Well Design Problem  
March, 2010

The Hopeful Oil and Gas Company is planning a well to test the morrow formation in Lea County, NM, the Mullet #1. The well is to be drilled in east ½ of sec.24-16S-34E. The expected BHP is 7100 psi. Other wells in the area have encountered 6800 psi in the strawn formation, about 11,800 ft. Design the casing strings required for this well.

If class G cement with 5% bentonite and 4% salt is used for the production string, how much is needed to get 1000’ of fill and at what pumping rate is needed for a good bond? K=.195 and n= .3. What else is helpful for a good bond?

Due March 26