

1. Record Nr.	UNINA9911006804403321
Titolo	Developments in petroleum science . 8 Fundamentals of reservoir engineering // L.P. Dake
Pubbl/distr/stampa	Amsterdam ; ; New York, : Elsevier Pub. Co., 1978
ISBN	1-281-71579-4 9786611715793 0-08-056898-X
Descrizione fisica	1 online resource (462 p.)
Collana	Developments in petroleum science ; ; 8
Altri autori (Persone)	DakeL. P
Disciplina	622.338 622/.33/8
Soggetti	Oil reservoir engineering Petroleum engineering
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Front Cover; Fundamentals of Reservoir Engineering; Copyright Page; Table of Contents; PREFACE; ACKNOWLEDGEMENTS; IN MEMORIAM; NOMENCLATURE; Chapter 1. SOME BASIC CONCEPTS IN RESERVOIR ENGINEERING; 1. Introduction; 2. Calculation of hydrocarbon volumes; 3. Fluid pressure regimes; 4. Oil recovery: recovery factor; 5. Volumetric gas reservoir engineering; 6. Application of the real gas equation of state; 7. Gas material balance: recovery factor; 8. Hydrocarbon phase behaviour; References; Chapter 2. PVT ANALYSIS FOR OIL; 1. Introduction; 2. Definition of the basic PVT parameters 3. Collection of fluid samples4. Determination of the basic PVT parameters in the laboratory and conversion for field operating conditions; 5. Alternative manner of expressing PVT laboratory analysis results; 6. Complete PVT analysis; References; Chapter 3. MATERIAL BALANCE APPLIED TO OIL RESERVOIRS; 1. Introduction; 2. General form of the material balance equation for a hydrocarbon reservoir; 3. The material balance expressed as a linear equation; 4. Reservoir drive mechanisms; 5. Solution gas drive; 6. Gascap drive; 7. Natural water drive 8. Compaction drive and related pore compressibility

phenomenaReferences; Chapter 4. DARCY'S LAW AND APPLICATIONS; 1. Introduction; 2. Darcy's law; fluid potential; 3. Sign Convention; 4. Units: units conversion; 5. Real gas potential; 6. Datum pressures; 7. Radial steady state flow; well stimulation; 8. Two-phase flow: effective and relative permeabilities; 9. The mechanics of supplementary recovery; References; Chapter 5. THE BASIC DIFFERENTIAL EQUATION FOR RADIAL FLOW IN A POROUS MEDIUM; 1. Introduction; 2. Derivation of the basic radial flow equation; 3. Conditions of solution 4. The linearization of equation 5.1 for fluids of small and constant compressibilityReferences; Chapter 6. WELL INFLOW EQUATIONS FOR STABILIZED FLOW CONDITIONS; 1. Introduction; 2. Semi steady state solution; 3. Steady state solution; 4. Example of the application of the stabilized inflow equations; 5. Generalized form of inflow equation under semi steady state conditions; References; Chapter 7. THE CONSTANT TERMINAL RATE SOLUTION OF THE RADIAL DIFFUSIVITY EQUATION AND ITS APPLICATION TO OILWELL TESTING; 1. Introduction; 2. The constant terminal rate solution 3. The constant terminal rate solution for transient and semi steady state flow4. Dimensionless variables; 5. Superposition theorem: general theory of well testing; 6. The Matthews, Brons, Hazebroek pressure buildup theory; 7. Pressure buildup analysis techniques; 8. Multi-rate drawdown testing; 9. The effects of partial well completion; 10. Some practical aspects of well surveying; 11. Afterflow analysis; References; Chapter 8. REAL GAS FLOW: GAS WELL TESTING; 1. Introduction; 2. Linearization and solution of the basic differential equation for the radial flow of a real gas 3. The Russell, Goodrich, et.al. solution technique

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#### Sommario/riassunto

"This book is fast becoming the standard text in its field", wrote a reviewer in the Journal of Canadian Petroleum Technology soon after the first appearance of Dake's book. This prediction quickly came true: it has become the standard text and has been reprinted many times. The author's aim - to provide students and teachers with a coherent account of the basic physics of reservoir engineering - has been most successfully achieved. No prior knowledge of reservoir engineering is necessary. The material is dealt with in a concise, unified and applied manner, and only the simplest and m

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