



Proj. No.: 113630.01.ZZ

SOIL BORING LOG

Project: DDMT GW Investigation

Drilling Contractor: Boart Longyear/Minnesota

Drilling Method & Equipment: Rotasonic

Logger: S. Bruer/MGM

Depth Below Surface (FT)	Sample			Standard Penetration Test Results	Soil Description	Comments	
	Interval	Number and Type	Recovery (FT)				
					6"-6'-6" (N)		
Elevation:					Location: Memphis, TN		Boring No. MW-49(D)
Start: 1010 1/25/96					Finish: 1803 1/25/96		
Sheet 1 of 3							
5 							

NOTES:

(1) - water level measurement made on 1/27/96

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Depth Below Surface (FT)	Sample			Standard Penetration Test Results 6"-6"-6" (N)	Soil Description	Comments
	Interval	Number and Type	Recovery (FT)			
	Elevation:					Location: Memphis, TN
Start: 1010 1/25/96					Finish: 1803 1/25/96	Water Level: 78.92 ft bgs
Sheet 2 of 3						
35						- gradational contact
40			10		<u>CLAYEY SAND (SC)</u> , reddish-brown, moist, medium dense, fine to medium, quartz, medium plasticity clay	<u>Fluvial Deposits</u>
					<u>SILTY FINE SAND (SM)</u> , reddish- to orangish-brown, moist, loose, quartz	- gradational contact
45	45				<u>POORLY GRADED SAND (SP)</u> , yellowish-brown, moist, loose, fine to medium, quartz	- gradational contact
					- orangish-brown below 47 ft	
50			9		- orangish-yellow below 48.5 ft	- gradational contact
					<u>WELL GRADED GRAVELLY SAND (SW)</u> , orangish-brown, moist to wet, loose, fine to coarse, quartz, with fine to coarse, subrounded to rounded, chert gravel	
55	55					
			5		<u>POORLY GRADED SAND (SP)</u> , yellowish-brown to yellowish-orange, moist, loose, fine to medium, quartz, trace coarse, quartz sand	
60	60					
			5		- brownish-orange below 62 ft	62 ft - 2 inch black, light gray, and light brown CLAY seam
65	65					
					<u>WELL GRADED GRAVELLY SAND (SW)</u> , orangish-brown, moist, loose, fine to coarse, quartz, with fine to coarse, sub-rounded, chert gravel	68 ft - 2 inch light gray CLAY seam; abrupt contact
70						

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Depth Below Surface (FT)	Sample			Standard Penetration Test Results	Soil Description	Comments
	Interval	Number and Type	Recovery (FT)			
				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
Elevation:					Location: Memphis, TN	Boring No. MW-49(D)
Start: 1010 1/25/96					Finish: 1803 1/27/96	Water Level: 78.92 ft bgs
Sheet 3 of 3						
75	75		10		(68 ft): POORLY GRADED SAND (SP) , brownish-orange, moist, loose, medium, quartz, trace coarse sand - trace fine, subrounded, chert gravel below 74 ft	- gradational contact
80			10		WELL GRADED SANDY GRAVEL (GW) , orangish-brown, wet, loose, fine to coarse, subrounded to rounded, chert with medium to coarse, quartz sand, trace subrounded, chert cobbles	
85	85				POORLY GRADED SAND (SP) , brownish-orange, moist, loose, fine to medium, quartz - 1 inch CLAY seam at 87 ft	- gradational contact
90	90		5		WELL GRADED GRAVELLY SAND (SW) , orangish-brown, wet, loose, fine to coarse, quartz, with fine to coarse, subrounded, chert gravel	
	92.5	S-1	2.5		POORLY GRADED SAND (SP) , tan, wet, loose, medium, quartz, trace fine, subrounded, chert gravel	- Geotechnical Sample collected from 88 ft to 90 ft Jackson Fm\Upper Claiborne Stopped Drilling at 1710
95					SILTY CLAY (CL) , light gray with black mottling, moist, very stiff, medium plasticity, lignitic Boring Terminated at 92.5 Feet	
100						1803 - MW-49 installed; see attached construction diagram
105						

NOTES:

- water level measurement made on 1/27/96

Pocket Penetrometer Measurements on S-1: 3.75, >4.5, >4.5 tsf