

EM 1110-1-4000

1 Nov 98

Facility/Project Name <u>Memphis Dept. of Public Works</u>		Local Grid Location of Well <u>8E</u>		Well Number <u>MW-70</u>	
Facility Use (Permit & Monitoring Number) <u>99-321-112(BD)</u>		Grid Origin Location Lat. _____ Long. _____		Date Well Installed (Start) <u>11/10/99</u>	
Type of Protection Cover: Above-Ground ☒ Flush-To-Ground ☐		St. Plane _____ m. N. _____ m. E.		Date Well Installed (Completed) <u>11/18/99</u>	
Well Distance From Waste/Source Boundary _____		Section Location of Waste/Source _____		Well Installed By: (Person's Name & Firm) <u>Glen Baker</u>	
Maximum Depth of Frost Penetration (estimated) <u>95'</u>		Location of Well Relative to Waste/Source Upgradient ☐ Downgradient ☒ Sidgradient ☐ Not Known ☐			

Note: Use top of casing (TOC) for all depth measurements.

A. Protection casing, top elevation _____ m. MSL

B. Well casing, top elevation 2.5' above ground m. MSL

C. Land surface elevation _____ m. MSL

D. Surface seal, bottom _____ m. TOC or _____ m. MSL

16. USCS classification of soil near screen:
 GP ☐ GM ☐ GC ☐ GW ☐ SW ☒ SP ☐
 SM ☐ SC ☐ ML ☐ MH ☐ CL ☐ CH ☐
 Bedrock ☐

17. Slave analysis attached? ☐ Yes ☒ No

18. Drilling method used: Rotary ☐ Hollow Stem Auger ☒ Other ☐

19. Drilling fluid used: Water ☐ Air ☐ Drilling Mud ☐ None ☒

20. Drilling additives used? ☐ Yes ☒ No
Describe _____

21. Source of water (attach analysis):
Deep Field (for bacter. & hydrocarbon)

E. Secondary filter, top NA m. TOC or _____ m. MSL

F. Bentonite seal, top 74.9 m. TOC or _____ m. MSL

G. Secondary filter, top 74.9 m. TOC or _____ m. MSL

H. Primary filter, top 78.3 m. TOC or _____ m. MSL

I. Screen joint, top 83 m. TOC or _____ m. MSL

J. Well bottom 93.5 (6' cu) m. TOC or _____ m. MSL

K. Filter pack, bottom 93.5 m. TOC or _____ m. MSL

L. Borehole, bottom 95.5 m. TOC or _____ m. MSL

M. Borehole, diameter 2" mm.

N. O.D. well casing 2" mm.

O. I.D. well casing _____ mm.

P. 24-hr water level after completion 81.45 m. TOC or _____ m. MSL

1. Cap and lock? ☒ Yes ☐ No

2. Protective posts? ☐ Yes ☒ No

3. Protective casing:
a. Inside diameter: _____ mm.
b. Length: _____ m.

4. Drainage port(s) ☒ Yes ☐ No

5. Surface seal:
a. Cap _____
b. Annular space seal: Gravel blanket ☐ Bentonite ☐ Concrete ☒ Other ☐

6. Material between well casing and protective casing: Bentonite ☐ Cement ☒ Other ☐

7. Annular space seal:
a. Granular Bentonite ☐
b. 100% mud weight Bentonite-sand slurry ☐
c. 100% mud weight Bentonite slurry ☐
d. 7.8 x Bentonite Bentonite-cement grout ☒
e. _____ m. volume added for any of the above
f. How installed: Tremie ☐ Tremie pumped ☒ Gravity ☐

8. Centralizers ☐ Yes ☒ No

9. Secondary filter ☐ Yes ☒ No
a. Volume added _____ Bags/Size

10. Bentonite seal:
a. Bentonite granules ☐
b. ☒ 1/4" ☐ 3/4" ☐ 1 1/4" Bentonite pellets ☒
c. _____ Other ☐

11. Secondary filter ☐ Yes ☒ No
a. Volume added _____ Bags/Size

12. Filter pack material: Manufacturer, product name & mesh size
a. 10-30
b. Volume added _____ 5/16" Bags/Size

13. Well casing: Flush threaded PVC schedule 40 ☒
Flush threaded PVC schedule 80 ☐ Other ☐

14. Screen material: BIC
a. Screen types: Factory cut ☒ Continuous slot ☐ Other ☐
b. Manufacturer _____
c. Slot size: 0.02 in.
d. Slotted length: _____ m.

15. Backfill material (below filter pack): None ☐
Bentonite ☒ Other ☐