Stone I RPM

3-phase RPM for low oil saturation water-wet formations.

(1) $k_{rw}(s_w, s_o, s_g) = k_{rw}(s_w)$	(2) $s_{wn} = \frac{s_w - s_{wi}}{1 - s_{wi} - s_{or}}$
(3) $k_{rg}(s_w, s_o, s_g) = k_{rg}(s_g)$	(4) $s_{on} = \frac{s_o - s_{or}}{1 - s_{wi} - s_{or}}$
(5) $k_{ro}(s_w, s_o, s_g) = \frac{s_{on}}{k^*_{row}} \frac{k_{row}(s_w)}{1 - s_{wn}} \frac{k_{rog}(s_w)}{1 - s_{gn}}$	(6) $s_{gn} = \frac{s_g}{1 - s_{wi} - s_{or}}$

where $k_{rcow} = k_{row}(s_{wi})$.

See also

Petroleum Industry / Upstream / Subsurface E&P Disciplines / Petrophysics

[Permeability] [Absolute permeability] [Relative permeability]