

08-0182
SDMS: 158339

United States Environmental Protection Agency
EPA New England
One Congress Street, Suite 1100
Boston, MA 02114-2023

Hand Delivered

March 14, 2000

Mr. Andrew T. Silfer, P.E.
Corporate Environmental Programs
General Electric Company
100 Woodlawn Avenue
Pittsfield, Massachusetts 01201

**RE: GE's March 3, 2000 Proposal to Address the Presence of DNAPL
Upper ½-Mile Reach Removal Action
General Electric-Housatonic River Site, Pittsfield, Massachusetts**

Dear Mr. Silfer:

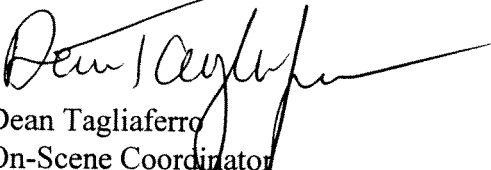
As we discussed this morning, EPA requires that the following items be addressed in GE's supplemental submittal to their March 3, 2000 *Proposal to Address the Presence of DNAPL*. These questions are in addition to those provided to GE on March 9, 2000.

- Clearly delineate the vertical and lateral extent of the initial excavation.
- Propose a suitable time period for the excavation to remain open in order for the Agencies to monitor and inspect for the migration of NAPL into the excavation area. This will be incorporated into the Agencies inspection of the area to determine whether or not additional DNAPL and/or DNAPL impacted materials are remain after the initial excavation.
- Propose the sequence of operational events, including in what sequence, if at all, the existing cut-off wall between Cells C and D and the existing centerline sheetpile wall in Cell D, will be removed.
- EPA's contractor, Roy F. Weston, Inc., performed oversight of the investigation program and has prepared boring logs. These logs differ slightly from those submitted by GE/BBL. EPA will review both sets of logs in their review of the final submittal. Weston's boring logs are attached.

As we discussed, the supplemental submittal discussed above requires EPA approval. Also, you informed me that GE is tentatively planning on initiating excavation activities possibly as soon as Monday, March 20, 2000. In order to meet this schedule, it is imperative that GE provide the supplemental submittal to EPA as soon as possible.

If you have any questions, please contact me at (617) 918-1282 or (413) 236-0969.

Sincerely,



Dean Tagliaferro
On-Scene Coordinator

Attachments

cc: Bill Horne, GE
Andrew J. Thomas, Jr., GE (w/o attachments)
J. Lyn Cutler, MA DEP (w/o attachments)
Sue Steenstrup, MA DEP
Holly Inglis, EPA
Bryan Olson, EPA (w/o attachments)
Tim Conway, EPA (w/o attachments)
K.C. Mitkevicius, USACE (w/o attachments)
Ray Goff, USACE (w/o attachments)
Site File

GEOLIS, Notes and Sketches Form

Survey ID = B-11R
Elevation = 969.32

COMPANY: Roy F. Weston
PROJECT: Housatonic River Project
PROPERTY: Source Reach
SITE/AREA: Cell D 1

LOCATION NO.: HR-SC-4
DATE: 2/17/00
LOGGER: S. Campbell / D. Morse
SIGNATURE: [Signature]



Feet	PIED	Comments
0'	3.1	0-0.5' Gryish brn med to
1'	5.5	fine sand, some coarse sand
2'	4.4	little fine gravel.
3'		0.5-0.7' Gry blk, stained med
4'		sand, some fine gravel, little silt
5'	11.2	and clay trace fine and very fine
5.6'		sand. (stained)
6'	11.6	
6.2'		
7'	1.0	0.7-1.2' Brnish gry coarse
8'		sand some med sand little
9'	2.0	fine sand. odor, slight stain
10'		1.2-4.0' Gry med coarse sand
11'	3.2	Some fine gravel little coarse
12'	4.5	gravel, trace med sand, stain
13'		and odor.
14'		4.0-4.4' med sand some fine sand
		4.4-5.6' Gryish brn fine gravel
		Some med to coarse sand, little
		coarse gravel, trace fine sand, stained.
		5.6-8.0' Gry med sand, some
		fine gravel, little fine sand
		trace coarse gravel. Odor, stained
		8-9.5' Gry blk med sand some
		coarse sand, stained, odor
		9.5-10.0' Gry blk coarse
		gravel, some fine gravel



* - Note: samples not at room temperature for head space. 1. 1.

GEOLIS, Notes and Sketches Form

9/14/00

COMPANY: Roy Weston	LOCATION NO.: HRSC-5	
PROJECT: Housatonic River Project	DATE: 2/14/00	
PROPERTY: Source Reach	LOGGER: S. Campbell / D. Morse	
SITE/AREA: Cell C, 1	SIGNATURE: [Signature]	

Feet by PID Comments

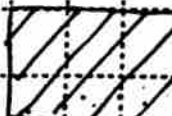







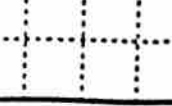
	0'	42		0 to 1.4' stained fine to medium sand. 1.4 to 2.8' Black stained medium and coarse sand w/ some fine gravel. Strong odor / LNAPL
	1'			
	1.4'			
	2'	280		
	3'			2.8 to 3.6' fine sand with heavy
			174	rainbow sheen. Strong odor
	4'			3.6 to 5.0' coarse sand with
			166	some gravel. slight staining
	5'			Heavy odor from 4 to 6'
				5 to 6' coarse sand with some
6'			gravel (fine). 10% fine sand 5% silt	
		66	from 6 to 8' Heavy odor with	
7'			sheen.	
			6 to 7' coarse gravel with some	
8'			coarse sand and little med/fine sand.	
		74	From 8 to 10' mild odor, no sheen	
9'			From 7 to 8' DK Brown to black	
			fine gravel with coarse sand	
			and some fine and medium sand.	
10'			4 to 8.9' Large gravel with sheen,	
			DK brown color and coarse and medium	
			sand. → 8.9 to 10' ON Reverse side	

GEOLIS, Notes and Sketches Form

COMPANY: Roy Weston
 PROJECT: Housatonic River Project
 PROPERTY: Source Reach
 SITE/AREA: Cell C 1

LOCATION NO.: HRSC-6
 DATE: 2/15/00
 LOGGER: S. Campbell / D. Morse
 SIGNATURE: [Signature]



		Feet bgs	PID	Comments
		0'		0.0'-0.7' bgs dark grayish
	stained fine gravel	0'	17.8	black fine gravel w/ some medium and coarse sand. DNAPL in shaker Heavy Sheen / Stain / odor +st
	Sheen	1'	7.5	0.7'-3.1' bgs Medium brown
	medium sand	2'	2.0	Medium sand w/ some fine sand, little coarse sand trace silt sheen / DNAPL / moderate odor
	medium to fine sand	3'	2.4	3.1'-6.6' bgs light brownish gray medium sand, some fine sand, w/ little very fine sand trace silt
	medium to fine sand (Brown in color)	4'	2.2	Moderate odor
	medium sand	5'	2.8	6.6'-8.0' bgs Grayish brown
	medium sand (Olive in color)	7'	17.5	Medium sand little fine sand
		8'	1.7	8.0'-10.0' bgs Grayish brown w/ 0.2'-0.5' thick coarse sand sequences and 0.1'-0.3' thick medium to fine sand sequences, little amounts of fine gravel and trace amounts of silt
		9'		Slight odor
		10'		

GEOLIS, Notes and Sketches Form

Survey ID = B10
Elevation = 969.31

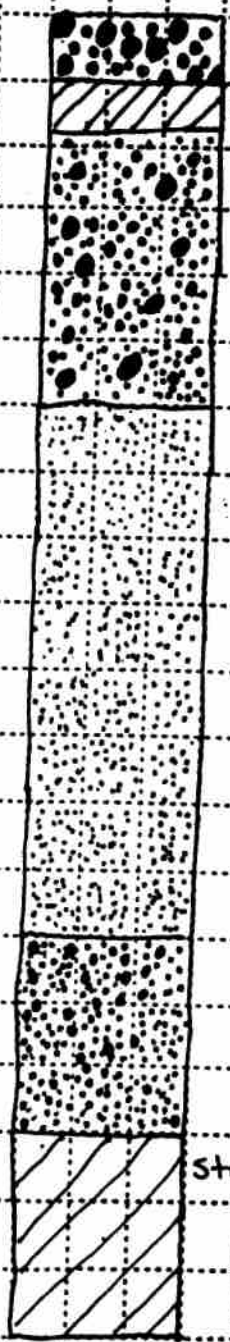
COMPANY: Roy Weston
PROJECT: Housatonic River Project
PROPERTY: Source Reach
SITE AREA: Cell #D 1

LOCATION NO.: HRSC-7
DATE: 2/17/00
LOGGER: S. Campbell / D. Morse
SIGNATURE: [Signature]



NOTE: samples Not at Room Temp. for headspace test

Feet	lbs	PIED	Comments
0'	2.0		0.0'-0.0' bgs Brownish Gray Coarse sand some fine Gravel Little med.
1'	0.5		sand Trace Coarse Gravel 0.5'-0.8' stained.
2'			0.8'-3.0' bgs Light Gray med. sand some Coarse Gravel Little fine Gravel trace
3'	0.4		Coarse sand
4'			3.0'-7.0' bgs Light Grayish brown very fine sand some fine sand little silt
5'	0.5		
6'			7.0'-8.5 Light Gray Fine to medium sand Little very fine sand. Rust colored globes,
7'	0.4		8.5'-10.0' bgs Dark Gray stained Coarse Sand some Coarse
8'			Gravel Little fine gravel
9'	0.0		trace med Sand
10'			



GEOLIS, Notes and Sketches Form

Survey ID - BBR
Elevation - 969.92

COMPANY: Roy F. Weston
PROJECT: Housatonic River Project
PROPERTY: Source Reach
SITE/AREA: Cell 0 1

LOCATION NO.: HRSC-8
DATE: 2/7/00
LOGGER: S. Campbell / D. Morse
SIGNATURE: [Signature]



NOTE: Samples Not at room Temp. for headspace to

Foot bgs: PID Comments



stained
sheen
odor

stained
sheen
odor

Heavy
Stain

stained

0'	4.8	0-0.3' DK Grayish Brn coarse sand with some fine gravel
1'		Little medium sand, trace fine
2'	5.2	0.3-0.6' med gry coarse to med sand, some fine gravel, little fine sand, trace coarse gravel.
3'		0.6-1.0' DK gry-blk med to fine sand and some fine gravel
4'	1.6	Does not stain/sheen/odor - look like coal tar.
5'		1.0-2.0' Same as above - lighter gry and less staining
6'	1.3	2-3.6' DK gry to blk coarse sand and some fine gravel, little medium sand, trace gravel and wood debris stain/sheen/odor.
7'	1.0	3.6-6.0' DK gry-blk fine gravel some coarse gravel
8'		little coarse sand, trace med sand.
9'	1.2	6-7.0' - DK gry to blk coarse sand some fine gravel, little
10'		med sand, stained
		7-7.8' - med brn fine to med sand some very fine sand

Descriptions continued on RRRK

GEOLOGICAL Notes and Sketches Form

B-4 968.4
961.2

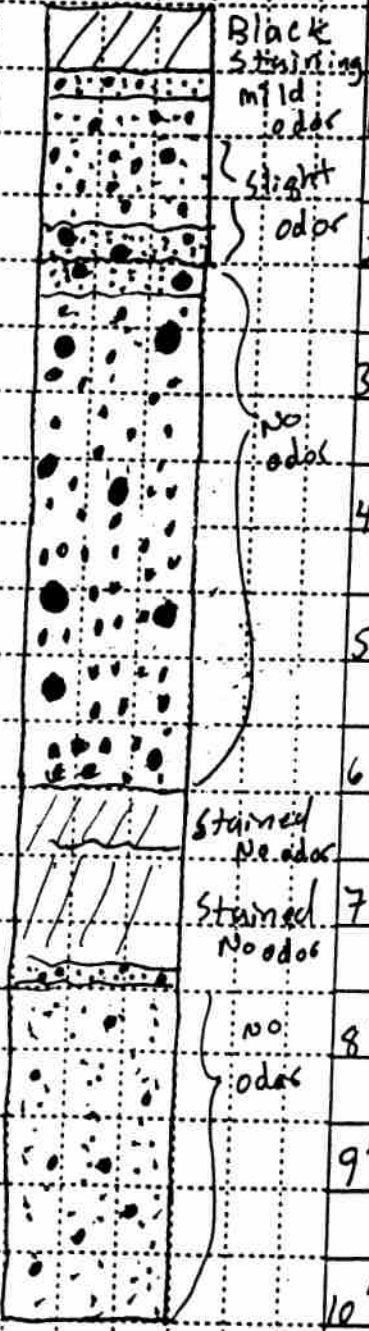
COMPANY: Roy Weston
 PROJECT: Housatonic River Project
 PROPERTY: Source Reach
 SITE/AREA: Cell C 1

LOCATION NO.: HRSC-9
 DATE: 2/14/00
 LOGGER: S. Campbell / D. Morse
 SIGNATURE: *[Signature]*



Feet bag PID Comments

0'	12	0 to 0.5' Black Stained Coarse
1'	↓	and med sand with Gravel. 0.5 to 0.6' Light Brown medium and fine Sand.
2'	↓	0.6 to 1.7' Dark Brown and Stained medium and fine Sand.
3'	↓	1.7 to 2.0' Dark Brown to blk fine sand with trace fine gravel
4'	↓	2.0 to 2.2 - Same as above.
5'	↓	2.2 to 6' Dark Brown Coarse and medium sand with some coarse and fine gravel.
6'	↓	6 to 6.4' Stained medium and fine sand. Sheen observed
7'	↓	6.4 - 7.2 - Black Stained Coarse Sand and some fine gravel.
8'	↓	7.2 - 7.4 fine and medium sand grading to fine/medium OLIV GRAY
9'	↓	7.4 to 10' light to olive gray fine sand with little medium sand.
10'	↓	Surface Sheen from 6 to 8' ODORS from 0 to 2'



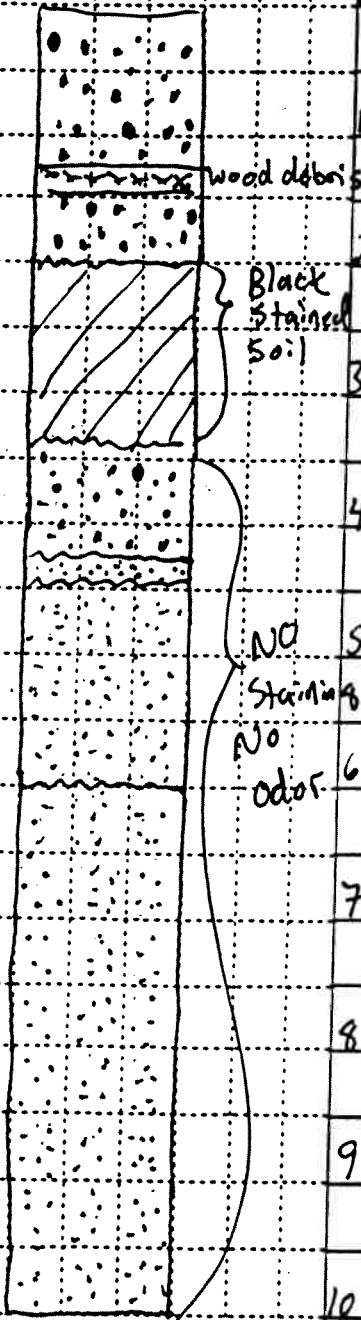
GEOLIS, Notes and Sketches Form

COMPANY: Roy Weston
 PROJECT: Housatonic River Project
 PROPERTY: Source Reach
 SITE/AREA: Cell 1

LOCATION NO.: HRSC-10
 DATE: 2/14/00
 LOGGER: S. Campbell / D. Morse
 SIGNATURE: [Signature]



Feet bgs PID Comments



0' 2.4

Black to dark brown
 medium sand w/ some coarse sand

wood debris

Decayed wood w/ trace clay
 sheen/odor from 0-2' bgs

Black Stained Soil

0.8

2' to 3.4 is stained medium

3'

0.2

grained material (sand) Slight odor

4'

0.2

3.4 to 4.2 Light to dark
 grey medium to fine sand. No
 staining.

NO Staining
 No odor

5'

0.0

4.2 to 6.0 fine and very fine
 sand with little silt.

6'

0.0

From 6 to 10' bgs Recovery
 is 2.6 feet of 4 feet. Material

7'

0.0

is Light grey fine grained
 sand with 1 cm laminations

8'

0.0

of darker grey. NO staining
 or odors.

9'

0.0

10'

0.0

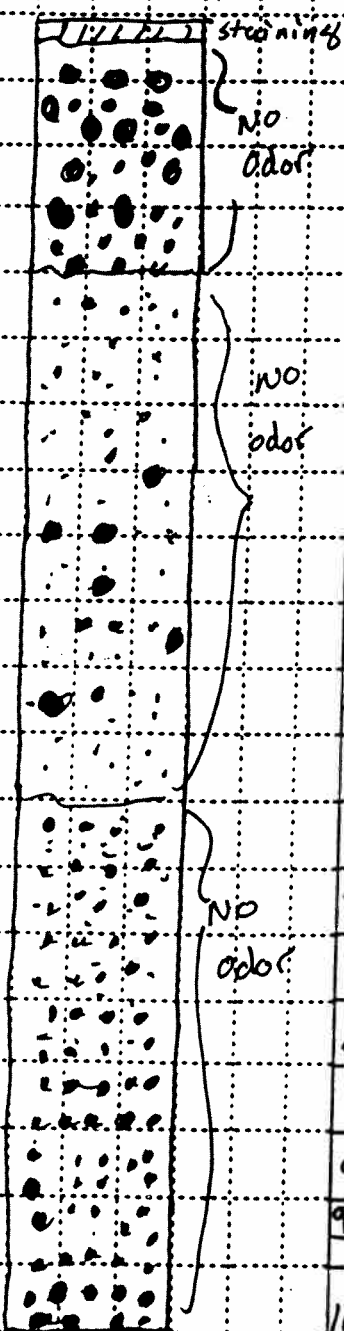
GEOLIS, Notes and Sketches Form

COMPANY: Roy Weston
 PROJECT: Hausatonic River Project
 PROPERTY: Source Reach
 SITE/AREA: Cell 1

LOCATION NO.: HRSC-11
 DATE: 2/14/00
 LOGGER: S. Campbell / D. Morse
 SIGNATURE: [Signature]



Feet	bag	PID	Comments
0'		0	0 to 2' Dark brown to
			Gry. slight staining from
1'		0	0 to 0.1' 60% coarse sand
2'		0	and 40% fine gravel.
3'			2 to 6' Light brown medium
4'			to fine sand with some medium
5'			gravel.
6'			6-10' Light Brown Coarse
7'			Sand. Coarsening downward.
8'			
9'			
10'			



GEOLOGICAL Notes and Sketches Form

COMPANY: Roy F. Weston
 PROJECT: Housatonic River Project
 PROPERTY: Source Reach
 SITE/AREA: Cell 1

LOCATION NO.: HRSC-12
 DATE: 2/14/00
 LOGGER: S. Campbell / D. Morse
 SIGNATURE: [Signature]



Feet bgs: PID Comments

	0'	0.0	0 to 2 inches Slightly stained medium to very fine sand. med-Brn color.
	1'		Remaining sediment is light brown medium with fine and very fine sand. No odor/No Sheen
	2'		2' to 2.8' Same as above
	3'		
	4'		From 2.8' to 5.5' Coarsening downward. medium to coarse sand with 15% fine sand. Light Brown in color.
	5'		
	6'		5.5 to 6' stained medium to fine Gravel with some medium to fine Sand.
	7'		From 6 to 7' fine with some very fine sand. some trace shale gravel.
	8'		From 7 to 10' Medium to fine Sand. Light Brown with 1 to 2 cm laminations
	9'		varying from Light Brown to dark brown. NO Sheen/odor
10'	↓		

GEOLIS, Notes and Sketches Form

COMPANY: Roy Weston
 PROJECT: Housatonic River Project
 PROPERTY: Source Reach
 SITE/AREA: Cell 1

LOCATION NO.: HRSC-13
 DATE: 2/15/00
 LOGGER: S. Campbell / D. Morse
 SIGNATURE: [Signature]



Feet bgs PID Comments

Feet bgs	PID	Comments
0'	0.0	Dark olive ^{coarse/} medium sand w/ little fine gravel and trace fine sand No staining or skew/odor 0.0'-1.1' bgs
1'		
2'		1.1'-2.0' bgs Dark Brown Woody material w/ coarse and medium sand.
3'	1.1	2.0'-2.6' bgs Dark Brown medium and coarse sand w/ trace amounts of silt
		2.6'-3.2' bgs 3cm thick alternating woody material and fine sand laminations
		3.2'-3.8' bgs light brown fine to very fine sand w/ 1cm-2cm laminations
4'	2.8	
	0.0	
5'		3.8'-6.0' bgs Olive gray medium to fine sand w/ a little amount of coarse sand
6'		6.0'-7.4' bgs same Olive gray sands
7'		
8'		7.4'-10' bgs Medium to light brown fine to very fine sands 1mm-5mm laminations.
9'		Fining downward, becomes lighter colored w/ depth,
10'		lamination thickness increased w/ depth.

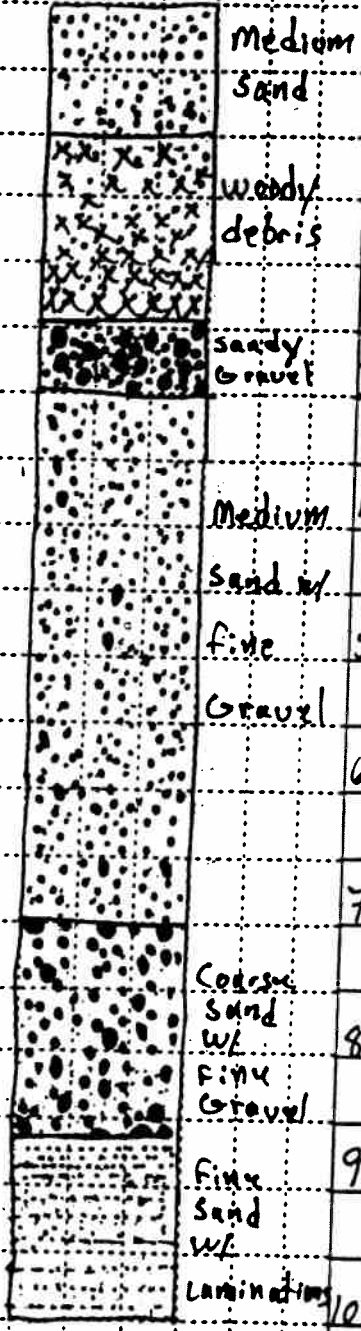
GEOLIS Notes and Sketches Form

COMPANY: Roy Weston
 PROJECT: Housatonic River Project
 PROPERTY: Source Reach
 SITE/AREA: Cell C 1

LOCATION NO.: HRSC-14
 DATE: 2/15/00
 LOGGER: S. Campbell / D. Morse
 SIGNATURE: S. Campbell



Feet	bag	PID	Comments
			0.0-1.0' bgs Medium brown
0'		0.9	Medium sand w/ some coarse sand Trace fine gravel No sheen
1'		2.2	or stain observed. Slight odor
2'		0.3	1.0'-2.4' bgs Dark Brown Woody debris w/ Trace fine to very fine sand
3'			2.4'-3.0' bgs Grayish brown Medium to fine Gravel w/ some coarse and medium sands w/ Trace coarse Gravel
4'		0.0	3.0'-7.0' bgs Medium brown Medium sand w/ some fine Gravel
5'			Trace fine sand
6'			
7'			7.0'-8.6' bgs Grayish brown Coarse sand w/ some fine Gravel Trace amounts of Coarse Gravel
8'			
9'			8.6'-10' bgs Light brown fine sand w/ Trace amounts of silt & 3mm Laminations
10'			



GEOLIS Notes and Sketches Form

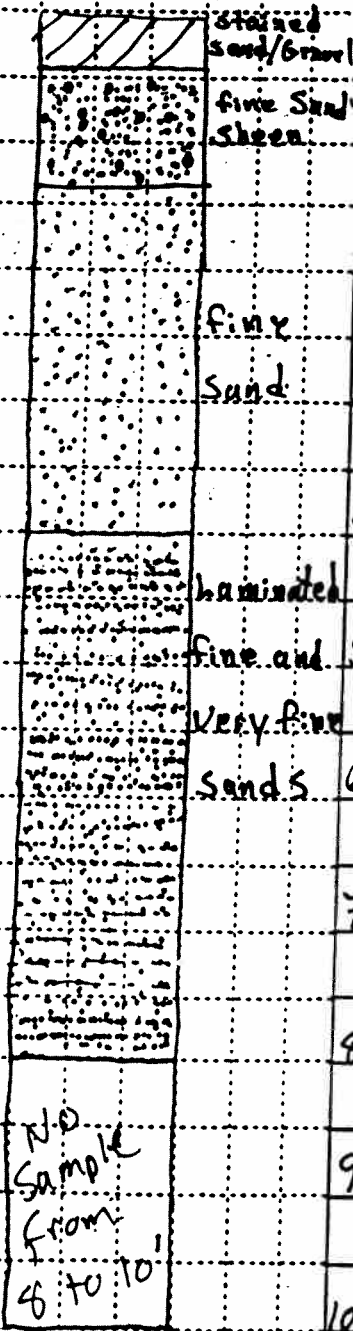
965.7



COMPANY: Roy F. Weston
 PROJECT: Housatonic River Project
 PROPERTY: Source Reach
 SITE/AREA: Cell 1

LOCATION NO.: HRSC-15
 DATE: 2/15/00
 LOGGER: S. Campbell / D. Morse
 SIGNATURE: [Signature]

Feet	Feet bgs	PID	Comments
0' - 0.4'	0.0' - 0.4' bgs	22	Dark brown, stained coarse-medium sand w/ some fine gravel
0.4' - 1.2'	0.4' - 1.2' bgs	23	Dark brown, Sheen, Med odor
1.2' - 4'	1.2' - 4' bgs	24	Medium brown fine sand w/ some very fine sand. Sheen on first 0.4' of interval
4' - 8'	4' - 8' bgs	24	Slight odor Med Brown fine sand w/ some very fine sand
8' - 10'	8' - 10' bgs	24	Little silt and Trace Clay. 1cm-1.5cm thick laminations. Slight odor
10' - 11'	10' - 11' bgs		Boring only completed to 4.0' below channel surface.
11' - 12'	11' - 12' bgs		
12' - 13'	12' - 13' bgs		
13' - 14'	13' - 14' bgs		
14' - 15'	14' - 15' bgs		
15' - 16'	15' - 16' bgs		
16' - 17'	16' - 17' bgs		
17' - 18'	17' - 18' bgs		
18' - 19'	18' - 19' bgs		
19' - 20'	19' - 20' bgs		



No Sample from 8 to 10'

GEOLIS, Notes and Sketches Form

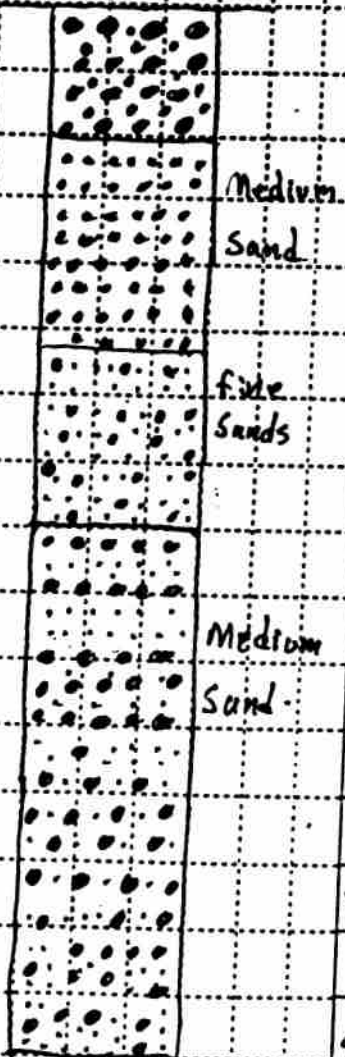
9655

COMPANY: Roy Weston
 PROJECT: Housatonic River Project
 PROPERTY: Source Reach
 SITE AREA: Cell 1

LOCATION NO.: HRSC-16
 DATE: 2/15/00
 LOGGER: S. Campbell / D. Morse
 SIGNATURE: Scott Campbell



Feet	logs	PID	Comments
0.0'			0.0'-1.0' bgs Brownish gray
0'		3.8	coarse sand w/ some medium sand litly fine sand trace fine gravel
1'		1.2	1.0'-2.6' Medium brown
2'		12.5	Medium sand slight odor
3'			2.6'-4.0' bgs Light to Medium brown. fine sand w/ some medium sand and a little silt slight odor
4'		32	4.0'-8.0' Light Brown medium sand w/ little fine sand slight odor
5'			
6'		20	
7'			
8'			



GEOLIS, Notes and Sketches Form

COMPANY: Roy F. Weston
 PROJECT: Housatonic River Project
 PROPERTY: Source Reach
 SITE AREA: Cell # D 1

LOCATION NO.: HRSC-17
 DATE: 2/17/00
 LOGGER: S. Campbell / D. Morse
 SIGNATURE: [Signature]



Feet bgs P10 Comments



Feet bgs	P10	Comments
0'	0.7	0.0'-0.7' bgs Gray to brown w/ depth finesand some silt
1'		Little organics Traced sand
2'		0.7'-1.2' bgs Gray stained medium sand some fine sand
3'		1.2'-4.0' bgs gray to light brown. top 0.2' stained
4'	2.0	Coarse Gravel some fine gravel. Little fine and very fine sand
5'		4.0'-4.3' bgs same as above
6'		4.3'-4.9' bgs Gray brown fine gravel some coarse gravel. Little coarse and medium sand.
7'		4.9'-8.0' bgs same as 1.4'-4.0' bgs
8'		core ends at 8' bgs
9'		
10'		