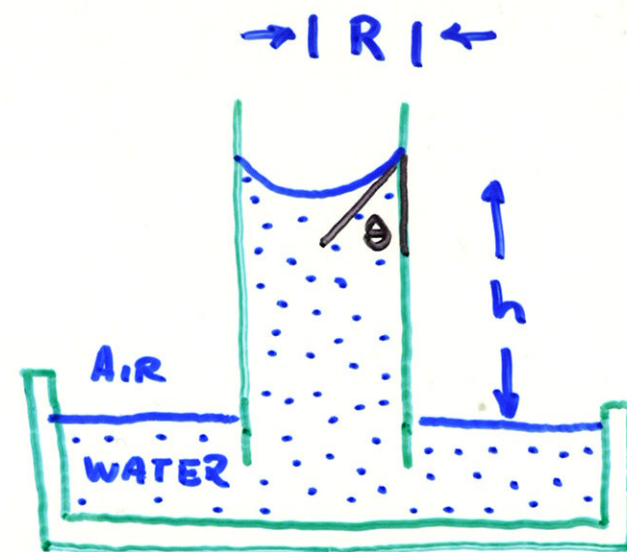


Capillary Pressure



Wetting Angle: θ

Radius of Curvature: $\frac{R}{\cos \theta}$

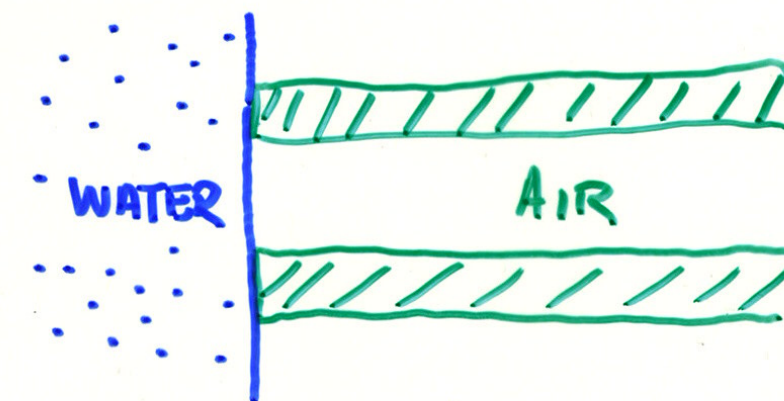
$$\therefore P_{\text{AIR}} - P_{\text{WATER}} = \frac{2\sigma \cos \theta}{R}$$

How high is water drawn?

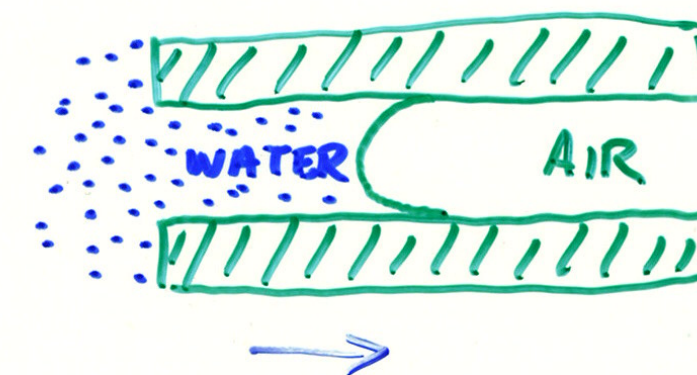
Capillary Imbibition

displacement of non wetting fluid by wetting fluid

Initial Time



LATER



water moves into cylinder (capillary)
why?

Capillary forces and CO₂ trapping

- Capillary forces (interfacial tension) play an important role in trapping of CO₂:
 - Both at the caprock interface (structural trapping)
 - And as residual CO₂ (as the plume migrates upwards)

