

PROJECT NUMBER	BORING NUMBER
170039	MW-121 (Clustered with MW-120)

SOIL BORING LOG

PROJECT: EBT Treatability Study LOCATION: Memphis Depot

ELEVATION: DRILLING CONTRACTOR: Boart Longyear

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

DRILLING METHOD AND EQUIPMENT USED: Rotasonic rig (4 inch sample casing / 6 inch outer casing) WATER LEVELS: START: 04/20/2002 END: 04/20/2002 LOGGER:					Bryan Burkingstock
DEPTH BELOW SURFACE (FT)	STANDARD	U412U12UU2	SOIL DESCRIPTION	LUGGER :	COMMENTS
INTERVAL (FT)	PENETRATION		GOIL DEGORIF HON		COMMENTS
RECOVERY (%) #/TYPE	TEST RESULTS 6"-6"-6"-6"	SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY, OR CONSISTENCY, SOIL STRUCTURE,		DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, AND INSTRUMENTATION.	
	(N)	MINERALOGY.	,		Corrected FID (ppm):
		Gravel (parking lot) Silt, brown, moist, (loess			(Soil headspace)
100		ont, brown, moist, (loess	,		0.0
5		Silt, brown, moist, (loess)		0.0
- - - 15 _					0.0
20 100					0.0
-1 -1 -1 -1 -1 25		Silt, brown, moist, (loess Sandy Clay, tan, dense,) moist, fine grained		0.0
		Color grading from tan to Increase fine grained san	o brownish red to dark red nd with depth		0.0
30 100		Clayey Sand, dark red, fi	ine grained, well sorted, moist		110.0
-I -I 35		Sand, dark red, fine g	rained, well sorted, mois ed, fine grained, moist		
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DEPTH BELOW SURFACE (FT)	STANDARD	SOIL DESCRIPTION	COMMENTS
INTERVAL (FT)	PENETRATION		
RECOVERY (%)	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):
		Clayey Sand, brownish red, fine grained, moist	300.0
1 7 1		Sand, brown, fine grained, well sorted, pebbles (<10%), < 1 inch diameter, moist	
_i i			
400			
40 100			
-! !		Clay, pink with light gray sandy clay inclusions, dense, massive, moist	
1 4 ! !			
1 1 1 1			240.0
-i			240.0
1 <u>i</u> i l			
l _e i i		Sand, brownish yellow, fine grained, well sorted, loose, moist	
⁴⁵ — I ——— I		O	
1 ! !		Gravelly Sand, brownish yellow to light yellow, fine to coarse grained, poorly sorted, loose, moist, pebbles (10 to 20%), <0.25 inches diameter, subangular	
1 7 !		10000, motor, possible (10 to 2070), 10:20 motor diameter, casaligatar	
1 1 1			
1 1 1			507.0
1 - 1			507.0
_i i			
<u> </u>			
50 100			
1 1 1 1			
1 7 1			
1 i i 1			200.0
-i i			390.0
! !			
-! !			
55			
1 1 1			
1 - 1		Sand, brownish yellow, medium grained, well sorted, moist	
l <u>j</u> i i l		ound, promiser yourse, modeling granted, won corred, motor	
i i			
_ 100			157.0
1 ! ! !			
-! !			
60			
1 1 1			
-ji			
i i			
7 !			
_1 100			203.0
1 ! ! !			
1 1 1			
65			
i i		Gravelly Sand, brownish yellow, fine to coarse grained, poorly sorted, pebbles (<10%)	
- Î		<0.25 inches diameter, subangular, mois	
] []			
1 7 ! !			
4 !			247.0
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70 100			
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1 ! ! !			
1 1 1			
1 4 1			109.0
1 i i l			



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	R LEVELS			START:	04/20/2002 END: 04/20/2002 LOGGER:	Bryan Burkingstock
	DEPTH BELOW SURFACE (FT)		STANDARD	SOIL DESCRIPTION	COMMENTS	
DEI III				SOIL DESCRIPTION	COMMENTS	
				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):
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75	j				Same as above, Gravelly Sand	
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	i	i				
-	i	i				
	Ī	ĺ				150.0
-	i	Ī				100.0
	I	l				
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80	J	100				
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	ļ	!				234.0
I -	1	ļ		ĺ		204.0
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85 _	 	! {				
	i					
-	i	i				
	i	i				
_	i	i				
	i	i				126.0
_	Ī	ĺ				
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90	-1	100			Same as above, Gravelly Sand	
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-	1					
	I	l				
_	1					
	I					80.0
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95_	Į.					
95 —	<u>-</u>	ļ				Watertable @ approximately 95 feet bg
	!	•				watertable @ approximately 95 leet by
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	j					
	i	i				
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	i	i				
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100	i	i				
100 <u> </u>	i	ĺ				
	I					
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_	J	l				
	Ī	<u> </u>			Samo as above. Gravelly Sand	
-	 -	ł			Same as above, Gravelly Sand	4
					Boring Terminated @ 103 feet bgs	
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105						
	1					
I -	_					
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						1
-	-					1
						1
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110						
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