

PROJECT NUMBER	BORING NUMBER
170039	IW-2

SOIL BORING LOG

PROJECT: EBT Treatability Study LOCATION : Memphis Depot DRILLING CONTRACTOR : Boart Longyear

ELEVATION:

DRILLING CONTRACTO
DRILLING METHOD AND EQUIPMENT USED: Rotasonic rig (4 inch sample casing / 6 inch outer casing)
WATER LEVELS:

START: 04/19/2002 END: 04/19/2002 LOGGER: Mike Karafa

WATER LEVE		START:	04/19/2002	END: 04/19/2002	LOGGER :	Mike Karafa
DEPTH BELOW	SURFACE (FT)	STANDARD		SOIL DESCRIPTION		COMMENTS
INTER	/AL (FT)	PENETRATION				
	RECOVERY (%) TEST	SOIL NAME, USCS GROUP	SYMBOL, COLOR,		DEPTH OF CASING, DRILLING RATE,
	#/T`	YPE RESULTS	MOISTURE CONTENT, REL	ATIVE DENSITY,		DRILLING FLUID LOSS,
		6"-6"-6"	OR CONSISTENCY, SOIL S	TRUCTURE,		TESTS, AND INSTRUMENTATION.
		(N)	MINERALOGY.			Corrected FID (ppm):
I	ı		Asphault, parking lot			(Soil headspace)
<u>-i</u>	<u> </u>		Silt, brown, dry, stiff			-
ļ	!		ont, brown, dry, our			
-	100					
l -i	i l					0.0
i	i l					
<u> </u>	<u> </u>					
5			City Clay raddiah brawn atiff	dn		
1 :			Silty Clay, reddish brown, stiff	ary		
l -i	i l					
–i	i l					
<u> </u>	<u> </u>					0.0
-	!					5.5
	:					
10	100					
¹⁰ —i	100		Silty Clay, reddish brown, stiff	damp		
<u> </u>	<u> </u>		, , , , , , , , , , , , , , , , , , , ,			
!	!					
-;	1					
l _i	i l					0.0
I						
-!	Į I					
15						
			Silty Clay, reddish brown, stiff	damp		
-i	i l					
Ī	Ī					
-						0.0
1 1	i					
i i	i l			and and gravel (>0.5 inches dia	ameter)	
20	100		Silty Clay, reddish brown, stiff	damp		
!	!					
-	:					
l -i	i					
I						0.0
-!	!		Sand, light orange, fine graine	d, well sorted, loose]
-			0:14 . 0 1 1	ttling, fine to medium grained, s		
25	i		onty oanu, reu with yellow mo	umy, ime to medium grained, s	un, uly	
	-ī					
-i	!					
!	!					
	i					
l –i	i					0.0
]	Į l					
- <u> </u>	!					
30	100					
1	i		Silty Sand, red, fine to mediun	grained, poorly sorted, stiff, dr	y to damp	
-i	i					
_!	į l					
1 !	!					0.0
-	!					
1 j	i					
] ₂₅	i		Sand, reddish orange, fine gra	ined, stiff, dry to damp		
³⁵ ———						
<u> </u>	ļ l					
-	!					
<u> </u>	!					



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			EQUIPMENT	NT USED: Rotasonic rig (4 inch sample casing / 6 inch outer casing)				
WATER				START:	04/19/2002 END: 04/19/2002 LOGGER:	Mike Karafa		
DEPTH B			FT)	STANDARD	SOIL DESCRIPTION	COMMENTS		
	INTERVA			PENETRATION				
		RECOVE		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):		
-I -I 40		100			Sand, red to orange, fine grained, stiff, some medium grained quartz	0.0		
-1 -1 -1	İ				Sand, orange/yellow, fine to medium grained, well sorted, loose, dry			
1 :					Sand, reddish white, fine grained, grading to medium grained, loose, dry	0.0		
1 1					Sand, orange, fine to medium grained, poorly sorted, grading to coarse grained, damp	0.0		
45 <u> </u>	i 				Pebble to cobble size			
	 				Sand, light orange yellow, fine grained, loose, dry, pebble:	0.0		
50I	 	100			Sand, tan/white, fine to medium grained, loose, dry, pebbles			
- I - I 55					Sand, tan/white, fine to medium grained grading to a coarse grain, loose, damp, pebbles	0.0		
					Sand, orange, fine to medium grained, poorly sorted, damp, pebbles, subangular			
		100				0.0		
- - - 		100			Sand, orange, fine to medium grained, poorly sorted, damp, pebble to cobble, subangular	0.0		
05 - -					Same as above: Tan orange sand Sand, light tan, fine grained, loose, well sorted, dry	0.0		
70 <u> </u>		100			Sand, tan to orange, fine grained, loose, well sorted, dry			
-1 -1 -1						0.0		



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DRILLING METHOD AND EQUIPMENT USED : Rotasonic rig (4 inch sample casing / 6 inch outer casing)

WATER LEVELS :	START:	04/19/2002 END: 04/19/2002 LOGGER:	Mike Karafa
DEPTH BELOW SURFACE (F		SOIL DESCRIPTION	COMMENTS
INTERVAL (FT)		SOIL DESCRIPTION	COMMENTS
RECOVER	PENETRATION RY (%) TEST #/TYPE RESULTS	SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY,	DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS,
	6"-6"-6"	OR CONSISTENCY, SOIL STRUCTURE,	TESTS, AND INSTRUMENTATION.
	(N)	MINERALOGY.	Corrected FID (ppm):
75		Silty sand, tan, fine grained, soft, some small gravel, damp Sand, orange white, fine grained, well sorted, loose, dry damp	0.0
80l		Silty Clay, tan, stiff, wet	0.0
85		Silty Sand, tan, fine grained, soft, wet Sand, white to light pink, fine grained, loose, dr	0.0
90i 100		Sand, brown, fine grained, stiff, pea size gravel with subrounded cobbles Sand, tan, fine to coarse grained, poorly sorted, gravel, subrounded to subangula pebbles to cobbles, loose dry Sand, white/tan, fine to coarse grained, poorly sorted, loose, saturated @ 96 ft bgs, White/orange interbedded sitly clay Sand, orange/red, fine grained, loose, damp	0.0 Watertable @ approximately 96 feet bg:
100		Gravelly Sand, tan, fine to coarse grained, poorly sorted, pebbles to cobbles Subangular to subrounded Silty Clay, orange and gray mottled, wet, stif Sand, gray, fine grained, wet @ 105: >1 inch bed of small brown angular gravel Clay, dark gray, massive Boring Terminated @ 106 feet bgs	
110			