



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

# FIELD BOREHOLE LOG

BOREHOLE NO.: **MW-161**

TOTAL DEPTH: **86'**


## PROJECT INFORMATION

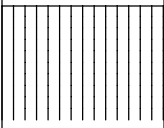
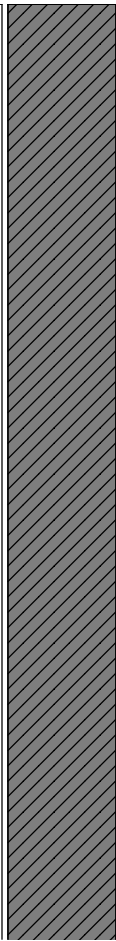
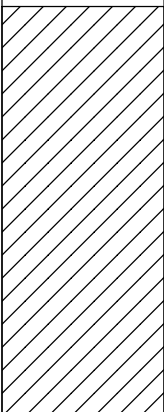

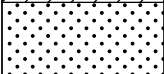
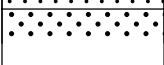
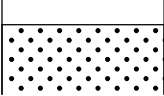
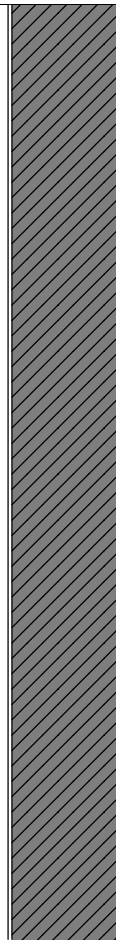
PROJECT: **DDMT**  
SITE LOCATION: **Memphis, TN**  
JOB NO.: **6301-04-0019**  
LOGGED BY: **Kevin Arnold**  
PROJECT MANAGER: **Tom Holmes**  
DATE DRILLED: **10/11/04**

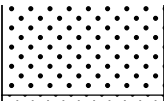
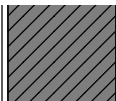
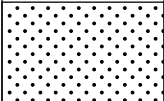
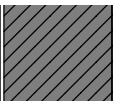
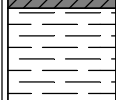
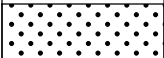
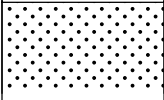
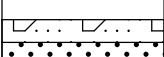
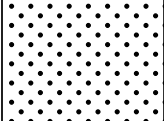
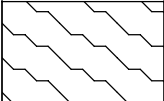
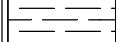
## DRILLING INFORMATION

DRILLING CO.: **ProSonic**  
DRILLER: **David Wilcox**  
RIG TYPE: **RotoSonic**  
TOP OF CASING  
ELEVATION: **296.40**  
GROUND SURFACE  
ELEVATION: **296.67**

### NOTES:

- 1) Drilling technique: 0 to 86.0 ft, bgs 6-inch diameter borehole with roto sonic.
- 2) Well construction: 2-inch diameter schedule 40 PVC casing set to 82.25ft, bgs with 20 ft of 0.01-inch slot well screen.
- 3) Well screens the fluvial aquifer.
- 4)  Stabilized water level measured on 10/09/04

DEPTH	SOIL SYMBOLS	USCS	SOIL DESCRIPTION	FID ppm	WELL COMPLETION	WELL DESCRIPTION
0		ML	No Recovery yellowish brown (10 YR 5/8), clayey SILT, non-plastic, loose	0.0		Grouted Annulus
-5			No Recovery			
-10		CL	yellowish brown (10 YR 5/6), silty CLAY, medium plastic, medium stiff to stiff, moist (dry 16 to 26 ft, bgs)	0.0		
-15				0.0		
-20				0.0		
-25				0.0		
-30		CL	yellowish brown (10 YR 5/8) silty CLAY, stiff, dry	0.0		
-35		SW	yellowish red (5 YR 5/8) slightly clayey, fine gravelly, silty fine grain SAND, well graded, medium stiff	0.0		
-35		SP	yellowish red (5 YR 5/8) slightly clayey, fine to coarse gravelly, fine grain SAND, loose	0.0		
-40		SP	No Recovery yellowish red (5 YR 5/8) fine to coarse gravelly, fine grain SAND with cobbles, loose	6.2		

DEPTH	SOIL SYMBOLS	USCS	SOIL DESCRIPTION	FID ppm	WELL COMPLETION	WELL DESCRIPTION
-45		SW	reddish yellow (7.5 YR 7/6) fine grain SAND with fine to coarse, sub-rounded gravel, loose	8.4		
			No Recovery			
-50		SW	brownish yellow (10 YR 6/6), slightly clayey, coarse gravelly, fine to medium grain SAND, well graded, loose	0.0		
-55			No Recovery	1.5		Bentonite Seal
-60		SP	reddish yellow (7.5 YR 6/8) fine grain SAND with coarse gravel, well rounded, loose			
-65		SW	reddish yellow (7.5 YR 7/8) coarse gravelly, fine grain SAND, well rounded, loose			
			No Recovery			
-70		GW	reddish yellow (7.5 YR 5/8) fine to coarse grain GRAVEL, well rounded, well graded, loose			
		SP	reddish yellow (7.5 YR 6/8) fine grain SAND, with trace well rounded fine grain gravel, well sorted, very loose			
-75			No Recovery			
-80		SP	reddish yellow (7.5 YR 5/8) slightly clayey, slightly fine gravelly, fine to medium grain SAND, well sorted, soft, loose, wet			
		CH	reddish yellow (7.5 YR 6/8) to gray (7.5 YR 6/1) silty CLAY, hard, highly plastic			
-85			Boring Terminated at 86 feet, bgs			Bentonite Plug