

Water formation volume factor = Bw

Formation Volume Factor (FVF) for water:

$$(1) \quad B_w(p, T) = \frac{\rho_w^\circ}{\rho_w} = \frac{V_w}{V_{w^\circ}} = \frac{q_w}{q_{w^\circ}}$$

The popular model for predicting [Bw](#) as a function of temperature and pressure is given by [McCain Bw correlation](#).

The value of [Bw](#) is usually below 1.0.

See Also

[Petroleum Industry](#) / [Upstream](#) / [Subsurface E&P Disciplines](#) / [Fluid \(PVT\) Analysis](#) / [Dynamic fluid properties](#)

[[Formation Volume Factor \(FVF\)](#)][[Oil formation volume factor \(Bo\)](#)][[Gas formation volume factor \(Bg\)](#)]

[[McCain Bw correlation](#)]

Attachments

[Bw.xlsx](#)