

PROJECT NUMBER BORING NUMBER 113630.01.ZZ MW-65

## **SOIL BORING LOG**

PROJECT : DDMT October 1998 Well Installation

ELEVATION : BTOC (flush) = 263.22 ft

DRILLING CONTRACTOR : Boart-Longyear, Little Falls, MN

DRILLING METHOD AND EQUIPMENT USED : Rotasonic 4" x 6" Method

	DRILLING METHOD AND EQUIPMENT USED: Rotasonic 4" x 6" Method  WATER LEVELS: 50.86 ft (11/12/98) START: 11/5/98 END: 11/5/98 LOGGER: T. Proper/ATL								
					<u></u>	LOGGER : T. Proper/ATL			
	ELOW SU		1)	STANDARD	SOIL DESCRIPTION	COMMENTS			
	INTERVAL (FT)			PENETRATION					
		RECOVE		TEST	SOIL NAME, USCS GROUP SYMBOL, COLOR,	DEPTH OF CASING, DRILLING RATE,			
		ŀ	#/TYPE	RESULTS	MOISTURE CONTENT, RELATIVE DENSITY,	DRILLING FLUID LOSS,			
	1			6"-6"-6"-6"	OR CONSISTENCY, SOIL STRUCTURE,	TESTS, AND INSTRUMENTATION.			
				(N)	MINERALOGY.	PID (ppm):			
	1				Top 4' of topsoil- light brown, dry, in stiff clumps, root material.	T=1450 Begin drilling (Soll headspace) T=1455 Core removed (0-5')			
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5					SILTY CLAY (CL-ML)- light brown with gray mottling and rust stains,				
3	<b>-</b>				moist to wet, soft, low plasticity.	T=1500			
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10		10				o _			
					Same except orangish-brown and firm.				
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I _	ļ	ļ			Same except more gray.				
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15 _					Same event act	T=1510			
I _					Same except soft.	1=1510			
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-					SILTY CLAY W/ GRAVEL (CL-ML)- brown with black mottling,				
l _					moist, firm, gravel is various sizes (<0.5" to 2"), pockets of gray,				
Ì					fine grained sand.				
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20		10				o			
-		}			SILTY SAND W/ GRAVEL (SM)- brown, wet, loose, medium grained,	-			
l _					quartz, chert gravel (<1"), clay pockets.				
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25					Same except more wet, gravel is smaller (<2") and subangular (like	T=1530			
-					seashell fragments), no clay pockets.	_			
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30 _		20				o _			
					Same except gray and gravel is larger (0.5 to 1").				
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PROJECT NUMBER

113630.01.ZZ BORING NUMBER

MW-65

## **SOIL BORING LOG**

PROJECT : DDMT October 1998 Well Installation LOCATION : Memphis, TN

ELEVATION: BTOC (flush) = 263.22 ft DRILLING CONTRACTOR: Boart-Longyear, Little Falls, MN

DRILLING METHOD AND EQUIPMENT USED : Rotasonic 4" x 6" Method

DRILLING METHOD AND EQUIPMEN WATER LEVELS : 50.86 ft (11/12/98)					T :11/5/98 END: 11/5/98	LOGGER : T. Proper/ATL
DEPTH BELOW SURFACE (FT)			n)	STANDARD	SOIL DESCRIPTION	COMMENTS
	INTERVAL	RECOVE	RY (FT) #/TYPE	PENETRATION TEST RESULTS 6"-6"-6" (N)	SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY, OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY.	DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, AND INSTRUMENTATION. PID (ppm):
35					Bottom 3" about 40% gravel.	-
-					CLAY (CL)- brown, moist to wet, very soft. Same as 25'-30' but gray.	
-					Same except brown.	
40					Same except orangish-brown.	-
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45 <u> </u>						T=1605
- -					Larger gravel (1") and clay layer.	T=0745 (11/6/98) Collect sample for grain-size analysis at 45'-50'.
50		10			Same except tan to light brown.	o <u>.</u>
-					Bottom 3" larger gravel (1 "-2"). FAT CLAY (CH)- orangish-brown with gray mottling and rust stains, moist, firm, moderate plasticity.	Jackson-Clayborne?
55					Same except stiff.	T=1615 Stop drilling for the day. T=0834 (11/6/98)
-						Set Well Bentonite pellets: 52.0'-56.0' TD: 51.3' Plug: 50.8'-51.3' Screen interval: 40.8'-50.8'
- 60						Sand:36.5'-52.0' Grout: GS-36.5'
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- 65						
65						
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