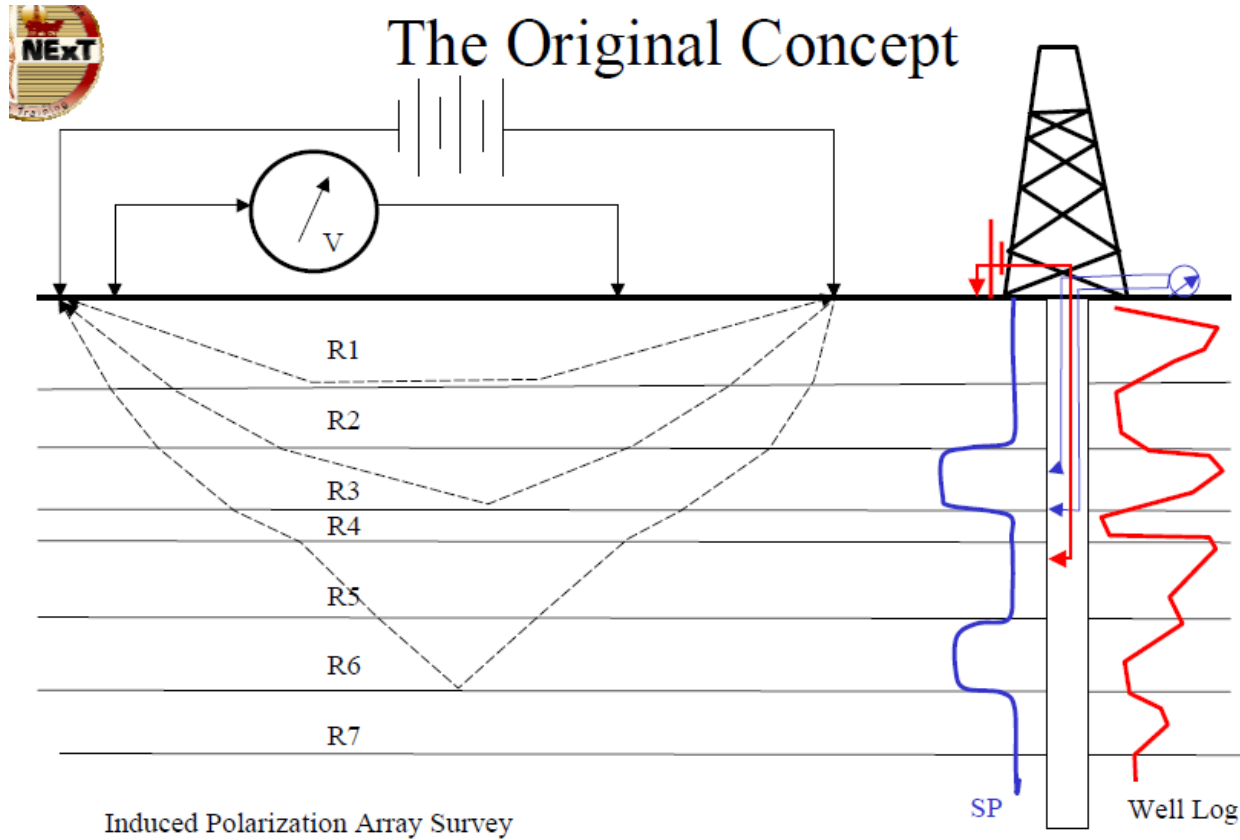


المقرر: جيوفيزياء

المحاضر: أ.د/ احمد محمد كمال بصل

محاضره رقم ٤

الموضوع تسجيلات الابار





# Archie's Equation

$$S_w = \frac{a R_w}{\phi^m R_t}$$

Water saturation, fraction

Empirical constant (usually near unity)

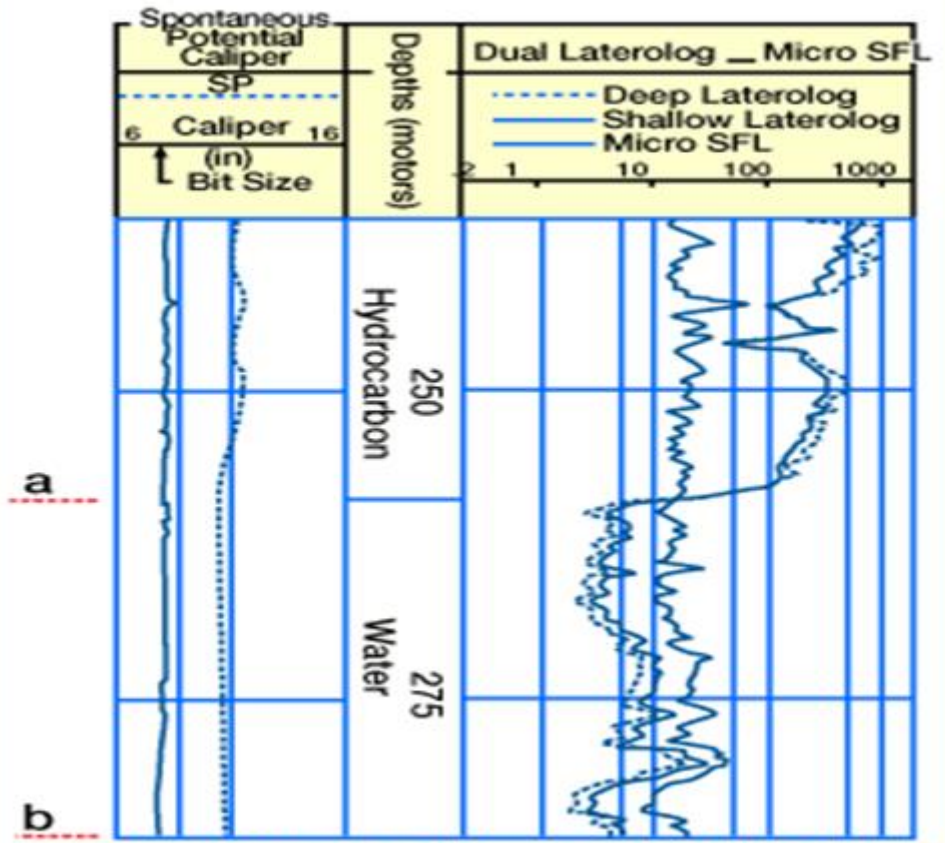
Saturation exponent (also usually near 2)

Porosity, fraction

Resistivity of formation water,  $\Omega\text{-m}$

Cementation exponent (usually near 2)

Resistivity of uninvaded formation,  $\Omega\text{-m}$



Courtesy Schlumberger Well Services

