



PROJECT NUMBER <b>160492.SA.03</b>	BORING NUMBER <b>MW-93A (Replaced by MW-93B)</b>
<b>SOIL BORING LOG</b>	

PROJECT : Long Term Operational Areas - Memphis Depot LOCATION : Memphis, Tennessee  
 ELEVATION : Not Applicable DRILLING CONTRACTOR : Tri-State Testing Services, Inc.  
 DRILLING METHOD AND EQUIPMENT USED : Hollow Stem Auger 4.25 inch ID with CME Sampler  
 WATER LEVELS : Not Applicable START : 09/25/2001 END: 09/27/2001 LOGGER : Adam Kaiser (Jacobs)

DEPTH BELOW SURFACE (FT)				STANDARD PENETRATION TEST RESULTS	SOIL DESCRIPTION	COMMENTS	
INTERVAL (FT)		RECOVERY (%)		6"-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.	
			#/TYPE				Corrected FID (ppm): <b>(Soil headspace)</b>
5	100			Used hollow-stem auger drilling method no penetration test results	Clayey silt-brown, dry, stiff	<b>0.8</b>	
					Clayey silt-brown, dry, stiff		
	100						
					Clayey silt-brown, dry, stiff		
	10				Damp, hard		<b>0.9</b>
					Clayey silt-brown, dry, stiff		
	15						
	100				More silty, reddish, firm		<b>1.0</b>
	20						
100			Silt	<b>1.0</b>			
			Sandy, silt-reddish brown, damp, soft, more sandy				
25							
30	100				<b>0.0</b>		
				Sand-reddish med coarse, dense, most, gravelly (small)			
	85					<b>1.4</b>	
35	65			Sand, <5% small gravel ~1/2" in size, transitioning into more gravel, 40% 1/2 to 1" in size	<b>2.2</b>		



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	RECOVERY (%)			TEST RESULTS		
				6"-6"-6"-6" (N)		
				Used hollow-stem auger drilling method no penetration test results		Corrected FID (ppm):
40		65			Sand, reddish, coarse loos, most, small gravel, 5% 1/4 - 1/2 - 4" silt zone	1.3
45		90			Sand, red, coarse, med dense, most, no gravel, more tannish, less dense	1.4
50		90			Sand, red/tannish, coarse, med dense, most	1.6
55		100			Same w/small gravel <5% 1/4"	0.0
60		100			Sand, red/tan, med, med-dense, moist, no gravel	
					More coarse, some large rocks 1" to 1-1/2 ", small, gravel <1/4"	0.6
					More gravel - 5% 1/4" - 1/2", large gravel 60% (1")	
65		90			Sand, tan, medium, dense, damp with small gravel, 20% - 30% 1/4" - 1", up to 1-1/2"	1.0
70		90				1.4
					Sand, tan/white, fine, loose, damp	



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	INTERVAL (FT)	RECOVERY (%)	#/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. Corrected FID (ppm):
75		100		Used hollow-stem auger drilling method, no penetration test results	Reddish/tan, more coarse	0.9
80		100				1.2
85		100			Sand, red coarse and tan fine, loose, damp	1.4
90		90			More coarse, 10-20% gravel 1/2" to 1" in size.	1.7
95		90			Less gravel	0.4
100		0			Wet Cemented iron stone	Sample collected for VOCs
105		100			Sand, reddish tan, medium to coarse grained, saturated	
110					BORING TERMINATED @ 105.5 feet Tri-State could not advance the augers past 105.5 feet because of "cork-screwing". A decision was made by Tri-State to abandon the soil boring MW-93A. The new soil boring (MW-93B) was offset approximately 25 feet west of MW-93A.	

