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| Nota di contenuto | Intro -- Nonlinear Flow and Well Test Analysis in Porous Media -- Preface -- Contents -- Mechanism of Nonlinear Flow and Analysis of Characteristics -- Analysis of Factors Affecting Fluid Flow in Porous Media -- Mechanism of Nonlinear Flow in Low Permeability Reservoirs -- Characteristics of Nonlinear Flow in Low Permeability Reservoirs -- Model of Nonlinear Flow in Low Permeability Reservoirs -- Mechanisms of Stress Sensitivity in Low-Permeability Reservoirs -- Stress Sensitivity Characteristics of Low-Permeability Reservoirs -- Stress Sensitivity Model for Low Permeability Reservoirs -- Characteristics of High-Velocity Nonlinear Flow -- Introduction -- Characteristics of High-Velocity Nonlinear Flow -- Judgment Method for High-Velocity Nonlinear Flow -- Equation for Description of High-Velocity Nonlinear Flow -- Model of Low-Velocity Nonlinear Flow in Single Media -- Threshold Pressure Gradient Model of Low-Velocity Nonlinear Flow -- Stable Flow Model -- Unstable Flow Model -- Dimensionless Well Test Model Under Unstable Flow -- Exponential Model of Low-Velocity Nonlinear Flow -- Stable Flow Model -- Unstable Flow Model -- Dimensionless Well Test Model of Unstable Flow -- Theory of Well Test for Low-Velocity Nonlinear Flow in Multiple Media -- Mathematical |

Model of Low-Velocity Nonlinear Flow in Double Media -- Motion Equation -- Channeling Equation -- State Equation -- Continuity Equation -- Simplified Models of Matrix Permeability and Fracture Porosity -- Simplified Model of Matrix Permeability -- Theory of Well Test of Low-Velocity Nonlinear Flow in Double Media -- Mathematical Model of Well Test in Dual-Porosity Reservoir and Its Solution -- Mathematical Model Considering Wellbore Storage Effect and Skin Factor -- Characteristics of Well Test Curve of Low-Velocity Nonlinear Flow in Double Media.
Analysis of Factors Affecting the Well Test Curves of Low-Velocity Nonlinear Flow in Double Media Reservoirs -- Mathematical Model of Low-Velocity Nonlinear Flow in Triple Media -- Ideal Model of Triple Media -- Mathematical Model and Its Solution for Triple Media Reservoirs -- Well Test Curve Characteristics of Low-Velocity Nonlinear Flow in Triple Media Reservoirs -- Analysis of Factors Affecting the Well Test Curves of Low-Velocity Nonlinear Flow in Triple Media -- Well Test of Nonlinear Flow Considering Stress Sensitivity in Low Permeability Reservoirs -- Factors Affecting Stress Sensitivity and Mathematical Models -- Change Characteristics of Stress Sensitivity -- Factors Affecting Stress Sensitivity -- Mathematical Model of Stress Sensitivity -- Nonlinear Stable and Pseudo-Stable Flow Model Considering Stress Sensitivity -- Productivity and Pressure Models of Stable Flow Considering Stress Sensitivity -- Productivity and Pressure Models of Pseudo-Stable Flow Considering Stress Sensitivity -- Nonlinear and Unstable Well Test Considering Stress Sensitivity -- Assumptions and the Model -- Solution and Charts for Well Test Model Considering Stress Sensitivity in Low Permeability Reservoirs -- Well Test in Fracture-Pore Double Media Considering Stress Sensitivity -- Sensitivity of Fracture Permeability -- Well-Test Model of Double Media Considering Stress Sensitivity and Typical Curves -- High-Velocity Nonlinear Stable Flow Model -- Darcy Linear Radial Flow -- Binomial Nonlinear Radial Flow -- Exponential Nonlinear Radial Flow -- Comparison of the Calculation Results for Darcy's Linear Flow and Nonlinear Flow -- Producing in a Constant Production -- Producing at a Constant Bottom-Hole Pressure -- Transient Well Test Under High-Velocity Nonlinear Flow -- Exponential High-Velocity Nonlinear Flow Model -- Exponential High-Velocity Nonlinear Flow Model.
Analytical Solution to the Exponential High-Velocity Nonlinear Flow Model -- Numerical Solution for the Exponential High-Velocity Nonlinear Flow Model -- Results and Discussion -- Binomial High-Velocity Nonlinear Flow Model -- Establishment of Flow Model -- Solution of the Model -- Results and Discussion -- Transient Well Test of Moving Boundary in High-Velocity Nonlinear Flow -- Assumptions -- Establishment and Solution of the Mathematical Model -- Results and Discussion -- Nomenclatures -- Appendix: Virtual Argument Integer Bessel Function -- References.

Sommario/riassunto

No detailed description available for "Nonlinear flow and well test analysis in porous media".