

Vertical Lift Performance = VLP

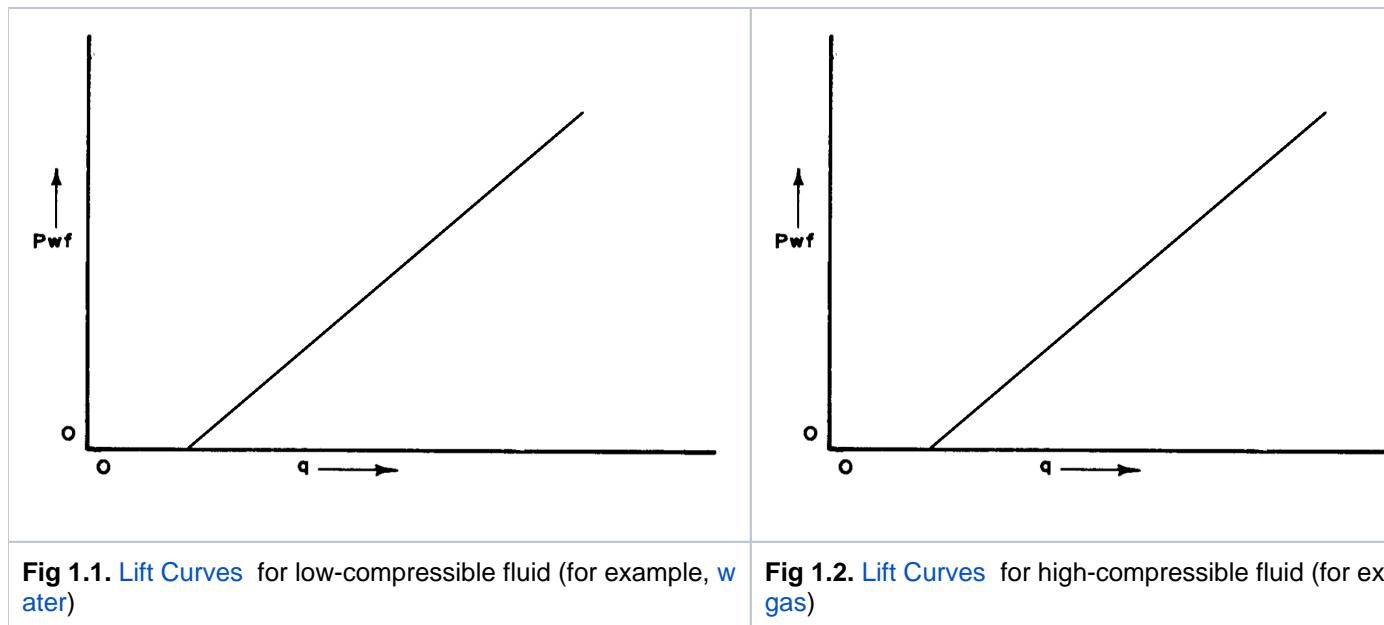
Lift Curves (LC) = Tubing Performance Relation (TPR) = Vertical Lift Performance (VLP) = Vertical Flow Performance (VFP)

Represents the relation between the bottom-hole pressure p_{wf} and surface flow rate q during the stabilised wellbore flow under a constant **Tubing Head Pressure (THP)** p_s :

$$(1) \quad p_{wf} = p_{wf}(q)$$

which also depends on **GOR** and **Yw**.

The example of **Lift Curves (LC)** for single-phase fluid flow is shown on **Fig. 1.1** (low-compressible) and **Fig. 1.2** (high compressible).



The example of **Lift Curves (LC)** for dual-phase fluid flow shown on **Fig. 2**.

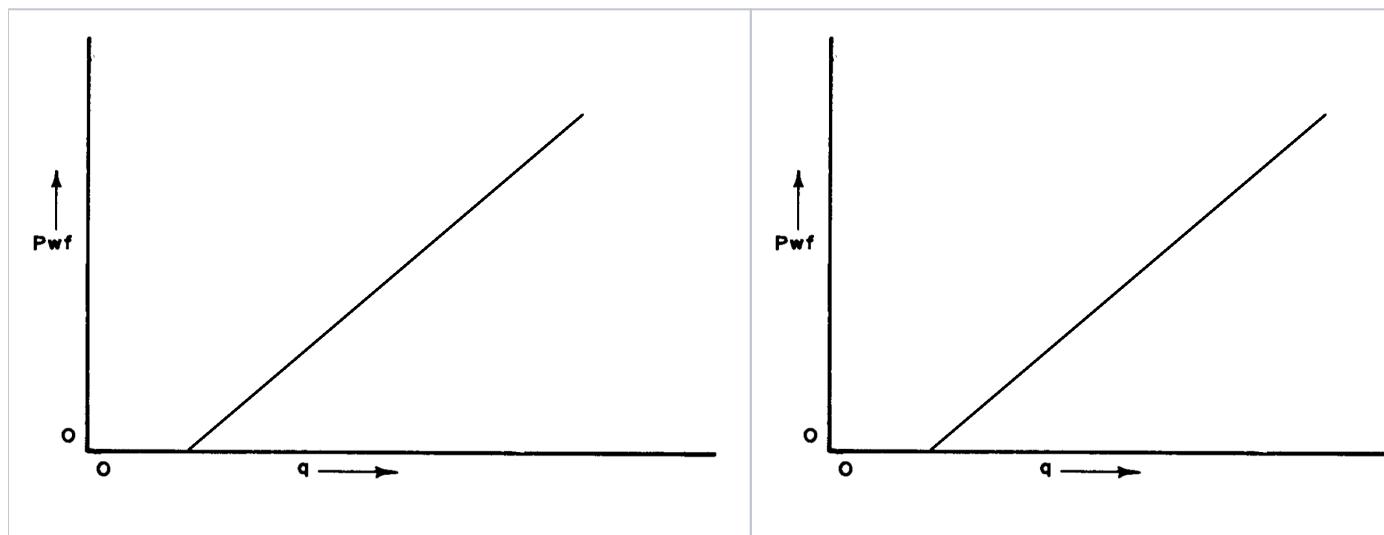


Fig 2.2. Lift Curves for 2-phase Oil + Gas flow

Fig 2.2. Lift Curves for 2-phase Oil + Water flow

The examples of **Lift Curves (LC)** for 3-phase Oil + Gas + Water flow at various **watercuts** ($Y_w = \{20\%, 50\%, 80\%\}$) are shown on **Fig. 3.**

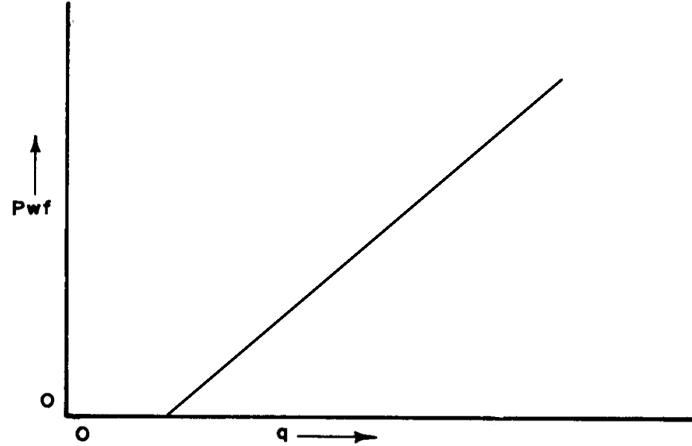


Fig 3.1. Lift Curves for 3-phase Oil + Gas + Water flow at $Y_w = 20\%$

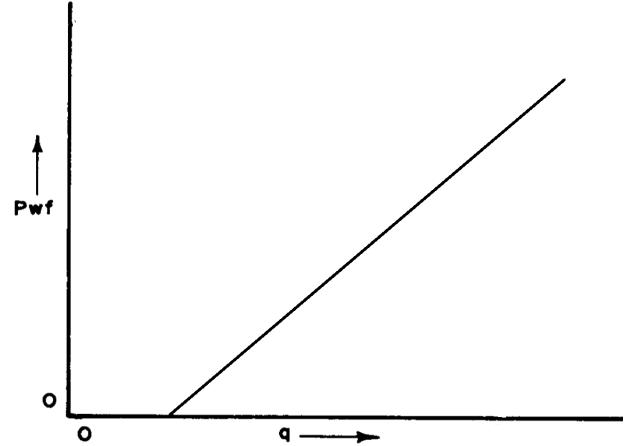


Fig 3.2. Lift Curves for 3-phase Oil + Gas + Water flow $Y_w = 50\%$

Mathematical Model

[Lift Curves @model](#)

See Also

[Petroleum Industry / Upstream / Subsurface E&P Disciplines / Production Technology / Well Flow Performance](#)

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[[Water Injection Wellbore Profile @model](#)]

[[Inflow Performance Relation \(IPR\)](#)]