

Petrosky–Farshad (1993) saturated oil formation volume factor Bo @model

Saturated oil formation volume factor	Bo	bbl/stb	p p _b	$B_o(p,T) = c_1 + c_2 \cdot \left[R_s^{c_4}(p,T) \gamma_g^{c_5} \gamma_o^{c_6} + c_7 T^{c_8} \right]^{c_3}$ $c_1 = 1.0113, c_2 = 7.2046 \cdot 10^{-5}, c_3 = 3.0936, c_4 = 0.3738$ $c_5 = 0.2914, c_6 = -0.6265, c_7 = 0.24626, c_8 = 0.5371$
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where

p	psia	Fluid pressure
T	°F	Initial formation temperature
γ _{API}	°API	Oil API gravity
γ _o	frac	Oil specific gravity
γ _g	frac	Gas specific gravity

See Also

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

[[Petrosky–Farshad \(1993\) oil correlations](#)]

References

Petrosky, G.E., and F.F. Farshad. "Pressure-Volume-Temperature Correlations for Gulf of Mexico Crude Oils." Paper presented at the SPE Annual Technical Conference and Exhibition, Houston, Texas, October 1993. doi: <https://doi.org/10.2118/26644-MS>