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of Waterdrive Reservoir; 2.2.4 - Harmonic Decline Equation of Water Drive Reservoir; 2.2.5 - Decline Equation of Bounded Elastic Drive-Constant Pressure Production; 2.2.6 - Decline Equation of Multilayer Oil Well-Constant Pressure Production; 2.2.7 - Decline Equation of Gas Well in Volumetric Gas Reservoir-Constant Pressure Production; 2.3 - Arps Type Curves; 2.3.1 - Gentry-Arps Type Curve
 2.3.2 - Arps Dimensionless Decline Flow Rate Type Curve
 2.3.3 - Arps Dimensionless Decline Cumulative Production Curve; 2.3.4 - Arps Dimensionless Decline Flow Rate Integral Type Curve; 2.3.5 - Arps Dimensionless Decline Flow Rate Integral Derivative Type Curve; 2.3.6 - Arps Type Curve; 2.4 - Power Function Analysis; 2.4.1 - Iik Method; 2.4.2 - Mattar Method; 2.5 - Case Analysis of Arps Method; 2.5.1 - Identification of Decline Law; 2.5.2 - Arps Exponential Decline Analysis; 2.5.3 - Arps Harmonic Decline Analysis; 2.5.4 - Result Correlation and Analysis; 3 - Fetkovich Decline Curves Analysis
 3.1 - Solution for a Well in a Closed Circular Reservoir: Constant Pressure Production
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 3.3.1 - Conventional Decline Curve Analysis

Sommario/riassunto

In recent years, production decline-curve analysis has become the most widely used tool in the industry for oil and gas reservoir production analysis. However, most curve analysis is done by computer today, promoting a "black-box" approach to engineering and leaving engineers with little background in the fundamentals of decline analysis. Advanced Production Decline Analysis and Application starts from the basic concept of advanced production decline analysis, and thoroughly discusses several decline methods, such as Arps, Fetkovich, Blasingame, Agarwal-Gardner, NPI, transient, long linear
