



ERM - New England, Inc.
 399 Boylston St. 6th Floor
 Boston MA 02116
 Telephone: 617 646 7800

WELL NUMBER MW-555/(B-555)

CLIENT <u>Raytheon</u>	PROJECT NAME <u>Raytheon-Wayland</u>
PROJECT NUMBER <u>0033366</u>	PROJECT LOCATION <u>Wayland, MA.</u>
DATE STARTED <u>9/15/05</u> COMPLETED _____	GROUND ELEVATION _____ WELL/BORING DIAMETER <u>8"</u>
DRILLING CONTRACTOR <u>Boart Longyear</u>	MEASURING POINT ELEVATION (ft) _____
DRILLING METHOD <u>Roto-Sonic</u>	GROUNDWATER ELEVATION (ft) _____
LOGGED BY <u>Moore</u> CHECKED BY _____	GROUNDWATER ELEVATION DATE _____
NOTES _____	

DEPTH (ft)	RECOVERY %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	Field Lab (ppm)	PID (ppm)	WELL DIAGRAM
0							
5	60	PT		Fine Silt with trace Fine Sand, dark brown, well sorted (poorly graded), loose, wet, Highly organic wetland mud.	NS		
10	53	SM		Medium Sand with trace Silt, olive gray, well sorted (poorly graded), loose, wet, Some Coarse Sand.	NS	0.833	
15		ML		Silt with some Fine Sand, olive gray, well sorted (poorly graded), medium dense, wet, Some very thin Clay layers.	NS	0.677	
20	96	SM		Fine Sand with Silt, olive gray, well sorted (poorly graded), medium dense, wet.	NS		
25				Fine Silt with some Very Fine Sand, olive gray, well sorted (poorly graded), dense, wet, Some Clay, Clay layers are sub-horizontal near top of deposit and become near vertical at base.	NS	0.843	
30	86	MH			NS	0.938	
35					NS		
					NS	1.015	

WAYLAND WETLANDS WAYLAND WETLANDS.GPJ MILFORD BORINGS.GDT 9/28/05



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35							
35 - 40		MH		Fine Silt with some Very Fine Sand, olive gray, well sorted (poorly graded), dense, wet, Some Clay, Clay layers are sub-horizontal near top of deposit and become near vertical at base. (continued)	NS	1.108	Zero Sand
40 - 45	104	CL-ML		Clay with Fine Silt, olive gray, 50/50 (two sizes), dense, very moist, Varved Clay with alternating Silt layers.	NS	1.190	
45 - 50		MH CH		Fine Silt with some Very Fine Sand, olive gray, well sorted (poorly graded), dense, wet, Some small Clay. Clay, dark olive gray, very dense, moist, 4" Clay layer, very compact and exhibits honeycomb structure.	NS	1.129	Bentonite
50 - 55	97			Fine Silt with some Very Fine Sand, olive gray, well sorted (poorly graded), dense, wet, Vertical Clay layer @ 48' and 51', horizontal Clay @ 62', drop stone @ 63' with some Clay nodules.	NS	1.235	
55 - 60		MH			NS	0.555	
60 - 65	97				NS	0.570	
65 - 70					ND	0.675	
70 - 75	69	SM		Fine Sand with some Clay, olive gray, well sorted (poorly graded), medium dense, wet, Clay layers 1-2".	ND	0.368	Filter Pack

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75							
80	88	SM		Fine Silt with trace Silt, olive gray, well sorted (poorly graded), medium dense, wet, Some laminations, Fine Sand is inter-bedded with Very Fine Sand. Clay lense @ 86'.	ND	0.660	
85		SM			ND	1.290	
90	64	CH		Clay, dark olive gray, very dense, moist, 2" Clay layer, compact.	ND	2.287	
95		SC-SM		Fine Sand mixed with Clay, olive gray, 50/50 (two sizes), dense, very moist, Alternating bands of Clay and Fine Sand (varves). Clay is fractured and granular.	ND	1.484	
100	84	SM		Fine Sand with trace Silt, olive gray, well sorted (poorly graded), dense, wet, Small Clay lenses in deposit.	ND	1.521	
105		CH		Clay, dark olive gray, very dense, moist, 2" Clay layer.	ND	0.278	
110		SM		Fine Sand with trace Silt, olive gray, well sorted (poorly graded), dense, wet.	ND	0.278	
115		GM		Coarse Sand with some Fine Gravel, olive gray, poorly sorted (well graded), loose, wet.			
				,SECTION MISSING.			

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115							
120	76	SM		Fine Sand, olive gray, well sorted (poorly graded), medium dense, wet, Very homogenous deposit.	ND	0.231	
125		SM		Very Fine Sand with some Silt, olive gray, well sorted (poorly graded), dense, wet, 1" Clay layer @ 124'.	ND	0.390	
130	69	GP GW		Coarse Sand with Medium Gravel, olive gray, poorly sorted (well graded), loose, wet, Some trace fines. Gravel with some Cobbles, olive gray, poorly sorted (well graded), very loose, wet, Cobbles are sub-rounded. Fine Sand with some Medium Sand, olive gray, well sorted (poorly graded), loose, wet, Grain size decreases with depth.	ND	1.405	
135		SM ML		Medium Sand with some Fine Sand, olive gray, well sorted (poorly graded), loose, wet, 1-2" Sand seams (Medium Sand). Fine Sand with some Silt, olive gray, well sorted (poorly graded), dense, wet, Clay layer @ base.	ND	1.406	
140	93	SM		Fine Sand with trace Medium Sand, olive gray, well sorted (poorly graded), dense, wet, < 2" layers of dark grained biotite deposits.	ND	1.267	
145		SM			ND	1.024	
150	71				ND	0.183	
155		MH		Fine Silt with some Very Fine Sand, olive gray, well sorted (poorly graded), dense, wet, 2" Clay layer @ 155'.	ND	0.142	

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155							
160	94			Fine Sand with some Silt, olive gray, well sorted (poorly graded), dense, wet, 1" Clay layers @ 156', 163', and 170'. Sub-rounded drop stone @ 175'.	ND	0.720	Bentonite
165		SM			ND	0.749	
170	60				ND	1.650	
175					ND	2.304	
180	100				ND	0.509	
185				Clay ,dark olive gray, very dense, moist, 4" Clay, vertically fractured, compact. Fine Sand with some Silt, olive gray, well sorted (poorly graded), dense, wet, Deposit becomes finer with depth.	ND	0.380	Filter Pack
190	83			Clay ,dark olive gray, very dense, moist, 4" Clay, vertically fractured, compact. Fine Sand with some Silt, olive gray, well sorted (poorly graded), dense, wet, Deposit becomes more coarse grained with depth.	ND	2.335	
195.0				Clay ,dark olive gray, very dense, moist, 1.5" Clay, vertically fractured, compact. Fine Sand with some Silt, olive gray, well sorted (poorly graded), loose, wet, Deposit becomes more coarse grained with depth.	ND	1.802	
		GP-GM		Coarse Sand with Fine Gravel, olive gray, poorly sorted (well graded), very loose, wet, Deposit grades from Medium/ Fine Sand to Coarse Sand and Gravel.	ND		10' 0.010 Slot Screen
		GW		Cobbles with Coarse Gravel, olive gray, poorly sorted (well	ND		

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				<p>graded), very loose, wet, Large Cobbles, some faceted. Bottom of hole at 194.5 feet.</p>			