



CH2MHILL

PROJECT NUMBER

334469.SA.FE

BORING NUMBER

SB-5

SHEET 1 of 3

SOIL BORING LOG

PROJECT : Memphis Depot - Microcasm Study

LOCATION : Memphis, Tennessee

ELEVATION:

DRILLING CONTRACTOR : Prosonic/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 : 88 ft-bgs

WATER LEVELS : N/A START: 12/19/06 / END: 12/19/06

LOGGER : David Nelson (ATL)

DEPTH BELOW SURFACE (FT)	STANDARD			SOIL DESCRIPTION		COMMENTS
	PENETRATION			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. FID (ppm)	
	TEST RESULTS					
	SAMPLE INTERVAL (FT)	RECOVERY (FT)	#/TYPE			
				6"-6"-6" (N)		
	0-3	0 / 3	C-1	N/A	No Recovery	N/A
5	3-8	5 / 5	C-2	N/A	SILT, brown, dry	0.0
10	8-13	5 / 5	C-3	N/A	SILT, brown, dry	0.0
15	13-18	5 / 5	C-4	N/A	SILT, brown, dry	0.0
20	18-23	3.8 / 5	C-5	N/A	SILT, brown, dry	0.0
25	23-28	3.9 / 5	C-6	N/A	SILT, brown, dry	3.1
30	28-33	4 / 5	C-7	N/A	SILT, brown, dry SILT, brown transitioning to reddish brown, moist Transition begins @ 32 feet bgs SANDY SILT, reddish brown, fine grained	10.0
35	33-38	3.8 / 5	C-8	N/A	SANDY SILT, reddish brown, fine grained SANDY SILT, reddish brown, fine grained	0.0



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DEPTH BELOW SURFACE (FT)	SAMPLE INTERVAL (FT)			STANDARD PENETRATION TEST RESULTS 6"-6"-6" (N)	SOIL DESCRIPTION	COMMENTS
		RECOVERY (FT)				
			#/TYPE			
	33-38	3.8 / 5	C-8	N/A	SILTY SAND, fine grained	0.0
40	38-43	2.3 / 5	C-9	N/A	SILTY SAND, brownish red, fine grained	0.0
					SILTY SAND, brownish red, fine grained	
					SAND, reddish yellow to light yellow, fine grained, well sorted	
					@42 feet bgs, with pebbles	
45	43-48	1 / 5	C-10	N/A	SAND, light yellow, fine grained, well sorted	0.0
					With pebbles, subangular	
					SAND, tan transitioning to dark yellow, medium grained	
					Poorly sorted, with pebbles (10%), subangular	
50	48-53	2 / 5	C-11	N/A	SAND, dark yellow, fine to medium grained, with pebbles	0.0
					SAND, fine to coarse grained, reddish yellow, poorly sorted	
					With 20% pebbles (< 1/2 inch width), subangular	
					SAND, fine grained, light yellow, well sorted	
55	53-58	4 / 5	C-12	N/A	SAND, fine to medium grained, light yellow, well sorted	0.0
					SAND, fine to medium grained, light yellow, well sorted	
					@ 56 feet bgs, three inch GRAVELLY SAND layer	
					SAND, fine to medium grained, yellow, well sorted	
					@ 57 feet bgs, four inch SANDY GRAVEL layer (1/4 to 1 in)	
					SAND, fine to medium grained, golden yellow, well sorted	
60	58-63	3 / 5	C-13	N/A	SAND, fine to medium grained, light brownish yellow, well sorted, with pebbles, subangular	0.0
					SAND, fine to medium grained, brownish yellow, poorly sorted	
					With pebbles, subangular	
65	63-68	3.8 / 5	C-14	N/A	SAND, fine to coarse grained, light brown / white, poorly sorted, with pebbles, subangular	4.7
					SAND, fine to coarse grained, light brown / white, poorly sorted, with pebbles, subangular	
70	68-73	3.7 / 5	C-15	N/A	SAND, fine to coarse grained, yellowish red, poorly sorted	2.4
					With pebbles (1/2 to 1 1/2 inch width), subangular	

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LOGGER : David Nelson (ATL)

DEPTH BELOW SURFACE (FT)

STANDARD

SOIL DESCRIPTION

COMMENTS

SAMPLE INTERVAL (FT)

PENETRATION

RECOVERY (FT)

TEST

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.
FID (ppm)

#/TYPE

RESULTS

6"-6"-6"
(N)

75	68-73	3.7 / 5	C-15	N/A	SAND, fine to medium grained, reddish yellow to golden Poorly sorted, with pebbles (decreasing with depth), subangular	2.4
	73-78	3.6 / 5	C-16	N/A	SAND, fine grained, tan to golden, well sorted SAND, fine grained, brownish red, well sorted	13.2
	78-83	4.8 / 5	C-17	N/A	SAND, fine grained, brownish red, well sorted @ 80 feet bgs, with pebbles SAND, fine to coarse grained, yellow, with pebbles, subangular WATER TABLE @ 81 FEET BGS	Not recorded No FID below water table
	83-88	5 / 5	C-18	N/A	SAND, fine to coarse grained, brownish yellow With pebbles, subangular SAND, fine to coarse grained, brownish yellow CLAY (@ 85 feet bgs) Light gray with hints of light yellow, stiff, plastic, wet BORING TERMINATED @ 88.0 FEET BGS.	