

PROJECT NUMBER	BORING NUMBER
334469	MW-192

SOIL BORING LOG

PROJECT: PRB Implementation Study LOCATION: Memphis Depot

ELEVATION: DRILLING CONTRACTOR: Prosonic

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

				START:	3/21/2006 END: 3/22/2006 LOGGER:	
				STANDARD	SOIL DESCRIPTION	COMMENTS
		ERVAL (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): 0.0
]				silt brown, grass, roots, saturated	0.0
_					silt brown, stiff saturated	-
_		400				
	i i	100				
_	<u>!</u> !				silt brown, stiff, dry, loess	1
_						
5	i i					
	<u> </u>				silt brown, stiff, damp, loess	1
-	!				with orange and grey silt	
_	! !!					
	j i	j				
-	!!!					
-	. ! ! !					
10	i i	100				
	!!!	100				
_						
	i					
_	Î Î					
-	! !					
_	! !					
45	i i					
15	!!!					
_						
	i					
_	11					
_	! !					
		! 				5.0
_	į į	i				
20	!!!	100				
_	i i					12.1
	i i					
_	!!!					
_] 1					
	i i					17.8
_] !					
25	! !					
	i i					
	i i					
-	!				silt, sand, brown with grey sand, siff, damp, fine grain, gravel up to 1/4"	-
_					,,,, _p , g, g	
	i i					
-	<u> </u>					
30] 	100				ĺ
	i i				gravelly sand, reddish orange, some silt, loose, fine to coarse grain, damp to wet	
_	<u>ļ</u>					
-	! !					0.0
	i i					
-	!!!					
35] 					
	i i					
-	<u>I</u> İ				gravelly sand, orange, fine to coarse grain, loose damp gravel up to 1.5" diameter	1
l _	<u>!</u> !			I	[I



PROJECT NUMBER	BORING NUMBER
334469	MW-192

SOIL BORING LOG

PROJECT: PRB Implementation Study LOCATION : Memphis Depot

ELEVATION: DRILLING CONTRACTOR : Prosonic

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

WATER LEVELS	5:	START:	3/21/2006 END: 3/22/2006 LOGGER:	Mike Karafa
DEPTH BELOW SURFACE (FT) INTERVAL (FT)		STANDARD	SOIL DESCRIPTION	COMMENTS
		PENETRATION		-
IIVI EIVV	RECOVERY (%)	TEST	SOIL NAME TISSE CHOTTE SAMBOL COLOR	DEPTH OF CASING, DRILLING RATE,
	#/TYPE	—	SOIL NAME, USCS GROUP SYMBOL, COLOR,	
	#/TYPE	RESULTS	MOISTURE CONTENT, RELATIVE DENSITY,	DRILLING FLUID LOSS,
		6"-6"-6"	OR CONSISTENCY, SOIL STRUCTURE,	TESTS, AND INSTRUMENTATION.
		(N)	MINERALOGY.	Corrected FID (ppm):
- - 40 _ - - - - - 45 _	100		sand, reddish orange, fine to medium grain, loose damp sand, light tan, fine grain, loose, dry	0.0
50I I I I I I I I I	100		gravelly sand, fine grain, loose, gravel up to 1.5" diameter gravelly sand, orangish tan, fine to coarse grain, loose dry, gravel pea size up to	3 3 0.0
55	75		sand, light tan, fine grain, loose, dry sand, tannish brown, fine grain, loose, dry	
- - - - 65 _ -			sand, orangish brown, fine to medium grain, loose damp gravel sand, light tan, fine grain, loose, dry, gravel	0.0
- - - - 70 _ - - -	75			10.1



PROJECT NUMBER	BORING NUMBER
334469	MW-192

SOIL BORING LOG

PROJECT:	PRB Implementation Study	LOCATION : Memphis Depot
ELEVATION:		DRILLING CONTRACTOR: Prosonic
DRILLING METH	HOD AND EQUIPMENT USED :	Rotasonic rig (4 inch sample casing / 6 inch outer casing)

	RLEVELS		LQOII WILIYI	START:	c rig (4 inch sample casing / 6 inch outer casing) 3/21/2006 END: 3/22/2006 LOGGER:	Mike Karafa
	EPTH BELOW SURFACE (FT) STANDARD			SOIL DESCRIPTION	COMMENTS	
	INTERVAL		,	PENETRATION		
	1	RECOVE	DV (%)	TEST	SOIL NAME, USCS GROUP SYMBOL, COLOR,	DEPTH OF CASING, DRILLING RATE,
			#/TYPE	RESULTS	MOISTURE CONTENT, RELATIVE DENSITY,	DRILLING FLUID LOSS,
			#/1166			
				6"-6"-6" (N)	OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY.	TESTS, AND INSTRUMENTATION. Corrected FID (ppm):
				(N)	WIINERALOGT.	Corrected FID (ppin).
75	: :					
	i i				sand, orange, fine to coarse grain, loose, wet, some gravel	
_	i i					
	!!					
	<u>1</u>					
_	ii				silty clay, orange, stiff, damp, grey	0.0
	i i				Silty clay, orange, still, damp, grey	0.0
	i I					
80	!!	100				
	!!					
_	i i					
_	i i					
	į i					
-	!!					
_	! ! !					
0.5	; ;					
85	i i				clay, dark grey, massive, damp	1
	<u> </u>				olay, dain groy, madoro, damp	
	!!				Boring terminated at 87-feet	
_	 				Borning terminated at 67-leet	
_						
_						
90						
- °°						
_						
_						
_						
_						
95						
-						
_						
-						
100						
_						
_						
I -						
_						
105						
103 _						
_						
-						
I -						
_						
110						
L]		