



PROJECT NUMBER 170039	BORING NUMBER MW-111
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)
 WATER LEVELS : START : 04/22/2002 END: 04/23/2002 LOGGER : Mike Karafa

DEPTH BELOW SURFACE (FT)				STANDARD	SOIL DESCRIPTION	COMMENTS
	INTERVAL (FT)		#/TYPE	PENETRATION	SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY, OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY.	DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, AND INSTRUMENTATION.
	RECOVERY (%)			TEST		
				RESULTS		
				6"-6"-6" (N)		Corrected FID (ppm): (Soil headspace)
5 10 15 20 25 30 35	100 100 100 100 100 100 100			Asphalt and gravel		
				Silt, brown, stiff, damp, (loess)		0.0
						1.5
				Same as above, Silt		11.4
						0.0
				Same as above, Silt		0.8
				Sand, orange, loose, fine grained		
				Silty Sand, reddish orange, fine to medium grained, stiff		10.5
				Sand, bright red, fine to coarse grained, poorly sorted, stiff		0.0
				Sand, tan, fine grained, loose, damp		
				Sand, tan with red mottles, fine to medium grained, poorly sorted, stiff		
				Sand, orange, fine to coarse grained, poorly sorted, loose, dry		
				Sand, dark brown, fine to medium grained, stiff, damp		



PROJECT NUMBER 170039	BORING NUMBER MW-111
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)
 WATER LEVELS : START : 04/22/2002 END: 04/23/2002 LOGGER : Mike Karafa

DEPTH BELOW SURFACE (FT)				STANDARD	SOIL DESCRIPTION	COMMENTS
	INTERVAL (FT)	RECOVERY (%)	#/TYPE	PENETRATION	SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY, OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY.	DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, AND INSTRUMENTATION.
	TEST					
	RESULTS					
				6"-6"-6" (N)		Corrected FID (ppm):
40	100				Sand, grayn very fine grained, loose, dry	0.0
					Sand, fine to medium grained, poorly sorted, loose, dry, some silt	
					Sand, red, fine to medium grained, poorly sorted, stiff, some silt	
45					Sand, orange, fine to coarse grained, poorly sorted, loose, dry, pebbles	0.0
						0.0
50	100				Sand, tan, fine to medium grained, poorly sorted, loose, dry, slight gravel	
						0.0
55					Sand, orange, fine to coarse grained, poorloy sorted, loose, gravel, dry	
						0.0
60	100				Sand, tan, fine to medium grained, loose, poorly sorted, gravel	
					Sand, tan, fine grained, loose dry, well sorted	0.0
					Sand, brown, fine to medium grained, loose, dry, poorly sorted	
65					Sand, light tan, fine grained, loose, dry, well sorted	18.3
70	100				Sand, yellow, fine grained, well sorted	
					Silty Sand, some clay, gray/orange/red, fine grained, interbedding, stiff, damp to dry	0.0



PROJECT NUMBER 170039	BORING NUMBER MW-111
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)
 WATER LEVELS : START : 04/22/2002 END: 04/23/2002 LOGGER : Mike Karafa

DEPTH BELOW SURFACE (FT)				STANDARD	SOIL DESCRIPTION	COMMENTS
	INTERVAL (FT)		RECOVERY (%)	PENETRATION	SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY, OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY.	DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, AND INSTRUMENTATION.
	TEST					
	RESULTS					
		#/TYPE	6"-6"-6"-6" (N)		Corrected FID (ppm):	
75					Sand, yellowish orange, fine grained, well sorted, loose dry	0.0
					Sand, orange and tan, fine to medium grained, poorly sorted, pebble to cobble, well rounded to angular, loose, dry	
80		100			Clayey Silt, brown, fine grained, stiff,wet	
					Sand, white, fine grained, well sorted, loose,dry	0.0
85						0.0
					Sand, dark grey, fine grained, well sorted, loose, dry	
90		100			Sand, orange to tan, fine grained, well sorted, loose, dry	
					Same as above with gravel, pebble to cobble	0.0
95					Sand, brown, fine to coarse grained, poorly sorted, gravel, pebble to cobble, subangular to subrounded, loose Wet	
					Sand, gray to white, fine grained, well sorted, subangular to subrounded, loose wet	
100		100			Clay, some silt, gray with red mottling, stiff, massive	Watertable @ approximately 96 feet bgs
105					Boring Terminated @ 105 feet bgs	
110						