



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

FIELD BOREHOLE LOG

BOREHOLE NO.: **MW-145**

TOTAL DEPTH: **106**


PROJECT INFORMATION

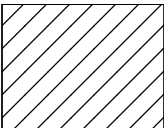
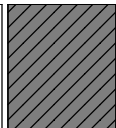

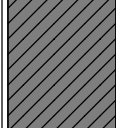

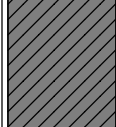

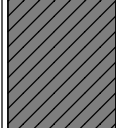

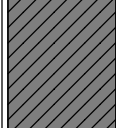
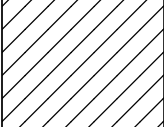
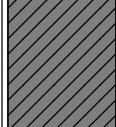
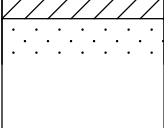
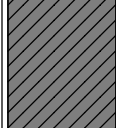
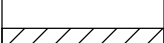

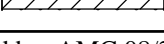
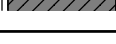


PROJECT: **DDMT**
SITE LOCATION: **Memphis, TN**
JOB NO.: **6301-04-0002**
LOGGED BY: **Amy Callaway**
PROJECT MANAGER: **Tom Holmes**
DATE DRILLED: **6/3/04**

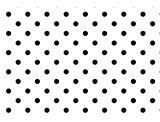
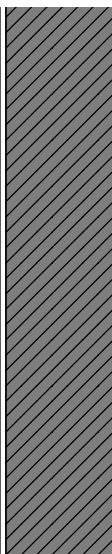
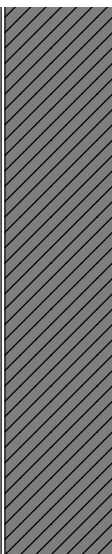
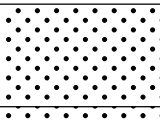

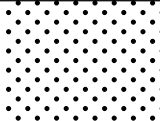

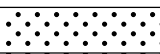


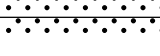

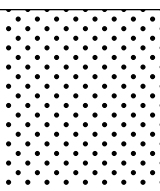
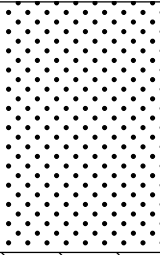
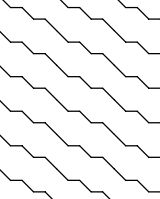
DRILLING INFORMATION

DRILLING CO.: **ProSonic**
DRILLER: **David Wilcox**
RIG TYPE: **RotoSonic**
TOP OF CASING
ELEVATION: **284.72'**
GROUND SURFACE
ELEVATION: **284.86'**

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 96.8 ft, bgs with 20 ft of 0.01-inch slot well screen.
- 3) Well screens the fluvial aquifer.
- 4)  Stabilized water level measured on 6/24/04

DEPTH	SOIL SYMBOLS	USCS	SOIL DESCRIPTION	FID ppm	WELL COMPLETION	WELL DESCRIPTION
0		CL	brown silty CLAY, slightly plastic, medium stiff	0.0		Grouted Annulus
-5		CL	brown silty CLAY, slight to medium plasticity, soft, moist	0.0		
-10		CL	brown silty CLAY, slight plasticity, medium stiff	0.0		
-15		CL	brown silty CLAY, slight plasticity, medium stiff	0.0		
-20		CL	brown silty CLAY and trace fine grain sand, slightly plastic, medium stiff	0.0		
-25		CL	layered reddish-brown and gray CLAY with fine grain sand and silt, stiff	0.0		
-30		CL	layered reddish-brown and gray CLAY with fine grain sand and silt, stiff	0.0		
-35		SM	brown, light gray, fine grain silty SAND, loose	0.0		
-40		NR	no recovery	0.0		
-40		CL	brown, CLAY and fine grain sand, soft	1.0		

DEPTH	SOIL SYMBOLS	USCS	SOIL DESCRIPTION	FID ppm	WELL COMPLETION		WELL DESCRIPTION		
-45		SP	gray, reddish-brown, yellow, fine grain SAND, trace medium grain sand, some rounded cobble size chert fragments	4.4					
		NR	no recovery						
-50		SP	gray, reddish-brown, yellow, fine grain SAND, trace medium grain sand	0.1					
-55		SP	yellowish-orange, light gray, fine grain SAND with clay lenses (<10%), loose	324.6/45.4					
		NR	no recovery						
-60		SP	yellowish-orange, fine grain SAND, trace clay lenses (<5%), trace very rounded cobble size chert nodules (<2%), loose	1.2					
-65		NR	no recovery	5.0					
-70		SP	yellowish-orange and brown, fine grain SAND, trace silt and gray clay, loose	NA				Bentonite Seal	
		SP	yellowish-orange, fine to medium grain SAND, poorly graded, loose, some clay lenses (<10%)						
-75		SP	yellowish-orange, fine grain SAND, loose, with clay lenses	NA				Sand Pack / Screened Interval	
		NR	no recovery						
-80		SP	yellowish-orange fine grain SAND, trace (<5%) very rounded chert nodules, loose	NA					
-85		SP	yellowish-orange, fine grain SAND with trace very rounded coarse size chert fragments (<5%), poorly graded, loose, wet	NA					
-90				NA					
-95				NA					
-100		CH	gray, brown very hard CLAY	NA					Bentonite Plug
-105			Boring Terminated at 106 feet bgs	NA					