Finite conductivity fracture

A fracture with a pressure gradient along the gap during the fluid flow.

Unlike Infinite conductivity fracture the fluid flow along the fracture plane in finite conductivity fracture is accountable along with fluid inflow from reservoir into a fracture.

Since the permeability of the fracture is usually much higher than that of reservoir and the fluid flow velocity along the fracture plane is much higher than in reservoir and corresponding pressure gradient is much lower than in reservoir.

In Pressure Transient Analysis the infinite conductivity fracture is a very rare difficult to diagnose but this concept is widely used in geomechanical Hydraulic Fracture modelling.

See Also

Geology / Rocks / Fracture

[Fracture] [Infinite conductivity fracture] [Finite conductivity fracture]

[Petroleum Industry / Upstream / Well / Well-Reservoir Contact (WRC) / Hydraulic Fracture]

[Production / Subsurface Production / Well & Reservoir Management (WRM) / Well stimulation / Hydraulic Fracturing]

[Hydraulic Fracture @model]