

PROJECT NUMBER
160492.SA.03

BORING NUMBER

SOIL BORING LOG

PROJECT : Long Term Operational Areas - Memphis Depot LOCATION : Memphis, Tennessee							
ELEVATI	ION : 304	4.13 fee	et MSL (TOC	c); 304.50 feet MSL	(ground) DRILLING CONTRACTOR : Tri-State Testing Services	, Inc.	
WATER		9 97 fe	et BTOC (11	1 USED : HOIIOW SI	09/18/2001 END: 09/19/2001 LOGGER ·	Jav Parker (Jacobs)	
DEPTH BE	ELOW SURF	ACE (F	T)	STANDARD	SOIL DESCRIPTION	COMMENTS	
I	NTERVAL (F	-T)		PENETRATION			
	RE	COVER	Y (%)	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. Blacktop	Corrected FID (ppm): (Soil headspace)	
I _i				Used hollow-stem	6" gravel, clayey silt, reddish brown 5 yr 5/3, firm, damp	(001110000000)	
i	i 1	100		auger drilling method		0.0	
- <u> </u>	!			no penetration test		-	
-	ł			results	Same as above	_	
l j	i						
		100					
5_		100				1.2 —	
_i	i					_	
!	ļ						
I	!					-	
-	i				Same as above	-	
!	ļ						
-						_	
¹⁰ —	1	100				0.0	
_!	Į.					_	
-	i					—	
	i				Same as above, slightly more silt and fine sand	_	
!	ļ						
	ł					-	
¹⁵ —	i 1	100				0.0	
	-					_	
-i	i					-	
_!	i				SILT with little clay, reddish brown 5 yr 5/3, damr	_	
1							
	i					-	
20	<u> </u>	100				0.0	
	ł						
l i	i						
-	ļ.					-	
-	!				Clayey SAND, reddish brown 5YR4/4 med to fine, well sorted firm-med density	_	
1 i	i						
1. 1	ļ.					_	
²⁵		100				0.0	
l j	i						
	ļ.						
_						—	
- i	i				Clayey SAND, reddish brown 5YR4/4, less clay more fine, med dense	-	
!	ļ						
	I					-	
30	i	50				6.4	
<u> </u>	Į					_	
1	ļ						
-	i					-	
_i'	i				SAND, yellowish red 5YR5/6 well sorted, fine, mostly med grained	_	
!	ļ				ioose, damp, small rounded trace gravel		
						-	
³⁵	i	60				0.0	
	ļ						
						_	



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BORING NUMBER MW-85

SOIL BORING LOG

	PROJECT : Long Term Operational Areas - Memphis Depot LOCATION : Memphis, Tennessee						
DRILLIN	IG METH	10D ANE	EQUIPMEN	T USED : Hollow Si	tem Auger 4.25 inch ID with CME Sampler	, INC.	
WATER	LEVELS	5:99.97	feet BTOC (1	1/2001) START :	09/18/2001 END: 09/19/2001 LOGGER :	Jay Parker (Jacobs)	
DEPTH E	BELOW S	JRFACE (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.	
	1			(N)	MINERALOGT.	Corrected FID (ppm):	
_				Used hollow-stem	SAND, fine, brownish y yellow 10YR6/6, very well sorted, some grayer streaks	_	
				auger drilling method	dry to damp, loose.		
_				no penetration test		-	
40		60		results		1.0	
1		l .					
_						-	
-i						-	
_i					Same as above, 10YR6/6	_	
_						-	
45		50					
1						2.1	
-						-	
- 1						-	
					Same as above, 10YR, 6/6		
						_	
-						-	
50		50				8.1	
_						-	
-						-	
					pebbles, samp, loose, rounded to subrounded pebbles		
					. ,	_	
-i						-	
55		50				11.9	
-						-	
_						_	
					SAND strong brown 7 5YR 6/6 fine well sorted some small pebbles to gravel		
_					loose, moist to damp	-	
-						-	
60		65				4.9	
-i		1				-	
_!						_	
					SAND, yellow 10YR, 7/6, very fine to fine, well sorted. loose. drv to damc		
i	İ	i			· · · · · · · · · · · · · · · · · · ·	-	
-						_	
65 _		100				3.5	
_						-	
_						_	
i					SAND reddish vellow 7.5YR 6/6 fine well sorted trace peobles loose dame		
-i		1			or and, reducer yonow rights, ore, and, were defined, trade perposed, todae, tallip	-	
-						-	
70		100				0.3	
i							
-!						-	
					At 71.5 turns to SAND with 40% gravel, fine to coarse gravel up to 1.5", pebbles		
ī		i			mottled yellow coarse sand 10YR, 7/4	_	
-!					subrounded, loose, damp to dry. Pebbles and gravel ~ 10%	-	
						_	



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PROJECT :	Long Term	n Operationa	Al Areas - Memphis	Depot LOCATION : Memphis, Tennessee	
DRILLING MET	HOD AND E		USED : Hollow St	em Auger 4.25 inch ID with CME Sampler	s, mc.
WATER LEVEL	S : 99.97 fe	et BTOC (11	1/2001) START :	09/18/2001 END: 09/19/2001 LOGGER :	Jay Parker (Jacobs)
DEPTH BELOW	SURFACE (F	Г)	STANDARD	SOIL DESCRIPTION	COMMENTS
INTER	AL (FT)	Y (%)	PENETRATION TEST	SOIL NAME, USCS GROUP SYMBOL, COLOR,	DEPTH OF CASING, DRILLING RATE,
	#	ITPE	RESULIS	OD CONSISTENCY SOIL STRUCTURE	TESTS AND INSTRUMENTATION
			(N)	MINERALOGY.	Corrected FID (ppm):
	1		()		
75 	50		Used hollow-stem auger drilling method no penetration test results	SAND, brownish yellow 7.5YR 6/4 fine to med. With some gravel to 1.5", subrounded, loose, damp to dry. Pebbles and gravel ~ 10%	2.3
				Same as above, fine to coarse, approx. 15% to 20% pebbles and gravel.	-
80	100				3.0
				Becoming moist to wet at 80.0.	
	i			At 81', SAND, very pale brown 10YR 7/3, wet to saturated, very fine to fine, loose	-
				SANDY SILT w/clay, light gray 2.5Y 7/2, very fine sand, wet to saturated med_plastic	
-	1				-
85	100				Sample collected for VOCs
- ⁰⁰	100			@ 86.5', yellowish brown color	
	İ				Sample collected for TOC
	.			Same as at 86.5 , grades to SAND, white 10 YR, 8/1, fine, well sorted	_
_					_
90	100			moist to wet @ 89.5.	
ļ	i l				_
	i				_
<u> </u>	·i			Same as above, grading to SAND w/50% pebbles and gravel to 95'. Light yellow brown matrix 10YR, 6/3, med to coarse sand subrounded and	-
_	1			subangular pebbles and gravel, damp to moist	_
95	80				_
_				SAND, pale yellow 2.5Y, 7/2, fine, loose, well sorted	_
-					Sample collected for VOCs
-				Same as above to 99.5 feet	-
-	1				Water table
¹⁰⁰ —	100			SAND, pale yellow 2.5Y, 7/2, fine, loose, well sorted, moist to wet	_
				At 101.5, GRAVELLY SAND, strong brown 7.5Y 5/6, gravel to 1 inch, subrounded to subangular sand, fine to coarse. Approx 50/50 gravel/sand, wet	-
	.i			Same GRAVEL & SAND to 103	
_	i			Then grades to a SAND, silty SAND, olive yellow 2.5Y, 6/6, very fine to fine dense, moist/wet/saturated.	_
105	100				_
	į			At 105.5, SAND, light grey 2.5Y 7/2, very fine to fine, loose, saturated	Sample collected for TOC
	i				
_!	·			Same as above, SAND	
110	100				
<u> </u>					-



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PROJECT :	Long Term Operationa	al Areas - Memphis	Depot LOCATION : Memphis, Tennessee	
DRILLING MET	HOD AND EQUIPMEN	USED : Hollow St	tem Auger 4.25 inch ID with CME Sampler	s, inc.
WATER LEVEL	S : 99.97 feet BTOC (1	1/2001) START :	09/18/2001 END: 09/19/2001 LOGGER :	Jay Parker (Jacobs)
DEPTH BELOW S	SURFACE (FT)	STANDARD	SOIL DESCRIPTION	COMMENTS
INTERV	RECOVERY (%) #/TYPE	TEST RESULTS	SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY, OR CONSISTENCY, SOIL STRUCTURE	DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS,
		0-0-0-0 (N)	MINERALOGY.	Corrected FID (ppm):
i	l l		SAND	
			CLAY, grey, @ 111.5 teet	-
-1	1		Same as above, CLAY	-
-	100			-
115	ļ l			_
			BORING TERMINATED @ 115 FEET BGS.	
_				-
-				-
_				_
120				
-				-
-				-
¹²⁵ —				—
-				-
-				-
130				
_				-
				1
-				
135				—
				-
				1 7
-				-
140				
_				_