

PROJECT NUMBER BORING NUMBER 160492.SA.03 MW-96

SOIL BORING LOG

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

DRILLING CONTRACTOR: Tri-State Testing Services, Inc.

ELEVATION: 289.02 feet MSL (TOC); 289.67 feet MSL (ground)

DRILLING CONTE

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

WATER LEVELS: 83.02 feet BTOC (11/2001)

START: 09/27/2001

END: 09/28

		BTOC (11/2001) START	09/27/2001	END: 09/28/2001	LOGGER :	Jay Parker (Jacobs)
EPTH BELOW SURFACE (FT)		STANDARD		SOIL DESCRIPTION		COMMENTS
INTERVA	RECOVERY (9		SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY,		DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS,	
		6"-6"-6"-6"	OR CONSISTENCY,			TESTS, AND INSTRUMENTATION.
		(N)	MINERALOGY.			Corrected FID (ppn
ı	1	Used hollow-stem	Clayey SILT, reddish b	rown 5YR 4/3, damp, stiff, organics		(Soil headspace
-!	Į I	auger				
_	100	drilling method				0.0
i	i	drilling method no penetration tes results	st			
-i	i	resuits		anics, some gray mottles in places		
_!	Į l			g,		
ļ	!					
-{	<u> </u>					
i	75					0.0
ī	i l					
-1	Į l					
_!	!					
]		Same as above, dry, m	ore gray mottles, slightly more silt content		
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7	<u> </u>					
	100					0.0
ł	1					
i	i l					
-1	J					
ļ	!		Same as above to 13.5 SAND_reddish_brown 2	2.5 YR 4/4 with light reddishbrown mottles, of	lamn loose fine	-
-	ł I		o, and, roddion brown i	o rre w r mar ngrie roadionorom moticoo, e	iamp, rocco, imo	
-i	i l					
Ī	75					0.0
- <u>!</u>	! '`					0.0
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i	i					
-i	i		SILTY SAND, light red,	2.5 YR 6/6, med, loose, moist to wet.		-1
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_	ł I					
_i	100					0.0
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<u>-i</u>	!					
	! •					_]
í	i		SAND, light red, 2.5YR	6/6, medium grained, loose, moist to wet		
i	i l					
.!	<u> </u>					
!	55					0.0
-{	55		4 inches of CLAY			-
i	i l		SAND, reddish yellow	7.5YR 6/8, fine, loose, dry		1
Ī	Ī					
!	!		SAND, as above, with i	nterbeds of dense, hard clay.		
- i	<u> </u>		CLAY, dense, followed	by a thin layer of SAND		
i	i		CLAY, dense			-
i	i l		SAND, same as above CLAY - 4" thick, dense			-
_!	50		SAND, same as above			0.0
!	!					
-:	:					
_i	j l					
í	ī l		SAND, reddish yellow	7.5YR 6/6, fine to med, loose, damp, trace p	ebbles	
-[Į I					
1	!					
1	50					0.0
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 DRILLING CONTRACTOR: Tri-State Testing Services, Inc.

TER LEVELS				09/27/2001	END: 09/28/2001	LOGGER :	Jay Parker (Jacobs)	
PTH BELOW SURFACE (FT)		STANDARD		SOIL DESCRIPTION		COMMENTS		
INTERVA			PENETRATION					
	RECOVER		TEST		GROUP SYMBOL, COLOR,		DEPTH OF CASING, DRILLIN	NG RATE,
	,	#/TYPE	RESULTS		NT, RELATIVE DENSITY,		DRILLING FLUID LOSS,	
			6"-6"-6"	OR CONSISTENCY,	SOIL STRUCTURE,		TESTS, AND INSTRUMENTA	
			(N)	MINERALOGY.			Correcte	ed FID (ppm
 - -			Used hollow-stem auger drilling method no penetration test results	Gravelly SAND, strong gravel, gravel 100% S) brown 7.5YR 5/8, fine to med to coarse, s AND, reddish yellow 2.5YR 6/8	ubangular		
	100							0.0
-ii				Fine, loose, moist SAND, yellow 10YR 7/	/8, fine, loose, damp to dry			
_i	100							0.0
- 				Same as above, browr	nish yellow 10YR 6/6			
 	90							0.0
-i i				CLAY, pale yellow 2.5' CLAY as above to 54.5	Y 7/4, plastic, soft, damp. Clay was at end	of shoe - 6"		
- - - - - - - - - - - - - - - - - - -	90			SAND, strong brown 7	SYR 5/6, med to coarse, loosemoist to we	t, trace pebbles		0.0
_ 				Pebbly SAND, very pa gravel, subangular, loc	ale brown 10YR 7/4, med to coarse, pebbles use, moist.	s and trace		
 - 	75							0.4
i i				Wet SAND at 62 and 6	62.5 feet		Sample collected for VOCs	
				Same as above, we rounded pea gravels	et, some thin interbedded Clays, very c	oarse sand and		
- - -	75							
-1 				Sand becomes finer w SAND pale yellow 2.5\	rith pebbles rounded, moist Y 8/2, fine, loose, dry			
_{	100							
1				Same as above, browr	nish yellow 10YR 6/6			



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DEPTH	BELOW SU	JRFACE (I	FT)	STANDARD	SOIL DESCRIPTION	COMMENTS
	INTERVA	L (FT)		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"-6"	OR CONSISTENCY, SOIL STRUCTURE,	TESTS, AND INSTRUMENTATION.
				(N)	MINERALOGY.	Corrected FID (ppm):
	l	l				
75	!	<u> </u>		Used hollow-stem		_
	ļ	85		drilling method		
_	-1 			auger drilling method no penetration test		_
_	i	i		results	SAND, same as above	-
	j	į			CLAY layer - 4"	•
_	Ţ -	1			Grades to med sand; same as above, pale yellow 25Y 8/3, fine, loose, dry.	<u> </u>
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80	ļ					
00 _	í					
_	j	100				_
_	Ī	Ī				
-	-!	<u> </u>				Sample collected for VOCs
	!	ļ			Becomes wet @ 82.5 feet	Sample collected for VOCs
I -	<u> </u>	1 			SAND as above, grading coarser, med to coarse, saturated	Water Table
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85	Ī	Ī				
~ _	1	<u>I</u>				_
_	<u> </u>	50				_
	ļ					
-	!	! 				-
_	i	j				_
	i — — — ·	Ī			SAND as above, saturated, med to coarse	Sample collected for TOC
_	ļ	<u> </u>				-
90	ļ	<u> </u>				
	- 					_
_	i	50				_
	j	į				
_	1	I			Same as above	-
_	<u>!</u>	<u> </u>				_
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-	i					_
95_	j	i				
	I	I			01477 15 11 0 577070 1 15 1 1	
-		60			CLAY, olive yellow 2.5Y 6/8, lastic, moist	-
	ļ	<u> </u>				
_	i					_
-	i	i			Same yellow clay, then the rest is gray clay with black bands	-
	I	I			Dame yellow day, then the rest is gray day with black ballus	
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100	<u> </u>					_
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l -	i	i				-
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-	1	ł			BORING TERMINATED @ 103 FEET BGS.	1
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105 _	-					_
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