

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

## FIELD BOREHOLE LOG

BOREHOLE NO.: MW-66A

TOTAL DEPTH: 106

PROJECT IN	FORMATION	DRILLING I	INFORMATION
PROJECT:	DDMT	DRILLING CO.:	ProSonic
SITE LOCATION:	Memphis, TN	DRILLER:	David Wilcox
JOB NO.:	6301-04-0002	RIG TYPE:	RotoSonic
LOGGED BY:	Amy Callaway	TOP OF CASING	284.22'
PROJECT MANAGER:	Tom Holmes	ELEVATION: GROUND SURFACE	
DATE DRILLED:	6/15/04	ELEVATION:	284.34'

NOTES:

1) Drilling technique: 0 to 106 ft, bgs 6-inch diameter borehole with rotosonic.

2) Well construction: 2-inch diameter schedule 40 PVC casing set to 95 ft, bgs with 20 ft of 0.01-inch slot well screen.

3) Well screens the fluvial aquifer.

4)  $\checkmark$  Stabilized water level measured on 6/25/04

DEPTH SOIL		SOIL DESCRIPTION	FID	WELL	WELL	
DEPTH	SYMBOLS USCS		ppm	COMPLETION	DESCRIPTION	
0-		CL	brown (7.5YR 4/2) CLAY with roots	0.0		Grouted Annulus
-		ML	brown (7.5YR 5/4) clayey SILT with some roots			
-5		CL	brown (7.5YR 5/4) CLAY	0.0		
-		CL	brown (7.5 YR 5/4) CLAY with some coarse sand			
-10				0.0		
-15 -				0.0		
_		CL	strong brown (7.5YR 5/6) sandy CLAY with trace gravel			
-20 -		SP	red (2.5YR 4/8) clayey coarse to very coarse SAND with pebble and gravel size chert nodules	0.0		
-25 -		SP	red (2.5YR 4/6) fine grain SAND with pebbles and	0.0		
-30 -		SP	gravel strong brown (7.5YR 5/8) medium grain SAND with pebbles and gravel	0.7		
-		SP SP	yellow (10YR 7/6) fine grain SAND			
-		51	yellow (10YR 7/6) fine grain SAND with gravel			
-35 -		SP	yellow (10YR 7/6) medium grain SAND	5.3		
-		SP	reddish yellow (7.5YR 6/8) coarse grain SAND with gravel			
-40 -		SP	strong brown (7.5YR 5/8) medium grain SAND	0.7		
+			brownish yellow (10YR 6/8) medium grain SAND with			

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DEPTH	SOIL SYMBOLS	USCS	SOIL DESCRIPTION	FID ppm	WELL COMPLETION	WELL DESCRIPTIO
-45 -		SF SC SP	some clay and gravel strong brown (7.5YR 5/8) fine grain SAND red (10R 4/8) and pinkish gray (7.5YR 7/2) and reddish yellow (7.5YR 7/6) clayey fine grain SAND	0.4		
		NR SP	reddish yellow (7.5YR 6/8) and yellow (10YR 7/6) fine grain SAND			
-50		SP SP	reddish yellow (7.5YR 6/8) and yellow (10YR 7/6) fine grain SAND	1.2		
-55 -		SP	very pale brown (10YR 8/2) medium grain SAND reddish yellow (7.5YR 6/8), medium grain SAND with gravel	0.0		
-60 -		SP	reddish yellow (7.5YR 6/8), medium grain SAND with chert cobbles reddish yellow (7.5 YR 6/8) medium grain SAND with	0.8		
-		SP	some gravel becoming more gravelly with depth yellow (10 YR 8/6) fine grain SAND	0.8		
-65 -		SP		0.2		
-		31	yellow (10 YR 8/6) medium grain SAND			
-70 -		SP GP	reddish yellow (7.5 YR 6/8) gravelly coarse grain SAND pinkish gray (7.5 YR 7/2) sandy GRAVEL with some cobbles becoming more sandy with depth	0.0		Bentonite Seal
-75 -		SP	very pale brown (10YR 7/3) gravelly fine grain SAND, sand grain size increasing with depth, becoming increasing moist with depth	0.1		Sand Pack / Screened Interv
-80				NA		<b>—</b>
-85 -		SP	very pale brown (10YR 7/3) medium grain SAND, wet	NIA		
-		SP	very pale brown (10YR 7/3) gravelly medium grain SAND, wet	NA		
-90 -		SP SP	very pale brown (10YR 7/3) gravelly medium grain SAND, wet with some cobbles very pale brown (10YR 7/3) pebbly coarse grain SAND	NA		
-95 -		SP CH	very pale brown (10YR 7/3) pebbly, gravelly coarse grain SAND reddish yellow (7.5YR 6/8) fat CLAY with trace sand	NA		
-		СН	dark gray (7.5YR 4/1) fat CLAY, damp			- Bentonite Plug
-100 -				NA		
-105 -			Boring Terminated at 106 feet bgs	NA		