



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

# FIELD BOREHOLE LOG

BOREHOLE NO.: **MW-166A**

TOTAL DEPTH: **80'**

## PROJECT INFORMATION

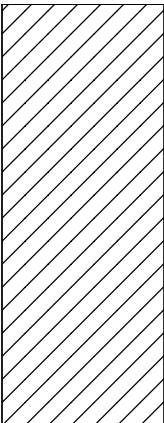
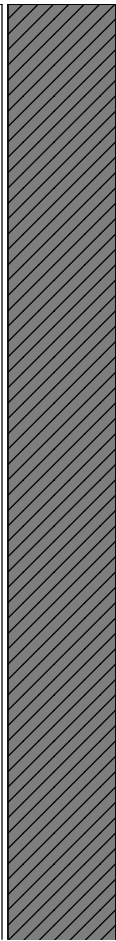
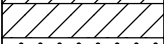



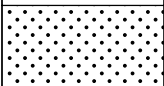
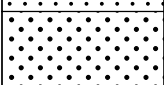
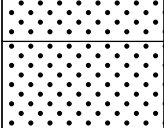
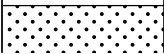
PROJECT: **DDMT**  
SITE LOCATION: **Memphis, TN**  
JOB NO.: **6301-04-0002**  
LOGGED BY: **Jaime Piver**  
PROJECT MANAGER: **Tom Holmes**  
DATE DRILLED: **11/13/04**

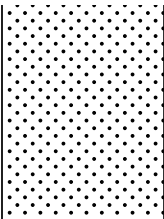
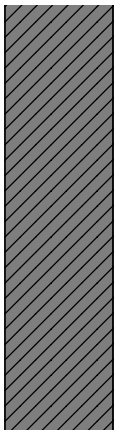
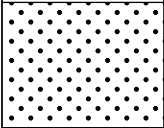
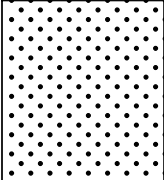
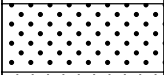
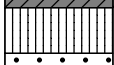

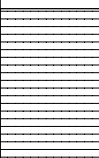

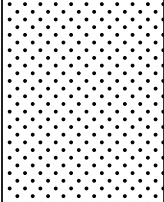
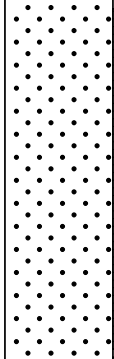
## DRILLING INFORMATION

DRILLING CO.: **ProSonic**  
DRILLER: **Dan O'Mara**  
RIG TYPE: **RotoSonic**  
TOP OF CASING  
ELEVATION:  
GROUND SURFACE  
ELEVATION:

### NOTES:

- 1) Drilling technique: 0 to 80 ft, bgs 6-inch diameter borehole with roto sonic.
- 2) Well construction: 2-inch diameter schedule 40 PVC casing set to 83.15ft, bgs with 15 ft of 0.01-inch slot well screen.
- 3) Well screens the fluvial aquifer.
- 4) ▼ Stabilized water level measured on 11/20/04

| DEPTH | SOIL SYMBOLS   | USCS     | SOIL DESCRIPTION   | FID ppm | WELL COMPLETION   | WELL DESCRIPTION |
|-------|--|----------|--|---------|---|------------------|
| 0     |    | CL       | brown (7.5 YR 5/4) soft silty CLAY, trace pebbles at 8 ft.                           |         |  | Grouted Annulus  |
| -5    |  |          |  | 0.0     |   |                  |
| -10   |  |          |  | 0.0     |   |                  |
| -15   |  |          |  | 0.0     |   |                  |
| -20   | <br> | CL       | brown (7.5 YR 4/3, 4/4) silty CLAY with fine gravel                                  |         |   |                  |
|       |  |          | yellowish red (5/6, 5 YR) gravelly SAND  | 1.7     |   |                  |
| -25   |   | SP       | reddish yellow (2.5 YR 6/8) fine to medium grain SAND with coarse gravel             |         |   |                  |
|       |   | SW<br>SP | red (2.5 YR 5/6) medium to coarse grained SAND with trace GRAVEL                     | 1.4     |   |                  |
|       |   |          | yellowish red (2.5 YR 5/6) fine grain SAND to sub-rounded very coarse grained gravel |         |   |                  |
| -30   |   | SW<br>SP | reddish yellow (5 YR 5/8) fine to medium grained SAND with trace pebbles             | 0.6     |   |                  |
| -35   |   | SP       | yellowish red (5 YR 5/8) fine to medium grained gravelly SAND                        | 0.3     |   |                  |
| -40   |   | SW       | reddish yellow (7.5 YR 6/6), fine to medium grain gravelly SAND                      | 8.3     |   |                  |

| DEPTH | SOIL<br>SYMBOLS   | USCS | SOIL DESCRIPTION   | FID<br>ppm | WELL<br>COMPLETION  | WELL<br>DESCRIPTION   |
|-------|---|------|--|------------|---|---|
| -45   |  | SP   |  | 9.9        |   |   |
| -50   |  |      | reddish yellow (7.5YR 6/8) fine to medium grain SAND                     | 0.0        |   |   |
| -55   |  | SP   | reddish yellow (7.5 YR 6/8) medium to coarse grain SAND                  | 3.7        |   |   |
| -60   |  | SP   |  | 0.0        |   | Bentonite   |
| -65   |  |      | reddish yellow (7.5 YR 6/8) fine to coarse grain SAND with trace pebbles | 0.0        |  |  Sand Pack / Screened Interval |
| -70   |  | SW   | reddish yellow (7.5 YR 6/8) fine to coarse grain SAND with trace pebbles | 0.0        |   |   |
| -75   |   |      |  |            |   |   |
| -80   |   |      | Boring Terminated at 80 ft, bgs  |            |   |   |