

Transmitted via Overnight Courier

February 27, 2007

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

#### Re: GE-Pittsfield/Housatonic River Site Groundwater Management Area 3 (GECD330) NAPL Monitoring Report for Fall 2006

Dear Mr. Hull:

In accordance with GE's approved *Baseline Monitoring Program Proposal for Plant Site 2 Groundwater Management Area* (April 2001), enclosed is a report entitled *Groundwater Management Area 3 NAPL Monitoring Report for Fall 2006* (Fall 2006 GMA 3 Report). This report summarizes activities performed at Groundwater Management Area (GMA) 3 (also known as the Plant Site 2 GMA) between July and December 2006, specifically the results of GE's non-aqueous phase liquid (NAPL) monitoring and recovery program in this area. In addition, this report contains proposed modifications to the NAPL monitoring program and a discussion of upcoming interim groundwater quality monitoring activities to be conducted at GMA 3 in 2007, which will continue until such time as all required soil-related Removal Actions are completed within this GMA and a comprehensive long-term monitoring program may be developed.

Please contact me if you have any questions or comments.

Sincerely,

n W Gates Maspez

Richard W. Gates Remediation Project Manager

Enclosure V:\GE\_Pittsfield\_CD\_GMA\_3\Reports and Presentations\Fall 2006 Monitoring Report\105711324CvrLtr.doc

cc: Dean Tagliaferro, EPA Tim Conway, EPA (cover letter only) Holly Inglis, EPA (CD-ROM) Rose Howell, EPA (cover letter only) K.C. Mitkevicius, USACE (CD-ROM) Linda Palmieri, Weston (2 hard copies & CD-ROM) Anna Symington, MDEP (cover letter only) Jane Rothchild, MDEP (cover letter only) Susan Steenstrup, MDEP (2 copies) Thomas Angus, MDEP (cover letter only) Mayor James Ruberto, City of Pittsfield Pittsfield Commissioner of Public Health Nancy E. Harper, MA AG Dale Young, MA EOEA Michael Carroll, GE (cover letter only) Andrew Silfer, GE (CD-ROM) Rod McLaren, GE (cover letter only) Mark Harkness, GE Andrew Hogeland, GE Advanced Materials Steven Deloye, GE Advanced Materials Jeff Gardner, Berkshire Community College Kevin Boland, CSX Transportation Cheryl Grosso, United States Navy James Nuss, ARCADIS BBL James Bieke, Goodwin Procter John Ciampa, SPECTRA Public Information Repositories GE Internal Repositories

GE 159 Plastics Avenue Pittsfield, MA 01201 USA



Groundwater Management Area 3 NAPL Monitoring Report for Fall 2006

February 2007

#### Groundwater Management Area 3 NAPL Monitoring Report for Fall 2006

(Fall 2006 GMA 3 NAPL Monitoring Report)

General Electric Company Pittsfield, Massachusetts

Prepared for: General Electric Company

Prepared by: ARCADIS of New York, Inc. 6723 Towpath Road Syracuse New York 13214-0066 Tel 315.446.9120 Fax 315.449.0017

Our Ref.: 201.86

Date: February 2007

## **Table of Contents**

1.	Introdu	ction		1
	1.1	General		1
	1.2	Background Inform	nation	4
		1.2.1 GMA Des	cription	4
		1.2.2 Interim Mo	onitoring Program	6
		1.2.3 NAPL Mo	nitoring Program	6
		1.2.4 Format of	Document	6
2.	Field a	d Analytical Pro	ocedures	7
	2.1	General		7
	2.2	Groundwater Elev	ation Monitoring	7
	2.3	LNAPL Monitoring	and Recovery	8
	2.4	Soil Gas Investiga	tions	9
3.	Assess	ment of Results		10
	3.1	General		10
	3.2	NAPL-Related Per	formance Standards	10
	3.3	Extent of NAPL		11
	3.4	NAPL Recovery		12
4.	Propos	ed Groundwater	and NAPL Monitoring Program Modifications	14
	4.1	General		14
	4.2	Interim Groundwat	ter Quality Monitoring Program Modifications	14
	4.3	NAPL Monitoring	Program Modifications	15
5.	Schedu	le of Future Acti	vities	18
	5.1	General		18
	5.2	Field Activities Sch	nedule	18
	5.3	Reporting Schedu	le	19

### **Table of Contents**

### Tables

1	Groundwater Elevation/NAPL Monitoring Program Summary
2	Monitoring Well Construction Summary
3	Groundwater Elevation Data – Fall 2006
4	Groundwater Elevation and LNAPL Monitoring/Recovery Data Summary
5	Spring 2007 Interim Groundwater Quality Monitoring Activities

## Figures

1

2

3

4

5

6 7

Groundwater Management Areas
Site Plan
Generalized Geologic Cross Section A-A'
Generalized Geologic Cross Section B-B'
Groundwater Elevation Contour Map - Fall 2006
Historical Extent of NAPL
Extent of LNAPL – Fall 2006 Monitoring Event

### Appendix

A Groundwater Elevation and LNAPL Monitoring/Recovery Data

#### 1. Introduction

#### 1.1 General

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

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

As part of the baseline program, GE was required to submit reports on a semi-annual basis to summarize the groundwater and NAPL monitoring and recovery results and, as appropriate, propose modification to the monitoring program. With regard to GMA 3, GE deferred the 2002 and 2003 sampling rounds (with EPA approval) because certain property access issues could not be resolved prior to the scheduled performance of those sampling events. However, GE continued to perform NAPL and groundwater elevation monitoring on an interim basis at all locations for which access was available and

General Electric Company Pittsfield, Massachusetts

collected groundwater samples from one well (78B-R) on a semi-annual basis for analysis of volatile organic compounds (VOCs) and, until fall 2003, PCBs.

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

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

Therefore, as the soil-related Removal Actions at the Unkamet Brook Area RAA within GMA 3 were not yet complete, the Fall 2005 GMA 3 Groundwater Quality Report contained a proposal to modify and extend baseline groundwater quality monitoring activities at GMA 3 (under a program referred to as the interim monitoring program) until such time as the soil-related Removal Actions at the Unkamet Brook Area RAA are completed and the specific components of a long-term groundwater quality monitoring program are determined.

General Electric Company Pittsfield, Massachusetts

These modifications were approved prior to the spring 2006 sampling event, which took place during April 2006. The Groundwater Management Area 3 Groundwater Quality and NAPL Monitoring Report for Spring 2006 (Spring 2006 GMA 3 Report) was submitted to EPA on August 29, 2006 and presented the results of the GMA 3 interim sampling activities, as well as certain other groundwater characterization and NAPL-related activities performed between January and June 2006. That report was conditionally approved by EPA in a letter dated December 7, 2006.

In addition, on May 31, 2006, GE submitted a Soil Gas Investigation Work Plan to evaluate LNAPL in the vicinity of Building 51. That work plan was conditionally approved by EPA in a letter dated July 11, 2006. The approved activities, which included sampling and analysis of soil gas, groundwater, and LNAPL samples from three locations adjacent to Building 51 were conducted on August 7-8, 2006. Those sampling activities and the analytical results obtained were described in a September 15, 2006 Soil Gas Investigation Summary Report for GMA 3 (Soil Gas Investigation Summary Report). After submittal of the Soil Gas Investigation Summary Report, GE conducted additional investigations and evaluations to further assess the potential for constituents in the LNAPL at GMA 3 to volatilize and migrate into Buildings 51 and 59. Specifically, in September 2006, GE conducted sub-slab soil gas sampling beneath Buildings 51 and 59 and indoor air sampling within those buildings, and conducted an industrial hygiene assessment of indoor air in those buildings. The results of those additional investigations were provided in an October 20, 2006 Soil Gas Migration Assessment Report for GMA 3 (Soil Gas Migration Assessment Report). The Soil Gas Investigation Summary Report and the Soil Gas Migration Assessment Report were conditionally approved by EPA in a letter dated February 15, 2007.

As part of the interim monitoring program, GE is required to submit reports after each groundwater sampling event to summarize the groundwater/NAPL monitoring results and related activities and, as appropriate, propose modifications to the monitoring program. However, since no groundwater sampling activities were scheduled for fall 2006 under the approved interim monitoring program, this *Groundwater Management Area 3 NAPL Monitoring Report for Fall 2006* (Fall 2006 GMA 3 Report) presents the results of groundwater elevation and NAPL monitoring activities performed at this GMA during October 2006, as well as other groundwater elevation and NAPL monitoring/recovery activities performed between July and December 2006 (henceforth referred to as fall 2006). The GMA 3 groundwater elevation/NAPL monitoring program is summarized in Table 1. This report also describes the upcoming groundwater quality and NAPL monitoring activities for GMA 3 and presents the schedule for their performance.

#### 1.2 Background Information

#### 1.2.1 GMA Description

GMA 3 encompasses the portion of the Unkamet Brook Area (as defined in the CD and SOW) located to the east of Plastics Avenue, and occupies an area of approximately 103 acres (Figures 1 and 2). This area includes the eastern portion of GE's Pittsfield facility, which is generally bounded by Dalton Avenue to the north, Merrill Road to the south, Plastics Avenue to the west, and railroad tracks to the east. GMA 3 also contains commercial/recreational properties located between Merrill Road and the Housatonic River to the southeast of the facility. Unkamet Brook extends from northwest to southeast through the interior of this GMA, although a portion of the brook in the center of the area flows through underground culverts. The GE-owned portion of this GMA located west of Unkamet Brook is mostly paved and covered with large buildings. The GE-owned portion to the east of Unkamet Brook, as well as much of the land between Merrill Road and the Housatonic River, is undeveloped except for the area associated with Building OP-3 and the commercial area along Merrill Road.

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

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

Most of the GMA 3 well clusters consist of an A-series well paired with a B-series well, and sometimes one or more of the deeper series wells. In addition, there are certain other individual wells installed at the RAA based on proposals by GE or EPA conditional approval letters. The specifications of the wells monitored at GMA 3 in fall 2006 are listed

General Electric Company Pittsfield, Massachusetts

in Table 2. Prior monitoring data from the well clusters has indicated that the vertical component of the hydraulic gradient is variable at GMA 3. In general, groundwater flows downward in the northern part of the GMA, moves laterally across the central areas, and rises to the south, near the Housatonic River.

Groundwater at GMA 3 generally flows in a southeasterly direction toward the Housatonic River, usually with a pattern that mimics the existing topography. However, localized variations in the flow direction exist due to fill materials used beneath building foundations in the GE Plastics area and the presence of Unkamet Brook. The subsurface conditions across GMA 3 are illustrated on cross-sections A-A' and B-B', presented as Figures 3 and 4, respectively. The locations of these cross-sections are provided on Figure 2. Figure 5 illustrates groundwater elevations and flow direction using data collected during the fall 2006 monitoring round. The horizontal hydraulic gradients are somewhat variable within GMA 3, but generally decrease toward the Housatonic River, corresponding to a flattening in the ground surface topography.

The presence of NAPL in this area has been documented in prior GE reports. NAPL has been observed near Building 59 in coarse gravel that was assumed to be fill material for the foundation of that building. NAPL also has been found in the vicinity of Building 51 and that NAPL may have originated from leakage of underground storage tanks located on the northeast side of that building. Previous investigations have identified the NAPL as a light non-aqueous phase liquid (LNAPL) in the soil at and above the groundwater table interface. The LNAPL east of Building 51 contains multiple constituents, including PCBs, aromatic hydrocarbons (PAHs), ethylbenzene, polynuclear xylenes. 1.2.4trichlorobenzene, and 1,4-dichlorobenzene, among other constituents. By contrast, the LNAPL just north of Building 59 contains PCBs, a single low level SVOC, and no VOCs. Dense non-aqueous phase liquid (DNAPL) has not been encountered at any of the monitoring wells within GMA 3.

Distribution of the LNAPL has been confined to the vicinity of Buildings 51 and 59, along the western boundary of the GMA, due primarily to: (a) the generally low hydraulic gradients in this area; (b) the difference in grain size between the coarse fill materials near and beneath the buildings and the grain size of the surrounding native soils; (c) an apparent groundwater mound present between Buildings 59 and 119, to the south of the NAPL area; and (d) the ongoing LNAPL recovery efforts (both automated and manual) conducted by GE. All locations where NAPL has been previously documented are shown on Figure 6, while the extent of NAPL observed in fall 2006 is illustrated on Figure 7. A discussion of the current extent of NAPL and the results of NAPL monitoring and recovery activities is provided in Section 3.3

#### 1.2.2 Interim Monitoring Program

As discussed in Section 1.1 above, the CD and the SOW provide for the performance of groundwater-related activities at a number of GMAs, including the implementation of groundwater monitoring, assessment, and recovery programs. In general, these programs consist of a baseline monitoring program conducted over a period of at least two years to establish existing groundwater conditions and a long-term monitoring program performed to assess groundwater conditions over time and to verify the attainment of the Performance Standards for groundwater. The baseline monitoring program was to be initiated at GMA 3 in the spring of 2002, but, as discussed above, access issues prevented performance of the full baseline monitoring program before spring 2004. The fall 2005 sampling event constituted the fourth baseline sampling event at most of the wells in GMA 3 and the baseline sampling program was completed in spring 2006. Beginning in spring 2006, as approved by EPA, an interim groundwater quality monitoring program consisting of annual sampling (in the spring season) and analysis for VOCs and the list of natural attenuation parameters at 22 monitoring wells, plus annual sampling (alternating between the spring and fall seasons) and analysis for volatile organic compounds (VOCs) at one additional well was initiated. The interim groundwater quality monitoring program is continuing at this GMA, but no sampling was scheduled for fall 2006. The next interim sampling event will take place in spring 2007.

#### 1.2.3 NAPL Monitoring Program

In addition to the wells that were sampled during the baseline monitoring period (all of which continue to be monitored for groundwater elevations on a semi-annual basis during the interim monitoring period), 27 monitoring wells are routinely monitored for groundwater elevation and the presence of NAPL on an established weekly, monthly, or quarterly schedule. The groundwater elevation/NAPL monitoring schedule for GMA 3 is summarized in Table 1. The well locations are shown on Figure 2.

#### 1.2.4 Format of Document

The remainder of this report is presented in four sections. Section 2 describes the NAPLrelated activities performed at GMA 3 in fall 2006. Section 3 provides a summary of the applicable NAPL-related Performance Standards under the CD and SOW and an evaluation of the NAPL monitoring/recovery results. Section 4 proposes certain modifications to the current NAPL monitoring programs. Finally, Section 5 addresses the schedule for future field and reporting activities related to groundwater quality and NAPL presence at GMA 3.

#### 2. Field and Analytical Procedures

#### 2.1 General

The activities conducted at GMA 3 in fall involved routine measurement of groundwater/NAPL levels, removal of LNAPL, and the soil gas investigation performed within and in the vicinity of Buildings 51 and 59. Monitoring and recovery of LNAPL (if present) were routinely performed at the monitoring wells that are included in the NAPL monitoring program. All wells that were gauged for groundwater elevations and/or monitored for LNAPL during fall 2006 are identified in Table 2, and a site plan showing the groundwater monitoring/sampling locations described in this report is presented on Figure 2. This section discusses the field procedures used to conduct those field activities. All activities were performed in accordance with GE's approved Field Sampling Plan/Quality Assurance Project Plan (FSP/QAPP).

#### 2.2 Groundwater Elevation Monitoring

The fall 2006 semi-annual groundwater elevation monitoring round was performed between October 25 and 30, 2006. This activity involved the collection of groundwater level 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. The groundwater elevation data presented in Table 3 from wells screened across or near the water table were used to prepare a groundwater elevation data collected in fall 2006 (Figure 5). A summary of all groundwater elevation data are included in Appendix A.

Groundwater elevations were, on average, approximately 1.03 feet lower than the elevations measured during the respective prior seasonal monitoring event in fall 2005 at water table monitoring locations measured during both monitoring events. Consistent with prior data, groundwater was found to generally flow toward the Housatonic River, with some localized variations in the vicinity of Buildings 51 and 59.

It should be noted that the groundwater elevation data from well GMA3-6 was found to be anomalous and was not utilized in the preparation of the groundwater elevation contour maps. The depth to water recorded at this well in 2006 was approximately six feet lower than measured during previous years. GE will conduct an inspection of this well prior to the spring 2007 monitoring event and, if necessary, will re-survey and/or re-develop this well.

#### 2.3 LNAPL Monitoring and Recovery

This section describes the results of the LNAPL monitoring and recovery activities performed by GE within GMA 3 from July through December 2006, including the October 2006 semi-annual monitoring event and other routine and non-routine monitoring/recovery activities conducted during that period. These activities primarily include the operation of the automated LNAPL recovery system at well 51-21, the routine measurement of groundwater elevations and NAPL thickness (if present), and the manual removal of NAPL if sufficient thickness is present. All activities were performed in accordance with GE's approved FSP/QAPP.

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

Routine LNAPL monitoring was conducted at the monitoring wells listed in Table 1 on a semi-annual, quarterly, monthly, and/or weekly basis. Table 4 also summarizes the fall 2006 LNAPL removal data on a well-by-well basis, and Table A-1 (Appendix A) presents a summary of all of the fall 2006 LNAPL measurements and removal quantities (when performed) for each well at GMA 3. Approximately 87.7 gallons of LNAPL were recovered between July and December 2006 at GMA 3. Approximately 92 % of this total (81 gallons) was removed by the automated skimmer system at well 51-21, and the remainder was manually recovered during routine monitoring events. Since 1997, approximately 1,232 gallons of LNAPL have been removed from GMA 3 as part of GE's NAPL monitoring and recovery program.

Figure 6 depicts the historical maximum extent of LNAPL observed at GMA 3. That figure represents a compilation of past investigations and shows the maximum lateral extent of LNAPL that has been observed and documented in prior GE reports, and is not indicative of current conditions. Figure 7 indicates the extent of LNAPL observed during the semi-annual monitoring event conducted at GMA 3 in October 2006. As shown on those two figures, the northern (upgradient) extent of LNAPL has decreased since the onset of the periodic LNAPL monitoring and recovery activities being conducted in this area.

General Electric Company Pittsfield, Massachusetts

Consistent with historical monitoring results at this GMA, DNAPL was not encountered in any of the monitoring wells gauged during fall 2006.

#### 2.4 Soil Gas Investigations

Samples of soil gas, groundwater, LNAPL, sub-slab soil gas, and indoor air were collected in and around the area of Buildings 51 and 59 by GE in fall 2006. The methods used in collecting the data and the results obtained were described in GE's Soil Gas Investigation Summary Report and Soil Gas Migration Assessment Report. As noted above, those reports were conditionally approved by EPA in a February 15, 2007 letter. Additional activities to satisfy EPA's approval conditions are described in Section 4.3 below.

#### 3. Assessment of Results

#### 3.1 General

This section discusses the NAPL-related Performance Standards and the results of the NAPL monitoring and recovery program at GMA 3 in fall 2006. In general, the ongoing NAPL recovery operations at GMA 3 have proven effective in removing LNAPL from the subsurface and in preventing LNAPL migration. A summary of the NAPL monitoring schedule is provided in Table 2.

#### 3.2 NAPL-Related Performance Standards

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

- 1. Containment, defined as no discharge of NAPL to surface waters and/or sediments, which shall include no sheens on surface water and no bank seeps of NAPL.
- 2. For areas near surface waters in which there is no physical containment barrier between the wells and the surface water, elimination of measurable NAPL (i.e., detectable with an oil/water interface probe) in wells near the surface water bank that could potentially discharge NAPL into the surface water, in order to prevent such discharge and assist in achieving groundwater quality Performance Standards.
- 3. For areas adjacent to physical containment barriers, prevention of any measurable LNAPL migration around the ends of the physical containment barriers.
- 4. For NAPL areas not located adjacent to surface waters, reduction in the amount of measurable NAPL to levels which eliminate the potential for NAPL migration toward surface water discharge areas or beyond GMA boundaries, and which assist in achieving groundwater quality Performance Standards.
- 5. For NAPL detected in wells designed to assess GW-2 groundwater (i.e., located at average depths of 15 feet or less from the ground surface and within a horizontal distance of 30 feet from an existing occupied building), a demonstration that constituents in the NAPL do not pose an unacceptable risk to occupants of such

General Electric Company Pittsfield, Massachusetts

building via volatilization and transport to the indoor air of such building. Such demonstration may include assessment activities such as: NAPL sampling, soil gas sampling, desk-top modeling of potential volatilization of chemicals from the NAPL (or associated groundwater) to the indoor air of the nearby occupied buildings, or sampling of the indoor air of such buildings. If necessary, GE shall propose corrective actions, including, but not limited to, containment, recovery, or treatment of NAPL and impacted groundwater.

In addition to these Performance Standards, GE has developed and implemented sitewide criteria for NAPL monitoring and manual recovery requirements, standard procedures for assessment of new NAPL occurrences, and the feasibility of the installation of new recovery systems. In response, GE proposed several NAPL monitoring program guidelines in the Fall 2001 NAPL Monitoring Report for GMA 1 (conditionally approved by EPA on August 29, 2002) and subsequently implemented the approved guidelines across all GMAs. Those guidelines were incorporated into GE's *Field Sampling Plan/Quality Assurance Project Plan* (FSP/QAPP).

#### 3.3 Extent of NAPL

The historical maximum extent of measurable LNAPL at GMA 3 is illustrated on Figure 6, while the extent of LNAPL observed during the October 2006 semi-annual monitoring event is shown on Figure 7. These figures show a significant decrease in the extent of measurable LNAPL observed in fall 2006 compared to the known maximum extent, particularly along the northeastern edge of the LNAPL area. This reduction in LNAPL extent on the northeastern portion of the LNAPL plume may, at least in part, be attributable to GE's NAPL recovery program, which includes an automatic skimmer system in well 51-21 and routine manual recovery of LNAPL at surrounding locations.

The extent of LNAPL to the east of Building 51 has decreased in comparison to the prior fall and spring. Specifically, LNAPL was not observed in wells 51-5 or 51-16R during the fall 2006 monitoring event, but was observed in these wells during the previous two semiannual monitoring events and on other occasions in fall 2006. The extent of LNAPL to the west of Building 51 shows a slight decrease from spring 2006 due to the absence of LNAPL observed in well GMA3-13 during the fall 2006 monitoring event (LNAPL was not observed in this well in fall 2005), although LNAPL was observed at this well on several other occasions in fall 2006.

General Electric Company Pittsfield, Massachusetts

Overall, since LNAPL continued to be occasionally observed in the same wells during monitoring rounds conducted between July and December 2006 as during the same timeframe during the previous year, the overall extent of LNAPL in this area has not changed significantly during the previous year. However, the lack of LNAPL observed at certain wells during the semi-annual monitoring event and at other times during the course of routine monitoring indicates that the overall volume of LNAPL present in the subsurface has decreased since the onset of LNAPL recovery activities in this area.

GE has also monitored well GMA4-3, located in GMA 4 across Plastics Avenue from well GMA3-13. No NAPL has ever been detected in that well. Moreover, in EPA's December 7, 2006 conditional approval letter, EPA required GE to include GMA 4 wells 60B and RF-14 in the groundwater elevation table and contour map for GMA 3. Accordingly, GE has included those wells in this report. Other than the reduction in existence of LNAPL along the northern edge of the LNAPL area and occasional variations in LNAPL presence in well GMA3-13, the extent of LNAPL has remained relatively consistent in recent years.

#### 3.4 NAPL Recovery

As discussed in Section 2.4, approximately 87.7 gallons of LNAPL were recovered at GMA 3 in fall 2006. Of this total, approximately 81 gallons were removed by the automated skimmer system at well 51-21, and the remaining 6.7 gallons were manually recovered from other monitoring wells (see Table 4). For comparison, over the same time period in fall 2005, approximately 165 gallons of LNAPL were recovered at GMA 3 (approximately 151 gallons by the automated skimmer system at well 51-21, and approximately 14 gallons from other monitoring wells). The decrease in LNAPL recovery is primarily attributed to a 78-gallon removal conducted on September 28, 2005 during a cleanout of the 51-21 recovery tank. Otherwise, LNAPL recovery was consistent with the prior year. Since 1997, approximately 1,190 gallons of LNAPL have been removed from GMA 3 as part of GE's NAPL monitoring and recovery program. This total removal volume has been corrected since the previous GMA 3 report to reflect a revision in the LNAPL removal volume cited for the spring 2005 season, which was incorrectly reported in the Spring 2005 GMA 3 report, as well as in the subsequent Spring 2006 GMA 3 Report. In Spring 2005, approximately 34 gallons of LNAPL were removed at GMA 3. Of this total, approximately 20 gallons were removed by the automated skimmer system at well 51-21 and the remaining 14 gallons were removed manually.

Based on the fact that the vast majority of the LNAPL removal at GMA 3 is accomplished by the automated skimmer system at well 51-21, GE plans to evaluate the feasibility of installing one or more additional skimmer systems at other points within the LNAPL area

## Fall 2006 GMA 3 NAPL Monitoring Report

General Electric Company Pittsfield, Massachusetts

to optimize its LNAPL removal activities. A proposal to conduct this evaluation is presented in Section 4.3.

General Electric Company Pittsfield, Massachusetts

#### 4. Proposed Groundwater and NAPL Monitoring Program Modifications

#### 4.1 General

In fall 2005, GE initiated the interim groundwater monitoring program to be conducted until completion of the soil-related Removal Actions at the RAA that comprise GMA 3. Aside from completing baseline sampling events at certain locations that could not be sampled during every round of the initial two-year baseline monitoring program (which was accomplished) and continuing the ongoing NAPL monitoring program, the interim monitoring program is designed to obtain additional data from locations where it is not yet clear whether the initial baseline groundwater quality results indicate that the well may require future monitoring in a long-term program.

This section contains a description of proposed and required modifications to the interim groundwater quality and NAPL monitoring program. These modifications are proposed in response to the results of GE's assessment of its NAPL monitoring/recovery data, the fall 2006 soil gas/indoor air investigations, and EPA approval conditions related to recent GE submittals.

#### 4.2 Interim Groundwater Quality Monitoring Program Modifications

As required in EPA's December 7, 2006 conditional approval letter related to the Spring 2006 GMA 3 Report, GE will analyze filtered samples from well 114A for PCBs during interim groundwater quality monitoring events where similar samples are collected from well 114B-R. The next such interim sampling event is scheduled for fall 2007. In spring 2007, these wells will each be sampled and analyzed for VOCs and natural attenuation parameters only.

In addition, in EPA's December 7, 2006 conditional approval letter related to the Spring 2006 GMA 3 Report, EPA disagreed with GE's interpretation that well cluster 115 is downgradient of the GMA with respect to the dissolved VOC plume and asserted that the well cluster may be cross-gradient of the point where the plume may discharge to surface water. GE nonetheless proposes to continue VOC and natural attenuation sampling at the 115 well cluster to evaluate groundwater quality and the lateral extent of the VOC plume near the Housatonic River.

Finally, EPA's December 7, 2006 conditional approval letter requested a reference documenting that chlorobenzene breakdown products include 2-chlorophenol and 4-chlorophenol, as well as any references that support the "natural" breakdown of

chlorobenzene in the environment. In response, the following excerpt from EPA's Technical Factsheet on Chlorobenzene (http://www.epa.gov/safewater/dwh/t-voc/chlorobe.html) is provided:

#### **Environmental Fate**

[Chlorobenzene] has a moderate adsorption onto organic soil. If retained long enough, a large number of soil bacteria and fungi are capable of degrading chlorobenzene and mineralizing it. 2- and 4-chlorophenol are products of this biodegradation. Degradation will generally be slow, but fairly rapid mineralization (20%/week) has been reported in one study.

\* \* \*

Therefore, GE plans to continue to incorporate analysis for 2-chlorophenol and 4chlorophenol at selected wells as part of its natural attenuation monitoring program.

#### 4.3 NAPL Monitoring Program Modifications

In GE's Soil Gas Migration Assessment Report for GMA 3, GE indicated that it was considering possible future activities to enhance the recovery of the subsurface LNAPL in the vicinity of Buildings 51 and 59 to minimize the potential that LNAPL may act as a contributing source of constituents within indoor air in this area. The Soil Gas Migration Assessment Report found that all constituents detected in the indoor air of these buildings were within the limits for workplace exposure and GE concluded that there was no clear link between those constituents and constituents detected in groundwater and NAPL near the buildings. In its February 15, 2007 letter to GE, EPA did not concur with the latter conclusion. Notwithstanding the actual source of substances detected in Buildings 51 and 59, GE proposes to evaluate enhancements to its ongoing LNAPL recovery activities in this area to facilitate a more rapid removal of LNAPL in the area near Buildings 51 and 59, as discussed below. Additional activities to be conducted within the buildings will be proposed separately, as discussed in Section 5.3.

As shown in Table 4, LNAPL volumes of greater than one liter were manually removed from five monitoring wells (wells 51-8, 51-17, 59-3R, GMA3-10, and GMA2-12) during fall 2006. One of these wells (51-17) is not a candidate for installation of an automated LNAPL recovery system, since it is located adjacent to the existing automated skimmer system at well 51-21. At the other four locations, GE proposes to conduct LNAPL recovery testing to evaluate which well, if any, is the best location for the installation of an

General Electric Company Pittsfield, Massachusetts

automated LNAPL recovery system. GE will remove LNAPL accumulations from these wells over a two- to three-day testing period, initially on an hourly basis, and document the rate and volume of LNAPL returning to each well. GE will present the results of this recovery testing in a letter report to EPA, along with an evaluation of the data and a proposal for additional activities, including the installation of additional LNAPL skimmer system(s) to expedite the removal of LNAPL from this area, if warranted.

It should be noted that similar testing conducted at wells GMA3-12 and GMA3-13 in May 2005 did not indicate that the installation of automated LNAPL recovery system in either of those wells was warranted. The amount of LNAPL returning to the wells during testing (LNAPL recovery ranged from approximately 0.016 to 0.134 liter per hour in well GMA3-12 and between 0.014 to 0.135 liter per hour in well GMA3-13) was considerably less than the guidance values provided in the FSP/QAPP to consider a well as a candidate for installation of an automated recovery system (i.e., 0.5 liter per hour). However, since that time, well GMA3-12, which was initially installed as a 4-inch diameter potential LNAPL recovery well, has consistently contained approximately one- to six-inches of LNAPL during routine monitoring, while the presence of LNAPL in well GMA3-13 has been more sporadic. As such, GE proposes to perform a second LNAPL recovery test at well GMA3-12, since the LNAPL monitoring and recovery data from this well indicates that the existing manual monitoring and recovery program is sufficient to address the LNAPL at that location.

In addition, GE will install a NAPL monitoring well at the location of Unkamet Brook Area pre-design investigation soil boring RAA10-N-Y-18, as required by Condition No. 3 of EPA's December 7, 2006 conditional approval letter. NAPL was observed in this soil boring, which is located near the southeast corner of the parking area constructed over a portion of the Former Interior Landfill, but NAPL has never been observed in nearby well 78B-R, located downgradient of this area. To further assess this observation, GE will install a NAPL monitoring well, to be designated as well GMA3-16 at the location illustrated on Figure 2. The well will be constructed with a 2-inch diameter, 20-slot (0.02-inch) screen from 1.0 to 11.0 feet below ground surface and equipped with a DNAPL collection sump from 11.0 to 12.0 feet below grade. GE will incorporate the well into its NAPL monitoring program and will monitor the well on a monthly basis. Any observed NAPL accumulations will be removed and properly disposed of. This well will be used solely for NAPL monitoring and removal purposes, as the space available over the very shallow screen placement is inadequate to construct a proper surface seal needed to collect representative groundwater samples. In addition, in accordance with Condition No.

## Fall 2006 GMA 3 NAPL Monitoring Report

General Electric Company Pittsfield, Massachusetts

2 of EPA's December 7, 2006 conditional approval letter, GE has begun monitoring well 78B-R on a monthly basis.

#### 5. Schedule of Future Activities

#### 5.1 General

This section addresses the schedule for future groundwater quality monitoring activities and reporting for GMA 3. This schedule assumes that the modifications to the interim groundwater monitoring program proposed in Section 4 will be implemented following EPA approval.

#### 5.2 Field Activities Schedule

GE plans to install well GMA3-16 at the location illustrated on Figure 2 in March 2007, to allow the well to be utilized during the spring 2007 semi-annual NAPL monitoring event. The installation of this well will be coordinated with additional soil investigations currently being considered in this area as part of the Unkamet Brook Area pre-design investigation, to the extent any such investigations are approved by EPA and can be scheduled prior to the well installation. The location of this well may be modified in the field (with EPA approval) if the results of the additional soil investigations suggest a more appropriate location to install the well.

GE will continue its routine groundwater elevation and NAPL monitoring according to the current schedule approved by EPA. In accordance with the approved semi-annual monitoring schedule, the spring 2007 groundwater elevation monitoring and NAPL monitoring event is scheduled for April 2007. GE will conduct a NAPL bailing round approximately one to two weeks prior to the spring 2007 semi-annual NAPL monitoring event. GE will also conduct an inspection of well GMA3-6 (which produced anomalous groundwater elevation data in 2006) prior to the spring 2007 monitoring event. Based on the results of that inspection, GE will re-survey and/or re-develop this well to facilitate collection of applicable data in the spring monitoring round.

The next natural attenuation monitoring event (conducted each spring) is scheduled for April 2007. GE will sample 22 wells, analyzing for VOCs and the natural attenuation parameters listed in Table 5.

Unlike the natural attenuation sampling, interim groundwater sampling activities alternate between the spring and fall seasons on an annual basis. The next interim sampling event is scheduled for October 2007, when groundwater samples will be collected and analyzed from five monitoring wells (including well 114A, where PCB sampling will be added to the interim monitoring program) for the constituents listed in Table 5.

General Electric Company Pittsfield, Massachusetts

Following EPA approval of the proposal contained in Section 4.3, GE will conduct LNAPL removal testing at wells 51-8, 59-3R, GMA3-10, and GMA3-12 to assess whether the installation of automated LNAPL recovery systems would be feasible in any of these wells. Specifically, GE will remove LNAPL accumulations from these wells over a two- to three-day testing period, initially on an hourly basis, and document the rate and volume of LNAPL returning to each well.

In addition, in its February 15, 2007 letter to GE, EPA requires that future periodic subsurface soil gas and indoor air monitoring activities at Buildings 51 and 59 be conducted at the same time that periodic groundwater and NAPL monitoring activities are performed. If feasible, GE will coordinate any such activities with future semi-annual monitoring events. Otherwise, those activities will be performed at the same time that monthly NAPL monitoring is conducted at GMA 3.

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

#### 5.3 Reporting Schedule

GE will submit the results of its inspections of Buildings 51 and 59 for potential soil gas migration pathways into the buildings, along with a plan for periodic monitoring of subsurface soil gas and indoor air of those buildings to EPA by March 17, 2007, in accordance with the schedule required in EPA's February 15, 2007 letter.

As discussed in Section 4.3 above, GE proposes to evaluate LNAPL recovery rates at four monitoring wells in the vicinity of Buildings 51 and 59 to determine the feasibility of installing additional automated LNAPL recovery systems in this area. The results of that evaluation and a proposal for future actions are proposed to be submitted to EPA within 3 months from the date of EPA approval of this report.

GE will submit a Groundwater Quality and NAPL Monitoring Report for Spring 2007 for GMA 3 by August 31, 2007. That report will contain the spring 2007 results related to its natural attenuation monitoring activities and any proposals to modify those activities, if applicable. Also, that report will present the groundwater elevation monitoring results and NAPL monitoring and recovery data for the period of January 2007 through June 2007.

GE will submit a Groundwater Quality and NAPL Monitoring Report for Fall 2006 for GMA 3 by February 28, 2008. That report will contain the fall 2007 results related to its interim groundwater quality monitoring activities and any proposals to modify those activities, if

General Electric Company Pittsfield, Massachusetts

applicable. Also, that report will present the groundwater elevation monitoring results and NAPL monitoring and recovery data for the period of July 2007 through December 2007.

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

Tables

Well Number	Monitoring Frequency <sup>(1)</sup>	Manual NAPL Removal Criteria <sup>(2)</sup>	Comments
GMA 3 Monitorin	ng Wells		
2A	Semi-Annual	Any Recoverable	
6B-R	Semi-Annual	Any Recoverable	
16A	Semi-Annual	Any Recoverable	
16B-R	Semi-Annual	Any Recoverable	
16C-R	Semi-Annual	Any Recoverable	
39B-R	Semi-Annual	Any Recoverable	
39D-R	Semi-Annual	Any Recoverable	
39E	Semi-Annual	Any Recoverable	
43A	Semi-Annual	Any Recoverable	
43B	Semi-Annual	Any Recoverable	
50B	Semi-Annual	Any Recoverable	
51-05	Monthly	Standard Criteria	
51-06	Monthly	Standard Criteria	
51-07	Monthly	Standard Criteria	
51-08	Weekly	Standard Criteria	
51-09	Monthly	Standard Criteria	
51-11	Monthly	Standard Criteria	
51-12	Monthly	Standard Criteria	
51-13	Monthly	Standard Criteria	
51-14	Monthly	Standard Criteria	
51-15	Monthly	Standard Criteria	
51-16R	Monthly	Standard Criteria	
51-17	Monthly	Standard Criteria	
51-18	Monthly	Standard Criteria	

Well Number	Monitoring Frequency <sup>(1)</sup>	Manual NAPL Removal Criteria <sup>(2)</sup>	Comments
51-19	Monthly	Standard Criteria	
51-21	Quarterly	Any Recoverable	LNAPL skimmer present in well.
54B-R	Semi-Annual	Any Recoverable	
59-01	Monthly	Standard Criteria	
59-03R	Monthly	Standard Criteria	
59-07	Monthly	Standard Criteria	
78B-R	Monthly	Any Recoverable	
82B-R	Semi-Annual	Any Recoverable	
89A	Semi-Annual	Any Recoverable	
89B	Semi-Annual	Any Recoverable	
89D-R	Semi-Annual	Any Recoverable	
90A	Semi-Annual	Any Recoverable	
90B	Semi-Annual	Any Recoverable	
95A	Semi-Annual	Any Recoverable	
95B-R	Semi-Annual	Any Recoverable	
111A-R	Semi-Annual	Any Recoverable	
111B-R	Semi-Annual	Any Recoverable	
114A	Semi-Annual	Any Recoverable	
114B-R	Semi-Annual	Any Recoverable	
115A	Semi-Annual	Any Recoverable	
115B	Semi-Annual	Any Recoverable	
GMA3-1	None	None	Installation of this well has been deferred until re-routing of Unkamet Brook is completed.
GMA3-2	Semi-Annual	Any Recoverable	
GMA3-3	Semi-Annual	Any Recoverable	
GMA3-4	Semi-Annual	Any Recoverable	

Well Number	Monitoring Frequency <sup>(1)</sup>	Manual NAPL Removal Criteria <sup>(2)</sup>	Comments
GMA3-5	Semi-Annual	Any Recoverable	
GMA3-6	Semi-Annual	Any Recoverable	
GMA3-7	Quarterly	Any Recoverable	Monitored in place of UB-PZ-1.
GMA3-8	Semi-Annual	Any Recoverable	
GMA3-9	Semi-Annual	Any Recoverable	
GMA3-10	Weekly	Standard Criteria	
GMA3-11	Monthly	Any Recoverable	
GMA3-12	Weekly	Standard Criteria	
GMA3-13	Weekly	Standard Criteria	
GMA3-14	Monthly	Any Recoverable	
GMA3-15	Quarterly	Any Recoverable	Monitored in place of UB-PZ-2.
OBG-2	Semi-Annual	Any Recoverable	
UB-MW-10	Monthly	Any Recoverable	
UB-PZ-3	Monthly	Any Recoverable	
GMA 4 Monitorin	ng Wells		
60B-R	Semi-Annual	Any Recoverable	
GMA4-3	Monthly	Any Recoverable	
RF-14	Semi-Annual	Any Recoverable	

#### NAPL Monitoring Report For Fall 2006 Groundwater Management Area 3 General Electric Company - Pittsfield, Massachusetts

Well Number	Monitoring Frequency <sup>(1)</sup>	Manual NAPL Removal Criteria <sup>(2)</sup>	Comments							
GMA 3 Staff Gaug	GMA 3 Staff Gauges									
GMA3-SG-1	Semi-Annual	Not Applicable								
GMA3-SG-2	Semi-Annual	Not Applicable								
GMA3-SG-3	Semi-Annual	Not Applicable								
GMA3-SG-4	Semi-Annual	Not Applicable								

Notes:

1. Monitoring consists of periodic depth to water and NAPL thickness measurements, if present and may also consist of manual removal of NAPL if a

thickness greater than the well specific criteria is observed during a monitoring event. 2. Standard LNAPL Removal Criteria: LNAPL is manually removed from a well with this designation if a thickness of greater than 0.25 feet is observed At other wells, any recoverable quantities of LNAPL will be removed (except at well 51-21, which is equipped with an during a monitoring event.

3. Any NAPL observed during the bailing round conducted prior to the spring and fall semi-annual monitoring events is manually removed.

4. No NAPL is manually removed from any wells during the spring and fall semi-annual monitoring events, provided that NAPL was removed during the

bailed warman and the second terms of terms of

## Table 2Monitoring Well Construction Summary

			Well	Ground Surface	Measuring Point	Depth to Top of	Screen	Top of Screen	Base of Screen	Average Depth to	Average Groundwater
Well ID	Survey Co	ordinates	Diameter	Elevation	Elevation	Screen	Length	Elevation	Elevation	Groundwater	Elevation
	Northing	Easting	(inches)	(ft AMSL)	(ft AMSL)	(ft bgs)	(ft)	(ft AMSL)	(ft AMSL)	(ft bgs)	(ft AMSL)
GMA 3 Monito	oring Wells										
2A	537005.10	138853.90	1.00	991.50	994.16	45.00	5.0	946.50	941.50	5.7	985.76
6B-R	537191.50	138910.00	2.00	991.40	993.62	2.00	10.0	989.40	979.40	4.8	986.58
16A	536730.50	139115.60	2.00	991.50	991.77	44.00	6.0	947.50	941.50	6.9	984.59
16B-R	536738.18	139076.37	2.00	991.80	994.87	3.08	10.0	988.72	978.72	6.1	985.68
16C-R	536734.00	139112.40	2.00	991.40	991.47	90.00	10.0	901.40	891.40	7.9	983.55
16E	536730.30	139112.70	1.00	991.40	992.14	144.00	6.0	847.40	841.40	7.2	984.18
34B	536293.70	138394.20	2.00	1,000.50	1,000.56	20.00	5.0	980.50	975.50	14.9	985.60
35B	536443.40	138525.40	2.00	998.03	997.36	18.00	5.0	980.03	975.03	12.6	985.40
39B-R	536938.60	138862.60	2.00	992.29	991.97	4.00	10.0	988.29	978.29	6.8	985.51
39D-R	536941.50	138854.80	2.00	992.30	994.73	55.00	10.0	937.30	927.30	6.4	985.96
39E	536932.10	138851.00	4.00	992.34	992.21	225.00	10.0	767.34	757.34	5.9	986.47
43A	538081.20	137905.90	1.00	991.90	993.79	45.00	5.0	946.90	941.90	5.2	986.70
43B	538081.20	137904.40	1.00	991.90	993.61	15.00	5.0	976.90	971.90	4.2	987.72
50B	538647.00	139106.20	2.00	989.72	991.72	8.50	5.0	981.22	976.22	1.0	988.69
51-05	536750.50	138335.60	2.00	996.91	996.44	5.00	10.0	991.91	981.91	10.6	986.34
51-06	536937.64	138194.32	2.00	997.57	997.36	5.00	10.0	992.57	982.57	10.9	986.64
51-07	536843.80	138244.60	2.00	997.26	997.08	5.00	10.0	992.26	982.26	10.6	986.62
51-08	536677.80	138317.00	2.00	997.39	997.08	5.00	10.0	992.39	982.39	11.3	986.12
51-09	536563.70	138370.30	2.00	997.76	997.70	5.00	10.0	992.76	982.76	10.1	987.64
51-11	536860.00	138774.50	2.00	994.62	994.37	5.00	10.0	989.62	979.62	8.7	985.89
51-12	536497.30	138518.50	2.00	996.83	996.55	5.00	10.0	991.83	981.83	7.5	989.30
51-13	536917.10	138579.80	2.00	997.68	997.65	5.00	10.0	992.68	982.68	10.2	987.52
51-14	536771.40	138502.60	2.00	996.93	996.77	5.00	10.0	991.93	981.93	10.7	986.25
51-15	536808.20	138306.30	2.00	996.68	996.43	5.00	10.0	991.68	981.68	10.4	986.29
51-16R	536830.20	138347.60	2.00	996.70	996.39	5.00	10.0	991.70	981.70	10.2	986.55
51-17	536769.90	138377.40	2.00	996.48	996.43	5.00	10.0	991.48	981.48	10.1	986.40
51-18	536902.90	138463.40	2.00	997.38	997.12	5.00	10.0	992.38	982.38	11.0	986.34
51-19	536823.20	138414.80	2.00	996.65	996.43	5.00	10.0	991.65	981.65	10.5	986.11

## Table 2Monitoring Well Construction Summary

Well ID	-	oordinates	Well Diameter	Ground Surface Elevation	Measuring Point Elevation	Depth to Top of Screen	Screen Length	Top of Screen Elevation	Base of Screen Elevation	Average Depth to Groundwater	Average Groundwater Elevation
	Northing	Easting	(inches)	(ft AMSL)	(ft AMSL)	(ft bgs)	(ft)	(ft AMSL)	(ft AMSL)	(ft bgs)	(ft AMSL)
51-21	536767.70	138442.35	4.00	996.70	1,001.49	5.00	10.0	991.70	981.70	10.5	986.24
54B-R	537827.30	139113.60	2.00	989.00	991.49	3.00	10.0	986.00	976.00	2.3	986.66
59-01	536488.80	138238.60	2.00	997.78	996.72	4.00	20.0	993.78	973.78	10.9	986.89
59-03R	536501.00	138260.70	2.00	997.82	997.64	7.30	10.0	990.52	980.52	11.5	986.28
59-07	536517.40	138296.10	2.00	998.27	997.96	4.00	20.0	994.27	974.27	11.9	986.38
74B	537490.90	138374.90	1.00	996.05	995.54	15.00	5.0	981.05	976.05	8.1	987.97
78B-R	537551.80	138716.50	2.00	989.11	988.83	1.82	10.0	987.29	977.29	1.8	987.34
82B-R	536937.40	139621.60	2.00	987.80	989.90	2.00	10.0	985.80	975.80	2.6	985.21
89A	536030.80	139413.40	1.00	983.60	985.76	43.00	5.0	940.60	935.60	0.7	982.90
89B	536031.60	139411.70	2.00	983.10	986.03	4.00	3.0	979.10	976.10	-0.3	983.42
89D-R	536072.20	139434.90	2.00	984.40	987.11	67.50	10.0	916.90	906.90	1.6	982.82
90A	536254.90	139765.40	1.00	986.50	988.07	45.00	5.0	941.50	936.50	3.6	982.86
90B	536251.60	139761.00	2.00	986.50	989.10	8.00	3.0	978.50	975.50	4.0	982.53
95A	535822.10	139769.60	1.00	985.30	987.18	45.00	5.0	940.30	935.30	4.5	980.84
95B-R	535637.20	139722.30	2.00	984.30	986.24	3.00	10.0	981.30	971.30	3.6	980.65
95C	535823.20	139780.30	1.00	985.30	988.16	95.00	5.0	890.30	885.30	1.2	984.07
111A-R	535824.10	139087.80	2.00	995.10	997.35	40.00	10.0	955.10	945.10	11.4	983.71
111B-R	535828.40	139092.00	2.00	994.80	997.48	7.18	10.0	987.62	977.62	11.7	983.13
114A	535499.50	139775.20	1.00	983.20	986.16	45.00	5.0	938.20	933.20	3.7	979.52
114B-R	535503.90	139786.90	2.00	983.50	985.54	4.00	10.0	979.50	969.50	4.1	979.40
114C	535500.50	139792.80	1.00	983.70	986.68	88.00	5.0	895.70	890.70	3.8	979.91
115A	N/A	N/A	1.00	986.69	988.53	36.00	5.0	950.69	945.69	9.0	977.69
115B	N/A	N/A	1.00	988.25	990.90	11.00	5.0	977.25	972.25	8.8	979.49
115C	N/A	N/A	1.00	987.24	988.37	109.00	5.0	878.24	873.24	10.1	977.12
GMA3-2	536596.40	138956.60	2.00	992.25	991.94	5.19	10.0	987.06	977.06	7.9	984.31
GMA3-3	538094.20	138178.20	2.00	990.86	990.45	2.00	10.0	988.86	978.86	2.1	988.77
GMA3-4	537044.70	138021.80	2.00	994.94	994.60	3.57	10.0	991.37	981.37	7.6	987.37
GMA3-5	537323.20	139766.90	2.00	991.50	993.67	4.00	10.0	987.50	977.50	5.5	986.01
GMA3-6	537021.50	138342.30	2.00	997.74	997.49	8.00	10.0	989.74	979.74	11.6	986.17

## Table 2Monitoring Well Construction Summary

#### NAPL Monitoring Report For Fall 2006 Groundwater Management Area 3 General Electric Company - Pittsfield, Massachusetts

Well ID	Survey Co Northing	oordinates Easting	Well Diameter (inches)	Ground Surface Elevation (ft AMSL)	Measuring Point Elevation (ft AMSL)	Depth to Top of Screen (ft bgs)	Screen Length (ft)	Top of Screen Elevation (ft AMSL)	Base of Screen Elevation (ft AMSL)	Average Depth to Groundwater (ft bgs)	Average Groundwater Elevation (ft AMSL)
GMA3-7	536291.70	138397.40	2.00	1,000.45	1,000.17	10.00	10.0	990.45	980.45	13.8	986.63
GMA3-8	536339.60	138899.10	2.00	994.50	996.24	5.00	10.0	989.50	979.50	8.7	985.85
GMA3-9	537383.20	138385.60	2.00	992.90	992.39	3.00	10.0	989.90	979.90	5.1	987.83
GMA3-10	536659.10	138056.40	2.00	997.78	997.54	9.00	10.0	988.78	978.78	10.8	986.98
GMA3-11	536353.70	138147.90	2.00	997.78	997.25	9.00	10.0	988.78	978.78	10.6	987.22
GMA3-12	536469.20	138169.70	4.00	998.04	997.84	7.00	15.0	991.04	976.04	11.2	986.88
GMA3-13	536534.30	138035.90	2.00	998.00	997.73	8.06	10.0	989.94	979.94	11.1	986.92
GMA3-14	536710.30	137953.20	2.00	997.66	997.42	7.25	10.0	990.41	980.41	10.7	986.97
GMA3-15	536710.30	137953.20	2.00	994.60	996.74	6.00	10.0	988.60	978.60	9.1	985.49
OBG-2	537209.10	139475.80	3.00	992.24	992.20	3.00	11.4	989.24	977.84	5.1	987.14
UB-MW-10	536908.10	138278.30	1.00	996.21	995.99	8.00	10.0	988.21	978.21	9.8	986.41
UB-PZ-3	536480.10	138110.00	1.00	998.55	998.15	11.00	5.0	987.55	982.55	12.2	986.30
GMA 4 Monito	ring Wells										
60B-R	536021.40	138133.00	2.00	1,003.04	1,002.79	12.00	10.0	991.04	981.04	15.2	987.62
GMA4-3	536289.60	137999.80	2.00	1,004.14	1,003.95	16.09	10.0	988.05	978.05	17.3	986.68
RF-14	536833.60	137753.70	4.00	1,001.90	1,001.59	7.00	15.0	994.90	979.90	10.9	990.74

NOTES:

1. The listed wells were scheduled to be utilized during fall 2006 for groundwater elevation and/or NAPL monitoring.

2. ft AMSL: Feet above mean sea level

3. ft bgs: Feet below ground surface

# Table 3Groundwater Elevation Data - Fall 2006

Well Number	Overall Average Groundwater	Average Fall Groundwater	Fall 2006 Groundwater	Fall 2006 LNAPL Thickness	
	(ft AMSL)	(ft AMSL)	(ft AMSL)	(ft)	
Monitoring Wells Screened	at Water Table				
6B-R	986.64	986.67	987.37	0.00	
16B-R	985.66	985.75	985.43	0.00	
39B-R	985.49	986.01	985.76	0.00	
43B	987.70	988.03	987.85	0.00	
50B	988.69	988.86	988.85	0.00	
51-05	986.70	986.37	986.19	0.00	
51-06	987.03	986.34	986.38	0.00	
51-07	987.03	986.78	986.08	0.00	
51-08	986.53	985.74	985.96	1.17	
51-09	987.98	987.01	986.30	0.00	
51-11	986.22	985.96	986.49	0.00	
51-12	989.56	989.07	988.93	0.00	
51-13	988.84	987.48	987.65	0.00	
51-14	986.62	986.17	985.96	0.00	
51-15	986.66	985.99	986.06	0.08	
51-16R	986.95	986.38	986.04	0.00	
51-17	986.83	986.09	986.24	1.24	
51-18	986.73	986.26	986.15	0.00	
51-19	986.49	985.85	985.94	0.09	
51-21	986.79	986.05	986.09	0.01	
54B-R	986.74	986.61	987.30	0.00	
59-01	987.55	986.56	<986.09	NA	
59-03R	986.69	985.98	985.98	0.61	
59-07	986.80	986.11	986.11	0.17	
78B-R	987.32	987.52	987.25	0.00	
82B-R	985.27	985.24	985.94	0.00	
89B	983.45	983.12	983.53	0.00	
90B	982.54	983.02	983.07	0.00	
95B-R	980.72	980.10	980.89	0.00	
111B-R	983.11	983.75	983.57	0.00	
114B-R	979.26	979.01	977.25	0.00	
115B	979.70	979.66	980.26	0.00	
GMA3-2	984.30	984.98	984.88	0.00	
GMA3-3	988.78	989.27	989.34	0.00	
GMA3-4	987.35	987.66	987.45	0.00	
GMA3-5	985.96	986.18	985.82	0.00	
GMA3-6	985.80	985.34	980.90	0.00	
GMA3-7	987.48	986.75	986.35	0.00	
GMA3-8	985.76	986.39	985.69	0.00	
GMA3-9	987.78	987.88	987.54	0.00	
GMA3-10	987.85	986.68	986.12	0.09	
GMA3-11	988.04	987.00	986.44	0.00	
GMA3-12	987.79	986.65	986.13	0.14	
GMA3-13	988.27	986.61	986.10	0.00	
GMA3-14	988.39	986.45	986.58	0.00	
GMA3-15	989.40	985.57	985.57	0.00	
GMA4-3	986.68	986.44	986.06	0.00	
OBG-2	987.15	987.14	987.28	0.00	

## Table 3Groundwater Elevation Data - Fall 2006

#### NAPL Monitoring Report For Fall 2006 Groundwater Management Area 3 General Electric Company - Pittsfield, Massachusetts

Well Number	Overall Average Groundwater (ft AMSL)	Average Fall Groundwater (ft AMSL)	Fall 2006 Groundwater (ft AMSL)	Fall 2006 LNAPL Thickness (ft)
UB-MW-10	986.76	986.18	986.22	0.00
UB-PZ-3	986.72	986.06	985.91	0.16
Monitoring Wells Screened	Below Water Table			•
2A	985.75	986.23	986.13	0.00
16A	984.60	984.74	984.85	0.00
16C-R	983.59	984.94	985.42	0.00
39D-R	985.95	986.35	986.17	0.00
39E	986.48	986.59	986.68	0.00
43A	986.71	988.17	988.25	0.00
89A	982.81	982.96	982.61	0.00
89D-R	982.96	984.18	985.26	0.00
90A	982.76	982.91	982.13	0.00
95A	981.00	981.81	983.07	0.00
111A-R	983.63	984.66	984.04	0.00
114A	979.52	980.62	980.66	0.00
115A	978.80	981.03	981.03	0.00
GMA 3 Surface Water Staff	Gauges			
GMA3-SG-1	NA	NA	984.58	NA
GMA3-SG-2	NA	NA	983.17	NA
GMA3-SG-3	NA	NA	991.32	NA
GMA 4 Wells for Reference			-	-
60B-R	987.68	987.82	986.83	0.00
GMA4-3	986.68	986.44	986.06	0.00
RF-14	990.63	989.59	991.94	0.00

Notes:

1. Groundwater elevation/NAPL thickness data collected between October 25 through 30, 2006.

2. ft AMSL - Feet Above Mean Sea Level

3. Groundwater elevations denoted <## indicate that the well was dry on the date measured and the referenced elevation represents the base of well elevation.

4. Average groundwater elevations based on available seasonal groundwater elevation data since 2000.5. NA - Data Not Available

6. The fall 2006 groundwater elevation recorded at well GMA3-6 was anomalous and not utilized in the preparation of groundwater countours.

# Table 4 Groundwater Elevation and LNAPL Monitoring/Recovery Data Summary

Well Name	Number of Measurements	Measuring Point Elevation (Feet AMSL)	Depth to Water		LNAPL Observations			LNAPL Recovery <sup>(6)</sup>	
			Minimum (Feet BMP)	Maximum (Feet BMP)	Times Observed	Minimum Thickness (Feet)	Maximum Thickness (Feet)	LNAPL Recovery (Liters)	LNAPL Recovery (Gallons)
GMA3 Monito	ring Wells	· · ·	· · · ·					/	
002A	1	994.16	8.03	8.03	0			0.000	0.000
6B-R	1	993.62	6.25	6.25	0			0.000	0.000
16A	1	991.77	6.92	6.92	0			0.000	0.000
16B-R	1	994.87	9.44	9.44	0			0.000	0.000
16C-R	1	993.23	7.81	7.81	0			0.000	0.000
39B-R	1	991.97	6.21	6.21	0			0.000	0.000
39D-R	1	994.73	8.56	8.56	0			0.000	0.000
39E	1	992.21	5.53	5.53	0			0.000	0.000
43A	1	993.79	5.54	5.54	0			0.000	0.000
43B	1	993.61	5.76	5.76	0			0.000	0.000
50B	1	991.76	2.91	2.91	0			0.000	0.000
51-05	6	996.44	9.80	10.63	1	0.03	0.03	0.000	0.000
51-06	7	997.36	10.47	11.39	1	0.01	0.01	0.000	0.000
51-07	7	997.08	9.00	11.00	1	<0.01	<0.01	0.000	0.000
51-08	27	997.08	10.60	12.88	27	<0.01	1.52	10.755	2.841
51-09	7	997.70	10.82	11.56	0			0.000	0.000
51-11	6	994.37	7.85	9.3	0			0.000	0.000
51-12	6	996.55	7.50	7.80	0			0.000	0.000
51-13	6	997.42	9.77	9.77	0			0.000	0.000
51-14	6	996.77	10.40	11.50	0			0.000	0.000

# Table 4 Groundwater Elevation and LNAPL Monitoring/Recovery Data Summary

			Depth to Water		LNAPL Observations			LNAPL Recovery <sup>(6)</sup>	
Well Name	Number of Measurements	Measuring Point Elevation (Feet AMSL)	Minimum (Feet BMP)	Maximum (Feet BMP)	Times Observed	Minimum Thickness (Feet)	Maximum Thickness (Feet)	LNAPL Recovery (Liters)	LNAPL Recovery (Gallons)
E4.4E	C C	(Feel AMSL) 996.43	(Feel BMF) 9.95	(Feet BMF) 11.37	<u> </u>	0.04	0.54		· · ·
51-15	6				6			0.333	0.088
51-16R	6	996.39	9.91	11.25	5	0.02	0.41	0.667	0.176
51-17	6	996.43	10.57	12.09	6	0.76	1.65	3.536	0.934
51-18	6	997.12	8.23	11.60	0			0.000	0.000
51-19	6	996.43	10.10	11.05	4	<0.01	0.09	0.025	0.007
51-21	26	1,001.49	14.97	16.70	25	<0.01	0.40	305.067	80.589
54B-R	1	991.49	4.19	4.19	0			0.000	0.000
59-01	7	997.52	10.92	11.33	2	0.01	0.02	0.000	0.000
59-03R	6	997.64	11.70	12.77	6	0.55	0.89	2.148	0.567
59-07	6	997.96	11.38	12.40	6	0.02	0.19	0.062	0.016
78B-R	3	988.83	1.58	1.85	0			0.000	0.000
82B-R	1	989.90	3.96	3.96	0			0.000	0.000
89A	1	985.76	3.15	3.15	0			0.000	0.000
89B	1	986.03	2.50	2.50	0			0.000	0.000
89D-R	1	987.11	1.85	1.85	0			0.000	0.000
90A	1	988.07	5.94	5.94	0			0.000	0.000
90B	1	989.10	6.03	6.03	0			0.000	0.000
95A	1	987.18	4.11	4.11	0			0.000	0.000
95B-R	1	986.24	5.35	5.35	0			0.000	0.000
111A-R	1	997.35	13.31	13.31	0			0.000	0.000

# Table 4 Groundwater Elevation and LNAPL Monitoring/Recovery Data Summary

			Depth t	o Water	LNAPL Observations			LNAPL Recovery <sup>(6)</sup>	
Well Name	Number of Measurements	Measuring Point Elevation (Feet AMSL)	Minimum (Feet BMP)	Maximum (Feet BMP)	Times Observed	Minimum Thickness (Feet)	Maximum Thickness (Feet)	LNAPL Recovery (Liters)	LNAPL Recovery (Gallons)
111B-R	1	997.48	13.91	13.91	0			0.000	0.000
114A	1	986.16	5.50	5.50	0			0.000	0.000
114B-R	1	985.54	8.29	8.29	0			0.000	0.000
115A	1	988.53	7.50	7.50	0			0.000	0.000
115B	1	990.90	10.64	10.64	0			0.000	0.000
GMA3-2	1	991.94	7.06	7.06	0			0.000	0.000
GMA3-3	1	990.45	1.11	1.11	0			0.000	0.000
GMA3-4	1	994.60	7.15	7.15	0			0.000	0.000
GMA3-5	1	993.67	7.85	7.85	0			0.000	0.000
GMA3-6	1	997.49	16.59	16.59	0			0.000	0.000
GMA3-7	2	1,000.17	13.68	13.82	0			0.000	0.000
GMA3-8	1	996.24	10.55	10.55	0			0.000	0.000
GMA3-9	1	992.39	4.85	4.85	0			0.000	0.000
GMA3-10	27	997.54	10.98	12.31	27	0.01	0.66	3.239	0.856
GMA3-11	6	997.25	9.96	11.15	0			0.000	0.000
GMA3-12	26	997.84	11.29	12.98	26	0.10	0.45	5.017	1.325
GMA3-13	26	997.73	11.10	12.1	18	0.01	0.28	0.838	0.221
GMA3-14	6	997.42	10.50	11.00	0			0.000	0.000
GMA3-15	2	996.74	11.17	11.65	0			0.000	0.000
OBG-2	1	992.20	4.92	4.92	0			0.000	0.000

# Table 4 Groundwater Elevation and LNAPL Monitoring/Recovery Data Summary

## NAPL Monitoring Report For Fall 2006 Groundwater Management Area 3 General Electric Company - Pittsfield, Massachusetts

			Depth to Water		LNAPL Observations			LNAPL Recovery <sup>(6)</sup>	
Well Name	Number of Measurements	Measuring Point Elevation (Feet AMSL)	Minimum (Feet BMP)	Maximum (Feet BMP)	Times Observed	Minimum Thickness (Feet)	Maximum Thickness (Feet)	LNAPL Recovery (Liters)	LNAPL Recovery (Gallons)
UB-MW-10	6	995.99	9.40	10.40	0			0.000	0.000
UB-PZ-3	7	998.15	11.85	13.08	7	0.15	0.28	0.443	0.117
GMA4 Monitori	ng Well (Adjacent	to GMA3)		• •			• •		• •
RF-14	1	1,001.59	9.65	9.65	0			0.000	0.000
GMA4-3	6	1,003.95	17.28	18.30	0			0.000	0.000
60B-R	1	1,003.95	15.96	15.96	0			0.000	0.000

Total amount of LNAPL Recovered - July 2006 through December 2006: 332.13 liters 87.74 gallons

Notes:

- 1. '--- indicates LNAPL was not present in a measurable quantity
- 2. NA indicates information not available.
- 3. DRY Indicates that groundwater was not present in the well at the time measurements were conducted.

4. ft BMP = Feet Below Measuring Point

5. ft AMSL = Feet Above Mean Sea Level

6. LNAPL was recovered via an automated skimmer at well 51-21 and was manually removed from the remaining wells.

# Table 5 Spring 2007 Interim Groundwater Quality Monitoring Activities

# NAPL Monitoring Interim Report for Fall 2006 Groundwater Management Area 3

# General Electric Company - Pittsfield, Massachusetts

Well Number	Well Designation / Analytical Category	Sampling Schedule	Analyses	Comments
2A	Natural Attenuation	Annual <sup>(1)</sup>	See Note 3	
6B-R	GW-3 Perimeter	Annual <sup>(2)</sup>	VOC	
16A	Natural Attenuation	Annual <sup>(1)</sup>	See Note 3	
16B-R	GW-2 Sentinel/Natural Attenuation	Annual <sup>(1)</sup>	See Note 4	
16C-R	Natural Attenuation	Annual <sup>(1)</sup>	See Note 4	
39B-R	Natural Attenuation	Annual <sup>(1)</sup>	See Note 3	
39D-R	Natural Attenuation	Annual <sup>(1)</sup>	See Note 4	
39E	Natural Attenuation	Annual <sup>(1)</sup>	See Note 4	
43A	Natural Attenuation	Annual <sup>(1)</sup>	See Note 4	
43B	Natural Attenuation	Annual <sup>(1)</sup>	See Note 4	
51-14	GW-2 Sentinel	Annual <sup>(2)</sup>	VOC	
82B-R	GW-3 Perimeter	Annual <sup>(2)</sup>	PCB	
89A	Natural Attenuation	Annual <sup>(1)</sup>	See Note 3	
89B	GW-3 Perimeter/Natural Attenuation	Annual <sup>(1)</sup>	See Note 3	
89D-R	Natural Attenuation	Annual <sup>(1)</sup>	See Note 4	
90A	Natural Attenuation	Annual <sup>(1)</sup>	See Note 4	

# Table 5 Spring 2007 Interim Groundwater Quality Monitoring Activities

# NAPL Monitoring Interim Report for Fall 2006 Groundwater Management Area 3

## **General Electric Company - Pittsfield, Massachusetts**

Well Number	Well Designation / Analytical Category	Sampling Schedule	Analyses	Comments
90B	GW-3 Perimeter/Natural Attenuation	Annual <sup>(1)</sup>	See Note 4	
95A	Natural Attenuation	Annual <sup>(1)</sup>	See Note 3	
95B-R	5B-R GW-3 Perimeter/Natural Attenuation		See Note 3	
111A-R	Natural Attenuation	Annual <sup>(1)</sup>	See Note 4	
111B-R	GW-3 Perimeter/Natural Attenuation	Annual <sup>(1)</sup>	See Note 4	
114A	Natural Attenuation	Annual (1,2)	See Note 5	Interim sampling for PCBs to be added in fall 2007.
114B-R	GW-3 Perimeter/Natural Attenuation	Annual (1,2)	See Note 5	
115A	Natural Attenuation	Annual <sup>(1)</sup>	See Note 4	
115B	Natural Attenuation	Annual <sup>(1)</sup>	See Note 4	

#### Notes:

1. Wells sampled under the natural attenuation monitoring program are proposed to continue to be sampled on an annual basis in the spring.

2. Wells proposed for annual interim groundwater quality sampling, will be sampled for the listed parameters during the interim period between the completion of the

baseline monitoring program and the initiation of a long-term monitoring program.

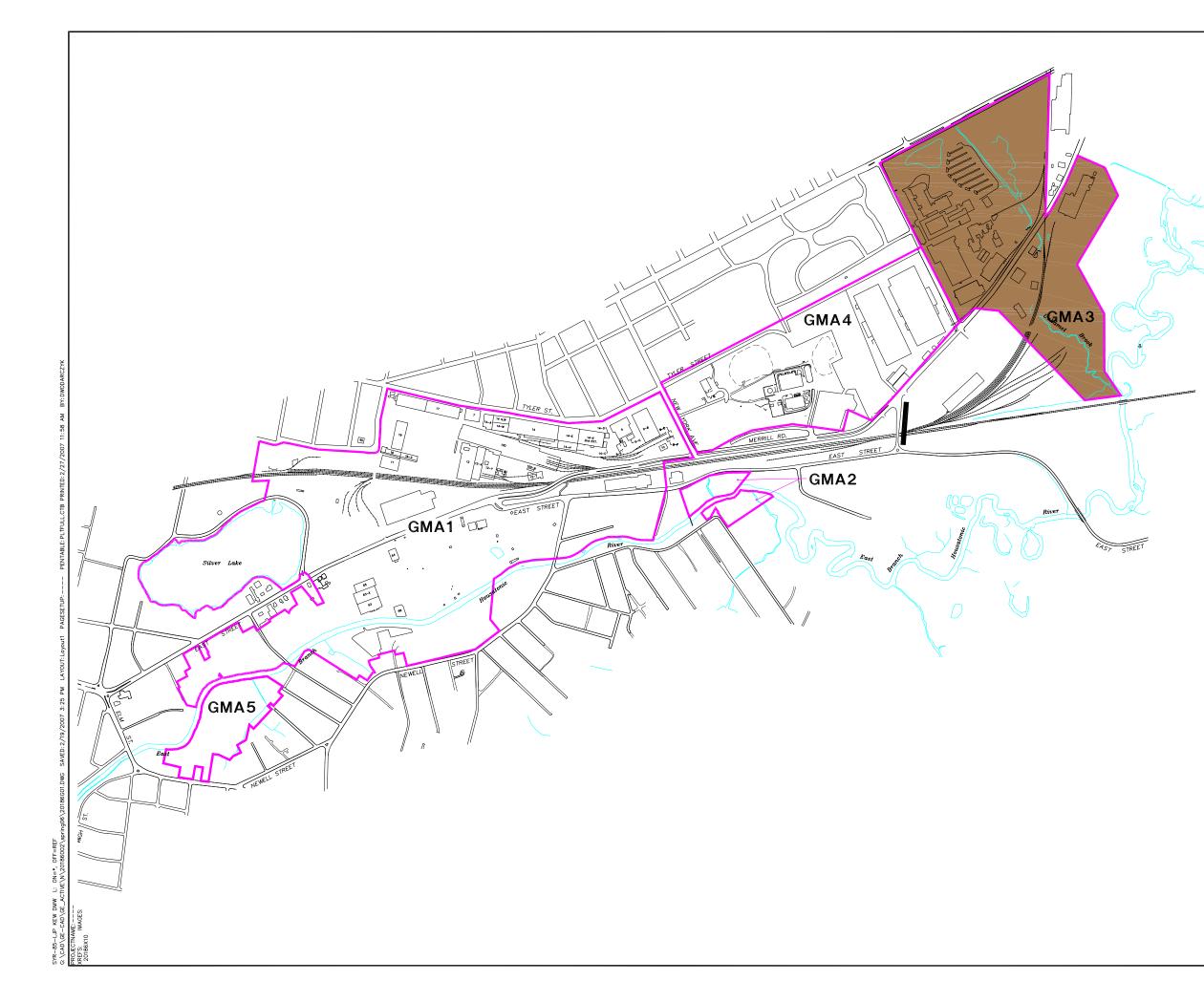
sach year with the next sampling round scheduled for fall 2007 chlorophenol and 4-chlorophenol), and for Natural Attenuation Parameters (methane, ethane, ethane, chloride, nitrate, nitrite, alkalinity, dissolved organic carbon, sulfate, and dissolved iron).

4. Samples proposed to be analyzed for: VOCs and for Natural Attenuation Parameters (methane, ethane, ethane, ethene, chloride, nitrate, nitrite, alkalinity, dissolved organic carbon, sulfate, and dissolved iron).

5. Samples proposed to be analyzed for: VOCs and Natural Attenuation Parameters (methane, ethane, ethane, ethene, chloride, nitrate, nitrite, alkalinity, dissolved organic carbon, sulfate, and dissolved iron) during the spring natural attenuation sampling rounds, and for PCBs (filtered samples only)during the alternating spring/fall interim sampling rounds.

# ARCADIS BBL

Figures





# LEGEND:

GMA1
GMA2
GMA3
GMA4
GMA5

GMA 1-PLANT SITE 1
GMA 2-FORMER OXBOWS J&K
GMA 3-PLANT SITE 2
GMA 4-PLANT SITE 3

GMA 5-FORMER OXBOWS A&C

#### GENERAL NOTES:

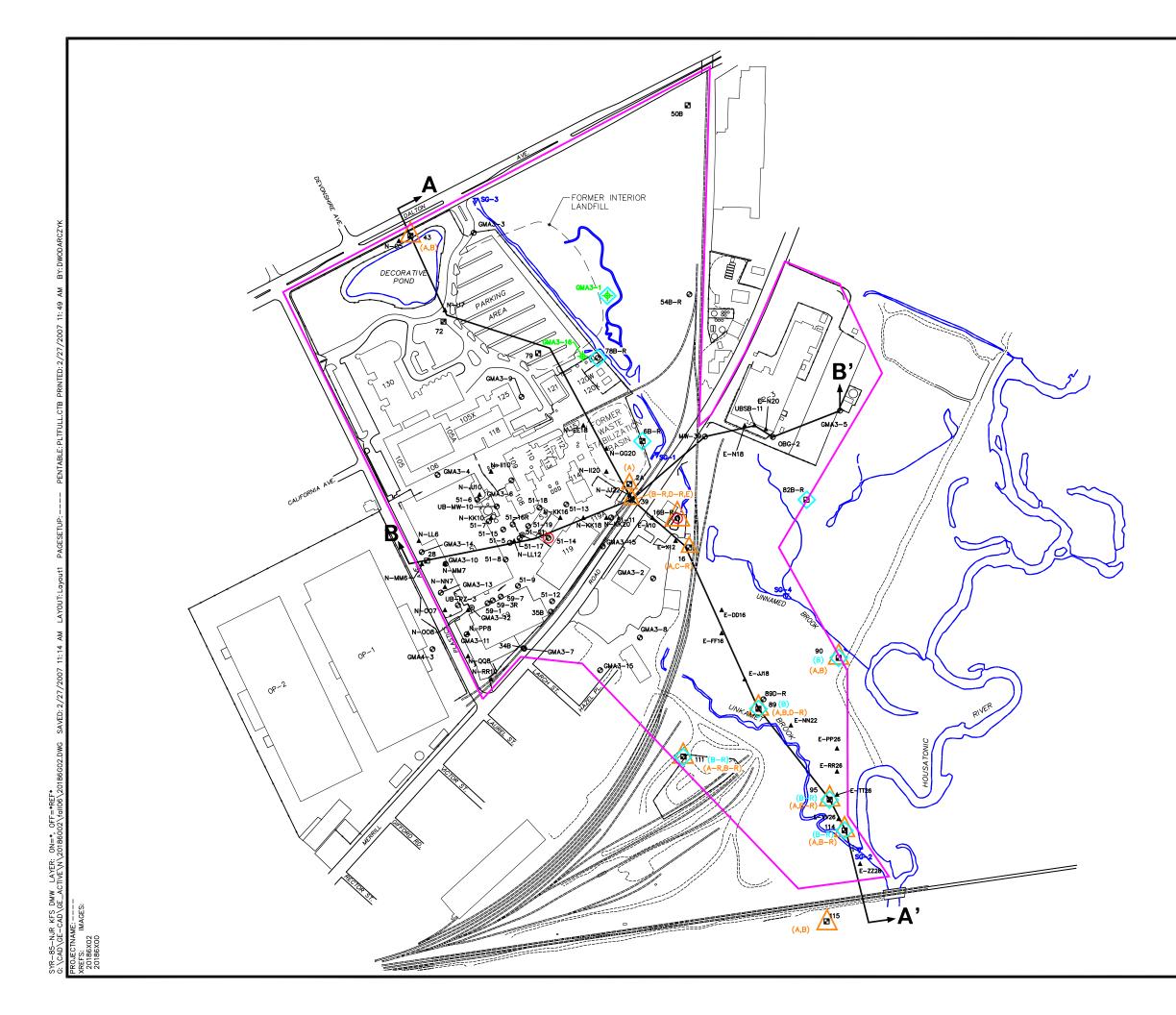
- MAPPING IS BASED ON AERIAL PHOTOGRAPHS AND PHOTOGRAMMETRIC MAPPING BY LOCKWOOD MAPPING, INC. – FLOWN IN APRIL 1990; DATA PROVIDED BY GENERAL ELECTRIC COMPANY; AND BLASLAND & BOUCK ENGINEERS, P.C. P.C. CONSTRUCTION PLANS.
- 2. NOT ALL PHYSICAL FEATURES SHOWN.
- 3. SITE BOUNDARIES/LIMITS ARE APPROXIMATE.

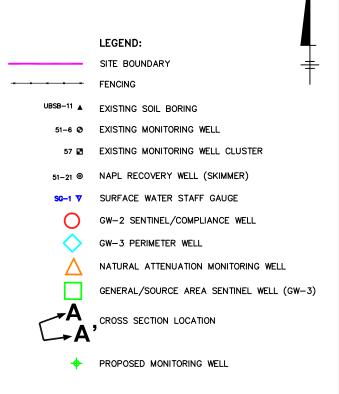


GENERAL ELECTRIC COMPANY PITTSFIELD, MASSACHUSETTS GMA 3 INTERM MONITORING PROGRAM

**GROUNDWATER MANAGEMENT AREAS** 



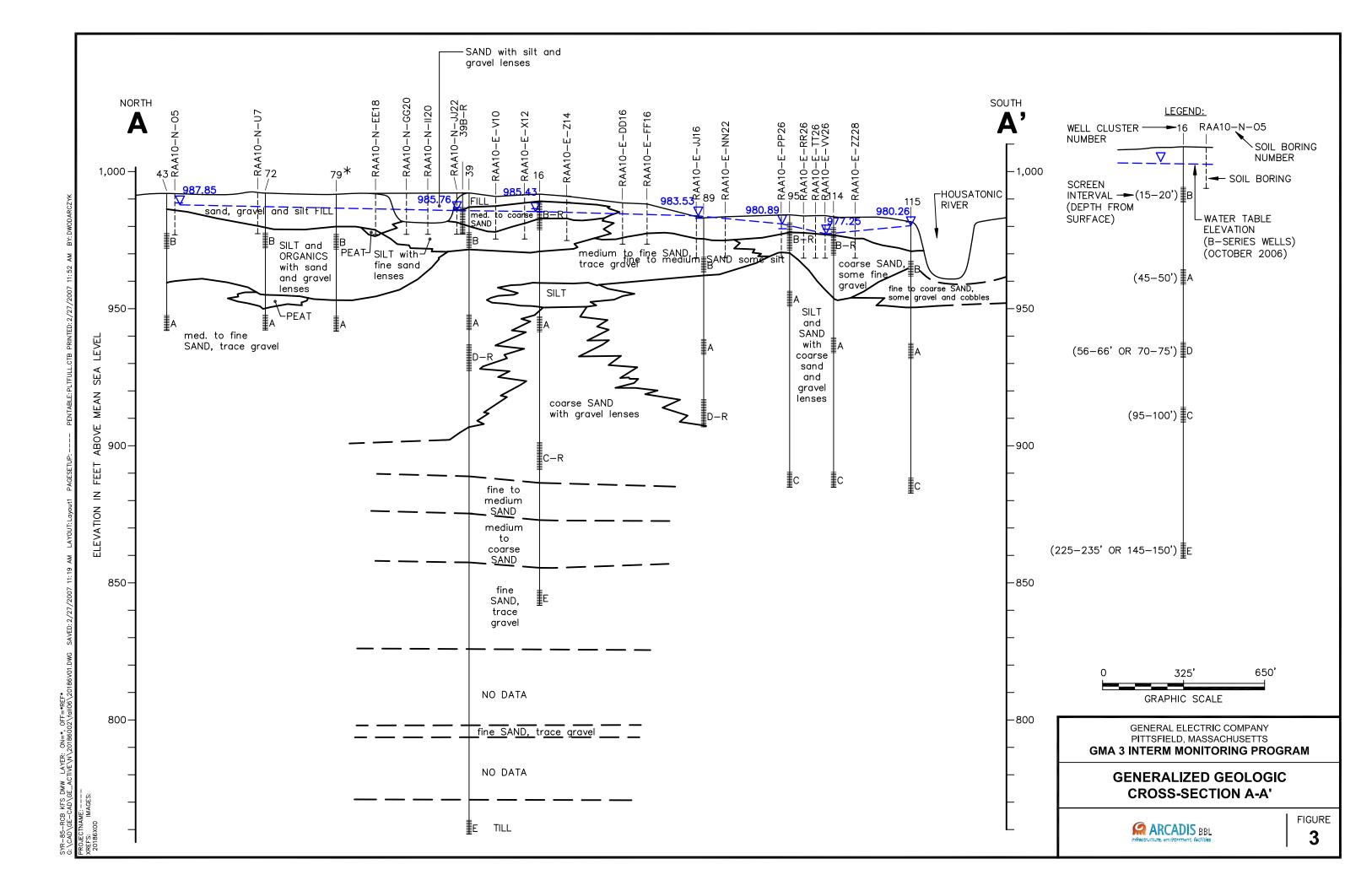


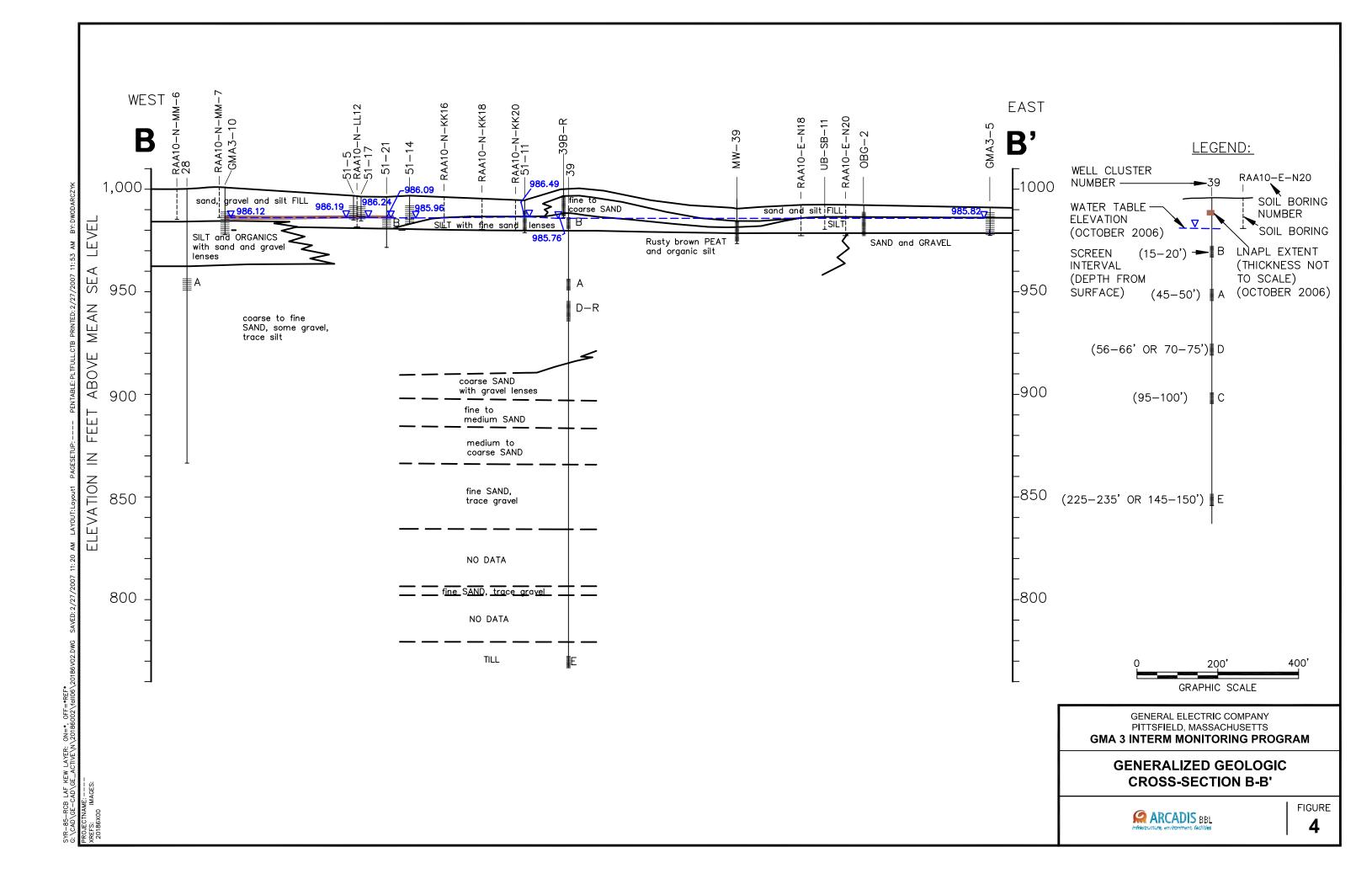


## NOTES:

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

0	400' GRAPHIC SCALE	800'
PITTS	RAL ELECTRIC CO FIELD, MASSACHU RM MONITORIN	JSETTS
	SITE PLAN	
	RCADIS BBL	FIGURE







## LEGEND:

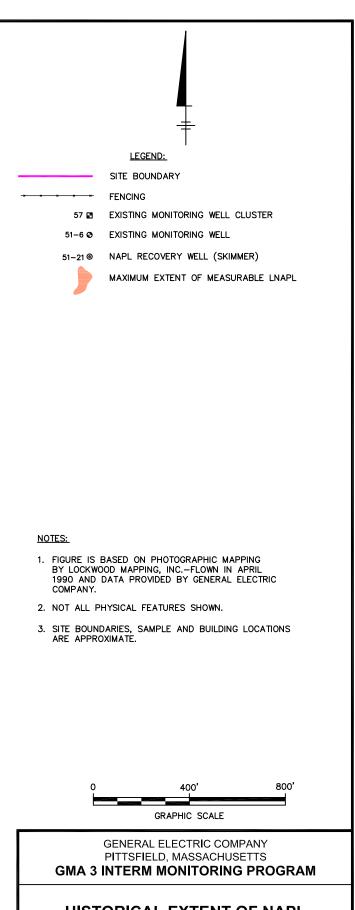
	SITE BOUNDARY
<del>-                                    </del>	FENCING
51-14 🛛	EXISTING MONITORING WELL
54B 🖬	EXISTING MONITORING WELL CLUSTER
51–21 ©	NAPL RECOVERY WELL (SKIMMER)
SG-1 ▼	SURFACE WATER STAFF GAUGE
GMA4-2 🔶	GMA4 MONITORING WELL
986 ———	GROUNDWATER ELEVATION CONTOUR IN FEET (DASHED WHERE INFERRED)
986.27	GROUNDWATER ELEVATION IN FEET

## NOTES:

- FIGURE IS BASED ON PHOTOGRAPHIC MAPPING BY LOCKWOOD MAPPING, INC.-FLOWN IN APRIL 1990 AND DATA PROVIDED BY GENERAL ELECTRIC COMPANY.
- 2. NOT ALL PHYSICAL FEATURES SHOWN.
- 3. SITE BOUNDARIES, SAMPLE AND BUILDING LOCATIONS ARE APPROXIMATE.
- FOR WELL CLUSTERS, GROUNDWATER ELEVATION DATA FROM THE UPPERMOST WELL (B-SERIES) WAS UTILIZED IN THE PREPARATION OF THIS FIGURE.
- GROUNDWATER ELEVATION DATA FROM WELL GMA3-6 WAS CONSIDERED ANOMALOUS AND NOT UTILIZED IN CONTOUR PREPARATION.

0	400'	800'
	GRAPHIC SCALE	
	. ELECTRIC CON LD, MASSACHU MONITORIN	SETTS
GROUNDW CONTOUR	/ATER ELE Map - Fa	
	Vironment, facilities	FIGURE





# HISTORICAL EXTENT OF NAPL





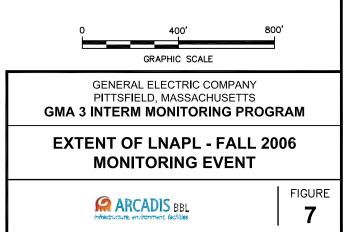
	• •	
	LEGEND:	
	SITE BOUNDARY	
<del>* * * * *</del>	FENCING	
51-6 @	EXISTING MONITORING WELL	
57 🖬	EXISTING MONITORING WELL CLUSTER	
51–21 ©	NAPL RECOVERY WELL (SKIMMER)	
GMA3-1- <del>\$</del> -	BASELINE GROUNDWATER MONITORING WELL LOCATION (PROPOSED WELL)	
SG-1 7	SURFACE WATER STAFF GAUGE	
-	EXTENT OF MEASURABLE LNAPL DURING FALL 2006 SEMI-ANNUAL MONITORING EVENT	

# NOTES:

1. FIGURE IS BASED ON PHOTOGRAPHIC MAPPING BY LOCKWOOD MAPPING, INC.-FLOWN IN APRIL 1990 AND DATA PROVIDED BY GENERAL ELECTRIC COMPANY.

2. NOT ALL PHYSICAL FEATURES SHOWN.

3. SITE BOUNDARIES, SAMPLE AND BUILDING LOCATIONS ARE APPROXIMATE.



# ARCADIS BBL

# Appendix A

Groundwater Elevation and LNAPL Monitoring/Recovery Data

Well	Measuring Point Elev.	Date	Depth to Water	Depth to LNAPL	LNAPL Thickness	Total Depth	Corrected Water Elev.	LNAPL Removed
Name	(feet)	2410	(ft BMP)	(ft BMP)	(feet)	(ft BMP)	(feet)	(Liters)
SMA 3 Monitori	· · /		()		()	(	()	()
002A	994.16	10/25/2006	8.03		0.00	55.02	986.13	
006B-R	993.62	10/25/2006	6.25		0.00	14.74	987.37	
016A	991.77	10/25/2006	6.92		0.00	51.18	984.85	
016B-R	994.87	10/25/2006	9.44		0.00	16.52	985.43	
016C-R	993.23	10/25/2006	7.81		0.00	102.42	985.42	
039B-R	991.97	10/25/2006	6.21		0.00	14.00	985.76	
039D-R	994.73	10/25/2006	8.56		0.00	63.37	986.17	
039E	992.21	10/25/2006	5.53		0.00	239.28	986.68	
043A	993.79	10/25/2006	5.54		0.00	51.36	988.25	
043B	993.61	10/25/2006	5.76		0.00	21.35	987.85	
050B	991.76	10/25/2006	2.91		0.00	15.01	988.85	
51-05	996.44	7/17/2006	10.35		0.00	11.65	986.09	
51-05	996.44	8/29/2006	10.63	10.60	0.03	11.41	985.84	
51-05	996.44	9/26/2006	9.85		0.00	11.61	986.59	
51-05	996.44	10/25/2006	10.25		0.00	11.47	986.19	
51-05	996.44	11/27/2006	9.80		0.00	11.65	986.64	
51-05	996.44	12/18/2006	10.24		0.00	11.37	986.20	
51-06	997.36	7/17/2006	10.84	10.83	0.01	14.61	986.53	
51-06	997.36	8/29/2006	11.20		0.00	14.56	986.16	
51-06	997.36	9/19/2006	11.25		0.00	14.55	986.11	
51-06	997.36	9/26/2006	11.39		0.00	14.34	985.97	
51-06	997.36	10/25/2006	10.98		0.00	14.44	986.38	
51-06	997.36	11/27/2006	10.47		0.00	14.50	986.89	
51-06	997.36	12/18/2006	10.80		0.00	14.46	986.56	
51-07	997.08	7/17/2006	10.82	Р	< 0.01	11.22	986.26	
51-07	997.08	8/29/2006	9.00		0.00	11.24	988.08	
51-07	997.08	9/19/2006	Dry			11.23	< 985.85	
51-07	997.08	9/26/2006	Dry			11.18	< 985.90	
51-07	997.08	10/25/2006	11.00		0.00	11.27	986.08	
51-07	997.08	11/27/2006	10.45		0.00	11.20	986.63	
51-07	997.08	12/18/2006	10.80		0.00	11.20	986.28	
51-08	997.08	7/5/2006	10.95	10.82	0.13	14.68	986.25	
51-08	997.08	7/12/2006	11.85	11.00	0.85	14.68	986.02	0.524
51-08	997.08	7/18/2006	11.75	10.98	0.77	14.69	986.05	0.475
51-08	997.08	7/24/2006	11.22	11.10	0.12	14.70	985.97	
51-08	997.08	8/2/2006	12.65	11.25	1.40	14.66	985.73	
51-08	997.08	8/8/2006	12.88	11.36	1.52	14.70	985.61	
51-08	997.08	8/9/2006	12.75	11.40	1.35	14.70	985.59	
51-08	997.08	8/16/2006	12.65	11.50	1.15	14.68	985.50	0.680
51-08	997.08	8/23/2006	12.60	11.45	1.15	14.67	985.55	0.709
51-08	997.08	8/29/2006	12.50	11.50	1.00	14.69	985.51	0.617
51-08	997.08	9/6/2006	12.85	11.53	1.32	14.66	985.46	0.815
51-08	997.08	9/13/2006	12.74	11.61	1.13	14.64	985.39	0.697
51-08	997.08	9/20/2006	12.68	11.52	1.16	14.65	985.48	0.716
51-08	997.08	9/26/2006	12.81	11.48	1.33	14.60	985.51	0.821
51-08	997.08	10/4/2006	12.40	12.40	0.00	14.64	984.68	0.617
51-08	997.08	10/11/2006	12.45	11.30	1.15	14.64	985.70	0.709
51-08	997.08	10/16/2006	12.30	11.24	1.06	14.64	985.77	0.654
51-08	997.08	10/25/2006	12.21	11.04	1.17	14.67	985.96	
51-08	997.08	11/2/2006	11.93	10.87	1.06	14.65	986.14	0.654
51-08	997.08	11/8/2006	11.68	10.80	0.88	14.67	986.22	0.543
51-08	997.08	11/15/2006	11.20	10.55	0.65	14.66	986.48	0.401
51-08	997.08	11/21/2006	10.60	10.55	0.05	14.65	986.53	
51-08	997.08	11/27/2006	10.63	10.60	0.03	14.65	986.48	

Well	Measuring Point Elev.	Date	Depth to Water	Depth to LNAPL	LNAPL Thickness	Total Depth	Corrected Water Elev.	LNAPL Removed
Name	(feet)	Duit	(ft BMP)	(ft BMP)	(feet)	(ft BMP)	(feet)	(Liters)
51-08	997.08	12/6/2006	10.78	10.73	0.05	14.65	986.35	
51-08	997.08	12/13/2006	11.20	10.90	0.30	14.65	986.16	0.185
51-08	997.08	12/18/2006	11.45	10.87	0.58	14.65	986.17	0.358
51-08	997.08	12/27/2006	11.80	10.86	0.94	14.65	986.15	0.580
51-09	997.70	7/17/2006	11.20		0.00	11.60	986.50	
51-09	997.70	8/29/2006	11.56		0.00	11.60	986.14	
51-09	997.70	9/19/2006	Dry			11.60	< 986.10	
51-09	997.70	9/26/2006	Dry			11.58	< 986.12	
51-09	997.70	10/25/2006	11.40		0.00	11.67	986.30	
51-09	997.70	11/27/2006	10.82		0.00	11.56	986.88	
51-09	997.70	12/18/2006	11.20		0.00	11.55	986.50	
51-11	994.37	7/17/2006	8.65		0.00	13.32	985.72	
51-11	994.37	8/29/2006	9.30		0.00	13.54	985.07	
51-11	994.37	9/19/2006	9.20		0.00	13.55	985.17	
51-11	994.37	10/25/2006	7.88		0.00	13.54	986.49	
51-11	994.37	11/27/2006	7.85		0.00	13.55	986.52	
51-11	994.37	12/18/2006	8.55		0.00	13.54	985.82	
51-12	996.55	7/17/2006	7.55		0.00	13.33	989.00	
51-12	996.55	8/29/2006	7.73		0.00	13.34	988.82	
51-12	996.55	9/19/2006	7.80		0.00	13.34	988.75	
51-12	996.55	10/25/2006	7.62		0.00	14.39	988.93	
51-12	996.55	11/27/2006	7.50		0.00	13.35	989.05	
51-12	996.55	12/18/2006	7.80		0.00	13.35	988.75	
51-13	997.42	7/17/2006	Dry			9.73	< 987.69	
51-13	997.42	8/29/2006	Dry			9.90	< 987.52	
51-13	997.42	9/19/2006	Dry			9.89	< 987.53	
51-13	997.42	10/25/2006	9.77		0.00	9.90	987.65	
51-13	997.42	11/27/2006	Dry			9.84	< 987.58	
51-13	997.42	12/18/2006	Dry			9.82	< 987.60	
51-14	996.77	7/17/2006	10.91		0.00	14.89	985.86	
51-14	996.77	8/29/2006	11.45		0.00	14.80	985.32	
51-14	996.77	9/19/2006	11.50		0.00	14.80	985.27	
51-14	996.77	10/25/2006	10.81		0.00	14.77	985.96	
51-14	996.77	11/27/2006	10.40		0.00	14.78	986.37	
51-14	996.77	12/18/2006	10.78		0.00	14.75	985.99	
51-15	996.43	7/17/2006	10.54	10.30	0.24	14.38	986.11	
51-15	996.43	8/29/2006	11.14	10.95	0.19	14.40	985.47	
51-15	996.43	9/26/2006	11.37	10.83	0.54	14.33	985.56	0.333
51-15	996.43	10/25/2006	10.44 9.95	10.36	0.08	14.38	986.06	
51-15	996.43	11/27/2006		9.90	0.05	14.35	986.53	
51-15	996.43	12/18/2006	10.28	10.24	0.04	14.35	986.19	
51-16R 51-16R	996.39 996.39	7/17/2006 8/29/2006	10.65 11.25	10.31 10.84	0.34	14.55	986.06 985.52	0.210
	996.39	9/26/2006			0.41	14.55		
51-16R 51-16R		9/26/2006	11.18	10.85	0.33	14.53	985.52	0.204
	996.39		10.35 9.91		0.00	15.58	986.04	
51-16R 51-16R	996.39	11/27/2006	10.28	9.89	0.02	14.55	986.50	
51-16R 51-17	996.39 996.43	12/18/2006 7/17/2006	11.73	10.25 10.08	0.03	14.54 14.50	986.14 986.23	1.019
51-17	996.43	8/29/2006	11.73	10.08	0.95		966.23	0.586
51-17	996.43	8/29/2006 9/26/2006	12.09	10.65	1.48	14.50 14.49	985.71	0.586
		9/26/2006						0.913
51-17	996.43		11.34	10.10	1.24	14.55	986.24	
51-17	996.43	11/27/2006	10.57	9.68	0.89	14.50	986.69	0.549
51-17	996.43	12/18/2006	10.80	10.04	0.76	14.50	986.34	0.469
51-18	997.12 997.12	7/17/2006 8/29/2006	11.03 8.23		0.00	12.60 12.60	986.09 988.89	

Name( $51-18$ 9 $51-18$ 9 $51-18$ 9 $51-18$ 9 $51-19$ 9 $51-19$ 9 $51-19$ 9 $51-19$ 9 $51-19$ 9 $51-19$ 9 $51-19$ 9 $51-19$ 9 $51-19$ 9 $51-19$ 9 $51-19$ 1, $51-21$ 1, <tr< th=""><th>int Elev. (feet)           997.12           997.12           997.12           997.12           997.12           997.12           997.12           997.12           997.12           997.12           996.43           996.43           996.43           996.43           996.43           901.49           ,001.49</th><th>Date 9/19/2006 10/25/2006 11/27/2006 12/18/2006 7/17/2006 8/29/2006 9/26/2006 10/25/2006 11/27/2006 12/18/2006 7/5/2006 7/12/2006 8/2/2006 8/21/2006 8/21/2006 8/21/2006 8/21/2006 9/6/2006 9/20/2006 9/20/2006 9/20/2006 10/4/2006 10/4/2006</th><th>to Water (ft BMP) 11.60 10.97 10.61 10.98 10.52 Well Submerged 11.05 10.57 10.10 10.45 15.25 15.45 15.58 15.70 15.79 16.08 16.70 16.03 15.10 16.18 16.10 15.98 15.80</th><th>LNAPL (ft BMP)  P NM 11.01 10.48 10.08  P 15.44 P  15.77 P 16.30 16.03 16.00 P 16.17 16.03 P</th><th>Thickness (feet)           0.00           0.00           0.00           0.00           0.00           0.00           0.00           0.00           0.00           0.00           0.00           0.01           0.02           0.00           &lt; 0.01           0.00           0.02           &lt; 0.01           0.02           &lt; 0.01           0.02           &lt; 0.03           &lt; 0.01           0.01           0.07</th><th>Depth (ft BMP)           12.59           12.60           12.60           12.60           12.60           14.05           14.05           14.05           14.05           NM           NM</th><th>Water Elev. (feet) 985.52 986.15 986.51 986.14 985.91 NA 985.94 985.94 986.35 985.98 986.24 986.05 985.91 985.72 985.72 985.72 985.41 985.16 985.46 985.49 986.39 986.39</th><th>Removed (Liters)      0.025    3.411 3.410 5.690 7.959 12.507 15.920 15.920 15.920 29.180 33.350 29.180 16.680</th></tr<>	int Elev. (feet)           997.12           997.12           997.12           997.12           997.12           997.12           997.12           997.12           997.12           997.12           996.43           996.43           996.43           996.43           996.43           901.49           ,001.49	Date 9/19/2006 10/25/2006 11/27/2006 12/18/2006 7/17/2006 8/29/2006 9/26/2006 10/25/2006 11/27/2006 12/18/2006 7/5/2006 7/12/2006 8/2/2006 8/21/2006 8/21/2006 8/21/2006 8/21/2006 9/6/2006 9/20/2006 9/20/2006 9/20/2006 10/4/2006 10/4/2006	to Water (ft BMP) 11.60 10.97 10.61 10.98 10.52 Well Submerged 11.05 10.57 10.10 10.45 15.25 15.45 15.58 15.70 15.79 16.08 16.70 16.03 15.10 16.18 16.10 15.98 15.80	LNAPL (ft BMP)  P NM 11.01 10.48 10.08  P 15.44 P  15.77 P 16.30 16.03 16.00 P 16.17 16.03 P	Thickness (feet)           0.00           0.00           0.00           0.00           0.00           0.00           0.00           0.00           0.00           0.00           0.00           0.01           0.02           0.00           < 0.01           0.00           0.02           < 0.01           0.02           < 0.01           0.02           < 0.03           < 0.01           0.01           0.07	Depth (ft BMP)           12.59           12.60           12.60           12.60           12.60           14.05           14.05           14.05           14.05           NM           NM	Water Elev. (feet) 985.52 986.15 986.51 986.14 985.91 NA 985.94 985.94 986.35 985.98 986.24 986.05 985.91 985.72 985.72 985.72 985.41 985.16 985.46 985.49 986.39 986.39	Removed (Liters)      0.025    3.411 3.410 5.690 7.959 12.507 15.920 15.920 15.920 29.180 33.350 29.180 16.680
51-18         9 $51-18$ 9 $51-18$ 9 $51-18$ 9 $51-19$ 9 $51-19$ 9 $51-19$ 9 $51-19$ 9 $51-19$ 9 $51-19$ 9 $51-19$ 9 $51-19$ 9 $51-19$ 9 $51-21$ 1, $51-21$ 1, $51-21$ 1, $51-21$ 1, $51-21$ 1, $51-21$ 1, $51-21$ 1, $51-21$ 1, $51-21$ 1, $51-21$ 1, $51-21$ 1, $51-21$ 1, $51-21$ 1, $51-21$ 1, $51-21$ 1, $51-21$ 1, $51-21$ 1, $51-21$ 1, $51-21$ 1,	997.12 997.12 997.12 997.12 996.43 996.43 996.43 996.43 996.43 996.43 996.43 996.43 996.43 996.43 996.43 996.43 996.43 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49	10/25/2006 11/27/2006 12/18/2006 7/17/2006 8/29/2006 9/26/2006 10/25/2006 11/27/2006 12/18/2006 7/19/2006 7/19/2006 8/2/2006 8/9/2006 8/21/2006 8/30/2006 9/6/2006 9/12/2006 9/20/2006 9/27/2006 10/4/2006	11.60           10.97           10.61           10.98           10.52           Well Submerged           11.05           10.57           10.10           10.45           15.25           15.45           15.70           15.79           16.08           16.70           16.03           15.10           16.18           16.10	 P NM 11.01 10.48 10.08  P 15.44 P  15.77 P 16.30 16.03 16.00 P 16.17 16.03	0.00 0.00 0.00 0.00 0.00 0.01 NM 0.04 0.09 0.02 0.00 < 0.01 0.01 < 0.01 0.02 < 0.01 0.02 < 0.01 0.02 < 0.01 0.00 0.02 < 0.01 0.00 0.02 < 0.01 0.00 0.02 0.00 0.02 0.00 0.00 0.02 0.00 0.01 0.01 0.02 0.00 0.02 0.00 0.02 0.00 0.00 0.02 0.00 0.00 0.02 0.00 0.00 0.00 0.00 0.02 0.00	12.59 12.60 12.60 14.06 NM 13.99 14.10 14.05 14.05 14.05 NM NM NM NM NM NM NM NM NM NM NM NM NM	985.52 986.15 986.51 986.14 985.91 NA 985.42 985.94 986.35 985.98 986.24 986.05 985.91 985.79 985.72 985.72 985.41 985.16 985.46 985.49 986.39	   0.025    3.411 3.410 5.690 7.959 12.507 15.920 15.920 29.180 33.350 29.180
51-189 $51-18$ 9 $51-18$ 9 $51-19$ 9 $51-19$ 9 $51-19$ 9 $51-19$ 9 $51-19$ 9 $51-19$ 9 $51-19$ 9 $51-19$ 9 $51-19$ 9 $51-19$ 9 $51-21$ 1, <th>997.12 997.12 996.43 996.43 996.43 996.43 996.43 996.43 996.43 996.43 996.43 996.43 996.43 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49</th> <th>10/25/2006 11/27/2006 12/18/2006 7/17/2006 8/29/2006 9/26/2006 10/25/2006 11/27/2006 12/18/2006 7/19/2006 7/19/2006 8/2/2006 8/9/2006 8/21/2006 8/30/2006 9/6/2006 9/12/2006 9/20/2006 9/27/2006 10/4/2006</th> <th>10.97           10.61           10.98           10.52           Well Submerged           11.05           10.57           10.10           10.45           15.25           15.45           15.70           15.79           16.08           16.70           16.03           15.10           16.18           16.10</th> <th> P NM 11.01 10.48 10.08  P 15.44 P  15.77 P 16.30 16.03 16.00 P 16.17 16.03</th> <th>0.00 0.00 0.00 &lt; 0.01 NM 0.04 0.09 0.02 0.00 &lt; 0.01 0.01 &lt; 0.01 0.02 &lt; 0.01 0.02 &lt; 0.01 0.02 &lt; 0.01 0.02 &lt; 0.01 0.02 &lt; 0.01 0.02 &lt; 0.01 0.02 0.00 0.02 &lt; 0.01 0.01 0.02 0.01 0.01 0.02 0.01 0.01 0.02 0.01 0.02 0.00 0.02 0.01 0.02 0.00 0.02 0.00 0.02 0.00 0.02 0.00 0.01 0.02 0.00 0.02 0.00 0.01 0.01 0.02 0.00 0.02 0.01 0.01 0.02 0.00 0.02 0.01 0.01 0.01 0.01 0.02 0.02 0.01 0.02 0.01 0.02 0.02 0.00 0.02 0.03 0.03 0.01 0.01 0.01 0.03 0.01 0.01 0.02 0.03 0.01 0.01 0.01 0.01 0.02 0.03 0.01 0.01 0.01 0.01 0.02 0.03 0.01 0.01 0.01 0.01 0.02 0.03 0.01 0.01 0.01 0.01 0.01 0.02 0.03 0.01</th> <th>12.60 12.60 12.60 14.06 NM 13.99 14.10 14.05 14.05 NM NM NM NM NM NM NM NM NM NM NM NM NM</th> <th>986.15 986.51 986.14 985.91 NA 985.42 985.94 986.35 985.98 986.24 986.05 985.91 985.79 985.72 985.72 985.41 985.16 985.46 985.49 986.39</th> <th>  0.025   3.411 3.410 5.690 7.959 12.507 15.920 15.920 29.180 33.350 29.180</th>	997.12 997.12 996.43 996.43 996.43 996.43 996.43 996.43 996.43 996.43 996.43 996.43 996.43 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49	10/25/2006 11/27/2006 12/18/2006 7/17/2006 8/29/2006 9/26/2006 10/25/2006 11/27/2006 12/18/2006 7/19/2006 7/19/2006 8/2/2006 8/9/2006 8/21/2006 8/30/2006 9/6/2006 9/12/2006 9/20/2006 9/27/2006 10/4/2006	10.97           10.61           10.98           10.52           Well Submerged           11.05           10.57           10.10           10.45           15.25           15.45           15.70           15.79           16.08           16.70           16.03           15.10           16.18           16.10	 P NM 11.01 10.48 10.08  P 15.44 P  15.77 P 16.30 16.03 16.00 P 16.17 16.03	0.00 0.00 0.00 < 0.01 NM 0.04 0.09 0.02 0.00 < 0.01 0.01 < 0.01 0.02 < 0.01 0.02 < 0.01 0.02 < 0.01 0.02 < 0.01 0.02 < 0.01 0.02 < 0.01 0.02 0.00 0.02 < 0.01 0.01 0.02 0.01 0.01 0.02 0.01 0.01 0.02 0.01 0.02 0.00 0.02 0.01 0.02 0.00 0.02 0.00 0.02 0.00 0.02 0.00 0.01 0.02 0.00 0.02 0.00 0.01 0.01 0.02 0.00 0.02 0.01 0.01 0.02 0.00 0.02 0.01 0.01 0.01 0.01 0.02 0.02 0.01 0.02 0.01 0.02 0.02 0.00 0.02 0.03 0.03 0.01 0.01 0.01 0.03 0.01 0.01 0.02 0.03 0.01 0.01 0.01 0.01 0.02 0.03 0.01 0.01 0.01 0.01 0.02 0.03 0.01 0.01 0.01 0.01 0.02 0.03 0.01 0.01 0.01 0.01 0.01 0.02 0.03 0.01	12.60 12.60 12.60 14.06 NM 13.99 14.10 14.05 14.05 NM NM NM NM NM NM NM NM NM NM NM NM NM	986.15 986.51 986.14 985.91 NA 985.42 985.94 986.35 985.98 986.24 986.05 985.91 985.79 985.72 985.72 985.41 985.16 985.46 985.49 986.39	  0.025   3.411 3.410 5.690 7.959 12.507 15.920 15.920 29.180 33.350 29.180
51-18         9 $51-18$ 9 $51-19$ 9 $51-19$ 9 $51-19$ 9 $51-19$ 9 $51-19$ 9 $51-19$ 9 $51-19$ 9 $51-19$ 9 $51-19$ 9 $51-21$ 1, <t< td=""><td>997.12 997.12 996.43 996.43 996.43 996.43 996.43 996.43 996.43 996.43 996.43 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49</td><td>11/27/2006 12/18/2006 7/17/2006 8/29/2006 9/26/2006 10/25/2006 11/27/2006 7/5/2006 7/19/2006 7/19/2006 8/2/2006 8/9/2006 8/21/2006 8/30/2006 9/6/2006 9/12/2006 9/20/2006 9/27/2006 10/4/2006</td><td>10.61           10.98           10.52           Well Submerged           11.05           10.57           10.10           10.45           15.25           15.45           15.70           15.79           16.08           16.70           16.03           15.10           16.18           16.10</td><td>P NM 11.01 10.48 10.08  P 15.44 P  15.77 P 16.30 16.03 16.00 P 16.17 16.03</td><td>0.00 0.00 &lt; 0.01 NM 0.04 0.09 0.02 0.00 &lt; 0.01 0.01 &lt; 0.01 0.02 &lt; 0.01 0.02 &lt; 0.01 0.02 &lt; 0.01 0.02 &lt; 0.03 &lt; 0.01 0.02 0.02 0.00 0.02 0.00 0.02 0.01 0.01 0.01 0.01 0.01 0.02 0.01 0.02 0.02 0.01 0.02 0.00 0.02 0.00 0.02 0.00 0.01 0.02 0.00 0.02 0.00 0.01 0.01 0.02 0.00 0.02 0.00 0.02 0.00 0.01 0.01 0.01 0.01 0.02 0.00 0.02 0.03 0.03 0.01 0.01 0.01 0.02 0.03 0.01 0.01 0.00 0.02 0.03 0.01 0.01 0.01 0.00 0.02 0.03 0.01 0.01 0.01 0.00 0.02 0.03 0.01 0.01 0.01 0.01 0.02 0.03 0.01 0.01 0.01 0.01 0.01 0.02 0.01</td><td>12.60 12.60 14.06 NM 13.99 14.10 14.05 14.05 NM NM NM NM NM NM NM NM NM NM NM NM</td><td>986.51 986.14 985.91 NA 985.42 985.94 986.35 985.98 986.24 986.05 985.91 985.79 985.72 985.72 985.41 985.16 985.46 985.49 986.39</td><td>  0.025   3.411 3.410 5.690 7.959 12.507 15.920 15.920 29.180 33.350 29.180</td></t<>	997.12 997.12 996.43 996.43 996.43 996.43 996.43 996.43 996.43 996.43 996.43 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49	11/27/2006 12/18/2006 7/17/2006 8/29/2006 9/26/2006 10/25/2006 11/27/2006 7/5/2006 7/19/2006 7/19/2006 8/2/2006 8/9/2006 8/21/2006 8/30/2006 9/6/2006 9/12/2006 9/20/2006 9/27/2006 10/4/2006	10.61           10.98           10.52           Well Submerged           11.05           10.57           10.10           10.45           15.25           15.45           15.70           15.79           16.08           16.70           16.03           15.10           16.18           16.10	P NM 11.01 10.48 10.08  P 15.44 P  15.77 P 16.30 16.03 16.00 P 16.17 16.03	0.00 0.00 < 0.01 NM 0.04 0.09 0.02 0.00 < 0.01 0.01 < 0.01 0.02 < 0.01 0.02 < 0.01 0.02 < 0.01 0.02 < 0.03 < 0.01 0.02 0.02 0.00 0.02 0.00 0.02 0.01 0.01 0.01 0.01 0.01 0.02 0.01 0.02 0.02 0.01 0.02 0.00 0.02 0.00 0.02 0.00 0.01 0.02 0.00 0.02 0.00 0.01 0.01 0.02 0.00 0.02 0.00 0.02 0.00 0.01 0.01 0.01 0.01 0.02 0.00 0.02 0.03 0.03 0.01 0.01 0.01 0.02 0.03 0.01 0.01 0.00 0.02 0.03 0.01 0.01 0.01 0.00 0.02 0.03 0.01 0.01 0.01 0.00 0.02 0.03 0.01 0.01 0.01 0.01 0.02 0.03 0.01 0.01 0.01 0.01 0.01 0.02 0.01	12.60 12.60 14.06 NM 13.99 14.10 14.05 14.05 NM NM NM NM NM NM NM NM NM NM NM NM	986.51 986.14 985.91 NA 985.42 985.94 986.35 985.98 986.24 986.05 985.91 985.79 985.72 985.72 985.41 985.16 985.46 985.49 986.39	  0.025   3.411 3.410 5.690 7.959 12.507 15.920 15.920 29.180 33.350 29.180
51-18         9 $51-19$ 9 $51-19$ 9 $51-19$ 9 $51-19$ 9 $51-19$ 9 $51-19$ 9 $51-19$ 9 $51-19$ 9 $51-19$ 9 $51-21$ 1,      <	997.12 996.43 996.43 996.43 996.43 996.43 996.43 996.43 996.43 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49	12/18/2006 7/17/2006 8/29/2006 9/26/2006 10/25/2006 11/27/2006 7/5/2006 7/19/2006 7/19/2006 8/2/2006 8/2/2006 8/9/2006 8/21/2006 8/30/2006 9/6/2006 9/12/2006 9/20/2006 9/27/2006 10/4/2006	10.98           10.52           Well Submerged           11.05           10.57           10.10           10.45           15.25           15.45           15.70           15.79           16.08           16.70           16.03           15.10           16.18           16.10	P NM 11.01 10.48 10.08  P 15.44 P  15.77 P 16.30 16.03 16.00 P 16.17 16.03	0.00 < 0.01 NM 0.04 0.09 0.02 0.00 < 0.01 0.01 < 0.01 0.00 0.02 < 0.01 0.40 0.02 0.03 < 0.01 0.01	12.60 14.06 NM 13.99 14.10 14.05 14.05 NM NM NM NM NM NM NM NM NM NM NM NM	986.14 985.91 NA 985.42 985.94 986.35 985.98 986.24 986.05 985.91 985.79 985.72 985.72 985.41 985.16 985.46 985.49 986.39	 0.025  3.411 3.410 5.690 7.959 12.507 15.920 15.920 29.180 33.350 29.180
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	996.43 996.43 996.43 996.43 996.43 996.43 996.43 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49	7/17/2006 8/29/2006 9/26/2006 10/25/2006 11/27/2006 7/5/2006 7/19/2006 7/19/2006 8/2/2006 8/2/2006 8/9/2006 8/21/2006 8/30/2006 9/6/2006 9/12/2006 9/20/2006 9/27/2006 10/4/2006	10.52           Well         Submerged           11.05         10.57           10.10         10.45           15.25         15.45           15.58         15.70           15.79         16.08           16.70         16.05           16.03         15.10           16.18         16.10	NM 11.01 10.48 10.08  P 15.44 P  15.77 P 16.30 16.03 16.00 P 16.17 16.03	< 0.01 NM 0.04 0.09 0.02 0.00 < 0.01 0.01 < 0.01 0.00 0.02 < 0.01 0.40 0.02 0.03 < 0.01 0.01	14.06 NM 13.99 14.10 14.05 14.05 NM NM NM NM NM NM NM NM NM NM NM NM	985.91 NA 985.42 985.94 986.35 985.98 986.24 986.05 985.91 985.79 985.72 985.72 985.41 985.16 985.46 985.49 986.39	 0.025  3.411 3.410 5.690 7.959 12.507 15.920 15.920 29.180 33.350 29.180
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	996.43 996.43 996.43 996.43 996.43 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49	8/29/2006 9/26/2006 10/25/2006 11/27/2006 7/5/2006 7/12/2006 7/19/2006 8/2/2006 8/2/2006 8/9/2006 8/16/2006 8/21/2006 8/30/2006 9/6/2006 9/12/2006 9/22/2006 9/27/2006 10/4/2006	Well         Submerged           11.05         10.57           10.10         10.45           15.25         15.45           15.58         15.70           15.79         16.08           16.70         16.05           16.03         15.10           16.18         16.10	NM 11.01 10.48 10.08  P 15.44 P  15.77 P 16.30 16.03 16.00 P 16.17 16.03	NM           0.04           0.09           0.02           0.00           < 0.01	NM           13.99           14.10           14.05           14.05           NM	NA 985.42 985.94 986.35 985.98 986.24 986.05 985.91 985.79 985.72 985.41 985.16 985.46 985.49 985.49 986.39	 3.411 3.410 5.690 7.959 12.507 15.920 15.920 29.180 33.350 29.180
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	996.43 996.43 996.43 996.43 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49	9/26/2006 10/25/2006 11/27/2006 7/5/2006 7/12/2006 7/19/2006 8/2/2006 8/2/2006 8/9/2006 8/16/2006 8/30/2006 9/6/2006 9/12/2006 9/20/2006 9/27/2006 10/4/2006	11.05           10.57           10.10           10.45           15.25           15.45           15.70           15.79           16.08           16.70           16.03           15.10           16.18           16.10	11.01 10.48 10.08  P 15.44 P  15.77 P 16.30 16.03 16.00 P 16.17 16.03	0.04 0.09 0.02 0.00 < 0.01 0.01 < 0.01 0.00 0.02 < 0.01 0.40 0.02 0.03 < 0.01 0.01	13.99 14.10 14.05 NM NM NM NM NM NM NM NM NM NM NM NM	985.42 985.94 986.35 985.98 986.24 986.05 985.91 985.79 985.72 985.41 985.16 985.46 985.49 986.39	 3.411 3.410 5.690 7.959 12.507 15.920 15.920 29.180 33.350 29.180
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	996.43 996.43 996.43 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49	10/25/2006 11/27/2006 7/5/2006 7/12/2006 7/19/2006 8/2/2006 8/2/2006 8/9/2006 8/16/2006 8/21/2006 8/30/2006 9/6/2006 9/12/2006 9/20/2006 9/27/2006 10/4/2006	10.57           10.10           10.45           15.25           15.45           15.58           15.70           15.79           16.08           16.70           16.03           15.10           16.18           16.10	10.48 10.08  P 15.44 P  15.77 P 16.30 16.03 16.00 P 16.17 16.03	0.09 0.02 0.00 < 0.01 0.01 < 0.01 0.00 0.02 < 0.01 0.40 0.02 0.03 < 0.01 0.01	14.10 14.05 14.05 NM NM NM NM NM NM NM NM NM NM NM	985.94 986.35 985.98 986.24 986.05 985.91 985.79 985.72 985.41 985.16 985.46 985.49 985.49 986.39	 3.411 3.410 5.690 7.959 12.507 15.920 15.920 29.180 33.350 29.180
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	996.43 996.43 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49	11/27/2006 12/18/2006 7/5/2006 7/19/2006 7/26/2006 8/2/2006 8/9/2006 8/9/2006 8/16/2006 8/30/2006 9/6/2006 9/6/2006 9/12/2006 9/20/2006 9/27/2006 10/4/2006	10.10           10.45           15.25           15.45           15.70           15.79           16.08           16.70           16.03           15.10           16.18           16.10	10.08  P 15.44 P  15.77 P 16.30 16.03 16.00 P 16.17 16.03	0.02 0.00 < 0.01 0.01 0.00 0.02 < 0.01 0.40 0.02 0.03 < 0.01 0.01	14.05 14.05 NM NM NM NM NM NM NM NM NM NM NM	986.35 985.98 986.24 986.05 985.91 985.79 985.72 985.41 985.16 985.46 985.49 986.39	3.411 3.410 5.690 7.959 12.507 15.920 15.920 29.180 33.350 29.180
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	996.43 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49	12/18/2006 7/5/2006 7/12/2006 7/26/2006 8/2/2006 8/9/2006 8/9/2006 8/16/2006 8/21/2006 9/6/2006 9/6/2006 9/12/2006 9/20/2006 9/27/2006 10/4/2006	10.45           15.25           15.45           15.58           15.70           15.79           16.08           16.70           16.05           16.03           15.10           16.18           16.10	 P 15.44 P  15.77 P 16.30 16.03 16.00 P 16.17 16.03	0.00 < 0.01 0.01 0.00 0.02 < 0.01 0.40 0.02 0.03 < 0.01	14.05 NM NM NM NM NM NM NM NM NM NM	985.98 986.24 986.05 985.91 985.79 985.72 985.41 985.16 985.46 985.49 986.39	3.411 3.410 5.690 7.959 12.507 15.920 15.920 29.180 33.350 29.180
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49	7/5/2006 7/12/2006 7/19/2006 8/2/2006 8/9/2006 8/16/2006 8/21/2006 8/30/2006 9/6/2006 9/6/2006 9/12/2006 9/20/2006 9/27/2006 10/4/2006	15.25           15.45           15.58           15.70           15.79           16.08           16.70           16.05           16.03           15.10           16.18           16.10           15.98	15.44 P  15.77 P 16.30 16.03 16.00 P 16.17 16.03	< 0.01 0.01 < 0.01 0.00 0.02 < 0.01 0.40 0.02 0.03 < 0.01 0.01	NM NM NM NM NM NM NM NM NM NM	986.24 986.05 985.91 985.79 985.72 985.41 985.16 985.46 985.46 985.49 986.39	3.410 5.690 7.959 12.507 15.920 15.920 29.180 33.350 29.180
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	,001.49           ,001.49	7/12/2006 7/19/2006 8/2/2006 8/9/2006 8/16/2006 8/21/2006 8/30/2006 9/6/2006 9/6/2006 9/12/2006 9/20/2006 9/27/2006 10/4/2006	15.45           15.58           15.70           15.79           16.08           16.70           16.05           16.03           15.10           16.18           16.10           15.98	15.44 P  15.77 P 16.30 16.03 16.00 P 16.17 16.03	0.01 < 0.01 0.00 < 0.02 < 0.01 0.40 0.02 0.03 < 0.01 0.01	NM NM NM NM NM NM NM NM NM NM	986.05 985.91 985.79 985.72 985.41 985.46 985.46 985.46 985.49 986.39	3.410 5.690 7.959 12.507 15.920 15.920 29.180 33.350 29.180
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49	7/19/2006 7/26/2006 8/2/2006 8/9/2006 8/16/2006 8/21/2006 8/30/2006 9/6/2006 9/12/2006 9/20/2006 9/27/2006 10/4/2006	15.58           15.70           15.79           16.08           16.70           16.05           16.03           15.10           16.18           16.10           15.98	P  P 16.30 16.03 16.00 P 16.17 16.03	< 0.01 0.00 0.02 < 0.01 0.40 0.02 0.03 < 0.01 0.01	NM NM NM NM NM NM NM NM NM	985.91 985.79 985.72 985.41 985.46 985.46 985.49 985.49 986.39	5.690 7.959 12.507 15.920 15.920 29.180 33.350 29.180
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49	7/26/2006 8/2/2006 8/9/2006 8/16/2006 8/21/2006 9/6/2006 9/6/2006 9/12/2006 9/20/2006 9/27/2006 10/4/2006	15.70 15.79 16.08 16.70 16.05 16.03 15.10 16.18 16.10 15.98	15.77 P 16.30 16.03 16.00 P 16.17 16.03	0.00 0.02 < 0.01 0.40 0.02 0.03 < 0.01 0.01	NM NM NM NM NM NM NM NM	985.79 985.72 985.41 985.16 985.46 985.46 985.49 986.39	7.959 12.507 15.920 15.920 29.180 33.350 29.180
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49	8/2/2006 8/9/2006 8/16/2006 8/21/2006 9/6/2006 9/6/2006 9/12/2006 9/20/2006 9/27/2006 10/4/2006	15.79           16.08           16.70           16.05           16.03           15.10           16.18           16.10           15.98	15.77 P 16.30 16.03 16.00 P 16.17 16.03	0.02 < 0.01 0.40 0.02 0.03 < 0.01 0.01	NM NM NM NM NM NM NM	985.72 985.41 985.16 985.46 985.49 985.49 986.39	12.507 15.920 15.920 29.180 33.350 29.180
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49	8/9/2006 8/16/2006 8/21/2006 9/6/2006 9/12/2006 9/20/2006 9/20/2006 9/27/2006 10/4/2006	16.08           16.70           16.05           16.03           15.10           16.18           16.10           15.98	P 16.30 16.03 16.00 P 16.17 16.03	< 0.01 0.40 0.02 0.03 < 0.01 0.01	NM NM NM NM NM NM	985.41 985.16 985.46 985.49 986.39	15.920 15.920 29.180 33.350 29.180
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49	8/16/2006 8/21/2006 9/6/2006 9/12/2006 9/20/2006 9/20/2006 9/27/2006 10/4/2006	16.70 16.05 16.03 15.10 16.18 16.10 15.98	16.30 16.03 16.00 P 16.17 16.03	0.40 0.02 0.03 < 0.01 0.01	NM NM NM NM NM	985.16 985.46 985.49 986.39	15.920 29.180 33.350 29.180
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49	8/21/2006 8/30/2006 9/6/2006 9/12/2006 9/20/2006 9/27/2006 10/4/2006	16.05 16.03 15.10 16.18 16.10 15.98	16.03 16.00 P 16.17 16.03	0.02 0.03 < 0.01 0.01	NM NM NM NM	985.46 985.49 986.39	29.180 33.350 29.180
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	,001.49 ,001.49 ,001.49 ,001.49 ,001.49 ,001.49	8/30/2006 9/6/2006 9/12/2006 9/20/2006 9/27/2006 10/4/2006	16.03 15.10 16.18 16.10 15.98	16.00 P 16.17 16.03	0.03 < 0.01 0.01	NM NM NM	985.49 986.39	33.350 29.180
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	,001.49 ,001.49 ,001.49 ,001.49 ,001.49	9/6/2006 9/12/2006 9/20/2006 9/27/2006 10/4/2006	15.10 16.18 16.10 15.98	P 16.17 16.03	< 0.01 0.01	NM NM	986.39	29.180
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	,001.49 ,001.49 ,001.49 ,001.49	9/12/2006 9/20/2006 9/27/2006 10/4/2006	16.18 16.10 15.98	16.17 16.03	0.01	NM		
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	,001.49 ,001.49 ,001.49	9/20/2006 9/27/2006 10/4/2006	16.10 15.98	16.03				
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	,001.49 ,001.49	9/27/2006 10/4/2006	15.98		0.07		985.46	31.457
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	,001.49	10/4/2006			< 0.01	NM	985.51	20.845
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$			13.00	Р	< 0.01	NM	985.69	20.845
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	,001.49		15.89	15.88	0.01	NM	985.61	12.507
51-21         1,           59-01         9           59-01         9	,001.49	10/18/2006	15.65	P	< 0.01	NM	985.84	12.510
51-21         1,           51-21         1,           51-21         1,           51-21         1,           51-21         1,           51-21         1,           51-21         1,           51-21         1,           51-21         1,           51-21         1,           51-21         1,           51-21         1,           51-21         1,           51-21         1,           51-21         1,           51-21         1,           51-21         1,           59-01         9           59-01         9	,001.49	10/25/2006	15.40	P	< 0.01	NM	986.09	8.330
51-21         1,           51-21         1,           51-21         1,           51-21         1,           51-21         1,           51-21         1,           51-21         1,           51-21         1,           51-21         1,           51-21         1,           51-21         1,           51-21         1,           51-21         1,           51-21         1,           51-21         1,           59-01         9           59-01         9	,001.49	10/31/2006	15.30	P	< 0.01	NM	986.19	4.160
51-21         1,           51-21         1,           51-21         1,           51-21         1,           51-21         1,           51-21         1,           51-21         1,           51-21         1,           51-21         1,           51-21         1,           51-21         1,           51-21         1,           51-21         1,           59-01         9           59-01         9	,001.49	11/14/2006	14.97	14.96	0.01	NM	986.53	2.271
51-21         1,           51-21         1,           51-21         1,           51-21         1,           51-21         1,           51-21         1,           51-21         1,           51-21         1,           51-21         1,           51-21         1,           51-21         1,           59-01         9           59-01         9	,001.49	11/22/2006	14.98	P	< 0.01	NM	986.51	2.082
51-21         1,           51-21         1,           51-21         1,           51-21         1,           51-21         1,           51-21         1,           51-21         1,           51-21         1,           51-21         1,           59-01         9           59-01         9	,001.49	11/22/2006	15.06	P	< 0.01	NM	986.43	2.082
51-21         1,           51-21         1,           51-21         1,           51-21         1,           51-21         1,           59-01         9           59-01         9	,001.49	12/5/2006	15.18	P	< 0.01	NM	986.31	2.082
51-21         1,           51-21         1,           51-21         1,           51-21         1,           59-01         9           59-01         9	,001.49	12/3/2006	15.18	15.33	0.01	NM	986.16	2.085
51-21         1,           51-21         1,           59-01         9           59-01         9	,001.49	12/20/2006	15.45	15.33	0.01	NM	986.06	2.085
51-211,59-01959-019	,001.49	12/27/2006	15.40	15.43	0.02	NM	986.10	6.246
59-01 9 59-01 9	,001.49	11/7/006	15.30	P	< 0.01	NM	986.19	2.271
59-01 9	,001.49 997.52	7/17/2006	11.33	г 	0.00	11.43	986.19	2.271
	997.52 997.52	8/29/2006	Dry			11.43	< 986.12	
	997.52 997.52	9/19/2006				11.40		
	997.52 997.52	9/26/2006	Dry Dry			11.40	< 986.12 < 986.12	
	997.52 997.52	10/25/2006 11/27/2006	Dry 10.92	10.90	0.02	11.43 11.40	< 986.09 986.62	
	997.52 997.52	12/18/2006	11.23	11.22	0.02	11.40	986.30	
	991.49	10/25/2006	4.19		0.00	15.51	987.30	
	997.64	7/17/2006	12.30	11.41	0.89	17.04 17.05	986.17	0.550
	997.64	8/29/2006	12.56	12.00	0.56		985.60	0.395
	997.64 997.64	9/26/2006	12.77 12.23	12.05 11.62	0.72	17.05 17.17	985.54 985.98	0.444
		10/25/2006			0.61			
	997.64	11/27/2006	11.70	11.02	0.68	17.05	986.57	0.420
	007.04	12/18/2006	11.90	11.35	0.55	17.05	986.25	0.339
	997.64	7/17/2006	11.72	11.70	0.02	23.55	986.26	
	997.96	8/29/2006	12.04	12.02	0.02	23.54	985.94	
	997.96 997.96	0/00/0000	12.40	12.30	0.10	23.52	985.65	0.062
59-07 9 59-07 9	997.96	9/26/2006 10/25/2006	12.03	11.84	0.19 0.08	23.50 23.54	986.11 986.65	

Well	Measuring Point Elev.	Date	Depth to Water	Depth to LNAPL	LNAPL Thickness	Total Depth	Corrected Water Elev.	LNAPL Removed
Name	(feet)	2 4 10	(ft BMP)	(ft BMP)	(feet)	(ft BMP)	(feet)	(Liters)
59-07	997.96	12/18/2006	11.70	11.65	0.05	23.54	986.31	
078B-R	988.83	10/25/2006	1.58		0.00	11.73	987.25	
078B-R	988.83	11/27/2006	1.70		0.00	11.74	987.13	
078B-R	988.83	12/18/2006	1.85		0.00	11.74	986.98	
082B-R	989.90	10/26/2006	3.96		0.00	11.79	985.94	
089A	985.76	10/30/2006	3.15		0.00	47.05	982.61	
089B	986.03	10/30/2006	2.50		0.00	8.60	983.53	
089D-R	987.11	10/30/2006	1.85		0.00	66.60	985.26	
090A	988.07	10/25/2006	5.94		0.00	51.32	982.13	
090B	989.10	10/25/2006	6.03		0.00	12.85	983.07	
095A	987.18	10/25/2006	4.11		0.00	65.57	983.07	
095B-R	986.24	10/25/2006	5.35		0.00	13.57	980.89	
111A-R	997.35	10/25/2006	13.31		0.00	52.30	984.04	
111B-R	997.48	10/25/2006	13.91		0.00	19.86	983.57	
114A	986.16	10/25/2006	5.50		0.00	52.19	980.66	
114B-R	985.54	10/25/2006	8.29		0.00	15.37	977.25	
115A	988.53	10/25/2006	7.50		0.00	42.70	981.03	
115B	990.90	10/25/2006	10.64		0.00	15.68	980.26	
GMA3-2	991.94	10/25/2006	7.06		0.00	15.03	984.88	
GMA3-3	990.45	10/25/2006	1.11		0.00	12.20	989.34	
GMA3-4	994.60	10/25/2006	7.15		0.00	13.19	987.45	
GMA3-5	993.67	10/26/2006	7.85		0.00	15.43	985.82	
GMA3-6	997.49	10/25/2006	16.59		0.00	23.58	980.90	
GMA3-7	1,000.17	7/17/2006	13.68		0.00	19.61	986.49	
GMA3-7	1,000.17	10/25/2006	13.82		0.00	19.82	986.35	
GMA3-8	996.24	10/25/2006	10.55		0.00	15.65	985.69	
GMA3-9	992.39	10/25/2006	4.85		0.00	12.66	987.54	
GMA3-10	997.54	7/5/2006	11.30	11.00	0.30	17.95	986.52	0.185
GMA3-10	997.54	7/12/2006	11.70	11.12	0.58	17.95	986.38	0.358
GMA3-10	997.54	7/18/2006	11.80	11.20	0.60	17.95	986.30	0.370
GMA3-10	997.54	7/24/2006	11.97	11.35	0.62	17.95	986.15	
GMA3-10	997.54	8/2/2006	11.98	11.52	0.46	17.96	985.99	
GMA3-10	997.54	8/8/2006	12.30	11.64	0.66	17.96	985.85	0.408
GMA3-10	997.54	8/9/2006	12.10	11.70	0.40	17.93	985.81	
GMA3-10	997.54	8/16/2006	12.15	11.81	0.34	17.95	985.71	0.210
GMA3-10	997.54	8/23/2006	12.03	11.81	0.22	17.96	985.71	
GMA3-10	997.54	8/29/2006	12.02	11.81	0.21	17.93	985.72	
GMA3-10	997.54	9/6/2006	12.23	11.84	0.39	17.93	985.67	0.241
GMA3-10	997.54	9/13/2006	12.08	11.90	0.18	17.93	985.63	
GMA3-10	997.54	9/20/2006	12.20	11.90	0.30	17.93	985.62	0.185
GMA3-10	997.54	9/26/2006	12.31	11.88 11.80	0.43	17.88	985.63	0.265
GMA3-10 GMA3-10	997.54 997.54	10/4/2006 10/11/2006	11.94 11.82	11.60	0.14	17.93 17.93	985.73 985.81	
GMA3-10 GMA3-10	997.54	10/16/2006	11.72	11.68	0.10	17.93	985.86	
GMA3-10 GMA3-10			11.72	11.41				
	997.54	10/25/2006			0.09	17.92	986.12	
GMA3-10 GMA3-10	997.54	10/31/2006 11/8/2006	11.39 11.30	11.31 11.20	0.08	17.94	986.22	
GMA3-10 GMA3-10	997.54 997.54	11/15/2006	11.00		0.10	17.91 17.91	986.33 986.55	
GMA3-10 GMA3-10	997.54	11/15/2006	10.98	10.99 10.85	0.01 0.13	17.91	986.55 986.68	
GMA3-10 GMA3-10	997.54	11/27/2006	11.01	10.83	0.13	17.91	986.70	
GMA3-10 GMA3-10	997.54	12/6/2006	11.01	10.83	0.18	17.90	986.70	
GMA3-10 GMA3-10	997.54	12/13/2006	11.45	11.06	0.13	17.90	986.45	0.241
GMA3-10 GMA3-10	997.54	12/13/2006	11.78	11.14	0.64	17.90	986.36	0.241
GMA3-10 GMA3-10	997.54	12/18/2006	11.85	11.14	0.64	17.90	986.26	0.400
GMA3-10 GMA3-11	997.25	7/17/2006	10.49		0.00	17.30	986.76	

Well	Measuring Point Elev.	Date	Depth to Water	Depth to LNAPL	LNAPL Thickness	Total Depth	Corrected Water Elev.	LNAPL Removed
Name	(feet)	Dute	(ft BMP)	(ft BMP)	(feet)	(ft BMP)	(feet)	(Liters)
GMA3-11	997.25	8/29/2006	9.96		0.00	18.30	987.29	
GMA3-11	997.25	9/19/2006	11.15		0.00	18.30	986.10	
GMA3-11	997.25	10/25/2006	10.81		0.00	18.36	986.44	
GMA3-11	997.25	11/27/2006	10.24		0.00	18.30	987.01	
GMA3-11	997.25	12/18/2006	10.60		0.00	18.28	986.65	
GMA3-12	997.84	7/5/2006	11.60	11.35	0.25	21.24	986.47	0.618
GMA3-12	997.84	7/12/2006	11.64	11.50	0.14	21.24	986.33	
GMA3-12	997.84	7/18/2006	11.79	11.60	0.19	21.24	986.23	
GMA3-12	997.84	7/24/2006	11.99	11.73	0.26	21.24	986.09	
GMA3-12	997.84	8/2/2006	12.23	11.90	0.33	21.24	985.92	0.816
GMA3-12	997.84	8/9/2006	12.20	12.09	0.11	21.24	985.74	
GMA3-12	997.84	8/16/2006	12.31	12.15	0.16	21.22	985.68	
GMA3-12	997.84	8/23/2006	12.30	12.18	0.12	21.24	985.65	
GMA3-12	997.84	8/29/2006	12.30	12.12	0.18	21.20	985.71	
GMA3-12	997.84	9/6/2006	12.29	12.15	0.14	21.23	985.68	
GMA3-12	997.84	9/13/2006	12.41	12.28	0.13	21.24	985.55	
GMA3-12	997.84	9/20/2006	12.37	12.20	0.17	21.20	985.63	
GMA3-12	997.84	9/26/2006	12.98	12.64	0.34	21.19	985.18	0.840
GMA3-12	997.84	10/4/2006	12.29	12.15	0.14	21.24	985.68	
GMA3-12	997.84	10/11/2006	12.15	12.05	0.10	21.24	985.78	
GMA3-12	997.84	10/16/2006	12.14	11.95	0.19	21.20	985.88	
GMA3-12	997.84	10/25/2006	11.84	11.70	0.14	21.20	986.13	
GMA3-12	997.84	10/31/2006	11.79	11.62	0.17	21.24	986.21	
GMA3-12	997.84	11/8/2006	11.60	11.50	0.10	21.20	986.33	
GMA3-12	997.84	11/15/2006	11.47	11.30	0.17	21.24	986.53	
GMA3-12	997.84	11/21/2006	11.31	11.15	0.16	21.23	986.68	
GMA3-12	997.84	11/27/2006	11.29	11.15	0.14	21.22	986.68	
GMA3-12	997.84	12/6/2006	11.37	11.25	0.12	21.20	986.58	
GMA3-12	997.84	12/13/2006	11.85	11.40	0.45	21.21	986.41	1.112
GMA3-12	997.84	12/18/2006	11.85	11.51	0.34	21.23	986.31	0.840
GMA3-12	997.84	12/27/2006	11.90	11.58	0.32	21.24	986.24	0.791
GMA3-13	997.73	7/5/2006	11.31	11.20	0.11	17.70	986.52	0.068
GMA3-13	997.73	7/12/2006	11.42	11.30	0.12	17.70	986.42	0.074
GMA3-13	997.73	7/18/2006	11.49	11.40	0.09	17.68	986.32	0.056
GMA3-13	997.73	7/24/2006	11.55		0.00	17.70	986.18	
GMA3-13	997.73	8/2/2006	11.75	11.73	0.02	17.70	986.00	0.019
GMA3-13	997.73	8/9/2006	11.90	11.88	0.02	17.68	985.85	0.012
GMA3-13	997.73	8/16/2006	12.00	11.96	0.04	17.68	985.77	0.024
GMA3-13	997.73	8/23/2006	11.96		0.00	17.62	985.77	
GMA3-13	997.73	8/29/2006	12.02	12.01	0.01	17.64	985.72	0.006
GMA3-13	997.73	9/6/2006	12.03	12.02	0.01	17.60	985.71	0.006
GMA3-13	997.73	9/13/2006	12.10		0.00	17.61	985.63	
GMA3-13	997.73	9/20/2006	12.10		0.00	17.67	985.63	
GMA3-13	997.73	9/26/2006	12.08	12.06	0.02	17.56	985.67	0.012
GMA3-13	997.73	10/4/2006	12.00		0.00	17.58	985.73	
GMA3-13	997.73	10/11/2006	11.90		0.00	17.60	985.83	
GMA3-13	997.73	10/16/2006	11.85	11.84	0.01	17.58	985.89	0.006
GMA3-13	997.73	10/25/2006	11.63		0.00	17.61	986.10	
GMA3-13	997.73	10/31/2006	11.50		0.00	17.55	986.23	
GMA3-13	997.73	11/8/2006	11.40	11.39	0.01	17.56	986.34	0.012
GMA3-13	997.73	11/15/2006	11.23	11.18	0.05	17.58	986.55	0.031
GMA3-13	997.73	11/21/2006	11.14	11.03	0.11	17.58	986.69	0.068
GMA3-13	997.73	11/27/2006	11.10	11.00	0.10	17.60	986.72	
GMA3-13	997.73	12/6/2006	11.20	11.10	0.10	17.58	986.62	0.062
GMA3-13	997.73	12/13/2006	11.48	11.24	0.24	17.58	986.47	0.148

#### NAPL Monitoring Report for Fall 2006 Groundwater Management Area 3 General Electric Company - Pittsfield, Massachusetts

Well	Measuring Point Elev.	Date	Depth to Water	Depth to LNAPL	LNAPL Thickness	Total Depth	Corrected Water Elev.	LNAPL Removed
Name	(feet)	Date	(ft BMP)	(ft BMP)	(feet)	(ft BMP)	(feet)	(Liters)
GMA3-13	997.73	12/18/2006	11.60	11.32	0.28	17.57	986.39	0.173
GMA3-13 GMA3-13	997.73	12/17/2006	11.50	11.40	0.20	17.54	986.32	0.062
GMA3-14	997.42	7/17/2006	10.99		0.00	17.03	986.43	0.002
GMA3-14 GMA3-14	997.42	8/29/2006	10.95		0.00	16.83	986.45	
GMA3-14 GMA3-14	997.42	9/19/2006	11.00		0.00	16.81	986.42	
GMA3-14	997.42	10/25/2006	10.84		0.00	16.81	986.58	
GMA3-14	997.42	11/27/2006	10.50		0.00	16.78	986.92	
GMA3-14	997.42	12/18/2006	10.90		0.00	16.76	986.52	
GMA3-15	996.74	7/17/2006	11.65		0.00	17.03	985.09	
GMA3-15	996.74	10/25/2006	11.17		0.00	17.33	985.57	
OBG-2	992.20	10/26/2006	4.92		0.00	14.83	987.28	
UB-MW-10	995.99	7/17/2006	9.75		0.00	15.02	986.24	
UB-MW-10	995.99	8/29/2006	10.40		0.00	14.95	985.59	
UB-MW-10	995.99	9/19/2006	10.40		0.00	14.90	985.59	
UB-MW-10	995.99	10/25/2006	9.77		0.00	14.91	986.22	
UB-MW-10	995.99	11/27/2006	9.40		0.00	14.85	986.59	
UB-MW-10	995.99	12/18/2006	9.75		0.00	14.82	986.24	
UB-PZ-3	998.15	7/17/2006	12.30	12.02	0.28	13.40	986.11	0.043
UB-PZ-3	998.15	8/8/2006	12.76	12.48	0.28	13.40	985.65	0.173
UB-PZ-3	998.15	8/29/2006	12.80	12.65	0.15	13.42	985.49	0.052
UB-PZ-3	998.15	9/26/2006	13.08	12.82	0.26	13.40	985.31	0.091
UB-PZ-3	998.15	10/25/2006	12.39	12.23	0.16	12.43	985.91	
UB-PZ-3	998.15	11/27/2006	11.85	11.63	0.22	13.42	986.50	0.077
UB-PZ-3	998.15	12/18/2006	12.20	11.98	0.22	13.42	986.15	0.008
MA 3 Surface \			12.20	11.00	0.EE	10.12	000.10	0.000
GMA3-SG-1	988.90	10/25/2006	4.32		0.00		984.58	
GMA3-SG-2	981.61	10/25/2006	1.56		0.00		983.17	
GMA3-SG-3	989.42	10/25/2006	1.90		0.00		991.32	
GMA3-SG-4	989.71	10/25/2006	NM				NA	
MA 4 Monitori					1		101	
GMA4-3	1.003.95	7/11/2006	17.48		0.00	26.26	986.47	
GMA4-3	1,003.95	8/29/2006	18.15		0.00	26.25	985.80	
GMA4-3	1,003.95	9/19/2006	18.30		0.00	26.26	985.65	
GMA4-3	1,003.95	10/26/2006	17.89		0.00	26.28	986.06	
GMA4-3	1,003.95	11/27/2006	17.28		0.00	26.25	986.67	
GMA4-3	1,003.95	12/18/2006	17.55		0.00	26.25	986.40	
RF-14	1,001.59	10/26/2006	9.65		0.00	22.63	991.94	
060B-R	1,002.79	10/26/2006	15.96		0.00	20.78	986.83	

Notes:

1. ft BMP - feet Below Measuring Point.

2. '--- indicates LNAPL or DNAPL was not present in a measurable quantity.

3. NA indicates information not available.

4. NM indicates information not measured.

5. P indicates that LNAPL is present at a thickness that is < 0.01 feet, the corresponding thickness is recorded as such.

6. Survey reference points were established on the GMA 3 staff gauges. The "Depth to Water" value(s) provided in the above table refer to the vertical distance from the surveyed reference point to the water surface.