

Bergman-Sutton (2006-2009) oil viscosity correlations

Saturated oil viscosity	o	cp	dead	$\mu_{ob}(R_s) = A \cdot (\mu_{od})^B$, $A = c_1 \cdot (R_s + c_2)^{c_3}$, $B = c_4 \cdot (R_s + c_5)^{c_6}$ $c_1 = 10.715$, $c_2 = 100$, $c_3 = -0.515$, $c_4 = 5.44$, $c_5 = 150$, $c_6 = -0.338$
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where

T	°F	Fluid temperature
γ_{API}	°API	Oil API gravity
μ_{od}	cp	Dead oil viscosity
R_s	scf/stb	Solution Gas Oil Ratio

See Also

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

References

Bergman, David F., and Robert P. Sutton. "An Update to Viscosity Correlations for Gas-Saturated Crude Oils." Paper presented at the SPE Annual Technical Conference and Exhibition, Anaheim, California, U.S.A., November 2007. doi: <https://doi.org/10.2118/110195-MS>