



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

FIELD BOREHOLE LOG

BOREHOLE NO.: **MW-144**

TOTAL DEPTH: **86**

PROJECT INFORMATION

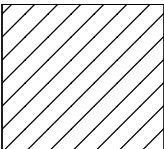
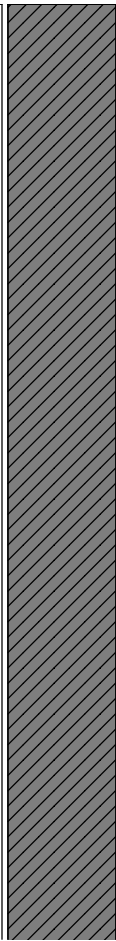
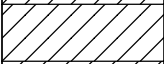
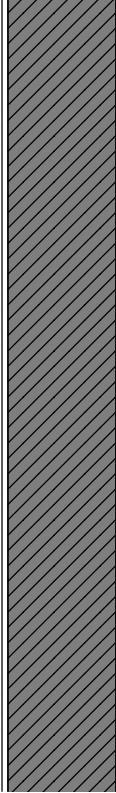
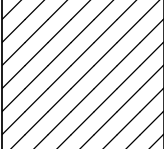
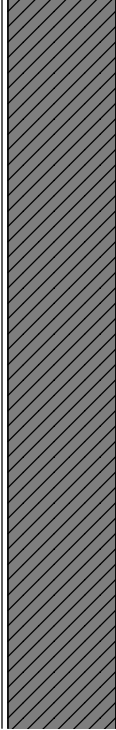
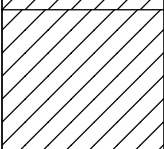
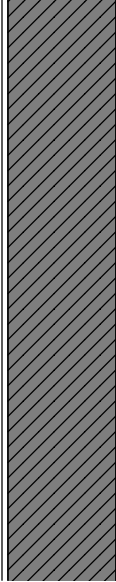
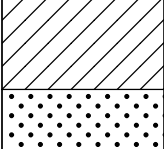
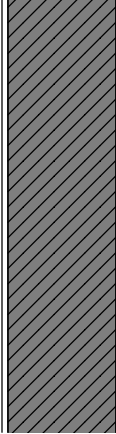
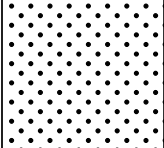
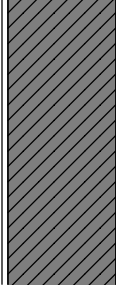

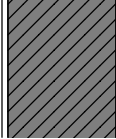
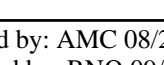
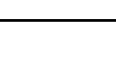
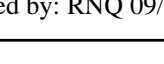
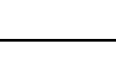


PROJECT: **DDMT**
SITE LOCATION: **Memphis, TN**
JOB NO.: **6301-04-0002**
LOGGED BY: **Kevin Arnold**
PROJECT MANAGER: **Tom Holmes**
DATE DRILLED: **6/2/04**


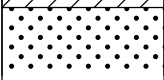
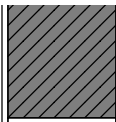
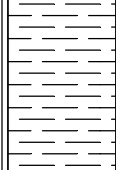
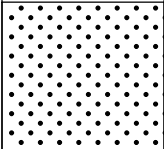
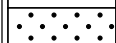




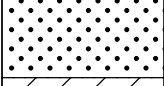
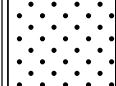
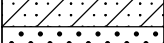




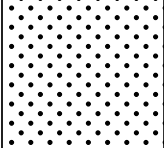
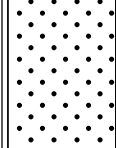
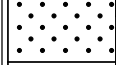
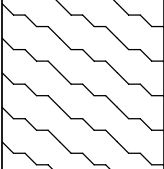
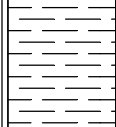
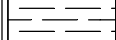
DRILLING INFORMATION

DRILLING CO.: **ProSonic**
DRILLER: **David Wilcox**
RIG TYPE: **RotoSonic**
TOP OF CASING
ELEVATION: **291.60'**
GROUND SURFACE
ELEVATION: **291.89'**

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 76.5 ft, bgs with 20 ft of 0.01-inch slot well screen.
- 3) Well screens the fluvial aquifer.
- 4) ▼ Stabilized water level measured on 6/25/04

DEPTH	SOIL SYMBOLS	USCS	SOIL DESCRIPTION	FID ppm	WELL COMPLETION	WELL DESCRIPTION
0		CL	dark brown to brown silty CLAY, medium stiff	0.0		Grouted Annulus
-5		CL	brown silty CLAY, medium to low plasticity, soft	0.0		
-10		CL	brown silty CLAY, low plasticity, medium stiff	0.0		
-15		CL	brown silty CLAY, medium stiff, medium to low plasticity	0.0		
-20		CL	brown silty CLAY, medium stiff, medium to low plasticity	0.0		
-25		CL	brown silty CLAY, medium stiff, medium to low plasticity	0.0		
-30		SP	reddish brown, fine to medium grain SAND, with trace rounded coarse size chert fragments, <10% clay	0.0		
-35		SP	brown, light gray fine to medium grain SAND, loose	0.0		
-40		SM	loose silty fine grain SAND	0.0		
-40		SP	fine grain SAND with coarse sized chert nodules	70.2/1.7		

DEPTH	SOIL SYMBOLS	USCS	SOIL DESCRIPTION	FID ppm	WELL COMPLETION	WELL DESCRIPTION
-45	 	CL SP	slightly silty CLAY, soft to very soft, wet reddish brown, fine grain SAND with some rounded to very rounded coarse sized chert nodules	36.6/2.9		Bentonite Seal
		NR	no recovery			
-50		SP	yellow, fine to medium grain SAND, loose, coarse size chert	0.0		
-55				87.7/18.2		Sand Pack / Screened Interval
		NR	no recovery			
		ML SP	light gray fine grain sandy SILT, very soft rounded coarse size chert nodules, with fine to medium grain SAND	0.0		
-60		SC	reddish brown, fine grain SAND with clay lenses			
-65		SP	reddish brown, yellow, fine grain SAND, soft with round medium grain chert nodules	1.8		
		NR	no recovery			
-70		SP	reddish brown, fine grained SAND, trace clay lenses (<10%), loose	0.0		▼
-75				12.1		
		CH	fat CLAY, hard	NA		
-80				NA		Bentonite Plug
-85			Boring Terminated at 86 feet bgs	NA	