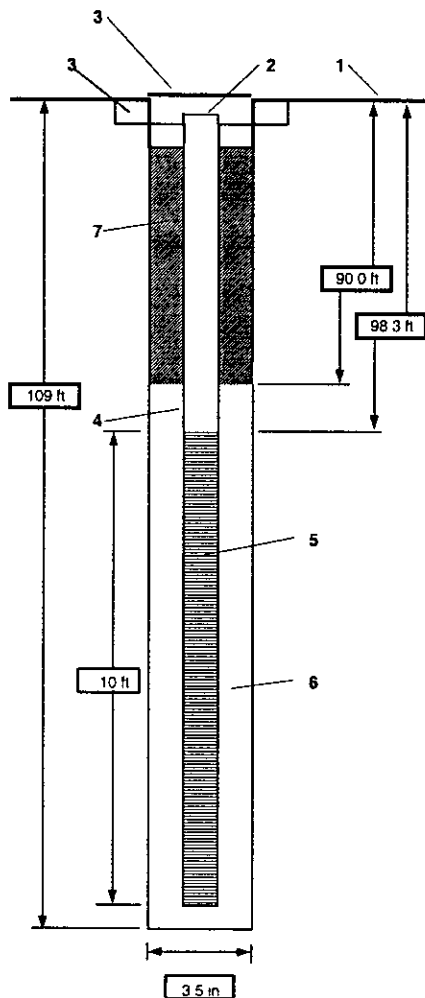


CH2MHILL

PROJECT NUMBER 113630.01.ZZ	WELL NUMBER PZ-4	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, O D = 3.5 in., I D = 2.25 in.
 WATER LEVELS Not measured START 11/3/98 END 11/3/98 LOGGER T Proper/ATL



Note: Diagram not to scale

1- Ground elevation at well	302.68 ft
2- Top of casing elevation	302.30 ft
3- Wellhead protection cover type	Flush mount vault
b) concrete pad dimensions	3 ft x 3 ft
4- Dia./type of well casing	3/4-inch PVC
5- Type/slot size of screen	0.010 slot PVC (pre-packed)
6- Type screen filter	Filter Sil™ - 10/20 sand (+ formation sand)
a) Quantity used	(Boundary b/t formation sand and Filter Sil™ - 100 ft) 50 lbs (1 bag)
7- Grout	
a) Grout mix used	Quik Grout™ (100 lbs) 48 gal water
b) Method of placement	Pumped
c) Vol. of well casing grout	Approx. 135 gal
Development method	Did not develop
Development time	Did not develop
Estimated purge volume	Did not purge (Driller estimated 30 gal of water added during PZ installation)
Comments	Mud weight = 9.4 lbs/gal (not measured)
	Total Depth (BTOC) = 108.8 ft
	PZ installed at HY-8 location