

# Pressure Pulse-Code Test (PCT)

A specific implementation of [Pressure Pulsation](#) survey with encoded flowrate variation sequences (could be non-harmonic and even non-periodic) at one or more disturbing wells inducing encoded [pressure pulse propagation](#) across the field.

The data interpretation is based on [pressure pulse-code decomposition \(PCD\)](#) algorithm.

The result of [decomposition](#) is the set of the unit-rate transient responses, [DTRs](#) and [CTRs](#), which characterise reservoir properties.

These transient responses can be then modelled analytically or numerically and provide quantitative assessment of reservoir properties and geological features around and between the wells.

The simplest form of quantitative analysis of decomposed transient responses is analytical simulations with homogenous reservoir model.

This simulated transmissibility in this case is called "apparent transmissibility".

The physical meaning of this value is that homogenous reservoir would provide the same unit-rate pressure response as the actual reservoir, although the actual reservoir can feature substantial variation of its properties around and between the wells.

In case of [DTR](#) it shows a homogenous hydrodynamic average across the whole drainage area around a given well and is called [apparent well drainage transmissibility](#).

In case of [CTR](#) it shows a homogenous hydrodynamic average across the dynamically connected area between two wells and is called [apparent cross-well transmissibility](#).

If [cross-well transmissibility](#) and [well drainage transmissibility](#) are close it means that the part of reservoir which is engaged in dynamic flow around tested wells is more or less homogeneous.

## See Also

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

[ [Well & Reservoir Surveillance](#) ]

[ [Pressure pulse-code decomposition \(PCD\) @ model](#) ]

[ [PCT @ samples](#) ] [ [Multi-well pressure-rate correlations @ review](#) ]

## References

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