

PROJECT NUMBER BORING NUMBER 160492.SA.03 MW-98

SOIL BORING LOG

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

 ELEVATION:
 294.43 feet MSL (TOC); 294.93 feet MSL (ground)
 DRILLING CONTR

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

 WATER LEVELS:
 102.00 feet BTOC (11/2001)
 START:
 10/01/2001
 END:
 10/05
 DRILLING CONTRACTOR: Tri-State Testing Services, Inc.

	S : 102.00 feet BTO		10/01/2001	END: 10/05/2001	LOGGER :	Jay Parker (Jacobs)
INTERVAL (FT) RECOVERY (%)		STANDARD		SOIL DESCRIPTION		COMMENTS
		PENETRATION TEST	SOIL NAME, USCS GROUP SYMBOL, COLOR,		DEPTH OF CASING, DRILLING RATE,	
	#/TYPE	RESULTS		IT, RELATIVE DENSITY,		DRILLING FLUID LOSS,
		6"-6"-6"	OR CONSISTENCY,	SOIL STRUCTURE,		TESTS, AND INSTRUMENTATION.
	<u> </u>	(N)	MINERALOGY. 6" concrete			Corrected FID (pp (Soil headspace
	!	Used hollow-stem	Clayey SILT, dark redo	lish brown, 5YR 4/2, med stiff, damp		(Soli Headspac
i	400	auger				
-j	100	drilling method no penetration tes results	ıt			0.0
<u> </u>	<u>.!</u>	results				
	!		Same as above, brown	n, 7.5YR 4/4		
i	i l					
5_ _	į l					
ļ	100					0.5
-						
– İ	İ					
<u> </u>	!					
	'}		Same as above, moist	, slightly higher clay content		
-j	i					
_!	!					
ļ	100					0.0
-j	i					0.0
_!	!					
ļ	!					
-i	'i		Same as above, most	to wet, soft, slightly plastic		Wet/saturated soil may be due to
-1	į l					open fire hydrants last week
_						
i	100					0.0
-	<u> </u>					0.0
_						
i	i					
!	.j		Same as above, wet to	saturated, becomes less wet by 20.5		
_	!					
_	i					
Ī	100		More silty at 20.5, firm			0.0
-	100		wore sitty at 20.5, iiiiii			0.0
-	i					
į	į l					
	']		Clayey silt, strong brow	vn 7.5YR 5/6, firm, damp, nonplastic		
-i	i					Water appears to be running down hole, outside is wet, but
_!	!					actual sample is not.
ļ	100					0.0
i	i					3.0
-!	i l					
	.;]
i	i		Silty SAND, strong bro	wn 7.5YR 5/8, very fine to fine, loose to firm	, damp.	
-!	!					
	1					
i	100					0.0
7	!					
	1					
-i	.i					1
ļ _	!		SAND, yellowish red, 8 Less mottled w/light gr	iYR, 5/8, fine to very fine, loose, moist, gray	mottles	
-	!		Loss motted writgill gr	uy 65 1661		
i_i	100					2.2
Ĩ	100					0.0



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			(11/2001) START :	10/01/2001	END: 10/05/2001	LUGGER :	Jay Parker (Jacobs)
PTH BELOW SURFACE (FT)		STANDARD		SOIL DESCRIPTION		COMMENTS	
INTERVA	AL (FT)		PENETRATION				
	RECOVE		TEST	SOIL NAME, USCS	GROUP SYMBOL, COLOR,		DEPTH OF CASING, DRILLING RATI
		#/TYPE	RESULTS	MOISTURE CONTE	NT, RELATIVE DENSITY,		DRILLING FLUID LOSS,
			6"-6"-6"	OR CONSISTENCY	, SOIL STRUCTURE,		TESTS, AND INSTRUMENTATION.
			(N)	MINERALOGY.			Corrected FID (p
Į.	Ī		Used hollow-stem				
<u> </u>	1		auger		gray mottles, grading coarser with depth		
_¦	ł		drilling method		3.,, 3 3		
i	i		no penetration tes	1			
-i	Ī		results				0.5
Į.	75						0.5
1	ļ						
-	1						
i	i			At 43, SAND red, 25Y	R 4/8, fine to med, loose to firm, damp		
i	ĺ						
-[Į.				.5YR 4/8, firm to loose, med gravel up to 2"	, subrounded,	
ļ	ļ			damp, pebbles			
1							1.6
i	55						
Ī	Ī						
1	<u>I</u>						
!	ļ						
1	ł			SAND with pebbles, re	eddish yellow 7.5YR 6/6, med, loose, moist		
i	i						
j	Ī						
1							1.0
!	50						
i	i						
i	i						
1	1			Pehhly SAND reddiel	yellow, 7.5YR 6/8, loose, med to fine, moi	st Pehhles are	Sand is wet at top, but believe it's
!	į			subangular	r years, r.o rix oro, loose, med to line, mor	ot. I Cobies ale	still running down hole from above
!							
i	i						1.1
Ī	70						1.1
ļ .	<u> </u>						
ļ	ļ						
ł	ł						
i	i			Same as above, trace	small gravel, damp, med, subrounded		
Ī	Ī						
į	į						
!	ļ						0.0
i	65						
į	i						
1	<u>I</u>						
!	Į			CAND -t-	7.5VD 5/0	:_4	
:				SAND, strong brown a subangular pebbles, t	7.5YR 5/6 coarse, some pebbles, loose, mo race rounded grayel	ISI,	
i	i						
Ī	Ī						
ļ.	80						0.2
1	1 50						
] 							
i	i						
i	i			SAND, strong brown	7.5YR 5/6, very coarse to fine gravel, pebble	es, loose, moist.	
<u>J</u>	I			40% fine gravel/pebbl		,	
į	į						
-	ļ						0.0
	90			SAND goes to med to	coarse, yellowish brown, with pebbles, loos	se. damp	0.6
Ī		1		J	, ,		
<u>.</u>			I				
] 							
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WATER LEVE	ELS: 102.00 feet BTO	C (11/2001) START:	10/01/2001 END: 10/05/2001 LOGGER	: Jay Parker (Jacobs)
DEPTH BELOW SURFACE (FT)		STANDARD	SOIL DESCRIPTION	COMMENTS
INTER	RVAL (FT) RECOVERY (%) #/TYPE	PENETRATION TEST RESULTS	SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY,	DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS,
	m1112	6"-6"-6" (N)	OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY.	TESTS, AND INSTRUMENTATION. Corrected FID (ppm):
75	90		SAND, strong brown 7.5YR 5/8, fine to med, few pebbles, loose, damp to moist.	0.6
- - 80 	-		SAND, pale yellow 2.5Y 8/2, very fine to fine, very loose, damp Same as above, but strong brown. CLAY layer - 6" Gravelly SAND, light brown 7.5YR 6/4, sand is med, gravel is fine to rounded.	- - -
	90		Gravel zone is wet at 80.5 to 81.5 pebbly SAND	0.0 - -
85	100		SAND white 5Y 9/1, very fine to fine, very loose, dry	0.5
- - 			Gravelly SAND at 87 to 88 feet SAND Same as above at 83 and dark to gravelly SAND at 90.5 feet.	-
90 - -	100		2" of clay at 90 feet Pebbly SAND as above down to 93 feet	0.8
95I	100		Pebbly SAND, as above, med to coarse, damp.	0.3
100	90		As above, with some gravel up to 1", becoming most to wet at 103 feet	0.2
- - - -	-		Becoming moist to wet at 103 feet Samples lost, probably saturated	Water Table -
105	0		Complex last probably activated	Sample collected for VOCs
- - 110	45		Samples lost, probably saturated SAND, med to coarse, saturated	Sample collected for TOC



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