Petrosky–Farshad (1995) undersaturated oil viscosity o @model

Undersaturated oil viscosity	o	cp	p > p_b	$\mu_o(p,T) = \mu_{ob} + c_5 \cdot (p - p_b) \cdot 10^A$ $A = c1 + c2 \cdot \log(\mu_{ob}) + c3 \cdot \left[\log(\mu_{ob})\right]^2 + c4 \cdot \left[\log(\mu_{ob})\right]^3$ $c_1 = -1.0146,\ c_2 = 1.3322\ c_3 = -0.4876,\ c_4 = -1.15036, c_5 = 1.3449 \cdot 10^{-3}$

where

μ_{ob}	cp	oil viscosity at bubble point pressure p_b
p	psia	Fluid pressure
p_b	psia	Bubble point pressure

See Also

Petroleum Industry / Upstream / Petroleum Engineering / Subsurface E&P Disciplines / Reservoir Engineering (RE) / PVT correlations / Oil correlations

[Petrosky–Farshad (1993 - 1995) oil correlations]

References

Petrosky, G.E., and F.F. Farshad. "Viscosity Correlations for Gulf of Mexico Crude Oils." Paper presented at the SPE Production Operations Symposium, Oklahoma City, Oklahoma, April 1995. doi: https://doi.org/10.2118/29468-MS