

Formation Resistivity Log @model

Formation resistivity R_f is defined by mineralization of the rock matrix and saturating fluids.

The simplest and most practical models are based on:

- formation porosity ϕ_e
- water-saturated shaliness V_{sh}
- water saturation volumetric share s_w

Archie Model
Simandoux Model
Indonesia Model (Poupon-Leveaux)
Dual-Water Model (DW)
Waxman-Smits-Thomas Model (WST)

See Also

[Petroleum Industry](#) / [Upstream](#) / [Subsurface E&P Disciplines](#) / [Petrophysics](#)

[Well & Reservoir Surveillance](#) / [Well logging](#) / [Reservoir Data Logs \(RDL\)](#) / [Saturation from Resistivity](#)