



CH2MHILL

PROJECT NUMBER

177556.SA.FE

BORING NUMBER

MW-186

SHEET 1 of 6

SOIL BORING LOG

PROJECT : Memphis Depot Remedial Investigation Plan LOCATION : Memphis, TN

ELEVATION:

DRILLING CONTRACTOR : Prosonic Corporation

NAME OF DRILLER : Adam Marshall

DRILLING METHOD/EQUIPMENT : Rotosonic Drilling

SIZE/TYPE OF BIT : 4 X 6"

OVERBURDEN THICKNESS : DEPTH DRILLED INTO ROCK : N/A

TOTAL DEPTH OF BORING : 186 ft-bgs

WATER LEVELS : START : 10/31/2005 END : 11/2/2005

LOGGER : Mike Karafa/ATL

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)		
5	0-16	100%	N/A	N/A	0-1: SILT, grass roots, brown 1-4: SILT, brown, loose, dry 4-6: SILT, brown, with gray sandy mottles, fine grain, loose, damp, loess 6-18: SILT, brown, stiff, damp, loess	9.6 0.0 0.0
10						
15						
20	16-26	100%	N/A	N/A	18-20: SANDY CLAY, tannish gray, fine grain, stiff, damp 20-23: GRAVELLY SAND, brownish orange, fine to v. course grain, loose, wet, gravel up to 2" 23-26: SAND, orange, fine to medium grain, loose, wet	0.0 0.0 0.0
25						
30	26-36	100%	N/A	N/A	26-29: SAND, orange, fine to medium grain, loose, wet, pea-sized gravel 29-36: SAND, orange, fine grain, loose, damp	0.0 0.0



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LOGGER : Mike Karafa/ATL

DEPTH BELOW SURFACE (FT)	SAMPLE INTERVAL (FT)			STANDARD PENETRATION TEST RESULTS 6"-6"-6" (N)	SOIL DESCRIPTION	COMMENTS
		RECOVERY (FT)	#/TYPE		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)
35	26-36	100%	N/A	N/A	35-35.5: (SAND, orange, with gravel up to 1", chert)	0.0
					36-40: SAND, orange, fine grain, loose, damp	0.0
40	36-46	100%	N/A	N/A	40-45: SAND, orange, fine to v. course grain, loose, wet	0.0
					45-48.5: SAND, orange, fine to medium grain, loose, wet	0.0
45					48.5-53.5: SAND, orange, fine to course grain, loose, saturated	0.0
50	46-56	100%	N/A	N/A	53.5-55.5: SILTY SAND w/ CLAY, gravelly, orange, sticky, saturated	0.0
					55.5-57: CLAY, light gray, stiff, damp	0.0
55					57-59.5: SILTY SAND, gray, fine grain, loose, damp	0.0
60	56-66	100%	N/A	N/A	59.5-60: CLAY, light gray, stiff, damp 60-66: SILTY SAND, gray w/ orange bands, loose, damp, fine grain	0.0 0.0
					62-66: (less SILT)	
65						



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RECOVERY (FT)				TEST RESULTS		
#/TYPE				6"-6"-6" (N)		
70	66-76	100%	N/A	N/A	66-70: SAND, gray, loose, damp, fine grain	0.0
					70-71: SILTY CLAY, gray, sticky, damp	0.0
					71-76: SAND, gray, loose, damp, fine grain	0.0
75						
	76-86	100%	N/A	N/A	76-81: SILTY SAND, some clay, gray, fine grain, loose, saturated	0.0
					81-85: SILTY SAND, some clay, orange and gray, sticky, fine grain, saturated	0.0
					83: (2" thick, SANDY CLAY, light gray, sticky, damp)	0.0
85					85-88: SILTY SAND, gray and orange, loose, wet, fine grain	0.0
					85: (1" thick, SANDY CLAY, light gray, sticky, damp)	0.0
					88-88.5: SANDY CLAY, gray and orange, sticky, fine, wet	0.0
					88.5-90: SAND, some silt and clay, gray and orange, fine grain, wet	0.0
90	86-96	100%	N/A	N/A	90-92: SANDY CLAY, gray and orange mottles, stiff, wet, fine grain	0.0
					92-96: SANDY SILTY CLAY, dark gray, v. stiff, damp, fine grain	0.0
95						
	96-106	100%	N/A	N/A	96-116: SILTY CLAY, less sand, dark gray, v. stiff, damp	0.0

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RECOVERY (FT)				TEST RESULTS		
#/TYPE				6"-6"-6" (N)		
100	96-106	100%	N/A	N/A		
105						
110	106-116	100%	N/A	N/A		
115						
120	116-126	100%	N/A	N/A	116-126: Sample lost, retrieved as sluff. Showed SAND, fine grain	0.0
125						
130	126-136	100%	N/A	N/A	126-136: SAND, tannish gray, fine grain, saturated	0.0



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SAMPLE INTERVAL (FT)		RECOVERY (FT)				
		#/TYPE				
135	126-136	100%	N/A	N/A	136-158: SAND, orangish gray, loose, fine to medium grain, wet	0.0
140	136-146	100%	N/A	N/A		
145						
150	146-156	100%	N/A	N/A		
155					158-172: SILTY CLAY, dark gray, stiff	0.0
160	156-166	100%	N/A	N/A		
165						



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RECOVERY (FT)				TEST RESULTS		
#/TYPE				6"-6"-6" (N)		
156-166	100%	N/A	N/A	N/A		
166-176	100%	N/A	N/A	N/A	172-173: SILTY SAND, some clay, dark gray, sticky, damp 173-175: SAND, some silt, dark gray, loose, damp 175-176: SANDY CLAY, dark gray, stiff, damp 176-178: SILTY CLAY, stiff, damp, dark gray	0.0 0.0 0.0 0.0
176-186	100%	N/A	N/A	N/A	178-184: SILTY CLAYEY SAND, dark gray, fine grain, loose 184-186: SILTY SANDY CLAY, dark gray, stiff, damp	0.0 0.0

TD @ 186' BGS