

1. Record Nr.	UNINA9910461880003321
Autore	Lee John (W. John)
Titolo	Well testing [[electronic resource] /] / John Lee
Pubbl/distr/stampa	New York, : Society of Petroleum Engineers of AIME, 1982
ISBN	1-61399-166-5
Descrizione fisica	1 online resource (167 p.)
Collana	SPE textbook series ; ; v. 1
Disciplina	622/.338/0287
Soggetti	Oil wells - Testing Gas wells - Testing Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes indexes.
Nota di bibliografia	Bibliography: p. [154]-155.
Nota di contenuto	<p>""Acknowledgments""; ""Contents""; ""Introduction""; ""1-Fluid Flow in Porous Media""; ""1.1 Introduction""; ""1.2 The Ideal Reservoir Model""; ""1.3 Solutions to Diffusivity Equation""; ""1.4 Radius of Investigation""; ""1.5 Principle of Superposition""; ""1.6 Horner's Approximation""; ""2-Pressure Buildup Tests""; ""2.1 Introduction""; ""2.2 The Ideal Buildup Test""; ""2.3 Actual Buildup Tests""; ""2.4 Deviations From Assumptions in Ideal Test Theory""; ""2.5 Qualitative Behavior of Field Tests""; ""2.6 Effects and Duration of Afterflow""; ""2.7 Determination of Permeability""</p> <p>""2.8 Well Damage and Stimulation""""2.9 Pressure Level in Surrounding Formation""; ""2.10 Reservoir Limits Test""; ""2.11 Modifications for Gases""; ""2.12 Modifications for Multiphase Flow""; ""3-Flow Tests""; ""3.1 Introduction""; ""3.2 Pressure Drawdown Tests""; ""3.3 Multirate Tests""; ""4-Analysis of Well Tests Using Type Curves""; ""4.1 Introduction""; ""4.2 Fundamentals of Type Curves""; ""4.3 Ramey's Type Curves""; ""4.4 McKinley's Type Curves""; ""4.5 Gringarten et al. Type Curves for Fractured Wells""; ""5-Gas Well Testing""; ""5.1 Introduction""</p> <p>""5.2 Basic Theory of Gas Flow in Reservoirs""""5.3 Flow-After-Flow Tests""; ""5.4 Isochronal Tests""; ""5.5 Modified Isochronal Tests""; ""5.6 Use of Pseudopressure in Gas Well Test Analysis""; ""6-Other Well Tests""; ""6.1 Introduction""; ""6.2 Interference Testing""; ""6.3 Pulse Testing""; ""6.4 Drillstem Tests""; ""6.5 Wireline Formation Tests"";</p>

""Appendix A: Development of Differential Equations for Flow in Porous Media""; ""Introduction""; ""Continuity Equation for Three-Dimensional Flow""; ""Continuity Equation for Radial Flow""; ""Flow Laws""
""Single-Phase Flow of Slightly Compressible Fluids""""Single-Phase Gas Flow""; ""Simultaneous Flow of Oil, Water, and Gas""; ""Appendix B: Dimensionless Variables""; ""Introduction""; ""Radial Flow of a Slightly Compressible Fluid""; ""Radial Flow With Constant BHP""; ""Appendix C: Van Everdingen and Hurst Solutions to Diffusivity Equations""; ""Introduction""; ""Constant Rate at Inner Boundary, No Flow Across Outer Boundary""; ""Constant Rate at Inner Boundary, Constant Pressure at Outer Boundary""; ""Constant Pressure at Inner Boundary, No Flow Across Outer Boundary""
""Appendix D: Rock and Fluid Property Correlations""""Introduction""; ""Pseudocritical Temperature and Pressure of Liquid Hydrocarbons""; ""Bubble-point Pressure of Crude Oil""; ""Solution GOR""; ""Oil Formation Volume Factor""; ""Compressibility of Undersaturated Oil""; ""Compressibility of Saturated Crude Oil""; ""Oil Viscosity""; ""Solubility of Gas in Water""; ""Water Formation Volume Factor""; ""Compressibility of Water in Undersaturated Reservoirs""; ""Compressibility of Water in a Saturated Reservoir""; ""Water Viscosity""; ""Pseudocritical Properties of Gas""
""Gas-Law Deviation Factor (z-Factor) and Gas Formation Volume Factor""
