

Vogel IPR @ model

A specific IPR model:

(1)
$$\frac{q_o}{q_{O,max}} = 1 - 0.2 \frac{p_{wf}}{p_r} - 0.8 \left(\frac{p_{wf}}{p_r} \right)^2, \quad p_b > p_r > p_{wf}$$

where

q_o	surface production rate of rate
$q_{O,max}$	Absolute Open Flow (AOL) for oil
p_{wf}	bottom-hole pressure (BHP)
p_r	drainarea formation pressure
p_b	bubble-point pressure

A more general forms of IPR is provided by [Vogel IPR @ model](#) and [Wiggins IPR @ model](#).

See also

[Petroleum Industry / Upstream / Production / Subsurface Production / Subsurface E&P Disciplines / Field Study & Modelling / Production Analysis / Productivity Diagnostics / Inflow Performance Relation \(IPR\)](#)

[[Vogel IPR @model](#)] [[Richardson and Shaw IPR @ model](#)] [[Wiggins IPR @ model](#)][[LIT IPR @ model](#)][[PADE IPR @ model](#)]

References

- [Vogel, J. V. \(1968, January 1\). Inflow Performance Relationships for Solution-Gas Drive Wells. Society of Petroleum Engineers. doi:10.2118/1476-PA](#)
- [Archer, R. A., Del Castillo, Y., & Blasingame, T. A. \(2003, January 1\). New Perspectives on Vogel Type IPR Models for Gas Condensate and Solution-Gas Drive Systems. Society of Petroleum Engineers. doi:10.2118/80907-MS](#)
- [Seidle, J. P., & Erickson, D. J. \(1993, January 1\). Use of Vogel’s Inflow Performance Relation for Coal Wells. Society of Petroleum Engineers. doi:10.2118/26201-MS](#)