



PROJECT NUMBER 160492.SA.03	BORING NUMBER MW-102
SOIL BORING LOG	

PROJECT : Long Term Operational Areas - Memphis Depot LOCATION : Memphis, Tennessee
 ELEVATION : 311.34 feet MSL (TOC); 311.70 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 : 110.66 feet BTOC (11/2001) START : 10/09/2001 END: 10/10/2001 LOGGER : Jay Parker (Jacobs)

DEPTH BELOW SURFACE (FT)				STANDARD	SOIL DESCRIPTION	COMMENTS
	INTERVAL (FT)		#/TYPE	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.
				TEST RESULTS		
				6"-6"-6"-6" (N)		
			Used hollow-stem auger drilling method no penetration test results	6 inch grass and organics Clayey SILT, brown 7.5YR 5/3, slightly plastic, med. stiff, damp	Corrected FID (ppm): (Soil headspace)	
		100		Clayey, SILT, same as above	0.0	
5		100			0.0	
				Clayey SILT, reddish brown, 5YR 5/4, soft to med. stiff, damp, slightly to non-plastic		
10		100			0.0	
				Clayey SILT, yellowish brown, 10YR 5/4, soft to med. stiff, dry, nonplastic		
15		100			0.0	
				Clayey SILT, same as above, med. stiff to stiff		
20		65			0.0	
				SAND, yellowish red, 5YR 5/6, very fine to fine, loose, moist		
25		60		0.9		
			At 27 feet, grades to reddish yellow 7.5YR 6/6, fine to med. Same as at 27 feet, very fine to fine, stiff			
30		75		1.6		
			At 31.5 feet, clayey SAND, yellowish red, 5YR 5/8 nonplastic, dense/very stiff, dry, fine. Nearly 50% clay.			
			SAND, dark red 2.5YR 3/6 with reddish yellow 7.5YR 6/6 mottles almost 50/50 mix, very fine to fine, dense, damp to dry			
35		75		1.2		
			At 37 feet, fine, well sorted, med. dense, strong brown 7.5 5/8, dry to damp			



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WATER LEVEL: 119.00 feet BTOC (1/1/2007) START: 10/09/2007 END: 10/10/2007 LOGGER: Jay Parker (jacobs)				STANDARD PENETRATION TEST RESULTS 6"-6"-6"-6" (N)		SOIL DESCRIPTION		COMMENTS	
DEPTH BELOW SURFACE (FT)		INTERVAL (FT)		RECOVERY (%)		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):	
40		60		Used hollow-stem auger drilling method no penetration test results	SAND, yellowish red 5YR 5/6, fine, med. dense, dry			5.6	
					Grades to med. to coarse at 42 feet with trace rounded pebbles		2.5' intervals		
45		60			SAND, brownish yellow 10YR 6/8 med. to coarse, loose, dry, trace rounded pebbles, grades to yellow sand 10YR 7/6 at 46 feet, fine to med., trace gravel			0.4	
					SAND, same as above, more gravel ~ 10%				
50		65						0.9	
55		55				SAND, same as above, only trace gravel til 57.5 feet, then gravel as above.		1.1	
						SAND, yellowish red 5YR 5/8, fine to med., loose, dry, grades to reddish yellow 7.5 YR, fine, loose, damp, trace pebbles			
60		75						1.8	
						SAND, same as above, reddish yellow, no gravel			
65		75					0.0		
70		75			SAND, same as above		1.5		
					Gravelly SAND, yellow 10YR 7/6 fine to coarse, loose, damp, gravel up to 2 inches				



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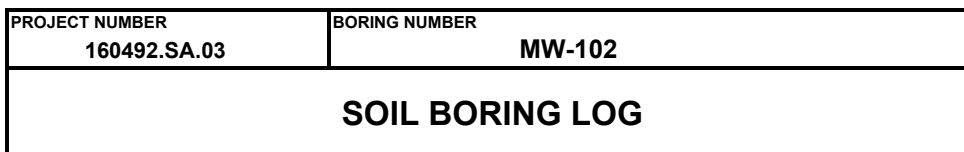
WATER LEVEL: 110.00 feet BVC (11/2007) START: 10/09/2007 END: 10/10/2007				LOGGER: Jay Parker (JACOBS)		
DEPTH BELOW SURFACE (FT)				STANDARD PENETRATION TEST RESULTS 6"-6"-6"-6" (N)	SOIL DESCRIPTION	COMMENTS
	INTERVAL (FT)		#/TYPE			
	RECOVERY (%)					
75		75		Used hollow-stem auger drilling method no penetration test results		0.0
					Grading down to pebbles at 78 feet SAND, yellow 10YR 7/6, med. to coarse, loose, dry	75%, but sample fell out on ground
80		75				0.0
					SAND, same as above, trace large gravels up to 1 inch	
85		60				0.0
					At 88 feet, sand appears moist. Gravelly SAND, pale yellow 2.5Y 7/4, fine to coarse, very dense, dry, gravel up to 1 inch, 45% gravel	
90		50				1.8
					Gravelly SAND, same as above	
95		65				0.6
					Gravelly SAND, same as above	Only 1 liner was placed in the 5' span
100		75				1.1
					Gravelly SAND, same as above	
105		60				2.6
					Gravelly SAND, same as above, strong, brown 7.5YR 5/8	Sample collected for VOCs
110		50			Wet at 110 feet	0.0
						Water Table



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				TEST		
				RESULTS		
				6"-6"-6"-6" (N)		
115	50			Used hollow-stem auger drilling method no penetration test results	Gravelly SAND, same as above, zones of rounded pebbles, saturated	Sample collected for TOC
					Gravelly SAND, same as above, saturated	
120	60				Sample fell out, probably more of the same	
125	0					
					SAND, very pale brown 10YR 7/3, fine to coarse, loose, saturated, few pebbles	
130	50					
					Silty SAND, light grey 2.5Y 7/1 with brownish yellow 10YR 6/8 mottles, very fine, silty, moist, med. stiff, nonplastic	
135	50					
					Silty SAND, same as above, grading to clay SAND at 139 feet	
140	100				Grading to Sandy CLAY at 140.5 feet	



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WATER LEVELS :	110.66 feet BTOC (11/2001)	START :	10/09/2001
		END :	10/10/2001
		LOGGER :	Jay Parker (Jacobs)

WATER LEVEL: 110.00 feet BYOC (11/2001) START: 10/09/2001 END: 10/10/2001 LOGGER: Jay Parker (jacobs)				SOIL DESCRIPTION		COMMENTS	
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	RECOVERY (%)			6"-6"-6"-6" (N)			
	#/TYPE						
				Used hollow-stem auger drilling method no penetration test results	Clay is bluish grey CLAY 5/1, hard, damp		
145					BORING TERMINATED @ 143 FEET BGS.		
150							
155							
160							
165							