



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

FIELD BOREHOLE LOG

BOREHOLE NO.: **MW-169**

TOTAL DEPTH: **118'**


PROJECT INFORMATION

PROJECT: **DDMT**
SITE LOCATION: **Memphis, TN**
JOB NO.: **6301-04-0019**
LOGGED BY: **Jaime Piver**
PROJECT MANAGER: **Tom Holmes**
DATE DRILLED: **12/9/04**

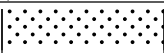
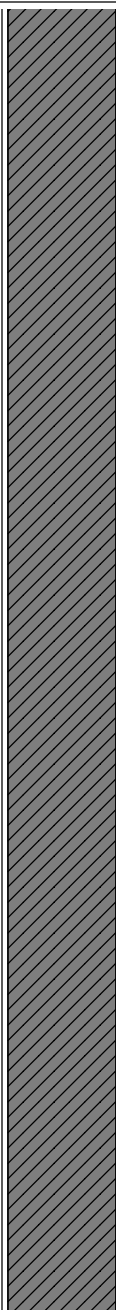
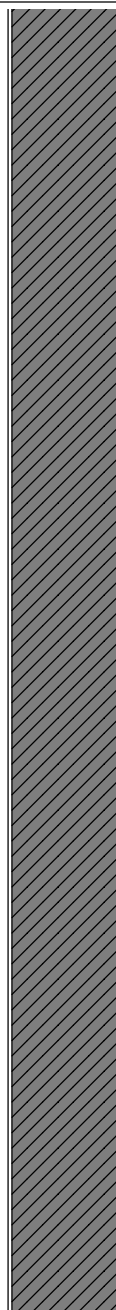
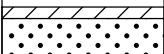
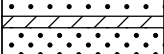


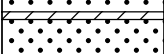






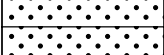



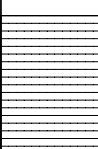
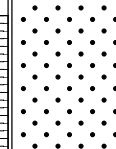
DRILLING INFORMATION

DRILLING CO.: **ProSonic**
DRILLER: **David Wilcox**
RIG TYPE: **RotoSonic**
TOP OF CASING
ELEVATION: **261.9'**
GROUND SURFACE
ELEVATION: **262.17'**

NOTES:

- 1) Drilling technique: 0 to 118 ft, bgs 6-inch diameter borehole with roto sonic.
- 2) Well construction: 2-inch diameter schedule 40 PVC casing set to 67.78 ft, bgs with 20 ft of 0.01-inch slot well screen.
- 3) Well screens the fluvial aquifer.
- 4)  Stabilized water level measured on 12/12/04

DEPTH	SOIL SYMBOLS	USCS	SOIL DESCRIPTION	FID ppm	WELL COMPLETION	WELL DESCRIPTION
0		FILL	grass, fill			
-5		CL	gray (7.5 YR 6/1) silty CLAY, very soft, loose, dry			
		CL	pinkish gray (7.5 YR 7/1) sandy, silty, CLAY with trace subrounded gravel (at 9.5' less silt, more gravel)			
-10		CL	gray (7.5 YR 6/1) silty CLAY, stiff, loose, dry			
		FILL	black (7.5 YR 2.5/1) organic rich layer.			
-15		CL	gray (7.5 YR 6/1), SILTY CLAY, stiff, loose, dry			
		SP	strong brown (7.5 YR 5/6) clayey SAND with pebbles			
-20		SW	strong brown (7.5 YR 5/6) clayey SAND with gravel, very tight			
						Grouted Annulus

DEPTH	SOIL SYMBOLS	USCS	SOIL DESCRIPTION	FID ppm	WELL COMPLETION		WELL DESCRIPTION
-25		CL	No Recovery				
			3" strong brown (7.5 YR 5/8) CLAY				
-30			yellowish red (7.5 YR 6/6) fine grain SAND, loose				
		CL	3" pink (7.5 YR 7/8) stiff CLAY lens				
			yellowish red (7.5 YR 6/6) fine grain SAND, loose				
-35		CL	2" pink (7.5 YR 7/4) stiff CLAY lens				
			yellowish red (7.5 YR 6/6) fine grain SAND, loose				
-40		SP	yellowish red (5 YR 5/6) fine to medium grain clayey SAND				
-45			yellowish red (5 YR 5/6) fine grain SAND with trace pebbles, loose				
-50		SM	reddish yellow (5 YR 7/6) fine silty SAND with trace pebbles				
-55			yellowish red (5 YR 5/6) fine grain silty SAND				
-60		CL	3" reddish yellow (5 YR 5/6) clay lens				
			reddish yellow (5 YR 5/6) fine grain silty SAND with trace clay				
-65		SM	reddish yellow (7.5 YR 7/6) fine silty SAND to gray (7.5 YR 5/1) silty SAND with trace clay				
		CL	strong brown (7.5 YR 5/6) CLAY separated by 6" of sand				
		CL	gray (7.5 YR 6/1) very fine silty CLAY				
-70		SM	yellowish brown (10 YR 5/6) silty clayey SAND, slight color change at 78' gray (7.5 YR 6/1)				
							Sand Pack / Screened Interval
							Bentonite Seal

DEPTH	SOIL SYMBOLS	USCS	SOIL DESCRIPTION	FID ppm	WELL COMPLETION	WELL DESCRIPTION
-75						
-80						
-85						
-90		SC	gray (7.5 YR 6/1) very fine clayey SAND			
-95		CL	gray (7.5 YR 6/1) stiff, silty CLAY			
-100						
-105						
-110						
-115						
			Boring Terminated at 118 ft, bgs			
						Bentonite Plug