

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

FIELD BOREHOLE LOG

BOREHOLE NO.: **DR1-4**TOTAL DEPTH: 136

PROJECT IN	FORMATION	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	292.78'	
PROJECT MANAGER:	Tom Holmes	ELEVATION: GROUND SURFACE	2/2.70	
DATE DRILLED:	5/11/04	ELEVATION:	292.99'	

NOTES:

- 1) Drilling technique: 0 to 136 ft, bgs 6-inch diameter borehole with rotosonic.
- 2) Well construction: 2-inch diameter schedule 40 PVC casing set to 126.5 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

DEDTH	SOIL		COH DESCRIPTION	FID	WELL	WELL
DEPTH	SYMBOLS	USCS	SOIL DESCRIPTION	ppm	COMPLETION	DESCRIPTION
		FILL	dark gray railroad bed fill, coarse grain sand to coarse GRAVEL			Grouted Annulus
-	-777	CL	brown silty CLAY			
-5 -	-7-7-7-7			0.0		
	-7-7-7-7-7					
-10 -				0.0		
-	-/-/-/-/-/					
-15 -	-7-7-7-7			0.0		
-	-7-7-7-7-	CL	brown fine grain sandy, silty, CLAY			
-20 -	_/_/_/_/ _/_/_/_/_/			0.0		
-		SW	mottled reddish-brown, light brown and light gray clayey, silty, fine to coarse grain SAND with <10% fine			
-25 -			clayey, sirty, fine to coarse grain SAND with <10% fine chert gravel	0.0		
		SM	reddish-brown silty fine grain SAND			
-30 -				0.6		
-35 —		GP-SP	light brown subangular fine chert GRAVEL and medium to coarse grain SAND	0.0		
		SP	brown medium to coarse grain SAND with <25%	0.0		
-40		CW, CW,	subangular to subrounded fine to coarse gravel			
-	KaKaKa	GW-SW	yellowish-brown subangular to subrounded fine to coarse	0.0		

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-1001051061071071081091091091101101101101101101151151151151151151151161171181181181191191191101	DEPTH	SOIL SYMBOLS	USCS	SOIL DESCRIPTION	FID ppm	WELL COMPLETION	WELL DESCRIPTION
1.0 1.0	-			GRAVEL and medium to coarse grain SAND			
1.0 3.6 3.6 3.6 3.6 3.6 3.6 3.6 3	-45 —				0.0		
SP	-50 -				1.0		
SP	-55 —				3.6		
SP S	-60 -			brown medium to coarse grain SAND and subangular fine GRAVEL	16		
SP S	-65 -				114.4/35.2		
SP S	-70 -			yellowish-brown medium to coarse grain SAND with	3.9		
SP SP SND and fine GRAVEL 5.5 SP SP SND and fine GRAVEL 5.5 SP SP Sw-GW SW-GW	-75 —			subrounded fine gravel brown fine to medium grain SAND with <5% coarse	0.0		
subangular to subrounded, fine to coarse gravel SP	-80 -			SAND and fine GRAVEL	5.5		
SW-GW SW-GW SP Grayish-brown fine grain to coarse grain SAND and fine to coarse grain SAND with <10% coarse grain SAND with <10% coarse grain sand and fine gravel SP Grayish-red CLAY Iight brown fine grain SAND NA Sand Pack / Screened Interview of the grain SAND with solution of the grain SAND NA Sand Pack / Screened Interview of the grain SAND with solution of the grain SAND NA Iight brown medium to coarse grain SAND NA NA NA NA NA NA NA NA NA	-85 —			brown medium to coarse grain SAND with ~25% subangular to subrounded, fine to coarse gravel	0.0		
SP light grayish-brown fine grain SAND with <10% coarse grain SAND with <10% coars		$\bigcirc A \bigcirc A \bigcirc A$			11.2		_
-10010510511011511511511511511511511611711711811811811811811811811911911911011011011011011011011	-95 —			coarse GRAVEL	0.0		Bentonite Seal
-110 - -110 - SP light brown fine grain SAND NA NA Screened Interv NA light brown medium to coarse grain SAND and fine to coarse GRAVEL light brown medium to coarse grain SAND NA NA NA NA NA NA NA	-100 -				NA		
SP S	-105 —				NA		Sand Pack / Screened Interval
-115 – SP coarse GRAVEL light brown medium to coarse grain SAND NA NA NA	-110 -			Ealst beauty medium to coarse grain SAND and fine to	NA		
	115			coarse GRAVEL			
		0,0,0, 0.0.0 0.0.0	SP-GP	brown medium to coarse grain SAND and subangular to subrounded fine GRAVEL	NA		

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DOTCHOIC NO. DK1-4						
DEPTH	SOIL	USCS	SOIL DESCRIPTION	FID	WELL	WELL
SYMBOLS	OBCB	SOIL DESCRIPTION	ppm	COMPLETION	DESCRIPTION	
-120		GP	brown subangular fine GRAVEL	NA		
-125 —		CL GP EA	yellowish-brown silty CLAY with <10% coarse sand brown subangular fine GRAVEL light yellowish brown CLAY and fine GRAVEL	NA		
-130 -		СН	light yellowish brown CLAY gray CLAY	NA		Bentonite Plug
-135 -			Boring Terminated at 136 ft, bgs	NA		

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