



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


FIELD BOREHOLE LOG


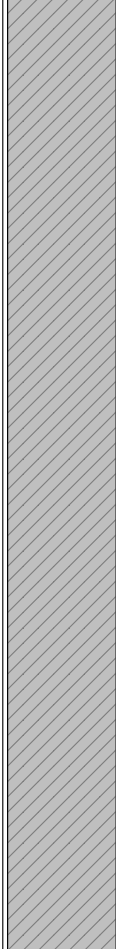
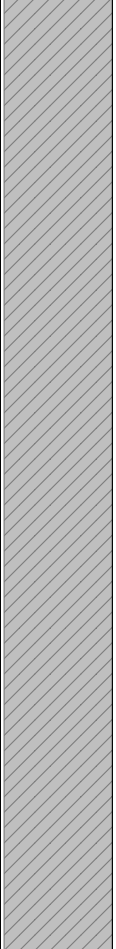
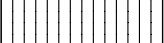
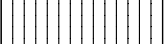
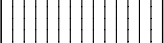
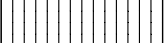
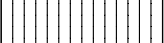

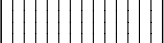

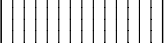
BOREHOLE NO.: **DR1-3**

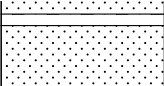
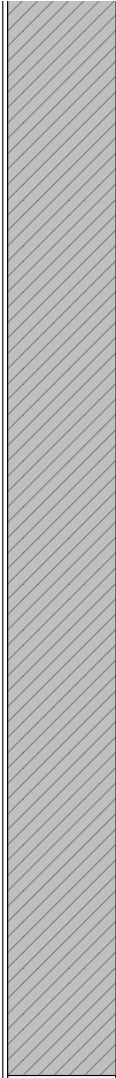
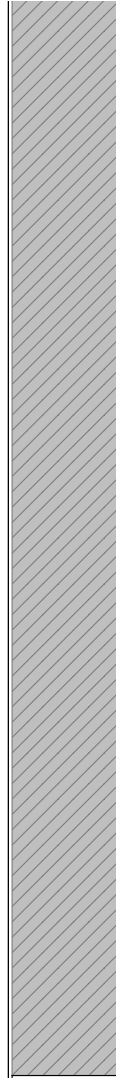
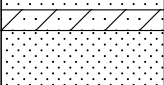
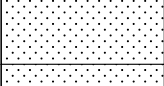
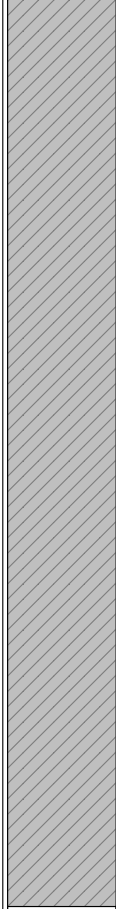



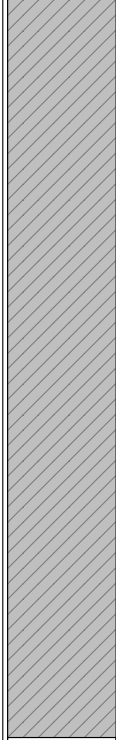
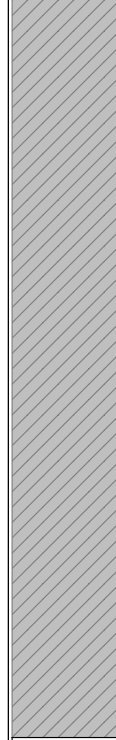


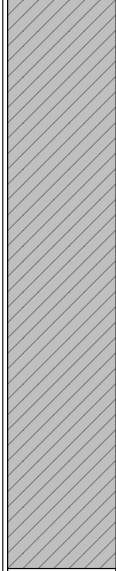



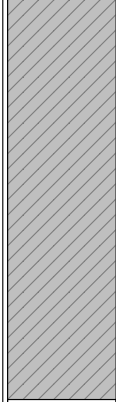
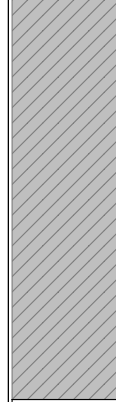

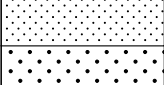
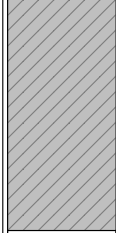

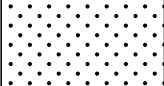
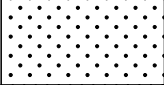


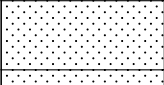
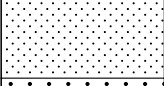
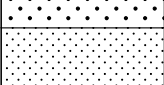

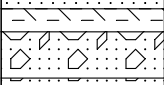
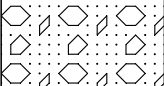


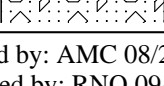
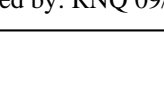

TOTAL DEPTH: **136.5**

PROJECT INFORMATION		DRILLING INFORMATION	
PROJECT:	DDMT	DRILLING CO.:	ProSonic
SITE LOCATION:	Memphis, TN	DRILLER:	David Wilcox
JOB NO.:	6301-04-0002	RIG TYPE:	RotoSonic
LOGGED BY:	Bill Payne	TOP OF CASING ELEVATION:	290.93'
PROJECT MANAGER:	Tom Holmes	GROUND SURFACE ELEVATION:	291.11'
DATE DRILLED:	5/5/04		

NOTES:

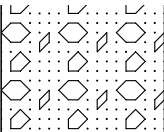
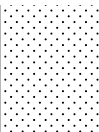
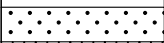

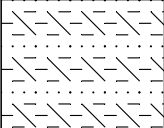
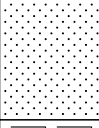
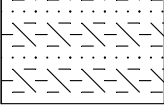
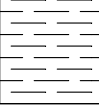
- 1) Drilling technique: 0 to 136.5 ft, bgs 6-inch diameter borehole with rotosonic.
- 2) Well construction: 2-inch diameter schedule 40 PVC casing set to 131 ft, bgs with 20 ft of 0.01-inch slot well screen.
- 3) Well screens the fluvial aquifer.
- 4)  Stabilized water level measured on 6/25/04

DEPTH	SOIL SYMBOLS	USCS	SOIL DESCRIPTION	FID ppm	WELL COMPLETION		WELL DESCRIPTION
0		FILL	gray gravel, fill	0.0			Grouted Annulus
-5			dark brown clayey SILT	0.0			
-10				0.0			
-15				0.0			
-20		ML	brown very fine grain sandy, clayey SILT	0.0			
-25		ML	brown with some reddish brown clayey, fine to medium grain sandy, SILT	0.0			
-30		SM	reddish brown with some brown and light gray silty, fine to medium grain SAND	0.0			
-35		SW	reddish brown with some yellowish brown silty fine to coarse grain SAND and 10-20% subangular to subrounded fine gravel	0.0			
-40		SP	brown poorly graded, fine to medium grain SAND with some clay and <10% subangular fine gravel	0.0			
		SP	brown fine to medium grain SAND with ~10% coarse grain SAND to fine subangular gravel	0.0			

DEPTH	SOIL SYMBOLS	USCS	SOIL DESCRIPTION	FID ppm	WELL COMPLETION		WELL DESCRIPTION
-45		CL	grayish brown CLAY	0.0			
		SP	light brown fine grain SAND with <10% fine gravel				
-45		SC	brown clayey fine grain SAND	0.0			
		SP	brown fine to medium grain SAND with <5% fine gravel				
-50		SP	brown to very dark gray fine grain SAND	120/0.0			
			light brown poorly graded very fine grain SAND and 10-15% subangular fine gravel				
-55		SP	brown fine grain SAND	0.0			
		SP	light brown to gray fine grain SAND, <10% coarse grain sand to fine gravel				
-60		SP	light brown to brown fine to medium grain SAND with <10% coarse sand to fine gravel	0.0			
		SP	light brown medium to coarse grain SAND with fine GRAVEL				
-65		SP	brown medium to coarse grain SAND	0.0			
		SP	brown medium to coarse grain SAND with ~10% subangular fine gravel				
-70		SP	light brown fine grain SAND with <10% fine gravel	0.0			
		SW	brown medium to coarse grain SAND and fine to coarse GRAVEL				
-75		SP	light brown to very light gray fine grain SAND with <25% fine subrounded to subangular gravel	0.0			
			light brown very fine grain SAND				
-80		SW	greenish-grayish-brown poorly sorted fine grain SAND and fine to coarse GRAVEL	NA			
		SP	light brownish gray medium grain SAND with fine gravel				
-85		CL	light reddish gray CLAY lense	NA			
		SP	light brownish gray medium grain SAND with fine gravel				
-90		CL	light reddish gray fine sandy CLAY	NA			
		SP-GP	light brown medium grain SAND and fine GRAVEL				
-95		SP-GP	brown medium to coarse grain SAND and fine GRAVEL with some coarse gravel	NA			
							
-100				NA			
-105				NA			
-110				NA			
-115				NA			

Bentonite Seal

Sand Pack /
Screened Interval

DEPTH	SOIL SYMBOLS	USCS	SOIL DESCRIPTION	FID ppm	WELL COMPLETION	WELL DESCRIPTION
-120		SW CL		NA		
-125			brown fine to coarse grain SAND	NA		
-130			dark gray CLAY	NA		
-135			Boring Terminated at 136.5 ft, bgs	NA		Back - filled with bentonite