### Øving 6

### J-function: Field example

Norne is an oil field in the Norwegian Sea. Reservoir pressure is 280 bar, reservoir temperature 98 oC and FWL=2688,5 m TVD MSL. Capillary pressure curves have been established for a number of cores (with varying porosity and permeability) taken from well 6608/10-2, using a Hg-air method. For each core sample, the corresponding J-value is calculated and plotted as a function of water saturation. A best fit to the data is calculated and the water saturation above the free water level is established as a function of porosity and permeability.



 ,  mD, = bar…………………Leveretts J-function

 …………Best fit

 (Uncertain parameter)

………………………………..Water saturation model

 Height above free water level (in meter)

 300 kg/m3

*g* = 9,81 m/s2

 ……………………..Water saturation model Norne Field