.00
6B-R	1	993.62	5.34	5.34	0	---	---	0.00	0.00
16A	1	991.77	6.40	6.40	0	---	---	0.00	0.00
16B-R	3	994.87	9.13	9.45	0	---	---	0.00	0.00
16C-R	1	993.23	7.33	7.33	0	---	---	0.00	0.00
39B-R	1	991.97	5.86	5.86	0	---	---	0.00	0.00
39D-R	1	994.73	8.35	8.35	0	---	---	0.00	0.00
39E	1	992.21	5.25	5.25	0	---	---	0.00	0.00
43A	1	993.79	5.02	5.02	0	---	---	0.00	0.00
43B	1	993.61	4.84	4.84	0	---	---	0.00	0.00
50B	1	991.76	3.01	3.01	0	---	---	0.00	0.00
51-05	6	996.44	5.66	10.36	2	0.01	0.03	0.00	0.00
51-06	6	997.36	9.95	11.03	0	---	---	0.00	0.00
51-07	6	997.08	9.95	11.00	0	---	---	0.00	0.00
51-08	27	997.08	10.08	12.44	27	0.04	1.4	14.09	3.72
51-09	7	997.70	10.24	12.48	1	0.64	0.64	0.39	0.10
51-11	6	994.37	6.73	8.80	0	---	---	0.00	0.00
51-12	6	996.55	7.38	7.73	0	---	---	0.00	0.00
51-13	4	997.42	10.05	11.06	0	---	---	0.00	0.00
51-14	7	996.77	9.56	11.20	0	---	---	0.00	0.00
51-15	6	996.43	9.35	10.48	6	0.01	0.05	0.02	0.01
51-16R	6	996.39	9.23	10.80	5	0.01	0.2	0.12	0.03
51-17	6	996.43	10.03	11.58	6	0.98	1.18	3.39	0.90
51-18	6	997.12	9.90	11.26	0	---	---	0.00	0.00
51-19	6	996.43	9.50	11.03	6	0.03	0.27	0.14	0.04

Table 5
LNAPL Monitoring/Recovery Data Summary
Groundwater Quality and NAPL Monitoring Interim Report for Fall 2008

Groundwater Management Area 3
General Electric Company - Pittsfield, Massachusetts

Well Name	Number of Measurements	Measuring Point Elevation (Feet AMSL)	Depth to Water		LNAPL Observations			LNAPL Recovery [6]	
			Minimum (Feet BMP)	Maximum (Feet BMP)	Times Observed	Minimum Thickness (Feet)	Maximum Thickness (Feet)	LNAPL Recovery (liters)	LNAPL Recovery (Gallons)
51-21	27	1,001.49	14.10	15.94	27	0.01	0.01	NR	NR
54B-R	1	991.49	3.76	3.76	0	---	---	0.00	0.00
59-01	7	997.52	10.68	12.02	3	<0.01	0.22	0.00	0.00
59-03R	6	997.64	11.58	12.98	6	0.5	1.28	2.83	0.75
59-07	8	997.96	10.47	12.19	7	0.02	0.05	0.01	0.00
78B-R	4	988.83	0.44	1.60	0	---	---	0.00	0.00
82B-R	1	989.90	5.72	5.72	0	---	---	0.00	0.00
89A	1	985.76	1.96	1.96	0	---	---	0.00	0.00
89B	1	986.03	2.32	2.32	0	---	---	0.00	0.00
89D-R	1	987.11	3.12	3.12	0	---	---	0.00	0.00
90A	1	988.07	3.93	3.93	0	---	---	0.00	0.00
90B	1	989.10	4.92	4.92	0	---	---	0.00	0.00
95A	1	987.18	5.00	5.00	0	---	---	0.00	0.00
95B-R	1	986.24	4.07	4.07	0	---	---	0.00	0.00
111A-R	1	997.35	13.25	13.25	0	---	---	0.00	0.00
111B-R	1	997.48	13.71	13.71	0	---	---	0.00	0.00
114A	1	986.16	4.17	4.17	0	---	---	0.00	0.00
114B-R	1	985.54	3.78	3.78	0	---	---	0.00	0.00
115A	1	988.53	6.61	6.61	0	---	---	0.00	0.00
115B	1	990.90	9.62	9.62	0	---	---	0.00	0.00
GMA3-2	3	991.94	6.79	7.70	0	---	---	0.00	0.00
GMA3-3	1	990.45	0.00	0.00	0	---	---	0.00	0.00
GMA3-4	4	994.60	0.55	7.20	0	---	---	0.00	0.00
GMA3-5	1	993.67	7.23	7.23	0	---	---	0.00	0.00
GMA3-6	1	997.49	16.61	16.61	0	---	---	0.00	0.00
GMA3-7	2	1,000.17	13.80	13.93	0	---	---	0.00	0.00

Table 5
LNAPL Monitoring/Recovery Data Summary
Groundwater Quality and NAPL Monitoring Interim Report for Fall 2008

Groundwater Management Area 3
General Electric Company - Pittsfield, Massachusetts

Well Name	Number of Measurements	Measuring Point Elevation (Feet AMSL)	Depth to Water		LNAPL Observations			LNAPL Recovery [6]	
			Minimum (Feet BMP)	Maximum (Feet BMP)	Times Observed	Minimum Thickness (Feet)	Maximum Thickness (Feet)	LNAPL Recovery (liters)	LNAPL Recovery (Gallons)
GMA3-8	3	996.24	10.33	11.77	0	---	---	0.00	0.00
GMA3-9	3	992.39	4.64	5.34	0	---	---	0.00	0.00
GMA3-10	27	997.54	10.16	11.98	27	0.04	0.54	2.04	0.54
GMA3-11	6	997.25	9.82	10.90	0	---	---	0.00	0.00
GMA3-12	27	997.84	10.40	12.39	27	0.06	0.7	5.27	1.39
GMA3-13	27	997.73	10.62	11.93	21	0.01	0.55	1.15	0.30
GMA3-14	6	997.42	9.90	10.98	0	---	---	0.00	0.00
GMA3-15	2	996.74	11.01	11.64	0	---	---	0.00	0.00
GMA3-16	6	989.26	0.00	11.32	0	---	---	0.00	0.00
GMA3-17	27	NA	15.20	17.40	27	0.01	0.01	NR	NR
OBG-2	4	992.20	5.00	6.12	0	---	---	0.00	0.00
UB-MW-10	6	995.99	8.75	10.05	0	---	---	0.00	0.00
UB-PZ-3	6	998.15	11.40	12.50	6	0.05	0.24	0.20	0.05
GMA 4 Monitoring Wells (Adjacent to GMA3)									
RF-14	2	1,001.59	10.03	10.11	0	---	---	0.00	0.00
GMA4-3	9	1,003.95	16.91	18.16	0	---	---	0.00	0.00
60B-R	2	1,003.95	15.98	16.02	0	---	---	0.00	0.00

Total amount of LNAPL Recovered - July 2008 through December 2008: 29.65 liters
7.83 gallons

Notes:

1. ft BMP - feet Below Measuring Point
2. --- indicates LNAPL or DNAPL was not present in a measurable quantity.
3. NA indicates information not available.
4. NM indicates information not measured.
5. NR indicates that an automated skimmer system is in place and no LNAPLwas manually recovered.

Table 6
Automated LNAPL Recovery System Summary

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

Removal Action Area / Recovery System	July 2008 LNAPL Recovery (Gallons)	August 2008 LNAPL Recovery (Gallons)	September 2008 LNAPL Recovery (Gallons)	October 2008 LNAPL Recovery (Gallons)	November 2008 LNAPL Recovery (Gallons)	December 2008 LNAPL Recovery (Gallons)	Fall 2008 Total LNAPL Recovery (Gallons)
51-21	4.4	1.8	16.1	18.3	1.8	2.7	45.1
GMA3-17	0.2	0.6	0.3	0.3	2.4	2.7	6.5

GMA 3 TOTAL **Total Amount of LNAPL Recovered by Automated Skimmer Systems - July 2008 through December 2008:** **51.6**

Notes:
1. Recovery Well GMA3-17 was placed into service on February 7, 2008.

Table 7
Field Parameter Measurements - Fall 2008

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

Well Number	Turbidity (NTU)	Temperature (degrees Celsius)	pH (standard units)	Specific Conductivity (mS/cm)	Oxidation-Reduction Potential (mV)	Dissolved Oxygen (mg/L)
51-14	3	13.43	6.35	0.400	-47.5	1.51
GMA3-4	11	16.57	7.13	1.539	-28.8	11.37
GMA3-9	9	13.68	6.96	0.655	-148.6	0.17
GMA3-2	15	16.64	7.08	1.780	-118.1	0.04
GMA3-8	3	15.47	6.88	1.001	-85.7	2.88
OBG-2	2	17.84	6.36	0.873	-52.6	0.09
16B-R	1	10.91	7.04	1.441	84.1	0.75

Notes:

1. Measurements collected during fall 2008 GMA 3 interim monitoring program sampling activities conducted on October 24 and 29, 2008.
2. Well parameters were generally monitored continuously during purging by low-flow techniques. Final parameter readings are presented.
3. NTU - Nephelometric Turbidity Units
4. mS/cm - Millisiemens per centimeter
5. mV - Millivolts
6. mg/L - Milligrams per liter (ppm)

Table 8
Comparison of Groundwater Analytical results to MCP Method 1 GW-2 Standards
Groundwater Quality and NAPL Monitoring Interim Report for Fall 2008

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

Parameter / Sample ID: / Date Collected:	Method 1 GW-2 Standards	16B-R 10/29/08	51-14 10/24/08	GMA3-2 10/24/08	GMA3-4 10/24/08	GMA3-8 10/24/08	GMA3-9 10/24/08	OBG-2 10/24/08
PCBs-Filtered								
Aroclor-1016	Not Listed	ND(0.000067) J	ND(0.00010) J	ND(0.00010) J	ND(0.00010) J [ND(0.00010) J]	ND(0.00010) J	ND(0.00010) J	ND(0.00010) J
Aroclor-1221	Not Listed	ND(0.000067) J	ND(0.00010) J	ND(0.00010) J	ND(0.00010) J [ND(0.00010) J]	ND(0.00010) J	ND(0.00010) J	ND(0.00010) J
Aroclor-1232	Not Listed	ND(0.000067) J	ND(0.00010) J	ND(0.00010) J	ND(0.00010) J [ND(0.00010) J]	ND(0.00010) J	ND(0.00010) J	ND(0.00010) J
Aroclor-1242	Not Listed	ND(0.000067) J	ND(0.00010) J	ND(0.00010) J	ND(0.00010) J [ND(0.00010) J]	ND(0.00010) J	ND(0.00010) J	ND(0.00010) J
Aroclor-1248	Not Listed	ND(0.000067) J	ND(0.00010) J	ND(0.00010) J	ND(0.00010) J [ND(0.00010) J]	ND(0.00010) J	ND(0.00010) J	ND(0.00010) J
Aroclor-1254	Not Listed	ND(0.000067) J	ND(0.00010) J	ND(0.00010) J	ND(0.00010) J [ND(0.00010) J]	ND(0.00010) J	ND(0.00010) J	ND(0.00010) J
Aroclor-1260	Not Listed	ND(0.000067) J	ND(0.00010) J	ND(0.00010) J	ND(0.00010) J [ND(0.00010) J]	ND(0.00010) J	ND(0.00010) J	ND(0.00010) J
Total PCBs	0.005	ND(0.000067) J	ND(0.00010) J	ND(0.00010) J	ND(0.00010) J [ND(0.00010) J]	ND(0.00010) J	ND(0.00010) J	ND(0.00010) J

Notes:

1. Samples were collected by ARCADIS and submitted to SGS Environmental Services, Inc. for analysis of PCBs (filtered).
2. Samples have been validated as per Field Sampling Plan/Quality Assurance Project Plan (FSP/QAPP), General Electric Company, Pittsfield, Massachusetts, ARCADIS (approved March 15, 2007 and re-submitted March 30, 2007).
3. Only those constituents detected in one or more samples are summarized.
4. -- Indicates that all constituents for the parameter group were not detected.

Data Qualifiers:

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

Table 9
Comparison of Groundwater Analytical Results to MCP UCLs for Groundwater
Groundwater Quality and Interim Report for Fall 2008

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

Parameter / Sample ID: / Date Collected:	MCP UCL for GroundWater	16B-R 10/29/08	51-14 10/24/08	GMA3-2 10/24/08	GMA3-4 10/24/08	GMA3-8 10/24/08	GMA3-9 10/24/08	OBG-2 10/24/08
PCBs-Filtered								
Aroclor-1016	Not Listed	ND(0.000067) J	ND(0.00010) J	ND(0.00010) J	ND(0.00010) J [ND(0.00010) J]	ND(0.00010) J	ND(0.00010) J	ND(0.00010) J
Aroclor-1221	Not Listed	ND(0.000067) J	ND(0.00010) J	ND(0.00010) J	ND(0.00010) J [ND(0.00010) J]	ND(0.00010) J	ND(0.00010) J	ND(0.00010) J
Aroclor-1232	Not Listed	ND(0.000067) J	ND(0.00010) J	ND(0.00010) J	ND(0.00010) J [ND(0.00010) J]	ND(0.00010) J	ND(0.00010) J	ND(0.00010) J
Aroclor-1242	Not Listed	ND(0.000067) J	ND(0.00010) J	ND(0.00010) J	ND(0.00010) J [ND(0.00010) J]	ND(0.00010) J	ND(0.00010) J	ND(0.00010) J
Aroclor-1248	Not Listed	ND(0.000067) J	ND(0.00010) J	ND(0.00010) J	ND(0.00010) J [ND(0.00010) J]	ND(0.00010) J	ND(0.00010) J	ND(0.00010) J
Aroclor-1254	Not Listed	ND(0.000067) J	ND(0.00010) J	ND(0.00010) J	ND(0.00010) J [ND(0.00010) J]	ND(0.00010) J	ND(0.00010) J	ND(0.00010) J
Aroclor-1260	Not Listed	ND(0.000067) J	ND(0.00010) J	ND(0.00010) J	ND(0.00010) J [ND(0.00010) J]	ND(0.00010) J	ND(0.00010) J	ND(0.00010) J
Total PCBs	0.1	ND(0.000067) J	ND(0.00010) J	ND(0.00010) J	ND(0.00010) J [ND(0.00010) J]	ND(0.00010) J	ND(0.00010) J	ND(0.00010) J

Notes:

1. Samples were collected by ARCADIS and submitted to SGS Environmental Services, Inc. for analysis of PCBs (filtered).
2. Samples have been validated as per Field Sampling Plan/Quality Assurance Project Plan (FSP/QAPP), General Electric Company, Pittsfield, Massachusetts, ARCADIS (approved March 15, 2007 and re-submitted March 30, 2007).
3. Only those constituents detected in one or more samples are summarized.
4. -- Indicates that all constituents for the parameter group were not detected.

Data Qualifiers:

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

Table 10
Spring 2009 Interim Groundwater Quality Monitoring Activities

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

Well Number	Monitoring Well Usage	Sampling Schedule & Analyses			Comments
		Spring [2] Annual Analyses	Spring/Fall [3] Annual Analyses	Semi-Annual [4] Analyses	
2A	Natural Attenuation	See Note 5	NONE	NONE	
6B-R	GW-3 Perimeter	NONE	VOC	NONE	No sampling to be conducted in spring 2009. Next scheduled annual sampling event to be conducted in fall 2009.
16A	Natural Attenuation	See Note 5	NONE	NONE	
16B-R	GW-2 Sentinel/Natural Attenuation	See Note 6	NONE	PCB	
16C-R	Natural Attenuation	See Note 6	NONE	NONE	
39B-R	Natural Attenuation	See Note 5	NONE	NONE	
39D-R	Natural Attenuation	See Note 6	NONE	NONE	
39E	Natural Attenuation	See Note 6	NONE	NONE	
43A	Natural Attenuation	See Note 6	NONE	NONE	
43B	Natural Attenuation	See Note 6	NONE	NONE	
51-14	GW-2 Sentinel	NONE	VOC	PCB	Semi-annual PCB sampling to be conducted in spring 2009. Next scheduled annual VOC sampling event to be conducted in fall 2009.
89A	Natural Attenuation	See Note 5	NONE	NONE	
89B	GW-3 Perimeter/Natural Attenuation	See Note 5	NONE	NONE	
89D-R	Natural Attenuation	See Note 6	NONE	NONE	
90A	Natural Attenuation	See Note 6	NONE	NONE	
90B	GW-3 Perimeter/Natural Attenuation	See Note 6	NONE	NONE	
95A	Natural Attenuation	See Note 5	NONE	NONE	
95B-R	GW-3 Perimeter/Natural Attenuation	See Note 5	NONE	NONE	
111A-R	Natural Attenuation	See Note 6	NONE	NONE	
111B-R	GW-3 Perimeter/Natural Attenuation	See Note 6	NONE	NONE	
114A	Natural Attenuation / Supplemental	See Note 6	NONE	NONE	
114B-R	GW-3 Perimeter/Natural Attenuation	See Note 6	NONE	NONE	
115A	Natural Attenuation	See Note 6	NONE	NONE	
115B	Natural Attenuation	See Note 6	NONE	NONE	

Table 10
Spring 2009 Interim Groundwater Quality Monitoring Activities

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

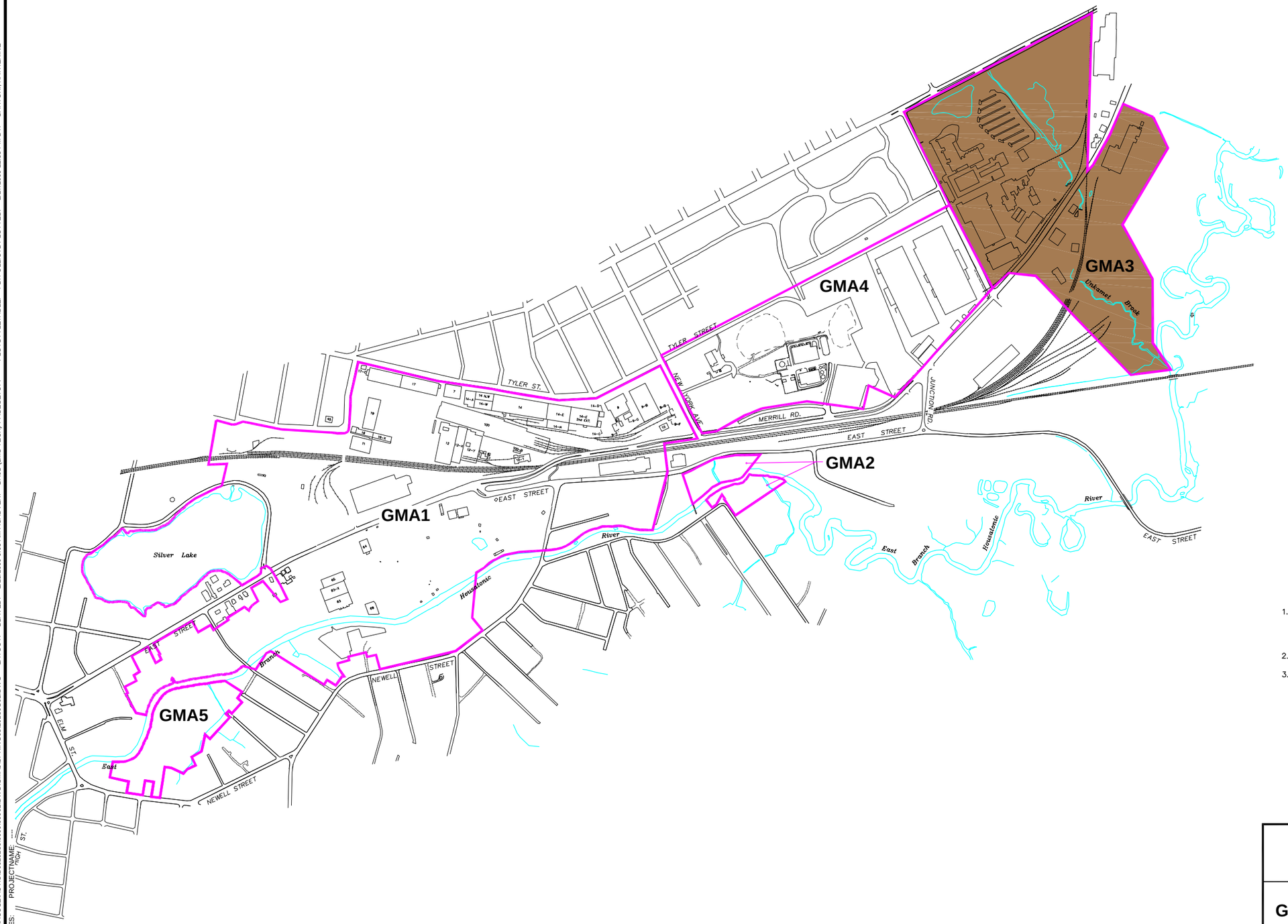
Well Number	Monitoring Well Usage	Sampling Schedule & Analyses			Comments
		Spring [2] Annual Analyses	Spring/Fall [3] Annual Analyses	Semi-Annual [4] Analyses	
GMA3-1	GW-3 Perimeter	NONE	NONE	Deferred	Installation of this well has been deferred until re-routing of Unkamet Brook is completed.
GMA3-2	GW-2 Sentinel	NONE	NONE	PCB	
GMA3-4	GW-2 Sentinel	NONE	NONE	PCB	
GMA3-8	GW-2 Sentinel	NONE	NONE	PCB	
GMA3-9	GW-2 Sentinel	NONE	NONE	PCB	
OBG-2	GW-2 Sentinel	NONE	NONE	PCB	

Notes

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

ARCADIS

Figures



LEGEND:

GMA1	GMA 1–PLANT SITE 1
GMA2	GMA 2–FORMER OXBOWS J&K
GMA3	GMA 3–PLANT SITE 2
GMA4	GMA 4–PLANT SITE 3
GMA5	GMA 5–FORMER OXBOWS A&C

GENERAL NOTES:

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

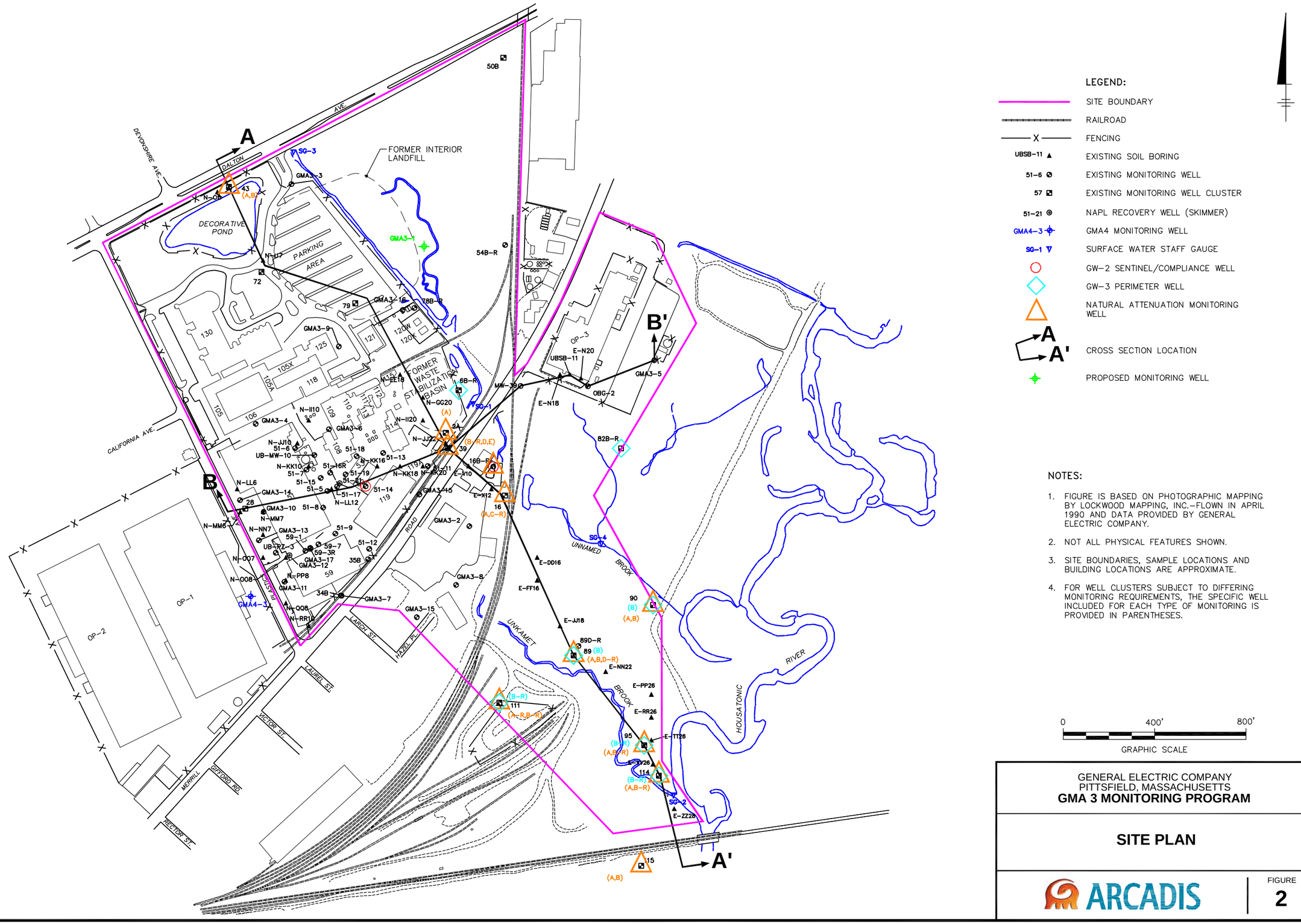
0 500' 1000'
GRAPHIC SCALE

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS
GMA 3 MONITORING PROGRAM

GROUNDWATER MANAGEMENT AREAS

ARCADIS

FIGURE
1



NOTES:

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

0 400' 800'

GRAPHIC SCALE

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS
GMA 3 MONITORING PROGRAM

SITE PLAN

ARCADIS

FIGURE **2**

NORTH **A**

A' SOUTH

ELEVATION IN FEET ABOVE MEAN SEA LEVEL

1,000
950
900
850
800

RAA10-N-05 (43) — 988.77
RAA10-N-U7 (72)
79
RAA10-N-EE18
RAA10-N-GG20
RAA10-N-II20
RAA10-N-JJ22 (39B-R, 39) — 986.11
RAA10-E-V10
RAA10-E-X12
RAA10-E-Z14 (16) — 985.42
RAA10-E-DD16
RAA10-E-FF16
RAA10-E-JJ18 (89) — 983.71
RAA10-E-NN22
RAA10-E-PP26 (95) — 982.17
RAA10-E-RR26
RAA10-E-TT26
RAA10-E-VV26 (114) — 981.76
RAA10-E-ZZ228 — 981.28
115

HOUSATONIC RIVER

sand, gravel and silt FILL

FILL

med. to coarse SAND

SILT and ORGANICS with sand and gravel lenses

PEAT

SILT with fine sand lenses

PEAT

med. to fine SAND, trace gravel

SILT

medium to fine SAND, trace gravel

fine to medium SAND some silt

coarse SAND, some fine gravel

fine to coarse SAND, some gravel and cobbles

SILT and SAND with coarse sand and gravel lenses

coarse SAND with gravel lenses

fine to medium SAND

medium to coarse SAND

fine SAND, trace gravel

NO DATA

fine SAND, trace gravel

NO DATA

TILL

LEGEND:

WELL CLUSTER NUMBER → 16 RAA10-N-05 ← SOIL BORING NUMBER

SOIL BORING

SCREEN INTERVAL (DEPTH FROM SURFACE) → (15–20') B

WATER TABLE ELEVATION (B-SERIES WELLS) (OCTOBER 2008)

(45–50') A

(56–66' OR 70–75') D

(95–100') C

(225–235' OR 145–150') E

0 325' 650'

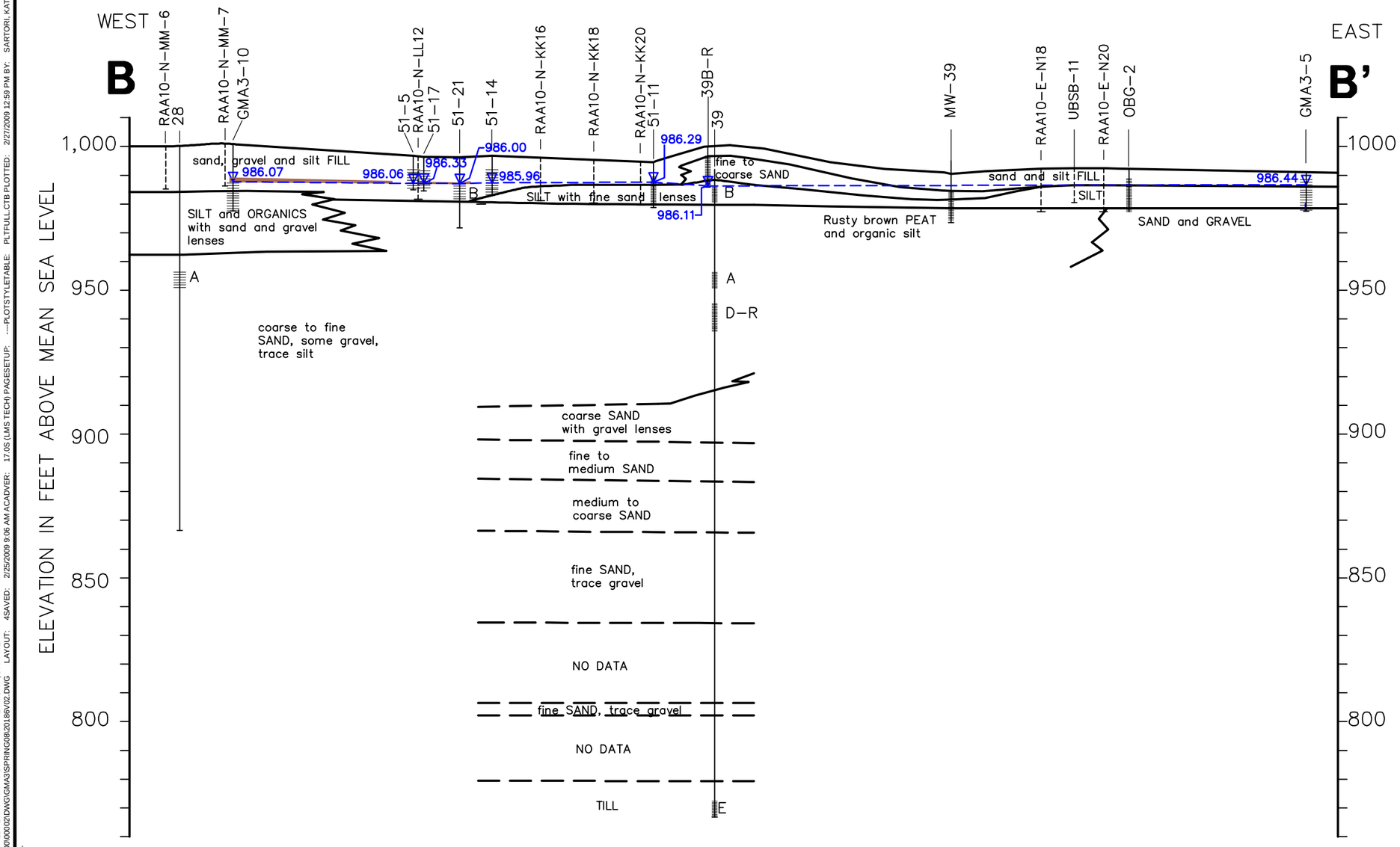
GRAPHIC SCALE

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS
GMA 3 MONITORING PROGRAM

GENERALIZED GEOLOGIC CROSS SECTION A-A'

ARCADIS

FIGURE **3**

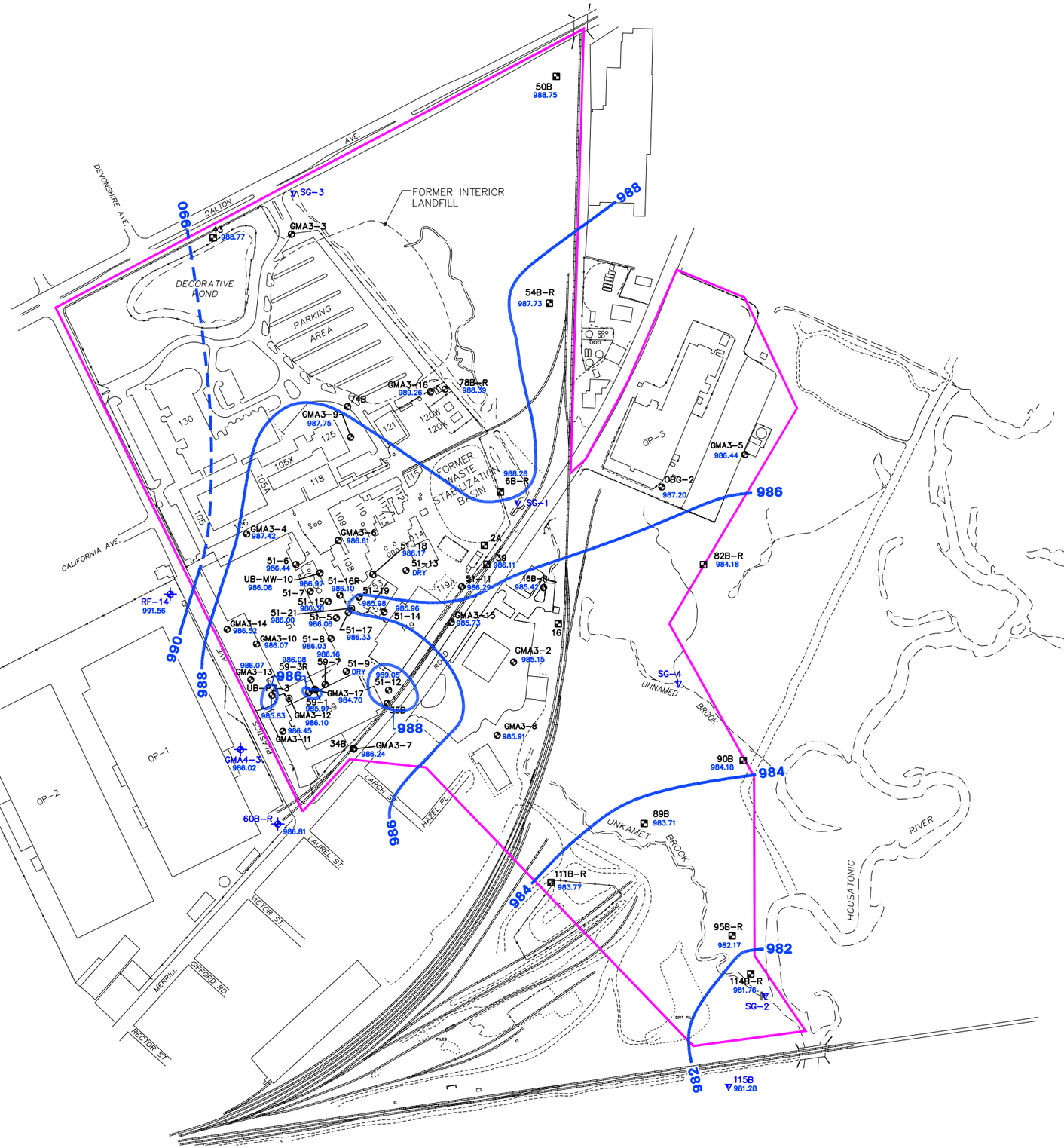


GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS
GMA 3 MONITORING PROGRAM

GENERALIZED GEOLOGIC CROSS SECTION B-B'

ARCADIS

FIGURE
4



LEGEND:

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

NOTES:

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

0 400' 800'

GRAPHIC SCALE

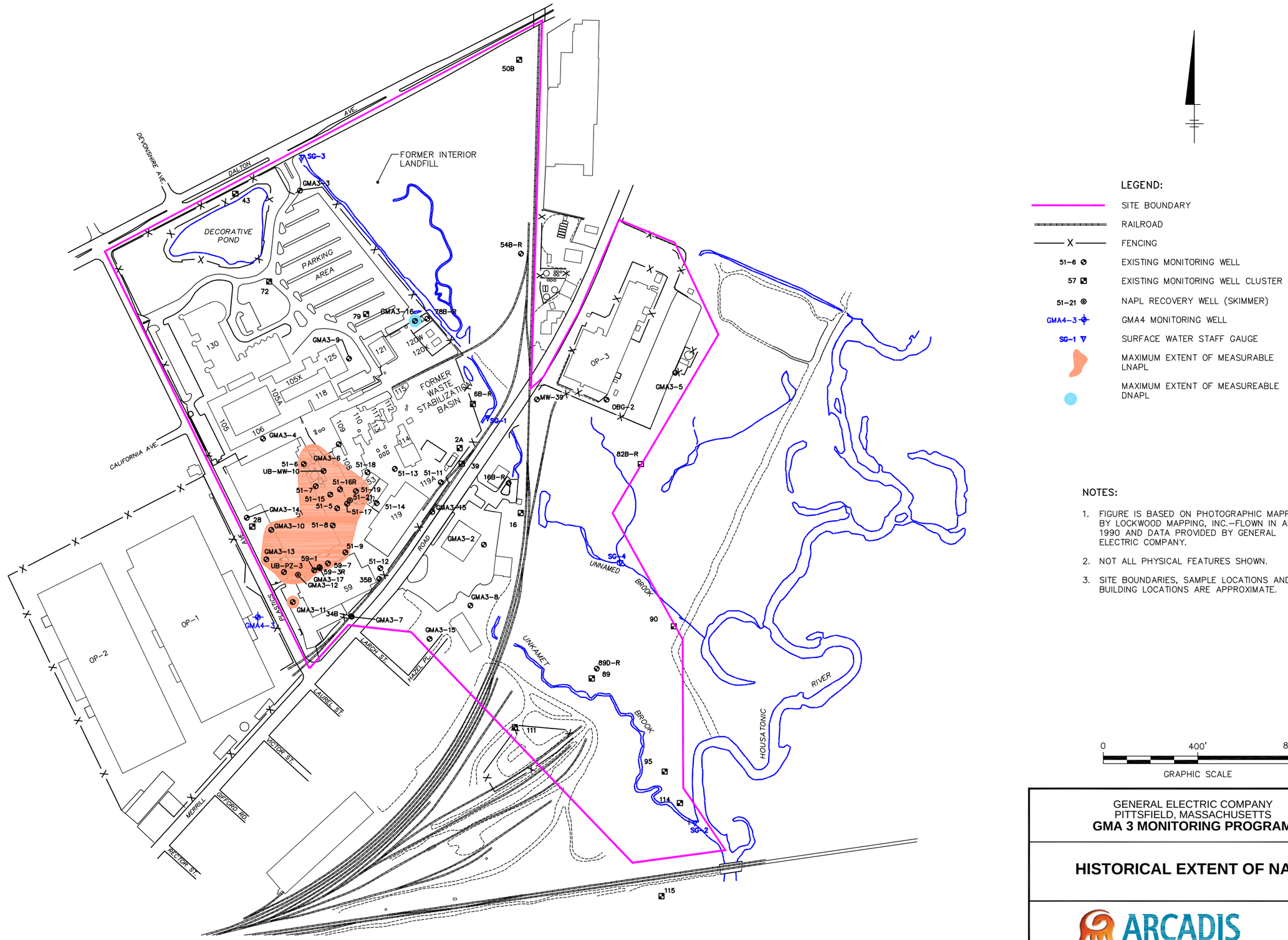
GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS
GMA 3 MONITORING PROGRAM

GROUNDWATER ELEVATION CONTOUR MAP - FALL 2008

ARCADIS

FIGURE 5

CITY:SYR DIV/GROUP:141 DB:DMW RCB DMW LD:DMW AM: PD: TM: TR: LYR:ON=*;OFF=*REF*
G:\GE\ENVCAD\SYR\ACUSE\ACTIVE\B0020186\0000\0002\DWG\GMA3\FALL 08\20186W06.DWG LAYOUT: 5 SAVED: 2/25/2009 9:06 AM ACADVER: 17.0S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: PLTFULL.CTB PLOTTED: 3/2/2009 2:50 PM BY: DECLERCQ, BRIAN
XREFS: PROJECTNAME: ----
20186X01
20186X00
IMAGES:



LEGEND:

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

NOTES:

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

0 400' 800'

GRAPHIC SCALE

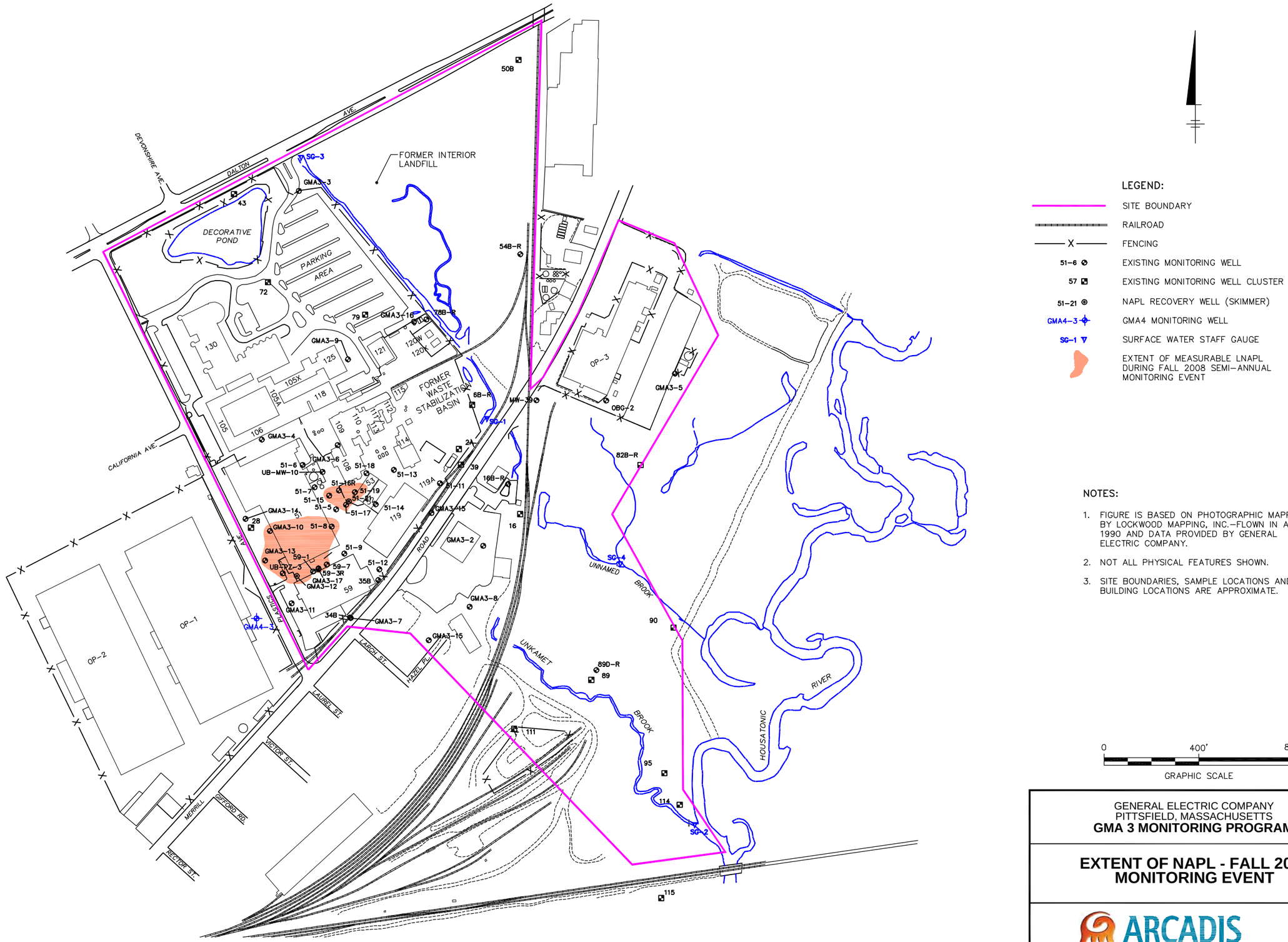
GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS
GMA 3 MONITORING PROGRAM

HISTORICAL EXTENT OF NAPL

ARCADIS

FIGURE 6

CITY: SYR DIV/GROUP: 85 DB: KEW LAF DMW LD: DMW AM: PD: TM: TR: LYR:ON=*;OFF=*REF*
G:\GE\ENVCAD\SYRACUSE\ACTIVE\B0020186\0000\0002\DWG\GMA3SPRING08\20186G03.DWG LAYOUT: 6SAVED: 2/25/2009 9:07 AM ACADVER: 17.0S (LMS TECH) PAGESETUP: ---PLOTSTYLETABLE: PLTFULL.CTB PLOTTED: 2/27/2009 1:01 PM BY: SARTORI, KATHERINE
XREFS: 20186X02 20186X00 IMAGES: PROJECTNAME: ---



LEGEND:

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

NOTES:

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

0 400' 800'

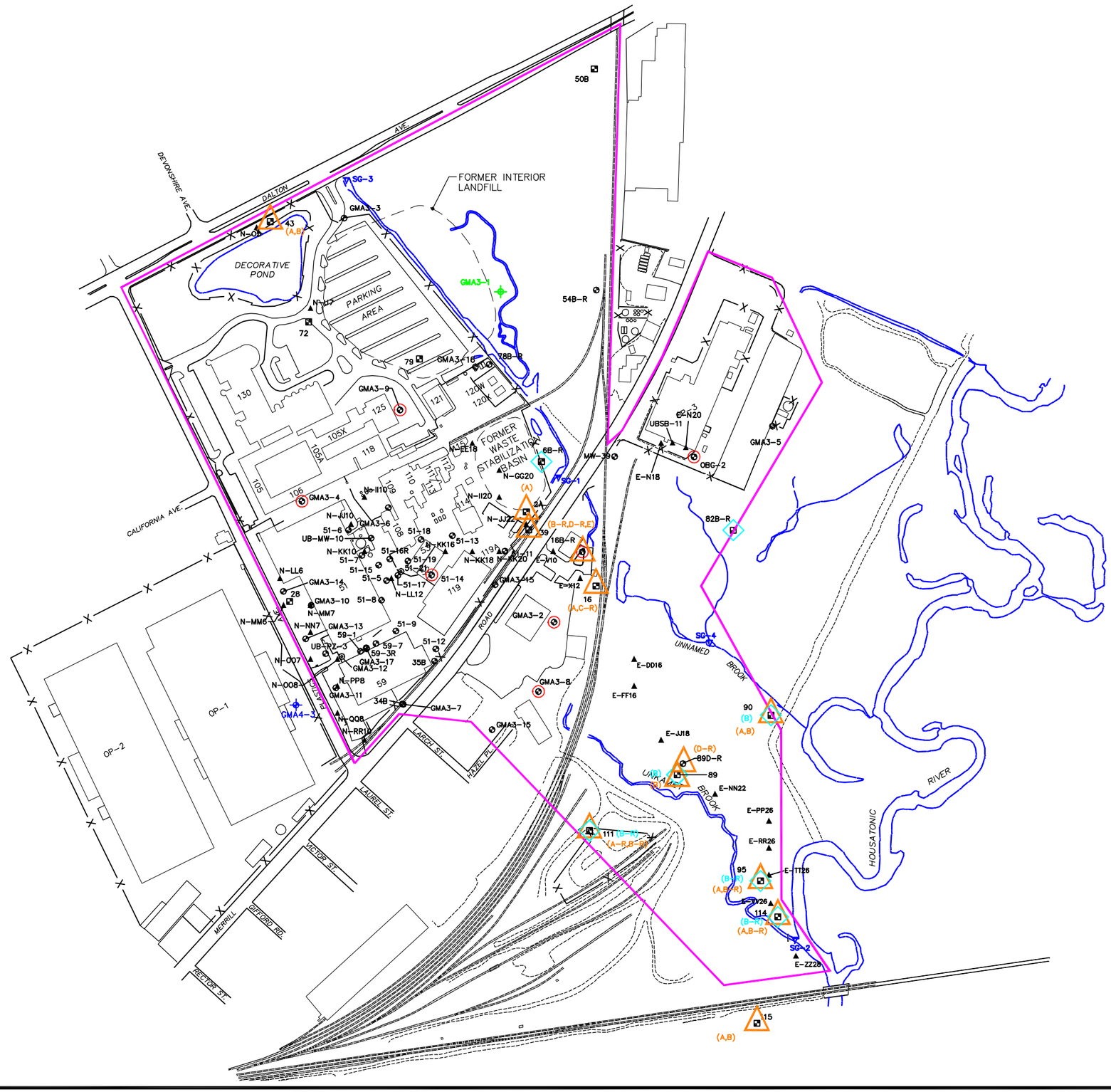
GRAPHIC SCALE

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS
GMA 3 MONITORING PROGRAM

EXTENT OF NAPL - FALL 2008 MONITORING EVENT

ARCADIS

FIGURE 7



LEGEND:

- SITE BOUNDARY
- RAILROAD
- FENCING
- UBSB-11 ▲ EXISTING SOIL BORING
- 51-6 ⊗ EXISTING MONITORING WELL
- 57 ⊠ EXISTING MONITORING WELL CLUSTER
- 51-21 ◉ NAPL RECOVERY WELL (SKIMMER)
- GMA4-3 ⊕ GMA4 MONITORING WELL
- SG-1 ▽ SURFACE WATER STAFF GAUGE
- ○ GW-2 SENTINEL/COMPLIANCE WELL
- ◇ GW-3 PERIMETER WELL
- △ NATURAL ATTENUATION MONITORING WELL
- ⊕ PROPOSED MONITORING WELL

NOTES:

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

0 400' 800'

GRAPHIC SCALE

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS
GMA 3 MONITORING PROGRAM

SPRING 2009 INTERIM GROUNDWATER MONITORING PROGRAM

ARCADIS

FIGURE
8

CITY: SYR DIV/GROUP: 85 DB: KEW LAF DMW LD: DMW AM: PD: TM: TR: LYR:ON=*;OFF=*REF*
G:\GE\ENVCAD\SYRACUSE\ACTIVE\B0020186\0000\0000021\DWG\GMA3\SPRING\G082018GR05.DWG LAYOUT: 8SAVED: 2/25/2009 9:10 AM ACADVER: 17.0S (LMS TECH) PAGESETUP: ---PLOTSTYLETABLE: PLTFULL.CTB PLOTTED: 2/27/2009 1:00 PM BY: SARTORI, KATHERINE
XREFS: IMAGES: PROJECTNAME: ---
20186X02
20186X00

ARCADIS

Appendices

ARCADIS

Appendix A

Groundwater Elevation and NAPL Monitoring / Recovery Data

Table A-1
Groundwater Elevation And Monitoring/Recovery Data
July 2008 - December 2008

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

Well Name	Measuring Point Elev. (feet)	Date	Depth to Water (ft BMP)	Depth to LNAPL (ft BMP)	LNAPL Thickness (feet)	Depth to DNAPL (ft BMP)	Total Depth (ft BMP)	DNAPL Thickness (feet)	Corrected Water Elev. (feet)	LNAPL Removed (Liters)	DNAPL Removed (Liters)
002A	994.16	10/28/2008	7.75	---	0.00	---	54.98	0.00	986.41	---	---
006B-R	993.62	10/28/2008	5.34	---	0.00	---	14.75	0.00	988.28	---	---
016A	991.77	10/29/2008	6.40	---	0.00	---	50.80	0.00	985.37	---	---
016B-R	994.87	10/1/2008	9.13	---	0.00	---	16.25	0.00	985.74	---	---
016B-R	994.87	10/2/2008	9.13	---	0.00	---	16.67	0.00	985.74	---	---
016B-R*	994.87	10/29/2008	9.45	---	0.00	---	16.18	0.00	985.42	---	---
016C-R	993.23	10/29/2008	7.33	---	0.00	---	101.97	0.00	985.90	---	---
039B-R	991.97	10/28/2008	5.86	---	0.00	---	13.82	0.00	986.11	---	---
039D-R	994.73	10/28/2008	8.35	---	0.00	---	63.35	0.00	986.38	---	---
039E	992.21	10/28/2008	5.25	---	0.00	---	240.00	0.00	986.96	---	---
043A	993.79	10/28/2008	5.02	---	0.00	---	51.37	0.00	988.77	---	---
043B	993.61	10/28/2008	4.84	---	0.00	---	21.32	0.00	988.77	---	---
050B	991.76	10/28/2008	3.01	---	0.00	---	14.83	0.00	988.75	---	---
51-05	996.44	7/16/2008	9.80	---	0.00	---	10.55	0.00	986.64	---	---
51-05	996.44	8/26/2008	10.25	---	0.00	---	10.54	0.00	986.19	---	---
51-05	996.44	9/26/2008	Well is submerged under water				NM	NM	NA	---	---
51-05	996.44	10/28/2008	10.36	---	0.00	---	10.42	0.00	986.08	---	---
51-05	996.44	11/25/2008	5.66	5.65	0.01	---	10.40	0.00	990.79	---	---
51-05	996.44	12/16/2008	9.28	9.25	0.03	---	10.48	0.00	987.19	---	---
51-06	997.36	7/16/2008	10.90	---	0.00	---	14.40	0.00	986.46	---	---
51-06	997.36	8/26/2008	10.96	---	0.00	---	14.36	0.00	986.40	---	---
51-06	997.36	9/15/2008	11.03	---	0.00	---	14.36	0.00	986.33	---	---
51-06	997.36	10/28/2008	10.92	---	0.00	---	14.27	0.00	986.44	---	---
51-06	997.36	11/25/2008	10.70	---	0.00	---	14.28	0.00	986.66	---	---
51-06	997.36	12/16/2008	9.95	---	0.00	---	14.25	0.00	987.41	---	---
51-07	997.08	7/16/2008	10.86	---	0.00	---	11.21	0.00	986.22	---	---
51-07	997.08	8/26/2008	10.94	---	0.00	---	11.23	0.00	986.14	---	---
51-07	997.08	9/30/2008	11.00	---	0.00	---	11.41	0.00	986.08	---	---
51-07	997.08	10/28/2008	10.11	---	0.00	---	12.00	0.00	986.97	---	---
51-07	997.08	11/25/2008	10.73	---	0.00	---	12.10	0.00	986.35	---	---
51-07	997.08	12/16/2008	9.95	---	0.00	---	12.09	0.00	987.13	---	---
51-08	997.08	7/1/2008	11.00	10.78	0.22	---	14.60	0.00	986.28	---	---
51-08	997.70	7/8/2008	11.55	10.91	0.64	---	14.60	0.00	986.75	0.395	---
51-08	997.08	7/16/2008	12.10	10.96	1.14	---	14.60	0.00	986.04	0.703	---
51-08	997.08	7/22/2008	12.22	11.10	1.12	---	14.62	0.00	985.90	0.691	---
51-08	997.08	7/29/2008	11.60	11.56	0.04	---	14.60	0.00	985.52	---	---
51-08	997.08	8/5/2008	10.82	10.75	0.07	---	14.60	0.00	986.33		---

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51-08	997.08	8/13/2008	11.60	10.80	0.80	---	14.61	0.00	986.22	0.494	---
51-08	997.70	8/19/2008	11.68	10.93	0.75	---	14.61	0.00	986.72	0.463	---
51-08	997.08	8/26/2008	12.11	11.05	1.06	---	14.61	0.00	985.96	0.654	---
51-08	997.08	9/2/2008	12.44	11.25	1.19	---	14.61	0.00	985.75	0.734	---
51-08	997.08	9/9/2008	12.36	11.20	1.16	---	14.61	0.00	985.80	0.716	---
51-08	997.70	9/16/2008	12.30	11.10	1.20	---	14.60	0.00	986.52	0.740	---
51-08	997.08	9/26/2008	12.25	11.15	1.10	---	14.60	0.00	985.85	0.679	---
51-08	997.08	9/30/2008	11.80	11.14	0.66	---	14.61	0.00	985.89	0.407	---
51-08	997.08	10/7/2008	12.10	11.10	1.00	---	14.60	0.00	985.91	0.617	---
51-08	997.70	10/14/2008	12.30	11.14	1.16	---	14.60	0.00	986.48	0.716	---
51-08	997.08	10/21/2008	12.30	11.20	1.10	---	14.60	0.00	985.80	0.679	---
51-08	997.08	10/28/2008	12.35	10.95	1.40	---	14.52	0.00	986.03	0.864	---
51-08	997.08	11/4/2008	11.90	10.72	1.18	---	14.60	0.00	986.28	0.728	---
51-08	997.08	11/11/2008	11.90	10.75	1.15	---	14.60	0.00	986.25	0.709	---
51-08	997.08	11/19/2008	11.60	10.73	0.87	---	14.60	0.00	986.29	0.537	---
51-08	997.08	11/25/2008	11.88	10.80	1.08	---	14.60	0.00	986.20	0.666	---
51-08	997.08	12/2/2008	11.84	10.70	1.14	---	14.60	0.00	986.30	0.703	---
51-08	997.08	12/9/2008	11.30	10.80	0.50	---	14.60	0.00	986.25	0.308	---
51-08	997.08	12/16/2008	10.40	9.98	0.42	---	14.60	0.00	987.07	0.259	---
51-08	997.08	12/22/2008	10.55	9.98	0.57	---	14.60	0.00	987.06	0.352	---
51-08	997.08	12/29/2008	10.08	9.64	0.44	---	14.60	0.00	987.41	0.271	---
51-09	997.70	7/8/2008	11.55	10.91	0.64	---	14.60	0.00	986.75	0.395	---
51-09	997.70	7/16/2008	11.15	---	0.00	---	11.59	0.00	986.55	---	---
51-09	997.70	8/26/2008	11.21	---	0.00	---	11.58	0.00	986.49	---	---
51-09	997.70	9/15/2008	11.30	---	0.00	---	11.58	0.00	986.40	---	---
51-09	997.70	9/30/2008	Dry at 12.59 (feet BMP)				12.59	NM	NA	---	---
51-09	997.70	10/28/2008	Dry at 9.70 (feet BMP)				9.70	NM	NA	---	---
51-09	997.70	11/13/2008	12.48	---	0.00	---	14.70	0.00	985.22	---	---
51-09	997.70	11/25/2008	11.20	---	0.00	---	14.60	0.00	986.50	---	---
51-09	997.70	12/16/2008	10.24	---	0.00	---	14.60	0.00	987.46	---	---
51-11	994.37	7/16/2008	8.65	---	0.00	---	13.55	0.00	985.72	---	---
51-11	994.37	8/26/2008	8.80	---	0.00	---	13.54	0.00	985.57	---	---
51-11	994.37	9/15/2008	8.45	---	0.00	---	13.55	0.00	985.92	---	---
51-11	994.37	10/28/2008	8.08	---	0.00	---	13.40	0.00	986.29	---	---
51-11	994.37	11/25/2008	8.08	---	0.00	---	13.50	0.00	986.29	---	---
51-11	994.37	12/16/2008	6.73	---	0.00	---	13.54	0.00	987.64	---	---
51-12	996.55	7/16/2008	7.70	---	0.00	---	13.34	0.00	988.85	---	---

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Well Name	Measuring Point Elev. (feet)	Date	Depth to Water (ft BMP)	Depth to LNAPL (ft BMP)	LNAPL Thickness (feet)	Depth to DNAPL (ft BMP)	Total Depth (ft BMP)	DNAPL Thickness (feet)	Corrected Water Elev. (feet)	LNAPL Removed (Liters)	DNAPL Removed (Liters)
51-12	996.55	8/26/2008	7.73	---	0.00	---	13.35	0.00	988.82	---	---
51-12	996.55	9/15/2008	7.73	---	0.00	---	13.34	0.00	988.82	---	---
51-12	996.55	10/28/2008	Well is submerged under water				NM	NM	NA	---	---
51-12	996.55	10/31/2008	7.50	---	0.00	---	13.35	0.00	989.05		---
51-12	996.55	11/25/2008	7.60	---	0.00	---	13.30	0.00	988.95	---	---
51-12	996.55	12/16/2008	7.38	---	0.00	---	13.38	0.00	989.17	---	---
51-13	997.42	7/16/2008	11.00	---	0.00	---	13.65	0.00	986.42	---	---
51-13	996.77	8/26/2008	Dry at 9.84 (feet BMP)				9.84	NM	NA	---	---
51-13	996.77	9/15/2008	Dry at 9.82 (feet BMP)				9.82	NM	NA	---	---
51-13	996.77	10/28/2008	Dry at 10.00 feet BMP				10.00	NM	NA	---	---
51-13	997.42	11/13/2008	11.04	---	0.00	---	14.05	0.00	986.38	---	---
51-13	997.42	11/25/2008	11.06	---	0.00	---	13.73	0.00	986.36	---	---
51-13	997.42	12/16/2008	10.05	---	0.00	---	13.75	0.00	987.37	---	---
51-14	996.77	7/16/2008	Dry at 9.83 (feet BMP)				9.83	NM	NA	---	---
51-14	996.77	8/26/2008	11.09	---	0.00	---	14.68	0.00	985.68	---	---
51-14	996.77	9/15/2008	11.00	---	0.00	---	14.68	0.00	985.77	---	---
51-14	996.77	9/30/2008	11.11	---	0.00	---	14.98	0.00	985.66	---	---
51-14*	996.77	10/24/2008	11.20	---	0.00	---	14.70	0.00	985.57	---	---
51-14	996.77	10/28/2008	10.81	---	0.00	---	14.70	0.00	985.96	---	---
51-14	996.77	11/25/2008	10.55	---	0.00	---	14.50	0.00	986.22	---	---
51-14	996.77	12/16/2008	9.56	---	0.00	---	14.48	0.00	987.21	---	---
51-15	996.43	7/16/2008	10.36	10.35	0.01	---	14.40	0.00	986.08	---	---
51-15	996.43	8/26/2008	10.48	10.46	0.02	---	14.55	0.00	985.97	---	---
51-15	996.43	9/26/2008	10.48	10.45	0.03	---	14.40	0.00	985.98	0.019	---
51-15	996.43	10/28/2008	10.10	10.05	0.05	---	14.35	0.00	986.38	---	---
51-15	996.43	11/25/2008	10.22	10.19	0.03	---	14.24	0.00	986.24	---	---
51-15	996.43	12/16/2008	9.35	9.30	0.05	---	14.27	0.00	987.13	---	---
51-16R	996.39	7/16/2008	10.40	10.36	0.04	---	14.50	0.00	986.03	---	---
51-16R	996.39	8/26/2008	10.65	10.50	0.15	---	14.50	0.00	985.88	---	---
51-16R	996.39	9/26/2008	10.80	10.60	0.20	---	14.50	0.00	985.78	0.123	---
51-16R	996.39	10/28/2008	10.30	10.29	0.01	---	14.00	0.00	986.10	---	---
51-16R	996.39	11/25/2008	10.24	10.20	0.04	---	14.51	0.00	986.19	---	---
51-16R	996.39	12/16/2008	9.23	---	0.00	---	14.50	0.00	987.16	---	---
51-17	996.43	7/16/2008	11.30	10.16	1.14	---	14.51	0.00	986.19	0.703	---
51-17	996.43	8/26/2008	11.35	10.25	1.10	---	14.48	0.00	986.10	0.679	---
51-17	996.43	9/26/2008	11.58	10.40	1.18	---	14.50	0.00	985.95	0.728	---
51-17	996.43	10/28/2008	11.05	10.03	1.02	---	14.48	0.00	986.33	---	---

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51-17	996.43	11/25/2008	11.30	10.20	1.10	---	14.50	0.00	986.15	0.679	---
51-17	996.43	12/16/2008	10.03	9.05	0.98	---	14.50	0.00	987.31	0.605	---
51-18	997.12	7/16/2008	11.12	---	0.00	---	12.60	0.00	986.00	---	---
51-18	997.12	8/26/2008	11.26	---	0.00	---	12.60	0.00	985.86	---	---
51-18	997.12	9/15/2008	11.15	---	0.00	---	12.60	0.00	985.97	---	---
51-18	997.12	10/28/2008	10.95	---	0.00	---	12.95	0.00	986.17	---	---
51-18	997.12	11/25/2008	10.90	---	0.00	---	12.60	0.00	986.22	---	---
51-18	997.12	12/16/2008	9.90	---	0.00	---	12.60	0.00	987.22	---	---
51-19	996.43	7/16/2008	10.63	10.60	0.03	---	14.08	0.00	985.83	---	---
51-19	996.43	8/26/2008	10.75	10.70	0.05	---	14.02	0.00	985.73	---	---
51-19	996.43	9/26/2008	11.03	10.81	0.22	---	14.02	0.00	985.60	0.136	---
51-19	996.43	10/28/2008	10.70	10.43	0.27	---	14.05	0.00	985.98	---	---
51-19	996.43	11/25/2008	10.50	10.40	0.10	---	14.10	0.00	986.02	---	---
51-19	996.43	12/16/2008	9.50	9.40	0.10	---	14.05	0.00	987.02	---	---
51-21	1001.49	7/2/2008	15.32	15.31	0.01	---	NM	0.00	986.18	---	---
51-21	1001.49	7/8/2008	15.35	P	< 0.01	---	NM	0.00	986.14	---	---
51-21	1001.49	7/15/2008	15.50	15.49	0.01	---	NM	0.00	986.00	---	---
51-21	1001.49	7/23/2008	15.60	15.59	0.01	---	NM	0.00	985.90	---	---
51-21	1001.49	7/30/2008	14.98	P	< 0.01	---	NM	0.00	986.51	---	---
51-21	1001.49	8/5/2008	15.20	P	< 0.01	---	NM	0.00	986.29	---	---
51-21	1001.49	8/13/2008	15.30	P	< 0.01	---	NM	0.00	986.19	---	---
51-21	1001.49	8/20/2008	15.45	P	< 0.01	---	NM	0.00	986.04	---	---
51-21	1001.49	8/27/2008	15.60	15.59	0.01	---	NM	0.00	985.90	---	---
51-21	1001.49	9/3/2008	15.94	P	< 0.01	---	NM	0.00	985.55	---	---
51-21	1001.49	9/8/2008	15.80	15.79	0.01	---	NM	0.00	985.70	---	---
51-21	1001.49	9/17/2008	15.60	P	< 0.01	---	NM	0.00	985.89	---	---
51-21	1001.49	9/23/2008	15.77	P	< 0.01	---	NM	0.00	985.72	---	---
51-21	1001.49	10/1/2008	15.65	P	< 0.01	---	NM	0.00	985.84	---	---
51-21	1001.49	10/7/2008	15.60	15.59	0.01	---	NM	0.00	985.90	---	---
51-21	1001.49	10/14/2008	15.68	P	< 0.01	---	NM	0.00	985.81	---	---
51-21	1001.49	10/21/2008	15.71	P	< 0.01	---	NM	0.00	985.78	---	---
51-21	1001.49	10/28/2008	15.50	15.49	0.01	---	NM	0.00	986.00	3.00	---
51-21	1001.49	11/4/2008	15.22	P	< 0.01	---	NM	0.00	986.27	---	---
51-21	1001.49	11/11/2008	15.33	P	< 0.01	---	NM	0.00	986.16	---	---
51-21	1001.49	11/18/2008	15.20	P	< 0.01	---	NM	0.00	986.29	---	---
51-21	1001.49	11/25/2008	15.39	P	< 0.01	---	NM	0.00	986.10	---	---
51-21	1001.49	12/2/2008	15.25	P	< 0.01	---	NM	0.00	986.24	---	---

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51-21	1001.49	12/9/2008	15.25	P	< 0.01	---	NM	0.00	986.24	---	---
51-21	1001.49	12/16/2008	14.35	P	< 0.01	---	NM	0.00	987.14	---	---
51-21	1001.49	12/24/2008	14.55	P	< 0.01	---	NM	0.00	986.94	---	---
51-21	1001.49	12/30/2008	14.10	P	< 0.01	---	NM	0.00	987.39	---	---
054B-R	991.49	10/28/2008	3.76	---	0.00	---	15.32	0.00	987.73	---	---
59-01	997.52	7/16/2008	11.15	---	0.00	---	11.43	0.00	986.37	---	---
59-01	997.52	8/26/2008	11.28	---	0.00	---	11.41	0.00	986.24	---	---
59-01	997.52	9/26/2008	Dry at 11.44 (feet BMP)				11.44	NM	NA	---	---
59-01	997.52	9/29/2008	12.02	---	0.00	---	13.88	0.00	985.50	---	---
59-01	997.52	10/28/2008	11.55	P	< 0.01	---	14.12	0.00	985.97	---	---
59-01	997.52	11/13/2008	11.10	---	0.00	---	18.40	0.00	986.42	---	---
59-01	997.52	11/25/2008	11.32	11.30	0.02	---	18.24	0.00	986.22	---	---
59-01	997.52	12/16/2008	10.68	10.46	0.22	---	18.24	0.00	987.04	---	---
59-03R	997.64	7/16/2008	12.00	11.50	0.50	---	17.02	0.00	986.11	0.308	---
59-03R	997.64	8/26/2008	12.15	11.60	0.55	---	17.05	0.00	986.00	0.339	---
59-03R	997.64	9/26/2008	12.98	11.70	1.28	---	17.02	0.00	985.85	0.790	---
59-03R	997.64	10/28/2008	12.31	11.50	0.81	---	16.98	0.00	986.08	---	---
59-03R	997.64	11/25/2008	12.50	11.35	1.15	---	17.02	0.00	986.21	0.710	---
59-03R	997.64	12/16/2008	11.58	10.48	1.10	---	17.02	0.00	987.08	0.679	---
59-07	997.96	7/16/2008	11.82	11.80	0.02	---	23.50	0.00	986.16	---	---
59-07	997.96	8/26/2008	11.90	11.85	0.05	---	23.50	0.00	986.11	---	---
59-07	997.96	9/26/2008	12.07	12.05	0.02	---	23.50	0.00	985.91	0.012	---
59-07	997.96	10/3/2008	12.19	---	0.00	---	23.61	0.00	985.77	---	---
59-07	997.96	10/3/2008	12.01	11.98	0.03	---	23.51	0.00	985.98	---	---
59-07	997.96	10/28/2008	11.82	11.80	0.02	---	23.45	0.00	986.16	---	---
59-07	997.96	11/25/2008	11.65	11.60	0.05	---	23.43	0.00	986.36	---	---
59-07	997.96	12/16/2008	10.47	10.44	0.03	---	23.51	0.00	987.52	---	---
078B-R	988.83	7/16/2008	1.20	---	0.00	---	11.70	0.00	987.63	---	---
078B-R	988.83	8/26/2008	1.60	---	0.00	---	11.70	0.00	987.23	---	---
078B-R	988.83	9/15/2008	0.72	---	0.00	---	11.74	0.00	988.11	---	---
078B-R	988.83	10/28/2008	Well is submerged under water				NM	NM	NA	---	---
078B-R	988.83	10/31/2008	0.44	---	0.00	---	11.65	0.00	988.39		---
078B-R	988.83	11/25/2008	Well is submerged under water				NM	NM	NA	---	---
078B-R	988.83	12/16/2008	Well is submerged under water				NM	NM	NA	---	---
082B-R	989.90	10/29/2008	5.72	---	0.00	---	11.62	0.00	984.18	---	---
089A	985.76	10/29/2008	1.96	---	0.00	---	47.06	0.00	983.80	---	---
089B	986.03	10/29/2008	2.32	---	0.00	---	8.63	0.00	983.71	---	---

Table A-1
Groundwater Elevation And Monitoring/Recovery Data
July 2008 - December 2008

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

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089D-R	987.11	10/29/2008	3.12	---	0.00	---	79.10	0.00	983.99	---	---
090A	988.07	10/29/2008	3.93	---	0.00	---	51.35	0.00	984.14	---	---
090B	989.10	10/29/2008	4.92	---	0.00	---	12.58	0.00	984.18	---	---
095A	987.18	10/29/2008	5.00	---	0.00	---	50.75	0.00	982.18	---	---
095B-R	986.24	10/29/2008	4.07	---	0.00	---	13.35	0.00	982.17	---	---
111A-R	997.35	10/29/2008	13.25	---	0.00	---	51.91	0.00	984.10	---	---
111B-R	997.48	10/29/2008	13.71	---	0.00	---	19.49	0.00	983.77	---	---
114A	986.16	10/29/2008	4.17	---	0.00	---	52.00	0.00	981.99	---	---
114B-R	985.54	10/29/2008	3.78	---	0.00	---	14.95	0.00	981.76	---	---
115A	988.53	10/29/2008	6.61	---	0.00	---	42.53	0.00	981.92	---	---
115B	990.90	10/29/2008	9.62	---	0.00	---	15.50	0.00	981.28	---	---
GMA3-2	991.94	10/1/2008	7.31	---	0.00	---	14.35	0.00	984.63	---	---
GMA3-2*	991.94	10/24/2008	7.70	---	0.00	---	14.55	0.00	984.24	---	---
GMA3-2	991.94	10/29/2008	6.79	---	0.00	---	14.35	0.00	985.15	---	---
GMA3-3	990.45	10/28/2008	Well is submerged under water				NM	NM	NA	---	---
GMA3-4	994.60	9/30/2008	7.20	---	0.00	---	13.33	0.00	987.40	---	---
GMA3-4*	994.60	10/24/2008	7.15	---	0.00	---	12.85	0.00	987.45	---	---
GMA3-4	994.60	10/28/2008	7.18	---	0.00	---	13.19	0.00	987.42	---	---
GMA3-4	991.45	10/31/2008	0.55	---	0.00	---	12.15	0.00	990.90		---
GMA3-5	993.67	10/29/2008	7.23	---	0.00	---	15.30	0.00	986.44	---	---
GMA3-6	1003.22	10/28/2008	16.61	---	0.00	---	23.58	0.00	986.61	---	---
GMA3-7	1000.17	7/16/2008	13.80	---	0.00	---	19.75	0.00	986.37	---	---
GMA3-7	1000.17	10/28/2008	13.93	---	0.00	---	19.79	0.00	986.24	---	---
GMA3-8	996.24	10/1/2008	10.60	---	0.00	---	15.51	0.00	985.64	---	---
GMA3-8*	996.24	10/24/2008	11.77	---	0.00	---	16.48	0.00	984.47	---	---
GMA3-8	996.24	10/29/2008	10.33	---	0.00	---	16.32	0.00	985.91	---	---
GMA3-9	992.39	10/1/2008	5.05	---	0.00	---	12.45	0.00	987.34	---	---
GMA3-9	992.39	10/24/2008	5.34	---	0.00	---	12.60	0.00	987.05	---	---
GMA3-9*	992.39	10/28/2008	4.64	---	0.00	---	12.63	0.00	987.75	---	---
GMA3-10	997.54	7/1/2008	11.10	11.00	0.10	---	17.73	0.00	986.53	---	---
GMA3-10	997.54	7/8/2008	11.24	11.14	0.10	---	17.72	0.00	986.39	---	---
GMA3-10	997.54	7/16/2008	11.75	11.24	0.51	---	17.72	0.00	986.26	0.315	---
GMA3-10	997.54	7/22/2008	11.85	11.35	0.50	---	17.70	0.00	986.16	0.308	---
GMA3-10	997.54	7/29/2008	11.09	10.98	0.11	---	17.71	0.00	986.55	---	---
GMA3-10	997.54	8/5/2008	11.11	10.97	0.14	---	17.71	0.00	986.56		---
GMA3-10	997.54	8/13/2008	11.42	11.10	0.32	---	17.71	0.00	986.42	0.197	---
GMA3-10	997.54	8/19/2008	11.41	11.18	0.23	---	17.74	0.00	986.34	---	---

Table A-1
Groundwater Elevation And Monitoring/Recovery Data
July 2008 - December 2008

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

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GMA3-10	997.54	8/26/2008	11.86	11.32	0.54	---	17.74	0.00	986.18	0.333	---
GMA3-10	997.54	9/2/2008	11.98	11.50	0.48	---	17.73	0.00	986.01	0.296	---
GMA3-10	997.54	9/9/2008	11.68	11.56	0.12	---	17.73	0.00	985.97	---	---
GMA3-10	997.54	9/16/2008	11.68	11.53	0.15	---	17.73	0.00	986.00	---	---
GMA3-10	997.54	9/26/2008	11.81	11.60	0.21	---	17.71	0.00	985.93	0.130	---
GMA3-10	997.54	9/30/2008	11.73	11.55	0.18	---	17.73	0.00	985.98	0.111	---
GMA3-10	997.54	10/7/2008	11.65	11.50	0.15	---	17.72	0.00	986.03	---	---
GMA3-10	997.54	10/14/2008	11.75	11.55	0.20	---	17.71	0.00	985.98	---	---
GMA3-10	997.54	10/21/2008	11.80	11.61	0.19	---	17.71	0.00	985.92	---	---
GMA3-10	997.54	10/28/2008	11.75	11.45	0.30	---	17.70	0.00	986.07	0.185	---
GMA3-10	997.54	11/4/2008	11.28	11.20	0.08	---	17.72	0.00	986.33	---	---
GMA3-10	997.54	11/11/2008	11.20	11.15	0.05	---	17.70	0.00	986.39	---	---
GMA3-10	997.54	11/19/2008	11.26	11.11	0.15	---	17.71	0.00	986.42	---	---
GMA3-10	997.54	11/25/2008	11.31	11.15	0.16	---	17.70	0.00	986.38	---	---
GMA3-10	997.54	12/2/2008	11.24	11.11	0.13	---	17.73	0.00	986.42	---	---
GMA3-10	997.54	12/9/2008	11.33	11.06	0.27	---	17.72	0.00	986.46	0.167	---
GMA3-10	997.54	12/16/2008	10.44	10.40	0.04	---	17.72	0.00	987.14	---	---
GMA3-10	997.54	12/22/2008	10.40	10.26	0.14	---	17.71	0.00	987.27	---	---
GMA3-10	997.54	12/29/2008	10.16	9.96	0.20	---	17.70	0.00	987.57	---	---
GMA3-11	997.25	7/16/2008	10.58	---	0.00	---	17.95	0.00	986.67	---	---
GMA3-11	997.25	8/26/2008	10.72	---	0.00	---	17.95	0.00	986.53	---	---
GMA3-11	997.25	9/15/2008	10.90	---	0.00	---	17.94	0.00	986.35	---	---
GMA3-11	997.25	10/28/2008	10.80	---	0.00	---	17.95	0.00	986.45	---	---
GMA3-11	997.25	11/25/2008	10.55	---	0.00	---	17.93	0.00	986.70	---	---
GMA3-11	997.25	12/16/2008	9.82	---	0.00	---	17.97	0.00	987.43	---	---
GMA3-12	997.84	7/1/2008	11.37	11.25	0.12	---	21.20	0.00	986.58	---	---
GMA3-12	997.84	7/8/2008	11.65	11.46	0.19	---	21.20	0.00	986.37	---	---
GMA3-12	997.84	7/16/2008	11.80	11.61	0.19	---	21.20	0.00	986.22	---	---
GMA3-12	997.84	7/22/2008	11.94	11.73	0.21	---	21.20	0.00	986.10	---	---
GMA3-12	997.84	7/29/2008	11.51	11.32	0.19	---	21.20	0.00	986.51	---	---
GMA3-12	997.84	8/5/2008	11.55	11.30	0.25	---	21.20	0.00	986.52	0.618	---
GMA3-12	997.84	8/13/2008	11.58	11.43	0.15	---	21.22	0.00	986.40	---	---
GMA3-12	997.84	8/19/2008	11.67	11.56	0.11	---	21.23	0.00	986.27	---	---
GMA3-12	997.84	8/26/2008	11.92	11.70	0.22	---	21.21	0.00	986.12	---	---
GMA3-12	997.84	9/2/2008	12.10	11.88	0.22	---	21.21	0.00	985.94	---	---
GMA3-12	997.84	9/9/2008	12.10	11.89	0.21	---	21.22	0.00	985.94	---	---
GMA3-12	997.84	9/16/2008	12.11	11.83	0.28	---	21.23	0.00	985.99	0.692	---

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Groundwater Elevation And Monitoring/Recovery Data
July 2008 - December 2008

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Groundwater Management Area 3
General Electric Company - Pittsfield, Massachusetts

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GMA3-12	997.84	9/26/2008	12.30	11.90	0.40	---	21.22	0.00	985.91	0.989	---
GMA3-12	997.84	9/30/2008	12.02	11.87	0.15	---	21.22	0.00	985.96	0.371	---
GMA3-12	997.84	10/7/2008	11.93	11.80	0.13	---	21.20	0.00	986.03	---	---
GMA3-12	997.84	10/14/2008	12.09	11.86	0.23	---	21.24	0.00	985.96	---	---
GMA3-12	997.84	10/21/2008	12.15	11.95	0.20	---	21.23	0.00	985.88	---	---
GMA3-12	997.84	10/28/2008	12.39	11.69	0.70	---	21.20	0.00	986.10	1.730	---
GMA3-12	997.84	11/4/2008	11.64	11.50	0.14	---	21.24	0.00	986.33	---	---
GMA3-12	997.84	11/11/2008	11.70	11.48	0.22	---	21.20	0.00	986.34	---	---
GMA3-12	997.84	11/19/2008	11.63	11.41	0.22	---	21.20	0.00	986.41	---	---
GMA3-12	997.84	11/25/2008	11.80	11.45	0.35	---	21.20	0.00	986.37	0.865	---
GMA3-12	997.84	12/2/2008	11.50	11.42	0.08	---	21.20	0.00	986.41	---	---
GMA3-12	997.84	12/9/2008	11.53	11.42	0.11	---	21.23	0.00	986.41	---	---
GMA3-12	997.84	12/16/2008	10.88	10.70	0.18	---	21.23	0.00	987.13	---	---
GMA3-12	997.84	12/22/2008	10.75	10.65	0.10	---	21.23	0.00	987.18	---	---
GMA3-12	997.84	12/29/2008	10.40	10.34	0.06	---	21.22	0.00	987.50	---	---
GMA3-13	997.73	7/1/2008	11.31	11.20	0.11	---	17.40	0.00	986.52	0.062	---
GMA3-13	997.73	7/8/2008	11.50	11.28	0.22	---	17.36	0.00	986.43	0.136	---
GMA3-13	997.73	7/16/2008	11.54	11.43	0.11	---	17.40	0.00	986.29	0.068	---
GMA3-13	997.73	7/22/2008	11.64	11.53	0.11	---	17.36	0.00	986.19	0.068	---
GMA3-13	997.73	7/29/2008	11.19	---	0.00	---	17.38	0.00	986.54	---	---
GMA3-13	997.73	8/5/2008	11.15	11.13	0.02	---	17.38	0.00	986.60	0.012	---
GMA3-13	997.73	8/13/2008	11.30	11.29	0.01	---	17.38	0.00	986.44	0.006	---
GMA3-13	997.73	8/19/2008	11.40	---	0.00	---	17.38	0.00	986.33	---	---
GMA3-13	997.73	8/26/2008	11.62	11.50	0.12	---	17.40	0.00	986.22	0.074	---
GMA3-13	997.73	9/2/2008	11.93	11.70	0.23	---	17.40	0.00	986.01	0.142	---
GMA3-13	997.73	9/9/2008	11.77	11.75	0.02	---	17.40	0.00	985.98	0.012	---
GMA3-13	997.73	9/16/2008	11.72	11.70	0.02	---	17.40	0.00	986.03	0.012	---
GMA3-13	997.73	9/26/2008	11.81	11.80	0.01	---	17.40	0.00	985.93	0.006	---
GMA3-13	997.73	9/30/2008	11.77	11.75	0.02	---	17.40	0.00	985.98	0.012	---
GMA3-13	997.73	10/7/2008	11.71	11.70	0.01	---	17.38	0.00	986.03	0.006	---
GMA3-13	997.73	10/14/2008	11.74	11.73	0.01	---	17.40	0.00	986.00	0.006	---
GMA3-13	997.73	10/21/2008	11.80	11.78	0.02	---	17.40	0.00	985.95	0.012	---
GMA3-13	997.73	10/28/2008	11.69	11.66	0.03	---	17.39	0.00	986.07	0.019	---
GMA3-13	997.73	11/4/2008	11.40	---	0.00	---	17.38	0.00	986.33	---	---
GMA3-13	997.73	11/11/2008	11.30	---	0.00	---	17.38	0.00	986.43	---	---
GMA3-13	997.73	11/19/2008	11.32	---	0.00	---	17.41	0.00	986.41	---	---
GMA3-13	997.73	11/25/2008	11.35	---	0.00	---	17.40	0.00	986.38	---	---

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Groundwater Elevation And Monitoring/Recovery Data
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General Electric Company - Pittsfield, Massachusetts

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GMA3-13	997.73	12/2/2008	11.32	11.30	0.02	---	17.40	0.00	986.43	0.012	---
GMA3-13	997.73	12/9/2008	11.28	11.27	0.01	---	17.41	0.00	986.46	0.006	---
GMA3-13	997.73	12/16/2008	10.62	10.60	0.02	---	17.40	0.00	987.13	0.012	---
GMA3-13	997.73	12/22/2008	10.65	10.44	0.21	---	17.42	0.00	987.28	0.130	---
GMA3-13	997.73	12/29/2008	10.69	10.14	0.55	---	17.40	0.00	987.55	0.339	---
GMA3-14	997.42	7/16/2008	10.95	---	0.00	---	16.46	0.00	986.47	---	---
GMA3-14	997.42	8/26/2008	10.96	---	0.00	---	16.43	0.00	986.46	---	---
GMA3-14	997.42	9/15/2008	10.98	---	0.00	---	16.48	0.00	986.44	---	---
GMA3-14	997.42	10/28/2008	10.90	---	0.00	---	16.43	0.00	986.52	---	---
GMA3-14	997.42	11/25/2008	10.41	---	0.00	---	16.95	0.00	987.01	---	---
GMA3-14	997.42	12/16/2008	9.90	---	0.00	---	16.46	0.00	987.52	---	---
GMA3-15	996.74	7/16/2008	11.64	---	0.00	---	17.18	0.00	985.10	---	---
GMA3-15	996.74	10/28/2008	11.01	---	0.00	---	17.20	0.00	985.73	---	---
GMA3-16	989.26	7/16/2008	11.32	---	0.00	---	12.30	0.00	977.94	---	---
GMA3-16	989.26	8/26/2008	1.66	---	0.00	---	12.24	0.00	987.60	---	---
GMA3-16	989.26	9/15/2008	0.74	---	0.00	---	12.26	0.00	988.52	---	---
GMA3-16	989.26	9/26/2008	0.73	---	0.00	---	12.25	0.00	988.53	---	---
GMA3-16	989.26	10/28/2008	0.00	---	0.00	---	12.31	0.00	989.26	---	---
GMA3-16	989.26	11/25/2008	0.70	---	0.00	---	12.20	0.00	988.56	---	---
GMA3-16	989.26	12/16/2008	Water above riser				12.22	NM	NA	---	---
GMA3-17	1002.00	7/2/2008	16.88	P	< 0.01	---	NM	0.00	985.12	---	---
GMA3-17	1002.00	7/8/2008	16.95	16.94	0.01	---	NM	0.00	985.06	---	---
GMA3-17	1002.00	7/15/2008	17.02	17.01	0.01	---	NM	NM	984.99	---	---
GMA3-17	1002.00	7/23/2008	17.20	P	< 0.01	---	NM	NM	984.80	---	---
GMA3-17	1002.00	7/30/2008	16.71	P	< 0.01	---	NM	0.00	985.29	---	---
GMA3-17	1002.00	8/5/2008	16.75	P	< 0.01	---	NM	0.00	985.25	---	---
GMA3-17	1002.00	8/13/2008	16.90	P	< 0.01	---	NM	0.00	985.10	---	---
GMA3-17	1002.00	8/20/2008	17.10	P	< 0.01	---	NM	NM	984.90	---	---
GMA3-17	1002.00	8/27/2008	17.20	P	< 0.01	---	NM	NM	984.80	---	---
GMA3-17	1002.00	9/3/2008	17.40	P	< 0.01	---	NM	0.00	984.60	---	---
GMA3-17	1002.00	9/8/2008	17.40	P	< 0.01	---	NM	0.00	984.60	---	---
GMA3-17	1002.00	9/17/2008	17.25	P	< 0.01	---	NM	NM	984.75	---	---
GMA3-17	1002.00	9/23/2008	17.35	P	< 0.01	---	NM	NM	984.65	---	---
GMA3-17	1002.00	10/1/2008	17.29	P	< 0.01	---	NM	NM	984.71	---	---
GMA3-17	1002.00	10/7/2008	17.30	P	< 0.01	---	NM	NM	984.70	---	---
GMA3-17	1002.00	10/14/2008	17.40	P	< 0.01	---	NM	NM	984.60	---	---
GMA3-17	1002.00	10/21/2008	17.40	P	< 0.01	---	NM	NM	984.60	---	---

Table A-1
Groundwater Elevation And Monitoring/Recovery Data
July 2008 - December 2008

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

Well Name	Measuring Point Elev. (feet)	Date	Depth to Water (ft BMP)	Depth to LNAPL (ft BMP)	LNAPL Thickness (feet)	Depth to DNAPL (ft BMP)	Total Depth (ft BMP)	DNAPL Thickness (feet)	Corrected Water Elev. (feet)	LNAPL Removed (Liters)	DNAPL Removed (Liters)
GMA3-17	1002.00	10/28/2008	17.30	P	< 0.01	---	NM	NM	984.70	---	---
GMA3-17	1002.00	11/4/2008	16.97	P	< 0.01	---	NM	NM	985.03	---	---
GMA3-17	1002.00	11/11/2008	16.90	P	< 0.01	---	NM	NM	985.10	---	---
GMA3-17	1002.00	11/18/2008	16.90	P	< 0.01	---	NM	NM	985.10	---	---
GMA3-17	1002.00	11/25/2008	17.05	P	< 0.01	---	NM	NM	984.95	---	---
GMA3-17	1002.00	12/2/2008	16.90	P	< 0.01	---	NM	0.00	985.10	---	---
GMA3-17	1002.00	12/9/2008	16.90	P	< 0.01	---	NM	0.00	985.10	---	---
GMA3-17	1002.00	12/16/2008	15.20	P	< 0.01	---	NM	NM	986.80	---	---
GMA3-17	1002.00	12/24/2008	16.10	P	< 0.01	---	NM	NM	985.90	---	---
GMA3-17	1002.00	12/30/2008	15.78	P	< 0.01	---	NM	0.00	986.22	---	---
OBG-2	992.20	10/1/2008	5.40	---	0.00	---	14.75	0.00	986.80	---	---
OBG-2	992.20	10/1/2008	5.25	---	0.00	---	14.67	0.00	986.95	---	---
OBG-2*	992.20	10/24/2008	6.12	---	0.00	---	15.13	0.00	986.08	---	---
OBG-2	992.20	10/29/2008	5.00	---	0.00	---	15.18	0.00	987.20	---	---
UB-MW-10	995.99	7/16/2008	9.90	---	0.00	---	14.30	0.00	986.09	---	---
UB-MW-10	995.99	8/26/2008	10.00	---	0.00	---	14.28	0.00	985.99	---	---
UB-MW-10	995.99	9/15/2008	10.05	---	0.00	---	14.30	0.00	985.94	---	---
UB-MW-10	995.99	10/28/2008	9.91	---	0.00	---	14.35	0.00	986.08	---	---
UB-MW-10	995.99	11/25/2008	9.58	---	0.00	---	14.20	0.00	986.41	---	---
UB-MW-10	995.99	12/16/2008	8.75	---	0.00	---	14.30	0.00	987.24	---	---
UB-PZ-3	998.15	7/16/2008	12.25	12.10	0.15	---	13.40	0.00	986.04	0.052	---
UB-PZ-3	998.15	8/26/2008	12.40	12.16	0.24	---	13.42	0.00	985.97	0.022	---
UB-PZ-3	998.15	9/26/2008	12.50	12.45	0.05	---	13.42	0.00	985.70	0.017	---
UB-PZ-3	998.15	10/28/2008	12.41	12.31	0.10	---	13.49	0.00	985.83	---	---
UB-PZ-3	998.15	11/25/2008	12.09	11.88	0.21	---	13.48	0.00	986.26	0.038	---
UB-PZ-3	998.15	12/16/2008	11.40	11.20	0.20	---	13.42	0.00	986.94	0.070	---
Unkamet Brook Staff Gauges											
GMA3-SG-1	988.90	10/28/2008	3.25	Chiseled square in concrete headwall at Outfall 009C					992.15	---	---
GMA3-SG-1	988.90	10/29/2008	3.34	Chiseled square in concrete headwall at Outfall 009C					992.24	---	---
GMA3-SG-2	981.61	10/28/2008	2.78	See Note 6 regarding depth to water					984.39	---	---
GMA3-SG-3	989.42	10/28/2008	3.16	See Note 6 regarding depth to water					992.58	---	---
GMA3-SG-3	989.42	10/29/2008	3.08	See Note 6 regarding depth to water					992.50	---	---
GMA3-SG-4	989.71	10/28/2008	0.88	See Note 6 regarding depth to water					989.42	---	---
GMA4 Monitoring Wells (Adjacent to GMA3)											
060B-R	1002.79	10/28/2008	16.02	---	0.00	---	20.60	0.00	986.77	---	---
060B-R	1002.79	10/29/2008	15.98	---	0.00	---	20.79	0.00	986.81	---	---
GMA4-3	1,003.95	7/23/2008	17.80	---	0.00	---	26.24	0.00	986.15	---	---

Table A-1
Groundwater Elevation And Monitoring/Recovery Data
July 2008 - December 2008

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

Well Name	Measuring Point Elev. (feet)	Date	Depth to Water (ft BMP)	Depth to LNAPL (ft BMP)	LNAPL Thickness (feet)	Depth to DNAPL (ft BMP)	Total Depth (ft BMP)	DNAPL Thickness (feet)	Corrected Water Elev. (feet)	LNAPL Removed (Liters)	DNAPL Removed (Liters)
GMA4-3	1,003.95	8/26/2008	17.71	---	0.00	---	26.25	0.00	986.24	---	---
GMA4-3	1,003.95	9/15/2008	17.93	---	0.00	---	26.24	0.00	986.02	---	---
GMA4-3	1,003.95	10/6/2008	18.05	---	0.00	---	26.10	0.00	985.90	---	---
GMA4-3	1,003.95	10/22/2008	18.16	---	0.00	---	26.20	0.00	985.79	---	---
GMA4-3	1,003.95	10/28/2008	17.98	---	0.00	---	26.95	0.00	985.97	---	---
GMA4-3	1,003.95	10/29/2008	17.93	---	0.00	---	26.15	0.00	986.02	---	---
GMA4-3	1,003.95	11/26/2008	17.60	---	0.00	---	26.30	0.00	986.35	---	---
GMA4-3	1,003.95	12/16/2008	16.91	---	0.00	---	26.30	0.00	987.04	---	---
RF-14	1,001.59	10/28/2008	10.11	---	0.00	---	22.45	0.00	991.48	---	---
RF-14	1,001.59	10/29/2008	10.03	---	0.00	---	22.43	0.00	991.56	---	---

Notes:

1. ft BMP - feet Below Measuring Point.
2. --- indicates LNAPL or DNAPL was not present in a measurable quantity.
3. NA indicates information not available.
4. NM indicates information not measured.
5. P indicates that LNAPL is present at a thickness that is < 0.01 feet, the corresponding thickness is recorded as such.
6. Survey reference points were established on the GMA 3 staff gauges. The "Depth to Water" value(s) provided in the above table refer to the vertical distance from the surveyed reference point to the water surface.
7. * Indicates well was sampled during the fall 2008 GMA 3 sampling event.

Table A-2
Housatonic River Discharge At Coltsville, MA USGS Gauging Station
July - December 2008

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

Date	Maximum Discharge (cfs)	Minimum Discharge (cfs)	Comments
1-Jul	100	76	
2-Jul	74	53	
3-Jul	54	46	
4-Jul	58	49	
5-Jul	56	49	
6-Jul	56	49	
7-Jul	53	45	
8-Jul	49	41	
9-Jul	122	40	
10-Jul	96	62	
11-Jul	66	50	
12-Jul	52	41	
13-Jul	42	37	
14-Jul	42	37	
15-Jul	40	35	
16-Jul	38	31	
17-Jul	34	28	
18-Jul	50	27	
19-Jul	74	41	
20-Jul	53	43	
21-Jul	43	37	
22-Jul	167	35	
23-Jul	225	156	
24-Jul	547	195	
25-Jul	543	294	
26-Jul	298	130	
27-Jul	422	130	
28-Jul	514	390	
29-Jul	390	135	
30-Jul	140	93	
31-Jul	93	78	
1-Aug	82	69	
2-Aug	73	64	
3-Aug	76	67	
4-Aug	71	64	
5-Aug	98	64	
6-Aug	89	66	
7-Aug	66	58	
8-Aug	93	58	
9-Aug	91	56	
10-Aug	74	49	
11-Aug	142	74	
12-Aug	229	137	
13-Aug	225	198	

Table A-2
Housatonic River Discharge At Coltsville, MA USGS Gauging Station
July - December 2008

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

Date	Maximum Discharge (cfs)	Minimum Discharge (cfs)	Comments
14-Aug	211	176	
15-Aug	182	96	
16-Aug	93	54	
17-Aug	56	45	
18-Aug	46	41	
19-Aug	45	38	
20-Aug	42	38	
21-Aug	38	35	
22-Aug	37	32	
23-Aug	32	30	
24-Aug	32	27	
24-Aug	32	27	
25-Aug	32	28	
26-Aug	30	27	
27-Aug	28	24	
28-Aug	26	23	
29-Aug	28	23	
30-Aug	29	25	
31-Aug	28	23	
1-Sep	23	20	
2-Sep	22	17	
3-Sep	66	17	
4-Sep	34	24	
5-Sep	24	18	
6-Sep	229	18	
7-Sep	328	232	
8-Sep	266	84	
9-Sep	167	69	
10-Sep	162	117	
11-Sep	120	84	
12-Sep	84	52	
13-Sep	62	54	
14-Sep	115	59	
15-Sep	100	80	
16-Sep	78	64	
17-Sep	67	61	
18-Sep	62	33	
19-Sep	33	29	
20-Sep	31	27	
21-Sep	31	28	
22-Sep	32	26	
23-Sep	32	28	
24-Sep	32	25	
25-Sep	29	24	

Table A-2
Housatonic River Discharge At Coltsville, MA USGS Gauging Station
July - December 2008

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

Date	Maximum Discharge (cfs)	Minimum Discharge (cfs)	Comments
26-Sep	86	25	
27-Sep	93	84	
28-Sep	115	74	
29-Sep	142	113	
30-Sep	127	98	
1-Oct	108	93	
2-Oct	96	86	
3-Oct	88	66	
4-Oct	67	64	
5-Oct	64	58	
6-Oct	59	52	
7-Oct	54	46	
8-Oct	47	43	
9-Oct	64	45	
10-Oct	64	56	
11-Oct	56	45	
12-Oct	45	42	
13-Oct	43	40	
14-Oct	43	40	
15-Oct	47	35	
16-Oct	40	33	
17-Oct	42	37	
18-Oct	40	35	
19-Oct	38	32	
20-Oct	34	30	
21-Oct	38	31	
22-Oct	58	35	
23-Oct	61	54	
24-Oct	61	56	Fall 2008 Sampling
25-Oct	243	56	
26-Oct	552	266	
27-Oct	355	215	
28-Oct	496	215	Fall 2008 semi-annual monitoring event
29-Oct	478	394	Fall 2008 Sampling/Fall 2008 semi-annual monitoring event
30-Oct	398	266	
31-Oct	273	215	
1-Nov	215	153	
2-Nov	159	140	
3-Nov	142	132	
4-Nov	137	127	
5-Nov	127	122	
6-Nov	127	120	
7-Nov	127	120	
8-Nov	142	125	

Table A-2
Housatonic River Discharge At Coltsville, MA USGS Gauging Station
July - December 2008

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

Date	Maximum Discharge (cfs)	Minimum Discharge (cfs)	Comments
9-Nov	142	130	
10-Nov	135	127	
11-Nov	132	122	
12-Nov	127	91	
13-Nov	96	86	
14-Nov	113	96	
15-Nov	145	108	
16-Nov	162	135	
17-Nov	148	122	
18-Nov	125	104	
19-Nov	106	93	
20-Nov	96	86	
21-Nov	88	76	
22-Nov	76	64	
23-Nov	69	59	
24-Nov	66	58	
25-Nov	302	64	
26-Nov	315	167	
27-Nov	173	132	
28-Nov	135	117	
29-Nov	120	106	
30-Nov	122	91	
1-Dec	281	122	
2-Dec	281	179	
3-Dec	182	130	
4-Dec	162	137	
5-Dec	170	137	
6-Dec	162	120	
7-Dec	137	125	
8-Dec	122	84	
9-Dec	98	80	
10-Dec	414	98	
11-Dec	439	378	
12-Dec	1940	452	
13-Dec	1130	562	
14-Dec	562	410	
15-Dec	465	374	
16-Dec	501	452	
17-Dec	456	290	
18-Dec	286	188	
19-Dec	192	130	
20-Dec	164	137	
21-Dec	159	140	

Table A-2
Housatonic River Discharge At Coltsville, MA USGS Gauging Station
July - December 2008

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

Date	Maximum Discharge (cfs)	Minimum Discharge (cfs)	Comments
22-Dec	142	122	
23-Dec	140	106	
24-Dec	355	122	
25-Dec	547	365	
26-Dec	514	337	
27-Dec	369	266	
28-Dec	533	360	
29-Dec	524	410	
30-Dec	406	218	
31-Dec	232	188	

Notes:

1. cfs - cubic feet per second.
2. Data obtained from the USGS Real-Time Water Data for Massachusetts Web Interface.
3. Data collected over 15 minute intervals, Daily maximum and minimum discharge values are presented.
4. Location: Lat 42°28'10", long 73°11'49", Berkshire County, Hydrologic Unit 01100005, on right bank 250 ft downstream from Hubbard Avenue Bridge at Coltsville, 1.2 mi upstream from Unkamet Brook, and 2 mi northeast of Pittsfield. Prior to Nov. 8, 1994, at site 200 ft upstream.

Table A-3
Well Re-Development Summary

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

Well ID	Re-Development Date	Depth to Water (ft bgs)	Screen Interval (ft bgs)	Initial Total Depth (ft bgs)	Final Total Depth (ft bgs)	Comments
16B-R	10/2/2008	6.06	3.08-13.08	13.18	13.88	Screen surged from top of saturated portion to bottom of well in one minute/one foot intervals. During surging approximately one gallon of water was added at each 1-foot surge interval to saturate screen and to allow for an adequate surging time. Approximately 15 gallons of water were removed during re-development. The final well turbidity was less than 50 NTU.
GMA3-2	10/1/2008	7.67	5.19-15.19	14.66	14.94	Screen surged from top of saturated portion to bottom of well in one minute/one foot intervals. Purging continued until turbidity was below 50 NTU.
GMA3-4	9/30/2008	7.54	3.57-13.57	13.32	13.67	Screen surged from top of saturated portion to bottom of well in one minute/one foot intervals. Purging continued until turbidity was below 50 NTU.
GMA3-8	10/1/2008	8.86	5.00-15.00	13.77	14.75	Screen surged from top of saturated portion to bottom of well in one minute/one foot intervals. During surging approximately one gallon of water was added at each 1-foot surge interval to saturate screen and to allow for an adequate surging time. Approximately 15 gallons of water were removed during re-development. The final well turbidity was less than 50 NTU.
GMA3-9	10/1/2008	5.56	3.00-13.00	12.61	13.24	Screen surged from top of saturated portion to bottom of well in one minute/one foot intervals. Purging continued until turbidity was below 50 NTU.
OBG-2	10/1/2008	5.29	3.00-14.40	14.71	15.07	Screen surged from top of saturated portion to bottom of well in one minute/one foot intervals. Approximately 50 gallons of water were removed during re-development. The final well turbidity was less than 50 NTU.
59-01	11/13/2008	11.71	4.00-24.00	14.51	18.66	Screen surged from top of saturated portion to bottom of well in one minute/one foot intervals. Pressurized air was introduced during re-development in order to break up sediment buildup at bottom of the well. Approximately 30 gallons of water were introduced during re-development and 20 gallons were able to be recovered.
59-07	9/30/2008	11.31	4.00-24.00	11.34	11.34	Approximately 0.02 liters of LNAPL removed prior to re-development. Screen surged from top of saturated portion to bottom of well in one minute/one foot intervals. During surging approximately one gallon of water was added at each 1-foot surge interval to saturate screen and to allow for an adequate surging time. Approximately 40 gallons of water were removed during re-development. The final well turbidity was less than 50 NTU.
51-09	11/13/2008	Dry	5.00-15.00	12.37	14.76	On the date of re-development, well 51-09 was dry when the initial water-level was taken. Pressurized air was introduced during re-development in order to break up sediment buildup at bottom of the well. Approximately 20 gallons of water were introduced to the well during re-development and 35 gallons were removed. Final depth to water was 12.48 ft.
51-13	11/13/2008	Dry	5.00-15.00	9.8	14.07	On the date of redevelopment, well 51-13 was dry when the initial water-level was taken. Pressurized air was utilized in order to break up sediment buildup at the bottom of the well. Approximately 30 gallons of water were introduced to the well during development and 20 gallons were removed. The final depth to water was 11.04 ft.
51-14	9/30/2008	11.27	5.00-15.00	14.72	15.14	Screen surged from top of saturated portion to bottom of well in one minute/one foot intervals. Approximately 35 gallons of water were removed during re-development. The final well turbidity was below 50 NTU.

Note:

1. bgs - below ground surface

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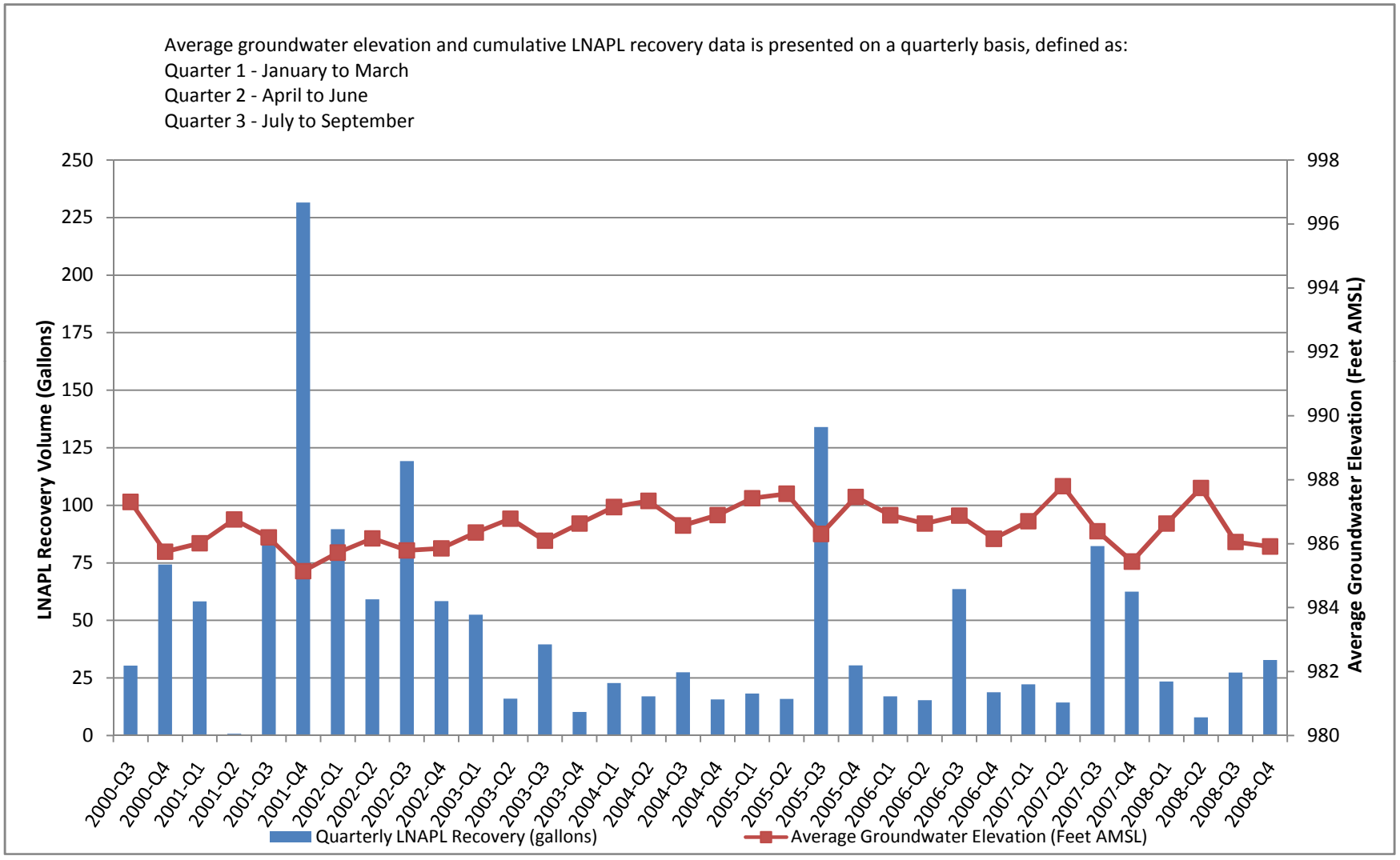
Appendix B

Comparison of Quarterly LNAPL Recovery Volumes to Average Groundwater Elevations

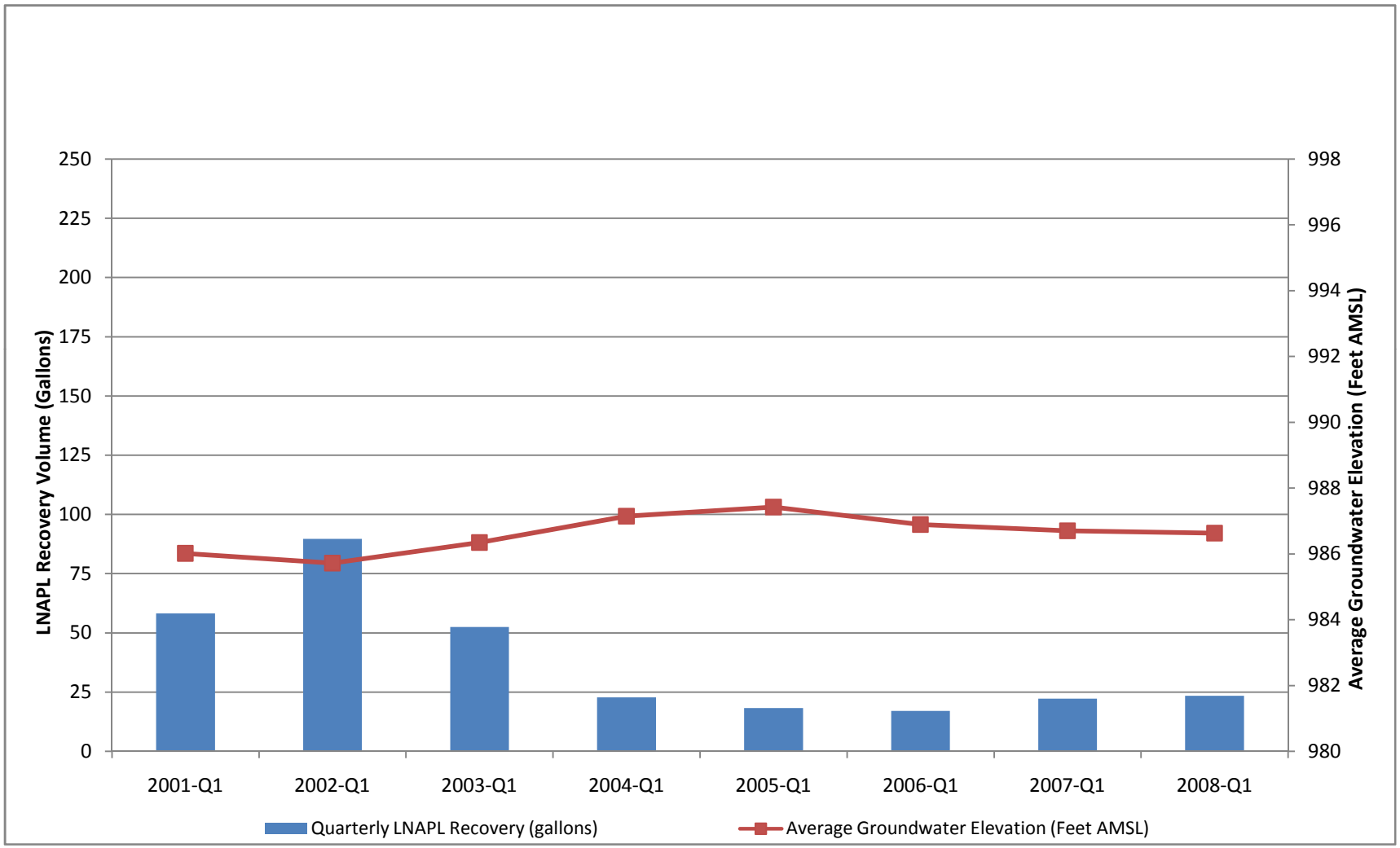
Appendix B
Comparison of Quarterly LNAPL Recovery to Groundwater Elevation

Groundwater Management Area 3
General Electric Company - Pittsfield, Massachusetts



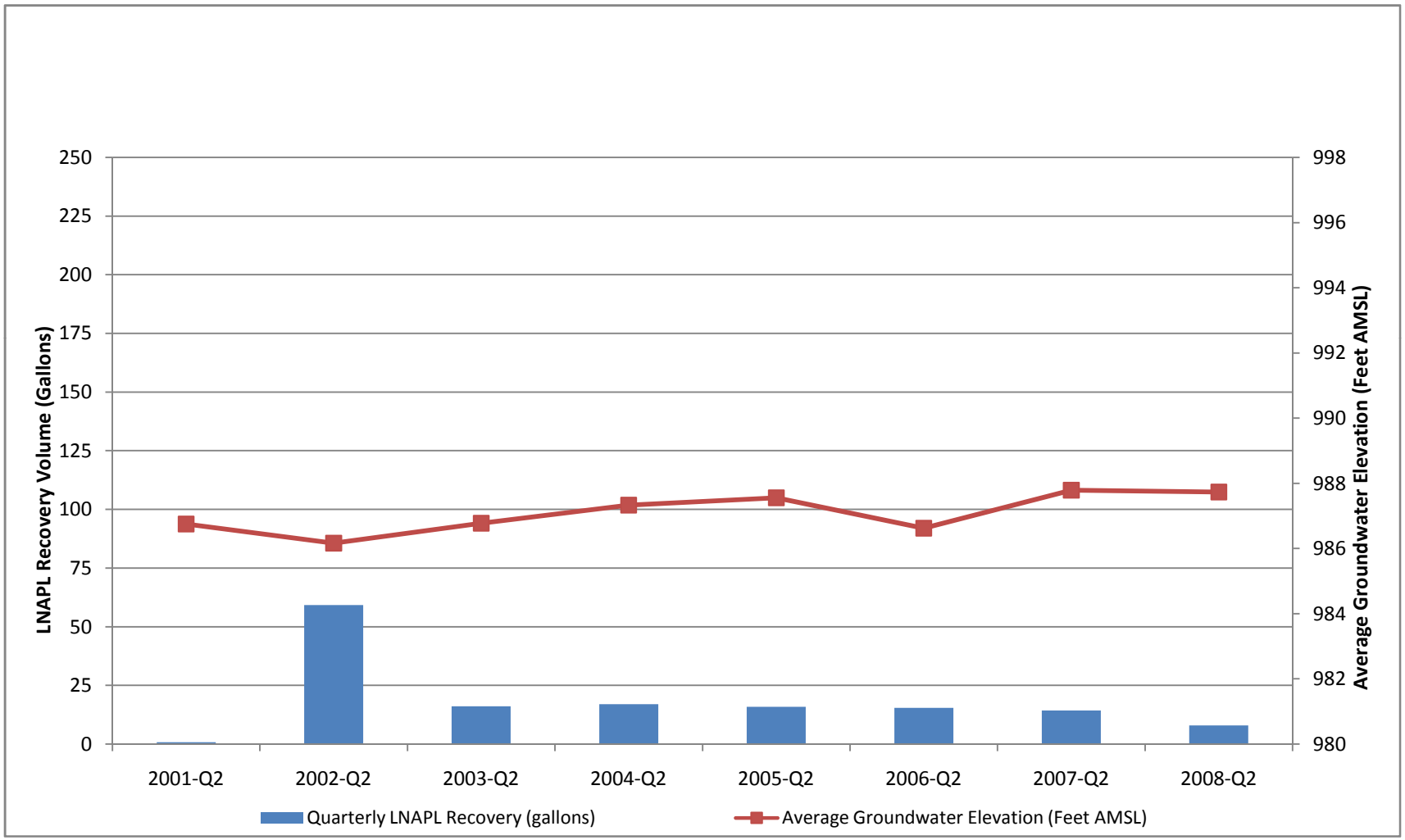
Appendix B
LNAPL Recovery vs. Groundwater Elevation
Quarter 1 (January - March), 2001 to 2008

Groundwater Management Area 3
General Electric Company - Pittsfield, Massachusetts



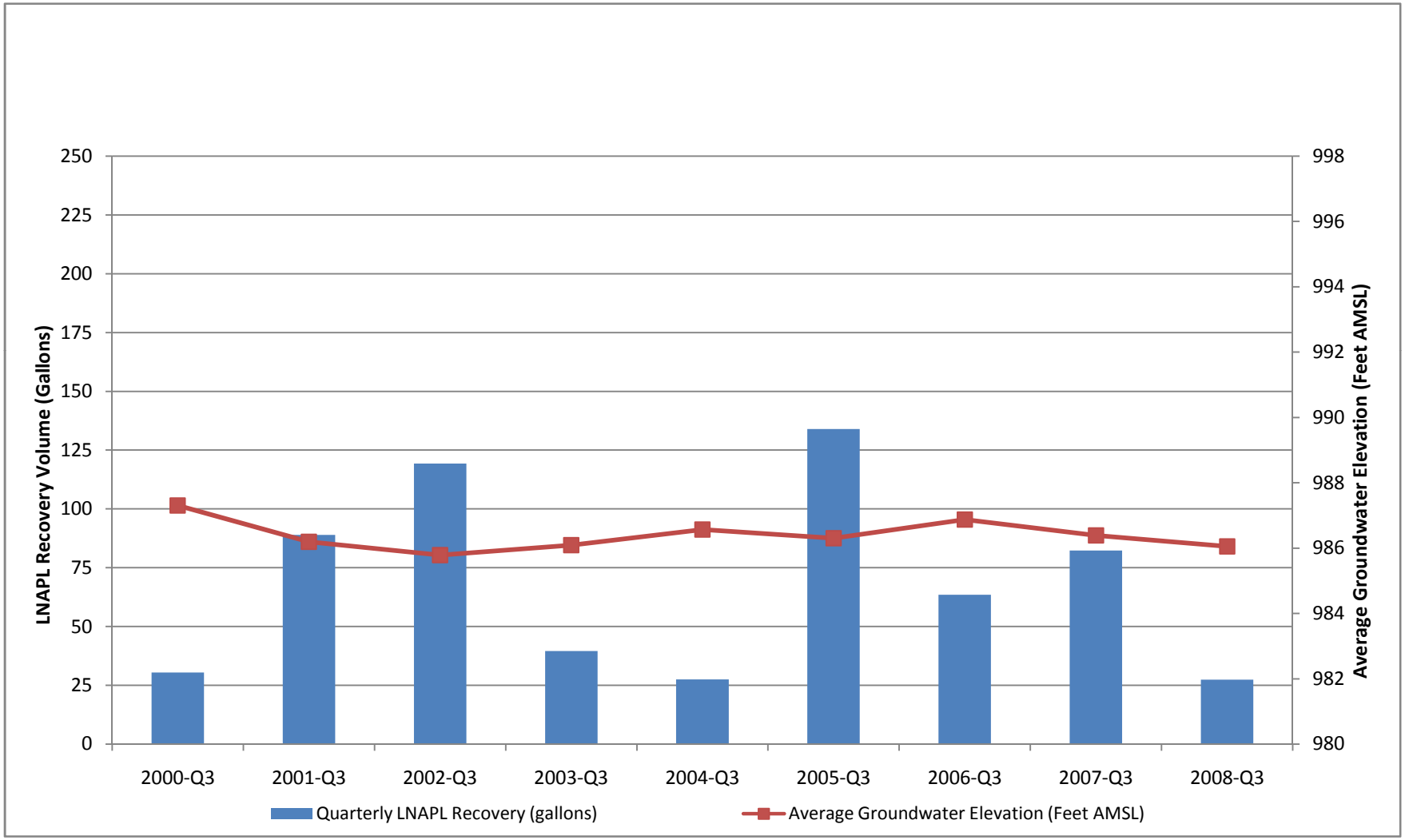
Appendix B
LNAPL Recovery vs. Groundwater Elevation
Quarter 2 (April - June), 2001 to 2008

Groundwater Management Area 3
General Electric Company - Pittsfield, Massachusetts



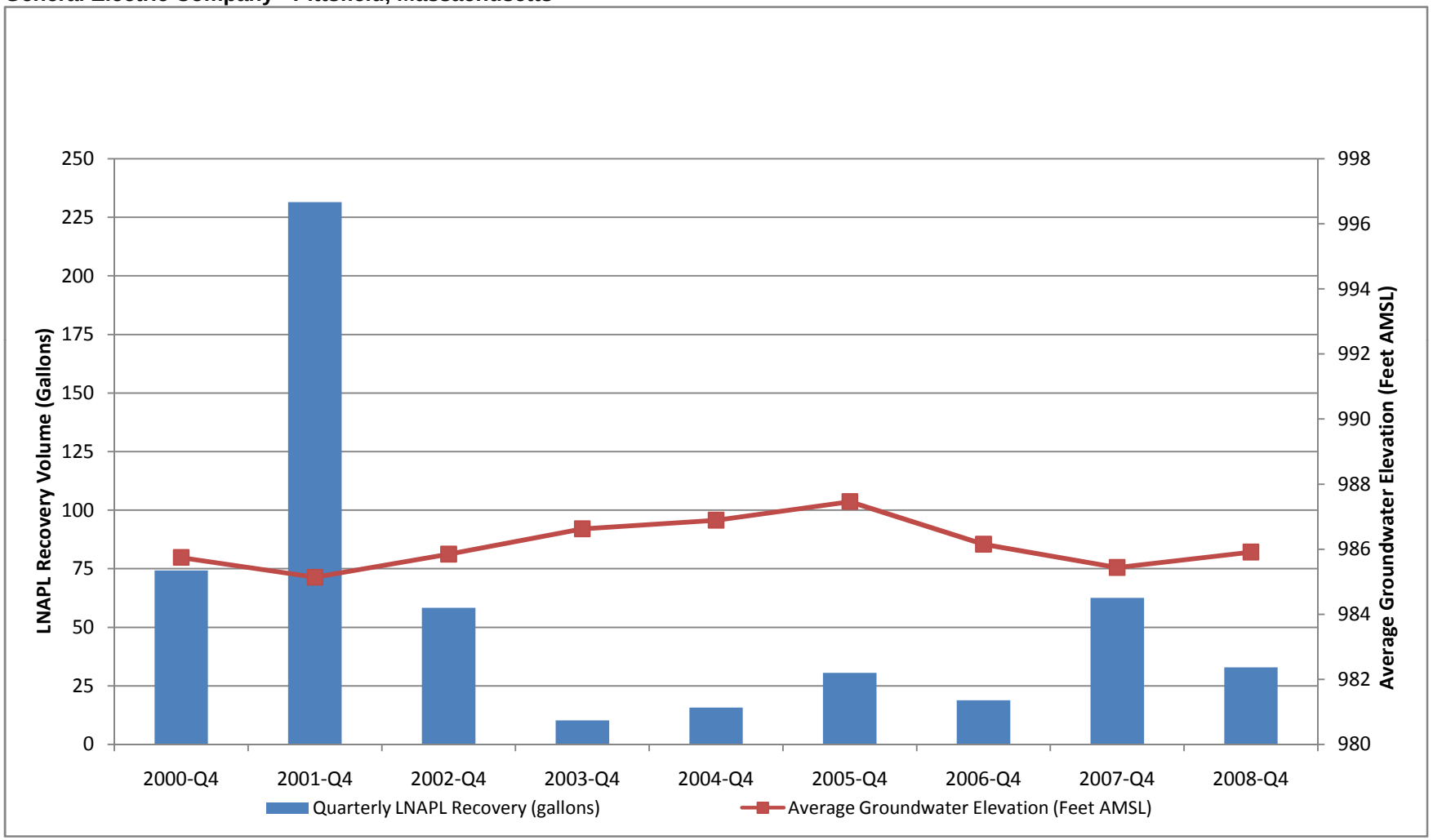
Appendix B
LNAPL Recovery vs. Groundwater Elevation
Quarter 3 (July - September), 2000 to 2008

Groundwater Management Area 3
General Electric Company - Pittsfield, Massachusetts



Appendix B
LNAPL Recovery vs. Groundwater Elevation
Quarter 4 (October - December), 2000 to 2008

Groundwater Management Area 3
General Electric Company - Pittsfield, Massachusetts



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Appendix C

Field Sampling Data

GROUNDWATER SAMPLING LOG

Well No. 51-14
Key No. ~~\~~
PID Background (ppm) ~~\~~
Well Headspace (ppm) ~~\~~

Site/GMA Name GMA-3
Sampling Personnel D. Zack
Date 10/24/08
Weather Cold clear ≈32°F

WELL INFORMATION

Reference Point Marked? Y (N)
Height of Reference Point ~~\~~ Meas. From ~~\~~
Well Diameter 2"
Screen Interval Depth 5-9.5' Meas. From Ground
Water Table Depth 11.20 Meas. From TIC
Well Depth 14.70 Meas. From TIC
Length of Water Column 3.5
Volume of Water in Well .57gal
Intake Depth of Pump/Tubing 13' Meas. From BLS

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

Redevelop? Y (N)

Sample Time 0940
Sample ID 51-14
Duplicate ID NA
MS/MSD Yes
Split Sample ID NA

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 0910
Pump Stop Time 1000
Minutes of Pumping 50
Volume of Water Removed ~~2.5~~ 2.4 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(#) / HACH 2100P

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
0910	200	—	11.20	—	—	—	177	—	—
0913		0.16		—	—	—	43	—	—
0918	180	0.40	11.21	13.20	6.40	0.401	13	3.26	18.0
0922		0.59		13.35	6.36	0.397	9	2.28	+22.9
0927		0.83	11.22	13.06	6.36	0.397	7	1.97	+39.1
0930		0.97		13.34	6.34	0.396	5	1.82	+43.1
0933	180	1.12	11.21	13.09	6.39	0.400	4	1.62	+51.0
0936		1.26		13.23	6.34	0.398	3	1.60	+45.5

* 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
* Noodor, Solid → slt. soft Bottom

SAMPLE DESTINATION
Laboratory: SES
Delivered Via: UPS
Airbill #: —

Field Sampling Coordinator: D. Zack

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GROUNDWATER SAMPLING LOG

Well No. 51-14

Site/GMA Name GMA-3
Sampling Personnel P. Zack
Date 10/24/04
Weather Cold clear ≈ 34°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]*
0939	180	≈1.40	11.21	13.43	6.35	0.400	3	1.51	-47.5

* 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. GMA3-4
Key No. --
PID Background (ppm) --
Well Headspace (ppm) --

Site/GMA Name GMA-3
Sampling Personnel KLC, SME
Date 10/24/08
Weather sun, high 20's

WELL INFORMATION

Reference Point Marked? (Y) N
Height of Reference Point 4" ↑ Meas. From bgs
Well Diameter 2"
Screen Interval Depth 3.59-13.59' Meas. From bgs
Water Table Depth 9.15 Meas. From TOC
Well Depth 12.85 Meas. From TOC
Length of Water Column 5.07'
Volume of Water in Well 0.93 gallon
Intake Depth of Pump/Tubing 9.5 Meas. From TOC

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

Redevelop? Y (N)

Sample Time 1045
Sample ID GMA3-4
Duplicate ID GMA3-DUP01
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 9:15
Pump Stop Time 1100
Minutes of Pumping 105
Volume of Water Removed 4.2 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-556MPS Hach 2100P Turbidimeter

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
9:20	150	0.20	7.2	–	–	–	>1,000	–	–
9:25	150	0.40	7.2	–	–	–	279	–	–
9:30	150	0.59	7.2	–	–	–	56	–	–
9:35	150	0.79	7.2	–	–	–	35	–	–
9:40	150	0.99	7.2	–	–	–	24	–	–
9:50	150	1.39	7.2	16.58	6.95	1.676	21	13.90	-50.0
9:55	150	1.39	7.2	16.51	7.10	1.659	18	11.66	-46.2
10:00	150	1.78	7.2	16.57	7.11	1.635	16	12.26	-44.7

* 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: cloudy, brown, no detectable odor. 0.25' subtracted from all water level depth to account for probe. At 9:35 hooked up YSI, used wipe to create flow through cell. 0940 - YSI will not turn on, trouble shooting.

SAMPLE DESTINATION

Laboratory: SGS
Delivered Via: UPS
Airbill #: —

Field Sampling Coordinator:

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GROUNDWATER SAMPLING LOG

Well No. GMA3-4

Site/GMA Name GMA-3
Sampling Personnel KLC, SME
Date 10/24/08
Weather sun; high 20's

WELL INFORMATION - See Page 1

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
1005	150	1.98	7.2	16.48	7.05	1.613	15	13.50	-40.5
1010	150	2.18	7.2	16.54	7.13	1.600	13	13.73	-39.4
1015	150	2.38	7.2	16.61	7.11	1.586	14	13.60	-36.4
1020	150	2.58	7.2	16.51	7.14	1.576	12	12.98	-34.2
1023	150	2.70	7.2	16.32	7.13	1.572	SME 11	13.04	-32.7
1026	150	2.82	7.2	16.45	7.12	1.560	12	12.67	-30.0
1029	150	2.94	7.2	16.60	7.12	1.549	10	12.28	-29.8
1032	150	3.06	7.2	16.54	7.12	1.549	12	11.94	-29.2
1035	150	3.17	7.2	16.52	7.16	1.545	11	11.78	-29.1
1038	150	3.29	7.2	16.68	7.12	1.540	10	11.55	-28.3
1041	150	3.41	7.2	16.57	7.13	1.539	11	11.37*	-28.8
1045	SAMPLE								

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

OBSERVATIONS/SAMPLING METHOD DEVIATIONS

* Checked D.O. and it calibrated fine.

GROUNDWATER SAMPLING LOG

Well No. GMA3-9
Key No.
PID Background (ppm)
Well Headspace (ppm)

Site/GMA Name GMA-3
Sampling Personnel DZ/KC
Date 10/24/06
Weather Sunny 40°F

WELL INFORMATION

Reference Point Marked? (Y) N
Height of Reference Point / Meas. From /
Well Diameter 2"
Screen Interval Depth 3-13 Meas. From BLS
Water Table Depth 5.34 Meas. From TIC
Well Depth 12.60 Meas. From TIC
Length of Water Column 7.26
Volume of Water in Well 1.18 gallon
Intake Depth of Pump/Tubing 9' 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 1150
Sample ID GMA3-9
Duplicate ID NA
MS/MSD NA
Split Sample ID NA

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 1025
Pump Stop Time 1155
Minutes of Pumping 1.5 hrs = 90
Volume of Water Removed 3.7 gal
Did Well Go Dry? Y (N)

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

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

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]*
★ 1025	500	—	5.34				27		
1030	—	0.40	—				1006		
1035	140	0.58	5.37				242		
1040	130	0.75	—				192		
1045	130	0.92	—				337		
1050	—	1.09	5.39				178		
1055	—	1.27	5.39				120		
1100	—	1.44	—				92		

* 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
★ Turb. Jumped after 1 min

SAMPLE DESTINATION

Laboratory: SGS
Delivered Via: UPS
Airbill #: —

Field Sampling Coordinator: D. Zeh

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GROUNDWATER SAMPLING LOG

Well No. GMA3-9

Site/GMA Name GMA-3
Sampling Personnel DZ/KC
Date 10/29/08
Weather Sunny 40°

WELL INFORMATION - See Page 1

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
1105	120	1.60	—				81		
1110	—	1.76	5.36				69		
1115	—	1.92	—				54		
1120	—	2.07	5.44	13.54	7.01	.664	41	0.22	-137.8
1125	—	2.23	—	13.54	6.95	.661	34	0.15	-141.0
1128	—	2.33	—	13.55	6.96	.659	28	0.13	-142.6
1131	250	2.53	5.39	13.55	6.95	.658	20	0.17	-143.1
1134	180	2.67	—	13.58	6.95	.658	16	0.14	-145.7
1137	—	2.82	—	13.53	6.97	.657	12	0.17	-145.5
1140	—	2.96	—	13.61	6.96	.657	11	0.18	-147.3
1143	—	3.10	—	13.63	6.97	.656	10	0.18	-149.2
1146	—	3.24	—	13.64	6.97	.655	9	0.14	-147.7
1149	—	3.39	5.43	13.68	6.96	.655	9	0.17	-148.6

* 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. GMA3-2
Key No. ~~[redacted]~~
PID Background (ppm) ~~[redacted]~~
Well Headspace (ppm) ~~[redacted]~~

Site/GMA Name GMA3
Sampling Personnel KLC, DAZ
Date 10/24/08
Weather 40's, sunny

WELL INFORMATION

Reference Point Marked? (Y) N
Height of Reference Point ~~[redacted]~~ Meas. From ~~[redacted]~~
Well Diameter 2"
Screen Interval Depth 5.19-15.19 Meas. From ~~TOC~~ BGS
Water Table Depth 7.70 Meas. From TIC
Well Depth 14.55 Meas. From TIC
Length of Water Column 6.85
Volume of Water in Well 1.12 gallon
Intake Depth of Pump/Tubing ~12.55 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) Maybe very high/elec. turb.

Sample Time 1356
Sample ID GMA3-2
Duplicate ID NA
MS/MSD NA
Split Sample ID NA

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 1235
Pump Stop Time 1400
Minutes of Pumping 1hr 25min = 85
Volume of Water Removed ~~[redacted]~~ 4.0 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: YSI 556 MPS (#2) / HACH 2100P

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
1240		0.15	7.72	—	—	—	7	—	—
1245	110	0.29	7.91	17.13	7.09	17.69	172	0.15	-131.0
1250	180	0.53	8.85	17.24	7.07	17.75	93	0.14	-130.1
1255	70	0.62	8.87	17.17	7.13	17.78	87	0.13	-124.1
*1300	120	0.78	9.99	17.69	7.07	17.70	96	0.11	-119.8
1305	180	1.02	9.26	—	—	—	71	—	—
1310	180	1.26	9.50	—	—	—	54	—	—
1315		1.49		—	—	—	57	—	—

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

OBSERVATIONS/SAMPLING METHOD DEVIATIONS

*disconnected flowthrough cell, to allow turbidity to decrease.

*SLI. NAPL odor at sampling

SAMPLE DESTINATION

Laboratory: SGS
Delivered Via: UPS
Airbill #: —

Field Sampling Coordinator: D. Zak

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GROUNDWATER SAMPLING LOG

Well No. GMA3-2

Site/GMA Name GMA-3
Sampling Personnel RG/DZ
Date 10/24/04
Weather* Sunny ~45°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]*
1320	90	~~1.61~~	9.46				51		
1325	90	~~1.73~~	9.48				63		
1330	380	~~2.23~~	—				38	~~(0.16)~~	
1335	—	~~2.73~~	—	16.81	7.00	1.762	33	~~120.3~~	-120.3
1338	—	~~3.03~~	9.62	16.74	7.03	1.771	34	0.07	-120.0
1341	160	~~3.16~~	—	16.67	7.04	1.773	26	0.04	-120.8
1344	—	~~3.28~~	9.65	16.67	7.05	1.775	24	0.04	-115.7
1346	—	~~3.41~~	9.63	16.56	7.07	1.779	23	0.04	-124.3
1349	150	~~3.53~~	—	16.52	7.07	1.779	17	0.04	-126.2
1352	—	~~3.65~~	—	16.60	7.06	1.778	16	0.04	-122.6
1355	—	~~3.77~~	9.66	16.66	7.07	1.777	15	0.04	-119.1
1358	—	~~3.88~~ 3.88	—	16.64	7.08	1.780	15	0.04	-118.1

* 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

GROUNDWATER SAMPLING LOG

Well No. GMA3-8
Key No. —
PID Background (ppm) 0
Well Headspace (ppm) 0

Site/GMA Name GE Pittsfield / GMA-3
Sampling Personnel GAR / SME
Date 10/24/08
Weather Sunny, 55-60°F

WELL INFORMATION

Reference Point Marked? (Y) N
Height of Reference Point +1.8' Meas. From Ground
Well Diameter 2"
Screen Interval Depth 5'-15' Meas. From Ground
Water Table Depth 11.77' Meas. From TIC
Well Depth 16.48' Meas. From TIC
Length of Water Column 4.71'
Volume of Water in Well 0.77 gallon
Intake Depth of Pump/Tubing 14.1' 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 14:00
Sample ID GMA3-8
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 12:30
Pump Stop Time 14:10
Minutes of Pumping 100
Volume of Water Removed 2.65 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 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]*
12:35	100ml	0.13	12.27	—	—	—	94	—	—
12:45	100ml	0.40	*	—	—	—	30	—	—
12:55	100ml	0.66		16.12	6.96	0.983	27	10.54	-107.6
13:00	100ml	0.79		15.79	6.92	0.994	33	8.94	-131.2
13:05	100ml	0.92		15.58	6.92	1.005	26	8.46	-117.8
13:10	100ml	1.06		15.55	6.93	1.005	30	7.28	-107.0
13:15	100ml	1.19		15.42	6.87	1.001	23	6.30	-104.0
13:20	100ml	1.32		15.53	6.85	1.002	10	5.51	-102.9

* 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: Orange-brown color, slightly turbid
Final Purge: Clear, odorless
* Water levels at or below the level of the top of the pump, can't get water level readings

SAMPLE DESTINATION

Laboratory: SGS
Delivered Via: —
Airbill #: —

Field Sampling Coordinator: [signature]

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GROUNDWATER SAMPLING LOG

Well No. GMA 3-8

Site/GMA Name GE Pittsfield / GMA-3
Sampling Personnel GAR/SME
Date 10/24/08
Weather Sunny, 60°F

WELL INFORMATION - See Page 1

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
13:25	100ml	1.45	*	15.50	6.88	1.003	5	4.74	-98.2
13:30	100ml	1.59		15.46	6.87	1.003	4	4.13	-95.0
13:35	100ml	1.72		15.49	6.87	1.003	4	3.65	-92.8
13:40	100ml	1.85		15.45	6.87	1.002	4	3.36	-90.2
13:45	100ml	1.98		15.43	6.87	1.002	4	3.10	-89.5
13:50	100ml	2.11		15.45	6.87	1.001	3	3.05	-87.1
13:55	100ml	2.25		15.47	6.88	1.001	3	2.88	-85.7

* 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. OBG-2
Key No. —
PID Background (ppm) 0
Well Headspace (ppm) 0

Site/GMA Name GMA 3
Sampling Personnel EC/DA
Date 10/24/08
Weather Sunny - Mid 50's

WELL INFORMATION

Reference Point Marked? Y (N)
Height of Reference Point ____ Meas. From Ground
Well Diameter 2"
Screen Interval Depth 3-14.9 Meas. From TIC
Water Table Depth 6.12 Meas. From TIC
Well Depth 15.13 Meas. From TIC
Length of Water Column 9.01
Volume of Water in Well 1.46
Intake Depth of Pump/Tubing 10.63 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 15:45
Sample ID OBG-2
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 14:20
Pump Stop Time 16:06
Minutes of Pumping 100 min
Volume of Water Removed ~~[illegible]~~ 4.0 gallons
Did Well Go Dry? Y (N)

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

Water Quality Meter Type(s) / Serial Numbers: YSI 556 MPS 03M0230 AE
HACH 2100P 416500.00

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
14:25	150	Initial	6.20	—	—	—	34	—	—
14:30	"	750	"	—	—	—	44	—	—
14:35	"	1500	"	—	—	—	16	—	—
14:40	"		"	19.04	7.03	0.641	13	1.26	-82.7
14:45	"		"	18.82	6.79	0.639	10	0.20	-86.5
14:50	"		6.20	18.69	6.75	0.643	9	0.16	-87.6
14:55	"		"	18.60	6.68	0.662	9	0.13	-80.2
15:00	"		"	18.47	6.56	0.722	8	0.12	-63.2

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

OBSERVATIONS/SAMPLING METHOD DEVIATIONS Initial purge - clear color, some ~~[illegible]~~ debris.

SAMPLE DESTINATION

Laboratory: SGS
Delivered Via: UPS
Airbill #: —

Field Sampling Coordinator: [signature]

GROUNDWATER SAMPLING LOG

Well No. OBG-2

Site/GMA Name GMA 3
Sampling Personnel EC/DH
Date 10/24/08
Weather Sunny - High 50's

WELL INFORMATION - See Page 1

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
15:05	150		6.20	18.35	6.50	0.750	6	0.11	-59.9
15:10	"		"	18.21	6.49	0.767	4	0.13	-56.9
15:15	"		"	18.11	6.39	0.787	3	0.10	-54.3
15:20	"		"	18.09	6.42	0.800	4	0.10	-56.0
15:25	"		"	17.97	6.39	0.820	3	0.14	-51.9
15:30	"		"	17.94	6.40	0.839	4	0.09	-53.5
15:35	"	10500	"	17.88	6.36	0.854	3	0.08	-52.4
15:38	"	10950	"	17.84	6.34	0.864	3	0.08	-53.2
15:41	"	11400	"	17.84	6.36	0.873	2	0.09	-52.6

* 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 Final purge - clear

GROUNDWATER SAMPLING LOG

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

Site/GMA Name GMA3 - Pittsfield, MN
Sampling Personnel DKA, EMV
Date 10/29/08
Weather Overcast, 35°F

WELL INFORMATION

Reference Point Marked? Y N
Height of Reference Point _____ Meas. From _____
Well Diameter 2"
Screen Interval Depth 3-13 Meas. From Ground
Water Table Depth 9.45 Meas. From TIC
Well Depth 16.18 Meas. From TIC
Length of Water Column 6.73
Volume of Water in Well 1.10 gallons
Intake Depth of Pump/Tubing 12.0 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 14:06
Sample ID 16B-R
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 12:25
Pump Stop Time 14:25
Minutes of Pumping 120
Volume of Water Removed ~~20~~ 2.5 gallons
Did Well Go Dry? Y (N)

Evacuation Method: Bailer ( ) Bladder Pump (✓)
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 #4, Hach 2100P

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
12:30	175	0.23	8.70	-	-	-	5	-	-
12:55	"	0.46	8.97	7.19	6.95	1.264	6	2.63	97.2
13:00	50	0.53	9.04	7.43	6.96	1.267	3	2.36	96.5
13:05	75	0.63	9.10	7.88	6.97	1.257	3	2.08	97.1
13:10	"	0.73	8.74	8.74	6.99	1.286	3	2.14	95.3
13:15	100	0.86	9.28	9.55	7.01	1.280	3	2.15	94.8
13:20	100	0.99	9.43	10.67	7.02	1.272	3	2.12	94.4
13:25	100	1.13	9.50	11.16	7.03	1.278	2	1.94	94.9

* 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. 16B-R

Site/GMA Name GMA 3
Sampling Personnel Emi/BH
Date 10/29/08
Weather Overcast, 35-40°

WELL INFORMATION - See Page 1

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
1330	100	1.26	9.55	10.92	7.04	1.305	2	1.87	95.4
13:35	100	1.39		11.25	7.02	1.304	2	1.40	96.1
13:40	"	1.52	9.71	11.28	7.03	1.349	2	1.08	94.5
13:45	"	1.65		11.17	7.03	1.347	2	0.89	92.6
13:50	"	1.79	9.80	10.98	7.05	1.380	2	0.92	92.4
13:55	"	1.92	9.92	10.96	7.04	1.410	2	0.71	86.4
14:00	"	2.05	9.93	11.07	7.03	1.420	2	0.71	86.1
14:03	"	2.13	9.96	10.91	7.04	1.441	1	0.75	84.1
14:06	"	SAMPLE							

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

OBSERVATIONS/SAMPLING METHOD DEVIATIONS

GROUNDWATER SAMPLING LOG

Well No. _____
Key No. _____
PID Background (ppm) _____
Well Headspace (ppm) _____

Site/GMA Name GE Pittsfield/GMA-3
Sampling Personnel GAR
Date 11/3/08
Weather _____

WELL INFORMATION

Reference Point Marked? Y N
Height of Reference Point _____ Meas. From _____
Well Diameter _____
Screen Interval Depth _____ Meas. From _____
Water Table Depth _____ Meas. From _____
Well Depth _____ Meas. From _____
Length of Water Column _____
Volume of Water in Well _____
Intake Depth of Pump/Tubing _____ Meas. From _____

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

Redevelop? Y N

Sample Time 15:00
Sample ID GMA-3-RB-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 _____
Pump Stop Time _____
Minutes of Pumping _____
Volume of Water Removed _____
Did Well Go Dry? Y N

Evacuation Method: Bailer ( ) Bladder Pump (X)
Peristaltic Pump ( ) Submersible Pump ( ) Other/Specify ( )
Pump Type: Marschulk - 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]*

* 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 An equipment rinse blank was collected by pouring distilled water through a decontaminated teflon bladder from a Marschulk bladder pump and then into lab supplied sample containers

SAMPLE DESTINATION

Laboratory: SGS
Delivered Via: UPS
Airbill #: —

Field Sampling Coordinator: [signature]

ARCADIS

Appendix D

Data Validation Report

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

General Electric Company
Pittsfield, Massachusetts

1.0 General

This attachment summarizes the data validation review performed on behalf of the General Electric Company (GE) for groundwater samples collected in October and November 2008 as part of groundwater sampling activities conducted at Groundwater Management Area 3, located at the General Electric Company/Housatonic River Site in Pittsfield, Massachusetts. The samples were analyzed for polychlorinated biphenyls (PCBs) by SGS Environmental Services, Inc. of Wilmington, North Carolina. Data validation was performed for nine PCB samples.

2.0 Data Evaluation Procedures

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

- *Field Sampling Plan/Quality Assurance Project Plan (FSP/QAPP), General Electric Company, Pittsfield, Massachusetts,* ARCADIS BBL (submitted by GE on March 30, 2007 and approved by EPA on June 13, 2007)*;* and

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

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

The following data qualifiers were used in this data evaluation:

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

U The compound was analyzed for, but was not detected. The sample quantitation limit is presented. Non-detect sample results are presented as ND(PQL) within this report for consistency with documents previously prepared for investigations conducted at the GE-Pittsfield/Housatonic River Site.

UJ The compound was not detected above the reported sample quantitation limit. However, the reported limit is estimated and may or may not represent the actual level of quantitation. Non-

detect sample results that required qualification are presented as ND(PQL) J within this report for consistency with documents previously prepared for investigations conducted at the GE-Pittsfield/Housatonic River Site.

R Indicates that the previously reported detection limit or sample result has been rejected due to a major deficiency in the data generation procedure. The data should not be used for any qualitative or quantitative purpose.

3.0 Data Validation Procedures

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

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

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

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

Parameter	Tier I Only			Tier I &Tier II			Total
	Samples	Duplicates	Blanks	Samples	Duplicates	Blanks	
PCBs	0	0	0	7	1	1	9
Total	**0**	**0**	**0**	**7**	**1**	**1**	**9**

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

4.0 Summary of QA/QC Parameter Deviations Requiring Data Qualification

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

Laboratory control sample/laboratory control sample duplicate (LCS/LCSD) analysis recovery criteria for organics must be within the laboratory-generated QC acceptance limits specified on the LCS/LCSD reporting form. Organic sample results associated with the LCS/LCSD that exceeded laboratory-generated QC acceptance limits were qualified as estimated (J). The compounds that did not meet LCS/LCSD recovery

criteria and the number of samples qualified due to those deviations are presented in the following table.

Compounds Qualified Due to LCS/LCSD Recovery Deviations

Analysis	Compound	Number of Affected Samples	Qualification
PCBs	All Aroclors	9	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. Associated sample results were qualified as estimated (J) for all compounds when surrogate recovery criteria were outside control limits and greater than 10%. A summary of the compounds affected by surrogate recovery exceedances 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	All Aroclors	2	J

5.0 Overall Data Usability

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

Data Usability

Parameter	Percent Usability	Rejected Data
PCBs	100	None

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

5.1 Precision

Precision measures the reproducibility of measurements under a given set of conditions. Specifically, it is a quantitative measure of the variability of a group of measurements compared to their average value. For this investigation, precision was defined as the RPD between duplicate sample results. The duplicate samples

used to evaluate precision included field duplicates, MS/MSD samples, and LCS/LCSD samples. None of the data required qualification due to field duplicate RPD deviations, MS/MSD RPD deviations, or LCS/LCSD 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, LCS/LCSDs, MS/MSD samples, and surrogate compound recoveries. For this analytical program, 100% of the data required qualification due to LCS/LCSD recoveries, and 22.2% of the data required qualification due to surrogate compound recovery deviations. None of the data required qualification due to instrument calibration deviations, or MS/MSD recovery deviations.

5.3 Representativeness

Representativeness expresses the degree to which sample data accurately and precisely represents a characteristic of a population, parameter variations at a sampling point, or an environmental condition. Representativeness is a qualitative parameter, which is most concerned with the proper design of the sampling program. The representativeness criterion is best satisfied by making certain that sampling locations are selected properly and a sufficient number of samples are collected. This parameter has been addressed by collecting samples at locations specified in the EPA-approved work plans, and by following the procedures for sample collection/analyses that were described in the FSP/QAPP. Additionally, the analytical program used procedures consistent with EPA-approved analytical methodology. A QA/QC parameter that is an indicator of the representativeness of a sample is holding time. Holding time criteria are established to maintain the samples in a state that is representative of the in-situ field conditions before analysis. For this analytical data set, none of the data required qualification due to holding time deviations.

5.4 Comparability

Comparability is a qualitative parameter expressing the confidence with which one data set can be compared with another. This goal was achieved through the use of the standardized techniques for sample collection and analysis presented in the FSP/QAPP. Specifically, all the groundwater samples collected in October and November 2008 were analyzed by EPA SW-846 method 8082 for PCBs.

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. This analytical data set had an overall usability of 100%.

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

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

Sample Delivery Group No.	Sample ID	Date Collected	Matrix	Validation Level	Qualification	Compound	QA/QC Parameter	Value	Control Limits	Qualified Result	Notes
PCBs											
G582-159	51-14 (Filtered)	10/24/2008	Water	Tier II	Yes	Aroclor-1016	LCS %R	56.1%	70% to 130%	ND(0.00010) J	
						Aroclor-1221	LCS %R	56.1%	70% to 130%	ND(0.00010) J	
						Aroclor-1232	LCS %R	56.1%	70% to 130%	ND(0.00010) J	
						Aroclor-1242	LCS %R	56.1%	70% to 130%	ND(0.00010) J	
						Aroclor-1248	LCS %R	56.1%	70% to 130%	ND(0.00010) J	
						Aroclor-1254	LCS %R	56.1%	70% to 130%	ND(0.00010) J	
						Aroclor-1260	LCS %R	56.1%	70% to 130%	ND(0.00010) J	
						Total PCBs	LCS %R	56.1%	70% to 130%	ND(0.00010) J	
G582-159	GMA3-2 (Filtered)	10/24/2008	Water	Tier II	Yes	Aroclor-1016	LCS %R	56.1%	70% to 130%	ND(0.00010) J	
						Aroclor-1221	LCS %R	56.1%	70% to 130%	ND(0.00010) J	
						Aroclor-1232	LCS %R	56.1%	70% to 130%	ND(0.00010) J	
						Aroclor-1242	LCS %R	56.1%	70% to 130%	ND(0.00010) J	
						Aroclor-1248	LCS %R	56.1%	70% to 130%	ND(0.00010) J	
						Aroclor-1254	LCS %R	56.1%	70% to 130%	ND(0.00010) J	
						Aroclor-1260	LCS %R	56.1%	70% to 130%	ND(0.00010) J	
						Total PCBs	LCS %R	56.1%	70% to 130%	ND(0.00010) J	
G582-159	GMA3-4 (Filtered)	10/24/2008	Water	Tier II	Yes	Aroclor-1016	LCS %R	56.1%	70% to 130%	ND(0.00010) J	
						Aroclor-1221	LCS %R	56.1%	70% to 130%	ND(0.00010) J	
						Aroclor-1232	LCS %R	56.1%	70% to 130%	ND(0.00010) J	
						Aroclor-1242	LCS %R	56.1%	70% to 130%	ND(0.00010) J	
						Aroclor-1248	LCS %R	56.1%	70% to 130%	ND(0.00010) J	
						Aroclor-1254	LCS %R	56.1%	70% to 130%	ND(0.00010) J	
						Aroclor-1260	LCS %R	56.1%	70% to 130%	ND(0.00010) J	
						Total PCBs	LCS %R	56.1%	70% to 130%	ND(0.00010) J	
G582-159	GMA3-8 (Filtered)	10/24/2008	Water	Tier II	Yes	Aroclor-1016	LCS %R	56.1%	70% to 130%	ND(0.00010) J	
						Aroclor-1016	Surrogate Recovery	32.0%, 34.2%	40% to 140%	ND(0.00010) J	
						Aroclor-1221	LCS %R	56.1%	70% to 130%	ND(0.00010) J	
						Aroclor-1221	Surrogate Recovery	32.0%, 34.2%	40% to 140%	ND(0.00010) J	
						Aroclor-1232	LCS %R	56.1%	70% to 130%	ND(0.00010) J	
						Aroclor-1232	Surrogate Recovery	32.0%, 34.2%	40% to 140%	ND(0.00010) J	
						Aroclor-1242	LCS %R	56.1%	70% to 130%	ND(0.00010) J	
						Aroclor-1242	Surrogate Recovery	32.0%, 34.2%	40% to 140%	ND(0.00010) J	
						Aroclor-1248	LCS %R	56.1%	70% to 130%	ND(0.00010) J	
						Aroclor-1248	Surrogate Recovery	32.0%, 34.2%	40% to 140%	ND(0.00010) J	
						Aroclor-1254	LCS %R	56.1%	70% to 130%	ND(0.00010) J	
						Aroclor-1254	Surrogate Recovery	32.0%, 34.2%	40% to 140%	ND(0.00010) J	
						Aroclor-1260	LCS %R	56.1%	70% to 130%	ND(0.00010) J	
						Aroclor-1260	Surrogate Recovery	32.0%, 34.2%	40% to 140%	ND(0.00010) J	
						Total PCBs	LCS %R	56.1%	70% to 130%	ND(0.00010) J	
						Total PCBs	Surrogate Recovery	32.0%, 34.2%	40% to 140%	ND(0.00010) J	
G582-159	GMA3-9 (Filtered)	10/24/2008	Water	Tier II	Yes	Aroclor-1016	LCS %R	56.1%	70% to 130%	ND(0.00010) J	
						Aroclor-1221	LCS %R	56.1%	70% to 130%	ND(0.00010) J	
						Aroclor-1232	LCS %R	56.1%	70% to 130%	ND(0.00010) J	
						Aroclor-1242	LCS %R	56.1%	70% to 130%	ND(0.00010) J	
						Aroclor-1248	LCS %R	56.1%	70% to 130%	ND(0.00010) J	
						Aroclor-1254	LCS %R	56.1%	70% to 130%	ND(0.00010) J	
						Aroclor-1260	LCS %R	56.1%	70% to 130%	ND(0.00010) J	
						Total PCBs	LCS %R	56.1%	70% to 130%	ND(0.00010) J	
G582-159	GMA3-DUP-01 (Filtered)	10/24/2008	Water	Tier II	Yes	Aroclor-1016	LCS %R	56.1%	70% to 130%	ND(0.00010) J	Parent Sample GMA3-4 (Filtered)
						Aroclor-1221	LCS %R	56.1%	70% to 130%	ND(0.00010) J	
						Aroclor-1232	LCS %R	56.1%	70% to 130%	ND(0.00010) J	
						Aroclor-1242	LCS %R	56.1%	70% to 130%	ND(0.00010) J	
						Aroclor-1248	LCS %R	56.1%	70% to 130%	ND(0.00010) J	
						Aroclor-1254	LCS %R	56.1%	70% to 130%	ND(0.00010) J	
						Aroclor-1260	LCS %R	56.1%	70% to 130%	ND(0.00010) J	
						Total PCBs	LCS %R	56.1%	70% to 130%	ND(0.00010) J	
G582-159	OBG-2 (Filtered)	10/24/2008	Water	Tier II	Yes	Aroclor-1016	LCS %R	56.1%	70% to 130%	ND(0.00010) J	
						Aroclor-1016	Surrogate Recovery	30.8%, 26.2%	40% to 140%	ND(0.00010) J	
						Aroclor-1221	LCS %R	56.1%	70% to 130%	ND(0.00010) J	
						Aroclor-1221	Surrogate Recovery	30.8%, 26.2%	40% to 140%	ND(0.00010) J	
						Aroclor-1232	LCS %R	56.1%	70% to 130%	ND(0.00010) J	
						Aroclor-1232	Surrogate Recovery	30.8%, 26.2%	40% to 140%	ND(0.00010) J	
						Aroclor-1242	LCS %R	56.1%	70% to 130%	ND(0.00010) J	
						Aroclor-1242	Surrogate Recovery	30.8%, 26.2%	40% to 140%	ND(0.00010) J	
						Aroclor-1248	LCS %R	56.1%	70% to 130%	ND(0.00010) J	

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

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

Sample Delivery Group No.	Sample ID	Date Collected	Matrix	Validation Level	Qualification	Compound	QA/QC Parameter	Value	Control Limits	Qualified Result	Notes
						Aroclor-1248	Surrogate Recovery	30.8%, 26.2%	40% to 140%	ND(0.00010) J	
						Aroclor-1254	LCS %R	56.1%	70% to 130%	ND(0.00010) J	
PCBs (continued)											
G582-159	OBG-2 (Filtered)	10/24/2008	Water	Tier II	Yes	Aroclor-1254	Surrogate Recovery	30.8%, 26.2%	40% to 140%	ND(0.00010) J	
						Aroclor-1260	LCS %R	56.1%	70% to 130%	ND(0.00010) J	
						Aroclor-1260	Surrogate Recovery	30.8%, 26.2%	40% to 140%	ND(0.00010) J	
						Total PCBs	LCS %R	56.1%	70% to 130%	ND(0.00010) J	
						Total PCBs	Surrogate Recovery	30.8%, 26.2%	40% to 140%	ND(0.00010) J	
G582-175	16B-R (Filtered)	10/29/2008	Water	Tier II	Yes	Aroclor-1016	LCS/LCSD %R	50.0%, 53.0%	70% to 130%	ND(0.000067) J	
						Aroclor-1221	LCS/LCSD %R	50.0%, 53.0%	70% to 130%	ND(0.000067) J	
						Aroclor-1232	LCS/LCSD %R	50.0%, 53.0%	70% to 130%	ND(0.000067) J	
						Aroclor-1242	LCS/LCSD %R	50.0%, 53.0%	70% to 130%	ND(0.000067) J	
						Aroclor-1248	LCS/LCSD %R	50.0%, 53.0%	70% to 130%	ND(0.000067) J	
						Aroclor-1254	LCS/LCSD %R	50.0%, 53.0%	70% to 130%	ND(0.000067) J	
						Aroclor-1260	LCS/LCSD %R	50.0%, 53.0%	70% to 130%	ND(0.000067) J	
						Total PCBs	LCS/LCSD %R	50.0%, 53.0%	70% to 130%	ND(0.000067) J	
G582-186	GMA-3-RB-1 (Filtered)	11/3/2008	Water	Tier II	Yes	Aroclor-1016	LCS/LCSD %R	50.0%, 53.0%	70% to 130%	ND(0.00010) J	
						Aroclor-1221	LCS/LCSD %R	50.0%, 53.0%	70% to 130%	ND(0.00010) J	
						Aroclor-1232	LCS/LCSD %R	50.0%, 53.0%	70% to 130%	ND(0.00010) J	
						Aroclor-1242	LCS/LCSD %R	50.0%, 53.0%	70% to 130%	ND(0.00010) J	
						Aroclor-1248	LCS/LCSD %R	50.0%, 53.0%	70% to 130%	ND(0.00010) J	
						Aroclor-1254	LCS/LCSD %R	50.0%, 53.0%	70% to 130%	ND(0.00010) J	
						Aroclor-1260	LCS/LCSD %R	50.0%, 53.0%	70% to 130%	ND(0.00010) J	
						Total PCBs	LCS/LCSD %R	50.0%, 53.0%	70% to 130%	ND(0.00010) J	

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Appendix E

Fall 2008 Soil Gas/Indoor Air Sampling Results

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Infrastructure, environment, buildings

Appendix E

Sub-Slab Soil Gas and Indoor Air Investigation Summary Report for Buildings 51 and 59 – Fall 2008

Groundwater Management Area 3

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Tables

Table of Contents

Figure

Attachments

1. Background

On March 16, 2007, the General Electric Company (GE) submitted to the United States Environmental Protection Agency (EPA) a document titled *Supplemental Soil Gas Migration Assessment Report and Sampling Plan - Groundwater Management Area 3* (Supplemental Assessment Report). That document was submitted in response to a conditional approval letter issued by EPA on February 15, 2007 regarding GE's September 15, 2006 *Soil Gas Investigation Summary Report for Groundwater Management Area 3* (Soil Gas Summary Report) and the October 20, 2006 *Soil Gas Migration Assessment Report for Groundwater Management Area 3* (Migration Assessment Report). Those GE reports summarized the results of groundwater, light non-aqueous-phase liquid (LNAPL), soil gas, and indoor air sampling conducted by GE in 2006 near and within GE-owned Buildings 51 and 59 at the GE Pittsfield facility. The Supplemental Assessment Report summarized the results of an inspection performed by GE in October 2006 at Buildings 51 and 59 to identify potential pathways by which soil gas beneath the building might enter the buildings through the slabs or sidewalls. That report also included, at EPA's direction, GE's proposed plans for future monitoring of soil gas beneath, and indoor air within, Buildings 51 and 59, as well as for conducting an inventory to identify commercial products within those buildings that may contain the chemicals detected in soil gas and indoor air samples.

GE received conditional approval from EPA of the Supplemental Assessment Report in a letter dated June 25, 2007 which required GE to perform the soil gas and indoor air sampling described in the Supplemental Assessment Report on an annual basis until otherwise proposed by GE and approved by EPA. Pursuant to Conditions 1 and 2 of EPA's letter, GE submitted the *Addendum to the Supplemental Soil Gas Migration Assessment Report and Sampling Plan* (Addendum to Supplemental Assessment Report) to EPA on July 24, 2007. That report presented an assessment of whether potential pathways/penetrations extend to the underlying soil, and it summarized the actions that had been taken up to that time to seal pathways/penetrations that may have extended to the underlying soil. The Addendum to Supplemental Assessment Report also identified five such potential pathways/penetrations in Building 51 that may extend to the underlying soil, but that could not be sealed during the available timeframe and provided a proposal for addressing those remaining potential pathways/penetrations.

EPA provided conditional approval of the Addendum to Supplemental Assessment Report in a letter dated October 1, 2007. In response to Condition No. 1 of that letter, GE submitted the *Second Addendum to Supplemental Soil Gas Migration Assessment Report and Sampling Plan* (Second Addendum to Supplemental Assessment Report) to EPA on

November 12, 2007. That report presented GE's confirmation that three of the five remaining potential pathways/penetrations within Building 51 were sealed and stated that the other two potential pathways/penetrations, after further investigation, were found not to penetrate to the underlying soil. Therefore, no additional sampling (beyond the annual sampling described in the Supplemental Assessment Report) was required. In October 2007, prior to submission of the Second Addendum to Supplemental Assessment Report, GE conducted the building material/products inventory and soil gas and indoor air sampling as proposed in the Supplemental Assessment Report, as conditionally approved by EPA. The results of that assessment were included as Appendix E to GE's *Groundwater Management Area 3 Groundwater Quality and NAPL Monitoring Interim Report for Fall 2007*, submitted February 27, 2008. EPA conditionally approved that report by letter dated April 23, 2008.

GE has now conducted the fall 2008 building material/products inventory and soil gas and indoor air sampling, also pursuant to the Supplemental Assessment Report as conditionally approved. This report summarizes the results of those activities and provides a general review and assessment of the most recent sampling data. Section 2 of this report summarizes the results of the material/product inventory and soil gas/indoor air sampling activities at Buildings 51 and 59. Section 3 provides an assessment of the recent sampling activities, and includes a comparison of the recent indoor air data to applicable occupational standards for workplace exposure. That section also identifies the schedule for GE's next round of soil gas and indoor air investigation activities.

2. Summary of the Fall 2008 Sub-Slab Soil Gas and Indoor Air Assessment Activities

2.1 General

In October 2008, GE conducted a building product and materials inventory, sub-slab soil gas sampling beneath Buildings 51 and 59, and indoor air sampling within those buildings. Sampling methods used were generally identical to those that had previously been used in the October 2006 and 2007 soil gas sampling events, and as proposed in the Supplemental Assessment Report. The building inventories, sample collection, and analytical results are described below.

2.2 Building Products and Materials Inventory

On October 28, 2008, GE performed a reconnaissance within each building to identify materials and/or products that might contain chemicals that could represent a potential source of volatile constituents in indoor air and/or that are common to the target constituents identified in the groundwater or LNAPL. The inventory was performed for immediately accessible areas in and around the designated sampling areas. In addition, although certain building materials could potentially contain VOCs (e.g., carpeting, adhesives, etc.), the inventory focused on the identification of those materials and products that are used or stored inside the buildings, such as fuels, chemicals, cleaning supplies, etc. It should be noted that the inventory did not specifically focus on the building structure itself or on furnishings.

Multiple items that could contain volatile constituents were identified during the reconnaissance of Buildings 51 and 59. Tables F-1 and F-2 summarize those items and the chemicals that are associated with each item.

2.3 Indoor Air and Sub-Slab Soil Gas Sampling Activities

GE collected and analyzed indoor air samples and sub-slab soil gas samples from within and beneath Buildings 51 and 59 on October 29, 2008. As discussed below, the samples were collected using SUMMA® canisters, in accordance with the procedures contained in GE's approved *Field Sampling Plan/Quality Assurance Project Plan* (FSP/QAPP). This sampling was conducted to provide further information regarding the presence of volatile constituents in the soil gas and indoor air to support further assessments regarding the potential migration of such constituents from beneath Buildings 51 and 59 into the buildings interior. The

locations at which the samples were collected are shown on Figure F-1. As discussed in the Supplemental Assessment Report, the sample locations for soil gas and indoor air were co-located in order to assess potential interactions, if any, between soil gas and indoor air quality.

2.3.1 Sub-Slab Soil Gas and Indoor Air Sampling and Analysis

Indoor air samplers were placed at the approximate height of the breathing zone of building occupants. The collection of sub-slab soil gas samples involved the drilling of a small diameter hole through the concrete floor slabs (which ranged in thickness from 8 to 12 inches) to allow insertion of a sampling tube to the underside of the floor slab. The duplicate sub-slab soil gas sample (SS-DUP-1) was collected simultaneously with sample BLDG59-SS-03 in the Building 59 office/lobby area using a "T-shaped" regulator that was attached to the two canisters to allow for a uniform sample collection over the same 8-hour sampling period. Note that this method differs from the method used during the 2006 sampling event in which a duplicate sample was collected over a shorter period of time using an increased vacuum, which appeared to produce anomalous results. The sub-slab soil gas and indoor air sampling logs are included as Attachments B and C, respectively.

The indoor air and sub-slab soil gas samples were collected over an approximate 8-hour period (to coincide with normal working hours within each building) using a 6-liter SUMMA® canister with an attached pre-set flow regulator. The laboratory provided individually-certified-clean canisters with an initial vacuum of greater than 26 inches of mercury (in. of Hg) for sample collection. Flow regulators were pre-set by the laboratory to provide uniform sample collection over the approximate 8-hour sampling period.

All indoor air and sub-slab soil gas samples were submitted for laboratory analysis in accordance with USEPA Compendium Method TO-15, titled *Compendium of Methods for the Determination of Toxic Organics Compounds in Ambient Air – Determination of Volatile Organic Compounds (VOCs) in Air Collected in Specially-Prepared Canisters and Analyzed by Gas Chromatography/Mass Spectrometry (GC/MS).* The samples were submitted to Lancaster Laboratories, Inc. of Lancaster, Pennsylvania, which has current National Environmental Laboratory Accreditation Program (NELAP) certification and is accredited in the Commonwealth of Massachusetts for conducting analyses in accordance with EPA Compendium Method TO-15. The constituents for which analyses were performed include the same constituents for which analyses were performed on the deep soil gas samples collected in 2006 and 2007 – namely, VOCs and certain SVOCs that can be identified during

the same analysis (including 1,2-dichlorobenzene, 1,3-dichlorobenzene, 1,4-dichlorobenzene, 1,2,4-trichlorobenzene, and naphthalene).

2.3.2 Sub-Slab Soil Gas and Indoor Air Analytical Results

The analytical results for the sub-slab soil gas samples collected in October 2008 are presented in Table F-3 (for samples collected beneath Building 51) and Table F-4 (for samples collected beneath Building 59), along with the respective historical analytical results from the previous sampling events (where such data exist). Analytical results for the indoor air samples are presented in Table F-5 (for samples collected in Building 51) and Table F-6 (for samples collected in Building 59). Available historical analytical results are also included in the indoor air sample tables. A general assessment of these results is provided in Section 3.

2.4 Data Validation

The sub-slab soil gas and indoor air analytical results were received from the laboratory in units of both micrograms per cubic meter ($\mu g/m^3$) and parts per million (ppm), and both sets of data have been validated in accordance with the procedures outlined in GE's approved FSP/QAPP. The results of this review are included in Attachment A. Results of the validation indicate that 100% of the analytical data are considered usable. Thus, this data set meets the data quality objectives (DQOs) set forth in the FSP/QAPP.

3. Assessment of Results and Future Activities

3.1 General

GE has reviewed the data sets from the 2006 sampling event (as presented in GE's Migration Assessment Report), the 2007 sampling event (discussed in the Groundwater Management Area 3 Groundwater Quality and NAPL Monitoring Interim Report for Fall 2007, Appendix E), and the recent sub-slab soil gas and indoor air sampling conducted in October 2008 (described in Section 2). The results of that evaluation are summarized in this section. This section also provides a schedule for future activities involving GE's assessment of potential soil-gas migration to these buildings.

3.2 Evaluation of Analytical Results

3.2.1 Sub-Slab Soil Gas Data

The sub-slab soil gas data collected during prior sampling events and the more recent data show the presence of a variety of constituents (Tables F-3 and F-4). Specifically, a total of 30 VOCs and one SVOC were detected in one or more of the fall 2008 sub-slab soil gas samples collected from Building 51, compared to 34 VOCs from the fall 2007 sampling event and 28 VOCs and one SVOC detected in one or more of the September 2006 sub-slab soil gas samples from this building. At Building 59, a total of 30 VOCs and two SVOCs were detected during the fall 2008 sampling event compared to a total of 40 VOCs and six SVOCs which were detected in one or more of the fall 2007 sub-slab soil gas samples from Building 59, while 27 VOCs and one SVOC were detected in one or more of the sub-slab soil gas samples from this building in 2006. Most of the constituents were observed to have detections that are considered estimates due to being detected at values below the minimum detection limit (MDL).

Of the constituents detected in soil gas, only three VOCs (methylene chloride, tetrachloroethylene [PCE], and trichloroethene [TCE]) and one SVOC (1,2,4-trichlorobenzene) were also detected in the previous LNAPL samples, and two of them (PCE and TCE) were only detected in one previous LNAPL sample (from well 51-8). Further, only TCE was detected in at least one deep soil gas, sub-slab soil gas, LNAPL, and groundwater sample.

3.2.2 Indoor Air Data

The indoor air data from both Building 51 and Building 59, presented in Tables F-5 and F-6, show a variety of detected constituents, most of which were not detected in the previously collected LNAPL or groundwater samples. During the fall 2008 sampling event there were 25 VOCs and one SVOC detected in Building 51 and 21 VOCs detected in Building 59. During the fall 2007 sampling event, 28 VOCs were detected in the indoor air at Building 51 and 25 VOCs were detected in Building 59. In comparison, 19 VOCs were detected in Building 51 and 26 VOCs and one SVOC were detected in Building 59 in September 2006. As noted in the Migration Assessment Report, the detection of constituents at these frequencies in the indoor air of buildings is expected and routine.

The indoor air concentrations found in both buildings are all far below the limits applicable to occupational settings such as Buildings 51 and 59 – namely, the workplace exposure standards established by the U.S. Occupational Safety and Health Administration (OSHA) and the guidelines established by NIOSH. This is shown in Tables F-7 and F-8 for Buildings 51 and 59, respectively. [Note that, in these tables, the concentrations have been converted from micrograms per cubic meter to parts per million (ppm), since the OSHA standards and NIOSH guidelines are expressed in units of ppm.]

There are many potential sources of VOCs in the indoor air in buildings. As identified during the material/product inventory (Tables F-1 and F-2), there are items within the buildings that could also be potential sources of VOCs (e.g., paint, paint thinner, cleaners, etc.). In addition, as noted above, other substances in the indoor environment not identified through the inspection may be contributing to indoor air concentrations as well.

3.3 Future Activities

In the fall of 2009, GE will conduct another annual inventory of materials and/or products within each building that could contain volatile constituents similar to those that have been previously detected in the indoor air samples and are common to the target constituents in the LNAPL or groundwater. Following completion of the building inventories, GE will perform additional monitoring of soil gas beneath and indoor air within Buildings 51 and 59 at or near the same locations that were sampled in fall 2008. As in 2007 and 2008, GE anticipates that these activities will be conducted during the month of October coinciding with the fall 2009 groundwater sampling and NAPL monitoring activities at GMA3. The results of this inventory and sampling event will be presented as part of the fall 2009

Groundwater Quality and NAPL Monitoring Report for GMA 3, which will be submitted by February 28, 2010.

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Tables

Table E-1
Summary Of Material/Product Inventory For Building 51

Sub-Slab Soil Gas and Indoor Air Investigation Summary Report for Buildings 51 and 59 – Fall 2008
General Electric Company - Pittsfield, Massachusetts

Area	Identified Material/Product	Information Regarding Material/Product
Chiller Room	Foamtrol AF1440	distillates, petroleum, straight run middle (CAS# 6474-44-2)
	Unigran 85	
	Spectrus NX106	magnesium nitrate (CAS# 10377-60-3), 5-chloro-2-methyl-4-isothiazolin-3-one (CAS# 26172-55-4)
	Lithium Bromide (drums)	CAS# 7550-35-8
	Paint Thinner	Information could not be found
	Grez-Off Degreaser (Srapy Nine) spray bottl	propylene glycol monobutyl ether (CAS# 5131-66-8), alcohols C9-11ethoxylated (68439-46-3), isolpropyl alcohol (CAS# 67-63-0)
	Evaporator coil cleaner	2-butoxyethanol
	Corrshield NT402 (Betz Dearborn)	sodium nitrate (CAS# 7632-00-0), boric acid (CAS# 12179-04-3)
	Duct Wrap Insulation	urea, polymer with formaldehyde and phenol (CAS# 25104-55-6), fiberglass wool (CAS# 65997-17-3)
	Stoko - Kresto Hand Cleaner	No hazardous ingredients
	1 Manhole in the immediate area	
	6 Floor Penetrations in the immediate area	
	Dianodic DN300 Drums (GE Betz)	phosphoric acid (CAS# 7778-53-2), potassium hydroxide (CAS# 1310-58-3), 1-h-benzotriazole (CAS# 29385-43-1), phosphonic acid (CAS# 2809-21-4)
Garage Area (off Chiller Room)	Acetylene Tank for welding	
	1 Manhole in the immediate area	
GEPS Area (office area)	No materials/products other than furnishings/structural items present at this area	
Janitor's Room near Records Room	Rovic: High Gloss, High Solids, Floor Polish	Cas# 63714-68-3, #68441-17-18, #68405-63-2, #78-51-3, and 111-77-3.
	Degreaser	KOH- Potassium Hydroxide
Records Room	Xerox copier toner cartridges	styrene/butadiene copolymer, carbon
	Static Guard	Dimethyl Ditallow Ammonium Chloride, small spray can
	Stoko - Kresto Hand Cleaner	No hazardous ingredients

Notes:
1. Where brands were not specified or ingredients listed on containers/items, general MSDS sheets were consulted
2. The material/product inventory was conducted in immediately accessible areas in and around the designated soil gas and indoor air sampling locations on October 28, 2008.

Table E-2
Summary Of Material/Product Inventory For Building 59

Sub-Slab Soil Gas and Indoor Air Investigation Summary Report for Buildings 51 and 59 – Fall 2008
General Electric Company - Pittsfield, Massachusetts

Area	Identified Material/Product	Information Regarding Material/Product
Facility Area	Xerox copier toner cartridges	styrene/butadiene copolymer, carbon
	Lysol basin tub-tile cleaner	diethylene glycol monobutyl ether (CAS#112-34-5)
Library Area	Xerox copier toner cartridges	styrene/butadiene copolymer, carbon
	White Out	ammonium hydroxide, calcium carbonate, ethylene glycol
	Lysol Spray	Alkyl Dimethyl Benzyl Ammonium Saccharinate
	Glass Cleaner-Windex	Ammonia
	Lysol Tub and Tile	Ammonia
	Flying Colors- Carpet Shampoo	
	22 Paint Cans	Multi-colors- Acrylic Resins, nephelsin, Syenite
Office Area	Xerox copier toner cartridges	styrene/butadiene copolymer, carbon
	White Out	ammonium hydroxide, calcium carbonate, ethylene glycol
Kitchen	Lysol Spray	Alkyl Dimethyl Benzyl Ammonium Saccharinate
Machine Shop Area / Storage	Oil/lubricants	Information could not be found
	Alconox	sodium dodecylbenzenesulfonate (CAS# 25155-30-0), sodium carbonate (CAS# 497-19-8), tetrasodium pyrophosphate (CAS# 7722-88-5), sodium phosphate (CAS#7758-29-4)
	3 Generators, 2 Snowblowers	Gasoline
	Ricoh Toner-Type 3100D	
	Krylon Industrial solvent based Marking Paint red	Propane CAS# 74-98-6,butane-106-97-8, Naptha-64742-89-8, toluene-108-88-3, ethylbenzene-100-41-4, xylene-1330-20-7, acetone-67-64-1, calcium carbonate-471-34-1, and titanium dioxide-13463-67-7
	Fire Extinguishers	inert
	PVC Cement- Arcadis Area	MEK-78-93-3, Tetrahydrofuran-109-99-9, PVC Resin-9002-86-2, Cyclohexanone-108-94-1, acetone-67-64-1
	Acetone- Arcadis Area	Solvent for decontamination
	Hexane- Arcadis Area	Solvent for decontamination
	Calibration Standards	Information could not be found
	Duct Wrap	urea, polymer with formaldehyde and phenol (CAS# 25104-55-6), fiberglass wool (CAS# 65997-17-3)
	Antifreeze	propylene glycol (CAS# 57-55-6)
	Liquefied Petroleum gas	propane (CAS# 74-98-6), propylene (CAS# 115-07-1)

Notes:
1. Where brands were not specified or ingredients listed on containers/items, general MSDS sheets were consulted.
2. The material/product inventory was conducted in immediately accessible areas in and around the designated soil gas and indo air sampling locations on October 28, 2008.

Table E-3
Summary of Subslab Soil Gas Data for Building 51

Sub-Slab Soil Gas and Indoor Air Investigation Summary Report for Buildings 51 and 59 – Fall 2008
General Electric Company - Pittsfield, Massachusetts
(Results are presented in ug/m^3)

Location ID:	Chiller Room			Records Room		Power Systems Hall		
Sample ID:	Summa Canister #0324	BLDG51-SS-1	BLDG51-SS-1	BLDG51-SS-2	BLDG51-SS-2	Summa Canister #0066	BLDG51-SS-3	BLDG51-SS-3
Parameter / Date Collected:	09/28/06	10/11/07	10/28/08	10/11/07	10/28/08	09/28/06	10/11/07	10/28/08
Volatile Organics								
1,1,1-Trichloroethane	2.9 J	37	71	43	16	ND(5.5)	9.8	11
1,1,2-trichloro-1,2,2-trifluoroethane	51	ND(7.7)	180	ND(7.7)	ND(15)	ND(7.7)	ND(7.7)	ND(15)
1,1,2-Trichloroethane	ND(5.5)	ND(5.5)	ND(5.5)	12	ND(5.5)	ND(5.5)	1.4 J	ND(5.5)
1,1-Dichloroethane	ND(4.0)	1.4 J	3.1 J	ND(4.0)	ND(4.0)	ND(4.0)	ND(4.0)	ND(4.0)
1,2,4-Trimethylbenzene	15	1.3 J	ND(4.9)	1.3 J	4.7 J	11	1.2 J	5.8
1,3,5-Trimethylbenzene	9.0	ND(4.9)	ND(4.9)	ND(4.9)	1.3 J	ND(4.9)	ND(4.9)	2.7 J
1,3-butadiene	ND(4.4)	2.3 J	ND(4.4)	5.6	4.6	ND(4.4)	2.9 J	ND(4.4)
2-Butanone	55	11	44	29	18	46	17	19
2-Hexanone	ND(8.2)	ND(8.2)	5.8 J	2.5 J	4.5 J	ND(8.2)	ND(8.2)	2.7 J
4-Ethyltoluene	15	1.3 J	ND(4.9)	1.2 J	ND(4.9)	ND(4.9)	1.3 J	ND(4.9)
4-Methyl-2-pentanone	ND(8.2)	ND(8.2)	3.3 J	6.3 J	ND(8.2)	ND(8.2)	ND(8.2)	ND(8.2)
Acetone	140	48	320 J	100	130	54	180	360
Acetonitrile	ND(3.4)	ND(3.4) J	ND(3.4)	ND(3.4) J	5.8	8.0	ND(3.4) J	ND(3.4)
Acrolein	ND(4.6)	1.7 J	4.3 J	3.3 J	ND(4.6)	ND(4.6)	1.9 J	3.8 J
Benzene	0.86 J	2.9 J	1.4 J	5.1	3.4	1.3 J	7.7	5.2
Bromomethane	ND(3.9)	ND(3.9)	ND(3.9)	1.6 J	ND(3.9)	ND(3.9)	ND(3.9)	ND(3.9)
Carbon Disulfide	ND(3.1)	2.0 J	2.1 J	1.6 J	0.95 J	ND(3.1)	3.4	3.0 J
Carbon Tetrachloride	ND(6.3)	ND(6.3)	1.8 J	ND(6.3)	ND(6.3)	ND(6.3)	ND(6.3)	ND(6.3)
Chlorodifluoromethane	63	ND(3.5)	ND(3.5)	ND(3.5)	ND(3.5)	46	0.71 J	ND(3.5)
Chloroform	1.1 J	3.2 J	5.4	4.4 J	4.7 J	ND(4.9)	ND(4.9)	ND(4.9)
Dichlorodifluoromethane	3.4 J	4.0 J	5.5	3.4 J	2.3 J	3.0 J	3.9 J	3.1 J
Dichlorofluoromethane	ND(4.2)	ND(4.2)	ND(4.2)	0.93 J	ND(4.2)	ND(4.2)	ND(4.2)	ND(4.2)
Ethylbenzene	6.7	2.8 J	ND(4.3)	3.9 J	1.2 J	8.0	3.7 J	13
Heptane	ND(4.1)	2.3 J	ND(4.1)	27	ND(4.1)	8.7	3.6 J	ND(4.1)
Hexane	14	23	1.8 J	25	5.1	13	25	1.9 J
Isooctane	2.2 J	1.1 J	ND(4.7)	1.1 J	ND(4.7)	2.8 J	1.2 J	ND(4.7)
Isopropylbenzene	1.2 J	ND(4.9)	NA	1.1 J	NA	0.98 J	4.9	NA
m&p-Xylene	12	4.5	1.3 J	6.0	3.4 J	16	5.8	32
Methyl tert-butyl ether	160	ND(3.6)	ND(3.6)	ND(3.6)	ND(3.6)	67	ND(3.6)	ND(3.6)
Methylene Chloride	2.5 J	1.0 J	1.1 J	1.6 J	51	18	0.73 J	ND(3.5)
Octane	1.4 J	1.9 J	1.4 J	9.1	2.8 J	2.2 J	5.6	7.9
o-Xylene	5.5	1.7 J	ND(4.3)	2.3 J	1.5 J	7.9	2.4 J	14
Pentane	5.5	3.9	3.1	9.1	5.1	7.3	3.5	1.9 J
Propene	11	4.3	14	130	32	ND(1.7)	23	5.8
Styrene	ND(4.3)	ND(4.3)	ND(4.3)	ND(4.3)	ND(4.3)	ND(4.3)	ND(4.3)	ND(4.3)
tert-Butyl Alcohol	ND(3.0)	0.91 J	4.7	1.0 J	ND(3.0)	ND(3.0)	0.94 J	ND(3.0)
Tetrachloroethene	ND(6.8)	9.8	41	3.9 J	10	ND(6.8)	160	250
Toluene	19	6.2	9.0	12	8.6	59	13	20
Trichloroethene	58	650	930	18	21	ND(5.4)	25	29
Trichlorofluoromethane	5.5 J	8.3	15	6.1	4.3 J	4.0 J	5.0 J	3.3 J
Vinyl Chloride	0.74 J	ND(2.6)	ND(2.6)	ND(2.6)	ND(2.6)	1.2 J	ND(2.6)	ND(2.6)
Semivolatile Organics								
1,2,4-Trichlorobenzene	9.9 J	ND(15)	ND(15)	ND(15)	ND(15)	ND(15)	ND(15)	ND(15)
Naphthalene	ND(5.2)	ND(5.2)	ND(5.2)	ND(5.2)	34	ND(5.2)	ND(5.2)	520

Notes:

1. Samples were collected by ARCADIS, and submitted to Lancaster Laboratories for analysis of VOCs and selected SVOCs.
2. Samples have been validated as per Field Sampling Plan/Quality Assurance Project Plan (FSP/QAPP), General Electric Company, Pittsfield, Massachusetts, ARCADIS (approved March 15, 2007 and re-submitted March 30, 2007).
3. Only those constituents detected in one or more samples are summarized.
4. ND - Analyte was not detected. The number in parentheses is the associated detection limit.
5. NA - Not Analyzed.

Data Qualifiers:

Organics (volatiles, semivolatiles)
J - Indicates an estimated value less than the practical quantitation limit (PQL).

Table E-4
Summary of Subslab Soil Gas Data for Building 59

Sub-Slab Soil Gas and Indoor Air Investigation Summary Report for Buildings 51 and 59 – Fall 2008
General Electric Company - Pittsfield, Massachusetts
(Results are presented in ug/m^3)

Location ID:	Facility Area			Library Area		Lobby Area			
Sample ID:	Summa Canister #0073	BLDG59-SS-1	BLDG59-SS-1	BLDG59-SS-2	BLDG59-SS-2	Summa Canister #0511	Summa Canister #0061 (Duplicate)*	BLDG59-SS-3	BLDG59-SS-3
Parameter Date Collected:	09/28/06	10/11/07	10/28/08	10/11/07	10/28/08	09/28/06	09/28/06	10/11/07	10/28/08
Volatile Organics									
1,1,1-Trichloroethane	ND(5.5)	1.9 J	3.9 J	44	60	ND(55)	1.4 J	1.1 J [1.1 J]	1.6 J [1.5 J]
1,2,3-Trichloropropane	ND(6.0)	ND(6.0)	1.6 J	ND(6.0)	ND(6.0)	ND(60)	ND(6.0)	ND(6.0) [ND(6.0)]	ND(6.0) [ND(6.0)]
1,2,4-Trimethylbenzene	8.8	1.3 J	ND(4.9)	3.8 J	1.9 J	ND(49)	4.1 J	15 [1.3 J]	ND(4.9) [ND(4.9)]
1,3,5-Trimethylbenzene	ND(4.9)	ND(4.9)	ND(4.9)	ND(4.9)	ND(4.9)	ND(49)	8.7	6.6 [ND(4.9)]	ND(4.9) [ND(4.9)]
1,3-butadiene	ND(4.4)	ND(4.4)	ND(4.4)	ND(4.4)	ND(4.4)	ND(44)	ND(4.4)	ND(4.4) [ND(4.4)]	3.1 J [ND(4.4)]
2-Butanone	47	7.2	19	10	ND(5.9)	50 J	ND(5.9)	6.9 [8.7]	18 [15]
2-Hexanone	ND(8.2)	ND(8.2)	3.9 J	ND(8.2)	3.3 J	ND(82)	ND(8.2)	ND(8.2) [ND(8.2)]	3.5 J [2.7 J]
4-Ethyltoluene	ND(4.9)	1.5 J	ND(4.9)	1.3 J	ND(4.9)	ND(49)	3.7 J	6.5 [1.2 J]	ND(4.9) [ND(4.9)]
4-Methyl-2-pentanone	ND(8.2)	ND(8.2)	ND(8.2)	2.5 J	ND(8.2)	ND(82)	ND(8.2)	ND(8.2) [ND(8.2)]	ND(8.2) [ND(8.2)]
Acetone	53	25	95	37	100	200	210	24 [30]	150 [200]
Acetonitrile	ND(3.4)	ND(3.4) J	2.4 J	ND(3.4) J	ND(3.4)	58	ND(3.4)	ND(3.4) J [ND(3.4) J]	1.9 J [ND(3.4)]
Acrolein	ND(4.6)	1.2 J	3.6 J	1.3 J	ND(4.6)	ND(46)	ND(4.6)	ND(4.6) [ND(4.6)]	3.9 J [3.5 J]
Alpha Methyl Styrene	ND(4.8)	10 J	1.1 J	ND(4.8) J	ND(4.8)	ND(48)	ND(4.8)	3.6 J [ND(4.8)]	ND(4.8) [ND(4.8)]
Benzene	0.73 J	12	1.3 J	1.5 J	1.9 J	ND(32)	0.77 J	1.8 J [2.0 J]	2.5 J [2.5 J]
Bromobenzene	ND(6.4)	ND(6.4)	ND(6.4)	ND(6.4)	ND(6.4)	ND(64)	ND(6.4)	1.5 J [ND(6.4)]	ND(6.4) [ND(6.4)]
Bromomethane	ND(3.9)	0.97 J	ND(3.9)	ND(3.9)	ND(3.9)	ND(39)	ND(3.9)	4.5 [1.1 J]	ND(3.9) [ND(3.9)]
Carbon Disulfide	ND(3.1)	5.9	2.8 J	1.9 J	5.2	93	ND(3.1)	1.5 J [1.1 J]	1.5 J [1.4 J]
Carbon Tetrachloride	ND(6.3)	110	210	ND(6.3)	2.1 J	ND(63)	4.7 J	4.7 J [4.5 J]	7.6 [7.7]
Chlorobenzene	ND(4.6)	ND(4.6)	ND(4.6)	ND(4.6)	ND(4.6)	ND(46)	ND(4.6)	3.0 J [ND(4.6)]	ND(4.6) [ND(4.6)]
Chlorodifluoromethane	0.99 J	0.71 J	ND(3.5)	5.6	ND(3.5)	20 J	ND(3.5)	1.8 J [1.9 J]	ND(3.5) [ND(3.5)]
Chloroethane	ND(2.6)	1.5 J	ND(2.6)	ND(2.6)	ND(2.6)	65	ND(2.6)	0.84 J [ND(2.6)]	ND(2.6) [ND(2.6)]
Chloroform	ND(4.9)	55	91	17	22	ND(49)	2.1 J	1.7 J [1.7 J]	2.0 J [2.1 J]
Chloromethane	ND(2.1)	ND(2.1)	ND(2.1)	ND(2.1)	ND(2.1)	ND(21)	ND(2.1)	0.89 J [1.0 J]	ND(2.1) [ND(2.1)]
cis-1,2-Dichloroethene	ND(4.0)	ND(4.0)	ND(4.0)	1.0 J	1.2 J	ND(40)	ND(4.0)	ND(4.0) [ND(4.0)]	ND(4.0) [ND(4.0)]
Cumene	ND(4.9)	NA	1.9 J	NA	ND(4.9)	ND(49)	ND(4.9)	NA	ND(4.9) [ND(4.9)]
Dichlorodifluoromethane	1.7 J	2.4 J	2.5 J	130	120	11 J	6.1	23 [23]	18 [18]
Ethylbenzene	3.1 J	3.7 J	ND(4.3)	2.9 J	1.9 J	ND(43)	1.3 J	4.3 J [2.6 J]	ND(4.3) [ND(4.3)]
Heptane	1.4 J	1.6 J	ND(4.1)	ND(4.1)	ND(4.1)	23 J	1.0 J	1.0 J [0.94 J]	ND(4.1) [ND(4.1)]
Hexane	62	15	1.1 J	26	21	85	9.6	20 [21]	2.0 J [2.2 J]
Isooctane	1.8 J	2.1 J	ND(4.7)	1.0 J	ND(4.7)	ND(47)	ND(4.7)	ND(4.7) [ND(4.7)]	ND(4.7) [ND(4.7)]
Isopropylbenzene	ND(4.9)	3.3 J	NA	ND(4.9)	NA	ND(49)	NA	2.9 J [1.3 J]	NA
m&p-Xylene	5.2	5.9	2.0 J	4.4	4.4	ND(43)	2.7 J	19 [5.3]	ND(4.3) [0.98 J]
Methyl tert-butyl ether	260	5.2	ND(3.6)	ND(3.6)	ND(3.6)	62	12	0.79 J [0.72 J]	ND(3.6) [ND(3.6)]
Methylene Chloride	3.3 J	ND(3.5)	ND(3.5)	0.76 J	ND(3.5)	58	ND(3.5)	ND(3.5) [0.87 J]	ND(3.5) [3.1 J]
Octane	ND(4.7)	3.7 J	ND(4.7)	1.0 J	7.0	ND(47)	ND(4.7)	3.0 J [2.0 J]	ND(4.7) [ND(4.7)]
o-Xylene	2.5 J	2.2 J	ND(4.3)	1.7 J	2.0 J	ND(43)	1.3 J	6.2 [1.9 J]	ND(4.3) [ND(4.3)]
Pentane	1.9 J	2.2 J	1.7 J	2.6 J	30	27 J	ND(3.0)	2.4 J [2.5 J]	4.1 [4.2]
Propene	ND(1.7)	1.9	4.2	3.9	13	ND(17)	ND(1.7)	5.4 [5.9]	22 [22]
Styrene	ND(4.3)	ND(4.3)	1.4 J	ND(4.3)	ND(4.3)	ND(43)	ND(4.3)	2.1 J [ND(4.3)]	ND(4.3) [ND(4.3)]
tert-Butyl Alcohol	ND(3.0)	3.2	3.5	1.1 J	ND(3.0)	ND(30)	0.67 J	4.4 [1.4 J]	3.5 [3.0 J]
Tetrachloroethene	ND(6.8)	4.5 J	14	13	41	ND(68)	ND(6.8)	20 [7.0]	11 [11]
Toluene	8.4	40	6.7	6.2	7.1	64	8.5	11 [12]	4.7 [4.9]
trans-1,2-Dichloroethene	ND(4.0)	ND(4.0)	ND(4.0)	0.99 J	ND(4.0)	ND(40)	ND(4.0)	ND(4.0) [ND(4.0)]	ND(4.0) [ND(4.0)]
Trichloroethene	5.3 J	540	1100	1,700	2300	ND(54)	470	180 [170]	270 [370]
Trichlorofluoromethane	15	5.6	3.5 J	250	260	44 J	37	60 [60]	33 [34]
Semivolatile Organics									
1,2,4-Trichlorobenzene	8.8 J	ND(15)	ND(15)	ND(15)	ND(15)	ND(150)	6.4 J	7.5 J [ND(15)]	ND(15) [ND(15)]
1,2-Dichlorobenzene	ND(6.0)	ND(6.0)	ND(6.0)	ND(6.0)	ND(6.0)	ND(60)	ND(6.0)	13 [ND(6.0)]	ND(6.0) [ND(6.0)]
1,3-Dichlorobenzene	ND(6.0)	ND(6.0)	ND(6.0)	ND(6.0)	ND(6.0)	ND(60)	ND(6.0)	11 [ND(6.0)]	ND(6.0) [ND(6.0)]
1,4-Dichlorobenzene	ND(6.0)	ND(6.0)	ND(6.0)	ND(6.0)	ND(6.0)	ND(60)	ND(6.0)	12 [ND(6.0)]	ND(6.0) [ND(6.0)]
Hexachlorobutadiene	ND(21)	ND(21)	ND(21)	ND(21)	ND(21)	ND(210)	ND(21)	57 [ND(21)]	ND(21) [ND(21)]
Hexachloroethane	ND(9.7)	ND(9.7)	3.0 J	ND(9.7)	ND(9.7)	ND(97)	ND(9.7)	ND(9.7) [ND(9.7)]	ND(9.7) [ND(9.7)]
Naphthalene	ND(5.2)	8.0	ND(5.2)	ND(5.2)	ND(5.2)	ND(5.2)	ND(5.2)	ND(5.2) [ND(5.2)]	49 [53]

Notes:

1. Samples were collected by ARCADIS, and submitted to Lancaster Laboratories for analysis of VOCs and selected SVOCs.
2. Samples have been validated as per Field Sampling Plan/Quality Assurance Project Plan (FSP/QAPP), General Electric Company, Pittsfield, Massachusetts, ARCADIS (approved March 15, 2007 and re submitted March 30, 2007).
3. Only those constituents detected in one or more samples are summarized.
4. Field duplicate sample results are presented in brackets.
5. ND - Analyte was not detected. The number in parentheses is the associated detection limit.
6. NA - Not Analyzed.
7. * - Although this sample is labeled as a duplicate sample, as previously discussed in the Migration Assessment Report, it was incorrectly collected at an increased rate and over a shorter period of time than the other 2006 samples.

Data Qualifiers:

Organics (volatiles, semivolatiles)
J - Indicates an estimated value less than the practical quantitation limit (PQL).

Table E-5
Summary of Indoor Air Data for Building 51

Sub-Slab Soil Gas and Indoor Air Investigation Summary Report for Buildings 51 and 59 – Fall 2007
General Electric Company - Pittsfield, Massachusetts
(Results are presented in ug/m^3)

Location ID:	Chiller Room			Records Room			Power Systems Hall		
Sample ID:	(Lobby Area Outside) Summa Canister #0337	BLDG51-IA-1	BLDG51-IA-1	Summa Canister #0197	BLDG51-IA-2	BLDG51-IA-2	Summa Canister #0075	BLDG51-IA-3	BLDG51-IA-3
Parameter / Date Collected:	09/28/06	10/11/07	10/28/08	09/28/06	10/11/07	10/28/08	09/28/06	10/11/07	10/28/08
Volatile Organics									
1,2,4-Trimethylbenzene	ND(4.9)	ND(4.9)	ND(4.9)	ND(4.9)	4.1 J	ND(4.9)	ND(49)	ND(4.9)	1.6 J
2-Butanone	4.1 J	3.3 J	4.2 J	30	1.5 J	5.4 J	550	ND(5.9)	13
2-Hexanone	ND(8.2)	ND(8.2)	ND(8.2)	ND(8.2)	ND(8.2)	ND(8.2)	ND(82)	ND(8.2)	2.6 J
4-Methyl-2-pentanone	ND(8.2)	ND(8.2)	ND(8.2)	ND(8.2)	ND(8.2)	4.2 J	ND(82)	ND(8.2)	8.0 J
Acetone	21	23	27	23	15	23	340	16	58
Acetonitrile	ND(3.4)	ND(3.4) J	ND(3.4)	ND(3.4)	ND(3.4) J	ND(3.4)	73	12 J	ND(3.4)
Acrolein	ND(4.6)	2.7 J	2.1 J	ND(4.6)	1.5 J	3.2 J	ND(46)	ND(4.6)	3.7 J
Alpha Methyl Styrene	ND(4.8)	ND(4.8)	ND(4.8)	ND(4.8)	2.3 J	ND(4.8)	ND(48)	ND(4.8)	ND(4.8)
Benzene	ND(3.2)	1.1 J	ND(3.2)	ND(3.2)	1.2 J	ND(3.2)	ND(32)	1.2 J	2.1 J
Bromomethane	ND(3.9)	ND(3.9)	ND(3.9)	ND(3.9)	ND(3.9)	ND(3.9)	ND(39)	3.8 J	ND(3.9)
Carbon Disulfide	ND(3.1)	ND(3.1)	ND(3.1)	ND(3.1)	0.75 J	0.86 J	160	ND(3.1)	ND(3.1)
Chlorodifluoromethane	650	0.74 J	2.2 J	590	0.85 J	ND(3.5)	500	ND(3.5)	ND(3.5)
Chloroethane	ND(2.6)	ND(2.6)	ND(2.6)	ND(2.6)	ND(2.6)	ND(2.6)	74	ND(2.6)	ND(2.6)
Chloroform	ND(4.9)	ND(4.9)	ND(4.9)	ND(4.9)	ND(4.9)	ND(4.9)	ND(49)	6.9	ND(4.9)
Chloromethane	ND(2.1)	1.1 J	0.85 J	ND(2.1)	1.4 J	0.96 J	ND(21)	4.6	0.79 J
Dichlorodifluoromethane	8.7	3.6 J	2.2 J	7.8	3.1 J	2.2 J	13 J	5	2.2 J
Ethyl Acetate	ND(3.6)	ND(3.6)	ND(3.6)	ND(3.6)	ND(3.6)	ND(3.6)	ND(36)	ND(3.6)	10
Ethylbenzene	ND(4.3)	1.4 J	1.7 J	ND(4.3)	1.2 J	ND(4.3)	11 J	ND(4.3)	12
Freon 114	ND(7.0)	ND(7.0)	ND(7.0)	ND(7.0)	ND(7.0)	ND(7.0)	ND(70)	3.8 J	ND(7.0)
Heptane	ND(4.1)	ND(4.1)	ND(4.1)	14	1.9 J	4.0 J	280	ND(4.1)	17
Hexane	ND(3.5)	1.6 J	0.85 J	1.1 J	2.2 J	ND(3.5)	31 J	3.5 J	1.1 J
Isooctane	ND(4.7)	ND(4.7)	ND(4.7)	ND(4.7)	1.7 J	ND(4.7)	ND(47)	ND(4.7)	ND(4.7)
m&p-Xylene	ND(4.3)	3.4 J	4.5	0.96 J	3.1 J	1.6 J	18 J	1.0 J	27
Methyl tert-butyl ether	ND(3.6)	ND(3.6)	ND(3.6)	ND(3.6)	ND(3.6)	ND(3.6)	44	ND(3.6)	ND(3.6)
Methylene Chloride	2.8 J	0.83 J	2.3 J	3.0 J	0.73 J	0.83 J	59	15	1.4 J
Octane	ND(4.7)	0.93 J	ND(4.7)	ND(4.7)	ND(4.7)	ND(4.7)	ND(47)	ND(4.7)	5.6
o-Xylene	ND(4.3)	1.1 J	1.4 J	ND(4.3)	1.3 J	ND(4.3)	ND(43)	ND(4.3)	12
Pentane	0.86 J	1.1 J	1.7 J	1.4 J	0.83 J	0.71 J	54	3.4	0.62 J
Propene	1.4 J	1.3 J	4.5	ND(1.7)	0.72 J	1.5 J	ND(17)	1.4 J	1.6 J
Styrene	ND(4.3)	ND(4.3)	ND(4.3)	ND(4.3)	ND(4.3)	ND(4.3)	9.4 J	ND(4.3)	ND(4.3)
tert-Butyl Alcohol	ND(3.0)	1.8 J	ND(3.0)	ND(3.0)	1.0 J	ND(3.0)	ND(30)	ND(3.0)	ND(3.0)
Tetrachloroethene	ND(6.8)	ND(6.8)	ND(6.8)	ND(6.8)	ND(6.8)	ND(6.8)	ND(68)	ND(6.8)	19
Toluene	9.6	6.3	7.0	150	4.8	7.6	1,900	2.1 J	36
Trichloroethene	ND(5.4)	1.3 J	2.7 J	1.2 J	2.7 J	2.4 J	23 J	ND(5.4)	ND(5.4)
Trichlorofluoromethane	1.5 J	2.3 J	2.0 J	2.5 J	3.8 J	2.5 J	19 J	5.2 J	3.4 J
Semivolatile Organics									
Naphthalene	ND(5.2)	ND(5.2)	ND(5.2)	ND(5.2)	ND(5.2)	ND(5.2)	ND(5.2)	ND(5.2)	2.1 J

Notes:

1. Samples were collected by ARCADIS, and submitted to Lancaster Laboratories for analysis of VOCs and selected SVOCs.
2. Samples have been validated as per Field Sampling Plan/Quality Assurance Project Plan (FSP/QAPP), General Electric Company, Pittsfield, Massachusetts, ARCADIS (approved March 15, 2007 and re-submitted March 30, 2007).
   ND - Analyte was not detected. The number in parenthesis is the associated detection limit.
3. Only those constituents detected in one or more samples are summarized.
4. Data Qualifiers:

   Organics (volatiles, semivolatiles)
   J - Indicates an estimated value less than the practical quantitation limit (PQL).

Table E-6
Summary of Indoor Air Data for Building 59

Sub-Slab Soil Gas and Indoor Air Investigation Summary Report for Buildings 51 and 59 – Fall 2008
General Electric Company - Pittsfield, Massachusetts
(Results are presented in ug/m^3)

Location ID:	Facility Area			Library Area			Lobby Area			
Sample ID:	Summa Canister #0110	BLDG59-IA-1	BLDG59-IA-1	Summa Canister #0174	BLDG59-IA-2	BLDG59-IA-2	Summa Canister #0200	Summa Canister #0189 (Duplicate)*	BLDG59-IA-3	BLDG59-IA-3
Parameter / Date Collected:	09/28/06	10/11/07	10/28/08	09/28/06	10/11/07	10/28/08	09/28/06	09/28/06	10/11/07	10/28/08
Volatile Organics										
1,1,1-Trichloroethane	ND(5.5)	ND(5.5)	ND(5.5)	1.5 J	ND(5.5)	ND(5.5)	ND(5.5)	ND(5.5)	ND(5.5)	ND(5.5)
1,2,4-Trimethylbenzene	ND(4.9)	1.4 J	ND(4.9)	1.9 J	1.8 J	ND(4.9)	1.4 J	ND(4.9)	ND(4.9)	ND(4.9)
1,3,5-Trimethylbenzene	ND(4.9)	ND(4.9)	ND(4.9)	ND(4.9)	ND(4.9)	ND(4.9)	ND(4.9)	2.0 J	0.98 J	ND(4.9)
2-Butanone	1.8 J	2.1 J	14	4.8 J	3.1 J	1.5 J	2.1 J	ND(5.9)	3.3 J	10
2-Hexanone	ND(8.2)	ND(8.2)	3.5 J	ND(8.2)	ND(8.2)	ND(8.2)	ND(8.2)	ND(8.2)	ND(8.2)	3.3 J
3-Chloropropene	ND(3.1)	ND(3.1)	ND(3.1)	ND(3.1)	ND(3.1)	ND(3.1)	ND(3.1)	ND(3.1)	ND(3.1)	ND(3.1)
4-Ethyltoluene	1.1 J	ND(4.9)	ND(4.9)	2.0 J	1.9 J	ND(4.9)	ND(4.9)	ND(4.9)	ND(4.9)	ND(4.9)
Acetone	26	15	48	100	30	14	29	29	25	36
Acetonitrile	ND(3.4)	ND(3.4) J	ND(3.4)	ND(3.4)	ND(3.4) J	ND(3.4)	ND(3.4)	ND(3.4)	ND(3.4) J	1.7 J
Acrolein	ND(4.6)	ND(4.6)	3.3 J	ND(4.6)	2.5 J	ND(4.6)	ND(4.6)	ND(4.6)	2.0 J	ND(4.6)
Benzene	ND(3.2)	ND(3.2)	ND(3.2)	4.6	1.8 J	1.3 J	1.5 J	0.67 J	1.1 J	ND(3.2)
Chlorodifluoromethane	2.0 J	ND(3.5)	ND(3.5)	6.0	4.5	1.8 J	4.9	2.5 J	3.0 J	ND(3.5)
Chloroform	ND(4.9)	ND(4.9)	ND(4.9)	1.2 J	ND(4.9)	ND(4.9)	ND(4.9)	ND(4.9)	ND(4.9)	ND(4.9)
Chloromethane	0.78 J	1.1 J	0.80 J	1.2 J	1.1 J	0.86 J	0.78 J	0.89 J	1.2 J	0.87 J
Dichlorodifluoromethane	1.9 J	2.3 J	2.2 J	3.2 J	2.6 J	2.1 J	2.7 J	2.4 J	3.1 J	2.7 J
Ethylbenzene	ND(4.3)	ND(4.3)	1.1 J	8.3	1.9 J	1.3 J	0.87 J	ND(4.3)	ND(4.3)	ND(4.3)
Heptane	1.2 J	1.8 J	ND(4.1)	3.0 J	1.1 J	ND(4.1)	1.7 J	ND(4.1)	ND(4.1)	ND(4.1)
Hexane	91	3.5 J	0.92 J	470	81	13	230	60	33	2.5 J
Isooctane	0.98 J	ND(4.7)	ND(4.7)	2.3 J	1.3 J	ND(4.7)	1.4 J	1.1 J	ND(4.7)	ND(4.7)
m&p-Xylene	3.9 J	1.3 J	2.1 J	20	5.0	3.2 J	2.2 J	0.96 J	1.8 J	1.1 J
Methyl tert-butyl ether	ND(3.6)	ND(3.6)	ND(3.6)	1.8 J	2.6 J	ND(3.6)	ND(3.6)	ND(3.6)	0.72 J	ND(3.6)
Methylene Chloride	3.1 J	8.6	ND(3.5)	4.5	ND(3.5)	ND(3.5)	2.7 J	6.6	19	1.1 J
Octane	ND(4.7)	ND(4.7)	ND(4.7)	2.3 J	1.2 J	ND(4.7)	ND(4.7)	ND(4.7)	ND(4.7)	ND(4.7)
o-Xylene	1.5 J	ND(4.3)	ND(4.3)	11	1.9 J	1.1 J	ND(4.3)	ND(4.3)	ND(4.3)	ND(4.3)
Pentane	1.7 J	0.86 J	0.86 J	5.7	7.7	5.2	3.5	1.8 J	3.2	1.4 J
Propene	ND(1.7)	1.2 J	1.5 J	ND(1.7)	6.9	3.8	11	5.5	3.2	2.3
Styrene	ND(4.3)	ND(4.3)	ND(4.3)	ND(4.3)	ND(4.3)	ND(4.3)	15	ND(4.3)	ND(4.3)	ND(4.3)
tert-Butyl Alcohol	ND(3.0)	1.1 J	ND(3.0)	ND(3.0)	0.61 J	ND(3.0)	ND(3.0)	ND(3.0)	0.61 J	3.0
Tetrachloroethene	ND(6.8)	ND(6.8)	1.5 J	ND(6.8)	ND(6.8)	ND(6.8)	ND(6.8)	ND(6.8)	ND(6.8)	ND(6.8)
Toluene	3.1 J	15	2.2 J	16	12	8.6	7.1	8.2	6.1	2.5 J
Trichloroethene	5.7	ND(5.4)	3.8 J	41	15	15	9.1	5.5	4.7 J	4.2 J
Trichlorofluoromethane	31	2.9 J	4.5 J	210	110	44	73	51	44	16
Semivolatile Organics										
Hexachlorobutadiene	ND(21)	ND(21)	ND(21)	ND(21)	ND(21)	ND(21)	12 J	ND(21)	ND(21)	ND(21)

Notes:

1. Samples were collected by ARCADIS, and submitted to Lancaster Laboratories for analysis of VOCs and selected SVOCs.
2. Samples have been validated as per Field Sampling Plan/Quality Assurance Project Plan (FSP/QAPP), General Electric Company, Pittsfield, Massachusetts, ARCADIS (approved March 15, 2007 and re-submitted March 30, 2007).
   ND - Analyte was not detected. The number in parenthesis is the associated detection limit.
3. Only those constituents detected in one or more samples are summarized.
4. * - Although this sample is labeled as a duplicate sample, as previously discussed in the Migration Assessment Report, it was incorrectly collected at an increased rate and over a shorter period of time than the other 2006 samples.
5. Data Qualifiers:

   Organics (volatiles, semivolatiles)
   J - Indicates an estimated value less than the practical quantitation limit (PQL).

Table E-7
Comparison of Indoor Air Results to Occupational Exposure Limits - Building 51

Sub-Slab Soil Gas and Indoor Air Investigation Summary Report for Buildings 51 and 59 – Fall 2008
General Electric Company - Pittsfield, Massachusetts
(Results are presented in parts per million, ppm)

Sample Location:			Chiller Room			Records Room			Power Systems Hall		
Parameter / Sample ID: / Date Collected:	OSHA PEL[4]	NIOSH REL[5]	(Lobby Area Outside) Summa Canister #0337 09/28/06	BLDG51-IA-1 10/11/07	BLDG51-IA-1 10/28/08	Summa Canister #0197 09/28/06	BLDG51-IA-2 10/11/07	BLDG51-IA-2 10/28/08	Summa Canister #0075 09/28/06	BLDG51-IA-3 10/11/07	BLDG51-IA-3 10/28/08
Volatile Organics											
1,2,4-Trimethylbenzene	--	25	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010)	0.00083 J	ND(0.0010)	ND(0.010)	ND(0.0010)	0.00033 J
2-Butanone	200	200	0.0014 J	0.0011 J	0.0014 J	0.010	0.00050 J	0.0018 J	0.19	ND(0.0020)	0.0042
2-Hexanone			ND(0.0020)	ND(0.0020)	ND(0.0020)	ND(0.0020)	ND(0.0020)	ND(0.0020)	ND(0.020)	ND(0.0020)	0.00062 J
4-Methyl-2-pentanone			ND(0.0020)	ND(0.0020)	ND(0.0020)	ND(0.0020)	ND(0.0020)	0.0010 J	ND(0.020)	ND(0.0020)	0.0019 J
Acetone	1,000	250	0.0087	0.0097	0.011	0.0096	0.0063	0.0095	0.14	0.0067	0.024
Acetonitrile	40	20	ND(0.0020)	ND(0.0020) J	ND(0.0020)	ND(0.0020)	ND(0.0020) J	ND(0.0020)	0.043	0.0072 J	ND(0.0020)
Acrolein	0.1	0.1	ND(0.0020)	0.0012 J	0.00092 J	ND(0.0020)	0.00067 J	0.0014 J	ND(0.020)	ND(0.0020)	0.0016 J
Alpha Methyl Styrene	100	50	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010)	0.00048 J	ND(0.0010)	ND(0.010)	ND(0.0010)	ND(0.0010)
Benzene	1	0.1	ND(0.0010)	0.00034 J	ND(0.0010)	ND(0.0010)	0.00036 J	ND(0.0010)	ND(0.010)	0.00036 J	0.00066 J
Bromomethane	20	--	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.010)	0.00097 J	ND(0.0010)
Carbon Disulfide	20	1	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010)	0.00024 J	0.00028 J	0.052	ND(0.0010)	ND(0.0010)
Chlorodifluoromethane	1,000	1,000	0.19	0.00021 J	0.00063 J	0.17	0.00024 J	ND(0.0010)	0.14	ND(0.0010)	ND(0.0010)
Chloroethane	1,000	--	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010)	0.028	ND(0.0010)	ND(0.0010)
Chloroform	50	2	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.010)	0.0014	ND(0.0010)
Chloromethane	100	--	ND(0.0010)	0.00051 J	0.00041 J	ND(0.0010)	0.00069 J	0.00046 J	ND(0.010)	0.0022	0.00038 J
Dichlorodifluoromethane	1,000	1,000	0.0018	0.00072 J	0.00044 J	0.0016	0.00063 J	0.00044 J	0.0026 J	0.0010	0.00045 J
Ethyl Acetate			ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.010)	ND(0.0010)	0.0028
Ethylbenzene	100	100	ND(0.0010)	0.00033 J	0.00040 J	ND(0.0010)	0.00027 J	ND(0.0010)	0.0026 J	ND(0.0010)	0.0028
Freon 114	1,000	1,000	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.010)	0.00055 J	ND(0.0010)
Heptane	500	85	ND(0.0010)	ND(0.0010)	ND(0.0010)	0.0035	0.00047 J	0.00097 J	0.069	ND(0.0010)	0.0041
Hexane	500	50	ND(0.0010)	0.00045 J	0.00024 J	0.00031 J	0.00063 J	ND(0.0010)	0.0088 J	0.00098 J	0.00030 J
Isooctane	500	75	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010)	0.00037 J	ND(0.0010)	ND(0.010)	ND(0.0010)	ND(0.0010)
m&p-Xylene	100	100	ND(0.0010)	0.00078 J	0.0010	0.00022 J	0.00072 J	0.00036 J	0.0042 J	0.00023 J	0.0063
Methyl tert-butyl ether	200	--	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010)	0.012	ND(0.0010)	ND(0.0010)
Methylene Chloride	25	--	0.00080 J	0.00024 J	0.00066 J	0.00086 J	0.00021 J	0.00024 J	0.017	0.0044	0.00039 J
Octane	500	75	ND(0.0010)	0.00020 J	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.010)	ND(0.0010)	0.0012
o-Xylene	100	100	ND(0.0010)	0.00025 J	0.00032 J	ND(0.0010)	0.00030 J	ND(0.0010)	ND(0.010)	ND(0.0010)	0.0028
Pentane	1,000	120	0.00029 J	0.00038 J	0.00058 J	0.00049 J	0.00028 J	0.00024 J	0.018	0.0012	0.00021 J
Propene	3	--	0.00082 J	0.00078 J	0.0026	ND(0.0010)	0.00042 J	0.00089 J	ND(0.010)	0.00083 J	0.00090 J
Styrene	100	50	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010)	0.0022 J	ND(0.0010)	ND(0.0010)
tert-Butyl Alcohol	100	100	ND(0.0010)	0.00060 J	ND(0.0010)	ND(0.0010)	0.00034 J	ND(0.0010)	ND(0.010)	ND(0.0010)	ND(0.0010)
Tetrachloroethene			ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.010)	ND(0.0010)	0.0028
Toluene	200	100	0.0026	0.0017	0.0019	0.039	0.0013	0.0020	0.51	0.00056 J	0.0095
Trichloroethene	100	25	ND(0.0010)	0.00025 J	0.00051 J	0.00022 J	0.00050 J	0.00045 J	0.0043 J	ND(0.0010)	ND(0.0010)
Trichlorofluoromethane	1,000	1,000	0.00027 J	0.00041 J	0.00035 J	0.00045 J	0.00068 J	0.00044 J	0.0033 J	0.00092 J	0.00061 J
Semivolatile Organics											
Naphthalene			ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010)	0.00041 J

Notes:

1. Samples were collected by ARCADIS, and submitted to Lancaster Laboratories for analysis of VOCs and selected SVOCs.
2. ND - Analyte was not detected. The number in parenthesis is the associated detection limit.
3. Only those constituents detected in one or more samples are summarized.
4. The United States Occupational Safety and Health Administration (OSHA) permissible exposure limits (PELs) for indoor air in an occupational setting for an 8-hour workday and a 40-hour workweek.
5. The National Institute for Occupational Safety and Health (NIOSH) recommended exposure levels (RELs) for up to a 10-hour workday over a 40-hour workweek.
6. Concentrations have been converted from micrograms per cubic meter (ug/m3) to parts per million (ppm) since the OSHA standards and NIOSH guidelines are expressed in ppm.
7. -- - Occupational exposure limit not available.

Data Qualifiers:

Organics (volatiles, semivolatiles)
J - Indicates an estimated value less than the practical quantitation limit (PQL).

Table E-8
Comparison of Indoor Air Results to Occupational Exposure Limits - Building 59

Sub-Slab Soil Gas and Indoor Air Investigation Summary Report for Buildings 51 and 59 – Fall 2008
General Electric Company - Pittsfield, Massachusetts
(Results are presented in parts per million, ppm)

Sample Location:			Facility Area			Library Area			Lobby Area			
Sample ID:	OSHA PEL[4]	NIOSH REL[5]	Summa Canister #0110	BLDG59-IA-1	BLDG59-IA-1	Summa Canister #0174	BLDG59-IA-2	BLDG59-IA-2	Summa Canister #0200	Summa Canister #0189 (Dup)*	BLDG59-IA-3	BLDG59-IA-3
Parameter Date Collected:			09/28/06	10/11/07	10/28/08	09/28/06	10/11/07	10/28/08	09/28/06	09/28/06	10/11/07	10/28/08
Volatile Organics												
1,1,1-Trichloroethane	350	350	ND(0.0010)	ND(0.0010)	ND(0.0010)	0.00027 J	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010)
1,2,4-Trimethylbenzene	--	25	ND(0.0010)	0.00028 J	ND(0.0010)	0.00038 J	0.00036 J	ND(0.0010)	0.00029 J	ND(0.0010)	ND(0.0010)	ND(0.0010)
1,3,5-Trimethylbenzene	--	25	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010)	0.00040 J	0.00020 J	ND(0.0010)
2-Butanone	200	200	0.00060 J	0.00071 J	0.0048	0.0016 J	0.0011 J	0.00051 J	0.00072 J	ND(0.0020)	0.0011 J	0.0034
2-Hexanone			ND(0.0020)	ND(0.0020)	0.00086 J	ND(0.0020)	ND(0.0020)	ND(0.0020)	ND(0.0020)		ND(0.0020)	0.00081 J
4-Ethyltoluene	--	--	0.00022 J	ND(0.0010)	ND(0.0010)	0.00041 J	0.00039 J	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010)
Acetone	1,000	250	0.011	0.0062	0.020	0.043	0.013	0.0057	0.012	0.012	0.010	0.015
Acrolein	0.1	0.1	ND(0.0020)	ND(0.0020)	0.0015 J	ND(0.0020)	0.0011 J	ND(0.0020)	ND(0.0020)	ND(0.0020)	0.00087 J	ND(0.0020)
Benzene	1	0.1	ND(0.0010)	ND(0.0010)	ND(0.0010)	0.0014	0.00055 J	0.00041 J	0.00046 J	0.00021 J	0.00034 J	ND(0.0010)
Chlorodifluoromethane	1,000	1,000	0.00057 J	ND(0.0010)	ND(0.0010)	0.0017	0.0013	0.00050 J	0.0014	0.00072 J	0.00085 J	ND(0.0010)
Chloromethane	100	--	0.00038 J	0.00051 J	0.00039 J	0.00057 J	0.00054 J	0.00042 J	0.00038 J	0.00043 J	0.00058 J	0.00042 J
Dichlorodifluoromethane	1,000	1,000	0.00039 J	0.00047 J	0.00044 J	0.00065 J	0.00052 J	0.00042 J	0.00055 J	0.00048 J	0.00062 J	0.00054 J
Ethylbenzene	100	100	ND(0.0010)	ND(0.0010)	0.00025 J	0.0019	0.00044 J	0.00031 J	0.00020 J	ND(0.0010)	ND(0.0010)	ND(0.0010)
Heptane	500	85	0.00030 J	0.00043 J	ND(0.0010)	0.00074 J	0.00028 J	ND(0.0010)	0.00042 J	ND(0.0010)	ND(0.0010)	ND(0.0010)
Hexane	500	50	0.026	0.00098 J	0.00026 J	0.13	0.023	0.0036	0.065	0.017	0.0095	0.00071 J
Isooctane	500	75	0.00021 J	ND(0.0010)	ND(0.0010)	0.00049 J	0.00028 J	ND(0.0010)	0.00031 J	0.00023 J	ND(0.0010)	ND(0.0010)
Isopropylbenzene			NA	ND(0.0010)	0.00048 J	NA	ND(0.0010)	0.00074 J	NA		ND(0.0010)	0.00026 J
m&p-Xylene	100	100	0.00089 J	0.00030 J		0.0047	0.0012		0.00050 J	0.00022 J	0.00041 J	
Methyl tert-butyl ether	--	--	ND(0.0010)	ND(0.0010)	ND(0.0010)	0.00051 J	0.00073 J	ND(0.0010)	ND(0.0010)	ND(0.0010)	0.00020 J	ND(0.0010)
Methylene Chloride	25	--	0.00090 J	0.0025	ND(0.0010)	0.0013	ND(0.0010)	ND(0.0010)	0.00079 J	0.0019	0.0054	0.00032 J
Octane	500	75	ND(0.0010)	ND(0.0010)	ND(0.0010)	0.00049 J	0.00025 J	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010)
o-Xylene	100	100	0.00034 J	ND(0.0010)	ND(0.0010)	0.0025	0.00043 J	0.00025 J	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010)
Pentane	1,000	120	0.00059 J	0.00029 J	0.00029 J	0.0019	0.0026	0.0018	0.0012	0.00062 J	0.0011	0.00048 J
Propene	--	--	ND(0.0010)	0.00072 J	0.00087 J	ND(0.0010)	0.0040	0.0022	0.0066	0.0032	0.0019	0.0013
Styrene	100	50	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010)	0.0035	ND(0.0010)	ND(0.0010)	ND(0.0010)
tert-Butyl Alcohol	100	100	ND(0.0010)	0.00037 J	ND(0.0010)	ND(0.0010)	0.00020 J	ND(0.0010)	ND(0.0010)	ND(0.0010)	0.00020 J	0.0010
Tetrachloroethene			ND(0.0010)	ND(0.0010)	0.00022 J	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010)		ND(0.0010)	ND(0.0010)
Toluene	200	100	0.00081 J	0.0041	0.00059 J	0.0043	0.0031	0.0023	0.0019	0.0022	0.0016	0.00066 J
Trichloroethene	100	25	0.0011	ND(0.0010)	0.00070 J	0.0077	0.0027	0.0028	0.0017	0.0010	0.00088 J	0.00078 J
Trichlorofluoromethane	1,000	1,000	0.0055	0.00052 J	0.00081 J	0.037	0.019	0.0078	0.013	0.0090	0.0078	0.0029
Semivolatile Organics												
Hexachlorobutadiene	0.02	0.02	ND(0.0020)	ND(0.0020)	ND(0.0020)	ND(0.0020)	ND(0.0020)	ND(0.0020)	0.0011 J	ND(0.0020)	ND(0.0020)	ND(0.0020)

Notes:

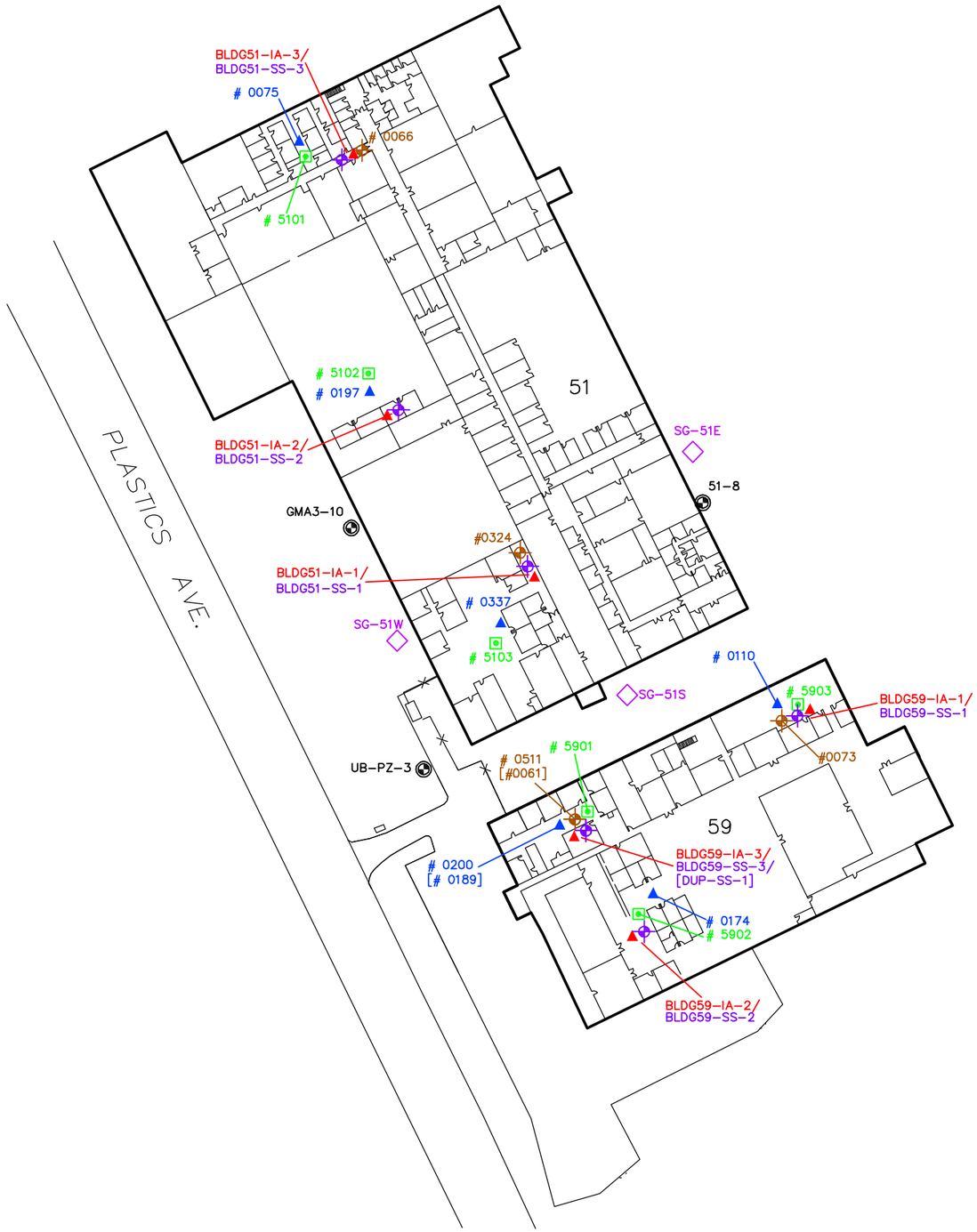
1. Samples were collected by ARCADIS, and submitted to Lancaster Laboratories for analysis of VOCs and selected SVOCs.
2. ND - Analyte was not detected. The number in parenthesis is the associated detection limit.
3. Only those constituents detected in one or more samples are summarized.
4. The United States Occupational Safety and Health Administration (OSHA) permissible exposure limits (PELs) for indoor air in an occupational setting for an 8-hour workday and a 40-hour workweek.
5. The National Institute for Occupational Safety and Health (NIOSH) recommended exposure levels (RELs) for up to a 10-hour workday over a 40-hour workweek.
6. Concentrations have been converted from micrograms per cubic meter (ug/m3) to parts per million (ppm) since the OSHA standards and NIOSH guidelines are expressed in ppm.
7. -- - Occupational exposure limit not available.
8. * - Although this sample is labeled as a duplicate sample, as previously discussed in the Migration Assessment Report, it was incorrectly collected at an increased rate and over a shorter period of time than the other 2006 samples.

Data Qualifiers:

Organics (volatiles, semivolatiles)
J - Indicates an estimated value less than the practical quantitation limit (PQL).

ARCADIS

Figure



LEGEND:

- SG-51E — AUGUST 2006 DEEP SOIL GAS SAMPLE LOCATION
- 51-8 — AUGUST 2006 GROUNDWATER/ LNAPL SAMPLE LOCATION
- # 0511 — SEPTEMBER 2006 SUB-SLAB SOIL GAS SAMPLE LOCATION
- # 0200 — SEPTEMBER 2006 INDOOR AIR SAMPLE LOCATION
- # 5902 — SEPTEMBER 2006 INDUSTRIAL HYGIENE INDOOR AIR SAMPLE LOCATION
- BLDG51-IA-3 — OCTOBER 2007/2008 INDOOR AIR SAMPLE LOCATION
- BLDG51-SS-3 — OCTOBER 2007/2008 SUB-SLAB SOIL GAS SAMPLE LOCATION

NOTES:

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

0 100' 200'

GRAPHIC SCALE

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS
GMA3 INTERIM MONITORING PROGRAM

EXISTING SUB-SLAB SOIL GAS AND INDOOR AIR SAMPLE LOCATIONS

ARCADIS

FIGURE
E-1

ARCADIS

Attachments

ARCADIS

Attachment A

Data Validation Report

Attachment A
Air Sampling Data Validation Report
Buildings 51 and 59 Soil Gas and Indoor Air Quality Investigations - Fall 2008

General Electric Company
Pittsfield, Massachusetts

1.0 General

This attachment summarizes the data validation review performed on behalf of the General Electric Company (GE) for air samples collected in October 2008 as part of soil gas and indoor air quality sampling activities conducted at Buildings 51 and 59, located at the General Electric Company/Housatonic River Site in Pittsfield, Massachusetts. The samples were analyzed in accordance with the United States Environmental Protection Agency (EPA) Compendium Method TO-15 for volatile organic compound (VOC) constituents, as well as certain semi-volatile (SVOC) constituents that can also be identified during the analyses, which were conducted by Lancaster Laboratories, Inc. of Lancaster, Pennsylvania. Data validation was performed for 13 volatile organic compound (VOC) samples.

2.0 Data Evaluation Procedures

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

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

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

The following data qualifiers were used in this data evaluation:

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

U The compound was analyzed for, but was not detected. The sample quantitation limit is presented. Non-detect sample results are presented as ND(PQL) within this report for

consistency with documents previously prepared for investigations conducted at the GE-Pittsfield/Housatonic River Site.

UJ The compound was not detected above the reported sample quantitation limit. However, the reported limit is estimated and may or may not represent the actual level of quantitation. Non-detect sample results that required qualification are presented as ND(PQL) J within this report for consistency with documents previously prepared for investigations conducted at the GE-Pittsfield/Housatonic River Site.

R Indicates that the previously reported detection limit or sample result has been rejected due to a major deficiency in the data generation procedure. The data should not be used for any qualitative or quantitative purpose.

3.0 Data Validation Procedures

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

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

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

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

Parameter	Tier I Only			Tier I &Tier II			Total
	Samples	Duplicates	Blanks	Samples	Duplicates	Blanks	
EPA TO-15	0	0	0	12	1	0	13
Total	**0**	**0**	**0**	**12**	**1**	**0**	**13**

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

4.0 Summary of QA/QC Parameter Deviations Requiring Data Qualification

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

Based on USEPA Region I Tier II data validation procedures, QA/QC parameter deviations that required sample result qualification were not observed for these data.

5.0 Overall Data Usability

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

Data Usability

Parameter	Percent Usability	Rejected Data
VOCs	100	None

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

5.1 Precision

Precision measures the reproducibility of measurements under a given set of conditions. Specifically, it is a quantitative measure of the variability of a group of measurements compared to their average value. For this investigation, precision was defined as the RPD between duplicate sample results. The duplicate samples used to evaluate precision included field duplicates and LCS/LCSD samples. None of the data required qualification due to field duplicate RPD deviations or LCS/LCSD 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, and LCS/LCSDs. None of the data required qualification due to instrument calibration deviations, internal standard recovery deviations, or LCS/LCSD recoveries.

5.3 Representativeness

Representativeness expresses the degree to which sample data accurately and precisely represents a characteristic of a population, parameter variations at a sampling point, or an environmental condition. Representativeness is a qualitative parameter, which is most concerned with the proper design of the sampling program. The representativeness criterion is best satisfied by making certain that sampling locations are selected properly and a sufficient number of samples are collected. This parameter has been addressed by collecting samples at locations specified in the EPA-approved work plans, and by following the procedures for sample collection/analyses that were described in the FSP/QAPP. Additionally, the analytical program used procedures consistent with EPA-approved analytical methodology. A QA/QC parameter that is an indicator of the representativeness of a sample is holding time. Holding time criteria are established to maintain the samples in a state that is representative of the in-situ field conditions before analysis. For this analytical data set, none of the data required qualification due to holding time deviations.

5.4 Comparability

Comparability is a qualitative parameter expressing the confidence with which one data set can be compared with another. This goal was achieved through the use of the standardized techniques for sample collection and analysis presented in the FSP/QAPP. Specifically, all the groundwater samples collected in October 2008 were analyzed by EPA method TO-15.

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. This analytical data set had an overall usability of 100%.

Table A-1
Analytical Data Validation Summary
Buildings 51 and 59 Soil Gas and Indoor Air Investigation - Fall 2008

General Electric Company - Pittsfield, Massachusetts
(Results are presented in parts per million by volume, ppmv and micrograms per cubic meter, ug/m^3)

Sample Delivery Group No.	Sample ID	Date Collected	Matrix	Validation Level	Qualification	Compound	QA/QC Parameter	Value	Control Limits	Qualified Result (ppmv)	Qualified Result (ug/m^3)	Notes
EPA TO-15												
PTF05	51-IA-1	10/29/2008	Air	Tier II	No							
PTF05	51-IA-2	10/29/2008	Air	Tier II	No							
PTF05	51-IA-3	10/29/2008	Air	Tier II	No							
PTF05	51-SS-1	10/29/2008	Air	Tier II	No							
PTF05	51-SS-2	10/29/2008	Air	Tier II	No							
PTF05	51-SS-3	10/29/2008	Air	Tier II	No							
PTF05	59-IA-1	10/29/2008	Air	Tier II	No							
PTF05	59-IA-2	10/29/2008	Air	Tier II	No							
PTF05	59-IA-3	10/29/2008	Air	Tier II	No							
PTF05	59-SS-1	10/29/2008	Air	Tier II	No							
PTF05	59-SS-2	10/29/2008	Air	Tier II	No							
PTF05	59-SS-3	10/29/2008	Air	Tier II	No							
PTF05	Duplicate	10/29/2008	Air	Tier II	No							Duplicate of 59-SS-3

TABLE 1
INDOOR AIR AND SUBSLAB SOIL GAS DATA RECEIVED DURING NOVEMBER 2008

BUILDING 51 SOIL GAS / INDOOR AIR INVESTIGATION
GROUNDWATER MANAGEMENT AREA 3
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in ppm)

Parameter / Sample ID: / Date Collected:	51-IA-1 10/29/08	51-IA-2 10/29/08	51-IA-3 10/29/08	51-SS-1 10/29/08	51-SS-2 10/29/08	51-SS-3 10/29/08
Volatile Organics						
1,1,1-Trichloroethane	ND(0.0010)	ND(0.0010)	ND(0.0010)	0.013	0.0030	0.0020
1,1,2-trichloro-1,2,2-trifluoroethane	ND(0.0020)	ND(0.0020)	ND(0.0020)	0.023	ND(0.0020)	ND(0.0020)
1,1-Dichloroethane	ND(0.0010)	ND(0.0010)	ND(0.0010)	0.00076 J	ND(0.0010)	ND(0.0010)
1,2,4-Trimethylbenzene	ND(0.0010)	ND(0.0010)	0.00033 J	ND(0.0010)	0.00096 J	0.0012
1,3,5-Trimethylbenzene	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010)	0.00027 J	0.00055 J
1,3-butadiene	ND(0.0020)	ND(0.0020)	ND(0.0020)	ND(0.0020)	0.0021	ND(0.0020)
2-Butanone	0.0014 J	0.0018 J	0.0042	0.015	0.0059	0.0064
2-Hexanone	ND(0.0020)	ND(0.0020)	0.00062 J	0.0014 J	0.0011 J	0.00066 J
4-Methyl-2-pentanone	ND(0.0020)	0.0010 J	0.0019 J	0.00080 J	ND(0.0020)	ND(0.0020)
Acetone	0.011	0.0095	0.024	0.13 J	0.057	0.15
Acetonitrile	ND(0.0020)	ND(0.0020)	ND(0.0020)	ND(0.0020)	0.0034	ND(0.0020)
Acrolein	0.00092 J	0.0014 J	0.0016 J	0.0019 J	ND(0.0020)	0.0017 J
Benzene	ND(0.0010)	ND(0.0010)	0.00066 J	0.00043 J	0.0011	0.0016
Carbon Disulfide	ND(0.0010)	0.00028 J	ND(0.0010)	0.00069 J	0.00031 J	0.00096 J
Carbon Tetrachloride	ND(0.0010)	ND(0.0010)	ND(0.0010)	0.00029 J	ND(0.0010)	ND(0.0010)
Chlorodifluoromethane	0.00063 J	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010)
Chloroform	ND(0.0010)	ND(0.0010)	ND(0.0010)	0.0011	0.00096 J	ND(0.0010)
Chloromethane	0.00041 J	0.00046 J	0.00038 J	ND(0.0010)	ND(0.0010)	ND(0.0010)
Dichlorodifluoromethane	0.00044 J	0.00044 J	0.00045 J	0.0011	0.00047 J	0.00063 J
Ethyl Acetate	ND(0.0010)	ND(0.0010)	0.0028	ND(0.0010)	ND(0.0010)	ND(0.0010)
Ethylbenzene	0.00040 J	ND(0.0010)	0.0028	ND(0.0010)	0.00028 J	0.0031
Heptane	ND(0.0010)	0.00097 J	0.0041	ND(0.0010)	ND(0.0010)	ND(0.0010)
Hexane	0.00024 J	ND(0.0010)	0.00030 J	0.00051 J	0.0014	0.00053 J
m&p-Xylene	0.0010	0.00036 J	0.0063	0.00030 J	0.00077 J	0.0075
Methylene Chloride	0.00066 J	0.00024 J	0.00039 J	0.00031 J	0.015	ND(0.0010)
Octane	ND(0.0010)	ND(0.0010)	0.0012	0.00030 J	0.00060 J	0.0017
o-Xylene	0.00032 J	ND(0.0010)	0.0028	ND(0.0010)	0.00035 J	0.0033
Pentane	0.00058 J	0.00024 J	0.00021 J	0.0010	0.0017	0.00064 J
Propene	0.0026	0.00089 J	0.00090 J	0.0082	0.019	0.0033
tert-Butyl Alcohol	ND(0.0010)	ND(0.0010)	ND(0.0010)	0.0016	ND(0.0010)	ND(0.0010)
Tetrachloroethene	ND(0.0010)	ND(0.0010)	0.0028	0.0061	0.0015	0.037
Toluene	0.0019	0.0020	0.0095	0.0024	0.0023	0.0054
Trichloroethene	0.00051 J	0.00045 J	ND(0.0010)	0.17	0.0039	0.0055
Trichlorofluoromethane	0.00035 J	0.00044 J	0.00061 J	0.0027	0.00076 J	0.00058 J
Semivolatile Organics						
Naphthalene	ND(0.0010)	ND(0.0010)	0.00041 J	ND(0.0010)	0.0066	0.098

Notes:

1. Samples were collected by ARCADIS BBL, and submitted to Lancaster Laboratories for analysis of VOCs and selected SVOCs.
2. Samples have been validated as per Field Sampling Plan/Quality Assurance Project Plan (FSP/QAPP), General Electric Company, Pittsfield, Massachusetts, ARCADIS (approved March 15, 2007 and re-submitted March 30, 2007).
3. ND - Analyte was not detected. The number in parenthesis is the associated detection limit.
4. Only those constituents detected in one or more samples are summarized.
5. -- 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 2
INDOOR AIR AND SUBSLAB SOIL GAS DATA RECEIVED DURING NOVEMBER 2008

BUILDING 59 SOIL GAS / INDOOR AIR INVESTIGATION
GROUNDWATER MANAGEMENT AREA 3
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in ppm)

Parameter / Sample ID: / Date Collected:	59-IA-1 10/29/08	59-IA-2 10/29/08	59-IA-3 10/29/08	59-SS-1 10/29/08	59-SS-2 10/29/08	59-SS-3 10/29/08
Volatile Organics						
1,1,1-Trichloroethane	ND(0.0010)	ND(0.0010)	ND(0.0010)	0.00072 J	0.011	0.00028 J [0.00027 J]
1,2,3-Trichloropropane	ND(0.0010)	ND(0.0010)	ND(0.0010)	0.00026 J	ND(0.0010)	ND(0.0010) [ND(0.0010)]
1,2,4-Trimethylbenzene	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010)	0.00038 J	ND(0.0010) [ND(0.0010)]
1,3-butadiene	ND(0.0020)	ND(0.0020)	ND(0.0020)	ND(0.0020)	ND(0.0020)	0.0014 J [ND(0.0020)]
2-Butanone	0.0048	0.00051 J	0.0034	0.0066	ND(0.0020)	0.0062 [0.0050]
2-Hexanone	0.00086 J	ND(0.0020)	0.00081 J	0.00094 J	0.00080 J	0.00084 J [0.00065 J]
Acetone	0.020	0.0057	0.015	0.040	0.043	0.065 [0.083]
Acetonitrile	ND(0.0020)	ND(0.0020)	0.0010 J	0.0014 J	ND(0.0020)	0.0011 J [ND(0.0020)]
Acrolein	0.0015 J	ND(0.0020)	ND(0.0020)	0.0016 J	ND(0.0020)	0.0017 J [0.0015 J]
Alpha Methyl Styrene	ND(0.0010)	ND(0.0010)	ND(0.0010)	0.00023 J	ND(0.0010)	ND(0.0010) [ND(0.0010)]
Benzene	ND(0.0010)	0.00041 J	ND(0.0010)	0.00041 J	0.00060 J	0.00078 J [0.00078 J]
Carbon Disulfide	ND(0.0010)	ND(0.0010)	ND(0.0010)	0.00089 J	0.0017	0.00049 J [0.00045 J]
Carbon Tetrachloride	ND(0.0010)	ND(0.0010)	ND(0.0010)	0.034	0.00033 J	0.0012 [0.0012]
Chlorodifluoromethane	ND(0.0010)	0.00050 J	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010) [ND(0.0010)]
Chloroform	ND(0.0010)	ND(0.0010)	ND(0.0010)	0.019	0.0045	0.00041 J [0.00043 J]
Chloromethane	0.00039 J	0.00042 J	0.00042 J	ND(0.0010)	ND(0.0010)	ND(0.0010) [ND(0.0010)]
cis-1,2-Dichloroethene	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010)	0.00029 J	ND(0.0010) [ND(0.0010)]
Cumene	ND(0.0010)	ND(0.0010)	ND(0.0010)	0.00038 J	ND(0.0010)	ND(0.0010) [ND(0.0010)]
Dichlorodifluoromethane	0.00044 J	0.00042 J	0.00054 J	0.00051 J	0.024	0.0037 [0.0037]
Ethylbenzene	0.00025 J	0.00031 J	ND(0.0010)	ND(0.0010)	0.00043 J	ND(0.0010) [ND(0.0010)]
Hexane	0.00026 J	0.0036	0.00071 J	0.00032 J	0.0058	0.00056 J [0.00062 J]
m&p-Xylene	0.00048 J	0.00074 J	0.00026 J	0.00046 J	0.0010	ND(0.0010) [0.00023 J]
Methylene Chloride	ND(0.0010)	ND(0.0010)	0.00032 J	ND(0.0010)	ND(0.0010)	ND(0.0010) [0.00091 J]
Octane	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010)	0.0015	ND(0.0010) [ND(0.0010)]
o-Xylene	ND(0.0010)	0.00025 J	ND(0.0010)	ND(0.0010)	0.00046 J	ND(0.0010) [ND(0.0010)]
Pentane	0.00029 J	0.0018	0.00048 J	0.00057 J	0.010	0.0014 [0.0014]
Propene	0.00087 J	0.0022	0.0013	0.0025	0.0073	0.013 [0.013]
Styrene	ND(0.0010)	ND(0.0010)	ND(0.0010)	0.00034 J	ND(0.0010)	ND(0.0010) [ND(0.0010)]
tert-Butyl Alcohol	ND(0.0010)	ND(0.0010)	0.0010	0.0011	ND(0.0010)	0.0012 [0.00099 J]
Tetrachloroethene	0.00022 J	ND(0.0010)	ND(0.0010)	0.0021	0.0061	0.0016 [0.0016]
Toluene	0.00059 J	0.0023	0.00066 J	0.0018	0.0019	0.0012 [0.0013]
Trichloroethene	0.00070 J	0.0028	0.00078 J	0.21	0.43	0.050 [0.068]
Trichlorofluoromethane	0.00081 J	0.0078	0.0029	0.00063 J	0.046	0.0059 [0.0061]
Semivolatile Organics						
Hexachloroethane	ND(0.0010)	ND(0.0010)	ND(0.0010)	0.00031 J	ND(0.0010)	ND(0.0010) [ND(0.0010)]
Naphthalene	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010)	0.0093 [0.010]

Notes:

1. Samples were collected by ARCADIS BBL, and submitted to Lancaster Laboratories for analysis of VOCs and selected SVOCs.
2. Samples have been validated as per Field Sampling Plan/Quality Assurance Project Plan (FSP/QAPP), General Electric Company, Pittsfield, Massachusetts, ARCADIS (approved March 15, 2007 and re-submitted March 30, 2007).
3. ND - Analyte was not detected. The number in parenthesis is the associated detection limit.
4. Only those constituents detected in one or more samples are summarized.
5. Field duplicate sample results are presented in brackets.

Data Qualifiers:

Organics (volatiles, semivolatiles)

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

TABLE 1
SOIL GAS / INDOOR AIR DATA RECEIVED DURING NOVEMBER 2007

BUILDING 51 SOIL GAS / INDOOR AIR INVESTIGATION
GROUNDWATER MANAGEMENT AREA 3
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in ug/m^3)

Parameter / Sample ID: / Date Collected:	BLDG51-IA-1 10/11/07	BLDG51-IA-2 10/11/07	BLDG51-IA-3 10/11/07	BLDG51-SS-1 10/11/07	BLDG51-SS-2 10/11/07	BLDG51-SS-3 10/11/07
Volatile Organics						
1,1,1-Trichloroethane	ND(5.5)	ND(5.5)	ND(5.5)	37	43	9.8
1,1,2-Trichloroethane	ND(5.5)	ND(5.5)	ND(5.5)	ND(5.5)	12	1.4 J
1,1-Dichloroethane	ND(4.0)	ND(4.0)	ND(4.0)	1.4 J	ND(4.0)	ND(4.0)
1,2,4-Trimethylbenzene	ND(4.9)	4.1 J	ND(4.9)	1.3 J	1.3 J	1.2 J
1,3-butadiene	ND(4.4)	ND(4.4)	ND(4.4)	2.3 J	5.6	2.9 J
2-Butanone	3.3 J	1.5 J	ND(5.9)	11	29	17
2-Hexanone	ND(8.2)	ND(8.2)	ND(8.2)	ND(8.2)	2.5 J	ND(8.2)
4-Ethyltoluene	ND(4.9)	ND(4.9)	ND(4.9)	1.3 J	1.2 J	1.3 J
4-Methyl-2-pentanone	ND(8.2)	ND(8.2)	ND(8.2)	ND(8.2)	6.3 J	ND(8.2)
Acetone	23	15	16	48	100	180
Acetonitrile	ND(3.4)	ND(3.4)	12	ND(3.4)	ND(3.4)	ND(3.4)
Acrolein	2.7 J	1.5 J	ND(4.6)	1.7 J	3.3 J	1.9 J
Alpha Methyl Styrene	ND(4.8)	2.3 J	ND(4.8)	ND(4.8)	ND(4.8)	ND(4.8)
Benzene	1.1 J	1.2 J	1.2 J	2.9 J	5.1	7.7
Bromomethane	ND(3.9)	ND(3.9)	3.8 J	ND(3.9)	1.6 J	ND(3.9)
Carbon Disulfide	ND(3.1)	0.75 J	ND(3.1)	2.0 J	1.6 J	3.4
Chlorodifluoromethane	0.74 J	0.85 J	ND(3.5)	ND(3.5)	ND(3.5)	0.71 J
Chloroform	ND(4.9)	ND(4.9)	6.9	3.2 J	4.4 J	ND(4.9)
Chloromethane	1.1 J	1.4 J	4.6	ND(2.1)	ND(2.1)	ND(2.1)
Dichlorodifluoromethane	3.6 J	3.1 J	5.0	4.0 J	3.4 J	3.9 J
Dichlorofluoromethane	ND(4.2)	ND(4.2)	ND(4.2)	ND(4.2)	0.93 J	ND(4.2)
Ethylbenzene	1.4 J	1.2 J	ND(4.3)	2.8 J	3.9 J	3.7 J
Freon 114	ND(7.0)	ND(7.0)	3.8 J	ND(7.0)	ND(7.0)	ND(7.0)
Heptane	ND(4.1)	1.9 J	ND(4.1)	2.3 J	27	3.6 J
Hexane	1.6 J	2.2 J	3.5 J	23	25	25
Isooctane	ND(4.7)	1.7 J	ND(4.7)	1.1 J	1.1 J	1.2 J
Isopropylbenzene	ND(4.9)	ND(4.9)	ND(4.9)	ND(4.9)	1.1 J	4.9
m&p-Xylene	3.4 J	3.1 J	1.0 J	4.5	6.0	5.8
Methylene Chloride	0.83 J	0.73 J	15	1.0 J	1.6 J	0.73 J
Octane	0.93 J	ND(4.7)	ND(4.7)	1.9 J	9.1	5.6
o-Xylene	1.1 J	1.3 J	ND(4.3)	1.7 J	2.3 J	2.4 J
Pentane	1.1 J	0.83 J	3.4	3.9	9.1	3.5
Propene	1.3 J	0.72 J	1.4 J	4.3	130	23
tert-Butyl Alcohol	1.8 J	1.0 J	ND(3.0)	0.91 J	1.0 J	0.94 J
Tetrachloroethene	ND(6.8)	ND(6.8)	ND(6.8)	9.8	3.9 J	160
Toluene	6.3	4.8	2.1 J	6.2	12	13
Trichloroethene	1.3 J	2.7 J	ND(5.4)	650	18	25
Trichlorofluoromethane	2.3 J	3.8 J	5.2 J	8.3	6.1	5.0 J
Semivolatile Organics						
None Detected	--	--	--	--	--	--

Notes:

1. Samples were collected by ARCADIS BBL, and submitted to Lancaster Laboratories for analysis of VOCs and selected SVOCs.
2. Samples have been validated as per Field Sampling Plan/Quality Assurance Project Plan (FSP/QAPP), General Electric Company, Pittsfield, Massachusetts, ARCADIS (approved March 15, 2007 and re-submitted March 30, 2007).
3. ND - Analyte was not detected. The number in parenthesis is the associated detection limit.
4. Only those constituents detected in one or more samples are summarized.
5. -- 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 2
SOIL GAS / INDOOR AIR DATA RECEIVED DURING NOVEMBER 2007

BUILDING 59 SOIL GAS / INDOOR AIR INVESTIGATION
GROUNDWATER MANAGEMENT AREA 3
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in ug/m^3)

Parameter / Sample ID: / Date Collected:	BLDG59-IA-1 10/11/07	BLDG59-IA-2 10/11/07	BLDG59-IA-3 10/11/07	BLDG59-SS-1 10/11/07	BLDG59-SS-2 10/11/07	BLDG59-SS-3 10/11/07
Volatile Organics						
1,1,1-Trichloroethane	ND(5.5)	ND(5.5)	ND(5.5)	1.9 J	44	1.1 J [1.1 J]
1,2,4-Trimethylbenzene	1.4 J	1.8 J	ND(4.9)	1.3 J	3.8 J	15 [1.3 J]
1,3,5-Trimethylbenzene	ND(4.9)	ND(4.9)	0.98 J	ND(4.9)	ND(4.9)	6.6 [ND(4.9)]
2-Butanone	2.1 J	3.1 J	3.3 J	7.2	10	6.9 [8.7]
4-Ethyltoluene	ND(4.9)	1.9 J	ND(4.9)	1.5 J	1.3 J	6.5 [1.2 J]
4-Methyl-2-pentanone	ND(8.2)	ND(8.2)	ND(8.2)	ND(8.2)	2.5 J	ND(8.2) [ND(8.2)]
Acetone	15	30	25	25	37	24 [30]
Acrolein	ND(4.6)	2.5 J	2.0 J	1.2 J	1.3 J	ND(4.6) [ND(4.6)]
Alpha Methyl Styrene	ND(4.8)	ND(4.8)	ND(4.8)	10	ND(4.8)	3.6 J [ND(4.8)]
Benzene	ND(3.2)	1.8 J	1.1 J	12	1.5 J	1.8 J [2.0 J]
Bromobenzene	ND(6.4)	ND(6.4)	ND(6.4)	ND(6.4)	ND(6.4)	1.5 J [ND(6.4)]
Bromomethane	ND(3.9)	ND(3.9)	ND(3.9)	0.97 J	ND(3.9)	4.5 [1.1 J]
Carbon Disulfide	ND(3.1)	ND(3.1)	ND(3.1)	5.9	1.9 J	1.5 J [1.1 J]
Carbon Tetrachloride	ND(6.3)	ND(6.3)	ND(6.3)	110	ND(6.3)	4.7 J [4.5 J]
Chlorobenzene	ND(4.6)	ND(4.6)	ND(4.6)	ND(4.6)	ND(4.6)	3.0 J [ND(4.6)]
Chlorodifluoromethane	ND(3.5)	4.5	3.0 J	0.71 J	5.6	1.8 J [1.9 J]
Chloroethane	ND(2.6)	ND(2.6)	ND(2.6)	1.5 J	ND(2.6)	0.84 J [ND(2.6)]
Chloroform	ND(4.9)	ND(4.9)	ND(4.9)	55	17	1.7 J [1.7 J]
Chloromethane	1.1 J	1.1 J	1.2 J	ND(2.1)	ND(2.1)	0.89 J [1.0 J]
cis-1,2-Dichloroethene	ND(4.0)	ND(4.0)	ND(4.0)	ND(4.0)	1.0 J	ND(4.0) [ND(4.0)]
Dichlorodifluoromethane	2.3 J	2.6 J	3.1 J	2.4 J	130	23 [23]
Ethylbenzene	ND(4.3)	1.9 J	ND(4.3)	3.7 J	2.9 J	4.3 J [2.6 J]
Heptane	1.8 J	1.1 J	ND(4.1)	1.6 J	ND(4.1)	1.0 J [0.94 J]
Hexane	3.5 J	81	33	15	26	20 [21]
Isooctane	ND(4.7)	1.3 J	ND(4.7)	2.1 J	1.0 J	ND(4.7) [ND(4.7)]
Isopropylbenzene	ND(4.9)	ND(4.9)	ND(4.9)	3.3 J	ND(4.9)	2.9 J [1.3 J]
m&p-Xylene	1.3 J	5.0	1.8 J	5.9	4.4	19 [5.3]
Methyl tert-butyl ether	ND(3.6)	2.6 J	0.72 J	5.2	ND(3.6)	0.79 J [0.72 J]
Methylene Chloride	8.6	ND(3.5)	19	ND(3.5)	0.76 J	ND(3.5) [0.87 J]
Octane	ND(4.7)	1.2 J	ND(4.7)	3.7 J	1.0 J	3.0 J [2.0 J]
o-Xylene	ND(4.3)	1.9 J	ND(4.3)	2.2 J	1.7 J	6.2 [1.9 J]
Pentane	0.86 J	7.7	3.2	2.2 J	2.6 J	2.4 J [2.5 J]
Propene	1.2 J	6.9	3.2	1.9	3.9	5.4 [5.9]
Styrene	ND(4.3)	ND(4.3)	ND(4.3)	ND(4.3)	ND(4.3)	2.1 J [ND(4.3)]
tert-Butyl Alcohol	1.1 J	0.61 J	0.61 J	3.2	1.1 J	4.4 [1.4 J]
Tetrachloroethene	ND(6.8)	ND(6.8)	ND(6.8)	4.5 J	13	20 [7.0]
Toluene	15	12	6.1	40	6.2	11 [12]
trans-1,2-Dichloroethene	ND(4.0)	ND(4.0)	ND(4.0)	ND(4.0)	0.99 J	ND(4.0) [ND(4.0)]
Trichloroethene	ND(5.4)	15	4.7 J	540	1700	180 [170]
Trichlorofluoromethane	2.9 J	110	44	5.6	250	60 [60]
Semivolatile Organics						
1,2,4-Trichlorobenzene	ND(15)	ND(15)	ND(15)	ND(15)	ND(15)	7.5 J [ND(15)]
1,2-Dichlorobenzene	ND(6.0)	ND(6.0)	ND(6.0)	ND(6.0)	ND(6.0)	13 [ND(6.0)]
1,3-Dichlorobenzene	ND(6.0)	ND(6.0)	ND(6.0)	ND(6.0)	ND(6.0)	11 [ND(6.0)]
1,4-Dichlorobenzene	ND(6.0)	ND(6.0)	ND(6.0)	ND(6.0)	ND(6.0)	12 [ND(6.0)]
Hexachlorobutadiene	ND(21)	ND(21)	ND(21)	ND(21)	ND(21)	57 [ND(21)]
Naphthalene	ND(5.2)	ND(5.2)	ND(5.2)	8.0	ND(5.2)	ND(5.2) [ND(5.2)]

Notes:

1.
2. Samples were collected by ARCADIS BBL, and submitted to Lancaster Laboratories for analysis of VOCs and selected SVOCs.
3. Samples have been validated as per Field Sampling Plan/Quality Assurance Project Plan (FSP/QAPP), General Electric Company, Pittsfield, Massachusetts, ARCADIS (approved March 15, 2007 and re-submitted March 30, 2007).
4. ND - Analyte was not detected. The number in parenthesis is the associated detection limit.
5. Only those constituents detected in one or more samples are summarized.
   Field duplicate sample results are presented in brackets.

Data Qualifiers:

Organics (volatiles, semivolatiles)

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

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Attachment B

Sub-Slab Soil Gas Sampling Logs

Sub-Slab Sample Collection Log

ARCADIS BBL Infrastructure, environment, facilities		Sub-Slab Sample Collection Log	
		Sample ID:	BLDG51-SS-1
Client:	GE	**Outdoor/Indoor:**	Indoor
Project:	Bldg. 51/59 Soil Gas / Indoor Air Investigation	**Sample Intake Height:**	--
Location:	GMA3 – Building 51	**Miscellaneous Equipment:**	PID
Project #:	B0030905	**Time On/Off:**	10:17/18:19
Samplers:	RMH, CDE, GAR	**Subcontractor:**	--
Sample Point Location:	Bldg. 51 Chiller Room	**Moisture Content of Sampling Zone**	
Sampling Depth:	11”	**Approximate Purge Volume and Method:**	0.8L via Vacuum Pump
Time of Collection	482 Minutes		

Instrument Readings:

Time	Canister Pressure (inches of HG)	Temperature (F or C)	Relative Humidity (%)	Air Speed (ft/min)	Pressure Differential (inches of H20)	PID (ppm or ppb)
10:17	30					21.1
11:23	27.5					
13.16	23					
14:59	19.5					
16:06	15					
18:19	10					

SUMMA Canister Information:

Size (circle one): 1 L (6 L)

Canister ID: 846

Flow Controller ID: Not Labeled

General Observations/Notes:

Tracer gas of helium was used to test the apparatus for leaks and ambient air dilution.
0.8L of air was purged from the lines and penetration using a low flow vacuum pump.
The sample was collected from the chiller room near the locked door on the north side of the room.

Please record current weather information including wind speed and direction, ambient temperature, barometric pressure, and relative humidity via suitable information source (e.g., weatherunderground.com).

Sub-Slab Sample Collection Log

ARCADIS BBL Infrastructure, environment, facilities		Sub-Slab Sample Collection Log	
		Sample ID:	BLDG59-SS-1
Client:	GE	**Outdoor/Indoor:**	Indoor
Project:	Bldg. 51/59 Soil Gas / Indoor Air Investigation	**Sample Intake Height:**	--
Location:	GMA3 – Building 59	**Miscellaneous Equipment:**	PID
Project #:	B0030905	**Time On/Off:**	8:53/16:57
Samplers:	RMH, CDE, GAR	**Subcontractor:**	--
Sample Point Location:	GE Facility Area	**Moisture Content of Sampling Zone**	
Sampling Depth:	10”	**Approximate Purge Volume and Method:**	0.8L Via Vacuum Pump
Time of Collection	484 Minutes		

Instrument Readings:

Time	Canister Pressure (inches of HG)	Temperature (F or C)	Relative Humidity (%)	Air Speed (ft/min)	Pressure Differential (inches of H20)	PID (ppm or ppb)
8:53	>30					50.9
11:15	26					
13:05	21.5					
14:53	17					
15:58	14					
16:57	11					

SUMMA Canister Information:

Size (circle one): 1 L (6 L)

Canister ID: 817

Flow Controller ID: Asset # 11811

General Observations/Notes:

Tracer gas of helium was used to test the apparatus for leaks and ambient air dilution.
1.0L of air was purged from the lines and penetration using a low flow vacuum pump.
Sample was collected from the interior wall area in the Facility area.

Please record current weather information including wind speed and direction, ambient temperature, barometric pressure, and relative humidity via suitable information source (e.g., weatherunderground.com).

Sub-Slab Sample Collection Log

ARCADIS BBL Infrastructure, environment, facilities		Sub-Slab Sample Collection Log	
		Sample ID:	BLDG51-SS-3
Client:	GE	**Outdoor/Indoor:**	Indoor
Project:	Bldg. 51/59 Soil Gas / Indoor Air Investigation	**Sample Intake Height:**	--
Location:	GMA3 – Building 51	**Miscellaneous Equipment:**	PID
Project #:	B0030905	**Time On/Off:**	11:05/18:47
Samplers:	RMH, CDE, GAR	**Subcontractor:**	--
Sample Point Location:	Bldg. 51 Hall outside PS Office Area	**Moisture Content of Sampling Zone**	
Sampling Depth:	12”	**Approximate Purge Volume and Method:**	1.0L Via Vacuum Pump
Time of Collection	462 Minutes		

Instrument Readings:

Time	Canister Pressure (inches of HG)	Temperature (F or C)	Relative Humidity (%)	Air Speed (ft/min)	Pressure Differential (inches of H20)	PID (ppm or ppb)
11:05	28					0.0
11:27	27.5					
13:20	21.5					
15:02	16					
16:08	13					
18:47	5					

SUMMA Canister Information:

Size (circle one): 1 L (6 L)

Canister ID: 868

Flow Controller ID: Not Labeled

General Observations/Notes:

Tracer gas of helium was used to test the apparatus for leaks and ambient air dilution.
1.0L of air was purged from the lines and penetration using a low flow vacuum pump.
The sample was collected in the hallway outside the door to PS Office Area

Please record current weather information including wind speed and direction, ambient temperature, barometric pressure, and relative humidity via suitable information source (e.g., weatherunderground.com).

Sub-Slab Sample Collection Log

ARCADIS BBL Infrastructure, environment, facilities		Sub-Slab Sample Collection Log	
		Sample ID:	BLDG51-SS-2
Client:	GE	**Outdoor/Indoor:**	Indoor
Project:	Bldg. 51/59 Soil Gas / Indoor Air Investigation	**Sample Intake Height:**	--
Location:	GMA3 – Building 51	**Miscellaneous Equipment:**	PID
Project #:	B0030905	**Time On/Off:**	10:37/18:37
Samplers:	RMH, CDE, GAR	**Subcontractor:**	--
Sample Point Location:	Bldg. 51 Records Area	**Moisture Content of Sampling Zone**	
Sampling Depth:	11”	**Approximate Purge Volume and Method:**	1.0L via Vacuum Pump
Time of Collection	480 Minutes		

Instrument Readings:

Time	Canister Pressure (inches of HG)	Temperature (F or C)	Relative Humidity (%)	Air Speed (ft/min)	Pressure Differential (inches of H20)	PID (ppm or ppb)
10:37	30					2.0
11:25	27					
13:18	21.5					
15:01	16.5					
16:23	11					
18:37	7					

SUMMA Canister Information:

Size (circle one): 1 L (6 L)

Canister ID: 512

Flow Controller ID: Not Labeled

General Observations/Notes:

Tracer gas of helium was used to test the apparatus for leaks and ambient air dilution.
1.0L of air was purged from the lines and penetration using a low flow vacuum pump.
The sample was collected from an alcove in the north side of the records area.

Please record current weather information including wind speed and direction, ambient temperature, barometric pressure, and relative humidity via suitable information source (e.g., weatherunderground.com).

Sub-Slab Sample Collection Log

ARCADIS BBL Infrastructure, environment, facilities		Sub-Slab Sample Collection Log	
		Sample ID:	BLDG59-SS-2
Client:	GE	**Outdoor/Indoor:**	Indoor
Project:	Bldg. 51/59 Soil Gas / Indoor Air Investigation	**Sample Intake Height:**	--
Location:	GMA3 – Building 59	**Miscellaneous Equipment:**	PID
Project #:	B0030905	**Time On/Off:**	9:19/17:20
Samplers:	RMH, CDE, GAR	**Subcontractor:**	--
Sample Point Location:	Bldg. 59 Library – Outside MCC Room	**Moisture Content of Sampling Zone**	
Sampling Depth:	10”	**Approximate Purge Volume and Method:**	0.5L Via Vacuum Pump
Time of Collection	481 Minutes		

Instrument Readings:

Time	Canister Pressure (inches of HG)	Temperature (F or C)	Relative Humidity (%)	Air Speed (ft/min)	Pressure Differential (inches of H20)	PID (ppm or ppb)
9:19	28					36.8
11:17	23					
13:08	17					
14:55	13					
15:59	11					
17:20	8					

SUMMA Canister Information:

Size (circle one): 1 L (6 L)

Canister ID: 335

Flow Controller ID: Not Labeled

General Observations/Notes:

Tracer gas of helium was used to test the apparatus for leaks and ambient air dilution.
0.5L of air was purged from the lines and penetration using a low flow vacuum pump.
Sample was collected from an interior wall area near the MCC office.

Please record current weather information including wind speed and direction, ambient temperature, barometric pressure, and relative humidity via suitable information source (e.g., weatherunderground.com).

Sub-Slab Sample Collection Log

ARCADIS BBL Infrastructure, environment, facilities		Sub-Slab Sample Collection Log	
		Sample ID:	BLDG59-SS-3 / SS-DUP-1
Client:	GE	**Outdoor/Indoor:**	Indoor
Project:	Bldg. 51/59 Soil Gas / Indoor Air Investigation	**Sample Intake Height:**	--
Location:	GMA3 – Building 59	**Miscellaneous Equipment:**	PID
Project #:	B0030905	**Time On/Off:**	9:48/17:48
Samplers:	RMH, CDE, GAR	**Subcontractor:**	--
Sample Point Location:	Bldg. 59 Office Area	**Moisture Content of Sampling Zone**	
Sampling Depth:	12”	**Approximate Purge Volume and Method:**	0.8L via Vacuum Pump
Time of Collection	480 minutes		

Instrument Readings:

Time	Canister Pressure (inches of HG)		Temperature (F or C)	Relative Humidity (%)	Air Speed (ft/min)	Pressure Differential (inches of H20)	PID (ppm or ppb)
	BLDG59-SS-3	SS-DUP-1					
9:48	26.5	28					34.2
11:20	22.5	24					
13:07	17	18.5					
14:57	12	13.5					
16:01	9	10					
17:48	4	5					

SUMMA Canister Information:

Size (circle one): 1 L (6 L)

Canister ID: 803 (BLDG59-SS-3) / (SS-DUP-1) 1026

Flow Controller ID: Not Labeled (BLDG59-SS-33) / (SS-DUP-1) Not Labeled

General Observations/Notes:

Sub-slab duplicate taken here (SS-DUP-1.
Tracer gas of helium was used to test the apparatus for leaks and ambient air dilution.
0.8L of air was purged from the lines and penetration using a low flow vacuum pump.
Sample taken along conference room wall outside Richard Gates' office.

Please record current weather information including wind speed and direction, ambient temperature, barometric pressure, and relative humidity via suitable information source (e.g., weatherunderground.com).

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Attachment C

Indoor Air Sampling Logs

Indoor/Ambient Air Sample Collection Log

ARCADIS BBL Infrastructure, environment, facilities		**Indoor/Ambient Air Sample Collection Log**	
		Sample ID:	BLDG51-IA-1
Client:	GE	**Outdoor/Indoor:**	Indoor
Project:	Bldg. 51/59 Soil Gas/Indoor Air Investigation	**Sample Intake Height:**	4’
Location:	GMA3 – Building 51 (Chiller Room)	**Miscellaneous Equipment:**	PID
Project #:	B0030905	**Time On/Off:**	10:20/18:21
Samplers:	RMH, CDE, GAR	**Subcontractor:**	--

Instrument Readings:

Time	Canister Pressure (inches of HG)	Temperature (F or C)	Relative Humidity (%)	Air Speed (ft/min)	Pressure Differential (inches of H20)
10:20	28	72.4			
11:23	25				
13:17	21				
14:59	14				
16:06	11				
18:21	5				

SUMMA Canister Information:

Size (circle one): 1 L (6 L)

Canister ID: 824

Flow Controller ID: Not Labeled

General Observations/Notes:

The sample was collected from the chiller room near the locked door on the north side of the room.

Please record current weather information including wind speed and direction, ambient temperature, barometric pressure, and relative humidity via suitable information source (e.g., weatherunderground.com).

Indoor/Ambient Air Sample Collection Log

ARCADIS BBL Infrastructure, environment, facilities		**Indoor/Ambient Air Sample Collection Log**	
		Sample ID:	BLDG51-IA-3
Client:	GE	**Outdoor/Indoor:**	Indoor
Project:	Bldg. 51/59 Soil Gas/Indoor Air Investigation	**Sample Intake Height:**	4.5’
Location:	GMA3 – Building 51 (Hall Outside PS Office Area)	**Miscellaneous Equipment:**	PID
Project #:	B0030905	**Time On/Off:**	11:07/18:57
Samplers:	RMH, CDE, GAR	**Subcontractor:**	--

Instrument Readings:

Time	Canister Pressure (inches of HG)	Temperature (F or C)	Relative Humidity (%)	Air Speed (ft/min)	Pressure Differential (inches of H20)
11:07	>30	72.4			
11:27	>30				
13:20	25				
15:02	20				
16:08	16.5				
18:57	10				

SUMMA Canister Information:

Size (circle one): 1 L (6 L)

Canister ID: 807

Flow Controller ID: Not Labeled

General Observations/Notes:

The sample was collected in the hallway outside the door to PS Office Area

Please record current weather information including wind speed and direction, ambient temperature, barometric pressure, and relative humidity via suitable information source (e.g., weatherunderground.com).

Indoor/Ambient Air Sample Collection Log

ARCADIS BBL Infrastructure, environment, facilities		**Indoor/Ambient Air Sample Collection Log**	
		Sample ID:	BLDG51-IA-2
Client:	GE	**Outdoor/Indoor:**	Indoor
Project:	Bldg. 51/59 Soil Gas/Indoor Air Investigation	**Sample Intake Height:**	4’
Location:	GMA3 – Building 51 (Records Room)	**Miscellaneous Equipment:**	PID
Project #:	B0030905	**Time On/Off:**	10:46/18:15
Samplers:	RMH, CDE, GAR	**Subcontractor:**	--

Instrument Readings:

Time	Canister Pressure (inches of HG)	Temperature (F or C)	Relative Humidity (%)	Air Speed (ft/min)	Pressure Differential (inches of H20)
10:46	30	72.4			
11:25	27.5				
13:18	21				
15:01	15				
16:53	9				
18:16	4				

SUMMA Canister Information:

Size (circle one): 1 L (6 L)

Canister ID: 21

Flow Controller ID: Not Labeled

General Observations/Notes:

The sample was collected from an alcove in the north side of the records area.

Please record current weather information including wind speed and direction, ambient temperature, barometric pressure, and relative humidity via suitable information source (e.g., weatherunderground.com).

Indoor/Ambient Air Sample Collection Log

ARCADIS BBL Infrastructure, environment, facilities		**Indoor/Ambient Air Sample Collection Log**	
		Sample ID:	BLDG59-IA-1
Client:	GE	**Outdoor/Indoor:**	Indoor
Project:	Bldg. 51/59 Soil Gas/Indoor Air Investigation	**Sample Intake Height:**	5.5'
Location:	GMA3 – Building 59 (Facility Area)	**Miscellaneous Equipment:**	PID
Project #:	B0030905	**Time On/Off:**	8:55
Samplers:	RMH, CDE, GAR	**Subcontractor:**	--

Instrument Readings:

Time	Canister Pressure (inches of HG)	Temperature (F or C)	Relative Humidity (%)	Air Speed (ft/min)	Pressure Differential (inches of H20)
8.55	>30	72.4			
11:15	24				
13:05	19				
14:53	13				
15:58	10				
16:56	8				

SUMMA Canister Information:

Size (circle one): 1 L (6 L)

Canister ID: 853

Flow Controller ID: Not Labeled

General Observations/Notes:

Sample was collected from the interior wall area in the Facility area.

Please record current weather information including wind speed and direction, ambient temperature, barometric pressure, and relative humidity via suitable information source (e.g., weatherunderground.com).

Indoor/Ambient Air Sample Collection Log

ARCADIS BBL Infrastructure, environment, facilities		**Indoor/Ambient Air Sample Collection Log**	
		Sample ID:	BLDG59-IA-2
Client:	GE	**Outdoor/Indoor:**	Indoor
Project:	Bldg. 51/59 Soil Gas/Indoor Air Investigation	**Sample Intake Height:**	5.5'
Location:	GMA3 – Building 59 (Library Area Outside MCC Room)	**Miscellaneous Equipment:**	PID
Project #:	B0030905	**Time On/Off:**	9:24
Samplers:	RMH, CDE, GAR	**Subcontractor:**	--

Instrument Readings:

Time	Canister Pressure (inches of HG)	Temperature (F or C)	Relative Humidity (%)	Air Speed (ft/min)	Pressure Differential (inches of H20)
9:24	28				
11:17	24				
13:08	18				
14:55	13				
16:00	10				
17:19	6				

SUMMA Canister Information:

Size (circle one): 1 L (6 L)

Canister ID: 260

Flow Controller ID: Not Labeled

General Observations/Notes:

Sample was collected from an interior wall area near the MCC office.

Please record current weather information including wind speed and direction, ambient temperature, barometric pressure, and relative humidity via suitable information source (e.g., weatherunderground.com).

Indoor/Ambient Air Sample Collection Log

ARCADIS BBL Infrastructure, environment, facilities		**Indoor/Ambient Air Sample Collection Log**	
		Sample ID:	BLDG59-IA-3
Client:	GE	**Outdoor/Indoor:**	Indoor
Project:	Bldg. 51/59 Soil Gas/Indoor Air Investigation	**Sample Intake Height:**	4’
Location:	GMA3 – Building 59 (Office/Lobby Area)	**Miscellaneous Equipment:**	PID
Project #:	B0030905	**Time On/Off:**	9:53/17:53
Samplers:	RMH, CDE, GAR	**Subcontractor:**	--

Instrument Readings:

Time	Canister Pressure (inches of Hg)	Temperature (F or C)	Relative Humidity (%)	Air Speed (ft/min)	Pressure Differential (inches of H20)
9:53	26.5				
11:19	23				
13:07	18				
14:56	13				
16:01	10				
17:53	5				

SUMMA Canister Information:

Size (circle one): 1 L 6 L

Canister ID: 800

Flow Controller ID: Not Labeled

General Observations/Notes:

Sample taken along conference room wall outside of Richard Gates' office.

Please record current weather information including wind speed and direction, ambient temperature, barometric pressure, and relative humidity via suitable information source (e.g., weatherunderground.com).

ARCADIS

Appendix F

Fall 2008 Groundwater Analytical Results

Table F-1
Fall 2008 Groundwater Analytical Results

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

Parameter / Sample ID: / Date Collected:	16B-R 10/29/08	51-14 10/24/08	GMA3-2 10/24/08	GMA3-4 10/24/08	GMA3-8 10/24/08	GMA3-9 10/24/08	OBG-2 10/24/08
PCBs-Filtered							
Aroclor-1016	ND(0.000067) J	ND(0.00010) J	ND(0.00010) J	ND(0.00010) J [ND(0.00010) J]	ND(0.00010) J	ND(0.00010) J	ND(0.00010) J
Aroclor-1221	ND(0.000067) J	ND(0.00010) J	ND(0.00010) J	ND(0.00010) J [ND(0.00010) J]	ND(0.00010) J	ND(0.00010) J	ND(0.00010) J
Aroclor-1232	ND(0.000067) J	ND(0.00010) J	ND(0.00010) J	ND(0.00010) J [ND(0.00010) J]	ND(0.00010) J	ND(0.00010) J	ND(0.00010) J
Aroclor-1242	ND(0.000067) J	ND(0.00010) J	ND(0.00010) J	ND(0.00010) J [ND(0.00010) J]	ND(0.00010) J	ND(0.00010) J	ND(0.00010) J
Aroclor-1248	ND(0.000067) J	ND(0.00010) J	ND(0.00010) J	ND(0.00010) J [ND(0.00010) J]	ND(0.00010) J	ND(0.00010) J	ND(0.00010) J
Aroclor-1254	ND(0.000067) J	ND(0.00010) J	ND(0.00010) J	ND(0.00010) J [ND(0.00010) J]	ND(0.00010) J	ND(0.00010) J	ND(0.00010) J
Aroclor-1260	ND(0.000067) J	ND(0.00010) J	ND(0.00010) J	ND(0.00010) J [ND(0.00010) J]	ND(0.00010) J	ND(0.00010) J	ND(0.00010) J
Total PCBs	ND(0.000067) J	ND(0.00010) J	ND(0.00010) J	ND(0.00010) J [ND(0.00010) J]	ND(0.00010) J	ND(0.00010) J	ND(0.00010) J

Notes:

1. Samples were collected by ARCADIS and submitted to SGS Environmental Services, Inc. for analysis of PCBs (filtered).
2. Samples have been validated as per Field Sampling Plan/Quality Assurance Project Plan (FSP/QAPP), General Electric Company, Pittsfield, Massachusetts, ARCADIS (approved March 15, 2007 and re-submitted March 30, 2007).
3. ND - Analyte was not detected. The number in parenthesis is the associated detection limit.
4. Field duplicate sample results are presented in brackets.

Data Qualifiers:

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

ARCADIS

Appendix G

Historical Groundwater Data

Appendix G

Plant Site 2 Groundwater Management Area
General Electric Company
Pittsfield, Massachusetts

Well OBG-2 Historical Total PCB Concentrations

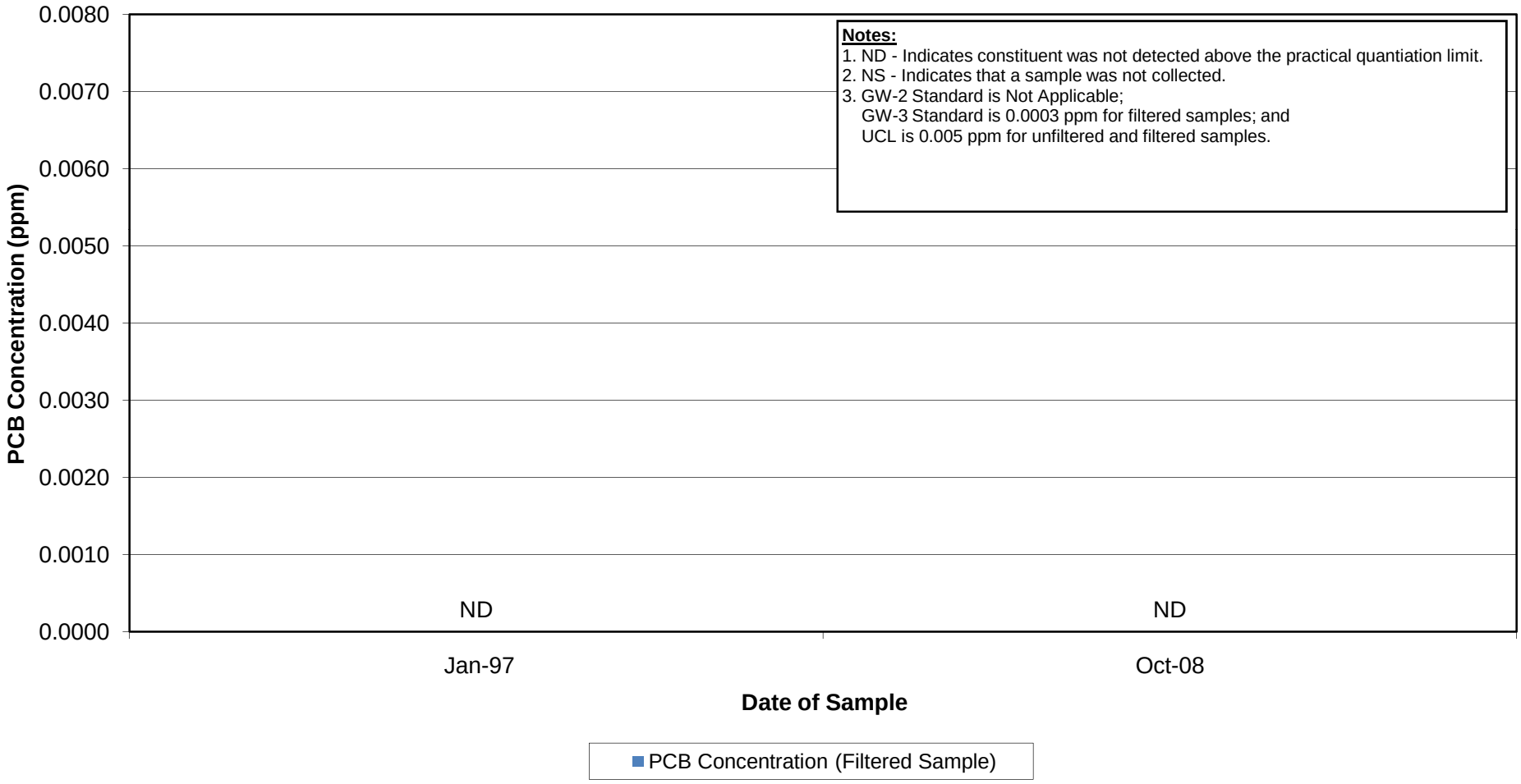

Table G-1
Groundwater Analytical Results - Natural Attenuation Parameters

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

Parameter / Location ID: / Sample ID: / Date Collected:	2A UBG02A 01/09/97	2A UBG2AX (Bailer) 01/09/97	2A UBG2A 04/30/97	2A UBG2AX (Bailer) 04/30/97	2A UBG2A 10/09/97	2A UBG02A 04/21/98
Volatile Organics						
Benzene	34	34 D	45	45	41	46
Chlorobenzene	110	100 D	140	150	150	130 DE
Trichloroethene	7.6	11	13	13	9.9	8.9
Vinyl Chloride	ND(10)	ND(2.0)	ND(12)	ND(12)	ND(10)	ND(3.3)
Total VOCs	150 J	150	200 J	210 J	200 J	350 J
Semivolatile Organics						
2-Chlorophenol	NA	NA	0.0010 J	NA	NA	NA
4-Chlorophenol	NA	NA	NA	NA	NA	NA
Natural Attenuation Parameters						
Alkalinity	NA	NA	NA	NA	NA	NA
Alkalinity to pH 4.5	240	NA	240	NA	NA	NA
Alkalinity to pH 8.3	ND(1.00)	NA	ND(1.00)	NA	NA	NA
Ammonia Nitrogen	0.0900	NA	0.150	NA	NA	NA
Chloride	43	NA	36	NA	NA	NA
Dissolved Iron	NA	NA	NA	NA	NA	NA
Dissolved Organic Carbon	3.90	NA	3.50	NA	NA	NA
Ethane	ND(0.0050)	NA	ND(0.0050)	NA	NA	NA
Ethene	ND(0.0050)	NA	ND(0.0050)	NA	NA	NA
Methane	ND(0.00500)	NA	ND(0.00500)	NA	NA	NA
Nitrate Nitrogen	NA	NA	NA	NA	NA	NA
Nitrite Nitrogen	NA	NA	NA	NA	NA	NA
Total Nitrate/Nitrite Nitrogen	NA	NA	NA	NA	NA	NA
Sulfate (turbidimetric)	47.6	NA	47.2	NA	NA	NA

Table G-1
Groundwater Analytical Results - Natural Attenuation Parameters

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

Location ID: / Sample ID: / Parameter / Date Collected:	2A UBG2A 12/22/98	2A 2A 04/30/99	2A 2A 10/20/99	2A 2A 05/12/00	2A 2A 11/17/00	2A 002A 04/23/02
Volatile Organics						
Benzene	43	41	29 D	17	31	4.4
Chlorobenzene	190	180	190 D	110	96	8.2
Trichloroethene	11	9.8 J	7.3 DJ	ND(5.0)	11	0.47
Vinyl Chloride	ND(10)	ND(12)	ND(0.10)	ND(10)	ND(0.010)	ND(0.0050)
Total VOCs	250 J	240 J	230 J	130	140	13
Semivolatile Organics						
2-Chlorophenol	NA	NA	NA	NA	NA	NA
4-Chlorophenol	2.1	NA	NA	NA	NA	NA
Natural Attenuation Parameters						
Alkalinity	NA	NA	NA	NA	NA	140
Alkalinity to pH 4.5	254	NA	NA	NA	NA	NA
Alkalinity to pH 8.3	ND(1.00)	NA	NA	NA	NA	NA
Ammonia Nitrogen	ND(0.200)	NA	NA	NA	NA	NA
Chloride	29	NA	NA	NA	NA	40
Dissolved Iron	ND(0.100)	NA	NA	NA	NA	ND(0.0500)
Dissolved Organic Carbon	1.60	NA	NA	NA	NA	11.0
Ethane	ND(0.0050)	NA	NA	NA	NA	0.017
Ethene	ND(0.0050)	NA	NA	NA	NA	0.30
Methane	ND(0.00500)	NA	NA	NA	NA	0.0450
Nitrate Nitrogen	NA	NA	NA	NA	NA	0.0490 B
Nitrite Nitrogen	NA	NA	NA	NA	NA	0.00300 B
Total Nitrate/Nitrite Nitrogen	1.30	NA	NA	NA	NA	NA
Sulfate (turbidimetric)	37.6	NA	NA	NA	NA	30.0

Table G-1
Groundwater Analytical Results - Natural Attenuation Parameters

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

Location ID:	2A	2A	2A	2A	2A	16A
Sample ID:	2A	2A	2A	2A	2A	PUEXG16A
Parameter / Date Collected:	04/12/04	04/07/05	04/19/06	05/14/07	05/01/08	02/22/91
Volatile Organics						
Benzene	21	27	34	38	21 [23]	17
Chlorobenzene	81	120	160	170	77 [97]	65
Trichloroethene	8.4	12	11	14	6.4 J [7.5 J]	ND(0.0050)
Vinyl Chloride	ND(5.0)	ND(5.0)	ND(0.20)	ND(8.0)	ND(10) [ND(10)]	ND(0.010)
Total VOCs	110	160	210	230 J	110 [130 J]	82
Semivolatile Organics						
2-Chlorophenol	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.0051) [ND(0.0051)]	NA
4-Chlorophenol	ND(0.010)	1.8	1.9	ND(0.010) J	ND(0.0051) [ND(0.0051)]	NA
Natural Attenuation Parameters						
Alkalinity	190	180	180	180	170 [170]	NA
Alkalinity to pH 4.5	NA	NA	NA	NA	NA	NA
Alkalinity to pH 8.3	NA	NA	NA	NA	NA	NA
Ammonia Nitrogen	NA	NA	NA	NA	NA	NA
Chloride	16	10	8.0	10	8.9 [8.6]	NA
Dissolved Iron	ND(0.0500)	ND(0.0500)	ND(0.100)	ND(0.100) J	ND(0.100) J	NA
Dissolved Organic Carbon	3.10	0.750 B	1.90	3.80	2.09 [2.17]	NA
Ethane	0.0045	ND(0.0040)	ND(0.020)	ND(0.020)	ND(0.020) [ND(0.020)]	NA
Ethene	0.017	ND(0.0030)	ND(0.020)	ND(0.020)	ND(0.020) [ND(0.020)]	NA
Methane	0.0110	ND(0.00200)	ND(0.00720)	ND(0.00720)	ND(0.00720) [ND(0.00720)]	NA
Nitrate Nitrogen	0.0170 B	0.0380 B	ND(0.100)	ND(0.0500)	ND(0.300) [ND(0.300)]	NA
Nitrite Nitrogen	0.0440 B	0.0820	ND(0.500)	0.0760	ND(0.300) [ND(0.300)]	NA
Total Nitrate/Nitrite Nitrogen	NA	NA	NA	NA	NA	NA
Sulfate (turbidimetric)	26.0	21.0	20.0	25.0	22.2 [21.9]	NA

Table G-1
Groundwater Analytical Results - Natural Attenuation Parameters

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

Parameter / Location ID / Sample ID / Date Collected:	16A UBG16A 12/13/96	16A UBG16AX (Bailer) 12/13/96	16A UBG16A 04/28/97	16A UBG16AX (Bailer) 04/28/97	16A UBG16A 10/08/97	16A UBG16A 04/14/98
Volatile Organics						
Benzene	20	15	13 [14]	8.1	19	17
Chlorobenzene	41	30	36 D [33 D]	11	38	33 D
Trichloroethene	ND(1.3)	ND(1.0)	0.086 J [ND(0.42)]	ND(0.42)	ND(1.3)	ND(0.62)
Vinyl Chloride	ND(2.5)	ND(2.0)	0.15 J [0.14 J]	ND(0.83)	ND(2.5)	ND(1.2)
Total VOCs	62 J	46	54 J [51]	21 J	58 J	51
Semivolatile Organics						
2-Chlorophenol	0.035	NA	NA	NA	NA	NA
4-Chlorophenol	NA	NA	NA	NA	NA	NA
Natural Attenuation Parameters						
Alkalinity	NA	NA	NA	NA	NA	NA
Alkalinity to pH 4.5	420	NA	424	NA	NA	NA
Alkalinity to pH 8.3	ND(1.00)	NA	ND(1.00)	NA	NA	NA
Ammonia Nitrogen	0.310	NA	0.320	NA	NA	NA
Chloride	2400	NA	3300	NA	NA	NA
Dissolved Iron	NA	NA	NA	NA	NA	NA
Dissolved Organic Carbon	35.0	NA	35.1	NA	NA	NA
Ethane	ND(0.0050)	NA	ND(0.0050)	NA	NA	NA
Ethene	0.13	NA	0.26	NA	NA	NA
Methane	0.730	NA	1.50	NA	NA	NA
Nitrate Nitrogen	NA	NA	NA	NA	NA	NA
Nitrite Nitrogen	NA	NA	NA	NA	NA	NA
Total Nitrate/Nitrite Nitrogen	NA	NA	NA	NA	NA	NA
Sulfate (turbidimetric)	2.20	NA	ND(2.00)	NA	NA	NA

Table G-1
Groundwater Analytical Results - Natural Attenuation Parameters

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

Parameter / Location ID: / Sample ID: / Date Collected:	16A UBG16A 12/14/98	16A 16A 04/27/99	16A 16A 10/19/99	16A 16A 05/12/00	16A 16A 11/17/00	16A 16A 04/26/02
Volatile Organics						
Benzene	94	17	16 D	14	16	7.5
Chlorobenzene	220	33	42 D	47	37	16
Trichloroethene	ND(17)	ND(3.3)	0.010	ND(10)	0.017	ND(0.010)
Vinyl Chloride	ND(17)	ND(3.3)	0.064	ND(20)	0.072	0.16
Total VOCs	320 J	51 J	59 J	61	53	24
Semivolatile Organics						
2-Chlorophenol	NA	NA	NA	NA	NA	NA
4-Chlorophenol	NA	NA	NA	NA	NA	NA
Natural Attenuation Parameters						
Alkalinity	NA	NA	NA	NA	NA	490
Alkalinity to pH 4.5	474	NA	NA	NA	NA	NA
Alkalinity to pH 8.3	ND(1.00)	NA	NA	NA	NA	NA
Ammonia Nitrogen	ND(0.200)	NA	NA	NA	NA	NA
Chloride	2400	NA	NA	NA	NA	1700
Dissolved Iron	1.00	NA	NA	NA	NA	1.30
Dissolved Organic Carbon	37.2	NA	NA	NA	NA	59.0
Ethane	ND(0.0050)	NA	NA	NA	NA	ND(0.050)
Ethene	ND(0.25)	NA	NA	NA	NA	0.15
Methane	1.10	NA	NA	NA	NA	1.40
Nitrate Nitrogen	NA	NA	NA	NA	NA	0.0140 B
Nitrite Nitrogen	NA	NA	NA	NA	NA	ND(0.0500)
Total Nitrate/Nitrite Nitrogen	ND(0.100)	NA	NA	NA	NA	NA
Sulfate (turbidimetric)	ND(2.00)	NA	NA	NA	NA	5.30

Table G-1
Groundwater Analytical Results - Natural Attenuation Parameters

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

Location ID: / Sample ID: / Parameter / Date Collected:	16A / 16A / 04/14/04	16A / 16A / 04/08/05	16A / 16A / 04/20/06	16A / 16A / 05/07/07	16A / 16A / 05/01/08	16B / UBG16B / 12/13/96
Volatile Organics						
Benzene	13	13	14	15	13	0.0040 J
Chlorobenzene	24	26	31	40	37	0.0050 J
Trichloroethene	ND(0.50)	ND(1.0)	ND(5.0)	ND(0.80)	ND(2.0)	ND(0.0050)
Vinyl Chloride	ND(0.50)	ND(1.0)	ND(2.0)	ND(0.80)	ND(2.0)	ND(0.010)
Total VOCs	38	39	46 J	56	51	0.0090 J
Semivolatile Organics						
2-Chlorophenol	0.027	0.035	0.019	0.028 J	0.022	ND(0.015)
4-Chlorophenol	ND(0.010)	0.60	0.55	ND(0.050) J	0.062	NA
Natural Attenuation Parameters						
Alkalinity	470	460	430	450	450	NA
Alkalinity to pH 4.5	NA	NA	NA	NA	NA	243
Alkalinity to pH 8.3	NA	NA	NA	NA	NA	ND(1.00)
Ammonia Nitrogen	NA	NA	NA	NA	NA	8.23
Chloride	1900	1300	1400	1800	1900	53
Dissolved Iron	0.640	0.940	1.20	1.07	1.23	NA
Dissolved Organic Carbon	38.0	28.0	25.0	36.0	32.9	7.00
Ethane	ND(0.020)	ND(0.0040)	ND(0.20)	ND(0.020)	ND(0.10)	ND(0.030)
Ethene	0.23	ND(0.0030)	0.23	0.35	0.37	ND(0.0050)
Methane	1.30	0.330	3.10	0.793	1.91	2.80
Nitrate Nitrogen	0.0170 B	0.00950 B	ND(0.100)	ND(0.0500)	ND(0.300)	NA
Nitrite Nitrogen	ND(0.0500)	0.00280 B	ND(0.500)	ND(0.100)	ND(3.00)	NA
Total Nitrate/Nitrite Nitrogen	NA	NA	NA	NA	NA	NA
Sulfate (turbidimetric)	1.60 B	0.540 B	ND(5.00)	ND(2.00)	0.951	ND(8.00)

Table G-1
Groundwater Analytical Results - Natural Attenuation Parameters

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

Location ID: / Sample ID: / Parameter / Date Collected:	16B UBG16B 04/28/97	16B UBG16BX (Bailer) 04/28/97	16B UBG16B 10/09/97	16B UBG16B 04/14/98	16B-R 16B-R 04/26/02	16B-R 16B-R 04/15/04
Volatile Organics						
Benzene	0.011	0.014	0.0030 J	ND(0.010)	ND(0.0050) [ND(0.0050)]	ND(0.0050)
Chlorobenzene	0.010	0.016	0.0020 J	ND(0.010)	ND(0.0050) [ND(0.0050)]	ND(0.0050)
Trichloroethene	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050) [ND(0.0050)]	ND(0.0050)
Vinyl Chloride	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.0020) [ND(0.0020)]	ND(0.0020)
Total VOCs	0.062 J	0.056 J	0.0050 J	0.0020 J	ND(0.20) [ND(0.20)]	ND(0.20)
Semivolatile Organics						
2-Chlorophenol	NA	NA	NA	NA	NA	NA
4-Chlorophenol	NA	NA	NA	NA	NA	NA
Natural Attenuation Parameters						
Alkalinity	NA	NA	NA	NA	480 [480]	510
Alkalinity to pH 4.5	263	NA	NA	NA	NA	NA
Alkalinity to pH 8.3	ND(1.00)	NA	NA	NA	NA	NA
Ammonia Nitrogen	8.89	NA	NA	NA	NA	NA
Chloride	63	NA	NA	NA	290 [280]	270
Dissolved Iron	NA	NA	NA	NA	0.360 [ND(0.0500)]	ND(0.0500)
Dissolved Organic Carbon	7.90	NA	NA	NA	11.0 [15.0]	11.0
Ethane	ND(0.10)	NA	NA	NA	ND(0.10) [ND(0.20)]	ND(0.020)
Ethene	ND(0.0050)	NA	NA	NA	ND(0.10) [ND(0.20)]	ND(0.015)
Methane	ND(0.00500)	NA	NA	NA	2.70 [2.70]	0.740
Nitrate Nitrogen	NA	NA	NA	NA	0.0270 B [0.0320 B]	0.100
Nitrite Nitrogen	NA	NA	NA	NA	0.00360 B [0.00340 B]	ND(0.0500)
Total Nitrate/Nitrite Nitrogen	NA	NA	NA	NA	NA	NA
Sulfate (turbidimetric)	ND(8.00)	NA	NA	NA	15.0 [16.0]	23.0

Table G-1
Groundwater Analytical Results - Natural Attenuation Parameters

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

Location ID: / Sample ID: / Parameter / Date Collected:	16B-R 16B-R 10/07/04	16B-R 16B-R 04/08/05	16B-R 16B-R 10/20/05	16B-R 16B-R 04/20/06	16B-R 16B-R 05/08/07	16B-R 16B-R 05/01/08
Volatile Organics						
Benzene	ND(0.0050) [ND(0.0050)]	0.0033 J	ND(0.0050)	0.012 J	0.0014 [0.0012]	0.00075 J
Chlorobenzene	0.00052 J [0.00056 J]	0.015	ND(0.0050)	0.051 J	0.0051 J [0.0024 J]	0.0011
Trichloroethene	0.00061 J [0.00064 J]	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0010) [ND(0.0010)]	0.00044 J
Vinyl Chloride	ND(0.0020) [ND(0.0020)]	ND(0.0020)	0.0015 J	ND(0.0020)	ND(0.0010) [ND(0.0010)]	ND(0.0010)
Total VOCs	0.0011 J [0.0012 J]	0.018 J	0.0015 J	0.063 J	0.014 J [0.0071 J]	0.0023 J
Semivolatile Organics						
2-Chlorophenol	NA	NA	NA	NA	NA	NA
4-Chlorophenol	NA	NA	NA	NA	NA	NA
Natural Attenuation Parameters						
Alkalinity	NA	440	NA	490	520 [530]	530
Alkalinity to pH 4.5	NA	NA	NA	NA	NA	NA
Alkalinity to pH 8.3	NA	NA	NA	NA	NA	NA
Ammonia Nitrogen	NA	NA	NA	NA	NA	NA
Chloride	NA	160	NA	570	300 [280]	270
Dissolved Iron	NA	ND(0.0500)	NA	ND(0.100)	ND(0.100) [ND(0.100)]	0.0246 J
Dissolved Organic Carbon	NA	5.70	NA	6.60	6.80 [6.80]	6.44
Ethane	NA	ND(0.0040)	NA	ND(0.20)	ND(0.020) [ND(0.040)]	ND(0.10)
Ethene	NA	0.12	NA	ND(0.20)	ND(0.020) [ND(0.040)]	ND(0.10)
Methane	NA	0.690	NA	2.20	1.05 [1.13]	1.52 J
Nitrate Nitrogen	NA	0.0560	NA	ND(0.100)	ND(0.0500) [ND(0.0500)]	ND(0.300)
Nitrite Nitrogen	NA	0.00900 B	NA	ND(0.500)	ND(0.100) [ND(0.10) J]	ND(3.00)
Total Nitrate/Nitrite Nitrogen	NA	NA	NA	NA	NA	NA
Sulfate (turbidimetric)	NA	35.0	NA	11.0	14.0 [12.0]	15.7

Table G-1
Groundwater Analytical Results - Natural Attenuation Parameters

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

Parameter / Location ID: / Sample ID: / Date Collected:	16C PUEXG16C 02/22/91	16C UBG16C 12/17/96	16C UBG16C 04/28/97	16C UBG16C 10/09/97	16C UBG16C 04/14/98	16C UBG16C 12/15/98
Volatile Organics						
Benzene	0.076	ND(0.010)	0.0030 J	0.0040 J	ND(0.010)	ND(0.010)
Chlorobenzene	0.16	ND(0.010)	0.0030 J	ND(0.010)	ND(0.010)	0.0010 J
Trichloroethene	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.010)
Vinyl Chloride	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
Total VOCs	0.27 J	0.0040 J	0.0060 J	0.012 J	0.051 J	0.0020 J
Semivolatile Organics						
2-Chlorophenol	NA	ND(0.015)	NA	NA	NA	NA
4-Chlorophenol	NA	NA	NA	NA	NA	NA
Natural Attenuation Parameters						
Alkalinity	NA	NA	NA	NA	NA	NA
Alkalinity to pH 4.5	NA	113	102	NA	NA	104
Alkalinity to pH 8.3	NA	ND(1.00)	ND(1.00)	NA	NA	6.90
Ammonia Nitrogen	NA	0.360	0.280	NA	NA	ND(0.200)
Chloride	NA	6.2	3.0	NA	NA	ND(1.0)
Dissolved Iron	NA	NA	NA	NA	NA	ND(0.100)
Dissolved Organic Carbon	NA	2.00	1.50	NA	NA	1.10
Ethane	NA	ND(0.0050)	ND(0.0050)	NA	NA	ND(0.0050)
Ethene	NA	ND(0.0050)	ND(0.0050)	NA	NA	ND(0.0050)
Methane	NA	0.400	1.19	NA	NA	0.570
Nitrate Nitrogen	NA	NA	NA	NA	NA	NA
Nitrite Nitrogen	NA	NA	NA	NA	NA	NA
Total Nitrate/Nitrite Nitrogen	NA	NA	NA	NA	NA	ND(0.100)
Sulfate (turbidimetric)	NA	2.00 N	2.00 N	NA	NA	ND(2.00)

Table G-1
Groundwater Analytical Results - Natural Attenuation Parameters

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

Parameter	Location ID: / Sample ID: / Date Collected:						
	Location ID:	16C	16C	16C	16C	16C	16C-R
	Sample ID:	16C	16C	16C	16C	16C	16C-R
Parameter	Date Collected:	04/26/99	10/19/99	05/12/00	11/17/00	04/25/02	04/27/05
Volatile Organics							
Benzene		ND(0.010)	0.0020 J	ND(0.0050)	0.036	ND(0.0050)	0.0039 J
Chlorobenzene		0.0020 J	0.0060 J	ND(0.0050)	0.021	0.0027 J	0.013
Trichloroethene		ND(0.010)	ND(0.010)	ND(0.0050)	ND(0.0050)	ND(0.0050)	0.0020 J
Vinyl Chloride		ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.0020)	ND(0.0020)
Total VOCs		0.0040 J	0.010 J	ND(0.20)	0.057	0.0027 J	0.023 J
Semivolatile Organics							
2-Chlorophenol		NA	NA	NA	NA	NA	NA
4-Chlorophenol		NA	NA	NA	NA	NA	NA
Natural Attenuation Parameters							
Alkalinity		NA	NA	NA	NA	160	130
Alkalinity to pH 4.5		NA	NA	NA	NA	NA	NA
Alkalinity to pH 8.3		NA	NA	NA	NA	NA	NA
Ammonia Nitrogen		NA	NA	NA	NA	NA	NA
Chloride		NA	NA	NA	NA	4.0	9.0
Dissolved Iron		NA	NA	NA	NA	ND(0.0500)	0.0480 B
Dissolved Organic Carbon		NA	NA	NA	NA	8.70	ND(1.0)
Ethane		NA	NA	NA	NA	ND(0.50)	ND(0.0040)
Ethene		NA	NA	NA	NA	ND(0.50)	ND(0.0030)
Methane		NA	NA	NA	NA	12.0	ND(0.00200)
Nitrate Nitrogen		NA	NA	NA	NA	0.150	0.0690
Nitrite Nitrogen		NA	NA	NA	NA	ND(0.0500)	0.0140 B
Total Nitrate/Nitrite Nitrogen		NA	NA	NA	NA	NA	NA
Sulfate (turbidimetric)		NA	NA	NA	NA	3.60	3.20

Table G-1
Groundwater Analytical Results - Natural Attenuation Parameters

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

Parameter / Location ID: / Sample ID: / Date Collected:	16C-R 16C-R 04/26/06	16C-R 16C-R 05/31/06	16C-R 16C-R 05/07/07	16C-R 16C-R 05/01/08	39B PU39B233 03/06/91	39B PUEX39BG 04/19/91
Volatile Organics						
Benzene	ND(0.0050)	NA	0.0027	ND(0.0010)	0.0030 J	5.6
Chlorobenzene	0.0012 J	NA	0.015	ND(0.0010)	0.0070	ND(1.5)
Trichloroethene	ND(0.0050)	NA	ND(0.0010)	ND(0.0010)	0.0030 J	1.8
Vinyl Chloride	ND(0.0020)	NA	ND(0.0010)	ND(0.0010)	ND(0.011)	ND(2.0)
Total VOCs	0.0012 J	NA	0.018	ND(0.10)	0.054 J	16
Semivolatile Organics						
2-Chlorophenol	NA	NA	NA	NA	NA	0.042 J
4-Chlorophenol	NA	NA	NA	NA	NA	NA
Natural Attenuation Parameters						
Alkalinity	130	NA	130	120	NA	NA
Alkalinity to pH 4.5	NA	NA	NA	NA	NA	NA
Alkalinity to pH 8.3	NA	NA	NA	NA	NA	NA
Ammonia Nitrogen	NA	NA	NA	NA	NA	NA
Chloride	2.0	NA	1.1	1.2	NA	NA
Dissolved Iron	ND(0.100)	NA	ND(0.100)	ND(0.100) J	NA	20.1 *
Dissolved Organic Carbon	0.810 B	NA	ND(1.00)	0.856	NA	NA
Ethane	NA	ND(0.020)	ND(0.020)	ND(0.020)	NA	NA
Ethene	NA	ND(0.020)	ND(0.020)	ND(0.020)	NA	NA
Methane	NA	0.0446	ND(0.00720)	ND(0.00720)	NA	NA
Nitrate Nitrogen	0.130	NA	0.120	0.190 B	NA	NA
Nitrite Nitrogen	ND(0.500)	NA	ND(0.0100)	ND(0.300)	NA	NA
Total Nitrate/Nitrite Nitrogen	NA	NA	NA	NA	NA	NA
Sulfate (turbidimetric)	6.30	NA	6.40	6.38	NA	NA

Table G-1
Groundwater Analytical Results - Natural Attenuation Parameters

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

Parameter / Location ID / Sample ID / Date Collected:	39B UBG39B 12/16/96	39B UBG39BX (Bailer) 12/16/96	39B UBG39B 04/23/97	39B UBG39BX (Bailer) 04/23/97	39B UBG39B 10/10/97	39B UBG39B 04/16/98
Volatile Organics						
Benzene	ND(0.77)	ND(0.50)	5.6	4.9	4.1 [4.6]	ND(5.0)
Chlorobenzene	14	6.1	16	13	30 [35]	52
Trichloroethene	ND(0.38)	ND(0.25)	ND(0.50)	ND(0.50)	1.3 [1.5]	0.74 J
Vinyl Chloride	ND(0.77)	ND(0.50)	ND(1.0)	ND(1.0)	ND(2.0) [ND(2.0)]	ND(5.0)
Total VOCs	15	6.4 J	24 J	20 J	37 J [43 J]	54 J
Semivolatile Organics						
2-Chlorophenol	0.010 J	NA	NA	NA	NA	NA
4-Chlorophenol	NA	NA	NA	NA	NA	NA
Natural Attenuation Parameters						
Alkalinity	NA	NA	NA	NA	NA	NA
Alkalinity to pH 4.5	334	NA	250	NA	NA	NA
Alkalinity to pH 8.3	ND(1.00)	NA	ND(1.00)	NA	NA	NA
Ammonia Nitrogen	0.680	NA	0.660	NA	NA	NA
Chloride	4.2	NA	69	NA	NA	NA
Dissolved Iron	NA	NA	NA	NA	NA	NA
Dissolved Organic Carbon	10.0	NA	13.2	NA	NA	NA
Ethane	ND(0.0050)	NA	0.010	NA	NA	NA
Ethene	0.0070	NA	0.021	NA	NA	NA
Methane	0.640	NA	1.00	NA	NA	NA
Nitrate Nitrogen	NA	NA	NA	NA	NA	NA
Nitrite Nitrogen	NA	NA	NA	NA	NA	NA
Total Nitrate/Nitrite Nitrogen	NA	NA	NA	NA	NA	NA
Sulfate (turbidimetric)	4.40	NA	ND(2.00)	NA	NA	NA

Table G-1
Groundwater Analytical Results - Natural Attenuation Parameters

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

Parameter / Location ID: / Sample ID: / Date Collected:	39B UBG39B 12/21/98	39B 39B 04/29/99	39B 39B 10/20/99	39B 39B 05/12/00	39B 39B 11/17/00	39B-R 39B-R 04/13/04
Volatile Organics						
Benzene	3.6	2.9 J	1.3 DJ [1.5]	ND(5.0)	2.0	0.59
Chlorobenzene	48	63	36 D [31 D]	53	26	9.7
Trichloroethene	0.94 J	1.0 J	0.13 [0.13]	ND(5.0)	0.082	ND(0.50)
Vinyl Chloride	ND(3.3)	ND(3.3)	0.0090 J [0.010 J]	ND(10)	0.036	ND(0.50)
Total VOCs	55 J	69 J	37 J [34]	53	29	10
Semivolatile Organics						
2-Chlorophenol	NA	NA	NA	NA	NA	ND(0.010)
4-Chlorophenol	NA	NA	NA	NA	NA	ND(0.010)
Natural Attenuation Parameters						
Alkalinity	NA	NA	NA	NA	NA	490
Alkalinity to pH 4.5	334 [157]	NA	NA	NA	NA	NA
Alkalinity to pH 8.3	ND(1.00) [3.10]	NA	NA	NA	NA	NA
Ammonia Nitrogen	0.990 [ND(0.200)]	NA	NA	NA	NA	NA
Chloride	44 [2.3]	NA	NA	NA	NA	230
Dissolved Iron	11.3 [ND(0.100)]	NA	NA	NA	NA	ND(0.0500)
Dissolved Organic Carbon	10.7 [ND(1.00)]	NA	NA	NA	NA	12.0
Ethane	0.015 [ND(0.0050)]	NA	NA	NA	NA	ND(0.0040)
Ethene	0.017 [ND(0.0050)]	NA	NA	NA	NA	0.0033
Methane	1.10 [0.00580]	NA	NA	NA	NA	0.230
Nitrate Nitrogen	NA	NA	NA	NA	NA	1.30
Nitrite Nitrogen	NA	NA	NA	NA	NA	ND(0.0500)
Total Nitrate/Nitrite Nitrogen	ND(0.100) [ND(0.100)]	NA	NA	NA	NA	NA
Sulfate (turbidimetric)	ND(2.00) [14.0]	NA	NA	NA	NA	9.90

Table G-1
Groundwater Analytical Results - Natural Attenuation Parameters

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

Parameter / Location ID: / Sample ID: / Date Collected:	39B-R 39B-R 04/07/05	39B-R 39B-R 10/21/05	39B-R 39B-R 04/20/06	39B-R 39B-R 05/07/07	39B-R 39B-R 04/30/08	39D PUEX39DG 04/19/91
Volatile Organics						
Benzene	0.17 J	0.049	1.4 J	0.66	0.67	0.11 J
Chlorobenzene	12	0.24	32	11	16	5.5
Trichloroethene	0.35 J	ND(0.010)	0.86 J	0.092 J	0.20 J	0.14 J
Vinyl Chloride	ND(0.50)	ND(0.010)	ND(2.0)	ND(0.40)	ND(0.40)	ND(0.33)
Total VOCs	13 J	0.29	35 J	12	17	6.1 J
Semivolatile Organics						
2-Chlorophenol	0.0096 J	NA	0.0094 J	ND(0.050)	ND(0.053)	0.011 J
4-Chlorophenol	0.60	NA	0.71	ND(0.050) J	NA	NA
Natural Attenuation Parameters						
Alkalinity	500	NA	280	310	310	NA
Alkalinity to pH 4.5	NA	NA	NA	NA	NA	NA
Alkalinity to pH 8.3	NA	NA	NA	NA	NA	NA
Ammonia Nitrogen	NA	NA	NA	NA	NA	NA
Chloride	250	NA	400	98	110	NA
Dissolved Iron	ND(0.0500)	NA	0.0250 B	0.0121 B	ND(0.100) J	ND(0.0420) *
Dissolved Organic Carbon	2.50	NA	8.00	6.50	6.24	NA
Ethane	ND(0.0040)	NA	ND(0.020)	ND(0.020)	ND(0.020)	NA
Ethene	ND(0.0030)	NA	ND(0.020)	ND(0.020)	ND(0.020)	NA
Methane	0.0300	NA	0.280	0.162	0.182	NA
Nitrate Nitrogen	1.90	NA	0.340	0.310	0.507	NA
Nitrite Nitrogen	ND(0.0500)	NA	ND(0.500)	ND(0.0100)	ND(0.300)	NA
Total Nitrate/Nitrite Nitrogen	NA	NA	NA	NA	NA	NA
Sulfate (turbidimetric)	9.20	NA	13.0	7.30	5.61	NA

Table G-1
Groundwater Analytical Results - Natural Attenuation Parameters

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

Parameter / Location ID: / Sample ID: / Date Collected:	39D UBG39D 12/16/96	39D UBG39D 04/23/97	39D UBG39D 10/10/97	39D UBG39D 04/16/98	39D UBG39D 12/21/98	39D 39D 04/29/99
Volatile Organics						
Benzene	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
Chlorobenzene	0.026	0.020	0.027	0.025	0.030	0.030
Trichloroethene	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.010)	ND(0.010)
Vinyl Chloride	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
Total VOCs	0.026	0.020	0.027	0.027 J	0.033 J	0.032 J
Semivolatile Organics						
2-Chlorophenol	ND(0.015)	NA	NA	NA	NA	NA
4-Chlorophenol	NA	NA	NA	NA	NA	NA
Natural Attenuation Parameters						
Alkalinity	NA	NA	NA	NA	NA	NA
Alkalinity to pH 4.5	172	144	NA	NA	156	NA
Alkalinity to pH 8.3	ND(1.00)	ND(1.00)	NA	NA	3.20	NA
Ammonia Nitrogen	0.310	0.0600	NA	NA	ND(0.200)	NA
Chloride	2.5	4.0	NA	NA	2.6	NA
Dissolved Iron	NA	NA	NA	NA	ND(0.100)	NA
Dissolved Organic Carbon	1.00	1.50	NA	NA	ND(1.00)	NA
Ethane	ND(0.0050)	ND(0.0050)	NA	NA	ND(0.0050)	NA
Ethene	ND(0.0050)	ND(0.0050)	NA	NA	ND(0.0050)	NA
Methane	ND(0.00500)	0.00700	NA	NA	0.00610	NA
Nitrate Nitrogen	NA	NA	NA	NA	NA	NA
Nitrite Nitrogen	NA	NA	NA	NA	NA	NA
Total Nitrate/Nitrite Nitrogen	NA	NA	NA	NA	ND(0.100)	NA
Sulfate (turbidimetric)	13.2	12.2	NA	NA	13.2	NA

Table G-1
Groundwater Analytical Results - Natural Attenuation Parameters

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

Parameter	Location ID: / Sample ID: / Date Collected:						
	Location ID:	39D	39D	39D	39D	39D	39D
	Sample ID:	39D	39D	39D	39D	39D	39D
Parameter	Date Collected:	10/20/99	05/12/00	11/16/00	04/23/02	04/14/04	04/07/05
Volatile Organics							
Benzene		ND(0.010)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)
Chlorobenzene		0.028 B	0.025	0.027	0.0063	0.019	0.019
Trichloroethene		ND(0.010)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)
Vinyl Chloride		ND(0.010)	ND(0.010)	ND(0.010)	ND(0.0020)	ND(0.0020)	ND(0.0020)
Total VOCs		0.032 J	0.025	0.027	0.0063	0.019	0.023 J
Semivolatile Organics							
2-Chlorophenol		NA	NA	NA	NA	NA	NA
4-Chlorophenol		NA	NA	NA	NA	NA	NA
Natural Attenuation Parameters							
Alkalinity		NA	NA	NA	160	140	140
Alkalinity to pH 4.5		NA	NA	NA	NA	NA	NA
Alkalinity to pH 8.3		NA	NA	NA	NA	NA	NA
Ammonia Nitrogen		NA	NA	NA	NA	NA	NA
Chloride		NA	NA	NA	4.0	4.3	4.2
Dissolved Iron		NA	NA	NA	0.130	0.0540	0.0360 B
Dissolved Organic Carbon		NA	NA	NA	2.10	2.30	ND(1.00)
Ethane		NA	NA	NA	ND(0.020)	ND(0.0040)	ND(0.0040)
Ethene		NA	NA	NA	ND(0.020)	ND(0.0030)	ND(0.0030)
Methane		NA	NA	NA	0.0230	ND(0.00200)	ND(0.00200)
Nitrate Nitrogen		NA	NA	NA	0.0370 B	ND(0.0500)	ND(0.0500)
Nitrite Nitrogen		NA	NA	NA	ND(0.0500)	ND(0.0500)	ND(0.0500)
Total Nitrate/Nitrite Nitrogen		NA	NA	NA	NA	NA	NA
Sulfate (turbidimetric)		NA	NA	NA	18.0	19.0	19.0

Table G-1
Groundwater Analytical Results - Natural Attenuation Parameters

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

Parameter / Location ID: / Sample ID: / Date Collected:	39D-R 39D-R 04/20/06	39D-R 39D-R 05/14/07	39D-R 39D-R 04/30/08	39E PU39EG 04/19/91	39E PUG39E 02/26/92	39E UBG39E 12/16/96
Volatile Organics						
Benzene	0.050	ND(0.0010)	0.00033 J	0.011	ND(0.0050)	ND(0.010)
Chlorobenzene	0.64	0.014	0.040	0.24	0.0010 J	ND(0.010)
Trichloroethene	0.12	ND(0.0010)	0.00017 J	ND(0.0050)	ND(0.0050)	ND(0.0050)
Vinyl Chloride	ND(0.0020)	ND(0.0010)	ND(0.0010)	ND(0.010)	ND(0.010)	ND(0.010)
Total VOCs	0.83 J	0.014 J	0.041	0.29 J	0.027 J	ND(3.7)
Semivolatile Organics						
2-Chlorophenol	NA	NA	NA	ND(0.012)	NA	NA
4-Chlorophenol	NA	NA	NA	NA	NA	NA
Natural Attenuation Parameters						
Alkalinity	140	130	130	NA	NA	NA
Alkalinity to pH 4.5	NA	NA	NA	NA	NA	NA
Alkalinity to pH 8.3	NA	NA	NA	NA	NA	NA
Ammonia Nitrogen	NA	NA	NA	NA	NA	NA
Chloride	8.4	5.5	5.5	NA	NA	NA
Dissolved Iron	ND(0.100)	ND(0.100) J	0.0401 J	ND(0.0420) *	NA	NA
Dissolved Organic Carbon	3.40	ND(1.00)	0.844 B	NA	NA	NA
Ethane	ND(0.020)	ND(0.020)	ND(0.020)	NA	NA	NA
Ethene	ND(0.020)	ND(0.020)	ND(0.020)	NA	NA	NA
Methane	ND(0.00720)	ND(0.00720)	ND(0.00720)	NA	NA	NA
Nitrate Nitrogen	ND(0.100)	ND(0.0500)	ND(0.300)	NA	NA	NA
Nitrite Nitrogen	ND(0.500)	ND(0.0100)	ND(0.300)	NA	NA	NA
Total Nitrate/Nitrite Nitrogen	NA	NA	NA	NA	NA	NA
Sulfate (turbidimetric)	56.0	22.0	20.4	NA	NA	NA

Table G-1
Groundwater Analytical Results - Natural Attenuation Parameters

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

Parameter	Location ID: / Sample ID: / Date Collected:						
	Location ID:	39E	39E	39E	39E	39E	39E
	Sample ID:	UBG39E	UBG39E	UBG39E	UBG39E	39E	39E
Parameter	Date Collected:	04/23/97	10/10/97	04/16/98	12/21/98	04/29/99	10/20/99
Volatile Organics							
Benzene		ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
Chlorobenzene		ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	0.0010 J	ND(0.010)
Trichloroethene		ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.010)	ND(0.010)	ND(0.010)
Vinyl Chloride		ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
Total VOCs		0.085 J	0.0010 J	0.0040 J	0.0020 J	0.0050 J	0.0050 J
Semivolatile Organics							
2-Chlorophenol		NA	NA	NA	NA	NA	NA
4-Chlorophenol		NA	NA	NA	NA	NA	NA
Natural Attenuation Parameters							
Alkalinity		NA	NA	NA	NA	NA	NA
Alkalinity to pH 4.5		116	NA	NA	119	NA	NA
Alkalinity to pH 8.3		ND(1.00)	NA	NA	1.20	NA	NA
Ammonia Nitrogen		NA	NA	NA	ND(0.200)	NA	NA
Chloride		3.1	NA	NA	4.3	NA	NA
Dissolved Iron		NA	NA	NA	ND(0.100)	NA	NA
Dissolved Organic Carbon		2.00	NA	NA	ND(1.00)	NA	NA
Ethane		NA	NA	NA	ND(0.0050)	NA	NA
Ethene		NA	NA	NA	ND(0.0050)	NA	NA
Methane		NA	NA	NA	0.0270	NA	NA
Nitrate Nitrogen		NA	NA	NA	NA	NA	NA
Nitrite Nitrogen		NA	NA	NA	NA	NA	NA
Total Nitrate/Nitrite Nitrogen		NA	NA	NA	0.370	NA	NA
Sulfate (turbidimetric)		NA	NA	NA	ND(2.00)	NA	NA

Table G-1
Groundwater Analytical Results - Natural Attenuation Parameters

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

Location ID:	39E	39E	39E	39E	39E	39E
Sample ID:	39E	39E	MW-39-E	39E	39E	39E
Parameter / Date Collected:	05/12/00	11/17/00	04/25/02	04/21/04	04/13/05	04/20/06
Volatile Organics						
Benzene	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050) [ND(0.0050)]	ND(0.0050)	0.0015 J
Chlorobenzene	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050) [ND(0.0050)]	ND(0.0050)	0.068
Trichloroethene	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050) [ND(0.0050)]	ND(0.0050)	ND(0.0050)
Vinyl Chloride	ND(0.010)	ND(0.010)	ND(0.0020)	ND(0.0020) [ND(0.0020)]	ND(0.0020)	ND(0.0020)
Total VOCs	ND(0.20)	ND(0.20)	ND(0.20)	0.0017 J [ND(0.20)]	ND(0.20)	0.070 J
Semivolatile Organics						
2-Chlorophenol	NA	NA	NA	NA	NA	NA
4-Chlorophenol	NA	NA	NA	NA	NA	NA
Natural Attenuation Parameters						
Alkalinity	NA	NA	24.0	94.0 [97.0]	43.0	81.0
Alkalinity to pH 4.5	NA	NA	NA	NA	NA	NA
Alkalinity to pH 8.3	NA	NA	NA	NA	NA	NA
Ammonia Nitrogen	NA	NA	NA	NA	NA	NA
Chloride	NA	NA	9.2	10 [10]	62	7.8
Dissolved Iron	NA	NA	ND(0.0500)	ND(0.0500) [ND(0.0500)]	0.0900	0.180
Dissolved Organic Carbon	NA	NA	5.20	2.30 [2.80]	ND(1.4)	1.20
Ethane	NA	NA	ND(0.0010)	ND(0.0040) [ND(0.0040)]	ND(0.0040)	ND(0.020)
Ethene	NA	NA	ND(0.0010)	ND(0.0030) [ND(0.0030)]	ND(0.0030)	ND(0.020)
Methane	NA	NA	ND(0.00100)	0.370 [0.310]	0.140	0.940
Nitrate Nitrogen	NA	NA	1.00	0.320 [0.290]	0.840	ND(0.100)
Nitrite Nitrogen	NA	NA	ND(0.0500)	ND(0.0500) [ND(0.0500)]	0.00770 B	ND(0.500)
Total Nitrate/Nitrite Nitrogen	NA	NA	NA	NA	NA	NA
Sulfate (turbidimetric)	NA	NA	5.70	3.60 [3.00]	4.90	ND(5.00)

Table G-1
Groundwater Analytical Results - Natural Attenuation Parameters

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

Parameter	Location ID: / Sample ID: / Date Collected:						
	Location ID:	39E	39E	43A	43A	43A	43A
	Sample ID:	39E	39E	PUEXG43A	UBG43A	UBG43A	43A
Parameter	Date Collected:	05/14/07	05/06/08	02/27/91	01/13/97	05/06/97	04/26/02
Volatile Organics							
Benzene		0.00031 J	ND(0.0010)	ND(0.0050)	ND(0.010)	ND(0.010)	ND(0.0050)
Chlorobenzene		0.00051 J	0.00024 J	ND(0.0050)	ND(0.010)	ND(0.010)	ND(0.0050)
Trichloroethene		ND(0.0010)	ND(0.0010)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)
Vinyl Chloride		ND(0.0010)	ND(0.0010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.0020)
Total VOCs		0.0020 J	0.00049 J	0.024	ND(3.7)	0.086 J	ND(0.20)
Semivolatile Organics							
2-Chlorophenol		NA	NA	ND(0.010)	NA	NA	NA
4-Chlorophenol		NA	NA	NA	NA	NA	NA
Natural Attenuation Parameters							
Alkalinity		21.0	87.0	NA	NA	NA	330
Alkalinity to pH 4.5		NA	NA	NA	NA	368	NA
Alkalinity to pH 8.3		NA	NA	NA	NA	ND(1.00)	NA
Ammonia Nitrogen		NA	NA	NA	NA	ND(0.0500)	NA
Chloride		170	25	NA	NA	ND(1.0)	29
Dissolved Iron		0.0364 J	1.21	0.698 E	NA	NA	ND(0.0500)
Dissolved Organic Carbon		2.00	4.35	NA	NA	2.30	4.30
Ethane		ND(0.020)	ND(0.10)	NA	NA	ND(0.0050)	ND(0.050)
Ethene		ND(0.020)	ND(0.10)	NA	NA	ND(0.0050)	ND(0.050)
Methane		ND(0.00720)	1.16	NA	NA	0.240	0.730
Nitrate Nitrogen		0.670	ND(0.300)	NA	NA	NA	0.0200 B
Nitrite Nitrogen		ND(0.0100)	ND(0.300)	NA	NA	NA	ND(0.0500)
Total Nitrate/Nitrite Nitrogen		NA	NA	NA	NA	NA	NA
Sulfate (turbidimetric)		4.80	ND(0.300)	NA	NA	55.3	42.0

Table G-1
Groundwater Analytical Results - Natural Attenuation Parameters

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

Location ID: / Sample ID: / Parameter / Date Collected:	43A 43A 04/14/04	43A 43A 04/12/05	43A 43A 04/19/06	43A 43A 05/09/07	43A 43A 04/30/08	43B PUEXG43B 02/27/91
Volatile Organics						
Benzene	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0010)	ND(0.0010)	ND(0.0050)
Chlorobenzene	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0010)	ND(0.0010)	ND(0.0050)
Trichloroethene	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0010)	ND(0.0010)	ND(0.0050)
Vinyl Chloride	ND(0.0020)	ND(0.0020)	ND(0.0020)	ND(0.0010)	ND(0.0010)	ND(0.010)
Total VOCs	ND(0.20)	0.077 J	ND(0.20)	0.19 J	0.18 J	0.043
Semivolatile Organics						
2-Chlorophenol	NA	NA	NA	NA	NA	ND(0.010)
4-Chlorophenol	NA	NA	NA	NA	NA	NA
Natural Attenuation Parameters						
Alkalinity	370	350	200	490	520	NA
Alkalinity to pH 4.5	NA	NA	NA	NA	NA	NA
Alkalinity to pH 8.3	NA	NA	NA	NA	NA	NA
Ammonia Nitrogen	NA	NA	NA	NA	NA	NA
Chloride	39	40	38	25	22	NA
Dissolved Iron	ND(0.0500)	ND(0.0500)	ND(0.100)	ND(0.100) J	ND(0.100) J	0.493 E
Dissolved Organic Carbon	5.70	ND(1.00)	1.60	1.80	2.03	NA
Ethane	ND(0.0040)	ND(0.0040)	ND(0.20)	ND(0.020)	ND(0.020)	NA
Ethene	ND(0.0030)	ND(0.0030)	ND(0.20)	ND(0.020)	ND(0.020)	NA
Methane	0.110	0.0830	1.60	0.0460	0.0180	NA
Nitrate Nitrogen	0.0280 B	ND(0.0500)	ND(0.100)	ND(0.0500)	ND(0.300)	NA
Nitrite Nitrogen	ND(0.0500)	ND(0.0500)	ND(0.500)	ND(0.0100)	ND(0.300)	NA
Total Nitrate/Nitrite Nitrogen	NA	NA	NA	NA	NA	NA
Sulfate (turbidimetric)	48.0	43.0	ND(5.00)	93.0	103	NA

Table G-1
Groundwater Analytical Results - Natural Attenuation Parameters

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

Parameter	Location ID: / Sample ID: / Date Collected:						
	Location ID:	43B	43B	43B	43B	43B	43B
	Sample ID:	UBG43B	UBG43B	43B	43B	43B	43B
Parameter	Date Collected:	01/13/97	05/06/97	04/26/02	04/21/04	04/07/05	04/19/06
Volatile Organics							
Benzene		ND(0.010)	ND(0.010)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)
Chlorobenzene		ND(0.010)	ND(0.010)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)
Trichloroethene		ND(0.0050)	0.0020 J	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)
Vinyl Chloride		ND(0.010)	ND(0.010)	ND(0.0020)	ND(0.0020)	ND(0.0020)	ND(0.0020)
Total VOCs		ND(3.7)	0.0090 J	ND(0.20)	ND(0.20)	ND(0.20)	ND(0.20)
Semivolatile Organics							
2-Chlorophenol		NA	NA	NA	NA	NA	NA
4-Chlorophenol		NA	NA	NA	NA	NA	NA
Natural Attenuation Parameters							
Alkalinity		NA	NA	570	590	620	590
Alkalinity to pH 4.5		496	486	NA	NA	NA	NA
Alkalinity to pH 8.3		ND(1.00)	ND(1.00)	NA	NA	NA	NA
Ammonia Nitrogen		0.880	0.970	NA	NA	NA	NA
Chloride		ND(1.0)	1.3	49	57	58	50
Dissolved Iron		NA	NA	ND(0.0500)	ND(0.0500)	ND(0.0500)	ND(0.100)
Dissolved Organic Carbon		2.90	3.60	9.00	11.0	7.60	2.70
Ethane		ND(0.0050)	ND(0.0050)	ND(0.10)	ND(0.020)	ND(0.0040)	ND(0.020)
Ethene		ND(0.0050)	ND(0.0050)	ND(0.10)	ND(0.015)	ND(0.0030)	ND(0.020)
Methane		0.800	2.80	1.30	0.770	0.880	0.980
Nitrate Nitrogen		NA	NA	0.0170 B	ND(0.0500)	0.0800	ND(0.100)
Nitrite Nitrogen		NA	NA	ND(0.0500)	ND(0.0500)	ND(0.0500)	ND(0.500)
Total Nitrate/Nitrite Nitrogen		NA	NA	NA	NA	NA	NA
Sulfate (turbidimetric)		ND(2.00)	ND(2.00)	1.30	ND(2.00)	ND(2.00)	ND(5.00)

Table G-1
Groundwater Analytical Results - Natural Attenuation Parameters

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

Location ID: / Sample ID: / Parameter / Date Collected:	43B 43B 05/09/07	43B 43B 04/30/08	89A PUEXG89A 02/21/91	89A UBG89A 12/05/96	89A UBG89AX (Bailer) 12/05/96	89A UBG89A 04/24/97
Volatile Organics						
Benzene	ND(0.0010)	ND(0.0010) [ND(0.0010)]	11	16	13	25
Chlorobenzene	ND(0.0010)	ND(0.0010) [ND(0.0010)]	48	49	42	53
Trichloroethene	ND(0.0010)	ND(0.0010) [ND(0.0010)]	ND(1.2)	ND(1.7)	ND(1.2)	ND(1.7)
Vinyl Chloride	ND(0.0010)	ND(0.0010) [ND(0.0010)]	2.1 J	0.48 J	0.43 J	ND(3.3)
Total VOCs	0.00050 J	0.041 J [0.00019 J]	63 J	65 J	55 J	100 J
Semivolatile Organics						
2-Chlorophenol	NA	NA	NA	0.0030 J	NA	NA
4-Chlorophenol	NA	NA	NA	NA	NA	NA
Natural Attenuation Parameters						
Alkalinity	590	580 [580]	NA	NA	NA	NA
Alkalinity to pH 4.5	NA	NA	NA	383	NA	376
Alkalinity to pH 8.3	NA	NA	NA	ND(1.00)	NA	ND(1.00)
Ammonia Nitrogen	NA	NA	NA	ND(0.0500)	NA	0.0900
Chloride	59	53 [50]	NA	860	NA	1100
Dissolved Iron	ND(0.100) J	0.0246 J	NA	NA	NA	NA
Dissolved Organic Carbon	2.50	2.77 [2.74]	NA	10.0	NA	11.5
Ethane	ND(0.20)	ND(0.10) [ND(0.10)]	NA	ND(0.010)	NA	0.13
Ethene	ND(0.20)	ND(0.10) [ND(0.10)]	NA	0.50	NA	1.3
Methane	0.802	1.51 [1.66]	NA	0.800	NA	2.40
Nitrate Nitrogen	ND(0.0500)	ND(0.300) [ND(0.300)]	NA	NA	NA	NA
Nitrite Nitrogen	ND(0.0100)	ND(0.300) [ND(0.300)]	NA	NA	NA	NA
Total Nitrate/Nitrite Nitrogen	NA	NA	NA	NA	NA	NA
Sulfate (turbidimetric)	ND(2.00)	ND(0.300) [ND(0.300)]	NA	ND(2.00)	NA	ND(2.00)

Table G-1
Groundwater Analytical Results - Natural Attenuation Parameters

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

Parameter / Location ID: / Sample ID: / Date Collected:	89A UBG89AX (Bailer) 04/24/97	89A UBG89A 10/07/97	89A UBG89A 04/15/98	89A UBG89A 12/17/98	89A 89A 04/28/99	89A 89A 10/21/99
Volatile Organics						
Benzene	19	18	14	10	8.8 [8.8]	2.1 D
Chlorobenzene	42	ND(3.3)	49	34	33 [33]	5.6 D
Trichloroethene	ND(1.3)	ND(1.7)	ND(1.2)	ND(2.5)	ND(2.5) [ND(2.5)]	ND(0.10)
Vinyl Chloride	ND(2.5)	0.80 J	ND(2.5)	ND(2.5)	ND(2.5) [ND(2.5)]	ND(0.10)
Total VOCs	74 J	73 J	63	45	42 [42]	7.7 J
Semivolatile Organics						
2-Chlorophenol	NA	NA	NA	NA	NA	NA
4-Chlorophenol	NA	NA	NA	0.74	NA	NA
Natural Attenuation Parameters						
Alkalinity	NA	NA	NA	NA	NA	NA
Alkalinity to pH 4.5	NA	NA	NA	368	NA	NA
Alkalinity to pH 8.3	NA	NA	NA	ND(1.00)	NA	NA
Ammonia Nitrogen	NA	NA	NA	ND(0.200)	NA	NA
Chloride	NA	NA	NA	580	NA	NA
Dissolved Iron	NA	NA	NA	0.650	NA	NA
Dissolved Organic Carbon	NA	NA	NA	8.90	NA	NA
Ethane	NA	NA	NA	0.017	NA	NA
Ethene	NA	NA	NA	1.4	NA	NA
Methane	NA	NA	NA	2.30	NA	NA
Nitrate Nitrogen	NA	NA	NA	NA	NA	NA
Nitrite Nitrogen	NA	NA	NA	NA	NA	NA
Total Nitrate/Nitrite Nitrogen	NA	NA	NA	ND(0.100)	NA	NA
Sulfate (turbidimetric)	NA	NA	NA	ND(2.00)	NA	NA

Table G-1
Groundwater Analytical Results - Natural Attenuation Parameters

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

Location ID: / Sample ID: / Parameter / Date Collected:	89A 89A 05/15/00	89A 89A 11/22/00	89A 89A 05/12/04	89A 89A 05/02/05	89A 89A 05/02/06	89A 89A 05/09/07
Volatile Organics						
Benzene	7.3	7.0	5.9	5.5	5.6	0.33
Chlorobenzene	21	24	22	16	14	2.5
Trichloroethene	ND(1.0)	ND(0.050)	ND(0.050)	ND(1.0)	ND(1.0)	ND(0.080)
Vinyl Chloride	ND(1.0)	ND(0.050)	ND(0.050)	ND(1.0)	ND(1.0)	ND(0.080)
Total VOCs	28	31	28	22	20	3.0 J
Semivolatile Organics						
2-Chlorophenol	NA	NA	ND(0.010)	NA	0.0068 J	0.0072 J
4-Chlorophenol	NA	NA	ND(0.010)	NA	0.010	ND(0.010) J
Natural Attenuation Parameters						
Alkalinity	NA	NA	350	340	340	360
Alkalinity to pH 4.5	NA	NA	NA	NA	NA	NA
Alkalinity to pH 8.3	NA	NA	NA	NA	NA	NA
Ammonia Nitrogen	NA	NA	NA	NA	NA	NA
Chloride	NA	NA	390	320	340	440
Dissolved Iron	NA	NA	ND(0.0500)	ND(0.0500)	0.0290 B	ND(0.100) J
Dissolved Organic Carbon	NA	NA	8.60	11.0	5.70	5.60
Ethane	NA	NA	0.044	0.023	ND(0.20)	ND(0.020)
Ethene	NA	NA	0.057	0.0054	ND(0.20)	ND(0.020)
Methane	NA	NA	0.850 E	1.40	5.80	0.738
Nitrate Nitrogen	NA	NA	0.0100 B	0.0170 B	ND(0.100)	ND(0.0500)
Nitrite Nitrogen	NA	NA	ND(0.0500)	ND(0.0500)	ND(0.500)	ND(0.100)
Total Nitrate/Nitrite Nitrogen	NA	NA	NA	NA	NA	NA
Sulfate (turbidimetric)	NA	NA	ND(2.00)	ND(2.00)	ND(5.00)	ND(2.00)

Table G-1
Groundwater Analytical Results - Natural Attenuation Parameters

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

Location ID: / Sample ID: / Parameter / Date Collected:	89A 89A 05/05/08	89B PUEXG89B 02/21/91	89B UBG89B 12/05/96	89B UBG89BX (Bailer) 12/05/96	89B UBG89B 04/24/97	89B UBG89BX (Bailer) 04/24/97
Volatile Organics						
Benzene	7.1	3.0 D	1.0	1.1	0.31	ND(0.14)
Chlorobenzene	26	15 D	4.3	4.5	1.6	ND(0.92)
Trichloroethene	ND(1.0)	ND(0.0050)	ND(0.14)	ND(0.16)	ND(0.042)	ND(0.042)
Vinyl Chloride	ND(1.0)	ND(0.010)	ND(0.29)	ND(0.31)	ND(0.083)	ND(0.083)
Total VOCs	33	18	5.3	5.6	1.9	ND(31)
Semivolatile Organics						
2-Chlorophenol	ND(0.0052)	NA	0.0080 J	NA	NA	NA
4-Chlorophenol	ND(0.0052)	NA	NA	NA	NA	NA
Natural Attenuation Parameters						
Alkalinity	330	NA	NA	NA	NA	NA
Alkalinity to pH 4.5	NA	NA	173	NA	150	NA
Alkalinity to pH 8.3	NA	NA	ND(1.00)	NA	ND(1.00)	NA
Ammonia Nitrogen	NA	NA	0.270	NA	0.180	NA
Chloride	380	NA	31	NA	11	NA
Dissolved Iron	ND(0.100) J	NA	NA	NA	NA	NA
Dissolved Organic Carbon	7.00	NA	4.00	NA	4.10	NA
Ethane	ND(0.20)	NA	ND(0.010)	NA	ND(0.0050)	NA
Ethene	ND(0.20)	NA	ND(0.0050)	NA	ND(0.0050)	NA
Methane	4.36	NA	0.230	NA	0.140	NA
Nitrate Nitrogen	ND(0.300)	NA	NA	NA	NA	NA
Nitrite Nitrogen	ND(3.00)	NA	NA	NA	NA	NA
Total Nitrate/Nitrite Nitrogen	NA	NA	NA	NA	NA	NA
Sulfate (turbidimetric)	ND(0.300)	NA	12.2	NA	18.2	NA

Table G-1
Groundwater Analytical Results - Natural Attenuation Parameters

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

Location ID: / Sample ID: / Parameter / Date Collected:	89B UBG89B 10/07/97	89B UBG89B 04/17/98	89B UBG89B 12/17/98	89B 89B 04/28/99	89B 89B 10/21/99	89B 89B 05/15/00
Volatile Organics						
Benzene	5.8	1.3	0.040 J	0.19	0.0030 J	ND(0.0050)
Chlorobenzene	14	5.6	0.63	1.2	0.17	0.027
Trichloroethene	ND(0.45)	ND(0.25)	ND(0.062)	ND(0.077)	ND(0.010)	ND(0.0050)
Vinyl Chloride	ND(0.91)	ND(0.50)	ND(0.062)	ND(0.077)	ND(0.010)	ND(0.010)
Total VOCs	20	6.9	0.68 J	1.4	0.18 J	0.027
Semivolatile Organics						
2-Chlorophenol	NA	NA	NA	NA	NA	NA
4-Chlorophenol	NA	NA	NA	NA	NA	NA
Natural Attenuation Parameters						
Alkalinity	NA	NA	NA	NA	NA	NA
Alkalinity to pH 4.5	NA	NA	176	NA	NA	NA
Alkalinity to pH 8.3	NA	NA	ND(1.00)	NA	NA	NA
Ammonia Nitrogen	NA	NA	ND(0.200)	NA	NA	NA
Chloride	NA	NA	29	NA	NA	NA
Dissolved Iron	NA	NA	7.03	NA	NA	NA
Dissolved Organic Carbon	NA	NA	12.0	NA	NA	NA
Ethane	NA	NA	ND(0.0050)	NA	NA	NA
Ethene	NA	NA	ND(0.0050)	NA	NA	NA
Methane	NA	NA	1.40	NA	NA	NA
Nitrate Nitrogen	NA	NA	NA	NA	NA	NA
Nitrite Nitrogen	NA	NA	NA	NA	NA	NA
Total Nitrate/Nitrite Nitrogen	NA	NA	ND(0.100)	NA	NA	NA
Sulfate (turbidimetric)	NA	NA	ND(2.00)	NA	NA	NA

Table G-1
Groundwater Analytical Results - Natural Attenuation Parameters

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

Location ID: / Sample ID: / Parameter / Date Collected:	89B / 89B / 11/22/00	89B / 89B / 04/30/04	89B / 89B / 10/14/04	89B / 89B / 05/03/05	89B / 89B / 11/09/05	89B / 89B / 05/02/06
Volatile Organics						
Benzene	0.92	0.16 [0.16]	0.0014 J [0.079]	0.16 [0.17]	0.0022 J [0.0022 J]	0.017
Chlorobenzene	4.4	0.91 [0.89]	0.010 J [0.56 J]	1.4 [1.3]	0.23 [0.20]	0.15
Trichloroethene	ND(0.010)	ND(0.0050) [ND(0.0050)]	ND(0.0050) [ND(0.050)]	ND(0.10) [ND(0.10)]	ND(0.0050) [ND(0.0050)]	ND(0.010)
Vinyl Chloride	ND(0.010)	ND(0.0020) [ND(0.0020)]	ND(0.0020) [ND(0.050)]	ND(0.10) [ND(0.10)]	ND(0.0020) [ND(0.0020)]	ND(0.010)
Total VOCs	5.3	1.1 [1.1]	0.011 J [0.64 J]	1.6 [1.5]	0.23 J [0.20 J]	0.17 J
Semivolatile Organics						
2-Chlorophenol	NA	ND(0.010) [ND(0.010)]	ND(0.010) [ND(0.010)]	0.0049 J [0.0068 J]	ND(0.010) [ND(0.010)]	ND(0.010)
4-Chlorophenol	NA	NA	ND(0.010) [ND(0.010)]	NA	NA	ND(0.010)
Natural Attenuation Parameters						
Alkalinity	NA	220 [210]	NA	270 [260]	NA	200
Alkalinity to pH 4.5	NA	NA	NA	NA	NA	NA
Alkalinity to pH 8.3	NA	NA	NA	NA	NA	NA
Ammonia Nitrogen	NA	NA	NA	NA	NA	NA
Chloride	NA	91 [98]	NA	130 [110]	NA	110
Dissolved Iron	NA	2.10 [3.20]	NA	5.60 [5.80]	NA	1.90
Dissolved Organic Carbon	NA	8.70 [9.00]	NA	6.90 [5.20]	NA	4.60
Ethane	NA	ND(0.040) [ND(0.040)]	NA	ND(0.0040) [ND(0.0040)]	NA	ND(0.20)
Ethene	NA	ND(0.030) [ND(0.030)]	NA	ND(0.0030) [ND(0.0030)]	NA	ND(0.20)
Methane	NA	2.40 [2.30]	NA	2.80 [2.80]	NA	2.70
Nitrate Nitrogen	NA	0.0280 B [0.0610]	NA	0.0150 B [0.0510]	NA	ND(0.100)
Nitrite Nitrogen	NA	ND(0.0500) [ND(0.0500)]	NA	0.00790 B [0.0130 B]	NA	ND(0.500)
Total Nitrate/Nitrite Nitrogen	NA	NA	NA	NA	NA	NA
Sulfate (turbidimetric)	NA	0.180 B [0.170 B]	NA	ND(2.00) [ND(2.00)]	NA	ND(5.00)

Table G-1
Groundwater Analytical Results - Natural Attenuation Parameters

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

Location ID: / Sample ID: / Parameter / Date Collected:	89B 89B 05/09/07	89B 89B 05/05/08	89D PUEXG89D 02/21/91	89D UBG89D 12/05/96	89D UBG89D 04/24/97	89D UBG89D 10/07/97
Volatile Organics						
Benzene	0.017	0.0067	0.0010 J	ND(0.010)	ND(0.010)	ND(0.010)
Chlorobenzene	0.15	0.048	0.0060	ND(0.010)	0.0020 J	0.0030 J
Trichloroethene	ND(0.0050)	ND(0.0020)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)
Vinyl Chloride	ND(0.0050)	ND(0.0020)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
Total VOCs	0.17	0.055	0.011 J	ND(3.7)	0.0020 J	0.0050 J
Semivolatile Organics						
2-Chlorophenol	ND(0.010)	ND(0.0051)	NA	ND(0.015)	NA	NA
4-Chlorophenol	ND(0.010) J	ND(0.0051)	NA	NA	NA	NA
Natural Attenuation Parameters						
Alkalinity	170	160	NA	NA	NA	NA
Alkalinity to pH 4.5	NA	NA	NA	NA	107	NA
Alkalinity to pH 8.3	NA	NA	NA	NA	ND(1.00)	NA
Ammonia Nitrogen	NA	NA	NA	NA	0.210	NA
Chloride	140	180	NA	NA	ND(1.0)	NA
Dissolved Iron	ND(0.100) J	0.902	NA	NA	NA	NA
Dissolved Organic Carbon	2.60	5.28	NA	NA	2.90	NA
Ethane	ND(0.020)	ND(0.020)	NA	NA	ND(0.0050)	NA
Ethene	ND(0.020)	ND(0.020)	NA	NA	ND(0.0050)	NA
Methane	0.188	0.338	NA	NA	3.30	NA
Nitrate Nitrogen	ND(0.0500)	ND(0.300)	NA	NA	NA	NA
Nitrite Nitrogen	ND(0.0100)	ND(0.300)	NA	NA	NA	NA
Total Nitrate/Nitrite Nitrogen	NA	NA	NA	NA	NA	NA
Sulfate (turbidimetric)	7.50	0.582	NA	NA	ND(2.00)	NA

Table G-1
Groundwater Analytical Results - Natural Attenuation Parameters

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

Parameter	Location ID: / Sample ID: / Date Collected:						
	Location ID:	89D	89D	89D	89D	89D	89D
	Sample ID:	UBG89D	UBG89D	89D	89D	89D	89D
Parameter	Date Collected:	04/17/98	12/18/98	04/28/99	10/21/99	05/15/00	11/22/00
Volatile Organics							
Benzene		0.0020 J	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.0050)	ND(0.0050)
Chlorobenzene		0.0080 J	ND(0.010)	ND(0.010)	0.0040 J	ND(0.0050)	ND(0.0050)
Trichloroethene		ND(0.0050)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.0050)	ND(0.0050)
Vinyl Chloride		ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
Total VOCs		0.090 J	0.0020 J	0.0010 J	0.0090 J	ND(0.20)	ND(0.20)
Semivolatile Organics							
2-Chlorophenol		NA	NA	NA	NA	NA	NA
4-Chlorophenol		NA	NA	NA	NA	NA	NA
Natural Attenuation Parameters							
Alkalinity		NA	NA	NA	NA	NA	NA
Alkalinity to pH 4.5		NA	141	NA	NA	NA	NA
Alkalinity to pH 8.3		NA	ND(1.00)	NA	NA	NA	NA
Ammonia Nitrogen		NA	ND(0.200)	NA	NA	NA	NA
Chloride		NA	1.4	NA	NA	NA	NA
Dissolved Iron		NA	0.870	NA	NA	NA	NA
Dissolved Organic Carbon		NA	ND(1.00)	NA	NA	NA	NA
Ethane		NA	ND(0.0050)	NA	NA	NA	NA
Ethene		NA	ND(0.0050)	NA	NA	NA	NA
Methane		NA	0.310	NA	NA	NA	NA
Nitrate Nitrogen		NA	NA	NA	NA	NA	NA
Nitrite Nitrogen		NA	NA	NA	NA	NA	NA
Total Nitrate/Nitrite Nitrogen		NA	ND(0.100)	NA	NA	NA	NA
Sulfate (turbidimetric)		NA	ND(4.00)	NA	NA	NA	NA

Table G-1
Groundwater Analytical Results - Natural Attenuation Parameters

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

Parameter / Location ID: / Sample ID: / Date Collected:	89D-R 89D-R 04/26/05	89D-R 89D-R 05/02/05	89D-R 89D-R 05/02/06	89D-R 89D-R 05/09/07	89D-R 89D-R 05/05/08	90A PUEXG90A 02/20/91
Volatile Organics						
Benzene	0.15	NA	12	8.3	8.1	ND(0.0050)
Chlorobenzene	0.45	NA	34	31	32	ND(0.0050)
Trichloroethene	ND(0.010)	NA	ND(0.10)	ND(0.80)	ND(1.6)	ND(0.0050)
Vinyl Chloride	ND(0.010)	NA	0.17	0.98	ND(1.6)	ND(0.010)
Total VOCs	0.62	NA	46	43 J	40	ND(0.12)
Semivolatile Organics						
2-Chlorophenol	NA	NA	NA	NA	NA	NA
4-Chlorophenol	NA	NA	NA	NA	NA	NA
Natural Attenuation Parameters						
Alkalinity	NA	330	330	330	320	NA
Alkalinity to pH 4.5	NA	NA	NA	NA	NA	NA
Alkalinity to pH 8.3	NA	NA	NA	NA	NA	NA
Ammonia Nitrogen	NA	NA	NA	NA	NA	NA
Chloride	NA	540	620	630	590	NA
Dissolved Iron	NA	ND(0.0500)	ND(0.100)	ND(0.100) J	0.141 J	NA
Dissolved Organic Carbon	NA	7.60	6.60	9.20	8.52	NA
Ethane	ND(0.0040)	NA	ND(0.020)	ND(0.020)	ND(0.10)	NA
Ethene	0.0032	NA	0.64	0.80	0.76	NA
Methane	0.00890	NA	1.30	1.06	1.62	NA
Nitrate Nitrogen	NA	0.00480 B	ND(0.100)	ND(0.0500)	ND(0.300)	NA
Nitrite Nitrogen	NA	ND(0.0500)	ND(0.500)	ND(0.100)	ND(3.00)	NA
Total Nitrate/Nitrite Nitrogen	NA	NA	NA	NA	NA	NA
Sulfate (turbidimetric)	NA	18.0	ND(1.00)	2.80	2.68	NA

Table G-1
Groundwater Analytical Results - Natural Attenuation Parameters

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

Parameter	Location ID: / Sample ID: / Date Collected:	90A / UBG90A / 12/10/96	90A / UBG90A / 04/29/97	90A / UBG90A / 10/07/97	90A / UBG90A / 04/14/98	90A / UBG90A / 12/22/98	90A / 90A / 04/28/99
Volatile Organics							
Benzene		ND(0.010) [ND(0.010)]	ND(0.010)	ND(0.010)	ND(0.010) [ND(0.010)]	ND(0.010)	ND(0.010)
Chlorobenzene		ND(0.010) [ND(0.010)]	ND(0.010)	ND(0.010)	ND(0.010) [ND(0.010)]	0.0040 J	ND(0.010)
Trichloroethene		ND(0.0050) [ND(0.0050)]	ND(0.0050)	ND(0.0050)	ND(0.0050) [ND(0.0050)]	ND(0.010)	ND(0.010)
Vinyl Chloride		ND(0.010) [ND(0.010)]	ND(0.010)	ND(0.010)	ND(0.010) [ND(0.010)]	ND(0.010)	ND(0.010)
Total VOCs		0.0040 J [0.0040 J]	ND(3.7)	ND(3.7)	0.0020 J [0.0020 J]	0.011 J	0.0020 J
Semivolatile Organics							
2-Chlorophenol		NA	NA	NA	NA	NA	NA
4-Chlorophenol		NA	NA	NA	NA	NA	NA
Natural Attenuation Parameters							
Alkalinity		NA	NA	NA	NA	NA	NA
Alkalinity to pH 4.5		135	147	NA	NA	135	NA
Alkalinity to pH 8.3		ND(1.00)	ND(1.00)	NA	NA	ND(1.00)	NA
Ammonia Nitrogen		0.170	0.150	NA	NA	ND(0.200)	NA
Chloride		4.3	4.9	NA	NA	3.3	NA
Dissolved Iron		NA	NA	NA	NA	2.53	NA
Dissolved Organic Carbon		1.00	1.70	NA	NA	ND(1.00)	NA
Ethane		ND(0.0050)	ND(0.0050)	NA	NA	ND(0.0050)	NA
Ethene		ND(0.0050)	ND(0.0050)	NA	NA	ND(0.0050)	NA
Methane		0.0280	0.0750	NA	NA	0.0200	NA
Nitrate Nitrogen		NA	NA	NA	NA	NA	NA
Nitrite Nitrogen		NA	NA	NA	NA	NA	NA
Total Nitrate/Nitrite Nitrogen		NA	NA	NA	NA	ND(0.100)	NA
Sulfate (turbidimetric)		15.1	19.7	NA	NA	10.5	NA

Table G-1
Groundwater Analytical Results - Natural Attenuation Parameters

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

Location ID: / Sample ID: / Parameter / Date Collected:	90A 90A 10/22/99	90A 90A 05/10/00	90A 90A 11/15/00	90A 90A 04/26/04	90A 90A 04/14/05	90A 90A 04/25/06
Volatile Organics						
Benzene	ND(0.010)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)
Chlorobenzene	0.012	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)
Trichloroethene	ND(0.010)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)
Vinyl Chloride	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.0020)	ND(0.0020)	ND(0.0020)
Total VOCs	0.028 J	ND(0.20)	ND(0.20)	ND(0.20)	0.00072 J	0.0056
Semivolatile Organics						
2-Chlorophenol	NA	NA	NA	NA	NA	NA
4-Chlorophenol	NA	NA	NA	NA	NA	NA
Natural Attenuation Parameters						
Alkalinity	NA	NA	NA	140	160	150
Alkalinity to pH 4.5	NA	NA	NA	NA	NA	NA
Alkalinity to pH 8.3	NA	NA	NA	NA	NA	NA
Ammonia Nitrogen	NA	NA	NA	NA	NA	NA
Chloride	NA	NA	NA	4.6	7.4	10
Dissolved Iron	NA	NA	NA	ND(0.0500)	ND(0.0500)	ND(0.100)
Dissolved Organic Carbon	NA	NA	NA	2.30	ND(1.0)	1.00
Ethane	NA	NA	NA	ND(0.0040)	ND(0.0040)	ND(0.020)
Ethene	NA	NA	NA	ND(0.0030)	ND(0.0030)	ND(0.020)
Methane	NA	NA	NA	0.0240	0.0190	0.150
Nitrate Nitrogen	NA	NA	NA	0.0130 B	0.0540	ND(0.100)
Nitrite Nitrogen	NA	NA	NA	ND(0.0500)	ND(0.0500)	ND(0.500)
Total Nitrate/Nitrite Nitrogen	NA	NA	NA	NA	NA	NA
Sulfate (turbidimetric)	NA	NA	NA	13.0	20.0	18.0

Table G-1
Groundwater Analytical Results - Natural Attenuation Parameters

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

Location ID: / Sample ID: / Parameter / Date Collected:	90A 90A 05/08/07	90A 90A 05/14/08	90B PUEXG90B 02/20/91	90B UBG90B 12/10/96	90B UBG90B 04/29/97	90B UBG90B 10/06/97
Volatile Organics						
Benzene	ND(0.0010)	ND(0.0010)	ND(0.0050)	ND(0.010)	ND(0.010)	ND(0.010)
Chlorobenzene	0.0011	ND(0.0010)	ND(0.0050)	ND(0.010)	ND(0.010)	ND(0.010)
Trichloroethene	ND(0.0010)	ND(0.0010)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)
Vinyl Chloride	ND(0.0010)	ND(0.0010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
Total VOCs	0.0011	ND(0.10)	ND(0.12)	0.0040 J	ND(3.7)	ND(3.7)
Semivolatile Organics						
2-Chlorophenol	NA	NA	NA	NA	NA	NA
4-Chlorophenol	NA	NA	NA	NA	NA	NA
Natural Attenuation Parameters						
Alkalinity	160	180	NA	NA	NA	NA
Alkalinity to pH 4.5	NA	NA	NA	117	129	NA
Alkalinity to pH 8.3	NA	NA	NA	ND(1.00)	ND(1.00)	NA
Ammonia Nitrogen	NA	NA	NA	0.160	0.180	NA
Chloride	9.3	14	NA	4.2	3.7	NA
Dissolved Iron	0.0670 B	0.0211 J	NA	NA	NA	NA
Dissolved Organic Carbon	ND(1.00)	1.60	NA	4.00	3.70	NA
Ethane	ND(0.020)	ND(0.020)	NA	ND(0.0050)	ND(0.0050)	NA
Ethene	ND(0.020)	ND(0.020)	NA	ND(0.0050)	ND(0.0050)	NA
Methane	0.108	0.0930	NA	0.0330	0.0920	NA
Nitrate Nitrogen	ND(0.0500)	ND(0.300)	NA	NA	NA	NA
Nitrite Nitrogen	ND(0.0100)	ND(0.300)	NA	NA	NA	NA
Total Nitrate/Nitrite Nitrogen	NA	NA	NA	NA	NA	NA
Sulfate (turbidimetric)	21.0	14.2	NA	18.9	9.90	NA

Table G-1
Groundwater Analytical Results - Natural Attenuation Parameters

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

Location ID: / Sample ID: / Parameter / Date Collected:	90B UBG90B 04/14/98	90B UBG90B 12/22/98	90B 90B 04/28/99	90B 90B 10/22/99	90B 90B 05/10/00	90B 90B 11/15/00
Volatile Organics						
Benzene	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.0050) [ND(0.0050)]	ND(0.0050) [ND(0.0050)]
Chlorobenzene	ND(0.010)	0.0060 J	ND(0.010)	0.024	ND(0.0050) [ND(0.0050)]	ND(0.0050) [ND(0.0050)]
Trichloroethene	ND(0.0050)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.0050) [ND(0.0050)]	ND(0.0050) [ND(0.0050)]
Vinyl Chloride	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010) [ND(0.010)]	ND(0.010) [ND(0.010)]
Total VOCs	0.0030 J	0.014 J	0.0010 J	0.029 J	ND(0.20) [ND(0.20)]	ND(0.20) [ND(0.20)]
Semivolatile Organics						
2-Chlorophenol	NA	NA	NA	NA	NA	NA
4-Chlorophenol	NA	NA	NA	NA	NA	NA
Natural Attenuation Parameters						
Alkalinity	NA	NA	NA	NA	NA	NA
Alkalinity to pH 4.5	NA	113	NA	NA	NA	NA
Alkalinity to pH 8.3	NA	ND(1.00)	NA	NA	NA	NA
Ammonia Nitrogen	NA	ND(0.200)	NA	NA	NA	NA
Chloride	NA	4.0	NA	NA	NA	NA
Dissolved Iron	NA	4.95	NA	NA	NA	NA
Dissolved Organic Carbon	NA	6.60	NA	NA	NA	NA
Ethane	NA	ND(0.0050)	NA	NA	NA	NA
Ethene	NA	ND(0.0050)	NA	NA	NA	NA
Methane	NA	0.0570	NA	NA	NA	NA
Nitrate Nitrogen	NA	NA	NA	NA	NA	NA
Nitrite Nitrogen	NA	NA	NA	NA	NA	NA
Total Nitrate/Nitrite Nitrogen	NA	ND(0.100)	NA	NA	NA	NA
Sulfate (turbidimetric)	NA	10.1	NA	NA	NA	NA

Table G-1
Groundwater Analytical Results - Natural Attenuation Parameters

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

Location ID: / Sample ID: / Parameter / Date Collected:	90B 90B 04/23/04	90B 90B 04/29/04	90B 90B 10/07/04	90B 90B 04/14/05	90B 90B 11/04/05	90B 90B 04/25/06
Volatile Organics						
Benzene	NA	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)
Chlorobenzene	NA	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)
Trichloroethene	NA	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)
Vinyl Chloride	NA	ND(0.0020)	ND(0.0020)	ND(0.0020)	ND(0.0020)	ND(0.0020)
Total VOCs	NA	ND(0.20)	ND(0.20)	ND(0.20)	ND(0.20)	0.0028 J
Semivolatile Organics						
2-Chlorophenol	ND(0.010)	NA	ND(0.010)	ND(0.010)	ND(0.010)	NA
4-Chlorophenol	NA	NA	NA	NA	NA	NA
Natural Attenuation Parameters						
Alkalinity	130	NA	NA	140	NA	130
Alkalinity to pH 4.5	NA	NA	NA	NA	NA	NA
Alkalinity to pH 8.3	NA	NA	NA	NA	NA	NA
Ammonia Nitrogen	NA	NA	NA	NA	NA	NA
Chloride	5.0	NA	NA	4.1	NA	5.8
Dissolved Iron	2.90	NA	NA	2.60	NA	5.10
Dissolved Organic Carbon	6.90	NA	NA	6.40	NA	6.10
Ethane	ND(0.0040)	NA	NA	ND(0.0040)	NA	ND(0.020)
Ethene	ND(0.0030)	NA	NA	ND(0.0030)	NA	ND(0.020)
Methane	0.0160	NA	NA	0.0340	NA	0.0900
Nitrate Nitrogen	0.0400 B	NA	NA	0.140	NA	ND(0.100)
Nitrite Nitrogen	ND(0.0500)	NA	NA	0.00260 B	NA	ND(0.500)
Total Nitrate/Nitrite Nitrogen	NA	NA	NA	NA	NA	NA
Sulfate (turbidimetric)	11.0	NA	NA	4.20	NA	6.80

Table G-1
Groundwater Analytical Results - Natural Attenuation Parameters

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

Parameter / Location ID: / Sample ID: / Date Collected:	90B 90B 05/08/07	90B 90B 05/14/08	95A UBG95A 12/11/96	95A UBG95A 04/25/97	95A UBG95AX (Bailer) 04/25/97	95A UBG95A 10/07/97
Volatile Organics						
Benzene	0.00027 J	ND(0.0010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
Chlorobenzene	0.0017	ND(0.0010)	ND(0.010)	ND(0.010)	ND(0.010)	0.0010 J
Trichloroethene	ND(0.0010)	ND(0.0010)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)
Vinyl Chloride	ND(0.0010)	ND(0.0010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
Total VOCs	0.0020 J	ND(0.10)	ND(3.7)	0.22 J	ND(3.7)	0.0020 J
Semivolatile Organics						
2-Chlorophenol	NA	NA	NA	NA	NA	NA
4-Chlorophenol	NA	NA	NA	NA	NA	NA
Natural Attenuation Parameters						
Alkalinity	130	110	NA	NA	NA	NA
Alkalinity to pH 4.5	NA	NA	115	107	NA	NA
Alkalinity to pH 8.3	NA	NA	ND(1.00)	ND(1.00)	NA	NA
Ammonia Nitrogen	NA	NA	0.120	0.150	NA	NA
Chloride	8.0	8.5	ND(2.0)	ND(2.0)	NA	NA
Dissolved Iron	3.62	3.68	NA	NA	NA	NA
Dissolved Organic Carbon	4.80	5.77	1.00	1.40	NA	NA
Ethane	ND(0.020)	ND(0.020)	ND(0.0050)	ND(0.0050)	NA	NA
Ethene	ND(0.020)	ND(0.020)	ND(0.0050)	ND(0.0050)	NA	NA
Methane	0.0830	0.0700	0.200	0.440	NA	NA
Nitrate Nitrogen	ND(0.0500)	ND(0.300)	NA	NA	NA	NA
Nitrite Nitrogen	ND(0.0100)	ND(0.300)	NA	NA	NA	NA
Total Nitrate/Nitrite Nitrogen	NA	NA	NA	NA	NA	NA
Sulfate (turbidimetric)	2.00	12.1	ND(4.00)	ND(4.00)	NA	NA

Table G-1
Groundwater Analytical Results - Natural Attenuation Parameters

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

Parameter / Location ID: / Sample ID: / Date Collected:	95A UBG95A 04/20/98	95A UBG95A 12/16/98	95A 95A 04/29/99	95A 95A 10/21/99	95A 95A 05/09/00	95A 95A 11/20/00
Volatile Organics						
Benzene	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.0050)	0.014
Chlorobenzene	ND(0.010)	ND(0.010)	0.0030 J	0.0010 J	ND(0.0050)	0.0070
Trichloroethene	ND(0.0050)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.0050)	ND(0.0050)
Vinyl Chloride	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
Total VOCs	0.0040 J	0.0020 J	0.0060 J	0.0060 J	ND(0.20)	0.021
Semivolatile Organics						
2-Chlorophenol	NA	NA	NA	NA	NA	NA
4-Chlorophenol	NA	NA	NA	NA	NA	NA
Natural Attenuation Parameters						
Alkalinity	NA	NA	NA	NA	NA	NA
Alkalinity to pH 4.5	NA	105	NA	NA	NA	NA
Alkalinity to pH 8.3	NA	ND(1.00)	NA	NA	NA	NA
Ammonia Nitrogen	NA	ND(0.200)	NA	NA	NA	NA
Chloride	NA	ND(1.0)	NA	NA	NA	NA
Dissolved Iron	NA	21.4	NA	NA	NA	NA
Dissolved Organic Carbon	NA	ND(1.00)	NA	NA	NA	NA
Ethane	NA	ND(0.0050)	NA	NA	NA	NA
Ethene	NA	ND(0.0050)	NA	NA	NA	NA
Methane	NA	1.20	NA	NA	NA	NA
Nitrate Nitrogen	NA	NA	NA	NA	NA	NA
Nitrite Nitrogen	NA	NA	NA	NA	NA	NA
Total Nitrate/Nitrite Nitrogen	NA	ND(0.100)	NA	NA	NA	NA
Sulfate (turbidimetric)	NA	ND(4.00)	NA	NA	NA	NA

Table G-1
Groundwater Analytical Results - Natural Attenuation Parameters

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

Location ID: / Sample ID: / Parameter / Date Collected:	95A / 95A / 05/07/04	95A / 95A / 04/22/05	95A / 95A / 05/01/06	95A / 95A / 05/10/07	95A / 95A / 05/14/08	95B / UBG95B / 12/05/96
Volatile Organics						
Benzene	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0010) [ND(0.0010)]	ND(0.0010)	0.049 J
Chlorobenzene	ND(0.0050)	0.00053 J	ND(0.0050)	ND(0.0010) [ND(0.0010)]	0.00035 J	1.4
Trichloroethene	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0010) [ND(0.0010)]	ND(0.0010)	ND(0.050)
Vinyl Chloride	ND(0.0020)	ND(0.0020)	ND(0.0020)	ND(0.0010) [ND(0.0010)]	ND(0.0010)	ND(0.10)
Total VOCs	ND(0.20)	0.00053 J	ND(0.20)	0.00049 J [0.00063 J]	0.00035 J	1.4 J
Semivolatile Organics						
2-Chlorophenol	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010) [ND(0.010)]	ND(0.0052)	NA
4-Chlorophenol	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010) J [ND(0.010) J]	ND(0.0052)	NA
Natural Attenuation Parameters						
Alkalinity	100	100	110	130 [130]	130	NA
Alkalinity to pH 4.5	NA	NA	NA	NA	NA	NA
Alkalinity to pH 8.3	NA	NA	NA	NA	NA	NA
Ammonia Nitrogen	NA	NA	NA	NA	NA	NA
Chloride	1.0	ND(2.1)	1.7	1.4 [1.4]	0.77	NA
Dissolved Iron	ND(0.0500)	0.720	ND(0.100)	ND(0.100) J [ND(0.100) J]	ND(0.100) J	NA
Dissolved Organic Carbon	1.30	ND(1.0)	1.40	ND(1.00) [ND(1.00)]	0.660 B	NA
Ethane	NA	ND(0.0040)	ND(0.020)	ND(0.020) [ND(0.020)]	ND(0.020)	NA
Ethene	NA	ND(0.0030)	ND(0.020)	ND(0.020) [ND(0.020)]	ND(0.020)	NA
Methane	NA	0.270	0.320	0.134 [0.0880]	0.156	NA
Nitrate Nitrogen	0.0620	ND(.05)	ND(0.100)	ND(0.0500) [ND(0.0500)]	ND(0.300)	NA
Nitrite Nitrogen	ND(0.0500)	0.00370 B	ND(0.500)	ND(0.0100) [ND(0.0100)]	ND(0.300)	NA
Total Nitrate/Nitrite Nitrogen	NA	NA	NA	NA	NA	NA
Sulfate (turbidimetric)	2.60	0.700 B	15.0	4.40 [4.20]	4.41	NA

Table G-1
Groundwater Analytical Results - Natural Attenuation Parameters

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

Location ID: / Sample ID: / Parameter / Date Collected:	95B UBG95B 04/25/97	95B UBG95BX (Bailer) 04/25/97	95B UBG95B 10/07/97	95B UBG95B 04/20/98	95B UBG95B 12/16/98	95B 95B 04/29/99
Volatile Organics						
Benzene	ND(2.1)	1.9	0.027 J	0.051 J	ND(0.010)	ND(0.010)
Chlorobenzene	8.7	8.0	1.1	1.0	0.054	0.060
Trichloroethene	ND(0.33)	ND(0.33)	ND(0.050)	ND(0.050)	ND(0.010)	ND(0.010)
Vinyl Chloride	0.79	0.68	ND(0.10)	ND(0.10)	ND(0.010)	ND(0.010)
Total VOCs	12 J	11 J	1.1 J	1.1	0.055 J	0.063 J
Semivolatile Organics						
2-Chlorophenol	NA	NA	NA	NA	NA	NA
4-Chlorophenol	NA	NA	NA	NA	ND(0.0094) [ND(0.0094)]	NA
Natural Attenuation Parameters						
Alkalinity	NA	NA	NA	NA	NA	NA
Alkalinity to pH 4.5	269	NA	NA	NA	134 [179]	NA
Alkalinity to pH 8.3	ND(1.00)	NA	NA	NA	ND(1.00) [ND(1.00)]	NA
Ammonia Nitrogen	0.340	NA	NA	NA	0.220 [ND(0.200)]	NA
Chloride	130	NA	NA	NA	30 [29]	NA
Dissolved Iron	NA	NA	NA	NA	1.93 [7.23]	NA
Dissolved Organic Carbon	4.70	NA	NA	NA	3.40 [12.2]	NA
Ethane	0.018	NA	NA	NA	ND(0.0050) [ND(0.0050)]	NA
Ethene	0.18	NA	NA	NA	ND(0.0050) [ND(0.0050)]	NA
Methane	1.14	NA	NA	NA	0.350 [1.30]	NA
Nitrate Nitrogen	NA	NA	NA	NA	NA	NA
Nitrite Nitrogen	NA	NA	NA	NA	NA	NA
Total Nitrate/Nitrite Nitrogen	NA	NA	NA	NA	ND(0.100) [ND(0.100)]	NA
Sulfate (turbidimetric)	8.90	NA	NA	NA	6.30 [ND(2.00)]	NA

Table G-1
Groundwater Analytical Results - Natural Attenuation Parameters

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

Location ID: / Sample ID: / Parameter / Date Collected:	95B 95B 10/21/99	95B 95B 05/09/00	95B 95B 11/20/00	95B-R 95B-R 10/14/04	95B-R 95B-R 04/21/05	95B-R 95B-R 11/04/05
Volatile Organics						
Benzene	ND(0.010)	0.018	0.091	ND(0.0050)	0.047	ND(0.0050)
Chlorobenzene	0.036	0.21	1.2	0.077 J	0.37	0.012
Trichloroethene	ND(0.010)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.010)	ND(0.0050)
Vinyl Chloride	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.0050)	ND(0.010)	ND(0.0020)
Total VOCs	0.041 J	0.23	1.3	0.077 J	0.42	0.012
Semivolatile Organics						
2-Chlorophenol	NA	NA	NA	R	ND(0.010)	ND(0.010)
4-Chlorophenol	NA	NA	NA	R	ND(0.010)	NA
Natural Attenuation Parameters						
Alkalinity	NA	NA	NA	NA	180	NA
Alkalinity to pH 4.5	NA	NA	NA	NA	NA	NA
Alkalinity to pH 8.3	NA	NA	NA	NA	NA	NA
Ammonia Nitrogen	NA	NA	NA	NA	NA	NA
Chloride	NA	NA	NA	NA	97	NA
Dissolved Iron	NA	NA	NA	NA	0.820	NA
Dissolved Organic Carbon	NA	NA	NA	NA	3.40	NA
Ethane	NA	NA	NA	NA	ND(0.020)	NA
Ethene	NA	NA	NA	NA	ND(0.015)	NA
Methane	NA	NA	NA	NA	0.600 J	NA
Nitrate Nitrogen	NA	NA	NA	NA	0.0130 B	NA
Nitrite Nitrogen	NA	NA	NA	NA	0.00440 B	NA
Total Nitrate/Nitrite Nitrogen	NA	NA	NA	NA	NA	NA
Sulfate (turbidimetric)	NA	NA	NA	NA	2.00 J	NA

Table G-1
Groundwater Analytical Results - Natural Attenuation Parameters

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

Location ID: / Sample ID: / Parameter / Date Collected:	95B-R 95B-R 4/26-05/31/2006	95B-R 95B-R 05/10/07	95B-R 95B-R 05/08/08	111A PUEXG111A 02/20/91	111A UBG111A 12/09/96	111A UBG111A 05/05/97
Volatile Organics						
Benzene	0.0031 J [0.0030 J]	2.3	2.3	ND(0.0050)	ND(0.010)	ND(0.010)
Chlorobenzene	0.073 [0.074]	9.7	10	ND(0.0050)	ND(0.010)	ND(0.010)
Trichloroethene	ND(0.0050) [ND(0.0050)]	ND(0.40)	ND(0.40)	ND(0.0050)	ND(0.0050)	ND(0.0050)
Vinyl Chloride	ND(0.0020) [ND(0.0020)]	ND(0.40)	ND(0.40)	ND(0.010)	ND(0.010)	ND(0.010)
Total VOCs	0.076 J [0.077 J]	12	12	0.0050 J	ND(3.7)	0.0020 J
Semivolatile Organics						
2-Chlorophenol	ND(0.010) [ND(0.010)]	0.0090 J	ND(0.014)	NA	NA	NA
4-Chlorophenol	ND(0.010) [ND(0.010)]	0.020 J	ND(0.022)	NA	NA	NA
Natural Attenuation Parameters						
Alkalinity	180 [190]	260	240	NA	NA	NA
Alkalinity to pH 4.5	NA	NA	NA	NA	63.0	108
Alkalinity to pH 8.3	NA	NA	NA	NA	ND(1.00)	ND(1.00)
Ammonia Nitrogen	NA	NA	NA	NA	0.250	0.320
Chloride	87 [83]	140	160	NA	240	180
Dissolved Iron	0.510 [0.490]	ND(0.100) J	0.0214 J	NA	NA	NA
Dissolved Organic Carbon	3.80 [4.00]	4.30	3.92	NA	1.30	1.90
Ethane	ND(0.20) [ND(0.20)]	0.051	ND(0.10)	NA	ND(0.0050)	ND(0.0050)
Ethene	ND(0.20) [ND(0.20)]	0.044	ND(0.10)	NA	ND(0.0050)	ND(0.0050)
Methane	2.46 [2.71]	1.57	0.871	NA	0.290	0.440
Nitrate Nitrogen	ND(0.100) [ND(0.100)]	ND(0.0500)	ND(0.300)	NA	NA	NA
Nitrite Nitrogen	ND(0.500) [ND(0.500)]	ND(0.100)	ND(0.300)	NA	NA	NA
Total Nitrate/Nitrite Nitrogen	NA	NA	NA	NA	NA	NA
Sulfate (turbidimetric)	ND(5.00) [ND(5.00)]	3.80	4.76	NA	43.2	52.0

Table G-1
Groundwater Analytical Results - Natural Attenuation Parameters

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

Parameter / Location ID / Sample ID / Date Collected:	111A UBG111A 10/09/97	111A UBG111A 04/14/98	111A UBG111A 12/21/98	111A UBG111A 12/22/98	111A 111A 04/30/99	111A 111A 10/20/99
Volatile Organics						
Benzene	ND(0.010)	ND(0.010)	ND(0.010)	NA	ND(0.010)	ND(0.010)
Chlorobenzene	0.0010 J	ND(0.010)	0.0050 J	NA	ND(0.010)	0.0070 JB
Trichloroethene	ND(0.0050)	ND(0.0050)	ND(0.010)	NA	ND(0.010)	ND(0.010)
Vinyl Chloride	ND(0.010)	ND(0.010)	ND(0.010)	NA	ND(0.010)	ND(0.010)
Total VOCs	0.0010 J	0.0030 J	0.012 J	NA	0.0020 J	0.016 J
Semivolatile Organics						
2-Chlorophenol	NA	NA	NA	NA	NA	NA
4-Chlorophenol	NA	NA	NA	NA	NA	NA
Natural Attenuation Parameters						
Alkalinity	NA	NA	NA	NA	NA	NA
Alkalinity to pH 4.5	NA	NA	NA	82.4	NA	NA
Alkalinity to pH 8.3	NA	NA	NA	7.90	NA	NA
Ammonia Nitrogen	NA	NA	NA	0.250	NA	NA
Chloride	NA	NA	NA	150	NA	NA
Dissolved Iron	NA	NA	NA	ND(0.100)	NA	NA
Dissolved Organic Carbon	NA	NA	NA	1.40	NA	NA
Ethane	NA	NA	NA	ND(0.0050)	NA	NA
Ethene	NA	NA	NA	ND(0.0050)	NA	NA
Methane	NA	NA	NA	0.190	NA	NA
Nitrate Nitrogen	NA	NA	NA	NA	NA	NA
Nitrite Nitrogen	NA	NA	NA	NA	NA	NA
Total Nitrate/Nitrite Nitrogen	NA	NA	NA	ND(0.100)	NA	NA
Sulfate (turbidimetric)	NA	NA	NA	27.5	NA	NA

Table G-1
Groundwater Analytical Results - Natural Attenuation Parameters

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

Location ID: / Sample ID: / Parameter / Date Collected:	111A 111A 05/10/00	111A 111A 11/17/00	111A-R 111A-R 04/14/05	111A-R 111A-R 04/24/06	111A-R 111A-R 05/07/07	111A-R 111A-R 05/06/08
Volatile Organics						
Benzene	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050) [ND(0.0050)]	ND(0.0010)	ND(0.0010)
Chlorobenzene	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050) [ND(0.0050)]	ND(0.0010)	ND(0.0010)
Trichloroethene	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050) [ND(0.0050)]	ND(0.0010)	ND(0.0010)
Vinyl Chloride	ND(0.010)	ND(0.010)	ND(0.0020)	ND(0.0020) [ND(0.0020)]	ND(0.0010)	ND(0.0010)
Total VOCs	ND(0.20)	ND(0.20)	0.017	ND(0.20) [ND(0.20)]	ND(0.10)	0.00015 J
Semivolatile Organics						
2-Chlorophenol	NA	NA	NA	NA	NA	NA
4-Chlorophenol	NA	NA	NA	NA	NA	NA
Natural Attenuation Parameters						
Alkalinity	NA	NA	120	140 [140]	140	140
Alkalinity to pH 4.5	NA	NA	NA	NA	NA	NA
Alkalinity to pH 8.3	NA	NA	NA	NA	NA	NA
Ammonia Nitrogen	NA	NA	NA	NA	NA	NA
Chloride	NA	NA	110	92 [92]	92	86
Dissolved Iron	NA	NA	ND(0.0500)	ND(0.100) [ND(0.100)]	0.0101 B	0.0432 J
Dissolved Organic Carbon	NA	NA	ND(1.4)	0.960 B [0.940 B]	1.20	1.18
Ethane	NA	NA	ND(0.0040)	ND(0.020) [ND(0.020)]	ND(0.020)	ND(0.020)
Ethene	NA	NA	ND(0.0030)	ND(0.020) [ND(0.020)]	ND(0.020)	ND(0.020)
Methane	NA	NA	ND(0.00200)	ND(0.00720) [ND(0.00720)]	ND(0.00720)	ND(0.00720)
Nitrate Nitrogen	NA	NA	0.00810 B	ND(0.100) [ND(0.100)]	ND(0.0500)	ND(0.300)
Nitrite Nitrogen	NA	NA	ND(0.0500)	ND(0.500) [ND(0.500)]	ND(0.0100)	ND(0.300)
Total Nitrate/Nitrite Nitrogen	NA	NA	NA	NA	NA	NA
Sulfate (turbidimetric)	NA	NA	54.0	120 J [76.0 J]	71.0	71.6

Table G-1
Groundwater Analytical Results - Natural Attenuation Parameters

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

Parameter / Location ID / Sample ID / Date Collected:	111B PUEXG111B 02/20/91	111B UBG111B 12/09/96	111B UBG111B 05/05/97	111B UBG111B 10/09/97	111B UBG111B 04/14/98	111B UBG111B 12/21/98
Volatile Organics						
Benzene	ND(0.0050)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
Chlorobenzene	ND(0.0050)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	0.012
Trichloroethene	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.010)
Vinyl Chloride	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
Total VOCs	0.0040 J	ND(3.7)	ND(3.7)	ND(3.7)	0.0020 J	0.019 J
Semivolatile Organics						
2-Chlorophenol	NA	NA	NA	NA	NA	NA
4-Chlorophenol	NA	NA	NA	NA	NA	NA
Natural Attenuation Parameters						
Alkalinity	NA	NA	NA	NA	NA	NA
Alkalinity to pH 4.5	NA	117	116	NA	NA	NA
Alkalinity to pH 8.3	NA	ND(1.00)	ND(1.00)	NA	NA	NA
Ammonia Nitrogen	NA	ND(0.00500)	ND(0.00500)	NA	NA	NA
Chloride	NA	3.4	3.8	NA	NA	NA
Dissolved Iron	NA	NA	NA	NA	NA	NA
Dissolved Organic Carbon	NA	1.40	1.90	NA	NA	NA
Ethane	NA	ND(0.0050)	ND(0.0050)	NA	NA	NA
Ethene	NA	ND(0.0050)	ND(0.0050)	NA	NA	NA
Methane	NA	ND(0.00500)	ND(0.00500)	NA	NA	NA
Nitrate Nitrogen	NA	NA	NA	NA	NA	NA
Nitrite Nitrogen	NA	NA	NA	NA	NA	NA
Total Nitrate/Nitrite Nitrogen	NA	NA	NA	NA	NA	NA
Sulfate (turbidimetric)	NA	254	241	NA	NA	NA

Table G-1
Groundwater Analytical Results - Natural Attenuation Parameters

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

Parameter / Location ID / Sample ID / Date Collected:	111B UBG111B 12/22/98	111B 111B 04/30/99	111B 111B 10/20/99	111B 111B 05/10/00	111B 111B 11/17/00	111B 111B 04/22/04
Volatile Organics						
Benzene	NA	ND(0.010)	ND(0.010)	ND(0.0050)	ND(0.0050)	ND(0.0050)
Chlorobenzene	NA	ND(0.010)	ND(0.010)	ND(0.0050)	ND(0.0050)	ND(0.0050)
Trichloroethene	NA	ND(0.010)	ND(0.010)	ND(0.0050)	ND(0.0050)	ND(0.0050)
Vinyl Chloride	NA	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.0020)
Total VOCs	NA	0.0030 J	0.0040 J	ND(0.20)	ND(0.20)	ND(0.20)
Semivolatile Organics						
2-Chlorophenol	NA	NA	NA	NA	NA	ND(0.010)
4-Chlorophenol	NA	NA	NA	NA	NA	NA
Natural Attenuation Parameters						
Alkalinity	NA	NA	NA	NA	NA	120
Alkalinity to pH 4.5	134	NA	NA	NA	NA	NA
Alkalinity to pH 8.3	ND(1.00)	NA	NA	NA	NA	NA
Ammonia Nitrogen	ND(0.200)	NA	NA	NA	NA	NA
Chloride	2.9	NA	NA	NA	NA	37
Dissolved Iron	ND(0.100)	NA	NA	NA	NA	ND(0.0500)
Dissolved Organic Carbon	1.40	NA	NA	NA	NA	2.50
Ethane	ND(0.0050)	NA	NA	NA	NA	ND(0.0040)
Ethene	ND(0.0050)	NA	NA	NA	NA	ND(0.0030)
Methane	ND(0.00500)	NA	NA	NA	NA	ND(0.00200)
Nitrate Nitrogen	NA	NA	NA	NA	NA	5.20
Nitrite Nitrogen	NA	NA	NA	NA	NA	ND(0.0500)
Total Nitrate/Nitrite Nitrogen	3.09	NA	NA	NA	NA	NA
Sulfate (turbidimetric)	230	NA	NA	NA	NA	310

Table G-1
Groundwater Analytical Results - Natural Attenuation Parameters

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

Parameter	Location ID: / Sample ID: / Date Collected:						
	Location ID:	111B	111-BR	111B-R	111B-R	111B-R	111B-R
	Sample ID:	111B	111-BR	111B-R	111B-R	111B-R	111B-R
	Date Collected:	10/22/04	11/03/05	04/21/05	04/25/06	05/08/07	05/14/08
Volatile Organics							
Benzene		ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)	0.00038 J	ND(0.0010)
Chlorobenzene		ND(0.0050)	ND(0.0050)	0.0030 J	ND(0.0050)	0.0020 J	ND(0.0010)
Trichloroethene		ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050) J	ND(0.0010)	ND(0.0010)
Vinyl Chloride		ND(0.0020)	ND(0.0020)	ND(0.0020)	ND(0.0020)	ND(0.0010)	ND(0.0010)
Total VOCs		ND(0.20)	ND(0.20)	0.0050 J	ND(0.20)	0.0024 J	ND(0.10)
Semivolatile Organics							
2-Chlorophenol		NA	ND(0.010)	ND(0.010)	ND(0.010)	NA	NA
4-Chlorophenol		NA	NA	NA	NA	NA	NA
Natural Attenuation Parameters							
Alkalinity		NA	NA	180	87.0	150	160
Alkalinity to pH 4.5		NA	NA	NA	NA	NA	NA
Alkalinity to pH 8.3		NA	NA	NA	NA	NA	NA
Ammonia Nitrogen		NA	NA	NA	NA	NA	NA
Chloride		NA	NA	13	8.8	11	4.3
Dissolved Iron		NA	NA	ND(0.0500)	ND(0.100)	ND(0.100)	0.0449 J
Dissolved Organic Carbon		NA	NA	1.90	1.20	1.10	1.31
Ethane		NA	NA	ND(0.0040)	ND(0.020)	ND(0.020)	ND(0.020)
Ethene		NA	NA	ND(0.0030)	ND(0.020)	ND(0.020)	ND(0.020)
Methane		NA	NA	ND(0.00200)	ND(0.00720)	ND(0.00720)	ND(0.00720)
Nitrate Nitrogen		NA	NA	5.90	6.30	5.90	4.29
Nitrite Nitrogen		NA	NA	0.0240 B	ND(0.500)	ND(0.0100)	ND(0.300)
Total Nitrate/Nitrite Nitrogen		NA	NA	NA	NA	NA	NA
Sulfate (turbidimetric)		NA	NA	250 J	170	190	169

Table G-1
Groundwater Analytical Results - Natural Attenuation Parameters

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

Parameter / Location ID: / Sample ID: / Date Collected:	114A PUEXG114A 02/21/91	114A UBG114A 12/11/96	114A UBG114A 05/02/97	114A UBG114A 10/08/97	114A UBG114A 04/20/98	114A UBG114A 12/15/98
Volatile Organics						
Benzene	ND(0.0050)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
Chlorobenzene	ND(0.0050)	0.0030 J	0.0020 J	0.0010 J	0.0010 J	ND(0.010)
Trichloroethene	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.010)
Vinyl Chloride	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
Total VOCs	0.0020 J	0.0030 J	0.0070 J	0.0010 J	0.0040 J	0.0050 J
Semivolatile Organics						
2-Chlorophenol	NA	NA	NA	NA	NA	NA
4-Chlorophenol	NA	NA	NA	NA	NA	NA
Natural Attenuation Parameters						
Alkalinity	NA	NA	NA	NA	NA	NA
Alkalinity to pH 4.5	NA	NA	132	NA	NA	127
Alkalinity to pH 8.3	NA	NA	ND(1.00)	NA	NA	ND(1.00)
Ammonia Nitrogen	NA	NA	0.110	NA	NA	ND(0.200)
Chloride	NA	NA	ND(1.0)	NA	NA	2.5
Dissolved Iron	NA	NA	NA	NA	NA	1.33
Dissolved Organic Carbon	NA	NA	1.50	NA	NA	ND(1.00)
Ethane	NA	NA	ND(0.0050)	NA	NA	ND(0.0050)
Ethene	NA	NA	ND(0.0050)	NA	NA	ND(0.0050)
Methane	NA	NA	0.340	NA	NA	0.420
Nitrate Nitrogen	NA	NA	NA	NA	NA	NA
Nitrite Nitrogen	NA	NA	NA	NA	NA	NA
Total Nitrate/Nitrite Nitrogen	NA	NA	NA	NA	NA	ND(0.100)
Sulfate (turbidimetric)	NA	NA	4.20	NA	NA	ND(2.00)

Table G-1
Groundwater Analytical Results - Natural Attenuation Parameters

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

Location ID: / Sample ID: / Parameter / Date Collected:	114A 114A 04/27/99	114A 114A 10/19/99	114A 114A 05/09/00	114A 114A 11/20/00	114A 114A 04/30/04	114A 114A 04/21/05
Volatile Organics						
Benzene	ND(0.010)	ND(0.010)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(1.0)
Chlorobenzene	ND(0.010)	0.0050 J	ND(0.0050)	ND(0.0050)	ND(0.0050)	12
Trichloroethene	ND(0.010)	ND(0.010)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(1.0)
Vinyl Chloride	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.0020)	ND(1.0)
Total VOCs	0.0020 J	0.0050 J	ND(0.20)	ND(0.20)	ND(0.20)	12
Semivolatile Organics						
2-Chlorophenol	NA	NA	NA	NA	NA	NA
4-Chlorophenol	NA	NA	NA	NA	NA	NA
Natural Attenuation Parameters						
Alkalinity	NA	NA	NA	NA	130	130
Alkalinity to pH 4.5	NA	NA	NA	NA	NA	NA
Alkalinity to pH 8.3	NA	NA	NA	NA	NA	NA
Ammonia Nitrogen	NA	NA	NA	NA	NA	NA
Chloride	NA	NA	NA	NA	1.4	1.5
Dissolved Iron	NA	NA	NA	NA	ND(0.0500)	ND(0.0500)
Dissolved Organic Carbon	NA	NA	NA	NA	2.20	0.510 B
Ethane	NA	NA	NA	NA	ND(0.0040)	ND(0.0040)
Ethene	NA	NA	NA	NA	ND(0.0030)	ND(0.0030)
Methane	NA	NA	NA	NA	0.0440	0.100
Nitrate Nitrogen	NA	NA	NA	NA	0.0360 B	0.0260 B
Nitrite Nitrogen	NA	NA	NA	NA	ND(0.0500)	0.00470 B
Total Nitrate/Nitrite Nitrogen	NA	NA	NA	NA	NA	NA
Sulfate (turbidimetric)	NA	NA	NA	NA	4.80	1.20 J

Table G-1
Groundwater Analytical Results - Natural Attenuation Parameters

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

Parameter / Location ID: / Sample ID: / Date Collected:	114A 114A 12/08/05	114A 114A 05/09/06	114A 114A 05/10/07	114A 114A 05/13/08	114B PUEXG114B 02/21/91	114B UBG114B 01/29/97
Volatile Organics						
Benzene	0.68 J	ND(0.0050)	ND(0.0010)	ND(0.0010)	0.0020 J	ND(0.010)
Chlorobenzene	ND(1.0)	ND(0.0050)	ND(0.0010)	0.00018 J	0.13	ND(0.010)
Trichloroethene	ND(1.0)	ND(0.0050)	ND(0.0010)	ND(0.0010)	ND(0.0050)	ND(0.0050)
Vinyl Chloride	ND(1.0)	ND(0.0020)	ND(0.0010)	ND(0.0010)	ND(0.010)	ND(0.010)
Total VOCs	97	ND(0.20)	0.00070 J	0.16 J	0.13 J	ND(3.7)
Semivolatile Organics						
2-Chlorophenol	NA	NA	NA	NA	NA	NA
4-Chlorophenol	NA	NA	NA	NA	NA	NA
Natural Attenuation Parameters						
Alkalinity	NA	120	130	170	NA	NA
Alkalinity to pH 4.5	NA	NA	NA	NA	NA	251
Alkalinity to pH 8.3	NA	NA	NA	NA	NA	ND(1.00)
Ammonia Nitrogen	NA	NA	NA	NA	NA	ND(0.00500)
Chloride	NA	1.6	3.8	1.4	NA	5.2
Dissolved Iron	NA	ND(0.100)	0.0434 J	ND(0.100)	NA	NA
Dissolved Organic Carbon	NA	0.400 B	1.20	4.36	NA	6.80
Ethane	NA	ND(0.020)	ND(0.020)	ND(2.0)	NA	ND(0.0050)
Ethene	NA	ND(0.020)	ND(0.020)	ND(2.0)	NA	ND(0.0050)
Methane	NA	0.330	0.285	10.9	NA	ND(0.00500)
Nitrate Nitrogen	NA	ND(0.100)	ND(0.0500)	ND(0.300)	NA	NA
Nitrite Nitrogen	NA	ND(0.500)	ND(0.0100)	ND(0.300)	NA	NA
Total Nitrate/Nitrite Nitrogen	NA	NA	NA	NA	NA	NA
Sulfate (turbidimetric)	NA	7.70	3.40	1.88	NA	14.4

Table G-1
Groundwater Analytical Results - Natural Attenuation Parameters

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

Parameter / Location ID / Sample ID / Date Collected:	114B UBG114B 05/01/97	114B UBG114B 10/08/97	114B UBG114B 04/20/98	114B UBG114B 12/16/98	114B 114B 04/27/99	114B 114B 10/19/99
Volatile Organics						
Benzene	ND(0.033)	0.011 J	ND(0.010)	0.0010 J	0.0050 J	0.0050 J
Chlorobenzene	0.33	0.40	0.079	0.15	0.20	0.40 D
Trichloroethene	ND(0.017)	0.017	ND(0.0050)	ND(0.010)	ND(0.010)	ND(0.010)
Vinyl Chloride	ND(0.033)	0.0060 J	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
Total VOCs	0.33	0.45 J	0.081 J	0.15 J	0.21	0.41 J
Semivolatile Organics						
2-Chlorophenol	NA	NA	NA	NA	NA	NA
4-Chlorophenol	NA	NA	NA	NA	NA	NA
Natural Attenuation Parameters						
Alkalinity	NA	NA	NA	NA	NA	NA
Alkalinity to pH 4.5	264	NA	NA	198	NA	NA
Alkalinity to pH 8.3	ND(1.00)	NA	NA	ND(1.00)	NA	NA
Ammonia Nitrogen	0.0700	NA	NA	ND(0.200)	NA	NA
Chloride	78	NA	NA	54	NA	NA
Dissolved Iron	NA	NA	NA	ND(0.100)	NA	NA
Dissolved Organic Carbon	6.40	NA	NA	5.20	NA	NA
Ethane	ND(0.0050)	NA	NA	ND(0.0050)	NA	NA
Ethene	ND(0.0050)	NA	NA	ND(0.0050)	NA	NA
Methane	0.310	NA	NA	0.170	NA	NA
Nitrate Nitrogen	NA	NA	NA	NA	NA	NA
Nitrite Nitrogen	NA	NA	NA	NA	NA	NA
Total Nitrate/Nitrite Nitrogen	NA	NA	NA	ND(0.100)	NA	NA
Sulfate (turbidimetric)	16.4	NA	NA	7.00	NA	NA

Table G-1
Groundwater Analytical Results - Natural Attenuation Parameters

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

Location ID: / Sample ID: / Parameter / Date Collected:	114B 114B 05/09/00	114B 114B 11/20/00	114B 114B 5/6-05/12/2004	114B-R 114B-R 10/14/04	114B-R 114B-R 04/21/05	114B-R 114B-R 12/08/05
Volatile Organics						
Benzene	ND(0.0050)	ND(0.010)	ND(0.0050)	ND(0.050)	ND(0.050)	ND(0.050)
Chlorobenzene	0.40	0.21	0.0083	1.0	1.4	3.3
Trichloroethene	ND(0.0050)	ND(0.010)	ND(0.0050)	ND(0.050)	ND(0.050)	ND(0.050)
Vinyl Chloride	ND(0.010)	ND(0.010)	ND(0.0020)	ND(0.050)	ND(0.050)	ND(0.050)
Total VOCs	0.40	0.21	0.0083	1.0	1.4	3.3
Semivolatile Organics						
2-Chlorophenol	NA	NA	ND(0.010)	ND(0.010)	ND(0.010)	R
4-Chlorophenol	NA	NA	NA	NA	NA	NA
Natural Attenuation Parameters						
Alkalinity	NA	NA	230	NA	250	NA
Alkalinity to pH 4.5	NA	NA	NA	NA	NA	NA
Alkalinity to pH 8.3	NA	NA	NA	NA	NA	NA
Ammonia Nitrogen	NA	NA	NA	NA	NA	NA
Chloride	NA	NA	67	NA	87	NA
Dissolved Iron	NA	NA	ND(0.0500)	NA	ND(0.0500)	NA
Dissolved Organic Carbon	NA	NA	4.00	NA	2.50	NA
Ethane	NA	NA	ND(0.0040)	NA	ND(0.0040)	NA
Ethene	NA	NA	0.0035	NA	ND(0.0030)	NA
Methane	NA	NA	0.140	NA	0.170	NA
Nitrate Nitrogen	NA	NA	0.00900 B	NA	0.0810	NA
Nitrite Nitrogen	NA	NA	ND(0.0500)	NA	0.00470 B	NA
Total Nitrate/Nitrite Nitrogen	NA	NA	NA	NA	NA	NA
Sulfate (turbidimetric)	NA	NA	10.0	NA	5.50 J	NA

Table G-1
Groundwater Analytical Results - Natural Attenuation Parameters

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

Location ID: / Sample ID: / Parameter / Date Collected:	114B-R 114B-R 04/20/06	114B-R 114B-R 05/10/07	114B-R 114B-R 05/13/08	115A UBG115A 12/12/96	115A UBG115A 05/05/97	115A UBG115A 10/08/97
Volatile Organics						
Benzene	0.021 J	0.10	0.020 J	ND(0.010)	ND(0.010)	ND(0.010)
Chlorobenzene	0.29	2.0	1.4	ND(0.010)	ND(0.010)	ND(0.010)
Trichloroethene	ND(0.050)	ND(0.080)	ND(0.040)	ND(0.0050)	ND(0.0050)	ND(0.0050)
Vinyl Chloride	0.013 J	0.11	ND(0.040)	ND(0.010)	ND(0.010)	ND(0.010)
Total VOCs	0.32 J	2.2	1.4	ND(3.7)	ND(3.7)	ND(3.7)
Semivolatile Organics						
2-Chlorophenol	NA	NA	NA	NA	NA	NA
4-Chlorophenol	NA	NA	NA	NA	NA	NA
Natural Attenuation Parameters						
Alkalinity	270	210	230	NA	NA	NA
Alkalinity to pH 4.5	NA	NA	NA	NA	148	NA
Alkalinity to pH 8.3	NA	NA	NA	NA	ND(1.00)	NA
Ammonia Nitrogen	NA	NA	NA	NA	0.0600	NA
Chloride	110	170	160	NA	ND(1.0)	NA
Dissolved Iron	ND(0.100)	ND(0.100) J	0.0461 B	NA	NA	NA
Dissolved Organic Carbon	2.20	2.50	4.61	NA	1.60	NA
Ethane	ND(0.020)	ND(0.020)	ND(0.10)	NA	ND(0.0050)	NA
Ethene	ND(0.020)	ND(0.020)	ND(0.10)	NA	ND(0.0050)	NA
Methane	0.140	0.205	1.32	NA	0.0130	NA
Nitrate Nitrogen	ND(0.100)	ND(0.0500)	ND(0.300)	NA	NA	NA
Nitrite Nitrogen	ND(0.500)	ND(0.0500)	ND(3.00)	NA	NA	NA
Total Nitrate/Nitrite Nitrogen	NA	NA	NA	NA	NA	NA
Sulfate (turbidimetric)	9.70	12.0	9.43	NA	5.40	NA

Table G-1
Groundwater Analytical Results - Natural Attenuation Parameters

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

Parameter / Location ID: / Sample ID: / Date Collected:	115A UBG115A 04/21/98	115A UBG115A 12/23/98	115A 115A 04/30/99	115A 115A 10/22/99	115A 115A 05/08/00	115A 115A 11/17/00
Volatile Organics						
Benzene	ND(0.050)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.0050)	0.10
Chlorobenzene	0.012 J	ND(0.010)	ND(0.010)	0.0040 J	ND(0.0050)	ND(0.0050)
Trichloroethene	ND(0.025)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.0050)	0.014
Vinyl Chloride	ND(0.050)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
Total VOCs	0.012 J	0.0020 J	0.0020 J	0.0080 J	ND(0.20)	0.11
Semivolatile Organics						
2-Chlorophenol	NA	NA	NA	NA	NA	NA
4-Chlorophenol	NA	NA	NA	NA	NA	NA
Natural Attenuation Parameters						
Alkalinity	NA	NA	NA	NA	NA	NA
Alkalinity to pH 4.5	NA	157	NA	NA	NA	NA
Alkalinity to pH 8.3	NA	ND(1.00)	NA	NA	NA	NA
Ammonia Nitrogen	NA	ND(0.200)	NA	NA	NA	NA
Chloride	NA	ND(1.0)	NA	NA	NA	NA
Dissolved Iron	NA	0.250	NA	NA	NA	NA
Dissolved Organic Carbon	NA	ND(1.00)	NA	NA	NA	NA
Ethane	NA	ND(0.0050)	NA	NA	NA	NA
Ethene	NA	ND(0.0050)	NA	NA	NA	NA
Methane	NA	ND(0.00500)	NA	NA	NA	NA
Nitrate Nitrogen	NA	NA	NA	NA	NA	NA
Nitrite Nitrogen	NA	NA	NA	NA	NA	NA
Total Nitrate/Nitrite Nitrogen	NA	ND(0.100)	NA	NA	NA	NA
Sulfate (turbidimetric)	NA	2.30	NA	NA	NA	NA

Table G-1
Groundwater Analytical Results - Natural Attenuation Parameters

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

Location ID: / Sample ID: / Parameter / Date Collected:	115A 115A 05/10/06	115A 115A 05/14/07	115A 115A 05/15/08	115B UBG115B 12/06/96	115B UBG115B 05/05/97	115B UBG115B 10/08/97
Volatile Organics						
Benzene	ND(0.0050)	ND(0.0010)	ND(0.0010)	ND(0.010)	ND(0.010)	ND(0.010) [ND(0.010)]
Chlorobenzene	ND(0.0050)	ND(0.0010)	ND(0.0010)	ND(0.010)	ND(0.010)	ND(0.010) [ND(0.010)]
Trichloroethene	ND(0.0050)	ND(0.0010)	ND(0.0010)	ND(0.0050)	ND(0.0050)	ND(0.0050) [ND(0.0050)]
Vinyl Chloride	ND(0.0020)	ND(0.0010)	ND(0.0010)	ND(0.010)	ND(0.010)	ND(0.010) [ND(0.010)]
Total VOCs	ND(0.20)	0.00040 J	ND(0.10)	ND(3.7)	ND(3.7)	ND(3.7) [ND(3.7)]
Semivolatile Organics						
2-Chlorophenol	NA	NA	NA	NA	NA	NA
4-Chlorophenol	NA	NA	NA	NA	NA	NA
Natural Attenuation Parameters						
Alkalinity	150	160	150	NA	NA	NA
Alkalinity to pH 4.5	NA	NA	NA	284	199	NA
Alkalinity to pH 8.3	NA	NA	NA	ND(1.00)	ND(1.00)	NA
Ammonia Nitrogen	NA	NA	NA	ND(0.00500)	2.20	NA
Chloride	2.0	1.2	ND(0.3)	3.1	16	NA
Dissolved Iron	ND(0.100)	ND(0.100) J	ND(0.100)	NA	NA	NA
Dissolved Organic Carbon	0.610 B	ND(1.00)	ND(1.0)	2.00	10.1	NA
Ethane	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.0050)	0.0070	NA
Ethene	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.0050)	ND(0.0050)	NA
Methane	ND(0.00720)	ND(0.00720)	ND(0.00720)	0.00800	0.0110	NA
Nitrate Nitrogen	ND(0.100)	ND(0.0500)	ND(0.300)	NA	NA	NA
Nitrite Nitrogen	ND(0.500)	ND(0.0100)	ND(0.300)	NA	NA	NA
Total Nitrate/Nitrite Nitrogen	NA	NA	NA	NA	NA	NA
Sulfate (turbidimetric)	ND(5.00)	4.20	4.03	16.8	0.190	NA

Table G-1
Groundwater Analytical Results - Natural Attenuation Parameters

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

Parameter / Location ID: / Sample ID: / Date Collected:	115B UBG115B 04/21/98	115B UBG115B 12/23/98	115B 115B 04/30/99	115B 115B 10/22/99	115B 115B 05/08/00	115B 115B 11/20/00
Volatile Organics						
Benzene	ND(0.010) [ND(0.010)]	ND(0.010)	ND(0.010) [ND(0.010)]	ND(0.010)	ND(0.0050)	ND(0.0050)
Chlorobenzene	ND(0.010) [ND(0.010)]	ND(0.010)	ND(0.010) [ND(0.010)]	0.0060 J	ND(0.0050)	ND(0.0050)
Trichloroethene	ND(0.0050) [ND(0.0050)]	ND(0.010)	ND(0.010) [ND(0.010)]	ND(0.010)	ND(0.0050)	ND(0.0050)
Vinyl Chloride	ND(0.010) [ND(0.010)]	ND(0.010)	ND(0.010) [ND(0.010)]	ND(0.010)	ND(0.010)	ND(0.010)
Total VOCs	0.0050 J [0.0050 J]	0.0030 J	0.0030 J [0.0020 J]	0.010 J	ND(0.20)	ND(0.20)
Semivolatile Organics						
2-Chlorophenol	NA	NA	NA	NA	NA	NA
4-Chlorophenol	NA	NA	NA	NA	NA	NA
Natural Attenuation Parameters						
Alkalinity	NA	NA	NA	NA	NA	NA
Alkalinity to pH 4.5	NA	203	NA	NA	NA	NA
Alkalinity to pH 8.3	NA	ND(1.00)	NA	NA	NA	NA
Ammonia Nitrogen	NA	ND(0.200)	NA	NA	NA	NA
Chloride	NA	8.4	NA	NA	NA	NA
Dissolved Iron	NA	ND(0.100)	NA	NA	NA	NA
Dissolved Organic Carbon	NA	1.10	NA	NA	NA	NA
Ethane	NA	ND(0.0050)	NA	NA	NA	NA
Ethene	NA	ND(0.0050)	NA	NA	NA	NA
Methane	NA	0.0130	NA	NA	NA	NA
Nitrate Nitrogen	NA	NA	NA	NA	NA	NA
Nitrite Nitrogen	NA	NA	NA	NA	NA	NA
Total Nitrate/Nitrite Nitrogen	NA	0.170	NA	NA	NA	NA
Sulfate (turbidimetric)	NA	11.0	NA	NA	NA	NA

Table G-1
Groundwater Analytical Results - Natural Attenuation Parameters

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

Parameter	Location ID: / Sample ID: / Date Collected:	115B / 115B / 05/10/06	115B / 115B / 05/14/07	115B / 115B / 05/15/08
Volatile Organics				
Benzene		ND(0.0050)	ND(0.0010)	ND(0.0010)
Chlorobenzene		ND(0.0050)	ND(0.0010)	ND(0.0010)
Trichloroethene		ND(0.0050)	ND(0.0010)	ND(0.0010)
Vinyl Chloride		ND(0.0020)	ND(0.0010)	ND(0.0010)
Total VOCs		ND(0.20)	0.00055 J	ND(0.10)
Semivolatile Organics				
2-Chlorophenol		NA	NA	NA
4-Chlorophenol		NA	NA	NA
Natural Attenuation Parameters				
Alkalinity		240	250	220
Alkalinity to pH 4.5		NA	NA	NA
Alkalinity to pH 8.3		NA	NA	NA
Ammonia Nitrogen		NA	NA	NA
Chloride		8.6	13	18
Dissolved Iron		ND(0.100)	ND(0.100) J	ND(0.100)
Dissolved Organic Carbon		1.40	ND(1.00)	ND(1.0)
Ethane		ND(0.020)	ND(0.020)	ND(0.020)
Ethene		ND(0.020)	ND(0.020)	ND(0.020)
Methane		ND(0.00720)	ND(0.00720)	ND(0.00720)
Nitrate Nitrogen		0.360	0.110	0.168 B
Nitrite Nitrogen		ND(0.500)	ND(0.0100)	ND(0.300)
Total Nitrate/Nitrite Nitrogen		NA	NA	NA
Sulfate (turbidimetric)		13.0	14.0	14.8

Table G-1
Groundwater Analytical Results - Natural Attenuation Parameters

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

Notes:

1. Samples were collected on behalf of General Electric Company and analyzed for Appendix IX+3 constituents and Natural Attenuation
2. Parameters.
3. Select Volatile Organics, 2-Chlorophenol, 4-Chlorophenol and Natural Attenuation Parameter results are presented.
4. NA - Not Analyzed.
5. ND - Analyte was not detected. The number in parentheses is the associated detection limit.
   Field duplicate sample results are presented in brackets.

Data Qualifiers:

Organics (volatiles, semivolatiles)

- B - Analyte was also detected in the associated method blank.
- D - Compound quantitated using a secondary dilution.
- E - Analyte exceeded calibration range.
- J - Estimated Value.
- R - Rejected.

Natural Attenuation Parameters

- B - Indicates an estimated value between the instrument detection limit (IDL) and practical quantitation limit (PQL).
- E - Serial dilution results not within 10%. Applicable only if analyte concentration is at least 50X the IDL in original sample.
- J - Estimated Value.
- N - Indicates sample matrix spike analysis was outside control limits.
- * - Indicates laboratory duplicate analysis was outside control limits.