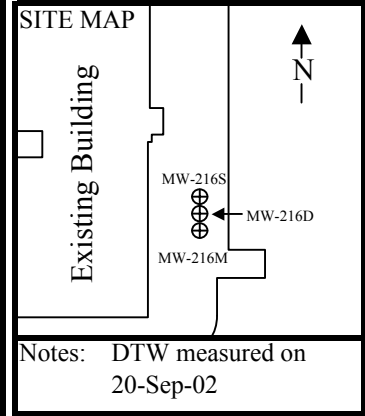


# DRILLING LOG for Well #: MW-216S

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

Project:	Raytheon-Wayland	Project Number:	143.69		
Client:	Raytheon	Logged by:	Viktoria Zoltay		
Drilling Co:	Drillex	Driller:			
Date Started:	20-Jul-02	Date Finished:	20-Jul-02		
Location:	Wayland, MA	Drilling Method:	4.25" ID HSA		
Screen Diam:	2"	Length:	10'	Slot Size:	0.010"
Casing Diam:	2"	Length:	12'	Type:	PVC
Boring Depth:	22'	Well Depth:	22'	Boring Diam.:	8"
Surface Elev.:	134.8'	MP:	TOC	Depth to GW:	17.58'
		MP Elev.:	134.54'		



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		SAND & GRAVEL	9-10-13-17	15"	Coarse SAND & GRAVEL, small Cobbles intermixed, brown; loose; damp.	S-1 8'-10'	0.0	
10								
11		SAND	5-10-13-15	16"	Coarse SAND w/ small fragments and Gravel, some red Sand and Gravel, small Cobbles, loose, dense; damp.	S-2 10'-12'	0.0	
12								
13		SAND	16-17-19-21	17"	Medium coarse SAND w/interbedded Gravel, loose, light brown; damp.	S-3 12'-14'	0.0	
14								
15		NR	17-15-14-14	NR	<b>NO RECOVERY</b>	S-4 14'-16'	NR	
16								
17		SAND	19-15-14-17	12"	Coarse brown SAND w/interbedded Gravel, loose; damp.	S-5 16'-18'	0.0	
18								
19		SAND	5-5-7-8	16"	Fine SAND, med. dense, some very fine Silty Sand, medium dense; wet.	S-6 18'-20'	0.1	
20								
21		SAND	10-13-20-21	23"	Medium fine SAND, Sandy Silt interbeds, brown, dense; wet	S-7 20'-22'	0.0	
22								
23					Bottom of Boring at 22' bgs.			
24								
25					Well Construction of Following Page			

NR=No Recovery

Key to Well Construction

	Sandpack		Well Screen		Grout
	Bentonite Seal		Cement		Native Fill

# DRILLING LOG for Well #:

MW-216S



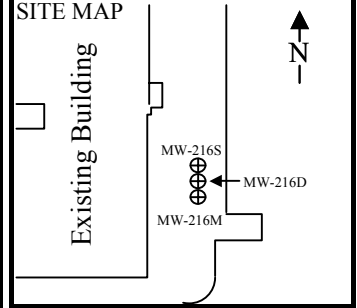
ERM  
399 Boylston Street, 6th Floor  
Boston, MA 02116

Depth	Well Log	Stratigraphy	Blowcounts per 6 inches	Recovery	Split Spoon Description/Soil Classification	Sample # & Depth	PID Conc. (ppm) spoon/HS	Lab Sample # & Analyses
					<p><b>Well Construction Details:</b></p> <p>Protective Flushmount Roadbox</p> <p>0-1' Concrete Surface Seal</p> <p>1'-9' Native Material</p> <p>9'-11' Bentonite Chip Seal</p> <p>11'-22' #1 Silica Sand Filter Pack</p> <p>12'-22' 0.010" Slotted PVC Well Screen</p> <p>22' Bottom of Borehole</p>			

# DRILLING LOG for Well #: MW-216M

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

Project: <u>Raytheon-Wayland</u>	Project Number: <u>143.69</u>	
Client: <u>Raytheon</u>	Logged by: <u>Viktoria Zoltay</u>	
Drilling Co: <u>Drillex</u>	Driller: _____	
Date Started: <u>20-Jul-02</u>	Date Finished: <u>20-Jul-02</u>	
Location: <u>Wayland, MA</u>	Drilling Method: <u>4.25" ID HSA</u>	
Screen Diam: <u>2"</u>	Length: <u>5'</u>	Slot Size: <u>0.010"</u>
Casing Diam: <u>2"</u>	Length: <u>26'</u>	Type: <u>PVC</u>
Boring Depth: <u>31'</u>	Well Depth: <u>31'</u>	Boring Diam.: <u>8"</u>
Surface Elev.: <u>134.8'</u>	MP: <u>TOC</u>	Depth to GW: <u>17.63'</u>
	MP Elev.: <u>134.59'</u>	



Notes:

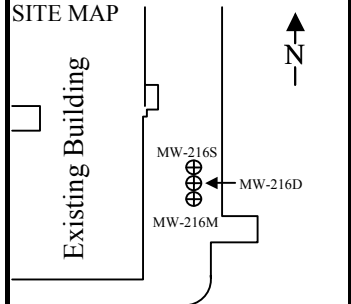
Depth	Well Log	Stratigraphy	Blowcounts per 6 inches	Recovery	Split Spoon Description/Soil Classification	Sample # & Depth	PID Conc. (ppm) spoon/HS	Lab Sample # & Analyses
3								
6								
9								
12								
15								
18								
21								
24								
27								
30								
33					Bottom of Boring at 31' bgs.			
36								
39					<b>Well Construction Details:</b>			
42					Protective Flushmount Roadbox			
45					0-1' Concrete Surface Seal			
48					1'-15' Native Material			
51					15'-24' Portland Cement & Bentonite Slurry Grout			
54					24'-25' Bentonite Chip Seal			
57					25'-31' #1 Silica Sand Filter Pack			
60					26'-31' 0.010" Slotted PVC Well Screen			
63					31' Bottom of Borehole			
66								
69								
72								
75								

**Key to Well Construction**

	Sandpack		Well Screen		Grout
	Bentonite Seal		Cement		Native Fill

# DRILLING LOG for Well #: MW-216D

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



Project: Raytheon-Wayland	Project Number: 143.69	
Client: Raytheon	Logged by: Viktoria Zoltay	
Drilling Co: Drillex	Driller:	
Date Started: 20-Jul-02	Date Finished: 20-Jul-02	
Location: Wayland, MA	Drilling Method: 4.25" ID HSA	
Screen Diam: 2"	Length: 5'	Slot Size: 0.010"
Casing Diam: 2"	Length: 52'	Type: PVC
Boring Depth: 57'	Well Depth: 57'	Boring Diam.: 8"
Surface Elev.: 134.8'	MP: TOC	Depth to GW: 17.84'
	MP Elev.: 134.59'	

Notes: DTW measured on 20-Sep-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
3								
6								
9								
12								
15					<b>Well Construction Details:</b>			
18					Protective Flushmount Roadbox			
21					0-1' Concrete Surface Seal			
24					1'-15' Native Material			
27					15'-50' Portland Cement & Bentonite Slurry Grout			
30					50'-51' Bentonite Chip Seal			
33					51'-57' #1 Silica Sand Filter Pack			
36					52'-57' 0.010" Slotted PVC Well Screen			
39					57' Bottom of Borehole			
42								
45								
48								
51								
54								
57								
60					Bottom of Boring at 57' bgs			
63								
66								
69								
72								
75								

**Key to Well Construction**

	Sandpack		Well Screen		Grout
	Bentonite Seal		Cement		Native Fill

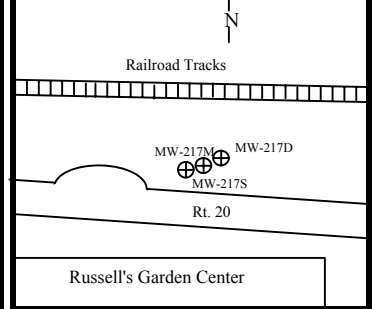
# DRILLING LOG for Well # MW-217S



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

Project:	Raytheon-Wayland	Project Number:	143.70		
Client:	Raytheon	Logged by:	Michael Horesh		
Drilling Co:	Geosearch, Inc.	Driller:	Joe Keenan		
Date Started:	28-Jun-02	Date Finished:	28-Jun-02		
Location:	Wayland, MA	Drilling Method:	4.25" ID HSA		
Screen Diam:	2"	Length:	10'	Slot Size:	0.010"
Casing Diam:	2"	Length:	14'	Type:	PVC
Boring Depth:	25'	Well Depth:	24'	Boring Diam.:	8"
Surface Elev.:	129.5'	MP:	TOC	Depth to GW:	16.05'
		MP Elev.:	130.06'		

## SITE MAP



Notes: DTW measured on 10/10/2002.

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								
23								
24								
25								

**Well Construction Details:**  
 Protective Flushmount Roadbox  
 0-1' Concrete Surface Seal  
 1'-12' Portland Cement and Bentonite Slurry Grout  
 12'-13' Bentonite Chip Seal  
 13'-25' #1 Silica Sand Filter Pack  
 14'-24' 0.010" Slotted PVC Well Screen  
 25' Bottom of Borehole

Bottom of Boring at 25' bgs

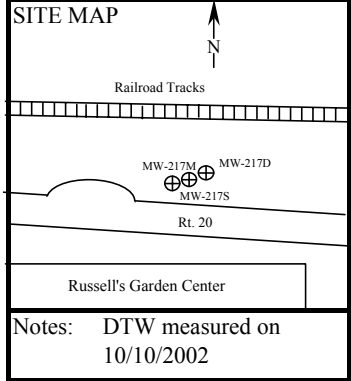
**Key to Well Construction**

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

# DRILLING LOG for Well #: MW-217M

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

Project:	Raytheon-Wayland	Project Number:	143.70		
Client:	Raytheon	Logged by:	Michael Horesh		
Drilling Co.:	Geosearch, Inc.	Driller:	Joe Keenan		
Date Started:	28-Jun-02	Date Finished:	28-Jun-02		
Location:	Wayland, MA	Drilling Method:	Drive and Wash		
Screen Diam:	2"	Length:	5'	Slot Size:	0.010"
Casing Diam:	2"	Length:	39'	Type:	PVC
Boring Depth:	45'	Well Depth:	44'	Boring Diam.:	4"
Surface Elev.:	129.5'	MP:	TOC	Depth to GW:	16.62'
		MP Elev.:	130.44'		



Depth	Well Log	Stratigraphy	Blowcounts per 6 inches	Recovery	Split Spoon Description/Soil Classification	Sample # & Depth	PID Conc. (ppm) spoon/HS	Lab Sample # & Analyses
3					<b>Well Construction Details:</b> Protective Flushmount Roadbox 0-1' Concrete Surface Seal 1'-34' Portland Cement and Bentonite Slurry Grout 34'-37' Bentonite Chip Seal 37'-45' #1 Silica Sand Filter Pack 39'-44': 0.010" Slotted PVC Well Screen 45' Bottom of Boring			
6								
9								
12								
15								
18								
21								
24								
27								
30								
33								
36								
39								
42								
45								
48					Bottom of Boring at 45' bgs.			
51								
54								
57								
60								
63								
66								
69								
72								
75								

Key to Well Construction

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

# DRILLING LOG for Well #: MW-217D



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

Project:	Raytheon-Wayland	Project Number:	143.70
Client:	Raytheon	Logged by:	Michael Horesh
Drilling Co:	Geosearch, Inc.	Driller:	Joe Keenan
Date Started:	27-Jun-02	Date Finished:	27-Jun-02
Location:	Wayland, MA	Drilling Method:	Drive and Wash
Screen Diam: 2"	Length: 5'	Slot Size:	0.010"
Casing Diam: 2"	Length: 59.5'	Type:	PVC
Boring Depth: 65'	Well Depth: 64.5'	Boring Diam.:	4"
Surface Elev.: 129.5'	MP: TOC	Depth to GW:	15.71'
	MP Elev.: 130.20'		

**SITE MAP**

Notes: DTW measured on 10/10/2002

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		SAND	6-8-10-11	20"	Brown/tan medium to coarse SAND, trace Gravel, reddish-brown stratification throughout section, dry.	S-1 8'-10'	0.0	
10								
11								
12								
13								
14		SAND	13-8-9-9	12"	Light brown to orange/brown SAND, little Silt, orange layering, 2 medium sand lenses, poorly sorted, moist.	S-2 13'-15'	0.0	
15								
16								
17								
18								
19		SAND & SILT	8-8-11-11	13"	Orange/brown medium SAND and SILT, trace Gravel, some stratification, well to moderately sorted, moist.	S-3 18'-20'	0.0	
20								
21								
22								
23								
24		SAND & SILT	8-9-7-8	19"	Medium brown SAND and SILT, trace Clays, stratification and orange staining, moist, middle 6" saturated.	S-4 23'-25'	0.0	
25								

Key to Well Construction

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







# DRILLING LOG for Well #: MW-218S

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

Project:	Raytheon-Wayland	Project Number:	143.70		
Client:	Raytheon	Logged by:	Michael Horesh		
Drilling Co:	Geosearch, Inc.	Driller:	Jeremiah Fluck		
Date Started:	2-Jul-02	Date Finished:	2-Jul-02		
Location:	Wayland, MA	Drilling Method:	4.25" ID HSA		
Screen Diam:	2"	Length:	10'	Slot Size:	0.010"
Casing Diam:	2"	Length:	12'	Type:	PVC
Boring Depth:	23'	Well Depth:	22'	Boring Diam.:	8"
Surface Elev.:	129.4'	MP:	TOC	Depth to GW:	16.65'
		MP Elev.:	130.24'		

**SITE MAP**

Notes: DTW measured on 10/10/02

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								
23								
24					Bottom of Boring at 23' bgs.			
25								

**Well Construction Details:**  
 Protective Flushmount Roadbox  
 0-1' Concrete Surface Seal  
 1'-7' Portland Cement and Bentonite Slurry  
 7'-10' Bentonite Chip Seal  
 10'-23' #1 Silica Sand Filter Pack  
 12'-22' 0.010" PVC Well Screen  
 23' Bottom of boring

**Key to Well Construction**

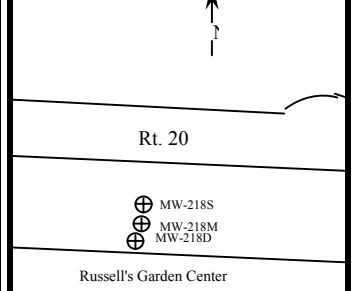
	Sandpack		Well Screen		Grout
	Bentonite Seal		Cement		

# DRILLING LOG for Well #: MW-218M



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

## SITE MAP



Project:	Raytheon-Wayland	Project Number:	143.70		
Client:	Raytheon	Logged by:	Michael Horesh		
Drilling Co:	Geosearch, Inc.	Driller:	Jeremiah Fluck		
Date Started:	2-Jul-02	Date Finished:	2-Jul-02		
Location:	Wayland, MA	Drilling Method:	Drive and Wash		
Screen Diam:	2"	Length:	5'	Slot Size:	0.010"
Casing Diam:	2"	Length:	45'	Type:	PVC
Boring Depth:	51'	Well Depth:	50'	Boring Diam.:	4"
Surface Elev.:	129.4'	MP:	TOC	Depth to GW:	16.74'
		MP Elev.:	130.16'		

Notes: DTW measured on 10/10/02

Depth	Well Log	Stratigraphy	Blowcounts per 6 inches	Recovery	Split Spoon Description/Soil Classification	Sample # & Depth	PID Conc. (ppm) spoon/HS	Lab Sample # & Analyses
3								
6								
9								
12								
15								
18								
21								
24								
27								
30								
33								
36								
39								
42								
45								
48								
51								
54								
57								
60								
63								
66								
69								
72								
75								

**Well Construction Details:**  
 Protective Flushmount Roadbox  
 0-1' Concrete Surface Seal  
 1'-40' Portland Cement and Bentonite Slurry Grout  
 40'-43' Bentonite Chip Seal  
 43'-51' #1 Silica Sand Filter Pack  
 45'-50' 0.010" PVC Well Screen  
 51' Bottom of Boring

Bottom of Boring at 51' bgs.

Key to Well Construction

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

# DRILLING LOG for Well #: MW-218D

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

Project:	Raytheon-Wayland	Project Number:	143.70		
Client:	Raytheon	Logged by:	Michael Horesh		
Drilling Co:	Geosearch, Inc.	Driller:	Jeremiah Fluck		
Date Started:	1-Jul-02	Date Finished:	1-Jul-02		
Location:	Wayland, MA	Drilling Method:	Drive and Wash		
Screen Diam:	2"	Length:	5'	Slot Size:	0.010"
Casing Diam:	2"	Length:	81'	Type:	PVC
Boring Depth:	90' *	Well Depth:	86'	Boring Diam.:	4"
Surface Elev.:	129.4'	MP:	TOC	Depth to GW:	14.77'
	MP Elev.:	130.02'			

**SITE MAP**

Notes: DTW measured on  
#####

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		SAND	4-4-6-11	16"	Brown/tan medium SAND, little Gravel, little Cobbles, larger Cobbles at bottom of section, dry.	S-1 8'-10'	0.0	
10								
11								
12								
13								
14			12-15-17-18	0"	NR	S-2 13'-15'		
15								
16								
17								
18								
19		SAND	17-16-13-13	11"	Medium brown coarse SAND, Gravel (top 4"), well sorted, saturated.	S-3 18'-20'	0.0	
20								
21								
22								
23								
24		SAND & SILT	10-10-12-14	14"	Medium brown to orange/brown SAND and SILT with orange staining, some Clay, trace Cobbles, saturated.	S-4 23'-25'	0.0	
25								

NR = No Recovery

\* Bottom 4' of borehole collapsed. Well set at 86' bgs.

Key to Well Construction

	Sandpack		Well Screen		Grout
	Bentonite Seal		Cement		





# DRILLING LOG for Well #: MW-218D



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

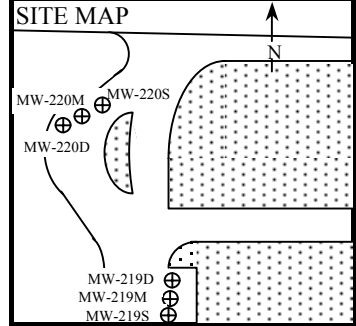
Depth	Well Log	Stratigraphy	Blowcounts per 6 inches	Recovery	Split Spoon Description/Soil Classification	Sample # & Depth	PID Conc. (ppm) spoon/HS	Lab Sample # & Analyses
86								
87								
88								
89		SAND	11-20-17-30	17"	Top 7": Gray/brown medium SAND; Bottom 6": Gravel and Cobbles, little Silt, poorly sorted, saturated.	S-17 88'-90'	0.0	
90					Bottom of Boring at 90' bgs*.			
91								
92								
93					<b>Well Construction Details:</b>			
94					Protective Flushmount Roadbox			
95					0-1' Concrete Surface Seal			
96					1'-76' Portland Cement & Bentonite Slurry Grout			
97					76'-79' Bentonite Chip Seal			
98					79'-87' #1 Silica Sand Filter Pack			
99					81'-86' 0.010" PVC Well Screen			
100					90' Bottom of Boring*			
101								
102								
103								
104								
105								
106								
107								
108								
109								
110								
111								
112								
113								
114								
115								

\* Bottom 4' of borehole collapsed. Well set at 86' bgs.

# DRILLING LOG for Well #: MW-219S

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






Project:	Raytheon-Wayland	Project Number:	143.70		
Client:	Raytheon	Logged by:	Michael Horesh		
Drilling Co:	Geosearch, Inc.	Driller:	Dave Crawford		
Date Started:	15-Aug-02	Date Finished:	15-Aug-02		
Location:	Wayland, MA	Drilling Method:	4.25" ID HSA		
Screen Diam:	2"	Length:	10'	Slot Size:	0.010"
Casing Diam:	2"	Length:	5'	Type:	PVC
Boring Depth:	15'	Well Depth:	15'	Boring Diam.:	8"
Surface Elev.:	118.4'	MP:	TOC	Depth to GW:	5.58'
		MP Elev.:	118.12'		



Notes: DTW measured on 10/10/02

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					Bottom of Boring at 15' bgs			
17								
18					<b>Well Construction Details</b>			
19					Protective Flushmount Roadbox			
20					0-1' Concrete Surface Seal			
21					1'-3' Native Backfill			
22					3'-4' Bentonite Chip Seal			
23					4'-15' #1 Silica Sand Filter Pack			
24					5'-15' 0.010" Slotted PVC Well Screen			
25					15' Bottom of Borehole			

Key to Well Construction

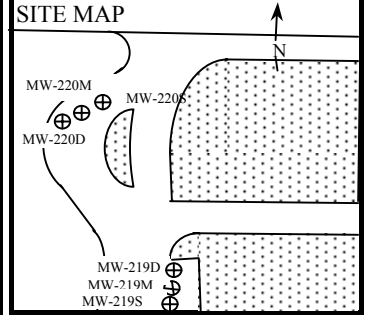
-  Sandpack
-  Well Screen
-  Bentonite Seal
-  Cement
-  Native Backfill



# DRILLING LOG for Well #: MW-219M

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

Project:	Raytheon-Wayland	Project Number:	143.70		
Client:	Raytheon	Logged by:	Michael Horesh		
Drilling Co:	Geosearch, Inc.	Driller:	Dave Crawford		
Date Started:	16-Aug-02	Date Finished:	16-Aug-02		
Location:	Wayland, MA	Drilling Method:	4.25" ID HSA		
Screen Diam:	2"	Length:	5'	Slot Size:	0.010"
Casing Diam:	2"	Length:	60'	Type:	PVC
Boring Depth:	65'	Well Depth:	65'	Boring Diam.:	8"
Surface Elev.:	118.4'	MP:	TOC	Depth to GW:	5.01'
		MP Elev.:	118.09'		



Notes: DTW measured on 10/10/02

Depth	Well Log	Stratigraphy	Blowcounts per 6 inches	Recovery	Split Spoon Description/Soil Classification	Sample # & Depth	PID Conc. (ppm) spoon/HS	Lab Sample # & Analyses
3								
6								
9					<b>Well Construction Details</b>			
12					Protective Flushmount Roadbox			
15					0-1' Concrete Surface Seal			
18					1'-16' Native Material			
21					16'-55' Portland Cement & Bentonite Slurry Grout			
24					55'-57' Bentonite Chip Seal			
27					57'-65' #1 Silica Sand Filter Pack			
30					60'-65' 0.010" Slotted PVC Well Screen			
33								
36								
39								
42								
45								
48								
51								
54								
57								
60								
63								
66					Bottom of Boring at 65'			
69								
72								
75								

**Key to Well Construction**

	Sandpack		Well Screen		Grout
	Bentonite Seal		Cement		Native Fill

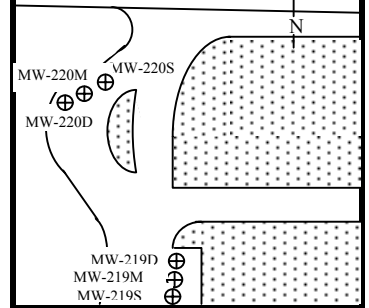
# DRILLING LOG for Well # MW-219D



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

Project:	Raytheon-Wayland	Project Number:	143.70		
Client:	Raytheon	Logged by:	Michael Horesh		
Drilling Co:	Geosearch, Inc.	Driller:	Dave Crawford		
Date Started:	14-Aug-02	Date Finished:	15-Aug-02		
Location:	Wayland, MA	Drilling Method:	Drive and Wash		
Screen Diam:	2"	Length:	5'	Slot Size:	0.010"
Casing Diam:	2"	Length:	71'	Type:	PVC
Boring Depth:	79'	Well Depth:	76'	Boring Diam.:	4"
Surface Elev.:	118.4'	MP:	TOC	Depth to GW:	4.67'
	MP Elev.:	117.95'			

## SITE MAP



Notes: DTW measured on 10/10/02

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		SILT	7-7-8-7	14"	Orange/brown well sorted SILT w/ orange horizontal staining, bottom 4" gray Silt w/ some dark gray Clay interbeds.	S-1 10'-12'	0.0	
12								
13								
14								
15								
16		SILT	5-4-4-5	13"	Gray well sorted SILT, little Clay, dark gray Clay interbeds (1/4").	S-2 15'-17'	0.0	
17								
18								
19								
20								
21		SILT	4-4-4-3	11"	Gray well sorted SILT w/ some dark gray Clay interbeds.	S-3 20'-22'	0.0	
22								
23								
24								
25								

### Key to Well Construction

	Sandpack		Well Screen		Grout
	Bentonite Seal		Cement		Native Backfill

# DRILLING LOG for Well #: MW-219D



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		SILT	6-7-6-7	16"	Gray well sorted SILT, some fine Sand, dark gray Clay interbeds (1/4" to 1/2").	S-4 25'-27'	0.0	
27								
28								
29								
30								
31		SAND	3-3-3-3	10"	Gray well sorted fine SAND, some Silt, minor bedding of dark minerals.	S-5 30'-32'	0.0	
32								
33								
34								
35								
36	SAND	4-5-5-7	11"	Gray well sorted fine to medium SAND, little Silt.	S-6 35'-37'	0.0		
37								
38								
39								
40								
41	SAND & SILT	7-4-7-8	5"	Gray well sorted fine SAND and SILT.	S-7 40'-42'	0.0		
42								
43								
44								
45								
46	SAND	5-7-7-8	14"	Gray well sorted fine SAND, some silt, dark gray Clay interbeds (2").	S-8 45'-47'	0.0		
47								
48								
49								
50								
51	SILT	10-5-5-4	8"	Gray well sorted SILT and dark gray Clay.	S-9 50'-52'	0.0		
52								
53								
54								
55								

# DRILLING LOG for Well #: MW-219D

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	Sample # & Analyses
56		SAND & SILT	7-8-9-7	16"	Gray well sorted fine SAND and SILT, little Clay, dark gray Clay interbeds (1/4").	S-10 55'-57'	0.0	
57								
58								
59								
60								
61		SILT	5-7-7-4	15"	Gray SILT, some to little Clay, dark gray Clay interbeds (1/4" to 1/2") some fine sand, well sorted.	S-11 60'-62'	0.0	
62								
63								
64								
65								
66		SILT	7-5-5-4	18"	Medium to dark gray SILT, some dark gray clay interbeds up to 1/3" thick.	S-12 65'-67'	0.0	
67								
68								
69								
70								
71		SILT	12-10-8-12	23"	Dark brown/gray SILT, some gray Clay, dark brown/gray horizontal bedding throughout interval.	S-13 70'-72'	0.0	
72								
73								
74								
75								
76		SILT	7-6-20-35	14"	Gray-gray/brown SILT, little to some Clay and Gravel at bottom 4" of interval.	S-14 75'-77'	0.0	
77								
78		TILL	25-35-40-100*	12"	TILL (unsorted Sand and Gravel)	S-15 77'-79'	0.0	
79								
80					Spoon Refusal at 79' bgs			
81					* Bottom 3' of borehole collapsed prior to well installation.			
82								
83								
84								
85					Well Construction Details on Following Page			

\* Spoon Refusal after 100 blowcounts

**DRILLING LOG for Well #** MW-219D



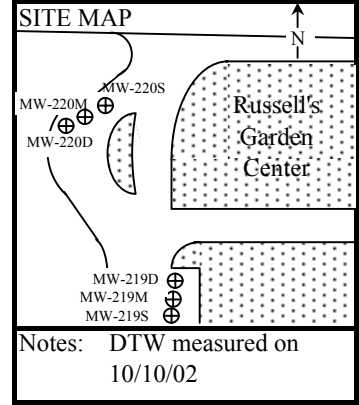
ERM  
399 Boylston Street, 6th Floor  
Boston, MA 02116

Depth	Well Log	Stratigraphy	Blowcounts per 6 inches	Recovery	Split Spoon Description/Soil Classification	Sample # & Depth	PID Conc. (ppm) spoon/HS	Lab Sample # & Analyses
					<p><b>Well Construction Details</b></p> <p>Protective Flushmount Roadbox</p> <p>0-1' Concrete Surface Seal</p> <p>1'-10' Native Backfill</p> <p>10'-67' Portland Cement and Bentonite Slurry Grout</p> <p>67'-69' Bentonite Chip Seal</p> <p>69'-76' #1 Silica Sand Filter Pack</p> <p>71'-76' 0.010" Slotted PVC Well Screen</p> <p>79' Bottom of Borehole</p>			

# DRILLING LOG for Well #: MW-220S

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

Project:	Raytheon-Wayland	Project Number:	143.70		
Client:	Raytheon	Logged by:	Michael Horesh		
Drilling Co:	Geosearch, Inc.	Driller:	Dave Crawford		
Date Started:	15-Aug-02	Date Finished:	15-Aug-02		
Location:	Wayland, MA	Drilling Method:	4.25" ID HSA		
Screen Diam:	2"	Length:	10'	Slot Size:	0.010"
Casing Diam:	2"	Length:	5'	Type:	PVC
Boring Depth:	15'	Well Depth:	15'	Boring Diam.:	8"
Surface Elev.:	117.5'	MP:	TOC	Depth to GW:	5.42'
		MP Elev.:	117.09'		



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					Bottom of Boring at 15' bgs			
17					<b>Well Construction Details</b>			
18					Protective Flushmount Roadbox			
19					0-1' Concrete Surface Seal			
20					1'-1.5' Native Backfill			
21					1.5'-3.5' Bentonite Chip Seal			
22					3.5'-15' #1 Silica Sand Filter Pack			
23					5'-15' 0.010" Slotted PVC Well Screen			
24								
25					15' Bottom of Boring			

Key to Well Construction

- Sandpack
- Well Screen
- Bentonite Seal
- Cement
- Native Backfill

# DRILLING LOG for Well #: MW-220M

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

Project:	Raytheon-Wayland	Project Number:	143.70		
Client:	Raytheon	Logged by:	Michael Horesh		
Drilling Co:	Geosearch, Inc.	Driller:	Dave Crawford		
Date Started:	14-Aug-02	Date Finished:	14-Aug-02		
Location:	Wayland, MA	Drilling Method:	Drive and Wash		
Screen Diam:	2"	Length:	5'	Slot Size:	0.010"
Casing Diam:	2"	Length:	60'	Type:	PVC
Boring Depth:	65'	Well Depth:	65'	Boring Diam.:	4"
Surface Elev.:	117.5'	MP:	TOC	Depth to GW:	5.27'
		MP Elev.:	117.29'		

**SITE MAP**

Notes: DTW measured on 10/10/02

Depth	Well Log	Stratigraphy	Blowcounts per 6 inches	Recovery	Split Spoon Description/Soil Classification	Sample # & Depth	PID Conc. (ppm) spoon/HS	Lab Sample # & Analyses
3								
6								
9								
12								
15								
18					<b>Well Construction Details</b>			
21					Protective Flushmount Roadbox			
24					0-1' Concrete Surface Seal			
27					1'-15' Native Backfill			
30					15'-56' Portland Cement and Bentonite Slurry Grout			
33					56'-58' Bentonite Chip Seal			
36					58'-65' #1 Silica Sand Filter Pack			
39					60'-65' 0.010" Slotted PVC Well Screen			
42					65' Bottom of Borehole			
45								
48								
51								
54								
57								
60								
63								
66								
69					Bottom of Borehole at 65' bgs.			
72								
75								

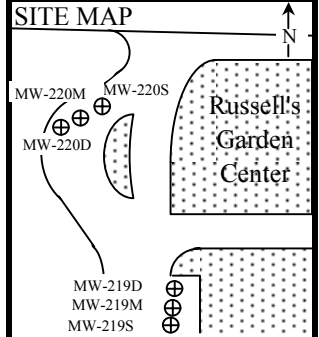
**Key to Well Construction**

	Sandpack		Well Screen		Grout
	Bentonite Seal		Cement		Native Fill

# DRILLING LOG for Well # MW-220D

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

Project:	Raytheon-Wayland	Project Number:	143.70		
Client:	Raytheon	Logged by:	Michael Horesh		
Drilling Co:	Geosearch, Inc.	Driller:	Dave Crawford		
Date Started:	12-Aug-02	Date Finished:	13-Aug-02		
Location:	Wayland, MA	Drilling Method:	Drive and Wash		
Screen Diam:	2"	Length:	5'	Slot Size:	0.010"
Casing Diam:	2"	Length:	96'	Type:	PVC
Boring Depth:	107'	Well Depth:	101'	Boring Diam.:	4"
Surface Elev.:	117.5'	MP:	TOC	Depth to GW:	5.19'
		MP Elev.:	116.99'		



Notes: DTW measured on 10/10/02

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		SAND & GRAVEL	20-17-12-15	14"	Coarse SAND & GRAVEL, well sorted, little Pebbles, trace Cobbles; bottom 7": brown Clay, little Silt.	S-1 10'-12'	0.0	
12								
13								
14								
15								
16		SILT & CLAY	7-6-4-4	22"	Gray, well sorted SILT & CLAY, medium Sand lens, thin (1/4") thin dark gray Clay interbeds throughout.	S-2 15'-17'	0.0	
17								
18								
19								
20								
21		SILT & CLAY	3-3-5-5	12"	Gray/brown SILT and CLAY, well sorted, two 1/4" dark gray Clay interbeds.	S-3 20'-22'	0.0	
22								
23								
24								
25								

Key to Well Construction

	Sandpack		Well Screen		Grout
	Bentonite Seal		Cement		Native Backfill



**DRILLING LOG for Well #:** MW-220D



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		SILT & CLAY	7-5-4-9	12"	Gray SILT and CLAY, well sorted, trace Cobbles at base of interval.	S-4 25'-27'	0.0	
27								
28								
29								
30								
31		SAND & SILT	7-7-7-8	14"	Brown-gray/brown fine SAND & SILT, well sorted, orange horizontal staining at bottom of interval, trace Silty Clay.	S-5 30'-32'	0.0	
32								
33								
34								
35								
36	SAND	5-6-9-11	11"	Medium Brown medium to coarse SAND, well sorted, some Silt, Sand and Gravel lens at 0.5'.	S-6 35'-37'	0.0		
37								
38								
39								
40								
41	SAND	6-7-5-9	11"	Gray medium SAND, well sorted, some Silt, some brown horizontal bedding, trace Gravel.	S-7 40'-42'	0.0		
42								
43								
44								
45								
46	SAND	4-7-9-10	11"	Gray to gray/brown fine SAND, well sorted, some Silt.	S-8 45'-47'	0.0		
47								
48								
49								
50								
51	SAND & SILT	3-3-4-4	13"	Gray well sorted fine SAND and SILT, trace Clay, some horizontal bedding of dark minerals.	S-9 50'-52'	0.0		
52								
53								
54								
55								

# DRILLING LOG for Well #: MW-220D



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
56		SAND	12-9-8-8	13"	Gray-gray/brown coarse SAND, some Gravel, some Silt, little Clay, well sorted.	S-10 55'-57'	0.0	
57								
58								
59								
60								
61		SAND	7-7-6-6	13"	Gray well sorted medium to coarse SAND, some fine Sand, little Silt, little Clay, minor bedding of dark minerals.	S-11 60'-62'	0.0	
62								
63								
64								
65								
66		SILT & CLAY	7-8-11-21	13"	Gray well sorted SILT and CLAY.	S-12 65'-67'	0.0	
67								
68								
69								
70								
71	SILT	7-4-7-8	24"	Gray well sorted SILT, few interbeds of dark gray Clay, minor horizontal bedding of sediments.	S-13 70'-72'	0.0		
72								
73								
74								
75								
76	SILT & CLAY	11-5-5-5	24"	Gray SILT and CLAY, some medium Sand, trace fine Sand.	S-14 75'-77'	0.0		
77								
78								
79								
80								
81	CLAY	5-6-6-6	24"	Gray CLAY, some Silt, some medium Sand.	S-15 80'-82'	0.0		
82								
83								
84								
85								



**DRILLING LOG for Well #** MW-220D



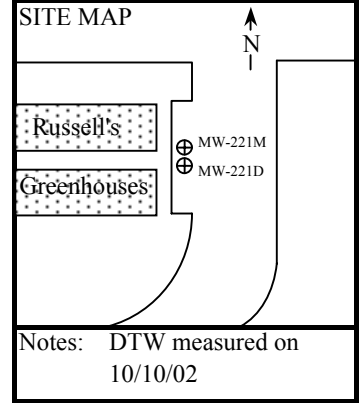
ERM  
399 Boylston Street, 6th Floor  
Boston, MA 02116

Depth	Well Log	Stratigraphy	Blowcounts per 6 inches	Recovery	Split Spoon Description/Soil Classification	Sample # & Depth	PID Conc. (ppm) spoon/HS	Lab Sample # & Analyses
					<p><b>Well Construction Details</b></p> <p>Protective Flushmount Roadbox</p> <p>0-1' Concrete Surface Seal</p> <p>1'-15' Native Backfill</p> <p>15'-92' Portland Cement and Bentonite Slurry Grout</p> <p>92'-94' Bentonite Chip Seal</p> <p>94'-101' #1 Silica Sand Filter Pack</p> <p>96'-101' 0.010" Slotted PVC Well Screen</p> <p>107' Bottom of Borehole</p>			

# DRILLING LOG for Well #: MW-221M

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

Project: Raytheon-Wayland	Project Number: 143.70	
Client: Raytheon	Logged by: Michael Horesh	
Drilling Co: Geosearch, Inc.	Driller: Joe Keenan	
Date Started: 12-Sep-02	Date Finished: 12-Sep-02	
Location: Wayland, MA	Drilling Method: 4.25" ID HSA	
Screen Diam: 2"	Length: 5'	Slot Size: 0.010"
Casing Diam: 2"	Length: 16'	Type: PVC
Boring Depth: 21'	Well Depth: 21'	Boring Diam.: 8"
Surface Elev.: 119.5'	MP: TOC	Depth to GW: 5.41'
	MP Elev.: 120.07'	



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					<p><b>Well Construction Details:</b></p> <p>Protective Flushmount Roadbox</p> <p>0'-1' Concrete Surface Seal</p> <p>1'-6' Native Material</p> <p>6'-11' Portland Cement &amp; Bentonite Slurry Grout</p> <p>11'-14' Bentonite Chip Seal</p> <p>14'-21' #1 Silica Sand Filter Pack</p> <p>16'-21' 0.010" Slotted PVC Well Screen</p>			
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22					Bottom of Boring at 21' bgs.			
23								
24								
25								

Key to Well Construction

	Sandpack		Well Screen		Grout
	Bentonite Seal		Cement		Native Backfill

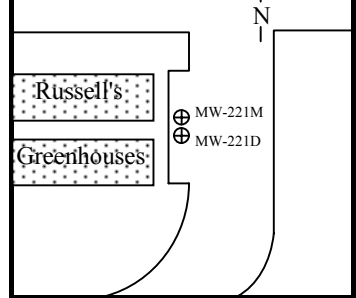
# DRILLING LOG for Well #: MW-221D



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

Project:	Raytheon-Wayland	Project Number:	143.70		
Client:	Raytheon	Logged by:	Michael Horesh		
Drilling Co:	Geosearch, Inc.	Driller:	Joe Keenan		
Date Started:	11-Sep-02	Date Finished:	12-Sep-02		
Location:	Wayland, MA	Drilling Method:	Drive and Wash		
Screen Diam:	2"	Length:	5'	Slot Size:	0.010"
Casing Diam:	2"	Length:	35'	Type:	PVC
Boring Depth:	44'	Well Depth:	40'	Boring Diam.:	4"
Surface Elev.:	119.5'	MP:	TOC	Depth to GW:	5.68'
		MP Elev.:	120.22'		

## SITE MAP



Notes: DTW measured on 10/10/02

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		SAND	6-5-4-4	17"	Orange/yellow to tan/brown, well sorted, fine to medium SAND, orange staining at top half of interval, little Silt, some horizontal bedding.	S-1 10'-12'	0.0	
12								
13								
14								
15								
16		SAND	2-2-3-3	14"	Orange/brown to tan/brown, well sorted, coarse to medium SAND, some horizontal layering, little Silt.	S-2 15'-17'	0.0	
17								
18								
19								
20								
21		SAND	3-4-3-3	24"	0-1': Orange/brown, well sorted fine SAND; 1'-2': Gray Silt, some Clay, multiple dark gray Clay interbeds (1/4").	S-3 20'-22'	0.0	
22								
23								
24								
25		SILT	4-5-5-4	15"	Gray, well sorted SILT, little dark Clay (1/4" interbeds).	S-4	0.0	

### Key to Well Construction

	Sandpack		Well Screen		Grout
	Bentonite Seal		Cement		Native Backfill

# DRILLING LOG for Well #: MW-221D



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	[Well Log Diagram: Hatched pattern]					24'-26'		
27								
28								
29								
30		SILT	2-4-2-3	18"	Brown/gray, well sorted SILT, trace fine Sand, some Clay.	S-5 29'-31'	0.0	
31								
32								
33								
34								
35		SILT	5-7-7-12	12"	<b>Top 6"</b> : Gray, well sorted SILT, little Clay; <b>Bottom 6"</b> : gray Silt, little Clay, some poorly sorted Cobbles and Gravel (bottom 6").	S-6 34'-36'	0.0	
36								
37								
38								
39								
40		TILL	29-50-88-49	7"	Very dark gray Cobbles, some brown Silty matrix, little Gravel, poorly sorted.	S-7 39'-41'	0.0	
41								
42		TILL	30-41-65-70	21"	Brown-dark brown, poorly sorted Cobbles and Gravel, little coarse Sand, little Silt.	S-8 41'-43'	0.0	
43								
44								
45		TILL	120*	1"	Brown, poorly sorted Cobbles and Gravel, little to some Silt.	S-9 44'-46'	0.0	
46								
47					Spoon refusal at 44' bgs			
48								
49								
50								
51								
52								
53								
54								
55					Well Construction Details on Following Page			

\* 120 blowcounts accounted for 1" penetration

# DRILLING LOG for Well #:

MW-221D



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

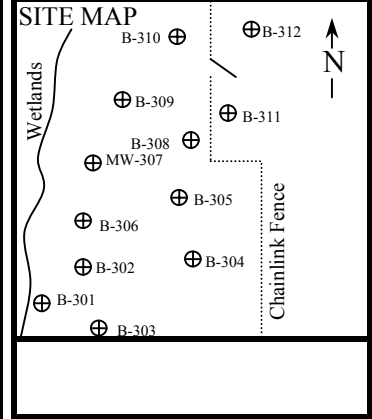
Depth	Well Log	Stratigraphy	Blowcounts per 6 inches	Recovery	Split Spoon Description/Soil Classification	Sample # & Depth	PID Conc. (ppm) spoon/HS	Lab Sample # & Analyses
					<p><b>Well Construction Details</b></p> <p>Protective Flushmount Roadbox</p> <p>0-1' Concrete Surface Seal</p> <p>1'-10' Native Material</p> <p>10'-30' Portland Cement &amp; Bentonite Slurry Grout</p> <p>30'-33' Bentonite Chip Seal</p> <p>33'-44' #1 Silica Sand Filter Pack</p> <p>35'-40' 0.010" Slotted PVC Well Screen</p> <p>44' Bottom of Borehole</p>			



# BORING LOG for Well #: MW-307

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

Project:	Raytheon-Wayland	Project Number:	143.72		
Client:	Raytheon	Logged by:	Michael Horesh		
Drilling Co:	Geosearch, Inc.	Driller:	Rodney		
Date Started:	19-Aug-02	Date Finished:	19-Aug-02		
Location:	Wayland, MA	Drilling Method:	GeoProbe		
Screen Diam:	1"	Length:	5'	Slot Size:	NA
Casing Diam:	1"	Length:	6'	Type:	NA
Boring Depth:	10'	Well Depth:	11'	Boring Diam.:	4"
Surface Elev.:	121.5'	MP:	TOC	Depth to GW:	11.39'
		MP Elev.:	124.86'		



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		SAND		36"	Tan to light brown medium SAND, some Gravel, trace Cobbles, dry.	S-1 0'-5'	0.0	
3								
4								
5								
6		SAND		52"	Gray/brown fine SAND, black and orange horizontal Sand intervals, wet.	S-2 5'-10'	0.0	
7								
8								
9								
10								
11								
12					Bottom of Boring at 11' bgs.			
13								
14					<b>Well Construction Details:</b>			
15					Protective Steel Standpipe			
16					0'-1' Concrete Surface Seal			
17					1'-3' Native Backfill			
18					3'-4' Bentonite Chip Seal			
19					4'-11' #1 Silica Sand Filter Pack			
20					6'-11' 0.010" Slotted PVC Well Screen			
21					11' Bottom of Borehole			
22								
23								
24								
25								

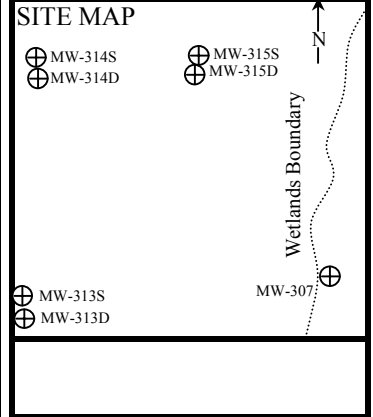
**Key to Well Construction**

	Sandpack		Well Screen		Grout
	Bentonite Seal		Cement		Native Fill

# DRILLING LOG for Well # MW-313S

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

Project:	Raytheon-Wayland	Project Number:	143.72		
Client:	Raytheon	Logged by:	Michael Horesh		
Drilling Co:	Geosearch, Inc.	Driller:	Rodney		
Date Started:	26-Aug-02	Date Finished:	26-Aug-02		
Location:	Wayland, MA	Drilling Method:	Hand Auger		
Screen Diam:	1"	Length:	5'	Slot Size:	0.010"
Casing Diam:	1"	Length:	3'	Type:	PVC
Boring Depth:	8'	Well Depth:	8'	Boring Diam.:	2"
Surface Elev.:	111.1'	MP:	TOC	Depth to GW:	4.18'
		MP Elev.:	114.61'		



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					Bottom of Boring at 8' bgs.			
10								
11					<b>Well Construction Details</b>			
12					Steel Protective Standpipe			
13					0-0.5' Concrete Surface Seal			
14					0.5'-1' Native Backfill			
15					1'-2' Bentonite Chip Seal			
16					2'-8' #1 Silica Sand Filter Pack			
17					3'-8' 0.010" Slotted PVC Well Screen			
18					8' Bottom of Borehole			
19								
20								
21								
22								
23								
24								
25								

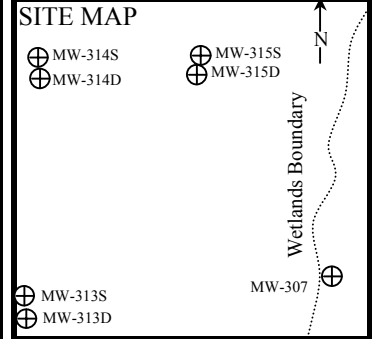
**Key to Well Construction**

Sandpack	Well Screen	Grout
Bentonite Seal	Cement	Native Fill

# DRILLING LOG for Well # MW-313D

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

Project:	Raytheon-Wayland	Project Number:	143.72		
Client:	Raytheon	Logged by:	Michael Horesh		
Drilling Co:	Geosearch, Inc.	Driller:	Pat Hines		
Date Started:	28-Aug-02	Date Finished:	28-Aug-02		
Location:	Wayland, MA	Drilling Method:	Drive and Wash		
Screen Diam:	1"	Length:	5'	Slot Size:	0.010"
Casing Diam:	1"	Length:	25'	Type:	PVC
Boring Depth:	32'	Well Depth:	30'	Boring Diam.:	4"
Surface Elev.:	111.1'	MP:	TOC	Depth to GW:	6.31'
		MP Elev.:	114.37'		



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		SAND	3-4-4-5	24"	0-1.2': Dark brown, well sorted Silt and Clay, low density. 1.2'-2.0': Dark gray/brown medium to coarse SAND, moderately sorted, some fine Sand.	S-1 5'-7'	0.0	
7								
8								
9								
10								
11		SILT	2-3-3-3	13"	Medim gray well sorted SILT, thin (1/8") Clay interbed, trace Gravel, trace fine Sand.	S-2 10'-12'	0.0	
12								
13								
14								
15								
16		SILT	4-5-6-6	13"	Dark medium gray well sorted SILT, little to trace Clay.	S-3 15'-17'	0.0	
17								
18								
19								
20								
21		SILT	5-5-5-4	12"	Dark medium gray well sorted SILT, little Clay.	S-4 20'-22'	0.0	
22								
23								
24								
25								

Key to Well Construction

	Sandpack		Well Screen		Grout
	Bentonite Seal		Cement		Native Fill

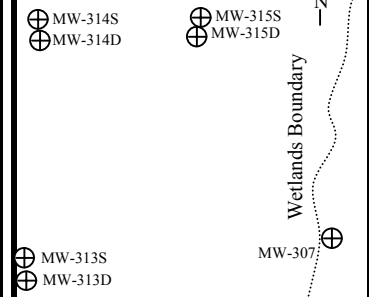
# DRILLING LOG for Well # MW-314S



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

Project:	Raytheon-Wayland	Project Number:	143.72		
Client:	Raytheon	Logged by:	Michael Horesh		
Drilling Co:	Geosearch, Inc.	Driller:	Rodney		
Date Started:	26-Aug-02	Date Finished:	26-Aug-02		
Location:	Wayland, MA	Drilling Method:	Hand Auger		
Screen Diam:	1"	Length:	5'	Slot Size:	0.010"
Casing Diam:	1"	Length:	3'	Type:	PVC
Boring Depth:	8'	Well Depth:	8'	Boring Diam.:	2"
Surface Elev.:	110.8'	MP:	TOC	Depth to GW:	4.18'
		MP Elev.:	114.10'		

## SITE MAP



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					Bottom of Boring at 8' bgs.			
10								
11					<b>Well Construction Details</b>			
12					Steel Protective Standpipe			
13					0-0.5' Concrete Surface Seal			
14					0.5'-1' Native Backfill			
15					1'-2' Bentonite Chip Seal			
16					2'-8' #1 Silica Sand Filter Pack			
17					3'-8' 0.010" Slotted PVC Well Screen			
18					8' Bottom of Borehole			
19								
20								
21								
22								
23								
24								
25								

**Key to Well Construction**

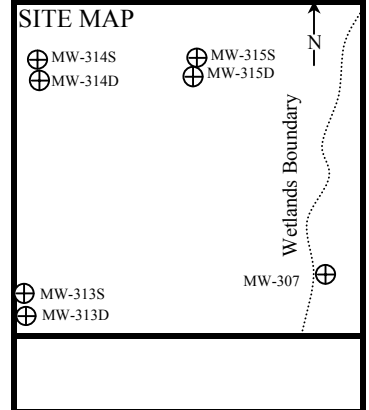
	Sandpack		Well Screen		Grout
	Bentonite Seal		Cement		Native Fill

# DRILLING LOG for Well # MW-314D



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

Project:	Raytheon-Wayland	Project Number:	143.72
Client:	Raytheon	Logged by:	Michael Horesh
Drilling Co:	Geosearch, Inc.	Driller:	Pat Hines
Date Started:	29-Aug-02	Date Finished:	30-Aug-02
Location:	Wayland, MA	Drilling Method:	Drive and Wash
Screen Diam:	1"	Length:	5'
		Slot Size:	0.010"
Casing Diam:	1"	Length:	25'
		Type:	PVC
Boring Depth:	32'	Well Depth:	30'
		Boring Diam.:	4"
Surface Elev.:	110.8'	MP:	TOC
		Depth to GW:	4.91'
		MP Elev.:	114.09'



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		SILT	WOR	14"	Dark brown well sorted SILT, trace Clay, low density interval, black staining at top 3".	S-1 5'-7'	0.0	
7								
8								
9								
10								
11		SILT	8-10-12-11	14"	Medium gray, well sorted SILT, trace Clay, some black staining throughout section, trace Gravel at top of interval.	S-2 10'-12'	0.0	
12								
13								
14								
15								
16		SILT	6-8-8-7	12"	Gray, well sorted SILT, little fine Sand, trace Clay.	S-3 15'-17'	0.0	
17								
18								
19								
20								
21		SILT	7-7-10-8	20"	Gray, well sorted SILT, some Clay, minor horizontal bedding.	S-4 20'-22'	0.0	
22								
23								
24								
25								

WOR=Weight of Rod

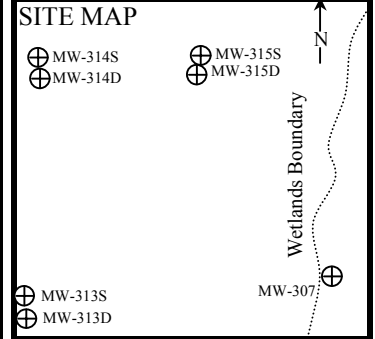
Key to Well Construction

	Sandpack		Well Screen		Grout
	Bentonite Seal		Cement		Native Fill

# DRILLING LOG for Well # MW-315S

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

Project:	Raytheon-Wayland	Project Number:	143.72		
Client:	Raytheon	Logged by:	Michael Horesh		
Drilling Co:	Geosearch, Inc.	Driller:	Rodney		
Date Started:	26-Aug-02	Date Finished:	26-Aug-02		
Location:	Wayland, MA	Drilling Method:	Hand Auger		
Screen Diam:	1"	Length:	5'	Slot Size:	0.010"
Casing Diam:	1"	Length:	3'	Type:	PVC
Boring Depth:	8'	Well Depth:	8'	Boring Diam.:	2"
Surface Elev.:	110.7'	MP:	TOC	Depth to GW:	4.09'
		MP Elev.:	114.07'		



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					Bottom of Boring at 8' bgs.			
10								
11					<b>Well Construction Details</b>			
12					Steel Protective Standpipe			
13					0-0.5' Concrete Surface Seal			
14					0.5'-1' Native Backfill			
15					1'-2' Bentonite Chip Seal			
16					2'-8' #1 Silica Sand Filter Pack			
17					3'-8' 0.010" Slotted PVC Well Screen			
18					8' Bottom of Borehole			
19								
20								
21								
22								
23								
24								
25								

**Key to Well Construction**

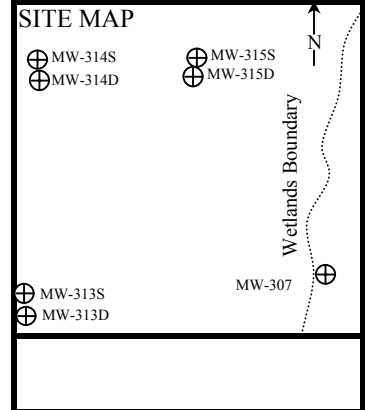
Sandpack	Well Screen	Grout
Bentonite Seal	Cement	Native Fill

# DRILLING LOG for Well # MW-315D



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

Project:	Raytheon-Wayland	Project Number:	143.72
Client:	Raytheon	Logged by:	Michael Horesh
Drilling Co:	Geosearch, Inc.	Driller:	Pat Hines
Date Started:	30-Aug-02	Date Finished:	30-Aug-02
Location:	Wayland, MA	Drilling Method:	Drive and Wash
Screen Diam:	1"	Length:	5'
		Slot Size:	0.010"
Casing Diam:	1"	Length:	25'
		Type:	PVC
Boring Depth:	32'	Well Depth:	30'
		Boring Diam.:	4"
Surface Elev.:	110.7'	MP:	TOC
		Depth to GW:	5.01'
		MP Elev.:	113.79'



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		SILT & CLAY	WOR-5	6"	Dark brown to black SILT and CLAY, organic-rich, well-sorted, low density interval.	S-1 5'-7'	0.6	
7								
8								
9								
10								
11		SILT & CLAY	5-6-6-9	10"	Medium gray, well sorted SILT and CLAY, top 2" coarse Sand and Gravel.	S-2 10'-12'	0.3	
12								
13								
14								
15								
16		SILT	6-8-8-7	17"	Med. gray, well sorted SILT, trace Clay, top 3" med. to dark gray Silt and Clay.	S-3 15'-17'	0.0	
17								
18								
19								
20								
21		SILT	4-5-5-7	11"	Gray, well sorted SILT, minor horizontal bedding, top 3" gray Silt, little Clay, little Cobbles.	S-4 20'-22'	0.0	
22								
23								
24								
25								

WOR=Weight of Rod

Key to Well Construction

Sandpack	Well Screen	Grout
Bentonite Seal	Cement	Native Fill