Pressure Transient

Synonym: Pressure Transient = Pressure Transition

Wellbore and reservoir pressure transition from one flow regime to another caused by the change in flow rate in the same well (Fig. 1 – Fig. 4) or remote well (Fig. 5 – Fig. 6).

Also called Unsteady State.

Represent the basic data input to Pressure Transient Analysis.

A popular convention for pressure transient data analysis is PTA Diagnostic Plot.

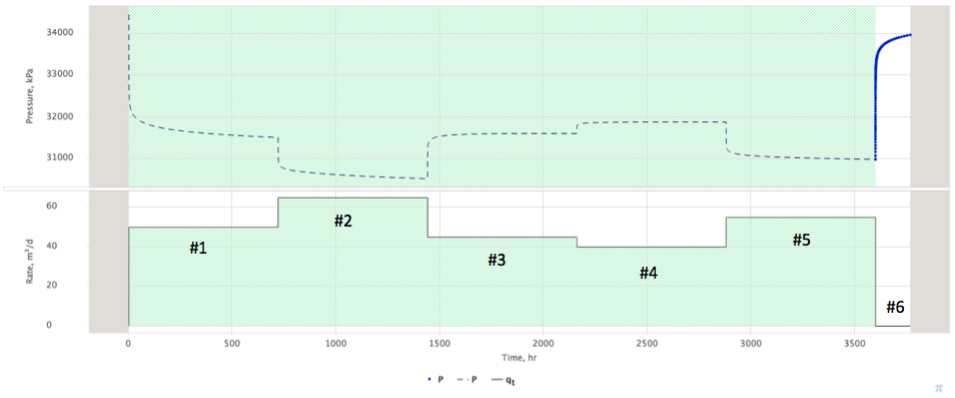
blocked URL	
Fig. 1 – Drawdown pressure transient as response to opening a well for production (#1) and to production rate increase (#2)	**Fig. 2** – Build-up pressure transient as response to production rate decrease (#1) and to shutting down the production (#6).
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Fig. 3 – Injection pressure transient as response to opening a well for injection (#1) and to injection rate increase (#2)	**Fig. 4** – Fall-off pressure transient as response to injection rate decrease (#1) and to shutting down the injection (#2).

See Also

Petroleum Industry / Upstream / Subsurface E&P Disciplines / Well Testing / Pressure Testing

[Well & Reservoir Surveillance] [Pressure Diffusion] [Pressure Transient Analysis (PTA)]