



CH2MHILL

PROJECT NUMBER  
334469.SA.HS

BORING NUMBER  
MW-240

SHEET 1 of 5

# SOIL BORING LOG

PROJECT : Memphis Depot - Intermediate Aquifer Inv. LOCATION : Memphis, Tennessee ELEVATION:

DRILLING CONTRACTOR : Boart Longyear NAME OF DRILLER : J. Asua

DRILLING METHOD/EQUIPMENT: SR 120 Track-Mounted Rotasonic SIZE/TYPE OF BIT : 4X6"

OVERBURDEN THICKNESS : DEPTH DRILLED INTO ROCK N/A TOTAL DEPTH OF BORING : 146 ft-bgs

WATER LEVELS : XXX ft-bgs START: 10/2/07 / END: 10/3/07 LOGGER : Derek Miller (KNV)

DEPTH BELOW SURFACE (FT)	SAMPLE INTERVAL (FT)			STANDARD PENETRATION TEST RESULTS 6"-6"-6" (N)	SOIL DESCRIPTION	COMMENTS
	RECOVERY (FT)	#/TYPE				
0-6	6 / 6	C-1	N/A	0.0-6.0: SL. CLAYEY SILT (ML), pale brown to strong brown, sl. moist, firm, ~10% clay		
6-16	9 / 10	C-2	N/A	6.0-6.6: AS ABOVE 6.6-16.0: AS ABOVE, gray, distinct contact		
16-26	10 / 10	C-3	N/A	16.0-19.7: AS ABOVE, common coarse distinct yellowish brown mottles throughout  19.7-21.0: SANDY CLAY W/ FEW GRAVELS (CL), gray, moist v. soft, ~35% fine to medium-grained sand, gravel up to 1", subround, chert 21.0-22.3: GRAVELLY SAND W/ TRACE CLAY (SW), gray, moist, loose, fine to medium-grained sand, gravel up to 1", subround, chert, ~10-15% gravel 22.3-23.1: SL. SANDY SILT W/ FEW GRAVELS (ML), strong brown, sl. moist, hard, ~5-10% medium-grained sand, ~5% gravel up to 1", subround, chert, distinct contact 23.1-24.3: SANDY CLAY (CL), gray, moist, v. soft, ~10-15% fine to medium-grained sand 24.3-26.0: SILTY SAND W/ SOME GRAVEL (SW), gray changing to orange @ 25.0', wet, loose, fine to coarse-grain sand, ~25% gravel up to 1", subround, chert, ~25% silt 26.0-28.4: AS ABOVE		
26-36	10 / 10	C-4	N/A	28.4-31.9: SAND W/ TRACE SILT AND GRAVEL (SP), yellowish brown, wet, loose, fine-grained  31.9-32.4: AS ABOVE, dark brown, large 4" sandstone frags, v. hard 32.4-36.0: SAND W/ FEW GRAVELS AND CLAY LENSES (SW), yellowish brown, wet, loose to soft, clay lenses up to 4" thick, typically surrounding large gravels up to 2-3", subround, chert, ~20% gravel and clay		



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	RECOVERY (FT)	#/TYPE			
40	36-46	10 / 10	C-5	N/A	
				36.0-40.9: GRAVELLY SAND (SW), brownish yellow, wet, loose, v. fine-grained sand, ~30% gravel up to 2-3", subround chert, ~25% silt	
				40.9-42.8: CLAY (CL), pale red, moist, v. soft, massive	
				42.8-46.0: SAND (SP), brownish yellow, sl. moist, loose, fluffy, v. fine-grained sand	
45				46.0-49.3: AS ABOVE	
				49.3-50.5: SAND (SP), brown, wet, loose, v. fine to fine-grain	
50	46-56	10 / 10	C-6	N/A	
				50.5-56.0: SL. SILTY SAND W/ TRACE GRAVEL (SP), brown, sl. moist, loose, ~10% silt	
				56.0-57.0: AS ABOVE	
				57.0-63.5: SL. SILTY SAND (SP), yellowish brown, moist, loose, v. fine to fine-grained	
55					
60	56-66	10 / 10	C-7	N/A	
				63.5-64.9: GRAVELLY SAND (SW), brownish yellow, wet, loose, medium-grained sand, ~35% gravel up to 3", subround, chert	
				64.9-66.0: SAND (SP), yellowish brown, moist, loose, v. fine-grained	
				66.0-72.0: AS ABOVE	
65					
70	66-76	6 / 10	C-8	N/A	



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	RECOVERY (FT)	#/TYPE			
75	66-76	6 / 10	C-8	N/A	72.0-72.5: CLAY (CL), v. light gray, moist, v. soft, highly plastic 72.5-76.0: SAND (SP), v. light gray, dry, loose, v. fine-grained
80	76-86	10 / 10	C-9	N/A	76.0-86.0: SAND (SP), gray to grayish brown, moist, loose, v. fine to fine-grained
85					86.0-96.0: AS ABOVE, wet
90	86-96	10 / 10	C-10	N/A	
95					96.0-97.0: AS ABOVE
100	96-106	10 / 10	C-11	N/A	97.0-104.5: SL. SANDY TO SILTY CLAY (CL), light gray changing to dark gray @ 98.2', sl. moist, firm, many coarse prominent yellowish brown mottles throughout, trace v. fine-grained sand, ~20% silt, becoming less silty w/ depth
105					104.5-106.0: CLAY (CL), dark gray, sl. moist, firm



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110	106-116	10 / 10	C-12	N/A	N/A	106.0-116.0: CLAY (CL), dark gray, sl. moist, firm, trace black organic staining throughout, ~10% silt	
115							
120	116-126	10 / 10	C-13	N/A	N/A	116.0-126.0: INTERBEDDED SILTY SAND AND CLAY (SM/CL) gray to brownish gray, moist to wet, v. soft to firm, clay lenses @ 117.5-118.0, 118.8-119.3, 120.0-120.5, 122.0-122.3 and 125.5-126.0, ~20-25% silt, v. fine-grained sand	
125							
130	126-136	10 / 10	C-14	N/A	N/A	126.0-136.0: SILTY SAND (SM), light gray, wet, loose to v. soft, v. fine-grained sand, clay lense from 132.1-132.4', grayish brown, moist, firm	
135							
140	136-146	4 / 10	C-15	N/A	N/A	136.0-146.0: AS ABOVE, no clay lense	

