



PROJECT NUMBER 113630.01.ZZ	BORING NUMBER MW-46 (B)	SHEET 1 OF 3
SOIL BORING LOG		

PROJECT DDMT Groundwater Investigation	LOCATION Memphis, TN
ELEVATION	DRILLING CONTRACTOR Boart Longyear
DRILLING METHOD AND EQUIPMENT Rotasonic	
WATER LEVELS 54.01 ft. bgs. 1/27/96	START 1048, 1/22/96 FINISH 1640, 1/22/96
LOGGER S. Bruer	

DEPTH BELOW SURFACE (FT)	SAMPLE			STANDARD PENETRATION TEST RESULTS 6" - 6" - 6" (N)	SOIL DESCRIPTION	COMMENTS
	INTERVAL	NUMBER AND TYPE	RECOVERY		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
	0		3.5		1-inch TOPSOIL SILTY CLAY (CL), light brown, moist, soft to medium stiff, black and orange mottling	Start Drilling at 1048 Modified loess
5.0	5				CLAYEY SILT (ML), light brown with light gray mottling, moist, medium stiff, trace organics, low plasticity, blocky structure	Abrupt contact
	9		3			
10.0			4		SILTY CLAY (CL), light brown with black mottling, moist, medium stiff, medium plasticity	Gradational contact
	14				With orange mottling and trace iron nodules (<1/8") below 13 ft.	
15.0					SILTY CLAY (CL), reddish brown with black and light brown mottling, moist, medium stiff, trace fine to coarse, quartz sand and fine, subrounded chert gravel, medium plasticity	Abrupt contact
20.0		10				
	24				SANDY CLAY (CL), reddish brown, moist, medium stiff, fine to medium, quartz, sand, trace fine, subrounded, chert gravel	Gradational contact Fluvial Deposits
25.0			4			
	28				CLAYEY SAND (SC), reddish brown, moist, medium dense, medium quartz, trace fine, subrounded, chert gravel	Gradational contact
					SANDY CLAY (CL), reddish brown, moist, medium stiff, medium quartz sand	Gradational contact



PROJECT NUMBER 113630.01.ZZ	BORING NUMBER MW-46 (B)
SHEET 2 OF 3	
SOIL BORING LOG	

PROJECT DDMT Groundwater Investigation	LOCATION Memphis, TN
ELEVATION _____	DRILLING CONTRACTOR Boart Longyear
DRILLING METHOD AND EQUIPMENT Rotasonic	
WATER LEVELS 54.01 ft. bgs. 1/27/96	START 1048, 1/22/96 FINISH 1640, 1/22/96 LOGGER S. Bruer

DEPTH BELOW SURFACE (FT)	SAMPLE			STANDARD PENETRATION TEST RESULTS 6" - 6" - 6" (N)	SOIL DESCRIPTION SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY	COMMENTS DEPTH OF CASING, DRILLING RATE DRILLING FLUID LOSS TESTS AND INSTRUMENTATION
	INTERVAL	NUMBER AND TYPE	RECOVERY			
30			3.5		<u>WELL-GRADED GRAVELLY SAND</u> (SW), brownish-orange, moist, loose, fine to coarse, quartz with fine to medium, subangular to subrounded, chert gravel	Gradational contact
	34				<u>SILTY FINE SAND</u> (SM), brownish-orange, loose, fine	Gradational contact
35.0			3			
38						
			3.5			
40.0	42					
45.0			3.5		<u>WELL-GRADED SAND</u> (SW), orangish-brown, moist, loose, fine to coarse, quartz, trace fine to coarse, subrounded chert gravel	Gradational contact
	47				<u>POORLY-GRADED SAND</u> (SP), tan to orangish-brown, moist, loose, fine, quartz, some silt	Gradational contact
50.0			7		<u>WELL-GRADED GRAVELLY SAND</u> (SW), tan, moist, loose, fine to coarse, quartz, with fine to coarse subrounded, chert gravel	Gradational contact
						Abrupt color change at 50 ft. to orangish brown
55.0	54				<u>SILTY FINE SAND</u> (SM), light brown, moist, loose	Wet from 51 ft. to 42 ft.
			3		<u>WELL-GRADED GRAVELLY SAND</u> (SW), tan, moist, loose, fine to medium, quartz, with fine to coarse subrounded, chert gravel	Gradational contact
	57				54 ft.: 6-inch layer of <u>SANDY CLAY</u> (CL), light brown, moist, soft	
60			3		<u>SILTY FINE SAND</u> (SM), tan moist to wet, loose, quartz	Gradational contact
					<u>POORLY-GRADED SAND</u> (SP-SM), orangish-tan, moist to wet, loose, medium, quartz, silty, trace medium, subrounded, chert gravel	



PROJECT NUMBER
113630.01.ZZ

BORING NUMBER
MW-46 (B)

SHEET 3 OF 3

SOIL BORING LOG

PROJECT DDMT Groundwater Investigation

LOCATION Memphis, TN

ELEVATION

DRILLING CONTRACTOR Boart Longyear

DRILLING METHOD AND EQUIPMENT Rotasonic

WATER LEVELS 54.01 ft. bgs. 1/27/96

START 1048, 1/22/96

FINISH 1640, 1/22/96

LOGGER S. Bruer

DEPTH BELOW SURFACE (FT)	SAMPLE			STANDARD PENETRATION TEST RESULTS 6" - 6" - 6" (N)	SOIL DESCRIPTION SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY	COMMENTS DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS AND INSTRUMENTATION
	INTERVAL	NUMBER AND TYPE	RECOVERY			
60.0	60				With olive gray silt laminations from 60 ft. to 62 ft.	Wet below 60 ft. Fluvial Aquifer
			8		POORLY-GRADED SAND (SP), brownish-orange, wet, loose, medium, quartz, trace medium, subrounded, chert gravel	Gradational contact
68.0	68				WELL-GRADED SAND (SW), orangish-brown, wet, loose, fine to coarse, quartz, trace fine to medium, subrounded, chert gravel	Gradational contact with iron staining
70.0			7		69 ft.: 3-inch layer of clay, light gray and lavender 71 ft.: 5-inch layer of clay, light gray and lavender	Geotechnical Sample collected at 72 ft.
75.0	75				SILTY CLAY (CL), light brown and light gray, moist, medium stiff to stiff, medium plasticity	Erosional contact
			2.5			S-I: Pocket Penetrometer = 1.5, 1.5, 1.5 tst
	77.5					Stopped Drilling at 1525
80.0					Boring terminated at 77.5 ft.	MW-46 Installed at 1640 (see attached construction log)
85.0						