

Marhoun (1988) saturated oil gas solubility Rs @model

Saturated oil gas solubility	R_s	scf /stb	$p \text{ } p_b$	$R_s(p,T) = \left[c_1^{-1} p \gamma_g^{-c_3} \gamma_o^{-c_4} T^{-c_5} \right]^{1/c_2}$ $c_1 = 5.38088 \cdot 10^{-3}, c_2 = 0.715082, c_3 = -1.877840, c_4 = 3.1437, c_5 = 1.32657$
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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](#)

[[Marhoun \(1980\) oil correlations](#)]

References

Al-Marhoun, Muhammad Ali. "PVT Correlations for Middle East Crude Oils." J Pet Technol 40 (1988): 650–666. doi: <https://doi.org/10.2118/13718-PA>