

ATTACHMENT 1

Soil Boring Forms

RX-1

ROUX ASSOCIATES, INC.
 GeoProbe Soil Investigation
 Soil Boring Form

Location: Woburn, MA

Field Staff: HAT/LHC
 Date Sampled: 12/5/2002

Depth (feet)	Head Space PID (ppm)	Description	Soil Sample Collected *	Water Sample Collected
0-2.5	0.0	0-2' Light brown fine SAND. 2-2.5' Brown fine SAND, some Silt.		
2.5-5.0	0.0	Grey fine SAND.		
5.0-7.5	0.0	Grey fine SAND, trace Silt.		
7.5-10	0.0	Black fine SAND.		
10-12.5	0.0	Black fine SAND, trace Silt; Wet at 11'.	RX-1 (10-12.5')	
12.5-15	0.1	Black fine SAND, trace Silt.		RX-1 (15')
15-20	7.3			
20-25	8.9	Black fine SAND, some Silt.		
25-30	3.4	Black fine SAND, some Silt, trace fine Gravel.		RX-1 (30')

Notes:

* = Saturated portion of interval was not included in sample sent to lab.

RX-2

ROUX ASSOCIATES, INC.
GeoProbe Soil Investigation
Soil Boring Form

Location: Woburn, MA

Field Staff: HAT/LHC
Date Sampled: 12/2/2002

Depth (feet)	Head Space PID (ppm)	Description	Soil Sample Collected *	Water Sample Collected
0-2.5	0.0	Brown fine (+) to medium SAND, trace fine Gravel.		
2.5-5.0	0.0	Black fine SAND, trace fine Gravel, trace Silt; Strong odor (unidentified).	RX-2 (2.5-5.0')	
5.0-7.5	0.0	Grey fine to coarse SAND, little Silt; Organic material present at 6'.		
7.5-10	0.0	Black fine SAND, trace Silt.		
10-12.5	0.0	Black fine SAND, trace Silt, trace fine Gravel (at 12)'; Organic odor present; Wet at 12'.		
12.5-15	0.0	No recovery		RX-2 (15')
15-20	NR	Black fine SAND, some Silt; Organic odor.		
20-25	NR	Black SILT, some fine Sand; Organic odor.		
25-30	NR	Black SILT, some fine Sand, trace fine Gravel; Organic odor.		
30-33	NR	Green/Grey SILT, some fine Sand, some fine Gravel.		RX-2 (33')

Notes:

(+) = Grain-size distribution skewed toward end of range denoted

* = Soil sample collected at 2.5-5.0' due to strong and distinct odor at that horizon, and potentially malfunctioning PID.

NR = No PID reading recorded

RX-3

ROUX ASSOCIATES, INC.
 GeoProbe Soil Investigation
 Soil Boring Form

Location: Woburn, MA

Field Staff: HAT/LHC
 Date Sampled: 12/4/2002

Depth (feet)	Head Space PID (ppm)	Description	Soil Sample Collected	Water Sample Collected
0-2.5	13.0	Brown fine SAND, some fine Gravel.	RX-3 (0-2.5')	
2.5-5.0	1.1	Grey fine SAND.		
5.0-7.5	2.2	Black to grey fine SAND, trace fine Gravel (at 5-6)'; Grey sand limited to layer at 5-6'.		
7.5-10	3.3			
10-12.5	3.1	Black fine SAND; Wet at 13'.		
12.5-15	8.0			RX-3 (15')
15-20	8.3	Black fine SAND, trace Silt.		
20-23	31.0	Black fine SAND, some Silt.		RX-3 (23')

RX-4

ROUX ASSOCIATES, INC.
 GeoProbe Soil Investigation
 Soil Boring Form

Location: Woburn, MA

Field Staff: HAT/LHC
 Date Sampled: 12/3/2002

Depth (feet)	Head Space PID (ppm)	Description	Soil Sample Collected *	Water Sample Collected
0-2.5	0.0	Brown fine SAND, trace fine Gravel (at 2').		
2.5-5.0	4.6	Black fine SAND; Organic odor.		
5.0-7.5	0.7			
7.5-10	5.2			
10-12.5	4.5	Black fine SAND, trace Gravel; Organic odor; Wet at 12'.		
12.5-15	34.5		RX-4 (12.5-15')	RX-4 (15')
15-20	36.0	Grey fine (+) to coarse SAND, trace Silt.		
20-25	71.5	Black fine SAND; Organic odor.		
25-29	73.8	Brown fine SAND.		RX-4 (29')

Notes:

- * = Soil sample may have been mislabeled, since it was not saturated; it likely was taken from 10-12.5'.
- (+) = Grain-size distribution skewed toward end of range denoted

RX-5

ROUX ASSOCIATES, INC.
 GeoProbe Soil Investigation
 Soil Boring Form

Location: Woburn, MA

Field Staff: HAT/LHC
 Date Sampled: 12/5/2002

Depth (feet)	Head Space PID (ppm)	Description	Soil Sample Collected	Water Sample Collected
0-2.5	3.2	Brown fine SAND, some fine Gravel.		
2.5-5.0	3.4	Grey fine SAND.		
5.0-7.5	2.3	Grey fine SAND; Orange layer at 5.5'.		
7.5-10	8.1	Black fine SAND, trace Silt.	RX-5 (7.5-10')	
10-12.5	9.8	Black fine SAND, trace Silt; Wet at 10'		
12.5-15	10.3			RX-5 (15')
15-20	0.0			
20-25	7.8	Black fine SAND, some Silt.		
25-29	6.4	Black fine SAND, some Silt, trace fine Gravel.		RX-5 (29')

RX-6

ROUX ASSOCIATES, INC.
 GeoProbe Soil Investigation
 Soil Boring Form

Location: Woburn, MA

Field Staff: HAT/LHC
 Date Sampled: 12/3/2002

Depth (feet)	Head Space PID (ppm)	Description	Soil Sample Collected *	Water Sample Collected
0-2.5	5.0	Brown fine SAND, some fine Gravel.		
2.5-5.0	1.2	Grey fine SAND, some fine Gravel; Organic odor 6-7.5'.		
5.0-7.5	4.1			
7.5-10	3.1	Black fine SAND; Organic odor.		
10-12.5	9.4	Black fine SAND, trace Silt; Organic odor; Wet at 14'		
12.5-15	293		RX-6 (12.5-15')	RX-6 (15')
15-20	729	Black fine SAND; Strong odor.		
20-25	204	Black fine SAND, some Silt.		
25-29	139	Black fine SAND, trace Silt; Organic odor.		RX-6 (29')

Notes:

* = Saturated portion of interval was not included in sample sent to lab.

RX-7

ROUX ASSOCIATES, INC.
 GeoProbe Soil Investigation
 Soil Boring Form

Location: Woburn, MA

Field Staff: HAT/LHC
 Date Sampled: 12/12/2002

Depth (feet)	Head Space PID (ppm)	Description	Soil Sample Collected	Water Sample Collected
0-2.5	0.0	0-1' Brown fine SAND, some fine Gravel. 1-2.5' Grey fine SAND, trace fine Gravel.		
2.5-5.0	19.7	Grey fine SAND, trace fine Gravel.	RX-7 (2.5-5.0')	
5.0-7.5	15.7	Black fine SAND, trace Silt; Odor.		
7.5-10	8.4			
10-15	21.7	10-13' Black fine SAND, trace Silt; Odor; Wet. 13-15' Brown fine SAND.		RX-7 (15')
15-20	174	Brown to black fine SAND, some Silt.		
20-25	129	Black fine SAND, some Silt		
25-30	NR	No recovery		
30-31	NR			RX-7 (31') RX-7 (31') DUP

Notes:

NR = No PID reading recorded

RX-8

ROUX ASSOCIATES, INC.
 GeoProbe Soil Investigation
 Soil Boring Form

Location: Woburn, MA

Field Staff: LHC/RP
 Date Sampled: 12/6/2002

Depth (feet)	Head Space PID (ppm)	Description	Soil Sample Collected	Water Sample Collected
0-2.5	0.0	Grey fine SAND, some fine Gravel.		
2.5-5.0	0.0	Brown fine SAND, trace fine Gravel.		
5.0-7.5	2.2			
7.5-10	≥2,000	Grey fine SAND, trace Silt.	RX-8 (7.5-10')	
10-12.5	1,530	Black fine SAND, some Silt, some fine Gravel; Wet.		
12.5-15	≥2,000			RX-8 (15')
15-20	158	Black fine SAND, trace Silt.		
20-25	210	Black fine SAND, some Silt.		
25-30	35.0	Black fine SAND, some Silt, trace fine Gravel.		
30-31	NR	No recovery		RX-8 (31')

Notes:

NR = No PID reading recorded

RX-9

ROUX ASSOCIATES, INC.
GeoProbe Soil Investigation
Soil Boring Form

Location: Woburn, MA

Field Staff: HAT/LHC
Date Sampled: 12/4-5/2002

Depth (feet)	Head Space PID (ppm)	Description	Soil Sample Collected	Water Sample Collected
0-2.5	0.0	Brown fine SAND, some fine Gravel.		
2.5-5.0	0.3	Brown fine SAND; trace fine Gravel (at 4.5).'		
5.0-7.5	1,565	Brown to red fine SAND.		
7.5-10	≥2,000	Dark brown fine SAND, trace Silt.	RX-9 (7.5-10) RX-9 (7.5-10) DUP	
10-12.5	427	Brown/green fine SAND, some Silt; Wet at 12'.		
12.5-15	703	Brown fine SAND, some Silt.		RX-9 (15') RX-9 (15') DUP
15-20	370	Black fine SAND; Strong odor.		
20-25	248	Black fine SAND, some Silt.		
25-30	NR	No recovery.		
30-33	NR			RX-9 (33')

Notes:

NR = No PID reading recorded

RX-10

ROUX ASSOCIATES, INC.
 GeoProbe Soil Investigation
 Soil Boring Form

Location: Woburn, MA

Field Staff: HAT/LHC
 Date Sampled: 12/12/2002

Depth (feet)	Head Space PID (ppm)	Description	Soil Sample Collected	Water Sample Collected	
0-2.5	19.2	0-1' Grey fine SAND, trace fine Gravel. 1-2.5' Brown fine SAND, some fine Gravel	RX-10 (0-2.5')		
2.5-5.0	10.4	2.5-3.0' Brown fine SAND, some fine Gravel 3.0-5' Black fine SAND, some fine Gravel.			
5.0-7.5	NR	No recovery, multiple obstructions; switched to discrete groundwater sampler.			
7.5-10	NR				
10-12.5	NR				
12.5-15	NR			RX-10 (15')	
15-20	NR				
20-25	NR				RX-10 (25')

Notes:

NR = No PID reading recorded

RX-11

ROUX ASSOCIATES, INC.
 GeoProbe Soil Investigation
 Soil Boring Form

Location: Woburn, MA

Field Staff: LHC/RP
 Date Sampled: 12/6/2002

Depth (feet)	Head Space PID (ppm)	Description	Soil Sample Collected	Water Sample Collected
0-2.5	0.0	Light brown medium SAND, trace fine Gravel (at 2.5').		
2.5-5.0	0.0	Light brown fine SAND, some fine Gravel.		
5.0-7.5	912	Dark brown fine SAND, trace Silt (in layer at 6'); Red staining throughout.		
7.5-10	1,909		RX-11 (7.5-10')	
10-12.5	1,574	Dark brown fine SAND, trace Silt; Odor; Wet.		
12.5-15	1,681			RX-11 (15')
15-20	538	Black fine SAND; Strong odor.		
20-25	704	Black fine SAND, trace Silt.		
25-30	309	Black to brown fine SAND, trace Silt; Brown fine SAND in layer at 26'.		
30-31	NR	No recovery		RX-11 (31')

Notes:
 NR = No PID reading recorded

RX-12

ROUX ASSOCIATES, INC.
GeoProbe Soil Investigation
Soil Boring Form

Location: Woburn, MA

Field Staff: HAT/LHC
Date Sampled: 12/9/2002

Depth (feet)	Head Space PID (ppm)	Description	Soil Sample Collected	Water Sample Collected
0-2.5	0.0	Grey fine to medium (+) SAND, some fine Gravel.		
2.5-5.0	0.0	Black fine SAND, trace Silt.		
5.0-7.5	0.0			
7.5-10	0.0		RX-12 (7.5-10)	
10-12.5	0.0	Black fine SAND, some Silt; Stong odor; Wet at 11'.		
12.5-15	0.0			RX-12 (15')
15-20	10.0	Brown to black fine SAND; Black sand in layer at 19'.		
20-25	0.0	Black fine SAND, little Silt (at 23').		
25-30	0.0	Brown to grey fine SAND, some Silt.		
30-31	NR	No recovery		RX-12 (31')

Notes:

(+) = Grain-size distribution skewed toward end of range denoted

NR = No PID reading recorded

RX-13

ROUX ASSOCIATES, INC.
 GeoProbe Soil Investigation
 Soil Boring Form

Location: Woburn, MA

Field Staff: HAT/LHC
 Date Sampled: 12/9/2002

Depth (feet)	Head Space PID (ppm)	Description	Soil Sample Collected	Water Sample Collected
0-2.5	10.0	Grey fine SAND, some fine Gravel.		
2.5-5.0	6.1	Black fine SAND, some Silt. Hair-like material throughout.		
5.0-7.5	12.6	Black fine SAND, some Silt; 3"-long wood fragments at 7'.	RX-13 (5.0-7.5')	
7.5-10	5.7	Black fine SAND, some Silt.		
10-12.5	7.9	Black fine (+) to medium SAND; Wet.		
12.5-15	0.0			RX-13 (15')
15-20	0.0	Black fine SAND, some Silt.		
20-25	0.0	20-22' Black fine to medium (+) SAND. 22-25' Brown fine SAND, trace Silt.		
25-29	0.0	Brown to black fine SAND; Black sand from 28.5-29'; Red staining at 27'.		RX-13 (29')

Notes:

(+) = Grain-size distribution skewed toward end of range denoted

RX-14

ROUX ASSOCIATES, INC.
 GeoProbe Soil Investigation
 Soil Boring Form

Location: Woburn, MA

Field Staff: HAT/LHC
 Date Sampled: 12/10/2002

Depth (feet)	Head Space PID (ppm)	Description	Soil Sample Collected	Water Sample Collected
0-2.5	0.8	Grey fine SAND some fine Gravel.	RX-14 (0-2.5')	
2.5-5.0	0.0	Brown fine SAND. Red staining at 4'.		
5.0-7.5	0.0	Brown fine SAND. Fine Gravel at 5.5'		
7.5-10	0.0			
10-12.5	214	Brown fine SAND; Wet.		
12.5-15	NR	Brown to black fine SAND. Black sand in 4" layer at 13'.		RX-14 (15')
15-20	3.5	Brown to black fine SAND, little fine Gravel; Black sand and gravel at 19-20'.		
20-25	0.0	Black fine SAND, some fine Gravel; Red Staining at 24'.		
25-29	NR	No recovery		RX-14 (29')

Notes:

NR = No PID reading recorded

RX-15

ROUX ASSOCIATES, INC.
 GeoProbe Soil Investigation
 Soil Boring Form

Location: Woburn, MA

Field Staff: HAT/LHC
 Date Sampled: 12/11/2002

Depth (feet)	Head Space PID (ppm)	Description	Soil Sample Collected *	Water Sample Collected
0-2.5	0.0	Brown to light brown CLAY, some Silt, trace fine Gravel; Organic material present.		
2.5-5.0	0.0	Red brown fine (+) to medium SAND, little Silt; trace fine Gravel (brick fragments).		
5.0-7.5	0.0	Yellow brown fine to medium (+) SAND, trace Clay.		
7.5-10	10.0	Light brown to black fine to medium (+) SAND, trace Silt; Wet at very bottom.	RX-15 (7.5-10')	
10-15	72.8	Brown to black fine to medium SAND, little Silt.		RX-15 (15')
15-20	6.0	Black fine SAND, some Silt; Red staining at 22'.		
20-25	3.7			
25-29	3.0	Brown fine(+) to medium SAND.		RX-15 (29')

Notes:

- * = Saturated portion of interval was not included in sample sent to lab.
- (+) = Grain-size distribution skewed toward end of range denoted

RX-16

ROUX ASSOCIATES, INC.
 GeoProbe Soil Investigation
 Soil Boring Form

Location: Woburn, MA

Field Staff: HAT/LHC
 Date Sampled: 12/11/2002

Depth (feet)	Head Space PID (ppm)	Description	Soil Sample Collected	Water Sample Collected
0-2.5	0.0	0-1' Brown fine SAND. 1-2.5' Brown SILT, some fine Sand.		
2.5-5.0	0.0	Brown fine SAND.		
5.0-7.5	6.8	Brown to black fine SAND, some Silt. Black sand in layer at 6'.		
7.5-10	70.1	Dark brown/red fine SAND	RX-16 (7.5-10') RX-16 (7.5-10') DUP	
10-12.5	16.1	Reddish Brown fine SAND; Wet at 11'.		
12.5-15				RX-16 (15')
15-20	46.4	Black fine SAND, some Silt.		
20-25	73.3	20-23' Black fine SAND, some Silt. 23-25' Greyish brown fine (+) to medium SAND.		
25-29	NR	No Recovery		RX-16 (29')

Notes:

- (+) = Grain-size distribution skewed toward end of range denoted
- NR = No PID reading recorded

RX-17

ROUX ASSOCIATES, INC.
 GeoProbe Soil Investigation
 Soil Boring Form

Location: Woburn, MA

Field Staff: HAT/LHC
 Date Sampled: 12/10/2002

Depth (feet)	Head Space PID (ppm)	Description	Soil Sample Collected	Water Sample Collected
0-2.5	0.0	Brown fine SAND, trace fine Gravel, trace red Silt (in layer at 4.75').		
2.5-5.0	0.0			
5.0-7.5	0.0	Reddish brown SILT, some fine Sand; 6" black silt layer at 9.5-10.0'; Wet at 8'.	RX-17 (5.0-7.5')	
7.5-10	756			
10-12.5	1,160	Brown fine SAND.		
12.5-15				RX-17 (15')
15-20	0.0	Black fine SAND, some Silt.		
20-25	0.0			
25-30	0.0	Black fine SAND, trace Silt, trace fine Gravel.		
30-33	NR	No recovery		RX-17 (33')

Notes:

NR = No PID reading recorded

RX-18

ROUX ASSOCIATES, INC.
GeoProbe Soil Investigation
Soil Boring Form

Location: Woburn, MA

Field Staff: HAT/LHC
Date Sampled: 12/13/2002

Depth (feet)	Head Space PID (ppm)	Description	Soil Sample Collected *	Water Sample Collected
0-2.5	0.0	Brown fine SAND, trace fine Gravel.		
2.5-5.0	0.3	Light Brown fine SAND; Geomembrane cap observed at 3'.		
5.0-7.5	201	Light brown fine SAND.	RX-18 (5.0-7.5')	
7.5-10	NR	No recovery		
10-15	≥2,000	10-14' Brown fine (+) to medium SAND; Wet. 14-15' Dark brown SILT, some fine Sand; Reddish-purple staining at 14.5'	RX-18 (10-15')	RX-18 (13')
				RX-18 (13') DUP
15-20	214	Brown fine SAND, trace Silt.		RX-18 (20')
20-25	78	Brown fine SAND, some Silt.		
25-30	12			RX-18 (30')

Notes:

(+) = Grain-size distribution skewed toward end of range denoted

NR = No PID reading recorded

* = Second soil sample collected in saturated zone due to staining and elevated PID reading.

RX-19

ROUX ASSOCIATES, INC.
 GeoProbe Soil Investigation
 Soil Boring Form

Location: Woburn, MA

Field Staff: HAT/LHC
 Date Sampled: 12/13/2002

Depth (feet)	Head Space PID (ppm)	Description	Soil Sample Collected	Water Sample Collected
0-2.5	0.0	Brown SILT, some fine Sand; Organic matter present.		
2.5-5.0	0.0	Light brown to brown fine (+) to medium SAND; Orange layer at 2.7'; Wet at 6'. Brown to dark brown SILT, some Clay, trace fine Gravel; Reddish-purple layer at 10'; Organic material present.	RX-19 (2.5-5.0')	
5.0-7.5	0.3			
7.5-10				
10-15	623	Brown SILT, some Clay; Organic material present.		RX-19 (13')
15-20	872	Black fine (+) to medium SAND, some fine Gravel; Organics.		
20-25	53.6	Grey to light brown fine to medium (+) SAND.		RX-19 (22')
25-30	0.9			RX-19 (30')

Notes:

(+) = Grain-size distribution skewed toward end of range denoted