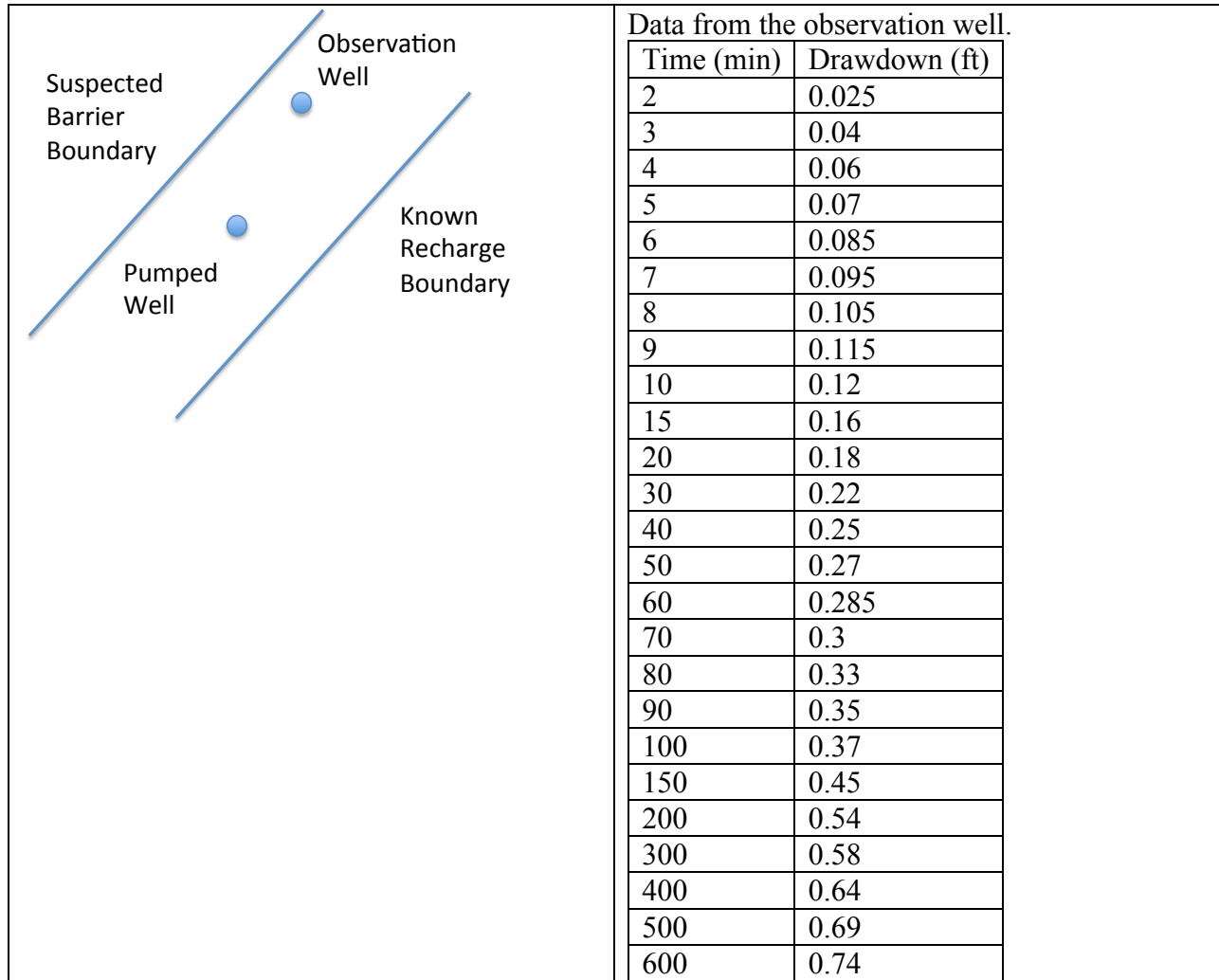


1. **Prob. 4.4.8.** A fully-penetrating pumping well in a confined aquifer is located between a suspected barrier boundary and a known recharge boundary as shown in the figure. Drawdown data from an observation well in the figure during a typical pumping test of the well in question are given in the following table. If the pumping is constant at a rate of 100 gpm and the observation well is 200 ft away from the pumping well, determine the transmissivity and the storage coefficient of the aquifer using the given data.



2. **Problem 4.8.1.** It is required to dewater a construction site 80m x 80m. The bottom of the construction will be 1.5 m below the initial water surface elevation of 90m. Four pumps are to be used in the 0.5-m diameter wells at the four corners of the site. Determine the required pumping rate. The aquifer has $T = 1600 \text{ m}^2/\text{day}$ and the wells each have a radius of influence of 600m.

