

PROJECT NUMBER	BORING NUMBER
170039	IW-3

SOIL BORING LOG

PROJECT:	EBT Treatability Study	LOCATION : Memphis Depot
ELEVATION:		DRILLING CONTRACTOR: Boart Longyear
DRILLING MET	HOD AND EQUIPMENT USED:	: Rotasonic rig (4 inch sample casing / 6 inch outer casing)

WATER	RLEVELS			START:	04/20/2002 END: 04/21/2002 LOGGER:	Mike Karafa
DEDTH	BELOW SU	IDEACE (CT\			
DEPIRE			F1)	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):
				(14)	Asphalt and gravel	(Soil headspace)
	•				rophat and graver	(con nonapaco)
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l _						
		100				
I –					0.10 1	0.0
		ŀ			Silt, brown, stiff, loess	
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5	i	i				
	i					
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	i i	i				
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	i i	i				
I -	1	1				0.0
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10	l i	100				
10 —	1 1	100				
					Same as above, Silt	
I -						
I _						
-						0.0
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15						
10 —	<u> </u> -					
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_	1					
_	<u> </u>	!				0.0
	<u> </u>					
I -	<u> </u>	!				
20	!	100			C	
20 —	!	100			Same as above, Silt Sand, orange, fine grained, loose, dry	-
	!	!			Sand, orange, fille graffed, loose, dry	
-	!					
	!	!				
_	!					
I -	!	!				0.0
I -		:				
25						
²³ –	:+				Silty Sand, red, fine grained, stiff, damp	
	•	i			onty ound, roa, line grained, sun, damp	
-	i	i				
	i	i				
I -	i	i				
I -	i	i				0.0
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30	į į	100				
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1 -	i i	1				0.0
	j i	i				
1	Î j	i				
I -	Î j	i				
	Î j	i				
35	ı——-	i				
	i	i			Sand, reddish orange, fine grained, loose, damp	
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	Ī	i				
						I.



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PROJECT: EBT Treatability Study LOCATION : Memphis Depot ELEVATION:

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

WATER LEVELS:

START: 04/20/2002 END: 04/21/2002

SOIL DESCRIPTIO DRILLING CONTRACTOR : Boart Longyear

LOGGER: Mike Karafa 04/21/2002

DEPTH BELOW SURFACE (FT)		START:	04/20/2002 END: 04/21/2002 LOGGER SOIL DESCRIPTION	: Mike Karafa COMMENTS
INTER\	/AL (FT) RECOVERY (%)	PENETRATION TEST	SOIL NAME, USCS GROUP SYMBOL, COLOR,	DEPTH OF CASING, DRILLING RATE,
	#/TYPE	RESULTS 6"-6"-6"-6" (N)	MOISTURE CONTENT, RELATIVE DENSITY, OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY.	DRILLING FLUID LOSS, TESTS, AND INSTRUMENTATION. Corrected FID (ppm
- I - I 40	100			2.6
** — 	100 		Sand, tan to yellow, fine grained, loose, dry	0.0
- - 1 5 -			Sand, orange, fine to coarse grained, loose, dry	
-1 -1 -1 -1 -1			Sand, orange, fine to coarse grained, loose, dry, pebbles >0.5 inch diameter angular to subangular	0.0
0 I _ I _ I _ I	100		Sand, tan to reddish tan, fine to medium grained, loose dry, pebbles	
- - - 5			Sand, orange, fine to medium grained, loose, dry pebble to cobble from 55 to 56 feet bgs	0.0
-i -l -l -l	100		people to consile notified to de leet ago	0.0
) -			Sand, tan, fine to medium grained, loose, dry	
-1 -1 -1 -1	100		Sand, grey, fine to coarse grained, loose, dry, pebble to cobble Sand, light tan, fine grained, loose, dry	0.0
65 i _ - -	-		Silty Sand (some clay), fine grained, stiff, damp Sand, orange to tan, fine grained, loose, dry	
i -1 -1 -1 -1	100		polito, orange to tail, line granied, loose, dry	0.0
-1 -1 -1				0.0



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ELEVATION: DRILLING CONTRACTOR: Boart Longyear

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

				START:	04/20/2002 END: 04/21/2002 LOGGER:	Mike Karafa
				STANDARD	SOIL DESCRIPTION	COMMENTS
DE	INTERVA		.,	PENETRATION	COLE DECOMM HOM	COMMENTE
	1	RECOVE	DV (0/)	1	COLL NAME LICCO ODOLID OVADOL. COL OD	DEDTH OF CACING DRILLING DATE
		RECOVE	#/TYPE	TEST	SOIL NAME, USCS GROUP SYMBOL, COLOR,	DEPTH OF CASING, DRILLING RATE,
			#/11PE	RESULTS	MOISTURE CONTENT, RELATIVE DENSITY,	DRILLING FLUID LOSS,
				6"-6"-6"	OR CONSISTENCY, SOIL STRUCTURE,	TESTS, AND INSTRUMENTATION.
	<u> </u>			(N)	MINERALOGY.	Corrected FID (ppm):
75		100			Sand, tan, fine grained, pebbles to cobbles	0.0
-	. !				Silty Clay, brown, stiff, pebbles to cobble, rounded, wet	
_						0.0
	i i				Silty Clay, tan and orange, thin interbedding, stiff, we	
-					Sand, orange, fine to medium grained, gravel, subrounded, pebble to cobble	
85 _	i				Sand, reddish orange, fine grained, damp	
-]]				Sand, white, fine grained, well sorted, loose	
_	j j	ĺ			cana, mile, into grantea, nei cortea, tecco	
90		100				0.0
-	į į				Sand, light tan to reddish tan, fine grained, well sorted, loose, dry	
-] 					
-		İ İ				0.0
05	į į				Sand, tan, medium to coarse grained, poorly sorted, loose, dam	
95	 				Sand, orange, fine to coarse grained, poorly sorted, loose, wet gravel, subangular to subrounded, pebble to cobble	Watertable @ approximately 96 feet bo
_	:				Silty Sandy Clay, tannish gray, fine grained, well sorted, stiff, damp	
-	į į				Sand, white, fine grained, well sorted, loose wet	1
-					-	
100	i i	100				
-	1 !				Sand, orange, fine to coarse grained, gravel, pebble	
-	į į				Silty Clay, orange and gray mottled, stiff	1
-					Silty Sand, gray, wel	
-	į į				Sitly Sandy Clay, orange to gray mottling, stiff, we	
_	! !				only outly only, orange to gray monthing, outly, to	
105	į i					
	1				Boring Terminated @ 105 feet bgs	1
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