

*Transmitted Via Overnight Delivery*

August 18, 2003

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

**Re: GE-Pittsfield/Housatonic River Site  
Lyman Street Area (GECD430)  
Supplemental Pre-Design Soil Investigations**

Dear Mr. Olson:

In April 2003, the General Electric Company (GE) submitted to the U.S. Environmental Protection Agency (EPA) a document titled *Pre-Design Investigation Report for the Lyman Street Area Removal Action* (PDI Report). The PDI Report was prepared in accordance with the Consent Decree (CD) for the GE-Pittsfield/Housatonic River Site and the accompanying *Statement of Work for Removal Actions Outside the River* (SOW). The associated field activities were described in the *Pre-Design Investigation Work Plan for the Lyman Street Area Removal Action* (PDI Work Plan, March 2002) and the supplemental information letter dated July 16, 2002. These documents were conditionally approved by EPA in letters dated July 2, 2002 and July 25, 2002, respectively. In the PDI Report, GE proposed that it perform certain additional soil investigations and present the results to EPA in a letter report. EPA conditionally approved the PDI Report in a letter dated June 20, 2003. This letter presents the results of supplemental PCB and Appendix IX+3 soil sampling performed at the Lyman Street Area on July 9, 2003, pursuant to the PDI Report and EPA's June 20, 2003 conditional approval letter.

As described in the PDI Report, the available data presented in that report were generally sufficient to characterize the soils within the Lyman Street Area and thus to support future Removal Design/Removal Action (RD/RA) evaluations for this area. However, based on the results of preliminary evaluations, GE determined that some additional information, including supplemental sampling for Appendix IX+3 constituents, would likely be needed to support future response actions and preparation of a Conceptual RD/RA Work Plan. These supplemental sampling activities were proposed in the PDI Report. In addition, EPA's conditional approval of the PDI Report required that a soil sample be re-collected at one PDI sampling location due to a rejected PCB result. EPA also required that additional soil sampling be performed at another location to further assess the presence of lead in deeper soils. Further, EPA indicated in the conditional approval letter that it would conduct "wild card" sampling at the RAA12-V6 location (0- to 1-foot and 1- to 3-foot depth intervals) for polycyclic aromatic hydrocarbons (PAHs). This letter does not include results of such wild card sampling, as the results have not yet been provided to GE.

The remainder of this letter summarizes the recent supplemental pre-design sampling. Figure 1, attached to this letter, shows the supplemental sample locations. The attached Table 1 summarizes the scope of the supplemental sampling, and Tables 2 and 3 summarize the sampling results for PCBs and Appendix IX soil sampling, respectively. A complete listing of the (non-PCB) Appendix IX+3 laboratory results is included in Attachment A. Subsurface boring logs and the soil sampling data validation information are included in Attachments B and C, respectively. Finally, this report proposes a schedule for future activities related to the Lyman Street Area.

The supplemental pre-design soil sampling at the Lyman Street Area involved the collection and analysis of 17 soil samples from 11 locations, as shown on Figure 1. The specific sample locations, depth intervals, and respective analyses are shown in Table 1. The supplemental sampling was conducted by and on behalf of GE by Blasland, Bouck & Lee, Inc. (BBL). The analytical services were provided by CT&E Environmental Services, Inc. All field and analytical activities conducted were performed in accordance with GE's approved *Field Sampling Plan/Quality Assurance Project Plan* (FSP/QAPP). Soil samples collected for PCB analysis were analyzed for Aroclor-specific PCBs by EPA Method 8082. The PCB results were reported on a dry-weight basis, with a detection limit of approximately 0.05 parts per million (ppm) for all Aroclors. Soil samples collected for other constituents listed in Appendix IX of 40 CFR Part 264, plus three additional constituents – benzidine, 2-chloroethylvinyl ether, and 1,2-diphenylhydrazine (Appendix IX+3) (excluding pesticides and herbicides), were analyzed utilizing methods and reporting limits consistent with those presented in the FSP/QAPP.

#### **A. Summary of Supplemental Pre-Design Soil Data**

The analytical results for PCBs and other Appendix IX+3 constituents are summarized in Tables 2 and 3, respectively. Table 3 presents only those Appendix IX+3 results for constituents that were detected in one or more samples. A complete listing of the (non-PCB) Appendix IX+3 laboratory results is included in Attachment A. These supplemental results are summarized below.

#### **PCB Results**

As outlined in EPA's conditional approval of the PDI Report, a soil sample was re-collected at one PDI sampling location due to a rejected PCB result during validation. This sample was required to fulfill subsurface characterization at this location in accordance with the PDI Work Plan. As shown in Table 2 and on Figure 1, the PCB sample was re-collected at RAA12-V4 (3- to 6-foot depth interval) and contained total PCBs at a concentration of 0.039J ppm.

#### **Supplemental Recreational Area Sampling**

As described in the PDI Report, GE proposed additional soil sampling in the vicinity of certain areas located along the Housatonic River that were designated in the SOW as recreational. This sampling was proposed based on the possibility that the specific limits of the recreational areas (as depicted in the SOW) may change as a result of restoration activities conducted by EPA associated with its remediation activities for the 1½ Mile Reach of the Housatonic River. Thus, GE identified the need for additional sampling coverage for this area.

As shown in Table 1 and on Figure 1, eight supplemental soil samples were collected at three locations (RAA12-Y5, RAA12-U9, and RAA12-TU9.5) for volatile organic compound (VOC), semi-volatile organic compound (SVOC), polychlorinated dibenzo-p-dioxin/polychlorinated dibenzofuran (PCDD/PCDF), and inorganic analyses. The purpose of these samples was to provide additional Appendix IX+3 characterization in these recreational areas. These samples were collected at the 0- to 1-foot depth

interval and at one or more subsurface depth intervals to provide vertical delineation of the soils. As shown in Table 3, the total 2,3,7,8-TCDD toxicity equivalents (TEQs) for the RAA12-U9 (0- to 1-foot and 1- to 3-foot depth intervals) and RAA12-TU9.5 (1- to 3-foot depth interval) samples are elevated as compared to the applicable Preliminary Remediation Goals (PRGs) for TEQs. Therefore, further sampling is required to delineate the extent of these elevated concentrations and is proposed in Section B. In addition, concentrations of certain PAHs may be elevated in the RAA12-U9 (1- to 3-foot depth interval) sample (Table 3). Therefore, additional sampling is required for PAHs and is proposed in Section B below.

### **Supplemental Lead Sampling**

As proposed in the PDI Report and as modified in EPA's conditional approval of the PDI Report, GE performed additional soil sampling for lead at Parcel I9-4-201 in the vicinity of the RAA12-O16 sampling location. GE's review of the PDI data indicated a possible need for additional sampling in this area due to the elevated lead concentration of 51,000 ppm at the 0- to 1-foot depth interval at RAA12-O16.

As shown in Table 1 and on Figure 1, five supplemental soil samples were collected at four locations in this area (RAA12-O16, RAA12-O16NE, RAA12-O16S, and RAA12-O16NW) for analysis of lead. As proposed in the PDI Report, samples were collected at the 0- to 1-foot depth interval to provide horizontal delineation at the RAA12-O16NE, RAA12-O16S, and RAA12-O16NW locations. Further, as required by EPA's conditional approval of the PDI Report, supplemental soil samples were collected at the 1- to 3-foot and 3- to 6-foot depth intervals at RAA12-O16 to provide vertical delineation of lead at this location. Analytical results for these samples are presented in Table 3. These supplemental results, together with the results of the previous PDI samples, provide adequate delineation of lead concentrations in this area.

### **Supplemental PAH Sampling**

As proposed in the PDI Report, additional soil sampling was performed at Parcel I9-4-19 in the vicinity of the RAA12-U8 sampling location. GE's review of the PDI data indicated a possible need for additional sampling due to elevated concentrations of PAHs in the RAA12-U8 (1- to 3-foot depth interval) sample.

As proposed in the PDI Report and shown in Table 1 and on Figure 1, two supplemental soil samples were collected at two locations (RAA12-U8NE and RAA12-U8SW) for analysis of SVOCs (which include PAHs). Both samples were collected at the 1- to 3-foot depth interval. As shown in Table 3, concentrations of certain of the PAHs are elevated in the RAA12-U8NE sample. Therefore, additional sampling is required to delineate the extent of the elevated concentrations and is proposed in Section B below.

## **B. Assessment of Potential Data Needs and Proposal for Additional Sampling**

In combination with the pre-design investigation soil data, the results for the supplemental pre-design soil sampling are generally sufficient to characterize soils within the Lyman Street Area and support the necessary evaluations for this RAA. However, as described in Section A above, some additional sampling is required.

First, additional supplemental sampling is proposed based on the need to delineate PAH concentrations at two locations, RAA12-U9 and RAA12-U8NE. At both locations, elevated or potentially elevated PAH concentrations were detected. Available data adequately delineate these PAH concentrations to the east and west of these locations, but not to the north. Therefore, as shown on Figure 1, GE proposes to collect

additional samples for analysis for SVOCs (including PAHs) at locations RAA12-U9N (1- to 3-foot depth interval), which is approximately 50 feet north of RAA12-U9, and RAA12-U8N (1- to 3-foot depth interval) which is approximately 35 northwest of RAA12-U8NE.

In addition, additional supplemental sampling is proposed to delineate elevated PCDD/PCDF concentrations at two locations, RAA12-U9 and RAA12-TU9.5. Available data adequately delineate elevated PCDD/PCDF concentrations to the east and west of these locations, but not to the north. Therefore, as shown on Figure 1, GE proposes to collect additional samples for analysis for PCDDs/PCDFs at location RAA12-U9N (0- to 1-foot and 1- to 3-foot depth intervals), one of the locations from which a sample is proposed to be collected for SVOC analysis. As mentioned above, the RAA12-UN location is approximately 50 feet north of RAA12-U9, and it is 35 feet northwest of RAA12-TU9.5.

All of these samples will be collected and analyzed as specified in the approved FSP/QAPP.

If during the course of performing RD/RA evaluations for the RAA, GE identifies the need for other supplemental data to support a potential response action, GE will propose the scope of such supplemental sampling to EPA for review and approval.

### **C. Future Activities and Schedule**

GE will submit an Additional Supplemental PDI Report in letter format within 45 days from EPA's approval of this letter. The Conceptual RD/RA Work Plan for the Lyman Street Area Removal Action will be submitted within 4 months from EPA's approval of the Additional Supplemental PDI Report. The contents of the Conceptual RD/RA Work Plan will be consistent with Section 3.3 of the SOW and as outlined in the PDI Report.

Please contact Dick Gates or me with any questions.

Sincerely,

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

### **Enclosure**

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# *Tables*

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**TABLE 1  
SUMMARY OF SUPPLEMENTAL PRE-DESIGN INVESTIGATION SOIL SAMPLE LOCATIONS FOR PCB AND APPENDIX IX+3 CONSTITUENTS**

**SUPPLEMENTAL PRE-DESIGN INVESTIGATION REPORT FOR LYMAN STREET AREA REMOVAL ACTION  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**

Parcel ID	Sample ID	Sample Depth (feet)	Nearest Grid Coordinate	Performed Analyses						Rationale
				PCBs	VOCs	SVOCs	PCDDs/PCDFs	Inorganics	Lead	
I9-4-14	RAA12-Y5	0-1	Y5	--	X	X	X	X	--	Non-PCB Appendix IX Characterization for Recreational Area
		1-3	Y5	--	X	X	X	X	--	Non-PCB Appendix IX Characterization for Recreational Area
I9-4-19	RAA12-V4	3-6	V4	X	--	--	--	--	--	PCB Characterization for Rejected Sample
	RAA12-U8NE	1-3	U8	--	--	X	--	--	--	Delineation of Potentially Elevated PAH Concentration at RAA12-U8
	RAA12-U8SW	1-3	U8	--	--	X	--	--	--	Delineation of Potentially Elevated PAH Concentration at RAA12-U8
	RAA12-X6	1-3	X6	--	X	--	--	--	--	Non-PCB Appendix IX Characterization for Recreational Area
I9-4-25	RAA12-U9	0-1	U9	--	X	X	X	X	--	Non-PCB Appendix IX Characterization for Recreational Area
		1-3	U9	--	X	X	X	X	--	Non-PCB Appendix IX Characterization for Recreational Area
		3-6	U9	--	X	X	X	X	--	Non-PCB Appendix IX Characterization for Recreational Area
I9-4-201	RAA12-O16	1-3	O16	--	--	--	--	--	X	Delineation of Potentially Elevated Lead Concentration at RAA12-O16 Area
		3-6	O16	--	--	--	--	--	X	Delineation of Potentially Elevated Lead Concentration at RAA12-O16 Area
	RAA12-O16NW	0-1	O16	--	--	--	--	--	X	Delineation of Potentially Elevated Lead Concentration at RAA12-O16 Area
	RAA12-O16NE	0-1	O16	--	--	--	--	--	X	Delineation of Potentially Elevated Lead Concentration at RAA12-O16 Area
	RAA12-O16S	0-1	O16	--	--	--	--	--	X	Delineation of Potentially Elevated Lead Concentration at RAA12-O16 Area
I9-4-203	RAA12-TU9.5	0-1	T9 and U9	--	X	X	X	X	--	Non-PCB Appendix IX Characterization for Recreational Area
		1-3	T9 and U9	--	X	X	X	X	--	Non-PCB Appendix IX Characterization for Recreational Area
		6-10	T9 and U9	--	X	X	X	X	--	Non-PCB Appendix IX Characterization for Recreational Area

Notes:

-- = No analyses were proposed.

**TABLE 2  
SUPPLEMENTAL PRE-DESIGN SOIL INVESTIGATION SAMPLING DATA FOR PCBs**

**SUPPLEMENTAL PRE-DESIGN INVESTIGATION REPORT FOR LYMAN STREET AREA REMOVAL ACTION  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
(Results are presented in dry weight parts per million, ppm)**

Sample ID	Depth (Feet)	Date Collected	Aroclor-1016	Aroclor-1221	Aroclor-1232	Aroclor-1242	Aroclor-1248	Aroclor-1254	Aroclor-1260	Total PCBs
RAA12-V4	3-6	7/9/2003	ND(0.043) [ND(0.043)]	ND(0.043) [ND(0.043)]	ND(0.043) [ND(0.043)]	ND(0.043) [ND(0.043)]	ND(0.043) [ND(0.043)]	0.039 J [ND(0.043)]	ND(0.043) [0.036 J]	0.039 J [0.036 J]

Notes:

1. Samples were collected by Blasland, Bouck & Lee, Inc., and submitted to CT&E Environmental Services, Inc. for analysis of PCBs.
2. ND - Analyte was not detected. The number in parentheses is the associated detection limit.
3. Field duplicate sample results are presented in brackets.

Data Qualifiers:

J - Indicates an estimated value less than the practical quantitation limit (PQL).



**TABLE 3  
SUPPLEMENTAL PRE-DESIGN SOIL INVESTIGATION SAMPLING DATA FOR APPENDIX IX+3 CONSTITUENTS**

**SUPPLEMENTAL PRE-DESIGN INVESTIGATION REPORT FOR LYMAN STREET AREA REMOVAL ACTION  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
(Results are presented in dry weight parts per million, ppm)**

Sample ID: Sample Depth (Feet): Parameter Date Collected:	RAA12-O16 1-3 07/09/03	RAA12-O16 3-6 07/09/03	RAA12-O16NE 0-1 07/09/03	RAA12-O16NW 0-1 07/09/03	RAA12-O16S 0-1 07/09/03	RAA12-TU9.5 0-1 07/09/03
<b>Volatile Organics</b>						
None Detected	NA	NA	NA	NA	NA	--
<b>Semivolatile Organics</b>						
1,2,4,5-Tetrachlorobenzene	NA	NA	NA	NA	NA	ND(0.37)
1,2,4-Trichlorobenzene	NA	NA	NA	NA	NA	ND(0.37)
1,4-Dichlorobenzene	NA	NA	NA	NA	NA	ND(0.37)
2-Methylnaphthalene	NA	NA	NA	NA	NA	0.12 J
2-Methylphenol	NA	NA	NA	NA	NA	ND(0.37)
3&4-Methylphenol	NA	NA	NA	NA	NA	ND(0.75)
3-Methylcholanthrene	NA	NA	NA	NA	NA	ND(0.75)
Acenaphthene	NA	NA	NA	NA	NA	ND(0.37)
Acenaphthylene	NA	NA	NA	NA	NA	0.57
Aniline	NA	NA	NA	NA	NA	ND(0.37)
Anthracene	NA	NA	NA	NA	NA	0.51
Benzo(a)anthracene	NA	NA	NA	NA	NA	1.4
Benzo(a)pyrene	NA	NA	NA	NA	NA	1.3
Benzo(b)fluoranthene	NA	NA	NA	NA	NA	1.1
Benzo(g,h,i)perylene	NA	NA	NA	NA	NA	1.0
Benzo(k)fluoranthene	NA	NA	NA	NA	NA	1.3
bis(2-Ethylhexyl)phthalate	NA	NA	NA	NA	NA	ND(0.37)
Butylbenzylphthalate	NA	NA	NA	NA	NA	ND(0.37)
Chrysene	NA	NA	NA	NA	NA	1.8
Dibenzo(a,h)anthracene	NA	NA	NA	NA	NA	0.24 J
Dibenzofuran	NA	NA	NA	NA	NA	0.19 J
Di-n-Butylphthalate	NA	NA	NA	NA	NA	ND(0.37)
Fluoranthene	NA	NA	NA	NA	NA	4.7
Fluorene	NA	NA	NA	NA	NA	0.53
Indeno(1,2,3-cd)pyrene	NA	NA	NA	NA	NA	0.80
Naphthalene	NA	NA	NA	NA	NA	0.12 J
Phenanthrene	NA	NA	NA	NA	NA	5.0
Phenol	NA	NA	NA	NA	NA	ND(0.37)
Pyrene	NA	NA	NA	NA	NA	4.1
<b>Furans</b>						
2,3,7,8-TCDF	NA	NA	NA	NA	NA	0.000059 YEI
TCDFs (total)	NA	NA	NA	NA	NA	0.00065
1,2,3,7,8-PeCDF	NA	NA	NA	NA	NA	0.000030
2,3,4,7,8-PeCDF	NA	NA	NA	NA	NA	0.000029
PeCDFs (total)	NA	NA	NA	NA	NA	0.00049
1,2,3,4,7,8-HxCDF	NA	NA	NA	NA	NA	0.0015 I
1,2,3,6,7,8-HxCDF	NA	NA	NA	NA	NA	0.000025
1,2,3,7,8,9-HxCDF	NA	NA	NA	NA	NA	0.0000039
2,3,4,6,7,8-HxCDF	NA	NA	NA	NA	NA	0.000039
HxCDFs (total)	NA	NA	NA	NA	NA	0.0025
1,2,3,4,6,7,8-HpCDF	NA	NA	NA	NA	NA	0.00017
1,2,3,4,7,8,9-HpCDF	NA	NA	NA	NA	NA	ND(0.000025) X
HpCDFs (total)	NA	NA	NA	NA	NA	0.00017
OCDF	NA	NA	NA	NA	NA	0.000095 B
<b>Dioxins</b>						
2,3,7,8-TCDD	NA	NA	NA	NA	NA	ND(0.00000073)
TCDDs (total)	NA	NA	NA	NA	NA	0.0000026
1,2,3,7,8-PeCDD	NA	NA	NA	NA	NA	ND(0.0000020)
PeCDDs (total)	NA	NA	NA	NA	NA	ND(0.0000020)
1,2,3,4,7,8-HxCDD	NA	NA	NA	NA	NA	0.0000067
1,2,3,6,7,8-HxCDD	NA	NA	NA	NA	NA	0.0000082
1,2,3,7,8,9-HxCDD	NA	NA	NA	NA	NA	0.0000064
HxCDDs (total)	NA	NA	NA	NA	NA	0.000021
1,2,3,4,6,7,8-HpCDD	NA	NA	NA	NA	NA	0.000075
HpCDDs (total)	NA	NA	NA	NA	NA	0.00014
OCDD	NA	NA	NA	NA	NA	0.00040 B
Total TEQs (WHO TEFs)	NA	NA	NA	NA	NA	0.00018

**TABLE 3  
SUPPLEMENTAL PRE-DESIGN SOIL INVESTIGATION SAMPLING DATA FOR APPENDIX IX+3 CONSTITUENTS**

**SUPPLEMENTAL PRE-DESIGN INVESTIGATION REPORT FOR LYMAN STREET AREA REMOVAL ACTION  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
(Results are presented in dry weight parts per million, ppm)**

Sample ID:	RAA12-O16	RAA12-O16	RAA12-O16NE	RAA12-O16NW	RAA12-O16S	RAA12-TU9.5
Sample Depth (Feet):	1-3	3-6	0-1	0-1	0-1	0-1
Parameter						
Date Collected:	07/09/03	07/09/03	07/09/03	07/09/03	07/09/03	07/09/03
<b>Inorganics</b>						
Antimony	NA	NA	NA	NA	NA	0.920 B
Arsenic	NA	NA	NA	NA	NA	4.40
Barium	NA	NA	NA	NA	NA	64.0
Beryllium	NA	NA	NA	NA	NA	0.190 B
Cadmium	NA	NA	NA	NA	NA	1.00
Chromium	NA	NA	NA	NA	NA	10.0
Cobalt	NA	NA	NA	NA	NA	5.20
Copper	NA	NA	NA	NA	NA	38.0
Cyanide	NA	NA	NA	NA	NA	0.470
Lead	420	720	66.0	1100	540	140
Mercury	NA	NA	NA	NA	NA	0.260
Nickel	NA	NA	NA	NA	NA	11.0
Selenium	NA	NA	NA	NA	NA	1.10
Silver	NA	NA	NA	NA	NA	0.370 B
Sulfide	NA	NA	NA	NA	NA	8.90
Tin	NA	NA	NA	NA	NA	6.00 B
Vanadium	NA	NA	NA	NA	NA	10.0
Zinc	NA	NA	NA	NA	NA	170

**TABLE 3  
SUPPLEMENTAL PRE-DESIGN SOIL INVESTIGATION SAMPLING DATA FOR APPENDIX IX+3 CONSTITUENTS**

**SUPPLEMENTAL PRE-DESIGN INVESTIGATION REPORT FOR LYMAN STREET AREA REMOVAL ACTION  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
(Results are presented in dry weight parts per million, ppm)**

Sample ID: Sample Depth (Feet): Parameter Date Collected:	RAA12-TU9.5 1-3 07/09/03	RAA12-TU9.5 6-10 07/09/03	RAA12-TU9.5 8-10 07/09/03	RAA12-U8NE 1-3 07/09/03	RAA12-U8SW 1-3 07/09/03	RAA12-U9 0-1 07/09/03
<b>Volatile Organics</b>						
None Detected	--	NA	--	NA	NA	--
<b>Semivolatile Organics</b>						
1,2,4,5-Tetrachlorobenzene	ND(0.38)	ND(0.53) [ND(0.50)]	NA	ND(0.39)	ND(0.52)	ND(0.35)
1,2,4-Trichlorobenzene	ND(0.38)	ND(0.53) [ND(0.50)]	NA	ND(0.39)	ND(0.52)	ND(0.35)
1,4-Dichlorobenzene	ND(0.38)	0.26 J [0.31 J]	NA	ND(0.39)	ND(0.52)	ND(0.35)
2-Methylnaphthalene	ND(0.38)	0.13 J [0.13 J]	NA	2.9	ND(0.52)	ND(0.35)
2-Methylphenol	ND(0.38)	ND(0.53) [0.11 J]	NA	ND(0.39)	ND(0.52)	ND(0.35)
3&4-Methylphenol	ND(0.77)	0.36 J [0.28 J]	NA	0.11 J	ND(0.74)	ND(0.70)
3-Methylcholanthrene	ND(0.77)	ND(0.99) [ND(1.0)]	NA	1.3	ND(0.74)	ND(0.70)
Acenaphthene	ND(0.38)	ND(0.53) [0.42 J]	NA	12	0.11 J	ND(0.35)
Acenaphthylene	0.14 J	0.21 J [0.60]	NA	2.2	0.15 J	ND(0.35)
Aniline	ND(0.38)	ND(0.53) [ND(0.50)]	NA	ND(0.39)	ND(0.52)	ND(0.35)
Anthracene	0.23 J	0.48 J [1.1]	NA	39	0.29 J	ND(0.35)
Benzo(a)anthracene	0.66	0.87 [3.4]	NA	71	0.74	ND(0.35)
Benzo(a)pyrene	0.64	0.76 [3.1]	NA	60	0.62	ND(0.35)
Benzo(b)fluoranthene	0.53	0.61 [3.0]	NA	49	0.61	ND(0.35)
Benzo(g,h,i)perylene	0.58	0.50 J [2.4]	NA	36	0.48 J	ND(0.35)
Benzo(k)fluoranthene	0.66	0.69 [2.8]	NA	55	0.36 J	ND(0.35)
bis(2-Ethylhexyl)phthalate	ND(0.38)	ND(0.49) [ND(0.50)]	NA	0.62	ND(0.37)	ND(0.34)
Butylbenzylphthalate	ND(0.38)	ND(0.53) [ND(0.50)]	NA	ND(0.39)	4.9	ND(0.35)
Chrysene	0.76	1.1 [4.2]	NA	65	0.72	ND(0.35)
Dibenzo(a,h)anthracene	0.13 J	ND(0.53) [0.53]	NA	9.3	ND(0.52)	ND(0.35)
Dibenzofuran	ND(0.38)	0.12 J [0.22 J]	NA	8.0	ND(0.52)	ND(0.35)
Di-n-Butylphthalate	0.12 J	ND(0.53) [ND(0.50)]	NA	ND(0.39)	0.16 J	ND(0.35)
Fluoranthene	1.4	2.4 [7.6]	NA	180	1.5	ND(0.35)
Fluorene	0.077 J	0.33 J [0.60]	NA	16	0.13 J	ND(0.35)
Indeno(1,2,3-cd)pyrene	0.41	0.38 J [1.9]	NA	36	0.36 J	ND(0.35)
Naphthalene	0.12 J	0.23 J [0.17 J]	NA	7.5	ND(0.52)	ND(0.35)
Phenanthrene	0.80	1.9 [5.0]	NA	110	0.86	ND(0.35)
Phenol	ND(0.38)	0.83 [1.7]	NA	ND(0.39)	ND(0.52)	ND(0.35)
Pyrene	1.3	2.1 [7.7]	NA	120	1.4	ND(0.35)
<b>Furans</b>						
2,3,7,8-TCDF	ND(0.00033) X	ND(0.00060) X [ND(0.00073) XY]	NA	NA	NA	ND(0.00013) XY
TCDFs (total)	0.0014	0.0029 [0.0025]	NA	NA	NA	0.00022
1,2,3,7,8-PeCDF	0.0020 I	0.0033 I [0.0040 I]	NA	NA	NA	0.00042 I
2,3,4,7,8-PeCDF	0.00088 I	0.00014 I [0.00013 I]	NA	NA	NA	0.00015 I
PeCDFs (total)	0.0038	0.0042 [0.0048]	NA	NA	NA	0.0014
1,2,3,4,7,8-HxCDF	ND(0.039) X	0.013 I [0.016 IE]	NA	NA	NA	0.016 IE
1,2,3,6,7,8-HxCDF	0.00026	0.00028 [0.00024]	NA	NA	NA	0.00052
1,2,3,7,8,9-HxCDF	0.00012	0.000026 [0.000035]	NA	NA	NA	0.000030
2,3,4,6,7,8-HxCDF	0.00053	0.00013 [0.00013]	NA	NA	NA	0.000095
HxCDFs (total)	0.019	0.020 [0.023]	NA	NA	NA	0.019
1,2,3,4,6,7,8-HpCDF	0.0028	0.0078 [0.0064]	NA	NA	NA	0.00036
1,2,3,4,7,8,9-HpCDF	0.00036	0.00028 [0.00024]	NA	NA	NA	0.000074
HpCDFs (total)	0.0032	0.0081 [0.0067]	NA	NA	NA	0.00044
OCDF	0.00075 B	0.0038 B [0.0036 B]	NA	NA	NA	0.00033 B
<b>Dioxins</b>						
2,3,7,8-TCDD	ND(0.000027) X	ND(0.000041) X [0.000033]	NA	NA	NA	ND(0.000029) X
TCDDs (total)	0.0000087	0.00052 [0.00055]	NA	NA	NA	0.0000016
1,2,3,7,8-PeCDD	ND(0.000021)	ND(0.000013) [ND(0.000011)]	NA	NA	NA	0.000011
PeCDDs (total)	ND(0.000021)	ND(0.000013) [ND(0.000011)]	NA	NA	NA	0.000011
1,2,3,4,7,8-HxCDD	0.000089	0.000061 [0.000063]	NA	NA	NA	0.000025
1,2,3,6,7,8-HxCDD	0.000072	0.00014 [0.00012]	NA	NA	NA	0.000025
1,2,3,7,8,9-HxCDD	0.000073	0.000096 [0.00010]	NA	NA	NA	0.000024
HxCDDs (total)	0.00023	0.00030 [0.00028]	NA	NA	NA	0.000074
1,2,3,4,6,7,8-HpCDD	0.00066	0.0018 [0.0017]	NA	NA	NA	0.00020
HpCDDs (total)	0.0013	0.0036 [0.0033]	NA	NA	NA	0.00041
OCDD	0.0028 B	0.013 B [0.010 B]	NA	NA	NA	0.00068 B
Total TEQs (WHO TEFs)	0.0027	0.0018 [0.0021]	NA	NA	NA	0.0017

**TABLE 3  
SUPPLEMENTAL PRE-DESIGN SOIL INVESTIGATION SAMPLING DATA FOR APPENDIX IX+3 CONSTITUENTS**

**SUPPLEMENTAL PRE-DESIGN INVESTIGATION REPORT FOR LYMAN STREET AREA REMOVAL ACTION  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
(Results are presented in dry weight parts per million, ppm)**

Sample ID: Sample Depth (Feet): Parameter Date Collected:	RAA12-TU9.5 1-3 07/09/03	RAA12-TU9.5 6-10 07/09/03	RAA12-TU9.5 8-10 07/09/03	RAA12-U8NE 1-3 07/09/03	RAA12-U8SW 1-3 07/09/03	RAA12-U9 0-1 07/09/03
<b>Inorganics</b>						
Antimony	2.60 B	2.10 B [3.40 B]	NA	NA	NA	ND(6.00)
Arsenic	7.80	5.80 [6.10]	NA	NA	NA	2.20
Barium	190	78.0 [97.0]	NA	NA	NA	16.0 B
Beryllium	0.280 B	0.340 B [0.410 B]	NA	NA	NA	0.200 B
Cadmium	1.30	5.60 [7.80]	NA	NA	NA	ND(0.500)
Chromium	24.0	38.0 [52.0]	NA	NA	NA	4.20
Cobalt	5.90	6.50 [7.30]	NA	NA	NA	4.50 B
Copper	380	200 [290]	NA	NA	NA	10.0
Cyanide	0.350	2.30 [1.30]	NA	NA	NA	ND(0.210)
Lead	620	210 [270]	NA	NA	NA	4.90
Mercury	1.20	0.700 [1.10]	NA	NA	NA	ND(0.100)
Nickel	17.0	16.0 [20.0]	NA	NA	NA	7.10
Selenium	1.40	0.830 B [1.10 B]	NA	NA	NA	0.640 B
Silver	ND(1.00)	1.10 [1.10 B]	NA	NA	NA	0.110 B
Sulfide	7.40	390 [300]	NA	NA	NA	6.70
Tin	24.0	21.0 [22.0]	NA	NA	NA	1.50 B
Vanadium	9.80	8.90 [11.0]	NA	NA	NA	7.40
Zinc	440	240 [290]	NA	NA	NA	24.0

**TABLE 3  
SUPPLEMENTAL PRE-DESIGN SOIL INVESTIGATION SAMPLING DATA FOR APPENDIX IX+3 CONSTITUENTS**

**SUPPLEMENTAL PRE-DESIGN INVESTIGATION REPORT FOR LYMAN STREET AREA REMOVAL ACTION  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
(Results are presented in dry weight parts per million, ppm)**

Sample ID: Sample Depth (Feet): Parameter Date Collected:	RAA12-U9 1-3 07/09/03	RAA12-U9 3-6 07/09/03	RAA12-U9 4-6 07/09/03	RAA12-X6 1-3 07/09/03	RAA12-Y5 0-1 07/09/03	RAA12-Y5 1-3 07/09/03
<b>Volatile Organics</b>						
None Detected	--	NA	--	--	--	--
<b>Semivolatile Organics</b>						
1,2,4,5-Tetrachlorobenzene	0.19 J	ND(0.60)	NA	NA	ND(0.36)	ND(0.36)
1,2,4-Trichlorobenzene	0.77	ND(0.60)	NA	NA	ND(0.36)	ND(0.36)
1,4-Dichlorobenzene	ND(0.74)	ND(0.60)	NA	NA	ND(0.36)	ND(0.36)
2-Methylnaphthalene	ND(0.74)	ND(0.60)	NA	NA	ND(0.36)	ND(0.36)
2-Methylphenol	ND(0.74)	ND(0.60)	NA	NA	ND(0.36)	ND(0.36)
3&4-Methylphenol	ND(0.74)	ND(0.83)	NA	NA	ND(0.72)	ND(0.73)
3-Methylcholanthrene	ND(0.74)	ND(0.83)	NA	NA	ND(0.72)	ND(0.73)
Acenaphthene	0.68 J	ND(0.60)	NA	NA	ND(0.36)	ND(0.36)
Acenaphthylene	0.52 J	0.20 J	NA	NA	ND(0.36)	ND(0.36)
Aniline	0.29 J	ND(0.60)	NA	NA	ND(0.36)	ND(0.36)
Anthracene	1.3	ND(0.60)	NA	NA	ND(0.36)	ND(0.36)
Benzo(a)anthracene	2.9	0.18 J	NA	NA	ND(0.36)	0.084 J
Benzo(a)pyrene	3.0	0.32 J	NA	NA	ND(0.36)	ND(0.36)
Benzo(b)fluoranthene	3.0	0.18 J	NA	NA	ND(0.36)	0.082 J
Benzo(g,h,i)perylene	2.6	0.32 J	NA	NA	ND(0.36)	ND(0.36)
Benzo(k)fluoranthene	2.5	0.21 J	NA	NA	ND(0.36)	ND(0.36)
bis(2-Ethylhexyl)phthalate	ND(0.37)	ND(0.41)	NA	NA	ND(0.35)	ND(0.36)
Butylbenzylphthalate	ND(0.74)	ND(0.60)	NA	NA	ND(0.36)	ND(0.36)
Chrysene	3.5	0.22 J	NA	NA	ND(0.36)	ND(0.36)
Dibenzo(a,h)anthracene	0.65 J	ND(0.60)	NA	NA	ND(0.36)	ND(0.36)
Dibenzofuran	0.40 J	ND(0.60)	NA	NA	ND(0.36)	ND(0.36)
Di-n-Butylphthalate	0.61 J	ND(0.60)	NA	NA	ND(0.36)	ND(0.36)
Fluoranthene	5.9	0.18 J	NA	NA	ND(0.36)	0.20 J
Fluorene	0.75	ND(0.60)	NA	NA	ND(0.36)	ND(0.36)
Indeno(1,2,3-cd)pyrene	2.2	0.18 J	NA	NA	ND(0.36)	ND(0.36)
Naphthalene	0.22 J	ND(0.60)	NA	NA	ND(0.36)	ND(0.36)
Phenanthrene	4.4	ND(0.60)	NA	NA	ND(0.36)	0.098 J
Phenol	ND(0.74)	ND(0.60)	NA	NA	ND(0.36)	ND(0.36)
Pyrene	5.4	0.26 J	NA	NA	ND(0.36)	0.15 J
<b>Furans</b>						
2,3,7,8-TCDF	ND(0.013)	ND(0.000032)	NA	NA	ND(0.00074) XY	ND(0.000044) XY
TCDFs (total)	0.029	0.000033	NA	NA	ND(0.000075)	0.000067
1,2,3,7,8-PeCDF	0.043 IE	0.00012 I	NA	NA	ND(0.000080)	0.000018 I
2,3,4,7,8-PeCDF	0.014 E	0.000045 I	NA	NA	ND(0.000085)	ND(0.000048)
PeCDFs (total)	0.074	0.00040	NA	NA	ND(0.000080)	0.00012
1,2,3,4,7,8-HxCDF	0.14 IE	0.0028 I	NA	NA	0.00018 I	0.00086 I
1,2,3,6,7,8-HxCDF	0.0083	ND(0.000024)	NA	NA	ND(0.000069)	ND(0.000054)
1,2,3,7,8,9-HxCDF	0.0059	ND(0.000094) X	NA	NA	ND(0.000091)	ND(0.000070)
2,3,4,6,7,8-HxCDF	0.015 E	0.000021	NA	NA	ND(0.000078)	ND(0.000061)
HxCDFs (total)	0.29	0.0035	NA	NA	0.00033	0.0012
1,2,3,4,6,7,8-HpCDF	0.060 E	0.00011	NA	NA	0.000032	0.000055
1,2,3,4,7,8,9-HpCDF	0.0088	0.000020	NA	NA	ND(0.000052)	ND(0.000030)
HpCDFs (total)	0.070	0.00013	NA	NA	0.000032	0.000055
OCDF	0.016 B	0.000076 B	NA	NA	0.00025 B	0.00018 B
<b>Dioxins</b>						
2,3,7,8-TCDD	0.00015	ND(0.0000050)	NA	NA	ND(0.0000083)	ND(0.0000039)
TCDDs (total)	0.00092	ND(0.0000050)	NA	NA	ND(0.0000083)	ND(0.0000039)
1,2,3,7,8-PeCDD	0.0015	ND(0.000019)	NA	NA	ND(0.000040)	ND(0.000021)
PeCDDs (total)	0.0019	ND(0.000019)	NA	NA	ND(0.000040)	ND(0.000021)
1,2,3,4,7,8-HxCDD	0.0033	0.000050	NA	NA	ND(0.000031)	ND(0.000017)
1,2,3,6,7,8-HxCDD	0.0024	0.000043	NA	NA	ND(0.000028)	ND(0.000016)
1,2,3,7,8,9-HxCDD	0.0027	ND(0.000014)	NA	NA	ND(0.000028)	ND(0.000016)
HxCDDs (total)	0.032	0.000093	NA	NA	ND(0.000028)	ND(0.000016)
1,2,3,4,6,7,8-HpCDD	0.034 E	0.000040	NA	NA	0.000031	0.000014
HpCDDs (total)	0.078	0.000075	NA	NA	0.000071	0.000029
OCDD	0.18 BE	0.00016 B	NA	NA	0.000020 B	0.00010 B
Total TEQs (WHO TEFs)	0.030	0.00032	NA	NA	0.000062	0.000093

**TABLE 3  
SUPPLEMENTAL PRE-DESIGN SOIL INVESTIGATION SAMPLING DATA FOR APPENDIX IX+3 CONSTITUENTS**

**SUPPLEMENTAL PRE-DESIGN INVESTIGATION REPORT FOR LYMAN STREET AREA REMOVAL ACTION  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
(Results are presented in dry weight parts per million, ppm)**

Sample ID: Sample Depth (Feet): Parameter Date Collected:	RAA12-U9 1-3 07/09/03	RAA12-U9 3-6 07/09/03	RAA12-U9 4-6 07/09/03	RAA12-X6 1-3 07/09/03	RAA12-Y5 0-1 07/09/03	RAA12-Y5 1-3 07/09/03
<b>Inorganics</b>						
Antimony	2.30 B	ND(6.00)	NA	NA	ND(6.00)	ND(6.00)
Arsenic	3.90	3.10	NA	NA	3.70	3.60
Barium	300	47.0	NA	NA	16.0 B	23.0
Beryllium	0.380 B	0.360 B	NA	NA	0.220 B	0.210 B
Cadmium	0.640	ND(0.500)	NA	NA	ND(0.500)	0.0910 B
Chromium	11.0	11.0	NA	NA	3.60	6.00
Cobalt	26.0	8.40	NA	NA	4.60 B	6.50
Copper	210	23.0	NA	NA	9.10	13.0
Cyanide	0.150 B	0.0950 B	NA	NA	ND(0.110)	0.0730 B
Lead	350	33.0	NA	NA	4.50	26.0
Mercury	2.70	0.120 B	NA	NA	ND(0.110)	0.0380 B
Nickel	17.0	16.0	NA	NA	8.30	11.0
Selenium	1.10	ND(1.00)	NA	NA	0.580 B	0.680 B
Silver	0.850 B	0.160 B	NA	NA	0.120 B	ND(1.00)
Sulfide	28.0	14.0	NA	NA	ND(5.40)	ND(5.40)
Tin	24.0	5.80 B	NA	NA	1.70 B	1.80 B
Vanadium	6.90	9.80	NA	NA	3.70 B	6.70
Zinc	170	62.0	NA	NA	29.0	49.0

Notes:

1. Samples were collected by Blasland Bouck & Lee, Inc., and were submitted to CT&E Environmental Services, Inc. for analysis of Appendix IX+3 constituents.
2. NA - Not Analyzed.
3. ND - Analyte was not detected. The number in parentheses is the associated detection limit.
4. Total 2,3,7,8-TCDD toxicity equivalents (TEQs) were calculated using Toxicity Equivalency Factors (TEFs) derived by the World Health Organization (WHO) and published by Van den Berg et al. in Environmental Health Perspectives 106(2), December 1998. Field duplicate sample results are presented in brackets.
5. With the exception of dioxin/furans, only those constituents detected in one or more samples are summarized.
- 6.

Data Qualifiers:

Organics (volatiles, semivolatiles, dioxin/furans)

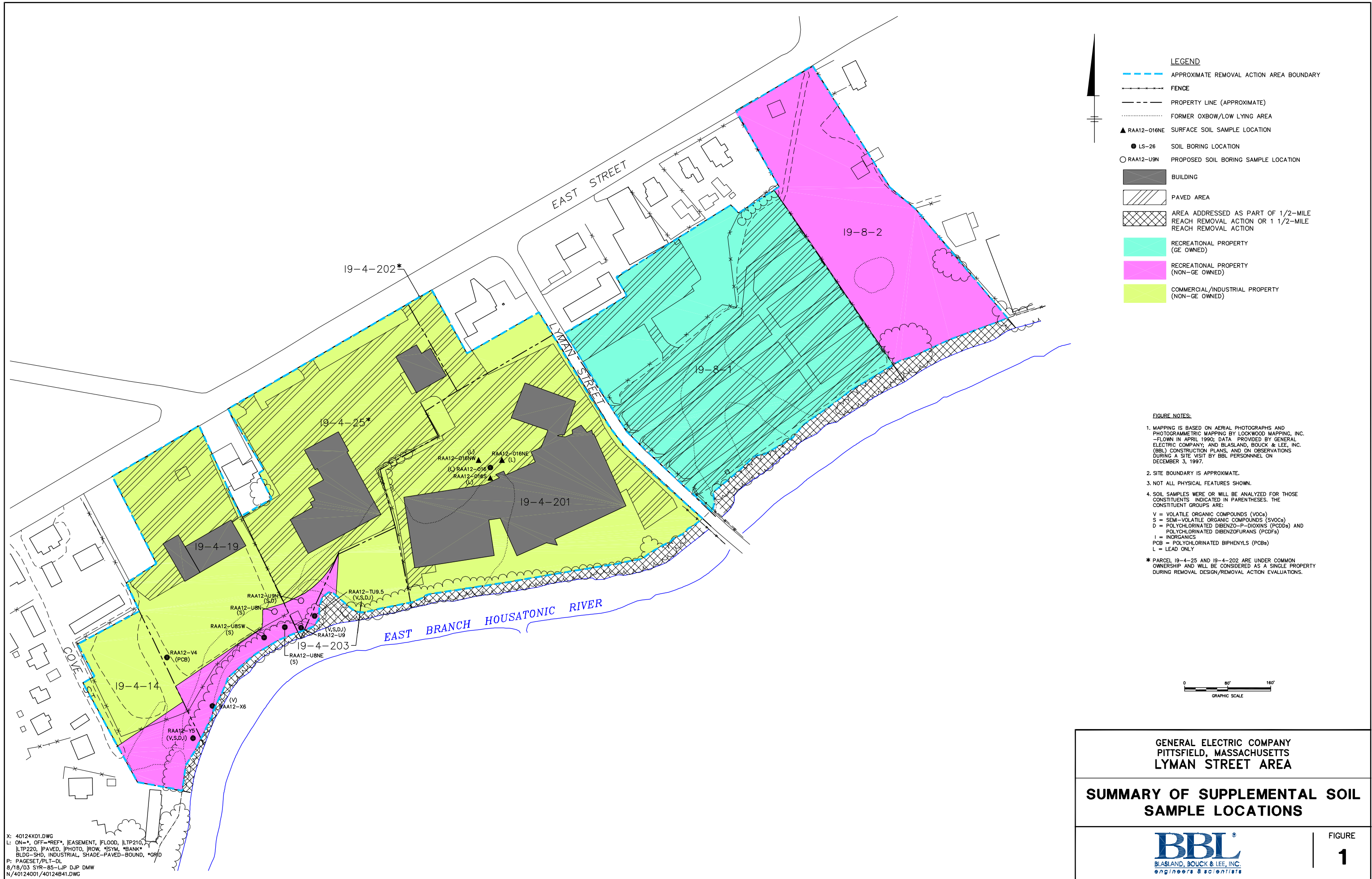
- B - Analyte was also detected in the associated method blank.
- E - Analyte exceeded calibration range.
- I - Polychlorinated Diphenyl Ether (PCDPE) Interference.
- J - Indicates an estimated value less than the practical quantitation limit (PQL).
- X - Estimated maximum possible concentration.
- Y - 2,3,7,8-TCDF results have been confirmed on a DB-225 column.

Inorganics

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

***Figure***

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X: 40124X01.DWG  
 L: ON=\*, OFF=REF\*, EASEMENT, FLOOD, ILTP210,  
 ILTP220, PAVED, PHOTO, ROW, SYM, \*BANK\*  
 BLDG-SHD, INDUSTRIAL, SHADE-PAVED-BOUND, \*GRID  
 P: PAGESET/PLT-DL  
 8/18/03 SYR-B5-LJP DJP DMW  
 N/40124001/40124B41.DWG



# ***Attachments***

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## ***Attachment A***

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# **Supplemental Pre-Design Soil Investigation Sampling Data for Appendix IX+3 Analytical Results**

**TABLE A-1**  
**SUPPLEMENTAL PRE-DESIGN SOIL INVESTIGATION SAMPLING DATA FOR APPENDIX IX+3 ANALYTICAL RESULTS**

**SUPPLEMENTAL PRE-DESIGN INVESTIGATION REPORT FOR LYMAN STREET AREA REMOVAL ACTION**  
**GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**  
(Results are presented in dry weight parts per million, ppm)

Sample ID: Sample Depth (Feet): Parameter Date Collected:	RAA12-O16 1-3 07/09/03	RAA12-O16 3-6 07/09/03	RAA12-O16NE 0-1 07/09/03	RAA12-O16NW 0-1 07/09/03	RAA12-O16S 0-1 07/09/03	RAA12-TU9.5 0-1 07/09/03	RAA12-TU9.5 1-3 07/09/03
<b>Volatile Organics</b>							
1,1,1,2-Tetrachloroethane	NA	NA	NA	NA	NA	ND(0.0056)	ND(0.0058)
1,1,1-Trichloroethane	NA	NA	NA	NA	NA	ND(0.0056)	ND(0.0058)
1,1,2,2-Tetrachloroethane	NA	NA	NA	NA	NA	ND(0.0056)	ND(0.0058)
1,1,2-Trichloroethane	NA	NA	NA	NA	NA	ND(0.0056)	ND(0.0058)
1,1-Dichloroethane	NA	NA	NA	NA	NA	ND(0.0056)	ND(0.0058)
1,1-Dichloroethene	NA	NA	NA	NA	NA	ND(0.0056)	ND(0.0058)
1,2,3-Trichloropropane	NA	NA	NA	NA	NA	ND(0.0056)	ND(0.0058)
1,2-Dibromo-3-chloropropane	NA	NA	NA	NA	NA	ND(0.0056)	ND(0.0058)
1,2-Dibromoethane	NA	NA	NA	NA	NA	ND(0.0056)	ND(0.0058)
1,2-Dichloroethane	NA	NA	NA	NA	NA	ND(0.0056)	ND(0.0058)
1,2-Dichloropropane	NA	NA	NA	NA	NA	ND(0.0056)	ND(0.0058)
1,4-Dioxane	NA	NA	NA	NA	NA	ND(0.11)	ND(0.12)
2-Butanone	NA	NA	NA	NA	NA	ND(0.011)	ND(0.012)
2-Chloro-1,3-butadiene	NA	NA	NA	NA	NA	ND(0.0056)	ND(0.0058)
2-Chloroethylvinylether	NA	NA	NA	NA	NA	ND(0.0056)	ND(0.0058)
2-Hexanone	NA	NA	NA	NA	NA	ND(0.011)	ND(0.012)
3-Chloropropene	NA	NA	NA	NA	NA	ND(0.0056)	ND(0.0058)
4-Methyl-2-pentanone	NA	NA	NA	NA	NA	ND(0.011)	ND(0.012)
Acetone	NA	NA	NA	NA	NA	ND(0.022)	ND(0.023)
Acetonitrile	NA	NA	NA	NA	NA	ND(0.11)	ND(0.12)
Acrolein	NA	NA	NA	NA	NA	ND(0.11)	ND(0.12)
Acrylonitrile	NA	NA	NA	NA	NA	ND(0.0056)	ND(0.0058)
Benzene	NA	NA	NA	NA	NA	ND(0.0056)	ND(0.0058)
Bromodichloromethane	NA	NA	NA	NA	NA	ND(0.0056)	ND(0.0058)
Bromoform	NA	NA	NA	NA	NA	ND(0.0056)	ND(0.0058)
Bromomethane	NA	NA	NA	NA	NA	ND(0.0056)	ND(0.0058)
Carbon Disulfide	NA	NA	NA	NA	NA	ND(0.0056)	ND(0.0058)
Carbon Tetrachloride	NA	NA	NA	NA	NA	ND(0.0056)	ND(0.0058)
Chlorobenzene	NA	NA	NA	NA	NA	ND(0.0056)	ND(0.0058)
Chloroethane	NA	NA	NA	NA	NA	ND(0.0056)	ND(0.0058)
Chloroform	NA	NA	NA	NA	NA	ND(0.0056)	ND(0.0058)
Chloromethane	NA	NA	NA	NA	NA	ND(0.0056)	ND(0.0058)
cis-1,3-Dichloropropene	NA	NA	NA	NA	NA	ND(0.0056)	ND(0.0058)
Dibromochloromethane	NA	NA	NA	NA	NA	ND(0.0056)	ND(0.0058)
Dibromomethane	NA	NA	NA	NA	NA	ND(0.0056)	ND(0.0058)
Dichlorodifluoromethane	NA	NA	NA	NA	NA	ND(0.0056)	ND(0.0058)
Ethyl Methacrylate	NA	NA	NA	NA	NA	ND(0.0056)	ND(0.0058)
Ethylbenzene	NA	NA	NA	NA	NA	ND(0.0056)	ND(0.0058)
Iodomethane	NA	NA	NA	NA	NA	ND(0.0056)	ND(0.0058)
Isobutanol	NA	NA	NA	NA	NA	ND(0.11)	ND(0.12)
Methacrylonitrile	NA	NA	NA	NA	NA	ND(0.0056)	ND(0.0058)
Methyl Methacrylate	NA	NA	NA	NA	NA	ND(0.0056)	ND(0.0058)
Methylene Chloride	NA	NA	NA	NA	NA	ND(0.0056)	ND(0.0058)
Propionitrile	NA	NA	NA	NA	NA	ND(0.011)	ND(0.012)
Styrene	NA	NA	NA	NA	NA	ND(0.0056)	ND(0.0058)
Tetrachloroethene	NA	NA	NA	NA	NA	ND(0.0056)	ND(0.0058)
Toluene	NA	NA	NA	NA	NA	ND(0.0056)	ND(0.0058)
trans-1,2-Dichloroethene	NA	NA	NA	NA	NA	ND(0.0056)	ND(0.0058)
trans-1,3-Dichloropropene	NA	NA	NA	NA	NA	ND(0.0056)	ND(0.0058)
trans-1,4-Dichloro-2-butene	NA	NA	NA	NA	NA	ND(0.0056)	ND(0.0058)
Trichloroethene	NA	NA	NA	NA	NA	ND(0.0056)	ND(0.0058)
Trichlorofluoromethane	NA	NA	NA	NA	NA	ND(0.0056)	ND(0.0058)
Vinyl Acetate	NA	NA	NA	NA	NA	ND(0.0056)	ND(0.0058)
Vinyl Chloride	NA	NA	NA	NA	NA	ND(0.0056)	ND(0.0058)
Xylenes (total)	NA	NA	NA	NA	NA	ND(0.0056)	ND(0.0058)
<b>Semivolatile Organics</b>							
1,2,4,5-Tetrachlorobenzene	NA	NA	NA	NA	NA	ND(0.37)	ND(0.38)
1,2,4-Trichlorobenzene	NA	NA	NA	NA	NA	ND(0.37)	ND(0.38)
1,2-Dichlorobenzene	NA	NA	NA	NA	NA	ND(0.37)	ND(0.38)
1,2-Diphenylhydrazine	NA	NA	NA	NA	NA	ND(0.37)	ND(0.38)
1,3,5-Trinitrobenzene	NA	NA	NA	NA	NA	ND(0.37)	ND(0.38)

**TABLE A-1**  
**SUPPLEMENTAL PRE-DESIGN SOIL INVESTIGATION SAMPLING DATA FOR APPENDIX IX+3 ANALYTICAL RESULTS**

**SUPPLEMENTAL PRE-DESIGN INVESTIGATION REPORT FOR LYMAN STREET AREA REMOVAL ACTION**  
**GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**  
(Results are presented in dry weight parts per million, ppm)

Sample ID: Sample Depth (Feet): Parameter Date Collected:	RAA12-O16 1-3 07/09/03	RAA12-O16 3-6 07/09/03	RAA12-O16NE 0-1 07/09/03	RAA12-O16NW 0-1 07/09/03	RAA12-O16S 0-1 07/09/03	RAA12-TU9.5 0-1 07/09/03	RAA12-TU9.5 1-3 07/09/03
<b>Semivolatile Organics (continued)</b>							
1,3-Dichlorobenzene	NA	NA	NA	NA	NA	ND(0.37)	ND(0.38)
1,3-Dinitrobenzene	NA	NA	NA	NA	NA	ND(0.75)	ND(0.77)
1,4-Dichlorobenzene	NA	NA	NA	NA	NA	ND(0.37)	ND(0.38)
1,4-Naphthoquinone	NA	NA	NA	NA	NA	ND(0.75)	ND(0.77)
1-Naphthylamine	NA	NA	NA	NA	NA	ND(0.75)	ND(0.77)
2,3,4,6-Tetrachlorophenol	NA	NA	NA	NA	NA	ND(0.37)	ND(0.38)
2,4,5-Trichlorophenol	NA	NA	NA	NA	NA	ND(0.37)	ND(0.38)
2,4,6-Trichlorophenol	NA	NA	NA	NA	NA	ND(0.37)	ND(0.38)
2,4-Dichlorophenol	NA	NA	NA	NA	NA	ND(0.37)	ND(0.38)
2,4-Dimethylphenol	NA	NA	NA	NA	NA	ND(0.37)	ND(0.38)
2,4-Dinitrophenol	NA	NA	NA	NA	NA	ND(1.9)	ND(2.0)
2,4-Dinitrotoluene	NA	NA	NA	NA	NA	ND(0.37)	ND(0.38)
2,6-Dichlorophenol	NA	NA	NA	NA	NA	ND(0.37)	ND(0.38)
2,6-Dinitrotoluene	NA	NA	NA	NA	NA	ND(0.37)	ND(0.38)
2-Acetylaminofluorene	NA	NA	NA	NA	NA	ND(0.75)	ND(0.77)
2-Chloronaphthalene	NA	NA	NA	NA	NA	ND(0.37)	ND(0.38)
2-Chlorophenol	NA	NA	NA	NA	NA	ND(0.37)	ND(0.38)
2-Methylnaphthalene	NA	NA	NA	NA	NA	0.12 J	ND(0.38)
2-Methylphenol	NA	NA	NA	NA	NA	ND(0.37)	ND(0.38)
2-Naphthylamine	NA	NA	NA	NA	NA	ND(0.75)	ND(0.77)
2-Nitroaniline	NA	NA	NA	NA	NA	ND(1.9)	ND(2.0)
2-Nitrophenol	NA	NA	NA	NA	NA	ND(0.75)	ND(0.77)
2-Picoline	NA	NA	NA	NA	NA	ND(0.37)	ND(0.38)
3&4-Methylphenol	NA	NA	NA	NA	NA	ND(0.75)	ND(0.77)
3,3'-Dichlorobenzidine	NA	NA	NA	NA	NA	ND(0.75)	ND(0.77)
3,3'-Dimethylbenzidine	NA	NA	NA	NA	NA	ND(0.37)	ND(0.38)
3-Methylcholanthrene	NA	NA	NA	NA	NA	ND(0.75)	ND(0.77)
3-Nitroaniline	NA	NA	NA	NA	NA	ND(1.9)	ND(2.0)
4,6-Dinitro-2-methylphenol	NA	NA	NA	NA	NA	ND(0.37)	ND(0.38)
4-Aminobiphenyl	NA	NA	NA	NA	NA	ND(0.75)	ND(0.77)
4-Bromophenyl-phenylether	NA	NA	NA	NA	NA	ND(0.37)	ND(0.38)
4-Chloro-3-Methylphenol	NA	NA	NA	NA	NA	ND(0.37)	ND(0.38)
4-Chloroaniline	NA	NA	NA	NA	NA	ND(0.37)	ND(0.38)
4-Chlorobenzilate	NA	NA	NA	NA	NA	ND(0.75)	ND(0.77)
4-Chlorophenyl-phenylether	NA	NA	NA	NA	NA	ND(0.37)	ND(0.38)
4-Nitroaniline	NA	NA	NA	NA	NA	ND(1.9)	ND(2.0)
4-Nitrophenol	NA	NA	NA	NA	NA	ND(1.9)	ND(2.0)
4-Nitroquinoline-1-oxide	NA	NA	NA	NA	NA	ND(0.75)	ND(0.77)
4-Phenylenediamine	NA	NA	NA	NA	NA	ND(0.75)	ND(0.77)
5-Nitro-o-toluidine	NA	NA	NA	NA	NA	ND(0.75)	ND(0.77)
7,12-Dimethylbenz(a)anthracene	NA	NA	NA	NA	NA	ND(0.75)	ND(0.77)
a,a'-Dimethylphenethylamine	NA	NA	NA	NA	NA	ND(0.75)	ND(0.77)
Acenaphthene	NA	NA	NA	NA	NA	ND(0.37)	ND(0.38)
Acenaphthylene	NA	NA	NA	NA	NA	0.57	0.14 J
Acetophenone	NA	NA	NA	NA	NA	ND(0.37)	ND(0.38)
Aniline	NA	NA	NA	NA	NA	ND(0.37)	ND(0.38)
Anthracene	NA	NA	NA	NA	NA	0.51	0.23 J
Aramite	NA	NA	NA	NA	NA	ND(0.75)	ND(0.77)
Benzidine	NA	NA	NA	NA	NA	ND(0.75)	ND(0.77)
Benzo(a)anthracene	NA	NA	NA	NA	NA	1.4	0.66
Benzo(a)pyrene	NA	NA	NA	NA	NA	1.3	0.64
Benzo(b)fluoranthene	NA	NA	NA	NA	NA	1.1	0.53
Benzo(g,h,i)perylene	NA	NA	NA	NA	NA	1.0	0.58
Benzo(k)fluoranthene	NA	NA	NA	NA	NA	1.3	0.66
Benzyl Alcohol	NA	NA	NA	NA	NA	ND(0.75)	ND(0.77)
bis(2-Chloroethoxy)methane	NA	NA	NA	NA	NA	ND(0.37)	ND(0.38)
bis(2-Chloroethyl)ether	NA	NA	NA	NA	NA	ND(0.37)	ND(0.38)
bis(2-Chloroisopropyl)ether	NA	NA	NA	NA	NA	ND(0.37)	ND(0.38)
bis(2-Ethylhexyl)phthalate	NA	NA	NA	NA	NA	ND(0.37)	ND(0.38)
Butylbenzylphthalate	NA	NA	NA	NA	NA	ND(0.37)	ND(0.38)
Chrysene	NA	NA	NA	NA	NA	1.8	0.76

**TABLE A-1**  
**SUPPLEMENTAL PRE-DESIGN SOIL INVESTIGATION SAMPLING DATA FOR APPENDIX IX+3 ANALYTICAL RESULTS**

**SUPPLEMENTAL PRE-DESIGN INVESTIGATION REPORT FOR LYMAN STREET AREA REMOVAL ACTION**  
**GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**  
(Results are presented in dry weight parts per million, ppm)

Sample ID: Sample Depth (Feet): Parameter Date Collected:	RAA12-O16 1-3 07/09/03	RAA12-O16 3-6 07/09/03	RAA12-O16NE 0-1 07/09/03	RAA12-O16NW 0-1 07/09/03	RAA12-O16S 0-1 07/09/03	RAA12-TU9.5 0-1 07/09/03	RAA12-TU9.5 1-3 07/09/03
<b>Semivolatile Organics (continued)</b>							
Diallate	NA	NA	NA	NA	NA	ND(0.75)	ND(0.77)
Dibenzo(a,h)anthracene	NA	NA	NA	NA	NA	0.24 J	0.13 J
Dibenzofuran	NA	NA	NA	NA	NA	0.19 J	ND(0.38)
Diethylphthalate	NA	NA	NA	NA	NA	ND(0.37)	ND(0.38)
Dimethylphthalate	NA	NA	NA	NA	NA	ND(0.37)	ND(0.38)
Di-n-Butylphthalate	NA	NA	NA	NA	NA	ND(0.37)	0.12 J
Di-n-Octylphthalate	NA	NA	NA	NA	NA	ND(0.37)	ND(0.38)
Diphenylamine	NA	NA	NA	NA	NA	ND(0.37)	ND(0.38)
Ethyl Methanesulfonate	NA	NA	NA	NA	NA	ND(0.37)	ND(0.38)
Fluoranthene	NA	NA	NA	NA	NA	4.7	1.4
Fluorene	NA	NA	NA	NA	NA	0.53	0.077 J
Hexachlorobenzene	NA	NA	NA	NA	NA	ND(0.37)	ND(0.38)
Hexachlorobutadiene	NA	NA	NA	NA	NA	ND(0.37)	ND(0.38)
Hexachlorocyclopentadiene	NA	NA	NA	NA	NA	ND(0.37)	ND(0.38)
Hexachloroethane	NA	NA	NA	NA	NA	ND(0.37)	ND(0.38)
Hexachlorophene	NA	NA	NA	NA	NA	ND(0.75)	ND(0.77)
Hexachloropropene	NA	NA	NA	NA	NA	ND(0.37)	ND(0.38)
Indeno(1,2,3-cd)pyrene	NA	NA	NA	NA	NA	0.80	0.41
Isodrin	NA	NA	NA	NA	NA	ND(0.37)	ND(0.38)
Isophorone	NA	NA	NA	NA	NA	ND(0.37)	ND(0.38)
Isosafrole	NA	NA	NA	NA	NA	ND(0.75)	ND(0.77)
Methapyrilene	NA	NA	NA	NA	NA	ND(0.75)	ND(0.77)
Methyl Methanesulfonate	NA	NA	NA	NA	NA	ND(0.37)	ND(0.38)
Naphthalene	NA	NA	NA	NA	NA	0.12 J	0.12 J
Nitrobenzene	NA	NA	NA	NA	NA	ND(0.37)	ND(0.38)
N-Nitrosodiethylamine	NA	NA	NA	NA	NA	ND(0.37)	ND(0.38)
N-Nitrosodimethylamine	NA	NA	NA	NA	NA	ND(0.37)	ND(0.38)
N-Nitroso-di-n-butylamine	NA	NA	NA	NA	NA	ND(0.75)	ND(0.77)
N-Nitroso-di-n-propylamine	NA	NA	NA	NA	NA	ND(0.37)	ND(0.38)
N-Nitrosodiphenylamine	NA	NA	NA	NA	NA	ND(0.37)	ND(0.38)
N-Nitrosomethylethylamine	NA	NA	NA	NA	NA	ND(0.75)	ND(0.77)
N-Nitrosomorpholine	NA	NA	NA	NA	NA	ND(0.37)	ND(0.38)
N-Nitrosopiperidine	NA	NA	NA	NA	NA	ND(0.37)	ND(0.38)
N-Nitrosopyrrolidine	NA	NA	NA	NA	NA	ND(0.75)	ND(0.77)
o,o,o-Triethylphosphorothioate	NA	NA	NA	NA	NA	ND(0.37)	ND(0.38)
o-Toluidine	NA	NA	NA	NA	NA	ND(0.37)	ND(0.38)
p-Dimethylaminoazobenzene	NA	NA	NA	NA	NA	ND(0.75)	ND(0.77)
Pentachlorobenzene	NA	NA	NA	NA	NA	ND(0.37)	ND(0.38)
Pentachloroethane	NA	NA	NA	NA	NA	ND(0.37)	ND(0.38)
Pentachloronitrobenzene	NA	NA	NA	NA	NA	ND(0.75)	ND(0.77)
Pentachlorophenol	NA	NA	NA	NA	NA	ND(1.9)	ND(2.0)
Phenacetin	NA	NA	NA	NA	NA	ND(0.75)	ND(0.77)
Phenanthrene	NA	NA	NA	NA	NA	5.0	0.80
Phenol	NA	NA	NA	NA	NA	ND(0.37)	ND(0.38)
Pronamide	NA	NA	NA	NA	NA	ND(0.37)	ND(0.38)
Pyrene	NA	NA	NA	NA	NA	4.1	1.3
Pyridine	NA	NA	NA	NA	NA	ND(0.37)	ND(0.38)
Safrole	NA	NA	NA	NA	NA	ND(0.37)	ND(0.38)
Thionazin	NA	NA	NA	NA	NA	ND(0.37)	ND(0.38)
<b>Furans</b>							
2,3,7,8-TCDF	NA	NA	NA	NA	NA	0.000059 YEI	ND(0.00033) X
TCDFs (total)	NA	NA	NA	NA	NA	0.00065	0.0014
1,2,3,7,8-PeCDF	NA	NA	NA	NA	NA	0.000030	0.0020 I
2,3,4,7,8-PeCDF	NA	NA	NA	NA	NA	0.000029	0.00088 I
PeCDFs (total)	NA	NA	NA	NA	NA	0.00049	0.0038
1,2,3,4,7,8-HxCDF	NA	NA	NA	NA	NA	0.0015 I	ND(0.039) X
1,2,3,6,7,8-HxCDF	NA	NA	NA	NA	NA	0.000025	0.00026
1,2,3,7,8,9-HxCDF	NA	NA	NA	NA	NA	0.0000039	0.00012
2,3,4,6,7,8-HxCDF	NA	NA	NA	NA	NA	0.000039	0.00053
HxCDFs (total)	NA	NA	NA	NA	NA	0.0025	0.019
1,2,3,4,6,7,8-HpCDF	NA	NA	NA	NA	NA	0.00017	0.0028

**TABLE A-1  
SUPPLEMENTAL PRE-DESIGN SOIL INVESTIGATION SAMPLING DATA FOR APPENDIX IX+3 ANALYTICAL RESULTS**

**SUPPLEMENTAL PRE-DESIGN INVESTIGATION REPORT FOR LYMAN STREET AREA REMOVAL ACTION  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
(Results are presented in dry weight parts per million, ppm)**

Sample ID: Sample Depth (Feet): Parameter Date Collected:	RAA12-O16 1-3 07/09/03	RAA12-O16 3-6 07/09/03	RAA12-O16NE 0-1 07/09/03	RAA12-O16NW 0-1 07/09/03	RAA12-O16S 0-1 07/09/03	RAA12-TU9.5 0-1 07/09/03	RAA12-TU9.5 1-3 07/09/03
<b>Furans (cont'd)</b>							
1,2,3,4,7,8,9-HpCDF	NA	NA	NA	NA	NA	ND(0.000025) X	0.00036
HpCDFs (total)	NA	NA	NA	NA	NA	0.00017	0.0032
OCDF	NA	NA	NA	NA	NA	0.000095 B	0.00075 B
<b>Dioxins</b>							
2,3,7,8-TCDD	NA	NA	NA	NA	NA	ND(0.0000073)	ND(0.000027) X
TCDDs (total)	NA	NA	NA	NA	NA	0.0000026	0.0000087
1,2,3,7,8-PeCDD	NA	NA	NA	NA	NA	ND(0.0000020)	ND(0.000021)
PeCDDs (total)	NA	NA	NA	NA	NA	ND(0.0000020)	ND(0.000021)
1,2,3,4,7,8-HxCDD	NA	NA	NA	NA	NA	0.0000067	0.000089
1,2,3,6,7,8-HxCDD	NA	NA	NA	NA	NA	0.0000082	0.000072
1,2,3,7,8,9-HxCDD	NA	NA	NA	NA	NA	0.0000064	0.000073
HxCDDs (total)	NA	NA	NA	NA	NA	0.000021	0.00023
1,2,3,4,6,7,8-HpCDD	NA	NA	NA	NA	NA	0.000075	0.00066
HpCDDs (total)	NA	NA	NA	NA	NA	0.00014	0.0013
OCDD	NA	NA	NA	NA	NA	0.00040 B	0.0028 B
Total TEQs (WHO TEFs)	NA	NA	NA	NA	NA	0.00018	0.0027
<b>Inorganics</b>							
Antimony	NA	NA	NA	NA	NA	0.920 B	2.60 B
Arsenic	NA	NA	NA	NA	NA	4.40	7.80
Barium	NA	NA	NA	NA	NA	64.0	190
Beryllium	NA	NA	NA	NA	NA	0.190 B	0.280 B
Cadmium	NA	NA	NA	NA	NA	1.00	1.30
Chromium	NA	NA	NA	NA	NA	10.0	24.0
Cobalt	NA	NA	NA	NA	NA	5.20	5.90
Copper	NA	NA	NA	NA	NA	38.0	380
Cyanide	NA	NA	NA	NA	NA	0.470	0.350
Lead	420	720	66.0	1100	540	140	620
Mercury	NA	NA	NA	NA	NA	0.260	1.20
Nickel	NA	NA	NA	NA	NA	11.0	17.0
Selenium	NA	NA	NA	NA	NA	1.10	1.40
Silver	NA	NA	NA	NA	NA	0.370 B	ND(1.00)
Sulfide	NA	NA	NA	NA	NA	8.90	7.40
Thallium	NA	NA	NA	NA	NA	ND(1.10)	ND(1.20)
Tin	NA	NA	NA	NA	NA	6.00 B	24.0
Vanadium	NA	NA	NA	NA	NA	10.0	9.80
Zinc	NA	NA	NA	NA	NA	170	440

**TABLE A-1**  
**SUPPLEMENTAL PRE-DESIGN SOIL INVESTIGATION SAMPLING DATA FOR APPENDIX IX+3 ANALYTICAL RESULTS**

**SUPPLEMENTAL PRE-DESIGN INVESTIGATION REPORT FOR LYMAN STREET AREA REMOVAL ACTION**  
**GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**  
(Results are presented in dry weight parts per million, ppm)

Sample ID: Sample Depth (Feet): Parameter Date Collected:	RAA12-TU9.5 6-10 07/09/03	RAA12-TU9.5 8-10 07/09/03	RAA12-U8NE 1-3 07/09/03	RAA12-U8SW 1-3 07/09/03	RAA12-U9 0-1 07/09/03
<b>Volatile Organics</b>					
1,1,1,2-Tetrachloroethane	NA	ND(0.0078) [ND(0.011)]	NA	NA	ND(0.0052)
1,1,1-Trichloroethane	NA	ND(0.0078) [ND(0.011)]	NA	NA	ND(0.0052)
1,1,2,2-Tetrachloroethane	NA	ND(0.0078) [ND(0.011)]	NA	NA	ND(0.0052)
1,1,2-Trichloroethane	NA	ND(0.0078) [ND(0.011)]	NA	NA	ND(0.0052)
1,1-Dichloroethane	NA	ND(0.0078) [ND(0.011)]	NA	NA	ND(0.0052)
1,1-Dichloroethene	NA	ND(0.0078) [ND(0.011)]	NA	NA	ND(0.0052)
1,2,3-Trichloropropane	NA	ND(0.0078) [ND(0.011)]	NA	NA	ND(0.0052)
1,2-Dibromo-3-chloropropane	NA	ND(0.0078) [ND(0.011)]	NA	NA	ND(0.0052)
1,2-Dibromoethane	NA	ND(0.0078) [ND(0.011)]	NA	NA	ND(0.0052)
1,2-Dichloroethane	NA	ND(0.0078) [ND(0.011)]	NA	NA	ND(0.0052)
1,2-Dichloropropane	NA	ND(0.0078) [ND(0.011)]	NA	NA	ND(0.0052)
1,4-Dioxane	NA	ND(0.16) [ND(0.22)]	NA	NA	ND(0.10)
2-Butanone	NA	ND(0.016) [ND(0.022)]	NA	NA	ND(0.010)
2-Chloro-1,3-butadiene	NA	ND(0.0078) [ND(0.011)]	NA	NA	ND(0.0052)
2-Chloroethylvinylether	NA	ND(0.0078) [ND(0.011)]	NA	NA	ND(0.0052)
2-Hexanone	NA	ND(0.016) [ND(0.022)]	NA	NA	ND(0.010)
3-Chloropropene	NA	ND(0.0078) [ND(0.011)]	NA	NA	ND(0.0052)
4-Methyl-2-pentanone	NA	ND(0.016) [ND(0.022)]	NA	NA	ND(0.010)
Acetone	NA	ND(0.031) [ND(0.044)]	NA	NA	ND(0.021)
Acetonitrile	NA	ND(0.16) [ND(0.22)]	NA	NA	ND(0.10)
Acrolein	NA	ND(0.16) [ND(0.22)]	NA	NA	ND(0.10)
Acrylonitrile	NA	ND(0.0078) [ND(0.011)]	NA	NA	ND(0.0052)
Benzene	NA	ND(0.0078) [ND(0.011)]	NA	NA	ND(0.0052)
Bromodichloromethane	NA	ND(0.0078) [ND(0.011)]	NA	NA	ND(0.0052)
Bromoform	NA	ND(0.0078) [ND(0.011)]	NA	NA	ND(0.0052)
Bromomethane	NA	ND(0.0078) [ND(0.011)]	NA	NA	ND(0.0052)
Carbon Disulfide	NA	ND(0.0078) [ND(0.011)]	NA	NA	ND(0.0052)
Carbon Tetrachloride	NA	ND(0.0078) [ND(0.011)]	NA	NA	ND(0.0052)
Chlorobenzene	NA	ND(0.0078) [ND(0.011)]	NA	NA	ND(0.0052)
Chloroethane	NA	ND(0.0078) [ND(0.011)]	NA	NA	ND(0.0052)
Chloroform	NA	ND(0.0078) [ND(0.011)]	NA	NA	ND(0.0052)
Chloromethane	NA	ND(0.0078) [ND(0.011)]	NA	NA	ND(0.0052)
cis-1,3-Dichloropropene	NA	ND(0.0078) [ND(0.011)]	NA	NA	ND(0.0052)
Dibromochloromethane	NA	ND(0.0078) [ND(0.011)]	NA	NA	ND(0.0052)
Dibromomethane	NA	ND(0.0078) [ND(0.011)]	NA	NA	ND(0.0052)
Dichlorodifluoromethane	NA	ND(0.0078) [ND(0.011)]	NA	NA	ND(0.0052)
Ethyl Methacrylate	NA	ND(0.0078) [ND(0.011)]	NA	NA	ND(0.0052)
Ethylbenzene	NA	ND(0.0078) [ND(0.011)]	NA	NA	ND(0.0052)
Iodomethane	NA	ND(0.0078) [ND(0.011)]	NA	NA	ND(0.0052)
Isobutanol	NA	ND(0.16) [ND(0.22)]	NA	NA	ND(0.10)
Methacrylonitrile	NA	ND(0.0078) [ND(0.011)]	NA	NA	ND(0.0052)
Methyl Methacrylate	NA	ND(0.0078) [ND(0.011)]	NA	NA	ND(0.0052)
Methylene Chloride	NA	ND(0.0078) [ND(0.011)]	NA	NA	ND(0.0052)
Propionitrile	NA	ND(0.016) [ND(0.022)]	NA	NA	ND(0.010)
Styrene	NA	ND(0.0078) [ND(0.011)]	NA	NA	ND(0.0052)
Tetrachloroethene	NA	ND(0.0078) [ND(0.011)]	NA	NA	ND(0.0052)
Toluene	NA	ND(0.0078) [ND(0.011)]	NA	NA	ND(0.0052)
trans-1,2-Dichloroethene	NA	ND(0.0078) [ND(0.011)]	NA	NA	ND(0.0052)
trans-1,3-Dichloropropene	NA	ND(0.0078) [ND(0.011)]	NA	NA	ND(0.0052)
trans-1,4-Dichloro-2-butene	NA	ND(0.0078) [ND(0.011)]	NA	NA	ND(0.0052)
Trichloroethene	NA	ND(0.0078) [ND(0.011)]	NA	NA	ND(0.0052)
Trichlorofluoromethane	NA	ND(0.0078) [ND(0.011)]	NA	NA	ND(0.0052)
Vinyl Acetate	NA	ND(0.0078) [ND(0.011)]	NA	NA	ND(0.0052)
Vinyl Chloride	NA	ND(0.0078) [ND(0.011)]	NA	NA	ND(0.0052)
Xylenes (total)	NA	ND(0.0078) [ND(0.011)]	NA	NA	ND(0.0052)
<b>Semivolatile Organics</b>					
1,2,4,5-Tetrachlorobenzene	ND(0.53) [ND(0.50)]	NA	ND(0.39)	ND(0.52)	ND(0.35)
1,2,4-Trichlorobenzene	ND(0.53) [ND(0.50)]	NA	ND(0.39)	ND(0.52)	ND(0.35)
1,2-Dichlorobenzene	ND(0.53) [ND(0.50)]	NA	ND(0.39)	ND(0.52)	ND(0.35)
1,2-Diphenylhydrazine	ND(0.53) [ND(0.50)]	NA	ND(0.39)	ND(0.52)	ND(0.35)
1,3,5-Trinitrobenzene	ND(0.53) [ND(0.50)]	NA	ND(0.39)	ND(0.52)	ND(0.35)

**TABLE A-1**  
**SUPPLEMENTAL PRE-DESIGN SOIL INVESTIGATION SAMPLING DATA FOR APPENDIX IX+3 ANALYTICAL RESULTS**

**SUPPLEMENTAL PRE-DESIGN INVESTIGATION REPORT FOR LYMAN STREET AREA REMOVAL ACTION**  
**GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**  
(Results are presented in dry weight parts per million, ppm)

Sample ID: Sample Depth (Feet): Parameter Date Collected:	RAA12-TU9.5 6-10 07/09/03	RAA12-TU9.5 8-10 07/09/03	RAA12-U8NE 1-3 07/09/03	RAA12-U8SW 1-3 07/09/03	RAA12-U9 0-1 07/09/03
<b>Semivolatile Organics (continued)</b>					
1,3-Dichlorobenzene	ND(0.53) [ND(0.50)]	NA	ND(0.39)	ND(0.52)	ND(0.35)
1,3-Dinitrobenzene	ND(0.99) [ND(1.0)]	NA	ND(0.78)	ND(0.74)	ND(0.70)
1,4-Dichlorobenzene	0.26 J [0.31 J]	NA	ND(0.39)	ND(0.52)	ND(0.35)
1,4-Naphthoquinone	ND(0.99) [ND(1.0)]	NA	ND(0.78)	ND(0.74)	ND(0.70)
1-Naphthylamine	ND(0.99) [ND(1.0)]	NA	ND(0.78)	ND(0.74)	ND(0.70)
2,3,4,6-Tetrachlorophenol	ND(0.53) [ND(0.50)]	NA	ND(0.39)	ND(0.52)	ND(0.35)
2,4,5-Trichlorophenol	ND(0.53) [ND(0.50)]	NA	ND(0.39)	ND(0.52)	ND(0.35)
2,4,6-Trichlorophenol	ND(0.53) [ND(0.50)]	NA	ND(0.39)	ND(0.52)	ND(0.35)
2,4-Dichlorophenol	ND(0.53) [ND(0.50)]	NA	ND(0.39)	ND(0.52)	ND(0.35)
2,4-Dimethylphenol	ND(0.53) [ND(0.50)]	NA	ND(0.39)	ND(0.52)	ND(0.35)
2,4-Dinitrophenol	ND(2.6) [ND(2.6)]	NA	ND(2.0)	ND(2.6)	ND(1.8)
2,4-Dinitrotoluene	ND(0.53) [ND(0.50)]	NA	ND(0.39)	ND(0.52)	ND(0.35)
2,6-Dichlorophenol	ND(0.53) [ND(0.50)]	NA	ND(0.39)	ND(0.52)	ND(0.35)
2,6-Dinitrotoluene	ND(0.53) [ND(0.50)]	NA	ND(0.39)	ND(0.52)	ND(0.35)
2-Acetylaminofluorene	ND(0.99) [ND(1.0)]	NA	ND(0.78)	ND(0.74)	ND(0.70)
2-Chloronaphthalene	ND(0.53) [ND(0.50)]	NA	ND(0.39)	ND(0.52)	ND(0.35)
2-Chlorophenol	ND(0.53) [ND(0.50)]	NA	ND(0.39)	ND(0.52)	ND(0.35)
2-Methylnaphthalene	0.13 J [0.13 J]	NA	2.9	ND(0.52)	ND(0.35)
2-Methylphenol	ND(0.53) [0.11 J]	NA	ND(0.39)	ND(0.52)	ND(0.35)
2-Naphthylamine	ND(0.99) [ND(1.0)]	NA	ND(0.78)	ND(0.74)	ND(0.70)
2-Nitroaniline	ND(2.6) [ND(2.6)]	NA	ND(2.0)	ND(2.6)	ND(1.8)
2-Nitrophenol	ND(0.99) [ND(1.0)]	NA	ND(0.78)	ND(0.74)	ND(0.70)
2-Picoline	ND(0.53) [ND(0.50)]	NA	ND(0.39)	ND(0.52)	ND(0.35)
3&4-Methylphenol	0.36 J [0.28 J]	NA	0.11 J	ND(0.74)	ND(0.70)
3,3'-Dichlorobenzidine	ND(1.0) [ND(1.0)]	NA	ND(0.78)	ND(1.0)	ND(0.70)
3,3'-Dimethylbenzidine	ND(0.53) [ND(0.50)]	NA	ND(0.39)	ND(0.52)	ND(0.35)
3-Methylcholanthrene	ND(0.99) [ND(1.0)]	NA	1.3	ND(0.74)	ND(0.70)
3-Nitroaniline	ND(2.6) [ND(2.6)]	NA	ND(2.0)	ND(2.6)	ND(1.8)
4,6-Dinitro-2-methylphenol	ND(0.53) [ND(0.50)]	NA	ND(0.39)	ND(0.52)	ND(0.35)
4-Aminobiphenyl	ND(0.99) [ND(1.0)]	NA	ND(0.78)	ND(0.74)	ND(0.70)
4-Bromophenyl-phenylether	ND(0.53) [ND(0.50)]	NA	ND(0.39)	ND(0.52)	ND(0.35)
4-Chloro-3-Methylphenol	ND(0.53) [ND(0.50)]	NA	ND(0.39)	ND(0.52)	ND(0.35)
4-Chloroaniline	ND(0.53) [ND(0.50)]	NA	ND(0.39)	ND(0.52)	ND(0.35)
4-Chlorobenzilate	ND(0.99) [ND(1.0)]	NA	ND(0.78)	ND(0.74)	ND(0.70)
4-Chlorophenyl-phenylether	ND(0.53) [ND(0.50)]	NA	ND(0.39)	ND(0.52)	ND(0.35)
4-Nitroaniline	ND(2.5) [ND(2.6)]	NA	ND(2.0)	ND(1.9)	ND(1.8)
4-Nitrophenol	ND(2.6) [ND(2.6)]	NA	ND(2.0)	ND(2.6)	ND(1.8)
4-Nitroquinoline-1-oxide	ND(0.99) [ND(1.0)]	NA	ND(0.78)	ND(0.74)	ND(0.70)
4-Phenylenediamine	ND(0.99) [ND(1.0)]	NA	ND(0.78)	ND(0.74)	ND(0.70)
5-Nitro-o-toluidine	ND(0.99) [ND(1.0)]	NA	ND(0.78)	ND(0.74)	ND(0.70)
7,12-Dimethylbenz(a)anthracene	ND(0.99) [ND(1.0)]	NA	ND(0.78)	ND(0.74)	ND(0.70)
a,a'-Dimethylphenethylamine	ND(0.99) [ND(1.0)]	NA	ND(0.78)	ND(0.74)	ND(0.70)
Acenaphthene	ND(0.53) [0.42 J]	NA	12	0.11 J	ND(0.35)
Acenaphthylene	0.21 J [0.60]	NA	2.2	0.15 J	ND(0.35)
Acetophenone	ND(0.53) [ND(0.50)]	NA	ND(0.39)	ND(0.52)	ND(0.35)
Aniline	ND(0.53) [ND(0.50)]	NA	ND(0.39)	ND(0.52)	ND(0.35)
Anthracene	0.48 J [1.1]	NA	39	0.29 J	ND(0.35)
Aramite	ND(0.99) [ND(1.0)]	NA	ND(0.78)	ND(0.74)	ND(0.70)
Benzidine	ND(1.0) [ND(1.0)]	NA	ND(0.78)	ND(1.0)	ND(0.70)
Benzo(a)anthracene	0.87 [3.4]	NA	71	0.74	ND(0.35)
Benzo(a)pyrene	0.76 [3.1]	NA	60	0.62	ND(0.35)
Benzo(b)fluoranthene	0.61 [3.0]	NA	49	0.61	ND(0.35)
Benzo(g,h,i)perylene	0.50 J [2.4]	NA	36	0.48 J	ND(0.35)
Benzo(k)fluoranthene	0.69 [2.8]	NA	55	0.36 J	ND(0.35)
Benzyl Alcohol	ND(1.0) [ND(1.0)]	NA	ND(0.78)	ND(1.0)	ND(0.70)
bis(2-Chloroethoxy)methane	ND(0.53) [ND(0.50)]	NA	ND(0.39)	ND(0.52)	ND(0.35)
bis(2-Chloroethyl)ether	ND(0.53) [ND(0.50)]	NA	ND(0.39)	ND(0.52)	ND(0.35)
bis(2-Chloroisopropyl)ether	ND(0.53) [ND(0.50)]	NA	ND(0.39)	ND(0.52)	ND(0.35)
bis(2-Ethylhexyl)phthalate	ND(0.49) [ND(0.50)]	NA	0.62	ND(0.37)	ND(0.34)
Butylbenzylphthalate	ND(0.53) [ND(0.50)]	NA	ND(0.39)	4.9	ND(0.35)
Chrysene	1.1 [4.2]	NA	65	0.72	ND(0.35)



**TABLE A-1**  
**SUPPLEMENTAL PRE-DESIGN SOIL INVESTIGATION SAMPLING DATA FOR APPENDIX IX+3 ANALYTICAL RESULTS**

**SUPPLEMENTAL PRE-DESIGN INVESTIGATION REPORT FOR LYMAN STREET AREA REMOVAL ACTION**  
**GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**  
(Results are presented in dry weight parts per million, ppm)

Sample ID: Sample Depth (Feet): Parameter Date Collected:	RAA12-TU9.5 6-10 07/09/03	RAA12-TU9.5 8-10 07/09/03	RAA12-U8NE 1-3 07/09/03	RAA12-U8SW 1-3 07/09/03	RAA12-U9 0-1 07/09/03
<b>Semivolatile Organics (continued)</b>					
Diallate	ND(0.99) [ND(1.0)]	NA	ND(0.78)	ND(0.74)	ND(0.70)
Dibenzo(a,h)anthracene	ND(0.53) [0.53]	NA	9.3	ND(0.52)	ND(0.35)
Dibenzofuran	0.12 J [0.22 J]	NA	8.0	ND(0.52)	ND(0.35)
Diethylphthalate	ND(0.53) [ND(0.50)]	NA	ND(0.39)	ND(0.52)	ND(0.35)
Dimethylphthalate	ND(0.53) [ND(0.50)]	NA	ND(0.39)	ND(0.52)	ND(0.35)
Di-n-Butylphthalate	ND(0.53) [ND(0.50)]	NA	ND(0.39)	0.16 J	ND(0.35)
Di-n-Octylphthalate	ND(0.53) [ND(0.50)]	NA	ND(0.39)	ND(0.52)	ND(0.35)
Diphenylamine	ND(0.53) [ND(0.50)]	NA	ND(0.39)	ND(0.52)	ND(0.35)
Ethyl Methanesulfonate	ND(0.53) [ND(0.50)]	NA	ND(0.39)	ND(0.52)	ND(0.35)
Fluoranthene	2.4 [7.6]	NA	180	1.5	ND(0.35)
Fluorene	0.33 J [0.60]	NA	16	0.13 J	ND(0.35)
Hexachlorobenzene	ND(0.53) [ND(0.50)]	NA	ND(0.39)	ND(0.52)	ND(0.35)
Hexachlorobutadiene	ND(0.53) [ND(0.50)]	NA	ND(0.39)	ND(0.52)	ND(0.35)
Hexachlorocyclopentadiene	ND(0.53) [ND(0.50)]	NA	ND(0.39)	ND(0.52)	ND(0.35)
Hexachloroethane	ND(0.53) [ND(0.50)]	NA	ND(0.39)	ND(0.52)	ND(0.35)
Hexachlorophene	ND(1.0) [ND(1.0)]	NA	ND(0.78)	ND(1.0)	ND(0.70)
Hexachloropropene	ND(0.53) [ND(0.50)]	NA	ND(0.39)	ND(0.52)	ND(0.35)
Indeno(1,2,3-cd)pyrene	0.38 J [1.9]	NA	36	0.36 J	ND(0.35)
Isodrin	ND(0.53) [ND(0.50)]	NA	ND(0.39)	ND(0.52)	ND(0.35)
Isophorone	ND(0.53) [ND(0.50)]	NA	ND(0.39)	ND(0.52)	ND(0.35)
Isosafrole	ND(0.99) [ND(1.0)]	NA	ND(0.78)	ND(0.74)	ND(0.70)
Methapyrilene	ND(0.99) [ND(1.0)]	NA	ND(0.78)	ND(0.74)	ND(0.70)
Methyl Methanesulfonate	ND(0.53) [ND(0.50)]	NA	ND(0.39)	ND(0.52)	ND(0.35)
Naphthalene	0.23 J [0.17 J]	NA	7.5	ND(0.52)	ND(0.35)
Nitrobenzene	ND(0.53) [ND(0.50)]	NA	ND(0.39)	ND(0.52)	ND(0.35)
N-Nitrosodiethylamine	ND(0.53) [ND(0.50)]	NA	ND(0.39)	ND(0.52)	ND(0.35)
N-Nitrosodimethylamine	ND(0.53) [ND(0.50)]	NA	ND(0.39)	ND(0.52)	ND(0.35)
N-Nitroso-di-n-butylamine	ND(0.99) [ND(1.0)]	NA	ND(0.78)	ND(0.74)	ND(0.70)
N-Nitroso-di-n-propylamine	ND(0.53) [ND(0.50)]	NA	ND(0.39)	ND(0.52)	ND(0.35)
N-Nitrosodiphenylamine	ND(0.53) [ND(0.50)]	NA	ND(0.39)	ND(0.52)	ND(0.35)
N-Nitrosomethylethylamine	ND(0.99) [ND(1.0)]	NA	ND(0.78)	ND(0.74)	ND(0.70)
N-Nitrosomorpholine	ND(0.53) [ND(0.50)]	NA	ND(0.39)	ND(0.52)	ND(0.35)
N-Nitrosopiperidine	ND(0.53) [ND(0.50)]	NA	ND(0.39)	ND(0.52)	ND(0.35)
N-Nitrosopyrrolidine	ND(0.99) [ND(1.0)]	NA	ND(0.78)	ND(0.74)	ND(0.70)
o,o,o-Triethylphosphorothioate	ND(0.53) [ND(0.50)]	NA	ND(0.39)	ND(0.52)	ND(0.35)
o-Toluidine	ND(0.53) [ND(0.50)]	NA	ND(0.39)	ND(0.52)	ND(0.35)
p-Dimethylaminoazobenzene	ND(0.99) [ND(1.0)]	NA	ND(0.78)	ND(0.74)	ND(0.70)
Pentachlorobenzene	ND(0.53) [ND(0.50)]	NA	ND(0.39)	ND(0.52)	ND(0.35)
Pentachloroethane	ND(0.53) [ND(0.50)]	NA	ND(0.39)	ND(0.52)	ND(0.35)
Pentachloronitrobenzene	ND(0.99) [ND(1.0)]	NA	ND(0.78)	ND(0.74)	ND(0.70)
Pentachlorophenol	ND(2.6) [ND(2.6)]	NA	ND(2.0)	ND(2.6)	ND(1.8)
Phenacetin	ND(0.99) [ND(1.0)]	NA	ND(0.78)	ND(0.74)	ND(0.70)
Phenanthrene	1.9 [5.0]	NA	110	0.86	ND(0.35)
Phenol	0.83 [1.7]	NA	ND(0.39)	ND(0.52)	ND(0.35)
Pronamide	ND(0.53) [ND(0.50)]	NA	ND(0.39)	ND(0.52)	ND(0.35)
Pyrene	2.1 [7.7]	NA	120	1.4	ND(0.35)
Pyridine	ND(0.53) [ND(0.50)]	NA	ND(0.39)	ND(0.52)	ND(0.35)
Safrole	ND(0.53) [ND(0.50)]	NA	ND(0.39)	ND(0.52)	ND(0.35)
Thionazin	ND(0.53) [ND(0.50)]	NA	ND(0.39)	ND(0.52)	ND(0.35)
<b>Furans</b>					
2,3,7,8-TCDF	ND(0.00060) X [ND(0.00073) XY]	NA	NA	NA	ND(0.00013) XY
TCDFs (total)	0.0029 [0.0025]	NA	NA	NA	0.00022
1,2,3,7,8-PeCDF	0.0033 I [0.0040 I]	NA	NA	NA	0.00042 I
2,3,4,7,8-PeCDF	0.00014 I [0.00013 I]	NA	NA	NA	0.00015 I
PeCDFs (total)	0.0042 [0.0048]	NA	NA	NA	0.0014
1,2,3,4,7,8-HxCDF	0.013 I [0.016 IE]	NA	NA	NA	0.016 IE
1,2,3,6,7,8-HxCDF	0.00028 [0.00024]	NA	NA	NA	0.000052
1,2,3,7,8,9-HxCDF	0.000026 [0.000035]	NA	NA	NA	0.000030
2,3,4,6,7,8-HxCDF	0.00013 [0.00013]	NA	NA	NA	0.000095
HxCDFs (total)	0.020 [0.023]	NA	NA	NA	0.019
1,2,3,4,6,7,8-HpCDF	0.0078 [0.0064]	NA	NA	NA	0.00036

**TABLE A-1**  
**SUPPLEMENTAL PRE-DESIGN SOIL INVESTIGATION SAMPLING DATA FOR APPENDIX IX+3 ANALYTICAL RESULTS**

**SUPPLEMENTAL PRE-DESIGN INVESTIGATION REPORT FOR LYMAN STREET AREA REMOVAL ACTION**  
**GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**  
(Results are presented in dry weight parts per million, ppm)

Sample ID: Sample Depth (Feet): Parameter Date Collected:	RAA12-TU9.5 6-10 07/09/03	RAA12-TU9.5 8-10 07/09/03	RAA12-U8NE 1-3 07/09/03	RAA12-U8SW 1-3 07/09/03	RAA12-U9 0-1 07/09/03
<b>Furans</b>					
1,2,3,4,7,8,9-HpCDF	0.00028 [0.00024]	NA	NA	NA	0.000074
HpCDFs (total)	0.0081 [0.0067]	NA	NA	NA	0.00044
OCDF	0.0038 B [0.0036 B]	NA	NA	NA	0.00033 B
<b>Dioxins</b>					
2,3,7,8-TCDD	ND(0.000041) X [0.000033]	NA	NA	NA	ND(0.000029) X
TCDDs (total)	0.00052 [0.00055]	NA	NA	NA	0.000016
1,2,3,7,8-PeCDD	ND(0.000013) [ND(0.000011)]	NA	NA	NA	0.000011
PeCDDs (total)	ND(0.000013) [ND(0.000011)]	NA	NA	NA	0.000011
1,2,3,4,7,8-HxCDD	0.000061 [0.000063]	NA	NA	NA	0.000025
1,2,3,6,7,8-HxCDD	0.00014 [0.00012]	NA	NA	NA	0.000025
1,2,3,7,8,9-HxCDD	0.000096 [0.00010]	NA	NA	NA	0.000024
HxCDDs (total)	0.00030 [0.00028]	NA	NA	NA	0.000074
1,2,3,4,6,7,8-HpCDD	0.0018 [0.0017]	NA	NA	NA	0.00020
HpCDDs (total)	0.0036 [0.0033]	NA	NA	NA	0.00041
OCDD	0.013 B [0.010 B]	NA	NA	NA	0.00068 B
Total TEQs (WHO TEFs)	0.0018 [0.0021]	NA	NA	NA	0.0017
<b>Inorganics</b>					
Antimony	2.10 B [3.40 B]	NA	NA	NA	ND(6.00)
Arsenic	5.80 [6.10]	NA	NA	NA	2.20
Barium	78.0 [97.0]	NA	NA	NA	16.0 B
Beryllium	0.340 B [0.410 B]	NA	NA	NA	0.200 B
Cadmium	5.60 [7.80]	NA	NA	NA	ND(0.500)
Chromium	38.0 [52.0]	NA	NA	NA	4.20
Cobalt	6.50 [7.30]	NA	NA	NA	4.50 B
Copper	200 [290]	NA	NA	NA	10.0
Cyanide	2.30 [1.30]	NA	NA	NA	ND(0.210)
Lead	210 [270]	NA	NA	NA	4.90
Mercury	0.700 [1.10]	NA	NA	NA	ND(0.100)
Nickel	16.0 [20.0]	NA	NA	NA	7.10
Selenium	0.830 B [1.10 B]	NA	NA	NA	0.640 B
Silver	1.10 [1.10 B]	NA	NA	NA	0.110 B
Sulfide	390 [300]	NA	NA	NA	6.70
Thallium	ND(1.50) [ND(1.50)]	NA	NA	NA	ND(1.00)
Tin	21.0 [22.0]	NA	NA	NA	1.50 B
Vanadium	8.90 [11.0]	NA	NA	NA	7.40
Zinc	240 [290]	NA	NA	NA	24.0

**TABLE A-1**  
**SUPPLEMENTAL PRE-DESIGN SOIL INVESTIGATION SAMPLING DATA FOR APPENDIX IX+3 ANALYTICAL RESULTS**

**SUPPLEMENTAL PRE-DESIGN INVESTIGATION REPORT FOR LYMAN STREET AREA REMOVAL ACTION**  
**GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**  
(Results are presented in dry weight parts per million, ppm)

Sample ID: Sample Depth (Feet): Parameter Date Collected:	RAA12-U9 1-3 07/09/03	RAA12-U9 3-6 07/09/03	RAA12-U9 4-6 07/09/03	RAA12-X6 1-3 07/09/03	RAA12-Y5 0-1 07/09/03	RAA12-Y5 1-3 07/09/03
<b>Volatile Organics</b>						
1,1,1,2-Tetrachloroethane	ND(0.0054)	NA	ND(0.0062)	ND(0.0054)	ND(0.0054)	ND(0.0054)
1,1,1-Trichloroethane	ND(0.0054)	NA	ND(0.0062)	ND(0.0054)	ND(0.0054)	ND(0.0054)
1,1,2,2-Tetrachloroethane	ND(0.0054)	NA	ND(0.0062)	ND(0.0054)	ND(0.0054)	ND(0.0054)
1,1,2-Trichloroethane	ND(0.0054)	NA	ND(0.0062)	ND(0.0054)	ND(0.0054)	ND(0.0054)
1,1-Dichloroethane	ND(0.0054)	NA	ND(0.0062)	ND(0.0054)	ND(0.0054)	ND(0.0054)
1,1-Dichloroethene	ND(0.0054)	NA	ND(0.0062)	ND(0.0054)	ND(0.0054)	ND(0.0054)
1,2,3-Trichloropropane	ND(0.0054)	NA	ND(0.0062)	ND(0.0054)	ND(0.0054)	ND(0.0054)
1,2-Dibromo-3-chloropropane	ND(0.0054)	NA	ND(0.0062)	ND(0.0054)	ND(0.0054)	ND(0.0054)
1,2-Dibromoethane	ND(0.0054)	NA	ND(0.0062)	ND(0.0054)	ND(0.0054)	ND(0.0054)
1,2-Dichloroethane	ND(0.0054)	NA	ND(0.0062)	ND(0.0054)	ND(0.0054)	ND(0.0054)
1,2-Dichloropropane	ND(0.0054)	NA	ND(0.0062)	ND(0.0054)	ND(0.0054)	ND(0.0054)
1,4-Dioxane	ND(0.11)	NA	ND(0.12)	ND(0.11)	ND(0.11)	ND(0.11)
2-Butanone	ND(0.011)	NA	ND(0.012)	ND(0.011)	ND(0.011)	ND(0.011)
2-Chloro-1,3-butadiene	ND(0.0054)	NA	ND(0.0062)	ND(0.0054)	ND(0.0054)	ND(0.0054)
2-Chloroethylvinylether	ND(0.0054)	NA	ND(0.0062)	ND(0.0054)	ND(0.0054)	ND(0.0054)
2-Hexanone	ND(0.011)	NA	ND(0.012)	ND(0.011)	ND(0.011)	ND(0.011)
3-Chloropropene	ND(0.0054)	NA	ND(0.0062)	ND(0.0054)	ND(0.0054)	ND(0.0054)
4-Methyl-2-pentanone	ND(0.011)	NA	ND(0.012)	ND(0.011)	ND(0.011)	ND(0.011)
Acetone	ND(0.022)	NA	ND(0.025)	ND(0.022)	ND(0.021)	ND(0.022)
Acetonitrile	ND(0.11)	NA	ND(0.12)	ND(0.11)	ND(0.11)	ND(0.11)
Acrolein	ND(0.11)	NA	ND(0.12)	ND(0.11)	ND(0.11)	ND(0.11)
Acrylonitrile	ND(0.0054)	NA	ND(0.0062)	ND(0.0054)	ND(0.0054)	ND(0.0054)
Benzene	ND(0.0054)	NA	ND(0.0062)	ND(0.0054)	ND(0.0054)	ND(0.0054)
Bromodichloromethane	ND(0.0054)	NA	ND(0.0062)	ND(0.0054)	ND(0.0054)	ND(0.0054)
Bromoform	ND(0.0054)	NA	ND(0.0062)	ND(0.0054)	ND(0.0054)	ND(0.0054)
Bromomethane	ND(0.0054)	NA	ND(0.0062)	ND(0.0054)	ND(0.0054)	ND(0.0054)
Carbon Disulfide	ND(0.0054)	NA	ND(0.0062)	ND(0.0054)	ND(0.0054)	ND(0.0054)
Carbon Tetrachloride	ND(0.0054)	NA	ND(0.0062)	ND(0.0054)	ND(0.0054)	ND(0.0054)
Chlorobenzene	ND(0.0054)	NA	ND(0.0062)	ND(0.0054)	ND(0.0054)	ND(0.0054)
Chloroethane	ND(0.0054)	NA	ND(0.0062)	ND(0.0054)	ND(0.0054)	ND(0.0054)
Chloroform	ND(0.0054)	NA	ND(0.0062)	ND(0.0054)	ND(0.0054)	ND(0.0054)
Chloromethane	ND(0.0054)	NA	ND(0.0062)	ND(0.0054)	ND(0.0054)	ND(0.0054)
cis-1,3-Dichloropropene	ND(0.0054)	NA	ND(0.0062)	ND(0.0054)	ND(0.0054)	ND(0.0054)
Dibromochloromethane	ND(0.0054)	NA	ND(0.0062)	ND(0.0054)	ND(0.0054)	ND(0.0054)
Dibromomethane	ND(0.0054)	NA	ND(0.0062)	ND(0.0054)	ND(0.0054)	ND(0.0054)
Dichlorodifluoromethane	ND(0.0054)	NA	ND(0.0062)	ND(0.0054)	ND(0.0054)	ND(0.0054)
Ethyl Methacrylate	ND(0.0054)	NA	ND(0.0062)	ND(0.0054)	ND(0.0054)	ND(0.0054)
Ethylbenzene	ND(0.0054)	NA	ND(0.0062)	ND(0.0054)	ND(0.0054)	ND(0.0054)
Iodomethane	ND(0.0054)	NA	ND(0.0062)	ND(0.0054)	ND(0.0054)	ND(0.0054)
Isobutanol	ND(0.11)	NA	ND(0.12)	ND(0.11)	ND(0.11)	ND(0.11)
Methacrylonitrile	ND(0.0054)	NA	ND(0.0062)	ND(0.0054)	ND(0.0054)	ND(0.0054)
Methyl Methacrylate	ND(0.0054)	NA	ND(0.0062)	ND(0.0054)	ND(0.0054)	ND(0.0054)
Methylene Chloride	ND(0.0054)	NA	ND(0.0062)	ND(0.0054)	ND(0.0054)	ND(0.0054)
Propionitrile	ND(0.011)	NA	ND(0.012)	ND(0.011)	ND(0.011)	ND(0.011)
Styrene	ND(0.0054)	NA	ND(0.0062)	ND(0.0054)	ND(0.0054)	ND(0.0054)
Tetrachloroethene	ND(0.0054)	NA	ND(0.0062)	ND(0.0054)	ND(0.0054)	ND(0.0054)
Toluene	ND(0.0054)	NA	ND(0.0062)	ND(0.0054)	ND(0.0054)	ND(0.0054)
trans-1,2-Dichloroethene	ND(0.0054)	NA	ND(0.0062)	ND(0.0054)	ND(0.0054)	ND(0.0054)
trans-1,3-Dichloropropene	ND(0.0054)	NA	ND(0.0062)	ND(0.0054)	ND(0.0054)	ND(0.0054)
trans-1,4-Dichloro-2-butene	ND(0.0054)	NA	ND(0.0062)	ND(0.0054)	ND(0.0054)	ND(0.0054)
Trichloroethene	ND(0.0054)	NA	ND(0.0062)	ND(0.0054)	ND(0.0054)	ND(0.0054)
Trichlorofluoromethane	ND(0.0054)	NA	ND(0.0062)	ND(0.0054)	ND(0.0054)	ND(0.0054)
Vinyl Acetate	ND(0.0054)	NA	ND(0.0062)	ND(0.0054)	ND(0.0054)	ND(0.0054)
Vinyl Chloride	ND(0.0054)	NA	ND(0.0062)	ND(0.0054)	ND(0.0054)	ND(0.0054)
Xylenes (total)	ND(0.0054)	NA	ND(0.0062)	ND(0.0054)	ND(0.0054)	ND(0.0054)
<b>Semivolatile Organics</b>						
1,2,4,5-Tetrachlorobenzene	0.19 J	ND(0.60)	NA	NA	ND(0.36)	ND(0.36)
1,2,4-Trichlorobenzene	0.77	ND(0.60)	NA	NA	ND(0.36)	ND(0.36)
1,2-Dichlorobenzene	ND(0.74)	ND(0.60)	NA	NA	ND(0.36)	ND(0.36)
1,2-Diphenylhydrazine	ND(0.74)	ND(0.60)	NA	NA	ND(0.36)	ND(0.36)
1,3,5-Trinitrobenzene	ND(0.74)	ND(0.60)	NA	NA	ND(0.36)	ND(0.36)

**TABLE A-1**  
**SUPPLEMENTAL PRE-DESIGN SOIL INVESTIGATION SAMPLING DATA FOR APPENDIX IX+3 ANALYTICAL RESULTS**

**SUPPLEMENTAL PRE-DESIGN INVESTIGATION REPORT FOR LYMAN STREET AREA REMOVAL ACTION**  
**GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**  
(Results are presented in dry weight parts per million, ppm)

Sample ID: Sample Depth (Feet): Parameter Date Collected:	RAA12-U9 1-3 07/09/03	RAA12-U9 3-6 07/09/03	RAA12-U9 4-6 07/09/03	RAA12-X6 1-3 07/09/03	RAA12-Y5 0-1 07/09/03	RAA12-Y5 1-3 07/09/03
<b>Semivolatile Organics (continued)</b>						
1,3-Dichlorobenzene	ND(0.74)	ND(0.60)	NA	NA	ND(0.36)	ND(0.36)
1,3-Dinitrobenzene	ND(0.74)	ND(0.83)	NA	NA	ND(0.72)	ND(0.73)
1,4-Dichlorobenzene	ND(0.74)	ND(0.60)	NA	NA	ND(0.36)	ND(0.36)
1,4-Naphthoquinone	ND(0.74)	ND(0.83)	NA	NA	ND(0.72)	ND(0.73)
1-Naphthylamine	ND(0.74)	ND(0.83)	NA	NA	ND(0.72)	ND(0.73)
2,3,4,6-Tetrachlorophenol	ND(0.74)	ND(0.60)	NA	NA	ND(0.36)	ND(0.36)
2,4,5-Trichlorophenol	ND(0.74)	ND(0.60)	NA	NA	ND(0.36)	ND(0.36)
2,4,6-Trichlorophenol	ND(0.74)	ND(0.60)	NA	NA	ND(0.36)	ND(0.36)
2,4-Dichlorophenol	ND(0.74)	ND(0.60)	NA	NA	ND(0.36)	ND(0.36)
2,4-Dimethylphenol	ND(0.74)	ND(0.60)	NA	NA	ND(0.36)	ND(0.36)
2,4-Dinitrophenol	ND(3.7)	ND(3.0)	NA	NA	ND(1.8)	ND(1.8)
2,4-Dinitrotoluene	ND(0.74)	ND(0.60)	NA	NA	ND(0.36)	ND(0.36)
2,6-Dichlorophenol	ND(0.74)	ND(0.60)	NA	NA	ND(0.36)	ND(0.36)
2,6-Dinitrotoluene	ND(0.74)	ND(0.60)	NA	NA	ND(0.36)	ND(0.36)
2-Acetylaminofluorene	ND(0.74)	ND(0.83)	NA	NA	ND(0.72)	ND(0.73)
2-Chloronaphthalene	ND(0.74)	ND(0.60)	NA	NA	ND(0.36)	ND(0.36)
2-Chlorophenol	ND(0.74)	ND(0.60)	NA	NA	ND(0.36)	ND(0.36)
2-Methylnaphthalene	ND(0.74)	ND(0.60)	NA	NA	ND(0.36)	ND(0.36)
2-Methylphenol	ND(0.74)	ND(0.60)	NA	NA	ND(0.36)	ND(0.36)
2-Naphthylamine	ND(0.74)	ND(0.83)	NA	NA	ND(0.72)	ND(0.73)
2-Nitroaniline	ND(3.7)	ND(3.0)	NA	NA	ND(1.8)	ND(1.8)
2-Nitrophenol	ND(0.74)	ND(0.83)	NA	NA	ND(0.72)	ND(0.73)
2-Picoline	ND(0.74)	ND(0.60)	NA	NA	ND(0.36)	ND(0.36)
3&4-Methylphenol	ND(0.74)	ND(0.83)	NA	NA	ND(0.72)	ND(0.73)
3,3'-Dichlorobenzidine	ND(1.5)	ND(1.2)	NA	NA	ND(0.72)	ND(0.73)
3,3'-Dimethylbenzidine	ND(0.74)	ND(0.60)	NA	NA	ND(0.36)	ND(0.36)
3-Methylcholanthrene	ND(0.74)	ND(0.83)	NA	NA	ND(0.72)	ND(0.73)
3-Nitroaniline	ND(3.7)	ND(3.0)	NA	NA	ND(1.8)	ND(1.8)
4,6-Dinitro-2-methylphenol	ND(0.74)	ND(0.60)	NA	NA	ND(0.36)	ND(0.36)
4-Aminobiphenyl	ND(0.74)	ND(0.83)	NA	NA	ND(0.72)	ND(0.73)
4-Bromophenyl-phenylether	ND(0.74)	ND(0.60)	NA	NA	ND(0.36)	ND(0.36)
4-Chloro-3-Methylphenol	ND(0.74)	ND(0.60)	NA	NA	ND(0.36)	ND(0.36)
4-Chloroaniline	ND(0.74)	ND(0.60)	NA	NA	ND(0.36)	ND(0.36)
4-Chlorobenzilate	ND(0.74)	ND(0.83)	NA	NA	ND(0.72)	ND(0.73)
4-Chlorophenyl-phenylether	ND(0.74)	ND(0.60)	NA	NA	ND(0.36)	ND(0.36)
4-Nitroaniline	ND(1.8)	ND(2.1)	NA	NA	ND(1.8)	ND(1.8)
4-Nitrophenol	ND(3.7)	ND(3.0)	NA	NA	ND(1.8)	ND(1.8)
4-Nitroquinoline-1-oxide	ND(0.74)	ND(0.83)	NA	NA	ND(0.72)	ND(0.73)
4-Phenylenediamine	ND(0.74)	ND(0.83)	NA	NA	ND(0.72)	ND(0.73)
5-Nitro-o-toluidine	ND(0.74)	ND(0.83)	NA	NA	ND(0.72)	ND(0.73)
7,12-Dimethylbenz(a)anthracene	ND(0.74)	ND(0.83)	NA	NA	ND(0.72)	ND(0.73)
a,a'-Dimethylphenethylamine	ND(0.74)	ND(0.83)	NA	NA	ND(0.72)	ND(0.73)
Acenaphthene	0.68 J	ND(0.60)	NA	NA	ND(0.36)	ND(0.36)
Acenaphthylene	0.52 J	0.20 J	NA	NA	ND(0.36)	ND(0.36)
Acetophenone	ND(0.74)	ND(0.60)	NA	NA	ND(0.36)	ND(0.36)
Aniline	0.29 J	ND(0.60)	NA	NA	ND(0.36)	ND(0.36)
Anthracene	1.3	ND(0.60)	NA	NA	ND(0.36)	ND(0.36)
Aramite	ND(0.74)	ND(0.83)	NA	NA	ND(0.72)	ND(0.73)
Benzidine	ND(1.5)	ND(1.2)	NA	NA	ND(0.72)	ND(0.73)
Benzo(a)anthracene	2.9	0.18 J	NA	NA	ND(0.36)	0.084 J
Benzo(a)pyrene	3.0	0.32 J	NA	NA	ND(0.36)	ND(0.36)
Benzo(b)fluoranthene	3.0	0.18 J	NA	NA	ND(0.36)	0.082 J
Benzo(g,h,i)perylene	2.6	0.32 J	NA	NA	ND(0.36)	ND(0.36)
Benzo(k)fluoranthene	2.5	0.21 J	NA	NA	ND(0.36)	ND(0.36)
Benzyl Alcohol	ND(1.5)	ND(1.2)	NA	NA	ND(0.72)	ND(0.73)
bis(2-Chloroethoxy)methane	ND(0.74)	ND(0.60)	NA	NA	ND(0.36)	ND(0.36)
bis(2-Chloroethyl)ether	ND(0.74)	ND(0.60)	NA	NA	ND(0.36)	ND(0.36)
bis(2-Chloroisopropyl)ether	ND(0.74)	ND(0.60)	NA	NA	ND(0.36)	ND(0.36)
bis(2-Ethylhexyl)phthalate	ND(0.37)	ND(0.41)	NA	NA	ND(0.35)	ND(0.36)
Butylbenzylphthalate	ND(0.74)	ND(0.60)	NA	NA	ND(0.36)	ND(0.36)
Chrysene	3.5	0.22 J	NA	NA	ND(0.36)	ND(0.36)

**TABLE A-1**  
**SUPPLEMENTAL PRE-DESIGN SOIL INVESTIGATION SAMPLING DATA FOR APPENDIX IX+3 ANALYTICAL RESULTS**

**SUPPLEMENTAL PRE-DESIGN INVESTIGATION REPORT FOR LYMAN STREET AREA REMOVAL ACTION**  
**GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**  
(Results are presented in dry weight parts per million, ppm)

Sample ID: Sample Depth (Feet): Parameter Date Collected:	RAA12-U9 1-3 07/09/03	RAA12-U9 3-6 07/09/03	RAA12-U9 4-6 07/09/03	RAA12-X6 1-3 07/09/03	RAA12-Y5 0-1 07/09/03	RAA12-Y5 1-3 07/09/03
<b>Semivolatile Organics (continued)</b>						
Diallate	ND(0.74)	ND(0.83)	NA	NA	ND(0.72)	ND(0.73)
Dibenzo(a,h)anthracene	0.65 J	ND(0.60)	NA	NA	ND(0.36)	ND(0.36)
Dibenzofuran	0.40 J	ND(0.60)	NA	NA	ND(0.36)	ND(0.36)
Diethylphthalate	ND(0.74)	ND(0.60)	NA	NA	ND(0.36)	ND(0.36)
Dimethylphthalate	ND(0.74)	ND(0.60)	NA	NA	ND(0.36)	ND(0.36)
Di-n-Butylphthalate	0.61 J	ND(0.60)	NA	NA	ND(0.36)	ND(0.36)
Di-n-Octylphthalate	ND(0.74)	ND(0.60)	NA	NA	ND(0.36)	ND(0.36)
Diphenylamine	ND(0.74)	ND(0.60)	NA	NA	ND(0.36)	ND(0.36)
Ethyl Methanesulfonate	ND(0.74)	ND(0.60)	NA	NA	ND(0.36)	ND(0.36)
Fluoranthene	5.9	0.18 J	NA	NA	ND(0.36)	0.20 J
Fluorene	0.75	ND(0.60)	NA	NA	ND(0.36)	ND(0.36)
Hexachlorobenzene	ND(0.74)	ND(0.60)	NA	NA	ND(0.36)	ND(0.36)
Hexachlorobutadiene	ND(0.74)	ND(0.60)	NA	NA	ND(0.36)	ND(0.36)
Hexachlorocyclopentadiene	ND(0.74)	ND(0.60)	NA	NA	ND(0.36)	ND(0.36)
Hexachloroethane	ND(0.74)	ND(0.60)	NA	NA	ND(0.36)	ND(0.36)
Hexachlorophene	ND(1.5)	ND(1.2)	NA	NA	ND(0.72)	ND(0.73)
Hexachloropropene	ND(0.74)	ND(0.60)	NA	NA	ND(0.36)	ND(0.36)
Indeno(1,2,3-cd)pyrene	2.2	0.18 J	NA	NA	ND(0.36)	ND(0.36)
Isodrin	ND(0.74)	ND(0.60)	NA	NA	ND(0.36)	ND(0.36)
Isophorone	ND(0.74)	ND(0.60)	NA	NA	ND(0.36)	ND(0.36)
Isosafrole	ND(0.74)	ND(0.83)	NA	NA	ND(0.72)	ND(0.73)
Methapyrilene	ND(0.74)	ND(0.83)	NA	NA	ND(0.72)	ND(0.73)
Methyl Methanesulfonate	ND(0.74)	ND(0.60)	NA	NA	ND(0.36)	ND(0.36)
Naphthalene	0.22 J	ND(0.60)	NA	NA	ND(0.36)	ND(0.36)
Nitrobenzene	ND(0.74)	ND(0.60)	NA	NA	ND(0.36)	ND(0.36)
N-Nitrosodiethylamine	ND(0.74)	ND(0.60)	NA	NA	ND(0.36)	ND(0.36)
N-Nitrosodimethylamine	ND(0.74)	ND(0.60)	NA	NA	ND(0.36)	ND(0.36)
N-Nitroso-di-n-butylamine	ND(0.74)	ND(0.83)	NA	NA	ND(0.72)	ND(0.73)
N-Nitroso-di-n-propylamine	ND(0.74)	ND(0.60)	NA	NA	ND(0.36)	ND(0.36)
N-Nitrosodiphenylamine	ND(0.74)	ND(0.60)	NA	NA	ND(0.36)	ND(0.36)
N-Nitrosomethylethylamine	ND(0.74)	ND(0.83)	NA	NA	ND(0.72)	ND(0.73)
N-Nitrosomorpholine	ND(0.74)	ND(0.60)	NA	NA	ND(0.36)	ND(0.36)
N-Nitrosopiperidine	ND(0.74)	ND(0.60)	NA	NA	ND(0.36)	ND(0.36)
N-Nitrosopyrrolidine	ND(0.74)	ND(0.83)	NA	NA	ND(0.72)	ND(0.73)
o,o,o-Triethylphosphorothioate	ND(0.74)	ND(0.60)	NA	NA	ND(0.36)	ND(0.36)
o-Toluidine	ND(0.74)	ND(0.60)	NA	NA	ND(0.36)	ND(0.36)
p-Dimethylaminoazobenzene	ND(0.74)	ND(0.83)	NA	NA	ND(0.72)	ND(0.73)
Pentachlorobenzene	ND(0.74)	ND(0.60)	NA	NA	ND(0.36)	ND(0.36)
Pentachloroethane	ND(0.74)	ND(0.60)	NA	NA	ND(0.36)	ND(0.36)
Pentachloronitrobenzene	ND(0.74)	ND(0.83)	NA	NA	ND(0.72)	ND(0.73)
Pentachlorophenol	ND(3.7)	ND(3.0)	NA	NA	ND(1.8)	ND(1.8)
Phenacetin	ND(0.74)	ND(0.83)	NA	NA	ND(0.72)	ND(0.73)
Phenanthrene	4.4	ND(0.60)	NA	NA	ND(0.36)	0.098 J
Phenol	ND(0.74)	ND(0.60)	NA	NA	ND(0.36)	ND(0.36)
Pronamide	ND(0.74)	ND(0.60)	NA	NA	ND(0.36)	ND(0.36)
Pyrene	5.4	0.26 J	NA	NA	ND(0.36)	0.15 J
Pyridine	ND(0.74)	ND(0.60)	NA	NA	ND(0.36)	ND(0.36)
Safrole	ND(0.74)	ND(0.60)	NA	NA	ND(0.36)	ND(0.36)
Thionazin	ND(0.74)	ND(0.60)	NA	NA	ND(0.36)	ND(0.36)
<b>Furans</b>						
2,3,7,8-TCDF	ND(0.013)	ND(0.000032)	NA	NA	ND(0.00074) XY	ND(0.000044) XY
TCDFs (total)	0.029	0.000033	NA	NA	ND(0.000075)	0.000067
1,2,3,7,8-PeCDF	0.043 IE	0.00012 I	NA	NA	ND(0.000080)	0.000018 I
2,3,4,7,8-PeCDF	0.014 E	0.000045 I	NA	NA	ND(0.000085)	ND(0.000048)
PeCDFs (total)	0.074	0.00040	NA	NA	ND(0.000080)	0.00012
1,2,3,4,7,8-HxCDF	0.14 IE	0.0028 I	NA	NA	0.00018 I	0.00086 I
1,2,3,6,7,8-HxCDF	0.0083	ND(0.000024)	NA	NA	ND(0.000069)	ND(0.000054)
1,2,3,7,8,9-HxCDF	0.0059	ND(0.000094) X	NA	NA	ND(0.000091)	ND(0.000070)
2,3,4,6,7,8-HxCDF	0.015 E	0.000021	NA	NA	ND(0.000078)	ND(0.000061)
HxCDFs (total)	0.29	0.0035	NA	NA	0.00033	0.0012
1,2,3,4,6,7,8-HpCDF	0.060 E	0.00011	NA	NA	0.000032	0.000055

**TABLE A-1**  
**SUPPLEMENTAL PRE-DESIGN SOIL INVESTIGATION SAMPLING DATA FOR APPENDIX IX+3 ANALYTICAL RESULTS**

**SUPPLEMENTAL PRE-DESIGN INVESTIGATION REPORT FOR LYMAN STREET AREA REMOVAL ACTION**  
**GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**  
(Results are presented in dry weight parts per million, ppm)

Sample ID: Sample Depth (Feet): Parameter Date Collected:	RAA12-U9 1-3 07/09/03	RAA12-U9 3-6 07/09/03	RAA12-U9 4-6 07/09/03	RAA12-X6 1-3 07/09/03	RAA12-Y5 0-1 07/09/03	RAA12-Y5 1-3 07/09/03
<b>Furans</b>						
1,2,3,4,7,8,9-HpCDF	0.0088	0.000020	NA	NA	ND(0.000052)	ND(0.000030)
HpCDFs (total)	0.070	0.00013	NA	NA	0.000032	0.000055
OCDF	0.016 B	0.000076 B	NA	NA	0.00025 B	0.00018 B
<b>Dioxins</b>						
2,3,7,8-TCDD	0.00015	ND(0.0000050)	NA	NA	ND(0.0000083)	ND(0.0000039)
TCDDs (total)	0.00092	ND(0.0000050)	NA	NA	ND(0.0000083)	ND(0.0000039)
1,2,3,7,8-PeCDD	0.0015	ND(0.0000019)	NA	NA	ND(0.0000040)	ND(0.0000021)
PeCDDs (total)	0.0019	ND(0.0000019)	NA	NA	ND(0.0000040)	ND(0.0000021)
1,2,3,4,7,8-HxCDD	0.0033	0.0000050	NA	NA	ND(0.0000031)	ND(0.0000017)
1,2,3,6,7,8-HxCDD	0.0024	0.0000043	NA	NA	ND(0.0000028)	ND(0.0000016)
1,2,3,7,8,9-HxCDD	0.0027	ND(0.0000014)	NA	NA	ND(0.0000028)	ND(0.0000016)
HxCDDs (total)	0.032	0.0000093	NA	NA	ND(0.0000028)	ND(0.0000016)
1,2,3,4,6,7,8-HpCDD	0.034 E	0.000040	NA	NA	0.0000031	0.000014
HpCDDs (total)	0.078	0.000075	NA	NA	0.0000071	0.000029
OCDD	0.18 BE	0.00016 B	NA	NA	0.000020 B	0.00010 B
Total TEQs (WHO TEFs)	0.030	0.00032	NA	NA	0.000062	0.000093
<b>Inorganics</b>						
Antimony	2.30 B	ND(6.00)	NA	NA	ND(6.00)	ND(6.00)
Arsenic	3.90	3.10	NA	NA	3.70	3.60
Barium	300	47.0	NA	NA	16.0 B	23.0
Beryllium	0.380 B	0.360 B	NA	NA	0.220 B	0.210 B
Cadmium	0.640	ND(0.500)	NA	NA	ND(0.500)	0.0910 B
Chromium	11.0	11.0	NA	NA	3.60	6.00
Cobalt	26.0	8.40	NA	NA	4.60 B	6.50
Copper	210	23.0	NA	NA	9.10	13.0
Cyanide	0.150 B	0.0950 B	NA	NA	ND(0.110)	0.0730 B
Lead	350	33.0	NA	NA	4.50	26.0
Mercury	2.70	0.120 B	NA	NA	ND(0.110)	0.0380 B
Nickel	17.0	16.0	NA	NA	8.30	11.0
Selenium	1.10	ND(1.00)	NA	NA	0.580 B	0.680 B
Silver	0.850 B	0.160 B	NA	NA	0.120 B	ND(1.00)
Sulfide	28.0	14.0	NA	NA	ND(5.40)	ND(5.40)
Thallium	ND(1.10)	ND(1.20)	NA	NA	ND(1.10)	ND(1.10)
Tin	24.0	5.80 B	NA	NA	1.70 B	1.80 B
Vanadium	6.90	9.80	NA	NA	3.70 B	6.70
Zinc	170	62.0	NA	NA	29.0	49.0

Notes:

1. Samples were collected by Blasland Bouck & Lee, Inc., and were submitted to CT&E Environmental Services, Inc. for analysis of Appendix IX+3 constituents.
2. NA - Not Analyzed.
3. ND - Analyte was not detected. The number in parentheses is the associated detection limit.
4. Total 2,3,7,8-TCDD toxicity equivalents (TEQs) were calculated using Toxicity Equivalency Factors (TEFs) derived by the World Health Organization (WHO) and published by Van den Berg et al. in Environmental Health Perspectives 106(2), December 1998.
5. Field duplicate sample results are presented in brackets.

Data Qualifiers:

Organics (volatiles, semivolatiles, dioxin/furans)

- B - Analyte was also detected in the associated method blank.
- E - Analyte exceeded calibration range.
- I - Polychlorinated Diphenyl Ether (PCDPE) Interference.
- J - Indicates an estimated value less than the practical quantitation limit (PQL).
- X - Estimated maximum possible concentration.
- Y - 2,3,7,8-TCDF results have been confirmed on a DB-225 column.

Inorganics

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

# ***Attachment B***

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## **Soil Boring Logs**






<b>Date Start/Finish:</b> 7/9/03 <b>Drilling Company:</b> BBL <b>Driller's Name:</b> JJB <b>Drilling Method:</b> Direct Push <b>Auger Size:</b> NA <b>Rig Type:</b> Tractor-mounted Power Probe <b>Sample Method:</b> 2' Macrocore	<b>Northing:</b> NA <b>Easting:</b> NA <b>Casing Elevation:</b> NA  <b>Borehole Depth:</b> 1' below grade <b>Surface Elevation:</b> NA  <b>Descriptions By:</b> JTB	<b>Boring ID:</b> RAA12-O16NE  <b>Client:</b> General Electric Company  <b>Location:</b> Lyman Street Area Supplemental Sampling
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DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Boring Construction
0	0	1	0-1	0.7	0.2	x x x x x	COAL, ASH and SLAG, trace gray-brown fine Sand and Silt. [FILL]	Borehole backfilled with Bentonite.
5	-5							
10	-10							
15	-15							

 <b>BLASLAND, BOUCK &amp; LEE, INC.</b> <i>engineers &amp; scientists</i>	<b>Remarks:</b> bgs = below ground surface; NA = Not Applicable/Available. Analyses: 0-1': Lead.
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<b>Date Start/Finish:</b> 7/9/03 <b>Drilling Company:</b> BBL <b>Driller's Name:</b> JJB <b>Drilling Method:</b> Direct Push <b>Auger Size:</b> NA <b>Rig Type:</b> Tractor-mounted Power Probe <b>Sample Method:</b> 2' Macrocore	<b>Northing:</b> NA <b>Easting:</b> NA <b>Casing Elevation:</b> NA  <b>Borehole Depth:</b> 1' below grade <b>Surface Elevation:</b> NA  <b>Descriptions By:</b> JTB	<b>Boring ID:</b> RAA12-O16NW <b>Client:</b> General Electric Company  <b>Location:</b> Lyman Street Area Supplemental Sampling
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DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Boring Construction
0	0	1	0-1	0.9	0.1	x x x x x	COAL, ASH and SLAG, trace fine Sand and Silt. [FILL]	Borehole backfilled with Bentonite.
5	-5							
10	-10							
15	-15							

 <b>BLASLAND, BOUCK &amp; LEE, INC.</b> <i>engineers &amp; scientists</i>	<b>Remarks:</b> bgs = below ground surface; NA = Not Applicable/Available. Analyses: 0-1': Lead.
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<b>Date Start/Finish:</b> 7/9/03 <b>Drilling Company:</b> BBL <b>Driller's Name:</b> JJB <b>Drilling Method:</b> Direct Push <b>Auger Size:</b> NA <b>Rig Type:</b> Tractor-mounted Power Probe <b>Sample Method:</b> 2' Macrocore	<b>Northing:</b> NA <b>Easting:</b> NA <b>Casing Elevation:</b> NA  <b>Borehole Depth:</b> 1' below grade <b>Surface Elevation:</b> NA  <b>Descriptions By:</b> JTB	<b>Boring ID:</b> RAA12-O16S  <b>Client:</b> General Electric Company  <b>Location:</b> Lyman Street Area Supplemental Sampling
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DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Boring Construction
0	0	1	0-1	0.8	0.2	x x x x x	Brown fine SAND and SILT, little fine Gravel, Coal, Ash, and Brick. [FILL]	Borehole backfilled with Bentonite.
5	-5							
10	-10							
15	-15							


	<b>Remarks:</b> bgs = below ground surface; NA = Not Applicable/Available. Analyses: 0-1': Lead.
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<b>Date Start/Finish:</b> 7/9/03 <b>Drilling Company:</b> BBL <b>Driller's Name:</b> JJB <b>Drilling Method:</b> Direct Push <b>Auger Size:</b> NA <b>Rig Type:</b> Tractor-mounted Power Probe <b>Sample Method:</b> 4' Macrocore	<b>Northing:</b> NA <b>Easting:</b> NA <b>Casing Elevation:</b> NA  <b>Borehole Depth:</b> 10' below grade <b>Surface Elevation:</b> NA  <b>Descriptions By:</b> JTB	<b>Boring ID:</b> RAA12-TU9.5  <b>Client:</b> General Electric Company  <b>Location:</b> Lyman Street Area Supplemental Sampling
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DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Boring Construction
0	0	1	0-1	2.0	0.0		Brown fine SAND and SILT, little fine to medium Gravel, trace Organic Material.	
		2	1-3	0.0	0.0			
		3	3-4	0.0	0.0			
5	-5	4	4-6	3.8	0.4		Brown-orange-gray fine SAND, trace fine Gravel, moist.	
		5	6-8	7.2	7.2		Black fine SAND and SILT, slight petroleum odor, wet.	
		6	8-10	41.7	41.7			
10	-10							
15	-15							




	<b>Remarks:</b> bgs = below ground surface; NA = Not Applicable/Available. Analyses: 0-1': VOCs, SVOCs, Inorganics, and PCDD/PCDF; and 1-3': VOCs, SVOCs, Inorganics, and PCDD/PCDF; and 6-10': VOCs (8-10'), SVOCs, Inorganics, and PCDD/PCDF; and Duplicate sample ID: RAA12-Dup-2 from 6-10' (VOCs (8-10'), SVOCs, Inorganics, and PCDD/PCDF).
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<b>Date Start/Finish:</b> 7/9/03 <b>Drilling Company:</b> BBL <b>Driller's Name:</b> JJB <b>Drilling Method:</b> Direct Push <b>Auger Size:</b> NA <b>Rig Type:</b> Tractor-mounted Power Probe <b>Sample Method:</b> 4' Macrocore	<b>Northing:</b> NA <b>Easting:</b> NA <b>Casing Elevation:</b> NA  <b>Borehole Depth:</b> 3' below grade <b>Surface Elevation:</b> NA  <b>Descriptions By:</b> JTB	<b>Boring ID:</b> RAA12-U8NE <b>Client:</b> General Electric Company  <b>Location:</b> Lyman Street Area Supplemental Sampling
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DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Boring Construction
0	0						Pre probe to 1' bgs.	 Borehole backfilled with Bentonite.
		1	1-3	2.0	0.2	x x x x x x x x x x x x x x x x x x x x	Brown fine SAND and SILT, some Coal, Ash and Slag. [FILL]	
5	-5							
10	-10							
15	-15							


 <b>BLASLAND, BOUCK &amp; LEE, INC.</b> <i>engineers &amp; scientists</i>	<b>Remarks:</b> bgs = below ground surface; NA = Not Applicable/Available. Analyses: 1-3': SVOCs.
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<b>Date Start/Finish:</b> 7/9/03 <b>Drilling Company:</b> BBL <b>Driller's Name:</b> JJB <b>Drilling Method:</b> Direct Push <b>Auger Size:</b> NA <b>Rig Type:</b> Hand Driven <b>Sample Method:</b> 4' Macrocore	<b>Northing:</b> NA <b>Easting:</b> NA <b>Casing Elevation:</b> NA  <b>Borehole Depth:</b> 3' below grade <b>Surface Elevation:</b> NA  <b>Descriptions By:</b> JTB	<b>Boring ID:</b> RAA12-U8SW <b>Client:</b> General Electric Company  <b>Location:</b> Lyman Street Area Supplemental Sampling
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DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Boring Construction
0	0						Pre probe to 1' bgs.	 Borehole backfilled with Bentonite.
		1	1-3	1.1	0.0		Orange-brown fine SAND, trace fine Gravel.	
							Brown fine SAND and SILT, trace Brick.	
5	-5							
10	-10							
15	-15							


	<b>Remarks:</b> bgs = below ground surface; NA = Not Applicable/Available. Analyses: 1-3': SVOCs.
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<b>Date Start/Finish:</b> 7/9/03 <b>Drilling Company:</b> BBL <b>Driller's Name:</b> JJB <b>Drilling Method:</b> Direct Push <b>Auger Size:</b> NA <b>Rig Type:</b> Tractor-mounted Power Probe <b>Sample Method:</b> 4' Macrocore	<b>Northing:</b> NA <b>Easting:</b> NA <b>Casing Elevation:</b> NA  <b>Borehole Depth:</b> 6' below grade <b>Surface Elevation:</b> NA  <b>Descriptions By:</b> JTB	<b>Boring ID:</b> RAA12-U9  <b>Client:</b> General Electric Company  <b>Location:</b> Lyman Street Area Supplemental Sampling
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DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Boring Construction
0	0	1	0-1	3.1	0.0	•••••	Brown-orange fine to coarse SAND, some fine Gravel, moist.	 Borehole backfilled with Bentonite.
		2	1-3		0.0	•••••		
		3	3-4		0.0	•••••		
5	-5	4	4-6	2.0	0.0	•••••	Orange fine SAND and SILT, moist.	
10	-10							
15	-15							

 <p><b>BBL</b>          BLASLAND, BOUCK &amp; LEE, INC.          engineers &amp; scientists</p>	<b>Remarks:</b> bgs = below ground surface; NA = Not Applicable/Available. Analyses: 0-1': VOCs, SVOCs, Inorganics, and PCDD/PCDF; and 1-3': VOCs, SVOCs, Inorganics, and PCDD/PCDF; and 3-6': VOCs (4-6'), SVOCs, Inorganics, and PCDD/PCDF.
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

<b>Date Start/Finish:</b> 7/9/03 <b>Drilling Company:</b> BBL <b>Driller's Name:</b> JJB <b>Drilling Method:</b> Direct Push <b>Auger Size:</b> NA <b>Rig Type:</b> Tractor-mounted Power Probe <b>Sample Method:</b> 2' Macrocore	<b>Northing:</b> NA <b>Easting:</b> NA <b>Casing Elevation:</b> NA  <b>Borehole Depth:</b> 6' below grade <b>Surface Elevation:</b> NA  <b>Descriptions By:</b> JTB	<b>Boring ID:</b> RAA12-V4  <b>Client:</b> General Electric Company  <b>Location:</b> Lyman Street Area Supplemental Sampling
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DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Boring Construction
0	0						Pre probe to 3' bgs.	 Borehole backfilled with Bentonite.
5	-5	1	3-6	2.3	0.2	x x	COAL, ASH, and SLAG, trace fine Sand and Silt. [FILL]	
10	-10							
15	-15							

 <b>BLASLAND, BOUCK &amp; LEE, INC.</b> <i>engineers &amp; scientists</i>	<b>Remarks:</b> bgs = below ground surface; NA = Not Applicable/Available. Analyses: 3-6': PCBs; and Duplicate sample ID: RAA12-Dup-1 (PCBs, 3-6'); MS/MSD collected (PCBs, 3-6').
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<b>Date Start/Finish:</b> 7/9/03 <b>Drilling Company:</b> BBL <b>Driller's Name:</b> JJB <b>Drilling Method:</b> Direct Push <b>Auger Size:</b> NA <b>Rig Type:</b> Hand Driven <b>Sample Method:</b> 4' Macrocore	<b>Northing:</b> NA <b>Easting:</b> NA <b>Casing Elevation:</b> NA  <b>Borehole Depth:</b> 3' below grade <b>Surface Elevation:</b> NA  <b>Descriptions By:</b> JTB	<b>Boring ID:</b> RAA12-X6  <b>Client:</b> General Electric Company  <b>Location:</b> Lyman Street Area Supplemental Sampling
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DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Boring Construction
0	0						Pre probe to 1' bgs.	 Borehole backfilled with Bentonite.
		1	1-3	2.0	0.3	 Orange-brown fine SAND.		
						 Same as above, little Coal, Ash and Wood. [FILL]		
5	-5							
10	-10							
15	-15							

 <b>BLASLAND, BOUCK &amp; LEE, INC.</b> <i>engineers &amp; scientists</i>	<b>Remarks:</b> bgs = below ground surface; NA = Not Applicable/Available. Analyses: 1-3': VOCs.
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<b>Date Start/Finish:</b> 7/9/03 <b>Drilling Company:</b> BBL <b>Driller's Name:</b> JJB <b>Drilling Method:</b> Direct Push <b>Auger Size:</b> NA <b>Rig Type:</b> Hand Driven <b>Sample Method:</b> 4' Macrocore	<b>Northing:</b> NA <b>Easting:</b> NA <b>Casing Elevation:</b> NA  <b>Borehole Depth:</b> 3' below grade <b>Surface Elevation:</b> NA  <b>Descriptions By:</b> JTB	<b>Boring ID:</b> RAA12-Y5  <b>Client:</b> General Electric Company  <b>Location:</b> Lyman Street Area Supplemental Sampling
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DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Boring Construction
0	0	1	0-1	2.0	0.0		Orange-brown fine SAND, trace Coal and Ash.	 Borehole backfilled with Bentonite.
		2	1-3		0.0			
5	-5							
10	-10							
15	-15							

 <b>BLASLAND, BOUCK &amp; LEE, INC.</b> <i>engineers &amp; scientists</i>	<b>Remarks:</b> bgs = below ground surface; NA = Not Applicable/Available. Analyses: 0-1': VOCs, SVOCs, Inorganics, and PCDD/PCDF; and 1-3': VOCs, SVOCs, Inorganics, and PCDD/PCDF.
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# *Attachment C*

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## **Soil Sampling Data Validation Report**

## ATTACHMENT C

### GENERAL ELECTRIC COMPANY PITTSFIELD, MASSACHUSETTS

#### AREA REMOVAL ACTION PRE-DESIGN INVESTIGATION

#### SOIL SAMPLING DATA VALIDATION REPORT

### 1.0 General

This attachment summarizes the Tier I and Tier II data reviews performed for soil samples collected at the pre-design investigation activities at a portion of the Supplemental Lyman Pre-Design Investigation, located in Pittsfield, Massachusetts. The samples were analyzed for various constituents listed in Appendix IX of 40 CFR Part 264, plus three additional constituents -- benzidine, 2-chloroethyl vinyl ether, and 1,2-diphenylhydrazine (hereafter referred to as Appendix IX+3), excluding pesticides and herbicides, by CT&E Environmental Services, Inc. of Charleston. Data validation was performed for three polychlorinated biphenyl (PCB) samples, 12 volatile organic compound (VOC) samples, 12 semi-volatile organic compound (SVOC) samples, 10 polychlorinated dibenzo-p-dioxin (PCDD)/polychlorinated dibenzofuran (PCDF) samples, 15 metals samples, and 10 cyanide/sulfide samples.

### 2.0 Data Evaluation Procedures

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

- *Field Sampling Plan/Quality Assurance Project Plan, General Electric Company, Pittsfield, Massachusetts*, Blasland, Bouck & Lee, Inc. ([BBL]; FSP/QAPP, approved October 17, 2000);
- *Region I Tiered Organic and Inorganic Data Validation Guidelines*, USEPA Region I (July 1, 1993);
- *Region I Laboratory Data Validation Functional Guidelines for Evaluating Inorganics Analyses*, USEPA Region I (June 13, 1988) (Modified February 1989);
- *Region I Laboratory Data Validation Functional Guidelines for Evaluating Organics Analyses*, USEPA Region I (February 1, 1988) (Modified November 1, 1988);
- *Region I Laboratory Data Validation Functional Guidelines for Evaluating Organics Analyses*, USEPA Region I (Draft, December 1996); and
- *National Functional Guidelines for Dioxin/Furan Data Validation*, USEPA (Draft, January 1996).

A tabulated summary of the Tier I and Tier II data evaluations is presented in Table C-1. Each sample that was subjected to evaluation is listed in Table C-1 to document that the data review was performed, as well as present the highest level of data validation (Tier I or Tier II) that was performed. Samples that required data qualification are listed separately for each parameter (compound or analyte) that required qualification.

The following data qualifiers have been used in this data evaluation.

- J The compound or analyte was positively identified, but the associated numerical value is an estimated concentration. This qualifier is used when the data evaluation procedure identifies a deficiency in the data generation process. This qualifier is also used when a compound or analyte is detected at an estimated concentration less than the practical quantitation limit (PQL).
- U The compound or analyte was analyzed for, but was not detected. The sample quantitation limit is presented and adjusted for dilution and (for solid samples only) percent moisture. Non-detected sample results are presented as ND(PQL) within this report and in Table C-1 for consistency with previous documents prepared for this investigation.
- UJ The compound or analyte was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual level of quantitation. Non-detected sample results that required qualification are presented as ND(PQL) J within this report and in Table C-1 for consistency with previous documents prepared for this investigation.
- R Indicates that the previously reported detection limit or sample result has been rejected due to a major deficiency in the data generation procedure. The data should not be used for any qualitative or quantitative purposes.

### **3.0 Data Validation Procedures**

The FSP/QAPP provides (in Section 7.5) that all analytical data will be validated to a Tier I level following the procedures presented in the *Region I Tiered Organic and Inorganic Data Validation Guidelines* (USEPA guidelines). Accordingly, 100% of the analytical data for these investigations were subjected to Tier I review. The Tier I review consisted of a completeness evidence audit, as outlined in the *USEPA Region I CSF Completeness Evidence Audit Program* (USEPA Region I, 7/31/91), to ensure that all laboratory data and documentation were present. A tabulated summary of the samples subjected to Tier I and Tier II data evaluation is presented below.

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

Parameter	Tier I Only			Tier I & Tier II			Total
	Samples	Duplicates	Blanks	Samples	Duplicates	Blanks	
PCBs	0	0	0	1	1	1	3
VOCs	0	0	0	9	1	2	12
SVOCs	0	0	0	10	1	1	12
PCDDs/PCDFs	0	0	0	8	1	1	10
Metals	0	0	0	13	1	1	15
Cyanide/Sulfide	0	0	0	8	1	1	10
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>49</b>	<b>6</b>	<b>7</b>	<b>62</b>

In the event data packages were determined to be incomplete, the missing information was requested from the laboratory. Upon completion of the Tier I review, the data packages complied with USEPA Region I Tier I data completeness requirements.

As specified in the FSP/QAPP, a Tier II review was also performed to resolve data usability limitations identified from laboratory qualification of the data during the Tier I data review. The Tier II data review consisted of a review of all data package summary forms for identification of quality assurance/quality control (QA/QC) deviations and qualification of the data according to the Region I Data Validation Functional Guidelines. The Tier

II review resulted in the qualification of data for several samples due to minor QA/QC deficiencies. Additionally, all field duplicates were examined for relative percent difference (RPD) compliance with the criteria specified in the FSP/QAPP.

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

#### **4.0 Data Review**

Initial calibration criterion for organic analyses requires that the average relative response factor (RRF) has a value greater than 0.05. Sample results were qualified as estimated (J) when this criterion was exceeded. The compounds that exceeded initial calibration criterion and the number of samples qualified are presented below.

**Analysis Qualified Due to Initial Calibration Deviations**

<b>Analysis</b>	<b>Compound</b>	<b>Number of Affected Samples</b>	<b>Qualification</b>
VOCs	1,4-Dioxane	10	J
	2-Chloroethylvinylether	2	J
	Acetonitrile	12	J
	Acrolein	12	J
	Isobutanol	12	J
	Propionitrile	2	J
SVOCs	Hexachlorophene	12	J

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

Initial calibration criterion for SVOCs requires that the percent relative standard deviation (%RSD) must be less than or equal to 30%. Sample data for detected and non-detected compounds with %RSD values greater than 30% were qualified as estimated (J). The compounds that exceeded initial calibration criterion and the number of samples qualified due those exceeded are identified below.

**Compounds Qualified Due to Initial Calibration %RSD Deviations**

<b>Analysis</b>	<b>Compound</b>	<b>Number of Affected Samples</b>	<b>Qualification</b>
SVOCs	2,4-Dinitrophenol	12	J
	4-Nitrophenol	12	J
	Hexachlorocyclopentadiene	12	J

The continuing calibration criterion requires that the %D between the initial calibration RRF and the continuing calibration RRF for VOCs and SVOCs be less than 25%. Sample data for detected and non-detected compounds with %D values exceeding the continuing calibration criterion were qualified as estimated (J). A summary of the compounds that exceeded continuing calibration criterion and the number of samples qualified due to those deviations are identified below.

**Compounds Qualified Due to Continuing Calibration of %D Values**

Analysis	Compound	Number of Affected Samples	Qualification
VOCs	1,4-Dioxane	2	J
	Acrylonitrile	2	J
	Bromoform	10	J
	Bromomethane	10	J
	Carbon Disulfide	12	J
	Chloroethane	10	J
	Iodomethane	12	J
SVOCs	4-Chlorobenzilate	11	J
	4-Nitroquinoline-1-oxide	11	J
	Benzidine	11	J
	bis(2-Chloroethyl)ether	1	J
	Hexachloropropene	1	J
	o,o,o-Triethylphosphorothioate	12	J
	Pentachlorobenzene	1	J
	Pronamide	12	J
	Safrole	11	J
	Benzidine	12	J

Contract required detection limit (CRDL) standards were analyzed to evaluate instrument performance at low-level concentrations that are near the analytical method PQL. These standards are required to have recoveries between 80 and 120% to verify that the analytical instrumentation was properly calibrated. When CRDL standard recoveries exceeded the 80 to 120% control limits, the affected samples with detected results at or near the PQL concentration (less than three times the PQL) were qualified as estimated (J). The analytes that exceeded CRDL criteria and the number of samples qualified due to those deviations are presented below.

**Analytes Qualified Due to CRDL Standard Recovery Deviations**

Analysis	Analyte	Number of Affected Samples	Qualification
Inorganics	Selenium	9	J
	Thallium	9	J

Field, laboratory, and method blanks were analyzed to evaluate whether field sampling equipment or laboratory background contamination may have contributed to the reported sample results. When detected analytes were identified in a blank sample, blank action levels were calculated at five times the blank concentration for all other detected analytes. Detected sample results below the blank action level were qualified as "U." The analytes detected in the method blanks, which resulted in qualification of sample data, are presented below.

**Analytes Qualified Due to Blank Deviations**

<b>Analysis</b>	<b>Analyte</b>	<b>Number of Affected Samples</b>	<b>Qualification</b>
Inorganics	Silver	6	U
	Tin	5	U

Matrix spike (MS) sample analysis recovery criteria for inorganics require that spike recoveries be between 75 and 125%, and the MS recoveries for organics must be within the laboratory-generated QC acceptance limits specified on the MS reporting form. Inorganic sample results that exceeded these limits were qualified as estimated (J). MS sample analysis recovery criteria for organics require that the MS be within the laboratory-generated QC acceptance limits specified on the MS reporting form. Analytes/compounds that did not meet MS recovery criteria and the samples qualified due to those deviations are presented below.

**Analytes/Compounds Qualified Due to MS Recovery Deviations**

<b>Analysis</b>	<b>Analyte/Compound</b>	<b>Number of Affected Samples</b>	<b>Qualification</b>
Inorganics	Antimony	9	J
	Copper	9	J
	Sulfide	9	J
PCDDs/PCDFs	1,2,3,4,7,8-HxCDF	1	J
	OCDF	1	J

MS sample analysis recovery criteria for organics require that the RPD between the MS and matrix spike duplicate (MSD) be less than the laboratory-generated QC acceptance limits specified on the MS reporting form. The compound that exceeded RPD limits and the number of samples qualified due to deviations are presented below.

**Compound Qualified Due to MS RPD Deviations**

<b>Analysis</b>	<b>Compound</b>	<b>Number of Affected Samples</b>	<b>Qualification</b>
VOCs	1,1-Dichloroethane	1	J

Field duplicate samples were analyzed to evaluate the overall precision of laboratory and field procedures. The RPD between duplicate samples is required to be less than 50% for soil sample values greater than five times the PQL. Sample results for analytes that exceeded these limits were qualified as estimated (J). The analytes/compounds that did not meet field duplicate RPD requirements and the number of samples qualified due to those deviations are presented below.



**Analytes/Compound Qualified Due to Field Duplicate Deviations**

<b>Analysis</b>	<b>Analyte/Compound</b>	<b>Number of Affected Samples</b>	<b>Qualification</b>
SVOCs	2-Methylphenol	2	J
	Acenaphthylene	2	J
	Anthracene	2	J
	Benzo(a)anthracene	2	J
	Benzo(a)pyrene	2	J
	Benzo(b)fluoranthene	2	J
	Benzo(g,h,i)perylene	2	J
	Benzo(k)fluoranthene	2	J
	Chrysene	2	J
	Dibenzofuran	2	J
	Fluoranthene	2	J
	Fluorene	2	J
	Indeno(1,2,3-cd)pyrene	2	J
	Phenanthrene	2	J
	Phenol	2	J
Pyrene	2	J	
Inorganics	Cyanide	9	J

The compounds listed below were qualified with the laboratory qualifier “Q.” Q was defined by the laboratory as “Indicates the presence of quantitative interference.” The quantitative interference occurred during the quantitation of the target compound and, at times, quantitation of the associated internal. Sample results and associated internal standards that were qualified by the laboratory with the data qualifier “Q” were additionally qualified as estimated with the “J” qualifier. The compounds which the laboratory identified with the data qualifier “Q” and the number of samples affected are presented below.

**Compounds Qualified Due to Quantifiable Interference**

<b>Analysis</b>	<b>Compound</b>	<b>Number of Affected Samples</b>	<b>Qualification Removed</b>
PCDDs/PCDFs Target compounds	PeCDDs (total)	4	J
	PeCDFs (total)	7	J
	TCDDs (total)	1	J
	TCDFs (total)	3	J

Internal standard compounds for PCDDs/PCDFs require that internal standard recoveries be between 40 and 140%. Internal standard compounds that exceeded recovery criteria resulted in the qualification of sample results for compounds that were quantified with the deviant standard. PCDD/PCDF sample results for the associated compounds were qualified as estimated (J) when the internal standard recovery was less than 40%, but greater than 10%. The compound associated with internal standards which exceeded the recovery criteria and the number of samples qualified due to those deviations are identified below.

**Compound Qualified Due to Internal Standard Recovery Deviations**

Analysis	Compound	Number of Affected Samples	Qualification
PCDDs/PCDFs	1,2,3,7,8-PeCDF	1	J

The quantitation criteria require that detected organic sample results be quantitated within the linear range of the five-point calibration curve. Detected sample results which are above the linear range of the calibration are required to be re-analyzed at a dilution yielding a sample result within the linear range of the calibration (preferable at the midpoint). Sample data for detected compounds which were not re-analyzed at a dilution within the calibration range were qualified as estimated (J). A summary of the compounds that exceeded quantitation criteria and the number of samples qualified due to those deviations are identified below.

**Compounds Qualified Due to Quantitation Criteria**

Analysis	Compound	Number of Affected Samples	Qualification
PCDDs/PCDFs	1,2,3,4,6,7,8-HpCDD	1	J
	1,2,3,4,6,7,8-HpCDF	1	J
	1,2,3,4,7,8-HxCDF	3	J
	1,2,3,7,8-PeCDF	1	J
	2,3,4,6,7,8-HxCDF	1	J
	2,3,4,7,8-PeCDF	1	J
	2,3,7,8-TCDF	1	J
	OCDD	1	J

**5.0 Overall Data Usability**

This section summarizes the analytical data in terms of its completeness and usability for site characterization purposes. Data completeness is defined as the percentage of sample results determined to be usable during the data validation process. Data completeness with respect to usability was calculated separately for inorganics and each of the organic analyses. The percent usability calculation included analyses evaluated under both the Tier I and Tier II data validation reviews. The percent usability calculation also includes quality control samples collected to aid in the evaluation of data usability. Therefore, field/equipment blank, trip blank, and field duplicate data determined to be unusable as a result of the validation process are represented in the percent usability value tabulated below.

**Data Usability**

Parameter	Percent Usability	Rejected Data
Inorganics	100	None
Cyanide and Sulfide	100	None
VOCs	100	None
SVOCs	100	None
PCBs	100	None
PCDDs/PCDFs	100	None

The data package completeness, as determined from the Tier I data review, was used in combination with the data quality deviations identified during the Tier II data review to determine overall data quality. As specified in the FSP/QAPP, the overall precision, accuracy, representativeness, comparability, and completeness (PARCC) parameters determined from the Tier I and Tier II data reviews were used as indicators of overall data quality. These parameters were assessed through an evaluation of the results of the field and laboratory QA/QC sample

analyses to provide a measure of compliance of the analytical data with the data quality objectives (DQOs) specified in the FSP/QAPP. Therefore, the following sections present summaries of the PARCC parameters assessment with regard to the DQOs specified in the FSP/QAPP.

### **5.1 Precision**

Precision measures the reproducibility of measurements under a given set of conditions. Specifically, it is a quantitative measure of the variability of a group of measurements compared to their average value. For this investigation, precision was defined as the RPD between duplicate sample results. The duplicate samples used to evaluate precision included laboratory duplicates, field duplicates, MS/MSD samples, and ICP serial dilution samples. For this analytical program, 1.6% of the data required qualification for MS/MSD RPD deviations and 0.04% of the data required qualification for field duplicate RPD deviations. None of the data required qualification for ICP serial dilution deviations or laboratory duplicate RPD deviations.

### **5.2 Accuracy**

Accuracy measures the bias in an analytical system or the degree of agreement of a measurement with a known reference value. For this investigation, accuracy was defined as the percent recovery of QA/QC samples that were spiked with a known concentration of an analyte or compound of interest. The QA/QC samples used to evaluate analytical accuracy included instrument calibration, internal standards, laboratory control standards (LCSs), MS/MSD samples, CRDL samples, and surrogate compound recoveries. For this analytical program, 9.2% of the data required qualification for calibration deviations, 0.70% required qualification for CRDL standard recoveries, 0.04% required qualification for internal standard recoveries, and 1.2% required qualification for MS/MSD recoveries. None of the data required qualification for surrogate compound standard recovery deviations, internal standard recovery deviations, or LCS recovery deviations.

### **5.3 Representativeness**

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

### **5.4 Comparability**

Comparability is a qualitative parameter expressing the confidence with which one data set can be compared with another. This goal was achieved through the use of the standardized techniques for sample collection and analysis presented in the FSP/QAPP. The USEPA SW-846<sup>1</sup> analytical methods presented in the FSP/QAPP are updated on occasion by the USEPA to benefit from recent technological advancements in analytical chemistry and instrumentation. In most cases, the method upgrades include the incorporation of new technology that improves the sensitivity and stability of the instrumentation or allows the laboratory to increase throughput without hindering accuracy and precision. Overall, the analytical methods for this investigation have remained consistent in their general approach through continued use of the basic analytical techniques

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<sup>1</sup> Test Methods for evaluating Solid Waste, SW-846, USEPA, Final Update III, December 1996.

(i.e., sample extraction/preparation, instrument calibration, QA/QC procedures, etc.). Through this use of consistent base analytical procedures and by requiring that updated procedures meet the QA/QC criteria specified in the FSP/QAPP, the analytical data from past, present, and future sampling events will be comparable to allow for qualitative and quantitative assessment of site conditions.

### **5.5 Completeness**

Completeness is defined as the percentage of measurements that are judged to be valid or usable to meet the prescribed DQOs. The completeness criterion is essentially the same for all data uses -- the generation of a sufficient amount of valid data. The actual completeness of this analytical data for individual analytical parameters and overall usability of this data set is 100.0%.

**TABLE C-1**  
**LYMAN STREET SUPPLEMENTAL PDI SAMPLES**  
**ANALYTICAL DATA VALIDATION SUMMARY**  
**GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**  
(Results are presented in parts per million, ppm)

Sample Delivery Group No.	Sample ID	Date Collected	Matrix	Validation Level	Qualification	Compound	QA/QC Parameter	Value	Control Limits	Qualified Result	Notes
<b>PCBs</b>											
3G0P211	RAA12-DUP-1 (3 -	7/9/2003	Soil	Tier II	No						RAA12-V4
3G0P211	RAA12-V4 (3 - 6)	7/9/2003	Soil	Tier II	No						
3G0P211	RB-070903-1 (0 - 0)	7/9/2003	Water	Tier II	No						
<b>Metals</b>											
3G0P211	RAA12-DUP-2 (6 -	7/9/2003	Soil	Tier II	Yes	Antimony	MS %R	68.0%	75% to 125%	3.40 J	RAA12-TU9.5
						Copper	MS %R	146.7%	75% to 125%	290 J	
						Selenium	CRDL Standard %R	137.8%	75% to 125%	1.10 J	
						Silver	Method Blank	-	-	ND(1.1)	
						Thallium	CRDL Standard %R	132.8%	75% to 125%	ND(1.50) J	
3G0P211	RAA12-O16 (1 - 3)	7/9/2003	Soil	Tier II	No						Lead only
3G0P211	RAA12-O16 (3 - 6)	7/9/2003	Soil	Tier II	No						Lead only
3G0P211	RAA12-O16NE (0 -	7/9/2003	Soil	Tier II	No						Lead only
3G0P211	RAA12-O16NW (0 -	7/9/2003	Soil	Tier II	No						Lead only
3G0P211	RAA12-O16S (0 - 1)	7/9/2003	Soil	Tier II	No						Lead only
3G0P211	RAA12-TU9.5 (0 - 1)	7/9/2003	Soil	Tier II	Yes	Antimony	MS %R	68.0%	75% to 125%	0.920 J	
						Copper	MS %R	146.7%	75% to 125%	38.0 J	
						Selenium	CRDL Standard %R	137.8%	75% to 125%	1.10 J	
						Silver	Method Blank	-	-	ND(1.0)	
						Thallium	CRDL Standard %R	132.8%	75% to 125%	ND(1.10) J	
						Tin	Method Blank	-	-	ND(10)	
3G0P211	RAA12-TU9.5 (1 - 3)	7/9/2003	Soil	Tier II	Yes	Antimony	MS %R	68.0%	75% to 125%	2.60 J	
						Copper	MS %R	146.7%	75% to 125%	380 J	
						Selenium	CRDL Standard %R	137.8%	75% to 125%	1.40 J	
						Thallium	CRDL Standard %R	132.8%	75% to 125%	ND(1.20) J	
3G0P211	RAA12-TU9.5 (6 -	7/9/2003	Soil	Tier II	Yes	Antimony	MS %R	68.0%	75% to 125%	2.10 J	
						Copper	MS %R	146.7%	75% to 125%	200 J	
						Selenium	CRDL Standard %R	137.8%	75% to 125%	0.830 J	
						Thallium	CRDL Standard %R	132.8%	75% to 125%	ND(1.50) J	
3G0P211	RAA12-U9 (0 - 1)	7/9/2003	Soil	Tier II	Yes	Antimony	MS %R	68.0%	75% to 125%	ND(6.00) J	
						Copper	MS %R	146.7%	75% to 125%	10.0 J	
						Selenium	CRDL Standard %R	137.8%	75% to 125%	0.640 J	
						Silver	Method Blank	-	-	ND(1.0)	
						Thallium	CRDL Standard %R	132.8%	75% to 125%	ND(1.00) J	
						Tin	Method Blank	-	-	ND(10)	
3G0P211	RAA12-U9 (1 - 3)	7/9/2003	Soil	Tier II	Yes	Antimony	MS %R	68.0%	75% to 125%	2.30 J	
						Copper	MS %R	146.7%	75% to 125%	210 J	
						Selenium	CRDL Standard %R	137.8%	75% to 125%	1.10 J	
						Silver	Method Blank	-	-	ND(1.0)	
						Thallium	CRDL Standard %R	132.8%	75% to 125%	ND(1.10) J	
3G0P211	RAA12-U9 (3 - 6)	7/9/2003	Soil	Tier II	Yes	Antimony	MS %R	68.0%	75% to 125%	ND(6.00) J	
						Copper	MS %R	146.7%	75% to 125%	23.0 J	
						Selenium	CRDL Standard %R	137.8%	75% to 125%	ND(1.00) J	
						Silver	Method Blank	-	-	ND(1.0)	
						Thallium	CRDL Standard %R	132.8%	75% to 125%	ND(1.20) J	
						Tin	Method Blank	-	-	ND(10)	
3G0P211	RAA12-Y5 (0 - 1)	7/9/2003	Soil	Tier II	Yes	Antimony	MS %R	68.0%	75% to 125%	ND(6.00) J	
						Copper	MS %R	146.7%	75% to 125%	9.10 J	
						Selenium	CRDL Standard %R	137.8%	75% to 125%	0.580 J	
						Silver	Method Blank	-	-	ND(1.0)	
						Thallium	CRDL Standard %R	132.8%	75% to 125%	ND(1.10) J	
						Tin	Method Blank	-	-	ND(10)	

**TABLE C-1**  
**LYMAN STREET SUPPLEMENTAL PDI SAMPLES**  
**ANALYTICAL DATA VALIDATION SUMMARY**  
**GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**  
(Results are presented in parts per million, ppm)

Sample Delivery Group No.	Sample ID	Date Collected	Matrix	Validation Level	Qualification	Compound	QA/QC Parameter	Value	Control Limits	Qualified Result	Notes
<b>Metals (continued)</b>											
3G0P211	RAA12-Y5 (1 - 3)	7/9/2003	Soil	Tier II	Yes	Antimony	MS %R	68.0%	75% to 125%	ND(6.00) J	
						Copper	MS %R	146.7%	75% to 125%	13.0 J	
						Selenium	CRDL Standard %R	137.8%	75% to 125%	0.680 J	
						Thallium	CRDL Standard %R	132.8%	75% to 125%	ND(1.10) J	
						Tin	Method Blank	-	-	ND(10)	
3G0P211	RB-070903-1 (0 - 0)	7/9/2003	Water	Tier II	No						
<b>VOCs</b>											
3G0P211	RAA12-DUP-3 (8 - )	7/9/2003	Soil	Tier II	Yes	1,4-Dioxane	ICAL RRF	0.010	>0.05	ND(0.22) J	RAA12-TU9.5
						Acetonitrile	ICAL RRF	0.041	>0.05	ND(0.22) J	
						Acrolein	ICAL RRF	0.005	>0.05	ND(0.22) J	
						Bromoform	CCAL %D	29.2%	<25%	ND(0.011) J	
						Bromomethane	CCAL %D	27.6%	<25%	ND(0.011) J	
						Carbon Disulfide	CCAL %D	35.2%	<25%	ND(0.011) J	
						Chloroethane	CCAL %D	28.0%	<25%	ND(0.011) J	
						Iodomethane	CCAL %D	32.8%	<25%	ND(0.011) J	
						Isobutanol	ICAL RRF	0.004	>0.05	ND(0.22) J	
						3G0P211	RAA12-TU9.5 (0 - 1)	7/9/2003	Soil	Tier II	
Acetonitrile	ICAL RRF	0.041	>0.05	ND(0.11) J							
Acrolein	ICAL RRF	0.005	>0.05	ND(0.11) J							
Bromoform	CCAL %D	29.2%	<25%	ND(0.0056) J							
Bromomethane	CCAL %D	27.6%	<25%	ND(0.0056) J							
Carbon Disulfide	CCAL %D	35.2%	<25%	ND(0.0056) J							
Chloroethane	CCAL %D	28.0%	<25%	ND(0.0056) J							
Iodomethane	CCAL %D	32.8%	<25%	ND(0.0056) J							
Isobutanol	ICAL RRF	0.004	>0.05	ND(0.11) J							
3G0P211	RAA12-TU9.5 (1 - 3)	7/9/2003	Soil	Tier II	Yes						1,4-Dioxane
						Acetonitrile	ICAL RRF	0.041	>0.05	ND(0.12) J	
						Acrolein	ICAL RRF	0.005	>0.05	ND(0.12) J	
						Bromoform	CCAL %D	29.2%	<25%	ND(0.0058) J	
						Bromomethane	CCAL %D	27.6%	<25%	ND(0.0058) J	
						Carbon Disulfide	CCAL %D	35.2%	<25%	ND(0.0058) J	
						Chloroethane	CCAL %D	28.0%	<25%	ND(0.0058) J	
						Iodomethane	CCAL %D	32.8%	<25%	ND(0.0058) J	
						Isobutanol	ICAL RRF	0.004	>0.05	ND(0.12) J	
						3G0P211	RAA12-TU9.5 (8 - )	7/9/2003	Soil	Tier II	Yes
Acetonitrile	ICAL RRF	0.041	>0.05	ND(0.16) J							
Acrolein	ICAL RRF	0.005	>0.05	ND(0.16) J							
Bromoform	CCAL %D	29.2%	<25%	ND(0.0078) J							
Bromomethane	CCAL %D	27.6%	<25%	ND(0.0078) J							
Carbon Disulfide	CCAL %D	35.2%	<25%	ND(0.0078) J							
Chloroethane	CCAL %D	28.0%	<25%	ND(0.0078) J							
Iodomethane	CCAL %D	32.8%	<25%	ND(0.0078) J							
Isobutanol	ICAL RRF	0.004	>0.05	ND(0.16) J							
3G0P211	RAA12-U9 (0 - 1)	7/9/2003	Soil	Tier II	Yes						
						Acetonitrile	ICAL RRF	0.041	>0.05	ND(0.10) J	
						Acrolein	ICAL RRF	0.005	>0.05	ND(0.10) J	
						Bromoform	CCAL %D	29.2%	<25%	ND(0.0052) J	
						Bromomethane	CCAL %D	27.6%	<25%	ND(0.0052) J	
						Carbon Disulfide	CCAL %D	35.2%	<25%	ND(0.0052) J	
						Chloroethane	CCAL %D	28.0%	<25%	ND(0.0052) J	
						Iodomethane	CCAL %D	32.8%	<25%	ND(0.0052) J	
						Isobutanol	ICAL RRF	0.004	>0.05	ND(0.10) J	

**TABLE C-1**  
**LYMAN STREET SUPPLEMENTAL PDI SAMPLES**  
**ANALYTICAL DATA VALIDATION SUMMARY**  
**GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**  
(Results are presented in parts per million, ppm)

Sample Delivery Group No.	Sample ID	Date Collected	Matrix	Validation Level	Qualification	Compound	QA/QC Parameter	Value	Control Limits	Qualified Result	Notes
<b>VOCs (continued)</b>											
3G0P211	RAA12-U9 (1 - 3)	7/9/2003	Soil	Tier II	Yes	1,1-Dichloroethane	MS/MSD RPD	21.0%	14.0%	ND(0.0054) J	
						1,4-Dioxane	ICAL RRF	0.010	>0.05	ND(0.11) J	
						Acetonitrile	ICAL RRF	0.041	>0.05	ND(0.11) J	
						Acrolein	ICAL RRF	0.005	>0.05	ND(0.11) J	
						Bromoform	CCAL %D	29.2%	<25%	ND(0.0054) J	
						Bromomethane	CCAL %D	27.6%	<25%	ND(0.0054) J	
						Carbon Disulfide	CCAL %D	35.2%	<25%	ND(0.0054) J	
						Chloroethane	CCAL %D	28.0%	<25%	ND(0.0054) J	
						Iodomethane	CCAL %D	32.8%	<25%	ND(0.0054) J	
3G0P211	RAA12-U9 (4 - 6)	7/9/2003	Soil	Tier II	Yes	1,4-Dioxane	ICAL RRF	0.010	>0.05	ND(0.12) J	
						Acetonitrile	ICAL RRF	0.041	>0.05	ND(0.12) J	
						Acrolein	ICAL RRF	0.005	>0.05	ND(0.12) J	
						Bromoform	CCAL %D	29.2%	<25%	ND(0.0062) J	
						Bromomethane	CCAL %D	27.6%	<25%	ND(0.0062) J	
						Carbon Disulfide	CCAL %D	35.2%	<25%	ND(0.0062) J	
						Chloroethane	CCAL %D	28.0%	<25%	ND(0.0062) J	
						Iodomethane	CCAL %D	32.8%	<25%	ND(0.0062) J	
						Isobutanol	ICAL RRF	0.004	>0.05	ND(0.12) J	
3G0P211	RAA12-X6 (1 - 3)	7/9/2003	Soil	Tier II	Yes	1,4-Dioxane	ICAL RRF	0.010	>0.05	ND(0.11) J	
						Acetonitrile	ICAL RRF	0.041	>0.05	ND(0.11) J	
						Acrolein	ICAL RRF	0.005	>0.05	ND(0.11) J	
						Bromoform	CCAL %D	29.2%	<25%	ND(0.0054) J	
						Bromomethane	CCAL %D	27.6%	<25%	ND(0.0054) J	
						Carbon Disulfide	CCAL %D	35.2%	<25%	ND(0.0054) J	
						Chloroethane	CCAL %D	28.0%	<25%	ND(0.0054) J	
						Iodomethane	CCAL %D	32.8%	<25%	ND(0.0054) J	
						Isobutanol	ICAL RRF	0.004	>0.05	ND(0.11) J	
3G0P211	RAA12-Y5 (0 - 1)	7/9/2003	Soil	Tier II	Yes	1,4-Dioxane	ICAL RRF	0.010	>0.05	ND(0.11) J	
						Acetonitrile	ICAL RRF	0.041	>0.05	ND(0.11) J	
						Acrolein	ICAL RRF	0.005	>0.05	ND(0.11) J	
						Bromoform	CCAL %D	29.2%	<25%	ND(0.0054) J	
						Bromomethane	CCAL %D	27.6%	<25%	ND(0.0054) J	
						Carbon Disulfide	CCAL %D	35.2%	<25%	ND(0.0054) J	
						Chloroethane	CCAL %D	28.0%	<25%	ND(0.0054) J	
						Iodomethane	CCAL %D	32.8%	<25%	ND(0.0054) J	
						Isobutanol	ICAL RRF	0.004	>0.05	ND(0.11) J	
3G0P211	RAA12-Y5 (1 - 3)	7/9/2003	Soil	Tier II	Yes	1,4-Dioxane	ICAL RRF	0.010	>0.05	ND(0.11) J	
						Acetonitrile	ICAL RRF	0.041	>0.05	ND(0.11) J	
						Acrolein	ICAL RRF	0.005	>0.05	ND(0.11) J	
						Bromoform	CCAL %D	29.2%	<25%	ND(0.0054) J	
						Bromomethane	CCAL %D	27.6%	<25%	ND(0.0054) J	
						Carbon Disulfide	CCAL %D	35.2%	<25%	ND(0.0054) J	
						Chloroethane	CCAL %D	28.0%	<25%	ND(0.0054) J	
						Iodomethane	CCAL %D	32.8%	<25%	ND(0.0054) J	
						Isobutanol	ICAL RRF	0.004	>0.05	ND(0.11) J	
3G0P211	RB-070903-1 (0 - 0)	7/9/2003	Water	Tier II	Yes	1,4-Dioxane	CCAL %D	33.2%	<25%	ND(0.20) J	
						2-Chloroethylvinylether	ICAL RRF	0.046	>0.05	ND(0.0050) J	
						Acetonitrile	ICAL RRF	0.048	>0.05	ND(0.10) J	
						Acrolein	ICAL RRF	0.001	>0.05	ND(0.10) J	
						Acrylonitrile	CCAL %D	38.0%	<25%	ND(0.0050) J	
						Carbon Disulfide	CCAL %D	30.0%	<25%	ND(0.0050) J	
						Iodomethane	CCAL %D	35.6%	<25%	ND(0.0050) J	
						Isobutanol	ICAL RRF	0.015	>0.05	ND(0.10) J	
						Propionitrile	ICAL RRF	0.014	>0.05	ND(0.010) J	

**TABLE C-1**  
**LYMAN STREET SUPPLEMENTAL PDI SAMPLES**  
**ANALYTICAL DATA VALIDATION SUMMARY**  
**GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**  
(Results are presented in parts per million, ppm)

Sample Delivery Group No.	Sample ID	Date Collected	Matrix	Validation Level	Qualification	Compound	QA/QC Parameter	Value	Control Limits	Qualified Result	Notes
<b>VOCs (continued)</b>											
3G0P211	TRIP BLANK	7/9/2003	Water	Tier II	Yes	1,4-Dioxane	CCAL %D	33.2%	<25%	ND(0.20) J	
						2-Chloroethylvinylether	ICAL RRF	0.046	>0.05	ND(0.0050) J	
						Acetonitrile	ICAL RRF	0.048	>0.05	ND(0.10) J	
						Acrolein	ICAL RRF	0.001	>0.05	ND(0.10) J	
						Acrylonitrile	CCAL %D	38.0%	<25%	ND(0.0050) J	
						Carbon Disulfide	CCAL %D	30.0%	<25%	ND(0.0050) J	
						Iodomethane	CCAL %D	35.6%	<25%	ND(0.0050) J	
						Isobutanol	ICAL RRF	0.015	>0.05	ND(0.10) J	
						Propionitrile	ICAL RRF	0.014	>0.05	ND(0.010) J	
<b>SVOCs</b>											
3G0P211	RAA12-DUP-2 (6 -	7/9/2003	Soil	Tier II	Yes	2,4-Dinitrophenol	ICAL %RSD	31.5%	<30%	ND(2.6) J	RAA12-TU9.5
						2-Methylphenol	Field Duplicate RPD (Soil)	131.3%	<50%	0.11 J	
						4-Chlorobenzilate	CCAL %D	29.3%	<25%	ND(1.0) J	
						4-Nitrophenol	ICAL %RSD	42.3%	<30%	ND(2.6) J	
						4-Nitroquinoline-1-oxide	CCAL %D	26.0%	<25%	ND(1.0) J	
						Acenaphthylene	Field Duplicate RPD (Soil)	96.3%	<50%	0.60 J	
						Anthracene	Field Duplicate RPD (Soil)	78.5%	<50%	1.1 J	
						Benzidine	CCAL %D	29.3%	<25%	ND(1.0) J	
						Benzo(a)anthracene	Field Duplicate RPD (Soil)	118.5%	<50%	3.4 J	
						Benzo(a)pyrene	Field Duplicate RPD (Soil)	121.2%	<50%	3.1 J	
						Benzo(b)fluoranthene	Field Duplicate RPD (Soil)	132.4%	<50%	3.0 J	
						Benzo(g,h,i)perylene	Field Duplicate RPD (Soil)	131.0%	<50%	2.4 J	
						Benzo(k)fluoranthene	Field Duplicate RPD (Soil)	120.9%	<50%	2.8 J	
						Chrysene	Field Duplicate RPD (Soil)	117.0%	<50%	4.2 J	
						Dibenzofuran	Field Duplicate RPD (Soil)	58.8%	<50%	0.22 J	
						Fluoranthene	Field Duplicate RPD (Soil)	104.0%	<50%	7.6 J	
						Fluorene	Field Duplicate RPD (Soil)	58.1%	<50%	0.60 J	
						Hexachlorocyclopentadiene	ICAL %RSD	34.7%	<30%	ND(0.50) J	
						Hexachlorophene	ICAL RRF	0.029	>0.05	ND(1.0) J	
						Indeno(1,2,3-cd)pyrene	Field Duplicate RPD (Soil)	133.3%	<50%	1.9 J	
						o,o,o-Triethylphosphorothioate	CCAL %D	31.7%	<25%	ND(0.50) J	
						Phenanthrene	Field Duplicate RPD (Soil)	89.9%	<50%	5.0 J	
						Phenol	Field Duplicate RPD (Soil)	68.8%	<50%	1.7 J	
						Pronamide	CCAL %D	25.4%	<25%	ND(0.50) J	
						Pyrene	Field Duplicate RPD (Soil)	114.3%	<50%	7.7 J	
						Safrole	CCAL %D	33.4%	<25%	ND(0.50) J	
3G0P211	RAA12-TU9.5 (0 - 1)	7/9/2003	Soil	Tier II	Yes	2,4-Dinitrophenol	ICAL %RSD	31.5%	<30%	ND(1.9) J	
						4-Chlorobenzilate	CCAL %D	29.3%	<25%	ND(0.75) J	
						4-Nitrophenol	ICAL %RSD	42.3%	<30%	ND(1.9) J	
						4-Nitroquinoline-1-oxide	CCAL %D	26.0%	<25%	ND(0.75) J	
						Benzidine	CCAL %D	29.3%	<25%	ND(0.75) J	
						Hexachlorocyclopentadiene	ICAL %RSD	34.7%	<30%	ND(0.37) J	
						Hexachlorophene	ICAL RRF	0.029	>0.05	ND(0.75) J	
						o,o,o-Triethylphosphorothioate	CCAL %D	31.7%	<25%	ND(0.37) J	
						Pronamide	CCAL %D	25.4%	<25%	ND(0.37) J	
						Safrole	CCAL %D	33.4%	<25%	ND(0.37) J	
3G0P211	RAA12-TU9.5 (1 - 3)	7/9/2003	Soil	Tier II	Yes	2,4-Dinitrophenol	ICAL %RSD	31.5%	<30%	ND(2.0) J	
						4-Chlorobenzilate	CCAL %D	29.3%	<25%	ND(0.77) J	
						4-Nitrophenol	ICAL %RSD	42.3%	<30%	ND(2.0) J	
						4-Nitroquinoline-1-oxide	CCAL %D	26.0%	<25%	ND(0.77) J	
						Benzidine	CCAL %D	29.3%	<25%	ND(0.77) J	
						Hexachlorocyclopentadiene	ICAL %RSD	34.7%	<30%	ND(0.38) J	
						Hexachlorophene	ICAL RRF	0.029	>0.05	ND(0.77) J	
						o,o,o-Triethylphosphorothioate	CCAL %D	31.7%	<25%	ND(0.38) J	
						Pronamide	CCAL %D	25.4%	<25%	ND(0.38) J	
						Safrole	CCAL %D	33.4%	<25%	ND(0.38) J	



**TABLE C-1**  
**LYMAN STREET SUPPLEMENTAL PDI SAMPLES**  
**ANALYTICAL DATA VALIDATION SUMMARY**  
**GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**  
(Results are presented in parts per million, ppm)

Sample Delivery Group No.	Sample ID	Date Collected	Matrix	Validation Level	Qualification	Compound	QA/QC Parameter	Value	Control Limits	Qualified Result	Notes						
<b>SVOCs (continued)</b>																	
3G0P211	RAA12-TU9.5 (6 -	7/9/2003	Soil	Tier II	Yes	2,4-Dinitrophenol	ICAL %RSD	31.5%	<30%	ND(2.6) J							
						2-Methylphenol	Field Duplicate RPD (Soil)	131.3%	<50%	ND(0.53) J							
						4-Chlorobenzilate	CCAL %D	29.3%	<25%	ND(0.99) J							
						4-Nitrophenol	ICAL %RSD	42.3%	<30%	ND(2.6) J							
						4-Nitroquinoline-1-oxide	CCAL %D	26.0%	<25%	ND(0.99) J							
						Acenaphthylene	Field Duplicate RPD (Soil)	96.3%	<50%	0.21 J							
						Anthracene	Field Duplicate RPD (Soil)	78.5%	<50%	0.48 J							
						Benzidine	CCAL %D	29.3%	<25%	ND(1.0) J							
						Benzo(a)anthracene	Field Duplicate RPD (Soil)	118.5%	<50%	0.87 J							
						Benzo(a)pyrene	Field Duplicate RPD (Soil)	121.2%	<50%	0.76 J							
						Benzo(b)fluoranthene	Field Duplicate RPD (Soil)	132.4%	<50%	0.61 J							
						Benzo(g,h,i)perylene	Field Duplicate RPD (Soil)	131.0%	<50%	0.50 J							
						Benzo(k)fluoranthene	Field Duplicate RPD (Soil)	120.9%	<50%	0.69 J							
						Chrysene	Field Duplicate RPD (Soil)	117.0%	<50%	1.1 J							
						Dibenzofuran	Field Duplicate RPD (Soil)	58.8%	<50%	0.12 J							
						Fluoranthene	Field Duplicate RPD (Soil)	104.0%	<50%	2.4 J							
						Fluorene	Field Duplicate RPD (Soil)	58.1%	<50%	0.33 J							
						Hexachlorocyclopentadiene	ICAL %RSD	34.7%	<30%	ND(0.53) J							
						Hexachlorophene	ICAL RRF	0.029	>0.05	ND(1.0) J							
						Indeno(1,2,3-cd)pyrene	Field Duplicate RPD (Soil)	133.3%	<50%	0.38 J							
						o,o,o-Triethylphosphorothioate	CCAL %D	31.7%	<25%	ND(0.53) J							
						Phenanthrene	Field Duplicate RPD (Soil)	89.9%	<50%	1.9 J							
						Phenol	Field Duplicate RPD (Soil)	68.8%	<50%	0.83 J							
						Pronamide	CCAL %D	25.4%	<25%	ND(0.53) J							
Pyrene	Field Duplicate RPD (Soil)	114.3%	<50%	2.1 J													
Safrole	CCAL %D	33.4%	<25%	ND(0.53) J													
3G0P211	RAA12-U8NE (1 - 3)	7/9/2003	Soil	Tier II	Yes	2,4-Dinitrophenol	ICAL %RSD	31.5%	<30%	ND(2.0) J							
						4-Chlorobenzilate	CCAL %D	29.3%	<25%	ND(0.78) J							
						4-Nitrophenol	ICAL %RSD	42.3%	<30%	ND(2.0) J							
						4-Nitroquinoline-1-oxide	CCAL %D	26.0%	<25%	ND(0.78) J							
						Benzidine	CCAL %D	29.3%	<25%	ND(0.78) J							
						Hexachlorocyclopentadiene	ICAL %RSD	34.7%	<30%	ND(0.39) J							
						Hexachlorophene	ICAL RRF	0.029	>0.05	ND(0.78) J							
						o,o,o-Triethylphosphorothioate	CCAL %D	31.7%	<25%	ND(0.39) J							
						Pronamide	CCAL %D	25.4%	<25%	ND(0.39) J							
						Safrole	CCAL %D	33.4%	<25%	ND(0.39) J							
						3G0P211	RAA12-U8SW (1 -	7/9/2003	Soil	Tier II	Yes	2,4-Dinitrophenol	ICAL %RSD	31.5%	<30%	ND(2.6) J	
												4-Chlorobenzilate	CCAL %D	29.3%	<25%	ND(0.74) J	
4-Nitrophenol	ICAL %RSD	42.3%	<30%	ND(2.6) J													
4-Nitroquinoline-1-oxide	CCAL %D	26.0%	<25%	ND(0.74) J													
Benzidine	CCAL %D	29.3%	<25%	ND(1.0) J													
Hexachlorocyclopentadiene	ICAL %RSD	34.7%	<30%	ND(0.52) J													
Hexachlorophene	ICAL RRF	0.029	>0.05	ND(1.0) J													
o,o,o-Triethylphosphorothioate	CCAL %D	31.7%	<25%	ND(0.52) J													
Pronamide	CCAL %D	25.4%	<25%	ND(0.52) J													
Safrole	CCAL %D	33.4%	<25%	ND(0.52) J													
3G0P211	RAA12-U9 (0 - 1)	7/9/2003	Soil	Tier II	Yes							2,4-Dinitrophenol	ICAL %RSD	31.5%	<30%	ND(1.8) J	
												4-Chlorobenzilate	CCAL %D	29.3%	<25%	ND(0.70) J	
						4-Nitrophenol	ICAL %RSD	42.3%	<30%	ND(1.8) J							
						4-Nitroquinoline-1-oxide	CCAL %D	26.0%	<25%	ND(0.70) J							
						Benzidine	CCAL %D	29.3%	<25%	ND(0.70) J							
						Hexachlorocyclopentadiene	ICAL %RSD	34.7%	<30%	ND(0.35) J							
						Hexachlorophene	ICAL RRF	0.029	>0.05	ND(0.70) J							
						o,o,o-Triethylphosphorothioate	CCAL %D	31.7%	<25%	ND(0.35) J							
						Pronamide	CCAL %D	25.4%	<25%	ND(0.35) J							
						Safrole	CCAL %D	33.4%	<25%	ND(0.35) J							

**TABLE C-1  
LYMAN STREET SUPPLEMENTAL PDI SAMPLES**

**ANALYTICAL DATA VALIDATION SUMMARY  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**

(Results are presented in parts per million, ppm)

Sample Delivery Group No.	Sample ID	Date Collected	Matrix	Validation Level	Qualification	Compound	QA/QC Parameter	Value	Control Limits	Qualified Result	Notes
<b>SVOCs (continued)</b>											
3G0P211	RAA12-U9 (1 - 3)	7/9/2003	Soil	Tier II	Yes	2,4-Dinitrophenol	ICAL %RSD	31.5%	<30%	ND(3.7) J	
						4-Chlorobenzilate	CCAL %D	29.3%	<25%	ND(0.74) J	
						4-Nitrophenol	ICAL %RSD	42.3%	<30%	ND(3.7) J	
						4-Nitroquinoline-1-oxide	CCAL %D	26.0%	<25%	ND(0.74) J	
						Benzidine	CCAL %D	29.3%	<25%	ND(1.5) J	
						Hexachlorocyclopentadiene	ICAL %RSD	34.7%	<30%	ND(0.74) J	
						Hexachlorophene	ICAL RRF	0.029	>0.05	ND(1.5) J	
						o,o,o-Triethylphosphorothioate	CCAL %D	31.7%	<25%	ND(0.74) J	
						Pronamide	CCAL %D	25.4%	<25%	ND(0.74) J	
						Safrole	CCAL %D	33.4%	<25%	ND(0.74) J	
3G0P211	RAA12-U9 (3 - 6)	7/9/2003	Soil	Tier II	Yes	2,4-Dinitrophenol	ICAL %RSD	31.5%	<30%	ND(3.0) J	
						4-Chlorobenzilate	CCAL %D	29.3%	<25%	ND(0.83) J	
						4-Nitrophenol	ICAL %RSD	42.3%	<30%	ND(3.0) J	
						4-Nitroquinoline-1-oxide	CCAL %D	26.0%	<25%	ND(0.83) J	
						Benzidine	CCAL %D	29.3%	<25%	ND(1.2) J	
						Hexachlorocyclopentadiene	ICAL %RSD	34.7%	<30%	ND(0.60) J	
						Hexachlorophene	ICAL RRF	0.029	>0.05	ND(1.2) J	
						o,o,o-Triethylphosphorothioate	CCAL %D	31.7%	<25%	ND(0.60) J	
						Pronamide	CCAL %D	25.4%	<25%	ND(0.60) J	
						Safrole	CCAL %D	33.4%	<25%	ND(0.60) J	
3G0P211	RAA12-Y5 (0 - 1)	7/9/2003	Soil	Tier II	Yes	2,4-Dinitrophenol	ICAL %RSD	31.5%	<30%	ND(1.8) J	
						4-Chlorobenzilate	CCAL %D	29.3%	<25%	ND(0.72) J	
						4-Nitrophenol	ICAL %RSD	42.3%	<30%	ND(1.8) J	
						4-Nitroquinoline-1-oxide	CCAL %D	26.0%	<25%	ND(0.72) J	
						Benzidine	CCAL %D	29.3%	<25%	ND(0.72) J	
						Hexachlorocyclopentadiene	ICAL %RSD	34.7%	<30%	ND(0.36) J	
						Hexachlorophene	ICAL RRF	0.029	>0.05	ND(0.72) J	
						o,o,o-Triethylphosphorothioate	CCAL %D	31.7%	<25%	ND(0.36) J	
						Pronamide	CCAL %D	25.4%	<25%	ND(0.36) J	
						Safrole	CCAL %D	33.4%	<25%	ND(0.36) J	
3G0P211	RAA12-Y5 (1 - 3)	7/9/2003	Soil	Tier II	Yes	2,4-Dinitrophenol	ICAL %RSD	31.5%	<30%	ND(1.8) J	
						4-Chlorobenzilate	CCAL %D	29.3%	<25%	ND(0.73) J	
						4-Nitrophenol	ICAL %RSD	42.3%	<30%	ND(1.8) J	
						4-Nitroquinoline-1-oxide	CCAL %D	26.0%	<25%	ND(0.73) J	
						Benzidine	CCAL %D	29.3%	<25%	ND(0.73) J	
						Hexachlorocyclopentadiene	ICAL %RSD	34.7%	<30%	ND(0.36) J	
						Hexachlorophene	ICAL RRF	0.029	>0.05	ND(0.73) J	
						o,o,o-Triethylphosphorothioate	CCAL %D	31.7%	<25%	ND(0.36) J	
						Pronamide	CCAL %D	25.4%	<25%	ND(0.36) J	
						Safrole	CCAL %D	33.4%	<25%	ND(0.36) J	
3G0P211	RB-070903-1 (0 - 0)	7/9/2003	Water	Tier II	Yes	2,4-Dinitrophenol	ICAL %RSD	31.5%	<30%	ND(0.050) J	
						4-Nitrophenol	ICAL %RSD	42.3%	<30%	ND(0.050) J	
						bis(2-Chloroethyl)ether	CCAL %D	27.1%	<25%	ND(0.010) J	
						Hexachlorocyclopentadiene	ICAL %RSD	34.7%	<30%	ND(0.010) J	
						Hexachlorophene	ICAL RRF	0.029	>0.05	ND(0.020) J	
						Hexachloropropene	CCAL %D	26.7%	<25%	ND(0.010) J	
						o,o,o-Triethylphosphorothioate	CCAL %D	26.7%	<25%	ND(0.010) J	
						Pentachlorobenzene	CCAL %D	56.0%	<25%	ND(0.010) J	
						Pronamide	CCAL %D	25.0%	<25%	ND(0.010) J	
						<b>PCDDs/PCDFs</b>					
3G0P211	RAA12-DUP-2 (6 -	7/9/2003	Soil	Tier II	Yes	1,2,3,4,7,8-HxCDF	Exceeds CAL Range	-	-	0.016 IEJ	RAA12-TU9.5
3G0P211	RAA12-TU9.5 (0 - 1)	7/9/2003	Soil	Tier II	Yes	2,3,7,8-TCDF	Exceeds CAL Range	-	-	0.000059 YEIJ	
3G0P211	RAA12-TU9.5 (1 - 3)	7/9/2003	Soil	Tier II	No						
3G0P211	RAA12-TU9.5 (6 -	7/9/2003	Soil	Tier II	No						
3G0P211	RAA12-U9 (0 - 1)	7/9/2003	Soil	Tier II	Yes	1,2,3,4,7,8-HxCDF	Exceeds CAL Range	-	-	0.034 EJ	

**TABLE C-1**  
**LYMAN STREET SUPPLEMENTAL PDI SAMPLES**  
**ANALYTICAL DATA VALIDATION SUMMARY**  
**GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**  
(Results are presented in parts per million, ppm)

Sample Delivery Group No.	Sample ID	Date Collected	Matrix	Validation Level	Qualification	Compound	QA/QC Parameter	Value	Control Limits	Qualified Result	Notes
<b>PCDDs/PCDFs (continued)</b>											
3G0P211	RAA12-U9 (1 - 3)	7/9/2003	Soil	Tier II	Yes	1,2,3,4,6,7,8-HpCDD	Exceeds CAL Range	-	-	0.034 EJ	
						1,2,3,4,6,7,8-HpCDF	Exceeds CAL Range	-	-	0.060 EJ	
						1,2,3,4,7,8-HxCDF	Exceeds CAL Range	-	-	0.14 IEJ	
						1,2,3,7,8-PeCDF	Exceeds CAL Range	-	-	0.043 IEJ	
						2,3,4,6,7,8-HxCDF	Exceeds CAL Range	-	-	0.015 EJ	
						2,3,4,7,8-PeCDF	Exceeds CAL Range	-	-	0.014 EJ	
						OCDD	Exceeds CAL Range	-	-	0.18 EJ	
						2,3,7,8-TCDF	Internal Standard %R	30.0%	40% to 135%	ND(0.013) J	
3G0P211	RAA12-U9 (3 - 6)	7/9/2003	Soil	Tier II	Yes	1,2,3,4,7,8-HxCDF	MS %R	847.0%	40% to 135%	0.0028 I J	
						1,2,3,4,7,8-HxCDF	MSD %R	721.0%	40% to 135%	0.0028 I J	
						OCDF	MS %R	137.0%	40% to 135%	0.000076 J	
3G0P211	RAA12-Y5 (0 - 1)	7/9/2003	Soil	Tier II	No						
3G0P211	RAA12-Y5 (1 - 3)	7/9/2003	Soil	Tier II	No						
3G0P211	RB-070903-1 (0 - 0)	7/9/2003	Water	Tier II	No						
<b>Sulfide and Cyanide</b>											
3G0P211	RAA12-DUP-2 (6 -	7/9/2003	Soil	Tier II	Yes	Cyanide	Field Duplicate RPD (Soil)	55.6%	<50%	1.30 J	RAA12-TU9.5
						Sulfide	MS %R	157.0%	75% to 125%	300 J	
3G0P211	RAA12-TU9.5 (0 - 1)	7/9/2003	Soil	Tier II	Yes	Cyanide	Field Duplicate RPD (Soil)	55.6%	<50%	0.470 J	
						Sulfide	MS %R	157.0%	75% to 125%	8.90 J	
3G0P211	RAA12-TU9.5 (1 - 3)	7/9/2003	Soil	Tier II	Yes	Cyanide	Field Duplicate RPD (Soil)	55.6%	<50%	0.350 J	
						Sulfide	MS %R	157.0%	75% to 125%	7.40 J	
3G0P211	RAA12-TU9.5 (6 -	7/9/2003	Soil	Tier II	Yes	Cyanide	Field Duplicate RPD (Soil)	55.6%	<50%	2.30 J	
						Sulfide	MS %R	157.0%	75% to 125%	390 J	
3G0P211	RAA12-U9 (0 - 1)	7/9/2003	Soil	Tier II	Yes	Cyanide	Field Duplicate RPD (Soil)	55.6%	<50%	ND(0.210) J	
						Sulfide	MS %R	157.0%	75% to 125%	6.70 J	
3G0P211	RAA12-U9 (1 - 3)	7/9/2003	Soil	Tier II	Yes	Cyanide	Field Duplicate RPD (Soil)	55.6%	<50%	0.150 J	
						Sulfide	MS %R	157.0%	75% to 125%	28.0 J	
3G0P211	RAA12-U9 (3 - 6)	7/9/2003	Soil	Tier II	Yes	Cyanide	Field Duplicate RPD (Soil)	55.6%	<50%	0.0950 J	
						Sulfide	MS %R	157.0%	75% to 125%	14.0 J	
3G0P211	RAA12-Y5 (0 - 1)	7/9/2003	Soil	Tier II	Yes	Cyanide	Field Duplicate RPD (Soil)	55.6%	<50%	ND(0.110) J	
						Sulfide	MS %R	157.0%	75% to 125%	ND(5.40) J	
3G0P211	RAA12-Y5 (1 - 3)	7/9/2003	Soil	Tier II	Yes	Cyanide	Field Duplicate RPD (Soil)	55.6%	<50%	0.0730 J	
						Sulfide	MS %R	157.0%	75% to 125%	ND(5.40) J	
3G0P211	RB-070903-1 (0 - 0)	7/9/2003	Water	Tier II	No						