CH2MHILL

PROJECT NUMBER	BORING NUMBER
160492.SA.03	MW-94

SOIL BORING LOG

PROJECT : Long Term Operational Areas - Memphis Depot LOCATION : Memphis, Tennessee

ELEVATION : 296.94 feet MSL (TOC); 296.95 feet MSL (ground) DRILLING CONTRACTOR : Tri-State Testing Services, Inc.

DRILLING METHOD AND EQUIPMENT USED : Hollow Stem Auger 4.25 inch ID with CME Sampler

WATER LEVELS : 107.07 feet BTOC (11/2001) START : 09/25/2001 END: 09/27/2001 LOGGER : Jay Parker (Jacobs)

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):
				Used hollow-stem auger drilling method no penetration test results	6" gravel Clayey SILT, reddish brown 5YR 4/4, dry, stiff	***(Soil headspace)***
		100				**0.0**
					Silt, same as above, med stiff	
5		100				**0.0**
					Silty CLAY, strong brown 7.5YR 4/6, moist, soft	
10		100				**0.0**
					Silty CLAY, strong brown 7.5YR 4/6, med stiff, damp	
15		100				**0.0**
					Same as above	
20		100				**0.0**
					Same as above, slightly more clay content, slightly plastic, med stiff	
25		100				**0.0**
					Silty SAND, red 2.5 YR 5/8, very fine, withlight reddish gray mottles, 2.5 YR 7/1, damp, loose	
30		80				**0.0**
					SAND, yellowish red 5YR 5/6 fine, very loose, damp, grading coarser to med sand and reddish yellow 7.5 YR 7/6 by 38'	
35		65				**0.0**

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40		60		Used hollow-stem auger drilling method no penetration test results	SAND as above, reddish yellow 7.5 YR 7/6, med, very loose, dry	0.0
45		50			Gravelly SAND as above, with gravel and pebbles 50% mix. Sample was only from 45.5 to 48 due to problems with rig. Becomes a pebbly SAND, 7.5YR 4/6, dry, loose	0.0
					Pebbly SAND as above to 49.5 feet.	
50		100			Sharp change to SAND, yellow 10YR 7/6, fine very loose, dry	0.0
					Grades to brownish yellow, SAND, yellow 10YR 7/8, med to fine, well sorted, very loose dry	
55		100			Grades coarser sand to 58 feet	0.0
					Pebbles at 57 to 58 feet	
					Gravelly SAND, as above, yellow 10YR 7/6, med to coarse, pebbles 40%, loose, damp	
60		90				0.0
					Grades down to pebbles, no gravel	
65		90			As above to 65.5, moist. Gravel replaces pebbles, rounded to subrounded, loose, damp	0.0
					Gravelly SAND, strong brown 7.5YR 5/8, Coarse, loose, damp, gravel approx. 10% of matrix, few pebbles.	
70		65				0.0
					Grades to a SAND, very pale brown, 10YR 8/2, fine, loose, dry Same fine sand as above, yellow 10YR 7/6	

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75		90		Used hollow-stem auger drilling method no penetration test results		**0.0**
					Silty CLAY, brownish yellow 10YR 6/8 plastic, fine, soft, damp to moist, 1" thick SAND, yellow 10YR 7/6, fine, loose, dry, some gravel, subrounded	
80		90				**0.0**
					Grading to brownish yellow 10YR 6/8 and no gravel, damp to moist Same as above with gravel	
85		100				**0.0**
					1 inch clay band, no water above	
					No gravel as above SAND, pale yellow 2.5Y 8/2 fine, loose, dry, some subrounded gravels	
90		100				**0.0**
					Same as above, damp	
95		75				**0.0**
					Gravelly SAND, yellow 10YR 7/6, fine, loose, dry, 20% gravel	
100		65				**0.0**
					Less gravelly; SAND, pale yellow 2.5Y 8/2, fine, well sorted, loose, dry	
105		75				**0.0**
					Wet, mixed coarse sand	Water Table Sample collected for VOCs
					Same as above, saturated	
110		100				Sample collected for TOC
					Silty CLAY, olive yellow 2.5Y 6/8 stiff, starting at 110.7'	

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115		100		Used hollow-stem auger drilling method no penetration test results	Clay, grey, stiff Clay as above	
120					BORING TERMINATED @ 118 FEET BGS.	
125						
130						
135						
140						