PROJECT NUMBER	WELL NUMBER	
160492.SA.03	MW-99	SHEET 1 OF 1

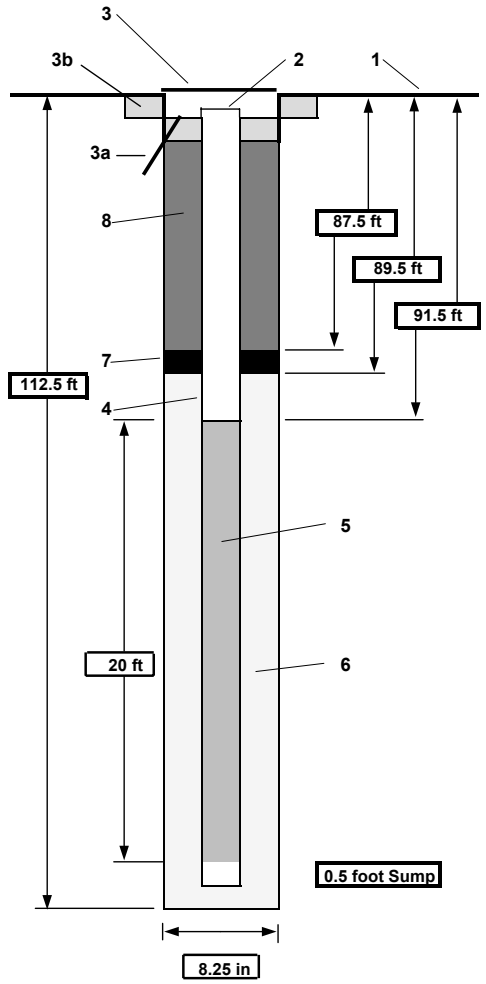
WELL COMPLETION DIAGRAM

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 : 89.60 feet BTOC (11/2001) — START : 10/05/2001 — END: 10/08/2001 — LOGGER : Adam Kaiser (Jacobs)



Note: Diagram not to scale.

1-	Ground elevation at well	285.69 feet MSL
2-	Top of casing elevation	285.33 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	9 bags
7-	Type of seal	Bentonite chips
	a) Quantity used	4 - 5 gallon buckets; 2.5 bags
8-	Grout	
	a) Grout mix used	90% Portland Grout, 10% bentonite powder
		9 bags
	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	4.5 hour
	Estimated purge volume	81 gallons

Comments: Total Depth (BGS) = 118 feet

Completed based on LTOA workplan (2001) specifications.

Final field parameters collected during well development (10/23/2001):

pH =	6.57
conductivity =	0.173 mS/cm
temperature =	20.13 °C
Dissolved Oxygen =	5.06 mg/l
Turbidity =	7.9 NTU