

Shut-in formation pressure estimate

Wellbore sandface pressure after a given well is shut-in for t_e hours

$$(1) \quad p_e = p_{wf}(t_e) \Big|_{q=0}$$

This definition is based on the practical observation of wellbore pressure in shut-in wells for [well intervention](#) purposes.

It is the simplest and the most popular definition of formation pressure and is widely used in all [upstream industry](#) applications.

The definition of shut-in time t_e is specific to each field or sometimes field area depending on the rock properties and the past [well intervention](#) experience.

Some conventions are to pick t_e at the end of the radial flow, as the most common number from the past pressure tests, which makes this definition close (but still not equal) to the [\(Drain-boundary formation pressure @ model:1\)](#)