



SDMS: 159434

08-0011

Corporate Environmental Programs  
General Electric Company  
100 Woodlawn Avenue, Pittsfield, MA 01201

*Transmitted Via FedEx*

March 9, 2001

Bryan Olson  
EPA Project Coordinator  
U.S. Environmental Protection Agency  
EPA New England  
One Congress Street, Suite 1100  
Boston, Massachusetts 02114-2023

Dean Tagliaferro  
On Scene Coordinator  
U.S. Environmental Protection Agency  
c/o Weston  
One Lyman Street  
Pittsfield, Massachusetts 01201

**Re: GE-Pittsfield/Housatonic River Site  
Upper ½-Mile Reach Removal Action (GECD800) and Plant Site 1 GMA (GECD310)  
Cell G1 Monitoring Results and Proposed Modification to Baseline Monitoring Program  
Proposal for Plant Site 1 Groundwater Management Area (GMA1)**

Dear Messrs. Olson and Tagliaferro:

On July 11, 2000, GE submitted a document entitled *Results of Cell G1 DNAPL Investigation and Proposal to Address the Presence of DNAPL in Cell G1*. Subsequently, by letter dated July 19, 2000, the United States Environmental Protection Agency (EPA), after consultation with the Massachusetts Department of Environmental Protection (MDEP), granted conditional approval of that proposal and requested that GE install three monitoring wells in the vicinity of the Cell G1 sheetpile containment barrier. Subsequently, on September 20, 2000, GE submitted a proposal for the installation of three monitoring wells on the landward side (i.e., north) of the containment barrier that had been installed between July and September 2000. EPA provided approval of GE's September 20, 2000 proposal by letter dated September 27, 2000. Details pertaining to the installation of the three monitoring wells are further discussed below.

On October 30, 2000, GE installed one perimeter monitoring well (HR-G1-MW1) outside the east end of the containment barrier and one well (HR-G1-MW2) between the ends of the containment barrier. The third well was not installed at that time due to ongoing removal activities in Cell G2. Following completion of Cell G2 activities, GE installed the remaining perimeter monitoring well on January 29, 2001 outside at the west end of the containment barrier (HR-G1-MW3). The surveyed locations of these three monitoring wells are shown on Figure 1. During well installation, construction details and actual field measurement were recorded. Well construction logs were developed for each well following installation and are provided as Attachment A. Well installation and development activities were performed in accordance with GE's approved *Field Sampling Plan/Quality Assurance Project Plan*.

Following well development, the wells were monitored on a weekly basis between January 12, 2001 and March 5, 2001 (a minimum of four weeks of monitoring including all three wells) to confirm that DNAPL was not present outside the limits of the containment barrier and to assess whether additional

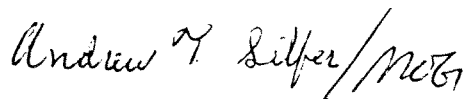
investigative or response actions are appropriate. NAPL was not detected in any of the wells during this monitoring period. Additionally, water level measurements that were observed during this monitoring period indicate that groundwater mounding behind the sheetpile containment barrier is not occurring. A summary of monitoring results is provided in Table 1.

Based on the results of the initial monitoring of these wells, GE proposes certain changes to the baseline groundwater monitoring program for the Plant Site 1 Groundwater Management Area (GMA 1) as it relates to these three wells. In GE's *Baseline Monitoring Program Proposal for the Plant Site 1 Groundwater Management Area*, submitted to EPA in September 2000, GE proposed to include one of these three wells (which were designated as PROP-24, -25, and -26 in that proposal) as a GW-3 perimeter well to address groundwater quality downgradient of the former Thermal Oxidizer location, with the specific well to be determined after installation of the wells. That submittal also proposed to include one of these wells in the NAPL monitoring program (with the specific well to be selected after installation) and to monitor that well weekly for the presence of NAPL.

Based on the results of the initial weekly monitoring of these wells, GE has selected well HR-G1-MW3 (PROP-24 in the GMA 1 Baseline Monitoring Proposal) for inclusion in the baseline monitoring program for GMA 1, and proposes to incorporate that well into the program as a GW-3 perimeter well. This well has been selected base on its location relative to both the former Thermal Oxidizer location and the Cell G1 source control barrier wall. In addition, GE proposes to continue to monitor all three of these wells for NAPL, but (given the absence of NAPL detected to date) change the NAPL monitoring frequency of these wells to monthly. Further, since (as anticipated) groundwater mounding is not occurring in any appreciable amount in this area, additional groundwater recovery associated with the Cell G1 containment barrier is not proposed. GE will continue to evaluate the Cell G1 monitoring wells for the presence of NAPL and for potential groundwater mounding effects as part of the GMA 1 program.

If you have any questions, please feel free to contact me.

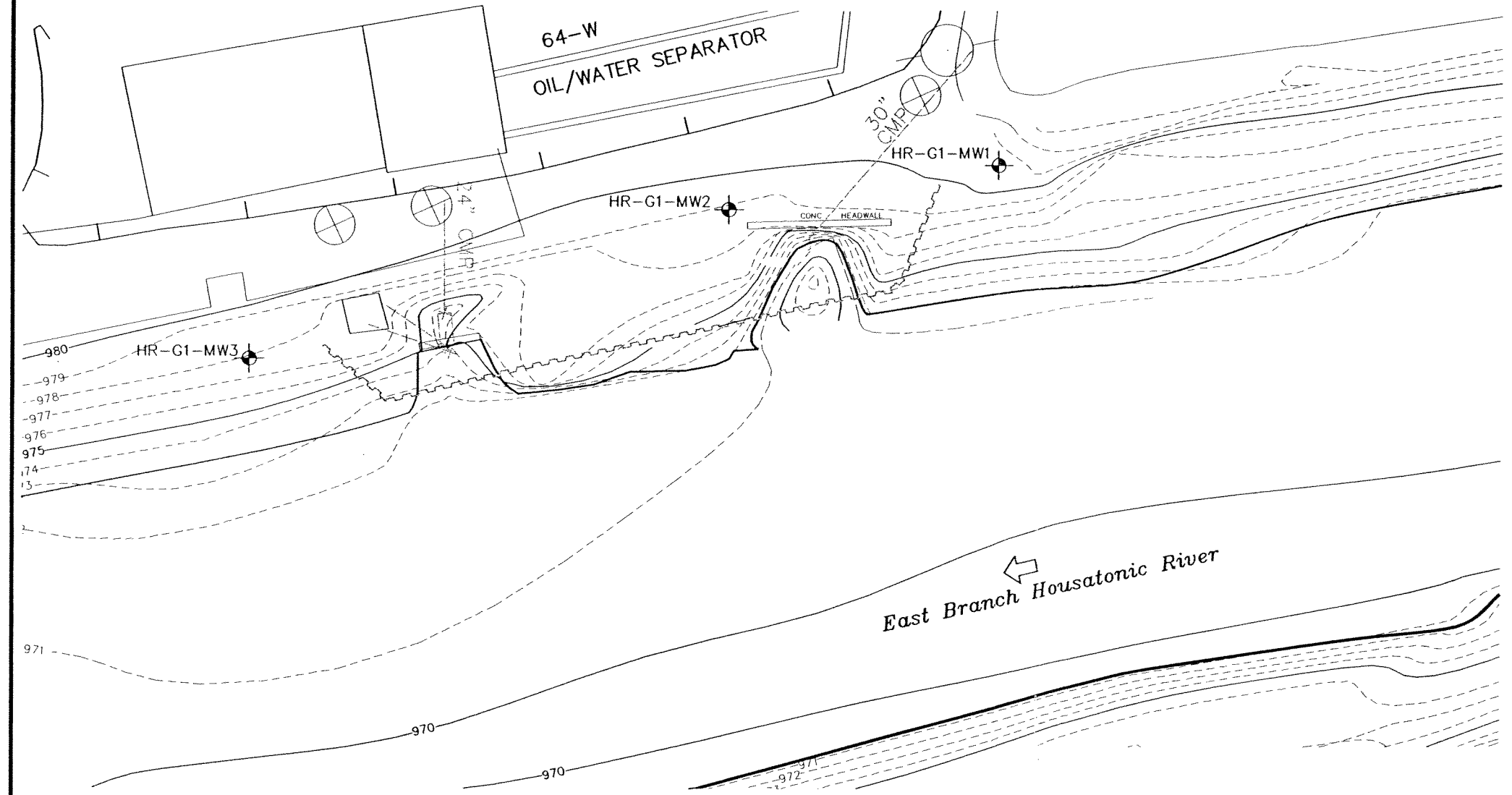
Very truly yours,

Handwritten signature of Andrew T. Silfer in cursive, with a horizontal line through the middle of the signature.

Andrew T. Silfer, P.E.  
GE Project Coordinator

cc: T. Conway, EPA  
H. Inglis, EPA  
M. Nalipinski, EPA  
A. Weinberg, MDEP  
R. Bell, MDEP  
S. Steenstrup, MDEP (2 copies)  
S. Keydel, MDEP  
C. Fredette, CT DEP  
S. Messur, BBL  
S. Gutter, Sidley & Austin  
J. Bernstein, Bernstein, Cushner & Kimmel  
J. Bieke, Shea & Gardner

R. Goff, USACE  
K. Mitkevicius, USACE  
D. Veilleux, Weston  
N. E. Harper, MA AG  
D. Young, MA EOE  
Mayor G. Doyle, City of Pittsfield  
A. Thomas, GE  
M. Carroll, GE  
Public Information Repositories

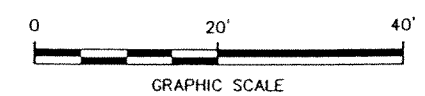


**LEGEND:**

- CONTAINMENT BARRIER
- HR-G1-MW1 MONITORING WELL LOCATION
- 980 GROUND ELEVATION CONTOUR (PRIOR TO EXCAVATION)

**NOTES:**

1. BASE MAP BY DESIGN GROUP, INC. 2 FEDERICO DRIVE, PITTSFIELD, MASSACHUSETTS 01201, "SKETCH PLAN OF G1 AND G2 BORING LOCATIONS", DATED JUNE 23, 2000.



GENERAL ELECTRIC COMPANY PITTSFIELD, MASSACHUSETTS REMOVAL ACTION UPPER 1/2-MILE REACH OF HOUSATONIC RIVER	
<b>CELL G1 MONITORING WELL LOCATIONS</b>	
<b>BBL</b> BLASLAND, BOUCK & LEE, INC. engineers & scientists	FIGURE <b>1</b>

X: NONE  
L: ON=\*, OFF=REF  
P: STD-PCP/BL  
3/2/01 SYR-54-JER DJP SDL  
20197071/20197005.DWG

TABLE 1

GENERAL ELECTRIC COMPANY  
PITTSFIELD, MASSACHUSETTS

UPPER 1/2-MILE REACH OF HOUSATONIC RIVER

CELL G-1 MONITORING RESULTS

Well I.D.	Date	Measuring Point Elevation (Feet AMSL)	Depth to Water (Feet below MP)	Depth to NAPL (Feet below MP)	Total Depth (Feet below MP)	NAPL Thickness (Feet)	Groundwater Elevation (Feet AMSL)	NAPL Removal (Liters)
HR-G1-MW-1	1/12/01	982.42	10.66	---	20.35	0.00	971.76	0.00
HR-G1-MW-1	1/19/01	982.42	10.75	---	20.35	0.00	971.67	0.00
HR-G1-MW-1	1/24/01	982.42	10.70	---	20.36	0.00	971.72	0.00
HR-G1-MW-1	1/29/01	982.42	10.65	---	20.32	0.00	971.77	0.00
HR-G1-MW-1	2/5/01	982.42	10.47	---	20.36	0.00	971.95	0.00
HR-G1-MW-1	2/12/01	982.42	9.86	---	20.35	0.00	972.56	0.00
HR-G1-MW-1	2/19/01	982.42	10.24	---	20.35	0.00	972.18	0.00
HR-G1-MW-1	2/26/01	982.42	10.26	---	20.35	0.00	972.16	0.00
HR-G1-MW-1	3/5/01	982.42	10.40	---	20.35	0.00	972.02	0.00
HR-G1-MW-2	1/12/01	980.23	8.45	---	28.52	0.00	971.78	0.00
HR-G1-MW-2	1/19/01	980.23	8.53	---	28.51	0.00	971.70	0.00
HR-G1-MW-2	1/24/01	980.23	8.54	---	28.53	0.00	971.69	0.00
HR-G1-MW-2	1/29/01	980.23	8.46	---	28.53	0.00	971.77	0.00
HR-G1-MW-2	2/5/01	980.23	8.21	---	28.52	0.00	972.02	0.00
HR-G1-MW-2	2/12/01	980.23	7.76	---	28.52	0.00	972.47	0.00
HR-G1-MW-2	2/19/01	980.23	8.01	---	28.51	0.00	972.22	0.00
HR-G1-MW-2	2/26/01	980.23	8.10	---	28.51	0.00	972.13	0.00
HR-G1-MW-2	3/5/01	980.23	8.11	---	28.51	0.00	972.12	0.00
HR-G1-MW-3	2/5/01	980.25	8.50	---	17.97	0.00	971.75	0.00
HR-G1-MW-3	2/12/01	980.25	7.77	---	17.97	0.00	972.48	0.00
HR-G1-MW-3	2/19/01	980.25	8.23	---	17.96	0.00	972.02	0.00
HR-G1-MW-3	2/26/01	980.25	8.21	---	17.94	0.00	972.04	0.00
HR-G1-MW-3	3/5/01	980.25	8.41	---	17.96	0.00	971.84	0.00

Notes:

1. NAPL = Non-Aqueous Phase Liquid.
2. MP = Measuring Point
3. Feet AMSL = Feet Above Mean Sea Level

# ***Attachment A***

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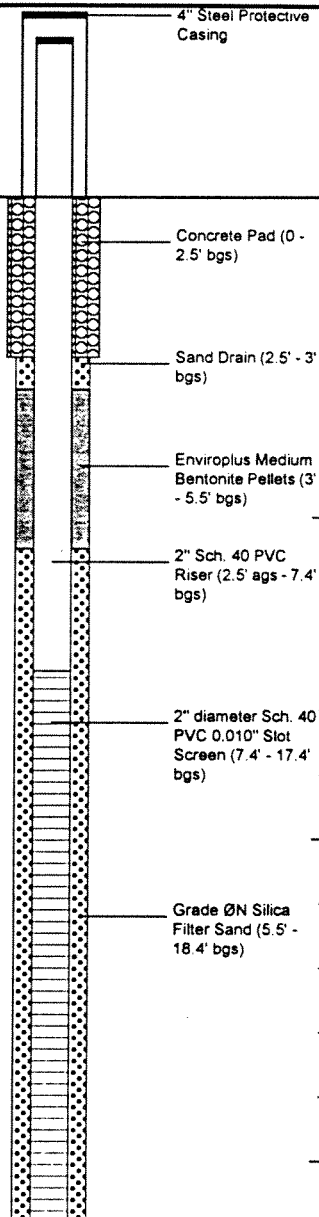
BLASLAND, BOUCK & LEE, INC.  
*engineers & scientists*

## ***Well Construction Logs***

Date Start/Finish: 10/30/00  
 Drilling Company: Parratt Wolff  
 Driller's Name: Joel Percy & Rick Nevatica  
 Drilling Method: Hollow Stem Auger  
 Bit Size: NA  
 Auger Size: 4 1/4" ID  
 Rig Type: CME 850 ATV  
 Sampling Method:

Northing: NA  
 Easting: NA  
 Casing Elevation: NA  
 Borehole Depth: 18.4' below grade  
 Surface Elevation: 980.33'  
 Geologist: Michael Cobb

Well/Boring ID: HR-G1-MW-1  
 Client: General Electric Company  
 Location: Housatonic River 1/2 Mile  
 Cell G1 Monitoring Well Installation

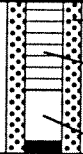
DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Blows / 6 Inches	N - Value	Geologic Column	Stratigraphic Description	Well/Boring Construction
0	980	NA	NA	NA	NA	NA	NA		No Soil Sampling Conducted.	
5	975									
10	970									
15	965									



Remarks:

Client:  
 General Electric Company  
 Site Location:  
 Housatonic River 1/2 Mile  
 Cell G1 Monitoring Well Installation

Well/Boring ID: HR-G1-MW-1  
 Borehole Depth: 18.4' below grade

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Blows / 6 Inches	N - Value	Geologic Column	Stratigraphic Description	Well/Boring Construction
		NA	NA	NA	NA	NA	NA		No Soil Sampling Conducted.	 <p>Grade ØN Silica Filter Sand (5.5' - 18.4' bgs)            2" diameter Sch. 40 PVC 0.010" Slot Screen (7.4' - 17.4' bgs)            1" Sump Sch. 40 PVC (17.4' - 18.4' bgs)            Female Bottom Slip Cap.</p>
20	960									
25	955									
30	950									
35	945									

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

Remarks:



Date Start/Finish: 10/30/00 Drilling Company: Parratt Wolff Driller's Name: Joel Percy & Rick Nevatica Drilling Method: Hollow Stem Auger Bit Size: NA Auger Size: 4 1/4" ID Rig Type: CME 850 ATV Sampling Method: 2" Split Spoon	Northing: NA Easting: NA Casing Elevation: NA  Borehole Depth: 26.5' below grade Surface Elevation: 978'  Geologist: Michael Cobb	Well/Boring ID: HR-G1-MW-2  Client: General Electric Company  Location: Housatonic River 1/2 Mile Cell G1 Monitoring Well Installation
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DEPTH	ELEVATION	Sample Run Number	Sample/In/Type	Recovery (feet)	PID Headspace (ppm)	Blows / 6 Inches	N - Value	Geologic Column	Stratigraphic Description	Well/Boring Construction
980										4" Steel Protective Casing
0		NA	NA	NA	NA	NA	NA		No Sampling/Auger to 18' bgs.	Concrete Pad (0 - 1' bgs)
975										Cement/Bentonite Grout (1' - 11' bgs)
5										2" Sch. 40 PVC Riser (2.5' ags - 15.5' bgs)
970										
10										
965										Enviroplus Medium Bentonite Pellets (11' - 13.3' bgs)
										Grade ØN Silica Filter Sand (13.3' - 26.5' bgs)
15										2" diameter Sch. 40 PVC 0.010" Slot Screen (15.5' - 25.5' bgs)

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**Remarks:** PID battery dies. Headspace readings not taken from 22'-26'.

Client:  
 General Electric Company  
 Site Location:  
 Housatonic River 1/2 Mile  
 Cell G1 Monitoring Well Installation

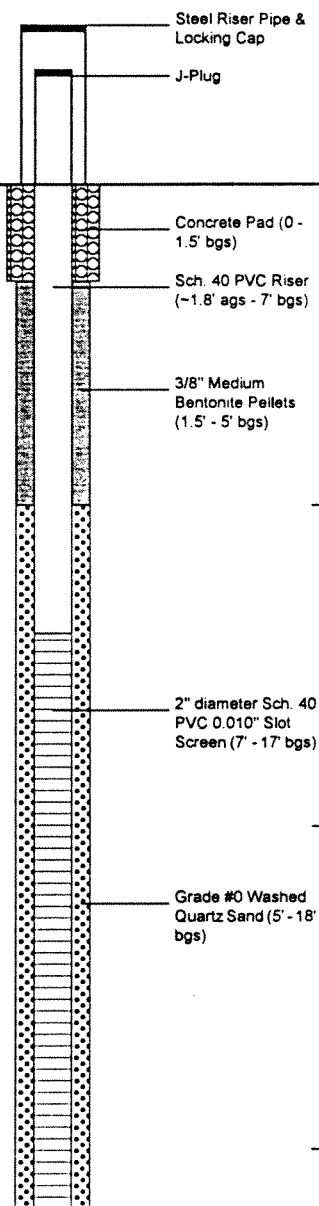
Well/Boring ID: HR-G1-MW-2  
 Borehole Depth: 26.5' below grade

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Blows / 6 inches	N - Value	Geologic Column	Stratigraphic Description	Well/Boring Construction
		NA	NA	NA	NA	NA	NA		No Sampling/Auger to 18' bgs.	
960		1	18-20	1.8	1.8	6	16		Gray-brown medium to coarse SAND and fine GRAVEL (angular), trace oily sheen, wet, slight odor.	
20		2	20-22	1.5	12.0	9	31		As above, possible little black staining, odor.	
955		3	22-24	1.3	NA	12	18		Gray-brown medium SAND, some coarse Sand and fine Gravel, rounded to angular, coarsens downward.	
						9			In shoe, light olive-brown SILT, soft, wet.	
						9			As above, grading denser, slight odor.	
25		4	24-26	1.0	NA	10	27		Olive-brown fine SAND, little coarse Sand, fine angular Gravel, hard. (TILL)	
						17				
						24				
950										
30										
945										
35										



Remarks: PID battery dies. Headspace readings not taken from 22'-26'.

Date Start/Finish: 1/29/01 Drilling Company: Parratt Wolff Driller's Name: Rod Trask & Rick Nevatica Drilling Method: Hollow Stem Auger Bit Size: NA Auger Size: 4 1/4" ID Rig Type: Ingersoll Rand A-300 Sampling Method:	Northing: NA Easting: NA Casing Elevation: NA  Borehole Depth: 18' below grade Surface Elevation: 980.12'  Geologist: L. Sanders	Well/Boring ID: HR-G1-MW-3  Client: General Electric Company  Location: Housatonic River 1/2 Mile Cell G1 Monitoring Well Installation
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DEPTH	ELEVATION	Sample Run Number	Sample/In/Type	Recovery (feet)	PID Headspace (ppm)	Blows / 6 Inches	N - Value	Geologic Column	Stratigraphic Description	Well/Boring Construction
0	980	NA	NA	NA	NA	NA	NA		No Soil Sampling Conducted.	 <p>Steel Riser Pipe &amp; Locking Cap            J-Plug            Concrete Pad (0 - 1.5' bgs)            Sch. 40 PVC Riser (~1.8' ags - 7' bgs)            3/8" Medium Bentonite Pellets (1.5' - 5' bgs)            2" diameter Sch. 40 PVC 0.010" Slot Screen (7' - 17' bgs)            Grade #0 Washed Quartz Sand (5' - 18' bgs)</p>
5	975									
10	970									
15	965									

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

Remarks:

Client:  
 General Electric Company  
 Site Location:  
 Housatonic River 1/2 Mile  
 Cell G1 Monitoring Well Installation

Well/Boring ID: HR-G1-MW-3  
 Borehole Depth: 18' below grade

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Blows / 6 Inches	N - Value	Geologic Column	Stratigraphic Description	Well/Boring Construction
		NA	NA	NA	NA	NA	NA		No Soil Sampling Conducted.	<p>Grade #0 Washed Quartz Sand (5' - 18' bgs)            2" diameter Sch. 40 PVC 0.010" Slot Screen (7' - 17' bgs)            1' Sump Sch. 40 PVC (17' - 18' bgs)</p>
20	960									
25	955									
30	950									
35	945									

**BBL**  
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 engineers & scientists

Remarks: