Assignment Prompt

Title: Calculating Drawdown in a Confined Aquifer

Type: In-Class/Group Activity

Course: Engineering Hydrogeology

Level: Senior elective in water resources engineering

Time: 45-min

Instructions:

1) Read through the program, run it, and take a screenshot of the default outputs (H_0-H versus distance and H_0-H over time).

2) Make the following changes one and a time and describe in writing how each changes drawdown over time and space:
    a) Increase Q
    b) Decrease K
    c) Increase b
    d) Decrease Ss

3) How does hydraulic conductivity influence drawdown? What is the smallest K value that you can achieve before dewatering the well? Dewatering means that the water level in the well reaches 0, implying that no more water has been pumped.