CH2MHILL

PROJECT NUMBER	BORING NUMBER
334469	MW-190

SOIL BORING LOG

PROJECT : PRB Implementation Study LOCATION : Memphis Depot

ELEVATION : DRILLING CONTRACTOR : Prosonic

DRILLING METHOD AND EQUIPMENT USED : Rotasonic rig (4 inch sample casing / 6 inch outer casing)

WATER LEVELS : START : 3/23/2006 END: 3/24/2006 LOGGER : Mike Karafa

DEPTH BELOW SURFACE (FT)	INTERVAL (FT)	RECOVERY (%)	#/TYPE	STANDARD PENETRATION TEST RESULTS 6"-6"-6" (N)	SOIL DESCRIPTION: SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY, OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY.	COMMENTS: DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, AND INSTRUMENTATION. Corrected FID (ppm):
0					Silt, brown, roots, grass, dry	
					Silt brown, loess, loose, dry	
		100				0.0
5						
						3.4
					silt brown, loess, stiff, damp to wet	
10		100				
						0.0
15						
20		100				
						0.0
25						
30		100			Silty sand, brown with grey and red and yellow sand, fine grain, stiff, gravel up to 1/2"	
35					silty sand, reddish orange, fine to coarse grain, loose to sticky, gravel up to 1/2"	0.0

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40		100			gravely sand, reddish orange, loose, damp, fine to coarse grain, gravel up to 3/4"	
45						0.0
50		100			gravelly sand, tan, loose, dry, fine to medium grain, gravel up to 1.5	
55						0.0
60		100			sand, tan, fine grain, loose, dry, gravel pea size up to 1/2" diamete	
65						0.0
					sand, light grey, fine grain, loose, dry, gravel up to 1/2"	
					sand, orange, fine to medium grain, loose, dry, gravel up to 3/4" diameter	
70		100				0.0
					clay, red, stiff, dry	
					sand, reddish brown, fine to coarse grain, loose, gravel and cobbles up to 5"	
					sand, orangish tan, fine grain, loose dry	

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75						
					sandy clay, orange, stiff, fine grain, dry to damp	
					sand orange, fine to medium grain, loose, damp to we	0.0
80		100				
					sand, orange, fine to coarse grain, loose, saturated	
85						
					clayey sand, orange, fine to coarse grain, sticky, saturated	
					silty clay, orange with grey, stiff, damp	
90		100				
						0.0
95					clay sand, orange, fine to medium grain, wet with grey cla	
					silty clay, dark grey, massive damp	
					Boring terminated at 97-feet	
100						
105						
110						