

Oil-gas relative permeability (krog)

Relative permeability to oil percolation while sweeping by gas and no presence of free reservoir water:

(1)
$$k_{rog}(s_w) = \frac{k_o(s_g)}{k_a}$$

where

$k_g(s)$	oil permeability in 2-phase Oil + Gas reservoir
k_a	absolute permeability
$\{s_o, s_g\}$	oil and gas reservoir saturation: $s_o + s_g = 1$

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](#)]