

\*\*\*\*\* GENERAL INFORMATION PROVIDED ON LAST 3 PAGES \*\*\*\*\*

**PROBLEM #3 - 60 points** Compile your answers in the summary on page 4. Blank graph paper is provided on pages 5-7 . Use the test data shown below to determine the aquifer properties from 1) the pump test by curve matching, 1) the pump test by Jacob's straight line method, 3) the recovery data; and 4) the slug test. All data are from the same aquifer. Discuss possible cause for any differences in calculated properties. Show all the details of your work to get full credit

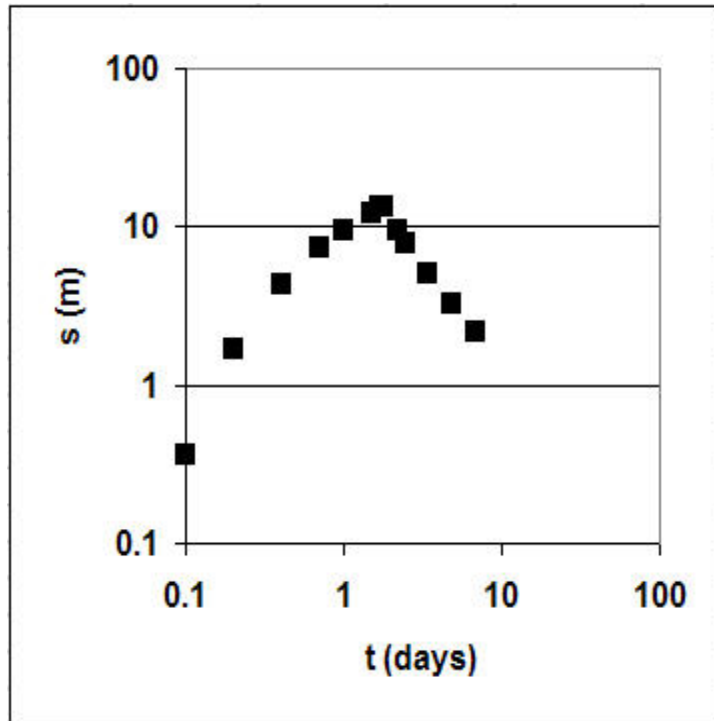
The aquifer is 30m thick

The well is pumped at a rate of 3000m<sup>3</sup>/day for 1.7 days and is then shut off

The observation well is 350m from the pumping well

**Pump Test Data**

time (days)	draw down (m)
0.1	0.37
0.2	1.69
0.4	4.36
0.7	7.37
1	9.60
1.5	12.32
1.7	13.20
1.8	13.24
2.2	9.57
2.5	7.80
3.4	5.06
4.8	3.30
6.9	2.18



**Slug Test Data**

WL	t (sec)
44.8	0
41.96	2.6
39.3	6.38
38.09	9.5

