

CMM-HILL

Proj. No.: 113630.01.ZZ

SOIL BORING LOG

Project: DDMT GW Investigation

Drilling Contractor: Soart LongyearMinnesota

Drilling Method & Equipment: Rotasonic

Logger: S. BruerMGM

Depth Below Surface (FT)	Sample			Standard Penetration Test Results 6"-6'-6" (N)	Soil Description	Comments
	Interval	Number and Type	Recovery (FT)			
						Soil name, uscs group symbol, color, moisture content, relative density or consistency, soil structure, mineralogy
Elevation:					Location: Memphis, TN	Boring No. MW-47(H)
Start: 0855 / 23 JAN 96					Finish: 1725 / 23 JAN 96	Water Level: 102.78 ft bgs
Sheet 1 of 4						
5 <						

NOTES:

- groundwater level measurement made on 27 JAN 96

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	Interval	Number and Type	Recovery (FT)			
					5'-6'-6" (N)	
Elevation:					Location: Memphis, TN	Boring No. MW-47(H)
Start: 0855 / 23 JAN 96					Finish: 1725 / 23 JAN 96	Water Level: 102.78 ft bgs

Sheet 2 of 4

35					34 ft: POORLY GRADED SAND (SP) , brownish-orange, moist, loose, fine to medium, quartz, trace fine, subrounded, chert gravel	34 ft: gradational contact
40			7		SANDY CLAY (CL) , brownish-red with light brown and light gray streaking, moist, medium stiff, medium, quartz sand	- gradational contact
45	45				POORLY GRADED SAND (SP) , brownish-orange, moist, loose, fine to medium, quartz	- gradational contact
					SILTY FINE SAND (SM-SP) , tan, moist, loose, quartz	- gradational contact
50			7		POORLY GRADED SAND (SP) , orangish-brown, moist, loose, fine to medium, quartz, trace fine, subrounded, chert gravel - tan below 50 ft - tan and brownish-orange below 53 ft	
55	55					
60			10		WELL GRADED GRAVELLY SAND (SW) , tan and brownish-orange, moist, loose, fine to coarse, quartz, with fine to coarse, subrounded, chert gravel, trace subrounded, chert cobbles	- gradational contact; clayey - gradational contact
65	65				SILTY FINE SAND (SM-SP) , brownish-orange, moist, loose, quartz - tan below 63 ft - brownish-orange below 66 ft	
70					WELL GRADED GRAVELLY SAND (SW) , tan to orangish-brown, fine to coarse,	- gradational contact

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	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-47(H)
Start: 0855 / 23 JAN 96					Finish: 1725 / 23 JAN 96	Water Level: 102.78 ft bgs
Sheet 3 of 4						
75	74 75		9 1		quartz, with fine to coarse, subrounded, chert, gravel 70 ft - 71 ft: <u>SILTY FINE SAND (SM-SP)</u> , tan, moist, loose, quartz <u>WELL GRADED GRAVELLY SAND (SW)</u> , - gradational contact	
80			9		orangish-brown, moist, loose, fine to coarse, quartz, with fine to coarse, subrounded to rounded, chert gravel <u>POORLY GRADED SAND (SP)</u> , brownish-orange, moist, loose, fine to medium, quartz, trace coarse sand and fine, subrounded, chert gravel - gradational contact; clayey <u>WELL GRADED SAND (SW)</u> , orangish-brown, moist, loose, fine to coarse, quartz, with fine to medium, subrounded, chert gravel - gradational contact	
85	84 85		1		quartz, with fine to medium, subrounded, chert gravel - well graded to gap graded below 84 ft	
90			10		- trace fine to medium, subrounded, chert gravel below 88 ft - tan below 90 ft	
95	95				- brownish-orange below 94 ft	
100			10		- tan below 97 ft	
105	105				- with fine to coarse, subrounded to rounded, chert gravel below 100 ft	

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	Interval	Number and Type	Recovery (FT)			
Elevation:					Location: Memphis, TN	Boring No. MW-47(H)
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Sheet 4 of 4						
110	105		10			
115	115				WELL GRADED GRAVEL (GW) , brownish orange, moist to wet, loose, fine to coarse, subrounded to rounded, chert with medium to coarse, quartz sand - wet below 112 ft	- gradational contact - Fluvial Aquifer at 112 ft (?)
120			10		SILTY CLAY (CL) , light gray, lavender, and yellowish-orange (marbled), moist, stiff, medium plasticity SILTY SAND (SM-SP) , light gray, wet, loose, fine to medium, quartz, minor clay - 2 inch clay seam at 118 ft SILTY CLAY (CL) , light gray, lavender, and yellowish-orange (marbled), moist, stiff to very stiff - light gray below 124 ft	- erosional contact Jackson Fm/Upper Claiborne - black silt lamination on bottom of clay seam at 118 ft
125	125				Boring Terminated at 125 feet	Stopped Drilling at 1503 1725 - MW-47 installed; see attached construction diagram
130						
135						
140						

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