



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

# FIELD BOREHOLE LOG

BOREHOLE NO.: MW-158A

TOTAL DEPTH: 96'


## PROJECT INFORMATION

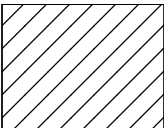
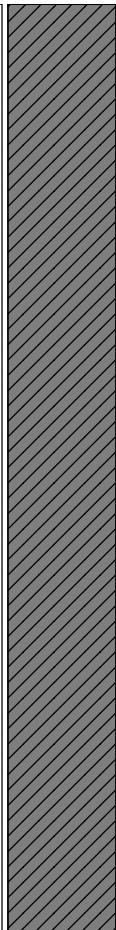

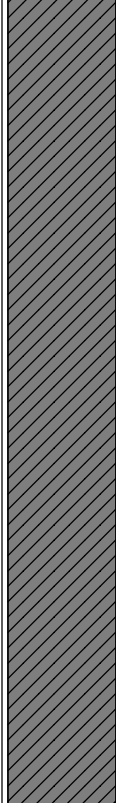

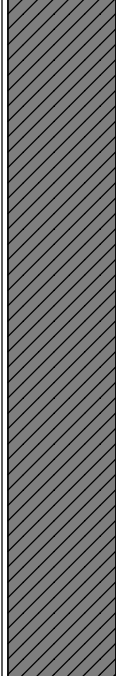
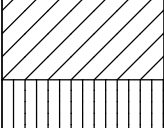
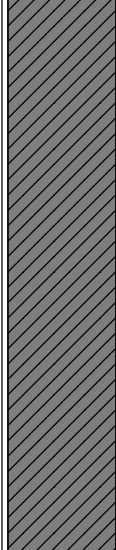
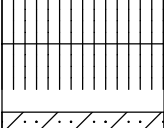
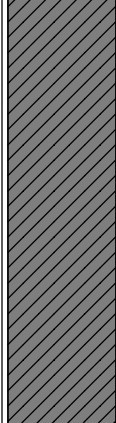
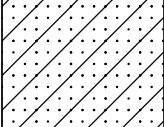
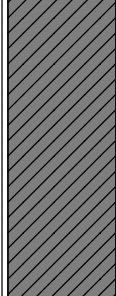

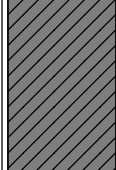
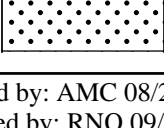

PROJECT: **DDMT**  
SITE LOCATION: **Memphis, TN**  
JOB NO.: **6301-04-0019**  
LOGGED BY: **Kevin Arnold**  
PROJECT MANAGER: **Tom Holmes**  
DATE DRILLED: **10/5/04**

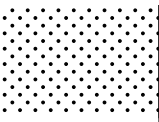
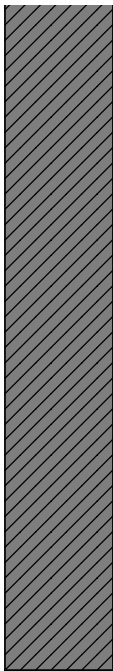
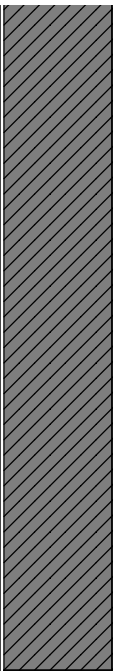

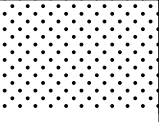




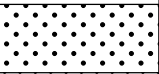

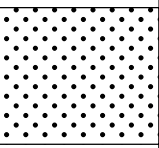

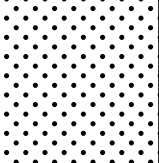
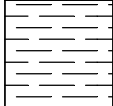
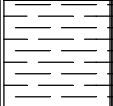
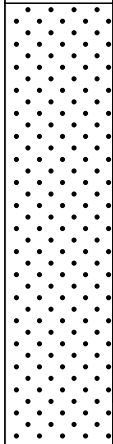
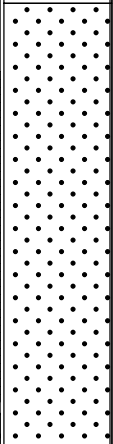
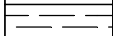
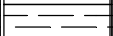
## DRILLING INFORMATION

DRILLING CO.: **ProSonic**  
DRILLER: **David Wilcox**  
RIG TYPE: **RotoSonic**  
TOP OF CASING  
ELEVATION: **293.95**  
GROUND SURFACE  
ELEVATION: **294.22**

### NOTES:

- 1) Drilling technique: 0 to 96.0 ft, bgs 6-inch diameter borehole with roto sonic.
- 2) Well construction: 2-inch diameter schedule 40 PVC casing set to 93.0 ft, bgs with 15 ft of 0.01-inch slot well screen.
- 3) Well screens the fluvial aquifer.
- 4)  Stabilized water level measured on 10/06/04

DEPTH	SOIL SYMBOLS	USCS	SOIL DESCRIPTION	FID ppm	WELL COMPLETION	WELL DESCRIPTION
0		CL	brown (7.5YR 5/4) non-plastic silty CLAY, soft to medium stiff	0.0		Grouted Annulus
-5		CL	reddish brown (5YR 5/4) silty CLAY, soft, medium plasticity, moist	0.0		
-10		CL	reddish brown (5YR 5/4) silty CLAY, low plastic, medium stiff, very little moisture	0.0		
-15		ML	reddish brown (5YR 4/4) clayey SILT, soft to medium stiff, dry to 24 feet	0.0		
-20		ML	yellowish red (5YR 5/6) clayey SILT, soft to medium stiff, low plasticity, little moisture	0.0		
-25		NR	No Recovery	0.0		
-30		SC	red (2.5YR 5/8) medium stiff, clayey fine grain SAND, tight, dense	0.0		
-35		GC-SC	red (2.5YR 5/8) clayey, very rounded cobbles, fine gravelly, fine grain SAND medium stiff	0.0		
-40		NR	No Recovery	0.0		
		SP	red (2.5YR 5/6) clayey fine grain SAND, trace fine gravel, loose	0.0		

DEPTH	SOIL SYMBOLS	USCS	SOIL DESCRIPTION	FID ppm	WELL COMPLETION		WELL DESCRIPTION
-45		SW	reddish yellow (5YR 6/6) gravelly fine to coarse grain SAND, very loose, dry	0.0			
		NR	No Recovery				
-50		SP	red (2.5YR 5/8) fine grain SAND, trace fine gravel, loose	0.0			
		SW	reddish yellow (5YR 6/6) gravelly fine to medium grain SAND, loose to very loose, well graded, dry	0.0			
-55		NR	No Recovery				
		SW	reddish yellow (5YR 6/6) gravelly fine to medium grain SAND, loose to very loose, well graded, dry	0.0			
-60		CH		0.0			
		SP	pinkish gray (5YR 7/2) CLAY, highly plastic, trace silt, medium stiff, highly plastic, moist	0.0			
-65		SP	reddish yellow (5YR 6/8) slightly clayey, fine gravelly fine grain SAND, loose	0.0			
		NR	reddish yellow (5YR 6/6) fine grain SAND, trace very rounded cobbles, trace fine gravel, well graded gravel and cobbles, very loose	0.0			
-70			No Recovery				
		SP	reddish yellow (7.5YR 7/6) slightly clayey, fine grain SAND, trace fine gravel, very loose	0.0			
-75		SW	light reddish brown (2.5YR 7/3) very rounded, coarse gravelly fine grain SAND, well graded, loose	0.0			
		NR	No Recovery				
-80		SP	light red (2.5YR 7/6) slightly silty, slightly clayey, fine grain SAND, trace coarse gravel, loose	0.0			
-85		SP	yellowish red (5YR 5/8) medium grain SAND, trace very well rounded coarse gravel, loose, wet				
		NR	No Recovery				
-90		SP	reddish yellow (7.5YR 6/8) medium grain SAND, with trace well rounded, well graded, fine to coarse gravel, very loose, wet				
-95			Boring Terminated at 96 feet. bgs				
							Bentonite Seal
							Sand Pack / Screened Interval
							Bentonite Plug