



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

FIELD BOREHOLE LOG

BOREHOLE NO.: **MW-158**

TOTAL DEPTH: **116'**

PROJECT INFORMATION

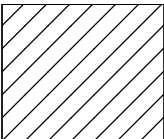
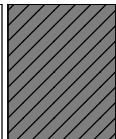

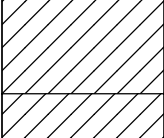
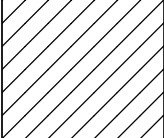
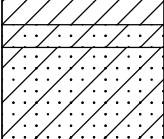
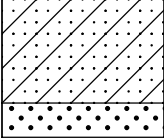
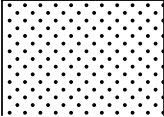
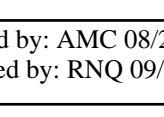

PROJECT: **DDMT**
SITE LOCATION: **Memphis, TN**
JOB NO.: **6301-04-0019**
LOGGED BY: **Kevin Arnold**
PROJECT MANAGER: **Tom Holmes**
DATE DRILLED: **10/4/04**

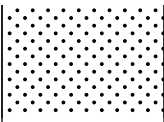
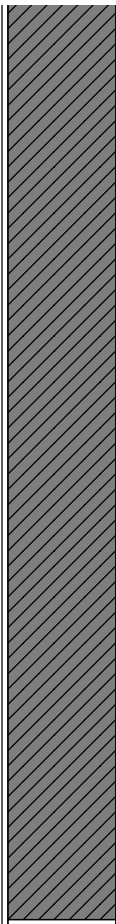
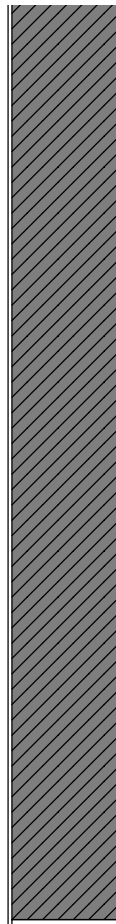
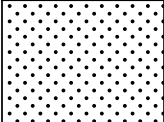


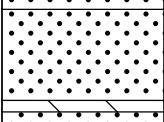


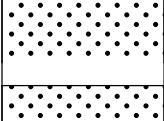
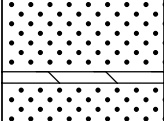
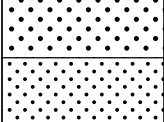
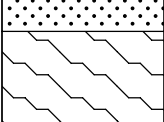

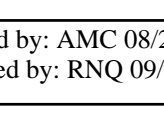

DRILLING INFORMATION

DRILLING CO.: **ProSonic**
DRILLER: **David Wilcox**
RIG TYPE: **RotoSonic**
TOP OF CASING
ELEVATION: **294.07**
GROUND SURFACE
ELEVATION: **294.38**

NOTES:

- 1) Drilling technique: 0 to 116 ft, bgs 6-inch diameter borehole with roto sonic.
- 2) Well construction: 2-inch diameter schedule 40 PVC casing set to 106.5ft, bgs with 15 ft of 0.01-inch slot well screen.
- 3) Well screens the fluvial aquifer.
- 4) ▼ Stabilized water level measured on 10/15/04

DEPTH	SOIL SYMBOLS	USCS	SOIL DESCRIPTION	FID ppm	WELL COMPLETION	WELL DESCRIPTION
0		CL	brown (7.5YR 4/3) silty CLAY, firm to soft, moist			Grouted Annulus
-5		CL	brown (7.5YR 5/4) silty CLAY, soft, medium plastic, moist	0.0		
-10				0.0		
-15		CL	strong brown (7.5YR 5/6) silty CLAY, soft to firm, slightly plastic	0.0		
-20				0.0		
-25		SC	strong brown (7.5YR 5/8) silty, clayey fine grain SAND, soft	0.0		
-30		SC	dark yellowish brown (10R 4/6) clayey fine grain SAND, stiff to dense	0.0		
-35		SP	red (2.5YR 4/6) slightly clayey fine grain SAND, with some rounded, coarse gravel, medium dense	0.0		
-40		SW	red (2.5YR 5/6) fine to coarse, rounded gravelly, fine grain SAND, well graded, loose	0.0		

DEPTH	SOIL SYMBOLS	USCS	SOIL DESCRIPTION	FID ppm	WELL COMPLETION		WELL DESCRIPTION
-45		NR	No Recovery	0.0			
-50		SW	red (2.5YR 5/6) and reddish brown (5YR 5/4) fine grain SAND and fine to coarse, rounded to subrounded GRAVEL, well graded, some cobbles	0.0			
-55		NR	No Recovery	0.0			
-60		CL	reddish yellow (7.5 YR 6/6) CLAY	0.0			
-65		SP	reddish yellow (7.5YR 6/6) fine grain SAND, with some well sorted, rounded to subrounded coarse gravel, some cobbles, loose	0.0			
-70		SP	reddish yellow (5YR 6/8) fine grain SAND, some rounded coarse gravel, trace cobbles, loose, poorly sorted	0.0			
-75		CH	CLAY, highly plastic, wet	0.0			
-75		SP	reddish yellow (5YR 6/8) fine grain SAND, some rounded coarse gravel, trace cobbles, loose, poorly sorted				
-75		SP	reddish yellow (5YR 6/6) fine grain SAND, with some poor graded, rounded coarse gravel, loose to very loose, wet				
-80		NR	No Recovery				
-85		SP	reddish yellow (5YR 6/6) well rounded, poor graded, coarse gravelly (10%), medium grain SAND, wet, loose				
-90		NR	No Recovery				
-95		SP	reddish yellow (5YR 6/6) well rounded, poor graded, coarse gravelly (10%), medium grain SAND, wet, loose				
-100		SP	reddish yellow (5YR 6/6) medium grain SAND, loose, wet				
-105		CH	CLAY, highly plastic, wet				
-110		NR	No Recovery				
-115		SW	reddish yellow (5YR 6/6) medium grain SAND, loose, wet				
-115		SW	reddish yellow (5YR 6/6) fine, rounded gravelly, medium to coarse grain SAND, well graded, loose, wet				
-115		CH	gray (5YR 5/1) silty CLAY, dense, hard				
-115			Boring Terminated at 116 feet bgs				

Bentonite Seal

Sand Pack /
Screened Interval

Bentonite Plug