



PROJECT NUMBER 170039	BORING NUMBER IW-5
SOIL BORING LOG	

PROJECT : EBT Treatability Study	LOCATION : Memphis Depot
ELEVATION :	DRILLING CONTRACTOR : Boart Longyear
DRILLING METHOD AND EQUIPMENT USED : Rotasonic rig (4 inch sample casing / 6 inch outer casing)	
WATER LEVELS :	START : 04/18/2002 END: 04/19/2002 LOGGER : Bryan Burkingstock

DEPTH BELOW SURFACE (FT)				STANDARD		SOIL DESCRIPTION		COMMENTS	
	INTERVAL (FT)		#/TYPE	PENETRATION TEST RESULTS 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. Corrected FID (ppm): (Soil headspace)			
	RECOVERY (%)								
5		100			Gravel (parking lot)				0.0
					Silt, brown, moist, loess, stiff				0.0
10		100			Same as above				0.0
15									0.0
20		100							0.0
25					Silt, brown, slight fine sand				0.0
					Sandy clay, (some silt), brown grading to tan, dense, red and grey sandy clay inclusions				0.0
30		100			Same as above, increase of fine sand, tan				0.0
					Clayey sand, tan increase of fine sand, firm				0.0
35					Sand, tan, fine grain, well sorted, moist, loose				
					Clay, light grey with maroon mottles, dense, stiff				0.0



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	TEST					
	RESULTS					
				6"-6"-6"-6" (N)		Corrected FID (ppm):
40	100				Clay same as above Sand, golden to light yellow, fine grain, well sorted, loose	14.1
45					Sand, brownish yellow, fine to medium grained poorly sorted, loose Sand, brownish, yellow, fine to coarse grained, poorly sorted, loose, gravel (<10%) subangular, <0.25 inches diameter	0.0
50	100					
55					Sand, fine grain, well sorted, light yellow, loose Sand, fine to medium grain, poorly sorted, brownish yellow, pebbles (<20%), subangular <0.25 inches diameter	140.2 @52.3 ft bgs 100.4 @57.5 ft bgs
60	100				Sand, brownish yellow, fine grain, well sorted, loose Sand, brownish yellow, fine to medium grained, poorly sorted, loose gravel (10-20%), <0.5 inches diameter Sand, brownish yellow, fine to medium grain, well sorted, loose	65 @62.5 ft bgs
65					Gravelly sand, poorly sorted, pebbles (20-30%) <1 inch diameter, loose Sand, brownish yellow, fine to medium grain, well sorted, loose	38.0
70	100				Gravelly sand, brownish yellow, fine to coarse grained sand, subangular pebbles (30-40%), < 1 inch diameter	110.4



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RECOVERY (%)				6"-6"-6" (N)					
#/TYPE									
75						Gravelly sand, same as above, brownish yellow			176
80			100						1476
85									165
90			100						306.0
95								Wet @ 95 ft bgs	
100			100						
105									
110			100			Sandy clay, light grey, wet, firm			
						Gravelly sand, brownish yellow, fine to coarse grain, poorly sorted, loose			



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RECOVERY (%)				TEST		
#/TYPE				RESULTS		
				6"-6"-6"-6" (N)		Corrected FID (ppm):
115					Same as above Clay, yellowish brown, dense, moist, stiff	
120						
125						
130						
135						
140						
					Boring terminated at 130 ft bgs	