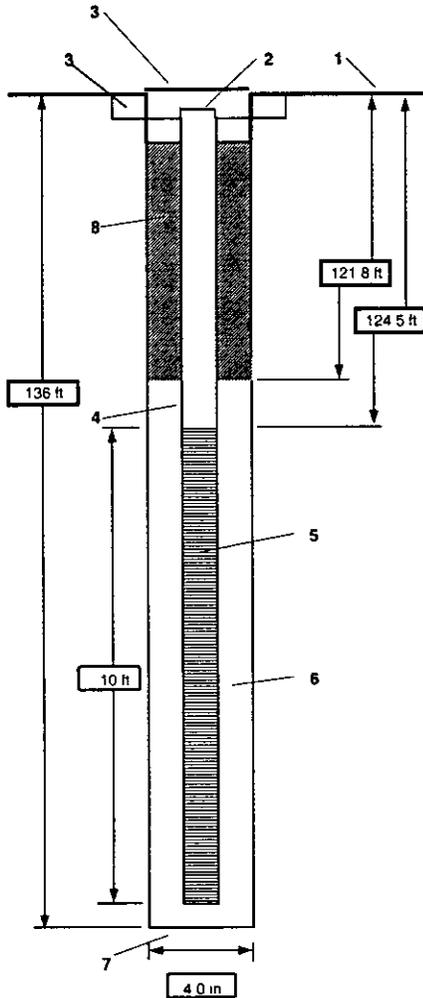




PROJECT NUMBER 113630.01.ZZ	WELL NUMBER MW-63
SHEET 1 OF 1	
WELL COMPLETION DIAGRAM	

PROJECT DDMT October 1998 Well Installation LOCATION Memphis, TN
 DRILLING CONTRACTOR Boart-Longyear, Little Falls, MN
 DRILLING METHOD AND EQUIPMENT USED Rotasonic, 4 in x 6 in
 WATER LEVELS 102.25 ft (11/12/98) START 10/13/98 END 10/13/98 LOGGER T Proper/ATL



1- Ground elevation at well	<u>305.10 ft</u>
2- Top of casing elevation	<u>304.58 ft</u>
3- Wellhead protection cover type	<u>Flush mount vault</u>
b) concrete pad dimensions	<u>3 ft x 3 ft</u>
4- Dia./type of well casing	<u>2-inch PVC</u>
5- Type/slot size of screen	<u>0.010 slot PVC</u>
6- Type screen filter	<u>Filter Sil™ -10/20 sand</u>
a) Quantity used	<u>200 lbs (4 bags)</u>
7- Type of seal	<u>Shur Pel™ bentonite pellets (1/4 in)</u>
a) Quantity used	<u>(Pellets used to seal confining unit if penetrated) 38 lbs (7 ft)</u>
8- Grout	<u>Quik Grout™ (100 lbs), 48 gal water</u>
a) Grout mix used	<u>Pumped</u>
b) Method of placement	<u>Approx 185 gal</u>
c) Vol of well casing grout	<u>Pump with Grundfos pump</u>
Development method	<u>1.5 hours</u>
Development time	<u>275 gal</u>
Estimated purge volume	<u>Mud weight = 9.4 lbs/gal (not measured)</u>
Comments	<u>Total Depth (BTOC) = 135.3 ft</u>
Final field parameters collected during well development (10/21/98)	<u>pH = 6.07</u>
	<u>conductivity = 0.354 mS/cm</u>
	<u>temperature = 19.2°C</u>

Note: Diagram not to scale