
 CH2MHILL				PROJECT NUMBER 334469.SA.HS		BORING NUMBER MW-235		SHEET 1 of 3	
				SOIL BORING LOG					
PROJECT : Memphis Depot - Intermediate Aquifer Inv.				LOCATION : Memphis, Tennessee				ELEVATION:	
DRILLING CONTRACTOR : Boart Longyear				NAME OF DRILLER : C. Herron					
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 97 ft-bgs					
WATER LEVELS : XXX ft-bgs				START: 9/4/07 / END: 9/4/07				LOGGER : Derek Miller/ORO	
DEPTH BELOW SURFACE (FT)		SAMPLE INTERVAL (FT)		STANDARD PENETRATION TEST RESULTS		SOIL DESCRIPTION		COMMENTS	
		RECOVERY (FT)		6"-6"-6" (N)				DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, AND INSTRUMENTATION. FID (ppm)	
		#/TYPE							
5		0-7		7 / 7		C-1		N/A	
						0.0-5.5: SILT (ML), pale brown, dry, loose		MAX FID ON CORE: 6.0	
						5.5-7.0: AS ABOVE, moist, soft			
10		7-17		10 / 10		C-2		N/A	
						7.0-12.0: AS ABOVE, becoming gravelly at 11.0', chert, up to 1", subround, ~35%		MAX FID ON CORE: 24.6	
						12.0-17.0: SILTY SAND (SM), red to gray, moist, firm, fine-grained sand, ~30% silt			
15									
						17.0-19.6: AS ABOVE, hard		MAX FID ON CORE: 940.6	
						19.6-27.0: SILTY SAND W/ FEW GRAVELS (SM), reddish brown, moist, loose, fine-grained sand, gravel up to 3/4", sub-round, chert, ~10%, ~20% silt			
20		17-27		10 / 10		C-3		N/A	
						27.0-37.0: AS ABOVE		MAX FID ON CORE: 109.6	
25									
30		27-37		10 / 10		C-4		N/A	
35									

 CH2MHILL				PROJECT NUMBER 334469.SA.HS		BORING NUMBER MW-235		SHEET 2 of 3	
				SOIL BORING LOG					
PROJECT : Memphis Depot - Intermediate Aquifer Inv. LOCATION : Memphis, Tennessee						ELEVATION:			
DRILLING CONTRACTOR : Boart Longyear						NAME OF DRILLER : C. Herron			
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 97 ft-bgs			
WATER LEVELS : XXX ft-bgs START: 9/4/07 / END: 9/4/07						LOGGER : Derek Miller/ORO			
DEPTH BELOW SURFACE (FT)				STANDARD PENETRATION TEST RESULTS		SOIL DESCRIPTION		COMMENTS	
SAMPLE INTERVAL (FT)		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. FID (ppm)	
		#/TYPE							
27-37		10 / 10		C-4		N/A		MAX FID ON CORE: 109.6	
37-47		10 / 10		C-5		N/A		MAX FID ON CORE: 37.0	
47-57		10 / 10		C-6		N/A		MAX FID ON CORE: 10.6	
57-67		10 / 10		C-7		N/A		MAX FID ON CORE: 3.6	
67-77		10 / 10		C-8		N/A		MAX FID ON CORE: 5.3	
37.0-47.0: SAND (SP), light reddish brown, moist, loose, fine-grained sand, trace chert gravel up to 1", subround, elongate 47.0-57.0: AS ABOVE 57.0-63.0: AS ABOVE, becoming wet w/ depth 63.0-63.4: GRAVEL/SAND/CLAY MIX (GC), light reddish brown, wet, loose, clay up to 3" intervals, soft, gravel is chert subangular, up to 3/4", ~15%, ~80% coarse-grained sand 63.4-63.5: SILTY CLAY (CL), reddish brown, wet, soft 63.5-67.0: CLAY (CL), v. dark grayish brown, moist, soft to firm w/ depth, many fine faint black mottles throughout 67.0-68.2: AS ABOVE 68.2-69.0: SILTY SAND (SM), light gray, wet, soft, v. fine-grained sand, ~40-45% silt 69.0-70.5: SL. SANDY CLAY (CL), v. dark brown, moist, firm, ~20-25% v. fine-grained sand						Sample MW235 SS 65: VOC (8260B/5035A) TOC (415.1)			



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SHEET 3 of 3

SOIL BORING LOG

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

ELEVATION:

DRILLING CONTRACTOR : Boart Longyear

NAME OF DRILLER : C. Herron

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 97 ft-bgs

WATER LEVELS : XXX ft-bgs START: 9/4/07 / END: 9/4/07

LOGGER : Derek Miller/ORO

DEPTH BELOW SURFACE (FT)				STANDARD	SOIL DESCRIPTION	COMMENTS
SAMPLE INTERVAL (FT)				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)
RECOVERY (FT)				TEST RESULTS		
#/TYPE				6"-6"-6" (N)		
75	67-77	10 / 10	C-8	N/A	70.5-76.0: SILTY TO CLAYEY SAND (SM/SC), light gray to v. dark grayish brown, wet, loose to firm, common medium prominent dark brown mottles, highly organic, wood debris up to 2" thick, black, flaky, brittle, ~75% v. fine-grained sand, ~20-25% silt and clay	MAX FID ON CORE: 5.3
80	77-87	10 / 10	C-9	N/A	76.0-77.0: SILTY SAND (SM), light gray, moist, soft and crumbly, v. fine-grained sand, ~20% silt 77.0-84.0: SL. SANDY CLAY (CL), dark grayish brown, moist, firm	MAX FID ON CORE: 2.1
85					84.0-87.0: ORGANIC CLAY (OH), v. dark brown to black, sl. moist, hard to loose, wood debris, flaky, ~60% organics	
90	87-92	5 / 5	C-10	N/A	87.0-92.0: SILTY CLAY (CL), light gray, moist, firm, few fine faint black mottles throughout, trace wood debris, up to 1/4", hard	MAX FID ON CORE: 2.8
95	92-94	0 / 2	ST-1	N/A	92.0-94.0: NO RECOVERY	MAX FID ON CORE: N/A 92.0-94.0: Attempt Shelby tube sample, no recovery
	94-97	0 / 3	ST-2	N/A	94.0-97.0: NO RECOVERY	MAX FID ON CORE: N/A 94.0-97.0: Attempt Shelby tube sample, no recovery

TD @ 97.0 FT-BGS