



CH2MHILL

PROJECT NUMBER

177556.SA.FE

BORING NUMBER

MW-185

SHEET 1 of 4

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 : 106 ft-bgs

WATER LEVELS : START : 10/26/2005 END : 10/27/2005

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, soil, brown, grass roots 1-3: SILT, brown, loose, dry, gravel 3-13: SILT, brown, damp, stiff, loess	1.1 54.6 32.8
10						
15					13-17: SILT, brown, damp, stiff, w/ sandy clay gray mottles, pea-sized gravel	2.0 1.4 1.7
20	16-26	100%	N/A	N/A	17-18: GRAVELLY SAND, brownish orange, loose, fine to v. course grain, wet, gravel pea-sized to 3" 18-18.5: GRAVELLY SAND, light gray, fine to medium grain, damp, gravel up to 3" 18.5-20.5: SANDY SILTY CLAY, orange and gray mottles, stiff, damp 20.5-31: SILTY SAND, some clay, orange, loose, wet, fine to medium grain	4.2 4.4
25						
30	26-36	100%	N/A	N/A	30-31: (GRAVEL, pea-sized to 2") 31-35: SAND, orange, loose, fine grain, damp	0.0



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ELEVATION:

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DEPTH BELOW SURFACE (FT)	DEPTH BELOW SURFACE (FT)			STANDARD PENETRATION TEST RESULTS 6"-6"-6" (N)	SOIL DESCRIPTION	COMMENTS
	SAMPLE INTERVAL (FT)		#/TYPE			
	RECOVERY (FT)					
					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, fine to course grain, loose, damp, gravel up to 1", chert	0.0
					35.5-36: SAND, orange, loose, fine grain, damp	0.0
					36-38: SAND, orange, loose, course grain, damp, chert up to 1"	0.0
					38-38.5: SAND, orangish white, loose, fine to course grain, damp to wet	0.0
40					38.5-43: SAND, orange, medium grain, loose, damp to wet	0.0
	36-46	100%	N/A	N/A		
					43-44.5: SAND, orange, v. course grain, loose, damp to wet	0.0
45					44.5-51: SAND, orange, fine to medium grain, loose, damp	0.0
50						
	46-56	100%	N/A	N/A	51-54.5: GRAVELLY SILTY SAND, orange, fine to v. course grain, saturated, loose, gravel and cobbles up to 4.5" to pea-sized chert, angular to subrounded	0.0
55					54.5-66: SILTY SAND, light gray, fine grain, loose, damp	5.0
60					60-61: (SAME AS ABOVE, orange)	1.2
	56-66	100%	N/A	N/A	61-66: (SAME AS ABOVE, less silt, light gray)	0.0
						0.0
65						

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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 : 106 ft-bgs	
WATER LEVELS :				START : 10/26/2005		END : 10/27/2005		LOGGER : Mike Karafa/ATL	
DEPTH BELOW SURFACE (FT)			STANDARD PENETRATION TEST RESULTS		SOIL DESCRIPTION		COMMENTS		
SAMPLE INTERVAL (FT)			RECOVERY (FT)		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						
			6"-6"-6" (N)						
70	66-76	100%	N/A	N/A	66-68: SILTY CLAY, gray and orange mottles, sticky to stiff, wet 68-68.5: SILTY SAND, gray, fine grain, loose, saturated 68.5-69: SILTY CLAY, gray and orange mottles, sticky to stiff, wet 69-86: SILTY SAND, gray w/ orange bands, fine grain, loose, damp		0.0 0.0 0.0 0.0		
75									
80	76-86	100%	N/A	N/A	76-81: (SAME AS ABOVE, wet) 79: (3" thick, SANDY CLAY lense, sticky to stiff, fine grain, gray and orange mottles) 81-86: (SAME AS 76-81', saturated)		0.0 0.0 0.0		
85									
90	86-96	100%	N/A	N/A	86-94: SILTY SAND, some clay, gray and orange, loose 94-94.5: SILTY SAND, dark gray, sticky, wet 94.5-95: SILTY CLAY, dark gray, stiff, damp to wet 95-106: SILTY CLAY, some sand, stiff, dark gray, damp		Lost 86-96' sample downhole, went back in and retrieved 0.0 0.0 0.0		
95									
	96-106	100%	N/A	N/A					



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OVERBURDEN THICKNESS :		DEPTH DRILLED INTO ROCK :		N/A		TOTAL DEPTH OF BORING : 106 ft-bgs
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SAMPLE INTERVAL (FT)						
RECOVERY (FT)		#/TYPE				
100	96-106	100%	N/A	N/A		TD @ 106' BGS
105						