PROJECT NUMBER **CH2MHILL**

170039

BORING NUMBER

MW-114

SOIL BORING LOG

PROJECT : LOCATION : Memphis Depot EBT Treatability Study DRILLING CONTRACTOR : Boart Longyear **ELEVATION** DRILLING METHOD AND EQUIPMENT USED : Rotasonic rig (4 inch sample casing / 6 inch outer casing) LOGGER : Mike Karafa WATER LEVELS START : 04/23/2002 END: 04/30/2002 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"-6" OR CONSISTENCY, SOIL STRUCTURE, TESTS, AND INSTRUMENTATION. Corrected FID (ppm): (Soil headspace) (N) MINERALOGY. Asphalt and gravel Silt, brown, stiff, damp, (loess) 100 6.1 5 0.0 10 100 L Same as above, Silt 7.1 15 0.0 20 100 0.0 Sand, orange, loose, fine grained, well sorted, dry 25 Silty Sand, red, fine to coarse grained, poorly sorted, stiff, dry 6.2 30 100 6.3 35 Sand, reddish orange, fine grained, well sorted, loose, dry

PROJECT NUMBER 170039 BORING NUMBER
MW-114

SOIL BORING LOG

PROJECT :	EBT Tre	atability Study	LOCATION : Memphis Depot			
ELEVATION :			DRILLING CONTRACTOR : Boart Longyear			
DRILLING METHOD AND EQUIPMENT WATER LEVELS :			START: 04/23/2002 END: 04/30/2002 LOGGER: Mike Karafa			
DEPTH BELOW		FT)	STANDARD	SOIL DESCRIPTION	COMMENTS	
	AL (FT)		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"-6"	OR CONSISTENCY, SOIL STRUCTURE,	TESTS, AND INSTRUMENTATION.	
	-		(N)	MINERALOGY.	Corrected FID (ppm):	
I _	i				0.0	
1 !	ļ					
40 —	100					
	1					
1 1	i					
<u> </u>	1					
1 -1					0.0	
_i	i					
45	1					
				Sand, yellow to orange, fine to coarse grained, loose, dry, pebbles		
-	i.					
i	100				0.0	
1 1	1					
1 -1	1					
50	j.					
1				Sand, orange, fine grained, well sorted, loose, dry		
	i					
-	100			Sand, white, fine grained, loose, well sorted		
					0.0	
i	i			Sand, orange, fine to coarse grained, poorly sorted, gravel, < 1 inch diameter		
-						
⁵⁵ — — — — —	-1			Same as above, except gravel <0.75 inch diameter		
_!	1					
	1					
Ī	i					
					0.0	
_i	i					
60	100					
	1			Sand, orange, fine to coarse grained, poorly sorted, loose		
-i	į					
_						
_i	i				0.0	
	ļ					
	i					
⁶⁵ ———	. j			Sand, yellowish orange to tan, fine grained, loose, dry, well sorted		
				ound, yonomon orange to tan, me gramed, 1005C, Uly, Well Solicu		
i	i					
	ļ					
-	i				0.0	
ļ	į					
70	100					
[′] –	100					
_!	1			Silty Sand brown		
				Silty Sand, brown		
<u></u>	i				0.0	
-!	ļ				0.0	
	1					

PROJECT NUMBER 170039 BORING NUMBER
MW-114

SOIL BORING LOG

PROJECT :	EBT Trea	atability Study	,	LOCATION : Memphis Depot		
				DRILLING CONTRACTOR : Boart Longyear		
DRILLING MET		EQUIPMENT	USED : Rotasonio START :	crig (4 inch sample casing / 6 inch outer casing) 04/23/2002 END: 04/30/2002 LOGGER	: Mike Karafa	
DEPTH BELOW		T)	START . STANDARD	SOIL DESCRIPTION	COMMENTS	
	AL (FT)	.,	PENETRATION			
	RECOVER	RY (%) #/TYPE	TEST RESULTS	SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY,	DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS,	
			6"-6"-6"-6"	OR CONSISTENCY, SOIL STRUCTURE,	TESTS, AND INSTRUMENTATION.	
			(N)	MINERALOGY.	Corrected FID (ppm):	
⁷⁵				Sand, white to yellowish orange, fine grained, loose, dry		
	100			Sand, yellow to tan, fine to coarse grained, loose, dry to damp, gravel, pebble to cobble	0.0	
					0.0	
				Sand, white to orange, fine grained, loose, dry		
 90 	100			Sand, orange, medium to coarse grained, poorly sorted, gravel	1.2	
- 95				Sand, fine to medium grained, poorly sorted, gravel, loose, wet	0.0	
				Sand, white, fine grained, well sorted, loose, wet	Watertable @ approximately 96 feet bg:	
100 	100			Sand, orange, fine to medium grained, poorly sorted, loose, gravel, pebbles to cobbles, subangular, we Clay, some silt, orange and gray mottling, stiff, massive	-	
105 	- 			Boring Terminated @ 105 feet bgs		
110						