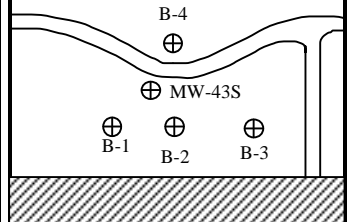


BORING LOG for Boring #: B-1



ERM
399 Boylston Street, 6th Floor
Boston, MA 02116

SITE MAP



Notes:

Project:	Raytheon - Wayland	Project Number:	143.78		
Client:	Raytheon	Logged by:	Michael Horesh		
Drilling Co:	Geosearch, Inc.	Driller:	Chris		
Date Started:	23-Nov-02	Date Finished:	23-Nov-02		
Location:	Wayland, Massachusetts	Drilling Method:	Geoprobe		
Screen Diam:	N/A	Length:	N/A	Slot Size:	N/A
Casing Diam:	N/A	Length:	N/A	Type:	N/A
Boring Depth:	28'	Well Depth:	N/A	Boring Diam.:	3"
Surface Elev.:	NA	MP:	N/A	Depth to GW:	~14'
		MP Elev.:	N/A		

Depth	Well Log	Stratigraphy	Blowcounts per 6 inches	Recovery	Split Spoon Description/Soil Classification	Sample # & Depth	HS Conc. (ppm)	Lab Sample # & Analyses	
0	N/A								
2									
4									
6									
8									
10		SAND	N/A	38"		Top 10" brown well sorted fine SAND, remaining depth brown poorly sorted coarse Sand, some Gravel, some fine Sand interbeds (~2"), trace Cobbles, dry	8'-12'	0.0	NS
12		SAND	N/A	48"		Top 23" brown/dark brown coarse SAND, trace Cobble & Gravel, dry, next 2" brown to orange/brown fine Sand, some Silt, trace gray Clay, wet	12'-16'	0.0	NS
14		SAND	N/A	38"		Top 8" brown/tan coarse SAND, poorly sorted, trace Cobble, little Gravel, next 22" brown-gray/brown fine Sand, Silt, little gray Clay, trace gray Clay	16'-20'	0.0	NS
16	SAND	N/A	37"		Top 30" dark purple to purple well sorted fine SAND, little Silt, purple staining, saturated through 31" decreasing in saturation w/ depth, bottom 7" dark-medium brown well sorted fine Sand	20'-24'	0.5	B-1 20'-24' VOCs	
18	SAND	N/A	NA*		Brown fine to medium SAND, well sorted, some purple Sand at bottom of sleeve (4")	24'-28'	0.5	NS	
20					Bottom of Boring at 28' bgs				
22					* Sample pushed through casing, unable to remove sleeve - could not determine recovery.				
24									
26									
28									

Note:

N/A - Not Applicable

NA - Not Available

NS - No Sample

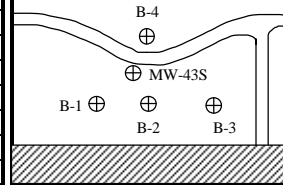
BORING LOG for Boring #:

B-2



ERM
399 Boylston Street, 6th Floor
Boston, MA 02116

SITE MAP



Notes:

Project:	Raytheon - Wayland	Project Number:	143.78
Client:	Raytheon	Logged by:	Michael Horesh
Drilling Co:	Geosearch, Inc.	Driller:	Chris
Date Started:	23-Nov-02	Date Finished:	23-Nov-02
Location:	Wayland, Massachusetts	Drilling Method:	Geoprobe
Screen Diam:	N/A	Length:	N/A
Casing Diam:	N/A	Length:	N/A
Boring Depth:	30'	Well Depth	N/A
Surface Elev.:	NA	MP:	N/A
		MP Elev.:	N/A
		Slot Size:	N/A
		Type:	N/A
		Boring Diam.:	3"
		Depth to GW:	~12'

Depth	Well Log	Stratigraphy	Blowcounts per 6 inches	Recovery	Split Spoon Description/Soil Classification	Sample # & Depth	HS Conc. (ppm)	Lab Sample # & Analyses
0	N/A							
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13		SAND	N/A	13"	Top 7" brown/dark tan, well sorted, medium SAND, little fine Sand, wet, bottom 6" brown medium Sand & Silt	12'-14'	2.0	NS
14								
15		SAND & SILT	N/A	31"	Top 6" brown medium to coarse SAND, little Gravel, some SILT, bottom 25" brown well sorted Silt, some Clay, some Sandy interbeds	14'-18'	0.0	B-2: 14'-18' VOCs
16								
17								
18								
19								
20		NA	N/A	NA	See Note*	NA	NA	NS
21								
22								
23		SAND	N/A	32"	Top 11" brown/orange fine SAND, some orange interbeds, well sorted, next 8" light brown coarse Sand, some fine Sand, end of interval marked by black & orange band, bottom 13" orange well sorted coarse & medium Sand, little fine Sand	22'-25'	0.0	NS
24								
25								
26								
27		SAND	N/A	48"	Top 14" orange/brown medium well sorted SAND, some fine Sand, next 16" brown/gray well sorted fine Sand, bottom 18" brown/gray fine Sand & Silt	25'-30'	0.0	NS
28								
29								
30					Bottom of Boring at 30' bgs			
					* Tip of rod dropped into bore hole, moved on to B-3 & B-4 until help from Steve Law of Geosearch			

Note:

- N/A - Not Applicable
- NA - Not Available
- NS - No Sample

BORING LOG for Boring #:

B-3

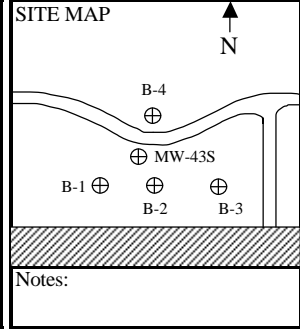


ERM
399 Boylston Street, 6th Floor
Boston, MA 02116

Project: Raytheon - Wayland
 Client: Raytheon
 Drilling Co: Geosearch, Inc.
 Date Started: 23-Nov-02
 Location: Wayland, Massachusetts
 Screen Diam: N/A
 Casing Diam: N/A
 Boring Depth: 30'
 Surface Elev.: NA

Project Number: 143.78
 Logged by: Michael Horesh
 Driller: Chris
 Date Finished: 23-Nov-02
 Drilling Method: Geoprobe
 Length: N/A
 Slot Size: N/A
 Type: N/A
 Boring Diam.: 3"
 Depth to GW: ~14'
 MP: N/A
 MP Elev.: N/A

SITE MAP



Depth	Well Log	Stratigraphy	Blowcounts per 6 inches	Recovery	Split Spoon Description/Soil Classification	Sample # & Depth	HS Conc. (ppm)	Lab Sample # & Analyses	
0	N/A								
1									
2									
3									
4			SAND	N/A	40"	Top 20" light brown coarse SAND, little Gravel, dry, poorly sorted, trace fine Silt, next 20" light brown fine SAND, well sorted, orange banding; bottom 1" purple fine Sand.	0-10'	0.0	NS
5									
6									
7									
8									
9									
10									
11									
12			SAND	N/A	49"	Top 16" light brown fine SAND, some purple interfingering, bottom 33" light brown coarse Sand, some fine/medium Sand, some orange banding throughout interval.	10'-15'	0.0	NS
13									
14									
15									
16									
17			SAND & SILT	N/A	54"	Top 40" brown well sorted fine SAND & SILT, interfingering with coarse/medium Sand, trace Gravel.	15'-20'	0.0	NS
18									
19									
20									
21									
22			SILT	N/A	60"	Top 28" brown well sorted SILT, next 2" dark purple well sorted Silt.	20'-25'	0.0	NS
23									
24									
25									
26									
27			GRAVEL	N/A	55"	Top 7" light brown coarse Sand & GRAVEL, next 28" light brown to brown medium Sand, little Silt, bottom 20" orange-brown fine Sand, some Silt, well sorted.	25'-30'	0.0	B-3: 25'-30' VOCs
28									
29									
30					Bottom of Boring at 30' bgs				

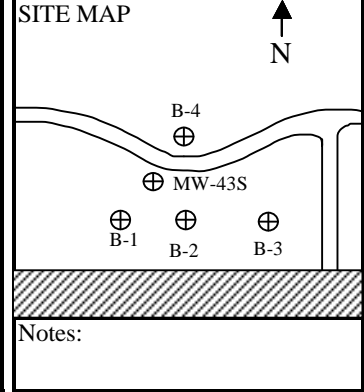
Note:

- N/A - Not Applicable
- NA - Not Available
- NS - No Sample

BORING LOG for Boring #: B-4



ERM
399 Bylston Street, 6th Floor
Boston, MA 02116



Project:	Raytheon - Wayland	Project Number:	143.78		
Client:	Raytheon	Logged by:	Michael Horesh		
Drilling Co:	Geosearch, Inc.	Driller:	Chris		
Date Started:	23-Nov-02	Date Finished:	23-Nov-02		
Location:	Wayland, Massachusetts	Drilling Method:	Geoprobe		
Screen Diam:	N/A	Length:	N/A	Slot Size:	N/A
Casing Diam:	N/A	Length:	N/A	Type:	N/A
Boring Depth:	30'	Well Depth:	N/A	Boring Diam.:	3"
Surface Elev.:	NA	MP:	N/A	Depth to GW:	~16'
		MP Elev.:	N/A		

Depth	Well Log	Stratigraphy	Blowcounts per 6 inches	Recovery	Split Spoon Description/Soil Classification	Sample # & Depth	HS Conc. (ppm)	Lab Sample # & Analyses
0	N/A							
2								
4								
6								
8								
10								
12								
14		SAND & GRAVEL	N/A	30"	Top 22" coarse SAND-GRAVEL., poorly sorted , brown/tan, dry, bottom 8" orange/brown fine Sand, little coarse Sand, well sorted, dry	12'-16'	0.0	NS
16								
18		SAND	N/A	37"	Top 12" brown, well sorted medium SAND, wet, next 22" brown well sorted Silt, some Clay, wet, bottom 3" purple Silt & Clay	16'-20'	0.0	B-4: 16'-20' VOCs
20								
22		SAND & SILT	N/A	46"	Top 30" deep purple, well sorted fine SAND, some SILT, bottom 16" brown to orange/brown well sorted fine Sand, some Silt	20'-24'	0.0	NS
24								
26		SAND	N/A	42"	Top 26" brown/pink swirl of fine to well sorted SAND, bottom 14" mostly brown some pink coarse Sand, little Gravel	24'-28'	0.0	NS
28								
30		SAND	N/A	26"	Dark purple medium to coarse SAND, little Gravel	28'-30'	0.0	NS
					Bottom of Boring at 30' bgs			

Note:

N/A - Not Applicable

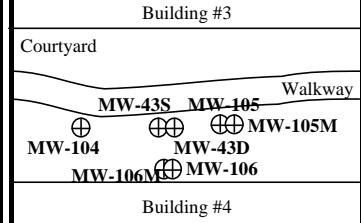
NA - Not Available

NS - No Sample

DRILLING LOG for Well #: MW-105M

ERM
399 Boylston Street, 6th Floor
Boston, MA 02116

SITE MAP



Notes: GW elevation measured on 11/11/02

Project:	Raytheon - Wayland	Project Number:	143.78		
Client:	Raytheon	Logged by:	Viktoria Zoltay		
Drilling Co:	Geosearch, Inc.	Driller:	Steven Law		
Date Started:	9-Nov-02	Date Finished:	9-Nov-02		
Location:	Wayland, Massachusetts	Drilling Method:	GeoProbe		
Screen Diam:	1"	Length:	10'	Slot Size:	0.010"
Casing Diam:	1"	Length:	20'	Type:	PVC
Boring Depth:	30'	Well Depth:	30'	Boring Diam.:	3"
Surface Elev.:	NA	MP:	PVC	Depth to GW:	18.36
		MP Elev.:	NA		

Depth	Well Log	Stratigraphy	Blowcounts per 6 inches	Recovery	Split Spoon Description/Soil Classification	Depth	PID Conc. (ppm)	Lab Sample # & Analyses
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22		SAND		50"	Brown to gray medium to fine SAND, some Silt, trace Clay, orange Sand at top of interval, dense, wet.	20'-25'	0.0	
23								
24								
25								

Key to Well Construction

- Sandpack
- Well Screen
- Grout
- Bentonite Seal
- Cement
- Native Material

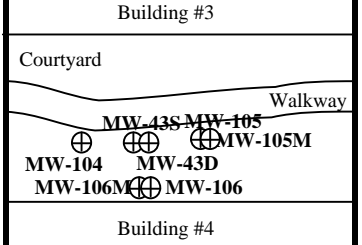
DRILLING LOG for Well #: MW-106M



ERM
399 Boylston Street, 6th Floor
Boston, MA 02116

Project:	Raytheon - Wayland	Project Number:	143.78
Client:	Raytheon	Logged by:	Viktoria Zoltay
Drilling Co.:	Geosearch, Inc.	Driller:	Steven Law
Date Started:	9-Nov-02	Date Finished:	9-Nov-02
Location:	Wayland, Massachusetts	Drilling Method:	GeoProbe
Screen Diam:	1"	Length:	10'
Casing Diam:	1"	Length:	20'
Boring Depth:	30'	Well Depth:	30'
Surface Elev.:	NA	MP:	PVC
		MP Elev.:	NA
		Slot Size:	0.010"
		Type:	PVC
		Boring Diam.:	3"
		Depth to GW:	18.85

SITE MAP



Notes: GW elevation measured on 11/11/02

Depth	Well Log	Stratigraphy	Blowcounts per 6 inches	Recovery	Split Spoon Description/Soil Classification	Depth	PID Conc. (ppm)	Lab Sample # & Analyses
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22		SAND & SILT		45"	Brown to Gray medium to fine SAND and SILT, some Clay lenses, dense, saturated.	20'-25'	0.0	
23								
24								
25								

Key to Well Construction

	Sandpack		Well Screen		Grout
	Bentonite Seal		Cement		Native Material

DRILLING LOG for Well #: MW-106M



ERM
399 Boylston Street, 6th Floor
Boston, MA 02116

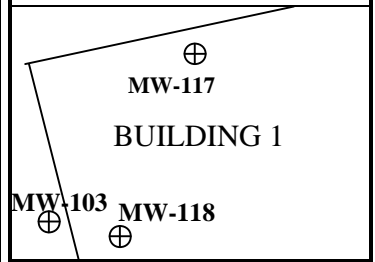
Depth	Well Log	Stratigraphy	Blowcounts per 6 inches	Recovery	Split Spoon Description/Soil Classification	Sample # & Depth	PID Conc. (ppm) spoon/HS	Lab Sample # & Analyses
26		SAND		48"	Brown medium SAND, little very fine SAND, trace coarse SAND, loose, saturated.	25'-30'	0.0	
27								
28								
29								
30					Bottom of Boring at 30' bgs			
31					<p>Well Construction Details</p> <ul style="list-style-type: none"> 0-1' Concrete Surface Seal 1'-16' Native Material 16'-18' Bentonite seal 18'-30' #1 Silica Sand Filter Pack 20'-30' 0.01" Slotted PVC Well Screen 30' Bottom of borehole 			
32								
33								
34								
35								
36								
37								
38								
39								
40								
41								
42								
43								
44								
45								
46								
47								
48								
49								
50								
51								
52								
53								
54								

DRILLING LOG for Well #: MW-117



ERM
399 Boylston Street, 6th Floor
Boston, MA 02116

SITE MAP



Project:	Raytheon - Wayland	Project Number:	143-78		
Client:	Raytheon	Logged by:	Mark Ciriello		
Drilling Co:	Geosearch, Inc.	Driller:	M. Bovenzi		
Date Started:	19-Nov-02	Date Finished:	9-Nov-02		
Location:	Wayland, Massachusetts	Drilling Method:	Hand Held Drilling Techniques		
Screen Diam:	1"	Length:	10'	Slot Size:	0.010"
Casing Diam:	1"	Length:	10'	Type:	PVC
Boring Depth:	20'	Well Depth	20'	Boring Diam.:	1"
Surface Elev.:	135.2'	MP:	PVC	Depth to GW:	18.76'
		MP Elev.:	134.84'		

Note: Depth to GW was measured on 12/3/03

Depth	Well Log	Stratigraphy	Blowcounts per 6 inches	Recovery	Split Spoon Description/Soil Classification	Sample # & Depth	HS Conc. (ppm)	Lab Sample # & Analyses
1								
2								
3								
4		SAND			Tan fine to medium SAND, little Silt, trace Gravel, well sorted, dry.	0'-8'	NA	
5								
6								
7								
8								
9		SAND		12"	Light brown medium to fine SAND, trace Silt, trace Gravel, well sorted, moist.	8'-10'	3.0	
10								
11		SAND		14"	Brown medium SAND, some Gravel, trace Silt, well sorted, moist.	10'-12'	3.5	
12								
13		SAND		24"	Brown medium SAND, little Gravel, well sorted, moist; top six inches tan fine Sand and Silt well sorted, moist.	12'-14'	1.3	
14								
15		SAND & SILT		12"	Tan/light brown SAND and SILT, well sorted, moist	14'-15'	2.3	
16								
17								
18								
19								
20								
					Bottom of Boring at 20' bgs			
					Well Construction Details			
					0'-1' Concrete Surface Seal			
					0'-4' Portland Cement and Bentonite Slurry Grout			
					5'-8' Bentonite Seal			
					8'-20' #1 Silica Sand Filter Pack			
					10'-20' 0.010" Slotted PVC Well Screen			
					19.6' Bottom of borehole			

Key to Well Construction

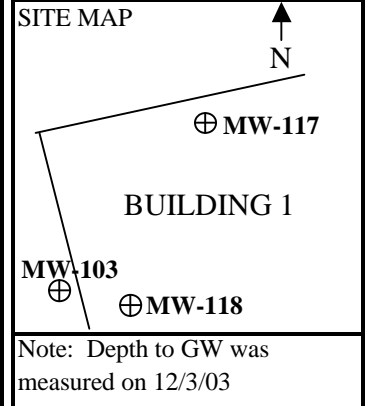
	Sandpack		Well Screen		Grout
	Bentonite Seal		Cement		Native Material

DRILLING LOG for Well #: MW-118



ERM
399 Boylston Street, 6th Floor
Boston, MA 02116

Project:	Raytheon - Wayland	Project Number:	143.78		
Client:	Raytheon	Logged by:	Mark Ciriello/Viktoria Zoltay		
Drilling Co:	Geosearch, Inc.	Driller:	M. Bovenzi		
Date Started:	9-Nov-02	Date Finished:	9-Nov-02		
Location:	Wayland, Massachusetts	Drilling Method:	Hand Held Drilling Techniques		
Screen Diam:	1"	Length:	10'	Slot Size:	0.010"
Casing Diam:	1"	Length:	10'	Type:	PVC
Boring Depth:	20'	Well Depth:	20'	Boring Diam.:	1"
Surface Elev.:	135.2'	MP:	PVC	Depth to GW:	18.73'
		MP Elev.:	134.98'		



Depth	Well Log	Stratigraphy	Blowcounts per 6 inches	Recovery	Split Spoon Description/Soil Classification	Sample # & Depth	HS Conc. (ppm)	Lab Sample # & Analyses
1								
2		SAND		48"	Brown fine to medium SAND, some Gravel, well sorted, dry.	0'-4'	NA	
3								
4								
5		SAND		24"	Light brown fine to medium SAND, some Silt, well sorted, dry interbeds of Silt.	4'-6'	7.2	
6								
7		SAND		22"	Interbedded tan and light brown fine SAND, well sorted, dry.	6'-8'	5.7	
8								
9		SAND		24"	Top 6" light brown fine SAND, some Silt, well sorted, dry; bottom 18" light brown fine Sand and Silt, well sorted, moist.	8'-10'	5.3	
10								
11		SAND & SILT		24'	Light brown fine SAND and SILT, well sorted, moist, compact.	10'-12'	4.5	
12								
13								
14								
15								
16		NA				12'-20'	NA	
17								
18								
19								
20								
					Bottom of Boring at 20' bgs			
					<u>Well Construction Details</u>			
					0-1' Concrete Surface Seal			
					1'-5' Portland Cement and Bentonite Slurry Grout			
					5'-8' Bentonite seal			
					8'-20' #1 Silica Sand Filter Pack			
					10'-20' 0.010" Slotted PVC Well Screen			
					20' Bottom of borehole			

Key to Well Construction

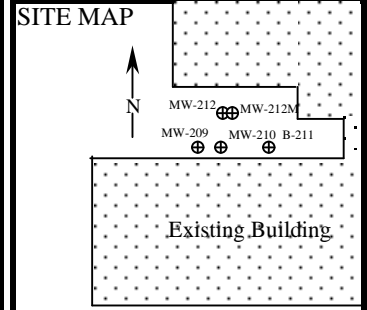
	Sandpack		Well Screen		Grout
	Bentonite Seal		Cement		Native Material

BORING LOG for Well # MW-212M



ERM
399 Boylston Street, 6th Floor
Boston, MA 02116

Project:	Raytheon-Wayland	Project Number:	143.78
Client:	Raytheon	Logged by:	Viktoria Zoltay
Drilling Co:	GeoSearch	Driller:	Steven Law
Date Started:	9-Nov-02	Date Finished:	9-Nov-02
Location:	Wayland, MA	Drilling Method:	GeoProbe
Screen Diam:	1"	Length:	10'
		Slot Size:	0.010"
Casing Diam:	1"	Length:	20'
		Type:	PVC
Boring Depth:	30'	Well Depth:	30'
		Boring Diam.:	3"
Surface Elev.:	NA	MP:	TOC
		Depth to GW:	18.03
		MP Elev.:	NA



Notes: GW elevation measured on 11/11/02

Depth	Well Log	Stratigraphy	Blowcounts per 6 inches	Recovery	Split Spoon Description/Soil Classification	Sample # & Depth	PID Conc. (ppm) spoon/HS	Lab Sample # & Analyses
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22		SAND		47"	Brown medium and fine SAND, some coarse Sand, loose, saturated.	20'-25'	0.0	
23								
24								
25								

Key to Well Construction

- Sandpack
- Well Screen
- Grout
- Bentonite Seal
- Cement
- Native Material

