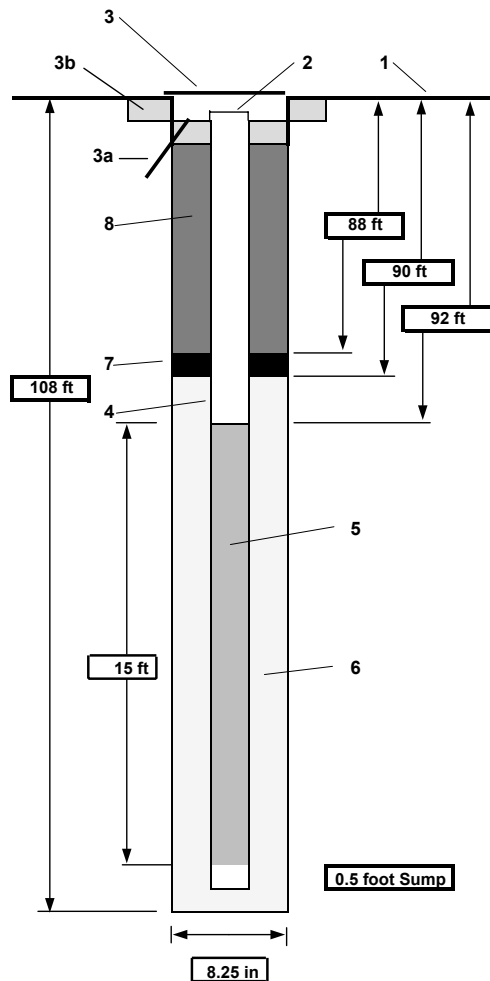




PROJECT NUMBER 160492.SA.03	WELL NUMBER MW-93	SHEET 1 OF 1
WELL COMPLETION DIAGRAM		

PROJECT : Long Term Operational Areas - Memphis Depot	LOCATION : Memphis, Tennessee
DRILLING CONTRACTOR : Tri-State Testing Services, Inc.	
DRILLING METHOD AND EQUIPMENT USED : Hollow Stem Auger 4.25 inch ID with CME Sampler	
WATER LEVELS : 102.45 feet BTOC (11/2001)	START : 09/25/2001
	END: 09/27/2001
	LOGGER : Adam Kaiser (Jacobs)



Note: Diagram not to scale.

1- Ground elevation at well	294.31 feet MSL
2- Top of casing elevation	294.08 feet MSL
3- Wellhead protection cover type	Flush mount vault
a) drain tube?	no
b) concrete pad dimensions	3 ft x 3 ft x 6 in
4- Dia./type of well casing	2-inch Sch. 40 PVC
5- Type/slot size of screen	2-inch 0.010 slotted PVC
6- Type screen filter	#2 filter sand
a) Quantity used	bags
7- Type of seal	Bentonite chips
a) Quantity used	bags
8- Grout	
a) Grout mix used	90% Portland Grout, 10% bentonite powder
b) Method of placement	Tremie Method
c) Vol. of well casing grout	
Development method	Surge & pump with an electrical, centrifugal, in-line pump.
Development time	2.5 hour
Estimated purge volume	38 gallons
Comments	Total Depth (BGS) = 107.5 feet Completed based on LTOA workplan (2001) specifications.
Final field parameters collected during well development (10/30/2001):	
pH =	6.10
conductivity =	0.145 mS/cm
temperature =	23.72 °C
Dissolved Oxygen =	6.85 mg/l
Turbidity =	10 NTU