REPORT

OUTSIDE THE RIVER
Site: GE-(00)00
Break: 2.2
Other: 5787

MCP Phase II/RCRA Facility Investigation Report for Hill 78 Area/USEPA Area 2

Volume I of II

General Electric Company
Pittsfield, Massachusetts

August 1997

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BLASLAND, BOUCK &
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Pittsfield, Massachusetts

August 1997

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

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1. Introduction

1.1 General

This report has been prepared on behalf of the General Electric Company (GE) by Blasland, Bouck & Lee, Inc., (BBL) to meet two sets of requirements applicable to the GE facility in Pittsfield, Massachusetts. First, the report constitutes a Phase II Report on a Comprehensive Site Assessment on the Hill 78 Area. This is required by the Massachusetts Department of Environmental Protection (MDEP), pursuant to the Massachusetts Contingency Plan (MCP) and a Consent Order executed by GE and the MDEP in May 1990 [effective July 1990]. This site is designated by the MDEP as the Hill 78 Area (ID# 1-0714).

Second, this document constitutes a RCRA Facility Investigation (RFI) Report for the area designated as United States Environmental Protection Agency (USEPA) Area 2, pursuant to the requirements of a permit (the "Permit") issued to GE by the USEPA under the corrective-action provisions of the Resource Conservation and Recovery Act (RCRA) as amended by the Hazardous and Solid Waste Amendments of 1984 (HSWA). The Permit was originally issued in February 1991 and was reissued, as modified, effective January 3, 1994. USEPA Area 2 is coextensive with the Hill 78 Area; therefore the site is referred to as "the Hill 78 Area" or "the site" throughout the remainder of this document. The general location of the site is illustrated on Figure 1-1.

The activities conducted by GE in the Hill 78 Area are subject to joint agency review under the Memorandum of Understanding (MOU) that was executed in June 1992 between the MDEP and USEPA (the "Agencies") to provide for coordination in reviewing GE's submittals.

The purpose of this document is to present and evaluate data generated pursuant to the *MCP Phase II Scope of Work and Proposal for RCRA Facility Investigation* [MCP Phase II SOW/RFI Proposal; O'Brien & Gere Engineers (OBG), May 1995, revised February 1996] as conditionally approved by the MDEP and USEPA in a letter to GE dated July 3, 1996. Data previously reported in the *MCP Phase I Report and Current Assessment Summary Hill 78 Area/EPA Area 2, Pittsfield, Massachusetts* (Phase I Report/CAS; OBG, May 1995) have been incorporated as appropriate, into these evaluations. That document, in its entirety, is incorporated by reference herein.

A *Phase I Limited Site Investigation/Current Assessment Summary Hill 78 Area (*Geraghty and Miller, 1991) and subsequent addendum [Blasland &Bouck Engineers, P.C. (Blasland & Bouck), 1992] were previously submitted

to the MDEP to satisfy the requirements of Phase I of the MCP process. Those documents constituted a Current Assessment Summary (CAS) under the USEPA permit and were updated, revised, and submitted as the Phase I Report/CAS (OBG, May 1995).

1.2 Background Information

The Hill 78 Area is an irregularly shaped, approximately 85-acre parcel of land centrally located within the GE facility in Pittsfield, Massachusetts (Figures 1-1 and 1-2). This site is bounded by Merrill Road to the south and southeast, New York Avenue to the southwest, Tyler Street extension to the northwest, and the fence on the side of Building OP-2 to the east. This site includes the following: a RCRA Part B - permitted hazardous waste storage facility (Building 78), a former general warehouse and Toxic Substance Control Act (TSCA) PCB drum storage facility (Building 71), parking areas, a cogeneration facility owned and operated by the Pittsfield Generating Company (PGC), and a former landfill area (former Hill 78 Area landfill) (Figure 1-2). Construction of the PGC Facility, formerly the Altresco Cogeneration Facility, began in 1989, after pre-excavation soil boring programs

were completed. This facility consists of four main buildings listed here in decreasing size: the gas turbine generator building, the steam turbine building, the cooling tower structure, and the fuel oil tank building. The PGC facility produces steam, which is piped through aboveground steam lines to provide heat for GE buildings. Electricity is also generated and input into the Massachusetts power grid. Additional buildings located within the Hill 78 Area include: Building 78, a former gas manufacturing plant and current RCRA permitted hazardous waste storage facility; Buildings 73, which is a former transformer test area; Building 14E, which is an electrical substation; and two small guard shacks on the eastern boundary which allow employees to access the OP buildings located to the east within the GE Unkamet Brook Area. Former Building 72 was built in 1967 as a transformer test area, and was demolished in approximately 1988.

The RCRA Corrective Action Permit identifies the former Hill 78 Area landfill and the Building 71 stormwater drain line as the only solid waste management units (SWMUs) within the site. These SWMUs are designated G-5 and T-40, respectively (refer to Figure 1-2), and are discussed in more detail in Section 3.

The former Hill 78 Area landfill was originally developed for the disposal of excavated soils from the construction of buildings OP-1 and OP-2 in the 1940s. The landfill was subsequently used for the disposal of plant demolition debris and other non-hazardous solid materials. Based on interviews with former GE employees, it is possible that in the 1950s and 1960s drums containing fuller's earth, which in turn could have contained polychlorinated biphenyls (PCBs), may have been disposed of in the Hill 78 Area. However, no drums were found during soil boring programs in this area.

Since TSCA became effective in 1977, the only materials placed within the former Hill 78 Area landfill have included excess soil from facility-wide excavations, non-biodegradable demolition material, and snow removed from the facility roadways and parking lots. Only materials containing less than 50 parts per million (ppm) PCBs were considered for placement in the landfill. In 1990, as requested by the MDEP, GE discontinued disposal of all materials in the landfill except snow, and GE subsequently ceased placement of snow at the landfill. Additionally, upon the request of MDEP, GE completed a Short Term Measure (STM) remediation of the landfill in 1991 which included the placement of a cap over the 3.5-acre landfill area. Currently, the landfill is approximately 15 feet in height (relative to surrounding grade), generally flat at the center with steep embankments along its eastern, western, and northern edges. Capping of the landfill included the following:

- placement of a geotextile layer over the relatively flat portion of the landfill. The geotextile specifications included:

  - grab strength = 350 pounds;
  - puncture strength = 150 pounds;
  - burst strength = 600 pounds per square inch;
  - trapezoidal tear strength = 100 pounds; and
  - apparent opening size = 0.149 millimeters.

- placement and compaction (> 90 percent) of crushed stone over geotextile layer (12-inch layer comprised of stone measuring primarily 0.187 to 0.5 inches in diameter); and

- placement and compaction of a 6-inch layer of clean fill on side slopes (1:3 maximum slope) followed by a 6-inch topsoil layer which was hydroseeded.

Across Tyler Street Extension to the north of the Hill 78 Area is the Allendale School Property. The Allendale School Property has been designated by the MDEP as a separate site under the MCP. Accordingly, the Allendale School Property is not addressed as part of this report. The Unkamet Brook Area/USEPA Area 1 site and the East Street Area 1/USEPA Area 3 site are located immediately adjacent to the Hill 78 Area to its east and west, respectively. These sites are also designated as separate sites and are not addressed as part of this report.

1.3 History of Investigations

A number of investigations have been conducted within the Hill 78 Area since 1987. Documented investigations performed since 1988 are listed in Table 1-1 and are summarized below. The results of these investigations are presented in Sections 3 through 8, along with data generated for the more recent MCP Phase II/RFI. Sampling locations are presented on Figure 1-3.

The May 1995 MCP Phase I Report/CAS provides a detailed chronology of investigation activities performed at the site prior to the more recent MCP Phase II/RFI activities, which are summarized here in this section and further detailed in subsequent sections of this document.

As proposed in the MCP Phase II SOW/RFI Proposal (OBG, May 1995; revised February 1996), GE conducted Phase II investigation activities at the site from July 1996 to June 1997. Phase II activities were undertaken to provide additional data needed to characterize the site for the Phase II Comprehensive Site Assessment and the USEPA RFI requirements. These activities were performed in accordance with GE's Sampling and Analysis Plan/Data Collection and Quality Assurance Plan dated May 1994 (SAP/DCAQAP), with subsequent revisions approved by the Agencies.

As part of Phase II/RFI activities, GE completed 24 new soil borings in July and November 1996 and June 1997, including six surrounding the former Hill 78 Area landfill [H78B-18, H78B-20, H78B-24, H78B-25, and H78B-8 (H78B-8R was installed as a replacement well for H78B-8)]; one (H78B-27) south of the former Hill 78 Area landfill and adjacent to existing boring 1S; three adjacent to the Building 71 stormwater drain line (H78B-10, H78B-11, and H78B-12); two in the area surrounding monitoring well NY-1 (H78B-13 and H78B-14); six in the area surrounding monitoring well 78-4 [H78B-15, H78B-16, H78B-17 (H78B-17R was installed as a replacement well for H78B-17), H78B-22, and H78B-29]; four north of the PGC Facility [H78B-18, H78B-19, and H78B-28 (H78B-28R was installed as a replacement for H78B-28)]; two PGC (H78B-20 and H78B-21) in the vicinity of the abandoned 10c pipeline; and, finally, two borings (H78B-30 and H78B-31) adjacent to the Building 73 effluent drainline. Borings were completed to a maximum depth of 30 feet and soil samples collected at 2-foot intervals, field-screened using a photoionization detector (PID), and submitted for PCB analyses. A minimum of one sample from each boring was also selected to be analyzed for Appendix IX + 3 constituents (Appendix IX of 40 CFR Part 264 plus benzidine, 2-chloroethyl vinyl ether, and 1,2-diphenylhydrazine) based on PID readings, soil staining, or location above the water table. Herbicides and pesticides were not included in the analysis. Additionally, 20 surface (0-6 inches)/near-surface (6-inch increments from 6-24 inches) samples were collected from eight locations (H78SS-1 through H78SS-8) and submitted for Appendix IX+3 and/or PCB analyses. GE also conducted a subsurface gas sampling program, analyzing (in the field) every 2-foot interval soil sample from all subsurface soil borings with a PID.

As part of the Phase II/RFI groundwater investigations, GE installed 12 new groundwater monitoring wells. Monitoring wells H78B-8, H78B-11, H78B-12, H78B-15, H78B-18 and H78B-28 were installed as 3/4-inch diameter microwells. Monitoring wells H78B-13, H78B-16, and H78B-17 were installed as 1-inch diameter

microwells and H78B-8R, H78B-17R, and H78B-28R were installed as 4-inch diameter wells replacing H78B-8, H78B-17, and H78B-28. The larger replacement wells were required because of inadequate sample volume in several slowly recharging monitoring wells. In September 1996, groundwater samples were collected from seven new wells (H78B-13, H78B-15, H78B-16, H78B-18, H78B-8R, H78B-17R, and H78B-28R), five existing monitoring wells (NY-1, NY-4, 78-1, 78-4, and 78-7), and two active supply wells (W-5 and W-6), and submitted for Appendix IX + 3 analyses, as well as other select parameters (see Section 5.7.1). In addition, two borings (H78B-14 and H78B-22) were used to obtain one-time discrete groundwater samples for laboratory analysis. Hydraulic conductivity measurements were conducted at 17 monitoring wells (eight new and nine existing). Additionally, water level measurements were obtained in September 1996 and April 1997.

In September 1996 sediment samples were collected from six locations (one sample per location) and submitted for analysis for PCBs and Appendix IX +3 volatile organics (VOCs), semivolatile organics (SVOCs) and inorganics. Sampling locations are illustrated on Figure 1-2 and include two locations (S2 and H78SE-3) within Swales A and B, respectively; one location (H78SE-5) within the swale area south of Merrill Road (combined flow from Swales A and B); one location (H78SE-6) within a sedimentation basin east of the PGC Facility; one location (H78SE-71-SECB) within the manhole adjacent to Building 71 diked oil storage area; and one location (H78SE-7) within a catch basin at the corner of Dalton Avenue and Brighton Avenue (upgradient of the site). A sediment sample was proposed to be collected from Swale C located along the western perimeter of the parking lot used for the PGC Facility (see Figure 1-2); however, that swale is simply a paved channel depression serving to convey runoff from the parking lot and other paved areas, and no sediment was present at the time of sampling.

Also during September 1996 surface water grab samples were collected from five locations (S2-SW, H78SW-3, H78SW-4, H78SW-5, and H78SW-7) and submitted for analysis consistent with the sediment samples. Four of these locations (S2-SW, H78SW-3, H78SW-5, and H78SW-7) were collected from locations co-located with sediment samples (S2, H78SE-3, H78SE-5, and H78SE-7, respectively).

As part of Phase II/RFI activities, GE also investigated an inactive oil pipeline which traversed the northern portion of the site. In December 1996, GE collected soil samples adjacent to the pipeline, excavated the pipeline near its low point, and drained residual materials. GE also completed a preferential pathway analysis of the site in March 1997. In that analysis, GE determined which on-site pipelines provided a potential off-site migration pathway for hazardous constituents and therefore required additional investigation or remedial activities. Results of that analysis were presented in *Assessment of Potential Preferential Pathways Hill 78 Area/USEPA Area 2* (BBL, March 1997), and followup activities are presented in Section 9 of this report.

1.4 Format of Document

This Phase II/RFI Report presents a description of site location and history, an overview of investigations conducted under the Phase II/RFI programs at the site, the results of the recent Phase II/RFI activities completed through March 1997, and a characterization of the presence, extent, and migration of PCBs and other hazardous constituents associated with the site.

The Phase II/RFI Report has been divided into nine sections. Specifically, Section 1 presents pertinent background and site investigation information. Section 2 describes the environmental setting of the site, including an overview of the physical location and extent of the site, associated hydrogeology, climatic conditions, and affected media. Section 3 presents the source characterization information to the extent available. Sections 4 through 8 provide detailed discussion of the affected media and related investigations. Section 9 presents an assessment of the

potential fate, transport, and migration of hazardous constituents at the site. Section 10 describes remaining data needs and, finally, Section 11 discusses a schedule for completing further activities. Appendices A through E, and the various tables and figures included herein provide supporting information referenced in this report.

Additionally, a supplement will be prepared and submitted shortly that contains the laboratory analytical summary data sheets from the 1996-97 investigations and a summary of the data evaluation of those data sets (using the Tier I/Tier II data evaluation process outlined in the SAP/DCAQAP).

2. Environmental Setting

2.1 General

This section summarizes the current physical and environmental characteristics of the Hill 78 Area. Site characteristics described include site location, topography, surface drainage, vegetation, surface water, wetlands and critical habitat, regional and site-specific geology/hydrogeology, land use, climatology/meteorology, and utilities.

2.2 Geographic Location of Site

The Hill 78 Area is centrally located within the GE Pittsfield, Massachusetts facility, and comprises approximately 85 acres. The location of this area is shown on Figure 1-1. The area is bounded by Tyler Street Extension to the north, Merrill Road to the south, New York Avenue to the west, and the fence on the western side of Building OP-2 to the east as-shown on Figure 1-2. The Universal Transverse Mercator (UTM) coordinates for the site are approximately 4,701,500m N, 645,500m E. The site is located at approximately 42° 27'10" N latitude and 72° 13'45" W longitude.

Figure 1-2 illustrates the parcels which immediately border the Hill 78 Area and presents corresponding City of Pittsfield Tax Assessors' property identification numbers. Table 2-1 lists the addresses of these parcels. Several properties located adjacent to the site along Merrill Road will be moved or demolished as part of the relocation of Merrill Road currently scheduled to be performed by the City of Pittsfield in late 1997 or early 1998. Shading has been added to Figure 1-2 to illustrate the affected properties.

As illustrated on Figure 1-1, the Allendale School is the only institution, as defined by the MCP, within a 500-foot radius of the site. The population residing within a one-half mile radius of the site boundary is estimated to be approximately 1,760 individuals. This is based on a review of 1990 aerial photographs of the area that indicate that approximately 700 homes are located within this radius. For purposes of estimating the population within one-half mile of the site, the 1990 Pittsfield average household size of 2.4 persons was used (OBG, May 1995).

2.3 Site Mapping and Photographs

2.3.1 Site Mapping

Figure 1-1 illustrates the general location of the site in the City of Pittsfield. This map was prepared using United States Geological Survey (USGS) 7.5 x 15 minute quadrangle topographic mapping. Figure 1-2 presents a more detailed plan of the site. Figure 1-2 is primarily based on aerial photographs and photogrammetric mapping by Lockwood Mapping, Inc., flown in April 1990. Locations south of Merrill Road were digitized from the April 1990 air photo and are approximate.

2.3.2 Site Photographs

Table 2-2 presents a summary list of available aerial photographs which depict the Hill 78 Area. Representative aerial photographs have been reproduced to illustrate the progression of change related to this site. These photographs are presented on Figure 2-1 and include:

- A photograph taken in 1942 showing the site under initial construction/excavation/fill activities and the OP-1 parking lot;

- A photograph taken in 1969 showing Building 78, Building 73, and testing facilities in the eastern portion of the site; and

- A photograph taken in 1990, which serves to illustrate more recent site conditions.

The 1990 photograph depicts the PGC Facility, the Building 78 RCRA Part-B permitted hazardous waste storage facility, the Building 71 former general warehouse and TSCA PCB drum storage facility, parking lots, and the former Hill 78 Area landfill. Buildings at the site also include an electrical substation (Building 14E), a former transformer test area (Building 73), and one small guard house on the eastern boundary that allows employees access to the OP buildings. These and other site features are also shown on Figure 1-2.

2.4 Topography, Vegetation, and Surface Drainage

As shown on Figure 1-2, the topography of the Hill 78 Area slopes moderately to the south and west towards New York Avenue and Merrill Road. Approximately 32 feet of relief is observed from a high point on Tyler Street Extension (approximate elevation of 1,020 feet) across the center of the site to a low point on Merrill Road (approximate elevation of 988 feet). The highest point of the Hill 78 Area is located at the northeastern corner (elevation 1,032 feet) in the Building OP-1/OP-2 parking lot.

The former Hill 78 Area landfill, which was capped as part of a STM in 1991, is located in the north-central portion of the site and rises approximately 15 feet above the surrounding area. Steep slopes exist on the eastern, western and northern boundaries of the former landfill. A low-lying area between the landfill and Tyler Street Extension had been regraded and seeded as part of the 1991 STM. The gravel roads delineate the approximate southern boundary of the landfill, which is characterized by more gently sloping gradients. A steep sandy slope is located at the southwest corner of the site near the New York Avenue/Merrill Road intersection.

The extent of vegetation at the Hill 78 Area varies depending on the specific area of the site. The Building OP-1/OP-2 and the PGC parking lots (paved) are located in the eastern portion of the site and cover approximately one-quarter of the site (Figure 2-2). The PGC Facility covers a significant portion of the center of the Hill 78 Area. The remainder of the site is covered by grasses, small shrubs, a variety of deciduous trees, and gravel and paved access roads. Various discrete unvegetated unpaved areas are also present (Figure 2-2).

Surface drainage at the Hill 78 Area occurs largely in the form of runoff. Runoff flows primarily from:

- The high point of the site in the northeastern corner west to the center of the site and south toward Merrill Road;

- The western portion of the site toward New York Avenue; and

- The southern portion of the site toward Merrill Road. Catch basins along New York Avenue and Merrill Road collect runoff from the Hill 78 Area.

A City of Pittsfield underground stormwater and sanitary sewer easement runs approximately north-south under the western edge of the landfill from Tyler Street Extension to Merrill Road (Figure 2-3 of Appendix A). This

easement begins south of Allengate Road, runs south through the Allendale School Property, crosses under the Tyler Street Extension, proceeds south through the Hill 78 Area and then underneath Merrill Road and the Conrail tracks.

Within the Hill 78 Area, three main drainage swales collect runoff from the majority of the site. Specifically, a surface water drainage swale, designated Swale "A" on Figure 1-2, runs parallel to, and almost directly above, the underground sewer and drainage easement. This surface water drainage swale originates approximately 220 feet south of the landfill where a 42-inch reinforced concrete pipe (RCP) emerges from the ground. The water emerging from the 42-inch pipe consists of runoff from areas upgradient of the Hill 78 Area. No surface drainage from GE property enters this 42-inch line. Surface water runoff is then directed south in an open-channel swale where it enters a 30-inch RCP which runs underneath Merrill Road. The drainage flow exits the 30-inch RCP on the south side of Merrill Road into another drainage swale. Upon reaching East Street, flow is discharged into a City of Pittsfield stormwater pipeline and is discharged directly into the Housatonic River.

A second drainage swale, designated Swale "B" on Figure 1-2, runs approximately east-west, parallel to Merrill Road. This swale originates southeast of the steam turbine generator building, near the intersection of Merrill Road and the main PGC entrance road. Water that enters this swale originates from an 18-inch RCP and a 12-inch corrugated metal pipe (CMP), which emerge from the ground on the west side of the main PGC entrance. Drainage from the 18-inch RCP flows south for a short distance and combines with the drainage from the 12-inch CMP. The combined drainage then flows west in an apparently man-made swale until it reaches the 30-inch RCP, where flow is conveyed under Merrill Road.

A third drainage swale, Swale "C" is denoted on Figure 1-2. This swale is a channelized depression along the western side of the paved PGC parking lot located in the southeastern portion of the site. This swale conveys runoff approximately north-south on the east side of the main PGC entrance where flow continues south to Merrill Road and enters a catch basin. Water entering the catch basin is conveyed east through a connecting storm drain pipe along Merrill Road. This swale accepts runoff from the PGC entrance road and from the area north and east of the PGC Facility buildings.

2.5 Surface Water/Flooding Potential

There are no natural surface water bodies within the Hill 78 Area other than the swale areas described above. However, a sedimentation basin has been identified on the east side of the PGC cooling tower (Figure 1-2). The basin provides temporary surface water storage during rainfall events. Runoff, which discharges into the basin, originates at a containment dike west of Building 71 and also includes drainage which originated east of Building 71. From the sedimentation basin, flow is conveyed through an 18-inch drainage pipe to a catch basin located immediately south of the PGC cooling tower. From the catch basin, flow is conveyed through a 18-inch CMP, which emerges from the ground at a point south of the cooling tower and discharges into Swale B.

The Hill 78 Area is not located within the floodplain of the Housatonic River, as indicated by the Flood Insurance Rate Map (FIRM), Community-Panel Number 250037 0010 C. The 500-year floodplain, at its closest point to Hill 78 Area, is located 300 feet directly south of the junction of Merrill Road and New York Avenue.

2.6 Wetlands and Critical Habitats

The Massachusetts Wetlands Protection Act identifies specific resource areas as wetlands subject to protection. No resource areas were designated within the Hill 78 Area. The National Wetlands Inventory, performed by the United States Department of the Interior - Office of Biological Services, has not classified any portion of the site as wetlands. The Housatonic River, approximately 400 feet south of the Hill 78 Area, is classed as riverine, lower perennial, open water.

As discussed previously, the Hill 78 Area consists of both paved and vegetated areas. These areas have not been designated as areas of critical environmental concern or protected areas, and there is no evidence that these areas constitute a critical habitat for any species.

2.7 Geologic Characteristics

2.7.1 General Geologic Setting

Pittsfield is situated in the Housatonic River Basin between the Berkshire Hills to the east and the Taconic Range to the west. The Housatonic River, which originates in Pittsfield at the confluence of the East, West, and

Southwest Branches of the Housatonic, flows south through Berkshire County, through Connecticut and discharges into the Long Island Sound north of Bridgeport, Connecticut.

The geology of the site is characterized by crystalline carbonate bedrock of Cambrian-Ordovician age, overlain by Pleistocene glacial deposits, recent alluvial sediments, and man-placed fill. Bedrock in the Pittsfield area consists of an assemblage of north-south trending metamorphic units (mainly gneiss, schist, and marble), from a series of Paleozoic mountain-building episodes that occurred between 520 to 480 million years ago. The main axis of the Housatonic River Valley is underlain by marble, limestone, and dolomite of the Cambrian-Ordovician Stockbridge Group. These rock types are generally less resistant and erode more easily than the schist and phyllite that comprise the Taconic Range and the gneiss and schist that form the Berkshire Highlands.

The bedrock underlying the site is reported to be lower Ordovician age, tan-beige quartzose calcite and dolomite marble (USGS, 1983). Immediately west of the site, the underlying bedrock is described as lower Cambrian, massive to finely laminated steel-gray calcitic dolomite marble containing a prominent zone of white quartz nodules near the top (USGS, 1983).

The unconsolidated surficial geologic deposits in the basin, excluding swamps and alluvium, are of late Pleistocene glacial origin and are classified as either stratified (glaciofluvial and glaciolacustrine) or nonstratified (till) deposits. The glaciers, which moved north to south across the area, covered the underlying bedrock with a variably thick, generally dense basal (lodgement) till. Retreat of the glaciers resulted in the deposition of outwash sediments on top of the till. Known thicknesses of the stratified and till deposits within the Housatonic River valley have been documented at 240 feet and 90 feet, respectively (Norvitch et al., 1968). Till is generally found at or near the ground surface in the upland areas, whereas stratified deposits occur primarily in the lower portions of the valley. More recent alluvial and swamp deposits are found mainly in the valley bottoms.

2.7.2 Site-Specific Geologic Setting

Site-specific geologic information, consisting primarily of subsurface boring logs, were collected during implementation of previous and recent subsurface investigations at the site. These borings, which are depicted on Figure 1-3 with their corresponding dates of installation, were either advanced during previous subsurface investigations (Pre-MCP), or in the Phase I Report/CAS, or during the recent MCP Phase II/RFI Investigation, both summarized in Sections 1.3 and 4.3. All available subsurface geologic logs were evaluated and re-interpreted, as appropriate, to develop a generalized stratigraphy of the Hill 78 Area that is consistent with the geologic framework of the region and adjacent areas of investigation (i.e. East Street Area 1) (Golder, 1996). Figure 2-3 presents the locations of the two cross sections developed to show the generalized stratigraphy of the Hill 78 Area. Figure 2-4 (Cross Section A-A') and Figure 2-5 (Cross Section B-B') depict, respectively, the generalized stratigraphy of the site generally perpendicular to, and parallel with, groundwater elevation contours, as shown on Figure 5-1D. Figure 2-6 depicts the top of till elevation contours for the site. Geologic information from the adjacent East Street Area 1 Investigation (Golder, 1996) also was used to aid in the interpretation of the configuration of the top of till elevation contours in the western portion of the Hill 78 Area. Subsurface boring logs from the recent Phase II/RFI investigation as well as previous investigations are presented in Appendix B.

In general, the subsurface soils encountered at the site consist of the following units from ground surface downward: fill/surficial soils - including topsoil and recent alluvial sediments; glaciofluvial sands; olive-brown till; and brown till. These overburden units unconformably overlie meta-sedimentary bedrock. A general discussion of the site geology is presented below and a detailed description of each unit, including the depth below grade to the top of the unit and approximate range of thickness as encountered at the Hill 78 Area is presented in Table 2-3.

Fill

Although fill material was encountered in numerous borings across the investigation area, the type of fill and the occurrence of fill was classified into three distinct fill units as encountered at four general, but separate areas of the site:

- Fill consisting of brown, fine to coarse sand, gravel, and boulders and general construction and demolition debris (glass, ceramics, brick, wood, cement, slag, plastic asphalt, and metal) was encountered to 27 feet below grade at the former Hill 78 Area landfill;

- Fill consisting of dark gray to black silt and fine sand with cinders, slag wood, metal, and brick was encountered to 14 feet below grade north of the PGC Facility. Similar-looking fill (black silt and fine sand) with cinders, slag, and general construction debris was encountered to approximately 10 feet below grade at the Soil Stockpile Area. A white, semi-cohesive fill material several feet (at least 2.5 feet) in thickness was also encountered in this area at boring H78B-13. Reportedly, this area was a former lime disposal area; and

- General fill consisting of brown silt and sand and metal, brick, and asphalt was encountered in the vicinity of the OP Parking Lot south of PGC.

Glaciofluvial Sand

This unit is described as light brown to brown, fine to coarse, loose, poorly- to well-sorted sand with approximately 10 to 20 percent of fine to medium gravel and up to 20 percent silt. In general, this unit was thickest in the southern

area of the site closer to the center of the Housatonic River valley, became progressively thinner to the north, and was absent in the upland areas of the site as shown in Cross Section B-B' (Figure 2-5).

Till

The olive-brown till unit was generally encountered throughout the site except where the top elevation of the unit was below the completion depth of the borings. The top of the till unit was encountered at 2 feet below grade in the northeastern upland portion of the site and at greater than 30 feet below grade in the north central portion of the site where the former Hill 78 Area landfill was constructed. Based on the relatively low compaction and the amount of silt and fine sand contained in this till unit, the unit is interpreted as an ablation till or melt-out till. The elevation of the top of till depicted on Figure 2-6 decreases from north to south towards the center of the Housatonic River Valley.

The top of the till surface exhibits substantial relief across the site of nearly 70 feet ranging in elevation from approximately 1,033 feet in the northern portion of the site to approximately 965 feet in the southern portion of the site. The top of the till surface is characterized by two prominent mounds separated by a significant north-south trending depression that essentially bisects the site.

A brown to gray-brown till directly overlying the top of bedrock surface is interpreted to underlie the less compact olive-brown till. Direct evidence of the brown to gray-brown till was observed on a limited basis during this investigation as the majority of the borings were too shallow to encounter this unit. However, this layer is identified in the boring log from 78-2 and the logs for the PGC supply wells. The borings advanced during the installation of the PGC supply wells did penetrate this unit; however, the logs do not provide enough detail to discern between the olive-brown till and the brown to gray-brown compact till. The subsurface logs describe both a gray and brown till/hardpan.

Figure 2-4 (Cross Section A-A') depicts the general stratigraphy encountered along the southern boundary of the study area along a line generally parallel to groundwater elevation contours. A relatively thin, but laterally extensive glaciofluvial sand occurs along the entire southern boundary of the site. The partially saturated sands are underlain by the olive-brown till, which appears to act as a confining unit throughout the site. The top surface of the till undulates along the east-west line of section, but drops off markedly beneath the former Soil Stockpile Area at the western side of the site. The drop in the top of till surface at the western end of the site corresponds to a thickening of the sands overlying the till in the western portion of the site. Gray fine sand with natural organic matter and peat deposits were also encountered in this area.

The general stratigraphy encountered along a north-south trending Cross Section B-B' is presented on Figure 2-5. The cross section, which was developed roughly perpendicular to groundwater elevation contours, depicts till-dominated uplands to the north and a thickening wedge of glaciofluvial sand to the south extending towards the Housatonic River Valley. The glaciofluvial sands were restricted to the valley and were not encountered in the uplands. Figure 2-5 also depicts the top of bedrock surface, which dips steeply towards the center of the valley. The elevation of the top of rock in this area of the site ranged from 60 feet below grade at PGC supply well ASW-1 to approximately 90 feet below grade at PGC supply well ASW- 5. The PGC supply well logs are included in Appendix B.

2.8 Hydrogeologic Characteristics

2.8.1 General Hydrogeologic Setting

The stratified and non-stratified overburden deposits are not considered productive aquifers (Norvitch et al., 1968). The carbonate bedrock subcropping beneath the site will only provide sufficient water for domestic and industrial use if the well is completed within a solution cavity or fault zone. Aquifers and water bodies within the Housatonic basin are recharged by precipitation (rainfall/snowfall) events.

The "Water Supply Protection Atlas" at the MDEP does not indicate the presence of mapped aquifers located in the Pittsfield East Quadrangle. The nearest mapped aquifers are within the Hoosick River Basin to the north and the Connecticut River Basin to the southeast (OBG, May 1995).

According to the Pittsfield Department of Public Utilities, the city obtains its industrial and municipal water supply from the following surface water bodies located several miles south and to the east: Sandwash Reservoir, Cleveland Reservoir, Farnham Reservoir, New Sackett Reservoir, Lake Ashley, and the Lower Ashley Intake. In the past, Onota Lake (approximately 3 miles to the north) has been used as an emergency municipal water supply (OBG, May 1995).

2.8.2 Groundwater Utilization

As determined from a review of the MDEP's "Water Supply Protection Atlas," and discussions with GE personnel, public or private water supply wells used for drinking water purposes are not located within a one-half mile radius of the site. PGC, located within the site area, however, has several deep bedrock wells (ASW-1 through ASW-6, also denoted as W-1 through W-6) that were installed from September 1988 to May 1991, as a source of cooling water for the facility.

2.8.3 Site-Specific Hydrogeologic Characteristics

Groundwater elevation data obtained from wells installed at the site indicate that groundwater flow is to the southeast towards the Housatonic River, which is the primary discharge zone in the area. The depth to the water table varied across the site and ranged between 0.9 and 17.8 feet below grade in the lower elevations of the site to 2.44 and 18.93 feet below grade in the upland portions of the site. In areas where significant filling has occurred, such as the former Hill 78 Landfill Area, the depth to the water table was greater than 18 feet below grade as a result of the artificial increase in land surface elevation.

As shown on Cross Section B'-B' (Figure 2-5), which transects the site roughly perpendicular to groundwater elevation contours, the water table in the upland portion of the site occurs within the olive brown till unit, while the water table in areas where glaciofluvial sand are present generally occurs within the middle to lower portion of the sand unit. The till unit, which was encountered throughout the investigation area, is a low permeability unit relative to the overlying fill material and glaciofluvial sands and therefore, appears to act as a confining unit by restricting the vertical movement of groundwater. Based on the hydraulic conductivities of this confining unit, the olive brown till is expected to yield a negligible amount of water to the groundwater flow system. The denser brown/gray-brown till which mantles the top of rock surface is interpreted to further restrict the hydraulic connection to the deeper bedrock aquifers. Further discussion on the permeability of the primary hydrostratigraphic

units encountered at the site, the groundwater flow patterns, and the corresponding groundwater flow rates is discussed in Sections 5.4, 5.5, and 5.6, respectively.

2.9 Past and Present Site Uses

Land at the Hill 78 Area site is zoned as General Industrial (I-G) as indicated on the Pittsfield Zoning Map (Appendix F of the Phase I Report/CAS). Abutting properties to the east and west of the Hill 78 Area are owned by GE and are zoned as General Industrial. South of East Street, land use is zoned as Light Industrial (I-L). Land to the north of the Hill 78 Area is occupied by the Allendale School and single-family homes and is zoned as Residence District R-12 (minimum 12,000-square feet per lot). As noted briefly in Section 2.2, there are currently several residential properties located between the fences on the southern boundary of the site and the railroad tracks, which due to the planned rerouting of Merrill Road in this area, will be either moved or demolished. Shading has been added to Figure 1-2 to highlight these properties. New road construction is to be initiated by the City of Pittsfield in late 1997 or early 1998. Engineering drawings for the project indicate that after completion of the road construction, at least portions and perhaps all of the abandoned road bed will be covered with soil and planted.

The Hill 78 Area was once part of the Allen Farm, a 1,250-acre champion horse breeding and training farm established in 1886. In 1920, several Pittsfield businessmen purchased several hundred acres south of Dalton Avenue under the name of the Pittsfield Industrial Development Company. In that same year, GE purchased the tract of land east of Plastics Avenue. In 1927, GE purchased what is now known as the Hill 78 Area, connecting the main plant with what is presently referred to as the GE Plastics Division. GE began construction of Buildings OP-1 and OP-2 (east of the site) in the 1940s. Soil excavated during the construction of these buildings was placed in the former Hill 78 Area landfill.

The former Hill 78 Area landfill was originally developed for the disposal of excavated soils during construction of Buildings OP-1 and OP-2 in the early 1940s. The former landfill was subsequently utilized by GE as a disposal area for plant demolition and construction debris and other solid wastes.

The PGC Facility comprises approximately one-fourth of the Hill 78 Area. Preliminary construction of the facility began in 1989. As noted in Section 1.2, this facility consists of four main buildings:

- The gas turbine generator building;
- The steam turbine generator building;
- The cooling tower structure; and
- The fuel oil tank building.

As also noted in Section 1.2, the cogeneration facility produces steam, which is then piped through aboveground steam lines to provide heat for GE facility buildings. Electricity is also generated and input into the Massachusetts power grid. Six productions wells have been installed from 100 to 600 feet below grade at the site to provide cooling water for the cogeneration facility; two of these wells have since been abandoned.

Prior to being used for hazardous waste storage, Building 78 was a gas manufacturing plant which produced industrial gas products (oxygen, hydrogen, and nitrogen) used at the GE facility. These gases were transported

through underground pipelines to various buildings within the GE facility. In October 1983, GE received approval for construction of aboveground gas storage tanks. In early 1984, industrial gases were delivered to the storage tanks, and gas production ceased in Building 78.

Building 71 was constructed in 1953 for use as a general warehouse. In 1979, the structure was renovated to meet TSCA regulations for storage of drums containing PCB-contaminated materials. Building 72, which was built in 1967 and demolished in approximately 1988, was a former lightning arrester test site area. Lightning strikes were the primary tests performed in this building, which was located on the site of the present steam turbine generator building. The location of Building 72 and the former arrester test site area is shown on an aerial photograph of the Hill 78 Area taken in 1969 (Figure 2-1).

Other small buildings on the property include an electrical substation (Buildings 14E), a former transformer test area (Building 73), and one small guard house on the eastern boundary that is used to monitor employees access to the OP buildings.

Approximately one-fourth of the Hill 78 Area is used for parking for the Ordnance Manufacturing Operations in the OP buildings. With the exception of the OP and PGC parking lot entrances, the Hill 78 Area is surrounded by a perimeter fence and is restricted to GE and PGC personnel and their contractors. Although the parking lots do not have locked gate entrances, they are monitored by plant security and camera surveillance.

2.10 Climatological and Meteorological Information

The climate in the area is characterized as humid with a mean annual temperature of approximately 46 degrees Fahrenheit (°F). Record temperatures recorded at the Pittsfield airport are a high of 95°F and a low of -25°F. The average precipitation varies from a low of 2.5 inches during the winter months, to a high of about 5 inches in the summer months. Historically, the frost-free period is from late May until late September, with the growing season lasting from 120 to 140 days.

Prevailing winds are from the west. This fact is supported by wind directional data collected from 1992 to 1994 as part of a facility air monitoring program. These data, illustrated on Figure 2-7, were collected at a meteorological station located at GE East Street Area 2/USEPA Area 4 site, which is located approximately 1/4-mile west of the site.

2.11 Utility Locations

As depicted in the utility mapping contained in Appendix A, utilities servicing the Hill 78 Area include potable water, sanitary, stormwater drainage, and electric. As discussed in Section 2.4 above, a stormwater and sanitary sewer easement runs north-south through the Hill 78 Area underneath the landfill.

Inactive underground hydrogen, oxygen, and nitrogen gas pipelines buried at depths of approximately 2 feet below grade run through the Hill 78 Area. Abandoned 10c transformer oil pipelines are located in the same trench parallel to these gas lines. Transformer oil was stored in tanks located in Building 12F (GE East Street Area 1). The oil was transported in underground pipelines across the northern portion of Hill 78 Area to Building 51 at Plastics Avenue (east of the Hill 78 Area) as well as to western portions of the GE facility.

In the Hill 78 Area, the 10c oil pipelines traversed the northern portion of the site, parallel to and east of Tyler Street Extension to Building 51. In approximately 1964, a new oil storage tank facility was constructed in East Street Area 1. Use of the pipelines was discontinued, and oil was transferred via tankered containers from the new facility to Building 51. In 1989, as part of the PGC Steam Line distribution system installation, the former oil distribution lines were severed at New York Avenue, drained, and sampled. Collected oil was transported for incineration at GE's TSCA-permitted Thermal Oxidizer. Additional oil collected from the eastern end of the pipeline at Building 51 was collected and transported to GE's Thermal Oxidizer for incineration.

In December 1996 and January 1997, these oil pipelines were investigated further at the Hill 78 site. As part of these efforts, GE excavated soil near the pipeline low point (approximately midway between New York Avenue and the OP parking lots), exposed the three oil pipelines, and cut into the pipelines to determine whether residual material remained. A vactor truck was utilized to remove liquids from each of the three pipelines at this low point. In total, approximately 400 gallons of liquid were removed from the three pipelines. The northern 4-inch line was found to contain oil, the southern 4-inch line contained an emulsified liquid, and the 2-inch line appeared to contain water. Samples collected from the pipelines contained PCBs at levels of 716 ppm, 667 ppm, and 112 ppm. Three soil samples collected from the excavated material were found to contain PCBs at concentrations below 1 ppm. Additionally, four soil grab samples were collected from the side walls (two samples) and base (two samples) of the excavation pit and analyzed for PCBs. PCB concentration of the sidewall soil was indicated to be 1.2 ppm, while that of the base soil was indicated to be 1.5 ppm.

3. Source Identification

3.1 General

The Hill 78 Area was designated by the MDEP as a "confirmed disposal site" under the MCP. This designation was based upon previous disposal practices (including disposal of hazardous materials) at the former Hill 78 Area landfill. As discussed in Sections 1.1 and 1.3, GE was required by the MDEP to complete Phase I and Phase II investigations under the MCP. Additionally, the USEPA issued a Corrective Action Permit to GE which identified two Solid Waste Management Units (SWMUs) within the Hill 78 Area. The former Hill 78 Area landfill - gas plant site was designated as SWMU G-5 and the Building 71 stormwater drain line designated as SWMU T-40. The USEPA also required GE to investigate underground pipelines and utilities within the Hill 78 Area as potential preferential pathways for the off-site migration of hazardous constituents. No additional SWMUs related to the Hill 78 Area were identified during the performance of the Phase II/RFI activities; however, the Assessment of Potential Preferential Pathways Report (BBL, 1997) identified a 3-inch diameter discharge line from Building 73 as a potential concern for migration of hazardous constituents. Section 3.2, below discusses the history of disposal practices associated with these facilities, while Section 3.3 discusses the presence of non-aqueous phase liquids (NAPLs).

Site-specific data have indicated the presence of PCBs and, to much less extent, other hazardous constituents in soils, groundwater, sediment, and surface water within the Hill 78 Area. A detailed summary of analytical data from recent investigations is provided in Sections 4 through 7. Section 8 provides a discussion of air monitoring activities performed to assess ambient air PCB concentrations associated with the site, and Section 9 provides a discussion of the fate and transport characteristics of PCBs found at the Hill 78 Area and potential off-site migration pathways.

3.2 History of Disposal Practices

3.2.1 Description of SWMUs

Former Hill 78 Area Landfill - SWMU G-5

In the early 1940s, the former Hill 78 Area landfill was created as a disposal area for excavated soils generated during the construction of Buildings OP-1 and OP-2. GE utilized the former Hill 78 Area landfill at different periods up to 1990 for the disposal of additional building demolition and construction debris and other solid wastes. Gravel, wood, metals, brick, glass, asphalt, paper, and ceramic materials have been identified in the landfill during recent soil boring programs. The former landfill presently covers approximately 3.5 acres.

In the RCRA Facility Assessment issued for the site, the USEPA indicated that based on information from former employees, drums of fuller's earth with adsorbed PCBs may have been disposed in the former Hill 78 Area landfill in the 1950s and 1960s. However, the boring programs completed as part of Phase I and Phase II investigations did not indicate the presence of drummed materials in the former Hill 78 Area landfill.

In response to TSCA regulations, from 1977 through 1990, GE restricted disposal at the former Hill 78 Area landfill to soils and construction debris having PCB concentrations of 50 ppm or less. In 1987, soil boring programs at the site confirmed the presence of PCBs in the former Hill 78 Area landfill. In 1990, GE discontinued the disposal of all materials at the former Hill 78 Area landfill, except for removal snow. Subsequently, GE also ceased placement of snow at the landfill. As described previously in Section 1.2, GE completed a STM under the MCP in 1991,

which included the capping of the landfill with a geotextile and 1-foot crushed stone layer on top of the landfill, and a fill/topsoil layer on the side slopes.

Additionally, GE also used the former landfill area as a disposal area for facility snow removal until 1995.

Building 71 Stormwater Drain Line - SWMU T-40

Building 71 was constructed in 1953 and originally used as a general storage building. In 1979, Building 71 was refurbished to meet TSCA regulations for the storage of drummed materials containing PCBs. This reconstruction included installation of a concrete floor, sealing of the floor, and creation of berms outside the building.

Also in 1979, GE installed a 26,000-gallon aboveground tank in a diked area adjacent to Building 71. This tank was used for the storage of oil containing PCBs collected from tankers and drums. A sump within the diked area was used to collect stormwater. Stormwater within the sump was sampled and analyzed for PCBs prior to discharge into the stormwater drainage system. Only after the analytical results were known was the sump drained into a stormwater catch basin. A locked manual valve was used to control drainage of the sump. In approximately 1983,

GE removed the oil tank and cleaned the diked area. This eliminated any potential stormwater contamination. Currently, any rainwater that gets into the diked area discharges through the sites stormwater drainage system.

3.2.2 Other Potential Sources

Lime Disposal Area

Based on aerial photography and historical site information, the southwest corner of the Hill 78 Area adjacent to the New York Avenue/Merrill Road Intersection was reportedly a former lime disposal area. The source of the lime has not been documented, but is believed to have been a byproduct from acetylene gas manufacturing.

Building 73

As indicated above in Section 3.1, the Assessment of Potential Preferential Pathways Report (BBL, 1997) identified a 3-inch diameter discharge line from Building 73 as a potential concern for the migration of hazardous constituents. Building 73 was designed and constructed in 1979/1980 as a transformer test facility. This facility was operated regularly through 1988. From 1988 through 1993 and 1994, it was only utilized on a few occasions. The 3-inch discharge line identified in the Assessment of Potential Preferential Pathways Report carried rainwater which fell onto a concrete equipment storage pad outside of Building 73. This rainwater, which could pick up oil from the concrete pad, was first processed through an oil/water separator before discharging to this pipeline. Construction drawings associated with the Building 73 testing equipment are provided in Appendix C.

In a letter to GE dated June 13, 1997, the Agencies required GE to advance two soil borings proximate to the Building 73 effluent drain line to further assess potential releases during operation. Those borings were advanced on June 25, 1997. The results of those activities are discussed in Section 4.

3.3 Presence of NAPL

As part of MCP Phase II/RFI activities, all available boring logs for the site were compiled (included in Appendix B) and reviewed for the presence of NAPL. Upon review of these borings logs, it was noted that soil samples from several locations (two historical borings and three 1996/1997 borings), exhibited the presence of sheens; and yellowish NAPL was found at one location (boring H78B-8R). However, all instances appear to be localized and/or occur over a narrow range of depth increments. Further, all locations with indications of NAPL in the soil borings were either converted to a monitoring well, or have a nearby well which have not detected any free product.

Specifically, yellowish NAPL was detected over the relatively narrow depth range of 27 to 27.5 feet below grade in soil boring H78B-8R south of the landfill area. This boring was advanced to facilitate the installation of a monitoring well proximate to monitoring well H78B-8 which did not produce enough groundwater volume for sampling and to further define the vertical extent of PCBs detected at the bottom of the boring for monitoring well H78B-8. Subsequent monitoring of both of these wells has not detected any evidence of NAPL (either light floating or dense sinking types).

A sheen was noted over the relatively narrow depth range of 6 to 7 feet below grade in boring H78B-11 near Building 71. However, no sheens were detected at nearby borings H78B-10 and H78B-12. Further, subsequent monitoring of the well installed at borings H78B-11 and H78B-12 has not detected NAPL at this location.

A sheen was noted over the relatively narrow depth range of 13.3 to 14 feet below grade in boring H78B-18 northeast of the landfill area. However, subsequent monitoring of the well installed at this location has not detected NAPL.

Finally, sheens were detected in borings 72-1 (4 to 20 feet below grade), 72-4 (12 to 20 feet below grade), and H78B-28 (6 to 8 feet below grade) east of the landfill area. Two monitoring wells (H78B-28 and H78B-28R) were installed at boring H78B-28 which is immediately adjacent to boring 72-4 and approximately 100 feet east of boring 72-1. Subsequent monitoring of these wells has not detected NAPL.

4. Soils/Fill Material Characterization

4.1 General

As discussed in Section 1.3, GE has performed a multi-phased and sequential study of the Hill 78 Area site since 1987 to investigate the presence and extent of PCBs and other constituents in the soils of the site.

The following sections provide a brief summary of the soil investigations conducted at the site. Section 4.2 presents surficial soil investigations, Section 4.3 presents subsurface soil investigations, and Section 4.4 presents miscellaneous soil investigations. These sections present a brief history of related investigations, as well as a summary of associated analytical data. The vertical and horizontal extent of impacted soils/fill are discussed in Section 4.5. Finally, updated volume estimates of PCB-containing soils/fill are presented in Section 4.6.

4.2 Surficial Soils Investigations

This section presents the historical and more recent MCP Phase II/RFI surficial soil sampling activities at Hill 78 Area and the analytical data associated with these activities. A brief summary of the historical surface soil sampling activities are presented below followed by a discussion of the MCP Phase II/RFI surface soil sampling activities. Finally, a summary of all surface soil analytical data according to constituent type is given. This section discusses primarily only data collected from to 0- to 6-inch depth increment, with the only exception being 6-inch depth increment samples collected from 0 to 2 feet below the ground surface at four locations (H78SS-1 through H78SS-4) as part of the recent MCP Phase II/RFI activities.

4.2.1 Description of Surficial Soil Investigations

A surficial soil investigation was conducted on August 23, 1991, at the Hill 78 Area west of the PGC Area along the southern portion of the former Hill 78 Area landfill. Surficial soil samples were collected at 10 locations (C-1 through C-10), at a depth of 0 to 6 inches below the ground surface. The samples were submitted to OBG Laboratories, Inc. for PCB analysis and the analytical results are summarized in Section 4.2.2.

On August 20, 1996, the MCP Phase II /RFI surficial soil investigation was completed at the Hill 78 Area. As part of this investigation, a total of eight surficial soil samples and 12 shallow subsurface soil samples were collected as shown on Figure 1-3. Specifically, four 0- to 6-inch surficial samples were collected at locations H78SS-1 through H78SS-4, within the Hill 78 Area, and four surficial samples (0- to 6-inches) and 12 shallow subsurface samples (at 6-inch increments to a total depth of 2 feet) were collected at locations H78SS-5 through H78SS-8 within a vacant lot at the PGC Facility. The four surficial soil samples collected within the Hill 78 Area were analyzed for PCBs and Appendix IX + 3 constituents (excluding pesticides and herbicides). The four surficial and 12 shallow subsurface samples collected within a vacant lot at the PGC facility were analyzed for PCBs. Table 4-2 presents descriptions of the surficial soils encountered and the analysis requested. The analytical results are summarized below in Section 4.2.2.

All samples were field screened for VOCs using a PID. PID readings are provided in Table 4-1F. In all cases, PID readings were below 10 units.

In addition to the surficial soil samples obtained for the MCP Phase II/RFI surficial soil investigation discussed above, soil samples were collected from 0 to 0.5 feet below grade at 23 MCP Phase II/RFI soil boring locations between July and November 1996 and during June 1997 and analyzed for PCBs. Table 4-3 identifies the 23 boring

locations where surface soil samples were collected from 0 to 0.5 feet below grade and indicates the chemical analyses performed. Lithologic descriptions of the samples are provided on the associated boring logs included in Appendix C. The 0- to 0.5-foot soil sample from boring H78B-12 was also analyzed for Appendix IX + 3 parameters (excluding pesticides and herbicides) and the 0- to 0.5-foot soil sample from borings H78B-18 and H78B-28 were analyzed for VOCs. The analytical results are summarized below in Section 4.2.2.

All samples were field screened for VOCs using a PID; PID readings are provided in Table 4-1G. Field PID readings generally ranged from 0 to 26 PID units, with only three samples for which PID readings were above 10 units.

4.2.2 Surficial Soil Analytical Results

Analytical results of the soil samples collected during the above mentioned investigations are presented below for each constituent type. Data qualified by the analytical laboratory as estimated values are not included in this discussion; however, these data are presented in Tables 4-4A, 4-4L, 4-4Q, 4-4S, 4-4T, and 4-4U, and were included in the calculated total concentrations for each constituent type as shown on Figures 4-1A through 4-1C.

PCBs

PCB concentrations in surficial soils samples collected at C-1 through C-10 from 0 to 6 inches below the ground surface were generally low with all results less than 10 ppm. PCBs were not detected in four samples, and only four samples were greater than 2 ppm. Chemical analysis of the PCBs indicated a composition made up entirely of Aroclor 1260. Analytical detections of PCBs in the surficial soil samples are summarized below and are presented in Table 4-4A.

Location	PCB Concentration
C-1	2.4 ppm
C-2	9.7 ppm
C-6	3.8 ppm
C-7	2.6 ppm
C-9	1.1 ppm
C-10	1.3 ppm

Analytical results for the eight surficial soil samples and 12 shallow subsurface soil samples collected during the recent MCP Phase II/RFI surficial soil investigation in July and August 1996 and the 23 surface soil samples collected at the MCP Phase II/RFI soil boring investigation (July - November 1996 and June 1997) indicate Aroclor 1260 was detected in 28 locations including:

- H78SS-1 (0-0.5)
- H78SS-2 (0-0.5)
- H78SS-3 (0-0.5)
- H78SS-4 (0-0.5)
- H78SS-5 (0-0.5, 0.5-1, 1-1.5, 1.5-2)
- H78SS-6 (0-0.5, 1.5-2)
- H78SS-7 (0-0.5, 0.5-1, 1-1.5, 1.5-2)
- H78SS-8 (0-0.5, 0.5-1, 1-1.5, 1.5-2)
- H78B-8 (0-0.5)
- H78B-10 (0-0.5)
- H78B-11 (0-0.5)
- H78B-12 (0-0.5)
- H78B-13 (0-0.5)
- H78B-14 (0-0.5)
- H78B-15 (0-0.5)
- H78B-16 (0-0.5)
- H78B-17 (0-0.5)
- H78B-18 (0-0.5)
- H78B-19 (0-0.5)
- H78B-20 (0-0.5)
- H78B-21 (0-0.5)
- H78B-22 (0-0.5)
- H78B-24 (0-0.5)
- H78B-25 (0-0.5)
- H78B-28 (0-0.5)
- H78B-29 (0-0.5)
- H78B-30 (0-0.5)
- H78B-31 (0-0.5)

Aroclor 1254 was also detected in soil sample H78B-27. Total PCB concentrations detected in the surficial soil samples from the 0- to 0.5-foot interval ranged from 0.14 ppm (H78SS-6) to 190 ppm (H78B-30), and the overall arithmetic mean detected PCB concentration is calculated to be 11.3 ppm. Excluding the outlying result of 190 ppm at H78B-30, the arithmetic mean detected PCB concentration is calculated to be 4.6 ppm. Ranges of total PCB concentrations detected in the shallow soil samples obtained from locations H78SS-5 through H78SS-8 are as follows:

- (0.5 to 1.0 foot) - 0.37 to 1.1 ppm;
- (1.0 to 1.5 feet) - 0.043 to 0.49 ppm; and
- (1.5 to 2.0 feet) - 0.03 to 0.072 ppm.

Analytical results are presented in Tables 4-4A and 4-4L and total PCB concentrations are presented on Figure 4-1A.

VOCs

Analytical results for the seven samples collected (H78SS-1, H78SS-2, H78SS-3, H78SS-4, H78B-12, H78B-18, and H78B-28) indicate the presence of volatile organics; however, all detected constituents were present in the associated method blanks and many were also detected at estimated values less than the associated quantitation limits. VOC concentrations in the method blanks will be evaluated as part of the Tier I and II data evaluations.

Total VOC concentrations of surficial soil samples ranged from 0.023 ppm (H78SS-1) in the western corner of the Hill 78 Area to 0.073 ppm (H78SS-3), in the area north of the PGC Facility. Analytical results are presented in Table 4-4Q and total VOC concentrations are presented in on Figure 4-1B.

SVOCs

Surficial soil samples H78B-12, H78SS-1, H78SS-2, H78SS-3, and H78SS-4 were analyzed for SVOCs. No SVOCs were detected in sample H78SS-2, located along the southern boundary of the former Hill 78 Area landfill. Only low levels of SVOCs were detected at the other locations; specifically, analytical results indicate the presence at these locations of bis(2-ethylhexyl)phthalate and 12 polycyclic aromatic hydrocarbons (PAHs) including acenaphthylene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(g,h,i)perylene, benzo(k)

fluoranthene, chrysene, fluoranthene, indeno(1,2,3-cd)pyrene, phenanthrene, and pyrene, all at estimated concentrations less than the associated quantitation limits.

The highest total SVOC concentrations in the surficial soils were found in sample H78SS-4 (4.956 ppm), west of the PGC parking lot. As well, slightly elevated total SVOC concentrations were also detected west of the former Hill 78 landfill in sample H78SS-1 (3.137 ppm). Analytical results are presented in Table 4-4S and are shown on Figure 4-1B.

PCDDs/PCDFs

Surficial samples at locations H78SS-1 through H78SS-4 and H78B-12 were analyzed for PCDDs and PCDFs. Locations H78SS-1 and H78SS-4 showed the presence of a similar array of these constituents at similar concentrations. PCDDs/PCDFs detected at these two locations include all homolog groupings, with the exception of pentachlordibenzo-p-dioxin (PeCDD); and associated concentrations generally ranged up to 0.00056 ppm (heptachlorodibenzo-p-dioxin at H78SS-1). Locations H78SS-2 and H78SS-3 showed the presence of only limited PCDDs and PCDFs.

The surficial soil sample at location H78B-12 exhibited the presence of all the associated PCDF homolog groupings at concentrations up to 0.00011 ppm (pentachlorodibenzofuran) and two PCDD homolog groupings, namely tetrachlorodibenzofuran (0.0000012 ppm) and octachlorodibenzofuran (0.000021 ppm). These data are presented in Table 4-4T and total PCDDs/PCDFs are shown on Figure 4-1B.

RCRA Metals

Although various Appendix IX + 3 inorganic constituents were detected at varying concentrations, the eight metals governed by RCRA (RCRA metals) have been selected for discussion.

Surficial soil samples at locations H78B-12 in the Building 71 Area (SWMU T-40), and H78SS-1 through H78SS-4 were analyzed for Appendix IX + 3 inorganics. Analytical results for the RCRA metals (arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver) are presented in this section. These data are presented in Table 4-4U and are presented on Figure 4-1C.

Arsenic, barium, chromium, and lead were detected in all of the surficial soil samples. Cadmium was detected at surface soil sample locations H78SS-1 through H78SS-3. Ranges of detected concentrations are provided in the summary table below. Selenium was detected at an estimated value less than the laboratory reporting limit and mercury and silver were not detected above the associated instrument detection limits.

Summary

In summary, the constituents detected in surficial soil samples at the Hill 78 Area and the range of detected concentrations include:

Constituent	No. Of Samples	Range of Detected Concentrations (ppm)	Detected Arithmetic Mean
Total PCBs			
(0 - 0.5)	37	0.14 to 190	11.3
(0.5 - 1.0)	4	0.37 to 1.1	0.47
(1.0 - 1.5)	4	0.043 to 0.49	0.077
(1.5 - 2.0)	4	0.03 to 0.072	0.054
Total VOCs	6	0.023 to 0.073 (avg. of dup.)	0.0501
Total SVOCs	5	0.277 to 4.956	2.4
Total PCDFs	5	0.0000374 to 0.00141	0.000522
Total PCDDs	5	0.0000222 to 0.00295	0.000739
Metals			
Arsenic	5	2.8 to 6.9	4.4
Barium	5	29 to 80.3	53.2
Cadmium	5	0.66 to 1.2	0.79
Chromium	5	9.0 to 15.4	10.1
Lead	5	8.7 (avg. of dup.) to 58.4	33.6

Note:

Refer to Tables 4-4A, 4-4L, 4-4Q, 4-4S, 4-4T, and 4-4U for individual data sets and associated notes and qualifications.

4.3 Subsurface Soil Investigation

Numerous subsurface soil investigations have been performed over the past decade at the Hill 78 Area to define the presence and extent of PCBs and other constituents. These investigations are collectively documented in Section 4 of the Phase I Report/CAS and Section 1.3 of this report. For the purpose of discussing these characterization efforts in this section, the site has been divided into several geographic areas. These areas include the following:

- Hill 78 Landfill Area;
- PGC Facility Area;
- PGC Facility Parking Lot;
- PGC Steamline Area;
- Eastern Area;

- Western and Southern Areas; and
- East Street Area 1/USEPA Area 3.

Discussions of these areas are presented below in Sections 4.3.1 through 4.3.7, respectively. These areas are illustrated on Figures 4-1A, 4-1B, and 4-1C, along with a summary of available soil analytical data. Figure 4-1A summarizes available PCB data; Figure 4-1B summarizes available VOC, SVOC, and PCDD/PCDF data; and Figure 4-1C summarizes available metals data. Additionally, the associated analytical data are summarized in various tables referenced throughout the following subsections. Tables not necessarily mentioned in this section which provide relevant information in support of the discussions provided herein include: Tables 4-1A through 4-1G which provide available PID data; Table 4-3 which presents an analysis summary for the MCP Phase II/RFI soil borings; and Tables 4-5 and 4-6 which summarize MCP Phase II/RFI soil boring/monitoring well installation data.

It is important to note that only select data for the East Street Area 1/USEPA Area 3 Site are discussed in this document, since that area is covered as a separate site under its own related documentation. However, per the Agencies' July 3, 1996 letter to GE, soil data for borings RF-13, ES1-6, ES1-15, and ES1-20 are presented herein as these data are relevant for evaluating conditions associated with location NY-1 located in the corner of the Hill 78 Area near the intersection of Merrill Road and New York Avenue. As such, the subsurface soil data for these borings are summarized below in Section 4.3.7 and on Figures 4-1A, 4-1B, and 4-1C.

4.3.1 Hill 78 Landfill Area

In April 1987, 16 soil borings (B-1 through B-16) were completed up to a 20-foot depth in the Hill 78 landfill. A total of 152 subsurface soil samples were collected from these borings and analyzed for PCBs; the results of these analyses are presented Table 4-4B.

As part of the MCP Phase I investigations performed between January and May 1991, two additional borings (78-6 and 78-7) were completed in this area up to depths of 20 feet and 28 feet, respectively. A total of 23 subsurface soil samples were collected from these borings and analyzed for PCBs, and one of these samples (78-6, 10-12 ft.) was analyzed for VOCs and SVOCs. The results of these analyses are presented in Tables 4-4I, 4-4O, and 4-4R.

During the more recent MCP Phase II/RFI activities, a total of eight soil borings (H78B-8/8R, H78B-18 through -21, H78B-24, and H78B-25) were completed within the Hill 78 landfill area up to a 30-foot depth. A total of 60 subsurface soil samples were collected from these borings and analyzed for PCBs. One sample from each of these borings was also analyzed for Appendix IX+3 constituents. One additional sample from boring H78B-8/8R (26-28 ft.) was analyzed for VOCs based on its PID reading. Although all of these borings provide information as to the presence and extent of constituents proximate to the landfill, borings H78B-20 and H78B-21 were completed to evaluate subsurface soil conditions proximate to the former 10C oil pipeline. Boring H78B-20 was located immediately adjacent to the low point of the pipeline near the intersection of the City of Pittsfield utilities and the 10C pipeline, while boring H78B-21 was located adjacent to the pipeline approximately 500 feet east of boring H78B-20. The subsurface soil analytical data for the eight MCP Phase II/RFI borings completed in this area are presented in Tables 4-4L, 4-4Q, 4-4S, 4-4T, and 4-4U. See also Figures 4-1A through 4-1C.

An overview of the analytical data for the Hill 78 landfill area is presented below.

PCBs

PCB concentrations were detected in shallow subsurface soils (0.5 to 6 feet below grade) of the Hill 78 landfill area up to 780 ppm at boring 78-7, located outside and southwest of the limits of the former landfill. (PCB concentrations decreased significantly with depth at this location.) Within the limits of the former landfill, the highest concentration in shallow soils was 361 ppm at boring B-5 (2 to 4 feet). (PCB concentrations at B-5 also decreased with depth to non-detect at a depth of 10 feet.)

In the deeper subsurface soils (greater than 6 feet below grade), the highest PCB concentration was detected at boring B-12 (12 - 14 ft.) at a concentration of 47,385 ppm. Otherwise, PCB concentrations detected in soils at existing borings ranged from non-detect to 1,159 ppm (at B-12, 16-18 ft.). Outside the limits of the former landfill, the highest concentration was 348 ppm at boring 78-7 (8 - 10 ft.). PCB concentrations detected at borings H78B-20 and H78B-21 located proximate to the former 10C oil pipeline were generally low (up to only 1.4 ppm) indicating no significant impact from the pipeline.

Other Non-PCB Hazardous Constituents

Only limited non-PCB constituents were detected in this area, with the majority of those constituents detected being quantitated as estimated values. Total VOC and SVOC concentrations detected at boring 78-6 (10-12 ft.) were calculated to be 0.069 and 0.12 ppm, respectively, while those of the more recent MCP Phase II/RFI borings ranged for VOCs from 0.031 ppm (H78B-24, 4-6 ft.) to 0.129 ppm (H78B-20, 8-10 ft.), and for SVOCs from non-detect (H78B-25, 10-12 ft.) to 11.6 ppm (H78B-19, 4-6 ft.). PCDDs and/or PCDFs were only detected at borings H78B-19 (4-6 ft.) (0.0000632 ppm PCDDs and 0.000856 ppm PCDFs) and H78B-21 (4-6 ft.) (0.000027 ppm PCDFs only). RCRA metals detected in this area include arsenic, barium, chromium, and lead at varying concentrations, and mercury in only one sample (H78B-19, 4-6 ft. - 0.14 ppm).

4.3.2 PGC Facility Area (formerly referred to as the Altresco Facility)

In the PGC area, a total of 41 soil borings (72-1 through -32 and 72-38 through -44 and B-1 through -4) were completed during three sampling events between July 1987 and March 1989; boring depths ranged up to 20 feet. In the first event performed between April and June 1987, 18 soil borings were completed, and a total of 156 subsurface soil samples were collected and analyzed for PCBs. In the second sampling event performed in August 1988, nine borings were completed to a depth of 8 feet; 14 of the 38 subsurface soil samples collected were analyzed for VOCs based on PID readings. In the third sampling event performed in February and March 1989, 14 soil borings were completed to depths ranging from up to 12 feet; 27 subsurface soil samples were collected and analyzed for PCBs.

VOC results for these analyses are presented in Table 4-4M, while the associated PCB data are presented in Tables 4-4C and 4-4D.

Additionally, during the more recent MCP Phase II/RFI activities, a total of five soil borings (H78B-10 through -12, H78B-15, and H78B-28/28R) were completed within the PGC area up to a 26-foot depth. A total of 28 subsurface soil samples were collected from these borings and analyzed for PCBs. With the exception of boring H78B-12, one subsurface soil sample from each of these borings was also analyzed for Appendix IX+3 constituents.

Although all of these borings provided information as to the presence and extent of constituents associated with the PGC area, three borings (H78B-10, H78B-11, and H78B-12) were completed south of Building 71 to further investigate potential releases from the Building 71 storm water drainline (SWMU T-40). Borings H78B-10 and H78B-11 were completed immediately adjacent to the Building 71 diked oil storage area, while boring H78B-12 was completed downgradient of the diked oil storage area. Based on the Agencies' conditional approval letter and a field inspection of this area performed on July 18, 1996, the locations of these borings were selected to better delineate potential contamination associated with the diked oil storage area. Soil boring H78B-11 was located adjacent to, and downgradient of, a catch basin located at the southeastern corner of the diked oil storage area. Boring H78B-12 was located within approximately 20 to 30 feet downgradient of the diked oil storage area to provide a better assessment of potentially impacted groundwater. H78B-10 was situated adjacent to the northwestern corner of the diked oil storage area where a small crack in the concrete floor was noted during inspection. The total depth of these three borings ranged from 10 to 12 feet below grade. Advancement of the borings to greater depths was limited by the capabilities of the boring method used (direct-push method). The difficulty in advancing the borings resulted from encountering stiff to hard olive-brown till at relatively shallow depths in each boring. The till was encountered at approximately 3 feet below grade at borings H78B-10 and H78B-12, and 6 feet below grade at boring H78B-11. Fill material was not encountered at these borings.

The subsurface soil analytical data for the five Phase II/RFI borings completed in this area are presented in Tables 4-4L, 4-4Q, 4-4S, 4-4T, and 4-4U. See also Figures 4-1A through 4-1C.

An overview of the analytical data for the PGC area is presented below.

PCBs

PCBs were detected up to 3,931 ppm (72-4 at 4 to 6 ft.) in shallow subsurface soils of the PGC area. Samples exhibiting PCB concentrations greater than 10 ppm included a total of only 11 samples: borings 72-1 (0-2 ft. - 663 ppm and 4-6 ft. - 447 ppm), 72-2 (2-4 ft. - 27 ppm), 72-3 (0-2 ft. - 95 ppm), 72-4 (0-2 ft. - 12 ppm, 2-4 ft. - 13 ppm, and 4-6 ft. - 3,931 ppm), 72-9 (4-6 ft. - 47 ppm), 72-28 (0-4 ft. - 51 ppm), B-1 (0-2 ft. - 45 ppm), B-4 (0-2 ft. - 24 ppm), and H78B-15 (2-4 ft.- 72 ppm). It is noteworthy that the PCB concentrations detected in shallow subsurface soils at borings H78B-11 through -12 were either non-detect or less than 2 ppm.

As for deeper subsurface soils of the PGC area, PCBs were detected up to 18,741 ppm (72-4 at 10 to 12 ft.). Samples exhibiting PCB concentrations greater than 10 ppm included select samples from a total of only six borings: borings 72-1, 72-4, 72-28, 72-32, H78B-11, and H78B-28. With the exception of location H78B-11 which is located immediately adjacent to the Building 71 diked oil storage area, these borings are concentrated in a relatively small area immediately east of the Hill 78 landfill and immediately north of the PGC's Gas Turbine Generating Building.

Other Non-PCB Hazardous Constituents

Similar to the Hill 78 landfill area, only limited non-PCB constituents were detected in the PGC area, with the majority of those constituents detected being quantitated as estimated values. Total VOC concentrations detected in the 72- and B-series borings ranged from 0.006 ppm (72-19, 0-4 ft.) to 0.013 ppm (72-25, 0-4 ft.), while those of the more recent MCP Phase II/RFI borings ranged from 0.036 ppm (H78B-10, 4-6 ft.) to 0.1 ppm (H78B-11, 6-8 ft.). Total SVOC concentrations associated with the MCP Phase II/RFI borings ranged from non-detect (H78B-15, 10-12 ft.) to 10.9 ppm (H78B-11, 6-8 ft.). PCDDs and PCDFs were only detected at borings H78B-11 (6-8 ft.)

(0.0000915 ppm PCDDs and 0.00749 ppm PCDFs) and H78B-28 (6-8 ft.) (0.000541 ppm PCDD and 0.00644 PCDFs). RCRA metals detected in this area include arsenic, barium, chromium, and lead, at varying concentrations, and mercury in only one sample (H78B-28, 6-8 ft. - 0.29 ppm).

4.3.3 PGC Parking Lot (formerly referred to as the GE - OP Parking Lot)

In the PGC parking lot , four soil borings (72-33 through -36) were completed in February and March 1989 to a 10-foot depth, with 12 subsurface soil samples being collected and analyzed for PCBs. In October 1989, 20 soil borings (B-2 through B-21) were completed to a 8-foot depth along the perimeter fence, with 40 subsurface samples being collected and analyzed for PCBs. In January 1991, another boring (78-3) was completed to a 24-foot depth in this area as part of the MCP Phase I activities. Twelve subsurface soil samples were collected from this location and analyzed for PCBs. Finally, one other boring H78B-17/17R was completed in this area to a 16-foot depth as part of the more recent MCP Phase II/RFI activities. Eight subsurface soil samples were collected from this location and analyzed for PCBs, and one of these samples was also analyzed for Appendix IX+3 constituents. Although this boring provides information as to the presence and extent of constituents in the parking lot, it was completed also to further delineate the extent of impacted soil previously detected immediately adjacent to and west of the parking lot.

The subsurface soil analytical data for the 26 borings completed in this area are presented in Tables 4-4D, 4-4E, 4-4I, 4-4L, 4-4Q, 4-4S, 4-4T, and 4-4U.

An overview of the analytical data for the PGC parking lot is presented below.

PCBs

PCBs were detected in eight subsurface soil samples within the PGC parking lot. All detected PCB concentrations were in shallow subsurface soils at borings B-11, B-20, 78-3, and H78B-17 at concentrations ranging from 0.01 ppm (78-3, 0-2 ft.) to 23 ppm (H78B-17, 0.5-2 ft.). PCBs were not detected in the deeper subsurface soils of this area.

Other Non-PCB Hazardous Constituents

Non-PCB constituents within the PGC parking lot are characterized by Appendix IX+3 data for one sample collected from boring H78B-17 at a depth of 12-14 feet. Only limited non-PCB constituents were detected at very low concentrations. The analysis of the sample from H78B-17 detected only acetone, methylene chloride, and bis(2-ethylhexyl)phthalate. Acetone and bis(2-ethylhexyl)phthalate were both quantified as estimated values, and acetone and methylene chloride were also detected in the associated method blank. Also, detected RCRA metals included: arsenic (3 ppm), barium (44.1 ppm), chromium (6.1 ppm), and lead (8.1 ppm).

4.3.4 PGC Facility (formerly referred to as the Altresco Facility) Steamline Area

In the PGC steamline area, 25 soil borings [PS-W-1, PS-W-3, PS-W-5, PS-W-7, PS-W-9, PS-W-11, PS-W-13, PS-W-15, PS-W-17, PS-W-18, PS-W-22, PS-W-24, PS-W-25, PS-W-26, PS-W-27, PS-W-30, PS-W-34, PS-W-38, PS-W-42, PS-E-5, PS-E-11, PS-E-14, PS-E-17, and PS-E-22] were completed during July and August 1989 to a maximum depth of 14 feet below grade. A total of 59 subsurface soil samples were collected and analyzed for PCBs. PCB analytical results are presented in Table 4-4F. Two of these samples (PS-W-24, 0-4 ft. and PS-W-25,

4-8 ft.) were submitted for VOC analyses. VOC analytical results are presented in Table 4-4N. See also Figures 4-1A through 4-1C.

An overview of the analytical data for the PGC steamline area is presented below.

PCBs

PCBs were detected at similar concentrations in shallow and deep subsurface soil along the PGC steamline. These concentrations ranged up to 96 ppm, and appeared to be highest between Buildings 78 and 14E (PS-W-24 through -27 and PS-W-30).

Other Non-PCB Hazardous Constituents

Non-PCB constituents within the PGC parking lot are characterized by VOC data for two samples: PS-W-24, 0-4 ft. and PS-W-25, 4-8 ft.. These analyses detected only methylene chloride in both samples (0.013 and 0.007 ppm, respectively), toluene (0.005 ppm) at PS-W-24, and 1,1,1-trichloroethane (estimated at 0.004 ppm) at PS-W-25.

4.3.5 Eastern Area

This area, which includes the Ordnance (O.P.) parking lot comprising the northeastern/eastern side of the site, is characterized by eight borings completed in 1990 and 1991 up to a 28-foot depth in the north corner of the site near Virginia Avenue and California Avenue. Specifically, in April 1990, six borings (L-19 through - 24) were completed to a 4- to 6-foot depth to investigate the presence of PCBs in soil of proposed landscaping areas. A total of 12 subsurface soil samples were collected from these six borings and analyzed for PCBs. These data are presented in Table 4-4J. In January 1991, two soil borings (78-1 and 78-2) were complete as part of MCP Phase I activities. These borings were completed to total depths of 22 and 28 feet, respectively. A total of 25 subsurface soil samples were collected from these two borings and analyzed for PCBs; one of these samples (78-1, 12-14 ft.) was also analyzed for VOCs and SVOCs. The results of these analyses are presented in Tables 4-4I (PCBs), 4-4O (VOCs), and 4-4R (SVOCs). See also Figures 4-1A and 4-1B.

An overview of the analytical data for the eastern area is presented below.

PCBs

PCBs were detected in only two samples in the eastern area of the site -- 0.09 ppm at 78-1, 0-2 ft. and 0.07 ppm at 78-2, 0-2 ft.

Other Non-PCB Hazardous Constituents

Non-PCB constituents within the eastern area of the site are characterized by VOC and SVOC data for one sample collected from boring 78-1 at a depth of 12-14 feet. These analyses detected only acetone, methylene chloride, benzoic acid, bis(2-ethylhexyl)phthalate, and di-n-octylphthalate. Benzoic acid, bis(2-ethylhexyl)phthalate, and di-n-octylphthalate were quantified as estimated values, and acetone and methylene chloride were also detected in the associated method blank.

4.3.6 Western and Southern Areas

These areas include the portions of the site surrounding Buildings 73, 78, and 14E as well as those portions located south of the Hill 78 landfill area, the PGC Facility area, and the PGC Facility steamline area. Subsurface soil investigations performed in this area are summarized as follows:

Date	Boring ID.'s	Depth	Analyses	Purpose
10/89	WL-1 through -7	up to 8 ft.	14 samples - PCBs	Define PCBs presence as part of waterline installation near Bldg. 78
11/89	(STR-) 1N, 1S, 2N, 2S, 3S, 3S1, 3S2, 3N, 3N1, 3N2, 4N, 4N2, 4S, 4S1, and 4S2	up to 10 ft.	39 samples - PCBs	Define PCBs presence as part of PGC Facility transmission line installation south of Bldg. 14E
4/90	L-1 through -18	up to 6 ft.	37 samples - PCBs	Define PCBs presence in proposed landscaping areas
5/90	A-1 through -10	up to 6 ft.	20 samples - PCBs	Define PCBs presence during installation of sanitary sewer line along Merrill Rd. for PGC Facility
1/91 and 7/91	78-4, 78-5 and NY-5	up to 22 ft.	20 samples - PCBs 1 sample - VOCs/SVOCs 1 sample - App. IX+3	MCP Phase I activities
7/96-11/96 and 6/97	H78B-13, H78B-14, H78B-16, H78B-22, H78B-27, and H78B-29 through -31	up to 26 ft.	60 samples - PCBs 8 samples - App. IX+3	MCP Phase II/RFI activities [Although all of these borings provide information concerning the western and southern areas of the site, borings H78B-13 and H78B-14 were completed to further characterize the area near NY-1; borings H78B-30 and H78B-31 were completed to further characterize the area near the Bldg. 73 drainline; and borings H78B-16, H78B-22 and H78B-29 were completed to further characterize the area near the boring 78-4.]

The analytical data for the 51 borings completed in the western and southern areas of the site are presented in Tables 4-4G, 4-4H, 4-4I, 4-4J, 4-4K,4-4L, 4-4O, 4-4Q, 4-4R, 4-4S, 4-4T, and 4-4U. See also Figures 4-1A through 4-1C.

An overview of the analytical data for the western and southern areas of the site is presented below.

PCBs

PCBs were detected in shallow subsurface soils at the existing borings up to 1,000 ppm (L-7). It appears that the presence of PCBs in soil at boring L-7 is restricted to shallow soils in a very localized area, as only low concentrations were detected in other borings in the vicinity of L-7 (e.g., 78-4, H78B-16, H78B-22, and H78B-29). Apart from L-7, the highest PCB concentration detected in shallow subsurface soils of these areas (710 ppm) was found at the newly-installed Phase II/RFI borings at H78B-27, 0-2 ft. The next highest PCB concentrations

detected were found at borings STR-2N, 0-2 ft. (430 ppm), H78B-30, 0.5-2 ft (85 ppm - average of duplicates), and WL-4, 0-4 ft. (53 ppm); otherwise, PCB concentrations in shallow subsurface soils ranged less than 20 ppm.

In the deeper subsurface soils, PCBs were detected up to 12 ppm (H78B-13, 8-10 ft.). Only four deeper subsurface samples exhibited PCB concentrations greater than 1 ppm -- WL-4, 8-10 ft. (67 ppm); 2N, 6-10 ft. (8.2 ppm); H78B-13, 6-8 ft. (6.5 ppm); and H78B-13, 8-10 ft. (12 ppm).

Other Non-PCB Hazardous Constituents

Similar to the other areas of the site, only limited non-PCB constituents were detected in the western and southern areas of the site, with the majority of those constituents detected being quantitated as estimated values. Total VOC concentrations ranged from 0.019 ppm (NY-5, 14-16 ft.) to 0.12 ppm (78-4, 4-6 ft.); total SVOC concentrations ranged from non-detect (H78B-16, 8-10 ft.) to 2.2 ppm (H78B-13, 2-4 ft.). PCDDs and/or PCDFs were only detected at borings H78B-13 (2-4 ft.) (0.00086 ppm PCDDs and 0.000208 ppm PCDFs), H78B-27 (2-4 ft.) (0.0000054 ppm PCDFs only), and H78B-30 (12-14 ft.) (0.0000556 ppm PCDDs and 0.000299 ppm PCDFs). RCRA metals detected in this area include arsenic, barium, chromium, and lead, at varying concentrations, cadmium in only two samples (H78B-13, 2-4 ft. - 0.25 ppm, estimated and H78B-31, 6-8 ft. - 0.31 ppm, estimated), and selenium in only one sample (H78B-30, 12-14 ft. - 0.62 ppm).

4.3.7 East Street Area 1/USEPA Area 3

As noted above, only select data for the East Street Area 1/USEPA Area 3 Site are discussed in this document, since that area is covered as a separate site under its own related documentation. However, per the Agencies' July 3, 1996 letter to GE, soil data for borings RF-13, ES1-6, ES1-15, and ES1-20 is presented herein as it is relevant for evaluating conditions associated with location NY-1 located in the corner of the Hill 78 Area near the intersection of Merrill Road and New York Avenue. As such, this section summarizes the subsurface soil data for these borings; these data are also summarized/illustrated on Figures 4-1A, 4-1B, and 4-1C.

PCBs

As part of the completion of these borings (May 1991 and May 1996), a total of 27 soil samples were analyzed for PCBs. PCBs were detected in shallow subsurface soils at concentrations ranging from up to 200 ppm at RF-13 (0-2 ft.), up to 970 ppm at ES1-6 (0.5-2 ft.), up to 24 ppm (average of duplicates) at ES1-15 (0.5-2 ft.), and up to 1.1 ppm at ES1-20 (0.5-2 ft.). PCBs were detected in deeper subsurface soils at concentrations up to 16 ppm at RF-13,12-14 ft.; but PCB concentrations decreased to non-detect or less than 1 ppm at greater depths at this location, and were either non-detect or less than 1 ppm at the other four locations.

Other Non-PCB Hazardous Constituents

Analytical results from these borings did not indicate the presence of any VOCs or PCDDs/PCDFs at ES1-6, ES1-15, and ES1-20. Two VOCs, acetone and methylene chloride, were detected at boring RF-13, 14-16 ft.; however, these constituents were also detected in the associated method blank. Bis(2-ethylhexyl) phthalate is the only SVOC detected at these locations; it was detected at an estimated concentration of 0.15 ppm at RF-13, 14-16 ft. and at an estimated value 0.053 ppm at ES1-6, 28-30 ft. This constituent was also detected in the method blank for RF-13, 14-16 ft. Also, various RCRA metals were detected at varying concentrations.

4.4 Miscellaneous Soil Investigations

In accordance with agreements between GE and the MDEP, certain excavation activities, landscaping, or other miscellaneous site work, are to be accompanied by a sampling and analysis program to assess the potential presence of chemical constituents in the excavated soils and thus to assist in determining the appropriate disposition of the materials. This section summarizes the sampling analysis activities that have been performed in connection with such soil excavations at the Hill 78 Area. Figure 4-1D show the approximate locations of the various areas that have been subject to such soil investigations. This section provides only a brief summary of these investigations and the analytical results. Further details regarding these soil investigations are included in Appendix E. It should be noted that the information presented in Appendix E refers to the PGC Facility as the Altresco Cogeneration Facility. The name of these facilities has since changed to the Pittsfield Generating Company; hence, it is referred to herein as the PGC Facility.

To date, a total of 18 miscellaneous soil investigations have been performed at the Hill 78 Area, with nearly all being performed in connection with materials originating from within or around the PGC Facility. These investigations are summarized as follows:

- Between September 29 and October 6, 1987, 18 composite soil grab samples, six composite asphalt core samples, one discrete asphalt core sample, 4 composite concrete core samples, 5 composite wood core samples, and one composite brick core sample were collected for PCB analysis. These samples were collected from piles of intermixed soil and debris located in the parking lot now referred to as the PGC parking lot and analyzed for PCBs. PCB concentrations of these various media ranged as follows:

  -soil: one sample at 5.3 ppm, the remaining samples non-detect;
  -asphalt: one sample at 14 ppm, the remaining samples non-detect;
  -concrete: all samples non-detect;
  -wood: all samples non-detect; and
  -brick: sample non-detect.

  Refer to Figure 4-1D, location MS-1, and Appendix E, Section MS-1 for sampling locations and further information.

- On March 1, 1989, four discrete grab samples were collected from a soil pile for PCB analysis. The sampling was performed on soil generated (approximately four cubic yards) during excavation for a well casement. PCBs were detected in all four samples at levels ranging from 65 to 200 ppm. Refer to Figure 4-1D, location MS-2, and Appendix E, Section MS-2 for sampling location and further information.

- On March 26, 1990, one discrete concrete core sample was collected from a soil and concrete pile for PCB analysis. This sample was collected from concrete footings excavated near Building 78 and the access road. The analytical results indicated that PCBs were not detected. Refer to Figure 4-1D, location MS-3, and Appendix E, Section MS-3 for sampling location and further information.

- On June 7, 1990, nine discrete soil grab samples were collected from a soil pile (approximately 75 cubic yards) for PCB analysis. The sampling was performed on soil generated during excavation conducted for gas line installation in the PGC parking lot. The analytical results indicated that PCBs were not detected. In addition,

head space readings were shown to be less than 10 units for all samples. Refer to Figure 4-1D, location MS-4, and Appendix E, Section MS-4 for sampling location and further information.

- On September 26, 1990, two discrete soil grab samples were collected analyzed for PCBs and pursuant to the Toxicity Characteristic Leachate Procedure (TCLP) (excluding TCLP herbicides and pesticides). These samples were collected from a soil pile excavated (0 - 4 ft) as part of the installation of a sign for the PGC Facility. The analytical results indicated that PCBs and TCLP constituents were not detected. In addition, head space readings were shown to be less than 10 units for these samples. Refer to Figure 4-1D, location MS-5, and Appendix E, Section MS-5 for sampling location and further information.

- On October 22, 1990, three discrete soil grab samples were collected for PCB analysis. These samples were collected from a soil pile (approximately 7 cubic yards) excavated as part of the installation of a stairway for the PGC Facility. These samples exhibited PCB concentrations of 1.8, 1.9, and 2.7 ppm, respectively. In addition, these samples were also subject to head space screening; readings were shown to be less than 10 for all three samples. Refer to Figure 4-1D, location MS-6, and Appendix E, Section MS-6 for sampling location and further information.

- On February 12, 1991, one discrete grab soil sample was collected for PCB analysis. This sample was collected from soil cuttings contained within two 55-gallon drums, originating from the installation of well ASW-6. The analytical results indicated that PCBs were detected at a level of 2.5 ppm. In addition, on April 9, 1991, an additional discrete grab soil sample was collected from the soil within these two drums (which were relocated to Building 12-1) and analyzed for TCLP constituents (excluding herbicides and pesticides). The analytical results were non-detect for the TCLP constituents. Refer to Figure 4-1D, location MS-7, and Appendix E, Section MS-7 for sampling location and further information.

- On April 16, 1991, two discrete soil samples were collected for PCB analysis from the 0- to 6-foot depth interval by augering two boreholes (in the vicinity of well ASW-6/W-6). These soil samples were collected in connection with a waterline installation at the PGC Facility. These samples exhibited PCB concentrations of 64 and 540 ppm respectively. In addition, these two samples were subject to head space screening which indicated readings above 10 units for both samples. As a result, the soil sample exhibiting the higher head space reading and PCB concentration was subject to further analyses for VOCs and SVOCs. The analytical results indicated that no VOCs were detected, but several SVOCs were detected including acenaphthene (9.3 ppm), dibenzofuran (7.2 ppm), fluorene (9.2 ppm), phenanthrene (34 ppm), anthracene (5.4 ppm), fluoranthene (31 ppm), pyrene (20 ppm), and chrysene (5.7 ppm). Refer to Figure 4-1D, location MS-8, and Appendix E, Section MS-8 for sampling location and further information

- On April 24, 1991, one discrete grab soil sample was collected for PCB analysis from the 0- to 6-foot depth interval using an auger. This soil sample was collected in connection with an electrical line installation at the PGC Facility. This sample exhibited a PCB concentration of 220 ppm. In addition, this sample was subject to head space screening which indicated a reading above 10 units. As a result, this soil sample was subject to further analyses for VOCs and SVOCs. The analytical results indicated that several VOCs were detected including toluene (0.035 ppm), chlorobenzene (0.007 ppm), and xylene (total) (0.007 ppm); and one SVOC was detected (1,4-dichlorobenzene at 1.3 ppm). Refer to Figure 4-1D, location MS-9, and Appendix E, Section MS-9 for sampling location and further information.

- On April 30, 1991, two discrete soil samples were collected for PCB analysis from two boreholes sampled at the 0- to 4-foot depth interval. These soil samples were collected in connection with a stairway installation at the PGC Facility. These samples exhibited PCB concentrations of 1.5 and 4.6 ppm, respectively. In addition, these two samples were subject to head space screening, indicating readings above 10 PID units for one of the two samples. As a result, that sample was subject to further analyses for VOCs and SVOCs. The results of these additional analyses indicated that no detectable levels of VOCs or SVOCs. Refer to Figure 4-1D, location MS-10, and Appendix E, Section MS-10 for sampling location and further information.

- On June 10, 1991, one composite soil grab sample was collected from a soil pile (approximately 77 cubic yards) and analyzed for TCLP constituents (excluding TCLP herbicides and pesticides). This sample was collected from soil excavated in association with a utility line (water and electrical) at the PGC Facility. The analytical results indicated that the regulatory limits for TCLP were not exceeded. Refer to Figure 4-1D, location MS-11, and Appendix E, Section MS-11 for sampling location and further information.

- On March 24, 1992, one discrete soil sample was collected for PCB analysis from an area to be excavated adjacent to the tanker unloading station at the PGC Facility. This sample was collected from the 0- to 2-foot depth interval prior to excavation. This sample exhibited a PCB concentration of 2.3 ppm. Refer to Figure 4-1D, location MS-12, and Appendix E, Section MS-12 for sampling location and further information.

- On October 5, 1992, 15 discrete soil grab samples were collected from a soil pile (approximately 43 cubic yards) for PCB analysis. These soil samples were collected from soil excavated during the installation of cathodic protection at the PGC Facility. The results of these analyses indicated two samples to exhibit PCB concentrations of 15 and 30 ppm, respectively; however, PCB concentrations of all other samples were less than 8 ppm. In addition, these samples were also subject to head space screening which indicated readings less than 10 units for all samples. Refer to Figure 4-1D, location MS-13, and Appendix E, Section MS-13 for sampling location and further information.

- On October 20, 1992, ten discrete soil grab samples were collected from five soil piles (approximately 8 cubic yards, total) for PCB analysis. These soil samples were collected from soil excavated during the installation of cathodic protection adjacent to the gas turbine building (along the cooling towers) at the PGC Facility. The results of these analyses indicated three samples to exhibit PCB concentrations ranging from 16 to 25 ppm; however, PCB concentrations of all other samples were either non-detect or less than 5 ppm. In addition, these samples were subject to head space screening which indicated readings less than 10 units for all samples. Refer to Figure 4-1D, location MS-14, and Appendix E, Section MS-14 for sampling location and further information.

- On August 16, 1996, five discrete soil grab samples were collected from five soil piles (approximately 8 cubic yards, total) for PCB analysis. These samples were collected from soil excavated during the installation of a concrete slab north of the steam turbine building at the PGC Facility. The results of these analyses indicated PCB concentrations of all samples were either non-detect or less than 5 ppm.. In addition, these five samples were subject to head space screening which indicated readings less than 10 units for all samples. Refer to Figure 4-1D, location MS-15, and Appendix E, Section MS-15 for sampling location and further information.

- On June 25 and 26, 1996, eight discrete soil grab samples were collected from several soil piles (approximately 15 cubic yards, total) for PCB analysis. These samples were collected from soil excavated during the repair of a water main north of the gas turbine building at the PGC Facility. The results of these analyses indicated PCB concentrations of all samples were less than 11 ppm. In addition, these samples were subject to head space

screening which indicated readings less than 10 units for all samples. Refer to Figure 4-1D, location MS-16, and Appendix E, Section MS-16 for sampling location and further information.

- On December 3 and 4, 1996, 20 discrete soil samples were collected from 10 locations (0- to 2-foot and 2- to 4-foot depth intervals) for PCB analysis. These samples were collected from soil beneath the asphalt at the PGC parking lot to determine PCB (and possibly other constituent) levels in the vicinity of a proposed building site. The results of these analyses indicated two samples to exhibit PCB concentrations of 1 and 2 ppm, respectively; however, PCB concentrations of all other samples were non-detect. In addition, these samples were subject to head space screening which indicated readings less than 10 units for all samples. Refer to Figure 4-1D, location MS-17, and Appendix E, Section MS-17 for sampling locations and further information.

- On March 13, 1997, four discrete soil grab samples were collected for PCB analysis from the base and sidewalls of an excavation associated with the 10c oil line draining. The results of these analyses indicated PCB concentrations of the sidewalls to be 1.2 ppm and the base to be 1.5 ppm. Refer to Figure 4-1D, location MS-18, and Appendix E, Section MS-18 for sampling location and further information.

4.5 Delineation of Extent of Impacted Soil

The soil data presented in Sections 4.2 through 4.4, Tables 4-4A through 4-4U, and on Figures 4-1A through 4-1D have been evaluated to determine whether the information collected to date as part of various investigative activities have adequately determined the extent of impacted soil at the Hill 78 Area. This evaluation involved the use of PCB concentrations as a surrogate for defining the extent of impact. While the data are not sufficient to allow calculations of volumes of soils affected by the various non-PCB constituents, the PCB data do allow volume estimates of PCB-affected soils (as summarized in Section 4.6), and those estimates should be adequate for performing the risk assessment and evaluating remedial alternatives. Further, only limited non-PCB constituents were detected in the Hill 78 Area, with the majority of those constituents detected being quantitated as estimated values.

Brief discussions regarding the vertical and horizontal extent of PCB-impacted soils at the Hill 78 Area are presented below.

Vertical Extent

The available subsurface soil PCB data were evaluated for the basis of determining the vertical extent of PCB-impacted soil at the Hill 78 Area. This evaluation involved the review of the data base for locations where PCBs may have been detected at concentrations 1 ppm or less in the deepest sample analyzed. This evaluation concluded that, in general, the vertical extent of impact has been delineated to an appropriate degree, with a few exceptions. Several borings were identified to exhibit PCB concentrations greater than 1 ppm in the deepest sample analyzed; however, in all but five instances, other borings in the immediate vicinity of certain of these borings did define the vertical extent to 1 ppm or less. These locations are summarized below.

Borings Exhibiting PCB >1 ppm in Deepest Sample	Borings in Immediate Vicinity Which Define Vertical Extent to 1 ppm or Less
Hill 78 Landfill Area	
B-3, 18-20 ft. (4 ppm)	None
B-4, 18-20 ft. (52 ppm)	None
B-12, 18-20 ft. (8 ppm)	None
H78B-8/8R, 28-30 ft. (11 ppm)	None
PGC Facility Area	
72-1), 18-20 ft. (9 ppm) and 72-4, 18-20 ft. (3,206 ppm)	H78B-28
PGC Facility Parking Lot	
B-1 through -4, 0-2 ft. (3.6 to 45 ppm)	Collectively by B-6, B-8, 72-33 and 72-34
PGC Facility Steamline Area	
PS-W-24 through -27, PS-W-30, and PS-W-34, 4-8 ft. (1.1	Collectively by H78B-30 and H78B-31
Western and Southern Areas	
2N (East of Bldg. 14E), 6-10 ft. (8.2 ppm)	None
WL-1, 3-5 ft. (11 ppm)and WL-4, 4-8 ft. (67 ppm)	H78B-31, WL-2, WL-5

Of the five locations where the vertical extent of PCBs were not completely defined, only one location (B-4) still had relatively significant levels of PCBs remaining at depth. Since this location lies within the capped landfill and there are 11 other borings within the landfill which do define the vertical extent of PCBs, further depth evaluation in this vicinity does not appear to be warranted.

Horizontal Extent

The available surface and subsurface soil PCB data were evaluated for the basis of determining the horizontal extent of PCB-impacted soil at the Hill 78 Area. This evaluation involved the review of the data base for locations where PCBs may have been detected at relatively high concentrations and there are no samples in the general vicinity which encircle it. This evaluation concluded that, in general, the horizontal extent of impacted soil has been delineated to an appropriate degree, with a couple of exceptions. Boring H78B-11 was completed immediately adjacent to the Building 71 diked oil storage area and encountered PCBs at concentrations of 2,480 ppm at 6 to 8 feet. Additionally, boring H78B-30 detected PCB levels at 190 ppm at 0 to 0.5 feet.

4.6 Estimation of Volume of Impacted Soils/Fill

In accordance with the permit requirements, preliminary soil volume estimates for the Hill 78 Area have been developed based on available site information. As indicated in Section 4.5, PCB concentrations have been used as a surrogate for defining the extent of impact as well as a basis for volume estimation.

To differentiate between varying levels of PCBs at the site, volumes were based on four different concentration ranges: greater than 1 ppm (> 1 ppm), greater than 50 ppm (> 50 ppm), greater than 100 ppm (> 100 ppm), and greater than 500 ppm (> 500 ppm). The methods used to determine these volumes are as follows:

- The Thiessen polygon method was used to divide the site base map into 197 individual polygons. AutoCAD (Version 12) was used to facilitate this process with each polygon surrounding one soil boring location;

- The concentration of PCBs in each polygon was assumed to be uniform throughout the entire polygon and equal to the maximum concentration detected from the various depth intervals within the respective boring. It should be noted that these assumptions result in conservative volume estimates of soils containing the various PCB concentration ranges (e.g., if PCBs were detected at a depth of 10 feet at a concentration greater than 50 ppm, the volume associated with the entire 0- to 10- foot interval was assumed to be greater than 50 ppm, regardless if it was less than 50 ppm);

- The maximum depth at which the PCB concentration exceeded each of the four concentration ranges (> 1 ppm, > 50 ppm, >100 ppm, > 500 ppm) occurred in each boring was determined. As a result, the soil volume estimates presented below represent the total volume of soil exceeding the specified criteria [(i.e., the volume of soil exceeding 1 ppm PCBs (248,000 cy) would contain the volume of soil exceeding the three other concentration ranges (> 50 ppm, > 100 ppm, > 500 ppm)];

- Using AutoCAD, the area of each polygon was calculated; and

- The area of each polygon was multiplied by the maximum depth exceeding the specified criteria to determine the volume of impacted soil. The total amount of impacted soil was then determined for each PCB concentration range.

The volumes of soil calculated for each concentration range are as follows:

PCB Concentration Range	Estimated Soil Volume (cubic yards)
> 1 ppm	248,000
> 50 ppm	104,000
> 100 ppm	68,000
> 500 ppm	55,000

5. Groundwater Investigations

5.1 General

This section provides a summary of groundwater investigations and activities conducted at the Hill 78 Area, as well as a discussion of groundwater sampling results of the Hill 78 Area wells and results of two adjacent East Street Area 1 wells, ES1-6 and RF-13. A number of hydrogeologic investigations have been conducted at the site since 1988. The May 1995 Phase I Report/CAS provides a detailed chronology of prior investigative activities performed at the site, while Section 1.3 of this document briefly describes the recent MCP Phase II/RFI activities.

The subsections below summarize the site hydrogeologic investigations as follows:

- Section 5.2 - Well Installation;
- Section 5.3 - Fluid Level Measurements;
- Section 5.4 - In-Situ Hydraulic Conductivity;
- Section 5.5 - Evaluation of Groundwater Flow Patterns;
- Section 5.6 - Groundwater Flow Rate Estimates;
- Section 5.7 - Groundwater Sampling and Analysis;
- Section 5.8 - Overall Summary of Groundwater Impacts; and
- Section 5.9 - Future Groundwater Monitoring Program.

5.2 Well Installation

Monitoring wells were installed in the Hill 78 Area during three separate investigations referred to as the Pre-1990 groundwater investigation, MCP Phase I Investigation, and the recent MCP Phase II/RFI as discussed below.

The New York Avenue wells (NY-1 through NY-4) were installed in April and May 1988 and monitoring wells (78-1 through 78-7) were installed as part of the MCP Phase I Investigation in January 1991. Both investigations were summarized in the MCP Phase I Report/CAS.

As part of the MCP Phase II/RFI, the following soil borings were installed: H78B-8, H78B-10 through H78B-22, H78B-24, H78B-25, H78B-27 through H78B-29. Nine soil borings were completed as smaller-diameter or micro monitoring wells, including H78B-8, H78B-11, H78B-12, H78B-13, H78B-15, H78B-16, H78B-17, H78B-18, and H78B-28. Three 4-inch replacement wells (designated H78B-8R, H78B-17R, H78B-28R) were installed due to insufficient water volume in these micro wells at the following respective locations: H78B-8, H78B-17, and H78B-28. A detailed description of the MCP Phase II/RFI monitoring well installation is given below in Section 5.2.1. A summary of monitoring well construction date of installation, screened depth intervals, the base of fill, and top of till are presented in Table 4-6. The subsurface logs and well construction details for these monitoring wells and borings are included in Appendix B.

Additionally, water supply wells for the PGC Facility [ASW-1 (or W-1) through ASW-6 (or W-6)] were installed from September 1988 to May 1991 in bedrock utilizing rotary drilling methods. The water supply wells are used solely for cooling water for plant operations. Supply wells W-1 and W-2 installed in the Stockbridge Marble Formation collapsed at depth and are not capable of being utilized as groundwater supply sources. Supply well W-3 was installed to a depth of 490 feet; however, formation material has collapsed to a depth of 439 feet limiting the estimated maximum long term yield. Supply wells W-3 and W-4 are not active wells. The total depths of active supply wells W-5 and W-6 are 457 and 471 feet below grade, respectively. Available subsurface logs and well construction diagrams for all water supply wells are provided in Appendix B, however, well construction logs for W-1 and W-4 are not available.

5.2.1 Description of MCP Phase II Monitoring Well Installation

A total of 12 permanent groundwater monitoring wells were installed during implementation of the MCP Phase II/RFI field program. Six wells were initially proposed as part of the MCP Phase II/RFI Investigation; however, three additional borings were converted to monitoring wells (H78B-11, H78B-18, and H78B-28) based on the presence of sheens observed in soils during drilling. The conversion of borings with the presence of sheens to monitoring wells was a requirement stipulated in the Agencies' conditional approval letter. Monitoring wells H78B-8, H78B-11, H78B-12, H78B-15, H78B-18, and H78B-28 were installed as 3/4-inch diameter microwells. Monitoring wells H78B-13, H78B-16, and H78B-17 were installed as 1-inch diameter microwells. Three 4-inch diameter replacement wells (H78B-8R, H78B-17R, and H78B-28R) were installed to facilitate the collection of groundwater samples at locations in which the small-diameter wells could not yield sufficient water volumes. In addition, two borings (H78B-14 and H78B-22) were used to obtain one-time, discrete groundwater samples for laboratory analyses.

The 3/4-inch and 1-inch diameter microwells and the two temporary sampling points were installed through overburden soils using the direct-push method, while the three 4-inch diameter replacement wells were installed using conventional hollow-stem auger drilling techniques. Screen lengths for the wells installed during the MCP Phase II/RFI program ranged from 5 feet to 13 feet and were based on the depth to water, the extent of fill, and the depth to the top of the silt till unit. As stipulated in the Agencies' conditional approval letter, the length of the screened interval did not exceed 15 feet at any well location. Monitoring well construction details are provided on the subsurface logs provided as Appendix B.

The two temporary microwells (H78B-14 and H78B-22) were used to collect groundwater samples during drilling by installing a section of slotted PVC well screen within the outer steel casing of the direct-push drill string and subsequently pulling back the outer casing, thus exposing a discrete interval to the slotted PVC well screen. After allowing groundwater to infiltrate the well screen, a dedicated bailer was used to collect a groundwater sample.

Following installation, all newly installed permanent monitoring wells were developed to remove residual fines from the well thereby increasing the hydraulic connection to the formation. Development was accomplished by bailing with a stainless steel bailer or pumping with an electric-powered Waterway pump and dedicated 3/8-inch I.D. polyethylene tubing and foot valve.

Upon completion of the development phase, hydraulic conductivity testing was performed on each newly installed well and all previously installed wells at the site. Section 5.4 provides a discussion of the specific testing methodologies and Table 5-1 presents the corresponding hydraulic conductivity values for all wells tested.

The following sections describe the monitoring well installation program conducted in each investigation area, and summarize significant modifications to the MCP Phase II/RFI program based on the Agencies' conditional approval letter and field conditions encountered during implementation of the field program. Table 4-5 provides a summary of the soil boring/monitoring well installation program and the rationale for location and number of wells installed in each area of investigation.

5.2.1.1 Building 78 Landfill - Gas Plant Site (SWMU G-5)

Monitoring wells (H78B-8/8R, and H78B-18) were installed to investigate the Building 78 Landfill Area. H78B-18 was converted to a monitoring well based on the observation of a sheen on soils during advancement of the boring. H78B-8R was installed as a replacement well for H78B-8, and was screened within fill material noted to be present just south of the landfill proper. The fill material in this area was characterized as brown fine sand and silt with trace amounts of glass.

5.2.1.2 Building 71 Stormwater Drain Line (SWMU T-40)

Monitoring wells (H78B-11 and H78B-12) were installed in the vicinity of Building 71 to evaluate potentially impacted soil/groundwater associated with the diked oil storage area. H78B-11, which was located adjacent to and downgradient of a catch basin at the southeastern corner of the diked oil storage area, was converted to a monitoring well based on the presence of a sheen observed during advancement of the boring. As stipulated in the Agencies' conditional approval letter, the location of H78B-12 was relocated to within approximately 30 feet downgradient of the diked oil storage area. The wells in this area are screened predominately within the till confining unit as a result of the unit being encountered very near the surface.

5.2.1.3 Area Surrounding NY-1

One permanent monitoring well (H78B-13) was installed in the area surrounding NY-1 and one temporary microwell (H78B-14) was sampled to evaluate the presence of PCDFs and PCDDs previously detected in the groundwater in this area.

5.2.1.4 Area Surrounding 78-4

Four permanent monitoring wells (H78B-15, H78B-16, H78B-17, and H78B-17R) and one temporary microwell (H78B-22) were installed to further investigate the horizontal and vertical extent of the presence of VOCs previously detected in groundwater in the vicinity of 78-4. The Agencies' conditional approval letter requested the installation of an additional monitoring well adjacent to, and deeper than existing well 78-4 to determine the vertical extent of VOC constituents in this area. The well was to be screened across the first aquitard below the water table. However, the geology encountered in the area indicated that existing well 78-4 is already screened across the first aquitard below the water table as this well is partially completed (approximately 5 feet) within the olive-brown till. As such, an additional monitoring well was not installed at this location.

Monitoring well H78B-17 did not produce sufficient water volumes for collection of a groundwater sample; therefore, replacement well H78B-17R was installed to facilitate collection of a groundwater sample at this location.

5.2.1.5 Area North of PGC Facility (formerly referred to as the Altresco Facility)

As stated in the MCP Phase II SOW/RFI Proposal, no new monitoring wells were to be installed in this area, only two soil borings to further define the nature and extent of PCBs detected in subsurface soils along the northern boundary of the PGC Facility area (H78B-18 and H78B-19). In addition, the Agencies' conditional approval letter requested an additional boring (H78B-28) in the vicinity of 72-4. However, during drilling, sheens were observed in soil at borings H78B-18 and H78B-28, thus requiring the installation of a monitoring well at each location.

5.3 Groundwater Level Measurements

Five rounds of depth to groundwater measurements have been performed at Hill 78 Area. No NAPL has been observed at any of the site wells, although as previously discussed, there have been some indications of NAPL within soil samples at the site.

Groundwater levels were measured at monitoring wells; at wells 78-1 through 78-7, and wells NY-1, NY-3, and NY-4 on January 22, 23, and 24, 1991; at well NY-2 on February 28, 1991; and at wells 78-1 through 78-7, and NY-1 through NY-4 on July 1, 1991. Table 5-2A presents the groundwater level measurements obtained in 1991. During the MCP Phase II/RFI, two rounds of water levels were obtained, on September 17-20, 1996 and April 7, 1997, during anticipated high and low water table conditions. Table 5-2B presents the groundwater level measurements obtained on these dates.

These measurements were utilized to develop water table elevation contour maps which are presented as Figures 5-1A through 5-1E.

5.4 In-Situ Hydraulic Conductivity

During the MCP Phase II/RFI program, in-situ hydraulic conductivity testing was completed at all existing locations (NY-1, NY-3, NY-4, 78-1, 78-2, 78-3, 78-4, 78-5, 78-7), except NY-2 and 78-6 due to an obstruction in each well. In-situ hydraulic conductivity testing was completed at all newly-installed MCP Phase II/RFI monitoring wells (H78B-11, H78B-12, H78B-13, H78B-15, H78B-16, H78B-17R, H78B-18, and H78B-28R), except H78B-8 and H78B-8R due to insufficient water in the well. The tests were conducted as rising head slug tests at 13 wells, and their data were analyzed using methods of Hvorslev (1951) and Bouwer and Rice (1976) included in the aquifer testing analysis program Aqtesolv (Geraghty and Miller, 1995). Specific capacity tests were performed at four wells (H78B-13, H78B-15, H78B-16, H78B-18) and their data were reduced based on a technique described in Walton (1962). These data for the in-situ hydraulic conductivity tests are presented in Appendix D. Table 5-1 presents the computed hydraulic conductivities which range from 8.94E-07 (till unit) to 7.10E-02 (alluvial sand unit) centimeters per second (cm/sec) for the different lithologic units encountered at the site. As shown in this table, several of the well screens straddle two separate lithologic units; therefore, the ranges and geometric mean hydraulic conductivities presented below were determined for the more conductive unit screened by those wells. Computed hydraulic conductivities for the alluvial sand unit range from 1.34E-04 to 7.10E-02 cm/sec, and the geometric mean hydraulic conductivity was calculated to be 2.12E-03 cm/sec (6.01 ft/day). Computed hydraulic conductivities for the till unit range from 8.94E-07 to 1.07E-04 cm/sec and the geometric mean hydraulic conductivity was calculated to be 1.16E-05 cm/sec (0.03 ft/day). The computed hydraulic conductivity for the fill unit at H78B-28R was 1.07E-03 cm/sec. The relatively higher hydraulic conductivity of 1.07E-04 for the till unit may be attributed to the relatively higher sand content around the upper screened zone at H78B-17R.

5.5 Evaluation of Groundwater Flow Patterns

Water table measurements obtained during the MCP Phase I and Phase II/RFI investigations show depths to water up to 18.9 feet below grade. Tables 5-2A and 5-2B present the water table elevations for water level measurement data obtained during the MCP Phase I Investigation for January and July 1991 and during the MCP Phase II/RFI in September 1996 and April 1997, respectively. Figures 5-1A through 5-1E depict the water table surface for water level measurement data obtained in June 1988, during the MCP Phase I Investigation in January and July 1991, and the MCP Phase II/RFI in September 1996 and April 1997, respectively.

The comparison of water table elevations over time shows seasonal variations with a general rise in the water table during the winter and spring (January 1991 and April 1997 measurements) and a drop in the water table during the summer and fall (July 1991 and September 1996 measurements). Water table elevation contour maps developed during the MCP Phase I and Phase II/RFI investigations show similar flow patterns across the site. In general, the local direction of groundwater flow is interpreted to be to the south toward Merrill Road and the Housatonic River, perpendicular to the water table elevation contour lines.

Review of water level measurement data indicates that in the upland portions of the site (at monitoring wells 78-1, 78-2, 78-6, NY-3, NY-4, H78B-11, H78B-12, H78B-18, and H78B-28), depth to water measurements ranged from approximately 2.4 to 15.4 feet below grade. Groundwater in this area of the site generally flows southward.

Review of water level measurement data indicates that in the area of the former Hill 78 Area landfill (at monitoring wells 78-7, H78B-8), depth to water measurements ranged from approximately 11.8 to 18.9 feet below grade. As shown in the water table elevation contour maps, groundwater in this area of the site generally flows toward the southern portion of the site, with local southwestern and southeastern components of flow in the area of the site near the landfill (Figure 5-1D).

Review of water level measurement data indicates that in the southern portion of the site (at monitoring wells 78-3, 78-4, 78-5, NY-1, NY-2, H78B-13, H78B-15, H78B-16, and H78B-17), depth to water measurements ranged from approximately 0.9 feet to 17.8 feet below grade. As shown in the water table elevation contour maps, groundwater in this section of the site flows south toward the Housatonic River.

5.6 Groundwater Flow Rate Estimates

An average groundwater flow velocity across the downgradient cross sectional area (A-A') in the southern portion of the site (Figure 2-4) was calculated using the modified Darcy equation:

$$v = Ki/n_e$$

Where:

v = average linear groundwater flow velocity (L/T), K = horizontal hydraulic conductivity (L/T), I = horizontal hydraulic gradient (L/L), and n_e = effective porosity (unitless).

The volumetric discharge across the downgradient cross section of the site was computed using the following equation:

$Q = KAi$,

Where:

Q is the volumetric discharge (L^3/T), K is the hydraulic conductivity (L/T), A is the cross sectional area (L^2), and I is the horizontal hydraulic gradient (L/L).

In the calculations of the average flow velocity and the volumetric discharge, the geometric mean hydraulic conductivity of the fill/alluvial sand hydrogeologic unit (which is anticipated to be the higher conductive unit at the site) was determined from in-situ hydraulic conductivity tests conducted at wells near the downgradient cross section. These included monitoring wells H78B-17R, 78-4, H78B-16, 78-5, NY-1, and H78B-13, which are located east to west along the cross sectional area in the southern portion of the site. The geometric mean hydraulic conductivity was determined to be 1.15E-03 cm/sec (3.27 ft/day). An estimated effective porosity of 0.30 was used in the calculation of the average linear velocity. The horizontal component of the hydraulic gradient in the fill/alluvial sand hydrogeologic unit was estimated using water table elevation data. This combined hydrogeologic unit was observed throughout the site except in the upland (northern) portion of the site where the till was encountered. Based on groundwater elevation data measured at wells screened at or near the water table in the southern portion of the site along the cross sectional area A-A', the horizontal gradient observed in this unit was 0.03 under high flow conditions. These high water table conditions were measured in April 1997. The average horizontal groundwater flow velocity was 1.15E-04 cm/sec or 0.3 feet/day. The cross sectional area, A, for the saturated portion of the fill/alluvial sand hydrogeologic unit was determined as approximately 11,600 ft^2. The volumetric discharge across the cross sectional area along the southern portion of the site was 1,138 cubic feet per day (5.9 gpm).

5.7 Groundwater Sampling and Analysis

5.7.1 History of Groundwater Sampling and Analysis Investigations

This section presents the historical and recent groundwater sampling activities and the data associated with these activities. The historical and recent groundwater sampling activities are presented below followed by a summary of all groundwater analytical data according to constituent type. Data qualified by the analytical laboratory as estimated values are not included in this discussion (J or J* - qualified on the data tables); however, these data for the site are presented in Tables 5-3A through 5-3H. Total concentrations for filtered and unfiltered PCBs, VOCs, SVOCs, and PCDDs/PCDFs are presented on Figures 5-2A and 5-2B. The RCRA metals arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver are presented on Figure 5-2B.

Groundwater sampling was conducted during April and May 1988, following installation of New York Avenue wells NY-1 through NY-4. Groundwater samples were analyzed for the complete list of priority pollutants. Groundwater analytical results are discussed in Section 5.7.2 and are presented in Table 5-3A.

Groundwater samples were collected at PGC supply well W-3 on January 11, 1989, and August 10, 1989, and analyzed for the complete list of priority pollutants. The results of these analyses are summarized on Figures 5-2A and 5-2B. The January results showed the presence of only toluene (0.15 ppm) and zinc (0.017 ppm). The August results indicated the presence of trichloroethene (0.004 ppm) and copper (0.04 ppm).

Monitoring wells 78-1 through 78-7, NY-1 through NY-4 and supply well W-3, were sampled in January and February 1991 as part of the MCP Phase I Investigation and analyzed for Appendix IX + 3 constituents. The analyses of samples from Wells 78-1 through 78-6 and supply well W-3 excluded pesticides and herbicides. Analytical results are presented in Table 5-3B.

A groundwater sample was collected at monitoring well NY-1 on August 29, 1991 as part of the MCP Phase I supplemental investigation to verify if detectable levels of PCDDs and PCDFs exist in groundwater. The groundwater sample was analyzed for PCDDs and PCDFs due to the presence of PCDDs and PCDFs detected in groundwater during January/February 1991. Analytical results are presented in Table 5-3C.

Groundwater sampling was conducted as part of the MCP Phase II/RFI on September 17 through 20, 1996. Groundwater samples proposed to be collected and analyzed for Appendix IX + 3 constituents excluding pesticides and herbicides included all newly installed monitoring wells and the active PGC supply wells. Six existing monitoring wells were proposed for sampling and analysis of select parameters as shown below.

Well	PCBs	VOCs	SVOCs	PCDDs/PCDFs
NY-1	X	X	X	X
NY-2	X	X	X	X
NY-4	X	X		
78-1		X	X	
78-4		X	X	
78-7	X	X		

Existing monitoring well NY-2 could not be sampled due to an obstruction in the well. Newly-installed wells H78B-8, H78B-12, H78B-17, and H78B-28 were not sampled due to insufficient water in the well. On November 18 and 19, 1996, groundwater samples were collected from replacement wells H78B-17R and H78B-28R and analyzed for Appendix IX + 3 parameters, excluding pesticides and herbicides. In December 1996, replacement well H78B-8R was sampled and analyzed for Appendix IX + 3 parameters excluding pesticides and herbicides. Wells H78B-12 was found dry in November/December 1996, and, inadvertently, no further attempts were subsequently made to resample these wells.

Analytical results for newly-installed monitoring wells (H78B-13, H78B-15, H78B-16 and H78B-18, H78B-8R, H78B-17R, and H78B-28R), existing wells (NY-1, NY-4, 78-1, 78-4, 78-7), and active supply wells (W-5 and W-6) are presented in Tables 5-3D through 5-3H. Supply wells W-5 and W-6 were sampled via a sample ports within the PGC Facility. Although not required by the MCP Phase II SOW/RFI Proposal, because it is not currently an active well, supply well ASW-4 (W-4) was inadvertently sampled and analyzed for VOCs.

Discrete groundwater samples were obtained during the advancement of borings H78B-14 and H78B-22. The groundwater sample from boring H78B-22 was analyzed for VOCs only. The groundwater sample from boring H78B-14 was forwarded to the analytical laboratory but was inadvertently not analyzed for PCDDs or PCDFs.

On May 20, 1997, groundwater samples were collected from two Hill 78 Area monitoring wells (78-6 and NY-4) located along Tyler Street Extension and four monitoring wells (SCH-1 through SCH-4) installed as part of the Allendale School Property MCP Supplemental Phase II Investigation. Groundwater samples were analyzed for Appendix IX + 3 parameters excluding pesticides and herbicides. It is important to note that only select data for the Allendale School Property discussed in this document, since that area is covered as a separate site under its own related documentation. As such, the groundwater analytical data for wells 78-6, NY-4, and SCH-4 are summarized in Section 5.7.2 and are presented on Figures 5-2A and 5-2B. Groundwater analytical results for monitoring well SCH-4 are presented in this report because this well is also located along Tyler Street Extension.

5.7.2 Groundwater Analytical Results for the Hill 78 Area

Analytical results of the groundwater samples collected at the above mentioned monitoring wells are presented below according to constituent type. Data qualified by the analytical laboratory as estimated values (J or J** - qualified on data tables) are not included in this discussion; however, these data are included in the total concentrations shown on Figures 5-2A and 5-2B.

Field measurements for specific conductivity, pH, and temperature for January 1991 (78-1 through 78-7, and NY-1, NY-3, and NY-4) and February 1991 (NY-2) sampling events ranged from 240 to 2,100 micromhos per centimeter (umhos/cm), 6.85 to 9.35 standard units (SU), and 5 to 9 degrees Celsius (°C), respectively. The highest conductivities were measured at 78-7 (1,100 umhos/cm) and 78-4 (2,100 umhos/cm). The highest pH was at well NY-1 [9.3 SU]. Field measurements are presented in Table 5-4A. Groundwater field parameters of specific conductivity, pH, temperature, and turbidity were measured during the MCP Phase II/RFI at the existing and newly-installed monitoring wells sampled in September, November, and December 1996 and three supply wells (W-4, W-5, and W-6). The specific conductivity, pH, temperature, and turbidity measurements ranged from 0.01 to 5.65 mS/cm, 6.9 to 12.7 SU, 10 to 14°C, and 1.5 to 225 Nephelometric Turbidity Units (NTUs), respectively. Table 5-4B presents these groundwater field parameters.

PCBs

Groundwater sampling was conducted during April and May 1988 following installation of New York Avenue wells NY-1 through NY-4. Groundwater samples were analyzed for the complete list of priority pollutants. PCBs were not detected.

Groundwater samples were collected at PGC supply well W-3 on January 11, 1989, and August 10, 1989 and analyzed for the complete list of priority pollutants. PCBs were not detected.

As part of the MCP Phase I Investigation, groundwater samples were collected at 11 monitoring wells (78-1 through 78-7 and NY-1 through NY-4) and one supply well (W-3) during January/February 1991 and analyzed for both total (unfiltered) and dissolved (filtered) PCBs. Analytical results from unfiltered groundwater samples collected from 78-7 and NY-4 indicate PCB concentrations of 0.00096 ppm and 0.000547 ppm, respectively. Analytical results from the filtered groundwater sample obtained from well NY-2 indicate a PCB concentration of 0.00063 ppm.

As part of the MCP Phase II/RFI Investigation, groundwater samples were collected from 10 monitoring wells (78-7, H78B-8R, H78B-13, H78B-15, H78B-16, H78B-17R, H78B-18, H78B-28R, NY-1, NY-4) and two supply wells (W-5 and W-6) from September through December 1996 and analyzed for total (unfiltered) and dissolved (filtered)

PCBs. Analytical results indicate the presence of PCBs at concentrations in unfiltered groundwater samples collected from H78B-8R, H78B-28R, and NY-4, and in a filtered groundwater sample collected from NY-4. PCB concentrations detected in unfiltered groundwater samples ranged from 0.0019 ppm (H78B-28R) to 0.017 ppm (NY-4). The PCB concentration detected in filtered groundwater sample obtained at well NY-4 was 0.0013 ppm.

Analytical results are presented in Tables 5-3A, 5-3B, and 5-3D. PCB results are presented on Figure 5-2A.

VOCs

Groundwater sampling was conducted during April and May 1988 following installation of New York Avenue wells NY-1 through NY-4. Groundwater samples were analyzed for the complete list of priority pollutants. No VOCs were detected.

Groundwater samples were collected at supply well W-3 on January 11, 1989, and August 10, 1989 and analyzed for the complete list of priority pollutants. Analytical results indicate VOCs, toluene (0.151 ppm) and TCE (0.004 ppm), were detected in groundwater at W-3 in January and August 1989, respectively.

As part of the MCP Phase I Investigation, groundwater samples were collected at 11 monitoring wells (78-1 through 78-7 and NY-1 through NY-4) and one supply well (W-3) during January/February 1991. VOCs were detected at well 78-4 and included 1,1,1-trichloroethane, 1,2-dichloroethene (total), TCE, tetrachloroethene, and vinyl chloride. Constituents detected in the groundwater samples and the associated method blanks included methylene chloride, acetone, chlorobenzene, and TCE. The highest total VOC concentrations were detected at monitoring well 78-4 (0.632 ppm).

As part of the MCP Phase II Investigation, groundwater samples were collected from 12 monitoring wells (78-1, 78-4, 78-7, H78B-8R, H78B-13, H78B-15, H78B-16, H78B-17R, H78B-18, H78B-28R, NY-1, NY-4) and three supply wells (W-4, W-5, and W-6) from September through December 1996. A discrete water sample was obtained during installation of boring H78B-22 in July 1996. Analytical results indicate the presence of 1,1,1-trichloroethane, 1,1-dichloroethane, acetone, methylene chloride, toluene, and TCE. Methylene chloride was present in these samples, but was also present in the associated method blanks. Total VOC concentrations ranged from 0.002 to 1.222 ppm, with the highest total VOC concentration being detected in groundwater at monitoring well H78B-17R. VOCs were not detected in groundwater at two monitoring locations (78-1 and H78B-28R).

In summary, VOCs were detected above the quantitation limits at wells NY-4, 78-4, H78B-13, H78B-16, H78B-17R, W-3, W-4, and W-5. Presented below is a summary of the VOCs detected and the associated maximum concentration.

Detected VOCs	Maximum Concentration (ppm)	Monitoring Well Location
1,1,1-Trichloroethane	0.013	78-4
1,1-Dichloroethane	0.005	H78B-16
1,2-Dichloroethene (Total)	0.180	78-4
Acetone	0.022	H78B-13
Tetrachloroethene	0.005	78-4
Toluene	0.151	W-3
Trichloroethene	1.05 (average of duplicates)	H78B-17R
Vinyl Chloride	0.023	78-4

Notes: Table does not include any J or B-qualified data.

Analytical results are presented in Tables 5-3A, 5-3B, and 5-3E. Total VOC concentrations are shown on Figure 5-2A.

SVOCs

Groundwater sampling was conducted during April and May 1988 following installation of New York Avenue wells NY-1 through NY-4. Groundwater samples were analyzed for the complete list of priority pollutants; phenol was the only SVOC detected in groundwater at the site at a concentration of 0.075 ppm at well NY-1.

Groundwater samples were collected at PGC supply well W-3 on January 11, 1989, and August 10, 1989 and analyzed for the complete list of priority pollutants; SVOCs were not detected.

As part of the MCP Phase I Investigation, groundwater samples were collected at 11 monitoring wells (78-1 through 78-7 and NY-1 through NY-4) and one supply well (W-3) during January/February 1991 and analyzed for SVOCs. Total phenols [78-1 (0.0104 ppm) and NY-1 (0.0459 ppm)] were the only SVOCs detected. The highest total SVOC concentration was detected at monitoring well NY-1 (0.102 ppm).

As part of the MCP Phase II/RFI I investigation, groundwater samples were collected from 10 monitoring wells (78-1, 78-4, H78B-8R, H78B-13, H78B-15, H78B-16, H78B-17R, H78B-18, H78B-28R, NY-1) and two supply wells (W-5, and W-6) from September through December 1996 and analyzed for SVOCs. Analytical results indicated the presence of bis(2-ethylhexyl)phthalate [78-4 (0.029 ppm)] and phenol [H78B-13 (0.043 ppm) and NY-1 (0.028 ppm)] (Table 5-3F). The highest total SVOC concentration was detected in groundwater at well H78B-13 (0.051 ppm).

Analytical results are presented in Tables 5-3A, 5-3B and 5-3F. Total SVOC concentrations are shown on Figure 5-2A.

PCDDs/PCDFs

As part of the MCP Phase I/RFI Investigation, groundwater samples were collected at 11 monitoring wells (78-1 through 78-7 and NY-1 through NY-4) and one supply well (W-3) during January/February 1991 and analyzed for PCDDs/PCDFs. Total PCDD and PCDF concentrations only detected at NY-1 were 0.0000983 and 0.0000795 ppm, respectively.

Due to the presence of PCDDs and PCDFs in groundwater at well NY-1, this well was resampled and groundwater samples were analyzed for PCDDs and PCDFs by two different laboratories. Analytical results confirmed the presence of PCDDs and PCDFs. Total PCDD concentrations were 0.0000624 and 0.0001793 ppm. Total PCDF concentrations were 0.0000505 and 0.0002025 pm.

As part of the MCP Phase II/RFI Investigation, groundwater samples were collected from eight monitoring wells (H78B-8R, H78B-13, H78B-15, H78B-16, H78B-17R, H78B-18, H78B-28R, NY-1) and two supply wells (W-5 and W-6) from September through December 1996 and analyzed for PCDDs and PCDFs. In addition, a discrete groundwater sample was collected during advancement of boring H78B-14. The groundwater sample from boring H78B-14 was forwarded to the analytical laboratory but was inadvertently not analyzed for PCDDs/PCDFs. PCDDs were detected in groundwater at wells H78B-8R, NY-1, and W-6. PCDFs were detected in groundwater at wells H78B-8R, H78B-13, NY-1, and W-6. PCDDs/PCDFs detected included HxCDDs (up to 0.00000017 ppm), HpCDDs (up to 0.0000014 ppm), OCDD (up to 0.000012 ppm), TCDFs (up to 0.00000017 ppm), PeCDFs (up to 0.0000011 ppm), HxCDFs (up to 0.0000019 ppm), HpCDFs (up to 0.0000024 ppm), and OCDF (up to 0.0000044 ppm).

Analytical results are presented in Tables 5-3B, 5-3C, and 5-3G. Total PCDD and PCDF concentrations are presented are shown on Figure 5-2A.

RCRA Metals

Groundwater sampling was conducted during April and May 1988 following installation of New York Avenue wells NY-1 through NY-4. Groundwater samples were analyzed for the complete list of priority pollutants; no RCRA metals were detected.

Groundwater samples were collected at supply well W-3 on January 11, 1989, and August 10, 1989 and analyzed for the complete list of priority pollutants; no RCRA metals were detected.

As part of the MCP Phase I/RFI Investigation, groundwater samples were collected at 11 monitoring wells (78-1 through 78-7 and NY-1 through NY-4) and one supply well (W-3) during January/February 1991 and analyzed for total and dissolved metals. Analytical results for dissolved RCRA metals indicated concentrations of lead (0.043 ppm) in NY-4, mercury (0.00039 ppm) in 78-2, and barium (0.0897 ppm) in NY-2. Analytical results indicated a total concentration of cadmium (0.0054 ppm) in 78-1. Total and dissolved RCRA metals arsenic, chromium, selenium, and silver were not detected in any groundwater sample.

As part of the MCP Phase II/RFI Investigation, groundwater samples were collected from seven monitoring wells (H78B-8R, H78B-13, H78B-15, H78B-16, H78B-17R, H78B-18, H78B-28R) and two supply wells (W-5 and W-6) from September through December 1996. All groundwater samples were analyzed for both dissolved and total metal concentrations. Table 5-3H and Figure 5-2B presents the RCRA metals detected in groundwater. Dissolved

and total cadmium, silver and mercury were not detected in any of the groundwater samples. The following table summarizes the total and dissolved RCRA metals and the locations and concentrations where these metals were detected.

RCRA Metal	Well Where Detected	Range to Total Concentrations (ppm)	Well Where Detected	Range of Dissolved Concentrations (ppm)
Arsenic	H78B-8R H78B-16 H78B-18	0.0126 to 0.0199	H78B-8R H78B-15 H78B-18 H78B-28R W-5 W-6	0.011 to 0.0152
Barium	H78B-8R H78B-17R	0.543 to 1.07	H78B-8R H78B-17R	0.326 to 0.908
Chromium	H78B-8R H78B-17R	0.0135 to 0.0279	H78B-17R	0.0148 to 0.0154
Lead	H78B-8R H78B-16 H78B-17R H78B-18 H78B-28R	0.0030 to 0.0158	H78B-17R	0.0064 to 0.0081
Selenium	H78B-16	0.0271 to 0.0299	H78B-8R H78B-13 H78B-15 H78B-17R H78B-18 H78B-28R W-5 W-6	0.0178 to 0.0374

The results of metals analyses are presented in Tables 5-3A, 5-3B and 5-3H and on Figure 5-2B.

5.7.3 Off-Site Groundwater Analytical Results for East Street Area 1

As noted previously, only select data for the East Street Area 1/USEPA Area 3 Site are discussed in this document, since that area is covered as a separate site under its own related documentation. However, per the Agencies' July 3, 1996 letter to GE, groundwater data for monitoring wells RF-13 and ES1-20 is presented herein as it is relevant for evaluating conditions associated with location NY-1 located in the corner of the Hill 78 Area near the intersection of Merrill Road and New York Avenue.

Groundwater samples were obtained from monitoring wells RF-13 and ES1-20 located at East Street Area 1 west of Hill 78 Area and New York Avenue and analyzed for Appendix IX + 3 parameters. In December 1991, groundwater sampling was conducted at monitoring well RF-13. VOCs detected in groundwater at RF-13 included 1,2-dichloroethene (0.13 ppm) and TCE (0.14 ppm). The total VOC concentration at RF-13 was 0.279 ppm. Bis(2-ethylhexyl)phthalate was the only SVOC detected in groundwater at RF-13 (0.014 ppm). The total SVOC concentration was 0.019 ppm. PCBs, PCDD and PCDF compounds, were not detected in groundwater at RF-13. Only two RCRA metals (barium and lead) were detected in groundwater at RF-13 at estimated concentrations below the target detection limit. Analytical results are presented on Figures 5-2A and 5-2B.

In June 1996, groundwater sampling was conducted at monitoring well ES1-20. VOCs, SVOCs, PCBs, and PCDD and PCDF compounds were not detected at ESI-20. Only one VOC, TCE, was detected at an estimated concentration (0.003 ppm) below the associated quantitation limit. The only RCRA metal detected was total lead at a concentration of 0.0027 ppm. Analytical results are presented on Figures 5-2A and 5-2B.

5.7.4 Groundwater Analytical Results for Allendale School Property

Groundwater samples were collected from two Hill 78 Area monitoring wells (78-6 and NY-4) located along Tyler Street Extension and four monitoring wells (SCH-1 through SCH-4) installed as part of the Allendale School Property MCP Supplemental Phase II Investigation on May 20, 1997. Groundwater analytical results for wells 78-6, NY-4, and SCH-4 are summarized below and are presented on Figures 5-2A and 5-2B.

PCBs were not detected in groundwater at monitoring wells NY-4 or SCH-4; however, PCBs (Aroclor-1254 and Aroclor-1260) at a total concentration of 0.0059 ppm were detected in the unfiltered groundwater sample collected from well 78-6. Total PCBs are presented on Figure 5-2A. VOCs were not detected in groundwater at wells 78-6, NY-4 or SCH-4. SVOCs were detected in groundwater at wells 78-6, NY-4 and SCH-4 at estimated concentrations below the CLP-required quantitation limit. Total SVOC concentrations are presented on Figure 5-2A. PCDDs/PCDFs were not detected in groundwater at wells NY-4 or SCH-4. PCDFs were detected in groundwater at well 78-6 at a total concentration of 0.00000035 ppm as presented on Figure 5-2A. Analytical results for filtered and unfiltered inorganics are presented on Figure 5-2B.

5.8 Overall Summary of Groundwater Impacts

This section presents a summary of the findings on groundwater quality at the Hill 78 Area. Figures 5-2A through 5-2B present a consolidated summary of total concentrations of constituents detected in groundwater at the site. Groundwater monitoring efforts have shown the presence of various constituents including PCBs, VOCs, SVOCs, PCDDs/PCDFs, and RCRA metals.

PCBs

During the MCP Phase II/RFI Investigations, low-level PCBs (above estimated values) have been detected in groundwater only at 6 of the 26 wells which are on or immediately adjacent to the Hill 78 Area. Those wells are: NY-2, NY-4, 78-6, 78-7, H78B-8R, and H78B-28R. Wells H78B-8R and H78B-28R are screened in the fill; wells NY-2 and 78-7 screens straddle the alluvial sand and till units; well 78-6 screen straddles the fill and till units; and well NY-4 screen is in the till. It should also be pointed out that in a number of these wells, the presence of PCBs has not been consistently observed. For example, in May 1997 PCBs were not detected in groundwater at well NY-4, but PCBs were detected in 1996.

PCB concentrations detected in unfiltered groundwater samples ranged from 0.0019 ppm (H78B-28R) to 0.017 ppm (NY-4). PCB concentrations detected in filtered groundwater ranged from 0.00063 ppm (NY-2) to 0.0013 ppm (NY-4). Furthermore, filtered PCBs (those more likely to move in groundwater) have only been observed above estimated levels in two wells (NY-2 and NY-4). Groundwater at the site has been slightly impacted by PCBs at wells located in the vicinity of the former Hill 78 landfill (78-7, H78B-8R, and H78B-28R); however, PCBs were also detected at one well located upgradient of the former Hill 78 landfill (NY-4). PCBs were detected only once in a filtered groundwater sample collected from NY-2.

VOCs

VOCs were detected in groundwater above the CLP-required quantitation limit at wells NY-4, 78-4, W-3, W-4, W-5, H78B-13, H78B-16, and H78B-17R. Well H78B-13 screen straddles the fill and alluvial sand units; well H78B-16 is screened in the alluvial sand; well 78-4 screen straddles the alluvial sand and till units; wells NY-4 and H78B-17R are screened in the till; and wells W-3, W-4, and W-5 are deep bedrock supply wells.

Wells H78B-15, H78B-16, H78B-17/H78B-17R, and boring H78B-22 were installed to further investigate the VOC presence in soil in the vicinity of 78-4. TCE and 1,1,1-trichloroethane were detected in groundwater at well 78-4. VOCs were also detected at both H78B-16 and H78B-17R; however, only methylene chloride was detected at H78B-15 and H78B-22 at estimated concentrations below the associated quantitation limit (and was detected in the associated method blank). Well H78B-15 and boring H78B-22 are located upgradient and downgradient of well 78-4, respectively.

Although low-level VOCs were detected at several monitoring wells, only one location encountered a constituent above the MCP GW-2 standards (1,1,1-trichlorethane in well H78B-17R). Low-level VOCs (other than blank contamination) were also detected in two of the PGC water-supply wells. These constituents, toluene and trichloroethene, were consistent with prior sampling results and are significantly below MCP GW-2 standards.

Additionally, although vinyl chloride was detected in well 78-4 in 1991, it was not detected in this well in 1996. Furthermore, concentrations of other VOCs present in well 78-4 in 1991 were either lower or non-detect in 1996 (e.g., trichloroethene decreased from 0.32 ppm to 0.012 ppm). Also, with the exception of methylene chloride which was also detected in the method blank, no VOCs were detected in well H78B-22 which is across the street (downgradient) from well 78-4.

SVOCs

Very low levels of SVOCs were detected in groundwater at wells NY-1, NY-4, 78-1, 78-4, 78-6, H78B-13, H78B-17R and SCH-4 (Allendale School). Wells NY-1 and H78B-13 screens straddle the fill and alluvial sand units; wells 78-1, 78-4, and SCH-4 screens straddle the alluvial sand and till units; well 78-6 screen straddles the fill and till units; and wells H78B-17R and NY-4 are screened in the till.

Phenol was detected in groundwater at the site at a concentration of 0.075 ppm at well NY-1 during the groundwater sampling conducted during April and May 1988. Total phenols [78-1 (0.0104 ppm) and NY-1 (0.0459 ppm)] were the only SVOCs detected during the MCP Phase I Investigation in 1991. During the MCP Phase II Investigation from September through December 1996, SVOCs detected in groundwater included bis(2-ethylhexyl)phthalate [78-4 (0.029 ppm)] and phenol [H78B-13 (0.043 ppm) and NY-1 (0.028 ppm)]. As part of the MCP Supplemental Phase II Investigation of the Allendale School Property, very low-levels (0.001 to 0.007

ppm, total) of SVOCs were detected in groundwater at wells 78-6, NY-4, and SCH-4. Other than the detection of phenol at NY-1 and H78B-13 (which occurs at levels significantly below MCP GW-2 standards), the groundwater at the site is not impacted by SVOCs.

PCDDs/PCDFs

PCDDs/PCDFs were detected in groundwater at wells NY-1, H78B-13, H78B-8R, 78-6, and W-6. Well H78B-8R is screened in the fill; wells NY-1 and H78B-13 screens straddle the fill and alluvial sand units; and well W-6 is a deep bedrock supply well.

During the MCP Phase I/RFI Investigation in January/February 1991, PCDDs and PCDFs were detected in groundwater only at well NY-1 at concentrations of 0.0000983 and 0.0000795 ppm, respectively. The August 1991 resampling of well NY-1 confirmed the presence of PCDDs and PCDFs at concentrations of 0.0000624 and 0.0000505 ppm, respectively.

For the MCP Phase II/RFI Investigation in September through December 1996, PCDDs were detected in groundwater at wells H78B-8R, NY-1, and W-6 and PCDFs were detected in groundwater at wells 78-7, H78B-8R, H78B-13, NY-1, and W-6. PCDFs were also detected in groundwater at well 78-6 in May 1997 as part of the Supplemental Phase II program for the Allendale Schoo Property.

Well H78B-13 and boring H78B-14 were installed to evaluate the presence of PCDD and PCDF compounds previously detected in groundwater at NY-1. Well H78B-13 and boring H78B-14 are located upgradient and downgradient of well NY-1, respectively. PCDFs were detected at H78B-13 (0.00000217 ppm). A discrete groundwater sample obtained during advancement of boring H78B-14 was forwarded to the analytical laboratory, but was inadvertently not analyzed for PCDDs and PCDFs. To evaluate the impacts of PCDDs/PCDFs in the vicinity of well NY-1, the results of samples collected from East Street Area 1 wells RF-13 and ES1-20 were reviewed; these constituents were not detected in groundwater at these wells.

RCRA Metals

During the MCP Phase I Investigation in January/February 1991, analytical results for dissolved RCRA metals indicated concentrations of lead (0.043 ppm) in NY-4, mercury (0.00039 ppm) in 78-2, and barium (0.0897 ppm) in NY-2. Analytical results indicated a total concentration of cadmium (0.0054 ppm) in 78-1. Total and dissolved RCRA metals arsenic, chromium, selenium, and silver were not detected in any groundwater sample.

During the MCP Phase II/RFI Investigation from September through December 1996, the following RCRA metals were detected in groundwater at the site: arsenic, barium, chromium, lead, and selenium. Dissolved and total cadmium and silver were not detected above the CLP - required detection limit (CDRL) in any of the groundwater samples. Mercury was not detected in groundwater. Figure 5-2B depicts the location where these metals were detected in groundwater at the site. RCRA metals were detected in groundwater at wells 78-6, NY-4, SCH-4 (Allendale), H78B-18, H78B-28R, and W-6 located north of the PGC Facility Area, at wells H78B-15, H78B-16, H78B-17R, and W-5 located in the vicinity of the PGC Facility Area (east and south), at well H78B-8R located south of the former Hill 78 Area landfill, at wells ES1-20 and RF-13 located at East Street Area 1 and at H78B-13 located in the vicinity of well NY-1. In all cases, RCRA metals in groundwater were below the MCP GW-3 standards (note: the MCP does not list GW-2 standards for metals).

6. Subsurface Gas

This section presents the results of the historic and recent MCP Phase II/RFI subsurface gas sampling activities at the Hill 78 Area and the data associated with these activities followed by a summary of subsurface soil gas results.

The readings obtained by the PID are a qualitative estimate of the total concentration of VOCs present. The PID instrument measures total organic vapor concentrations by producing a response to an unknown sample which can be related to a gas of known composition to which the instrument has previously been calibrated.

The subsurface gas sampling activities were completed during the installation of soil borings at Hill 78 Area. Headspace measurements of soil obtained from split-spoon samples were performed in the field using a PID. These headspace readings give a qualitative estimate of the concentration of VOCs present in the subsurface soil gas, and do not represent the absolute concentrations of any VOC in soil, whether the compound is natural or manmade.

As described below, previous subsurface gas investigations were completed in the PGC Area during April through June 1987 and August 1988, during the installation of the New York wells NY-1 through NY-4 in April/May 1988, in connection with the installation of the PGC sanitary line along the northern edge of Merrill Road during May 1990, as part of the MCP Phase I work efforts in January 1991, and as part of the MCP Phase II/RFI work efforts in July through November 1996.

During April through June 1987, soil borings were installed at various locations throughout the PGC Area. Soil samples were obtained at borings 72-1 through 72-18 in 2-foot intervals to depths of 20 feet below grade. During August 1988, additional soil borings were installed throughout the PGC Area. Soil samples were obtained in 2-foot intervals at borings 72-19 through 72-25 to depths of 8 feet below grade and at borings 72-5, 72-6, 72-11, 72-26, and 72-27 to depths of 4 feet below grade. The soil samples were screened with a PID for VOCs in the soil gas. Results are presented in Tables 4-1A and 4-1B and are summarized below.

During the installation of the New York Avenue wells NY-1 through NY-4 in April/May 1988, soil samples were obtained at 2-foot intervals to depths ranging from 14 to 33 feet and screened with a PID. Results are presented in Table 4-1E and are summarized below.

On May 17 and 18, 1990, soil borings were installed in connection with the installation of the PGC sanitary line along the northern edge of Merrill Road. Soil samples were collected at 10 locations and screened with a PID. Soil samples were obtained in 3-foot intervals from borings A-1 through A-3 to depths of 6 feet below grade. Soil samples were obtained in 2-foot intervals from borings A-4 through A-10 to depths of 4 feet below grade. Results are presented in Table 4-1D and are summarized below.

On January 9 and 10, 1991, soil samples were collected at various locations at the Hill 78 Area as part of the MCP Phase I Investigation. Soil samples were collected in 2-foot intervals from borings 78-1 through 78-7 to depths of 28 feet below grade and screened with a PID. Results are presented in Table 4-1C and are summarized below.

During the installation of the MCP Phase II/RFI soil borings in July through November 1996, soil samples were obtained in 2-foot intervals at 21 locations (H78B-8, H78B-10 through H78B-22, H78B-24, H78B-25, and H78B-27 through H78B-29) to depths ranging from 9 to 30 feet below grade. Results are presented in Table 4-1G and are summarized below.

Subsurface soil gas readings at the site ranged from less than background levels (0 PID units) to 1,720 PID units. The highest reading (1,720 PID units) was measured at boring 72-4 from 8 to 10 feet below grade. Elevated soil gas readings (greater than 10 PID units) were primarily measured in six soil borings in the PGC Area during the April through June 1987 PID field screening investigation (72-1, 72-4, 72-5, 72-6, 72-9, 72-11). However, soil gas readings from borings installed in this area during August 1988 were also below 2 PID units.

Elevated readings (greater than 10 PID units) were measured at borings 72-1, 72-4, 72-5, 72-6, 72-9, 72-11 in the PGC Area, at boring 78-1, and at the following MCP Phase II/RFI borings: H78B-8R, H78B-11, H78B-12, H78B-13, H78B-18, H78B-19, H78B-24, and H78B-28. The vertical profile of soil gas readings for borings 72-1, 72-4, 72-5, and 72-6 shows elevated soil gas readings were measured to the bottom of the borings. At other boring locations exhibiting elevated readings, only sporadic detections occurred. The following table presents these soil borings, the maximum soil gas readings and the respective depth interval, and the number of soil samples exhibiting soil gas readings greater than 10 PID units.

Location	Date	Maximum Reading (PID Units) [depth in feet]	Reading (PID Unit) from 0-2 feet	Number of Samples (>10 PID Units)
72-1	4-6/87	630 [8'-10']	10	8
72-4	4-6/87	1,720 [8'-10']	145	10
72-5	4-6/87	225 [0'-2']	225	9
72-6	4-6/87	340 [14'-16']	174	10
72-9	4-6/87	11.4 [4'-6']	0.6	1
72-11	4-6/87	350 [4'-6']	253	3
78-1	1/91	39.4 [12'-14']	0	1
H78B-8R	11/96	45.8 [26-28']	0	1
H78B-11	7/96	228 [6'-7']	0	2
H78B-12	7/96	13 [0-2']	13	1
H78B-13	7/96	24 [4'-6']	0	1
H78B-18	7/96	26 [0'-0.5']	26	1
H78B-19	7/96	24 [4'-6']	0	1
H78B-24	7/96	10.5 [4'-6']	0.5	1
H78B-28	7/96	36 [6'-8']	10.5	2

7. Surface Water and Sediment Investigations

7.1 General

Surface water and sediment samples were collected in May and September 1991 and September 1996 from the Hill 78 Area. All sampling was performed in accordance to the protocols set forth in the SAP/DCAQAP. Locations of the surface water and sediment samples are shown on Figures 7-1A and 7-1B. The analytical results are summarized in Tables 7-1A through 7-1K and on Figures 7-1A and 7-1B.

As presented in the May 1995 Phase I Report /CAS, surface water and sediment samples were collected in May 1991 from two locations in Swale A (S-1 and S-2) for Appendix IX + 3 analysis. Due to laboratory error, however, the sediment samples were inadvertently analyzed for only VOCs and SVOCs. To compensate, in September 1991, three new sediment samples were subsequently collected from the same two locations and analyzed for all the remaining Appendix IX + 3 parameters except VOCs and SVOCs. These analytical results are summarized in Tables 7-1A through 7-1C and on Figures 7-1A and 7-1B.

It is important to note that the sediment and surface water samples collected in May and September 1991 were obtained from two locations within Swale A. Surface water and sediment sample collections were co-located at these two locations. Sample designations included SW-1 and SW-2 for May 1991 surface water; co-located sediment samples were designated SE-1 and SE-2, respectively. The September 1991 sediment samples were designated S1S and S2S; these samples were co-located with the May 1991 sediment samples SE-1 and SE-2, respectively.

As outlined previously in Section 1.3, in September 1996, sediment samples were collected from six locations (one sample per location) and submitted for analysis of PCBs and Appendix IX + 3, VOCs, SVOCs, and inorganics. Sampling locations are illustrated on Figures 1-2, 7-1A, and 7-1B, and include two locations (S2 and H78SE-3) with Swales A and B, respectively; one location (H78SE-5) within the swale area south of Merrill Road (combined flow from Swales A and B); one location (H78SE-6) within the sedimentation basin east of the PGC Facility; one location (H78SE-71-SECB) within a manhole adjacent to the Building 71 diked oil storage area; and one location (H78SE-7) within a catch basin at the corner of Dalton Avenue and Brighton Avenue. A sediment sample was proposed to be collected from Swale C located along the western perimeter of the parking lot used for the PGC Facility (see Figure 1-2); however, that swale is simply a paved channel depression serving to convey runoff from the parking lot and no sediment was present at the time of sampling.

Also during September 1996 surface water grab samples were collected from five locations (S2-SW, H78SW-3, H78SW-4, H78SW-5, and H78SW-7) and submitted for analysis consistent with the sediment samples. Four of these locations (S2-SW, H78SW-3, H78SW-5, and H78SW-7) were collected from locations co-located with sediment samples (S2, H78SE-3, H78SE-5, and H78SE-7, respectively).

It is also important to note that September 1996 surface water and sediment samples S2-SW and S2 were co-located with the 1991 sampling locations SW-2 and SE-2/S2S, respectively.

Summaries of the results of these investigations are presented in Sections 7.2 and 7.3 below for surface water and sediment, respectively.

Additionally, Section 7.4 briefly describes storm water sampling performed by GE in 1992 related to its NPDES permit application.

7.2 Surface Water Analytical Results

Total and dissolved PCB data from unfiltered and filtered sample analysis, respectively, are presented in Tables 7-1A and 7-1D and summarized on Figure 7-1A. No dissolved PCBs were detected in any surface water sample. Total PCBs were reported in surface water at H78SW-7 (0.00092 ppm-estimated value). A total PCB concentration of 0.0015 ppm (estimated value) was reported for sample H78SW-3 from near the mouth of Swale B, and 0.000066 ppm was reported for the 1991 sample from SW-2. All detected PCBs were quantified as Aroclor 1260.

Only limited low-level VOCs were detected in surface water samples. Low concentrations of methylene chloride and acetone were reported at estimated concentrations in certain samples, but were detected in the associated method blanks, and attributed to laboratory contamination. Also, chloroethane was detected at a concentration of 0.003 ppm (estimated value) in the sample from the Brighton and Dalton Avenues catch basin (H78SW-7). Total VOC concentrations in surface water samples ranged from 0.002 ppm to 0.017 ppm. Surface water VOCs analytical results are presented in Tables 7-1A and 7-1E and summarized on Figure 7-1A. All detections were either estimated values (due to their low levels) or were also associated with blank contamination.

Limited SVOCs were also detected in surface water samples. Low concentrations (0.001 - 0.004 ppm, estimated values) of bis(2-ethylhexyl)phthalate were reported for the 1996 samples, but this constituent was also detected in the associated method blanks. Total phenols were reported at 0.0112 ppm for the May 1991 sample from SW-1, but no other SVOCs were detected in the 1991 samples. Overall, total SVOCs in all surface water samples ranged from 0.001 ppm to 0.004 ppm. SVOC analytical data is presented in Tables 7-1A and 7-1F and summarized on Figure 7-1A. With the exception of the May 1991 phenol detection from SW-1, all other detections were either estimated values (due to their low levels) or associated with blank contamination.

Both filtered and unfiltered surface water samples were also analyzed for Appendix IX + 3 inorganics. The results are presented in Table 7-1A and 7-1G and show varying concentrations of these metals. These data are also summarized on Figure 7-1B.

7.3 Sediment Sample Analytical Results

Sediment PCB data are presented in Tables 7-1B and 7-1H and summarized on Figure 7-1A. PCBs were detected in all sediment samples, with PCB concentrations ranging from 0.7 ppm (SE-1) to 200 ppm (H78SE-6). All PCBs were quantified as Aroclor 1260. Excluding the 200 ppm concentration observed in the sample from H78SE-6, the only other PCB concentration greater than 5 ppm is a 49 ppm concentration reported from the sample from the catch basin near Building 71 (Location H78SE-71-SECB).

With the exception of the manhole near Building 71 (Location H78SE-71-SECB) which exhibited the presence of chlorobenzene at 34 ppm (and a few other VOCs at low concentrations), the available sediment data show little presence of VOCs in sediment samples. Although acetone, acetonitrile, and methylene chloride were reported for many samples, these compounds were also detected in each of the associated method blank samples. Generally, the only VOCs detected in either the 1991 or 1996 samples (excluding H78SE-71-SECB) are chlorobenzene (0.002 - 0.004 ppm - estimated value) and trichorofluoromethane (ranging from 0.001 to 0.002 ppm - estimated values). Overall, total VOC concentrations in sediment samples ranged from 0.031 ppm at H78SE-5 to 37 ppm at H78SW-71-SECB. Sediment VOC data is presented in Table 7-1B and 7-1I and summarized on Figure 7-1A.

Tables 7-1B and 7-1J presents results of the sediment SVOC analysis results. A wide array of SVOCs were detected at various concentrations. Overall, total SVOCs ranged from 3.7 ppm at H78SE-6 to 722 ppm at H78SE-71-SECB. As was the case for VOCs, sample H78SE-71-SECB, collected near the Building 71 catch basin, exhibited notably higher concentrations than samples from other locations. Also, notable about the SVOC results from that sample are the high concentrations of chlorinated benzenes and the relative lack of detections of other SVOCs, while the other samples had few detectable chlorinated benzenes and relatively high detection frequencies for other SVOCs, such as PAHs. Sediment SVOC data are summarized on Figure 7-1A.

Appendix IX + 3 inorganic results indicate the presence of a wide range of concentrations of various metals. These data are shown in Tables 7-1C and 7-1K and summarized on Figure 7-1B.

7.4 NPDES Storm Drain Sampling

As part of their NPDES stormwater permit application, GE sampled stormwater from three locations in the Hill 78 Area/USEPA Area 2 in 1992. Sampling location YD9, sampled August 29, 1992, is situated at the discharge of the storm drain for surface water runoff from the Building 78 area. Location YD13, also sampled on August 29, 1992, is situated at the outlet of a stormwater detention basin near Building 71, which collects stormwater runoff from the Building 71 area and a portion of the OP parking lot. Sampling location YD14 was sampled on September 30, 1992. Sample YD14 was collected from the 18-inch drain outlet adjacent to Merrill Road near the vehicle entrance to the PGC facility, and represents stormwater that originates from YD13, with additional stormwater contributed from the PGC facility drainage. The NPDES storm drain sampling locations are shown on Figure 1-3. All samples were grab samples and were analyzed for PCBs and metals.

PCBs were not detected in sample YD14. Aroclor 1260 was detected in sample YD9 at a concentration of 4.4 ppm and in sample YD13 at a concentration of 0.8 ppm. Various metals were detected in all three samples at varying concentrations. All analytical data are presented in Appendix K of the MCP Phase I Report/CAS (O'Brien & Gere, 1995).

8. Air Monitoring

8.1 General

Zorex Environmental Engineers, Inc. conducted a year-long Facility Air Monitoring Program to quantify levels of PCBs at and near the Pittsfield General Electric facility. The PCB ambient monitoring program began on August 20, 1991, and ended on August 14, 1992. This year-long program generally involved the collection of high-volume ambient air every 12 days for PCB analysis. The monitoring network included one air sampler at Hill 78 Area/USEPA Area 2. Meteorological data were collected at an on-site weather station within the East Street Area 2/USEPA Area 4 portion of the GE facility.

The monitoring program was conducted in accordance with the SOW approved by the MDEP in December 1990 and in accordance with the Quality Assurance Project Plan (QAPP) submitted to the MDEP in August 1991. The MDEP approved monitoring locations in May 1991.

8.2 Results of Air Monitoring Program

The results of this PCB sampling were submitted to the MDEP and the USEPA on a quarterly basis and presented in a final report submitted in November 1992 (Zorex, November 1992). In that report, the results are summarized in Table 2, which has been reproduced as Table 8-1 of this report. As shown on Table 8-1, ambient air PCB concentrations during the year-long study averaged 0.0007 $\mu g/m^3$ at the Hill 78 Area/USEPA Area 2 location.

Only seven of the 31 samples collected in the Hill 78 Area/USEPA Area 2 show detectable levels of PCBs. The highest concentration detected was on June 5, 1992 (Table 8-1).

9. Fate and Transport/Migration of Hazardous Constituents

9.1 General

The following section presents a detailed evaluation of potential migration pathways associated with chemical constituents observed at the Hill 78 Area. Since PCBs are the primary constituent of concern and because other constituents observed at the site vary widely in terms of detection frequency, concentration, and chemical characteristics, PCBs are presented as a surrogate in this discussion. However, the principles of this evaluation can be applied to other constituents of concern based on the individual chemical characteristics and the physical processes described below. Specifically, Section 9.2 describes the fate and transport characteristics of PCB Aroclors; Section 9.3 discusses the potential migration within the site; and Section 9.4 provides evaluations of specific potential preferential pathways.

When the background sampling plan for the facility (BBL, April 1996) is completed and supplemental RFI/Phase II data are collected (see Section 10), it is possible that other constituents of concern will be identified. If so, the fate and transport characteristics of those constituents will be presented in a future submittal.

9.2 Supplemental Fate and Transport Characteristics of PCB Aroclors

The fate and transport of PCBs in the environment are greatly influenced by their low water solubility and high affinity for soil organic matter. This generally limits aqueous-phase concentrations to low parts-per-billion levels unless significant amounts of solvents, oils, or colloids are present (Baker et al., 1986; Dragun, 1989). In general, the adsorption of PCBs to soils increases with increasing soil organic content, decreasing soil particle size, and increasing congener chlorination (Lyman et al., 1982; Pignatello, 1989). PCBs are relatively immobile as long as the soil matrix to which they are sorbed remains in place.

The results of soil sampling at the Hill 78 Area show that the vast majority of the PCBs present was quantified as Aroclor 1260. For the soil PCB data collected at the site in 1996, 2.4 percent (three samples) of the reported total PCB detections included Aroclor 1248, and 4.0 percent (five samples) included Aroclor 1254. In contrast, 97.7 percent of the total PCB concentrations detected included Aroclor 1260. Aroclor 1016, 1232, and 1242 were not detected in any soil sample.

Analytical results of the 1996 groundwater and surface water samples indicated no detections of Aroclors 1232, 1242, 1248, or 1254. Aroclor 1260 was detected in four unfiltered groundwater samples and in three of the filtered samples (Table 5-3D). In surface water, both PCB detections were quantified as Aroclors 1260 and were detected in unfiltered, but not filtered samples (Table 7-1D). These results indicate that the fate and transport of PCB at this site will be determined primarily by the properties and characteristics of Aroclor 1260.

Aroclor 1260 is a mixture of various specific PCB congeners and has an average of more than six chlorine atoms per molecule. The average molecular composition (on a weight basis) of Aroclor 1260 is as follows: 12 percent pentachlorobiphenyl ($C_{12}H_5Cl_5$), 38 percent hexachlorobiphenyl ($C_{12}H_4Cl_6$), 41 percent heptachlorobiphenyl ($C_{12}H_3Cl_7$), and 9 percent higher chlorinated molecules (Connell & Mileler, 1984). Because of this distribution of homologs, Aroclor 1260 is considered to be highly chlorinated.

The solubility in water of Aroclor 1260 has been reported to be between 3 and 80 ppb. The range for all PCB Aroclors is 3 to 5,000 ppb (Mackay et al., 1992). As the chlorine content of the Aroclor increases, the compound becomes less soluble in water and, therefore, becomes more hydrophobic.

The soil or sediment sorption constant (log K_{oc}) of Aroclor 1260 has been reported to be 6.8 (USEPA, 1982). The range for all PCB Aroclors is 2.9 to 6.8 (USEPA, 1982; Mackay et al., 1982). The greater the K_{oc}, the greater the relative portion of the compound will adsorb to soil and other organic matter. A compound with a log K_{oc} greater than 3.7 (i.e., Aroclors 1254 and 1260) is considered immobile in soil (Chou and Griffin, 1986).

PCBs could potentially volatilize from soil, but strong adsorption of soils and low solubility tends to limit the extent of volatilization (ATSDR, 1993). The tendency for PCB to volatilize can be estimated from its vapor pressure (for dry soils) or Henry's Law constant (for wetted soils). The vapor pressure of Aroclor 1260 has been reported to be between 0.002 and 0.012 Pa. The range for all PCB Aroclors is 0.0002 to 2.0 Pa. The Henry's Law constant of Aroclor 1260 has been reported to be between 20 and 60 Pa-m^3/mole. The range for all PCB Aroclors is 5 to 900 Pa-m^3/mole (Mackay et al., 1992).

PCBs are fairly persistent in the environment, and degradation via chemical oxidation and hydrolysis in soil is generally insignificant. PCBs may, however, be subject to loss via photolysis, biotransformation, and biodegradation (ATSDR, 1993). Experimental evidence indicated that PCBs are susceptible to biodegradation under both aerobic and anaerobic conditions. In general, the degradability of PCB congeners under aerobic conditions increases as the degree of chlorination decreases.. Variations in this trend exist and are attributed to preferential degradation determined by chlorine substitution patterns (ATSDR, 1993), with congeners with a chlorinated ortho-position more resistant to degradation.

Laboratory research has shown that the lesser chlorinated PCB congeners are subject to aerobic biodegradation by microorganisms indigenous to soils. Aerobic biodegradation results in a complete breakdown of PCBs, causing a net decrease in total molar PCB concentration. Various breakdown products have been identified and include chlorinated catechol, chlorobenzoic acid, and carbon dioxide (Bedard et al., 1987; Hankin and Sawhney, 1984; Fries and Morrow, 1984).

As with aerobic biodegradation, preferential degradation of meta- and para-substituted congeners has been observed under anaerobic conditions, although biotransformation is apparently also related to the chlorination pattern on the congeners (Rhee et al., June 1993, April 1993; Quensen et al., 1988). Laboratory research has shown that PCBs undergo reductive dechlorination under anaerobic conditions by indigenous microorganisms; however, the extent and rate of dechlorination varies among congeners and soil collection locales (Rhee et al., June 1993, April 1993; Nies and Vogel, 1990). Study results indicate that the more highly chlorinated PCBs are transformed to less chlorinated congeners by anaerobes (Quensen et al., 1988) and that the lower chlorinated PCBs may be further degraded to carbon dioxide, water, and chlorine by aerobes (Chen et al., 1988; Quensen et al., 1990).

9.3 Potential Migration Within the Site

Prior sections of this report have described the investigations that have been performed at the Hill 78 Area to characterize the presence, quantity, and concentration of constituents in various site media. The fate and transport characteristics of PCBs and other constituents, as well as the physical characteristics and environmental setting of the site, influence the potential for migration of these constituents.

Based on the available information, the following potential migration pathways have been identified for constituents detected at the site:

- Volatilization, dust migration, and surface runoff from surficial soils;
- Leaching to or direct contact releases from subsurface soils and fill to groundwater, or volatilization or dust migration from subsurface material;
- Subsurface transport via groundwater flow;
- Dissolution into surface water from sediment and resuspension of sediment;
- Surface transport via surface water flow; and
- Migration via specific potential pathways (Section 9.4).

9.3.1 Potential Migration from Surficial Soils

Surficial soil could potentially provide a source of constituents to the atmosphere via volatilization or dust migration and to surface water via surface water runoff. Although volatilization of constituents presents a potential migration pathway, the constituents of greater volatility (VOCs and SVOCs) were generally not detected at significant concentrations in the surficial soil samples. Furthermore, results of the 1992 air monitoring program at Hill 78 indicate that although PCBs are present in the surface materials, vertical migration of PCBs to the atmosphere does not appear to be occurring to any appreciable extent. If limited volatilization should occur at the site, the eventual fate of these constituents would be largely dependent on dispersion within the atmosphere.

Dust migration as a potential pathway for constituent transport will depend on the type and extent of surface soil cover and the level of activity in the vicinity of the exposed surfaces. Generation of potential dust is minimized by leaving the surficial soil undisturbed. Natural dust generation through wind uplift at the site is reduced by the well established grass and vegetative cover over a majority of Hill 78 Area.

Another potential transport pathway of constituents from surficial soil is precipitation runoff. The Hill 78 Area includes a combination of natural vegetated ground surface and paved surfaces or structures. Drainage of precipitation is enhanced by the existence of drainage pipe networks, swales, and the small retention pond on the east side of the site. Discharge of stormwater from specific points throughout the stormwater management system is discussed elsewhere in this report, as are specific preferential pathways previously identified (BBL, 1996).

If soil was disturbed during excavation or similar activities, the potential for transport via volatilization, dust migration, and surface runoff would be increased. However, excavation activities are of limited frequency and duration and are unlikely to contribute significantly to the migration of chemical compounds within or from the site. Additionally, GE's excavation protocols address releases of vapors and dusts from on-site excavations. These protocols define appropriate measures to mitigate potential migration associated with on-site excavations.

To evaluate the potential for release of PCBs to the ambient air, air monitoring activities were conducted in 1992. These activities are described on Section 8 of this report. Results of year-long air sampling showed an average air PCB concentration of 0.0007 $\mu g/m^3$ at the Hill 78 Area, which is only slightly above the analytical detection limit

of 0.0005 $\mu g/m^3$. Furthermore, 77 percent of the analyzed samples showed no detectable PCBs. Thus, migration of PCBs from surficial soil to air does not appear to be a significant transport pathway at this site.

9.3.2 Potential Migration from Subsurface Soils/Fill

The potential migration of constituents from subsurface material at the Hill 78 Area would occur as a result of dissolution to groundwater via direct contact and/or as a results of leaching by infiltrating precipitation. The potential for contact of subsurface soil with infiltrating precipitation is limited in certain areas by physical characteristics of the site. For example, some areas at the site are covered by concrete or asphalt surfaces or buildings, which prevent infiltration and subsequent leaching from soils above the water table. Other portions of the site are covered by vegetation, which increases evapotranspiration and reduces infiltration. Additionally, the hydrophobic nature of PCBs, SVOCs, and other constituents decreases the potential for the release of significant quantities via leaching.

Groundwater is in direct contact with constituents in subsurface materials in some locations at the Hill 78 Area. Dissolution of the more water-soluble chemicals from the soil matrix to the groundwater may occur at these locations, but the extent to which this occurs will depend on the characteristics of individual constituents. The low concentrations observed in those samples where constituents were detected suggest that some limited dissolution and transport along the groundwater gradient may occur, but is unlikely as a migration pathway to release significant quantities of constituents.

Volatilization of constituents and the generation of dusts from subsurface materials could potentially occur during excavation or other disturbances. Under current conditions at the site, volatilization of constituents from the subsurface soils is not considered a significant migration pathway because the depth of many of the constituents limits diffusion to the atmosphere. Additionally, the presence of the landfill cap and impervious surfaces (where present) eliminates contact of subsurface materials with the atmosphere. Any disturbance which would expose the subsurface materials to the air, such as small-scale excavation/construction activities, or utility maintenance, would be limited in frequency and duration, and would unlikely result in significant migration of constituents within or from the site. In addition, in the event of such activities, GE's excavation protocols address the potential release of vapor and dust from on-site excavations and define appropriate measures to mitigate potential constituent migration associated with these activities.

9.3.3 Potential Migration via Groundwater

Movement of groundwater beneath the Hill 78 Area site provides a transport mechanism for dissolved constituents. As discussed in Section 5, groundwater flow at the site is generally in a southerly direction toward the Housatonic River at an estimated velocity of 0.3 ft/day and an estimated discharge of water from the site of approximately 5.9 gpm during high-flow conditions (see Section 5.6). The fate of constituents released to groundwater at the site could possibly include:

1) Permanent "containment" within the groundwater system as a result of adsorption onto subsurface soils; and

2) Possible subsurface transport off site into a receiving body of water, such as the downgradient Housatonic River.

Due to the hydrophobic nature of PCBs, SVOCs, and other constituents, extensive dissolution from subsurface soil to the groundwater is not expected to occur in quantities to provide significant export of constituents. Further, the amount of dissolution, which will be determined by the partition coefficients of specific constituents, will be limited by chemical equilibrium and may even tend toward sorption to organic carbon in the subsurface soil.

Detections of PCBs, VOCs, SVOCs, and other constituents in groundwater were generally limited to a relatively small fraction of the wells sampled and/or low concentrations. Constituents were detected at a greater frequency on the southern, downhill side of the site, which could be due to groundwater transport from elsewhere on site, or to local conditions in the immediate vicinity of the individual wells. However, the vast majority reported concentrations of the detected constituents were very low; some concentrations were less than the required analytical detection limit. Thus, groundwater transport is unlikely to release significant quantities of constituents off site.

9.3.4 Potential Migration via Sediment and Surface Water

Mobilization of constituents from sediments and transport via the limited surface water drainages at this site is another potential migration pathway. Sediment analytical data for samples collected from the storm-drainage swale immediately downstream of the site (i.e., just south of Merrill Road) indicate that low concentrations of VOCs and SVOCs are present. Surface water samples from the same locations show few detections and no significant transport of the same constituents. Two sediment samples that require additional attention (refer to Section 10) are H78SE-71-SECB and H78SE-6, both in the vicinity of Building 71. Sediment PCB concentrations in these samples were 49 ppm and 200 ppm, respectively. Also, sample H78SE-71-SECB shows VOC and SVOC concentrations notably higher than the other samples, and with a different array of constituents detected. However, limited transport of constituents from the site is evidenced by surface water data, suggesting that these sediments are relatively immobile and not prone to erosive transport during storm events.

Surface water sampling in 1991 and 1996, and NPDES monitoring at Outfall 007 indicate little export of PCBs or other constituents from the Hill 78 Area. Outfall 007 NPDES monitoring shows little PCB transport via the stormwater outfall, and compliance with the NPDES permit requirements. Moreover, the surface water drainages at the site ultimately discharge into the Housatonic River, and available sampling and analysis data from the river indicate no contribution of PCBs from the portion of the GE facility containing this site to the surface water or sediments of the river. Hence, transport via surface water does not appear to be a significant migration pathway at this site.

9.4 Specific Potential Pathways Evaluation

The Assessment of Potential Preferential Pathways Report (BBL, 1997) was prepared to assess potential preferential pathways at the Hill 78 Area. This investigation was conducted in accordance with the MCP Phase II SOW/RFI Proposal under the oversight of the Agencies. Figures summarizing underground utilities information (including a GE or City of Pittsfield designated drawing reference, location, invert elevation, and associated groundwater elevation) and pipelines retained for Phase III Analysis have been reproduced from the Assessment of Potential Pathways Report (BBL, 1997) and are included in Appendix A to this report.

A phased approach was used to evaluate potential preferential pathways at the site. In accordance with the criteria previously defined in the MCP Phase II SOW/RFI Proposal, hazardous constituent migration could occur via one or more of the following mechanisms:

1) Infiltration of constituent-containing groundwaters or oils into a piping network (applicable to all underground pipelines/conduits/tunnels where the pipeline/conduit/tunnel inverts are below the groundwater table);

2) Infiltration of constituent-containing groundwaters or oils into trench backfill material of a piping network (applicable to all underground pipelines/conduits/tunnels where the associated backfill/bedding materials are below the groundwater table); and

3) Release of hazardous materials to subgrade from process/product lines, underground tunnels, or "other" piping networks at the site that may have conveyed hazardous materials, irrespective of their proximity to the groundwater table and site boundaries.

To evaluate potential hazardous constituent migration pathways, a three-phased evaluation was performed:

Phase I - Development of a groundwater contour map for the site, identification of the locations (horizontal and vertical) of various underground pipelines/conduits/tunnels, and placement of those conveyance systems into general categories [i.e., stormwater drainage, sanitary sewer, utilities (potable water main, fire protection main, natural gas main, electrical/telephone conduits), tunnels, process/product lines and "other" piping networks].

Phase II - Evaluation of those pipelines/conduits/tunnels identified during Phase I that potentially serve as off-site preferential pathways for hazardous constituents, and identification of those pipelines/conduits/tunnels which require additional investigation.

Phase III - Additional investigation of those pipelines/conduits/tunnels identified in Phase II as requiring further evaluation.

As a result of the first two phases of the evaluation, select pipelines were retained for proposed Phase III Investigation based on their potential to act as preferential pathways for the off-site migration of hazardous constituents. Pipelines retained for Phase III evaluation included three stormwater drainage pipelines, two sanitary sewer pipelines, one utility pipeline (fire protection line), one process/product pipeline system (three 10c oil lines), and one "other" piping network (3-inch effluent line). Positions of these pipelines in the subsurface at the Hill 78 Area range from below the high groundwater elevation, to several feet above the groundwater table.

The proposed Phase III evaluation activities generally consisted of review of GE facility pipeline closure records, review of sediment, soil, surface water, and groundwater data, review of hydraulic conductivity testing, field inspections, and review of NPDES outfall records.

It should be noted, in general, hydraulic conductivities in the upper hydrogeologic units at the site are relatively high, especially in the alluvial sand layers. The geometric mean hydraulic conductivities for the sand and fill layers (2.12×10^{-3} cm/sec and 1.07×10^{-3} cm/sec, respectively) suggest the soils are relatively conducive to groundwater flow, on average across the Hill 78 Area. Given the high groundwater gradients observed at the site (Figure 5-1D), groundwater flow would most likely not be impacted by the differential of pipeline backfill unless that backfill has a significantly higher flow gradient or hydraulic conductivity. Further, given the limited presence of low levels of constituents observed in groundwater across the site (see Section 5), the impact (if any) resulting from preferential pathway infiltration would likely be minimal.

Details of the Phase III evaluation are further summarized in the following subsections.

9.4.1 Stormwater Drainage and Sanitary Sewer Pipelines

The stormwater and the sanitary pipeline investigation activities were conducted together since these systems are in close proximity to one another in most areas of the site. In addition, both systems lead to common off-site areas (i.e., in the vicinity of Merrill Road at the western end of the site and Merrill Road at the central southern portion of the site).

As noted in the Assessment of Potential Preferential Pathways Report, the three stormwater drainage pipeline systems retained for Phase III evaluation ultimately lead to the Housatonic River via Outfall 007 or via a non-permitted City of Pittsfield outfall neat Commercial Street. The two sanitary sewer pipelines retained for Phase III evaluation lead to systems which convey sanitary flow under the Housatonic River to a 42-inch diameter concrete sanitary main pipeline on the south side of the river. As such, potential off-site migration via these stormwater or sanitary sewer pipelines and/or bedding materials were evaluated by:

1) Review of ongoing sediment, soil, surface water, and groundwater investigations; and

2) Free product investigations, as described herein.

Additionally, Outfall 007 was proposed to be evaluated under the East Street Area 1 preferential pathway analysis. Results from the evaluation presented herein will also be used in the analysis of that Site as well. The City of Pittsfield outfall near Commercial Street was not evaluated since this outfall receives stormwater flows from large off-site areas. More importantly, however, is the fact that surface water flows from the Hill 78 Site are conveyed through open swales prior to reaching this outfall and, therefore, can be evaluated further upstream.

9.4.1.1 Outfall Investigations

Potential off-site migration via stormwater and sanitary pipeline bedding materials was evaluated by conducting visual inspections of the stormwater drainage outfalls at Outfall 007, at the 48-inch RCP stormwater outfall, which discharges to Swale A, and at the two stormwater pipes (12-inch and 18-inch), which discharge to Swale B (see Appendix A). These inspections were conducted monthly from April to July, 1997 (4 months). There were no observed free product, sheens, or staining in either the water from these outfall pipes or the surrounding sediment during these inspections.

9.4.1.2 NPDES Monitoring Data Review

This evaluation included the review of existing analytical data from NPDES Discharge Monitoring Reports for the 1995 and 1996 calendar years. As part of GE's NPDES Permit, GE regularly monitors stormwater outfalls to the Housatonic River, including Outfall 007. The required parameters and monitoring frequencies for this outfall is summarized below:

Parameter	Outfall 007
Flow	Monthly calculation.
PCB	Sample one day per quarter.
pH	Sample one day per month; grab sample.
Temperature	Sample one day per month; grab sample.

Based on a review of the stormwater outfall data for 1995 and 1996, the maximum detected PCB discharge concentration to Outfall 007 was 0.0007 ppm reported for September 1995. The average PCB discharge concentration to Outfall 007 for the 1995-96 reporting period was 0.0002 ppm; the average discharge flow rate from Outfall 007 for the same reporting period was 0.006 million gallons per day (mgd). Using the average PCB concentration and the average discharge flow from Outfall 007, the corresponding average PCB load during that period was approximately 0.0017 kg/yr (0.004 lbs/yr). Due to the low PCB concentration detected, and resulting low PCB mass, off-site migration of constituents via discharge from Outfall 007 not considered significant.

The NPDES Permit Application (HMM Associates, Inc., 1992) for Outfall 007 was also reviewed. As shown in Drainage Plan 3 of the Application, areas YD6, YD7, YD8, YD9, YD15, NP4, and NP5 contribute stormwater runoff to Outfall 007. Of these areas, only YD9 and NP5 are associated with the Hill 78 Area. Although, a 4.4 ppm PCB concentration was observed in the stormwater in one sample from area YD9, as discussed previously, the outfall is in compliance with the NPDES Permit requirements.

9.4.1.3 Review of Sediment, Soil, Surface water, and Groundwater Data

Phase III Investigations of the stormwater and sanitary pipelines involved evaluations of groundwater, soil, sediment, and surface water data from monitoring wells and sampling locations in close proximity downgradient of the targeted pipelines using data from the Phase I/CAS report (O'Brien & Gere, 1995) and the results of the Supplemental Phase II/RFI sampling efforts. These investigations included:

- Evaluation of groundwater data from monitoring wells H78B-13, NY-1, NY-3, and soil sampling data from boring H78B-13, to assess potential constituent migration near the stormwater and sanitary pipelines along New York Avenue;

- Evaluation of groundwater data from monitoring wells NY-4, 78-7, H78B-8, and 78-5; soil sampling data from boring H78B-8; and sediment and surface water sampling data from Swale A (locations H78SE-5/H78SW-5 and S2) to assess potential migration near the Cross-Site stormwater and sanitary lines;

- Evaluation of groundwater data from monitoring wells 78-3, H78B-17, 78-4, and H78B-16; soil sampling data from borings H78B-16 and H78B-17; and sediment and surface water samples from Swale B (location H78SE-3/H78SW-3) to assess potential constituent migration in the vicinity of the stormwater pipeline running from the GE parking lot to Swale B; and

- Evaluation of groundwater data from monitoring wells NY-1, 78-4, and 78-5 to assess potential constituent migration upgradient of the sanitary sewer lines along Merrill Road.

Further discussion of the results of the evaluation is presented below.

New York Avenue Pipelines

Groundwater data from monitoring wells H78B-13, NY-1, and NY-3, which are in close proximity to the storm sewer, and sanitary lines along New York Avenue, were evaluated. Additionally, per the Agencies' letter to GE dated July 13, 1997, the potable water line along New York Avenue was also evaluated. Groundwater analyses from all three wells were non-detect for total PCBs at a detection limit of 0.0010 ppm (see Table 5-3D, Figure 5-2A). However, PCBs were detected in soil boring H78B-13 at a maximum concentration of 17 ppm in the sample from 4 to 6 feet below grade. Other soil samples taken at varying intervals from this boring indicated PCB concentrations as low as non-detect. Due to the relatively low constituent concentrations in groundwater and soil in the vicinity of the potable water, stormwater, and sanitary sewer lines along New York Avenue, it is not likely that these lines act as preferential pathways for potential off-site migration of PCBs.

Although other non-PCB constituents were detected in wells NY-1 and H78B-13, such constituents were not detected across New York Avenue at East Street Area 1 well RF-13. This is consistent with groundwater flow maps for this area which indicate a southerly flow direction rather than westerly across New York Avenue. Therefore, migration of any of these constituents into any utilities (and/or backfill) along New York Avenue is not apparent.

Cross-Site Pipelines

Groundwater data from monitoring wells NY-4 and 78-7, which are respectively upgradient and directly adjacent to the Cross-Site storm sewer and sanitary sewer lines that traverse the site, indicated extremely low PCB concentrations (0.0013 ppm for filtered PCB from well NY-4) where PCBs were detected (Table 5-3E, Figure 5-2A). In addition, historic data from monitoring wells 78-5 (located near these sewer lines) was also non-detect for PCBs. It should be noted, however, that PCBs were present in the soil boring for H78B-8 at levels of up to 110 ppm at a depth of 6 to 10 feet below grade. Since the soil boring is in close proximity to the former Hill 78 Area landfill, this elevated level of PCBs is likely due to previous landfill operations and is not associated with preferential pathway migration of constituents. An unfiltered PCB concentration of 0.012 ppm was reported in the groundwater sample from H78B-8R in May 1997; however, no filtered PCBs were detected in that sample and downgradient of the well. Additional evidence of no significant migration into or along the cross-site stormwater pipeline is provided by comparing sampling results upgradient of the site (H78SW-7) with those from the sampling location where that pipeline emerges from the ground south of the landfill (S2-SW). As seen on Figure 7-1A, the downgradients results are very similar to the upgradient results. Furthermore, although a prior surface water sample from SW-2 had an unfiltered PCB concentration of 0.000066 ppm, more recent sampling in 1996 showed PCBs to be non-detect at that same location (Tables 7-1A and 7-1D).

Based on the above considerations, it is not likely that the Cross-Site pipelines act as preferential pathways for potential off-site migration of constituents.

GE Parking Lot/Swale B Stormwater Pipeline

Groundwater data from monitoring wells H78B-16, and 78-4 which are in the direct vicinity of Swale B, indicated non-detectable (0.0010 ppm) concentrations of PCBs (Table 5-3D, Figure 5-2A). Groundwater well data from well 78-3 (this well is in relatively close proximity to the stormwater drainage line that drains to Swale B) was also non-detectable for PCBs, although the primary and duplicate groundwater samples from monitoring well H78B-17R

contained filtered PCB concentrations of 0.00036J ppm and 0.00046J ppm, and an unfiltered PCB concentration of 0.0025 ppm for the duplicate sample only. Soil data corresponding to soil borings H78B-16 and H78B-17 indicated low levels of PCBs (varying from non-detect to 23 ppm). Surface water data corresponding to Swale B (H78SW-3) indicated an extremely low PCB concentration (0.0015J ppm) in the unfiltered sample, non-detect for PCBs in the filtered sample, and very low levels of other constituents indicating unimpacted conditions.

It is not likely that PCB detections in the groundwater and surface water are the result of preferential pathway migration, since the majority of this pipeline is several feet above the high groundwater elevation.

Based on the above considerations, it is not likely that the parking lot/Swale B stormwater pipeline acts as a preferential pathway for potential off-site migration of constituents.

<u>Merrill Road Sewer Lines</u>

Groundwater data from monitoring wells NY-1, 78-4, and 78-5, which are in the direct vicinity of the sanitary sewer line that exists along Merrill Road, indicated non-detectable (detection limit of 0.0010 ppm) concentrations for PCBs and low levels of other organic contaminants (Table 5-3D, Figure 5-2A). Additionally, the eastern end of this sewer line is near well H78B-17R, where elevated VOCs were detected. A review of the hydraulic conductivity data from these wells indicates that the soil has a mean hydraulic conductivity of 1.46×10^{-3} cm/sec. Because of this relatively high value, it is not likely that the backfill along the sewer pipe would act as a preferential pathway. However, given the somewhat elevated VOCs detected in well H78B-17R and the orientation of the sewer line (i.e., perpendicular to groundwater flow rather than parallel to it) additional evaluation of the sewer line appears warranted (see Section 10). Also, the westerly end of these utilities could be a preferential pathway because of constituents detected in well NY-1. Further evaluation of this is also proposed in Section 10.

9.4.1.4 Free Product Investigations

Although free product has never been observed in any monitoring wells within the site, a focused assessment was conducted due to the presence of the 10c oil pipelines which cross the site. The free product investigation activities of the retained stormwater and sanitary sewer pipelines consisted of a visual inspection of select accessible stormwater and sanitary manholes for the presence of free product. Specific focus was placed on the stormwater drainage and sanitary pipelines along New York Avenue and the Cross-Site stormwater system, both of which are downgradient of the 10c oil pipelines. During field inspection, pipeline invert elevations of the inspected manholes also were confirmed, and are consistent with the information presented in the Assessment of Potential Preferential Pathways Report. Neither free product nor sheens were detected in any of the inspected manholes

9.4.2 Fire Protection Utility Pipeline

As discussed in the Assessment of Potential Preferential Pathways Report, one fire protection pipeline was retained for Phase III evaluation. This 6-inch pipeline runs from a hydrant near the steam turbine generator building, along the eastern side of the main access road at the site, and connects to water mains along Merrill Road. Although Figure 3-1 of the March 1997 Assessment of Potential Preferential Pathways Report indicated that the entire section of this fire protection line is below the historical high water table it is more likely that only a portion of this line near H78B-15 is actually below the water table. Figure 2-5 of that report does indicate that the invert is below the water table at the hydrant (southeast of the cooling tower). However, this line connects into the water main along Merrill Road, which Figure 2-4 indicates is actually above the water table, (by approximately 5.7 ft.) in this area.

As such, it is doubtful that this fire protection line acts as a preferential pathway which could carry contaminants off site.

Nevertheless, since the fire protection line may be below the historical groundwater high in the vicinity of H78B-15, an evaluation in that area will be made. As indicated in Table 5-1 of this report, the hydraulic conductivity in well H78B-15 was relatively high (2.44 x 10^{-3} cm/sec). Thus, it is unlikely that the pipe backfill along the fire protection line would act as a preferential pathway. Furthermore, a review of Figure 5-2A indicates that only very low levels of PCBs, VOCs, and SVOCs were detected in this well. Even if groundwater were to get into the pipe backfill, these low-level contaminants would migrate for a short distance in the same direction as the natural groundwater flow. Therefore, the result would not be any different than if the pipe itself did not exist.

9.4.3 Process/Product Line System

As discussed in the Assessment of Potential Preferential Pathways report, one process/product pipeline system was retained for Phase III analysis based on a potential release to subgrade. The retained process/product pipeline system contains three 10c oil pipelines (two 4-inch pipelines and one 2-inch pipeline) that traverse the northern portion of the site. These pipelines run from the East Street Area 1 Site, beneath New York Avenue, across the Hill 78 Site, and connect to oil storage facilities at the Unkamet Brook Site.

As an initial step in this evaluation, GE facility records relating to pipeline closure activities were reviewed to determine the status of this pipeline system and, thus, its potential to release hazardous materials to subgrade. Transfer of 10c oil in the pipelines was discontinued in 1964. In 1989, as part of the installation of the PGC Steam Line, these former distribution lines were severed at New York Avenue, drained and sampled. At approximately the same time, the oil pipelines were severed and drained near Building 51 within the Unkamet Brook Site. Oil collected at that time was transported to GE's TSCA-permitted Thermal Oxidizer for incineration.

In December 1996 and January 1997, these oil pipelines were investigated further at the site. As part of these efforts, GE excavated soil near the pipeline low point to the northwest of the Hill 78 landfill. Three oil pipelines were exposed and cut to determine whether residual material remained. A vactor truck was utilized to remove liquids from each of the three pipelines at this low point. In total, approximately 400 gallons of liquid were removed from the three pipelines. The northern 4-inch line was found to contain oil, the southern 4-inch line contained an emulsified liquid, and the 2-inch line appeared to contain water. Samples collected from the pipelines contained PCBs at levels of 716 ppm, 667 ppm, and 112 ppm. Three soil samples collected from the excavated material were found to contain PCB concentrations below 1 ppm; two samples from the trench sidewalls both exhibited PCB concentrations of 1.2 ppm, and two samples from the bottom trench each had PCB concentrations of 1.5 ppm. These low PCB levels immediately adjacent to the pipeline indicate that the pipeline is not acting as a source for PCBs into the environment.

As these pipelines have been drained at the low point within the site, no additional oil removal or excavation activities were warranted. However, GE agreed to evaluate soil data at nearby borings (H78B-20, and H78B-21) to assess any potential subgrade impacts, as appropriate. As discussed in Section 4.3, PCB results from soil borings H78B-20 and H78B-21 indicate total PCB concentrations ranging from 0.031 to 1.7 ppm at soil depths up to 14 feet below existing grade (Table 4-4L). Based on these low PCB concentrations from borings taken in direct vicinity of the process/product lines, no further evaluation of these lines is warranted.

9.4.4 "Other" Piping Networks

As a result of the Phase II screening that was conducted in the Assessment of Potential Preferential Pathways report, one "other" piping network was identified for Phase III evaluation. A 3-inch effluent drain line was identified in Phase II, Step 1 as a potential pathway for hazardous material release to subgrade. The 3-inch pipeline carried wastewater from equipment testing facilities in Building 73 to an on-site stormwater line. Wastewaters were first processed through an oil/water separator before discharge to this pipeline. This gravity fed line is now inactive. Since engineering drawings did not show any low points within this pipeline, no draining activities were warranted.

Stormwater manholes to the north of this pipeline and along New York Avenue were visually inspected for the presence of free product. No free product was detected as part of visual inspection activities.

Additionally, as requested in the Agenies' letter to GE dated June 13, 1997, two additional borings (H78B-30 and H78B-31) were installed directly adjacent to the effluent drain line to better assess any potential impact from the pipeline. Analytical results for these borings are summarized in Tables 4-4L, 4-4Q, 4-4S, 4-4T, and 4-4U and on Figures 4-1A through 4-1C. Although some higher PCB concentrations were detected at the ground surface, PCB concentrations were less than 1 ppm at both borings in the depth intervals surrounding the elevation of the effluent pipeline (i.e. 8 feet deep). Further, only relatively low concentrations of limited other constituents were detected. Thus, this pipeline does not appear to have released constituents to the subgrade.

In addition to the above, groundwater data from the nearest downgradient monitoring wells (NY-1 and H78B-13) were reviewed. Analytical results from these monitoring wells indicated total PCB concentrations that were non-detectable at a detection limit of 0.0010 ppm (Table 5-3D and Figure 5-2A).

Based on the above considerations, no additional investigation of this "Other" Piping Network is warranted.

9.4.5 Additional Evaluation of Potential Preferential Pathways

In the Agencies' letter to GE dated July 13, 1997, it was required that GE evaluate utilities which are within or one foot above the seasonal high water table. There are two areas of the site identified above where constituents could potentially migrate via preferential pathways, namely the sanitary/storm sewer lines along Merrill Road downgradient of wells 78-4 and H78B-17 to the east and well NY-1 to the west. These utilities will be further evaluated with additional investigations to be performed as outlined in Section 10.

Additionally, other utilities present in these two areas which are within or one foot above the seasonal high water table include a gas main and a potable water line downgradient of well NY-1. The potable water line in this area is the same potable water line which runs along New York Avenue. That portion of the line was evaluated above in Section 9.4.1.3 per the Agencies' July 13, 1997 letter. This pipe as well as the gas main will also be evaluated with the additional investigations to be performed as outlined in Section 10. There were no other utilities within one foot of the water table in the area downgradient of wells 78-4 and H78B-17.

10. Evaluation of Additional Data Needs

With a few exceptions, results from the prior site investigations summarized in the previous sections of this document satisfy the requirements for an MCP Phase II - Comprehensive Site Assessment, as well as those of the RCRA Corrective - Action Permit. This section identifies additional data needs and outlines proposed supplemental activities to fulfill these data need toward completing the Comprehensive Site Assessment/RFI for the Hill 78 Area.

Additional data needs identified at this time and corresponding proposals for additional investigative activities for the Hill 78 Area are outlined as follows:

Soil

- As indicated in Section 4.5, there is one area of the site, namely boring H78B-11 located immediately adjacent to the Building 71 diked oil storage area, where PCBs were detected at relatively high concentrations (up to 2,480 ppm: 6-8 ft. depth) and the eastern extent of PCB presence is not defined. Accordingly, one additional boring (HB78B-32) is proposed to be completed just east of boring H78B-11 and just west of Building 71, as shown on Figure 10-1. This boring will be completed to a final depth of 12 feet below the ground surface, and samples will be collected at 2-foot depth intervals and analyzed for PCBs, and samples will be collected at 2-foot depth intervals and analyzed for PCBs.

- Elevated PCBs were encountered in the top 2 feet at boring H78B-30. Although there are adequate data to define the extent of PCBs to the north and west of this location, the lateral extent is not defined in the other directions. As such, three additional near surface locations (H78SS-9, H78SS-10, H78SS-11) will be established to collect PCB samples in the top 2 feet in 6-inch increments.

- Groundwater sampling has been conducted four times in the past at well NY-4 near Tyler Street extension. Even though this well is upgraident of the site, low-level PCBs, VOCs, and SVOCs have been detected in the groundwater. Since soil sampling has never been conducted at this location, a soil boring will be drilled to a depth of 2 feet below the water table and soil samples will be collected in 2-foot increments for PCB analysis. Additionally, one sample will be analyzed for Appendix IX+3 VOCs and SVOCs in accordance with the protocols in the SAP/DCAQAP.

Groundwater

- Well H78B-17R was installed to evaluate the levels of VOCs in groundwater near existing well 78-4. Since well H78B-17R encountered VOCs at higher levels than in 78-4, an additional well (H78B-33) is proposed to the east to define the lateral limits of VOC groundwater constituents in this area. Since existing soil sampling in this parking lot has adequately determined the extent of PCBs in this area (Figure 4-1A), only one sample from the boring will be collected for Appendix IX+3 constituents (excluding pesticides/herbicides) in accordance with the protocols in the SAP/DCAQAP. After the well is installed and developed, groundwater samples will be collected from this new well, 78-4 and H78B-17R for VOC analysis.

- As noted in Section 5.7, groundwater samples were required to be collected from well H78B-12 for Appendix IX+3 analysis, and a discrete groundwater sample was to be collected from boring H78B-14 for PCDD/PCDF analysis. However, well H78B-12 was found to be dry at the time other wells at the site were sampled, and no further attempts were inadvertently made to sample this well. As for the discrete groundwater sample for boring H78B-14, that sample was collected as part of the Phase II/RFI field activities, but the laboratory inadvertently

misplaced the sample. Accordingly, it is proposed that another attempt be made to sample well H78B-12 for Appendix IX+3 analysis; and should it be dry or not produce sufficient sample volumes, then a replacement well will need to be established at this location. As for boring H78B-14, it is proposed that a replacement boring (H78B-14R) be completed at this location, and that a discrete groundwater sample be collected for PCDD/PCDF analysis. This sample location will also be placed as close to the sanitary/storm sewer, potable water, and gas lines along Merrill Road to evaluate any potential preferential pathways downgradient of Well NY-1. Additionally, since there is a potential concern for groundwater (containing VOCs) to be migrating preferentially near the utilities which cross Merrill Road in this vicinity, the groundwater will also be sampled for VOCs.

- As also noted in Section 5.7, PCDDs and PCDFs were detected in groundwater at the PGC Facility supply well ASW-6/W-6 at concentrations of 0.00000225 ppm and 0.00000029 ppm, respectively. Accordingly, it is proposed that this well be resampled to confirm the presence of these constituents at this location. Additionally, as indicated in Table 5-4B, the water sample from W-6 was relatively turbid. Construction records will be reviewed for this well and an attempt will be made to collect a less turbid sample. If this is not possible, both a filtered and unfiltered sample will be submitted for PCDD/PCDF analysis. The well construction logs for ASW-5/W-5 and ASW-6/W-6 will also be reviewed.

- Also, low-level VOCs have been detected in supply wells ASW-4/W-4, ASW-5/W-5, and ASW-6/W-6. As such, it is proposed that these wells be sampled once again to confirm the presence of these constituents.

Surface Water/Sediment

- As indicated in Section 7.2, very low levels of PCBs were indicated at surface water location H78SW-7. Although this was an estimated value, collection and PCB analysis of another sample from this location is proposed to further evaluate this estimated detection.

- As noted in Section 7.3, sediment sample H78SE-6 collected from the sedimentation basin located east of the PGC Facility cooling towers exhibited a PCB concentration of 200 ppm. Accordingly, it is proposed that four additional sediment samples (H78SE-6A through -6D) be collected for PCB analysis to further characterize this area. Furthermore, during the course of outfall inspections for the preferential pathway evaluation, it was noted that sediment has accumulated at the upstream end of Swale B. Since this area receives drainage from the sedimentation basin east of the PGC cooling tower, an additional PCB sample (H78SE-8) will be collected. Pending the results of these samples, additional sampling and/or removal may be warranted.

- As also noted in Section 7.3, sediment sample H78SE-71SECB collected from the manhole outside of the Building 71 diked oil storage area exhibited elevated levels of PCBs, VOCs, and SVOCs (49 ppm, 37 ppm and 722 ppm, respectively). It is proposed that this material be removed and disposed of properly.

11. Schedule

Upon approval of this MCP Phase II/RFI Report by the Agencies, GE will proceed with the performance of the supplemental activities proposed in Section 10 of this document. These activities will be completed and a supplementary addendum to this report will be submitted to the Agencies within approximately 120 days after Agencies' approval of this present document.

Additionally, upon approval of the *Proposal for Human Health and Environmental Assessment of the Hill 78 Area* (ChemRisk, August 1997) by the Agencies, GE will proceed with the performance of the human health and environmental risk assessment (HEA) for the site in accordance with the schedule set forth in that document.

12. References

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Tables

TABLE 1-1

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP PHASE II/RFI REPORT FOR HILL 78 AREA/USEPA AREA 2

SUMMARY OF STUDIES CONDUCTED RELATED TO HILL 78 AREA: 1988 -TO DATE

Author	Title and Date of Study/Report
BBL	Assessment of Potential Preferential Pathways Hill 78 Area/USEPA Area 2, March 1997
CR	Preliminary Health and Environmental Assessment Proposal for Hill 78/EPA Area 2, May 1996
OBG	MCP Phase II Scope of Work and Proposal for RCRA Facility Investigation Hill 78 Area/EPA Area 2, February 1996
OBG	MCP Phase I Report and Current Assessment Summary Hill 78 Area/EPA Area 2, May 1995
GE	MCP Supplemental Phase II Scope of Work and Proposal for RCRA Facility Investigation for Hill 78 Area/USEPA Area 2, May 1995
EHC	Hydrogeologic Investigation and Testing of Production Well W-3 Altresco, Inc., March 1992
B&B	MCP Phase II Scope of Work Hill 78, February 1992
B&B	Addendum to Phase I - Limited Site Investigation/Current Assessment Summary Report Hill 78 Area, February 1992
EHC	Hydrogeologic Investigation and Installation of Production Well W-6 Altresco, Inc., September 1991
G&M	Phase I - Limited Site Investigation/Current Assessment Summary Report Hill 78 Area: Vol. 1&2, September 1991
HMM	New York Avenue and Woodlawn Avenue Drainage Analysis, June 1991
G&M	Soil Boring Program at the GE/Altresco Cogeneration Plant, November 1990
EHC	Groundwater Resources Investigation at the Altresco Cogeneration Facility: Vol. 1-3, June 1990
G&M	Soil Borings for Proposed Sewer Line, June 1990
B&B	Hill 78 Area MCP Phase I: Scope of Work, May 1990
B&B	Hill 78 Area - MCP Phase I Supplemental Data Summary, May 1990
G&M	QA/QC Report and Laboratory Analysis Reports and Chain-of-Custody Records for April 1990 Allendale Schoolyard and Virginia Avenue Yards, May 1990
G&M	Soil Boring for Altresco Meter Pit, April 1990
G&M	Soil Borings for Altresco Tree Plantings, April 1990

TABLE 1-1
(cont'd)

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP PHASE II/RFI REPORT FOR HILL 78 AREA/USEPA AREA 2

SUMMARY OF STUDIES CONDUCTED RELATED TO HILL 78 AREA: 1988 -TO DATE

Author	Title and Date of Study/Report
G&M	Results of the Soil Boring Program Conducted at the GE/Altresco Cogeneration Plant, March 1990
G&M	Soil Boring for Altresco Bedrock Well Number 5 at the GE/Altresco Cogeneration Plant, March 1990
G&M	Soil Boring Investigation Altresco Cogeneration Site Internal Report, February 1990
G&M	GE/Altresco New York Avenue Water Line Project (Soil Borings), December 1989
G&M	Results of the Soil Boring Program Conducted in the Vicinity of the Proposed Altresco Gas Line (an Oxbow Study), November 1989
G&M	Soil Boring Data for New York Avenue Water Line Project, November 1989
G&M	GE/Altresco Strain Pole Soil Boring Program, November 1989
G&M	Results of the Soil Boring Program Conducted in the Vicinity of the Altresco Steam Line, June 1989
G&M	Hydrogeologic Investigation at the New York Avenue Sites (Draft Copy), June 1988

Abbreviations:

G&M = Geraghty & Miller, Inc., Plainview, New York.
B&B = Blasland & Bouck Engineers, P.C., Syracuse, New York.
BBL = Blasland, Bouck & Lee, Inc., Syracuse, New York
GE = General Electric Company
HMM = HMM Associates
CR = ChemRisk, Portland, Maine
EHC = Environmental Hydrology Corporation, Clifton Park, New York

TABLE 2-1

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP PHASE II/RFI REPORT FOR HILL 78 AREA/USEPA AREA 2

SUMMARY OF PROPERTIES ADJACENT TO HILL 78 AREA

Property Identification	PropertyAddress
J10-9-2	Woodlawn Avenue - Tyler Street Pittsfield, MA 01201
J11-10-1	Tyler Street Pittsfield, MA 01201
K10-14-2	1311 East Street Pittsfield, MA 01201
K10-14-3	1315 East Street Pittsfield, MA 01201
K11-1-1*	Merrill Road Pittsfield, MA 01201
K11-1-2*	160 Merrill Road Pittsfield, MA 01201
K11-1-3*	164 Merrill Road Pittsfield, MA 01201
K11-1-4*	170 Merrill Road Pittsfield, MA 01201
K11-1-5*	172 Merrill Road Pittsfield, MA 01201
K11-1-6*	174 Merrill Road Pittsfield, MA 01201
K11-1-7*	176-178 Merrill Road Pittsfield, MA 01201
K11-1-8*	Merrill Road Pittsfield, MA 01201
K11-1-9*	188 Merrill Road Pittsfield, MA 01201
K11-1-10*	200-202 Merrill Road Pittsfield, MA 01201
K11-1-11*	234-236 Merrill Road Pittsfield, MA 01201

TABLE 2-1
(cont'd)

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP PHASE II/RFI REPORT FOR HILL 78 AREA/USEPA AREA 2

SUMMARY OF PROPERTIES ADJACENT TO HILL 78 AREA

Property Identification	PropertyAddress
K11-1-12*	238-240 Merrill Road Pittsfield, MA 01201
K11-1-13*	244 Merrill Road Pittsfield, MA 01201
K11-1-14*	248 Merrill Road Pittsfield, MA 01201
K11-1-15	RR Right of Way
K11-1-16	1531 East Street Pittsfield, MA 01201
K11-1-17*	286 Merrill Road Pittsfield, MA 01201
K11-1-18*	288 Merrill Road Pittsfield, MA 01201
K11-1-19	290 Merrill Road Pittsfield, MA 01201
K11-1-20	1355 East Street Pittsfield, MA 01201
K11-4-5	316 Merrill Road Pittsfield, MA 01201
K11-5-6	326 Merrill Road Pittsfield, MA 01201
K11-7-1	169-171 Merrill Road Pittsfield, MA 01201
K11-7-2	99 New York Avenue - Merrill Road Pittsfield, MA 01201
K11-7-3*	251 Merrill Road Pittsfield, MA 01201
K11-7-4*	255-257 Merrill Road Pittsfield, MA 01201

TABLE 2-1
(cont'd)

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP PHASE II/RFI REPORT FOR HILL 78 AREA/USEPA AREA 2

SUMMARY OF PROPERTIES ADJACENT TO HILL 78 AREA

Property Identification	PropertyAddress
K11-7-5*	259-261 Merrill Road Pittsfield, MA 01201
K11-7-6*	273 Merrill Road Pittsfield, MA 01201
K11-7-7*	281 Merrill Road Pittsfield, MA 01201
K11-7-8	Merrill Road Pittsfield, MA 01201
K11-7-10	164 California Avenue Pittsfield, MA 01201
K11-7-11	158 California Avenue Pittsfield, MA 01201
K11-7-12	154 California Avenue Pittsfield, MA 01201
K11-7-13	150 California Avenue Pittsfield, MA 01201
K11-7-14	146 California Avenue Pittsfield, MA 01201
K11-7-15	142 California Avenue Pittsfield, MA 01201
K11-7-16	138 California Avenue Pittsfield, MA 01201
K11-7-17	134 California Avenue Pittsfield, MA 01201
K11-7-18	130 California Avenue Pittsfield, MA 01201
K11-7-19	126 California Avenue Pittsfield, MA 01201
K11-7-29	Connecticut Avenue Pittsfield, MA 01201

TABLE 2-1
(cont'd)

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP PHASE II/RFI REPORT FOR HILL 78 AREA/USEPA AREA 2

SUMMARY OF PROPERTIES ADJACENT TO HILL 78 AREA

Property Identification	PropertyAddress
K12-5-1	168 California Avenue Pittsfield, MA 01201
K12-5-2	172 California Avenue Pittsfield, MA 01201
K12-5-3	178 California Avenue Pittsfield, MA 01201

Notes:

1. Property information was obtained from the City of Pittsfield Tax Assessors' office and is current through July 19, 1994.
2. Refer to Figure 1-2 for illustration of parcel locations.
3. Those properties with an asterisk indicate residences to be removed as part of relocation of Merrill Road.

TABLE 2-2
GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS
MCP PHASE 11/RFI REPORT FOR HILL 78 AREA/USEPA AREA 2

SUMMARY OF HISTORIC AERIAL PHOTOGRAPHS

Date	Photographer	Approximate Scale of Photos
July 13, 1942*	National Archives, Washington D.C.	1:16,300
July 3, 1960	Col-East, Inc. North Adams, MA	1:2,400
April 14, 1969*	Col-East, Inc. North Adams, MA	1:4,800
March 21, 1979	Col-East, Inc. North Adams, MA	1:6,000
April 13, 1983	Quinn Associated, Inc., Horsham, PA	1:6,000
November 1, 1987	Col-East, Inc. North Adams, MA	1:19,200
April 23, 1990*	Lockwood Mapping, Inc., Rochester, NY	1:6,000

Note:

1. * = Photographs reproduced - see Figure 2-2.

TABLE 2-3

GENERAL ELECTRIC CORPORATION - PITTSFIELD, MASSACHUSETTS

MCP PHASE II/RCRA FACILITY INVESTIGATION REPORT FOR HILL 78 AREA/USEPA AREA 2

SUMMARY OF GEOLOGIC SOIL UNITS

Unit	Depth to Top of Unit (feet below grade)	Approximate Thickness (feet)	Description	Comments
Fill (anthropogenic)	Surface	0 to 27 feet	The fill unit was highly variable across the site, ranging from a dark brown, brown-gray, fine to coarse sand and fine to coarse gravel, to dark gray-black silt and fine sand. Anthropogenic materials included glass, ceramics, brick, wood, cement, plastic, paper, asphalt, and metal.	Three distinct fill units were encountered at four general areas of the site: Fill consisting of dark brown to brown fine to coarse sand, gravel, and boulders, and general construction and demolition debris (glass, ceramics, brick, wood, cement, slag, plastic, paper, asphalt, and metal) was encountered at the former Hill 78 Area landfill. Fill consisting of dark gray to black silt and fine sand with cinders, slag, wood, metal, and brick was encountered to 14 feet below grade north of Altresco. Similar fill (black silt and fine sand) with cinders, slag, and general construction debris was encountered to approximately 10 feet below grade at the Soil Stockpile Area. A white, pasty material was also encountered in this area. General fill consisting of brown/brown-gray silt, sand, and metal, brick, and asphalt was encountered in the vicinity of O.P Parking Lot.
Surficial Soils	Surface to 27 feet (where fill materials have been placed on top of previous ground surface [Hill 78 Landfill]).	0 to 6 feet	Brown to brown-orange silt, fine to coarse sand and gravel, silty sands and gravels. Commonly oxidized with some natural organic matter (included topsoil and subsoil horizons).	This unit was generally encountered throughout the site, except where fill or glacio-fluvial sands were encountered at the surface. Surficial soils became thicker towards the valley.
Glacio-fluvial Sands	Surface to 12 feet	0 to 25 feet	Light brown to brown and brown-gray, fine to coarse, loose, poorly to well-sorted sand and varying amounts of fine to medium gravel (<10 - 20%) and little silt (<20%). This unit generally became coarser with depth where a coarse, well-sorted sand was frequently encountered above the olive-brown silt till. The water table was generally encountered in the lower portions of this unit or at the sand/silt till interface (Cross Section A-A' and B-B').	In general, this unit was restricted to the Housatonic River Valley and was not encountered in the till-dominated upland areas. The wedge-shaped unit, which was thickest towards the center of the valley, became progressively thinner and was absent in the upland areas of the site (Cross Section B-B').

TABLE 2-3

GENERAL ELECTRIC CORPORATION - PITTSFIELD, MASSACHUSETTS

MCP PHASE II/RCRA FACILITY INVESTIGATION REPORT FOR HILL 78 AREA/USEPA AREA 2

SUMMARY OF GEOLOGIC SOIL UNITS

Unit	Depth to Top of Unit (feet below grade)	Approximate Thickness (feet)	Description	Comments
Olive-Brown Silt Till	2 to approximately 20 feet in areas without significant fill deposits. Greater than 30 feet in the former Hill 78 Area landfill.	Unable to determine. Maximum thickness <50 feet, based on top-of-bedrock elevations from Altresco Supply Wells.	Olive-brown silt and silty fine sand matrix with matrix-supported fine to coarse sand, and subangular to angular, fine to medium gravel clastics. The unit ranged from soft and firm, where wet, to very stiff to hard, when dry. Occasional poorly sorted fine to medium sand seams were encountered within the till unit.	Based on the amount of sand and silt, and the limited compaction, this unit had characteristics of an ablation or melt-out till. The unit was encountered at various elevations throughout the site, ranging from 1,033 feet mean sea level (msl) in the northern portion of the site to 965 feet msl in the southwestern portion of the site (Figure 2-6). The top-of-till surface was characterized by two prominent mounds, separated by a significant north-south trending depression that essentially bisects the site.
Brown Lodgement Till	Unable to determine.	Unable to determine definitely; however, based on Altresco Supply Wells, <50 feet.	Brown to gray-brown silt matrix with varying amounts of fine to coarse sand and fine to medium gravel. Based on blow counts, unit was very stiff to hard.	Characteristic of a compact lodgement till overlying bedrock. As a result of the relatively shallow borings installed at the site, this unit was not encountered in the majority of borings completed in the area. Interpretation of this unit was derived from investigations in adjacent areas to the site (East Street Area I, Golder & Associates) and interpretation of the subsurface logs for the Altresco Supply Wells.
Bedrock (meta-sedimentary rock)	60 to 85 feet	Not determined; however, >491 feet.	Yellow-white dolomitic marble.	Based on the top-of-rock elevations obtained from Altresco Supply Wells, Figure 2-6 depicts the top of rock surface overlain by till and dipping steeply towards the center of the valley.

TABLE 4-1A

HILL 78 AREA
GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

SUMMARY OF PID FIELD SCREENING - ALTRESCO AREA
(PPM, APRIL THROUGH JUNE 1987)

	Depth in Feet Below Land Surface									
Boring	0-2	2-4	4-6	6-8	8-10	10-12	12-14	14-16	16-18	18-20
72-1	10	NR	480	290	630	260	200	40	11	9
72-2	NR	3.1	2.1	2.5	2.0	2.0	5.3	2.2	2.2	2.3
72-3	2.5	1.5	1.6	1.6	1.5	2.0	1.9	2.2	1.9	NR
72-4	145	180	1,100	280	1,720	500	300	250	455	485
72-5	225	218	201	204	NR	210	163	180	210	205
72-6	174	174	195	230	280	175	170	340	168	169
72-7	0.9	1.1	0.8	0.9	0.6	1.0	0.8	0.7	1.1	NR
72-8	1.2	1.2	0.8	0.9	0.9	0.8	0.6	1.1	0.6	1.3
72-9	0.6	0.7	11.4	0.4	0.7	0.4	0.5	0.4	0.7	0.8
72-10	0.4	0.5	4.4	1.0	1.0	0.9	0.6	0.7	1.2	1.0
72-11	253	1.1	350	210	1.2	1.2	1.3	1.1	NR	0.8
72-12	0.6	0.6	0.4	0.7	0.6	0.7	0.6	0.8	0.8	0.8
72-13	0.6	0.4	2.6	0.5	0.9	0.5	0.6	0.6	1.9	1.0
72-14	0.5	0.4	0.8	0.3	0.7	0.5	0.5	0.4	0.4	0.6
72-15	0.6	0.9	0.9	0.8	0.9	.08	0.8	NR	0.6	0.9
72-16	0.7	0.8	1.9	NR	0.5	0.8	0.5	0.5	0.6	0.7
72-17	0.4	NR	0.6	2.1	1.0	0.9	0.9	0.8	0.8	0.8
72-18	0.1	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2

Notes:

NR = No Recovery
ND = Not Detected

These values are qualitative only and do not represent the absolute concentrations of any volatile organic compounds.

TABLE 4-1B

HILL 78 AREA
GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

SUMMARY OF PID FIELD SCREENING
- ALTRESCO AREA (PPM, AUGUST 1988)

	Depth in Feet Below Land Surface			
Boring	0-2	2-4	4-6	6-8
72-19	0.8	0.9	0.6	0.5
72-20	1.0	0.6	0.5	0.9
72-21	0.8	1.0	0.5	0.3
72-22	1.7	0.7	1.5	0.6
72-23	0.5	0.5	0.6	0.8
72-24	0.2	0.2	0.3	0.2
72-25	0.6	0.5	0.7	0.7
72-26	0.6	0.5		
72-27	0.5	0.9		
72-5	0.6	0.5		
72-6	0.2	0.3		
72-11	0.4	1.4		

Note:

These values are qualitative only and do not represent the absolute concentrations of any volatile organic compounds.

TABLE 4-1C

Summary of Photoionization Detector (PID) Results for Soil Samples Collected at GE Company, Hill 78 Area, January 2 through 10, 1991, Pittsfield, Massachusetts.

Sample Location	Depth (Feet) and Correlating PID Results (ppm)[a]													
	(0-2)	(2-4)	(4-6)	(6-8)	(8-10)	(10-12)	(12-14)	(14-16)	(16-18)	(18-20)	(20-22)	(22-24)	(24-26)	(26-28)
78-1	0.0	0.0	0.0	0.0	0.0	0.0	39.4	0.0	0.0	0.0	0.0	NA	NA	NA
78-2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	NA
78-3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	NA
78-4	0.0	0.0	2.4	0.0	0.0	0.0	0.0	1.7	0.8	1.9	0.2	NA	NA	NA
78-5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	NA	NA	NA	NA
78-6	0.0	0.0	0.0	0.0	0.0	6.1	0.0	0.0	0.0	NA	NA	NA	NA	NA
78-7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

[a] These results are qualitative only and do not represent the absolute concentrations of any volatile organic compound in the soil core, whether the compound is natural or man-made.

NA Not applicable; boring did not extend to this depth.

TABLE 4-1D

SUMMARY OF PHOTOIONIZATION DETECTOR RESULTS FOR SOIL SAMPLES COLLECTED FOR PROPOSED SEWER LINE AT GE/ALTRESCO COGENERATION PLANT, PITTSFIELD, MASSACHUSETTS

	Sample depth (feet) and correlating TIP results (ppm)[a]			
Sample Location	0-2 feet[b]	2-4 feet	0-3 feet[c]	3-6 feet
A-1	--	--	0.9	3.6
A-2	--	--	1.3	2.4
A-3	--	--	1.1	1.9
A-4	2.5	0.9	--	--
A-5	0.5	0.4	--	--
A-6	0.2	0.3	--	--
A-7	0.1	0.1	--	--
A-8	0.0	0.1	--	--
A-9	0.1	0.1	--	--
A-10	0.1	0.0	--	--

[a] These results are qualitative only and do not represent the absolute concentrations of any volatile organic compound in the soil core, whether the compound is natural or man-made.

[b] Samples AS-1 through AS-3 were sampled to six (6) feet, and composited as (0-3) and (3-6) feet.

[c] Samples AS-4 through AS-10 were sampled to four (4) feet, and composited as (0-2) and (2-4) feet.

TABLE 4-1E

Concentrations of Total Volatile Organic Compounds in Soil Samples Determined by Photoionization Screening, New York Avenue Sites, General Electric Company, Pittsfield, Massachusetts. a)

Sample Interval (feet)	Boring Number: NY-1	NY-2	NY-3	NY-4
0 - 2	<1	<1	<1	5.2
2 - 4	<1	1.0	1.1	6.9
4 - 6	<1	1.5	1.1	6.0
6 - 8	<1	1.3	1.2	5.3
8 - 10	<1	1.2	1.3	5.6
10 - 12	<1	1.1	1.1	NR
12 - 14	<1	1.6	<1	4.6
14 - 16	--	1.5	<1	4.6
16 - 18	--	1.6	2.4	3.7
18 - 20	--	1.5	2.7	4.2
20 - 22	--	1.5	2.9	2.8
22 - 24	--	--	--	2.7
24 - 26	--	--	--	2.7
26 - 28	--	--	--	2.3
28 - 30	--	--	--	4.2
30 - 32	--	--	--	5.3
32 - 33	--	--	--	3.6

a) These values are qualitative only and do not represent the absolute concentrations of any volatile organic compound in soil core, whether the compound is natural or man-made. Concentrations in (ppm).

-- No sample collected.

NR No recovery of sample.

TABLE 4-1F

GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
MCP PHASE II / RCRA FACILITY INVESTIGATION REPORT FOR
HILL 78 AREA / USEPA AREA 2

SUMMARY OF SURFICIAL SOIL PID READINGS

Sample ID	Date	Depth (Feet Below Grade)	PID (ppm)
H78SS-1	8/96	0 - 0.5'	0.0
H78SS-2	8/96	0 - 0.5'	4.6
H78SS-3	8/96	0 - 0.5'	2.6
H78SS-4	8/96	0 - 0.5'	2.4
H78SS-5	8/96	0 - 0.5'	6.0
	8/96	0.5 - 1'	9.9
	8/96	1 - 1.5'	4.6
	8/96	1.5 - 2'	2.4
H78SS-6	8/96	0 - 0.5'	0.25
	8/96	0.5 - 1'	0.9
	8/96	1 - 1.5'	0.0
	8/96	1.5 - 2'	0.2
H78SS-7	8/96	0 - 0.5'	0.0
	8/96	0.5 - 1'	5.5
	8/96	1 - 1.5'	0.05
	8/96	1.5 - 2'	0
H78SS-8	8/96	0 - 0.5'	1.4
	8/96	0.5 - 1'	0.0
	8/96	1 - 1.5'	0.0
	8/96	1.5 - 2'	1.0

Notes:

ppm = Parts per million.

TABLE 4-1G

GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS

MCP PHASE II/RCRA FACILITY INVESTIGATION REPORT
FOR HILL 78 AREA/USEPA AREA 2

SUMMARY OF PID FIELD SCREENING RESULTS

Boring ID	Date Sampled	Depth (Feet) and Correlating PID Result (ppm)															
		(0-0.5)	(0.5-2)	(2-4)	(4-6)	(6-8)	(8-10)	(10-12)	(12-14)	(14-16)	(16-18)	(18-20)	(20-22)	(22-24)	(24-26)	(26-28)	(28-30)
H78B-8/ H78B-8R	7/16/96 11/7/96	0	0	0	0	0	0	0	0	0	0	0	0	0	0	45.8	5.8
H78B-10	7/19/96	0	0	0	0	0	0	--	--	--	--	--	--	--	--	--	--
H78B-11	7/17/96	0	0	0	0	228[1]	0	0	--	--	--	--	--	--	--	--	--
H78B-12	7/18/96	13	0	0	0	0	0	0	--	--	--	--	--	--	--	--	--
H78-B13	7/23/96	0	0	0	24	0	0	NA	NA	0	0	0	0	0	0	--	--
H78B-14	7/24/96	0	0	0	0	0	0	0	--	--	--	--	--	--	--	--	--
H78B-15	7/18/96	0	0	0	0	0	0	0	0	0	--	--	--	--	--	--	--
H78B-16	7/25/96	0	0	0	0	0	0	0	0	--	--	--	--	--	--	--	--
H78B-17/ H78B-17R	7/24/96 11/8/86	0	0.1	3.2	0	0	0	0	2.8	--	--	--	--	--	--	--	--
H78B-18	7/23/96	26	0	0	0	0	0	0	0	2.5	0	0	--	--	--	--	--
H78B-19	7/19/96	0	0	0	24	0	0	0	0	0	NA	NA	NA	NA	0	--	--
H78B-20	9/6/96	0	0	0	0	0	0	0	--	--	--	--	--	--	--	--	--
H78B-21	7/19/96	0	0	0	0	0	0	0	NA	--	--	--	--	--	--	--	--
H78B-22	7/24/96	0	0	0	0	0	0	0	--	--	--	--	--	--	--	--	--
H78B-24	7/17/96	0.5	1	0	10.5	0	0	--	--	--	--	--	--	--	--	--	--
H78B-25	7/15/96	0	0	0	0	0	NA	0	--	--	--	--	--	--	--	--	--
H78B-27	7/22/96	0	0	0	0	0	0	--	--	--	--	--	--	--	--	--	--
H78-B28/ H78B28R	7/22/96 11/8/96	10.5	0	0.5	0	36	4.8	0	NA	0	0	0	0	0	--	--	--
H78B-29	7/25/96	0	0	0	0	0	0	0	0	0	0	0	0	0	--	--	--
H78B-30	6/25/97	0	0	0	0	0	0	0	0.5	--	--	--	--	--	--	--	--
H78B-31	6/25/97	0	0	0	0	0	0	0	--	--	--	--	--	--	--	--	--

Notes:

[1] = H78B-11 sample (6-7') PID=228 parts per million (ppm); sample (7-8') PID =110 ppm.
NA = Not available.
-- = Not sampled.

TABLE 4-2

GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
MCP PHASE II / RCRA FACILITY INVESTIGATION REPORT FOR
HILL 78 AREA / USEPA AREA 2

SUMMARY OF SURFICIAL SOIL SAMPLING

Sample ID	Date	Analysis Requested	Sample Depth (inches)	Sample Description	Comments
H78SS-1	8-20-96	Appendix IX+3	0 - 6	Mowed lawn, brown, very fine to fine sand, silt and roots.	
H78SS-2	8-20-96	Appendix IX+3	0 - 6	Unmowed field, light brown, very fine to fine sand.	H78SS-DUP-2 is a blind duplicate of this sample.
H78SS-3	8-20-96	Appendix IX+3	0 - 6	Edge of asphalt parking lot, brown, very fine to fine sand, silt, fine gravel, and roots.	Matrix spike/Matrix spike duplicate performed at this location.
H78SS-4	8-20-96	Appendix IX+3	0 - 6	Under trees near fence line, light brown to brown, very fine sand and silt.	
H78SS-5	8-20-96	PCBs	0 - 6 6 - 12 12 - 18 18 - 24	Mowed lawn, brown, fine to medium sand, trace roots and silt. Orange brown, fine sand, trace silt and fine gravel. Orange, fine sand, trace fine gravel and silt. Orange, fine sand, trace fine gravel.	
H78SS-6	8-20-96	PCBs	0 - 6 6 - 12 12 - 18 18 - 24	Mowed lawn, brown, very fine to fine sand with some silt, fine gravel. Brown to orange brown, fine sand, trace silt, and fine gravel. Orange, fine sand and fine gravel. Orange brown, fine sand, trace fine gravel.	Matrix spike/Matrix spike duplicate performed at this location.
H78SS-7	8-20-96	PCBs	0 - 6 6 - 12 12 - 18 18 - 24	Mowed lawn, brown, very fine to fine sand and silt, trace roots, fine gravel. Brown, very fine to fine sand and silt, trace fine gravel, rubble (brick and coal). Orange brown, very fine to fine sand, some silt and fine gravel. Orange brown, very fine to fine sand, trace silt.	H78SS-DUP-1 is a blind duplicate of this sample.
H78SS-8	8-20-96	PCBs	0 - 6 6 - 12 12 - 18 18 - 24	Mowed lawn, light brown, very fine to fine sand, silt and fine gravel (red ants). Orange brown, very fine to fine sand, some silt and fine gravel. Orange brown, fine sand, rocks (moved 2' NW to obtain sample due to rocks). Orange brown, fine sand, rocks.	
H78SS-DUP-1	8-20-96	PCBs	0 - 6	See H78SS-7 (0 - 6") for sample description.	This is a blind duplicate of H78SS-7 (0 - 6").
H78SS-DUP-2	8-20-96	Appendix IX+3	0 - 6	See H78SS-2 (0 - 6") for sample description.	This is a blind duplicate of H78SS-2 (0 - 6").
H78SS-EB-1	8-20-96	PCBs	--	Equipment rinse blank collected off a stainless steel auger sleeve.	
H78SS-EB-2	8-20-96	Appendix IX+3	--	Equipment rinse blank collected off a stainless steel scoop.	

TABLE 4-3

GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
MCP PHASE II / RCRA FACILITY INVESTIGATION REPORT FOR
HILL 78 AREA / USEPA AREA 2

SOIL BORING SAMPLE ANALYSIS SUMMARY

		Analyses			QA/QC			
Date	Boring	PCBs	VOCs	Appendix IX+3*	Field Dup.	Rinse Blank	MS/MSD	Comments
07/16/96	H78B-8/	0-0.5						
11/07/96	H78B-8R	0.5-2						
		2-4						
		4-6						
		6-8						
		8-10						
		10-12						
		12-14						
		14-16						
		16-18	16-18	16-18				
		18-20			H78-Dup-1 PCBs		18-20	
		20-20.5						
		20-22						
		22-24						
		24-26						
		26-28	26-28		26-28			
		28-30						
07/19/96	H78B-10	0-0.5						
		0.5-2						
		2-4						
		4-6	4-6	4-6				
		6-8				H78-RB-3 PCBs		
		8-10						
07/17/96	H78B-11	0-0.5						
		0.5-2						
		2-4						
		4-6						
		6-8	6-8	6-8				
		8-10						
		10-12				H78-RB-2 PCBs		
07/18/96	H78B-12	0-0.5	0-0.5	0-0.5				
		0.5-2						
		2-4						
		4-6						
		6-8			H78-Dup2 PCBs			
		8-10					8-10 PCBs	
07/23/96	H78B-13	0-0.5						No recovery 10-14'
		0.5-2						
		2-4	2-4	2-4				
		4-6						
		6-8						
		8-10						
		14-16						
		16-18						
		18-20						
		20-22					20-22	
		22-24						
		24-26						

TABLE 4-3

GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
MCP PHASE II / RCRA FACILITY INVESTIGATION REPORT FOR
HILL 78 AREA / USEPA AREA 2

SOIL BORING SAMPLE ANALYSIS SUMMARY

		Analyses			QA/QC			
Date	Boring	PCBs	VOCs	Appendix IX+3*	Field Dup.	Rinse Blank	MS/MSD	Comments
07/24/96	H78B-14	0-0.5						Obtained groundwater sample from 8-12' for dioxin/furan analysis.
		0.5-2						
		2-4						
		4-6						
		6-8						
		8-10	8-10	8-10				
		10-12			H78-Dup-6 PCBs	H78-RB-6 PCBs		
07/18/97	H78B-15	0-0.5						
		0.5-2						
		2-4						
		4-6						
		6-8						
		8-10						
		10-12	10-12	10-12				
		12-14						
		14-16						
07/25/96	H78B-16	0-0.5						
		0.5-2						
		2-4				H78-RB-7 PCBs		
		4-6			H78-Dup-7 PCBs			
		6-8						
		8-10	8-10	8-10				
		10-12					10-12	
		12-14						
07/24/96	H78B-17/ H78B-17R	0-0.5						
		0.5-2						
		2-4						
		4-6						
		6-8						
		8-10						
		10-12						
		12-14	12-14	12-14				
		14-16						
07/23/96	H78B-18	0-0.5	0-0.5					
		0.5-2						
		2-4						
		4-6						
		6-8						
		8-10						
		10-12						
		12-14	12-14	12-14		H78-RB-5 PCBs		
		14-16						
		16-18						
		18-20			H78-Dup-5 PCBs			

TABLE 4-3

GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
MCP PHASE II / RCRA FACILITY INVESTIGATION REPORT FOR
HILL 78 AREA / USEPA AREA 2

SOIL BORING SAMPLE ANALYSIS SUMMARY

Date	Boring	Analyses			QA/QC			Comments
		PCBs	VOCs	Appendix IX+3*	Field Dup.	Rinse Blank	MS/MSD	
07/19/96	H78B-19	0-0.5						No recovery from 20-22 and 22-24'.
		0.5-2						
		2-4						
		4-6	4-6	4-6				
		6-8						
		8-10						
		10-12						
		12-14						
		14-16						
		16-18						
		18-20				H78-RB-4 PCBs		
		24-26						
09/06/96	H78B-20	0-0.5						
		0.5-2						
		2-4						
		4-6						
		6-8						
		8-10	8-10	8-10				
		10-12					10-12	
07/19/96	H78B-21	0-0.5						
		0.5-2			H78-Dup-3 PCBs			
		2-4						
		4-6	4-6	4-6				
		6-8					6-8	
		8-10						
		10-12						
		12-14						
07/24/96	H78B-22	0-0.5						Obtained groundwater sample from 8-12' for VOC analysis
		0.5-2						
		2-4					2-4	
		4-6						
		6-8						
		8-10	8-10	8-10				
		10-12						
07/17/96	H78B-24	0-0.5						
		0.5-2						
		2-4						
		4-6	4-6	4-6				
		6-8						
		8-9						
07/15/96	H78B-25	0-0.5						
		0.5-2						
		2-4						
		4-6						
		6-8						
				10-12		H78-RB-1 Appendix IX+3		

TABLE 4-3

GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
MCP PHASE II / RCRA FACILITY INVESTIGATION REPORT FOR
HILL 78 AREA / USEPA AREA 2

SOIL BORING SAMPLE ANALYSIS SUMMARY

Date	Boring	Analyses			QA/QC			Comments
		PCBs	VOCs	Appendix IX+3*	Field Dup.	Rinse Blank	MS/MSD	
07/22/96	H78B-27	0-0.5						
		0.5-2			H78-Dup-4 PCBs			
		2-4	2-4	2-4				
		4-6						
		6-8					6-8	
		8-10						
07/22/96	H78B-28/ H78B-28R	0-0.5	0-0.5					
		6-8	6-8	6-8				
		18-20						
		20-22						
		22-24						
07/25/96	H78B-29	0-0.5						
		0.5-2						
		2-4						
		4-6						
		6-8						
		8-10						
		10-12						
		12-14	12-14	12-14				
		14-16						
		16-18						
		18-20						
		20-22						
06/25/97	H78B-30	0-0.5			H78B-Dup1 RB0625971 PCBs			
		0.5-2					0.5-2	
		2-4						
		4-6						
		6-8						
		8-10						
		10-12						
		12-14		12-14				
06/25/97	H78B-31	0-0.5						
		0.5-2						
		2-4						
		4-6						
		6-8		6-8				
		8-10						
		10-12						

Notes:

* = Analyses exclude pesticides and herbicides.

OBG LABORATORIES, INC.

TABLE 4-4A

Laborator Repor

CLIENT BLASLAND &BOUCK ENGINEERS, INC. JOB NO. 2887.026.517

DESCRIPTION Hill 78 Superficial Soil Sampling B & B # 101.75.18

MATRIX: Solid

Date Analyzed 8-24-91 DATE COLLECTED 8-23-91 DATE RECEIVED 8-24-91

	Sample #	PCB	Aroclor	PERCENT TOTAL SOLIDS
HILL 78-SUP-C1	N0753	2.4	1260	88.
HILL 78-SUP-C2	N0754	9.7	1260	93.
HILL 78-SUP-C3	N0755	<0.6	-	92.
HILL 78-SUP-C4	N0756	<0.6	-	95.
HILL 78-SUP-C5	N0757	<0.6	-	94.
HILL 78-SUP-C6	N0758	3.8	1260	93.
HILL 78-SUP-C7	N0759	2.6	1260	90.
HILL 78-SUP-C8	N0760	<0.7	-	81.
HILL 78-SUP-C9	N0761	1.1	1260	96.
HILL 78-SUP-C10	N0762	1.3	1260	94.

Comments:

Certification No.: NY034

Units: mg/kg dry weight

Authorized:

Date: August 26, 1991

OBG Laboratories, Inc., an O'Brien & Gere Limited Company
5000 Brittonfield Parkway / Suite 300, Box 4942 / Syracuse, NY 13221 / (315) 437-0200

TABLE 4-4B

HILL 78 AREA
GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

SUMMARY OF PCB ANALYSES - HILL 78 FILL AREA (PPM)

	Depth in Feet Below Land Surface									
Boring	0-2	2-4	4-6	6-8	8-10	10-12	12-14	14-16	16-18	18-20
B-1	<1.0	16	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
B-2	17	32	34	1.0	–	5.0	1.0	1.0	<1.0	1.0
B-3	9.0	15	10	22	6.0	–	<1.0	9.0/7.0	8.0	4.0
B-4	2.0	–	74	49	12	30	2.0	3.0	57	52
B-5	52	361	53	99	83	9.0	<1.0	<1.0	<1.0	<1.0
B-6	35	32	18	969/128	10	4.0	<1.0	<1.0	<1.0	<1.0
B-7	5.0	<1.0	4.0	12	55	84	<1.0	<1.0	<1.0	<1.0
B-8	105	2.0	–	29	100	54	4.9	<1.0	<1.0	<1.0
B-9	11	17	–	73	17	37	1.0	<1.0	<1.0	<1.0
B-10	35	<1.0	–	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
B-11	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	–	1.0	1.0
B-12	1.0	<1.0	35	12	33	359	47,385	301	1,159	8.0
B-13	6.0	9.0	82	143	–	30	<1.0	<1.0	<1.0	1.0
B-14	2.0	–	6.0	<1.0	3.0	1.0	<1.0	<1.0	2.0	<1.0
B-15	92	10	232	57	15	10	558	<1.0	<1.0	<1.0
B-16	20	56	11	5.0	<1.0	<1.0	–	<1.0	<1.0	<1.0

Note:

– = No sample

5/15/90
1890414X

TABLE 4-4C

HILL 78 AREA
GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

SUMMARY OF PCB ANALYSES - ALTRESCO AREA (PPM DRY WEIGHT, JULY 1987)

	Depth in Feet Below Land Surface									
Boring	0-2	2-4	4-6	6-8	8-10	10-12	12-14	14-16	16-18	18-20
72-1	663	–	447	378	1,231	224	644	35	12	9.0
72-2	–	27	<1.0	<1.0	<1.0	2.0	<1.0	<1.0	<1.0	<1.0
72-3	95	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	–
72-4	12	13	3,931	16,067	5,844	18,741	917	348	331	3,206
72-5	<1.0	<1.0	9.0	<1.0	–	2.0	<1.0	<1.0	<1.0	<1.0
72-6	<1.0	<1.0	<1.0	<1.0	–	<1.0	<1.0	<1.0	<1.0	<1.0
72-7	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	–
72-8	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
72-9	<1.0	<1.0	47	<1.0	–	<1.0	<1.0	<1.0	<1.0	<1.0
72-10	<1.0	<1.0	<1.0	<1.0	–	<1.0	<1.0	<1.0	<1.0	<1.0
72-11	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	–	<1.0
72-12	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
72-13	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
72-14	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
72-15	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	–	<1.0	<1.0
72-16	<1.0	<1.0	<1.0	–	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
72-17	<1.0	–	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
72-18	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0

Note:

– = No sample

TABLE 4-4D

HILL 78 AREA
GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

SUMMARY OF PCBs DETECTED IN ALTRESCO AREA (FEBRUARY/MARCH 1989)

Boring	Sample Depth (ft)	Total PCBs (ppm dry weight)
72-28	0-4	51
	4-8	2.7
	8-12	20
72-29	0-4	3.6
	4-8	3.7
	8-12	<0.05
72-30	0-4	0.13
	4-8	<0.05
72-31	0-4	0.08
	4-8	<0.05
72-32	0-4	7.7
	4-8	16
	8-12	0.05
72-33	0-2	<0.05
	2-6	<0.05
	6-10	<0.05
72-34	0-2	<0.05
	2-6	<0.05
	6-10	<0.05
72-35	0-2	<0.05
	2-6	<0.05
	6-10	<0.05
72-36	0-2	<0.05
	2-6	<0.05
	6-10	<0.05
72-40	0-4	0.60
	4-8	<0.05
72-41	0-4	0.42
	4-8	0.21
72-42	0-4	0.11
	4-8	<0.05

TABLE 4-4D

HILL 78 AREA
GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

SUMMARY OF PCBs DETECTED IN ALTRESCO AREA (FEBRUARY/MARCH 1989)

Boring	Sample Depth (ft)	Total PCBs (ppm dry weight)
72-43	0-4	<0.05
	4-8	<0.05
72-44	0-4	0.08
	4-8	<0.05
B-1	0-2	45
B-2	0-2	3.6
B-3	0-2	7.0
B-4	0-2	24

TABLE 4-4E

HILL 78 AREA
GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

SUMMARY OF PCB ANALYSES - ALTRESCO PARKING AREA

Boring	Depth (feet)	Total PCBs (ppm dry weight)
B2	0-4	<1
	4-8	<1
B3	0-4	<1
	4-8	<1
B4	0-4	<1
	4-8	<1
B5	0-4	<1
	4-8	<1
B6	0-4	<1
	4-8	<1
B7	0-4	<1
	4-8	<1
B8	0-4	<1
	4-8	<1
B9	0-4	<1
	4-8	<1
B10	0-4	<1
	4-8	<1
B11	0-4	5.3
	4-8	<1
B12	0-4	<1
	4-8	<1
B13	0-4	<1
	4-8	<1
B14	0-4	<1
	4-8	<1
B15	0-4	<1
	4-8	<1

TABLE 4-4E

HILL 78 AREA
GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

SUMMARY OF PCB ANALYSES - ALTRESCO PARKING AREA

Boring	Depth (feet)	Total PCBs (ppm dry weight)
B16	0-4	<1
	4-8	<1
B17	0-4	<1
	4-8	<1
B18	0-4	<1
	4-6	<1
B19	0-4	<1
	4-8	<1
B20	0-4	12
	4-8	<1
B21	0-4	<1
	4-8	<1

TABLE 4-4F

HILL 78 AREA
GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

SUMMARY OF PCB ANALYSIS - ALTRESCO STEAMLINE SUPPORTS

Sample #	Sample Depth (ft)	Total PCBs (ppm dry weight)
PS-W-1A	0-4	0.45
PS-W-1B	4-8	<0.05
PS-W-3A	0-4	2.8
PS-W-3B	4-8	0.08
PS-W-5A	0-4	20
PS-W-5B	4-8	0.07
PS-W-7A	0-2	1.6
PS-W-7B	2-6	0.08
PS-W-7C	6-10	<0.05
PS-W-9A	0-4	0.65
PS-W-9B	4-8	0.20
PS-W-11A	0-4	2.4
PS-W-11B	4-8	0.35
PS-W-13A	0-4	8.6
PS-W-13B	4-8	0.61
PS-W-15A	0-4	22
PS-W-15B	4-8	5.5
PS-W-17A	0-2	8.4
PS-W-17B	2-6	0.36
PS-W-17C	6-10	<0.05
PS-W-17D	10-14	<0.05
PS-W-18A	0-2	4.7
PS-W-18B	2-6	<0.05
PS-W-18C	6-10	<0.05
PS-W-18D	10-14	0.13
PS-W-22A	0-2	28
PS-W-22B	2-6	16
PS-W-22C	6-10	0.38
PS-W-26A	0-4	38
PS-W-26B	4-8	53
PS-W-30A	0-4	37
PS-W-30B	4-8	38
PS-W-34A	0-4	16
PS-W-34B	4-8	2.0
PS-W-38A	0-4	2.0
PS-W-38B	4-8	0.20
PS-W-42A	0-4	5.9
PS-W-42B	4-8	0.11

TABLE 4-4F

HILL 78 AREA
GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

SUMMARY OF PCB ANALYSIS - ALTRESCO STEAMLINE SUPPORTS

Sample #	Sample Depth (ft)	Total PCBs (ppm dry weight)
PS-W-24A	0-4	96.0
PS-W-24B	4-8	1.1
PS-W-25A	0-4	71.0
PS-W-25B	4-8	39.0
PS-W-27A	0-4	31.0
PS-W-27B	4-8	22.0
PS-E-5A	0-2	0.97
PS-E-5B	2-6	ND
PS-E-5C	6-10	ND
PS-E-11A	0-2	0.15
PS-E-11B	2-6	ND
PS-E-11C	6-10	ND
PS-E-14A	0-2	0.19
PS-E-14B	2-6	ND
PS-E-14C	6-10	ND
PS-E-17A	0-2	0.26
PS-E-17B	2-6	0.13
PS-E-17C	6-10	0.05
PS-E-22A	0-2	ND
PS-E-22B	2-6	ND
PS-E-22C	6-10	0.07

TABLE 4-4G

HILL 78 AREA
GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

SUMMARY OF PCB ANALYSES - NEW YORK AVENUE WATER LINE

Sample #	Depth (feet)	Total PCBs (ppm)
WL-1	0-3	17
WL-1	3-5	11
WL-2	0-3	12
WL-2	3-7	<1.0
WL-3	0-3	10
WL-3	3-7	<1.0
WL-4	0-4	53
WL-4	4-8	67
WL-5	0-4	10
WL-5	4-8	<1.0
WL-6	0-4	20
WL-6	4-8	<1.0
WL-7	0-4	8.3
WL-7	4-8	<1.0

TABLE 4-4H

HILL 78 AREA
GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

SUMMARY OF PCB ANALYSES - ALTRESCO TRANSMISSION LINE

Sample #	Depth (feet)	Total PCBs (ppm dry weight)
STR-2N	0-2	430
	2-6	2.5
	6-10	8.2
STR-1N	0-2	4.2
	2-6	<1.0
	6-10	<1.0
STR-2S	0-4	<1.0
STR-1S	0-4	190
STR-4S1	0-4	<1.0
STR-3S	0-2	2.4
	2-6	<1.0
	6-10	<1.0
STR-3S1	0-2	15
	2-6	<1.0
	6-10	<1.0
STR-3S2	0-2	5.3
	2-6	<1.0
	6-10	<1.0
STR-4S	0-2	21
	2-6	<1.0
	6-10	<1.0
STR-3N	0-2	4.2
	2-6	<1.0
	6-10	<1.0
STR-3N1	0-2	1.7
	2-6	<1.0
	6-10	<1.0
STRN-3N2	0-2	4.4
	2-6	<1.0
	6-10	<1.0

TABLE 4-4H

HILL 78 AREA
GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

SUMMARY OF PCB ANALYSES - ALTRESCO TRANSMISSION LINE

Sample #	Depth (feet)	Total PCBs (ppm dry weight)
STR-4S2	0-2	5.1
	2-6	<1.0
	6-10	<1.0
STR-4N	0-2	12
	2-6	<1.0
	6-10	<1.0
STR-4N2	0-2	1.8
	2-6	<1.0
	6-10	<1.0

TABLE 4-4I

Summary of Total PCBs in Soil Samples, GE Company, Hill 78 Area, Pittsfield, Massachusetts.

Depth (ft)	78-1	78-1 (8-10) DP-1	78-2	78-3	78-4	78-4 (4-6) DP-3	78-5	78-6	78-6 (12-14) DP-2	78-7
0-2	0.09	NS	0.07	0.01	2.20	NS	0.41		NS	5.30
2-4		NS			0.52	NS	0.05	0.10	NS	780.00
4-6		NS		0.08	0.86	25			NS	210.00
6-8		NS			1.90	NS			NS	280.00
8-10						NS	0.15		NS	348.00
10-12		NS				NS			NS	58.00
12-14		NS				NS				0.92
14-16		NS				NS			NS	1.80
16-18		NS				NS			NS	0.05
18-20		NS				NS	NS	NS	NS	
20-22		NS			0.17	NS	NS	NS	NS	
22-24	NS	NS			NS	NS	NS	NS	NS	0.05
24-26	NS	NS		NS	NS	NS	NS	NS	NS	
26-28	NS	NS		NS	NS	NS	NS	NS	NS	0.91

Concentrations reported in milligrams per kilogram (mg/kg). Only detected analytes are shown.
NS Not Sampled.
DP Duplicate.

LABORATORIES, INC.

TABLE 4-4J

Laboratory Report

CLIENT BLASLAND & BOUCK ENGINEERS, P.C. JOB NO. 2887.026.517

DESCRIPTION G.E. Pittsfield, Massachusetts

Date Analyzed: 4-16-90 DATE COLLECTED 4-12,13-90 DATE RECEIVED 4-16-90

Description	Sample #	PCB	PERCENT TOTAL SOLIDS	Aroclor
L1 0-2'	K0230	<0.6	82.	-
L1 2-4'	K0231	<0.6	88.	-
L2 0-2'	K0232	<0.6	80.	-
L2 2-4'	K0233	<0.6	78.	-
L3 0-2'	K0234	<0.6	84.	-
L3 2-4'	K0235	<0.6	87.	-
L4 0-2'	K0236	<0.5	93.	-
L4 2-4'	K0237	<0.6	82.	-
L5 0-2'	K0238	4.6	71.	1260
L5 2-4'	K0239	<0.6	77.	-
L6 0-2'	K0240	<0.6	82.	-
L6 2-4'	K0241	<0.6	87.	-
L7 0-2'	K0242	840.	79.	1254+1260
L7 2-4'	K0243	1000.	87.	1254+1260
L8 0-2'	K0244	1.8	88.	1260
L8 2-4'	K0245	33.	82.	1260
L8 4-6'	K0246	<0.6	85.	-
L9 0-2'	K0247	<0.7	74.	-
L9 2-4'	K0248	<0.6	82.	-

Comments:

Certification No.: (10155) Massachusetts-NY03

Units: mg/kg dry weight

Authorized: [signature]

Date: June 14, 1990

LABORATORIES, INC.

TABLE 4-4J

Laboratory Report

CLIENT BLASLAND & BOUCK ENGINEERS, P.C. JOB NO. 2887.026.517

DESCRIPTION G.E., Pittsfield, Massachusetts

Date Analyzed: 4-16-90 DATE COLLECTED 4-12,13-90 DATE RECEIVED 4-16-90

Description	Sample #	PCB	PERCENT TOTAL SOLIDS	Aroclor
L10 0-2'	K0249	<0.6	82.	-
L10 2-4'	K0250	<0.6	80.	-
L11 0-2'	K0251	<0.6	86.	-
L12 0-2'	K0252	<0.6	82.	-
L12 2-4'	K0253	<0.6	80.	-
L13 0-2'	K0254	<0.6	87.	-
L14 0-2'	K0255	<0.6	85.	-
L14 2-4'	K0256	<0.6	87.	-
L15 0-2'	K0257	<0.6	79.	-
L15 2-4'	K0258	<0.6	90.	-
L16 0-2'	K0259	<0.6	83.	-
L16 2-4'	K0260	<0.6	88.	-
L17 0-2'	K0261	<0.6	88.	-
L17 2-4'	K0262	<0.6	91.	-
L17 4-6'	K0263	<0.5	95.	-
L18 0-2'	K0264	<0.6	85.	-
L18 2-5'	K0265	<0.6	81.	-
L19 2-4'	K0266	<0.5	93.	-
L19 2-4'	K0267	<0.6	83.	-

Comments:

Certification No.: (10155) Massachusetts-NY

Units: mg/kg dry weight

Authorized: [signature]

Date: June 12, 1990

OBG Laboratories, Inc., an O'Brien & Gere Limited Company
5000 Brittonfield Parkway / Suite 300, Box 4942 / Syracuse, NY 13221 / (315) 437-0200

OBG LABORATORIES, INC.

TABLE 4-4J

Laboratory Report

CLIENT BLASLAND & BOUCK ENGINEERS, P.C. JOB NO. 2887.026.517

DESCRIPTION G.E., Pittsfield, Massachusetts

Date Analyzed: 4-16-90 DATE COLLECTED 4-12,13-90 DATE RECEIVED 4-16-90

Description	Sample #	PCB	PERCENT TOTAL SOLIDS	Aroclor
L19 4-6'	K0268	<0.6	80.	-
L20 0-2'	K0269	<0.6	81.	-
L20 2-4'	K0270	<0.6	84.	-
L21 0-2'	K0271	<0.6	82.	-
L21 2-4'	K0272	<0.6	84.	-
L22 0-2'	K0273	<0.6	84.	-
L22 204'	K0274	<0.6	84.	-
L23 0-2'	K0275	<0.6	85.	-
L23 2-4'	K0276	<0.6	89.	-
L24 0-2'	K0277	<0.6	85.	-
L24 2-4'	K0278	<0.5	93.	-

Comments:

Certification No.:(10155) Massachusetts-NY034

Units: mg/kg dry weight

Authorized: [signature]

Date: June 12, 1990

LABORATORIES, INC.

TABLE 4-4J

Laboratory Report

CLIENT BLASLAND & BOUCK ENGINEERS, P.C. JOB NO. 2887.026.517

DESCRIPTION G.E. Pittsfield, Massachusetts
Altresco Metering Pit

DATE COLLECTED 4-13-90 DATE RECEIVED 4-16-90

Description	Sample #	PCB	PERCENT TOTAL SOLIDS	Aroclor
Altresco Meter Pit 0-2'	K0279	34.	91.	1260
Altresco Meter Pit 2-6'	K0280	2.3	90.	1260
Altresco Meter Pit 6-10'	K0281	<0.6	78.	-

Comments:

Certification No.: (10155).Massachusetts-NY03

Units: mg/kg dry weight

Authorized: [signature]

Date: June 12, 1990

TABLE 4-4K

RESULTS OF PCB ANALYSES[a] PERFORMED ON SOIL SAMPLES COLLECTED FOR PROPOSED SEWER LINE AT GE COMPANY/ALTRESCO COGENERATION PLANT, PITTSFIELD, MASSACHUSETTS

Sample Location	Sample Depth (feet below land surface)	Aroclor 1016, 1232 1242 &/or 1248	Aroclor 1254	Aroclor 1260	Total Aroclors
A-1	0-3	ND	ND	0.26*	0.26
A-1	3-6	ND	ND	0.18*	0.18
A-2	0-3	ND	ND	ND	0
A-2	3-6	ND	ND	ND	0
A-3	0-3	ND	0.17*	0.20*	0.37
A-3	3-6	ND	ND	ND	0
A-4	0-2	ND	ND	ND	0
A-4	2-4	ND	ND	ND	0
A-5	0-2	ND	ND	0.43*	0.43
A-5	2-4	ND	ND	ND	0
A-6	0-2	ND	ND	ND	0
A-6	2-4	ND	ND	ND	0
A-7	0-2	ND	ND	ND	0
A-7	2-4	ND	ND	ND	0
A-8	0-2	ND	0.19*	0.12*	0.31
A-8	2-4	ND	ND	ND	0
A-9	0-2	ND	ND	0.92*	0.92
A-9	2-4	ND	ND	ND	0
A-10	0-2	ND	ND	0.12*	0.12
A-10	2-4	ND	ND	0.07	0.07

[a]Analyzed per EPA Method 8080; Concentrations reported in $^{mg}/_{kg}$ (ppm).

*Sample exhibits alteration of standard Aroclor pattern.

ND = Compound was analyzed for but not detected.

TABLE 4-4L

GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS

MCP PHASE II/RCRA FACILITY
INVESTIGATION REPORT FOR HILL 78 AREA

SUMMARY OF SOIL BORING PCB DATA COLLECTED JULY, AUGUST, SEPTEMBER AND NOVEMBER 1996 AND JUNE 1997
(Results are presented in dry-weight parts per million, ppm)

Sample ID	Sample Depth (feet)	Date Collected	PCB-1248	PCB-1254	PCB-1260	Total PCBs
H78B-8/H78B-8R	0 - 0.5	07/16/96	ND(0.038)	ND(0.038)	7.3	7.3
H78B-8/H78B-8R	0.5 - 2	07/16/96	ND(0.035)	ND(0.035)	12	12
H78B-8/H78B-8R	2 - 4	07/16/96	ND(0.035)	ND(0.035)	13 P	13 P
H78B-8/H78B-8R	4 - 6	07/16/96	ND(0.037)	ND(0.037)	7.0 P	7.0 P
H78B-8/H78B-8R	6 - 8	07/16/96	ND(0.72)	ND(0.72)	110	110
H78B-8/H78B-8R	8 - 10	07/16/96	ND(0.70)	ND(0.70)	95 P	95 P
H78B-8/H78B-8R	10 - 12	07/16/96	ND(0.035)	ND(0.035)	7.2 P	7.2 P
H78B-8/H78B-8R	12 - 14	07/16/96	ND(0.035)	ND(0.035)	7.1	7.1
H78B-8/H78B-8R	14 - 16	07/16/96	ND(0.36)	ND(0.36)	16 P	16 P
H78B-8/H78B-8R	16 - 18	07/16/96	ND(0.036)	ND(0.036)	5.6	5.6
H78B-8/H78B-8R	18 - 20	07/16/96	ND(0.38) [ND(0.38)]	ND(0.38) [ND(0.38)]	110 P [95 P]	110 P [95 P]
H78B-8/H78B-8R	20 - 20.5	07/16/96	ND(0.035)	ND(0.035)	11 P	11 P
H78B-8/H78B-8R	20 - 22	11/07/96	ND(0.40)	ND(0.40)	130 P	130 P
H78B-8/H78B-8R	22 - 24	11/07/96	ND(0.38)	ND(0.38)	34 P	34 P
H78B-8/H78B-8R	24 - 26	11/07/96	ND(0.044)	ND(0.044)	29 P	29 P
H78B-8/H78B-8R	26 - 28	11/07/96	ND(0.038) [ND(0.20)]	ND(0.038) [ND(0.20)]	6.2 P [31 P]	6.2 P [31 P]
H78B-8/H78B-8R	28 - 30	11/07/96	ND(0.056)	ND(0.056)	11 P	11 P
H78B-10	0 - 0.5	07/19/96	ND(0.035)	ND(0.035)	3	3
H78B-10	0.5 - 2	07/19/96	ND(0.036)	ND(0.036)	1.0 P	1.0 P
H78B-10	2 - 4	07/19/96	ND(0.036)	ND(0.036)	0.044 P	ND(0.036)
H78B-10	4 - 6	07/19/96	ND(0.038)	ND(0.038)	0.044 P	0.044 P
H78B-10	6 - 8	07/19/96	ND(0.036)	ND(0.036)	0.023 J	0.023 J
H78B-10	8 - 10	07/19/96	ND(0.036)	ND(0.036)	ND(0.036)	ND(0.036)
H78B-11	0 - 0.5	07/17/96	ND(0.038)	ND(0.038)	23	23
H78B-11	0.5 - 2	07/17/96	ND(0.037)	ND(0.037)	2.0	2.0
H78B-11	2 - 4	07/17/96	ND(0.038)	ND(0.038)	0.5	0.5
H78B-11	4 - 6	07/17/96	ND(0.038)	ND(0.038)	0.17	0.17
H78B-11	6 - 8	07/17/96	2100	ND(1.8)	330 P	2430 P
H78B-11	8 - 10	07/17/96	3.5 P	ND(0.036)	0.57 P	4.07 P
H78B-11	10 - 12	07/17/96	0.62 P	ND(0.037)	0.11 P	0.73 P
H78B-12	0 - 0.5	07/18/96	ND(0.036)	ND(0.036)	7.5	7.5
H78B-12	0.5 - 2	07/18/96	ND(0.037)	ND(0.037)	2.0	2.0
H78B-12	2 - 4	07/18/96	ND(0.036)	ND(0.036)	0.039 JP	0.039 JP
H78B-12	4 - 6	07/18/96	ND(0.036)	ND(0.036)	0.033 JP	0.033 JP
H78B-12	6 - 8	07/18/96	ND(0.037) [ND(0.037)]	ND(0.037) [ND(0.037)]	ND(0.037) [0.053 J]	ND(0.037) [0.053 J]
H78B-12	8 - 10	07/18/96	ND(0.038)	ND(0.038)	0.034 JP	0.034 JP
H78B-13	0 - 0.5	07/23/96	ND(0.036)	ND(0.036)	0.6	0.6
H78B-13	0.5 - 2	07/23/96	ND(0.17)	ND(0.17)	13	13
H78B-13	2 - 4	07/23/96	ND(0.037)	ND(0.037)	0.63 P	0.63 P
H78B-13	4 - 6	07/23/96	ND(0.18)	ND(0.18)	17 P	17 P
H78B-13	6 - 8	07/23/96	ND(0.048)	ND(0.048)	6.5 P	6.5 P
H78B-13	8 - 10	07/23/96	ND(0.064)	ND(0.064)	12	12
H78B-13	14 - 16	07/23/96	ND(0.36)	ND(0.36)	0.63 P	0.63 P
H78B-13	16 - 18	07/23/96	ND(0.87)	ND(0.87)	ND(0.87)	ND(0.87)
H78B-13	18 - 20	07/23/96	ND(0.87)	ND(0.87)	ND(0.87)	ND(0.87)
H78B-13	20 - 22	07/23/96	ND(0.042)	ND(0.042)	ND(0.042)	ND(0.042)
H78B-13	22 - 24	07/23/96	ND(0.04)	ND(0.04)	ND(0.04)	ND(0.04)
H78B-13	24 - 26	07/23/96	ND(0.041)	ND(0.041)	ND(0.041)	ND(0.041)
H78B-14	0 - 0.5	07/23/96	ND(0.036)	ND(0.036)	1.5 P	1.5 P
H78B-14	0.5 - 2	07/23/96	ND(0.035)	ND(0.035)	1.7 P	1.7 P
H78B-14	2 - 4	07/23/96	ND(0.035)	ND(0.035)	0.013 JP	0.013 JP
H78B-14	4 - 6	07/23/96	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.038)

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GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS

MCP PHASE II/RCRA FACILITY
INVESTIGATION REPORT FOR HILL 78 AREA

SUMMARY OF SOIL BORING PCB DATA COLLECTED JULY, AUGUST, SEPTEMBER AND NOVEMBER 1996 AND JUNE 1997
(Results are presented in dry-weight parts per million, ppm)

Sample ID	Sample Depth (feet)	Date Collected	PCB-1248	PCB-1254	PCB-1260	Total PCBs
H78B-14	6 - 8	07/23/96	ND(0.04)	ND(0.04)	ND(0.04)	ND(0.04)
H78B-14	8 - 10	07/23/96	ND(0.042)	ND(0.042)	ND(0.042)	ND(0.042)
H78B-14	10 - 12	07/23/96	ND(0.042) [ND(0.039)]	ND(0.042) [ND(0.039)]	ND(0.042) [ND(0.039)]	ND(0.042) [ND(0.039)]
H78B-15	0 - 0.5	07/18/96	ND(0.035)	ND(0.035)	0.30	0.30
H78B-15	0.5 - 2	07/18/96	ND(0.034)	ND(0.034)	0.21 P	0.21 P
H78B-15	2 - 4	07/18/96	ND(0.038)	ND(0.038)	72 P	72 P
H78B-15	4 - 6	07/18/96	ND(0.036)	ND(0.036)	2.9	2.9
H78B-15	6 - 8	07/18/96	ND(0.037)	ND(0.037)	0.14 P	0.14 P
H78B-15	10 - 12	07/18/96	ND(0.037)	ND(0.037)	0.07	0.07
H78B-15	8 - 10	07/18/96	ND(0.037)	ND(0.037)	0.096	0.096
H78B-15	12 - 14	07/18/96	ND(0.04)	ND(0.04)	0.057	0.057
H78B-15	14 - 16	07/18/96	ND(0.037)	ND(0.037)	ND(0.037)	ND(0.037)
H78B-16	0 - 0.5	07/25/96	ND(0.22)	ND(0.22)	6.0	6.0
H78B-16	0.5 - 2	07/25/96	ND(0.37)	ND(0.37)	0.73	0.73
H78B-16	2 - 4	07/25/96	ND(0.037)	ND(0.037)	0.041 JP	0.041 JP
H78B-16	4 - 6	07/25/96	ND(0.036) [ND(0.035)]	ND(0.036) [ND(0.035)]	ND(0.036) [ND(0.035)]	ND(0.036) [ND(0.035)]
H78B-16	6 - 8	07/25/96	ND(0.036)	ND(0.036)	0.013 JP	0.013 JP
H78B-16	8 - 10	07/25/96	ND(0.04)	ND(0.04)	ND(0.04)	ND(0.04)
H78B-16	10 - 12	07/25/96	ND(0.042)	ND(0.042)	ND(0.042)	ND(0.042)
H78B-16	12 - 14	07/26/96	ND(0.04)	ND(0.04)	ND(0.04)	ND(0.04)
H78B-17	0 - 0.5	07/24/96	ND(0.034)	ND(0.034)	0.91	0.91
H78B-17	0.5 - 2	07/24/96	ND(0.34)	ND(0.34)	23	23
H78B-17	2 - 4	07/24/96	ND(0.037)	ND(0.037)	0.32	0.32
H78B-17	4 - 6	07/24/96	ND(0.036)	ND(0.036)	ND(0.036)	ND(0.036)
H78B-17	6 - 8	07/24/96	ND(0.036)	ND(0.036)	ND(0.036)	ND(0.036)
H78B-17	8 - 10	07/24/96	ND(0.034)	ND(0.034)	ND(0.034)	ND(0.034)
H78B-17	10 - 12	07/24/96	ND(0.035)	ND(0.035)	ND(0.035)	ND(0.035)
H78B-17	12 - 14	07/24/96	ND(0.035)	ND(0.035)	ND(0.035)	ND(0.035)
H78B-17	14 - 16	07/24/96	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.038)
H78B-18	0 - 0.5	07/22/96	ND(0.039)	ND(0.039)	0.79	0.79
H78B-18	0.5 - 2	07/22/96	ND(0.038)	ND(0.038)	14	14
H78B-18	2 - 4	07/22/96	ND(0.037)	ND(0.037)	45	45
H78B-18	4 - 6	07/22/96	ND(0.036)	ND(0.036)	0.039 JP	0.039 JP
H78B-18	6 - 8	07/22/96	ND(0.036)	ND(0.036)	0.022 J	0.022 J
H78B-18	8 - 10	07/22/96	ND(0.38)	ND(0.38)	ND(0.38)	ND(0.38)
H78B-18	10 - 12	07/22/96	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.038)
H78B-18	12 - 14	07/22/96	ND(0.042)	ND(0.042)	ND(0.042)	ND(0.042)
H78B-18	14 - 16	07/22/96	ND(0.046)	ND(0.046)	0.048 J	0.048 J
H78B-18	16 - 18	07/22/96	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.038)
H78B-18	18 - 20	07/22/96	ND(0.037) [ND(0.039)]	ND(0.037) [ND(0.039)]	ND(0.037) [0.021 JP]	ND(0.037) [0.021 JP]
H78B-19	0 - 0.5	07/19/96	ND(0.039)	ND(0.039)	0.22	0.22
H78B-19	0.5 - 2	07/19/96	ND(0.036)	ND(0.036)	0.077	0.077
H78B-19	2 - 4	07/19/96	ND(0.038)	ND(0.038)	0.035 J	0.035 J
H78B-19	4 - 6	07/19/96	ND(0.036)	ND(0.036)	0.64 P	0.64 P
H78B-19	6 - 8	07/19/96	ND(0.18)	ND(0.18)	0.44 P	0.44 P

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GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS

MCP PHASE II/RCRA FACILITY
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SUMMARY OF SOIL BORING PCB DATA COLLECTED JULY, AUGUST, SEPTEMBER AND NOVEMBER 1996 AND JUNE 1997
(Results are presented in dry-weight parts per million, ppm)

Sample ID	Sample Depth (feet)	Date Collected	PCB-1248	PCB-1254	PCB-1260	Total PCBs
H78B-19	8 - 10	07/19/96	ND(0.037)	ND(0.037)	ND(0.037)	ND(0.037)
H78B-19	10 - 12	07/19/96	ND(0.18)	ND(0.18)	0.037 JP	0.037 JP
H78B-19	12 - 14	07/19/96	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.18)
H78B-19	14 - 16	07/19/96	ND(0.19)	ND(0.19)	0.03 J	0.03 J
H78B-19	16 - 18	07/19/96	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.038)
H78B-19	18 - 20	07/19/96	ND(0.037)	ND(0.037)	ND(0.037)	ND(0.037)
H78B-19	24 - 26	07/19/96	ND(0.037)	ND(0.037)	ND(0.037)	ND(0.037)
H78B-20	0 - 0.5	09/06/96	ND(0.036)	ND(0.036)	1.4	1.4
H78B-20	0.5 - 2	09/06/96	ND(0.036)	ND(0.036)	0.9	0.9
H78B-20	2 - 4	09/06/96	ND(0.04)	ND(0.04)	1.7	1.7
H78B-20	4 - 6	09/06/96	ND(0.037) [ND(0.38)]	ND(0.037) [ND(0.38)]	1.0 P [0.37 P]	1.0 P [0.37 P]
H78B-20	6 - 8	09/06/96	ND(0.04)	ND(0.04)	1.3 P	1.3 P
H78B-20	8 - 10	09/06/96	ND(0.066)	ND(0.066)	0.39 P	0.39 P
H78B-20	10 - 12	09/06/96	ND(0.038)	ND(0.038)	0.031 J	0.031 J
H78B-21	0 - 0.5	07/19/96	ND(0.038)	ND(0.038)	0.22	0.22
H78B-21	0.5 - 2	07/19/96	ND(0.037) [ND(0.038)]	ND(0.037) [ND(0.038)]	0.014 JP [0.024 JP]	0.014 JP [0.024 JP]
H78B-21	2 - 4	07/19/96	ND(0.037)	ND(0.037)	0.018 JP	0.018 JP
H78B-21	4 - 6	07/19/96	ND(0.038)	ND(0.038)	0.73	0.73
H78B-21	6 - 8	07/19/96	ND(0.038)	ND(0.038)	0.59	0.59
H78B-21	8 - 10	07/19/96	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.038)
H78B-21	10 - 12	07/19/96	ND(0.039)	ND(0.039)	ND(0.039)	ND(0.039)
H78B-21	12 - 14	07/19/96	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.038)
H78B-22	0 - 0.5	07/23/96	ND(0.039)	ND(0.039)	7.8	7.8
H78B-22	0.5 - 2	07/23/96	ND(0.037)	ND(0.037)	7.3 P	7.3 P
H78B-22	2 - 4	07/23/96	ND(0.041)	ND(0.041)	0.040	0.040
H78B-22	4 - 6	07/23/96	ND(0.037)	ND(0.037)	ND(0.037)	ND(0.037)
H78B-22	6 - 8	07/23/96	ND(0.04)	ND(0.04)	ND(0.04)	ND(0.04)
H78B-22	8 - 10	07/23/96	ND(0.04)	ND(0.04)	ND(0.04)	ND(0.04)
H78B-22	10 - 12	07/23/96	ND(0.04)	ND(0.04)	ND(0.04)	ND(0.04)
H78B-24	0 - 0.5	07/17/96	ND(0.38)	ND(0.38)	7.0	7.0
H78B-24	0.5 - 2	07/17/96	ND(0.036)	ND(0.036)	0.81	0.81
H78B-24	2 - 4	07/17/96	ND(0.034)	ND(0.034)	0.051	0.051
H78B-24	4 - 6	07/17/96	ND(0.039)	ND(0.039)	ND(0.039)	ND(0.039)
H78B-24	6 - 8	07/17/96	ND(0.037)	ND(0.037)	ND(0.037)	ND(0.037)
H78B-24	8 - 9	07/17/96	ND(0.036)	ND(0.036)	0.037 P	0.037 P
H78B-25	0 - 0.5	07/15/96	ND(0.056)	ND(0.056)	25 P	25 P
H78B-25	0.5 - 2	07/15/96	ND(0.037)	ND(0.037)	8.3 P	8.3 P
H78B-25	2 - 4	07/15/96	ND(0.038)	ND(0.038)	0.23 P	0.23 P
H78B-25	4 - 6	07/15/96	ND(0.036)	ND(0.036)	0.12 P	0.12 P
H78B-25	6 - 8	07/15/96	ND(0.038)	ND(0.038)	0.069 P	0.069 P
H78B-25	10 - 12	07/15/96	ND(0.037)	ND(0.037)	0.034 JP	0.034 JP
H78B-27	0 - 0.5	07/22/96	ND(0.18)	21	ND(0.18)	21
H78B-27	0.5 - 2	07/22/96	ND(0.19) [ND(2.0)]	510 P [ND(2.0)]	200 P [450 P]	710 P [450 P]
H78B-27	2 - 4	07/22/96	ND(0.036)	1.4	ND(0.036)	1.4

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MCP PHASE II/RCRA FACILITY
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SUMMARY OF SOIL BORING PCB DATA COLLECTED JULY, AUGUST, SEPTEMBER AND NOVEMBER 1996 AND JUNE 1997
(Results are presented in dry-weight parts per million, ppm)

Sample ID	Sample Depth (feet)	Date Collected	PCB-1248	PCB-1254	PCB-1260	Total PCBs
H78B-27	4 - 6	07/22/96	ND(0.039)	5.3	ND(0.039)	5.3
H78B-27	6 - 8	07/22/96	ND(0.039)	ND(0.039)	0.017 J	0.017 J
H78B-27	8 - 10	07/22/96	ND(0.041)	ND(0.041)	0.057 P	0.057 P
H78B-28	0 - 0.5	07/22/96	ND(0.034)	ND(0.034)	0.55 P	0.55 P
H78B-28	6 - 8	07/22/96	ND(2.0)	ND(2.0)	480 P	480 P
H78B-28	18 - 20	07/22/96	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.038)
H78B-28	20 - 22	07/22/96	ND(0.037)	ND(0.037)	0.0085 JP	0.0085 JP
H78B-28	22 - 24	07/22/96	ND(0.038)	ND(0.038)	0.059 P	0.059 P
H78B-29	0 - 0.5	07/25/96	ND(0.04)	ND(0.04)	4.7	4.7
H78B-29	0.5 - 2	07/25/96	ND(0.039)	ND(0.039)	1.4 P	1.4 P
H78B-29	2 - 4	07/25/96	ND(0.036)	ND(0.036)	11 P	11 P
H78B-29	4 - 6	07/25/96	ND(0.038)	ND(0.038)	0.073 P	0.073 P
H78B-29	6 - 8	07/25/96	ND(0.039)	ND(0.039)	0.18	0.18
H78B-29	8 - 10	07/25/96	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.038)
H78B-29	10 - 12	07/25/96	ND(0.035)	ND(0.035)	ND(0.035)	ND(0.035)
H78B-29	12 - 14	07/25/96	ND(0.037)	ND(0.037)	ND(0.037)	ND(0.037)
H78B-29	14 - 16	07/25/96	ND(0.041)	ND(0.041)	0.011 JP	0.011 JP
H78B-29	16 - 18	07/25/96	ND(0.037)	ND(0.037)	ND(0.037)	ND(0.037)
H78B-29	18 - 20	07/25/96	ND(0.037)	ND(0.037)	0.023 JP	0.023 JP
H78B-29	20 - 22	07/25/96	ND(0.037)	ND(0.037)	ND(0.037)	ND(0.037)
H78B-30	0 - 0.5	06/25/97	ND(6.9)	ND(6.9)	190	190
H78B-30	0.5 - 2	06/25/97	ND(3.5)[ND(3.5]	ND(3.5)[ND(3.5]	80[90]	80[90]
H78B-30	2 - 4	06/25/97	ND(0.035)	ND(0.035)	4.6P	4.6P
H78B-30	4 - 6	06/25/97	ND(0.036)	ND(0.036)	2.5	2.5
H78B-30	6 - 8	06/25/97	ND(0.037)	ND(0.037)	0.074	0.074
H78B-30	8 - 10	06/25/97	ND(0.037)	ND(0.037)	0.17P	0.17P
H78B-30	10 - 12	06/25/97	ND(0.036)	ND(0.036)	0.18	0.18
H78B-30	12 - 14	06/25/97	ND(0.037)	ND(0.037)	0.71	0.71
H78B-31	0 - 0.5	06/25/97	ND(0.036)	ND(0.036)	1.3	1.3
H78B-31	0.5 - 2	06/25/97	ND(0.035)	ND(0.035)	2.5	2.5
H78B-31	2 - 4	06/25/97	ND(0.035)	ND(0.035)	3.1	3.1
H78B-31	4 - 6	06/25/97	ND(0.18)	ND(0.18)	6.1	6.1
H78B-31	6 - 8	06/25/97	ND(0.038)	ND(0.038)	0.29	0.29
H78B-31	8 - 10	06/25/97	ND(0.037)	ND(0.037)	0.39	0.39
H78B-31	10 - 12	06/25/97	ND(0.036)	ND(0.036)	0.019J	0.019J
H78SS-1	0 - 0.5	08/20/96	ND(0.20)	ND(0.20)	1.6 P	1.6 P
H78SS-2	0 - 0.5	08/20/96	ND(0.037) [ND(0.036)]	ND(0.037) [ND(0.036)]	0.19 P [0.099]	0.19 P [0.099]
H78SS-3	0 - 0.5	08/20/96	ND(0.037)	ND(0.037)	0.16	0.16
H78SS-4	0 - 0.5	08/20/96	ND(0.042)	ND(0.042)	6.0	6.0
H78SS-5	0 - 0.5	08/20/96	ND(0.18)	ND(0.18)	0.17 P	0.17 P
H78SS-5	0.5 - 1	08/20/96	ND(0.036)	ND(0.036)	0.39 P	0.39 P
H78SS-5	1 - 1.5	08/20/96	ND(0.036)	ND(0.036)	0.11 P	0.11 P
H78SS-5	1.5 - 2	08/20/96	ND(0.037)	ND(0.037)	0.07 P	0.07 P
H78SS-6	0 - 0.5	08/20/96	ND(0.035)	ND(0.035)	0.14 P	0.14 P
H78SS-6	0.5 - 1	08/20/96	ND(0.036)	ND(0.036)	0.021 JP	0.021 JP
H78SS-6	1 - 1.5	08/20/96	ND(0.035)	ND(0.035)	ND(0.035)	ND(0.035)
H78SS-6	1.5 - 2	08/20/96	ND(0.034)	ND(0.034)	0.042	0.042

(See Notes on Page 5)

TABLE 4-4L

GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS

MCP PHASE II/RCRA FACILITY
INVESTIGATION REPORT FOR HILL 78 AREA

SUMMARY OF SOIL BORING PCB DATA COLLECTED JULY, AUGUST, SEPTEMBER AND NOVEMBER 1996 AND JUNE 1997
(Results are presented in dry-weight parts per million, ppm)

Sample ID	Sample Depth (feet)	Date Collected	PCB-1248	PCB-1254	PCB-1260	Total PCBs
H78SS-7	0 - 0.5	08/20/96	ND(0.036) [ND(0.036)]	ND(0.036) [ND(0.036)]	1.5 P [1.9 P]	1.5 P [1.9 P]
H78SS-7	0.5 - 1	08/20/96	ND(0.036)	ND(0.036)	1.1 P	1.1 P
H78SS-7	1 - 1.5	08/20/96	ND(0.18)	ND(0.18)	0.043 P	0.043 P
H78SS-7	1.5 - 2	08/20/96	ND(0.17)	ND(0.17)	0.03 P	0.03 P
H78SS-8	0 - 0.5	08/20/96	ND(0.17)	ND(0.17)	4.6 P	4.6 P
H78SS-8	0.5 - 1	08/20/96	ND(0.035)	ND(0.035)	0.37	0.37
H78SS-8	1 - 1.5	08/20/96	ND(0.035)	ND(0.035)	0.49	0.49
H78SS-8	1.5 - 2	08/20/96	ND(0.037)	ND(0.037)	0.072	0.072

Notes:

1. Samples collected by Blasland, Bouck & Lee, Inc., and submitted to CompuChem, Inc., for analysis of PCBs.
2. Only parameters detected in at least one sample are shown.
3. * - Indicates laboratory duplicate analysis was outside control limits.
4. J - Indicates an estimated value less than the CLP-required quantitation limit.
5. P - Indicates dual column percent difference value exceeded 25 percent.
6. ND - Compound was not detected, associated detection limit presented in parentheses.
7. Results of duplicate samples are presented in brackets.
8. Samples H78B-13 (10 - 12 ft., 12 - 14 ft.), H78B-19 (20 - 22 ft., 22 - 24 ft.), and H78B-28 (0.5 - 2 ft., 2 - 4 ft., 4 - 6 ft., 8 - 10 ft., 10 - 12 ft., 12 - 14 ft., 14 - 16 ft., 16 - 18 ft.) were not analyzed for PCBs.
9. Total PCBs include J and P qualified data.

TABLE 4-4M

HILL 78 AREA
GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

SUMMARY OF VOLATILE ORGANIC COMPOUNDS DETECTED
IN SOIL SAMPLES - ALTRESCO AREA (AUGUST 1988)

Sample I.D.	Compound	Concentration (ppb)
72-19, 0-4'	methylene chloride	6.0
	toluene	<5.0
72-19, 4-8'	methylene chloride	7.0
	toluene	<5.0
	trichloroethene	<5.0
72-20, 0-4'	methylene chloride	11.0
	toluene	<5.0
72-20, 4-8'	trans-1,2-dichloroethene	<5.0
	methylene chloride	9.0
	toluene	<5.0
	trichloroethene	<5.0
72-21, 0-4'	methylene chloride	9.0
72-21, 4-8'	methylene chloride	5.0
	toluene	<5.0
72-22, 0-4'	methylene chloride	8.0
	toluene	<5.0
72-22, 4-8'	methylene chloride	7.0
72-23, 0-4'	methylene chloride	8.0
72-23, 4-8'	methylene chloride	9.0
2-24, 0-4'	methylene chloride	10.0
72-24, 4-8'	methylene chloride	6.0
2-25, 0-4'	methylene chloride	8.0
	toluene	<5.0
	trichlorethene	5.0
72-25, 4-8'	methylene chloride	6.0

ites:

1. Quantitation limit = 5 ppb.
   < = detected but at a level less than the quantitation limit.

VOLATILE ORGANIC PRIORITY POLLUTANT ANALYSIS

TABLE 4-4N

Results in ug/kg (ppb)

Sample Matrix: Soil

Client Sample ID: PS-W-24,0-4'
Lab Sample ID: JJ5129

Compound		Compound	
acrolein	10 U	1,1-dichloroethene	5 U
acrylonitrile	10 U	trans-1,2-dichloroethene	5 U
benzene	5 U	1,2-dichloropropane	5 U
bromodichloromethane	5 U	cis-1,3-dichloropropene	5 U
bromoform	5 U	trans-1,3-dichloropropene	5 U
bromomethane	10 U	ethyl benzene	5 U
carbon tetrachloride	5 U	methylene chloride	13
chlorobenzene	5 U	1,1,2,2-tetrachloroethane	5 U
chloroethane	10 U	tetrachloroethene	5 U
2-chloroethylvinyl ether	10 U	toluene	5
chloroform	5 U	1,1,1-trichloroethane	5 U
chloromethane	10 U	1,1,2-trichloroethane	5 U
dibromochloromethane	5 U	trichloroethene	5 U
1,1-dichloroethane	5 U	vinyl chloride	10 U
1,2-dichloroethane	5 U		

Date of Analysis: 09/11/89

Client Sample ID: PS-W-25B, 4-8'
Lab Sample ID: JJ3464

Compound		Compound	
acrolein	10 U	1,1-dichloroethene	5 U
acrylonitrile	10 U	trans-1,2-dichloroethene	5 U
benzene	5 U	1,2-dichloropropane	5 U
bromodichloromethane	5 U	cis-1,3-dichloropropene	5 U
bromoform	5 U	trans-1,3-dichloropropene	5 U
bromomethane	10 U	ethyl benzene	5 U
carbon tetrachloride	5 U	methylene chloride	7
chlorobenzene	5 U	1,1,2,2-tetrachloroethane	5 U
chloroethane	10 U	tetrachloroethene	5 U
2-chloroethylvinyl ether	10 U	toluene	5 U
chloroform	5 U	1,1,1-trichloroethane	4 J
chloromethane	10 U	1,1,2-trichloroethane	5 U
dibromochloromethane	5 U	trichloroethene	5 U
1,1-dichloroethane	5 U	vinyl chloride	10 U
1,2-dichloroethane	5 U		

U = Compound analyzed for but not detected. The number is the detection limit for the sample.
J = Indicates an estimated value less than the detection limit.

TABLE 4-40

Summary of Volatile Organic Compounds in Soil Samples, Hill 78 Area, GE Company, Pittsfield, Massachusetts.

Parameter	78-1 (12-14 FT)	78-4 (4-6 FT)	78-6 (10-12 FT)
Acetone	0.014B	0.076B	0.037B
Methylene Chloride	0.013B	0.044B	0.032B

Concentrations reported in milligrams per kilogram (mg/kg). Only detected analytes are shown.
B Indicates the compound was found in the associated blank as well as in the sample.

TABLE 4-4P

HILL 78 AREA
GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

SUMMARY OF APPENDIX IX + 3 CONSTITUENTS DETECTED IN
SOIL BORING NY-5
JULY 10, 1991

Constituent	NY-5 (14 to 16 feet)
Volatile Organic Compound (ppm)	
Methylene Chloride	0.019B
Semivolatile Organic Compound (ppm)	
bis(2-Ethylhexyl)Phthalate	0.16J
Fluoranthene	0.041J
Phenanthrene	0.087J
Pyrene	0.074J
Metal (ppm)	
Aluminum	3,410
Arsenic	5.2N
Barium	11.6B
Calcium	23,300E*
Chromium	4.1
Cobalt	4.4B
Copper	9.4*
Iron	9,120E
Lead	1.6
Magnesium	10,900*
Manganese	250
Nickel	8.4
Potassium	297B
Sodium	93.7B
Vanadium	3.8B
Zinc	30E

Notes:

Concentrations are reported in parts per million (ppm). Only the detected constituents are shown.

B - When used for organics, indicates that the analyte was detected in the associated blank. When used for inorganics, indicates a value greater than or equal to the instrument detection limit but less than the contract required detection limit.

E - Indicates a chemical or physical interference effect was encountered during the analysis of the flagged analyte.

J - Indicates an estimated value less than the sample detection limit.

N - Indicates a matrix-related interference in the sample preparation procedure and/or analysis for the flagged analyte.

* - Indicates duplicate analysis was not within control limits.

TABLE 4-4Q

GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS

MCP PHASE II/RCRA FACILITY
INVESTIGATION REPORT FOR HILL 78 AREA

SUMMARY OF SOIL BORING VOLATILE ORGANICS DATA COLLECTED JULY-SEPTEMBER 1996 AND JUNE 1997
(Results are presented in dry-weight parts per million, ppm)

Parameter	Location ID:	H78B-8/H78B-8R	H78B-8/H78B-8R	H78B-10	H78B-11	H78B-12	H78B-13	H78B-14	H78B-15	H78B-16
	Sample ID:	H8B	H8B	H10B	H11B	H12B	H13B	H14B	H15B	H16B
	Sample Depth (feet):	16 - 18	26 - 28	4 - 6	6 - 8	0 - 0.5	2 - 4	8 - 10	10 - 12	8 - 10
	Date Collected:	07/16/96	11/07/96	07/19/96	07/17/96	07/18/96	07/23/96	07/23/96	07/18/96	07/25/96
1,1,1-Trichloroethane		ND(0.022)	ND(0.024)	ND(0.024)	0.053	ND(0.022)	ND(0.023)	ND(0.026)	ND(0.022)	ND(0.024)
1,2-Dibromo-3-chloropropane		ND(0.054)	ND(0.059)	0.003 J	ND(0.054)	ND(0.054)	ND(0.057)	ND(0.064)	ND(0.056)	ND(0.06)
Acetone		0.006 JB	ND(0.110)	0.016 JB	0.012 JB	0.023 JB	0.026 JB	0.025 JB	0.027 JB	0.041 JB
Acetonitrile		0.03 J	ND(0.240)	ND(0.24)	ND(0.22)	ND(0.22)	0.013 J	0.012 J	ND(0.22)	ND(0.24)
Ethylbenzene		ND(0.016)	0.004 J	ND(0.018)	0.002 J	ND(0.16)	ND(0.017)	ND(0.019)	ND(0.017)	ND(0.018)
Methylene chloride		0.017 B	0.003 JB	0.017 JB	0.016 B	0.017 B	0.036 B	0.03 B	0.024 B	0.025 B
Tetrachloroethene		ND(0.016)	ND(0.018)	ND(0.018)	0.003 J	ND(0.16)	ND(0.017)	ND(0.019)	ND(0.017)	ND(0.018)
Toluene		ND(0.016)	0.009 J	ND(0.018)	0.002 J	ND(0.016)	ND(0.017)	ND(0.019)	ND(0.017)	ND(0.018)
Xylenes (Total)		ND(0.022)	0.098	ND(0.024)	0.012 J	ND(0.022)	ND(0.023)	ND(0.026)	ND(0.022)	ND(0.024)
TOTAL VOCs		**0.053**	**0.114**	**0.036**	**0.1**	**0.04**	**0.075**	**0.067**	**0.051**	**0.066**

(See Notes on Page 3)

TABLE 4-4Q

GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS

MCP PHASE II/RCRA FACILITY
INVESTIGATION REPORT FOR HILL 78 AREA

SUMMARY OF SOIL BORING VOLATILE ORGANICS DATA COLLECTED JULY-SEPTEMBER 1996 AND JUNE 1997
(Results are presented in dry-weight parts per million, ppm)

Parameter	Location ID:	H78B-17/H78B-17R	H78B-18	H78B-18	H78B-19	H78B-20	H78B-21	H78B-22	H78B-24	H78B-25	H78B-30	H78B-31
	Sample ID:	H17B	H18B	H18B	H19B	78B20	H21B	H22B	H24B	H25B		
	Sample Depth (feet):	12 - 14	0 - 0.5	12 - 14	4 - 6	8 - 10	4 - 6	8 - 10	4 - 6	10 - 12	12 - 14	6 - 8
	Date Collected:	07/24/96	07/22/96	07/22/96	07/19/96	09/06/96	07/19/96	07/23/96	07/17/96	07/15/96	06/25/96	06/25/96
1,1,1-Trichloroethane		ND(0.021)	ND(0.024)	ND(0.026)	ND(0.022)	ND(0.040)	ND(0.023)	ND(0.024)	ND(0.023)	ND(0.023)	0.002JB	0.001JB
1,2-Dibromo-3-chloropropane (DBCP)		ND(0.053)	ND(0.06)	ND(0.064)	ND(0.056)	ND(0.10)	ND(0.058)	ND(0.061)	ND(0.058)	ND(0.057)	0.004JB	ND(0.057)
Acetone		0.04 JB	0.017 JB	0.033 JB	0.034 JB	0.072JB	0.031 JB	0.021 JB	0.017 JB	0.02 JB	0.025JB	0.024JB
Acetonitrile		ND(0.21)	ND(0.24)	ND(0.26)	ND(0.22)	0.036 JB	ND(0.23)	ND(0.24)	ND(0.23)	0.041 J	0.03JB	0.056JB
Ethylbenzene		ND(0.016)	ND(0.18)	ND(0.019)	ND(0.017)	ND(0.030)	ND(0.017)	ND(0.018)	ND(0.017)	ND(0.017)	ND (0.017)	ND(0.017)
Methylene chloride		0.022 B	0.028 B	0.033 B	0.023 B	0.021B	0.02 B	0.026 B	0.014 JB	0.019 B	0.004JB	0.006JB
Tetrachloroethene		ND(0.016)	ND(0.13)	ND(0.019)	ND(0.017)	ND(0.030)	ND(0.017)	ND(0.018)	ND(0.017)	ND(0.017)	ND(0.017)	ND(0.017)
Toluene		ND(0.016)	ND(0.018)	ND(0.019)	ND(0.017)	ND(0.030)	ND(0.017)	ND(0.018)	ND(0.017)	ND(0.017)	0.002JB	0.001JB
Xylenes (Total)		ND(0.021)	ND(0.024)	ND(0.026)	ND(0.022)	ND(0.040)	ND(0.023)	ND(0.024)	ND(0.023)	ND(0.023)	ND(0.022)	ND(0.023)
TOTAL VOCs		**0.062**	**0.045**	**0.066**	**0.057**	**0.129**	**0.031**	**0.047**	**0.031**	**0.08**	**0.064**	**0.088**

(See Notes on Page 3)

TABLE 4-4Q

GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS

MCP PHASE II/RCRA FACILITY
INVESTIGATION REPORT FOR HILL 78 AREA

SUMMARY OF SOIL BORING VOLATILE ORGANICS DATA COLLECTED JULY-SEPTEMBER 1996 AND JUNE 1997
(Results are presented in dry-weight parts per million, ppm)

Parameter	Location ID:	H78B-27	H78B-28/H78B-28R	H78B-28/H78B-28R	H78B-29	H78SS-1	H78SS-2	H78SS-3	H78SS-4
	Sample ID:	H27B	H28B	H28B	H29B				
	Sample Depth (feet):	2 - 4	0 - 0.5	6 - 8	12 - 14	0 - 0.5	0 - 0.5	0 - 0.5	0 - 0.5
	Date Collected:	07/22/96	07/22/96	07/22/96	07/25/96	08/20/96	08/20/96	08/20/96	08/20/96
1,1,1-Trichloroethane		ND(0.022)	ND(0.021)	ND(0.024)	ND(0.023)	ND(0.024)	ND(0.022) [ND(0.022)]	ND(0.022)	ND(0.025)
1,2-Dibromo-3-chloropropane (DBCP)		ND(0.055)	ND(0.052)	ND(0.061)	ND(0.057)	0.001 JB	0.002 JB [0.001 JB]	ND(0.056)	0.002 JB
Acetone		0.016 JB	0.016 JB	0.019 JB	0.042 JB	ND(0.11)	0.029 JB [0.039 JB]	0.038 JB	0.032 JB
Acetonitrile		ND(0.22)	ND(0.21)	ND(0.24)	0.004 J	0.015 JB	0.022 JB [0.018 JB]	0.03 JB	0.018 JB
Ethylbenzene		ND(0.016)	ND(0.16)	ND(0.018)	ND(0.017)	ND(0.018)	ND(0.017)[ND(0.016)]	ND(0.017)	ND(0.019)
Methylene chloride		0.023 B	0.026 B	0.03 B	0.027 B	0.007 JB	0.005 JB [0.008 JB]	0.005 JB	0.014 JB
Tetrachloroethene		ND(0.016)	ND(0.010)	ND(0.018)	ND(0.017)	ND(0.018)	ND(0.017)[ND(0.016)]	ND(0.017)	ND(0.017)
Toluene		ND(0.016)	ND(0.016)	ND(0.018)	ND(0.017)	ND(0.018)	ND(0.017) [ND(0.016)]	ND(0.017)	ND(0.019)
Xylenes (Total)		ND(0.022)	ND(0.021)	ND(0.024)	ND(0.023)	ND(0.024)	ND(0.022) [ND(0.022)]	ND(0.022)	ND(0.025)
TOTAL VOCs		**0.039**	**0.042**	**0.049**	**0.073**	**0.023**	**0.058[0.066]**	**0.073**	**0.066**

Notes:

1. Samples collected by Blasland, Bouck & Lee, Inc., and submitted to CompuChem, Inc., for analysis of Appendix IX + 3 volatile organics.
2. Only parameters detected in at least one sample are shown.
3. J - Indicates an estimated value less than the CLP-required quantitation limit.
4. B - Compound also detected in associated method blank sample.
5. ND - Compound was not detected, associated detection limit presented in parentheses.
6. Results of duplicate samples are presented in brackets.
7. Total values include J, B, X, D, and E qualified data, as applicable.

TABLE 4-4R

Summary of Semi-Volatile Organic Compounds in Soil Samples, Hill 78 Area, GE Company, Pittsfield, Massachusetts.

Parameter	78-1 (12-14 FT)	78-4 (4-6 FT)	78-6 (10-12 FT)
Benzoic Acid	0.660J		
bis(2-Ethylhexyl)phthalate	0.068J	1.30	0.120J
Butyl benzyl phthalate		0.042J	
Di-n-octyl phthalate	0.038J	0.30J	

Concentrations reported in milligrams per kilogram (mg/kg). Only detected analytes are shown.
J Indicates an estimated value less than the sample detection limit.

TABLE 4-4S

GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS

MCP PHASE II/RCRA FACILITY
INVESTIGATION REPORT FOR HILL 78 AREA

SUMMARY OF SOIL BORING SEMIVOLATILE ORGANICS DATA COLECTED JULY-SEPTEMBER 1996 AND JUNE 1997
(Results are presented in dry-weight parts per million, ppm)

Parameter	Location ID:	H78B-8/H78B-8R	H78B-10	H78B-11	H78B-12	H78B-13	H78B-14	H78B-15	H78B-16
	Sample ID.:	H8B	H10B	H11B	H12B	H13B	H14B	H15B	H16B
	ample Depth (feet):	16 - 18	4 - 6	6 - 8	0 - 0.5	2 - 4	8 - 10	10 - 12	8 - 10
	Date Collected:	07/16/96	07/19/96	07/17/96	07/18/96	07/23/96	07/23/96	07/18/96	07/25/96
1,2,4,5-Tetrachlorobenzene		ND(1.4)	ND(1.5)	0.58 J	ND(1.4)	ND(1.5)	ND(1.7)	ND(1.4)	ND(1.6)
1,2,4-Trichlorobenzene		ND(0.60)	ND(0.64)	9.3 D	ND(0.59)	ND(0.62)	ND(0.71)	ND(0.61)	ND(0.66)
1,2-Dichlorobenzene		ND(0.64)	ND(0.69)	0.058 J	ND(0.63)	ND(0.67)	ND(0.76)	ND(0.65)	ND(0.71)
1,3-Dichlorobenzene		ND(0.55)	ND(0.60)	ND(0.55)	ND(0.55)	ND(0.58)	ND(0.65)	ND(0.57)	ND(0.61)
1,4-Dichlorobenzene		ND(0.57)	ND(0.61)	0.062 J	ND(0.56)	ND(0.59)	ND(0.67)	ND(0.58)	ND(0.63)
2-Methylnaphthalene		ND(0.91)	ND(0.98)	0.057 J	ND(0.90)	ND(0.95)	ND(1.1)	ND(0.93)	ND(1.0)
3-Methylphenol		ND(1.4)	ND(1.5)	ND(1.4)	ND(1.4)	ND(1.5)	ND(1.7)	ND(1.4)	ND(1.6)
4-Methylphenol		ND(1.4)	ND(1.5)	ND(1.4)	ND(1.4)	ND(1.5)	ND(1.7)	ND(1.4)	ND(1.6)
Acenaphthene		ND(0.72)	ND(0.77)	ND(0.71)	ND(0.71)	ND(0.75)	ND(0.85)	ND(0.73)	ND(0.80)
Acenaphthylene		ND(0.73)	ND(0.78)	ND(0.72)	ND(0.72)	ND(0.76)	ND(0.86)	ND(0.74)	ND(0.81)
Aniline		ND(0.61)	ND(0.65)	ND(0.60)	ND(0.60)	ND(0.64)	ND(0.72)	ND(0.62)	ND(0.67)
Anthracene		ND(0.80)	ND(0.86)	ND(0.80)	ND(0.79)	ND(0.84)	ND(0.95)	ND(0.82)	ND(0.89)
Benzo(a)anthracene		ND(0.72)	ND(0.77)	ND(0.71)	0.037 J	0.17 J	ND(0.85)	ND(0.73)	ND(0.80)
Benzo(a)pyrene		ND(0.72)	ND(0.77)	ND(0.71)	0.028 J	0.16 J	ND(0.85)	ND(0.73)	ND(0.80)
Benzo(b)fluoranthene		ND(0.84)	ND(0.90)	ND(0.83)	0.05 XJ	0.33 XJ	ND(0.99)	ND(0.85)	ND(0.93)
Benzo(g,h,i)perylene		ND(0.67)	ND(0.72)	ND(0.67)	ND(0.66)	0.12 J	ND(0.79)	ND(0.69)	ND(0.75)
Benzo(k)fluoranthene		ND(0.67)	ND(0.72)	ND(0.67)	0.055 XJ	0.35 XJ	ND(0.79)	ND(0.69)	ND(0.75)
bis(2-Ethylhexyl)phthalate		0.078 J	0.07 J	0.16 J	0.064 J	0.077 J	0.37 J	ND(0.83)	ND(0.90)
Butyl benzyl phthalate		ND(0.74)	ND(0.79)	ND(0.16)	ND(0.73)	ND(0.77)	ND(0.87)	ND(0.75)	ND(0.82)
Chrysene		ND(0.59)	ND(0.63)	ND(0.58)	ND(0.58)	0.19 J	ND(0.69)	ND(0.60)	ND(0.65)
Di-n-octyl phthalate		ND(0.52)	ND(0.56)	ND(0.58)	ND(0.51)	ND(0.55)	ND(0.62)	ND(0.53)	ND(0.53)

(See Notes on Page 5)

TABLE 4-4S

GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS

MCP PHASE II/RCRA FACILITY
INVESTIGATION REPORT FOR HILL 78 AREA

SUMMARY OF SOIL BORING SEMIVOLATILE ORGANICS DATA COLECTED JULY-SEPTEMBER 1996 AND JUNE 1997
(Results are presented in dry-weight parts per million, ppm)

Parameter	Location ID:	H78B-17/H78B-17R	H78B-18	H78B-19	H78B-20	H78B-21	H78B-22	H78B-24	H78B-25
	Sample ID.:	H17B	H18B	H19B	HB20	H21B	H22B	H24B	H25B
	ample Depth (feet):	12 - 14	12 - 14	4 - 6	8 - 10	4 - 6	8 - 10	4 - 6	10 - 12
	Date Collected:	07/24/96	07/22/96	07/19/96	09/06/96	07/19/96	07/23/96	07/17/96	07/15/96
1,2,4,5-Tetrachlorobenzene		ND(1.4)	ND(1.7)	ND(1.5)	ND(2.6)	ND(1.5)	ND(1.6)	ND(1.5)	ND(1.5)
1,2,4-Trichlorobenzene		ND(0.59)	ND(0.71)	ND(0.62)	ND(1.1)	ND(0.64)	ND(0.67)	ND(0.62)	ND(0.63)
1,2-Dichlorobenzene		ND(0.63)	ND(0.76)	ND(0.66)	ND(1.2)	ND(0.69)	ND(0.72)	ND(0.67)	ND(0.68)
1,3-Dichlorobenzene		ND(0.54)	ND(0.65)	ND(0.57)	ND(1.0)	ND(0.59)	ND(0.62)	ND(0.50)	ND(0.59)
1,4-Dichlorobenzene		ND(0.55)	ND(0.67)	ND(0.58)	ND(1.0)	ND(0.60)	ND(0.63)	ND(0.59)	ND(0.60)
2-Methylnaphthalene		ND(0.89)	ND(1.1)	0.14 J	ND(1.7)	ND(0.98)	ND(1.0)	ND(0.95)	ND(0.97)
3-Methylphenol		ND(1.4)	ND(1.7)	ND(1.5)	ND(2.6)	ND(1.5)	ND(1.6)	ND(1.5)	ND(1.5)
4-Methylphenol		ND(1.4)	ND(1.7)	ND(1.5)	ND(2.6)	ND(1.5)	ND(1.6)	ND(1.5)	ND(1.5)
Acenaphthene		ND(0.70)	ND(0.85)	0.091 J	ND(1.3)	ND(0.77)	ND(0.80)	ND(0.75)	ND(0.76)
Acenaphthylene		ND(0.71)	ND(0.86)	0.13 J	0.14 J	ND(0.78)	ND(0.82)	ND(0.76)	ND(0.77)
Aniline		ND(0.60)	ND(0.72)	ND(0.63)	ND(1.1)	ND(0.65)	ND(0.68)	ND(0.64)	ND(0.64)
Anthracene		ND(0.79)	ND(0.95)	0.35 J	0.13 J	ND(0.86)	ND(0.90)	ND(0.84)	ND(0.85)
Benzo(a)anthracene		ND(0.70)	ND(0.85)	0.79	0.58 J	ND(0.77)	ND(0.80)	ND(0.75)	ND(0.76)
Benzo(a)pyrene		ND(0.70)	ND(0.85)	0.75	0.51 J	ND(0.77)	ND(0.80)	ND(0.75)	ND(0.76)
Benzo(b)fluoranthene		ND(0.82)	ND(0.99)	1.1 X	0.80 XJ	ND(0.90)	ND(0.94)	ND(0.88)	ND(0.88)
Benzo(g,h,i)perylene		ND(0.66)	ND(0.79)	0.34 J	0.41 J	ND(0.72)	ND(0.76)	ND(0.70)	ND(0.71)
Benzo(k)fluoranthene		ND(0.66)	ND(0.79)	1.2 X	0.57 XJ	ND(0.72)	ND(0.76)	ND(0.70)	ND(0.71)
bis(2-Ethylhexyl)phthalate		0.041 J	0.052 J	0.06 J	ND(1.5)	0.054 J	ND(0.91)	0.066 J	ND(0.86)
Butyl benzyl phthalate		ND(0.72)	ND(0.062)	ND(0.76)	ND(1.3)	ND(0.79)	ND(0.83)	ND(0.77)	ND(0.78)
Chrysene		ND(0.57)	ND(0.69)	0.82	0.85 J	ND(0.63)	ND(0.66)	ND(0.61)	ND(0.62)
Di-n-octyl phthalate		ND(0.51)	ND(0.62)	ND(0.54)	ND(0.95)	ND(0.56)	ND(0.59)	ND(0.55)	ND(0.55)

(See Notes on Page 5)

TABLE 4-4S

GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS

MCP PHASE II/RCRA FACILITY
INVESTIGATION REPORT FOR HILL 78 AREA

SUMMARY OF SOIL BORING SEMIVOLATILE ORGANICS DATA COLECTED JULY-SEPTEMBER 1996 AND JUNE 1997
(Results are presented in dry-weight parts per million, ppm)

Parameter	Location ID.:	H78B-27	H78B-28/H78B-28R	H78B-29	H78B-30	H78B-31	H78SS-1	H78SS-2	H78SS-3	H78SS-4
	Sample ID:	H27B	H28B	H29B						
	ample Depth (feet):	2 - 4	6 - 8	12 - 14	12 - 14	6 - 8	0 - 0.5	0 - 0.5	0 - 0.5	0 - 0.5
	Date Collected:	07/22/96	07/22/96	07/25/96	06/25/97	06/25/97	08/20/96	08/20/96	08/20/96	08/20/96
1,2,4,5-Tetrachlorobenzene		ND(1.5)	ND(1.6)	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5) [ND(1.4)]	ND(1.5)	ND(1.6)
1,2,4-Trichlorobenzene		ND(0.64)	0.045 J	ND(0.62)	ND(0.61)	ND(0.63)	ND(0.65)	ND(0.62) [ND(0.60)]	ND(0.62)	ND(0.70)
1,2-Dichlorobenzene		ND(0.69)	ND(0.71)	ND(0.67)	ND(0.66)	ND(0.68)	ND(0.70)	ND(0.66) [ND(0.65)]	ND(0.66)	ND(0.75)
1,3-Dichlorobenzene		ND(0.60)	ND(0.61)	ND(0.58)	ND(0.57)	ND(0.59)	ND(0.60)	ND(0.57) [ND(0.56)]	ND(0.57)	ND(0.65)
1,4-Dichlorobenzene		ND(0.61)	0.23 J	ND(0.59)	ND(0.58)	ND(0.6)	ND(0.61)	ND(0.58) [ND(0.57)]	ND(0.58)	ND(0.66)
2-Methylnaphthalene		ND(0.98)	ND(1.0)	ND(0.95)	ND(0.94)	ND(0.97)	ND(0.99)	ND(0.94) [ND(0.92)]	ND(0.94)	ND(1.1)
3-Methylphenol		ND(1.5)	ND(1.6)	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5) [ND(1.4)]	ND(1.5)	ND(1.6)
4-Methylphenol		ND(1.5)	ND(1.6)	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5) [ND(1.4)]	ND(1.5)	ND(1.6)
Acenaphthene		ND(0.77)	ND(0.80)	ND(0.75)	ND(0.74)	ND(0.76)	ND(0.78)	ND(0.74) [ND(0.73)]	ND(0.74)	ND(0.84)
Acenaphthylene		ND(0.79)	ND(0.81)	ND(0.76)	ND(0.75)	ND(0.77)	0.047 J	ND(0.75) [ND(0.74)]	ND(0.75)	0.046 J
Aniline		ND(0.66)	ND(0.67)	ND(0.64)	ND(0.62)	ND(0.64)	ND(0.66)	ND(0.63) [ND(0.62)]	ND(0.63)	ND(0.71)
Anthracene		ND(0.87)	ND(0.89)	ND(0.84)	ND(0.83)	ND(0.85)	ND(0.88)	ND(0.83) [ND(0.81)]	ND(0.83)	ND(0.94)
Benzo(a)anthracene		ND(0.77)	ND(0.80)	ND(0.75)	ND(0.74)	ND(0.76)	0.18 J	ND(0.74) [ND(0.73)]	0.041 J	0.27 J
Benzo(a)pyrene		ND(0.77)	ND(0.80)	ND(0.75)	ND(0.74)	ND(0.76)	0.25 J	ND(0.74) [ND(0.73)]	0.05 J	0.39 J
Benzo(b)fluoranthene		ND(0.90)	0.05 XJ	ND(0.88)	ND(0.86)	ND(0.89)	0.44 JX	ND(0.87) [ND(0.85)]	0.093 JX	0.67 JX
Benzo(g,h,i)perylene		ND(0.73)	ND(0.75)	ND(0.70)	ND(0.69)	ND(0.71)	0.13 J	ND(0.70) [ND(0.68)]	ND(0.69)	0.21 J
Benzo(k)fluoranthene		ND(0.73)	0.055 XJ	ND(0.70)	ND(0.69)	ND(0.71)	0.48 JX	ND(0.70) [ND(0.68)]	0.10 JX	0.75 JX
bis(2-Ethylhexyl)phthalate		0.071 J	0.085 J	0.073 J	0.56 J	0.39 J	ND(0.89)	ND(0.84) [ND(0.82)]	ND(0.84)	0.06 J
Butyl benzyl phthalate		ND(0.80)	ND(0.82)	ND(0.77)	ND(0.76)	ND(0.78)	ND(0.80)	ND(0.76) [ND(0.75)]	ND(0.76)	ND(0.86)
Chrysene		ND(0.63)	ND(0.65)	ND(0.61)	ND(0.6)	ND(0.62)	0.28 J	ND(0.61) [ND(0.59)]	0.056 J	0.41 J
Di-n-octyl phthalate		ND(0.56)	ND(0.58)	ND(0.55)	ND(0.54)	ND(0.55)	ND(0.57)	ND(0.54) [ND(0.53)]	ND(0.54)	ND(0.61)

(See Notes on Page 5)

TABLE 4-4S

GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS

MCP PHASE II/RCRA FACILITY
INVESTIGATION REPORT FOR HILL 78 AREA

SUMMARY OF SOIL BORING SEMIVOLATILE ORGANICS DATA COLECTED JULY-SEPTEMBER 1996 AND JUNE 1997
(Results are presented in dry-weight parts per million, ppm)

Parameter	Location ID:	H78B-8/H78B-8R	H78B-10	H78B-11	H78B-12	H78B-13	H78B-14	H78B-15	H78B-16
	Sample ID.:	H8B	H10B	H11B	H12B	H13B	H14B	H15B	H16B
	ample Depth (feet):	16 - 18	4 - 6	6 - 8	0 - 0.5	2 - 4	8 - 10	10 - 12	8 - 10
	Date Collected:	07/16/96	07/19/96	07/17/96	07/18/96	07/23/96	07/23/96	07/18/96	07/25/96
Dibenzo(a,h)anthracene		ND(0.47)	ND(0.50)	ND(0.46)	ND(0.46)	ND(0.49)	ND(0.55)	ND(0.48)	ND(0.52)
Dibenzofuran		ND(0.75)	ND(0.81)	ND(0.74)	ND(0.74)	ND(0.78)	ND(0.88)	ND(0.77)	ND(0.83)
Diethyl phthalate		0.094 J	ND(0.84)	ND(0.77)	ND(0.77)	ND(0.82)	ND(0.92)	ND(0.80)	ND(0.87)
Dimethyl phthalate		ND(1.1)	ND(1.1)	ND(1.0)	ND(1.0)	ND(1.1)	ND(1.2)	ND(1.1)	ND(1.2)
Fluoranthene		ND(1.0)	ND(1.1)	ND(0.99)	ND(0.051)	0.29 J	ND(1.2)	ND(1.0)	ND(1.1)
Fluorene		ND(0.75)	ND(0.81)	ND(0.74)	ND(0.74)	ND(0.78)	ND(0.88)	ND(0.77)	ND(0.83)
Hexachlorobenze		ND(0.840)	ND(0.90)	ND(0.83)	ND(0.83)	ND(0.88)	ND(0.99)	ND(0.85)	ND(0.93)
Indeno(1,2,3-cd)pyrene		ND(0.50)	ND(0.54)	ND(0.49)	ND(0.49)	0.11 J	ND(0.59)	ND(0.51)	ND(0.55)
Naphthalene		ND(0.72)	ND(0.77)	ND(0.71)	ND(0.71)	ND(0.75)	ND(0.85)	ND(0.73)	ND(0.80)
Pentachlorobenzene		ND(0.72)	ND(0.77)	0.51 J	ND(0.71)	ND(0.75)	ND(0.85)	ND(0.73)	ND(0.80)
Phenanthrene		ND(0.67)	ND(0.72)	ND(0.67)	ND(0.66)	0.12 J	ND(0.79)	ND(0.69)	ND(0.75)
Phenol		ND(0.62)	ND(0.67)	0.15 J	ND(0.61)	ND(0.65)	ND(0.73)	ND(0.63)	ND(0.69)
Pyrene		ND(0.79)	ND(0.85)	ND(0.78)	0.043 J	0.31 J	ND(0.94)	ND(0.81)	ND(0.88)
TOTAL SVOCs		0.172	0.07	10.877	0.277	2.227	0.37	ND	ND

Parameter	Location ID:	H78B-17/H78B-17R	H78B-18	H78B-19	H78B-20	H78B-21	H78B-22	H78B-24	H78B-25
	Sample ID.:	H17B	H18B	H19B	HB20	H21B	H22B	H24B	H25B
	ample Depth (feet):	12 - 14	12 - 14	4 - 6	8 - 10	4 - 6	8 - 10	4 - 6	10 - 12
	Date Collected:	07/24/96	07/22/96	07/19/96	09/06/96	07/19/96	07/23/96	07/17/96	07/15/96
Dibenzo(a,h)anthracene		ND(0.46)	ND(0.55)	0.064 J	ND(0.85)	ND(0.50)	ND(0.52)	ND(0.49)	ND(0.49)
Dibenzofuran		ND(0.73)	ND(0.88)	0.13 J	ND(1.4)	ND(0.80)	ND(0.84)	ND(0.78)	ND(0.79)
Diethyl phthalate		ND(0.77)	ND(0.92)	ND(0.81)	ND(1.4)	ND(0.84)	ND(0.88)	ND(0.82)	ND(0.83)
Dimethyl phthalate		ND(1.0)	ND(1.2)	ND(1.1)	ND(1.9)	ND(1.1)	ND(1.2)	ND(1.1)	ND(1.1)
Fluoranthene		ND(0.98)	ND(1.2)	1.7	1.2 J	ND(1.1)	ND(1.1)	ND(1.0)	ND(1.1)
Fluorene		ND(0.73)	ND(0.88)	0.35 J	0.21 J	ND(0.80)	ND(0.84)	ND(0.78)	ND(0.79)
Hexachlorobenze		ND(0.82)	ND(0.99)	ND(0.86)	ND(1.5)	ND(0.9)	ND(0.94)	ND(0.88)	ND(0.88)
Indeno(1,2,3-cd)pyrene		ND(0.49)	ND(0.59)	0.32 J	0.094 J	ND(0.53)	ND(0.56)	ND(0.52)	ND(0.53)
Naphthalene		ND(0.70)	ND(0.85)	0.17 J	ND(1.3)	ND(0.77)	ND(0.80)	ND(0.75)	ND(0.76)
Pentachlorobenzene		ND(0.70)	ND(0.85)	ND(0.74)	ND(1.3)	ND(0.77)	ND(0.80)	ND(0.75)	ND(0.76)
Phenanthrene		ND(0.66)	ND(0.79)	1.6	1.6	ND(0.72)	ND(0.76)	ND(0.70)	ND(0.71)
Phenol		ND(0.61)	ND(0.73)	ND(0.64)	ND(1.1)	ND(0.66)	ND(0.70)	ND(0.65)	ND(0.66)
Pyrene		ND(0.78)	ND(0.94)	1.5	1.6	ND(0.85)	ND(0.89)	ND(0.83)	ND(0.84)
TOTAL SVOCs		0.041	0.0052	11.605	8.694	0.054	ND	0.066	ND

(See Notes on Page 5)

TABLE 4-4S

GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS

MCP PHASE II/RCRA FACILITY
INVESTIGATION REPORT FOR HILL 78 AREA

SUMMARY OF SOIL BORING SEMIVOLATILE ORGANICS DATA COLECTED JULY-SEPTEMBER 1996 AND JUNE 1997
(Results are presented in dry-weight parts per million, ppm)

Parameter	Location ID.:	H78B-27	H78B-28/H78B-28R	H78B-29	H78B-30	H78B-31	H78SS-1	H78SS-2	H78SS-3	H78SS-4
	Sample ID:	H27B	H28B	H29B						
	ample Depth (feet):	2 - 4	6 - 8	12 - 14	12 - 14	6 - 85	0 - 0.5	0 - 0.5	0 - 0.5	0 - 0.5
	Date Collected:	07/22/96	07/22/96	07/25/96	06/25/97	06/25/97	08/20/96	08/20/96	08/20/96	08/20/96
Dibenzo(a,h)anthracene		ND(0.50)	ND(0.52)	ND(0.49)	ND(0.48)	ND(0.5)	ND(0.51)	ND(0.48) [ND(0.47)]	ND(0.48)	ND(0.54)
Dibenzofuran		ND(0.81)	ND(0.83)	ND(0.78)	ND(0.77)	ND(0.79)	ND(0.82)	ND(0.78) [ND(0.76)]	ND(0.77)	ND(0.87)
Diethyl phthalate		ND(0.84)	ND(0.87)	ND(0.82)	ND(0.8)	ND(0.83)	ND(0.85)	ND(0.81) [ND(0.79)]	ND(0.81)	ND(0.91)
Dimethyl phthalate		ND(1.1)	ND(1.2)	ND(1.1)	ND(1.1)	ND(1.1)	ND(1.1)	ND(1.1) [ND(1.1)]	ND(1.1)	ND(1.2)
Fluoranthene		ND(1.1)	0.097 J	ND(1.0)	ND(1.0)	ND(1.1)	0.48 J	ND(1.0) [ND(1.0)]	0.10 J	0.71 J
Fluorene		ND(0.81)	ND(0.83)	ND(0.78)	ND(0.77)	ND(0.79)	ND(0.82)	ND(0.78) [ND(0.76)]	ND(0.77)	ND(0.87)
Hexachlorobenzene		ND(0.90)	ND(0.93)	ND(0.88)	ND(0.86)	ND(0.89)	ND(0.91)	ND(0.87) [ND(0.85)]	ND(0.86)	ND(0.97)
Indeno(1,2,3-cd)pyrene		ND(0.54)	ND(0.55)	ND(0.52)	ND(0.51)	ND(0.53)	0.10 J	ND(0.52) [ND(0.51)]	ND(0.52)	0.15 J
Naphthalene		ND(0.77)	ND(0.80)	ND(0.75)	ND(0.74)	ND(0.76)	ND(0.78)	ND(0.74) [ND(0.73)]	ND(0.74)	ND(0.84)
Pentachlorobenzene		ND(0.77)	ND(0.80)	ND(0.75)	ND(0.74)	ND(0.76)	ND(0.78)	ND(0.74) [ND(0.73)]	ND(0.74)	ND(0.84)
Phenanthrene		ND(0.73)	0.11 J	ND(0.70)	ND(0.69)	ND(0.71)	0.27 J	ND(0.70) [ND(0.68)]	0.054 J	0.45 J
Phenol		ND(0.67)	ND(0.69)	ND(0.65)	ND(0.64)	ND(0.66)	ND(0.67)	ND(0.64) [ND(0.63)]	ND(0.64)	ND(0.72)
Pyrene		ND(0.86)	0.10 J	ND(0.83)	ND(0.81)	ND(0.84)	0.48 J	ND(0.82) [ND(0.80)]	0.10 J	0.84 J
TOTAL SVOCs		0.071	0.772	0.073	0.56	0.39	3.137	ND[ND]	0.594	4.956

Notes:

1. Samples collected by Blasland, Bouck & Lee, Inc., and submitted to CompuChem, Inc. for analysis of Appendix IX + 3 semivolatile organics.
2. Only parameters detected in at least one sample are shown.
3. J - Indicates an estimated value less than the CLP-required quantitation limit.
4. X - Manual quantitation was performed to resolve benzo(b)fluoranthene and benzo(k)fluoranthene.
5. D - Sample concentration was determined from a secondary dilution.
6. ND - Compound was not detected, associated detection limit presented in parentheses.
7. Results of duplicate samples are presented in brackets.
8. Total values include J, B, X, D, E qualified data, as applicable.

TABLE 4-4T

GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
MCP PHASE II/RCRA FACILITY INVESTIGATION REPORT FOR HILL 78 AREA/USEPA AREA 2

SUMMARY OF SOIL BORING POLYCHLORINATED DIBENZOFURANS AND POLYCHLORINATED DIBENZO-P-DIOXINS DATA - 1996/1997
(Results are presented in dry-weight parts per million, ppm)

Parameter / Location ID.:	H78B-8	H78B-10	H78B-11	H78B-12	H78B-13	H78B-14	H78B-15	H78B-16	H78B-17	H78-18	H78B-22	H78B-29
Sample ID.:	H8B	H10B	H11B	H12B	H13B	H14B	H15B	H16B	H17B	H18B	H22B	H29B
Sample Depth (feet):	16 - 18	4 - 6	6 - 8	0 - 0.5	2 - 4	8 - 10	10 - 12	8 - 10	12- 14	12 - 14	8 - 10	12 - 14
Date Collected:	16-Jul-96	19-Jul-96	17-Jul-96	18-Jul-96	7/23/96	7/24/96	18-Jul-96	7/25/96	7/24/96	7/23/96	7/24/96	7/25/96
1,2,3,4,6,7,8-HpCDD	ND(0.000031)	ND(0.00000029)	0.000013	ND(0.0000075)	0.000092	ND (0.00000046)	ND(0.000025)	ND (0.00000044)	ND (0.000049)	ND (0.000054)	ND (0.00000052)	ND (0.000048)
1,2,3,4,6,7,8-HpCDF	ND(0.000024)	ND(0.00000010)	0.00024	0.0000075	0.000038	ND (0.00000015)	ND(0.000018)	ND (0.00000016)	ND (0.000036)	ND (0.000044)	ND (0.00000016)	ND (0.000035)
1,2,3,4,7,8,9-HpCDF	ND(0.000024)	ND(0.00000014)	0.00019	ND(0.0000046)	ND (0.0000014)	ND (0.0000020)	ND(0.000018)	ND (0.00000021)	ND (0.000036)	ND (0.000044)	ND (0.00000022)	ND (0.000035)
1,2,3,4,7,8-HxCDF	ND(0.000033)	ND(0.00000015)	0.00064	0.0000051 J**	0.0000039 J**	ND (0.00000014)	ND(0.000021)	ND (0.00000016)	ND (0.000046)	ND (0.000047)	ND (0.00000074)	ND (0.000052)
1,2,3,6,7,8-HxCDD	ND(0.00014)	ND(0.00000024)	0.0000029 J**	ND(0.00000646)	0.0000036 J**	ND (0.00000035)	ND(0.000030)	ND (0.00000051)	ND (0.000067)	ND (0.000073)	ND (0.00000019)	ND (0.000055)
1,2,3,6,7,8-HxCDF	ND(0.000033)	ND(0.00000011)	0.000052	ND(0.0000025)	ND (0.0000019)	ND (0.0000001)	ND(0.000021)	ND (0.00000013)	ND (0.000046)	ND (0.000047)	ND (0.00000061)	ND (0.000052)
1,2,3,7,8,9-HxCDD	ND(0.00014)	ND(0.00000027)	0.0000028 J**	ND(0.00000046)	ND (0.0000015)	ND (0.00000041)	ND(0.000030)	ND (0.00000053)	ND (0.000067)	ND (0.000073)	ND (0.00000020)	ND (0.000052)
1,2,3,7,8-PeCDF	ND(0.000028)	ND(0.00000025)	0.00013	0.000041	ND (0.00000093)	ND (0.00000028)	ND(0.000020)	ND (0.00000036)	ND (0.000027)	ND (0.000040)	ND (0.00000034)	ND (0.000031)
2,3,4,6,7,8-HxCDF	ND(0.000033)	ND(0.00000021)	0.000081	0.0000044 J**	0.0000053 J	ND (0.00000068)	ND(0.000021)	ND (0.00000067)	ND (0.000046)	ND (0.000047)	ND (0.00000048)	ND (0.000052)
2,3,4,7,8-PeCDF	ND(0.000028)	ND(0.00000021)	0.00033	ND(0.0000014)	ND (0.0000017)	ND (0.00000023)	ND(0.000020)	ND (0.00000033)	ND (0.000027)	ND (0.000040)	ND (0.00000031)	ND (0.000031)
2,3,7,8-TCDF	ND(0.000037)	ND(0.00000027)	0.00040 g	0.0000017	0.0000026 g	ND (0.0000011)	ND(0.000049)	ND (0.000000018)	ND (0.000051)	ND (0.000052)	ND (0.00000020) g	ND (0.000054)
HpCDDs (total)	ND(0.000031)	ND(0.00000029)	0.000025	ND(0.000028)	0.00015	ND (0.00000046)	ND(0.000025)	ND (0.00000044)	ND (0.000049)	ND (0.000054)	ND (0.00000052)	ND (0.000048)
HpCDFs (total)	ND(0.000024)	ND(0.00000014)	0.00079	0.000015	0.000075	ND (0.00000020)	ND(0.000018)	ND (0.00000021)	ND (0.000036)	ND (0.000044)	ND (0.00000022)	ND (0.000035)
HxCDDs (total)	ND(0.00014)	ND(0.00000028)	0.000025	ND(0.0000018)	0.000018	ND (0.00000041)	ND(0.000030)	ND (0.00000053)	ND (0.000067)	ND (0.000073)	ND (0.0000011)	ND (0.000055)
HxCDFs (total)	ND(0.000033)	ND(0.00000024)	0.0013	0.000049	0.000053	ND (0.00000068)	ND(0.000021)	ND (0.00000067)	ND (0.000046)	ND (0.000047)	ND (0.00000048)	ND (0.000052)
OCDD	ND(0.000059)	ND(0.0000019)	0.000034	0.000021	0.00069	ND (0.0000064)	ND(0.000056)	ND (0.00000018)	ND (0.000097)	ND (0.000011)	ND (0.00000041)	ND (0.00011)
OCDF	ND(0.000069)	ND(0.0000014)	0.0013	ND(0.0000014)	0.000020	ND (0.0000020)	ND(0.000075)	ND (0.00000035)	ND (0.000094)	ND (0.00010)	ND (0.00000037)	ND (0.00012)
PeCDFs (total)	ND(0.000028)	ND(0.00000025)	0.0030	0.00011	0.000039	ND (0.00000028)	ND(0.000020)	ND (0.00000036)	ND (0.000027)	ND (0.00004)	ND (0.00000034)	ND (0.000031)
TCDDs (total)	ND(0.000027)	ND(0.00000022)	0.0000075	0.0000012	0.000021	ND (0.0000004)	ND(0.000011)	ND (0.00000035)	ND (0.000018)	ND (0.000024)	ND (0.00000060)	ND (0.000018)
TCDFs (total)	ND(0.000037)	ND(0.00000040)	0.0011	0.000096	0.00021	ND (0.0000011)	ND(0.000049)	ND (0.00000043)	ND (0.000051)	ND (0.000052)	ND (0.00000084)	ND (0.000054)
1,2,3,4,7,8-HxCDD	ND (0.00014)	ND (0.00000028)	ND (0.0000023)	ND (0.00000035)	ND (0.0000012)	ND (0.00000041)	ND (0.00003)	ND (0.00000052)	ND (0.000067)	ND (0.000073)	ND (0.00000020)	ND (0.000055)
2,3,7,8-TCDD	ND (0.000027)	ND (0.00000022)	ND (0.0000003)	ND (0.00000051)	ND (0.00000018)	ND (0.00000026)	ND (0.000011)	ND (0.00000019)	ND (0.000018)	ND (0.000024)	ND (0.00000017)	ND (0.000018)
PeCDDs (total)	ND (0.0014)	ND (0.00000037)	ND (0.0000031)	ND (0.00000014)	ND (0.00000027)	ND (0.00000023)	ND (0.000039)	ND (0.00000068)	ND (0.000073)	ND (0.000073)	ND (0.0000010)	ND (0.000083)
1,2,3,7,8-PeCDD	ND (0.000029)	ND (0.00000024)	ND (0.0000031)	ND (0.00000042)	ND (0.00000027)	ND (0.00000014)	ND (0.000039)	ND (0.00000035)	ND (0.000073)	ND (0.000073)	ND (0.00000026)	ND (0.000083)
Total PCDDs	ND	ND	0.0000915	0.0000222	0.0008601	ND	ND	ND	ND	ND	ND	ND
Total PCDFs	ND	ND	0.00749	0.00027	0.000208	ND	ND	ND	ND	ND	ND	ND

(See Notes on Page 2)

TABLE 4-4T

GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
MCP PHASE II/RCRA FACILITY INVESTIGATION REPORT FOR HILL 78 AREA/USEPA AREA 2

SUMMARY OF SOIL BORING POLYCHLORINATED DIBENZOFURANS AND POLYCHLORINATED DIBENZO-P-DIOXINS DATA - 1996/1997
(Results are presented in dry-weight parts per million, ppm)

Parameter / Location ID.	H78B-19	H78B-20	H78B-21	H878B-24	H78B-25	H78B-27	H78B-28	H78B-30	H78B-31	H78SS-1	H78SS-2	H78SS-3	H78SS-4
Sample ID.	H19B	H20B	H21B	H24B	H25B	H27B	H28B	H30B	H31B	HSS1	HSS2	HSS3	HSS4
Sample Depth (feet)	4 - 6	8 - 10	4 - 6	4 - 6	10 - 12	2 - 4	6 - 8	12-14	6-8	0 - 0.5	0 - 0.5	0 - 0.5	0 - 0.5
Date Collected	07/19/96	09/06/96	07/19/96	07/17/96	07/15/96	7/22/96	7/22/96	6/25/97	6/25/97	8/25/96	8/20/96		
1,2,3,4,6,7,8-HpCDD	0.0000092	ND(0.0000000025)	ND(0.00000038)	ND(0.00000028)	ND(0.000028)	ND (0.00000033)	0.000025	0.0000051	ND (0.00000044)	0.000031	ND (0.0000015) [ND (0.0000023)]	0.0000075 J**	0.000041
1,2,3,4,6,7,8-HpCDF	0.0000070	ND(0.0000000011)	ND(0.00000065)	ND(0.00000010)	ND(0.000025)	ND (0.00000053)	0.00014	0.000026	ND (0.00000091)	0.000093	ND (0.0000014) [ND (0.0000063 J**)]	ND (0.0000038)	0.000047
1,2,3,4,7,8,9-HpCDF	ND(0.00000096)	ND(0.00000000025)	ND(0.00000011)	ND(0.00000010)	ND(0.000025)	ND (0.00000016)	0.000082	0.0000036	ND (0.00000025)	0.000016	ND (0.00000037) [ND (0.00000051)]	ND (0.00000064)	0.0000069 J**
1,2,3,4,7,8-HxCDF	ND(0.0000023)	ND(0.00000000030)	ND(0.00000062)	ND(0.00000018)	ND(0.000032)	ND (0.00000062)	0.00025	0.0000057	ND (0.00000036)	0.000028	ND (0.00000040) [ND (0.00000086)]	ND (0.0000019)	0.000018
1,2,3,6,7,8-HxCDD	0.0000048 J**	ND(0.00000000079)	ND(0.00000026)	ND(0.00000029)	ND(0.000051)	ND (0.00000016)	0.000017	ND (0.0000013)	ND (0.00000046)	ND (0.0000036)	ND (0.00000084) [ND (0.0000012)]	ND (0.00000077)	ND (0.0000029)
1,2,3,6,7,8-HxCDF	0.0000073	ND(0.00000000023)	ND(0.00000021)	ND(0.00000014)	ND(0.000032)	ND (0.00000021)	0.000049	0.000004	ND (0.00000036)	ND (0.0000056) y	ND (0.00000057) [ND (0.0000068)]	ND (0.00000094)	ND (0.000014) y
1,2,3,7,8,9-HxCDD	0.0000031 J**	ND(0.00000000081)	ND(0.00000031)	ND(0.00000034)	ND(0.000051)	ND (0.00000018)	0.000012	ND (0.0000019)	ND (0.00000044)	ND (0.0000054)	ND (0.00000093) [ND (0.00000031)]	ND (0.00000085)	ND (0.0000015)
1,2,3,7,8-PeCDF	ND(0.000054)y	ND(0.00000000057)	ND(0.0000016)	ND(0.00000018)	ND(0.000023)	ND (0.00000031)	ND (0.000036) y	ND (0.00000053)	ND (0.00000026)	0.0000092 J**	ND (0.00000066) [ND (0.0000017)]	ND (0.00000099)	0.0000065 J**
2,3,4,6,7,8-HxCDF	0.0000067	ND(0.00000000073)	ND(0.00000065)	ND(0.00000027)	ND(0.000032)	ND (0.00000053)	0.000140	0.0000067	ND (0.00000060)	0.000029	ND (0.00000076) [ND (0.0000025)]	ND (0.0000017)	0.0000012 J**
2,3,4,7,8-PeCDF	0.0000052 J**	ND(0.00000000049)	0.00000025	ND(0.00000015)	ND(0.000023)	ND (0.00000030)	0.000049	ND (0.00000014)	ND (0.00000026)	0.000012	ND (0.00000058) [ND (0.0000015)]	ND (0.0000011)	0.0000092 J**
2,3,7,8-TCDF	0.0000019 g	ND(0.00000000086)	0.00000059 gJ**	ND(0.00000018)	ND(0.000046)	0.00000097 g J**	0.000017 g	0.00000082	ND (0.00000055)	0.000034 g	ND (0.0000031) [0.00000021 g]	0.0000037 g	0.000023 g
HpCDDs (total)	0.000019	ND(0.0000000025)	ND(0.00000052)	ND(0.00000028)	ND(0.000028)	ND (0.00000033)	0.000054	0.000014	ND (0.00000044)	0.000061	ND (0.0000015) [ND (0.0000023)]	0.000014	0.000077
HpCDFs (total)	0.000016	ND(0.0000000017)	ND(0.00000065)	ND(0.00000019)	ND(0.000025)	ND (0.00000053)	0.00043	0.000064	ND (0.00000010)	0.00021	ND (0.0000014) [ND (0.0000012)]	ND (0.0000038)	0.00010
HxCDDs (total)	0.000038	ND(0.0000000017)	ND(0.00000042)	ND(0.00000034)	ND(0.000051)	ND (0.00000030)	0.00021	0.000016	ND (0.00000050)	0.000038	ND (0.0000098) [ND (0.0000014)]	ND (0.0000022)	0.0000087
HxCDFs (total)	0.00014	ND(0.0000000019)	ND(0.0000031)	ND(0.00000027)	ND(0.000032)	ND (0.0000011)	0.0021	0.000150	ND (0.0000020)	0.00056	ND (0.0000018) [ND (0.000037)]	0.0000064	0.00022
OCDD	0.0000062 J**	ND(0.0000000074)	ND(0.0000033)	ND(0.0000038)	ND(0.000077)	ND (0.0000029)	0.000058	0.000025	ND (0.0000027)	0.00019	(0.000021 J) [0.000024]	0.000063	0.00044
OCDF	ND(0.0000017)	ND(0.0000000046)	ND(0.0000018)	ND(0.00000094)	ND(0.000074)	ND (0.00000093)	0.00021	0.0000093	ND (0.00000096)	0.000058	ND (0.0000036) [ND (0.0000038)]	ND (0.0000066)	0.000071
PeCDFs (total)	0.00052	ND(0.0000000023)	ND(0.0000044)	ND(0.00000018)	ND(0.000023)	ND (0.0000013)	0.0026	0.00064	ND (0.0000018)	0.00035	ND (0.0000013) [ND (0.000033)]	0.000013	0.00020
TCDDs (total)	ND(0.00000061)	ND(0.00000000050)	ND(0.00000023)	ND(0.00000028)	ND(0.000012)	ND (0.00000019)	0.00012	0.00000062	ND (0.00000019)	0.0000060	ND (0.00000024) [ND (0.00000065)]	ND (0.00000072)	0.0000039
TVDFs (total)	0.00018	ND(0.00000000096)	0.000027	ND(0.00000018)	ND(0.000046)	0.0000054	0.0011	0.000012 *	ND (0.00000055)	0.00023	ND (0.00000031) [ND (0.000018)]	0.000018	0.00020
1,2,3,4,7,8-HxCDD	ND (0.00000047)	ND	ND (0.00000031)	ND (0.00000034)	ND (0.000051)	ND (0.00000018)	0.0000067	ND (0.0000014)	ND (0.00000036)	ND (0.0000029)	ND (0.00000098) [ND (0.0000014)]	ND (0.00000044)	ND (0.0000015)
2,3,7,8-TCDD	ND (0.0000024)	ND	ND (0.00000023)	ND (0.00000028)	ND (0.000012)	ND (0.00000014)	0.0000018	ND (0.00000017)	ND (0.00000019)	ND (0.00000053)	ND (0.00000024) [ND (0.00000065)]	ND (0.00000037)	ND (0.00000073)
PeCDDs (total)	ND (0.0000046)	ND	ND (0.00000022)	ND (0.00000016)	ND (0.000047)	ND (0.00000018)	0.000099	ND (0.0000022)	ND (0.00000032)	ND (0.0000080)	ND (0.00000094) [ND (0.00000014)]	ND (0.00000099)	ND (0.0000041)
1,2,3,7,8-PeCDD	ND (0.00000082)	ND	ND (0.00000022)	ND (0.00000016)	ND (0.000047)	ND (0.00000018)	0.000010	ND (0.0000012)	ND (0.00000032)	ND (0.0000031)	ND (0.00000070) [ND (0.00000091)]	ND (0.00000084)	ND (0.0000016)
Total PCDDs	0.0000632	ND	ND	ND	ND	ND	0.000541	0.00003062	ND	0.000295	0.00021 [0.000024]	0.000077	0.0005296
Total PCDFs	0.000856	ND	0.000027	ND	ND	0.0000054	0.00644	0.00029	ND	0.001408	ND (0.00010)	0.0000374	0.000791

Notes:

1. Samples collected by Blasland, Bouck & Lee, Inc., and submitted to CompuChem, Inc., for analysis oF 2,3,7,8-substituted polychlorinated dibenzo-p-dioxins (PCDDs) and polychlorinated dibenzofurans (PCDFs)
2. Only parameters detected in at least one sample are shown
3. ND - Compound was not detected, associated detection limit presented in parentheses
4. g - 2,3,7,8-TCDF results have been confirmed on a DB-225 column.
5. J** - Indicates an estimated value below the lower calibration limit, but above the target detection limit
6. E - Indicates the reported value is estimated because of the presence of interference
7. y - Elevated detection limit due to chemical interference
8. CompuChem, Inc has not provided the PCDD and PCDF results for surface soil samples H78SS-1, H78SS-2, H78SS-3, and H78SS-4 or for subsurface soil samples H78B-13, H78B-14, H78B-16, H78B-17, H78B-18,H78B-22, H78B-27, H78B-28, and H78B-29
9. Total values include J, B, X, D, and E qualified data, as applicable; total PCDD and PCDF values are based on homologs only

TABLE 4-4U

GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS

MCP PHASE II/RCRA FACILITY
INVESTIGATION REPORT FOR HILL 78 AREA

SUMMARY OF SOIL BORING INORGANICS DATA COLLECTED JULY-SEPTEMBER 1996 AND JUNE 1997
(Results are presented in dry-weight parts per million, ppm)

Parameter	Location ID.:	H78B-8	H78B-10	H78B-11	H78B-12	H78B-13	H78B-14	H78B-15	H78B-16
	Sample ID:	H8B	H10B	H11B	H12B	H13B	H14B	H15B	H16B
	Sample Depth (feet):	16 - 18	4 - 6	6 - 8	0 - 0.5	2 - 4	8 - 10	10 - 12	8 - 10
	Date Collected:	07/16/96	07/19/96	07/17/96	07/18/96	07/23/96	07/23/96	07/18/96	07/25/96
Antimony		0.33 J*N	0.27 J*N	ND(0.23) N	0.33 J*N	0.58 J*N	ND(0.26) N	0.43 J*N	0.33 J*N
Arsenic		5.0	3.4	2.0	2.8	7.9	1.8	4.5	3.8
Barium		19.7 J*	34.9	23.1	80.3	34.1	20 J*	36.0	32.5
Beryllium		0.20 J*	0.26 J*	0.17 J*	0.21 J*	0.25 J*	0.17 J*	0.21 J*	0.24 J*
Cadmium		ND(0.03)	ND(0.03)	ND(0.03)	ND(0.03)	0.25J*	ND(0.04)	ND(0.03)	ND(0.04)
Chromium		7.3	10.8	6.4	7.5	9.1	7.5	8.9	9.7
Cobalt		8.3 E	9.7 E	5.3 J*E	8.2 E	9.7 E	8.2 E	9.4 E	7.6 E
Copper		25.2	17.8	14.8	23.5	41.2	14.3	25	16.5
Lead		7.9 E	10.7 E	5.9 E	11.2 E	75.7 E	6.1 E	6.3 E	7.5 E
Mercury		ND(0.12)	ND(0.12)	ND(0.11)	ND(0.11)	ND(0.10)	ND(0.12)	ND(0.11)	ND(0.12)
Nickel		15.1 E	17.6 E	10.2 E	13.3 E	17.5 E	14.5 E	17.3 E	14.9 E
Selenium		ND(0.33)	ND(0.35)	ND(0.32)	ND(0.32)	ND(0.33)	ND(0.36)	ND(0.33)	ND(0.35)
Silver		ND(0.07)	ND(0.07)	ND(0.06)	ND(0.06)	ND(0.07)	ND(0.07)	ND(0.07)	ND(0.07)
Thallium		ND(0.34)	ND(0.36)	ND(0.33)	ND(0.33)	ND(0.34)	ND(0.37)	ND(0.35)	ND(0.36)
Tin		1.6 J*	2.3 J*	1.8 J*	1.9 J*	2.2 J*	2.2 J*	1.7 J*	2.3 J*
Vanadium		5.6	8.9	5.3 J*	8.0	7.7	5.6 J*	5.6	7.1
Zinc		60.9	54.6	36.4	47.6	68.9	43.9	53.8	44.3

(See Notes on Page 3)

TABLE 4-4U

GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS

MCP PHASE II/RCRA FACILITY
INVESTIGATION REPORT FOR HILL 78 AREA

SUMMARY OF SOIL BORING INORGANICS DATA COLLECTED JULY-SEPTEMBER 1996 AND JUNE 1997
(Results are presented in dry-weight parts per million, ppm)

Parameter / Location ID.:	H78B-17	H78B-18	H78B-19	H78B-20	H78B-21	H78B-22	H78B-24	H78B-25
Sample ID:	H17B	H18B	H19B	H20B	H21B	HF22B	H24B	H25B
Sample Depth (feet):	12 - 14	12 - 14	4 - 6	8 - 10	4 - 6	8 - 10	4 - 6	10 - 12
Date Collected:	07/24/96	07/22/96	07/19/96	09/06/96	07/19/96	07/23/96	07/17/96	07/15/96
Antimony	0.31 J*N	0.51 J*N	0.42 J*N	0.49 J N	0.34 J*N	0.40 J*N	0.37 J*N	0.47 J*N
Arsenic	3.0	3.6	5.9	9.5	3.0	1.3	5.0	6.2
Barium	44.1	42.3	45.5	37.7 J	33.3	27.4	40.2	48.9
Beryllium	0.23 J*	0.38 J*	0.34 J*	0.54 J	0.27 J*	0.22 J*	0.30 J*	0.38 J*
Cadmium	ND(0.03)	ND(0.04)	ND(0.03)	ND(0.06)	ND(0.03)	ND(0.03)	ND(0.03)	ND(0.03)
Chromium	6.1	12.0	10.1	13.6	9.4	8.3	11.3	14.5
Cobalt	8.3 E	8.6 E	9.3 E	15.6 E	8.3 E	7.5 E	12.5 E	14.5 E
Copper	14.6	19.5	19.9	41.0 N	15.6	14.3	33.3	34.6
Lead	8.1 E	9.4 E	10.3 E	14.4 E	7.3 E	6.5 E	9.5 E	12.1 E
Mercury	ND(0.11)	ND(0.11)	0.14	ND(0.20)	ND(0.12)	ND(0.11)	ND(0.10)	ND(0.11)
Nickel	14.4 E	18.0 E	17.5 E	27.7 E	15.2 E	13.7 E	23.1 E	27 E
Selenium	ND(0.29)	ND(0.37)	ND(0.32)	ND(0.60)	ND(0.32)	ND(0.34)	ND(0.34)	ND(0.34)
Silver	ND(0.06)	ND(0.07)	ND(0.06)	ND(0.12)	ND(0.06)	ND(0.06)	ND(0.06)	ND(0.06)
Thallium	ND(0.30)	ND0.38)	ND(0.33)	ND(0.62)	ND(0.34)	ND(0.36)	ND(0.35)	ND(0.35)
Tin	1.7 J*	2.4 J*	2.1 J*	4.6 J*	2.1 J*	2.3 J*	1.4 J*	1.9 J*
Vanadium	5.4	11.5	9.9	13.8	7.8	7.2	9.0	11.5
Zinc	37	56.9	52.4	98.4	44.2	43.8	98.1	90.6

(See Notes on Page 3)

TABLE 4-4U

GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS

MCP PHASE II/RCRA FACILITY
INVESTIGATION REPORT FOR HILL 78 AREA

SUMMARY OF SOIL BORING INORGANICS DATA COLLECTED JULY-SEPTEMBER 1996 AND JUNE 1997
(Results are presented in dry-weight parts per million, ppm)

Parameter	Location ID:	H78B-27	H78B-28	H78B-29	H78B-30	H78B-31	H78SS-1	H78SS-2	H78SS-3	H78SS-4
	Sample ID:	H27B	H28B	H29B						
	Sample Depth (feet):	2 - 4	6 - 8	12 - 14	12 - 14	6 - 8	0 - 0.5	0 - 0.5	0 - 0.5	0 - 0.5
	Date Collected:	07/22/96	07/22/96	07/25/96	06/25/97	06/25/97	08/20/96	08/20/96	08/20/96	08/20/96
Antimony		0.32 J*N	0.46 J*N	ND(0.24) N	ND(0.27)	ND(0.28) N	0.32 J* N	0.25 J* N [ND (	0.29 J* N	0.33 J* N
Arsenic		4.8	5.5	3.9	2.6	5.4	6.9 N	5.3 N [2.4 N]	5.4 N	3.2 N
Barium		37.2	37.7	27.5	26.5	29.1	58.2	62.9 [66.4]	29.0	33.7
Beryllium		0.29 J*	0.34 J*	0.15 J*	0.21 J*	0.26 J*	0.46 J*	0.33 J* [0.35 J*	0.24 J*	0.27 J*
Cadmium		ND(0.03)	ND(0.04)	ND(0.03)	ND(0.04)	0.31 J*	1.2	0.86[0.80]	0.66	0.48 J*
Chromium		9.7	8.2	7.7	7.6*	12.3	15.0	4.9 [15.4]	8.7	9.0
Cobalt		14.2 E	6.5 E	7.0 E	--	--	12.5 E	9.6 E [10.1 E]	9.4 E	7.7 E
Copper		23.1	15	13	11.7	19	35.9	22.3 [23.2]	25.3	19.2
Lead		16.3 E	10.8 E	5.3 E	5.6*	8.9	54.7 EN	8.9 EN [8.5 EN]	58.4 EN	34.8 EN
Mercury		ND(0.10)	0.29	ND(0.11)	ND(0.06)	ND(0.06)	ND (0.12)	ND (0.11) [ND	ND (0.12)	ND (0.13)
Nickel		17.3 E	13.2 E	14.5 E	11.9	19.9	24.1 E	18.0 E [18.2 E]	16.5 E	15.0 E
Selenium		ND(0.33)	ND(0.36)	ND(0.33)	0.62	ND (0.5)	ND (0.36) N	ND (0.34) N [N	0.46 J* N	0.56 J* N
Silver		ND(0.07)	ND(0.07)	ND(0.07)	ND (0.07)	ND (0.07)	ND (0.07) N	ND (0.07) N [N	ND (0.07) N	ND (0.08) N
Thallium		ND(0.34)	ND(0.34)	ND(0.34)	ND (0.61)	ND (0.64)	ND (0.37)	ND (0.35) [ND	ND (0.35)	ND (0.39)
Tin		2.4 J*	2.7 J*	1.9 J*	2.6 J*	1.7 J*	2.1 J*	3.6 J* [3.7 J*]	2.6 J*	3.3 J*
Vanadium		7.6	9.7	5.1 J*	7.6	10.8	23.9 E	19.3 E [20.1 E]	14.6 E	18.7 E
Zinc		52.6	41.6	41.2	37.4 N	70.4 N	122 E	52.4 E [53.0 E]	74.2 E	75.8 E

Notes:

1. Samples collected by Blasland, Bouck & Lee, Inc., and submitted to CompuChem, Inc. for analysis of Appendix IX + 3 inorganics.
2. Only parameters detected in at least one sample are shown.
3. Laboratory duplicate analysis exceeded control limits for arsenic and lead.
4. J* - Indicates the reported value is less than the CLP-required detection limit (CRDL), but greater than the instrument detection limit (IDL).
5. E - Indicates inductively coupled plasma (ICP) serial dilution analysis was outside control limits.
6. N - Indicates sample matrix spike analysis was outside control limits.
7. ND - Compound was not detected, associated detection limit presented in parentheses.
8. Results of duplicate samples are presented in brackets.
9. -- Denotes that no analysis was performed; no values are available.
10. * - Indicates the laboratory duplicate analysis exceeded control limits.

TABLE 4-5

GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS

MCP PHASE II/RCRA FACILITY INVESTIGATION REPORT FOR HILL 78 AREA/USEPA AREA 2

SOIL BORING/MONITORING WELL INSTALLATION FIELD ACTIVITY SUMMARY

Investigation Area	Phase II/RFI Scope of Work Proposal	Modifications to Field Program Per Agencies' Conditional Approval Letter (July 3, 1996)	Modifications to Field Program Based on Field Conditions Encountered During Implementation
Hill 78 Landfill - Gas Plant Site (SWMU-G5)	Scope: Install five soil borings (H78B-18, H78B-19, H78B-24, H78B-25, and H78B-8). Install a monitoring well at H78B-8. Rationale: Install soil borings H78B-18 and H78B-19 northeast of landfill to investigate northern extent of impacted soil and to investigate presence of potentially impacted soil in the area surrounding borings 72-1 and 72-4. [These borings also to be used to evaluate area north of PGC. See below.] Install soil borings H78B-24 and H78B-25 southwest of landfill, and H78B-8 downgradient of former landfill to define vertical and horizontal extent of impacted soil associated with the former landfill.	• Modify the location of one of the borings (H78B-18 or H78B-19) to be directly north of boring 72-4. • Install additional boring south of landfill in vicinity of 1S to define the extent of PCBs in soil. • Install an additional boring (H78B-28) proximal to and deeper than 72-4 to better define the vertical extent of impacted soil in that area.	• Modified the location of boring H78B-19 in the field to be directly north of boring 72-4. • Based on evidence of sheen, boring H78B-18 was converted to a monitoring well. • Soil boring H78B-8 terminated in fill due to limitations of the direct-push method unable to advance through the fill materials. Conversion of boring to well resulted in dry well. Re-drilled (H78B-8R) to below extent of fill and installed 4-inch monitoring well to facilitate collection of a groundwater sample. Yellow NAPL observed in soil of H78B-8R. • Soil boring H78B-27 was installed south of landfill in vicinity of boring 1S. • Soil boring H78B-28 installed proximal to and deeper than 72-4.
Building 71 Stormwater Drain Line (SWMU T-40)	Scope: Install three borings (H78B-10, H78B-11, and H78B-12). Install a monitoring well at H78B-12. Rationale: Install borings to further investigate reported releases from this SWMU and evaluate potentially impacted soil/groundwater associated with diked oil storage area.	• Relocate soil boring H78B-11 on the downgradient or downslope side of the southeastern corner of the diked oil storage area. • Conduct detailed inspection of diked area for signs of cracks or deterioration. If any are visible, install one of the proposed borings (H78B-10 or H78B-11) in suspected release area. • Collect sediment samples from catch basin located along southeastern side of diked area and near the storm drain outfall. • Relocate boring H78B-12 to within 20 to 30 feet downgradient of diked oil storage area to provide assessment of potentially impacted groundwater and to determine if the diked area was a potential source.	• Based on evidence of sheen and odors, boring H78B-11 was converted to a monitoring well. H78BN-11 was not sampled due to insufficient water in the well. • Modified location of H78B-10 to assess crack in concrete floor. • H78B-12 was not sampled due to insufficient water in the well.

TABLE 4-5

GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS

MCP PHASE II/RCRA FACILITY INVESTIGATION REPORT FOR HILL 78 AREA/USEPA AREA 2

SOIL BORING/MONITORING WELL INSTALLATION FIELD ACTIVITY SUMMARY

Investigation Area	Phase II/RFI Scope of Work Proposal	Modifications to Field Program Per Agencies' Conditional Approval Letter (July 3, 1996)	Modifications to Field Program Based on Field Conditions Encountered During Implementation
Area Surrounding NY-1	Scope: Install two subsurface borings (H78B-13 and H78B-14). Convert H78B-13 to a monitoring well and obtain a one-time, discrete groundwater sample at boring H78B-14. Rationale: Install borings upgradient and downgradient of NY-1 to evaluate the physical characteristics of the fill in the area and the presence of PCDFs and PCDDs previously detected in the groundwater.	None.	None.
Area Surrounding 78-4	Scope: Install four soil borings (H78B-15, H78B-16, H78B-17, and H78B-22). Convert H78B-15 , H78B-16, and H78B-17 to permanent monitoring wells and obtain a one-time, discrete groundwater sample at H78B-22. Rationale: Install soil borings and monitoring wells to further investigate impacted soil and groundwater (VOCs) in the vicinity of 78-4.	• Install an additional boring directly adjacent to 78-4 to better define the vertical extent of VOCs detected in 78-4. Boring to be converted to a monitoring well deeper than existing 78-4 and screened across first aquitard below the water table.	• Soil boring H78B-29 was installed adjacent to 78-4. This boring was not converted to a monitoring well, based on geologic conditions encountered at boring H78B-29 and other borings in the vicinity (H78B-16 and H78B-17). The newly installed borings indicated the presence of the olive-brown silt till unit at approximately 14 feet bgs. This unit is interpreted as the first confining unit below the water table. Existing well 78-4, which was drilled to a depth of 21 feet bgs and completed with a 15-foot screen, is therefore already screened across the first aquitard (i.e., olive-brown till) and, thus, meets the requirements stipulated in the Agencies' conditional approval letter. • Monitoring well H78B-17 was re-drilled (H78B-17R) to a deeper depth to facilitate collection of a groundwater sample. Boring H78B-17 was terminated at 16 feet bgs to preclude carry-down of potential VOC contaminants (elevated PID readings) encountered at the alluvial sand/till interface. However, insufficient water was available during groundwater sampling, necessitating deepening of the well.

TABLE 4-5

GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS

MCP PHASE II/RCRA FACILITY INVESTIGATION REPORT FOR HILL 78 AREA/USEPA AREA 2

SOIL BORING/MONITORING WELL INSTALLATION FIELD ACTIVITY SUMMARY

Investigation Area	Phase II/RFI Scope of Work Proposal	Modifications to Field Program Per Agencies' Conditional Approval Letter (July 3, 1996)	Modifications to Field Program Based on Field Conditions Encountered During Implementation
Area North of PGC	Scope: Install two soil borings (H78B-18 and H78B-19). Rationale: Install borings to further define the nature and extent of PCB detected in subsurface soils along the northern boundary of the Altresco Area (72-1 and 72-4). [These borings also to be used to evaluate Hill 78 Landfill Area (SWMU G-5)]	• Modify location of one of the borings (H78B-18 or H78B-19) to be directly north of boring 72-4. • Install an additional boring (H78B-28) proximal to and deeper than 72-4 to better define the vertical extent of impacted soil in that area.	• Modified the location of boring H78B-19 in the field to be directly north of boring 72-4. • Soil boring H78B-28 installed proximal to and deeper than 72-4. • Based on evidence of sheens, borings H78B-18 and H78B-28 were converted to monitoring wells. • H78B-28 required re-drilling (H78B-28R) to a deeper depth to facilitate collection of a groundwater sample. A 4-inch monitoring well was installed to 19 feet bgs at H78B-28R.
Abandoned 10C Pipeline	Scope: Install two borings (H78B-20 and H78B-21). Rationale: Install soil borings to characterize the subsurface conditions in the vicinity of the 10C pipeline and evaluate the pipeline as a potential source area.	None.	None.

TABLE 4-6

GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
MCP SUPPLEMENTAL PHASE II / RCRA FACILITY INVESTIGATION REPORT FOR
HILL 78 AREA / USEPA AREA 2

SUMMARY OF BORING / MONITORING WELL DATA

Well Identification	Date Completed	Well/Boring Depth (ft bgs)	Depth to Base of Fill (ft bgs)	Depth to Top of Till (ft bgs)	Screened Interval (ft bgs)	Well Diameter & Material	Screened Unit	Ground Surface Elevation (ft.)	TIC Elevation (ft)	Screened Interval Elevation (ft.)	Elevation Base of Fill (ft.)	Elevation Top of Till (ft.)	Comments
Newly Installed MCP Phase II / RFI Wells													
H78B-8	07/16/96	20.5	>20.5	NE	10.5 - 20.5	0.75" diameter, 0.010" Slot PVC	Fill	1022.7	1025.89	1012.2 - 1002.2	<1002.2	NE	
H78B-8R	11/07/96	30	27	NE	19.6-28.9	4" diameter, 0.010" Slot PVC	Fill	1023.2	1025.09	1003.6 - 994.3	996.2	NE	Yellow NAPL with odor. Replacement well
H78B-11	07/17/96	12	NE	6	4 - 9	0.75" diameter, 0.010" Slot PVC	Till	1016.6	1019.45	1012.6 - 1007.6	NE	1010.6	Slight solvent odor from 6-10'; sheen observed from 6-7'; therefore, a well was installed.
H78B-12	07/18/96	10.5	NE	3	4 - 10.5	0.75" diameter, 0.010" Slot PVC	Till	1017.4	1020.59	1013.4 - 1006.9	NE	1014.4	
H78B-13	07/23/96	26	~10	22	6 - 18	1" diameter, 0.010" Slot PVC	Fill/Alluvial Sand	989.8	992.71	983.8 - 971.8	979.8	987.8	Slight septic odor from 16-18' and 22-24'.
H78B-15	07/18/96	16	NE	14	6 - 16	0.75" diameter, 0.010" Slot PVC	Alluvial Sand	1009.8	1012.73	1003.8 - 993.8	NE	995.8	
H78B-16	07/25/96	14	NE	13.8	4 - 14	1" diameter, 0.010" Slot PVC	Alluvial Sand	996.0	999.21	992.0 - 982.0	NE	982.2	
H78B-17	07/24/96	16	3.5	14	6 - 16	1" diameter, 0.010" Slot PVC	Alluvial Sand/Till	999.3	1002.96*	993.3 - 983.3	995.8	985.3	
H78B-17R	11/06/96	25	3.5	14	14.3 - 23.6	4" diameter, 0.010" Slot PVC	Till	999.2	1000.48	986.18 - 976.86	995.7	985.2	Replacement well.
H78B-18	07/23/96	20	NE	19	6 - 19	0.75" diameter, 0.010" Slot PVC	Alluvial Sand/Till	1015.6	1019.31	1009.6 - 996.6	NE	996.6	Observed sheen from approx. 13.3-14'; therefore, a well was installed.
H78B-28	07/22/96	24	12	14	3.5 - 12	0.75" diameter, 0.010" Slot PVC	Fill	1018.4	1021.57	1014.9 - 1006.4	1006.4	1004.4	Black staining, slight odor and sheen from 6-8'. Backfilled original borehole, moved over 3-5 ft, advanced borehole, and set well.
H78B-28R	11/06/96	19.3	12	14	9.3 -18.6	4" diameter, 0.010" Slot PVC	Fill/Till	1018.3	1019.57	1009.0 - 999.7	1006.3	1004.3	Replacement well.

TABLE 4-6

GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
MCP SUPPLEMENTAL PHASE II / RCRA FACILITY INVESTIGATION REPORT FOR
HILL 78 AREA / USEPA AREA 2

SUMMARY OF BORING / MONITORING WELL DATA

Well Identification	Date Completed	Well/Boring Depth (ft bgs)	Depth to Base of Fill (ft bgs)	Depth to Top of Till (ft bgs)	Screened Interval (ft bgs)	Well Diameter & Material	Screened Unit	Ground Surface Elevation (ft.)	TIC Elevation (ft)	Screened Interval Elevation (ft.)	Elevation Base of Fill (ft.)	Elevation Top of Till (ft.)	Comments
Existing Wells													
78-1	01/02/90	23	5.8	12	8 - 23	4" diameter, 0.010" Slot PVC	Alluvial Sand/Till	1027.4	1026.34	1019.4 - 1004.4	1021.6	1015.4	
78-2	01/04/90	24	2	2	6 - 21	4" diameter, 0.010" Slot PVC	Till	1034.9	1033.98	1028.9 - 1013.9	1032.9	1032.9	Black staining from 8-10'.
78-3	01/07/90	25	NE	13.5	10 - 25	4" diameter, 0.010" Slot PVC	Alluvial Sand/Till	1008.1	1007.2	998.1 - 983.1	NE	994.6	
78-4	01/08/91	22	2	17	6 - 21	4" diameter, 0.010" Slot PVC	Alluvial Sand/Till	999.5	998.63	993.5 - 978.5	997.5	982.5	
78-5	01/09/91	17	NE	10	2 - 17	4" diameter, 0.010" Slot PVC	Alluvial Sand/Till	997.8	996.96	995.8 - 980.8	NE	987.8	
78-6	01/03/91	18	13	14	3 - 18	4" diameter, 0.010" Slot PVC	Fill/Till	1013.1	1011.99	1010.1 - 995.1	1000.1	999.1	Well obstructed.
78-7	01/10/91	28	12	16	13 - 28	4" diameter, 0.010" Slot PVC	Alluvial Sand/Till	1019.0	1017.72	1006.0 - 991.0	1007.0	1003.0	
NY-1	04/25/88	14	7	NE	2.5 - 14.5	4" diameter, 0.010" Slot PVC	Fill/Alluvial Sand	988.6[2]	988.61	986.4 - 974.4	981.6	NE	
NY-2	04/26/88	24	NE	12.2	9.5 - 24.5	4" diameter, 0.010" Slot PVC	Alluvial Sand/Till	993.1[2]	993.01	984.01 - 969.01	NE	980.9	Well obstructed.
NY-3	04/27/88	25	NE	15.8	10 - 25	4" diameter, 0.010" Slot PVC	Till	1005.6[2]	1005.33	995.78 - 980.78	NE	989.8	
NY-4	05/02/88	33	NE	4	17 - 32	4" diameter, 0.010" Slot PVC	Till	1024.8[2]	1024.53	1007.65 - 992.65	NE	1020.8	

TABLE 4-6

GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
MCP SUPPLEMENTAL PHASE II / RCRA FACILITY INVESTIGATION REPORT FOR
HILL 78 AREA / USEPA AREA 2

SUMMARY OF BORING / MONITORING WELL DATA

Boring Identification	Date Completed	Boring Depth (ft bgs)	Depth to Base of Fill (ft bgs)	Depth to Top of Till (ft bgs)	Screened Interval (ft bgs)	Well Diameter & Material	Screened Unit	Ground Surface Elevation (ft.)	TIC Elevation (ft)	Screened Interval Elevation (ft.)	Elevation Base of Fill (ft.)	Elevation Top of Till (ft.)	Comments
Newly Installed MCP Phase II / RFI Borings													
H78B-10	07/19/96	10	NE	2.5	NA	NA	NA	1016.9	NA	NA	NE	1014.4	
H78B-14	07/24/96	12	NE	NE	NA	NA	NA	998.2	NA	NA	NE	NE	Discrete ground-water sample obtained from 8-12 ft interval.
H78B-19	07/22/96	26	7	18	NA	NA	NA	1023.4	NA	NA	1016.4	1005.4	
H78B-20	09/06/96	12	NE	NE	NA	NA	NA	1005.1	NA	NA	NE	NE	
H78B-21	07/19/96	14	5	10	NA	NA	NA	1016.7	NA	NA	1011.7	1006.7	
H78B-22	07/24/96	12	NE	NE	NA	NA	NA	996.6	NA	NA	NE	NE	Discrete ground-water sample obtained from 8-12 ft interval.
H78B-24	07/17/96	9	NE	8	NA	NA	NA	1016.9	NA	NA	NE	1008.9	
H78B-25	07/15/96	12	8	10	NA	NA	NA	1017.9	NA	NA	1009.9	1007.9	
H78B-27	07/22/96	10	3	6	NA	NA	NA	1008.3	NA	NA	1005.3	1002.3	
H78B-29	07/25/96	22.5	6.3	13.9	NA	NA	NA	996.6	NA	NA	992.3	984.7	

Notes:

bgs = Below ground surface.
TIC = top of inner casing used as a reference point for measurements.
Soil borings H78B-27, H78B-28, and H78B-29 were completed per comments in the July 8, 1996 Agencies letter.
Elevation of Base of Fill and Top of Fill units are referenced from ground surface unless otherwise noted.
NE = Not encountered.
NA = Not available.
[1] = H78B-17 was locked at time of surveying; elevation is top of outer casing.
[2] = NY-1 through NY-4 wells are completed as flushmount wells.
Ground surface elevations and top of inner casing (TIC) elevations for wells NY-1 through NY-4 and 78-1 through 78-7 were recently surveyed in May 1997 for MCP Phase II/RFI activities by Hill Engineers, Architects, and Planners.
The recent May 1997 ground surface elevations are listed for NY-1 through NY-4, and the recent measuring point elevations are listed for all wells.
Vertical elevation datum referenced to NGVD of 1929.

TABLE 5-1

GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
MCP PHASE II/RCRA FACILITY INVESTIGATION REPORT
FOR HILL 78 AREA/USEPA AREA 2

IN-SITU HYDRAULIC CONDUCTIVITY SUMMARY

Monitoring Well	Test Date	Hydraulic Conductivity (cm/sec)	Hydraulic Conductivity (ft/day)	Screened Unit	Test Method
NY-1	07/30/96	9.22E-04	2.61	Fill/ Alluvial Sand	Slug Test
NY-2	NA	NA	NA	Alluvial Sand/Till	Not Tested (1)
NY-3	07/30/96	1.18E-02	33.4	Alluvial Sand/Till	Slug Test
NY-4	07/30/96	3.19E-06	0.0090	Till	Slug Test
78-1	07/30/96	4.47E-03	12.7	Alluvial Sand/Till	Slug Test
78-2	08/01/96	7.47E-05	0.21	Till	Slug Test
78-3	07/31/96	1.61E-02	45.6	Alluvial Sand/Till	Slug Test
78-4	07/31/96	4.23E-03	12.0	Alluvial Sand/Till	Slug Test
78-5	08/01/96	5.89E-04	1.67	Alluvial Sand/Till	Slug Test
78-6	NA	NA	NA	Fill/Till	Not Tested (1)
78-7	07/31/96	5.69E-04	1.61	Alluvial Sand/Till	Slug Test
H78B-8	NA	NA	NA	Fill	Not Tested (2)
H78B-8R	NA	NA	NA	Fill	Not Tested (2)
H78B-11	07/31/96	9.05E-06	0.030	Till	Slug Test
H78B-12	07/31/96	8.94E-07	0.0030	Till	Slug Test
H78B-13	08/01/96	1.34E-04	0.38	Fill/Alluvial Sand	Specific Capacity
H78B-15	08/01/96	2.44E-03	6.92	Alluvial Sand	Specific Capacity
H78B-16	08/01/96	7.10E-02	201.26	Alluvial Sand	Specific Capacity
H78B-17R	11/25/96	1.07E-04	0.30	Till	Slug Test
H78B-18	08/01/96	1.53E-04	0.43	Alluvial Sand	Specific Capacity
H78B-28R	11/25/96	1.07E-03	3.033	Fill/Till	Slug Test
Minimum		8.94E-07	0.0030		
Maximum		7.10E-02	201.26		
Fill		1.07E-03	3.00		
Alluvial Sand GM		2.12E-03	6.01		
Till GM		1.16E-05	0.030		

Notes:

NA = Not applicable.
GM = Geometric Mean Hydraulic Conductivity.
Geometric Mean Hydraulic Conductivities for lithologic units were calculated using the most conductive unit in instances where the well screen straddles two separate lithologic units.
Fill - H78B-28R
Alluvial Sand - NY-1, NY-3, 78-1, 78-3, 78-4, 78-5, 78-7, H78B-13, H78B-15, H78B-16, and H78B-18
Till - NY-4, 78-2, H78B-11, H78B-12, and H78B-17R
1 = Not tested due to obstruction in well.
2 = Not tested due to insufficient water in the well.

TABLE 5-2A

Water-Level Elevation Data, Collected Winter and Summer 1991, Hill 78 Area, GE Company, Pittsfield, Massachusetts.

Well	Date of Measurement	Elevation of Measuring Point	DTW (feet)	Ground-Water Elevation (feet)
78-1	1-22-91	1027.19	9.08	1018.11
	7-1-91	1027.19	11.87	1015.32
78-2	1-22-91	1034.80	6.38	1028.42
	7-1-91	1034.80	8.80	1026.00
78-3	1-23-91	1007.97	8.71	999.26
	7-1-91	1007.97	17.71	990.26
78-4	1-23-91	999.38	10.42	988.96
	7-1-91	999.38	12.97	986.41
78-5	1-23-91	997.72	3.91	993.81
	7-1-91	997.72	4.83	992.89
78-6	1-23-91	1012.96	6.86	1006.10
	7-1-91	1012.96	10.42	1002.54
78-7	1-24-91	1018.55	11.35	1007.20
	7-1-91	1018.55	18.48	1000.07
NY-1	1-24-91	988.90	3.06	985.84
	7-1-91	988.90	5.29	983.61
NY-2	2-28-91	993.51	14.72	978.79
	7-1-91	993.51	14.45	979.06
NY-3	1-24-91	1005.78	15.22	990.56
	7-1-91	1005.78	15.55	990.23
NY-4	1-24-91	1024.65	8.22	1016.43
	7-1-91	1024.65	11.02	1013.63

DTW Depth to water.

TABLE 5-2B

GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
MCP PHASE II/RCRA FACILITY INVESTIGATION REPORT FOR
HILL 78 AREA/USEPA AREA 2

SUMMARY OF GROUNDWATER ELEVATIONS - 1996/97

Well I.D.	Measuring Point Elevation	September 1996		April 1997	
		Depth to Water (ft)	Groundwater Elevation (ft. above MSL)	Depth to Water (ft)	Groundwater Elevation (ft. above MSL)
78-1	1026.34	11.65	1014.69	6.34	1020.00
78-2	1033.96	Not Measured	—	5.52	1028.44
78-3	1007.2	Not Measured	—	16.13	991.07
78-4	998.63	13.33	985.30	11.50	987.13
78-5	996.96	Not Measured	—	3.56	933.40
78-6 (a)	1011.99	Not Measured	—	7.76	1004.23
78-7	1017.72	18.15	999.57	11.14	1006.58
NY-1	988.61	5.82	982.79	0.93	987.68
NY-2 (a)	993.01	Dry	—	13.05	979.96
NY-3	1005.33	Not Measured	—	15.16	990.17
NY-4	1024.53	11.22	1013.31	7.66	1016.87
H78B-8	1025.89	21.73	1004.16	20.87	1005.02
H78B-8R	1025.09	Installed 11/96	—	Not Measured	—
H78B-11	1019.45	11.66	1007.79	6.40	1013.05
H78B-12	1020.59	Dry (13.45)	—	Not Measured	—
H78B-13	992.71	9.71	983.0	5.37	987.34
H78B-15	1012.73	8.81	1003.92	10.66	1002.07
H78B-16	999.21	12.90	986.31	11.14	988.07
H78B-17	1002.96	16.75	986.21	16.26	986.70
H78B-17R	1000.48	Installed 11/96	—	Not Measured	—
H78B-18	1019.31	13.50	1005.81	6.15	1013.16
H78B-28	1021.57	13.90	1007.67	6.05	1015.52
H78B-28R	1019.57	Installed 11/96	—	Not Measured	—

Notes:

1. 1996/97 groundwater levels were measured by Blasland, Bouck & Lee, Inc., during September 17-20,1996 and on April 7, 1997, respectively.
2. Measuring point elevations for wells 78-1 through 78-7 and NY-1 through NY-4 were established by Geraghty & Miller, Inc., as part of a prior investigation and are presented in Table 5-2A. Measuring point elevations for these wells were resurveyed by Hill Engineers, Architects, and Planners as part of the Phase II/RFI activities in May 1997 and these elevations are listed above. Measuring point elevations for the newly installed wells (H78B-series) were also established by Hill. Engineers, Architects & Planners as part of the recent Phase II/RFI activities.
3. MSL - Mean sea level.

(a) Although total depth does not correlate with well construction details, well was used in contouring the water table elevation as the well screen is still open to the water table.

TABLE 5-3A

HILL 78 AREA
GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

SUMMARY OF GROUND-WATER ANALYSES - NEW YORK AVENUE

Constituent	Well Designation: Date Sampled: Detection Limit (ppb)	NY-1 4/27/88 (ppb)	NY-2 4/27/88 (ppb)	NY-3/NY-R* 5/11/88 (ppb/ppb)	NY-4 5/11/88 (ppb)
Volatile Organic Compound					
Acrolein	10	ND	ND	ND/ND	ND
Acrylonitrile	10	ND	ND	ND/ND	ND
Benzene	5	ND	ND	ND/ND	ND
Bromodichloromethane	5	ND	ND	ND/ND	ND
Bromoform	5	ND	ND	ND/ND	ND
Bromomethane	10	ND	ND	ND/ND	ND
Carbon tetrachloride	5	ND	ND	ND/ND	ND
Chlorobenzene	5	ND	ND	ND/ND	ND
Chloroethane	10	ND	ND	ND/ND	ND
2-Chloroethylvinyl ether	10	ND	ND	ND/ND	ND
Chloroform	5	<5	ND	ND/ND	ND
Chloromethane	10	ND	ND	ND/ND	ND
1,1-Dichloroethane	5	ND	ND	ND/ND	ND
1,2-Dichlorethane	5	ND	ND	ND/ND	ND
1,1-Dichloroethene	5	ND	ND	ND/ND	ND
Trans-1,2-Dichloroethene	5	ND	ND	ND/ND	ND
1,2-Dichloropropane	5	ND	ND	ND/ND	ND
cis-1,3-Dichloropropane	5	ND	ND	ND/ND	ND
Ethyl benzene	5	ND	ND	ND/ND	ND
Methylene chloride	5	ND	ND	ND/ND	ND
1,1,2,2-Tetrachloroethane	5	ND	ND	ND/ND	ND
Tetrachloroethene	5	ND	ND	ND/ND	ND
Toluene	5	ND	ND	ND/ND	ND
1,1,1-Trichloroethane	5	ND	ND	ND/ND	ND
1,1,2-Trichloroethane	5	ND	ND	ND/ND	ND
Trichloroethene	5	ND	ND	ND/ND	ND
Vinyl Chloride	10	ND	ND	ND/ND	ND

(See page 5 for notes).

TABLE 5-3A

HILL 78 AREA
GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

SUMMARY OF GROUND-WATER ANALYSES - NEW YORK AVENUE

Constituent	Well Designation: Date Sampled: Detection Limit (ppb)	NY-1 4/27/88 (ppb)	NY-2 4/27/88 (ppb)	NY-3/NY-R* 5/11/88 (ppb/ppb)	NY-4 5/11/88 (ppb)
Base/Neutrals					
Acenaphthene	10	ND	ND	ND	ND
Acenapthylene	10	ND	ND	ND	ND
Anthracene	10	ND	ND	ND	ND
Benzidine	50	ND	ND	ND	ND
Benzo(a)anthracene	10	ND	ND	ND	ND
Benzo(b)fluoranthene	10	ND	ND	ND	ND
Benzo(k)fluoranthene	10	ND	ND	ND	ND
Benzo(a)pyrene	10	ND	ND	ND	ND
Benzo(g,h,i)perylene	10	ND	ND	ND	ND
Benzyl butyl Phthalate	10	ND	ND	ND	ND
Bis(2-chloroethoxy)methane	10	ND	ND	ND	ND
Bis(2-chloroethyl)ether	10	ND	ND	ND	ND
Bis(2-chloroisopropyl)ether	10	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate	10	ND	ND	ND	<10
4-Bromophenyl phenyl ether	10	ND	ND	ND	ND
2-Chloronaphthalene	10	ND	ND	ND	ND
4-Chlorophenyl phenyl ether	10	ND	ND	ND	ND
2-Chloronaphthalene	10	ND	ND	ND	ND
4-Chlorophenyl ether	10	ND	ND	ND	ND
Chrysene	10	ND	ND	ND	ND
Dibenzo(a,h)anthracene	10	ND	ND	ND	ND
Di-n-butyl phthalate	10	ND	ND	ND	<10
1,2-Dichlorobenzene	10	ND	ND	ND	ND
1,3-Dichlorobenzene	10	ND	ND	ND	ND
1,4-Dichlorobenzene	10	ND	ND	ND	ND
3,3-Dichlorobenzidine	20	ND	ND	ND	ND
Diethyl phthalate	10	ND	ND	ND	ND
Dimethyl phthalate	10	ND	ND	ND	ND
2,4-Dinitrotoluene	10	ND	ND	ND	ND
2,6-Dinitrotoluene	10	ND	ND	ND	ND
Di-n-ocyl phthalate	10	ND	ND	ND	ND
1,2-diphenylhydrazine*	10	ND	ND	ND	ND
Fluoranthene	10	ND	ND	ND	ND
Fluorene	10	ND	ND	ND	ND

(See page 5 for notes).

TABLE 5-3A

HILL 78 AREA
GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

SUMMARY OF GROUND-WATER ANALYSES - NEW YORK AVENUE

Constituent	Well Designation: Date Sampled: Detection Limit (ppb)	NY-1 4/27/88 (ppb)	NY-2 4/27/88 (ppb)	NY-3/NY-R* 5/11/88 (ppb/ppb)	NY-4 5/11/88 (ppb)
Base/Neutrals (Cont'd.)					
Hexachlorobenzene	10	ND	ND	ND	ND
Hexachlorobutadiene	10	ND	ND	ND	ND
Hexachlorocyclopentadiene	10	ND	ND	ND	ND
Hexachloroethane	10	ND	ND	ND	ND
Indeno(1,2,3-c,d)pyrene	10	ND	ND	ND	ND
Isophorone	10	ND	ND	ND	ND
Naphthalene	10	ND	ND	ND	ND
Nitrobenzene	10	ND	ND	ND	ND
n-Nitrosodimethylamine	10	ND	ND	ND	ND
n-Nitrosodi-n-propylamine	10	ND	ND	ND	ND
n-Nitrosodiphenylamine **	10	ND	ND	ND	ND
Phenanthrene	10	ND	ND	ND	<10
Pyrene	10	ND	ND	ND	ND
1,2,4-Trichlorobenzene	10	ND	ND	ND	ND
Acid Extractables					
4-Chloro-3-methylphenol	10	ND	ND	ND	ND
2-Chlorophenol	10	ND	ND	ND	ND
2,4-Dichlorophenol	10	ND	ND	ND	ND
2,4-Dimethylphenol	10	ND	ND	ND	ND
2,4-Dinitrophenol	50	ND	ND	ND	ND
2-Methyl-4,6-dinitrophenol	50	ND	ND	ND	ND
2-Nitrophenol	10	ND	ND	ND	ND
4-Nitrophenol	10	ND	ND	ND	ND
Pentachlorophenol	10	ND	ND	ND	ND
Phenol	10	75	ND	ND	ND
2,4,6-Trichlorophenol	10	ND	ND	ND	ND
Metals and Indicator Parameters					
Antimony		<0.03	<0.03	<0.03	<0.03
Arsenic		<0.03	<0.03	<0.03	<0.03
Beryllium		<0.001	<0.001	<0.001	<0.001
Cadmium		<0.005	<0.005	<0.005	<0.005
Chromium		<0.01	<0.01	<0.01	<0.01
Copper		<0.01	<0.01	<0.01	<0.01

(See page 5 for notes).

TABLE 5-3A

HILL 78 AREA
GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

SUMMARY OF GROUND-WATER ANALYSES - NEW YORK AVENUE

Constituent	Well Designation: Date Sampled: Detection Limit (ppb)	NY-1 4/27/88 (ppb)	NY-2 4/27/88 (ppb)	NY-3/NY-R* 5/11/88 (ppb/ppb)	NY-4 5/11/88 (ppb)
Metals and Indicator Parameters (Cont'd.)					
Lead		<0.03	<0.03	<0.03	<0.03
Mercury		<0.001	<0.001	<0.001	<0.001
Nickel		<0.02	<0.02	<0.02	<0.02
Selenium		<0.06	<0.06	<0.06	<0.06
Silver		<0.005	<0.005	<0.005	<0.005
Thallium		<0.1	<0.1	<0.1	<0.1
Zinc		0.022	<0.005	0.036	0.006
Cyanide		<0.01	0.73	<0.01	<0.01
Phenols		<0.01	<0.01	<0.01	<0.01
Pesticides and PCBs					
Aldrin		<0.5	<0.5	<0.5	<1.1
Alpha-BHC		<0.5	<0.5	<0.5	<0.5
Beta-BHC		<0.5	<0.5	<0.5	<0.5
Gmm-BHC (Lindane)		<0.5	<0.5	<0.5	<0.5
Delta-BHC		<0.5	<0.5	<0.5	<0.5
Chlordane		<1.0	<1.0	<1.0	<4.2
4,4'-DDT		<0.5	<0.5	<0.5	<0.5
4,4'-DDE		<1.1	<1.1	<0.5	<0.5
4,4'-DDD		<0.5	<0.5	<0.5	<0.5
Dieldrin		<0.5	<0.5	<0.5	<0.7
Endosulfan I		<0.5	<0.5	<0.5	<0.5
Endosulfan II		<0.5	<0.5	<0.5	<0.5
Endrin		<0.5	<0.5	<0.5	<0.5
Endrin aldehyde		<1.0	<1.0	<1.0	<1.0
Heptachlor		<0.5	<0.5	<0.5	<1.1
Heptachlor epoxide		<0.5	<1.0	<0.5	<0.5

(See page 5 for notes).

TABLE 5-3A

HILL 78 AREA
GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

SUMMARY OF GROUND-WATER ANALYSES - NEW YORK AVENUE

Constituent	Well Designation: Date Sampled: Detection Limit (ppb)	NY-1 4/27/88 (ppb)	NY-2 4/27/88 (ppb)	NY-3/NY-R* 5/11/88 (ppb/ppb)	NY-4 5/11/88 (ppb)
Pesticides and PCBs (Cont'd.)					
PCB-(Aroclor)-1242		<1.0	<1.0	<1.0	<3.6
PCB-(Aroclor)-1254		<1.0	<1.0	<1.0	<1.0
PCB-(Aroclor)-1221		<1.0	<1.0	<1.0	<1.0
PCB-(Aroclor)-1232		<1.0	<1.0	<1.0	<2.6
PCB-(Aroclor)-1248		<1.0	<1.0	<1.0	<2.5
PCB-(Aroclor)-1260		<1.0	<1.0	<1.0	<1.0
PCB-(Aroclor)-1016		<1.0	<1.0	<1.0	<2.7
Toxaphene		<1.0	<1.0	<1.0	<3.4

Notes:

* Replicate sample
ND Not detected.
< Compound detected but at a level less than the detection limit.

TABLE 5-3 B

HILL 78 AREA
GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

SUMMARY OF APPENDIX IX + 3 CONSTITUENTS DETECTED IN GROUNDWATER SAMPLES
JANUARY/FEBRUARY 1991

Constituent	Location: Sample Matrix	78-1 Water	78-2 Water	78-3 Water	78-4 Water	78-5 Water	78-6 Water	78-7 Water	NY-1 Water	NY-2 Water	NY-3 Water	NY-4 Water	ASW-3 Water
Volatile Organic Compound (ppb)													
Methylene Chloride		5BJ	4BJ	32B	42B	2BJ	7BJ	17B	31B	14B	10B	13B	5BJ
Acetone				18B	8BJ	8BJ	5BJ	16B	11B		6BJ	7BJ	6BJ
1,1,1-Trichloroethane					13							4J	
1,2-Dichloroethane					2J								
1,2-Dichloroethene (Total)					180								
Benzene					1J								
Chlorobenzene					36B								
Chloroform					2BJ								
Tetrachloroethene					5							4J	
Toluene						2J						1J	
Trichloroethene					320BE							5	
Vinyl Chloride					23								
Xylenes (Total)						2J							
Semivolatile Organic Compound (ppb)													
1,2,4-Trichlorobenzene					2J								
1,4-Dichlorobenzene					2J								
2,3,4,6-Tetrachlorophenol									14J				
2,4,5-Trichlorophenol									2J				
2,4,6-Trichlorophenol									13J				
2,4-Dichlorophenol									3J				
Benzoic Acid					1J				2J				
Di-n-butylphthalate			1J						1BJ	1BJ			
Isophorone									4J				
Pentachlorophenol									12J				
bis(2-Ethylhexyl)Phthalate			1J			2J		3BJ	1BJ	2J			
Phenols		10.4							45.9				
Phenol									4J				

TABLE 5-3 B

HILL 78 AREA
GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

SUMMARY OF APPENDIX IX + 3 CONSTITUENTS DETECTED IN GROUNDWATER SAMPLES
JANUARY/FEBRUARY 1991

Constituent	Location: Sample Matrix	78-1 Water	78-2 Water	78-3 Water	78-4 Water	78-5 Water	78-6 Water	78-7 Water	NY-1 Water	NY-2 Water	NY-3 Water	NY-4 Water	ASW-3 Water
Dioxin/Furan Compound (ppt)													
Heptachlorodibenzodioxin									15.3				
Octachlorodibenzodioxin									83				
Pentachlorodibenzofuran									1.4				
Hexachlorodibenzofuran									7.7				
Heptachlorodibenzofuran									26.6				
Octachlorodibenzofuran									43.8				
PCBs (ppb)													
PCB-1254 (total) PCB-1254 (filtered								0.96 ND					
PCB-1260 (total) PCB-1260 (filtered)										NA 0.63		0.547 ND	
Metal (ppm)		(d)/(f)	(d)/(f)	(f)	(f)	(f)	(f)	(d)	(d)	(d)	(d)	(d)	(f)
Aluminum		ND/0.62								0.0577B			
Cadmium		ND/0.0054											
Calcium		43/49	44/45	100	150	60	110	150	42	113E	38	57	48
Iron		ND/1.1	0.24/0.10				10		0.18	0.0638BE		0.16	
Lead												0.043	
Magnesium		18/22	21/20	32	45	14	36	33		40.6	15	24	23
Manganese		0.47/0.53		0.017	0.024	0.10	0.52	0.026	0.086	0.0723		0.26	
Mercury			0.00039/ND										
Potassium										11.7			
Sodium		27/29	5/ND	20	270	21	42	74	9.9	19.2	5.9		16
Zinc		0.037/0.036	ND/0.023		0.021	0.02	0.026			0.0225	0.02	0.02	
Barium										0.0897B			
Total Sulfide (ppm)													
									1.6				

TABLE 5-3 B

HILL 78 AREA
GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

SUMMARY OF APPENDIX IX + 3 CONSTITUENTS DETECTED IN GROUNDWATER SAMPLES
JANUARY/FEBRUARY 1991

Notes:

Concentrations are reported as parts per million (ppm), parts per billion (ppb), or parts per trillion (ppt), as indicated. Only the detected constituents are shown.
ASW-3 is the Altresco Supply Well #3.

B - When used for organics, indicates that the analyte was detected in the associated blank. When used for inorganics, indicates a value greater than or equal to the instrument detection limit but less than the contract required detection limit.
E - When used for organics, indicates that the compound concentrations exceed the calibration range of the GC/MS instrument for that specific analysis. When used for inorganics, indicates that a chemical or physical interference effect was encountered during the analysis of the flagged analyte.
J - Indicates an estimated value less than the sample detection limit.
(d) - Indicates dissolved metal concentrations are reported.
(t) - Indicates total metal concentrations are reported.
NA - Indicates constituent was not analyzed for.
ND - Indicates analyte is not detected.

TABLE 5-3 C

HILL 78 AREA
GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

SUMMARY OF DIOXIN/FURAN COMPOUNDS DETECTED IN GROUNDWATER AT MONITORING WELL NY-1
AUGUST 29, 1991

Constituent / Location / Matrix / Laboratory	NY-1 Water COMPUCHEM LABORATORIES, INC.	NY-1 Water IT ANALYTICAL SERVICES
Dioxin Compound (ppt)		
Hexachlorodibenzodioxin		3.7
Heptachlorodibenzodioxin	12.4	33.6
Octachlorodibenzodioxin	50	142
Furan Compound (ppt)		
Pentachlorodibenzofuran		14.5*
Hexachlorodibenzofuran	5.4	54*
Heptachlorodibenzofuran	20.8	55*
Octachlorodibenzofuran	24.3	69

Notes:

Concentrations are reported as parts per trillion (ppt). Only the detected constituents are shown.
* - Indicates possible interference from polychlorinated diphenyl ethers.

TABLE 5-3D

GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS

MCP PHASE II/RCRA FACILITY
INVESTIGATION REPORT FOR HILL 78 AREA

SUMMARY OF GROUNDWATER PCB DATA - 1996/1997
(Results are presented in parts per million, ppm)

Sample ID	Date Collected	PCB-1254	PCB-1260	Total PCBs
Unfiltered PCBs				
78-7	09/18/96	ND(0.0010)	ND(0.0010)	ND(0.0010)
ASW-5/W-5	09/20/96	ND(0.0010)	ND(0.0010)	ND(0.0010)
ASW-6/W-6	09/20/96	ND(0.0010)	ND(0.0010)	ND(0.0010)
H78B-8R *	05/16/97	0.012	ND(0.0010)	0.012
H78B-13	09/18/96	ND(0.0010)	ND(0.0010)	ND(0.0010)
H78B-15	09/18/96	ND(0.0010)	ND(0.0010)	ND(0.0010)
H78B-16	09/17/96	ND(0.0010)[ND(0.0010]	0.00063 JP [ND(0.0010)]	0.00063 JP [ND(0.0010)]
H78B-17R	11/19/96	ND(0.0010)[ND(0.0010)]	ND(0.0010) [0.0025]	ND(0.0010) [0.0025]
H78B-18	09/18/96	ND(0.0010)	0.00050 J	0.00050 J
H78B-28R	11/19/96	ND(0.0010)	0.0019 P	0.0019 P
NY-1	09/18/96	ND(0.0010)	ND(0.0010)	ND(0.0010)
NY-4	09/20/96	ND(0.0010)	0.017	0.017
Filtered PCBs				
78-7	09/18/96	ND(0.0010)	ND(0.0010)	ND(0.0010)
ASW-5/W-5	09/20/96	ND(0.0010)	ND(0.0010)	ND(0.0010)
ASW-6/W-6	09/20/96	ND(0.0010)	ND(0.0010)	ND (0.0010)
H78B-8R	12/09/96	ND(0.0010)	ND(0.0010)	ND(0.0010)
H78B-13	09/18/96	ND(0.0010)	ND(0.0010)	ND(0.0010)
H78B-15	09/18/96	ND(0.0010)	0.00051 JN	0.00051 JN
H78B-16	09/17/96	ND(0.0010)[ND(0.0010)]	ND(0.0010)[ND(0.0010)]	ND(0.0010)[ND(0.0010)]
H78B-17R	11/19/96	ND(0.0010) [ND(0.0010)]	0.00036 J [0.00046 JP]	0.00036 J [0.00046 JP]
H78B-18	09/18/96	ND(0.0010)	ND(0.0010)	ND(0.0010)
H78B-28R	11/19/96	ND(0.0010)	ND(0.0010)	ND(0.0010)
NY-1	09/18/96	ND(0.0010)	ND(0.0010)	ND(0.0010)
NY-4	09/20/96	ND(0.0010)	0.0013	0.0013

Notes:

1. Samples collected by Blasland, Bouck & Lee, Inc., and submitted to CompuChem, Inc., for analysis of PCBs.
2. Only parameters detected in at least one sample are shown.
3. J - Indicates an estimated value less than the CLP-required quantitation limit.
4. P - Indicates dual column percent difference value exceeded 25 percent.
5. ND - Compound was not detected; associated detection limit presented in parentheses.
6. Results of duplicates samples are presented in brackets.
7. * Due to problems associated with sample collection from well H78B-8R for total PCBs on 12/9/96 (sample jar broken), the well was resampled on 5/16/97.
8. N - Indicates sample matrix spike analysis was outside control limits.
9. The calculation of totals includes B, J, N, and P qualified data, as applicable.

TABLE 5-3E

GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS

MCP PHASE II/RCRA FACILITY
INVESTIGATION REPORT FOR HILL 78 AREA

SUMMARY OF GROUNDWATER VOLATILE ORGANICS DATA - 1996
(Results are presented in parts per million, ppm)

Parameter	Sample ID.: Date Collected:	78-1	78-4 09/17/96	78-7 09/18/96	ASW-4/W-4 09/17/96	ASW-5/W-5 09/20/96	ASW-6/W-6 09/20/96
1,1,1-Trichloroethane		ND (0.010)	0.010	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
1,1-Dichloroethane		ND (0.005)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)
Acetone		ND (0.015)	ND(0.015)	ND(0.015)	ND(0.015)	ND(0.015)	ND(0.015)
Chlorobenzene		ND (0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
Chloroethane		ND (0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
Methylene chloride		ND (0.010)	ND(0.010)	0.0020 JB	ND(0.010)	0.0050 JB	0.010 B
Tetrachloroethene		ND (0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
Toluene		ND (0.005)	ND(0.0050)	ND(0.0050)	0.0090	ND(0.0050)	ND(0.0050)
Trans-1,2-Dichloroethene		ND (0.005)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)
Trichloroethene		ND (0.005)	0.012	0.0010 J	ND(0.0050)	0.0150	ND(0.0050)
Vinyl chloride		ND (0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
Total VOCs		**ND**	**0.022**	**0.003**	**0.009**	**0.02**	**0.01**

Parameter	Sample ID.: Date Collected:	H78B-8R 12/09/96	H78B-13 09/18/96	H78B-15 09/18/96	H78B-16 09/17/96	H78B-17R 09/17/96	H78B-28R
1,1,1-Trichloroethane		ND(0.010)	ND(0.010)	ND(0.010)	0.0090 J[0.0090 J]	ND(0.083) [ND(0.10)]	ND
1,1-Dichloroethane		ND(0.0050)	ND(0.0050)	ND(0.0050)	0.005 [0.0040 J]	ND(0.042) [ND(0.050)]	ND
Acetone		ND(0.015)	0.0220	ND(0.015)	ND(0.015) [ND(0.015)]	ND(0.120) [ND(0.150)]	ND
Chlorobenzene		ND(0.010)	ND(0.010)	ND(0.010)	0.0020 J [0.0020 J]	ND(0.083) [ND(0.10)]	ND
Chloroethane		ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010) [ND (0.010)]	ND(0.083) [ND(0.10)]	ND
Methylene chloride		ND(0.010)	0.0020 JB	0.0020 JB	ND(0.010) [ND (0.010)]	ND(0.083) [ND(0.10)]	ND
Tetrachloroethene		ND(0.010)	ND(0.010)	ND(0.010)	0.0010 J [0.0010 J]	0.017 J [0.022 J]	ND
Toluene		0.0040 J	ND(0.0050)	ND(0.0050)	ND(0.0050) [ND(0.0050)]	ND (0.042) [ND(0.050)]	ND
Trans-1,2-Dichloroethene		ND(0.005)	ND(0.0050)	ND(0.0050)	0.0020 J [0.0020 J]	ND (0.042) [ND(0.050)]	ND
Trichloroethene		0.0010 J	ND(0.0050)	ND(0.0050)	0.081 [0.08]	0.91 [1.20]	ND
Vinyl chloride		ND(0.0010)	ND(0.0010)	ND(0.010)	0.0090 J [0.0090 J]	ND(0.083) [ND(0.10)]	ND
Total VOCs		**0.005**	**0.024**	**0.002**	**0.109 [0.107]**	**0.927 [1.222]**	**ND**

(See Notes on Page 2)

TABLE 5-3E

GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS

MCP PHASE II/RCRA FACILITY
INVESTIGATION REPORT FOR HILL 78 AREA

SUMMARY OF GROUNDWATER VOLATILE ORGANICS DATA - 1996
(Results are presented in parts per million, ppm)

Parameter	Sample ID.: Date Collected:	H78B-18 09/18/96	H78B-22 (D) 07/23/96	NY-1 09/18/96	NY-4 09/20/96
1,1,1-Trichloroethane		ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
1,1-Dichloroethane		ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)
Acetone		ND(0.0050)	ND(0.015)	ND(0.015)	ND(0.015)
Chlorobenzene		ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
Chloroethane		ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
Methylene chloride		0.0020 JB	0.0030 JB	0.0030 JB	0.0080 JB
Tetrachloroethene		ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
Toluene		ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)
Trans-1,2-Dichloroethene		ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)
Trichloroethene		ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)
Vinyl Chloride		ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
Total VOCs		**0.002**	**0.003**	**0.003**	**0.008**

Notes:

1. Samples collected by Blasland, Bouck & Lee, Inc., and submitted to CompuChem, Inc., for analysis of Appendix IX + 3 volatile organics.
2. Only parameters detected in at least one sample are shown.
3. J - Indicates an estimated value less than the CLP-required quantitation limit.
4. B - Compound also detected in the associated method blank.
5. ND - Compound was not detected; associated detection limit presented in parentheses.
6. Results of duplicates samples are presented in brackets.
7. D - This sample is a discrete water sample collected from a temporary microwell installed during the advancement of the boring.
8. The calculation of totals includes B, J, N, and P qualified data, as applicable.

TABLE 5-3F

GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS

MCP PHASE II/RCRA FACILITY
INVESTIGATION REPORT FOR HILL 78 AREA

SUMMARY OF GROUNDWATER SEMIVOLATILE ORGANICS DATA - 1996
(Results are presented in parts per million, ppm)

Parameter / Sample ID.: / Date Collected:	78-1 09/17/96	78-4 09/17/96	ASW-5/W-5 09/20/96	ASW-6/W-6 09/20/96
1,2,4-Trichlorobenzene	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)
3-Methylphenol	ND(0.035)	ND(0.035)	ND(0.035)	ND(0.035)
4-Methylphenol	ND(0.035)	ND(0.035)	ND(0.035)	ND(0.035)
bis(2-Ethylhexyl)phthalate	0.022 JB	0.029 B	ND(0.025)	ND(0.025)
Diethyl phthalate	ND(0.015)	ND(0.015)	ND(0.015)	ND(0.015)
Phenol	ND(0.015)	ND(0.015)	ND(0.015)	ND(0.015)
Total SVOCs	**0.022**	**0.029**	**ND**	**ND**

Parameter / Sample ID.: / Date Collected:	H78B-8R 12/09/96	H78B-13 09/18/96	H78B-15 09/18/96	H78B-16 09/17/96
1,2,4-Trichlorobenzene	ND(0.010)	0.0020 J	ND(0.0050)	ND(0.0050) [ND(0.0050)]
3-Methylphenol	0.004 J	0.0020 J	ND(0.035)	ND(0.035) [ND(0.035)]
4-Methylphenol	0.004 J	0.0020 J	ND(0.035)	ND(0.035) [ND(0.035)]
bis(2-Ethylhexyl)phthalate	ND(0.050)	0.0020 JB	0.0020 JB	0.020 JB [0.044 B]
Diethyl phthalate	ND(0.030)	ND(0.015)	ND(0.015)	0.0010 J [ND(0.015)]
Phenol	ND(0.030)	0.043	ND(0.015)	ND(0.015) [ND(0.015)]
Total SVOCs	**0.008**	**0.051**	**0.002**	**0.021 [0.044]**

Parameter / Sample ID.: / Date Collected:	H78B-17R 11/19/96	H78B-18 09/18/96	H78B-28R 11/19/96	NY-1 09/18/96
1,2,4-Trichlorobenzene	0.002 J [0.002J]	ND(0.0050)	ND(0.0050)	ND(0.0050)
3-Methylphenol	ND (0.035) [ND (0.035)]	ND(0.035)	ND(0.035)	0.0090 J
4-Methylphenol	ND (0.035) [ND (0.035)]	ND(0.035)	ND(0.035)	0.0090 J
bis(2-Ethylhexyl)phthalate	0.002 J [0.002 JB]	ND(0.025)	ND(0.025)	0.0010 JB
Diethyl phthalate	ND(0.015) [ND(0.015)]	ND(0.015)	ND(0.015)	ND(0.015)
Phenol	ND(0.015) [ND(0.015)]	ND(0.015)	ND(0.015)	0.028
Total SVOCs	**0.004 [0.004]**	**ND**	**ND**	**0.047**

Notes:

1. Samples collected by Blasland, Bouck & Lee, Inc., and submitted to CompuChem, Inc., for analysis of Appendix IX + 3 semivolatile organics.
2. Only parameters detected in at least one sample are shown.
3. J - Indicates an estimated value less than the CLP-required quantitation limit.
4. B - Compound also detected in the associated method blank.
5. ND - Compound was not detected; associated detection limit presented in parentheses.
6. Results of duplicates samples are presented in brackets.
7. The calculation of totals includes B, J, N, and P qualified data, as applicable.

TABLE 5-3G

GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
MCP PHASE II/RCRA FACILITY
INVESTIGATION REPORT FOR HILL 78 AREA/USEPA AREA 2

SUMMARY OF GROUNDWATER POLYCHLORINATED DIBENZOFURANS AND POLYCHLORINATED DIBENZO-P-DIOXINS DATA - 1996
(Results are presented in parts per million, ppm)

Paramete	Sample ID.: Date Collected:	ASW-5/W-5 09/20/96	ASW-6/W-6 09/20/96	H78B-8R 12/09/96	H78B-13 09/18/96	H78B-15 09/18/96
Furans						
TCDFs (total)		ND(0.0000000022)	ND(0.0000000017)	0.00000017	0.000000039	ND(0.0000000031)
2,3,7,8-TCDF		ND(0.0000000022)	ND(0.0000000015)	0.000000011	0.0000000093	ND(0.0000000031)
PeCDFs (total)		ND(0.0000000025)	ND(0.000000010)	0.0000011	0.00000011	ND(0.0000000037)
1,2,3,7,8-PeCDF		ND(0.0000000025)	ND(0.0000000018)	ND(0.0000000094)	ND(0.0000000069)	ND(0.0000000037)
2,3,4,7,8-PeCDF		ND(0.0000000021)	ND(0.0000000015)	0.000000031	ND(0.000000006)	ND(0.0000000032)
HxCDFs (total)		ND(0.0000000038)	ND(0.000000061)	0.0000019	0.000000068	ND(0.0000000041)
1,2,3,4,7,8-HxCDF		ND(0.0000000038)	ND(0.0000000049)	0.00000011	ND(0.0000000036)	ND(0.0000000041)
1,2,3,6,7,8-HxCDF		ND(0.0000000031)	ND(0.000000004)	0.000000075	ND(0.0000000081)	ND(0.0000000033)
2,3,4,6,7,8-HxCDF		ND(0.0000000029)	ND(0.0000000029)	0.000000065	ND(0.0000000048)	ND(0.0000000031)
1,2,3,7,8,9-HxCDF		ND(0.0000000037)	ND(0.0000000048)	ND(0.0000000019)	ND(0.0000000036)	ND(0.000000004)
HpCDFs (total)		ND(0.0000000012)	0.00000012	0.00000078	ND(0.000000013)	ND(0.0000000032)
1,2,3,4,6,7,8-HpCDF		ND(0.00000000091)	0.000000026	0.00000031	ND(0.000000007)	ND(0.0000000024)
1,2,3,4,7,8,9-HpCDF		ND(0.0000000012)	ND(0.0000000019)	0.000000071	ND(0.000000013)	ND(0.0000000032)
OCDF		ND(0.0000000029)	0.00000017	0.000000022	ND(0.000000007)	ND(0.0000000025)
Total PCDFs		**ND**	**0.00000029**	**0.000003972**	**0.000000217**	**ND**
Dioxins						
TCDDs (total)		ND(0.0000000026)	ND(0.0000000023)	ND(0.0000000035)	ND(0.000000002)	ND(0.0000000047)
2,3,7,8-TCDD		ND(0.0000000026)	ND(0.0000000023)	ND(0.0000000011)	ND(0.000000002)	ND(0.0000000047)
PeCDDs (total)		ND(0.0000000042)	ND(0.0000000024)	ND(0.000000013)	ND(0.0000000034)	ND(0.0000000068)
1,2,3,4,7,8-PeCDD		ND(0.0000000042)	ND(0.0000000024)	ND(0.0000000037)	ND(0.0000000034)	ND(0.0000000068)
HxCDDs (total)		ND(0.0000000043)	ND(0.0000000062)	ND(0.000000022)	ND(0.0000000029)	ND(0.0000000046)
1,2,3,4,7,8-HxCDD		ND(0.0000000042)	ND(0.000000003)	ND(0.0000000045)	ND(0.0000000028)	ND(0.0000000044)
1,2,3,6,7,8-HxCDD		ND(0.0000000042)	ND(0.0000000062)	ND(0.0000000046)	ND(0.0000000028)	ND(0.0000000044)
1,2,3,7,8,9-HxCDD		ND(0.0000000043)	ND(0.0000000031)	ND(0.0000000048)	ND(0.0000000029)	ND(0.0000000046)
HpCDDs (total)		ND(0.0000000012)	0.00000025	0.000000085	ND(0.0000000035)	ND(0.000000002)
1,2,3,4,6,7,8-HpCDD		ND(0.0000000012)	0.00000017	0.000000043	ND(0.0000000035)	ND(0.000000002)
OCDD		ND(0.0000000037)	0.0000023	0.00000036	ND(0.000000018)	ND(0.000000006)
Total PCDDs		**ND**	**0.00000255**	**0.000000445**	**ND**	**ND**

(See Notes on Page 3)

TABLE 5-3G

GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
MCP PHASE II/RCRA FACILITY
INVESTIGATION REPORT FOR HILL 78 AREA/USEPA AREA 2

SUMMARY OF GROUNDWATER POLYCHLORINATED DIBENZOFURANS AND POLYCHLORINATED DIBENZO-P-DIOXINS DATA - 1996
(Results are presented in parts per million, ppm)

Paramete	Sample ID.: Date Collected:	H78B-16 09/17/96	H78B-17R 11/19/96	H78B-18 09/18/96	H78B-28R 11/19/96	NY-1 09/18/96
Furans						
TCDFs (total)		ND(0.00000000092) [ND(0.0000000012)]	ND(0.0000000022) [ND(0.0000000039)]	ND(0.0000000016)	ND(0.0000000010)	0.000000021
2,3,7,8-TCDF		ND(0.00000000092) [ND(0.0000000012)]	ND(0.0000000022) [ND(0.0000000039)]	ND(0.0000000016)	ND(0.0000000010)	ND(0.0000000028)
PeCDFs (total)		ND(0.0000000026) [ND(0.0000000027)]	ND(0.0000000075) [ND(0.000000013)]	ND(0.0000000059)	ND(0.0000000015)	0.00000025
1,2,3,7,8-PeCDF		ND(0.0000000026) [ND(0.0000000027)]	ND(0.0000000018) [ND(0.0000000026)]	ND(0.0000000059)	ND(0.00000000063)	ND(0.0000000056)
2,3,4,7,8-PeCDF		ND(0.0000000023) [ND(0.0000000023)]	ND(0.0000000026) [ND(0.0000000022)]	ND(0.0000000051)	ND(0.00000000065)	ND(0.0000000048)
HxCDFs (total)		ND(0.0000000024) [ND(0.0000000027)]	ND(0.0000000092) [ND(0.000000012)]	ND(0.0000000036)	ND(0.0000000047)	0.00000062
1,2,3,4,7,8-HxCDF		ND(0.00000000077) [ND(0.0000000015)]	ND(0.0000000092) [ND(0.000000012)]	ND(0.0000000036)	ND(0.0000000017)	ND(0.00000002)
1,2,3,6,7,8-HxCDF		ND(0.0000000006) [ND(0.0000000012)]	ND(0.0000000034) [ND(0.0000000041)]	ND(0.0000000029)	ND(0.0000000010)	ND(0.000000077)
2,3,4,6,7,8-HxCDF		ND(0.0000000024) [ND(0.0000000027)]	ND(0.0000000049) [ND(0.0000000054)]	ND(0.0000000032)	ND(0.0000000047)	ND(0.000000014)
1,2,3,7,8,9-HxCDF		ND(0.00000000076) [ND(0.0000000015)]	ND(0.00000000057) [ND(0.00000000028)]	ND(0.0000000035)	ND(0.00000000048)	ND(0.0000000043)
HpCDFs (total)		ND(0.0000000013) [ND(0.0000000013)]	ND(0.0000000052) [ND(0.0000000073)]	ND(0.0000000049)	ND(0.0000000033)	0.0000024
1,2,3,4,6,7,8-HpCDF		ND(0.00000000085) [ND(0.00000000088)]	ND(0.0000000052) [ND(0.0000000073)]	ND(0.0000000025)	ND(0.0000000024)	0.00000060
1,2,3,4,7,8,9-HpCDF		ND(0.0000000013) [ND(0.0000000013)]	ND(0.0000000030) [ND(0.0000000053)]	ND(0.0000000049)	ND(0.0000000033)	0.000000062
OCDF		ND(0.0000000068) [ND(0.0000000045)]	ND(0.000000010) [ND(0.0000000053)]	ND(0.0000000076)	ND(0.0000000035)	0.0000044
Total PCDFs		**ND**	**ND**	**ND**	**ND**	**0.00007691**
Dioxins						
TCDDs (total)		ND(0.0000000015) [ND(0.0000000018)]	ND(0.0000000015) [ND(0.0000000015)]	ND(0.0000000023)	ND(0.0000000020)	ND(0.0000000021)
2,3,7,8-TCDD		ND(0.0000000015) [ND(0.0000000018)]	ND(0.00000000054) [ND(0.0000000015)]	ND(0.0000000023)	ND(0.0000000011)	ND(0.0000000021)
PeCDDs (total)		ND(0.0000000025) [ND(0.0000000045)]	ND(0.00000000064) [ND(0.0000000012)]	ND(0.0000000032)	ND(0.00000000067)	ND(0.0000000072)
1,2,3,4,7,8-PeCDD		ND(0.0000000016) [ND(0.0000000045)]	ND(0.00000000064) [ND(0.0000000012)]	ND(0.0000000032)	ND(0.00000000067)	ND(0.0000000044)
HxCDDs (total)		ND(0.0000000021) [ND(0.0000000026)]	ND(0.0000000020) [ND(0.0000000015)]	ND(0.0000000042)	ND(0.0000000012)	0.00000017
1,2,3,4,7,8-HxCDD		ND(0.0000000021) [ND(0.0000000026)]	ND(0.0000000020) [ND(0.0000000015)]	ND(0.0000000041)	ND(0.0000000012)	ND(0.000000012)
1,2,3,6,7,8-HxCDD		ND(0.0000000019) [ND(0.0000000024)]	ND(0.0000000020) [ND(0.0000000015)]	ND(0.0000000041)	ND(0.0000000012)	0.000000037
1,2,3,7,8,9-HxCDD		ND(0.000000002) [ND(0.0000000025)]	ND(0.0000000020) [ND(0.0000000015)]	ND(0.0000000042)	ND(0.0000000012)	0.000000037
HpCDDs (total)		ND(0.0000000019) [ND(0.0000000017)]	ND(0.0000000032) [ND(0.0000000037)]	ND(0.0000000019)	ND(0.0000000014)	0.0000014
1,2,3,4,6,7,8-HpCDD		ND(0.0000000021) [ND(0.0000000017)]	ND(0.0000000032) [ND(0.0000000037)]	ND(0.0000000019)	ND(0.0000000014)	0.0000010
OCDD		ND(0.000000016) [ND(0.000000014)]	ND(0.000000026) [ND(0.000000035)]	ND(0.000000016)	ND(0.0000000091)	0.000012
Total PCDDs		**ND**	**ND**	**ND**	**ND**	**0.000136**

(See Notes on Page 3)

TABLE 5-3G

GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
MCP PHASE II/RCRA FACILITY
INVESTIGATION REPORT FOR HILL 78 AREA/USEPA AREA 2

SUMMARY OF GROUNDWATER POLYCHLORINATED DIBENZOFURANS AND POLYCHLORINATED DIBENZO-P-DIOXINS DATA - 1996
(Results are presented in parts per million, ppm)

Notes:

1. Samples collected by Blasland, Bouck & Lee, Inc., and submitted to Quanterra Environmental Services for analysis of 2,3,7,8-substituted polychlorinated dibenzo-p-dioxins (PCDDs) and polychlorinated dibenzofurans (PCDFs).
2. Only parameters detected in at least one sample are shown.
3. ND - Compound was not detected; associated detection limit presented in parentheses.
4. 2,3,7,8-TCDF results have been confirmed on a DB-225 column.
5. Results of duplicates samples are presented in brackets.
6. Sample H78B-14 was received by CompuChem, but was not sent to Quanterra for analysis of PCDD and PCDF. Therefore, no results are available.
7. The calculation of totals includes B, J., N, and P qualified data, as applicable, total PCDD, and PCDF values are based only on total homologs.

TABLE 5-3H

GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
MCP PHASE II/RCRA FACILITY
INVESTIGATION REPORT FOR HILL 78 AREA/USEPA AREA 2

SUMMARY OF GROUNDWATER INORGANICS DATA COLLECTED SEPTEMBER - DECEMBER 1996
(Results are presented in parts per million, ppm)

Parameter / Sample ID.: / Date Collected:	ASW-5/W-5 (unfiltered) 09/20/96	ASW-5/W-5 (filtered) 09/20/96	ASW-6/W-6 (unfiltered) 09/20/96	ASW-6/W-6 (filtered) 09/20/96	H78B-8R (unfiltered) 12/09/96
Antimony	ND(0.0022)	ND(0.0022)	ND(0.0022)	ND(0.0022)	0.0113 J*
Arsenic	ND(0.0023)	0.0119	ND(0.0023)	0.011	0.0174
Barium	0.0167 J*	0.0186 J*	0.0364 J*	0.038 J*	0.543
Beryllium	ND(0.00010)	ND(0.00010)	ND(0.00010)	ND(0.00010)	0.00067 J*
Cadmium	ND(0.00030)	ND(0.00030)	ND(0.00030)	ND(0.00030)	0.0018 J*
Chromium	ND(0.0016)	ND(0.0016)	0.0019 J*	ND(0.0016)	0.0135
Cobalt	ND(0.00050)	ND(0.00050)	0.00058 J*	0.00050 J*	0.0114 J*
Copper	0.0044 J*	ND(0.0018)	0.0057 J*	ND(0.0018)	0.0447 J*
Lead	ND(0.0013)	0.0016 J*	ND(0.0013)	ND(0.0013)	0.0158
Mercury	ND(0.00020)	ND(0.00020)	ND(0.00020)	ND(0.00020)	ND(0.00020)
Nickel	0.0022 J*	ND(0.0016)	0.0119 J*	0.0091 J*	0.0195 J*
Selenium	ND(0.0030)	0.0178	ND(0.0030)	0.0179	0.0043 J*
Silver	ND(0.00060) J*	ND(0.00060) J*	ND(0.00060) J*	ND(0.00060) J*	ND(0.00060) J*
Thallium	ND(0.0031)	0.0078 J*	ND(0.0031)	0.0078 J*	ND(0.0033)
Tin	ND(0.00047)	ND(0.00047)	ND(0.00047)	ND(0.00047)	ND(0.00047)
Vanadium	ND(0.00060)	ND(0.00060)	ND(0.00060)	ND(0.00060)	0.0126 J*
Zinc	0.0057 J*	ND(0.0012)	0.0147 J*	0.0039 J*	0.123 J*

Parameter / Sample ID.: / Date Collected:	H78B-8R(filtered) 12/09/96	H78B-13 (unfiltered) 09/18/96	H78B-13 (filtered) 09/18/96	H78B-15 (unfiltered) 09/18/96	H78B-15 (filtered) 09/18/96
Antimony	0.0039 J*	ND(0.0022)	ND(0.0022)	ND(0.0022)	ND(0.0022)
Arsenic	0.0144	0.0043 J*	ND(0.0023)	ND(0.0023)	0.0152
Barium	0.326	0.0922 J*	0.0431 J*	0.0453 J*	0.0451 J*
Beryllium	0.00026 J*	ND(0.00010)	ND(0.00010)	ND(0.00010)	ND(0.00010)
Cadmium	0.00086 J*	ND(0.00030)	ND(0.00030)	ND(0.00030)	ND(0.00030)
Chromium	ND(0.00070)	ND(0.0016)	ND(0.0016)	ND(0.0016)	ND(0.0016)
Cobalt	0.0040 J*	0.0010 J*	ND(0.00050)	0.00066 J*	ND(0.00050)
Copper	0.0011 J*	0.0067 J*	ND(0.0018)	0.0095 J*	ND(0.0018)
Lead	ND(0.0023)	0.0021 J*	ND(0.0013)	ND(0.0013)	0.0026 J*
Mercury	ND(0.00020)	ND(0.00020)	ND(0.00020)	ND(0.00020)	ND(0.00020)
Nickel	0.0026 J*	0.0323 J*	0.0159 J*	0.0078 J*	ND(0.0016)
Selenium	0.0367	ND(0.0030)	0.0243	ND(0.0030)	0.021
Silver	ND(0.00060) J*	ND(0.00060) J*	ND(0.00060) J*	ND(0.00060) J*	ND(0.00060) J*
Thallium	0.0183	ND(0.0031)	ND(0.0031)	ND(0.0031)	0.0136
Tin	ND(0.00047)	ND(0.00047)	ND(0.00047)	ND(0.00047)	ND(0.00047)
Vanadium	0.0016 J*	0.0044 J*	0.0021 J*	ND(0.00060)	ND(0.00060)
Zinc	ND(0.00040)	0.0066 J*	ND(0.0012)	0.0070 J*	ND(0.0012)

(See Notes Page 2)

TABLE 5-3H

GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
MCP PHASE II/RCRA FACILITY
INVESTIGATION REPORT FOR HILL 78 AREA/USEPA AREA 2

SUMMARY OF GROUNDWATER INORGANICS DATA COLLECTED SEPTEMBER - DECEMBER 1996
(Results are presented in parts per million, ppm)

Parameter / Sample ID.: / Date Collected:	H78B-16 (unfiltered) 09/17/96	H78B-16 (filtered) 09/17/96	H78B-17R (unfiltered) 11/19/96	H78B-17R (filtered) 11/19/96
Antimony	0.0030 J* [ND(0.0022)]	0.0096 J* [0.0038 J*]	ND(0.0025) [ND(0.0025)]	ND(0.0025) [ND(0.0025)]
Arsenic	0.0199 [0.0158]	ND(0.0023) [ND(0.0023)]	0.0035 J* [ND(0.0081)	0.0061 J* [0.0081 J*]
Barium	0.0287 J* [0.0265 J*]	0.0297 J* [0.025 J*]	1.07 [0.871 E]	0.908 [0.871]
Beryllium	ND(0.00010) [ND(0.00010)]	ND(0.00010) [ND(0.00010)]	0.00066 J* [0.00068 J*]	0.00072 J* [0.00068 J*]
Cadmium	0.00030 J* [ND(0.00030)]	ND(0.00030) [ND(0.00030)]	ND(0.00040) [ND(0.00040)]	ND(0.00040) [ND(0.00040)]
Chromium	ND(0.0016) [ND(0.0016)]	ND(0.0016) [ND(0.0016)]	0.0279 [0.0148]	0.0154 [0.0148]
Cobalt	ND(0.00050) [ND(0.00050)]	ND(0.00050) [ND(0.00050)]	0.0102 J* [0.0020 J*]	0.0020 J* [0.0020 J*]
Copper	ND(0.0018) [ND(0.0018)]	0.0026 J* [0.0034 J*]	0.027 [0.0064 J*]	0.0063 J* [0.0064 J*]
Lead	0.0030 [0.0024 J*]	0.0019 J* [0.0015 J*]	0.0147 [0.0064]	0.0081 [0.0064]
Mercury	ND(0.00020)[ND(0.00020)]	ND(0.00020)[ND(0.00020)]	ND(0.00020)[ND(0.00020)]	ND(0.00020)[ND(0.00020)]
Nickel	0.0020 J* [ND(0.0016)]	0.0023 J* [0.0020 J*]	0.0246 J* [0.0050 J*]	0.0053 J* [0.0050 J*]
Selenium	0.0299 [0.0271]	0.0034 J* [ND(0.0030)]	ND(0.0039) [ND(0.0215)]	0.0232 [0.0215]
Silver	ND(0.00060)J* [ND(0.0006	ND(0.00060)J*[ND(0.00060)] J	ND(0.00060) J* [ND(0.00060)]J	ND(0.00060)J* [ND(0.00060)]J
Thallium	0.0136 [0.0134]	ND(0.0031) [ND(0.0031)]	ND(0.0033) [ND(0.0042 J*)]	0.0062 J* [0.0042 J*]
Tin	ND(0.00047)[ND(0.00047)]	ND(0.00047)[ND(0.00012)]	ND(0.00047)[ND(0.00047)]	ND(0.00047)[ND(0.00047)]
Vanadium	ND(0.00060) [ND(0.00060)]	ND(0.00060) [ND(0.00060)]	0.0216 J* [0.0108 J*]	0.0117 J* [0.0108 J*]
Zinc	ND(0.0012) [ND(0.0012)]	ND(0.0012) [ND(0.0012)]	0.0751 [0.0090 J*]	0.0102 J* [0.0090 J*]

Parameter / Sample ID.: / Date Collected:	H78B-18 (unfiltered) 09/18/96	H78B-18 (filtered) 09/18/96	H78B-28R (unfiltered) 11/18/96	H78B-28R (filtered) 11/18/96
Antimony	0.0038 J*	ND(0.0022)	0.0035 J*	0.0052 J*
Arsenic	0.0126	0.015	ND(0.0031)	0.0147
Barium	0.0851 J*	0.0433 J*	0.126 J*	0.0781 J*
Beryllium	ND(0.00010)	ND(0.00010)	0.00025 J*	0.00031 J*
Cadmium	ND(0.00030)	ND(0.00030)	ND(0.00040)	ND(0.00040)
Chromium	0.0057 J*	ND(0.0016)	0.0078 J*	ND(0.00070)
Cobalt	0.0087 J*	0.0025 J*	0.0103 J*	0.0043 J*
Copper	0.0196 J*	ND(0.0018)	0.0178 J*	ND(0.00040)
Lead	0.0070	0.0021 J*	0.0077	0.0030 J*
Mercury	ND(0.00020)	ND(0.00020)	ND(0.00020)	ND(0.00020)
Nickel	0.0156 J*	0.0017 J*	0.0149 J*	0.0013 J*
Selenium	ND(0.0030)	0.0207	ND(0.0039)	0.0374
Silver	ND(0.00060) J*	ND(0.00060) J*	0.0014 J*	ND(0.00060) J*
Thallium	ND(0.0031)	0.0137	ND(0.0033)	0.0111
Tin	ND(0.00047)	ND(0.00047)	ND(0.00047)	ND(0.00047)
Vanadium	0.0077 J*	ND(0.00060)	0.0091 J*	0.00085 J*
Zinc	0.0494	ND(0.0012)	0.0444	ND(0.00040)

Notes
1 Samples collected by Blasland, Bouck & Lee, Inc., and submitted to CompuChem, Inc., for analysis of Appendix IX + 3 Inorganics
2 Only parameters detected in at least one sample are shown
3 J* - Indicates the reported value is less than the CLP-required detection limit (CRDL), but greater than the instrument detection limit (IDL)
4 ND - Compound was not detected, associated detection limit presented in parentheses
5 Results of duplicates samples are presented in brackets

TABLE 5-4A

Field Measurements of Specific Conductivity, pH and Temperature for Hill 78 Wells, GE Company, Pittsfield, Massachusetts.

Well Designation	Date Sampled	Specific Conductivity (umhos/cm)	pH	Temperature (°C)
78-1	1-22-91	400	7.27	8
78-2	1-22-91	390	6.85	8
78-3	1-23-91	760	7.85	8
78-4	1-23-91	2100	7.65	7
78-5	1-23-91	500	8.55	5
78-6	1-23-91	770	7.70	6
78-7	1-24-91	1100	7.70	8
NY-1	1-24-91	240	9.35	5
NY-2	2-28-91	610	7.07	8
NY-3	1-24-91	270	8.70	9
NY-4	1-24-91	280	8.80	7

TABLE 5-4B

GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
MCP PHASE II / RCRA FACILITY INVESTIGATION REPORT FOR
HILL 78 AREA/USEPA AREA 2

SUMMARY OF GROUNDWATER FIELD PARAMETERS

Monitoring Well	Date	Temperature (Celsius)	Conductivity (ms/cm)	pH	Turbidity (NTU)
H78B-8	09/16/96	NS	NS	NS	NS
H78B-8R	12/09/96	13	1.15	6.9	62.3
H78B-11	09/16/96	NS	NS	NS	NS
H78B-12	09/16/96	NS	NS	NS	NS
H78B-13	09/18/96	14	5.65	12.7	7.5
H78B-15	09/18/96	13	0.65	7.8	10.0
H78B-16	09/17/96	14	1.38	7.9	2.0
H78B-17	09/16/96	NS	NS	NS	NS
H78B-17R	11/19/96	11	1.19	7.6	118.0
H78B-18	09/18/96	13	0.85	7.9	120.0
H78B-28	09/16/96	NS	NS	NS	NS
H78B-28R	11/18/96	12	1.25	7.9	225.0
NY-1	09/18/96	13	0.62	7.9	85.0
NY-2	09/18/96	NS	NS	NS	NS
NY-4	09/20/96	12	0.35	8.4	15.4
78-1	09/17/96	13	0.78	7.7	15.0
78-4	09/17/96	14	0.94	7.3	1.8
78-7	09/18/96	13	0.69	7.9	2.0
W-4	09/17/96	14	0.60	7.8	6.2
W-5	09/20/96	10	0.01	7.9	1.5
W-6	09/20/96	10	0.69	7.9	55.7

Notes:

ms/cm = milliSiemens per centimeter.
NTU = Nephelometric turbidity units.
NS = No sample due to dry well, or in the case of monitoring well NY-2, an obstruction in the well.

TABLE 7-1A

HILL 78 AREA
GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

SUMMARY OF APPENDIX IX + 3 CONSTITUENTS DETECTED IN SURFACE WATER FROM THE DRAINAGE SWALE
MAY 1991

Constituent / Location / Matrix	SW-1 Surface Water		SW-2 Surface Water	
Volatile Organic Compound (ppb)				
Acetone				5BJ
Methylene Chloride		3BJ		3BJ
Semivolatile Organic Compound (ppb)				
Phenols (total)		11.2		
Pesticide (ppb)				
Alpha-BHC				0.031
PCB (ppb)				
Aroclor 1260* - total				0.066
Aroclor 1260* - filtered				ND
Metal (ppm)	Total	Dissolved	Total	Dissolved
Aluminum	0.156B	0.117B	0.37	0.117B
Barium	0.0212B	0.0156B	0.0145B	0.0101B
Calcium	67.1	62	35.2	29.8
Copper	0.0047B		0.007B	0.0091B
Iron	0.513	.0.149	0.765	0.15
Lead	0.003		0.0066W	
Magnesium	23.7	22	11.6	9.78
Manganese	0.245	0.0216**	0.156	0.0039B**
Potassium	1.89B	1.88B	2.13B	1.8B
Selenium			0.0091O	
Sodium	43E	41.6	24.3E	21.3
Thallium			0.0038BO	
Vanadium	0.0041B			
Zinc	0.0289	0.0062B	0.0291	0.211

TABLE 7-1A

HILL 78 AREA
GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

SUMMARY OF APPENDIX IX + 3 CONSTITUENTS DETECTED IN SURFACE WATER FROM THE DRAINAGE SWALE
MAY 1991

Notes:

Surface water concentrations are reported as parts per billion (ppb) except the metals concentrations which are reported as parts per million (ppm). Only detected constituents are shown.

B - When used for organics, indicates that the analyte was detected in the associated blank. When used for inorganics, indicates a value greater than or equal to the instrument detection limit but less than the contract required detected limit.
J - Indicates an estimated value less than the sample detection limit.
O - Indicates an estimated value due to severe physical or chemical interference.
W - Indicates that post-ingestion spike for furnace AA analysis was out of control limits.
* - Indicates that sample exhibited alteration of standard Aroclor pattern.
** - Indicates that duplicate analysis was not within control limits.

TABLE 7-1B

HILL 78 AREA
GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

SUMMARY OF VOCs, SVOCs, and PCBs IN SEDIMENT
FROM THE DRAINAGE SWALE
MAY 1991

Constituent / Location: Matrix	SE-1 Sediment	SE-2 Sediment
Volatile Organic Compound (ppm)		
Acetone	0.033B	0.034B
Methylene Chloride	0.1B	0.045B
Semivolatile Organic Compound (ppm)		
Acenaphthene	0.31J	
Acenaphthylene	0.21J	2.6J
Anthracene	0.55	2.9J
Benzo(a)anthracene	2.4	14J
Benzo(b)fluoranthene	4X	36X
Benzo(k)fluoranthene	4X	36X
Benzo(a)pyrene	1.9	14J
Benzo(g,h,i)perylene	0.85	13J
bis(2-Ethylhexyl)phthalate	0.25J	
Butylbenzylphthalate	0.056J	
Chrysene	2.5	24J
Dibenzo(a,h)anthracene	0.4J	5.2J
Dibenzofuran	0.26J	
Fluoranthene	5.1	38
Fluorene	0.66	4J
Indeno(1,2,3-cd)pyrene	0.78	11J
1,Methylnaphthalene	0.16J	
2,Methylnaphthalene	0.065J	
Naphthalene	0.12J	
Phenanthrene	5.3	24J
Pyrene	4	28
PCBs (ppm)		
Total	0.70	2.5

Notes:

Sediment concentrations are reported as parts per million (ppm). Only detected constituents are shown.
Sediment samples SE-1 and SE-2 were only analyzed for volatile and semivolatile organic compounds and PCBs. These same locations were resampled in September 1991, and submitted for Appendix IX + 3 analysis, excluding volatile and semivolatile organic compounds.

B - For organics, indicates that the analyte was detected in the associated blank.
J - Indicates an estimated value less than the sample detection limit.
X - Indicates coeluting indistinguishable isomers.

TABLE 7-1C

HILL 78 AREA
GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

SUMMARY OF METALS, TOTAL PHENOLS, AND PESTICIDES DETECTED IN SEDIMENT FROM THE DRAINAGE SWALE
SEPTEMBER 1991

Constituent / Location Matrix	S1S Sediment	S2S Sediment	S3S (DP of S1S) Sediment
Metals (ppm)			
Aluminum	6,660*	7,160*	5,330*
Arsenic	4.9	5.5	1.4
Barium	13.3B	22.8	20.7B
Beryllium	0.15B	0.22B	0.27B
Calcium	9,300E	8,880E	14,200E
Chromium	21.5*N	9.1*N	8*N
Cobalt	6.9	10.9	11
Copper	20.6	77.2	22.2
Iron	23,300E	24,400E	21,900E
Lead	124*N	37.1*N	76.1*N
Magnesium	6,250*E	4,860*E	7,830*E
Manganese	345*NE	423*NE	356*NE
Nickel	12.7	15.5	16.7
Potassium	297B	451B	297B
Sodium	82.3B	92.6B	78.2B
Vanadium	14.8	15.9	16.3
Zinc	90E	109E	105E
Phenols (total) (ppm)	0.12[a]		0.18

2/19/93

TABLE 7-1C

HILL 78 AREA
GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

SUMMARY OF METALS, TOTAL PHENOLS, AND PESTICIDES DETECTED IN SEDIMENT FROM THE DRAINAGE SWALE
SEPTEMBER 1991

Constituent / Location / Matrix	S1S Sediment	S2S Sediment	S3S (DP of S1S) Sediment
Pesticide (ppb)			
Alpha-BHC		12	
Delta-BHC			27
Endosulfan I			110

Notes:

Concentrations are reported in parts per million (ppm) or parts per billion (ppb) as indicated. Only the detected constituents are shown.
The sediment samples S1S and S2S were collected at the same locations in the drainage swale as previous sediment samples SE-1 and SE-2, respectively.

DP - Indicates duplicate sample.
* - Indicates duplicate analysis was not within control limits.
B - Indicates a value greater than or equal to the instrument detection limit but less than the contract required detection limit.
E - Indicates a chemical or physical interference effect was encountered during the analysis of the flagged analyte.
N - Indicates a matrix-related interference in the sample preparation procedure and/or analysis for the flagged analyte.
* - The concentration reported is at the detection limit.

TABLE 7-1D

GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS

MCP PHASE II/RCRA FACILITY
INVESTIGATION REPORT FOR HILL 78 AREA

SUMMARY OF SURFACE WATER PCB DATA - 1996
(Results are presented in parts per million, ppm)

Sample ID	Date Collected	PCB-1260	Total PCBs
Unfiltered PCBs			
H78SW-3	09/18/96	0.0015 J	0.0015 J
H78SW-4	09/18/96	ND(0.0010)	ND(0.0010)
H78SW-5	09/18/96	ND(0.0010)[ND(0.0010)]	ND(0.0010)[ND(0.0010)]
H78SW-7	09/18/96	0.00092 J	0.00092 J
S2-SW	09/18/96	ND	ND
Filtered PCBs			
H78SW-3	09/18/96	ND(0.0010)	ND(0.0010)
H78SW-4	09/18/96	ND(0.0010)	ND(0.0010)
H78SW-5	09/18/96	ND(0.0010)[ND(0.0010)]	ND(0.0010)[ND(0.0010)]
H78SW-7	09/18/96	ND(0.0010)	ND(0.0010)
S2-SW	09/18/96	ND(0.0010)	ND(0.0010)

Notes:
1. Samples collected by Blasland, Bouck & Lee, Inc., and submitted to CompuCh Inc., for analysis of PCBs.
2. Only parameters detected in at least one sample are shown.
3. J - Indicates an estimated value less than the CLP-required quantitation limit.
4. P - Indicates dual column percent difference value exceeded 25 percent.
5. ND - Compound was not detected; associated detection limit presented in parentheses.
6. Results of duplicates samples are presented in brackets.

TABLE 7-1E

GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS

MCP PHASE II/RCRA FACILITY
INVESTIGATION REPORT FOR HILL 78 AREA

SUMMARY OF SURFACE WATER VOLATILE ORGANICS DATA - 1996
(Results are presented in parts per million, ppm)

Parameter / Sample ID.: / Date Collected:	H78SW-4 09/18/96	H78SW-5 09/18/96	H78SW-7 09/18/96	S2-SW 09/18/96	H78SW-3 09/18/96
1,1,1-Trichloroethane	ND(0.010)	ND(0.010)[ND(0.010)]	ND(0.010)	ND(0.010)	ND(0.010)
1,1-Dichloroethane	ND(0.0050)	ND(0.0050)[ND(0.0050)]	ND(0.0050)	ND(0.0050)	ND(0.0050)
Acetone	ND(0.015)	ND(0.015)[ND(0.015)]	ND(0.015)	ND(0.015)	ND(0.015)
Chlorobenzene	ND(0.010)	ND(0.010)[ND(0.010)]	ND(0.010)	ND(0.010)	ND(0.010)
Chloroethane	ND(0.010)	ND(0.010)[ND(0.010)]	0.0030 J	ND(0.010)	ND(0.010)
Methylene chloride	0.0020 JB	0.017 B[0.030 JB]	0.0020 JB	0.0020 JB	0.0020 JB
Tetrachloroethene	ND(0.010)	ND(0.010)[ND(0.010)]	ND(0.010)	ND(0.010)	ND(0.010)
Toluene	ND(0.0050)	ND(0.0050)[ND(0.0050)]	ND(0.0050)	ND(0.0050)	ND(0.0050)
Trans-1,2-Dichloroethene	ND(0.0050)	ND(0.0050)[ND(0.0050)]	ND(0.0050)	ND(0.0050)	ND(0.0050)
Trichloroethene	ND(0.0050)	ND(0.0050)[ND(0.0050)]	ND(0.0050)	ND(0.0050)	ND(0.0050)
Vinyl chloride	ND(0.010)	ND(0.010)[ND(0.010)]	ND(0.010)	ND(0.010)	ND(0.010)

Notes:

1. Samples collected by Blasland, Bouck & Lee, Inc., and submitted to CompuChem, Inc., for analysis of Appendix IX + 3 volatile organics.
2. Only parameters detected in at least one sample are shown.
3. J - Indicates an estimated value less than the CLP-required quantitation limit.
4. B - Compound also detected in the associated method blank.
5. ND - Compound was not detected; associated detection limit presented in parentheses.
6. Results of duplicates samples are presented in brackets.

TABLE 7-1F

GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS

MCP PHASE II/RCRA FACILITY
INVESTIGATION REPORT FOR HILL 78 AREA

SUMMARY OF SURFACE WATER SEMIVOLATILE ORGANICS DATA - 1996
(Results are presented in parts per million, ppm)

Paramete	Sample ID.: Date Collected:	H78SW-4 09/18/96	H78SW-5 09/18/96	H78SW-7 09/18/96	S2-SW 09/18/96	H78SW-3 09/18/96
1,2,4-Trichlorobenzene		ND(0.0050)	ND(0.0050)[ND(0.0050)]	ND(0.0050)	ND(0.0050)	ND(0.0050)
3-Methylphenol		ND(0.035)	ND(0.035)[ND(0.35)]	ND(0.035)	ND(0.035)	ND(0.035)
4-Methylphenol		ND(0.035)	ND(0.035)[ND(0.35)]	ND(0.035)	ND(0.035)	ND(0.035)
bis(2-Ethylhexyl)phthalate		0.0010 JB	0.0040 JB[0.0010JB]	0.0010 JB	0.0020 JB	0.0010 JB
Diethyl phthalate		ND(0.015)	ND(0.015)[ND(0.15)]	ND(0.015)	ND(0.015)	ND(0.015)
Phenol		ND(0.015)	ND(0.015)[ND(0.15)]	ND(0.015)	ND(0.015)	ND(0.015)

Notes:

1. Samples collected by Blasland, Bouck & Lee, Inc., and submitted to CompuChem, Inc., for analysis of Appendix IX + 3 semivolatile organics.
2. Only parameters detected in at least one sample are shown.
3. J - Indicates an estimated value less than the CLP-required quantitation limit.
4. B - Compound also detected in the associated method blank.
5. ND - Compound was not detected; associated detection limit presented in parentheses.
6. Results of duplicates samples are presented in brackets.

TABLE 7-1G

GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS

MCP PHASE II/RCRA FACILITY
INVESTIGATION REPORT FOR HILL 78 AREA

SUMMARY OF SURFACE WATER INORGANICS DATA - 1996
(Results are presented in parts per million, ppm)

Parameter	Sample ID.: Date Collected:	H78SW-3 (unfiltered) 09/18/96	H78SW-3 (filtered) 09/18/96	H78SW-4 (unfiltered) 09/18/96	H78SW-4 (filtered) 09/18/96	H78SW-5 (unfiltered) 09/18/96
Aluminum		----	----	----	----	----
Antimony		ND(0.0022)	ND(0.0022)	ND(0.0022)	ND(0.0022)	ND(0.0022) [ND(0.0022)]
Arsenic		ND(0.0023)	ND(0.0023)	ND(0.0023)	ND(0.0023)	ND(0.0023) [ND(0.0023)]
Barium		0.0023 J*	0.0023 J*	0.0018 J*	0.0010 J*	0.0079 J* [0.0027 J*]
Beryllium		ND(0.00010)	ND(0.00010)	ND(0.00010)	ND(0.00010)	ND(0.00010) [ND(0.00010)]
Cadmium		ND(0.00030)	ND(0.00030)	ND(0.00030)	0.00030 J*	ND(0.00030) [ND(0.00030)]
Calcium		----	----	----	----	----
Chromium		0.0016 J*	ND(0.0016)	ND(0.0016)	ND(0.0016)	(0.0017) J*[ND(0.0016)]
Cobalt		ND(0.00050)	ND(0.00050)	ND(0.00050)	ND(0.00050)	(0.00063)J*[ND(0.00050)]
Copper		0.0060 J*	0.0033 J*	0.0019 J*	ND(0.0018)	0.0070 J* [0.0029 J*]
Iron		----	----	----	----	----
Lead		0.0018 J*	ND(0.0013)	ND(0.0013)	ND(0.0013)	0.0041 [ND(0.0015)]
Magnesium		----	----	----	----	----
Manganese		----	----	----	----	----
Mercury		ND(0.00020)	ND(0.00020)	ND(0.00020)	ND(0.00020)	ND(0.00020)[ND(0.0020)]
Nickel		0.0028 J*	ND(0.0016)	0.0019 J*	ND(0.0016)	0.0018 J* [ND(0.0016)]
Potassium		----	----	----	----	----
Selenium		ND(0.0030)	ND(0.0030)	ND(0.0030)	ND(0.0030)	ND(0.0030) [ND(0.0030)]
Silver		ND(0.00060)	ND(0.00060)	ND(0.00060) J*	ND(0.00060)	ND(0.00060) [ND(0.00060)]
Sodium		----	----	----	----	----
Thallium		ND(0.0031)	ND(0.0031)	ND(0.0031)	0.0035 J*	ND(0.0031) [ND(0.0031)]
Tin		ND(0.0047)	ND(0.0047)	ND(0.0047)	ND(0.0047)	ND(0.0047)[ND(0.0047)]
Vanadium		ND(0.00060)	ND(0.00060)	0.00086 J*	ND(0.00030)	0.0017 J* [ND(0.00060)]
Zinc		0.0517	0.0921	ND(0.0012)	ND(0.0012)	0.0380 [0.0194 J*]

(see notes on page 2)

TABLE 7-1G

GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS

MCP PHASE II/RCRA FACILITY
INVESTIGATION REPORT FOR HILL 78 AREA

SUMMARY OF SURFACE WATER INORGANICS DATA - 1996
(Results are presented in parts per million, ppm)

Parameter	Sample ID.: Date Collected:	H78SW-5 (filtered) 09/18/96	H78SW-7 (unfiltered) 09/18/96	H78SW-7 (filtered) 09/18/96	S2-SW (unfiltered) 09/18/96	S2-SW (filtered) 09/18/96
Aluminum		----	----	----	----	----
Antimony		ND(0.0022) [ND(0.0022)]	ND(0.0022)	ND(0.0022)	ND(0.0022)	ND(0.0022)
Arsenic		ND(0.0023) [ND(0.0023)]	ND(0.0023)	ND(0.0023)	ND(0.0023)	0.0027 B
Barium		0.0031 J* [0.0027 J*]	0.0027 J*	0.0012 J*	0.0033 J*	0.0043 J*
Beryllium		ND(0.00010) [ND(0.00010)]	ND(0.00010)	ND(0.00010)	ND(0.00010)	ND(0.00010)
Cadmium		0.00040 J* [ND(0.00030)]	ND(0.00030)	0.00033 J*	ND(0.00030)	ND(0.00030)
Calcium		----	----	----	----	----
Chromium		ND(0.0016) [ND(0.0016)]	ND(0.0016)	ND(0.0016)	ND(0.0016)	ND(0.0016)
Cobalt		ND(0.00050) [ND(0.00050)]	ND(0.00050)	ND(0.00050)	ND(0.00050)	ND(0.00050)
Copper		0.0034 J* [0.0029 J*]	0.0034 J*	0.0033 J*	0.0023 J*	0.0042 J*
Iron		----	----	----	----	----
Lead		0.0016 J* [0.0015 J*]	0.0027 J*	0.0024 J*	ND(0.0013)	ND(0.0013)
Magnesium		----	----	----	----	----
Manganese		----	----	----	----	----
Mercury		ND(0.00020)	ND(0.00020)	ND(0.00020)	ND(0.00020)	ND(0.00020)
Nickel		ND(0.0016) [ND(0.0016)]	----	----	----	----
Potassium		----	0.0018 J*	ND(0.0016)	0.0028 J*	ND(0.0016)
Selenium		0.0031 J* [ND(0.0030)]	ND(0.0030)	ND(0.0030)	ND(0.0030)	ND(0.0030)
Silver		ND(0.00060) [ND(0.00060)]	ND(0.00060)	ND(0.00060)	ND(0.00060)	ND(0.00060)
Sodium		----	----	----	----	----
Thallium		ND(0.0031) [ND(0.0031)]	ND(0.0031)	0.0033 J*	ND(0.0031)	0.0032 J*
Tin		ND(0.0047)	ND(0.0047)	ND(0.0047)	ND(0.0047)	ND(0.0047)
Vanadium		ND(0.00060) [ND(0.00060)]	0.0011 J*	0.00070 J*	0.00075 J*	ND(0.00060)
Zinc		0.0199 J* [0.0194 J*]	ND(0.0012)	0.0012 J*	ND(0.0012)	0.0024 J*

Notes:

1. Samples collected by Blasland, Bouck & Lee, Inc., and submitted to CompuChem, Inc., for analysis of Appendix IX + 3 inorganics.
2. Only parameters detected in at least one sample are shown.
3. J* - Indicates the reported value is less than the CLP-required detection limit (CRDL), but greater than the instrument detection limit (IDL).
4. ND - Compound was not detected, associated detection limit presented in parentheses.
5. Results of duplicates samples are presented in brackets.
6. ---- Indicates that the laboratory did not analyze for this parameter for this sample.

TABLE 7-1H

GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS

MCP PHASE II/RCRA FACILITY
INVESTIGATION REPORT FOR HILL 78 AREA

SUMMARY OF SEDIMENT PCB DATA - 1996
(Results are presented in dry-weight parts per million, ppm)

Sample ID.	Sample Depth (feet)	Date Collected	PCB-1260
H78SE-3	0 - 1	09/11/96	3.7 [3.5]
H78SE-5	0 - 0.9	09/11/96	0.38
H78SE-6	0 - 1	09/11/96	200
H78SE-7	0 - 0.6	09/11/96	0.91 P
H78SE-71-SECB	0 - 0.3	09/11/96	49.0
S2	0 - 0.9	09/11/96	1.3 P

Notes:

1. Samples collected by Blasland, Bouck & Lee, Inc., and submitted to CompuChem, Inc., for analysis of PCBs.
2. Only parameters detected in at least one sample are shown.
3. P - Indicates dual column percent difference value exceeded 25 percent.
4. Results of duplicate samples are presented in brackets.

TABLE 7-11

GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS

MCP PHASE II/RCRA FACILITY
INVESTIGATION REPORT FOR HILL 78 AREA

SUMMARY OF SEDIMENT VOLATILE ORGANICS DATA - MAY 1991 AND SEPTEMBER 1996
(Results are presented in dry-weight parts per million, ppm)

Parameter	Sample ID.:	H78SE-3	H78SE-5	H78SE-6	H78SE-7	H78SE-71-SECB	S2
	Sample Depth (feet):	0 - 1	0 - 0.9	0 - 1	0 - 0.6	0 - 0.3	0 - 0.9
	Date Collected:	09/11/96	09/11/96	09/11/96	09/11/96	09/11/96	09/11/96
1,1,1-Trichloroethane		ND(0.021) [ND(0.030)]	ND(0.022)	ND(0.021)	ND(0.029)	0.73 J	ND(0.032)
1,1-Dichloroethane		ND(0.016) [ND(0.023)]	ND(0.017)	ND(0.016)	ND(0.022)	0.25 J	ND(0.024)
1,2-Dibromo-3-chloropropane		ND(0.052) [ND(0.076)]	ND(0.056)	ND(0.053)	ND(0.074)	ND(5.1)	ND(0.079)
Acetone		0.010 JB [0.02 JB]	0.010 JB	0.0080 JB	0.030JB	ND(2.4)	ND(0.14)
Acetonitrile		0.0220 JB [0.035 JB]	0.014 JB	0.019 JB	0.032 JB	ND(36)	0.026 JB
Chlorobenzene		0.0040 J [0.0020 J]	ND(0.017)	ND(0.016)	0.0020 J	34	0.0030 J
Chloroethane		ND(0.021) [ND(0.030)]	ND(0.022)	ND(0.021)	ND(0.029)	0.30 J	ND(0.032)
Methylene chloride		0.009 JB [0.016 JB]	0.0060 JB	0.0050 JB	0.018 JB	0.57 JB	0.017 JB
Toluene		ND(0.016) [ND(0.023)]	ND(0.017)	ND(0.016)	ND(0.022)	0.75 J	ND(0.024)
Trichlorofluoromethane		0.0010 J [ND(0.030)]	0.0010J	0.0010 J	ND(0.029)	ND(3.8)	0.0020 J
Xylenes (Total)		ND(0.021) [ND(0.030)]	ND(0.022)	ND(0.021)	ND(0.029)	0.36 J	ND(0.032)

Notes:

1. Samples collected by Blasland, Bouck & Lee, Inc., and submitted to CompuChem, Inc. for analysis of Appendix IX + 3 volatile organics.
2. Only parameters detected in at least one sample are shown.
3. J - Indicates an estimated value less than the CLP-required quantitation limit.
4. B - Compound also detected in associated method blank sample.
5. ND - Compound was not detected, associated detection limit presented in parentheses.
6. Results of duplicate samples are presented in brackets.

TABLE 7-1J

GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS

MCP PHASE II/RCRA FACILITY
INVESTIGATION REPORT FOR HILL 78 AREA

SUMMARY OF SEDIMENT SEMIVOLATILE ORGANICS DATA - MAY 1991 AND SEPTEMBER 1996
(Results are presented in dry-weight parts per million, ppm)

Parameter	Sample ID.:	H78SE-3	H78SE-5	H78SE-6	H78SE-7	H78SE-71-SECB	S2
	Sample Depth (feet):	0 - 1	0 - 0.9	0 - 1	0 - 0.6	0 - 0.3	0 - 0.9
	Date Collected:	09/11/96	09/11/96	09/11/96	09/11/96	09/11/96	09/11/96
1,2,3,4-Tetrachlorobenzene		ND(0.66) [---]	---	---	---	91 E	ND(1.0)
1,2,3,5-Tetrachlorobenzene		ND(1.3) [---]	---	---	---	21 E	ND(2.0)
1,2,3-Trichlorobenzene		ND(0.62) [---]	---	---	---	60 E	ND(0.94)
1,3,5- Trichlorobenzene		ND(0.630) [---]	---	---	---	1.4	ND(0.96)
1,2,4,5-Tetrachlorobenzene		ND(1.3) [ND(2.7)]	ND(1.4)	ND(1.4)	ND(1.9)	21 E	ND(2.0)
1,2,4-Trichlorobenzene		ND(0.57) [ND(1.1)]	ND(0.61)	0.041 J	ND(0.80)	300 D	ND(0.86)
1,2-Dichlorobenzene		ND(0.61) [ND(0.88)]	ND(0.65)	ND(0.63)	ND(0.86)	9.0	ND(0.92)
1,3-Dichlorobenzene		ND(0.53) [ND(0.76)]	ND(0.56)	ND(0.54)	ND(0.74)	27 D	ND(0.80)
1,4-Dichlorobenzene		ND(0.54) [ND(0.78)]	ND(0.58)	ND(0.55)	ND(0.75)	160 D	ND(0.81)
1-Methylnaphthalene		0.039 J [---]	---	---	---	1.1 J	0.23 J
2-Methylnaphthalene		0.037 J [ND(1.3)]	ND(0.93)	ND(0.89)	0.35 J	1.5	0.26 J
3-Methylphenol		ND(1.3) [ND(1.9)]	ND(1.4)	ND(1.4)	0.53 J	ND(2.4)	ND(2.0)
4-Methylphenol		ND(1.3) (ND(1.9))	ND(1.4)	ND(1.4)	0.53 J	ND(2.4)	ND(2.0)
Acenaphthene		0.24 J [0.28 J]	0.084 J	ND(0.70)	0.86 J	ND(1.2)	1.5
Acenaphthylene		0.072 J [0.091 J]	ND(0.74)	ND(0.71)	0.19 J	ND(1.2)	0.10 J
Aniline		ND(0.58) [ND(0.84)]	ND(0.62)	ND(0.59)	0.23 J	ND(1.0)	ND(0.88)
Anthracene		0.60 J [0.73 J]	0.19 J	ND(0.78)	1.8	ND(1.3)	2.6
Benzal chloride		ND(0.55) [---]	---	---	---	0.66 J	ND(0.83)
Benzo(a)anthracene		2.8 [3.3]	0.85	0.19 J	4.6	ND(1.2)	5.7
Benzo(a)pyrene		2.7 [3.5]	0.79	0.22 J	3.0	ND(1.2)	4.2
Benzo(b)fluoranthene		5.6 DX [7.3 X]	1.8 X	0.52 XJ	6.8 X	ND(1.4)	8.7 DX
Benzo(g,h,i)perylene		3.6 [5.8]	0.71	0.52 J	4.4	ND(1.1)	2.8

(See Notes on Page 2)

TABLE 7-1J

GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS

MCP PHASE II/RCRA FACILITY
INVESTIGATION REPORT FOR HILL 78 AREA

SUMMARY OF SEDIMENT SEMIVOLATILE ORGANICS DATA - MAY 1991 AND SEPTEMBER 1996
(Results are presented in dry-weight parts per million, ppm)

Parameter	Sample ID.:	H78SE-3	H78SE-5	H78SE-6	H78SE-7	H78SE-71-SECB	S2
	Sample Depth (feet):	0 - 1	0 - 0.9	0 - 1	0 - 0.6	0 - 0.3	0 - 0.9
	Date Collected:	09/11/96	09/11/96	09/11/96	09/11/96	09/11/96	09/11/96
Benzo(k)fluoranthene		4.6 X [5.2 X]	1.2 X	0.37 XJ	4.9 X	ND(1.1)	6.7 X
Benzoic acid		0.084 J [---]	---	---	---	ND(3.4)	0.085 J
bis(2-Ethylhexyl)phthalate		0.66 J [1.2]	0.074 J	0.26 J	0.35 J	ND(1.4)	0.13 J
Butyl benzyl phthalate		0.20 J [0.11 J]	ND(0.75)	ND(0.72)	ND(0.99)	ND(1.2)	ND(1.1)
Chrysene		3.4 [4.2]	0.95	0.24 J	4.7	ND(0.98)	5.7
Di-n-octyl phthalate		0.043 J [ND(0.72)]	ND(0.53)	ND(0.51)	ND(0.70)	ND(0.87)	ND(0.75)
Dibenzo(a,h)anthracene		0.22 J [0.40 J]	ND(0.48)	ND(0.46)	ND(0.62)	ND(0.78)	0.27 J
Dibenzofuran		0.15 J [0.18 J]	0.054 J	ND(0.73)	0.65 J	ND(1.2)	1.2
Diethyl phthalate		ND(0.74) [ND(1.1)]	ND(0.80)	ND(0.76)	ND(1.0)	ND(1.3)	ND(1.1)
Dimethyl phthalate		0.11 J [ND(1.4)]	0.11 J	ND(1.0)	ND(1.4)	ND(1.8)	0.72 J
Ethylmethacrylate		ND(0.61) [---]	---	---	---	ND(1.1)	ND(0.92)
Fluoranthene		5.5 [6.7]	2	0.37 J	8.1 E	ND(1.7)	16 D
Fluorene		0.38 J [0.47 J]	0.14 J	ND(0.73)	1.5	0.30 J	2.4
Hexachlorobenzene		ND(0.80) [ND(1.2)]	ND(0.85)	0.13 J	ND(1.1)	ND(1.4)	ND(1.2)
Indeno(1,2,3-cd)pyrene		1.1 [1.8]	0.24 J	0.16 J	1.2	ND(0.83)	0.87
Naphthalene		0.047 J [ND(0.99)]	ND(0.73)	ND(0.70)	0.48 J	0.69 J	0.50 J
Pentachlorobenzene		ND(0.68) [ND(0.99)]	ND(0.73)	ND(0.70)	ND(0.96)	24 E	ND(1.0)
Phenanthrene		4.0 [4.9]	1.5	0.22 J	9.0 E	ND(1.1)	13 E
Phenol		ND(0.59) [ND(0.85)]	ND(0.63)	ND(0.60)	ND(0.83)	3.4	ND(0.89)
Pyrene		8.4 D [7.1]	1.7	0.47 J	10 E	0.44 J	15 D

Notes:

1. Samples were collected by Blasland, Bouck, & Lee, Inc., and submitted to CompuChem, Inc. for analysis of Appendix IX + 3 semivolatile organics.
2. Only parameters detected in at least one sample are shown.
3. J - Indicates an estimated value less than the CLP-required quantitation limit.
4. X - Manual quantitation was performed to resolve benzo(b) fluoranthene and benzo(k) fluoranthene.
5. E - Indicates inductively coupled plasma (ICP) serial dilution analysis was outside control limits.
6. Results of duplicate samples are presented in brackets.
7. ---- Indicates that the laboratory did not analyze for this parameter for this sample.
8. D = Dilution.

TABLE 7-1K

GENERAL ELECTRIC COMPANY - PITTSFIELD,MASSACHUSETTS

MCP PHASE II/RCRA FACILITY
INVESTIGATION REPORT FOR HILL 78 AREA

SUMMARY OF SEDIMENT INORGANICS DATA - MAY 1991 AND SEPTEMBER 1996
(Results are presented in dry-weight parts per million, ppm)

Parameter / Sample ID.: / Sample Depth (feet): / Date Collected:	H78SE-3 0 - 1 09/11/96	H78SE-5 0 - 0.9 09/11/96	H78SE-6 0 - 1 09/11/96	H78SE-7 0 - 0.6 09/11/96	H78SE-71-SECB 0 - 0.3 09/11/96	S2 0 - 0.5 09/11/96
Aluminum	----	----	----	----	----	----
Antimony	0.42 J* [0.59 J*]	0.25 J*	ND(0.26)	0.44 J*	0.45 J*	0.41 J*
Arsenic	2.3 [3.0]	5.5	1.7	2.8	3.9	4.9
Barium	26.3 [36.6]	86.8	17.1 J*	20.5 J*	53.9	36.2
Beryllium	0.18 J* [0.28 J*]	0.23 J*	0.16 J*	0.20 J*	0.36 J*	0.3J*
Cadmium	0.29 J* [0.40 J*]	ND(0.033)	ND(0.032)	ND(0.059)	ND(0.11)	ND(0.05)
Calcium	----	----	----	----	----	----
Chromium	13.1 [21.6]	8.9	6.2	11.2	14.6	10
Cobalt	5.4 [8]	9.5	4.2 J*	8.1	11.8	8.3
Copper	31.4 [42.7]	15.2	11.6	17.2	31.1	23.5
Lead	43.8 [66.3]	19.5	11.6	20.1	21.1	25.1
Magnesium	----	----	----	----	----	----
Manganese	----	----	----	----	----	----
Mercury	ND(0.11) N [ND(0.23) N]	ND(0.12) N	ND(0.12) N	ND(0.22) N	0.20 N	ND(0.16)N
Nickel	11.8 [19.1]	11.9	8.9	13.7	20.6	20.2
Selenium	0.54 N [0.68 J*N]	0.88 N	ND(0.34) N	0.54 J*N	0.83 J*N	0.76 J* N
Silver	ND(0.06)[ND(0.09)]	ND(0.07)	ND(0.06)	ND(0.09)	ND(0.11)	ND(0.09)N
Sodium	----	----	----	----	----	----
Thallium	ND(0.32)	ND(0.34)	ND(0.33)	ND(0.45)	ND(0.57)	ND(0.49)
Tin	2.2 J* [3.1 J*]	1.6 J*	1.7 J*	2.3 J*	6.3 J*	2.6 J*
Vanadium	21.9 [32.4]	17.7	8.7	18.1	19.7	23.6
Zinc	217 [312]	86.8	45.1	60.8	115	96.6

Notes:

1. Samples collected by Blasland, Bouck & Lee, Inc., and submitted to CompuChem, Inc. for analysis of Appendix IX + 3 inorganics.
2. Only parameters detected in at least one sample are shown.
3. J* - Indicates the reported value is less than the CLP-required detection limit (CRDL), but greater than the instrument detection limit (IDL).
4. E - Indicates inductively coupled plasma (ICP) serial dilution analysis was outside control limits.
5. N - Indicates sample matrix spike analysis was outside control limits.
6. ND - Compound was not detected, associated detection limit presented in parentheses.
7. Results of duplicate samples are presented in brackets.
8. * - Indicates the laboratory duplicate analysis exceeded control limits.
9. ---- Indicates that the respective laboratory did not analyze for this parameter for this sample.

TABLE 8-1

GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS

MCP PHASE II/RCRA FACILITY
INVESTIGATION REPORT FOR HILL 78 AREA

24-HOUR HIGH VOLUME AMBIENT PCB CONCENTRATIONS: AUGUST 20, 1991 - AUGUST 14, 1992
(Results Are Presented in Micrograms Per Cubic Meter [$\mu g/m^3$])

Monitor Identification: Location Description:	002 NWL	003 LYM	004 H78	005 OP3	006 BCC	007 64Y	001[1] 64YC	008 32S
Mean Concentration[2]:	0.0062	0.0013	0.0007	<0.0005	<0.0005	0.0011	0.0011	0.0050[3]
Mean Spring[2]:	0.0097	0.0016	0.0008	0.0006	<0.0005	0.0012	0.0009	(-)
Mean Summer[2,4]:	0.0117	0.0029	0.0011	0.0010	<0.0005	0.0022	0.0020	(-)
Mean Fall[2]:	0.0028	0.0006	<0.0005	<0.0005	<0.0005	0.0006	0.0007	(-)
Mean Winter[2]:	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0007	(-)
Max. 24 Hour Concentration:	0.030	0.0059	0.0035	0.0019	0.0015	0.0037	0.0041	0.0071
Date of Occurrence:	06/15/92	08/02/92	06/05/92	07/19/92	08/14/92	07/21/92	08/02/92	08/02/92
Min. 24 Hour Concentration[5]:	ND[6]	ND	ND	ND	ND	ND	ND	0.0035
Date of Occurrence:	(-)[7]	(-)	(-)	(-)	(-)	(-)	(-)	07/09/92
Total # of Valid Samples:	30	30	30	31	31	29	29	6
% Below the Detection Limit:	26.7	46.7	76.7	74.2	83.9	37.9	37.9	0

Notes:

1. Co-located with Monitor 007.
2. Averages are calculated using one-half the detection limit for non-detect events.
3. Based on six sampling events between June 15, 1992 and August 14, 1992.
4. Observations from summer 1991 and 1992 were combined to produce summer averages.
5. Sampling Stations 001 through 007 had several observations of non-detect.
6. ND - Below the detection limit of 0.0005 $\mu g/m^3$.
7. (-) - Indicates that a non-detect was recorded on several occasions.
8. Shaded column contains air sampling data collected within the Hill 78 Area.

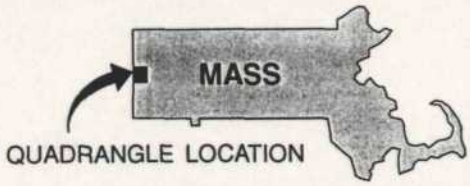
Reference: Information was reproduced from Zorex, November 1992 - Table 2.

Figures

REFERENCE: PITTSFIELD EAST, MASS. USGS QUADS., 7.5 MIN. SERIES, 1988

2000' 0 2000'

APPROXIMATE SCALE: 1" = 2000'



QUADRANGLE LOCATION

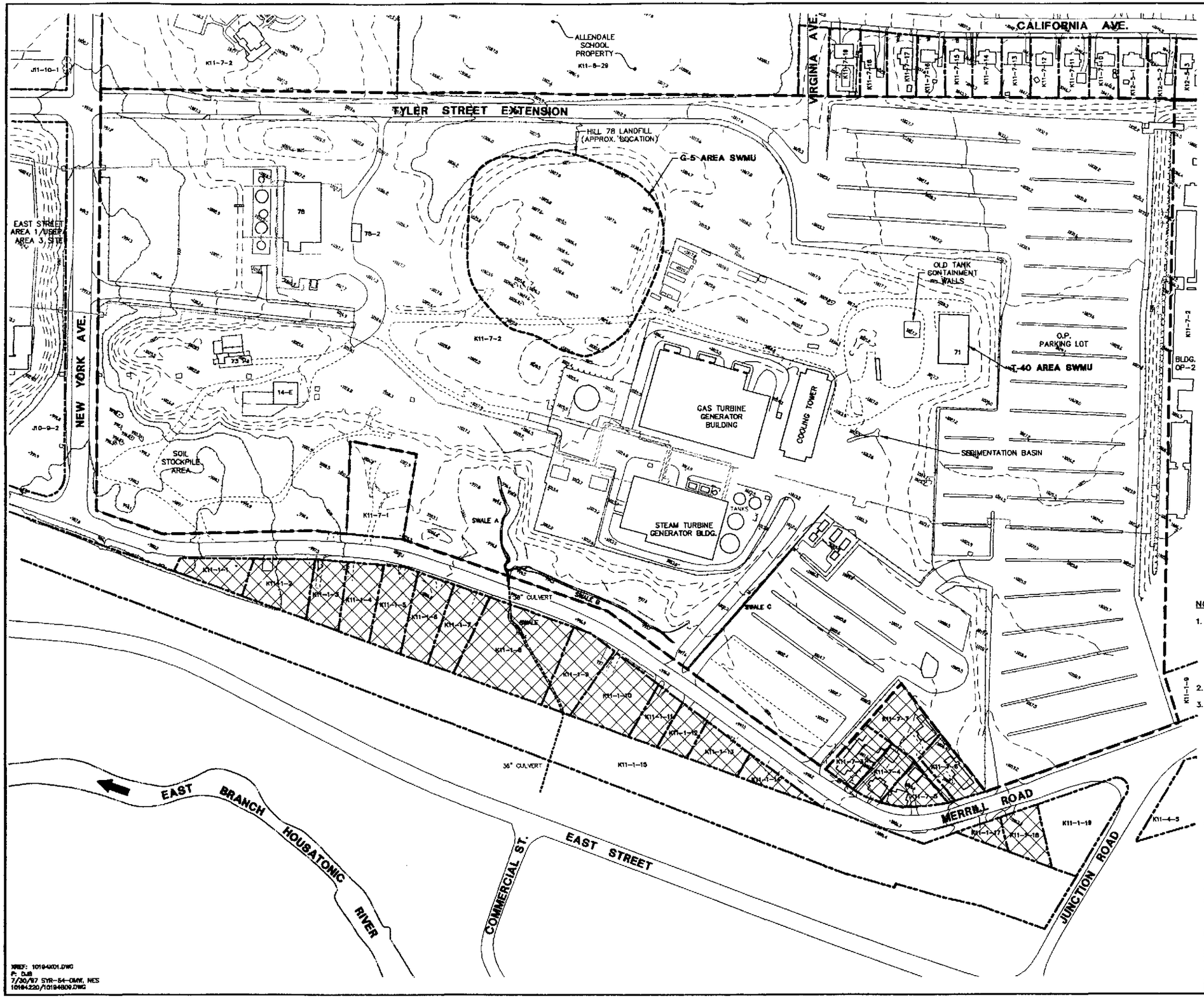
GENERAL ELECTRIC COMPANY
PITTSFIELD MASSACHUSETTS
MCP PHASE II/RFI REPORT FOR
HILL 78 AREA/USEPA AREA 2

LOCATION PLAN

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

FIGURE **1-1**

05/97 SYR-D54-DJH
10194001/10194n01.CDR



LEGEND:

- APPROXIMATE SITE BOUNDARY
- FENCELINE
- APPROXIMATE PROPERTY LINE
- K11-1-8 PROPERTY ID
- ABOVEGROUND STEAMLINE
- TOPOGRAPHIC CONTOUR LINE 5 FT CONTOUR INTERVAL
- 1016.5 ELEVATION POINT
- RESIDENCES TO BE REMOVED AS PART OF RE-LOCATION OF MERRILL ROAD

NOTES:

1. MAPPING BASED ON AUTOCAD DRAWING FILE (PLANT3.CAD) AS PROVIDED BY GE AND ADDITIONAL INFORMATION FROM THE MCP PHASE II SCOPE OF WORK AND PROPOSAL FOR RCRA FACILITY INVESTIGATION (O'BRIEN & GERE ENGINEERS, INC., FEBRUARY 1996) AS WELL AS SUPPLEMENTAL SITE SURVEY INFORMATION OBTAINED BY HILL ENGINEERS, PLANNERS & ARCHITECTS (WEEK OF MAY 29, 1997). LOCATIONS SOUTH OF MERRILL ROAD DIGITIZED FROM AUGUST 1990 AIR PHOTO AND ARE APPROXIMATE.
2. SITE BOUNDARY IS APPROXIMATE.
3. PRE-1996 SAMPLE LOCATIONS ARE APPROXIMATE. 1996 SAMPLE LOCATIONS SURVEYED BY HILL ENGINEERS, PLANNERS & ARCHITECTS OR BLASLAND, BOUCK AND LEE, INC.

100' 0 100' 200'
SCALE

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

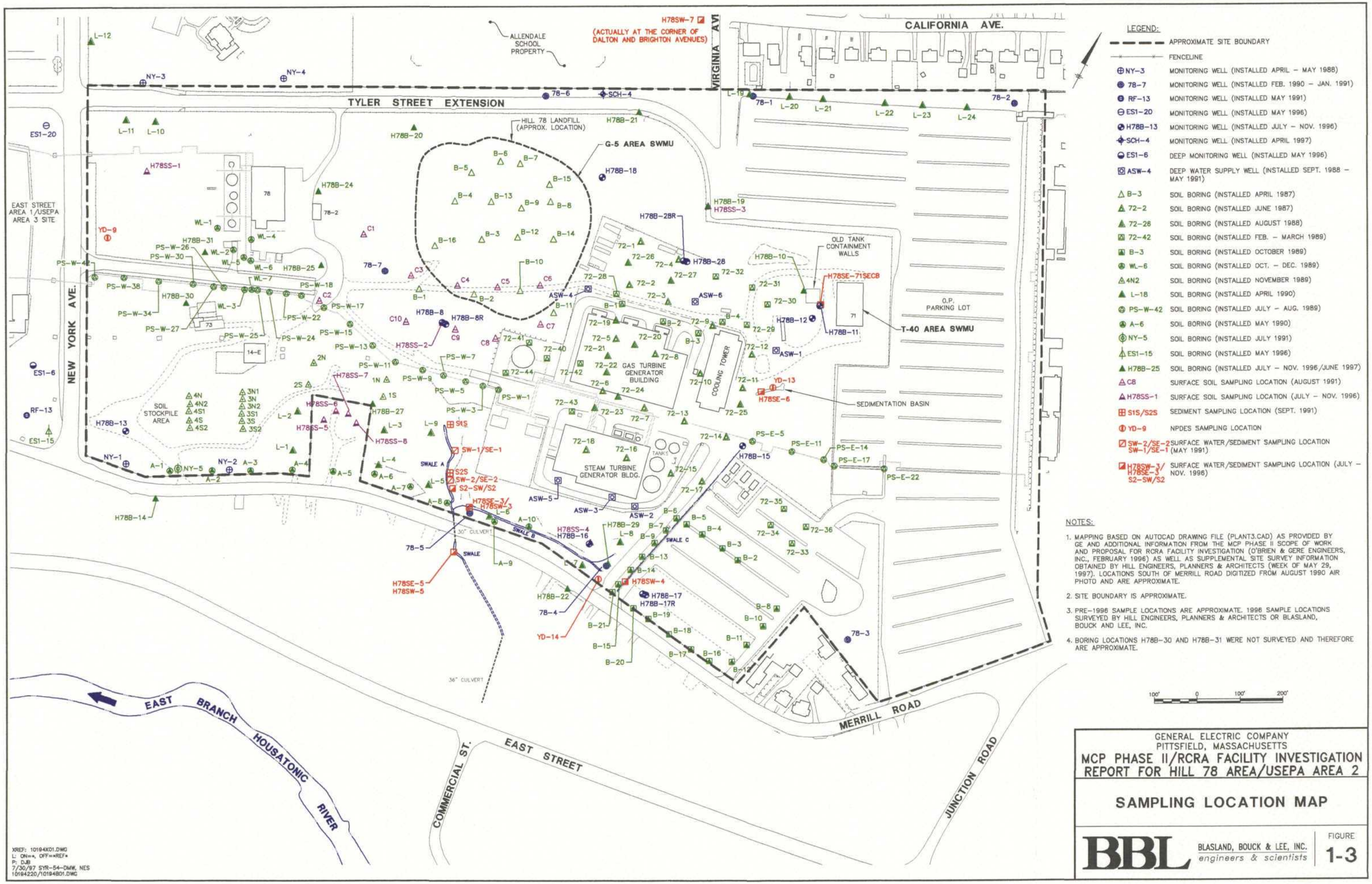
MCP PHASE II/RCRA FACILITY INVESTIGATION REPORT FOR HILL 78 AREA/USEPA AREA 2

SITE PLAN

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

FIGURE 1-2

XREF: 10194X01.DWG
P: DJB
7/30/97 SYR-54-DMW, NES
10194220/10194809.DWG



GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

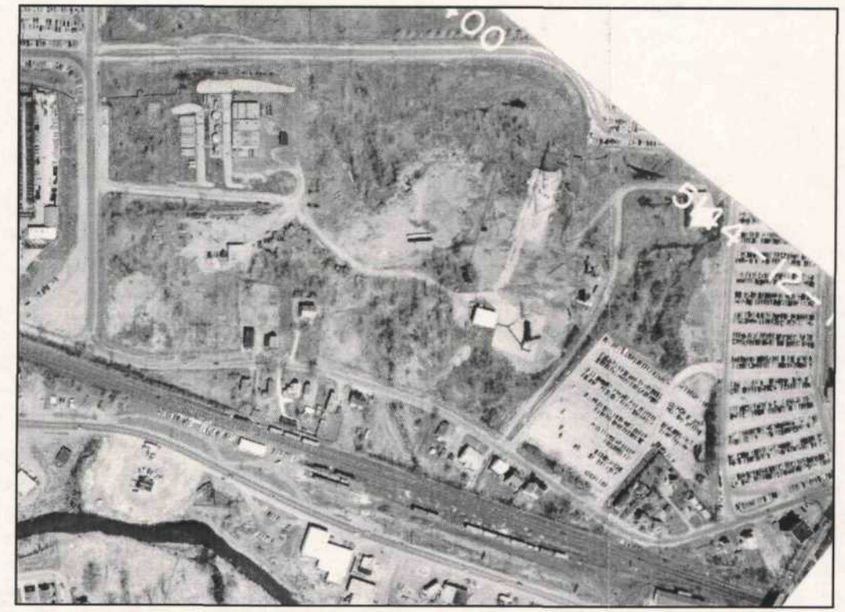
MCP PHASE II/RCRA FACILITY INVESTIGATION REPORT FOR HILL 78 AREA/USEPA AREA 2

SAMPLING LOCATION MAP

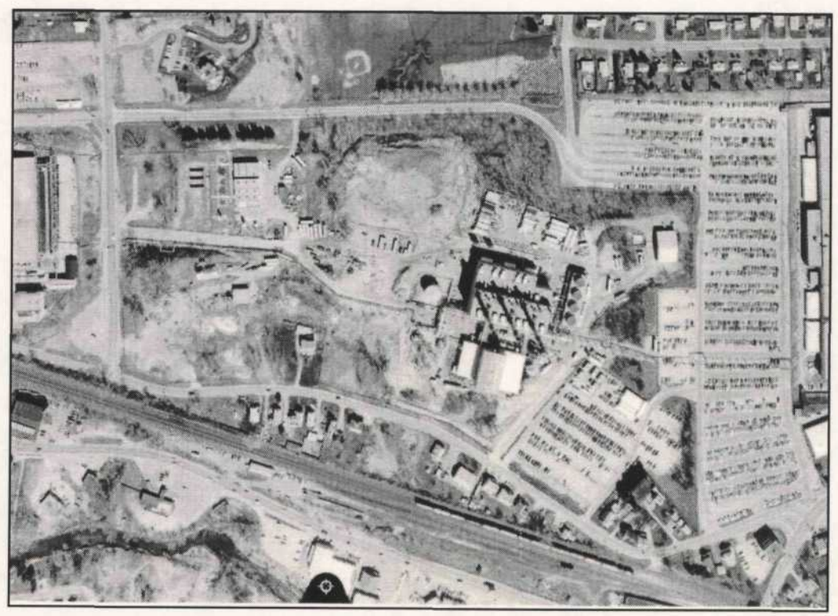
BBL BLASLAND, BOUCK & LEE, INC. engineers & scientists

FIGURE 1-3

July 13, 1942



April 14, 1969



April 23, 1990

NOTE:
Photographs were produced by scanning aerial photographs from Lockwood Mapping, 7/42, 4/69 & 4/90.

500 0 500

APPROX. SCALE: 1" = 500 FEET

GENERAL ELECTRIC COMPANY
PITTSFIELD MASSACHUSETTS
MCP PHASE II/RFI REPORT FOR HILL 78 AREA/USEPA AREA 2

SELECT HISTORICAL AERIAL PHOTOGRAPHS

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

FIGURE **2-1**

05/97 SYR-D54-DJH
10194001/10194g01.CDR

NOTE:
Photograph was produced by scanning an aerial photograph 8/90.

300 0 300

APPROX. SCALE: 1" = 300 FEET

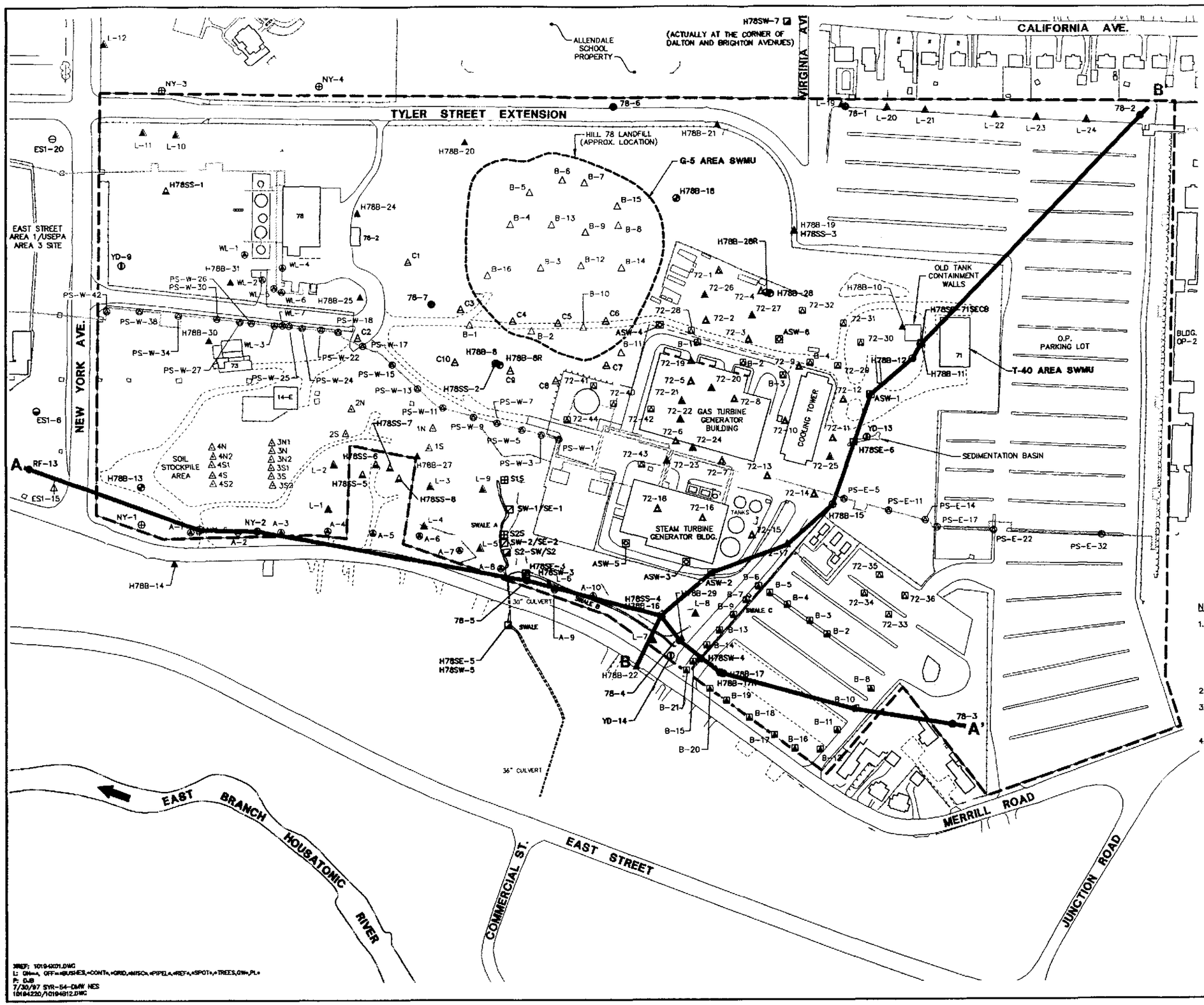
GENERAL ELECTRIC COMPANY
PITTSFIELD MASSACHUSETTS
MCP PHASE II/RFI REPORT FOR HILL 78 AREA/USEPA AREA 2

AERIAL PHOTOGRAPH AUGUST 1990

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

FIGURE 2-2

05/97 SYR-D54-DJH
10194001/10194g01.CDR



LEGEND:

— — —	APPROXIMATE SITE BOUNDARY
———	FENCELINE
NY-3	MONITORING WELL (INSTALLED APRIL – MAY 1988)
78-7	MONITORING WELL (INSTALLED FEB. 1990 – JAN. 1991)
RF-13	MONITORING WELL (INSTALLED MAY 1991)
ES1-20	MONITORING WELL (INSTALLED MAY 1996)
H78B-13	MONITORING WELL (INSTALLED JULY – NOV. 1996)
ES1-6	DEEP MONITORING WELL (INSTALLED MAY 1996)
ASW-4	DEEP WATER SUPPLY WELL (INSTALLED SEPT. 1988 – MAY 1991)
B-3	SOIL BORING (INSTALLED APRIL 1987)
72-2	SOIL BORING (INSTALLED JUNE 1987)
72-26	SOIL BORING (INSTALLED AUGUST 1988)
72-42	SOIL BORING (INSTALLED FEB. – MARCH 1989)
B-3	SOIL BORING (INSTALLED OCTOBER 1989)
WL-6	SOIL BORING (INSTALLED OCT. – DEC. 1989)
4N2	SOIL BORING (INSTALLED NOVEMBER 1989)
L-18	SOIL BORING (INSTALLED APRIL 1990)
PS-W-42	SOIL BORING (INSTALLED JULY – AUG. 1989)
A-6	SOIL BORING (INSTALLED MAY 1990)
NY-5	SOIL BORING (INSTALLED JULY 1991)
ES1-15	SOIL BORING (INSTALLED MAY 1996)
H78B-25	SOIL BORING (INSTALLED JULY – NOV. 1996/JUNE 1997)
C8	SURFACE SOIL SAMPLING LOCATION (AUGUST 1991)
H78SS-1	SURFACE SOIL SAMPLING LOCATION (JULY – NOV. 1996)
H78SE-3	SEDIMENT SAMPLING LOCATION (JULY – NOV. 1996)
S1S/S2S	SEDIMENT SAMPLING LOCATION (SEPT. 1991)
YD-9	NPDES SAMPLING LOCATION
SW-2/SE-2 SW-1/SE-1	SURFACE WATER/SEDIMENT SAMPLING LOCATION (MAY 1991)
H78SW-3 H78SE-3 S2-SW/S2	SURFACE WATER/SEDIMENT SAMPLING LOCATION (JULY – NOV. 1996)
A —— A'	CROSS SECTION LOCATION

NOTES:

1. MAPPING BASED ON AUTOCAD DRAWING FILE (PLANT3.CAD) AS PROVIDED BY GE AND ADDITIONAL INFORMATION FROM THE MCP PHASE II SCOPE OF WORK AND PROPOSAL FOR RCRA FACILITY INVESTIGATION (O'BRIEN & GERE ENGINEERS, INC., FEBRUARY 1996) AS WELL AS SUPPLEMENTAL SITE SURVEY INFORMATION OBTAINED BY HILL ENGINEERS, PLANNERS & ARCHITECTS (WEEK OF MAY 29, 1997). LOCATIONS SOUTH OF MERRILL ROAD DIGITIZED FROM AUGUST 1990 AIR PHOTO AND ARE APPROXIMATE.
2. SITE BOUNDARY IS APPROXIMATE.
3. PRE-1996 SAMPLE LOCATIONS ARE APPROXIMATE. 1996 SAMPLE LOCATIONS SURVEYED BY HILL ENGINEERS, PLANNERS & ARCHITECTS OR BLASLAND, BOUCK AND LEE, INC.
4. BORING LOCATIONS H78B-30 AND H78B-31 WERE NOT SURVEYED AND THEREFORE ARE APPROXIMATE.

100' 0 100' 200'
SCALE

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

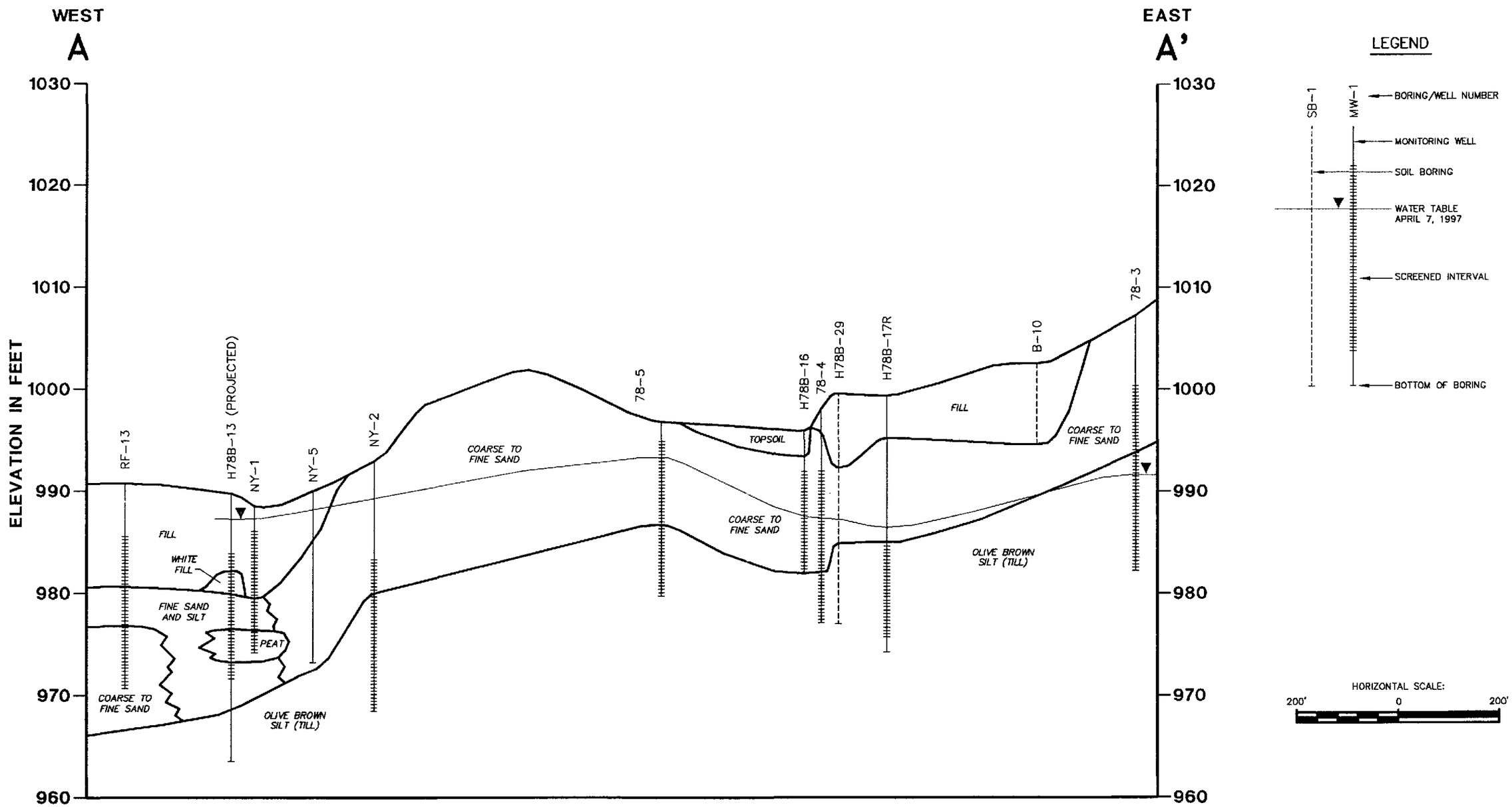
MCP PHASE II/RCRA FACILITY INVESTIGATION REPORT FOR HILL 78 AREA/USEPA AREA 2

CROSS SECTION LOCATION MAP

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

FIGURE 2-3

XREF: 10194X01.DWG
LI: ON=*, OFF=*BUSHES,*CONT*,*GRID,*MISC*,*PIPE2,*,*REF*,*SPOT*,*TREES,ON=*,PL*
P: DJB
7/30/97 SYR-54-DMW NES
10194220/10194812.DWG



CROSS SECTION A-A'

VERTICAL SCALE: 1" = 10'

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

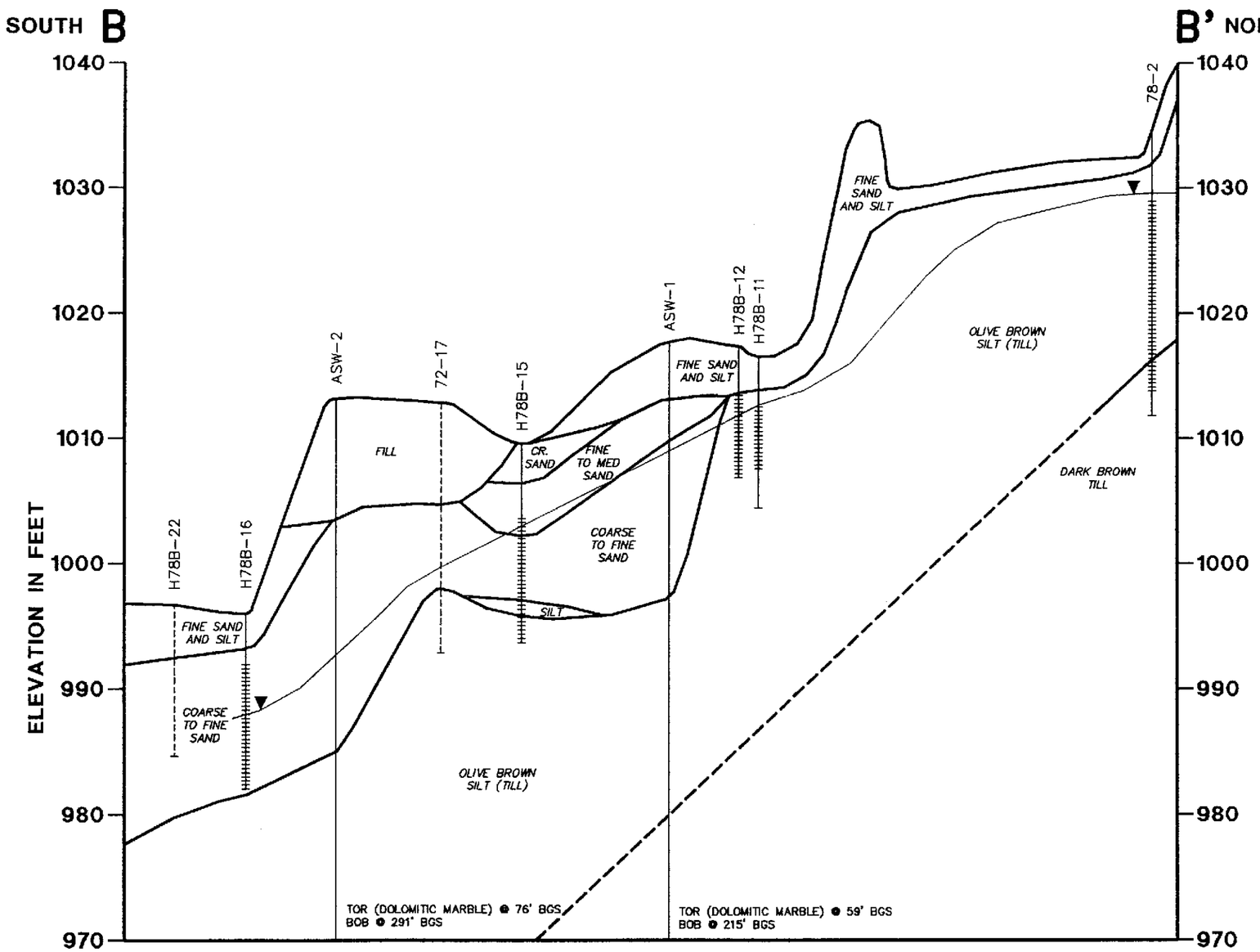
MCP PHASE II/RCRA FACILITY INVESTIGATION REPORT FOR HILL 78 AREA/USEPA AREA 2

GEOLOGIC CROSS SECTION A-A'

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

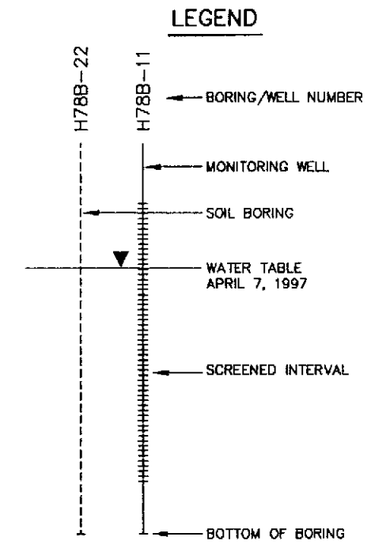
FIGURE **2-4**

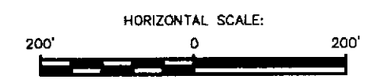
P: OJB
7/17/97 SYR-54-DMW NES
10194220\10194CSA.DWG



CROSS SECTION B-B'

VERTICAL SCALE: 1" = 10'





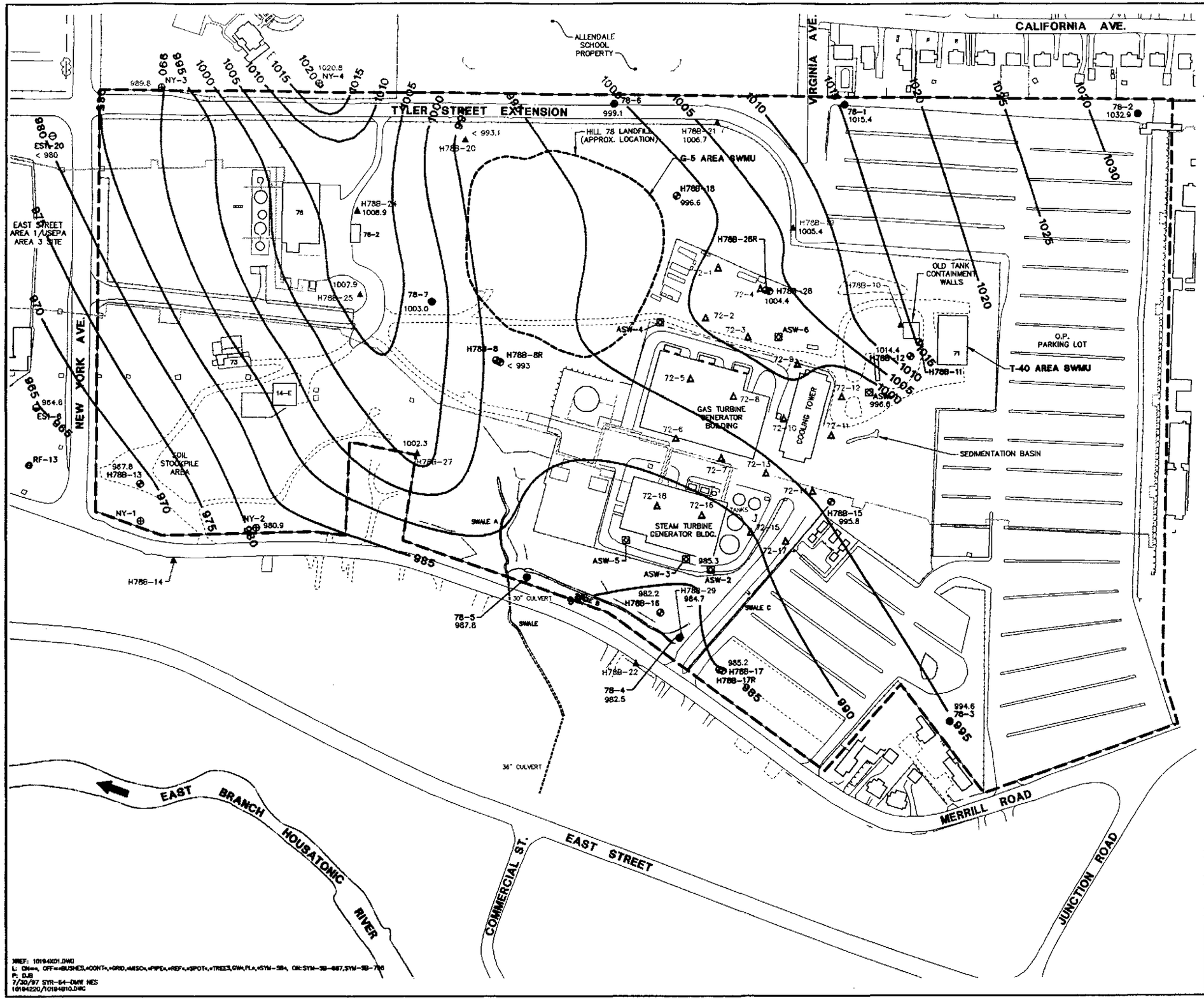
GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS
MCP PHASE II/RCRA FACILITY INVESTIGATION
REPORT FOR HILL 78 AREA/USEPA AREA 2

GEOLOGIC CROSS SECTION B-B'

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

FIGURE 2-5

P: DJB
7/30/97 SYR-54-DMW NES
10194220\10194CS8.DWG



LEGEND:

— — — —	APPROXIMATE SITE BOUNDARY
—+—+—	FENCELINE
⊕ NY-3	MONITORING WELL (INSTALLED APRIL – MAY 1988)
● 78-7	MONITORING WELL (INSTALLED FEB. 1990 – JAN. 1991)
⊖ RF-13	MONITORING WELL (INSTALLED MAY 1991)
⊖ ESI-20	MONITORING WELL (INSTALLED MAY 1996)
⊕ H78B-13	MONITORING WELL (INSTALLED JULY – NOV. 1996)
⊖ ESI-6	DEEP MONITORING WELL (INSTALLED MAY 1996)
⊠ ASW-4	DEEP WATER SUPPLY WELL (INSTALLED SEPT. 1988 – MAY 1991)
△ 72-2	SOIL BORING (INSTALLED JUNE 1987)
▲ H78B-25	SOIL BORING (INSTALLED JULY – NOV. 1996)
995.6	TOP OF TILL ELEVATION (FEET)
< 993	THE TILL UNIT WAS NOT ENCOUNTERED WITHIN THE TOTAL DEPTH OF THE BORING. THE ELEVATION GIVEN WITH A LESS THAN SIGN (<) IS THE ELEVATION OF THE BASE OF BORING AND THE TOP OF TILL UNIT IS INTERPRETED TO BE BELOW THAT DEPTH
995 ———	TOP OF TILL ELEVATION CONTOUR LINE (FEET)

NOTES:

1. MAPPING BASED ON AUTOCAD DRAWING FILE (PLANT3.CAD) AS PROVIDED BY GE AND ADDITIONAL INFORMATION FROM THE MCP PHASE II SCOPE OF WORK AND PROPOSAL FOR RCRA FACILITY INVESTIGATION (O'BRIEN & GERE ENGINEERS, INC., FEBRUARY 1996) AS WELL AS SUPPLEMENTAL SITE SURVEY INFORMATION OBTAINED BY HILL ENGINEERS, PLANNERS & ARCHITECTS (WEEK OF MAY 29, 1997). LOCATIONS SOUTH OF MERRILL ROAD DIGITIZED FROM AUGUST 1990 AIR PHOTO AND ARE APPROXIMATE.
2. SITE BOUNDARY IS APPROXIMATE.
3. PRE-1996 SAMPLE LOCATIONS ARE APPROXIMATE. 1996 SAMPLE LOCATIONS SURVEYED BY HILL ENGINEERS, PLANNERS & ARCHITECTS OR BLASLAND, BOUCK AND LEE, INC.
4. ELEVATIONS REFERENCED TO NGVD OF 1929.

100' 0 100' 200'
SCALE

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

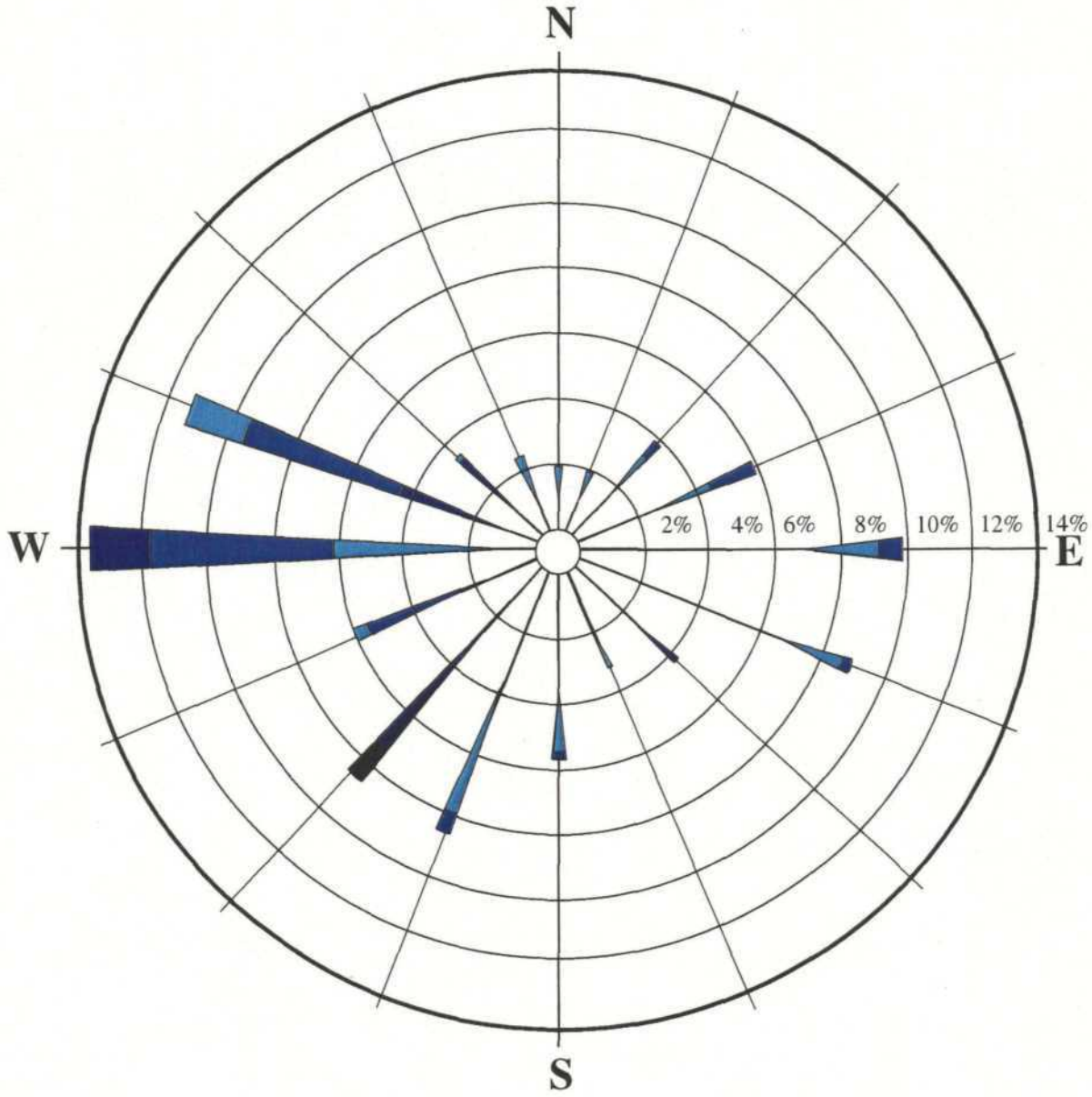
MCP PHASE II/RCRA FACILITY INVESTIGATION REPORT FOR HILL 78 AREA/USEPA AREA 2

TOP OF TILL CONTOURS

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

FIGURE 2-6

XREF: 10194X01.DWG
L: Ones, OFF=+BUSHES,+CONT*,+GRID,+MISC*,+PIPE*,+REF*,+SPOT*,+TREE3,GW*,PL*,+SYM-SB*, ON:SYM-SB-467,SYM-SB-796
P: DJB
7/30/97 SYR-64-DMW NES
10194220/10194810.DWG



NOTES:

1. INFORMATION WAS COLLECTED BY ZOREX ENVIRONMENTAL ENGINEERS, INC., DURING JANUARY 1 THROUGH DECEMBER 31, 1992 FROM A METEOROLOGICAL STATION LOCATED IN EAST STREET AREA 2/USEPA AREA 4.
2. FREQUENCIES INDICATE DIRECTION FROM WHICH THE WIND IS BLOWING.
3. CALM WINDS 2.94%.

WIND SPEED (KNOTS)

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS
MCP PHASE II/RCRA FACILITY INVESTIGATION REPORT FOR HILL 78 AREA/USEPA AREA 2

1992 WIND ROSE

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

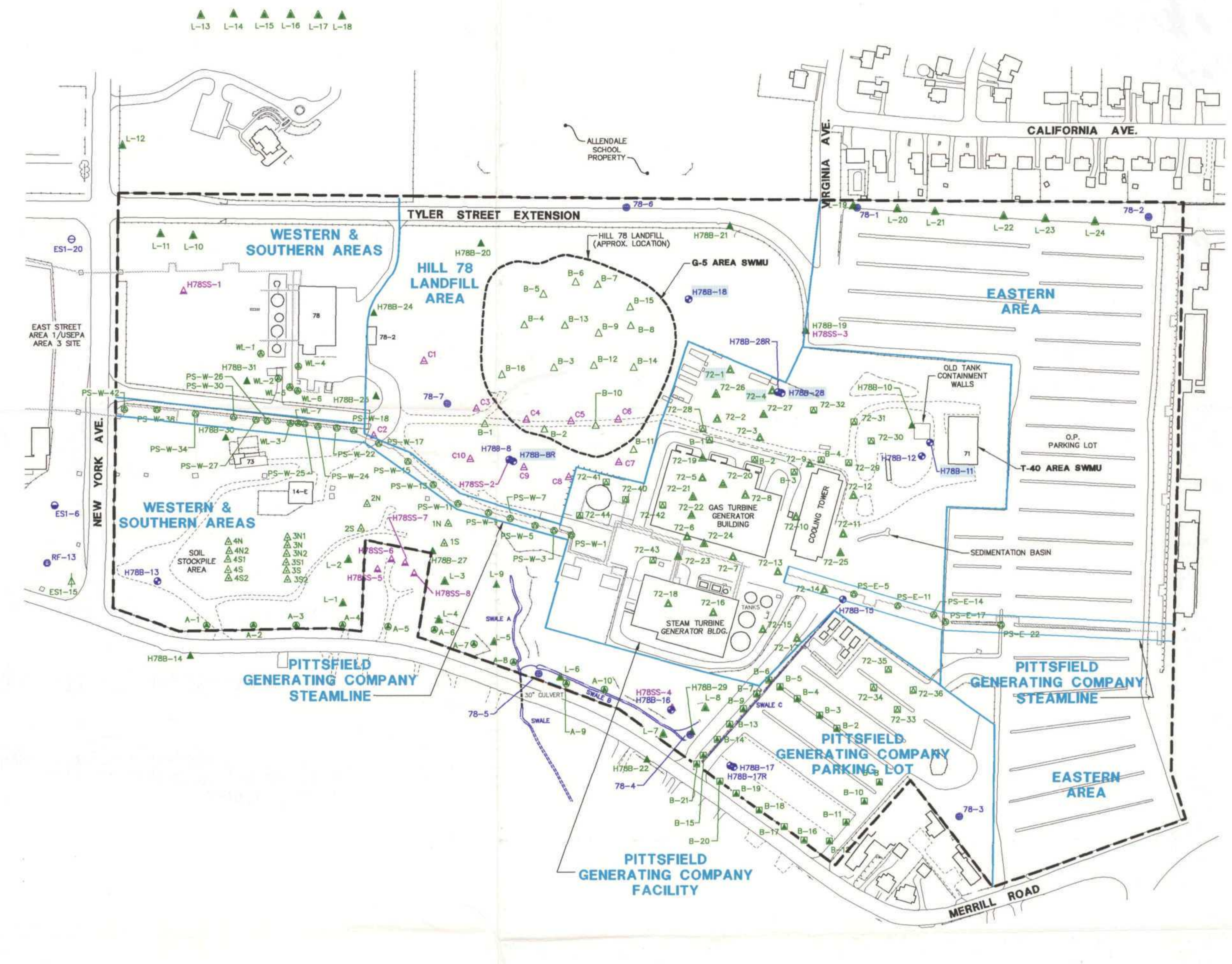
FIGURE **2-7**

06/97 SYR-D54-DJH
10194220/10194n01.CDR

SUMMARY OF SOIL BORING PCB DATA
(Results are presented in dry-weight parts per million, ppm)

HISTORIC DATA:																				
Boring	0 - 2'	0 - 4'	2 - 4'	2 - 6'	4 - 6'	4 - 8'	6 - 8'	6 - 10'	8 - 10'	8 - 12'	10 - 12'	10 - 14'	12 - 14'	14 - 16'	16 - 18'	18 - 20'	20 - 22'	22 - 24'	24 - 26'	26 - 28'
1N	4.2	---	---	ND	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---
1S	---	190	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2N	430	---	---	2.5	---	---	---	8.2	---	---	---	---	---	---	---	---	---	---	---	---
2S	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
3N	4.2	---	---	ND	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---
3N1	1.7	---	---	ND	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---
3N2	4.4	---	---	ND	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---
3S	2.4	---	---	ND	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---
3S1	15	---	---	ND	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---
3S2	5.3	---	---	ND	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---
4N	12	---	---	ND	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---
4N2	1.8	---	---	ND	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---
4S	21	---	---	ND	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---
4S1	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
4S2	5.1	---	---	ND	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---
72-01	663	---	---	---	447	---	378	---	1231	---	224	---	644	35	12	9	---	---	---	---
72-02	---	---	27	---	ND	---	ND	---	ND	---	2	---	ND	ND	ND	ND	---	---	---	---
72-03	95	---	ND	---	ND	---	ND	---	ND	---	ND	---	ND	ND	ND	---	---	---	---	---
72-04	12	---	13	---	3931	---	16067	---	5844	---	18741	---	917	348	331	3206	---	---	---	---
72-05	ND	---	ND	---	9	---	ND	---	---	---	2	---	ND	ND	ND	ND	---	---	---	---
72-06	ND	---	ND	---	ND	---	ND	---	---	---	ND	---	ND	ND	ND	ND	---	---	---	---
72-07	ND	---	ND	---	ND	---	ND	---	ND	---	ND	---	ND	ND	ND	---	---	---	---	---
72-08	ND	---	ND	---	ND	---	ND	---	ND	---	ND	---	ND	ND	ND	ND	---	---	---	---
72-09	ND	---	ND	---	47	---	ND	---	---	---	ND	---	ND	ND	ND	ND	---	---	---	---
72-10	ND	---	ND	---	ND	---	ND	---	---	---	ND	---	ND	ND	ND	ND	---	---	---	---
72-11	ND	---	ND	---	ND	---	ND	---	ND	---	ND	---	ND	ND	---	ND	---	---	---	---
72-12	ND	---	ND	---	ND	---	ND	---	ND	---	ND	---	ND	ND	ND	ND	---	---	---	---
72-13	ND	---	ND	---	ND	---	ND	---	ND	---	ND	---	ND	ND	ND	ND	---	---	---	---
72-14	ND	---	ND	---	ND	---	ND	---	ND	---	ND	---	ND	ND	ND	ND	---	---	---	---
72-15	ND	---	ND	---	ND	---	ND	---	ND	---	ND	---	ND	---	ND	ND	---	---	---	---
72-16	ND	---	ND	---	ND	---	---	---	ND	---	ND	---	ND	ND	ND	ND	---	---	---	---
72-17	ND	---	---	---	ND	---	ND	---	ND	---	ND	---	ND	ND	ND	ND	---	---	---	---
72-18	ND	---	ND	---	ND	---	ND	---	ND	---	ND	---	ND	ND	ND	ND	---	---	---	---
72-28	---	51	---	---	---	2.7	---	---	---	20	---	---	---	---	---	---	---	---	---	---
72-29	---	3.6	---	---	---	3.7	---	---	---	ND	---	---	---	---	---	---	---	---	---	---
72-30	---	0.13	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---
72-31	---	0.08	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---
72-32	---	7.7	---	---	---	16	---	---	---	0.05	---	---	---	---	---	---	---	---	---	---
72-33	ND	---	---	ND	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---
72-34	ND	---	---	ND	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---
72-35	ND	---	---	ND	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---
72-36	ND	---	---	ND	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---
72-40	---	0.6	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---
72-41	---	0.42	---	---	---	0.21	---	---	---	---	---	---	---	---	---	---	---	---	---	---
72-42	---	0.11	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---
72-43	---	ND	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---
72-44	---	0.08	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---
78-1	0.09	---	ND	---	ND	---	ND	---	ND	---	ND	---	ND	ND	ND	ND	ND	---	---	---
78-2	0.07	---	ND	---	ND	---	ND	---	ND	---	ND	---	ND	ND	ND	ND	ND	ND	ND	ND
78-3	0.01	---	ND	---	0.06	---	ND	---	ND	---	ND	---	ND	ND	ND	ND	ND	ND	---	---
78-4	2.2	---	0.52	---	0.86	---	1.9	---	ND	---	ND	---	ND	ND	ND	ND	0.17	---	---	---
78-5	0.41	---	0.05	---	ND	---	ND	---	0.15	---	ND	---	ND	ND	ND	---	---	---	---	---
78-6	ND	---	0.1	---	ND	---	ND	---	ND	---	ND	---	ND	ND	ND	---	---	---	---	---
78-7	5.3	---	780	---	210	---	280	---	348	---	58	---	0.92	1.8	0.05	ND	ND	0.05	ND	0.91
A-01	---	0 - 3 ft: 0.26	---	---	3 - 6 ft: 0.18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
A-02	---	0 - 3 ft: ND	---	---	3 - 6 ft: ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
A-03	---	0 - 3 ft: 0.37	---	---	3 - 6 ft: ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
A-04	ND	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
A-05	0.43	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
A-06	ND	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
A-07	ND	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
A-08	0.31	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
A-09	0.92	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
A-10	0.12	---	0.07	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
B-01 (PGC)	45	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
B-02 (PGC)	3.6	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
B-03 (PGC)	7.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
B-04 (PGC)	2.4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
B-02 (PGC) Pkg	---	ND	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---
B-03 (PGC) Pkg	---	ND	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---
B-04 (PGC) Pkg	---	ND	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---
B-05 (PGC) Pkg	---	ND	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---
B-06 (PGC) Pkg	---	ND	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---
B-07 (PGC) Pkg	---	ND	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---
B-08 (PGC) Pkg	---	ND	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---
B-09 (PGC) Pkg	---	ND	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---
B-10 (PGC) Pkg	---	ND	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---
B-11 (PGC) Pkg	---	5.3	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---
B-12 (PGC) Pkg	---	ND	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---
B-13 (PGC) Pkg	---	ND	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---
B-14 (PGC) Pkg	---	ND	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---
B-15 (PGC) Pkg	---	ND	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---
B-16 (PGC) Pkg	---	ND	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---
B-17 (PGC) Pkg	---	ND	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---
B-18 (PGC) Pkg	---	ND	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---
B-19 (PGC) Pkg	---	ND	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---
B-20 (PGC) Pkg	---	12	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---
B-21 (PGC) Pkg	---	ND	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---
B-01 (Hill 78)	ND	---	16	---	ND	---	ND	---	ND	---	ND	---	ND	ND	ND	ND	---	---	---	---
B-02 (Hill 78)	17	---	32	---	34	---	1	---	---	---	5	---	1	1	ND	1	---	---	---	---
B-03 (Hill 78)	9	---	15	---	10	---	22	---	6	---	---	---	ND	8	8	4	---	---	---	---
B-04 (Hill 78)	2	---	---	---	74	---	49	---	12	---	30	---	2	3	57	52	---	---	---	---
B-05 (Hill 78)	52	---	361	---	53	---	99	---	83	---	9	---	ND	ND	ND	ND	---	---	---	---
B-06 (Hill 78)	35	---	32	---	18	---	549	---	10	---	4	---	ND	ND	ND	ND	---	---	---	---
B-07 (Hill 78)	5	---	ND	---	4	---	12	---	55	---	84	---	ND	ND	ND	ND	---	---	---	---
B-08 (Hill 78)	105	---	2	---	---	---	29	---	100	---	54	---	4.9	ND	ND	ND	---	---	---	---
B-09 (Hill 78)	11	---	17	---	---	---	73	---	17	---	37	---	1	ND	ND	ND	---	---	---	---
B-10 (Hill 78)	35	---	ND	---	---	---	ND	---	ND	---	ND	---	ND	ND	ND	ND	---	---	---	---
B-11 (Hill 78)	ND	---	ND	---	ND	---	ND	---	ND	---	ND	---	ND	---	1	1	---	---	---	---
B-12 (Hill 78)	1	---	ND	---	35	---	12	---	33	---	359	---	47385	301	1159	8	---	---	---	---
B-13 (Hill 78)	6	---	9	---	82	---	143	---	---	---	30	---	ND	ND	ND	1	---	---	---	---
B-14 (Hill 78)	2	---	---	---	6	---	ND	---	3	---	1	---	ND	ND	2	ND	---	---	---	---
B-15 (Hill 78)	92	---	10	---	232	---	57	---	15	---	10	---	558	ND	ND	ND	---	---	---	---
B-16 (Hill 78)	20	---	56	---	11	---	5	---	ND	---	ND	---	---	ND	ND	ND	---	---	---	---
C-01	0 - 0.5 ft: 2.4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
C-02	0 - 0.5 ft: 9.7	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
C-03	0 - 0.5 ft: ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
C-04	0 - 0.5 ft: ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
C-05	0 - 0.5 ft: ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
C-06	0 - 0.5 ft: 3.8	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
C-07	0 - 0.5 ft: 2.6	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
C-08	0 - 0.5 ft: ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
C-09	0 - 0.5 ft: 1.1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
C-10	0 - 0.5 ft: 1.3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
L-01	ND	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
L-02	ND	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
L-03	ND	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
L-04	ND	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
L-05	4.6	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
L-06	ND	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
L-07	840	---	1000	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
L-08	1.8	---	33	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
L-09	ND	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
L-10	ND	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
L-11	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
L-12	ND	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
L-13	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
L-14	ND	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
L-15	ND	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
L-16	ND	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
L-17	ND	---	ND	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
L-18	ND	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
L-19	ND	---	ND	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
L-20	ND	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
L-21	ND	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
L-22	ND	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
L-23	ND	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
L-24	ND	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
PS-E-05	0.97	---	---	ND	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---
PS-E-11	0.15	---	---	ND	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---
PS-E-14	0.19	---	---	ND	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---
PS-E-17	0.26	---	---	0.13	---	---	---	0.05	---	---	---	---	---	---	---	---	---	---	---	---
PS-E-22	ND	---	---	ND	6 - 11 ft: 0.07	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
PS-W-01	---	0.45	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---
PS-W-03	---	2.8	---	---	---	0.08	---	---	---	---	---	---	---	---	---	---	---	---	---	---
PS-W-05	---	20	---	---	---	0.07	---	---	---	---	---	---	---	---	---	---	---	---	---	---
PS-W-07	1.6	---	---	0.08	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---
PS-W-09	---	0.65	---	---	---	0.2	---	---	---	---	---	---	---	---	---	---	---	---	---	---
PS-W-11	---	2.4	---	---	---	0.35	---	---	---	---	---	---	---	---	---	---	---	---	---	---
PS-W-13	---	8.6	---	---	---	0.61	---	---	---	---	---	---	---	---	---	---	---	---	---	---
PS-W-15	---	22	---	---	---	5.5	---	---	---	---	---	---	---	---	---	---	---	---	---	---
PS-W-17	8.4	---	---	0.36	---	---	---	ND	---	---	---	ND	---	---	---	---	---	---	---	---
PS-W-18	4.7	---	---	ND	---	---	---	ND	---	---	---	0.13	---	---	---	---	---	---	---	---
PS-W-22	28	---	---	16	---	---	---	0.38	---	---	---	---	---	---	---	---	---	---	---	---
PS-W-24	---	96	---	---	---	1.1	---	---	---	---	---	---	---	---	---	---	---	---	---	---
PS-W-25	---	71	---	---	---	39	---	---	---	---	---	---	---	---	---	---	---	---	---	---
PS-W-26	---	38	---	---	---	53	---	---	---	---	---	---	---	---	---	---	---	---	---	---
PS-W-27	---	31	---	---	---	22	---	---	---	---	---	---	---	---	---	---	---	---	---	---
PS-W-30	---	37	---	---	---	38	---	---	---	---	---	---	---	---	---	---	---	---	---	---
PS-W-34	---	16	---	---	---	2	---	---	---	---	---	---	---	---	---	---	---	---	---	---
PS-W-38	---	2	---	---	---	0.2	---	---	---	---	---	---	---	---	---	---	---	---	---	---
PS-W-42	---	5.9	---	---	---	0.11	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WL-1	---	0 - 3 ft: 17	---	---	3 - 5 ft: 11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WL-2	---	0 - 3 ft: 12	---	---	3 - 7 ft: ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WL-3	---	0 - 3 ft: 10	---	---	3 - 7 ft: ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WL-4	---	53	---	---	---	67	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WL-5	---	10	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WL-6	---	20	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WL-7	---	8.3	---	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---

East Street Area 1											
Boring	0 - 0.5'	0.5 - 2'	2 - 4'	4 - 6'	6 - 8'	8 - 10'	10 - 12'	12 - 14'	14 - 16'	16 - 18'	18 - 20'	28 - 30'
ES1-6	120	970	4.4	0.033 JP	0.019 JP	0.019 JP	---	---	---	---	---	0.026 J
ES1-15	21	2.2 [46]	ND	ND	ND	ND	---	---	---	---	---	---
ES1-20	1.3	1.1	---	0.074	0.049	ND	ND [ND]	ND	---	---	---	---
RF-13	200 (0-2')	---	79	33	0.44	3	ND	16	0.10	ND	0.08	---



Sample ID	0 - 0.5'	0.5 - 2'	2 - 4'	4 - 6'	6 - 8'	8 - 10'	10 - 12'	12 - 14'	14 - 16'	16 - 18'	18 - 20'	20 - 22'	22 - 24'	24 - 26'	26 - 28'	28 - 30'
1996 Data:																
H78B-8/H78B-8R	7.3	12	13 P	7.0 P	110	95 P	7.2 P	7.1	16 P	5.6	110 P [95 P]	(20 - 20.5 ft) 11 P	---	---	---	---
H78B-8/H78B-8R	---	---	---	---	---	---	---	---	---	---	---	130 P	34 P	29 P	6.2 P [31 P]	11P
H78B-10	3.0	1.0 P	ND	0.044 P	0.023 J	ND	---	---	---	---	---	---	---	---	---	---
H78B-11	23	2.0	0.5	0.17	2430 P	4.07 P	0.73 P	---	---	---	---	---	---	---	---	---
H78B-12	7.5	2.0	0.039 JP	0.033 JP	ND [0.053 J]	0.034 JP	---	---	---	---	---	---	---	---	---	---
H78B-13	0.6	13	0.63 P	17 P	6.5 P	12	---	---	0.63 P	ND	ND	ND	ND	ND	---	---
H78B-14	1.5 P	1.7 P	0.013 JP	ND	ND	ND	ND [ND]	---	---	---	---	---	---	---	---	---
H78B-15	0.30	0.21 P	72 P	2.9	0.14 P	0.07	0.096	0.057	ND	---	---	---	---	---	---	---
H78B-16	6.0	0.73	0.041 JP	ND [ND]	0.013 JP	ND	ND	ND	---	---	---	---	---	---	---	---
H78B-17/H78B-17R	0.91	23	0.32	ND	ND	ND	ND	ND	ND	---	---	---	---	---	---	---
H78B-18	0.79	14	45	0.039 JP	0.022 J	ND	ND	ND	0.048 J	ND	ND [0.021 JP]	---	---	---	---	---
H78B-19	0.22	0.077	0.035 J	0.64 P	0.44 P	ND	0.037 JP	ND	0.03 J	ND	ND	---	---	ND	---	---
H78B-20	1.4	0.9	1.7	1.0 P [0.37 P]	1.3 P	0.39 P	0.031 J	---	---	---	---	---	---	---	---	---
H78B-21	0.22	0.014 JP (0.024 JP)	0.018 JP	0.73	0.59	ND	ND	ND	---	---	---	---	---	---	---	---
H78B-22	7.8	7.3 P	0.04	ND	ND	ND	ND	---	---	---	---	---	---	---	---	---
H78B-24	7.0	0.81	0.051	ND	ND	8 - 9 ft: 0.037 P	---	---	---	---	---	---	---	---	---	---
H78B-25	25 P	8.3 P	0.23 P	0.12 P	0.069 P	---	0.034 JP	---	---	---	---	---	---	---	---	---
H78B-27	21	710 P (450 P)	1.4	5.3	0.017 J	0.057 P	---	---	---	---	---	---	---	---	---	---
H78B-28/H78B-28R	0.55 P	---	---	---	480 P	---	---	---	---	---	ND	0.0085 JP	0.059	---	---	---
H78B-29	4.7	1.4 P	11 P	0.073 P	0.18	ND	ND	ND	0.011 JP	ND	0.023 JP	ND	---	---	---	---
H78B-30	190	80 [90]	4.6 P	2.5	0.074	0.17 P	0.18	0.71	---	---	---	---	---	---	---	---
H78B-31	1.3	2.5	3.1	6.1	0.29	0.39	0.019 J	---	---	---	---	---	---	---	---	---
H78SS-1	1.6 P	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
H78SS-2	0.19 P (0.099)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
H78SS-3	0.16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
H78SS-4	6.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
H78SS-5	0.17 P	0.5 - 1 ft: 0.39	---	---	---	---	---	---	---	---	---	---	---	---	---	---
		1 - 1.5 ft: 0.11 P	---	---	---	---	---	---	---	---	---	---	---	---	---	---
		1.5 - 2 ft: 0.07 P	---	---	---	---	---	---	---	---	---	---	---	---	---	---
H78SS-6	0.14 P	0.5 - 1 ft: 0.021 JP	---	---	---	---	---	---	---	---	---	---	---	---	---	---
		1 - 1.5 ft: ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---
		1.5 - 2 ft: 0.042	---	---	---	---	---	---	---	---	---	---	---	---	---	---
H78SS-7	1.5 P (1.9 P)	0.5 - 1 ft: 1.1 P	---	---	---	---	---	---	---	---	---	---	---	---	---	---
		1 - 1.5 ft: 0.043 P	---	---	---	---	---	---	---	---	---	---	---	---	---	---
		1.5 - 2 ft: 0.03 P	---	---	---	---	---	---	---	---	---	---	---	---	---	---
H78SS-8	4.6	0.5 - 1 ft: 0.37	---	---	---	---	---	---	---	---	---	---	---	---	---	---
		1 - 1.5 ft: 0.49	---	---	---	---	---	---	---	---	---	---	---	---	---	---
		1.5 - 2 ft: 0.072	---	---	---	---	---	---	---	---	---	---	---	---	---	---

200' 0 200' 400'
SCALE

ILLUSTRATION NOTES:

1. MAPPING BASED ON AUTOCAD DRAWING FILE (PLANT3.CAD) AS PROVIDED BY GE AND ADDITIONAL INFORMATION FROM THE MCP PHASE II SCOPE OF WORK AND PROPOSAL FOR RCRA FACILITY INVESTIGATION (O'BRIEN & GERE ENGINEERS, INC., FEBRUARY 1996) AS WELL AS SUPPLEMENTAL SITE SURVEY INFORMATION OBTAINED BY HILL ENGINEERS, PLANNERS & ARCHITECTS (WEEK OF MAY 29, 1997). LOCATIONS SOUTH OF MERRILL ROAD DIGITIZED FROM AUGUST 1990 AIR PHOTO AND ARE APPROXIMATE.
2. SITE BOUNDARY IS APPROXIMATE.
3. PRE-1996 SAMPLE LOCATIONS ARE APPROXIMATE. 1996 SAMPLE LOCATIONS SURVEYED BY HILL ENGINEERS, PLANNERS & ARCHITECTS OR BLASLAND, BOUCK AND LEE, INC.
4. BORING LOCATIONS H78B-30 AND H78B-31 WERE NOT SURVEYED AND THEREFORE ARE APPROXIMATE.

LEGEND:

- APPROXIMATE SITE BOUNDARY
- FENCELINE
- B-3 SOIL BORING (INSTALLED APRIL 1987)
- 72-2 SOIL BORING (INSTALLED JUNE 1987)
- 72-26 SOIL BORING (INSTALLED AUGUST 1988)
- 72-42 SOIL BORING (INSTALLED FEB. - MARCH 1989)
- B-3 SOIL BORING (INSTALLED OCTOBER 1989)
- WL-6 SOIL BORING (INSTALLED OCT. - DEC. 1989)
- 4N2 SOIL BORING (INSTALLED NOVEMBER 1989)
- L-18 SOIL BORING (INSTALLED APRIL 1990)
- PS-W-42 SOIL BORING (INSTALLED JULY - AUG. 1989)
- A-6 SOIL BORING (INSTALLED MAY 1990)
- H78B-25 SOIL BORING (INSTALLED JULY - NOV. 1996)
- C8 SURFACE SOIL SAMPLING LOCATION (AUGUST 1991)
- H78SS-1 SURFACE SOIL SAMPLING LOCATION (JULY - NOV. 1996)
- H78B-13 MONITORING WELL (INSTALLED JULY - NOV. 1996)
- A SHEEN WAS OBSERVED ON SOILS OVER RELATIVELY NARROW DEPTH RANGES AT THESE BORING LOCATIONS AND YELLOWISH NAPL WAS FOUND ON SOILS AT BORING H78B-8R (27-27.5' BELOW GRADE).

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

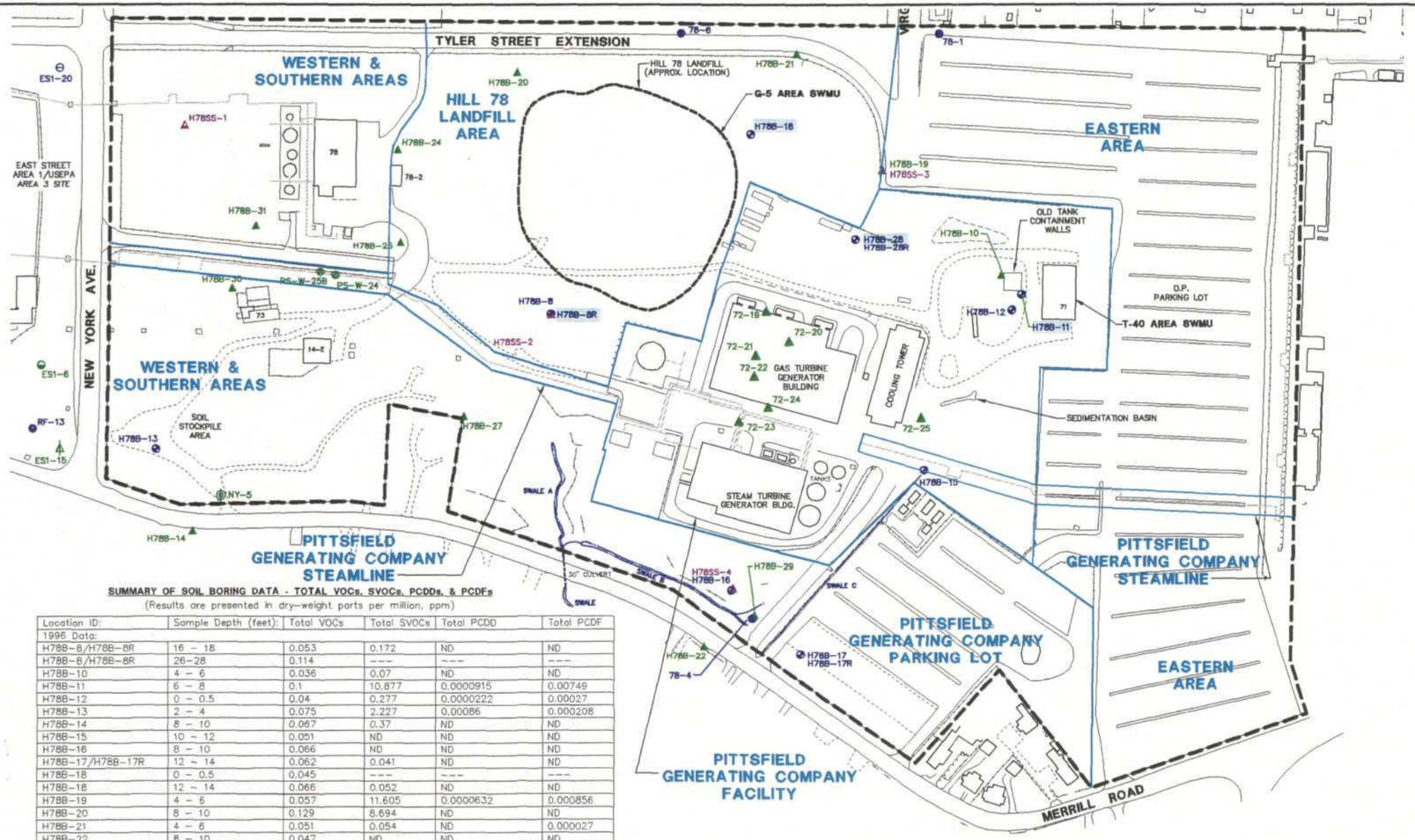
MCP PHASE II/RCRA FACILITY INVESTIGATION REPORT FOR HILL 78 AREA/USEPA AREA 2

SUMMARY OF SOIL PCB DATA

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

FIGURE
4-1A

XREF: 10194X01.DWG
P: DJD11
7/30/97 SYR-54-DMW NES
10194220/10194B11.DWG



LEGEND:

- APPROXIMATE SITE BOUNDARY
- FENCELINE
- 72-26 SOIL BORING (INSTALLED AUGUST 1988)
- NY-5 SOIL BORING (INSTALLED JULY 1991)
- PS-W-24 SOIL BORING (INSTALLED JULY – AUG. 1989)
- H78B-25 SOIL BORING (INSTALLED JULY – NOV. 1996)
- 78-1 MONITORING WELL (INSTALLED FEB.1990–JAN.1991)
- H78B-13 MONITORING WELL (INSTALLED JULY – NOV. 1996)
- H78SS-1 SURFACE SOIL SAMPLING LOCATION (JULY – NOV. 1996)
- A SHEEN WAS OBSERVED ON SOILS OVER RELATIVELY NARROW DEPTH RANGES AT THESE BORING LOCATIONS AND YELLOWISH NAPL WAS FOUND ON SOILS AT BORING H78B-8R (27–27.5 FEET BELOW GRADE).

SUMMARY OF SOIL BORING DATA - TOTAL VOCs, SVOCs, PCDDs, & PCDFs

(Results are presented in dry-weight parts per million, ppm)

Location ID:	Sample Depth (feet):	Total VOCs	Total SVOCs	Total PCDD	Total PCDF
1996 Data:					
H78B-8/H78B-8R	16 – 18	0.053	0.172	ND	ND
H78B-8/H78B-8R	26–28	0.114	---	---	---
H78B-10	4 – 6	0.036	0.07	ND	ND
H78B-11	6 – 8	0.1	10.877	0.0000915	0.00749
H78B-12	0 – 0.5	0.04	0.277	0.0000222	0.00027
H78B-13	2 – 4	0.075	2.227	0.00086	0.000208
H78B-14	8 – 10	0.067	0.37	ND	ND
H78B-15	10 – 12	0.051	ND	ND	ND
H78B-16	8 – 10	0.066	ND	ND	ND
H78B-17/H78B-17R	12 – 14	0.062	0.041	ND	ND
H78B-18	0 – 0.5	0.045	---	---	---
H78B-18	12 – 14	0.066	0.052	ND	ND
H78B-19	4 – 6	0.057	11.605	0.0000632	0.000856
H78B-20	8 – 10	0.129	8.694	ND	ND
H78B-21	4 – 6	0.051	0.054	ND	0.000027
H78B-22	8 – 10	0.047	ND	ND	ND
H78B-24	4 – 6	0.031	0.066	ND	ND
H78B-25	10 – 12	0.08	ND	ND	ND
H78B-27	2 – 4	0.039	0.071	ND	0.0000054
H78B-28/H78B-28R	0 – 0.5	0.042	---	---	---
H78B-28/H78B-28R	6 – 8	0.049	0.772	0.000541	0.00644
H78B-29	12 – 14	0.073	0.073	ND	ND
H78B-30	12 – 14	0.064	0.56	0.0000556	0.000299
H78B-31	6 – 8	0.088	0.39	ND	ND
H78SS-1	0 – 0.5	0.023	3.137	0.00295	0.00141
H78SS-2	0 – 0.5	0.058 [0.088]	ND [ND]	0.0021 [0.000024]	ND [0.0001]
H78SS-3	0 – 0.5	0.073	0.594	0.000077	0.0000374
H78SS-4	0 – 0.5	0.066	4.956	0.00053	0.000791
Historic Data:					
72-19	0 – 4	0.006	---	---	---
	4 – 8	0.007	---	---	---
72-20	0 – 4	0.011	---	---	---
	4 – 8	0.009	---	---	---
72-21	0 – 4	0.009	---	---	---
	4 – 8	0.005	---	---	---
72-22	0 – 4	0.008	---	---	---
	4 – 8	0.007	---	---	---
72-23	0 – 4	0.008	---	---	---
	4 – 8	0.009	---	---	---
72-24	0 – 4	0.01	---	---	---
	4 – 8	0.006	---	---	---
72-25	0 – 4	0.013	---	---	---
	4 – 8	0.006	---	---	---
78-1	12 – 14	0.027	0.766	---	---
78-4	4 – 6	0.12	1.642	---	---
78-6	10 – 12	0.069	0.12	---	---
NY-5	14 – 16	0.019	0.362	ND	ND
PS-W-24	0 – 4	0.018	---	---	---
PS-W-25B	4 – 8	0.007	---	---	---
East Street Area 1					
ES1-6	28 – 30	ND	0.053	---	---
ES1-15	8 – 10	ND	ND	ND	ND
ES1-20	12 – 14	ND	ND	ND	ND
RF-13	14 – 16	0.062 B	0.15 BJ	ND	ND

Table Notes:
1. ND – Indicates that individual constituents were below detection limits; therefore the totals were reported as not detected.
2. Total values include J, B, X, D, and E qualified data; total PCDD and PCDF values are based on homologs only.
3. Results of duplicate samples are presented in brackets.
4. --- Denotes that no analysis was performed, no values are available.

ILLUSTRATION NOTES:

1. MAPPING BASED ON AUTOCAD DRAWING FILE (PLANT3.CAD) AS PROVIDED BY GE AND ADDITIONAL INFORMATION FROM THE MCP PHASE II SCOPE OF WORK AND PROPOSAL FOR RCRA FACILITY INVESTIGATION (O'BRIEN & GERE ENGINEERS, INC., FEBRUARY 1996) AS WELL AS SUPPLEMENTAL SITE SURVEY INFORMATION OBTAINED BY HILL ENGINEERS, PLANNERS & ARCHITECTS (WEEK OF MAY 29, 1997). LOCATIONS SOUTH OF MERRILL ROAD DIGITIZED FROM AUGUST 1990 AIR PHOTO AND ARE APPROXIMATE.
2. SITE BOUNDARY IS APPROXIMATE.
3. PRE–1996 SAMPLE LOCATIONS ARE APPROXIMATE. 1996 SAMPLE LOCATIONS SURVEYED BY HILL ENGINEERS, PLANNERS & ARCHITECTS OR BLASLAND, BOUCK AND LEE, INC.
4. BORING LOCATIONS H78B–30 AND H78B–31 WERE NOT SURVEYED AND THEREFORE ARE APPROXIMATE.

125' 0 125' 250'
SCALE

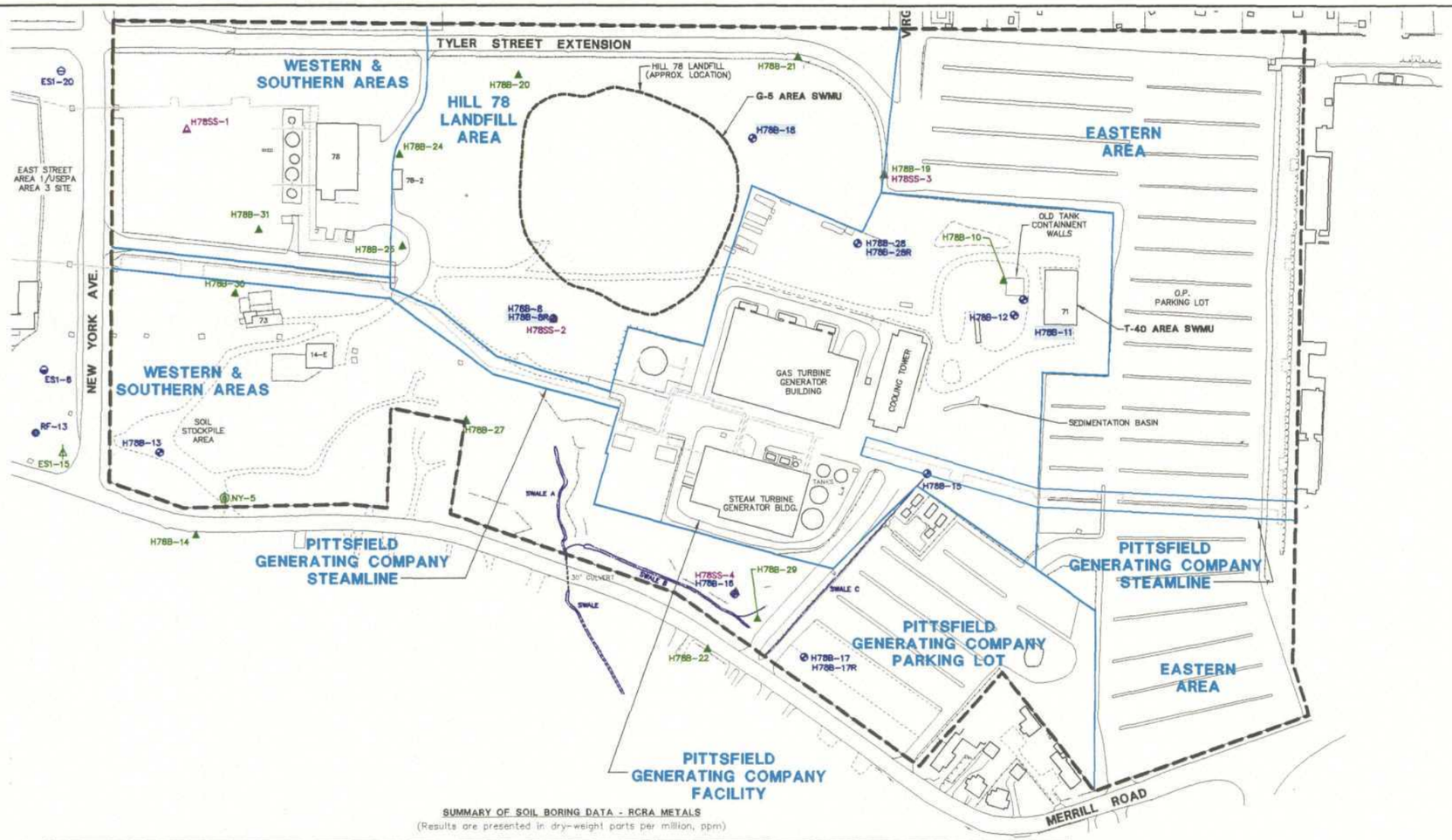
GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS
MCP PHASE II/RCRA FACILITY INVESTIGATION REPORT FOR HILL 78 AREA/USEPA AREA 2

SUMMARY OF SOIL DATA - VOCs, SVOCs, PCDDs, & PCDFs

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

FIGURE 4-1B

XREF: 10194X01.DWG
P: DJB
7/30/97 SYR-54-DMW NES
10194220/10194808.DWG



LEGEND:

- APPROXIMATE SITE BOUNDARY
- FENCELINE
- H78B-13 MONITORING WELL (INSTALLED JULY – NOV. 1996)
- NY-5 SOIL BORING (INSTALLED JULY 1991)
- H78B-25 SOIL BORING (INSTALLED JULY – NOV. 1996)
- H78SS-1 SURFACE SOIL SAMPLING LOCATION (JULY – NOV. 1996)
- A SHEEN WAS OBSERVED ON SOILS OVER RELATIVELY NARROW DEPTH RANGES AT THESE BORING LOCATIONS AND YELLOWISH NAPL WAS FOUND ON SOILS AT BORING H78B-8R (27-27.5 FEET BELOW GRADE).

SUMMARY OF SOIL BORING DATA - RCRA METALS

(Results are presented in dry-weight parts per million, ppm)

Location ID.:	Sample Depth (feet):	Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	Silver
1996 Data:									
H78B-8/H78B-8R	16 – 18	5.0	19.7 J *	ND	7.3	7.9 E	ND	ND	ND
H78B-10	4 – 6	3.4	34.9	ND	10.8	10.7 E	ND	ND	ND
H78B-11	6 – 8	2.0	23.1	ND	6.4	5.9 E	ND	ND	ND
H78B-12	0 – 0.5	2.8	80.3	ND	7.5	11.2 E	ND	ND	ND
H78B-13	2 – 4	7.9	34.1	0.25 J *	9.1	75.7 E	ND	ND	ND
H78B-14	8 – 10	1.8	20 J *	ND	7.5	6.1 E	ND	ND	ND
H78B-15	10 – 12	4.5	36.0	ND	8.9	6.3 E	ND	ND	ND
H78B-16	8 – 10	3.8	32.5	ND	9.7	7.5 E	ND	ND	ND
H78B-17/H78B-17R	12 – 14	3.0	44.1	ND	6.1	8.1 E	ND	ND	ND
H78B-18	12 – 14	3.6	42.3	ND	12.0	9.4 E	ND	ND	ND
H78B-19	4 – 6	5.9	45.5	ND	10.1	10.3 E	0.14	ND	ND
H78B-20	8 – 10	9.5	37.7 J *	ND	13.6	14.4 E	ND	ND	ND
H78B-21	4 – 6	3	33.3	ND	9.4	7.3 E	ND	ND	ND
H78B-22	8 – 10	1.3	27.4	ND	8.3	6.5 E	ND	ND	ND
H78B-24	4 – 6	5	40.2	ND	11.3	9.5 E	ND	ND	ND
H78B-25	10 – 12	6.2	48.9	ND	14.5	12.1 E	ND	ND	ND
H78B-27	2 – 4	4.8	37.2	ND	9.7	16.3 E	ND	ND	ND
H78B-28/H78B-28R	6 – 8	5.5	37.7	ND	8.2	10.8 E	0.29	ND	ND
H78B-29	12 – 14	3.9	27.5	ND	7.7	5.3 E	ND	ND	ND
H78B-30	12 – 14	2.6	26.5	ND	7.6*	5.6*	ND	0.62	ND
H78B-31	6 – 8	5.4	29.1	0.31J*	12.3	8.9	ND	ND	ND
H78SS-1	0 – 0.5	6.9 N	58.2	1.2	15.0	54.7 EN	ND	ND N	ND N
H78SS-2	0 – 0.5	5.3 N [2.4 N]	62.9 [66.4]	0.86 [0.80]	4.9 [15.4]	8.9 EN [8.5 EN]	ND [ND]	ND N [ND N)]	ND N [ND (0.07) N]
H78SS-3	0 – 0.5	5.4 N	29.0	0.66	8.7	58.4 EN	ND	0.46 J*N	ND N
H78SS-4	0 – 0.5	3.2 N	33.7	0.48 J *	9.0	34.8 EN	ND	0.56 J*N	ND N
Historic Data:									
NY-5	14 – 16	5.2	11.6	---	4.1	1.6	---	---	---
East Street Area 1									
ES1-6	28 – 30	4.2	23.8	---	6.9	6.7	ND	ND	ND
ES1-15	8 – 10	5.1	16.8	---	6.1	6.5	ND	ND	ND
ES1-20	12 – 14	2.3	10.2	---	4.6	5.9	ND	ND	ND
RF-13	14 – 16	3.8	18.3 J	---	5.9	7.3	---	---	---

Table Notes:

1. J* – Indicates the reported value is less than the CLP-required detection limit (CRDL), but greater than the instrument detection limit (IDL).
2. E – Indicates inductively coupled plasma (ICP) serial dilution analysis was outside control limits.
3. N – Indicates sample matrix spike analysis was outside outside control limits.
4. Laboratory duplicate analysis exceeded control limits for arsenic and lead for samples H78SS-1, H78SS-2, H78SS-3, and H78SS-4.
5. ND – Compound was not detected.
6. --- Denotes that no analysis was performed; no values are available.
7. Results of duplicate samples are presented in brackets.
8. * – Indicates laboratory duplicate analysis exceeded control limits.

ILLUSTRATION NOTES:

1. MAPPING BASED ON AUTOCAD DRAWING FILE (PLANT3.CAD) AS PROVIDED BY GE AND ADDITIONAL INFORMATION FROM THE MCP PHASE II SCOPE OF WORK AND PROPOSAL FOR RCRA FACILITY INVESTIGATION (O'BRIEN & GERE ENGINEERS, INC., FEBRUARY 1996) AS WELL AS SUPPLEMENTAL SITE SURVEY INFORMATION OBTAINED BY HILL ENGINEERS, PLANNERS & ARCHITECTS (WEEK OF MAY 29, 1997). LOCATIONS SOUTH OF MERRILL ROAD DIGITIZED FROM AUGUST 1990 AIR PHOTO AND ARE APPROXIMATE.
2. SITE BOUNDARY IS APPROXIMATE.
3. PRE-1996 SAMPLE LOCATIONS ARE APPROXIMATE. 1996 SAMPLE LOCATIONS SURVEYED BY HILL ENGINEERS, PLANNERS & ARCHITECTS OR BLASLAND, BOUCK AND LEE, INC.

125' 0 125' 250'
SCALE

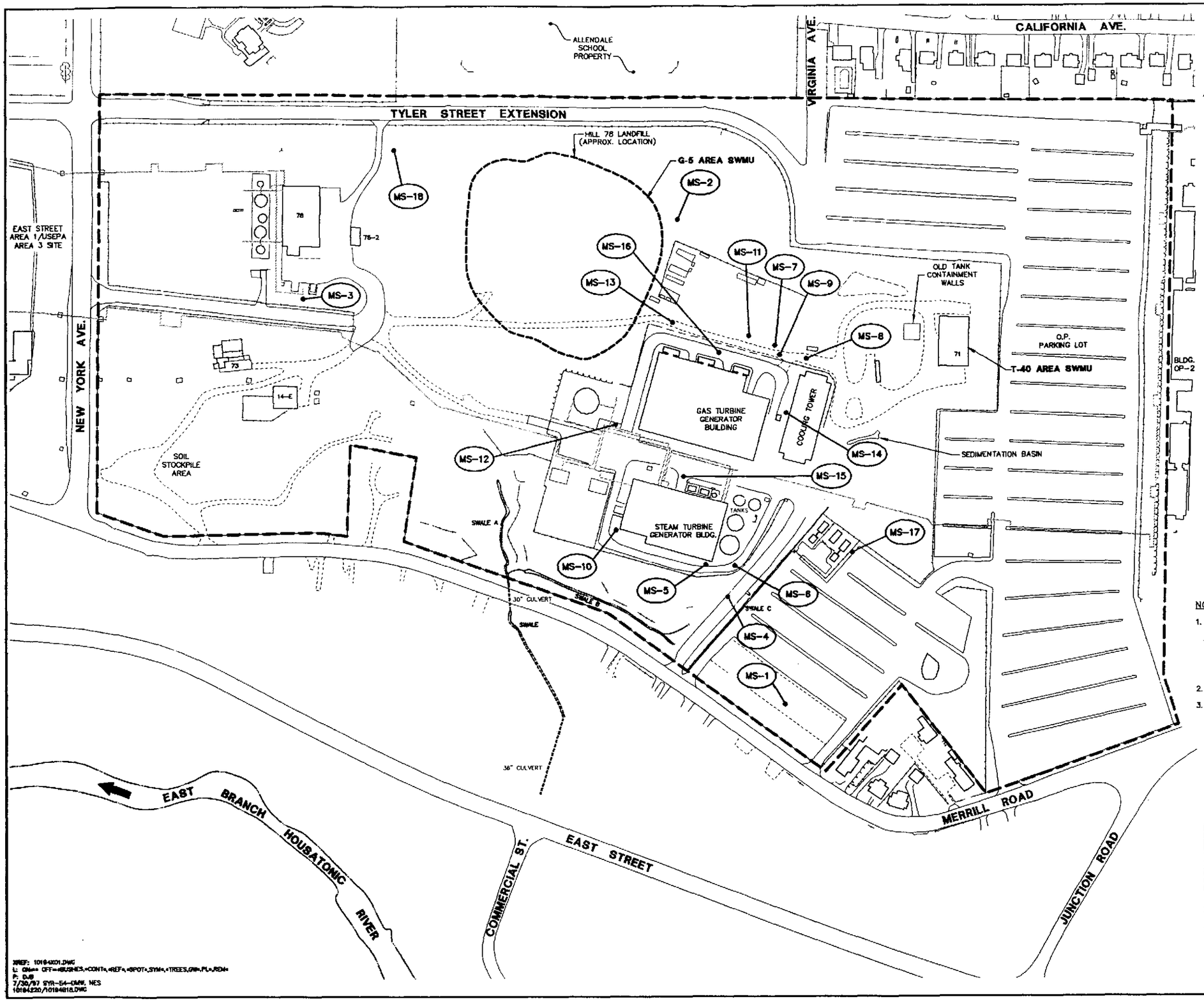
GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS
MCP PHASE II/RCRA FACILITY INVESTIGATION
REPORT FOR HILL 78 AREA/USEPA AREA 2

SUMMARY OF SOIL DATA - RCRA METALS

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

FIGURE 4-1C

XREF: 10194XD1.DWG
P: DJB
7/30/97 SYR-54-DMW NES
10194220/10194B07.DWG



LEGEND:

- APPROXIMATE SITE BOUNDARY
- FENCELINE

MS-1	PGC PARKING LOT SOIL/DEBRIS SAMPLING
MS-2	WELL CASEMENT EXCAVATION
MS-3	CONCRETE FOOTING REMOVAL
MS-4	PARKING LOT GASLINE SAMPLING
MS-5	ALTRESCO SIGN INSTALLATION
MS-6	ALTRESCO STAIRWAY INSTALLATION
MS-7	WELL ASW-6 INSTALLATION/DRILLING CUTTINGS
MS-8	WATERLINE INSTALLATION
MS-9	ELECTRICAL LINE INSTALLATION
MS-10	ALTRESCO STAIRWAY INSTALLATION
MS-11	ALTRESCO UTILITY LINE EXCAVATION
MS-12	ALTRESCO TANKER UNLOADING STATION EXCAVATION
MS-13	ALTRESCO CATHODIC PROTECTION EXCAVATION (A)
MS-14	ALTRESCO CATHODIC PROTECTION EXCAVATION (B)
MS-15	CONCRETE SLAB INSTALLATION
MS-16	WATER MAIN REPAIR
MS-17	PGC PROPOSED BUILDING SITE
MS-18	OIL LINE SHUTOFF EXCAVATION

NOTES:

1. MAPPING BASED ON AUTOCAD DRAWING FILE (PLANT3.CAD) AS PROVIDED BY GE AND ADDITIONAL INFORMATION FROM THE MCP PHASE II SCOPE OF WORK AND PROPOSAL FOR RCRA FACILITY INVESTIGATION (O'BRIEN & GERE ENGINEERS, INC., FEBRUARY 1996) AS WELL AS SUPPLEMENTAL SITE SURVEY INFORMATION OBTAINED BY HILL ENGINEERS, PLANNERS & ARCHITECTS (WEEK OF MAY 29, 1997). LOCATIONS SOUTH OF MERRILL ROAD DIGITIZED FROM AUGUST 1990 AIR PHOTO AND ARE APPROXIMATE.
2. SITE BOUNDARY IS APPROXIMATE.
3. LOCATIONS OF MISCELLANEOUS SOIL INVESTIGATIIONS AREA APPROXIMATE.

100' 0 100' 200'
SCALE

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP PHASE II/RCRA FACILITY INVESTIGATION REPORT FOR HILL 78 AREA/USEPA AREA 2

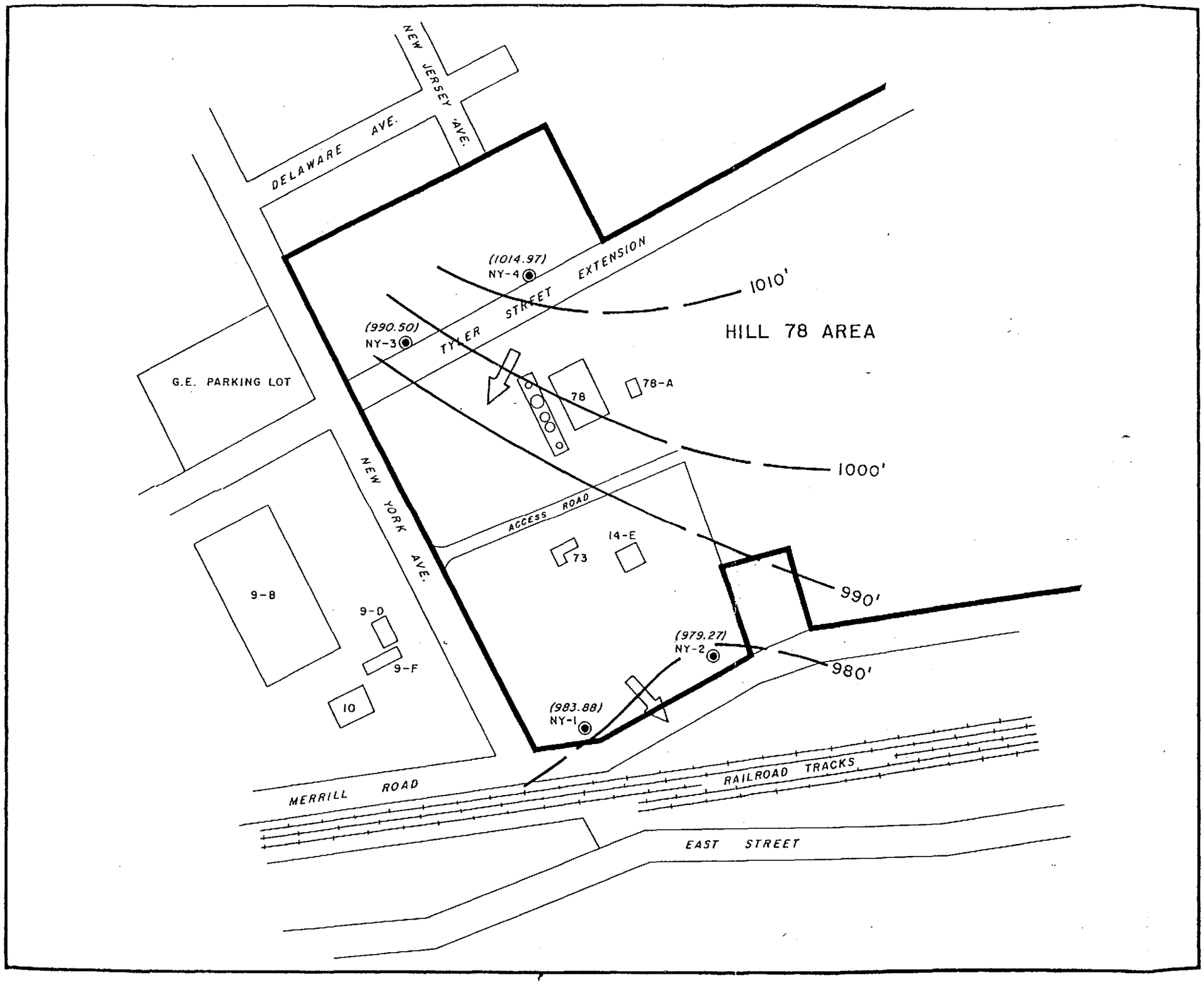
LOCATIONS OF MISCELLANEOUS SOIL INVESTIGATIONS

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

FIGURE 4-1D

XREF: 10194X01.DWG
L: ON=* OFF=*BUSHES,*CONT*,*REF*,*SPOT*,SYM*,*TREES,GW*,PL*,REM*
P: DJB
7/30/97 SYR-54-DMW, NES
10194220/10194B18.DWG

FIGURE 5-1A



LEGEND

980' — GROUND-WATER CONTOUR ELEVATION LINE (DASHED WHERE INFERRED)

GROUND-WATER FLOW DIRECTION

MONITORING WELL

(950.50) GROUND-WATER ELEVATION

HILL 78 AREA BOUNDARY

SOURCE: GERAGHTY & MILLER, INC., CONFIGURATION OF THE WATER TABLE - JUNE 24, 1988.

SCALE

200' 0 200'

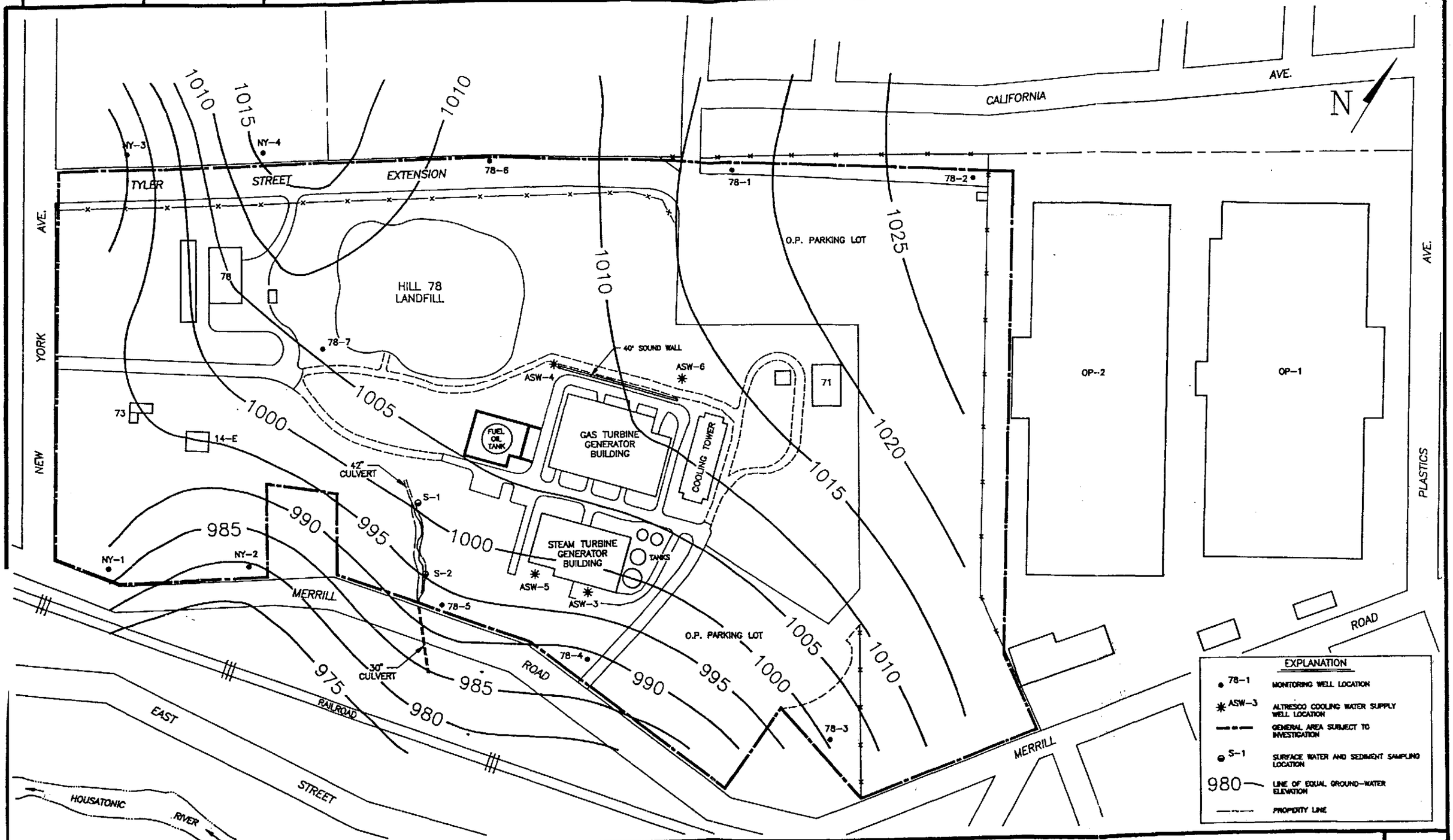
GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP PHASE I - HILL 78

GROUND-WATER CONTOUR MAP JUNE 1988

BLASLAND & BOUCK ENGINEERS, P.C.
ENGINEERS & GEOSCIENTISTS

DATE: JULY 1991 | PRJCT. NO.: AY05500 | FILE NO.: | CAD FILE: G7D | COMPILER: A. LABARGE | MGR.: M. SANFORD | DRAFTER: TAD

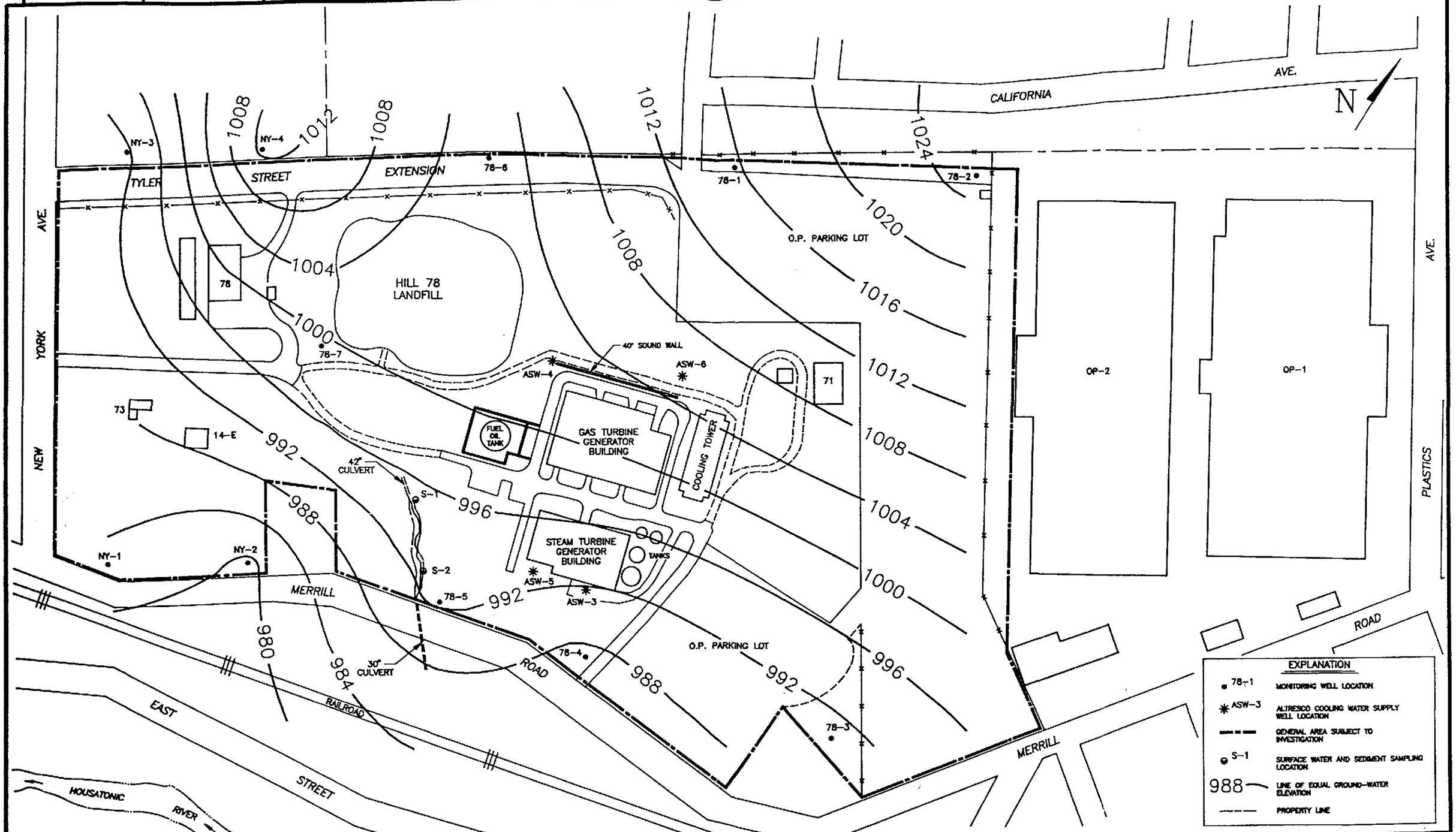


GERAGHTY & MILLER, INC.
Environmental Services

CONFIGURATION OF THE WATER TABLE, JANUARY 23,1991,
HILL 78 AREA
GENERAL ELECTRIC COMPANY – PITTSFIELD, MASSACHUSETTS

FIGURE
5-1B

DATE: JULY 1991 | PRJCT. NO.: AY05500 | FILE NO.: | CAD FILE: G7E | COMPILER: A. LABARGE | MGR.: M. SANFORD | DRAFTER: TAD

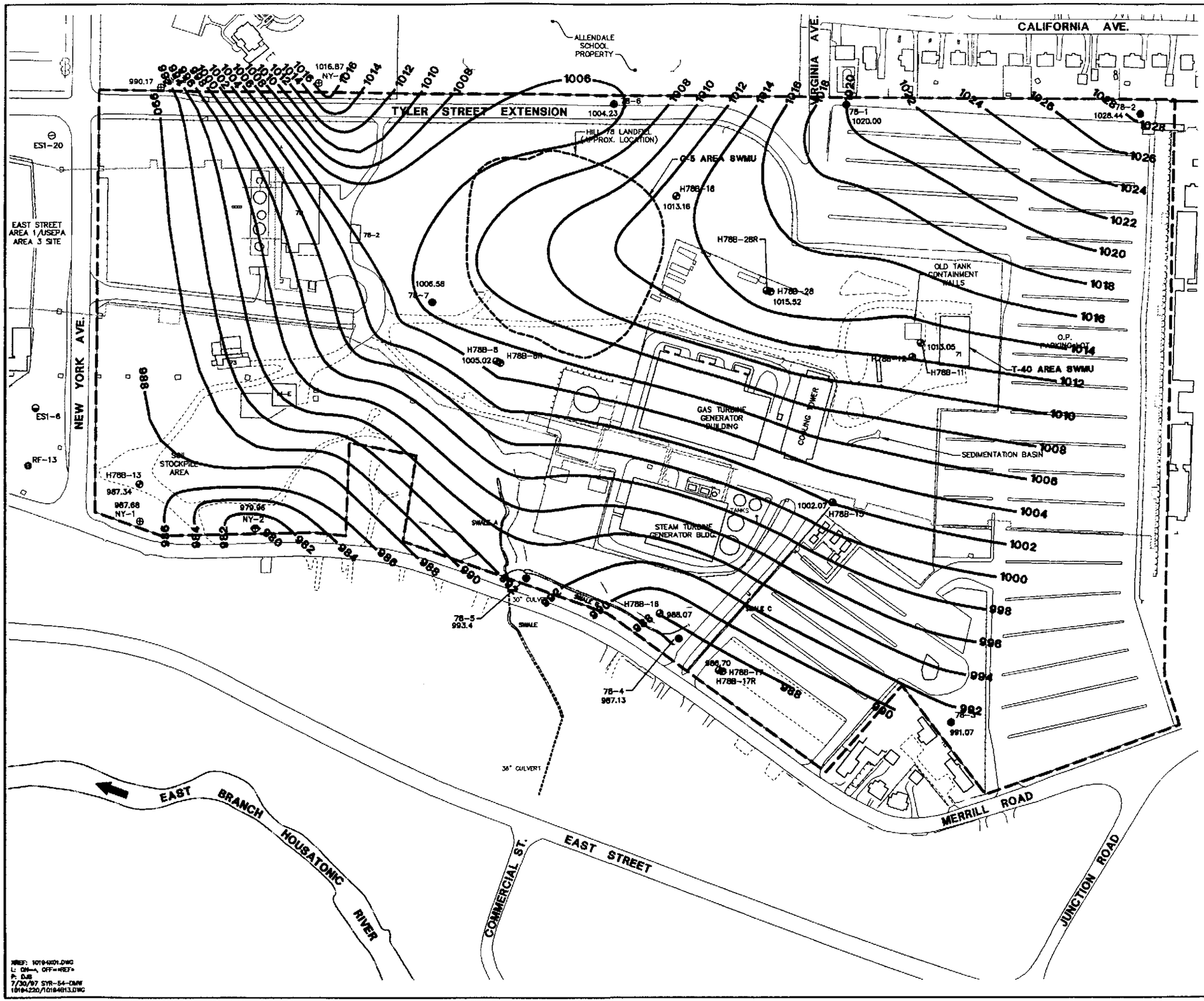


100 0 100 200
SCALE IN FEET

GERAGHTY & MILLER, INC.
Environmental Services

CONFIGURATION OF WATER TABLE, JULY 1,1991,
HILL 78 AREA
GENERAL ELECTRIC COMPANY – PITTSFIELD, MASSACHUSETTS

FIGURE
5-1C



LEGEND:

- APPROXIMATE SITE BOUNDARY
- FENCELINE
- NY-3 — MONITORING WELL (INSTALLED APRIL – MAY 1988)
- 78-7 — MONITORING WELL (INSTALLED FEB. 1990 – JAN. 1991)
- RF-13 — MONITORING WELL (INSTALLED MAY 1991)
- ES1-20 — MONITORING WELL (INSTALLED MAY 1996)
- H78B-13 — MONITORING WELL (INSTALLED JULY – NOV. 1996)
- ES1-6 — DEEP MONITORING WELL (INSTALLED MAY 1996)
- 991.84 — GROUNDWATER ELEVATION (FEET)
- 994 — GROUNDWATER ELEVATION CONTOUR LINE (FEET)

NOTES:

1. MAPPING BASED ON AUTOCAD DRAWING FILE (PLANT3.CAD) AS PROVIDED BY GE AND ADDITIONAL INFORMATION FROM THE MCP PHASE II SCOPE OF WORK AND PROPOSAL FOR RCRA FACILITY INVESTIGATION (O'BRIEN & GERE ENGINEERS, INC., FEBRUARY 1996) AS WELL AS SUPPLEMENTAL SITE SURVEY INFORMATION OBTAINED BY HILL ENGINEERS, PLANNERS & ARCHITECTS (WEEK OF MAY 29, 1997). LOCATIONS SOUTH OF MERRILL ROAD DIGITIZED FROM AUGUST 1990 AIR PHOTO AND ARE APPROXIMATE.
2. SITE BOUNDARY IS APPROXIMATE.
3. PRE-1996 SAMPLE LOCATIONS ARE APPROXIMATE. 1996 SAMPLE LOCATIONS SURVEYED BY HILL ENGINEERS, PLANNERS & ARCHITECTS OR BLASLAND, BOUCK AND LEE, INC.
4. ALTHOUGH TOTAL DEPTH DOES NOT CORRELATE WITH WELL CONSTRUCTION DETAILS, WELLS 78-6 AND NY-2 WERE USED IN CONTOURING THE WATER TABLE ELEVATION AS THE WELL SCREEN IS STILL OPEN TO THE WATER TABLE.
5. THE WATER TABLE WAS 9.34 FEET ABOVE THE TOP OF THE SCREEN AT NY-4; THEREFORE, WATER LEVEL MEASUREMENTS FROM THIS WELL MAY NOT ACCURATELY REFLECT TRUE WATER TABLE ELEVATION. THE WATER LEVEL MEASUREMENT WAS USED IN CONSTRUCTING THIS WATER TABLE ELEVATION CONTOUR MAP.
6. ELEVATIONS REFERENCED TO NGVD OF 1929.

100' 0 100' 200'
SCALE

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

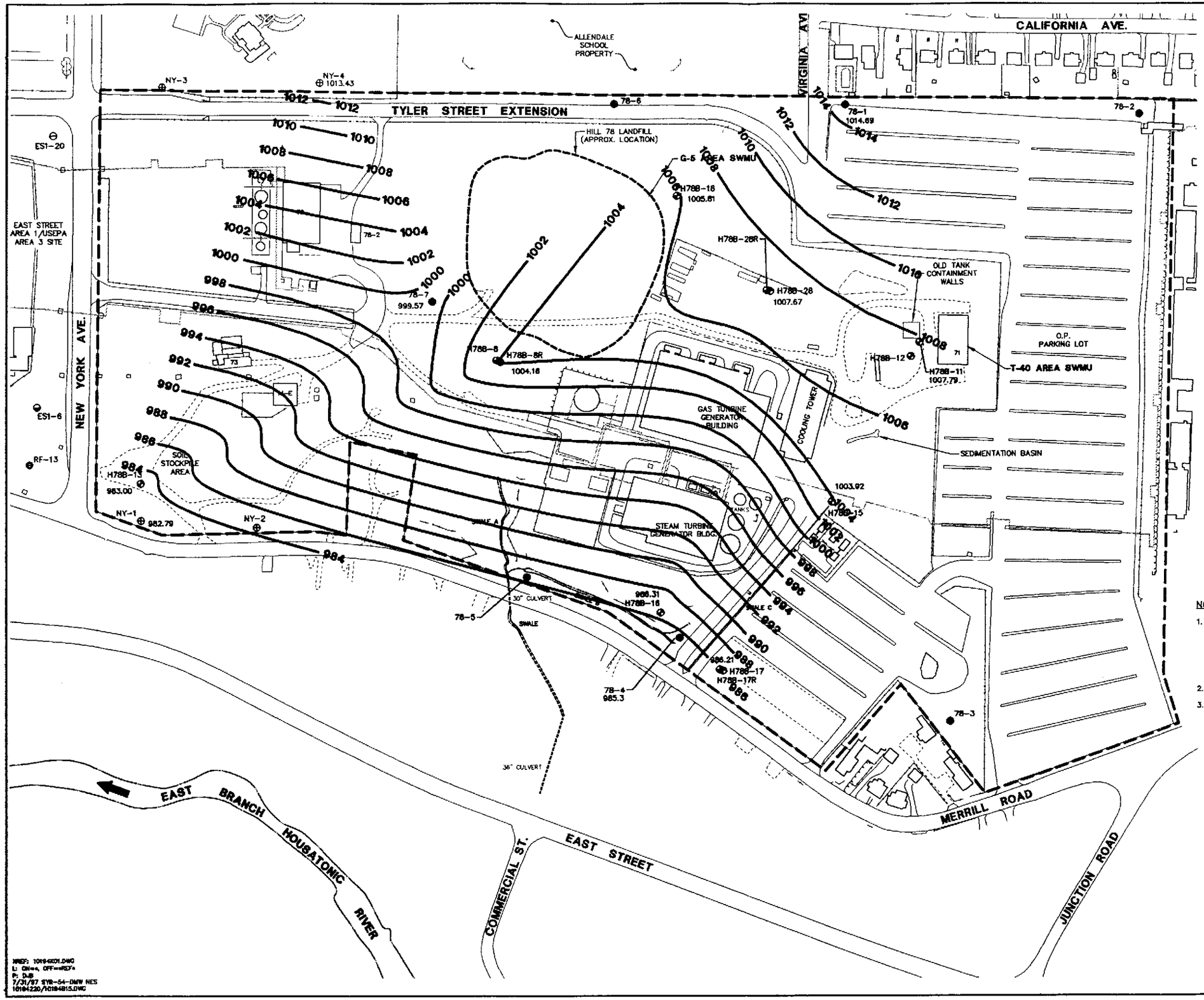
MCP PHASE II/RCRA FACILITY INVESTIGATION
REPORT FOR HILL 78 AREA/USEPA AREA 2

WATER TABLE ELEVATION CONTOUR MAP APRIL 7, 1997

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

FIGURE 5-1D

XREF: 10194X01.DWG
L: ON=*, OFF=*REF*
P: DJS
7/30/97 SYR-54-DMW
10194220/10184613.DWG



LEGEND:

- APPROXIMATE SITE BOUNDARY
- FENCELINE
- NY-3 — MONITORING WELL (INSTALLED APRIL – MAY 1988)
- 78-7 — MONITORING WELL (INSTALLED FEB. 1990 – JAN. 1991)
- RF-13 — MONITORING WELL (INSTALLED MAY 1991)
- ES1-20 — MONITORING WELL (INSTALLED MAY 1996)
- H78B-13 — MONITORING WELL (INSTALLED JULY – NOV. 1996)
- ES1-6 — DEEP MONITORING WELL (INSTALLED MAY 1996)
- 991.84 — GROUNDWATER ELEVATION (FEET)
- 994 — GROUNDWATER ELEVATION CONTOUR LINE (FEET)

NOTES:

1. MAPPING BASED ON AUTOCAD DRAWING FILE (PLANT3.CAD) AS PROVIDED BY GE AND ADDITIONAL INFORMATION FROM THE MCP PHASE II SCOPE OF WORK AND PROPOSAL FOR RCRA FACILITY INVESTIGATION (O'BRIEN & GERE ENGINEERS, INC., FEBRUARY 1996) AS WELL AS SUPPLEMENTAL SITE SURVEY INFORMATION OBTAINED BY HILL ENGINEERS, PLANNERS & ARCHITECTS (WEEK OF MAY 29, 1997). LOCATIONS SOUTH OF MERRILL ROAD DIGITIZED FROM AUGUST 1990 AIR PHOTO AND ARE APPROXIMATE.
2. SITE BOUNDARY IS APPROXIMATE.
3. PRE-1998 SAMPLE LOCATIONS ARE APPROXIMATE. 1996 SAMPLE LOCATIONS SURVEYED BY HILL ENGINEERS, PLANNERS & ARCHITECTS OR BLASLAND, BOUCK AND LEE, INC.

100' 0 100' 200'
SCALE

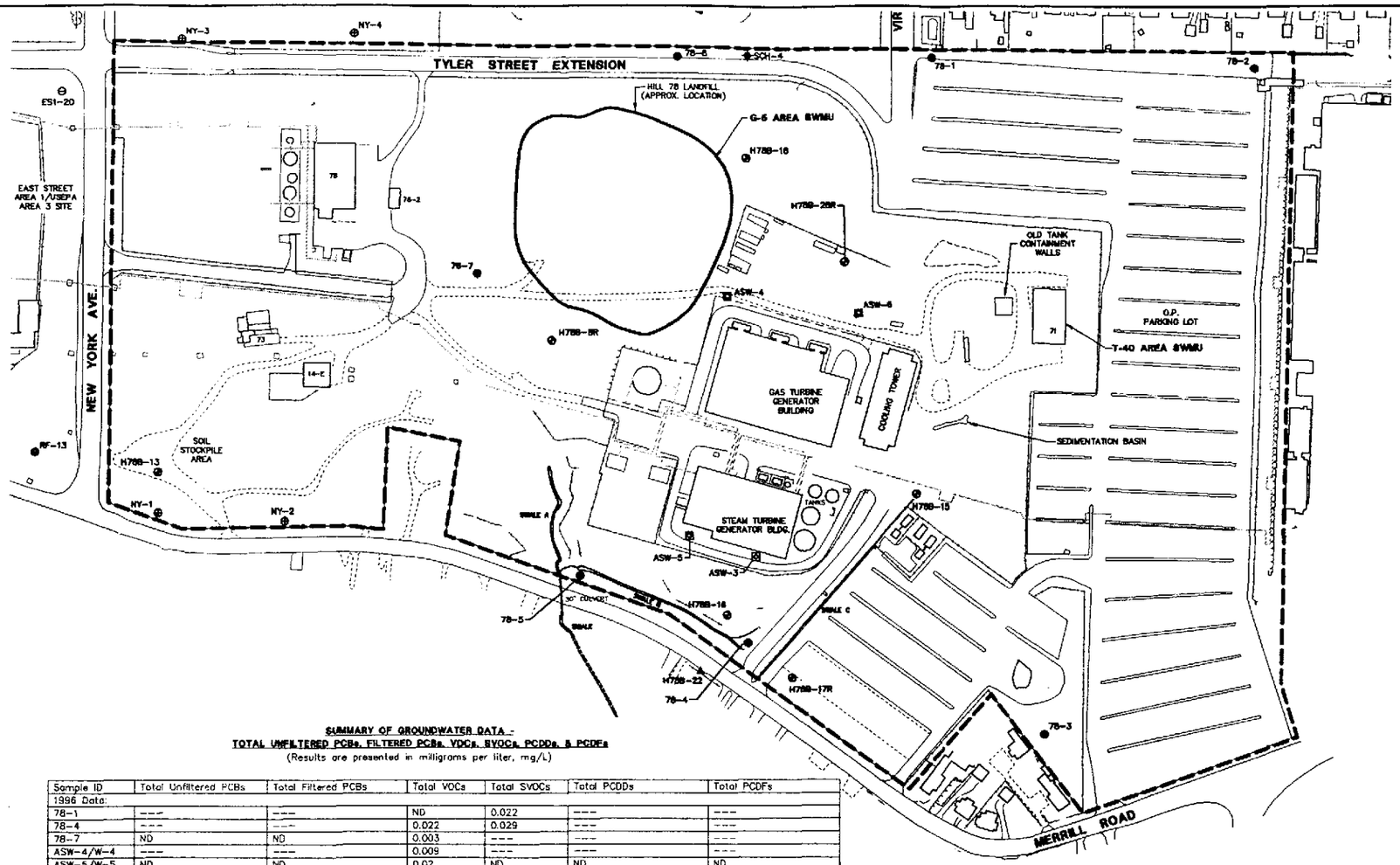
GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS
MCP PHASE II/RCRA FACILITY INVESTIGATION
REPORT FOR HILL 78 AREA/USEPA AREA 2

WATER TABLE ELEVATION CONTOUR MAP SEPTEMBER 17-20, 1996

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

FIGURE 5-1E

XREF: 10194001.DWG
L: ON=*, OFF=*REF*
P: DJB
7/21/97 SYR-54-DMW NES
10194220/10194815.DWG



LEGEND:

- APPROXIMATE SITE BOUNDARY
- FENCELINE
- NY-3 — MONITORING WELL (INSTALLED APRIL – MAY 1988)
- 78-7 — MONITORING WELL (INSTALLED FEB. 1990 – JAN. 1991)
- RF-13 — MONITORING WELL (INSTALLED MAY 1991)
- ES1-20 — MONITORING WELL (INSTALLED MAY 1996)
- H78B-13 — MONITORING WELL (INSTALLED JULY – NOV. 1996)
- SCH-4 — MONITORING WELL (INSTALLED APRIL 1997)
- ES1-6 — DEEP MONITORING WELL (INSTALLED MAY 1996)
- ASW-4 — DEEP WATER SUPPLY WELL (INSTALLED SEPT. 1988 – MAY 1991)

SUMMARY OF GROUNDWATER DATA -
TOTAL UNFILTERED PCBs, FILTERED PCBs, VOCs, SVOCs, PCDDs, & PCDFs
(Results are presented in milligrams per liter, mg/L)

Sample ID	Total Unfiltered PCBs	Total Filtered PCBs	Total VOCs	Total SVOCs	Total PCDDs	Total PCDFs
1996 Data:						
78-1	---	---	ND	0.022	---	---
78-4	---	---	0.022	0.029	---	---
78-7	ND	ND	0.003	---	---	---
ASW-4/W-4	---	---	0.009	---	---	---
ASW-5/W-5	ND	ND	0.02	ND	ND	ND
ASW-6/W-6	ND	ND	0.01	ND	0.00000255	0.00000029
H78B-8R	0.012	ND	0.005	0.008	0.000000445	0.000003972
H78B-13	ND	ND	0.024	0.051	ND	0.000000217
H78B-15	ND	0.00051 JN	0.002	0.002	ND	ND
H78B-16	0.00063 JP [ND]	ND[ND]	0.109 [0.107]	0.021 [0.044]	ND [ND]	ND [ND]
H78B-17R	ND [0.0025]	0.00036 J [0.00046 JP]	0.927 [1.222]	0.004 [0.004]	ND [ND]	ND [ND]
H78B-18	0.00050 J	ND	0.002	ND	ND	ND
H78B-22 (D)	---	---	0.003	---	---	---
H78B-28R	0.0019 P	ND	ND	ND	ND	ND
NY-1	ND	ND	0.003	0.047	0.0000136	0.000007691
NY-4	0.017	0.0013	0.008	---	---	---
1997 Data:						
78-6 (6)	0.0059	ND	ND	0.001	ND	0.000000349
NY-4 (6)	ND [ND]	ND [ND]	ND [ND]	0.001 [0.007]	ND [ND]	ND [ND]
SCH-4 (6)	ND	ND	ND	0.001	ND	ND
Historic Data:						
78-1 (3)	---	---	0.005	0.0104	---	---
78-2 (3)	---	---	0.004	0.002	---	---
78-3 (3)	---	---	0.05	ND	---	---
78-4 (3)	---	---	0.632	0.005	---	---
78-5 (3)	---	---	0.014	0.002	---	---
78-6 (3)	---	---	0.012	ND	---	---
78-7 (3)	0.00096	ND	0.033	0.003	---	---
ASW-3 (2)	ND	---	0.15	---	---	---
ASW-3 (3)	---	---	0.011	ND	---	---
ASW-3 (4)	ND	---	0.004	ND	---	---
NY-1 (1)	ND	---	ND	---	---	---
NY-1 (3)	---	---	0.042	0.1019	0.0000983	0.0000795
NY-1 (5)	---	---	---	---	0.0000624 [0.0001793]*	0.0000505 [0.0002025]*
NY-2 (1)	ND	---	ND	---	---	---
NY-2 (3)	---	0.00063	0.014	0.003	---	---
NY-3 (1)	ND	---	ND	---	---	---
NY-3 (3)	---	---	0.016	ND	---	---
NY-4 (1)	ND	---	ND	---	---	---
NY-4 (3)	0.000547	ND	0.034	ND	---	---
East Street Area 1						
RF-13	ND	---	0.279	0.018 [0.005]	ND	ND
ES1-20	ND [ND]	ND [ND]	ND [0.003J]	ND [ND]	ND [ND]	ND [ND]

Table Notes:

1. J – Indicates an estimated value less than the CLP–required quantitation limit.
2. N – Indicates sample matrix spike analysis was outside control limits.
3. P – Indicates dual column percent difference value exceeded 25 percent.
4. The calculation of totals includes J, N, B, and P qualified data, as applicable; total PCDD AND PCDF values are based only on total homologs.
5. ND – No individual constituents were detected above detection limits, therefore totals are reported as not detected.
6. The results of duplicate samples are presented in brackets.
7. (1) – Denotes samples collected in April/May 1988.
8. (2) – Denotes sample collected in January 1989.
9. (3) – Denotes samples collected in January/February 1991.
10. (4) – Denotes sample collected in August 1989.
11. (5) – Denotes samples collected in August 1991.
12. (6) – Denotes samples collected in May 1997 as part of the MCP Supplemental Phase II Investigation–Allendale School Property.
13. * – Samples were analyzed for dioxin and furans by two laboratories (CompuChem and IT Analytical). The results from IT Analytical are presented in brackets.
14. D – This sample is a discrete water sample collected from a temporary microwell installed during the advancement of the boring.
15. --- Denotes that no analysis was performed; no values are available.
16. Sample H78B–14 (D) was received by CompuChem, but was not sent to Quanterra for analysis of PCDD and PCDF. Therefore, no results are available.

ILLUSTRATION NOTES:

1. MAPPING BASED ON AUTOCAD DRAWING FILE (PLANT3.CAD) AS PROVIDED BY GE AND ADDITIONAL INFORMATION FROM THE MCP PHASE II SCOPE OF WORK AND PROPOSAL FOR RCRA FACILITY INVESTIGATION (O'BRIEN & GERE ENGINEERS, INC., FEBRUARY 1996) AS WELL AS SUPPLEMENTAL SITE SURVEY INFORMATION OBTAINED BY HILL ENGINEERS, PLANNERS & ARCHITECTS (WEEK OF MAY 29, 1997). LOCATIONS SOUTH OF MERRILL ROAD DIGITIZED FROM AUGUST 1990 AIR PHOTO AND ARE APPROXIMATE.
2. SITE BOUNDARY IS APPROXIMATE.
3. PRE–1996 SAMPLE LOCATIONS ARE APPROXIMATE. 1996 SAMPLE LOCATIONS SURVEYED BY HILL ENGINEERS, PLANNERS & ARCHITECTS OR BLASLAND, BOUCK AND LEE, INC.

125' 0 125' 250'
SCALE

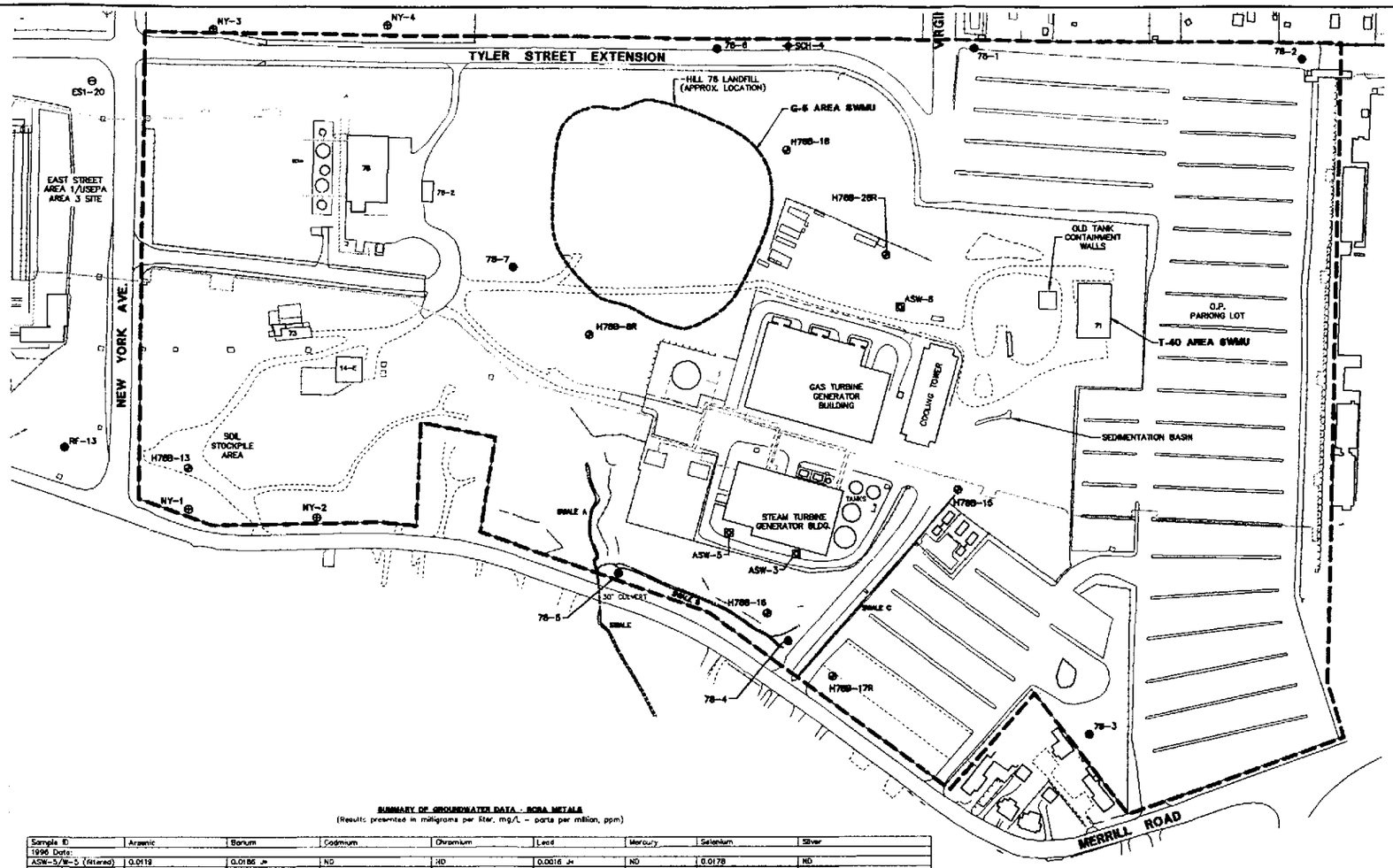
GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS
MCP PHASE II/RCRA FACILITY INVESTIGATION
REPORT FOR HILL 78 AREA/USEPA AREA 2

SUMMARY OF GROUNDWATER DATA - PCBs, VOCs, SVOCs, PCDD, PCDF

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

FIGURE 5-2A

XREF: 10194X01.DWG
P: DJB
7/31/97 SYR-54-DMW NES
10194220/10194804.DWG



LEGEND:

- APPROXIMATE SITE BOUNDARY
- FENCELINE
- NY-3 MONITORING WELL (INSTALLED APRIL – MAY 1988)
- 78-7 MONITORING WELL (INSTALLED FEB. 1990 – JAN. 1991)
- H78B-13 MONITORING WELL (INSTALLED JULY – NOV. 1996)
- ASW-4 DEEP WATER SUPPLY WELL (INSTALLED SEPT. 1988 – MAY 1991)
- SCH-4 MONITORING WELL (INSTALLED APRIL 1997)

SUMMARY OF GROUNDWATER DATA - RCRA METALS
(Results presented in milligrams per liter, mg/L – parts per million, ppm)

Sample ID	Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	Silver
1996 Data:								
ASW-5/W-5 (filtered)	0.0119	0.0186 J+	ND	ND	0.0016 J+	ND	0.0178	ND
ASW-5/W-5 (unfiltered)	ND	0.0167 J+	ND	ND	ND	ND	ND	ND
ASW-6/W-6 (filtered)	0.011	0.035 J+	ND	ND	ND	ND	0.0179	ND
ASW-6/W-6 (unfiltered)	ND	0.0364 J+	ND	0.0019 J+	ND	ND	ND	ND
H78B-8R (unfiltered)	0.0174	0.543	0.0018 J+	0.0135	0.0158	ND	0.0043 J+	ND
H78B-8R (filtered)	0.0144	0.326	0.00065 J+	ND	ND	ND	0.0367	ND
H78B-13 (filtered)	ND	0.0431 J+	ND	ND	ND	ND	0.0243	ND
H78B-13 (unfiltered)	0.0043 J+	0.0922 J+	ND	ND	0.0021 J+	ND	ND	ND
H78B-15 (filtered)	0.0152	0.0451 J+	ND	ND	0.0026 J+	ND	0.021	ND
H78B-15 (unfiltered)	ND	0.0453 J+	ND	ND	ND	ND	ND	ND
H78B-16 (filtered)	ND [ND]	0.0297 J+ [0.025 J+]	ND [ND]	ND [ND]	0.0019 J+ [0.0015 J+]	ND [ND]	0.0034 J+ [ND]	ND [ND]
H78B-16 (unfiltered)	0.0189 [0.0158]	0.0287 J+ [0.0265 J+]	0.00030 J+ [ND]	ND [ND]	0.0030 [0.0024 J+]	ND [ND]	0.0299 [0.0271]	ND [ND]
H78B-17R (filtered)	0.0061 J+ [0.0081 J+]	0.905 [0.871]	ND[ND]	0.0154 [0.0148]	0.0081 [0.0064]	ND [ND]	0.0232 [0.0215]	ND [ND]
H78B-17R (unfiltered)	0.0035 J+ [ND]	1.07 [0.871 E]	ND [ND]	0.0279 [0.0148]	0.0147 [0.0064]	ND [ND]	ND[0.0039] [ND]	ND [ND]
H78B-18 (filtered)	0.015	0.0433 J+	ND	ND[0.0016]	0.0021 J+	ND	0.0207	ND
H78B-18 (unfiltered)	0.0126	0.0851 J+	ND	0.0057 J+	0.0070	ND	ND	ND
H78B-26R (filtered)	0.0147	0.0781 J+	ND	ND	0.0030 J+	ND	0.0374	ND
H78B-26R (unfiltered)	ND	0.126 J+	ND	0.0078 J+	0.0077	ND	ND	0.0014 J+
1997 Data								
78-6 (5) (filtered)	0.0068 J+	0.0365 J+	ND	ND	ND	----	ND	----
78-6 (5) (unfiltered)	0.0298	0.0487 J+	ND	0.002 J+	0.0034	----	ND	----
NY-4 (5) (filtered)	ND [ND]	0.0196 J+ [0.019 J+]	ND [ND]	ND [ND]	0.0012 J+ [0.0011 J+]	----	0.0039 J+ [0.0031 J+]	----
NY-4 (5) (unfiltered)	0.0136 [0.0159]	0.166 J+ [0.175 J+]	ND [ND]	0.0384 [0.042]	0.0224 [0.0231]	----	ND [ND]	----
SCH-4 (5) (filtered)	0.004 J+	0.0962 J+	ND	ND	0.0013 J+	----	ND	----
SCH-4 (5) (unfiltered)	0.045	0.387	ND	0.0677	0.0621	----	ND	----
Historic Data:								
78-1 (3)	----	----	ND d/0.0054 I	ND d t	ND d t	ND d t	ND d t	ND d t
78-2 (3)	----	----	ND d t	ND d t	ND d t	0.00039 d/ND t	ND d t	ND d t
78-3 (3)	----	----	ND t	ND t	ND t	ND t	ND t	ND t
78-4 (3)	----	----	ND t	ND t	ND t	ND t	ND t	ND t
78-5 (3)	----	----	ND t	ND t	ND t	ND t	ND t	ND t
78-6 (3)	----	----	ND t	ND t	ND t	ND t	ND t	ND t
78-7 (3)	----	----	ND d	ND d	ND d	ND d	ND d	ND d
ASW-3 (2)	ND	----	ND	ND	ND	ND	ND	ND
ASW-3 (3)	----	----	ND t	ND t	ND t	ND t	OFF	ND t
ASW-3 (4)	ND	----	ND	ND	ND	ND	ND	ND
NY-1 (1)	ND	----	ND	ND	ND	ND	ND	ND
NY-1 (3)	----	----	ND d	ND d	ND d	ND d	ND d	ND d
NY-2 (1)	ND	----	ND	ND	ND	ND	ND	ND
NY-2 (3)	----	0.0897 d	ND d	ND d	ND d	ND d	ND d	ND d
NY-3 (1)	ND	----	ND	ND	ND	ND	ND	ND
NY-3 (3)	----	----	ND d	ND d	ND d	ND d	ND d	ND d
NY-4 (1)	ND	----	ND	ND	ND	ND	ND	ND
NY-4 (3)	----	----	ND d	ND d	0.043 d	ND d	ND d	ND d
East Street Area 1								
RF-13	----	0.0153 J+	----	----	0.0027 J+	----	----	----
ES1-20 (filtered)	----	ND [ND]	----	----	----	----	0.019 J+ [0.0163 J+]	----
ES1-20 (unfiltered)	----	ND [ND]	----	ND [ND]	0.0027 B [ND]	----	----	----

Table Notes:

1. J+ – Indicates the reported value is less than the CLP-required detection limit (CRDL), but greater than the instrument detection limit (IDL).
2. ND – Compound was not detected, associated detection limit presented in parentheses.
3. E – Indicates inductively couple plasma (ICP) serial dilution analyses was outside control limits.
4. d – The results are reported as dissolved metals.
5. t – The results are reported as total metals.
6. (1) – Denotes samples collected in April/May 1988.
7. (2) – Denotes sample collected in January 1989.
8. (3) – Denotes samples collected in January/February 1991.
9. (4) – Denotes samples collected in August 1989.
10. (5) – Samples collected in May 1997 as part of the MCP Supplemental Phase II Investigation– Allendale School Property.
10. Results of duplicate samples are presented in brackets.
11. ---- Denotes that no analysis was performed; no values are available.

ILLUSTRATION NOTES:

1. MAPPING BASED ON AUTOCAD DRAWING FILE (PLANT3.CAD) AS PROVIDED BY GE AND ADDITIONAL INFORMATION FROM THE MCP PHASE II SCOPE OF WORK AND PROPOSAL FOR RCRA FACILITY INVESTIGATION (O'BRIEN & GERE ENGINEERS, INC., FEBRUARY 1996) AS WELL AS SUPPLEMENTAL SITE SURVEY INFORMATION OBTAINED BY HILL ENGINEERS, PLANNERS & ARCHITECTS (WEEK OF MAY 29, 1997). LOCATIONS SOUTH OF MERRILL ROAD DIGITIZED FROM AUGUST 1990 AIR PHOTO AND ARE APPROXIMATE.
2. SITE BOUNDARY IS APPROXIMATE.
3. PRE-1996 SAMPLE LOCATIONS ARE APPROXIMATE. 1996 SAMPLE LOCATIONS SURVEYED BY HILL ENGINEERS, PLANNERS & ARCHITECTS OR BLASLAND, BOUCK AND LEE, INC.

125' 0 125' 250'
SCALE

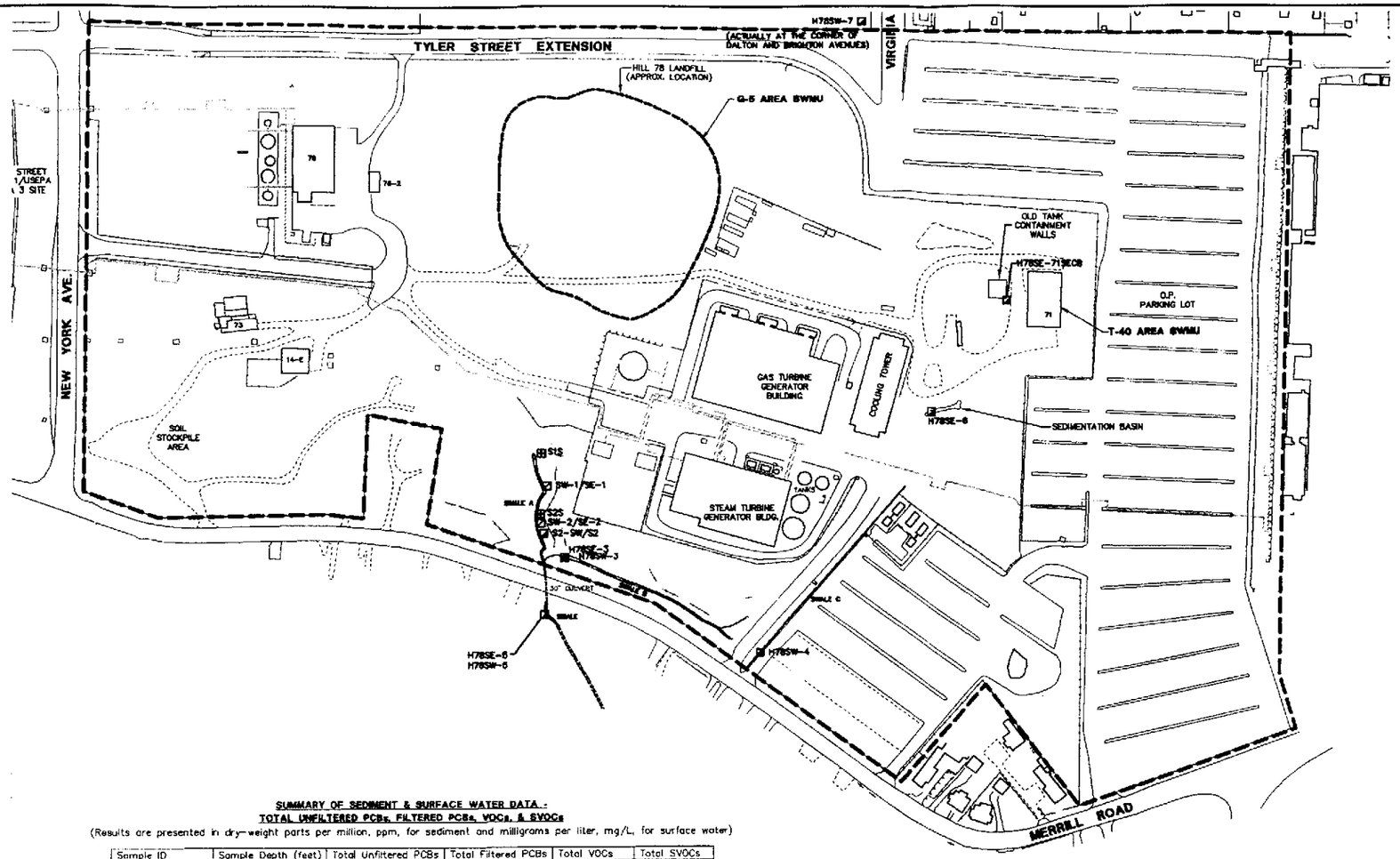
GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS
MCP PHASE II/RCRA FACILITY INVESTIGATION
REPORT FOR HILL 78 AREA/USEPA AREA 2

SUMMARY OF GROUNDWATER DATA - RCRA METALS

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

FIGURE 5-2B

XREF: 10194X01.DWG
L: ON== OFF==REF*
Pt DJB
7/30/97 SYR-54-DMW MES
10194220/10194B03.DWG



LEGEND:

- APPROXIMATE SITE BOUNDARY
- FENCELINE
- S1S/S2S — SEDIMENT SAMPLING LOCATION (SEPT. 1991)
- SW-2/SE-2, SW-1/SE-1 — SURFACE WATER/SEDIMENT SAMPLING LOCATION (MAY 1991)
- H78SW-3/H78SE-3, S2-SW/S2 — SURFACE WATER/SEDIMENT SAMPLING LOCATION (JULY - NOV. 1996)

SUMMARY OF SEDIMENT & SURFACE WATER DATA - TOTAL UNFILTERED PCBs, FILTERED PCBs, VOCs, & SVOCs

(Results are presented in dry-weight parts per million, ppm, for sediment and milligrams per liter, mg/L, for surface water)

Sample ID	Sample Depth (feet)	Total Unfiltered PCBs	Total Filtered PCBs	Total VOCs	Total SVOCs
1996 Data:					
Sediment:					
H78SE-3	0 - 1	3.7 [3.5]	NA	0.046 [0.073]	44.6 [53.3]
H78SE-5	0 - 0.9	0.38	NA	0.031	12.4
H78SE-6	0 - 1	200	NA	0.033	3.7
H78SE-7	0 - 0.6	0.91 P	NA	0.082	64.2
H78SE-71-SECB	0 - 0.3	49	NA	37.0	722
S2	0 - 0.9	1.3 P	NA	0.048	88.7
Surface Water:					
H78SW-3	---	0.0015 J	ND	0.002	0.001
H78SW-4	---	ND	ND	0.002	0.001
H78SW-5	---	ND[ND]	ND	0.017 [0.03]	0.004 [0.001]
H78SW-7	---	0.00092 J	ND	0.005	0.001
S2-SW	---	ND	ND	0.002	0.002
Historic Data:					
Sediment:					
SE-1	---	0.7	NA	0.133	33.9
SE-2	---	2.5	NA	0.079	252.7
Surface Water:					
SW-1	---	---	---	0.003	0.0112
SW-2	---	0.000066	ND	0.008	ND

Table Notes:
1. J - Indicates an estimated value less than the CLP-required quantitation limit.
2. ND - Individual constituents were below detection limits; therefore the total is reported as not detected.
3. The calculation of total values includes J, B, X, E, and P qualified data, as applicable.
4. Results of duplicate samples are presented in brackets.
5. --- Denotes that no analysis was performed; no results are available.
6. NA - Not applicable

ILLUSTRATION NOTES:

1. MAPPING BASED ON AUTOCAD DRAWING FILE (PLANT3.CAD) AS PROVIDED BY GE AND ADDITIONAL INFORMATION FROM THE MCP PHASE II SCOPE OF WORK AND PROPOSAL FOR RCRA FACILITY INVESTIGATION (O'BRIEN & GERE ENGINEERS, INC., FEBRUARY 1996) AS WELL AS SUPPLEMENTAL SITE SURVEY INFORMATION OBTAINED BY HILL ENGINEERS, PLANNERS & ARCHITECTS (WEEK OF MAY 29, 1997). LOCATIONS SOUTH OF MERRILL ROAD DIGITIZED FROM AUGUST 1990 AIR PHOTO AND ARE APPROXIMATE.
2. SITE BOUNDARY IS APPROXIMATE.
3. PRE-1996 SAMPLE LOCATIONS ARE APPROXIMATE. 1996 SAMPLE LOCATIONS SURVEYED BY HILL ENGINEERS, PLANNERS & ARCHITECTS OR BLASLAND, BOUCK AND LEE, INC.

125' 0 125' 250'
SCALE

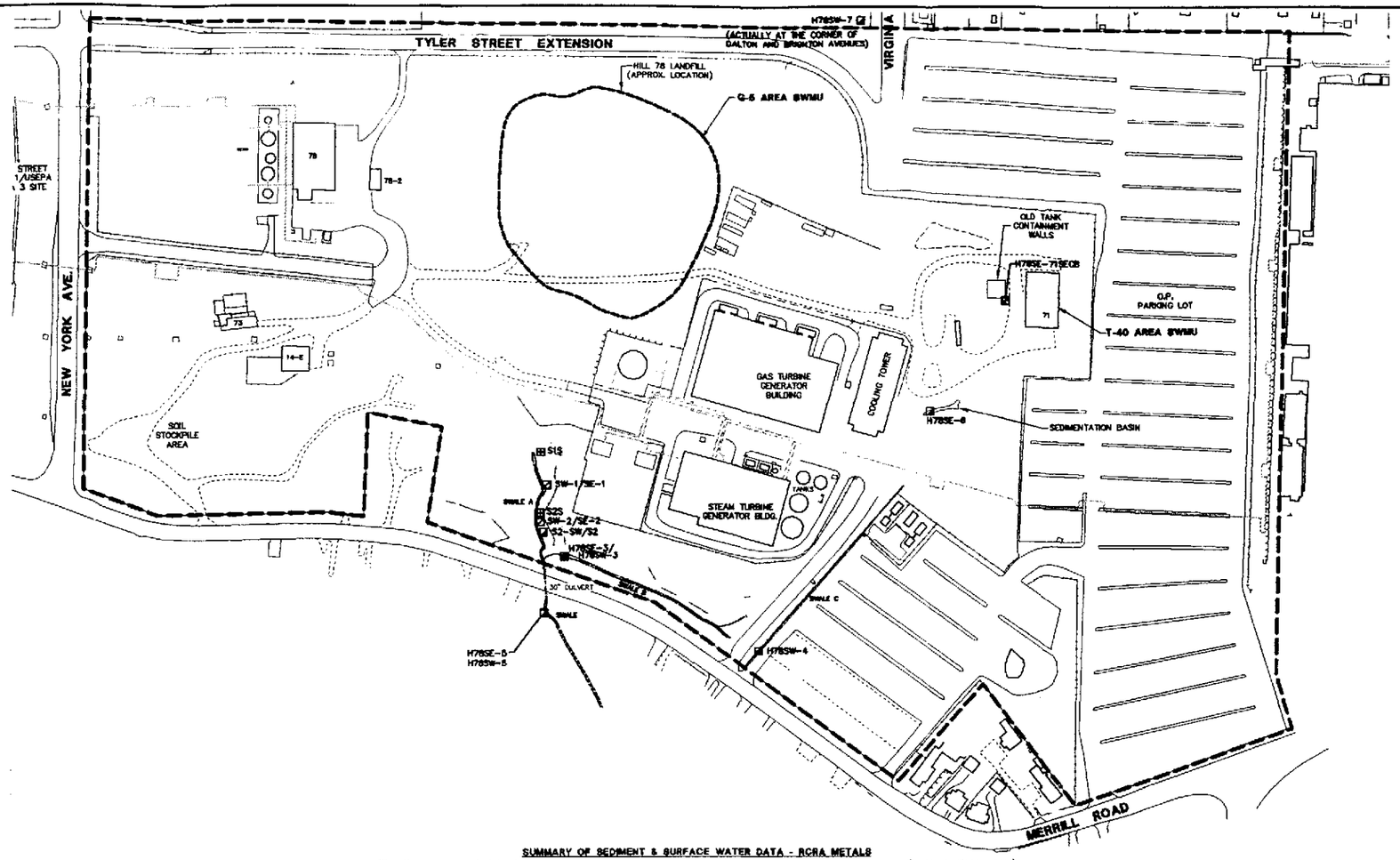
GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS
MCP PHASE II/RCRA FACILITY INVESTIGATION
REPORT FOR HILL 78 AREA/USEPA AREA 2

SUMMARY OF SURFACE WATER/ SEDIMENT DATA - PCBs, VOCs, SVOCs

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

FIGURE 7-1A

XREF: 10194XD1.DWG
L: ON=*, OFF=*REF*
P: DJB
7/30/97 SYR-04-DMW, NES
ID194220/10194B05.DWG



LEGEND:

- APPROXIMATE SITE BOUNDARY
- FENCELINE
- S1S/S2S — SEDIMENT SAMPLING LOCATION (SEPT. 1991)
- SW-2/SE-2, SW-1/SE-1 — SURFACE WATER/SEDIMENT SAMPLING LOCATION (MAY 1991)
- H78SW-3/H78SE-3, S2-SW/S2 — SURFACE WATER/SEDIMENT SAMPLING LOCATION (JULY – NOV. 1996)

SUMMARY OF SEDIMENT & SURFACE WATER DATA - RCRA METALS

(Results are presented in dry-weight parts per million, ppm, for sediment and milligrams per liter, mg/L, for surface water)

Sample ID.:	Sample Depth (feet):	Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	Silver
1996 Data:									
Sediment:									
S2	0 – 0.5	4.9	35.2	ND	10	25.1	ND N	0.75 J+N	ND
H78SE-3	0 – 1	2.3 [3.0]	26.3 [36.6]	0.29 J+ [0.40 J+]	13.1[21.6]	43.8 [66.3]	ND N [ND N]	0.54 N [0.68 J+N]	ND [ND]
H78SE-5	0 – 0.9	5.5	86.8	ND	8.9	19.5	ND N	0.88 N	ND
H78SE-6	0 – 1	1.7	17.1 J+	ND	6.2	11.6	ND N	ND N	ND
H78SE-7	0 – 0.6	2.8	20.5 J+	ND	11.2	20.1	ND N	0.54 J+N	ND
H78SE-71-SECB	0 – 0.3	3.9	53.9	ND	14.6	21.1	0.20 N	0.83 J+N	ND
Surface Water:									
H78SW-3 (unfiltered)	---	ND	0.0023 J+	ND	0.0016 J+	0.0018 J+	ND	ND	ND
H78SW-3 (filtered)	---	ND	0.0023 J+	ND	ND	ND	ND	ND	ND
H78SW-4 (unfiltered)	---	ND	0.0018 J+	ND	ND	ND	ND	ND	ND J+
H78SW-4 (filtered)	---	ND	0.0010 J+	0.00030 J+	ND	ND	ND	ND	ND
H78SW-5 (unfiltered)	---	ND [ND]	0.0079 J+ [0.0027 J+]	ND [ND]	0.0017 J+ [ND]	0.0041 [ND]	ND	ND [ND]	ND J+ [ND J+]
H78SW-5 (filtered)	---	ND [ND]	0.0027 J+ [0.0027 J+]	0.00040 J+ [ND]	ND [ND]	0.0016 J+ [0.0015 J+]	ND	0.0031 J+ [ND]	ND [ND]
H78SW-7 (unfiltered)	---	ND	0.0027 J+	ND	ND	0.0027 J+	ND	ND	ND J+
H78SW-7 (filtered)	---	ND	0.0012 J+	0.00033 J+	ND	0.0024 J+	ND	ND	ND
S2-SW (unfiltered)	---	ND	0.0033 J+	ND	ND	ND	ND	ND	ND J+
S2-SW (filtered)	---	0.0027 B	0.0043 J+	ND	ND	ND	ND	ND	ND
Historic Data:									
Sediment:									
S1S	---	4.9 [1.4]	13.3 [20.7]	---	21.5 [8]	124 [76.1]	---	---	---
S2S	---	5.5	22.8	---	9.1	37.1	---	---	---
Surface Water:									
S2	0 – 0.9	3.9	27.5	ND	7.7	5.3 E	ND	ND	ND
SW-1	---	---	0.0212 t/0.0156 d	---	---	0.003 t/ ND d	---	ND t/ ND d	---
SW-2	---	---	0.0145 t/0.0101 d	---	---	0.0066 t/ ND d	---	0.0091 t/ ND d	---

Table Notes:

1. J+ – Indicates the reported value is less than the CLP-required detection limit (CRDL), but greater than the instrument detection limit (IDL).
2. E – Indicates inductively coupled plasma (ICP) serial dilution analysis was outside control limits.
3. N – Indicates sample matrix spike analysis was outside control limits.
4. ND – Compound was not detected.
5. Results of duplicate samples are presented in brackets.
6. d – The results are reported as dissolved metals.
7. t – The results are reported as total metals.
8. --- Denotes that no analysis was performed; no values are available.

ILLUSTRATION NOTES:

1. MAPPING BASED ON AUTOCAD DRAWING FILE (PLANT3.CAD) AS PROVIDED BY GE AND ADDITIONAL INFORMATION FROM THE MCP PHASE II SCOPE OF WORK AND PROPOSAL FOR RCRA FACILITY INVESTIGATION (O'BRIEN & GERE ENGINEERS, INC., FEBRUARY 1996) AS WELL AS SUPPLEMENTAL SITE SURVEY INFORMATION OBTAINED BY HILL ENGINEERS, PLANNERS & ARCHITECTS (WEEK OF MAY 29, 1997). LOCATIONS SOUTH OF MERRILL ROAD DIGITIZED FROM AUGUST 1990 AIR PHOTO AND ARE APPROXIMATE.
2. SITE BOUNDARY IS APPROXIMATE.
3. PRE-1996 SAMPLE LOCATIONS ARE APPROXIMATE. 1996 SAMPLE LOCATIONS SURVEYED BY HILL ENGINEERS, PLANNERS & ARCHITECTS OR BLASLAND, BOUCK AND LEE, INC.

125' 0 125' 250'
SCALE

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

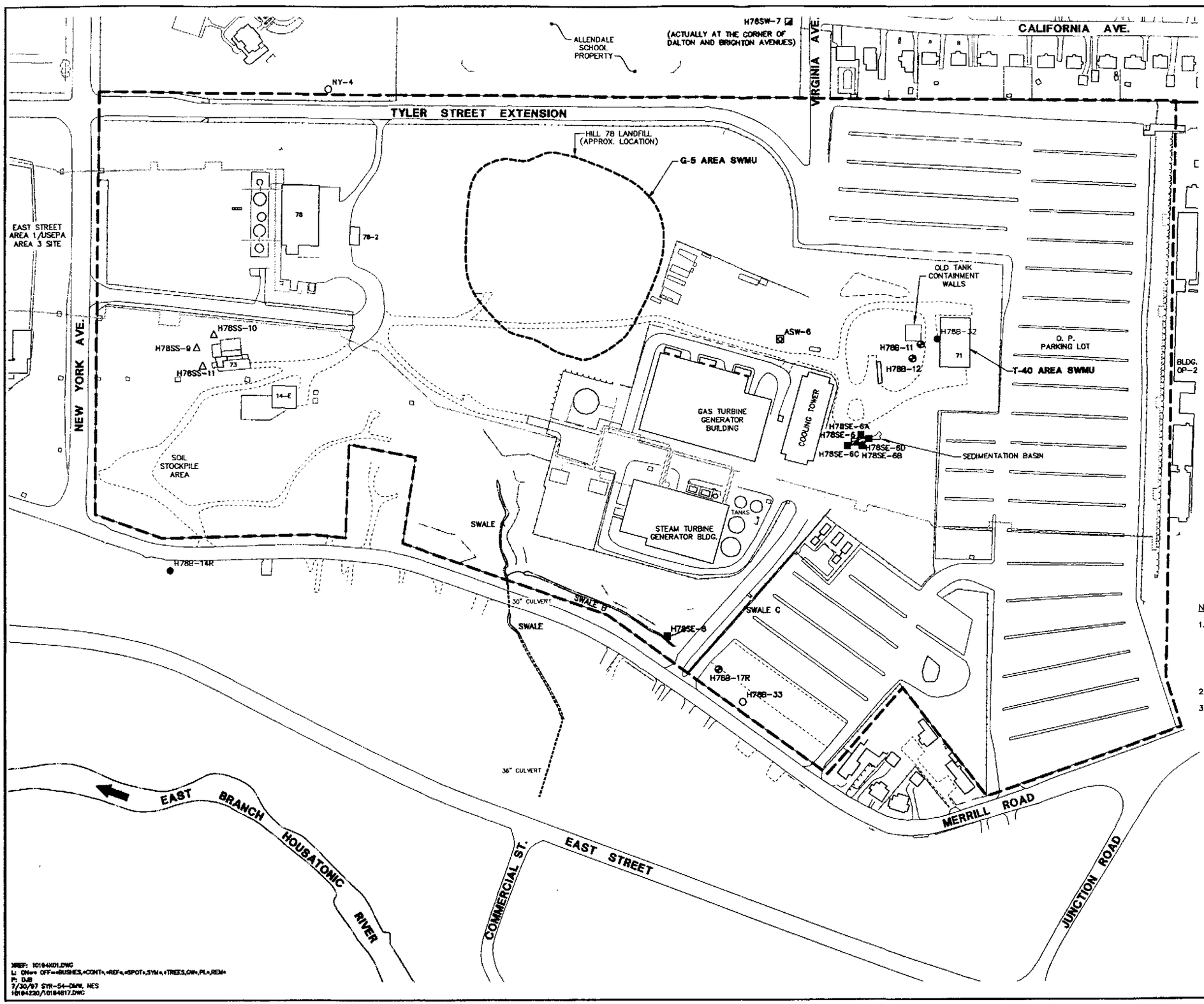
MCP PHASE II/RCRA FACILITY INVESTIGATION REPORT FOR HILL 78 AREA/USEPA AREA 2

SUMMARY OF SURFACE WATER/ SEDIMENT DATA - RCRA METALS

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

FIGURE 7-1B

XREF: 10194001.DWG
L: ON=* OFF=*REF*
P: DJB
7/30/97 SYR-54-DMW NES
10194220/10194806.DWG



LEGEND:

- APPROXIMATE SITE BOUNDARY
- FENCELINE
- H78B-16 PROPOSED SOIL BORING LOCATION
- H78SE-6E PROPOSED SEDIMENT SAMPLING LOCATION
- H78SS-9 PROPOSED SURFICIAL SOIL SAMPLING LOCATION
- H78B-33 PROPOSED MONITORING WELL LOCATION
- H78SW-7 EXISTING SURFACE WATER SAMPLING LOCATION
- H78B-13 MONITORING WELL (INSTALLED JULY – NOV. 1996)
- ASW-6 DEEP WATER SUPPLY WELL (INSTALLED SEPT. 1988 – MAY 1991)

NOTES:

1. MAPPING BASED ON AUTOCAD DRAWING FILE (PLANT3.CAD) AS PROVIDED BY GE AND ADDITIONAL INFORMATION FROM THE MCP PHASE II SCOPE OF WORK AND PROPOSAL FOR RCRA FACILITY INVESTIGATION (O'BRIEN & GERE ENGINEERS, INC., FEBRUARY 1996) AS WELL AS SUPPLEMENTAL SITE SURVEY INFORMATION OBTAINED BY HILL ENGINEERS, PLANNERS & ARCHITECTS (WEEK OF MAY 29, 1997). LOCATIONS SOUTH OF MERRILL ROAD DIGITIZED FROM AUGUST 1990 AIR PHOTO AND ARE APPROXIMATE.
2. SITE BOUNDARY IS APPROXIMATE.
3. SAMPLING LOCATIONS ARE APPROXIMATE.

100' 0 100' 200'
SCALE

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP PHASE II/RCRA FACILITY INVESTIGATION REPORT FOR HILL 78 AREA/USEPA AREA 2

PROPOSED SUPPLEMENTAL ACTIVITIES

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

FIGURE 10-1

XREF: 10194X01.DWG
L: ON=* OFF=*BUSHES,*CONT*,*REF*,*SPOT*,SYM*,*TREES,GW*,PL*,REM*
P: DJB
7/30/97 SYR-54-DMW, NES
10194220/10184817.DWG

Appendix A

BLASLAND, BOUCK & LEE, INC.
engineers & scientists

Site Utility Maps

(Figures 2-2 through 3-1 of *Assessment of Preferential Pathways Hill 78 Area/USEPA Area 2*, BBL, March 1997)

LEGEND:

- APPROXIMATE SITE BOUNDARY
- 24" STORMWATER DRAINAGE LINE
- FENCELINE
- MANHOLE (MH)
- CATCH BASIN (CB)
- GE 316D473 INV=1004.7 GW=998.0 (B) — GE OR CITY REFERENCE DRAWING NUMBER; MH/CB INVERT ELEVATION (FT); GROUNDWATER ELEVATION (FT)
- GW = 984.5 (A) — GROUNDWATER ELEVATION ABOVE OR WITHIN 0.5' OF PIPELINE OR DUCT INVERT ELEVATION
- GW = 984.5 (B) — GROUNDWATER ELEVATION BELOW (AT LEAST 0.5') PIPELINE OR DUCT INVERT ELEVATION
- VCP — VITRIFIED CLAY PIPE
- CIP — CAST IRON PIPE
- RCP — REINFORCED CONCRETE PIPE

100' 0 100' 200'

APPROXIMATE SCALE: 1" = 200'

NOTES:

1. MAPPING IS BASED ON AERIAL PHOTOGRAPHS AND PHOTOGRAMMETRIC MAPPING BY LOCKWOOD MAPPING, INC. – FLOWN IN APRIL 1990 AND ADDITIONAL INFORMATION FROM THE MCP PHASE II SCOPE OF WORK AND PROPOSAL FOR RCRA FACILITY INVESTIGATION, FIGURE 2 (O'BRIEN & GERE ENGINEERS, INC., MAY, 1995).
2. SITE BOUNDARIES ARE APPROXIMATE.
3. UTILITY LOCATIONS AND SIZES ARE BASED ON MAPPING PROVIDED BY GENERAL ELECTRIC AND THE CITY OF PITTSFIELD. ALL UTILITY LOCATIONS ARE APPROXIMATE.

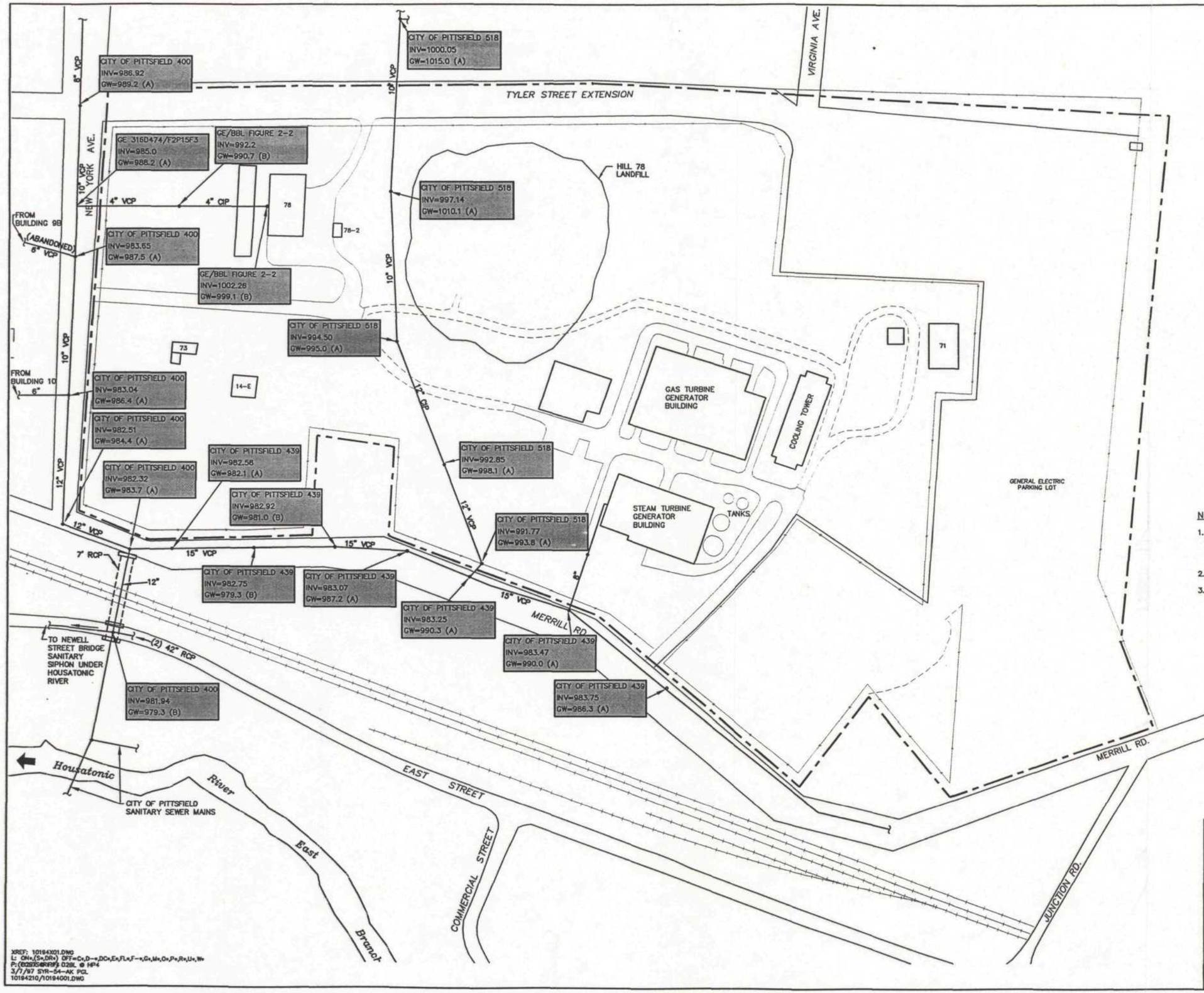
GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

HILL 78 AREA/USEPA AREA 2
PREFERENTIAL PATHWAY ANALYSIS

STORMWATER DRAINAGE SYSTEM

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

FIGURE 2-2



LEGEND:

- APPROXIMATE SITE BOUNDARY
- 4" SANITARY SEWER LINE
- FENCELINE
- MANHOLE (MH)

CITY OF PITTSFIELD 439 INV=983.47 GW=986.3 (A) = GE OR CITY REFERENCE DRAWING NUMBER; MH INVERT ELEVATION (FT); GROUNDWATER ELEVATION (FT)

GW = 984.5 (A)	GROUNDWATER ELEVATION ABOVE OR WITHIN 0.5' OF PIPELINE OR DUCT INVERT ELEVATION
GW = 984.5 (B)	GROUNDWATER ELEVATION BELOW (AT LEAST 0.5') PIPELINE OR DUCT INVERT ELEVATION
VCP	VITRIFIED CLAY PIPE
CIP	CAST IRON PIPE
RCP	REINFORCED CONCRETE PIPE

100' 0 100' 200'

APPROXIMATE SCALE: 1" = 200'

NOTES:

1. MAPPING IS BASED ON AERIAL PHOTOGRAPHS AND PHOTOGRAMMETRIC MAPPING BY LOCKWOOD MAPPING, INC. – FLOWN IN APRIL 1990 AND ADDITIONAL INFORMATION FROM THE MCP PHASE II SCOPE OF WORK AND PROPOSAL FOR RCRA FACILITY INVESTIGATION, FIGURE 2 (O'BRIEN & GERE ENGINEERS, INC., MAY, 1995).
2. SITE BOUNDARIES ARE APPROXIMATE.
3. UTILITY LOCATIONS AND SIZES ARE BASED ON MAPPING PROVIDED BY GENERAL ELECTRIC AND THE CITY OF PITTSFIELD. ALL UTILITY LOCATIONS ARE APPROXIMATE.

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

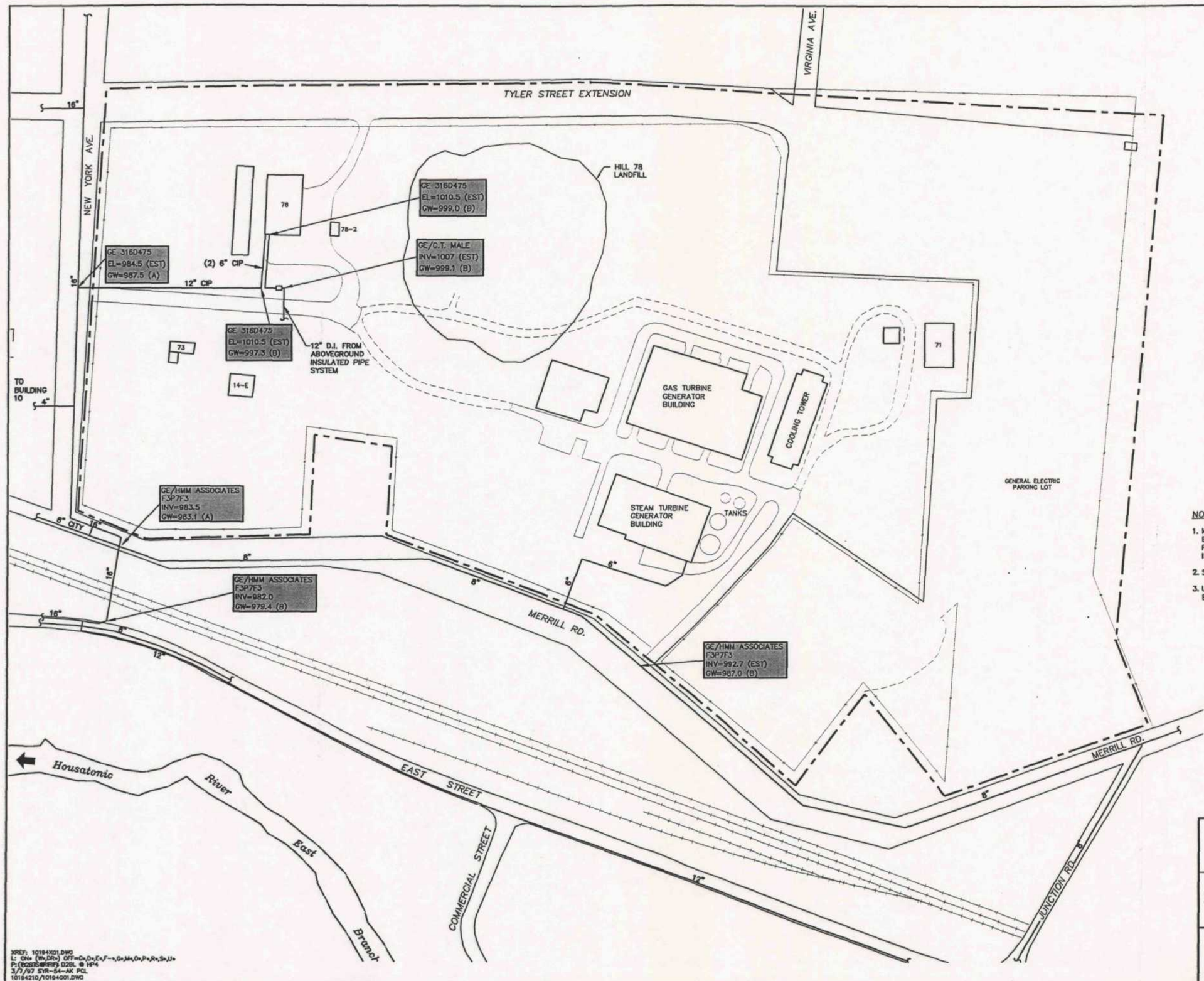
HILL 78 AREA/USEPA AREA 2
PREFERENTIAL PATHWAY ANALYSIS

SANITARY SEWER SYSTEM

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

FIGURE 2-3

XREF: 10194X01.DWG
L: ON=,(S=,DR=) OFF=C=,D=-=,DC=,E=,FL=,F=-=,G=,M=,O=,P=,R=,U=,W=
P:(BBL\S\RFF) D:29L @ HP4
3/7/97 SYR=54=AK PGL
10194210/10194G01.DWG



LEGEND:

- APPROXIMATE SITE BOUNDARY
- 8" POTABLE WATER LINE
- FENCELINE

GE 316D473 INV=1004.78 GW=987.0 (B) = GE OR CITY REFERENCE DRAWING NUMBER / MH INVERT ELEVATION (FT) / GROUNDWATER ELEVATION (FT)

GW = 984.5 (A) — GROUNDWATER ELEVATION ABOVE OR WITHIN 0.5' OF PIPELINE OR DUCT INVERT ELEVATION

GW = 984.5 (B) — GROUNDWATER ELEVATION BELOW (AT LEAST 0.5') PIPELINE OR DUCT INVERT ELEVATION

(EST) = INVERT ELEVATION ESTIMATED USING AVAILABLE TOPOGRAPHIC INFORMATION

CIP = CAST IRON PIPE

DI = DUCTILE IRON

100' 0 100' 200'

APPROXIMATE SCALE: 1" = 200'

NOTES:

1. MAPPING IS BASED ON AERIAL PHOTOGRAPHS AND PHOTOGRAMMETRIC MAPPING BY LOCKWOOD MAPPING, INC. – FLOWN IN APRIL 1990 AND ADDITIONAL INFORMATION FROM THE MCP PHASE II SCOPE OF WORK AND PROPOSAL FOR RCRA FACILITY INVESTIGATION, FIGURE 2 (O'BRIEN & GERE ENGINEERS, INC., MAY, 1995).
2. SITE BOUNDARIES ARE APPROXIMATE.
3. UTILITY LOCATIONS AND SIZES ARE BASED ON MAPPING PROVIDED BY GENERAL ELECTRIC AND THE CITY OF PITTSFIELD. ALL UTILITY LOCATIONS ARE APPROXIMATE.

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

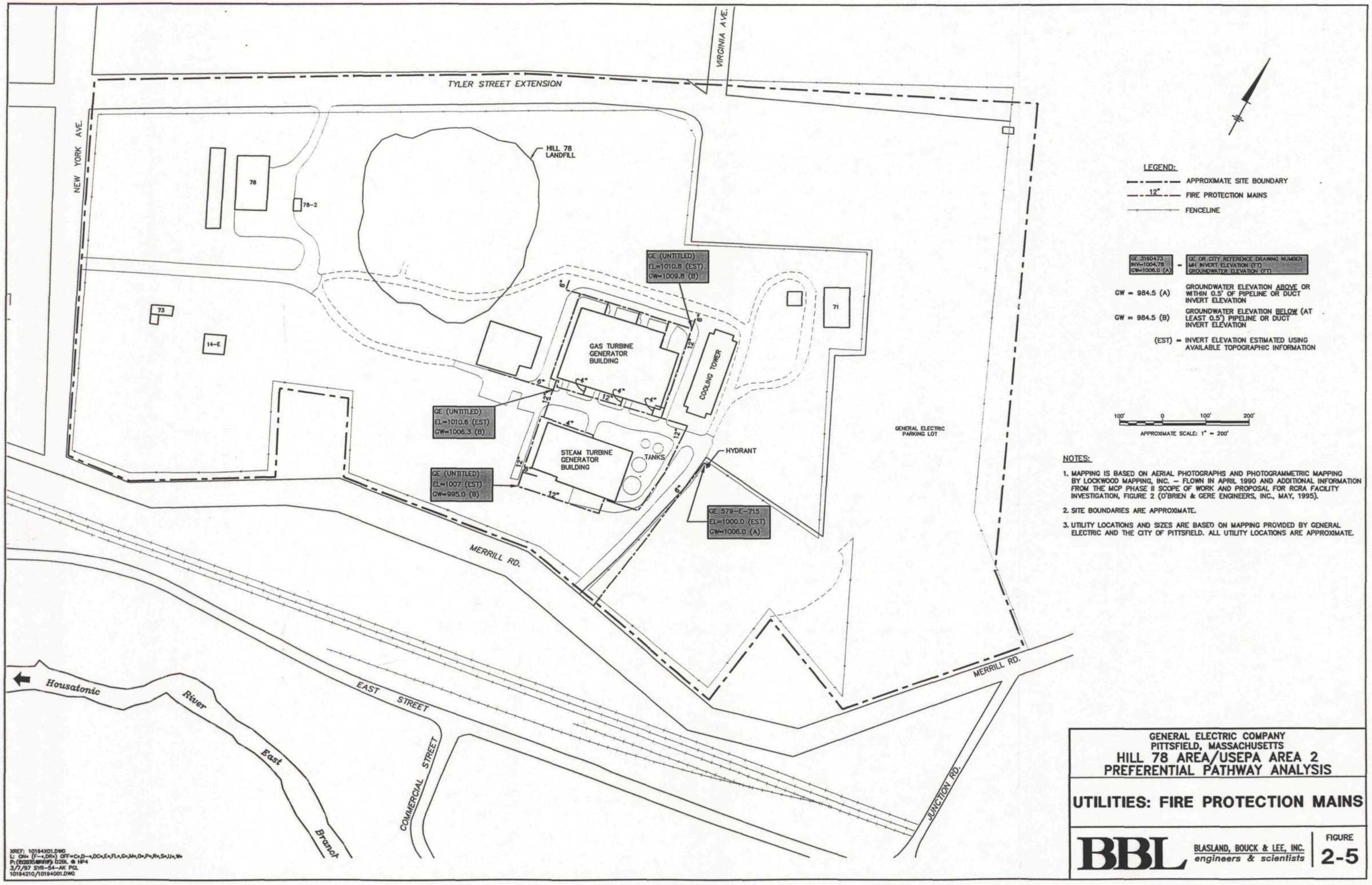
HILL 78 AREA/USEPA AREA 2
PREFERENTIAL PATHWAY ANALYSIS

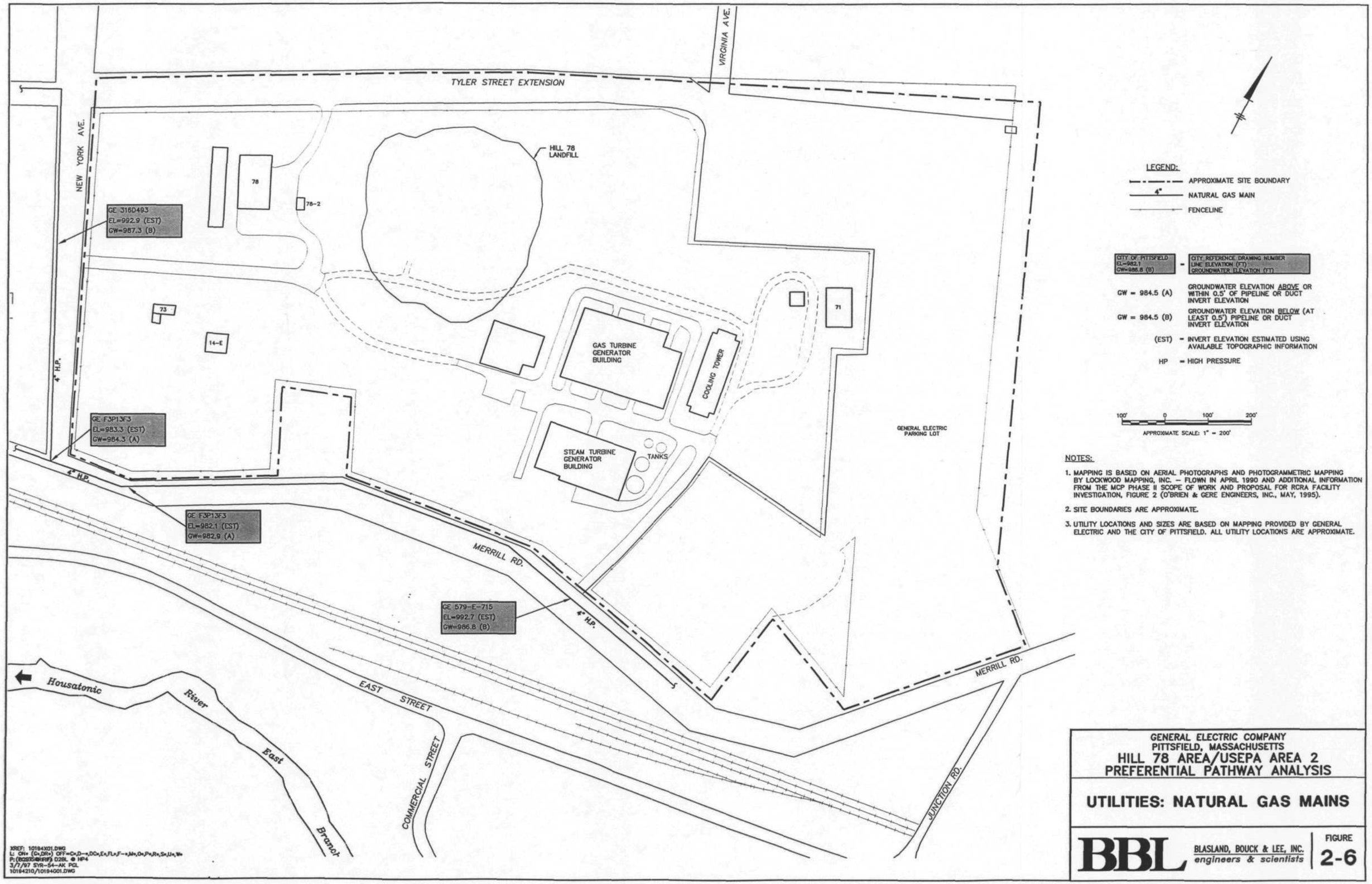
UTILITIES: POTABLE WATER MAINS

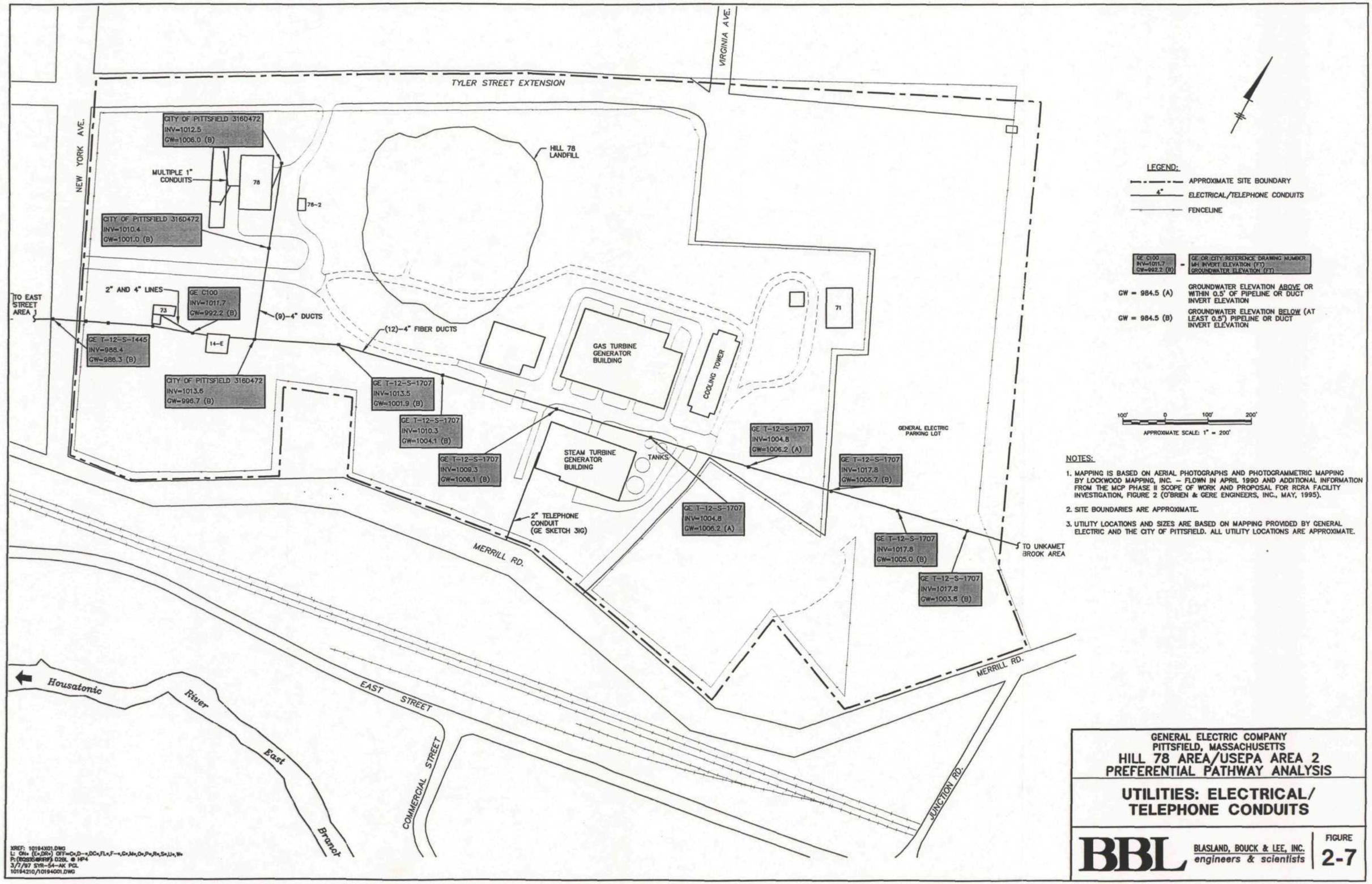
BBL BLASLAND, BOUCK & LEE, INC. engineers & scientists

FIGURE 2-4

XREF: 10194X01.DWG
LI: ON= (Wx,DRx) OFF=Cx,Dx,Ex,F-x,Gx,Mx,Ox,Px,Rx,Sx,Ux
P:(EQSIX6KRIP) D2BL @ HP4
3/7/97 SYR-54-AK PCL
10194210/10194G01.DWG


TYLER STREET EXTENSION
VIRGINIA AVE.
NEW YORK AVE.
HILL 78 LANDFILL
78
78-2
73
14-E
71
GE (UNTITLED)
EL=1010.8 (EST)
GW=1009.8 (B)
GAS TURBINE GENERATOR BUILDING
COOLING TOWER
GE (UNTITLED)
EL=1010.6 (EST)
GW=1006.3 (B)
STEAM TURBINE GENERATOR BUILDING
TANKS
HYDRANT
GE (UNTITLED)
EL=1007 (EST)
GW=995.0 (B)
GE 579-E-715
EL=1000.0 (EST)
GW=1006.0 (A)
GENERAL ELECTRIC PARKING LOT
MERRILL RD.
MERRILL RD.
EAST STREET
COMMERCIAL STREET
JUNCTION RD.
Housatonic
River
East
Branch
LEGEND:
APPROXIMATE SITE BOUNDARY
12" FIRE PROTECTION MAINS
FENCELINE
GE 316D473 INV=1004.78 GW=1006.0 (A) = GE OR CITY REFERENCE DRAWING NUMBER; MH INVERT ELEVATION (FT); GROUNDWATER ELEVATION (FT)
GW = 984.5 (A) GROUNDWATER ELEVATION ABOVE OR WITHIN 0.5' OF PIPELINE OR DUCT INVERT ELEVATION
GW = 984.5 (B) GROUNDWATER ELEVATION BELOW (AT LEAST 0.5') PIPELINE OR DUCT INVERT ELEVATION
(EST) = INVERT ELEVATION ESTIMATED USING AVAILABLE TOPOGRAPHIC INFORMATION
100' 0 100' 200'
APPROXIMATE SCALE: 1" = 200'
NOTES:
1. MAPPING IS BASED ON AERIAL PHOTOGRAPHS AND PHOTOGRAMMETRIC MAPPING BY LOCKWOOD MAPPING, INC. – FLOWN IN APRIL 1990 AND ADDITIONAL INFORMATION FROM THE MCP PHASE II SCOPE OF WORK AND PROPOSAL FOR RCRA FACILITY INVESTIGATION, FIGURE 2 (O'BRIEN & GERE ENGINEERS, INC., MAY, 1995).
2. SITE BOUNDARIES ARE APPROXIMATE.
3. UTILITY LOCATIONS AND SIZES ARE BASED ON MAPPING PROVIDED BY GENERAL ELECTRIC AND THE CITY OF PITTSFIELD. ALL UTILITY LOCATIONS ARE APPROXIMATE.
GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS
HILL 78 AREA/USEPA AREA 2
PREFERENTIAL PATHWAY ANALYSIS
UTILITIES: FIRE PROTECTION MAINS
BBL
BLASLAND, BOUCK & LEE, INC.
engineers & scientists
FIGURE
2-5
XREF: 10194X01.DWG
3/7/97 SYR-54-AK PCL
10194210/10194001.DWG


TYLER STREET EXTENSION
VIRGINIA AVE.
NEW YORK AVE.
HILL 78 LANDFILL
78
78-2
73
14-E
71
GAS TURBINE GENERATOR BUILDING
COOLING TOWER
STEAM TURBINE GENERATOR BUILDING
TANKS
GENERAL ELECTRIC PARKING LOT
GE 316D493
EL=992.9 (EST)
GW=987.3 (B)
GE F3P13F3
EL=983.3 (EST)
GW=984.3 (A)
GE F3P13F3
EL=982.1 (EST)
GW=982.9 (A)
GE 579-E-715
EL=992.7 (EST)
GW=986.8 (B)
4" H.P.
MERRILL RD.
EAST STREET
COMMERCIAL STREET
JUNCTION RD.
Housatonic
River
East
Branch
LEGEND:
APPROXIMATE SITE BOUNDARY
4" NATURAL GAS MAIN
FENCELINE
CITY OF PITTSFIELD EL=982.1 GW=986.8 (B) - CITY REFERENCE DRAWING NUMBER LINE ELEVATION (FT) GROUNDWATER ELEVATION (FT)
GW = 984.5 (A) GROUNDWATER ELEVATION ABOVE OR WITHIN 0.5' OF PIPELINE OR DUCT INVERT ELEVATION
GW = 984.5 (B) GROUNDWATER ELEVATION BELOW (AT LEAST 0.5') PIPELINE OR DUCT INVERT ELEVATION
(EST) - INVERT ELEVATION ESTIMATED USING AVAILABLE TOPOGRAPHIC INFORMATION
HP - HIGH PRESSURE
100' 0 100' 200'
APPROXIMATE SCALE: 1" = 200'
NOTES:
1. MAPPING IS BASED ON AERIAL PHOTOGRAPHS AND PHOTOGRAMMETRIC MAPPING BY LOCKWOOD MAPPING, INC. – FLOWN IN APRIL 1990 AND ADDITIONAL INFORMATION FROM THE MCP PHASE II SCOPE OF WORK AND PROPOSAL FOR RCRA FACILITY INVESTIGATION, FIGURE 2 (O'BRIEN & GERE ENGINEERS, INC., MAY, 1995).
2. SITE BOUNDARIES ARE APPROXIMATE.
3. UTILITY LOCATIONS AND SIZES ARE BASED ON MAPPING PROVIDED BY GENERAL ELECTRIC AND THE CITY OF PITTSFIELD. ALL UTILITY LOCATIONS ARE APPROXIMATE.
GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS
HILL 78 AREA/USEPA AREA 2
PREFERENTIAL PATHWAY ANALYSIS
UTILITIES: NATURAL GAS MAINS
BBL
BLASLAND, BOUCK & LEE, INC.
engineers & scientists
FIGURE
2-6
XREF: 10194X01.DWG
3/7/97 SYR-54-AK PCL
10194210/10194G01.DWG



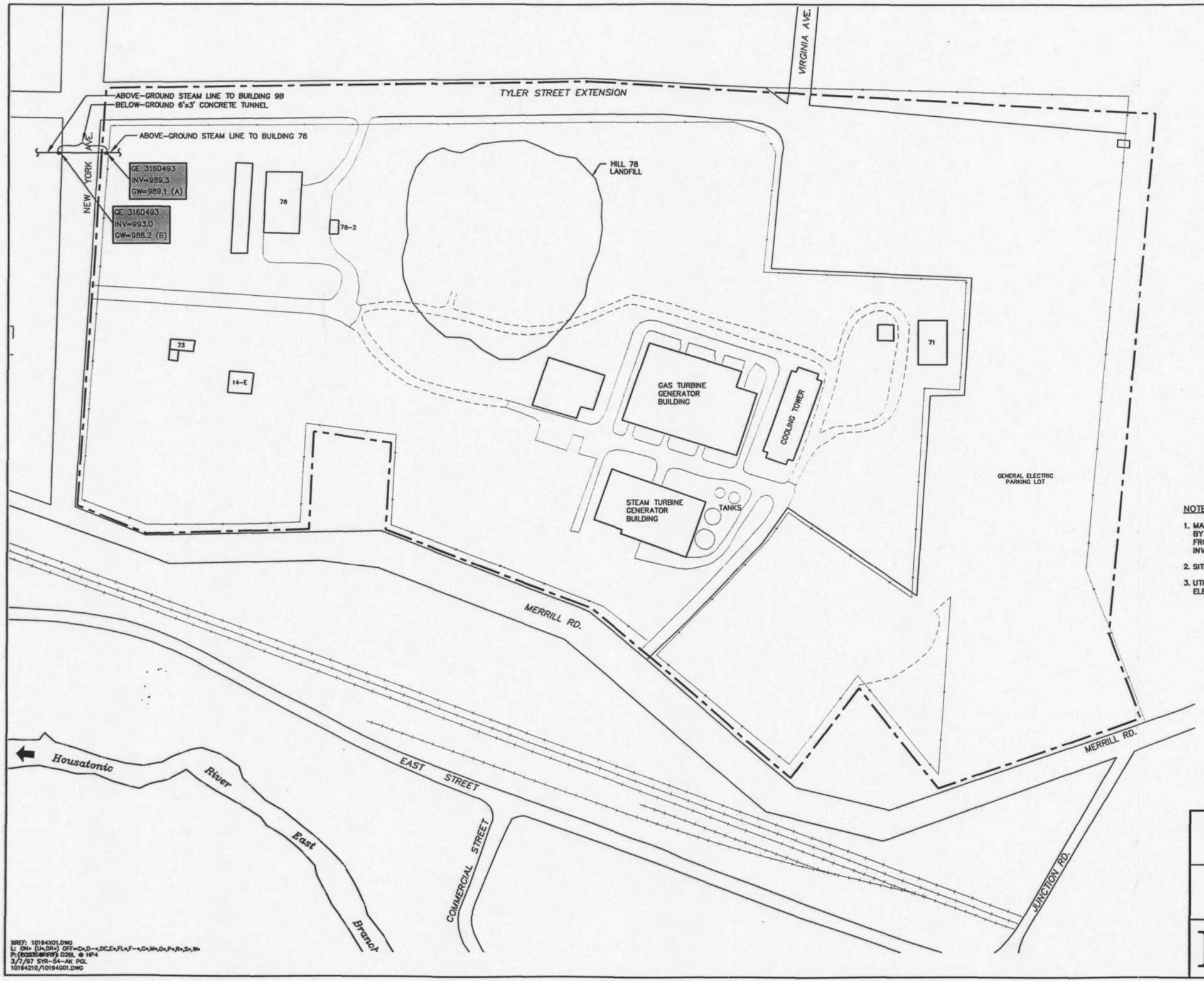
GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

HILL 78 AREA/USEPA AREA 2
PREFERENTIAL PATHWAY ANALYSIS

UTILITIES: ELECTRICAL/ TELEPHONE CONDUITS

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

FIGURE 2-7



LEGEND:

- APPROXIMATE SITE BOUNDARY
- UNDERGROUND STEAM TUNNEL
- FENCELINE

GE 3160493 INV=989.3 GW=989.1 (A) - GE OR CITY REFERENCE DRAWING NUMBER MH/CB INVERT ELEVATION (FT) GROUNDWATER ELEVATION (FT)

GW = 984.5 (A) GROUNDWATER ELEVATION ABOVE OR WITHIN 0.5' OF PIPELINE OR DUCT INVERT ELEVATION

GW = 984.5 (B) GROUNDWATER ELEVATION BELOW (AT LEAST 0.5') PIPELINE OR DUCT INVERT ELEVATION

100' 0 100' 200'

APPROXIMATE SCALE: 1" = 200'

NOTES:

1. MAPPING IS BASED ON AERIAL PHOTOGRAPHS AND PHOTOGRAMMETRIC MAPPING BY LOCKWOOD MAPPING, INC. – FLOWN IN APRIL 1990 AND ADDITIONAL INFORMATION FROM THE MCP PHASE II SCOPE OF WORK AND PROPOSAL FOR RCRA FACILITY INVESTIGATION, FIGURE 2 (O'BRIEN & GERE ENGINEERS, INC., MAY, 1995).
2. SITE BOUNDARIES ARE APPROXIMATE.
3. UTILITY LOCATIONS AND SIZES ARE BASED ON MAPPING PROVIDED BY GENERAL ELECTRIC AND THE CITY OF PITTSFIELD. ALL UTILITY LOCATIONS ARE APPROXIMATE.

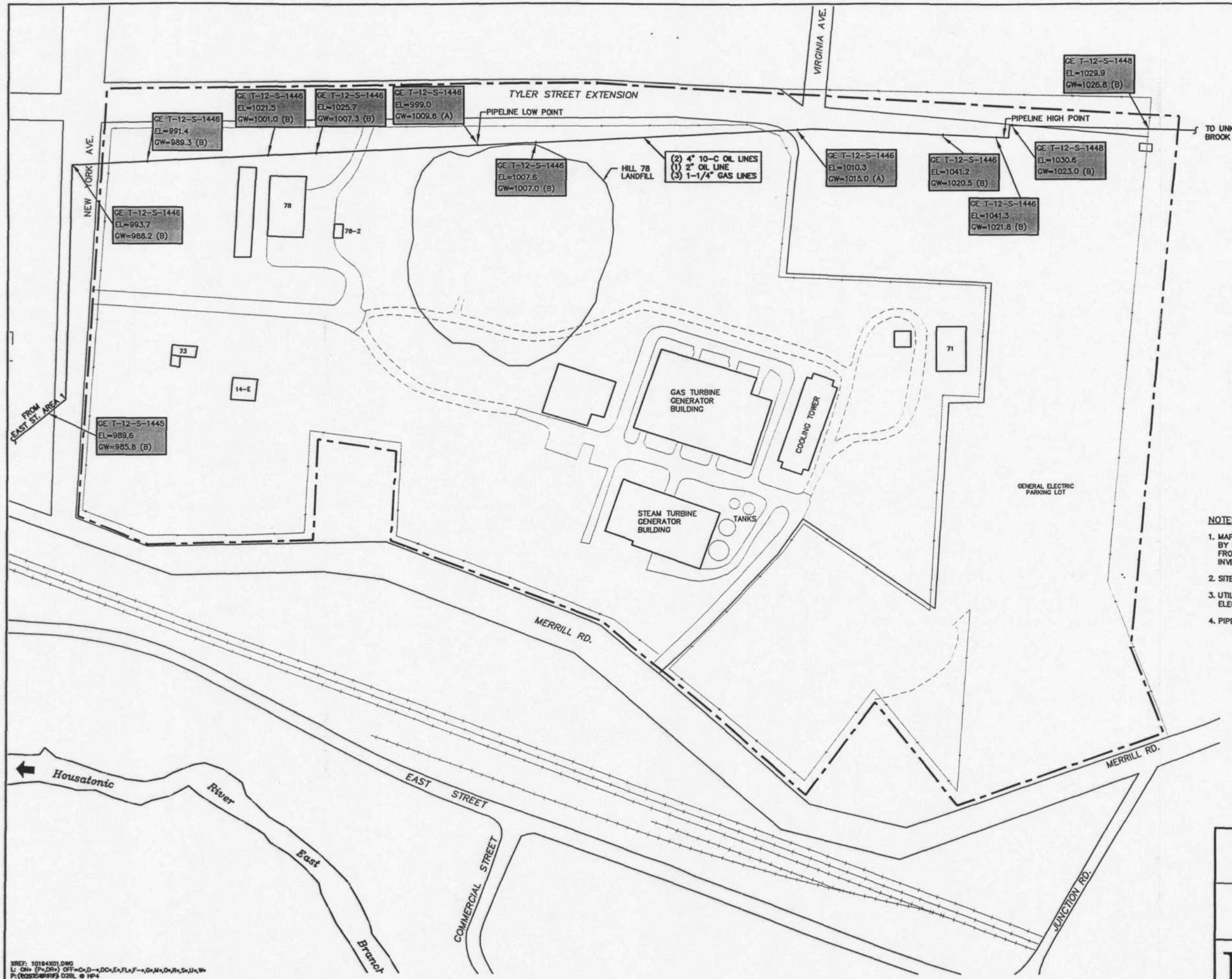
GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS
HILL 78 AREA/USEPA AREA 2
PREFERENTIAL PATHWAY ANALYSIS

UNDERGROUND TUNNELS

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

FIGURE 2-8

XREF: 10194X01.DWG
L: ON= (U=,DR=) OFF=Cx,D-=,DC,Ex,FL=,F-=,Gx,Mx,Ox,Px,Rx,Sx,Wx
P: (BBL\BBL\RIF) D2BL @ HP4
3/7/97 SYR-54-AK PGL
10194210/10194001.DWG



LEGEND:

- APPROXIMATE SITE BOUNDARY
- 4" PROCESS / PRODUCT LINE
- FENCELINE

GE C100 INV=993.0 GW=990.7 (B) = GE OR CITY REFERENCE DRAWING NUMBER MH/CB INVERT ELEVATION (FT) GROUNDWATER ELEVATION (FT)

GW = 984.5 (A) GROUNDWATER ELEVATION ABOVE OR WITHIN 0.5' OF PIPELINE OR DUCT INVERT ELEVATION

GW = 984.5 (B) GROUNDWATER ELEVATION BELOW (AT LEAST 0.5') PIPELINE OR DUCT INVERT ELEVATION

100' 0 100' 200'

APPROXIMATE SCALE: 1" = 200'

NOTES:

1. MAPPING IS BASED ON AERIAL PHOTOGRAPHS AND PHOTOGRAMMETRIC MAPPING BY LOCKWOOD MAPPING, INC. – FLOWN IN APRIL 1990 AND ADDITIONAL INFORMATION FROM THE MCP PHASE II SCOPE OF WORK AND PROPOSAL FOR RCRA FACILITY INVESTIGATION, FIGURE 2 (O'BRIEN & GERE ENGINEERS, INC., MAY, 1995).
2. SITE BOUNDARIES ARE APPROXIMATE.
3. UTILITY LOCATIONS AND SIZES ARE BASED ON MAPPING PROVIDED BY GENERAL ELECTRIC AND THE CITY OF PITTSFIELD. ALL UTILITY LOCATIONS ARE APPROXIMATE.
4. PIPELINE ELEVATIONS ARE GIVEN FOR LOCATIONS WHERE PIPELINE SLOPE CHANGES.

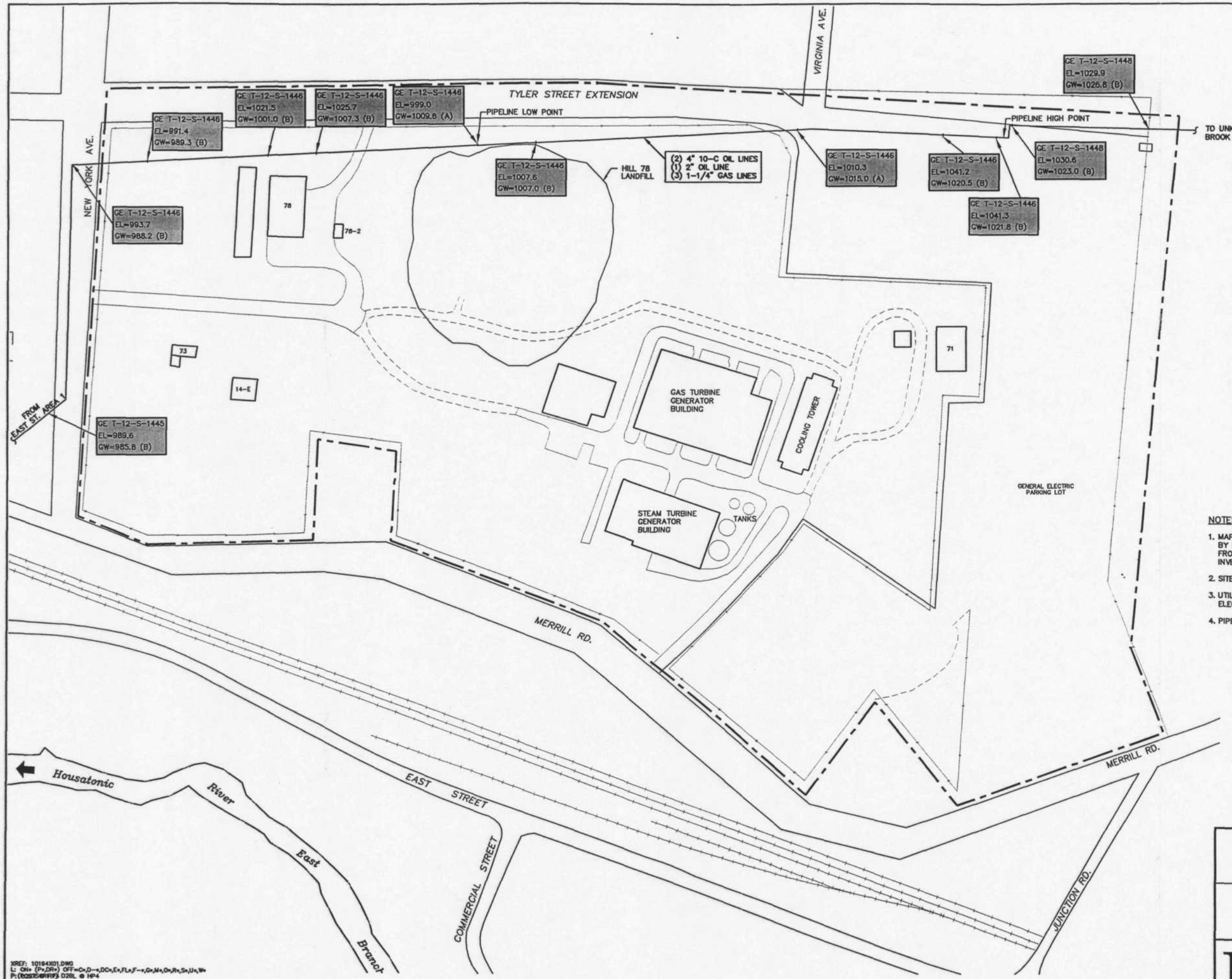
GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS
HILL 78 AREA/USEPA AREA 2
PREFERENTIAL PATHWAY ANALYSIS

PROCESS/PRODUCT LINES

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

FIGURE 2-9

XREF: 10194X01.DWG
L: ON= (P=,DR=) OFF=C=,D-=,DC=,E=,FL=,F-=,G=,M=,O=,R=,S=,U=,W=
P:(BQ5TS4RRF) D2BL @ HP4
3/7/97 SYR-54-AK PGL
10194210/10194001.DWG



LEGEND:

- APPROXIMATE SITE BOUNDARY
- 4" PROCESS / PRODUCT LINE
- FENCELINE

GE C100 INV=993.0 GW=990.7 (B) = GE OR CITY REFERENCE DRAWING NUMBER MH/CB INVERT ELEVATION (FT) GROUNDWATER ELEVATION (FT)

GW = 984.5 (A) GROUNDWATER ELEVATION ABOVE OR WITHIN 0.5' OF PIPELINE OR DUCT INVERT ELEVATION

GW = 984.5 (B) GROUNDWATER ELEVATION BELOW (AT LEAST 0.5') PIPELINE OR DUCT INVERT ELEVATION

100' 0 100' 200'

APPROXIMATE SCALE: 1" = 200'

NOTES:

1. MAPPING IS BASED ON AERIAL PHOTOGRAPHS AND PHOTOGRAMMETRIC MAPPING BY LOCKWOOD MAPPING, INC. – FLOWN IN APRIL 1990 AND ADDITIONAL INFORMATION FROM THE MCP PHASE II SCOPE OF WORK AND PROPOSAL FOR RCRA FACILITY INVESTIGATION, FIGURE 2 (O'BRIEN & GERE ENGINEERS, INC., MAY, 1995).
2. SITE BOUNDARIES ARE APPROXIMATE.
3. UTILITY LOCATIONS AND SIZES ARE BASED ON MAPPING PROVIDED BY GENERAL ELECTRIC AND THE CITY OF PITTSFIELD. ALL UTILITY LOCATIONS ARE APPROXIMATE.
4. PIPELINE ELEVATIONS ARE GIVEN FOR LOCATIONS WHERE PIPELINE SLOPE CHANGES.

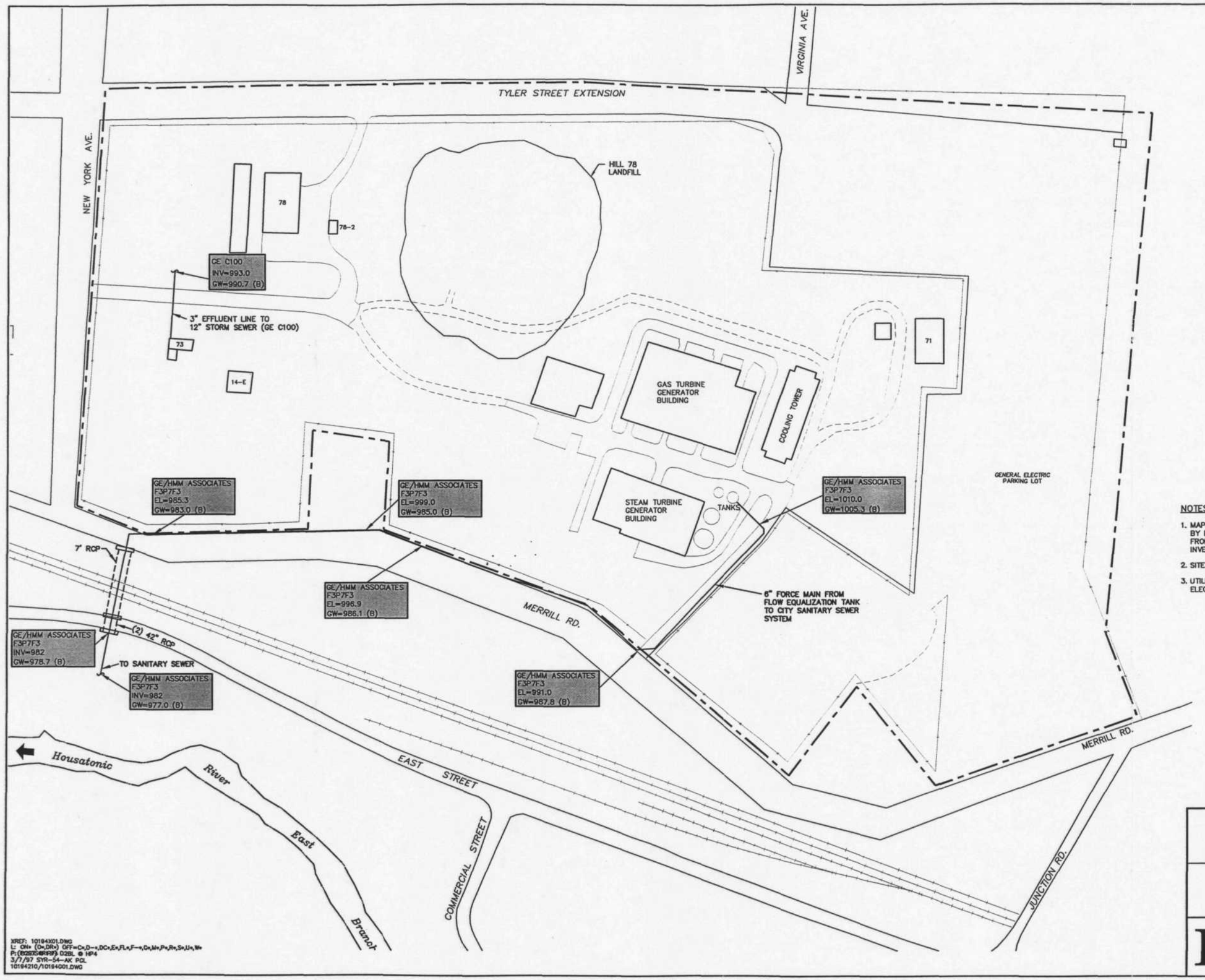
GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS
HILL 78 AREA/USEPA AREA 2
PREFERENTIAL PATHWAY ANALYSIS

PROCESS/PRODUCT LINES

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

FIGURE 2-9

XREF: 10194X01.DWG
L: ON= (P=,DR=) OFF=C=,D-=,DC=,E=,FL=,F-=,G=,M=,O=,R=,S=,U=,W=
P:(BQ5TS4RRF) D2BL @ HP4
3/7/97 SYR-54-AK PGL
10194210/10194001.DWG



LEGEND:

- APPROXIMATE SITE BOUNDARY
- 6" "OTHER" PIPING NETWORK LINE
- FENCELINE

GE 3160473 INV=1004.78 GW=1005.3 (B) = GE OR CITY REFERENCE DRAWING NUMBER; MH INVERT ELEVATION (FT); GROUNDWATER ELEVATION (FT)

GW = 984.5 (A) GROUNDWATER ELEVATION ABOVE OR WITHIN 0.5' OF PIPELINE OR DUCT INVERT ELEVATION

GW = 984.5 (B) GROUNDWATER ELEVATION BELOW (AT LEAST 0.5') PIPELINE OR DUCT INVERT ELEVATION

RCP = REINFORCED CONCRETE PIPE

100' 0 100' 200'

APPROXIMATE SCALE: 1" = 200'

NOTES:

1. MAPPING IS BASED ON AERIAL PHOTOGRAPHS AND PHOTOGRAMMETRIC MAPPING BY LOCKWOOD MAPPING, INC. – FLOWN IN APRIL 1990 AND ADDITIONAL INFORMATION FROM THE MCP PHASE II SCOPE OF WORK AND PROPOSAL FOR RCRA FACILITY INVESTIGATION, FIGURE 2 (O'BRIEN & GERE ENGINEERS, INC., MAY, 1995).
2. SITE BOUNDARIES ARE APPROXIMATE.
3. UTILITY LOCATIONS AND SIZES ARE BASED ON MAPPING PROVIDED BY GENERAL ELECTRIC AND THE CITY OF PITTSFIELD. ALL UTILITY LOCATIONS ARE APPROXIMATE.

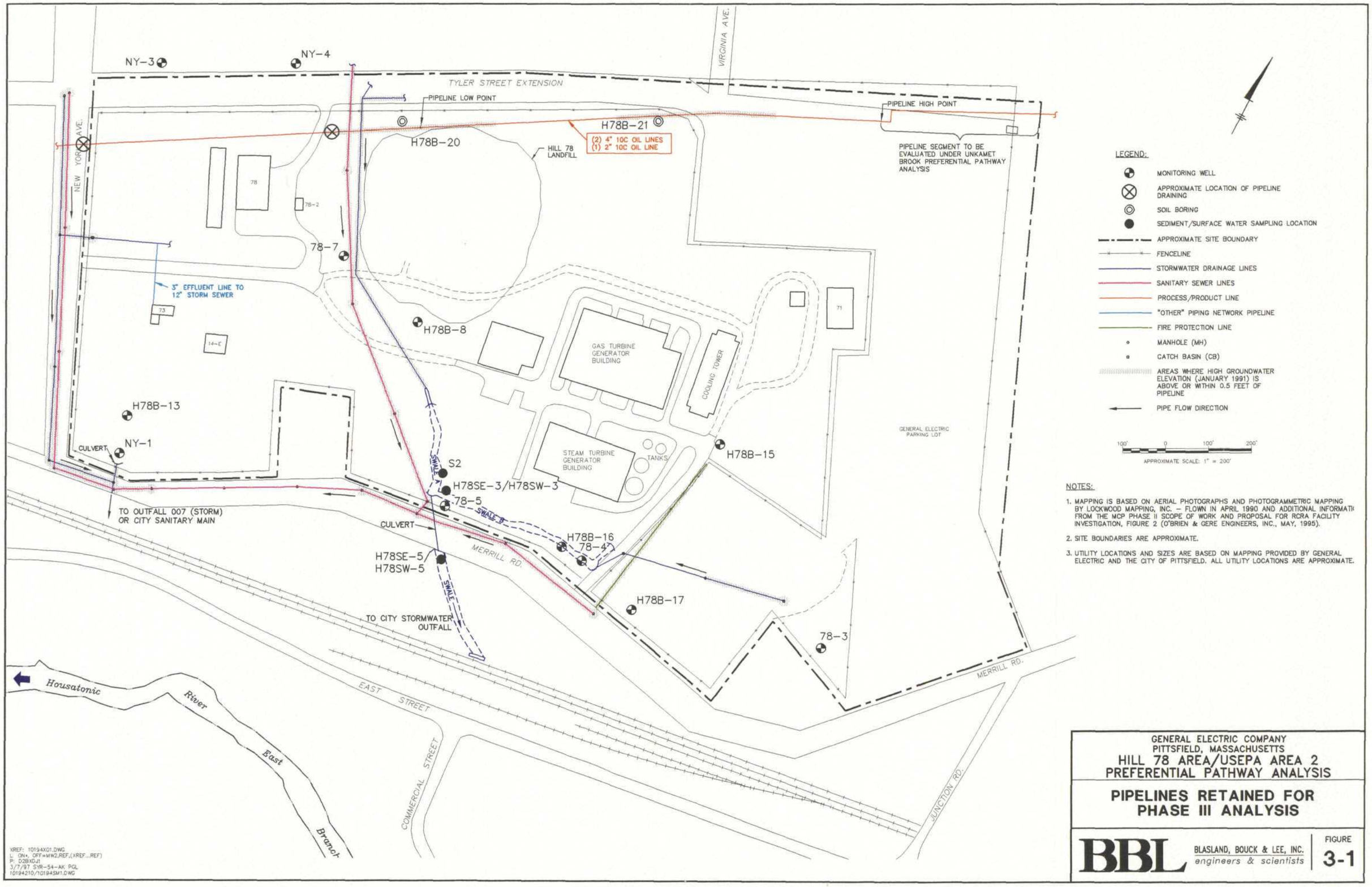
GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS
HILL 78 AREA/USEPA AREA 2
PREFERENTIAL PATHWAY ANALYSIS

"OTHER" PIPING NETWORKS

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

FIGURE 2-10

XREF: 10194X01.DWG
L: ON= (O=,DR=) OFF=Cx,D-=,DCx,Ex,FLx,F-=,Gx,Mx,Px,Rx,Sx,Ux,Wx
P: (0202C4RFRF) D28L @ HP4
3/7/97 SYR-54-AK PCL
10194210/10194G01.DWG



GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS
HILL 78 AREA/USEPA AREA 2
PREFERENTIAL PATHWAY ANALYSIS

PIPELINES RETAINED FOR PHASE III ANALYSIS

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

FIGURE 3-1

Appendix B

BLASLAND, BOUCK & LEE, INC.
engineers & scientists

Subsurface Logs

ALTRESCO SUPPLY WELLS

HYDROGEOLOGY CORPORATION
RTE. 146 CLIFTON PARK, N.Y. 371-7821

TEST BORING LOG

BORING NO. W-1

PROJECT Co-Generation Plant Water Supply Study	SHEET 1 OF 3
CLIENT Altresco	JOB NO. 91015.043H
DRILLING CONTRACTOR Hanson Well Drilling & Pump	MEAS. PT. ELEV.
PURPOSE Water Supply Investigation	GROUND ELEV.
DRILLING METHOD Mud Rotary	DATUM
DRILL RIG TYPE IR-TH-60	DATE STARTED 9/26/88
GROUNDWATER DEPTH	DATE FINISHED 9/30/88
MEASURING POINT	DRILLER
DATE OF MEASUREMENT	INSPECTOR S. Revell -LAG Inc.

	SAMPLE	CORE	CASING
TYPE	Grab	-	Steel
DIAM.	8 3/4"	-	8"
WEIGHT	-		
FALL	-		

DEPTH IN FT	SAMPLE NUMBER	BLOWS ON SAMPLE SPOON PER 6"	UNIFIED CLASSIFICATION	GRAPHIC LOG	GEOLOGIC DESCRIPTION	REMARKS
			SM		SAND, some Silt, trace Clay 3.0'	Geologic description based on log from Hanson Well Drilling & Pump
			SC		SAND, some brown Clay 21.0'	
			SC		Gr till/Hardpan 60.0'	Drilled w/ 12¼" bit to 66 feet.
					yw/wh dolomitic marble 66.0'	
					yw dolomitic marble and wh dolomitic marble	

PROJECT Co-Generation Plant Water Supply Study

SHEET 2 OF 3

CLIENT Altresco

JOB No. 91095.043H

DEPTH FT	SAMPLE NUMBER	BLOWS ON SAMPLE SPOON PER 6"	UNIFIED CLASSIFICATION	GRAPHIC LOG	GEOLOGIC DESCRIPTION	REMARKS
00					103.0'	
					yw dolomitic marble and wh dolomitic marble trace seams br dolomitic marble	
25						
50					151.0'	
					Br dolomitic marble trace seams Sand, trace voids	
75						
00						
						4" sand filled voids at 2" and 215'

HYDROGEOLOGY CORPORATION
RTE.148 CLIFTON PARK, N.Y. 371-7821

TEST BORING LOG | BORING NO. [illegible]

PROJECT Co-Generation Plant Water Supply Study	SHEET 3 OF 3
CLIENT Altresco	JOB No. 91095.043H

DEPTH FT	SAMPLE NUMBER	BLOWS ON SAMPLE SPOON PER 6"	UNIFIED CLASSI-FICATION	GRAPHIC LOG	GEOLOGIC DESCRIPTION	REMARKS
25						
50						
75						
100						
125						

HC ENVIRONMENTAL HYDROGEOLOGY CORPORATION
ATE:46 CLIFTON PARK, N.Y. 371-782:

TEST BORING LOG

BORING NO. W-2

PROJECT Co-Generation Plant Water Supply Study	SHEET 1 OF 3
CLIENT Altresco	JOB NO. 91015.043H
DRILLING CONTRACTOR Hanson Well Drilling & Pump	MEAS. PT. ELEV.
PURPOSE Water Supply Investigation	GROUND ELEV.
DRILLING METHOD Mud Rotary	DATUM
DRILL RIG TYPE IR-TH-60	DATE STARTED 10/01/88
GROUNDWATER DEPTH	DATE FINISHED 10/05/88
MEASURING POINT	DRILLER
DATE OF MEASUREMENT	INSPECTOR S. Revell -LAG Inc.

	SAMPLE	CORE	CASING
TYPE	Grab	-	Steel
DIAM.	8 3/4"	-	8"
WEIGHT	-		
FALL	-		

DEPTH FT	SAMPLE NUMBER	BLOWS ON SAMPLE SPOON PER 6"	UNIFIED CLASSI-FICATION	GRAPHIC LOG	GEOLOGIC DESCRIPTION	REMARKS
						Geologic description based on log from Hanson Well Drilling & Pump
5			SM		Br SAND, some Clay (28.0')	
10			SC		till/hard pan (76.0')	
					Br dolomitic marble with white streaks	Total depth of 8" Casing 78'

HYDROGEOLOGY CORPORATION
RTE.146 CLIFTON PARK, N.Y. 371-7621

TEST BORING LOG | BORING NO.

PROJECT Co-Generation Plant Water Supply Study | SHEET 2 OF 3

NT Altresco | JOB No. 91095.043H

DEPTH	SAMPLE NUMBER	BLOWS ON SAMPLE SPOON PER 6"	UNIFIED CLASSIFICATION	GRAPHIC LOG	GEOLOGIC DESCRIPTION	REMARKS
100						
125						
150					Br dolomitic marble with white streaks	
175						
						Well caved in to 126 feet
200						
225						

HYDROGEOLOGY CORPORATION
RTE. 146 CLIFTON PARK, N.Y. 371-7621

TEST BORING LOG

BORING No. W-2

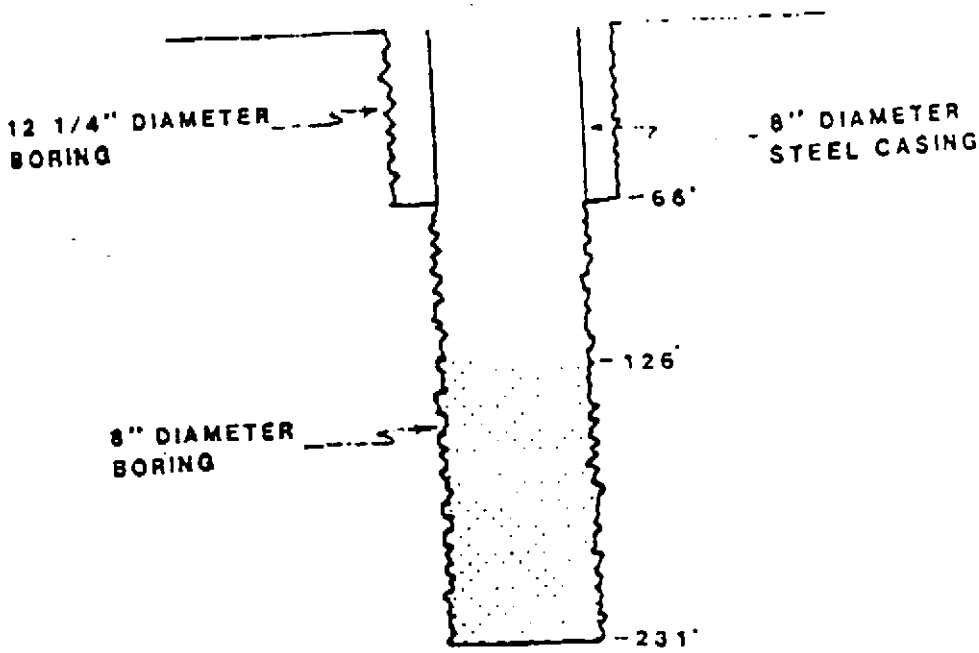
PROJECT Co-Generation Plant Water Supply Study

SHEET 3 OF 3

CLIENT Altresco

JOB No. 91095.043H

DEPTH FT	SAMPLE NUMBER	BLOWS ON SAMPLE SPOON PER 6"	UNIFIED CLASSI-FICATION	GRAPHIC LOG	GEOLOGIC DESCRIPTION	REMARKS
225						
250					Br dolomitic marble with white streaks	
275						
					Total Depth of Boring @ 291'	
300						
325						



PRODUCTION WELL WAS CONSTRUCTED AND DESIGNED BY HANSON WELL DRILLING & PUMP UTILIZING ROTARY DRILLING METHODS

WELL HAS HEAVED BACK TO 126 FEET

PRODUCTION WELL W-2

CONSTRUCTION DIAGRAM

EHC ENVIRONMENTAL HYDROGEOLOGY CORPORATION

WATER RESOURCES

HYDROGEOLOGY CORPORATION
RTE.146 CLIFTON PARK, N.Y. 371-7621

TEST BORING LOG

BORING No. W-3

PROJECT	Co-Generation Plant Water Supply Study					SHEET 1 OF 5
CLIENT	Altresco					JOB No. 91015.043H
DRILLING CONTRACTOR	Hanson Well Drilling & Pump					MEAS. PT. ELEV.
PURPOSE	Water Supply Investigation					GROUND ELEV.
DRILLING METHOD	Mud Rotary		SAMPLE	CORE	CASING	DATUM
DRILL RIG TYPE	IR-TH-60	TYPE	Grab	-	Steel	DATE STARTED 10/06/88
GROUNDWATER DEPTH		DIAM.	14½"/11 7/8"	-		DATE FINISHED
MEASURING POINT		WEIGHT	9 7/8" -			DRILLER
DATE OF MEASUREMENT		FALL	-			INSPECTOR S. Revell -LAG Inc.

DEPTH FT	SAMPLE NUMBER	BLOWS ON SAMPLE SPOON PER 6"	UNIFIED CLASSIFICATION	GRAPHIC LOG	GEOLOGIC DESCRIPTION	REMARKS
			SW		Very coarse gravelly SAND with quartz, bits of shist	Geologic Descriptio supplied by
			SW		Very coarse gravelly Sand and abundance of quartz	
5			SW		Very coarse gravelly Sand, pieces of schist quartz	
			SW		Very coarse gravel, beginning to get dolomitic marble with gravel	
			SW		Fine Gravelly mud, quartz, no dolomitic marble small pieces of schist	
0			SW		Olive: Same as above;	
			SW		Same as above; increased mud content, larger cuttings	
5			SW		Light tan schist, quartz, gravel, with mud	
			Sw		Light tan weathered dark Brown chert, very fine gravel	
			SW		Chert, dark brown, micro-crystaline, gravel also present	

ATC 146 CLIFTON PARK, N.Y. 371-7821

PROJECT Co-Generation Plant Water Supply Study

SHEET 2 OF 5

CLIENT Altresco

JOB No. 91095.043H

DEPTH FT	SAMPLE NUMBER	BLOWS ON SAMPLE SPOON PER 6"	UNIFIED CLASSIFICATION	GRAPHIC LOG	GEOLOGIC DESCRIPTION	REMARKS
100					dolomitic marble with bands of chert	
					dolomitic marble with pieces of chert sand bits of micaceous saprolitic present	
					dolomitic marble, cert quartz	large cuttings
125						
					Dolomitic marble also highly weathered micaceous, muscovite saprolite	large cuttings
					Same as above;	Large cutting Iron Stain noted
150						
					Same as above;	Smaller cuttings
					Same as above;	
175					Chert nodules large pieces of chert, small dolomitic marble cuttings	
					Dolomitic marble, weathered Sand Concretions	Large cuttings
					Dolomitic marble, some chert	grainy texture
200						
					Same as above;	
					Same as above;	
225					Same as above;	

HC ENVIRONMENTAL HYDROGEOLOGY CORPORATION
RTE.146 CLIFTON PARK, N.Y. 371-7621

TEST BORING LOG | BORING NO.

SHEET 3 OF 5

PROJECT Co-Generation Plant Water Supply Study

JOB No. 91095.043H

CLIENT Altresco

DEPTH FT	SAMPLE NUMBER	BLOWS ON SAMPLE SPOON PER 6"	UNIFIED CLASSIFICATION	GRAPHIC LOG	GEOLOGIC DESCRIPTION	REMARKS
225					Dolomitic marble, some chert, little quartz	
					Same as above;	
250						
					Same as above;	
					Same as above;	
275						
					Same as above; 290.0'	
					Quartzite	
300						
325						
350						

HYDROGEOLOGY CORPORATION
RTE.146 CLIFTON PARK, N.Y. 371-7621

TEST BORING LOG | BORING NO. [illegible]

PROJECT Co-Generation Plant Water Supply Study | SHEET 4 OF 5

IENT Altresco | JOB No. 91095.043H

M FI	SAMPLE NUMBER	BLOWS ON SAMPLE SPOON PER 6"	UNIFIED CLASSI-FICATION	GRAPHIC LOG	GEOLOGIC DESCRIPTION	REMARKS
350						
375						
400						
					Quartzite	
25					Same as above;	
					Same as above;	
					Same as above;	
0					Same as above;	
					Same as above;	
					Same as above;	
5						

EHC ENVIRONMENTAL HYDROGEOLOGY CORPORATION
RTE. 146 CLIFTON PARK, N.Y. 371-7621

TEST BORING LOG

BORING No. W-3

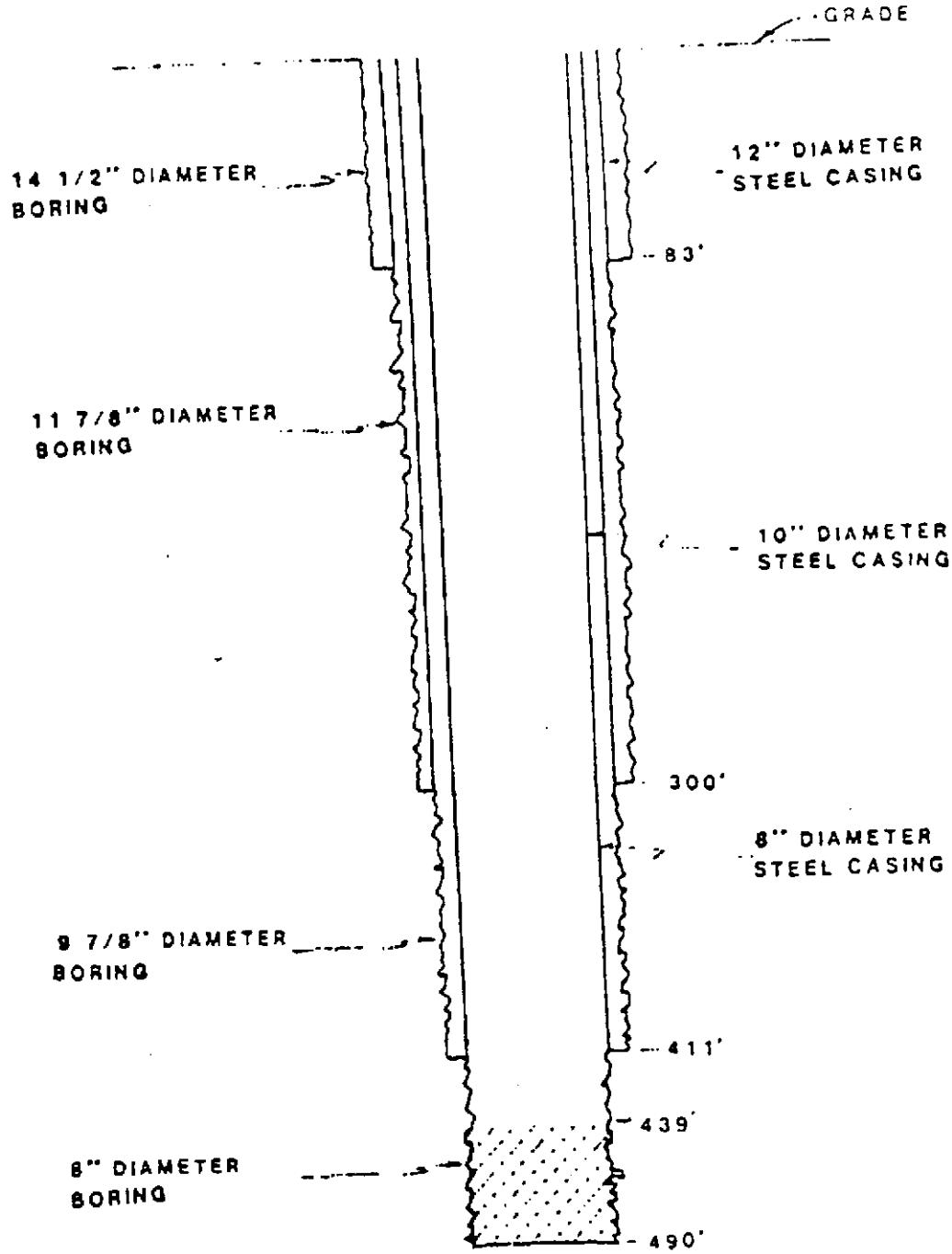
PROJECT Co-Generation Plant Water Supply Study

SHEET 5 OF 5

CLIENT Altresco

JOB No. 91095.043H

DEPTH FT	SAMPLE NUMBER	BLOWS ON SAMPLE SPOON PER 6"	UNIFIED CLASSIFICATION	GRAPHIC LOG	GEOLOGIC DESCRIPTION	REMARKS
475					Quartzite	
500					Total Depth of Boring @ 490'	
525						
550						
575						
580						



PRODUCTION WELL WAS CONSTRUCTED AND DESIGNED BY HANSON WELL DRILLING & PUMP UTILIZING ROTARY DRILLING METHODS

WELL HAS COLLAPSED BACK TO 439 FEET

PRODUCTION WELL W-3

CONSTRUCTION DIAGRAM

EHC ENVIRONMENTAL HYDROGEOLOGY CORPORATION

EHC ENVIRONMENTAL HYDROGEOLOGY CORPORATION
RTE.146 CLIFTON PARK, N.Y. 371-7821

TEST BORING LOG

BORING NO. W-4

PROJECT	Co-Generation Plant Water Supply Study
CLIENT	Altresco
DRILLING CONTRACTOR	Hanson Well Drilling & Pump
PURPOSE	Water Supply Investigation
DRILLING METHOD	Mud Rotary
DRILL RIG TYPE	IR-TH-60
GROUNDWATER DEPTH	
MEASURING POINT	
DATE OF MEASUREMENT	

	SAMPLE	CORE	CASING
TYPE	Grab	-	Steel
DIAM.	36/24/15	-	26/16/12
WEIGHT	-		
FALL	-		

SHEET	1 OF 5
JOB NO.	91015.043H
MEAS. PT. ELEV.	
GROUND ELEV.	
DATUM	
DATE STARTED	
DATE FINISHED	
DRILLER	
INSPECTOR	S. Revell -LAG Inc

DEPTH FT	SAMPLE NUMBER	BLOWS ON SAMPLE SPOON PER 6"	UNIFIED CLASSIFICATION	GRAPHIC LOG	GEOLOGIC DESCRIPTION	REMARKS
25			SC		Till/Hardpan	
50						
					70.0'	
75					Dolomitic Marble	End of 36" Boring at 80'
100						

EHC ENVIRONMENTAL HYDROGEOLOGY CORPORATION
RTE.144 CLIFTON PARK, N.Y. 371-7621

TEST BORING LOG

BORING No. [illegible]

PROJECT Co-Generation Plant Water Supply Study

SHEET 2 OF 5

CLIENT Altresco

JOB No. 91095.043H

DEPTH FT	SAMPLE NUMBER	BLOWS ON SAMPLE SPOON PER 6"	UNIFIED CLASSI-FICATION	GRAPHIC LOG	GEOLOGIC DESCRIPTION	REMARKS
100						
125					Dolomitic marble	
150						
175						
200						
225						

ENVIRONMENTAL HYDROGEOLOGY CORPORATION
RTE.146 CLIFTON PARK, N.Y. 371-7621

TEST BORING LOG | BORING NO.

PROJECT Co-Generation Plant Water Supply Study | SHEET 3 OF 5

CLIENT Altresco | JOB No. 91095.043H

DEPTH	SAMPLE NUMBER	BLOWS ON SAMPLE SPOON PER 6"	UNIFIED CLASSIFICATION	GRAPHIC LOG	GEOLOGIC DESCRIPTION	REMARKS
50						
					Dolomitic marble	
75						
300						
325						
350						

HC HYDROGEOLOGY CORPORATION
RTE.146 CLIFTON PARK, N.Y. 371-7621

TEST BORING LOG

SHEET 4 OF 5

PROJECT Co-Generation Plant Water Supply Study

JOB No. 91095.043H

CLIENT Altresco

DEPTH (FT)	SAMPLE NUMBER	BLOWS ON SAMPLE SPOON PER 6"	UNIFIED CLASSIFICATION	GRAPHIC LOG	GEOLOGIC DESCRIPTION	REMARKS
0					Dolomitic marble	
375					380.0'	End of 24" boring at 380'
					Quartzite	
400						
						Fracture zones at 420 to 425'
425						
450						
475						

ENVIRONMENTAL HYDROGEOLOGY CORPORATION
RTE.146 CLIFTON PARK, N.Y. 371-7621

TEST BORING LOG | BORING NO. [illegible]

PROJECT Co-Generation Plant Water Supply Study | SHEET 5 OF 5

JOB No. 91095.043H

CLIENT Altresco

DEPTH FT	SAMPLE NUMBER	BLOWS ON SAMPLE SPOON PER 6"	UNIFIED CLASSI-FICATION	GRAPHIC LOG	GEOLOGIC DESCRIPTION	REMARKS
475						
500					Quartzite	
525						
						Fracture zone at 520 to 540'
550						
575						
600					Total Depth of Boring @ 600'	End of 15" boring at 600'

GROUP

LAYNE WELL & PUMP DIVISIC

LOG OF WELL

Well No. 5 Job. No. _____ Test No. 1

Log of Well for (Owner) GLTrasco Corp WELL #5

Address Pittsfield Mass G.E

Representatives, if any Hanson

Well Located at Pittsfield in _____ County, State of Mass

Furnish sketch of location _____ Date Drilling started 4-25-90 Date Test Hole Completed _____

Total depth to bottom of Well 457' Diameter Test Hole 12"x6" Elevation at Ground Level, if available _____

Elevation at Ground Level, if available _____ Distance from where measurements were taken to ground level _____

Water stands when not pumping 11 feet _____ inches from the surface of the ground

All Measurements taken from _____

THICKNESS OF STRATUM	DEPTH TO BOTTOM OF STRATA	Length of Core Taken	FORMATION FOUND EACH STRATUM	THICKNESS OF STRATUM	DEPTH TO BOTTOM OF STRATA	Length of Core Taken	FORMATION FOUND EACH STRATUM
10'	0'-10'		Dark Brown				Clay and Broke
			Silty Sand and				Light Brown Bo
			Gravel	8'	165'-173'		Light Brown So
15'	10'-25'		Light Brown Fine				Sand Stone
			To Course Sand	11'	173'-184'		Harder Bed Rock
			and Gravel.	13'	184'-197'		Gray Brown Si
			Silty Clay				Sand and Clay
17'	25'-42'		Same as above				(Cavern)
~~8'~~	~~42'-50'~~		With More Gravel	2'	197'-199'		Same with Bro
8'	42'-50'		Brown Hard Pan				Bed Rock
40'	50'-90'		Gray Brown	16'	199'-215'		Hard Gray Bro
			Hard Pan				Bed Rock
37'	90'-127'		Light Brown	3'	215'-218'		Reddish Brown
			Bed Rock, Very				Bed Rock Soft
			Soft.	22'	218'-240'		Same as above
8'	127'-135'		Red Silty Sand				But Very ha
			and Clay (Cavern)	10'	240'-250'		Soft
30'	135'-165'		Red Silty Sandy	15'	250'-265'		Same But Red

Remarks and opinion of Test

CHECK TYPE OF RIG USED: Reverse, Rotary, Cable Tool, Wash, Other?

Daniel C Lane

Driller

GROUP

LAYNE WELL & PUMP DIVISI

Page 2

LOG OF WELL

Well No. 5 Job. No. _____ Test No. 1

Log of Well for (Owner) ALTRESCO WELL NO. 5

Address PITTSFIELD MASS

Representatives, if any _____ in _____ County, State of _____

Well Located at _____ Date Drilling started _____ Date Test Hole Completed _____

Furnish sketch of location _____ Diameter Test Hole _____ Elevation at Ground Level, if available _____

Total depth to bottom of Well _____ Distance from where measurements were taken to ground level _____

Elevation at Ground Level, if available _____ feet _____ inches from the surface of the ground

Water stands when not pumping _____

All Measurements taken from _____

THICKNESS OF STRATUM	DEPTH TO BOTTOM OF STRATA	Length of Core Taken	FORMATION FOUND EACH STRATUM	THICKNESS OF STRATUM	DEPTH TO BOTTOM OF STRATA	Length of Core Taken	FORMATION FOUND EACH STRATUM
15'	265'-280'		Same as above		318'		40 GPM Cau Cle
			But Stiffer		322'		60 "
10'	280'-290'		Soft (Cavern)		330'		150 "
5'	290'-295		Harder		332'		200 "
32'	295'-327'		Broken Quar-		342		5 GPM
			Tize, Very hard		362		60 "
7'	327'-334'		Same But Reddish		369		200 GPM "
			Brown		400'		150+ "
11'	334'-345'		Light Brown		421'		150 "
			Bedrock		421'		225
14'	345'-359'		Broken Bedrock		430'		225+ GPM Mi'
34'	359'-393'		Broken Bedrock		437'		225 " "
			and Brown Silty		457'		260 "
			Sand		450'		300 " "
64'	393'-457'		Streaks of		448		300 " "
			Hard Bedrock				
			With Fractures				
			and Broken Zones				

Remarks and opinion of Test

CHECK TYPE OF RIG USED { Reverse / Rotary ✓ / Cable Tool / Wash

Driller

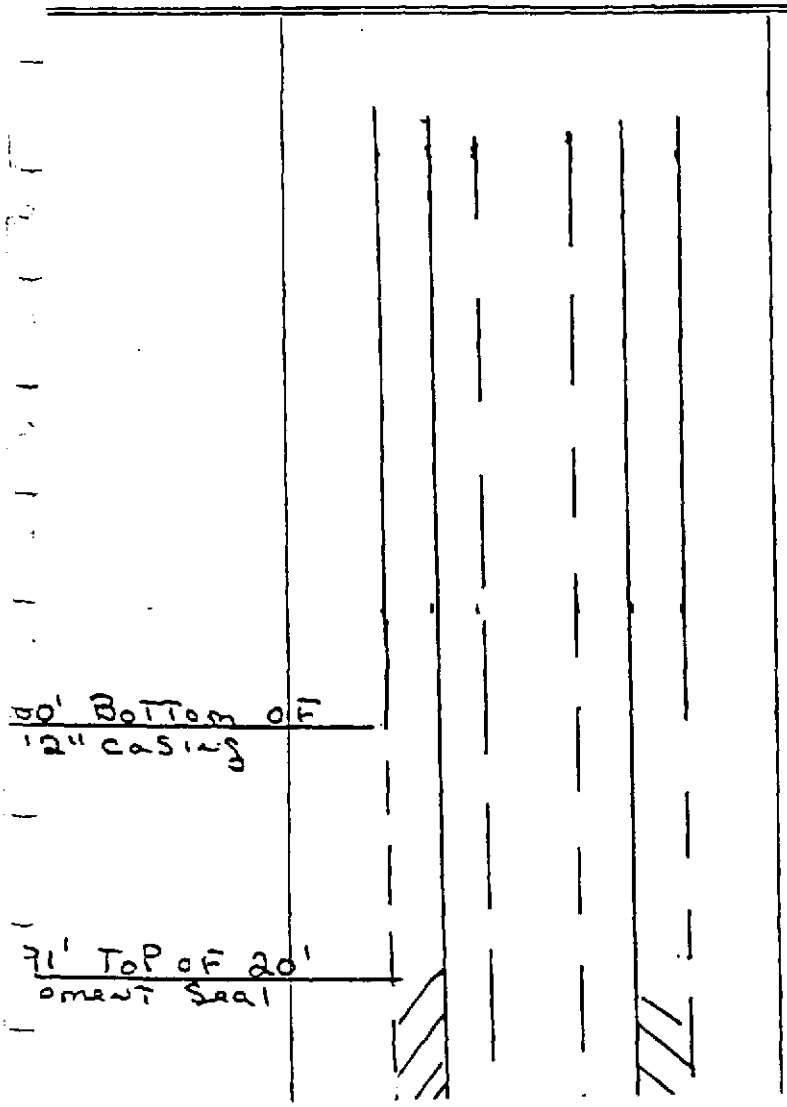
HYDRO GROUP
DRILLERS REPORT

JOB No. DRILLER Darrell Learn CUSTOMER WELL No. 5

CUSTOMER ALTRESCO WELL No. 5

WELL LOCATION PITTSFIELD MASS STATE PERMIT No.

FORMATION SKETCH OF SETTING REMARKS



PIPE SET:

DIA.	WALL	LGTH.	MATL	~~T & C~~ WELD
12"	3/8"	200'	Steel	
8"	3/8"	339'	Steel	
6"	3/8"	429	Steel	

PIPE LEFT IN PLACE:

DIA.	WALL	LGTH.	MATL.	T & C WELD
12"		200'	-	
8"		339'		
6"		121'		

SCREEN:

NOM. SIZE 6" Telo, I.D. 5" LGTH. 16' OPNG. 500 S

MFG. COOK TYPE WW METAL S.S GA. NO.

SET IN BeD Rock (Bail) BOTTOM FORMATION T

WELL UNDEREAMED TO DIAMETER 5" Threaded

MISCELLANEOUS:

R & L BACK OFF CUT OFF PACKER TYPE

CONE:

DIA. TOP DIA. BOTT. LGTH. MTL.

PLUG:

DIA. LGTH. MTL.

GRAVEL: **CLAY:**

AMT. BAGS PWDR. REG.

LAYNE WELL & PUMP DIVISIC

LOG OF WELL

Well No. 6 Job. No. _____ Test No. 6

Log of Well for (Owner) ALTRESCO

Address PITSFIELD GE

Representatives, if any Hewson Ass.

Well Located at PITSFIELD in _____ County, State of Mass

Furnish sketch of location _____ Date Drilling started _____ Date Test Hole Completed _____

Total depth to bottom of Well 43[illegible]' Diameter Test Hole 16" x 8" Elevation at Ground Level, if available _____

Elevation at Ground Level, if available _____ Distance from where measurements were taken to ground level _____

Water stands when not pumping 45' feet _____ inches from the surface of the ground

All Measurements taken from _____

THICKNESS OF STRATUM	DEPTH TO BOTTOM OF STRATA	Length of Core Taken	FORMATION FOUND EACH STRATUM	THICKNESS OF STRATUM	DEPTH TO BOTTOM OF STRATA	Length of Core Taken	FORMATION FOUND EACH STRATUM
5'	0'-5'		Brown Silty Fine	6'	104'-110'		Same But Reddis
			To Course Sand	15'	110'-125'		Brown Hard Re
			and Gravel	18'	125'-143'		Softer Red
15'	5'-20'		Grey Silty Sand	15'	143'-158'		Changes From
			Clay Some Gravel				Grey Brown To Red.
22'	20'-42'		Grey Brown Fine				Grey Brown is Ha
			To Course Sand				Red is Soft
			and Gravel, Boulders	3'	158'-161'		Grey Hard
			(Hard Packed)	4'	161'-165'		Soft Red
1'	42'-43'		Boulder (Could	17'	165'-182'		Grey
			Be Top of Bedrock)	2' 50	182'-184.50		Red
20'	43'-63'		Grey Fine To Course	8' 50	184.50-193		Grey
			Sand and Gravel	4'	193'-197'		Red
			Tight (Takes No Mud)	6' 50	197'-202.50		Grey
18'	63'-81'		Brown and Grey	7' 50	202.50-210'		Softer Grey
			Soft Bedrock	4'	210'-214'		Broken Hard
23'	81'-104'		Same But Softer	7'	214'-221'		Red
			(Takes a little mud)	5'	221'-226'		Broken Hard

Remarks and opinion of Test

CHECK TYPE OF RIG USED { Reverse / Rotary ✓ / Cable Tool / Wash / Other }

[illegible]

Driller

HYDRO GROUP

2

LAYNE WELL & PUMP DIVISI

LOG OF WELL

Well No. 6 Job. No. _____ Test No. 6

Log of Well for (Owner) Altresco

Address Pitsfield GE

Representatives, if any Hansel

Well Located at Pitsfield in _____ County, State of Mass

Furnish sketch of location _____ Date Drilling started _____ Date Test Hole Completed _____

Total depth to bottom of Well 471' Diameter Test Hole 16"x8" Elevation at Ground Level, if available _____

Elevation at Ground Level, if available _____ Distance from where measurements were taken to ground level _____

Water stands when not pumping 45' feet _____ inches from the surface of the ground

All Measurements taken from _____

THICKNESS OF STRATUM	DEPTH TO BOTTOM OF STRATA	Length of Core Taken	FORMATION FOUND EACH STRATUM	THICKNESS OF STRATUM	DEPTH TO BOTTOM OF STRATA	Length of Core Taken	FORMATION FOUND EACH STRATUM
25'	226'-251		Soft	35'	333'-368'		Broken Soft
14'	251'-265'		Soft Broken	1'	368'-369		Hard
			White Rock	6'	369'-375		Broken Hard
11'	265'-276'		Soft White	5'	375'-380'		Hard
3'	276'-279'		Hard	2'	380'-382'		Softer
3'	279'-282'		Soft	8'	382'-390'		Softer
5'	282'-287'		Broken Rock	2'	390'-392'		Broken
6'	287'-293'		Soft	10'	392'-402		White Fracture
2'	293'-295'		Very Broken	10'	402'-412'		Broken with G
9'	295'-304'		Soft				2' Streaks of
3'	304'-307'		Broken Reddish	11'	412'-423'		Same but very
2'	307'-309'		Very Soft Red				with Mica
7.50	309'-316'50		Very hard White	13'	423'-436'		Broken Hard
6.50	316.50-323'		Very hard (2'				1' Streaks of
	~~[illegible]~~		Per Day)				Hard
3'	323'-326'		Broken Hard	18'50	436'-454'50		Same with Lo
4'	326'-330'		Broken Softer				of Very Broke
3'	330'-333'		Hard				

Remarks and opinion of Test

Changes From Hard To Broken at Bottom every Few inches Too Hard To Tell Depth Accurately

CHECK TYPE OF RIG USED: Reverse Rotary — Cable Tool Wash Other

[signature]

Driller

GROUP

3

LAYNE WELL & PUMP DIVISIC

LOG OF WELL

Well No. 6 Job. No. _____ Test No. 6

Log of Well for (Owner) Altresco

Address Pittsfield G.E

Representatives, if any Hawson

Well Located at Pittsfield in _____ County, State of Mass

Furnish sketch of location _____ Date Drilling started _____ Date Test Hole Completed _____

Total depth to bottom of Well 471 Diameter Test Hole 8" Elevation at Ground Level, if available _____

Elevation at Ground Level, if available _____ Distance from where measurements were taken to ground level _____

Water stands when not pumping 60'± feet _____ inches from the surface of the ground

All Measurements taken from _____

THICKNESS OF STRATUM	DEPTH TO BOTTOM OF STRATA	Length of Core Taken	FORMATION FOUND EACH STRATUM	THICKNESS OF STRATUM	DEPTH TO BOTTOM OF STRATA	Length of Core Taken	FORMATION FOUND EACH STRATUM
16.50	467.50-471		Broken white				
			Quartz. Stays				
			open.				

Remarks and opinion of Test

CHECK TYPE OF RIG USED { Reverse / Rotary ✓ / Cable Tool / Wash / Other?

Driller

1M 12 83 WS

TEST WELL RECORD

HYDRO GROUP

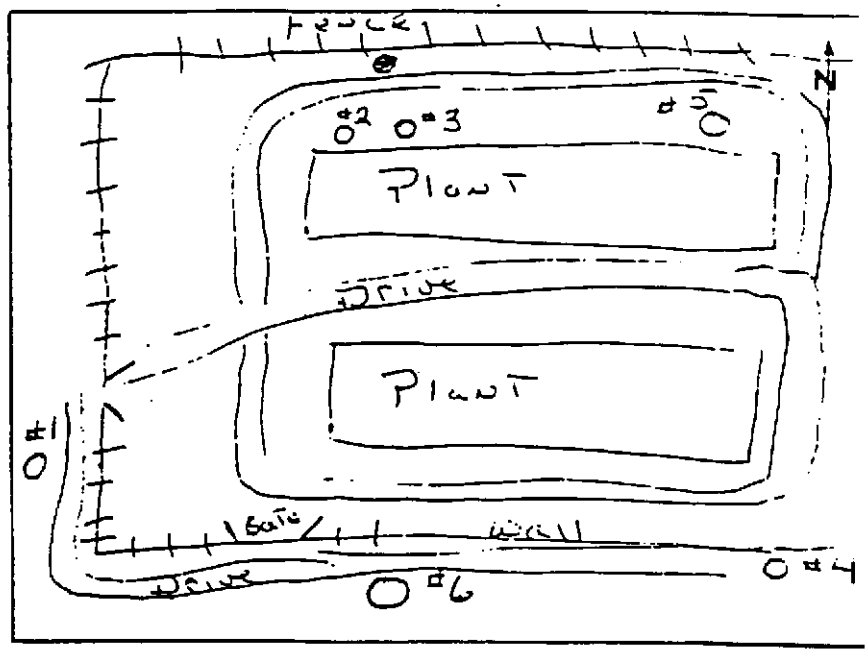
DATE 5/7/91 TEST WELL NO. #6

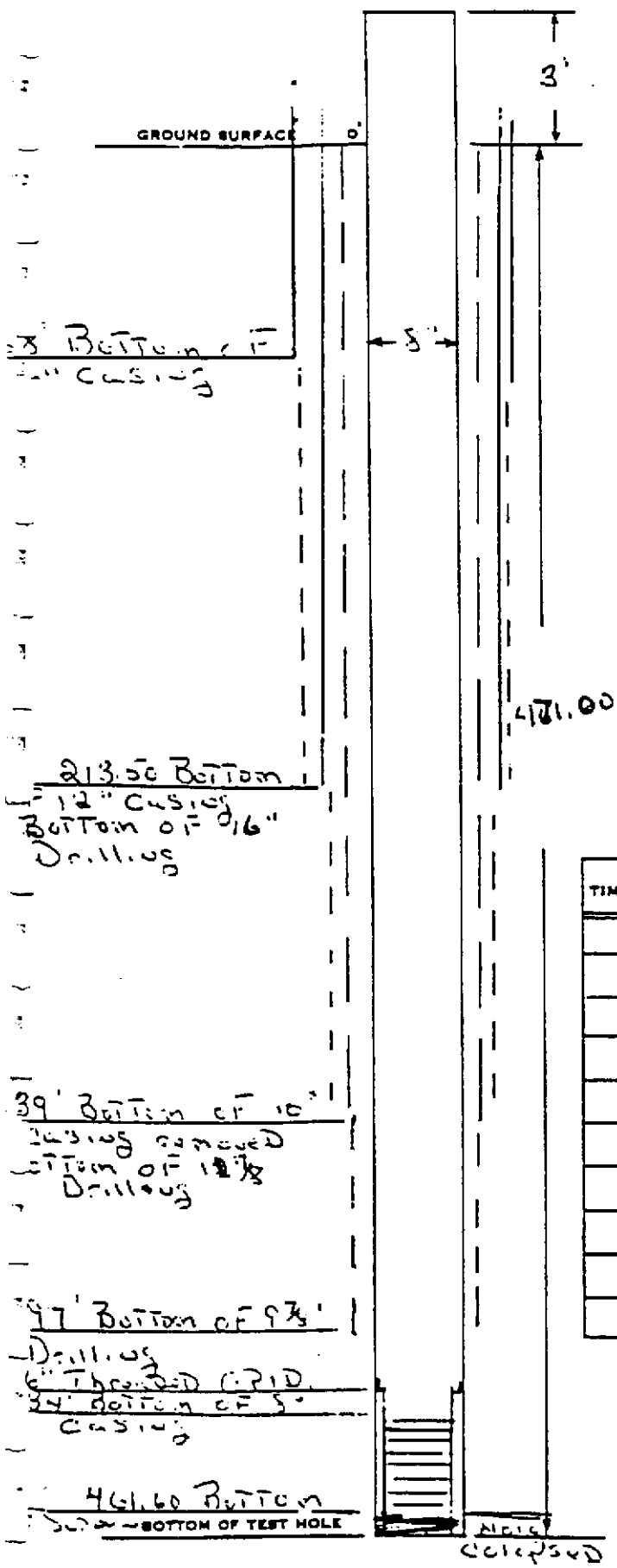
FOR Altresco CO Generation Plant

LOCATION Pitsfield Mass

PROPERTY OWNER General Elec.

SKETCH OF LOCATION





OBS. WELL: NO. _____ DISTANCE _____ DEPTH _____

NO. _____ DISTANCE _____ DEPTH _____

WELL SCREEN: TYPE 6" S.S. U.W. Ball Bottom LENGTH 36.50 OPENING 250 Sl

PUMPING DATA (MEASURED FROM TOP OF PIPE) ELEVATION: _____

TIME	GPM	PUMP. WELL	OBS. WELL	OBS. WELL	TIME	GPM	PUMP. WELL	OBS. WELL	OB WE

STATIC LEVEL 60' ± ORIFICE _____ AIR LINE LENGTH _____

QUALITY: PH _____ HARD. _____ IRON _____ MANGANESE _____

ODOR _____ TASTE _____ LAB. SAMPLE _____

PIPE LEFT: IN WELL _____ FT., IN OBS. WELL _____ FT

SCREEN LEFT: IN WELL _____ FT., IN OBS. WELL _____ FT

NOTE (1) SKETCH MEASUREMENTS FROM GROUND LEVEL.

(2) OBS. WELL SCREEN IS OPPOSITE WELL SCREEN.

(3) DEPTH SHOWN IS MAXIMUM DEPTH OF HOLE.

[signature]

FOR HYDRO GROUP, INC.

NEW YORK AVENUE WELLS

SAMPLE/CORE LOG

WELL: NY-1 PROJECT NO: New York Ave. NY360NY01 PAGE: 1 of 1

SITE LOCATION: General Electric Pittsfield, MA DRILLING STARTED: 4/25/88 DRILLING COMPLETED: 4/25/88

TOTAL DEPTH DRILLED: 14 ft HOLE DIAMETER: 8 in. TYPE OF SAMPLE/ CORING DEVICE: Split Spoon

LENGTH & DIAMETER OF CORING DEVICE: 2 ft x 2 in. SAMPLING INTERVAL: 2 ft

LAND-SURFACE ELEVATION: { } SURVEYED { } ESTIMATED DATUM:

DRILLING FLUID USED: None DRILLING METHOD: Hollow Stem Auger

DRILLING CONTRACTOR: Soil & Mat'l. Testing DRILLER: Tom HELPER: Bob

PREPARED BY: W. Gray HAMMER WEIGHT: 140 lb HAMMER DROP: 30 in.

SAMPLE NO.	SAMPLE DEPTH FROM	SAMPLE DEPTH TO	CORE RECVRY	BLOW COUNTS	SAMPLE/CORE DESCRIPTION
	0	2	0.9	4-10-	Sand, medium to fine (80%); with silt, some small
				12-15	gravel, little clay, brown (fill).
	2	4	1.1	9-7-	Sand (90%), brown, 6 in. of crushed lime, gray at
				4-1	base (fill).
	4	6	1.0	1-1	Sand (85%), little silt and clay, brown, moist
				1-0	(fill).
	6	8	1.4	7-3-	Sand, fine to medium, silty, trace gravel, brown
				1-5	(fill - 6 to 7 ft). Sand, medium to fine, some
					silt, gray (7 to 8 ft).
	8	10	1.6	4-4-	Sand, medium to fine, some silt, gray.
				2-2	
	10	12	2.0	2-4-	1 ft as above; 1 ft peat, brown, moist.
				3-3	
	12	14	1.7	3-4-	Sand (85%), little silt, gray, wet, some peat
				4-4	material.

SAMPLE/CORE LOG

WELL: NY-2 PROJECT NO: New York Ave. NY360NY01 PAGE: 1 of 1

SITE LOCATION: General Electric Pittsfield, MA DRILLING STARTED: 4/26/88 DRILLING COMPLETED: 4/26/88

TOTAL DEPTH DRILLED: 24 ft HOLE DIAMETER: 8 in. TYPE OF SAMPLE/ CORING DEVICE: Split Spoon

LENGTH & DIAMETER OF CORING DEVICE: 2 ft x 2 in. SAMPLING INTERVAL: 2 ft

LAND-SURFACE ELEVATION: { } SURVEYED ESTIMATED DATUM:

DRILLING FLUID USED: None DRILLING METHOD: Hollow Stem Auger

DRILLING CONTRACTOR: Soil & Mat'l. Testing DRILLER: Tom HELPER: Bob

PREPARED BY: W. Gray HAMMER WEIGHT: 140 lb HAMMER DROP: 30 in.

SAMPLE NO	SAMPLE DEPTH FROM	SAMPLE DEPTH TO	CORE RECVRY	BLOW COUNTS	SAMPLE/CORE DESCRIPTION
	0	2	0.6	2-3-	Sand, medium to fine (90%); trace silt, little
				3-4	gravel, brown.
	2	4	1.0	4-4-	Sand (95%), poorly sorted; trace silt; little gravel,
				5-7	light brown.
	4	6	1.5	6-6-	Sand (85%), trace silt; increased gravel, small,
				5-5	light brown.
	6	8	1.5	10-8-	Same as above.
				8-10	
	8	10	1.6	10-12-	Same as above, gray-brown.
				12-12	
	10	12	2.0	12-6-	Same as above.
				7-7	
	12	14	0.4	12-8-	Same as above (2 in.). Fine sand and silt, trace
				7-22	clay, moist.
	14	16	0.4	8-10-	Sand, medium to fine (80%); some silt, little clay;
				8-8	little gravel, brown, moist
	16	18	1.1	12-11-	Same as above, with silt, increased gravel. Wet
				24-30	fragments of limestone at 18 ft.
	18	20	1.7	15-19-	Same as above, very silty.
				32-39	
	20	22	1.6	12-27-	Same as above.
				32-50	
	22	24	1.3	25-33-	Sand, fine, and silt; some gravel; very dense, drier
				47-97	than above, brown.

SAMPLE/CORE LOG

WELL: NY-3 PROJECT NO: New York Ave. NY360NY01 PAGE: 1 of 2

SITE LOCATION: General Electric Pittsfield, MA DRILLING STARTED: 4/27/88 DRILLING COMPLETED: 4/27/88

TOTAL DEPTH DRILLED: 25 ft HOLE DIAMETER: 8 in. TYPE OF SAMPLE/ CORING DEVICE: Split Spoon

LENGTH & DIAMETER OF CORING DEVICE: 2 ft x 2 in. SAMPLING INTERVAL: continuous

LAND-SURFACE ELEVATION: ( ) SURVEYED ( ) ESTIMATED DATUM:

DRILLING FLUID USED: None DRILLING METHOD: Hollow Stem Auger

DRILLING CONTRACTOR: Soil & Mat'l. Testing DRILLER: Mike HELPER: Bob

PREPARED BY: J. Duminuco HAMMER WEIGHT: 140 lb HAMMER DROP: 30 in.

SAMPLE NO	SAMPLE DEPTH FROM	SAMPLE DEPTH TO	CORE RECVRY	BLOW COUNTS	SAMPLE/CORE DESCRIPTION
	0	2	1.2	2-4-	Sand, fine, trace silt, gravel, vegetation, brown.
				9-6	
	2	4	1.7	5-4-	Sand, fine, some silt, brown.
				4-4	
	4	6	2.0	4-3-	Do
				3-3	
	6	8	1.8	3-3-	Do, trace gravel.
				4-6	
	8	10	1.6	12-14-	Sand, fine, some silt, trace gravel, brown-gray.
				18-15	
	10	12	1.0	16-17-	Sand, fine to medium, some silt, gravel, brown-gray.
				19-12	
	12	14	0.9	16-17-	Do
				12-9	
	14	16	1.2	6-6-	Do 14 to 15.8 ft; silt, some fine sand, brown,
				8-9	(15.8 to 16 ft), wet at tip.
	16	18	1.0	6-10-	(Interlayered) sand, fine, silty and sand fine to
				11-11	medium, trace silt, gravel, brown; (wet).
	18	20	1.4	10-10-	Silt, some fine sand, brown.
				10-16	
	20	22	0.9	13-13-	Sand, fine to medium, silty, some gravel, brown.
				14-14	
	22	24	1.4	18-26-	Silt, some fine sand, trace gravel, brown.
				17-20	

SAMPLE/CORE LOG

WELL: NY-4 PROJECT NO: New York Ave. NY360NY01 PAGE: 1 of 1

SITE LOCATION: General Electric Pittsfield, MA DRILLING STARTED: 5/2/88 DRILLING COMPLETED: 5/2/88

TOTAL DEPTH DRILLED: 33 ft HOLE DIAMETER: 8 in. TYPE OF SAMPLE/ CORING DEVICE: Split Spoon

LENGTH & DIAMETER OF CORING DEVICE: 2 ft x 2 in. SAMPLING INTERVAL: continuous

LAND-SURFACE ELEVATION: { } SURVEYED { } ESTIMATED DATUM:

DRILLING FLUID USED: None DRILLING METHOD: Hollow Stem Auger

DRILLING CONTRACTOR: Soil & Mat'l. Testing DRILLER: Tom HELPER: Bob

PREPARED BY: J. Dumimuco HAMMER WEIGHT: 140 lb HAMMER DROP: 30 in.

SAMPLE NO	SAMPLE DEPTH FROM	SAMPLE DEPTH TO	CORE RECVRY	BLOW COUNTS	SAMPLE/CORE DESCRIPTION
	0	2	1.0	1-2-	Sand, fine to medium, trace gravel, silt, vegetation,
				2-2	brown.
	2	4	1.1	3-3-	Sand, fine to coarse, some gravel, trace silt,
				3-4	brown-gray.
	4	6	1.2	6-9-	Interlayered: sand, fine to coarse, some gravel,
				6-7	trace silt; sand, fine, silty; silt, sandy; brown.
	6	8	1.4	9-18-	Sand, fine to medium, silty and gravel, brown (damp).
				16-18	
	8	10	1.4	15-15-	Silt, sandy, trace gravel, brown; (wet).
				19-14	
	10	12	0.0	20-25-	No recovery - pushing cobbles - augered to 14.0 ft.
				40-120	
	14	16	1.0	11-9-	(Interlayered) Sand, fine, silty and silt, sandy,
				12-17	brown; (damp).
	16	18	0.9	16-20-	Silt, some fine sand, trace gravel, brown.
				22-27	
	18	20	0.8	29-50-	Sand, fine, some silt, trace gravel, brown; (damp).
				45-45	
	20	22	1.8	70-75-	Do
				50-70	
	22	24	1.1	11-16-	Sand, fine, trace silt, brown; (damp).
				32-37	

SAMPLE/CORE LOG (Cont.d)

WELL: NY-4 PREPARED BY: J. Duminuco PAGE: 2 of 2

SAMPLE NO	SAMPLE DEPTH		CORE RECVRY	BLOW COUNTS	SAMPLE/CORE DESCRIPTION
	FROM	TO			
	24	26	1.4	25-30	Do, wet @ top.
				35-45	
	26	28	2.0	13-16-	Silt, some fine sand, brown; (damp).
				18-35	
	28	30	2.0	30-40-	Do
				46-42	
	30	32	1.8	19-22-	Silt, clayey, brown; (damp).
				40-75	
	32	33	0.8	35-35	Do

HILL 78 LANDFILL AREA
B1 - B16

Fracchia & Miller Inc.

SAMPLE/CORE LOG

BORING/WELL: B-1 PROJECT NO: NO360551 PAGE: 1

SITE LOCATION: General Electric Co. Pittsfield, MA (Bldg 78) DRILLING STARTED: 7/13/87 16:10 DRILLING COMPLETED: 7/13/87 17:00

TOTAL DEPTH DRILLED: 20 ft HOLE DIAMETER: 3-3/4 in TYPE OF SAMPLE/CORING DEVICE: Split Spoon

LENGTH & DIAMETER OF CORING DEVICE: 2' x 2" SAMPLING INTERVAL: 2 ft

LAND-SURFACE ELEVATION: - [ ] SURVEYED [ ] ESTIMATED DATUM: -

DRILLING FLUID USED: None DRILLING METHOD: Hollow Stem Auger

DRILLING CONTRACTOR: Soil & Mat'l Testing DRILLER: Mike HELPER: Daryl

PREPARED BY: W. Gray HAMMER WEIGHT: 140 lb HAMMER DROP: 30 in

SAMPLE NO	SAMPLE DEPTH FROM	SAMPLE DEPTH TO	CORE RECOVRY	BLOW COUNTS	SAMPLE/CORE DESCRIPTION
	0	2	.5	1-6-8-24	Sand (90%) fine, dark brown; some silt, white.
	2	4	1.0	5-18-24-100/3	Sand and silt (fine), dark brown.
	4	6	1.5	16-16-16-14	Sand (90%) fine, brown and white.
	6	8	1.5	6-3-4-3	Sand (90%) medium-coarse, brown.
	8	10	0.5	3-3-4-5	Sand (90%) medium-coarse, brown.
	10	12	1.0	4-4-7-8	4" sand (90%) medium-coarse, brown, moist. 4" silt and sand, (60%), dark brown. 4" sand (90%) coarse-fine, brown.
	12	14	1.0	8-7-9-68	Sand (90%) medium-coarse, brown, moist.
	14	16	0.3	17-11-13-12	Sand (70%) medium-fine, brown; silt.
	16	18	1.2	11-15-14-13	Sand (70%) fine, brown; silt.
	18	20	2.0	12-13-12-14	Sand (70%) fine, brown; silt; small limestone fragment.

Dewberry & Miller Inc.

SAMPLE CORE LOG

BORING/WELL: B-1 PROJECT NO: N0360551 PAGE: 1

SITE LOCATION: General Electric Co., Pittsfield, MA (Bldg 78) DRILLING STARTED: 6/11/87 8:56 DRILLING COMPLETED: 6/16/87 10:30

TOTAL DEPTH DRILLED: 20 ft HOLE DIAMETER: 5-3/4 in TYPE OF SAMPLE/CORING DEVICE: Split Spoon

LENGTH & DIAMETER OF CORING DEVICE: 2' x 2" SAMPLING INTERVAL: 2 ft

LAND-SURFACE ELEVATION: - ( ) SURVEYED ( ) ESTIMATED DATUM: -

DRILLING FLUID USED: None DRILLING METHOD: Hollow Stem Auger

DRILLING CONTRACTOR: Soil & Mat'l Testing DRILLER: Mike HELPER: Daryl

PREPARED BY: W. Gray HAMMER WEIGHT: 140 lb HAMMER DROP: 30 in

SAMPLE NO	SAMPLE DEPTH FROM	SAMPLE DEPTH TO	CORE RECVRY	BLOW COUNTS	SAMPLE/CORE DESCRIPTION
	0	2	0.8	4-11-	Brown top soil; sand (75%) coarse-fine, brown; some
				15-46	silt and gravel.
	2	4	1.1	22-71-	Sand (70%) medium-fine, brown; some silt; dark black.
				21-24	
	4	6	1.3	14-15-	Sand (70%) medium-fine, brown; some silt; gravel.
				12-15	
	6	8	0.7	1-4-	Sand (75%) coarse-fine, brown; some silt and gravel.
				4-4	
	8	10	-	100/3	NO RECOVERY.
	10	12	0.3	5-4-	Same as above.
				4-4	
	12	14	1.7	3-2-	Sand (80%) medium-fine; brown; some silt and gravel.
				2-4	
	14	16	1.8	3-3-	Same as above; some large gravel.
				3-6	
	16	18	1.0	3-3-	Same as above.
				4-6	
	18	20	0.4	3-4-	Same as above.
				6-3	

Geraghty & Miller, Inc.

SAMPLE/CORE LOG

BORING/WELL: B-3 PROJECT NO: NO360931 PAGE: .

SITE LOCATION: General Electric Co. Pittsfield, MA (Bldg 73) DRILLING STARTED: 11/14/87 DRILLING COMPLETED: 11/87

TOTAL DEPTH DRILLED: 20 ft HOLE DIAMETER: 3-1/4 in TYPE OF SAMPLE/CORING DEVICE: Split Spoon

LENGTH & DIAMETER OF CORING DEVICE: 2' x 2" SAMPLING INTERVAL: 2 ft

LAND-SURFACE ELEVATION: - SURVEYED / ESTIMATED DATUM: -

DRILLING FLUID USED: None DRILLING METHOD: Hollow Stem Auger

DRILLING CONTRACTOR: Soil & Mat'l Testing DRILLER: Mike HELPER: Darryl

PREPARED BY: W. Gray HAMMER WEIGHT: 140 lb HAMMER DROP: 30 in

SAMPLE NO	SAMPLE DEPTH FROM	SAMPLE DEPTH TO	CORE RECOVRY	BLOW COUNTS	SAMPLE/CORE DESCRIPTION
	0	2	2.0	14-29-35-32	Sand (70%) coarse-fine; limestone gravel, glass (fill material).
	2	4	1.5	14-11-8-11	Same as above.
	4	6	1.0	11-47-56-15	Sand and fill - glass, brick, ceramic.
	6	8	1.0	10-7-10-100/3	Same as above, with more brick.
	8	10	0.6	6-6-10-8	Same as above.
	10	12	0	7-13-12-5	NO RECOVERY.
	12	14	0	43-100/4"	Recovered 3" of wood.
	14	16	0.4	74-10-46-83	Large cement fragments; wood; brown sand, gravel.
	16	18	0.4	30-13-9-9	Cement; red brick; gravel; brown sand.
	18	20	1.0	6-3-5-3	Sand, light brown, medium-fine; small gravel.

Geraghty & Miller, Inc.

SAMPLE/CORE LOG

BORING/WELL: B-4 PROJECT NO: N0360SS1 PAGE: 1

SITE LOCATION: General Electric Co. / Pittsfield, MA (Bldg 78) DRILLING STARTED: 4/14/87 13:15 DRILLING COMPLETED: 4/14/87 15:10

TOTAL DEPTH DRILLED: 20 ft HOLE DIAMETER: 5-3/4 in TYPE OF SAMPLE/CORING DEVICE: Split Spoon

LENGTH & DIAMETER OF CORING DEVICE: 2' x 2" SAMPLING INTERVAL: 2 ft

LAND-SURFACE ELEVATION: - | | SURVEYED | | ESTIMATED DATUM: -

DRILLING FLUID USED: None DRILLING METHOD: Hollow Stem Auger

DRILLING CONTRACTOR: Soil & Mat'l Testing DRILLER: Mike HELPER: Daryl

PREPARED BY: W. Gray HAMMER WEIGHT: 140 lb HAMMER DROP: 30 in

SAMPLE NO	SAMPLE DEPTH FROM	SAMPLE DEPTH TO	CORE RECVRY	BLOW COUNTS	SAMPLE/CORE DESCRIPTION
	0	2	2.0	3-4-	Fill material - sand, gravel (mica) brick, glass,
				7-8	ceramic.
	2	4	-	13-9-	NO RECOVERY.
				4-6	
	4	6	0.6	11-7-	Fill - cement, brick, sand, wood.
				16-55	
	6	8	0.3	9-15-	Fill sand, gravel, small cement fragments.
				18-	
				100/4	
	8	10	0.4	8-13-	Fill sand, gravel, cement, wood.
				7-4	
	10	12	0.9	4-4-	Sand, gravel, cement.
				4-4	
	12	14	0.9	3-2-	Sand, gravel, yellow brick, orange brick, green sand,
				7-9	ceramic fragments.
	14	16	0.2	6-16-	Sand, gravel, yellow brick, orange brick.
				17-6	
	16	18	0.8	3-4-	Gravel: sand, red brick, cement - WET.
				24-	
				100/2	
	18	20	0.6	5-13-	Gravel: sand, red brick, WET.
				13-6	

Geraghty & Miller, Inc.

SAMPLE CORE LOG

BORING/WELL: B-5 PROJECT NO: NC360SS1 PAGE: 1

SITE LOCATION: General Electric Co. Pittsfield, MA (Bldg 78) DRILLING STARTED: 4/14/87 16:40 DRILLING COMPLETED: 4/14/87 18:35

TOTAL DEPTH DRILLED: 20 ft HOLE DIAMETER: 5-3/4 in TYPE OF SAMPLE/CORING DEVICE: Split Spoon

LENGTH & DIAMETER OF CORING DEVICE: 2' x 2" SAMPLING INTERVAL: 2 ft

LAND-SURFACE ELEVATION: - SURVEYED ESTIMATED DATUM: -

DRILLING FLUID USED: None DRILLING METHOD: Hollow Stem Auger

DRILLING CONTRACTOR: Soil & Mat'l Testing DRILLER: Mike HELPER: Daryl

PREPARED BY: W. Gray HAMMER WEIGHT: 140 lb HAMMER DROP: 30 in

SAMPLE NO	SAMPLE DEPTH FROM	SAMPLE DEPTH TO	CORE RECVRY	BLOW COUNTS	SAMPLE/CORE DESCRIPTION
	0	2	1.2	6-26-	Fill - sand, very white; gravel, plastic, paper.
				17-13	
	2	4	0.9	10-55-	Fill - sand, brown; limestone fragments.
				9-37	
	4	6	0.5	5-6-	Gravel, large; sand, medium, brown.
				9-8	
	6	8	0.7	6-7-	Sand (70%) brown medium-fine; gravel.
				11-7	
	8	10	1.1	14-11-	Sand, fine, light brown; gravel, limestone; wood.
				14-18	
	10	12	0.2	6-14-	Sand, coarse-fine, light brown.
				20-26	
	12	14	2.0	7-8-	Sand (95%) fine, light brown; some silt and small
				11-8	gravel.
	14	16	2.0	5-5-	Same as above.
				4-6	
	16	18	2.0	5-6-	Same as above, moist.
				4-7	
	18	20	1.5	4-7-	Same as above, moist.
				17-42	

Geraghty & Miller, Inc.

SAMPLE CORE LOG

BORING/WELL: B-6 PROJECT NO: N0360551 PAGE: 1

SITE LOCATION: General Electric Co: Pittsfield, MA (Bldg "B") DRILLING STARTED: 8/15/87 8:45 DRILLING COMPLETED: 8/15/87 10:15

TOTAL DEPTH DRILLED: 20 ft HOLE DIAMETER: 8-3/4 in TYPE OF SAMPLE/ CORING DEVICE: Split Spoon

LENGTH & DIAMETER OF CORING DEVICE: 2' x 2" SAMPLING INTERVAL: 2 ft

LAND-SURFACE ELEVATION: - SURVEYED / ESTIMATED DATUM: -

DRILLING FLUID USED: None DRILLING METHOD: Hollow Stem Auger

DRILLING CONTRACTOR: Soil & Mat'l Testing DRILLER: Mike HELPER: Daryl

PREPARED BY: W. Gray HAMMER WEIGHT: 140 lb HAMMER DROP: 30 in

SAMPLE NO	SAMPLE DEPTH FROM	SAMPLE DEPTH TO	CORE RECOVRY	BLOW COUNTS	SAMPLE/CORE DESCRIPTION
	0	2	1.2	4-6-28-83	Fill - brown sand and gravel, red brick.
	2	4	1.1	22-21-15-16	Fill - brown sand, gravel, cement, wood.
	4	6	0.4	7-11-7-5	Fill - sand and gravel; some gray silt.
	6	8	1.0	Weight of rods	Sand (80%), gray, fine; gravel.
	8	10	1.1	3-7-2-3	Same as above, with reeds.
	10	12	1.6	14-19-15-10	Sand (80%), light brown, fine - gray; small gravel.
	12	14	1.1	4-11-30-82	Sand (80%), light brown, fine; also gray fine sand; gravel.
	14	16	1.5	27-34-35-35	Sand (80%), fine, gray; gravel, large.
	16	18	0.2	7-3-3-3	Sand (80%) gray, fine - light brown - moist.
	18	20	1.0	5-2-2-5	Same as above, WET.

Geraghty & Miller, Inc.

SAMPLE CORE LOG

BORING/WELL: B-7 PROJECT NO: NG36CSS1 PAGE: -

SITE LOCATION: General Electric Co. Pittsfield, MA (Bldg 78) DRILLING STARTED: 4/15/87 12:20 DRILLING COMPLETED: 4/15/87 14:05

TOTAL DEPTH DRILLED: 20 ft HOLE DIAMETER: 5-3/4 in TYPE OF SAMPLE/CORING DEVICE: Split Spoon

LENGTH & DIAMETER OF CORING DEVICE: 2' x 2" SAMPLING INTERVAL: 2 ft

LAND-SURFACE ELEVATION: - SURVEYED ESTIMATED DATUM: -

DRILLING FLUID USED: None DRILLING METHOD: Hollow Stem Auger

DRILLING CONTRACTOR: Soil & Mat'l Testing DRILLER: Mike HELPER: Daryl

PREPARED BY: W. Gray HAMMER WEIGHT: 140 lb HAMMER DROP: 30 in

SAMPLE NO	SAMPLE DEPTH FROM	SAMPLE DEPTH TO	CORE RECVRY	BLOW COUNTS	SAMPLE/CORE DESCRIPTION
	0	2	1.0	5-36-10-13	Fill - sand, brown, gravel, red brick, cement, wood.
	2	4	0.4	29-49-26-15	Fill - sand and gravel, cement.
	4	6	0.4	8-14-25-3	Fill - sand and gravel, asphalt fragments.
	6	8	0.2	4-5-10-18	Same as above.
	8	10	0.5	13-8-11-29	Same as above.
	10	12	0.2	9-13-33-70	Sand brown, coarse; gravel.
	12	14	0.5	12-10-7-7	Sand (80%) fine, light brown; gravel.
	14	16	1.3	3-8-13-37	Same as above, moist.
	16	18	1.5	8-16-11-2	Sand (80%) fine, light brown; some gravel; bottom 2" coarse dark brown sand; WET.
	18	20	0	Weight of rods	Some dark brown sand on spoon; WET.

Dewberry & Miller, Inc.

SAMPLE CORE LOG

BORING/WELL: B-8 PROJECT NO: N0360SS1 PAGE: .

SITE LOCATION: General Electric Co., Pittsfield, MA (Bldg 78) DRILLING STARTED: 4/16/87 9:00 DRILLING COMPLETED: 4/21/87

TOTAL DEPTH DRILLED: 20 ft HOLE DIAMETER: 5-3/4 in TYPE OF SAMPLE/ CORING DEVICE: Split Spoon

LENGTH & DIAMETER OF CORING DEVICE: 2' x 2" SAMPLING INTERVAL: 2 ft

LAND-SURFACE ELEVATION: . ( ) SURVEYED ( ) ESTIMATED DATUM: .

DRILLING FLUID USED: None DRILLING METHOD: Hollow Stem Auger

DRILLING CONTRACTOR: Soil & Mat'l Testing DRILLER: Mike HELPER: Darwl

PREPARED BY: W. Gray HAMMER WEIGHT: 140 lb HAMMER DROP: 30 in

SAMPLE NO	SAMPLE DEPTH FROM	SAMPLE DEPTH TO	CORE RECVRY	BLOW COUNTS	SAMPLE/CORE DESCRIPTION
	0	2	1.5	7-7-	Top soil, sand, (70%) brown, medium; gravel.
				12-9	
	2	4	1.5	6-13-	Same as above.
				45-64	
	4	6	0	100/.4	NO RECOVERY.
	6	8	1.6	16-16-	Sand and gravel fill, red brick, wood, cement.
				13-14	
	8	10	1.5	80-	Same as above, rebar in cuttings, cement.
				100/1"	
	10	12	0.4	2-3-	Sand and gravel; cement.
				3-4	
	12	14	1.5	5-4-	Sand: medium-fine, gray-light brown; gravel.
				5-18	
	14	16	1.3	22-25-	Same as above.
				22-19	
	16	18	1.3	5-9-	Same as above - moist.
				14-13	
	18	20	1.0	9-4-	Same as above.
				5-2	

Geraghty & Miller, Inc.

SAMPLE CORE LOG

BORING/WELL: B-9 PROJECT NO: NC160331 PAGE: 1

SITE LOCATION: General Electric Co. Pittsfield, MA (Bldg 78) DRILLING STARTED: 11/16/87 DRILLING COMPLETED: 11/16/87

TOTAL DEPTH DRILLED: 30 ft HOLE DIAMETER: 8-3/4 in TYPE OF SAMPLE/ BORING DEVICE: Split Spoon

LENGTH & DIAMETER OF BORING DEVICE: 1' x 2" SAMPLING INTERVAL: 2 ft

LAND-SURFACE ELEVATION: . SURVEYED / ESTIMATED DATUM: .

DRILLING FLUID USED: None DRILLING METHOD: Hollow Stem Auger

DRILLING CONTRACTOR: Soil & Mat'l Testing DRILLER: Mike HELPER: Darryl

PREPARED BY: W. Gray HAMMER WEIGHT: 140 lb HAMMER DROP: 30 in

SAMPLE NO	SAMPLE DEPTH FROM	SAMPLE DEPTH TO	CORE RECVRY	BLOW COUNTS	SAMPLE/CORE DESCRIPTION
	0	2	1.8	12-16-40-97	Fill, sand and gravel, brown, gray sand; red brick.
	2	4	0.7	48/- 100/3	Sand and gravel, fill, brown.
	4	6	-	100/1"	NO RECOVERY.
	6	8	0.3	16-16-8/7	Sand and gravel fill, cement.
	8	10	0.4	4-4-5-6	Same as above.
	10	12	0.6	8-7-10-16	Sand and gravel fill, red brick.
	12	14	2.0	33-47-39-50	Sand (80%) fine, light brown; some gravel and silt.
	14	16	2.0	18-42-50-42	Sand (80%) same as above, light brown - gray.
	16	18	1.8	13-13-13-9	Same as above; then coarse sand, darker.
	18	20	0.7	10-9-7-7	Sand (80%), fine; light brown-gray; gravel, some silt.

Terzanni & Miller Inc.

SAMPLE/CORE LOG

BORING/WELL: B-10 PROJECT NO: NO360551 PAGE: 1

SITE LOCATION: General Electric Co., Pittsfield, MA (Bldg 76) DRILLING STARTED: 4-16/87 DRILLING COMPLETED: 4-16/87

TOTAL DEPTH DRILLED: 20 ft HOLE DIAMETER: 5-3/4 in TYPE OF SAMPLE/CORING DEVICE: Split Spoon

LENGTH & DIAMETER OF CORING DEVICE: 2' x 2" SAMPLING INTERVAL: 2 ft

LAND-SURFACE ELEVATION: - ( ) SURVEYED ( ) ESTIMATED DATUM: -

DRILLING FLUID USED: None DRILLING METHOD: Hollow Stem Auger

DRILLING CONTRACTOR: Soil & Mat'l Testing DRILLER: Mike HELPER: Daryl

PREPARED BY: W. Gray HAMMER WEIGHT: 140 lb HAMMER DROP: 30 in

SAMPLE NO	SAMPLE DEPTH FROM	SAMPLE DEPTH TO	CORE RECVRY	BLOW COUNTS	SAMPLE/CORE DESCRIPTION
	0	2	1.6	3-8-	Top soil: sand and gravel limestone: fine light brown:
				16-23	sand.
	2	4	1.0	17-14-	Sand (80%) fine, light brown: some silt and gravel.
				11-12	
	4	6	-	4-4-	NO RECOVERY.
				3-3	
	6	8	0.8	11-7-	Same as 2-4' spoon.
				3-4	
	8	10	0.3	1-2-	Same as above.
				2-3	
	10	12	0.6	8-3-	Sand (80%) fine-coarse, light brown, some silt and
				3-3	gravel.
	12	14	0.7	3-2-	Same as above: large fragments of limestone.
				3-5	
	14	16	0.6	2-3-	Same as above.
				3-3	
	16	18	0.4	1-4-	Same as above; but no limestone: moist.
				5-5	
	18	20	1.0	3-7-	6" same as above: 6" black sandy top soil, some
				6-4	gravel, small roots: moist.

Dewberry & Miller Inc

SAMPLE CORE LOG

BORING/WELL: B-11 PROJECT NO: NO060551 PAGE: 1

SITE LOCATION: General Electric Co. Pittsfield, MA (Bldg 78) DRILLING STARTED: 7-16-87 DRILLING COMPLETED: 7-16-87

TOTAL DEPTH DRILLED: 20 ft HOLE DIAMETER: 3-3/4 in TYPE OF SAMPLE/ DORING DEVICE: Split Spoon

LENGTH & DIAMETER OF DORING DEVICE: 2' x 2" SAMPLING INTERVAL: 2 ft

LAND-SURFACE ELEVATION: - SURVEYED ESTIMATED DATUM: -

DRILLING FLUID USED: None DRILLING METHOD: Hollow Stem Auger

DRILLING CONTRACTOR: Soil & Materials Testing DRILLER: Mike HELPER: Daryl

PREPARED BY: W. Gray HAMMER WEIGHT: 140 lb HAMMER DROP: 30 in

SAMPLE NO	SAMPLE DEPTH FROM	SAMPLE DEPTH TO	CORE RECVRY	BLOW COUNTS	SAMPLE/CORE DESCRIPTION
	0	2	1.7	1-3-9-23	3" top soil; sand (80%) fine, light brown some silt and gravel.
	2	4	1.5	35-29-36-62	Same as above with coarse-fine sand; some limestone gravel.
	4	6	1.0	19-20-23-14	Same as above.
	6	8	1.0	9-6-8-7	Same as above.
	8	10	0.8	2-3-3-3	Same as above.
	10	12	0.5	5-7-6-5	Same as above.
	12	14	1.0	2-1-3-3	Top 6" same as above; lower 6" sand (80%) fine; some silt and gravel.
	14	16	-	8-9-11-15	NO RECOVERY.
	16	18	1.7	5-2-2-3	Top 3" same as 12-14' spoon; moist then black organic type layer - small roots, sandy.
	18	20	1.0	3-13-17-20	Top 6" coarse, light brown sand; bottom 6" sand, medium-fine, light brown-gray, moist.

Geraghty & Miller, Inc.

SAMPLE CORE LOG

BORING/WELL: B-12 PROJECT NO: N0360551 PAGE: 1

SITE LOCATION: General Electric Co. Pittsfield, MA (Bldg 78) DRILLING STARTED: 11/87 9:35 DRILLING COMPLETED: 11/87 11:40

TOTAL DEPTH DRILLED: 20 ft HOLE DIAMETER: 5-3/4 in TYPE OF SAMPLE/ BORING DEVICE: Split Spoon

LENGTH & DIAMETER OF BORING DEVICE: 2' x 2" SAMPLING INTERVAL: 2 ft

LAND-SURFACE ELEVATION: - [ ] SURVEYED [ ] ESTIMATED DATUM: -

DRILLING FLUID USED: None DRILLING METHOD: Hollow Stem Auger

DRILLING CONTRACTOR: Soil & Mat'l Testing DRILLER: Mike HELPER: Darryl

PREPARED BY: W. Gray HAMMER WEIGHT: 140 lb HAMMER DROP: 30 in

SAMPLE NO	SAMPLE DEPTH FROM	SAMPLE DEPTH TO	CORE RECVRY	BLOW COUNTS	SAMPLE/CORE DESCRIPTION
	0	2	1.7	17-7-	Sand and gravel fill: medium-coarse: some white sand.
				53-71	
	2	4	2.0	41-18-	Sand and gravel as above: bottom 6" finer gray sand.
				15-10	with gravel.
	4	6	1.6	10-11-	Sand and gravel: coarse-fine brown and gray.
				19-18	
	6	8	0.5	10-13-	Same as above
				10-7	
	8	10	1.0	3-4-	Same as above: bottom 2" darker sandy material with
				3-4	grass and small roots.
	10	12	0.5	2-13-	Top 1-1/2" brown sand with small gravel
				18-12	1/2" fine gray sand
					1/2" fine light brown sand
					1/2" brown sand with small gravel
					2" fine gray sand with larger gravel and wood
					1" dark black fine sand, silt and some clay: wood.
	12	14	1.0	24-7-	6" charred wood and red brick: large fragments.
				17-16	6" bright yellow crushed stone.
	14	16	1.0	32-3-	6" crushed yellow with metal fragments as above:
				5-4	large metal fragments in cuttings. 8" fine sand
					light brown - gray.
	16	18	1.0	5-7-	Top 2" sand coarse-fine: 8" fine light brown sand.
				7-6	

SAMPLE/CORE LOG Cont'd

BORING/WELL: B-12 PREPARED BY: W. Gray PAGE: 2

SAMPLE NO	SAMPLE DEPTH FROM	SAMPLE DEPTH TO	CORE RECOVRY	BLOW COUNTS	SAMPLE/CORE DESCRIPTION
	18	20	0.5	3-6-	Sand, fine, gray.
				6-8	

Terracon & Miller, Inc.

SAMPLE/CORE LOG

BORING/WELL: B-13 PROJECT NO: N0360591 PAGE: 1

SITE LOCATION: General Electric Co. Pittsfield, MA Bldg 78) DRILLING STARTED: 7/17/87 10:35 DRILLING COMPLETED: 7/20/87 10:30

TOTAL DEPTH DRILLED: 20 ft HOLE DIAMETER: 8-3/4 in TYPE OF SAMPLE/ CORING DEVICE: Split Spoon

LENGTH & DIAMETER OF CORING DEVICE: 2' x 2" SAMPLING INTERVAL: 2 ft

LAND-SURFACE ELEVATION: - SURVEYED ESTIMATED DATUM: -

DRILLING FLUID USED: None DRILLING METHOD: Hollow Stem Auger

DRILLING CONTRACTOR: Soil & Mat'l Testing DRILLER: Mike HELPER: Daryl

PREPARED BY: W. Gray HAMMER WEIGHT: 140 lb HAMMER DROP: 30 in

SAMPLE NO	SAMPLE DEPTH FROM	SAMPLE DEPTH TO	CORE RECVRY	BLOW COUNTS	SAMPLE/CORE DESCRIPTION
	0	2	1.3	10-20-	FILL: sand and gravel.
				30-28	
	2	4	1.0	38-41-	do
				36-22	
	4	6	0.2	10-6-	do; with large limestone fragments.
				11-10	
	6	8	0.5	4-6-	do
				6-12	
	8	10	0.4	36-32-	do; with more gravel.
				48-11	
	10	12	0	100/.1	NO RECOVERY.
	12	14	2.0	26-22-	Sand, medium-fine, light brown; some gravel.
				48-25	
	14	16	0.4	7-6-	do
				4-3	
	16	18	1.0	1-0-	do; moist.
				2-1	
	18	20	0.5	1-1-	do; wet.
				2-1	

Terracon & Miller, Inc

SAMPLE CORE LOG

BORING/WELL: B-14 PROJECT NO: M0360SS1 PAGE: 1

SITE LOCATION: General Electric Co. Pittsfield, MA (Bldg 78) DRILLING STARTED: 7/20/87 11:30 DRILLING COMPLETED: 7/20/87 11:[illegible]

TOTAL DEPTH DRILLED: 20 ft HOLE DIAMETER: 8-3/4 in TYPE OF SAMPLE/ CORING DEVICE: Split Spoon

LENGTH & DIAMETER OF CORING DEVICE: 2' x 2" SAMPLING INTERVAL: 2 ft

LAND-SURFACE ELEVATION: . SURVEYED ESTIMATED DATUM: .

DRILLING FLUID USED: None DRILLING METHOD: Hollow Stem Auger

DRILLING CONTRACTOR: Soil & Mat'l Testing DRILLER: Mike HELPER: Daryl

PREPARED BY: W. Gray HAMMER WEIGHT: 140 lb HAMMER DROP: 30 in

SAMPLE NO	SAMPLE DEPTH FROM	SAMPLE DEPTH TO	CORE RECOVRY	BLOW COUNTS	SAMPLE/CORE DESCRIPTION
	0	2	0.6	4-6-	Fill: sand, gravel, glass, wood.
				6-16	
	2	4	0	100/.2	NO RECOVERY.
	4	6	0.4	3-3-	Sand, gray; gravel, large-small; some silt, wood,
				3-4	glass.
	6	8	1.2	18-14-	Sand, medium-fine, light brown; gravel, medium
				25-23	2" fine black sand
					6" coarse-fine, brown sand with gravel.
	8	10	1.0	22-16-	Sand, coarse-fine, brown with gravel
				15-15	3" sand, medium-fine, light brown-gray; small
					gravel.
	10	12	1.0	8-13-	Sand, medium-fine, light brown-gray; large gravel
				12-11	
	12	14	1.0	14-10-	do
				6-7	
	14	16	1.0	3-3-	do
				3-4	
	16	18	0.9	3-2-	do
				2-4	
	18	20	1.1	3-3-	Sand, medium-fine, light brown-gray; some silt; small
				3-3	gravel.

Geraghty & Miller, Inc.

SAMPLE/CORE LOG

BORING/WELL: B-15 PROJECT NO: NO360SS1 PAGE: 1

SITE LOCATION: General Electric Co. Pittsfield, MA (Bldg 78) DRILLING STARTED: 4/20/87 14:05 DRILLING COMPLETED: 4/20/87 16:10

TOTAL DEPTH DRILLED: 20 ft HOLE DIAMETER: 5-3/4 in TYPE OF SAMPLE/CORING DEVICE: Split Spoon

LENGTH & DIAMETER OF CORING DEVICE: 2' x 2" SAMPLING INTERVAL: 2 ft

LAND-SURFACE ELEVATION: - SURVEYED / ESTIMATED DATUM: -

DRILLING FLUID USED: None DRILLING METHOD: Hollow Stem Auger

DRILLING CONTRACTOR: Soil & Mat'l Testing DRILLER: Mike HELPER: Daryl

PREPARED BY: W. Gray HAMMER WEIGHT: 140 lb HAMMER DROP: 30 in

SAMPLE NO	SAMPLE DEPTH FROM	SAMPLE DEPTH TO	CORE RECVRY	BLOW COUNTS	SAMPLE/CORE DESCRIPTION
	0	2	1.0	8-12-	Fill: sand, gravel, red brick, limestone.
				16-22	
	2	4	0.8	21-19-	do
				40-	
				100/.2	
	4	6	1.3	11-12-	Fill: limestone fragments, sand, gravel, glass, red
				30-49	brick.
	6	8	1.4	34-22-	do; some wood
				15-15	
	8	10	1.0	8-6-	do
				5-7	
	10	12	0.9	8-5-	Sand, coarse-fine, brown; some gravel.
				5-28	
	12	14	1.7	6-11-	Sand, medium-fine, light brown; some gravel and
				17-20	glass.
	14	16	1.1	6-7-	Sand, fine, light brown; some silt and small gravel.
				5-4	
	16	18	1.6	4-8-	do
				26-38	
	18	20	1.0	11-16-	do
				12-12	

Geraghty & Miller, Inc

SAMPLE/CORE LOG

BORING/WELL: B-16 PROJECT NO: NO360551 PAGE: 1

SITE LOCATION: General Electric Co. Pittsfield, MA (Bldg 78) DRILLING STARTED: 4/20/87 16:45 DRILLING COMPLETED: 4/20/87 18:20

TOTAL DEPTH DRILLED: 20 ft HOLE DIAMETER: 5-3/4 in TYPE OF SAMPLE/CORING DEVICE: Split Spoon

LENGTH & DIAMETER OF CORING DEVICE: 2' x 2" SAMPLING INTERVAL: 2 ft

LAND-SURFACE ELEVATION: - (SURVEYED ESTIMATED DATUM: -

DRILLING FLUID USED: None DRILLING METHOD: Hollow Stem Auger

DRILLING CONTRACTOR: Soil & Mat'l Testing DRILLER: Mike HELPER: Daryl

PREPARED BY: W. Gray HAMMER WEIGHT: 140 lb HAMMER DROP: 30 in

SAMPLE NO	SAMPLE DEPTH FROM	SAMPLE DEPTH TO	CORE RECOVRY	BLOW COUNTS	SAMPLE/CORE DESCRIPTION
	0	2	0.9	5-8-8-14	1" top soil; sand, coarse-medium; gravel; glass fragments.
	2	4	0.5	5-10-9-6	Red brick, yellow brick; sand, coarse, brown.
	4	6	0.5	7-28-13-4	Sand, coarse, brown; some red brick.
	6	8	0.4	6-4-8-7	do
	8	10	0.5	5-4-6-5	Sand, medium-fine, brown; some silt; red brick; cinders.
	10	12	1.0	1-3-2-2	Sand, coarse, reddish brown; gravel, medium.
	12	14	0	2-3-3-3	No recovery.
	14	16	0.7	1-1-1-6	Sand, coarse-fine, light brown; wet.
	16	18	1.8	1-8-12-10	do
	18	20	1.8	13-16-15-18	Sand, coarse.

ALTRESCO AREA BORINGS
72-1 - 72-44

SAMPLE CORE LOG

BORING-WELL: 72-1 PROJECT NO: N2360SS2 PAGE: 1 of 1

SITE LOCATION: General Electric Co. Pittsfield, MA (Bldg 72) DRILLING STARTED: 6/23/87 DRILLING COMPLETED: 6/23/87

TOTAL DEPTH DRILLED: 20 ft HOLE DIAMETER: 5-3/4 in TYPE OF SAMPLE/CORING DEVICE: split spoon

LENGTH & DIAMETER OF CORING DEVICE: 2' x 2" SAMPLING INTERVAL: 2 ft

LAND-SURFACE ELEVATION: SURVEYED / ESTIMATED DATUM:

DRILLING FLUID USED: none DRILLING METHOD: auger

DRILLING CONTRACTOR: Soil & Mat'l Testing DRILLER: Mike HELPER: Mike

PREPARED BY: W. Gray HAMMER WEIGHT: 140 lb HAMMER DROP: 30 in

SAMPLE NO	SAMPLE DEPTH FROM	SAMPLE DEPTH TO	CORE RECVRY	BLOW COUNTS	SAMPLE/CORE DESCRIPTION
	0	2	1.0	5-8-	Fill - Sandy top soil, brown (6 inches)
				10-13	Black silt, wood fragments (6 inches).
	2	4	-	100/2"	No recovery, wood in bottom of split spoon sampler.
	4	6	1.5	4-8-	Fill - Silt (80%) with fine sand, little clay, gray,
				24-17	black; oil sheen on sediments.
	6	8	0.5	12-13-	Fill - Silt (80%), with fine sand, little clay, gray,
				11-16	oil sheen on sediments.
	8	10	1.5	10-21-	Same as above.
				17-8	
	10	12	1.3	2-2-	Fill - Silt (60%), with fine sand, little clay, gray,
				1-2	some gravel, grass; oil sheen on sediments
	12	14	0.4	0-3-	Sand (50%) fine to medium, some silt, gray; oil sheen
				3-12	on sediments
	14	16	2.0	3-4-	Sand (80%), little silt, gray; oil sheen on
				8-7	sediments.
					Silt (80%), with fine sand, little clay, gray, oil
					sheen on sediments.
	16	18	1.0	3-6-	Same sequence as above (sand over silt), oil sheen on
				18-18	sediments.
	18	20	1.0	9-7-	Silt (80%) with fine sand, little clay, gray, little
				6-7	gravel; oil sheen on sediments.
					Perched water at 3.5 feet

SAMPLE CORE LOG

BORING/WELL: TB-2 PROJECT NO: M0360S52 PAGE: 1 of 1

SITE LOCATION: General Electric Co. Pittsfield, MA (Bldg 72) DRILLING STARTED: 6/23/87 DRILLING COMPLETED: 6/23/87

TOTAL DEPTH DRILLED: 20 ft HOLE DIAMETER: 8-3/4 in TYPE OF SAMPLE/ CORING DEVICE: split spoon

LENGTH & DIAMETER OF CORING DEVICE: 2' x 2" SAMPLING INTERVAL: 2 ft

LAND-SURFACE ELEVATION: [ ] SURVEYED [ ] ESTIMATED DATUM:

DRILLING FLUID USED: none DRILLING METHOD: auger

DRILLING CONTRACTOR: Soil & Mat'l Testing DRILLER: Mike HELPER: Mike

PREPARED BY: W. Gray HAMMER WEIGHT: 140 lb HAMMER DROP: 30 in

SAMPLE NO	SAMPLE DEPTH FROM	SAMPLE DEPTH TO	CORE RECVRY	BLOW COUNTS	SAMPLE/CORE DESCRIPTION
	0	2	-	6-6-	No recovery.
				16-26	
	2	4	1.5	9-12-	Fill - Silt (80%), with fine sand, brown, little
				9-15	clay, little gravel.
	4	6	1.5	8-8-	Same as above.
				7-7	
	6	8	1.5	4-5-	Same as above.
				3-3	
	8	10	1.0	3-3-	Same as above.
				4-5	
	10	12	0.3	3-3-	Same as above, moist.
				2-2	
	12	14	0.9	2-3-	Fill - Silt (80%), with fine sand, brown, gray and
				3-8	black, metal fragments, little gravel.
	14	16	2.0	10-12-	Silt (80%), with fine sand, gray, little gravel,
				12-11	little clay, moist.
	16	18	1.5	6-6-	Same as above, but a higher percentage of gravel.
				5-4	
	18	20	1.0	3-10-	Same as above.
				18-83	

SAMPLE/CORE LOG

BORING/WELL: T2-3 PROJECT NO: M0360SS2 PAGE: 1 of 1

SITE LOCATION: General Electric Co. Pittsfield, MA (Bldg 72) DRILLING STARTED: 6/23/87 DRILLING COMPLETED: 6/23/87

TOTAL DEPTH DRILLED: 20 ft HOLE DIAMETER: 5-3/4 in TYPE OF SAMPLE/ CORING DEVICE: split spoon

LENGTH & DIAMETER OF CORING DEVICE: 2' x 2" SAMPLING INTERVAL: 2 ft

LAND-SURFACE ELEVATION: SURVEYED ESTIMATED DATUM:

DRILLING FLUID USED: none DRILLING METHOD: auger

DRILLING CONTRACTOR: Soil & Mat'l Testing DRILLER: Mike HELPER: Mike

PREPARED BY: W. Gray HAMMER WEIGHT: 140 lb HAMMER DROP: 30 in

SAMPLE NO	SAMPLE DEPTH FROM	SAMPLE DEPTH TO	CORE RECOVRY	BLOW COUNTS	SAMPLE/CORE DESCRIPTION
	0	2	1.0	3-5-	Silt (80%) with fine sand, black, gray and brown,
				10-12	little gravel.
	2	4	1.0	10-14-	Same as above but all brown.
				10-17	
	4	6	1.0	10-12	Sand (70%), fine to medium, with silt, brown.
				9-10	
	6	8	0.5	5-4-	Silt (80%) with fine sand, brown: little gravel.
				3-4	
	8	10	1.5	4-3-	Sand, fine (80%) with silt, light brown, white,
				2-2	layered, moist.
	10	12	1.5	2-2	Same as above (6 inches).
				1-6	Sand, fine to medium (70%), with silt, black.
	12	14	1.0	4-4-	Sand (80%), some silt, brown, wet (6 inches).
				5-10	Silt (80%), with fine sand, brown, little clay
					(6 inches).
	14	16	1.0	7-9-	Silt (80%), gray, some clay, little gravel.
				8-10	
	16	18	1.6	4-8-	Same as above.
				20-21	
	18	20	1.0	14-17-	Sand (70%), some silt, brown, little gravel.
				18-20	
					Water at 16.3 feet

SAMPLE/CORE LOG

BORING/WELL: 72-4 PROJECT NO: M0360952 PAGE: 1 of 1

SITE LOCATION: General Electric Co. Pittsfield, MA (Bldg 72) DRILLING STARTED: 6/24/87 DRILLING COMPLETED: 6/24/87

TOTAL DEPTH DRILLED: 20 ft HOLE DIAMETER: 6-3/4 in TYPE OF SAMPLE/ CORING DEVICE: split spoon

LENGTH & DIAMETER OF CORING DEVICE: 2' x 2" SAMPLING INTERVAL: 2 ft

LAND-SURFACE ELEVATION: ( ) SURVEYED ( ) ESTIMATED DATUM:

DRILLING FLUID USED: none DRILLING METHOD: auger

DRILLING CONTRACTOR: Soil & Mat'l Testing DRILLER: Mike HELPER: Mike

PREPARED BY: W. Gray HAMMER WEIGHT: 140 lb HAMMER DROP: 30 in

SAMPLE NO	SAMPLE DEPTH FROM	SAMPLE DEPTH TO	CORE RECVRY	BLOW COUNTS	SAMPLE/CORE DESCRIPTION
	0	2	1.5	2-2-	Fill - Sandy, brown, top soil; some gravel (6 inches);
				4-3	Fill - Silt (85%), with fine sand, black.
	2	4	0.3	3-2-	Same as above.
				2-2	
	4	6	2.0	1-0-	Same as above.
				1-3	
	6	8	1.5	9-16-	Fill - Silt (80%), with fine sand, little clay,
				15-12	little gravel, light brown, moist.
	8	10	1.5	5-4-	Same as above, wet.
				4-3	
	10	12	0.5	0-10-	Fill - Sand, fine to medium (70%), with silt, light
				4-2-	brown-gray (4 inches).
					Top Soil, dark brown, roots (2 inches).
	12	14	1.3	1-10	Sand (70%) medium-fine, with silt, brown-gray, little
				12-12	gravel; oil sheen on sediments.
	14	16	1.0	7-9-	Same as above.
				5-12	
	16	18	0.8	10-6-	Same as above.
				6-6	
	18	20	1.7	2-5-	Same as above.
				5-21	
					Water at 17.3 feet

SAMPLE/CORE LOG

BORING/WELL: 72-5 PROJECT NO: NO360SS2 PAGE: 1 of 1

SITE LOCATION: General Electric Co. Pittsfield, MA (Bldg 72) DRILLING STARTED: 6/24/87 DRILLING COMPLETED: 6/24/87

TOTAL DEPTH DRILLED: 20 ft HOLE DIAMETER: 5-3/4 in TYPE OF SAMPLE/CORING DEVICE: split spoon

LENGTH & DIAMETER OF CORING DEVICE: 2' x 2" SAMPLING INTERVAL: 2 ft

LAND-SURFACE ELEVATION: ( ) SURVEYED ESTIMATED DATUM:

DRILLING FLUID USED: none DRILLING METHOD: auger

DRILLING CONTRACTOR: Soil & Mat'l Testing DRILLER: Mike HELPER: Mike

PREPARED BY: W. Gray HAMMER WEIGHT: 140 lb HAMMER DROP: 30 in

SAMPLE NO	SAMPLE DEPTH FROM	SAMPLE DEPTH TO	CORE RECVRY	BLOW COUNTS	SAMPLE/CORE DESCRIPTION
	0	2	2.0	3-22-	Sandy, top soil (6 inches).
				22-24	Sand, fine to medium (80%), brown; some gravel.
	2	4	1.0	13-20-	Same as above.
				17-34	
	4	6	0.7	13-20-	Same as above.
				25-24	
	6	8	1.0	7-6-	Same as above.
				5-3	
	8	10	-	2-2-	No recovery.
				2-2	
	10	12	1.0	2-2-	Sand (70%), some silt, brown, little gravel.
				3-2	
	12	14	1.0	3-4-	Sand (80%), some silt, brown.
				5-21	
	14	16	1.0	10-6-	Silt (80%), with fine sand, brown; little clay,
				8-8	little gravel.
	16	18	1.5	7-7-	Same as above, moist.
				8-15	
	18	20	1.7	7-11-	Silt (75%), some clay, brown, little gravel, moist.
				17-18	

SAMPLE/CORE LOG

BORING/WELL: [illegible]-6 PROJECT NO: NO360SS2 PAGE: 1 of 1

SITE LOCATION: General Electric Co Pittsfield, MA (Bldg [illegible]) DRILLING STARTED: 6/25/87 DRILLING COMPLETED: 6/25/87

TOTAL DEPTH DRILLED: 20 ft HOLE DIAMETER: 5-3/4 in TYPE OF SAMPLE/ CORING DEVICE: split spoon

LENGTH & DIAMETER OF CORING DEVICE: 2' x 2" SAMPLING INTERVAL: 2 ft

LAND-SURFACE ELEVATION: SURVEYED ESTIMATED DATUM:

DRILLING FLUID USED: none DRILLING METHOD: auger

DRILLING CONTRACTOR: Soil & Mat'l Testing DRILLER: Mike HELPER: Mike

PREPARED BY: W. Gray HAMMER WEIGHT: 140 lb HAMMER DROP: 30 in

SAMPLE NO	SAMPLE DEPTH FROM	SAMPLE DEPTH TO	CORE RECOVRY	BLOW COUNTS	SAMPLE/CORE DESCRIPTION
	0	2	1.0	3-26-	Top soil, brown (4 inches).
				20-20	Silt with fine sand; brown (4 inches).
					Fragments of limestone (4 inches).
	2	4	1.0	5-7-	Sand, fine (70%), with silt, brown.
				12-34	
	4	6	2.0	30-36-	Sand (75%), some silt, some gravel brown.
				27-26	
	6	8	1.0	5-7-	Silt (80%), with fine sand, gray (8 inches).
				5-4	Sand (70%), some silt, little gravel, brown
					(4 inches).
	8	10	0.9	3-3-	Sand (70%), some silt, some gravel, brown.
				5-5	
	10	12	0.6	4-5-	Same as above.
				7-6	
	12	14	1.5	3-4-	Sand (75%), some silt, brown.
				4-5	
	14	16	1.5	4-5-	Same as above.
				6-9	
	16	18	2.0	5-8-	Same as above.
				7-16	
	18	20	1.5	5-9-	Silt (80%), some fine sand, little clay, little
				12-18	gravel, brown, moist.

SAMPLE CORE LOG

BORING/WELL: 72-7 PROJECT NO: N0360552 PAGE: 1 of 1

SITE LOCATION: General Electric Co. Pittsfield, MA (Bldg 72) DRILLING STARTED: 4/24/87 DRILLING COMPLETED: 4/25/87

TOTAL DEPTH DRILLED: 20 ft HOLE DIAMETER: 5-3/4 in TYPE OF SAMPLE/ CORING DEVICE: split spoon

LENGTH & DIAMETER OF CORING DEVICE: 2' x 2" SAMPLING INTERVAL: 2 ft

LAND-SURFACE ELEVATION: ( ) SURVEYED ( ) ESTIMATED DATUM:

DRILLING FLUID USED: none DRILLING METHOD: auger

DRILLING CONTRACTOR: Soil & Mat'l Testing DRILLER: Mike HELPER: Mike

PREPARED BY: W. Gray HAMMER WEIGHT: 140 lb HAMMER DROP: 30 in

SAMPLE NO	SAMPLE DEPTH FROM	SAMPLE DEPTH TO	CORE RECVRY	BLOW COUNTS	SAMPLE/CORE DESCRIPTION
	0	2	1.5	4-4-	Top soil (4 inches); Sand, medium-fine (75%), some
				8-9	silt, little gravel.
	2	4	2.0	3-2-	Same as above.
				5-12	
	4	6	2.0	5-5-	Same as above.
				3-3	
	6	8	1.5	2-3-	Sand (75%), some silt, brown.
				4-4	
	8	10	1.2	3-3-	Sand (60%), fine with silt, little clay, brown.
				1-2	little gravel, moist
	10	12	1.0	2-3-	Same as above.
				3-11	
	12	14	0.3	12-6-	Same as above, with limestone fragment.
				8-5	
	14	16	0.8	12-7-	Silt (75%), some fine sand, some clay, brown;
				4-6	little gravel.
	16	18	0.2	1-3-	Same as above.
				4-7	
	18	20	-	7-6-	No recovery.
				3-5	

SAMPLE CORE LOG

BORING/WELL: 72-6 PROJECT NO: MD360551 PAGE: 1 of 1

SITE LOCATION: General Electric Co. Pittsfield, MA (Bldg 72) DRILLING STARTED: 6/25/87 DRILLING COMPLETED: 6/25/87

TOTAL DEPTH DRILLED: 20 ft HOLE DIAMETER: 3-3/4 in TYPE OF SAMPLE/ CORING DEVICE: split spoon

LENGTH & DIAMETER OF CORING DEVICE: 2' x 2" SAMPLING INTERVAL: 2 ft

LAND-SURFACE ELEVATION: SURVEYED / ESTIMATED DATUM:

DRILLING FLUID USED: none DRILLING METHOD: auger

DRILLING CONTRACTOR: Soil & Mat'l Testing DRILLER: Mike HELPER: Mike

PREPARED BY: W. Gray HAMMER WEIGHT: 140 lb HAMMER DROP: 30 in

SAMPLE NO	SAMPLE DEPTH FROM	SAMPLE DEPTH TO	CORE RECVRY	BLOW COUNTS	SAMPLE/CORE DESCRIPTION
	0	2	1.0	3-8-	3" Top soil: Sand (80%) medium-fine, some silt,
				100/2	some gravel.
	2	4	0.6	18-24-	Same as above.
				14-13	
	4	6	1.5	18-24-	Silt (80%), with fine sand, brown, some limestone
				22-32	fragments.
	6	8	1.5	13-7-	Sand (70%) fine; some silt, brown
				12-6	
	8	10	1.0	4-5-	Sand (80%), some silt, brown.
				4-5	
	10	12	1.5	2-2-	Same as above.
				5-5	
	12	14	1.0	3-4-	Sand, fine (70%), some silt, little clay; little
				4-3	gravel, brown, moist.
	14	16	1.0	2-3-	Same as above, with limestone fragments.
				6-10	
	16	18	1.3	6-8-	Silt (75%), with fine sand, little clay, some gravel.
				6-6	
	18	20	1.3	4-6-	Same as above.
				8-5	

SAMPLE/CORE LOG

BORING/WELL: 72-9 PROJECT NO: NO360552 PAGE: 1 of 1

SITE LOCATION: General Electric Co. Pittsfield, MA (Bldg 72) DRILLING STARTED: 6/26/87 DRILLING COMPLETED: 6/26/87

TOTAL DEPTH DRILLED: 20 ft HOLE DIAMETER: 5-3/4 in TYPE OF SAMPLE/CORING DEVICE: split spoon

LENGTH & DIAMETER OF CORING DEVICE: 2' x 2" SAMPLING INTERVAL: 2 ft

LAND-SURFACE ELEVATION: ( ) SURVEYED ( ) ESTIMATED DATUM:

DRILLING FLUID USED: none DRILLING METHOD: auger

DRILLING CONTRACTOR: Soil & Mat'l Testing DRILLER: Mike HELPER: Mike

PREPARED BY: W. Gray HAMMER WEIGHT: 140 lb HAMMER DROP: 30 in

SAMPLE NO	SAMPLE DEPTH FROM	SAMPLE DEPTH TO	CORE RECVRY	BLOW COUNTS	SAMPLE/CORE DESCRIPTION
	0	2	1.5	4-8-	Top soil, sandy, brown (3 inches).
				12-11	Sand, fine to medium (50%), with silt, brown; some
					gravel.
	2	4	1.8	9-12-	Same as above.
				21-62	
	4	6	2.0	10-14	Sand, fine (50%), with silt, gray; some gravel.
				15-14	
	6	8	1.0	10-6-	Same as above.
				4-4	
	8	10	1.5	0-2-	Same as above (3 inches)
				3-6	Clay, gray (2 inches)
					Sand (70%), some silt; brown; roots.
	10	12	1.0	7-6-	Same as above (6 inches).
				4-6	Sand, medium-fine (50%) with silt, gray; some
					gravel; some clay.
	12	14	0.8	2-1-	Same as above; moist.
				4-5	
	14	16	1.0	4-5-	Silt, (70%), with fine sand; some clay, gray-brown;
				5-4	some gravel, moist.
	16	18	1.3	1-36-	Same as above; wet.
				7-9	
	18	20	1.3	5-7-	Same as above.
				5-3	
					Water at 19.8 feet

SAMPLE CORE LOG

BORING/WELL: [illegible] PROJECT NO: M0360552 PAGE: 1 of 1

SITE LOCATION: General Electric Co. Pittsfield, MA (Bldg [illegible]) DRILLING STARTED: 6/26/87 DRILLING COMPLETED: 6/26/87

TOTAL DEPTH DRILLED: 20 ft HOLE DIAMETER: 3-3/4 in TYPE OF SAMPLE/ CORING DEVICE: split spoon

LENGTH & DIAMETER OF CORING DEVICE: 2' x 2" SAMPLING INTERVAL: 2 ft

LAND-SURFACE ELEVATION: SURVEYED ESTIMATED DATUM:

DRILLING FLUID USED: none DRILLING METHOD: auger

DRILLING CONTRACTOR: Soil & Mat'l Testing DRILLER: Mike HELPER: Mike

PREPARED BY: W. Gray HAMMER WEIGHT: 140 lb HAMMER DROP: 30 in

SAMPLE NO	SAMPLE DEPTH FROM	SAMPLE DEPTH TO	CORE RECOVRY	BLOW COUNTS	SAMPLE/CORE DESCRIPTION
	0	2	1.5	6-11-	Top soil, sandy (4 inches); Sand, fine to medium
				11-15	(60%), some silt, some gravel, brown.
	2	4	2.0	12-19-	Same as above.
				30-64	
	4	6	1.0	10-20	Same as above; some limestone fragments.
				21-25	
	6	8	1.3	9-12-	Sand (70%) with silt, some gravel, brown.
				13-12	
	8	10	1.0	6-5-	Same as a bove.
				4-5	
	10	12	1.5	4-5-	Sand (80%), some silt, brown; little gravel.
				4-4	
	12	14	2.0	3-3-	Sand (85%), little silt, brown.
				3-5	
	14	16	1.8	4-4-	Same as above (3 inches).
				3-4	Sand, black, coarse-medium (2 inches).
					Sand (85%), some silt, little clay, brown.
	16	18	0.5	4-6-	Silt (80%), some clay, gray; some limestone
				5-3	fragments.
	18	20	0.9	2-5-	Silt (80%), some clay, gray; some gravel.
				7-12	

SAMPLE/CORE LOG

BORING/WELL: T2-11 PROJECT NO: N0360552 PAGE: 1 of 1

SITE LOCATION: General Electric Co. Pittsfield, MA (Bldg 72) DRILLING STARTED: 6/26/87 DRILLING COMPLETED: 6/26/97

TOTAL DEPTH DRILLED: 20 ft HOLE DIAMETER: 5-3/4 in TYPE OF SAMPLE/ CORING DEVICE: split spoon

LENGTH & DIAMETER OF CORING DEVICE: 2' x 2" SAMPLING INTERVAL: 2 ft

LAND-SURFACE ELEVATION: ( ) SURVEYED ( ) ESTIMATED DATUM:

DRILLING FLUID USED: none DRILLING METHOD: auger

DRILLING CONTRACTOR: Soil & Mat'l Testing DRILLER: Mike HELPER: Mike

PREPARED BY: W. Gray HAMMER WEIGHT: 140 lb HAMMER DROP: 30 in

SAMPLE NO	SAMPLE DEPTH FROM	SAMPLE DEPTH TO	CORE RECVRY	BLOW COUNTS	SAMPLE/CORE DESCRIPTION
	0	2	1.2	2-12	Top soil, sandy, brown; some gravel (4 inches).
				8-8	Sand (60%), some silt, brown; some gravel.
	2	4	0.6	8-12	Sand, fine to medium (50%) with silt; some gravel.
				12-12	
	4	6	1.0	12-6-	Silt (65%) with fine sand, gray; some gravel.
				7-8	
	6	8	1.7	3-4-	Sand (80%), some silt, brown.
				3-3	
	8	10	1.0	4-4-	Same as above, with some gravel.
				4-4	
	10	12	1.4	3-3-	Same as above.
				4-4	
	12	14	1.8	3-4-	Same as above.
				4-6	
	14	16	1.5	3-3-	Same as above; some red staining on sediments; wet.
				3-2	
	16	18	-	2-2-	No recovery.
				6-4	
	18	20	1.0	4-5-	Silt (80%); some clay, gray; some gravel.
				5-4	
					Water at 15 feet

SAMPLE/CORE LOG

BORING/WELL: T2-12 PROJECT NO: N0360SS2 PAGE: 1 of 1

SITE LOCATION: General Electric Co. Pittsfield, MA (Bldg 72) DRILLING STARTED: 6/29/87 DRILLING COMPLETED: 6/29/87

TOTAL DEPTH DRILLED: 20 ft HOLE DIAMETER: 3-3/4 in TYPE OF SAMPLE/CORING DEVICE: split spoon

LENGTH & DIAMETER OF CORING DEVICE: 2' x 2" SAMPLING INTERVAL: 2 ft

LAND-SURFACE ELEVATION: SURVEYED ESTIMATED DATUM:

DRILLING FLUID USED: none DRILLING METHOD: auger

DRILLING CONTRACTOR: Soil & Mat'l Testing DRILLER: Mike HELPER: Mike

PREPARED BY: W. Gray HAMMER WEIGHT: 140 lb HAMMER DROP: 30 in

SAMPLE NO	SAMPLE DEPTH FROM	SAMPLE DEPTH TO	CORE RECVRY	BLOW COUNTS	SAMPLE/CORE DESCRIPTION
	0	2	1.0	4-12-	Top soil, sandy, brown (3 inches).
				13-32	Sand, fine to medium (70%), some silt, some
					gravel, brown.
	2	4	2.0	18-40	Same as above.
				14-18	
	4	6	1.6	7-9-	Silt (70%) with fine sand, little clay, brown; some
				15-30	gravel and limestone fragments.
	6	8	2.0	22-17-	Sand (70%), some silt, some gravel, brown.
				10-10	
	8	10	2.0	4-4-	Sand, fine to medium (70%), some silt, brown.
				4-5	
	10	12	1.8	2-3-	Same as above.
				4-4	
	12	14	2.0	5-6-	Sand (90%), little silt, brown and black staining on
				7-9	sediments.
	14	16	1.5	4-5-	Black stained sand as above (3 inches).
				4-3	Silt (80%), some clay, brown-gray; moist.
	16	18	2.0	3-1-	Silt (80%), some clay, little gravel, brown-gray;
				2-3	moist.
	18	20	0.3	6-12-	Same as above.
				14-14	

SAMPLE/CORE LOG

BORING/WELL: 72-13 PROJECT NO: NO36CSS2 PAGE: 1 of 1

SITE LOCATION: General Electric Co. Pittsfield, MA (Bldg 72) DRILLING STARTED: 6/29/87 DRILLING COMPLETED: 6/29/87

TOTAL DEPTH DRILLED: 20 ft HOLE DIAMETER: 3-3/4 in TYPE OF SAMPLE/ CORING DEVICE: split spoon

LENGTH & DIAMETER OF CORING DEVICE: 2' x 2" SAMPLING INTERVAL: 2 ft

LAND-SURFACE ELEVATION: ( ) SURVEYED ( ) ESTIMATED DATUM:

DRILLING FLUID USED: none DRILLING METHOD: auger

DRILLING CONTRACTOR: Soil & Mat'l Testing DRILLER: Mike HELPER: Mike

PREPARED BY: W. Gray HAMMER WEIGHT: 140 lb HAMMER DROP: 30 in

SAMPLE NO	SAMPLE DEPTH FROM	SAMPLE DEPTH TO	CORE RECVRY	BLOW COUNTS	SAMPLE/CORE DESCRIPTION
	0	2	1.0	5-8-	Top soil, sandy, brown (3 inches).
				10-10	Sand, fine to medium (75%), some silt, little
					gravel.
	2	4	0.3	13-31-	Same as above.
				20-32	
	4	6	1.5	13-10-	Silt (75%) with fine sand, brown; little gravel.
				6-6	
	6	8	1.0	4-4-	Sand (80%), some silt, little gravel, light brown.
				6-7	
	8	10	1.3	3-4-	Same as above.
				5-5	
	10	12	1.5	3-3-	Sand, fine to medium (70%), with silt, brown.
				5-6	
	12	14	1.6	3-4-	Sand (90%) little silt, brown.
				3-4	
	14	16	1.5	4-4-	Same as above; moist.
				4-7	
	16	18	1.0	4-1-	Silt (80%), some clay, some gravel, brown-gray;
				3-4	moist.
	18	20	1.0	3-6-	Same as above.
				5-4	

SAMPLE/CORE LOG

BORING/WELL: T2-14 PROJECT NO: NO360SS2 PAGE: 1 of 1

SITE LOCATION: General Electric Co. Pittsfield, MA (Bldg 72) DRILLING STARTED: 6/29/87 DRILLING COMPLETED: 6/29/87

TOTAL DEPTH DRILLED: 20 ft HOLE DIAMETER: 5-3/4 in TYPE OF SAMPLE/ CORING DEVICE: split spoon

LENGTH & DIAMETER OF CORING DEVICE: 2' x 2" SAMPLING INTERVAL: 2 ft

LAND-SURFACE ELEVATION: ( ) SURVEYED ( ) ESTIMATED DATUM:

DRILLING FLUID USED: none DRILLING METHOD: auger

DRILLING CONTRACTOR: Soil & Mat'l Testing DRILLER: Mike HELPER: Mike

PREPARED BY: W. Gray HAMMER WEIGHT: 140 lb HAMMER DROP: 30 in

SAMPLE NO	SAMPLE DEPTH FROM	SAMPLE DEPTH TO	CORE RECOVRY	BLOW COUNTS	SAMPLE/CORE DESCRIPTION
	0	2	1.0	3-6-	Top soil, sandy, brown (3 inches).
				5-5	Sand, fine to medium (70%), some silt, some
					gravel.
	2	4	1.0	5-6-	Same as above.
				4-6	
	4	6	1.0	2-2-	Silt (70%) with fine sand, little gravel, brown.
				3-3	
	6	8	1.3	4-4-	Same as above.
				5-6	
	8	10	1.0	4-3-	Sand, fine to medium (70%) with silt, brown; little
				4-5	gravel.
	10	12	1.8	4-5-	Sand (80%) some silt, little gravel, brown.
				6-6	
	12	14	1.5	5-4-	Same as above (12 inches).
				5-6	Silt (80%), some fine sand, brown (6 inches).
	14	16	1.5	9-6-	Sand (80%), some silt, brown (4 inches).
				6-6	Silt (80%), some fine sand, brown (2 inches).
					Sand (80%), some silt, brown.
	16	18	0.6	5-3-	Same as above (4 inches).
				5-7	Silt (80%), some clay, brown, moist.
	18	20	1.0	12-3-	Silt (75%), some clay, little gravel, brown, moist.
				6-19	

SAMPLE/CORE LOG

BORING/WELL: 72-15 PROJECT NO: NO360SS2 PAGE: 1 of 1

SITE LOCATION: General Electric Co. Pittsfield, MA (Bldg 72) DRILLING STARTED: 6/30/87 DRILLING COMPLETED: 6/30/87

TOTAL DEPTH DRILLED: 20 ft HOLE DIAMETER: 5-3/4 in TYPE OF SAMPLE/ CORING DEVICE: split spoon

LENGTH & DIAMETER OF CORING DEVICE: 2' x 2" SAMPLING INTERVAL: 2 ft

LAND-SURFACE ELEVATION: ( ) SURVEYED ( ) ESTIMATED DATUM:

DRILLING FLUID USED: none DRILLING METHOD: auger

DRILLING CONTRACTOR: Soil & Mat'l Testing DRILLER: Mike HELPER: Mike

PREPARED BY: W. Gray HAMMER WEIGHT: 140 lb HAMMER DROP: 30 in

SAMPLE NO	SAMPLE DEPTH FROM	SAMPLE DEPTH TO	CORE RECVRY	BLOW COUNTS	SAMPLE/CORE DESCRIPTION
	0	2	1.7	4-8-	Top soil, sandy, brown (3 inches).
				12-22	Sand, fine to medium (65%); with silt, some
					gravel.
	2	4	1.3	28-26-	Same as above.
				25-20	
	4	6	1.0	6-6-	Same as above (3 inches).
				3-4	Sand (80%), little silt, brown (2 inches).
					Sand, fine to medium (70%), some silt, dark brown.
	6	8	1.4	5-7-	Sand (85%), little silt, brown; little gravel.
				7-10	
	8	10	1.5	7-7-	Sand (85%), little silt, some gravel; brown.
				7-7	
	10	12	2.0	4-3-	Sand (90%), little silt, brown.
				4-3	
	12	14	1.0	3-2-	Same as above (2 inches).
				6-35	Silt (75%) with fine sand, little gravel; brown;
					moist.
	14	16	-	25-13-	No recovery.
				27-20	
	16	18	1.5	2-1-	Silt (80%), little fine sand, some gravel, some clay.
				2-2	
	18	20	0.4	3-7-	Same as above, moist.
				6-7	

SAMPLE/CORE LOG

BORING/WELL: 72-16 PROJECT NO: NO360SS2 PAGE: 1 of 1

SITE LOCATION: General Electric Co. Pittsfield, MA (Bldg 72) DRILLING STARTED: 6/30/87 DRILLING COMPLETED: 6/30/87

TOTAL DEPTH DRILLED: 20 ft HOLE DIAMETER: 5-3/4 in TYPE OF SAMPLE/ CORING DEVICE: split spoon

LENGTH & DIAMETER OF CORING DEVICE: 2' x 2" SAMPLING INTERVAL: 2 ft

LAND-SURFACE ELEVATION: ( ) SURVEYED ( ) ESTIMATED DATUM:

DRILLING FLUID USED: none DRILLING METHOD: auger

DRILLING CONTRACTOR: Soil & Mat'l Testing DRILLER: Mike HELPER: Mike

PREPARED BY: W. Gray HAMMER WEIGHT: 140 lb HAMMER DROP: 30 in

SAMPLE NO	SAMPLE DEPTH FROM	SAMPLE DEPTH TO	CORE RECOVERY	BLOW COUNTS	SAMPLE/CORE DESCRIPTION
	0	2	1.2	3-7-	Large gravel (1 inch).
				5-15	Silt (80%), little clay, little fine sand.
	2	4	1.8	10-22-	Same as above.
				25-40	
	4	6	2.0	13-18-	Sand, fine to medium (70%), some silt, some gravel.
				24-32	
	6	8	-	100/.2	No recovery.
	8	10	1.3	3-9-	Sand, fine to medium (70%), some silt, some gravel,
				7-5	dark brown.
	10	12	1.5	4-3-	Sand (80%), some silt, brown.
				3-4	
	12	14	1.6	5-6-	sand (80%), some silt, little gravel; brown.
				5-5	
	14	16	2.0	4-4-	Sand (85%), little silt, brown.
				3-4	
	16	18	1.0	6-5-	Silt (80%), little fine sand, little gravel
				4-4	(6 inches).
					Sand (85%), little silt, brown.
	18	20	1.0	5-6-	Silt (75%), little clay, little fine sand, brown;
				5-4	some gravel, limestone fragments; moist.

SAMPLE/CORE LOG

BORING/WELL: 72-17 PROJECT NO: N0360SS2 PAGE: 1 of 1

SITE LOCATION: General Electric Co. Pittsfield, MA (Bldg 72) DRILLING STARTED: 6/30/87 DRILLING COMPLETED: 6/30/87

TOTAL DEPTH DRILLED: 20 ft HOLE DIAMETER: 5-3/4 in TYPE OF SAMPLE/ CORING DEVICE: split spoon

LENGTH & DIAMETER OF CORING DEVICE: 2' x 2" SAMPLING INTERVAL: 2 ft

LAND-SURFACE ELEVATION: ( ) SURVEYED ( ) ESTIMATED DATUM:

DRILLING FLUID USED: none DRILLING METHOD: auger

DRILLING CONTRACTOR: Soil & Mat'l Testing DRILLER: Mike HELPER: Mike

PREPARED BY: W. Gray HAMMER WEIGHT: 140 lb HAMMER DROP: 30 in

SAMPLE NO	SAMPLE DEPTH FROM	SAMPLE DEPTH TO	CORE RECVRY	BLOW COUNTS	SAMPLE/CORE DESCRIPTION
	0	2	1.0	2-8-	Fill - Top soil, sandy, brown (2 inches).
				17-24	Sand, fine to medium (65%), some silt, little
					gravel.
	2	4	1.3	21-15-	Fill - Same as above.
				20-15	
	4	6	1.2	6-5-	Fill - Same as above (9 inches).
				2-8	Metal fragments, red brick, fill material.
	6	8	-	6-5-	No recovery.
				7-6	
	8	10	1.3	5-7-	Sand (85%), some gravel, little silt, brown.
				7-6	
	10	12	1.2	5-5-	Same as above.
				5-5	
	12	14	2.0	5-5-	Sand (90%), little silt, brown.
				5-5	
	14	16	1.3	6-3-	Silt (80%), some clay, little gravel, brown.
				2-7	
	16	18	1.4	7-3-	Same as above.
				5-6	
	18	20	1.4	6-8-	Same as above.
				10-12	

SAMPLE/CORE LOG

BORING/WELL: 72-18 PROJECT NO: NO36CSS2 PAGE: 1 of 1

SITE LOCATION: General Electric Co. Pittsfield, MA (Bldg 72) DRILLING STARTED: 6/30/87 DRILLING COMPLETED: 6/30/87

TOTAL DEPTH DRILLED: 20 ft HOLE DIAMETER: 5-3/4 in TYPE OF SAMPLE/ CORING DEVICE: split spoon

LENGTH & DIAMETER OF CORING DEVICE: 2' x 2" SAMPLING INTERVAL: 2 ft

LAND-SURFACE ELEVATION: ( ) SURVEYED ( ) ESTIMATED DATUM:

DRILLING FLUID USED: none DRILLING METHOD: auger

DRILLING CONTRACTOR: Soil & Mat'l Testing DRILLER: Mike HELPER: Mike

PREPARED BY: W. Gray HAMMER WEIGHT: 140 lb HAMMER DROP: 30 in

SAMPLE NO	SAMPLE DEPTH FROM	SAMPLE DEPTH TO	CORE RECVRY	BLOW COUNTS	SAMPLE/CORE DESCRIPTION
	0	2	1.7	2-22-	3" Top soil, sandy, brown (3 inches).
				14-30	Sand, fine to medium (70%), some silt, some
					gravel.
	2	4	1.5	15-14-	Same as above.
				18-15	
	4	6	2.0	8-8-	Same as above.
				5-5	
	6	8	1.0	3-3-	Silt (70%), with fine sand, little clay; some gravel.
				10-8	
	8	10	1.7		Same as above.
	10	12	1.3	14-16-	Sand, fine to medium (70%); some silt; some gravel.
				14-12	
	12	14	0.4	3-9-	Same as above.
				14-9	
	14	16	1.7	4-6-	Sand (70%); some silt, some gravel, little clay,
				6-7	brown.
	16	18	1.7	6-6-	Same as above.
				5-6	
	18	20	1.9	4-4-	Sand (85%), some silt, brown.
				5-8	

REPAGITY & MILLER, INC.

SAMPLE/CORE LOG

BORING: 72-19 PROJECT NO: Bldg. 72 NY0360SS02 PAGE: 1 of 1

SITE LOCATION: General Electric Co. Pittsfield, MA DRILLING STARTED: 8/8/88 DRILLING COMPLETED: 8/8/88

TOTAL DEPTH DRILLED: 8 ft HOLE DIAMETER: 6-1/4 in. TYPE OF SAMPLE/ CORING DEVICE: Split Spoon

LENGTH & DIAMETER OF CORING DEVICE: 2 ft x 2 in. SAMPLING INTERVAL: 2 ft

LAND-SURFACE ELEVATION: { } SURVEYED ESTIMATED DATUM:

DRILLING FLUID USED: None DRILLING METHOD: Hollow-Stem Auger

DRILLING CONTRACTOR: Soil & Mat'l Testing DRILLER: Gilley HELPER: Joe

PREPARED BY: W. Gray HAMMER WEIGHT: 140 lb HAMMER DROP: 30 inches

SAMPLE DEPTH (FT BELOW LAND SURFACE) FROM	TO	CORE RECOVRY (FT)	BLOW COUNTS PER 6 INCHES	SAMPLE/CORE DESCRIPTION
0	2	1.4	4-4-5-8	Topsoil, sandy, brown (4 in.). Sand, fine to medium,
				some silt, trace gravel, brown.
2	4	0.8	28-	Same as above.
			100/5"	
4	6	2.0	22-15-	Same
			13-13	
6	8	1.1	10-11-	Same
			10-8	

GERAGHTY & MILLER, INC.

SAMPLE/CORE LOG

BORING: 72-20 PROJECT NO: Bldg. 72 NY0360SS02 PAGE: 1 of 1

SITE LOCATION: General Electric Co. Pittsfield, MA DRILLING STARTED: 8/8/88 DRILLING COMPLETED: 8/8/88

TOTAL DEPTH DRILLED: 8 ft HOLE DIAMETER: 6-1/4 in. TYPE OF SAMPLE/CORING DEVICE: Split Spoon

LENGTH & DIAMETER OF CORING DEVICE: 2 ft x 2 in. SAMPLING INTERVAL: 2 ft

LAND-SURFACE ELEVATION: { } SURVEYED ESTIMATED DATUM:

DRILLING FLUID USED: None DRILLING METHOD: Hollow-Stem Auger

DRILLING CONTRACTOR: Soil & Mat'l Testing DRILLER: Gilley HELPER: Joe

PREPARED BY: W. Gray HAMMER WEIGHT: 140 lb HAMMER DROP: 30 inches

SAMPLE DEPTH (FT BELOW LAND SURFACE) FROM	TO	CORE RECVRY (FT)	BLOW COUNTS PER 6 INCHES	SAMPLE/CORE DESCRIPTION
0	2	1.3	4-8-	Topsoil, sandy, brown (4 in.). Sand, fine to medium,
			10-13	some silt, trace gravel, brown.
2	4	1.0	12-20	Same
			19-17	
4	6	1.2	17-24-	Sand, some silt, little gravel, brown.
			54-45	
6	8	0.9	12-10-	Same
			8-6	

GEPAGHTY & MILLER, INC.

SAMPLE/CORE LOG

BORING: 72-21 PROJECT NO: Bldg. 72 NY0360SS02 PAGE: 1 of 1

SITE LOCATION: General Electric Co. Pittsfield, MA DRILLING STARTED: 8/8/88 DRILLING COMPLETED: 8/8/88

TOTAL DEPTH DRILLED: 8 ft HOLE DIAMETER: 6-1/4 in. TYPE OF SAMPLE/ CORING DEVICE: Split Spoon

LENGTH & DIAMETER OF CORING DEVICE: 2 ft x 2 in. SAMPLING INTERVAL: 2 ft

LAND-SURFACE ELEVATION: { } SURVEYED ESTIMATED DATUM:

DRILLING FLUID USED: None DRILLING METHOD: Hollow-Stem Auger

DRILLING CONTRACTOR: Soil & Mat'l Testing DRILLER: Gilley HELPER: Joe

PREPARED BY: W. Gray HAMMER WEIGHT: 140 lb HAMMER DROP: 30 inches

SAMPLE DEPTH (FT BELOW LAND SURFACE)		CORE RECVRY (FT)	BLOW COUNTS PER 6 INCHES	SAMPLE/CORE DESCRIPTION
FROM	TO			
0	2	1.2	8-17-	Topsoil, sandy, brown (2 in.). Sand, fine to medium,
			35-50	some silt, trace gravel, brown.
2	4	0.4	100/4"	Same
4	6	1.2	15-14-	Sand; little gravel, trace silt; brown.
			7-8	
6	8	1.0	40-20	Sand, fine to medium; some silt; trace gravel,
			17-12	gray-brown.

GRAGRY & MILLER, INC.

SAMPLE/CORE LOG

BORING: 72-22 PROJECT NO: Bldg. 72 NY0360SS02 PAGE: 1 of 1

SITE LOCATION: General Electric Co. Pittsfield, MA DRILLING STARTED: 8/8/88 DRILLING COMPLETED: 8/8/88

TOTAL DEPTH DRILLED: 8 ft HOLE DIAMETER: 6-1/4 in. TYPE OF SAMPLE/ CORING DEVICE: Split Spoon

LENGTH & DIAMETER OF CORING DEVICE: 2 ft x 2 in. SAMPLING INTERVAL: 2 ft

LAND-SURFACE ELEVATION: ( ) SURVEYED ( ) ESTIMATED DATUM:

DRILLING FLUID USED: None DRILLING METHOD: Hollow-Stem Auger

DRILLING CONTRACTOR: Soil & Mat'l Testing DRILLER: Gilley HELPER: Joe

PREPARED BY: W. Gray HAMMER WEIGHT: 140 lb HAMMER DROP: 30 inches

SAMPLE DEPTH (FT BELOW LAND SURFACE) FROM	TO	CORE RECOVRY (FT)	BLOW COUNTS PER 6 INCHES	SAMPLE/CORE DESCRIPTION
0	2	1.7	4-12-	Topsoil, sandy, brown (4 in.). Sand, fine to medium:
			7-15	some silt, trace gravel, brown.
2	4	0.9	8-7-5-5	Same
4	6	1.2	50-35-	Same
			25-17	
6	8	1.6	12-15	Sand, fine to medium, some silt, trace gravel,
			15-11	gray-brown.

DRAGETT & MILLER, INC.

SAMPLE/CORE LOG

BORING: 72-23 PROJECT NO: Bldg. 72 NY0360SS02 PAGE: 1 of 1

SITE LOCATION: General Electric Co. Pittsfield, MA DRILLING STARTED: 8/8/88 DRILLING COMPLETED: 8/8/88

TOTAL DEPTH DRILLED: 8 ft HOLE DIAMETER: 6-1/4 in. TYPE OF SAMPLE/ CORING DEVICE: Split Spoon

LENGTH & DIAMETER OF CORING DEVICE: 2 ft x 2 in. SAMPLING INTERVAL: 2 ft

LAND-SURFACE ELEVATION: { } SURVEYED ESTIMATED DATUM:

DRILLING FLUID USED: None DRILLING METHOD: Hollow-Stem Auger

DRILLING CONTRACTOR: Soil & Mat'l Testing DRILLER: Gilley HELPER: Joe

PREPARED BY: W. Gray HAMMER WEIGHT: 140 lb HAMMER DROP: 30 inches

SAMPLE DEPTH (FT BELOW LAND SURFACE) FROM	TO	CORE RECVRY (FT)	BLOW COUNTS PER 6 INCHES	SAMPLE/CORE DESCRIPTION
0	2	0.9	10-15-	Sand, some silt, some gravel, brown.
			15-12	
2	4	1.0	15-19-	Same as above.
			20-15	
4	6	1.4	16-60-	Sand, medium to fine, some gravel, little silt.
			27-15	
6	8	1.1	10-7-	Sand, little silt, trace gravel, brown.
			6-6	

GERAGHTY & MILLER, INC.

SAMPLE/CORE LOG

BORING: 72-24 PROJECT NO: Bldg. 72 NY0360SS02 PAGE: 1 of 1

SITE LOCATION: General Electric Co. Pittsfield, MA DRILLING STARTED: 8/8/88 DRILLING COMPLETED: 8/8/88

TOTAL DEPTH DRILLED: 8 ft HOLE DIAMETER: 6-1/4 in. TYPE OF SAMPLE/ CORING DEVICE: Split Spoon

LENGTH & DIAMETER OF CORING DEVICE: 2 ft x 2 in. SAMPLING INTERVAL: 2 ft

LAND-SURFACE ELEVATION: ( ) SURVEYED ( ) ESTIMATED DATUM:

DRILLING FLUID USED: None DRILLING METHOD: Hollow-Stem Auger

DRILLING CONTRACTOR: Soil & Mat'l Testing DRILLER: Gilley HELPER: Joe

PREPARED BY: W. Gray HAMMER WEIGHT: 140 lb HAMMER DROP: 30 inches

SAMPLE DEPTH (FT BELOW LAND SURFACE) FROM	TO	CORE RECOVERY (FT)	BLOW COUNTS PER 6 INCHES	SAMPLE/CORE DESCRIPTION
0	2	1.1	4-14-	Topsoil, sandy, brown (3 in.). Sand, medium to fine;
			28-20	some silt; trace gravel.
2	4	0.8	7-5-7-23	Sand; little silt; trace gravel; brown.
4	6	1.6	25-27-	Sand, fine to medium; some silt; trace gravel.
			60-45	
6	8	0.7	35-28-	Same as above.
			23-20	

DRAGHTY & MILLER, INC.

SAMPLE/CORE LOG

BORING: 72-25 PROJECT NO: Bldg. 72 NY0360SS02 PAGE: 1 of 1

SITE LOCATION: General Electric Co. Pittsfield, MA DRILLING STARTED: 8/8/88 DRILLING COMPLETED: 8/8/88

TOTAL DEPTH DRILLED: 8 ft HOLE DIAMETER: 6-1/4 in. TYPE OF SAMPLE/ CORING DEVICE: Split Spoon

LENGTH & DIAMETER OF CORING DEVICE: 2 ft x 2 in. SAMPLING INTERVAL: 2 ft

LAND-SURFACE ELEVATION: { } SURVEYED { } ESTIMATED DATUM:

DRILLING FLUID USED: None DRILLING METHOD: Hollow-Stem Auger

DRILLING CONTRACTOR: Soil & Mat'l Testing DRILLER: Gilley HELPER: Joe

PREPARED BY: W. Gray HAMMER WEIGHT: 140 lb HAMMER DROP: 30 inches

SAMPLE DEPTH (FT BELOW LAND SURFACE) FROM	TO	CORE RECOVRY (FT)	BLOW COUNTS PER 6 INCHES	SAMPLE/CORE DESCRIPTION
0	2	0.6	2-8-6-8	Topsoil, sandy, brown (3 in.). Sand, medium to fine;
				some silt; trace gravel.
2	4	1.9	5-7-	Same
			12-12	
4	6	0.5	12-30	Same
			15-10	
6	8	0.9	8-7-	Sand, fine; some silt; trace gravel.
			12-10	

GERAGHTY & MILLER, INC.

SAMPLE/CORE LOG

PAGE: 1 of 1

PROJECT NO: Block 72 NY0360SS02

BORING: 72-26

DRILLING STARTED: 9/8/88

DRILLING COMPLETED: 9/8/88

SITE LOCATION: General Electric Co. Pittsfield, MA

TYPE OF SAMPLE/CORING DEVICE: Split Spoon

TOTAL DEPTH DRILLED: 4 ft

HOLE DIAMETER: 6-1/4 in.

SAMPLING INTERVAL: 2 ft

LENGTH & DIAMETER OF CORING DEVICE: 2 ft x 2 in.

LAND-SURFACE ELEVATION: ( ) SURVEYED ( ) ESTIMATED DATUM:

DRILLING METHOD: Hollow-Stem Auger

DRILLING FLUID USED: None

HELPER: Joe

DRILLING CONTRACTOR: Soil & Mat'l Testing DRILLER: Gilley

HAMMER WEIGHT: 140 lb HAMMER DROP: 30 inches

PREPARED BY: W. Gray

SAMPLE DEPTH (FT BELOW LAND SURFACE) FROM	TO	CORE REC'RY (FT)	BLOW COUNTS PER 6 INCHES	SAMPLE/CORE DESCRIPTION
0	2	0.9	4-12-18-18	Topsoil, sandy, brown (3 in.). Sand, medium to fine; some silt; trace gravel.
2	4	0.5	10-8-9-10	Sand, fine; some silt; trace gravel.

GERAGHTY & MILLER, INC.

SAMPLE/CORE LOG

BORING: 72-27 PROJECT NO: Bldg. 72 NY0360SS02 PAGE: 1 of 1

SITE LOCATION: General Electric Co. Pittsfield, MA DRILLING STARTED: 8/8/88 DRILLING COMPLETED: 8/8/88

TOTAL DEPTH DRILLED: 4 ft HOLE DIAMETER: 6-1/4 in. TYPE OF SAMPLE/ CORING DEVICE: Split Spoon

LENGTH & DIAMETER OF CORING DEVICE: 2 ft x 2 in. SAMPLING INTERVAL: 2 ft

LAND-SURFACE ELEVATION: ( ) SURVEYED ( ) ESTIMATED DATUM:

DRILLING FLUID USED: None DRILLING METHOD: Hollow-Stem Auger

DRILLING CONTRACTOR: Soil & Mat'l Testing DRILLER: Gilley HELPER: Joe

PREPARED BY: W. Gray HAMMER WEIGHT: 140 lb HAMMER DROP: 30 inches

SAMPLE DEPTH (FT BELOW LAND SURFACE) FROM	TO	CORE RECVRY (FT)	BLOW COUNTS PER 6 INCHES	SAMPLE/CORE DESCRIPTION
0	2	0.3	10-7-	Topsoil, sandy, brown (2 in.). Silt, fine sand, black.
			8-7	
2	4	0.6	6-6-6-6	Silt, trace fine sand; black.

DRAGETT & MILLER, INC.

SAMPLE/CORE LOG

BORING/WELL: 72-28 PROJECT NO: NY0360SS03 PAGE: 1 of 1

SITE LOCATION: Building 72 DRILLING STARTED: 2/15/89 DRILLING COMPLETED: 2/15/89

TOTAL DEPTH DRILLED: 12 ft. HOLE DIAMETER: 4 inches TYPE OF SAMPLE/ CORING DEVICE: Split-spoon

LENGTH & DIAMETER OF CORING DEVICE: 2 ft x 2 in. SAMPLING INTERVAL: 2 feet

LAND-SURFACE ELEVATION: { } SURVEYED ESTIMATED DATUM:

DRILLING FLUID USED: none DRILLING METHOD: Solid Stem Auger

DRILLING CONTRACTOR: Hanson Drilling DRILLER: Rocky HELPER: Roy

PREPARED BY: W. Gray HAMMER WEIGHT: 140 HAMMER DROP: 30 inches

SAMPLE DEPTH (FT BELOW LAND SURFACE) FROM	TO	CORE RECOVRY (FT)	BLOW COUNTS PER 6 INCHES	SAMPLE/CORE DESCRIPTION
0	2	1.9		Sand, medium to fine with gravel, medium, trace silt,
				brown and black staining pieces of logs per copper wire.
2	4	1.2		Medium to fine sand and silt, trace gravel small, trace
				clay, brown. Pieces of wood.
4	6	1.8		Sand, fine (75%), with silt, trace gravel, small, red
				brick fragments.
6	8	1.1		Sand, medium to fine, trace gravel, small, trace silt.
8	10	1.0		Sand, medium to fine, trace gravel, small trace silt.
10	12	1.3		Sand, medium to fine, trace gravel, medium to large,
				trace silt, brown.
				* Ground-level lowered approximately 4 ft; surface water
				going down borehole.

DRAGETT & MILLER, INC.

SAMPLE/CORE LOG

BORING/WELL: 72-29 PROJECT NO: NY0360SS03 PAGE: 1 of 1

SITE LOCATION: Building 72 DRILLING STARTED: 2/23/89 DRILLING COMPLETED: 2/23/89

TOTAL DEPTH DRILLED: 12 ft. HOLE DIAMETER: 4 inches TYPE OF SAMPLE/ CORING DEVICE: Split-spoon

LENGTH & DIAMETER OF CORING DEVICE: 2 ft x 2 in. SAMPLING INTERVAL: 2 feet

LAND-SURFACE ELEVATION: ( ) SURVEYED ( ) ESTIMATED DATUM:

DRILLING FLUID USED: none DRILLING METHOD: Solid Stem Auger

DRILLING CONTRACTOR: SMT DRILLER: Gilley HELPER: Charlie

PREPARED BY: W. Gray HAMMER WEIGHT: 140 HAMMER DROP: 30 inches

SAMPLE DEPTH (FT BELOW LAND SURFACE) FROM	TO	CORE RECOVRY (FT)	BLOW COUNTS PER 6 INCHES	SAMPLE/CORE DESCRIPTION
0	2	1.5	20-21	Fill - sand and gravel, per red brick.
			26-20	
2	4	1.1	19-25	Natural - sand, medium to fine, trace gravel, small,
			25-20	trace silt, light brown. Trace clay, gray.
4	6	1.9	18-30	2' as above. Sand, fine, with silt, trace gravel, small
			33-49	trace clay; gray.
6	8	1.6	30-13	Sand, medium to fine, trace silt, trace gravel, small,
				brown.
8	10	1.8	20-28	7" as above. Sand, coarse - fine, trace silt, gray,
			22-20	moist.
10	12	2.0	17-11	Same as above.

DAGETY & MILLER, INC.

SAMPLE/CORE LOG

BORING/WELL: 72-30 PROJECT NO: NY0360SS03 PAGE: 1 of 1

SITE LOCATION: Building 72 DRILLING STARTED: 2/23/89 DRILLING COMPLETED: 2/23/89

TOTAL DEPTH DRILLED: 8 ft. HOLE DIAMETER: 4 inches TYPE OF SAMPLE/ CORING DEVICE: Split-spoon

LENGTH & DIAMETER OF CORING DEVICE: 2 ft x 2 in. SAMPLING INTERVAL: 2 feet

LAND-SURFACE ELEVATION: ( ) SURVEYED ( ) ESTIMATED DATUM:

DRILLING FLUID USED: none DRILLING METHOD: Auger

DRILLING CONTRACTOR: SMT DRILLER: Gilley HELPER: Charlie

PREPARED BY: W. Gray HAMMER WEIGHT: 140 HAMMER DROP: 30 inches

SAMPLE DEPTH (FT BELOW LAND SURFACE) FROM	TO	CORE RECOVRY (FT)	BLOW COUNTS PER 6 INCHES	SAMPLE/CORE DESCRIPTION
0	2	1.7	24-40	Fill - sand and gravel to ~1'.
			37-20	
2	4	1.0	17-15	Natural - sand, medium to fine, trace silt, trace gravel
			12-9	small, light brown.
4	6	1.9	6-8-4-6	Same
6	8	1.7	8-8-7-7	Same

DRAGETT & MILLER, INC.

SAMPLE/CORE LOG

BORING/WELL: 72-31 PROJECT NO: NY0360SS03 PAGE: 1 of 1

SITE LOCATION: Building 72 DRILLING STARTED: 2/23/89 DRILLING COMPLETED: 2/23/89

TOTAL DEPTH DRILLED: 8 ft. HOLE DIAMETER: 4 inches TYPE OF SAMPLE/ CORING DEVICE: Split-spoon

LENGTH & DIAMETER OF CORING DEVICE: 2 ft x 2 in. SAMPLING INTERVAL: 2 feet

LAND-SURFACE ELEVATION: { } SURVEYED ESTIMATED DATUM:

DRILLING FLUID USED: none DRILLING METHOD: Auger

DRILLING CONTRACTOR: SMT DRILLER: Gilley HELPER: Charlie

PREPARED BY: W. Gray HAMMER WEIGHT: 140 HAMMER DROP: 30 inches

SAMPLE DEPTH (FT BELOW LAND SURFACE) FROM	TO	CORE RECOVRY (FT)	BLOW COUNTS PER 6 INCHES	SAMPLE/CORE DESCRIPTION
0	2	1.8	5-18-	Natural - sand, medium to fine, trace silt, trace gravel
			48-47	brown.
2	4	1.0	29-15	Same as above.
			14-13	
4	6	1.4	5-5-6-4	Sand, medium to fine, trace silt, trace gravel, layered
				dark brown, light brown and gray.
6	8	2.0	4-4-6-8	6" same as above. 18" sand, coarse-fine, trace silt,
				light brown.

DRAGETT & MILLER, INC.

SAMPLE/CORE LOG

BORING/WELL: 72-32 PROJECT NO: NY0360SS03 PAGE: 1 of 1

SITE LOCATION: Building 72 DRILLING STARTED: 2/23/89 DRILLING COMPLETED: 2/23/89

TOTAL DEPTH DRILLED: 12 ft. HOLE DIAMETER: 4 inches TYPE OF SAMPLE/ CORING DEVICE: Split-spoon

LENGTH & DIAMETER OF CORING DEVICE: 2 ft x 2 in. SAMPLING INTERVAL: 2 feet

LAND-SURFACE ELEVATION: { } SURVEYED { } ESTIMATED DATUM:

DRILLING FLUID USED: none DRILLING METHOD: Auger

DRILLING CONTRACTOR: SMT DRILLER: Gilley HELPER: Charlie

PREPARED BY: W. Gray HAMMER WEIGHT: 140 HAMMER DROP: 30 inches

SAMPLE DEPTH (FT BELOW LAND SURFACE) FROM	TO	CORE RECOVRY (FT)	BLOW COUNTS PER 6 INCHES	SAMPLE/CORE DESCRIPTION
0	2	2.0	14-14-	1' fill - sand and gravel. 1' sand, medium to fine,
			7-8	trace silt, trace gravel, light brown.
2	4	1.6	12-16	Natural - sand medium to fine, trace silt, trace gravel,
			18-18	small, light brown, trace vegitation.
4	6	0.5	9-6-6-6	Same as above.
6	8	1.0	4-5-6-7	Sand, medium to fine, trace silt, light brown.
8	10	1.8	8-2-3-2	Same as above.
10	12	1.5		Same as above.

DRAGETT & MILLER, INC.

SAMPLE/CORE LOG

BORING/WELL: 72-33 PROJECT NO: NY0360SS03 PAGE: 1 of 1

SITE LOCATION: Building 72 DRILLING STARTED: 2/24/89 DRILLING COMPLETED: 2/24/89

TOTAL DEPTH DRILLED: 10 ft. HOLE DIAMETER: 4 inches TYPE OF SAMPLE/ CORING DEVICE: Split-spoon

LENGTH & DIAMETER OF CORING DEVICE: 2 ft x 2 in. SAMPLING INTERVAL: 2 feet

LAND-SURFACE ELEVATION: { } SURVEYED ESTIMATED DATUM:

DRILLING FLUID USED: none DRILLING METHOD: Auger

DRILLING CONTRACTOR: SMT DRILLER: Gilley HELPER:

PREPARED BY: W. Gray HAMMER WEIGHT: 140 HAMMER DROP: 30 inches

SAMPLE DEPTH (FT BELOW LAND SURFACE) FROM	TO	CORE RECVRY (FT)	BLOW COUNTS PER 6 INCHES	SAMPLE/CORE DESCRIPTION
0	2	1.0	12-23-	Sand and gravel.
2	4	0.9	9-8-8-11	Sand, medium to fine, trace silt, trace gravel, light brown.
4	6	1.8	8-7-8-10	Same as above.
6	8	1.0	8-10-8-8	Same as above.
8	10	0.9	6-5-4-4	Sand, medium to fine, trace gravel, trace silt.

DRAGETT & MILLER, INC.

SAMPLE/CORE LOG

BORING/WELL: 72-34 PROJECT NO: NY0360SS03 PAGE: 1 of 1

SITE LOCATION: Building 72 DRILLING STARTED: 2/24/89 DRILLING COMPLETED: 2/24/89

TOTAL DEPTH DRILLED: 10 ft. HOLE DIAMETER: 4 inches TYPE OF SAMPLE/ CORING DEVICE: Split-spoon

LENGTH & DIAMETER OF CORING DEVICE: 2 ft x 2 in. SAMPLING INTERVAL: 2 feet

LAND-SURFACE ELEVATION: { } SURVEYED ESTIMATED DATUM:

DRILLING FLUID USED: none DRILLING METHOD: Auger

DRILLING CONTRACTOR: SMT DRILLER: Gilley HELPER:

PREPARED BY: W. Gray HAMMER WEIGHT: 140 HAMMER DROP: 30 inches

SAMPLE DEPTH (FT BELOW LAND SURFACE) FROM	TO	CORE RECOVRY (FT)	BLOW COUNTS PER 6 INCHES	SAMPLE/CORE DESCRIPTION
0	2	0.9	27-45	Sand and gravel.
2	4	1.0	33-12-	Same
			11-12	
4	6	1.1	8-6-6-6	Same
6	8	1.9	3-4-5-5	Sand, coarse to medium, trace gravel.
8	10	1.8		Sand, medium to fine, trace gravel, trace silt.

GRAGERY & MILLER, INC.

SAMPLE/CORE LOG

BORING/WELL: 72-35 PROJECT NO: NY0360SS03 PAGE: 1 of 1

SITE LOCATION: Building 72 DRILLING STARTED: 2/24/89 DRILLING COMPLETED: 2/24/89

TOTAL DEPTH DRILLED: 10 ft. HOLE DIAMETER: 4 inches TYPE OF SAMPLE/ CORING DEVICE: Split-spoon

LENGTH & DIAMETER OF CORING DEVICE: 2 ft x 2 in. SAMPLING INTERVAL: 2 feet

LAND-SURFACE ELEVATION: { } SURVEYED ESTIMATED DATUM:

DRILLING FLUID USED: none DRILLING METHOD: Auger

DRILLING CONTRACTOR: SMT DRILLER: Gilley HELPER:

PREPARED BY: W. Gray HAMMER WEIGHT: 140 HAMMER DROP: 30 inches

SAMPLE DEPTH (FT BELOW LAND SURFACE) FROM	TO	CORE RECOVRY (FT)	BLOW COUNTS PER 6 INCHES	SAMPLE/CORE DESCRIPTION
0	2	0.9		Sand and gravel.
2	4	1.3	30-25-10-11	Sand, medium to fine, trace silt, trace gravel, light brown.
4	6	1.1	8-8-8-7	Same
6	8	1.9	6-5-4-5	Sand, coarse to medium, trace silt, some gravel, small, light brown - gray.
8	10	0.9	4-3-3-2	Same.

DRAGETT & MILLER, INC.

SAMPLE/CORE LOG

BORING/WELL: 72-36 PROJECT NO: NY0360SS03 PAGE: 1 of 1

SITE LOCATION: Building 72 DRILLING STARTED: 2/24/89 DRILLING COMPLETED: 2/24/89

TOTAL DEPTH DRILLED: 10 ft. HOLE DIAMETER: 4 inches TYPE OF SAMPLE/ CORING DEVICE: Split-spoon

LENGTH & DIAMETER OF CORING DEVICE: 2 ft x 2 in. SAMPLING INTERVAL: 2 feet

LAND-SURFACE ELEVATION: { } SURVEYED ESTIMATED DATUM:

DRILLING FLUID USED: none DRILLING METHOD: Auger

DRILLING CONTRACTOR: SMT DRILLER: Gilley HELPER:

PREPARED BY: W. Gray HAMMER WEIGHT: 140 HAMMER DROP: 30 inches

SAMPLE DEPTH (FT BELOW LAND SURFACE) FROM	TO	CORE RECVRY (FT)	BLOW COUNTS PER 6 INCHES	SAMPLE/CORE DESCRIPTION
0	2	0.9		Sand and gravel.
2	4	1.1	13-13-	Sand, medium to fine, trace silt, trace gravel, small,
			10-7	light brown.
4	6	1.8	4-4-4-4	Same
6	8	1.0	4-6-5-4	Same
8	10	1.3	4-3-3-4	Sand, coarse-medium, trace silt, some gravel, small,
				light brown - gray.

GERAGHTY & MILLER, INC.

SAMPLE/CORE LOG

BORING/WELL: 72-40 PROJECT NO: NY0360SS03 PAGE: 1 of 1

SITE LOCATION: Building 72, GE Pittsfield DRILLING STARTED: 3/7/89 DRILLING COMPLETED: 3/7/89

TOTAL DEPTH DRILLED: 8 ft. HOLE DIAMETER: 2 inches TYPE OF SAMPLE/CORING DEVICE: Split-spoon Core barrel

LENGTH & DIAMETER OF CORING DEVICE: 24 in. x 2 in. SAMPLING INTERVAL: continuous

LAND-SURFACE ELEVATION: { } SURVEYED { } ESTIMATED DATUM:

DRILLING FLUID USED: none DRILLING METHOD: Solid Stem Auger

DRILLING CONTRACTOR: Hanson Wells & Pumps DRILLER: Rocky HELPER: Bob

PREPARED BY: C. Devine HAMMER WEIGHT: 300 HAMMER DROP: 18 inches

SAMPLE DEPTH (FT BELOW LAND SURFACE) FROM	TO	CORE RECVRY (FT)	BLOW COUNTS PER 6 INCHES	SAMPLE/CORE DESCRIPTION
0	2	2	7,7,8,7	Sand, fine to medium, light brown/tan, some silt, dry
				compact frozen.
2	4	2	7,8,	Same as above but contains marble fragments.
			14,20	
4	6	2	10,8,	Sand, fine to medium, brown, some silt, trace gravel.
			12,17	
6	8	2	11,12,	Same as above.
			10,10	

GERAGHTY & MILLER, INC.

SAMPLE/CORE LOG

BORING/WELL: 72-41 PROJECT NO: NY0360SS03 PAGE: 1 of 1

SITE LOCATION: Building 72, GE Pittsfield DRILLING STARTED: 12:00 3/7/89 DRILLING COMPLETED: 12:45 3/7/89

TOTAL DEPTH DRILLED: 8 ft. HOLE DIAMETER: 2 inches TYPE OF SAMPLE/CORING DEVICE: Split-spoon Core barrel

LENGTH & DIAMETER OF CORING DEVICE: 24 in. x 2 in. SAMPLING INTERVAL: continuous

LAND-SURFACE ELEVATION: ( ) SURVEYED ( ) ESTIMATED DATUM:

DRILLING FLUID USED: none DRILLING METHOD: Solid Stem Auger

DRILLING CONTRACTOR: Hanson Wells & Pumps DRILLER: Rocky HELPER: Bob

PREPARED BY: C. Devine HAMMER WEIGHT: 300 HAMMER DROP: 18 inches

SAMPLE DEPTH (FT BELOW LAND SURFACE) FROM	TO	CORE RECVRY (FT)	BLOW COUNTS PER 6 INCHES	SAMPLE/CORE DESCRIPTION
0	2	2	3,5,	Sand, fine to medium, gray brown, some silt, marble
			10,11	fragments, top wet from overlying water.
2	4	2	32,10,	Same as above, sample wet; water ~8'.
			11,12	
4	6	2	7,10,	Same as above, wet.
			16,19	
6	8	2	10,17,	Same as above.
			23,20	
				Boring started at bottom of ~1 foot ice and water.

GERAGHTY & MILLER, INC.

SAMPLE/CORE LOG

BORING/WELL: 72-42 PROJECT NO: NY0360SS03 PAGE: 1 of 1

SITE LOCATION: GE Building 72, Pittsfield DRILLING STARTED: 13:00 3/7/89 DRILLING COMPLETED: 13:30 3/7/89

TOTAL DEPTH DRILLED: 8 ft. HOLE DIAMETER: 2 inches TYPE OF SAMPLE/ CORING DEVICE: Split-spoon Core barrel

LENGTH & DIAMETER OF CORING DEVICE: 24 in. x 2 in. SAMPLING INTERVAL: continuous

LAND-SURFACE ELEVATION: { } SURVEYED ESTIMATED DATUM:

DRILLING FLUID USED: none DRILLING METHOD: Solid Stem Auger

DRILLING CONTRACTOR: Hanson Wells & Pumps DRILLER: Rocky HELPER: Bob

PREPARED BY: C. Devine HAMMER WEIGHT: 300 HAMMER DROP: 18 inches

SAMPLE DEPTH (FT BELOW LAND SURFACE) FROM	TO	CORE RECOVRY (FT)	BLOW COUNTS PER 6 INCHES	SAMPLE/CORE DESCRIPTION
0	2	2	11,14,	Sand, fine to medium, tan/brown, silt, trace gravel and
			10,12	marble fragments; dry, frozen.
2	4	2	14,18,	Same as above.
			17,14	
4	6	2	11,10	Same as above, wet.
			9,11	
6	8	2	7,7,	Same as above.
			12,10	

EBASCO & MILLER, INC.

SAMPLE/CORE LOG

BORING/WELL: 72-43 PROJECT NO: NY0360SS03 PAGE: 1 of 1

SITE LOCATION: GE Building 72, Pittsfield DRILLING STARTED: 14:40 3/7/89 DRILLING COMPLETED: 15:00 3/7/89

TOTAL DEPTH DRILLED: 8 ft. HOLE DIAMETER: 2 inches TYPE OF SAMPLE/ CORING DEVICE: Split-spoon Core barrel

LENGTH & DIAMETER OF CORING DEVICE: 24 in. x 2 in. SAMPLING INTERVAL: continuous

LAND-SURFACE ELEVATION: { } SURVEYED ESTIMATED DATUM:

DRILLING FLUID USED: none DRILLING METHOD: Solid Stem Auger

DRILLING CONTRACTOR: Hanson Wells & Pumps DRILLER: Rocky HELPER: Bob

PREPARED BY: C. Devine HAMMER WEIGHT: 300 HAMMER DROP: 18 inches

SAMPLE DEPTH (FT BELOW LAND SURFACE) FROM	TO	CORE RECOVRY (FT)	BLOW COUNTS PER 6 INCHES	SAMPLE/CORE DESCRIPTION
0	2	2	10,14,	Sand, fine to medium, tan/brown; some silt, trace
			30,35	gravel, dry, compact, some marble fragments.
2	4	2	24,25,	Same as above, wet at ~3'.
			30,21	
4	6	2	11,12	Sand, fine to coarse, red brown, some silt, trace
			12,14	gravel, wet, some marble fragments.
6	8	2	8,8,8,8	Same as above but dry.

HERAGHTY & MILLER, INC.

SAMPLE/CORE LOG

BORING/WELL: 72-44 PROJECT NO: NY0360SS03 PAGE: 1 of 1

SITE LOCATION: Building 72, GE Pittsfield DRILLING STARTED: 14:40 3/7/89 DRILLING COMPLETED: 15:00 3/7/89

TOTAL DEPTH DRILLED: 8 ft. HOLE DIAMETER: 2 inches TYPE OF SAMPLE/CORING DEVICE: Split-spoon Core barrel

LENGTH & DIAMETER OF CORING DEVICE: 24 in. x 2 in. SAMPLING INTERVAL: continuous

LAND-SURFACE ELEVATION: { } SURVEYED ESTIMATED DATUM:

DRILLING FLUID USED: none DRILLING METHOD: Solid Stem Auger

DRILLING CONTRACTOR: Hanson Wells & Pumps DRILLER: Rocky HELPER: Bob

PREPARED BY: C. Devine HAMMER WEIGHT: 300 HAMMER DROP: 18 inches

SAMPLE DEPTH (FT BELOW LAND SURFACE) FROM	TO	CORE RECVRY (FT)	BLOW COUNTS PER 6 INCHES	SAMPLE/CORE DESCRIPTION
0	2	2	6,15	Sand, fine to medium, tan/brown; some silt, trace gravel
			17,10	dry, compact, marble fragments.
2	4	2	9,9,	Sand, fine to coarse, brown, some silt trace gravel, dry
			15,18	compact, marble fragments.
4	6	2	13,11	Same as above.
			11,10	
6	8	2	9,8,	Same as above.
			12,18	

ALTRESCO PARKING AREA
B2 - B21

DERAGHTY & MILLER, INC.

SAMPLE/CORE LOG

BORING: B-2 PROJECT NO: NY05505 PAGE: 1 of 1

SITE LOCATION: GE - Altresco Pittsfield, MA DRILLING STARTED: 10/30/89 DRILLING COMPLETED: 10/30/89

TOTAL DEPTH DRILLED: 8 ft HOLE DIAMETER: 6 in. TYPE OF SAMPLE/ CORING DEVICE: Split Spoon Core

LENGTH & DIAMETER OF CORING DEVICE: 2 ft x 2 in. SAMPLING INTERVAL: 2 ft

LAND-SURFACE ELEVATION: { } SURVEYED { } ESTIMATED DATUM:

DRILLING FLUID USED: None DRILLING METHOD: Hollow-Stem Auger

DRILLING CONTRACTOR: Soil and Material Testing DRILLER: Gilley HELPER: Weasel

PREPARED BY: W. Gray HAMMER WEIGHT: 140 lb. HAMMER DROP: 30 inches

SAMPLE DEPTH (FT BELOW LAND SURFACE) FROM	TO	CORE RECVRY (FT)	BLOW COUNTS PER 6 INCHES	SAMPLE/CORE DESCRIPTION
0	2	1.5	10-10-7-5	Asphalt - 1.5 inches. Fill, sand (85%), medium to fine; silt (10%), brown; trace gravel.
2	4	1.6	6-6-6-6	Same.
4	6	1.5	5-4-3-3	Same.
6	8	1.4	3-4-5-5	Same.

DRAGHTY & MILLER, INC

SAMPLE/CORE LOG

BORING: B-3 PROJECT NO: NY05505 PAGE: 1 of 1

SITE LOCATION: GE - Altresco Pittsfield, MA DRILLING STARTED: 10/30/89 DRILLING COMPLETED: 10/30/89

TOTAL DEPTH DRILLED: 8 ft HOLE DIAMETER: 6 in. TYPE OF SAMPLE/ CORING DEVICE: Split Spoon Core

LENGTH & DIAMETER OF CORING DEVICE: 2 ft x 2 in. SAMPLING INTERVAL: 2 ft

LAND-SURFACE ELEVATION: [ ] SURVEYED [ ] ESTIMATED DATUM:

DRILLING FLUID USED: None DRILLING METHOD: Hollow-Stem Auger

DRILLING CONTRACTOR: Soil and Material Testing DRILLER: Gilley HELPER: Weasel

PREPARED BY: W. Gray HAMMER WEIGHT: 140 lb. HAMMER DROP: 30 inches

SAMPLE DEPTH (FT BELOW LAND SURFACE) FROM	TO	CORE RECOVRY (FT)	BLOW COUNTS PER 6 INCHES	SAMPLE/CORE DESCRIPTION
0	2	1.7	6-7-7-7	1-1/2 in. Asphalt. Fill, sand (85%), fine to medium, silt (10%), trace gravel, brown.
2	4	1.7	3-6-3-3	Same.
4	6	1.0	3-3-2-3	Same.
6	8	1.4	3-2-3-4	Fill, sand (85%), medium, silt (15%), light brown-gray.

DEHAGHTY & MILLER, INC.

SAMPLE/CORE LOG

BORING: B-4 PROJECT NO: NY09505 PAGE: 1 of 1

SITE LOCATION: GE - Altresco Pittsfield, MA DRILLING STARTED: 10/30/89 DRILLING COMPLETED: 10/30/89

TOTAL DEPTH DRILLED: 8 ft HOLE DIAMETER: 6 in. TYPE OF SAMPLE/ CORING DEVICE: Split Spoon Core

LENGTH & DIAMETER OF CORING DEVICE: 2 ft x 2 in. SAMPLING INTERVAL: 2 ft

LAND-SURFACE ELEVATION: ( ) SURVEYED ( ) ESTIMATED DATUM:

DRILLING FLUID USED: None DRILLING METHOD: Hollow-Stem Auger

DRILLING CONTRACTOR: Soil and Material Testing DRILLER: Gilley HELPER: Weasel

PREPARED BY: W. Gray HAMMER WEIGHT: 140 lb. HAMMER DROP: 30 inches

SAMPLE DEPTH (FT BELOW LAND SURFACE) FROM	TO	CORE RECVRY (FT)	BLOW COUNTS PER 6 INCHES	SAMPLE/CORE DESCRIPTION
0	2	0.9	6-5-10-9	1-1/2 in. Asphalt. Fill, sand and gravel; trace silt.
2	4	1.5	10-6-7-8	Fill, sand (90%), fine to medium; trace silt; trace gravel.
4	6	1.3	10-8-6-8	Same.
6	8	1.6	5-4-4-4	Sand and gravel, trace silt (natural sediments).

BRAGHTY & MILLER, INC.

SAMPLE/CORE LOG

BORING: B-5 PROJECT NO: NY05505 PAGE: 1 of 1

SITE LOCATION: GE - Altresco Pittsfield, MA DRILLING STARTED: 10/30/89 DRILLING COMPLETED: 10/30/89

TOTAL DEPTH DRILLED: 8 ft HOLE DIAMETER: 6 in. TYPE OF SAMPLE/ CORING DEVICE: Split Spoon Core

LENGTH & DIAMETER OF CORING DEVICE: 2 ft x 2 in. SAMPLING INTERVAL: 2 ft

LAND-SURFACE ELEVATION: ( ) SURVEYED ( ) ESTIMATED DATUM:

DRILLING FLUID USED: None DRILLING METHOD: Hollow-Stem Auger

DRILLING CONTRACTOR: Soil and Material Testing DRILLER: Gilley HELPER: Weasel

PREPARED BY: W. Gray HAMMER WEIGHT: 140 lb. HAMMER DROP: 30 inches

SAMPLE DEPTH (FT BELOW LAND SURFACE) FROM	TO	CORE RECOVRY (FT)	BLOW COUNTS PER 6 INCHES	SAMPLE/CORE DESCRIPTION
0	2	1.4	8-7-8-7	1-1/2 in. Asphalt. Fill, sand (85%), fine; silt (10%),
				trace gravel, dark brown.,
2	4	1.6	4-5-5-6	Fill, sand (85%), fine to medium, light brown.
4	6	1.0	6-6-6-6	Sand and gravel, brown (natural sediments).
6	8	1.1	5-5-5-7	Same.

DERAGHTY & MILLER, INC.

SAMPLE/CORE LOG

BORING: B-6 PROJECT NO: NY05505 PAGE: 1 of 1

SITE LOCATION: GE - Altresco Pittsfield, MA DRILLING STARTED: 10/30/89 DRILLING COMPLETED: 10/30/89

TOTAL DEPTH DRILLED: 8 ft HOLE DIAMETER: 6 in. TYPE OF SAMPLE/ CORING DEVICE: Split Spoon Core

LENGTH & DIAMETER OF CORING DEVICE: 2 ft x 2 in. SAMPLING INTERVAL: 2 ft

LAND-SURFACE ELEVATION: ( ) SURVEYED ( ) ESTIMATED DATUM:

DRILLING FLUID USED: None DRILLING METHOD: Hollow-Stem Auger

DRILLING CONTRACTOR: Soil and Material Testing DRILLER: Gilley HELPER: Weasel

PREPARED BY: W. Gray HAMMER WEIGHT: 140 lb. HAMMER DROP: 30 inches

SAMPLE DEPTH (FT BELOW LAND SURFACE) FROM	TO	CORE RECVRY (FT)	BLOW COUNTS PER 6 INCHES	SAMPLE/CORE DESCRIPTION
0	2	1.2	4-6-6-7	1-1/2 in. Asphalt. Fill, sand and gravel, brown.
2	4	1.5	5-4-4-4	Same.
4	6	1.3	3-3-3-3	Sand and gravel, brown (natural sediments).
6	8	1.7	3-4-4-6	Same.

DERAGHTY & MILLER, INC.

SAMPLE/CORE LOG

BORING: B-7 PROJECT NO: NYC5505 PAGE: 1 of 1

SITE LOCATION: GE - Alpresco Pittsfield, MA DRILLING STARTED: 10/30/89 DRILLING COMPLETED: 10/30/89

TOTAL DEPTH DRILLED: 8 ft HOLE DIAMETER: 6 in. TYPE OF SAMPLE/ CORING DEVICE: Split Spoon Core

LENGTH & DIAMETER OF CORING DEVICE: 2 ft x 2 in. SAMPLING INTERVAL: 2 ft

LAND-SURFACE ELEVATION: ( ) SURVEYED ( ) ESTIMATED DATUM:

DRILLING FLUID USED: None DRILLING METHOD: Hollow-Stem Auger

DRILLING CONTRACTOR: Soil and Material Testing DRILLER: Gilley HELPER: Weasel

PREPARED BY: W. Gray HAMMER WEIGHT: 140 lb. HAMMER DROP: 30 inches

SAMPLE DEPTH (FT BELOW LAND SURFACE) FROM	TO	CORE RECVRY (FT)	BLOW COUNTS PER 6 INCHES	SAMPLE/CORE DESCRIPTION
0	2	0.9	5-11-9-7	1-1/2 in. Asphalt. Fill, sand and gravel, brown.
2	4	1.1	6-8-8-8	Same.
4	6	1.6	5-3-5-4	Sand, medium to coarse (85%), gravel (15%), brown
				(natural sediments).
6	8	1.3	4-5-4-5	Same.

DERAGHTY & MILLER, INC.

SAMPLE/CORE LOG

BORING: B-8 PROJECT NO: NY05505 PAGE: 1 of 1

SITE LOCATION: GE - Altresco Pittsfield, MA DRILLING STARTED: 10/30/89 DRILLING COMPLETED: 10/30/89

TOTAL DEPTH DRILLED: 8 ft HOLE DIAMETER: 6 in. TYPE OF SAMPLE/ CORING DEVICE: Split Spoon Core

LENGTH & DIAMETER OF CORING DEVICE: 2 ft x 2 in. SAMPLING INTERVAL: 2 ft

LAND-SURFACE ELEVATION: ( ) SURVEYED ( ) ESTIMATED DATUM:

DRILLING FLUID USED: None DRILLING METHOD: Hollow-Stem Auger

DRILLING CONTRACTOR: Soil and Material Testing DRILLER: Gilley HELPER: Weasel

PREPARED BY: W. Gray HAMMER WEIGHT: 140 lb. HAMMER DROP: 30 inches

SAMPLE DEPTH (FT BELOW LAND SURFACE) FROM	TO	CORE RECVRY (FT)	BLOW COUNTS PER 6 INCHES	SAMPLE/CORE DESCRIPTION
0	2	1.2	10-9-8-7	1-1/2 in. Asphalt. Fill, sand and gravel, dark brown.
2	4	1.5	6-7-7-9	Fill, sand (85%), medium to fine, orange brown; trace silt; trace gravel.
4	6	1.3	8-7-8-8	Same as above.
6	8	1.0	5-5-6-6	Fill, sand and gravel, light brown-gray.

DERAGHTY & MILLER, INC.

SAMPLE/CORE LOG

BORING: B-9 PROJECT NO: NYO5505 PAGE: 1 of 1

SITE LOCATION: GE - Altresco Pittsfield, MA DRILLING STARTED: 10/31/89 DRILLING COMPLETED: 10/31/89

TOTAL DEPTH DRILLED: 8 ft HOLE DIAMETER: 6 in. TYPE OF SAMPLE/ CORING DEVICE: Split Spoon Core

LENGTH & DIAMETER OF CORING DEVICE: 2 ft x 2 in. SAMPLING INTERVAL: 2 ft

LAND-SURFACE ELEVATION: ( ) SURVEYED ( ) ESTIMATED DATUM:

DRILLING FLUID USED: None DRILLING METHOD: Hollow-Stem Auger

DRILLING CONTRACTOR: Soil and Material Testing DRILLER: Gilley HELPER: Weasel

PREPARED BY: W. Gray HAMMER WEIGHT: 140 lb. HAMMER DROP: 30 inches

SAMPLE DEPTH (FT BELOW LAND SURFACE) FROM	TO	CORE RECOVRY (FT)	BLOW COUNTS PER 6 INCHES	SAMPLE/CORE DESCRIPTION
0	2	1.1	6-8-6-8	1-1/2 in. Asphalt. Fill, sand and gravel, brown.
2	4	0.9	8-8-7-5	Same.
4	6	0.9	3-4-3-3	Sand and gravel, brown (natural sediments).
6	8	0.7	2-2-2-1	Same.

DERAGHTY & MILLER, INC.

SAMPLE/CORE LOG

BORING: B-10 PROJECT NO: NY05505 PAGE: 1 of 1

SITE LOCATION: GE - Altresco Pittsfield, MA DRILLING STARTED: 10/31/89 DRILLING COMPLETED: 10/31/89

TOTAL DEPTH DRILLED: 8 ft HOLE DIAMETER: 6 in. TYPE OF SAMPLE/ CORING DEVICE: Split Spoon Core

LENGTH & DIAMETER OF CORING DEVICE: 2 ft x 2 in. SAMPLING INTERVAL: 2 ft

LAND-SURFACE ELEVATION: ( ) SURVEYED ( ) ESTIMATED DATUM:

DRILLING FLUID USED: None DRILLING METHOD: Hollow-Stem Auger

DRILLING CONTRACTOR: Soil and Material Testing DRILLER: Gilley HELPER: Weasel

PREPARED BY: W. Gray HAMMER WEIGHT: 140 lb. HAMMER DROP: 30 inches

SAMPLE DEPTH (FT BELOW LAND SURFACE) FROM	TO	CORE RECVRY (FT)	BLOW COUNTS PER 6 INCHES	SAMPLE/CORE DESCRIPTION
0	2	1.0	6-11-8-4	1-1/2 in. Asphalt. Fill, sand and gravel, brown.
2	4	0.8	2-2-2-3	Same.
4	6	1.1	4-5-5-5	Same.
6	8	1.0	3-4-4-3	Same.

GERAGHTY & MILLER, INC

SAMPLE CORE LOG

BORING: B-11 PROJECT NO: NY05505 PAGE: 1 of 1

SITE LOCATION: GE - Altresco Pittsfield, MA DRILLING STARTED: 10/31/89 DRILLING COMPLETED: 10/31/89

TOTAL DEPTH DRILLED: 8 ft HOLE DIAMETER: 6 in. TYPE OF SAMPLE/ CORING DEVICE: Split Spoon Core

LENGTH & DIAMETER OF CORING DEVICE: 2 ft x 2 in. SAMPLING INTERVAL: 2 ft

LAND-SURFACE ELEVATION: ( ) SURVEYED ( ) ESTIMATED DATUM:

DRILLING FLUID USED: None DRILLING METHOD: Hollow-Stem Auger

DRILLING CONTRACTOR: Soil and Material Testing DRILLER: Gilley HELPER: Weasel

PREPARED BY: W. Gray HAMMER WEIGHT: 140 lb. HAMMER DROP: 30 inches

SAMPLE DEPTH (FT BELOW LAND SURFACE) FROM	TO	CORE RECVRY (FT)	BLOW COUNTS PER 6 INCHES	SAMPLE/CORE DESCRIPTION
0	2	1.5	11-9-9-7	1-1/2 in. Asphalt. Fill, sand and gravel, brown.
2	4	1.4	9-9-7-6	Same.
4	6	1.3	6-3-4-3	Sand and gravel, brown (natural sediments).
6	8	1.4	5-4-4-3	Same.

HERLIHY & MILLER, INC.

SAMPLE/CORE LOG

BORING: B-12 PROJECT NO: NY05505 PAGE: 1 of 1

SITE LOCATION: GE - Altresco Pittsfield, MA DRILLING STARTED: 10/31/89 DRILLING COMPLETED: 10/31/89

TOTAL DEPTH DRILLED: 8 ft HOLE DIAMETER: 6 in. TYPE OF SAMPLE/ CORING DEVICE: Split Spoon Core

LENGTH & DIAMETER OF CORING DEVICE: 2 ft x 2 in. SAMPLING INTERVAL: 2 ft

LAND-SURFACE ELEVATION: ( ) SURVEYED ( ) ESTIMATED DATUM:

DRILLING FLUID USED: None DRILLING METHOD: Hollow-Stem Auger

DRILLING CONTRACTOR: Soil and Material Testing DRILLER: Gilley HELPER: Weasel

PREPARED BY: W. Gray HAMMER WEIGHT: 140 lb. HAMMER DROP: 30 inches

SAMPLE DEPTH (FT BELOW LAND SURFACE) FROM	TO	CORE RECVRY (FT)	BLOW COUNTS PER 6 INCHES	SAMPLE/CORE DESCRIPTION
0	2	1.0	12-7-	1-1/2 in. Asphalt. Fill, sand and gravel, brown.
			9-10	
2	4	0.9	7-5-5-6	Same.
4	6	1.1	5-6-3-3	Sand and gravel, brown (natural sediments,.
6	8	1.5	3-3-3-4	Same.

TERRAFIRMA & MILLER, INC

SAMPLE/CORE LOG

BORING: B-13 PROJECT NO: NY05505 PAGE: 1 of 1

SITE LOCATION: GE - Altresco Pittsfield, MA DRILLING STARTED: 10/31/89 DRILLING COMPLETED: 10/31/89

TOTAL DEPTH DRILLED: 8 ft HOLE DIAMETER: 6 in. TYPE OF SAMPLE/ CORING DEVICE: Split Spoon Core

LENGTH & DIAMETER OF CORING DEVICE: 2 ft x 2 in. SAMPLING INTERVAL: 2 ft

LAND-SURFACE ELEVATION: ( ) SURVEYED ( ) ESTIMATED DATUM:

DRILLING FLUID USED: None DRILLING METHOD: Hollow-Stem Auger

DRILLING CONTRACTOR: Soil and Material Testing DRILLER: Gilley HELPER: Weasel

PREPARED BY: W. Gray HAMMER WEIGHT: 140 lb. HAMMER DROP: 30 inches

SAMPLE DEPTH (FT BELOW LAND SURFACE) FROM	TO	CORE RECVRY (FT)	BLOW COUNTS PER 6 INCHES	SAMPLE/CORE DESCRIPTION
0	2	1.3	16-10-	1-1/2 in. Asphalt. Fill, sand and gravel, brown.
			7-9	
2	4	1.3	8-8-8-8	Same.
4	6	1.5	7-9-9-9	Sand and gravel, brown (natural sediments).
6	8	1.3	7-6-6-7	Same.

IERACHTY & MILLER, INC

SAMPLE/CORE LOG

BORING: B-14 PROJECT NO: NY05505 PAGE: 1 of 1

SITE LOCATION: GE - Altresco Pittsfield, MA DRILLING STARTED: 10/31/89 DRILLING COMPLETED: 10/31/89

TOTAL DEPTH DRILLED: 8 ft HOLE DIAMETER: 6 in. TYPE OF SAMPLE/ CORING DEVICE: Split Spoon Core

LENGTH & DIAMETER OF CORING DEVICE: 2 ft x 2 in. SAMPLING INTERVAL: 2 ft

LAND-SURFACE ELEVATION: ( ) SURVEYED ( ) ESTIMATED DATUM:

DRILLING FLUID USED: None DRILLING METHOD: Hollow-Stem Auger

DRILLING CONTRACTOR: Soil and Material Testing DRILLER: Gilley HELPER: Weasel

PREPARED BY: W. Gray HAMMER WEIGHT: 140 lb. HAMMER DROP: 30 inches

SAMPLE DEPTH (FT BELOW LAND SURFACE) FROM	TO	CORE RECVRY (FT)	BLOW COUNTS PER 6 INCHES	SAMPLE/CORE DESCRIPTION
0	2	1.2	8-7-5-5	1-1/2 in. Asphalt. Fill, sand and gravel, brown.
2	4	1.1	4-5-4-4	Same.
4	6	1.3	3-3-4-4	Sand and gravel, brown (natural sediments).
6	8	1.0	4-4-5-6	Same.

BRADDY & MILLER, INC.

SAMPLE CORE LOG

BORING: B-15 PROJECT NO: MY05505 PAGE: 1 of 1

SITE LOCATION: GE - Alpresco Pittsfield, MA DRILLING STARTED: 10/31/89 DRILLING COMPLETED: 10/31/89

TOTAL DEPTH DRILLED: 8 ft HOLE DIAMETER: 6 in. TYPE OF SAMPLE/ CORING DEVICE: Split Spoon Core

LENGTH & DIAMETER OF CORING DEVICE: 2 ft x 2 in. SAMPLING INTERVAL: 2 ft

LAND-SURFACE ELEVATION: [ ] SURVEYED [ ] ESTIMATED DATUM:

DRILLING FLUID USED: None DRILLING METHOD: Hollow-Stem Auger

DRILLING CONTRACTOR: Soil and Material Testing DRILLER: Gilley HELPER: Weasel

PREPARED BY: W. Gray HAMMER WEIGHT: 140 lb. HAMMER DROP: 30 inches

SAMPLE DEPTH (FT BELOW LAND SURFACE) FROM	TO	CORE RECVRY (FT)	BLOW COUNTS PER 6 INCHES	SAMPLE/CORE DESCRIPTION
0	2	1.4	6-6-4-3	1-1/2 in. Asphalt. Fill, sand and gravel, brown.
2	4	1.3	4-4-7-8	Sand and gravel, brown (natural sediments).
4	6	1.6	7-8-8-9	Same.
6	8	1.5	8-8-7-7	Same.

DERAGHTY & MILLER, INC

SAMPLE/CORE LOG

BORING: B-16 PROJECT NO: NY05505 PAGE: 1 of 1

SITE LOCATION: GE - Altresco Pittsfield, MA DRILLING STARTED: 10/31/89 DRILLING COMPLETED: 10/31/89

TOTAL DEPTH DRILLED: 8 ft HOLE DIAMETER: 6 in. TYPE OF SAMPLE/ CORING DEVICE: Split Spoon Core

LENGTH & DIAMETER OF CORING DEVICE: 2 ft x 2 in. SAMPLING INTERVAL: 2 ft

LAND-SURFACE ELEVATION: ( ) SURVEYED ( ) ESTIMATED DATUM:

DRILLING FLUID USED: None DRILLING METHOD: Hollow-Stem Auger

DRILLING CONTRACTOR: Soil and Material Testing DRILLER: Gilley HELPER: Weasel

PREPARED BY: W. Gray HAMMER WEIGHT: 140 lb. HAMMER DROP: 30 inches

SAMPLE DEPTH (FT BELOW LAND SURFACE) FROM	TO	CORE RECVRY (FT)	BLOW COUNTS PER 6 INCHES	SAMPLE/CORE DESCRIPTION
0	2	1.3	2-3-4-4	Topsoil (3 inches), dark brown; sand and gravel, brown.
2	4	1.6	4-4-4-6	Sand and gravel, brown.
4	6	1.5	7-5-5-4	Same.
6	8	1.5	5-3-4-4	Same.

DERAGHTY & MILLER, INC

SAMPLE/CORE LOG

BORING: B-17 PROJECT NO: NY05505 PAGE: 1 of 1

SITE LOCATION: GE - Altresco Pittsfield, MA DRILLING STARTED: 10/31/89 DRILLING COMPLETED: 10/31/89

TOTAL DEPTH DRILLED: 8 ft HOLE DIAMETER: 6 in. TYPE OF SAMPLE/ CORING DEVICE: Split Spoon Core

LENGTH & DIAMETER OF CORING DEVICE: 2 ft x 2 in. SAMPLING INTERVAL: 2 ft

LAND-SURFACE ELEVATION: ( ) SURVEYED ( ) ESTIMATED DATUM:

DRILLING FLUID USED: None DRILLING METHOD: Hollow-Stem Auger

DRILLING CONTRACTOR: Soil and Material Testing DRILLER: Gilley HELPER: Weasel

PREPARED BY: W. Gray HAMMER WEIGHT: 140 lb. HAMMER DROP: 30 inches

SAMPLE DEPTH (FT BELOW LAND SURFACE) FROM	TO	CORE RECVRY (FT)	BLOW COUNTS PER 6 INCHES	SAMPLE/CORE DESCRIPTION
0	2	1.5	2-3-3-3	Topsoil (3 inches), dark brown; sand and gravel, brown.
2	4	1.4	3-4-4-3	Sand and gravel, brown.
4	6	1.3	4-4-3-3	Same.
6	8	1.4	3-3-4-5	Same.

DERACHTI & MILLER, INC.

SAMPLE CORE LOG

BORING: B-18 PROJECT NO: NY05505 PAGE: 1 of 1

SITE LOCATION: GE - Altresco Pittsfield, MA DRILLING STARTED: 10/31/89 DRILLING COMPLETED: 10/31/89

TOTAL DEPTH DRILLED: 8 ft HOLE DIAMETER: 6 in. TYPE OF SAMPLE/ CORING DEVICE: Split Spoon Core

LENGTH & DIAMETER OF CORING DEVICE: 2 ft x 2 in. SAMPLING INTERVAL: 2 ft

LAND-SURFACE ELEVATION: ( ) SURVEYED ( ) ESTIMATED DATUM:

DRILLING FLUID USED: None DRILLING METHOD: Hollow-Stem Auger

DRILLING CONTRACTOR: Soil and Material Testing DRILLER: Gilley HELPER: Weasel

PREPARED BY: W. Gray HAMMER WEIGHT: 140 lb. HAMMER DROP: 30 inches

SAMPLE DEPTH (FT BELOW LAND SURFACE) FROM	TO	CORE RECVRY (FT)	BLOW COUNTS PER 6 INCHES	SAMPLE/CORE DESCRIPTION
0	2	1.6	3-6-8-9	Topsoil (3 inches), dark brown; sand and gravel, brown.
2	4	1.5	8-7-7-8	Sand and gravel, brown.
4	6	1.6	6-7-7-7	Same.
6	8	1.4	6-4-5-5	Same.

DERAGHTY & MILLER, INC.

SAMPLE/CORE LOG

BORING: B-19 PROJECT NO: NY05505 PAGE: 1 of 1

SITE LOCATION: GE - Altresco Pittsfield, MA DRILLING STARTED: 10/31/89 DRILLING COMPLETED: 10/31/89

TOTAL DEPTH DRILLED: 8 ft HOLE DIAMETER: 6 in. TYPE OF SAMPLE/ CORING DEVICE: Split Spoon Core

LENGTH & DIAMETER OF CORING DEVICE: 2 ft x 2 in. SAMPLING INTERVAL: 2 ft

LAND-SURFACE ELEVATION: ( ) SURVEYED ( ) ESTIMATED DATUM:

DRILLING FLUID USED: None DRILLING METHOD: Hollow-Stem Auger

DRILLING CONTRACTOR: Soil and Material Testing DRILLER: Gilley HELPER: Weasel

PREPARED BY: W. Gray HAMMER WEIGHT: 140 lb. HAMMER DROP: 30 inches

SAMPLE DEPTH (FT BELOW LAND SURFACE) FROM	TO	CORE RECVRY (FT)	BLOW COUNTS PER 6 INCHES	SAMPLE/CORE DESCRIPTION
0	2	1.3	6-4-3-3	Topsoil (3 inches), dark brown; sand and gravel, dark brown.
2	4	1.4	4-4-5-4	Sand and gravel, brown.
4	6	0.9	5-6-5-5	Same.
6	8	1.0	5-5-5-5	Same.

DERAGHTY & MILLER, INC.

SAMPLE/CORE LOG

BORING: B-20 PROJECT NO: NYO5505 PAGE: 1 of 1

SITE LOCATION: GE - Alltesco Pittsfield, MA DRILLING STARTED: 10/31/89 DRILLING COMPLETED: 10/31/89

TOTAL DEPTH DRILLED: 8 ft HOLE DIAMETER: 6 in. TYPE OF SAMPLE/ CORING DEVICE: Split Spoon Core

LENGTH & DIAMETER OF CORING DEVICE: 2 ft x 2 in. SAMPLING INTERVAL: 2 ft

LAND-SURFACE ELEVATION: ( ) SURVEYED ( ) ESTIMATED DATUM:

DRILLING FLUID USED: None DRILLING METHOD: Hollow-Stem Auger

DRILLING CONTRACTOR: Soil and Material Testing DRILLER: Gilley HELPER: Weasel

PREPARED BY: W. Gray HAMMER WEIGHT: 140 lb. HAMMER DROP: 30 inches

SAMPLE DEPTH (FT BELOW LAND SURFACE) FROM	TO	CORE RECVRY (FT)	BLOW COUNTS PER 6 INCHES	SAMPLE/CORE DESCRIPTION
0	2	1.1	1-2-4-4	Topsoil (5 inches) dark brown; sand, medium to fine,
				dark brown.
2	4	1.6	3-3-2-2	Sand, fine (85%); trace silt, trace gravel, brown
				(natural sediments).
4	6	1.4	5-7-7-7	Sand and gravel, brown.
6	8	1.4	7-7-7-6	Same.

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SAMPLE/CORE LOG

BORING: B-21 PROJECT NO: NY05505 PAGE: 1 of 1

SITE LOCATION: GE - Altresco Pittsfield, MA DRILLING STARTED: 10/31/89 DRILLING COMPLETED: 10/31/89

TOTAL DEPTH DRILLED: 8 ft HOLE DIAMETER: 6 in. TYPE OF SAMPLE/ CORING DEVICE: Split Spoon Core

LENGTH & DIAMETER OF CORING DEVICE: 2 ft x 2 in. SAMPLING INTERVAL: 2 ft

LAND-SURFACE ELEVATION: ( ) SURVEYED ( ) ESTIMATED DATUM:

DRILLING FLUID USED: None DRILLING METHOD: Hollow-Stem Auger

DRILLING CONTRACTOR: Soil and Material Testing DRILLER: Gilley HELPER: Weasel

PREPARED BY: W. Gray HAMMER WEIGHT: 140 lb. HAMMER DROP: 30 inches

SAMPLE DEPTH (FT BELOW LAND SURFACE) FROM	TO	CORE RECVRY (FT)	BLOW COUNTS PER 6 INCHES	SAMPLE/CORE DESCRIPTION
0	2	1.7	1-3-3-5	Topsoil (5 inches), dark brown; sand, medium to fine,
				brown.
2	4	1.4	3-5-10-9	Sand (85%) fine; trace silt; trace gravel, brown.
4	6	1.7	9-9-8-9	Sand and gravel, brown (natural sediments).
6	8	1.6	7-7-7-8	Same.

ALTRESCO TRANSMISSION LINE

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SAMPLE/CORE LOG

Boring/Well: STR-4N Project No: NY05505 Page 1 of 15

Site Location: Pittsfield, MA Drilling Started: 11-14-89 Drilling Completed: 11-14-89

Total Depth Drilled: 8 feet Hole Diameter: 4 inches Type of Sampler/Coring Device: Split-barrel core

Length and Diameter of Coring Device: 2' x 1.5" Sampling Interval: continuous

Land Surface Elev: _____ feet ☐ Surveyed ☐ Estimated Datum: _____

Drilling Fluid Used: NONE Drilling Method: Hollow-stem auger

Drilling Contractor: Soil & Material Testing Driller: M. Sofia Helper: S. Kannes

Prepared By: T. Loukides Hammer Weight: 140# Hammer Drop: 30 inches

HNU	Sample/Core Depth (feet below land surface) From	To	Core Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample/Core Description
ND	0	2	0.2	1-2-3-4	Silt, dark brown (100%); plant roots
ND	2	4	1.5	5-6-11-12	Sand, fine to medium, brown (95%); gravel, fine to medium, rounded
ND	4	6	1.7	4-7-7-8-9	Sand, fine, light brown to salt and pepper (90%); gravel, fine, rounded; micaceous throughout
ND	6	8	1.1	8-6-7-7	Sand, fine, brown (90%); micaceous and moist throughout
ND	8	10	1.2	8-9-6-8	Sand, fine to medium, light brown to salt and pepper (90%); micaceous throughout; wet @ 9'

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SAMPLE/CORE LOG

Boring/Well STR-4S Project/No NY05505 Page 2 of 15

Site Location Pittsfield, MA Drilling Started 11-14-89 Drilling Completed 11-14-89

Total Depth Drilled 8 (feet)

Hole Diameter 4 (inches) Type of Sampler/Coring Device Split-barrel core

Length and Diameter of Coring Device 2' x 1.5" Sampling Interval continuous feet

Drilling Fluid Used NONE Drilling Method Hollow-stem auger

Drilling Contractor Soil & Material Testing Driller M. Sofia Helper S. Hannes

Prepared By T. Loukides Hammer Weight 140# Hammer Drop 30 inches

Sample/Core Depth (feet below land surface) From	To	Core Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample/Core Description
0	2	1.0	2-3-4-6	Sand, fine, light brown to creme (80%); silt, brown to dark brown (20%)
2	4	1.4	2-2-4-7	Silt, brown to olive-brown (80%), micaceous; sand fine, salt and pepper (20%); orange and black mottling
4	6	1.3	9-11-8-9	Same as above; silt more dense, moist
6	8	1.5	7-6-3-5	Sand, fine, brown (50%), salt and pepper (50%); wet @ 8'
8	10	1.9	6-7-11-10	Same as above; wet

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SAMPLE/CORE LOG

Boring/Well: STP-4N2 Project/No.: NY05505 Page 3 of 15

Site Location: Pittsfield, MA Drilling Started: 11-14-89 Drilling Completed: 11-14-89

Total Depth Drilled: 8 (feet)

Hole Diameter: 4 inches Type of Sample/Coring Device: Split-barrel core

Length and Diameter of Coring Device: 2' x 1.3" Sampling Interval: continuous feet

Drilling Fluid Used: NONE Drilling Method: Hollow-stem auger

Drilling Contractor: Soil & Material Testing Driller: M. Sofia Helper: S. Kannes

Prepared By: T. Loukides Hammer Weight: 140# Hammer Drop: 30 inches

HNU	Sample/Core Depth (feet below land surface) From	To	Core Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample/Core Description
ND	0	2	0.7	1-3-5-7	Sand, fine, light, brown to creme, (60%); silt, brown (40%)
ND	2	4	1.3	6-9-7-11	Sand, fine, brown (90%); rust-orange mottling throughout; micaceous
ND	4	6	1.9	5-7-6-5	Sand, fine, brown to salt and pepper (95%); trace fine gravel; micaceous
ND	6	8	1.2	7-10-10-9	Silt, brown (50%); sand, fine, brown to salt and pepper (45%); micaceous; moist
ND	8	10	1.4	8-10-9-6	Silt, brown (60%); sand fine, salt and pepper (35%); micaceous; wet @ 9'

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SAMPLE/CORE LOG

Boring/Well: STP-4S2 Project/No.: NY03505 Page 4 of 13

Site Location: Pittsfield, MA Drilling Started: 11-14-89 Drilling Completed: 11-14-89

Total Depth Drilled: 8 (feet)

Hole Diameter: 4 (inches) Type of Sampler/Coring Device: Split-barrel core

Length and Diameter of Coring Device: 2' x 1.5" Sampling Interval: continuous ~~rock~~

Drilling Fluid Used: NONE Drilling Method: Hollow-stem auger

Drilling Contractor: Soil & Material Testing Driller: M. Sofia Helper: S. Hannes

Prepared By: T. Loukides Hammer Weight: 140# Hammer Drop: 30 inches

HNU	Sample/Core Depth (feet below land surface) From	To	Core Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample/Core Description
ND	0	2	1.8	1-2-2-3	Silt, brown to dark brown (50%); sand, fine, light brown to brown (50%)
ND	2	4	1.1	3-5-5-9	Silty fine sand, brown (100%); purple-brown mottling in places
ND	4	6	2.0	6-5-3-4	Silt, gray-brown, moderately dense, micaceous (65%); sand, fine, salt and pepper (30%); trace fine gravel
ND	6	8	1.8	3-3-5-5	Silty fine sand, brown to gray-brown (100%); micaceous; wet @ 7.5'
ND	8	10	1.8	4-5-3-5	Sand, fine, gray-brown to salt and pepper (100%); micaceous; wet

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SAMPLE/CORE LOG

Boring/Well STR-3N1 Project/No NY05505 Page 5 of 5

Site Location Pittsfield, MA Drilling Started 11-14-89 Drilling Completed 11-14-89

Total Depth Drilled 8 (feet)

Hole Diameter 4 inches Type of Sample/Coring Device Split-barrel core

Length and Diameter of Coring Device 2' x 1.5" Sampling interval continuous feet

Drilling Fluid Used NONE Drilling Method Hollow-stem auger

Drilling Contractor Soil & Material Testing Driller M. Sofia Helper S. Mannes

Prepared By T. Loukides Hammer Weight 140# Hammer Drop 30 inches

Sample/Core Depth (feet below land surface) From	To	Core Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample/Core Description
0	2	1.0	1-2-3-3	Sand, fine, brown (90%); silt, dark brown, with plant root fragments (10%)
2	4	1.8	4-4-4-5	Sand, fine, brown to salt and pepper (100%); micaceous in places
4	6	1.7	6-6-6-6	Same as above
6	8	1.4	6-7-6-7	Clayey silt, olive-brown to gray (65%); with fine to medium gravel embedded (30%); wet @ 8'
8	10	1.2	8-10-16-17	Silt, same as above (50%); sand, same as above (40%); fine rounded gravel throughout

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SAMPLE/CORE LOG

Boring/Well STR-3N Project/No NYC5505 Page 4 of 18

Site Location Pittsfield, MA Drilling Started 11-14-89 Drilling Completed 11-14-89

Total Depth Drilled 8 (feet)

Hole Diameter 4 (inches) Type of Sample/Coring Device Split-barrel core

Length and Diameter of Coring Device 2' x 1.5" Sampling Interval continuous

Drilling Fluid Used NONE Drilling Method Hollow-stem auger

Drilling Contractor Soil & Material Testing Driller M. Sofia Helper S. Hannes

Prepared By T. Loukides Hammer Weight 140# Hammer Drop 30 inches

HNU	Sample/Core Depth (feet below land surface) From	To	Core Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample/Core Description
ND	0	2	1.0	1-2-6-6	Silty fine sand, brown to dark brown (90%); trace root fragments
ND	2	4	1.6	4-3-2-2	Sand, fine, brown to salt and pepper
ND	4	6	1.1	2-2-2-9	Sand, same as above (90%); glut of olive-brown silt on shoe of spoon
ND	6	8	1.6	10-4-4-6	Silt, brown to olive-brown, moderately dense (85%); gravel, medium to coarse, rounded (15%); varicolored mottling; m
ND	8	10	1.7	6-8-10-11	Silt, gray to gray-brown, dense (90%); seams of moist, fine gray sand

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SAMPLE/CORE LOG

Boring/Well STR-3N2 Project/No NY05505 Page 1 of 15

Site Location Pittsfield, MA Drilling Started 11-14-89 Drilling Completed 11-14-89

Total Depth Drilled 5 (feet)

Hole Diameter 4 (inches) Type of Sampler/Coring Device Split-barrel core

Length and Diameter of Coring Device 2' x 1.5" Sampling Interval continuous

Drilling Fluid Used NONE Drilling Method Hollow-stem auger

Drilling Contractor Soil & Material Testing Driller M. Sofia Helper S. Hannes

Prepared By T. Loukides Hammer Weight 140# Hammer Drop 30 inches

HNU	Sample/Core Depth (feet below land surface) From	To	Core Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample/Core Description
ND	0	2	1.1	1-2-3-3	Silty fine sand, dark brown (90%); root fragments and wood chips @ top
ND	2	4	1.8	3-3-3-3	Sand, fine, brown to salt and pepper (100%); slightly moist
ND	4	6	1.9	3-3-4-6	Same as above; plug of gray-brown silt in shoe of spoon
ND	6	8	1.7	4-3-6-10	Silt, olive-brown, moderately dense (90%); fine to medium rounded gravel clasts and varicolored mottling; slightly moist
ND	8	10	1.8	11-11-12-12	Same as above but dry and tight

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SAMPLE/CORE LOG

Boring/Well STR-3S1 Project/No NY05505 Page 8 of 15

Site Location Pittsfield, MA Drilling Started 11-14-89 Drilling Completed 11-14-89

Total Depth Drilled 8 (feet)

Hole Diameter 4 (inches) Type of Sample/Coring Device Split-barrel core

Length and Diameter of Coring Device 2' x 1.5" Sampling Interval continuous feet

Drilling Fluid Used NONE Drilling Method Hollow-stem auger

Drilling Contractor Soil & Material Testing Driller M. Sofia Helper S. Kannes

Prepared By T. Loukides Hammer Weight 140# Hammer Drop 30 inches

HNU	Sample/Core Depth (feet below land surface) From	To	Core Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample/Core Description
ND	0	2	1.2	1-2-2-3	Silty fine sand, brown (50%), to dark brown (50%); plant root fragments
ND	2	4	1.7	3-4-5-6	Sand, fine, brown to salt and pepper (100%)
ND	4	6	1.1	6-5-5-5	Silt, gray-brown to olive-brown (70%); sand, same as above (30%)
ND	6	8	1.5	6-6-8-10	Sand, fine, light brown (80%), wet; silt, same as above (20%)
ND	8	10	1.8	10-10-11-14	Sand, same as above (70%); grades to silt, gray-brown, dense, dry, @ 9'

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SAMPLE/CORE LOG

Boring/Well STR-3S Project/No. NY05505 Page 3 of 13

Site Location Pittsfield, MA Drilling Started 11-14-89 Drilling Completed 11-14-89

Total Depth Drilled 8 (feet)

Hole Diameter 4 (inches) Type of Sample/Coring Device Split-barrel core

Length and Diameter of Coring Device 3' x 1.5" Sampling Interval Continuous feet

Drilling Fluid Used NONE Drilling Method Hollow-stem auger

Drilling Contractor Soil & Material Testing Driller M. Sofia Helper S. Haines

Prepared By T. Louvides Hammer Weight 140# Hammer Drop 30 inches

HNU	Sample/Core Depth (feet below land surface) From	To	Core Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample/Core Description
ND	0	2	1.0	1-3-2-3	Silty fine sand, brown to dark brown 91
					root fragments and rock chips
ND	2	4	1.4	3-3-3-3	Sand, fine, brown to salt and pepper 100
ND	4	6	1.5	4-4-3-3	Silt, olive-brown (90%) ; trace fine
					rounded gravel and variocolored
					mottling throughout
ND	6	8	1.4	4-5-6-6	Silt, same as above 100% moist
ND	8	10	1.6	6-8-8-10	Same as above

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SAMPLE/CORE LOG

Boring/Well STR-392 Project/No. NY05505 Page 10 of 13

Site Location Pittsfield, MA Drilling Started 11-14-89 Drilling Completed 11-14-89

Total Depth Drilled 8 (feet)

Hole Diameter 4 (inches) Type of Sample/Coring Device Split-barrel core

Length and Diameter of Coring Device 3' x 1.5" Sampling Interval continuous feet

Drilling Fluid Used NONE Drilling Method Hollow-stem auger

Drilling Contractor Soil & Material Testing Driller M. Sofia Helper E. Haines

Prepared By T. Loukides Hammer Weight 140# Hammer Drop 30 inches

Sample/Core Depth (feet below land surface) From	To	Core Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample/Core Description
0	2	0.9	1-2-2-2	Silt, dark brown (85%); cinder, coal, and rock fragments (10%)
2	4	1.3	4-6-9-9	Sand, fine, brown (100%); moist
4	6	1.2	7-7-5-5	Sand, fine to medium, brown to salt and pepper (100%)
6	8	1.3	4-3-3-4	Silt, brown to olive-brown, moderately dense, micaceous (95%); trace fine gravel and varicolored mottling
8	10	1.4	4-4-5-4	Same as above

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SAMPLE/CORE LOG

Boring/Well STR-2N Project/No. NY06505 Page 11 of 15

Site Location Pittsfield, MA Drilling Started 11-13-89 Drilling Completed 11-13-89

Total Depth Drilled 8 (feet)

Hole Diameter 4 (inches) Type of Sampler Coring Device Split-barrel core

Length and Diameter of Coring Device 2' x 1.5" Sampling Interval continuous ft.

Drilling Fluid Used NONE Drilling Method Hollow-stem auger

Drilling Contractor Soil & Material Testing Driller N. Sofia Helper S. Hannes

Prepared By T. Louxides Hammer Weight 140# Hammer Drop 30 inches

HNU	Sample/Core Depth (feet below land surface) From	To	Core Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample/Core Description
ND	0	2	0.8	3-4-9-5	Silt, gray-brown (60%); sand, fine,
					brown (30%); gravel, fine, rounded (10%
ND	2	4	1.5	6-4-8-9	Silty fine sand, brown to olive-brown
					(90%); gravel, fine, rounded (10%.
ND	4	6	1.7	8-8-6-6	Silty fine sand, brown (100%); moist
ND	6	8	1.0	5-3-4-3	Same as above
ND	8	10	1.1	6-3-4-3	Same as above; wet @ base of spoon

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SAMPLE/CORE LOG

Boring/Well STR-1N Project/No. NY05505 Page 12 of 15

Site Location: Pittsfield, MA Drilling Started 11-15-89 Drilling Completed 11-15-89

Total Depth Drilled 8 (feet)

Hole Diameter 4 (inches) Type of Sample/Coring Device Split-barrel core

Length and Diameter of Coring Device 2' x 1.5" Sampling Interval continuous ~~for~~

Drilling Fluid Used NONE Drilling Method Hollow-stem auger

Drilling Contractor Soil & Material Testing Driller M. Sofia Helper S. Nannes

Prepared By T. Loukides Hammer Weight 140# Hammer Drop 30 inches

HNU	Sample/Core Depth (feet below land surface) From	To	Core Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample/Core Description
ND	0	2	1.1	1-2-4-4	Silt, brown, with organic detritus (50%);
					grades to silt, gray-brown, micaceous (5)
ND	2	4	1.3	6-12-9-10	Silty fine sand, brown to creme (90%);
					Quartzose gravel, medium to coarse,
					white (10%)
ND	4	6	1.4	6-4-4-4	Silty fine sand, brown to gray-brown
					(100%); slightly moist
ND	6	8	1.2	3-3-3-2	Silty fine sand, same as above (90%);
					quartzose gravel, medium to coarse,
					white (10%)
ND	8	10	1.3	3-3-9-10	Same as above

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SAMPLE/CORE LOG

Boring/Well STR-1S Project/No. NY05505 Page 13 of 13

Site Location Pittsfield, MA Drilling Started 11-15-89 Drilling Completed 11-15-89

Total Depth Drilled N.A. (feet)

Hole Diameter 2 (inches) Type of Sampler/Coring Device Split-barrel core

Length and Diameter of Coring Device 3' x 1.5" Sampling Interval continuous feet

Drilling Fluid Used NONE Drilling Method Hand-held sledge

Drilling Contractor Soil & Material Testing Driller M. Sofia Helper S. Nannes

Prepared By T. Loukides Hammer Weight -- Hammer Drop -- inches

HNU	Sample/Core Depth (feet below land surface) From	To	Core Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample/Core Description
ND	0	2	1.0	---	Silt, dark brown to brown (80%); sand, fine, brown (15%); trace organic detritus
ND	2	4	1.4	---	Silty fine sand, brown, micaceous (95%); trace fine rounded gravel and orange to black mottling

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SAMPLE/CORE LOG

Boring/Well STR-2S Project/No. NY05505 Page 14 of 15

Site Location Pittsfield, MA Drilling Started 11-15-89 Drilling Completed 11-15-89

Total Depth Drilled N.A. (feet)

Hole Diameter 2 (inches) Type of Sample/Coring Device Split-barrel core

Length and Diameter of Coring Device 2' x 1.5" Sampling Interval Continuous Feet

Drilling Fluid Used NONE Drilling Method Hand-held sledge

Drilling Contractor Soil & Material Testing Driller M. Sofia Helper S. Hannes

Prepared By T. Loukides Hammer Weight -- Hammer Drop -- inches

Sample/Core Depth (feet below land surface) From	To	Core Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample/Core Description
0	2	1.0	---	Silt, dark brown (70%); sand, very fine, brown (20%); trace organic detritus
2	4	1.7	---	Sand, fine, brown to salt and pepper

GERAGHTY & MILLER, INC
Groundwater Consultants

SAMPLE/CORE LOG

Boring/Well SCR-4S1 Project/No. NY05505 Page 15 of 15

Site Location Pittsfield, MA Drilling Started 11-15-89 Drilling Completed 11-15-89

Total Depth Drilled N.A. (feet)

Hole Diameter 2 (inches) Type of Sample/Coring Device Split-barrel core

Length and Diameter of Coring Device 2' x 1.5" Sampling Interval Continuous

Drilling Fluid Used NONE Drilling Method Hand-held sledge

Drilling Contractor Soil & Material Testing Driller M. Sofia Helper S. Hannes

Prepared By T. Loukides Hammer Weight -- Hammer Drop -- inches

HNU	Sample/Core Depth (feet below land surface) From	To	Core Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample/Core Description
ND	0	2	1.7	---	Sand, fine, brown to creme (70%);
					silt, dark brown (30%), with organic
					detritus
ND	2	4	1.8	---	Silty fine sand, brown (100%),
					micaceous

NEW YORK AVENUE WATER LINE

GERAGHTY & MILLER, INC.

SAMPLE/CORE LOG

BORING: WL-1 PROJECT NO: NY0360SS06 PAGE: 1 of 1

SITE LOCATION: GE Company Pittsfield, MA DRILLING STARTED: 10/3/89 DRILLING COMPLETED: 10/3/89

TOTAL DEPTH DRILLED: 5 ft HOLE DIAMETER: 4 in. TYPE OF SAMPLE/ CORING DEVICE: Split-Barrel Core

LENGTH & DIAMETER OF CORING DEVICE: 2 ft x 1.5 in. SAMPLING INTERVAL: 2 ft

LAND-SURFACE ELEVATION: ( ) SURVEYED ( ) ESTIMATED DATUM:

DRILLING FLUID USED: None DRILLING METHOD: Hollow-Stem Auger

DRILLING CONTRACTOR: Soil & Material Testing DRILLER: Lodge HELPER: Loomis

PREPARED BY: T.Loukides HAMMER WEIGHT: 140 lb. HAMMER DROP: 30 inches

SAMPLE DEPTH (FT BELOW LAND SURFACE) FROM	TO	CORE RECVRY (FT)	BLOW COUNTS PER 6 INCHES	SAMPLE/CORE DESCRIPTION
0	1	1.1	3-2	Sand, fine, brown to dark brown (80%), gravel, medium to coarse, subrounded to angular (20%).
1	3	1.2	4-8-7-6	Sand, fine to medium, brown to dark brown.
3	5	1.0	10-11-8-8	Sand, silty, fine, brown to dark brown (90%); trace gravel.
5	7		Refusal	

DERAGHTY & MILLER, INC.

SAMPLE/CORE LOG

BORING: WL-2 PROJECT NO: NY0360SS06 PAGE: 1 of 1

SITE LOCATION: GE Company Pittsfield, MA DRILLING STARTED: 10/3/89 DRILLING COMPLETED: 10/3/89

TOTAL DEPTH DRILLED: 5 ft HOLE DIAMETER: 4 in. TYPE OF SAMPLE/ CORING DEVICE: Split-Barrel Core

LENGTH & DIAMETER OF CORING DEVICE: 2 ft x 1.5 in. SAMPLING INTERVAL: 2 ft

LAND-SURFACE ELEVATION: ( ) SURVEYED ( ) ESTIMATED DATUM:

DRILLING FLUID USED: None DRILLING METHOD: Hollow-Stem Auger

DRILLING CONTRACTOR: Soil & Material Testing DRILLER: Lodge HELPER: Loomis

PREPARED BY: T.Loukides HAMMER WEIGHT: 140 lb. HAMMER DROP: 30 inches

SAMPLE DEPTH (FT BELOW LAND SURFACE) FROM	TO	CORE RECVRY (FT)	BLOW COUNTS PER 6 INCHES	SAMPLE/CORE DESCRIPTION
0	1	0.1	2-3	Silt and very fine sand, dark brown, organic debris
				(poor recovery)
1	3	1.0	9-8-8-10	Sand, medium, brown (70%); trace orange and black
				staining; gravel, angular to subrounded, medium to
				coarse (20%).
3	5	1.2	10-8-	Sand, fine, brown (90%); trace gravel, medium, rounded.
			11-13	
5	7	1.1	7-8-6-6	Sand, fine, and silt, brown (95%), micaceous; trace fine
				gravel.

GERAGHTY & MILLER, INC.

SAMPLE/CORE LOG:

BORING: WL-3 PROJECT NO: NY0360SS06 PAGE: 1 of 1

SITE LOCATION: GE Company Pittsfield, MA DRILLING STARTED: 10/3/89 DRILLING COMPLETED: 10/3/89

TOTAL DEPTH DRILLED: 5 ft HOLE DIAMETER: 4 in. TYPE OF SAMPLE/ CORING DEVICE: Split-Barrel Core

LENGTH & DIAMETER OF CORING DEVICE: 2 ft x 1.5 in. SAMPLING INTERVAL: 2 ft

LAND-SURFACE ELEVATION: ( ) SURVEYED ( ) ESTIMATED DATUM:

DRILLING FLUID USED: None DRILLING METHOD: Hollow-Stem Auger

DRILLING CONTRACTOR: Soil & Material Testing DRILLER: Lodge HELPER: Loomis

PREPARED BY: T.Loukides HAMMER WEIGHT: 140 lb. HAMMER DROP: 30 inches

SAMPLE DEPTH (FT BELOW LAND SURFACE) FROM	TO	CORE RECVRY (FT)	BLOW COUNTS PER 6 INCHES	SAMPLE/CORE DESCRIPTION
0	1	0.3	3-3	Sand, medium, light brown (75%); gravel, fine to medium,
				angular (20%); trace organic debris.
1	3	1.2	8-7-8-6	Sand, medium to coarse, brown (70%); gravel, medium to
				coarse, angular (25%).
3	5	1.3	9-11-	Sand, silty, fine, brown to dark brown (90%); trace
			8-10	gravel, medium to coarse, angular.
5	7	1.3	8-6-5-7	Sand, medium, light brown to brown (80%); gravel, medium
				to coarse (15%); orange and black staining.

GERAGHTY & MILLER, INC.
Groundwater Consultants

SAMPLE/CORE LOG

Boring/Well WL-4 Project No. NY05555 Page 1 of 1

Site Location GE Pittsfield, MA Drilling Started 12/4/89 Drilling Completed 12/4/89

Total Depth Drilled 8 feet Hole Diameter 4 inches Type of Sampler/Coring Device split-spoon

Length and Diameter of Coring Device 2' x 2" Sampling Interval 2 feet

Land Surface Elev. _____ feet ☐ Surveyed ☐ Estimated Datum _____

Drilling Fluid Used None Drilling Method Auger

Drilling Contractor Soil & Material Testing Driller Lineberry Helper _____

Prepared By W. Gray Hammer Weight 140 Hammer Drop 30 inches

Sample/Core Depth (feet below land surface) From	To	Core Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample/Core Description
0	2	1.1	16-9-6-12	Sand, med-fine, (80%) lt brown; trace gravel.
2	4	1.1	19-8-4-4	Sand, med-fine, (75%), dark brown; gravel, small-med, (15%).
4	6	1.3	4-4-4-4	Sand, med-fine (70%) dark brown; gravel (20%) med.
6	8	1.7	4-2-4-20	Sand, silty, fine (85%); dark brown to light brown; gravel, trace, small.

GERAGHTY & MILLER, INC.
Ground Water Consultants

SAMPLE/CORE LOG

Boring/Well WL-5 Project/No. NY05505 Page 1 of 1

Site Location GE Pittsfield, MA Drilling Started 12/4/89 Drilling Completed 12/4/89

Total Depth Drilled 8 feet Hole Diameter 4 inches Type of Sample/Coring Device split-spoon

Length and Diameter of Coring Device 2' x 2" Sampling Interval 2 feet

Land Surface Elev ____ feet ☐ Surveyed ☐ Estimated Datum ____

Drilling Fluid Used None Drilling Method Auger

Drilling Contractor Soil & Material Testing Driller Lineberry Helper ____

Prepared By W. Gray Hammer Weight 140 Hammer Drop 30 inches

Sample/Core Depth (feet below land surface) From	To	Core Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample/Core Description
0	2	0.6	19-12-10-10	Sand, medium, lt brown (70%); gravel, fine-medium.
2	4	1.9	13-15-13-10	Same
4	6	1.7	7-7-7-5	Sand, silty, fine (90%), brown to dark brown; trace gravel.
6	8	1.6	5-3-4-4	Sand, fine-med (80%), lt brown to brown; gravel, fine.

GERAGHTY & MILLER, INC.
Ground Water Consultants

SAMPLE/CORE LOG

Boring/Well WL-6 Project/No NY05505 Page 1 of 1

Site Location GE Pittsfield, MA Drilling Started 12/4/89 Drilling Completed 12/4/89

Total Depth Drilled 8 feet Hole Diameter 4 inches Type of Sampler/Coring Device split-spoon

Length and Diameter of Coring Device 2' x 2" Sampling Interval 2 feet

Land-Surface Elev _____ feet ☐ Surveyed ☐ Estimated Datum _____

Drilling Fluid Used None Drilling Method Auger

Drilling Contractor Soil & Material Testing Driller Lineberry Helper _____

Prepared By W. Gray Hammer Weight 140 Hammer Drop 30 inches

Sample/Core Depth (feet below land surface) From	To	Core Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample/Core Description
0	2	1.5	24-12-12-10	Sand, medium-fine (70%), light brown to dark brown; gravel, small to large (15%).
2	4	1.7	12-9-5-6	Sand, fine-medium (60%), light brown to dark brown; gravel, small (25%).
4	6	1.4	6-5-5-7	Same
6	8	1.6	9-9-10-11	1' sand, silty, fine, dark brown. Sand, medium-fine, (60%), brown; gravel, small-medium.

GERAGHTY & MILLER, INC.
Groundwater Consultants

SAMPLE/CORE LOG

Boring/Well WL-7 Project/No NY05505 Page 1 of 1

Site Location GE Pittsfield, MA Drilling Started 12/4/89 Drilling Completed 12/4/89

Total Depth Drilled 8 feet Hole Diameter 4 inches Type of Sampler/Coring Device split-spoon

Length and Diameter of Coring Device 2' x 2" Sampling Interval 2 feet

Land Surface Elev _____ feet ☐ Surveyed ☐ Estimated Datum _____

Drilling Fluid Used None Drilling Method Auger

Drilling Contractor Soil & Material Testing Driller Lineberry Helper _____

Prepared By W. Gray Hammer Weight 140 Hammer Drop 30 inches

Sample/Core Depth (feet below land surface) From	To	Core Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample/Core Description
0	2	1.4	22-19 -18-16	Sand, med-fine, brown (70%); gravel (35%) med-large.
2	4	1.5	7-9 -5-4	Sand, silty, fine (80%) lt brown to dark brown; gravel, trace, small.
4	6	1.8	3-3 -4-2	Sand, med-fine (80%) lt brown; gravel, trace, small.
6	8	1.4	5-10 -10-18	4" or above; then sand and silt, (90%), lt brown, wet @ 7.5'

ALTRESCO LANDSCAPING

GERAGHTY & MILLER, INC.

SAMPLE/CORE LOG

BORING/WELL: L-1 PROJECT NO: NY0S505 PAGE: 1 of 1

SITE LOCATION: GE Pittsfield/Altresco DRILLING STARTED: 4/12/90 DRILLING COMPLETED: 4/12/90

TOTAL DEPTH DRILLED: 4 ft. HOLE DIAMETER: 2 inches TYPE OF SAMPLE/ CORING DEVICE: Split Spoon

LENGTH & DIAMETER OF CORING DEVICE: 2' x 2" SAMPLING INTERVAL: 2 ft.

LAND-SURFACE ELEVATION: ( ) SURVEYED ( ) ESTIMATED DATUM:

DRILLING FLUID USED: None DRILLING METHOD: Sledge Hammer

DRILLING CONTRACTOR: Soil&Material Tsting DRILLER: Gilley HELPER: Joe

PREPARED BY: A. LaBarge HAMMER WEIGHT: 12 HAMMER DROP: inches

SAMPLE DEPTH (FT BELOW LAND SURFACE)		CORE RECVRY (FT)	BLOW COUNTS PER 6 INCHES	SAMPLE/CORE DESCRIPTION
FROM	TO			
0	2	1.4	18-10-	Sand, 90%, medium-coarse grained, reddish-brown;
			12-15	Gravel, 10% small.
2	4	1.3	11-10-	Same.
			10-12	

GERAGHTY & MILLER, INC.

SAMPLE/CORE LOG

BORING/WELL: L-2 PROJECT NO: NY05505 PAGE: 1 of 1

SITE LOCATION: GE Pittsfield/Altresco DRILLING STARTED: 4/12/90 DRILLING COMPLETED: 4/12/90

TOTAL DEPTH DRILLED: 4 ft. HOLE DIAMETER: 2 inches TYPE OF SAMPLE/ CORING DEVICE: Split Spoon

LENGTH & DIAMETER OF CORING DEVICE: 2' x 2" SAMPLING INTERVAL: 2 ft.

LAND-SURFACE ELEVATION: ( ) SURVEYED ( ) ESTIMATED DATUM:

DRILLING FLUID USED: None DRILLING METHOD: Sledge Hammer

DRILLING CONTRACTOR: Soil&Material Tsting DRILLER: Gilley HELPER: Joe

PREPARED BY: A. LaBarge HAMMER WEIGHT: 12 HAMMER DROP: inches

SAMPLE DEPTH (FT BELOW LAND SURFACE) FROM	TO	CORE RECVRY (FT)	BLOW COUNTS PER 6 INCHES	SAMPLE/CORE DESCRIPTION
0	2	0.4	7-7-6-7	Sand, 80%, brown, medium-coarse grain; Gravel,
				10% small.
2	4	0.4	3-3-4-3	Same.

GERAGHTY & MILLER, INC.

SAMPLE/CORE LOG

BORING/WELL: L-3 PROJECT NO: NY05505 PAGE: 1 of 1

SITE LOCATION: GE Pittsfield/Altresco DRILLING STARTED: 4/12/90 DRILLING COMPLETED: 4/12/90

TOTAL DEPTH DRILLED: 4 ft. HOLE DIAMETER: 2 inches TYPE OF SAMPLE/ CORING DEVICE: Split Spoon

LENGTH & DIAMETER OF CORING DEVICE: 2' x 2" SAMPLING INTERVAL: 2 ft.

LAND-SURFACE ELEVATION: ( ) SURVEYED ( ) ESTIMATED DATUM:

DRILLING FLUID USED: None DRILLING METHOD: Sledge Hammer

DRILLING CONTRACTOR: Soil&Material Tsting DRILLER: Gilley HELPER: Joe

PREPARED BY: A. LaBarge HAMMER WEIGHT: 12 HAMMER DROP: inches

SAMPLE DEPTH (FT BELOW LAND SURFACE) FROM	TO	CORE RECVRY (FT)	BLOW COUNTS PER 6 INCHES	SAMPLE/CORE DESCRIPTION
0	2	1.0	4-5-5-5	Sand, 90%, medium-coarse grain, reddish-brown;
				Gravel, 10% small.
2	4	0.5	3-4-5-5	Same.

GERAGHTY & MILLER, INC.

SAMPLE/CORE LOG

BORING/WELL: L-4 PROJECT NO: NY05505 PAGE: 1 of 1

SITE LOCATION: GE Pittsfield/Altresco DRILLING STARTED: 4/12/90 DRILLING COMPLETED: 4/12/90

TOTAL DEPTH DRILLED: 4 ft. HOLE DIAMETER: 2 inches TYPE OF SAMPLE/ CORING DEVICE: Split Spoon

LENGTH & DIAMETER OF CORING DEVICE: 2' x 2" SAMPLING INTERVAL: 2 ft.

LAND-SURFACE ELEVATION: ( ) SURVEYED ( ) ESTIMATED DATUM:

DRILLING FLUID USED: None DRILLING METHOD: Sledge Hammer

DRILLING CONTRACTOR: Soil&Material Tsting DRILLER: Gilley HELPER: Joe

PREPARED BY: A. LaBarge HAMMER WEIGHT: 12 HAMMER DROP: inches

SAMPLE DEPTH (FT BELOW LAND SURFACE) FROM	TO	CORE RECVRY (FT)	BLOW COUNTS PER 6 INCHES	SAMPLE/CORE DESCRIPTION
0	2	1.2	8-8-7-6	Sand, 90%, medium-coarse grain, reddish-brown;
				Gravel, 10% small.
2	4	0.7	6-5-5-4	Same.

GERAGHTY & MILLER, INC.

SAMPLE/CORE LOG

BORING/WELL: L-5 PROJECT NO: NY05505 PAGE: 1 of 1

SITE LOCATION: GE Pittsfield/Altresco DRILLING STARTED: 4/12/90 DRILLING COMPLETED: 4/12/90

TOTAL DEPTH DRILLED: 4 ft. HOLE DIAMETER: 2 inches TYPE OF SAMPLE/ CORING DEVICE: Split Spoon

LENGTH & DIAMETER OF CORING DEVICE: 2' x 2" SAMPLING INTERVAL: 2 ft.

LAND-SURFACE ELEVATION: ( ) SURVEYED ( ) ESTIMATED DATUM:

DRILLING FLUID USED: None DRILLING METHOD: Sledge Hammer

DRILLING CONTRACTOR: Soil&Material Tsting DRILLER: Gilley HELPER: Joe

PREPARED BY: A. LaBarge HAMMER WEIGHT: 12 HAMMER DROP: inches

SAMPLE DEPTH (FT BELOW LAND SURFACE) FROM	TO	CORE RECVRY (FT)	BLOW COUNTS PER 6 INCHES	SAMPLE/CORE DESCRIPTION
0	2	0.7	9-9-8-9	Sand, 60%, fine-medium grain, brown; silt, 40%
				fine grain, brown.
2	4	1.1	8-5-7-7	Same.

GERAGHTY & MILLER, INC.

SAMPLE/CORE LOG

BORING/WELL: L-6 PROJECT NO: NY05505 PAGE: 1 of 1

SITE LOCATION: GE Pittsfield/Altresco DRILLING STARTED: 4/12/90 DRILLING COMPLETED: 4/12/90

TOTAL DEPTH DRILLED: 4 ft. HOLE DIAMETER: 2 in. TYPE OF SAMPLE/ CORING DEVICE: Split spoon

LENGTH & DIAMETER OF CORING DEVICE: 2' x 2" SAMPLING INTERVAL: 2 ft.

LAND-SURFACE ELEVATION: ( ) SURVEYED ( ) ESTIMATED DATUM:

DRILLING FLUID USED: None DRILLING METHOD: Sledge Hammer

DRILLING CONTRACTOR: Soil&Material Testing DRILLER: Gilley HELPER: Joe

PREPARED BY: A. LaBarge HAMMER WEIGHT: 12 HAMMER DROP: inches

SAMPLE DEPTH (FT BELOW LAND SURFACE) FROM	TO	CORE RECVRY (FT)	BLOW COUNTS PER 6 INCHES	SAMPLE/CORE DESCRIPTION
0	2	0.6	9-8-7-8	Sand, 80%, medium coarse grain, brown; silt, 20%, fine-
				medium grain, brown.
2	4	1.2	10-10-	Sand 80%, medium coarse grain, reddish-brown, silt, 20%
			11-10	fine-medium grain, brown.

GERAGHTY & MILLER, INC.

SAMPLE/CORE LOG

BORING/WELL: L-7 PROJECT NO: NY05505 PAGE: 1 of 1

SITE LOCATION: GE Pittsfield/Altresco DRILLING STARTED: 4/12/90 DRILLING COMPLETED: 4/12/90

TOTAL DEPTH DRILLED: 4 ft. HOLE DIAMETER: 2 inches TYPE OF SAMPLE/ CORING DEVICE: Split Spoon

LENGTH & DIAMETER OF CORING DEVICE: 2' x 2" SAMPLING INTERVAL: 2 ft.

LAND-SURFACE ELEVATION: ( ) SURVEYED ( ) ESTIMATED DATUM:

DRILLING FLUID USED: None DRILLING METHOD: Sledge Hammer

DRILLING CONTRACTOR: Soil&Material Tsting DRILLER: Gilley HELPER: Joe

PREPARED BY: A. LaBarge HAMMER WEIGHT: 12 HAMMER DROP: inches

SAMPLE DEPTH (FT BELOW LAND SURFACE) FROM	TO	CORE RECVRY (FT)	BLOW COUNTS PER 6 INCHES	SAMPLE/CORE DESCRIPTION
0	2	1.4	8-10-9-9	Sand, 80%, medium-coarse grain, brown; silt, 20%,
				fine-medium grain, brown.
2	4	1.5	8-10-	Same.
			10-9	

GERAGHTY & MILLER, INC.

SAMPLE/CORE LOG

BORING/WELL: L-8 PROJECT NO: NY05505 PAGE: 1 of 1

SITE LOCATION: GE Pittsfield/Altresco DRILLING STARTED: 4/12/90 DRILLING COMPLETED: 4/12/90

TOTAL DEPTH DRILLED: 6 ft. HOLE DIAMETER: 2 inches TYPE OF SAMPLE/ CORING DEVICE: Split Spoon

LENGTH & DIAMETER OF CORING DEVICE: 2' x 2" SAMPLING INTERVAL: 2 ft.

LAND-SURFACE ELEVATION: ( ) SURVEYED ( ) ESTIMATED DATUM:

DRILLING FLUID USED: None DRILLING METHOD: HSA

DRILLING CONTRACTOR: Soil&Material Tsting DRILLER: Gilley HELPER: Joe

PREPARED BY: A. LaBarge HAMMER WEIGHT: 140 HAMMER DROP: 30 inches

SAMPLE DEPTH (FT BELOW LAND SURFACE)		CORE RECVRY (FT)	BLOW COUNTS PER 6 INCHES	SAMPLE/CORE DESCRIPTION
FROM	TO			
0	2	0.8	2-3-5-7	Sand, 70%, medium-coarse grain, brown; silt, 20%,
				medium-grain, brown.
2	4	0.9	6-6-12-6	Sand, 50%, medium-coarse grain, brown; black organic
				material 30%, appears as finely crushed coal; white
				sandstone chunks, 20%.
4	6	1.3	2-4-3-3	Sand, 80% fine-medium grain, brown; silt, 20%,
				fine-medium grain, brown.

GERAGHTY & MILLER, INC.

SAMPLE/CORE LOG

BORING/WELL: L-9 PROJECT NO: NY05505 PAGE: 1 of 1

SITE LOCATION: GE Pittsfield/Altresco DRILLING STARTED: 4/12/90 DRILLING COMPLETED: 4/12/90

TOTAL DEPTH DRILLED: 4 ft. HOLE DIAMETER: 2 inches TYPE OF SAMPLE/ CORING DEVICE: Split Spoon

LENGTH & DIAMETER OF CORING DEVICE: 2' x 2" SAMPLING INTERVAL: 2 ft.

LAND-SURFACE ELEVATION: ( ) SURVEYED ( ) ESTIMATED DATUM:

DRILLING FLUID USED: None DRILLING METHOD: Sledge Hammer

DRILLING CONTRACTOR: Soil&Material Tsting DRILLER: Gilley HELPER: Joe

PREPARED BY: A. LaBarge HAMMER WEIGHT: 12 HAMMER DROP: inches

SAMPLE DEPTH (FT BELOW LAND SURFACE)		CORE RECVRY (FT)	BLOW COUNTS PER 6 INCHES	SAMPLE/CORE DESCRIPTION
FROM	TO			
0	2	0.5	7-7-8-7	Sand, 80%, medium-coarse grain, brown; silt, 20%,
				fine-medium grain, brown.
2	4	0.7	9-9-7-8	Same.

GERAGHTY & MILLER, INC.

SAMPLE/CORE LOG

BORING/WELL: L-10 PROJECT NO: NY05505 PAGE: 1 of 1

SITE LOCATION: GE Pittsfield/Altresco DRILLING STARTED: 4/13/90 DRILLING COMPLETED: 4/13/90

TOTAL DEPTH DRILLED: 4 ft. HOLE DIAMETER: 2 inches TYPE OF SAMPLE/ CORING DEVICE: Split Spoon

LENGTH & DIAMETER OF CORING DEVICE: 2' x 2" SAMPLING INTERVAL: 2 ft.

LAND-SURFACE ELEVATION: ( ) SURVEYED ( ) ESTIMATED DATUM:

DRILLING FLUID USED: None DRILLING METHOD: Sledge Hammer

DRILLING CONTRACTOR: Soil&Material Tsting DRILLER: Gilley HELPER: Joe

PREPARED BY: A. LaBarge HAMMER WEIGHT: 12 HAMMER DROP: inches

SAMPLE DEPTH (FT BELOW LAND SURFACE)		CORE RECVRY (FT)	BLOW COUNTS PER 6 INCHES	SAMPLE/CORE DESCRIPTION
FROM	TO			
0	2	1.2	6-7-6-6	Silt, 70%, very-fine grain, gray-brown; sand, 20%,
				fine-medium grain, red-brown; gravel, 10%, very small.
2	4	1.5	5-6-7-7	Same.

GERAGHTY & MILLER, INC.

SAMPLE/CORE LOG

BORING/WELL: L-11 PROJECT NO: NY05505 PAGE: 1 of 1

SITE LOCATION: GE Pittsfield/Altresco DRILLING STARTED: 4/13/90 DRILLING COMPLETED: 4/13/90

TOTAL DEPTH DRILLED: 4 ft. HOLE DIAMETER: 2 inches TYPE OF SAMPLE/ CORING DEVICE: Split Spoon

LENGTH & DIAMETER OF CORING DEVICE: 2' x 2" SAMPLING INTERVAL: 2 ft.

LAND-SURFACE ELEVATION: ( ) SURVEYED ( ) ESTIMATED DATUM:

DRILLING FLUID USED: None DRILLING METHOD: Sledge Hammer

DRILLING CONTRACTOR: Soil&Material Tsting DRILLER: Gilley HELPER: Joe

PREPARED BY: A. LaBarge HAMMER WEIGHT: 12 HAMMER DROP: inches

SAMPLE DEPTH (FT BELOW LAND SURFACE)		CORE RECVRY (FT)	BLOW COUNTS PER 6 INCHES	SAMPLE/CORE DESCRIPTION
FROM	TO			
0	2	0.4	4-6-9-9	Sand, 60%, medium-coarse grain, brown; silt, 20%,
				medium grain, brown; gravel, 20%, medium.
2	4			NO RECOVERY. HIT SANDSTONE AT 2 FEET.

GERAGHTY & MILLER, INC.

SAMPLE/CORE LOG

BORING/WELL: L-12 PROJECT NO: NY05505 PAGE: 1 of 1

SITE LOCATION: GE Pittsfield/Altresco DRILLING STARTED: 4/13/90 DRILLING COMPLETED: 4/13/90

TOTAL DEPTH DRILLED: 4 ft. HOLE DIAMETER: 2 in. TYPE OF SAMPLE/ CORING DEVICE: Split Spoon

LENGTH & DIAMETER OF CORING DEVICE: 2' x 2" SAMPLING INTERVAL: 2 ft.

LAND-SURFACE ELEVATION: ( ) SURVEYED ( ) ESTIMATED DATUM:

DRILLING FLUID USED: None DRILLING METHOD: Sledge Hammer

DRILLING CONTRACTOR: Soil&Material Tsting DRILLER: Gilley HELPER: Joe

PREPARED BY: A. LaBarge HAMMER WEIGHT: 12 HAMMER DROP: inches

SAMPLE DEPTH (FT BELOW LAND SURFACE) FROM	TO	CORE RECVRY (FT)	BLOW COUNTS PER 6 INCHES	SAMPLE/CORE DESCRIPTION
0	2	1.35	7-7-8-8	Sand, 70%, medium-coarse grain, brown; silt, 20%, fine
				grain, brown; gravel, 10%, medium size.
2	4	1.1	6-7-7-7	Same.

GERAGHTY & MILLER, INC.

SAMPLE/CORE LOG

BORING/WELL: L-13 PROJECT NO: NY05505 PAGE: 1 of 1

SITE LOCATION: GE Pittsfield/Altresco DRILLING STARTED: 4/13/90 DRILLING COMPLETED: 4/13/90

TOTAL DEPTH DRILLED: 4 ft. HOLE DIAMETER: 2 in. TYPE OF SAMPLE/ CORING DEVICE: Split Spoon

LENGTH & DIAMETER OF CORING DEVICE: 2' x 2" SAMPLING INTERVAL: 2 ft.

LAND-SURFACE ELEVATION: ( ) SURVEYED ( ) ESTIMATED DATUM:

DRILLING FLUID USED: None DRILLING METHOD: Sledge Hammer

DRILLING CONTRACTOR: Soil&Material Tsting DRILLER: Gilley HELPER: Joe

PREPARED BY: A. LaBarge HAMMER WEIGHT: 12 HAMMER DROP: inches

SAMPLE DEPTH (FT BELOW LAND SURFACE)		CORE RECVRY (FT)	BLOW COUNTS PER 6 INCHES	SAMPLE/CORE DESCRIPTION
FROM	TO			
0	2	0.55	8-6-6-7	Sand, 80%, fine-medium grain, brown; gravel, 10%, small;
.				silt, 10%, fine-grain, black.
2	4			No recovery, hit sandstone at 2 feet.

GERAGHTY & MILLER, INC.

SAMPLE/CORE LOG

BORING/WELL: L-14 PROJECT NO: NY05505 PAGE: 1 of 1

SITE LOCATION: GE Pittsfield/Altresco DRILLING STARTED: 4/13/90 DRILLING COMPLETED: 4/13/90

TOTAL DEPTH DRILLED: 4 ft. HOLE DIAMETER: 2 in. TYPE OF SAMPLE/ CORING DEVICE: Split Spoon

LENGTH & DIAMETER OF CORING DEVICE: 2' x 2" SAMPLING INTERVAL: 2 ft.

LAND-SURFACE ELEVATION: ( ) SURVEYED ( ) ESTIMATED DATUM:

DRILLING FLUID USED: None DRILLING METHOD: Sledge Hammer

DRILLING CONTRACTOR: Soil&Material Tsting DRILLER: Gilley HELPER: Joe

PREPARED BY: A. LaBarge HAMMER WEIGHT: 12 HAMMER DROP: inches

SAMPLE DEPTH (FT BELOW LAND SURFACE)		CORE RECVRY (FT)	BLOW COUNTS PER 6 INCHES	SAMPLE/CORE DESCRIPTION
FROM	TO			
0	2	1.1	6-7-7-8	Sand, 70%, medium grain, red; silt, 30%, fine-medium
				grain, black.
2	4	1.6	5-5-4-5	Sand, 90%, medium-coarse grain, reddish-gold; silt, 10%,
				medium grain, red-brown.

GERAGHTY & MILLER, INC.

SAMPLE/CORE LOG

BORING/WELL: L-15 PROJECT NO: NY05505 PAGE: 1 of 1

SITE LOCATION: GE Pittsfield/Altresco DRILLING STARTED: 4/13/90 DRILLING COMPLETED: 4/13/90

TOTAL DEPTH DRILLED: 4 ft. HOLE DIAMETER: 2 in. TYPE OF SAMPLE/ CORING DEVICE: Split Spoon

LENGTH & DIAMETER OF CORING DEVICE: 2' x 2" SAMPLING INTERVAL: 2 ft.

LAND-SURFACE ELEVATION: ( ) SURVEYED ( ) ESTIMATED DATUM:

DRILLING FLUID USED: None DRILLING METHOD: Sledge Hammer

DRILLING CONTRACTOR: Soil&Material Tsting DRILLER: Gilley HELPER: Joe

PREPARED BY: A. LaBarge HAMMER WEIGHT: 12 HAMMER DROP: inches

SAMPLE DEPTH (FT BELOW LAND SURFACE)		CORE RECVRY (FT)	BLOW COUNTS PER 6 INCHES	SAMPLE/CORE DESCRIPTION
FROM	TO			
0	2	1.2	5-5-7-6	Sand, 80%, fine-medium grain, red-brown; silt, 20%,
				medium grain, black and brown.
2	4	1.3	7-7-6-5	Same.

GERAGHTY & MILLER, INC.

SAMPLE/CORE LOG

BORING/WELL: L-16 PROJECT NO: NY05505 PAGE: 1 of 1

SITE LOCATION: GE Pittsfield/Altresco DRILLING STARTED: 4/13/90 DRILLING COMPLETED: 4/13/90

TOTAL DEPTH DRILLED: 4 ft. HOLE DIAMETER: 2 in. TYPE OF SAMPLE/ CORING DEVICE: Split Spoon

LENGTH & DIAMETER OF CORING DEVICE: 2' x 2" SAMPLING INTERVAL: 2 ft.

LAND-SURFACE ELEVATION: ( ) SURVEYED ( ) ESTIMATED DATUM:

DRILLING FLUID USED: None DRILLING METHOD: Sledge Hammer

DRILLING CONTRACTOR: Soil&Material Tsting DRILLER: Gilley HELPER: Joe

PREPARED BY: A. LaBarge HAMMER WEIGHT: 12 HAMMER DROP: inches

SAMPLE DEPTH (FT BELOW LAND SURFACE) FROM	TO	CORE RECVRY (FT)	BLOW COUNTS PER 6 INCHES	SAMPLE/CORE DESCRIPTION
0	2	1.0	5-6-5-5	Sand, 60%, fine-medium grain, reddish-brown; silt, 20%,
				medium grain, black and brown;gravel, 20%, small-mecium.
2	4	0.2	6-7-9-9	Poor recovery. White sandstone chunks, 90%; sand 10%,
				medium grain, reddish-brown.

GERAGHTY & MILLER, INC.

SAMPLE/CORE LOG

BORING/WELL: L-17 PROJECT NO: NY05505 PAGE: 1 of 1

SITE LOCATION: GE Pittsfield/Altresco DRILLING STARTED: 4/13/90 DRILLING COMPLETED: 4/13/90

TOTAL DEPTH DRILLED: 6 ft. HOLE DIAMETER: 2 in. TYPE OF SAMPLE/ CORING DEVICE: Split Spoon

LENGTH & DIAMETER OF CORING DEVICE: 2' x 2" SAMPLING INTERVAL: 2 ft.

LAND-SURFACE ELEVATION: ( ) SURVEYED ( ) ESTIMATED DATUM:

DRILLING FLUID USED: None DRILLING METHOD: HSA

DRILLING CONTRACTOR: Soil&Material Tsting DRILLER: Gilley HELPER: Joe

PREPARED BY: A. LaBarge HAMMER WEIGHT: 140 HAMMER DROP: 30 inches

SAMPLE DEPTH (FT BELOW LAND SURFACE) FROM	TO	CORE RECVRY (FT)	BLOW COUNTS PER 6 INCHES	SAMPLE/CORE DESCRIPTION
0	2	1.0	5-4-4-3	Sand, 70%, medium-coarse grain, reddish brown; silt, 20%
				very fine grain, black; gravel, 10%, small.
2	4	0.9	4-4-4-5	Sand, 80%, medium-coarse grain, reddish-brown; gravel,
				20%, small-medium.
4	6	0.3	4-3-2-4	Sand, 70%, very coarse, brown-gold; gravel, 30%,
				small-medium size.

GERAGHTY & MILLER, INC.

SAMPLE/CORE LOG

BORING/WELL: L-18 PROJECT NO: NY05505 PAGE: 1 of 1

SITE LOCATION: GE Pittsfield/Altresco DRILLING STARTED: 4/13/90 DRILLING COMPLETED: 4/13/90

TOTAL DEPTH DRILLED: 4 ft. HOLE DIAMETER: 2 in. TYPE OF SAMPLE/ CORING DEVICE: Split Spoon

LENGTH & DIAMETER OF CORING DEVICE: 2' x 2" SAMPLING INTERVAL: 2 ft.

LAND-SURFACE ELEVATION: ( ) SURVEYED ( ) ESTIMATED DATUM:

DRILLING FLUID USED: None DRILLING METHOD: Sledge Hammer

DRILLING CONTRACTOR: Soil&Material Tsting DRILLER: Gilley HELPER: Joe

PREPARED BY: A. LaBarge HAMMER WEIGHT: 12 HAMMER DROP: inches

SAMPLE DEPTH (FT BELOW LAND SURFACE) FROM	TO	CORE RECVRY (FT)	BLOW COUNTS PER 6 INCHES	SAMPLE/CORE DESCRIPTION
0	2	1.5	6-5-5-5	Sand, 80%, medium grain, reddish brown; silt, 10% fine-
				medium grain, black and brown; gravel, 10%, small size.
2	4	1.6	5-5-5-5	Sand, 60%, medium grain, reddish-brown; silt, 40%, very
				fine grain, gray-brown.

GERAGHTY & MILLER, INC.

SAMPLE/CORE LOG

BORING/WELL: L-19 PROJECT NO: NY05505 PAGE: 1 of 1

SITE LOCATION: GE Pittsfield/Altresco DRILLING STARTED: 4/13/90 DRILLING COMPLETED: 4/13/90

TOTAL DEPTH DRILLED: 6 ft. HOLE DIAMETER: 2 in. TYPE OF SAMPLE/ CORING DEVICE: Split Spoon

LENGTH & DIAMETER OF CORING DEVICE: 2' x 2" SAMPLING INTERVAL: 2 ft.

LAND-SURFACE ELEVATION: ( ) SURVEYED ( ) ESTIMATED DATUM:

DRILLING FLUID USED: None DRILLING METHOD: HSA

DRILLING CONTRACTOR: Soil&Material Tsting DRILLER: Gilley HELPER: Joe

PREPARED BY: A. LaBarge HAMMER WEIGHT: 140 HAMMER DROP: 30 inches

SAMPLE DEPTH (FT BELOW LAND SURFACE) FROM	TO	CORE RECVRY (FT)	BLOW COUNTS PER 6 INCHES	SAMPLE/CORE DESCRIPTION
0	2	0.7	3-6-6-7	Sand, 50%, medium-coarse grain, brown; gravel, 50%,
				medium-large size.
2	4	0.6	7-4-2-2	Sand, 50%, fine-medium grain, brown; gravel, 40%, medium
				size; silt, 10% fine grain, brown.
4	6	1.1	2-2-2-2	Sand, 50%, fine-medium grain, brown; silt, 40%, fine
				grain, brown; gravel, 10% medium size.

GERAGHTY & MILLER, INC.

SAMPLE/CORE LOG

BORING/WELL: L-20 PROJECT NO: NY05505 PAGE: 1 of 1

SITE LOCATION: GE Pittsfield/Altresco DRILLING STARTED: 4/12/90 DRILLING COMPLETED: 4/12/90

TOTAL DEPTH DRILLED: 4 ft. HOLE DIAMETER: 2 in. TYPE OF SAMPLE/CORING DEVICE: Split Spoon

LENGTH & DIAMETER OF CORING DEVICE: 2' x 2" SAMPLING INTERVAL: 2 ft.

LAND-SURFACE ELEVATION: ( ) SURVEYED ( ) ESTIMATED DATUM:

DRILLING FLUID USED: None DRILLING METHOD: Sledge Hammer

DRILLING CONTRACTOR: Soil&Material Tsting DRILLER: Gilley HELPER: Joe

PREPARED BY: A. LaBarge HAMMER WEIGHT: 12 HAMMER DROP: inches

SAMPLE DEPTH (FT BELOW LAND SURFACE) FROM	TO	CORE RECVRY (FT)	BLOW COUNTS PER 6 INCHES	SAMPLE/CORE DESCRIPTION
0	2	0.9	4-4-6-4	Sand, 70%, fine-medium grain, reddish-brown; silt, 30%,
				fine grain, brown.
2	4	0.8	4-5-5-5	Same.

GERAGHTY & MILLER, INC.

SAMPLE/CORE LOG

BORING/WELL: L-21 PROJECT NO: NY05505 PAGE: 1 of 1

SITE LOCATION: GE Pittsfield/Altresco DRILLING STARTED: 4/12/90 DRILLING COMPLETED: 4/12/90

TOTAL DEPTH DRILLED: 3 ft. HOLE DIAMETER: 2 in. TYPE OF SAMPLE/ CORING DEVICE: Split Spoon

LENGTH & DIAMETER OF CORING DEVICE: 2' x 2" SAMPLING INTERVAL: 2 ft.

LAND-SURFACE ELEVATION: ( ) SURVEYED ( ) ESTIMATED DATUM:

DRILLING FLUID USED: None DRILLING METHOD: Sledge Hammer

DRILLING CONTRACTOR: Soil&Material Tsting DRILLER: Gilley HELPER: Joe

PREPARED BY: A. LaBarge HAMMER WEIGHT: 12 HAMMER DROP: inches

SAMPLE DEPTH (FT BELOW LAND SURFACE)		CORE RECVRY (FT)	BLOW COUNTS PER 6 INCHES	SAMPLE/CORE DESCRIPTION
FROM	TO			
0	2	1.2	4-3-3-5	Sand, 70%, fine-medium grain, reddish-brown; silt, 30%,
				fine grain, brown.
2	3	0.3	7-9	Same. Hit sandstone at 3 feet.

GERAGHTY & MILLER, INC.

SAMPLE/CORE LOG

BORING/WELL: L-22 PROJECT NO: MY05505 PAGE: 1 of 1

SITE LOCATION: GE Pittsfield/Altresco DRILLING STARTED: 4/12/90 DRILLING COMPLETED: 4/12/90

TOTAL DEPTH DRILLED: 4 ft. HOLE DIAMETER: 2 in. TYPE OF SAMPLE/ CORING DEVICE: Split spoon

LENGTH & DIAMETER OF CORING DEVICE: 2' x 2" SAMPLING INTERVAL: 2 ft.

LAND-SURFACE ELEVATION: ( ) SURVEYED (') ESTIMATED DATUM:

DRILLING FLUID USED: None DRILLING METHOD: Sledge Hammer

DRILLING CONTRACTOR: Soil&Material Tsting DRILLER: Gilley HELPER: Joe

PREPARED BY: A. LaBarge HAMMER WEIGHT: 12 HAMMER DROP: inches

SAMPLE DEPTH (FT BELOW LAND SURFACE) FROM	TO	CORE RECVRY (FT)	BLOW COUNTS PER 6 INCHES	SAMPLE/CORE DESCRIPTION
0	2	1.4	4-5-3-5	Sand, 70%, very fine grain, reddish-brown; silt, 30%,
				fine grain, brown.
2	4	1.2	3-3-4-4	Same.

GERAGHTY & MILLER, INC.

SAMPLE/CORE LOG

BORING/WELL: L-23 PROJECT NO: NY05505 PAGE: 1 of 1

SITE LOCATION: GE Pittsfield/Altresco DRILLING STARTED: 4/12/90 DRILLING COMPLETED: 4/12/90

TOTAL DEPTH DRILLED: 4 ft. HOLE DIAMETER: 2 in. TYPE OF SAMPLE/ CORING DEVICE: Split spoon

LENGTH & DIAMETER OF CORING DEVICE: 2' x 2" SAMPLING INTERVAL: 2 ft.

LAND-SURFACE ELEVATION: ( ) SURVEYED ( ) ESTIMATED DATUM:

DRILLING FLUID USED: None DRILLING METHOD: Sledge Hammer

DRILLING CONTRACTOR: Soil&Material Testing DRILLER: Gilley HELPER: Joe

PREPARED BY: A. LaBarge HAMMER WEIGHT: 12 HAMMER DROP: inches

SAMPLE DEPTH (FT BELOW LAND SURFACE)		CORE RECVRY (FT)	BLOW COUNTS PER 6 INCHES	SAMPLE/CORE DESCRIPTION
FROM	TO			
0	2	1.6	4-3-3-5	Sand, 90%, very fine grain, red; silt, 10%, fine grain,
				brown.
2	4	1.7	5-5-6-5	Sand 90%, fine grain, brown; silt, 10%, fine grain,
				brown.

GERAGHTY & MILLER, INC.

SAMPLE/CORE LOG

BORING/WELL: L-24 PROJECT NO: NY05505 PAGE: 1 of 1

SITE LOCATION: GE Pittsfield/Altresco DRILLING STARTED: 4/12/90 DRILLING COMPLETED: 4/12/90

TOTAL DEPTH DRILLED: 4 ft. HOLE DIAMETER: 2 in. TYPE OF SAMPLE/ CORING DEVICE: Split spoon

LENGTH & DIAMETER OF CORING DEVICE: 2' x 2" SAMPLING INTERVAL: 2 ft.

LAND-SURFACE ELEVATION: ( ) SURVEYED ( ) ESTIMATED DATUM:

DRILLING FLUID USED: None DRILLING METHOD: Sledge Hammer

DRILLING CONTRACTOR: Soil&Material Testing DRILLER: Gilley HELPER: Joe

PREPARED BY: A. LaBarge HAMMER WEIGHT: 12 HAMMER DROP: inches

SAMPLE DEPTH (FT BELOW LAND SURFACE)		CORE RECVRY (FT)	BLOW COUNTS PER 6 INCHES	SAMPLE/CORE DESCRIPTION
FROM	TO			
0	2	0.9	7-7-6-7	Sand, 90%, very fine grain, brown; silt, 10%, fine grain
				red-brown.
2	4	1.2	5-5-6-6	Sand 50%, fine-medium grain, brown; sand, 50%, medium-
				coarse grain, white.

ALTRESCO SANITARY SEWER LINE

GERAGHTY & MILLER, INC.

SAMPLE/CORE LOG

BORING/WELL: A-1 PROJECT NO: HY05505 PAGE: 1 of 1

SITE LOCATION: GE Pittsfield/Altresco DRILLING STARTED: 5/17/90 DRILLING COMPLETED: 5/17/90

TOTAL DEPTH DRILLED: 6 ft HOLE DIAMETER: 2 inches TYPE OF SAMPLE/ CORING DEVICE: Split Spoon

LENGTH & DIAMETER OF CORING DEVICE: 2' x 2" SAMPLING INTERVAL: 2 ft

LAND-SURFACE ELEVATION: ( ) SURVEYED ( ) ESTIMATED DATUM:

DRILLING FLUID USED: None DRILLING METHOD: HSA

DRILLING CONTRACTOR: Soil&Material Tsting DRILLER: Tom HELPER: Ron

PREPARED BY: A. LaBarge HAMMER WEIGHT: 140 HAMMER DROP: 30 inches

SAMPLE DEPTH (FT BELOW LAND SURFACE) FROM	TO	CORE RECVRY (FT)	BLOW COUNTS PER 6 INCHES	SAMPLE/CORE DESCRIPTION
0	2	0.7	5-5-7-3	Sand, 70%, red-brown, medium grain; Silt, 30%, top humus layer, dark brown, fine.
2	4	0.8	2-4-7-4	Sand, 80%, red, medium grain; Silt, 10%, fine, brown; Gravel, 10%, small.
4	6	1.1	4-3-5-2	Sand, 90%, red, medium grain; Silt, 5%, fine, brown; Gravel, 5%, small.

GERAGHTY & MILLER, INC.

SAMPLE/CORE LOG

BORING/WELL: A-2 PROJECT NO: NY05505 PAGE: 1 of 1

SITE LOCATION: GE Pittsfield/Altresco DRILLING STARTED: 5/17/90 DRILLING COMPLETED: 5/17/90

TOTAL DEPTH DRILLED: 6 ft HOLE DIAMETER: 2 inches TYPE OF SAMPLE/ CORING DEVICE: Split Spoon

LENGTH & DIAMETER OF CORING DEVICE: 2' x 2" SAMPLING INTERVAL: 2 ft

LAND-SURFACE ELEVATION: ( ) SURVEYED ( ) ESTIMATED DATUM:

DRILLING FLUID USED: None DRILLING METHOD: HSA

DRILLING CONTRACTOR: Soil&Material Tsting DRILLER: Tom HELPER: Ron

PREPARED BY: A. LaBarge HAMMER WEIGHT: 140 HAMMER DROP: 30 inches

SAMPLE DEPTH (FT BELOW LAND SURFACE) FROM	TO	CORE RECVRY (FT)	BLOW COUNTS PER 6 INCHES	SAMPLE/CORE DESCRIPTION
0	2	1.0	5-5-4-4	Sand, 70%, red-brown, medium grain; Silt, 30%, top humus
				layer, dark brown, fine.
2	4	0.9	4-3-7-7	Sand, 80%, red, medium grain; Silt, 10%, fine, brown;
				Gravel, 10%, small.
4	6	0.7	4-4-3-2	Sand, 90%, red, medium grain; Silt, 5%, fine, brown;
				Gravel, 5%, small.

DERAGHTY & MILLER, INC.

SAMPLE/CORE LOG

BORING/WELL: A-3 PROJECT NO: NY05505 PAGE: 1 of 1

SITE LOCATION: GE Pittsfield/Altresco DRILLING STARTED: 5/17/90 DRILLING COMPLETED: 5/17/90

TOTAL DEPTH DRILLED: 6 ft HOLE DIAMETER: 2 inches TYPE OF SAMPLE/ CORING DEVICE: Split Spoon

LENGTH & DIAMETER OF CORING DEVICE: 2' x 2" SAMPLING INTERVAL: 2 ft

LAND-SURFACE ELEVATION: ( ) SURVEYED ( ) ESTIMATED DATUM:

DRILLING FLUID USED: None DRILLING METHOD: HSA

DRILLING CONTRACTOR: Soil&Material Tsting DRILLER: Tom HELPER: Ron

PREPARED BY: A. LaBarge HAMMER WEIGHT: 140 HAMMER DROP: 30 inches

SAMPLE DEPTH (FT BELOW LAND SURFACE) FROM	TO	CORE RECVRY (FT)	BLOW COUNTS PER 6 INCHES	SAMPLE/CORE DESCRIPTION
0	2	0.5	4-5-5-5	Sand, 70%, red-brown, medium grain; Silt, 30%, top humus
				layer, dark brown, fine.
2	4	1.2	5-6-4-4	Sand, 80%, red, medium grain; Silt, 10%, fine, brown;
				Gravel, 10%, small.
4	6	0.9	2-3-3-4	Sand, 90%, red, medium grain; Silt, 5%, fine, brown;
				Gravel, 5%, small.

DERAGHTY & MILLER, INC.

SAMPLE/CORE LOG

BORING/WELL: A-4 PROJECT NO: NY05505 PAGE: 1 of 1

SITE LOCATION: GE Pittsfield/Altresco DRILLING STARTED: 5/17/90 DRILLING COMPLETED: 5/17/90

TOTAL DEPTH DRILLED: 4 ft HOLE DIAMETER: 2 inches TYPE OF SAMPLE/ CORING DEVICE: Split Spoon

LENGTH & DIAMETER OF CORING DEVICE: 2' x 2" SAMPLING INTERVAL: 2 ft

LAND-SURFACE ELEVATION: ( ) SURVEYED ( ) ESTIMATED DATUM:

DRILLING FLUID USED: None DRILLING METHOD: Sledge Hammer

DRILLING CONTRACTOR: Soil&Material Tsting DRILLER: Tom HELPER: Ron

PREPARED BY: A. LaBarge HAMMER WEIGHT: HAMMER DROP: inches

SAMPLE DEPTH (FT BELOW LAND SURFACE) FROM	TO	CORE RECVRY (FT)	BLOW COUNTS PER 6 INCHES	SAMPLE/CORE DESCRIPTION
0	2	1.0	8-8-4-3	Sand, 70%, red-brown, medium grain; Silt, 30%, top humus layer, dark brown, fine.
2	4	0.9	8-4-3-4	Sand, 90%, red, medium grain; Silt, 5%, fine, brown; Gravel, 5%, small.

GERAGHTY & MILLER, INC.

SAMPLE/CORE LOG

BORING/WELL: A-5 PROJECT NO: NY05505 PAGE: 1 of 1

SITE LOCATION: GE Pittsfield/Altresco DRILLING STARTED: 5/17/90 DRILLING COMPLETED: 5/17/90

TOTAL DEPTH DRILLED: 4 ft HOLE DIAMETER: 2 inches TYPE OF SAMPLE/ CORING DEVICE: Split Spoon

LENGTH & DIAMETER OF CORING DEVICE: 2' x 2" SAMPLING INTERVAL: 2 ft

LAND-SURFACE ELEVATION: ( ) SURVEYED ( ) ESTIMATED DATUM:

DRILLING FLUID USED: None DRILLING METHOD: Sledge Hammer

DRILLING CONTRACTOR: Soil&Material Tsting DRILLER: Tom HELPER: Ron

PREPARED BY: A. LaBarge HAMMER WEIGHT: HAMMER DROP: inches

SAMPLE DEPTH (FT BELOW LAND SURFACE) FROM	TO	CORE RECVRY (FT)	BLOW COUNTS PER 6 INCHES	SAMPLE/CORE DESCRIPTION
0	2	0.7	4-7-6-6	Sand, 50%, red, medium grain; Silt, 50%, brown, top
				humus layer, fine.
2	4	0.8	6-5-6-4	Sand, 80%, red, medium grain; Silt, 10%, brown, fine;
				Gravel, 10%, small.

GERAGHTY & MILLER, INC.

SAMPLE/CORE LOG

BORING/WELL: A-6 PROJECT NO: NY05505 PAGE: 1 of 1

SITE LOCATION: GE Pittsfield/Altresco DRILLING STARTED: 5/18/90 DRILLING COMPLETED: 5/18/90

TOTAL DEPTH DRILLED: 4 ft HOLE DIAMETER: 2 inches TYPE OF SAMPLE/ CORING DEVICE: Split Spoon

LENGTH & DIAMETER OF CORING DEVICE: 2' x 2" SAMPLING INTERVAL: 2 ft

LAND-SURFACE ELEVATION: ( ) SURVEYED ( ) ESTIMATED DATUM:

DRILLING FLUID USED: None DRILLING METHOD: Sledge Hammer

DRILLING CONTRACTOR: Soil&Material Tsting DRILLER: Tom HELPER: Ron

PREPARED BY: A. LaBarge HAMMER WEIGHT: HAMMER DROP: inches

SAMPLE DEPTH (FT BELOW LAND SURFACE)		CORE RECVRY (FT)	BLOW COUNTS PER 6 INCHES	SAMPLE/CORE DESCRIPTION
FROM	TO			
0	2	1.0	7-7-8-7	Sand, 60%, red, medium grain; Silt, 40%, top humus
				layer, brown, fine.
2	4	1.2	8-7-7-8	Sand, 100%, very coarse grain, red.

GERAGHTY & MILLER, INC.

SAMPLE/CORE LOG

BORING/WELL: A-7 PROJECT NO: NY05505 PAGE: 1 of 1

SITE LOCATION: GE Pittsfield/Altresco DRILLING STARTED: 5/18/90 DRILLING COMPLETED: 5/18/90

TOTAL DEPTH DRILLED: 4 ft HOLE DIAMETER: 2 inches TYPE OF SAMPLE/ CORING DEVICE: Split Spoon

LENGTH & DIAMETER OF CORING DEVICE: 2' x 2" SAMPLING INTERVAL: 2 ft

LAND-SURFACE ELEVATION: ( ) SURVEYED ( ) ESTIMATED DATUM:

DRILLING FLUID USED: None DRILLING METHOD: Sledge Hammer

DRILLING CONTRACTOR: Soil&Material Tsting DRILLER: Tom HELPER: Ron

PREPARED BY: A. LaBarge HAMMER WEIGHT: HAMMER DROP: inches

SAMPLE DEPTH (FT BELOW LAND SURFACE)		CORE RECVRY (FT)	BLOW COUNTS PER 6 INCHES	SAMPLE/CORE DESCRIPTION
FROM	TO			
0	2	1.0	7-8-6-6	Sand, 60%, red, medium grain; Silt, 30%, brown, top
				humus layer, fine; Gravel, 10%, small size.
2	4	1.0	6-6-5-7	Sand, 70%, red, coarse grain; Silt, 30%, brown, fine
				grain.

GERAGHTY & MILLER, INC.

SAMPLE/CORE LOG

BORING/WELL: A-8 PROJECT NO: NY05505 PAGE: 1 of 1

SITE LOCATION: GE Pittsfield/Altresco DRILLING STARTED: 5/18/90 DRILLING COMPLETED: 5/18/90

TOTAL DEPTH DRILLED: 4 ft HOLE DIAMETER: 2 inches TYPE OF SAMPLE/ CORING DEVICE: Split Spoon

LENGTH & DIAMETER OF CORING DEVICE: 2' x 2" SAMPLING INTERVAL: 2 ft

LAND-SURFACE ELEVATION: ( ) SURVEYED ( ) ESTIMATED DATUM:

DRILLING FLUID USED: None DRILLING METHOD: Sledge Hammer

DRILLING CONTRACTOR: Soil&Material Tsting DRILLER: Tom HELPER: Ron

PREPARED BY: A. LaBarge HAMMER WEIGHT: HAMMER DROP: inches

SAMPLE DEPTH (FT BELOW LAND SURFACE)		CORE RECVRY (FT)	BLOW COUNTS PER 6 INCHES	SAMPLE/CORE DESCRIPTION
FROM	TO			
0	2	1.2	9-10-	Sand, 50%, red-brown, medium grain; Silt, 40%, brown,
			11-11	fine; Gravel, 10%, small size.
2	4	0.9	11-10-	Silt, 70%, brown, fine; Sand, 20%, red-brown, medium
			9-10	grain; Gravel, 10%, small.

GERAGHTY & MILLER, INC.

SAMPLE/CORE LOG

BORING/WELL: A-9 PROJECT NO: NY05505 PAGE: 1 of 1

SITE LOCATION: GE Pittsfield/Altresco DRILLING STARTED: 5/18/90 DRILLING COMPLETED: 5/18/90

TOTAL DEPTH DRILLED: 4 ft HOLE DIAMETER: 2 inches TYPE OF SAMPLE/ CORING DEVICE: Split Spoon

LENGTH & DIAMETER OF CORING DEVICE: 2' x 2" SAMPLING INTERVAL: 2 ft

LAND-SURFACE ELEVATION: ( ) SURVEYED ( ) ESTIMATED DATUM:

DRILLING FLUID USED: None DRILLING METHOD: Sledge Hammer

DRILLING CONTRACTOR: Soil&Material Tsting DRILLER: Tom HELPER: Ron

PREPARED BY: A. LaBarge HAMMER WEIGHT: HAMMER DROP: inches

SAMPLE DEPTH (FT BELOW LAND SURFACE)		CORE RECVRY (FT)	BLOW COUNTS PER 6 INCHES	SAMPLE/CORE DESCRIPTION
FROM	TO			
0	2	1.2	12-12-	Silt, 80%, brown-black, top humus layer, fine grain;
			14-17	Sand, 20%, brown, medium grain.
2	4	1.1	18-14-	Same.
			14-17	

GERAGHTY & MILLER, INC.

SAMPLE/CORE LOG

BORING/WELL: A-10 PROJECT NO: NY05505 PAGE: 1 of 1

SITE LOCATION: GE Pittsfield/Altresco DRILLING STARTED: 5/18/90 DRILLING COMPLETED: 5/18/90

TOTAL DEPTH DRILLED: 4 ft HOLE DIAMETER: 2 inches TYPE OF SAMPLE/ CORING DEVICE: Split Spoon

LENGTH & DIAMETER OF CORING DEVICE: 2' x 2" SAMPLING INTERVAL: 2 ft

LAND-SURFACE ELEVATION: ( ) SURVEYED ( ) ESTIMATED DATUM:

DRILLING FLUID USED: None DRILLING METHOD: Sledge Hammer

DRILLING CONTRACTOR: Soil&Material Tsting DRILLER: Tom HELPER: Ron

PREPARED BY: A. LaBarge HAMMER WEIGHT: HAMMER DROP: inches

SAMPLE DEPTH (FT BELOW LAND SURFACE) FROM	TO	CORE RECVRY (FT)	BLOW COUNTS PER 6 INCHES	SAMPLE/CORE DESCRIPTION
0	2	1.0	10-11-	Sand, 80%, red, coarse grain; Silt, 10%, brown, fine,
			14-11	top humus layer; Gravel, 10% small size.
2	4	1.1	11-10-	Sand, 70%, red, medium-coarse grain; Silt, 20%, brown,
			12-14	fine grain; Gravel 10%, small.

MCP - HILL 78 AREA

GERAGHTY & MILLER, INC.
Environmental Services

SAMPLE/CORE LOG

Well 78-1 Project/No. AY05502 Page 1 of 1

Hill 78 Area, Pittsfield, MA Drilling Started 1-2-90 Drilling Completed 1-2-90

Depth Drilled 23 feet Hole Diameter 6.65 inches Type of Sample/Coring Device Split-spoon

Inner Diameter (2' X 2") Sampling Interval 2 feet

Surface Elev. 1027.4 feet ☒ Surveyed ☐ Estimated Datum USGS 1929

Fluid Used None Drilling Method Hollow-stem Auger

Contractor Clean Berkshires, Inc. Driller Ed Helper George Ron

Recorded A. LaBarge Hammer Weight 140# Hammer Drop 30 inches

Core Depth (below land surface) To	Core Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	SAMPLE ID	Sample/Core Description
2	1.0	11-10-12-12	PH01B0002	SAND (75%) brown, medium to coarse; Gravel (15%); fine to
				medium, poorly sorted.
4	0.2	8-8-5-4	PH01B0204	SAND (50%) brown, medium; Gravel (50%) fine, well-sorted.
6	1.2	2-9-5-4	PH01B0406	SAND (85%) light-brown, fine, moist; Gravel (10%)
				fine, well-sorted; Abrupt change to black organic peat material
				with roots at base of spoon, ~ 5.8'.
8	0.7	2-1-2-5	PH01B0608	SAND (95%) light-brown, fine, moist;Gravel (5%) very fine.
10	1.6	5-5-4-5	PH01B0810	SAND (95%) brown-grey, fine, moist; Gravel (5%) fine.
12	1.8	8-10-7-12	PH01B1012	SAND (95%) light-brown to red-brown, moist, fine, includes
				roots and reeds; Gravel (5%) fine.
14	1.9	6-7-10-11	PH01B1214	SAND (90%) light-brown to grey, fine, moist; Gravel
				(10%) fine to medium, rounded to subangular.
16	1.8	7-9-10-8	PH01B1416	Same as above, wet.
18	1.9	15-20-13-15	PH01B1618	Same as above, wet.
20	2.0	18-41-36-40	PH01B1820	Same as above, wet.
22	0.8	25-31-100/R	PH01B2022	SAND (85%) red-brown, medium to coarse; Rock fragments (15%);
				refusal at ~ 22 feet
23				No recovery, pushing boulder; Augured to 23 feet
				TD = 23 feet.
				DTW = 9.5 feet.

GERAGHTY & MILLER, INC.
Environmental Services

SAMPLE/CORE LOG

Boring/Well 78-2 Project/No. AY05502 Page 1 of 1

Site Location Hill 78 Area, Pittsfield, MA Drilling Started 1-4-90 Drilling Completed 1-4-90

Total Depth Drilled 24 feet Hole Diameter 6.65 inches Type of Sample/Coring Device Split-spoon

Length and Diameter of Coring Device (2' X 2") Sampling Interval 2 feet

Land-Surface Elev. 1034.9 feet X☐ Surveyed ☐ Estimated Datum USGS 1929

Drilling Fluid Used None Drilling Method Hollow-stem Auger

Drilling Contractor Clean Berkshires, Inc. Driller Ed Helper George Ron

Prepared By A. LaBarge Hammer Weight 140# Hammer Drop 30 inches

Sample/Core Depth (feet below land surface) From	To	Core Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	SAMPLE ID	Sample/Core Description
0	2	0.9	7-7-6-11	PH02B0002	SAND (85%) dark-brown, medium, grading to light brown-grey,
					fine; Sandstone fragments (10%) white; grass and roots.
2	4	2.0	17-23-22-27	PH02B0204	SAND (100%) light-brown, fine, dry.
4	6	1.9	10-13-31-34	PH02B0406	Same as above, slightly dryer, very tight.
6	8	1.6	25-31-46-60	PH02B0608	Same, trace gravel, moist, very tight.
8	10	1.7	6-7-33-40	PH02B0810	Same sand as above, trace black staining, very tight.
10	12	1.2	34-60/R	PH02B1012	SAND as above (90%); Sandstone fragments (10%), white; refusal
					at 11 feet, augered to 12 feet.
12	14	1.7	15-31-50-60	PH02B1214	Same as above, moist at top, dry at bottom.
14	16	1.8	14-28-47-39	PH02B1416	SAND (90%) dark-brown, fine, moist at top; grey-brown,
					fine, dry at base; Sandstone fragments (10%) orange, white.
16	18	1.2	30-60/R	PH02B1618	SAND (95%) grey-brown, fine, dry, Very tight,
					Refusal at ~ 17 feet, augured to 18 feet.
18	20	1.9	5-16-35-42	PH02B1820	SAND (100%) dark-brown, fine, moist at top; grey-brown,
					fine, dry at base.
20	22	2.0	29-60-55-54	PH02B2022	SAND (100%) grey-brown, fine at top; grading into grey-brown to
					white, medium to coarse at base, wet.
22	24	2.0	12-12-29-59	PH02B2224	SAND (95%) wet, coarse, white to grey, grading to dry fine, gray
					in shoe; Gravel (5%) fine and angular in shoe.
					DTW = 8 feet. TD = 24 feet.

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nvironmental Services

SAMPLE/CORE LOG

ng/Well 78-3 Project/No. AY05502 Page 1 of 2

t n Hill 78 Area, Pittsfield, MA Drilling Started 1-7-90 Drilling Completed 1-7-90

Depth Drilled 25 feet Hole Diameter 6.65 inches Type of Sample/ Coring Device Split-spoon

t and Diameter
g Device (2' x 2")

Sampling Interval 2 feet

rface Elev. 1008.1 feet ☒ Surveyed ☐ Estimated Datum USGS 1929

Fluid Used None Drilling Method Hollow-stem Auger

g
tor Clean Berkshires, Inc. Driller George Helper Ron John

d
A. Labarge Hammer Weight 140# Hammer Drop 30 inches

Core Depth (land surface) To	Core Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	SAMPLE ID	Sample/Core Description
2	1.1	19-17-13-10	PH03B0002	SAND (80%) red-brown, medium to coarse, dry; Gravel (20%)
				medium, well-sorted.
4	1.2	8-7-6-5	PH03B0204	SAND (85%) red-gold, coarse dry; Gravel (15%) medium-size,
				well-sorted, subrounded.
6	0.8	4-5-7-7	PH030406	SAND (90%) brown-gold, coarse, dry; Gravel (10%) medium,
				well-sorted, subrounded.
8	1.1	6-5-3-7	PH02B0608	SAND (90%) gold-brown, medium to coarse; Gravel (10%)
				fine to medium, well-sorted, subrounded.
10	1.1	6-4-3-4	PH03B0810	SAND (90%) gold-brown, coarse; Gravel (10%) fine to coarse
				poorly-sorted, subrounded.
12	0.7	4-5-6-6	PH03B1012	SAND (80%) gold-brown, coarse; Gravel (20%) fine to coarse
				poory-sorted, angular to rounded.
14	0.4	5-4-5-60/R	PH03B1214	SAND (70%) gold-brown, coarse; Gravel (20%) fine to coarse,
				angular to subrounded; Abrupt change to very fine
				Sand (10%) olive-brown, moist, at 13.5 ft.; Refusal at 13.7 ft.
16	1.6	7-9-20-23	PH03B1416	SAND (95%) very fine, olive-brown; Gravel (5%) very fine;
				white, medium to coarse at base, wet.
18	1.2	8-20-21-25	PH03B1618	SAND (100%) Fine to Medium, Light Brown, wet; trace fine gravel.
20	1.2	13-18-32-33	PH03B1820	Same as above, wet.

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Environmental Services

SAMPLE/CORE LOG (Cont.d)

Boring/Well 78-3

Prepared By A. LaBarge

Sample/Core Depth (feet below land surface) From	To	Core Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	SAMPLE ID	Sample/Core Description
20	22	2.0	10-16-30-40	PH03B2022	Same as above, wet.
22	24	2.0	41-34-35		
			87/R	PH03B2224	Same as above, wet at top; dry layer at bottom, very tight.
24	25	-	-	-	Augered to 25 feet to construct well.
					TD = 25 feet.
					DTW = 17 feet.

GERAGHTY & MILLER, INC.
Environmental Services

SAMPLE/CORE LOG

g/Well 78-4 Project/No. AY05502 Page 1 of 2

tic Hill 78 Area, Pittsfield, MA Drilling Started 1-8-91 Drilling Completed 1-8-91

Depth Drilled 22 feet Hole Diameter 6.65 inches Type of Sample/Coring Device Split-spoon

th and Diameter
oring Device (2' x 2") Sampling Interval 2 feet

-S rface Elev. 999.5 feet x☐ Surveyed ☐ Estimated Datum USGS 1929

g Fluid Used None Drilling Method Hollow-stem Auger

g
a or Clean Berkshires, Inc Driller Ed Helper George Ron

ared
A. LaBarge Hammer Weight 140# Hammer Drop 30 inches

ole ore Depth low land surface) n	To	Core Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	SAMPLE ID	Sample/Core Description
	2	1.8	13-13-14-14	PH040002	SAND (70%) dark-brown, fine; Gravel (20%) fine to coarse, angular; Fill material (10%), paper, cellophane; Some organic material, bark, roots, reeds.
	4	1.7	14-23-18-20	PH04B0204	SAND (75%) dark-brown to olive-brown, fine to coarse; Silt (15%) olive-grey, dry, fine-grain; Gravel (10%) fine to coarse. No fill material.
	6	1.9	6-8-8-9	PH04B0406	SAND (95%) Gold-brown, fine, to dark-brown, medium; slight black stain, does not appear to be oil; Gravel (5%) fine to medium, angular.
	8	2.0	13-14-16-21	PH04B0608	SAND (95%) red-gold-brown, fine to medium, trace olive colored fine sand; Gravel (5%) fine, angular; Moist at top.
	10	1.9	7-9-9-12	PH04B0810	SAND (95%) red-brown, medium to coarse; Gravel (5%) fine to medium, subrounded to subangular;Trace fine olive-brown sand, moist.
	12	1.8	9-11-6-8	PH04B1012	SAND (90%) red-gold-brown, coarse, moist at bottom; Gravel (10%) fine to coarse, poorly sorted, moist.
	14	2.0	5-6-7-12	PH04B1214	SAND (90%) fine, Dark brown at top, coarse in middle grading to fine again at base; Gravel(10%) fine to medium, subangular, wet.
	16	1.1	6-5-14-16	PH04B1416	SAND (90%) coarse, dark brown at base, thin 2" Fine Sand layer at top, wet; Gravel (10%) fine to medium

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Environmental Services

SAMPLE/CORE LOG (Cont.d)

Boring/Well 78-4

Page 2 of 2

Prepared By A. LaBarge

Sample/Core Depth (feet below land surface) From	To	Core Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	SAMPLE ID	Sample/Core Description
16	18	2.0	10-13-22-27	PH0481618	SAND (90%) brown, coarse, from 16 to 17 feet; abrupt
					change to fine, olive-brown at 17 feet; Gravel (10%),
					angular to subangular, fine to medium, wet.
18	20	2.0	13-31-48-50	PH0481820	SAND (90%) coarse, brown with abrupt change to
					fine, olive-brown Sand at 19.7 feet, wet. Gravel (10%)
					fine to medium, poorly-sorted.
20	22	0.6	42-17-20-20	PH0482022	SAND (90%) brown, medium to coarse, wet; Gravel (10%)
					fine to coarse, unsorted, angular.
					TD = 22 feet.
					DTW = 12 feet.

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Environmental Services

SAMPLE/CORE LOG

Page 1 of 1

Boring/Well 78-5 Project/No. AY05502

Site Location Hill 78 Area, Pittsfield, MA

Drilling Started 1-9-91 Drilling Completed 1-9-91

Total Depth Drilled 17 feet Hole Diameter 6.65 inches Type of Sample/Coring Device Split-spoon

Length and Diameter of Coring Device (2' x 2")

Sampling Interval 2 feet

Land-Surface Elev. 997.8 feet ☒ Surveyed ☐ Estimated

Datum USGS 1929

Drilling Fluid Used None

Drilling Method Hollow-stem Auger

Drilling Contractor Clean Berkshires, Inc.

Driller Ed Helper George Ron

Prepared By A. LaBarge

Hammer Weight 140# Hammer Drop 30 inches

Sample/Core Depth (feet below land surface) From	To	Core Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	SAMPLE ID	Sample/Core Description
0	2	1.2	11-10-13-14	PH05B0002	SAND (80%) red to brown, coarse to medium; Rock fragments (20%) white, dry, trace gravel.
2	4	1.0	13-24-14-13	PH05B0204	SAND (95%) red-brown, coarse, moist at 1.5 feet; Gravel (5%), fine to medium.
4	6	1.2	4-3-22-17	PH05B0406	SAND (95%) red-brown, coarse grading to olive-brown, medium; Gravel (5%) fine to medium, angular, wet.
6	8	1.0	9-10-13-13	PH05B0608	SAND (95%) olive-brown, fine to medium, wet; Gravel (5%) fine, angular, sorted.
8	10	0.7	60-60/R	PH05B0310	SAND (95%) red-brown, coarse, wet; Gravel (5%) fine, angular.
10	12	1.1	41-27-26-22	PH05B1012	SAND (95%) olive-brown, fine to medium, moist at top, dryer on bottom; Gravel (5%) fine, angular.
12	14	2.0	11-14-25-24	PH05B1214	SAND (90%), same as above, wet; Schist fragments (10%) broken, shiny surfaces.
14	15	2.0	15-42-11-7	PH05B1416	SAND (95%) olive-brown, fine to coarse; Gravel (5%) fine coarse to wet.
16	17	1.0	6-5-	PH05B1617	Same as above TD = 17 feet. DTW = 5 feet.

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Environmental Services

SAMPLE/CORE LOG

Boring/Well 78-6 Project/No. AY05502 Page 1 of 1

Site Location Hill 78 Area, Pittsfield, MA Drilling Started 1-3-91 Drilling Completed 1-3-91

Total Depth Drilled 18 feet Hole Diameter 6.65 inches Type of Sample/Coring Device Split-spoon

Length and Diameter of Coring Device (2' x 2") Sampling Interval 2 feet

Land-Surface Elev. 1013.1 feet ☒ Surveyed ☐ Estimated Datum USGS 1929

Drilling Fluid Used None Drilling Method Hollow-stem Auger

Drilling Contractor Clean Berkshires, Inc. Driller Ed Helper George Ron

Prepared By A. LaBarge Hammer Weight 140# Hammer Drop 30 inches

Sample/Core Depth (feet below land surface) From	To	Core Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	SAMPLE ID	Sample/Core Description
0	2	0.5	4-6-5-5	PH06B002	SAND (80%) brown, fine, dry; Grass, roots (15%) top humus
					layer; Gravel (5%) very fine, rounded.
2	4	0.2	4-3-2-7	PH06B0204	SAND (90%) light brown to brown, fine to medium, dry;
					Gravel (10%) fine, subangular.
4	6	0.8	7-8-5-6	PH06B0406	Same as above.
6	8	1.3	6-10-6-7	PH06B0608	SAND (95%) light brown to reddish brown, fine, moist;
					Gravel (5%) fine, subrounded. Trace of plastic material.
8	10	1.5	2-1-3-5	PH06B0310	SAND (95%) brown to light grey, fine, wet; Gravel (5%) fine
					to medium, subrounded.
10	12	1.9	11-11-6-5	PH06B1012	SAND (95%) light-grey, fine, wet; Gravel (5%) fine,
					rounded.
12	14	1.8	3-7-13-16	PH06B1214	SAND (50%) light-grey, fine, wet; Abrupt change to black
					peat (30%), natural organic material at 13 feet, with roots;
					SAND (20%) grey, fine, dry at base, tight.
14	16	1.6	5-6-10-16	PH06B1416	SAND (95%) light-grey to brown, fine, moist; Trace silt, grey.
16	18	2.0	21-20-23-20	PH06B1618	SAND (85%) light-grey, fine at top, coarsening and yellow-brown
					at base; Gravel (15%) fine at top, coarse at base, wet.
					Bottom of boring TD = 18 feet
					DTW = 7.5

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Environmental Services

SAMPLE/CORE LOG

Boring/Well 78-7 Project/No. AY05502 Page 1 of 2

Site Location Hill 78 Area, Pittsfield, MA Drilling Started 1-10-91 Drilling Completed 1-10-91

Total Depth Drilled 28 feet Hole Diameter 6.65 inches Type of Sample/Coring Device Split-spoon

Length and Diameter of Coring Device (2' x 2")" Sampling Interval 2 feet

Land-Surface Elev. 1019.0 feet x☐ Surveyed ☐ Estimated Datum USGS 1929

Drilling Fluid Used None Drilling Method Hollow-stem Auger

Drilling Contractor Clean Berkshires, Inc. Driller Ed Helper George Ron

Prepared By A. LaBarge Hammer Weight 140# Hammer Drop 30 inches

Sample/Core Depth (feet below land surface) From	To	Core Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	SAMPLE ID	Sample/Core Description
0	2	1.9	25-25-29-21	PH078 0002	Sand (60%) dark-brown, fine grain at top, dry, light-brown, medium grain in middle; Brick (30%) bottom 5 inches; Gravel (10%) fine to coarse, angular to subangular.
2	4	0.5	27-17-17-16	PH078 0204	Sand (60%) olive-brown, to brown, medium-grain, dry; Brick (10%) at top of spoon; Gravel (30%) fine to very coarse, subrounded to subangular.
4	6	1.1	20-8-11-13	PH070406	Sand (90%) medium-brown to dark-brown, medium-grain, dry; Gravel (10%) fine to medium, angular to subangular, trace brick.
6	8	0.7	7-8-11-10	PH070608	Sand (75%) brown with yellow Sand layer, medium; Gravel (20%), fine to coarse, angular; Rock fragments(5%) large cobble in shoe
8	10	0.8	20-16-7-5	PH070810	Sand (90%) medium to dark brown, medium, moist; Gravel (10%) fine to medium, sorted.
10	12	0.7	13-20-13-9	PH078 1012	Sand (75%) medium-brown, fine, moist at top, roots and organic material; red-brown medium-grain at base; Gravel (25%) fine to coarse, angular, poorly sorted.
12	14	0.7	10-12-12-6	PH078 1214	Sand (90%) red-brown, to light-brown, medium to fine; Gravel (10%) fine to medium, angular; slightly moist at top, dry at bottom
14	16	1.2	5-10-15-22	PH078 1416	Sand (80%) medium-brown, fine, moist at top, red-brown, medium at base, dry at base; gravel (15%) fine to medium.

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SAMPLE/CORE LOG (Cont.d)

Boring/Well 78-7

Prepared By A. LaBarge

Sample/Core Depth (feet below land surface) From	To	Core Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	SAMPLE ID	Sample/Core Description
14	16	1.2	5-10-15-22	PH07B1416	angular; Coal fragments (5%) crushed.
16	18	1.9	24-13-17-14	PH07B1618	Sand (95%) olive-brown, fine-grain, moist, very tight;
					Gravel (5%), fine, angular.
18	20	1.0	12-11-10-15	PH07B1820	Same as above, tight, moist to wet.
20	22	2.0	8-18-18-19	PH07B2022	SAND (95%) olive-brown, fine to medium, not as tight, wet;
					Gravel (5%) fine, angular.
22	24	2.0	12-60/R	PH07B2224	Samd as above, wet, very tight at base. Refusal at ~ 23 feet
					augered to 24 feet.
24	26	1.0	13-28-19-18	PH07B2426	SAND (50%) as above wet; white sandstone fragments (45%)
					crushed; Gravel (5%) fine, angular.
26	28	2.0	4-19-22-14	PH07B2628	SAND (80%) olive-brown, fine to medium, tight at base, wet;
					Gravel (20%) fine to medium, angular.
					TD = 28 feet.
					DTW = 19 feet.

GERAGHTY & MILLER, INC.
Environmental Services

SAMPLE/CORE LOG

Boring/Well MY-5 Project/No. AY05502 Page 1 of 1

Site Location GE, Mill 78, Corner of Merrill Rd. & NY Ave Drilling Started 7-10-91 Drilling Completed 7-10-91

Total Depth Drilled 16 feet Hole Diameter 6 1/4 inches Type of Sample/Coring Device Split-spoon

Length and Diameter of Coring Device 2' x 2" Sampling Interval 2 feet

Land-Surface Elev. _____ feet ☐ Surveyed ☐ Estimated Datum _____

Drilling Fluid Used None Drilling Method Hollow-Stem Auger

Drilling Contractor Clean Berkshires, Inc. Driller G. Rustemeyer Helper W. Pike

Prepared By A. LaBarge Hammer Weight 140# Hammer Drop 30 inches

Sample/Core Depth (feet below land surface) From	To	Core Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample/Core Description
0	2	1.1	4-15-21-13	SAND (85%) light brown to dark brown, coarse to fine, dry, loose; Gravel
				(15%) small to medium, subrounded.
2	4	1.8	10-8-8-8	SAND (90%) light brown to stained black, coarse to fine, dry, loose; Gravel
				(5%) small to medium, subangular to subrounded; Scoriaceous Coal Slag (5%)
				charred, whole and crushed.
4	6	1.8	9-6-9-10	SAND (95%) light brown to orange-brown, coarse to medium, dry, loose; Gravel
				(5%) subangular to subrounded.
6	8	1.7	11-11-7-7	Same as above, moist.
8	10	1.8	8-5-6-5	Same as above, moist.
10	12	1.9	4-5-5-6	SAND (90%) red, brown, orange, coarse, moist, loose; Gravel (10%) small,
				subrounded to rounded.
12	14	0.9	6-5-8-10	SAND (85%) brown, coarse to medium, moist to wet; Gravel (15%) small to
				medium, subrounded to rounded.
14	16	2.0	7-8-10-10	SAND (90%) brown, coarse, wet; Gravel (10%) small to medium, rounded.

Date Start/Finish: 7/16/96 / 7/16/96 **Drilling Company:** Precision Sampling, Inc. **Driller's Name:** Glen Chavez **Drilling Method:** Direct Push **Rig Type:** XD-2 **Spoon Size:** 0.75" ID	**Northing:** 535,338.9805 **Easting:** 135,952.5066 **Well Casing Elev.:** 1025.89 ft. **Borehole Depth:** 20.5 ft. **Ground Surface Elev.:** 1022.67 ft. **Descriptions by:** Paul C. Steck	**Well No.** H78B-8 **Client:** General Electric Company **Site:** Hill 78 Pittsfield, Massachusetts

DEPTH	ELEVATION	Sample Depth Sample Number	Sample/Int/Type	Blows/6 In.	N	Recovery (ft.)	PID (ppm) Headspace	Geologic Column	Stratigraphic Description	Well Construction
gs elevation 1022.67 ft.									**GROUND SURFACE**	Protective well casing with locking well cap
		(0-0.5')				0.5	0.0		Brown SILTY CLAY, some fine to coarse Sand, little fine Gravel, natural organic matter, moist (TOPSOIL).	Concrete pad
		(0.5-2')				1.0	0.0		Brown to dark brown CLAYEY SILT and fine to coarse SAND, little fine Gravel, moist. SAA, dark brown to black (TOPSOIL).	0.75-in. diameter Schedule 40 PVC well casing to 10.5' bgs
	1020	(2-4')				1.2	0.0		Brown orange and tan CLAYEY SILT and fine to coarse SAND, some fine Gravel, brick fragments, moist (FILL).	Type I Portland cement/5% bentonite grout 0.5' to 6.5' bgs
5		(4-6')				0.8	0.0		SAA, brown and gray, little fine Gravel, moist to wet. Large rock fragment lodged in bottom of sampler.	
		(6-8')				1.0	0.0		SAA, little fine to medium Gravel, rock fragment, moist.	Hydrated bentonite seal 6.5' to 8.5' bgs
	1015	(8-10')				1.0	0.0		SAA, dark brown to black, some fine to medium Gravel, broken rock fragment, cinders.	
10		(10-12')				0.2	0.0		Brown and tan SILT, fine to coarse Sand, little fine Gravel, rock and brick fragments, moist to dry (FILL).	Grade #2 Morie sand pack 8.5' to 20.5' bgs
	1010	(12-14')				1.1	0.0		Gray to dark gray fine to coarse SAND, trace fine Gravel, dry (FILL). Brown CLAYEY SILT, some fine to coarse Sand and fine Gravel, moist to dry (FILL).	0.75-in. diameter, 0.010-in. slotted, Schedule 40 PVC well screen 10.5' to 20.5' bgs
15		(14-16')				1.2	0.0			

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

Remarks:

Third boring attempt due to obstructions at 10' and 11' below ground surface (bgs).

Water Levels

Date / Time	Elevation	Depth

Site:
Hill 78
Pittsfield, Massachusetts

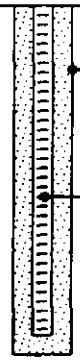
Client:
General Electric Company

Well No. H78B-8

Total Depth = 20.5 ft.

DEPTH	ELEVATION	Sample Depth Sample Number	Sample/Int/Type	Blows/6 In.	N	Recovery (ft.)	PID (ppm) Headspace	Geologic Column	Stratigraphic Description
		(14-16')				1.2	0.0		At 14.8' little fine to medium Gravel, rock fragment, moist to wet (FILL).
	1005	(16-18')				0.9	0.0		Brown SILT and fine to coarse SAND, trace fine Gravel, wet (FILL).
		(18-20')				1.8	0.0		Brown fine to coarse SAND, trace fine Gravel, wet (FILL).
20		(20-22')				0.5	0.0		Gray CLAYEY SILT, some fine to coarse Sand, trace fine Gravel, moist (FILL).
									At 20.0' bgs SAA, gray to dark gray, little fine to medium Gravel, concrete fragment, brick, wood, moist.
									Bottom of boring 20.5' bgs.
	1000								
25									
	995								
30									
	990								
35									

Well Construction



Grade #2 Morie sand pack 8.5' to 20.5' bgs

0.75-in. diameter, 0.010-in. slotted, Schedule 40 PVC well screen 10.5' to 20.5' bgs

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Remarks:

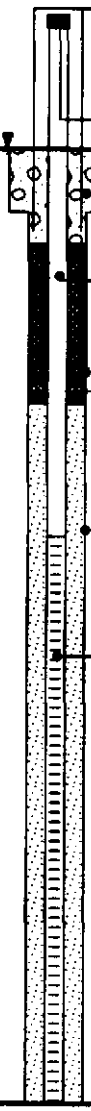
Water Levels

Date / Time	Elevation	Depth

Date Start/Finish: 7/16/96 / 7/16/96 **Drilling Company:** Precision Sampling, Inc. **Driller's Name:** Glen Chavez **Drilling Method:** Direct Push **Rig Type:** XD-2 **Spoon Size:**	**Northing:** N/A **Easting:** N/A **Well Casing Elev.:** ft. **Borehole Depth:** 12 ft. **Ground Surface Elev.:** ft. **Descriptions by:** Paul C. Steck	**Well No.** h78b8 **Client:** General Electric Company **Site:** Hill 78 Pittsfield, Massachusetts

DEPTH	ELEVATION	Sample Depth Sample Number	Sample/Int/Type	Blows/6 In.	N	Recovery (ft.)	PID (ppm) Headspace	Geologic Column	Stratigraphic Description
gs elevation ft.									**GROUND SURFACE**
		(0-0.5')				0.5	0.0		Brown SILTY CLAY, some fine to coarse Sand, little fine Gravel, organics, moist (TOPSOIL).
		(0.5-2')				1.0	0.0		Brown to dark brown CLAYEY SILT, fine to coarse Sand, little fine Gravel, moist.
									SAA, dark brown to black.
		(2-4')				1.2	0.0		Brown, orange and tan CLAYEY SILT, fine to coarse Sand, some fine Gravel, brick fragments, moist.
5						0.8	0.0		Brown and gray CLAYEY SILT, fine to coarse Sand, little fine Gravel, moist to wet.
									Large rock fragment lodged in bottom of shoe.
		(6-8')				1.0	0.0		Brown and gray CLAYEY SILT, fine to coarse Sand, little fine to medium Gravel, rock fragment, brick fragment, moist.
		(8-10')				1.0	0.0		Dark brown to black CLAYEY SILT, fine to coarse Sand, some fine to medium Gravel, broken rock fragment, large brick fragment, cinders, moist.
10		(10-11')				0.8	0.0		Brown and Tan SILT, fine to coarse Sand, little fine Gravel, rock and brick fragments, moist to dry.
									Bottom of boring 11.0' bgs.
15									

Well Construction



- Locking, 4-in diameter steel protective casing 2.22' ags
- Well cap
- Cement seal ground surface to 1.5' bgs
- 2-in diameter schedule 40 PVC well casing 1.91' ags to 6.1' bgs
- Bentonite seal 1.5' to 4.0' bgs
- Grade #2 Silica sand pack 4.0' to 16.0' bgs
- 2-in diameter, 0.010-in slotted schedule 40 PVC well screen 6.1' to 15.6' bgs

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Remarks:

Moved 3' from initial boring due to obstruction at 10.0' bgs.

Water Levels

Date / Time	Elevation	Depth
na		▼
na		▽
na		▽

Date Start/Finish: 7/16/96 / 7/16/96 **Drilling Company:** **Driller's Name:** Glen Chavez **Drilling Method:** Direct Push **Rig Type:** XD-2 **Spoon Size:** 0.75" ID	**Northing:** 535,338.9805 **Easting:** 135,952.5066 **Well Casing Elev.:** 1025.89 ft. **Borehole Depth:** 20.5 ft. **Ground Surface Elev.:** 1022.67 ft. **Descriptions by:** Paul C. Steck	**Well No.** H78B-8 **Client:** General Electric Company **Site:** Hill 78 Pittsfield, Massachusetts

DEPTH	ELEVATION	Sample Depth Sample Number	Sample/Int/Type	Blows/6 In.	N	Recovery (ft.)	PID (ppm) Headspace	Geologic Column	Stratigraphic Description
gs elevation 1022.67 ft.									**GROUND SURFACE**
		(0-0.5')				0.5	0.0		Brown SILTY CLAY, some fine to coarse Sand, little fine Gravel, natural organic matter, moist (TOPSOIL).
		(0.5-2')				1.0	0.0		Brown to dark brown CLAYEY SILT and fine to coarse SAND, little fine Gravel, moist. SAA, dark brown to black (TOPSOIL).
	1020	(2-4')				1.2	0.0		Brown orange and tan CLAYEY SILT and fine to coarse SAND, some fine Gravel, brick fragments, moist (FILL).
5		(4-6')				0.8	0.0		SAA, brown and gray, little fine Gravel, moist to wet. Large rock fragment lodged in bottom of sampler.
		(6-8')				1.0	0.0		SAA, little fine to medium Gravel, rock fragment, moist.
	1015	(8-10')				1.0	0.0		SAA, dark brown to black, some fine to medium Gravel, broken rock fragment, cinders.
10		(10-12')				0.2	0.0		Brown and tan SILT, fine to coarse Sand, little fine Gravel, rock and brick fragments, moist to dry (FILL).
	1010	(12-14')				1.1	0.0		Gray to dark gray fine to coarse SAND, trace fine Gravel, dry (FILL). Brown CLAYEY SILT, some fine to coarse Sand and fine Gravel, moist to dry (FILL).
15		(14-18')				1.2	0.0		

Well Construction

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Remarks:

Moved approximently 3.0' from second boring due to obstruction at 11' below ground surface (bgs). Began sampling at 10-12' again. SAA - Same As Above.

Water Levels

Date / Time	Elevation	Depth

Site:
Hill 78
Pittsfield, Massachusetts

Client:
General Electric Company

Well No. H78B-8

Total Depth = 20.5 ft.

DEPTH	ELEVATION	Sample Depth Sample Number	Sample/Int/Type	Blows/6 In.	N	Recovery (ft.)	PID (ppm) Headspace	Geologic Column	Stratigraphic Description
		(14-16')				1.2	0.0		At 14.8' little fine to medium Gravel, rock fragment, moist to wet (FILL).
	1005	(16-18')				0.9	0.0		Brown SILT and fine to coarse SAND, trace fine Gravel, wet (FILL).
		(18-20')				1.8	0.0		Brown fine to coarse SAND, trace fine Gravel, wet (FILL).
20		(20-22')				0.5	0.0		Gray CLAYEY SILT, some fine to coarse Sand, trace fine Gravel, moist (FILL).
									At 20.0' bgs SAA, gray to dark gray, little fine to medium Gravel, concrete fragment, brick, wood, moist.
									Bottom of boring 20.5' bgs.
	1000								
25									
	995								
30									
	990								
35									

Well Construction

Grade #2 Morie sand pack 8.5' to 20.5' bgs

0.75-in. diameter, 0.010-in. slotted, Schedule 40 PVC well screen 10.5' to 20.5' bgs

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Remarks:

Water Levels

Date / Time	Elevation	Depth

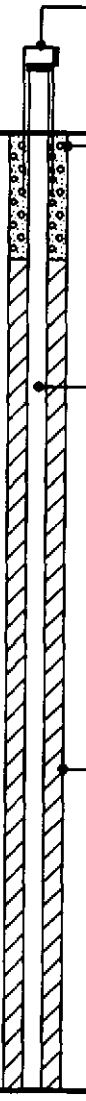
Project: 20137

Script: GEH78-fw
Date: 05/21/97

Date Start/Finish: 11/7/96 / 11/7/96 **Drilling Company:** Maxymillian **Driller's Name:** George Rustemeyer **Drilling Method:** HSA **Rig Type:** Mobile B-57 **Spoon Size:** 2" OD	**Northing:** 535,339.4122 **Easting:** 135,961.4748 **Well Casing Elev.:** 1025.09 ft. **Borehole Depth:** 30.0 ft. **Ground Surface Elev.:** 1023.15 ft. **Descriptions by:** Ronald D. Kuhn	**Well No.** H78B8R **Client:** General Electric Company **Site:** Hill 78 Pittsfield, Massachusetts

DEPTH	ELEVATION	Sample Depth Sample Number	Sample/Int/Type	Blows/6 In.	N	Recovery (ft.)	PID (ppm) Headspace	Geologic Column	Stratigraphic Description
gs elevation 1023.15 ft.									**GROUND SURFACE**
		(0-2')			NA	NA	0.0 0.0		Brown SILTY CLAY, some fine to coarse sand, little fine Gravel, organic matter, moist (TOPSOIL). Brown to dark brown CLAYEY SILT and fine to coarse SAND, little fine gravel, moist. SAA, dark brown to black (TOPSOIL).
	1020	(2-4')			NA	NA	0.0		Brown orange and tan CLAYEY SILT and fine to coarse SAND, some fine Gravel, brick fragments, moist (FILL).
5		(4-6')			NA	NA	0.0		SAA, brown and gray, little fine Gravel, moist to wet (FILL). Large rock fragment lodged in bottom of sampler.
		(6-8')			NA	NA	0.0		SAA, little fine to medium Gravel, rock fragment, moist.
	1015	(8-10')			NA	NA	0.0		SAA, dark brown to black, some fine to medium Gravel, broken rock fragment, cinders.
10		(10-12')			NA	0.2	0.0		Brown and tan SILT, fine to coarse sand, little fine gravel, rock and brick fragments, moist to dry (FILL).
	1010	(12-14')			NA	1.1	0.0		Gray to dark gray fine to coarse SAND, trace fine Gravel, dry (FILL). Brown CLAYEY SILT, some fine to coarse Sand and fine Gravel, moist to dry (FILL).
15		(14-16')			NA	1.2	0.0		

Well Construction



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Remarks:
Lithology based upon H78B8 for 0-20' bgs. Soil samples submitted to Compuchem for PCB analysis. (26-28') sample submitted for additional VOC analysis.

Water Levels

Date / Time	Elevation	Depth

Site:
Hill 78
Pittsfield, Massachusetts

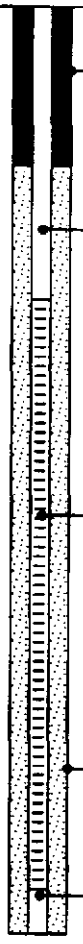
Client:
General Electric Company

Well No. H78B8R

Total Depth = 30.0 ft.

DEPTH	ELEVATION	Sample Depth Sample Number	Sample/Int/Type	Blows/6 In.	N	Recovery (ft.)	PID (ppm) Headspace	Geologic Column	Stratigraphic Description
		(14-16')			NA	1.2	0.0		At 14.8' little fine to medium Gravel, rock fray, moist to wet (FILL).
		(16-18')			NA	0.9	0.0		Brown SILT, fine to coarse sand, trace fine Gravel, wet (FILL).
	1005	(18-20')			NA	1.8	0.0		Brown fine to coarse SAND, trace fine Gravel, wet (FILL).
20		(20-22')		3 10 10 9	20	1.2	0.0		Gray CLAYEY SILT, some fine to coarse Sand, trace fine Gravel, moist (FILL). Brown fine SAND and SILT, trace fine to medium Gravel, very stiff, moist.
	1000	(22-24')		10 8 7 7	13	1.1	0.0		Stiff, wet.
25		(24-26')		7 9 4 6	13	1.4	0.0		Brown fine SAND and SILT, trace glass, very stiff, wet (FILL).
		(26-28')		10 15 14 9	29	1.5	45.8		Black fine SAND, saturated with yellow NAPL, odor. At 27.2-27.5' bgs, brown fine to medium SAND and SILT, yellow NAPL with odor.
	995	(28-30')		1/ (18") 18	NA	1.6	5.8		Dark brown organic SILT (highly decomposed organics) and organics (roots), moist. Gray SILT with orange varved SILT. Gray fine to medium SAND, wet.
30									Bottom of boring 30.0' bgs.
	990								
35									

Well Construction



- Hydrated bentonite seal 15.0' to 17.5' bgs
- 4-in. diameter Schedule 40 PVC well casing to 19.6' bgs
- 4-in. diameter, 0.010-in. slotted, Schedule 40 PVC well screen 19.6' to 28.9' bgs
- Grade #2 Morie sand pack 17.5' to 29.6' bgs
- 4-in. diameter Schedule 40 PVC with 0.2' sump 28.9' to 29.6' bgs.

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Remarks:

Water Levels

Date / Time	Elevation	Depth

Date Start/Finish: 7/19/96 - 7/19/96 **Drilling Company:** Precision Sampling, Inc. **Driller's Name:** Glen Chavez **Drilling Method:** Direct Push **Rig Type:** XD-2 **Spoon Size:** 0.75" ID	**Northing:** 535,797.6549 **Easting:** 136,661.6305 **Borehole Depth:** 10 ft. **Ground Surface Elev.:** 1016.92 ft. **Descriptions by:** Paul C. Steck	**Boring No.** H78B-10 **Client:** General Electric Company **Site:** Hill 78 Pittsfield, Massachusetts

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Blows/6 In.	N	Recovery (ft.)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Boring Construction
gs elevation 1016.92 ft.									**GROUND SURFACE**	
		(0-0.5')				0.5	0.0		Brown and tan fine to coarse SAND, little fine Gravel, loose, moist (TOPSOIL).	Backfill with Portland cement/5% bentonite grout ground surface to 10.0' bgs
	1015	(0.5-2')				0.4	0.0		Brown and gray SILT and fine SAND, trace fine Gravel, natural organic matter, moist.	
		(2-4')				1.5	0.0		Brown and olive fine SAND, trace coarse Sand, medium dense, moist. At 2.5' bgs olive SILT, trace fine to coarse Sand and fine Gravel, moist (TILL).	
5		(4-6')				2.0	0.0		SAA, little fine to coarse Sand, stiff, moist to wet.	
	1010	(6-8')				1.6	0.0		SAA, trace fine to coarse Sand.	
		(8-10')				1.7	0.0		SAA, very stiff to hard.	
10									Bottom of boring 10.0'bgs.	
	1005									
15										

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Remarks:

Initial boring terminated at 8.0' bgs due to broken casing in borehole. Moved 2.0 feet east of H78B-10. bgs - below ground surface. SAA - Same As Above.

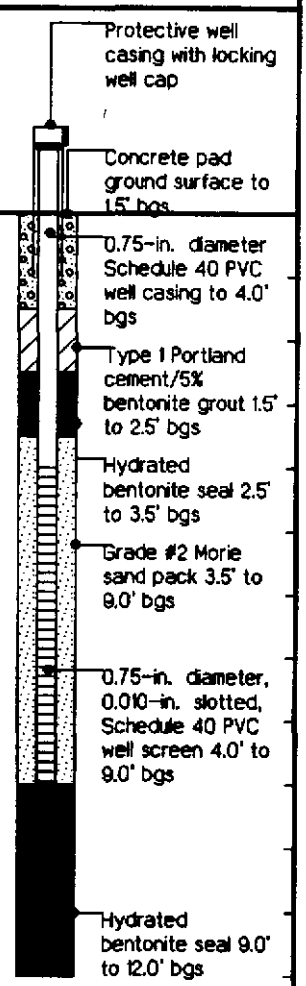
Saturated Zones

Date / Time	Elevation	Depth

Date Start/Finish: 7/17/96 / 7/17/96 **Drilling Company:** Precision Sampling, Inc. **Driller's Name:** Glen Chavez **Drilling Method:** Direct Push **Rig Type:** XD-2 **Spoon Size:** 0.75" ID	**Northing:** 535,784.3948 **Easting:** 136,711.3122 **Well Casing Elev.:** 1019.45 ft. **Borehole Depth:** 12 ft. **Ground Surface Elev.:** 1016.61 ft. **Descriptions by:** Paul C. Steck	**Well No.** H78B-11 **Client:** General Electric Company **Site:** Hill 78 Pittsfield, Massachusetts

DEPTH	ELEVATION	Sample Depth Sample Number	Sample/Int/Type	Blows/6 In.	N	Recovery (ft.)	PID (ppm) Headspace	Geologic Column	Stratigraphic Description
gs elevation 1016.61 ft.									**GROUND SURFACE**
		(0-0.5')				0.5	0.0		Brown SILT, little fine Gravel, natural organic matter, moist to wet (TOPSOIL).
	1015	(0.5-2')				1.0	0.0		Brown SILT, little fine to medium Sand, trace fine to medium Gravel, moist.
		(2-4')				0.9	0.0		Brown, orange, and gray CLAYEY SILT, little fine to coarse Sand, trace fine Gravel, moist.
5		(4-6')				1.0	0.0		SAA, oxidized, mottled, wet. SAA, brown, gray, and olive, trace fine to medium Sand, stiff, moist.
	1010	(6-7')				0.8	228		Olive SILT, some fine Sand and fine to medium Gravel, wet to moist, quartzite fragments embedded in Silt matrix (TILL).
		(7-8')				1.0	110		Olive-gray SILT and SAND, some fine to medium Gravel, trace medium to coarse Sand, moist (TILL). Large quartzite fragment at 7.2' bgs.
		(8-10')				1.8	0.0		Olive SILT, little fine Gravel, trace fine to medium Sand, quartzite gravel-sized fragments, wet (TILL). Moist.
10		(10-12')				1.9	0.0		SAA, some fine Sand, trace fine Gravel, very stiff, moist.
	1005								Bottom of boring at 12.0' bgs.
15									

Well Construction



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Remarks:

Slight solvent odor from 8-10' bgs. Sheen observed from 6-7' bgs. bgs - below ground surface. SAA - Same As Above.

Water Levels

Date / Time	Elevation	Depth

Date Start/Finish: 7/18/96 / 7/18/96 **Drilling Company:** Precision Sampling, Inc. **Driller's Name:** Glen Chavez **Drilling Method:** Direct Push **Rig Type:** XD-2 **Spoon Size:** 0.75" ID	**Northing:** 535,750.7738 **Easting:** 136,709.4639 **Well Casing Elev.:** 1020.59 ft. **Borehole Depth:** 10.5 ft. **Ground Surface Elev.:** 1017.44 ft. **Descriptions by:** Paul C. Steck	**Well No.** H78B-12 **Client:** General Electric Company **Site:** Hill 78 Pittsfield, Massachusetts

DEPTH	ELEVATION	Sample Depth Sample Number	Sample/Int/Type	Blows/6 In.	N	Recovery (ft.)	PID (ppm) Headspace	Geologic Column	Stratigraphic Description
gs elevation 1017.44 ft.									**GROUND SURFACE**
		(0-0.5')				0.4	13		Brown SILT and fine to coarse SAND, trace fine Gravel, natural organic matter, moist (TOPSOIL).
		(0.5-2')				1.2	0.0		Brown CLAYEY SILT, some fine to coarse Sand, trace fine Gravel, medium stiff, moist.
	1015	(2-4')				1.5	0.0		Brown fine SAND, some Silt, trace medium to coarse Sand, medium dense, moist.
									Brown olive SILT and fine SAND, trace medium to coarse Sand and medium Gravel, quartite fragment, stiff, moist (TILL).
5		(4-6')				0.6	0.0		Olive SILT, some fine to coarse Sand, little fine to medium Gravel, very stiff, moist (TILL).
		(6-7')				0.9	0.0		SAA, trace fine to medium Sand, little medium Gravel, hard, moist.
	1010	(7-8')				0.0	0.0		
		(8-10')				1.8	0.0		Wet.
10		(10-10.5')				0.1	0.0		SAA, medium gravel-sized quartzite fragment at 10.5' bgs.
									Bottom of boring at 10.5' bgs.
	1005								
15									

Well Construction

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Remarks:

Refusal at 10.5' below ground surface (bgs).
SAA - Same As Above.

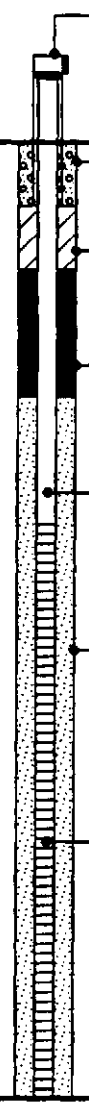
Water Levels

Date / Time	Elevation	Depth

Date Start/Finish: 7/23/96 / 7/23/96 **Drilling Company:** Precision Sampling, Inc. **Driller's Name:** Glen Chavez **Drilling Method:** Direct Push **Rig Type:** XD-2 **Spoon Size:** 0.75" ID	**Northing:** 534,769.9706 **Easting:** 135,421.8353 **Well Casing Elev.:** 992.71 ft. **Borehole Depth:** 26 ft. **Ground Surface Elev.:** 989.81 ft. **Descriptions by:** Paul C. Steck	**Well No.** H78B-13 **Client:** General Electric Company **Site:** Hill 78 Pittsfield, Massachusetts

DEPTH	ELEVATION	Sample Depth Sample Number	Sample/Int/Type	Blows/6 In.	N	Recovery (ft.)	PID (ppm) Headspace	Geologic Column	Stratigraphic Description
gs elevation 989.81 ft.									**GROUND SURFACE**
		(0-0.5')				0.5	0.0		Brown tan fine to coarse SAND, some fine to medium Gravel, natural organic matter, moist.
		(0.5-2')				1.0	0.0		SAA, brick, natural organic matter (FILL).
		(2-4')				1.2	0.0		SAA, dark brown, coal, cinders.
5	985	(4-6')				0.5	24		Dark gray to black fine to coarse SAND and fine GRAVEL, brick, cinders, moist (FILL).
		(6-8')				0.2	0.0		
		(8-10')				0.1	0.0		At 7.5' bgs white gray CLAYEY SILT, very soft, wet (bentonite or drywall spackling appearance) dries quickly, crusty (FILL).
10	980	(10-12')				NR	NA		No recovery 10.0' bgs to 14.0' bgs.
		(12-14')				NR	NA		
15	975	(14-16')				0.5	0.0		Dark brown gray SILT, trace fine Sand, natural organic matter, wet.

Well Construction



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Remarks:
NA=Not available. bgs - below ground surface.
SAA - Same As Above. NR - No Recovery.

Water Levels

Date / Time	Elevation	Depth

Site:
Hill 78
Pittsfield, Massachusetts

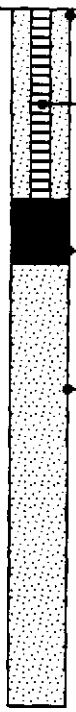
Client:
General Electric Company

Well No. H78B-13

Total Depth = 26 ft.

DEPTH	ELEVATION	Sample Depth Sample Number	Sample/Int/Type	Blows/6 In.	N	Recovery (ft.)	PID (ppm) Headspace	Geologic Column	Stratigraphic Description
		(14-16')				0.5	0.0		Dark brown gray SILT, trace fine Sand, natural organic matter, wet.
		(16-18')				0.5	0.0		Dark gray fine SAND, natural organic matter, slight septic odor, wet.
		(18-20')				0.6	0.0		Dark gray fine SAND and SILT, trace medium Sand, wet.
20	970	(20-22')				1.5	0.0		At 20.5' bgs brown fine SAND, wet. Gray fine to medium SAND, trace coarse Sand, wet.
		(22-24')				1.0	0.0		Olive gray fine SAND, trace medium Sand, septic odor, wet.
25	965	(24-26')				1.2	0.0		Olive gray fine to coarse SAND, wet.
									Bottom of boring at 26.0' bgs. Encountered running sands in drill casing to 19.0' bgs.
30	960								
35	955								

Well Construction



- Grade #2 Morie sand pack 4.0' to 18.0' bgs
- 1-in. diameter, 0.010-in. slotted, Schedule 40 PVC well screen 6.0' to 18.0' bgs
- Hydrated bentonite 18.0' to 19.0' bgs
- Fine to coarse sand 19.0' to 26.0' bgs

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Remarks:
Native soil at approximately 22.0' bgs.

Water Levels

Date / Time	Elevation	Depth

Date Start/Finish: 7/24/96 - 7/24/96 **Drilling Company:** Precision Sampling, Inc. **Driller's Name:** Glen Chavez **Drilling Method:** Direct Push **Rig Type:** XD-2 **Spoon Size:** 0.75" ID	**Northing:** 534,663.1673 **Easting:** 135,556.2732 **Borehole Depth:** 12 ft. **Ground Surface Elev.:** 988.22 ft. **Descriptions by:** Paul C. Steck	**Boring No.** H78B-14 **Client:** General Electric Company **Site:** Hill 78 Pittsfield, Massachusetts

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Blows/6 In.	N	Recovery (ft.)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Boring Construction
gs elevation 988.22 ft.									**GROUND SURFACE**	
		(0-0.5')				0.5	0.0		Dark brown fine SAND and SILT, some medium to coarse Sand, natural organic matter, moist.	Backfilled with cement/5% bentonite grout ground surface to 12.0' bgs
		(0.5-2')				0.8	0.0		At 0.2' bgs brown tan fine to coarse SAND, some fine Gravel, moist.	
									Dark brown CLAYEY SILT, little fine to coarse Sand, trace fine Gravel, natural organic matter, moist.	
	985	(2-4')				1.2	0.0		At 2.4' bgs brown orange fine SAND, some medium to coarse Sand, trace fine Gravel, loose, moist.	
5		(4-6')				1.5	0.0		Brown CLAYEY SILT, some fine Sand, medium stiff, moist to wet.	
		(6-8')				1.6	0.0		Brown gray fine to coarse SAND, loose, moist to wet.	
	980	(8-10')				1.3	0.0		SAA, wet.	
10		(10-12')				1.5	0.0			
	975								Bottom of boring at 12.0' bgs.	
15										

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Remarks:

Obtained discrete ground-water sample from 8-12' interval for analysis of dioxin/furan compounds. bgs - below ground surface. SAA - Same As Above.

Saturated Zones

Date / Time	Elevation	Depth

Date Start/Finish: 7/18/96 / 7/18/96 **Drilling Company:** Precision Sampling, Inc. **Driller's Name:** Glen Chavez **Drilling Method:** Direct Push **Rig Type:** XD-2 **Spoon Size:** 0.75" ID	**Northing:** 535,410.1317 **Easting:** 136,704.9033 **Well Casing Elev.:** 1012.73 ft. **Borehole Depth:** 16 ft. **Ground Surface Elev.:** 1009.79 ft. **Descriptions by:** Paul C. Steck	**Well No.** H78B-15 **Client:** General Electric Company **Site:** Hill 78 Pittsfield, Massachusetts

DEPTH	ELEVATION	Sample Depth Sample Number	Sample/Int/Type	Blows/6 In.	N	Recovery (ft.)	PID (ppm) Headspace	Geologic Column	Stratigraphic Description
as elevation 1009.79 ft.									**GROUND SURFACE**
		(0-0.5')				0.4	0.0		Brown fine to coarse SAND, little Silt, trace fine Gravel, natural organic matter, moist.
		(0.5-2')				0.5	0.0		SAA, loose, no Silt.
		(2-4')				0.8	0.0		
5	1005	(4-6')				1.1	0.0		Brown and orange fine to medium SAND, trace fine to medium Gravel, loose, moist.
		(6-8')				1.0	0.0		Brown fine SAND, trace medium Sand, medium dense, moist.
		(8-10')				1.5	0.0		SAA, Silt seam at 8.2' to 8.3' bgs. Brown and gray fine to coarse SAND, loose, moist.
10	1000	(10-12')				1.5	0.0		SAA, wet.
		(12-14')				1.8	0.0		Brown SILT, trace fine Sand, medium stiff, wet.
15	995	(14-16')				1.1	0.0		Brown, gray and olive SILT, some fine to coarse Sand, medium stiff, wet (TILL).

Well Construction

- Protective well casing with locking well cap
- Concrete pad ground surface to 1.5' bgs.
- Type 1 Portland cement/bentonite grout 1.5' to 3.0' bgs
- Hydrated bentonite seal 3.0' to 5.0' bgs
- 0.75-in. diameter Schedule 40 PVC well casing to 6.0' bgs
- 0.75-in. diameter, 0.010-in. slotted, Schedule 40 PVC well screen 6.0' to 16.0' bgs
- Grade #2 Morie sand pack 5.0' to 16.0' bgs

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Remarks:

bgs - below ground surface. SAA - Same As Above.

Water Levels

Date / Time	Elevation	Depth

Site:
Hill 78
Pittsfield, Massachusetts

Client:
General Electric Company

Well No. H78B-15

Total Depth = 18 ft.

DEPTH	ELEVATION	Sample Depth Sample Number	Sample/Int/Type	Blows/6 In.	N	Recovery (ft.)	PID (ppm) Headspace	Geologic Column	Stratigraphic Description	Well Construction
		(14-18')				1.1	0.0		Brown, gray and olive SILT, some fine to coarse Sand, medium stiff, wet (TILL).	0.75-in. diameter, 0.010-in. slotted, Schedule 40 PVC well screen 8.0' to 18.0' bgs
									Bottom of boring at 18.0' bgs.	
20	990									
25	985									
30	980									
35	975									

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Remarks:

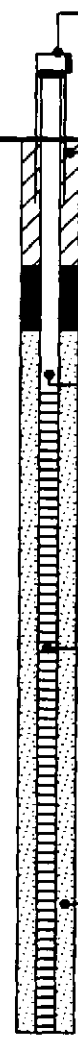
Water Levels

Date / Time	Elevation	Depth

Date Start/Finish: 7/25/96 / 7/25/96 **Drilling Company:** Precision Sampling, Inc. **Driller's Name:** Glen Chavez **Drilling Method:** Direct Push **Rig Type:** XD-2 **Spoon Size:** 0.75" ID	**Northing:** 535,041.6275 **Easting:** 136,495.7600 **Well Casing Elev.:** 999.21 ft. **Borehole Depth:** 14 ft. **Ground Surface Elev.:** 995.99 ft. **Descriptions by:** Paul C. Steck	**Well No.** H78B-16 **Client:** General Electric Company **Site:** Hill 78 Pittsfield, Massachusetts

DEPTH	ELEVATION	Sample Depth Sample Number	Sample/Int/Type	Blows/6 In.	N	Recovery (ft.)	PID (ppm) Headspace	Geologic Column	Stratigraphic Description
gs elevation 995.99 ft.									**GROUND SURFACE**
		(0-0.5')				0.5	0.0		Brown gray CLAYEY SILT, trace fine Sand, natural organic matter, moist.
	995	(0.5-2')				1.0	0.0		Brown orange fine SAND and SILT, moist.
									SAA, oxidized organic matter.
		(2-4')				1.6	0.0		Brown tan fine to medium SAND, trace coarse Sand, loose, moist.
									Brown fine to coarse SAND, loose, moist.
5		(4-6')				0.7	0.0		
	990								Brown tan fine to medium SAND, loose, moist.
		(6-8')				1.3	0.0		SAA, brown gray, moist to wet.
									Brown gray fine to coarse SAND, loose, wet.
		(8-10')				1.5	0.0		At 9.5' bgs SAA, dark gray, trace fine Gravel, wet.
10									
	985	(10-12')				1.7	0.0		
		(12-14')				1.8	0.0		
									At 13.8' bgs olive SILT, trace fine Sand and fine Gravel, wet (TILL).
15									

Well Construction



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Remarks:

Bottom of boring 14.0' bgs. bgs - below ground surface. SAA - Same As Above.

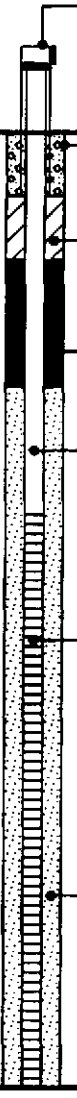
Water Levels

Date / Time	Elevation	Depth

Date Start/Finish: 7/24/96 / 7/24/96 **Drilling Company:** Precision Sampling, Inc. **Driller's Name:** Glen Chavez **Drilling Method:** Direct Push **Rig Type:** XD-2 **Spoon Size:** 0.75" ID	**Northing:** 534,997.9930 **Easting:** 136,666.7407 **Well Casing Elev.:** 1002.96 ft. **Borehole Depth:** 16 ft. **Ground Surface Elev.:** 999.30 ft. **Descriptions by:** Paul C. Steck	**Well No.** H78B-17 **Client:** General Electric Company **Site:** Hill 78 Pittsfield, Massachusetts

DEPTH	ELEVATION	Sample Depth Sample Number	Sample/Int/Type	Blows/6 In.	N	Recovery (ft.)	PID (ppm) Headspace	Geologic Column	Stratigraphic Description
gs elevation 999.30 ft.									**GROUND SURFACE**
		(0-0.5')				0.3	0.0		Brown tan fine SAND, some medium to coarse Sand, trace fine Gravel, natural organic matter, loose, moist.
		(0.5-2')				0.6	0.1		At 0.5' bgs SAA, black, little fine to medium Gravel, asphalt fragments, loose, moist to dry (FILL).
		(2-4')				1.3	3.2		At 2.4' bgs dark brown gray SILT and fine to coarse SAND, trace fine Gravel, glass, moist to dry (FILL).
	995								At 3.5' bgs brown orange fine to coarse SAND, some fine Gravel, moist.
5		(4-6')				1.5	0.0		At 4.0' bgs brown orange fine to medium SAND, trace coarse Sand, some fine Gravel, medium dense, moist.
		(6-8')				1.6	0.0		Brown orange fine to coarse SAND, trace fine Gravel, loose, moist to wet.
	990	(8-10')				1.1	0.0		
10		(10-12')				1.3	0.0		SAA, little fine Gravel.
		(12-14')				1.5	2.8		SAA, wet.
									At 13.5' bgs olive brown SILT, wet.
	985	(14-16')				0.8	0.0		Olive SILT, some fine to coarse Sand, trace fine Gravel, medium stiff, wet (TILL).
15									

Well Construction



- Protective well casing with locking well cap
- Concrete pad ground surface to 1.0' bgs.
- Type 1 Portland cement/5% bentonite grout 1.0' to 2.0' bgs
- Hydrated bentonite seal 2.0' to 4.0' bgs
- 1-in. diameter Schedule 40 PVC well casing to 6.0' bgs
- 1-in. diameter, 0.010-in. slotted, Schedule 40 PVC well screen 6.0' to 16.0' bgs
- Grade #2 Morie sand pack 4.0' to 16.0' bgs

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Remarks:

bgs - below ground surface. SAA - Same As Above.

Water Levels

Date / Time	Elevation	Depth

Site:
Hill 78
Pittsfield, Massachusetts

Client:
General Electric Company

Well No. H78B-17

Total Depth = 18 ft.

DEPTH	ELEVATION	Sample Depth Sample Number	Sample/Int/Type	Blows/6 In.	N	Recovery (ft.)	PID (ppm) Headspace	Geologic Column	Stratigraphic Description	Well Construction
		(14-18')				0.8	0.0		Olive SILT, some fine to coarse Sand, trace fine Gravel, medium stiff, wet (TILL).	1-in. diameter, 0.010-in. slotted, Schedule 40 PVC well screen 8.0' to 18.0' bgs
									Bottom of boring at 18.0' bgs.	
	980									
20										
	975									
25										
	970									
30										
	965									
35										

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Remarks:

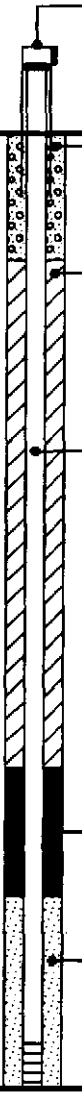
Water Levels

Date / Time	Elevation	Depth

Date Start/Finish: 11/8/96 / 11/8/96 **Drilling Company:** Maxymillian, Inc. **Driller's Name:** George Rustmeyer **Drilling Method:** Hollow Stem Auger **Rig Type:** Mobile B-57 **Spoon Size:** 0.75" ID	**Northing:** 534,996.7039 **Easting:** 136,659.0896 **Well Casing Elev.:** 100.48 ft. **Borehole Depth:** 25 ft. **Ground Surface Elev.:** 999.24 ft. **Descriptions by:** Ronald Kuhn	**Well No.** H78B-17R **Client:** General Electric Company **Site:** Hill 78 Pittsfield, Massachusetts

DEPTH	ELEVATION	Sample Depth Sample Number	Sample/Int/Type	Blows/6 In.	N	Recovery (ft.)	PID (ppm) Headspace	Geologic Column	Stratigraphic Description
gs elevation 999.24 ft.									**GROUND SURFACE**
		(0-0.5')				0.3	0.0		Brown tan fine SAND, some medium to coarse Sand, trace fine Gravel, organic debris, loose, moist (FILL)
		(0.5-2')				0.6	0.1		SAA, black, little fine to medium Gravel, asphalt fragments, loose, moist to dry (FILL).
		(2-4')				1.3	3.2		At 2.4' bgs dark brown gray SILT and fine to coarse SAND, trace fine Gravel, glass, moist to dry (FILL).
	995								At 3.5' bgs brown orange fine to coarse SAND, some fine Gravel, moist.
5		(4-6')				1.5	0.0		SAA, trace coarse Sand, medium dense.
		(6-8')				1.6	0.0		SAA, trace fine Gravel, loose, moist to wet.
	990	(8-10')				1.1	0.0		
10		(10-12')				1.3	0.0		SAA, little fine Gravel.
		(12-14')				1.5	2.8		SAA, wet.
									At 13.5' bgs olive brown SILT, wet.
	985	(14-16')				0.8	0.0		Olive SILT, some fine to coarse Sand, trace fine Gravel, soft to medium stiff, wet (TILL).
15									

Well Construction



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Remarks:

bgs - below ground surface. SAA - Same As Above. Lithology based on H78B17 from 0-16' bgs.

Water Levels

Date / Time	Elevation	Depth

Site:
Hill 78
Pittsfield, Massachusetts

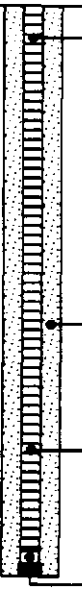
Client:
General Electric Company

Well No. H78B-17R

Total Depth = 25 ft.

DEPTH	ELEVATION	Sample Depth Sample Number	Sample/Int/Type	Blows/6 In.	N	Recovery (ft.)	PID (ppm) Headspace	Geologic Column	Stratigraphic Description
		(14-16')				0.8	0.0		
		(16-18')		4 17 7 11	24	1.8	0.0		SAA, trace fine to medium Sand and fine Gravel, stiff.
	980	(18-20')		8 15 20 20	35	1.4	0.0		SAA, hard.
20		(20-22')		25 30 30 33	60	0.4	0.0		SAA, trace fine to medium Gravel.
		(22-24')		17 27 23 20	50	1.8	0.0		Olive SILT and fine SAND, trace fine to medium Gravel, saturated (TILL).
	975	(24-25')		15 17	15	0.8	0.0		
25									Bottom of boring at 25.0' bgs.
	970								
30									
	965								
35									

Well Construction



4-in. diameter, 0.010-in. slotted, schedule 40 PVC well screen 14.3' to 23.6' bgs

Grade #2 Morie sand pack 12.0' to 24.0' bgs

4-in. diameter, 0.010-in. slotted, schedule 40 PVC well screen 14.3' to 23.6' bgs

4-in. diameter Schedule 40 PVC well casing with 0.2' sump from 23.6' to 24.0' bgs.

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Remarks:

Water Levels

Date / Time	Elevation	Depth

Project: 20L37

Script: GEH78-1M
Date: 05/21/97

Date Start/Finish: 7/23/96 / 7/23/96 **Drilling Company:** Precision Sampling, Inc. **Driller's Name:** Glen Chavez **Drilling Method:** Direct Push **Rig Type:** XD-2 **Spoon Size:** 0.75" ID	**Northing:** 535,912.5583 **Easting:** 136,123.0082 **Well Casing Elev.:** 1019.31 ft. **Borehole Depth:** 20 ft. **Ground Surface Elev.:** 1015.62 ft. **Descriptions by:** Paul C. Steck	**Well No.** H78B-18 **Client:** General Electric Company **Site:** Hill 78 Pittsfield, Massachusetts

DEPTH	ELEVATION	Sample Depth Sample Number	Sample/Int/Type	Blows/6 In.	N	Recovery (ft.)	PID (ppm) Headspace	Geologic Column	Stratigraphic Description
gs elevation 1015.62 ft.									**GROUND SURFACE**
	1015	(0-0.5')				0.5	26.0		Brown CLAYEY SILT, trace fine Gravel, natural organic matter, moist.
		(0.5-2')				1.0	0.0		Brown SILT, some fine to coarse Sand, natural organic matter, moist.
		(2-4')				1.5	0.0		Brown orange SILT, some fine to coarse Sand, little fine Gravel, moist. SAA, little fine to medium Gravel.
5	1010	(4-6')				0.9	0.0		Brown SILT and fine to coarse SAND, some fine to medium Gravel, medium gravel sized rock fragment, moist. Brown SILT and fine SAND, moist.
		(6-8')				1.6	0.0		At 6.5' bgs brown gray fine SAND, trace medium to coarse Sand, trace medium Gravel, moist to wet.
		(8-10')				0.5	0.0		SAA, little medium Sand, trace fine Gravel, wet.
10	1005	(10-12')				1.1	0.0		SAA, olive gray, little medium to coarse Sand.
		(12-14')				1.5	0.0		SAA, gray brown.
									At 13.1' bgs dark brown SILT, natural organic matter, wet.
15		(14-16')				1.2	2.5		At 13.3' bgs gray fine SAND, sheen, loose, wet.

Well Construction

- Protective well casing with locking well cap
- Concrete pad ground surface to 1.0' bgs.
- Type I Portland cement/5% bentonite grout 1.0' to 2.0' bgs
- Hydrated bentonite seal 2.0' to 4.0' bgs
- 0.75-in. Schedule 40 PVC well casing to 6.0' bgs
- 0.75-in. diameter, 0.010-in. slotted, Schedule 40 PVC well screen 6.0' to 19.0' bgs
- Grade #2 Morie sand pack 4.0' to 19.0' bgs

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Remarks:

Observed sheen from approximately 13.3-14.0' below ground surface (bgs). SAA - Same As Above.

Water Levels

Date / Time	Elevation	Depth

Site:
Hill 78
Pittsfield, Massachusetts

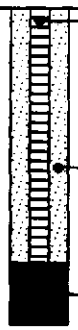
Client:
General Electric Company

Well No. H78B-18

Total Depth = 20 ft.

DEPTH	ELEVATION	Sample Depth Sample Number	Sample/Int/Type	Blows/6 In.	N	Recovery (ft.)	PID (ppm) Headspace	Geologic Column	Stratigraphic Description
	1000	(14-16')				1.2	2.5		Dark brown to black CLAYEY SILT, little fine to coarse Sand, natural organic matter, moist.
									Brown fine to coarse SAND, wet.
		(16-18')				1.5	0.0		At 16.3' bgs brown orange SILT and fine SAND, little wood fragments and medium Gravel, wet.
									Olive, orange, and brown SILT and fine SAND, wet.
									Gray brown fine to coarse SAND, wet.
		(18-20')				1.6	0.0		Olive brown SILT, some fine to coarse Sand, little fine to medium Gravel, wet (TILL).
20									Bottom of boring at 20.0' bgs.
	995								
25									
	990								
30									
	985								
35									

Well Construction



0.75-in. diameter, 0.010-in. slotted, Schedule 40 PVC well screen 8.0' to 19.0' bgs

Grade #2 Morie sand pack 4.0' to 19.0' bgs

Hydrated bentonite pellets 19.0' to 20.0' bgs

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Remarks:
Native soil at approximately 19.0' bgs.

Water Levels

Date / Time	Elevation	Depth

Date Start/Finish: 7/19/96 - 7/19/96 **Drilling Company:** Precision Sampling, Inc. **Driller's Name:** Glen Chavez **Drilling Method:** Direct Push **Rig Type:** XD-2 **Spoon Size:** 0.75" ID	**Northing:** 535,868.4253 **Easting:** 136,370.4382 **Borehole Depth:** 26 ft. **Ground Surface Elev.:** 1023.42 ft. **Descriptions by:** Paul C. Steck	**Boring No.** H78B-19 **Client:** General Electric Company **Site:** Hill 78 Pittsfield, Massachusetts

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Blows/6 In.	N	Recovery (ft.)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Boring Construction
gs elevation 1023.42 ft.									**GROUND SURFACE**	
		(0-0.5')				0.5	0.0		Dark brown CLAYEY SILT, some fine to coarse Sand, natural organic matter, moist.	
		(0.5-2')				0.7	0.0		Brown orange fine SAND, some medium to coarse Sand, trace fine Gravel, natural organic matter, moist.	
		(2-4')				1.2	0.0		Brown orange medium to coarse SAND, trace Silt and fine Gravel, moist to wet. At 2.5' bgs brown fine SAND and SILT, little embedded medium to coarse Sand, trace fine Gravel, medium stiff, wet (FILL).	
	1020									
5		(4-6')				1.3	24			Backfilled with cement/5% bentonite grout ground surface to 26.0' bgs
		(6-8')				1.7	0.0		At 7.0' bgs SAA, dark gray, natural organics matter (roots), moist. At 7.2' bgs SAA, olive gray, little medium to coarse Sand, trace fine Gravel.	
	1015	(8-10')				1.3	0.0			
10									SAA, wet.	
		(10-12')				1.5	0.0		At 10.8' bgs black gray SILT and organic matter (wood, roots), wet. At 11.1' bgs olive gray fine SAND and SILT, trace fine Gravel, wet.	
		(12-14')				1.4	0.0		Olive gray fine SAND, some Silt, little fine Gravel, wet.	
	1010								Olive gray fine SAND and SILT, moist. Moist to wet.	
15		(14-16')				1.6	0.0		At 14.3' bgs dark brown CLAYEY SILT, some fine Sand, natural organic matter, moist.	

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Remarks:

bgs - below ground surface. SAA - Same As Above.

Saturated Zones

Date / Time	Elevation	Depth

Site:
Hill 78
Pittsfield, Massachusetts

Client:
General Electric Company

Boring No. H78B-19

Total Depth = 28 ft.

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Blows/6 In.	N	Recovery (ft.)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Boring Construction
		(14-16')				1.6	0.0		At 14.8' bgs olive gray fine SAND and SILT, trace fine Gravel, moist.	Backfilled with cement/5% bentonite grout ground surface to 26.0' bgs
		(16-18')				1.3	NA		Gray fine SAND, trace Silt, wet. Olive gray fine SAND and SILT, some medium to coarse Sand, little fine Gravel, moist to wet.	
	1005	(18-20')				1.2	NA		Olive green SILT, little fine to coarse Sand, trace fine Gravel embedded in matrix, medium stiff, wet (TILL).	
20		(20-22')				NR	NA		No recovery 20.0' to 24.0'bgs.	
	1000	(22-24')				NR	NA			
25		(24-26')				0.2	0.0		Olive green SILT, little fine to coarse Sand, little fine to medium Gravel, wet (TILL). Medium gravel sized fragment lodged in bottom of sampler.	
									Bottom of boring at 26.0' bgs.	
	995									
30										
	990									
35										

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Remarks:
Native soil at approximately 18.0' bgs. NR - No Recovery. NA - Not Available.

Saturated Zones

Date / Time	Elevation	Depth

Date Start/Finish: 9/06/96 - 9/06/96 **Drilling Company:** Maxymillian Drilling Co. **Driller's Name:** Keith Hoab and Dick LaPointe **Drilling Method:** Tripod with 140-lb. hammer **Rig Type:** 5hp B&S Cathead **Spoon Size:**	**Northing:** 535,708.7711 **Easting:** 135,682.9642 **Borehole Depth:** 12 ft. **Ground Surface Elev.:** 1005.06 ft. **Descriptions by:** Ronald D. Kuhn	**Boring No.** H78B-20 **Client:** General Electric Company **Site:** Hill 78 Pittsfield, Massachusetts

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Blows/6 In.	N	Recovery (ft.)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Boring Construction
gs elevation 1005.06 ft.									**GROUND SURFACE**	
	1005	(0-0.5')		5			0.0		Brown fine SAND, trace Silt and natural organic matter (roots), medium dense, damp.	Backfilled with cement/5% bentonite grout ground surface to 12.0' bgs
		(0.5-2')		10 5 5	15	1.2	0.0			
		(2-4')		4 6 6 10	12	0.2	0.0			
5	1000	(4-6')		4 4 6 6	10	0.2	0.0		SAA, trace fine Gravel, damp to moist.	
		(6-8')		3 6 6 5	12	0.3	0.0			
		(8-10')		5 5 10 12	15	0.3	0.0		Brown fine to medium SAND, trace Silt and fine Gravel, medium dense, saturated.	
10	995	(10-12)		20 20 10 15	30	1.8	0.0		SAA, trace coarse SAND, fine to medium Gravel, and Silt.	
									Bottom of boring at 12.0' bgs.	
15										

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Remarks:
bgs - below ground surface. SAA - Same As Above.

Saturated Zones

Date / Time	Elevation	Depth

Date Start/Finish: 7/19/96 - 7/19/96 **Drilling Company:** Precision Sampling, Inc. **Driller's Name:** Glen Chavez **Drilling Method:** Direct Push **Rig Type:** XD-2 **Spoon Size:** 0.75" ID	**Northing:** 535,985.0144 **Easting:** 136,127.8073 **Borehole Depth:** 14 ft. **Ground Surface Elev.:** 1016.70 ft. **Descriptions by:** Paul C. Steck	**Boring No.** H78B-21 **Client:** General Electric Company **Site:** Hill 78 Pittsfield, Massachusetts

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Blows/6 In.	N	Recovery (ft.)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Boring Construction
gs elevation 1016.70 ft.									**GROUND SURFACE**	
		(0-0.5')				0.4	0.0		Dark brown gray SILT and fine to coarse SAND, little fine Gravel, natural organic matter, moist (TOPSOIL).	Backfilled with cement/5% bentonite grout ground surface to 14.0' bgs
	1015	(0.5-2')				1.2	0.0		Brown olive SILT and fine SAND, little medium to coarse Sand, trace fine Gravel, moist. SAA, brown, trace fine to medium Gravel (FILL).	
		(2-4')				0.3	0.0			
5		(4-6')				1.3	0.0		SAA, little medium Gravel, trace medium to coarse Sand, moist. SAA, wet. Gray olive SILT and fine SAND, little fine to coarse Sand, trace fine Gravel.	
	1010	(6-8')				1.1	0.0		Gray SILT, little fine Sand, trace medium to coarse Sand, moist to wet. Gray, brown, and tan fine SAND, well sorted, medium dense, wet.	
		(8-10')				1.0	0.0		Gray brown SILT and fine SAND, some fine to medium Gravel, wet.	
10		(10-12')				0.5	0.0		Gray olive fine SAND, some embedded fine Gravel, wet (TILL).	
	1005	(12-14')							Gray olive SILT, some fine Sand, little embedded fine Gravel (TILL).	
15									Bottom of boring at 14.0' bgs.	

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Remarks:
bgs - below ground surface. SAA - Same As Above.

Saturated Zones

Date / Time	Elevation	Depth

Date Start/Finish: 7/24/96 - 7/24/96 **Drilling Company:** Precision Sampling, Inc. **Driller's Name:** Glen Chavez **Drilling Method:** Direct Push **Rig Type:** XD-2 **Spoon Size:** 0.75" ID	**Northing:** 534,924.9782 **Easting:** 136,500.2563 **Borehole Depth:** 12 ft. **Ground Surface Elev.:** 996.60 ft. **Descriptions by:** Paul C. Steck	**Boring No.** H78B-22 **Client:** General Electric Company **Site:** Hill 78 Pittsfield, Massachusetts

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Blows/6 In.	N	Recovery (ft.)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Boring Construction
@ elevation 996.60 ft.									**GROUND SURFACE**	
		(0-0.5')				0.4	0.0		Dark brown CLAYEY SILT, some fine Sand, natural organic matter, moist.	
	995	(0.5-2')				1.3	0.0		Brown orange fine to coarse SAND, little Silt, trace fine Gravel, moist.	
		(2-4')				1.4	0.0		At 1.6' bgs dark brown CLAYEY SILT, little fine Sand, natural organic matter, moist. SAA, no organic matter. At 3.0' bgs brown orange SILT, trace fine Sand and fine Gravel, medium stiff, moist.	
5		(4-6')				1.5	0.0		Brown orange SILT and fine SAND, moist. Brown, orange, and gray fine to medium SAND, medium dense, moist.	Backfilled with cement/5% bentonite grout ground surface to 12.0' bgs
	990	(6-8')				1.7	0.0		SAA, gray, little Silt, moist to wet.	
		(8-10')				1.4	0.0		Brown gray SILT and fine SAND, medium stiff, wet. SAA, some medium to coarse Sand.	
10		(10-12')				1.5	0.0		Brown gray SILT, some fine Sand, trace medium Sand, wet.	
	985								At 11.6' bgs orange brown medium Sand lense 0.1' thick. Brown gray SILT, little fine Sand, moist to wet. Bottom of boring at 12.0' bgs.	
15										

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Remarks:

Obtained discrete ground-water sample from 8-12' interval for analysis of VOC compounds. bgs - below ground surface. SAA - Same As Above.

Saturated Zones

Date / Time	Elevation	Depth

Date Start/Finish: 7/17/96 - 7/17/96 **Drilling Company:** Precision Sampling, Inc. **Driller's Name:** Glen Chavez **Drilling Method:** Direct Push **Rig Type:** XD-2 **Spoon Size:** 0.75" ID	**Northing:** 535,475.1242 **Easting:** 135,554.6906 **Borehole Depth:** 9 ft. **Ground Surface Elev.:** 1016.91 ft. **Descriptions by:** Paul C. Steck	**Boring No.** H78B-24 **Client:** General Electric Company **Site:** Hill 78 Pittsfield, Massachusetts

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Blows/6 In.	N	Recovery (ft.)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Boring Construction
gs elevation 1016.91 ft.									**GROUND SURFACE**	
		(0-0.5')				0.5	0.5		Brown CLAYEY SILT, some fine to medium Sand, trace fine Gravel, natural organic matter, moist (TOPSOIL).	
		(0.5-2')				1.0	1.0		At 0.8' bgs brown tan fine SAND, little medium to coarse Sand, trace fine Gravel, moist.	
	1015								At 1.5' bgs brown SILT.	
		(2-4')				0.8	0.0		At 1.8' bgs brown tan fine to coarse SAND. At 2.0' bgs SAA, brown tan and orange, little Silt, some fine to medium Gravel, oxidized, mottled, moist.	
		(4-6')				1.2	10.5		At 4.0' bgs brown SILT and fine SAND, trace fine Gravel, wet. Brown CLAYEY SILT, little fine to coarse Sand, fine Sand partings, moist.	Backfilled with cement/5% bentonite grout ground surface to 9.0' bgs
5										
	1010	(6-8')				1.5	0.0		Brown SILT, wet. SAA, little fine to medium Sand.	
		(8-9')				0.8	0.0		Brown gray CLAYEY SILT, little fine to coarse Sand, trace fine Gravel, moist (TILL). SAA, brown olive, some fine to medium Gravel. Large quartzite rock fragments at 8.5' bgs, could not advance boring any further than 9.0' bgs. Bottom of boring at 9.0' bgs.	
10										
	1005									
15										

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Remarks:

No sheens observed. bgs - below ground surface.
SAA - Same As Above.

Saturated Zones

Date / Time	Elevation	Depth

Date Start/Finish: 7/15/96 - 7/15/96 **Drilling Company:** Precision Sampling, Inc. **Driller's Name:** Glen Chavez **Drilling Method:** Direct Push **Rig Type:** XD-2 **Spoon Size:**	**Northing:** 535,325.2337 **Easting:** 135,640.9989 **Borehole Depth:** 12 ft. **Ground Surface Elev.:** 1017.87 ft. **Descriptions by:** Paul C. Steck	**Boring No.** H78B-25 **Client:** General Electric Company **Site:** Hill 78 Pittsfield, Massachusetts

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Blows/6 In.	N	Recovery (ft.)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Boring Construction
gs elevation 1017.87 ft.									**GROUND SURFACE**	
		(0-1')				0.8	0.0		Dark brown CLAYEY SILT, some fine Sand, natural organic matter, moist (TOPSOIL).	
									Dark brown to brown SILT and fine to medium SAND, moist (TOPSOIL).	
		(1-4')				1.5	0.0		Brown CLAYEY SILT, trace fine Sand, moist (FILL).	Backfilled with cement/5% bentonite grout ground surface to 12.0' bgs
	1015								White SILT and fine SAND, trace fine Gravel, moist (FILL).	
									Brown fine SAND, some medium Sand, little Silt, moist (FILL).	
									SAA, trace medium Gravel.	
5		(4-6')				0.5	0.0		Brown, tan and white SILTY CLAY, some fine to coarse Sand, little medium Gravel, mottled, moist (FILL).	
		(6-8')				0.5	0.0		Brown to brown gray CLAYEY SILT, some fine to coarse Sand, trace fine Gravel, tan and white mottling, moist to wet (FILL).	
	1010									
		(8-10')				NR	NA		No recovery 8.0' to 10.0'.	
10		(10-12)				1.6	0.0		Olive to olive gray CLAYEY SILT, little fine Sand, trace fine Gravel, Silt partings, stiff, moist (TILL).	
	1005								Bottom of boring at 12.0' bgs.	
15										

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Remarks:
bgs - below ground surface. SAA - Same As Above. NA - Not Available. NR - No Recovery.

Saturated Zones

Date / Time	Elevation	Depth

Date Start/Finish: 7/22/96 – 7/22/96 **Drilling Company:** Precision Sampling, Inc. **Driller's Name:** Glen Chavez **Drilling Method:** Direct Push **Rig Type:** XD-2 **Spoon Size:** 0.75" ID	**Northing:** 535,731.0923 **Easting:** 136,387.6370 **Borehole Depth:** 10 ft. **Ground Surface Elev.:** 1018.39 ft. **Descriptions by:** Paul C. Steck	**Boring No.** H78B-27 **Client:** General Electric Company **Site:** Hill 78 Pittsfield, Massachusetts

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Blows/6 in.	N	Recovery (ft.)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Boring Construction
gs elevation 1018.39 ft.									**GROUND SURFACE**	
		(0-0.5')				0.4	0.0		Dark brown, gray fine SAND and SILT, natural organic matter, moist.	
		(0.5-2')				1.0	0.0		Brown fine SAND. Dark brown to black fine SAND and SILT, wood debris, glass, moist (FILL).	
	1015	(2-4')				1.7	0.0		Brown to dark brown SILT, some fine to medium Sand. Brown orange SILT, fine to coarse Sand, soft, moist to wet (FILL).	
5		(4-6')				1.8	0.0		Brown gray fine SAND, some medium to coarse Sand, trace Silt, wet. Brown to brown gray CLAYEY SILT, little fine to coarse Sand, trace fine Gravel, medium stiff, moist.	Backfilled with cement/5% bentonite grout ground surface to 10.0' bgs
		(6-8')				1.6	0.0		Brown, gray, olive, CLAYEY SILT, trace fine to medium Sand, wet (TILL). SAA, olive gray, little fine to coarse Sand, stiff. Moist. SAA, little fine to medium Gravel (TILL).	
	1010	(8-10')				1.9	0.0			
10									Bottom of boring at 10.0' bgs.	
	1005									
15										

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Remarks:

bgs – below ground surface. SAA – Same As Above.

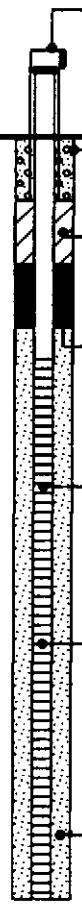
Saturated Zones

Date / Time	Elevation	Depth

Date Start/Finish: 7/22/96 / 7/22/96 **Drilling Company:** Precision Sampling, Inc. **Driller's Name:** Glen Chavez **Drilling Method:** Direct Push **Rig Type:** XD-2 **Spoon Size:** 0.75" ID	**Northing:** 535,731.4968 **Easting:** 136,387.8117 **Well Casing Elev.:** 1021.57 ft. **Borehole Depth:** 24 ft. **Ground Surface Elev.:** 1018.39 ft. **Descriptions by:** Paul C. Steck	**Well No.** H78B-28 **Client:** General Electric Company **Site:** Hill 78 Pittsfield, Massachusetts

DEPTH	ELEVATION	Sample Depth Sample Number	Sample/Int/Type	Blows/6 In.	N	Recovery (ft.)	PID (ppm) Headspace	Geologic Column	Stratigraphic Description
gs elevation 1018.39 ft.									GROUND SURFACE
		(0-0.5')				0.3	10.5		Brown fine to coarse SAND, some fine Gravel, natural organic matter, moist.
		(0.5-2')				1.0	0.0		Dark gray black fine SAND and medium GRAVEL. At 0.6' bgs brown fine SAND, trace coarse Sand and fine Gravel, medium dense, moist. At 2.0' bgs SAA, some medium to coarse Sand, loose.
	1016	(2-4')				1.1	0.5		Dark gray black fine SAND and SILT, little coarse Sand, trace fine Gravel, natural organic matter (FILL).
5		(4-6')				0.9	0.0		Brown fine SAND, little medium to fine Gravel, moist. At 4.5' bgs SAA, medium dense, wet.
		(6-8')				1.4	36		At 6.1' bgs black SILT, little medium to coarse Sand, slight odor, slight sheen, wet. At 6.4' bgs gray CLAYEY SILT, some fine to coarse Sand, trace fine Gravel, stiff, moist. Gray black fine SAND, trace fine Gravel, wood fragment, moist (FILL).
	1010	(8-10')				1.2	4.8		Brown gray fine SAND and SILT, natural organic matter, wet (FILL).
10		(10-12')				0.2	0.0		Brown gray fine SAND, some fine to medium Gravel, wet.
	1005	(12-14')				NR	NA		No recovery 12.0' to 14.0' bgs.
15		(14-16')				0.5	0.0		Brown, gray, and olive SILT, some fine to coarse Sand, little fine Gravel, wet (TILL).

Well Construction



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Remarks:

Black staining, slight odor, and slight sheen from 6' to 8'bgs. The fill/native boundary may be between 12' to 14' bgs. Moved over approximately 3-5' from original borehole and installed monitoring well.

Water Levels

Date / Time	Elevation	Depth

Site:
Hill 78
Pittsfield, Massachusetts

Client:
General Electric Company

Well No. H78B-28

Total Depth = 24 ft.

DEPTH	ELEVATION	Sample Depth Sample Number	Sample/Int/Type	Blows/6 In.	N	Recovery (ft.)	PID (ppm) Headspace	Geologic Column	Stratigraphic Description	Well Construction
		(14-16')				0.5	0.0		Brown, gray, and olive SILT, some fine to coarse Sand, little fine Gravel, wet (TILL).	
		(16-18')				1.8	0.0			
	1000	(18-20')				1.8	0.0			
20		(20-22')				1.8	0.0		SAA, some fine to coarse Sand, little fine Gravel, wet.	
	995	(22-24')				0.7	0.0			
25									Bottom of boring at 24.0' bgs.	
	990									
30										
	985									
35										

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Remarks:
bgs - below ground surface. SAA - Same As Above. NR - No Recovery. NA - Not Available.

Water Levels

Date / Time	Elevation	Depth

Date Start/Finish: 11/8/96 / 11/8/96 **Drilling Company:** Maxymillian, Inc. **Driller's Name:** George Rustmeyer **Drilling Method:** Hollow Stem Auger **Rig Type:** Mobile B-57 **Spoon Size:** N/A	**Northing:** 535,729.4273 **Easting:** 136,380.1586 **Well Casing Elev.:** 1017.18 ft. **Borehole Depth:** 19.3 ft. **Ground Surface Elev.:** 1018.31 ft. **Descriptions by:** Ronald Kuhnck	**Well No.** H78B-28R **Client:** General Electric Company **Site:** Hill 78 Pittsfield, Massachusetts

DEPTH	ELEVATION	Sample Depth Sample Number	Sample/Int/Type	Blows/6 In.	N	Recovery (ft.)	PID (ppm) Headspace	Geologic Column	Stratigraphic Description	Well Construction
gs elevation 1018.31 ft.									**GROUND SURFACE**	
		(0-0.5')							Brown fine to coarse SAND, some fine Gravel, natural organic debris, moist.	Concrete pad to 2.0' bgs
		(0.5-2')							Dark gray black fine SAND and medium GRAVEL. At 0.6' bgs brown fine SAND, trace coarse Sand and fine Gravel, medium dense, moist. SAA, some medium to coarse Sand, loose.	Locking well cap
	1015	(2-4')							Dark gray black fine SAND and SILT, little coarse Sand, trace fine Gravel, natural organic debris (FILL).	
5		(4-6')							Brown fine SAND, little medium to fine Gravel, moist. At 4.5' bgs SAA, medium dense, wet.	Type 1 Portland cement/5% bentonite grout 2.0' to 5.0' bgs
		(6-8')							At 6.1' bgs black SILT, little medium to coarse Sand, slight odor, slight sheen, wet. At 6.4' bgs gray CLAYEY SILT, some fine to coarse Sand, trace fine Gravel, stiff, moist.	Hydrated bentonite chips 5.0' to 7.0' bgs
	1010	(8-10')							Gray black fine SAND, trace fine Gravel, wood fragment, moist (FILL). Brown gray fine SAND and SILT, organic debris, wet (FILL).	4-in diameter, sch 40 PVC well riser from 1.13' bgs to 9.3' bgs
10		(10-12')							Brown gray fine SAND, some fine to medium Gravel, wet.	4-in diameter, 0.010" slotted, sch 40 PVC well screen 9.3' to 18.6' bgs
	1005	(12-14')							No recovery 12.0' to 14.0' bgs.	Grade #2 morie sandpack 7.0' to 19.3' bgs
15		(14-18')							Brown, gray, and olive SILT, some fine to coarse Sand, little fine wet (TILL).	

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Remarks:

Black staining, slight odor, and slight sheen from 6' to 8'bgs. The fill/native boundary may be between 12' to 14' bgs. Lithology based on H78B28. H78B28R continuously augered to 19.3' bgs.

Water Levels

Date / Time	Elevation	Depth

Site:
Hill 78
Pittsfield, Massachusetts

Client:
General Electric Company

Well No. H78B-28R

Total Depth = 19.3 ft.

DEPTH	ELEVATION	Sample Depth Sample Number	Sample/Int/Type	Blows/6 In.	N	Recovery (ft.)	PID (ppm) Headspace	Geologic Column	Stratigraphic Description	Well Construction
		(14-16')							Brown, gray, and olive SILT, some fine to coarse Sand, little fine wet (TILL).	4-in diameter, 0.010" slotted, sch 40 PVC well screen 9.3' to 18.6' bgs
		(16-18')								Grade #2 morie sandpack 7.0' to 19.3' bgs
	1000	(18-19')								4-in diameter, sch 40 PVC well riser with 0.2' sump 18.6' to 19.3' bgs
20									Bottom of boring at 19.3' bgs.	
	995									
25										
	990									
30										
	985									
35										

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Remarks:
bgs - below ground surface. SAA - Same As Above. NR - No Recovery. NA - Not Available.

Water Levels

Date / Time	Elevation	Depth

Date Start/Finish: 7/25/96 - 7/25/96 **Drilling Company:** Precision Sampling, Inc. **Driller's Name:** Glen Chavez **Drilling Method:** Direct Push **Rig Type:** XD-2 **Spoon Size:** 0.75" ID	**Northing:** 535,020.3550 **Easting:** 136,556.0194 **Borehole Depth:** 22.5 ft. **Ground Surface Elev.:** 998.61 ft. **Descriptions by:** Paul C. Steck	**Boring No.** H78B-29 **Client:** General Electric Company **Site:** Hill 78 Pittsfield, Massachusetts

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Blows/6 In.	N	Recovery (ft.)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Boring Construction
gs elevation 998.61 ft.									**GROUND SURFACE**	
		(0-0.5')				0.3	0.0		Brown to dark brown SILT, some fine Sand, organic debris, moist.	
		(0.5-2')				1.3	0.0		SAA, brown tan, little fine Sand, trace fine to medium Gravel.	
		(2-4')				0.8	0.0		SAA, gray olive, little medium to coarse Sand, asphalt fragments, organic debris (wood).	
	995									
5		(4-6')				<0.1	0.0		SAA, brown orange, trace fine to medium Sand, oxidized (FILL).	Backfilled with cement/5% bentonite grout ground surface to 22.5' bgs
		(6-8')				1.3	0.0		Brown orange SILT and fine SAND, asphalt, moist (FILL). At 6.3' bgs brown tan fine to medium SAND, moist.	
	990	(8-10')				1.5	0.0		SAA, trace Silt, loose to medium dense.	
10		(10-12')				1.2	0.0		Brown to brown orange fine to coarse SAND, trace fine Gravel, oxidized, loose, moist to wet.	
		(12-14')				0.7	0.0		SAA, brown gray, wet.	
	985									
15		(14-16')				1.1	0.0		Olive gray SILT, little fine Sand, wet (TILL). At 14' bgs SAA, trace medium to coarse sand and medium Gravel embedded within SILT matrix, wet.	

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Remarks:
bgs - below ground surface. SAA - Same As Above.

Saturated Zones

Date / Time	Elevation	Depth

Site:
Hill 78
Pittsfield, Massachusetts

Client:
General Electric Company

Boring No. H78B-29

Total Depth = 22.5 ft.

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Blows/6 In.	N	Recovery (ft.)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Boring Construction
		(14-16')				1.1	0.0		SAA, some fine to coarse Sand, little fine Gravel, wet.	Backfilled with cement/5% bentonite grout ground surface to 22.5' bgs
		(16-18')				1.7	0.0			
	980	(18-20')				0.3	0.0		SAA, little fine to medium Gravel.	
20		(20-22')				0.5	0.0		Olive SILT and fine SAND, wet (TILL).	
		(22-22.5')				0.2	0.0		Olive SILT, some fine to coarse Sand, little fine to medium Gravel, wet (TILL).	
									Bottom of boring at 22.5' bgs.	
	975									
25										
	970									
30										
	965									
35										

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Remarks:

Saturated Zones

Date / Time	Elevation	Depth

Project: 20137

Script: GEH78-2B
Date: 05/21/97

Date Start/Finish: 6/25/97 - 6/25/97 **Drilling Company:** Geologic **Driller's Name:** Tim Tucker **Drilling Method:** Direct Push **Rig Type:** Dierich D-25 **Spoon Size:** 1 ID	**Northing:** **Easting:** **Borehole Depth:** 14.0 ft. **Ground Surface Elev.:** ft. **Descriptions by:** Mark Ackerly	**Boring No.** H78B-30 **Client:** General Electric Company **Site:** Hill 78 Pittsfield, Massachusetts

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Blows/6 In.	N	Recovery (ft.)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Boring Construction
gs elevation ft										
0									GROUND SURFACE	
		(0-0.5')				0.1	0.0/0.0		Brown fine SAND, trace medium to coarse Sand and fine Gravel, natural organic matter (grass), dry (TOPSOIL)	
		(0.5-2')				0.4	0.0/0.0		Same as above, trace Slag, damp (FILL)	
		(2-4')				0.7	0.0/0.0			
5	-5	(4-6')				1.0	0.0/0.0		Brown fine SAND and SILT, trace medium to coarse Sand and fine Gravel, moist (FILL)	
									Brown fine to medium SAND, trace fine Gravel, moist (FILL)	
		(6-8')				1.2	0.0/0.0		Brown fine SAND and SILT, trace medium to coarse SAND, moist (FILL)	Hydrated bentonite chip seal from 0.0' to 14.0' bgs.
		(8-10')				1.0	0.0/0.0		Same as above, trace fine gravel, moist (FILL)	
10	-10	(10-12')				0.5	0.0/0.0		Brown fine SAND, some Silt, trace medium to coarse SAND, moist (FILL)	
		(12-14')				1.0	0.0/0.5		Same as above, moist to wet (FILL)	
15	-15								Bottom of boring at 14.0' bgs.	

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Remarks:

Refusal at 14.0' below ground surface (bgs).
Duplicate sample taken at (0.5-2.0') interval.
Appendix IX+3 sample collected at (12-14') interval.
PCB samples collected at (0.0-0.5'), (0.5-2.0'), and at 2' intervals down to 14' bgs.

Saturated Zones

Date / Time	Elevation	Depth

Date Start/Finish: 6/25/97 - 6/25/97 **Drilling Company:** Geologic **Driller's Name:** Tim Tucker **Drilling Method:** Direct Push **Rig Type:** Dierich D-25 **Spoon Size:** 1 ID	**Northing:** **Easting:** **Borehole Depth:** 12.0 ft. **Ground Surface Elev.:** ft. **Descriptions by:** Mark Ackerly	**Boring No.** H78B-31 **Client:** General Electric Company **Site:** Hill 78 Pittsfield, Massachusetts

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Blows/6 In.	N	Recovery (ft.)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Boring Construction
gs elevation ft.										
	0								**GROUND SURFACE**	
		(0-0.5')				0.2	0.0/0.0		Brown fine to medium SAND, little Silt, , natural organic matter (grass), dry (TOPSOIL)	
		(0.5-2')				0.8	0.0/0.0			
		(2-4')				1.8	0.0/0.0		Brown fine to medium SAND and SILT, trace coarse Sand and fine Gravel, trace Slag, damp (FILL)	
5	-5	(4-6')				1.0	0.0/0.0		Same as above, moist (FILL)	
									Fill/Native Boundary	
		(6-8')				0.7	0.0/0.0		Olive gray Clayey SILT, trace fine Gravel, wet (NATIVE TILL)	Hydrated bentonite chip seal from 0.0' to 12.0' bgs.
		(8-10')				1.0	0.0/0.0		Same as above, wet	
10	-10	(10-12')				1.7	0.0/0.0		Same as above, less clay content, less plastic, dry	
									Bottom of boring at 12.0' bgs.	
15	-15									

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

Remarks:

MS/MSD sample collected at (0.5-2.0') interval.
Appendix IX+3 sample collected at (6-8') interval.
PCB samples collected at (0.0-0.5'), (0.5-2.0'), and at 2' intervals down to 12' bgs.

Saturated Zones

Date / Time	Elevation	Depth

Appendix C

BLASLAND, BOUCK & LEE, INC.
engineers & scientists

Building 73 Equipment Construction Drawings

4"ϕ CONDUIT STUB-UP 3" WITH THREADED END LOCATION TO SUIT FIELD CONDITIONS

FENCE

3" EFFLUENT PIPE

4'-0" GATE

4'-0" SLIDING GATE

F.D.

273 GALLON STEEL TANK

SCHED. 80 PIPE

CAST IRON PIPE

2" INFLUENT PIPE

4" EQUAL SPACES = 12'-6"

4'-0" GATE

4'-0" GATE

4" CONDUIT

2"ϕ CONDUIT

FLOOR DRAIN - JOSAM #36505 WITH 3" CAULK OUTLET SAME SPEC. AS FLOOR DRAIN IN SECTION A DWG C102 TOP OF GRATE EL 100'-4"

FIXED H.R. THIS SIDE ONLY - ALL OTHERS REMOVABLE

2-CONDUITS EL 98'-0" (ELEV. MAY VARY TO SUIT FIELD CONDITIONS)

BEARING 2 3/4 x 3/4 x 5/16

HEX NUT & WASHER

5/8"ϕ

ANCHOR BOLT

EL. 101'-4" TOP OF GRATING

1/4" MIN.

FILL WITH CONCRETE AFTER BEAM IS SET IN PLACE

W8

2-5/8"ϕ ANCHOR BOLTS

GRATING (1" x 3/16" BEARING BARS)

1 1/2"ϕ STD. PIPE POST (REMOVABLE)

2"ϕ PIPE SLEEVE

W8

1 1/2" x 1/4" MIN.

1/4" BAR

TOP OF CONCRETE

1/8" CONTINUOUS FILLET WELD

L 2 1/2 x 2 1/2 x 1/4

1" x 1/4" x 7" LG ANCHOR STRAP 2'-0" O.C. WELD TO ANGLE

FLOOR FRAMING PLAN

FLOOR PLATE PLAN

DETAIL (10-REQ'D)

DETAIL (3-REQ'D)

DETAIL

NOTES:

1. THE OUT TO OUT DIMENSIONS OF THE BUILDING FOUNDATION MAY VARY SLIGHTLY FROM THAT SHOWN ON THIS DRAWING TO SUIT THE METAL BUILDING DESIGN. REFER TO METAL BLDG. SPECS. FOR REQUIREMENTS OF BLDG.
2. ELEVATIONS SHOWN ARE BASED ON THE FLOOR LINE OF BUILDING, 14'-6" TALLER, DATUM EL. 100.00'
3. GENERAL NOTES ARE ON DWG S100.

F2 PIS F3 BLDG. 73

REV SYMBOLS			
AC-CCR2/R2/R2			
FA-FIN FINAL			
PA-PRELIMINARY			
B-PRELIMINARY			
R-REVISED			
NO.	SYM.	DATE	REVISION
0	KC	10/26/73	
1	KC	1/16/74	
2	KC	1/30/74	REDRAWN

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DRAWN BY: DET
CHECKED BY: C.A. Fuller
REVIEW BY:
REF NO.
FED JOB NO. 15H9142
PROJECT NO.

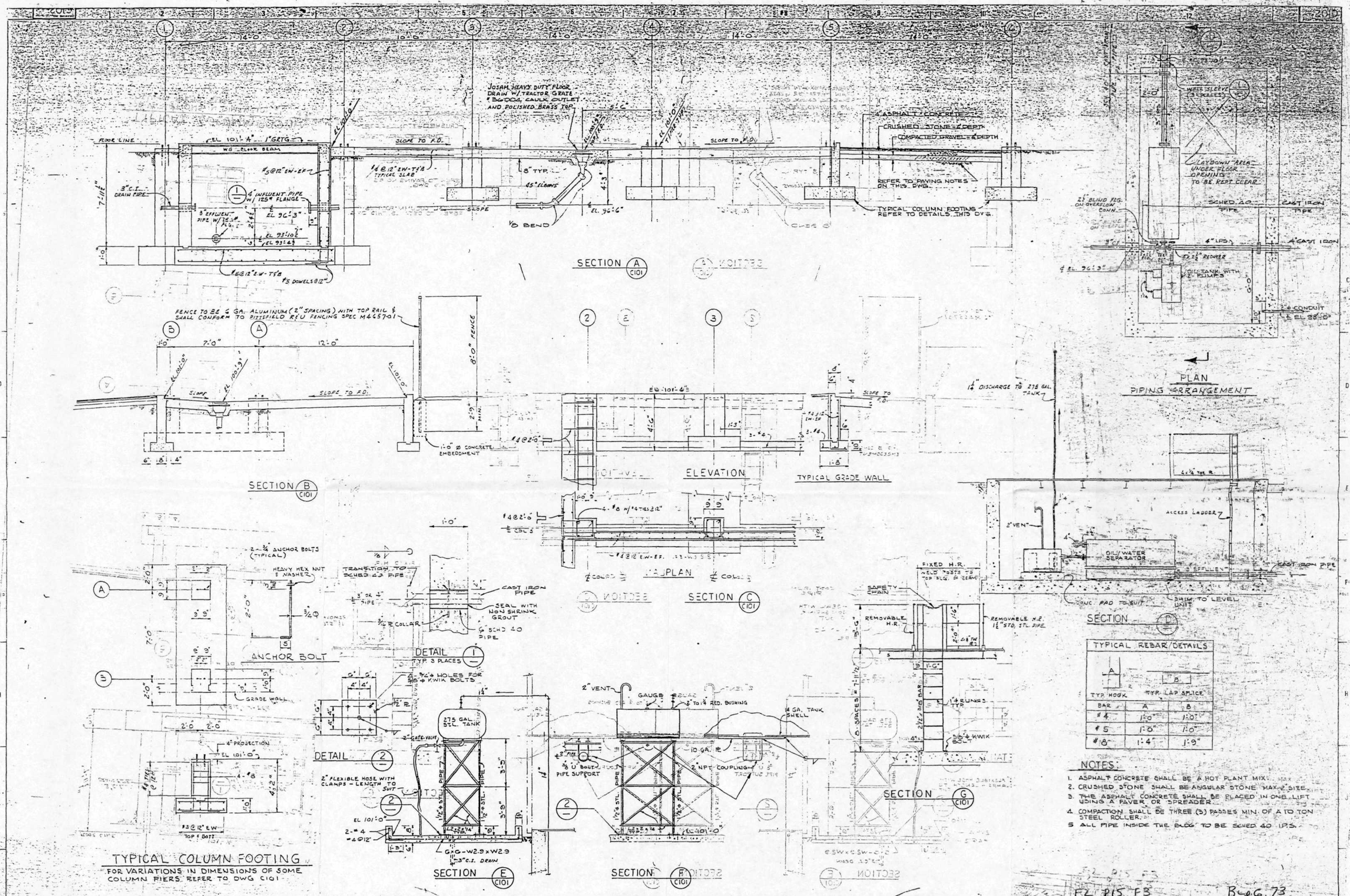
APPROVALS: ARCH. / CIVIL / ELEC. / MECH.

SCALE:
PROJECT ENGINEER: C.A. Fuller
EXCEPTIONS AS NOTED

TITLE: REGULATORY TEST FACILITY
FOUNDATION PLAN
PROJECT: REGULATORY TEST FACILITY
MADE FOR: PITTSFIELD - G.E. CO.

GENERAL ELECTRIC
PROJECTS ENGINEERING OPERATION
INSTALLATION AND SERVICE ENGINEERING DIVISION
SCHENECTADY, N.Y.

FED. DWG. NO. 15H9142 C101
DWG. NO. 1
SHT. 1 OF 1


SECTION A C101
PLAN
PIPING ARRANGEMENT
ELEVATION
TYPICAL GRADE WALL
SECTION B C101
SECTION C C101
SECTION D C101
SECTION E C101
SECTION F C101
SECTION G C101
ANCHOR BOLT
DETAIL 1 TYP. 3 PLACES
DETAIL 2
TYPICAL COLUMN FOOTING
FOR VARIATIONS IN DIMENSIONS OF SOME COLUMN PIERS REFER TO DWG C101
JOSAM HEAVY DUTY FLOOR DRAIN W/ TRACTOR GRATE # 36000A, CAULK OUTLET AND POLISHED BRASS TOP
4" ASPHALT CONCRETE
CRUSHED STONE
COMPACTED GRAVEL
REFER TO PAVING NOTES ON THIS DWG.
TYPICAL COLUMN FOOTING REFER TO DETAILS THIS DWG.
SLOPE TO F.D.
FENCE TO BE 6 GA. ALUMINUM (2" SPACING) WITH TOP RAIL & SHALL CONFORM TO PITTSFIELD R&U FENCING SPEC M4657-01
8'-0" FENCE
1-0" Ø CONCRETE EMBEDMENT
1¼" DISCHARGE TO 275 GAL. TANK
LAYDOWN AREA UNDER FLOOR OPENING TO BE KEPT CLEAR
SCHED. 40 CAST IRON PIPE
OIL TANK WITH 2 PUMPS
2" Ø CONDUIT @ EL 98'-0"
OIL/WATER SEPARATOR
ACCESS LADDER
2" VENT
CONC. PAD TO SUIT
SHIM TO LEVEL UNIT
275 GAL. STL. TANK
2" GATE VALVE
2" FLEXIBLE HOSE WITH CLAMPS - LENGTH TO SUIT
GAUGE
14 GA. TANK SHELL
2" NPT COUPLING
U BOLT PIPE SUPPORT
SAFETY CHAIN
REMOVABLE H.R.
FIXED H.R.
TRANSITION TO SCHED. 40 PIPE
CAST IRON PIPE
SEAL WITH NON SHRINK GROUT
6" SCHED 40 PIPE
2-¾ ANCHOR BOLTS (TYPICAL)
HEAVY HEX NUT & WASHER
GRADE WALL
4" PROJECTION
EL 101'-0"
2" DRAIN
TYPICAL REBAR/DETAILS
TYP. HOOK
TYP. LAP SPLICE
BAR A B
#4 1'-0" 1'-0"
#5 1'-0" 1'-0"
#8 1'-4" 1'-9"
NOTES:
1. ASPHALT CONCRETE SHALL BE A HOT PLANT MIX.
2. CRUSHED STONE SHALL BE ANGULAR STONE MAX. 2" SIZE.
3. THE ASPHALT CONCRETE SHALL BE PLACED IN ONE LIFT USING A PAVER OR SPREADER.
4. COMPACTION SHALL BE THREE (3) PASSES MIN. OF A 10 TON STEEL ROLLER.
5. ALL PIPE INSIDE THE BLDG. TO BE SCHED 40 I.P.S.
REGULATORY TEST FACILITY
FOUNDATION DETAILS
REGULATORY TEST FACILITY
PITTSFIELD - G.E. CO.
GENERAL ELECTRIC
PROJECTS ENGINEERING-OPERATION
SCHENECTADY, N.Y.
15H9142
C102
2
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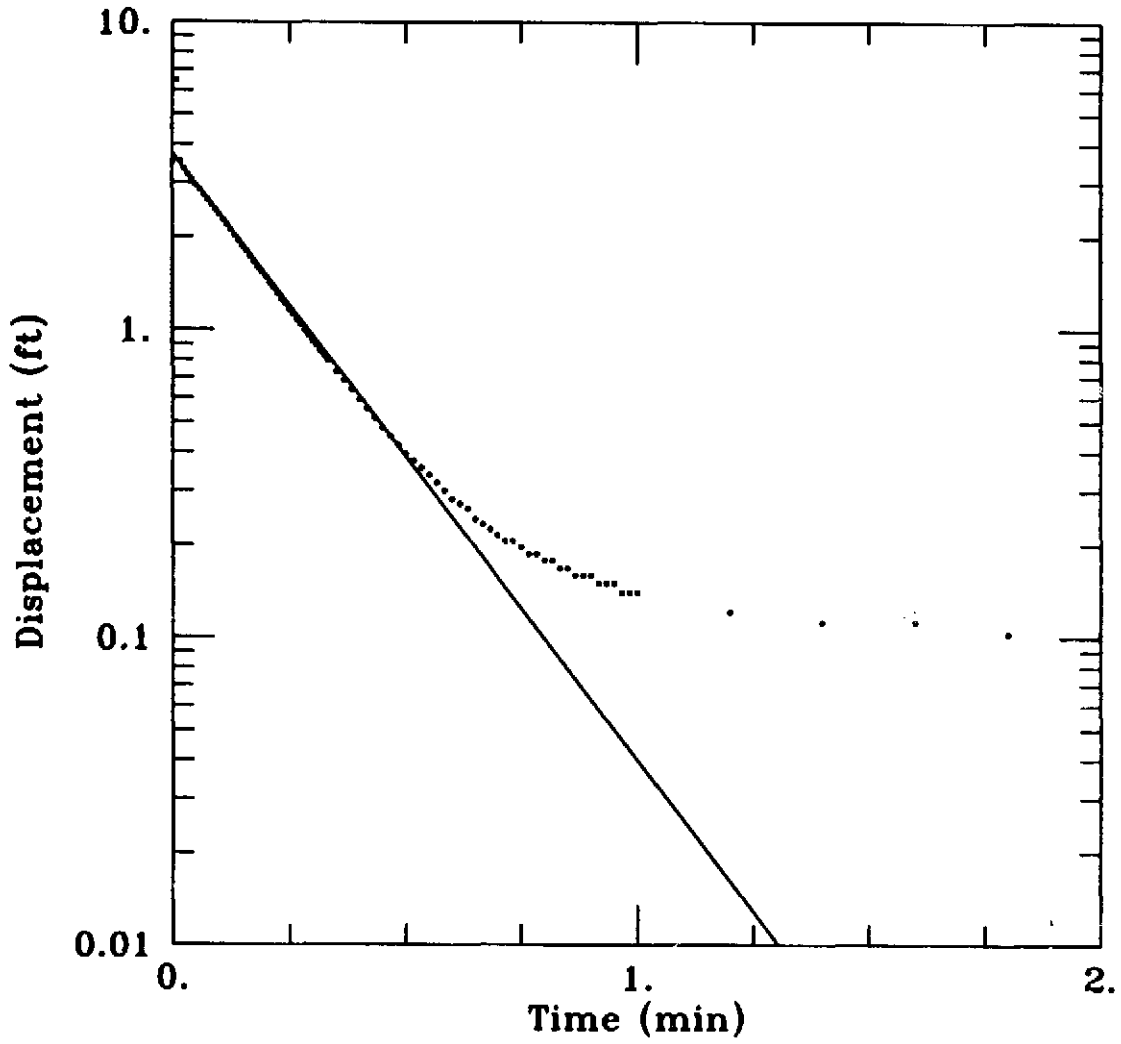
Appendix D

BLASLAND, BOUCK & LEE, INC.
engineers & scientists

In-Situ Hydraulic Conductivity Testing Results

Client: **General Electric**	Company: **Blasland, Bouck, & Lee, Inc.**
Location: **Hill 78 Area, Pittsfield, MA**	Project: **101.94**

NY-3 Rising Head Test



DATA SET:
NY-3.PAR
04/30/97

AQUIFER MODEL:
Unconfined

SOLUTION METHOD:
Bouwer-Rice

PROJECT DATA:
test date: 7/30/96

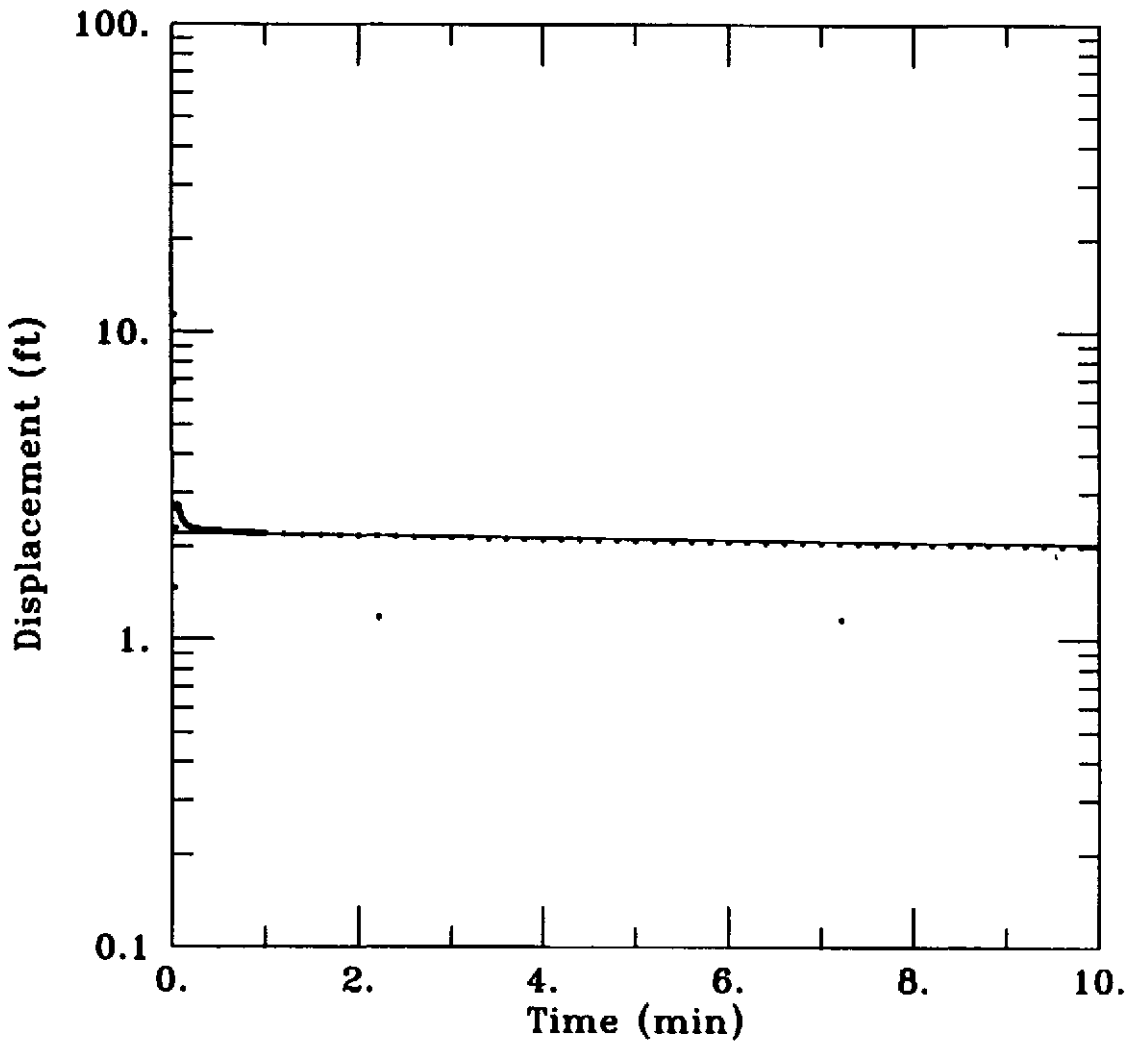
TEST DATA:
H0 = 3.518 ft
rc = 0.083 ft
rw = 0.3333 ft
L = 9.38 ft
b = 9.38 ft
H = 9.38 ft

PARAMETER ESTIMATES:
K = 0.0232 ft/min
y0 = 3.73 ft

AQTESOLV

Client: **General Electric**	Company: **Blasland, Bouck, and Lee, Inc.**
Location: **Hill 78 Area, Pittsfield, MA**	Project: **101.94**

NY-4 Rising Head Test



DATA SET:
NY-4.PAR
04/30/97

AQUIFER MODEL:
Unconfined

SOLUTION METHOD:
Bouwer-Rice

PROJECT DATA:
test date: 7/30/96

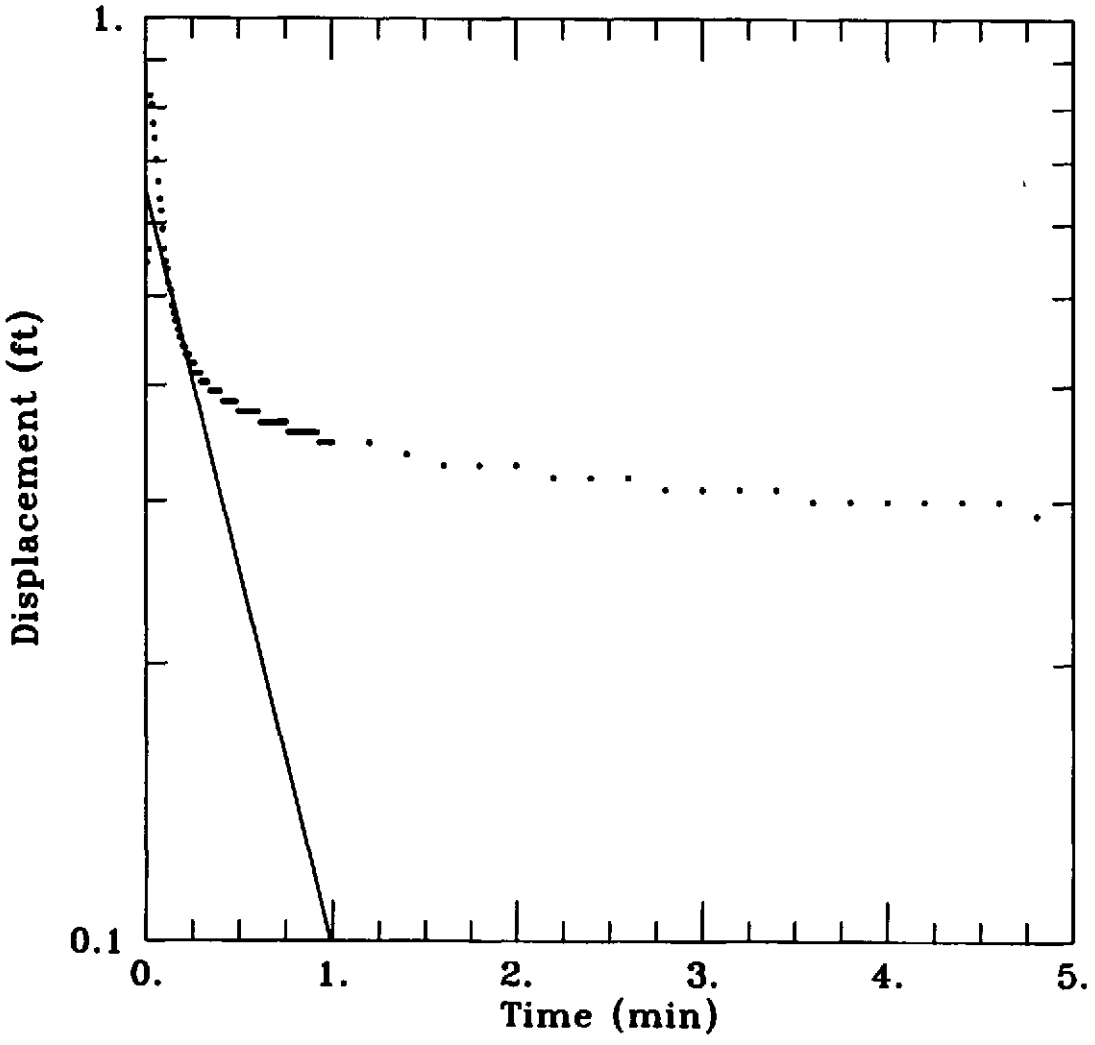
TEST DATA:
H0 = 2.748 ft
rc = 0.0833 ft
rw = 0.3333 ft
L = 15. ft
b = 23.18 ft
H = 23.18 ft

PARAMETER ESTIMATES:
K = 6.269E-06 ft/min
y0 = 2.222 ft

AQTESOLV

Client: **General Electric**	Company: **Blasland, Bouck, and Lee, Inc.**
Location: **Hill 78 Area, Pittsfield, MA**	Project: **101.94**

78-1 Rising Head Test #1



DATA SET:
78-1A.PAR
04/30/97

AQUIFER MODEL:
Unconfined

SOLUTION METHOD:
Bouwer-Rice

PROJECT DATA:
test date: 7/30/96

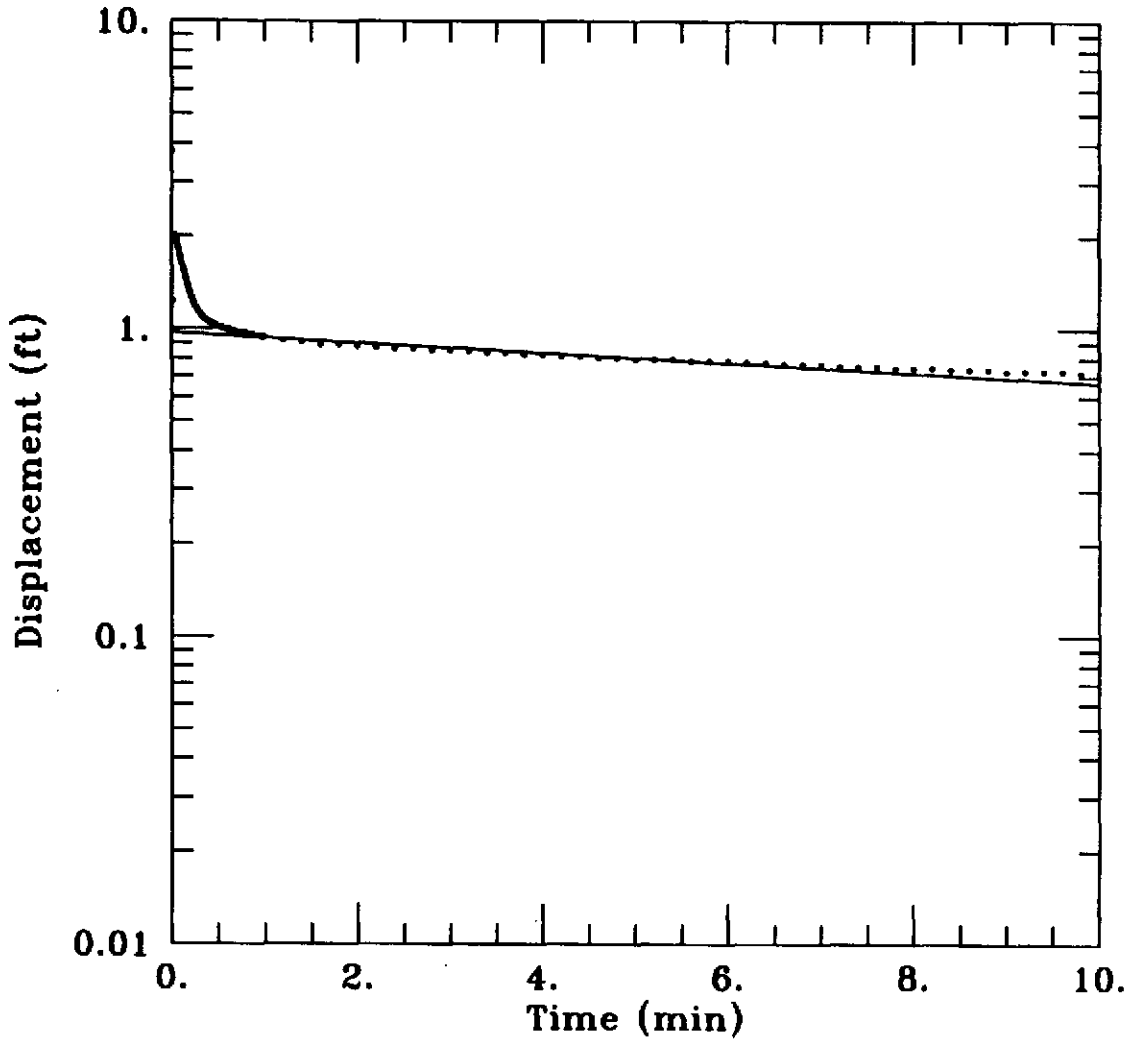
TEST DATA:
H0 = 0.825 ft
rc = 0.1667 ft
rw = 0.2771 ft
L = 13.62 ft
b = 13.62 ft
H = 13.62 ft

PARAMETER ESTIMATES:
K = 0.008791 ft/min
y0 = 0.6507 ft

AQTESOLV

Client: **General Electric**	Company: **Blasland, Bouck, and Lee, Inc.**
Location: **Hill 78 Area, Pittsfield, MA**	Project: **101.94**

78-2 Rising Head Slug Test #2



DATA SET:
78-2B.PAR
04/30/97

AQUIFER MODEL:
Unconfined

SOLUTION METHOD:
Bouwer-Rice

PROJECT DATA:
test date: 08/01/96

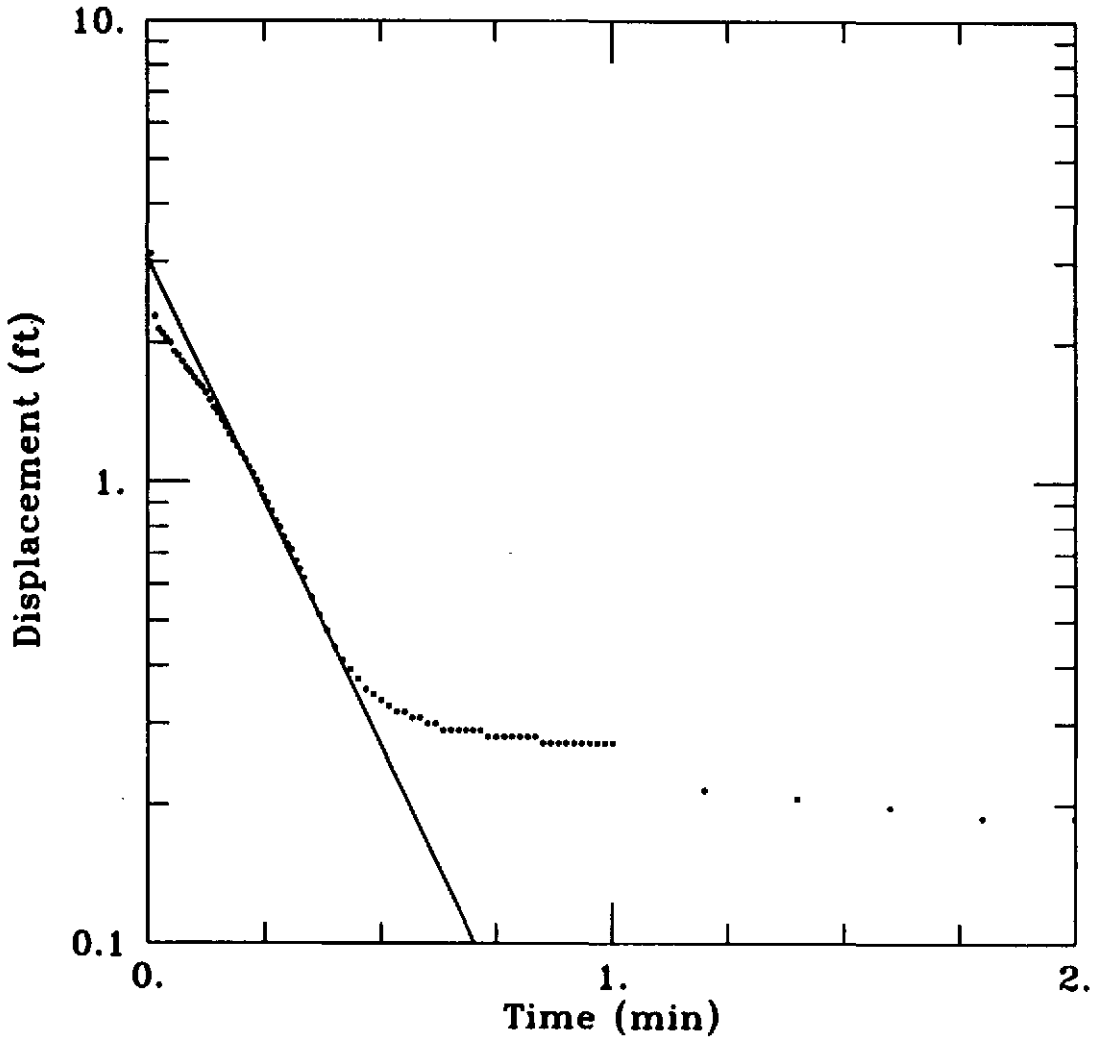
TEST DATA:
H0 = 2.017 ft
rc = 0.1667 ft
rw = 0.2771 ft
L = 17.08 ft
b = 17.08 ft
H = 17.08 ft

PARAMETER ESTIMATES:
K = 0.0001467 ft/min
y0 = 0.9696 ft

AQTESOLV

Client: **General Electric**	Company: **Blasland, Bouck, and Lee, Inc.**
Location: **Hill 78 Area, Pittsfield, MA**	Project: **101.94**

78-3 Rising Head Test



DATA SET:
78-3.PAR
04/30/97

AQUIFER MODEL:
Unconfined

SOLUTION METHOD:
Bouwer-Rice

PROJECT DATA:
test date: 7/31/96

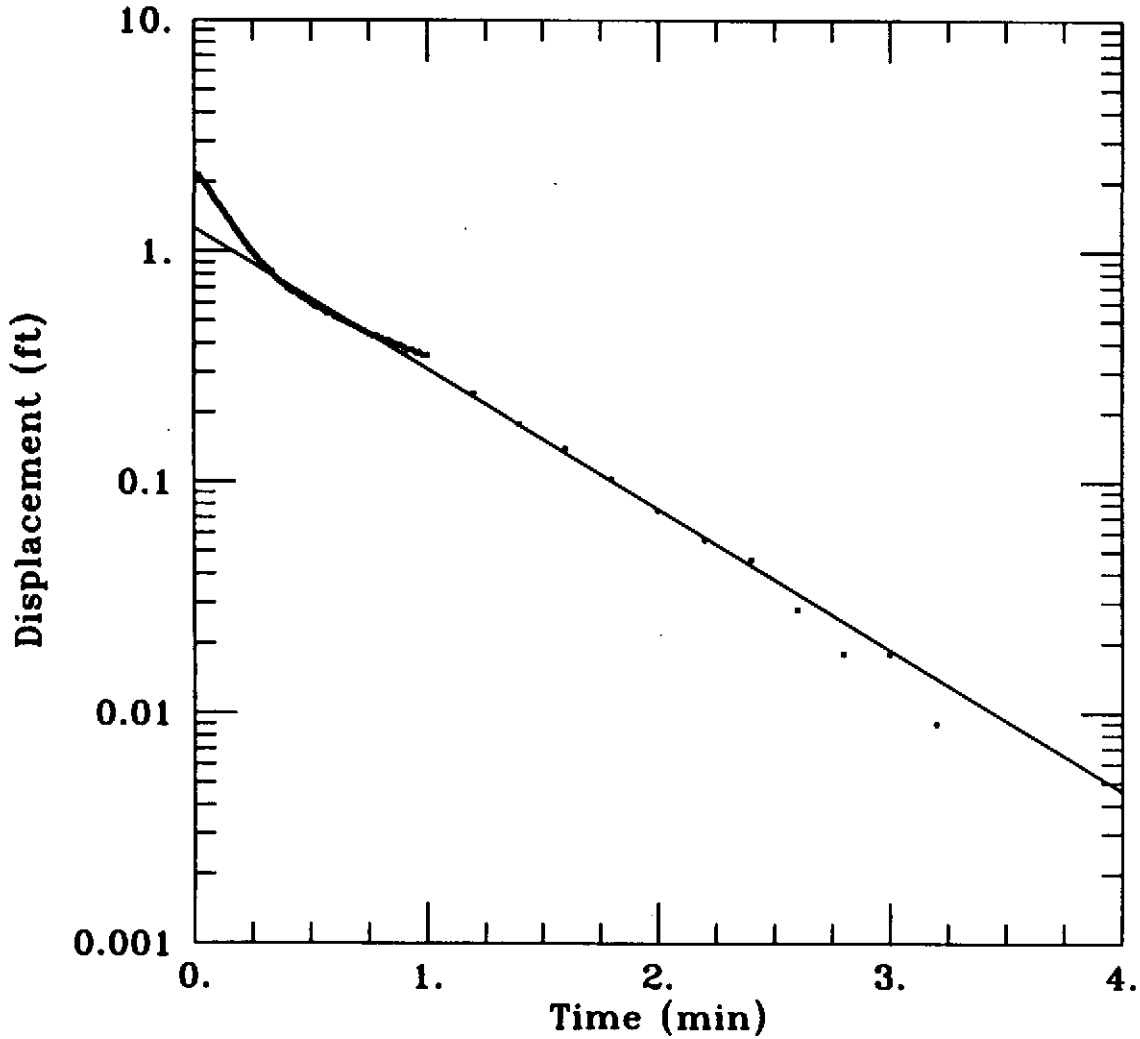
TEST DATA:
H0 = 3.114 ft
rc = 0.1667 ft
rw = 0.2771 ft
L = 8.4 ft
b = 8.4 ft
H = 8.4 ft

PARAMETER ESTIMATES:
K = 0.03172 ft/min
y0 = 3.057 ft

AQTESOLV

Client: **General Electric**	Company: **Blasland, Bouck, & Lee, Inc.**
Location: **Hill 78 Area, Pittsfield, MA**	Project: **101.94**

78-4 Rising Head Test



DATA SET:
78-4.PAR
04/30/97

AQUIFER MODEL:
Unconfined

SOLUTION METHOD:
Bouwer-Rice

PROJECT DATA:
test date: 7/31/96

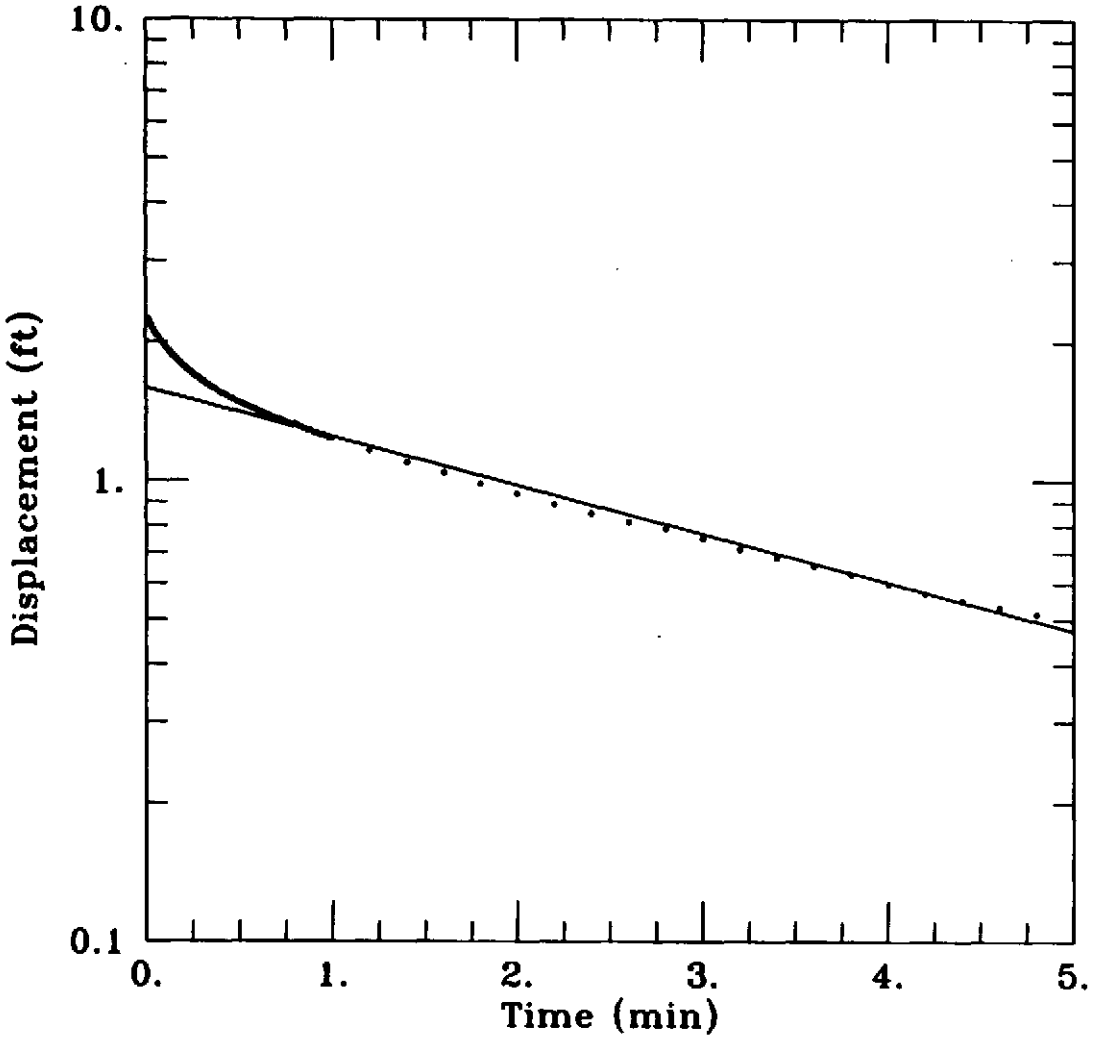
TEST DATA:
H0 = 2.139 ft
rc = 0.1667 ft
rw = 0.2771 ft
L = 9.66 ft
b = 9.66 ft
H = 9.66 ft

PARAMETER ESTIMATES:
K = 0.008332 ft/min
y0 = 1.263 ft

AQTESOLV

Client: **General Electric**	Company: **Blasland, Bouck, and Lee, Inc.**
Location: **Hill 78 Area, Pittsfield, MA**	Project: **101.94**

78-5 Rising Head Test



DATA SET:
78-5.PAR
04/30/97

AQUIFER MODEL:
Unconfined

SOLUTION METHOD:
Bouwer-Rice

PROJECT DATA:
test date: 8/1/96

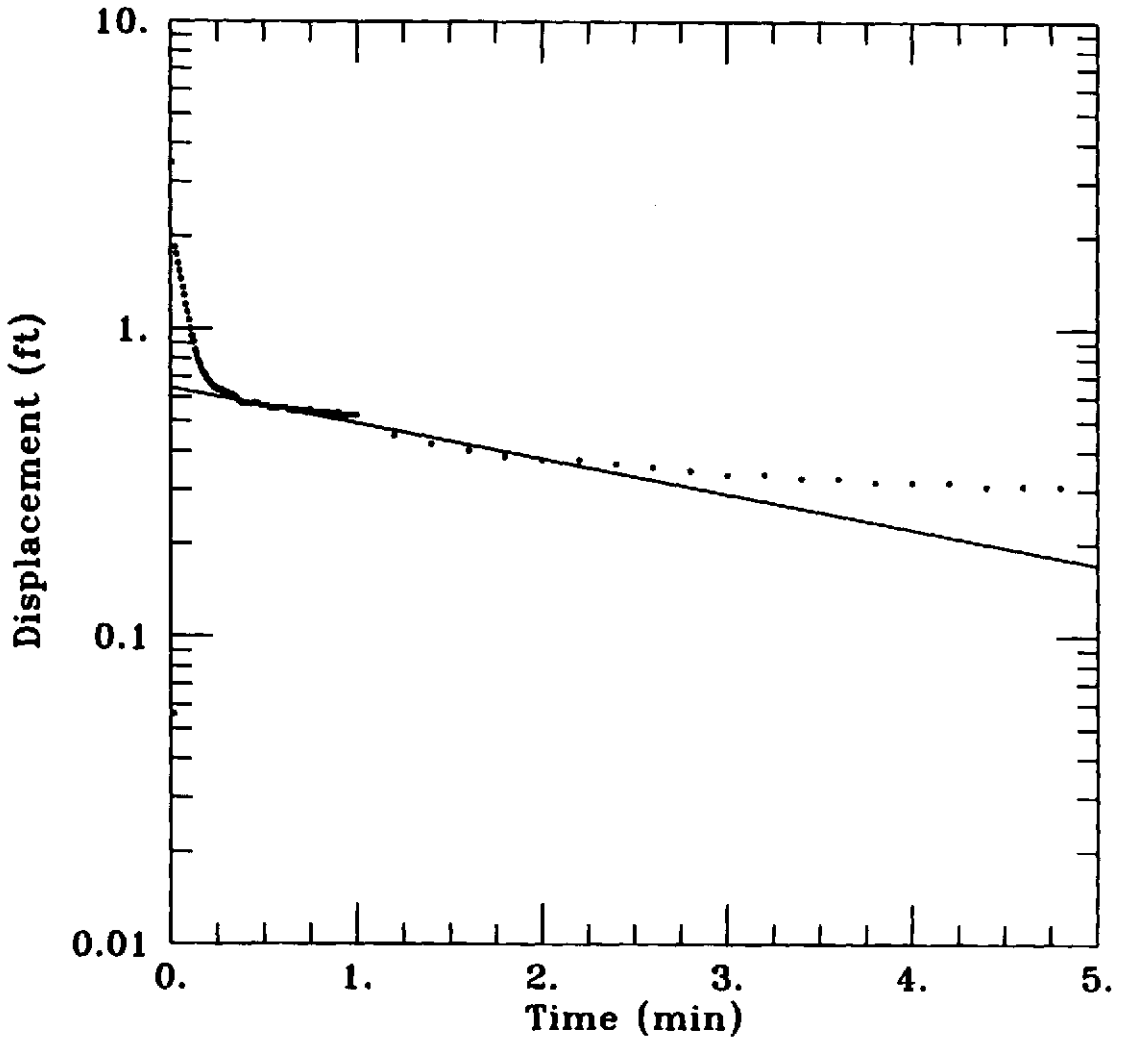
TEST DATA:
H0 = 2.242 ft
rc = 0.1667 ft
rw = 0.2771 ft
L = 13.11 ft
b = 13.11 ft
H = 13.11 ft

PARAMETER ESTIMATES:
K = 0.001156 ft/min
y0 = 1.586 ft

AQTESOLV

Client: **General Electric**	Company: **Blasland, Bouck, and Lee, Inc.**
Location: **Hill 78 Area, Pittsfield, MA**	Project: **101.94**

78-7 Rising Head Test



DATA SET:
78-7.PAR
04/30/97

AQUIFER MODEL:
Unconfined

SOLUTION METHOD:
Bouwer-Rice

PROJECT DATA:
test date: 7/31/96

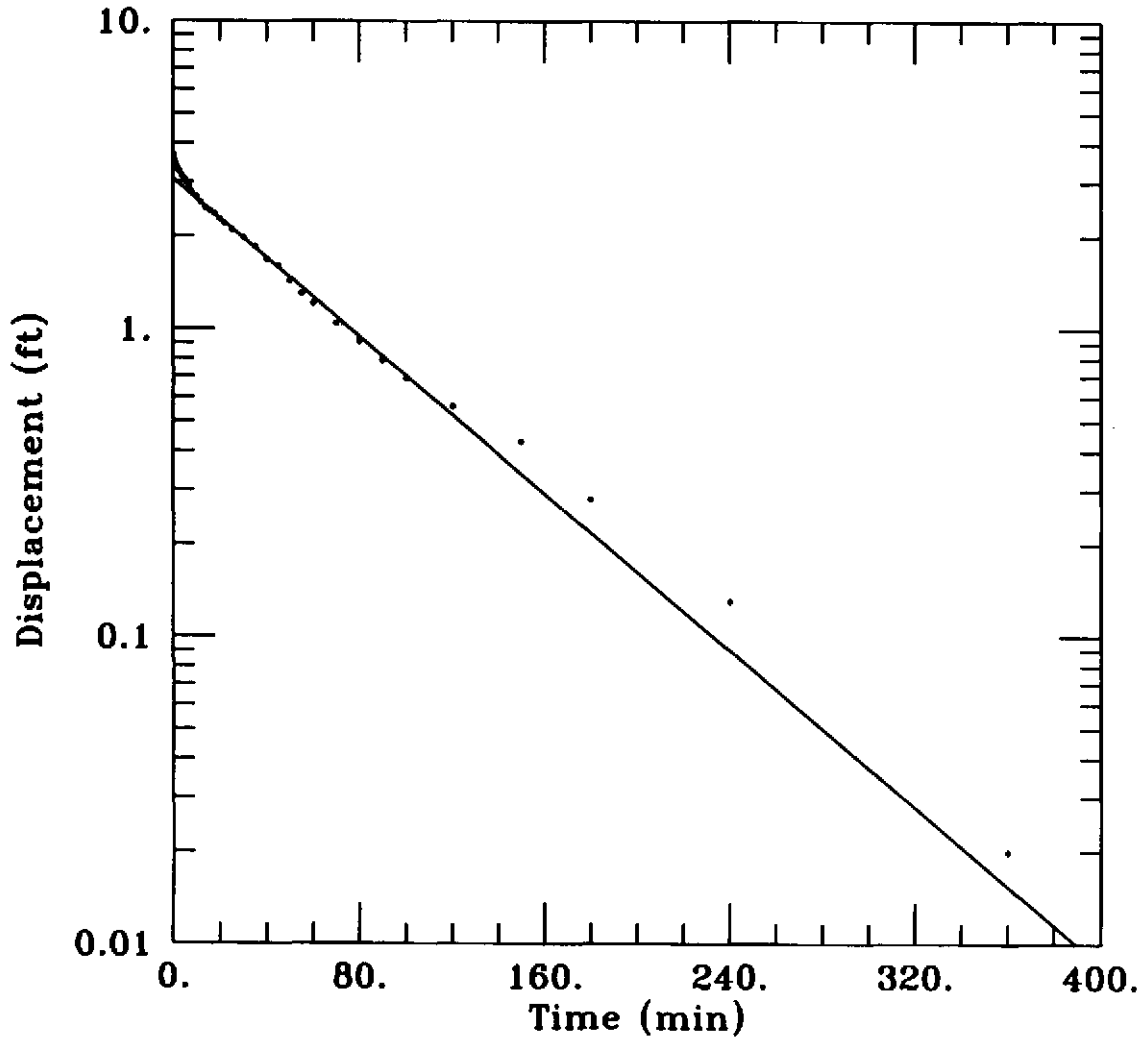
TEST DATA:
H0 = 1.838 ft
rc = 0.1667 ft
rw = 0.2771 ft
L = 15.51 ft
b = 15.51 ft
H = 15.51 ft

PARAMETER ESTIMATES:
K = 0.001122 ft/min
y0 = 0.6438 ft

AQTESOLV

Client: **General Electric**	Company: **Blasland, Bouck, and Lee, Inc.**
Location: **Hill 78 Area, Pittsfield, MA**	Project: **101.94**

78B-11 Rising Head Test



DATA SET:
78-11.PAR
05/01/97

AQUIFER MODEL:
Unconfined

SOLUTION METHOD:
Bouwer-Rice

PROJECT DATA:
test date: 7/31/96

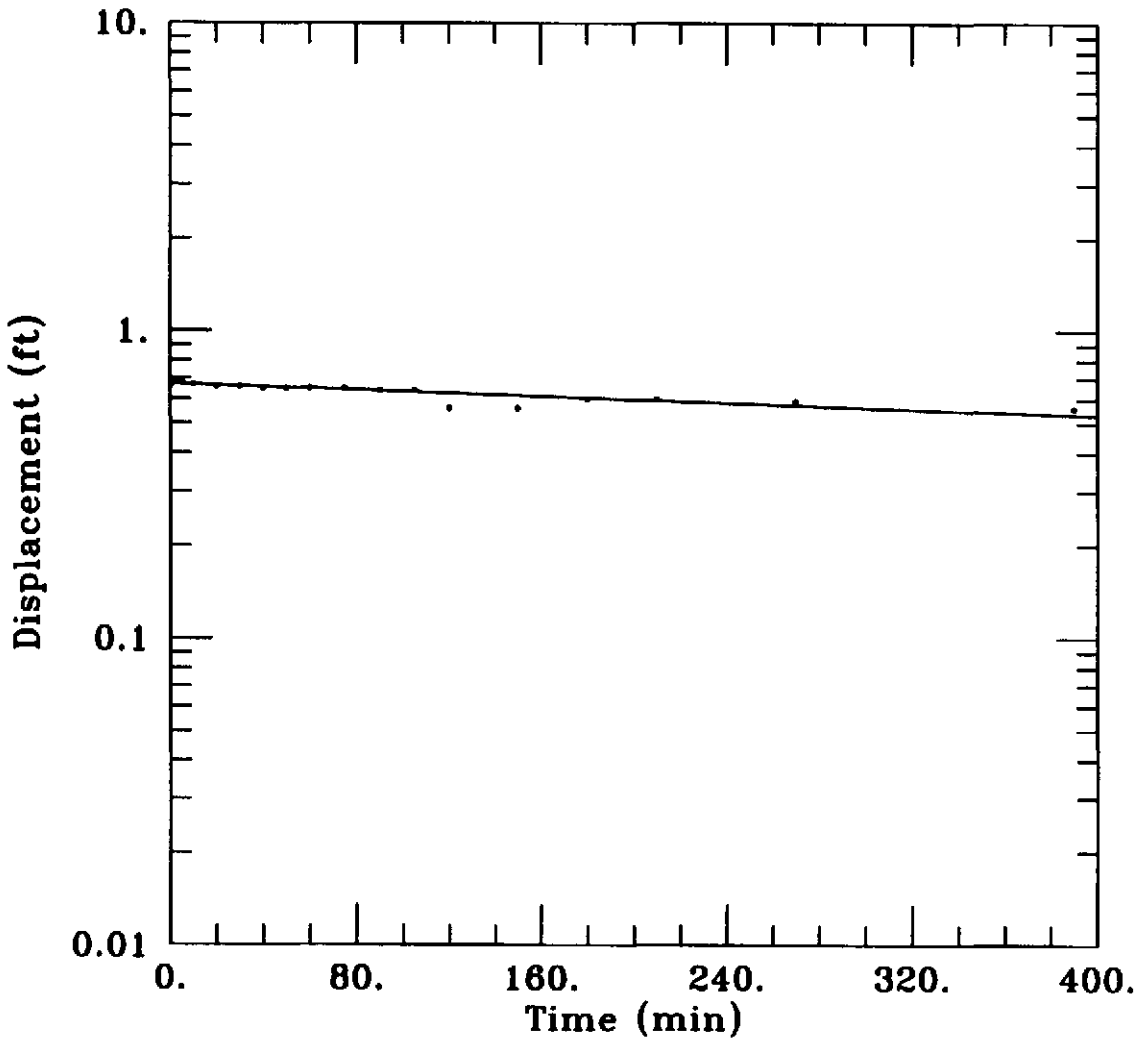
TEST DATA:
H0 = 3.66 ft
rc = 0.03125 ft
rw = 0.094 ft
L = 3.91 ft
b = 3.91 ft
H = 3.91 ft

PARAMETER ESTIMATES:
K = 1.782E-05 ft/min
y0 = 3.057 ft

AQTESOLV

Client: **General Electric**	Company: **Blasland, Bouck, and Lee, Inc.**
Location: **Hill 78 Area, Pittsfield, MA**	Project: **101.94**

78B-12 Rising Head Test



DATA SET:
78-12.PAR
05/01/97

AQUIFER MODEL:
Unconfined

SOLUTION METHOD:
Bouwer-Rice

PROJECT DATA:
test date: 7/31/96

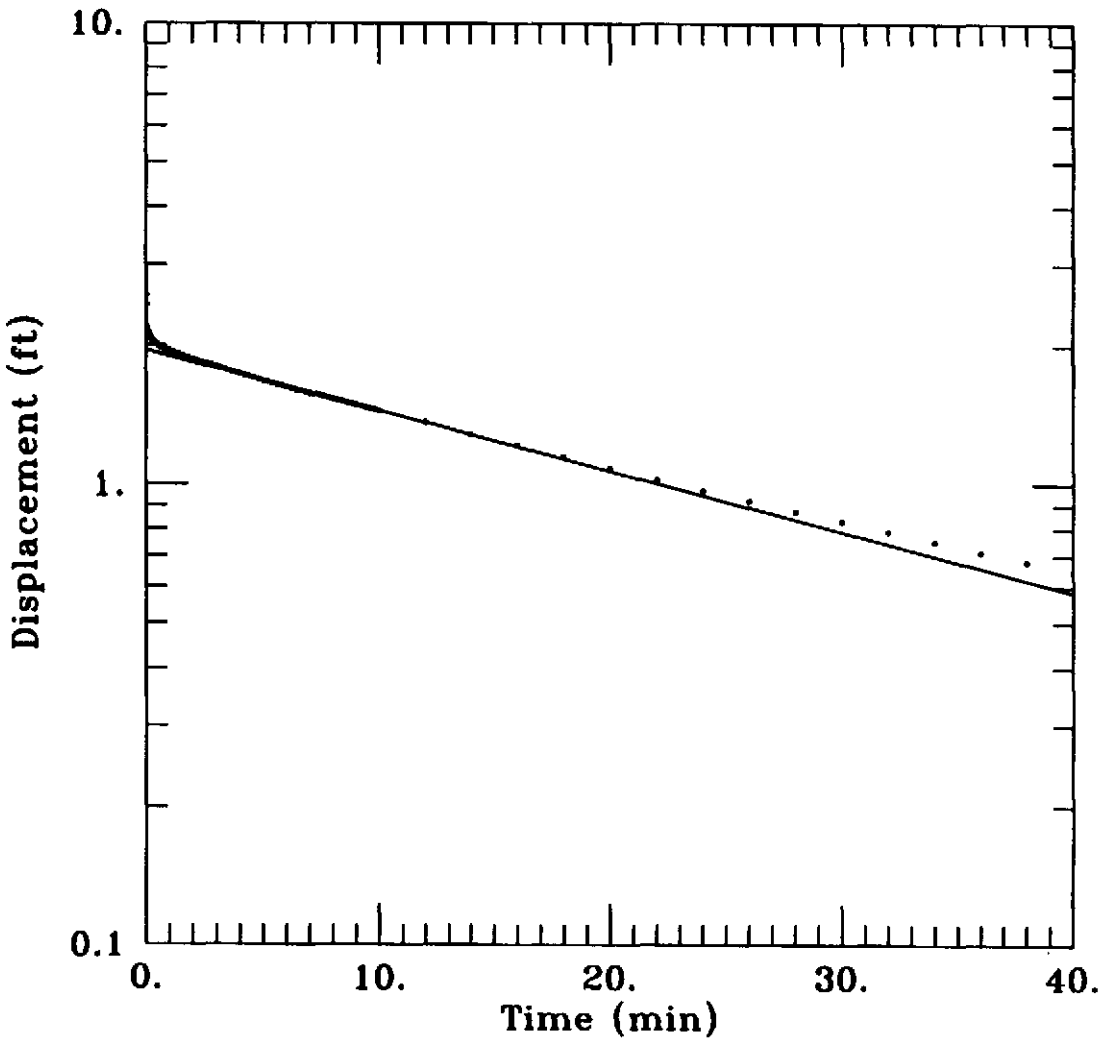
TEST DATA:
H0 = 0.68 ft
rc = 0.03125 ft
rw = 0.094 ft
L = 0.91 ft
b = 0.91 ft
H = 0.91 ft

PARAMETER ESTIMATES:
K = 1.76E-06 ft/min
y0 = 0.673 ft

AQTESOLV

Client: **General Electric**	Company: **Blasland, Bouck, and Lee, Inc.**
Location: **Hill 78 Area**	Project: **101.94.121**

H78B-17R Rising Head Test



DATA SET:
B17R.PAR
12/30/96

AQUIFER MODEL:
Unconfined

SOLUTION METHOD:
Bouwer-Rice

PROJECT DATA:
test date: 11/25/96

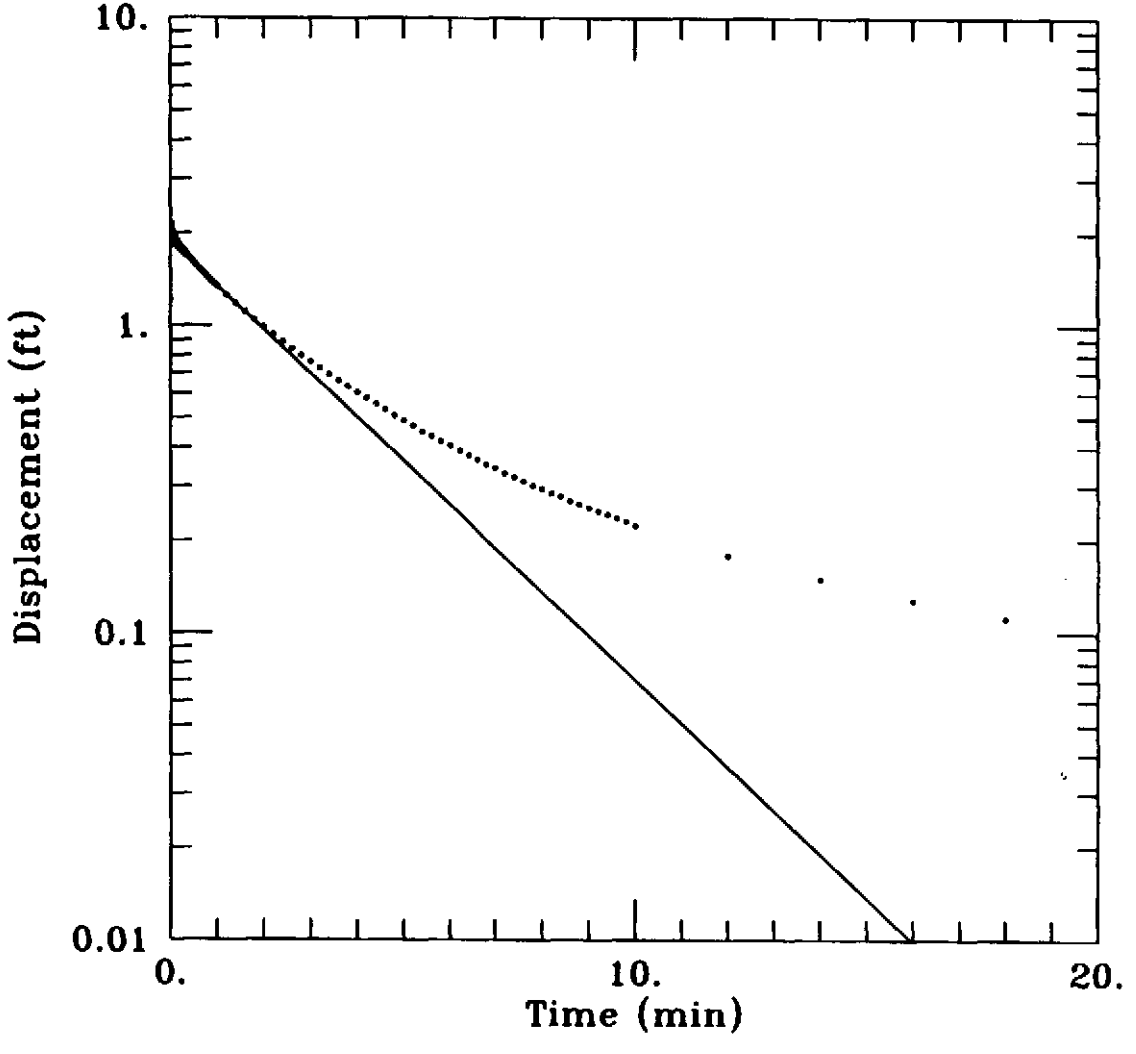
TEST DATA:
H0 = 2.568 ft
rc = 0.1666 ft
rw = 0.511 ft
L = 11.78 ft
b = 11.78 ft
H = 11.78 ft

PARAMETER ESTIMATES:
K = 8.346E-05 ft/min
y0 = 1.953 ft

AQTESOLV

Client: **General Electric**	Company: **Blasland, Bouck, and Lee, Inc.**
Location: **Hill 78 Area**	Project: **101.94.121**

H78B-28R Rising Head Test



DATA SET:
B28R.PAR
12/30/96

AQUIFER MODEL:
Unconfined

SOLUTION METHOD:
Bouwer-Rice

PROJECT DATA:
test date: 11/25/96

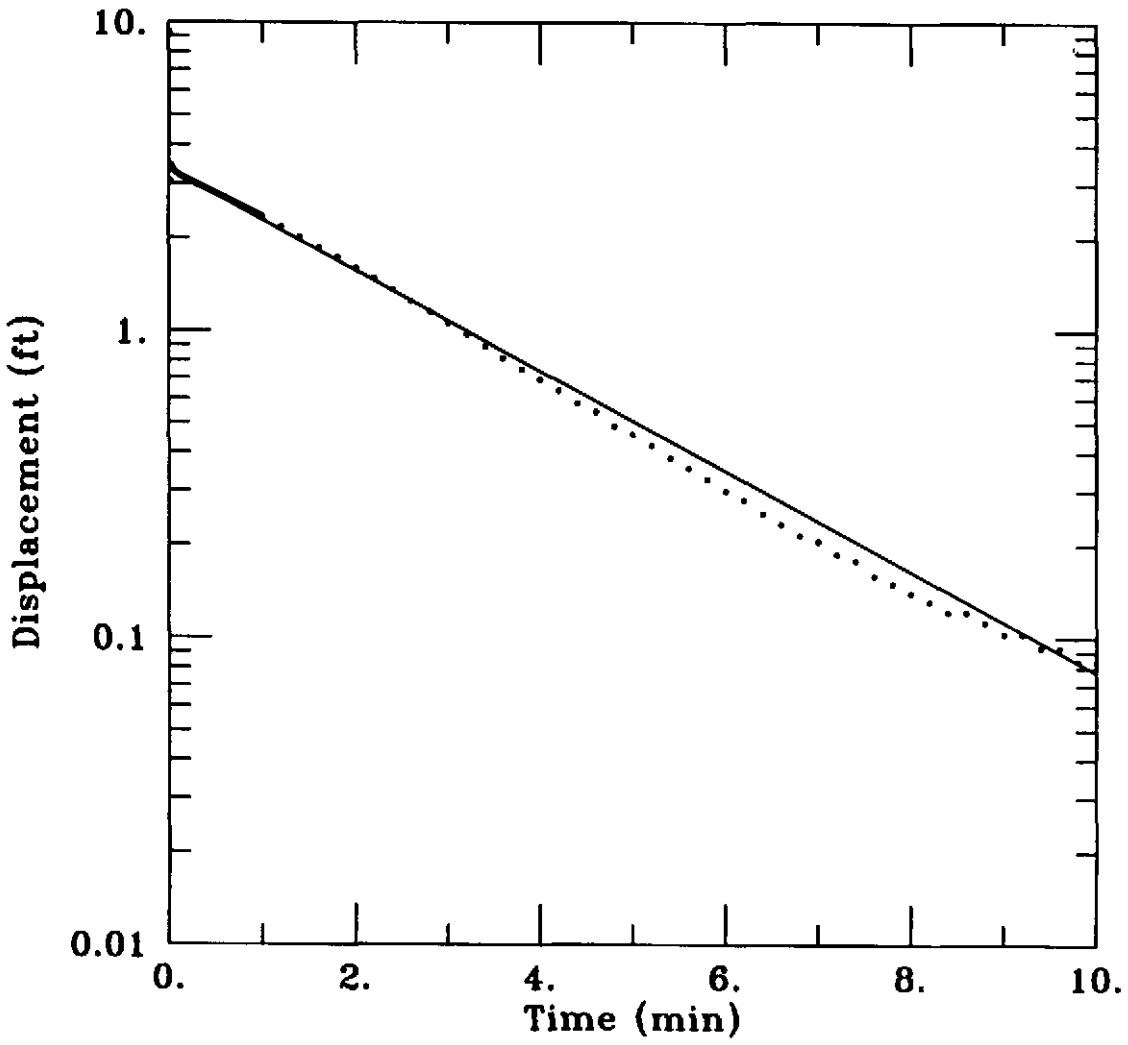
TEST DATA:
H0 = 2.144 ft
rc = 0.1666 ft
rw = 0.511 ft
L = 11.67 ft
b = 11.67 ft
H = 11.67 ft

PARAMETER ESTIMATES:
K = 0.0009109 ft/min
y0 = 1.87 ft

AQTESOLV

Client: **General Electric**	Company: **Blasland, Bouck, & Lee, Inc.**
Location: **Hill 78 Area, Pittsfield, MA**	Project: **101.94**

NY-1 Rising Head Test



DATA SET:
NY-1.PAR
04/30/97

AQUIFER MODEL:
Unconfined

SOLUTION METHOD:
Bouwer-Rice

PROJECT DATA:
test date: 7/30/96

TEST DATA:
H0 = 3.433 ft
rc = 0.083 ft
rw = 0.3333 ft
L = 10.26 ft
b = 10.26 ft
H = 10.26 ft

PARAMETER ESTIMATES:
K = 0.001814 ft/min
y0 = 3.33 ft

AQTESOLV

QSTRANSX Specific Capacity Test Reduction Spreadsheet
by M J Gefell, February 1993
Reformatted by J D Conrad, 11/07/96, 11/12/96
Variable descriptions added 11/12/96
Modified for unsaturated screen conditions, 11/13/96

	Variable	Units	H78B-13 08/01/96	H78B-15 08/01/96	H78B-16 08/01/96	H78B-18 08/01/96
Model Input						
1a. Initial Volume	V-initial	gal	0	0	0	0
1b. Final Volume	V-final	gal	6	4	35	8
1c. Total Volume	V-total	gal	6	4	35	8
2a. Initial Time	t-0	min	0	0	0	0
2b. Final Time	t-f	min	42.5	38.5	29.5	59.75
2c. Time Elapsed	t	min	42.5	38.5	29.5	59.75
3. Mean Flowrate	Q	gpm	0.141	0.104	1.186	0.134
		mL/min	534	393	4491	507
4a. Initial Depth to Water	dtw0	ft	8.05	14.64	8.59	6.59
4b. Final Depth to Water	dtwf	ft	12.71	15.47	8.92	10.81
4c. Total Depth	TD	ft	20.3	17.95	12.6	18.82
4d. Initial Well Water Column Height	b-w-0	ft	12.25	3.31	4.01	12.23
5. Drawdown	s	ft	4.66	0.83	0.33	4.22
6a. Screen Top	top S	ft bgs	6.0	6.0	4.0	6.0
6b. Screen Bottom	bot S	ft bgs	18.0	16.0	14.0	19.0
6c. Screen Length	LS	ft	12.0	10.0	10.0	13.0
7. Well Saturated Thickness	L	ft	12	3.31	4.01	12.23
8. Storativity	S		0.01	0.01	0.01	0.01
9. Well Diameter	ID (w)	in	1	0.75	1	0.75
	r(w)	ft	0.042	0.031	0.042	0.031
Iteration Parameters						
10a. Iteration Scale factor:	x		100	2000	1000	500
10b. Initial Transmissivity Guess	T (guess)	gpd/ft	34	170	6009	39
Model Output						
11a. Computed Flowrate	Q (comp)	gpm	0.141	0.104	1.186	0.134
		mL/min	534	393	4491	507
11b. Flowrate Error	Q(comp) - Q	gpm	0.000	0.000	0.000	0.000
		mL/min	0.000	0.000	0.000	0.000
12. Computed Transmissivity	T (comp)	gpd/ft	34	170	6009	39
		ft^2/d	5	23	803	5
13. Computed Hydraulic Conductivit	K	cm/sec	1.34E-04	2.44E-03	7.10E-02	1.53E-04
		ft/d	0.38	6.91	201.31	0.43

Specific capacity test reduction based on technique described in Walton, W.C. 1962. Selected Analytical Methods for Well and Aquifer Evaluation, Illinois State Water Survey, Bulletin 19.

1a, 1b, 1c, 2a, 2b, 2c, 3. Flowrates calculated from purge data as recorded in specific capacity log-books, BBL, 1996.
4a, 4b, 4c, 4d. Water levels and total depth recorded in specific capacity testing log-books, BBL, 1996.
5. Calculated from 4a-4b.
6a, 6b, 6c. Well dimensions obtained from well installation logs, BBL, 1996.
7. Well saturated thickness computed from the minimum of either: a. total depth-depth to water, or b. screen length.
8. Storativity estimated from ranges of sand storativities.
9. Well diameter obtained from well installation logs, BBL, 1996.
10a, 10b. Iteration parameters used in spreadsheet convergence model.
11a, 11b. Flowrate computed using iterative version of Walton technique.
12. Transmissivity computed using iterative version of Walton technique.
13. Hydraulic conductivity computed by the transmissivity divided by the saturated screen length.