

PROJECT NUMBER BORING NUMBER

160492.SA.03 MW-101B (Replaced SB-101)

## **SOIL BORING LOG**

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

ELEVATION: 291.70 feet MSL (TOC); 291.99 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: 93.32 feet BTOC (11/2001) START: 10/19/2001 END: 10/19/2001 LOGGER: Jay Parker (Jacobs) DEPTH BELOW SURFACE (FT) STANDARD SOIL DESCRIPTION COMMENTS INTERVAL (FT) PENETRATION RECOVERY (%) TEST SOIL NAME, USCS GROUP SYMBOL, COLOR, DEPTH OF CASING, DRILLING RATE, #/TYPE DRILLING FLUID LOSS, RESULTS MOISTURE CONTENT, RELATIVE DENSITY. 6"-6"-6"-6" OR CONSISTENCY, SOIL STRUCTURE, TESTS, AND INSTRUMENTATION. (N) MINERALOGY Corrected FID (ppm): 6" asphalt Clayey SILT, brown, soft, damp, med plastic (Soil headspace) Used hollow-stem auger drilling method no penetration tes results 100 0.0 Same as above, reddish brown, med stiff to stiff, damp, med plastic 10 0.0 100 15 0.0 CLAYEY SILT Slowly grades to a CLAYEY SAND, brownish red, very fine, med stiff, slightly plastic to med plastic 20 0.2 100 Sample collected for VOCs (MW-101) Grading to a SILTY SAND with clay 25 0.0 SAND, red, very fine to fine, stiff, some clay in matrix, grading coarser with depth, damp, trace gravel at 27 feet becoming more gravelly to 37 feet SAND, reddish brown, fine to medium, loose, damp 30 0.0 100 6" of Clay at 35 feet Color starts turning more yellow at 35 feet after the clay seam. Gravel up to 2.5 inches at 35 feet. ~5 to 10% of the matrix is gravel @ 36 feet



WATER LEVELS: 93.32 feet BTOC (11/2001) START:

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10/19/2001

# **SOIL BORING LOG**

LOGGER: Jay Parker (Jacobs)

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

10/19/2001

DRILLING CONTRACTOR: Tri-State Testing Services, Inc.

ELEVATION: 291.70 feet MSL (TOC); 291.99 feet MSL (ground) DRILLING CONTE DRILLING METHOD AND EQUIPMENT USED: Hollow Stem Auger 4.25 inch ID with CME Sampler

				11/2001) START.	10/19/2001	END. 10/19/2001	EGGGEIT.	Jay Farker (Jacobs)
DEPTH E	BELOW SI	JRFACE (I	FT)	STANDARD		SOIL DESCRIPTION		COMMENTS
	INTERVA	L (FT)		PENETRATION				
	INTERVAL (FT)							
	RECOVERY (%)		TEST		ROUP SYMBOL, COLOR,		DEPTH OF CASING, DRILLING RATE,	
	1	1	#/TYPE	RESULTS	MOISTURE CONTEN	T, RELATIVE DENSITY,		DRILLING FLUID LOSS,
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	1	1	1	6"-6"-6"	OR CONSISTENCY,	SOIL STRUCTURE,		TESTS, AND INSTRUMENTATION.
				(N)	MINERALOGY.			Corrected FID (ppm):
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					Gravelly SAND, reddish	yellow to pale yellow, fine, loose, damp, gr	avelly in	
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DRILLING METHOD AND EQUIPMENT USED: Hollow Stem Auger 4.25 inch ID with CME Sampler

LOGGER: Jay Parker (Jacobs) WATER LEVELS: 93.32 feet BTOC (11/2001) START: 10/19/2001 END: 10/19/2001 DEPTH BELOW SURFACE (FT) STANDARD SOIL DESCRIPTION COMMENTS INTERVAL (FT) PENETRATION RECOVERY (%) TEST SOIL NAME, USCS GROUP SYMBOL, COLOR, DEPTH OF CASING, DRILLING RATE, #/TYPE MOISTURE CONTENT, RELATIVE DENSITY, DRILLING FLUID LOSS, RESULTS 6"-6"-6"-6" OR CONSISTENCY, SOIL STRUCTURE, TESTS, AND INSTRUMENTATION. (N) MINERALOGY Corrected FID (ppm): 75 Used hollow-stem 1.8 auger drilling method no penetration tes results Same as above. Gravel zone from 77 to 77.5. Becoming a sandy gravel with depth then back to gravelly SAND by 86 feet 80 0.0 100 85 0.0 Sample collected for VOCs Gravelly SAND, pale yellow to light grey, fine, loose Gravelly zone at 88 feet 90 1.2 100 Water Table Sample collected for VOCs (MW-101) Wet @ 96 to 100 feet Hard to identify water table as most water runs out of sample before reaching the surface. Gravelly zone at 96 feet 100 100 105 Sample collected for TOC Gravelly zone at 105 feet SAND and gravelly SAND, pale yellow, fine ro med, loose, saturated Gravel zones at 107 to 108 feet 110



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

DRILLING CONTRACTOR: Tri-State Testing Services, Inc.

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DRILLING CONTE

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

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WATER LEVELS: 93.32 feet BTOC (11/2001)					Jay Parker (Jacobs)
			STANDARD	SOIL DESCRIPTION	COMMENTS
			PENETRATION		
	RECOVE	RY (%)	TEST	SOIL NAME, USCS GROUP SYMBOL, COLOR,	DEPTH OF CASING, DRILLING RATE,
		#/TYPE	RESULTS	MOISTURE CONTENT, RELATIVE DENSITY,	DRILLING FLUID LOSS,
			6"-6"-6"	OR CONSISTENCY, SOIL STRUCTURE,	TESTS, AND INSTRUMENTATION.
			(N)	MINERALOGY.	Corrected FID (ppm):
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_i	100		Used hollow-stem	Gravelly SAND	
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I	I			Above the gravel zone, SAND yellowish red, coarse, loose, saturated, trace gravel	
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7	I			CLAY, yellowish grey, dense, damp, plastic	1
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