

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

## FIELD BOREHOLE LOG

BOREHOLE NO.: MW-160

TOTAL DEPTH: 96'

	DDAILOT		nnesaw, GA 30144					NT			
PROJE	PROJECT			DRILLIN DRILLING CO.:			IG INFORMATION				
							ProSonic				
SITE LOCATION: Memphis, TN			DRILLER: RIG TYPE:			David Wilcox RotoSonic					
JOB NO.: 6301-04-0019						toSonic					
LOGGED BY: Kevin Arnold			TOP OF ELEVA		G 294	1.00					
PROJECT MANAGER: Tom Holmes				GROUN		FACE 20/	1.11				
DATE DRILLED: 10/11/04				ELEVA	TION:	27-	r.11				
NOTE											
1) Drilling technique: 0 to 96.0 ft, bgs 6-inch diameter borehole with rotosonic.											
<ul> <li>2) Well construction: 2-inch diameter schedule 40 PVC casing set to 86.17ft, bgs with 20 ft of 0.01-inch slot well screen.</li> <li>3) Well screens the fluvial aquifer.</li> </ul>											
		-	easured on 10/11/04								
			FID		WE	WELL					
DEPTH	SOIL SYMBOLS	USCS	SOIL DESCRIPTIO	ON	ppm		LETION	WELL DESCRIPTION			
0-			1								
-		FILL ML	asphalt, coarse grain SAND, loose and stiff brown (7.5YR 5/4) and brown (7.5 5/2) cla	/							
-			soft	yey SiL1,							
-5		CL			0.0			Grouted Annulus			
-			brown (7.5YR 5/3) silty CLAY, medium st plasticity, moist	iff, medium							
-10 -					0.0						
-											
-15 -											
-		CL	No Recovery		0.0						
-			strong brown (7.5YR 5/8) silty CLAY, mee plasticity, stiff	lium							
-20 -					0.0						
-											
-25 -					0.0						
-		SC	Vo Recovery yellowish red (5YR 5/8) and reddish gray (								
-30 -			slightly fine gravelly, clayey, fine grain SA	ND, stiff	0.0						
-					0.0						
-35 —	/:/:/:/:/:/		No Recovery		0.0						
1											
-40 -		SP	yellowish red (5YR 5/8) and dark reddish b	prown (5YR	0.0						

## Borehole No. **MW-160**

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DEDTU	SOIL	USCS	SOIL DESCRIPTION	FID WELL		WELL				
DEPTH	SYMBOLS			ppm	COMPLETION	DESCRIPTION				
			3/4) slightly clayey, fine grain SAND, with some well sorted, very rounded fine gravel, loose							
-45 -		SW	light reddish brown (5YR 6/4) well rounded to subrounded, coarse gravelly, fine grain SAND, very loose	0.0						
			No Recovery							
-50		SW	light reddish brown (5YR 6/4) well rounded to subrounded, coarse gravelly, fine grain SAND, very loose	0.0						
-55 -			No Recovery	1.5						
-60 -		sw	light reddish brown (5YR 6/4) well rounded to subrounded, coarse gravelly, fine grain SAND, very loose	3.0		Bentonite Seal				
		SP ML	brown (7.5YR 5/4) slightly clayey, slightly fine gravelly, fine grain SAND, loose			Sand Pack /				
-65		SP	pinkish gray (7.5YR 7/2) SILT, very loose reddish yellow (7.5YR 6/8) slightly fine gravelly, fine	0.0		Screened Interval				
-70			vo Recovery	0.0						
-75 -		SP	reddish yellow (7.5YR 6/8) slightly fine gravelly, fine grain SAND, very loose	8.6						
			No Recovery							
-80		SP	reddish yellow (7.5YR 6/8) fine to medium grain SAND, loose, wet	-						
-85 -		СН	strong brown (7.5YR 5/8) slightly silty CLAY, highly plastic, hard	-						
-90 -			plaste, hard			Bentonite Plug				
-95 -		CL	strong brown (7.5YR 4/6) and dark gray (7.5YR 4/1) CLAY, highly plastic, hard							
			Boring Terminated at 96 feet bgs							