

Well Tests Homework (Due Wednesday October 29)

Fetter, Chapter 5 Problem 16.

1. (5pts) Draw a cross-section of the geologic situation, including the geologic formations (labeled), the location of the pumping well (including depth of casing), and the location of the observation well. Be sure the scale is 1:1, that is, no vertical or horizontal exaggeration. Assume the observation well is identical in construction to the pumping well.
2. (10pts) Answer questions (A) and (B) by hand. Show your work. If you wonder what 3x5 cycle log paper is, well figure 5.6 is an example.
3. (10pts) Redo the problem using Aqtesolve. Recommendation, complete the tutorial first. Print out the final graphic and the results. Compare your results by hand to the automated method and discuss why they are different (if they are).
4. (3pts) Compare your results for hydraulic conductivity with Table 3.7 and briefly discuss.