



MACTEC Engineering and Consulting  
3200 Town Point Dr, Suite 100  
Kennesaw, GA 30144

# FIELD BOREHOLE LOG

BOREHOLE NO.: **MW-159**

TOTAL DEPTH: **106'**


## PROJECT INFORMATION

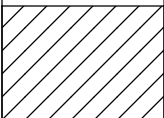
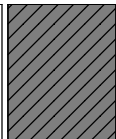
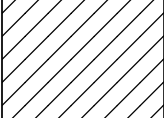

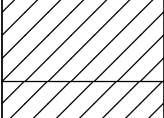

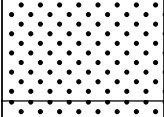

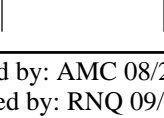
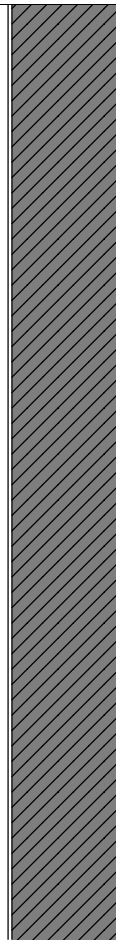
PROJECT: **DDMT**  
SITE LOCATION: **Memphis, TN**  
JOB NO.: **6301-04-0019**  
LOGGED BY: **Kevin Arnold**  
PROJECT MANAGER: **Tom Holmes**  
DATE DRILLED: **10-6-04**

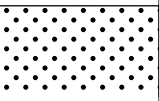
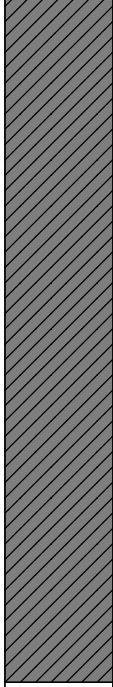
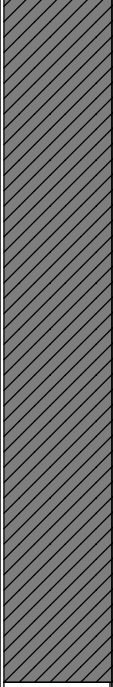
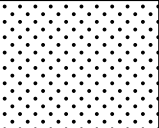

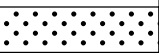
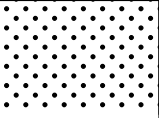
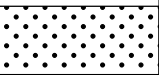
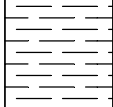
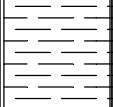

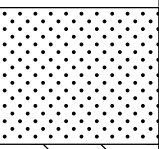
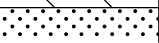
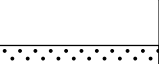
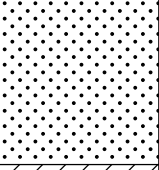
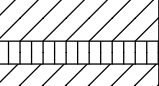
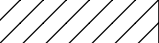

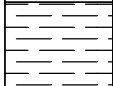

## DRILLING INFORMATION

DRILLING CO.: **ProSonic**  
DRILLER: **David Wilcox**  
RIG TYPE: **RotoSonic**  
TOP OF CASING  
ELEVATION: **286.33**  
GROUND SURFACE  
ELEVATION: **286.58**

### NOTES:

- 1) Drilling technique: 0 to 106.0 ft, bgs 6-inch diameter borehole with roto sonic.
- 2) Well construction: 2-inch diameter schedule 40 PVC casing set to 99.85 ft, bgs with 20 ft of 0.01-inch slot well screen.
- 3) Well screens the fluvial aquifer.
- 4)  Stabilized water level measured on 10/07/04

DEPTH	SOIL SYMBOLS	USCS	SOIL DESCRIPTION	FID ppm	WELL COMPLETION	WELL DESCRIPTION
0		CL	No Recovery dark yellowish brown (10YR 4/6) silty CLAY, soft, slightly plastic			Grouted Annulus
-5		CL	dark yellowish brown (10YR 4/4) silty CLAY, soft to medium stiff, medium plastic, moist	0.0		
-10				0.0		
-15		CL	yellowish brown (10YR 5/8) silty CLAY, medium stiff to stiff, medium plasticity	0.0		
-20		CL	yellowish brown (10YR 5/8) well rounded, well sorted gravelly, silty CLAY, trace cobbles, medium stiff, slightly plastic	0.0		
-25		SP-SC	yellowish red (5YR 5/6) fine to coarse gravelly, clayey fine grain SAND, medium stiff	0.0		
-30		SP	No Recovery red (2.5YR 5/8) slightly clayey, rounded to subrounded fine gravelly, fine grain SAND, trace coarse gravel, loose	0.0		
-35		SP	red (2.5YR 5/8) slightly fine gravelly, fine grain SAND, with some medium grain sand, loose	0.0		
-40			No Recovery	0.0		
		SP-GC	red (5YR 5/8) slightly clayey, fine GRAVEL, loose	0.0		

DEPTH	SOIL SYMBOLS	USCS	SOIL DESCRIPTION	FID ppm	WELL COMPLETION		WELL DESCRIPTION
-45		SP	light reddish brown (5YR 6/4) fine to coarse gravelly, fine grain SAND, with trace very rounded to subrounded cobbles, loose	0.0			
			No Recovery				
-50		SW	pink (5YR 7/3) and reddish yellow (5YR 6/6) slightly clayey, fine to coarse, well graded, rounded to subrounded gravelly, fine grain SAND, loose	0.0			
-55		SP	pink (5YR 7/3) fine grain SAND, very loose	0.0			
			No Recovery				
-60		SP	light red (2.5YR 6/8) slightly medium grain sand and fine grain SAND, loose	0.0			
-65		SP	pink (5YR 7/4) slightly medium grain sand and fine grain SAND, well sorted, loose	0.0			
			No Recovery				
-70				0.0			
-75		SP	pink (5YR 7/4) slightly medium grain sand and fine grain SAND, well sorted, loose				▼ Bentonite Seal
		SW	yellowish red (5YR 5/8) fine gravelly, fine grain SAND, well graded, loose, wet				
			No Recovery				
-80		SW	yellowish red (5YR 5/8) fine gravelly, fine grain SAND, well graded, loose, wet				
-85		CH	pinkish gray (5YR 6/2) CLAY, medium stiff, highly plastic				
		SW	yellowish red (5YR 5/8) fine gravelly, fine grain SAND, well graded, loose, wet				
			No Recovery				
-90		SW	yellowish red (5YR 5/8) fine gravelly, fine grain SAND, well graded, loose, wet				
-95		CL	bluish black (GLE Y 2/2.5 5PB) silty CLAY, hard				
-100		ML	bluish black (GLE Y 2/2.5/1) clayey SILT, loose				
		CL	bluish black (GLE Y 2/2.5/1) silty CLAY, dense, hard				
-105			Boring Terminated at 106 feet bgs				Bentonite Plug