

Residual gas saturation to water displacement (sgrw)

A value of [gas saturation](#) s_{grw} below which [oil](#) is not getting displaced by [water](#):

$$(1) \quad k_{rgw}(s_g < s_{grw}) = 0$$

It usually depends on [absolute permeability](#) k_a as:

$$(2) \quad s_{grw} = s_{grw,0} \cdot \left(1 + k_a/k_{a,sgrw}\right)^{-n_{sgrw}}$$

See also

[Physics](#) / [Fluid Dynamics](#) / [Percolation](#)

[Petroleum Industry](#) / [Upstream](#) / [Subsurface E&P Disciplines](#) / [Field Study & Modelling](#)

[[Petrophysics](#)] [[Basic reservoir properties](#)] [[Wettability](#)] [[Permeability](#)] [[Absolute permeability](#)] [[Relative permeability](#)] [[Oil permeability](#)] [[Oil relative permeability](#)] [[Oil-water relative permeability \(krow\)](#)]