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Transmitted Via Overnight Courier

January 30, 2009

Mr. Richard Fisher
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EPA - New England
One Congress Street, Suite 1100
Boston, Massachusetts 02114-2023

**Re: GE-Pittsfield/Housatonic River Site
Groundwater Management Area 1 (GECD310)
Groundwater Quality Monitoring Interim Report for Fall 2008**

Dear Mr. Fisher:

In accordance with GE's approved *Baseline Monitoring Program Proposal for Plant Site 1 Groundwater Management Area* (September 2000) and *Plant Site 1 Groundwater Management Area Groundwater Quality Monitoring Interim Report for Spring 2008* (July 2008), enclosed is the *Plant Site 1 Groundwater Management Area Groundwater Quality Monitoring Interim Report for Fall 2008*. This report summarizes activities performed as part of the Plant Site 1 Groundwater Management Area (GMA 1) groundwater quality monitoring program during fall 2008, including the results of the latest groundwater sampling and analysis round at GMA 1. In addition, certain minor modifications to the interim monitoring program at GMA 1 are proposed in response to the results of the fall 2008 activities.

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

Sincerely,

Richard W. Gates
Remediation Project Manager

Enclosure

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**General Electric Company
Pittsfield, Massachusetts**

**Plant Site 1 Groundwater
Management Area
Groundwater Quality Monitoring
Interim Report for Fall 2008**

January 2009

ARCADIS

**Plant Site 1 Groundwater
Management Area
Groundwater Quality Monitoring
Interim Report for Fall 2008**

(Fall 2008 GMA 1 Groundwater
Quality 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 Plant Site 1 Groundwater Management Area, also known as and referred to herein as GMA 1.

In September 2000, GE submitted a *Baseline Monitoring Program Proposal for Plant Site 1 Groundwater Management Area (GMA 1 Baseline Monitoring Proposal)*. The GMA 1 Baseline Monitoring Proposal summarized the hydrogeologic information available at that time for GMA 1 and proposed groundwater and NAPL monitoring activities (incorporating as appropriate those activities that were in place at that time) for the baseline monitoring period at this GMA. EPA provided conditional approval of the GMA 1 Baseline Monitoring Proposal by letter of March 20, 2001. Thereafter, certain modifications were made to the GMA 1 baseline monitoring program as a result of EPA approval conditions and/or findings during field reconnaissance of the selected monitoring locations and, subsequently, during implementation of the baseline monitoring program.

The baseline monitoring program, which was initiated in fall 2001, consisted of four semi-annual groundwater quality sampling events followed by preparation and submittal of reports summarizing the groundwater monitoring results and, as appropriate, proposal of modifications to the monitoring program. The fourth baseline monitoring report for GMA 1, entitled *Plant Site 1 Groundwater Management Area Baseline Groundwater Quality Interim Report for Spring 2003* (Spring 2003 GMA 1 Groundwater Quality Report), was submitted to EPA on July 30, 2003. Section 6.1.3 of Attachment H to the SOW provides that if the

two-year “baseline” period ends prior to the completion of soil-related response actions at all the RAAs in a GMA, GE may make a proposal to EPA to modify and/or extend the Baseline Monitoring Program based on the results of the initial assessment and the estimated timing of future response actions at the RAAs in the GMA. The approved GMA 1 Baseline Monitoring Proposal also allows GE to propose a modification and/or extension of the baseline monitoring program based on the results of the initial assessment and the estimated timing of future response actions. The Spring 2003 GMA 1 Groundwater Quality Report contained such a proposal to modify and extend baseline groundwater quality monitoring activities at GMA 1 (under a program referred to as the interim monitoring program) until such time as the soil-related Removal Actions at the GMA 1 RAAs are completed and the specific components of a long-term groundwater quality monitoring program are determined. EPA conditionally approved the Spring 2003 GMA 1 Groundwater Quality Report by letter dated September 23, 2003. Under the approved interim monitoring program, annual water quality sampling (alternating between the spring and fall seasons) at selected GMA 1 wells began in spring 2004, following a limited sampling event in fall 2003 involving the collection of groundwater samples from six wells that did not yet have four complete rounds of sampling as part of the baseline monitoring program. The monitoring wells included in the interim monitoring program are shown on Figure 2.

As part of the interim groundwater quality monitoring program, GE is required to submit reports after each groundwater sampling event to summarize the groundwater monitoring results and related activities and, as appropriate, propose modifications to the monitoring program. The results of the most recent full round of interim groundwater sampling activities performed at this GMA in spring 2008 were provided in GE's July 2008 *Plant Site 1 Groundwater Management Area Groundwater Quality Interim Report for Spring 2008* (Spring 2008 GMA 1 Groundwater Quality Report), which was conditionally approved by EPA in a letter dated November 25, 2008. That report also contained an evaluation of existing groundwater quality data at GMA 1 against applicable MCP Method 1 GW-2 and GW-3 groundwater standards and MCP UCLs for groundwater that were revised on February 14, 2008. As a result of those evaluations, GE proposed to discontinue interim PCB analyses at nine wells based on their compliance with the revised Method 1 GW-3 standard. In addition, to demonstrate compliance with the new Method 1 GW-2 standard for PCBs, GE proposed to conduct four rounds of semi-annual sampling and PCB analyses at 14 GW-2 monitoring wells that were initially analyzed only for VOCs under the baseline monitoring program. These modifications were conditionally approved by EPA in its November 25, 2008 letter to GE, which also required GE to demonstrate compliance with the new Method 1 GW-2 standard for PCBs at certain other GW-2 monitoring points. It should be noted that MDEP has informed EPA that the use of filtered samples is appropriate to assess compliance with the Method 1 GW-2 standard for PCBs. Therefore, with the concurrence of EPA, GE has utilized filtered PCB samples for such comparisons.

GE initiated semi-annual PCB sampling and analysis at the required GW-2 monitoring wells in fall 2008. In addition, in accordance with Condition 2 of EPA's October 10, 2007 conditional approval letter, GE continued its semi-annual sampling and analysis of groundwater samples from two monitoring wells at Newell Street Area II (wells GMA1-25 and GMA1-27). The results of the third round of that sampling have been incorporated into this report. Following completion of four sampling rounds, the analytical data will be evaluated to determine whether further sampling and analysis is appropriate at those monitoring wells.

The results of the interim groundwater sampling activities conducted in fall 2008 are provided in this *Plant Site 1 Groundwater Management Area Groundwater Quality Monitoring Interim Report for Fall 2008* (Fall 2008 GMA 1 Groundwater Quality Report). As requested by EPA in a March 29, 2007 letter conditionally approving a prior groundwater report, this report also contains groundwater elevation data collected at GMA 1 during the fall semi-annual monitoring event performed in October 2008 (both in data tables and plotted in groundwater elevation contour maps). GE will continue to present detailed discussions of GE's groundwater flow monitoring, including information on groundwater elevations, flow direction, and seasonal trends, as well as assessments of the presence and extent of NAPL at GMA 1 (including summaries of GE's NAPL recovery efforts), in the separate semi-annual reports submitted under GE's NAPL monitoring program. The most recent GMA 1 NAPL monitoring report (covering the spring 2008 monitoring period) was submitted to EPA in August 2008, and the NAPL monitoring report for the fall 2008 monitoring period will be submitted to EPA in February 2009.

1.2 Background Information

As discussed above, the CD and SOW provide for the performance of groundwater-related monitoring and NAPL removal activities at a number of GMAs. Some of these GMAs, including GMA 1, incorporate multiple RAAs to reflect the fact that groundwater may flow between RAAs. GMA 1 encompasses 11 RAAs and occupies an area of approximately 215 acres (Figure 1). The RAAs within GMA 1 are:

- RAA 1 - 40s Complex;
- RAA 2 - 30s Complex;
- RAA 3 - 20s Complex;
- RAA 4 - East Street Area 2-South;

- RAA 5 - East Street Area 2-North;
- RAA 6 - East Street Area 1-North;
- RAA 12 - Lyman Street Area;
- RAA 13 - Newell Street Area II;
- RAA 14 - Newell Street Area I;
- RAA 17 - Silver Lake Area; and
- RAA 18 - East Street Area 1-South.

GMA 1 contains a combination of GE-owned and non-GE-owned industrial areas, residential properties, and recreational areas, including land formerly owned by GE that has been, or will be, transferred to the Pittsfield Economic Development Authority (PEDA) pursuant to the Definitive Economic Development Agreement (DEDA). The Housatonic River flows through the southern portion of this GMA, while Silver Lake is located along the western boundary. Certain portions of this GMA originally consisted of land associated with oxbows or low-lying areas of the Housatonic River. Re-channelization and straightening of the Housatonic River in the early 1940s by the City of Pittsfield and the United States Army Corps of Engineers (USACE) separated several of these oxbows and low-lying areas from the active course of the river. These oxbows and low-lying areas were subsequently filled with various materials from a variety of sources, resulting in the current surface elevations and topography.

Groundwater flow patterns at GMA 1 generally reflect the topography of the site with flow toward the Housatonic River, except where influenced by features such as Silver Lake, the recharge pond, or by recovery systems which are pumped to induce hydraulic depressions in their vicinity. Although variations occur in groundwater elevations at various wells or portions of GMA 1, overall groundwater flow patterns have remained relatively stable for years. As shown on Figure 3, Groundwater flow conditions observed during fall 2008 display the typical patterns observed at GMA 1.

As required in EPA's November 25, 2008 conditional approval letter, GE has updated a figure originally presented in the September 2000 *Baseline Monitoring Program Proposal for Plant Site 1 Groundwater Management Area* which illustrates areas within GMA 1, where the average depth to groundwater is 15 feet or less below ground surface, utilizing groundwater elevation data collected from wells that are screened at or above the water

table since 2000. The shallow groundwater areas identified at GMA 1 based on these recent data are illustrated on Figure 4 and a discussion of any variations from the original shallow groundwater mapping, including the need to perform additional evaluations near occupied structures located above the shallow groundwater areas is presented in Section 5.3.

As discussed in Section 1.1 above, the CD and the SOW provide for the performance of groundwater-related Removal Actions at the GMAs, including the implementation of groundwater monitoring, assessment, and recovery programs. In general, these programs consist of a baseline monitoring program conducted over a period of at least two years to establish existing groundwater conditions and a long-term monitoring program performed to assess groundwater conditions over time and to verify the attainment of the Performance Standards for groundwater. As set forth in the GMA 1 Baseline Monitoring Proposal and Addendum, the baseline monitoring program at this GMA initially involved a total of 65 monitoring wells. Subsequent modifications to the program resulted in the addition of one well (LSSC-08I) and replacement of five wells with substitute monitoring wells (ESA2S-52 for ES2-17, MW-3R for MW-3, GMA1-13 for 95-9, ESA1S-33 for ES1-8, and ES1-23R for ES1-23). All of these wells were monitored for groundwater elevations on a quarterly basis and sampled on a semi-annual basis for analysis of PCBs and/or certain other constituents listed in Appendix IX of 40 CFR Part 264, plus three additional constituents -- benzidine, 2-chloroethylvinyl ether, and 1,2-diphenylhydrazine (Appendix IX+3). The specific groundwater quality parameters for each individual well were selected based on the monitoring objectives of the well.

After the fourth baseline sampling event at most of the wells in GMA 1 in spring 2003, EPA approved the implementation of the interim monitoring program until the completion of the soil-related Removal Actions at the GMA 1 RAAs, at which time GE will propose a long-term monitoring program. In the Spring 2003 GMA 1 Groundwater Quality Report, GE described its proposed interim groundwater quality monitoring program. Certain specific monitoring tasks were to be performed in fall 2003, and GE submitted its Fall 2003 GMA 1 Groundwater Quality Report providing the results of those tasks. Beginning in spring 2004, as approved by EPA, the interim groundwater quality monitoring program was to consist of annual sampling (alternating between the spring and fall seasons) and analysis for select constituents at 22 GMA 1 wells. Locations selected for interim groundwater quality monitoring were wells downgradient of known NAPL areas/recovery systems where no additional hydraulic controls are in place, and/or those wells where analytical results from the baseline monitoring rounds did not clearly indicate whether long-term monitoring would be necessary. Supplemental sampling outside of that annual schedule has been conducted at certain monitoring wells as required by EPA.

Since the spring 2004 groundwater sampling event, GE has presented the results of each sampling event in interim and supplemental groundwater quality monitoring reports and, based on those results, has proposed and, following EPA approval, implemented modifications to the interim program. A number of program modifications were made in spring 2006, following revisions to the MCP Method 1 groundwater standards that took effect on April 3, 2006. On February 14, 2008, additional revisions to the MCP Method 1 groundwater standards took effect, and, as required by Condition 4 of EPA's April 8, 2008 conditional approval letter, the Spring 2008 GMA 1 Groundwater Quality Report discussed the revised standards, evaluated their implications on the interim groundwater quality monitoring program, and proposed further modifications to that program in response to those new standards.

A separate non-GE-related disposal site, as designated under the MCP, is located on an adjacent property near the northern edge of the Lyman Street Area. This disposal site is the O'Connell Mobil Station site (MDEP Site No. 1-13347) (also referred to as the "East Street Mobil Site") at 730 East Street. GE understands this site is currently being addressed by O'Connell Oil Associates, Inc. to satisfy the requirements of Massachusetts General Laws Chapter 21E and the MCP. Available documentation indicates that soluble-phase contaminants related to gasoline releases from the East Street Mobil Site may have migrated onto GMA 1. GE is required to include available monitoring results from response actions performed at this adjacent site in the groundwater monitoring reports for GMA 1, to the extent that information is available to GE. To fulfill this requirement, GE conducted a file search at MDEP in January 2009 to review any reports that have been submitted regarding this site since submittal of the Spring 2008 GMA 1 Groundwater Quality Report. The results of that file search, including a listing of the reports that were reviewed, is provided in Section 3.3.

1.3 Format to Document

The remainder of this report is presented in four sections. Section 2 describes the groundwater quality-related activities performed at GMA 1 in fall 2008. Section 3 presents the analytical results obtained during the fall 2008 sampling event performed from October to December 2008. Section 4 provides a summary of the applicable groundwater quality Performance Standards identified in the CD and SOW, and provides an assessment of the results of the fall 2008 activities, including a comparison to those Performance Standards. Finally, Section 5 presents GE's discussion of the need for additional modifications to the GMA 1 interim groundwater quality monitoring program, proposes certain modifications to that interim groundwater monitoring program, and summarizes the schedule for future field and reporting activities related to groundwater quality at GMA 1.

2. Field and Analytical Procedures

2.1 General

The activities conducted as part of the interim groundwater monitoring program during fall 2008, and summarized herein, primarily involved the redevelopment of monitoring wells, monitoring well repair and replacement, measurement of groundwater levels, and collection and analysis of groundwater samples at select monitoring wells within GMA 1, as described in Table 1. Newly installed monitoring well construction details are found in Appendix F. The construction details of the wells that were sampled are provided in Table 2 and the spring 2008 field sampling data are presented in Appendix A. This section discusses the field procedures used to measure site groundwater levels and collect groundwater samples, as well as the methods used to analyze the groundwater samples. All activities were performed in general accordance with GE's approved Field Sampling Plan/Quality Assurance Project Plan (FSP/QAPP).

2.2 Monitoring Well Inspections and Repairs

In spring 2008, monitoring well inventories were conducted at all wells sampled during the interim sampling event and at several wells that were monitored only for groundwater elevation and/or the presence of NAPL. A total of 128 wells were evaluated and, where necessary, flagged for additional well integrity evaluations to determine the need for repair or replacement, and an extensive well maintenance operation was initiated in fall 2008. This task included but was not limited to: reinstallation of manholes, protective covers, and flush mounted pads; replacement of missing bolts, washers, well cover gaskets; replacement of broken J-plug/well caps; and the adjustment/re-surveying of measuring point elevation marks. The well inventory results are summarized in Appendix A.

As specifically requested by the EPA prior to the fall 2008 sampling event (and documented in its November 25, 2008 letter to GE), monitoring wells ESA1N-52 and ES2-2A were checked for integrity and maintenance issues on September 24 and 26, 2008, respectively. The PVC well casing in well ESA1N-52 was found to be intact and the only specific maintenance need identified for the well was a new J-plug well cap and manhole cover, as the well's current cover is a non-bolting version. Prior to the spring 2009 monitoring event a new bolted cover for the manhole will be installed to prevent the possibility of future road run-off into the well vault. In addition, EPA requested the ESA1N-52 be re-developed due to a build-up of sediment resulting in depth to bottom discrepancies from year to year. That monitoring well re-development is discussed further in Section 2.3 below.

Monitoring well ES2-2A was evaluated for integrity and was determined to be acceptable. A new J-plug, cover seal, and bolts were installed to prevent the possibility of flooding within the well's vault during significant rain events. Although the well vault was flooded upon inspection, no signs of drainage into the well itself were evident upon the evacuation of vault water.

2.3 Monitoring Well Re-Development

Prior to the fall 2008 sampling round, each GW-2 monitoring well scheduled for PCB analysis was re-developed since those wells had generally not been sampled since the final full baseline sampling event in 2003. Additional monitoring wells within GMA 1 were also re-developed in GMA-1 based on observations of excessive sedimentation during the well inventories, or, for wells ESA1N-52 and ES2-2A, as required by EPA in its November 25, 2008 conditional approval letter.

For most wells, re-development consisted of groundwater removal by a positive displacement, peristaltic, and/or submersible pump (depending on well diameter and rate of recharge) until temperature/pH/conductivity field parameters stabilized and the purged groundwater was relatively free of sediment (i.e., less than 50 NTU). At well ESA1N-52, an additional development technique (air sparging) was attempted but GE was unable to remove coarser deposits in the well, which may include asphalt fragments. The rate of recharge at well ESA1N-52 was low and further hindered the development process. As discussed in Section 5.2, GE believes that a sufficient portion of the screen zone in this well has been cleared to allow groundwater elevation and LNAPL monitoring, but additional groundwater sample collection at this well is not recommended. As also discussed in the Spring 2008 GMA 1 Groundwater Quality Report and in Section 5.2 of this report, further sampling in this well is not necessary.

2.4 Monitoring Well Installation and Development

During the GW-2 monitoring well re-development activities performed prior to the fall 2008 sampling event, well A7 was found to be paved over with concrete. As a result of these findings, GE installed replacement well A7-R at the location shown on Figure 2. Table 2 shows the survey data and well construction detail for this well, along with the other existing wells utilized in the GMA 1 monitoring program. The monitoring well construction log can be found in Appendix F.

Following installation, the replacement well was developed to remove fine materials (e.g., fine sand, silt, and/or 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 this 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).

2.5 Groundwater Elevation Monitoring

GE conducted the fall 2008 semi-annual groundwater elevation monitoring round at GMA 1 from October 27 through October 30, 2008. This activity involved the collection of groundwater elevation data at the locations listed in Table 3. Groundwater levels and NAPL thicknesses (where NAPL is present) were measured in accordance with the procedures specified in GE's approved FSP/QAPP. Groundwater elevations were, on average, approximately 1.08 feet higher than the elevations measured during the previous fall 2007 monitoring event. The groundwater elevation data presented in Table 3 from wells screened across or near the water table were used to prepare a groundwater elevation contour map for fall 2008 (Figure 3). Consistent with prior data, groundwater was found to generally flow toward the Housatonic River.

As required by EPA, GE also recorded Housatonic River flow data collected at the USGS gauging station in Coltsville, Massachusetts during the groundwater elevation monitoring and sampling events. The river flow data ranged from 30 to 552 cubic feet per second (cfs) during this period. In addition, GE monitored river elevations at the measuring points established at the Lyman Street and Newell Street bridges during each day of sampling to further assess potential changes in river conditions during the sampling event. No atypical river elevation readings were observed during the sampling event. The Housatonic River flow data and elevation readings are included in Appendix A.

2.6 Groundwater Sampling and Analysis

The fall 2008 groundwater sampling event was performed between October 15 and December 11, 2008, with the exception of monitoring well GMA1-4, which could not be sampled due to insufficient water levels within the well. Groundwater samples were collected from the remaining sixteen groundwater monitoring wells scheduled for interim sampling. These samples were collected by the low-flow techniques specified in the FSP/QAPP, using either a bladder or peristaltic pump for the purging and collection of groundwater samples. The sampling methods utilized at each well are specified in Appendix A. Each monitoring well was purged utilizing low-flow techniques until field parameters (including temperature, pH, specific conductivity, oxidation-reduction potential, dissolved oxygen, and turbidity) stabilized prior to sample collection. Field parameters were

measured in combination with the sampling activities at the monitoring wells. The stabilized field parameter measurements are presented below and the field sampling data are provided in Appendix A.

Parameter	Units	Range of Stabilized Readings
Turbidity	Nephelometric turbidity units (NTU)	1 to 215
pH	pH units	6.63 to 11.31
Specific Conductivity	Millisiemens per centimeter	0.841 to 6.069
Oxidation-Reduction Potential	Millivolts	-227.3 to 95.3
Dissolved Oxygen	Milligrams per liter	0.14 to 15.32
Temperature	Degrees Celsius	8.07 to 20.29

As shown above and in Table 4, one of the groundwater samples extracted from the monitoring wells in this sampling event had turbidity levels greater than the target level of 50 NTU upon stabilization. This well (17A) contained limited quantities of groundwater and was pumped dry prior to sampling and the elevated turbidity readings are attributed to a greater proportion of sediment mixing at the base of the wells. A similar situation occurred at well ES2-19, where no turbidity was recorded in Table 4. That well was purged dry before any turbidity readings could be collected. The well was sampled following recharge and a spot check of turbidity of the initial purge water did not produce a recordable value on the meter.

All of the wells displayed “normal” pH readings (i.e., between 6.63 and 7.71 pH units in fall 2008) with the exception of newly-installed replacement well A7-R, where a pH reading of 11.36 pH units was recorded during sampling. This elevated pH reading, which was confirmed by recalibrating the pH meter and with pH paper (see Appendix A), may be related to the presence of a boulder or rock layer that was encountered at the base of the well during installation in November 2008 or could be attributed to grout from the newly-installed well descending into the saturated zone during construction or development. Since the well was sampled just after the minimum required recovery time after installation and development, the groundwater pH may have been temporarily elevated, but it is anticipated that the pH will return to more typical levels with increased groundwater flow through the well over time. GE will carefully monitor the pH during the next scheduled sampling event at this location.

The collected groundwater samples were submitted to SGS Environmental Services, Inc. of Wilmington, North Carolina (SGS) for laboratory analysis. For the two groundwater samples that were monitored for compliance with GW-3 standards (i.e., Newell Street Area II wells GMA1-25 and GMA1-27), the samples were submitted for analysis of the following constituents using the associated EPA methods:

Constituent	EPA Method
VOCs	8260B
SVOCs	8270C
PCBs (Filtered Samples)	8082

The remaining groundwater samples were collected to assess compliance with the Method 1 GW-2 standard for PCBs which went into effect on February 14, 2008, and were submitted for analysis of PCBs using EPA Method 8082. As discussed in Section 1.1, MDEP has informed EPA that the use of filtered samples is appropriate to assess compliance with the Method 1 GW-2 standard for PCBs and all of the PCB samples collected in fall 2008 were filtered prior to analysis.

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

The 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 2008 groundwater quality data are considered to be useable, which is greater than the minimum required usability of 90% as specified in the FSP/QAPP. The SVOC and PCB sample results were found to be 100% usable. VOC sample results were found to be 99.6% usable. The only rejected data was one VOC sample result where the 2-chloroethylvinylether data was rejected due to MS/MSD recovery deviations. The validated analytical results are summarized in Section 3 and discussed in Section 4 below.

3. Fall 2008 Groundwater Analytical Results

3.1 General

A description of the fall 2008 groundwater analytical results is presented in this section. The complete analytical data sets are summarized in Appendix B. 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. An assessment of these results relative to those groundwater quality Performance Standards and the UCLs is provided in Section 4.

3.2 Groundwater Sample Results

The following paragraphs provide an overview of the fall 2008 analytical results from the GMA 1 groundwater quality monitoring wells for each constituent group that was analyzed.

3.2.1 VOC Results

Two groundwater samples were analyzed for VOCs during the fall 2008 sampling event. The VOC analytical results are summarized in Table 7 and Table B-1 of Appendix B. Only one VOC (methylene chloride) was detected at wells GMA1-25 and GMA1-27. All detected concentrations were at estimated levels below the Practical Quantitation Limit (PQL) and well below the applicable Method 1 and GW-2 and GW-3 standards.

3.2.2 SVOC Results

Groundwater samples collected from two monitoring wells (wells GMA1-25 and GMA1-27) were analyzed for SVOCs during the fall 2008 sampling event. No SVOCs were detected at either sampling location, with the exception of a trace concentration of bis(2-ethylhexyl)phthalate (a common laboratory contaminant) at well GMA1-25. No bis(2-ethylhexyl)phthalate was detected in a duplicate sample analyzed from that well. The SVOC analytical results are summarized in Table 7 and Table B-1 of Appendix B.

3.2.3 PCB Results

Filtered groundwater samples from sixteen monitoring wells were analyzed for PCBs as part of the fall 2008 sampling event. The PCB analytical results are summarized in Table 7 and Table B-1 of Appendix B. No PCBs were detected in any of the groundwater samples analyzed during this sampling event.

3.3 Adjacent MCP Disposal Site Monitoring Results

As mentioned above in Section 1.2, the O'Connell East Street Mobil Station site (MDEP Site No. 1-13347, also referred to as the "East Street Mobil Site") is located on adjacent property near the northern edge of the Lyman Street Area. GE understands that this site is currently being addressed by O'Connell Oil Associates, Inc. to satisfy the requirements of Massachusetts General Laws Chapter 21-E and the MCP. Available documentation indicates that soluble-phase contaminants related to gasoline releases from the East Street Mobil Site have been documented upgradient of GMA 1.

GE is required to include available monitoring results from response actions performed at this adjacent site in the groundwater monitoring reports for GMA 1, to the extent that information is available to GE. To fulfill this requirement, GE conducted a file search at MDEP on January 7, 2009 to review any reports that have been placed on file at MDEP regarding this site since the prior file search was conducted and reported in the Spring 2008 GMA 1 Groundwater Quality Report. One document pertaining to groundwater investigations and response actions at the East Street Mobil Site has been added to the MDEP files since the spring 2008 file search:

- Remedy Operation Status Report (ECS, September, 26 2008)

A site map and pertinent monitoring results from the most recent report reviewed for the East Street Mobil Site (i.e., the September 2008 Remedy Operation Status Report) are provided in Appendix E. That report describes the effectiveness of the oxygen sparging system activated at the site on September 11, 2006 and the results of the most recent groundwater sampling event conducted on May 1, 2008. The oxygen sparging monitoring data (September 11, 2006 through September 9, 2008) are provided in Appendix E and indicated an increase in dissolved oxygen in wells downgradient of the source area.

Based on the general trend of decreasing concentrations of dissolved phase gasoline constituents to levels below the applicable GW-2 and GW-3 groundwater standards, the oxygen sparging system was shut down on February 11, 2008 to evaluate if remediation goals were met and groundwater conditions remained stable. Groundwater sampling was conducted in March 2008 to evaluate the groundwater response to the oxygen sparging system shutdown. The results of the March 2008 monitoring showed that although the concentrations of certain constituents slightly increased at specific wells compared to the October 2007 sampling round, those concentrations were still well below the applicable GW-2 and GW-3 standards.

The groundwater samples collected May 1, 2008 were evaluated for MNA and VPH carbon fractions constituents. When compared to the March 2008 and October 2007 results, some samples from the May 2008 on-site sampling event showed a continuing increase in petroleum constituents above the GW-2 and GW-3 standards. This increase resulted in the reactivation of the air sparging system. Monitoring and sampling results from this event can be found in Appendix E.

GMA 1 monitoring wells MW-4R and LSSC-16S are GW-2 monitoring points located downgradient from the East Street Mobil Site that were sampled during the spring 2008 sampling event and analyzed for VOCs (see Spring 2008 GMA 1 Groundwater Quality Report), including BTEX (benzene, toluene, ethylbenzene, and xylene). No BTEX constituents were detected in well LSSC-16S during the spring 2008 sampling event. Benzene was the only BTEX constituent detected in well MW-4R, at a concentration (0.0042 ppm) well below the MCP GW-2 Standard of 2 ppm for benzene. The downgradient wells MW-3R and LSSC-16S were analyzed for PCB during the fall 2008 sampling event, and evaluated for PCBs (See Appendix B).

Based on these results, it appears that the prior groundwater quality exceedances attributed to the East Street Mobil Site were confined to that site and appear to have been addressed by the remedial actions performed at that site, including the operation of a groundwater remediation system. According to the September 2008 Remedy Operation Status Report, the reactivated air sparging system was to remain in operation through the November 2008 groundwater event at the East Street Mobil Site, at which time its effectiveness was to be re-evaluated. The results of that re-evaluation have not yet been filed with MDEP. As such, no additional actions beyond a continuation of the ongoing groundwater quality program at GMA 1 appear to be warranted to assess potential impacts to GMA 1 related to the East Street Mobil Site. GE will continue to review and assess the results from the East Street Mobil Site and downgradient areas within GMA 1 and will provide updates in future groundwater quality monitoring reports.

4. Overall Assessment of Groundwater Results

4.1 General

The information presented herein is based on the laboratory results obtained during the fall 2008 groundwater sampling event, supplemented with historical groundwater analytical data when applicable.

4.2 Groundwater Quality Performance Standards

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

- GW-2 groundwater is defined as groundwater that is a potential source of vapors to the indoor air of buildings. Groundwater is classified as GW-2 if it is located within 30 feet of an existing occupied building and has an average annual depth to groundwater of 15 feet or less. Under the MCP, certain constituents present within GW-2 groundwater represent a potential source of vapors to the indoor air of the overlying occupied structures.
- GW-3 groundwater is defined as groundwater that discharges to surface water. By MCP definition, all groundwater at a site is classified as GW-3 since it is considered to be ultimately discharged to surface water. It should be noted that some groundwater within GMA 1 does not in fact discharge directly to surface water because of the operation of numerous groundwater pumping systems. Water extracted from these systems is transferred to an on-site treatment plant for processing prior to discharge. Nevertheless, in accordance with the CD and SOW, all groundwater at GMA 1 is considered as GW-3.

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

and will serve as the initial basis for evaluating groundwater at GMA 1. The current MCP Method 1 GW-2 and GW-3 standards for the constituents detected in the fall 2008 sampling event are listed in Tables 5 and 6, respectively. (In the event of any discrepancy between the standards listed in these tables and those published in the MCP, the latter will be controlling.) For constituents for which Method 1 standards do not exist, the MCP provides procedures, known as Method 2, for developing such standards (Method 2 standards) for both GW-2 (310 CMR 40.0983(2)) and GW-3 (310 CMR 40.0983(4)) groundwater. For such constituents that are detected in groundwater during the baseline monitoring program, Attachment H to the SOW states that in the Baseline Monitoring Program Final Report, GE must propose to develop Method 2 standards using the MCP procedures or alternate procedures approved by EPA, or provide a rationale for why such standards need not be developed. For constituents whose concentrations exceed the applicable Method 1 (or Method 2) standards, GE may develop and propose to EPA alternative GW-2 and/or GW-3 standards based on a site-specific risk assessment. This procedure is known as Method 3 in the MCP. Upon EPA approval, these alternative risk-based GW-2 and/or GW-3 standards may be used in lieu of the Method 1 (or Method 2) standards. Of course, whichever method is used to establish such groundwater standards, GW-2 standards will be applied to GW-2 groundwater and GW-3 standards will be applied to GW-3 groundwater.

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

Based on consideration of the above points, the specific groundwater quality Performance Standards for GMA 1 consist of the following:

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

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

These Performance Standards are to be applied to the results of the individual monitoring wells included in the monitoring program. Several monitoring wells have been designated as the compliance points for attainment of the Performance Standards identified above. These wells were initially identified in the GMA 1 Baseline Monitoring Proposal (although certain modifications were made subsequent to submittal of that proposal as a result of EPA approval conditions, findings during field reconnaissance of the selected wells, or replacement of certain wells during the course of the baseline monitoring program). As described above in Section 2.6, only selected wells were sampled in fall 2008.

4.3 Groundwater Quality – Fall 2008

For the purpose of generally assessing current groundwater quality conditions, the analytical results from the fall 2008 groundwater sampling event were compared to the applicable groundwater Performance Standards for GMA 1. These Performance Standards are described in Section 4.2 above, and are currently based (on a well-specific basis) on

the MCP Method 1 GW-2 and/or GW-3 standards. The following subsections discuss the fall 2008 groundwater analytical results in relation to these Performance Standards, as well as in relation to the MCP UCLs for groundwater. In support of those discussions, Tables 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.

4.3.1 Fall 2008 Groundwater Results Relative to GW-2 Performance Standards

As part of the fall 2008 program, groundwater samples were collected from sixteen wells designated as GW-2 monitoring locations that were scheduled to be sampled for PCBs (i.e., specifically wells ES2-19, GMA1-3, 17A, 95-20, A7-R, ES1-10, ES1-18, F-1, 95-25, LSSC-16S, MW-3R, MM-1, GMA1-25, GMA1-27, 37R, and 31R). Two of these wells (i.e., wells GMA1-25 and GMA1-27) are designated as GW-2/GW-3 wells and were also sampled for VOCs and SVOCs. As discussed in Section 2.6, well GMA1-4, an additional GW-2 monitoring well that was scheduled for sampling and analysis for PCBs, was unable to be sampled in fall 2008. Two additional wells listed in condition number 5 of EPA's November 25, 2008 conditional approval letter (which identified wells where GE is required to demonstrate compliance with the new GW-2 standard for PCBs) were not sampled in fall 2008, as those wells (i.e., wells 72R and GMA1-6) already have at least four rounds of PCB sampling, and the results are below the new GW-2 standards.

The fall 2008 groundwater analytical results for all detected constituents subject to MCP Method 1 GW-2 standards and a comparison of those results with the applicable MCP Method 1 GW-2 Standards are presented in Table 5. As shown in Table 5, none of the fall 2008 sample concentrations from the two GW-2 monitoring wells sampled and analyzed for VOCs was above the corresponding GW-2 Performance Standard and neither well exhibited total VOC concentrations above 5 ppm (the level specified in the SOW as a notification level for GW-2 wells located within 30 feet of a school or occupied residential structure and as a trigger level for the proposal of interim response actions). These results are consistent with the available results from prior sampling events. No PCBs were detected in any of the GW-2 monitoring wells sampled in fall 2008.

4.3.2 Fall 2008 Groundwater Results Relative to GW-3 Performance Standards

Groundwater samples designated for GW-3 monitoring were collected from two monitoring wells (GMA1-25 and GMA1-27) during the fall 2008 interim sampling event. The fall 2008 groundwater analytical results for all constituents detected in these monitoring wells and a comparison of those results with the applicable MCP Method 1 GW-3 standards are presented in Table 6. Both wells are identified in Table 1 as upgradient GW-3 perimeter wells.

The comparisons set forth in Table 6 show that no constituents were found at levels above their respective MCP Method 1 GW-3 standards in groundwater samples collected in fall 2008.

4.3.3 Fall 2008 Comparison to Upper Concentration Limits

In addition to comparing the fall 2008 groundwater analytical results with applicable MCP Method 1 GW-2 and GW-3 standards, the analytical results from all 16 wells that were sampled were compared with the UCLs for groundwater specified in the MCP (310 CMR 40.0996(7)). As shown in Table 7, none of the groundwater samples collected in fall 2008 contained constituent concentrations greater than any of the listed UCLs for groundwater.

4.4 Overall Assessment of Groundwater Analytical Results

Graphs illustrating historical total VOC concentrations and filtered PCB concentrations for select wells sampled in fall 2008 that have been previously sampled and analyzed for those constituents are presented in Appendix C. Typically, Appendix C would also contain graphs of historical concentrations of individual constituents that exceeded the applicable MCP Method 1 GW-2 or GW-3 standards or UCLs during any of the prior baseline monitoring program sampling events at GMA 1. However, since no exceedances of the MCP Method 1 GW-2 or GW-3 standards have been documented at the two Newell Street Area II monitoring wells, no graphs have been prepared for individual VOCs or SVOCs at those locations based on comparisons to MCP criteria. The remaining wells were analyzed only for PCBs in fall 2008, and, therefore, since this sampling event represents the first of four rounds of PCB sampling and analysis at those wells, no additional graphs were prepared.

A review of the graphs contained in Appendix C, as well as historical data, indicates that constituent concentrations have been mostly at non-detectable or trace levels during the three monitoring rounds that have been performed at the two Newell Street Area II wells. At well GMA1-25, a single VOC was detected at a level below the PQL during each sampling round (i.e., acetone in fall 2007, toluene in spring 2008, and methylene chloride in fall



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2008), while no VOCs were detected at well GMA1-27 until the trace detection of methylene chloride in fall 2008. No PCBs have been detected in either well during any of the three monitoring events conducted.

5. Proposed Monitoring Program Modifications and Schedule of Future Activities

5.1 General

In spring 2004, GE initiated the interim groundwater quality monitoring program to be conducted until completion of the soil-related Removal Actions at the RAAs that comprise GMA 1. The interim monitoring program is designed to obtain additional data from locations where it is not yet clear whether the initial baseline groundwater quality results indicate that the well may require future monitoring in a long-term monitoring program.

GE has reviewed the results of its groundwater-related activities conducted at GMA 1 in fall 2008, including the groundwater analytical data from the fall 2008 interim sampling event for results that indicate the need to modify the interim monitoring program. The results of that evaluation and resulting proposed program modifications are discussed in Section 5.2 below. This section also summarizes the schedule for upcoming interim monitoring events and associated reporting activities.

5.2 Assessment of Selected Monitoring Wells

In its November 25, 2008 conditional approval letter, EPA directed GE to re-develop wells ESA1N-52 and ES2-2A and to perform additional inspections and repairs to the wells to inhibit surficial inflow to the wells. Those activities were performed, as discussed in Section 2.3, and the results are discussed below.

GE was able to successfully develop and repair well ES2-2A and that well can be utilized for future monitoring and sampling activities. The next scheduled sampling round at this well will be conducted in fall 2009, when samples will be collected for VOC analysis under the annual interim groundwater quality monitoring program.

At well ESA1N-52, GE utilized multiple development techniques, but was unable to clear the obstruction in the well, which is believed to be an asphalt fragment. A review of historical groundwater monitoring data shows that the measured depth to bottom of the well began to decrease in early 2004 and by spring 2008 the well was approximately 10 feet shallower than the depths recorded in 2003 and earlier. GE was able to remove approximately two feet of sediment from the well during the fall 2008 development activities, but significant accumulations still remain in the well. Although the well was not completely cleared, a sufficient portion of the well screen is available to permit water level and LNAPL monitoring to continue at this location.

This well was previously included in the interim monitoring program for annual PCB analyses. However, in the Spring 2008 GMA 1 Groundwater Quality Report, GE proposed to discontinue PCB monitoring at this location since the historical PCB results were well below the revised MCP Method 1 standards for PCBs. In response, EPA stated in its November 25, 2008 conditional approval letter that groundwater quality data from this well since 2003 may be questionable due to the accumulation of sediment, and EPA required GE to further evaluate the existing data to determine if additional monitoring is required. GE has reviewed the historical data from this well and found that four rounds of baseline sampling were completed at well ESA1N-52 by spring 2003, well before the deposition began to occur in the well. Therefore, data sufficient to characterize this location were collected at times before there could have been a question concerning any possible effects of sediment deposition in the well. PCBs were detected in the well during two of four baseline sampling events and the maximum filtered PCB concentration observed during the baseline period was 0.00079 ppm in fall 2002, which is well below both the current Method 1 GW-2 (0.005 ppm) and GW-3 (0.01 ppm) standards. Since spring 2003, the well was sampled for PCBs on four occasions. PCBs were detected during two of those interim sampling rounds with a maximum detected concentration of 0.000087 ppm, which is also well below the applicable Performance Standards. Therefore, it does not appear that additional PCB characterization is necessary at well ESA1N-52, regardless of whether the post-2003 results are utilized. For non-PCB constituents, all data from this well were collected during the baseline monitoring rounds performed before accumulation of sediment. Thus, GE's prior conclusion that no further sampling is needed at the well remains valid.

5.3 Overview of Shallow Groundwater Areas at GMA 1

Condition 6 of EPA's November 25, 2008 conditional approval letter required GE to update a figure originally presented in the September 2000 GMA 1 Baseline Monitoring Proposal which illustrated areas within GMA 2 where the average depth to groundwater is within 15 feet of the ground surface, utilizing groundwater elevation data collected between 2000 and 2008. The updated areas with groundwater at an average depth of less than 15 feet, which are illustrated on Figure 4, are very similar to the areas identified during preparation of the baseline monitoring proposal. Relatively minor variations between the figures occur in East Street Area 2-North, where a reduced shallow groundwater area is present in the western portion (based on data collected from well GMA1-4, which were not available at the time the previous figure was prepared) and a greater percentage of the eastern portion of that RAA contains shallow groundwater (based on data from well ES1-27R collected during the baseline monitoring period). No occupied buildings were identified above the revised shallow groundwater areas that were not similarly illustrated in the prior mapping, which was utilized to determine the GW-2 characterization needs for GMA 1. Therefore, no

additional GW-2 groundwater quality monitoring is proposed based on this updated assessment.

5.4 Proposed Modifications to Interim Monitoring Program

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

Most recently, following revisions to the MCP that became effective on February 14, 2008, GE re-evaluated the existing groundwater quality data at GMA 1 and identified several locations that should be added to or removed from the interim monitoring program and, in the Spring 2008 GMA 1 Groundwater Quality Report, GE proposed several modifications to the interim monitoring program, particularly in response to the modification of the Method 1 GW-3 standard for PCBs (from 0.0003 ppm to 0.01 ppm) and the promulgation of a new Method 1 GW-2 standard for PCBs. The modifications to the annual interim sampling program discussed proposed in that report, as conditionally approved by EPA, will be implemented during the next annual interim sampling event in fall 2009, and GE does not propose any changes to those activities at this time. The semi-annual analysis for PCBs at selected GW-2 monitoring wells was initiated in fall 2008 and was the primary sampling activity conducted during the fall 2008 monitoring period, along with collection of the third round of analytical data at Newell Street Area II wells GMA-25 and GMA1-27. Since the fall 2008 sampling event was only the first of four required PCB characterization rounds at the GW-2 wells, only minimal changes to the program are proposed at this time. Specifically, GE proposes to:

- Continue to utilize well A7-R as a replacement for well A7, which was found to be destroyed. Since elevated pH readings were recorded during the initial sampling event at this well, GE will pay particular attention to the pH data during the spring 2009 sampling event and will discuss the results in the next monitoring report.
- Remove well GMA1-4 from the GW-2/PCB assessment sampling program, since the average annual depth to water at this well is deeper than the 15 foot criteria for GW-2 groundwater. The GW-2 designation was previously removed from this well, with EPA approval, following a proposal by GE to discontinue VOC sampling at this well in spring 2003. However, GE will continue to measure water levels at this well as part of the remaining semi-annual PCB sampling events and will collect groundwater samples for PCB analysis if a depth to water of 15 feet or less is observed and there is an adequate quantity of water in the well to collect the required sample volume.
- Continue to utilize well ESA1N-52 for groundwater elevation and NAPL monitoring purposes only. As discussed in Section 5.2 above, no additional sampling is proposed at this location.

A summary of the interim sampling program for GMA 1 in spring 2009, as proposed to be modified herein, is provided in Table 8, and the locations where sampling is to be conducted, as proposed to be modified herein, are illustrated on Figure 4.

The wells proposed to be sampled and analyzed for PCBs for comparison to the new GW-2 standard are proposed to be sampled on a semi-annual basis until four sets of PCB data have been collected. At that time, GE will evaluate the data and propose whether to add any of the wells to the ongoing interim or long-term monitoring program at GMA 1. As approved by EPA, based on discussions with MDEP, GE will continue to analyze filtered groundwater samples for comparison with the GW-2 standard.

Additional details on the sampling and reporting schedule at GMA 1 are provided below.

5.5 Field Activities Schedule

GE will conduct the spring 2009 interim groundwater sampling event at GMA 1 in April 2009, in conjunction with groundwater sampling activities that will be performed at the other GMAs. Pursuant to EPA's October 10, 2007 conditional approval letter, the spring 2009 interim sampling event will include the fourth of four required semi-annual sampling and analysis (for VOCs, SVOCs, and filtered PCBs) rounds at wells GMA1-25 and GMA1-27. That sampling event will also include the second of four required semi-annual sampling and analysis rounds for PCBs (filtered samples) at the GW-2 monitoring locations where

compliance with the new MCP Method 1 GW-2 standard for PCBs was not verified during the initial baseline monitoring program (see Table 8).

Consistent with the schedule as approved by EPA, the interim sampling events alternate between spring and fall schedules until a long-term groundwater quality monitoring program is implemented at GMA 1. Therefore, the next full interim sampling event will not be conducted until fall 2009. The group of GW-2 wells scheduled for semi-annual sampling and PCB analysis discussed above will also be sampled in fall 2009.

The spring 2009 semi-annual groundwater elevation and NAPL monitoring event will also be conducted in April 2009 at all wells included in the GMA 1 NAPL monitoring program. Results from that monitoring event will be incorporated into the next groundwater quality monitoring report for GMA 1.

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

5.6 Reporting Schedule

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

GE will submit the Spring 2009 Interim Groundwater Quality Report for GMA 1 by July 31, 2009, in accordance with the reporting schedule approved by EPA. That report will present the final, validated spring 2009 interim sampling results and a brief discussion of the results, including an assessment of the four rounds of sampling results from Newell Street Area II wells GMA1-25 and GMA1-27 and the need for any additional groundwater characterization activities at those locations, and any proposals to further modify the interim monitoring program, if necessary. GE will also include an updated summary of available groundwater monitoring results and analytical data collected at the adjacent East Street Mobil Site, to the extent that such information is available to GE.

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

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Tables

Table 1
Fall 2008 Interim Groundwater Quality Monitoring Wells

Plant Site 1 Groundwater Management Area
Groundwater Quality Monitoring Interim Report For Fall 2008
General Electric Company - Pittsfield, Massachusetts

Well Number	Monitoring Well Usage	Sampling Schedule	Fall 2008 Analyses ⁽³⁾	Comments
RAA 1 - 40s COMPLEX				
No interim groundwater quality monitoring scheduled to be performed in this RAA.				
RAA 2 - 30s COMPLEX				
No interim groundwater quality monitoring scheduled to be performed in this RAA.				
RAA 3 - 20s COMPLEX				
ES2-19	GW-2 Sentinel	Semi-annual ⁽¹⁾	PCB	
GMA1-3	GW-2 sentinel	Semi-annual ⁽¹⁾	PCB	
RAA 4 - EAST STREET AREA 2-SOUTH				
95-25	GW-2 sentinel	Semi-annual ⁽¹⁾	PCB	
95-20	GW-2 sentinel	Semi-annual ⁽¹⁾	PCB	
RAA 5 - EAST STREET AREA 2-NORTH				
17A	GW-2 sentinel	Semi-annual ⁽¹⁾	PCB	
95-20	GW-2 sentinel	Semi-annual ⁽¹⁾	PCB	
A7-R	GW-2 sentinel	Semi-annual ⁽¹⁾	PCB	
ES1-10	GW-2 sentinel	Semi-annual ⁽¹⁾	PCB	
ES1-18	GW-2 sentinel	Semi-annual ⁽¹⁾	PCB	
F-1	GW-2 sentinel	Semi-annual ⁽¹⁾	PCB	
GMA1-4	GW-2 sentinel	Semi-annual ⁽¹⁾	PCB	Insufficient groundwater available to collect sample in fall 2008
RAA 6 - EAST STREET AREA 1-NORTH				
No interim groundwater quality monitoring scheduled to be performed in this RAA.				
RAA 12 - LYMAN STREET AREA				
LS-MW-3R	GW-2 sentinel	Semi-annual ⁽¹⁾	PCB	
LSSC-16S	GW-2 Sentinel	Semi-annual ⁽¹⁾	PCB	

Table 1
Fall 2008 Interim Groundwater Quality Monitoring Wells

Plant Site 1 Groundwater Management Area
Groundwater Quality Monitoring Interim Report For Fall 2008
General Electric Company - Pittsfield, Massachusetts

Well Number	Monitoring Well Usage	Sampling Schedule	Fall 2008 Analyses ⁽³⁾	Comments
RAA 13 - NEWELL STREET AREA II				
GMA1-25	GW-2 Sentinel/ GW-3 Perimeter (Upgradient)	Semi-annual ⁽²⁾	VOC/SVOC/PCB	
GMA1-27	GW-2 Sentinel/ GW-3 Perimeter (Upgradient)	Semi-annual ⁽²⁾	VOC/SVOC/PCB	
RAA 14 - NEWELL STREET AREA I				
MM-1	GW-2 sentinel	Semi-annual ⁽¹⁾	PCB	
RAA 18 - EAST STREET AREA 1 SOUTH				
31R	GW-2 sentinel	Semi-annual ⁽¹⁾	PCB	
37R	GW-2 sentinel	Semi-annual ⁽¹⁾	PCB	

NOTES:

- Several GW-2 Sentinel wells were added to the interim monitoring program in fall 2008 to assess compliance with the new MCP Method 1 GW-2 standard for PCBs. These wells are scheduled for four semi-annual rounds of groundwater quality sampling for PCBs, after which the needs for additional sampling during the interim period or as part of a long-term monitoring program will be assessed.
- Wells GMA1-25 and GMA1-27 were added to the interim monitoring program in fall 2007 and are scheduled for four semi-annual rounds of groundwater quality sampling for the listed parameters, after which the needs for additional sampling during the interim period or as part of a long-term monitoring program will be assessed.
- All analyses for PCBs conducted under the GMA 1 groundwater quality monitoring program are performed on filtered samples only.

Table 2
Monitoring Well Construction

Plant Site 1 Groundwater Management Area
Groundwater Quality Monitoring Interim Report For Fall 2008
General Electric Company - Pittsfield, Massachusetts

Well Number	Survey Coordinates		Well Diameter (inches)	Ground Surface Elevation (feet AMSL)	Measuring Point Elevation (feet AMSL)	Depth to Top of Screen (feet BGS)	Screen Length (feet)	Top of Screen Elevation (feet AMSL)	Base of Screen Elevation (feet AMSL)
	Northing	Easting							
RAA 2 - 30s Complex									
ES2-19	534344.3200	131781.7900	0.75	1,007.6	1,007.22	11.5	8	996.1	988.1
GMA1-3	533679.9000	131685.4000	2	991.3	990.78	5.7	10	985.6	975.6
RAA 4 - East Street Area 2-South									
95-25	533090.3600	131385.7800	0.75	985.1	988.20	8	10	977.1	967.1
RAA 5 - East Street Area 2-North									
17A	535187.4500	132107.0500	2	1,024.2	1,023.86	5	15	1,019.2	1,004.2
95-20	534445.1600	133286.9800	0.75	1,010.8	1,010.67	10	10	1,000.8	990.8
A7-R			2			5.1	12		
ES1-10	534813.9000	134583.8000	0.75	1,024.0	1,023.99	7	10.5	1,017.0	1,006.5
ES1-18	535027.2200	133724.9700	0.75	1,049.8	1,049.71	4	10	1,045.8	1,035.8
F-1	534711.0000	134287.3000	2	1,024.0	1,023.84	4	15	1,020.0	1,005.0
GMA1-4	534702.1000	132178.3000	2	1,011.8	1,011.52	10.3	10	1,001.5	991.5
RAA 12 - Lyman Street Area									
LSSC-16S	532500.5000	130690.3000	2	981.5	981.37	5.0	10	976.5	966.5
LS-MW-3R	532589.5000	130460.6000	2	983.8	983.54	5.2	10	978.6	968.6
RAA 13 - Newell Street Area II									
GMA1-25	532475.2000	131882.3000	2	987.5	987.19	5	10	982.5	972.5
GMA1-27	532319.7000	131693.2000	2	981.3	983.29	4	10	977.3	967.3
RAA 18 - East Street Area 1-South									
31R	534143.9000	134059.5000	2	1,000.5	1,000.23	5.5	10	995.0	985.0
37R	533949.6000	133932.6000	2	989.0	988.79	7.77	10	981.3	971.3

NOTES:

1. The listed wells were scheduled to be utilized during fall 2008 for interim groundwater quality sampling.
2. feet AMSL: Feet above mean sea level
3. feet BGS: Feet below ground surface

Table 3
Groundwater Elevation Data - Fall 2008 Monitoring Round
Plant Site 1 Groundwater Management Area
Groundwater Quality Monitoring Interim Report For Fall 2008
General Electric Company - Pittsfield, Massachusetts

Well ID	Date	Groundwater Elevation (Feet AMSL ¹)
40s Complex		
95-17	10/27/2008	983.71
30s Complex		
ES2-19	10/27/2008	994.06
GMA1-3	10/27/2008	983.92
GMA1-12	10/27/2008	977.78
RF-03	10/27/2008	977.81
RF-03D	10/27/2008	978.38
RF-16R	10/27/2008	978.38
20s Complex		
CC	10/27/2008	NA
EE	10/27/2008	979.74
GG	10/27/2008	981.55
II	10/27/2008	980.53
JJ	10/27/2008	979.81
LL-R	10/27/2008	981.05
P-R	10/27/2008	979.26
QQ-R	10/27/2008	979.47
U	10/27/2008	980.26
Y	10/27/2008	979.55
East Street Area 2-South		
01R	10/27/2008	980.59
2	10/27/2008	978.14
5	10/27/2008	981.69
6	10/27/2008	976.92
09R	10/27/2008	973.49
10	10/27/2008	NA
13	10/27/2008	973.02
14	10/27/2008	973.74
16R	10/27/2008	973.85
19	10/27/2008	972.86
25R	10/27/2008	977.41
26RR	10/27/2008	978.31
28	10/27/2008	975.23
29	10/27/2008	973.42
30	10/27/2008	977.43
31	10/27/2008	977.31
32	10/27/2008	979.03
34	10/27/2008	975.79
35	10/27/2008	973.86

Table 3
Groundwater Elevation Data - Fall 2008 Monitoring Round
Plant Site 1 Groundwater Management Area
Groundwater Quality Monitoring Interim Report For Fall 2008
General Electric Company - Pittsfield, Massachusetts

Well ID	Date	Groundwater Elevation (Feet AMSL¹)
36	10/27/2008	974.67
37	10/27/2008	974.72
38	10/27/2008	975.83
42	10/27/2008	976.25
43	10/27/2008	975.20
44	10/27/2008	976.17
47	10/27/2008	973.39
48	10/27/2008	976.72
49R	10/27/2008	973.58
49RR	10/27/2008	973.41
50	10/27/2008	975.09
51	10/27/2008	973.62
ESA2S-52	10/27/2008	973.28
53	10/27/2008	973.52
54	10/27/2008	973.05
55	10/27/2008	973.28
57	10/27/2008	977.62
58	10/27/2008	973.30
59	10/27/2008	972.28
ESA2S-64	10/27/2008	972.97
64R	10/28/2008	977.38
64S	10/28/2008	965.67
64V	10/28/2008	967.55
64X(N)	10/28/2008	972.53
64X(S)	10/28/2008	965.95
64X(W)	10/28/2008	966.23
95-1	10/28/2008	973.46
95-04R	10/27/2008	974.45
95-5	10/27/2008	973.80
95-07R	10/27/2008	974.65
E2SC-03I	10/30/2007	972.22
E2SC-21	10/27/2008	NA
E2SC-23	10/27/2008	974.47
E2SC-24	10/27/2008	973.40
3-6C-EB-14	10/28/2008	973.31
3-6C-EB-22	10/28/2008	973.35
3-6C-EB-25	10/28/2008	973.68
3-6C-EB-28	10/28/2008	973.48
ES2-01	10/30/2007	972.48
ES2-02A	10/27/2008	973.13
ES2-05	10/27/2008	973.80

Table 3
Groundwater Elevation Data - Fall 2008 Monitoring Round
Plant Site 1 Groundwater Management Area
Groundwater Quality Monitoring Interim Report For Fall 2008
General Electric Company - Pittsfield, Massachusetts

Well ID	Date	Groundwater Elevation (Feet AMSL¹)
ES2-06	10/30/2007	972.40
ES2-08	10/27/2008	973.47
ES2-10	10/27/2008	977.03
ES2-11	10/27/2008	973.87
ES2-16	10/27/2008	976.17
ES2-18	10/28/2008	971.34
GMA1-13	10/27/2008	973.50
GMA1-14	10/27/2008	978.39
GMA1-15	10/27/2008	973.34
GMA1-16	10/27/2008	973.62
GMA1-17W	10/27/2008	977.39
GMA1-17E	10/27/2008	977.39
GMA1-19	10/27/2008	973.26
GMA1-21	10/28/2008	973.35
GMA1-22	10/27/2008	973.48
GMA1-23	10/27/2008	973.26
GMA1-24	10/27/2008	973.12
HR-G1-MW-1	10/27/2008	972.94
HR-G1-MW-2	10/27/2008	973.08
HR-G2-MW-1	10/27/2008	972.95
HR-G2-MW-3	10/27/2008	973.25
HR-G2-RW-1	10/27/2008	973.25
HR-G3-MW-1	10/27/2008	976.64
HR-G3-MW-2	10/27/2008	981.96
HR-G3-RW-1	10/27/2008	971.86
HR-J1-MW-1	10/28/2008	973.17
HR-J1-MW-2	10/31/2008	973.70
HR-J1-MW-3	10/28/2008	973.37
HR-J1-RW-1	10/28/2008	973.05
M-R	10/27/2008	978.28
P3	10/27/2008	983.75
PZ-1S	10/27/2008	973.59
PZ-6S	10/27/2008	973.22
RW-1(S)	10/28/2008	969.35
RW-1(X)	10/28/2008	966.98
RW-2(X)	10/28/2008	972.95
RW-3(X)	10/28/2008	970.67
RW-4	10/28/2008	969.39
TMP-1	10/27/2008	973.21
SG-HR-1	10/29/2008	973.73

Table 3
Groundwater Elevation Data - Fall 2008 Monitoring Round
Plant Site 1 Groundwater Management Area
Groundwater Quality Monitoring Interim Report For Fall 2008
General Electric Company - Pittsfield, Massachusetts

Well ID	Date	Groundwater Elevation (Feet AMSL ¹)
East Street Area 2-North		
05-N	10/31/2008	984.85
11-N	10/31/2008	981.92
14-N	10/31/2008	987.20
16-N	10/31/2008	980.80
17A	10/31/2008	1,017.75
17-N	10/31/2008	981.15
19-N	10/31/2008	981.99
20-N	10/31/2008	982.20
23-N	10/31/2008	981.72
24-N	10/31/2008	982.50
95-20	10/31/2008	996.89
ES1-05	10/29/2008	983.55
ES1-10	10/31/2008	1,019.24
ES1-18	10/31/2008	1,044.11
ES1-20	10/29/2008	987.22
ES1-27R	10/31/2008	1,016.57
F-1	10/31/2008	1,021.25
GMA1-4	10/31/2008	995.71
East Street Area 1-North		
25	10/28/2008	994.08
ESA1N-52	10/28/2008	996.36
60R	10/28/2008	992.95
105	10/28/2008	995.33
106	10/28/2008	995.97
107	10/28/2008	996.49
108A	10/28/2008	997.61
109A	10/28/2008	997.05
118	10/28/2008	995.00
128	10/28/2008	994.00
131	10/28/2008	996.77
140	10/28/2008	992.59
ES1-08	10/28/2008	994.70
North Caisson	10/28/2008	979.69
East Street Area 1-South		
31R	10/28/2008	991.24
ESA1S-33	10/28/2008	997.40
34	10/28/2008	994.95
35	10/28/2008	994.75
37R	10/28/2008	979.09
45	10/28/2008	993.75
46	10/28/2008	NA
72	10/28/2008	993.30

Table 3
Groundwater Elevation Data - Fall 2008 Monitoring Round
Plant Site 1 Groundwater Management Area
Groundwater Quality Monitoring Interim Report For Fall 2008
General Electric Company - Pittsfield, Massachusetts

Well ID	Date	Groundwater Elevation (Feet AMSL ¹)
East Street Area 1-South (cont.)		
72R	10/28/2008	991.97
75	10/28/2008	993.52
76	10/28/2008	993.10
78	10/28/2008	995.76
80	10/28/2008	985.25
90	10/28/2008	982.65
139R	10/28/2008	977.46
ES1-13	10/28/2008	993.46
ES1-18	10/23/2008	1,041.08
ES1-23R	10/28/2008	987.63
GMA1-6	10/28/2008	992.39
GMA1-7	10/28/2008	976.17
GMA1-18	10/28/2008	992.19
South Caisson	10/28/2008	988.01
Lyman Street Area		
GMA1-5	10/28/2008	971.77
B-2	10/28/2008	971.90
E-4	10/28/2008	973.25
E-7	10/31/2007	974.98
EPA-1	10/28/2008	971.79
LS-12	10/27/2008	971.38
LS-24	10/27/2008	969.15
LS-29	10/31/2007	969.97
LS-30	10/27/2008	970.94
LS-31	10/27/2008	971.13
LS-38	10/28/2008	971.17
LS-44	10/31/2007	970.66
LSSC-07	10/29/2007	971.56
LSSC-08I	10/28/2008	971.88
LSSC-16I	10/31/2007	971.23
LSSC-16S	10/27/2008	NA
LSSC-18	10/27/2008	969.51
LSSC-33	10/31/2007	970.96
LSSC-34I	10/27/2008	969.99
MW-4R	10/27/2008	972.15
MW-6R	10/28/2008	973.72
RW-1(R)	10/28/2008	967.57
RW-2	10/28/2008	968.41
BM-2A	10/28/2008	971.27

Table 3
Groundwater Elevation Data - Fall 2008 Monitoring Round
Plant Site 1 Groundwater Management Area
Groundwater Quality Monitoring Interim Report For Fall 2008
General Electric Company - Pittsfield, Massachusetts

Well ID	Date	Groundwater Elevation (Feet AMSL ¹)
Newell Street Area I		
FW-16R	10/29/2008	974.11
IA-9R	10/29/2008	974.06
MM-1	10/29/2008	976.06
Newell Street Area II		
GMA1-8	10/27/2008	972.68
GMA1-9	10/27/2008	973.29
GMA1-25	10/27/2008	973.82
GMA1-26	10/27/2008	973.46
GMA1-27	10/27/2008	974.91
GMA1-28	10/27/2008	973.17
MW-1D	10/30/2007	972.22
MW-1S	10/27/2008	972.68
N2SC-011	10/27/2008	973.29
N2SC-02	10/27/2008	973.46
NS-20	10/27/2008	978.79
NS-37	10/27/2008	973.02
Silver Lake Area		
SLGW-01S	10/27/2008	977.10
SLGW-05S	10/27/2008	977.13
SLGW-06S	10/27/2008	976.92

1. AMSL - Above Mean Sea Level
2. NA - Indicated well was unable to be monitored during the Fall 2008 Groundwater Monitoring Event.

Table 4
Field Parameter Measurements - Fall 2008

Plant Site 1 Groundwater Management Area
Groundwater Quality Monitoring Interim Report For Fall 2008
General Electric Company - Pittsfield, Massachusetts

Well ID	Turbidity (NTU)	Temperature (Degrees Celsius)	pH (Standard Units)	Specific Conductivity (mS/cm)	Oxidation-Reduction Potential (mV)	Dissolved Oxygen (mg/L)
RAA 2 - 30s COMPLEX						
GMA1-3	4.0	15.11	7.01	1.555	-8.9	0.42
ES2-19	NA	14.31	7.65	0.464	71.7	7.87
RAA 4 - EAST STREET AREA 2-SOUTH						
95-25	3	13.72	6.63	0.495	-163.7	1.92
RAA 5 - EAST STREET AREA 2-NORTH						
A7-R	16	8.07	11.31	3.720	-227.3	15.32
17A	215	16.58	7.71	1.460	95.3	8.36
95-20	1	15.94	7.16	0.895	35.0	6.18
ES1-10	2	19.98	7.41	1.265	-185.3	1.41
ES1-18	27	13.65	7.07	6.069	-62.7	1.12
F-1	7.4	20.29	7.74	0.639	-167.7	5.89
RAA 12 - LYMAN STREET AREA						
LSSC-16S	8	13.50	6.82	1.273	12.0	1.90
LS-MW-3R	6	14.03	6.68	-0.841	-182.7	2.49
RAA - NEWELL STREET AREA I						
MM-1	40	14.47	7.00	0.501	-44.4	0.52
RAA 13 - NEWELL STREET AREA II						
GMA1-25	3	12.24	7.37	0.583	-177.4	0.67
GMA1-27	10	12.74	7.02	0.653	-54.6	0.14

Table 4
Field Parameter Measurements - Fall 2008

Plant Site 1 Groundwater Management Area
Groundwater Quality Monitoring Interim Report For Fall 2008
General Electric Company - Pittsfield, Massachusetts

Well ID	Turbidity (NTU)	Temperature (Degrees Celsius)	pH (Standard Units)	Specific Conductivity (mS/cm)	Oxidation-Reduction Potential (mV)	Dissolved Oxygen (mg/L)
RAA 18 - EAST STREET AREA 1-SOUTH						
31R	17	10.8	7.28	0.845	56.1	6.99
37R	13	8.70	7.24	0.993	-9.1	0.65

Notes:

1. Measurements collected during Fall 2008 groundwater sampling event.
2. Well parameters were generally monitored continuously during purging by low-flow techniques. Final parameter readings are presented.
3. The turbidity meter at well GMA1-3malfuncned just prior to sampling. Prior to the devices malfunction, the well's turbidity was stable at approximately 4 NTU.
5. NTU - Nephelometric Turbidity Units
6. mS/cm - Millisiemens per centimeter
7. mV - Millivolts
8. mg/L - Milligrams per liter (ppm)

Table 5
Comparison of Groundwater Analytical Results to MCP Method 1 GW-2 Standards

Plant Site 1 Groundwater Management Area
 Groundwater Quality Monitoring Interim Report for Fall 2008
 General Electric Company - Pittsfield, Massachusetts
 (Results are presented in parts per million, ppm)

Parameter	Location ID: Sample ID: Date Collected:	Method 1 GW-2 Standards	30s Complex		East St. Area 1 - South	
			ES2-19 10/23/08	GMA1-3 10/16/08	31R 10/30/08	37R 10/16/08
Volatiles Organics						
Methylene Chloride		10	NA	NA	NA	NA
Total VOCs		5	NA	NA	NA	NA
PCBs-Filtered						
None Detected		--	--	--	--	--
Semivolatile Organics						
bis(2-Ethylhexyl)phthalate		Not Listed	NA	NA	NA	NA

Parameter	Location ID: Sample ID: Date Collected:	Method 1 GW-2 Standards	East St. Area 2 - North			
			17A 10/16/08	95-20 10/15/08	A7-R 12/11/08	ES1-10 10/15/08
Volatiles Organics						
Methylene Chloride		10	NA	NA	NA	NA
Total VOCs		5	NA	NA	NA	NA
PCBs-Filtered						
None Detected		--	--	--	--	--
Semivolatile Organics						
bis(2-Ethylhexyl)phthalate		Not Listed	NA	NA	NA	NA

Parameter	Location ID: Sample ID: Date Collected:	Method 1 GW-2 Standards	East St. Area 2 - North		East St. Area 2 - South	Lyman Street Area
			ES1-18 10/23/08	F-1 10/15/08	95-25 10/16/08	LSSC-16S 10/16/08
Volatiles Organics						
Methylene Chloride		10	NA	NA	NA	NA
Total VOCs		5	NA	NA	NA	NA
PCBs-Filtered						
None Detected		--	--	--	--	--
Semivolatile Organics						
bis(2-Ethylhexyl)phthalate		Not Listed	NA	NA	NA	NA

Parameter	Location ID: Sample ID: Date Collected:	Method 1 GW-2 Standards	Lyman Street Area	Newell St. Area I	Newell St. Area II	
			MW-3R 10/16/08	MM-1 10/24/08	GMA1-25 10/17/08	GMA1-27 10/17/08
Volatiles Organics						
Methylene Chloride		10	NA	NA	0.00024 J [0.00053 J]	0.00061 J
Total VOCs		5	NA	NA	0.00024 J [0.00053 J]	0.00061 J
PCBs-Filtered						
None Detected		--	--	--	--	--
Semivolatile Organics						
bis(2-Ethylhexyl)phthalate		Not Listed	NA	NA	0.00099 J [ND(0.0051)]	ND(0.0051)

Notes:

1. Samples were collected by ARCADIS and submitted to SGS Environmental Services, Inc. for analysis of volatiles, PCBs (filtered) and semivolatiles.
2. NA - Not Analyzed.
3. ND - Analyte was not detected. The number in parentheses is the associated detection limit.
4. Field duplicate sample results are presented in brackets.
5. Only volatile, semivolatile and PCBs constituents detected in at least one sample are summarized.
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.
7. -- Indicates that all constituents for the parameter group were not detected.

Data Qualifiers:

Organics (volatiles, PCBs, semivolatiles)

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

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

Plant Site 1 Groundwater Management Area
Groundwater Quality Monitoring Interim Report for Fall 2008
General Electric Company - Pittsfield, Massachusetts
(Results are presented in parts per million, ppm)

Parameter	Location ID: Sample ID: Date Collected:	Method 1 GW-3 Standards	Newell St. Area II	
			GMA1-25 10/17/08	GMA1-27 10/17/08
Volatile Organics				
Methylene Chloride		50	0.00024 J [0.00053 J]	0.00061 J
PCBs-Filtered				
None Detected		--	--	--
Semivolatile Organics				
bis(2-Ethylhexyl)phthalate		50	0.00099 J [ND(0.0051)]	ND(0.0051)

Notes:

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

Data Qualifiers:

Organics (volatiles, PCBs, semivolatiles)

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

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

Plant Site 1 Groundwater Management Area
 Groundwater Quality Monitoring Interim Report for Fall 2008
 General Electric Company - Pittsfield, Massachusetts
 (Results are presented in parts per million, ppm)

Parameter	Location ID: Sample ID: Date Collected:	MCP UCL for GroundWater	30s Complex		East St. Area 1 - South	
			ES2-19 10/23/08	GMA1-3 10/16/08	31R 10/30/08	37R 10/16/08
Volatil Organic						
Methylene Chloride		100	NA	NA	NA	NA
PCBs-Filtered						
None Detected		--	--	--	--	--
Semivolatil Organic						
bis(2-Ethylhexyl)phthalate		100	NA	NA	NA	NA

Parameter	Location ID: Sample ID: Date Collected:	MCP UCL for GroundWater	East St. Area 2 - North			
			17A 10/16/08	95-20 10/15/08	A7-R 12/11/08	ES1-10 10/15/08
Volatil Organic						
Methylene Chloride		100	NA	NA	NA	NA
PCBs-Filtered						
None Detected		--	--	--	--	--
Semivolatil Organic						
bis(2-Ethylhexyl)phthalate		100	NA	NA	NA	NA

Parameter	Location ID: Sample ID: Date Collected:	MCP UCL for GroundWater	East St. Area 2 - North		East St. Area 2 - South	Lyman Street Area
			ES1-18 10/23/08	F-1 10/15/08	95-25 10/16/08	LSSC-16S 10/16/08
Volatil Organic						
Methylene Chloride		100	NA	NA	NA	NA
PCBs-Filtered						
None Detected		--	--	--	--	--
Semivolatil Organic						
bis(2-Ethylhexyl)phthalate		100	NA	NA	NA	NA

Parameter	Location ID: Sample ID: Date Collected:	MCP UCL for GroundWater	Lyman Street Area	Newell St. Area I	Newell St. Area II	
			MW-3R 10/16/08	MM-1 10/24/08	GMA1-25 10/17/08	GMA1-27 10/17/08
Volatil Organic						
Methylene Chloride		100	NA	NA	0.00024 J [0.00053 J]	0.00061 J
PCBs-Filtered						
None Detected		--	--	--	--	--
Semivolatil Organic						
bis(2-Ethylhexyl)phthalate		100	NA	NA	0.00099 J [ND(0.0051)]	ND(0.0051)

Notes:

1. Samples were collected by ARCADIS and submitted to SGS Environmental Services, Inc. for analysis of volatiles, PCBs (filtered) and semivolatiles.
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 parentheses is the associated detection limit.
5. Only those constituents detected in one or more samples are summarized.
6. Field duplicate sample results are presented in brackets.
7. -- Indicates that all constituents for the parameter group were not detected.

Data Qualifiers:

Organics (volatiles, PCBs, semivolatiles)

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

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

Table 8
Proposed Spring 2009 Interim Groundwater Quality Monitoring Program

Plant Site 1 Groundwater Management Area
Groundwater Quality Monitoring Interim Report For Fall 2008
General Electric Company - Pittsfield, Massachusetts

Well Number	Monitoring Well Usage	Analysis	Basis for Inclusion or Exclusion/Comments
RAA 2 - 30s COMPLEX			
ES2-19	GW-2 Sentinel	PCB	Second of four rounds of PCB analyses to be conducted to evaluate compliance with MCP GW-2 standard.
GMA1-3	GW-2 Sentinel	PCB	Second of four rounds of PCB analyses to be conducted to evaluate compliance with MCP GW-2 standard.
RAA 4 - EAST STREET AREA 2-SOUTH			
95-25	GW-2 Sentinel	PCB	Second of four rounds of PCB analyses to be conducted to evaluate compliance with MCP GW-2 standard.
RAA 5 - EAST STREET AREA 2-NORTH			
17A	GW-2 Sentinel	PCB	Second of four rounds of PCB analyses to be conducted to evaluate compliance with MCP GW-2 standard.
95-20	GW-2 Sentinel	PCB	Second of four rounds of PCB analyses to be conducted to evaluate compliance with MCP GW-2 standard.
A7	GW-2 Sentinel	PCB	Second of four rounds of PCB analyses to be conducted to evaluate compliance with MCP GW-2 standard.
ES1-10	GW-2 Sentinel	PCB	Second of four rounds of PCB analyses to be conducted to evaluate compliance with MCP GW-2 standard.
ES1-18	GW-2 Sentinel	PCB	Second of four rounds of PCB analyses to be conducted to evaluate compliance with MCP GW-2 standard.
F-1	GW-2 Sentinel	PCB	Second of four rounds of PCB analyses to be conducted to evaluate compliance with MCP GW-2 standard.
GMA1-4	GW-2 Sentinel (Conditional)	PCB	First of four rounds of PCB analyses to be conducted to evaluate compliance with MCP GW-2 standard, if depth to groundwater is less than 15 feet and if an adequate volume of water is present in the well.

**Table 8
Proposed Spring 2009 Interim Groundwater Quality Monitoring Program**

**Plant Site 1 Groundwater Management Area
Groundwater Quality Monitoring Interim Report For Fall 2008
General Electric Company - Pittsfield, Massachusetts**

Well Number	Monitoring Well Usage	Analysis	Basis for Inclusion or Exclusion/Comments
RAA 12 - LYMAN STREET AREA			
LSSC-16S	GW-2 Sentinel	PCB	Second of four rounds of PCB analyses to be conducted to evaluate compliance with MCP GW-2 standard.
MW-3R	GW-2 Sentinel	PCB	Second of four rounds of PCB analyses to be conducted to evaluate compliance with MCP GW-2 standard.
RAA 13 - NEWELL STREET AREA II			
GMA1-25	GW-2 Sentinel/GW-3 Perimeter (Upgradient)	VOC/SVOC/PCB	Fourth of four rounds of sampling and analysis to be conducted as required by EPA.
GMA1-27	GW-2 Sentinel/GW-3 Perimeter (Upgradient)	VOC/SVOC/PCB	Fourth of four rounds of sampling and analysis to be conducted as required by EPA.
RAA 14 - NEWELL STREET AREA I			
MM-1	GW-2 Sentinel	PCB	Second of four rounds of PCB analyses to be conducted to evaluate compliance with MCP GW-2 standard.
RAA 18 - EAST STREET AREA 1 SOUTH			
31R	GW-2 Sentinel	PCB	Second of four rounds of PCB analyses to be conducted to evaluate compliance with MCP GW-2 standard.
37R	GW-2 Sentinel	PCB	Second of four rounds of PCB analyses to be conducted to evaluate compliance with MCP GW-2 standard.

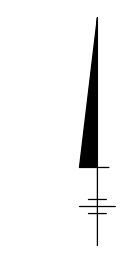
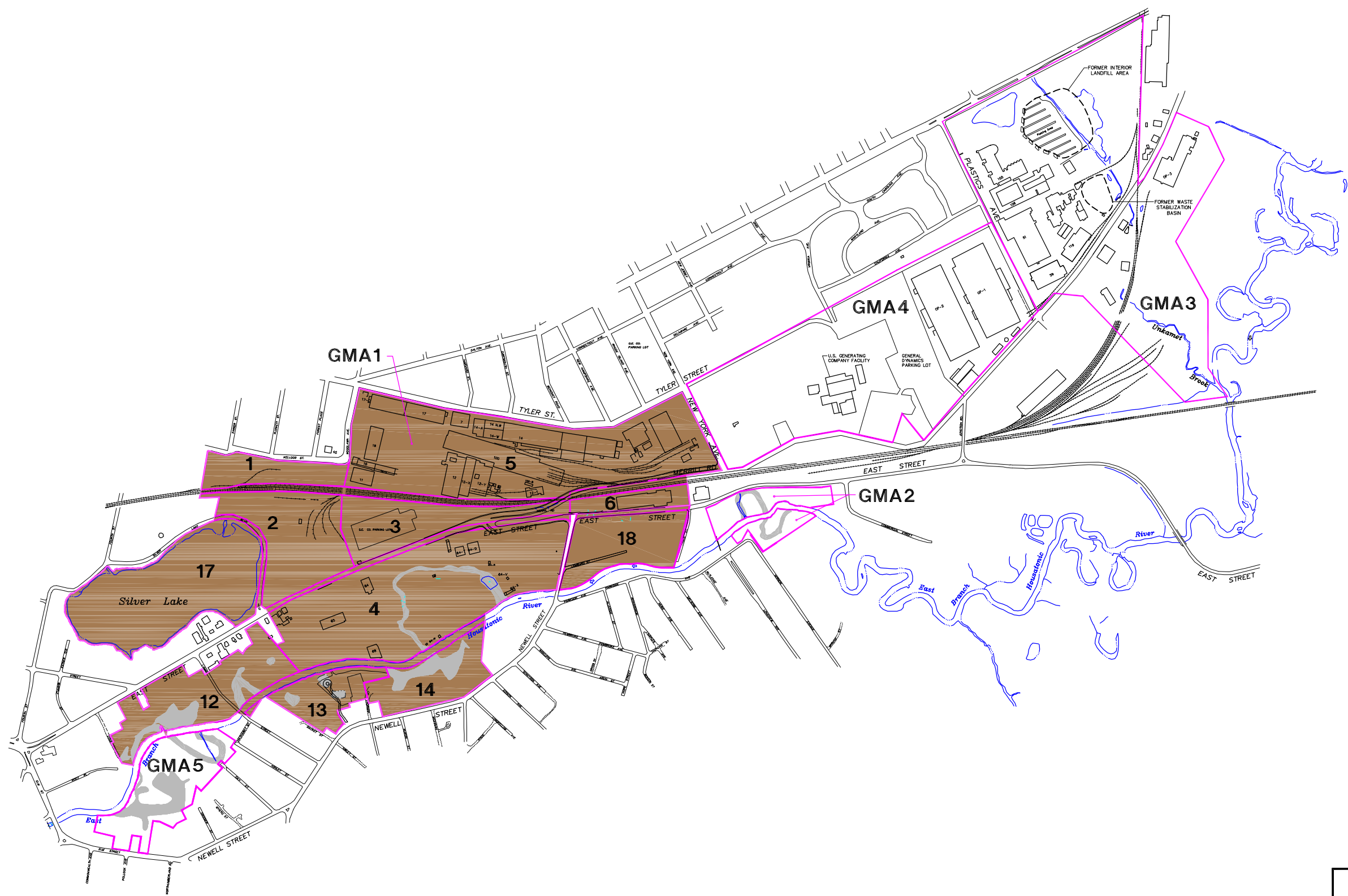
NOTES:

1. The wells listed above are sampled on a semi-annual as part of the interim groundwater quality monitoring program at GMA 1.
2. The wells will be sampled for the listed parameters on a semi-annual basis and may be proposed to be removed from the interim groundwater quality monitoring program after the fourth data set is collected.
3. All analyses for PCBs will be performed on filtered samples only.
4. Additional wells included in the interim monitoring program for annual groundwater quality sampling are not included in this table since they will not be sampled in spring 2009. The sampling schedule for those wells alternates between the spring and fall seasons each year, with the next sampling round to be conducted in fall 2009.

ARCADIS

Figures

CITY: SYRACUSE DIV/GROUP: ENVCADD DB: GMS RCB LAF LD: DMW PIC: P. KEANEY PM: J. NUSS TM: N. SMITH LTR: ONE OFF REF: GAGE: ENVCADD/SYRACUSE/ENVCADD/10113000000004/DWG/GMA/INTERM/10113001.DWG LAYOUT: 1 SAVER: 128/2009 3:41 PM ACADVER: 17.0S (LMS TECH) PAGESETUP: C4D2B-PDF PLOTSTYLETABLE: PLT:FULLCTB PLOTTED: 128/2009 3:41 PM BY: SARTORI, KATHERINE XREFS: IMAGES: PROJECTNAME: -



LEGEND:

**GMA 1
(PLANT SITE 1)**

COMPRISED OF:

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

- GMA 2**
- GMA 3**
- GMA 4**
- GMA 5**

- GMA 2-FORMER OXBOWS J&K
- GMA 3-PLANT SITE 2
- GMA 4-PLANT SITE 3
- GMA 5-FORMER OXBOWS A&C

NOTES:

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



GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS
GMA 1 INTERIM MONITORING PROGRAM

GROUNDWATER MANAGEMENT AREAS


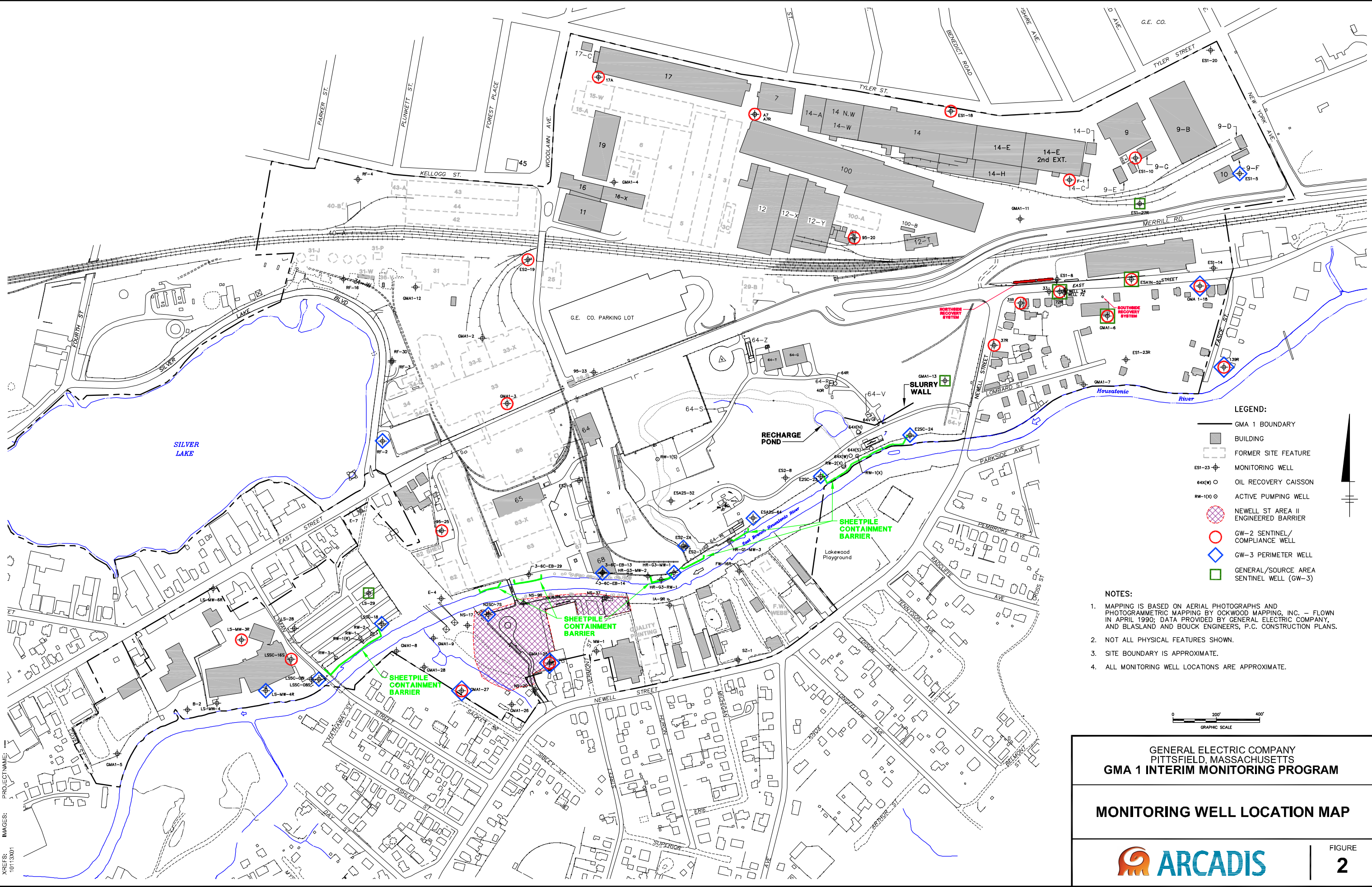


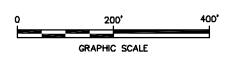
FIGURE
1

CITY: SYRACUSE DIV/GROUP: ENVCADD DB: GMS RCB LAF LD: DMW PIC: P. KEANEY TM: N. SMITH LYR: ON*OFF*REF*
 GAGE: ENVCADD/SYRACUSE/ACT/IN001/01130000/00004/DWG/GMANTERM/0113002.DWG LAYOUT: 2. SAVED: 7/23/2009 8:08 AM ACADVER: 17.05 (LMS TECH) PAGES: 17 OF 17 PLOT: PLT/PLT.CTB PLOTTED: 12/28/2009 3:43 PM BY: SARTORI, KATHERINE



- LEGEND:**
- GMA 1 BOUNDARY
 - BUILDING
 - - - FORMER SITE FEATURE
 - ES1-23 ○ MONITORING WELL
 - 64(X)W ○ OIL RECOVERY CAISSON
 - RW-1(X)O ○ ACTIVE PUMPING WELL
 - NEWELL ST AREA II ENGINEERED BARRIER
 - GW-2 SENTINEL/COMPLIANCE WELL
 - ◇ GW-3 PERIMETER WELL
 - GENERAL/SOURCE AREA SENTINEL WELL (GW-3)

- NOTES:**
1. MAPPING IS BASED ON AERIAL PHOTOGRAPHS AND PHOTOGRAMMETRIC MAPPING BY OCKWOOD MAPPING, INC. - FLOWN IN APRIL 1990; DATA PROVIDED BY GENERAL ELECTRIC COMPANY, AND BLASLAND AND BOUCK ENGINEERS, P.C. CONSTRUCTION PLANS.
 2. NOT ALL PHYSICAL FEATURES SHOWN.
 3. SITE BOUNDARY IS APPROXIMATE.
 4. ALL MONITORING WELL LOCATIONS ARE APPROXIMATE.



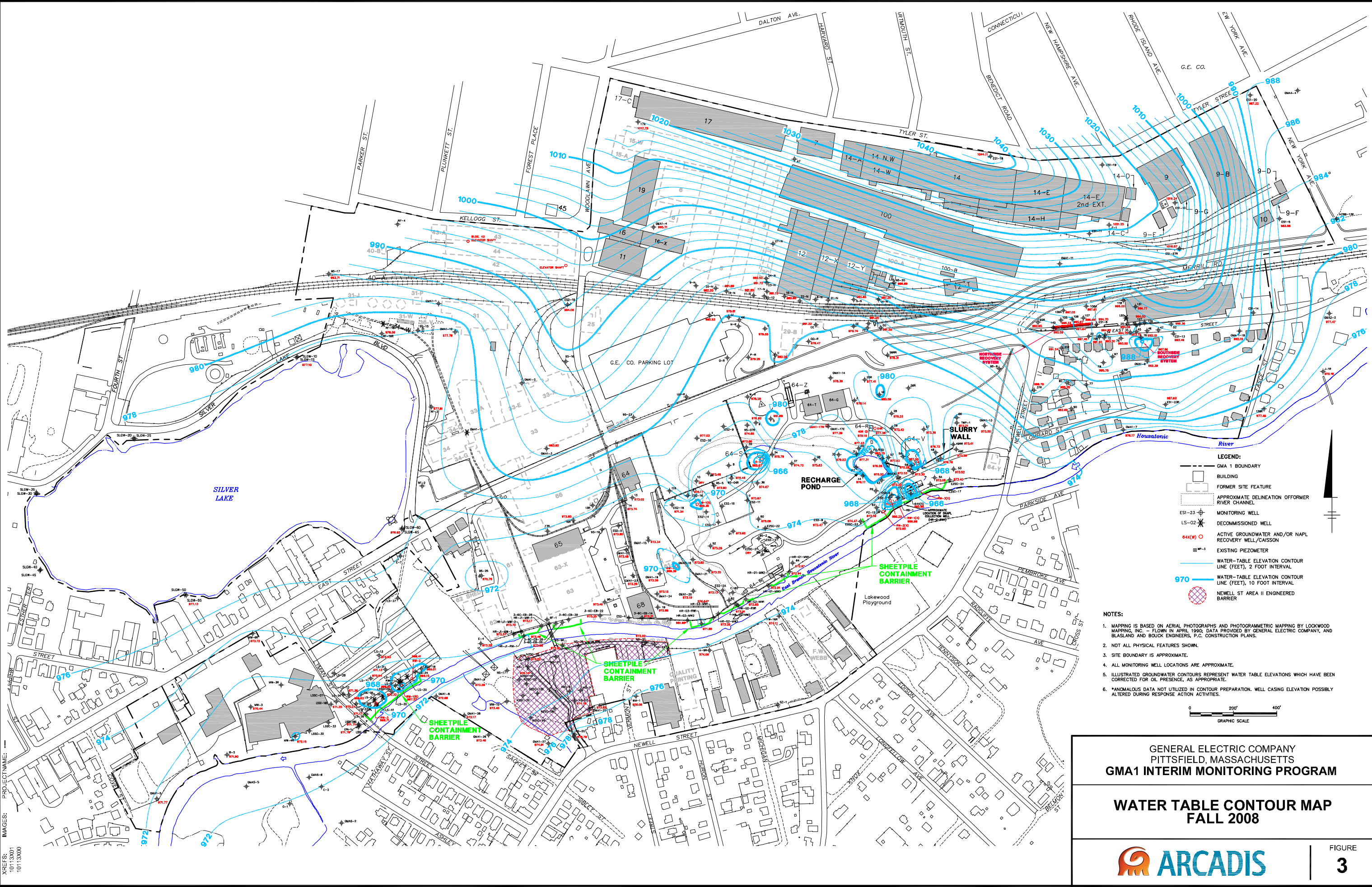
**GENERAL ELECTRIC COMPANY
 PITTSFIELD, MASSACHUSETTS
 GMA 1 INTERIM MONITORING PROGRAM**

MONITORING WELL LOCATION MAP

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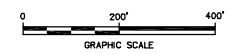
FIGURE
2

CITY: SYRACUSE DIV: GROUP: ENCAD DB: GMS RCB LAF LD: DMW PIC: P. KEANEY PM: J. NUSS TM: N. SMITH LYR: ON: OFF: REF: GAGE: ENCAD: SYRACUSE: ACT: IN: 0010113000000004DWG: G: M: A: I: T: E: R: M: 10113001.DWG LAYOUT: 3 SAVED: 12/28/2009 3:43 PM ACADVER: 17.05 (LMS TECH) PAGES: 17 OF 17 PLOT: PLT: ALL: CTB PLOTTED: 12/28/2009 3:43 PM BY: SARTORI, KATHERINE



- LEGEND:**
- GMA 1 BOUNDARY
 - ▭ BUILDING
 - ▭ FORMER SITE FEATURE
 - - - APPROXIMATE DELINEATION OF FORMER RIVER CHANNEL
 - ⊕ ES1-23 MONITORING WELL
 - ⊕ LS-02 DECOMMISSIONED WELL
 - ⊕ 64(W) ACTIVE GROUNDWATER AND/OR NAPL RECOVERY WELL/CAISSON
 - ⊕ EX-101 EXISTING PIEZOMETER
 - WATER-TABLE ELEVATION CONTOUR LINE (FEET), 2 FOOT INTERVAL
 - WATER-TABLE ELEVATION CONTOUR LINE (FEET), 10 FOOT INTERVAL
 - ⊕ NEWELL ST AREA II ENGINEERED BARRIER

- NOTES:**
1. MAPPING IS BASED ON AERIAL PHOTOGRAPHS AND PHOTOGRAMMETRIC MAPPING BY LOCKWOOD MAPPING, INC. - FLOWN IN APRIL 1995; DATA PROVIDED BY GENERAL ELECTRIC COMPANY, AND BLASLAND AND BOUCK ENGINEERS, P.C. CONSTRUCTION PLANS.
 2. NOT ALL PHYSICAL FEATURES SHOWN.
 3. SITE BOUNDARY IS APPROXIMATE.
 4. ALL MONITORING WELL LOCATIONS ARE APPROXIMATE.
 5. ILLUSTRATED GROUNDWATER CONTOURS REPRESENT WATER TABLE ELEVATIONS WHICH HAVE BEEN CORRECTED FOR OIL PRESENCE, AS APPROPRIATE.
 6. *ANOMALOUS DATA NOT UTILIZED IN CONTOUR PREPARATION. WELL CASING ELEVATION POSSIBLY ALTERED DURING RESPONSE ACTION ACTIVITIES.



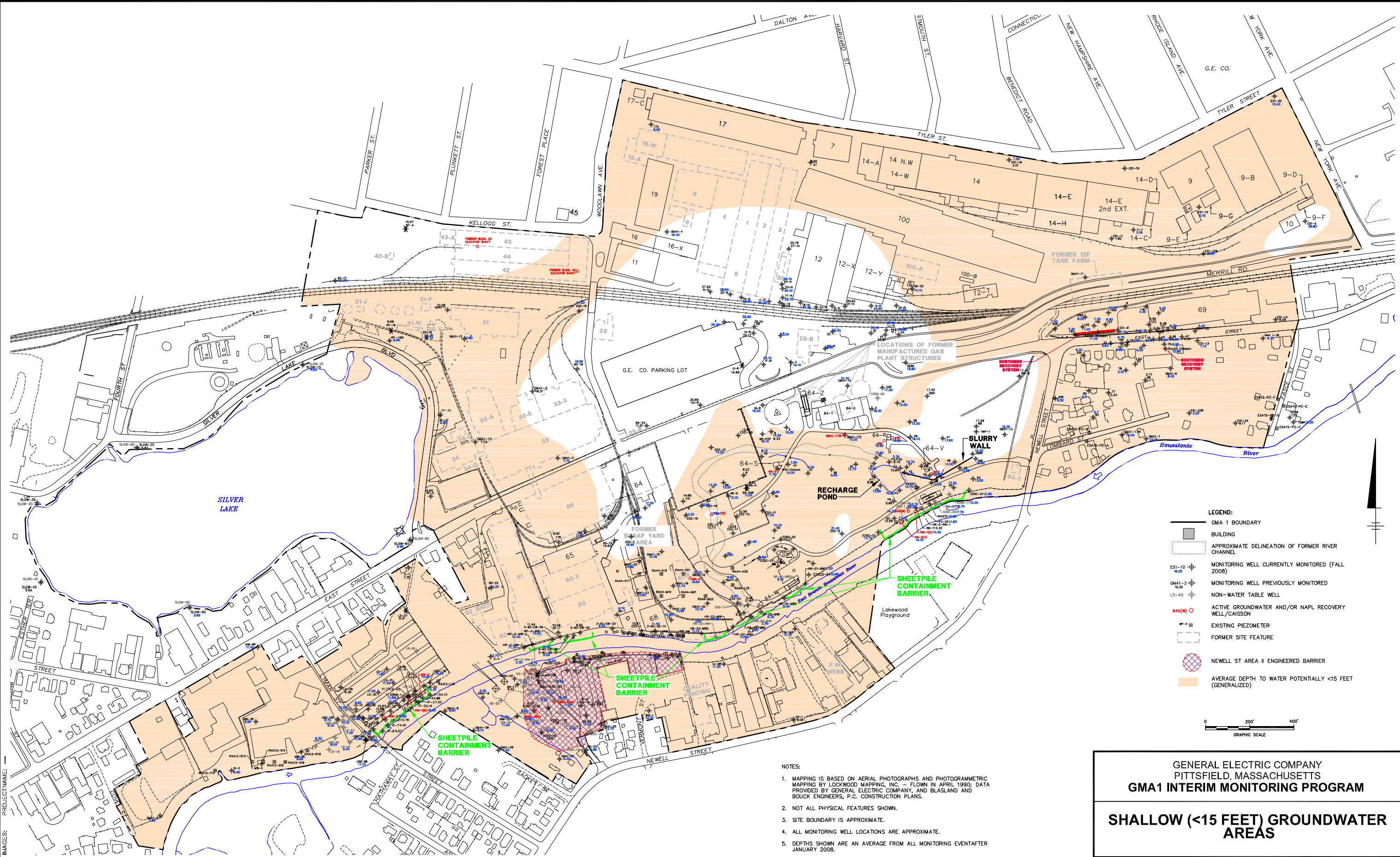
GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS
GMA1 INTERIM MONITORING PROGRAM

**WATER TABLE CONTOUR MAP
FALL 2008**

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FIGURE
3

CITY: SYRACUSE DIV/PROJECT: ENV/DB: PGL/AMSLAF: LD: DMW PIC: P. KEANEY PM: J. NUSS TM: N. SMITH LVR: ON/OFF/REF*
 GAGE: ENV/CA/DC/SY/RAC/SE/ACT/IN/00/101130/000/00004/DWG/MAN/ITER/01/13/03.DWG LAYOUT: 4. SAVED: 7/30/2009 8:43 AM ACADVER: 17.05 (LMS TECH) PAGES: 25 OF 25 PLOTSTYLE: PLT/ULL/CTB PLOTTED: 7/30/2009 8:44 AM BY: SARTORI, KATHERINE
 PROJECT NAME: GMA1 INTERIM MONITORING PROGRAM



- NOTES:
1. MAPPING IS BASED ON AERIAL PHOTOGRAPHS AND PHOTOGAMMETRIC MAPPING BY LOCKWOOD MAPPING, INC. - FLOWN IN APRIL 1990; DATA PROVIDED BY GENERAL ELECTRIC COMPANY, AND BLASLAND AND BOUCK ENGINEERS, P.C. CONSTRUCTION PLANS.
 2. NOT ALL PHYSICAL FEATURES SHOWN.
 3. SITE BOUNDARY IS APPROXIMATE.
 4. ALL MONITORING WELL LOCATIONS ARE APPROXIMATE.
 5. DEPTHS SHOWN ARE AN AVERAGE FROM ALL MONITORING EVENTS AFTER JANUARY 2008.
 6. DEPTHS ARE SHOWN BLS (BELOW LAND SURFACE).

LEGEND:

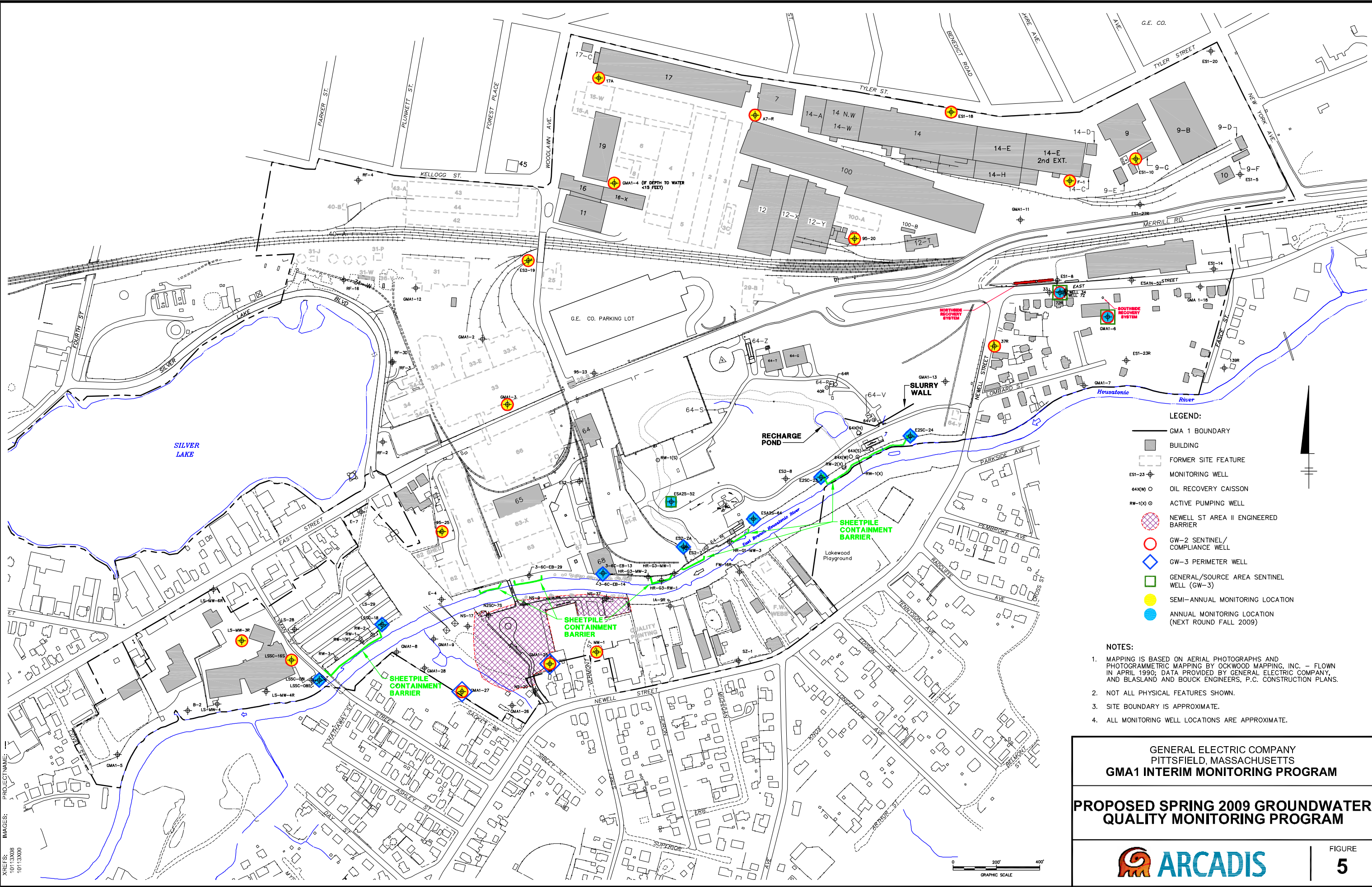
- GMA 1 BOUNDARY
- BUILDING
- APPROXIMATE DELINEATION OF FORMER RIVER CHANNEL
- MONITORING WELL CURRENTLY MONITORED (FALL 2008)
- MONITORING WELL PREVIOUSLY MONITORED
- NON-WATER TABLE WELL
- ACTIVE GROUNDWATER AND/OR NAPL RECOVERY WELL/CAISSON
- EXISTING PIEZOMETER
- FORMER SITE FEATURE
- NEWELL ST AREA II ENGINEERED BARRIER
- AVERAGE DEPTH TO WATER POTENTIALLY <15 FEET (GENERALIZED)

0 200' 400'
GRAPHIC SCALE

GENERAL ELECTRIC COMPANY
 PITTSFIELD, MASSACHUSETTS
GMA1 INTERIM MONITORING PROGRAM

SHALLOW (<15 FEET) GROUNDWATER AREAS

CITY: SYRACUSE DIV: GROUP: ENVCADD DB: GMS RCB LAF LD: DMW PIC: P. KEANEY PM: J. NUSS TM: N. SMITH LYR: ON: OFF: REF: GEGE: ENVCADD: SYRACUSE: ACT: IN: 0010113000000004: DWG: GMA1: INTER: M: 101130: 4: DWG LAYOUT: 5: SAVED: 12/28/2009 3:42 PM ACAD: VER: 17.05 (LMS TECH) PAGESETUP: C4D2B: PDF PLOTSTYLETABLE: PLT: FULL: CTB PLOTTED: 12/28/2009 3:42 PM BY: SARTORI, KATHERINE



- LEGEND:**
- GMA 1 BOUNDARY
 - BUILDING
 - FORMER SITE FEATURE
 - ⊕ ESI-23 MONITORING WELL
 - 64(X) OIL RECOVERY CAISSON
 - RW-1(X) ACTIVE PUMPING WELL
 - ⊗ NEWELL ST AREA II ENGINEERED BARRIER
 - GW-2 SENTINEL/COMPLIANCE WELL
 - ◇ GW-3 PERIMETER WELL
 - GENERAL/SOURCE AREA SENTINEL WELL (GW-3)
 - SEMI-ANNUAL MONITORING LOCATION (NEXT ROUND FALL 2009)
 - ANNUAL MONITORING LOCATION

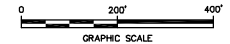
- NOTES:**
1. MAPPING IS BASED ON AERIAL PHOTOGRAPHS AND PHOTOGRAMMETRIC MAPPING BY OCKWOOD MAPPING, INC. - FLOWN IN APRIL 1990; DATA PROVIDED BY GENERAL ELECTRIC COMPANY, AND BLASLAND AND BOUCK ENGINEERS, P.C. CONSTRUCTION PLANS.
 2. NOT ALL PHYSICAL FEATURES SHOWN.
 3. SITE BOUNDARY IS APPROXIMATE.
 4. ALL MONITORING WELL LOCATIONS ARE APPROXIMATE.

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS
GMA1 INTERIM MONITORING PROGRAM

**PROPOSED SPRING 2009 GROUNDWATER
QUALITY MONITORING PROGRAM**

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FIGURE
5



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Appendices

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Appendix A

Field Sampling Data

Table A-1

East Branch Housatonic River at Coltsville, MA River Discharge for Fall 2008

Plant Site 1 Groundwater Management Area

Groundwater Quality Monitoring Interim Report For Fall 2008

General Electric Company - Pittsfield Massachusetts

Date	Maximum Discharge (cfs)	Minimum Discharge (cfs)	Comments
15-Oct	47	35	Groundwater Samples Collected
16-Oct	40	33	Groundwater Samples Collected
17-Oct	42	37	Groundwater Samples Collected
18-Oct	40	35	No Samples Collected
19-Oct	38	32	No Samples Collected
20-Oct	34	30	No Samples Collected
21-Oct	38	31	No Samples Collected
22-Oct	58	35	No Samples Collected
23-Oct	61	54	Groundwater Samples Collected
24-Oct	61	56	Groundwater Samples Collected
25-Oct	243	56	No Samples Collected
26-Oct	552	266	No Samples Collected
27-Oct	355	215	No Samples Collected
28-Oct	496	215	Groundwater Samples Collected
29-Oct	478	394	No Samples Collected
30-Oct	398	266	Groundwater Samples Collected
11-Dec	439	378	Groundwater Samples Collected

NOTES:

1. Fall 2008 groundwater sampling event at GMA 1 was conducted between October 15 - 30, 2008 and on December 11, 2008.
2. Groundwater samples were collected on the dates listed above.

Table A-2

Housatonic River Elevation at Lyman and Newell Street Bridges

Plant Site 1 Groundwater Management Area

Groundwater Quality Monitoring Interim Report For Fall 2008

General Electric Company - Pittsfield Massachusetts

Date	Lyman St Bridge Elevation (ft)	Newell St Bridge Elevation (ft)
15-Oct	16.46	19.75
16-Oct	16.53	19.70
17-Oct	NA	NA
23-Oct	16.30	19.55
24-Oct	NA	NA
28-Oct	15.05	17.74
30-Oct	14.95	NA
11-Dec	NA	NA

NOTES:

1. Fall 2008 groundwater sampling event at GMA 1 was conducted between October 15 - 30, 2008 and on December 11, 2008.
2. Groundwater samples were collected in the vicinity of the river monitoring points on the dates listed above.
3. NA - River elevation data not available.

GROUNDWATER SAMPLING LOG

Well No. A7-R
 Key No. 2537
 PID Background (ppm) 0
 Well Headstage (ppm) 0

Site/GMA Name GE Pittsfield/GMA-1
 Sampling Personnel GAR
 Date 12/11/08
 Weather Overcast, Rain and sleet, 25-30°F

WELL INFORMATION

Reference Point Marked? Y N
 Height of Reference Point -0.05' Meas. From Ground
 Well Diameter 2"
 Screen Interval Depth 3'-17' Meas. From Ground
 Water Table Depth 6.63' Meas. From TIC
 Well Depth 15.39' Meas. From TIC
 Length of Water Column 9.15'
 Volume of Water in Well 1.49 gallons
 Intake Depth of Pump/Tubing 11' Meas. From TIC

Sample Time 17:15
 Sample ID A7-R
 Duplicate ID GMA1-DWP-2
 MCMMSD Collected Here
 Split Sample ID -

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

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

Redevelop? Y N

EVAUATION INFORMATION

Pump Start Time 14:35
 Pump Stop Time 18:05
 Minutes of Pumping 210
 Volume of Water Removed 5.25 gallons
 Did Well Go Dry? Y N

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

Water Quality Meter Type(s) / Serial Numbers: YSI-556 MP3 Hach 2100P Turbidity meter #2

Time	Pump Rate (L/min)	Total Gallons Removed	Water Level (R TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mc/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
14:40	100ml	0.13	6.86	-	-	-	184	-	-
14:50	100ml	0.40	7.08	-	-	-	235	-	-
15:05	100ml	0.79	7.20	-	-	-	163	-	-
15:15	100ml	1.06	7.28	-	-	-	125	-	-
15:35	100ml	1.59	7.36	-	-	-	69	-	-
15:45	100ml	1.85	7.12	-	-	-	68	-	-
15:55	100ml	2.11	7.15	-	-	-	76	-	-
16:05	100ml	2.38	7.08	6.64	10.61	3.621	61	30.30	-216.1

* 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 Water: Cloudy, light-brown, odor loss
 Final Purge Water: Clear, odor loss

SAMPLE DESTINATION

Laboratory: JGS
 Delivered Via: UPS
 Airbill #: -

Field Sampling Coordinator: [Signature]

GROUNDWATER SAMPLING LOG

Well No. E52-19
 Key No.
 PID Background (ppm) 0
 Well Headspace (ppm) 0

Site/GMA Name GE P.H.s field / GMA-1
 Sampling Personnel DAZ / KIC
 Date 10/23/08
 Weather SO, Sunny

WELL INFORMATION

Reference Point Marked? Y N
 Height of Reference Point _____ Meas. From _____
 Well Diameter 0.75'
 Screen Interval Depth 11.5' - 21.5' Meas. From Ground
 Water Table Depth 14.39' Meas. From TIC
 Well Depth 18.88' Meas. From TIC
 Length of Water Column 4.49'
 Volume of Water in Well 0.10 gal
 Intake Depth of Pump/Tubing 16.6" Meas. From TIC

Sample Time 15:00
 Sample ID E52-19
 Duplicate ID
 MS/MSD
 Spill Sample ID

Reference Point Identification:

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

Redevelop? Y N

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

EVACUATION INFORMATION

Pump Start Time 14:55
 Pump Stop Time 15:05
 Minutes of Pumping 10
 Volume of Water Removed 0.69 gal
 Did Well Go Dry? Y N

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

Water Quality Meter Type(s) / Serial Numbers: YSI-556 MP3 Hoch 2100P Turbidity

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
15:05	250ml	0.33	18.81	14.31	7.65	0.464	7999	7.87	71.7

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

OBSERVATIONS/SAMPLING METHOD DEVIATIONS

SAMPLE DESTINATION

Laboratory: JGS
 Delivered Via: UPS
 Airbill #:

Field Sampling Coordinator: [Signature]

GROUNDWATER SAMPLING LOG

Well No. GMAI-3
 Key No.
 PHD Background (ppm)
 Well Headspace (ppm)

Site/GMA Name GMAI of Pittsfield
 Sampling Personnel KIC DAZ
 Date 10/14/08
 Weather 60's Rainy

WELL INFORMATION

Reference Point Marked? (Y) N
 Height of Reference Point NA Meas. From
 Well Diameter 2"
 Screen Interval Depth 5.910 Meas. From BLS
 Water Table Depth 7.13 Meas. From TIC
 Well Depth 15.45 Meas. From TIC
 Length of Water Column 4.32
 Volume of Water in Well 1.33 gal.
 Intake Depth of Pump/Tubing 11.45 Meas. From TIC

Sample Time 1518
 Sample ID GMAI-3
 Duplicate ID N/A
 MS/MSD N/A
 Split Sample ID N/A

Reference Point Identification:

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

Redevelop? Y (N)

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

EVACUATION INFORMATION

Pump Start Time 1405
 Pump Stop Time 1523
 Minutes of Pumping 78
 Volume of Water Removed 3.30 gallons
 Did Well Go Dry? Y (N)

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

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

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
1415	150	0.20	7.76				54		
1420	300	0.60	7.89				150		
1425	200	0.52	8.39	15.25	7.16	1533	7.0	1.48	21.5
1430	↓	0.78	8.54	15.14	7.06	1547	5.0	1.80	10.2
1435	↓	1.04	8.91	15.13	7.02	1558	4.0	2.55	7.9
1440	↓	1.31	9.21	15.11	6.99	1562	4.0	2.64	7.1
1445	150	1.51	9.42	15.15	6.97	1568	4.0	2.14	5.2
1450		1.71	9.63	15.11	6.99	1568	4.0	1.74	4.2

* 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

SAMPLE DESTINATION

Laboratory: SGS
 Delivered Via: UPS
 Airbill #:

Field Sampling Coordinator: P. Zude

GROUNDWATER SAMPLING LOG

Well No. GMA1-3

Site/GMA Name GMA1 GE PITTSFIELD
 Sampling Personnel D. Zwick, K. Corneli
 Date 10/16/08
 Weather 60°F/60%RH

WELL INFORMATION - See Page 1

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
1453	200	1.87	9.77	15.16	6.94	1.572	4.0	1.38	2.2
1456		2.03	9.96	15.14	6.94	1.575	4.0	1.08	0.2
1459		2.19	10.17	15.21	6.93	1.571	4.0	0.83	-0.8
1502		2.34	10.27	15.23	6.94	1.569	3.0	0.53	-2.7
1505		2.50	NA	15.24	6.96	1.559	4.0	0.35	-5.9
1508		2.66	11.16	15.25	6.97	1.554	4.0	0.30	-6.4
1511		2.82	11.31	15.22	7.01	1.551	NA*	0.49	-8.7
1513		2.93	11.67	15.18	7.01	1.552	NA*	0.46	-8.9
1516		3.08	11.59	15.11	7.01	1.555	NA*	0.42	-8.9
Collected sample @				1517					

* 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

* Turbidity meter not used, NO change in turb. (signature from 1508 reading)

GROUNDWATER SAMPLING LOG

Well No. F-1
 Key No. -
 PID Background (ppm) 0
 Well Headspace (ppm) 0

Site/GMA Name GMA1
 Sampling Personnel EMC/DA
 Date 10/15/08
 Weather Sunny - Mid 70s

WELL INFORMATION

Reference Point Marked? Y N
 Height of Reference Point 3' Meas. From GROUND
 Well Diameter 2"
 Screen Interval Depth 15.4/19' Meas. From TIC
 Water Table Depth 3.05' Meas. From TIC
 Well Depth 19' Meas. From TIC
 Length of Water Column 15.95'
 Volume of Water in Well 2.59'
 Intake Depth of Pump/Tubing 14' Meas. From TIC

Sample Time 15:20
 Sample ID F-1
 Duplicate ID -
 MSMSO -
 Spill Sample ID -

Reference Point Identification:

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

Redevelop? Y N

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

EVACUATION INFORMATION

Pump Start Time 14:20
 Pump Stop Time 15:25
 Minutes of Pumping 65
 Volume of Water Removed 425 1.5 gallons
 Did Well Go Dry? Y N

Evacuation Method: Bailer () Bladder Pump
 Peristaltic Pump () Submersible Pump () Other/Specify ()
 Pump Type: Marschalle-System 2000
 Samples collected by same method as evacuation? Y N (specify)

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

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
14:20	100	INITIAL	3.61	-	-	-	27	-	-
14:25	100	500	3.78	20.87	7.55	0.888	31	10.72	-180.1
14:30	100	1000	4.82	20.87	7.59	0.876	35	7.97	-179.1
14:35	150	1750	5.04	20.51	7.60	0.827	29	7.63	-178.1
14:40	75	2125	5.07	20.77	7.64	0.811	20	7.63	-173.9
14:45	75	2500	5.09	20.63	7.63	0.769	17	7.63	-171.1
14:50	75	2875	5.17	20.66	7.68	0.755	12	7.71	-167.8
14:55	75	3250	5.25	20.58	7.67	0.691	10	7.67	-166.9

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

OBSERVATIONS/SAMPLING METHOD DEVIATIONS Pump intake depth pre-determined

SAMPLE DESTINATION

Laboratory: 385
 Delivered Via: UPS
 Airbill #: -

Field Sampling Coordinator: [Signature]

GROUNDWATER SAMPLING LOG

Well No. 95-20
 Key No. -
 PID Background (ppm) -
 Well Headspace (ppm) -

Site/GMA Name GMAL GE P.H.S. Field
 Sampling Personnel KIC
 Date 10/15/08
 Weather Sunny 60's

WELL INFORMATION

Reference Point Marked? N
 Height of Reference Point _____ Meas. From _____
 Well Diameter 8"
 Screen Interval Depth 12-20' Meas. From Ground
 Water Table Depth 13.84' Meas. From TIC
 Well Depth 17.96' Meas. From TIC
 Length of Water Column 6.12'
 Volume of Water in Well 1.00 gallon
 Intake Depth of Pump/Tubing ~17.00' Meas. From TIC

Sample Time 1620
 Sample ID 95-20
 Duplicate ID -
 MS/MSD -
 Split Sample ID -

Reference Point Identification:

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

Redevelop? Y N

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

EVACUATION INFORMATION

Pump Start Time 16:05
 Pump Stop Time 16:30
 Minutes of Pumping 85
 Volume of Water Removed 5.6 gallons
 Did Well Go Dry? Y N

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

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

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
* 1510	250	0.33	13.97	-	7.13	-	7	-	-
1515		0.66	14.32	16.46	7.13	0.869	4	6.83	-53.1
1520		0.99	14.44	16.40	7.09	0.863	3	6.51	-50.9
1525		1.32	14.77	16.58	7.05	0.860	2	6.13	-38.4
1530		1.65	14.94	16.49	7.04	0.864	1	6.07	-22.1
1535	↓	1.98	15.13	16.35	7.02	0.872	1	5.91	-8.2
1540		2.31	15.39	16.36	7.02	0.875	1	5.61	0.2
1545		2.64	15.47	16.24	7.04	0.882	1	5.59	12.9


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

OBSERVATIONS/SAMPLING METHOD DEVIATIONS

* Hooked up to YSI

SAMPLE DESTINATION

Laboratory: SGS
 Delivered Via: UPJ
 Airbill #: -

Field Sampling Coordinator: 

GROUNDWATER SAMPLING LOG

Well No. 17A
 Key No. _____
 PID Background (ppm) _____
 Well Headspace (ppm) _____

Site/GMA Name GMA 1 GIG Phillipsfield
 Sampling Personnel Dan Zuck / Kary Cornwall
 Date 10/15/08
 Weather Sunny 60's

WELL INFORMATION

Reference Point Marked? Y N
 Height of Reference Point -3' Meas. From BLS
 Well Diameter 2"
 Screen Interval Depth 5-20' Meas. From BLS
 Water Table Depth 7.25 Meas. From TIC
 Well Depth 19.45 Meas. From TIC
 Length of Water Column 12.20
 Volume of Water in Well 1.98
 Intake Depth of Pump/Tubing ~15' Meas. From TIC

Sample Time 10:30 AM on 10/16/08
 Sample ID 17A
 Duplicate ID _____
 MS/MSD _____
 Split Sample ID _____

Reference Point Identification:

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

Redevelop? Y N

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

EVACUATION INFORMATION

Pump Start Time 1255 1335
 Pump Stop Time 1415 1015
 Minutes of Pumping 105 1040
 Volume of Water Removed 9.0 gallons
 Did Well Go Dry? Y N

Evacuation Method: Bailor () Bladder Pump (X)
 Peristaltic Pump () Submersible Pump () Other/Specify ()
 Pump Type: Marschalle-System One
 Samples collected by same method as evacuation? Yes No (specify)

Water Quality Meter Type(s) / Serial Numbers: YSI 556 MPS (#3 unit), Hach 2100P

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
1305	—	—	8.55	—	—	—	363	—	—
1308	—	—	9.31	—	—	—	48	—	—
1310	480	1.90	9.62	19.44	7.84	1.394	44	6.20	-18.8
1315	480	2.54	9.91	19.03	7.80	1.397	37	6.21	-21.4
1320	480	3.17	10.51	18.94	7.78	1.411	30	6.48	-16.5
1325	480	3.80	11.05	18.90	7.77	1.443	27	6.71	-8.3
1330	300	4.20	12.20	18.82	7.74	1.533	49	6.88	-4.0
1335	300	4.59	12.64	18.82	7.73	1.539	80	6.91	-2.8

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

OBSERVATIONS/SAMPLING METHOD DEVIATIONS

* Hach 2100P w/ YSI.

SAMPLE DESTINATION

Laboratory: SGS
 Delivered Via: UPS
 Airbill #: _____

Field Sampling Coordinator: G. Robinson

GROUNDWATER SAMPLING LOG

Well No. 17A

Site/GMA Name GMA1/GG Pittsfield
 Sampling Personnel DAZ/KLC
 Date 10/15/08
 Weather Sunny 60'S

WELL INFORMATION - See Page 1

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
1340	300	4.99	13.04	18.70	7.74	1.473	30	7.58	1.6
1345	300	5.39	13.74	18.60	7.73	1.493	33	7.76	5.5
* 1350	300	5.78	-	18.57	7.71	1.488	51	7.72	7.1
1355	300	6.18	-	18.39	7.74	1.466	104	7.72	5.0
1400	300	6.57	-	18.12	7.77	1.461	138	8.16	4.6
** 1405	300	6.97	16.02	17.39	7.79	1.455	190	8.03	5.1
1410	300	7.37	16.39	17.05	7.76	1.473	1000	7.94	4.0
1415									
(X) October 16th, 2008 re-Attempt to sample 1025 14.46 16.58 7.71 1.460 295 8.86 95.3 Sampled @ 1025 1030 @									

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

OBSERVATIONS/SAMPLING METHOD DEVIATIONS

- * Water level dropped to level below the pump/tap
- ** lowered pump to bottom of well

10/15 Lyman's 46
 Newell 19.75 10/16 Lyman
 Newell = 19.70

Sample time 10/16/08 @ 1030 turbidity = 137 (checked after sample 2nd time)

GROUNDWATER SAMPLING LOG

Well No. GMA1-25
 Key No.
 PID Background (ppm) 0
 Well Headspace (ppm) 0

Site/GMA Name GMA1
 Sampling Personnel EMC
 Date 10/17/08
 Weather Sunny - low mid 50's

WELL INFORMATION

Reference Point Marked? (Y) N
 Height of Reference Point 2.2' Meas. From GROUND
 Well Diameter 2.4"
 Screen Interval Depth 5-15' Meas. From TIC
 Water Table Depth 13.54' Meas. From TIC
 Well Depth 17.20' Meas. From TIC
 Length of Water Column 3.61'
 Volume of Water in Well 0.58
 Intake Depth of Pump/Tubing 15.34' Meas. From TIC

Sample Time 10:55
 Sample ID GMA1-25
 Duplicate ID GMA1-DUP-01
 MSMSD WIA
 Spill Sample ID N/A

Reference Point Identification:

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

Redevelop? Y (N)

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

EVACUATION INFORMATION

Pump Start Time 0930
 Pump Stop Time 11:45
 Minutes of Pumping 95
 Volume of Water Removed 4,225.0 gallons
 Did Well Go Dry? Y (N)

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

Water Quality Meter Type(s) / Serial Numbers: YSE 556 MPS 03C0392 AE
HACH 2100P # 96500-03


Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
0930	200	INITIAL	11.01	-	-	-	12	-	-
0935	"	1000	"	12.38	7.28	0.568	10	7.42	-183.4
0940	"	2000	"	12.32	7.25	0.571	10	5.63	-185.0
0945	"	3000	"	12.32	7.24	0.577	11	4.08	-184.7
0950	"	4000	"	12.19	7.31	0.579	6	3.52	-187.9
0955	"	5000	"	12.17	7.42	0.580	5	3.23	-175.1
10:00	"	6000	"	12.17	7.29	0.581	5	2.69	-179.2
10:05	"	7000	"	12.12	7.24	0.581	5	1.94	-162.4

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

OBSERVATIONS/SAMPLING METHOD DEVIATIONS

SAMPLE DESTINATION

Laboratory: SGS
 Delivered Via: UPS
 Airbill #:

Field Sampling Coordinator: 

GROUNDWATER SAMPLING LOG

Well No. GMA1-25

Site/GMA Name GMA1

Sampling Personnel EMC

Date 10/17/08

Weather Sunny - low 60s

WELL INFORMATION - See Page 1

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
10:10	200	8000	1.61	12.24	7.24	0.580	3	1.75	-164.5
10:15	"	9000	"	12.24	7.34	0.581	3	1.42	-162.1
10:20	"	10000	"	12.28	7.37	0.581	3	1.39	-165.5
10:25	"	11000	"	12.24	7.38	0.583	3	1.11	-166.2
10:30	"	12000	"	12.24 12.23	7.36	0.583	3	0.97	-165.4
10:35	"	13000	"	12.24	7.37	0.583	3	0.79	-166.7
10:40	"	14000	"	12.26	7.38	0.583	3	0.71	-174.3
10:45	"	15000	"	12.24	7.37	0.583	3	0.70	-176.1
10:50	"	16000	"	12.24	7.37	0.583	3	0.67	-177.4
10:55	SAMPLE								

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

OBSERVATIONS/SAMPLING METHOD DEVIATIONS

GROUNDWATER SAMPLING LOG

Well No. GMAI-27
 Key No. 2537 Perot/1001/08
 PID Background (ppm) 0
 Well Headspace (ppm) 0

Site/GMA Name GMAI GE AHSRID
 Sampling Personnel KCL/DAZ
 Date 10/17/08
 Weather Sunny FCIS

WELL INFORMATION

Reference Point Marked? N
 Height of Reference Point _____ Meas. From _____
 Well Diameter 2"
 Screen Interval Depth 4.14 Meas. From BGS
 Water Table Depth 9.14 Meas. From TIC
 Well Depth 18.45 Meas. From TIC
 Length of Water Column 9.31'
 Volume of Water in Well 1.52 gallons
 Intake Depth of Pump/Tubing ~13.5' Meas. From TIC

Sample Time 1120
 Sample ID GMAI-27
 Duplicate ID GMA
 MSMSD GMAI-27 MS/MSD
 Sp# Sample ID _____

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

Redevelop? Y N

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

EVACUATION INFORMATION

Pump Start Time 1020
 Pump Stop Time 1210
 Minutes of Pumping 110
 Volume of Water Removed 7.0 gallons
 Did Well Go Dry? Y N

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

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

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
1030	400	1.06	-	-	-	-	51	-	-
1035	350	1.52	9.14	13.05	7.21	0.680	42	1.18	-54.9
1040	300	1.92	9.14	12.72	7.05	0.679	35	0.31	-55.6
1045	300	2.32	9.14	12.65	6.99	0.681	28	0.24	-54.4
1050	300	2.72	9.15	12.66	7.03	0.680	23	0.22	-49
1055	300	3.11	9.14	12.68	6.99	0.677	17	0.18	-52.5
1100	250	3.44	9.15	12.57	6.98	0.673	15	0.17	-51.7
1105	250	3.77	9.15	12.54	7.03	0.669	13	0.16	-53.5

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

OBSERVATIONS/SAMPLING METHOD DEVIATIONS

* Hooked up YSI
 * kept flow through in shade

SAMPLE DESTINATION

Laboratory: SGS
 Delivered Via: UPS
 Airbill #: _____

Field Sampling Coordinator: [Signature]

GROUNDWATER SAMPLING LOG

Well No. GMA1-27

Site/GMA Name GMA1 GE Pittsfield
 Sampling Personnel KLC/PAZ
 Date 10/17/08
 Weather Sunny 70's

WELL INFORMATION - See Page 1

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
1110	250	4.10	9.14 9.14	12.64	7.02	0.664	11	0.15	-52.8
1113	250	4.30	9.13	12.65	7.05	0.658	10	0.14	-53.5
1116	250	4.50	9.14	12.78	7.06	0.655	10	0.14	-54.5
1119	250	4.69	9.15	12.74	7.02	0.653	10	0.14	-54.1
1120	→ Sampled @ 1120 ←								
KLC									

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

OBSERVATIONS/SAMPLING METHOD DEVIATIONS

GROUNDWATER SAMPLING LOG

Well No. E51-18
 Key No. -
 PID Background (ppm) 0
 Well Headspace (ppm) 0

Site/GMA Name GE P. H. Field / GMA-1
 Sampling Personnel PZ/KCL
 Date 10/23/08
 Weather clear, 45°F

WELL INFORMATION

Reference Point Marked? Y N
 Height of Reference Point _____ Meas. From _____
 Well Diameter 0.75"
 Screen Interval Depth 4.14' Meas. From Ground
 Water Table Depth 8.63 Meas. From TIL
 Well Depth 14.25 Meas. From TIL
 Length of Water Column 5.62'
 Volume of Water in Well 0.13 gallon
 Intake Depth of Pump/Tubing 11.4' Meas. From TIL

Sample Time 15:30
 Sample ID E51-18
 Duplicate ID -
 MS/MSD -
 Split Sample ID -

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

Redevelop? Y N

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

EVACUATION INFORMATION

Pump Start Time 15:25
 Pump Stop Time 15:35
 Minutes of Pumping 10
 Volume of Water Removed 0.5 gallon
 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? N (specify)

Water Quality Meter Type(s) / Serial Numbers: YSI-552 MPJ Hach 2100 P Turbid, T

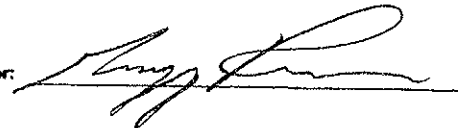
Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
15:35	200ml	0.26	8.63	13.65	7.07	6.069	27	1.12	-62.7

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

OBSERVATIONS/SAMPLING METHOD DEVIATIONS

SAMPLE DESTINATION

Laboratory: SGS
 Delivered Via: UPS
 Airbill #: _____

Field Sampling Coordinator: 

GROUNDWATER SAMPLING LOG

Well No. MM-1
 Key No. -
 PID Background (ppm) 0
 Well Headspace (ppm) 0

Site/GMA Name GMA1
 Sampling Personnel EM/DN
 Date 10/24/08
 Weather Sunny - 38°

WELL INFORMATION

Reference Point Marked? Y N
 Height of Reference Point 4" Meas. From GROUND
 Well Diameter 2"
 Screen Interval Depth 5-15' Meas. From TIC
 Water Table Depth 12.4' Meas. From TIC
 Well Depth 15' Meas. From TIC
 Length of Water Column 2.60'
 Volume of Water in Well 0.42
 Intake Depth of Pump/Tubing 13.70' Meas. From TIC

Sample Time 13:30
 Sample ID MM-1
 Duplicate ID -
 MSMSD -
 Split Sample ID -

Reference Point Identification:

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

Redevelop? Y N

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

EVACUATION INFORMATION

Pump Start Time 10:00 - SEE NOTES
 Pump Stop Time 13:30
 Minutes of Pumping 210
 Volume of Water Removed 4,125.5 gallons
 Did Well Go Dry? Y N

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

Water Quality Meter Type(s) / Serial Numbers: YSI 556 MPS # 03 M0230 AE
HACH 2100P # 46500-00

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
13:00	100		100	15.52	6.68	0.513	53	3.19	26.6
13:05	"	500		15.16	6.91	0.512	47	2.35	-3.0
13:10	"	1000	6.7	14.91	7.21	0.504	43	0.73	-41.9
13:15	"	1500	6.5	14.81	7.04	0.502	40	0.54	-43.9
13:20	"	2000	5.2	14.59	6.99	0.501	40	0.56	-44.6
13:25	"	2500		14.47	7.00	0.501	40	0.52	-44.4
	SAMPLE								

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

OBSERVATIONS/SAMPLING METHOD DEVIATIONS

10:00 - SET UP INITIAL PURGE. INITIAL TURB 71000
PURGED WELL @ 75 ml/min FOR 1.5 hrs. INCREASED FLOW TO 100 ml/min.
TURB @ 54 by 13:00. SET UP YSI. WATER LEVEL UNACCESSIBLE DUE TO
BLADDER PUMP.

SAMPLE DESTINATION

Laboratory: SGJ
 Delivered Via: UPS
 Airbill #: -

Field Sampling Coordinator: [Signature]

GROUNDWATER SAMPLING LOG

Well No. 31R
 Key No. -
 PID Background (ppm) 0
 Well Headspace (ppm) 0

Site/GMA Name GMA - PITTSFIELD, MA
 Sampling Personnel DGA, EMC
 Date 10/30/08
 Weather SUNNY, 35°

WELL INFORMATION

Reference Point Marked? Y N
 Height of Reference Point _____ Meas. From _____
 Well Diameter 2"
 Screen Interval Depth 5.5-15.5' Meas. From Ground
 Water Table Depth 3.67' Meas. From TIC
 Well Depth 14.77' Meas. From TIC
 Length of Water Column 6.10'
 Volume of Water in Well 1.00 gallon
 Intake Depth of Pump/Tubing 12.0' Meas. From Til

Sample Time 11:50
 Sample ID 31R
 Duplicate ID _____
 MSMSD _____
 Spill Sample ID _____

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

Redevelop? Y N

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

EVACUATION INFORMATION

Pump Start Time 10:35
 Pump Stop Time 12:05
 Minutes of Pumping 90
 Volume of Water Removed 2.0 gallons
 Did Well Go Dry? Y (N)

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

Water Quality Meter Type(s) / Serial Numbers: YSI 556 MPS #4, HACH 2100P

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
10:40	75	0.10	8.60	-	-	-	35	-	-
10:45	75	0.20	8.65	-	-	-	-	-	-
10:50	"	0.30	8.90	10.91	7.54	0.524	77	9.441	37.5
10:55	150	0.50	9.05	10.44	7.47	0.835	77	7.06	34.1
11:00	100	0.63	9.68	9.56	7.43	0.541	64	7.53	37.1
11:05	"	0.76	9.21	9.81	7.36	0.333	41	7.73	46.6
11:10	100	0.90	9.31	10.23	7.28	0.334	26	7.27	47.7
11:15	100	1.03	10.43	10.31	7.26	0.338	20	7.33	49.4

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

OBSERVATIONS/SAMPLING METHOD DEVIATIONS

INITIAL PUMP WAS CLEAR, CORRECT

SAMPLE DESTINATION

Laboratory: SGS
 Delivered Via: UPS
 Airtel #: -

Field Sampling Coordinator: [Signature]

GROUNDWATER SAMPLING LOG

Well No. MW-312

Site/GMA Name GMA - P PITSFIELD, MA
 Sampling Personnel ORA, FMC
 Date 10/30/03
 Weather Sunny, 35

WELL INFORMATION - See Page 1

11:38

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
11:20	100	1.16	9.51	10.44	7.25	0.839	18	7.63	51.7
11:25	100	1.29	9.55	10.54	7.24	0.839	17	7.65	53.4
11:30	100	1.42	9.65	10.60	7.27	0.840	16	7.46	52.0
11:35	100	1.56	9.71	10.63	7.30	0.845	17	7.20	52.9
11:40	100	1.64	9.81	10.71	7.27	0.843	18	7.19	55.4
11:41	100	1.72	9.81	10.66	7.27	0.846	17	7.11	54.7
11:44	100	1.80	9.82	10.30	7.28	0.845	17	6.99	56.1

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

OBSERVATIONS/SAMPLING METHOD DEVIATIONS _____

GROUNDWATER SAMPLING LOG

Well No. ESI-10
 Key No. -
 PID Background (ppm) 0
 Well Headspace (ppm) 0

Site/GMA Name GMAI
 Sampling Personnel EMC/OA
 Date 10/15/09
 Weather Sunny - Mid 70's

WELL INFORMATION

Reference Point Marked? (Y) N
 Height of Reference Point +2" Meas. From GROUND
 Well Diameter 0.75"
 Screen Interval Depth 10.39' - 12.5' Meas. From GROUND TIC
 Water Table Depth 6.57' Meas. From TIC
 Well Depth 17.5' Meas. From TIC
 Length of Water Column 10.93'
 Volume of Water in Well 1.78 0.25 gallon
 Intake Depth of Pump/Tubing 16.85' Meas. From TIC

Sample Time 12:35
 Sample ID ESI-10
 Duplicate ID N/A
 MS/MSD N/A
 Split Sample ID N/A

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

Redevelop? Y (N)

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

EVACUATION INFORMATION

Pump Start Time 11:35
 Pump Stop Time 12:40
 Minutes of Pumping 65
 Volume of Water Removed 2,073.4 gallons
 Did Well Go Dry? Y (N)

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

Water Quality Meter Type(s) / Serial Numbers: YSI 556 MK 0380 392 AE
TURBIDIMETER # 46500-02 - HACH 2100P

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO % (mg/l) [10% @ 0.1 mg/l]*	ORP (mV) [10 mV]*
11:40	200	INITIAL	-	-	-	-	28	-	-
11:45	200	1000	-	-	-	-	8	-	-
11:50	200	2000	-	20.20	7.39	1.238	5	109.3	-187.3
11:55	200	3000	-	19.98	7.39	1.258	3	87.3	-210.6
12:00	200	4000	-	20.01	7.35	1.261	4	72.3	-208.1
12:05	200	5000	-	19.99	7.35	1.262	2	5.21	-208.9
12:10	200	6000	-	19.86	7.35	1.264	2	4.38	-178.4
12:13	200	6600	-	19.88	7.40	1.264	2	3.67	-197.8

*The stabilization criteria for each field parameter (three consecutive readings collected at 3- to 5-minute intervals) is listed in each column heading.
OBSERVATIONS/SAMPLING METHOD DEVIATIONS Initial purge - clear, no odor
NOTE: DO READINGS FOR 11:50 - 12:00 READINGS LISTED AS %. ~~DO NOT~~ ALL OTHER
DO READINGS LISTED AS MG/L.
FINAL PURGE - CLEAR, NO ODOOR

SAMPLE DESTINATION
 Laboratory: JGS
 Delivered Via: UPS
 Airbill #: -

Field Sampling Coordinator: [Signature]

GROUNDWATER SAMPLING LOG

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

Site/GMA Name GMAI - LINDEN ST, PITTSFIELD, MA
 Sampling Personnel DYA
 Date 10/16/08
 Weather Overcast, 55°

WELL INFORMATION

Reference Point Marked? Y N
 Height of Reference Point _____ Meas. From _____
 Well Diameter 2"
 Screen Interval Depth 5.15' Meas. From Ground
 Water Table Depth 10.12 Meas. From TIC
 Well Depth 13.35 Meas. From TIC
 Length of Water Column 3.73
 Volume of Water in Well 0.61 gallons
 Intake Depth of Pump/Tubing 12.0' Meas. From TIC

Sample Time 10:45
 Sample ID LSSC-165
 Duplicate ID -
 MS/MSD -
 Spill Sample ID -

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

Redevelop? Y N

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

EVACUATION INFORMATION

Pump Start Time 9:35
 Pump Stop Time 11:00
 Minutes of Pumping 75
 Volume of Water Removed 1.85 gallons
 Did Well Go Dry? Y (N)

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

Water Quality Meter Type(s) / Serial Numbers: YS1556 MPS #4, Hach 2100P

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
9:50	100	0.40	-	13.47	7.08	1.205	37	3.24	-4.2
10:00	100	0.66	-	13.60	6.73	1.215	27	1.93	6.4
10:05	75	0.76	-	13.62	6.79	1.231	22	1.86	7.7
10:10	75	0.86	-	13.64	6.81	1.240	17	1.94	8.6
10:15	75	0.96	-	13.61	6.81	1.250	15	1.95	9.7
10:20	75	1.06	-	13.56	6.81	1.252	12	1.92	10.8
10:25	100	1.19	-	13.51	6.82	1.260	10	1.86	11.2
10:30	100	1.32	-	13.49	6.83	1.265	9	1.89	11.5

* 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

Normal price slightly turbid, no odor. Water level could not be recorded due to water below top of pump.

SAMPLE DESTINATION

Laboratory: SGS
 Delivered Via: UPS
 Airtel #: _____

Field Sampling Coordinator: _____

GROUNDWATER SAMPLING LOG

Well No. L55C-165

Site/GMA Name GMA1-Lyman St, Pittsfield, MA
 Sampling Personnel DRA
 Date 11/11/08
 Weather Rainy, 55°

WELL INFORMATION - See Page 1

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
10:35	100	1.46	-	13.52	6.83	1.270	8	1.87	11.7
10:40	100	1.59	-	13.50	6.82	1.273	8	1.90	12.0

* 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 _____

GROUNDWATER SAMPLING LOG

Well No. MW-3R
 Key No. -
 PID Background (ppm) 0
 Well Headspace (ppm) 0

Site/GMA Name CMAI
 Sampling Personnel EMC
 Date 10/16/08
 Weather Rain - mid 50's

WELL INFORMATION

Reference Point Marked? (Y) N
 Height of Reference Point -2.4' Meas. From Ground
 Well Diameter 2.4"
 Screen Interval Depth 6.5' to 11.0' Meas. From TIC
 Water Table Depth 8.23' Meas. From TIC
 Well Depth 11' Meas. From TIC
 Length of Water Column 2.77'
 Volume of Water in Well 0.45'
 Intake Depth of Pump/Tubing 9.61' Meas. From TIC

Sample Time 11:10
 Sample ID MW-3R
 Duplicate ID -
 MS/MSD -
 Split Sample ID -

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

Redevelop? Y (N)

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

EVACUATION INFORMATION

Pump Start Time 10:30
 Pump Stop Time 11:10
 Minutes of Pumping 40
 Volume of Water Removed 158 gal
 Did Well Go Dry? Y (N)

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

Water Quality Meter Type(s) / Serial Numbers: YSE 550 MP 03C0392 AE
TURBIDIMETER - HACH 2100 # 46500-00

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
10:30	150	75	11.30	13.91	6.95	.913	68	6.24	-192.5
10:35	150	150	11.30	13.95	6.91	.884	25	5.79	-178.0
10:40	150	1500	11.30	13.45	6.62	.875	14	4.22	-179.1
10:45	150	2250	11.30	14.00	6.65	.870	11	3.50	-185.1
10:50	150	3000	11.30	14.00	6.69	.860	7	3.02	-183.1
10:55	150	3750	11.30	14.02	6.68	.842	6	2.68	-182.3
11:00	150	4500	11.30	14.02	6.67	.845	7	2.52	-181.3
11:05	150	5250	11.30	14.03	6.68	.841	6	2.49	-182.7

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

OBSERVATIONS/SAMPLING METHOD DEVIATIONS

SAMPLE DESTINATION

Laboratory: JGS
 Delivered Via: UPS
 Airbill #: -

Field Sampling Coordinator: [Signature]

GROUNDWATER SAMPLING LOG

Well No. 95-25
 Key No. -
 PID Background (ppm) 0
 Well Headspace (ppm) 0

Site/GMA Name GMAI
 Sampling Personnel SMC
 Date 10/16/09
 Weather Rain - mid 50s

WELL INFORMATION

Reference Point Marked? (Y) (N)
 Height of Reference Point Meas. From GROUND
 Well Diameter 1"
 Screen Interval Depth 10' Meas. From TIC
 Water Table Depth 14.43 Meas. From TIC
 Well Depth 18' Meas. From TIC
 Length of Water Column 3.57
 Volume of Water in Well 1.58 0.15 gallon
 Intake Depth of Pump/Tubing 16.21 Meas. From TIC

Sample Time 12:45
 Sample ID 95-25
 Duplicate ID -
 MS/MSD -
 Split Sample ID -

Reference Point Identification:

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

Redevelop? Y (N)

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

EVACUATION INFORMATION

Pump Start Time 12:00
 Pump Stop Time 12:45
 Minutes of Pumping 45
 Volume of Water Removed 1.88 gal.
 Did Well Go Dry? Y (N)

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

Water Quality Meter Type(s) / Serial Numbers: USE 556 MSP # 03CO 392 AE
TURB: HACH 2100P # 4650-00

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) (3%)*	pH (0.1 units)*	Sp. Cond. (mS/cm) (3%)*	Turbidity (NTU) (10% or 1 NTU)*	DO (mg/l) (10% or 0.1 mg/l)*	ORP (mV) (10 mV)*
12:00	150	Initial	14.56	13.62	6.63	0.491	9	4.02	-153.0
12:05	150	750	14.56	13.61	6.62	0.491	7	3.88	-153.6
12:10	150	1500	14.57	13.56	6.62	0.491	4	3.33	-156.3
12:15	150	2250	"	13.56	6.62	0.490	4	2.88	-156.5
12:20	150	3000	14.58	13.60	6.62	0.491	3	2.24	-163.5
12:25	150	3750	14.58	13.62	6.62	0.491	3	2.20	-163.1
12:30	150	4500	"	13.66	6.62	0.492	4	2.07	-164.7
12:35	150	5250	"	13.71	6.62	0.494	3	1.98	-163.1

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

OBSERVATIONS/SAMPLING METHOD DEVIATIONS

SAMPLE DESTINATION

Laboratory: SGS
 Delivered Via: AP
 Airbill #: -

Field Sampling Coordinator: [Signature]

GROUNDWATER SAMPLING LOG

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

Site/GMA Name GMAI - PITTSFIELD, MA
 Sampling Personnel DJA
 Date 10/16/08
 Weather Partly, 55°

WELL INFORMATION

Reference Point Marked? Y N
 Height of Reference Point _____ Meas. From _____
 Well Diameter 2"
 Screen Interval Depth 7.72'-17.72' Meas. From Ground
 Water Table Depth 10.09 Meas. From TIC
 Well Depth 18.30 Meas. From TIC
 Length of Water Column 8.21'
 Volume of Water in Well 1.34 gallons
 Intake Depth of Pump/Tubing 14.2' Meas. From TIC

Sample Time 13:30
 Sample ID 37R
 Duplicate ID ---
 MS/MSD ---
 Spill Sample ID ---

Reference Point Identification:

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

Redevelop? Y N

Required	Analytical Parameters:	Collected
()	VOCs (Std. list)	()
()	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 11:45
 Pump Stop Time 13:50
 Minutes of Pumping 125
 Volume of Water Removed 2.5 gal
 Did Well Go Dry? Y (N)

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

Water Quality Meter Type(s) / Serial Numbers: YSI 556 mps #4, Hor 2100P

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
11:50	100	0.13	10.16	-	-	-	310	-	-
11:55	100	0.26	10.24	-	-	-	266	-	-
12:00	75	0.36	10.21	-	-	-	205	-	-
12:10	75	0.56	10.20	-	-	-	175	-	-
12:20	75	0.76	10.20	-	-	-	130	-	-
12:30	75	0.96	10.20	-	-	-	78	-	-
12:40	75	1.26	10.20	8.74	7.27	0.990	48	147	86.7
12:50	75	1.36	10.20	8.80	7.26	0.991	31	0.67	48.2

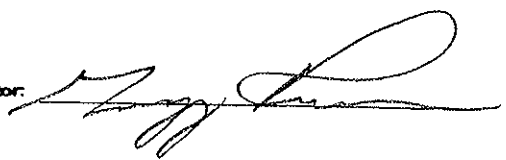
* The stabilization criteria for each field parameter (three consecutive readings collected at 3- to 5-minute intervals) is listed in each column heading.

OBSERVATIONS/SAMPLING METHOD DEVIATIONS

Initial Pore was turbid, high ORP. No ORP

SAMPLE DESTINATION

Laboratory: JGS
 Delivered Via: UPS
 Airbill #: ---

Field Sampling Coordinator: 

ARCADIS

Appendix B

Fall 2008 Groundwater Analytical
Results

Table B-1
Fall 2008 Groundwater Analytical Results

Plant Site 1 Groundwater Management Area
Groundwater Quality Monitoring Interim Report for Fall 2008
General Electric Company - Pittsfield, Massachusetts
(Results are presented in parts per million, ppm)

Parameter	Location ID:	30s Complex		East St. Area 1 - South		East St. Area 2 - North
	Sample ID: Date Collected:	ES2-19 10/23/08	GMA1-3 10/16/08	31R 10/30/08	37R 10/16/08	17A 10/16/08
Volatile Organics						
1,1,1,2-Tetrachloroethane		NA	NA	NA	NA	NA
1,1,1-Trichloroethane		NA	NA	NA	NA	NA
1,1,2,2-Tetrachloroethane		NA	NA	NA	NA	NA
1,1,2-Trichloroethane		NA	NA	NA	NA	NA
1,1-Dichloroethane		NA	NA	NA	NA	NA
1,1-Dichloroethene		NA	NA	NA	NA	NA
1,2,3-Trichloropropane		NA	NA	NA	NA	NA
1,2-Dibromo-3-chloropropane		NA	NA	NA	NA	NA
1,2-Dibromoethane		NA	NA	NA	NA	NA
1,2-Dichloroethane		NA	NA	NA	NA	NA
1,2-Dichloropropane		NA	NA	NA	NA	NA
1,4-Dioxane		NA	NA	NA	NA	NA
2-Butanone		NA	NA	NA	NA	NA
2-Chloro-1,3-butadiene		NA	NA	NA	NA	NA
2-Chloroethylvinylether		NA	NA	NA	NA	NA
2-Hexanone		NA	NA	NA	NA	NA
3-Chloropropene		NA	NA	NA	NA	NA
4-Methyl-2-pentanone		NA	NA	NA	NA	NA
Acetone		NA	NA	NA	NA	NA
Acetonitrile		NA	NA	NA	NA	NA
Acrolein		NA	NA	NA	NA	NA
Acrylonitrile		NA	NA	NA	NA	NA
Benzene		NA	NA	NA	NA	NA
Bromodichloromethane		NA	NA	NA	NA	NA
Bromoform		NA	NA	NA	NA	NA
Bromomethane		NA	NA	NA	NA	NA
Carbon Disulfide		NA	NA	NA	NA	NA
Carbon Tetrachloride		NA	NA	NA	NA	NA
Chlorobenzene		NA	NA	NA	NA	NA
Chloroethane		NA	NA	NA	NA	NA
Chloroform		NA	NA	NA	NA	NA
Chloromethane		NA	NA	NA	NA	NA
cis-1,3-Dichloropropene		NA	NA	NA	NA	NA
Dibromochloromethane		NA	NA	NA	NA	NA
Dibromomethane		NA	NA	NA	NA	NA
Dichlorodifluoromethane		NA	NA	NA	NA	NA
Ethyl Methacrylate		NA	NA	NA	NA	NA
Ethylbenzene		NA	NA	NA	NA	NA
Iodomethane		NA	NA	NA	NA	NA
Isobutanol		NA	NA	NA	NA	NA
Methacrylonitrile		NA	NA	NA	NA	NA
Methyl Methacrylate		NA	NA	NA	NA	NA
Methylene Chloride		NA	NA	NA	NA	NA
Propionitrile		NA	NA	NA	NA	NA
Styrene		NA	NA	NA	NA	NA
Tetrachloroethene		NA	NA	NA	NA	NA
Toluene		NA	NA	NA	NA	NA
trans-1,2-Dichloroethene		NA	NA	NA	NA	NA
trans-1,3-Dichloropropene		NA	NA	NA	NA	NA
trans-1,4-Dichloro-2-butene		NA	NA	NA	NA	NA
Trichloroethene		NA	NA	NA	NA	NA
Trichlorofluoromethane		NA	NA	NA	NA	NA
Vinyl Acetate		NA	NA	NA	NA	NA
Vinyl Chloride		NA	NA	NA	NA	NA
Xylenes (total)		NA	NA	NA	NA	NA
Total VOCs		NA	NA	NA	NA	NA

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Parameter	Location ID:	30s Complex		East St. Area 1 - South		East St. Area 2 - North
	Sample ID: Date Collected:	ES2-19 10/23/08	GMA1-3 10/16/08	31R 10/30/08	37R 10/16/08	17A 10/16/08
PCBs-Filtered						
Aroclor-1016		ND(0.00012) J	ND(0.000080) J	ND(0.000069) J	ND(0.000078) J	ND(0.000081) J
Aroclor-1221		ND(0.00012) J	ND(0.000080) J	ND(0.000069) J	ND(0.000078) J	ND(0.000081) J
Aroclor-1232		ND(0.00012) J	ND(0.000080) J	ND(0.000069) J	ND(0.000078) J	ND(0.000081) J
Aroclor-1242		ND(0.00012) J	ND(0.000080) J	ND(0.000069) J	ND(0.000078) J	ND(0.000081) J
Aroclor-1248		ND(0.00012) J	ND(0.000080) J	ND(0.000069) J	ND(0.000078) J	ND(0.000081) J
Aroclor-1254		ND(0.00012) J	ND(0.000080) J	ND(0.000069) J	ND(0.000078) J	ND(0.000081) J
Aroclor-1260		ND(0.00012) J	ND(0.000080) J	ND(0.000069) J	ND(0.000078) J	ND(0.000081) J
Total PCBs		ND(0.00012) J	ND(0.000080) J	ND(0.000069) J	ND(0.000078) J	ND(0.000081) J
Semivolatile Organics						
1,2,4,5-Tetrachlorobenzene		NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene		NA	NA	NA	NA	NA
1,2-Dichlorobenzene		NA	NA	NA	NA	NA
1,2-Diphenylhydrazine		NA	NA	NA	NA	NA
1,3,5-Trinitrobenzene		NA	NA	NA	NA	NA
1,3-Dichlorobenzene		NA	NA	NA	NA	NA
1,3-Dinitrobenzene		NA	NA	NA	NA	NA
1,4-Dichlorobenzene		NA	NA	NA	NA	NA
1,4-Naphthoquinone		NA	NA	NA	NA	NA
1-Naphthylamine		NA	NA	NA	NA	NA
2,3,4,6-Tetrachlorophenol		NA	NA	NA	NA	NA
2,4,5-Trichlorophenol		NA	NA	NA	NA	NA
2,4,6-Trichlorophenol		NA	NA	NA	NA	NA
2,4-Dichlorophenol		NA	NA	NA	NA	NA
2,4-Dimethylphenol		NA	NA	NA	NA	NA
2,4-Dinitrophenol		NA	NA	NA	NA	NA
2,4-Dinitrotoluene		NA	NA	NA	NA	NA
2,6-Dichlorophenol		NA	NA	NA	NA	NA
2,6-Dinitrotoluene		NA	NA	NA	NA	NA
2-Acetylaminofluorene		NA	NA	NA	NA	NA
2-Chloronaphthalene		NA	NA	NA	NA	NA
2-Chlorophenol		NA	NA	NA	NA	NA
2-Methylnaphthalene		NA	NA	NA	NA	NA
2-Methylphenol		NA	NA	NA	NA	NA
2-Naphthylamine		NA	NA	NA	NA	NA
2-Nitroaniline		NA	NA	NA	NA	NA
2-Nitrophenol		NA	NA	NA	NA	NA
2-Picoline		NA	NA	NA	NA	NA
3&4-Methylphenol		NA	NA	NA	NA	NA
3,3'-Dichlorobenzidine		NA	NA	NA	NA	NA
3,3'-Dimethylbenzidine		NA	NA	NA	NA	NA
3-Methylcholanthrene		NA	NA	NA	NA	NA
3-Nitroaniline		NA	NA	NA	NA	NA
4,6-Dinitro-2-methylphenol		NA	NA	NA	NA	NA
4-Aminobiphenyl		NA	NA	NA	NA	NA
4-Bromophenyl-phenylether		NA	NA	NA	NA	NA
4-Chloro-3-Methylphenol		NA	NA	NA	NA	NA
4-Chloroaniline		NA	NA	NA	NA	NA
4-Chlorobenzilate		NA	NA	NA	NA	NA
4-Chlorophenyl-phenylether		NA	NA	NA	NA	NA
4-Nitroaniline		NA	NA	NA	NA	NA
4-Nitrophenol		NA	NA	NA	NA	NA
4-Nitroquinoline-1-oxide		NA	NA	NA	NA	NA
4-Phenylenediamine		NA	NA	NA	NA	NA
5-Nitro-o-toluidine		NA	NA	NA	NA	NA
7,12-Dimethylbenz(a)anthracene		NA	NA	NA	NA	NA
a,a'-Dimethylphenethylamine		NA	NA	NA	NA	NA
Acenaphthene		NA	NA	NA	NA	NA
Acenaphthylene		NA	NA	NA	NA	NA
Acetophenone		NA	NA	NA	NA	NA
Aniline		NA	NA	NA	NA	NA
Anthracene		NA	NA	NA	NA	NA

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General Electric Company - Pittsfield, Massachusetts
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Parameter	Location ID:	30s Complex		East St. Area 1 - South		East St. Area 2 - North
	Sample ID: Date Collected:	ES2-19 10/23/08	GMA1-3 10/16/08	31R 10/30/08	37R 10/16/08	17A 10/16/08
Semivolatile Organics (continued)						
Aramite		NA	NA	NA	NA	NA
Benidine		NA	NA	NA	NA	NA
Benzo(a)anthracene		NA	NA	NA	NA	NA
Benzo(a)pyrene		NA	NA	NA	NA	NA
Benzo(b)fluoranthene		NA	NA	NA	NA	NA
Benzo(g,h,i)perylene		NA	NA	NA	NA	NA
Benzo(k)fluoranthene		NA	NA	NA	NA	NA
Benzyl Alcohol		NA	NA	NA	NA	NA
bis(2-Chloroethoxy)methane		NA	NA	NA	NA	NA
bis(2-Chloroethyl)ether		NA	NA	NA	NA	NA
bis(2-Chloroisopropyl)ether		NA	NA	NA	NA	NA
bis(2-Ethylhexyl)phthalate		NA	NA	NA	NA	NA
Butylbenzylphthalate		NA	NA	NA	NA	NA
Chrysene		NA	NA	NA	NA	NA
Diallate		NA	NA	NA	NA	NA
Dibenzo(a,h)anthracene		NA	NA	NA	NA	NA
Dibenzofuran		NA	NA	NA	NA	NA
Diethylphthalate		NA	NA	NA	NA	NA
Dimethylphthalate		NA	NA	NA	NA	NA
Di-n-Butylphthalate		NA	NA	NA	NA	NA
Di-n-Octylphthalate		NA	NA	NA	NA	NA
Diphenylamine		NA	NA	NA	NA	NA
Ethyl Methanesulfonate		NA	NA	NA	NA	NA
Fluoranthene		NA	NA	NA	NA	NA
Fluorene		NA	NA	NA	NA	NA
Hexachlorobenzene		NA	NA	NA	NA	NA
Hexachlorobutadiene		NA	NA	NA	NA	NA
Hexachlorocyclopentadiene		NA	NA	NA	NA	NA
Hexachloroethane		NA	NA	NA	NA	NA
Hexachlorophene		NA	NA	NA	NA	NA
Hexachloropropene		NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene		NA	NA	NA	NA	NA
Isodrin		NA	NA	NA	NA	NA
Isophorone		NA	NA	NA	NA	NA
Isosafrole		NA	NA	NA	NA	NA
Methapyrilene		NA	NA	NA	NA	NA
Methyl Methanesulfonate		NA	NA	NA	NA	NA
Naphthalene		NA	NA	NA	NA	NA
Nitrobenzene		NA	NA	NA	NA	NA
N-Nitrosodiethylamine		NA	NA	NA	NA	NA
N-Nitrosodimethylamine		NA	NA	NA	NA	NA
N-Nitroso-di-n-butylamine		NA	NA	NA	NA	NA
N-Nitroso-di-n-propylamine		NA	NA	NA	NA	NA
N-Nitrosomethylethylamine		NA	NA	NA	NA	NA
N-Nitrosomorpholine		NA	NA	NA	NA	NA
N-Nitrosopiperidine		NA	NA	NA	NA	NA
N-Nitrosopyrrolidine		NA	NA	NA	NA	NA
o,o,o-Triethylphosphorothioate		NA	NA	NA	NA	NA
o-Toluidine		NA	NA	NA	NA	NA
p-Dimethylaminoazobenzene		NA	NA	NA	NA	NA
Pentachlorobenzene		NA	NA	NA	NA	NA
Pentachloroethane		NA	NA	NA	NA	NA
Pentachloronitrobenzene		NA	NA	NA	NA	NA
Pentachlorophenol		NA	NA	NA	NA	NA
Phenacetin		NA	NA	NA	NA	NA
Phenanthrene		NA	NA	NA	NA	NA
Phenol		NA	NA	NA	NA	NA
Pronamide		NA	NA	NA	NA	NA
Pyrene		NA	NA	NA	NA	NA
Pyridine		NA	NA	NA	NA	NA
Safrole		NA	NA	NA	NA	NA
Thionazin		NA	NA	NA	NA	NA

Table B-1
Fall 2008 Groundwater Analytical Results

Plant Site 1 Groundwater Management Area
Groundwater Quality Monitoring Interim Report for Fall 2008
General Electric Company - Pittsfield, Massachusetts
(Results are presented in parts per million, ppm)

Parameter	Location ID:	East St. Area 2 - North			
	Sample ID: Date Collected:	95-20 10/15/08	A7-R 12/11/08	ES1-10 10/15/08	ES1-18 10/23/08
Volatile Organics					
1,1,1,2-Tetrachloroethane		NA	NA	NA	NA
1,1,1-Trichloroethane		NA	NA	NA	NA
1,1,2,2-Tetrachloroethane		NA	NA	NA	NA
1,1,2-Trichloroethane		NA	NA	NA	NA
1,1-Dichloroethane		NA	NA	NA	NA
1,1-Dichloroethene		NA	NA	NA	NA
1,2,3-Trichloropropane		NA	NA	NA	NA
1,2-Dibromo-3-chloropropane		NA	NA	NA	NA
1,2-Dibromoethane		NA	NA	NA	NA
1,2-Dichloroethane		NA	NA	NA	NA
1,2-Dichloropropane		NA	NA	NA	NA
1,4-Dioxane		NA	NA	NA	NA
2-Butanone		NA	NA	NA	NA
2-Chloro-1,3-butadiene		NA	NA	NA	NA
2-Chloroethylvinylether		NA	NA	NA	NA
2-Hexanone		NA	NA	NA	NA
3-Chloropropene		NA	NA	NA	NA
4-Methyl-2-pentanone		NA	NA	NA	NA
Acetone		NA	NA	NA	NA
Acetonitrile		NA	NA	NA	NA
Acrolein		NA	NA	NA	NA
Acrylonitrile		NA	NA	NA	NA
Benzene		NA	NA	NA	NA
Bromodichloromethane		NA	NA	NA	NA
Bromoform		NA	NA	NA	NA
Bromomethane		NA	NA	NA	NA
Carbon Disulfide		NA	NA	NA	NA
Carbon Tetrachloride		NA	NA	NA	NA
Chlorobenzene		NA	NA	NA	NA
Chloroethane		NA	NA	NA	NA
Chloroform		NA	NA	NA	NA
Chloromethane		NA	NA	NA	NA
cis-1,3-Dichloropropene		NA	NA	NA	NA
Dibromochloromethane		NA	NA	NA	NA
Dibromomethane		NA	NA	NA	NA
Dichlorodifluoromethane		NA	NA	NA	NA
Ethyl Methacrylate		NA	NA	NA	NA
Ethylbenzene		NA	NA	NA	NA
Iodomethane		NA	NA	NA	NA
Isobutanol		NA	NA	NA	NA
Methacrylonitrile		NA	NA	NA	NA
Methyl Methacrylate		NA	NA	NA	NA
Methylene Chloride		NA	NA	NA	NA
Propionitrile		NA	NA	NA	NA
Styrene		NA	NA	NA	NA
Tetrachloroethene		NA	NA	NA	NA
Toluene		NA	NA	NA	NA
trans-1,2-Dichloroethene		NA	NA	NA	NA
trans-1,3-Dichloropropene		NA	NA	NA	NA
trans-1,4-Dichloro-2-butene		NA	NA	NA	NA
Trichloroethene		NA	NA	NA	NA
Trichlorofluoromethane		NA	NA	NA	NA
Vinyl Acetate		NA	NA	NA	NA
Vinyl Chloride		NA	NA	NA	NA
Xylenes (total)		NA	NA	NA	NA
Total VOCs		NA	NA	NA	NA

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(Results are presented in parts per million, ppm)

Parameter	Location ID: Sample ID: Date Collected:	East St. Area 2 - North			
		95-20 10/15/08	A7-R 12/11/08	ES1-10 10/15/08	ES1-18 10/23/08
PCBs-Filtered					
Aroclor-1016		ND(0.000075) J	ND(0.00065) J [ND(0.00065)]	ND(0.000077) J	ND(0.00010) J
Aroclor-1221		ND(0.000075) J	ND(0.00065) J [ND(0.00065)]	ND(0.000077) J	ND(0.00010) J
Aroclor-1232		ND(0.000075) J	ND(0.00065) J [ND(0.00065)]	ND(0.000077) J	ND(0.00010) J
Aroclor-1242		ND(0.000075) J	ND(0.00065) J [ND(0.00065)]	ND(0.000077) J	ND(0.00010) J
Aroclor-1248		ND(0.000075) J	ND(0.00065) J [ND(0.00065)]	ND(0.000077) J	ND(0.00010) J
Aroclor-1254		ND(0.000075) J	ND(0.00065) J [ND(0.00065)]	ND(0.000077) J	ND(0.00010) J
Aroclor-1260		ND(0.000075) J	ND(0.00065) J [ND(0.00065)]	ND(0.000077) J	ND(0.00010) J
Total PCBs		ND(0.000075) J	ND(0.00065) J [ND(0.00065)]	ND(0.000077) J	ND(0.00010) J
Semivolatile Organics					
1,2,4,5-Tetrachlorobenzene		NA	NA	NA	NA
1,2,4-Trichlorobenzene		NA	NA	NA	NA
1,2-Dichlorobenzene		NA	NA	NA	NA
1,2-Diphenylhydrazine		NA	NA	NA	NA
1,3,5-Trinitrobenzene		NA	NA	NA	NA
1,3-Dichlorobenzene		NA	NA	NA	NA
1,3-Dinitrobenzene		NA	NA	NA	NA
1,4-Dichlorobenzene		NA	NA	NA	NA
1,4-Naphthoquinone		NA	NA	NA	NA
1-Naphthylamine		NA	NA	NA	NA
2,3,4,6-Tetrachlorophenol		NA	NA	NA	NA
2,4,5-Trichlorophenol		NA	NA	NA	NA
2,4,6-Trichlorophenol		NA	NA	NA	NA
2,4-Dichlorophenol		NA	NA	NA	NA
2,4-Dimethylphenol		NA	NA	NA	NA
2,4-Dinitrophenol		NA	NA	NA	NA
2,4-Dinitrotoluene		NA	NA	NA	NA
2,6-Dichlorophenol		NA	NA	NA	NA
2,6-Dinitrotoluene		NA	NA	NA	NA
2-Acetylaminofluorene		NA	NA	NA	NA
2-Chloronaphthalene		NA	NA	NA	NA
2-Chlorophenol		NA	NA	NA	NA
2-Methylnaphthalene		NA	NA	NA	NA
2-Methylphenol		NA	NA	NA	NA
2-Naphthylamine		NA	NA	NA	NA
2-Nitroaniline		NA	NA	NA	NA
2-Nitrophenol		NA	NA	NA	NA
2-Picoline		NA	NA	NA	NA
3&4-Methylphenol		NA	NA	NA	NA
3,3'-Dichlorobenzidine		NA	NA	NA	NA
3,3'-Dimethylbenzidine		NA	NA	NA	NA
3-Methylcholanthrene		NA	NA	NA	NA
3-Nitroaniline		NA	NA	NA	NA
4,6-Dinitro-2-methylphenol		NA	NA	NA	NA
4-Aminobiphenyl		NA	NA	NA	NA
4-Bromophenyl-phenylether		NA	NA	NA	NA
4-Chloro-3-Methylphenol		NA	NA	NA	NA
4-Chloroaniline		NA	NA	NA	NA
4-Chlorobenzilate		NA	NA	NA	NA
4-Chlorophenyl-phenylether		NA	NA	NA	NA
4-Nitroaniline		NA	NA	NA	NA
4-Nitrophenol		NA	NA	NA	NA
4-Nitroquinoline-1-oxide		NA	NA	NA	NA
4-Phenylenediamine		NA	NA	NA	NA
5-Nitro-o-toluidine		NA	NA	NA	NA
7,12-Dimethylbenz(a)anthracene		NA	NA	NA	NA
a,a'-Dimethylphenethylamine		NA	NA	NA	NA
Acenaphthene		NA	NA	NA	NA
Acenaphthylene		NA	NA	NA	NA
Acetophenone		NA	NA	NA	NA
Aniline		NA	NA	NA	NA
Anthracene		NA	NA	NA	NA

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

Parameter	Location ID: Sample ID: Date Collected:	East St. Area 2 - North			
		95-20 10/15/08	A7-R 12/11/08	ES1-10 10/15/08	ES1-18 10/23/08
Semivolatile Organics (continued)					
Aramite		NA	NA	NA	NA
Benzidine		NA	NA	NA	NA
Benzo(a)anthracene		NA	NA	NA	NA
Benzo(a)pyrene		NA	NA	NA	NA
Benzo(b)fluoranthene		NA	NA	NA	NA
Benzo(g,h,i)perylene		NA	NA	NA	NA
Benzo(k)fluoranthene		NA	NA	NA	NA
Benzyl Alcohol		NA	NA	NA	NA
bis(2-Chloroethoxy)methane		NA	NA	NA	NA
bis(2-Chloroethyl)ether		NA	NA	NA	NA
bis(2-Chloroisopropyl)ether		NA	NA	NA	NA
bis(2-Ethylhexyl)phthalate		NA	NA	NA	NA
Butylbenzylphthalate		NA	NA	NA	NA
Chrysene		NA	NA	NA	NA
Diallate		NA	NA	NA	NA
Dibenzo(a,h)anthracene		NA	NA	NA	NA
Dibenzofuran		NA	NA	NA	NA
Diethylphthalate		NA	NA	NA	NA
Dimethylphthalate		NA	NA	NA	NA
Di-n-Butylphthalate		NA	NA	NA	NA
Di-n-Octylphthalate		NA	NA	NA	NA
Diphenylamine		NA	NA	NA	NA
Ethyl Methanesulfonate		NA	NA	NA	NA
Fluoranthene		NA	NA	NA	NA
Fluorene		NA	NA	NA	NA
Hexachlorobenzene		NA	NA	NA	NA
Hexachlorobutadiene		NA	NA	NA	NA
Hexachlorocyclopentadiene		NA	NA	NA	NA
Hexachloroethane		NA	NA	NA	NA
Hexachlorophene		NA	NA	NA	NA
Hexachloropropene		NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene		NA	NA	NA	NA
Isodrin		NA	NA	NA	NA
Isophorone		NA	NA	NA	NA
Isosafrole		NA	NA	NA	NA
Methapyrilene		NA	NA	NA	NA
Methyl Methanesulfonate		NA	NA	NA	NA
Naphthalene		NA	NA	NA	NA
Nitrobenzene		NA	NA	NA	NA
N-Nitrosodiethylamine		NA	NA	NA	NA
N-Nitrosodimethylamine		NA	NA	NA	NA
N-Nitroso-di-n-butylamine		NA	NA	NA	NA
N-Nitroso-di-n-propylamine		NA	NA	NA	NA
N-Nitrosomethylethylamine		NA	NA	NA	NA
N-Nitrosomorpholine		NA	NA	NA	NA
N-Nitrosopiperidine		NA	NA	NA	NA
N-Nitrosopyrrolidine		NA	NA	NA	NA
o,o,o-Triethylphosphorothioate		NA	NA	NA	NA
o-Toluidine		NA	NA	NA	NA
p-Dimethylaminoazobenzene		NA	NA	NA	NA
Pentachlorobenzene		NA	NA	NA	NA
Pentachloroethane		NA	NA	NA	NA
Pentachloronitrobenzene		NA	NA	NA	NA
Pentachlorophenol		NA	NA	NA	NA
Phenacetin		NA	NA	NA	NA
Phenanthrene		NA	NA	NA	NA
Phenol		NA	NA	NA	NA
Pronamide		NA	NA	NA	NA
Pyrene		NA	NA	NA	NA
Pyridine		NA	NA	NA	NA
Safrole		NA	NA	NA	NA
Thionazin		NA	NA	NA	NA

Table B-1
Fall 2008 Groundwater Analytical Results

Plant Site 1 Groundwater Management Area
Groundwater Quality Monitoring Interim Report for Fall 2008
General Electric Company - Pittsfield, Massachusetts
(Results are presented in parts per million, ppm)

Parameter	Location ID:	East St. Area 2 - North	East St. Area 2 - South	Lyman Street Area	
	Sample ID: Date Collected:	F-1 10/15/08	95-25 10/16/08	LSSC-16S 10/16/08	MW-3R 10/16/08
Volatil Organic					
1,1,1,2-Tetrachloroethane		NA	NA	NA	NA
1,1,1-Trichloroethane		NA	NA	NA	NA
1,1,2,2-Tetrachloroethane		NA	NA	NA	NA
1,1,2-Trichloroethane		NA	NA	NA	NA
1,1-Dichloroethane		NA	NA	NA	NA
1,1-Dichloroethene		NA	NA	NA	NA
1,2,3-Trichloropropane		NA	NA	NA	NA
1,2-Dibromo-3-chloropropane		NA	NA	NA	NA
1,2-Dibromoethane		NA	NA	NA	NA
1,2-Dichloroethane		NA	NA	NA	NA
1,2-Dichloropropane		NA	NA	NA	NA
1,4-Dioxane		NA	NA	NA	NA
2-Butanone		NA	NA	NA	NA
2-Chloro-1,3-butadiene		NA	NA	NA	NA
2-Chloroethylvinylether		NA	NA	NA	NA
2-Hexanone		NA	NA	NA	NA
3-Chloropropene		NA	NA	NA	NA
4-Methyl-2-pentanone		NA	NA	NA	NA
Acetone		NA	NA	NA	NA
Acetonitrile		NA	NA	NA	NA
Acrolein		NA	NA	NA	NA
Acrylonitrile		NA	NA	NA	NA
Benzene		NA	NA	NA	NA
Bromodichloromethane		NA	NA	NA	NA
Bromoform		NA	NA	NA	NA
Bromomethane		NA	NA	NA	NA
Carbon Disulfide		NA	NA	NA	NA
Carbon Tetrachloride		NA	NA	NA	NA
Chlorobenzene		NA	NA	NA	NA
Chloroethane		NA	NA	NA	NA
Chloroform		NA	NA	NA	NA
Chloromethane		NA	NA	NA	NA
cis-1,3-Dichloropropene		NA	NA	NA	NA
Dibromochloromethane		NA	NA	NA	NA
Dibromomethane		NA	NA	NA	NA
Dichlorodifluoromethane		NA	NA	NA	NA
Ethyl Methacrylate		NA	NA	NA	NA
Ethylbenzene		NA	NA	NA	NA
Iodomethane		NA	NA	NA	NA
Isobutanol		NA	NA	NA	NA
Methacrylonitrile		NA	NA	NA	NA
Methyl Methacrylate		NA	NA	NA	NA
Methylene Chloride		NA	NA	NA	NA
Propionitrile		NA	NA	NA	NA
Styrene		NA	NA	NA	NA
Tetrachloroethene		NA	NA	NA	NA
Toluene		NA	NA	NA	NA
trans-1,2-Dichloroethene		NA	NA	NA	NA
trans-1,3-Dichloropropene		NA	NA	NA	NA
trans-1,4-Dichloro-2-butene		NA	NA	NA	NA
Trichloroethene		NA	NA	NA	NA
Trichlorofluoromethane		NA	NA	NA	NA
Vinyl Acetate		NA	NA	NA	NA
Vinyl Chloride		NA	NA	NA	NA
Xylenes (total)		NA	NA	NA	NA
Total VOCs		NA	NA	NA	NA

Table B-1
Fall 2008 Groundwater Analytical Results

Plant Site 1 Groundwater Management Area
Groundwater Quality Monitoring Interim Report for Fall 2008
General Electric Company - Pittsfield, Massachusetts
(Results are presented in parts per million, ppm)

Parameter	Location ID:	East St. Area 2 - North	East St. Area 2 - South	Lyman Street Area	
	Sample ID: Date Collected:	F-1 10/15/08	95-25 10/16/08	LSSC-16S 10/16/08	MW-3R 10/16/08
PCBs-Filtered					
Aroclor-1016		ND(0.000075) J	ND(0.000075) J	ND(0.000077) J	ND(0.000076) J
Aroclor-1221		ND(0.000075) J	ND(0.000075) J	ND(0.000077) J	ND(0.000076) J
Aroclor-1232		ND(0.000075) J	ND(0.000075) J	ND(0.000077) J	ND(0.000076) J
Aroclor-1242		ND(0.000075) J	ND(0.000075) J	ND(0.000077) J	ND(0.000076) J
Aroclor-1248		ND(0.000075) J	ND(0.000075) J	ND(0.000077) J	ND(0.000076) J
Aroclor-1254		ND(0.000075) J	ND(0.000075) J	ND(0.000077) J	ND(0.000076) J
Aroclor-1260		ND(0.000075) J	ND(0.000075) J	ND(0.000077) J	ND(0.000076) J
Total PCBs		ND(0.000075) J	ND(0.000075) J	ND(0.000077) J	ND(0.000076) J
Semivolatile Organics					
1,2,4,5-Tetrachlorobenzene		NA	NA	NA	NA
1,2,4-Trichlorobenzene		NA	NA	NA	NA
1,2-Dichlorobenzene		NA	NA	NA	NA
1,2-Diphenylhydrazine		NA	NA	NA	NA
1,3,5-Trinitrobenzene		NA	NA	NA	NA
1,3-Dichlorobenzene		NA	NA	NA	NA
1,3-Dinitrobenzene		NA	NA	NA	NA
1,4-Dichlorobenzene		NA	NA	NA	NA
1,4-Naphthoquinone		NA	NA	NA	NA
1-Naphthylamine		NA	NA	NA	NA
2,3,4,6-Tetrachlorophenol		NA	NA	NA	NA
2,4,5-Trichlorophenol		NA	NA	NA	NA
2,4,6-Trichlorophenol		NA	NA	NA	NA
2,4-Dichlorophenol		NA	NA	NA	NA
2,4-Dimethylphenol		NA	NA	NA	NA
2,4-Dinitrophenol		NA	NA	NA	NA
2,4-Dinitrotoluene		NA	NA	NA	NA
2,6-Dichlorophenol		NA	NA	NA	NA
2,6-Dinitrotoluene		NA	NA	NA	NA
2-Acetylaminofluorene		NA	NA	NA	NA
2-Chloronaphthalene		NA	NA	NA	NA
2-Chlorophenol		NA	NA	NA	NA
2-Methylnaphthalene		NA	NA	NA	NA
2-Methylphenol		NA	NA	NA	NA
2-Naphthylamine		NA	NA	NA	NA
2-Nitroaniline		NA	NA	NA	NA
2-Nitrophenol		NA	NA	NA	NA
2-Picoline		NA	NA	NA	NA
3&4-Methylphenol		NA	NA	NA	NA
3,3'-Dichlorobenzidine		NA	NA	NA	NA
3,3'-Dimethylbenzidine		NA	NA	NA	NA
3-Methylcholanthrene		NA	NA	NA	NA
3-Nitroaniline		NA	NA	NA	NA
4,6-Dinitro-2-methylphenol		NA	NA	NA	NA
4-Aminobiphenyl		NA	NA	NA	NA
4-Bromophenyl-phenylether		NA	NA	NA	NA
4-Chloro-3-Methylphenol		NA	NA	NA	NA
4-Chloroaniline		NA	NA	NA	NA
4-Chlorobenzilate		NA	NA	NA	NA
4-Chlorophenyl-phenylether		NA	NA	NA	NA
4-Nitroaniline		NA	NA	NA	NA
4-Nitrophenol		NA	NA	NA	NA
4-Nitroquinoline-1-oxide		NA	NA	NA	NA
4-Phenylenediamine		NA	NA	NA	NA
5-Nitro-o-toluidine		NA	NA	NA	NA
7,12-Dimethylbenz(a)anthracene		NA	NA	NA	NA
a,a'-Dimethylphenethylamine		NA	NA	NA	NA
Acenaphthene		NA	NA	NA	NA
Acenaphthylene		NA	NA	NA	NA
Acetophenone		NA	NA	NA	NA
Aniline		NA	NA	NA	NA
Anthracene		NA	NA	NA	NA

Table B-1
Fall 2008 Groundwater Analytical Results

Plant Site 1 Groundwater Management Area
Groundwater Quality Monitoring Interim Report for Fall 2008
General Electric Company - Pittsfield, Massachusetts
(Results are presented in parts per million, ppm)

Parameter	Location ID:	East St. Area 2 - North	East St. Area 2 - South	Lyman Street Area	
	Sample ID: Date Collected:	F-1 10/15/08	95-25 10/16/08	LSSC-16S 10/16/08	MW-3R 10/16/08
Semivolatiles Organics (continued)					
Aramite		NA	NA	NA	NA
Benzidine		NA	NA	NA	NA
Benzo(a)anthracene		NA	NA	NA	NA
Benzo(a)pyrene		NA	NA	NA	NA
Benzo(b)fluoranthene		NA	NA	NA	NA
Benzo(g,h,i)perylene		NA	NA	NA	NA
Benzo(k)fluoranthene		NA	NA	NA	NA
Benzyl Alcohol		NA	NA	NA	NA
bis(2-Chloroethoxy)methane		NA	NA	NA	NA
bis(2-Chloroethyl)ether		NA	NA	NA	NA
bis(2-Chloroisopropyl)ether		NA	NA	NA	NA
bis(2-Ethylhexyl)phthalate		NA	NA	NA	NA
Butylbenzylphthalate		NA	NA	NA	NA
Chrysene		NA	NA	NA	NA
Diallate		NA	NA	NA	NA
Dibenzo(a,h)anthracene		NA	NA	NA	NA
Dibenzofuran		NA	NA	NA	NA
Diethylphthalate		NA	NA	NA	NA
Dimethylphthalate		NA	NA	NA	NA
Di-n-Butylphthalate		NA	NA	NA	NA
Di-n-Octylphthalate		NA	NA	NA	NA
Diphenylamine		NA	NA	NA	NA
Ethyl Methanesulfonate		NA	NA	NA	NA
Fluoranthene		NA	NA	NA	NA
Fluorene		NA	NA	NA	NA
Hexachlorobenzene		NA	NA	NA	NA
Hexachlorobutadiene		NA	NA	NA	NA
Hexachlorocyclopentadiene		NA	NA	NA	NA
Hexachloroethane		NA	NA	NA	NA
Hexachlorophene		NA	NA	NA	NA
Hexachloropropene		NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene		NA	NA	NA	NA
Isodrin		NA	NA	NA	NA
Isophorone		NA	NA	NA	NA
Isosafrole		NA	NA	NA	NA
Methapyrilene		NA	NA	NA	NA
Methyl Methanesulfonate		NA	NA	NA	NA
Naphthalene		NA	NA	NA	NA
Nitrobenzene		NA	NA	NA	NA
N-Nitrosodiethylamine		NA	NA	NA	NA
N-Nitrosodimethylamine		NA	NA	NA	NA
N-Nitroso-di-n-butylamine		NA	NA	NA	NA
N-Nitroso-di-n-propylamine		NA	NA	NA	NA
N-Nitrosomethylethylamine		NA	NA	NA	NA
N-Nitrosomorpholine		NA	NA	NA	NA
N-Nitrosopiperidine		NA	NA	NA	NA
N-Nitrosopyrrolidine		NA	NA	NA	NA
o,o,o-Triethylphosphorothioate		NA	NA	NA	NA
o-Toluidine		NA	NA	NA	NA
p-Dimethylaminoazobenzene		NA	NA	NA	NA
Pentachlorobenzene		NA	NA	NA	NA
Pentachloroethane		NA	NA	NA	NA
Pentachloronitrobenzene		NA	NA	NA	NA
Pentachlorophenol		NA	NA	NA	NA
Phenacetin		NA	NA	NA	NA
Phenanthrene		NA	NA	NA	NA
Phenol		NA	NA	NA	NA
Pronamide		NA	NA	NA	NA
Pyrene		NA	NA	NA	NA
Pyridine		NA	NA	NA	NA
Safrole		NA	NA	NA	NA
Thionazin		NA	NA	NA	NA

Table B-1
Fall 2008 Groundwater Analytical Results

Plant Site 1 Groundwater Management Area
Groundwater Quality Monitoring Interim Report for Fall 2008
General Electric Company - Pittsfield, Massachusetts
(Results are presented in parts per million, ppm)

Parameter	Location ID:	Newell St. Area II	
	Sample ID: Date Collected:	MM-1 10/24/08	GMA1-25 10/17/08
Volatile Organics			
1,1,1,2-Tetrachloroethane	NA	ND(0.0010) [ND(0.0010)]	ND(0.0010)
1,1,1-Trichloroethane	NA	ND(0.0010) [ND(0.0010)]	ND(0.0010)
1,1,2,2-Tetrachloroethane	NA	ND(0.0010) [ND(0.0010)]	ND(0.0010)
1,1,2-Trichloroethane	NA	ND(0.0010) [ND(0.0010)]	ND(0.0010)
1,1-Dichloroethane	NA	ND(0.0010) [ND(0.0010)]	ND(0.0010)
1,1-Dichloroethene	NA	ND(0.0010) [ND(0.0010)]	ND(0.0010)
1,2,3-Trichloropropane	NA	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
1,2-Dibromoethane	NA	ND(0.0010) [ND(0.0010)]	ND(0.0010)
1,2-Dichloroethane	NA	ND(0.0010) [ND(0.0010)]	ND(0.0010)
1,2-Dichloropropane	NA	ND(0.0010) [ND(0.0010)]	ND(0.0010)
1,4-Dioxane	NA	ND(0.10) [ND(0.10)]	ND(0.10)
2-Butanone	NA	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)
2-Chloroethylvinylether	NA	ND(0.013) J [ND(0.013) J]	R
2-Hexanone	NA	ND(0.0050) J [ND(0.0050) J]	ND(0.0050) J
3-Chloropropene	NA	ND(0.0010) [ND(0.0010)]	ND(0.0010)
4-Methyl-2-pentanone	NA	ND(0.0050) [ND(0.0050)]	ND(0.0050)
Acetone	NA	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
Acrolein	NA	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
Benzene	NA	ND(0.0010) [ND(0.0010)]	ND(0.0010)
Bromodichloromethane	NA	ND(0.0010) [ND(0.0010)]	ND(0.0010)
Bromoform	NA	ND(0.0010) [ND(0.0010)]	ND(0.0010)
Bromomethane	NA	ND(0.0010) [ND(0.0010)]	ND(0.0010)
Carbon Disulfide	NA	ND(0.0010) [ND(0.0010)]	ND(0.0010)
Carbon Tetrachloride	NA	ND(0.0010) [ND(0.0010)]	ND(0.0010)
Chlorobenzene	NA	ND(0.0010) [ND(0.0010)]	ND(0.0010)
Chloroethane	NA	ND(0.0010) [ND(0.0010)]	ND(0.0010)
Chloroform	NA	ND(0.0010) [ND(0.0010)]	ND(0.0010)
Chloromethane	NA	ND(0.0010) [ND(0.0010)]	ND(0.0010)
cis-1,3-Dichloropropene	NA	ND(0.0010) [ND(0.0010)]	ND(0.0010)
Dibromochloromethane	NA	ND(0.0010) [ND(0.0010)]	ND(0.0010)
Dibromomethane	NA	ND(0.0010) [ND(0.0010)]	ND(0.0010)
Dichlorodifluoromethane	NA	ND(0.0010) [ND(0.0010)]	ND(0.0010)
Ethyl Methacrylate	NA	ND(0.0010) [ND(0.0010)]	ND(0.0010)
Ethylbenzene	NA	ND(0.0010) [ND(0.0010)]	ND(0.0010)
Iodomethane	NA	ND(0.0010) [ND(0.0010)]	ND(0.0010)
Isobutanol	NA	ND(0.050) J [ND(0.050) J]	ND(0.050) J
Methacrylonitrile	NA	ND(0.010) [ND(0.010)]	ND(0.010)
Methyl Methacrylate	NA	ND(0.0010) [ND(0.0010)]	ND(0.0010)
Methylene Chloride	NA	0.00024 J [0.00053 J]	0.00061 J
Propionitrile	NA	ND(0.020) J [ND(0.020) J]	ND(0.020) J
Styrene	NA	ND(0.0010) [ND(0.0010)]	ND(0.0010)
Tetrachloroethene	NA	ND(0.0010) [ND(0.0010)]	ND(0.0010)
Toluene	NA	ND(0.0010) [ND(0.0010)]	ND(0.0010)
trans-1,2-Dichloroethene	NA	ND(0.0010) [ND(0.0010)]	ND(0.0010)
trans-1,3-Dichloropropene	NA	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
Trichloroethene	NA	ND(0.0010) [ND(0.0010)]	ND(0.0010)
Trichlorofluoromethane	NA	ND(0.0010) [ND(0.0010)]	ND(0.0010)
Vinyl Acetate	NA	ND(0.0025) [ND(0.0025)]	ND(0.0025)
Vinyl Chloride	NA	ND(0.0010) [ND(0.0010)]	ND(0.0010)
Xylenes (total)	NA	ND(0.0010) [ND(0.0010)]	ND(0.0010)
Total VOCs	NA	0.00024 J [0.00053 J]	0.00061 J

Table B-1
Fall 2008 Groundwater Analytical Results

Plant Site 1 Groundwater Management Area
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General Electric Company - Pittsfield, Massachusetts
(Results are presented in parts per million, ppm)

Parameter	Location ID: Sample ID: Date Collected:	Newell St. Area I	Newell St. Area II	
		MM-1 10/24/08	GMA1-25 10/17/08	GMA1-27 10/17/08
PCBs-Filtered				
Aroclor-1016		ND(0.00011) J	ND(0.000068) J [ND(0.000068) J]	ND(0.000066) J
Aroclor-1221		ND(0.00011) J	ND(0.000068) J [ND(0.000068) J]	ND(0.000066) J
Aroclor-1232		ND(0.00011) J	ND(0.000068) J [ND(0.000068) J]	ND(0.000066) J
Aroclor-1242		ND(0.00011) J	ND(0.000068) J [ND(0.000068) J]	ND(0.000066) J
Aroclor-1248		ND(0.00011) J	ND(0.000068) J [ND(0.000068) J]	ND(0.000066) J
Aroclor-1254		ND(0.00011) J	ND(0.000068) J [ND(0.000068) J]	ND(0.000066) J
Aroclor-1260		ND(0.00011) J	ND(0.000068) J [ND(0.000068) J]	ND(0.000066) J
Total PCBs		ND(0.00011) J	ND(0.000068) J [ND(0.000068) J]	ND(0.000066) J
Semivolatile Organics				
1,2,4,5-Tetrachlorobenzene		NA	ND(0.0058) [ND(0.0051)]	ND(0.0051)
1,2,4-Trichlorobenzene		NA	ND(0.0058) [ND(0.0051)]	ND(0.0051)
1,2-Dichlorobenzene		NA	ND(0.0058) [ND(0.0051)]	ND(0.0051)
1,2-Diphenylhydrazine		NA	ND(0.0058) [ND(0.0051)]	ND(0.0051)
1,3,5-Trinitrobenzene		NA	ND(0.029) [ND(0.026)]	ND(0.026)
1,3-Dichlorobenzene		NA	ND(0.0058) [ND(0.0051)]	ND(0.0051)
1,3-Dinitrobenzene		NA	ND(0.0058) [ND(0.0051)]	ND(0.0051)
1,4-Dichlorobenzene		NA	ND(0.0058) [ND(0.0051)]	ND(0.0051)
1,4-Naphthoquinone		NA	ND(0.0058) [ND(0.0051)]	ND(0.0051)
1-Naphthylamine		NA	ND(0.029) J [ND(0.026) J]	ND(0.026) J
2,3,4,6-Tetrachlorophenol		NA	ND(0.0058) [ND(0.0051)]	ND(0.0051)
2,4,5-Trichlorophenol		NA	ND(0.0058) [ND(0.0051)]	ND(0.0051)
2,4,6-Trichlorophenol		NA	ND(0.0058) [ND(0.0051)]	ND(0.0051)
2,4-Dichlorophenol		NA	ND(0.0058) [ND(0.0051)]	ND(0.0051)
2,4-Dimethylphenol		NA	ND(0.0058) [ND(0.0051)]	ND(0.0051)
2,4-Dinitrophenol		NA	ND(0.029) [ND(0.026)]	ND(0.026)
2,4-Dinitrotoluene		NA	ND(0.0058) [ND(0.0051)]	ND(0.0051)
2,6-Dichlorophenol		NA	ND(0.0058) [ND(0.0051)]	ND(0.0051)
2,6-Dinitrotoluene		NA	ND(0.0058) [ND(0.0051)]	ND(0.0051)
2-Acetylaminofluorene		NA	ND(0.012) [ND(0.010)]	ND(0.010)
2-Chloronaphthalene		NA	ND(0.0058) [ND(0.0051)]	ND(0.0051)
2-Chlorophenol		NA	ND(0.0058) [ND(0.0051)]	ND(0.0051)
2-Methylnaphthalene		NA	ND(0.0058) [ND(0.0051)]	ND(0.0051)
2-Methylphenol		NA	ND(0.0058) [ND(0.0051)]	ND(0.0051)
2-Naphthylamine		NA	ND(0.029) J [ND(0.026) J]	ND(0.026) J
2-Nitroaniline		NA	ND(0.0058) [ND(0.0051)]	ND(0.0051)
2-Nitrophenol		NA	ND(0.0058) [ND(0.0051)]	ND(0.0051)
2-Picoline		NA	ND(0.0058) [ND(0.0051)]	ND(0.0051)
3&4-Methylphenol		NA	ND(0.0058) [ND(0.0051)]	ND(0.0051)
3,3'-Dichlorobenzidine		NA	ND(0.012) [ND(0.010)]	ND(0.010)
3,3'-Dimethylbenzidine		NA	ND(0.029) [ND(0.026)]	ND(0.026)
3-Methylcholanthrene		NA	ND(0.0058) [ND(0.0051)]	ND(0.0051)
3-Nitroaniline		NA	ND(0.029) [ND(0.026)]	ND(0.026)
4,6-Dinitro-2-methylphenol		NA	ND(0.029) [ND(0.026)]	ND(0.026)
4-Aminobiphenyl		NA	ND(0.0058) [ND(0.0051)]	ND(0.0051)
4-Bromophenyl-phenylether		NA	ND(0.0058) [ND(0.0051)]	ND(0.0051)
4-Chloro-3-Methylphenol		NA	ND(0.0058) [ND(0.0051)]	ND(0.0051)
4-Chloroaniline		NA	ND(0.029) [ND(0.026)]	ND(0.026)
4-Chlorobenzilate		NA	ND(0.0058) [ND(0.0051)]	ND(0.0051)
4-Chlorophenyl-phenylether		NA	ND(0.0058) [ND(0.0051)]	ND(0.0051)
4-Nitroaniline		NA	ND(0.029) [ND(0.026)]	ND(0.026)
4-Nitrophenol		NA	ND(0.029) [ND(0.026)]	ND(0.026)
4-Nitroquinoline-1-oxide		NA	ND(0.029) J [ND(0.026) J]	ND(0.026) J
4-Phenylenediamine		NA	ND(0.012) J [ND(0.010) J]	ND(0.010) J
5-Nitro-o-toluidine		NA	ND(0.0058) [ND(0.0051)]	ND(0.0051)
7,12-Dimethylbenz(a)anthracene		NA	ND(0.0058) [ND(0.0051)]	ND(0.0051)
a,a'-Dimethylphenethylamine		NA	ND(0.029) J [ND(0.026) J]	ND(0.026) J
Acenaphthene		NA	ND(0.0058) [ND(0.0051)]	ND(0.0051)
Acenaphthylene		NA	ND(0.0058) [ND(0.0051)]	ND(0.0051)
Acetophenone		NA	ND(0.0058) [ND(0.0051)]	ND(0.0051)
Aniline		NA	ND(0.0058) [ND(0.0051)]	ND(0.0051)
Anthracene		NA	ND(0.0058) [ND(0.0051)]	ND(0.0051)

Table B-1
Fall 2008 Groundwater Analytical Results

Plant Site 1 Groundwater Management Area
Groundwater Quality Monitoring Interim Report for Fall 2008
General Electric Company - Pittsfield, Massachusetts
(Results are presented in parts per million, ppm)

Parameter	Location ID:	Newell St. Area II	
	Sample ID: Date Collected:	MM-1 10/24/08	GMA1-25 10/17/08
Semivolatile Organics (continued)			
Aramite		NA	ND(0.0058) [ND(0.0051)]
Benzidine		NA	ND(0.012) J [ND(0.010) J]
Benzo(a)anthracene		NA	ND(0.0058) [ND(0.0051)]
Benzo(a)pyrene		NA	ND(0.0058) [ND(0.0051)]
Benzo(b)fluoranthene		NA	ND(0.0058) [ND(0.0051)]
Benzo(g,h,i)perylene		NA	ND(0.0058) [ND(0.0051)]
Benzo(k)fluoranthene		NA	ND(0.0058) [ND(0.0051)]
Benzyl Alcohol		NA	ND(0.012) [ND(0.010)]
bis(2-Chloroethoxy)methane		NA	ND(0.0058) [ND(0.0051)]
bis(2-Chloroethyl)ether		NA	ND(0.0058) [ND(0.0051)]
bis(2-Chloroisopropyl)ether		NA	ND(0.0058) [ND(0.0051)]
bis(2-Ethylhexyl)phthalate		NA	0.00099 J [ND(0.0051)]
Butylbenzylphthalate		NA	ND(0.0058) [ND(0.0051)]
Chrysene		NA	ND(0.0058) [ND(0.0051)]
Diallate		NA	ND(0.0058) [ND(0.0051)]
Dibenzo(a,h)anthracene		NA	ND(0.0058) [ND(0.0051)]
Dibenzofuran		NA	ND(0.0058) [ND(0.0051)]
Diethylphthalate		NA	ND(0.0058) [ND(0.0051)]
Dimethylphthalate		NA	ND(0.0058) [ND(0.0051)]
Di-n-Butylphthalate		NA	ND(0.0058) [ND(0.0051)]
Di-n-Octylphthalate		NA	ND(0.0058) [ND(0.0051)]
Diphenylamine		NA	ND(0.0058) [ND(0.0051)]
Ethyl Methanesulfonate		NA	ND(0.0058) [ND(0.0051)]
Fluoranthene		NA	ND(0.0058) [ND(0.0051)]
Fluorene		NA	ND(0.0058) [ND(0.0051)]
Hexachlorobenzene		NA	ND(0.0058) [ND(0.0051)]
Hexachlorobutadiene		NA	ND(0.0058) [ND(0.0051)]
Hexachlorocyclopentadiene		NA	ND(0.012) J [ND(0.010) J]
Hexachloroethane		NA	ND(0.0058) [ND(0.0051)]
Hexachlorophene		NA	ND(0.0058) J [ND(0.0051) J]
Hexachloropropene		NA	ND(0.012) [ND(0.010)]
Indeno(1,2,3-cd)pyrene		NA	ND(0.0058) [ND(0.0051)]
Isodrin		NA	ND(0.0058) [ND(0.0051)]
Isophorone		NA	ND(0.0058) [ND(0.0051)]
Isosafrole		NA	ND(0.0058) [ND(0.0051)]
Methapyrilene		NA	ND(0.0058) J [ND(0.0051) J]
Methyl Methanesulfonate		NA	ND(0.0058) [ND(0.0051)]
Naphthalene		NA	ND(0.0058) [ND(0.0051)]
Nitrobenzene		NA	ND(0.0058) [ND(0.0051)]
N-Nitrosodiethylamine		NA	ND(0.0058) [ND(0.0051)]
N-Nitrosodimethylamine		NA	ND(0.0058) [ND(0.0051)]
N-Nitroso-di-n-butylamine		NA	ND(0.0058) [ND(0.0051)]
N-Nitroso-di-n-propylamine		NA	ND(0.0058) [ND(0.0051)]
N-Nitrosomethylethylamine		NA	ND(0.0058) [ND(0.0051)]
N-Nitrosomorpholine		NA	ND(0.0058) [ND(0.0051)]
N-Nitrosopiperidine		NA	ND(0.0058) [ND(0.0051)]
N-Nitrosopyrrolidine		NA	ND(0.0058) [ND(0.0051)]
o,o,o-Triethylphosphorothioate		NA	ND(0.0058) [ND(0.0051)]
o-Toluidine		NA	ND(0.0058) [ND(0.0051)]
p-Dimethylaminoazobenzene		NA	ND(0.0058) [ND(0.0051)]
Pentachlorobenzene		NA	ND(0.0058) [ND(0.0051)]
Pentachloroethane		NA	ND(0.0058) [ND(0.0051)]
Pentachloronitrobenzene		NA	ND(0.0058) [ND(0.0051)]
Pentachlorophenol		NA	ND(0.029) [ND(0.026)]
Phenacetin		NA	ND(0.0058) [ND(0.0051)]
Phenanthrene		NA	ND(0.0058) [ND(0.0051)]
Phenol		NA	ND(0.0058) [ND(0.0051)]
Pronamide		NA	ND(0.0058) [ND(0.0051)]
Pyrene		NA	ND(0.0058) [ND(0.0051)]
Pyridine		NA	ND(0.0058) [ND(0.0051)]
Safrole		NA	ND(0.0058) [ND(0.0051)]
Thionazin		NA	ND(0.012) [ND(0.010)]

**Table B-1
Fall 2008 Groundwater Analytical Results**

**Plant Site 1 Groundwater Management Area
Groundwater Quality Monitoring Interim Report for Fall 2008
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 volatiles, PCBs (filtered) and semivolatiles.
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. 2007).
4. NA - Not Analyzed.
5. ND - Analyte was not detected. The number in parentheses is the associated detection limit.
6. Only those constituents detected in one or more samples are summarized.
Field duplicate sample results are presented in brackets.

Data Qualifiers:

Organics (volatiles, PCBs, semivolatiles)

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

ARCADIS

Appendix C

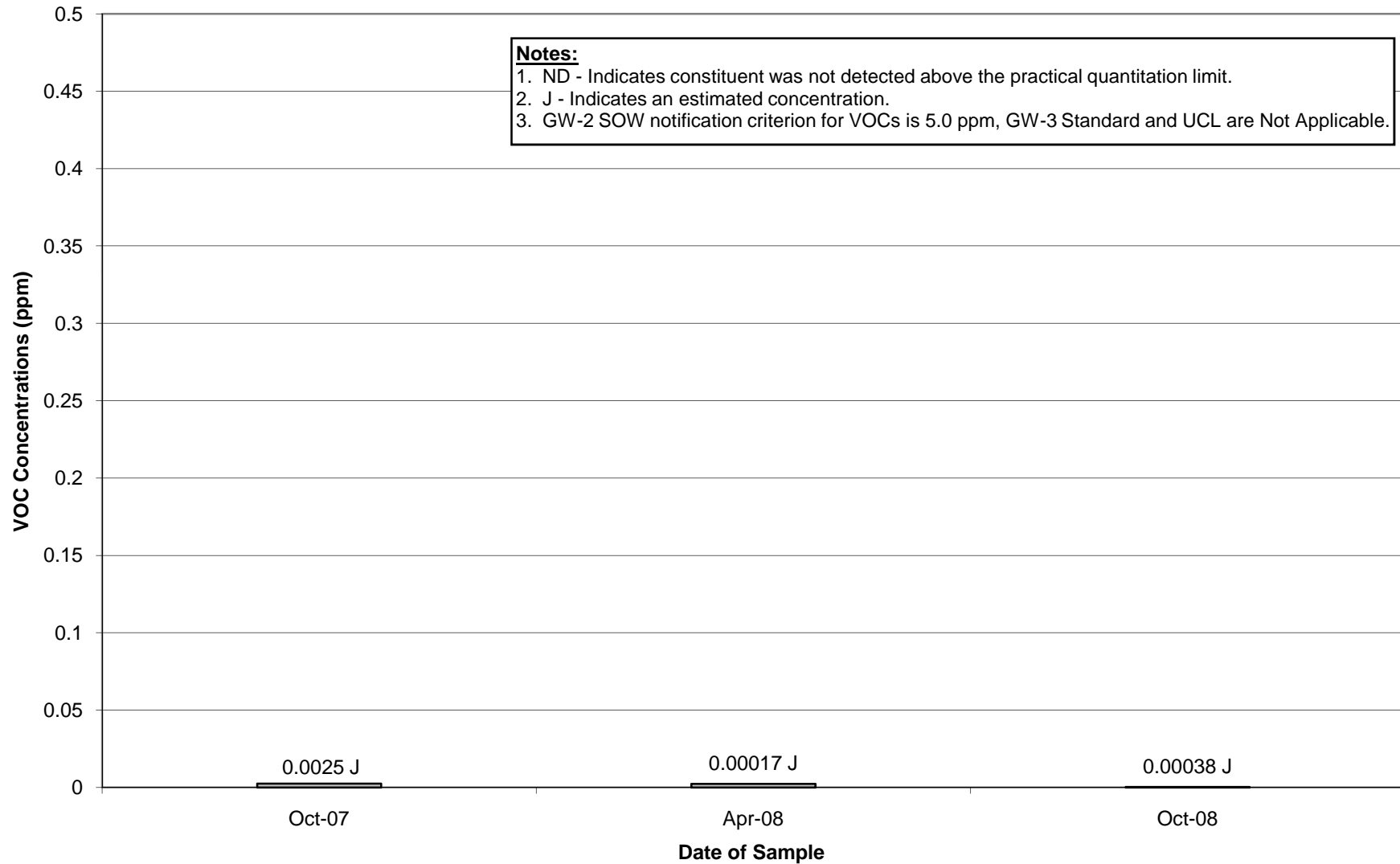
Historical Groundwater Data

Historical Groundwater Data

Total VOC Concentrations –
Wells Sampled in Fall 2008

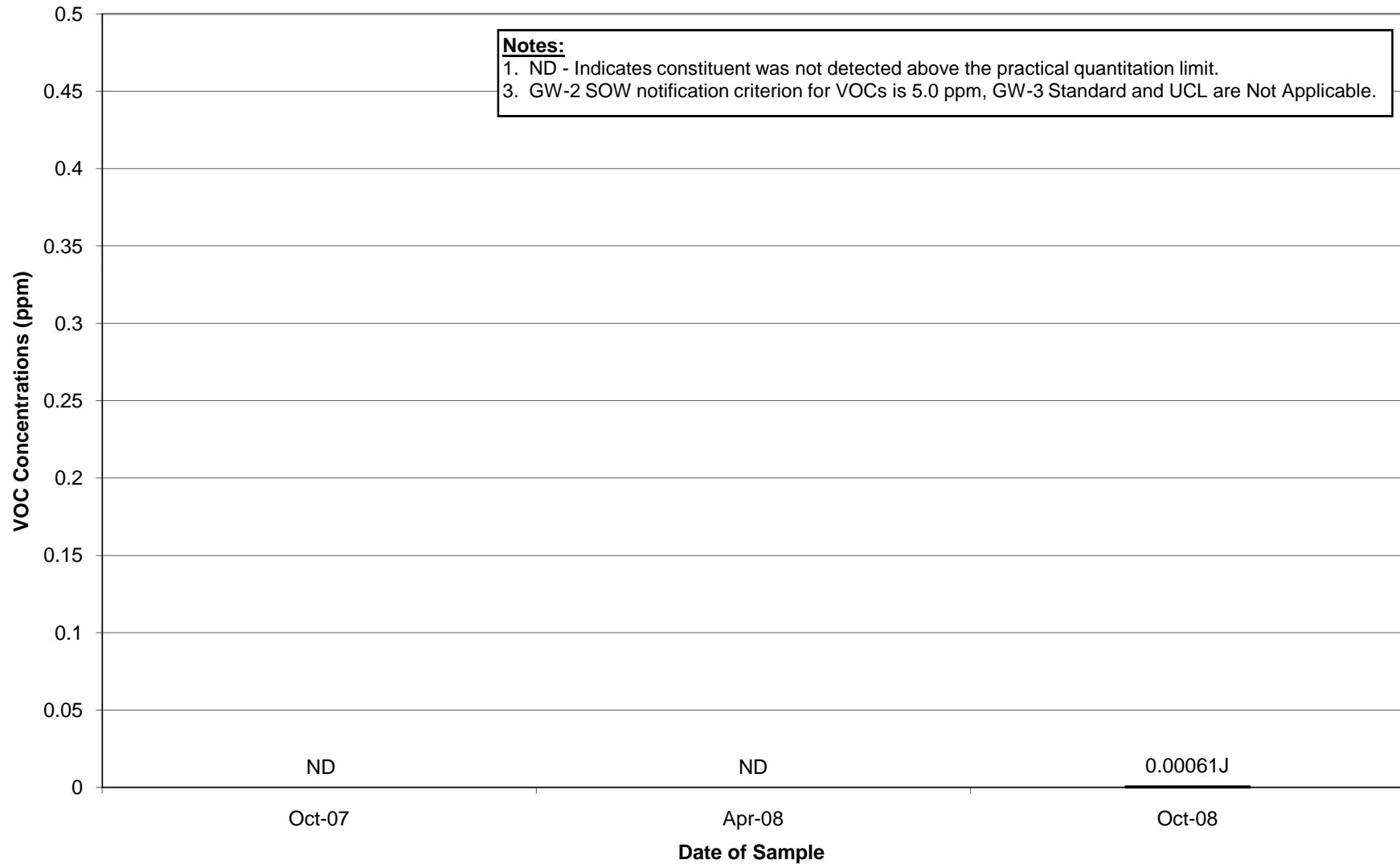
Appendix C
Well GMA1-25 Historical VOC Concentrations

Groundwater Management Area 1
General Electric Company - Pittsfield, Massachusetts



Appendix C
Well GMA1-27 Historical VOC Concentrations

Groundwater Management Area 1
General Electric Company - Pittsfield, Massachusetts

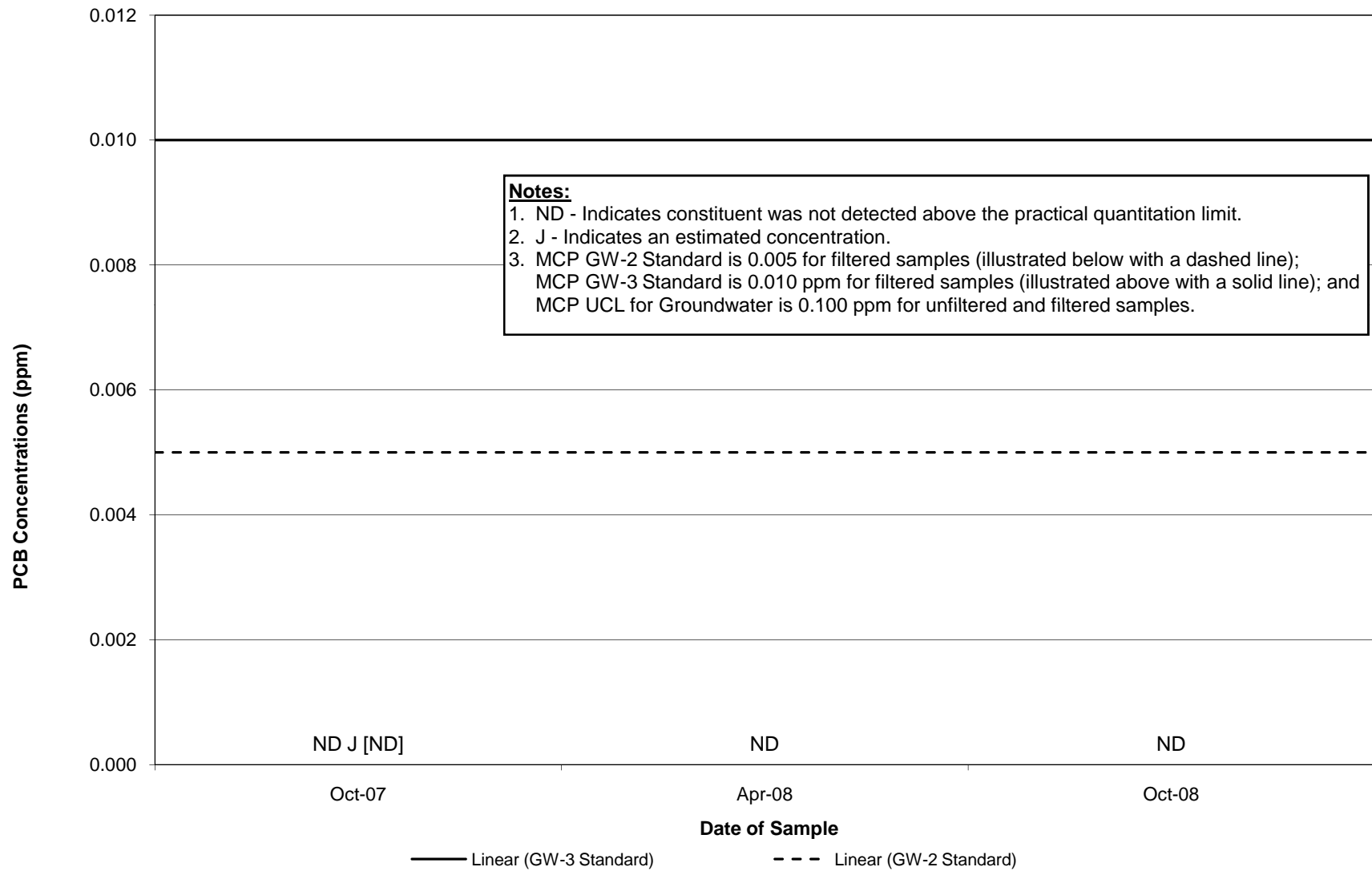


Historical Groundwater Data

Total PCB Concentrations –
Wells Sampled in Fall 2008

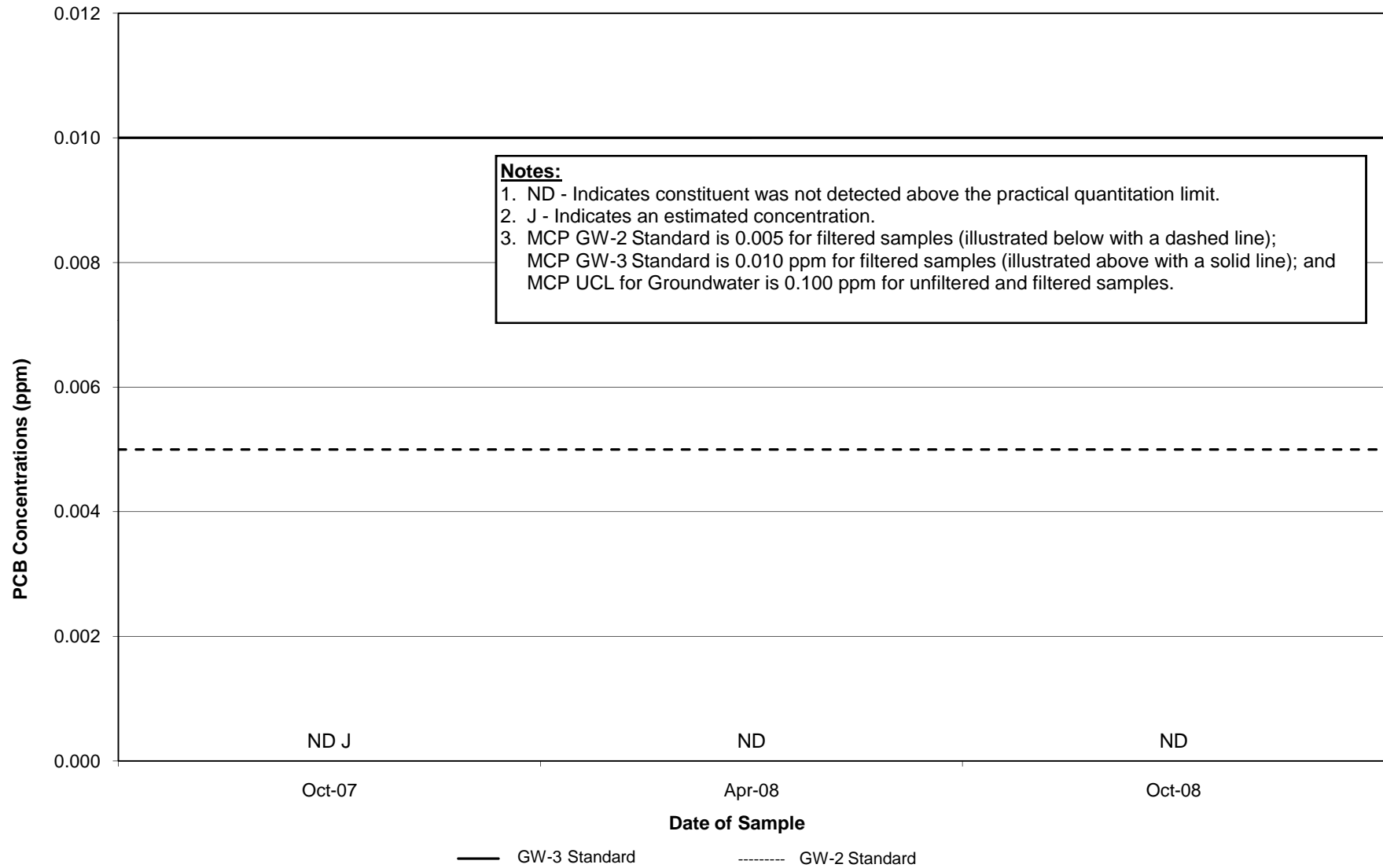
Appendix C
Well GMA1-25 Historical PCB Concentrations

Groundwater Management Area 1
General Electric Company - Pittsfield, Massachusetts



Appendix C
Well GMA1-27 Historical PCB Concentrations

Groundwater Management Area 1
General Electric Company - Pittsfield, Massachusetts



Appendix D

Data Validation Report

**Appendix D
Groundwater Sampling Data Validation Report
Groundwater Management Area 1 – Fall 2008**

**General Electric Company
Pittsfield, Massachusetts**

1.0 General

This attachment summarizes the data validation review performed on behalf of the General Electric Company (GE) for groundwater samples collected in October and November 2008 as part of groundwater sampling activities conducted at Groundwater Management Area 1, 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. of Wilmington, North Carolina. Data validation was performed for 19 PCB samples, five volatile organic compound (VOC) samples, and four semi-volatile organic compound (SVOC) samples.

2.0 Data Evaluation Procedures

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

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

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

The following data qualifiers were used in this data evaluation:

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

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

3.0 Data Validation Procedures

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

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

A 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	16	2	1	19
VOCs	0	0	0	2	1	2	5
SVOCs	0	0	0	2	1	1	4
Total	0	0	0	20	4	4	28

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	5	J
	1,4-Dioxane	1	J
	2-Butanone	5	J
	2-Chloroethylvinylether	4	J
	Acetone	5	J
	Acetonitrile	5	J
	Acrolein	5	J
	Acrylonitrile	5	J
	Isobutanol	5	J
	Methacrylonitrile	1	J
	Propionitrile	5	J
	trans-1,4-Dichloro-2-butene	5	J
SVOCs	Hexachlorophene	4	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	2-Hexanone	4	J
	Acrolein	1	J
	Bromomethane	1	J
	Methacrylonitrile	1	J

Compounds Qualified Due to Continuing Calibration of %D Values

Analysis	Compound	Number of Affected Samples	Qualification
SVOCs	1-Naphthylamine	3	J
	2-Naphthylamine	4	J
	4-Nitroquinoline-1-oxide	3	J
	4-Phenylenediamine	4	J
	a,a'-Dimethylphenethylamine	3	J
	Benzidine	3	J
	Hexachlorocyclopentadiene	3	J
	Methapyrilene	3	J

Matrix spike/matrix spike duplicate (MS/MSD) sample analysis recovery criteria for organics require that the MS/MSD recovery must be within the laboratory-generated QC control limits specified on the MS reporting form. 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). Non-detect organic sample results that exhibited MS/MSD recoveries less than 10% were qualified as rejected (R). The compound that did not meet MS/MSD recovery criteria and the number of samples qualified due to those deviations are presented in the following table.

Compound Qualified Due to MS/MSD Recovery Deviations

Analysis	Compound	Number of Affected Samples	Qualification
VOCs	2-Chloroethylvinylether	1	R

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

Compounds Qualified Due to LCS/LCSD Recovery Deviations

Analysis	Compound	Number of Affected Samples	Qualification
PCBs	All Aroclors	1	J
SVOCs	Benzo(k)fluoranthene	1	J
	Isophorone	1	J

Surrogate compounds are analyzed with every organic sample to aid in evaluation of the sample extraction efficiency. As specified in the FSP/QAPP, at least one of the PCB surrogate compounds must have a recovery between laboratory-specified control limits. Associated sample results were qualified as estimated (J) for all compounds when surrogate recovery criteria were outside control limits and greater than 10%. A summary of the compounds affected by surrogate recovery exceedances and the number of samples qualified due to those deviations are presented in the following table.

Compounds Qualified Due to Surrogate Recovery Deviations

Analysis	Compound	Number of Affected Samples	Qualification
PCBs	All Aroclors	2	J

5.0 Overall Data Usability

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

Data Usability		
Parameter	Percent Usability	Rejected Data
VOCs	99.6	A total of one sample result was rejected due to MS/MSD recovery deviations.
SVOCs	100	None
PCBs	100	None

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

5.1 Precision

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

5.2 Accuracy

Accuracy measures the bias in an analytical system or the degree of agreement of a measurement with a known reference value. For this investigation, accuracy was defined as the percent recovery of QA/QC samples that were spiked with a known concentration of an analyte or compound of interest. The QA/QC samples used to evaluate analytical accuracy included instrument calibration, internal standards, LCS/LCSDs, MS/MSD samples, and surrogate compound recoveries. For this analytical program, 9.9% of the data

required qualification due to instrument calibration deviations, 15.5% of the data required qualification due to LCS/LCSD recoveries, 0.11% of the data required qualification due to MS/MSD recovery deviations, and 1.8% of the data required qualification due to surrogate compound recovery deviations. None of the data required qualification due to internal standard recovery deviations.

5.3 Representativeness

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

5.4 Comparability

Comparability is a qualitative parameter expressing the confidence with which one data set can be compared with another. This goal was achieved through the use of the standardized techniques for sample collection and analysis presented in the FSP/QAPP. Specifically, all the groundwater samples collected in October and November 2008 were analyzed by EPA SW-846 method 8082 for PCBs, 8260 for VOCs, and 8270 for SVOCs.

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 1 Sampling - Fall 2008

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

Sample Delivery Group No.	Sample ID	Date Collected	Matrix	Validation Level	Qualification	Compound	QA/QC Parameter	Value	Control Limits	Qualified Result	Notes						
PCBs																	
G582-131	17A (Filtered)	10/16/2008	Water	Tier II	Yes	Aroclor-1016	LCS %R	62.8%	70% to 130%	ND(0.000081) J							
						Aroclor-1221	LCS %R	62.8%	70% to 130%	ND(0.000081) J							
						Aroclor-1232	LCS %R	62.8%	70% to 130%	ND(0.000081) J							
						Aroclor-1242	LCS %R	62.8%	70% to 130%	ND(0.000081) J							
						Aroclor-1248	LCS %R	62.8%	70% to 130%	ND(0.000081) J							
						Aroclor-1254	LCS %R	62.8%	70% to 130%	ND(0.000081) J							
						Aroclor-1260	LCS %R	62.8%	70% to 130%	ND(0.000081) J							
						Total PCBs	LCS %R	62.8%	70% to 130%	ND(0.000081) J							
						G582-131	37R (Filtered)	10/16/2008	Water	Tier II	Yes	Aroclor-1016	LCS %R	62.8%	70% to 130%	ND(0.000078) J	
												Aroclor-1221	LCS %R	62.8%	70% to 130%	ND(0.000078) J	
Aroclor-1232	LCS %R	62.8%	70% to 130%	ND(0.000078) J													
Aroclor-1242	LCS %R	62.8%	70% to 130%	ND(0.000078) J													
Aroclor-1248	LCS %R	62.8%	70% to 130%	ND(0.000078) J													
Aroclor-1254	LCS %R	62.8%	70% to 130%	ND(0.000078) J													
Aroclor-1260	LCS %R	62.8%	70% to 130%	ND(0.000078) J													
Total PCBs	LCS %R	62.8%	70% to 130%	ND(0.000078) J													
G582-131	95-20 (Filtered)	10/15/2008	Water	Tier II	Yes							Aroclor-1016	LCS %R	62.8%	70% to 130%	ND(0.000075) J	
												Aroclor-1221	LCS %R	62.8%	70% to 130%	ND(0.000075) J	
						Aroclor-1232	LCS %R	62.8%	70% to 130%	ND(0.000075) J							
						Aroclor-1242	LCS %R	62.8%	70% to 130%	ND(0.000075) J							
						Aroclor-1248	LCS %R	62.8%	70% to 130%	ND(0.000075) J							
						Aroclor-1254	LCS %R	62.8%	70% to 130%	ND(0.000075) J							
						Aroclor-1260	LCS %R	62.8%	70% to 130%	ND(0.000075) J							
						Total PCBs	LCS %R	62.8%	70% to 130%	ND(0.000075) J							
						G582-131	95-25 (Filtered)	10/16/2008	Water	Tier II	Yes	Aroclor-1016	LCS %R	62.8%	70% to 130%	ND(0.000075) J	
												Aroclor-1221	LCS %R	62.8%	70% to 130%	ND(0.000075) J	
Aroclor-1232	LCS %R	62.8%	70% to 130%	ND(0.000075) J													
Aroclor-1242	LCS %R	62.8%	70% to 130%	ND(0.000075) J													
Aroclor-1248	LCS %R	62.8%	70% to 130%	ND(0.000075) J													
Aroclor-1254	LCS %R	62.8%	70% to 130%	ND(0.000075) J													
Aroclor-1260	LCS %R	62.8%	70% to 130%	ND(0.000075) J													
Total PCBs	LCS %R	62.8%	70% to 130%	ND(0.000075) J													
G582-131	ES1-10 (Filtered)	10/15/2008	Water	Tier II	Yes							Aroclor-1016	LCS %R	62.8%	70% to 130%	ND(0.000077) J	
												Aroclor-1221	LCS %R	62.8%	70% to 130%	ND(0.000077) J	
						Aroclor-1232	LCS %R	62.8%	70% to 130%	ND(0.000077) J							
						Aroclor-1242	LCS %R	62.8%	70% to 130%	ND(0.000077) J							
						Aroclor-1248	LCS %R	62.8%	70% to 130%	ND(0.000077) J							
						Aroclor-1254	LCS %R	62.8%	70% to 130%	ND(0.000077) J							
						Aroclor-1260	LCS %R	62.8%	70% to 130%	ND(0.000077) J							
						Total PCBs	LCS %R	62.8%	70% to 130%	ND(0.000077) J							
						G582-131	F-1 (Filtered)	10/15/2008	Water	Tier II	Yes	Aroclor-1016	LCS %R	62.8%	70% to 130%	ND(0.000075) J	
												Aroclor-1221	LCS %R	62.8%	70% to 130%	ND(0.000075) J	
Aroclor-1232	LCS %R	62.8%	70% to 130%	ND(0.000075) J													
Aroclor-1242	LCS %R	62.8%	70% to 130%	ND(0.000075) J													
Aroclor-1248	LCS %R	62.8%	70% to 130%	ND(0.000075) J													
Aroclor-1254	LCS %R	62.8%	70% to 130%	ND(0.000075) J													
Aroclor-1260	LCS %R	62.8%	70% to 130%	ND(0.000075) J													
Total PCBs	LCS %R	62.8%	70% to 130%	ND(0.000075) J													
G582-131	GMA1-3 (Filtered)	10/16/2008	Water	Tier II	Yes							Aroclor-1016	LCS %R	62.8%	70% to 130%	ND(0.000080) J	
												Aroclor-1221	LCS %R	62.8%	70% to 130%	ND(0.000080) J	
						Aroclor-1232	LCS %R	62.8%	70% to 130%	ND(0.000080) J							
						Aroclor-1242	LCS %R	62.8%	70% to 130%	ND(0.000080) J							
						Aroclor-1248	LCS %R	62.8%	70% to 130%	ND(0.000080) J							
						Aroclor-1254	LCS %R	62.8%	70% to 130%	ND(0.000080) J							
						Aroclor-1260	LCS %R	62.8%	70% to 130%	ND(0.000080) J							
						Total PCBs	LCS %R	62.8%	70% to 130%	ND(0.000080) J							
						G582-131	LSSC-16S (Filtered)	10/16/2008	Water	Tier II	Yes	Aroclor-1016	LCS %R	62.8%	70% to 130%	ND(0.000077) J	
												Aroclor-1221	LCS %R	62.8%	70% to 130%	ND(0.000077) J	
Aroclor-1232	LCS %R	62.8%	70% to 130%	ND(0.000077) J													
Aroclor-1242	LCS %R	62.8%	70% to 130%	ND(0.000077) J													
Aroclor-1248	LCS %R	62.8%	70% to 130%	ND(0.000077) J													
Aroclor-1254	LCS %R	62.8%	70% to 130%	ND(0.000077) J													
Aroclor-1260	LCS %R	62.8%	70% to 130%	ND(0.000077) J													
Total PCBs	LCS %R	62.8%	70% to 130%	ND(0.000077) J													
G582-131	MW-3R (Filtered)	10/16/2008	Water	Tier II	Yes							Aroclor-1016	LCS %R	62.8%	70% to 130%	ND(0.000076) J	
												Aroclor-1221	LCS %R	62.8%	70% to 130%	ND(0.000076) J	
						Aroclor-1232	LCS %R	62.8%	70% to 130%	ND(0.000076) J							

Table D-1
Analytical Data Validation Summary
Groundwater Management Area 1 Sampling - Fall 2008
General Electric Company - Pittsfield, Massachusetts
(Results are presented in parts per million, ppm)

Sample Delivery Group No.	Sample ID	Date Collected	Matrix	Validation Level	Qualification	Compound	QA/QC Parameter	Value	Control Limits	Qualified Result	Notes							
PCBs (continued)																		
G582-131	MW-3R (Filtered)	10/16/2008	Water	Tier II	Yes	Aroclor-1242	LCS %R	62.8%	70% to 130%	ND(0.00076) J								
						Aroclor-1248	LCS %R	62.8%	70% to 130%	ND(0.00076) J								
						Aroclor-1254	LCS %R	62.8%	70% to 130%	ND(0.00076) J								
						Aroclor-1260	LCS %R	62.8%	70% to 130%	ND(0.00076) J								
						Total PCBs	LCS %R	62.8%	70% to 130%	ND(0.00076) J								
G582-137	GMA1-25 (Filtered)	10/17/2008	Water	Tier II	Yes	Aroclor-1016	LCS %R	66.5%	70% to 130%	ND(0.00068) J								
						Aroclor-1221	LCS %R	66.5%	70% to 130%	ND(0.00068) J								
						Aroclor-1232	LCS %R	66.5%	70% to 130%	ND(0.00068) J								
						Aroclor-1242	LCS %R	66.5%	70% to 130%	ND(0.00068) J								
						Aroclor-1248	LCS %R	66.5%	70% to 130%	ND(0.00068) J								
						Aroclor-1254	LCS %R	66.5%	70% to 130%	ND(0.00068) J								
						Aroclor-1260	LCS %R	66.5%	70% to 130%	ND(0.00068) J								
						Total PCBs	LCS %R	66.5%	70% to 130%	ND(0.00068) J								
G582-137	GMA1-27 (Filtered)	10/17/2008	Water	Tier II	Yes	Aroclor-1016	LCS %R	66.5%	70% to 130%	ND(0.00066) J								
						Aroclor-1221	LCS %R	66.5%	70% to 130%	ND(0.00066) J								
						Aroclor-1232	LCS %R	66.5%	70% to 130%	ND(0.00066) J								
						Aroclor-1242	LCS %R	66.5%	70% to 130%	ND(0.00066) J								
						Aroclor-1248	LCS %R	66.5%	70% to 130%	ND(0.00066) J								
						Aroclor-1254	LCS %R	66.5%	70% to 130%	ND(0.00066) J								
						Aroclor-1260	LCS %R	66.5%	70% to 130%	ND(0.00066) J								
						Total PCBs	LCS %R	66.5%	70% to 130%	ND(0.00066) J								
G582-137	GMA1-DUP-01 (Filtered)	10/17/2008	Water	Tier II	Yes	Aroclor-1016	LCS %R	66.5%	70% to 130%	ND(0.00068) J	Parent sample GMA1-25 (Filtered)							
						Aroclor-1221	LCS %R	66.5%	70% to 130%	ND(0.00068) J								
						Aroclor-1232	LCS %R	66.5%	70% to 130%	ND(0.00068) J								
						Aroclor-1242	LCS %R	66.5%	70% to 130%	ND(0.00068) J								
						Aroclor-1248	LCS %R	66.5%	70% to 130%	ND(0.00068) J								
						Aroclor-1254	LCS %R	66.5%	70% to 130%	ND(0.00068) J								
						Aroclor-1260	LCS %R	66.5%	70% to 130%	ND(0.00068) J								
						Total PCBs	LCS %R	66.5%	70% to 130%	ND(0.00068) J								
						G582-151	ES1-18 (Filtered)	10/23/2008	Water	Tier II		Yes	Aroclor-1016	LCS %R	56.1%	70% to 130%	ND(0.00010) J	
													Aroclor-1221	LCS %R	56.1%	70% to 130%	ND(0.00010) J	
													Aroclor-1232	LCS %R	56.1%	70% to 130%	ND(0.00010) J	
Aroclor-1242	LCS %R	56.1%	70% to 130%	ND(0.00010) J														
Aroclor-1248	LCS %R	56.1%	70% to 130%	ND(0.00010) J														
Aroclor-1254	LCS %R	56.1%	70% to 130%	ND(0.00010) J														
Aroclor-1260	LCS %R	56.1%	70% to 130%	ND(0.00010) J														
Total PCBs	LCS %R	56.1%	70% to 130%	ND(0.00010) J														
G582-151	ES2-19 (Filtered)	10/23/2008	Water	Tier II	Yes	Aroclor-1016	LCS %R	56.1%	70% to 130%	ND(0.00012) J								
						Aroclor-1016	Surrogate Recovery	31.0%, 34.8%	40% to 140%	ND(0.00012) J								
						Aroclor-1221	LCS %R	56.1%	70% to 130%	ND(0.00012) J								
						Aroclor-1221	Surrogate Recovery	31.0%, 34.8%	40% to 140%	ND(0.00012) J								
						Aroclor-1232	LCS %R	56.1%	70% to 130%	ND(0.00012) J								
						Aroclor-1232	Surrogate Recovery	31.0%, 34.8%	40% to 140%	ND(0.00012) J								
						Aroclor-1242	LCS %R	56.1%	70% to 130%	ND(0.00012) J								
						Aroclor-1242	Surrogate Recovery	31.0%, 34.8%	40% to 140%	ND(0.00012) J								
						Aroclor-1248	LCS %R	56.1%	70% to 130%	ND(0.00012) J								
						Aroclor-1248	Surrogate Recovery	31.0%, 34.8%	40% to 140%	ND(0.00012) J								
						Aroclor-1254	LCS %R	56.1%	70% to 130%	ND(0.00012) J								
						Aroclor-1254	Surrogate Recovery	31.0%, 34.8%	40% to 140%	ND(0.00012) J								
						Aroclor-1260	LCS %R	56.1%	70% to 130%	ND(0.00012) J								
						Aroclor-1260	Surrogate Recovery	31.0%, 34.8%	40% to 140%	ND(0.00012) J								
						Total PCBs	LCS %R	56.1%	70% to 130%	ND(0.00012) J								
						Total PCBs	Surrogate Recovery	31.0%, 34.8%	40% to 140%	ND(0.00012) J								
						G582-160	MM-1 (Filtered)	10/24/2008	Water	Tier II	Yes	Aroclor-1016	LCS %R	56.1%	70% to 130%	ND(0.00011) J		
												Aroclor-1221	LCS %R	56.1%	70% to 130%	ND(0.00011) J		
Aroclor-1232	LCS %R	56.1%	70% to 130%	ND(0.00011) J														
Aroclor-1242	LCS %R	56.1%	70% to 130%	ND(0.00011) J														
Aroclor-1248	LCS %R	56.1%	70% to 130%	ND(0.00011) J														
Aroclor-1254	LCS %R	56.1%	70% to 130%	ND(0.00011) J														
Aroclor-1260	LCS %R	56.1%	70% to 130%	ND(0.00011) J														
Total PCBs	LCS %R	56.1%	70% to 130%	ND(0.00011) J														
G582-174	31R (Filtered)	10/30/2008	Water	Tier II	Yes							Aroclor-1016	LCS %R	50.0%	70% to 130%	ND(0.00069) J		
												Aroclor-1221	LCS %R	50.0%	70% to 130%	ND(0.00069) J		
						Aroclor-1232	LCS %R	50.0%	70% to 130%	ND(0.00069) J								
						Aroclor-1242	LCS %R	50.0%	70% to 130%	ND(0.00069) J								
						Aroclor-1248	LCS %R	50.0%	70% to 130%	ND(0.00069) J								

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

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

Sample Delivery Group No.	Sample ID	Date Collected	Matrix	Validation Level	Qualification	Compound	QA/QC Parameter	Value	Control Limits	Qualified Result	Notes
PCBs (continued)											
G582-174	31R (Filtered)	10/30/2008	Water	Tier II	Yes	Aroclor-1254	LCS %R	50.0%	70% to 130%	ND(0.000069) J	
						Aroclor-1260	LCS %R	50.0%	70% to 130%	ND(0.000069) J	
						Total PCBs	LCS %R	50.0%	70% to 130%	ND(0.000069) J	
G582-185	GMA-1-RB-1 (Filtered)	11/3/2008	Water	Tier II	Yes	Aroclor-1016	LCS %R	50.0%	70% to 130%	ND(0.000066) J	
						Aroclor-1221	LCS %R	50.0%	70% to 130%	ND(0.000066) J	
						Aroclor-1232	LCS %R	50.0%	70% to 130%	ND(0.000066) J	
						Aroclor-1242	LCS %R	50.0%	70% to 130%	ND(0.000066) J	
						Aroclor-1248	LCS %R	50.0%	70% to 130%	ND(0.000066) J	
						Aroclor-1254	LCS %R	50.0%	70% to 130%	ND(0.000066) J	
						Aroclor-1260	LCS %R	50.0%	70% to 130%	ND(0.000066) J	
						Total PCBs	LCS %R	50.0%	70% to 130%	ND(0.000066) J	
G582-272	A7-R (Filtered)	12/11/2008	Water	Tier II	Yes	Aroclor-1016	Surrogate Recovery	19.7%, 39.2%	40% to 140%	ND(0.00065) J	
						Aroclor-1221	Surrogate Recovery	19.7%, 39.2%	40% to 140%	ND(0.00065) J	
						Aroclor-1232	Surrogate Recovery	19.7%, 39.2%	40% to 140%	ND(0.00065) J	
						Aroclor-1242	Surrogate Recovery	19.7%, 39.2%	40% to 140%	ND(0.00065) J	
						Aroclor-1248	Surrogate Recovery	19.7%, 39.2%	40% to 140%	ND(0.00065) J	
						Aroclor-1254	Surrogate Recovery	19.7%, 39.2%	40% to 140%	ND(0.00065) J	
						Aroclor-1260	Surrogate Recovery	19.7%, 39.2%	40% to 140%	ND(0.00065) J	
						Total PCBs	Surrogate Recovery	19.7%, 39.2%	40% to 140%	ND(0.00065) J	
G582-272	GMA1-DUP-2 (Filtered)	12/11/2008	Water	Tier II	No						Parent Sample A7-R
VOCs											
G582-137	GMA1-25	10/17/2008	Water	Tier II	Yes	1,2-Dibromo-3-chloropropane	ICAL RRF	0.016	>0.05	ND(0.0050) J	
						2-Butanone	ICAL RRF	0.038	>0.05	ND(0.0050) J	
						2-Chloroethylvinylether	ICAL RRF	0.013	>0.05	ND(0.013) J	
						2-Hexanone	CCAL %D	33.7%	<25%	ND(0.0050) J	
						Acetone	ICAL RRF	0.028	>0.05	ND(0.0050) J	
						Acetonitrile	ICAL RRF	0.008	>0.05	ND(0.020) J	
						Acrolein	ICAL RRF	0.014	>0.05	ND(0.025) J	
						Acrylonitrile	ICAL RRF	0.027	>0.05	ND(0.025) J	
						Isobutanol	ICAL RRF	0.004	>0.05	ND(0.050) J	
						Propionitrile	ICAL RRF	0.010	>0.05	ND(0.020) J	
						trans-1,4-Dichloro-2-butene	ICAL RRF	0.020	>0.05	ND(0.0050) J	
G582-137	GMA1-27	10/17/2008	Water	Tier II	Yes	1,2-Dibromo-3-chloropropane	ICAL RRF	0.016	>0.05	ND(0.0050) J	
						2-Butanone	ICAL RRF	0.038	>0.05	ND(0.0050) J	
						2-Chloroethylvinylether	MS/MSD %R	0.0%, 0.0%	16.7% to 200%	R	
						2-Hexanone	CCAL %D	33.7%	<25%	ND(0.0050) J	
						Acetone	ICAL RRF	0.028	>0.05	ND(0.0050) J	
						Acetonitrile	ICAL RRF	0.008	>0.05	ND(0.020) J	
						Acrolein	ICAL RRF	0.014	>0.05	ND(0.025) J	
						Acrylonitrile	ICAL RRF	0.027	>0.05	ND(0.025) J	
						Isobutanol	ICAL RRF	0.004	>0.05	ND(0.050) J	
						Propionitrile	ICAL RRF	0.010	>0.05	ND(0.020) J	
						trans-1,4-Dichloro-2-butene	ICAL RRF	0.020	>0.05	ND(0.0050) J	
G582-137	GMA1-DUP-01	10/17/2008	Water	Tier II	Yes	1,2-Dibromo-3-chloropropane	ICAL RRF	0.016	>0.05	ND(0.0050) J	Parent sample GMA1-25
						2-Butanone	ICAL RRF	0.038	>0.05	ND(0.0050) J	
						2-Chloroethylvinylether	ICAL RRF	0.013	>0.05	ND(0.013) J	
						2-Hexanone	CCAL %D	33.7%	<25%	ND(0.0050) J	
						Acetone	ICAL RRF	0.028	>0.05	ND(0.0050) J	
						Acetonitrile	ICAL RRF	0.008	>0.05	ND(0.020) J	
						Acrolein	ICAL RRF	0.014	>0.05	ND(0.025) J	
						Acrylonitrile	ICAL RRF	0.027	>0.05	ND(0.025) J	
						Isobutanol	ICAL RRF	0.004	>0.05	ND(0.050) J	
						Propionitrile	ICAL RRF	0.010	>0.05	ND(0.020) J	
						trans-1,4-Dichloro-2-butene	ICAL RRF	0.020	>0.05	ND(0.0050) J	
G582-137	Trip Blank	10/17/2008	Water	Tier II	Yes	1,2-Dibromo-3-chloropropane	ICAL RRF	0.016	>0.05	ND(0.0050) J	
						2-Butanone	ICAL RRF	0.038	>0.05	ND(0.0050) J	
						2-Chloroethylvinylether	ICAL RRF	0.013	>0.05	ND(0.013) J	
						2-Hexanone	CCAL %D	33.7%	<25%	ND(0.0050) J	
						Acetone	ICAL RRF	0.028	>0.05	ND(0.0050) J	
						Acetonitrile	ICAL RRF	0.008	>0.05	ND(0.020) J	
						Acrolein	ICAL RRF	0.014	>0.05	ND(0.025) J	
						Acrylonitrile	ICAL RRF	0.027	>0.05	ND(0.025) J	
						Isobutanol	ICAL RRF	0.004	>0.05	ND(0.050) J	
						Propionitrile	ICAL RRF	0.010	>0.05	ND(0.020) J	
						trans-1,4-Dichloro-2-butene	ICAL RRF	0.020	>0.05	ND(0.0050) J	
G582-185	GMA-1-RB-1	11/3/2008	Water	Tier II	Yes	1,2-Dibromo-3-chloropropane	ICAL RRF	0.019	>0.05	ND(0.0050) J	

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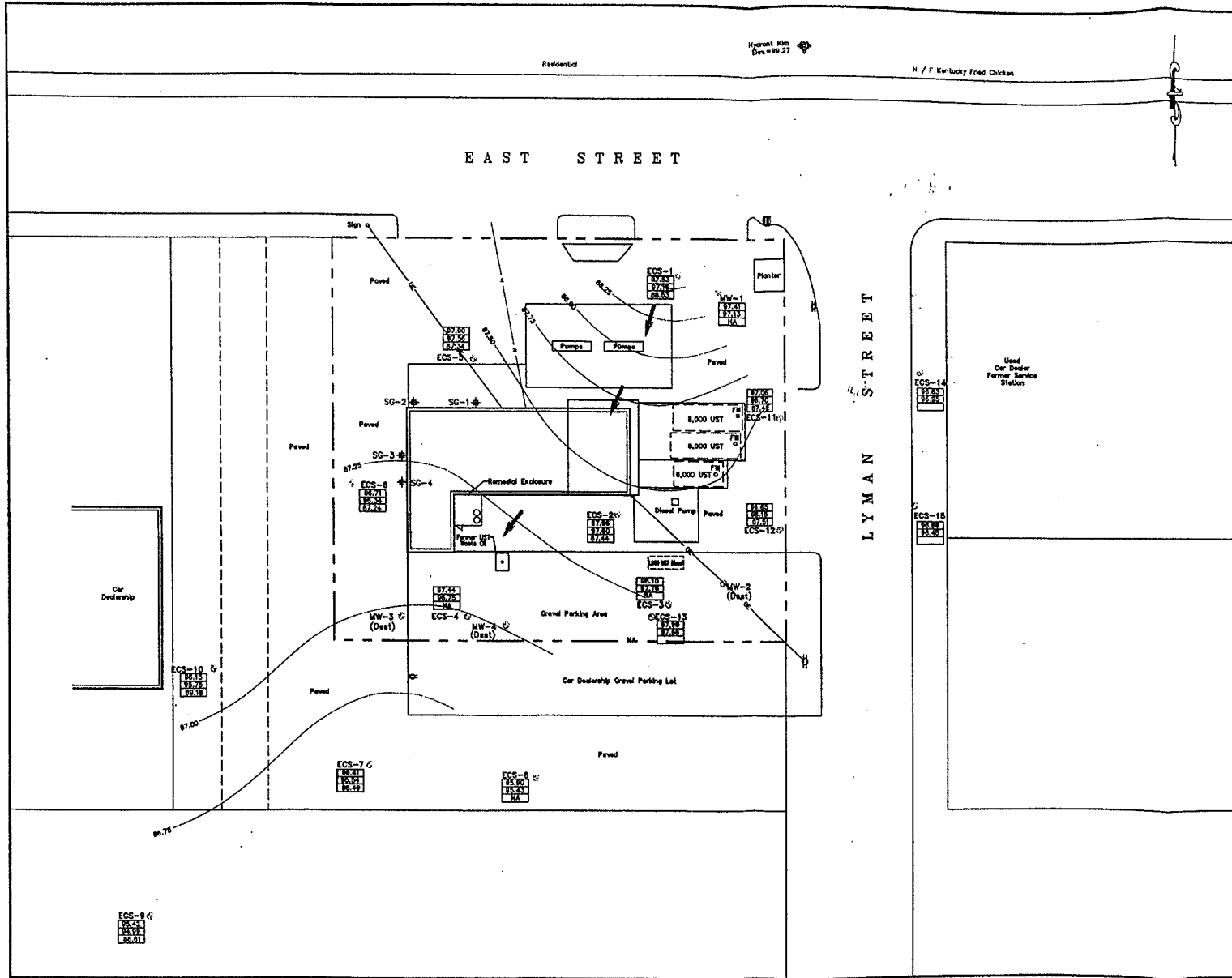
General Electric Company - Pittsfield, Massachusetts
(Results are presented in parts per million, ppm)

Sample Delivery Group No.	Sample ID	Date Collected	Matrix	Validation Level	Qualification	Compound	QA/QC Parameter	Value	Control Limits	Qualified Result	Notes
VOCs (continued)											
G582-185	GMA-1-RB-1	11/3/2008	Water	Tier II	Yes	1,4-Dioxane	ICAL RRF	0.001	>0.05	ND(0.10) J	
						2-Butanone	ICAL RRF	0.047	>0.05	ND(0.0050) J	
						2-Chloroethylvinylether	ICAL RRF	0.027	>0.05	ND(0.013) J	
						Acetone	ICAL RRF	0.032	>0.05	ND(0.0050) J	
						Acetonitrile	ICAL RRF	0.009	>0.05	ND(0.020) J	
						Acrolein	ICAL RRF	0.023	>0.05	ND(0.025) J	
						Acrolein	CCAL %D	34.8%	<25%	ND(0.025) J	
						Acrylonitrile	ICAL RRF	0.040	>0.05	ND(0.025) J	
						Bromomethane	CCAL %D	40.0%	<25%	ND(0.0010) J	
						Isobutanol	ICAL RRF	0.003	>0.05	ND(0.050) J	
						Methacrylonitrile	ICAL RRF	0.010	>0.05	ND(0.010) J	
						Methacrylonitrile	CCAL %D	30.0%	<25%	ND(0.010) J	
						Propionitrile	ICAL RRF	0.012	>0.05	ND(0.020) J	
						trans-1,4-Dichloro-2-butene	ICAL RRF	0.028	>0.05	ND(0.0050) J	
SVOCs											
G582-137	GMA1-25	10/17/2008	Water	Tier II	Yes	1-Naphthylamine	CCAL %D	56.9%	<25%	ND(0.029) J	
						2-Naphthylamine	CCAL %D	63.5%	<25%	ND(0.029) J	
						4-Nitroquinoline-1-oxide	CCAL %D	32.6%	<25%	ND(0.029) J	
						4-Phenylenediamine	CCAL %D	55.0%	<25%	ND(0.012) J	
						a,a'-Dimethylphenethylamine	CCAL %D	33.1%	<25%	ND(0.029) J	
						Benzidine	CCAL %D	26.0%	<25%	ND(0.012) J	
						Hexachlorocyclopentadiene	CCAL %D	40.0%	<25%	ND(0.012) J	
						Hexachlorophene	ICAL RRF	0.024	>0.05	ND(0.0058) J	
						Methapyrene	CCAL %D	28.6%	<25%	ND(0.0058) J	
G582-137	GMA1-27	10/17/2008	Water	Tier II	Yes	1-Naphthylamine	CCAL %D	56.9%	<25%	ND(0.026) J	
						2-Naphthylamine	CCAL %D	63.5%	<25%	ND(0.026) J	
						4-Nitroquinoline-1-oxide	CCAL %D	32.6%	<25%	ND(0.026) J	
						4-Phenylenediamine	CCAL %D	55.0%	<25%	ND(0.010) J	
						a,a'-Dimethylphenethylamine	CCAL %D	33.1%	<25%	ND(0.026) J	
						Benzidine	CCAL %D	26.0%	<25%	ND(0.010) J	
						Hexachlorocyclopentadiene	CCAL %D	40.0%	<25%	ND(0.010) J	
						Hexachlorophene	ICAL RRF	0.024	>0.05	ND(0.0051) J	
						Methapyrene	CCAL %D	28.6%	<25%	ND(0.0051) J	
G582-137	GMA1-DUP-01	10/17/2008	Water	Tier II	Yes	1-Naphthylamine	CCAL %D	56.9%	<25%	ND(0.026) J	Parent sample GMA1-25
						2-Naphthylamine	CCAL %D	63.5%	<25%	ND(0.026) J	
						4-Nitroquinoline-1-oxide	CCAL %D	32.6%	<25%	ND(0.026) J	
						4-Phenylenediamine	CCAL %D	55.0%	<25%	ND(0.010) J	
						a,a'-Dimethylphenethylamine	CCAL %D	33.1%	<25%	ND(0.026) J	
						Benzidine	CCAL %D	26.0%	<25%	ND(0.010) J	
						Hexachlorocyclopentadiene	CCAL %D	40.0%	<25%	ND(0.010) J	
						Hexachlorophene	ICAL RRF	0.024	>0.05	ND(0.0051) J	
						Methapyrene	CCAL %D	28.6%	<25%	ND(0.0051) J	
G582-185	GMA-1-RB-1	11/3/2008	Water	Tier II	Yes	2-Naphthylamine	CCAL %D	27.5%	<25%	ND(0.025) J	
						4-Phenylenediamine	CCAL %D	33.0%	<25%	ND(0.010) J	
						Benzo(k)fluoranthene	LCS %R	73.3%	74.3% to 111%	ND(0.0051) J	
						Hexachlorophene	ICAL RRF	0.027	>0.05	ND(0.0051) J	
						Isophorone	LCS %R	70.8%	74.2% to 106%	ND(0.0051) J	

ARCADIS

Appendix E

Monitoring Results for Adjacent
MCP Disposal Site



Legend

- Approximate Property Line
 - - - Sanitary Sewer Line
 - - - Storm Sewer Line
 - - - Water Line
 - - - Natural Gas Line
 - - - Overhead Electric Line
 - ⊕ Manhole
 - ⊞ Catchbasin
 - Water Gate
 - ◆ Fire Hydrant
 - ⊕ Utility Pole
 - ◆ Soil Gas Point
 - ⊕ Monitoring Well
- | | |
|-------|-----------------------|
| ECS-1 | Well I.D. |
| 98.94 | Rim Elevation |
| 98.80 | PVC Elevation |
| 73.71 | Water Table Elevation |
- 90.0 --- Water Table Contour (Dashed where inferred)
 - ➔ Flow Direction Indicator

General Notes:

All locations, dimensions, and property lines depicted on this plan are approximate. This plan should not be used for construction or load conveyance purposes.

Horizontal, and vertical locations of wells, and selected site features determined through measurements made by representatives of ECS.

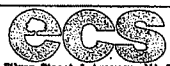
Water table elevations are based on an assumed benchmark of 99.27 feet located at the hydrant rim.

Water table elevations are based on measurements made on January 25, 2006.

Water table contours, and flow directions assume homogenous, isotropic aquifer conditions, and horizontal flow.

Fluctuations in the level of the water table may occur due to factors not accounted for at the time of measurement.

Water table contours are interpolated between data points, and inferred in other areas.

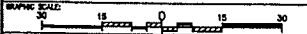


630 Silver Street, Agawam, MA 01001
Phone: 1-800-788-3630 Fax: 413-788-2776

PROJECT: **O'Connell's Mobil Station**
730 East Street - Route 9
Pittsfield, Massachusetts

TITLE: **Site Plan with Groundwater Contours (1/25/06)**

CLIENT: **O'Connell Oil Associates, Inc.**



COMPUTER GENERATED BY: J136328.DWG

DRAWN BY:	DESIGNED BY:	CHECKED BY:	APPROVED BY:
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RAS	CPP	CPP	JN
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SCALE:	DATE:	JOB NO.:	FIGURE NO.:
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1"=30' Dec, 2007 J13632 3

O'Connell Mobil
730 East Street
Pittsfield, Massachusetts

Table 1 (2 of 4)
Oxygen Sparge Monitoring
September 11, 2006* to September 9, 2008

Date	Oxygen Sparge Legs										Total Flow SCFH	Tank 1 psi	Tank 2 psi	Comments
	AS-1		AS-2		AS-3		AS-4		AS-5					
	Flow (SCFH)	Pressure (psi)	Flow (SCFH)	Pressure (psi)	Flow (SCFH)	Pressure (psi)	Flow (SCFH)	Pressure (psi)	Flow (SCFH)	Pressure (psi)				
5/27/08	OFF	OFF	3	6	OFF	OFF	3	6	1.5	3	7.5	185	230	System restarted due to slight rebound (D).
6/4/08	OFF	OFF	1.5	7	OFF	OFF	10	5	0.5	4	12	135	135	
6/17/08	OFF	OFF	1.5	7	OFF	OFF	3	5	3	5	7.5	125	125	
7/9/08	OFF	OFF	3	9	OFF	OFF	3	9	1.5	4	7.5	210	222	Tanks changed Departure readings (D)
7/14/08	OFF	OFF	3	7	OFF	OFF	3.25	5	1.5	4	7.75	210	200	
7/30/08	OFF	OFF	1.5	7	OFF	OFF	3	5	3	5	7.5	200	180	Tanks changed Departure readings (D)
8/12/08	OFF	OFF	NR	NR	OFF	OFF	NR	NR	NR	NR	0	0	0	Tanks empty on arrival.
8/20/08	OFF	OFF	3	6	OFF	OFF	3	5	1.5	7	7.5	235	230	converted units on regulator in Kg/cm2 to PSI
8/26/08	OFF	OFF	2.25	7	OFF	OFF	2.5	4.5	1.5	4	6.25	210	190	
9/9/08	OFF	OFF	3	7	OFF	OFF	3	9	1.5	4	7.5	245	220	Tanks changed Departure readings (D)

NOTES:

¹ Each Oxygen sparge leg is 2-inch diameter.

All readings were recorded upon arrival unless otherwise noted.

SCFH = cubic feet per hour, psi = pounds per square inch

OFF = Intentionally not available - Oxygen sparge leg not in operation. NR = No reading taken. E = Empty. D = Delivery.

*Oxygen sparge system activated September 11, 2006.

O'Connell Mobil
730 East Street
Pittsfield, Massachusetts

Table 1 (1 of 4)
Oxygen Sparge Monitoring
September 11, 2006* to September 9, 2008

Date	Oxygen Sparge Legs										Total Flow SCFH	Tank 1	Tank 2	Comments
	AS-1		AS-2		AS-3		AS-4		AS-5			psi	psi	
	Flow (SCFH)	Pressure (psi)	Flow (SCFH)	Pressure (psi)	Flow (SCFH)	Pressure (psi)	Flow (SCFH)	Pressure (psi)	Flow (SCFH)	Pressure (psi)				
9/15/06	2.0	2.0	4.0	1.5	1.5	1.5	1.5	1.0	1.5	1.0	10.8	170	160	System start-up
9/21/06	1.5	3.0	1.5	5.0	1.5	2.0	1.5	2.0	2.0	2.0	8.0	140	125	
10/10/06	1.5	3.0	1.5	5.0	1.5	2.0	1.5	2.0	1.5	2.0	7.5	210	190	Departure readings Tanks E on 10/6/06 (D)
10/23/06	1.25	4.0	1.5	5.0	1.5	3.5	1.5	3.5	2.0	3.0	7.8	150	140	
11/7/06	1.5	4.0	1.5	5.0	1.5	2.5	1.5	2.5	1.5	2.5	7.5	190	205	Departure readings Tanks E on arrival (D)
11/20/06	1.5	4.0	1.0	6.0	1.5	3.0	1.5	3.0	1.5	3.0	7.0	158	158	
12/4/06	1.5	4.0	1.5	6.0	1.5	3.0	1.5	3.0	1.5	2.5	7.5	220	235	Departure readings Tanks E on arrival (D)
12/18/06	1.5	4.0	1.0	6.0	1.0	3.0	1.5	2.5	1.0	3.0	6.0	180	205	
1/2/07	1.5	4.0	1.5	6.0	1.5	3.5	1.5	2.5	1.5	3.0	7.5	224	221	Departure readings Tanks E on arrival (D)
1/15/07	1.5	4.0	1.0	6.0	1.0	3.0	1.3	2.5	1.0	2.5	5.8	110	100	
1/29/07	1.5	4.0	1.5	3.0	1.5	4.0	1.5	4.0	1.5	2.5	7.5	245	240	Departure readings Tanks E on arrival (D)
2/12/07	1.5	4.0	1.0	5.5	1.0	3.0	1.5	3.0	1.5	2.5	6.5	141	141	
2/26/07	1.5	4	1.5	6	1.5	2.5	1.5	3	1.5	2	7.5	121	240	Departure readings Tanks E on arrival (D)
3/12/07	1.5	4	1	6	1	2.5	1.5	3	1	2.5	6	81	90	
3/26/07	1.5	5	1.5	6	1.5	4	1.5	4	1.5	3	7.5	245	230	Departure readings Tanks E on arrival (D)
4/10/07	1.25	5	1	6.5	1.25	4	1.25	4	1	4	5.75	160	140	
4/25/07	1.5	6	1.5	5	1.5	5	1.5	5	1.5	4	7.5	231	91	Departure readings Tanks E on arrival (D)
5/7/07	1.5	5	1.25	5	2.25	5	2	5	1.25	4	8.25	91	110	
5/24/07	1.5	5	1.5	6.5	1.5	5	1.5	4.5	1.5	4	7.5	235	225	Departure readings Tanks E on arrival (D)
6/4/07	1.5	5	1.5	6.5	1.5	4.5	2	4	2	3	8.5	130	120	
6/18/07	1.5	5	1.5	6	1.5	8	1.5	4	1.5	3	7.5	172	230	Departure readings Tanks E on arrival (D)
7/3/07	1.5	5	1	6	1.5	4.5	1.5	4	1	3	6.5	210	200	
7/16/07	OFF	OFF	4	6	4	5	4	4	4	3	16	192	221	Departure readings Tanks E on arrival (D)
8/1/07	OFF	OFF	3.5	6	4	5	4	4	3.5	3	15	85	92	
8/13/07	OFF	OFF	4	6	OFF	OFF	4	4	1.5	3	9.5	200	270	Departure readings Tanks E on arrival (D)
8/27/07	OFF	OFF	0.5	2.5	OFF	OFF	0	0	0	0	0.5	0	25	Tanks E on arrival and departure.
8/31/07	OFF	OFF	3	6	OFF	OFF	3	4	1.5	3	7.5	NR	NR	Departure readings Tanks E on arrival (D)
9/10/07	OFF	OFF	3	6	OFF	OFF	3	4	1.5	4	7.5	100	160	Departure readings
9/25/07	OFF	OFF	3	5	OFF	OFF	3	4	1.5	4	7.5	0	30	Departure readings
10/9/07	OFF	OFF	3	6	OFF	OFF	3	4	1	2	7	112	132	
10/23/07	OFF	OFF	4	6	OFF	OFF	4	6	1.5	4	9.5	NR	NR	Departure readings (D)
11/5/07	OFF	OFF	2	6	OFF	OFF	2.5	4	1	2	5.5	140	173	
11/19/07	OFF	OFF	3	6	OFF	OFF	3	7	1.5	2	7.5	200	186	Departure readings (D)
12/3/07	OFF	OFF	1	6	OFF	OFF	1.5	4	0.5	3	3	15	29	
12/17/07	OFF	OFF	1	6	OFF	OFF	0.5	2	0.1	2	1.6	10	30	Tanks changed prior to departure (D)
1/2/08	OFF	OFF	2	6	OFF	OFF	1.5	3	1	3	4.5	140	132	
1/14/08	OFF	OFF	3	6	OFF	OFF	3	5	1.5	4	7.5	145	178	Tanks changed Departure readings (D)
1/29/08	OFF	OFF	3	6	OFF	OFF	3	4	1	2	7	95	75	
2/11/08	OFF	OFF	NR	NR	OFF	OFF	NR	NR	NR	NR	0	NR	NR	System shut down to monitor rebound

NOTES:

* Each Oxygen sparge leg is 2-inch diameter.

All readings were recorded upon arrival unless otherwise noted.

SCFH = cubic feet per hour; psi = pounds per square inch

OFF = Intentionally not available - Oxygen sparge leg not in operation. NR = No reading taken. E = Empty. D = Delivery.

*Oxygen sparge system activated September 11, 2006.

O'Connell Mobil
730 East Street
Pittsfield, Massachusetts

Table 1 (3 of 4)
Oxygen Sparge Monitoring
September 11, 2006* to September 9, 2008

Date	Oxygen Sparge Legs										Total Flow SCFH	Tank 1	Tank 2	Comments
	AS-6		AS-7		AS-8		AS-9		AS-10			psi	psi	
	Flow (SCFH)	Pressure (psi)	Flow (SCFH)	Pressure (psi)	Flow (SCFH)	Pressure (psi)	Flow (SCFH)	Pressure (psi)	Flow (SCFH)	Pressure (psi)				
9/11/06	1.0	0.5	1.5	1.5	1.0	1.5	2.0	1.5	1.0	1.5	6.5	170	160	System start-up
9/21/06	1.8	2.0	1.5	2.5	1.5	1.0	1.3	2.0	1.5	2.0	7.5	140	125	Departure readings Tanks E on 10/6/06 (D)
10/10/06	1.5	2.0	1.5	3.0	1.5	1.5	1.5	2.5	1.5	3.0	7.5	210	190	
10/23/06	2.0	3.5	1.5	4.0	1.5	3.0	1.5	4.0	1.5	4.0	8.0	150	140	
11/7/06	1.5	3.5	1.5	4.0	1.5	2.0	1.5	3.5	1.5	3.0	7.5	190	205	Departure readings Tanks E on arrival (D)
11/20/06	1.5	2.5	1.5	5.0	1.5	2.5	1.0	5.0	1.5	4.5	7.0	158	158	
11/20/06	1.5	2.5	1.5	5.0	1.5	2.5	1.0	5.0	1.5	4.5	7.0	158	158	Departure readings Tanks E on arrival (D)
12/4/06	1.5	4.0	1.5	4.5	1.5	2.0	1.5	5.0	1.5	4.0	7.5	220	235	
12/18/06	0.75	4.0	0.5	4.0	1	2.0	0.5	4.5	0.5	4.0	3.3	180	205	
1/2/07	1.5	3.0	1.5	4.0	1.5	2.0	1.5	5.0	1.5	5.0	7.5	224	221	Departure readings Tanks E on arrival (D)
1/15/07	1.5	3.0	1.5	3.0	1	2.0	1.0	5.0	1.5	5.0	6.5	110	100	
1/15/07	1.5	3.0	1.5	3.0	1	2.0	1.0	5.0	1.5	5.0	7.5	245	240	Departure readings Tanks E on arrival (D)
1/29/07	1.5	4.0	1.5	5.0	1.5	3.0	1.5	5.0	1.5	5.0	7.5	245	240	
2/12/07	1.0	4.0	1	5.0	1	3.0	1.0	5.0	1.5	5.0	5.5	141	141	
2/12/07	1.0	4.0	1	5.0	1	3.0	1.0	5.0	1.5	5.0	5.5	141	141	Departure readings Tanks E on arrival (D)
2/26/07	1.5	4	1.5	4	1.5	3	1.5	5	1.5	5	7.5	121	240	
2/26/07	1.5	4	1.5	4	1.5	3	1.5	5	1.5	5	7.5	121	240	Departure readings Tanks E on arrival (D)
3/12/07	1.5	3	1	4	1.25	2	0.75	5	1	5	5.5	81	90	
3/12/07	1.5	3	1	4	1.25	2	0.75	5	1	5	5.5	81	90	Departure readings Tanks E on arrival (D)
3/26/07	1.5	5	1.5	5	1.5	4	1.5	5	1.5	6	7.5	245	230	
3/26/07	1.5	5	1.5	5	1.5	4	1.5	5	1.5	6	7.5	245	230	Departure readings Tanks E on arrival (D)
4/10/07	1	4	1.5	5	1.25	2	1	5	1	5.5	5.75	160	140	
4/10/07	1	4	1.5	5	1.25	2	1	5	1	5.5	5.75	160	140	Departure readings Tanks E on arrival (D)
4/25/07	1.5	5	1.5	6	1.5	5	1.5	6.5	1.5	10	7.5	231	91	
4/25/07	1.5	5	1.5	6	1.5	5	1.5	6.5	1.5	10	7.5	231	91	Departure readings Tanks E on arrival (D)
5/7/07	1.5	5	2	6	2	4.5	2	6	1.5	6.5	9	91	110	
5/7/07	1.5	5	2	6	2	4.5	2	6	1.5	6.5	9	91	110	Departure readings Tanks E on arrival (D)
5/24/07	1.5	5	1.5	5.25	1.5	4	1.5	6	1.5	7	7.5	235	225	
5/24/07	1.5	5	1.5	5.25	1.5	4	1.5	6	1.5	7	7.5	235	225	Departure readings Tanks E on arrival (D)
6/4/07	1.5	5	1.5	5	1.25	4	1	5.5	1.5	6	6.75	130	120	
6/4/07	1.5	5	1.5	5	1.25	4	1	5.5	1.5	6	6.75	130	120	Departure readings Tanks E on arrival (D)
6/18/07	1.5	5	1.5	5	1.5	4	1.5	5	1.5	7	7.5	172	230	
6/18/07	1.5	5	1.5	5	1.5	4	1.5	5	1.5	7	7.5	172	230	Departure readings Tanks E on arrival (D)
7/3/07	1	4.5	1.5	5	1.5	4	1	5.5	1.75	6	6.75	210	200	
7/3/07	1	4.5	1.5	5	1.5	4	1	5.5	1.75	6	6.75	210	200	Departure readings Tanks E on arrival (D)
7/16/07	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	4	7	4	192	221	
7/16/07	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	4	7	4	192	221	Departure readings Tanks E on arrival (D)
8/1/07	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	3.75	7	3.75	85	92	
8/1/07	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	3.75	7	3.75	85	92	Departure readings Tanks E on arrival (D)
8/13/07	4	4	1.5	3	OFF	OFF	OFF	OFF	0	0	0	0	25	
8/13/07	4	4	1.5	3	OFF	OFF	OFF	OFF	0	0	0	0	25	Tanks E on arrival and Departure.
8/27/07	0	0	0	0	OFF	OFF	OFF	OFF	3	4	7.5	NR	NR	Departure readings Tanks E on arrival (D)
8/31/07	3	4	1.5	4	OFF	OFF	OFF	OFF	1	8	5.5	100	160	Departure readings
9/10/07	3	5	1.5	5	OFF	OFF	OFF	OFF	0	10	4.5	95	240	Departure readings
9/25/07	3	4	1.5	4	OFF	OFF	OFF	OFF	0	8	3.5	112	132	
9/25/07	3	4	1.5	4	OFF	OFF	OFF	OFF	0	8	3.5	112	132	Departure readings (D)
10/9/07	2.5	4	1	4	OFF	OFF	OFF	OFF	3	1	7.5	NR	NR	
10/9/07	2.5	4	1	4	OFF	OFF	OFF	OFF	3	1	7.5	NR	NR	Departure readings (D)
10/23/07	3	2	1.5	4	OFF	OFF	OFF	OFF	0.1	10	4.1	140	173	
10/23/07	3	2	1.5	4	OFF	OFF	OFF	OFF	0.1	10	4.1	140	173	Departure readings (D)
11/5/07	3	4	1	5	OFF	OFF	OFF	OFF	0.1	15	4.6	200	186	
11/5/07	3	4	1	5	OFF	OFF	OFF	OFF	0.1	15	4.6	200	186	Departure readings (D)
11/19/07	3	5	1.5	6	OFF	OFF	OFF	OFF	0.3	5	1.8	15	29	
11/19/07	3	5	1.5	6	OFF	OFF	OFF	OFF	0.3	5	1.8	15	29	Tank readings on departure (D)
12/3/07	1	4	0.5	3	OFF	OFF	OFF	OFF	0.5	4	1.6	240	225	
12/3/07	1	4	0.5	3	OFF	OFF	OFF	OFF	0.5	4	1.6	240	225	Departure readings (D)
12/17/07	1	4	0.1	4	OFF	OFF	OFF	OFF	0.2	10	3.7	140	132	
12/17/07	1	4	0.1	4	OFF	OFF	OFF	OFF	0.2	10	3.7	140	132	Departure readings (D)
1/2/08	2	5	1.5	5	OFF	OFF	OFF	OFF	1	10	5.5	145	178	
1/2/08	2	5	1.5	5	OFF	OFF	OFF	OFF	1	10	5.5	145	178	Departure readings (D)
1/14/08	3	5	1.5	4	OFF	OFF	OFF	OFF	0.5	10	3.5	95	75	
1/14/08	3	5	1.5	4	OFF	OFF	OFF	OFF	0.5	10	3.5	95	75	
1/29/08	2	4	1	4	OFF	OFF	OFF	OFF	NR	NR	OFF	NR	NR	System shut down to monitor rebound
1/29/08	2	4	1	4	OFF	OFF	OFF	OFF	NR	NR	OFF	NR	NR	
2/11/08	NR	NR	NR	NR	OFF	OFF	OFF	OFF	NR	NR	OFF	NR	NR	

NOTES:

¹ Each Oxygen sparge leg is 2-inch diameter.

All readings were recorded upon arrival unless otherwise noted.

SCFH = cubic feet per hour, psi = pounds per square inch

OFF = intentionally not available - Oxygen sparge leg not in operation. NR = No reading taken. E = Empty. D = Delivery.

*Oxygen sparge system activated September 11, 2006.

O'Connell Mobil
730 East Street
Pittsfield, Massachusetts

Table 1 (4 of 4)
Oxygen Sparge Monitoring
September 11, 2006* to September 9, 2008

Date	Oxygen Sparge Legs										Total Flow SCFH	Tank 1 psi	Tank 2 psi	Comments
	AS-6		AS-7		AS-8		AS-9		AS-10					
	Flow (SCFH)	Pressure (psi)	Flow (SCFH)	Pressure (psi)	Flow (SCFH)	Pressure (psi)	Flow (SCFH)	Pressure (psi)	Flow (SCFH)	Pressure (psi)				
5/27/08	NR	NR	NR	NR	3	4	1.5	6	1	3	5.5	185	230	System restarted due to slight rebound (D).
6/4/08	3	7	1.5	6.5	1.5	4	OFF	OFF	OFF	OFF	6.0	135	135	
6/17/08	3	6	1.5	6	1.5	4	OFF	OFF	OFF	OFF	6.0	125	125	
7/9/08	1.5	22	1.5	12	OFF	OFF	3	5	OFF	OFF	6.0	210	222	Tanks changed Departure readings (D)
7/14/08	2.5	5	2	6	OFF	OFF	2	6.5	OFF	OFF	6.5	210	200	
7/30/08	3	5	1.5	6	1.5	4	OFF	OFF	OFF	OFF	6.0	200	180	Tanks changed Departure readings (D)
8/12/08	NR	NR	NR	NR	NR	NR	OFF	OFF	OFF	OFF	NA	NR	NR	Tanks empty on arrival.
8/20/08	3	5	1.5	6	OFF	OFF	OFF	OFF	3	10	7.5	235	230	converted units on regulator in Kg/cm2 to PSI
8/26/08	2	4.5	1.75	6	OFF	OFF	OFF	OFF	6.5	12	10.3	210	190	
9/9/08	3	9	1.5	9	OFF	OFF	OFF	OFF	3	10	7.5	245	220	Tanks changed Departure readings (D)

NOTES:
 † Each Oxygen sparge leg is 2-inch diameter.
 All readings were recorded upon arrival unless otherwise noted.
 SCFH = cubic feet per hour; psi = pounds per square inch
 OFF = intentionally not available - Oxygen sparge leg not in operation. NR = No reading taken. E = Empty. D = Delivery.
 *Oxygen sparge system activated September 11, 2006.

O'Connell Oil/Mobil Station
730 East Street
Pittsfield, Massachusetts

Table 2
Groundwater Geochemical Monitoring Data

Monitoring Well & PVC Elevation (ft)	Monitoring Date	Depth to Water (ft)	Groundwater Elevation (ft)	pH (SU)	Specific Conductivity (µS/cm)	Dissolved Oxygen (mg/L)	Redox (mV)	Nitrate (mg/L)	Sulfate (mg/L)	Dissolved Iron (mg/L)
ECS-1* 97.19 97.02	11/8/99	NA	NA	NA	NA	NA	NA	NS	NS	NS
	12/19/02	NA	NA	NA	NA	NA	NA	NS	NS	NS
	9/8/05	11.78	85.24	5.06	750	4.91	549	4.48	26.2	0.015
	1/25/06	8.49	88.53	7.31	108	2.71	68.0	2.16	23.4	3.90
	4/11/06	11.38	85.64	7.04	926	4.00	10.0	4.45	27.6	<0.01
	7/20/06	11.72	85.30	4.78	814	2.98	590	3.85	27.5	<0.01
	10/10/06	12.21	84.81	NA	NA	NA	NA	NS	NS	NS
	1/25/07	11.34	85.68	7.65	620	4.87	33.0	3.70	25.9	<0.01
	2/26/07	11.29	85.73	7.82	NM	2.67	182.6	NS	NS	NS
	4/24/07	9.89	87.13	NA	NA	NA	NA	NS	NS	NS
	10/4/07	12.74	84.28	7.45	743	4.49	88	3.81	27.3	<0.03
	3/11/08	9.82	87.20	7.37	708	4.06	160	3.35	25.9	<0.03
	5/1/08	11.5	85.52	7.56	822	5.37	33	3.79	27.8	<0.03

NOTES: System shut down between 2/11/08 and 5/26/08
ft = feet; SU = standard units; mS/cm = milliSiemens per centimeter; mg/L = milligrams per liter; mV = millivolts.
NG = Not gauged; NS = Not sampled; NA = Not applicable; NM = Not measured.
97.02 = PVC elevations following well repairs on 8/29/05 & 9/1/05. Bold date denotes a groundwater sampling event.
* indicates these wells are sampled for secondary MNA parameters. ** Wells ECS-2, ECS-3, ECS-4, ECS-8, ECS-11, ECS-12, and ECS-13 are within O2 remediation

O'Connell Oil/Mobil Station
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Pittsfield, Massachusetts

Table 2
Groundwater Geochemical Monitoring Data

Monitoring Well & PVC Elevation (ft)	Monitoring Date	Depth to Water (ft)	Groundwater Elevation (ft)	pH (SU)	Specific Conductivity (µS/cm)	Dissolved Oxygen (mg/L)	Redox (mV)	Nitrate (mg/L)	Sulfate (mg/L)	Dissolved Iron (mg/L)
ECS-2** 97.76 97.60	11/8/99	NA	NA	NA	NA	NA	NA	NS	NS	NS
	12/19/02	NA	NA	NA	NA	NA	NA	NS	NS	NS
	9/8/05	12.44	85.16	5.94	975	0.48	-9.5	NS	NS	NS
	11/1/05	10.65	86.95	6.89	1410	0.87	-65.9	NS	NS	NS
	1/25/06	10.16	87.44	6.84	781	1.52	-93.0	NS	NS	NS
	4/10/06	12.09	85.51	6.70	1,118	0.62	10.0	NS	NS	NS
	7/20/06	12.42	85.18	3.40	1,601	0.29	572	NS	NS	NS
	9/15/06	13.44	84.16	6.99	NM	3.88	-36.8	NS	NS	NS
	9/21/06	13.00	84.60	6.97	NM	11.68	237	NS	NS	NS
	10/6/06	12.84	84.76	6.97	NM	2.27	60.3	NS	NS	NS
	10/10/06	12.92	84.68	NM	805	0.63	28.0	NS	NS	NS
	10/23/06	12.25	85.35	6.28	NM	0.80	NM	NS	NS	NS
	11/7/06	12.21	85.39	6.67	NM	8.83	-60.8	NS	NS	NS
	11/20/06	11.58	86.02	7.12	NM	8.94	161.7	NS	NS	NS
	12/4/06	12.06	85.54	7.19	NM	9.96	228.8	NS	NS	NS
	12/18/06	12.54	85.06	6.20	NM	9.40	10.9	NS	NS	NS
	1/2/07	12.44	85.16	7.34	NM	8.68	-122.3	NS	NS	NS
	1/15/07	11.94	85.66	7.41	NM	8.76	-133.6	NS	NS	NS
	1/25/07	12.06	85.54	7.10	838	1.84	6.0	NS	NS	NS
	1/29/07	12.21	85.39	7.07	NM	12.24	-98.9	NS	NS	NS
	2/12/07	12.74	84.86	7.34	NM	11.84	-6.2	NS	NS	NS
	2/26/07	12.01	85.59	7.28	NM	6.63	252.3	NS	NS	NS
	3/12/07	12.92	84.68	6.68	NM	14.60	32.2	NS	NS	NS
	3/26/07	11.91	85.69	6.67	NM	11.34	-66.9	NS	NS	NS
	4/10/07	11.26	86.34	7.09	NM	5.75	-1.8	NS	NS	NS
	4/24/07	10.39	87.21	4.94	1015	0.60	-27.6	NS	NS	NS
	5/7/07	11.27	86.33	5.66	NM	11.98	32.9	NS	NS	NS
	5/24/07	11.02	86.58	5.82	NM	10.45	45.7	NS	NS	NS
	6/4/07	12.13	85.47	5.52	NM	*24.65	-8.6	NS	NS	NS
	6/18/07	12.38	85.22	6.48	NM	15.23	-67.2	NS	NS	NS
	7/3/07	12.52	85.08	7.60	NM	15.09	37.0	NS	NS	NS
	7/16/07	12.81	84.79	7.25	NM	15.37	58.0	NS	NS	NS
	8/1/07	12.95	84.65	6.61	NM	14.28	-57.4	NS	NS	NS
	8/13/07	13.01	84.59	5.22	NM	15.20	-265.0	NS	NS	NS
	8/27/07	13.23	84.37	6.48	NM	19.17	-92.2	NS	NS	NS
	9/10/07	13.32	84.28	7.72	NM	12.07	-61.6	NS	NS	NS
	9/25/07	13.39	84.21	7.69	NM	7.23	-73.5	NS	NS	NS
	10/4/07	13.50	84.10	6.55	1436	1.34	-73.0	NS	NS	NS
	10/9/07	13.54	84.06	6.07	NM	1.97	-308.7	NS	NS	NS
	10/22/07	13.29	84.31	6.81	NM	5.91	-51.9	NS	NS	NS
	11/5/07	13.13	84.47	7.41	NM	9.97	-24.2	NS	NS	NS
11/19/07	12.84	84.76	6.71	NM	4.31	-50.1	NS	NS	NS	
12/3/07	13.83	83.77	7.06	NM	9.75	-199.7	NS	NS	NS	
12/17/07	12.94	84.66	7.06	NM	8.15	-111.5	NS	NS	NS	
1/2/08	12.42	85.18	6.46	NM	6.47	-139.1	NS	NS	NS	
1/14/08	12.03	85.57	6.41	NM	7.01	-130.4	NS	NS	NS	
1/29/08	12.41	85.19	6.36	NM	9.21	61.5	NS	NS	NS	
2/11/08	12.23	85.37	NM	NM	NM	NM	NS	NS	NS	
3/7/08	11.06	86.54	6.36	227	0.60	129.6	NS	NS	NS	
3/11/08	10.38	87.22	6.47	245	4.21	61	NS	NS	NS	
5/1/08	11.13	86.47	6.29	194	0.74	38	NS	NS	NS	
5/27/08	10.95	86.65	NM	NM	NM	NM	NS	NS	NS	
6/4/08	12.28	85.32	5.21	NM	11.40	44.4	NS	NS	NS	
6/17/08	12.08	85.52	6.27	NM	4.56	143.6	NS	NS	NS	
7/1/08	12.02	85.58	6.59	NM	8.22	60.3	NS	NS	NS	
7/9/08	NM	85.58	NM	NM	NM	NM	NS	NS	NS	
7/14/08	12.43	85.17	6.60	NM	0.88	-82.9	NS	NS	NS	
7/30/08	11.62	85.98	6.54	NM	9.87	61.7	NS	NS	NS	
8/12/08	12.05	85.55	6.39	NM	1.80	5.4	NS	NS	NS	
8/20/08	11.68	85.92	NM	NM	NM	NM	NS	NS	NS	
8/26/08	12.48	85.12	6.43	NM	1.74	-18	NS	NS	NS	
9/9/08	11.56	86.04	6.25	NM	1.42	23.8	NS	NS	NS	

NOTES: System shut down between 2/11/08 and 5/26/08

ft = feet; SU = standard units; mS/cm = milliSiemens per centimeter; mg/L = milligrams per liter; mV = millivolts.

NG = Not gauged; NS = Not sampled; NA = Not applicable; NM = Not measured.

97.02 = PVC elevations following well repairs on 8/29/05 & 9/1/05. Bold date denotes a groundwater sampling event.

* indicates these wells are sampled for secondary MNA parameters. ** Wells ECS-2, ECS-3, ECS-4, ECS-8, ECS-11, ECS-12, and ECS-13 are within O2 remediation

O'Connell Oil/Mobil Station
730 East Street
Pittsfield, Massachusetts

Table 2
Groundwater Geochemical Monitoring Data

Monitoring Well & PVC Elevation (ft)	Monitoring Date	Depth to Water (ft)	Groundwater Elevation (ft)	pH (SU)	Specific Conductivity (µS/cm)	Dissolved Oxygen (mg/L)	Redox (mV)	Nitrate (mg/L)	Sulfate (mg/L)	Dissolved Iron (mg/L)
ECS-3** 97.95 97.76	11/8/99	NA	NA	NA	NA	NA	NA	NS	NS	NS
	12/19/02	NA	NA	NA	NA	NA	NA	NS	NS	NS
	9/8/05	12.65	85.11	5.64	1,418	0.87	-69.9	<1.0	<10.0	53.9
	11/1/05	10.87	86.89	6.23	694	1.52	-0.4	NS	NS	NS
	1/25/06	NG	NA	NM	NM	NM	NM	NS	NS	NS
	4/11/06	12.34	85.42	6.69	2,070	0.36	-40.0	<0.1	<1.0	10.3
	7/20/06	12.56	85.20	3.10	908	0.32	610	<0.5	27.5	14.4
	9/15/06	13.61	84.15	6.89	NM	5.24	-57.3	NS	NS	NS
	9/21/06	13.24	84.52	7.19	NM	10.88	255	NS	NS	NS
	10/6/06	13.08	84.68	6.97	NM	3.19	8.2	NS	NS	NS
	10/10/06	13.17	84.59	7.05	599	0.55	78.0	NS	NS	NS
	10/23/06	12.25	85.51	6.28	NM	2.18	NM	NS	NS	NS
	11/7/06	12.45	85.31	6.60	NM	9.35	-68.8	NS	NS	NS
	11/20/06	11.81	85.95	6.52	NM	10.34	177.8	NS	NS	NS
	12/4/06	12.31	85.45	7.24	NM	3.85	342.4	NS	NS	NS
	12/18/06	12.77	84.99	6.27	NM	8.35	-31.9	NS	NS	NS
	1/2/07	12.64	85.12	7.19	NM	7.25	-209.7	NS	NS	NS
	1/15/07	12.19	85.57	7.12	NM	7.39	-209.4	NS	NS	NS
	1/25/07	12.27	85.49	7.25	627	1.20	6.0	<0.5	28.4	5.98
	1/29/07	12.47	85.29	7.18	NM	8.72	-125.6	NS	NS	NS
	2/12/07	12.96	84.80	7.55	NM	10.63	-89.0	NS	NS	NS
	2/26/07	NG-S	NA	NM	NM	NM	NM	NS	NS	NS
	3/12/07	NG-S	NA	NM	NM	NM	NM	NS	NS	NS
	3/26/07	12.13	85.63	6.72	NM	8.71	-80.60	NS	NS	NS
	4/10/07	11.51	86.25	7.00	NM	14.93	-8.40	NS	NS	NS
	4/24/07	10.62	87.14	6.70	819	1.43	-66.8	NS	NS	NS
	5/7/07	11.52	86.24	5.24	NM	12.26	38.2	NS	NS	NS
	5/24/07	11.38	86.38	5.43	NM	9.37	49.2	NS	NS	NS
	6/4/07	12.4	85.36	5.72	NM	8.62	-16.7	NS	NS	NS
	6/18/07	12.59	85.17	6.64	NM	12.59	-141.8	NS	NS	NS
	7/3/07	12.98	84.78	7.98	NM	15.82	37.7	NS	NS	NS
	7/16/07	13.27	84.49	7.92	NM	15.98	56.4	NS	NS	NS
	8/1/07	13.18	84.58	6.78	NM	18.48	-76.9	NS	NS	NS
	8/13/07	13.26	84.50	6.77	NM	2.18	-262.7	NS	NS	NS
	8/27/07	13.48	84.28	6.77	NM	11.05	-115.8	NS	NS	NS
	9/10/07	13.55	84.21	7.58	NM	9.23	-48.2	NS	NS	NS
	9/25/07	13.63	84.13	7.55	NM	7.23	-50.1	NS	NS	NS
	10/4/07	13.73	84.03	7.04	800	5.31	-99.0	<0.1	37.8	5.21
	10/9/07	13.77	83.99	6.47	NM	5.10	-329.9	NS	NS	NS
	10/22/07	13.50	84.26	7.63	NM	4.38	-50.3	NS	NS	NS
	11/5/07	13.36	84.40	7.88	NM	7.21	-42.7	NS	NS	NS
11/19/07	13.09	84.67	7.52	NM	3.71	-48.5	NS	NS	NS	
12/3/07	13.04	84.72	7.21	NM	7.07	-127.1	NS	NS	NS	
12/17/07	13.18	84.58	7.17	NM	7.01	-125.1	NS	NS	NS	
1/2/08	12.71	85.05	6.17	NM	5.21	41.4	NS	NS	NS	
1/14/08	12.24	85.52	6.09	NM	5.02	40.1	NS	NS	NS	
1/29/08	12.64	85.12	7.12	NM	8.75	8.2	NS	NS	NS	
2/11/08	12.27	85.49	NM	NM	NM	NS	NS	NS	NS	
3/7/08	11.33	86.43	NM	NM	NM	NS	NS	NS	NS	
3/11/08	10.68	87.08	7.12	932	2.97	-77	<0.5	27.1	2.08	
5/1/08	11.41	86.35	6.56	1,810	1.45	1.0	<1.0	28.9	21.6	
5/27/08	11.08	86.68	NM	NM	NM	NS	NS	NS	NS	
6/4/08	12.51	85.25	5.83	NM	2.11	100.1	NS	NS	NS	
6/17/08	12.33	85.43	6.33	NM	2.85	-102.2	NS	NS	NS	
7/1/08	12.30	85.46	6.45	NM	0.95	-50.7	NS	NS	NS	
7/9/08	NM	85.46	NM	NM	NM	NM	NS	NS	NS	
7/14/08	10.7	87.06	6.37	NM	1.68	-31.9	NS	NS	NS	
7/30/08	11.88	85.88	6.26	NM	2.68	-40.0	NS	NS	NS	
8/12/08	12.31	85.45	6.59	NM	6.81	-31.6	NS	NS	NS	
8/20/08	11.91	85.85	NM	NM	NM	NS	NS	NS	NS	
8/26/08	12.78	84.98	6.65	NM	1.78	-35.6	NS	NS	NS	
9/9/08	11.83	85.93	6.48	NM	5.38	-47.2	NS	NS	NS	

NOTES: System shut down between 2/11/08 and 5/26/08
ft = feet; SU = standard units; mS/cm = milliSiemens per centimeter; mg/L = milligrams per liter; mV = millivolts.
NG = Not gauged; NS = Not sampled; NA = Not applicable; NM = Not measured.
97.02 = PVC elevations following well repairs on 8/29/05 & 9/1/05. Bold date denotes a groundwater sampling event.
* indicates these wells are sampled for secondary MNA parameters. ** Wells ECS-2, ECS-3, ECS-4, ECS-8, ECS-11, ECS-12, and ECS-13 are within O2 remediation

O'Connell Oil/Mobil Station
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Table 2
Groundwater Geochemical Monitoring Data

Monitoring Well & PVC Elevation (ft)	Monitoring Date	Depth to Water (ft)	Groundwater Elevation (ft)	pH (SU)	Specific Conductivity (µS/cm)	Dissolved Oxygen (mg/L)	Redox (mV)	Nitrate (mg/L)	Sulfate (mg/L)	Dissolved Iron (mg/L)
ECS-4** 97.06 96.75	11/8/99	NA	NA	NA	NA	NA	NA	NS	NS	NS
	12/19/02	NA	NA	NA	NA	NA	NA	NS	NS	NS
	9/8/05	11.94	84.81	NM	NM	NM	NM	NS	NS	NS
	1/25/06	NG	NA	NM	NM	NM	NM	NS	NS	NS
	4/10/06	11.51	85.24	NM	NM	NM	NM	NS	NS	NS
	7/20/06	11.96	84.79	5.67	1,013	246	932	NS	NS	NS
	9/15/06	DRY	NA	NM	NM	NM	NM	NS	NS	NS
	9/21/06	DRY	NA	NA	NM	NM	NM	NM	NS	NS
	10/6/06	12.36	84.39	NM	NM	NM	NM	NS	NS	NS
	10/10/06	12.43	84.32	NS	NS	NS	NS	NS	NS	NS
	10/23/06	11.75	85.00	5.94	NM	2.51	NM	NS	NS	NS
	11/7/06	11.72	85.03	6.54	NM	10.47	-42.90	NS	NS	NS
	11/20/06	11.08	85.67	7.01	NM	10.25	166.30	NS	NS	NS
	12/4/06	DRY	NA	NA	NM	NM	NM	NS	NS	NS
	12/18/06	DRY	NA	NA	NM	NM	NM	NS	NS	NS
	1/2/07	11.93	84.82	6.78	NM	10.48	-36.50	NS	NS	NS
	1/15/07	11.41	85.34	6.95	NM	10.82	-86.90	NS	NS	NS
	1/25/07	11.55	85.20	NS	NM	NS	NS	NS	NS	NS
	1/29/07	11.72	85.03	6.95	NM	12.86	-35.2	NS	NS	NS
	2/12/07	12.23	84.52	NM	NM	NM	NM	NS	NS	NS
	2/26/07	NG	NA	NA	NM	NM	NM	NS	NS	NS
	3/12/07	12.42	84.33	NM	NM	NM	NM	NS	NS	NS
	3/26/07	11.39	85.36	5.87	NM	13.76	179.60	NS	NS	NS
	4/10/07	10.46	86.29	6.75	NM	12.17	64.50	NS	NS	NS
	4/24/07	9.88	86.87	5.83	891	4.95	202	NS	NS	NS
	5/7/07	11.79	84.96	6.42	NM	5.34	136	NS	NS	NS
	5/24/07	11.65	85.10	6.23	NM	4.21	150	NS	NS	NS
	6/4/07	11.63	85.12	5.72	NM	9.72	38	NS	NS	NS
	6/18/07	11.81	84.94	6.53	NM	12.81	123	NS	NS	NS
	7/3/07	12.25	84.50	7.65	NM	7.17	87	NS	NS	NS
	7/16/07	12.31	84.44	7.41	NM	7.23	83	NS	NS	NS
	8/1/07	12.47	84.28	6.58	NM	20.52	101	NS	NS	NS
	8/13/07	12.53	84.22	6.40	NM	6.61	265	NS	NS	NS
	8/27/07	12.61	84.14	6.59	NM	9.21	-89	NS	NS	NS
	9/10/07	DRY	96.75	NM	NM	NM	NM	NS	NS	NS
	9/25/07	DRY	96.75	NM	NM	NM	NM	NS	NS	NS
	10/4/07	DRY	96.75	NM	NM	NM	NM	NS	NS	NS
	10/9/07	DRY	96.75	NM	NM	NM	NM	NS	NS	NS
	10/22/07	DRY	96.75	NM	NM	NM	NM	NS	NS	NS
	11/5/07	12.62	84.13	NM	NM	NM	NM	NS	NS	NS
11/19/07	12.31	84.44	NM	NM	NM	NM	NS	NS	NS	
12/3/07	12.31	84.44	NM	NM	NM	NM	NS	NS	NS	
12/17/07	NG	NG	NA	NM	NM	NM	NS	NS	NS	
1/2/08	DRY	96.75	NM	NM	NM	NM	NS	NS	NS	
1/14/08	DRY	96.75	NM	NM	NM	NM	NS	NS	NS	
1/29/08	DRY	96.75	NM	NM	NM	NM	NS	NS	NS	
2/11/08	DRY	96.75	NM	NM	NM	NM	NS	NS	NS	
3/7/08	10.55	86.20	6.72	827	4.20	72.8	NS	NS	NS	
3/11/08	9.93	86.82	6.78	887	9.81	92	NS	NS	NS	
5/1/08	10.71	86.04	6.64	984	1.21	46	NS	NS	NS	
5/27/08	11.32	85.43	NM	NM	NM	NM	NS	NS	NS	
6/4/08	11.65	85.10	6.03	NM	1.16	12.3	NS	NS	NS	
6/17/08	11.88	84.87	6.61	NM	1.96	88.4	NS	NS	NS	
7/1/08	11.73	85.02	6.63	NM	2.12	99.7	NS	NS	NS	
7/9/08	NM	85.02	NM	NM	NM	NM	NS	NS	NS	
7/14/08	12.08	84.67	6.45	NM	1.93	84	NS	NS	NS	
7/30/08	11.16	85.59	6.20	NM	4.24	112	NS	NS	NS	
8/12/08	11.65	85.10	6.55	NM	5.18	66.6	NS	NS	NS	
8/20/08	11.38	85.37	NM	NM	NM	NM	NS	NS	NS	
8/26/08	11.97	84.78	6.58	NM	3.12	-21	NS	NS	NS	
9/9/08	11.13	85.62	6.51	NM	4.37	47.6	NS	NS	NS	

NOTES: System shut down between 2/11/08 and 5/26/08
ft = feet; SU = standard units; mS/cm = milliSiemens per centimeter; mg/L = milligrams per liter; mV = millivolts.
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97.02 = PVC elevations following well repairs on 8/29/05 & 9/1/05. Bold date denotes a groundwater sampling event.
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ECS-5 97.73 97.56	11/8/99	NA	NA	NA	NA	NA	NA	NS	NS	NS
	12/19/02	NA	NA	NA	NA	NA	NA	NS	NS	NS
	9/8/05	12.44	85.12	5.12	893	1.47	484	NS	NS	NS
	1/25/06	10.22	87.34	7.31	830	1.67	6.0	NS	NS	NS
	4/11/06	11.15	86.41	6.81	910	2.61	18.0	NS	NS	NS
	7/20/06	12.48	85.08	4.93	803	2.63	559	NS	NS	NS
	10/10/06	12.98	84.58	NM	NM	NM	NM	NS	NS	NS
	1/25/07	12.14	85.42	NM	NM	NM	NM	NS	NS	NS
	2/26/07	12.11	85.45	8.06	NM	2.21	193.8	NS	NS	NS
	4/24/07	10.43	87.13	NA	NA	NA	NA	NS	NS	NS
	10/4/07	13.57	82.77	7.30	813	3.98	82.0	NS	NS	NS
	3/7/08	11.20	85.14	6.94	726	3.34	90.6	NS	NS	NS
	3/11/08	10.54	85.80	7.10	834	1.52	105	NS	NS	NS
	5/1/08	11.27	85.07	NA	NA	NA	NA	NS	NS	NS
ECS-6 96.58 96.34	2/13/03	NA	NA	NA	NA	NA	NA	NS	NS	NS
	9/8/05	11.34	85.00	4.97	972	0.43	258	NS	NS	NS
	11/1/05	9.57	86.77	6.67	893	1.22	26.8	NS	NS	NS
	1/25/06	9.10	87.24	6.90	907	0.60	-99.0	NS	NS	NS
	4/10/06	11.05	85.29	7.15	1,146	0.47	64.0	NS	NS	NS
	7/20/06	11.40	84.94	4.11	907	0.17	561	NS	NS	NS
	10/10/06	11.89	84.45	NM	657	0.84	86.4	NS	NS	NS
	1/25/07	10.99	85.35	7.12	802	1.91	49.0	NS	NS	NS
	4/24/07	9.35	86.99	6.71	885	0.26	-10.4	NS	NS	NS
	10/4/07	12.46	83.88	6.87	947	1.20	-4.0	NS	NS	NS
	3/7/08	10.05	86.29	6.16	1721	1.18	68.4	NS	NS	NS
	3/11/08	10.44	85.90	6.04	1408	0.35	83.0	22.8	252	30.6
5/1/08	10.16	86.18	6.57	880	0.72	24.0	<2.0	100	5.7	
ECS-7 95.97 95.54	2/13/03	NA	NA	NA	NA	NA	NA	NS	NS	NS
	9/8/05	9.75	85.79	5.55	1,398	1.20	243	NS	NS	NS
	1/25/06	9.05	86.49	6.85	925	0.35	16.0	NS	NS	NS
	4/10/06	9.90	85.64	6.44	1,490	0.79	180	NS	NS	NS
	7/20/06	9.78	85.76	NM	NM	NM	NM	NS	NS	NS
	10/10/06	9.96	85.58	NM	NM	NM	NM	NS	NS	NS
	1/25/07	9.70	85.84	NM	NM	NM	NM	NS	NS	NS
	4/24/07	9.47	86.07	NM	NM	NM	NM	NS	NS	NS
	10/4/07	10.41	85.13	6.58	1,089	0.39	9	NS	NS	NS
	3/7/08	14.79	80.75	6.63	962	2.62	60.2	NS	NS	NS
	5/1/08	9.62	85.92	NM	NM	NM	NM	NS	NS	NS

NOTES: System shut down between 2/11/08 and 5/26/08
ft = feet; SU = standard units; mS/cm = milliSiemens per centimeter; mg/L = milligrams per liter; mV = millivolts.
NG = Not gauged; NS = Not sampled; NA = Not applicable; NM = Not measured.
97.02 = PVC elevations following well repairs on 8/29/05 & 9/1/05. **Bold** date denotes a groundwater sampling event.
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Monitoring Well & PVC Elevation (ft)	Monitoring Date	Depth to Water (ft)	Groundwater Elevation (ft)	pH (SU)	Specific Conductivity (µS/cm)	Dissolved Oxygen (mg/L)	Redox (mV)	Nitrate (mg/L)	Sulfate (mg/L)	Dissolved Iron (mg/L)
ECS-8** 95.72 95.43	2/13/03	NA	NA	NA	NA	NA	NA	NS	NS	NS
	9/8/05	10.35	85.08	4.74	1,534	1.20	469	<0.1	52.6	18.3
	1/25/06	NG	NA	NM	NM	NM	NM	NS	NS	NS
	4/11/06	9.98	85.45	6.51	193	0.16	4.0	<0.1	59.2	1.64
	7/20/06	10.28	85.15	NM	NM	NM	NM	NS	NS	NS
	9/15/06	11.29	84.14	6.62	NM	10.17	-2.8	NS	NS	NS
	9/21/06	10.31	85.12	6.75	NM	7.85	123	NS	NS	NS
	10/6/06	11.75	83.68	7.63	NM	1.23	27.0	NS	NS	NS
	10/10/06	10.81	84.62	NM	NM	NM	NM	NS	NS	NS
	10/23/06	NG	NA	NM	NM	NM	NM	NS	NS	NS
	11/7/06	10.09	85.34	6.33	NM	7.43	-34.7	NS	NS	NS
	11/20/06	9.47	85.96	6.82	NM	3.53	78.6	NS	NS	NS
	12/4/06	9.92	85.51	7.92	NM	10.70	179.5	NS	NS	NS
	12/18/06	11.42	84.01	6.18	NM	7.30	27.2	NS	NS	NS
	1/2/07	10.33	85.10	6.69	NM	7.64	-98.5	NS	NS	NS
	1/15/07	9.87	85.56	6.82	NM	7.33	-109.6	NS	NS	NS
	1/25/07	9.91	85.52	NM	NM	NM	NM	NS	NS	NS
	1/29/07	10.08	85.35	7.13	NM	13.11	-79.2	NS	NS	NS
	2/12/07	11.62	83.81	6.93	NM	10.22	14.4	NS	NS	NS
	2/26/07	10.35	85.08	7.31	NM	6.41	246.7	NS	NS	NS
	3/12/07	10.22	85.21	7.14	NM	8.63	62.7	NS	NS	NS
	3/26/07	9.84	85.59	7.15	NM	9.40	39.7	NS	NS	NS
	4/10/07	9.16	86.27	7.06	NM	11.61	60.4	NS	NS	NS
	4/24/07	8.19	87.24	6.40	1,075	8.84	222.6	NS	NS	NS
	5/7/07	9.00	86.43	5.01	NM	11.69	90.8	NS	NS	NS
	5/24/07	9.83	85.60	5.47	NM	10.14	108.2	NS	NS	NS
	6/4/07	9.08	86.35	5.13	NM	8.03	43.6	NS	NS	NS
	6/18/07	10.18	85.25	6.28	NM	13.65	-14.7	NS	NS	NS
	7/3/07	10.62	84.81	7.36	NM	7.44	90.8	NS	NS	NS
	7/16/07	11.89	83.54	7.14	NM	7.54	104.7	NS	NS	NS
	8/1/07	10.83	84.60	6.45	NM	7.61	71.8	NS	NS	NS
	8/13/07	10.92	84.51	5.71	NM	3.10	-283.4	NS	NS	NS
	8/27/07	11.17	84.26	6.27	NM	7.42	-13.8	NS	NS	NS
	9/10/07	11.26	84.18	7.30	NM	9.71	-14.5	NS	NS	NS
	9/25/07	11.35	84.08	7.28	NM	7.10	-17.1	NS	NS	NS
	10/4/07	11.45	83.98	6.41	1,580	0.54	96.0	NS	NS	NS
	10/9/07	11.48	83.95	6.16	NM	2.85	-301.2	NS	NS	NS
	10/22/07	11.22	84.21	7.04	NM	4.01	-22.5	NS	NS	NS
	11/5/07	11.05	84.38	7.08	NM	3.01	39.9	NS	NS	NS
	11/19/07	10.79	84.64	7.03	NM	3.85	-25.2	NS	NS	NS
12/3/07	9.74	85.69	7.01	NM	2.98	38.4	NS	NS	NS	
12/17/07	NG	NG	NM	NM	NM	NM	NS	NS	NS	
1/2/08	NG	NG	NM	NM	NM	NM	NS	NS	NS	
1/14/08	NG	NG	NM	NM	NM	NM	NS	NS	NS	
1/29/08	10.31	85.12	6.42	NM	4.51	73.0	NS	NS	NS	
2/11/08	NG	NG	NM	NM	NM	NM	NS	NS	NS	
3/11/08	NG	NG	NM	NM	NM	NM	NS	NS	NS	
3/24/08	8.56	86.87	6.33	1078	2.37	46	3.34	70.6	<0.03	
5/1/08	9.02	86.41	6.64	1451	0.50	27	NS	NS	NS	
5/27/08	9.59	85.84	NM	NM	NM	NM	NS	NS	NS	
6/4/08	10.07	85.36	6.00	NM	1.06	-5	NS	NS	NS	
6/17/08	9.82	85.61	6.46	NM	1.87	49.5	NS	NS	NS	
7/1/08	9.72	85.71	6.49	NM	1.43	5.7	NS	NS	NS	
7/9/08	NM	85.71	NM	NM	NM	NM	NS	NS	NS	
7/14/08	10.23	85.20	6.32	NM	1.84	50.1	NS	NS	NS	
7/30/08	9.51	85.92	6.00	NM	2.77	57	NS	NS	NS	
8/12/08	9.81	85.62	6.30	NM	2.02	15.6	NS	NS	NS	
8/20/08	9.47	85.96	NM	NM	NM	NM	NS	NS	NS	
8/26/08	10.02	85.41	6.32	NM	2.00	9.4	NS	NS	NS	
9/9/08	8.89	86.54	6.22	NM	1.95	23.7	NS	NS	NS	

NOTES: System shut down between 2/11/08 and 5/26/08

ft = feet; SU = standard units; mS/cm = milliSiemens per centimeter; mg/L = milligrams per liter; mV = millivolts.

NG = Not gauged; NS = Not sampled; NA = Not applicable; NM = Not measured.

97.02 = PVC elevations following well repairs on 8/29/05 & 9/1/05. Bold date denotes a groundwater sampling event.

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Table 2
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ECS-9* 95.22 94.99	2/13/03	NA	NA	NA	NA	NA	NA	NS	NS	NS
	9/19/05	10.91	84.08	6.22	1,047	4.69	-46.8	<0.1	<1.0	11.5
	1/25/06	8.38	86.61	6.32	944	0.80	-89.0	<0.1	7.27	9.75
	4/11/06	10.33	84.66	6.52	157	0.60	-13.0	<0.1	<1.0	0.945
	7/20/06	10.72	84.27	3.02	1,136	0.30	445	<0.1	<1.0	10.8
	10/10/06	11.12	83.87	NA	NA	NA	NA	NS	NS	NS
	1/25/07	10.31	84.68	6.64	995	1.42	-2	<0.5	<5.0	10.6
	4/24/07	8.57	86.42	6.40	1,609	0.58	-2.6	NS	NS	NS
	10/4/07	11.79	83.20	6.69	1,478	1.11	-94.0	<0.1	8.05	47.1
	3/7/08	9.22	85.77	6.57	1,195	2.80	36.5	NS	NS	NS
	3/11/08	8.63	86.36	6.75	1,217	0.32	12.0	<0.1	36.2	6.76
	5/1/08	9.47	85.52	6.77	1,730	0.52	46.0	<1.0	61.3	0.40
	ECS-10 95.90 95.75	2/13/03	NA	NA	NA	NA	NA	NA	NS	NS
9/8/05		9.59	86.16	4.40	1,624	0.93	601	NS	NS	NS
1/25/06		8.57	87.18	6.96	1,850	0.37	23.0	NS	NS	NS
4/10/06		9.52	86.23	6.60	234	0.35	180	NS	NS	NS
7/20/06		9.42	86.33	NM	NM	NM	NM	NS	NS	NS
10/10/06		9.64	86.11	NM	NM	NM	NM	NS	NS	NS
1/25/07		9.31	86.44	NM	NM	NM	NM	NS	NS	NS
4/24/07		8.53	87.22	NM	NM	NM	NM	NS	NS	NS
10/4/07		10.18	85.57	6.60	1,570	0.36	15.0	NS	NS	NS
3/7/08		8.01	87.74	6.70	1,473	0.46	62.2	NS	NS	NS
3/11/08		5.74	90.01	6.58	930	0.51	82.0	3.84	27.2	1.20
5/1/08		8.87	86.88	6.93	1,650	0.57	47.0	13.3	45.2	<0.03

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ECS-11** 96.70	1/25/06	9.28	87.42	6.42	1,033	0.70	-74.0	<0.1	25.2	10.4
	4/10/06	10.94	85.76	6.92	1,103	0.67	-5.0	NS	NS	NS
	7/20/06	11.31	85.39	4.75	1,024	0.25	503	NS	NS	NS
	9/15/06	12.31	84.39	7.00	NM	8.92	-49.9	NS	NS	NS
	9/21/06	11.89	84.81	6.95	NM	10.01	266	NS	NS	NS
	10/6/06	11.74	84.96	8.10	NM	2.48	-41.5	NS	NS	NS
	10/10/06	11.81	84.89	NM	649	0.63	71.4	NS	NS	NS
	10/23/06	11.20	85.50	6.12	NM	1.60	NM	NS	NS	NS
	11/7/06	10.74	85.96	6.76	NM	10.43	-51.4	NS	NS	NS
	11/20/06	10.49	86.21	7.56	NM	8.52	-11.5	NS	NS	NS
	12/4/06	10.93	85.77	7.46	NM	12.59	232.5	NS	NS	NS
	12/18/06	11.40	85.30	6.44	NM	8.36	-8.5	NS	NS	NS
	1/2/07	11.34	85.36	7.69	NM	8.39	-127.5	NS	NS	NS
	1/15/07	10.89	85.81	7.34	NM	8.16	-133.4	NS	NS	NS
	1/25/07	10.98	85.72	7.03	849	1.58	4.0	NS	NS	NS
	1/29/07	11.11	85.59	7.43	NM	8.73	-105.0	NS	NS	NS
	2/12/07	11.54	85.16	7.22	NM	10.69	-48.6	NS	NS	NS
	2/26/07	11.14	85.56	7.14	NM	4.89	NM	NS	NS	NS
	3/12/07	11.91	84.79	7.07	NM	9.85	42.4	NS	NS	NS
	3/26/07	10.86	85.84	7.29	NM	10.23	-38.8	NS	NS	NS
	4/10/07	10.2	86.50	7.25	NM	12.52	66.7	NS	NS	NS
	4/24/07	9.35	87.35	5.70	1,163	0.30	149.2	NS	NS	NS
	5/7/07	10.18	86.52	5.37	NM	12.55	59.1	NS	NS	NS
	5/24/07	10.98	85.72	5.82	NM	11.23	58.6	NS	NS	NS
	6/4/07	11.05	85.65	6.63	NM	6.17	210.1	NS	NS	NS
	6/18/07	11.28	85.42	6.72	NM	9.23	10.2	NS	NS	NS
	7/3/07	11.65	85.05	7.85	NM	15.90	81.5	NS	NS	NS
	7/16/07	12.92	83.78	7.03	NM	13.29	98.3	NS	NS	NS
	8/1/07	11.87	84.83	6.94	NM	9.42	-0.6	NS	NS	NS
	8/13/07	11.97	84.73	6.27	NM	1.21	-319.1	NS	NS	NS
	8/27/07	12.2	84.50	6.65	NM	8.97	-51.7	NS	NS	NS
	9/10/07	12.29	84.41	7.28	NM	5.81	-41.1	NS	NS	NS
	9/25/07	12.36	84.34	7.26	NM	5.23	-42.3	NS	NS	NS
	10/4/07	12.47	84.23	6.64	1,176	1.07	-11.0	NS	NS	NS
	10/9/07	12.52	84.18	6.91	NM	5.33	-306.3	NS	NS	NS
	10/22/07	12.26	84.44	7.91	NM	4.20	-64.1	NS	NS	NS
	11/5/07	12.10	84.60	7.56	NM	2.80	-15.1	NS	NS	NS
	11/19/07	11.82	84.88	7.82	NM	4.07	-69.7	NS	NS	NS
	12/3/07	12.79	83.91	7.31	NM	2.68	-98.1	NS	NS	NS
	12/17/07	11.93	84.77	7.03	NM	2.97	-91.5	NS	NS	NS
	1/2/08	11.40	85.30	6.61	NM	4.95	-96.2	NS	NS	NS
	1/14/08	11.01	85.69	6.60	NM	4.52	-65.7	NS	NS	NS
	1/29/08	11.34	85.36	7.11	NM	5.47	20.9	NS	NS	NS
2/11/08	11.19	85.51	NM	NM	NM	NM	NS	NS	NS	
3/7/08	9.84	86.86	6.86	1,999	0.16	70.7	NS	NS	NS	
3/11/08	9.36	87.34	6.88	1,601	0.86	-25.0	NS	NS	NS	
5/1/08	10.28	86.42	7.04	1,471	0.52	12.0	NS	NS	NS	
5/27/08	10.63	86.07	NM	NM	NM	NM	NS	NS	NS	
6/4/08	11.01	85.69	6.48	NM	0.29	-28.7	NS	NS	NS	
6/17/08	11.03	85.67	7.22	NM	2.17	-37.3	NS	NS	NS	
7/1/08	10.55	86.15	7.29	NM	0.90	-32.4	NS	NS	NS	
7/9/08	NM	86.15	NM	NM	NM	NM	NS	NS	NS	
7/14/08	11.84	84.86	6.81	NM	1.70	19.0	NS	NS	NS	
7/30/08	10.58	86.12	6.55	NM	1.98	-17.8	NS	NS	NS	
8/12/08	10.58	86.12	6.86	NM	0.86	112.4	NS	NS	NS	
8/20/08	11.02	85.68	NM	NM	NM	NM	NS	NS	NS	
8/26/08	10.81	85.89	6.90	NM	1.93	-11.2	NS	NS	NS	
9/9/08	10.74	85.96	6.69	NM	0.72	118.2	NS	NS	NS	

NOTES: System shut down between 2/11/08 and 5/26/08

ft = feet; SU = standard units; mS/cm = milliSiemens per centimeter; mg/L = milligrams per liter; mV = millivolts.

NG = Not gauged; NS = Not sampled; NA = Not applicable; NM = Not measured.

97.02 = PVC elevations following well repairs on 8/29/05 & 9/1/05. Bold date denotes a groundwater sampling event.

* indicates these wells are sampled for secondary MNA parameters. **Wells ECS-2, ECS-3, ECS-4, ECS-8, ECS-11, ECS-12, and ECS-13 are within O2 remediation

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Table 2
Groundwater Geochemical Monitoring Data

Monitoring Well & PVC Elevation (ft)	Monitoring Date	Depth to Water (ft)	Groundwater Elevation (ft)	pH (SU)	Specific Conductivity (µS/cm)	Dissolved Oxygen (mg/L)	Redox (mV)	Nitrate (mg/L)	Sulfate (mg/L)	Dissolved Iron (mg/L)
ECS-12** 96.15	1/25/06	8.64	87.51	6.44	1,207	0.53	-117	NS	NS	NS
	4/10/06	10.60	85.55	6.65	1,436	0.42	14.0	NS	NS	NS
	7/20/06	10.95	85.20	4.19	1,419	0.12	506	15.5	<5.0	15.5
	9/15/06	11.92	84.23	6.60	NM	8.11	-47.5	NS	NS	NS
	9/21/06	11.53	84.62	6.67	NM	9.63	283	NS	NS	NS
	10/6/06	11.35	84.80	7.68	NM	1.24	-22.7	NS	NS	NS
	10/10/06	11.42	84.73	6.58	1,291	0.48	-23.3	NS	NS	NS
	10/23/06	10.79	85.36	5.91	NM	1.46	NM	NS	NS	NS
	11/7/06	10.74	85.41	6.65	NM	5.74	-69.8	NS	NS	NS
	11/20/06	10.15	86.00	6.94	NM	8.77	72.5	NS	NS	NS
	12/4/06	10.58	85.57	7.32	NM	12.13	199.4	NS	NS	NS
	12/18/06	11.04	85.11	6.20	NM	7.52	-3.8	NS	NS	NS
	1/2/07	10.96	85.19	7.29	NM	8.41	-120.8	NS	NS	NS
	1/15/07	10.56	85.59	7.02	NM	8.29	-128.6	NS	NS	NS
	1/25/07	12.55	83.60	6.93	1,500	1.51	9.0	<2.0	<20.0	15.8
	1/29/07	11.74	84.41	7.22	NM	13.75	-94.7	NS	NS	NS
	2/12/07	11.23	84.92	6.95	NM	13.78	-52.9	NS	NS	NS
	2/26/07	NG-S	NA	NM	NM	NM	NM	NS	NS	NS
	3/12/07	NG-S	NA	NM	NM	NM	NM	NS	NS	NS
	3/26/07	10.42	85.73	7.06	NM	12.40	-89.60	NS	NS	NS
	4/10/07	9.77	86.38	6.76	NM	10.88	-14.00	NS	NS	NS
	4/24/07	8.83	87.32	5.48	1,642	0.30	-57.8	NS	NS	NS
	5/7/07	9.89	86.26	5.93	NM	16.80	-11.9	NS	NS	NS
	5/24/07	10.21	85.94	6.01	NM	13.25	24.3	NS	NS	NS
	6/4/07	10.66	85.49	5.99	NM	12.92	28.4	NS	NS	NS
	6/18/07	10.86	85.29	6.71	NM	12.56	-84.4	NS	NS	NS
	7/3/07	11.27	84.88	7.85	NM	21.14	46.2	NS	NS	NS
	7/16/07	12.54	83.61	7.88	NM	18.24	60.7	NS	NS	NS
	8/1/07	11.47	84.68	6.80	NM	9.79	-59.9	NS	NS	NS
	8/13/07	11.56	84.59	6.35	NM	1.35	-331.1	NS	NS	NS
	8/27/07	11.78	84.37	6.34	NM	8.73	-75.3	NS	NS	NS
	9/10/07	11.87	84.28	7.26	NM	5.96	-68.2	NS	NS	NS
	9/25/07	11.95	84.20	7.23	NM	5.30	-69.9	NS	NS	NS
	10/4/07	12.04	84.66	6.71	1,740	1.11	-86.0	<0.1	10.0	21.3
	10/9/07	12.08	84.62	6.71	NM	4.22	-300.4	NS	NS	NS
	10/22/07	11.82	84.88	7.42	NM	3.31	-40.7	NS	NS	NS
	11/5/07	11.66	85.04	7.47	NM	6.90	-99.2	NS	NS	NS
	11/19/07	11.38	85.32	7.34	NM	2.97	-39.5	NS	NS	NS
	12/3/07	12.87	83.83	7.49	NM	6.95	-111.5	NS	NS	NS
	12/17/07	11.47	85.23	7.49	NM	6.51	-110.1	NS	NS	NS
	1/2/08	10.97	85.73	6.52	NM	6.51	-76.1	NS	NS	NS
	1/14/08	10.59	86.11	6.59	NM	6.01	-71.5	NS	NS	NS
	1/29/08	10.92	85.78	6.85	NM	6.38	16.1	NS	NS	NS
2/11/08	10.82	85.88	NM	NM	NM	NM	NS	NS	NS	
3/24/08	9.15	87.55	6.75	1,510	0.44	-25	<0.1	2.72	16.3	
5/1/08	9.71	86.99	7.00	1,600	0.35	-29	<0.1	<1.0	6.31	
5/27/08	10.18	86.52	NM	NM	NM	NM	NS	NS	NS	
6/4/08	11.82	84.88	6.67	NM	0.45	-112.2	NS	NS	NS	
6/17/08	10.61	86.09	7.36	NM	0.36	-166.2	NS	NS	NS	
7/1/08	10.62	86.08	7.02	NM	1.66	-75	NS	NS	NS	
7/9/08	NM	86.08	NM	NM	NM	NM	NS	NS	NS	
7/14/08	10.96	85.74	6.63	NM	1.18	-62.7	NS	NS	NS	
7/30/08	10.18	86.52	6.48	NM	2.15	-52.3	NS	NS	NS	
8/12/08	10.60	86.10	6.77	NM	0.90	-63.5	NS	NS	NS	
8/20/08	10.67	86.03	NM	NM	NM	NM	NS	NS	NS	
8/26/08	11.02	85.68	6.71	NM	2.02	-52.2	NS	NS	NS	
9/9/08	10.71	85.99	6.80	NM	0.88	-88.1	NS	NS	NS	

NOTES: System shut down between 2/11/08 and 5/26/08
ft = feet; SU = standard units; mS/cm = milliSiemens per centimeter; mg/L = milligrams per liter; mV = millivolts.

NG = Not gauged; NS = Not sampled; NA = Not applicable; NM = Not measured.

97.02 = PVC elevations following well repairs on 8/29/05 & 9/1/05. Bold date denotes a groundwater sampling event.

* indicates these wells are sampled for secondary MNA parameters. **Wells ECS-2, ECS-3, ECS-4, ECS-8, ECS-11, ECS-12, and ECS-13 are within O2 remediation

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Table 2
Groundwater Geochemical Monitoring Data

Monitoring Well & PVC Elevation (ft)	Monitoring Date	Depth to Water (ft)	Groundwater Elevation (ft)	pH (SU)	Specific Conductivity (µS/cm)	Dissolved Oxygen (mg/L)	Redox (mV)	Nitrate (mg/L)	Sulfate (mg/L)	Dissolved iron (mg/L)
ECS-13** 97.66	1/25/06	NG	NA	NM	NM	NM	NM	NS	NS	NS
	4/10/06	12.20	85.46	6.61	246	0.75	-2.0	NS	NS	NS
	7/20/06	12.53	85.13	3.00	890	0.28	543	NS	NS	NS
	9/15/06	10.45	87.21	7.10	NM	9.28	-40.2	NS	NS	NS
	9/21/06	13.11	84.55	7.76	NM	11.94	244	NS	NS	NS
	10/6/06	12.97	84.69	8.19	NM	4.94	-7.6	NS	NS	NS
	10/10/06	13.01	84.65	6.32	533	0.73	14.2	NS	NS	NS
	10/23/06	12.34	85.32	6.40	NM	1.50	NM	NS	NS	NS
	11/7/06	12.31	85.35	6.25	NM	13.45	109.4	NS	NS	NS
	11/20/06	11.72	85.94	6.74	NM	3.33	16.3	NS	NS	NS
	12/4/06	12.18	85.48	7.42	NM	9.57	180.2	NS	NS	NS
	12/18/06	12.62	85.04	6.40	NM	5.97	-13.7	NS	NS	NS
	1/2/07	12.58	85.08	7.29	NM	6.41	-135.4	NS	NS	NS
	1/15/07	12.04	85.62	7.18	NM	6.27	-173.5	NS	NS	NS
	1/25/07	12.18	85.48	7.59	668	1.46	57.0	NS	NS	NS
	1/29/07	12.34	85.32	7.58	NM	12.82	-84.6	NS	NS	NS
	2/12/07	12.83	84.83	7.41	NM	8.54	-59.4	NS	NS	NS
	2/26/07	NG-S	NA	NM	NM	NM	NM	NS	NS	NS
	3/12/07	NG-S	NA	NM	NM	NM	NM	NS	NS	NS
	3/26/07	12.03	85.63	6.92	NM	14.41	104.50	NS	NS	NS
	4/10/07	11.41	86.25	6.69	NM	13.47	14.60	NS	NS	NS
	4/24/07	10.51	87.15	6.96	685	280.00	-41.3	NS	NS	NS
	5/7/07	11.42	86.24	4.75	NM	15.95	125.6	NS	NS	NS
	5/24/07	11.27	86.39	5.06	NM	14.82	132.7	NS	NS	NS
	6/4/07	12.27	85.39	6.18	NM	11.05	21.8	NS	NS	NS
	6/18/07	12.50	85.16	7.31	NM	14.44	48.1	NS	NS	NS
	7/3/07	12.88	84.78	8.22	NM	12.65	73.3	NS	NS	NS
	7/16/07	12.95	84.71	7.81	NM	12.64	88.1	NS	NS	NS
	8/1/07	13.07	84.59	7.34	NM	24.48	110.5	NS	NS	NS
	8/13/07	13.17	84.49	6.97	NM	10.09	-256.6	NS	NS	NS
	8/27/07	13.39	84.27	6.61	NM	10.78	-111.8	NS	NS	NS
	9/10/07	13.45	84.21	7.73	NM	7.28	-83.8	NS	NS	NS
	9/25/07	13.52	84.14	7.72	NM	7.10	-86.7	NS	NS	NS
	10/4/07	13.64	84.02	7.22	937	0.53	-53.0	NS	NS	NS
	10/9/07	13.67	83.99	6.61	NM	3.41	-268.4	NS	NS	NS
	10/22/07	13.38	84.28	7.52	NM	4.81	-46.2	NS	NS	NS
	11/5/07	13.20	84.46	7.13	NM	8.19	-37.1	NS	NS	NS
	11/19/07	12.92	84.74	7.45	NM	4.02	-45.5	NS	NS	NS
	12/3/07	12.87	84.79	7.07	NM	8.12	-102.4	NS	NS	NS
	12/17/07	13.01	84.65	7.19	NM	7.15	-102.5	NS	NS	NS
	1/2/08	12.54	85.12	6.01	NM	5.10	39.8	NS	NS	NS
	1/14/08	12.06	85.60	6.05	NM	5.04	42.3	NS	NS	NS
	1/29/08	12.53	85.13	7.01	NM	8.13	-11.3	NS	NS	NS
2/11/08	12.34	85.32	NM	NM	NM	NM	NS	NS	NS	
3/7/08	11.19	86.47	7.19	161	8.81	303	NS	NS	NS	
3/11/08	10.80	86.86	7.27	905	3.52	-39	NS	NS	NS	
5/1/08	11.28	86.38	6.44	1,350	1.00	-7	NS	NS	NS	
5/27/08	10.63	87.03	NM	NM	NM	NM	NS	NS	NS	
6/4/08	12.44	85.22	6.28	NM	4.81	49.1	NS	NS	NS	
6/17/08	12.18	85.48	7.08	NM	7.41	33.8	NS	NS	NS	
7/1/08	12.20	85.46	6.61	NM	0.80	25.1	NS	NS	NS	
7/9/08	NM	85.46	NM	NM	NM	NM	NS	NS	NS	
7/14/08	12.56	85.10	6.53	NM	2.29	-18	NS	NS	NS	
7/30/08	11.78	85.88	6.75	NM	2.52	47.2	NS	NS	NS	
8/12/08	12.21	85.45	6.69	NM	1.85	-28.3	NS	NS	NS	
8/20/08	11.49	86.17	NM	NM	NM	NM	NS	NS	NS	
8/26/08	12.65	85.01	6.82	NM	0.96	-62.5	NS	NS	NS	
9/9/08	11.99	85.67	6.72	NM	1.37	-42.7	NS	NS	NS	

NOTES: System shut down between 2/11/08 and 5/26/08
ft = feet; SU = standard units; mS/cm = milliSiemens per centimeter; mg/L = milligrams per liter; mV = millivolts.
NG = Not gauged; NS = Not sampled; NA = Not applicable; NM = Not measured.
97.02 = PVC elevations following well repairs on 8/29/05 & 9/1/05. Bold date denotes a groundwater sampling event. Italicized GW elevation is estimate
* indicates these wells are sampled for secondary MNA parameters. **Wells ECS-2, ECS-3, ECS-4, ECS-8, ECS-11, ECS-12, and ECS-13 are within O2 remediation

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Table 2
Groundwater Geochemical Monitoring Data

Monitoring Well & PVC Elevation (ft)	Monitoring Date	Depth to Water (ft)	Groundwater Elevation (ft)	pH (SU)	Specific Conductivity ($\mu\text{S}/\text{cm}$)	Dissolved Oxygen (mg/L)	Redox (mV)	Nitrate (mg/L)	Sulfate (mg/L)	Dissolved Iron (mg/L)
ECS-14 96.25	4/10/06	10.00	86.25	6.92	1,310	0.20	4.0	NS	NS	NS
	7/20/06	10.31	85.94	NM	NM	NM	NM	NS	NS	NS
	10/10/06	10.79	85.46	NM	NM	NM	NM	NS	NS	NS
	1/25/07	9.87	86.38	NM	NM	NM	NM	NS	NS	NS
	4/24/07	8.51	87.74	NM	NM	NM	NM	NS	NS	NS
	10/4/07	11.35	84.90	6.90	1,720	1.21	-81	NS	NS	NS
	3/7/08	9.13	87.12	6.83	1,698	0.42	16.6	NS	NS	NS
ECS-15 96.45	4/10/06	10.47	85.98	6.54	1,357	0.97	68.0	NS	NS	NS
	7/20/06	10.72	85.73	NM	NM	NM	NM	NS	NS	NS
	10/10/06	11.23	85.22	NM	NM	NM	NM	NS	NS	NS
	1/25/07	10.37	86.08	NM	NM	NM	NM	NS	NS	NS
	4/24/07	8.93	87.52	NM	NM	NM	NM	NS	NS	NS
	10/4/07	11.91	84.54	6.24	1,082	0.90	80	NS	NS	NS
	3/7/08	9.68	86.77	6.61	898	3.06	34.6	NS	NS	NS

NOTES: System shut down between 2/11/08 and 5/26/08
ft = feet; SU = standard units; mS/cm = milliSiemens per centimeter; mg/L = milligrams per liter; mV = millivolts.
NG = Not gauged; NS = Not sampled; NA = Not applicable; NM = Not measured. NG-S= Not gauged due to snow.
97.02 = PVC elevations following well repairs on 8/29/05 & 9/1/05. Bold date denotes a groundwater sampling event.
* indicates these wells are sampled for secondary MNA parameters. **Wells ECS-2, ECS-3, ECS-4, ECS-8, ECS-11, ECS-12, and ECS-13 are within O2 remediation

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Table 3
Site Monitoring Data

Monitoring Well & Elevation (ft)	Sampling Date	Depth to Water (ft)	Groundwater Elevation (ft)	Benzene (µg/L)	Toluene (ug/L)	Ethyl-benzene (µg/L)	Xylenes (µg/L)	S BTEX (µg/L)	Naphthalene (µg/L)	MtBE (µg/L)	C ₅ - C ₈ Aliphatics (mg/L)	C ₉ - C ₁₂ Aliphatics (mg/L)	C ₉ - C ₁₀ Aromatics (mg/L)	Sum VPH (mg/L)
Revised MCP Method 1 Standards*			GW-2:	2000	50000	20000	9000	NA	1000	50000	3	5	7	
			GW-3:	10000	40000	5000	5000	NA	20000	50000	50	50	50	
ECS-1	11/8/99	11.48	85.71	<5.0	<5.0	<5.0	<10	ND	<5.0	<5.0	<0.075	<0.025	<0.025	
97.19	12/19/02	11.60	85.59	<5.0	<5.0	<5.0	<10	ND	<5.0	<5.0	<0.075	<0.025	<0.025	
97.02	9/8/05	11.78	85.38	<5.0	<5.0	<5.0	<10	ND	<5.0	<5.0	<0.075	<0.025	<0.025	
97.16	1/25/06	8.49	88.67	<5.0	<5.0	<5.0	<10	ND	<5.0	6.5	0.263	<0.025	<0.025	
	4/11/06	11.38	85.78	<5.0	<5.0	<5.0	<10	ND	<5.0	<5.0	<0.075	<0.025	<0.025	
	7/20/06	11.72	85.44	<5.0	<5.0	<5.0	<10	ND	<5.0	<5.0	<0.075	<0.025	<0.025	
	10/10/06	12.21	84.95	NS	NS	NS	NS	NA	NS	NS	NS	NS	NS	
	1/25/07	11.34	85.82	<5.0	<5.0	<5.0	<10	ND	<5.0	<5.0	<0.075	<0.025	<0.025	
	4/24/07	9.89	87.27	NS	NS	NS	NS	NA	NS	NS	NS	NS	NS	
	10/4/07	12.74	84.42	<5.0	<5.0	<5.0	<10	ND	<5.0	<5.0	<0.075	<0.025	<0.025	0.625
	3/11/08	9.82	87.34	<5.0	<5.0	<5.0	<10	ND	<5.0	8.5	<0.075	<0.025	<0.025	0.625
	5/1/08	11.50	85.66	<5.0	<5.0	<5.0	<10	ND	<5.0	8.5	<0.075	<0.025	<0.025	
ECS-2	11/8/99	12.35	85.41	<100	670	1,600	7,400	9,670	260	190	<1.50	<0.500	5.0	5.000
97.76	12/19/02	12.56	85.20	<20	1,000	420	1,920	3,340	34	5,700	0.501	<0.100	0.54	1.041
97.60	9/8/05	12.44	85.16	<5.0	754	463	2,396	3,613	92	3,330	2.35	1.52	3.13	7.000
	11/1/05	10.65	86.95	<50	425	366	1,502	2,293	<50	4,590	2.37	0.44	2.81	5.621
	1/25/06	10.16	87.44	32.2	778	781	3,827	5,418	163	1,970	5.23	1.39	4.31	10.930
	4/10/06	12.09	85.51	42.1	600	1,040	5,820	7,502	244	1,590	9.29	3.63	6.64	19.560
	7/20/06	12.42	85.18	<100	670	1,090	5,460	7,220	240	31,700	2.70	2.85	4.53	10.080
	10/10/06	12.92	84.68	<50	81.9	232	951	1,265	<50	4,860	<0.750	0.763	1.82	2.583
	1/25/07	12.06	85.54	<10	79.1	139	642	860	29.9	1,180	0.793	0.533	1.01	2.336
	4/24/07	10.39	87.21	<25	114	479	2,113	2,706	81.6	2,080	1.92	1.12	2.39	5.430
	10/4/07	13.50	84.10	8.2	<5.0	247	399	654	66.7	350	1.53	0.544	1.19	3.264
	3/11/08	10.38	87.22	<5.0	<5.0	<5.0	<10	ND	<5.0	<5.0	0.623	<0.025	<0.025	0.623
	5/1/08	11.13	86.47	<5.0	<5.0	<5.0	7.6	7.6	<5.0	<5.0	1.60	<0.025	0.0477	1.648

NOTES: Depth to water in feet from PVC.

ft = feet. µg/L = micrograms per liter. mg/L = milligrams per liter.

*MCP Method 1 Standards as set forth by 310 CMR 40.0974(2) revised on February 14, 2008.

Shading indicates value or detection limit exceeds GW-2 standard.

Bolding indicates value or detection limit exceeds GW-3 standard.

D = Duplicate sample.

Elevation of PVC in feet.

NA = Not applicable/available.

97.02 = PVC elevations following well repairs on 8/29/05 & 9/1/05

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Table 3
Site Monitoring Data

Monitoring Well & Elevation (ft)	Sampling Date	Depth to Water (ft)	Groundwater Elevation (ft)	Benzene (µg/L)	Toluene (ug/L)	Ethyl-benzene (µg/L)	Xylenes (µg/L)	S BTEX (µg/L)	Naphthalene (µg/L)	MtBE (µg/L)	C ₅ - C ₈ Aliphatics (mg/L)	C ₉ - C ₁₂ Aliphatics (mg/L)	C ₉ - C ₁₀ Aromatics (mg/L)	Sum VPH (mg/L)
Revised MCP Method 1 Standards*			GW-2:	2000	50000	20000	9000	NA	1000	50000	3	5	7	
			GW-3:	10000	40000	5000	5000	NA	20000	50000	50	50	50	
ECS-3	11/8/99	12.58	85.37	<100	10,500	2,700	12,200	25,400	370	<100	<1.50	<0.500	9.2	9.20
97.95	12/19/02	12.70	85.25	<100	2,900	1,400	4,900	9,200	100	240	0.594	<0.100	2.22	2.81
97.76	9/8/05	12.65	85.11	55	3,210	3,010	14,190	20,465	468	821	15.1	5.5	11.0	31.60
	11/1/05	10.87	86.89	10.2	565	536	2,250	3,361	83	<5.0	2.54	0.13	1.88	4.55
	1/25/06	NG	NA	NS	NS	NS	NS	NA	NS	NS	NS	NS	NS	
	4/11/06	12.34	85.42	145	2,390	3,820	16,930	23,285	491	546	27.1	5.35	12.3	44.75
	7/20/06	12.56	85.20	<20	564	744	2,909	4,217	131	70	3.50	2.40	3.15	9.05
	10/10/06	13.17	84.59	15.1	1,110	1,280	5,570	7,975	150	<10	2.93	1.23	2.98	7.14
	1/25/07	12.27	85.49	11.3	168	865	3,694	4,738	137	65.6	2.62	0.711	3.02	6.35
	4/24/07	10.62	87.14	<5.0	87.1	112	510	709	14	7.5	0.298	0.169	0.446	0.913
	10/3/07	13.73	84.03	<5.0	<5.0	52.7	131.9	185	8.6	<5.0	0.403	0.115	0.180	0.698
	3/11/08	10.68	87.08	<5.0	29.4	342	618	989	27.6	<5.0	0.812	0.291	0.735	1.838
	5/1/08	11.42	86.34	<50.0	387.0	2,220	9,180	11,787	355	<50.0	6.75	2.86	10.00	19.610
ECS-4	11/8/99	11.78	85.28	<5.0	<5.0	340	460	800	20	19	0.42	<0.025	0.45	
97.06	12/19/02	12.45	84.61	NS (DRY)	NS (DRY)	NS (DRY)	NS (DRY)	NA	NS (DRY)	NS (DRY)	NS (DRY)	NS (DRY)	NS (DRY)	
96.75	9/8/05	11.94	84.81	NS (DRY)	NS (DRY)	NS (DRY)	NS (DRY)	NA	NS (DRY)	NS (DRY)	NS (DRY)	NS (DRY)	NS (DRY)	
	1/25/06	NG	NA	NS	NS	NS	NS	NA	NS	NS	NS	NS	NS	
	4/10/06	11.51	85.24	<5.0	<5.0	<5.0	<10	ND	<5.0	<5.0	<0.075	<0.025	<0.025	
	7/20/06	11.96	84.79	<5.0	<5.0	<5.0	<10	ND	<5.0	10.9	<0.075	<0.025	<0.025	
	10/10/06	12.43	84.32	NS	NS	NS	NS	NA	NS	NS	NS	NS	NS	
	4/24/07	9.88	86.87	<5.0	<5.0	<5.0	<10	ND	<5.0	<5.0	<0.075	<0.025	<0.025	
	10/4/07	NM	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	3/11/08	9.93	86.82	<5.0	<5.0	<5.0	<10	ND	<5.0	29.1	<0.075	<0.025	<0.025	
	5/1/08	10.71	86.04	<5.0	<5.0	<5.0	<10	ND	<5.0	5.6	<0.075	<0.025	<0.025	

NOTES: Depth to water in feet from PVC.

ft = feet. µg/L = micrograms per liter. mg/L = milligrams per liter.

*MCP Method 1 Standards as set forth by 310 CMR 40.0974(2) revised on February 14, 2008.

Shading indicates value or detection limit exceeds GW-2 standard.

Bolding indicates value or detection limit exceeds GW-3 standard.

D = Duplicate sample.

Elevation of PVC in feet.

NA = Not applicable/available.

97.02 = PVC elevations following well repairs on 8/29/05 & 9/1/05

Monitoring Well & Elevation (ft)	Sampling Date	Depth to Water (ft)	Groundwater Elevation (ft)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	S BTEX (µg/L)	Naphthalene (µg/L)	MtBE (µg/L)	C ₁ - C ₄ Aliphatics (mg/L)	C ₅ - C ₁₂ Aliphatics (mg/L)	C ₆ - C ₁₀ Aromatics (mg/L)	Sum VPH*1000	LN of O	
*Revised MCP Method 1 Standards			GW-2:	2,000	50,000	20,000	9,000	NA	1,000	50,000	3.0	5.0	7.0			
			GW-3:	10,000	40,000	5,000	5,000	NA	20,000	50,000	50.0	50.0	50.0			
ECS-5 97.73 97.56	11/8/99 12/19/02 9/8/05 1/25/06 4/11/06 7/20/06 10/10/06 4/24/07 10/4/07 3/11/08 5/1/08	12.26 12.54 12.44 10.22 11.15 12.48 12.98 10.43 13.57 10.54 11.27	85.47 85.19 85.12 87.34 86.41 85.08 84.58 87.13 83.99 87.02 86.29	<20 <5.0 <5.0 <5.0 <5.0 <5.0 NS NS NS <5.0 <5.0 NS	110 <5.0 5.7 <5.0 <5.0 <5.0 NS NS NS <5.0 <5.0 NS	1,400 70 48 28.7 13.2 <5.0 NS NS <5.0 9.5 NS	6,000 339 208 109 52.4 14.6 NS NS <10 35.7 NS	7,510 409 262 138 66 15 NA NA ND 45.2 NA	240 12 27 20.5 10.1 6.2 NS NS <5.0 7.8 NS	<20 <5.0 <5.0 <5.0 <5.0 <5.0 NS NS NS <5.0 <5.0 NS	1.2 0.105 0.403 0.480 0.330 0.187 NS NS <0.075 0.335 NS	<0.100 <0.025 0.438 0.414 0.336 0.286 NS NS <0.025 0.156 NS	5.0 0.404 0.948 0.988 0.678 0.414 NS NS 0.0735 0.430 NS	6,200.0 509.0 1,789.0 1,882.0 1,344.0 887.0 0.0 0.0 73.5 921.0	8.732 6.232 7.489 7.540 7.203 6.788 0.0 0.0 4.297 6.825	
ECS-6 96.58 96.34	2/13/03 9/8/05 11/1/05 1/25/06 1/25/06D 4/10/06 7/20/06 7/20/06D 10/10/06 1/25/07 4/24/07 10/4/07 3/11/08 5/1/08	10.74 11.34 9.57 9.10 NA 11.05 11.40 NA 11.89 10.99 9.35 12.46 9.43 10.16	85.84 85.00 86.77 87.24 NA 85.29 84.94 NA 84.45 85.35 86.99 83.88 86.91 86.18	<5.0 <20 <5.0 <10.0 <10.0 <5.0 <5.0 <5.0 <5.0 <5.0 <5.0 <5.0 <25 <25.0	<5.0 53 15.8 23.3 14.7 12.6 <5.0 <5.0 6.4 7.5 <5.0 <5.0 <25 62.5	<5.0 1,170 172 390 363 130 <5.0 <5.0 123 172 91 <5.0 545 572	<10 4,183 564 1,029 962 352 <15 <15 286 588.1 83.2 <10.0 2,054 2,789	ND 5,406 752 1,442 1,340 495 ND ND 415 748 174 ND 2,599 3,424	<5.0 167 41.0 45.4 57.1 30.3 <5.0 <5.0 8.3 40.9 14.7 <5.0 111.0 98.1	<5.0 <20 13.4 51.8 50.2 <5.0 <5.0 <5.0 <5.0 128.0 40.6 24.8 376.0 39.5	<0.075 4.15 0.885 2.24 2.22 0.944 0.095 <0.075 0.380 0.653 0.152 0.194 2.38 3.37	<0.025 1.90 0.264 0.969 1.04 0.512 0.049 0.045 0.089 0.385 0.109 0.0621 1.16 2.14	0.026 4.96 1.37 2.17 2.12 0.985 0.091 0.067 0.183 1.570 0.297 0.0638 2.91 3.71	0.026 11.01 2.519 5.379 5.38 2.441 0.2352 0.1116 0.6523 2.608 0.558 0.3199 6.45 9.22	26 11,010 2,519 5,379 5,380 2,441 235 112 652 2,608 558 320 6,450 9,220	3.258 9.307 7.832 8.590 8.590 7.800 5.460 4.715 6.481 7.866 6.324 5.768 8.771835 9.129130
ECS-7 95.97 95.54	2/13/03 9/8/05 1/25/06 4/10/06 7/20/06 10/10/06 4/24/07 10/4/07 3/11/08 5/1/08	10.14 9.75 9.05 9.90 9.78 9.96 9.47 10.41 9.24 9.62	85.83 85.79 86.49 85.64 85.76 85.58 86.07 85.13 86.30 85.92	<5.0 <5.0 <5.0 <5.0 NS NS NS <5.0 NS NS	<5.0 <5.0 <5.0 <5.0 NS NS NS <5.0 NS NS	<5.0 <5.0 <5.0 <5.0 NS NS NS <10 NS NS	<10 <10 <10 <10 NS NS NS NS NS NS	ND ND ND ND NA NA NA ND NA NA	<5.0 <5.0 <5.0 <5.0 NS NS NS <5.0 NS NS	<0.075 <0.075 <0.075 <0.075 NS NS NS <0.075 NS NS	<0.025 <0.025 <0.025 <0.025 NS NS NS <0.025 NS NS	<0.025 <0.025 <0.025 <0.025 NS NS NS <0.025 NS NS				
ECS-8 95.72 95.43	2/13/03 9/8/05 9/8/05D 1/25/06 4/11/06 7/20/06 10/10/06 4/24/07 10/4/07 3/11/08 3/24/08 5/1/08	11.63 10.35 NG NG 9.98 10.28 10.81 8.19 11.45 NG 8.56 9.02	84.09 85.08 NA NA 85.45 85.15 84.62 87.24 83.98 NA 86.87 86.41	<5.0 <5.0 <5.0 NS <5.0 NS NS NS <5.0 NS <5.0 <5.0	160 <5.0 <5.0 NS <5.0 NS NS NS <5.0 NS <5.0 <5.0	1,100 <5.0 <5.0 NS <5.0 NS NS NS <5.0 NS <5.0 <5.0	4,400 <10 <10 NS <10 NS NS NS NS NS NS NS	5,660 ND ND NA ND NA NA NA ND NA ND ND	120 <5.0 <5.0 NS <5.0 NS NS NS <5.0 NS <5.0 <5.0	40 <0.075 <0.075 NS <0.075 NS NS NS <0.075 NS <0.075 <0.075	3.7 <0.025 <0.025 NS <0.025 NS NS NS <0.025 NS <0.025 <0.025	3.4 <0.025 <0.025 NS <0.025 NS NS NS <0.025 NS <0.025 <0.025				

NOTES: Depth to water in feet from PVC.

ft = feet. µg/L = micrograms per liter. mg/L = milligrams per liter.

*MCP Method 1 Standards as set forth by 310 CMR 40.0974(2) revised on February 14, 2008.

Shading indicates value or detection limit exceeds GW-2 standard.

Bolding indicates value or detection limit exceeds GW-3 standard.

D = Duplicate sample.

Elevation of PVC in feet.

NA = Not applicable/available.

97.02 = PVC elevations following well repairs on 8/29/05 & 9/1/05

O'Connell Oil/Mobil Station 730 East Street Pittsfield, Massachusetts				Table 3 (3 of 4) Site Monitoring Data										Sum VPH mg/L
Monitoring Well & Elevation (ft)	Sampling Date	Depth to Water (ft)	Ground-water Elevation (ft)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	S BTEX (µg/L)	Naphthalene (µg/L)	MtBE (µg/L)	C ₆ - C ₈ Aliphatics (mg/L)	C ₉ - C ₁₂ Aliphatics (mg/L)	C ₉ - C ₁₀ Aromatics (mg/L)	
*Revised MCP Method 1 Standards			GW-2:	2,000	50,000	20,000	9,000	NA	1,000	50,000	3.0	5.0	7.0	
			GW-3:	10,000	40,000	5,000	5,000	NA	20,000	50,000	50.0	50.0	50.0	
ECS-9	2/13/03	10.82	84.40	<5.0	<5.0	<5.0	85	85	<5.0	16	0.540	0.240	0.300	1.080
95.22	9/19/05	10.91	84.08	9.6	6.7	60.7	730	807	40.2	831	0.652	0.611	1.41	2.673
94.99	1/25/06	8.38	86.61	<10	12.7	57.9	568	639	26.6	1,090	0.660	0.429	1.11	2.199
	4/11/06	10.33	84.66	<25	<25	98.3	915	1013	47.3	3,970	1.73	0.770	1.53	4.030
	7/20/06	10.72	84.27	<25	<25	51.5	626	678	51.9	1,980	0.913	0.970	1.24	3.123
	10/10/06	11.12	83.87	NS	NS	NS	NS	NA	NS	NS	NS	NS	NS	0.000
	1/25/07	10.31	84.68	<10	<10	28.5	336	365	28.8	1,370	0.356	0.522	0.949	1.827
	4/24/07	8.57	86.42	<5.0	5.3	12.6	145	163	15.1	1,540	<0.075	0.262	0.571	0.833
	10/4/07	11.79	83.20	<50	<50	<50	<100	ND	<50	4,260	<0.75	0.399	1.290	1.689
	3/11/08	8.63	86.36	5.6	<5.0	<5.0	38.7	44	11.6	666	<0.075	0.140	0.400	0.540
	5/1/08	9.47	85.52	<5.0	12.7	<5.0	31.9	45	5.0	335	<0.075	0.0523	0.0995	0.152
ECS-10	2/13/03	10.11	85.79	<5.0	<5.0	<5.0	<10	ND	<5.0	<5.0	<0.075	<0.025	<0.025	0.0625
95.90	9/8/05	9.59	86.16	<5.0	<5.0	<5.0	<10	ND	<5.0	<5.0	<0.075	<0.025	<0.025	0.0625
95.75	1/25/06	8.57	87.18	<5.0	<5.0	<5.0	<10	ND	<5.0	<5.0	<0.075	<0.025	<0.025	0.0625
	4/10/06	9.52	86.23	<5.0	<5.0	<5.0	<10	ND	<5.0	<5.0	<0.075	<0.025	<0.025	0.0625
	7/20/06	9.42	86.33	NS	NS	NS	NS	NA	NS	NS	NS	NS	NS	
	10/10/06	9.64	86.11	NS	NS	NS	NS	NA	NS	NS	NS	NS	NS	
	4/24/07	8.53	87.22	NS	NS	NS	NS	NA	NS	NS	NS	NS	NS	
	10/4/07	10.18	85.57	<5.0	<5.0	<5.0	<10	ND	<5.0	<5.0	<0.075	<0.025	<0.025	0.0625
	3/11/08	5.74	90.01	<5.0	<5.0	<5.0	<10	ND	<5.0	<5.0	<0.075	<0.025	<0.025	0.0625
	5/1/08	8.87	86.88	<5.0	<5.0	<5.0	<10	ND	<5.0	<5.0	<0.075	<0.025	<0.025	

NOTES: Depth to water in feet from PVC.

ft = feet, µg/L = micrograms per liter, mg/L = milligrams per liter.

MCP Method 1 Standards as set forth by 310 CMR 40.0974(2).

Shading indicates value or detection limit exceeds GW-2 standard.

Bolding indicates value or detection limit exceeds GW-3 standard.

D = Duplicate sample.

Elevation of PVC in feet.

NA = Not applicable/available.

O'Connell Oil/Mobil Station 730 East Street Pittsfield, Massachusetts				Table 3 (3 of 4) Site Monitoring Data										Sum VPH mg/L
Monitoring Well & Elevation (ft)	Sampling Date	Depth to Water (ft)	Ground-water Elevation (ft)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	S BTEX (µg/L)	Naphthalene (µg/L)	MtBE (µg/L)	C ₅ - C ₈ Aliphatics (mg/L)	C ₉ - C ₁₂ Aliphatics (mg/L)	C ₉ - C ₁₀ Aromatics (mg/L)	
*Revised MCP Method 1 Standards			GW-2:	2,000	50,000	20,000	9,000	NA	1,000	50,000	3.0	5.0	7.0	
			GW-3:	10,000	40,000	5,000	5,000	NA	20,000	50,000	50.0	50.0	50.0	
ECS-11	1/25/06	9.28	87.42	18.0	<10	<10	<30	18.0	12.5	1,040	1.08	0.056	0.059	
96.70	4/10/06	10.94	85.76	<5.0	<5.0	<5.0	<10.0	ND	<5.0	277	0.226	<0.025	0.029	
	7/20/06	11.31	85.39	<5.0	<5.0	<5.0	<10.0	ND	<5.0	243	0.164	<0.025	0.025	
	10/10/06	11.81	84.89	<5.0	<5.0	<5.0	<10.0	ND	<5.0	598	0.261	0.047	0.077	
	1/25/07	10.98	85.72	<5.0	<5.0	<5.0	<10.0	ND	<5.0	359	0.133	<0.025	0.041	
	4/24/07	9.35	87.35	5.8	5.1	<5.0	<10.0	10.9	<5.0	628	0.369	<0.025	0.026	
	10/4/07	12.47	84.23	5	<5.0	<5.0	<10.0	5.0	<5.0	207	0.899	0.124	0.072	
	3/11/08	9.36	87.34	14.5	<5.0	<5.0	<10.0	14.5	6.9	387	0.982	0.029	0.093	
	5/1/08	10.28	86.42	<5.0	5.7	<5.0	<10.0	5.7	13.0	81.4	0.639	0.0685	0.0669	
ECS-12	1/25/06	8.64	87.51	47.0	54.0	1,960	9,690	11,751	399	<20	14.1	6.04	13.6	33.74
96.15	4/10/06	10.60	85.55	<10	37.3	86.6	437	581	98.9	20.9	5.94	6.69	12.9	25.53
	7/20/06	10.95	85.20	<10	32.4	19.9	59	111	53.9	14.7	3.38	4.39	6.60	14.37
	10/10/06	11.42	84.73	<10	33.7	53.0	270	357	69.3	32.2	2.72	3.07	6.17	11.96
	10/10/06D	NA	NA	<10	70.9	53.9	288	412	102	45.9	4.14	3.21	7.13	14.48
	1/25/07	12.55	83.60	<5.0	50	29.8	149.6	229	63.8	17.1	3.22	2.07	3.82	9.11
	1/25/07D	12.55	83.60	<25	40.3	30	147	217	64.5	<25.0	3.03	2.14	4.10	9.27
	4/24/07	8.83	87.32	<10	56.2	18.8	29.7	105	74.6	<10	3.95	1.20	4.31	9.46
	4/24/07D	8.83	87.32	<5.0	33.3	11.7	17.5	62.5	54.5	<5.0	2.06	1.46	2.88	6.4
	10/4/07	12.04	84.11	5.7	<5.0	12.2	30.3	48.2	54	<5.0	2.88	1.44	3.44	7.76
	10/4/07D	12.04	84.11	<5.0	<5.0	10.7	29.9	40.6	46.9	<5.0	2.21	1.10	2.74	6.05
	3/11/08	NG	NA	NS	NS	NS	NS	NA	NS	NS	NS	NS	NS	0
	3/24/08	9.15	87.00	<10	<10	17.1	67.9	85.0	60	<10	2.20	1.76	1.95	5.91
	3/24/08D	9.15	87.00	<10	<10	24.5	78.7	103.2	76	<10	2.39	2.33	2.68	7.40
	5/1/08	9.71	86.44	<25.0	<25.0	43.7	151.3	195.0	96.9	<25.0	2.47	1.58	4.48	8.53
	5/1/08D	9.71	86.44	<25.0	<25.0	29.4	66.5	95.9	87.4	<25.0	2.48	1.48	4.48	8.44

NOTES: Depth to water in feet from PVC.
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MCP Method 1 Standards as set forth by 310 CMR 40.0974(2).
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Bolding indicates value or detection limit exceeds GW-3 standard.
D = Duplicate sample.

Elevation of PVC in feet.
NA = Not applicable/available.

O'Connell Oil/Mobil Station 730 East Street Pittsfield, Massachusetts				Table 3 (4 of 4) Site Monitoring Data									
Monitoring Well & Elevation (ft)	Sampling Date	Depth to Water (ft)	Ground-water Elevation (ft)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Xylenes (µg/L)	S BTEX (µg/L)	Naphthalene (µg/L)	MtBE (µg/L)	C ₅ - C ₈ Aliphatics (mg/L)	C ₉ - C ₁₂ Aliphatics (mg/L)	C ₉ - C ₁₀ Aromatics (mg/L)
*Revised MCP Method 1 Standards			GW-2:	2,000	50,000	20,000	9,000	NA	1,000	50,000	3.0	5.0	7.0
			GW-3:	10,000	40,000	5,000	5,000	NA	20,000	50,000	50.0	50.0	50.0
ECS-13	1/25/06	NG	NA	NS	NS	NS	NS	NA	NS	NS	NS	NS	NS
97.66	4/10/06	12.20	85.46	77.8	9,600	4,780	22,430	36,888	566	342	28.9	5.66	11.0
	7/20/06	12.53	85.13	<5.0	9.2	223	753	985	36.5	<5.0	0.727	0.454	0.809
	10/10/06	13.01	84.65	<5.0	<5.0	<5.0	<10	ND	<5.0	<5.0	<0.075	<0.025	<0.025
	1/25/07	12.18	85.48	<5.0	<5.0	<5.0	<10	ND	<5.0	36.3	<0.075	<0.025	<0.025
	4/24/07	10.51	87.15	<5.0	<5.0	<5.0	<10	ND	<5.0	<5.0	<0.075	<0.025	<0.025
	10/4/07	13.64	84.02	<5.0	11.1	451	206.3	668	33.0	<5.0	0.598	0.434	1.29
	3/11/08	10.80	86.86	<5.0	<5.0	266	22.9	289	11.4	<5.0	0.50	0.345	0.704
	5/1/08	11.28	86.38	<50.0	178.0	2,470	6,044	8,692	371	<50	6.00	2.35	7.54
ECS-14	4/10/06	10.00	86.25	<5.0	11.7	<5.0	<15	12	15.2	<5.0	1.22	0.278	0.328
96.25	7/20/06	10.31	85.94	NS	NS	NS	NS	NA	NS	NS	NS	NS	NS
	10/10/06	10.79	85.46	NS	NS	NS	NS	NA	NS	NS	NS	NS	NS
	1/25/07	9.87	86.38	NS	NS	NS	NS	NA	NS	NS	NS	NS	NS
	4/24/07	8.51	87.74	NS	NS	NS	NS	NA	NS	NS	NS	NS	NS
	10/4/07	11.35	84.90	7.2	5.0	<5.0	42.8	55	57.6	<5.0	2.32	0.710	1.22
	3/11/08	8.80	87.45	NS	NS	NS	NS	NA	NS	NS	NS	NS	NS
	5/1/08	9.19	87.06	NS	NS	NS	NS	NA	NS	NS	NS	NS	NS
ECS-15	4/10/06	10.47	85.98	<5.0	<5.0	<5.0	<10	ND	<5.0	<5.0	0.307	<0.025	0.032
96.45	7/20/06	10.72	85.73	NS	NS	NS	NS	NA	NS	NS	NS	NS	NS
	10/10/06	11.23	85.22	NS	NS	NS	NS	NA	NS	NS	NS	NS	NS
	1/25/07	10.37	86.08	NS	NS	NS	NS	NA	NS	NS	NS	NS	NS
	4/24/07	8.93	87.52	NS	NS	NS	NS	NA	NS	NS	NS	NS	NS
	10/4/07	11.91	84.54	<5.0	<5.0	<5.0	<10	ND	<5.0	52.7	<0.075	<0.025	<0.025
	3/11/08	9.92	86.53	NS	NS	NS	NS	NA	NS	NS	NS	NS	NS
	5/1/08	9.76	86.69	NS	NS	NS	NS	NA	NS	NS	NS	NS	NS

NOTES: Depth to water in feet from PVC. Elevation of PVC in feet.
ft = feet. µg/L = micrograms per liter. mg/L = milligrams per liter. NA = Not applicable/available.
*MCP Method 1 Standards as set forth by 310 CMR 40.0974(2) revised on February 14, 2008.
Shading indicates value or detection limit exceeds GW-2 standard.
Bolding indicates value or detection limit exceeds GW-3 standard.
D = Duplicate sample.

O'Connell Mobil 730 East Street Pittsfield, Massachusetts	Table 4 Quality Assurance/Quality Control (QA/QC) Samples (MADEP VPH Method Revision 1.1) Results/Method Detection Limits ¹						
	Sample Location	ECS-12	ECS-12D	RPD (%)	TB	Groundwater Standards ²	
	Sampling Date	5/1/08	5/1/058		5/1/08	GW-2	GW-3
VPH (mg/L)							
C5-C8 Aliphatics	2.47	2.48	0.4	<0.075	3	50	
C9-C12 Aliphatics	1.58	1.48	6.5	<0.025	5	50	
C9-C10 Aromatics	4.48	4.48	0.0	<0.025	7	50	
Targeted VPH Analytes (µg/L)							
Benzene	<25	<25	NA	<5.0	2,000	10,000	
Ethylbenzene	43.7	29.4	39.1	<5.0	20,000	5,000	
Methyl-tert-butyl ether	<25	<25	NA	<5.0	50,000	50,000	
Naphthalene	96.9	87.4	10.3	<5.0	1,000	20,000	
Toluene	<25	<25	NA	<5.0	50,000	40,000	
m,p-Xylenes	117.0	66.5	55.0	<10.0	9,000 ³	5,000 ³	
o-Xylene	34.3	<25	NA	<5.0			
<p>NOTES: RPD = Relative Percent Difference. Shaded indicates concentration exceeds GW-2 standard; bold indicates concentration exceeds GW-3 standard. ¹Milligrams per liter (mg/L) or micrograms per liter (µg/L) as noted. ²MCP Method 1 Groundwater Standards from Table 1, 310 CMR 40.0974(2). Revised 2/14/08 ³Standards for total xylenes.</p>							

O'Connell Oil Associates
730 East Street
Pittsfield, Massachusetts

Table 5
Decay Rates based on Steady-State Analytical Solution

RTN 1-13347

	Seepage Velocity ft/day	Retardation Coefficient R	Contaminant Velocity ft/day	Dispersivity α ft	Attenuation Rate (k) %/day	Decay rate λ %/day	% Biodecay λ/k %
2005 - 2007	0.344	5.75	0.06	9.65	1.85	0.44	24

ARCADIS

Appendix F

Soil Boring/
Well Installation Logs

Date Start/Finish: 11/25/08 Drilling Company: Parratt Wolff Driller's Name: Joel Runscher Drilling Method: HSA Auger Size: 7" Rig Type: HSA Sampling Method: 2" x 2' SS	Northing: 534995.6 Easting: 132799.7 Casing Elevation: 1023.47 Borehole Depth: 17.5' bgs Surface Elevation: D.ZUCK Descriptions By: Dan Zuck	Well/Boring ID: A7-R Client: General Electric Location: Pittsfield, MA
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DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	Blow Counts	N - Value	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Well/Boring Construction
			0-2	NA	NA	NA	0.0 PPM		Solid cement fill.	Concrete Surface Pad. Filpro Type #1 Silica Sand (0.8' to 1.0' bgs) Hydrated Bentonite Chips (1' to 3' bgs) 2-in ID Schedule 40 PVC Riser (0.6' to 5.05' bgs) Filpro Type #00 Silica Sand (3' to 4' bgs)
			2-4	NA	NA	NA	0.0 PPM		Med brown, Silty SAND, few fine pebbles, trace granules 2-3cm, moist	
1020		1	4-6	11"	5, 8, 5, 4	NA	0.0 PPM		Med. brown, silty M-F. (+) sub angular SAND, few L. pebbles, trace C. pebbles, wet, loose	Filpro Type #0 Silica Sand (4' to 17.3' bgs) 2-in ID Schedule 40 PVC 0.010" Slotted Screen (5.05' to 17.05' bgs)
		2	6-8	5"	5, 6, 9, 13	NA	0.0 PPM		Lt. Brown - Lt. Gray, Silty M-F(+) sub angular SAND, few angular fine pebbles, trace sub rounded large pebbles, stone blocking tip (quartzite), moist, loose Water level BMP 11/26/08	
		3	8-10	11"	4, 4, 6, 19	NA	0.0 PPM		0-6": Med. brown, Silty M-F. subangular-subrounded SAND, trace L. pebbles @ 5-6"; wet-saturated, loose. 6"-11": solid wood, wet, 4cm VL. pebble stuck in tip.	
1015		4	10-12	10"	18, 49, 40, 53	NA	0.0 PPM		0-4": same as 0-6" from 8'-10' core: Med. brown, Silty M-F. subangular-subrounded SAND, trace L. pebbles, wet-saturated, loose. 4-6": same as 6-11" from 8'-10' core: solid wood, wet 6-10": Med Gray, Silty (+)sm.-L. sub rounded GRAVEL(pebbles), few M-F. sub angular sand, VL. pebble stuck in tip, saturated, loose	
10		5	12-14	22"	34, 35, 37, 31	NA	0.0 PPM		0-4": SAA from 6-10" in 10-12' core, saturated, looks to contain fragments of wood and plastic 4"-22": Med. brown, f. -c. (pebbles) Gravely SILT, some vf. sands, wet, slight plasticity, stiff - Med. Dense	

 Infrastructure, environment, facilities	Remarks: DTW: 6.83 (BMP) Outer Casing Elevation: 1024.08 (ft AMSL)
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Date Start/Finish: 11/25/08 Drilling Company: Parratt Wolff Driller's Name: Joel Runscher Drilling Method: HSA Auger Size: 7" Rig Type: HSA Sampling Method: 2" x 2' SS	Northing: 534995.6 Easting: 132799.7 Casing Elevation: 1023.47 Borehole Depth: 17.5' bgs Surface Elevation: D.ZUCK Descriptions By: Dan Zuck	Well/Boring ID: A7-R Client: General Electric Location: Pittsfield, MA
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DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	Blow Counts	N - Value	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Well/Boring Construction
10.10		6	14-16	21"	(11, 31, 51, 50/4)	NA	0.0 PPM		0-7"; SAA from 4-22" in 12-14' core, Saturated 7"-16"; Reddish Brown, vf. SAND, few silts, trace C. sub angular sand, wet, med. dense 16"-21"; SAA, Except color is white with yellow tint	<p>Well Cap (17.05' to 17.3' bgs)</p>
15		7	16-16.4	4"	REF.	NA	0.0 PPM		0-4"; No positive recovery, slough	
						NA	0.0 PPM		0-1"; White, vf. sub angular SAND, some white Sandstone fragments 1cm Diam., trace mica, moist, med. dense, REFUSAL AT 17.6' BLS	
		8	17.5-18.5	1"	REF.	NA	0.0 PPM			

<p>ARCADIS Infrastructure, environment, facilities</p>	Remarks: DTW: 6.83 (BMP) Outer Casing Elevation: 1024.08 (ft AMSL)
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