

Unit-rate transient response = UTR

A sandface pressure response drop to unit-rate production in the same or remote well.

It further splits into (see Fig. 1):

DTR	pressure response to unit-rate production in the same well
CTR	pressure response to unit-rate production in the remote well

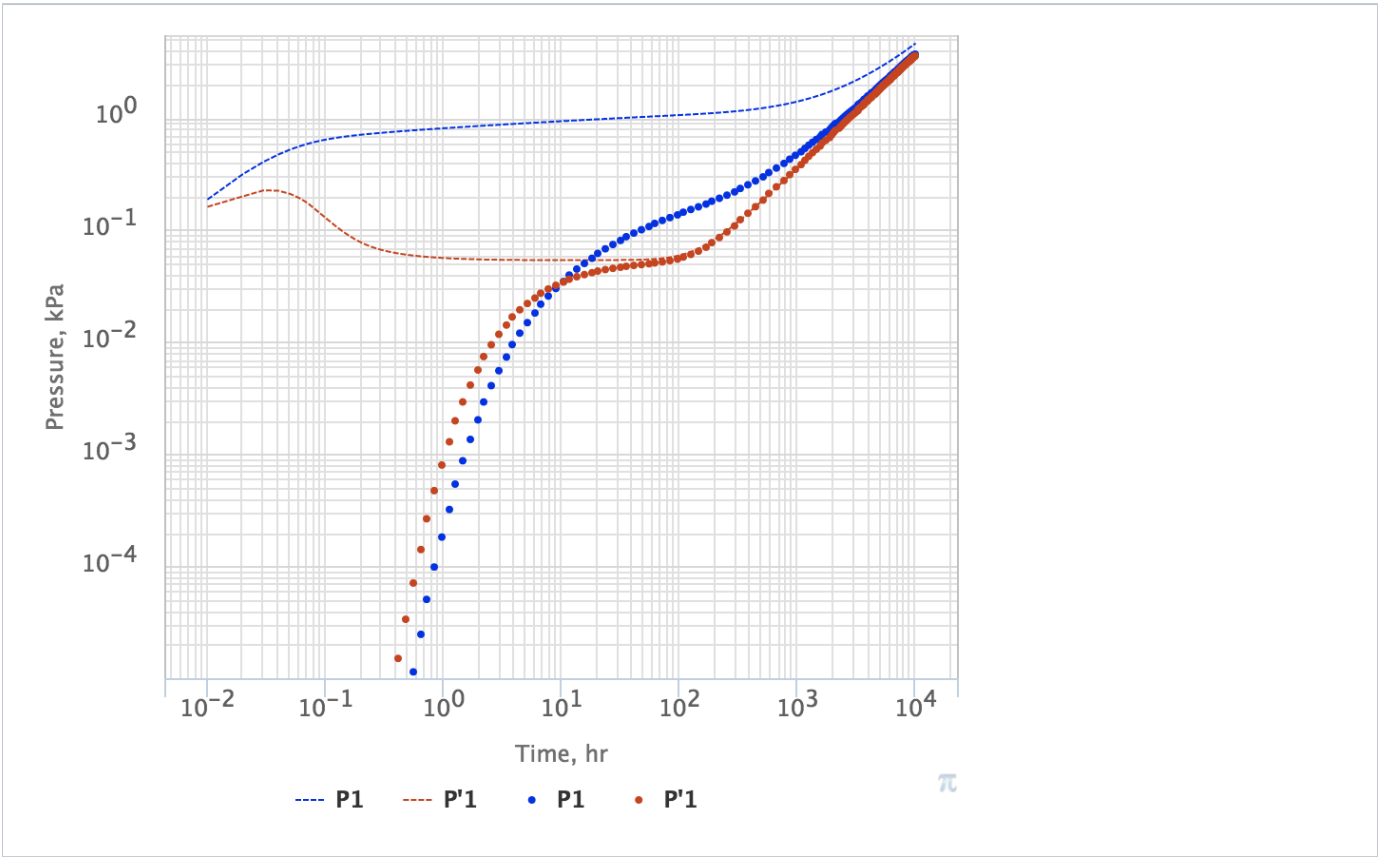


Fig. 1. A sample of typical DTR (dash line) and CTR (circles) for a 2-well system presented on PTA type-library log-log plot.

(pressure drop P in blue and log-derivative P' in red). One well is producing at unit-rate and the other one is shut-in.

In this case, LTRs on both UTRs are the same because two wells are sharing the same reservoir volume.

The source of UTRs are:

Numerical pressure simulations	Numerical flow simulations	Deconvolution of long-term PDG data records	Pressure Interference Testing
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The most common use of [UTRs](#) is to assemble a [Pressure Interference Matrix](#) and perform:

Qualitative analyses of the reservoir properties	Qualitative analysis with Unit-rate Transient Response Model (UTRM)
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See Also

[Petroleum Industry](#) / [Upstream](#) / [Subsurface E&P Disciplines](#) / [Well Testing](#) / [Pressure Testing](#)

[[Pressure Interference Matrix](#)] [[Pressure Test Model](#)]