Numerical and computational strategy for pressure-driven steady-state simulation of oilfield production

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a r t i c l e i n f o

a b s t r a c t

Within the TINA (Transient Integrated Network Analysis) research project and in partnership with Total, IFP is developing a new generation of simulation tool for flow assurance studies. This integrated simulation software will be able to perform multiphase simulations from the wellbore to the surface facilities. The purpose of this paper is to define, in a CAPE-OPEN compliant environment, a numerical and computational strategy for solving pressure-driven steady-state simulation problems, *i.e.* pure simulation and design problems, in the specific context of hydrocarbon production and transport from the well bore to the surface facilities.