

PARSONS ENGINEERING SCIENCE

SOIL BORING LOG AND WELL CONSTRUCTION RECORD

Page 1 of 3

Client CEHNCSite Memphis DepotBoring I.D. SB-5Geologist/Engineer Ross SurrencyDrilling Method 4 1/4" HSASampling Method 3" Diameter Split SpoonDate Started 8/11/97Date Completed 8/20/97Driller Atlanta Testing and EngineeringBorehole Diameter (in) 15" to 10": 8" to 68.5'Depth Drilled (ft) 68.5Ground Elevation (ft) 285.46Depth to Water (ft) 61.15Date Measured 8/26/98Project I.D. 732283.02Well I.D. MW-58Date Installed 8/20/98Date Grouted 8/20/98Casing Material 2" Diameter sch 40 PVCScreen Material 0.010 Slot 2" PVCCasing Interval (ft) 0-57Screened Interval (ft) 57-67Sump Installed? NOWell Depth (ft) 67.5TOC Elevation (ft) 285.42Water Level (ft) 224.27Date Measured 8/26/98

DEPTH (feet)	SAMPLE	BLOWS/6 IN	% REC.	HMV/OVA (ppm)	LITHOLOGIC DESCRIPTION	SOIL CLASS	GRAPHIC LOG	WELL DIAGRAM
0	X	N/A,	N/A	N/A		ML		
	X	5,6, 6,5	95	0	SILT, some clay, strong brown, (7.5YR-5/6), at 1.5' color is red, (10YR-5/6), gravel layer at 2.5', some cobble material, wet at 2.5', (loess).	GM		
	X	4,5, 21,15	95	0.1	3-3.5' gravel as above, 3.5-4.5, CLAY and SILT, strong brown, (7.5YR-4/6), at 4.5' CLAY, red (2.5YR-5/6), dry, trace silt, (loess).	CL		
5	X	4,8, 8,14	90	0	CLAY, some silt, strong brown (7.5YR-5/8), hard, slightly moist, (loess).			
	X	3,5, 10,17	90	0	CLAY, as above			
10	X	6,8, 8,14	20	0	CLAY, some silt, reddish yellow (7.5YR-6/8), moist, firm.			
	X	3,3, 5,7	40	0	CLAY, as above			
	X	3,4, 6,9	90	0	CLAY, as above			
15								
20	X	4,5, 8,-	20	0	SILT, some clay, trace pebbles, soft to firm, brown (7.5YR-5/4), moist, (loess).	ML		
25	X	3,6, 8,-	60	0	CLAY, some silt, little sand, medium, strong brown (7.5YR-5/6), firm, slightly moist, (loess).	CL		
30	X	5,11, 36,-	80	0				

10" PVC Casing

Bentonite Slurry

WRAP

ENGINEERING - SCIENCE

SOIL BORING LOG AND WELL CONSTRUCTION RECORD

Client <u>CEHNC</u> Site <u>Memphis Depot</u> Boring I.D. <u>SB-5</u> Geologist <u>Ross Surrency</u>					Page 2 of 3		
Project I.D. <u>732283.02</u> Well I.D. <u>MW-58</u> Date Installed <u>8/20/98</u>							

DEPTH (feet)	SAMPLE	BLOWS/6 IN	%REC.	H ₂ O/OVA (ppm)	LITHOLOGIC DESCRIPTION	SOIL CLASS	GRAPHIC LOG	WELL DIAGRAM
30	X				CLAY, little silt, some sand, medium, yellowish red (5YR-5/8), at 30' SAND, fine to medium, trace silt, reddish yellow (5YR-6/8), slightly moist, (loess).	CL GP		
35	X	25, 24, 24, -	80	0	SAND, fine to medium, very firm, reddish yellow (7.5YR-6/8), little gravel, subrounded, slightly moist.			
40	X	19, 29, 34, -	90	0	SAND, medium, gravel seam at 39.5', very firm to dense, moist, reddish yellow (7.5YR-6/8), gravel is subrounded.			
45	X	14, 29, 37, -	90	0	SAND, medium, very well sorted, subrounded, very firm to dense, slightly moist, yellow (10YR-7/8)			
50	X	13, 49, 50, -	85	0	SAND, as above, trace gravel, subrounded.			
55	X	15, 36, 44, -	80	0	SAND to 54.5, fine well sorted, yellow (10YR-8/8), from 54.5 on SAND, medium to very coarse, some gravel fine to coarse, subrounded, sand is poorly sorted, reddish yellow (7.5YR-8/8), slightly moist, dense.			
60	X	39, 50, -, -	85	0	SAND, coarse to very coarse, with gravel, fine, subrounded, dense, wet, yellowish red (5YR-5/8).			
65	X	29, 36, 50, -	80	0	SAND, and gravel, medium to very coarse, subrounded, strong brown (7.5YR-5/8), wet.	GW		

Riser

Screen (10 feet)


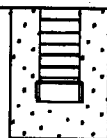
Bentonite Slurry

Sand Pack

WRAP

ENGINEERING - SCIENCE

SOIL BORING LOG AND WELL CONSTRUCTION RECORD

Client <u>CEHNC</u> Site <u>Memphis Depot</u> Boring I.D. <u>SB-5</u> Geologist <u>Ross Surrency</u>					Page 3 of 3 Project I.D. <u>732283.02</u> Well I.D. <u>MW-58</u> Date Installed <u>8/20/98</u>			
DEPTH (feet)	SAMPLE	BLOWS/6 IN	%REC.	HMU/OVA (ppm)	LITHOLOGIC DESCRIPTION	SOIL CLASS	GRAPHIC LOG	WELL DIAGRAM
65	X	16, 29, 50, -	80	0	SAND, and gravel as above, 20% fines. SAND, and gravel from 67-67.5, sand is medium to very coarse, poorly sorted, subrounded.	GW		 <div style="text-align: right; font-size: small;"> Sand Pack </div>
	X	16, 12, 10, -	90	0		CL		
70					SILT and CLAY, banded, stiff, moist, reddish-yellow (7.5YR-6/8) to white (7.5YR-8/1), kaolinitic. Boring terminated at 68.5' BGS			
75								
80								
85								
90								
95								
100								