

Slug Test Class Problem

The following water level data were collected on the Spring Creek Aquifer. These data represent the time-variant change in water levels during a slug test (depth to water). All well geometry data is supplied in the attached paper aquifer model. You are also given a sheet of semi-log paper to analyze these data using the Hvorslev method. Please use these data and the provided model to determine the hydraulic conductivity of the aquifer.

A. Quantify the hydraulic conductivity using the Hvorslev method.

B. Based on the hydraulic conductivity value above, determine if this geologic unit makes a better aquifer or confining unit. Please explain your answer.

Time (Min)	Depth to water (m)	H-h/(H-Ho)
1	3.5	
10	3.907	
20	4.425	
30	4.832	
50	6.09	
100	6.164	
120	6.46	
180	6.904	
200	7.015	
300	7.2	



