

Pressure Control Homework

Data

Depth 12,125' Hole size 7 7/8" Drill Pipe 4 1/2"
6" Drill Collars 1000'
 P_a 600 psi P_{dp} 400 psi Pit Gain 21 bbls
Mud 9.8 #/gal T_{sur} 70F Temp Grad 1.5F/100'
Bottom hole to be maintained 100 psi over reservoir pressure
Calculate @ the Casing seat 4500' and at the surface