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Transmitted Via Overnight Courier

March 20, 2008

Mr. Richard Fisher
U.S. Environmental Protection Agency
EPA New England
One Congress Street, Suite 1100
Boston, Massachusetts 02114-2023

Re: **GE-Pittsfield/Housatonic River Site**
Groundwater Management Area 5 (GECD350)
Long-Term Monitoring Program
Monitoring Event Evaluation Report for Fall 2007

Dear Mr. Fisher:

Enclosed is the *Groundwater Management Area 5 Long-Term Monitoring Program Monitoring Event Evaluation Report for Fall 2007* (GMA 5 Fall 2007 Monitoring Event Evaluation Report). This report and proposal was prepared in accordance with 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 Section 7.0 of Attachment H to the SOW (Groundwater/NAPL Monitoring, Assessment, and Response Programs).

The GMA 5 Fall 2007 Monitoring Event Evaluation Report is the first report to be submitted as part of the long-term monitoring program for this GMA. It summarizes activities performed at GMA 5 (also known as the Former Oxbow Areas A and C GMA) during fall 2007, and presents the results of the latest round of sampling and analysis of groundwater performed as part of the groundwater quality monitoring program.

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

Sincerely,

Richard W. Gates

Richard W. Gates
Remediation Project Manager

Enclosure
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ARCADIS
Infrastructure, environment, facilities

General Electric Company
Pittsfield, Massachusetts

Groundwater Management Area 5 Long-Term Monitoring Program Monitoring Event Evaluation Report for Fall 2007

March 2008

ARCADIS

Groundwater Management Area 5 Long-Term Monitoring Program
Monitoring Event Evaluation Report for Fall 2007

(GMA 5 Fall 2007 Monitoring Event Evaluation Report)

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1. Introduction

1.1 General

On October 27, 2000, a Consent Decree (CD) executed in 1999 by the General Electric Company (GE), the United States Environmental Protection Agency (EPA), the Massachusetts Department of Environmental Protection (MDEP) and several other government agencies was entered by the United States District Court for the District of Massachusetts. The CD governs (among other things) the performance of response actions to address polychlorinated biphenyls (PCBs) and other hazardous constituents in soil, sediment, and groundwater in several Removal Action Areas (RAAs) located in or near Pittsfield, Massachusetts, that collectively comprise the GE Pittsfield/Housatonic River Site (the Site). For groundwater and non-aqueous-phase liquid (NAPL), the RAAs at and near the GE Pittsfield facility have been divided into five separate Groundwater Management Areas (GMAs), which are illustrated on Figure 1. These GMAs are described, together with the Performance Standards established for the response actions at and related to them, in Section 2.7 of the *Statement of Work for Removal Actions Outside the River* (SOW) (Appendix E to the CD), with further details presented in Attachment H to the SOW (Groundwater/NAPL Monitoring, Assessment, and Response Programs). This report relates to the Former Oxbows A and C Groundwater Management Area, also known as and referred to herein as GMA 5.

The Consent Decree and Attachment H to the SOW specify a series of steps to be taken at each of the GMAs to investigate and, as appropriate, respond to groundwater conditions. These documents provide initially for the design and implementation of a baseline monitoring program at each of the GMAs. Pursuant to Section 1.1.1 of Attachment H, the objective of the baseline monitoring program was to establish existing conditions in order to assess whether the existing response actions are protecting surface water, groundwater and sediment quality, and human health in occupied buildings. Additionally, the baseline monitoring program provides the basis for evaluating the effectiveness of future response actions, including the identification of any additional response actions that may be necessary to attain the Performance Standards. The baseline data are to be used in the future for comparison with data collected under the long-term monitoring program.

The baseline monitoring program consists of semi-annual groundwater quality sampling and quarterly elevation monitoring and generally lasts for a minimum two-year period. Section 6.1.3 of Attachment H to the SOW allows for the modification and/or continuation of the baseline monitoring program if the two-year baseline period ends prior to the completion of soil-related response actions at all the RAAs in a GMA. As the removal action for Former Oxbow Areas A and C comprising GMA 5 had not yet been completed at the end of the

two-year period, GE proposed, and EPA approved, an interim groundwater monitoring program. In April 2007, following the completion of the remediation work at Former Oxbow Areas A and C, GE submitted a *Baseline Assessment Final Report and Long-Term Monitoring Program Proposal for GMA 5* (GMA 5 Long-Term Monitoring Proposal). That report proposed a long-term groundwater monitoring program for GMA 5. Following conditional approval of that report by EPA in a letter dated August 21, 2007, GE prepared an *Addendum to the Baseline Assessment Final Report and Long-Term Monitoring Program Proposal for Groundwater Management Area 5* (GMA 5 Long-Term Monitoring Proposal Addendum) to address the requirements contained in EPA's conditional approval letter. The GMA 5 Long-Term Monitoring Proposal Addendum was submitted to EPA on September 19, 2007 and conditionally approved by EPA in a letter dated October 24, 2007. This report constitutes the initial monitoring event evaluation report submitted pursuant to the long-term groundwater quality monitoring program at GMA 5.

1.2 Background Information

1.2.1 Description of GMA 5

GMA 5 encompasses the Former Oxbow Areas A and C RAA, comprising approximately 7 acres adjacent to the Housatonic River and located approximately 250 feet downstream of the Lyman Street Bridge (Figures 1 and 2). The GMA contains a combination of non-GE-owned commercial and recreational areas. As shown on Figures 1 and 2, the Housatonic River flows along the north boundary of this GMA. Certain portions of this GMA originally consisted of land associated with oxbows or low-lying areas of the Housatonic River. Re-channelization and straightening of the Housatonic River in the early 1940s by the City of Pittsfield and the United States Army Corps of Engineers (USACOE) separated several of these oxbows and low-lying areas from the active course of the river. These oxbows and low-lying areas were subsequently filled with various materials from a variety of sources, resulting in the current surface elevations and topography. At their closest proximity, Former Oxbow Area A is located approximately 225 feet southwest of Former Oxbow Area C (Figure 2).

Former Oxbow Area A encompasses approximately 5 acres. This area consists of a large open field on the south side of the river, north of Elm Street and Newell Street. The majority of this generally flat area is undeveloped and covered with grass and low brush. Commercial businesses occupy a portion of an area along Elm Street to the south of the former oxbow. Specifically, a former gas station, laundromat and car wash are located at the southwestern portion of this former oxbow area.

Former Oxbow Area C encompasses an undeveloped area of approximately 2 acres on the south side of the Housatonic River, near the northwest end of Day Street. This generally flat area is undeveloped and covered with grass and low brush. The southeastern side of the area is bordered by residential properties along Day Street and Ashley Street.

Removal Actions performed by GE at the Former Oxbow Areas A and C RAA were implemented between July and November 2006, and generally included site preparation, soil removal/replacement, and property restoration. Most excavations were to a depth of one foot, with limited spot removals to approximately 2 feet. The final limits of soil removal were completed to the general limits shown on the EPA-approved technical drawings included in the *Final Removal Design/Removal Action Work Plan for Former Oxbow Areas A and C* (July 2005), as modified in the *Second Addendum to Final Removal Design/Removal Action Work Plan for Former Oxbow Areas A and C* (April 2006) and *Revision to Second Addendum to Final Removal Design/Removal Action Work Plan* (letter to EPA dated June 13, 2006). In addition to these soil removals, three soil piles located on the recreational portion of Parcel I8-23-6 were removed during the course of the remediation. Overall, approximately 6,290 cubic yards of soil were removed from Former Oxbow Areas A and C and placed within the appropriate On-Plant Consolidation Area or off-site disposal facility.

A separate disposal site, as designated under the Massachusetts Contingency Plan (MCP), is located on adjacent property near the southwestern corner of GMA 5. This disposal site is the Former Elm Street Mobil Station site (MDEP Site No. 1-0539, Tier 1B Permit No. 78741), and this site is currently being addressed by Exxon Mobil Corporation (ExxonMobil) pursuant to the MCP under an Administrative Consent Order (ACO) with the MDEP. As discussed below in Section 3.5, available documentation indicates that light NAPL (LNAPL) and soluble-phase contaminants related to releases from the Mobil Station may have migrated to the southwestern portion of GMA 5.

1.2.2 Overview of Hydrogeologic Conditions at the Site

In general, two unconsolidated hydrogeologic units are present within GMA 5. These units are briefly described below:

Surficial Deposits - This unit generally consists of heterogeneous fill materials and alluvial sands and gravels. These sands and sandy gravels are well-sorted and were deposited as glacial outwash and/or in association with recent depositional processes within the Housatonic River. Isolated peat deposits are also present, typically at depths corresponding to the bottom elevations of the river and the former oxbows. At certain locations within GMA 5, non-native fill materials are present above the alluvial deposits. These fill materials typically consist of sand, gravel, cinders, brick, and wood.

The alluvial unit extends from ground surface to depths of at least 25 feet. Fill materials, where present, have been observed to depths of 7 to 17 feet. From a hydrogeologic perspective, the fill and the sand/gravel deposits act as a single unit. All of the existing monitoring wells within GMA 5 are screened within this unit, as it is the upper and primary water-bearing unit within the GMA. Groundwater is encountered under unconfined conditions within this unit at depths between 8 and 15 feet below ground surface.

Glacial Till - Based on boring results at nearby locations within the Lyman Street Area and Newell Street Area II (within GMA 1), glacial till underlies the alluvial deposits and typically consists of dense silt containing varying amounts of clay, sand, and gravel. Discontinuous sandy lenses also have been identified in the till within the central portion of the Lyman Street Area RAA to the north of GMA 5. Till is generally encountered at depths beginning at approximately 20 to 25 feet beneath the Lyman Street Area to the north and at approximately 40 feet at Newell Street Area II to the east. No wells or borings have been installed to till beneath GMA 5.

The unconsolidated units at GMA 5 overlie bedrock. Based on information obtained from nearby areas, bedrock occurs at depths up to approximately 50 to 60 feet near the Housatonic River. The bedrock consists of white coarse-grained marble associated with the Stockbridge Formation.

Groundwater at GMA 5 generally flows toward the Housatonic River and is primarily influenced by the area's location (adjacent to the river). Figure 3 illustrates typical water table conditions, using groundwater data obtained during the fall 2007 groundwater monitoring event. The average depth to groundwater ranges from approximately 7 feet (in the eastern portion of the GMA) to over 18 feet (in the western portion of the GMA). This variation in depth to groundwater is attributed to an increase in ground surface elevations across the western portion of the GMA, as little change in groundwater elevations are observed at monitoring wells located at similar distances from the river. As such, it appears that the localized changes in surface topography have little influence on groundwater flow characteristics.

Hydraulic conductivity data (as previously presented on Table 3 and Appendix C of the Groundwater Quality Monitoring Report for Spring 2002) indicate a wide range in conductivities, varying from 1.99 feet/day (at GMA5-7, located along the Housatonic River in the northwestern portion of the GMA) to 260.13 feet day (at GMA5-6, located along the Housatonic River in the northeastern portion of the GMA). The geometric mean of the calculated hydraulic conductivity values for GMA 5 is 17.76 feet/day. Calculated groundwater velocities using the above-referenced hydraulic conductivities, as well as representative horizontal gradients and porosities, range from a minimum of 0.05 feet per day to a maximum of 35.12 feet day, with a geometric mean of 1.18 feet per day.

A drainage ditch extends northeast from Former Oxbow Area A into Former Oxbow Area C. The ditch then turns toward the northwest and discharges into the Housatonic River, bisecting Former Oxbow Area C. The presence of this drainage ditch, which serves as a City of Pittsfield stormwater discharge point, may locally influence groundwater flow in its immediate vicinity, but the overall flow direction is still toward the Housatonic River.

Monitoring for the presence of NAPL is performed as part of the routine groundwater elevation monitoring activities at GMA 5. NAPL has not been observed within any of the GE monitoring wells monitored to date at GMA 5 as part of the baseline program.

1.2.3 Overview of the Nature and Extent of Substances in Groundwater at the Site

Based on current information, the principal constituent sources that could potentially affect groundwater quality within GMA 5 appear to include the former oxbows and existing or historical commercial businesses located within or upgradient of this GMA. These potential sources are described below.

Former Oxbows - As a result of the straightening of the Housatonic River channel in the late 1930s and early 1940s, Former Oxbows A and C were isolated from the newly formed channel of the river. These oxbows were subsequently filled with materials originating from the GE facility as well as other sources. There are no available records that provide information regarding the specific type or origin of the fill materials, or parties involved in the filling activities. The former oxbow areas are labeled as “disposal areas” on re-channelization drawings developed by the City of Pittsfield in 1940. These areas were publicly accessible and it is likely that a variety of industries and/or individuals contributed fill material. A review of historical photographs indicates that the former river channel in Oxbow Area A and other portions of this area were filled prior to 1969. Filling of this area allegedly continued until into the 1980s. Review of these photographs also indicates that large portions of Former Oxbow Area C were filled prior to 1956, while other portions were not filled until the 1970s.

Other Sources - In addition to fill materials that have been placed within the former oxbows, it is possible that there are other potential contributing sources of groundwater constituents to GMA 5. Commercial businesses present within or upgradient of GMA 5 include an existing laundromat and car wash, as well as a former gasoline station. These operations are located adjacent to Former Oxbow Area A, in the southwest corner of the GMA.

Very few constituents were consistently detected during the baseline period at GMA 5. The observed detections were sporadic and spread throughout most of the GMA 5 wells, resulting in an apparent scattered distribution of occasionally-detected constituents. Low levels of VOCs, PCBs and inorganics were detected in several wells across the GMA. In

general, however, higher constituent concentrations and more frequent detections were observed in or near Oxbow Area A in the western portion of the GMA. In particular, chlorinated VOCs and PAHs are primarily, but not exclusively, found at the monitoring wells installed in or around the western oxbow.

1.2.4 Overview of Groundwater Investigation Activities at GMA 5

In December 2000, GE submitted a *Baseline Monitoring Program Proposal for Former Oxbows A and C Groundwater Management Area* (GMA 5 Baseline Monitoring Proposal). The GMA 5 Baseline Monitoring Proposal summarized the hydrogeologic information available at that time for GMA 5 and proposed groundwater monitoring activities for the baseline monitoring period at this GMA. EPA provided conditional approval of the GMA 5 Baseline Monitoring Proposal by letter of September 25, 2001. Thereafter, certain modifications were made to the GMA 5 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.

The baseline monitoring program, which was initiated in spring 2002, consisted of four semi-annual groundwater quality sampling events (with intervening quarterly groundwater elevation monitoring) followed by preparation and submittal of semi-annual reports summarizing the groundwater monitoring results, comparing the groundwater results with applicable Performance Standards, and, as appropriate, proposing modifications to the monitoring program. The fourth baseline monitoring report for GMA 5 entitled *Groundwater Management Area 5 Baseline Groundwater Quality Interim Report for Fall 2003* (Fall 2003 GMA 5 Groundwater Quality Report), was submitted to EPA on January 30, 2004.

As noted above, Section 6.1.3 of Attachment H to the SOW provides that if the two-year baseline monitoring period ends prior to the completion of soil-related response actions at all the RAAs in a GMA, GE may make a proposal to EPA to modify and/or extend the Baseline Monitoring Program based on the results of the initial assessment and the estimated timing of future response actions at the RAAs in the GMA. The approved GMA 5 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 RAA within GMA 5 were not yet complete, the Fall 2003 GMA 5 Groundwater Quality Report included a proposal to modify and extend baseline groundwater quality monitoring activities at GMA 5 (under a program referred to as the interim monitoring program) until such time as the soil-related Removal Actions at the GMA 5 RAA were completed and the needs for a long-term groundwater quality monitoring program were fully delineated.

EPA conditionally approved the Fall 2003 GMA 5 Groundwater Quality Report in a letter dated May 5, 2004. Under the approved interim monitoring program, annual water quality sampling (alternating between the spring and fall seasons) and semi-annual water level monitoring at selected GMA 5 wells was initiated in spring 2004.

The results of the initial interim sampling event were provided in GE's July 2004 *Groundwater Management Area 5 Groundwater Quality Interim Report for Spring 2004* (Spring 2004 GMA 5 Groundwater Quality Report), which was conditionally approved by EPA in a letter dated November 10, 2004. However, in that letter, EPA stated that the presence of EPA's temporary dam across the Housatonic River adjacent to GMA 5 (which was utilized as part of EPA's remediation along the 1 ½-Mile Reach of the Housatonic River) may influence groundwater flow at the GMA and that future groundwater quality monitoring there should be postponed until it is demonstrated that groundwater flow is not being artificially influenced by the dam. In addition, EPA required that groundwater elevation monitoring should continue to be performed on a semi-annual basis.

The EPA temporary dam was removed during January and February of 2006, and a round of water level monitoring was conducted on March 30, 2006. GE discussed the results with EPA during an April 10, 2006 technical call and received EPA approval to resume interim groundwater sampling in spring 2006. The results of the groundwater elevation monitoring and sampling activities conducted in spring 2006 were provided in GE's July 2006 *Groundwater Management Area 5 Groundwater Quality Monitoring Interim Report for Spring 2006* (Spring 2006 GMA 5 Groundwater Quality Report).

The Spring 2006 GMA 5 Groundwater Quality Report was conditionally approved by EPA in a letter dated November 16, 2006. In that letter, EPA required GE to conduct an additional full baseline sampling event in fall 2006 and, since soil-related Removal Actions at Former Oxbow Areas A and C were completed in November 2006, to submit a final baseline assessment report and proposal for long-term groundwater quality monitoring at GMA 5.

GE conducted the required fall 2006 groundwater monitoring and sampling activities and submitted the GMA 5 Long-Term Monitoring Proposal to EPA in April 2007. The GMA 5 Long-Term Monitoring Proposal provided a summary of the fall 2006 sampling activities conducted at GMA 5, evaluated the overall groundwater quality at the GMA pursuant to the requirements of Attachment H of the SOW and contained a proposal for long-term groundwater quality monitoring activities. Locations were considered for inclusion in the long-term program if:

- Exceedances of applicable MCP GW-2 or GW-3 standards were reported during the baseline monitoring program.

- The well is located downgradient of a location where exceedances of applicable MCP GW-2 or GW-3 standards were reported during the baseline monitoring program.

- A review of the available data indicates the potential presence of an increasing trend in the concentrations of certain constituents at levels approaching the applicable MCP GW-2 or GW-3 standards

In that report, as a result of the evaluations, GE proposed to conduct long-term groundwater quality monitoring at two wells in GMA 5: wells GMA 5-4, and GMA5-7. In EPA's August 21, 2007 approval letter, EPA directed GE to collect an additional round of samples from well GMA5-5 for the full suite of analyses to re-evaluate the possible inclusion of the well in the long-term groundwater quality monitoring program, required GE to submit a proposal to establish the source of VOCs detected in well GMA5-7, and specified that wells GT-7 and GT-101 should be included in the semi-annual groundwater elevation monitoring events. In GE's September 19, 2007 GMA 5 Long-Term Monitoring Proposal Addendum, GE proposed to install and sample wells GMA5-9 and GMA5-10 to assess the source of the VOCs upgradient from well GMA5-7 and modified the long-term monitoring program to incorporate the other EPA requirements.

Following EPA approval of the to GMA 5 Long-Term Monitoring Proposal Addendum, GE conducted the initial round of the required groundwater elevation monitoring and sampling activities in fall 2007, including the installation and sampling of the two new wells. The results of those activities are described herein.

1.3 Format of Document

The remainder of this report is presented in five sections. Section 2 describes the groundwater-related activities performed at GMA 5 in fall 2007. Section 3 presents the analytical results obtained during the fall 2007 sampling event, including a summary of the applicable groundwater quality Performance Standards identified in the CD and SOW, and a comparison of the fall 2007 results to those Performance Standards. Section 4 provides an overall assessment of groundwater quality at GMA 5 since initiation of baseline monitoring activities in spring 2002, including an evaluation of the analytical dataset for the wells that were sampled as part of the fall 2007 sampling event, and an assessment of the need for follow-up investigations or response actions. Section 5 proposes certain modifications to the long-term groundwater quality monitoring program for GMA 5 based on the evaluations of the recent and historical data presented herein. Finally, Section 6 presents the schedule for future field and reporting activities related to groundwater quality at GMA 5.

2. Fall 2007 Field and Analytical Procedures

2.1 General

The activities conducted as part of the long-term groundwater monitoring program in fall 2007, and summarized herein, involved new well installation, well decommissioning, the measurement of groundwater levels, and the collection and analysis of groundwater samples at select monitoring wells within GMA 5 (see Table 1). A summary of construction details for the GMA 5 wells, including those wells that were monitored during the fall 2007 interim monitoring event, is provided in Table 2. The field sampling data for the fall 2007 sampling event are presented in Appendix A. This section discusses the field procedures used to perform the activities listed above, as well as the methods used to analyze the groundwater samples. All activities were performed in accordance with GE's approved *Field Sampling Plan/Quality Assurance Project Plan* (FSP/QAPP).

2.2 Well Installation and Development

In late November 2007, GE installed two new monitoring well (GMA5-9 and GMA5-10) at the locations shown on Figure 2. Table 2 shows the survey data and well construction detail for these new wells along with the other existing wells utilized in the GMA 5 monitoring program. The monitoring well logs for wells GMA5-9 and GMA5-10 are presented in Appendix B**.**

Following installation, the new monitoring wells were developed to remove fine materials (e.g., fine sand, silt, clay) that may have accumulated in the filter pack and to ensure that the well screen was transmitting groundwater representative of the surrounding formation. Development was performed by surging the saturated portion of the well screen with a surge block and removing groundwater with a submersible pump and a positive displacement pump. Development of the well was continued until temperature/ pH/conductivity field parameters stabilized and the purged groundwater was relatively free of sediment (i.e., less than 50 NTU).

2.3 Monitoring Well Decommissioning

Monitoring well BH000141 was decommissioned on November 27, 2007, pursuant to an agreement between GE and EPA to utilize the drill rig then located on site (for the installation of wells GMA5-9 and GMA5-10) to remove the EPA-installed well which was no longer being utilized. The well was removed in accordance with the FSP/QAPP by over drilling the well to the installation depth provided by EPA and backfilling the borehole with cement/bentonite grout.

2.4 Groundwater Elevation Monitoring

Groundwater elevations were collected from the 13 wells listed in Table 3 during the fall 2007 groundwater elevation monitoring event performed on October 31, 2007 and November 1, 2007. Six of these wells are associated with the former Elm St. Mobil Station, including wells GES-8 and GES-9 which were found to be dry during the monitoring event. Groundwater elevations in fall 2007 were, on average, approximately 0.76 feet lower than the elevations measured during fall 2006 for wells gauged during both monitoring events. The fall 2007 groundwater elevation data presented in Table 3 were used to prepare a groundwater elevation contour map for fall 2007 (Figure 3). As shown on this figure and consistent with prior monitoring data, the groundwater flow direction is generally north to northwest toward the Housatonic River. The hydraulic gradient is relatively flat in the central and eastern part of GMA 5, but increases slightly on the west side of the GMA and in the riverbank areas.

In addition, monitoring for the potential presence of NAPL was performed as part of these well gauging events. No NAPL was observed during these monitoring events or any of the previous monitoring events conducted by GE at GMA 5. However, as discussed in Section 3.5 and Appendix F, NAPL related to the former Elm Street Mobil Site (which is being addressed by ExxonMobil) is present on the southwest portion of the GMA.

2.5 Groundwater Sampling and Analysis

Groundwater samples were collected from existing wells GMA5-4, GMA5-5 and GMA5-7 on November 15, 2007. For new wells GMA 5-9 and GMA5-10, which were installed in late November 2007, sampling was performed on December 17 and 18, 2007. Samples were collected for analysis for the constituents shown in Table 1.

Low-flow sampling techniques using a bladder pump or peristaltic pump were utilized for purging the wells and collection of groundwater samples during this sampling event. Each monitoring well was purged utilizing low-flow sampling techniques until field parameters (including temperature, pH, specific conductivity, oxidation-reduction potential, dissolved oxygen, and turbidity) stabilized. Field parameters were measured in combination with the sampling activities at the monitoring wells. The field parameter measurements are presented in Table 4 and the field sampling records are provided in Appendix A. A general summary of the field measurement results during the fall 2007 monitoring event is provided below:

Parameter	Units	Range
Turbidity	Nephelometric turbidity units (NTU)	4.0 to 26.0
pH	pH units	6.47 to 6.87
Specific Conductivity	Millisiemens per centimeter	0.750 to 1.945
Oxidation-Reduction Potential	Millivolts	-87.40 to 277.0
Dissolved Oxygen	Milligrams per liter	0.29 to 5.54
Temperature	Degrees Celsius	8.63 to 11.95

As shown above, for this sampling event, none of the groundwater extracted from the monitoring wells had turbidity levels greater than 26 NTU. These results indicate that the sampling and measurement procedures utilized during this sampling event were effective in obtaining groundwater samples with low turbidity.

The collected groundwater samples were submitted to SGS Environmental Services, Inc. (SGS) in Wilmington, North Carolina for laboratory analysis. Filtered samples from well GMA5-4 were analyzed for cadmium (EPA Method 6010B), and samples from well GMA5-7, GMA5-9 and GMA5-10 were analyzed only for VOCs (using EPA Method 8260B). The samples from well GMA5-5 were submitted for analysis of the following constituents using the associated EPA methods:

Constituent	EPA Method
Volatile Organic Compounds (VOCs)	8260B
Semi-Volatile Organic Compounds (SVOCs)	8270C
PCBs (filtered and unfiltered samples)	8082
Polychlorinated Dibenzo-p-dioxins and Polychlorinated Dibenzofurans (PCDDs/PCDFs)	8290
Metals (filtered and unfiltered samples)	6010B, 7000A, 7470A
Total Cyanide (filtered and unfiltered samples)	9014
Physiologically Available Cyanide (filtered samples)	9014 / MDEP PAC Protocol
Sulfide (unfiltered samples)	9034
Pesticide/Herbicides	8080, 8151

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

Finally, the data were validated in accordance with the FSP/QAPP and the validated results were utilized in the preparation of this report. As discussed in the validation report provided as Appendix D, 99.9% of the fall 2007 groundwater quality data are considered to be useable, which is greater than the minimum required usability of 90% as specified in the FSP/QAPP. The SVOC, PCB, PCDD/PCDF, and inorganic sample results were found to be 100% usable. VOC sample results were found to be 99.6% usable. The only rejected data were the VOC results for 2-chloroethylvinylether from two groundwater samples (GMA5-5 and GMA5-10), which were rejected due to low MS/MSD recoveries.

3. Fall 2007 Groundwater Analytical Results

3.1 General

A description of the fall 2007 groundwater analytical results is presented in this section. Tables 5 and 6 provide a comparison of the concentrations of all detected constituents with the currently applicable groundwater quality Performance Standards established in the CD and SOW, while Table 7 presents a comparison of the concentrations of detected constituents with the UCLs for groundwater. These Performance Standards are described in Section 3.2 below and an assessment of the fall 2007 results relative to those groundwater quality Performance Standards and the UCLs is provided in Section 3.4.

3.2 Groundwater Quality Performance Standards

The Performance Standards applicable to response actions for groundwater at GMA 5 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 5 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 (bgs) 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 and nearby 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 ultimately discharge to surface water. In accordance with the CD and SOW, all groundwater at GMA 5 is considered as GW-3.

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

and will serve as the initial basis for evaluating groundwater at GMA 5. The current MCP Method 1 GW-2 and GW-3 standards for the constituents detected in the fall 2006 sampling event are listed in Tables 5 and 6, respectively.

For constituents for which Method 1 standards do not exist, the MCP provides procedures, known as Method 2, for developing such standards (Method 2 standards) for both GW-2 (310 CMR 40.0983(2)) and GW-3 (310 CMR 40.0983(4)) groundwater. For such constituents that are detected in groundwater during the baseline monitoring program, Attachment H to the SOW states that in the Baseline Monitoring Program Final Report, GE must propose to develop Method 2 standards using the MCP procedures or alternate procedures approved by EPA, or provide a rationale for why such standards need not be developed.

For constituents whose concentrations exceed the applicable Method 1 (or Method 2) standards, GE may develop and propose to EPA alternative GW-2 and/or GW-3 standards based on a site-specific risk assessment. This procedure is known as Method 3 in the MCP. Upon EPA approval, these alternative risk-based GW-2 and/or GW-3 standards may be used in lieu of the Method 1 (or Method 2) standards. Of course, whichever method is used to establish such groundwater standards, GW-2 standards will be applied to GW-2 groundwater and GW-3 standards will be applied to GW-3 groundwater.

Based on consideration of the above points, the specific groundwater quality Performance Standards for GMA 5 consist of the following:

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

    a) the Method 1 GW-2 groundwater standards set forth in the MCP (or, for constituents for which no such standards exist, Method 2 GW-2 standards once developed, unless GE provides and EPA approves a rationale for not developing such Method 2 standards);

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

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

2. Groundwater quality shall ultimately achieve the following standards at the perimeter monitoring wells designated as compliance points for GW-3 standards:

   a) the Method 1 GW-3 groundwater standards set forth in the MCP (or, for constituents for which no such standards exist, Method 2 GW-3 standards once developed, unless GE provides and EPA approves a rationale for not developing such Method 2 standards); or

   b) alternative risk-based GW-3 standards proposed by GE and approved by EPA as protective against unacceptable risks in surface water due to potential migration of constituents in groundwater.

These Performance Standards are to be applied to the results of the individual monitoring wells included in the monitoring program. Several monitoring wells have been designated as the compliance points for attainment of the Performance Standards identified above. Those compliance wells that are sampled under the long-term monitoring program are identified in Table 1. As shown in that table, compliance with the applicable Performance Standards at several other wells has been verified during performance of the baseline monitoring program at GMA 5.

In addition to the Performance Standards described above, analytical results from all groundwater monitoring wells sampled during the fall 2007 sampling event were compared to the MCP UCLs for groundwater.

3.3 Fall 2007 Groundwater Quality Results

The following subsections provide an overview of the fall 2007 analytical results from the GMA 5 monitoring wells for each constituent group that was analyzed.

3.3.1 VOC Results

Groundwater samples collected from four groundwater quality monitoring wells were analyzed for VOCs during the fall 2007 sampling event. The VOC analytical results are summarized in Table 7 (for detected constituents compared to MCP UCLs for groundwater) and Table C-1 of Appendix C (for all constituents analyzed). A total of eight VOCs were detected in the fall 2007 sample set. Total VOC concentrations ranged from an estimated concentration of 0.00016 parts per million (ppm), with an estimated duplicate sample concentration of 0.00035 ppm at well GMA5-10 to an estimated concentration of 0.029 ppm at well GMA5-7. The only VOCs detected at more than one sampling location were tetrachloroethene (PCE) and toluene. Specifically, wells GMA5-7 and GMA5-9 contained PCE at concentrations of 0.024 ppm and 0.022 ppm, respectively. Toluene was detected in

wells GMA5-5 and GMA5-10 at estimated concentrations below the practical quantitation limit (PQL) in duplicate samples analyzed from each well. As shown in Tables 5 and 6 and discussed below, no VOCs were detected at levels exceeding the applicable Method 1 GW-2 or Method 1 GW-3 standards during the fall 2007 sampling round.

3.3.2 SVOC Results

One groundwater sample and a duplicate sample from well GMA5-5 were analyzed for SVOCs during the fall 2007 groundwater sampling event. The SVOC analytical results, which are summarized in Table C-1, show that no SVOCs were detected in that well.

3.3.3 PCB Results

Unfiltered and filtered groundwater samples from well GMA5-5 were analyzed for PCBs as part of the fall 2007 sampling event. The PCB analytical results are summarized in Tables 7 and C-1. PCBs were detected in the unfiltered sample and a duplicate unfiltered sample at estimated concentrations below the PQL of 0.00005 ppm and 0.000041 ppm, respectively. No PCBs were detected in the filtered samples from well GMA5-5.

3.3.4 Pesticide/Herbicide Results

One groundwater sample and a duplicate sample from well GMA5-5 were analyzed for pesticides and herbicides during the fall 2007 groundwater sampling event. The analytical results, which are summarized in Table C-1, show that no pesticides or herbicides were detected in that well.

3.3.5 PCDD/PCDF Results

A groundwater sample and duplicate sample collected from monitoring well GMA5-5 were analyzed for PCDDs/PCDFs during the fall 2007 sampling event. The analytical results, which are summarized in Tables 7 and C-1, show that no PCDFs and one PCDD were detected in the samples. Total Toxicity Equivalency Quotients (TEQs) were calculated for the PCDD/PCDF compounds using the Toxicity Equivalency Factors (TEFs) derived by the World Health Organization (WHO). In calculating those TEQs, the concentrations of individual PCDD/PCDF compounds that were not detected were represented as one-half of the analytical detection limit for those compounds. Total TEQ concentrations in the GMA5-5 sample and duplicate sample were 7.5×10^{-9} ppm and 7.0×10^{-9} ppm, respectively.

3.3.6 Inorganic Constituent Results

Unfiltered and filtered groundwater samples were obtained from monitoring well GMA5-5 for analysis of inorganic constituents during the fall 2007 sampling event. In addition, a filtered sample from well GMA5-4 was analyzed for cadmium. The analytical results for these samples are summarized in Tables 7 and C-1 within Appendix C.

Well GMA 5-5 contained a total of seven inorganic constituents in either the initial or duplicate unfiltered samples, while four individual inorganic constituents were detected in at least one filtered sample analyzed from that well. All detected inorganic constituent concentrations were below the applicable MCP Method 1 GW-3 standards. Cadmium was not detected in the filtered sample analyzed from well GMA5-4.

3.4 Evaluation of Groundwater Quality – Fall 2007

For the purpose of assessing current groundwater conditions, the analytical results from the fall 2007 groundwater sampling event were compared to the applicable groundwater Performance Standards for GMA 5. These Performance Standards are described in Section 3.2 above and are currently based on the MCP Method 1 GW-2 and/or GW-3 standards. The following subsections discuss the fall 2007 groundwater analytical results in relation to these Performance Standards, as well as in relation to the MCP UCLs for groundwater. In support of those discussions, Tables 5 and 6 provide a comparison of the concentrations of detected constituents with the currently applicable GW-2 and GW-3 standards, respectively, while Table 7 presents a comparison of the concentrations of detected constituents with the groundwater UCLs.

Additionally, as discussed in Section 3.5 below, concentrations of certain petroleum hydrocarbon compounds in wells installed and monitored by Exxon Mobil Oil Corporation at their Elm Street Mobil Site exceeded Method 1 GW-2 and/or GW-3 Standards. These wells were installed at the southwest corner of GMA 5, as part of ongoing remedial investigations and monitoring activities being conducted at that site. Groundwater quality data obtained during those investigations since March 2007 is provided in Appendix F. Matters concerning water quality at that site are being addressed by ExxonMobil.

3.4.1 Fall 2007 Groundwater Results Relative to GW-2 Performance Standards

During the fall 2007 groundwater quality monitoring event at GMA 5, groundwater samples were collected from three wells designated as GW-2 monitoring locations (i.e., wells GMA5-7, GMA5-9, and GMA5-10). The fall 2007 groundwater analytical results for all detected constituents subject to MCP Method 1 GW-2 standards are presented in Table 5, along with a comparison of those results to the applicable GW-2 standards. Six constituents were

found in well GMA5-7 (ethylbenzene, PCE, trans,-1,2-Dichloroethene, trichloroethene (TCE) and vinyl chloride). All were below the respective Method 1 GW-2 standards. PCE was also the only constituent detected in well GMA5-9. PCE was detected at a concentration of 0.024 ppm and 0.022 ppm at wells GMA5-7 and GMA5-9, respectively. These concentrations are both below the MCP GW-2 standard of 0.05 ppm. Toluene was the only VOC detected in well GMA5-10 at an estimated concentration of 0.00016 ppm and estimated duplicate sample concentration of 0.00035 ppm.

None of the three GW-2 wells exhibited total VOC concentrations above 5 ppm (the level specified in the SOW as a notification level for GW-2 wells located within 30 feet of a school or occupied residential structure and as a trigger level for the proposal of interim response actions).

3.4.2 Fall 2007 Groundwater Results Relative GW-3 Performance Standards

Groundwater samples were collected from three wells designated as GW-3 monitoring points during the fall 2007 interim sampling event (i.e., wells GMA5-4, GMA5-5, and GMA5-7). The fall 2007 groundwater analytical results for all constituents detected in these wells and a comparison of those results with MCP Method 1 GW-3 standards are presented in Table 6. There were no exceedances of the GW-3 standards for any substances in any wells within GMA 5 in fall 2007. At well GMA5-4 no cadmium was detected in fall 2007, compared to the fall 2006 sampling round. at which an estimated concentration of 0.00411 ppm, a slight exceedance of the GW-3 standard for cadmium (0.004 ppm), was detected. The fall 2006 sampling event at GMA5-4 was the only time that an exceedance of this standard, which is lower than the PQL of 0.005 ppm for cadmium, has occurred at this GMA.

3.4.3 Comparison of Fall 2007 Groundwater Results to Upper Concentration Limits

In addition to comparing the fall 2007 groundwater analytical results with applicable MCP Method 1 GW-2 and GW-3 standards, the analytical results from all wells that were sampled were compared with the UCLs for groundwater specified in the MCP (310 CMR 40.09996(7)). These comparisons, presented in Table 7, show that none of the detected constituents exceeded its respective UCL.

3.5 Adjacent MCP Site Monitoring Results

As discussed above in Section 1.2, the Former Elm Street Mobil Site (MDEP Site No. 1-0539, Tier 1B Permit No. 78741) is located on adjacent, upgradient property near the southwestern corner of GMA 5. This separate disposal site (as designated under the MCP) is currently being addressed by ExxonMobil pursuant to the MCP under an Administrative Consent Order with MDEP.

The Long-Term Monitoring Proposal requires that GE include available monitoring results from response actions performed by ExxonMobil in the monitoring event evaluation reports for GMA 5. The most recent review of the MDEP file for the Elm Street Mobil Site was conducted on January 9, 2008. Five documents pertaining to groundwater investigations and response actions have been issued for that site since the previous file review performed during preparation of the GMA 5 Long-Term Monitoring Proposal. Those documents include:

- Six Month Recertification Remediation General Permit Authorization No. MAG910107 (Camp, Dresser and McKee, Inc. [CDM], February 26, 2007).
- Phase V Inspection and Monitoring Report and Remedial Monitoring Report (CDM, June 27, 2007).
- Notice of Monitoring Well Destruction, Improper Closure Greylock Federal Credit Union (CDM, July 26, 2007).
- Release Abatement Measures Plan Former Mobil Service Station No. 01-ECQ (CDM, September 5, 2007).
- Notice of Remedial System Downtime (CDM, September 21, 2007).

A site map and pertinent monitoring results from the most recent monitoring report reviewed for the Former Elm Street Mobil Site (i.e., the June 27, 2007 Phase V Inspection and Monitoring Report and Remedial Monitoring Report) are provided in Appendix E. That report describes the total volume of hydrocarbons removed and the effectiveness of the soil vapor extraction system (SVE), and the vacuum enhanced groundwater extraction system (VEGE). As shown in the CDM-prepared tables provided in Appendix F, the total amount of hydrocarbons removed by the SVE system during the period of December 1, 2006 to May 31, 2007 are 107.4 pounds. The total amount of hydrocarbons removed by the VEGE system during the same period are 3.22 pounds.

A review of the analytical results for the most recent groundwater sampling event, conducted in April 2007, indicate that VPH compounds were detected in all of the well samples except for well GES-310, where no VPH compounds were detected above the laboratory detection limit. There were no MCP Method 1 GW-2 or GW-3 exceedances for VPH compounds for wells where VPH were detected (wells GES-102, GES-233, GES-224, EXP-6, EX-7, EXP-17, and EXP-18). GW-2 standards were exceeded at four wells (GT-2, GES-208, EXP-11R, and EXP-12) for C_5-C_8 aliphatic hydrocarbons, with concentrations ranging from 1.450 ppm (GES-208) to 4.110 ppm (GT-2). Samples collected from GES-208 detected a GW-2 standard exceedance of C_9-C_{10} aromatic hydrocarbons at a concentration of 8.940 ppm.

GW-3 standard exceedances were detected in samples collected from four of the five GW-3 monitoring wells located on the former Mobil station property (GES-12, GT-2, EXP-11R, EXP-12, and GES-208). GW-3 standards were exceeded for total xylenes in samples collected from four out of these five wells, with concentrations ranging from 1.492 ppm (EXP-11R) to 3.714 ppm (GES-208). Total xylene concentrations did not exceed the GW-3 standard in well EXP-12. The GW-3 standard for C_5-C_8 aliphatic hydrocarbons were exceeded at well GT-2 with a concentration of 4.110 ppm. The GW-3 standard for C_9-C_{10} aromatic hydrocarbons was exceeded at monitoring well GES-208 where a concentration of 8.940 ppm was detected.

In an attempt to increase the efficiency of NAPL removal in the intermediate aquifer, in May 2007 several pumps were reinstalled into several extraction wells (EXP-10R, EXP-11R, EXP-12, and EXP-13R). Prior to pump installation, the wells were redeveloped in April 2007.

3.6 NAPL Evaluation

Consistent with prior monitoring results, no NAPL was observed in any of the GMA 5 monitoring wells during the groundwater elevation and sampling activities conducted in fall 2007.

If NAPL is encountered at portions of GMA 5 outside of the Former Elm Street Mobil Site and adjacent areas being addressed by ExxonMobil pursuant to the MCP under a separate Administrative Consent Order with MDEP, the long-term trend evaluations will also include a review of the current NAPL recovery efforts to the extent that data are available from ExxonMobil.

During the Long-Term Monitoring Program, if NAPL is observed to be discharging to any surface water or creating a sheen on the water in a location in which such NAPL discharge was not previously observed or measures are not in place to effectively contain the sheen,

GE will notify EPA and MDEP within two hours of obtaining knowledge of such observation. This will be followed by written notice to EPA within seven (7) days. The written notification will include a proposal to EPA for interim response actions to contain such discharge. Upon EPA approval, GE will conduct the approved interim response actions to contain the NAPL discharge.

Also under the approved GMA 5 Long-Term Monitoring Proposal, if NAPL is observed to be discharging to any surface water or creating a sheen on the water in a location in which such NAPL discharge was previously observed and measures are in place to contain the sheen, GE will notify EPA of the continued presence of such NAPL in the next monthly progress report for overall work at the Site.

For groundwater, if a NAPL thickness of greater than or equal to 1/2-inch is observed in any monitoring well, GE will notify EPA and MDEP within seventy-two hours of obtaining knowledge of such a condition, unless such conditions are consistent with the types, nature, and quantities of NAPL which were previously observed and reported to the Agencies. This notification will be followed by written notice to the EPA within 60 days. The written notification will include a proposal to EPA for interim response actions to be conducted which may include NAPL sampling, additional assessment/monitoring, or NAPL removal activities. Upon EPA approval, GE will conduct the approved interim response actions. If a NAPL thickness of greater than or equal to 1/8-inch, but less than 1/2-inch is observed in a monitoring well, GE will notify EPA and MDEP in the next monthly progress report, unless the results are consistent with the types, nature, and quantities of NAPL which have previously been observed and reported to the Agencies.

4. Assessment of Groundwater Quality

4.1 General

This report constitutes the first monitoring event evaluation report submitted since commencement of the GMA 5 long-term groundwater quality program. The information presented herein is based on the laboratory results obtained during the course of the GMA 5 baseline and long-term groundwater monitoring programs.

For the purpose of assessing overall groundwater conditions at GMA 5, the analytical results from the fall 2007 groundwater sampling event were compared to the applicable groundwater Performance Standards for GMA 5, as described in Section 3.4 above. In addition, GE has compared the fall 2007 results to prior data to evaluate variations and/or potential trends in constituent concentrations in GMA 5 groundwater.

The following sections present the results of those overall assessments of groundwater quality, including an evaluation of the need for follow-up investigations, assessments, interim response actions, or other modifications to the long-term monitoring program.

In accordance with EPA's conditional approval letter dated August 21, 2007, GE collected samples from well GMA5-5 in fall 2007 for the full suite of analyses specified in the baseline program and evaluated the need for the possible inclusion of this well in the long-term monitoring program. Tables E-1 and E-2 in Appendix E contain summaries of all analytical data collected at well GMA5-5 since commencement of the baseline monitoring program in spring 2002. Those results, along with GE's rationale to discontinue groundwater quality monitoring at well GMA5-5 are discussed in Section 4.4 below.

4.2 Evaluation of Variations in Groundwater Quality

For the purpose of assessing current groundwater conditions, the analytical results from the fall 2007 groundwater sampling event were compared to data obtained during prior baseline sampling events, and in particular, the most recent fall round of sampling data. In addition, the variability of the data was evaluated. The results of these comparisons are described below.

4.2.1 Comparison of Fall 2007 Analytical Results to Baseline Data

Graphs illustrating historical total VOC and total PCB concentrations for all wells sampled and analyzed for those constituent during fall 2007 at GMA 5 are presented in Appendix E. In addition, Appendix E contains graphs of historical concentrations of individual constituents that exceeded the applicable MCP Method 1 GW-2 or GW-3 standards during any of the baseline monitoring program sampling events (i.e., cadmium at well GMA5-4 and PCE and vinyl chloride at well GMA5-7).

The total VOC results at well GMA5-5 have consistently been either non-detect or at trace levels during all baseline sample events conducted at that location, including the current round conducted in fall 2007. At well GMA5-7, the fall 2007 total VOC concentrations are at approximately the middle of the range of previously-detected concentrations and have shown a decrease during the last two sampling events since the historical high concentration observed in spring 2006.

As shown in the graph in Appendix E, cadmium was not detected in well GMA5-4 during fall 2007. This is consistent with all other baseline sampling rounds at well GMA5-4, with the exception of the fall 2006 monitoring event.

Since PCE is the primary constituent found at well GMA5-7, the graph of historical PCE concentrations contained in Appendix E is very similar to the total VOC results discussed above --- i.e., the fall 2007 PCE concentration (0.024 ppm) was at the approximate mid-range of previously-detected PCE concentrations and have shown a steady decrease since the historical high concentration observed in spring 2006 (0.062 ppm). All PCE concentrations, with the exception of that spring 2006 result, have been below the GW-2 standard of 0.05 ppm.

The historical graph for vinyl chloride concentrations shows an estimated concentration of 0.00061 ppm for vinyl chloride in fall 2007, which is well below the GW-2 standard of 0.002 ppm. That result is an order of magnitude less than the only other vinyl chloride detection at this well, a GW-2 exceedance observed in fall 2003 (0.0029 ppm), and is the first recorded detection of vinyl chloride since that time.

Well GMA5-5 was the only well analyzed for PCBs during fall 2007. Consistent with prior baseline data, no PCBs were detected in the filtered samples. Low levels of PCBs were detected in the unfiltered samples that were analyzed, at concentrations within the range detected during the baseline program. Table E-1 in Appendix E also contains all analytical results for well GMA5-5 since commencement of the baseline monitoring program in spring 2002 and Table E-2 contains a summary of the detected results for this well. As seen in Table E-2, very few constituents were consistently detected during the baseline period.

4.2.2 Comparison of Fall 2007 Analytical Results to Previous Fall Sampling Round

Table E-3 in Appendix E presents a comparison to the fall 2007 analytical results to the most recent fall sampling data collected in fall 2006, for constituents analyzed during both sampling events at wells included in the long-term monitoring program (i.e., VOCs at well GMA5-7 and cadmium at well GMA5-4). Well GMA5-5 is not included in these comparisons because that well is not part of the long-term monitoring program. The fall 2007 results represented the initial sampling round at wells GMA5-9 and GMA5-10, so they could not be compared to prior data.

No cadmium was detected in the filtered sample from well GMA5-4 in fall 2007, which was not consistent with the results from fall 2006 when the concentration of cadmium in this well (estimated at 0.00411 ppm) slightly exceeded the GW-3 standard of 0.004 ppm. The fall 2006 result appears to be anomalous, given that cadmium was not detected during any other sampling rounds performed at this well.

At well GMA 5-7, the total VOC concentrations detected in fall 2007 (estimated at 0.029 ppm) was slightly greater than half the concentration observed in fall 2006 (0.048 ppm). PCE was the primary constituent detected during each sampling round (concentrations of 0.046 ppm in fall 2006 and 0.024 ppm in fall 2007). TCE was the only other VOC detected during each fall sampling event and was found at similar low concentrations during each round (0.0023 ppm in fall 2006 and 0.0031 ppm in fall 2007). Three other VOCs were detected in fall 2007, but were not detected in this well in fall 2006. Two of those constituents (trans-1,2-dichloroethene, and vinyl chloride) were previously detected at this well during other monitoring events. The third VOC, ethylbenzene, was detected for the first time in fall 2007, but at trace levels estimated to be an order of magnitude below the PQL.

4.2.3 Evaluation of Seasonal Variability in Data

To evaluate the potential presence of seasonal trends in the groundwater quality data at GMA 5, GE has reviewed the analytical data from the wells included in the long-term monitoring program at GMA 5. Inspection of the historical concentration graphs contained in Appendix E indicates that ranges of data collected in the spring vs. fall seasons are within the same order of magnitude at well GMA5-7 for PCE and Total VOCs, although the fall data are slightly more variable, primarily due to low concentrations of those constituents observed in fall 2002. Cadmium and vinyl chloride (at wells GMA5-4 and GMA5-7, respectively) were only detected during fall monitoring events, but were only observed during limited sampling events overall. Based on these preliminary evaluations, it does not appear that seasonality is significantly affecting the sampling results at GMA 5.

4.3 Statistical Assessment of Data

To assess potential trends in groundwater constituent concentrations over time (i.e., long-term increasing or decreasing concentrations) as well as seasonal cycles, various statistical methods can be utilized depending on the extent of the overall sampling period and the frequency of sampling events within the sampling period. Graphical representations such as a simple plot of concentration data versus time may reveal long-term cyclical patterns as well as pulses, both of which may explain temporal trends. As described in the GMA 5 Long-Term Monitoring Proposal, three statistical techniques may be utilized to evaluate temporal trends in GMA 5 groundwater and to determine the statistical significance of any potential trends that are identified: (1) Mann-Kendall Test; (2) Sen's slope estimator; and (3) Seasonal Kendall Tau estimator. Such statistical evaluations will be conducted as the long-term monitoring program progresses and will be summarized in the Long-Term Trend Evaluation Reports for GMA 5 as appropriate.

In addition to the concentration versus time graphs discussed above, GE has prepared a general summary of the analytical results for all wells/constituents included in the long-term monitoring program. The summary statistics of the analytical data for the GMA 5 wells where long-term monitoring is being conducted (i.e., wells GMA5-4 and GMA5-7) are contained in Appendix G and are discussed below.

As shown in Table G-1 in Appendix G, cadmium was only detected at well GMA5-4 during one of six sampling events (fall 2006). Although the estimated concentration during that event was slightly above the GW-3 standard of 0.004 ppm, the average concentration at this well is below the applicable standard and that single detection appears to be anomalous. Similar to the four sampling rounds conducted prior to fall 2006, no cadmium was detected in the filtered sample from well GMA5-4 analyzed in fall 2007.

A statistical breakdown of the historical VOC data for well GMA5-7 is contained in Table G-2 in Appendix G. As seen on that table, seven individual VOCs have been detected in this well during at least one of the eight sampling events that have been conducted. Three of these constituents were only detected during a single sampling round, including ethylbenzene, which was detected at trace levels during fall 2007. Trans-1,2-dichloroethene and vinyl chloride were each detected during two sampling events, including fall 2007. The primary VOCs observed at well GMA5-7 are PCE (detected during all eight sampling events) and TCE (detected during five of eight sampling events). The fall 2007 concentrations of each of these constituents are below the average concentrations for the GMA5-7 dataset, with the exception of TCE, where the concentration was equal to the calculated average shown in Table G-2.

4.4 Assessment of Baseline Data for Well GMA5-5

The available dataset for GMA 5 consists of the results of five sampling events (Spring 2002, Fall 2002, Spring 2003, Fall 2003, and Fall 2007) which have been conducted since the initiation of baseline monitoring at GMA 5. In fall 2007, well GMA5-5 was sampled for the constituents identified in the baseline monitoring program to complete the baseline assessment for this well, since this well was not sampled in the fall 2006 sampling event. The baseline data set for this well (see Table E-1 in Appendix E) was evaluated by utilizing the same methodology employed for the other GMA 5 wells, as presented in the GMA 5 Long-Term Monitoring Proposal. Specifically, GE has prepared a general summary of the analytical results for all detected constituents at this monitoring well and performed a qualitative review of the concentration versus time graphs of selected data to identify potential trends (see Section 4.2.1 above). The summary statistics of the analytical data for well GMA 5-5 are contained in Table E-2 in Appendix E.

The data summary contained in Appendix E show that very few constituents were consistently detected in the GMA 5-5 monitoring well. As shown in the historical graphs for well GMA5-5 in Appendix E, VOCs have been detected in this well only twice during the baseline monitoring period, at very low concentrations. Three VOCs (benzene, chlorobenzene, and toluene) were only detected during one or two sampling events at any given well. No SVOCs were detected in this well during the baseline sampling events. PCBs were detected in unfiltered samples analyzed during three of five events, but were not detected in any filtered samples analyzed during the baseline sampling period. Due to the method used for the calculation of Total TEQs, which includes a value in the calculation of one-half of the detection limit for non-detected PCDD/PCDF congeners, calculated Total TEQs are available for each sampling round, even where no PCDD/PCDF congeners were detected. No pesticides were detected at this well during the baseline program. Several inorganics were detected in the groundwater samples, the most common being barium and chromium. Total cyanide was detected in three of the five unfiltered samples analyzed, and was found in one of the four corresponding filtered samples (no physiologically available cyanide was detected during the fall 2007 sampling event, which was the only round where this analytical protocol was utilized).

There were no exceedances of the applicable GW-3 standards observed at this well during any of the baseline sampling events. As such, it appears that well GMA5-5 currently satisfies the groundwater quality Performance Standards applicable to that well. As discussed in Section 5.2 below, GE does not propose to conduct additional groundwater sampling at this location during the long-term monitoring program.

4.5 Overall Assessment of Groundwater Quality Data

Very few constituents have been consistently detected in groundwater at GMA 5. Most of the observed detections have been sporadic and spread across the GMA, resulting in an apparent scattered distribution of occasionally-detected constituents. Low levels of VOCs, PCBs and inorganics have been detected in several wells across the GMA. In general, however, higher constituent concentrations and more frequent detections, including all recorded exceedances of the applicable GW-2 or GW-3 standards, were observed in or near Oxbow Area A in the western portion of the GMA. As such, the long-term groundwater quality monitoring program is focused on this area.

The following subsections provide an overview of the groundwater quality data at GMA 5, focused on the constituents and locations that are included in the long-term monitoring program and/or were sampled in fall 2007. A specific assessment of the groundwater quality data at well GMA5-5, where an additional baseline sampling event was conducted in fall 2007, is presented in Section 4.4 above.

4.5.1 VOCs

Four wells were included in the fall 2007 long-term sampling event for VOC analysis. However, only one well (GMA5-7) is currently part of the long-term monitoring program. Well GMA5-5 was sampled to satisfy an EPA requirement to collect an additional baseline data set, and wells GMA5-9 and GMA5-10 were installed and sampled to assess the VOCs found to be present in well GMA5-7, particularly to help determine if the presence of PCE in well GMA5-7 could be related to a dry cleaning facility located upgradient of that well.

Total VOC concentrations at well GMA5-7 are linked to the concentrations of PCE, which constitutes the primary constituent detected in this well. PCE has been detected in well GMA5-7 during each sampling round, as shown in the graph in Appendix E. During the spring 2006 sampling event, the concentration of PCE detected in this well (0.062 ppm) exceeded the GW-2 standard of 0.05 ppm. However, in the fall 2007 sampling round, the PCE concentration detected in this well (0.024 ppm) was below the GW-2 standard. The spring 2006 event was the only occasion on which the GW-2 standard for PCE was exceeded at this well. Since that time, two sampling rounds have been conducted, with the PCE results below the applicable standard. Since four consecutive sampling events showing results below the applicable standards are required to demonstrate that the groundwater Performance Standards have been achieved, GE plans to continue to collect additional data from this well during the long-term monitoring program.

As noted above, given the location of this well downgradient from operating dry cleaning and laundry facilities and the general absence of PCE elsewhere in the GMA, it appears that the PCE in this well is not related to former GE operations at the site. Wells GMA5-9 and GMA5-10 were installed upgradient of well GMA5-7 to further evaluate the possible source of PCE. At well GMA5-9, which is closest to the dry cleaning facility, the PCE concentration in fall 2007 was 0.022 ppm (see Table 5), which is comparable to the concentration in well GMA5-7. No PCE was detected in well GMA5-10 in fall 2007.

The GW-2 standard for vinyl chloride (0.002 ppm) was exceeded in well GMA5-7 during the fall 2003 sampling round, when the detected concentration was 0.0029 ppm. As shown in the historical vinyl chloride concentration graph for this well in Appendix E, vinyl chloride was not detected in this well during the three subsequent sampling events and was detected at trace levels below the PQL in fall 2007. Thus, fall 2007 represents the fourth consecutive sampling event in which the vinyl chloride concentration was below the applicable GW-2 standard, indicating that the Performance Standard for vinyl chloride has been achieved at well GMA5-7. However, well GMA5-7 is subject to additional sampling and VOC analyses due to the presence of PCE in the well, as discussed above. Therefore, GE will continue to assess the presence of vinyl chloride in this well during future monitoring event evaluation reports.

4.5.2 Cadmium

Well GMA5-4 was added to the long-term monitoring program based on an estimated cadmium concentration of 0.00411 ppm detected in fall 2006, which is slightly above the GW-3 standard of 0.004 ppm. Cadmium was not detected in the filtered sample from well GMA5-4 in fall 2007. Overall, samples from well GMA5-4 have been analyzed for cadmium during six sampling events conducted since initiation of the baseline monitoring program and the fall 2006 event was the only time that the constituent was detected. Although fall 2007 was only the first sampling event conducted since the GW-3 exceedance observed in fall 2006, the historical data from this well indicate that the fall 2006 data is anomalous and the Performance Standard for cadmium has been achieved at this well. As discussed in Section 5.2, GE proposes to discontinue long-term monitoring for cadmium at well GMA5-4.

4.6 Evaluation of the Need for Follow-up Investigations, Assessments, or Interim Response Actions

As stated in the GMA 5 Long-Term Monitoring Proposal and Addendum, the analytical data obtained during the baseline monitoring programs did not reveal any significant data gaps concerning groundwater quality that would suggest the need for any further investigations or assessments, other than the additional investigations being conducted to identify the source of PCE found in well GMA5-7. Likewise, a review of the fall 2007 long-term

monitoring data does not indicate the need for additional actions beyond the approved long-term monitoring activities.

As such, GE proposes to continue to sample well GMA5-7 for VOCs under the currently-approved long-term monitoring program schedule to collect additional data to refine the statistical analyses and/or to otherwise verify the attainment of the GW-2 Performance Standards at this location.

An additional baseline monitoring event was conducted at well GMA5-5 in fall 2007. There have been no exceedances of GW-3 standards at this well. These results indicate that the GW-3 Performance Standards have been attained at this location and well GMA5-5 is not proposed for any additional sampling during the long-term monitoring program at GMA 5.

In fall 2007, the detected concentrations were very low, and were all below any applicable GW-2 or GW-3 standards. Based on the results during the fall 2007 sampling round, GE does not proposed any changes to the overall long-term monitoring program. As noted above, however, GE proposes not to continue sampling for cadmium at well GMA5-4, not to continue sampling at well GMA5-5, and to perform one additional round of sampling and VOC analysis at wells GMA5-9 and GMA5-10. There have been no wells at which any detected concentration suggests the need for an interim response action apart from continued long-term monitoring at certain of these locations. If any exceedances of the groundwater-related Performance Standards arise at GMA 5, GE will evaluate the need for appropriate response actions and will propose any necessary actions for EPA approval.

5. Proposed Sampling Modifications

5.1 General

In fall 2007, GE initiated the long-term monitoring program at GMA 5. The long-term monitoring program is designed to continue to evaluate the need for further response actions related to groundwater and to collect sufficient data to verify the attainment of the Performance Standards at GMA 5.

GE has reviewed the groundwater analytical data from this sampling event for results that would indicate the need to modify the long-term monitoring program. The fall 2007 data are generally consistent with prior monitoring events and no overall modifications to the long-term program are proposed. However, as noted above and discussed further below, GE makes three specific proposals concerning further sampling. No interim response actions are proposed at this time, as none of the conditions requiring such actions was met in fall 2007.

A summary of the long-term groundwater sampling program activities proposed to be conducted in spring 2008 is provided in Table 8. The monitoring wells subject to sampling in spring 2008 are illustrated on Figure 4.

5.2 Proposed Groundwater Monitoring Modifications

As noted above, GE has evaluated the results from the fall 2007 sampling event to determine if modifications to the long-term monitoring program are needed. Based on the results of that evaluation, GE makes the following three proposals:

- **Well GMA5-4 is proposed to be removed from the long-term sampling program.** This well was sampled in fall 2007 to assess a cadmium detection during the last baseline sampling event that was slightly above the GW-3 Standard. Cadmium was not detected at this well in fall 2007, nor was it detected during four other baseline monitoring rounds, excluding fall 2006. As such, the fall 2006 cadmium result appears to be anomalous and no additional sampling for this constituent is warranted at well GMA5-4. GE will continue to collect groundwater elevation data from this well on a semi-annual basis.

- **No long-term sampling is proposed at well GMA5-5.** As discussed in Section 4.4, GE conducted an additional baseline sampling round at well GMA5-5 in fall 2007. A review of the analytical data from this well shows that there have been no exceedances of GW-3 standards recorded at this well during the baseline monitoring program, including the additional baseline sampling conducted in fall 2007, verifying that the GW-3 Performance Standards have been attained. Therefore, GE does not propose long-term sampling at this well.

- **An additional round of sampling and VOC analyses is proposed at wells GMA5-9 and GMA5-10.** In the GMA 5 Long-Term Monitoring Proposal Addendum, GE stated that following the fall 2007 sampling event, it would evaluate whether it would be appropriate to include well GMA5-9 and/or GMA5-10 in the long-term groundwater quality monitoring program. Prior to performing that evaluation, GE proposes to conduct additional sampling at these new wells in spring 2008 to obtain data from the spring season for use in its assessment of PCE in this area.

Upon EPA approval of these proposed program modifications, GE will implement any approved or required modifications during the next long-term groundwater quality sampling event scheduled for spring 2008.

6. Schedule of Future Activities

6.1 Field Activities Schedule

If approved by EPA, GE will conduct the spring 2008 long-term groundwater quality sampling event in April/May 2008. A round of groundwater elevation monitoring at the GMA 5 wells where such monitoring is required will also be performed at that time.

Prior to performance of these field activities, GE will provide EPA with 7 days advance notice to allow the assignment of oversight personnel. The schedule discussed above was developed under the assumption that GE will be able to obtain permission from the owners of the properties that comprise GMA 5 to conduct the monitoring and sampling activities in advance of their estimated performance dates. If that is not the case, GE will notify EPA of potential schedule impacts due to delays in obtaining such access to the properties.

6.2 Reporting Schedule

GE will continue to provide the results of preliminary groundwater analytical data in its monthly reports on overall activities at the GE-Pittsfield/Housatonic River Site. Those reports will also document the schedules for submittal of the Monitoring Event Evaluation Reports and Long-Term Trend Evaluation Reports, which are contingent upon receipt of the final analytical data packages from the groundwater sampling events, as discussed below.

In accordance with the previously-approved reporting schedule for this GMA, GE proposes to submit the Spring 2008 Monitoring Event Evaluation Report for GMA 5 within 60 days following receipt of the final analytical data packages from the event. That report will present the final, validated spring 2008 sampling results and a brief discussion of the results, including the evaluations of the data and any proposals to further modify the long-term monitoring program, if necessary. GE will also include an updated summary of available groundwater monitoring results and analytical data collected at the adjacent Elm Street Mobil Site, to the extent that such information is available to GE.

Subsequent semi-annual Monitoring Event Evaluation Reports for GMA 5 will be submitted within 60 days following receipt of the final analytical data packages from each event.

In addition, as previously approved by EPA, a Long-Term Trend Evaluation Report will be submitted in place of a Monitoring Event Evaluation Report, at the completion of the fall 2009 sampling round. Subsequent Long-Term Trend Evaluation Reports for GMA 5 will be prepared at two-year intervals over the duration of the long-term monitoring program at GMA 5. Each such report will be submitted within 75 days following receipt of the final analytical data packages from the latest monitoring event included in the two-year evaluation cycle.

ARCADIS

Tables

Table 1
Fall 2007 Groundwater Monitoring Program

Groundwater Management Area 5 Long-Term Monitoring Program
Monitoring Event Evaluation Report for Fall 2007
General Electric Company-Pittsfield, Massachusetts

Well Number	Monitoring Well Usage	Proposed Sampling Schedule & Analyses		Comments
		Sampling Schedule	Proposed Analyses	
GMA5-1	Groundwater Elevation	None	None	Groundwater elevation monitoring only
GMA5-3	Groundwater Elevation	None	None	Groundwater elevation monitoring only
GMA5-4	GW-3 Perimeter (GW-3 Compliance Well)	Semi-Annual	Cadmium	Long-term monitoring conducted to verify attainment of GW-3 Performance Standards for cadmium.
GMA5-5	GW-3 Perimeter (GW-3 Compliance Well)	Fall 2007	See Note 2	Long-term sampling needs to be evaluated after assessment of the fall 2007 supplemental sampling results.
GMA5-7	GW-2 Sentinel/GW-3 Perimeter (GW-2/GW-3 Compliance Well)	Semi-Annual	VOC	Long-term monitoring conducted to verify attainment of GW-2 Performance Standards for vinyl chloride and PCE.
GMA5-8	Groundwater Elevation	None	None	Groundwater elevation monitoring only
GMA5-9	GW-2 Sentinel	Fall 2007	VOC (see Note 3)	Well installed and sampled as part of PCE assessment.
GMA5-10	GW-2 Sentinel	Fall 2007	VOC (see Note 3)	Well installed and sampled as part of PCE assessment.
GES-8	Groundwater Elevation - Elm Street Mobil	None	None	Groundwater elevation monitoring only
GT-7	Groundwater Elevation - Elm Street Mobil	None	None	Groundwater elevation monitoring only
GT-101	Groundwater Elevation - Elm Street Mobil	None	None	Groundwater elevation monitoring only

NOTE:

1. The wells GMA5-4 and GMA5-7 were sampled for the listed parameters during the long-term groundwater quality sampling event conducted in fall 2007.

2. Supplemental sampling was conducted at well GMA5-5 during the fall 2007 sampling event in order to evaluate whether long-term sampling is warranted at this location. The samples were analyzed for the following parameters : VOCs, SVOCs, PCBs (filtered and unfiltered analyses), PCDD/PCDF, pesticides/herbicides, metals/inorganics (filtered and unfiltered analyses), and physiologically available cyanide (filtered analysis only) .

3. Wells GMA5-9 and GMA5-10 were installed in fall 2007. Supplemental sampling and analysis for VOCs was conducted at these wells during the fall 2007 sampling event in order to evaluate whether additional sampling is warranted at these locations.

Table 2
Monitoring Well Construction

Groundwater Management Area 5 Long-Term Monitoring Program
Monitoring Event Evaluation Report for Fall 2007
General Electric Company-Pittsfield, Massachusetts

Well Number	Survey Coordinates		Well Diameter (inches)	Ground Surface Elevation (feet AMSL)	Measuring Point Elevation (feet AMSL)	Depth to Top of Screen (feet BGS)	Screen Length (feet)	Top of Screen Elevation (feet AMSL)	Base of Screen Elevation (feet AMSL)	Average Depth to Groundwater (feet BGS)	Average Groundwater Elevation (feet AMSL)
	Northing	Easting									
GMA5-1	531464.50	130012.30	2	984.40	984.82	5.11	10.00	979.29	969.29	9.01	975.39
GMA5-2	531952.60	130739.20	2	982.86	982.66	5.91	15.00	976.95	961.95	10.11	972.75
GMA5-3	531419.00	139738.70	2	989.57	989.14	10.00	15.00	979.57	964.57	17.77	971.80
GMA5-4	531811.30	129982.60	2	979.29	979.10	8.09	10.00	971.20	961.20	7.91	971.38
GMA5-5	532121.00	130300.10	2	982.85	982.64	6.77	15.00	976.08	961.08	11.11	971.74
GMA5-7	531507.50	129845.00	2	987.21	986.75	8.00	20.00	979.21	959.21	15.66	971.55
GMA5-8	531711.70	130216.90	2	984.95	984.69	8.00	10.00	976.95	966.95	12.52	972.43
GMA5-9	531276.20	129834.80	2	989.88	989.42	12.00	10.00	977.88	967.88	16.88	973.00
GMA5-10	531407.90	129894.40	2	987.57	987.11	9.00	10.00	978.57	968.57	14.34	973.23
GES-7	531186.66	129745.53	2	992.40	992.10	7.00	10.00	985.40	975.40	14.59	977.81
GES-8	531256.86	129779.34	2	990.40	990.15	7.00	10.00	983.40	973.40	12.72	977.68
GES-9	531234.26	129813.45	2	990.97	990.72	7.00	10.00	983.97	973.97	15.61	975.36
GT-7	531331.70	129602.82	4	990.11	989.76	10.00	15.00	980.11	965.11	16.85	973.26
GT-101	--	--	--	989.92	989.68	10.00	15.00	979.92	964.92	18.97	970.95
GT-102	--	--	--	990.27	990.03	--	--	--	--	17.65	972.62

Notes:
1. feet AMSL = feet above mean sea level.
2. feet BGS = feet below ground surface.
3. -- = not available.
4. Complete monitoring well construction information for Former Mobil Service Station wells GT-101, GT-102, and RW-2 is not available. Ground surface elevatins are inferred based on flush mount well construction.
5. Well GMA5-1 was modified during construction activities in the area. The screen elevations listed above are based on an initial ground elevation of 985.11 feet AMSL and depth to top of screen of 5.72 feet.
This well was re-surveyed on January 8, 2008 and the corrected ground surface and measuring point elevations, as well as a revised depth to top of screen based on new grade are listed above.

Table 3
Groundwater Elevation Data - Fall 2007

Groundwater Management Area 5 Long-Term Monitoring Program
Monitoring Event Evaluation Report for Fall 2007
General Electric Company-Pittsfield, Massachusetts

Well Number	Remedial Action Area	Fall 2007 Groundwater Elevation (Feet AMSL)
GMA5-1	Oxbow Areas A and C	974.90
GMA5-2	Oxbow Areas A and C	971.32
GMA5-3	Oxbow Areas A and C	971.16
GMA5-4	Oxbow Areas A and C	969.00
GMA5-5	Oxbow Areas A and C	970.00
GMA5-7	Oxbow Areas A and C	971.15
GMA5-8	Oxbow Areas A and C	971.24
GES-7	Elm Street Mobil	975.43
GES-8	Elm Street Mobil	<973.41 (Dry)
GES-9	Elm Street Mobil	<974.09 (Dry)
GT-7	Elm Street Mobil	971.57
GT-101	Elm Street Mobil	971.42
GT-102	Elm Street Mobil	971.51

Notes:
1. Groundwater elevation measurements were collected on October 31, 2007, with the exception of well GMA5-2 which was monitored on November 1, 2007.
2. The surface water elevation of the Housatonic River, measured at the Lyman Street Bridge on October 29, 2007, was 970.34 feet AMSL.
3. Well GMA5-6 was found to be obstructed above the water table and could not be monitored.
4. Wells GMA5-9 and GMA5-10 were installed after the fall 2007 monitoring event.

Table 4
Field Parameter Measurements - Fall 2007

Groundwater Management Area 5 Long-Term Monitoring Program
Monitoring Event Evaluation Report for Fall 2007
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)
GMA5-4	14	11.72	6.87	1.217	-43.50	0.59
GMA5-5	26	10.32	6.66	1.329	-87.40	1.19
GMA5-7	8	10.39	6.83	0.750	-15.20	1.05
GMA5-9	12	8.63	6.76	1.901	277.00	5.54
GMA5-10	4	11.95	6.47	1.945	-63.80	0.29

Notes:
1. Measurements collected during fall 2007 groundwater sampling event performed between November 15 and December 18, 2007.
2. Well parameters were 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 5
Comparison of Groundwater Analytical Results to MCP Method 1 GW-2 Standards

Groundwater Management Area 5 Long-Term Monitoring Program
Monitoring Event Evaluation Report for Fall 2007
General Electric Company - Pittsfield, Massachusetts
(Results are presented in parts per million, ppm)

Parameter / Sample ID: / Date Collected:	Method 1 GW-2 Standards	GMA5-7 11/15/07	GMA5-9 12/17/07	GMA5-10 12/18/07
Volatile Organics				
Ethylbenzene	30	0.00023 J	ND(0.0010)	ND(0.0010) [ND(0.0010)]
Tetrachloroethene	0.05	0.024	0.022	ND(0.0010) [ND(0.0010)]
Toluene	8	ND(0.0010)	ND(0.0010)	0.00016 J [0.00035 J]
trans-1,2-Dichloroethene	0.09	0.0011	ND(0.0010)	ND(0.0010) [ND(0.0010)]
Trichloroethene	0.03	0.0031	ND(0.0010)	ND(0.0010) [ND(0.0010)]
Vinyl Chloride	0.002	0.00061 J	ND(0.0010)	ND(0.0010) [ND(0.0010)]
Total VOCs	5	0.029 J	0.022	0.00016 J [0.00035 J]

Notes:
1. Samples were collected by ARCADIS, and submitted to SGS Environmental Services, Inc. for analysis of PCBs (filtered and unfiltered) and Appendix IX+3 constituents.
2. Samples have been validated as per Field Sampling Plan/Quality Assurance Project Plan (FSP/QAPP), General Electric Company, Pittsfield, Massachusetts, ARCADIS (approved March 15, 2007 and re-submitted March 30, 2007).
3. Only volatiles are presented for the MCP Method 1 GW-2 Standards Comparison.
4. Only detected volatiles are summarized.
5. Field duplicate sample results are presented in brackets.
6. Total VOCs are being compared to the notification level in the SOW of 5 ppm, as there is no GW-2 standard for total VOCs.

Data Qualifiers:

Organics (volatiles)

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

R - Data was rejected due to a deficiency in the data generation process

Table 6
Comparison of Groundwater Analytical Results to MCP Method 1 GW-3 Standards

Groundwater Management Area 5 Long-Term Monitoring Program
Monitoring Event Evaluation Report for Fall 2007
General Electric Company - Pittsfield, Massachusetts
(Results are presented in parts per million, ppm)

Parameter / Sample ID: / Date Collected:	Method 1 GW-3 Standards	GMA5-4 11/15/07	GMA5-5 11/15/07	GMA5-7 11/15/07
Volatile Organics				
Benzene	10	NA	0.00034 J [0.00032 J]	ND(0.0010)
Chlorobenzene	1	NA	0.00051 J [0.00050 J]	ND(0.0010)
Ethylbenzene	4	NA	ND(0.0010) [ND(0.0010)]	0.00023 J
Tetrachloroethene	30	NA	ND(0.0010) [ND(0.0010)]	0.024
Toluene	4	NA	0.00023 J [0.00020 J]	ND(0.0010)
trans-1,2-Dichloroethene	50	NA	ND(0.0010) [ND(0.0010)]	0.0011
Trichloroethene	5	NA	ND(0.0010) [ND(0.0010)]	0.0031
Vinyl Chloride	50	NA	ND(0.0010) [ND(0.0010)]	0.00061 J
PCBs-Unfiltered				
Aroclor-1260	Not Applicable	NA	0.000050 J [0.000041 J]	NA
Total PCBs	Not Applicable	NA	0.000050 J [0.000041 J]	NA
PCBs-Filtered				
Aroclor-1260	Not Listed	NA	ND(0.000068) J [ND(0.000067)]	NA
Total PCBs	0.0003	NA	ND(0.000068) J [ND(0.000067)]	NA
Semivolatile Organics				
None Detected	--	NA	--	NA
Organochlorine Pesticides				
None Detected	--	NA	--	NA
Herbicides				
None Detected	--	NA	--	NA
Furans				
2,3,7,8-TCDF	Not Listed	NA	ND(0.0000000028) [ND(0.0000000023)]	NA
TCDFs (total)	Not Listed	NA	ND(0.0000000028) [ND(0.0000000023)]	NA
1,2,3,7,8-PeCDF	Not Listed	NA	ND(0.0000000051) [ND(0.0000000051)]	NA
2,3,4,7,8-PeCDF	Not Listed	NA	ND(0.0000000051) [ND(0.0000000051)]	NA
PeCDFs (total)	Not Listed	NA	ND(0.0000000051) [ND(0.0000000051)]	NA
1,2,3,4,7,8-HxCDF	Not Listed	NA	ND(0.0000000051) [ND(0.0000000051)]	NA
1,2,3,6,7,8-HxCDF	Not Listed	NA	ND(0.0000000051) [ND(0.0000000051)]	NA
1,2,3,7,8,9-HxCDF	Not Listed	NA	ND(0.0000000051) [ND(0.0000000051)]	NA
2,3,4,6,7,8-HxCDF	Not Listed	NA	ND(0.0000000051) [ND(0.0000000051)]	NA
HxCDFs (total)	Not Listed	NA	ND(0.0000000051) [ND(0.0000000051)]	NA
1,2,3,4,6,7,8-HpCDF	Not Listed	NA	ND(0.0000000051) [ND(0.0000000051)]	NA
1,2,3,4,7,8,9-HpCDF	Not Listed	NA	ND(0.0000000051) [ND(0.0000000051)]	NA
HpCDFs (total)	Not Listed	NA	ND(0.0000000051) [ND(0.0000000051)]	NA
OCDF	Not Listed	NA	ND(0.000000010) [ND(0.000000010)]	NA
Dioxins				
2,3,7,8-TCDD	Not Listed	NA	ND(0.0000000033) [ND(0.0000000021)]	NA
TCDDs (total)	Not Listed	NA	ND(0.0000000033) [ND(0.0000000021)]	NA
1,2,3,7,8-PeCDD	Not Listed	NA	ND(0.0000000051) [ND(0.0000000051)]	NA
PeCDDs (total)	Not Listed	NA	ND(0.0000000051) [ND(0.0000000051)]	NA
1,2,3,4,7,8-HxCDD	Not Listed	NA	ND(0.0000000051) [ND(0.0000000051)]	NA
1,2,3,6,7,8-HxCDD	Not Listed	NA	ND(0.0000000051) [ND(0.0000000051)]	NA
1,2,3,7,8,9-HxCDD	Not Listed	NA	ND(0.0000000051) [ND(0.0000000051)]	NA
HxCDDs (total)	Not Listed	NA	ND(0.0000000051) [ND(0.0000000051)]	NA
1,2,3,4,6,7,8-HpCDD	Not Listed	NA	ND(0.0000000051) [ND(0.0000000051)]	NA
HpCDDs (total)	Not Listed	NA	ND(0.0000000051) [ND(0.0000000051)]	NA
OCDD	Not Listed	NA	0.000000011 J [0.000000013 J]	NA
Total TEQs (WHO TEFs)	0.0000001	NA	0.0000000075 [0.0000000070]	NA
Inorganics-Unfiltered				
Arsenic	Not Applicable	NA	0.00297 B [0.00418 B]	NA
Barium	Not Applicable	NA	0.0953 B [0.0963 B]	NA
Beryllium	Not Applicable	NA	ND(0.0100) J [0.00464 J]	NA
Cadmium	Not Applicable	NA	ND(0.00500) [ND(0.00500)]	NA
Chromium	Not Applicable	NA	0.00208 B [0.00207 B]	NA
Selenium	Not Applicable	NA	ND(0.0200) [0.0117 B]	NA
Thallium	Not Applicable	NA	0.00957 B [0.00695 B]	NA
Zinc	Not Applicable	NA	ND(0.0200) [0.0321]	NA

Table 6
Comparison of Groundwater Analytical Results to MCP Method 1 GW-3 Standards

Groundwater Management Area 5 Long-Term Monitoring Program
Monitoring Event Evaluation Report for Fall 2007
General Electric Company - Pittsfield, Massachusetts
(Results are presented in parts per million, ppm)

Parameter / Sample ID: / Date Collected:	Method 1 GW-3 Standards	GMA5-4 11/15/07	GMA5-5 11/15/07	GMA5-7 11/15/07
Inorganics-Filtered				
Arsenic	0.9	NA	ND(0.0100) [0.00574 B]	NA
Barium	50	NA	0.0778 B [0.0875 B]	NA
Beryllium	0.05	NA	0.00435 J [0.000460 J]	NA
Cadmium	0.004	ND(0.0100)	ND(0.00500) [ND(0.00500)]	NA
Chromium	0.3	NA	0.00115 [0.00149 B]	NA
Selenium	0.1	NA	ND(0.0200) [ND(0.0200)]	NA
Thallium	3	NA	ND(0.0100) [ND(0.0100)]	NA
Zinc	0.9	NA	ND(0.0200) [ND(0.0200)]	NA

Notes:

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

Data Qualifiers:

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

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

Inorganics

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

Table 7
Comparison of Groundwater Analytical Results to MCP UCLs for Groundwater

Groundwater Management Area 5 Long-Term Monitoring Program
Monitoring Event Evaluation Report for Fall 2007
General Electric Company - Pittsfield, Massachusetts
(Results are presented in parts per million, ppm)

Parameter / Sample ID: / Date Collected:	MCP UCL for GroundWater	GMA5-4 11/15/07	GMA5-5 11/15/07	GMA5-7 11/15/07	GMA5-9 12/17/07	GMA5-10 12/18/07
Volatile Organics						
Benzene	100	NA	0.00034 J [0.00032 J]	ND(0.0010)	ND(0.0010)	ND(0.0010) [ND(0.0010)]
Chlorobenzene	10	NA	0.00051 J [0.00050 J]	ND(0.0010)	ND(0.0010)	ND(0.0010) [ND(0.0010)]
Ethylbenzene	100	NA	ND(0.0010) [ND(0.0010)]	0.00023 J	ND(0.0010)	ND(0.0010) [ND(0.0010)]
Tetrachloroethene	100	NA	ND(0.0010) [ND(0.0010)]	0.024	0.022	ND(0.0010) [ND(0.0010)]
Toluene	80	NA	0.00023 J [0.00020 J]	ND(0.0010)	ND(0.0010)	0.00016 J [0.00035 J]
trans-1,2-Dichloroethene	100	NA	ND(0.0010) [ND(0.0010)]	0.0011	ND(0.0010)	ND(0.0010) [ND(0.0010)]
Trichloroethene	50	NA	ND(0.0010) [ND(0.0010)]	0.0031	ND(0.0010)	ND(0.0010) [ND(0.0010)]
Vinyl Chloride	100	NA	ND(0.0010) [ND(0.0010)]	0.00061 J	ND(0.0010)	ND(0.0010) [ND(0.0010)]
PCBs-Unfiltered						
Aroclor-1260	Not Listed	NA	0.000050 J [0.000041 J]	NA	NA	NA
Total PCBs	0.005	NA	0.000050 J [0.000041 J]	NA	NA	NA
PCBs-Filtered						
Aroclor-1260	Not Listed	NA	ND(0.000068) J [ND(0.000067)]	NA	NA	NA
Total PCBs	0.005	NA	ND(0.000068) J [ND(0.000067)]	NA	NA	NA
Semivolatile Organics						
None Detected	--	NA	--	NA	NA	NA
Organochlorine Pesticides						
None Detected	--	NA	--	NA	NA	NA
Herbicides						
None Detected	--	NA	--	NA	NA	NA
Furans						
2,3,7,8-TCDF	Not Listed	NA	ND(0.0000000028) [ND(0.0000000023)]	NA	NA	NA
TCDFs (total)	Not Listed	NA	ND(0.0000000028) [ND(0.0000000023)]	NA	NA	NA
1,2,3,7,8-PeCDF	Not Listed	NA	ND(0.0000000051) [ND(0.0000000051)]	NA	NA	NA
2,3,4,7,8-PeCDF	Not Listed	NA	ND(0.0000000051) [ND(0.0000000051)]	NA	NA	NA
PeCDFs (total)	Not Listed	NA	ND(0.0000000051) [ND(0.0000000051)]	NA	NA	NA
1,2,3,4,7,8-HxCDF	Not Listed	NA	ND(0.0000000051) [ND(0.0000000051)]	NA	NA	NA
1,2,3,6,7,8-HxCDF	Not Listed	NA	ND(0.0000000051) [ND(0.0000000051)]	NA	NA	NA
1,2,3,7,8,9-HxCDF	Not Listed	NA	ND(0.0000000051) [ND(0.0000000051)]	NA	NA	NA
2,3,4,6,7,8-HxCDF	Not Listed	NA	ND(0.0000000051) [ND(0.0000000051)]	NA	NA	NA
HxCDFs (total)	Not Listed	NA	ND(0.0000000051) [ND(0.0000000051)]	NA	NA	NA
1,2,3,4,6,7,8-HpCDF	Not Listed	NA	ND(0.0000000051) [ND(0.0000000051)]	NA	NA	NA
1,2,3,4,7,8,9-HpCDF	Not Listed	NA	ND(0.0000000051) [ND(0.0000000051)]	NA	NA	NA
HpCDFs (total)	Not Listed	NA	ND(0.0000000051) [ND(0.0000000051)]	NA	NA	NA
OCDF	Not Listed	NA	ND(0.000000010) [ND(0.000000010)]	NA	NA	NA
Dioxins						
2,3,7,8-TCDD	Not Listed	NA	ND(0.0000000033) [ND(0.0000000021)]	NA	NA	NA
TCDDs (total)	Not Listed	NA	ND(0.0000000033) [ND(0.0000000021)]	NA	NA	NA
1,2,3,7,8-PeCDD	Not Listed	NA	ND(0.0000000051) [ND(0.0000000051)]	NA	NA	NA
PeCDDs (total)	Not Listed	NA	ND(0.0000000051) [ND(0.0000000051)]	NA	NA	NA
1,2,3,4,7,8-HxCDD	Not Listed	NA	ND(0.0000000051) [ND(0.0000000051)]	NA	NA	NA
1,2,3,6,7,8-HxCDD	Not Listed	NA	ND(0.0000000051) [ND(0.0000000051)]	NA	NA	NA
1,2,3,7,8,9-HxCDD	Not Listed	NA	ND(0.0000000051) [ND(0.0000000051)]	NA	NA	NA
HxCDDs (total)	Not Listed	NA	ND(0.0000000051) [ND(0.0000000051)]	NA	NA	NA
1,2,3,4,6,7,8-HpCDD	Not Listed	NA	ND(0.0000000051) [ND(0.0000000051)]	NA	NA	NA
HpCDDs (total)	Not Listed	NA	ND(0.0000000051) [ND(0.0000000051)]	NA	NA	NA
OCDD	Not Listed	NA	0.000000011 J [0.000000013 J]	NA	NA	NA
Total TEQs (WHO TEFs)	0.000001	NA	0.0000000075 [0.0000000070]	NA	NA	NA

Table 7
Comparison of Groundwater Analytical Results to MCP UCLs for Groundwater

Groundwater Management Area 5 Long-Term Monitoring Program
Monitoring Event Evaluation Report for Fall 2007
General Electric Company - Pittsfield, Massachusetts
(Results are presented in parts per million, ppm)

Parameter / Sample ID: / Date Collected:	MCP UCL for GroundWater	GMA5-4 11/15/07	GMA5-5 11/15/07	GMA5-7 11/15/07	GMA5-9 12/17/07	GMA5-10 12/18/07
Inorganics-Unfiltered						
Arsenic	9	NA	0.00297 B [0.00418 B]	NA	NA	NA
Barium	100	NA	0.0953 B [0.0963 B]	NA	NA	NA
Beryllium	0.5	NA	ND(0.0100) J [0.00464 J]	NA	NA	NA
Cadmium	0.05	NA	ND(0.00500) [ND(0.00500)]	NA	NA	NA
Chromium	3	NA	0.00208 B [0.00207 B]	NA	NA	NA
Selenium	1	NA	ND(0.0200) [0.0117 B]	NA	NA	NA
Thallium	30	NA	0.00957 B [0.00695 B]	NA	NA	NA
Zinc	50	NA	ND(0.0200) [0.0321]	NA	NA	NA
Inorganics-Filtered						
Arsenic	9	NA	ND(0.0100) [0.00574 B]	NA	NA	NA
Barium	100	NA	0.0778 B [0.0875 B]	NA	NA	NA
Beryllium	0.5	NA	0.00435 J [0.000460 J]	NA	NA	NA
Cadmium	0.05	ND(0.0100)	ND(0.00500) [ND(0.00500)]	NA	NA	NA
Chromium	3	NA	0.00115 [0.00149 B]	NA	NA	NA
Selenium	1	NA	ND(0.0200) [ND(0.0200)]	NA	NA	NA
Thallium	30	NA	ND(0.0100) [ND(0.0100)]	NA	NA	NA
Zinc	50	NA	ND(0.0200) [ND(0.0200)]	NA	NA	NA

Notes:

1. Samples were collected by ARCADIS, and submitted to SGS Environmental Services, Inc. for analysis of PCBs (filtered and unfiltered) and Appendix IX+3 constituents.
2. NA - Not Analyzed.
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. Field duplicate sample results are presented in brackets.
6. With the exception of dioxin/furans and cadmium only those constituents detected in one or more samples are summarized.
7. -- Indicates that all constituents for the parameter group were not detected.

Data Qualifiers:

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

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

Inorganics

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

Table 8
Proposed Long Term Groundwater Monitoring Program Activities - Spring 2008

Groundwater Management Area 5 Long-Term Monitoring Program
Monitoring Event Evaluation Report for Fall 2007
General Electric Company-Pittsfield, Massachusetts

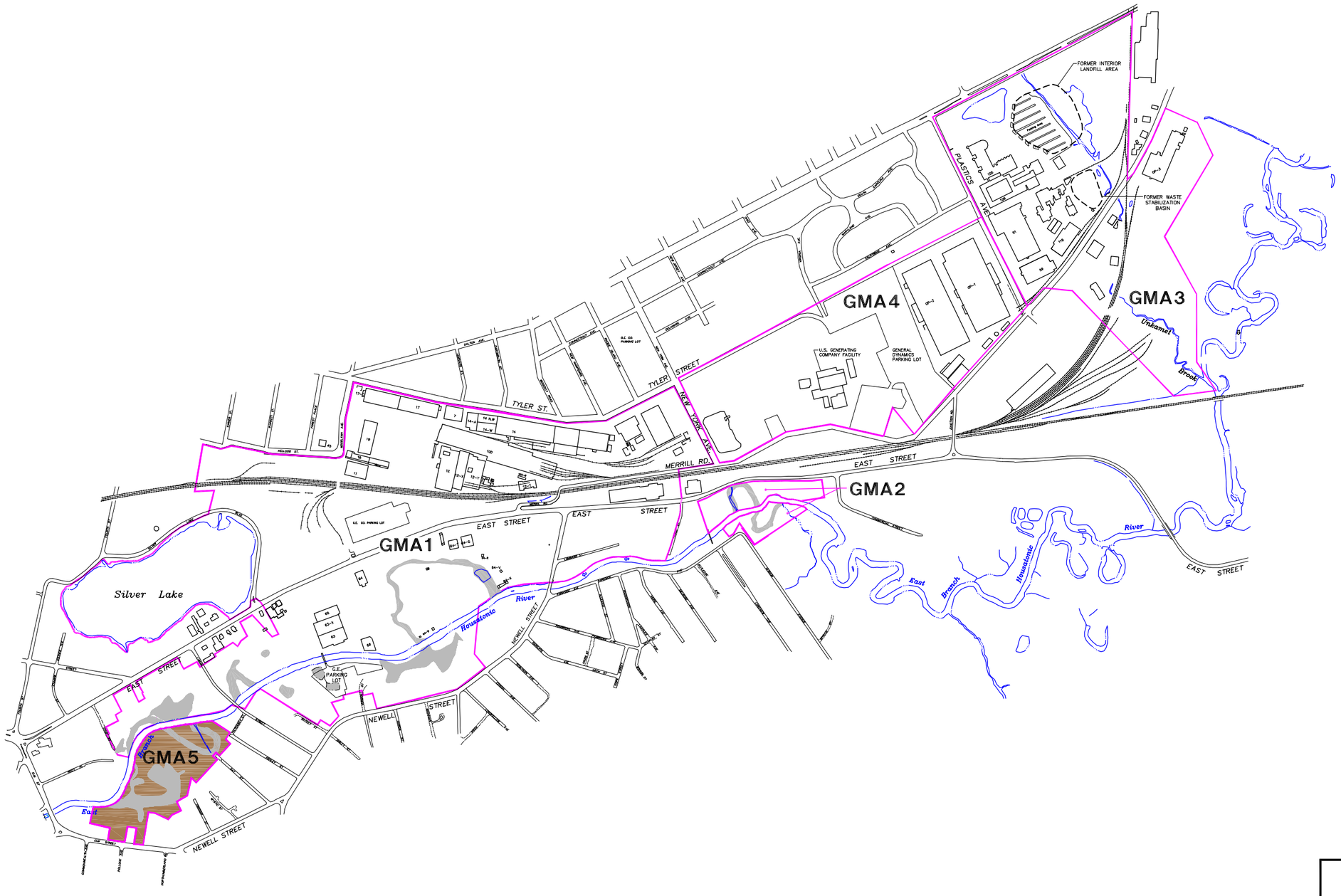
Well Number	Monitoring Well Usage	Proposed Sampling Schedule & Analyses		Comments
		Sampling Schedule	Proposed Analyses	
GMA5-1	Groundwater Elevation	None	None	Groundwater elevation monitoring only
GMA5-3	Groundwater Elevation	None	None	Groundwater elevation monitoring only
GMA5-4	Groundwater Elevation	None	None	No additional long-term sampling for cadmium is proposed as it was only detected during one of six sampling events at this well.
GMA5-5	Groundwater Elevation	None	None	No long-term sampling needs identified after completion of supplemental sampling conducted in fall 2007.
GMA5-7	GW-2 Sentinel/GW-3 Perimeter (GW-2/GW-3 Compliance Well)	Semi-Annual	VOC	Additional long-term sampling to be conducted to verify attainment of GW-2 Performance Standards for vinyl chloride and PCE .
GMA5-8	Groundwater Elevation	None	None	Groundwater elevation monitoring only
GMA5-9	GW-2 Sentinel	Spring 2008	VOC	Additional sampling proposed as part of PCE assessment (see Note 2).
GMA5-10	GW-2 Sentinel	Spring 2008	VOC	Additional sampling proposed as part of PCE assessment (see Note 2).
GES-8	Groundwater Elevation - Elm Street Mobil	None	None	Groundwater elevation monitoring only
GT-7	Groundwater Elevation - Elm Street Mobil	None	None	Groundwater elevation monitoring only
GT-101	Groundwater Elevation - Elm Street Mobil	None	None	Groundwater elevation monitoring only

NOTE:

1. The wells proposed for long-term groundwater quality sampling under a semi-annual schedule will be sampled for the listed parameters during the spring and fall seasons, generally during the months of April and October. The next scheduled sampling round is proposed to be conducted in spring 2008.
2. Wells GMA5-9 and GMA5-10 were installed, sampled, and analyzed for VOCs during the fall 2007 sampling event to assess PCE concentrations in groundwater across this portion of the GMA. GE proposes to conduct an additional supplemental sampling round at these locations in spring 2008. Any additional sampling, if necessary, will be proposed in the Spring 2008 Monitoring Event Evaluation Report.

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

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. CONSTRUCTION PLANS.
2. NOT ALL PHYSICAL FEATURES SHOWN.
3. SITE BOUNDARIES/LIMITS ARE APPROXIMATE.

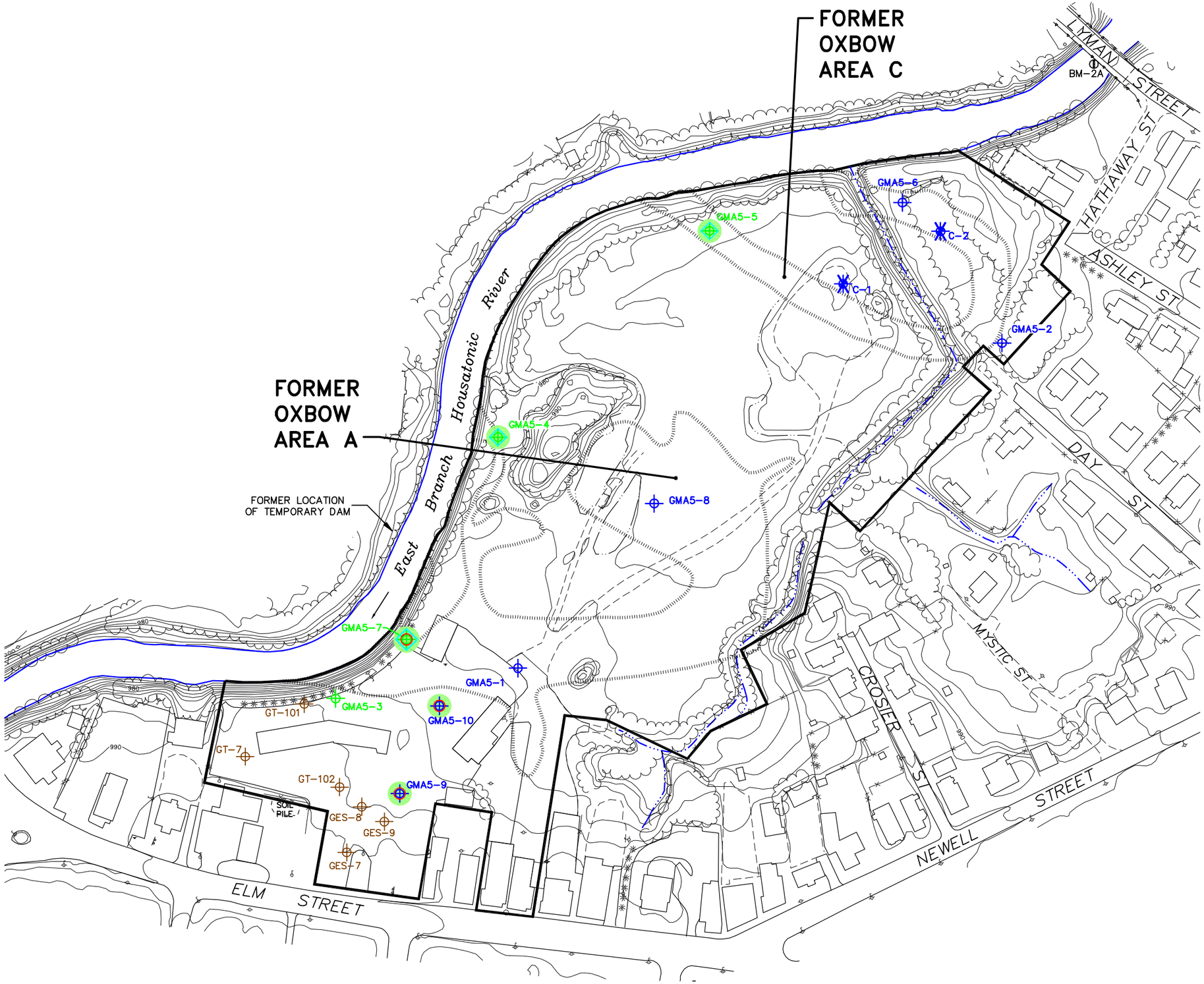
0 500' 1000'
APPROXIMATE SCALE

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS
GMA 5 GROUNDWATER QUALITY MONITORING PROGRAM

GROUNDWATER MANAGEMENT AREAS

ARCADIS

FIGURE
1



LEGEND:

- GMA 5 SITE BOUNDARY
- FORMER OXBOW/LOW-LYING AREA
- FENCE
- DITCHES/STREAMS WITH INTERMITTENT FLOW
- MONITORING WELL (OR)
- STAFF GAUGE
- ADJACENT MCP DISPOSAL SITE MONITORING WELL
- GW-2 SENTINEL/ COMPLIANCE WELL
- GENERAL SOURCE AREA/SENTINEL WELL (GW-3)
- GW-3 PERIMETER WELL
- GW-3 COMPLIANCE POINT
- WELL SAMPLED IN FALL 2007
- DECOMMISSIONED MONITORING WELL

NOTES:

1. MAPPING IS BASED ON AERIAL PHOTOGRAPHS AND PHOTOGRAMMETRIC MAPPING BY LOCKWOOD MAPPING, INC. FLOWN IN APRIL 1990; DATA PROVIDED BY GENERAL ELECTRIC COMPANY AND BLASLAND AND BOUCK ENGINEERS, P.C. CONSTRUCTION PLANS.
2. FORMER RIVER CHANNEL AND LOWLAND AREAS DELINEATED USING THE CITY OF PITTSFIELD'S RECHANNELIZATION MAPPING, 1940.
3. NOT ALL PHYSICAL FEATURES SHOWN.
4. SITE PROPERTY BOUNDARIES ARE APPROXIMATE.
5. ALL MONITORING WELL LOCATIONS ARE APPROXIMATE.

0 150' 300'

GRAPHIC SCALE

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

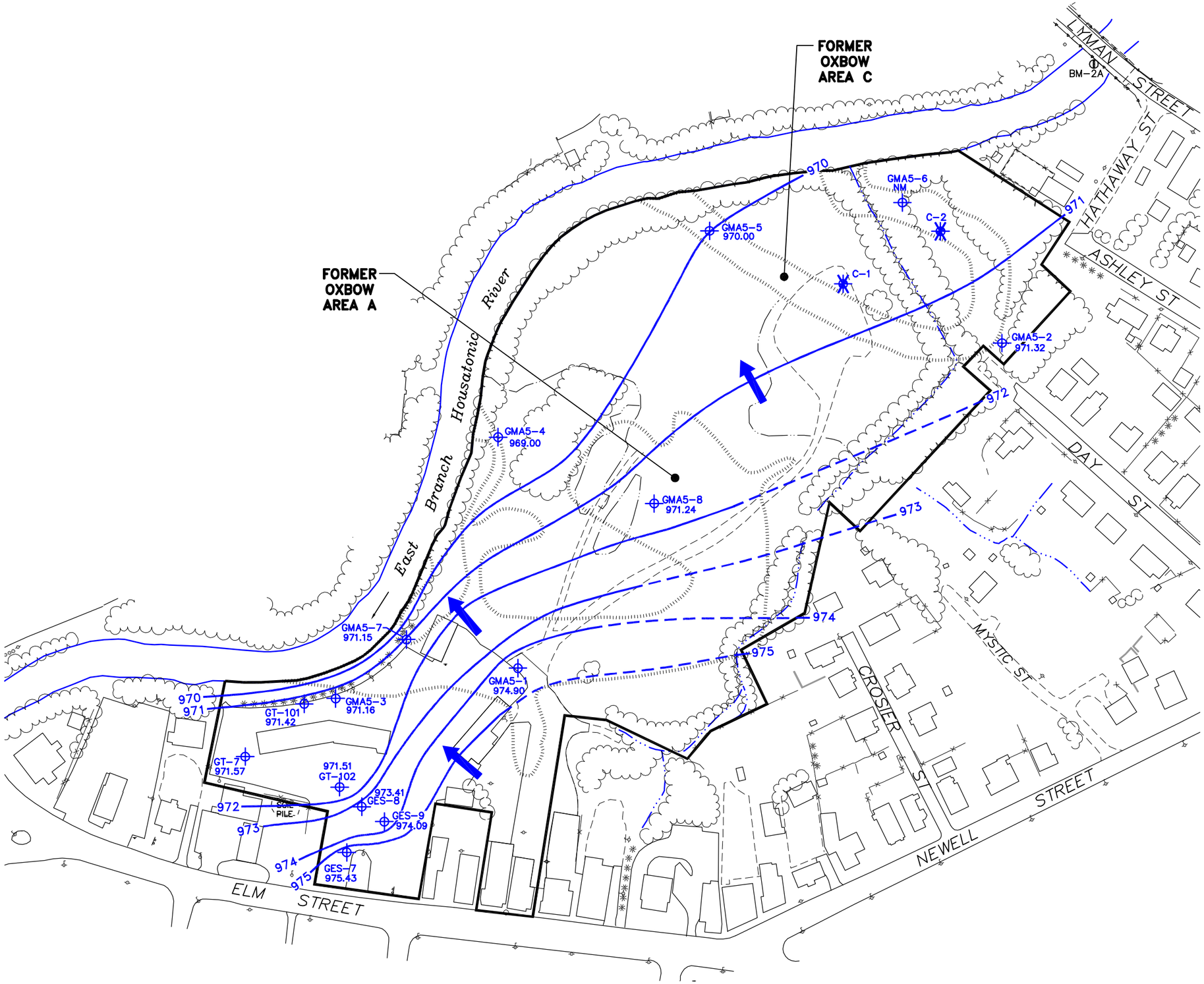
GMA 5 GROUNDWATER QUALITY MONITORING PROGRAM

MONITORING WELL LOCATIONS

ARCADIS

FIGURE **2**

CITY: SYRACUSE DIV:85/GROUP: ENV DB: NES PGL.DMW PM:NS LYR:(Opt)ON=*;OFF=REF*,(FRZ)
G:\CAD\GE-CADN-ACT\B0030131\0000\000004\DWG\30131B11.DWG LAYOUT: 2 SAVED: 3/17/2008 2:49 PM ACADVER: 17.0S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: PLTFULL.CTB PLOTTED: 3/19/2008 8:29 AM BY: WODARCZYK, DAVID
XREFS: IMAGES: PROJECTNAME: ----
30131X01



LEGEND:

- GMA 5 BOUNDARY
- FORMER OXBOW/LOW-LYING AREA
- FENCE
- STREAMS WITH INTERMITTENT FLOW
- MONITORING WELL
- STAFF GAUGE
- 974.26 GROUNDWATER ELEVATION (FT AMSL)
- 974 GROUNDWATER ELEVATION CONTOUR (FT AMSL), DASHED WHERE INFERRED
- DECOMMISSIONED MONITORING PROGRAM WELL
- GROUNDWATER FLOW

NOTE:

1. MAPPING IS BASED ON AERIAL PHOTOGRAPHS AND PHOTOGRAMMETRIC MAPPING BY LOCKWOOD MAPPING, INC. FLOWN IN APRIL 1990; DATA PROVIDED BY GENERAL ELECTRIC COMPANY AND BLASLAND AND BOUCK ENGINEERS, P.C. CONSTRUCTION PLANS.
2. FORMER RIVER CHANNEL AND LOWLAND AREAS DELINEATED USING THE CITY OF PITTSFIELD'S RECHANNELIZATION MAPPING, 1940
3. NOT ALL PHYSICAL FEATURES SHOWN.
4. SITE PROPERTY BOUNDARIES ARE APPROXIMATE.
5. ALL MONITORING WELL LOCATIONS ARE APPROXIMATE.
6. GROUNDWATER LEVEL MEASUREMENTS OBTAINED OCTOBER 31, 2007 AND NOVEMBER 1, 2007.
7. RIVER ELEVATION AT LYMAN STREET BRIDGE ON OCTOBER 29, 2007: 970.34 FT. AMSL.

0 150' 300'

GRAPHIC SCALE

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS
GMA 5 GROUNDWATER QUALITY MONITORING PROGRAM

WATER TABLE CONTOUR MAP - FALL 2007

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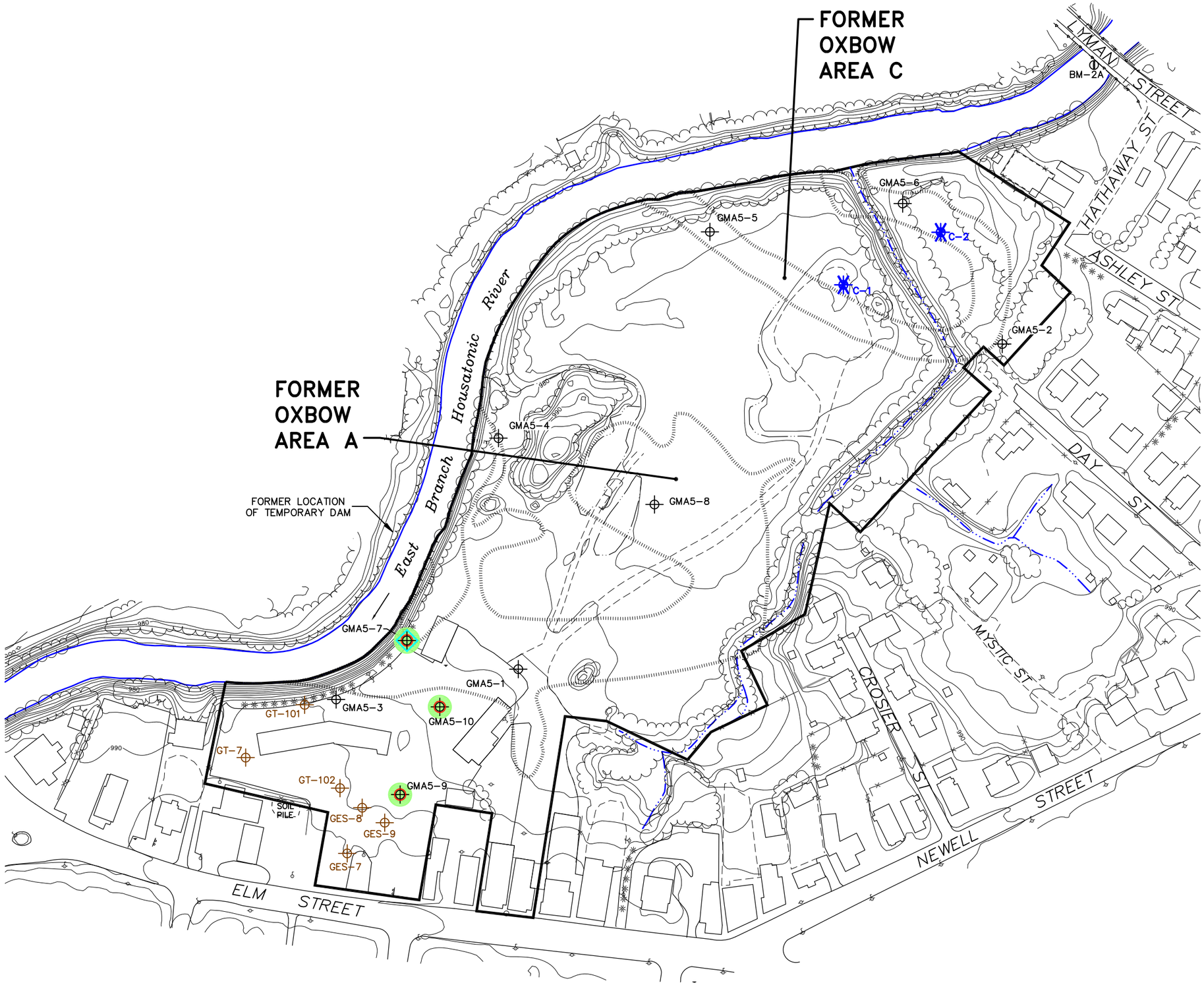
FIGURE 3



LEGEND:

- GMA 5 SITE BOUNDARY
- FORMER OXBOW/LOW-LYING AREA
- FENCE
- DITCHES/STREAMS WITH INTERMITTENT FLOW
- MONITORING WELL
- STAFF GAUGE
- ADJACENT MCP DISPOSAL SITE MONITORING WELL
- GW-2 SENTINEL/ COMPLIANCE WELL
- GW-3 PERIMETER WELL
- WELL TO BE SAMPLED IN SPRING 2008
- DECOMMISSIONED MONITORING WELL

NOTES:

1. MAPPING IS BASED ON AERIAL PHOTOGRAPHS AND PHOTOGRAMMETRIC MAPPING BY LOCKWOOD MAPPING, INC. FLOWN IN APRIL 1990; DATA PROVIDED BY GENERAL ELECTRIC COMPANY AND BLASLAND AND BOUCK ENGINEERS, P.C. CONSTRUCTION PLANS.
2. FORMER RIVER CHANNEL AND LOWLAND AREAS DELINEATED USING THE CITY OF PITTSFIELD'S RECHANNELIZATION MAPPING, 1940.
3. NOT ALL PHYSICAL FEATURES SHOWN.
4. SITE PROPERTY BOUNDARIES ARE APPROXIMATE.
5. ALL MONITORING WELL LOCATIONS ARE APPROXIMATE.

0 150' 300'

GRAPHIC SCALE

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS
GMA 5 GROUNDWATER QUALITY MONITORING PROGRAM

PROPOSED SPRING 2008 GROUNDWATER MONITORING PROGRAM

ARCADIS

FIGURE
4

CITY: SYRACUSE DIV: 85/GROUP: ENV DB: NES DMW AMS PM:NS LYR:(Op)ON=*OFF=REF* (FRZ)
G:\CADGE-CADIN-ACT\B003013100000004\DWG\30131B13.DWG LAYOUT: 4 SAVED: 3/20/2008 3:05 PM ACADVER: 17.0S (LMS TECH) PAGESETUP: --- PLOTSTYLETABLE: PLTFULL.CTB PLOTTED: 3/20/2008 3:06 PM BY: SCHILLING, ADAM
XREFS: IMAGES: PROJECTNAME: ---
30131X01

Appendices

ARCADIS

Appendix A

Field Sampling Data

Table A-1
Summary Of Groundwater Sampling Methods

Groundwater Management Area 5 Long-Term Monitoring Program
Monitoring Event Evaluation Report for Fall 2007
General Electric Company-Pittsfield, Massachusetts

Well ID	Sampling Method								
	Spring 2002	Fall 2002	Spring 2003	Fall 2003	Spring 2004	Fall 2005	Spring 2006	Fall 2006	Fall 2007
GMA5-4	PP/BA	PP	PP	PP	NS	NS	NS	PP	PP
	Spring 2003: Water in outer cover of flush-mount protective casing. Fall 2002: Flush-mount protective casing filled with water, pumped water out to open well. Spring 2002: VOCs collected with a disposable teflon bailer.								
GMA5-5	PP	PP	PP	PP	NS	NS	NS	NS	PP
	Fall 2002: Surface water surrounded well due to new drainage pattern; high turbidity (>50 NTU) in groundwater. Flow adjusted during pumping to reduce turbidity.								
GMA5-7	BP	PP	BP	BP	BP	NS	BP	BP	BP
	Fall 2005: Sampling postponed due to operation of temporary dam across Housatonic River.								
GMA5-9	NS	NS	NS	NS	NS	NS	NS	NS	BP
	Fall 2007: Well installed and added to monitoring program. Water level below top of pump, unable to measure during purging.								
GMA5-10	NS	NS	NS	NS	NS	NS	NS	NS	BP
	Fall 2007: Well installed and added to monitoring program.								

Notes:

1. Sampling method abbreviations:
   BP - Bladder Pump.
   PP - Peristaltic Pump.
   PP/BA - Peristaltic Pump with Bailer used for VOC sample collection.
   NS - Not Sampled.
2. Baseline monitoring program conducted from spring 2002 to fall 2003, and fall 2006.
3. Interim/baseline sampling conducted at select wells from spring 2004 to spring 2006.
4. Long-term monitoring program initiated in fall 2007.

GROUNDWATER SAMPLING LOG

Well No. GMA5-4
Key No. —
PID Background (ppm) 0
Well Headspace (ppm) 0

Site/GMA Name GMA5
Sampling Personnel RKH, RAB
Date 11/5/07
Weather Heavy Rain

WELL INFORMATION

Reference Point Marked? Y N
Height of Reference Point ____ Meas. From ____
Well Diameter 2"
Screen Interval Depth 8.09-18.09 Meas. From Ground
Water Table Depth 9.15 Meas. From TIC @ 9.15
Well Depth 19.10 Meas. From TIC
Length of Water Column 9.95'
Volume of Water in Well 1.62 gallons
Intake Depth of Pump/Tubing ~~14~~ 13' 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 1650
Sample ID ~~GMA5-4~~ GMA5-4
Duplicate ID —
MS/MSD —
Split Sample ID —

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

EVACUATION INFORMATION

Pump Start Time 1315
Pump Stop Time 1700
Minutes of Pumping 105
Volume of Water Removed 4.5 gallons
Did Well Go Dry? Y (N)

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

Water Quality Meter Type(s) / Serial Numbers: YSI-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]*
1315	200	—	9.20	—	—	—	319	—	—
1327	↓	0.63	9.15	—	—	—	314	—	—
1330		0.79	9.15	—	—	—	279	—	—
1335	↓	1.06	9.15	—	—	—	219	—	—
1340	200	1.32	9.15	—	—	—	159	—	—
1345	150	1.52	9.15	—	—	—	71	—	—
1350	150	1.72	9.15	—	—	—	69	—	—
1355	150	1.92	9.15	—	—	—	67	—	—
1600	150	2.12	9.15	—	—	—	53	—	—
1605	150	2.32	9.10	—	—	—	57	—	—
1610	150	2.52	9.10	—	—	—	42	—	—
1615	150	2.72	9.08	10.80	6.85	1.218	34	1.40	-37.4

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

OBSERVATIONS/SAMPLING METHOD DEVIATIONS 3 cfm Bottom

SAMPLE DESTINATION

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

Field Sampling Coordinator: [signature]

GROUNDWATER SAMPLING LOG

Well No. GMA 5-4 Site/GMA Name GMA-5

Sampling Personnel RAB

Date 4/25/07

Weather Heavy Rain

WELL INFORMATION - See Page 1

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)*	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
1620	150	2.92	9.08	11.17	6.87	1.222	30	0.99	-42.5
1625 ~~1624~~	150	3.12	9.08	11.42	6.86	1.223	29	0.90	-42.6
1630	150	3.32	9.08	11.43	6.89	1.223	17	0.83	-44.5 -44.5
1635	150	3.52	9.08	11.18	6.86	1.223	18	0.74	-42.5
1640	150	3.72	9.08	11.43	6.87	1.223	19	0.66	-43.3
1643	150	3.92	9.08	11.61	6.87	1.223	14	0.61	-42.7
1646	150	4.12	9.08	11.55 ~~11.70~~	6.88	1.225	14	0.61	-43.0
1649	150	4.32	9.08	11.72	6.87	1.217	14	0.59	-43.5

* 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. GMA5-5
Key No. —
PID Background (ppm) —
Well Headspace (ppm) —

Site/GMA Name GMA5/GE Pittsfield
Sampling Personnel KC
Date 11/15/07
Weather 40 rainy

WELL INFORMATION

Reference Point Marked? Y N
Height of Reference Point ____ Meas. From ____
Well Diameter 2"
Screen Interval Depth 6.77-21.77 Meas. From Ground
Water Table Depth 12.16 Meas. From TIC
Well Depth 18.7 Meas. From TIC
Length of Water Column 6.55'
Volume of Water in Well 1.07 gallons
Intake Depth of Pump/Tubing 16.5 Meas. From TIC

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

Redevelop? Y (N)

Sample Time 1600
Sample ID GMA5-5
Duplicate ID GMA5-DUP01
MS/MSD GMA5 MS/MSD
Split Sample ID —

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

EVACUATION INFORMATION

Pump Start Time 1440
Pump Stop Time 2030
Minutes of Pumping 350
Volume of Water Removed 18.5 gallons
Did Well Go Dry? Y (N)

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

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

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
1440	150	—	12.48	—	—	—	347	—	—
1445	200	0.26	12.43	—	—	—	262	—	—
1450		0.52	12.41	—	—	—	216	—	—
1455		0.78	12.49	—	—	—	220	—	—
1500		1.04	12.40	—	—	—	220	—	—
1505		1.30	12.41	—	—	—	138	—	—
1510		1.56	12.39	—	—	—	92	—	—
1515		1.82	12.38	—	—	—	81	—	—
1520		2.08	12.37	—	—	—	71	—	—
1525		2.34	12.38	—	—	—	49	—	—
1530		2.60		9.87	6.69	1.377	43	1.04	-79.0
1535	↓	2.86		9.97	6.666	1.377	39	0.44	-84.1

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

OBSERVATIONS/SAMPLING METHOD DEVIATIONS
Initial purge, strong odor, dark brown water, lots of solids.

SAMPLE DESTINATION

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

Field Sampling Coordinator: [signature]

GROUNDWATER SAMPLING LOG

Well No. GMA5-5

Site/GMA Name GMA5/GE Pittsfield

Sampling Personnel KC

Date 11/15/07

Weather 40, rainy

Sampled at 1600

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]*
1540	200	3.12	12.95	10.05	6.68	1.367	30	0.39	-84.5
1545	↓	3.38	12.98	10.34	6.67	1.337	27	1.24	-87.5
1550		3.64	13.01	10.27	6.67	1.341	25	1.18	-87.4
1555	↓	3.90	13.11	10.32	6.66	1.329	26	1.19	-87.4

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

OBSERVATIONS/SAMPLING METHOD DEVIATIONS

1555: all parameters stable but turb, purging for 1hr + ~~turb~~ turb below 50 ntu, started sampling

GMA5-7

GROUNDWATER SAMPLING LOG

Well No. ~~GMA5-5~~
Key No. —
PID Background (ppm) —
Well Headspace (ppm) —

Site/GMA Name GMA5 / CRA Pittsfield
Sampling Personnel KJC
Date 11/15/07
Weather Cloudy/Rain 40's

WELL INFORMATION

Reference Point Marked? Y N
Height of Reference Point ____ Meas. From ____
Well Diameter 2"
Screen Interval Depth 8-28' Meas. From Ground
Water Table Depth 15.48' Meas. From TIC
Well Depth 27.58 Meas. From TIC
Length of Water Column 12.1'
Volume of Water in Well 1.97 gallons
Intake Depth of Pump/Tubing ~23' 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 ~~TIC~~ 1245
Sample ID GMA5-7
Duplicate ID —
MS/MSD —
Split Sample ID —

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

EVACUATION INFORMATION

Pump Start Time 1130
Pump Stop Time 1255
Minutes of Pumping 85
Volume of Water Removed 3.5 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 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]*
1135	150	0.20	15.08	—	—	—	—	—	—
1140		0.40	17.61	—	—	—	129	—	—
1145		0.60	17.68	—	—	—	60	—	—
1150		0.80	17.71	—	—	—	32	—	—
1155		1.00	17.15	—	—	—	19	—	—
1200		1.20	16.89	11.15	6.81	0.759	18	9.47	-51.4
1205		1.40	16.65	10.53	6.82	0.755	16	7.49	-38.6
1210	↓	1.60	16.51	9.76	6.82	0.755	14	6.60	-31.6

* 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

1155 Hooked up to YSI.

SAMPLE DESTINATION

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

Field Sampling Coordinator:

GROUNDWATER SAMPLING LOG

Well No. GMA5-7

Site/GMA Name GMA 5/GE Pittsfield

Sampling Personnel KLC

Date 11/15/07

Weather cloudy, rain, 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]*
1215	150	1.80	16.71	10.60	6.84	0.748	12	3.40	-15.8
1220	↓	2.00	16.73	10.57	6.84	0.749	11	2.45	-15.9
1225		2.20	16.75	10.65	6.84	0.748	9	1.29	-17.9
1230		2.40	16.78	10.43	6.83	0.750	9	1.09	-16.9
1235		2.60	~~16.36~~	10.36	6.83	0.750	8	0.99	-15.9
1240	↓	2.80	16.82	10.39	6.83	0.750	8	1.05	-15.2

* 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 @1235 depth to = 16.80

GROUNDWATER SAMPLING LOG

Well No. GMA 5-9
Key No.
PID Background (ppm)
Well Headspace (ppm)

Site/GMA Name GMA 5 / Pittsfield
Sampling Personnel Emc / TJT
Date 12/17/07
Weather overcast, windy, 12° F

WELL INFORMATION

Reference Point Marked? Y N
Height of Reference Point n/m Meas. From TIC
Well Diameter 2"
Screen Interval Depth 12-22 Meas. From Ground
Water Table Depth 15.96 Meas. From TIC
Well Depth 21.38 Meas. From TIC
Length of Water Column 5.42
Volume of Water in Well .883
Intake Depth of Pump/Tubing 18.67 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 1425
Sample ID GMA 5-9
Duplicate ID
MS/MSD
Split Sample ID

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

EVACUATION INFORMATION

Pump Start Time 1345
Pump Stop Time 1420
Minutes of Pumping 35
Volume of Water Removed ~~[illegible]~~ 750ml
Did Well Go Dry? Y (N)

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

Water Quality Meter Type(s) / Serial Numbers: YSI # 03M0230

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]*
~~1345~~ 1345	100		17.3	9.29	6.70	2721	195	5.98	280
1350	100			10.48	6.65	1.810	66	4.95	273.8
1355	100			10.40	6.83	1.818	37	5.10	272.5
1400	100			9.94	6.76	1.839	19	5.29	273.4
1405	100			9.72	6.76	1.858	14	5.24	275.8
1410	100			9.28	6.74	1882	12	5.28	277.5
1415	75			8.69	6.83	1.897	13	5.40	275.4
1420	75			8.63	6.76	1.901	12	5.54	277.0

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

OBSERVATIONS/SAMPLING METHOD DEVIATIONS

SAMPLE DESTINATION

Laboratory: STL
Delivered Via:
Airbill #:

Field Sampling Coordinator: Eric Cimmler

GROUNDWATER SAMPLING LOG

Well No. GMA5-10
Key No. —
PID Background (ppm) —
Well Headspace (ppm) —

Site/GMA Name GMA5 / Pittsfield
Sampling Personnel Eric / TT
Date 12/12/07
Weather Cloudy, 20°F.

WELL INFORMATION

Reference Point Marked? Y (N)
Height of Reference Point — Meas. From TIC
Well Diameter 2"
Screen Interval Depth 3.79-13.79 Meas. From TIC ground
Water Table Depth 13.76 Meas. From TIC
Well Depth 18.72 Meas. From TIC
Length of Water Column 5.02
Volume of Water in Well .818
Intake Depth of Pump/Tubing 16.21 Meas. From TIC

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

Redevelop? Y (N)

Sample Time 10:40
Sample ID GMA5-10
Duplicate ID Dup-001
MS/MSD GMA5-10 MS
Split Sample ID GMA5-10 MSD

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

EVACUATION INFORMATION

Pump Start Time 0945
Pump Stop Time 11:00
Minutes of Pumping 75
Volume of Water Removed 1280 ml
Did Well Go Dry? Y (N)

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

Water Quality Meter Type(s) / Serial Numbers: YSI # 08M0230

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
10:00	160		13.82	10.67	6.31	1.932	18	4.12	-18.3
10:05	160		13.85	11.27	6.57	1.929	13	1.36	-41.9
10:10	160		13.93	11.66	6.48	1.935	11	.76	-50.9
10:15	160		13.95	11.87	6.48	1.949	14	.44	-54.5
10:20	160		13.95	11.73	6.50	1.948	8	.38	-58.5
10:25	160		14.00	11.76	6.49	1.945	5	.33	-62.4
10:30	160		14.01	11.79	6.92	1.947	4	.27	-62.7
10:35	160		14.02	11.95	6.47	1.945	4	.29	-63.8

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

OBSERVATIONS/SAMPLING METHOD DEVIATIONS

Start pumping @ 0945. Turbidity 441. Purged for 15 min. Turb below 50 @ 10:00.

SAMPLE DESTINATION

Laboratory: STL
Delivered Via: —
Airbill #: —

Field Sampling Coordinator: [signature]

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Appendix B

Soil Boring Logs

Date Start/Finish: 11/28/07 - 11/29/07
Drilling Company: Parratt-Wolff, Inc.
Driller's Name: Rick/Joe
Drilling Method: Hollow-Stem Auger
Auger Size 4.25"
Rig Type: CME-55

Northing: 531276.20
Easting: 129834.80
Casing Elevation: 989.88

Borehole Depth: 22'
Surface Elevation: 989.72

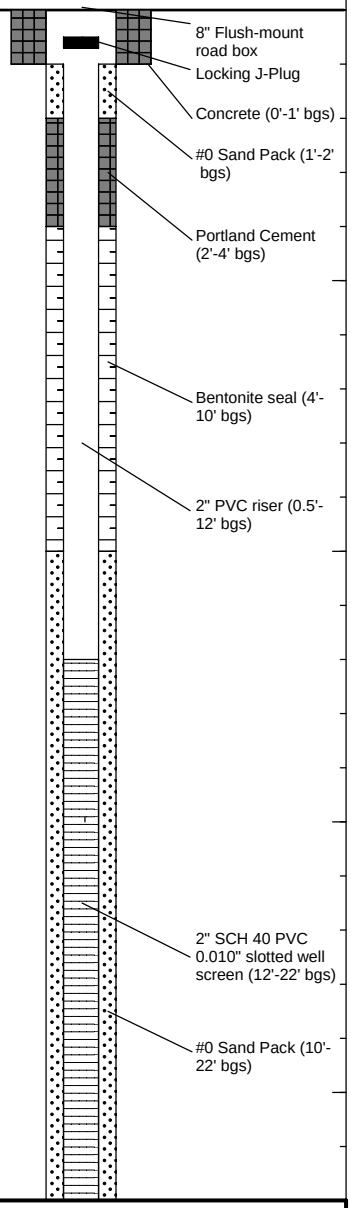
Descriptions By: R. Stevenson

Well/Boring ID: **GMA5-9**

Client: General Electric Company

Location: GMA5-9
Pittsfield, Massachusetts

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	Blow Counts	N - Value	PID Headspace (ppm)	Geologic Column	Stratigraphic Description
0	990			NA	NA				Brown, damp, FILL MATERIAL, some fine sand, little cobbles, little gravel.
5	985	ss-1		0.1	4 3				Dark brown, damp, FINE SAND, little gravel, loose.
		ss-2		1.2	2 3 2 3				Brown, damp, FINE SAND, trace gravel, loose.
		ss-3		1.4	4 5 6 6				Brown, damp, FINE SAND, little silt, trace gravel, dense.
10	980	ss-4		0.7	4 5 6 6				Grayish brown, damp, FINE SAND, moderately loose.
		ss-5		1.3	3 2 2 4				Grayish brown, wet, SILT, some clay, trace gravel, dense.
15	975	ss-6		1.1	2 4 3 14				
		ss-7		0.3	9 9 11 9				
		ss-8		0.3	5 7 7 7				
20	970	ss-9		1.3	7 12 9 9				SAA, trace cobbles. END OF BORING



Remarks: NA = not available; SAA = same as above; bgs = below ground surface; PVC = polyvinyl chloride; SCH = schedule; ppm = parts per million.

ARCADIS
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Date Start/Finish: 11/28/07
Drilling Company: Parratt-Wolff, Inc.
Driller's Name: Rick/Joe
Drilling Method: Hollow-Stem Auger
Auger Size 4.25"
Rig Type: CME-55

Northing: 531407.9
Easting: 987.57
Casing Elevation: 987.11

Borehole Depth: 19'
Surface Elevation: 987.11

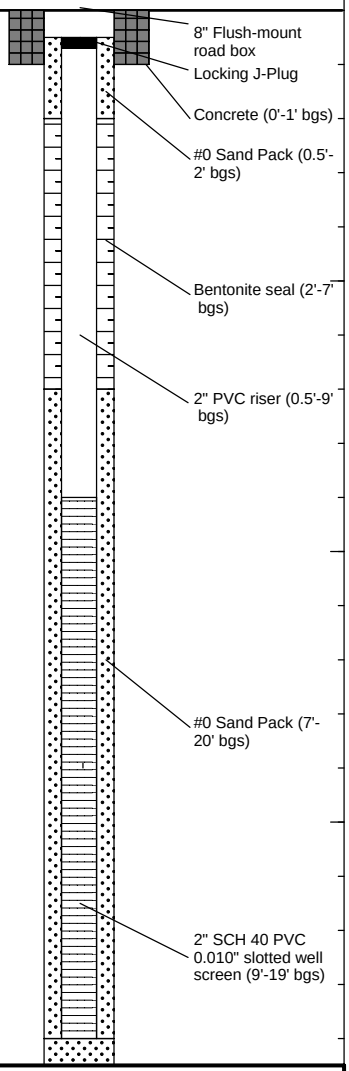
Descriptions By: R. Stevenson

Well/Boring ID: **GMA5-10**

Client: General Electric Company

Location: GMA5-10
Pittsfield, Massachusetts

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	Blow Counts	N - Value	PID Headspace (ppm)	Geologic Column	Stratigraphic Description
	990								
0									Brownish gray, damp, FILL MATERIAL (concrete, brick, wood), some fine sand, little gravel, trace cobbles, loose.
	985			NA	NA				
5		ss-1		0.7	4 6				Brownish gray, damp, FINE SAND, little cobbles, trace gravel, trace silt; rock in tip of spoon.
	980	ss-2		0.9	4 5 5 7				Dark brownish gray, damp, FINE SAND, little gravel, trace silt.
		ss-3		0.1	5 7 7 5				SAA; rock in tip of spoon.
10		ss-4		NR	7 3 3 2				No recovery, rock in tip of spoon.
	975	ss-5		0.2	4 3 1 2				Dark brownish gray, damp, FINE SAND, little gravel, trace silt.
15		ss-6		0.8	2 2 2 2				Dark gray, saturated, FINE SAND and SILT, trace gravel, trace wood.
	970	ss-7		2.0	3 3 5 4				Dark gray, saturated, SILT, little fine sand, trace clay, dense.
		ss-8		1.3	4 7 7 9				Gray, saturated, FINE SAND. Light olive brown, saturated, SILT and CLAY, trace fine sand.



Well/Boring Construction

Remarks: NA = not available; SAA = same as above; bgs = below ground surface; PVC = polyvinyl chloride; SCH = schedule; ppm = parts per million.

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Appendix C

Validated Groundwater
Analytical Results – Fall 2007

Table C-1
Fall 2007 Groundwater Analytical Results

Groundwater Management Area 5 Long-Term Monitoring Program
Monitoring Event Evaluation Report for Fall 2007
General Electric Company - Pittsfield, Massachusetts
(Results are presented in parts per million, ppm)

Sample ID: / Parameter / Date Collected:	GMA5-4 11/15/07	GMA5-5 11/15/07	GMA5-7 11/15/07	GMA5-9 12/17/07	GMA5-10 12/18/07
Volatile Organics					
1,1,1,2-Tetrachloroethane	NA	ND(0.0010) [ND(0.0010)]	ND(0.0010)	ND(0.0010)	ND(0.0010) [ND(0.0010)]
1,1,1-Trichloroethane	NA	ND(0.0010) [ND(0.0010)]	ND(0.0010)	ND(0.0010)	ND(0.0010) [ND(0.0010)]
1,1,2,2-Tetrachloroethane	NA	ND(0.0010) [ND(0.0010)]	ND(0.0010)	ND(0.0010)	ND(0.0010) [ND(0.0010)]
1,1,2-Trichloroethane	NA	ND(0.0010) [ND(0.0010)]	ND(0.0010)	ND(0.0010)	ND(0.0010) [ND(0.0010)]
1,1-Dichloroethane	NA	ND(0.0010) [ND(0.0010)]	ND(0.0010)	ND(0.0010)	ND(0.0010) [ND(0.0010)]
1,1-Dichloroethene	NA	ND(0.0010) [ND(0.0010)]	ND(0.0010)	ND(0.0010)	ND(0.0010) [ND(0.0010)]
1,2,3-Trichloropropane	NA	ND(0.0010) [ND(0.0010)]	ND(0.0010)	ND(0.0010)	ND(0.0010) [ND(0.0010)]
1,2-Dibromo-3-chloropropane	NA	ND(0.0050) J [ND(0.0050) J]	ND(0.0050) J	ND(0.0050) J	ND(0.0050) J [ND(0.0050) J]
1,2-Dibromoethane	NA	ND(0.0010) [ND(0.0010)]	ND(0.0010)	ND(0.0010)	ND(0.0010) [ND(0.0010)]
1,2-Dichloroethane	NA	ND(0.0010) [ND(0.0010)]	ND(0.0010)	ND(0.0010)	ND(0.0010) [ND(0.0010)]
1,2-Dichloropropane	NA	ND(0.0010) [ND(0.0010)]	ND(0.0010)	ND(0.0010)	ND(0.0010) [ND(0.0010)]
1,4-Dioxane	NA	ND(0.10) J [ND(0.10) J]	ND(0.10) J	ND(0.10) J	ND(0.10) J [ND(0.10) J]
2-Butanone	NA	ND(0.0050) J [ND(0.0050) J]	ND(0.0050) J	ND(0.0050) J	ND(0.0050) J [ND(0.0050) J]
2-Chloro-1,3-butadiene	NA	ND(0.0010) [ND(0.0010)]	ND(0.0010)	ND(0.0010)	ND(0.0010) [ND(0.0010)]
2-Chloroethylvinylether	NA	R [ND(0.013) J]	ND(0.013) J	ND(0.013) J	R [ND(0.013) J]
2-Hexanone	NA	ND(0.0050) [ND(0.0050)]	ND(0.0050)	ND(0.0050)	ND(0.0050) [ND(0.0050)]
3-Chloropropene	NA	ND(0.0010) [ND(0.0010)]	ND(0.0010)	ND(0.0010)	ND(0.0010) [ND(0.0010)]
4-Methyl-2-pentanone	NA	ND(0.0050) J [ND(0.0050) J]	ND(0.0050) J	ND(0.0050)	ND(0.0050) [ND(0.0050)]
Acetone	NA	ND(0.0050) J [ND(0.0050) J]	ND(0.0050) J	ND(0.0050) J	ND(0.0050) J [ND(0.0050) J]
Acetonitrile	NA	ND(0.020) J [ND(0.020) J]	ND(0.020) J	ND(0.020) J	ND(0.020) J [ND(0.020) J]
Acrolein	NA	ND(0.025) J [ND(0.025) J]	ND(0.025) J	ND(0.025) J	ND(0.025) J [ND(0.025) J]
Acrylonitrile	NA	ND(0.025) J [ND(0.025) J]	ND(0.025) J	ND(0.025) J	ND(0.025) J [ND(0.025) J]
Benzene	NA	0.00034 J [0.00032 J]	ND(0.0010)	ND(0.0010)	ND(0.0010) [ND(0.0010)]
Bromodichloromethane	NA	ND(0.0010) [ND(0.0010)]	ND(0.0010)	ND(0.0010)	ND(0.0010) [ND(0.0010)]
Bromoform	NA	ND(0.0010) [ND(0.0010)]	ND(0.0010)	ND(0.0010)	ND(0.0010) [ND(0.0010)]
Bromomethane	NA	ND(0.0010) J [ND(0.0010) J]	ND(0.0010) J	ND(0.0010)	ND(0.0010) [ND(0.0010)]
Carbon Disulfide	NA	ND(0.0010) [ND(0.0010)]	ND(0.0010)	ND(0.0010)	ND(0.0010) [ND(0.0010)]
Carbon Tetrachloride	NA	ND(0.0010) [ND(0.0010)]	ND(0.0010)	ND(0.0010)	ND(0.0010) [ND(0.0010)]
Chlorobenzene	NA	0.00051 J [0.00050 J]	ND(0.0010)	ND(0.0010)	ND(0.0010) [ND(0.0010)]
Chloroethane	NA	ND(0.0010) [ND(0.0010)]	ND(0.0010)	ND(0.0010) J	ND(0.0010) J [ND(0.0010) J]
Chloroform	NA	ND(0.0010) [ND(0.0010)]	ND(0.0010)	ND(0.0010)	ND(0.0010) [ND(0.0010)]
Chloromethane	NA	ND(0.0010) [ND(0.0010)]	ND(0.0010)	ND(0.0010) J	ND(0.0010) J [ND(0.0010) J]
cis-1,3-Dichloropropene	NA	ND(0.0010) [ND(0.0010)]	ND(0.0010)	ND(0.0010)	ND(0.0010) [ND(0.0010)]
Dibromochloromethane	NA	ND(0.0010) [ND(0.0010)]	ND(0.0010)	ND(0.0010)	ND(0.0010) [ND(0.0010)]
Dibromomethane	NA	ND(0.0010) [ND(0.0010)]	ND(0.0010)	ND(0.0010)	ND(0.0010) [ND(0.0010)]
Dichlorodifluoromethane	NA	ND(0.0010) [ND(0.0010)]	ND(0.0010)	ND(0.0010) J	ND(0.0010) J [ND(0.0010) J]
Ethyl Methacrylate	NA	ND(0.0010) [ND(0.0010)]	ND(0.0010)	ND(0.0010)	ND(0.0010) [ND(0.0010)]
Ethylbenzene	NA	ND(0.0010) [ND(0.0010)]	0.00023 J	ND(0.0010)	ND(0.0010) [ND(0.0010)]
Iodomethane	NA	ND(0.0010) [ND(0.0010)]	ND(0.0010)	ND(0.0010)	ND(0.0010) [ND(0.0010)]
Isobutanol	NA	ND(0.050) J [ND(0.050) J]	ND(0.050) J	ND(0.050) J	ND(0.050) J [ND(0.050) J]
Methacrylonitrile	NA	ND(0.010) J [ND(0.010) J]	ND(0.010) J	ND(0.010)	ND(0.010) [ND(0.010)]
Methyl Methacrylate	NA	ND(0.0010) [ND(0.0010)]	ND(0.0010)	ND(0.0010)	ND(0.0010) [ND(0.0010)]
Methylene Chloride	NA	ND(0.0050) [ND(0.0050)]	ND(0.0050)	ND(0.0050)	ND(0.0050) [ND(0.0050)]
Propionitrile	NA	ND(0.020) J [ND(0.020) J]	ND(0.020) J	ND(0.020) J	ND(0.020) J [ND(0.020) J]
Styrene	NA	ND(0.0010) [ND(0.0010)]	ND(0.0010)	ND(0.0010)	ND(0.0010) [ND(0.0010)]
Tetrachloroethene	NA	ND(0.0010) [ND(0.0010)]	0.024	0.022	ND(0.0010) [ND(0.0010)]
Toluene	NA	0.00023 J [0.00020 J]	ND(0.0010)	ND(0.0010)	0.00016 J [0.00035 J]
trans-1,2-Dichloroethene	NA	ND(0.0010) [ND(0.0010)]	0.0011	ND(0.0010)	ND(0.0010) [ND(0.0010)]
trans-1,3-Dichloropropene	NA	ND(0.0010) [ND(0.0010)]	ND(0.0010)	ND(0.0010)	ND(0.0010) [ND(0.0010)]
trans-1,4-Dichloro-2-butene	NA	ND(0.0050) J [ND(0.0050) J]	ND(0.0050) J	ND(0.0050)	ND(0.0050) [ND(0.0050)]
Trichloroethene	NA	ND(0.0010) [ND(0.0010)]	0.0031	ND(0.0010)	ND(0.0010) [ND(0.0010)]
Trichlorofluoromethane	NA	ND(0.0010) [ND(0.0010)]	ND(0.0010)	ND(0.0010)	ND(0.0010) [ND(0.0010)]
Vinyl Acetate	NA	ND(0.0025) [ND(0.0025)]	ND(0.0025)	ND(0.0025)	ND(0.0025) [ND(0.0025)]
Vinyl Chloride	NA	ND(0.0010) [ND(0.0010)]	0.00061 J	ND(0.0010)	ND(0.0010) [ND(0.0010)]
Xylenes (total)	NA	ND(0.0010) [ND(0.0010)]	ND(0.0010)	ND(0.0010)	ND(0.0010) [ND(0.0010)]
Total VOCs	NA	0.0011 J [0.0010 J]	0.029 J	0.022	0.00016 J [0.00035 J]

Table C-1
Fall 2007 Groundwater Analytical Results

Groundwater Management Area 5 Long-Term Monitoring Program
Monitoring Event Evaluation Report for Fall 2007
General Electric Company - Pittsfield, Massachusetts
(Results are presented in parts per million, ppm)

Sample ID: / Parameter / Date Collected:	GMA5-4 11/15/07	GMA5-5 11/15/07	GMA5-7 11/15/07	GMA5-9 12/17/07	GMA5-10 12/18/07
PCBs-Unfiltered					
Aroclor-1016	NA	ND(0.000065) [ND(0.000065)]	NA	NA	NA
Aroclor-1221	NA	ND(0.000065) [ND(0.000065)]	NA	NA	NA
Aroclor-1232	NA	ND(0.000065) [ND(0.000065)]	NA	NA	NA
Aroclor-1242	NA	ND(0.000065) [ND(0.000065)]	NA	NA	NA
Aroclor-1248	NA	ND(0.000065) [ND(0.000065)]	NA	NA	NA
Aroclor-1254	NA	ND(0.000065) [ND(0.000065)]	NA	NA	NA
Aroclor-1260	NA	0.000050 J [0.000041 J]	NA	NA	NA
Total PCBs	NA	0.000050 J [0.000041 J]	NA	NA	NA
PCBs-Filtered					
Aroclor-1016	NA	ND(0.000068) J [ND(0.000067)]	NA	NA	NA
Aroclor-1221	NA	ND(0.000068) J [ND(0.000067)]	NA	NA	NA
Aroclor-1232	NA	ND(0.000068) J [ND(0.000067)]	NA	NA	NA
Aroclor-1242	NA	ND(0.000068) J [ND(0.000067)]	NA	NA	NA
Aroclor-1248	NA	ND(0.000068) J [ND(0.000067)]	NA	NA	NA
Aroclor-1254	NA	ND(0.000068) J [ND(0.000067)]	NA	NA	NA
Aroclor-1260	NA	ND(0.000068) J [ND(0.000067)]	NA	NA	NA
Total PCBs	NA	ND(0.000068) J [ND(0.000067)]	NA	NA	NA
Semivolatile Organics					
1,2,4,5-Tetrachlorobenzene	NA	ND(0.0050) [ND(0.0050)]	NA	NA	NA
1,2,4-Trichlorobenzene	NA	ND(0.0050) [ND(0.0050)]	NA	NA	NA
1,2-Dichlorobenzene	NA	ND(0.0050) [ND(0.0050)]	NA	NA	NA
1,2-Diphenylhydrazine	NA	ND(0.0050) [ND(0.0050)]	NA	NA	NA
1,3,5-Trinitrobenzene	NA	ND(0.025) [ND(0.025)]	NA	NA	NA
1,3-Dichlorobenzene	NA	ND(0.0050) [ND(0.0050)]	NA	NA	NA
1,3-Dinitrobenzene	NA	ND(0.0050) [ND(0.0050)]	NA	NA	NA
1,4-Dichlorobenzene	NA	ND(0.0050) [ND(0.0050)]	NA	NA	NA
1,4-Naphthoquinone	NA	ND(0.0050) [ND(0.0050)]	NA	NA	NA
1-Naphthylamine	NA	ND(0.025) J [ND(0.025) J]	NA	NA	NA
2,3,4,6-Tetrachlorophenol	NA	ND(0.0050) [ND(0.0050)]	NA	NA	NA
2,4,5-Trichlorophenol	NA	ND(0.0050) [ND(0.0050)]	NA	NA	NA
2,4,6-Trichlorophenol	NA	ND(0.0050) J [ND(0.0050) J]	NA	NA	NA
2,4-Dichlorophenol	NA	ND(0.0050) [ND(0.0050)]	NA	NA	NA
2,4-Dimethylphenol	NA	ND(0.0050) [ND(0.0050)]	NA	NA	NA
2,4-Dinitrophenol	NA	ND(0.025) [ND(0.025)]	NA	NA	NA
2,4-Dinitrotoluene	NA	ND(0.0050) [ND(0.0050)]	NA	NA	NA
2,6-Dichlorophenol	NA	ND(0.0050) [ND(0.0050)]	NA	NA	NA
2,6-Dinitrotoluene	NA	ND(0.0050) [ND(0.0050)]	NA	NA	NA
2-Acetylaminofluorene	NA	ND(0.010) [ND(0.010)]	NA	NA	NA
2-Chloronaphthalene	NA	ND(0.0050) [ND(0.0050)]	NA	NA	NA
2-Chlorophenol	NA	ND(0.0050) [ND(0.0050)]	NA	NA	NA
2-Methylnaphthalene	NA	ND(0.0050) [ND(0.0050)]	NA	NA	NA
2-Methylphenol	NA	ND(0.0050) J [ND(0.0050) J]	NA	NA	NA
2-Naphthylamine	NA	ND(0.025) [ND(0.025)]	NA	NA	NA
2-Nitroaniline	NA	ND(0.0050) [ND(0.0050)]	NA	NA	NA
2-Nitrophenol	NA	ND(0.0050) [ND(0.0050)]	NA	NA	NA
2-Picoline	NA	ND(0.0050) J [ND(0.0050) J]	NA	NA	NA
3&4-Methylphenol	NA	ND(0.0050) J [ND(0.0050) J]	NA	NA	NA
3,3'-Dichlorobenzidine	NA	ND(0.010) [ND(0.010)]	NA	NA	NA
3,3'-Dimethylbenzidine	NA	ND(0.025) [ND(0.025)]	NA	NA	NA
3-Methylcholanthrene	NA	ND(0.0050) [ND(0.0050)]	NA	NA	NA
3-Nitroaniline	NA	ND(0.025) [ND(0.025)]	NA	NA	NA
4,6-Dinitro-2-methylphenol	NA	ND(0.025) [ND(0.025)]	NA	NA	NA
4-Aminobiphenyl	NA	ND(0.0050) [ND(0.0050)]	NA	NA	NA
4-Bromophenyl-phenylether	NA	ND(0.0050) [ND(0.0050)]	NA	NA	NA
4-Chloro-3-Methylphenol	NA	ND(0.0050) J [ND(0.0050)]	NA	NA	NA
4-Chloroaniline	NA	ND(0.025) [ND(0.025)]	NA	NA	NA
4-Chlorobenzilate	NA	ND(0.0050) [ND(0.0050)]	NA	NA	NA
4-Chlorophenyl-phenylether	NA	ND(0.0050) [ND(0.0050)]	NA	NA	NA
4-Nitroaniline	NA	ND(0.025) [ND(0.025)]	NA	NA	NA

Table C-1
Fall 2007 Groundwater Analytical Results

Groundwater Management Area 5 Long-Term Monitoring Program
Monitoring Event Evaluation Report for Fall 2007
General Electric Company - Pittsfield, Massachusetts
(Results are presented in parts per million, ppm)

Parameter / Sample ID: / Date Collected:	GMA5-4 11/15/07	GMA5-5 11/15/07	GMA5-7 11/15/07	GMA5-9 12/17/07	GMA5-10 12/18/07
Semivolatile Organics (continued)					
4-Nitrophenol	NA	ND(0.025) [ND(0.025)]	NA	NA	NA
4-Nitroquinoline-1-oxide	NA	ND(0.025) [ND(0.025)]	NA	NA	NA
4-Phenylenediamine	NA	ND(0.010) J [ND(0.010) J]	NA	NA	NA
5-Nitro-o-toluidine	NA	ND(0.0050) [ND(0.0050)]	NA	NA	NA
7,12-Dimethylbenz(a)anthracen	NA	ND(0.0050) [ND(0.0050)]	NA	NA	NA
a,a'-Dimethylphenethylamine	NA	ND(0.025) [ND(0.025)]	NA	NA	NA
Acenaphthene	NA	ND(0.0050) [ND(0.0050)]	NA	NA	NA
Acenaphthylene	NA	ND(0.0050) [ND(0.0050)]	NA	NA	NA
Acetophenone	NA	ND(0.0050) [ND(0.0050)]	NA	NA	NA
Aniline	NA	ND(0.0050) [ND(0.0050)]	NA	NA	NA
Anthracene	NA	ND(0.0050) [ND(0.0050)]	NA	NA	NA
Aramite	NA	ND(0.0050) J [ND(0.0050) J]	NA	NA	NA
Benzidine	NA	ND(0.010) [ND(0.010)]	NA	NA	NA
Benzo(a)anthracene	NA	ND(0.0050) [ND(0.0050)]	NA	NA	NA
Benzo(a)pyrene	NA	ND(0.0050) [ND(0.0050)]	NA	NA	NA
Benzo(b)fluoranthene	NA	ND(0.0050) [ND(0.0050)]	NA	NA	NA
Benzo(g,h,i)perylene	NA	ND(0.0050) [ND(0.0050)]	NA	NA	NA
Benzo(k)fluoranthene	NA	ND(0.0050) [ND(0.0050)]	NA	NA	NA
Benzyl Alcohol	NA	ND(0.010) [ND(0.010)]	NA	NA	NA
bis(2-Chloroethoxy)methane	NA	ND(0.0050) [ND(0.0050)]	NA	NA	NA
bis(2-Chloroethyl)ether	NA	ND(0.0050) [ND(0.0050)]	NA	NA	NA
bis(2-Chloroisopropyl)ether	NA	ND(0.0050) [ND(0.0050)]	NA	NA	NA
bis(2-Ethylhexyl)phthalate	NA	ND(0.0050) [ND(0.0050)]	NA	NA	NA
Butylbenzylphthalate	NA	ND(0.0050) [ND(0.0050)]	NA	NA	NA
Chrysene	NA	ND(0.0050) [ND(0.0050)]	NA	NA	NA
Diallate	NA	ND(0.0050) [ND(0.0050)]	NA	NA	NA
Dibenzo(a,h)anthracene	NA	ND(0.0050) [ND(0.0050)]	NA	NA	NA
Dibenzofuran	NA	ND(0.0050) [ND(0.0050)]	NA	NA	NA
Diethylphthalate	NA	ND(0.0050) J [ND(0.0050)]	NA	NA	NA
Dimethylphthalate	NA	ND(0.0050) [ND(0.0050)]	NA	NA	NA
Di-n-Butylphthalate	NA	ND(0.0050) [ND(0.0050)]	NA	NA	NA
Di-n-Octylphthalate	NA	ND(0.0050) [ND(0.0050)]	NA	NA	NA
Diphenylamine	NA	ND(0.0050) [ND(0.0050)]	NA	NA	NA
Ethyl Methanesulfonate	NA	ND(0.0050) [ND(0.0050)]	NA	NA	NA
Fluoranthene	NA	ND(0.0050) [ND(0.0050)]	NA	NA	NA
Fluorene	NA	ND(0.0050) [ND(0.0050)]	NA	NA	NA
Hexachlorobenzene	NA	ND(0.0050) [ND(0.0050)]	NA	NA	NA
Hexachlorobutadiene	NA	ND(0.0050) [ND(0.0050)]	NA	NA	NA
Hexachlorocyclopentadiene	NA	ND(0.010) J [ND(0.010)]	NA	NA	NA
Hexachloroethane	NA	ND(0.0050) [ND(0.0050)]	NA	NA	NA
Hexachlorophene	NA	ND(0.0050) [ND(0.0050)]	NA	NA	NA
Hexachloropropene	NA	ND(0.010) [ND(0.010)]	NA	NA	NA
Indeno(1,2,3-cd)pyrene	NA	ND(0.0050) [ND(0.0050)]	NA	NA	NA
Isodrin	NA	ND(0.0050) [ND(0.0050)]	NA	NA	NA
Isophorone	NA	ND(0.0050) [ND(0.0050)]	NA	NA	NA
Isosafrole	NA	ND(0.0050) [ND(0.0050)]	NA	NA	NA
Methapyrilene	NA	ND(0.0050) [ND(0.0050)]	NA	NA	NA
Methyl Methanesulfonate	NA	ND(0.0050) [ND(0.0050)]	NA	NA	NA
Naphthalene	NA	ND(0.0050) [ND(0.0050)]	NA	NA	NA
Nitrobenzene	NA	ND(0.0050) [ND(0.0050)]	NA	NA	NA
N-Nitrosodiethylamine	NA	ND(0.0050) [ND(0.0050)]	NA	NA	NA
N-Nitrosodimethylamine	NA	ND(0.0050) [ND(0.0050)]	NA	NA	NA
N-Nitroso-di-n-butylamine	NA	ND(0.0050) [ND(0.0050)]	NA	NA	NA
N-Nitroso-di-n-propylamine	NA	ND(0.0050) [ND(0.0050)]	NA	NA	NA
N-Nitrosodiphenylamine	NA	ND(0.0050) [ND(0.0050)]	NA	NA	NA
N-Nitrosomethylethylamine	NA	ND(0.0050) [ND(0.0050)]	NA	NA	NA
N-Nitrosomorpholine	NA	ND(0.0050) [ND(0.0050)]	NA	NA	NA
N-Nitrosopiperidine	NA	ND(0.0050) [ND(0.0050)]	NA	NA	NA
N-Nitrosopyrrolidine	NA	ND(0.0050) [ND(0.0050)]	NA	NA	NA

Table C-1
Fall 2007 Groundwater Analytical Results

Groundwater Management Area 5 Long-Term Monitoring Program
Monitoring Event Evaluation Report for Fall 2007
General Electric Company - Pittsfield, Massachusetts
(Results are presented in parts per million, ppm)

Parameter / Sample ID: / Date Collected:	GMA5-4 11/15/07	GMA5-5 11/15/07	GMA5-7 11/15/07	GMA5-9 12/17/07	GMA5-10 12/18/07
Semivolatile Organics (continued)					
o,o,o-Triethylphosphorothioate	NA	ND(0.0050) [ND(0.0050)]	NA	NA	NA
o-Toluidine	NA	ND(0.0050) [ND(0.0050)]	NA	NA	NA
p-Dimethylaminoazobenzene	NA	ND(0.0050) [ND(0.0050)]	NA	NA	NA
Pentachlorobenzene	NA	ND(0.0050) [ND(0.0050)]	NA	NA	NA
Pentachloroethane	NA	ND(0.0050) [ND(0.0050)]	NA	NA	NA
Pentachloronitrobenzene	NA	ND(0.0050) [ND(0.0050)]	NA	NA	NA
Pentachlorophenol	NA	ND(0.025) [ND(0.025)]	NA	NA	NA
Phenacetin	NA	ND(0.0050) [ND(0.0050)]	NA	NA	NA
Phenanthrene	NA	ND(0.0050) [ND(0.0050)]	NA	NA	NA
Phenol	NA	ND(0.0050) [ND(0.0050)]	NA	NA	NA
Pronamide	NA	ND(0.0050) [ND(0.0050)]	NA	NA	NA
Pyrene	NA	ND(0.0050) [ND(0.0050)]	NA	NA	NA
Pyridine	NA	ND(0.0050) J [ND(0.0050) J]	NA	NA	NA
Safrole	NA	ND(0.0050) [ND(0.0050)]	NA	NA	NA
Thionazin	NA	ND(0.010) [ND(0.010)]	NA	NA	NA
Organochlorine Pesticides					
4,4'-DDD	NA	ND(0.00015) [ND(0.00015)]	NA	NA	NA
4,4'-DDE	NA	ND(0.00015) J [ND(0.00015)]	NA	NA	NA
4,4'-DDT	NA	ND(0.00015) [ND(0.00015)]	NA	NA	NA
Aldrin	NA	ND(0.00015) J [ND(0.00015)]	NA	NA	NA
Alpha-BHC	NA	ND(0.00015) [ND(0.00015)]	NA	NA	NA
Alpha-Chlordane	NA	ND(0.00015) [ND(0.00015)]	NA	NA	NA
Beta-BHC	NA	ND(0.00015) [ND(0.00015)]	NA	NA	NA
Delta-BHC	NA	ND(0.00015) [ND(0.00015)]	NA	NA	NA
Dieldrin	NA	ND(0.00015) [ND(0.00015)]	NA	NA	NA
Endosulfan I	NA	ND(0.00015) [ND(0.00015)]	NA	NA	NA
Endosulfan II	NA	ND(0.00015) [ND(0.00015)]	NA	NA	NA
Endosulfan Sulfate	NA	ND(0.00015) [ND(0.00015)]	NA	NA	NA
Endrin	NA	ND(0.00015) [ND(0.00015)]	NA	NA	NA
Endrin Aldehyde	NA	ND(0.00015) J [ND(0.00015)]	NA	NA	NA
Endrin Ketone	NA	ND(0.00015) [ND(0.00015)]	NA	NA	NA
Gamma-BHC (Lindane)	NA	ND(0.00015) [ND(0.00015)]	NA	NA	NA
Gamma-Chlordane	NA	ND(0.00015) [ND(0.00015)]	NA	NA	NA
Heptachlor	NA	ND(0.00015) [ND(0.00015)]	NA	NA	NA
Heptachlor Epoxide	NA	ND(0.00015) [ND(0.00015)]	NA	NA	NA
Kepone	NA	ND(0.025) [ND(0.025)]	NA	NA	NA
Methoxychlor	NA	ND(0.00015) [ND(0.00015)]	NA	NA	NA
Technical Chlordane	NA	ND(0.00025) [ND(0.00025)]	NA	NA	NA
Toxaphene	NA	ND(0.00050) [ND(0.00050)]	NA	NA	NA
Herbicides					
2,4,5-T	NA	ND(0.00050) [ND(0.00050)]	NA	NA	NA
2,4,5-TP	NA	ND(0.00050) [ND(0.00050)]	NA	NA	NA
2,4-D	NA	ND(0.00050) [ND(0.00050)]	NA	NA	NA
Dinoseb	NA	ND(0.025) [ND(0.025)]	NA	NA	NA
Furans					
2,3,7,8-TCDF	NA	ND(0.0000000028) [ND(0.0000000023)]	NA	NA	NA
TCDFs (total)	NA	ND(0.0000000028) [ND(0.0000000023)]	NA	NA	NA
1,2,3,7,8-PeCDF	NA	ND(0.0000000051) [ND(0.0000000051)]	NA	NA	NA
2,3,4,7,8-PeCDF	NA	ND(0.0000000051) [ND(0.0000000051)]	NA	NA	NA
PeCDFs (total)	NA	ND(0.0000000051) [ND(0.0000000051)]	NA	NA	NA
1,2,3,4,7,8-HxCDF	NA	ND(0.0000000051) [ND(0.0000000051)]	NA	NA	NA
1,2,3,6,7,8-HxCDF	NA	ND(0.0000000051) [ND(0.0000000051)]	NA	NA	NA
1,2,3,7,8,9-HxCDF	NA	ND(0.0000000051) [ND(0.0000000051)]	NA	NA	NA
2,3,4,6,7,8-HxCDF	NA	ND(0.0000000051) [ND(0.0000000051)]	NA	NA	NA
HxCDFs (total)	NA	ND(0.0000000051) [ND(0.0000000051)]	NA	NA	NA
1,2,3,4,6,7,8-HpCDF	NA	ND(0.0000000051) [ND(0.0000000051)]	NA	NA	NA
1,2,3,4,7,8,9-HpCDF	NA	ND(0.0000000051) [ND(0.0000000051)]	NA	NA	NA
HpCDFs (total)	NA	ND(0.0000000051) [ND(0.0000000051)]	NA	NA	NA
OCDF	NA	ND(0.000000010) [ND(0.000000010)]	NA	NA	NA

Table C-1
Fall 2007 Groundwater Analytical Results

Groundwater Management Area 5 Long-Term Monitoring Program
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Sample ID: / Parameter / Date Collected:	GMA5-4 11/15/07	GMA5-5 11/15/07	GMA5-7 11/15/07	GMA5-9 12/17/07	GMA5-10 12/18/07
Dioxins					
2,3,7,8-TCDD	NA	ND(0.0000000033) [ND(0.0000000021)]	NA	NA	NA
TCDDs (total)	NA	ND(0.0000000033) [ND(0.0000000021)]	NA	NA	NA
1,2,3,7,8-PeCDD	NA	ND(0.0000000051) [ND(0.0000000051)]	NA	NA	NA
PeCDDs (total)	NA	ND(0.0000000051) [ND(0.0000000051)]	NA	NA	NA
1,2,3,4,7,8-HxCDD	NA	ND(0.0000000051) [ND(0.0000000051)]	NA	NA	NA
1,2,3,6,7,8-HxCDD	NA	ND(0.0000000051) [ND(0.0000000051)]	NA	NA	NA
1,2,3,7,8,9-HxCDD	NA	ND(0.0000000051) [ND(0.0000000051)]	NA	NA	NA
HxCDDs (total)	NA	ND(0.0000000051) [ND(0.0000000051)]	NA	NA	NA
1,2,3,4,6,7,8-HpCDD	NA	ND(0.0000000051) [ND(0.0000000051)]	NA	NA	NA
HpCDDs (total)	NA	ND(0.0000000051) [ND(0.0000000051)]	NA	NA	NA
OCDD	NA	0.000000011 J [0.000000013 J]	NA	NA	NA
Total TEQs (WHO TEFs)	NA	0.0000000075 [0.0000000070]	NA	NA	NA
Inorganics-Unfiltered					
Antimony	NA	ND(0.0400) [ND(0.0400)]	NA	NA	NA
Arsenic	NA	0.00297 B [0.00418 B]	NA	NA	NA
Barium	NA	0.0953 B [0.0963 B]	NA	NA	NA
Beryllium	NA	ND(0.0100) J [0.00464 J]	NA	NA	NA
Cadmium	NA	ND(0.00500) [ND(0.00500)]	NA	NA	NA
Chromium	NA	0.00208 B [0.00207 B]	NA	NA	NA
Cobalt	NA	ND(0.0100) [ND(0.0100)]	NA	NA	NA
Copper	NA	ND(0.0100) J [ND(0.0100) J]	NA	NA	NA
Cyanide	NA	ND(0.00600) [ND(0.00600)]	NA	NA	NA
Lead	NA	ND(0.0100) [ND(0.0100)]	NA	NA	NA
Mercury	NA	ND(0.000406) [ND(0.000406)]	NA	NA	NA
Nickel	NA	ND(0.0100) [ND(0.0100)]	NA	NA	NA
Selenium	NA	ND(0.0200) [0.0117 B]	NA	NA	NA
Silver	NA	ND(0.0100) [ND(0.0100)]	NA	NA	NA
Sulfide	NA	ND(1.00) J [ND(1.00) J]	NA	NA	NA
Thallium	NA	0.00957 B [0.00695 B]	NA	NA	NA
Tin	NA	ND(0.0100) J [ND(0.0100) J]	NA	NA	NA
Vanadium	NA	ND(0.0500) [ND(0.0500)]	NA	NA	NA
Zinc	NA	ND(0.0200) [0.0321]	NA	NA	NA
Inorganics-Filtered					
Antimony	NA	ND(0.0400) [ND(0.0400)]	NA	NA	NA
Arsenic	NA	ND(0.0100) [0.00574 B]	NA	NA	NA
Barium	NA	0.0778 B [0.0875 B]	NA	NA	NA
Beryllium	NA	0.00435 J [0.000460 J]	NA	NA	NA
Cadmium	ND(0.0100)	ND(0.00500) [ND(0.00500)]	NA	NA	NA
Chromium	NA	0.00115 [0.00149 B]	NA	NA	NA
Cobalt	NA	ND(0.0100) [ND(0.0100)]	NA	NA	NA
Copper	NA	ND(0.0100) J [ND(0.0100) J]	NA	NA	NA
Cyanide	NA	ND(0.00600) [ND(0.00600)]	NA	NA	NA
Cyanide-MADEP (PAC)	NA	ND(0.00600) [ND(0.00600)]	NA	NA	NA
Lead	NA	ND(0.0100) [ND(0.0100)]	NA	NA	NA
Mercury	NA	ND(0.000406) [ND(0.000406)]	NA	NA	NA
Nickel	NA	ND(0.0100) [ND(0.0100)]	NA	NA	NA
Selenium	NA	ND(0.0200) [ND(0.0200)]	NA	NA	NA
Silver	NA	ND(0.0100) [ND(0.0100)]	NA	NA	NA
Thallium	NA	ND(0.0100) [ND(0.0100)]	NA	NA	NA
Tin	NA	ND(0.0100) J [ND(0.0100) J]	NA	NA	NA
Vanadium	NA	ND(0.0500) [ND(0.0500)]	NA	NA	NA
Zinc	NA	ND(0.0200) [ND(0.0200)]	NA	NA	NA

Table C-1
Fall 2007 Groundwater Analytical Results

Groundwater Management Area 5 Long-Term Monitoring Program
Monitoring Event Evaluation Report for Fall 2007
General Electric Company - Pittsfield, Massachusetts
(Results are presented in parts per million, ppm)

Notes:

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

Data Qualifiers:

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

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

Inorganics

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

ARCADIS

Appendix D

Data Validation Report –
Fall 2007

Appendix D
Groundwater Sampling Data Validation Report

Groundwater Management Area 5 Long-Term Monitoring Program
Monitoring Event Evaluation Report for Fall 2007
General Electric Company - Pittsfield, Massachusetts

1.0 General

This appendix summarizes the data validation review performed on behalf to the General Electric Company (GE) for groundwater samples collected between November and December 2007 as part of groundwater sampling activities conducted at Groundwater Management Area 5, located at the General Electric Company/Housatonic River Site in Pittsfield, Massachusetts. The samples were analyzed for polychlorinated biphenyls (PCBs) and/or various other constituents listed in Appendix IX of 40 CFR Part 264, plus three additional constituents -- benzidine, 2-chloroethyl vinyl ether, and 1,2-diphenylhydrazine (hereafter referred to as Appendix IX+3) by SGS Environmental Services, Inc. (formerly Paradigm Analytical Labs, Inc.) of Wilmington, North Carolina. Data validation was performed for four PCB samples, nine volatile organic compound (VOC) samples, two semi-volatile organic compound (SVOC) samples, five metal samples, four cyanide samples, two sulfide samples, two pesticide samples, two herbicide samples, and two polychlorinated dibenzo-p-dioxin (PCDD)/polychlorinated dibenzofuran (PCDF) samples.

2.0 Data Evaluation Procedures

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

- *Field Sampling Plan/Quality Assurance Project Plan (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);

- *Region I Laboratory Data Validation Functional Guidelines for Evaluating Inorganics Analyses,* USEPA Region I (June 13, 1988) (Modified February 1989);

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

- *National Functional Guidelines for Dioxin/Furan Data Validation,* USEPA (Draft, January 1996).

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

The following data qualifiers were used in this data evaluation:

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

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

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

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

3.0 Data Validation Procedures

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

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

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

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

Parameter	Tier I Only			Tier I &Tier II			Total
	Samples	Duplicates	Blanks	Samples	Duplicates	Blanks	
PCBs	0	0	0	2	2	0	4
VOCs	0	0	0	4	2	3	9

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	
SVOCs	0	0	0	1	1	0	2
Metals	0	0	0	3	2	0	5
Pesticides	0	0	0	1	1	0	4
Herbicides	0	0	0	1	1	0	2
PCDDs/PCDFs	0	0	0	1	1	0	2
Sulfides	0	0	0	1	1	0	2
Cyanides	0	0	0	2	2	0	4
Total	**0**	**0**	**0**	**16**	**13**	**3**	**34**

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

4.0 Summary of QA/QC Parameter Deviations Requiring Data Qualification

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

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

Compounds Qualified Due to Initial Calibration Deviations (RRF)

Analysis	Compound	Number of Affected Samples	Qualification
VOCs	1,2-Dibromo-3-chloropropane	9	J
	1,4-Dioxane	9	J
	2-Butanone	9	J
	2-Chloroethylvinylether	7	J
	4-Methyl-2-pentanone	4	J
	Acetone	9	J
	Acetonitrile	9	J
	Acrolein	9	J
	Acrylonitrile	9	J
	Bromomethane	4	J
	Isobutanol	9	J

Compounds Qualified Due to Initial Calibration Deviations (RRF)

Analysis	Compound	Number of Affected Samples	Qualification
VOCs (continued)	Methacrylonitrile	4	J
	Propionitrile	9	J
	trans-1,4-Dichloro-2-butene	4	J
SVOCs	4-Phenylenediamine	2	J
	Aramite	2	J

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

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

Compounds Qualified Due to Continuing Calibration of %D Values

Analysis	Compound	Number of Affected Samples	Qualification
VOCs	Bromomethane	4	J
	Chloroethane	4	J
	Chloromethane	4	J
	Dichlorodifluoromethane	4	J
	Isobutanol	4	J
SVOCs	1-Naphthylamine	2	J
	2-Methylphenol	2	J
	2-Picoline	2	J
	Pyridine	2	J

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

Analytes Qualified Due to CRDL Standard Recovery Deviations

Analysis	Analyte	Number of Affected Samples	Qualification
Inorganics	Beryllium	4	J
	Copper	4	J
	Tin	4	J

Matrix spike/matrix spike duplicate (MS/MSD) sample analysis recovery criteria for organics require that the MS/MSD recovery be within the laboratory-generated QC control limits specified on the MS/MSD reporting form and inorganics MS recoveries must be within 75% to 125%. Associated sample results with MS/MSD recoveries that were less than the laboratory-generated QC control limits and have recoveries greater than 10% were qualified as estimated (J). Associated non-detect organic sample results that exhibited MS/MSD recoveries below 10% were qualified as rejected (R). Associated inorganic sample results with MS recoveries less than the 75% to 125% control limits were qualified as estimated (J). The compounds/analyte that did not meet MS/MSD recovery criteria and the number of samples qualified due to those deviations are presented in the following table.

Compounds/Analyte Qualified Due to MS/MSD Recovery Deviations

Analysis	Compound	Number of Affected Samples	Qualification
VOCs	2-Butanone	1	J
	2-Chloroethylvinylether	2	R
SVOCs	4-Chloro-3-Methylphenol	1	J
	Diethylphthalate	1	J
Pesticides	4,4'-DDE	1	J
	Aldrin	1	J
	Endrin Aldehyde	1	J
Inorganics	Sulfide	1	J

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

Compounds Qualified Due to MS/MSD RPD Deviations

Analysis	Compound	Number of Affected Samples	Qualification
PCBs	All Aroclors	1	J
VOCs	2-Butanone	1	J
	Chloroethane	1	J
SVOCs	Hexachlorocyclopentadiene	1	J

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

Analytes Qualified Due to Blank Deviations

Analysis	Analyte	Number of Affected Samples	Qualification
Inorganics	Copper	4	U
	Lead	4	U

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

Compounds Qualified Due to Surrogate Recovery Deviations

Analysis	Compound	Number of Affected Samples	Qualification
PCBs	All Aroclors	1	J

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 and inorganics must be between 80% to 120%. Organic sample results associated with the LCS/LCSD that exceeded laboratory-generated QC acceptance limits were qualified as estimated. The compounds/analyte 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/Analyte Qualified Due to LCS Recovery Deviations

Analysis	Compound/Analyte	Number of Affected Samples	Qualification
SVOCs	2,4,6-Trichlorophenol	2	J
	3&4-Methylphenol	2	J
Inorganics	Sulfide	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
VOCs	99.6	A total of two sample results were rejected due to MS/MSD recovery deviations.
SVOCs	100	None
PCBs	100	None
Pesticides	100	None
Herbicides	100	None
PCDDs/PCDFs	100	None
Metals	100	None
Sulfides	100	None
Cyanides	100	None

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

5.1 Precision

Precision measures the reproducibility of measurements under a given set of conditions. Specifically, it is a quantitative measure of the variability of a group of measurements compared to their average value. For this investigation, precision was defined as the RPD between duplicate sample results. The duplicate samples used to evaluate precision included laboratory duplicates, field duplicates, MS/MSD samples, and LCS/LCSD samples. For this analytical program, 1.1% of the data required qualification due to MS/MSD RPD deviations. None of the data required qualification due to laboratory duplicate RPD deviations, 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, LCS/LCSDs, MS/MSD samples, CRDL samples, and surrogate compound recoveries. For this analytical program, 14.2% of the data required qualification due to instrument calibration deviations, 0.63% of the data required qualification due to LCS/LCSD recovery deviations, 0.94% of the data required qualification due to MS/MSD recovery deviations, 1.3% of the data required qualification due to CRDL recovery deviations, and 0.84% of the data required qualification due to surrogate compound recovery deviations. None of the data required qualification due to internal standard 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 between October and December 2007 were analyzed by EPA SW-846 method 8082 for PCBs, 8260 for VOCs, 8270 for SVOCs, 8081 for pesticides, 8151 for herbicides, 8290 for PCDDs/PCDFs, 6000/7000 for metals, 9030 for sulfides, and 9014 for cyanides.

5.5 Completeness

Completeness is defined as the percentage of measurements that are judged to be valid or usable to meet the prescribed DQOs. The completeness criterion is essentially the same for all data uses -- the generation of a sufficient amount of valid data. The actual completeness of this analytical data set ranged from 99.6% to 100% for individual analytical parameters and had an overall usability of 99.9%, which is greater than the minimum required usability of 90% as specified in the FSP/QAPP.

Table D-1
Analytical Data Validation Summary

Groundwater Management Area 5 Long-Term Monitoring Program
Monitoring Event Evaluation Report for Fall 2007
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											
G135-560	GMA5-5	11/15/2007	Water	Tier II	No						
G135-560	GMA5-5 (Filtered)	11/15/2007	Water	Tier II	Yes	Aroclor-1016	MS/MSD RPD	21.2%	<12%	ND(0.000068) J	
						Aroclor-1016	Surrogate Recovery	37.7%, 18.2%	40% to 140%	ND(0.000068) J	
						Aroclor-1221	MS/MSD RPD	21.2%	<12%	ND(0.000068) J	
						Aroclor-1221	Surrogate Recovery	37.7%, 18.2%	40% to 140%	ND(0.000068) J	
						Aroclor-1232	MS/MSD RPD	21.2%	<12%	ND(0.000068) J	
						Aroclor-1232	Surrogate Recovery	37.7%, 18.2%	40% to 140%	ND(0.000068) J	
						Aroclor-1242	MS/MSD RPD	21.2%	<12%	ND(0.000068) J	
						Aroclor-1242	Surrogate Recovery	37.7%, 18.2%	40% to 140%	ND(0.000068) J	
						Aroclor-1248	MS/MSD RPD	21.2%	<12%	ND(0.000068) J	
						Aroclor-1248	Surrogate Recovery	37.7%, 18.2%	40% to 140%	ND(0.000068) J	
						Aroclor-1254	MS/MSD RPD	21.2%	<12%	ND(0.000068) J	
						Aroclor-1254	Surrogate Recovery	37.7%, 18.2%	40% to 140%	ND(0.000068) J	
						Aroclor-1260	MS/MSD RPD	21.2%	<12%	ND(0.000068) J	
						Aroclor-1260	Surrogate Recovery	37.7%, 18.2%	40% to 140%	ND(0.000068) J	
						Total PCBs	MS/MSD RPD	21.2%	<12%	ND(0.000068) J	
						Total PCBs	Surrogate Recovery	37.7%, 18.2%	40% to 140%	ND(0.000068) J	
G135-560	GMA5-DUP-1	11/15/2007	Water	Tier II	No						Parent Sample GMA5-5
G135-560	GMA5-DUP-1 (Filtered)	11/15/2007	Water	Tier II	No						Parent Sample GMA5-5 (Filtered)
Metals											
G135-560	GMA5-4 (Filtered)	11/15/2007	Water	Tier II	No						
G135-560	GMA5-5	11/15/2007	Water	Tier II	Yes	Beryllium	CRDL Standard %R	36.6%	80% to 120%	ND(0.0100) J	
						Copper	CRDL Standard %R	126.0%	80% to 120%	ND(0.0100) J	
						Copper	Method Blank	-	-	ND(0.0100)	
						Lead	Method Blank	-	-	ND(0.0100)	
						Tin	CRDL Standard %R	124.0%	80% to 120%	ND(0.0100) J	
G135-560	GMA5-5 (Filtered)	11/15/2007	Water	Tier II	Yes	Beryllium	CRDL Standard %R	36.6%	80% to 120%	0.00435 J	
						Copper	CRDL Standard %R	126.0%	80% to 120%	ND(0.0100) J	
						Copper	Method Blank	-	-	ND(0.0100)	
						Lead	Method Blank	-	-	ND(0.0100)	
						Tin	CRDL Standard %R	124.0%	80% to 120%	ND(0.0100) J	
G135-560	GMA5-DUP-1	11/15/2007	Water	Tier II	Yes	Beryllium	CRDL Standard %R	36.6%	80% to 120%	0.00464 J	Parent Sample GMA5-5
						Copper	CRDL Standard %R	126.0%	80% to 120%	ND(0.0100) J	
						Copper	Method Blank	-	-	ND(0.0100)	
						Lead	Method Blank	-	-	ND(0.0100)	
						Tin	CRDL Standard %R	124.0%	80% to 120%	ND(0.0100) J	
G135-560	GMA5-DUP-1 (Filtered)	11/15/2007	Water	Tier II	Yes	Beryllium	CRDL Standard %R	36.6%	80% to 120%	0.000460 J	Parent Sample GMA5-5 (Filtered)
						Copper	CRDL Standard %R	126.0%	80% to 120%	ND(0.0100) J	
						Copper	Method Blank	-	-	ND(0.0100)	
						Lead	Method Blank	-	-	ND(0.0100)	
						Tin	CRDL Standard %R	124.0%	80% to 120%	ND(0.0100) J	
VOCs											
G135-560	GMA5-5	11/15/2007	Water	Tier II	Yes	1,2-Dibromo-3-chloropropane	ICAL RRF	0.014	>0.05	ND(0.0050) J	
						1,4-Dioxane	ICAL RRF	0.000	>0.05	ND(0.10) J	
						2-Butanone	ICAL RRF	0.019	>0.05	ND(0.0050) J	
						2-Chloroethylvinylether	MS/MSD %R	0.0%, 0.0%	16.7% to 200%	R	
						4-Methyl-2-pentanone	ICAL RRF	0.043	>0.05	ND(0.0050) J	
						Acetone	ICAL RRF	0.013	>0.05	ND(0.0050) J	
						Acetonitrile	ICAL RRF	0.004	>0.05	ND(0.020) J	
						Acrolein	ICAL RRF	0.007	>0.05	ND(0.025) J	
						Acrylonitrile	ICAL RRF	0.013	>0.05	ND(0.025) J	
						Bromomethane	ICAL RRF	0.029	>0.05	ND(0.0010) J	
						Bromomethane	CCAL %D	62.2%	<25%	ND(0.0010) J	
						Isobutanol	ICAL RRF	0.002	>0.05	ND(0.050) J	
						Methacrylonitrile	ICAL RRF	0.034	>0.05	ND(0.010) J	
						Propionitrile	ICAL RRF	0.002	>0.05	ND(0.020) J	
						trans-1,4-Dichloro-2-butene	ICAL RRF	0.019	>0.05	ND(0.0050) J	
G135-560	GMA5-7	11/15/2007	Water	Tier II	Yes	1,2-Dibromo-3-chloropropane	ICAL RRF	0.014	>0.05	ND(0.0050) J	
						1,4-Dioxane	ICAL RRF	0.000	>0.05	ND(0.10) J	
						2-Butanone	ICAL RRF	0.019	>0.05	ND(0.0050) J	
						2-Chloroethylvinylether	ICAL RRF	0.012	>0.05	ND(0.013) J	
						4-Methyl-2-pentanone	ICAL RRF	0.043	>0.05	ND(0.0050) J	
						Acetone	ICAL RRF	0.013	>0.05	ND(0.0050) J	
						Acetonitrile	ICAL RRF	0.004	>0.05	ND(0.020) J	
						Acrolein	ICAL RRF	0.007	>0.05	ND(0.025) J	
						Acrylonitrile	ICAL RRF	0.013	>0.05	ND(0.025) J	
						Bromomethane	ICAL RRF	0.029	>0.05	ND(0.0010) J	

Table D-1
Analytical Data Validation Summary

Groundwater Management Area 5 Long-Term Monitoring Program
Monitoring Event Evaluation Report for Fall 2007
General Electric Company - Pittsfield, Massachusetts
(Results are presented in parts per million, ppm)

Sample Delivery Group No.	Sample ID	Date Collected	Matrix	Validation Level	Qualification	Compound	QA/QC Parameter	Value	Control Limits	Qualified Result	Notes
VOCs (continued)											
G135-560	GMA5-7	11/15/2007	Water	Tier II	Yes	Bromomethane	CCAL %D	62.2%	<25%	ND(0.0010) J	
						Isobutanol	ICAL RRF	0.002	>0.05	ND(0.050) J	
						Methacrylonitrile	ICAL RRF	0.034	>0.05	ND(0.010) J	
						Propionitrile	ICAL RRF	0.002	>0.05	ND(0.020) J	
						trans-1,4-Dichloro-2-butene	ICAL RRF	0.019	>0.05	ND(0.0050) J	
G135-560	GMA5-DUP-1	11/15/2007	Water	Tier II	Yes	1,2-Dibromo-3-chloropropane	ICAL RRF	0.014	>0.05	ND(0.0050) J	Parent Sample GMA5-5
						1,4-Dioxane	ICAL RRF	0.000	>0.05	ND(0.10) J	
						2-Butanone	ICAL RRF	0.019	>0.05	ND(0.0050) J	
						2-Chloroethylvinylether	ICAL RRF	0.012	>0.05	ND(0.013) J	
						4-Methyl-2-pentanone	ICAL RRF	0.043	>0.05	ND(0.0050) J	
						Acetone	ICAL RRF	0.013	>0.05	ND(0.0050) J	
						Acetonitrile	ICAL RRF	0.004	>0.05	ND(0.020) J	
						Acrolein	ICAL RRF	0.007	>0.05	ND(0.025) J	
						Acrylonitrile	ICAL RRF	0.013	>0.05	ND(0.025) J	
						Bromomethane	ICAL RRF	0.029	>0.05	ND(0.0010) J	
						Bromomethane	CCAL %D	62.2%	<25%	ND(0.0010) J	
						Isobutanol	ICAL RRF	0.002	>0.05	ND(0.050) J	
						Methacrylonitrile	ICAL RRF	0.034	>0.05	ND(0.010) J	
						Propionitrile	ICAL RRF	0.002	>0.05	ND(0.020) J	
						trans-1,4-Dichloro-2-butene	ICAL RRF	0.019	>0.05	ND(0.0050) J	
G135-560	TRIP BLANK	11/15/2007	Water	Tier II	Yes	1,2-Dibromo-3-chloropropane	ICAL RRF	0.014	>0.05	ND(0.0050) J	
						1,4-Dioxane	ICAL RRF	0.000	>0.05	ND(0.10) J	
						2-Butanone	ICAL RRF	0.019	>0.05	ND(0.0050) J	
						2-Chloroethylvinylether	ICAL RRF	0.012	>0.05	ND(0.013) J	
						4-Methyl-2-pentanone	ICAL RRF	0.043	>0.05	ND(0.0050) J	
						Acetone	ICAL RRF	0.013	>0.05	ND(0.0050) J	
						Acetonitrile	ICAL RRF	0.004	>0.05	ND(0.020) J	
						Acrolein	ICAL RRF	0.007	>0.05	ND(0.025) J	
						Acrylonitrile	ICAL RRF	0.013	>0.05	ND(0.025) J	
						Bromomethane	ICAL RRF	0.029	>0.05	ND(0.0010) J	
						Bromomethane	CCAL %D	62.2%	<25%	ND(0.0010) J	
						Isobutanol	ICAL RRF	0.002	>0.05	ND(0.050) J	
						Methacrylonitrile	ICAL RRF	0.034	>0.05	ND(0.010) J	
						Propionitrile	ICAL RRF	0.002	>0.05	ND(0.020) J	
						trans-1,4-Dichloro-2-butene	ICAL RRF	0.019	>0.05	ND(0.0050) J	
G135-572	GMA-5-RB-1	12/3/2007	Water	Tier II	Yes	1,2-Dibromo-3-chloropropane	ICAL RRF	0.013	>0.05	ND(0.0050) J	
						1,4-Dioxane	ICAL RRF	0.000	>0.05	ND(0.10) J	
						2-Butanone	ICAL RRF	0.039	>0.05	ND(0.0050) J	
						2-Chloroethylvinylether	ICAL RRF	0.015	>0.05	ND(0.013) J	
						Acetone	ICAL RRF	0.022	>0.05	ND(0.0050) J	
						Acetonitrile	ICAL RRF	0.008	>0.05	ND(0.020) J	
						Acrolein	ICAL RRF	0.015	>0.05	ND(0.025) J	
						Acrylonitrile	ICAL RRF	0.025	>0.05	ND(0.025) J	
						Isobutanol	ICAL RRF	0.003	>0.05	ND(0.050) J	
						Propionitrile	ICAL RRF	0.004	>0.05	ND(0.020) J	
G135-577	DUP-01	12/18/2007	Water	Tier II	Yes	1,2-Dibromo-3-chloropropane	ICAL RRF	0.013	>0.05	ND(0.0050) J	Parent Sample GMA5-10
						1,4-Dioxane	ICAL RRF	0.000	>0.05	ND(0.10) J	
						2-Butanone	ICAL RRF	0.039	>0.05	ND(0.0050) J	
						2-Chloroethylvinylether	ICAL RRF	0.015	>0.05	ND(0.013) J	
						Acetone	ICAL RRF	0.022	>0.05	ND(0.0050) J	
						Acetonitrile	ICAL RRF	0.008	>0.05	ND(0.020) J	
						Acrolein	ICAL RRF	0.015	>0.05	ND(0.025) J	
						Acrylonitrile	ICAL RRF	0.025	>0.05	ND(0.025) J	
						Chloroethane	CCAL %D	26.0%	<25%	ND(0.0010) J	
						Chloromethane	CCAL %D	44.3%	<25%	ND(0.0010) J	
						Dichlorodifluoromethane	CCAL %D	37.2%	<25%	ND(0.0010) J	
						Isobutanol	ICAL RRF	0.003	>0.05	ND(0.050) J	
						Isobutanol	CCAL %D	28.0%	<25%	ND(0.050) J	
						Propionitrile	ICAL RRF	0.004	>0.05	ND(0.020) J	
G135-577	GMA5-10	12/18/2007	Water	Tier II	Yes	1,2-Dibromo-3-chloropropane	ICAL RRF	0.013	>0.05	ND(0.0050) J	
						1,4-Dioxane	ICAL RRF	0.000	>0.05	ND(0.10) J	
						2-Butanone	ICAL RRF	0.039	>0.05	ND(0.0050) J	
						2-Butanone	MS/MSD RPD	46.8%	<30%	ND(0.0050) J	
						2-Chloroethylvinylether	MS/MSD %R	0.0%, 0.0%	16.7% to 200%	R	
						Acetone	ICAL RRF	0.022	>0.05	ND(0.0050) J	

Table D-1
Analytical Data Validation Summary

Groundwater Management Area 5 Long-Term Monitoring Program
Monitoring Event Evaluation Report for Fall 2007
General Electric Company - Pittsfield, Massachusetts
(Results are presented in parts per million, ppm)

Sample Delivery Group No.	Sample ID	Date Collected	Matrix	Validation Level	Qualification	Compound	QA/QC Parameter	Value	Control Limits	Qualified Result	Notes
VOCs (continued)											
G135-577	GMA5-10	12/18/2007	Water	Tier II	Yes	Acetonitrile	ICAL RRF	0.008	>0.05	ND(0.020) J	
						Acrolein	ICAL RRF	0.015	>0.05	ND(0.025) J	
						Acrylonitrile	ICAL RRF	0.025	>0.05	ND(0.025) J	
						Chloroethane	CCAL %D	26.0%	<25%	ND(0.0010) J	
						Chloroethane	MS/MSD RPD	33.2%	<30%	ND(0.0010) J	
						Chloromethane	CCAL %D	44.3%	<25%	ND(0.0010) J	
						Dichlorodifluoromethane	CCAL %D	37.2%	<25%	ND(0.0010) J	
						Isobutanol	ICAL RRF	0.003	>0.05	ND(0.050) J	
						Isobutanol	CCAL %D	28.0%	<25%	ND(0.050) J	
						Propionitrile	ICAL RRF	0.004	>0.05	ND(0.020) J	
G135-577	GMA5-9	12/17/2007	Water	Tier II	Yes	1,2-Dibromo-3-chloropropane	ICAL RRF	0.013	>0.05	ND(0.0050) J	
						1,4-Dioxane	ICAL RRF	0.000	>0.05	ND(0.10) J	
						2-Butanone	ICAL RRF	0.039	>0.05	ND(0.0050) J	
						2-Chloroethylvinylether	ICAL RRF	0.015	>0.05	ND(0.013) J	
						Acetone	ICAL RRF	0.022	>0.05	ND(0.0050) J	
						Acetonitrile	ICAL RRF	0.008	>0.05	ND(0.020) J	
						Acrolein	ICAL RRF	0.015	>0.05	ND(0.025) J	
						Acrylonitrile	ICAL RRF	0.025	>0.05	ND(0.025) J	
						Chloroethane	CCAL %D	26.0%	<25%	ND(0.0010) J	
						Chloromethane	CCAL %D	44.3%	<25%	ND(0.0010) J	
						Dichlorodifluoromethane	CCAL %D	37.2%	<25%	ND(0.0010) J	
						Isobutanol	ICAL RRF	0.003	>0.05	ND(0.050) J	
						Isobutanol	CCAL %D	28.0%	<25%	ND(0.050) J	
						Propionitrile	ICAL RRF	0.004	>0.05	ND(0.020) J	
G135-577	Trip Blank	12/17/2007	Water	Tier II	Yes	1,2-Dibromo-3-chloropropane	ICAL RRF	0.013	>0.05	ND(0.0050) J	
						1,4-Dioxane	ICAL RRF	0.000	>0.05	ND(0.10) J	
						2-Butanone	ICAL RRF	0.039	>0.05	ND(0.0050) J	
						2-Chloroethylvinylether	ICAL RRF	0.015	>0.05	ND(0.013) J	
						Acetone	ICAL RRF	0.022	>0.05	ND(0.0050) J	
						Acetonitrile	ICAL RRF	0.008	>0.05	ND(0.020) J	
						Acrolein	ICAL RRF	0.015	>0.05	ND(0.025) J	
						Acrylonitrile	ICAL RRF	0.025	>0.05	ND(0.025) J	
						Chloroethane	CCAL %D	26.0%	<25%	ND(0.0010) J	
						Chloromethane	CCAL %D	44.3%	<25%	ND(0.0010) J	
						Dichlorodifluoromethane	CCAL %D	37.2%	<25%	ND(0.0010) J	
						Isobutanol	ICAL RRF	0.003	>0.05	ND(0.050) J	
						Isobutanol	CCAL %D	28.0%	<25%	ND(0.050) J	
						Propionitrile	ICAL RRF	0.004	>0.05	ND(0.020) J	
SVOCs											
G135-560	GMA5-5	11/15/2007	Water	Tier II	Yes	1-Naphthylamine	CCAL %D	88.4%	<25%	ND(0.025) J	
						2,4,6-Trichlorophenol	LCS %R	69.6%	70.7% to 112%	ND(0.0050) J	
						2-Methylphenol	CCAL %D	25.9%	<25%	ND(0.0050) J	
						2-Picoline	CCAL %D	46.3%	<25%	ND(0.0050) J	
						3&4-Methylphenol	LCS %R	70.0%	75.6% to 200%	ND(0.0050) J	
						4-Chloro-3-Methylphenol	MS %R	65.5%	67.0% to 109%	ND(0.0050) J	
						4-Phenylenediamine	ICAL RRF	0.024	>0.05	ND(0.010) J	
						Aramite	ICAL RRF	0.010	>0.05	ND(0.0050) J	
						Diethylphthalate	MS %R	63.8%	65.0% to 102%	ND(0.0050) J	
						Hexachlorocyclopentadiene	MS/MSD RPD	75.4%	<30%	ND(0.010) J	
						Pyridine	CCAL %D	35.0%	<25%	ND(0.0050) J	
G135-560	GMA5-DUP-1	11/15/2007	Water	Tier II	Yes	1-Naphthylamine	CCAL %D	88.4%	<25%	ND(0.025) J	Parent Sample GMA5-5
						2,4,6-Trichlorophenol	LCS %R	69.6%	70.7% to 112%	ND(0.0050) J	
						2-Methylphenol	CCAL %D	25.9%	<25%	ND(0.0050) J	
						2-Picoline	CCAL %D	46.3%	<25%	ND(0.0050) J	
						3&4-Methylphenol	LCS %R	70.0%	75.6% to 200%	ND(0.0050) J	
						4-Phenylenediamine	ICAL RRF	0.024	>0.05	ND(0.010) J	
						Aramite	ICAL RRF	0.010	>0.05	ND(0.0050) J	
						Pyridine	CCAL %D	35.0%	<25%	ND(0.0050) J	
PCDDs/PCDFs											
G135-560	GMA5-5	11/15/2007	Water	Tier II	No						
G135-560	GMA5-DUP-1	11/15/2007	Water	Tier II	No						Parent Sample GMA5-5
Pesticides											
G135-560	GMA5-5	11/15/2007	Water	Tier II	Yes	4,4'-DDE	MS %R	58.2%	60.0% to 140%	ND(0.00015) J	
						Aldrin	MS/MSD %R	53.8%, 57.6%	60.0% to 140%	ND(0.00015) J	
						Endrin Aldehyde	MS/MSD %R	57.6%, 56.6%	60.0% to 140%	ND(0.00015) J	
G135-560	GMA5-DUP-1	11/15/2007	Water	Tier II	No						Parent Sample GMA5-5
Herbicides											
G135-560	GMA5-5	11/15/2007	Water	Tier II	No						
G135-560	GMA5-DUP-1	11/15/2007	Water	Tier II	No						Parent Sample GMA5-5
Cyanide-MADEP (PAC)											
G135-560	GMA5-5	11/15/2007	Water	Tier II	No						
G135-560	GMA5-5 (Filtered)	11/15/2007	Water	Tier II	No						
G135-560	GMA5-DUP-1	11/15/2007	Water	Tier II	No						Parent Sample GMA5-5
G135-560	GMA5-DUP-1 (Filtered)	11/15/2007	Water	Tier II	No						Parent Sample GMA5-5 (Filtered)
Sulfides											
G135-560	GMA5-5	11/15/2007	Water	Tier II	Yes	Sulfide	MS/MSD %R	33.0%, 31.0%	75% to 125%	ND(1.00) J	
						Sulfide	LCS %R	71.0%	80% to 120%	ND(1.00) J	
G135-560	GMA5-DUP-1	11/15/2007	Water	Tier II	Yes	Sulfide	LCS %R	71.0%	80% to 120%	ND(1.00) J	Parent Sample GMA5-5

ARCADIS

Appendix E

Historical Groundwater Data

ARCADIS

Summary of Historical Groundwater Analytical Results – Selected Wells

Table E-1
Baseline Monitoring Program Groundwater Analytical Results - Well GMA 5-5

Groundwater Management Area 5 Long-Term Monitoring Program
Monitoring Event Evaluation Report for Fall 2007
General Electric Company - Pittsfield, Massachusetts
(Results are presented in parts per million, ppm)

Parameter / Sample ID:	GMA5-5	GMA5-5	GMA5-5
Laboratory:	SGS	SGS	SGS
Date Collected:	04/16/02	10/17/02	04/30/03
Volatile Organics			
1,1,1,2-Tetrachloroethane	ND(0.0050)	ND(0.0050)	ND(0.0050)
1,1,1-Trichloroethane	ND(0.0050)	ND(0.0050)	ND(0.0050)
1,1,2,2-Tetrachloroethane	ND(0.0050)	ND(0.0050)	ND(0.0050)
1,1,2-Trichloroethane	ND(0.0050)	ND(0.0050)	ND(0.0050)
1,1-Dichloroethane	ND(0.0050)	ND(0.0050)	ND(0.0050)
1,1-Dichloroethene	ND(0.0010)	ND(0.0010)	ND(0.0010)
1,2,3-Trichloropropane	ND(0.0050)	ND(0.0050)	ND(0.0050)
1,2-Dibromo-3-chloropropane	ND(0.0050)	ND(0.0050)	ND(0.0050)
1,2-Dibromoethane	ND(0.0010)	ND(0.0010)	ND(0.0010)
1,2-Dichloroethane	ND(0.0050)	ND(0.0050)	ND(0.0050)
1,2-Dichloropropane	ND(0.0050)	ND(0.0050)	ND(0.0050)
1,4-Dioxane	ND(0.20) J	ND(0.20)	ND(0.20)
2-Butanone	ND(0.010)	ND(0.010)	ND(0.010)
2-Chloro-1,3-butadiene	ND(0.0050)	ND(0.0050)	ND(0.0050)
2-Chloroethylvinylether	ND (0.0050) J	ND(0.0050)	ND(0.0050) J
2-Hexanone	ND(0.010)	ND(0.010)	ND(0.010)
3-Chloropropene	ND(0.0050)	ND(0.0050)	ND(0.0050)
4-Methyl-2-pentanone	ND(0.010)	ND(0.010)	ND(0.010)
Acetone	ND (0.010) J	ND(0.010)	ND(0.010)
Acetonitrile	ND (0.10) J	ND(0.10) J	ND(0.10) J
Acrolein	ND (0.10) J	ND(0.10) J	ND(0.10) J
Acrylonitrile	ND (0.0050) J	ND(0.0050) J	ND(0.0050)
Benzene	ND(0.0050)	ND(0.0050)	ND(0.0050)
Bromodichloromethane	ND(0.0050)	ND(0.0050)	ND(0.0050)
Bromoform	ND(0.0050)	ND(0.0050)	ND(0.0050)
Bromomethane	ND(0.0020)	ND(0.0020)	ND(0.0020)
Carbon Disulfide	ND(0.0050)	ND(0.0050)	ND(0.0050)
Carbon Tetrachloride	ND(0.0050)	ND(0.0050)	ND(0.0050)
Chlorobenzene	ND(0.0050)	ND(0.0050)	ND(0.0050)
Chloroethane	ND(0.0050)	ND(0.0050)	ND(0.0050)
Chloroform	ND(0.0050)	ND(0.0050)	ND(0.0050)
Chloromethane	ND(0.0050)	ND(0.0050)	ND(0.0050)
cis-1,3-Dichloropropene	ND(0.0050)	ND(0.0050)	ND(0.0050)
Dibromochloromethane	ND(0.0050)	ND(0.0050)	ND(0.0050)
Dibromomethane	ND(0.0050)	ND(0.0050)	ND(0.0050)
Dichlorodifluoromethane	ND(0.0050)	ND(0.0050)	ND(0.0050)
Ethyl Methacrylate	ND(0.0050)	ND(0.0050)	ND(0.0050)
Ethylbenzene	ND(0.0050)	ND(0.0050)	ND(0.0050)
Iodomethane	ND(0.0050)	ND(0.0050)	ND(0.0050)
Isobutanol	ND (0.10) J	ND(0.10)	ND(0.10) J
Methacrylonitrile	ND(0.0050)	ND(0.0050)	ND(0.0050)
Methyl Methacrylate	ND(0.0050)	ND(0.0050)	ND(0.0050)
Methylene Chloride	ND(0.0050)	ND(0.0050)	ND(0.0050)
Propionitrile	ND (0.010) J	ND(0.010)	ND(0.010) J
Styrene	ND(0.0050)	ND(0.0050)	ND(0.0050)
Tetrachloroethene	ND(0.0020)	ND(0.0020) J	ND(0.0020)
Toluene	ND(0.0050)	ND(0.0050)	ND(0.0050)
trans-1,2-Dichloroethene	ND(0.0050)	ND(0.0050)	ND(0.0050)
trans-1,3-Dichloropropene	ND(0.0050)	ND(0.0050)	ND(0.0050)
trans-1,4-Dichloro-2-butene	ND(0.0050)	ND(0.0050)	ND(0.0050)
Trichloroethene	ND(0.0050)	ND(0.0050)	ND(0.0050)
Trichlorofluoromethane	ND(0.0050)	ND(0.0050)	ND(0.0050)
Vinyl Acetate	ND(0.0050)	ND(0.0050)	ND(0.0050)
Vinyl Chloride	ND(0.0020)	ND(0.0020)	ND(0.0020)
Xylenes (total)	ND(0.010)	ND(0.010)	ND(0.010)
Total VOCs	ND(0.20)	ND(0.20)	ND(0.20)

Table E-1
Baseline Monitoring Program Groundwater Analytical Results - Well GMA 5-5

Groundwater Management Area 5 Long-Term Monitoring Program
Monitoring Event Evaluation Report for Fall 2007
General Electric Company - Pittsfield, Massachusetts
(Results are presented in parts per million, ppm)

Parameter	Sample ID: / Laboratory: / Date Collected:	GMA5-5 / SGS / 04/16/02	GMA5-5 / SGS / 10/17/02	GMA5-5 / SGS / 04/30/03
PCBs-Unfiltered				
Aroclor-1016		ND(0.000065) J	ND(0.000065)	ND(0.000065)
Aroclor-1221		ND(0.000065) J	ND(0.000065)	ND(0.000065)
Aroclor-1232		ND(0.000065) J	ND(0.000065)	ND(0.000065)
Aroclor-1242		ND(0.000065) J	ND(0.000065)	ND(0.000065)
Aroclor-1248		ND(0.000065) J	ND(0.000065)	ND(0.000065)
Aroclor-1254		ND(0.000065) J	0.00038	ND(0.000065)
Aroclor-1260		ND(0.000065) J	0.00010	ND(0.000065)
Total PCBs		ND(0.000065) J	0.00048	ND(0.000065)
PCBs-Filtered				
Aroclor-1016		ND(0.000065)	ND(0.000065)	ND(0.000065)
Aroclor-1221		ND(0.000065)	ND(0.000065)	ND(0.000065)
Aroclor-1232		ND(0.000065)	ND(0.000065)	ND(0.000065)
Aroclor-1242		ND(0.000065)	ND(0.000065)	ND(0.000065)
Aroclor-1248		ND(0.000065)	ND(0.000065)	ND(0.000065)
Aroclor-1254		ND(0.000065)	ND(0.000065)	ND(0.000065)
Aroclor-1260		ND(0.000065)	ND(0.000065)	ND(0.000065)
Total PCBs		ND(0.000065)	ND(0.000065)	ND(0.000065)
Semivolatile Organics				
1,2,4,5-Tetrachlorobenzene		ND(0.010)	ND(0.010)	ND(0.010)
1,2,4-Trichlorobenzene		ND(0.010)	ND(0.010)	ND(0.010)
1,2-Dichlorobenzene		ND(0.010)	ND(0.010)	ND(0.010)
1,2-Diphenylhydrazine		ND(0.010)	ND(0.010)	ND(0.010)
1,3,5-Trinitrobenzene		ND(0.010)	ND(0.010)	ND(0.010)
1,3-Dichlorobenzene		ND(0.010)	ND(0.010)	ND(0.010)
1,3-Dinitrobenzene		ND(0.010)	ND(0.010)	ND(0.010)
1,4-Dichlorobenzene		ND(0.010)	ND(0.010)	ND(0.010)
1,4-Naphthoquinone		ND(0.010)	ND(0.010)	ND(0.010)
1-Naphthylamine		ND(0.010)	ND(0.010)	ND(0.010)
2,3,4,6-Tetrachlorophenol		ND(0.010) J	ND(0.010)	ND(0.010)
2,4,5-Trichlorophenol		ND(0.010)	ND(0.010)	ND(0.010)
2,4,6-Trichlorophenol		ND(0.010)	ND(0.010)	ND(0.010)
2,4-Dichlorophenol		ND(0.010)	ND(0.010)	ND(0.010)
2,4-Dimethylphenol		ND(0.010)	ND(0.010)	ND(0.010)
2,4-Dinitrophenol		ND(0.050)	ND(0.050)	ND(0.050) J
2,4-Dinitrotoluene		ND(0.010)	ND(0.010)	ND(0.010)
2,6-Dichlorophenol		ND(0.010)	ND(0.010)	ND(0.010)
2,6-Dinitrotoluene		ND(0.010) J	ND(0.010)	ND(0.010)
2-Acetylaminofluorene		ND(0.010)	ND(0.010)	ND(0.010)
2-Chloronaphthalene		ND(0.010)	ND(0.010)	ND(0.010)
2-Chlorophenol		ND(0.010)	ND(0.010)	ND(0.010)
2-Methylnaphthalene		ND(0.010)	ND(0.010)	ND(0.010)
2-Methylphenol		ND(0.010)	ND(0.010)	ND(0.010)
2-Naphthylamine		ND(0.010)	ND(0.010)	ND(0.010)
2-Nitroaniline		ND(0.050)	ND(0.050)	ND(0.050)
2-Nitrophenol		ND(0.010)	ND(0.010)	ND(0.010)
2-Picoline		ND(0.010)	ND(0.010)	ND(0.010)
3&4-Methylphenol		ND(0.010)	ND(0.010)	ND(0.010)
3,3'-Dichlorobenzidine		ND(0.020)	ND(0.020)	ND(0.020)
3,3'-Dimethylbenzidine		ND(0.010)	ND(0.010)	ND(0.010)
3-Methylcholanthrene		ND(0.010)	ND(0.010)	ND(0.010)
3-Nitroaniline		ND(0.050)	ND(0.050)	ND(0.050)
4,6-Dinitro-2-methylphenol		ND(0.050)	ND(0.050)	ND(0.050) J
4-Aminobiphenyl		ND(0.010)	ND(0.010)	ND(0.010)
4-Bromophenyl-phenylether		ND(0.010)	ND(0.010)	ND(0.010)
4-Chloro-3-Methylphenol		ND(0.010)	ND(0.010)	ND(0.010)
4-Chloroaniline		ND(0.010)	ND(0.010)	ND(0.010)
4-Chlorobenzilate		ND(0.010) J	ND(0.010)	ND(0.010)
4-Chlorophenyl-phenylether		ND(0.010)	ND(0.010)	ND(0.010)

Table E-1
Baseline Monitoring Program Groundwater Analytical Results - Well GMA 5-5

Groundwater Management Area 5 Long-Term Monitoring Program
Monitoring Event Evaluation Report for Fall 2007
General Electric Company - Pittsfield, Massachusetts
(Results are presented in parts per million, ppm)

Parameter	Sample ID: / Laboratory: / Date Collected:	GMA5-5 / SGS / 04/16/02	GMA5-5 / SGS / 10/17/02	GMA5-5 / SGS / 04/30/03
Semivolatile Organics (continued)				
4-Nitroaniline		ND(0.050)	ND(0.050)	ND(0.050)
4-Nitrophenol		ND(0.050)	ND(0.050)	ND(0.050) J
4-Nitroquinoline-1-oxide		ND(0.010) J	ND(0.010)	ND(0.010)
4-Phenylenediamine		ND(0.010) J	ND(0.010) J	ND(0.010)
5-Nitro-o-toluidine		ND(0.010)	ND(0.010)	ND(0.010)
7,12-Dimethylbenz(a)anthracene		ND(0.010)	ND(0.010)	ND(0.010)
a,a'-Dimethylphenethylamine		ND(0.010) J	ND(0.010)	ND(0.010) J
Acenaphthene		ND(0.010)	ND(0.010)	ND(0.010)
Acenaphthylene		ND(0.010)	ND(0.010)	ND(0.010)
Acetophenone		ND(0.010)	ND(0.010)	ND(0.010)
Aniline		ND(0.010)	ND(0.010)	ND(0.010)
Anthracene		ND(0.010)	ND(0.010)	ND(0.010)
Aramite		ND(0.010) J	ND(0.010)	ND(0.010)
Benzidine		ND(0.020)	ND(0.020) J	ND(0.020)
Benzo(a)anthracene		ND(0.010)	ND(0.010)	ND(0.010)
Benzo(a)pyrene		ND(0.010)	ND(0.010)	ND(0.010)
Benzo(b)fluoranthene		ND(0.010)	ND(0.010)	ND(0.010)
Benzo(g,h,i)perylene		ND(0.010)	ND(0.010)	ND(0.010)
Benzo(k)fluoranthene		ND(0.010)	ND(0.010)	ND(0.010)
Benzyl Alcohol		ND(0.020)	ND(0.020)	ND(0.020)
bis(2-Chloroethoxy)methane		ND(0.010)	ND(0.010)	ND(0.010)
bis(2-Chloroethyl)ether		ND(0.010)	ND(0.010)	ND(0.010)
bis(2-Chloroisopropyl)ether		ND(0.010)	ND(0.010)	ND(0.010)
bis(2-Ethylhexyl)phthalate		ND(0.0060)	ND(0.0060)	ND(0.0060)
Butylbenzylphthalate		ND(0.010)	ND(0.010)	ND(0.010)
Chrysene		ND(0.010)	ND(0.010)	ND(0.010)
Diallate		ND(0.010)	ND(0.010)	ND(0.010)
Dibenzo(a,h)anthracene		ND(0.010)	ND(0.010)	ND(0.010)
Dibenzofuran		ND(0.010)	ND(0.010)	ND(0.010)
Diethylphthalate		ND(0.010)	ND(0.010)	ND(0.010)
Dimethylphthalate		ND(0.010)	ND(0.010)	ND(0.010)
Di-n-Butylphthalate		ND(0.010)	ND(0.010)	ND(0.010)
Di-n-Octylphthalate		ND(0.010)	ND(0.010)	ND(0.010)
Diphenylamine		ND(0.010)	ND(0.010)	ND(0.010)
Ethyl Methanesulfonate		ND(0.010)	ND(0.010)	ND(0.010) J
Fluoranthene		ND(0.010)	ND(0.010)	ND(0.010)
Fluorene		ND(0.010)	ND(0.010)	ND(0.010)
Hexachlorobenzene		ND(0.010)	ND(0.010)	ND(0.010)
Hexachlorobutadiene		ND(0.0010)	ND(0.0010) J	ND(0.0010)
Hexachlorocyclopentadiene		ND(0.010)	ND(0.010)	ND(0.010) J
Hexachloroethane		ND(0.010)	ND(0.010)	ND(0.010)
Hexachlorophene		ND(0.020)	ND(0.020) J	ND(0.020) J
Hexachloropropene		ND(0.010) J	ND(0.010)	ND(0.010)
Indeno(1,2,3-cd)pyrene		ND(0.010)	ND(0.010)	ND(0.010)
Isodrin		ND(0.010)	ND(0.010)	ND(0.010)
Isophorone		ND(0.010)	ND(0.010)	ND(0.010)
Isosafrole		ND(0.010)	ND(0.010)	ND(0.010)
Methapyrilene		ND(0.010)	ND(0.010)	ND(0.010)
Methyl Methanesulfonate		ND(0.010)	ND(0.010)	ND(0.010)
Naphthalene		ND(0.010)	ND(0.010)	ND(0.010)
Nitrobenzene		ND(0.010)	ND(0.010)	ND(0.010)
N-Nitrosodiethylamine		ND(0.010)	ND(0.010)	ND(0.010)
N-Nitrosodimethylamine		ND(0.010)	ND(0.010)	ND(0.010)
N-Nitroso-di-n-butylamine		ND(0.010)	ND(0.010)	ND(0.010) J
N-Nitroso-di-n-propylamine		ND(0.010)	ND(0.010)	ND(0.010)
N-Nitrosodiphenylamine		ND(0.010)	ND(0.010)	ND(0.010)
N-Nitrosomethylethylamine		ND(0.010)	ND(0.010)	ND(0.010)
N-Nitrosomorpholine		ND(0.010)	ND(0.010)	ND(0.010)
N-Nitrosopiperidine		ND(0.010)	ND(0.010)	ND(0.010)

Table E-1
Baseline Monitoring Program Groundwater Analytical Results - Well GMA 5-5

Groundwater Management Area 5 Long-Term Monitoring Program
Monitoring Event Evaluation Report for Fall 2007
General Electric Company - Pittsfield, Massachusetts
(Results are presented in parts per million, ppm)

Parameter	Sample ID: / Laboratory: / Date Collected:	GMA5-5 / SGS / 04/16/02	GMA5-5 / SGS / 10/17/02	GMA5-5 / SGS / 04/30/03
Semivolatile Organics (continued)				
N-Nitrosopyrrolidine		ND(0.010)	ND(0.010)	ND(0.010)
o,o,o-Triethylphosphorothioate		ND(0.010)	ND(0.010)	ND(0.010)
o-Toluidine		ND(0.010)	ND(0.010)	ND(0.010)
p-Dimethylaminoazobenzene		ND(0.010)	ND(0.010)	ND(0.010)
Pentachlorobenzene		ND(0.010)	ND(0.010)	ND(0.010)
Pentachloroethane		ND(0.010)	ND(0.010)	ND(0.010)
Pentachloronitrobenzene		ND(0.010) J	ND(0.010)	ND(0.010)
Pentachlorophenol		ND(0.050)	ND(0.050)	ND(0.050)
Phenacetin		ND(0.010)	ND(0.010)	ND(0.010)
Phenanthrene		ND(0.010)	ND(0.010)	ND(0.010)
Phenol		ND(0.010)	ND(0.010)	ND(0.010)
Pronamide		ND(0.010)	ND(0.010)	ND(0.010)
Pyrene		ND(0.010)	ND(0.010)	ND(0.010)
Pyridine		ND(0.010)	ND(0.010)	ND(0.010)
Safrole		ND(0.010)	ND(0.010)	ND(0.010)
Thionazin		ND(0.010)	ND(0.010)	ND(0.010)
Organochlorine Pesticides				
4,4'-DDD		ND(0.00010)	ND(0.00010)	ND(0.00010)
4,4'-DDE		ND(0.00010)	ND(0.00010)	ND(0.00010)
4,4'-DDT		ND(0.00010)	ND(0.00010)	ND(0.00010)
Aldrin		ND(0.000050)	ND(0.000050)	ND(0.000050)
Alpha-BHC		ND(0.000050)	ND(0.000050)	ND(0.000050)
Alpha-Chlordane		ND(0.000050)	ND(0.000050)	ND(0.000050)
Beta-BHC		ND(0.000050)	ND(0.000050)	ND(0.000050)
Delta-BHC		ND(0.000050)	ND(0.000050)	ND(0.000050)
Dieldrin		ND(0.00010)	ND(0.00010)	ND(0.00010)
Endosulfan I		ND(0.00010)	ND(0.00010)	ND(0.00010)
Endosulfan II		ND(0.00010)	ND(0.00010)	ND(0.00010)
Endosulfan Sulfate		ND(0.00010)	ND(0.00010)	ND(0.00010)
Endrin		ND(0.00010)	ND(0.00010)	ND(0.00010)
Endrin Aldehyde		ND(0.00010)	ND(0.00010)	ND(0.00010)
Endrin Ketone		ND(0.00010)	ND(0.00010)	ND(0.00010)
Gamma-BHC (Lindane)		ND(0.000050)	ND(0.000050)	ND(0.000050)
Gamma-Chlordane		ND(0.000050)	ND(0.000050)	ND(0.000050)
Heptachlor		ND(0.000050)	ND(0.000050)	ND(0.000050)
Heptachlor Epoxide		ND(0.000050)	ND(0.000050)	ND(0.000050)
Kepone		ND(0.050)	ND(0.050)	ND(0.050)
Methoxychlor		ND(0.00050)	ND(0.00050)	ND(0.00050)
Technical Chlordane		ND(0.00050)	ND(0.00050)	ND(0.00050)
Toxaphene		ND(0.0010)	ND(0.0010)	ND(0.0010)
Organophosphate Pesticides				
Dimethoate		ND(0.050)	ND(0.050)	ND(0.050)
Disulfoton		ND(0.010)	ND(0.010)	ND(0.010)
Ethyl Parathion		ND(0.010)	ND(0.010)	ND(0.010)
Famphur		ND(0.050)	ND(0.050)	ND(0.050)
Methyl Parathion		ND(0.010)	ND(0.010)	ND(0.010)
Phorate		ND(0.010)	ND(0.010)	ND(0.010)
Sulfotep		ND(0.010)	ND(0.010)	ND(0.010)
Herbicides				
2,4,5-T		ND(0.0020)	ND(2.0) J	ND(0.0020)
2,4,5-TP		ND(0.0020)	ND(2.0) J	ND(0.0020)
2,4-D		ND(0.010)	ND(10.0) J	ND(0.010)
Dinoseb		ND(0.0010)	ND(1.0) J	ND(0.0010)

Table E-1
Baseline Monitoring Program Groundwater Analytical Results - Well GMA 5-5

Groundwater Management Area 5 Long-Term Monitoring Program
Monitoring Event Evaluation Report for Fall 2007
General Electric Company - Pittsfield, Massachusetts
(Results are presented in parts per million, ppm)

Parameter	Sample ID: / Laboratory: / Date Collected:	GMA5-5 / SGS / 04/16/02	GMA5-5 / SGS / 10/17/02	GMA5-5 / SGS / 04/30/03
Furans				
2,3,7,8-TCDF		0.0000000044 J	ND(0.0000000012)	ND(0.0000000078)
TCDFs (total)		0.0000000044 J	ND(0.0000000012)	ND(0.0000000078)
1,2,3,7,8-PeCDF		ND(0.0000000023) J	ND(0.0000000024)	ND(0.0000000061) X
2,3,4,7,8-PeCDF		0.0000000078 J	ND(0.0000000024)	0.0000000035 J
PeCDFs (total)		ND(0.0000000078)	ND(0.0000000024)	0.0000000035
1,2,3,4,7,8-HxCDF		ND(0.0000000053) XJ	ND(0.0000000024)	ND(0.0000000049)
1,2,3,6,7,8-HxCDF		ND(0.0000000048) XJ	ND(0.0000000024)	ND(0.0000000044)
1,2,3,7,8,9-HxCDF		ND(0.0000000037) XJ	ND(0.0000000024)	ND(0.0000000059)
2,3,4,6,7,8-HxCDF		0.0000000043 J	ND(0.0000000024)	ND(0.0000000048)
HxCDFs (total)		0.0000000043 J	ND(0.0000000024)	ND(0.0000000050)
1,2,3,4,6,7,8-HpCDF		0.0000000067 J	ND(0.0000000024)	ND(0.0000000051)
1,2,3,4,7,8,9-HpCDF		0.0000000062 J	ND(0.0000000024)	ND(0.0000000068)
HpCDFs (total)		0.000000013	ND(0.0000000024)	ND(0.0000000058)
OCDF		0.000000013 J	ND(0.0000000049)	ND(0.000000028)
Dioxins				
2,3,7,8-TCDD		ND(0.0000000025) J	ND(0.0000000017)	ND(0.0000000058)
TCDDs (total)		ND(0.0000000025) J	ND(0.0000000017)	ND(0.000000012)
1,2,3,7,8-PeCDD		ND(0.0000000023) J	ND(0.0000000024)	ND(0.0000000068)
PeCDDs (total)		ND(0.0000000023) J	ND(0.0000000024)	ND(0.0000000068)
1,2,3,4,7,8-HxCDD		0.0000000050 J	ND(0.0000000028)	ND(0.0000000074)
1,2,3,6,7,8-HxCDD		ND(0.0000000045) XJ	ND(0.0000000025)	ND(0.0000000066)
1,2,3,7,8,9-HxCDD		0.0000000047 J	ND(0.0000000026)	ND(0.0000000073)
HxCDDs (total)		0.0000000097 J	ND(0.0000000028)	ND(0.0000000071)
1,2,3,4,6,7,8-HpCDD		ND(0.0000000064) X	ND(0.0000000028) X	ND(0.0000000093)
HpCDDs (total)		ND(0.0000000064) X	ND(0.0000000024)	ND(0.0000000093)
OCDD		0.000000022 J	0.000000020 J	ND(0.000000033)
Total TEQs (WHO TEFs)		0.0000000093	0.0000000037	0.000000011
Inorganics-Unfiltered				
Antimony		ND(0.0600)	ND(0.0600)	ND(0.0600)
Arsenic		ND(0.0100)	ND(0.0100)	ND(0.0100) J
Barium		ND(0.200)	0.160 B	0.270
Beryllium		ND(0.00100)	ND(0.00100)	ND(0.00100)
Cadmium		ND(0.00500)	ND(0.0050)	ND(0.00500)
Chromium		ND(0.0100)	0.00250 B	0.00300 B
Cobalt		ND(0.0500)	0.0120 B	0.00460 B
Copper		ND(0.0250)	0.0210 B	ND(0.025)
Cyanide		ND(0.0100)	0.00270 B	0.00340 B
Lead		ND (0.0030) J	0.0120	ND(0.00300) J
Mercury		ND(0.000200)	0.000280	ND(0.00020)
Nickel		ND(0.0400)	ND(0.0400)	0.00630 B
Selenium		ND(0.00500)	ND(0.00500)	ND(0.00500) J
Silver		ND(0.00500)	ND(0.00500)	0.00140 B
Sulfide		ND(5.00)	ND(5.00)	ND(5.00)
Thallium		ND (0.010) J	ND(0.0100)	ND(0.0100) J
Tin		ND(0.0300)	ND(0.0300)	ND(0.0300)
Vanadium		ND(0.0500)	ND(0.0500)	ND(0.0500)
Zinc		0.00760 B	0.0200 J	ND(0.0200) J

Table E-1
Baseline Monitoring Program Groundwater Analytical Results - Well GMA 5-5

Groundwater Management Area 5 Long-Term Monitoring Program
Monitoring Event Evaluation Report for Fall 2007
General Electric Company - Pittsfield, Massachusetts
(Results are presented in parts per million, ppm)

Parameter	Sample ID: / Laboratory: / Date Collected:	GMA5-5 / SGS / 04/16/02	GMA5-5 / SGS / 10/17/02	GMA5-5 / SGS / 04/30/03
Inorganics-Filtered				
Antimony		ND(0.0600)	ND(0.0600)	ND(0.0600)
Arsenic		ND(0.100)	ND(0.0100)	ND(0.0100) J
Barium		ND(0.200)	0.120 B	0.190 B
Beryllium		ND(0.00100)	ND(0.00100)	ND(0.00100)
Cadmium		ND(0.0100)	ND(0.00500)	ND(0.00500)
Chromium		ND(0.0250)	0.00220 B	0.00170 B
Cobalt		ND(0.0500)	ND(0.0500)	0.00600 B
Copper		ND(0.100)	0.00680 B	ND(0.025)
Cyanide		NA	ND(0.0100)	0.00270 B
Cyanide-MADEP (PAC)		NA	NA	NA
Lead		ND (0.0030) J	ND(0.00300)	ND(0.00300) J
Mercury		ND(0.000200)	0.000150 B	ND(0.00020)
Nickel		ND(0.0400)	ND(0.0400)	0.00300 B
Selenium		ND(0.00500)	ND(0.00500)	ND(0.00500) J
Silver		ND(0.00500)	ND(0.00500)	ND(0.00500)
Thallium		ND (0.010) J	ND(0.0100)	ND(0.0100) J
Tin		ND(0.0300)	ND(0.0300)	ND(0.0300)
Vanadium		ND(0.0500)	ND(0.0500)	ND(0.0500)
Zinc		ND(0.0200)	ND(0.0200) J	ND(0.0200) J

Table E-1
Baseline Monitoring Program Groundwater Analytical Results - Well GMA 5-5

Groundwater Management Area 5 Long-Term Monitoring Program
Monitoring Event Evaluation Report for Fall 2007
General Electric Company - Pittsfield, Massachusetts
(Results are presented in parts per million, ppm)

Parameter	Sample ID: / Laboratory: / Date Collected:	GMA5-5 / SGS / 10/22/03	GMA5-5 / SGS / 11/15/07
Volatile Organics			
1,1,1,2-Tetrachloroethane		ND(0.0050)	ND(0.0010) [ND(0.0010)]
1,1,1-Trichloroethane		ND(0.0050)	ND(0.0010) [ND(0.0010)]
1,1,2,2-Tetrachloroethane		ND(0.0050)	ND(0.0010) [ND(0.0010)]
1,1,2-Trichloroethane		ND(0.0050)	ND(0.0010) [ND(0.0010)]
1,1-Dichloroethane		ND(0.0050)	ND(0.0010) [ND(0.0010)]
1,1-Dichloroethene		ND(0.0010)	ND(0.0010) [ND(0.0010)]
1,2,3-Trichloropropane		ND(0.0050)	ND(0.0010) [ND(0.0010)]
1,2-Dibromo-3-chloropropane		ND(0.0050)	ND(0.0050) J [ND(0.0050) J]
1,2-Dibromoethane		ND(0.0010)	ND(0.0010) [ND(0.0010)]
1,2-Dichloroethane		ND(0.0050)	ND(0.0010) [ND(0.0010)]
1,2-Dichloropropane		ND(0.0050)	ND(0.0010) [ND(0.0010)]
1,4-Dioxane		ND(0.20) J	ND(0.10) J [ND(0.10) J]
2-Butanone		ND(0.010) J	ND(0.0050) J [ND(0.0050) J]
2-Chloro-1,3-butadiene		ND(0.0050)	ND(0.0010) [ND(0.0010)]
2-Chloroethylvinylether		ND(0.0050)	R [ND(0.013) J]
2-Hexanone		ND(0.010)	ND(0.0050) [ND(0.0050)]
3-Chloropropene		ND(0.0050)	ND(0.0010) [ND(0.0010)]
4-Methyl-2-pentanone		ND(0.010)	ND(0.0050) J [ND(0.0050) J]
Acetone		ND(0.010)	ND(0.0050) J [ND(0.0050) J]
Acetonitrile		ND(0.10) J	ND(0.020) J [ND(0.020) J]
Acrolein		ND(0.10)	ND(0.025) J [ND(0.025) J]
Acrylonitrile		ND(0.0050)	ND(0.025) J [ND(0.025) J]
Benzene		ND(0.0050)	0.00034 J [0.00032 J]
Bromodichloromethane		ND(0.0050)	ND(0.0010) [ND(0.0010)]
Bromoform		ND(0.0050)	ND(0.0010) [ND(0.0010)]
Bromomethane		ND(0.0020)	ND(0.0010) J [ND(0.0010) J]
Carbon Disulfide		ND(0.0050)	ND(0.0010) [ND(0.0010)]
Carbon Tetrachloride		ND(0.0050)	ND(0.0010) [ND(0.0010)]
Chlorobenzene		ND(0.0050)	0.00051 J [0.00050 J]
Chloroethane		ND(0.0050)	ND(0.0010) [ND(0.0010)]
Chloroform		ND(0.0050)	ND(0.0010) [ND(0.0010)]
Chloromethane		ND(0.0050)	ND(0.0010) [ND(0.0010)]
cis-1,3-Dichloropropene		ND(0.0050)	ND(0.0010) [ND(0.0010)]
Dibromochloromethane		ND(0.0050)	ND(0.0010) [ND(0.0010)]
Dibromomethane		ND(0.0050)	ND(0.0010) [ND(0.0010)]
Dichlorodifluoromethane		ND(0.0050)	ND(0.0010) [ND(0.0010)]
Ethyl Methacrylate		ND(0.0050)	ND(0.0010) [ND(0.0010)]
Ethylbenzene		ND(0.0050)	ND(0.0010) [ND(0.0010)]
Iodomethane		ND(0.0050)	ND(0.0010) [ND(0.0010)]
Isobutanol		ND(0.10) J	ND(0.050) J [ND(0.050) J]
Methacrylonitrile		ND(0.0050)	ND(0.010) J [ND(0.010) J]
Methyl Methacrylate		ND(0.0050)	ND(0.0010) [ND(0.0010)]
Methylene Chloride		ND(0.0050)	ND(0.0050) [ND(0.0050)]
Propionitrile		ND(0.010) J	ND(0.020) J [ND(0.020) J]
Styrene		ND(0.0050)	ND(0.0010) [ND(0.0010)]
Tetrachloroethene		ND(0.0020)	ND(0.0010) [ND(0.0010)]
Toluene		0.00083 J	0.00023 J [0.00020 J]
trans-1,2-Dichloroethene		ND(0.0050)	ND(0.0010) [ND(0.0010)]
trans-1,3-Dichloropropene		ND(0.0050)	ND(0.0010) [ND(0.0010)]
trans-1,4-Dichloro-2-butene		ND(0.0050)	ND(0.0050) J [ND(0.0050) J]
Trichloroethene		ND(0.0050)	ND(0.0010) [ND(0.0010)]
Trichlorofluoromethane		ND(0.0050)	ND(0.0010) [ND(0.0010)]
Vinyl Acetate		ND(0.0050)	ND(0.0025) [ND(0.0025)]
Vinyl Chloride		ND(0.0020)	ND(0.0010) [ND(0.0010)]
Xylenes (total)		ND(0.010)	ND(0.0010) [ND(0.0010)]
Total VOCs		0.00083 J	0.0011 J [0.0010 J]

Table E-1
Baseline Monitoring Program Groundwater Analytical Results - Well GMA 5-5

Groundwater Management Area 5 Long-Term Monitoring Program
Monitoring Event Evaluation Report for Fall 2007
General Electric Company - Pittsfield, Massachusetts
(Results are presented in parts per million, ppm)

Parameter	Sample ID: / Laboratory: / Date Collected:	GMA5-5 / SGS / 10/22/03	GMA5-5 / SGS / 11/15/07
PCBs-Unfiltered			
Aroclor-1016		ND(0.000065)	ND(0.000065) [ND(0.000065)]
Aroclor-1221		ND(0.000065)	ND(0.000065) [ND(0.000065)]
Aroclor-1232		ND(0.000065)	ND(0.000065) [ND(0.000065)]
Aroclor-1242		ND(0.000065)	ND(0.000065) [ND(0.000065)]
Aroclor-1248		ND(0.000065)	ND(0.000065) [ND(0.000065)]
Aroclor-1254		0.000049 J	ND(0.000065) [ND(0.000065)]
Aroclor-1260		ND(0.000065)	0.000050 J [0.000041 J]
Total PCBs		0.000049 J	0.000050 J [0.000041 J]
PCBs-Filtered			
Aroclor-1016		ND(0.000065)	ND(0.000068) J [ND(0.000067)]
Aroclor-1221		ND(0.000065)	ND(0.000068) J [ND(0.000067)]
Aroclor-1232		ND(0.000065)	ND(0.000068) J [ND(0.000067)]
Aroclor-1242		ND(0.000065)	ND(0.000068) J [ND(0.000067)]
Aroclor-1248		ND(0.000065)	ND(0.000068) J [ND(0.000067)]
Aroclor-1254		ND(0.000065)	ND(0.000068) J [ND(0.000067)]
Aroclor-1260		ND(0.000065)	ND(0.000068) J [ND(0.000067)]
Total PCBs		ND(0.000065)	ND(0.000068) J [ND(0.000067)]
Semivolatile Organics			
1,2,4,5-Tetrachlorobenzene		ND(0.040)	ND(0.0050) [ND(0.0050)]
1,2,4-Trichlorobenzene		ND(0.040)	ND(0.0050) [ND(0.0050)]
1,2-Dichlorobenzene		ND(0.040)	ND(0.0050) [ND(0.0050)]
1,2-Diphenylhydrazine		ND(0.040)	ND(0.0050) [ND(0.0050)]
1,3,5-Trinitrobenzene		ND(0.040) J	ND(0.025) [ND(0.025)]
1,3-Dichlorobenzene		ND(0.040)	ND(0.0050) [ND(0.0050)]
1,3-Dinitrobenzene		ND(0.040)	ND(0.0050) [ND(0.0050)]
1,4-Dichlorobenzene		ND(0.040)	ND(0.0050) [ND(0.0050)]
1,4-Naphthoquinone		ND(0.040)	ND(0.0050) [ND(0.0050)]
1-Naphthylamine		ND(0.040)	ND(0.025) J [ND(0.025) J]
2,3,4,6-Tetrachlorophenol		ND(0.040)	ND(0.0050) [ND(0.0050)]
2,4,5-Trichlorophenol		ND(0.040)	ND(0.0050) [ND(0.0050)]
2,4,6-Trichlorophenol		ND(0.040)	ND(0.0050) J [ND(0.0050) J]
2,4-Dichlorophenol		ND(0.040)	ND(0.0050) [ND(0.0050)]
2,4-Dimethylphenol		ND(0.040)	ND(0.0050) [ND(0.0050)]
2,4-Dinitrophenol		ND(0.20)	ND(0.025) [ND(0.025)]
2,4-Dinitrotoluene		ND(0.040)	ND(0.0050) [ND(0.0050)]
2,6-Dichlorophenol		ND(0.040)	ND(0.0050) [ND(0.0050)]
2,6-Dinitrotoluene		ND(0.040)	ND(0.0050) [ND(0.0050)]
2-Acetylaminofluorene		ND(0.040)	ND(0.010) [ND(0.010)]
2-Chloronaphthalene		ND(0.040)	ND(0.0050) [ND(0.0050)]
2-Chlorophenol		ND(0.040)	ND(0.0050) [ND(0.0050)]
2-Methylnaphthalene		ND(0.040)	ND(0.0050) [ND(0.0050)]
2-Methylphenol		ND(0.040)	ND(0.0050) J [ND(0.0050) J]
2-Naphthylamine		ND(0.040) J	ND(0.025) [ND(0.025)]
2-Nitroaniline		ND(0.20)	ND(0.0050) [ND(0.0050)]
2-Nitrophenol		ND(0.040)	ND(0.0050) [ND(0.0050)]
2-Picoline		ND(0.040)	ND(0.0050) J [ND(0.0050) J]
3&4-Methylphenol		ND(0.040)	ND(0.0050) J [ND(0.0050) J]
3,3'-Dichlorobenzidine		ND(0.080)	ND(0.010) [ND(0.010)]
3,3'-Dimethylbenzidine		ND(0.040)	ND(0.025) [ND(0.025)]
3-Methylcholanthrene		ND(0.040) J	ND(0.0050) [ND(0.0050)]
3-Nitroaniline		ND(0.20)	ND(0.025) [ND(0.025)]
4,6-Dinitro-2-methylphenol		ND(0.050) J	ND(0.025) [ND(0.025)]
4-Aminobiphenyl		ND(0.040)	ND(0.0050) [ND(0.0050)]
4-Bromophenyl-phenylether		ND(0.040)	ND(0.0050) [ND(0.0050)]
4-Chloro-3-Methylphenol		ND(0.040)	ND(0.0050) J [ND(0.0050)]
4-Chloroaniline		ND(0.040)	ND(0.025) [ND(0.025)]
4-Chlorobenzilate		ND(0.040) J	ND(0.0050) [ND(0.0050)]
4-Chlorophenyl-phenylether		ND(0.040)	ND(0.0050) [ND(0.0050)]

Table E-1
Baseline Monitoring Program Groundwater Analytical Results - Well GMA 5-5

Groundwater Management Area 5 Long-Term Monitoring Program
Monitoring Event Evaluation Report for Fall 2007
General Electric Company - Pittsfield, Massachusetts
(Results are presented in parts per million, ppm)

Parameter	Sample ID: / Laboratory: / Date Collected:	GMA5-5 / SGS / 10/22/03	GMA5-5 / SGS / 11/15/07
Semivolatile Organics (continued)			
4-Nitroaniline		ND(0.050)	ND(0.025) [ND(0.025)]
4-Nitrophenol		ND(0.20)	ND(0.025) [ND(0.025)]
4-Nitroquinoline-1-oxide		ND(0.040)	ND(0.025) [ND(0.025)]
4-Phenylenediamine		ND(0.040) J	ND(0.010) J [ND(0.010) J]
5-Nitro-o-toluidine		ND(0.040)	ND(0.0050) [ND(0.0050)]
7,12-Dimethylbenz(a)anthracene		ND(0.040)	ND(0.0050) [ND(0.0050)]
a,a'-Dimethylphenethylamine		ND(0.040)	ND(0.025) [ND(0.025)]
Acenaphthene		ND(0.040)	ND(0.0050) [ND(0.0050)]
Acenaphthylene		ND(0.040)	ND(0.0050) [ND(0.0050)]
Acetophenone		ND(0.040)	ND(0.0050) [ND(0.0050)]
Aniline		ND(0.040)	ND(0.0050) [ND(0.0050)]
Anthracene		ND(0.040)	ND(0.0050) [ND(0.0050)]
Aramite		ND(0.040) J	ND(0.0050) J [ND(0.0050) J]
Benzidine		ND(0.080)	ND(0.010) [ND(0.010)]
Benzo(a)anthracene		ND(0.040)	ND(0.0050) [ND(0.0050)]
Benzo(a)pyrene		ND(0.040)	ND(0.0050) [ND(0.0050)]
Benzo(b)fluoranthene		ND(0.040)	ND(0.0050) [ND(0.0050)]
Benzo(g,h,i)perylene		ND(0.040)	ND(0.0050) [ND(0.0050)]
Benzo(k)fluoranthene		ND(0.040)	ND(0.0050) [ND(0.0050)]
Benzyl Alcohol		ND(0.080)	ND(0.010) [ND(0.010)]
bis(2-Chloroethoxy)methane		ND(0.040)	ND(0.0050) [ND(0.0050)]
bis(2-Chloroethyl)ether		ND(0.040)	ND(0.0050) [ND(0.0050)]
bis(2-Chloroisopropyl)ether		ND(0.040)	ND(0.0050) [ND(0.0050)]
bis(2-Ethylhexyl)phthalate		ND(0.020)	ND(0.0050) [ND(0.0050)]
Butylbenzylphthalate		ND(0.040)	ND(0.0050) [ND(0.0050)]
Chrysene		ND(0.040)	ND(0.0050) [ND(0.0050)]
Diallate		ND(0.040)	ND(0.0050) [ND(0.0050)]
Dibenzo(a,h)anthracene		ND(0.040)	ND(0.0050) [ND(0.0050)]
Dibenzofuran		ND(0.040)	ND(0.0050) [ND(0.0050)]
Diethylphthalate		ND(0.040)	ND(0.0050) J [ND(0.0050)]
Dimethylphthalate		ND(0.040)	ND(0.0050) [ND(0.0050)]
Di-n-Butylphthalate		ND(0.040)	ND(0.0050) [ND(0.0050)]
Di-n-Octylphthalate		ND(0.040)	ND(0.0050) [ND(0.0050)]
Diphenylamine		ND(0.040)	ND(0.0050) [ND(0.0050)]
Ethyl Methanesulfonate		ND(0.040)	ND(0.0050) [ND(0.0050)]
Fluoranthene		ND(0.040)	ND(0.0050) [ND(0.0050)]
Fluorene		ND(0.040)	ND(0.0050) [ND(0.0050)]
Hexachlorobenzene		ND(0.040)	ND(0.0050) [ND(0.0050)]
Hexachlorobutadiene		ND(0.0010)	ND(0.0050) [ND(0.0050)]
Hexachlorocyclopentadiene		ND(0.040) J	ND(0.010) J [ND(0.010)]
Hexachloroethane		ND(0.040)	ND(0.0050) [ND(0.0050)]
Hexachlorophene		ND(0.080) J	ND(0.0050) [ND(0.0050)]
Hexachloropropene		ND(0.040) J	ND(0.010) [ND(0.010)]
Indeno(1,2,3-cd)pyrene		ND(0.040)	ND(0.0050) [ND(0.0050)]
Isodrin		ND(0.040)	ND(0.0050) [ND(0.0050)]
Isophorone		ND(0.040)	ND(0.0050) [ND(0.0050)]
Isosafrole		ND(0.040)	ND(0.0050) [ND(0.0050)]
Methapyrilene		ND(0.040)	ND(0.0050) [ND(0.0050)]
Methyl Methanesulfonate		ND(0.040)	ND(0.0050) [ND(0.0050)]
Naphthalene		ND(0.040)	ND(0.0050) [ND(0.0050)]
Nitrobenzene		ND(0.040)	ND(0.0050) [ND(0.0050)]
N-Nitrosodiethylamine		ND(0.040)	ND(0.0050) [ND(0.0050)]
N-Nitrosodimethylamine		ND(0.040)	ND(0.0050) [ND(0.0050)]
N-Nitroso-di-n-butylamine		ND(0.040)	ND(0.0050) [ND(0.0050)]
N-Nitroso-di-n-propylamine		ND(0.040)	ND(0.0050) [ND(0.0050)]
N-Nitrosodiphenylamine		ND(0.040)	ND(0.0050) [ND(0.0050)]
N-Nitrosomethylethylamine		ND(0.040)	ND(0.0050) [ND(0.0050)]
N-Nitrosomorpholine		ND(0.040) J	ND(0.0050) [ND(0.0050)]
N-Nitrosopiperidine		ND(0.040)	ND(0.0050) [ND(0.0050)]

Table E-1
Baseline Monitoring Program Groundwater Analytical Results - Well GMA 5-5

Groundwater Management Area 5 Long-Term Monitoring Program
Monitoring Event Evaluation Report for Fall 2007
General Electric Company - Pittsfield, Massachusetts
(Results are presented in parts per million, ppm)

Parameter	Sample ID: / Laboratory: / Date Collected:	GMA5-5 / SGS / 10/22/03	GMA5-5 / SGS / 11/15/07
Semivolatile Organics (continued)			
N-Nitrosopyrrolidine		ND(0.040) J	ND(0.0050) [ND(0.0050)]
o,o,o-Triethylphosphorothioate		ND(0.040)	ND(0.0050) [ND(0.0050)]
o-Toluidine		ND(0.040)	ND(0.0050) [ND(0.0050)]
p-Dimethylaminoazobenzene		ND(0.040)	ND(0.0050) [ND(0.0050)]
Pentachlorobenzene		ND(0.040)	ND(0.0050) [ND(0.0050)]
Pentachloroethane		ND(0.040)	ND(0.0050) [ND(0.0050)]
Pentachloronitrobenzene		ND(0.040) J	ND(0.0050) [ND(0.0050)]
Pentachlorophenol		ND(0.20)	ND(0.025) [ND(0.025)]
Phenacetin		ND(0.040)	ND(0.0050) [ND(0.0050)]
Phenanthrene		ND(0.040)	ND(0.0050) [ND(0.0050)]
Phenol		ND(0.040)	ND(0.0050) [ND(0.0050)]
Pronamide		ND(0.040)	ND(0.0050) [ND(0.0050)]
Pyrene		ND(0.040)	ND(0.0050) [ND(0.0050)]
Pyridine		ND(0.040)	ND(0.0050) J [ND(0.0050) J]
Safrole		ND(0.040)	ND(0.0050) [ND(0.0050)]
Thionazin		ND(0.040) J	ND(0.010) [ND(0.010)]
Organochlorine Pesticides			
4,4'-DDD		NA	ND(0.00015) [ND(0.00015)]
4,4'-DDE		NA	ND(0.00015) J [ND(0.00015)]
4,4'-DDT		NA	ND(0.00015) [ND(0.00015)]
Aldrin		NA	ND(0.00015) J [ND(0.00015)]
Alpha-BHC		NA	ND(0.00015) [ND(0.00015)]
Alpha-Chlordane		NA	ND(0.00015) [ND(0.00015)]
Beta-BHC		NA	ND(0.00015) [ND(0.00015)]
Delta-BHC		NA	ND(0.00015) [ND(0.00015)]
Dieldrin		NA	ND(0.00015) [ND(0.00015)]
Endosulfan I		NA	ND(0.00015) [ND(0.00015)]
Endosulfan II		NA	ND(0.00015) [ND(0.00015)]
Endosulfan Sulfate		NA	ND(0.00015) [ND(0.00015)]
Endrin		NA	ND(0.00015) [ND(0.00015)]
Endrin Aldehyde		NA	ND(0.00015) J [ND(0.00015)]
Endrin Ketone		NA	ND(0.00015) [ND(0.00015)]
Gamma-BHC (Lindane)		NA	ND(0.00015) [ND(0.00015)]
Gamma-Chlordane		NA	ND(0.00015) [ND(0.00015)]
Heptachlor		NA	ND(0.00015) [ND(0.00015)]
Heptachlor Epoxide		NA	ND(0.00015) [ND(0.00015)]
Kepone		NA	ND(0.025) [ND(0.025)]
Methoxychlor		NA	ND(0.00015) [ND(0.00015)]
Technical Chlordane		NA	ND(0.00025) [ND(0.00025)]
Toxaphene		NA	ND(0.00050) [ND(0.00050)]
Organophosphate Pesticides			
Dimethoate		NA	NA
Disulfoton		NA	NA
Ethyl Parathion		NA	NA
Famphur		NA	NA
Methyl Parathion		NA	NA
Phorate		NA	NA
Sulfotep		NA	NA
Herbicides			
2,4,5-T		NA	ND(0.00050) [ND(0.00050)]
2,4,5-TP		NA	ND(0.00050) [ND(0.00050)]
2,4-D		NA	ND(0.00050) [ND(0.00050)]
Dinoseb		NA	ND(0.025) [ND(0.025)]

Table E-1
Baseline Monitoring Program Groundwater Analytical Results - Well GMA 5-5

Groundwater Management Area 5 Long-Term Monitoring Program
Monitoring Event Evaluation Report for Fall 2007
General Electric Company - Pittsfield, Massachusetts
(Results are presented in parts per million, ppm)

Parameter	Sample ID: / Laboratory: / Date Collected:	GMA5-5 / SGS / 10/22/03	GMA5-5 / SGS / 11/15/07
Furans			
2,3,7,8-TCDF		ND(0.0000000015)	ND(0.0000000028) [ND(0.0000000023)]
TCDFs (total)		ND(0.0000000015)	ND(0.0000000028) [ND(0.0000000023)]
1,2,3,7,8-PeCDF		ND(0.0000000013)	ND(0.0000000051) [ND(0.0000000051)]
2,3,4,7,8-PeCDF		ND(0.0000000013)	ND(0.0000000051) [ND(0.0000000051)]
PeCDFs (total)		ND(0.0000000013)	ND(0.0000000051) [ND(0.0000000051)]
1,2,3,4,7,8-HxCDF		ND(0.0000000010)	ND(0.0000000051) [ND(0.0000000051)]
1,2,3,6,7,8-HxCDF		ND(0.0000000010)	ND(0.0000000051) [ND(0.0000000051)]
1,2,3,7,8,9-HxCDF		ND(0.0000000013)	ND(0.0000000051) [ND(0.0000000051)]
2,3,4,6,7,8-HxCDF		ND(0.0000000011)	ND(0.0000000051) [ND(0.0000000051)]
HxCDFs (total)		ND(0.0000000010)	ND(0.0000000051) [ND(0.0000000051)]
1,2,3,4,6,7,8-HpCDF		ND(0.0000000013)	ND(0.0000000051) [ND(0.0000000051)]
1,2,3,4,7,8,9-HpCDF		ND(0.0000000016)	ND(0.0000000051) [ND(0.0000000051)]
HpCDFs (total)		ND(0.0000000013)	ND(0.0000000051) [ND(0.0000000051)]
OCDF		ND(0.0000000013)	ND(0.000000010) [ND(0.000000010)]
Dioxins			
2,3,7,8-TCDD		ND(0.0000000012)	ND(0.0000000033) [ND(0.0000000021)]
TCDDs (total)		ND(0.0000000012)	ND(0.0000000033) [ND(0.0000000021)]
1,2,3,7,8-PeCDD		ND(0.0000000013)	ND(0.0000000051) [ND(0.0000000051)]
PeCDDs (total)		ND(0.0000000013)	ND(0.0000000051) [ND(0.0000000051)]
1,2,3,4,7,8-HxCDD		ND(0.0000000013)	ND(0.0000000051) [ND(0.0000000051)]
1,2,3,6,7,8-HxCDD		ND(0.0000000012)	ND(0.0000000051) [ND(0.0000000051)]
1,2,3,7,8,9-HxCDD		ND(0.0000000012)	ND(0.0000000051) [ND(0.0000000051)]
HxCDDs (total)		ND(0.0000000012)	ND(0.0000000051) [ND(0.0000000051)]
1,2,3,4,6,7,8-HpCDD		ND(0.00000000082)	ND(0.0000000051) [ND(0.0000000051)]
HpCDDs (total)		ND(0.00000000082)	ND(0.0000000051) [ND(0.0000000051)]
OCDD		ND(0.000000019)	0.000000011 J [0.000000013 J]
Total TEQs (WHO TEFs)		0.0000000021	0.0000000075 [0.0000000070]
Inorganics-Unfiltered			
Antimony		ND(0.0600)	ND(0.0400) [ND(0.0400)]
Arsenic		ND(0.010)	0.00297 B [0.00418 B]
Barium		0.380	0.0953 B [0.0963 B]
Beryllium		ND(0.00100)	ND(0.0100) J [0.00464 J]
Cadmium		ND(0.00500)	ND(0.00500) [ND(0.00500)]
Chromium		0.00230 B	0.00208 B [0.00207 B]
Cobalt		0.00340 B	ND(0.0100) [ND(0.0100)]
Copper		ND(0.0250)	ND(0.0100) J [ND(0.0100) J]
Cyanide		0.00260 B	ND(0.00600) [ND(0.00600)]
Lead		ND(0.00300)	ND(0.0100) [ND(0.0100)]
Mercury		ND(0.000200)	ND(0.000406) [ND(0.000406)]
Nickel		0.00540 B	ND(0.0100) [ND(0.0100)]
Selenium		ND(0.00500) J	ND(0.0200) [0.0117 B]
Silver		0.00120 B	ND(0.0100) [ND(0.0100)]
Sulfide		ND(5.00)	ND(1.00) J [ND(1.00) J]
Thallium		ND(0.0100)	0.00957 B [0.00695 B]
Tin		ND(0.0300)	ND(0.0100) J [ND(0.0100) J]
Vanadium		ND(0.0500)	ND(0.0500) [ND(0.0500)]
Zinc		ND(0.0200) J	ND(0.0200) [0.0321]

Table E-1
Baseline Monitoring Program Groundwater Analytical Results - Well GMA 5-5

Groundwater Management Area 5 Long-Term Monitoring Program
Monitoring Event Evaluation Report for Fall 2007
General Electric Company - Pittsfield, Massachusetts
(Results are presented in parts per million, ppm)

Parameter	Sample ID: / Laboratory: / Date Collected:	GMA5-5 / SGS / 10/22/03	GMA5-5 / SGS / 11/15/07
Inorganics-Filtered			
Antimony		ND(0.0600)	ND(0.0400) [ND(0.0400)]
Arsenic		ND(0.010)	ND(0.0100) [0.00574 B]
Barium		0.240	0.0778 B [0.0875 B]
Beryllium		ND(0.00100)	0.00435 J [0.000460 J]
Cadmium		ND(0.00500)	ND(0.00500) [ND(0.00500)]
Chromium		0.00200 B	0.00115 [0.00149 B]
Cobalt		0.00340 B	ND(0.0100) [ND(0.0100)]
Copper		0.00200 B	ND(0.0100) J [ND(0.0100) J]
Cyanide		ND(0.0100)	ND(0.00600) [ND(0.00600)]
Cyanide-MADEP (PAC)		NA	ND(0.00600) [ND(0.00600)]
Lead		0.00180 B	ND(0.0100) [ND(0.0100)]
Mercury		ND(0.000200)	ND(0.000406) [ND(0.000406)]
Nickel		0.00450 B	ND(0.0100) [ND(0.0100)]
Selenium		ND(0.00500) J	ND(0.0200) [ND(0.0200)]
Silver		0.00180 B	ND(0.0100) [ND(0.0100)]
Thallium		ND(0.0100)	ND(0.0100) [ND(0.0100)]
Tin		ND(0.0300)	ND(0.0100) J [ND(0.0100) J]
Vanadium		ND(0.0500)	ND(0.0500) [ND(0.0500)]
Zinc		ND(0.0200) J	ND(0.0200) [ND(0.0200)]

Table E-1
Baseline Monitoring Program Groundwater Analytical Results - Well GMA 5-5

Groundwater Management Area 5 Long-Term Monitoring Program
Monitoring Event Evaluation Report for Fall 2007
General Electric Company - Pittsfield, Massachusetts
(Results are presented in parts per million, ppm)

Notes:
1. Samples were collected by Arcadis, and submitted to SGS Environmental Services, Inc. for analysis of PCBs and Appendix IX+3 constituents.
2. Samples have been validated as per Field Sampling Plan/Quality Assurance Project Plan (FSP/QAPP), General Electric Company, Pittsfield, Massachusetts, Blasland Bouck & Lee, Inc. (approved May 29, 2004 and resubmitted June 19, 2004).
3. NA - Not Analyzed.
4. ND - Analyte was not detected. The number in parentheses is the associated detection limit.
5. Total 2,3,7,8-TCDD toxicity equivalents (TEQs) were calculated using Toxicity Equivalency Factors (TEFs) derived by the World Health Organization (WHO) and published by Van den Berg et al. in Environmental Health Perspectives 106(2), December 1998.

Data Qualifiers:

Organics (volatiles, PCBs, semivolatiles,pesticides, herbicides,dioxin/furans)
- B - Analyte was also detected in the associated method blank.
- I - Polychlorinated Diphenyl Ether (PCDPE) Interference.
- J - Indicates that the associated numerical value is an estimated concentration.
- X - Estimated maximum possible concentration.
- R - Data was rejected due to a deficiency in the data generation process.

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

Table E-2
Summary of Historical Groundwater Analytical Results - Well GMA5-5

Groundwater Management Area 5 Long-Term Monitoring Program
Monitoring Event Evaluation Report for Fall 2007
General Electric Company - Pittsfield, Massachusetts
(Results are presented in parts per million, ppm)

Parameter / Sample ID: / Laboratory: / Date Collected:	Method 1 GW-3 Standards	MCP UCL for GroundWater	Detection Frequency	Minimum Detect	Maximum Detect	Median Value	Arithmetic Average	Geometric Mean	Standard Deviation
Volatile Organics									
Benzene	10	100	1/5	0.00032	0.00034	0.00250	0.00207	0.00167	0.000970
Chlorobenzene	1	10	1/5	0.0005	0.00051	0.00250	0.00210	0.00182	0.000890
Toluene	4	80	2/5	0.0002	0.00083	0.00250	0.00171	0.00123	0.00110
Total VOCs	Not Listed	Not Listed	2/5	0.00083	0.0011	0.100	0.0604	0.0156	0.0542
PCBs-Unfiltered									
Aroclor-1254	Not Applicable	Not Listed	2/5	0.000049	0.00038	0.0000330	0.000106	0.0000582	0.000154
Aroclor-1260	Not Applicable	Not Listed	2/5	0.000041	0.0001	0.0000330	0.0000490	0.0000440	0.0000291
Total PCBs	Not Applicable	0.005	3/5	0.000041	0.00048	0.0000460	0.000128	0.0000652	0.000197
PCBs-Filtered									
None Detected	Not Applicable	Not Applicable	0/5	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Semivolatile Organics									
None Detected	Not Applicable	Not Applicable	0/5	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Organochlorine Pesticides									
None Detected	Not Applicable	Not Applicable	0/4	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Organophosphate Pesticides									
None Detected	Not Applicable	Not Applicable	0/3	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Herbicides									
None Detected	Not Applicable	Not Applicable	0/4	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Furans									
2,3,7,8-TCDF	Not Listed	Not Listed	1/5	4.4E-09	4.4E-09	0.00000000130	0.00000000219	0.00000000159	0.00000000182
TCDFs (total)	Not Listed	Not Listed	1/5	4.4E-09	4.4E-09	0.00000000130	0.00000000219	0.00000000159	0.00000000182
2,3,4,7,8-PeCDF	Not Listed	Not Listed	2/5	3.5E-09	7.8E-09	0.00000000260	0.00000000315	0.00000000223	0.00000000283
PeCDFs (total)	Not Listed	Not Listed	1/5	3.5E-09	3.5E-09	0.00000000260	0.00000000237	0.00000000194	0.00000000141
2,3,4,6,7,8-HxCDF	Not Listed	Not Listed	1/5	4.3E-09	4.3E-09	0.00000000240	0.00000000221	0.00000000178	0.00000000144
HxCDFs (total)	Not Listed	Not Listed	1/5	4.3E-09	4.3E-09	0.00000000250	0.00000000222	0.00000000176	0.00000000146
1,2,3,4,6,7,8-HpCDF	Not Listed	Not Listed	1/5	6.7E-09	6.7E-09	0.00000000260	0.00000000275	0.00000000204	0.00000000237
1,2,3,4,7,8,9-HpCDF	Not Listed	Not Listed	1/5	6.2E-09	6.2E-09	0.00000000260	0.00000000284	0.00000000221	0.00000000215
HpCDFs (total)	Not Listed	Not Listed	1/5	0.000000013	0.000000013	0.00000000260	0.00000000407	0.00000000238	0.00000000508
OCDF	Not Listed	Not Listed	1/5	0.000000013	0.000000013	0.00000000500	0.00000000703	0.00000000431	0.00000000611
Dioxins									
1,2,3,4,7,8-HxCDD	Not Listed	Not Listed	1/5	0.000000005	0.000000005	0.00000000260	0.00000000267	0.00000000213	0.00000000175
1,2,3,7,8,9-HxCDD	Not Listed	Not Listed	1/5	4.7E-09	4.7E-09	0.00000000260	0.00000000258	0.00000000204	0.00000000168
HxCDDs (total)	Not Listed	Not Listed	1/5	9.7E-09	9.7E-09	0.00000000260	0.00000000358	0.00000000238	0.00000000361
OCDD	Not Listed	Not Listed	3/5	0.000000011	0.000000022	0.0000000170	0.0000000161	0.0000000154	0.00000000527
Total TEQs (WHO TEFs)	0.0000001	0.000001	5/5	2.1E-09	0.000000011	0.00000000750	0.00000000672	0.00000000569	0.00000000374

Table E-2
Summary of Historical Groundwater Analytical Results - Well GMA5-5

Groundwater Management Area 5 Long-Term Monitoring Program
Monitoring Event Evaluation Report for Fall 2007
General Electric Company - Pittsfield, Massachusetts
(Results are presented in parts per million, ppm)

Parameter / Sample ID: / Laboratory: / Date Collected:	Method 1 GW-3 Standards	MCP UCL for GroundWater	Detection Frequency	Minimum Detect	Maximum Detect	Median Value	Arithmetic Average	Geometric Mean	Standard Deviation
Inorganics-Unfiltered									
Arsenic	Not Applicable	9	1/5	0.00297	0.00418	0.00500	0.00472	0.00468	0.000626
Barium	Not Applicable	100	4/5	0.0953	0.38	0.160	0.201	0.174	0.122
Beryllium	Not Applicable	0.5	1/5	0	0.00464	0.000500	0.00136	0.000786	0.00192
Chromium	Not Applicable	3	4/5	0.00207	0.003	0.00250	0.00298	0.00283	0.00118
Cobalt	Not Applicable	Not Listed	3/5	0.0034	0.012	0.00500	0.0100	0.00748	0.00904
Copper	Not Applicable	Not Listed	1/5	0.021	0.021	0.0130	0.0130	0.0118	0.00566
Cyanide	Not Applicable	2	3/5	0.0026	0.0034	0.00300	0.00334	0.00324	0.000979
Lead	Not Applicable	0.15	1/5	0.012	0.012	0.00150	0.00430	0.00289	0.00456
Mercury	Not Applicable	0.2	1/5	0.00028	0.00028	0.000100	0.000156	0.000141	0.0000817
Nickel	Not Applicable	2	2/5	0.0054	0.0063	0.00630	0.0113	0.00926	0.00792
Selenium	Not Applicable	1	1/5	0	0.0117	0.00250	0.00420	0.00336	0.00380
Silver	Not Applicable	1	2/5	0.0012	0.0014	0.00250	0.00252	0.00221	0.00151
Thallium	Not Applicable	30	1/5	0.00695	0.00957	0.00500	0.00566	0.00553	0.00148
Zinc	Not Applicable	50	3/5	0.0076	0.0321	0.0100	0.0137	0.0126	0.00628
Inorganics-Filtered									
Arsenic	0.9	9	1/5	0	0.00574	0.00500	0.0141	0.00805	0.0201
Barium	50	100	4/5	0.0778	0.24	0.120	0.147	0.135	0.0662
Beryllium	0.05	0.5	1/5	0.00046	0.00435	0.000500	0.000880	0.000684	0.000850
Chromium	0.3	3	4/5	0.00115	0.0022	0.00200	0.00404	0.00263	0.00502
Cobalt	Not Listed	Not Listed	2/5	0.0034	0.006	0.00600	0.0129	0.00914	0.0111
Copper	Not Listed	Not Listed	2/5	0.002	0.0068	0.00680	0.0154	0.00849	0.0198
Cyanide	0.03	2	1/4	0.0027	0.0027	0.00400	0.00393	0.00377	0.00125
Lead	0.01	0.15	1/5	0.0018	0.0018	0.00150	0.00226	0.00198	0.00154
Mercury	0.02	0.2	1/5	0.00015	0.00015	0.000100	0.000130	0.000125	0.0000447
Nickel	0.2	2	2/5	0.003	0.0045	0.00500	0.0105	0.00770	0.00870
Silver	0.007	1	1/5	0.0018	0.0018	0.00250	0.00286	0.00269	0.00123

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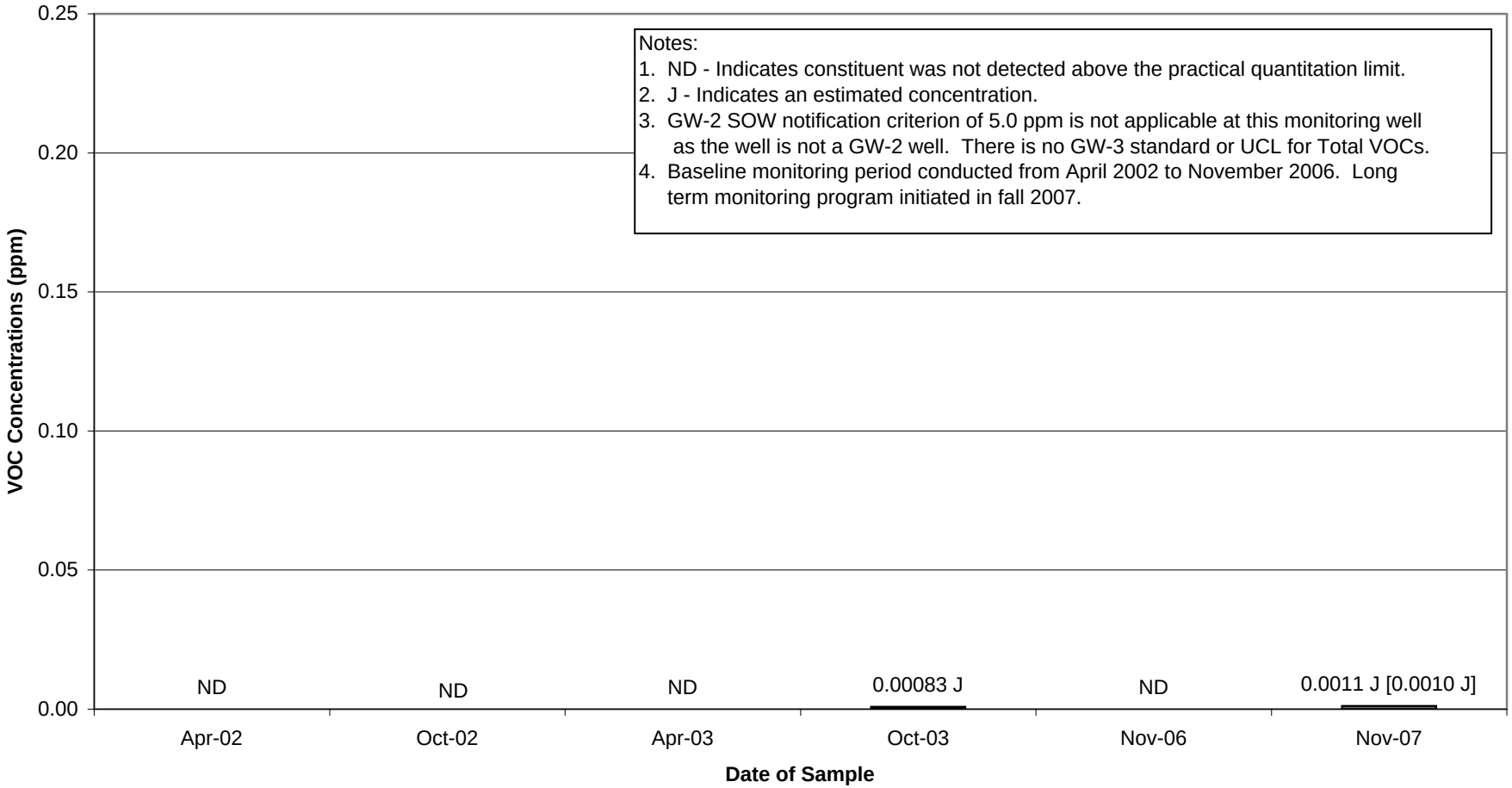
Total VOC Concentrations – Selected Wells

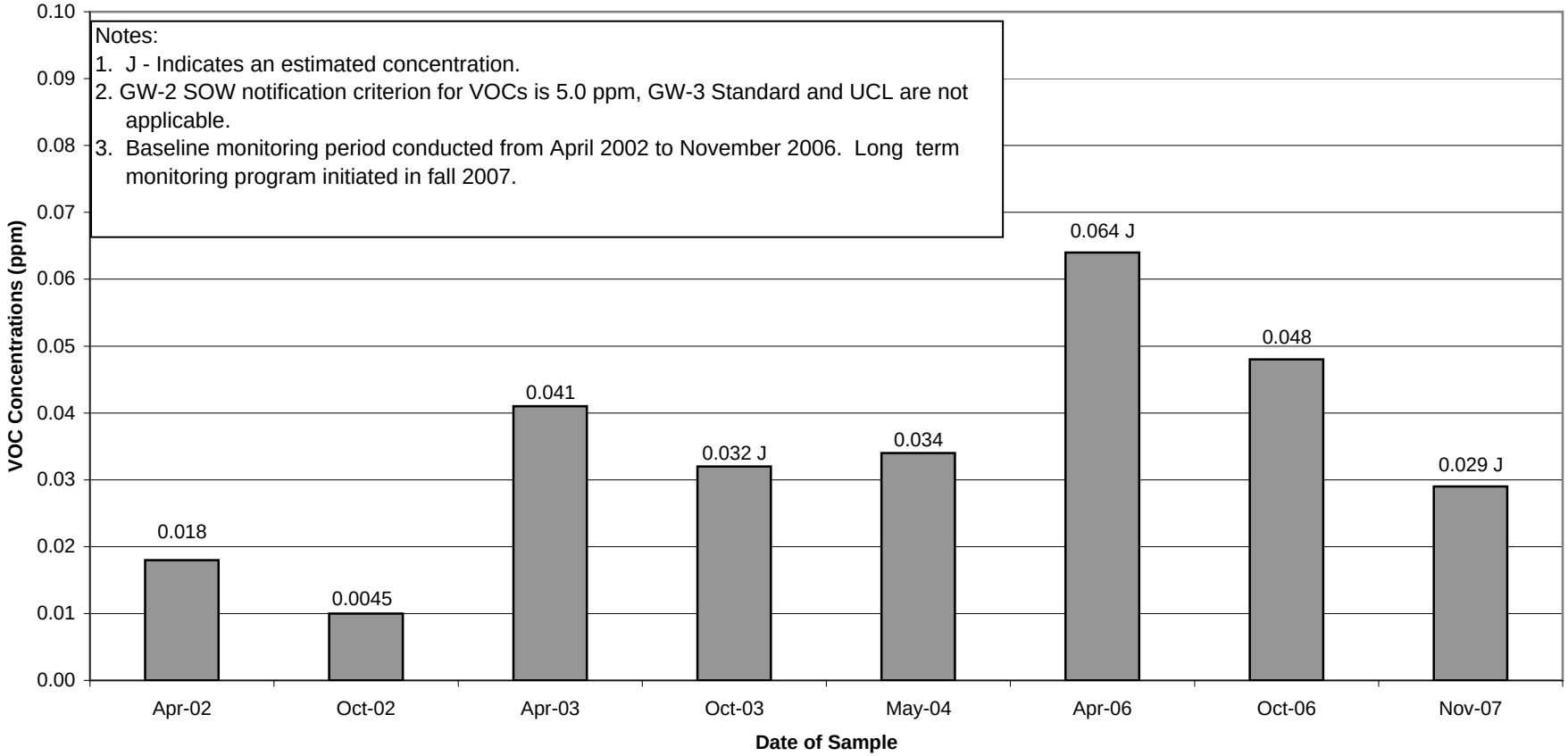
Appendix E
Well GMA5-5 Historical Total VOC Concentrations

Groundwater Management Area 5
General Electric Company - Pittsfield, Massachusetts



Appendix E
Well GMA5-7 Historical Total VOC Concentrations

Groundwater Management Area 5
General Electric Company - Pittsfield, Massachusetts



ARCADIS

Total PCB Concentrations –
Well GMA5-5

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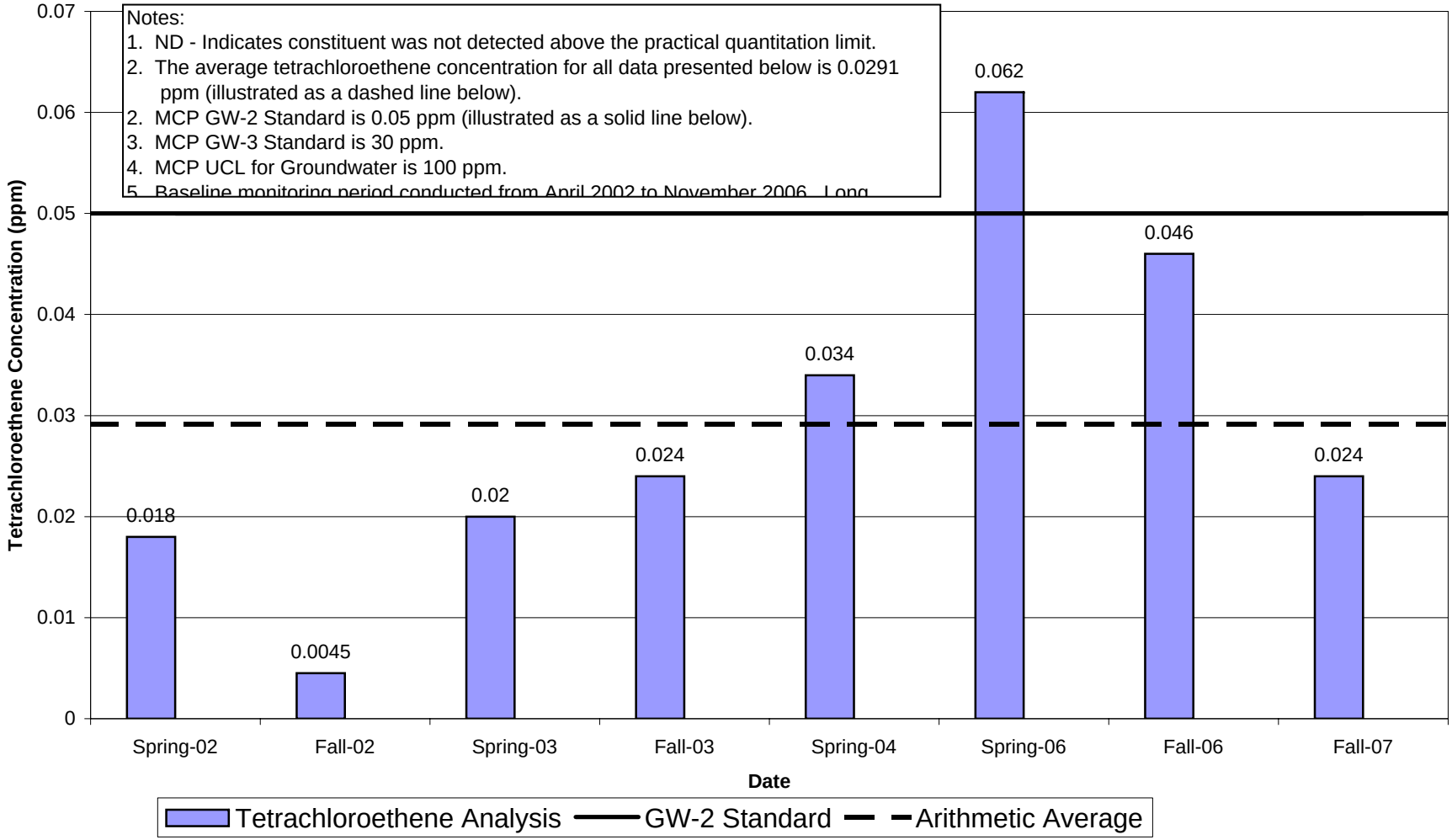
Tetrachloroethene Concentrations – Well GMA5-7

Appendix E
Well GMA5-7 Historical Tetrachloroethene Concentrations

Groundwater Management Area 5
General Electric Company - Pittsfield, Massachusetts



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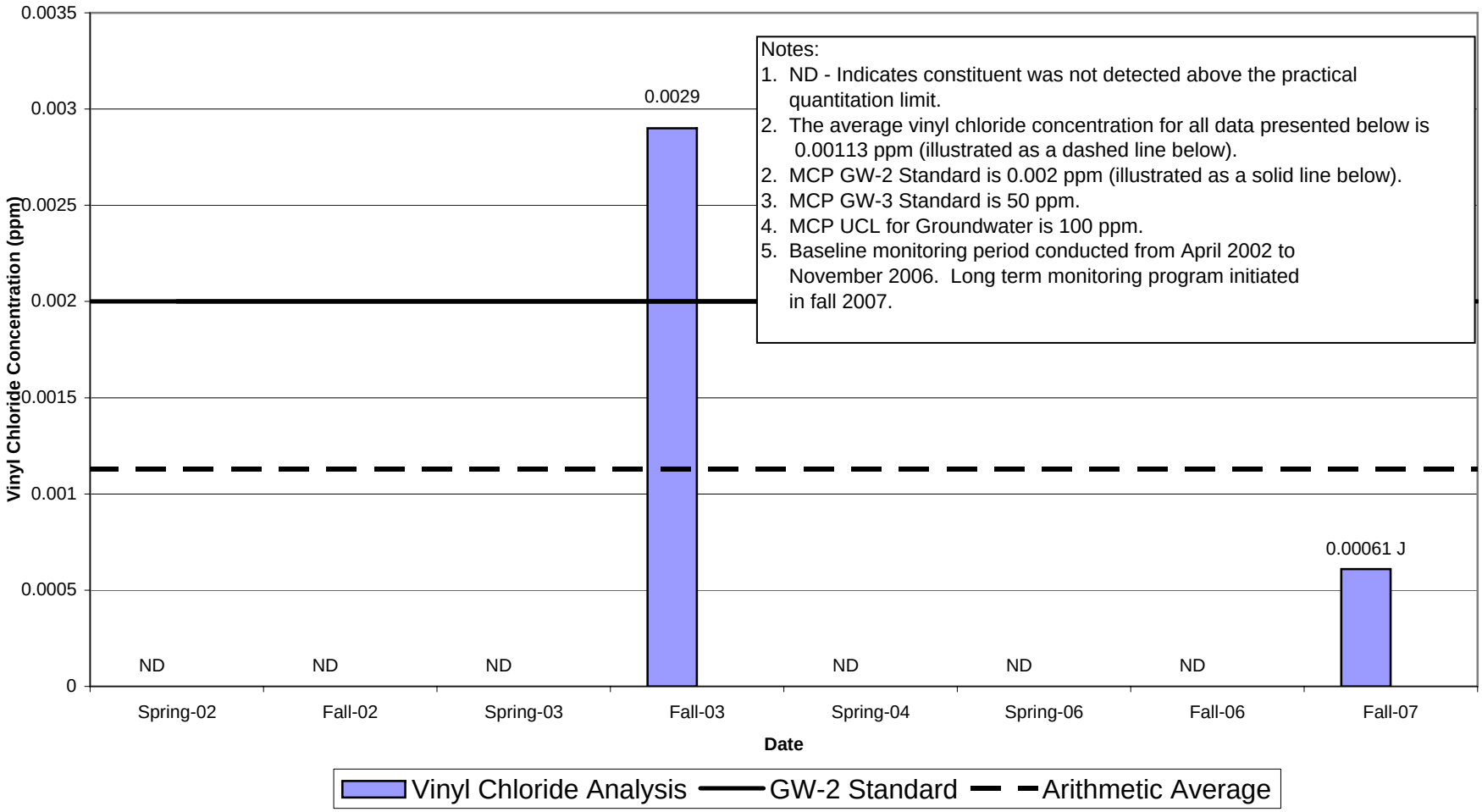
Vinyl Chloride Concentrations – Well GMA5-7

Appendix E
Well GMA5-7 Historical Vinyl Chloride Concentrations

Groundwater Management Area 5
General Electric Company - Pittsfield, Massachusetts



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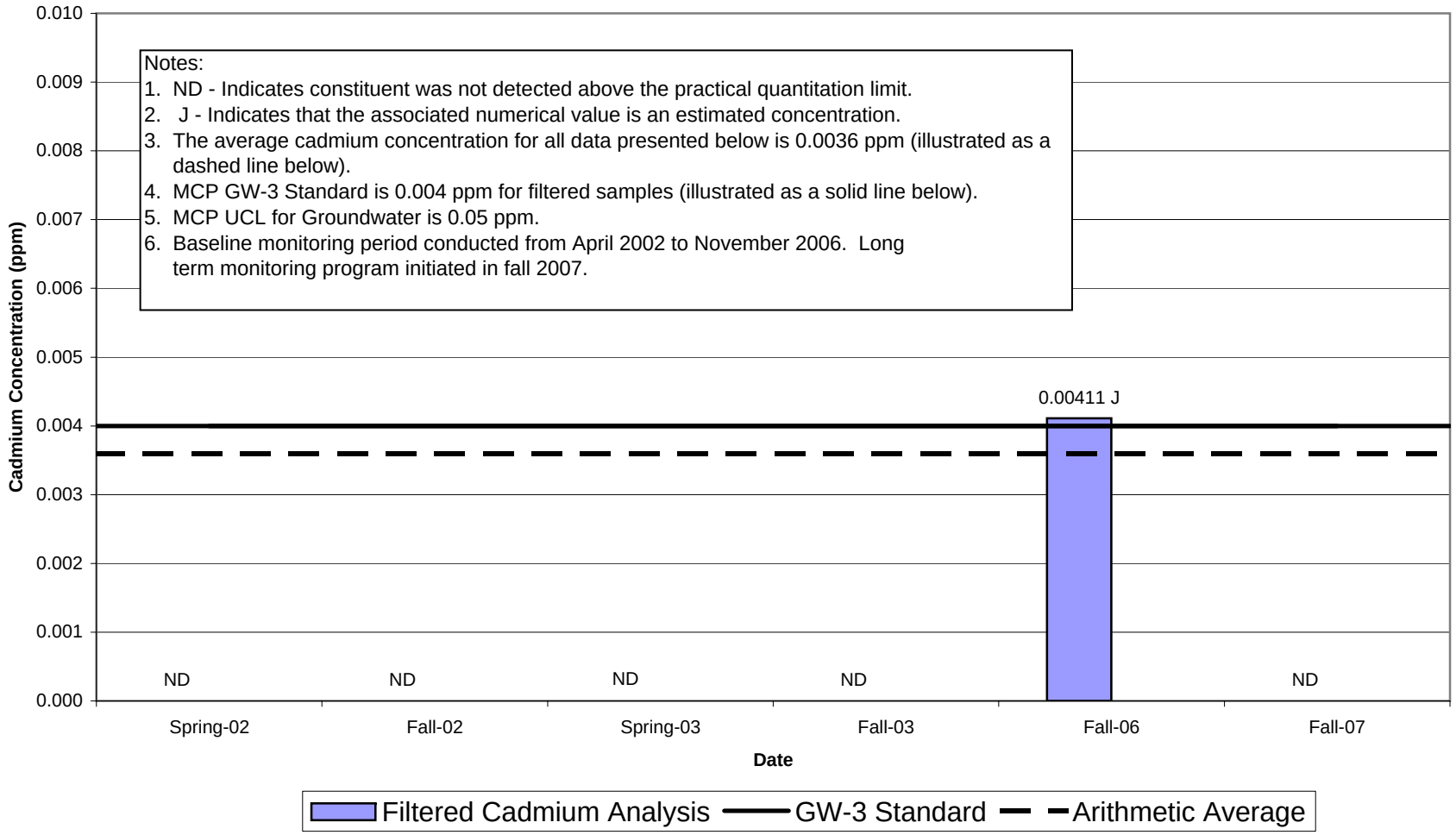
Cadmium Concentrations –
Well GMA5-4

Appendix E
Well GMA5-4 Historical Cadmium Concentrations (Filtered Analysis)

Groundwater Management Area 5

General Electric Company - Pittsfield, Massachusetts



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Appendix F

Monitoring Results for Adjacent MCP Disposal Site

TABLE 2-1
SUMMARY OF SOIL VAPOR EXTRACTION REMOVAL RATES
Former Mobil Service Station No. 01-ECQ
83-89 Elm Street
Pittsfield, Massachusetts

Date	Days in Period	VE Hour Meter	Up/Down on Arrival	Percent Runtime %	Influent TOV (ppm)	Effluent TOV (ppm)	Removal Efficiency %	Airflow (scfm)	Blower Vacuum (in w.c)	Average Pounds Removed per hour	Average Pounds Removed per period	Average Pounds Removed cumulative
19-Jul-04	Start-Up	13718.4	-	0%	299.0	0.3	100%	349	46	0.00	0.0	0.0
26-Jul-04	7	13881.9	U	97%	77.0	0.0	100%	332	48	1.54	259.1	259.1
04-Aug-04	9	14096.9	U	100%	63.3	0.0	100%	314	44	0.39	83.3	342.4
13-Aug-04	9	14306.3	D (2)	97%	114.0	0.0	100%	262	107	0.29	63.2	405.6
23-Aug-04	10	14547.3	D (2)	100%	183.0	1.8	99%	262	106	0.45	109.2	514.8
02-Sep-04	10	14732.5	U	77%	27.1	0.0	100%	218	98	0.56	134.7	649.5
13-Sep-04	11	14995.3	U	100%	233.0	5.1	98%	218	100	0.77	202.8	852.4
27-Sep-04	14	15305.6	U	92%	13.2	0.0	100%	305	132	0.06	19.0	871.3
04-Oct-04	7	15496.4	U	100%	42.9	0.6	99%	262	126	0.17	28.6	900.0
11-Oct-04	7	15633.9	U	82%	17.0	0.0	100%	236	120	0.05	8.4	908.4
16-Oct-04	5	15800.7	U	100%	16.8	0.0	100%	240	122	0.06	7.3	915.7
25-Oct-04	9	15970.0	U	78%	259.0	0.0	100%	140	114	0.43	92.9	1008.7
05-Nov-04	11	16233.9	U	100%	315.0	0.0	100%	218	108	1.04	275.3	1284.0
08-Nov-04	3	16310.3	U	100%	371.0	0.0	100%	393	96	2.21	159.3	1443.2
15-Nov-04	7	16471.6	U	96%	365.0	0.0	100%	393	102	2.09	351.0	1794.2
22-Nov-04	7	16639.8	U	100%	275.0	0.0	100%	175	98	0.73	122.6	1916.8
29-Nov-04	7	16810.3	U	100%	92.2	0.0	100%	262	118	0.37	61.6	1978.4
06-Dec-04	7	16978.5	U	100%	109.0	0.0	100%	240	114	0.40	66.8	2045.2
13-Dec-04	7	17146.4	U	100%	73.6	0.0	100%	196	117	0.22	36.8	2082.0
21-Dec-04	8	17246.0	D (8)	52%	116.0	0.0	100%	262	102	0.24	45.9	2127.9
27-Dec-04	6	17345.5	D (8)	69%	52.0	0.0	100%	140	92	0.08	11.0	2138.9
03-Jan-05	7	17505.4	U	95%	60.6	0.0	100%	436	86	0.38	64.2	2203.1
10-Jan-05	7	17673.2	U	100%	78.9	0.0	100%	436	96	0.52	87.7	2290.8
18-Jan-05	8	17873.9	U	100%	97.2	0.0	100%	65	137	0.10	18.5	2309.3
24-Jan-05	6	18014.4	U	98%	6.6	0.0	100%	153	108	0.01	2.1	2311.5
31-Jan-05	7	18180.9	U	99%	6.2	0.0	100%	209	100	0.02	3.3	2314.8
09-Feb-05	9	18392.9	U	98%	50.8	0.0	100%	428	96	0.32	69.9	2384.7
14-Feb-05	5	18514.9	U	100%	7.8	0.0	100%	506	100	0.06	7.2	2391.9
21-Feb-05	7	18684.6	U	100%	30.6	0.0	100%	153	120	0.07	11.9	2403.8
28-Feb-05	7	18851.6	U	99%	8.1	0.0	100%	227	110	0.03	4.7	2408.5
09-Mar-05	9	19069.5	U	100%	278.0	0.0	100%	393	106	1.66	358.0	2766.5
14-Mar-05	5	19187.6	U	98%	396*	91.2*	100%	240	100	0.00	0.0	2766.5
22-Mar-05	8	19380.0	U	100%	3.0	0.0	100%	218	110	0.01	1.9	2768.4
28-Mar-05	6	19519.5	U	97%	70.0	0.0	100%	375	116	0.39	55.6	2824.0
04-Apr-05	7	19686.3	U	99%	41.8	0.0	100%	314	142	0.20	33.3	2857.2
11-Apr-05	7	19855.7	U	100%	2.9	0.0	100%	524	130	0.02	3.9	2861.1
18-Apr-05	7	19930.5	U	45%	9.2	0.0	100%	227	106	0.01	2.4	2863.5
25-Apr-05	7	20096.0	U	99%	2.6	0.0	100%	524	108	0.02	3.4	2866.9
02-May-05	7	20263.5	U	100%	0.5	0.0	100%	524	118	0.00	0.7	2867.6
09-May-05	7	20433.8	U	100%	4.5	0.0	100%	419	110	0.03	4.8	2872.4
16-May-05	7	20602.3	U	100%	17.1	0.0	100%	196	108	0.05	8.6	2881.0
31-May-05	15	20958.6	U	99%	2.2	0.0	100%	349	116	0.01	4.2	2885.1
06-Jun-05	6	21101.4	U	99%	5.8	0.0	100%	349	106	0.03	4.4	2889.5
13-Jun-05	7	21273.6	U	100%	46.8	0.0	100%	175	106	0.12	20.8	2910.4
20-Jun-05	7	21442.9	U	100%	2.5	0.0	100%	153	118	0.01	1.0	2911.3
27-Jun-05	7	21606.9	U	98%	1.5	0.0	100%	332	114	0.01	1.2	2912.6
05-Jul-05	8	21797.4	U	99%	65.7	0.0	100%	297	0	0.29	56.4	2968.9
11-Jul-05	6	21944.7	U	100%	19.2	0.0	100%	209	122	0.06	8.8	2977.7
18-Jul-05	7	22111.5	U	99%	15.0	0.0	100%	297	116	0.07	11.3	2989.0
01-Aug-05	14	22442.9	U	99%	1.6	0.0	100%	375	94	0.01	3.0	2992.0
08-Aug-05	7	22611.0	U	100%	3.3	0.0	100%	349	96	0.02	2.9	2995.0
15-Aug-05	7	22783.2	U	100%	5.6	0.0	100%	305	120	0.03	4.4	2999.3
23-Aug-05	8	22974.1	U	99%	1.3	0.0	100%	262	120	0.01	1.0	3000.3
29-Aug-05	6	23117.7	U	100%	3.2	0.0	100%	262	118	0.01	1.8	3002.1
06-Sep-05	8	23305.8	U	98%	2.6	0.0	100%	305	126	0.01	2.3	3004.4
14-Sep-05	8	23503.2	U	100%	0.0	0.0	100%	236	126	0.00	0.0	3004.4
20-Sep-05	6	23644.1	U	98%	7.7	0.0	100%	236	100	0.03	3.9	3008.3
26-Sep-05	6	23785.6	U	98%	8.7	0.0	100%	393	100	0.05	7.3	3015.6
03-Oct-05	7	23856.4	U	42%	5.6	0.0	100%	393	80	0.01	2.4	3018.0
10-Oct-05	7	23988.5	U	79%	5.1	0.0	100%	349	124	0.02	3.6	3021.6
17-Oct-05	7	23992.1	D	2%	41.5	0.0	100%	305	136	0.00	0.7	3022.3
24-Oct-05	7	24157.7	D	99%	12.9	0.0	100%	393	180	0.08	12.7	3035.0
01-Nov-05	8	24348.8	D	100%	1.0	0.0	100%	314	142	0.00	0.9	3035.9
07-Nov-05	6	24493.2	U	100%	4.1	0.0	100%	305	132	0.02	2.7	3038.6
19-Nov-05	12	24658.4	D	57%	0.0	0.0	100%	393	98	0.00	0.0	3038.6
22-Nov-05	3	24850.0	U	100%	4.6	0.0	100%	305	134	0.02	1.5	3040.2
28-Nov-05	6	24996.4	D	100%	4.5	0.0	100%	349	142	0.02	3.4	3043.6
05-Dec-05	7	25162.1	D	99%	1.6	0.0	100%	332	136	0.01	1.3	3045.0
16-Dec-05	11	25427.8	D	100%	0.8	0.7	13%	305	102	0.00	1.0	3045.9
22-Dec-05	6	25572.1	D	50%	61.2	0.0	100%	349	92	0.16	23.4	3069.3
03-Jan-06	12	25856.8	D	50%	2.3	0.0	100%	305	104	0.01	1.5	3070.8
09-Jan-06	6	26002.8	U	100%	0.0	0.0	100%	428	124	0.00	0.0	3070.8
16-Jan-06	7	26171.7	U	100%	0.5	0.0	100%	349	140	0.00	0.4	3071.3
23-Jan-06	7	26334.5	U	100%	1.5	0.0	100%	367	138	0.01	1.4	3072.7
31-Jan-06	8	26528.0	U	100%	2.6	0.0	100%	349	160	0.01	2.6	3075.3

TABLE 2-1
SUMMARY OF SOIL VAPOR EXTRACTION REMOVAL RATES
Former Mobil Service Station No. 01-ECQ
83-89 Elm Street
Pittsfield, Massachusetts

Date	Days in Period	VE Hour Meter	Up/Down on Arrival	Percent Runtime %	Influent TOV (ppm)	Effluent TOV (ppm)	Removal Efficiency %	Airflow (scfm)	Blower Vacuum (in w.c)	Average Pounds Removed per hour	Average Pounds Removed per period	Average Pounds Removed cumulative
16-Mar-06	--	27221.3	D (17)	--	0.0	0.0	100%	310	96	0.00	NA	3075.3
31-Mar-06	15	NR	D	80%	3.2	0.0	100%	NR	110	NA	NA	3075.3
06-Apr-06	6	27256.8	D	17%	NR	NR	NA	700	20	NA	NA	3075.3
26-Apr-06	20	27652.0	D	82%	NR	NR	NA	NR	NR	NA	NA	3075.3
28-Apr-06	2	27653.5	D	3%	NR	NR	NA	NR	110	NA	NA	3075.3
10-May-06	12	27913.3	O	90%	4.3	0.0	100%	NR	140	NA	NA	3075.3
24-May-06	14	28244.8	U	99%	0.7	0.0	100%	191	193	0.00	0.7	3076.0
01-Jun-06	8	28435.6	U	99%	0.0	0.0	100%	204	196	0.00	0.0	3076.0
08-Jun-06	7	28605.2	U	100%	0.0	0.0	100%	204	178	0.00	0.0	3076.0
20-Jun-06	12	28717.1	O	58%	1.8	0.0	100%	NR	110	NA	NA	3076.0
26-Jun-06	6	28861.8	U	100%	1.0	0.0	100%	NR	118	NA	NA	3076.0
07-Jul-06	11	29127.6	U	100%	0.0	0.0	100%	265	120	0.00	0.0	3076.0
12-Jul-06	5	29250.1	U	100%	0.3	0.0	100%	NR	122	NA	NA	3076.0
19-Jul-06	7	29418.0	U	100%	0.0	0.0	100%	NR	120	NA	NA	3076.0
24-Jul-06	5	29536.7	U	100%	0.0	0.0	100%	NR	120	NA	NA	3076.0
02-Aug-06	9	29753.4	U	100%	0.0	0.0	100%	NR	122	NA	NA	3076.0
11-Aug-06	9	29962.0	U	100%	0.0	0.0	100%	NR	124	NA	NA	3076.0
15-Aug-06	4	30059.9	U	100%	NR	NR	NA	NR	120	NA	NA	3076.0
23-Aug-06	8	30244.0	U	100%	NR	NR	NA	250	126	NA	NA	3076.0
30-Aug-06	7	30408.3	U	100%	0.0	0.0	100%	NR	126	NA	NA	3076.0
05-Sep-06	6	30550.9	U	100%	0.0	0.0	100%	NR	122	NA	NA	3076.0
13-Sep-06	8	30742.7	U	100%	NR	NR	NA	NR	122	NA	NA	3076.0
18-Sep-06	5	30865.1	U	100%	0.0	0.0	100%	NR	121	NA	NA	3076.0
27-Sep-06	9	31005.3	U	100%	1.8	0.0	100%	307	128	0.01	1.2	3077.2
05-Oct-06	8	31196.8	U	100%	0.0	0.0	100%	NR	130	NA	NA	3077.2
11-Oct-06	6	31197.0	O	0%	NR	NR	NA	NR	NR	NA	NA	3077.2
25-Oct-06	14	31200.0	O	0%	1.5	0.0	100%	NR	130	NA	NA	3077.2
01-Nov-06	7	31365.2	U	100%	0.0	0.0	100%	NR	128	NA	NA	3077.2
07-Nov-06	6	31509.5	U	100%	0.6	0.0	100%	NR	130	NA	NA	3077.2
17-Nov-06	10	31749.9	U	100%	0.3	0.0	100%	NR	120	NA	NA	3077.2
21-Nov-06	4	31844.8	U	100%	0.3	0.0	100%	NR	122	NA	NA	3077.2
27-Nov-06	6	32013.0	U	100%	NR	NR	NA	NR	120	NA	NA	3077.2
08-Dec-06	11	32249.0	U	100%	0.0	0.0	100%	NR	178	NA	NA	3077.2
11-Dec-06	3	32325.0	U	100%	3.8	0.0	100%	NR	180	NA	NA	3077.2
19-Dec-06	8	32519.8	U	100%	0.4	0.0	100%	NR	176	NA	NA	3077.2
28-Dec-06	9	32727.8	U	100%	NR	NR	NA	NR	178	NA	NA	3077.2
03-Jan-07	6	32872.8	U	100%	4.8	0.0	100%	NR	178	NA	NA	3077.2
09-Jan-07	6	32999.1	U	100%	1.0	0.0	100%	235	180	0.00	0.5	3077.6
24-Jan-07	15	33130.3	U	100%	0.0	0.0	100%	220	188	0.00	0.0	3077.6
02-Feb-07	9	33350.9	U	100%	0.1	0.0	100%	219	180	0.00	0.1	3077.7
20-Feb-07	18	33774.7	U	100%	16.6	0.0	100%	570	195	0.14	60.9	3138.6
01-Mar-07	9	33982.2	U	100%	6.3	0.0	100%	449	190	0.04	8.9	3147.5
06-Mar-07	5	34104.9	U	100%	12.1	0.0	100%	544	192	0.10	12.3	3159.7
13-Mar-07	7	34269.5	U	100%	3.1	0.0	100%	232	190	0.01	1.8	3161.5
19-Mar-07	6	34417.8	U	100%	0.0	0.0	100%	152	200	0.00	0.0	3161.5
27-Mar-07	8	34605.1	U	100%	0.8	0.0	100%	272	NR	NA	NA	3161.5
05-Apr-07	9	34819.5	U	100%	0.4	0.0	100%	282	174	0.00	0.4	3161.9
12-Apr-07	7	34987.2	U	100%	0.8	0.0	100%	274	160	0.00	0.6	3162.4
17-Apr-07	5	35107.3	U	100%	5.3	0.0	100%	269	176	0.02	2.6	3165.0
23-Apr-07	6	35251.3	U	100%	0.4	0.0	100%	420	5	0.00	0.4	3165.4
26-Apr-07	3	35321.1	U	100%	6.8	0.0	100%	449	5	0.05	3.2	3168.7
27-Apr-07	1	35321.1	O	100%	7.2	0.0	100%	426	5	0.05	0.0	3168.7
11-May-07	14	35654.4	U	100%	0.7	0.0	100%	425	4	0.00	1.5	3170.2
17-May-07	6	35797.2	U	100%	7.1	0.0	100%	442	4	0.05	6.8	3177.0
25-May-07	8	35989.2	U	100%	1.7	0.0	100%	469	0	0.01	2.3	3179.3
05-Jun-07	11	36224.0	D	91%	3.0	0.0	100%	479	46	0.02	5.1	3184.4

TABLE 2-1
SUMMARY OF SOIL VAPOR EXTRACTION REMOVAL RATES
Former Mobil Service Station No. 01-ECQ
83-89 Elm Street
Pittsfield, Massachusetts

Notes:

Cumulative Total (Pre + Post 2004 Upgrade)	
As of 11/21/06	20,043.6

VE = vapor extraction.
scfm = standard cubic feet per minute.
in w.c. = inches of water column.
Molecular weight of gasoline = 96 lb/mol.
NA = not available.
ppm = parts per million.
TOV = total organic vapors.
Volume of 1 lb of air at 55 degrees Fahrenheit = 379.4 ft/mol.
System start-up was on July 21, 2004. Earliest system data prior to start-up was from July 19, 2004
(1) = No alarms indicated.
(2) = Low flow to catox.
(3) = Airflow estimated with blower performance curve.
(4) = Main breaker tripped.
(5) = System frozen.
(6) = Low temperature on Catox.
(7) = VE system restarted on April 10th repair visit.
(8) = High water level in moisture separator.
(9) = System restarted on May 9, 2003 visit.
(10) = System manually shut down on 7/16/03 to allow aquifer to return to steady state for Sitewide fluid levels.
(11) = System down due to power outage.
(12) = System down due to tripped transfer pump on oil water separator.
(13) = System down for blower repairs as of August 8, 2003.
(14) = System down due to VE blower failure.
(15) = System down to relocation/consolidation.
(16) = Down pending carbon changeout.
(17) = CDM assumes O&M responsibilities. Cumulative mass VOCs removed between 1/31/06 and 3/16/06 is unknown.
* = Suspect numbers are inaccurate. Will not include in mass removal calculations.

Calculations:
Pounds of Hydrocarbons Removed

$$[\text{lb/hour}] = \frac{\text{Influent TOV (ppm)} \times \text{Airflow (scfm)} \times 96\ (\text{lb/mol}) \times 60\ (\text{min/hr})}{379.4\ (\text{ft}^3/\text{mol}) \times 10^6} \times \text{Percent Runtime}$$

[lb/period] = [lb/hour] x days in period x 24 (hr/day

TABLE 2 -3
SUMMARY OF GROUNDWATER PUMP & TREAT SYSTEM REMOVAL RATES
Former Mobil Service Station No 01-ECQ
83-89 Elm Street
Pittsfield, Massachusetts

DATE	Days In Operation In Period	Up/Down on Arrival	Uptime percent	Air Stripper Effluent Totalizer (gallons)	Gallons Treated this Period	Average Flow Rate (gpm)	Liquid Carbon Vessels Influent VOC (µg/L)	Liquid Carbon Vessels Effluent VOC (µg/L)	Liquid Carbon Vessels Dissolved VOCs Removed (lbs)	Air Stripper Influent VOC (ppm)	Air Stripper Air Flow Rate (cfm)	Air Stripper Dissolved VOCs Removed (lbs)	Air Stripper Vapor Carbon Loading (lbs/lbs)	Total Hydrocarbons Removed Dissolved VOC (lb)	Total Hydrocarbons Removed NAPL Bailed (gallons)	Total Hydrocarbons Removed Total per Period (lb)	Cumulative Removed (lb)	Cumulative Equivalent (gallons)
16-Mar-06	--	D	--	NR	--	--	--	--	--	NR	270	0	--	--	--	--	0.00	0.00
31-Mar-06	15	U	60.0%	21900600	235,225	18 2	274 0	0 0	0 54	NR	270	0.00	--	0 54	--	0.54	0.54	0.08
06-Apr-06	6	D	50.0%	21952100	51,500	11 9	274 0	0 0	0 12	NR	115	0.00	--	0 12	--	0.12	0.66	0 10
27-Apr-06	21	D	14.3%	21994100	42,000	9 7	200.0	0 0	0 07	NR	270	0.00	--	0 07	2 0	13 17	13.83	2 11
10-May-06	13	D	61 5%	22046800	52,700	4 6	200 0	0 0	0 09	2 1	70	0 42	--	0 09	--	0.09	13.91	2 12
24-May-06	14	U	50.0%	22102540	55,740	5 5	238 4	0 0	0 11	1.9	197	0.94	0 0002	0.11	--	0.11	14.02	2.14
01-Jun-06	8	U	100.0%	22165560	63,020	5 5	238 4	0 0	0 13	2.3	287	1 89	0 0005	0 13	--	0.13	14 15	2 16
08-Jun-06	7	U	100.0%	22215540	49,980	5 0	238 4	0 0	0 10	0.0	309	0.00	0 0005	0 10	--	0.10	14.25	2 18
20-Jun-06	12	O	58.3%	22227500	11,960	1 2	591 4	0 0	0 06	0 0	270	0.00	0 0005	0 06	--	0.06	14 31	2 18
26-Jun-06	6	D	83.3%	22229400	1,900	0 3	591 4	0 0	0 01	3 1	270	1.49	0 0007	0 01	--	0 01	14.32	2.19
07-Jul-06	11	U	100.0%	22327110	97,710	6 2	591 4	0 0	0 48	0.5	230	0 45	0 0008	0 48	--	0 48	14 80	2 26
10-Jul-06	3	D	66.7%	22335400	8,290	2 9	591 4	0 0	0 04	NR	270	0 00	0 0008	0 04	--	0.04	14.84	2.27
12-Jul-06	2	D	100.0%	22344795	9,395	3 3	450 1	0 0	0 04	1 8	280	0.36	0 0009	0 04	--	0 04	14 88	2.27
19-Jul-06	7	D	28.6%	22345650	855	0 3	450 1	0 0	0 00	NR	292	0.00	0.0009	0.00	--	0.00	14.88	2.27
02-Aug-06	14	D	60.0%	22406450	60,800	5 0	450 1	0 0	0 23	1.3	240	0.94	0 0010	0 23	--	0.23	15.11	2.31
05-Aug-06	3	D	66.7%	22425100	18,650	6 5	450 1	0 0	0 07	NR	270	0.00	0 0010	0 07	--	0.07	15 18	2 32
17-Aug-06	12	U	5.9%	NR	NA	NA	450 1	0 0	NA	2.3	275	0.16	0 0010	--	--	--	15 18	2.32
23-Aug-06	6	U	100 0%	22425189	51,044	5 9	297 7	0 0	0 13	NR	280	0.00	0 0010	0.13	--	0.13	15 30	2.34
30-Aug-06	7	D	14.3%	22425189	2,437	1 7	297 7	0 0	0 01	NR	270	0.00	0 0010	0.01	--	0.01	15 31	2.34
05-Sep-06	6	O	0 0%	22425189	0	0 0	297 7	0 0	0 00	NR	268	0.00	0 0010	0 00	--	0.00	15 31	2.34
13-Sep-06	8	D	75 0%	22425189	40,584	4 7	297 7	0 0	0 10	NR	268	0.00	0 0010	0 10	--	0.10	15 41	2.35
18-Sep-06	5	D	20 0%	22425189	0	0 0	297 7	0 0	0 00	0 2	271	0 02	0 0010	0 00	--	0.00	15 41	2.35
27-Sep-06	9	U	100.0%	8456282*	50,834	3 9	3 8	0 0	0 00	NR	270	0.00	0 0010	0 00	--	0.00	15.41	2.35
05-Oct-06	8	D	100 0%	8495081	38,799	3 4	3 8	0 0	0 00	NR	259	0.00	0 0010	0 00	--	0.00	15 41	2.35
11-Oct-06	6	O	0.0%	NR	NA	NA	3 8	0 0	NA	NR	270	0.00	0.0010	--	--	--	15.41	2.35
25-Oct-06	14	O	0 0%	8495480	NA	NA	264 8	0 0	NA	0 1	270	0.00	0 0010	--	--	--	15 41	2.35
01-Nov-06	7	U	100.0%	8559483	64,003	6 3	264 8	0 0	0 14	0.0	416	0.00	0 0010	0 14	--	0.14	15.55	2.37
07-Nov-06	6	D	33 3%	8572360	12,877	4 5	263 8	0 0	0 03	NR	270	0.00	0 0010	0 03	--	0.03	15 58	2 38
13-Nov-06	6	D	33.3%	8572570	210	0 1	263 8	0 0	0.00	0 1	389	0.03	0.0010	0 00	--	0.00	15 58	2.38
17-Nov-06	4	O	50.0%	8600600	28,030	9 7	263 8	0 0	0.06	0 1	270	0 02	0 0010	0 06	--	0 06	15 64	2.39
21-Nov-06	4	D	100.0%	8653630	53,030	9 2	656 3	0 0	0 29	0 8	306	0 35	0 0011	0 29	--	0.29	15 93	2 43
27-Nov-06	6	U	100 0%	8742020	88,390	10 2	656 3	0 0	0 48	NR	270	0 00	0 0011	0 48	--	0 48	16 13	2 46
08-Dec-06	11	U	100.0%	8805221	63,201	4 0	317 1	0 0	0 17	0.0	311	0.00	0.0011	0 17	--	0.17	16.10	2 46
11-Dec-06	3	U	100 0%	8825390	20,169	4 7	317 1	0 0	0 05	4 4	270	1 27	0 0013	0 05	--	0.05	16 18	2 47
19-Dec-06	8	U	100 0%	8854767	29,377	2 6	317 1	0 0	0 08	3 1	302	2.67	0 0018	0 08	--	0 08	16 38	2.47
26-Dec-06	9	U	100 0%	8864447	9,680	0 7	317 1	0 0	0 03	NR	299	0.00	0 0018	0 03	--	0.03	16 21	2.47
03-Jan-07	6	U	100.0%	8901070	36,623	4 2	255 6	0 0	0 08	7.5	302	4.85	0 0026	0 08	--	0 08	16.26	2.48
09-Jan-07	6	U	100 0%	8963386	62,316	7 2	255 6	0 0	0 13	0.5	204	0.22	0 0026	0 13	--	0 13	16.34	2 49
24-Jan-07	15	O	33.0%	NR	0	-	255 6	0 0	0 00	NR	270	0.00	0 0026	0 00	--	0.00	16 26	2 48
02-Feb-07	9	O	0.0%	NR	0	-	664 4	0 0	0 00	NR	270	0.00	0 0026	0 00	--	0 00	16 34	2 49
06-Feb-07	6	O	0.0%	NR	0	-	664 4	0 0	0 00	NR	270	0.00	0 0026	0 00	--	0 00	16 26	2 48
20-Feb-07	12	O	8.3%	8998070	34,684	2 0	664 4	0 0	0 19	0 0	270	0.00	0 0026	0 19	--	0 19	16 53	2 52
01-Mar-07	9	U	100.0%	9072520	74,450	5 7	549	0 0	0 03	0 0	270	0.00	0 0026	0 03	--	0 03	16 29	2 49
06-Mar-07	5	U	100.0%	9088770	16,250	2 3	549	0 0	0 01	NR	NR	0.00	0 0026	0 01	--	0 01	16 54	2 53
13-Mar-07	7	O	0.0%	9088770	0	0 0	549	0 0	0 00	4 2	270	0.00	0 0026	0 00	--	0.00	16 29	2 49
19-Mar-07	6	D	66.7%	9103720	14,950	2 6	549	0 0	0 01	0 0	270	0.00	0 0026	0 01	--	0 01	16 55	2 53
27-Mar-07	8	D	0.0%	9122300	18,580	NA	549	0 0	0.01	0 8	270	0.00	0 0026	0 01	--	0 01	16.30	2.49
05-Apr-07	9	U	100.0%	9260490	138,190	10 7	510 2	0 0	0 59	0 8	270	0.69	0 0027	0 59	--	0 59	17.13	2.62
12-Apr-07	7	U	100.0%	9315300	54,810	5 4	510 2	0 0	0 23	0 0	270	0.00	0 0027	0 23	--	0 23	16.53	2 52
17-Apr-07	5	U	100.0%	9451480	136,180	18 9	510 2	0 0	0 58	0 8	902	1 29	0 0029	0 58	--	0 58	17 71	2 70
23-Apr-07	6	U	100.0%	9538170	86,690	10 0	510 2	0 0	0 37	NR	270	0 00	0 0029	0 37	--	0 37	16 90	2 58
26-Apr-07	3	U	100.0%	9558960	20,790	4 8	510 2	0 0	0 09	NR	270	0.00	0 0029	0.09	--	0 09	17 80	2.72
27-Apr-07	1	O	100.0%	9558960	0	0 0	510 2	0 0	0 00	NR	270	0 00	0 0029	0 00	--	0 00	16 90	2 58
11-May-07	14	D	100.0%	9653340	94,380	4 7	454 4	0 0	0 36	1 1	270	1 48	0 0032	0 36	--	0 36	18 16	2 77
17-May-07	6	U	100 0%	9708670	55,330	6 4	454 4	0 0	0 21	1 0	270	0 58	0 0033	0 21	--	0 21	17 11	2 61
25-May-07	8	O	12 5%	9708670	0	0 0	454 4	0 0	0 00	1 0	270	0.10	0.0033	0 00	--	0 00	18.16	2 77
05-Jun-07	11	D	72 7%	9772480	63,810	5 5	-	-	-	0 8	270	0.62	0 0034	-	--	-	-	-
	446.00																	

Notes:

gpm = gallons per minute
VOC = volatile organic compounds.
µg/L = micrograms per liter
ppm = parts per million
lb = pound
lb/day = pounds per day
psi = pounds per square inch
NAPL = non aqueous-phase liquid
NA = not available
* = Air flow not available, air flowrate of 270 scfm assumed for calculation of hydrocarbons removed
# = photo ionization detector (PID) not calibrated correctly, could not take readings
From August 5, 2006 to September 27, 2006, system discharge totals calculated from OWS flow meter
(1) = Oil/water separator transfer pump failure.
(2) = High water level in air stripper sump
(3) = system frozen
(4) = compressor down
(5) = filters clogged
(6) = high water in floor sump
(7) = frac tp tripped out.
(8) = high water level in settling tank
(9) = high water in ows
(10) = AS discharge flow meter broken

Liquid Phase Granular Activated Carbon (LGAC): 2 X 1000 lb vessels
Vapor Phase Granular Activated Carbon (VGAC) 2 X 3000 lb vessels C O 5/18/2006

Influent VOCs = Total BTEX + MTBE and Naphthalene by EPA Method 8260B. ND for Effluent = 0

Cumulative Total (Since CDM began system operation)
As of 03/16/2006 15.93

Calculations:

POUNDS OF HYDROCARBONS REMOVED.

Dissolved VOC (lb) = Gallons Treated this Period (gal) x Influent VOC (µg/L) x 8.34x10^{-6} (L lb/gal µg)

Vapor Phase VOC (

$$\frac{\text{Air flow (cfm)} \times \text{Conc (ppmv)} \times 1 \text{ mole air} \times 1000 \text{ L} \times 1000 \text{ mg} \times 96 \text{ g} \times 0.0283 \text{ m}^3 \times 60 \text{ min} \times 2.2 \text{ lbs}}{10^6 \times 24.1 \text{ L} \times \text{m}^3 \times \text{g} \times \text{mole air} \times \text{ft}^3 \times \text{day} \times 10^6 \text{ mg}}$$

Total Hydrocarbons Removed (lb) = Dissolved VOC (lb) + (6.55 (lb/gal) * NAPL bailed (gal))
Cumulative Pounds (lb): Previous Cumulative Pounds + Total Pounds per Period
Equivalent Gallons (gal): Cumulative Pounds (lb) / 6.55 (lb/gal)

CDM

TABLE 2-7
HISTORICAL GROUNDWATER MONITORING DATA
VOLATILE PETROLEUM HYDROCARBONS
Former Mobil Service Station No. 01-ECQ
83-89 Elm Street
Pittsfield, Massachusetts

Well ID/MP El (feet)	Date of Sampling	Depth to Water (feet)	Depth to Product (feet)	NAPL Thickness (feet)	NAPL Recovered (gallons)	Groundwater Elevation (feet)	VPH Target Analytes							VPH Fractions		
							Benzene	Toluene	Ethylbenzene	Total Xylenes	Total BTEX	MTBE	Naphthalene	C5-C8 Aliphatics	C9-C12 Aliphatics	C9-C10 Aromatics
Units		feet	feet	feet	gallons	feet	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MCP Method 1 GW-2 Standard:							2,000	8,000	30,000	9,000	-	50,000	1,000	1,000	1,000	5,000
MCP Method 1 GW-3 Standard:							10,000	4,000	4,000	500	-	50,000	20,000	4,000	20,000	4,000
† ECS-11	19 May 98	15.07	12.00	3.07	NA	980.09	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
992.83	30 Nov 98	DRY	NA	NA	NA	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	24 Aug 99	DRY	NA	NA	NA	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	28 Jan 00	DRY	NA	NA	NA	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	10 Feb 00	DRY	NA	NA	NA	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	21 Apr 00	11.03	11.01	0.02	NA	981.82	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	20 Nov 00	DRY	NA	NA	NA	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	29 Dec 00	DRY	NA	NA	NA	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
993.01	20 Aug 02	DRY	NA	NA	NA	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	11 Dec 02	DRY	NA	NA	NA	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	29 May 03	DRY	NA	NA	NA	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01 Dec 03	DRY	NA	NA	NA	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	27 Feb 04	DRY	NA	NA	NA	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	09 Aug 05	DRY	NA	NA	NA	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
† ECS-14	01 Apr 99	8.90	NA	NA	NA	NA	<1.0	<5.0	11.6	159.4	151	<5.0	33.1	<50	95	407
NA	24 Nov 99	8.92	NA	NA	NA	NA	<1.0	<5.0	<5.0	<15	ND	<5.0	<5.0	<100	<100	<100
	21 Apr 00	6.70	NA	NA	NA	NA	<1.0	<5.0	5.4	117.2	122.6	<5.0	14	<100	400	490
	11 Dec 02	7.39	NA	NA	NA	NA	<0.50	2.4	<1.0	5.5	7.9	<1.0	<5.0	<50	<50	<50
	01 Dec 03	7.65	NA	NA	NA	NA	<2.0	<2.0	<2.0	<4.0	ND	<2.0	<3.0	<50	<50	<50
	13 Sep 04	NM	NA	NA	NA	NA	<2.0	<2.0	<2.0	<4.0	ND	<2.0	<3.0	<50	<50	<50
	21 Feb 05	8.47	NA	NA	NA	NA	<2.0	<2.0	<2.0	<4.0	ND	<2.0	<3.0	<50	<50	<50
ECS-15	21 Apr 00	10.16	NA	NA	NA	979.70	<1.0	15	15.4	181.3	211.7	<5.0	13.8	870	480	500
989.86	20 Nov 00	11.36	NA	NA	NA	978.50	<1.0	<5.0	<5.0	<15	ND	<5.0	<5.0	**4,190**	<500	<500
	11 Dec 02	10.73	NA	NA	NA	979.13	1.8	37.9	19.4	106	165.1	<1.0	8.0	457	52.7	134
	07 Feb 03	11.39	NA	NA	NA	978.47	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	28 Feb 03	11.17	NA	NA	NA	978.69	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	22 Apr 03	10.81	NA	NA	NA	979.05	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	23 Apr 03	11.35	NA	NA	NA	978.51	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	30 May 03	13.95	NA	NA	NA	975.91	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	03 Dec 03	12.81	NA	NA	NA	977.05	<2.0	<2.0	<2.0	<2.0	ND	<2.0	<3.0	<50	<50	<50
GES-7	24 Nov 99	14.71	NA	NA	NA	983.07	1.2	19	10	56.6	87.1	<5.0	8.5	140	<100	120
997.78	21 Apr 00	12.78	NA	NA	NA	985.00	<1.0	<5.0	<5.0	18.5	18.5	<5.0	6.6	<100	<100	<100
	23 Aug 00	10.31	NA	NA	NA	987.47	<1.0	<5.0	<5.0	<15	ND	<5.0	<5.0	<100	<100	<100
	20 Nov 00	12.70	NA	NA	NA	985.08	<1.0	<5.0	<5.0	<15	ND	<5.0	<5.0	<100	<100	<100
992.10	12 Jan 01	14.05	NA	NA	NA	978.05	<1.0	<5.0	<5.0	<15	ND	<5.0	<5.0	<100	<100	130
	11 Jul 01	10.73	NA	NA	NA	981.37	<1.0	<5.0	<5.0	<15	ND	<5.0	<5.0	<100	<100	<100
	11 Dec 02	14.20	NA	NA	NA	977.90	<0.50	<1.0	<1.0	<1.0	ND	<1.0	<5.0	<50	<50	<50
	01 Dec 03	14.76	NA	NA	NA	977.34	<2.0	<2.0	<2.0	<2.0	ND	<2.0	<3.0	<50	<50	<50

TABLE 2-7
HISTORICAL GROUNDWATER MONITORING DATA
VOLATILE PETROLEUM HYDROCARBONS
Former Mobil Service Station No. 01-ECQ
83-89 Elm Street
Pittsfield, Massachusetts

Well ID/MP El (feet)	Date of Sampling	Depth to Water (feet)	Depth to Product (feet)	NAPL Thickness (feet)	NAPL Recovered (gallons)	Groundwater Elevation (feet)	VPH Target Analytes							VPH Fractions		
							Benzene	Toluene	Ethylbenzene	Total Xylenes	Total BTEX	MTBE	Naphthalene	C5-C8 Aliphatics	C9-C12 Aliphatics	C9-C10 Aromatics
	Units	feet	feet	feet	gallons	feet	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
					MCP Method 1 GW-2 Standard:		2,000	8,000	30,000	9,000	-	50,000	1,000	1,000	1,000	5,000
					MCP Method 1 GW-3 Standard:		10,000	4,000	4,000	500	-	50,000	20,000	4,000	20,000	4,000
GES-8	24 Nov 99	12.03	NA	NA	NA	983.75	<1.0	<5.0	<5.0	<15	ND	<5.0	<5.0	<100	<100	<100
995.78	21 Apr 00	9.83	NA	NA	NA	985.95	<1.0	50.2	38.8	197.5	286.5	<5.0	23.9	<100	600	600
	23 Aug 00	10.67	NA	NA	NA	985.11	<1.0	<5.0	<5.0	18.3	18.3	<5.0	<5.0	<100	<100	<100
	20 Nov 00	11.77	NA	NA	NA	984.01	<1.0	<5.0	<5.0	<15	ND	<5.0	<5.0	<100	<100	<100
995.78	12 Jan 01	13.17	NA	NA	NA	982.61	<1.0	<5.0	<5.0	73.6	73.6	<5.0	<5.0	<100	310	510
	11 Jul 01	10.82	NA	NA	NA	984.96	<1.0	<5.0	<5.0	<15	ND	<5.0	<5.0	<100	<100	<100
	12 Oct 01	13.65	NA	NA	NA	982.13	<1.0	<5.0	<5.0	<15	ND	<5.0	<5.0	<100	<100	<100
990.15	20 Aug 02	12.01	NA	NA	NA	978.14	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	11 Dec 02	10.05	NA	NA	NA	980.10	<0.50	<1.0	<1.0	<1.0	ND	<1.0	<5.0	<50	<50	<50
	02 Dec 03	14.52	NA	NA	NA	975.63	<2.0	<2.0	<2.0	<2.0	ND	<2.0	<3.0	<50	<50	<50
GES-9	24 Nov 99	14.91	NA	NA	NA	981.47	<1.0	<5.0	<5.0	<15	ND	<5.0	4.7	<100	<100	<100
996.38	21 Apr 00	13.36	NA	NA	NA	983.02	<1.0	<5.0	<5.0	20.4	20.4	<5.0	<5.0	<100	<100	<100
	23 Aug 00	12.23	NA	NA	NA	984.15	<1.0	<5.0	<5.0	<15	ND	<5.0	<5.0	<100	<100	<100
	20 Nov 00	14.11	NA	NA	NA	982.27	<1.0	<5.0	<5.0	<15	ND	<5.0	<5.0	<100	<100	<100
	12 Jan 01	14.83	NA	NA	NA	981.55	<1.0	<5.0	<5.0	29.7	29.7	<5.0	7.1	<100	180	300
990.72	20 Aug 02	14.57	NA	NA	NA	976.15	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	11 Dec 02	13.80	NA	NA	NA	976.92	<0.50	1.1	<1.0	<1.0	1.1	<1.0	<5.0	<50	<50	<50
	02 Dec 03	15.66	NA	NA	NA	975.06	<2.0	<2.0	<2.0	<2.0	ND	<2.0	<3.0	<50	<50	<50
GES-11	23 Aug 00	12.67	NA	NA	NA	985.44	<5.0	54	346	2,100	2,500	<25	143	1,940	2,560	3,390
998.11	20 Nov 00	14.86	NA	NA	NA	983.25	<5.0	<25	496	1,348	1,844	<25	187	3,510	3,640	2,930
	12 Jan 01	15.23	NA	NA	NA	982.88	<1.0	7.8	255	526.4	789.2	12	82	1,850	1,050	1,370
	19 Jan 01	15.65	NA	NA	NA	982.46	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	11 Jul 01	14.46	NA	NA	NA	983.65	<1.0	17	325	999	1,341	<5.0	145	2,270	2,400	1,400
	12 Oct 01	17.23	NA	NA	NA	980.88	<5.0	<25	344	1,160	1,504	<25	118	1,640	1,130	2,070
992.65	20 Aug 02	17.82	NA	NA	NA	974.83	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	29 May 03	16.70	NA	NA	NA	975.95	<2.0	8.9	226	1,013.2	1,248.1	<2.0	123	1,870	574	1,780
	01 Dec 03	16.90	NA	NA	NA	975.75	<2.0	<2.0	62.4	165.2	227.6	<2.0	47	813	<50	564
	25 Feb 04	19.49	NA	NA	NA	973.16	<2.0	4.0	170	956.4	1,130.4	<2.0	229	2,420	<50	2,420
	14 Sep 04	NM	NA	NA	NA	NA	<2.0	<2.0	121	447.2	568.2	<2.0	101	1,450	1,200	1,200
	23 Feb 05	16.10	NA	NA	NA	976.55	<2.0	<2.0	118	404.1	522.1	<2.0	68.9	1,280	233	1,330
	10 Aug 05	19.20	NA	NA	NA	973.45	<2.0	<2.0	14.1	2.5	16.6	<2.0	7.6	424	<50	<50
	09 May 06	16.21	NA	NA	NA	976.44	<2.0	2.4	353	2,945	3,300.4	<2.0	319	4,440	1,990	4,050
	20-Sep-06	18.11	NA	NA	NA	974.54	<2.0	<2.0	21.4	64.3	85.7	<2.0	17.4	504	101	219

TABLE 2-7
HISTORICAL GROUNDWATER MONITORING DATA
VOLATILE PETROLEUM HYDROCARBONS
Former Mobil Service Station No. 01-ECQ
83-89 Elm Street
Pittsfield, Massachusetts

Well ID/MP El (feet)	Date of Sampling	Depth to Water (feet)	Depth to Product (feet)	NAPL Thickness (feet)	NAPL Recovered (gallons)	Groundwater Elevation (feet)	VPH Target Analytes							VPH Fractions		
							Benzene	Toluene	Ethylbenzene	Total Xylenes	Total BTEX	MTBE	Naphthalene	C5-C8 Aliphatics	C9-C12 Aliphatics	C9-C10 Aromatics
	Units	feet	feet	feet	gallons	feet	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
	MCP Method 1 GW-2 Standard:						2,000	8,000	30,000	9,000	-	50,000	1,000	1,000	1,000	5,000
	MCP Method 1 GW-3 Standard:						10,000	4,000	4,000	500	-	50,000	20,000	4,000	20,000	4,000
GT-4	30 Nov 98	17.50	NA	NA	NA	975.59	298	170	369	3,500	4,337	1,020	500	1,630	15,400	11,800
993.09	01 Apr 99	13.54	NA	NA	NA	979.55	269	33	126	1,519	1,947	1,690	468	<250	3,700	8,910
	24 Aug 99	16.97	NA	NA	NA	976.12	309	76	160	1,953	2,498	1,540	-	<500	4,860	8,850
	24 Nov 99	15.55	NA	NA	NA	977.54	588	63	174	1,998	2,823	2,230	874	<500	6,530	8,600
	21 Apr 00	12.17	NA	NA	NA	980.92	308	36	100	1,335	1,779	533	390	<500	8,620	6,900
	23 Aug 00	11.32	NA	NA	NA	981.77	166	79	307	2,026	2,578	66	476	<500	5,620	7,160
	09 Aug 05	DESTROYED														
† GT-5	21 Apr 00	13.22	13.05	0.17	0.02	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	23 Aug 00	12.67	NA	NA	NA	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	11 Jul 01	12.52	NA	NA	NA	NA	21	1,230	875	9,730	11,856	133	431	4,700	23,400	13,200
NA	12 Oct 01	15.59	NA	NA	NA	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
990.15	20 Aug 02	15.58	15.57	0.01	NA	974.58	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	11 Dec 02	13.85	NA	NA	NA	976.30	12.9	519	945	15,400	16,876.9	15.1	847	11,900	11,300	17,400
	29 May 03	17.20	NA	NA	NA	972.95	<10	56.7	173	5,720	5,949.7	<10	365	3,680	2,750	14,500
	24 Feb 04	18.43	NA	NA	NA	971.72	<10	27.2	194	3,577	3,798.2	18.3	414	9,400	<250	23,700
GT-6	18 Oct 96	14.86	14.82	0.04	NA	975.44	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
990.27	25 Nov 96	14.91	14.87	0.04	NA	975.39	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	19 Dec 96	13.49	13.45	0.04	NA	976.81	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	31 Jan 97	14.34	14.31	0.03	NA	975.95	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	06 Mar 97	13.81	NS	NS	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01 Apr 99	14.14	NS	NS	NA	NS	1,220	5,010	560	8,160	14,950	230	410	6,400	5,100	10,200
	24 Nov 99	15.69	NA	0.00	NA	974.58	2,420	9,080	2,190	11,610	25,300	1,270	770	12,400	6,800	8,200
	28 Jan 00	15.99	15.97	0.02	0.00	974.30	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	21 Apr 00	13.43	13.28	0.15	NA	976.95	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	23 Aug 00	13.89	13.86	0.03	0.00	976.40	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	20 Nov 00	14.98	14.95	0.03	0.00	975.31	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	29 Jan 01	16.02	15.59	0.43	0.25	974.58	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	11 Jul 01	14.30	14.27	0.03	NA	975.84	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	12 Oct 01	16.23	16.22	0.01	NA	973.90	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	20 Aug 02	16.42	16.41	0.01	NA	973.71	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	29 May 03	19.10	19.00	0.10	NA	971.10	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	02 Dec 03	17.20	NA	NA	NA	972.92	901	11,300	10,200	46,500	68,901	<100	4,560	120,000	<2500	135,000
	27 Feb 04	NA	20.44	0.02	NA	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	10 May 06	17.74	17.62	0.12	NA	972.53	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

TABLE 2-7
HISTORICAL GROUNDWATER MONITORING DATA
VOLATILE PETROLEUM HYDROCARBONS
Former Mobil Service Station No. 01-ECQ
83-89 Elm Street
Pittsfield, Massachusetts

Well ID/MP El (feet)	Date of Sampling	Depth to Water (feet)	Depth to Product (feet)	NAPL Thickness (feet)	NAPL Recovered (gallons)	Groundwater Elevation (feet)	VPH Target Analytes							VPH Fractions		
							Benzene	Toluene	Ethylbenzene	Total Xylenes	Total BTEX	MTBE	Naphthalene	C5-C8 Aliphatics	C9-C12 Aliphatics	C9-C10 Aromatics
	Units	feet	feet	feet	gallons	feet	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
	MCP Method 1 GW-2 Standard:						2,000	8,000	30,000	9,000	-	50,000	1,000	1,000	1,000	5,000
	MCP Method 1 GW-3 Standard:						10,000	4,000	4,000	500	-	50,000	20,000	4,000	20,000	4,000
† GT-7	19 May 98	14.08	NA	NA	NA	975.77	<25	<50	<25	536	536	<25	188	<250	500	<250
989.85	30 Nov 98	16.23	NA	NA	NA	973.62	6.3	<10	<5	22	28.6	<5	94	<50	195	138
	01 Apr 99	13.80	NA	NA	NA	976.05	2.6	37	49	667	756.2	<5.0	118	434	1,210	1,980
	24 Aug 99	16.35	NA	NA	NA	973.50	8.2	<5.0	<5.0	14	22.2	<5.0	108	<100	<100	110
	24 Nov 99	15.24	NA	NA	NA	974.61	7.6	15	60	156.4	239.5	<5.0	123	230	280	380
	21 Apr 00	13.73	NA	NA	NA	976.12	5.9	10.5	31.8	176.1	224.3	<5.0	75.7	410	400	380
	23 Aug 00	13.10	NA	NA	NA	976.75	6.1	12.4	25.1	160.6	204.2	<5.0	93.8	280	280	440
	12 Jan 01	14.72	NA	NA	NA	975.13	3.8	<5.0	7.8	<15	11.6	<5.0	12.5	<100	<100	<100
	11 Jul 01	13.82	NA	NA	NA	976.03	5.6	<5.0	19.3	43.1	68.0	<5.0	63.3	<100	260	250
	12 Oct 01	15.75	NA	NA	NA	974.10	7.6	<5.0	<5.0	<15	7.6	<5.0	<5.0	<100	<100	<100
989.76	20 Aug 02	13.23	NA	NA	NA	976.53	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	11 Dec 02	14.82	NA	NA	NA	974.94	4.1	7.5	50.6	179.0	241.2	<1.0	34.7	211	117	319
	29 May 03	19.20	NA	NA	NA	970.56	<2.0	<2.0	<2.0	2.1	2.1	<2.0	<3.0	<50	<50	<50
	02 Dec 03	17.31	NA	NA	NA	972.45	<2.0	<2.0	<2.0	<2.0	ND	<2.0	<3.0	<50	<50	<50
† RW-1	18 Oct 96	16.00	NA	NA	NA	976.48	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
992.48	31 Jan 97	NS	NS	NS	1.00	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	06 Mar 97	NS	NS	NS	0.10	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01 Apr 99	NS	NS	NS	1.50	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	24 Aug 99	20.20	18.98	1.22	2.00	973.21	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	28 Jan 00	18.52	18.30	0.22	0.30	974.13	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	10 Feb 00	NS	NS	0.67	2.00	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	21 Apr 00	16.80	16.50	0.30	0.50	975.91	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	23 Aug 00	16.20	15.85	0.35	NA	976.55	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	20 Nov 00	16.80	14.00	2.80	1.75	977.81	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	29 Dec 00	16.75	16.70	0.05	2.00	975.77	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	29 Jan 01	17.86	17.76	0.10	0.25	974.70	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	11 Jul 01	17.17	15.40	1.77	1.00	976.66	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	12 Oct 01	18.34	18.30	0.04	0.60	974.17	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
992.46	20 Aug 02	21.46	17.63	3.83	0.00	973.91	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	29 May 03	22.50	20.95	1.55	NA	971.14	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
RW-101	24 Feb 04	20.33	NA	NA	NA	969.66	<2.0	<2.0	<2.0	5.9	5.9	<2.0	<3.0	<50	<50	<50
989.99																
RW-2	28 Jan 00	17.50	16.05	1.45	1.10	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
NA	30 Mar 00	16.33	14.95	1.38	3.00	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	21 Apr 00	14.52	14.39	0.13	0.50	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	23 Aug 00	13.69	13.65	0.04	NA	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	20 Nov 00	15.22	NS	NS	0.60	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	29 Jan 01	17.10	16.00	1.10	1.75	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	11 Jul 01	15.59	14.57	1.02	1.20	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	12 Oct 01	17.30	17.22	0.08	0.10	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
991.49	20 Aug 02	17.58	NA	NA	NA	973.91	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	11 Dec 02	16.45	NA	NA	NA	975.04	3,320	13,700	3,390	20,600	41,010	30	1,160	18,700	13,000	13,600
	29 May 03	18.60	NA	NA	NA	972.89	2,250	9,870	2,570	12,450	27,140	<20	789	20,600	6,200	14,800
	10 Aug 05	19.38	NA	NA	NA	972.11	120.0	70.8	35.3	112.4	338.5	3.2	34.0	567	168	341

TABLE 2-7
HISTORICAL GROUNDWATER MONITORING DATA
VOLATILE PETROLEUM HYDROCARBONS
Former Mobil Service Station No. 01-ECQ
83-89 Elm Street
Pittsfield, Massachusetts

Well ID/MP El (feet)	Date of Sampling	Depth to Water (feet)	Depth to Product (feet)	NAPL Thickness (feet)	NAPL Recovered (gallons)	Groundwater Elevation (feet)	VPH Target Analytes							VPH Fractions		
							Benzene	Toluene	Ethylbenzene	Total Xylenes	Total BTEX	MTBE	Naphthalene	C5-C8 Aliphatics	C9-C12 Aliphatics	C9-C10 Aromatics
	Units	feet	feet	feet	gallons	feet	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
	MCP Method 1 GW-2 Standard:						2,000	8,000	30,000	9,000	-	50,000	1,000	1,000	1,000	5,000
	MCP Method 1 GW-3 Standard:						10,000	4,000	4,000	500	-	50,000	20,000	4,000	20,000	4,000
RW-3	31 Jan 97	NS	NS	NS	0.40	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
989.89	06 Mar 97	NS	NS	NS	1.20	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	28 Jan 00	16.96	15.32	1.64	0.60	974.18	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	30 Mar 00	14.30	13.52	0.78	1.00	976.18	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	21 Apr 00	14.60	14.09	0.51	0.06	975.68	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	23 Aug 00	13.66	NA	0.00	NA	976.23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	20 Nov 00	14.83	14.82	0.01	NA	975.07	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	29 Jan 01	16.18	15.72	0.46	0.50	974.06	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	11 Jul 01	14.55	14.34	0.21	0.50	975.50	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	12 Oct 01	16.07	15.87	0.20	0.20	973.97	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	20 Aug 02	16.16	16.15	0.01	NA	973.84	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	11 Dec 02	15.65	14.15	1.50	0.20	975.48	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	29 May 03	DRY	NA	NA	NA	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
GES-201	11 Dec 02	15.14	NA	NA	NA	974.92	71.2	9.8	466	1,100	1,647	51.2	176	2,110	2,100	4,330
990.06	29 May 03	17.90	NA	NA	NA	972.16	41.1	74.5	353	519.5	988.1	46.1	69.3	3,160	542	2,970
	20 Jun 03	18.36	NA	NA	NA	971.70	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	24 Feb 04	17.10	NA	NA	NA	972.96	6.0	<2.0	18.3	15.8	40.1	10	6.2	1,200	<50	531
	13 Sep 04	NM	NA	NA	NA	NA	7.6	<2.0	6.3	<4.0	13.9	<2.0	4.1	1,100	88	509
	22 Feb 05	16.80	NA	NA	NA	973.26	2.9	4.1	142.0	224.1	373.1	<2.0	35.2	332	207	791
	10 Aug 05	18.04	NA	NA	NA	972.02	4.2	<2.0	7.1	<2.0	11.3	<2.0	<3.0	367	<50	83
	10 May 06	16.88	NA	NA	NA	973.18	4.1	<2.0	23.6	12.5	40.2	<2.0	4.2	367	61.1	220
	20 Sep 06	17.63	NA	NA	NA	972.43	4.7	<2.0	8.5	5.4	18.6	<2.0	<3.0	358	80.0	167
	26 Apr 07	14.66	NA	NA	NA	975.40	<2.0	<2.0	12.4	28.9	41.3	<2.0	5.5	198	<50	205
† GES-202	11 Dec 02	13.69	NA	NA	NA	976.42	<0.5	<1.0	<1.0	<1.0	ND	5.6	<5.0	<50	<50	<50
990.11	29 May 03	17.60	NA	NA	NA	972.51	<2.0	<2.0	<2.0	<4.0	ND	<2.0	<3.0	<50	<50	<50
	20 Jun 03	18.49	NA	NA	NA	971.62	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	02 Dec 03	16.35	NA	NA	NA	973.76	<2.0	<2.0	<2.0	<2.0	ND	<2.0	<3.0	<50	<50	<50
	24 Feb 04	20.58	NA	NA	NA	969.53	<2.0	<2.0	<2.0	<4.0	ND	<2.0	<3.0	<50	<50	<50
† GES-203	11 Dec 02	11.90	NA	NA	NA	977.94	<0.50	2.9	4.9	75.3	83.1	<1.0	99.3	116	<50	882
989.84	29 May 03	13.50	NA	NA	NA	976.34	<2.0	<2.0	<2.0	10.0	10.0	<2.0	67.0	104	109	581
	20 Jun 03	16.21	NA	NA	NA	973.63	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	02 Dec 03	13.67	NA	NA	NA	976.17	<2.0	<2.0	<2.0	9.5	9.5	<2.0	34.0	62.8	<50	479
	13 Sep 04	NM	NA	NA	NA	NA	<2.0	<2.0	<2.0	<4.0	ND	<2.0	<3.0	<50	<50	72.8
	21 Feb 05	16.04	NA	NA	NA	973.80	<2.0	<2.0	<2.0	<4.0	ND	<2.0	<3.0	<50	<50	<50
GES-204	11 Dec 02	14.86	NA	NA	NA	974.57	<0.50	<1.0	<1.0	<1.0	ND	<1.0	<5.0	<50	<50	<50
989.43	29 May 03	17.00	NA	NA	NA	972.43	<2.0	<2.0	<2.0	<4.0	ND	<2.0	<3.0	<50	<50	<50
	20 Jun 03	19.58	NA	NA	NA	969.85	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	02 Dec 03	14.69	NA	NA	NA	974.74	<2.0	<2.0	<2.0	<2.0	ND	<2.0	<3.0	<50	<50	<50
	24 Feb 04	20.78	NA	NA	NA	968.65	<2.0	<2.0	<2.0	<4.0	ND	<2.0	<3.0	<50	<50	<50
GES-205	11 Dec 02	14.07	NA	NA	NA	974.99	<0.50	<1.0	<1.0	<1.0	ND	<1.0	<5.0	<50	<50	<50
989.06	30 May 03	18.50	NA	NA	NA	970.56	<2.0	<2.0	<2.0	<4.0	ND	<2.0	<3.0	<50	<50	<50
	01 Dec 03	19.33	NA	NA	NA	969.73	<2.0	<2.0	<2.0	<4.0	ND	<2.0	<3.0	<50	<50	<50
	13 Sep 04	NM	NA	NA	NA	NA	<2.0	<2.0	<2.0	<4.0	ND	<2.0	<3.0	<50	<50	<50
	10 May 06	16.64	NA	NA	NA	972.42	<2.0	<2.0	<2.0	<4.0	ND	<2.0	<3.0	<50	<50	<50
	21 Sep 06	16.02	NA	NA	NA	973.04	<2.0	<2.0	<2.0	<4.0	ND	<2.0	<3.0	<50	<50	<50

TABLE 2-7
HISTORICAL GROUNDWATER MONITORING DATA
VOLATILE PETROLEUM HYDROCARBONS
Former Mobil Service Station No. 01-ECQ
83-89 Elm Street
Pittsfield, Massachusetts

	Well ID/MP El (feet)	Date of Sampling	Depth to Water (feet)	Depth to Product (feet)	NAPL Thickness (feet)	NAPL Recovered (gallons)	Groundwater Elevation (feet)	VPH Target Analytes							VPH Fractions		
								Benzene	Toluene	Ethylbenzene	Total Xylenes	Total BTEX	MTBE	Naphthalene	C5-C8 Aliphatics	C9-C12 Aliphatics	C9-C10 Aromatics
		Units	feet	feet	feet	gallons	feet	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
						MCP Method 1 GW-2 Standard:		2,000	8,000	30,000	9,000	-	50,000	1,000	1,000	1,000	5,000
						MCP Method 1 GW-3 Standard:		10,000	4,000	4,000	500	-	50,000	20,000	4,000	20,000	4,000
**	GES-206	11 Dec 02	23.30	12.75	10.55	NA	973.78	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	989.06	04 Dec 03	21.34	19.48	1.86	NA	969.13	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		27 Feb 04	21.86	21.83	0.03	NA	967.22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12 Mar 04	22.96	22.55	0.41	NR	966.25	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
†	GES-208	11 Dec 02	13.37	NA	NA	NA	980.10	470	3,790	1,980	**13,400**	19,640	401	416	**7,810**	**10,300**	**8,990**
	993.47	29 May 03	16.00	NA	NA	NA	977.47	311	2,950	2,360	**9,920**	15,541	237	547	**7,500**	**6,140**	**7,510**
		02 Dec 03	16.85	NA	NA	NA	976.62	512	224	1,960	**9,010**	11,706	82.7	510	9,440	52.0	**9,030**
		27 Feb 04	20.00	NA	NA	NA	973.47	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		13 Sep 04	NM	NA	NA	NA	NA	630	298	1,520	**5,591**	8,039	26.3	720	4,790	**4,850**	**8,720**
		23 Feb 05	18.60	NA	NA	NA	974.87	745	616	2,070	**7,300**	10,731	<10	588	**9,720**	**3,400**	**10,400**
		10 Aug 05	19.67	NA	NA	NA	973.80	207	55.7	286	**1,167**	1,715.7	<2.0	147	6,140	305	**6,810**
		10 May 06	15.50	NA	NA	NA	977.97	314	632	3,000	**15,580**	19,526	<2.0	598	6,210	**1,080**	**33,600**
		20 Sep 06	17.96	NA	NA	NA	975.51	302	525	2,090	**10,020**	12,937	<2.0	1,100	**8,710**	**10,900**	**17,800**
		26 Apr 07	11.67	NA	NA	NA	981.80	10.4	212	388	**3,714**	4,324	<4.0	200	**1,450**	<100	**8,940**
	GES-209	21 Mar 03	12.96	NA	NA	NA	976.36	<2.0	<2.0	<2.0	<2.0	ND	<2.0	<3.0	<50	<50	<50
	989.32	30 May 03	13.10	NA	NA	NA	976.22	<2.0	<2.0	<2.0	<4.0	ND	<2.0	<3.0	<50	<50	<50
		03 Dec 03	13.09	NA	NA	NA	976.23	<2.0	<2.0	<2.0	<2.0	ND	<2.0	<3.0	<50	<50	<50
		27 Feb 04	DRY	NA	NA	NA	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	989.31	13 Sep 04	NM	NA	NA	NA	NA	<2.0	<2.0	<2.0	<2.0	ND	<2.0	<3.0	<50	<50	<50
		22 Feb 05	16.00	NA	NA	NA	973.31	<2.0	<2.0	<2.0	<2.0	ND	<2.0	<3.0	<50	<50	<50
	GES-210	30 May 03	9.80	NA	NA	NA	975.86	<2.0	<2.0	<2.0	<4.0	ND	<2.0	<3.0	<50	<50	<50
	985.66	04 Dec 03	8.23	NA	NA	NA	977.43	<2.0	<2.0	<2.0	<2.0	ND	<2.0	<3.0	<50	<50	<50
		27 Feb 04	DRY	NA	NA	NA	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		09 Aug 05	13.00	NA	NA	NA	969.29	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	GES-211	21 Mar 03	13.66	NA	NA	NA	977.21	<2.0	<2.0	<2.0	<2.0	ND	<2.0	<3.0	<50	<50	<50
	990.87	30 May 03	14.40	NA	NA	NA	976.47	<2.0	<2.0	<2.0	<4.0	ND	<2.0	<3.0	<50	<50	<50
		04 Dec 03	14.63	NA	NA	NA	976.24	<2.0	<2.0	<2.0	<2.0	ND	<2.1	<3.1	<50	<50	<50
		27 Feb 04	DRY	NA	NA	NA	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		09 Aug 05	DRY	NA	NA	NA	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	GES-212	21 Mar 03	10.89	NA	NA	NA	976.74	<2.0	<2.0	<2.0	<2.0	ND	<2.0	<3.0	<50	<50	<50
	987.63	30 May 03	11.65	NA	NA	NA	975.98	<2.0	<2.0	<2.0	<2.0	ND	<2.0	<3.0	<50	<50	<50
		05 Dec 03	MISSING under mud.					NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	987.59	14 Sep 04	NM	NA	NA	NA	NA	12.2	55.3	61.4	**2,047**	2,175.9	<2.0	232	1,290	2,590	**7,440**
		21 Feb 05	11.69	NA	NA	NA	975.90	3.3	<2.0	19.2	292	314.5	<2.0	49.6	490	411	942
		10 Aug 05	12.24	NA	NA	NA	975.35	<2.0	<2.0	<2.0	34.6	34.6	<2.0	6.7	<50	<50	<50
	GES-213	21 Mar 03	9.53	NA	NA	NA	979.67	<2.0	<2.0	<2.0	<2.0	ND	<2.0	<3.0	<50	<50	<50
	989.20	30 May 03	9.90	NA	NA	NA	979.30	<2.0	<2.0	<2.0	<4.0	ND	<2.0	<3.0	<50	<50	<50
		04 Dec 03	10.74	NA	NA	NA	978.46	<2.0	<2.0	<2.0	3.3	3.3	<2.0	<3.0	348	<50	<50
		27 Feb 04	13.87	13.85	0.02	NA	975.35	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

TABLE 2-7
HISTORICAL GROUNDWATER MONITORING DATA
VOLATILE PETROLEUM HYDROCARBONS
Former Mobil Service Station No. 01-ECQ
83-89 Elm Street
Pittsfield, Massachusetts

Well ID/MP El (feet)	Date of Sampling	Depth to Water (feet)	Depth to Product (feet)	NAPL Thickness (feet)	NAPL Recovered (gallons)	Groundwater Elevation (feet)	VPH Target Analytes							VPH Fractions		
							Benzene	Toluene	Ethylbenzene	Total Xylenes	Total BTEX	MTBE	Naphthalene	C5-C8 Aliphatics	C9-C12 Aliphatics	C9-C10 Aromatics
	Units	feet	feet	feet	gallons	feet	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
					MCP Method 1 GW-2 Standard:		2,000	8,000	30,000	9,000	-	50,000	1,000	1,000	1,000	5,000
					MCP Method 1 GW-3 Standard:		10,000	4,000	4,000	500	-	50,000	20,000	4,000	20,000	4,000
GES-214	21 Mar 03	10.65	NA	NA	NA	975.95	<2.0	<2.0	<2.0	<2.0	ND	<2.0	<3.0	<50	<50	<50
986.60	30 May 03	12.20	NA	NA	NA	974.40	<2.0	<2.0	<2.0	<4.0	ND	<2.0	<3.0	<50	<50	<50
	05 Dec 03	11.79	NA	NA	NA	974.81	228	44.4	76.6	964	1,313	<2.0	42.7	691	109	806
	27 Feb 04	15.94	NA	NA	NA	970.66	195	4.6	181	258.2	638.8	<2.0	115	868	<50	1,030
986.57	13 Sep 04	NM	NA	NA	NA	NA	3.2	<2.0	4.0	26.3	33.5	7.8	60.0	71.3	<50	564
	21 Feb 05	13.38	NA	NA	NA	973.19	<2.0	<2.0	<2.0	3.3	3.3	<2.0	<3.0	<50	<50	<50
	10 Aug 05	15.30	NA	NA	NA	971.27	<2.0	<2.0	<2.0	<2.0	ND	<2.0	<3.0	<50	<50	<50
GES-215	21 Mar 03	11.46	NA	NA	NA	975.19	<2.0	<2.0	<2.0	<2.0	ND	<2.0	<3.0	<50	<50	<50
986.65	30 May 03	13.70	NA	NA	NA	972.95	<2.0	<2.0	<2.0	<4.0	ND	<2.0	<3.0	<50	<50	<50
	04 Dec 03	11.66	NA	NA	NA	974.99	<2.0	<2.0	<2.0	<2.0	ND	<2.0	<3.0	<50	<50	<50
	27 Feb 04	15.91	NA	NA	NA	970.74	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	13 Sep 04	NM	NA	NA	NA	NA	<2.0	<2.0	<2.0	<4.0	ND	4.3	<3.0	<50	<50	<50
	21 Feb 05	15.39	NA	NA	NA	971.26	<2.0	<2.0	<2.0	<4.0	ND	<2.0	<3.0	<50	<50	<50
	10 Aug 05	15.45	NA	NA	NA	971.20	<2.0	<2.0	<2.0	<2.0	ND	<2.0	<3.0	<50	<50	<50
GES-216	10 Apr 03	14.05	NA	NA	NA	NA	245	559	602	2,777	4,183	<4.0	261	2,820	1,000	4,110
986.88	30 May 03	20.50	NA	NA	NA	NA	66.7	1,330	2,010	9,010	12,416.7	<10	1,110	9,730	4,380	20,300
	03 Dec 03	19.28	19.25	0.03	NA	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01 Feb 04	20.91	20.80	0.11	NA	966.05	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	10 Aug 05	22.69	NA	NA	NA	964.19	10.5	72.9	201.0	3,403	3,687.4	<10.0	465.0	6,240	<250	22,900
	09 May 06	17.05	NA	NA	NA	969.83	11.1	14.5	11.0	42.8	79.4	<2.0	7.1	230	100	541
	21 Sep 06	17.53	NA	NA	NA	969.35	245.0	327.0	267.0	672.0	1,511.0	<2.0	103.0	2,790	751	1,160
GES-217	10 Apr 03	13.46	NA	NA	NA	NA	19.6	14.4	11.6	32	77.6	2.8	<3.0	88.1	<50	<50
986.76	30 May 03	20.65	NA	NA	NA	NA	450	158	191	333.2	1,132.2	<2.0	61.4	2,070	68.0	549
	05 Dec 03	19.10	NA	NA	NA	NA	539	10,100	4,540	40,100	55,279	100	5,120	67,700	3,400	85,600
	26 Feb 04	20.78	NA	NA	NA	965.98	28.1	442	300	2,636	3,406	<2.0	416	14,700	<50	14,200
	12 Mar 04	21.50	NA	NA	NA	965.26	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	21 Feb 05	21.13	20.53	0.60	NA	966.09	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	10 Aug 05	22.68	NA	NA	NA	964.08	383	1,360	5,250	36,850	43,843	<50	4,550	220,000	34,000	171,000
	09 May 06	16.94	NA	NA	NA	969.82	90.5	15.5	96.8	906.4	1,109.2	6.3	176	6,380	<50	11,000
	21 Sep 06	17.31	NA	NA	NA	969.45	119.0	39.5	337.0	672.8	1,168.3	<2.0	295	16,900	7,110	5,820
GES-218	03 Dec 03	21.10	20.46	0.64	NA	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
989.74	27 Feb 04	25.01	NA	NA	NA	964.73	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	12 Mar 04	NM	22.66	NM	NR	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	09 Aug 05	DRY	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
GES-219	30 May 03	16.10	NA	NA	NA	NA	416	259	199	477.9	1,351.9	<4.0	64.0	1,850	<100	695
981.58	05 Dec 03	13.84	NA	NA	NA	NA	232	19.7	22.0	68.4	342.1	90.7	32.6	1,280	<50	199
	27 Feb 04	15.55	NA	NA	NA	966.03	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	12 Mar 04	16.99	NA	NA	NA	964.59	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	13 Sep 04	NM	NA	NA	NA	NA	2.8	<2.0	<2.0	<4.0	2.8	2.7	<3.0	<50	<50	<50
	22 Feb 05	15.65	NA	NA	NA	965.93	115.0	<2.0	13.4	<4.0	128.4	33.6	<3.0	400	<50	73.0
	11 Aug 05	15.41	NA	NA	NA	966.17	<2.0	<2.0	<2.0	12.8	12.8	<2.0	6.1	<50	93.7	295
	09 May 06	11.83	NA	NA	NA	969.75	<2.0	<2.0	<2.0	<4.0	ND	<2.0	<3.0	<50	<50	<50
	21 Sep 06	12.24	NA	NA	NA	969.34	<2.0	<2.0	<2.0	<4.0	ND	<2.0	<3.0	<50	<50	<50

TABLE 2-7
HISTORICAL GROUNDWATER MONITORING DATA
VOLATILE PETROLEUM HYDROCARBONS
Former Mobil Service Station No. 01-ECQ
83-89 Elm Street
Pittsfield, Massachusetts

Well ID/MP El (feet)	Date of Sampling	Depth to Water (feet)	Depth to Product (feet)	NAPL Thickness (feet)	NAPL Recovered (gallons)	Groundwater Elevation (feet)	VPH Target Analytes							VPH Fractions		
							Benzene	Toluene	Ethylbenzene	Total Xylenes	Total BTEX	MTBE	Naphthalene	C5-C8 Aliphatics	C9-C12 Aliphatics	C9-C10 Aromatics
	Units	feet	feet	feet	gallons	feet	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
	MCP Method 1 GW-2 Standard:						2,000	8,000	30,000	9,000	-	50,000	1,000	1,000	1,000	5,000
	MCP Method 1 GW-3 Standard:						10,000	4,000	4,000	500	-	50,000	20,000	4,000	20,000	4,000
GES-220	30 May 03	19.50	NA	NA	NA	NA	688	121	299	470.6	1,578.6	38.5	73.9	2,100	<100	862
	05 Dec 03	18.70	NA	NA	NA	NA	683	134	253	557	1,627	69.4	104	3,600	112	822
988.39	26 Feb 04	20.78	NA	NA	NA	967.61	91.6	2.4	<2.0	7.3	101.3	12.0	11.3	603	<50	94.0
	12 Mar 04	20.56	NA	NA	NA	967.83	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	11 Aug 05	27.25	NA	NA	NA	961.14	347	10.8	209	143.8	710.6	29.3	36.5	2,150	280	466
GES-221	04 Dec 03	19.00	NA	NA	NA	968.28	<2.0	<2.0	<2.0	<2.0	ND	<2.0	<3.0	<50	<50	<50
987.28	27 Feb 04	20.38	NA	NA	NA	966.90	<2.0	<2.0	<2.0	<4.0	ND	<2.0	<3.0	<50	<50	<50
	12 Mar 04	21.54	NA	NA	NA	965.74	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	13 Sep 04	NM	NA	NA	NA	NA	<2.0	<2.0	<2.0	<4.0	ND	<2.0	<3.0	<50	<50	<50
	21 Feb 05	20.09	NA	NA	NA	967.19	<2.0	<2.0	<2.0	<4.0	ND	<2.0	<3.0	<50	<50	<50
	10 Aug 05	21.31	NA	NA	NA	965.97	<2.0	<2.0	<2.0	<2.0	ND	<2.0	<3.0	<50	<50	<50
	09 May 06	17.25	NA	NA	NA	970.03	<2.0	<2.0	<2.0	<4.0	ND	<2.0	<3.0	<50	<50	<50
	21 Sep 06	17.77	NA	NA	NA	969.51	<2.0	<2.0	<2.0	<4.0	ND	<2.0	<3.0	<50	<50	<50
GES-222	05 Dec 03	19.00	NA	NA	NA	NA	1,640	9,010	993	9,370	21,013	57.5	473	**21,800**	1,760	**8,090**
986.73	26 Feb 04	20.70	NA	NA	NA	966.03	37.9	127	54.2	700	919.1	11.0	44.8	1,690	<50	959
	12 Mar 04	21.60	21.10	0.50	NR	965.51	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	09 Aug 05	19.05	19.00	0.05	NA	967.72	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
GES-223	02 Dec 03	17.63	NA	NA	NA	NA	674	3.6	9.3	7.6	694.5	1,600	<3.0	1,090	<50	177
989.16	24 Feb 04	21.00	NA	NA	NA	968.16	925	<2.0	<2.0	<4.0	925	1,460	<3.0	1,430	<50	69.1
	13 Sep 04	NM	NA	NA	NA	NA	98.6	<2.0	<2.0	<4.0	98.6	309	<3.0	<50	<50	<50
	22 Feb 05	19.45	NA	NA	NA	969.71	<2.0	<2.0	<2.0	<4.0	ND	<2.0	<3.0	<50	<50	<50
	10 Aug 05	19.54	NA	NA	NA	969.62	<2.0	<2.0	<2.0	5.3	5.3	7.7	<3.0	<50	<50	76.5
	09 May 06	17.90	NA	NA	NA	971.26	<2.0	<2.0	<2.0	<4.0	ND	7.4	<3.0	<50	<50	<50
	20 Sep 06	18.50	NA	NA	NA	970.66	<2.0	<2.0	<2.0	<4.0	ND	30.9	<3.0	<50	<50	<50
	26 Apr 07	15.96	NA	NA	NA	973.20	<2.0	<2.0	<2.0	<4.0	ND	4.4	<3.0	<50	<50	<50
† GES-224	03 Dec 03	18.65	NA	NA	NA	970.83	<2.0	<2.0	<2.0	<2.0	ND	1,040	<3.0	<50	<50	<50
989.48	24 Feb 04	21.43	NA	NA	NA	968.05	3.6	<2.0	<2.0	<4.0	3.6	232	<3.0	<50	<50	<50
	13 Sep 04	NM	NA	NA	NA	NA	<2.0	<2.0	<2.0	<4.0	ND	3.7	<3.0	<50	<50	<50
	22 Feb 05	20.15	NA	NA	NA	969.33	<2.0	<2.0	<2.0	<4.0	ND	<2.0	<3.0	<50	<50	<50
	10 Aug 05	20.02	NA	NA	NA	969.46	<2.0	<2.0	<2.0	2.8	2.8	104.0	<3.0	<50	<50	<50
	09 May 06	18.70	NA	NA	NA	970.78	<2.0	<2.0	<2.0	<4.0	ND	<2.0	<3.0	<50	<50	<50
	20 Sep 06	19.28	NA	NA	NA	970.20	<2.0	<2.0	<2.0	<4.0	ND	12.5	<3.0	<50	<50	<50
	26 Apr 07	16.90	NA	NA	NA	972.58	<2.0	<2.0	<2.0	<4.0	ND	2.5	<3.0	<50	<50	<50
† GES-225	02 Dec 03	18.17	NA	NA	NA	NA	611	9,160	2,410	12,610	24,791	<2.0	549	**21,200**	211	10,900
992.82	27 Feb 04	23.20	NA	NA	NA	969.62	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	12 Mar 04	22.85	22.80	0.05	NA	970.01	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	11 Aug 05	20.57	NA	NA	NA	972.25	115	314	2,100	**8,546**	11,075	49.7	363	**9,240**	**7,460**	**9,380**
	10 May 06	18.14	NA	NA	NA	974.68	243	587	1,930	**8,285**	11,045	<2.0	468	**8,170**	354	9,600
	10 May 06 DUP	18.14	NA	NA	NA	974.68	252	614	1,760	7,657	10,283	<2.0	501	**8,310**	<50	9,090
	21 Sep 06	19.87	NA	NA	NA	972.95	<2.0	<2.0	<2.0	<2.0	ND	<2.0	<3.0	<50	<50	<50
GES-226	04 Dec 03	17.53	NA	NA	NA	NA	128	578	92.6	408.8	1,207.4	<2.0	<3.0	**12,800**	<50	375
989.27	24 Feb 04	19.70	NA	NA	NA	969.57	12.9	19.3	3.1	42.7	78.0	16.0	3.1	**4,100**	<50	165
	13 Sep 04	NM	NA	NA	NA	NA	<2.0	<2.0	<2.0	<4.0	ND	<2.0	<3.0	217	<50	<50
	21 Feb 05	20.11	NA	NA	NA	969.16	<2.0	<2.0	<2.0	<4.0	ND	<2.0	<3.0	<50	<50	<50
	11 Aug 05	20.84	NA	NA	NA	968.43	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<3.0	<50	<50	<50

TABLE 2-7
HISTORICAL GROUNDWATER MONITORING DATA
VOLATILE PETROLEUM HYDROCARBONS
Former Mobil Service Station No. 01-ECQ
83-89 Elm Street
Pittsfield, Massachusetts

Well ID/MP El (feet)	Date of Sampling	Depth to Water (feet)	Depth to Product (feet)	NAPL Thickness (feet)	NAPL Recovered (gallons)	Groundwater Elevation (feet)	VPH Target Analytes							VPH Fractions		
							Benzene	Toluene	Ethylbenzene	Total Xylenes	Total BTEX	MTBE	Naphthalene	C5-C8 Aliphatics	C9-C12 Aliphatics	C9-C10 Aromatics
	Units	feet	feet	feet	gallons	feet	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
	MCP Method 1 GW-2 Standard:						2,000	8,000	30,000	9,000	-	50,000	1,000	1,000	1,000	5,000
	MCP Method 1 GW-3 Standard:						10,000	4,000	4,000	500	-	50,000	20,000	4,000	20,000	4,000
† GES-227	27 Feb 04	23.02	23.00	0.02	NA	967.42	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
990.42	12 Mar 04	23.74	23.15	0.59	NA	967.13	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	21 Feb 05	25.90	25.00	0.90	NA	965.20	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
† GES-228	01 Dec 03	23.57	NA	NA	NA	NA	22.2	2,160	1,400	9,930	13,512.2	<20	1,460	16,500	<500	41,300
991.40	27 Feb 04	23.61	23.56	0.05	NA	967.83	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	13 Sep 04	NM	NA	NA	NA	NA	81.6	786	143	4,600	5,810.6	<2.0	643	21,400	4,130	11,700
	09 Aug 05	26.30	26.20	0.05	NA	965.14	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	10 May 06	18.71	18.62	0.09	NA	972.76	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
† GES-229	04 Dec 03	24.13	NA	NA	NA	NA	<2.0	<2.0	<2.0	2.3	2.3	<2.0	<3.0	<50	<50	<50
990.80	25 Feb 04	23.81	NA	NA	NA	966.99	<2.0	<2.0	<2.0	<4.0	ND	<2.0	<3.0	<50	<50	<50
	13 Sep 04	NM	NA	NA	NA	NA	<2.0	<2.0	<2.0	<4.0	ND	<2.0	<3.0	<50	<50	<50
	21 Feb 05	20.88	NA	NA	NA	969.92	<2.0	<2.0	<2.0	<4.0	ND	<2.0	<3.0	<50	<50	<50
GES-230	04 Dec 03	20.12	20.06	0.06	NA	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
988.82	27 Feb 04	22.92	NA	NA	NA	965.90	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	12 Mar 04	23.81	23.79	0.02	NA	965.03	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
GES-231	05 Dec 03	23.48	23.02	0.46	NA	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
987.72	26 Feb 04	21.68	NA	NA	NA	966.04	935	6,370	1,480	9,160	17,945	<2.0	694	13,300	<50	11,500
	10 Aug 05	25.15	NA	NA	NA	962.57	55.3	48.4	62.3	142.4	308.4	13.8	22.5	1,050	233	348
	09 May 06	17.91	NA	NA	NA	969.81	507	726	252	955	2,440	<2.0	119	2,580	220	1,720
	21 Sep 06	18.27	NA	NA	NA	969.45	395	456	245	857	1,953	<2.0	150	3,660	1,640	2,110
GES-232	04 Dec 03	20.19	NA	NA	NA	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
988.21	27 Feb 04	25.10	20.60	4.50	NA	963.11	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	12 Mar 04	22.42	NM	NA	NA	965.79	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
GES-301D	26 Feb 04	16.51	NA	NA	NA	975.89	<2.0	<2.0	<2.0	<2.0	ND	<2.0	<3.0	<50	<50	<50
992.40	14 Sep 04	NM	NA	NA	NA	NA	<2.0	<2.0	<2.0	<2.0	ND	<2.0	<3.0	<50	<50	<50
	23 Feb 05	15.33	NA	NA	NA	977.07	<2.0	<2.0	<2.0	<2.0	ND	<2.0	<3.0	<50	<50	<50
	10 Aug 05	17.03	NA	NA	NA	975.37	<2.0	<2.0	<2.0	<2.0	ND	<2.0	<3.0	<50	268	205
GES-301I	10 May 06	22.15	18.84	3.31	NA	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
GES-301M	27 Feb 04	27.20	20.84	6.36	NA	970.03	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
992.40	09 Aug 05	20.86	22.25	1.39	NA	972.60	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
GES-301S	26 Feb 04	11.64	NA	NA	NA	980.77	<2.0	<2.0	13.7	32.4	46.1	<2.0	11.1	76.4	<50	370
992.41	10 Aug 05	11.50	NA	NA	NA	980.91	<2.0	<2.0	<2.0	2.4	2.4	<2.0	<3.0	<50	<50	<50
	10 May 06	10.09	NA	NA	NA	982.32	<2.0	<2.0	<2.0	<4.0	ND	<2.0	<3.0	<50	<50	<50
	20 Sep 06	10.91	NA	NA	NA	981.50	<2.0	<2.0	<2.0	<4.0	ND	<2.0	<3.0	<50	<50	<50
GES-302D	24 Feb 04	16.19	NA	NA	NA	974.19	<2.0	<2.0	<2.0	<4.0	ND	<2.0	<3.0	<50	<50	<50
990.38	13 Sep 04	NM	NA	NA	NA	NA	<2.0	<2.0	<2.0	2.4	2.4	<2.0	<3.0	<50	<50	<50
	21 Feb 05	15.87	NA	NA	NA	974.51	<2.0	<2.0	<2.0	<4.0	ND	<2.0	<3.0	<50	<50	<50
GES-302I	24 Feb 04	22.05	NA	NA	NA	968.34	<2.0	<2.0	<2.0	<4.0	ND	<2.0	<3.0	<50	<50	<50
990.39	13 Sep 04	NM	NA	NA	NA	NA	<2.0	<2.0	<2.0	<4.0	ND	<2.0	<3.0	<50	<50	<50
	21 Feb 05	20.25	NA	NA	NA	970.14	<2.0	<2.0	<2.0	<4.0	ND	<2.0	<3.0	<50	<50	<50

TABLE 2-7
HISTORICAL GROUNDWATER MONITORING DATA
VOLATILE PETROLEUM HYDROCARBONS
Former Mobil Service Station No. 01-ECQ
83-89 Elm Street
Pittsfield, Massachusetts

Well ID/MP El (feet)	Date of Sampling	Depth to Water (feet)	Depth to Product (feet)	NAPL Thickness (feet)	NAPL Recovered (gallons)	Groundwater Elevation (feet)	VPH Target Analytes							VPH Fractions		
							Benzene	Toluene	Ethylbenzene	Total Xylenes	Total BTEX	MTBE	Naphthalene	C5-C8 Aliphatics	C9-C12 Aliphatics	C9-C10 Aromatics
	Units	feet	feet	feet	gallons	feet	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
					MCP Method 1 GW-2 Standard:		2,000	8,000	30,000	9,000	-	50,000	1,000	1,000	1,000	5,000
					MCP Method 1 GW-3 Standard:		10,000	4,000	4,000	500	-	50,000	20,000	4,000	20,000	4,000
GES-302S	27 Feb 04	14.95	NA	NA	NA	975.45	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
990.40																
GES-303	27 Feb 04	13.96	NA	NA	NA	973.20	<2.0	<2.0	<2.0	<4.0	ND	<2.0	<3.0	<50	<50	<50
987.16	13 Sep 04	NM	NA	NA	NA	NA	<2.0	<2.0	<2.0	<4.0	ND	3.3	<3.0	<50	<50	<50
	21 Feb 05	14.23	NA	NA	NA	972.93	<2.0	<2.0	<2.0	<4.0	ND	<2.0	<3.0	<50	<50	<50
	10 Aug 05	15.38	NA	NA	NA	971.78	<2.0	<2.0	<2.0	<2.0	ND	<2.0	<3.0	<50	<50	<50
† GES-304D	24 Feb 04	16.98	NA	NA	NA	972.00	<2.0	<2.0	<2.0	<4.0	ND	<2.0	<3.0	<50	<50	<50
988.98	22 Feb 05	17.30	NA	NA	NA	971.68	<2.0	<2.0	<2.0	<4.0	ND	<2.0	<3.0	<50	<50	<50
† GES-304I	24 Feb 04	17.00	NA	NA	NA	971.98	<2.0	<2.0	<2.0	<4.0	ND	<2.0	<3.0	<50	<50	<50
988.98	13 Sep 04	NM	NA	NA	NA	NA	<2.0	<2.0	<2.0	<4.0	ND	<2.0	<3.0	<50	<50	<50
† GES-304S	24 Feb 04	10.99	NA	NA	NA	978.02	<2.0	<2.0	<2.0	<4.0	ND	<2.0	<3.0	<50	<50	<50
989.01																
† GES-305	25 Feb 04	17.96	NA	NA	NA	972.99	<2.0	<2.0	<2.0	2.2	2.2	<2.0	<3.0	<50	<50	<50
990.95	13 Sep 04	NM	NA	NA	NA	NA	<2.0	<2.0	<2.0	<4.0	ND	<2.0	<3.0	<50	<50	<50
	21 Feb 05	12.20	NA	NA	NA	978.75	<2.0	<2.0	<2.0	<4.0	ND	<2.0	<3.0	<50	<50	<50
† GES-306	24 Feb 04	16.36	NA	NA	NA	974.59	<2.0	<2.0	<2.0	<4.0	ND	<2.0	<3.0	<50	<50	<50
989.37	10 Aug 05	18.57	NA	NA	NA	972.38	<2.0	<2.0	<2.0	<2.0	ND	<2.0	<3.0	<50	<50	<50
† GES-307	25 Feb 04	16.56	NA	NA	NA	972.33	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
988.89																
† GES-308	27 Feb 04	13.81	NA	NA	NA	976.75	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
990.56																
GES-310	27 Feb 04	22.82	NA	NA	NA	968.91	2.8	<2.0	2.4	2.8	8.0	6.5	3.8	295	<50	223
991.73	13 Sep 04	NM	NA	NA	NA	NA	5.6	<2.0	8.1	14.7	28.4	<2.0	<3.0	1,500	549	772
	22 Feb 05	18.20	NA	NA	NA	973.53	4.8	3.0	36.5	39.6	83.9	<2.0	6.8	321	138	366
	09 May 06	18.26	NA	NA	NA	973.47	<2.0	<2.0	2.0	4.7	6.7	<2.0	<3.0	<50	<50	50.6
	20 Sep 06	19.33	N	NA	NA	972.40	<2.0	<2.0	<2.0	<4.0	ND	<2.0	<3.0	<50	<50	<50
	26 Apr 07	14.78	N	NA	NA	976.95	<2.0	<2.0	<2.0	<4.0	ND	<2.0	<3.0	<50	<50	<50
GES-311	24 Feb 04	20.63	NA	NA	NA	969.52	<2.0	<2.0	<2.0	<4.0	ND	9.7	<3.0	<50	<50	<50
990.15	13 Sep 04	NM	NA	NA	NA	NA	<2.0	<2.0	<2.0	<4.0	ND	4.9	<3.0	<50	<50	<50
	21 Feb 05	17.95	NA	NA	NA	972.20	<2.0	<2.0	<2.0	<4.0	ND	3.2	<3.0	<50	<50	<50
GES-312	24 Feb 04	20.58	NA	NA	NA	968.90	74.4	<2.0	<2.0	25.4	99.8	65.8	4.7	530	<50	126
989.48	13 Sep 04	NM	NA	NA	NA	NA	3.5	<2.0	<2.0	<4.0	3.5	2.0	<3.0	<50	<50	<50
	21 Feb 05	17.80	NA	NA	NA	971.68	<2.0	<2.0	<2.0	<4.0	ND	<2.0	<3.0	<50	<50	<50
† GES-314	24 Feb 04	19.01	NA	NA	NA	970.11	<2.0	<2.0	<2.0	<4.0	ND	<2.0	<3.0	<50	<50	<50
989.12				-												
† GES-315	24 Feb 04	13.12	NA	NA	NA	977.25	<2.0	<2.0	<2.0	<4.0	ND	<2.0	<3.0	<50	<50	<50
990.37	13 Sep 04	NM	NA	NA	NA	NA	<2.0	<2.0	<2.0	<4.0	ND	<2.0	<3.0	<50	<50	<50
	22 Feb 05	11.83	NA	NA	NA	978.54	<2.0	<2.0	<2.0	<4.0	ND	<2.0	<3.0	<50	<50	<50
† GES-316	25 Feb 04	25.03	NA	NA	NA	964.21	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
989.24																
† GES-317	27 Feb 04	15.98	NA	NA	NA	974.71	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
990.69																
† GES-318D	26 Feb 04	17.73	NA	NA	NA	975.13	<2.0	<2.0	<2.0	<4.0	ND	<2.0	<3.0	<50	<50	<50
992.86																

TABLE 2-7
HISTORICAL GROUNDWATER MONITORING DATA
VOLATILE PETROLEUM HYDROCARBONS
Former Mobil Service Station No. 01-ECQ
83-89 Elm Street
Pittsfield, Massachusetts

	Well ID/MP El (feet)	Date of Sampling	Depth to Water (feet)	Depth to Product (feet)	NAPL Thickness (feet)	NAPL Recovered (gallons)	Groundwater Elevation (feet)	VPH Target Analytes							VPH Fractions		
								Benzene	Toluene	Ethylbenzene	Total Xylenes	Total BTEX	MTBE	Naphthalene	C5-C8 Aliphatics	C9-C12 Aliphatics	C9-C10 Aromatics
		Units	feet	feet	feet	gallons	feet	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
						MCP Method 1 GW-2 Standard:		2,000	8,000	30,000	9,000	-	50,000	1,000	1,000	1,000	5,000
						MCP Method 1 GW-3 Standard:		10,000	4,000	4,000	500	-	50,000	20,000	4,000	20,000	4,000
†	GES-318S	26 Feb 04	19.42	NA	NA	NA	973.29	<2.0	<2.0	<2.0	<4.0	ND	<2.0	<3.0	<50	<50	<50
	992.71	14 Sep 04	NM	NA	NA	NA	NA	<2.0	<2.0	<2.0	3.2	3.2	<2.0	<3.0	295	<50	<50
		23 Feb 05	12.87	NA	NA	NA	979.84	3	516	205	5,500	6,223.6	<2.0	135	762	1,980	3,010
		10 May 06	18.37	NA	NA	NA	974.34	<2.0	<2.0	<2.0	2.2	2.2	<2.0	<3.0	<50	<50	<50
		10 May 06 Dup	18.37	NA	NA	NA	974.34	<2.0	<2.0	<2.0	2.1	2.1	<2.0	<3.0	<50	<50	<50
		21 Sep 06	19.69	NA	NA	NA	973.02	179	199	1,560	6,163.0	8,101.0	<2.0	632	7,500	5,050	7,100
	GES-319D	26 Feb 04	19.76	NA	NA	NA	972.55	<2.0	3.9	<2.0	<4.0	3.9	<2.0	<3.0	<50	<50	<50
	992.31	10 Aug 05	16.58	NA	NA	NA	975.73	<2.0	<2.0	<2.0	<2.0	ND	<2.0	<3.0	<50	<50	<50
	GES-319S	26 Feb 04	27.25	NA	NA	NA	965.07	<2.0	5.2	<2.0	<4.0	5.2	<2.0	<3.0	<50	<50	<50
	992.32	13 Sep 04	NM	NA	NA	NA	NA	<2.0	<2.0	<2.0	<4.0	ND	<2.0	<3.0	<50	<50	<50
		22 Feb 05	14.69	NA	NA	NA	977.63	<2.0	<2.0	<2.0	<4.0	ND	<2.0	<3.0	<50	<50	<50
		10 Aug 05	16.57	NA	NA	NA	975.75	<2.0	<2.0	<2.0	<2.0	ND	<2.0	<3.0	68.3	197	114
†	GES-320D	26 Feb 04	17.28	NA	NA	NA	975.88	<2.0	24.5	<2.0	3.2	27.7	<2.0	<3.0	<50	<50	<50
	993.16	10 Aug 05	17.81	NA	NA	NA	975.35	<2.0	4.5	<2.0	4.3	8.8	<2.0	<3.0	<50	<50	<50
†	GES-320S	26 Feb 04	32.31	NA	NA	NA	960.80	<2.0	2.2	<2.0	2.3	4.5	<2.0	<3.0	<50	<50	<50
	993.11	13 Sep 04	NM	NA	NA	NA	NA	<2.0	<2.0	<2.0	<4.0	ND	<2.0	<3.0	<50	<50	<50
		23 Feb 05	17.97	NA	NA	NA	975.14	<2.0	<2.0	<2.0	<4.0	ND	<2.0	<3.0	<50	<50	<50
		10 Aug 05	18.23	NA	NA	NA	974.88	<2.0	<2.0	<2.0	2.6	2.6	<2.0	<3.0	<50	<50	<50
†	GES-321D	27 Feb 04	12.14	NA	NA	NA	976.30	<2.0	<2.0	<2.0	<4.0	ND	<2.0	<3.0	<50	<50	<50
	988.44																
†	GES-321S	27 Feb 04	20.18	NA	NA	NA	968.02	<2.0	4.2	2.9	14.4	21.5	<2.0	<3.0	<50	<50	<50
	988.20	14 Sep 04	NM	NA	NA	NA	NA	<2.0	<2.0	<2.0	2.7	2.7	<2.0	<3.0	231	<50	<50
	GES-322D	27 Feb 04	10.10	NA	NA	NA	976.09	<2.0	3.1	<2.0	<4.0	3.1	<2.0	<3.0	<50	<50	<50
	986.19	10 Aug 05	10.60	NA	NA	NA	975.59	<2.0	<2.0	<2.0	<2.0	ND	<2.0	<3.0	<50	<50	<50
	GES-322S	27 Feb 04	19.74	NA	NA	NA	966.62	<2.0	<2.0	<2.0	<4.0	ND	<2.0	<3.0	<50	<50	<50
	986.36	14 Sep 04	NM	NA	NA	NA	NA	<2.0	<2.0	<2.0	6.0	6.0	<2.0	<3.0	420	66	<50
		21 Feb 05	19.97	NA	NA	NA	966.39	<2.0	<2.0	<2.0	<4.0	ND	<2.0	<3.0	<50	<50	<50
		10 Aug 05	20.93	NA	NA	NA	965.43	<2.0	<2.0	<2.0	<2.0	ND	<2.0	<3.0	<50	<50	<50
†	EXP-2	27 Feb 04	DRY	NA	NA	NA	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	993.25																
	EXP-4	26 Feb 04	13.91	NA	NA	NA	978.87	<2.0	<2.0	<2.0	2.8	2.8	<2.0	<3.0	<50	<50	<50
	992.78																
	EXP-6	01 Dec 03	18.37	NA	NA	NA	974.04	6.3	15.1	39.8	653	714.2	<2.0	116	935	<50	1,390
	992.41	09 May 06	17.79	NA	NA	NA	974.62	5.4	5.4	220	435	665.8	<2.0	111	1,940	244	1,330
		20 Sep 06	19.40	NA	NA	NA	973.01	3.8	7.7	121	348	480.5	<2.0	71	13,220	388	822
		26 Apr 07	15.41	NA	NA	NA	977.00	<2.0	5.8	27.7	183.4	216.9	<2.0	25.2	567	<50	420
		26 Apr 07 Dup	15.41	NA	NA	NA	977.00	<2.0	5.6	27.0	179.9	212.5	<2.0	26.9	549	55.9	396
	EXP-7	01 Dec 03	19.10	NA	NA	NA	NA	247	118	237	930.8	1,532.8	<2.0	79.1	2,560	<50	1,850
	992.30	27 Feb 04	21.84	NA	NA	NA	970.46	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		14 Sep 04	NM	NA	NA	NA	NA	14.8	2.7	31	100.4	148.9	<2.0	11.9	968	429	418
		22 Feb 05	13.09	NA	NA	NA	980.11	19.8	10.8	15.0	49.3	94.9	<2.0	<3.0	116	<50	<50
		10 Aug 05	18.75	NA	NA	NA	973.55	<2.0	<2.0	<2.0	<2.0	ND	<2.0	<3.0	<50	<50	<50
		09 May 06	19.20	NA	NA	NA	973.10	50.0	39.2	192	419	700.2	<2.0	33.0	744	116	558
		20 Sep 06	19.86	NA	NA	NA	972.44	64.4	4.8	44	256	369.6	<2.0	28.7	805	231	521
		26 Apr 07	17.74	NA	NA	NA	974.56	<2.0	<2.0	2.1	3.7	5.8	<2.0	<3.0	<50	<50	<50
	EXP-9	01 Dec 03	DRY	NA	NA	NA	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	993.20	27 Feb 04	DRY	NA	NA	NA	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

TABLE 2-7
HISTORICAL GROUNDWATER MONITORING DATA
VOLATILE PETROLEUM HYDROCARBONS
Former Mobil Service Station No. 01-ECQ
83-89 Elm Street
Pittsfield, Massachusetts

Well ID/MP Et (feet)	Date of Sampling	Depth to Water (feet)	Depth to Product (feet)	NAPL Thickness (feet)	NAPL Recovered (gallons)	Groundwater Elevation (feet)	VPH Target Analytes							VPH Fractions		
							Benzene	Toluene	Ethylbenzene	Total Xylenes	Total BTEX	MTBE	Naphthalene	C5-C8 Aliphatics	C9-C12 Aliphatics	C9-C10 Aromatics
	Units	feet	feet	feet	gallons	feet	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
						MCP Method 1 GW-2 Standard:	2,000	8,000	30,000	9,000	-	50,000	1,000	1,000	1,000	5,000
						MCP Method 1 GW-3 Standard:	10,000	4,000	4,000	500	-	50,000	20,000	4,000	20,000	4,000
EXP-10	10 May 06	17.03	17.02	0.01	NA	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
EXP-10R	03 Dec 03	19.96	19.84	0.12	NA	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
990.11	27 Feb 04	20.35	NA	NA	NA	969.76	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	21 Feb 05	17.85	17.86	0.01	NA	972.27	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	10 May 06	17.79	17.31	0.48	NA	972.68	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
† EXP-11R	03 Dec 03	18.70	NA	NA	NA	NA	135	589	290	1,811	2,825	13.8	243	2,090	<50	3,070
	24 Feb 04	20.65	NA	NA	NA	969.61	234	25.9	567	1,423	2,249.9	23.2	418	5,360	<50	4,670
	12 Mar 04	15.20	NA	NA	NA	975.06	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
990.26	11 Aug 05	13.72	NA	NA	NA	976.54	20	255	211	1,039	1,525	<2.0	125	770	<50	1,560
	10 May 06	17.82	NA	NA	NA	972.44	128	109	939	1,786.9	2,962.9	<2.0	340	4,560	343	3,570
	20 Sep 06	18.53	NA	NA	NA	971.73	361	361	713	1,376.0	2,811.0	<2.0	297	6,230	1,800	2,460
	27 Apr 07	15.70	NA	NA	NA	974.56	167	344	603	1,492.0	2,606	17.7	168	2,930	<100	2,160
† EXP-12	03 Dec 03	18.08	NA	NA	NA	NA	132	342	248	1,517	2,239	8.9	259	3,030	<50	3,800
990.14	24 Feb 04	21.25	NA	NA	NA	968.89	134	61.1	360	640.5	1,195.6	16.5	365	5,610	<50	2,600
990.08	12 Mar 04	15.60	NA	NA	NA	974.48	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	10 May 06	16.34	NA	NA	NA	973.74	<2.0	<2.0	<2.0	<4.0	ND	<2.0	<3.0	<50	<50	<50
	20 Sep 06	17.33	NA	NA	NA	972.75	<2.0	94.4	153	1,124.0	1,371.4	<2.0	44	2,550	828	1,500
	26 Apr 07	17.45	NA	NA	NA	972.63	144	11.5	136	316.6	608.1	<2.0	40.1	1,590	<50	664
† EXP-13	03 Dec 03	19.68	19.17	0.51	NA	971.20	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
990.37	12 Mar 04	22.00	21.00	1.00	NA	969.13	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	10 May 06	18.85	18.48	0.37	NA	971.80	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
† EXP-13R	03 Dec 03	18.80	18.77	0.03	NA	971.64	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
990.42	12 Mar 04	14.40	NA	NA	NA	976.02	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
EXP-16	03 Dec 03	20.78	NA	NA	NA	NA	63.1	49.1	5.6	224.1	341.9	<2.0	40.3	2,960	<50	2,940
990.42																
EXP-17	05 Dec 03	21.20	NA	NA	NA	NA	857	13,100	5,050	26,570	45,577	126	3,130	73,200	4,690	43,600
990.39	26 Feb 04	21.11	NA	NA	NA	969.28	<2.0	<2.0	<2.0	<4.0	ND	<2.0	<3.0	<50	<50	<50
	12 Mar 04	20.80	NA	NA	NA	969.59	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	11 Aug 05	16.90	NA	NA	NA	973.49	326	61.8	234	316.4	938.2	<2.0	54	1,120	<50	544
	10 May 06	18.47	NA	NA	NA	971.92	243	62.1	178	161.7	644.8	<2.0	49.5	1,710	72.1	414
	21 Sep 06	16.02	NA	NA	NA	974.37	134	53.1	149	64.1	400.2	<2.0	21.6	1,190	145.0	177
	27 Apr 07	16.15	NA	NA	NA	974.24	24.4	58.1	45	88.1	216	<2.0	5.8	339	<50	81.3
EXP-18	03 Dec 03	20.15	20.02	0.13	NA	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
988.87	26 Feb 04	22.05	NA	NA	NA	966.82	<2.0	96.5	6.7	2,779	2,882.2	<2.0	319	7,330	<50	16,300
	12 Mar 04	22.69	NA	NA	NA	966.18	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	14 Sep 04	NM	NA	NA	NA	NA	<2.0	589.0	267.0	2,386	3,242.0	201	200	39,600	24,700	5,780
	09 Aug 05	DRY	NA	NA	NA	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	10 May 06	18.77	NA	NA	NA	970.10	14.6	87.9	24.0	1,891	2,017.5	<2.0	84.4	3,210	73.5	3,810
	21 Sep 06	19.23	NA	NA	NA	969.64	13.9	40.1	16.0	581	651.0	<2.0	44.4	2,550	828.0	1,500
	27 Apr 07	16.74	NA	NA	NA	972.13	12.9	31.3	11.3	428	483.5	<2.0	19.3	759	<50	656
EXP-20	26 Feb 04	20.15	NA	NA	NA	966.09	21.1	4.6	6.9	34.8	67.4	3.5	3.4	243	<50	65.3
986.24	12 Mar 04	20.95	NA	NA	NA	965.29	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	10 Aug 05	22.87	NA	NA	NA	963.78	9.5	<2.0	<2.0	<2.0	ND	12.6	<3.0	<50	<50	<50

CDM

TABLE 2-7
HISTORICAL GROUNDWATER MONITORING DATA
VOLATILE PETROLEUM HYDROCARBONS
Former Mobil Service Station No. 01-ECQ
83-89 Elm Street
Pittsfield, Massachusetts

Well ID/MP El (feet)	Date of Sampling	Depth to Water (feet)	Depth to Product (feet)	NAPL Thickness (feet)	NAPL Recovered (gallons)	Groundwater Elevation (feet)	VPH Target Analytes							VPH Fractions		
							Benzene	Toluene	Ethylbenzene	Total Xylenes	Total BTEX	MTBE	Naphthalene	C5-C8 Aliphatics	C9-C12 Aliphatics	C9-C10 Aromatics
	Units	feet	feet	feet	gallons	feet	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
					MCP Method 1 GW-2 Standard:		2,000	8,000	30,000	9,000	-	50,000	1,000	1,000	1,000	5,000
					MCP Method 1 GW-3 Standard:		10,000	4,000	4,000	500	-	50,000	20,000	4,000	20,000	4,000
EXP-21	27 Feb 04	NA**	20.12	>2.59	NA	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
986.85	12 Mar 04	NA**	21.00	>1.2	NA	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	10 Aug 05	20.40	NA	NA	NA	NA	<2.0	<2.0	<2.0	<2.0	ND	<2.0	<3.0	<50	<50	<50
EXP-22	05 Dec 03	18.80	NA	NA	NA	969.43	284	1,720	368	3,629	6,001	41	170	9,800	1,200	2,470
988.23	26 Feb 04	20.62	NA	NA	NA	967.61	30.7	152	64.9	857	1,104.6	<2.0	52.0	1,450	<50	1,170
	12 Mar 04	20.66	NA	NA	NA	967.57	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	11 Aug 05	17.80	NA	NA	NA	967.61	2.3	2.4	4.3	100.8	109.8	8.0	13.2	739	167	420
	10 May 06	17.00	NA	NA	NA	971.23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Notes:
BTEX = benzene, toluene, ethylbenzene, and xylenes
MTBE = methyl tert-butyl ether
NA = not applicable
"<" = less than the laboratory reporting limit
ND = not detected
NS = not sampled, analyzed and/or measured
VPH = volatile petroleum hydrocarbons (analyzed according to Massachusetts Department of Environmental Protection VPH Methodology)
MCP = Massachusetts Contingency Plan 310 CMR 40.0000
† MCP Method 1 Groundwater Standard "GW-3" is applicable to all wells; however, "GW-2" is also applicable to this well
Bolded values represent concentrations that exceed applicable groundwater standard
*Well was thought to have been destroyed, but was found and saved during 9/01 trenching activities
**Well was blocked therefore depth to groundwater could not be determined
NAPL = non aqueous-phase liquid
NAPL recovered = non aqueous-phase liquid recovered during bailing

HARRY'S IGA
SUPERMARKET
1 STORY BRICK
GROCERY STORE
(37 ELM STREET)

LANDS NOW OR FORMERLY OF
ROBERT K. GEORGE
& DONALD W. GEORGE
BOOK 19 PAGE 483
TAX MAP 178-24-1

EAST BRANCH HOUSATONIC RIVER

TOP OF BANK
BOTTOM OF BANK
EDGE OF WATER

CONCRETE BLOCK GARAGE

(83-89 ELM STREET)
2 STORY BRICK APARTMENT BUILDING

(71 ELM STREET)
FORMER FRIENDLY'S RESTAURANT

(77 ELM STREET)
2 STORY OFFICE BUILDING

ABANDONED GAS STATION BUILDING

CAR WASH
(101-103 ELM STREET)

ELM STREET

N

LEGEND

- DMH — DRAINAGE MANHOLE
- SMH — SANITARY MANHOLE
- CB — CATCH BASIN
- TMH — TELEPHONE MANHOLE
- WV — WATER VALVE
- GV — GAS VALVE
- MON — CONCRETE MONUMENT
- IPF — IRON PIPE FOUND
- UP — UTILITY POLE WITH LIGHT
- LP — LIGHT POLE
- RECOVERY WELL
- MICRO WELL
- MONITORING WELL
- DESTROYED MONITORING WELL
- NESTED WELLS (SHALLOW, INTERMEDIATE & DEEP)
- BEDROCK WELLS
- VAPOR EXTRACTION WELL
- SS — UNDERGROUND SANITARY SEWER
- OE — OVERHEAD ELECTRIC
- OHU — OVERHEAD UTILITY
- D — DRAINAGE LINES
- TRENCH, OFF-SITE VAPOR SYSTEM JUNE 2004

1" = 60'
30 0 60

FORMER MOBIL SERVICE STATION (#01-ECQ)
83-89 ELM STREET
PITTSFIELD, MASSACHUSETTS

SITE PLAN

FIGURE 1-2

CDM

P:\20474\32302\01-ECQ\CSTPL001.DWG

ARCADIS

Appendix G

Results of Statistical Assessment

Table G-1
Summary Of Historical Groundwater Analytical Results - Well GMA5-4

Groundwater Management Area 5 Long-Term Monitoring Program
Monitoring Event Evaluation Report for Fall 2007
General Electric Company - Pittsfield, Massachusetts
(Results are presented in parts per million, ppm)

Parameter / Sample ID: / Date Collected:	Method 1 GW-3 Standards	MCP UCL for Groundwater	Detection Frequency	Minimum Detect	Maximum Detect	Minimum Non-Detect	Maximum Non-Detect	Median Value	Arithmetic Average	Geometric Mean	Standard Deviation	Fall 2007 Results GMA5-4 11/15/07
Inorganics-Filtered												
Cadmium	0.004	0.05	1/6	0.00411	0.00411	0.005	0.01	0.00330	0.00360	0.00342	0.00125	ND(0.0100)

Notes:
1. Samples were collected by ARCADIS between 2002 and 2007 and submitted to SGS Environmental Services, Inc. for analysis.
2. Analytical results have been validated as per GE's approved Field Sampling Plan/Quality Assurance Project Plan.
3. ND - Analyte was not detected. The number in parenthesis is the associated detection limit.
4. Only constituents which were detected during at least one prior sampling event and were analyzed for during the fall 2007 sampling event are summarized.

Data Qualifiers:

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

Table G-2
Summary Of Historical Groundwater Analytical Results - Well GMA5-7

Groundwater Management Area 5 Long-Term Monitoring Program
Monitoring Event Evaluation Report for Fall 2007
General Electric Company - Pittsfield, Massachusetts
(Results are presented in parts per million, ppm)

Parameter / Sample ID: / Date Collected:	Method 1 GW-2 Standards	Method 1 GW-3 Standards	MCP UCL for GroundWater	Detection Frequency	Minimum Detect	Maximum Detect	Max Detect Location	Minimum Non-Detect	Maximum Non-Detect	Median Value	Arithmetic Average	Geometric Mean	Standard Deviation	Fall 2007 Results GMA5-7 11/15/07
Volatile Organics														
Acetone	50	50	100	1/8	0.014	0.014	GMA5-7	0.005	0.01	0.00500	0.00550	0.00478	0.00362	ND(0.0050) J
Ethylbenzene	30	4	100	1/8	0.00023	0.00023	GMA5-7	0.001	0.005	0.00250	0.00197	0.00152	0.000991	0.00023 J
Tetrachloroethene	0.05	30	100	8/8	0.0045	0.062	GMA5-7	N/A	N/A	0.0240	0.0291	0.0234	0.0179	0.024
Toluene	8	4	80	1/8	0.0011	0.0011	GMA5-7	0.001	0.005	0.00250	0.00183	0.00151	0.000950	ND(0.0010)
trans-1,2-Dichloroethene	0.09	50	100	2/8	0.00082	0.0011	GMA5-7	0.001	0.005	0.00250	0.00187	0.00161	0.000891	0.0011
Trichloroethene	0.03	5	50	5/8	0.0023	0.0067	GMA5-7	0.005	0.005	0.00250	0.00310	0.00290	0.00148	0.0031
Vinyl Chloride	0.002	50	100	2/8	0.00061	0.0029	GMA5-7	0.001	0.002	0.00100	0.00113	0.000985	0.000745	0.00061 J
Total VOCs	5	Not Listed	Not Listed	8/8	0.0045	0.064	GMA5-7	N/A	N/A	0.0330	0.0338	0.0274	0.0181	0.029 J

Notes:
1. Samples were collected by ARCADIS between 2002 and 2007 and submitted to SGS Environmental Services, Inc. for analysis.
2. Analytical results have been validated as per GE's approved Field Sampling Plan/Quality Assurance Project Plan.
3. ND - Analyte was not detected. The number in parenthesis is the associated detection limit.
4. Only constituents which were detected during at least one prior sampling event and were analyzed for during the fall 2007 sampling event are summarized.
5. Total VOCs are being compared to the notification level in the SOW of 5 ppm, as there is no GW-2 standard for total VOCs.

Data Qualifiers:

Organics (volatiles)
J - Indicates that the associated numerical value is an estimated concentration.